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1954-67.

Up to Dec 1967

ELDORADO MINING AND REFINING (1944) LIMITED

Perpetual File (VOL. III)

Minutes ~~Vol. I~~

ANNEXES

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS OF ELDORADO
MINING AND REFINING LIMITED HELD IN THE ROYAL YORK HOTEL,
TORONTO, ONTARIO, ON DECEMBER 6TH, 1967 COMMENCING AT 9:30 A.M.

Present: Messrs. W. M. Gilchrist
W. G. Thompson
W. F. James
John E. Sydie
Fred. R. Hadley

In attendance: Messrs. H. E. Lake
J. C. Burger
G. F. Colborne
R. C. Powell
J. C. Orr
B. S. W. Buffam

PRELIMINARY MATTERS

Mr. Gilchrist occupied the chair and Mr. Powell acted as secretary of the meeting. A quorum was present pursuant to due notice, and the meeting was declared to be regularly constituted.

MINUTES OF BOARD MEETING HELD SEPTEMBER 15TH, 1967

Following a brief review of the minutes of the previous meeting, copies of which had been sent to Board members earlier, the minutes were approved upon motion of Messrs. Hadley and James.

REVIEW OF 1967 OPERATIONS FOR TEN MONTHS ENDING OCT. 31/67

The Chairman referred to detailed statements dealing with operating results to October 31st. Net income for the ten months was \$162,190, compared with \$243,622 for the same period in 1966. Production at the mine is within 3% of target, and the target of 2,000,000 pounds for the year will likely be met. However, production costs of \$5.77 per pound are 7% above estimate. As noted at previous meetings, costs have been inflated by low productivity, excessive overtime to keep production up, and a consequent wage-bill 18% higher than a year ago. The problem of finding, training and retaining manpower continues, but some progress is being made. Mr. Lake advised that the situation is considerably better now, and that the winter months should see more stability. It is apparent that the availability of housing, the assistance given in moving, and the intensive programme of training are all beginning to pay off.

- 2 -

Mr. Lake noted that the new HAB mine programme is on schedule, sinking will start at the beginning of the year, and cost is within estimate to date. The mine will be in production by mid-1969.

CAPITAL EXPENDITURES 1967

Upon motion of Messrs. Hadley and James, the following items were added to the list of approved expenditures for 1967:

Beaverlodge

Instrument for ore detection on sorter waste belt	\$ 1,550
Theodolite for survey department	<u>675</u>

Refinery

Property on Smith Street, Port Hope	13,500
Vibratory screw feeder	2,615
Accessories for spectrometer	1,590
Birdcages for product shipments	<u>1,500</u>

Research and Development

Spectrophotometer parts	2,170
Sales tax on prior years' equipment	<u>3,135</u>
	<u>\$26,735</u>

URANIUM SALES

Mr. Gilchrist referred to the decision taken some months ago that the Company would refrain from entering into long-term uranium contracts at today's prices, and he noted that recent developments have confirmed the soundness of this policy. It is becoming evident that, in the absence of the discovery of some major new mines, the world demand for uranium will not be satisfied by the quantity of uranium available in the \$8.00 range, in the mid and late 1970's.

Mr. Gilchrist referred to the planned negotiations with the U.K.A.E.A., as set out in detail in the minutes of the Executive Committee Meeting of November 22nd, 1967.

- 3 -

1968 OPERATING FORECASTS

The Chairman presented a Statement of Income and Expense and Profit Forecast for 1968. This is based upon the premise that the Company's entire production in 1968 (or 2,000,000 pounds comprised of about 680,000 1967 pounds and 1,320,000 1968 pounds) will be sold in that year, half at \$7.00 (Can.) and half at \$7.25 (Can.). On this basis an operating profit of \$20,000 is projected, which, together with income from ore procurement, financing and interest income, is forecast to produce a net profit for the year before tax of \$434,000.

However, Mr. Gilchrist drew attention to the fact that no interest expense is reflected in this forecast, although this may well arise, dependent upon the success achieved with the UK in negotiations for the pre-payment of amounts due in the 1970's.

Referring to the various detailed statements, the Chairman noted:

- (i) Other income will be less than in 1967 by some \$560,000 due to the much lower volume of funds available for investment.
- (ii) General and Administration Expense will be up by \$36,000 due primarily to a provision of \$10,000 for possible scholarships and increases in student assistance and anticipated travel expense.
- (iii) Sales expenditure will be increased by \$16,550, reflecting greater activity, including advertising, which will arise with the Company's entry into the zirconium and UF₆ markets.
- (iv) Ore procurement administration expense will be reduced by \$15,000.
- (v) Mine costs are estimated at \$13,278,944 including the HAB project. This is an increase of \$1,615,670 over the projected 1967 costs. The budget is predicated upon a 13% increase in tons mined, an 8% increase in tons milled and a

- 4 -

U₃O₈ output unchanged at 1,000 tons. The higher costs are due almost entirely to the manpower sector. Grade of ore mined will be .190% in 1968 compared with the .211% in 1967, making it necessary to mine a higher tonnage to maintain output. Every effort will be expended to improve the unsatisfactory forecast mill recovery rate of 84.7%.

- (vi) After absorbing product development and sales department expenditures, the Refinery forecasts a minimal profit of \$11,000.
- (vii) The Research and Development Budget (revised since the Executive Committee Meeting of November 22nd) contemplates a total expenditure by the Division of \$906,870 including depreciation, an increase of \$68,540 over 1967. Of the total expenditure, some \$479,960 will be recovered or transferred, leaving a net expenditure on Research and New Product Development of \$426,910. After removing depreciation and technical assistance and liaison, the net R&D expense guideline is reduced to \$365,880.

The expenses of the Division recovered or transferred are forecast as follows:-

Zirconium development \$281,610, transferred and deferred
Uranium Development \$85,050, transferred and deferred
Custom contracts and PAIT \$53,300 recovered
Process Control \$60,000 transferred

- (viii) Referring to the proposed budget for surface evaluation, the Chairman called upon the Consulting Geologist for comment. Dr. Buffam noted that provision has been made in this budget for an amount of \$149,725 for surface diamond drilling. He does not, however, anticipate that any significant portion of this will be required unless something quite unexpected should be encountered and require drilling. It is his view that the

- 5 -

should be devoted to a tidying-up, assembling and appraisal of surface exploration, geological and geophysical data, mapping etc., and plan on a 1969 drilling programme based upon such appraisal.

Following the consideration of the corporate forecast and the various budgets, the Board, upon motion of Messrs. James and Hadley, approved the 1968 budgets as presented to the meeting in the following amounts:-

1. Beaverlodge Operation	\$12,621,698
2. HAB Mine Programme	657,246
3. Surface Evaluation Programme	260,885
4. General and Administration	580,000
5. Sales Administration Expense	174,110
6. Refinery	2,502,566
7. Research and Development	906,870

and recognizing that Items 6 and 7 are inclusive of:-

(a) Zirconium pre-production expense	660,000
(b) UF ₆ pre-production expense	124,000

CAPITAL BUDGETS 1968

The Chairman referred the meeting to a summary of proposed capital expenditures totalling \$2,912,625, exclusive of the UF₆ plant to which reference is made later and exclusive of any expenditure for the purchase or construction of hydro electric facilities.

During the consideration of the individual items in this budget the Chairman called the attention of the Board to the discussion of the proposed retail store in Uranium City, as recorded in the minutes of the Executive Committee Meeting of November 22nd. The Board agreed that the store appears necessary in order to complement the current endeavour of the Company in providing adequate housing with a view to keeping the cost of living commensurate with employee earnings. The Board noted that the Executive Committee had considered the various items in this list of capital expenditures in detail, and upon motion of Messrs. James and Sydnie, the budget was approved.

CASH POSITION AND CONSIDERATION OF DIVIDEND

The Chairman noted that the Company's cash position would be difficult in the coming months. If anticipated contract sales are made, and cash therefor received in 1968, there is an anticipated cash shortfall of approximately \$15.5 million, which will rise to the extent that cash is not received from such sales. As already indicated, an attempt will be made to secure pre-payment in 1968 of all or part of \$25.7 million due in three instalments in 1971/2/3 from the U.K.A.E.A. To the extent that this is not successful, the Company will be obliged to borrow from banks.

In the light of the Company's cash position, it was the view of the Board that the usual dividend^{should} be omitted in 1967. ✓

PROPOSED UF₆ PLANT

The Chairman called on the Vice-President - Refining to review developments in this matter. Mr. Burger recalled that negotiations have been going on with Getty Oil Company and he expects a letter of intent by the year-end, committing Getty to 2,500 tons per year for five years. Conversations have also been had with Japanese utilities, and there is every likelihood that 1,500 tons per year will be available from that source. Adding 1,000 tons of Company production, the plant can be sized at 5,000 tons with provision for expansion. The Company holds certain advantages over others who might consider going into this business, in that:

- (i) the UO₃ part of the required plant already exists
- (ii) the Company personnel have the necessary know-how and experience, and
- (iii) the specification of the concentrates to be entered to the plant is not as stringent as will be required by US plants, and this eliminates the need for mining companies to add expensive equipment to upgrade their concentrates.

The subject has been discussed with the other two major uranium producers in Canada and they are not interested, because of lack of know-how, and the fact that they would be required to start with a UO₃ plant which would render the operation not competitive. Mr. Gilchrist observed that when a letter has been received from Getty, this matter will receive the consideration of the

- 7 -

Board or Executive Committee at a later meeting.

ORE RESERVES

Dr. Buffam stated that ore reserves in place and assured at the present time amount to 3,300,000 tons. During the past year some 600,000 tons has been put in sight and this will likely be repeated next year. He estimates current reserves as good for ten years ahead. He pointed out that this is a large mine and is of a type which requires an unusual amount of work in ore development.

RELEASE OF CERTAIN MINING CLAIMS

Dr. Buffam recommended that three of the Gil group of five claims should be allowed to lapse and the existing excess assessment work be used to maintain the remaining two claims, which should be high-graded in 1968 and then allowed to lapse before February 1st 1969, when further assessment work would be due.

He also recommended that certain portions of claim blocks CBS-223 and CBS-224 should be abandoned, and further, that the options held on CBS-290 and CBS-490 be allowed to lapse without action. Copies of Dr. Buffam's recommendation to the President are attached to these minutes as an appendix.

FRENCH VERSION OF COMPANY NAME

Mr. Gilchrist observed that the Minister had asked that a French version of the Company name should be established, and accordingly, upon motion of Messrs. Sydie and Thompson, the Resolution attached to these minutes as an appendix was duly passed to so provide.

CHRISTMAS GRATUITY

Upon motion of Messrs. Sydie and Thompson, the customary Christmas gratuity, as in past years, was authorized.

- 8 -

DATE OF NEXT MEETING

February 27th was tentatively agreed upon as the date of the next meeting of the Board to be held in Ottawa.

ADJOURNMENT

There being no further business, the meeting was adjourned.

MINUTES OF A SPECIAL GENERAL MEETING OF SHAREHOLDERS OF
ELDORADO MINING AND REFINING LIMITED HELD IN THE ROYAL YORK
HOTEL, TORONTO, ONTARIO, ON DECEMBER 6TH 1967 COMMENCING
AT 1.00 P.M.

Present: Messrs. W.M. Gilchrist
 W.G. Thompson
 W.F. James
 John E. Sydie
 Fred. R. Hadley

In attendance: Messrs. B.S.W. Buffam
 R.C. Powell
 J.C. Orr

The President occupied the Chair and Mr. Powell acted as secretary of the meeting. The secretary noted that five shareholders, representing five shares were present and he produced a proxy authorizing W.M. Gilchrist to vote 70,493 shares held by the Minister of Energy, Mines and Resources in Trust for Her Majesty the Queen in Right of Canada, making a total representation of all issued shares but two.

The Chairman declared the meeting to be regularly called and properly constituted for the transaction of the specific item of business for which the meeting was called, viz: the ratification of a Resolution passed by the Board at a meeting held immediately previous.

Upon motion of Messrs. James and Sydie, the Resolution passed by the Board of Directors at its meeting of December 6th 1967 and reading as follows:-

"WHEREAS it is deemed desirable that there be a French language version of the Company's name,
NOW THEREFORE BE and it is hereby resolved:

THAT the name of the Company shall be ELDORADO MINING AND REFINING LIMITED in the English language and LA SOCIÉTÉ D'EXPLOITATION MINIÈRE ET D'AFFINAGE ELDORADO LTÉE in the French language; and

THAT the Secretary be and he is hereby authorized to apply for confirming Supplementary Letters Patent:

and further resolved:

- 2 -

THAT the first sentence of Section (O) of By-law No: 1
be and it is hereby amended to read as follows:-

"The seal, in the English language version or in the French
language version, an impression of each of which is stamped
on the margin of this by-law, shall be the common seal
of the Company."

was ratified by a unanimous vote.

There being no further business, upon motion duly made and
seconded, the meeting was adjourned.

MINUTES OF A MEETING OF THE EXECUTIVE COMMITTEE OF THE
BOARD OF DIRECTORS OF ELDORADO MINING AND REFINING LIMITED
HELD IN THE ROYAL YORK HOTEL, TORONTO, ONTARIO,
NOV 22, 1967, COMMENCING AT 9.30 A.M.

Present: W.M. Gilchrist
W.F. James
Gordon Lawson

In attendance: B.S.W. Buffam
J.C. Orr
R.C. Powell
*H.E. Lake
*J.C. Burger
*A. Thunaes
*G. Colborne
*R.M. Berry
*A.R. Allen
*W.E. Tranmer
*G.A. Frost
*C. Baschenis

*as required

PRELIMINARY MATTERS

Notice of the meeting having been duly given in accordance with the by-laws, and all members being present, the meeting was declared to be properly constituted. Mr. Gilchrist and Mr. Powell acted as chairman and secretary, respectively.

REVIEW OF URANIUM MARKET DEVELOPMENT

Mr. Gilchrist recalled that it was decided some months ago that the Company would not enter into long-term U_3O_8 contracts, because of a conviction that higher prices are inevitable. Recent indications confirm that this is sound policy. For example, the most recent sale made in the U.S. was for \$7.40 (U.S.). Moreover, there have, as yet, been no major new finds reported, while the pace of commitments to nuclear power, by the utilities, continues unabated. This all points to a shortage of uranium available for commitment in the \$8.00 range by the mid 1970's or earlier.

Mr. Gilchrist also recalled that the Company's contract with the United Kingdom provides, in part, that:

- (i) in respect of 2,400 tons of U_3O_8 already delivered at a price of \$5.37 per pound, the UK Authority may defer payment of \$25.7 million until 1971-2-3, when payment is due in three equal instalments; and
- (ii) the Company has the right, on 30 days notice, to re-purchase this uranium at \$5.37 per pound; and
- (iii) the Company has the right to cancel delivery of some 3,700 tons of uranium scheduled for future delivery.

It is obvious that a price of \$5.37 for current deliveries is now unrealistic, and Mr. Gilchrist therefore proposes to begin talks with the Authority, shortly after year-end, with a view to some form of price re-negotiation, tied to an earlier payment for the 2,400 tons, in order to alleviate the Company's up-coming shortage of cash.

ZIRCONIUM PROJECT

The Chairman reported that the proposal for a zirconium plant, approved by the Board at its September meeting, had now received the informal approval of members of a committee of the Cabinet, and he expected formal approval by Nov. 27th. In the meantime, design and procurement have been going forward. In passing, Mr. Burger noted that, just this week, the Company has been approached by AECL to provide some 60 tons of zirconium metal, desperately required by the end of 1968. This requirement is additional to the demand figures used in the economic study on which the proposal was made.

BEAVER LODGE POWER REQUIREMENTS

The Chairman referred to the discussion at the September meeting of the Board, about the possibility of purchasing the Cominco power plant at Wellington Lake. No further negotiations have yet taken place. In the meantime, it will be necessary to peak with diesel power in the coming winter. A study by Montreal Engineering is now underway on two other possibilities - raising the White Lake dam to give a 15% increase in output, or develop another 10,000 H.P. site down the Charlot River at a probable cost of \$4 million. This would not be cheap hydro power but it would be cheaper than diesel. The report on these two proposals will be ready shortly.

CASH POSITION

Mr. Gilchrist referred to the Company's anticipated difficult cash position, arising out of the substantial capital expenditures proposed. At present, some \$6 million is on deposit with the Receiver General, but with the Government's present cash emergency, these funds will be unavailable for an indefinite period. While current revenue from anticipated sales of 1,000 tons of U_3O_8 are expected, in 1968, to provide all necessary operating funds, any capital and pre-production expenditures must be financed from other sources. As noted above, it is anticipated that arrangements can be made with the UK for pre-payment of the \$25.7 million or part thereof, along with an upward revision of price to provide further additional funds; failing these developments, the Company will be obliged to arrange bank financing.

1968 OPERATING FORECASTS

- (a) Mr. Gilchrist referred the Committee to a statement of Income and Expense, forecast for 1968, and compared with the projected 1967 year-end position. This forecast is based upon sales of all 1968 production, 500 tons at \$7.00 (Can.) per lb. and 500 tons at \$7.25 (Can.). On this assumption, an operating loss of \$122,000 is forecast, but income from ore procurement financing and interest income will offset this loss and produce a net profit for the year of \$292,000. This is some \$247,000 less than the projected 1967 profit.

(b) Referring to the various detailed statements presented in support of this corporate forecast, the discussion may be summarized as follows:-

- (i) Other income will be less than in 1967, by some \$560,000, due to the much lower volume of funds available to earn interest.
- (ii) General and administration expense will be up by \$36,000. This is due largely to \$10,000 provided for possible scholarships, and increases in student assistance and anticipated travelling expense.
- (iii) Sales expense is budgeted for an increase of \$16,550, reflecting greater selling activity, including advertising, which will arise with the Company's entry into the zirconium and UF₆ markets.
- (iv) Ore procurement administration expense will be down by \$15,000; this reflects the reduced activity in this sector.
- (v) The mine costs are estimated at \$13,278,944, including HAB; this is an increase of \$1,615,670 over the projected 1967 costs. These costs are predicated upon a 13% increase in tons mined, an 8% increase in tons milled, and a U₃O₈ output of 1,000 tons (no change). The higher costs are due almost entirely to the manpower sector, to which reference has been made at all recent meetings of the Board. Productivity per man, in the past four months, has been down to 15.5 tons, compared with a high of 22 tons some few years ago. While there is evidence that the improved housing policies and training programmes are paying off, it must be recognized that, not only are these programmes costly, but that there is no quick solution to the manpower problem and costs will continue to suffer while productivity is gradually re-established at a higher level. Moreover grade of ore mined will be .19% in 1968 compared with .211% in 1967, so more tons must be mined to maintain a 1,000-ton/yr output of U₃O₈. Recovery is forecast as 84.7%, which is not satisfactory. The R&D Division are continuing investigation as to the reasons for, and the means of improving, this rate of recovery. One of the problems continues to be a changing character of ore at depth.
- (vi) The Refinery forecasts a small profit of \$10,000 on 1968 operations, after absorbing product development cost and sales expense.
- (vii) The R&D budget for 1968 contemplates a total expenditure by the Division of \$886,870, including depreciation, an increase of \$48,540 over 1967. Of this amount, some \$317,550 will be deferred, recovered or transferred, as follows:-

(transferred and
Zirconium Development.....\$204,250 (deferred)

PAIT assistance, not
compacting.....\$ 20,000 (recovered)

Consortium payments,

Custom contracts..... \$ 20,000 (recovered)
Process Control, B/L.....\$ 50,000 (transferred)
Process Control, Refinery.\$ 10,000 (transferred)
\$317,550

This leaves \$569,320 as expenditure on research as such, and new product development. However, removing depreciation of \$36,060 and technical assistance and liaison of \$35,130, there is left a true R&D expense guideline of \$498,130.

This method of allocating expenditures of the Division gave rise to considerable discussion. Mr. Lawson recalled that some two years previous, the Board had established a policy of limiting the R&D budget to \$500,000, yet he noted that, in the 1967 projected corporate expenditure statement, the R&D expense is shown as \$647,000, with an additional \$379,000 deferred as zirconium pre-production expense. Mr. Colborne noted that, of this latter amount, some \$326,293 had been spent by the Refinery. Mr. Gilchrist observed that, in research, success leads almost inevitably to over-expenditure, and this was the case with the zirconium project. Mr. Lawson expressed the view that, in the Company's present financial situation, it is easier to justify pre-production or process development than research as such.

Moreover, as more work of the Division is channelled into pre-production projects, the "guide-line" of \$500,000 for "research" should be cut back accordingly. It was the view of the Committee that, while the \$379,000 spent in 1967 on deferred zirconium research is undoubtedly justifiable, it is not apparent that the Board had ever approved it as such, and upon motion of Messrs. Lawson and James, such retroactive approval was given.

Following these discussions as here recorded, the Committee, upon motion of Messrs. James and Lawson, adopted the following resolution:

"That the Committee recommends to the Board that it approve the 1968 forecasts presented to this meeting, as follows:-

1. Forecast Corporate Statement of Income and Expense evidencing a net income of \$292,000.
2. Beaverlodge expenditures (incl. HAB) \$ 13,278,944
3. Refinery expenditures \$ 2,502,566
4. Research and Development \$ 886,870
expenditures of which \$317,550 will be deferred, recovered from outsiders or transferred to other company operations;

and recognizing that items 2, 3 and 4 are inclusive of

- (a) Hab mine pre-production expense \$ 657,000
- (b) Zirconium pre-production expense \$ 583,000
- (c) UF₆ Pre-production expense \$ 39,000⁰¹⁷

CAPITAL BUDGETS 1968

The Chairman referred the meeting to a summary of proposed capital expenditures totalling \$3,297,625. This is exclusive of the UF₆ plant to which reference is made later, and is exclusive of any expenditure for the purchase or construction of any hydro plant.

The Committee directed its attention to the individual items in the Beaverlodge, Refinery and R&D schedules, and received explanations as to the necessity or desirability of the major projects. Two proposals in the Beaverlodge schedule were discussed at length, as follows:-

- (i) A custom ore sampling plant at a cost of \$400,000. It was agreed that, in light of the current development status of possible custom ore shippers, this plant need not be built in 1968.
- (ii) A retail store in Uranium City at a cost of \$300,000. Mr. Allen noted that there will shortly be 400 Eldorado families in the City, and at present these people must buy from local stores or come over to the mine townsite to shop. This creates problems of transportation, and of delivery of groceries. He strongly recommended that a branch of the successful Eldorado store be established in the City and operated, as is the present store, on a break-even basis as far as possible. He considers that such a store would complement the current endeavour of the Company in providing adequate housing, and that such a move is consistent with a policy of ensuring that there is no penalty for living in the North. The Committee agreed with these views; but recognized the strong possibility of local political difficulties, particularly with Hudson Bay Company. One suggestion was made that Mr. Gilchrist should meet with the HBC general manager in Winnipeg to discuss the possibility and determine whether HBC would be likely to cause difficulties; another suggestion was made that an Eldorado Employees Corporative be formed to operate both stores.

The Committee agreed that the store is needed, and approved it in principle, if it can be done without encountering difficulties with existing Uranium City merchants.

Subject to the above, the Committee agreed, on motion of Messrs. James and Lawson, to recommend the adoption of the capital budgets as presented.

REVIEW OF ORE RESERVES AND MINE DEVELOPMENT

Dr. Buffam reviewed recent drilling and development results in the Fay and Verna orebodies. What appears to be a reverse in the pitch of the Verna folded structures will necessitate further development and drilling to confirm. A crosscut will be put out on the lower Fay level from which drilling may be carried out to confirm depth continuation of the '09' orebodies. Dr. Buffam recommended delaying for a year the siting of the new Fay Winze, in order to have more information available as to the downward extension of the two main orebodies. Exploration laterally will continue to both the East and West. Dr. Buffam estimates that, at a production rate of 2,000,000/lbs 000018 there is 11 years' ore on the sight at the present time.

PROPOSED UF₆ PLANT


Mr. Gilchrist recalled the discussion of this matter at the September meeting of the Board, and stated that negotiations have been continuing with Tidewater (now Getty Oil Co.) and that a letter of intent is expected soon. In the meantime, the Sales Division has had encouraging reactions from Japanese and European customers with whom the possibility has been discussed.

He called on Mr. Tranmer to present to the Committee a proposal resulting from the staff's study of the technical and economic factors involved in the proposal. In summary, Mr. Tranmer noted that:-

- (i) Eldorado already possesses an adequate refinery for converting yellowcake to UO₃, and has produced UF₄. The third stage, fluorination of UF₄, has not been carried out by Eldorado, but the process is fully documented by the USAEC and detailed equipment design, operating data and the physical arrangement of an existing USA plant have been studied by Eldorado and its consulting firm.
- (ii) There appears to be assurance of a satisfactory volume of U₃O₈ concentrates available for a viable Canadian UF₆ operation at a 5,000/ton year rate.
- (iii) Eldorado can achieve costs permitting a sales price of at least 10% below present US prices, and can offer an attractive package deal which relieves foreign utilities of all the problems of shipping, insurance, weighing, sampling and assaying of concentrates.
- (iv) On a capital expenditure of \$12,935,000, the proposal offers an after-tax return of 11.1% on a 5-year basis and 21.1% on a 10-year basis.

ADJOURNMENT

Following this presentation, the meeting was adjourned at 2.00 p.m.


Chairman


Secretary

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS OF
ELDORADO MINING AND REFINING LIMITED HELD AT THE
COMPANY'S HEAD OFFICE AT 151 SLATER STREET, OTTAWA,
ONTARIO, ON SEPTEMBER 15TH, 1967 COMMENCING AT
2.00 P.M.

Present: Messrs. W.J. Bennett
W.M. Gilchrist
Fred. R. Hadley
G. Lawson
W.G. Thompson
J.E. Sydie

In attendance: Messrs. B.S.W. Buffam
J.C. Orr
R.C. Powell
*H.E. Lake
*J.C. Burger
*C.G. Baschenis
*W.E. Tranmer
*G.F. Colborne
*R.M. Berry

*As required

Visitors: Messrs. A.B. Caywood
P.L.P. Macdonnell

Prior to formally opening the meeting, Mr. Gilchrist gave a verbal review of recent developments on the world uranium marketing scene. Announcements of plans for nuclear power installations continue at a fast pace. For all practical purposes, the South African uranium supply is taken up for the next few years, and it is unlikely that their production will reach even 5,000 tons annually before 1973. U.S.A. utilities are finding that there is almost no domestic uranium for sale for delivery up to 1971. This is forcing a reappraisal of the AEC's thinking with regards to the importation of foreign uranium for use in domestic reactors in the U.S.A. and the viability of the U.S. domestic industry. The sale of Canadian uranium to European customers and others is also hastening a decision on the arrangements for safeguards by the Canadian and U.S. governments. In Europe, all indications are that between 3,500 and 4,500 tons must be arranged within the next few months. The UKAEA are coming to Canada very shortly to open further supply discussions. By 1973, for use in 1975, the U.S.A. will require 35,000 tons annually. Their industry can probably reach this figure by 1972. However, by 1980, their requirements are estimated at 90,000 tons annually, leaving a gap to be filled by expansion of present mines or the finding of new ones in the range of 55,000 to 65,000 tons annually.

PRELIMINARY MATTERS

Mr. Gilchrist occupied the chair and Mr. Powell acted as secretary of the meeting. A quorum being present pursuant to due notice, the meeting was declared to be regularly constituted. Upon motion of Messrs. Hadley and Sydie, following a brief review thereof, the minutes of the previous meeting of the Board held May 12th 1967 were approved.

PRICING AND SALES POLICY

Mr. Gilchrist noted that a firm sale of 800 tons, and a possible 200 additional tons, of U_3O_8 has been arranged by the Company with a German utility at a price of \$5.90 U.S., plus a 4% annual increment, for delivery between 1969 and 1980. A further sale has just been completed of 500 tons to the Tokyo Electric Power Company at a price of \$6.15 U.S., plus 6% compounded annually; a 10% down-payment in each case upon signing of the contract will be made. Mr. Gilchrist stated that the Executive Committee on the previous day had discussed pricing policy, and it is prepared to recommend that the company should not at this time write further long-term contracts at today's prices, but seek spot sales. Mr. Gilchrist is convinced that by 1970, the price of U_3O_8 will be in the \$10.00 range. However, the company would be prepared to sell the balance of its 1967 production, about 300 tons, and its '68 production at \$6.50 U.S. on a cash basis, offers to be open for thirty days only and subject to prior sale. The Board accepted the Committee's recommendation in this matter.

FINANCIAL AND PRODUCTION STATEMENTS

The Chairman presented a summary of the company's operations for the first seven months of the year showing a net income of \$379,187, but with an operating loss of \$77,621. Production at the mine is 6% below target, a shortage of about 80,000 pounds, which, it is hoped, will be made up by the end of the year. Production difficulties are related to unsatisfactory recoveries in the mill due in part to refractory ore. Efforts are continuing to improve this rate of recovery. Mr. Gilchrist noted that there has been some improvement in the labour supply, although this improvement is made at the expense of an 18% increase in labour costs over the comparable seven months in 1966.

An analysis of the net income from operations for the seven months is attached to these minutes as Appendix "A".

RESEARCH AND DEVELOPMENT

Reviewing the activities of the R&D Division, Mr. Gilchrist noted that expenditures in the first seven months were somewhat greater than anticipated, but this was due to progress faster than planned on the zirconium programme. However, the total expenditures for the full year are not expected to exceed the budget.

Work being done on the hot compacting process is going well. A refractory brick has been produced but further development work is in progress and it is expected that tests can be done in Stelco's plant by the year-end.

CAPITAL EXPENDITURES

Mr. Gilchrist presented a list of additional capital expenditures in the amount of \$453,520, as per Appendix "B" attached. He advised that the Executive Committee had scrutinized these proposals on the previous day and recommended their authorization. Special reference was made to the additional housing programme planned for Uranium City. The original budget had provided for twenty-four houses, but manpower requirements now dictate the need for an additional twenty houses by the year-end and a further substantial programme will be required in 1968. In the meantime, to take advantage of weather and get an early start on the 1968 programme, he recommended that in addition to the twenty houses to be built in 1967, fifteen foundations be laid in the current year. This programme had been put out to tender and an acceptable tender had been received from Byrn 000021

Following this discussion and upon motion of Messrs. Lawson and Thompson, the capital expenditure programme attached was approved in the amount of \$453,520.

WELLINGTON LAKE POWER PLANT

Mr. Gilchrist reviewed the history of the Wellington Lake Power Plant which is owned by Cominco and has been rented by the company since the early 1950's. In 1959, the capacity of the plant was increased by adding a second wheel which Cominco has paid for by suitable reductions in rental in recent years. The present arrangement with Cominco calls for a rental of \$92,000 per year plus 5 mills on primary power produced above 60 million K.W.H. and 2 mills for heating power, making a total power cost from this plant for 1967 of \$146,000. Cominco have advised that they wish to revise the agreement to provide for a flat mill rate of 10 to 12 mills which would increase power costs to \$180,000. They have offered a second alternative i.e., an outright sale of the plant for \$3 million. Mr. Gilchrist has retained Montreal Engineering Company to make an assessment of the economic value of the plant and their preliminary recommendation was \$2.5 million but they are now making a more detailed assessment. If the plant could be bought for \$2 million the company could make an 8% return on investment.

Mr. Gilchrist also noted, however, that the Saskatchewan Government has the right to expropriate power plants according to an announced formula and Mr. Lawson observed that any price paid to Cominco should be such that the company would be protected in the event of a later expropriation.

Upon motion, the President was authorized to negotiate with Cominco for the purchase of the plant at a price in the range of \$2 million.

During this discussion, Mr. W.J. Bennett declared his interest as a director of Cominco.

POSSIBLE UF₆ PLANT

Mr. Burger advised the meeting that the Tidewater Oil Company, which operates uranium mines in Wyoming, had approached him recently with respect to Eldorado getting into UF₆ production. Mine concentrates which are now converted at the Port Hope refinery to UO₃ must be further processed to UF₆ before the uranium can be fed to an enrichment plant. Canada has no UF₆ facilities, yet it is evident that by far the major portion of Canada's uranium sales will be made to utilities operating enriched reactors. At the present time, such uranium must go to a UF₆ conversion plant in the U.S., operated by Allied Chemical Corporation. Kerr-McGee Inc. have announced plans for the construction of a UF₆ facility to be ready by 1970. If there were a plant in Canada, foreign utilities buying Canadian uranium could purchase it in the form of UF₆.

The Tidewater Company has expressed keen interest in having a UF₆ plant at Eldorado to which Tidewater would ship concentrates for conversion. There is a strong attraction in having such a plant at Port Hope, in that the UO₃ part of the facility already exists and makes the economics quite attractive and more than competitive with U.S. conversion prices, on the basis of preliminary estimates. It is expected that the plant would cost about 12 million dollars and that the investment would be returned in five years. The viability of the project appears to be assured if a contract for at least five years can be obtained with Tidewater. The Board agreed that negotiations should continue.

CONTRIBUTION TO QUEEN'S UNIVERSITY AND ARCTIC STUDY OF TRANSPORTATION

Upon motion of Messrs. Bennett and Lawson, a sum of \$5,000 was authorized, as a contribution to be made to the new mining faculty building at Queen's University.

Upon motion of Messrs. Lawson and Hadley, a contribution of \$7,000 per year for 1967-8-9 was authorized to be made to the study-in-depth of transportation in the north being undertaken under the general sponsorship of the Arctic Institute.

APPOINTMENT OF ASSISTANT TREASURER

Mr. Gilchrist advised the meeting that due to the impending retirement of the Chief Accountant, Mr. E. Tottman, a re-organization of the Treasurer's department is indicated and he recommended the appointment of Mr. G.A. Frost as Assistant Treasurer. He noted also that this would give rise to certain adjustments in the signing authority of certain bank accounts and upon motion of Messrs. Hadley and Lawson, the resolution attached as Appendix C hereto was passed to accomplish these ends.

MEETING OF THE BOARD

The date of December 6th was agreed upon as the date of the next meeting of the Board to be held in Ottawa.

PROPOSED ZIRCONIUM PROJECT

At this point in the meeting, a staff presentation of a proposal for a zirconium production plant was made to the Board, using visual aids. Mr. Gilchrist recalled that this matter has been under consideration for some time. The highlights of the proposal and a condensation of the policy implications related thereto are as follows:-

The availability of zirconium is vital to the success of the Canadian nuclear power programme, yet there is no producer of zirconium in Canada. Zirconium requirements will increase in direct proportion to the growth of installed nuclear capacity. Although existing zirconium producers in the free world are in the process of expanding their productive capabilities, there is now developing a shortage of zirconium which endangers the Canadian nuclear programme. Canada should, therefore, take immediate steps to ensure for itself an adequate supply of this metal.

With the objective of assuring Canada's zirconium needs, Eldorado began in 1964 to apply its substantial experience in uranium processing to the development of a method of producing zirconium. The project was encouraged from the outset by Atomic Energy of Canada Limited, Ontario Hydro and the fuel fabricators, Canadian General Electric and Canadian Westinghouse. The Department of Industry has been interested in and has financially supported the project under its Programme for the Advancement of Industrial Technology.

The research and development work, including the operation of a pilot plant in recent months, has been successful in developing a new method for the production of zirconium. Metal produced in the pilot plant in commercial-sized ingots has been fabricated into tubes meeting specifications and acceptable to the fuel fabricators. On the strength of Eldorado's demonstrated ability to produce zirconium of acceptable quality, Ontario Hydro has directed its nuclear materials suppliers to use Canadian-produced zirconium as and when it is available at competitive prices.

In light of the successful pilot plant results and favourable preliminary economic assessment of the project, Catalytic Construction of Canada Limited was commissioned some months ago to prepare an engineering estimate of the capital cost of a zirconium plant of 300-ton annual capacity. Such a plant would satisfy Canadian domestic requirements and in the early years leave some production available for export to the United Kingdom and the United States where near-term shortages are indicated. A detailed operating estimate was also prepared.

Both capital and operating estimates have been developed on conservative bases. For example, all major items of equipment have been priced, and operating costs have been escalated despite a history of declining unit costs in refinery operations even in the face of increased wage rates and cost of supplies. The economic assessment indicates that the capital cost of \$7,585,600 for plant would be recovered over six years, and over a total productive period of ten years the annual rate of return on the investment after tax would amount to 10%.

In summary, the desirability of Canada having a zirconium production capability in support of its nuclear power programme appears to be self-evident. Moreover, with the urgent requirement and with availability of supply in doubt, the time factor is of paramount importance.

Following the presentation, various members of the Board interrogated the staff on certain aspects of the proposal, and in the ensuing discussion, concluded as follows:-

- (a) That it is essential that Canada's power programme be protected by having a source of zirconium in Canada, and that this requirement is urgent.
- (b) That Eldorado is the logical vehicle by which to accomplish this objective, not only because of the existence of ancillary facilities at the refinery and the fund of knowledge in the required techniques which resides in the company's personnel, but also because Eldorado has a distinct advantage in time over any other company which might be interested.

Following consideration of this matter, and upon motion of Messrs. Bennett and Lawson, a capital expenditure in the amount of \$7,585,600 for the building of a zirconium production plant of three-hundred tons annual capacity was authorized.

ADJOURNMENT

Upon motion of Messrs. Hadley and Lawson, the meeting was adjourned.

W. M. Filchist
Chairman

R. Howell
Secretary

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS OF
ELDORADO MINING AND REFINING LIMITED
HELD AT 151 SLATER STREET, OTTAWA, ONTARIO,
MAY 12TH, 1967, IMMEDIATELY FOLLOWING THE ANNUAL
GENERAL MEETING OF SHAREHOLDERS

Present: Messrs. W.J. Bennett
W.M. Gilchrist
F.R. Hadley
W.F. James
G. Lawson
J.E. Sydie
W.G. Thompson

In attendance: Messrs. R.C. Powell
J.C. Orr
B.S.W. Buffam
*J.C. Burger
*H.E. Lake
*G. Colborne
*R.M. Berry

* as required

PRELIMINARY MATTERS

This being the first meeting of the newly elected Board, Mr. Gilchrist and Mr. Powell respectively acted as temporary chairman and secretary.

OFFICERS AND EXECUTIVE COMMITTEE

Upon motion of Messrs. James and Hadley, officers were appointed as follow:-

President	W.M. Gilchrist
Vice President	
Mining & Exploration	H.E. Lake
Vice President Refining	J.C. Burger
Secretary	R.C. Powell
Treasurer	J.C. Orr
Director of Administration	C. Baschenis
Assistant Secretary	E.C.A. Kelly

and an Executive Committee of the Board was appointed consisting of Messrs. Gilchrist, James and Lawson.

REVIEW OF OPERATIONS TO MARCH 31ST 1967

(a) Profit

The Chairman presented an interim report summary for the first quarter of the year showing a net income from operations of \$238,480 and a net profit after other income of \$441,840. Mr. Gilchrist explained that the reported profit position is attributable to a profit of \$861,000 on the sale of some 300 tons of U₃O₈ to Ontario Hydro. Without this sale, the quarter would have shown a net loss of \$419,000, since deliveries to the Government Stockpile were made at substantially less than cost because of high mine costs resulting from low production.

(b) Suspension of Deliveries to Government Stockpile

Mr. Gilchrist then referred to the recommendation of the Executive Committee that deliveries to the Government Stockpile should be suspended and the company's funds employed to build up its own stockpile, and he reported that he had now received the Minister's concurrence. Accordingly, the Board approved suspension of deliveries until such time as further action by the Board is indicated.

(c) Mine Production

The Chairman referred to a statement of mine production for the three months, indicating a shortfall of about 86,500 pounds with a consequent cost per pound of \$6.26 compared with a target of \$5.12. However, he reported that production for the month of April had been above target of 170,000 pounds per month and that production for the year of 2,000,000 pounds without excessive high grading should now be possible. The manpower situation has eased somewhat and further anticipated improvement should contribute to keeping production up to target.

(d) Mine Development and Surface Exploration

Referring to the Statement of Operating Statistics of the Beaverlodge Operation for the quarter, Mr. Gilchrist noted that lateral development and diamond drilling in the mine was ahead of schedule and at less than estimated cost. Dr. Buffam reported that diamond drilling was active in the exploration headings of the 13th level west at Fay, the 12th level east at the Winze and the 24th level drive east. Drifting is in progress on the exploration drive west on the 23rd level. There are indications of ore in the "99" zone on the 12th and 24th levels, and drilling in the "09" zone on the 18th level at Fay is giving continuing confirmation of good grade ore. Dr. Buffam observed that the main ore shoots in the mine have opened up well in the lower levels with some considerable number of veins traceable for 300 to 400 feet. It is his view that the mine is generally standing up well to exploration. The underground and surface activities, which will be directed towards augmenting existing information on a number of outstanding areas, will be essential to the locating of the proposed internal shaft.

ZIRCONIUM DEVELOPMENT

The Chairman recalled that the first and very satisfactory 500 pound experimental billet of zirconium metal had been poured in mid-April. Moreover, sheath tubes made from an earlier billet had now been satisfactorily evaluated by Canadian Westinghouse and evaluation by C.G.E., although not complete, had so far shown nothing detrimental. It appears evident, therefore, that the company is able to make satisfactory zirconium metal. Negotiations are now underway with Ontario Hydro, its fuel fabricator and A.E.C.L. looking towards commitments which would support a 200 ton per year operation for five years. Indications are that while such a market would serve only to guarantee return of capital and operating costs in the five-year period without interest or profit, it would get the company established as a supplier of the unquestionably substantial zirconium market of the 1970's.

At the present time, Catalytic Construction Company Limited are doing an engineering and cost study of a proposed plant, looking at two possibilities - a plant incorporated with the refinery uranium circuit and a completely separate facility. The results of this study will be available in a matter of weeks and it is expected that a recommendation will be ready for the Board's September meeting.

REVIEW OF URANIUM SITUATION

Mr. Gilchrist reported that he had recently visited Washington to sound out the A.E.C. on the American uranium position. As a result of this meeting, Mr. Gilchrist is convinced that the U.S. uranium industry has no hope of finding uranium in the quantity required as fast as the U.S. will need it. While their exploration has been greatly stepped-up, they have not yet added to their reserves, which are now 4,000 tons of U_3O_8 less than a year ago.

Recent forecasts now indicate world requirements as 80,000 - 85,000 tons in 1980 and up to 120,000 tons annually by 1985.

In France there will be a requirement of 5,000 tons annually by 1975 and French production is about 2,000 tons annually. The South African production is beginning to look less and less important and will be adversely affected by any reduction in gold production.

Australia has recently put quotas on uranium exports. These developments obviously will enhance Canada's position as a leading supplier of uranium to the world.

CAPITAL EXPENDITURES

The chairman reported that the Hab Development programme, as approved earlier, is on schedule. Benching and site preparation commenced in April, and a pilot hole has confirmed good ground conditions at the shaft site. The housing programme at Uranium City is similarly on schedule. Other capital expenditures so far this year were routine and within estimate.

POSSIBLE JOINT VENTURE WITH AIR PRODUCTS AND CHEMICALS INCORPORATED

Mr. Gilchrist referred to the fact that most of the world's power reactors are going to be of a type which uses enriched uranium. Before enrichment, natural uranium must be taken to UF_6 , which requires fluorine in large amounts. Recently, he had been approached by Air Products and Chemicals Inc., a U.S. firm which produces a variety of chemicals, including fluorine. This firm has proposed a partnership with Eldorado in a UF_6 venture. This has much to commend it, as it would give Eldorado an entree to the U.S. markets, and could also be useful in re-channeling the resulting enriched UF_6 back to the Port Hope Refinery for the production of the enriched nuclear fuel UO_2 .

A team from each company is at present engaged in a preliminary assessment of the project, to report in a few weeks, and depending upon this assessment, the Board may be asked to consider this matter at its next meeting.

NEXT MEETING

The date of Friday, September 8, in the forenoon, was agreed upon as a suitable date for the next meeting of the Board.

ADJOURNMENT

There being no further business, the meeting was adjourned upon motion duly made and seconded.

W. M. Gilchrist
Chairman

R. C. Powell
Secretary

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS OF
ELDORADO MINING AND REFINING LIMITED
HELD AT 151 SLATER STREET, OTTAWA, ONTARIO,
MAY 12TH, 1967 COMMENCING AT 2.00 P.M.

Present: Messrs. W.M. Gilchrist
F.R. Hadley
W.F. James
G. Lawson
J.E. Sydie
W.G. Thompson

In attendance: Messrs. R.C. Powell
J.C. Orr
Dr. B.S.W. Buffam

PRELIMINARY MATTERS

The meeting, having been called with due notice and a quorum being present, was declared to be regularly constituted.

MINUTES OF BOARD MEETING HELD FEBRUARY 24, 1967

The president reviewed the items dealt with at the previous meeting of the Board and referred particularly to the preliminary consideration given at that meeting to the possibility of increasing the capacity of the Wellington Lake power plant. He advised the Board that he would now recommend against proceeding with this project at this time, but would probably bring it forward for consideration in another year.

Upon motion of Messrs. James and Hadley the minutes were approved.

MINUTES OF EXECUTIVE COMMITTEE MEETING HELD APRIL 18/67

The chairman observed that these minutes had been circulated to Board members and, there being no discussion or comment, it was moved by Mr. Sydie and seconded by Mr. Thompson that the minutes be adopted and the actions of the committee ratified.

ANNUAL REPORT 1966

Upon motion of Messrs. James and Lawson, the annual report of the directors to the shareholders was approved for presentation to the forthcoming annual general meeting of shareholders.

ADJOURNMENT

There being no further business, the meeting was adjourned.

W. M. Gilchrist
Chairman

R. C. Powell
Secretary

ANNUAL GENERAL MEETING OF SHAREHOLDERS OF ELDORADO
MINING AND REFINING LIMITED HELD AT 151 SLATER STREET,
OTTAWA, ONTARIO, MAY 12TH, 1967 COMMENCING AT 2:35 P.M.

Present: Messrs. W.M. Gilchrist
F.R. Hadley
W.F. James
G. Lawson
J.E. Sydie
W.G. Thompson

In attendance: Messrs. R.C. Powell
J.C. Orr
Dr. B.S.W. Buffam

PRELIMINARY MATTERS

The president occupied the chair and Mr. Powell acted as secretary of the meeting. The secretary read a list of 6 shareholders present representing 6 shares and produced a proxy authorizing W.M. Gilchrist to vote 70,493 shares held by the Minister of Energy, Mines and Resources in trust for Her Majesty the Queen in Right of Canada - making total representation of all issued shares but one. The chairman accordingly declared the meeting to be regularly called and properly constituted for the transaction of business and directed that a copy of the notice calling the meeting be filed together with the declaration approving mailing of notices.

REVIEW OF MINUTES

Upon motion of Messrs. Thompson and James, reading of the minutes of the previous annual general meeting of shareholders held May 6, 1966 was dispensed with and the minutes taken as read and confirmed.

ANNUAL REPORT

The secretary of the meeting read the Auditor's Report for 1966 and upon motion of Messrs. Lawson and Sydie the reading of the Annual Report was dispensed with. Upon motion of Messrs. Hadley and James, it was resolved that the Annual Report of the Directors, the Statement of Income and Expense and the Statement of Surplus, together with the Balance Sheet as of December 31, 1966 as printed be approved. /

ELECTION OF DIRECTORS

In response to a call from the chair, the following were nominated as directors:

W.J. Bennett
W.M. Gilchrist
F.R. Hadley
W.F. James
G. Lawson
J.E. Sydie
W.G. Thompson

There being no further nominations for the seven Board seats, the chairman declared nominations closed and those nominated to be duly elected as directors to hold office until the next annual general meeting of shareholders or until their successors are appointed.

APPOINTMENT OF AUDITORS

Upon motion of Messrs. Lawson and Sydie it was resolved that the Auditor General of Canada be appointed auditor of the company in accordance with existing arrangements, until the next annual general meeting of shareholders.

ADJOURNMENT

There being no further business, upon motion of Messrs. Hadley and Sydie the meeting was adjourned.

de. m. Schreist
Chairman

R. Powell
Secretary

Present: Mr. W.M. Gilchrist
Mr. F. R. Hadley
Dr. W.F. James
Mr. W.G. Thompson

In attendance: Dr. B.S.W. Buffam
Mr. R.C. Powell
Mr. J. C. Orr
* Mr. J. C. Burger
* Mr. H.E. Lake

*As required

PRELIMINARY MATTERS

Notice having been duly given, and the four members present representing a quorum, the meeting was declared to be regularly constituted. Mr. Gilchrist presided and Mr. Powell acted as secretary.

MINUTES OF DECEMBER 2, 1966 MEETING

The President reviewed the minutes of the Board Meeting of December 2, 1966, and upon motion of Dr. James and Mr. Hadley, the minutes were approved.

DRAFT OF ANNUAL REPORT

The Chairman then referred to the draft of the Annual Report of the Company and its subsidiaries, including the audited financial statements of the parent company, which had been mailed out to Board members in advance of the meeting. The Board approved the draft and statements and the Secretary was instructed to proceed with translation and printing.

RESOLUTION AUTHORIZING SIGNATURES ON BALANCE SHEET

Upon motion of Mr. Thompson and Dr. James, Dr. W.F. James and Mr. F.R. Hadley were authorized to sign the audited balance sheet.

PRELIMINARY PROPOSAL FOR AN INCREASE IN CAPACITY OF THE WELLINGTON LAKE POWER PLANT

Mr. Gilchrist, in raising this matter with the Board, emphasized that only preliminary studies of the project had been made at this date. However, a definite need for additional power is indicated because the tonnage of ore to be mined by the company, and probably by others in the district, will inevitably increase in the next few years. It appears that the cheapest way to provide additional power would be to raise the White Lake Dam and increase capacity by another 750 - 1,000 HP. Agreement with Cominco would, of course, be necessary. A rough estimate of cost at this time is about \$400,000. An adequate flow of water is assured.

A second alternative would be to replace the present two horizontal 3,300 HP wheels with a larger one which would take the plant up to 10,000 HP. A rough estimate of the cost of this is \$2.5 million. Another and more far-reaching alternative would be to reappraise the Elizabeth Falls potential at Fond-Du-Lac where 36,000 HP could be developed.

Mr. Gilchrist advised that when further information is available from the feasibility studies now underway, The Executive Committee would meet to consider the matter.

RENTAL HOUSING IN URANIUM CITY

Mr. Gilchrist recalled that the 1967 capital budget approved at the December meeting of the Board contained an item of \$160,000 for rental housing to be provided in Uranium City, and that this figure was predicated upon the cost of purchasing, moving and re-establishing twenty-four houses from the Gunnar mine. Bids have now been received on the job and the lowest bid is \$293,000, which will put the cost of the houses at about \$12,200 instead of the anticipated \$6,600. The mine management is attempting to negotiate this price downwards, but whether this is possible or not, the programme must, it was agreed, be proceeded with, if the company is to attract a better type of permanent married personnel. Mr. Gilchrist observed also that houses built in 1968 - and there will be a requirement - will be in the \$20,000 bracket. There seems to be a generally accepted view that housing of this type in mining communities must be priced so that the occupant's total cost of housing is not more than \$100 per month. This means that the houses will have to be rented at \$50, and at this rental there is a subsidization factor of \$25 to \$30. per month over a fifteen-year period. Mr. Gilchrist also advised the Board that management has undertaken to pay family transportation costs and up to \$500 for moving furniture. Since this practice has been initiated in an effort to attract the better employee, it is obvious that the payment of these additional subsidies will dictate the need for a very careful appraisal of employees selected.

ZIRCONIUM DEVELOPMENT

The Chairman reported further progress on the zirconium development programme to which reference had been made at the December meeting. The arc melting and forging done at Wah Chang had gone very well, and a very encouraging report had just been received from Wolverine on the first extrusion to a base tube stage. However, contrary to earlier indications, it now appears that the Wah Chang Company will not have excess oxide which could be purchased for conversion to metal, and it is therefore imperative to press forward with development of the front end of the process, i.e., from zircon sand to ZrO_2 (zirconium oxide). The time required for this development is estimated at 5 - 7 months, and by the September meeting of the Board, there should be adequate information on plant design and capital requirements. so that a proposal for a production plant may be put before the Board at that time.

Mr. Gilchrist advised the Board that demand in Canada has increased 100% since 1965, that all zirconium used is imported, and that Canada could well be a captive market for 200 tons/year. In the US and Europe, demand is up 30% from just a year ago, and demand must inevitably follow the uptrend in uranium demand since most reactor types use zirconium both as fuel cladding and as calandria tubes.

RESOLUTION AUTHORIZING USE OF COMPANY SEAL

Upon motion of Messrs. Hadley and Thompson, the following Resolution was passed:

"WHEREAS by resolution passed December 3, 1965, certain officials of the Beaverlodge Operation were authorized to sign and apply the company seal to certain housing documents necessary to implement the Company's policy of financial assistance to employees in the purchase of houses in Uranium City, and

WHEREAS it is deemed advisable to extend this authorization to include leases between employees and the Company for company-owned residences.

NOW THEREFORE, be it resolved:

That the first paragraph of the resolution of the Board dated December 3, 1965 hereinbefore referred to be and it is hereby amended to read as follows:

"THAT the Manager or the General Superintendent of the Beaverlodge Operation, together with either the Chief Accountant, the Personnel Officer, or such other officer responsible for housing administration as the Manager may designate from time to time, be and they are hereby authorized to execute under the Company seal, Transfers of Land and Discharges of Mortgage required under the Saskatchewan Land Titles Act in connection with the implementation of the Company's policy of housing assistance to its employees residing in the Municipal District of Uranium City, and leases between employees and the Company for company-owned residences, and"

RESOLUTION RE LOAN TO NORTHERN TRANSPORTATION COMPANY LTD.

Upon motion of Mr. Thompson and Dr. James, the following Resolution was passed:

"WHEREAS the Company's subsidiary Northern Transportation Company Limited will require certain funds for capital and operating expenditures during 1967, and

WHEREAS Northern will have insufficient working capital from time to time during 1967 to provide such funds but expects to generate funds to the amount required, by the end of 1967, and

WHEREAS the Company has surplus funds which can be loaned to Northern.

NOW THEREFORE, be and it is hereby resolved that Eldorado Mining and Refining Limited shall advance such funds to Northern Transportation Company Limited during 1967 as the latter may require, but not exceeding \$1,500,000 in all, the funds so advanced to bear interest at the rate which Eldorado would have earned had the said funds been on deposit with the Receiver General."

AREA DEVELOPMENT

Dr. Buffam reviewed briefly recent ore developments in the main mine and referred also to the HAB development and to the possibility of re-opening the dormant Eagle property and to further exploration of the Company's holdings in the Fish Hook Bay area. All of these constitute potential additions to mill feed in the next few years and, while Dr. Buffam does not anticipate the finding of any new large properties in the area, he considers it likely that some of the smaller properties which produced or on which development had taken place during the boom of the 1950's, would almost inevitably come into production. In all likelihood these small properties would not support milling operations and a resumption of custom ore milling by Eldorado is indicated.

OPERATING REVIEW

At this point an operating review in the form of a visual presentation with commentary was given to the Board, updating to the end of 1966 and projecting to 1967, a comparable presentation made in 1963.

DATE OF NEXT MEETING OF BOARD

Mr. Gilchrist passed on to the meeting an invitation to the Board from Mr. A. B. Caywood to visit Mr. Caywood's home in Victoria, B. C., for its next meeting. The members present were prepared to accept this invitation and a tentative date of the weekend of May 5 - 6th was agreed upon, subject to confirmation at an early date.

ADJOURNMENT

There being no further business, upon motion duly made and seconded, the meeting was adjourned.

Chairman

Secretary

R. C. Powell

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS OF
ELDORADO MINING AND REFINING LIMITED,
HELD IN TORONTO, ONTARIO, ON DECEMBER 2ND 1966,
COMMENCING AT 9.30 A.M.

Present: Mr. W.M. Gilchrist
Dr. W.F. James
Mr. W.J. Bennett
Mr. W.G. Thompson
Mr. J.E. Sydie
Mr. F.R. Hadley

In attendance: Dr. B.S.W. Buffam
Mr. J.C. Orr
Mr. R.C. Powell
*Mr. J.C. Burger
*Dr. A. Thunaes
*Mr. H.E. Lake
*Mr. G.F. Colborne

* as required

PRELIMINARY MATTERS

Notice of the meeting having been duly given and a quorum being present, the meeting was declared to be regularly constituted. The President chaired the meeting and Mr. Powell acted as secretary.

MINUTES OF PREVIOUS MEETING

The Chairman reviewed the minutes of the Board's meeting of September 2nd 1966, copies of which had been circulated previously, and upon motion of Messrs. Bennett, and Thompson, the minutes were taken as read and approved.

REVIEW OF 1966 OPERATIONS FOR 10-MONTHS ENDING
OCT 31ST

The Chairman referred to the detailed statements dealing with operating results to Oct 31st.

He noted that for the first ten months of the year, operations had shown a loss of some \$695,000, offset by interest and other earnings to produce a net income of \$243,622. Production at the mine has been below target by some 8% and production cost was 12% above target. The production shortfall is due almost entirely to the continuing difficult labour situation, and the resulting shortfall, in turn, has adversely affected the cost per pound. Mr. Gilchrist referred to the need for improving supervision and the need for management training in order to employ the Company's personnel to the best advantage, and he spoke of plans now underway to this end. He referred also to the reluctance of employees or potential employees to invest in housing and stated his view that a rental housing programme has become essential. A full discussion of these matters is contained in the minutes of the Executive Committee held November 21st 1966 and members had had these minutes prior to this meeting.

CAPITAL EXPENDITURES 1966

Referring to a comparison of expenditures versus authorization, the Chairman noted that there was unspent at the end of October some \$571,290 of the total authorization of \$1,299,735. However, it is estimated that about \$1.1 million will have been spent by year-end.

Document disclosed under the Access to Information Act -
Document divulgué en vertu de la Loi sur l'accès à l'information

Mr. Gilchrist referred the Board to the minutes of the Executive Committee meeting of November 21st 1966. Upon motion of Messrs. Bennett and Hadley, the actions of the Executive Committee, as expressed in the minutes, were ratified.

MINE DEVELOPMENT AND ORE RESERVES

Dr. Buffam spoke briefly about recent developments in the mine and the ore reserve position. There has been a significant growth in reserves in 1966 mainly in the higher grade ore bodies, and the overall grade of published reserves is thereby preserved. For the next few years new growth in ore reserves can be anticipated from the lower grade ore bodies at the east end of the mine. Dr. Buffam referred to the long range programme of mine development commenced five years ago, which, it has now been established, has paid off. He is optimistic as to the long range future of the mine and noted that while it is a difficult ore body to test by drilling, the structure is similar to one in the Kirkland Lake area which has developed ore to 10,000 ft.

HAB CLAIMS DEVELOPMENT AND OTHER EXPLORATION

The Chairman referred to the information set out in the Executive Committee minutes with respect to this development, and noted that the Committee had recommended proceeding with the project. The budget for the programme for 1967 is made up as follows:-

Completion of the access road	\$ 45,000
Site preparation	\$146,000
Shaft sinking preparation	<u>\$ 20,000</u>
	<u>\$211,000</u>

In addition, capital expenditures are estimated at \$470,000. Upon motion of Messrs. Bennett and Sydie these appropriations were authorized.

Dr. Buffam stated also that plans for the coming year included re-mapping in still greater detail of certain areas of the company's outside property previously mapped, some additional prospecting within ground held, and a further look at the company's claims in the Fish Hook Bay area.

1967 OPERATING FORECAST

The Chairman referred to a forecast of income and expenditure for the year 1967. This statement had been revised following the Executive Committee meeting in the light of the sale to Ontario Hydro of some 231 tonnes of U (300 tons of U_3O_8 as concentrates), confirmed since that meeting. With this sale confirmed, management is able to forecast a small profit position of \$145,000 for 1967. The operating income for the year is forecast at \$14,646,000, operating expenses including depreciation \$15,219,000, and net other income of \$718,000, for an anticipated profit of \$145,000. Upon motion of Messrs. Bennett and Hadley this operating budget was approved.

During discussion of this forecast, and in particular the sale to Ontario Hydro, Mr. Gilchrist noted that Hydro intends to purchase from the company a total of 1,000 tonnes of U, including the above-mentioned 231 tonnes, in the period ending with 1977. Moreover, the product will be sold in the form of UO_2 , and the company has also been assured that it will have a refining contract for the conversion to UO_2 of uranium concentrates to be purchased by Hydro from others for delivery through 1973.

Mr. Gilchrist advised that the 300 tons of U_3O_8 in concentrates now in inventory (231 tonnes of U) has been sold at \$5.50 per pound of U_3O_8 , the last delivery to take place in mid-1970. From that time, Hydro's purchases from Eldorado will be at the rate of some 102 tonnes of U per year from mid-1970 through 1977. Prices will range from \$7.10 in 1970 to \$8.00 in 1973. Thereafter, the price will be based upon a formula which assumes a 1967 production cost of \$6.00 with a \$1.00 markup for taxes, profit, and other elements not included in mine-production cost. The \$6.00 will be escalated on the basis of DBS labour and materials indexes and the \$1.00 will be escalated at 5% compounded annually. It is expected that this formula will produce selling prices ranging from \$8.79 in 1974 to \$9.69 in 1977. All the prices given are exclusive of refining fees.

Mr. Gilchrist advised the meeting that Hydro's total annual requirements will rise from 154 tons of U_3O_8 in 1970 to about 980 tons in 1980. While Hydro would have been interested in having Eldorado supply its total requirements this would have meant committing an increasing percentage of the company's output each year until, by 1980, essentially the entire output of the mine would have been earmarked for Hydro. In Mr. Gilchrist's view, with the assured world demand which is on the horizon, this would not have been good policy. It would have effectively precluded meaningful negotiations with other power utilities, domestic or foreign, since the company would consequently have been unable to guarantee long-term supply and would have become essentially a captive supplier to Ontario Hydro.

At this point, some discussions arose in the meeting as to whether the company should be seeking off-shore sales or whether the national interest would point to the desirability of conserving the company's reserves for the use of domestic utilities.

1967 CAPITAL BUDGET

The Chairman referred to the capital budget of \$804,025 as detailed in the statements presented and as recommended to the Board by the Executive Committee. Upon motion of Messrs. James and Hadley this budget was approved, including \$92,400 of 'possible' projects about which further information is desired before proceeding, and which projects will, if firmed up, be referred back to the Committee or the Board. A detailed list of the capital expenditure items, making up the total of \$804,025, is attached to these minutes as an appendix.

ZIRCONIUM

Mr. Gilchrist reported that the first electrode of zirconium metal had now been shipped to the Wah Chang Company as forecast in the minutes of the Executive Committee meeting. It would be a few weeks before the results of testing would be available. In answer to a question from the Board, Dr. Thunaes advised that there is nothing on the horizon which would appear to be competitive with zirconium as a cladding metal for nuclear fuel.

DIVIDEND

Mr. Gilchrist presented a forecast of the company's cash position at December 31st 1967 of \$15,600,000. This figure does not contain any provision for the possible cost of building a zirconium plant.

In the light of the company's cash position, it was the view of the meeting that a dividend should be paid and upon motion of Messrs. Sydi and Bennett a dividend of \$1,000,000 was declared payable December 9/66.

CHRISTMAS GRATUITIES

Upon motion of Messrs. Hadley and Bennett it was resolved that the practice of granting a Christmas gratuity to employees, as in past years, be continued for 1966.

NEXT MEETING OF THE BOARD

It was agreed that the next meeting of the Board would be held in the company's new offices in Ottawa on February 24th 1967.

PRESENTATION OF LONG-SERVICE PINS

The President took the opportunity of the meeting to present to Mr. H.E. Lake a twenty-year service pin and to Mr. G.F. Colborne a fifteen-year service pin.

SALARIES

Mr. Gilchrist discussed salaries of officers and management, and upon motion duly made and seconded, the following increases in salaries were authorized effective January 1st 1967:

Vice-President - Mining and Exploration	\$ 500 per annum
Vice-President - Refining	\$1,800 " "
Refinery Manager	\$1,500 " "
Treasurer	\$ 900 " "
Secretary	\$ 900 " "
Director of Administration	\$ 800 " "
Mine Manager, Beaverlodge	\$ 800 " "

In addition, Mr. G.F. Colborne was promoted from Assistant Manager R&D Division to Manager of the Division, effective January 1st 1966, with an increase in salary of \$2,000 per annum.

ADJOURNMENT

There being no further business, the meeting, upon motion was adjourned.

22

J F Dunnet

Chairman

Gen. Superint. Beaverlodge
+ 1,200

Secretary

See RCP memo to JEB of Dec 22, 1966

ELDORADO MINING AND REFINING LIMITED

Summary of Minutes of Board Meeting of
September 2nd 1966

1. Reviewed Board Minutes of May 6th 1966
2. Reviewed and ratified decisions of Executive Committee at meeting of July 19th 1966.
3. Reviewed financial statements to July 31, showing net loss on operations of \$36,693, with corporate profit of \$529,072.
4. Heard report on progress of zirconium research, and proposed 4-party agreement for further research on hot compacting technique.
5. Approved capital expenditure of \$82,350.
6. Heard reports by geologists on surface evaluation programme, and approved additional \$50,000 for Hab road.
7. Re-confirmation of policy of maintaining and expanding ore reserves within the confines of the restrictions placed upon the company.
8. Agreement that exploration programmes should be reviewed at each meeting of the Board.
9. Discussion of labour supply and means of attracting and retaining.
10. Authorization of loan to NTCL.
11. Agreed to cancel \$26,600 in Uranium City Bonds held by company.
12. Authorization to transfer 70,493 shares of company stock to Minister of Energy, Mines and Resources.
13. Set date of Dec 2/66 for next meeting.

MINUTES OF THE MEETING OF THE BOARD OF DIRECTORS OF
ELDORADO MINING AND REFINING LIMITED HELD AT THE
BEAVER LODGE OPERATION, ELDORADO, SASKATCHEWAN,
ON FRIDAY, SEPTEMBER 2ND, 1966, COMMENCING AT 2.30 P.M.

Present: Messrs. W.M. Gilchrist
Fred. R. Hadley
W.F. James
Gordon Lawson
John E. Sydie
W.G. Thompson

In attendance: Messrs. J.C. Burger
H.E. Lake
P.L.P. Macdonnell
J.C. Orr
R.C. Powell
*A.R. Allen
*A. Thunaes
*C.M. Trigg
*G.N. Woollett

*as required

PRELIMINARY MATTERS

Notice of the meeting having been duly given and a quorum being present, the meeting was declared to be regularly constituted.

MINUTES OF BOARD MEETING OF MAY 6TH 1966

Upon motion of Messrs. Hadley and Thompson, minutes of the meeting of the Board held May 6th 1966, copies of which had been circulated to Board members, were approved.

MINUTES OF EXECUTIVE COMMITTEE MEETING

The Chairman reviewed the minutes of the Executive Committee Meeting held July 19th 1966, copies having been supplied to the Board in advance, and upon motion of Messrs. Thompson and Hadley, the actions taken by the Executive Committee at that meeting were ratified. In referring to the proposed negotiations with Baska, Mr. Gilchrist noted that it had not as yet been possible to negotiate with Baska due to re-financing of that company which is currently underway.

REVIEW OF OPERATIONS TO JULY 31ST 1966

The Chairman presented an interim report summary for the first seven months of the year, showing a net loss on operations of \$36,693 against a target for the period of \$89,600. This position stems from a number of factors including a shortage of labour at Beaverlodge and lower mill recoveries due to refractory ores. Because of high interest rates earned, however, non-operating income was 56% above target, and the net income position was a profit of \$529,072, some 16% above target for the seven months. The Chairman predicted that the net income target for the year would be achieved.

The Board then considered the various detailed statements in support of the summary. The Chairman observed that the Company's cash position was \$17,500,000 at the end of July and should be approximately \$16,500,000 at the year end. Mr. Gilchrist also noted in passing that the operation of the Refinery has, to date, produced a net income of \$201,000.

Turning to the Research and Development statements, it was noted that expenses recorded, as compared to the budget at July 31st show an excess of \$79,000. This is because certain zirconium expenditures had been made earlier than had been anticipated, but it is still expected that the total expenditures for the year will be close to the \$500,000 budgeted.

The faster pace of the zirconium programme has the objective of getting tubes made for early evaluation. One thousand pounds of metal is required and it is now hoped to have this by September to send to a zirconium fabricator in the US for appraisal. Moreover, it had not been intended to get into much work on zirconium sands, but since it now appears evident that the US supplier will be too busy to meet our oxide requirements, it has been deemed advisable to upgrade this work in order to become self-sufficient in the supply of oxide.

One result of this concentration upon zirconium has been to neglect certain uranium work which had been planned, but attention is being given to investigation of the milling difficulties arising out of refractory ores. These ores are being found in the 09 Zone and they do not respond with good recovery to carbonate leach. While an acid leach treatment is successful, it is too costly. This refractory ore does not, fortunately, extend over the whole of the 09 zone, but it is difficult to distinguish and control in mining. This milling problem is continuing to command the attention of the R&D Division.

Mr. Gilchrist also referred to the hot compacting technique which the Division has developed and which has been protected for a year by a British provisional patent application. In the meantime, negotiations are going forward rapidly for a joint programme to perfect this process and define its applicability to the production of refractory bricks. The other participants in the programme, which will be limited to a total expenditure of \$150,000, of which P.A.I.T. will assume about half, are Alcan, General Refractories of Canada, and Stelco. Apart from any royalty earnings which may accrue, the project will provide work for the Division's Ottawa laboratories.

In dealing with the usual statement of Head Office expenditures, Mr. Gilchrist informed the Board that arrangements have been made to take space in a new office building in Ottawa about October 1st, because present accommodations are quite inadequate. The new space will cost approximately \$4.75 per sq.ft. with the owner providing partitions and lighting, as compared with a rental of \$2.75 per sq.ft. in the present building where the partitions and lighting were paid for by the company.

CAPITAL EXPENDITURES

The Board reviewed the list of capital expenditures made for the first seven months as compared with the budgeted amount and found no over-runs at this date.

The necessity for five new items of capital expenditure was explained by the Chairman, and upon motion of Messrs. Sydie and Hadley, these were authorized as follows:-

Beaverlodge

New boiler plant (increased from \$150,000 to \$185,000)	\$ 35,000
Flue gas compressor (increased from \$35,000 to \$62,000)	\$ 27,000

Refinery

Automation of system for unloading, sampling and storing drums of yellowcake:	
increase to \$28,000 from original estimate of \$15,000	\$ 000042

Research and Development

2-Filing cabinets

\$ 350

\$ 82,350

SURFACE EVALUATION

At this point, Dr. Murray Trigg, Chief Geologist of the Beaverlodge Operation, joined the meeting, to review the surface evaluation work being carried out. The HAB group of claims comprises the principal area of activity. Diamond drilling is continuing and there has been indicated by drilling, two zones, one with approximately 100,000 tons of .35% grade, the other about 230,000 tons at .24% grade. This tonnage is quite sufficient to justify underground work, but further drilling is continuing to provide better information for the location and dimensions of the approach to underground development. Sufficient data should be obtained by the year-end to have planning completed and ready for sinking to begin in the Summer of 1967 with some production capability established by early 1969.

Dr. Trigg reported also that the Love and Donaldson claims, which the Company has held for many years, have been drilled, and while the drilling was not encouraging, detailed geological mapping should be carried out. Prospecting is also going on around the Fish Hook Bay area where anomalies are prevalent, and more work is also indicated in the cluster of showings in the old Eagle shaft area. Hydro-chemical survey sampling was completed in July, but soil sampling is continuing.

In the discussion which ensued following Dr. Trigg's presentation, Mr. Gilchrist noted that with the coming demand for uranium, the Company might possibly step up its exploration activities. These activities, however, are confined to the immediate Beaverlodge area since the Company had not been permitted to engage in broad exploration activities as a mining company of its kind and size. Nevertheless, there is some hope for exploration within the confines of this restrictive policy. The present mine cannot be expected to supply mill feed beyond the rate of 1,700 tons per day, and while the whole St. Louis fault has not been exhaustively examined, distances are becoming a problem, and any significant extension of the present mine would involve a new shaft and surface plant somewhere on the seventeen miles of the fault which the Company holds. It has been a policy of the Board for many years to maintain ore reserves, and proceeding with intensive surface evaluation of both the St. Louis fault structure and other properties, is clearly an extension of this policy. Dr. James noted that Beaverlodge is the area with the most prolific uranium showings in Canada. There is a good chance of finding something worthwhile, and in the national interest, the Company should not be hesitant to investigate these showings. Mr. Sydnie enquired as to whether the Company would be able to participate financially in outside properties brought to its attention by others. Mr. Gilchrist indicated that this would not be possible under the present terms of reference, but the Company should probably be prepared to provide custom milling facilities for small operators in the area.

Mr. Lawson commented that he would like to see spending estimates somewhat more specific in this field of exploration. At the same time however, Mr. Lake pointed out that in exploration, the success of the venture is likely to dictate expenditures beyond those budgeted, while unfavourable results permit of staying within the budget. Mr. Gilchrist agreed that excessive contingencies should be avoided and every effort should be made to clearly define the cost of proposed programmes, but the nature of exploration demands that these programmes be reviewed, and if necessary, revised at each meeting of the Board.

During the course of this discussion, the Board authorized, upon motion of Messrs. James and Hadley, the expenditure of an additional \$50,000 to continue the road to the HAB group, an initial expenditure of \$25,000 having been approved by the Executive Committee in July.

MINE GEOLOGY

At this point Mr. G. Woollett, Chief Mine Geologist, joined the meeting to review briefly the current mine geology. While the attitude of the Verna ore body is changing at depth, and generally speaking, there is a slight diminution of tons per vertical foot as the mine goes deeper, the structural conditions of the geology remain unchanged, and there is no indication that grade is diminishing at depth.

LABOUR SUPPLY

Mr. Gilchrist advised the Board that despite the Company's forward-looking policies on manpower, and despite the success which has been achieved in attracting and holding high quality people, it is evident that each year the problem is becoming more and more difficult. Production this year has been significantly affected. It must be recognized that in a time of full employment there is resistance to coming to northern areas, but it will be worth spending money to achieve and maintain top production, since the profit is largely in the last five or ten per cent of production. The problem must be attacked on several fronts, and while adequate wage rates are important, other aspects are of even greater significance.

Since a contented family life generally enhances an employee's attitude to his employment, there must be better housing and more amenities in the community, with the elimination, as far as possible, of any conditions which might tend to discourage employees or their families and make them want to move on. Moreover, there must be even better selection, indoctrination, and on-the-job training of employees.

Mr. Gilchrist stated that he has instructed Mr. Baschenis to undertake a comprehensive study of this problem in order to have a report available for the December meeting of the Board.

LOAN TO N.T.C.L.

Mr. Gilchrist explained that the parent company had advanced funds to the subsidiary for the 1966 construction programme; and he has asked for a resolution of the Board to so authorize. Upon motion of Messrs. Lawson and James it was resolved that:-

"the action of company officers in advancing funds to Northern Transportation Company Limited to assist in its capital expenditure programme be and it is hereby ratified; such advances not to exceed \$1,400,000 in total and the outstanding balance at December 31, 1966 not to exceed \$700,000; the funds so advanced to bear interest at the rate which Eldorado would have earned had the funds been on deposit in The Receiver General account."

CANCELLATION OF URANIUM CITY BONDS

Mr. Gilchrist advised the Board that during a visit of Premier Thatcher to Uranium City, the Premier had agreed to assist the municipality by cancelling the province's share of some \$71,000 of debenture debt still outstanding relative to the now defunct Gunnar School, provided that Eldorado would similarly accept cancellation of its share of the debt, amounting to about \$26,600. Since Eldorado

is the principal taxpayer in the municipality, the Company will not suffer through cancellation of these debentures.

Accordingly, upon motion of Messrs. Hadley and James, the following resolution was adopted:-

"BE IT RESOLVED THAT:-

debentures of the Municipality of Uranium City and District numbered 214-217 inclusive which are held by the Company and which have unamortized principal of approximately \$26,600 be surrendered to the municipality for cancellation, this action to be taken only after firm assurance that the Treasury Department of the Province of Saskatchewan will surrender for cancellation Uranium City debentures having unamortized principal of approximately \$35,600."

TRANSFER OF SHARES

Upon motion of Messrs. Thompson and James, the following resolution was adopted:-

WHEREAS the letters patent incorporating the Company provide in part that shares of the Company shall not be transferred without the consent of the directors, expressed by a resolution passed by a majority of the Board of Directors, and:-

WHEREAS by Order-in-Council P.C. 1965-2284 dated December 22, 1965, the powers, duties and functions of the Minister of Trade and Commerce under the Atomic Energy Control Act in relation to Eldorado Mining and Refining Limited were transferred to the Minister of Mines and Technical Surveys (shortly to be the Minister of Energy, Mines and Resources), and:-

WHEREAS one of the said powers of the Minister is the power to hold all except the directors' qualifying shares of Eldorado Mining and Refining Limited.

NOW THEREFORE be it resolved that the Secretary be and he is hereby instructed to transfer to the Minister of Mines and Technical Surveys (shortly to be the Minister of Energy, Mines and Resources) in trust for Her Majesty the Queen in right of Canada, the 70,493 shares of the capital stock of the Company heretofore held in the name of the Minister of Trade and Commerce in trust for Her Majesty the Queen in right of Canada.

DATE OF NEXT MEETING

December 2nd, 1966 was decided upon as the date of the next meeting of the Board, preferably to be held in Ottawa, but the definite location to be determined later.

ADJOURNMENT

There being no further business the meeting was adjourned. In the two days following adjournment the Board and officials visited the Pine Point mine, the NTCL installations at Hay River, and the mine and plant of Great Canadian Oil Sands Limited near Waterways.

Chairman

Secretary

000045

ELDOCRADO MINING AND REFINING LIMITED

SUMMARY OF MINUTES OF BOARD MEETING OF MAY 6TH 1966

1. Appointed officers and Executive Committee
2. Reviewed operations to March 31st 1966
3. Reported on Reactive Hot Pressing Process and arrangement for sharing costs of development
4. Approved Capital Expenditures
5. Approved purchase of \$30,000 Uranium City Debentures
6. Approved use of Mechanical Cheque Signing Device
7. Approved financial assistance of \$10,000 to McGill and \$3,000 to U.B.C.
8. Reviewed uranium outlook
9. Reviewed surface evaluation results
10. Tribute to A.B. Caywood upon retirement as President of subsidiary
11. Reviewed N.T.C.L. construction programme and progress
12. Adjourned to dinner with Minister

MEETING OF THE BOARD OF DIRECTORS OF ELDORADO
MINING AND REFINING LIMITED HELD
AT 150 KENT STREET, OTTAWA, ONTARIO
MAY 6, 1966, COMMENCING AT 2:30 P.M.

Present: Messrs. W.M. Gilchrist
W.J. Bennett
F.R. Hadley
W.F. James
G. Lawson
J.E. Sydie
W.G. Thompson

In attendance: Messrs. R.C. Powell
J.C. Orr
B.S.W. Buffam

PRELIMINARY MATTERS

The meeting, having been called with due notice and all members being present, was declared to be regularly constituted.

MINUTES OF BOARD MEETING HELD FEBRUARY 24, 1966

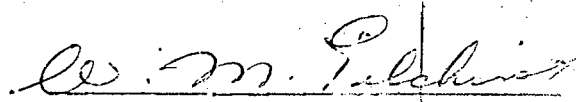
Upon motion of Messrs. Bennett and Hadley, the minutes of the Board Meeting of February 24, 1966 were approved in the form previously circulated to Board members.

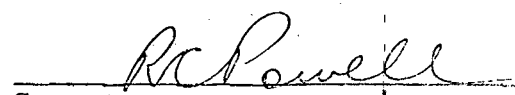
ANNUAL REPORT 1965

Upon motion of Messrs. Sydie and Thompson, the Annual Report of the Directors to the Shareholders was approved for presentation to the forthcoming Annual General Meeting of Shareholders.

ADJOURNMENT

There being no further business the meeting was adjourned.


Chairman


Secretary

ANNUAL GENERAL MEETING OF SHAREHOLDERS OF
ELDORADO MINING AND REFINING LIMITED HELD AT
150 KENT STREET, OTTAWA, ONTARIO
MAY 6, 1966 COMMENCING AT 2.35 P.M.

Present: Messrs. W.M. Gilchrist
W.J. Bennett
F.R. Hadley
W.F. James
G. Lawson
J.E. Sydie
W.G. Thompson

In attendance: Messrs. R.C. Powell
J.C. Orr
B.S.W. Buffam

PRELIMINARY MATTERS

The President occupied the chair and Mr. Powell acted as secretary of the meeting. The Secretary read a list of seven shareholders present representing seven shares and produced a proxy authorizing W.M. Gilchrist to vote 70,493 shares held by the Minister of Mines and Technical Surveys in trust for Her Majesty the Queen in Right of Canada - making a total representation of all shares. The Chairman accordingly declared the meeting to be regularly called and properly constituted for the transaction of business and directed that a copy of the notice calling the meeting be filed together with the declaration proving mailing of notice.

REVIEW OF MINUTES

Upon motion of Messrs. Lawson and Bennett, reading of the minutes of the last Annual General Meeting of Shareholders held May 27th, 1965, was dispensed with and the minutes taken as read and confirmed.

ANNUAL REPORT

The Secretary of the meeting read the Auditors Report for 1965 and upon motion of Messrs. Hadley and Bennett, the reading of the Annual Report was dispensed with. Upon motion of Messrs. Thompson and Sydie, it was resolved that the Annual Report of the Directors, the Statement of Income and Expense and the Statement of Surplus, together with the Balance Sheet as of December 31, 1965, as printed be approved.

ELECTION OF DIRECTORS

In response to a call from the chair, the following were nominated for directorship:

W.M. Gilchrist
W.J. Bennett
F.R. Hadley
W.F. James
G. Lawson
J.E. Sydie
W.G. Thompson

There being no further nominations for the seven Board seats, the Chairman declared nominations closed and those nominated to be duly elected as directors to hold office until the next Annual General Meeting of Shareholders or until their successors are elected or appointed.

APPOINTMENT OF AUDITOR

Upon motion of Messrs. James and Bennett, it was resolved that the Auditor General of Canada be appointed auditor of the Company in accordance with existing arrangements until the next Annual General Meeting of Shareholders.

ADJOURNMENT

There being no further business, upon motion of Messrs. James and Thompson, the meeting was adjourned.

W. M. E. E. E. E.
Chairman

R. C. Powell
Secretary

MEETING OF THE BOARD OF DIRECTORS OF ELDORADO
MINING AND REFINING LIMITED HELD
AT 150 KENT STREET, OTTAWA, ONTARIO
MAY 6, 1966, COMMENCING AT 2.45 P.M.

Present: Messrs. W.M. Gilchrist
W.J. Bennett
F.R. Hadley
W.F. James
G. Lawson
J.E. Sydie
W.G. Thompson

In attendance: Messrs. R.C. Powell
J.C. Orr
B.S.W. Buffam
*J.C. Burger
*H.E. Lake
*A. Thunaes
*C. Baschenis

* As required

PRELIMINARY MATTERS

This being the first meeting of the newly elected Board, Mr. Gilchrist and Mr. Powell acted, respectively, as temporary chairman and secretary.

OFFICERS

Upon motion of Messrs. Bennett and Sydie, the following officers were appointed:

President	W.M. Gilchrist
Vice President Refining	J.C. Burger
Vice President Mining and Exploration	H.E. Lake
Secretary	R.C. Powell
Treasurer	J.C. Orr
Director of Administration	C. Baschenis
Assistant Secretary	E.C.A. Kelly

and an Executive Committee of the Board was appointed consisting of Messrs. Gilchrist, James and Lawson.

REVIEW OF OPERATIONS TO MARCH 31, 1966

The Chairman presented an interim report summary for the first three months of the year. This summary showed a net income from operations of \$250,304 although the projected net income for the period was only \$23,000. The major factor in this increase was an additional 35¢ per pound profit earned on Beaverlodge concentrates produced late in 1965 and sold in 1966. Moreover, the government stockpile programme for processing concentrates at the Refinery was firmed up since estimates were prepared and this has added \$77,000 to net income earlier than had been anticipated. Interest rates being higher than anticipated, non-operating income was 37% above target.

The Board scrutinized the Statement of Income and Earned Surplus, Analysis of Net Income from Operations, and the Balance Sheet at March 31st. The President commented that the year will probably see an overall profit in the order of one million dollars, substantially greater than the projection made in December. It was noted that of fixed assets somewhat in excess of fifty million dollars, there remains for amortization only \$664,000.

Turning to a summary of operations at the Beaverlodge mine, it was noted that expenses for the first three months were about 10% better than the estimate. Mr. Gilchrist observed that the labour force was satisfactory except for some difficulty in obtaining raise miners, which has left the raising programme about 700 feet short of objective. Considerable discussion arose concerning the maintenance of a satisfactory labour force. It was recognized that Eldorado's policy of direct housing assistance, of supporting town and community services and operating a retail food store at cost, has served to maintain stability of labour, with some 75% of workmen now residing with their families in the area. Mr. Gilchrist noted that while wages have risen about 60% in the past seven years, output efficiency has gone up 110%. Average take-home pay for hourly-rated personnel at the mine is about \$600 per month.

Referring next to the summary of Refinery operations, the Chairman noted that a profit of about \$92,000 had been earned in the first three months. Some considerable activity is developing in sales of specialized refinery products and services, reflecting the results of both sales promotion and developmental projects carried out in recent years. A sale of 75,000 pounds of UO_2 powder - the largest domestic order received to date - has just been consummated with Canadian General Electric Co., and a profit in the range of \$90,000 will accrue on this. Negotiations are also underway on a possible sale of UO_2 to Ontario Hydro for the initial charges of the first Pickering nuclear station.

In dealing with the programme of the Research and Development Division for the first three months, total costs of \$102,000 more than the budget for the period were reported. This arises out of a speeding up of the P.A.I.T. - assisted zirconium research, where \$102,000 more than the estimated budget for the period was spent, with an under-expenditure of \$76,000 on other research projects.

Mr. Gilchrist noted that zirconium production should be a reality by the year-end. He advised the Board that a detailed report of R & D activities for the three month period would be mailed shortly to each director.

REACTIVE HOT PRESSING PROCESS

Mr. Gilchrist advised the meeting that in the course of certain work done at the R & D laboratory, a lab-scale process for reactive hot pressing of a highly efficient refractory brick had been developed. The Steel Company of Canada, Alcan, and Canadian General Refractories Limited are interested in contributing to further development work on the process, along with Eldorado, and it is planned to complete an agreement for sharing the costs of a \$125,000 programme to be carried out largely by Eldorado. Patent action will be initiated and the costs and returns therefrom will be likewise shared by the four parties. The Department of Industry will also contribute through P.A.I.T.

CAPITAL EXPENDITURES

A review of capital expenditures for the three month period indicated that only some 15% of the authorized amount for the year had been spent, with no individual item exceeding the estimate.

The Chairman asked for, and upon motion of Messrs. Bennett and Thompson, received approval of the following capital expenditures additional to the budget approved at the December meeting:

Mechanical handling equipment for autogenous Mill liners	\$ 20,000
Fan for fume hoods in chemical laboratory	\$ 2,000
Skip bucket frame (increased from \$1,500 to \$3,000)	\$ 1,500
Electric range for cookery	\$ 1,000
Theodolite with tripod for surface survey	\$ 950
	<u>\$ 25,450</u>

URANIUM CITY DEBENTURES

Mr. Gilchrist recalled that the Company had, in the years 1956-9, purchased \$1.1 million of Uranium City Debentures. These bear an interest rate of 5%, and interest received to date has been \$387,995, with repayment of principal amounting to \$319,597, leaving the principal amount outstanding of \$780,403.

He advised that an addition to the High School is now required, and the municipality has been authorized to issue a debenture to pay for this. He recommended that the company purchase \$30,000 of this issue. The purchase was authorized upon motion of Dr. James and Mr. Hadley.

RESOLUTION TO PROVIDE FOR THE USE OF A MECHANICAL
CHEQUE SIGNING DEVICE ON ROYAL BANK CHEQUES

Upon motion of Messrs. Bennett and Lawson, the following resolution was adopted:-

As a means of expediting the transacting of the business of the company, it is hereby resolved that any officers or employees of the company who have been authorized to sign the company's cheques in any capacity may, and are hereby authorized to, adopt and use a mechanical cheque signing device for the purpose of affixing their signature to cheques drawn upon the depositories of the funds of the funds of the company.

It is further resolved that The Royal Bank of Canada is hereby authorized and directed to honour, pay and charge to the account of the company, any and all cheques signed and completed in the manner hereinbefore described with the facsimile signature or signatures, of which specimens or impressions are furnished to it with a certified copy of this resolution, regardless of howsoever or by whomsoever the said facsimile signatures or impressions are affixed.

FINANCIAL ASSISTANCE TO U.B.C. & MCGILL

The Chairman advised of a request from the University of British Columbia for financial support for a programme similar to that started at McGill last year for the development of more mining engineers. Upon motion of Messrs. James and Thompson, management was authorized to support this programme, and that of McGill, by a total contribution of not more than \$15,000 in the current calendar year.

URANIUM OUTLOOK

Mr. Gilchrist gave the Board a brief review of recent developments in the industry. He noted that the potential demand for uranium is building up at a rate not envisaged even a year ago. So far this year, 4,200 megawatts of nuclear power capacity has been firmly committed in the United States, and there is every indication that some 10,000 megawatts of nuclear power capacity will be on line in the U.S., and this will mean that that country will have to be a net importer of uranium by 1973 and possibly earlier.

will be
committed by
year-end. By
1970, it is
expected that
22,000
megawatts

Mr. Gilchrist noted a very marked interest by foreign companies in acquiring potential uranium reserves in Canada. The French government-backed Mokta company has recently acquired permit areas in the Black Lake region in Saskatchewan, and that company now holds more ground than does Eldorado in the Beaverlodge area. Numac Oil and Gas Ltd., are also active in the area, and Kerr-McGee has acquired large holdings in the Blind River region.

MISCELLANEOUS DEVELOPMENT AND SURFACE EVALUATION

Dr. Buffam reviewed briefly recent mine developments, and noted that development drifting is on schedule, with no unexpected ore encountered. The underground diamond drilling programme is some ten per cent ahead of schedule.

Two diamond drills were active on the HAB claims and thirteen exploration holes completed. A series of trenches were cut across the surface exposure of ore zones.

RETIREMENT OF MR. A.B. CAYWOOD

Mr. Gilchrist asked Mr. A.B. Caywood to join the meeting, and referred to Mr. Caywood's retirement as President of Eldorado Aviation Limited at a meeting of that Board held earlier in the day. He recalled that Mr. Caywood had joined the parent company to organize an aviation division in March of 1944, and he paid tribute to Mr. Caywood's inestimable contribution in providing and maintaining a very highly efficient and low-cost system of air transportation for the parent company and the other subsidiary, Northern Transportation Company, over the past 22 years. While leaving direct employment with the company for a well-earned retirement, Mr. Caywood will continue as a consultant and will remain a director of Eldorado Aviation Limited and of Northern Transportation Company Limited.

Mr. Caywood expressed his gratitude and satisfaction with the pleasant relationships he had enjoyed over the years.

NEXT MEETING OF BOARD

It was agreed that the next meeting of the Board would be held at Beaverlodge on Friday, August 26th, the Board and necessary staff members travelling to the mine direct from Edmonton International Airport in the early evening of August 25th. Arrangements will be made, so far as possible, to visit Pine Point, Hay River, and the Athabasca Tar Sands development on the return trip to Edmonton

N. T. C. L.

Mr. Gilchrist referred briefly to the outlook for the subsidiary company for the coming navigation season. It appears that tonnage will be maintained at about last year's level, although final commitments by the oil companies to exploration programmes are not yet complete. The construction of shore facilities, particularly at Hay River, is progressing favourably; all buildings have been purchased, the steel for the Tuk-Tuk wharf has been delivered to Waterways, and a contract has been let for work at the site. The weather has been unusually cold, and at this date no vessels had been launched. Reductions averaging 14% have been made in bulk fuel rates, with some locations enjoying a reduction of up to 30%. Refrigerated barge rates have also been reduced, and in an effort to encourage Hay River-Yellowknife traffic by water, a special 100-ton barge rate has been established.

No undue operating problems are foreseen, and the season should prove to be a profitable one for the company. The advantages of integration of the former Y.T.C.L. operation should be more apparent this year than last.

ADJOURNMENT

There being no further business, the meeting was adjourned. Following the meeting, a dinner was enjoyed at the Rideau Club, at which the Minister responsible for Eldorado, the Hon. Jean-Luc Pepin, and his deputy, Mr. Claude Isbister, together with Mr. A.E. Côté, Deputy Minister of Northern Affairs and National Resources, were present.

W. M. Gilchrist
Chairman

R. C. Powell
Secretary

SUMMARY OF MINUTES

Director's Meeting of February 24th 1966

1. Approved minutes of previous meeting
2. Considered draft of Annual Report and authorized directors to sign.
3. Authorized \$84,170 capital expenditures.
4. Heard report of successful defence of suit brought by Amalgamated Rare Earths Mines Ltd.
5. Heard report that settlement effected with D.S. Co.
6. Authorized salary revisions.
7. Set date of Annual General Meeting of Shareholders for May 6th 1966.

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS OF
ELDORADO MINING AND REFINING LIMITED
HELD IN TORONTO, ONTARIO, ON
FEBRUARY 24TH, 1966, COMMENCING AT 9.30 A.M.

Present: W.J. Bennett
W.M. Gilchrist
F.R. Hadley
W.F. James
Gordon Lawson
J.E. Sydie
W.G. Thompson

In attendance: B.S.W. Buffam
R.C. Powell
J.C. Orr
*H.E. Lake
*J.C. Burger
*A. Thunaes
*C. Baschenis

*as required

PRELIMINARY MATTERS

The full Board being present in response to notice duly given, the meeting was declared to be regularly constituted. Mr. Gilchrist occupied the chair and Mr. Powell acted as secretary of the meeting.

MINUTES OF PREVIOUS MEETING

The Chairman reviewed briefly the minutes of the Board's meeting held December 3rd 1965, copies of which minutes had been previously circulated to the directors. Upon motion of Messrs. James and Bennett the minutes were approved.

DRAFT OF ANNUAL REPORT 1965

The Chairman referred to the draft of the 1965 Annual Report, together with the audited financial statements, which had been sent to Board members in advance of the meeting, and he asked for comments. A copy of the draft is attached to these minutes as an appendix.

The Chairman called attention to the fact that Northern Transportation Company Limited, as from January 1st 1966, reports to a Minister other than the Minister responsible for Eldorado and Eldorado Aviation Limited. For this reason, two separate reports are required to be published, contrary to the practice for many years of one report embracing the parent and two subsidiary companies.

The reaction of Board members to the content of the draft reports was favourable and the few changes suggested in the draft were largely editorial rather than substantive.

The audited financial statements showed a net income for the year of \$1,426,247 as compared with \$2,450,490 in 1964. This net income compares with a projection of \$1,270,000 made at the December 3rd 1965 Board Meeting.

Upon motion of Messrs. James and Lawson, Mr. W.G. Thompson and Mr. F.R. Hadley were duly empowered to sign the audited balance sheet on behalf of the Board.

CAPITAL EXPENDITURES 1966

Mr. Gilchrist advised the Board that since the last meeting, a number of capital expenditures had been put forward by management, and he presented a list of these and recommended their approval in the amount of \$84,170. He also requested approval to transfer from the Refinery budget to the Research and Development budget an amount of \$10,000 approved at the December 3rd Board Meeting for zirconium development equipment.

Upon motion of Messrs. Bennett and Thompson, these expenditures and the requested transfer were approved. The details follow:-

Beaverlodge

Exhaust fan, Ace shaft - balance not spent in 1965	\$ 3,500
16 Mine cars - additional amount required	7,400
2 Crystals for ore sorter	10,000
Autogenous mill strip chart recorder	1,800
Underground ventilation fans - additional	900
Telephone switchboard, group selector	900
4 Scintillometers to assist evaluation of claims	5,500
Set of steel filing drawers for evaluation maps	700
	<u>\$30,700</u>

Refinery

Completion of cobalt 60 radiography facility -	
Request reinstatement of balance authorized	
but not spent in 1965 due to late approval by A.E.C.B.	4,440

Research and Development

The equipment listed below is required for the Eldorado project on the production of zirconium alloys and products which has been approved by the Department of Industry under its Programme for Advancement of Industrial Technology (P.A.I.T.)

For Caustic Fritting -	
Compacting rolls	9,890
Handling equipment	5,910
Furnace	4,850
Filter	3,120
Tankage	2,200
For Hydrofluorination -	
Reactor and controls	7,320
Sublimation reactor	5,050
HF heater	4,900
Pumping system	4,850
Cooling chamber	940
	<u>49,030</u>
	<u>\$84,170</u>

LEGAL ACTION BY AMALGAMATED RARE EARTHS MINES LTD.

Mr. Gilchrist reported that this long-standing action against the Company had come to trial in December, and the action had been dismissed, with costs to be paid by the plaintiff. However, there appears to be no possibility of recovering costs from the plaintiff.

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SETTLEMENT WITH MR. D.G. SCOTT

Referring to the discussion which had taken place on this matter at the December Board Meeting, Mr. Gilchrist advised that Mr. Scott's further representations had been considered and as a result, and with the approval of the Minister, a further payment equivalent to six months' salary had been made to Mr. Scott upon the execution of a release of all claims against the company.

SALARY ADJUSTMENTS

Mr. Gilchrist recommended salary increases for certain officers of the company, and upon motion duly made and seconded, these were approved as follows, with effect from Jan 1/66:

Vice-President, Mining & Exploration	\$1,500 -
Manager, Beaverlodge Operation	\$1,200 -
Treasurer	\$1,200 -
Secretary	\$ 700 -
Director of Administration	\$1,200 -

DATE OF ANNUAL GENERAL MEETING

The Board considered a date for the Annual General Meeting of Shareholders, with the usual Board Meetings preceding and following, and agreed on Friday May 6th 1966, the meeting to be held in Ottawa.

ADJOURNMENT

There being no further business, the meeting was adjourned.


Chairman


Secretary

Present: Messrs. W.M. Gilchrist
Fred. R. Hadley
W.F. James
John E. Sydie

In attendance: B.S.W. Buffam
J.C. Orr
R.C. Powell
*J.C. Burger
*A. Thunaes
*H.E. Lake

*As required

PRELIMINARY MATTERS

Notice of the meeting having been duly given and a quorum bring present, the meeting was declared to be regularly constituted. The President occupied the chair, and Mr. Powell acted as secretary of the meeting.

MINUTES OF PREVIOUS MEETING

The Chairman reviewed the minutes of the Board's meeting held September 10th 1965, copies of which had previously been circulated, and upon motion of Messrs. Hadley and Sydie, the minutes were taken as read and approved.

REVIEW OF OPERATIONS FOR THE TEN MONTHS ENDED 31ST OCT/65

The Chairman presented financial statements for the first ten months which may be summarized as follows:-

	<u>Actual</u>	<u>% of Target</u>
Sales Revenue	\$14,259,405	88
Cost of Sales & Development, etc.	13,959,760	91
Net Income from Operations	299,645	33
Ore Procurement & Other Income	1,325,157	98
Total Income	1,624,802	72
Provision for Taxes	<u>\$ 1,624,802</u>	72
Pounds sold	\$ 1,700,298 (Av. \$7.81)	90
Pounds produced at Mine	\$ 1,470,069	98
Total cost per pound	\$5.30	103
Cash and Deposits	\$ 9,416,833	68
Working Capital	22,618,168	
Expenditures on Plant & Equipment	\$ 490,502	
Total employees	\$ 772	
Salaries and wages	4,878,315	

He noted that the 12% short-fall from target for sales revenue is largely due to a reduction in the feed ratio of Beaverlodge concentrates entered to the refinery solvent process, this hold-back being due to metallurgical reasons. He noted that there would be no income tax payable for 1965 because of large capital cost allowances, together deductions for depletion and research. The cash position of \$9,416,833

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is low, because some \$4,465,000 had been employed to date for the financing of the stockpiling programme until the Trade and Commerce supplementary estimates are passed.

The number of pounds produced at Beaverlodge is 29,000 below target due to production troubles at the mine, stemming from drive and liner trouble in the autogenous grinding mill and reduced recovery. However, a report just received had indicated that production was slightly above target at the end of November.

Cost per pound of Beaverlodge production at \$5.30 is 18¢ or about 3% above target, but with higher production in the final two months the cost should be closer to target. The normal refinery operations produced a profit of \$212,000, but this is offset by new product development costs, sales and promotion costs and depreciation on idle plant to the extent of \$869,000, to create a loss position at the refinery of \$657,000.

CAPITAL EXPENDITURES 1965

The Chairman presented a Statement of Capital Expenditures made to October 31/65 against the amounts approved by the Board to that date. At the Beaverlodge operation, it appears that approximately \$200,000 of the total appropriation of \$465,000 will not be spent. The Refinery and R&D Divisions will have, unspent, about \$72,000 of a total authorization of \$537,000. Mr. Gilchrist noted that there are however, three additional projects not authorized which he would recommend. These are as follows:-

Refinery

Building and equipment for radiography:

Project as revised estimated at	\$20,000	
Original authorization, Dec 1, 1964	<u>6,000</u>	\$14,000

Extension to plant warehouse building:

Actual cost will be about	\$35,000	
Original authorization, July 14, 1964	<u>30,000</u>	\$ 5,000

Research and Development

Typewriter for technical library	<u>\$ 500</u>	<u>\$ 500</u>
		<u>\$19,500</u>

Upon motion of Messrs. Hadley and James, these expenditures were approved.

MINUTES OF MEETING OF EXECUTIVE COMMITTEE HELD NOV 24/65

Mr. Gilchrist next referred to the minutes of the above-noted meeting, copies of which minutes had been made available to all Board members for study prior to the meeting. He noted that since the Executive Committee meeting, the management had revised the Refinery and R&D operating budgets and the overall corporate forecast, and he referred the meeting to these new budgets and forecast. He reviewed the history and results of the programme for new product development, the reasons for undertaking this work, its successes and disappointments, all as set out in considerable detail in the minutes of the Executive Committee meeting. Following a full discussion of these matters, the Board found itself in agreement with the views of the Executive Committee and upon motion of Messrs. Sydie and Hadley the minutes were approved and the actions taken by the Executive Committee were ratified.

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Mr. Gilchrist then turned specifically to the forecast which had been prepared since the Executive Committee meeting. He noted that the Research and Development Division had now been allocated \$500,000, including grants to universities, but excluding costs of technical assistance and liaison, depreciation, custom contracts which are to be self-liquidating, any funds received from P.A.I.T., and costs of process control at the mine and refinery. As for the refinery, it is scheduled to show a profit of about \$15,000 after bearing the cost of new product development and sales and promotion expense.

Looking at the corporate forecast as a whole, a net loss on operations of \$107,000 is projected, offset by other income to produce a net profit for the year of \$482,000, compared with a projected net loss on operations of \$152,000 in 1965, offset by other income to produce a net profit of \$1,270,000. Following discussion and upon motion of Messrs. James and Hadley, the operating forecasts as presented to the meeting, and calling for total operating expense of \$14,157,000 were approved.

OUTLOOK FOR URANIUM DEMAND

Mr. Gilchrist noted that the company would, starting early in 1967, sell to the government stockpile, and he anticipates that the price, with escalation, will by that time be about \$5.10. He pointed out that the presence of the stockpile means that Canadian mines will not be under any pressure to sell at bargain prices in order to maintain a viable industry. Mr. Gilchrist believes that world demand will dictate some firm contracts by 1968, and that demand will climb rather sharply after 1970. The stockpile will act as a cushion to allow for an orderly expansion of mines, should demand exceed the then possible output. His view is that Switzerland may be the first country into the market. They are committed to nuclear power entirely, for reasons of air pollution and the maintenance of tourist attractions which might be eliminated if the remaining hydro power sites were developed.

MINE DEVELOPMENT AND ORE RESERVES

Dr. Buffam referred to the mine development programme which has been laid down for the next five years, aimed at having the mine developed by 1970 to the bottom of the Fay shaft. Lateral development in 1966, in terms of both drifting and raising, will be greater than in the past year, and directed mainly to developing the west Fay and lower Verna ore bodies.

Ore reserves at August 1st indicated that reserves had been maintained and increased by one month's ore during the previous year. Present reserves represent about five years' ore, but this includes only proved and probable ore. It is significant that more ore is now being put in sight than is being mined. Moreover, ore reserve grade of .21% is in excess of the average grade being mined of .193%. He noted, however, that the optimum tonnage is less at the lower depths with not quite so many tons per vertical foot. For this reason, among others, it appears that the time has arrived to look at some surface showings, and a programme of surface evaluation with a budget of \$170,000 as more particularly set out in the minutes of the Executive Committee Meeting, will be undertaken during the current year.

1966 CAPITAL BUDGETS

The forecast of capital expenditures for the year is \$1,076,520 as more particularly set out in the appendix attached hereto. In considering the individual items, the Board noted that the Executive Committee had already scrutinized in detail the Beaverlodge expenditures which constitute the major portion of the estimate. Satisfactory explanations of the need for all items in the budget were forthcoming, and upon motion of Messrs. Sydnie and Hadley, the capital expenditure forecast was approved.

Upon motion of Messrs. Hadley and Sydie, a dividend was declared payable December 17th 1965 to the Receiver General of Canada in the amount of \$1,500,000.

RESOLUTION FOR USE OF COMPANY SEAL BY BEAVERLODGE
MANAGEMENT

Mr. Gilchrist explained that it would be much more convenient and less time-consuming if Beaverlodge management were able to apply the Company seal to documents necessary for implementation of the Company's Uranium City Housing Programme. Accordingly, the following resolution was passed, upon motion of Messrs. James and Sydie.

"WHEREAS from time to time, in implementing the Company's policy of financial assistance to employees in the purchase of houses in Uranium City, it is necessary to execute Transfers of Land and Discharge of Mortgage under the Saskatchewan Land Titles Act, and

WHEREAS the transmitting of these documents to Head Office for execution is time-consuming and cumbersome,

NOW, THEREFORE, be it resolved:

THAT the Manager or the General Superintendent of the Beaverlodge Operation, together with either the Chief Accountant or the Personnel Officer of the said operation be and they are hereby authorized to execute under the Company seal, Transfers of Land or Discharges of Mortgage required under the Saskatchewan Land Titles Act in connection with the implementation of the Company's policy of housing assistance to its employees residing in the Municipal District of Uranium City, and

THAT the Secretary be and he is hereby authorized to provide to the Beaverlodge Operation a duplicate of the Company seal to be used for the aforementioned purpose and no other."

CHRISTMAS GRATUITIES

Upon motion of Messrs. James and Hadley, it was resolved that the practice of granting a Christmas Gratuity to employees, as in past years, be continued for 1965.

DATE OF NEXT MEETING

It was the consensus of the meeting that Friday, March 4th 1966, would be a suitable date for the next meeting of the Board.

NTCL CAPITAL PROGRAMME FOR 1966

Mr. Gilchrist advised the Board that, on the previous day, the directors of Northern Transportation Company Limited had approved a capital expenditure programme of \$3,200,000, all but \$300,000 for shore installations or equipment, and in view of this very substantial expenditure, he wished to inform the Board of the reasons therefor.

He reviewed the purchase by Northern Transportation Company Limited of Yellowknife Transportation Company and two associated companies, and he noted that the integration of personnel and equipment had gone well. A profit of \$1,405,000 had been earned in the first year, 000062

an increase of \$432,000 over 1964. Because of this, and the anticipated satisfactory profits of future years, it can be assumed that pressure will be brought to bear for tariff reductions.

Mr. Gilchrist would be prepared to effect a reasonable reduction in bulk oil rates for 1966, since this is a commodity which affects all customers, but he does not favour a substantial across-the-board cut in all rates. Rather, he considers that these increased earnings present an excellent opportunity to carry out a much-needed major capital expenditure programme. Included in the programme would be the renovation or replacement of a number of run-down shore facilities, particularly housing and mess halls, and the re-location of the Tuk-Tuk terminal which was originally located on an unfavourable site because the desirable area at Cache Point was then required by the DEW Line; now, however, this site is being made available. The completion of these highly desirable projects, combined with the absolutely essential warehousing, ship-yards, and improvements to the dock and waterfront at Hay River, will bring the Company's shore facilities up to a very satisfactory standard for the foreseeable future.

The Board, upon motion of Messrs. Sydnie and James, gave its approval to this substantial expenditure by the subsidiary.

ADJOURNMENT

There being no further business, upon motion being duly made and seconded, the meeting was adjourned.

W. M. Gilchrist
Chairman

R. C. Powell
Secretary

FORECAST

ELDORADO MINING AND REFINING LIMITED

CAPITAL EXPENDITURE ESTIMATES FOR YEAR 1966

Beaverlodge:

Equipment - Mine

- Mill

- Maintenance

- General

Port Hope Refinery:

Equipment - Plant and shops

- Laboratories

- Continuous UO₂ proc

- Special projects

- Zirconium development

Research & Development:

Labs and pilot plant equipment

Head Office, Refinery and Sales Office:

Furniture and equipment

1965 Projects Group A	NEW PROJECTS		TOTAL
	Group B	Group C	
3,850	111,250	70,000	185,100
105,800	24,600	--	130,400
13,175	506,400	33,000	552,575
--	62,200	--	62,200
122,825	704,450	103,000	930,275
--	40,300	--	40,300
--	19,000	--	19,000
20,000	--	--	20,000
--	24,000	--	24,000
--	10,000	--	10,000
20,000	93,300	--	113,300
--	22,945	--	22,945
--	10,000	--	10,000
142,825	830,695	103,000	1,076,520

ELDORADO MINING AND REFINING LIMITED BEAVERLODGE OPERATION

1966 CAPITAL BUDGET

S U M M A R Y

GROUP "A" EXPENDITURES \$122,825
Expenditures which were approved
in 1965 but carried over to 1966.

GROUP "B" EXPENDITURES \$704,450
New projects and equipment which
will be required in 1966.
Justification for these expen-
ditures are shown under Details.

TOTAL \$827,275

GROUP "C" EXPENDITURES
Projects which could prove econo-
mical but lack detail investiga-
tion. Estimates submitted are
"in the order of". \$103,000

GRAND TOTAL \$930,275

GROUP "A" EXPENDITURES

RE-AUTHORIZATION OF 1965 EXPENDITURES

HELL

1. Steam Stripping Addition (49534)
 - 1965 Approved Project Cost - \$90,000
 - 1965 Expenditures - -
 - 1966 Requested Carryover - \$90,000 \$ 90,000

2. Improvements to Precipitate Drying
Section (49539)
 - 1965 Approved Project Cost - \$10,000
 - 1965 Estimated Expenditure - -
 - 1966 Requested Carryover - \$10,000 \$ 10,000

3. Four Electronic Recorders (49537)
 - 1965 Approved Project Cost - \$5,800
 - 1965 Estimated Expenditure - -
 - 1966 Requested Carryover - \$5,800 \$ 5,800

\$105,800

MAINTENANCE

1. Improvements on Fay Skip Hoist (49408)
 - 1965 Approved Expenditure - \$26,000
 - (Semi-Automation of Hoist)
 - 1965 Estimated Expenditure - \$ 2,177
 - 1966 Requested Carryover - \$12,000 \$ 12,000

- Beam Meter for Sorting Plant (49509)
 - 1965 Approved Expenditure - \$475
 - 1965 Estimated Expenditure - -
 - 1966 Requested Carryover - \$475 \$ 475

- Hydraulic Ram & Pump Assembly (49507)
 - 1965 Approved Expenditure - \$275
 - 1965 Estimated Expenditure - -
 - 1966 Requested Capital - \$700 \$ 700
 - (Revised Purchase Price)

\$ 13,175

MINE

1. Aneroid Barometer (49536)
 - 1965 Approved Expenditure - \$650
 - 1965 Estimated Expenditure - -
 - 1966 Requested Capital - \$1,100 \$ 1,100
 - (Revised Purchase Price)

2. Radiometric Scaler and Four Electronic
Timing Mechanisms (49418)
 - 1965 Approved Expenditure - \$2,750
 - 1965 Estimated Expenditure - -
 - 1966 Requested Carryover - \$2,750 \$ 2,750

\$ 3,850

TOTAL - GROUP "A" EXPENDITURE

\$122,825

DETAIL JUSTIFICATION
FOR
GROUP "B" EXPENDITURES

XXXX

1. Automation of Autogenous Mill Dorrclones \$ 3,400

Purchase:

- (1) Pneumatic Apex Valves - \$2,000
- (2) Control System - \$3,400

The dorrclones cannot handle the surging of feed, caused by changes in the grindability of the ore, with a fixed size apex valve. An automated system is required to prevent variation of the degree of classification.

2. Automation of Autogenous Mill Solution System \$ 3,700

Purchase:

- (1) Flow Recorder - \$2,700
- (2) Control System & Valves- \$1,000

Balancing of the solution flow to each side of the mill is nearly impossible without a recorder. To ensure constant flow for optimum density of grinding will require an automated control system.

3. Sampling and Distribution of Flotation Feed \$ 1,500

Purchase:

- (1) Rotary Sampler - \$ 300
- (2) Rotary Distributer - \$1,000

A second sampler is required due to recurring mechanical and electrical failure. To improve Xanthate consumption and sulphur removal, a new distributer is required to equalize distribution between banks of flotation cells.

4. Concentric Pipe Heat Exchanger \$ 700

At present the flash steam from the second stage condensate is fed to the splash tower. Installation of a heat exchanger would reduce water addition to the circuit by twelve tons per day.

5. Pulp to Pulp Heat Exchanger \$ 10,000

At present the pachuca discharge is cooled from 175°F to 150°F with water which is used for tailings repulp. A portion of this heat can be recovered for process by the use of a concentric pipe heat exchanger. The value of the heat recovered would vary between \$750 and \$1,500 per month depending on the system used.

III (Continued)6. Automatic Wash System for Sorting Machines \$ 500

It has been found that background control gives the most efficient rejection ratio. The control of background requires routine washing of the machines on a fifteen minute cycle.

7. Test Instruments \$ 800

A potentiometer with a range of 0 to 500 Mv is required to test pH meters and calibrate various control instruments. Also an instrument is required to measure resistances to 0.01 ohms accurately.

8. Honeywell Electronic "19" for Research Work \$ 2,000

A research instrument with multiple scales and various chart speeds is required for evaluation of instrument application. This instrument is also very convenient for trouble shooting in the Ore Sorter and in various controllers in the circuit.

\$ 24,600

NINE1. Long Tom Carriage With Booms \$ 4,400

Required for 1966 Lateral Development Programme.

Loading Conveyor for 'True-Gun All' Concrete Machine \$ 4,000

This loading conveyor was included in the justification analysis for the purchase of the D-2 concreting machine. The pay-back period for the complete project is three years.

This conveyor will ensure ease and rapidity of loading, also accuracy of mix.

3. Hydraulic Battery Lifters \$ 1,000

Additional battery changers, required for new levels at the Winze.

4. Four Auxiliary Ventilation Fans \$ 1,600

Additional fans required for increased development and spread out mining areas.

5. Five J.M.G. Car Dumpers \$ 9,000

This type of car dumper has been tested and works well, giving a faster dump cycle and improved clean out of cars.

It is proposed to install these units on the new levels in the Winze shaft.

MINE (Continued)

6. Twelve C.L.50 Electric Blasting Machines \$ 1,500

To replace sixteen plunger-type blasting machines now in use. The existing machines are awkward units which are prone to malfunction from dampness.

7. 216 Mucking Machine \$ 6,750

Required for increased stopes preparation and lateral development.

8. Pump and Equipment for Clean-Up of Backfill Spills \$ 2,000

Testing during the past year has indicated the feasibility of cleaning up backfill by pumping. This will replace the costly manual method now employed.

9. Remote Control for Trolley Locomotive \$ 2,000

The experience gained from the remote spotting of cars at the 13th Level Waste Dump, indicates the feasibility of this expenditure. It is proposed to install remote spotting of cars at the three main draw points on the 13th Level and reduce crews to one man.

10. Remote Controls for Two Battery Locomotives \$ 3,000

On one man crews, the remote spotting of cars will improve tramming efficiency. It is proposed to test two of these units in 1966.

11. Purchase Sixteen 60-cubic-foot Mine Cars for 19th Level Haulage \$ 39,200

The additional development crews will utilize all spare 60 cubic foot mine cars. Sixteen cars are required for the 19th Level Waste Haulage in 1966.

12. Verna Winze Automated Fill Storage \$ 36,000

A storage facility is required on the 10th Level at the Winze to handle back-filling below this elevation. This installation will allow greater flexibility as two areas may be filled at Verna simultaneously. The extra storage will result in greater utilization of fill. Shorter distribution lines will reduce amount of fill when a spill occurs.

\$111,250

MAINTENANCE1. Boggy Wheels for 60 Cubic Foot Mine Cars

\$ 3,400

All available wheels are in use leaving fifty-four cars without wheels. The installation of the new type car dumpers at the waste passes in the Lower Winzo will require the cars to be fitted with Boggy wheels.

2. Electrical Installations in Winzo Below 13th Level

\$ 41,000

Required for mining operations when shaft sinking complete.

3. Underground Haulage Equipment

\$ 49,100

Purchase of:

(1) One 3.5 ton locomotive with batteries \$19,500
Required for 1966 lateral development.

(2) Replacement of batteries .. \$24,000

2 for 5 ton loco-
motive \$10,000

4 for 3.5 ton
locomotive \$10,000

2 for 1.5 ton
locomotive \$ 4,000

(3) New Controllers \$ 1,100

1 for 5 ton locomotive

1 for 1 ton locomotive

(4) Three 100 ampere battery
chargers for Winzo develop-
ment. \$ 4,500

4. One 7 Ton Steam Hoist

\$ 1,500

Required as spare for Pay production hoisting.

5. Recording Meter for Verna Compressors

\$ 1,400

To record volume and pressure of air to ensure that compressors are maintained at maximum output. With the heavy schedule of lateral development and diamond drilling, the full capacity of the compressors is required.

6. Arc Welding Machine for Underground Maintenance

\$ 2,500

Present unit prone to dampness. Maintenance on this unit has been excessive.

7. Model 'K' Filter Drum Cleaning Tool and Jig

\$ 600

Required for filter maintenance to remove carbunculation and reduce filter cloth usage.

MAINTENANCE (Continued)

8. Washing System for No. 1 Conveyor \$ 1,500

A spray system at head pulley to eliminate the continual clean-up in this area.

9. Pachuca Heating Coils (10) \$ 9,500

Replace existing coils with 316 stainless steel to give an extended life and lower maintenance.

10. Mill Conveyor Replacement \$ 30,000

Replacement of existing 24" belts on Nos. 11 and 13 conveyors with 30" conveyor bolting. The coarser feed to the Autogenous Mill necessitates the design change on these conveyors. Proposal includes new weighometer.

11. Renovation of Utilities and Services \$335,000

1. Ace Mine Air Heating Plant \$150,000

To install a heat exchange system to utilize available heat from the mill process and compressors, for heating mine air during the winter months.

2. Steam Generation \$150,000

- (1) Purchase of a 50,000 pound per hour water tube boiler \$85,000
- (2) Relocation and purchase of controls ... 5,600
- (3) Preparation of site.. 22,500
- (4) Relocation of steam plant accessories.... 20,750
- (5) New piping & pumps... 6,350
- (6) Engineering 9,800

3. Flue Gas Compressor & Scrubbing..\$ 35,000

To replace existing reciprocating compressors with one rotary screw compressor. The present units require excessive maintenance and the frequent downtime is costly to the mill process.

Details of justification submitted in Maintenance Consultant's Report, October 19th, 1965.

12. Chlorinator for Pay Service Building \$ 6,500

To replace existing unit which gives unsatisfactory service and requires excessive maintenance.

13. Purchase of Vehicles \$ 7,400

Replacement of:

- (1) 1952 Model Tractor at Wellington \$2,000
- (2) 1953 Model Tractor in Mill \$2,000
- (3) 1962 Model Half-Ton Panel \$3,400

MAINTENANCE (Continued)

- | | | |
|-----|--|----------|
| 14. | <u>Purchase of New Tools</u> | \$ 1,600 |
| 1. | Four Brush Saws \$800
For clearing brush along
transmission lines. | |
| 2. | Impact Wrench with Sockets \$800
To facilitate repair of
heavy equipment. | |
| 15. | <u>Eight Low Water Cut-Out Switches for Low
Pressure Boilers</u> | \$ 2,500 |
| | Recommended by Boiler Inspector. | |
| 16. | <u>Sluice Log Lifter for Wellington Lake</u> | \$ 500 |
| | To replace manual method for lifting logs. | |
| 17. | <u>Crane for Shop Area</u> | \$ 2,000 |
| | To facilitate the handling of underground
equipment. | |
| 18. | <u>Six Ox-Acetylene Mixing Chambers</u> | \$ 500 |
| | Mixing chambers and cutting attachments
required for replacement of existing units. | |
| 19. | <u>Purchase Used Telephone Exchange</u> | \$ 2,500 |
| | To relieve overloading on existing
exchange. | |
| 20. | <u>Replacement of Stoves and Refrigerators
in Townsite Dwellings</u> | \$ 4,800 |
| | Replacement of 1952, 1953 and 1954 units. | |
| 21. | <u>Outboard Motor - 25 H.P.</u> | \$ 600 |
| | Transportation of men and materials for
transmission line work and firefighting. | |

\$506,400

GENERAL

- | | | |
|----|--------------------------------|-----------|
| 1. | <u>Campsite Housing</u> | \$ 60,000 |
| | Four units. | |
| 2. | <u>Cookery Equipment</u> | \$ 1,650 |
| | Replacement of: | |
| | (1) Meat Delicator \$550 | |
| | (2) Meat Grinder 550 | |
| | (3) 75 Nesting Chairs ... 550 | |
| 3. | <u>Retail Store Equipment</u> | \$ 550 |
| | One Meat Delicator - \$550. | |

\$ 62,200

TOTAL "B" EXPENDITURES \$704,430

GROUP "C" EXPENDITURES

Included are tentative projects that appear attractive from preliminary investigation. These projects require more detail study to support their justification. Expenditures are "in the order of".

1. Preparation of Ammonium Nitrate Explosive At the Mine Site

\$ 19,000

Considerable detail has been investigated on this project. The indicated savings look very attractive. Further study will be given the licence required, storage restrictions, and the source and transportation of prills.

2. Underground Hydraulic Air Receiver

\$ 31,000

This project has been under consideration for a number of years by the Mine Engineering section. Detail layout design is well established. Study on the suitability of rock structure to ensure confinement of compressed air will proceed.

3. Boring Mill for Shop

\$ 30,000

Preliminary investigation indicates justification for the purchase of this unit to repair heavy equipment on the property. The boring mill will add flexibility to shop work but the final justification will depend on savings possible compared to the present practice of transporting the equipment to Edmonton.

4. Rotary Broom - Airport

\$ 3,000

To clean strip and tarmac after winter sanding. Would be attached to pick-up truck.

TOTAL "C" EXPENDITURES \$103,000

PORT ROBE REFINERY

CAPITAL EXPENDITURE ESTIMATES - 1966

GENERAL PLANT EQUIPMENT

1. DRY FEEDS AREA

Fork Lift Truck Replacement	\$ 8,100	
Materials Handling Automation	<u>15,000</u>	
		\$ 23,100

2. LABORATORIES

Power Source -		
Direct Reading Spectrometer	\$16,000	
Miscellaneous Laboratory Equipment	<u>3,000</u>	
		\$ 19,000

3. ENGINEERING AND MAINTENANCE

Tube Cleaner - For Use Preheater	\$ 550	
Portable Welding Machine	850	
Electric Circuit Breaker	350	
Potentiometric Recorder	450	
Power Hack Saw	4,500	
Truck	<u>7,000</u>	
		\$ 13,700

NATURAL AND ENRICHED URANIUM AREA

Continuous Process Pilot Equipment	\$20,000	
Ammonia Dissociation Catalyst & Retort		
Replacement	<u>3,500</u>	
		\$ 23,500

SPECIAL PROJECTS AREA

Vacuum Valve Assembly - CVC Furnace	\$ 500	
Scrap Recovery Circuit - Enriched Uranium	15,000	
Electric Furnace for Mold Bake-out	<u>8,500</u>	
		\$ 24,000

ZIRCONIUM DEVELOPMENT

Development Equipment	\$10,000	
		\$ 10,000

TOTAL		<u>\$113,300</u>
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December 1, 1965.

RESEARCH AND DEVELOPMENT DIVISION

PROPOSED CAPITAL EXPENDITURES - 1966

tawa

Surface Grinder	\$ 2,500	
Vacuum Heat Treating Furnace	3,000	
Stirrers - 7 only	810	
Covers for Reaction Vessels - 3 only	850	
Teflon Beakers - 6 only	2,000	
Pipe Bender	460	
Vacuum Cleaner	425	
Brown Pyrovanne Controllers - 2 only	700	
Rotating Welding Table	300	
Moyno Pump	1,200	
Dry Solids Feeder	800	
Filter Press	500	
Thermofax Microfiche Reader	1,000	
		\$14,545

Port Hope

Zirconium Cutting Equipment ✓	2,000	
Die Set for Powder Metallurgy	1,000	
Calcium Size Reduction Equipment ✓	3,000	
Forced Air Oven	1,900	
Typewriter	500	
		8,400
Total		<u>\$22,945</u>

December 1, 1965

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS OF ELDORADO
MINING AND REFINING LIMITED HELD IN TORONTO, ONTARIO, ON
DECEMBER 3RD, 1965, COMMENCING AT 9.30 A.M.

Present: Messrs. W.M. Gilchrist
Fred. R. Hadley
W.F. James
John E. Sydie

In attendance: B.S.W. Buffam
J.C. Orr
R.C. Powell
*J.C. Burger
*A. Thunaes
*H.E. Lake

*As required

PRELIMINARY MATTERS

Notice of the meeting having been duly given and a quorum being present, the meeting was declared to be regularly constituted. The President occupied the chair and Mr. Powell acted as secretary of the meeting.

MINUTES OF PREVIOUS MEETING

The Chairman reviewed the minutes of the Board's meeting held September 10th 1965, copies of which had previously been circulated, and upon motion of Messrs. Hadley and Sydie, the minutes were taken as read and approved.

REVIEW OF OPERATIONS FOR THE TEN MONTHS ENDED 31ST OCT. 1965

The Chairman presented financial statements for the first ten months which may be summarized as follows:-

	<u>Actual</u>	<u>% of Target</u>
Sales Revenue	\$14,259,405	88
Cost of Sales & Development, etc.	<u>13,959,760</u>	91
Net Income from Operations	299,645	33
Ore Procurement & Other Income	<u>1,325,157</u>	98
Total Income	1,624,802	72
Provision for Taxes	-	
	<u>\$ 1,624,802</u>	72
Pounds sold	1,700,298 (Av. \$7.81)	90
Pounds produced at Mine	1,470,069	98
Total cost per pound	\$5.30	103
Cash and Deposits	\$ 9,416,833	68
Working Capital	\$22,618,168	
Expenditures on Plant & Equipment	\$ 490,502	
Total employees	772	
Salaries and wages	\$ 4,878,315	

He noted that the 12% short-fall from target for sales revenue is largely due to a reduction in the feed ratio of Beaverlodge concentrates entered to the refinery solvent process, this hold-back being due to metallurgical reasons. He noted that there would be no income tax payable for 1965 because of large capital cost allowances, together with deductions for depletion and research. The cash position of \$9,416,833 is low, because some \$4,465,000 had been employed to date for interim financing of the stockpiling programme until the Trade and Commerce supplementary estimates are passed.

The number of pounds produced at Beaverlodge is 29,000 below target due to production troubles at the mine, stemming from drive and liner trouble in the autogenous grinding mill and reduced recovery. However, a report just received had indicated that production was slightly above target at the end of November.

Cost per pound of Beaverlodge production at \$5.30 is 18¢ or about 3% above target, but with higher production in the final two months the cost should be closer to target. The normal refinery operations produced a profit of \$212,000, but this is offset by new product development costs, sales and promotion costs and depreciation on idle plant to the extent of \$869,000, to create a loss position at the refinery of \$657,000.

CAPITAL EXPENDITURES 1965

The Chairman presented a Statement of Capital Expenditures made to October 31/65 against the amounts approved by the Board to that date. At the Beaverlodge operation, it appears that approximately \$200,000 of the total appropriation of \$465,000 will not be spent. The Refinery and R&D Divisions will have, unspent, about \$72,000 of a total authorization of \$537,000. Mr. Gilchrist noted that there are however, three additional projects not authorized which he would recommend. These are as follow:-

Refinery

Building and equipment for radiography:

Project as revised estimated at	\$20,000	
Original authorization, Dec 1, 1964	<u>6,000</u>	
		\$ 14,000

Extension to plant warehouse building:

Actual cost will be about	\$35,000	
Original authorization, July 14, 1964	<u>30,000</u>	
		\$ 5,000

Research and Development

Typewriter for technical library	\$ 500
	<u>\$19,500</u>

Upon motion of Messrs. Hadley and James, these expenditures were approved.

MINUTES OF MEETING OF EXECUTIVE COMMITTEE HELD NOVEMBER 24TH 1965

Mr. Gilchrist next referred to the minutes of the above-noted meeting, copies of which minutes had been made available to all Board members for study prior to the meeting. He noted that since the Executive Committee meeting, the management had revised the Refinery and R&D operating budgets and the overall corporate forecast, and he referred the meeting to these new budgets and forecast. He reviewed the history and results of the programme for new product development, the reasons for undertaking this work, its successes and disappointments, all as set out in considerable detail in the minutes of the Executive Committee meeting. Following a full discussion of these matters, the Board found itself in agreement with the views of the Executive Committee, and upon motion of Messrs. Sydie and Hadley the minutes were approved and the actions taken by the Executive Committee were ratified.

Mr. Gilchrist then turned specifically to the revised forecasts which had been prepared since the Executive Committee meeting. He noted that the Research and Development Division had now been allocated \$500,000, including grants to universities, but excluding costs of technical assistance and liaison, depreciation, custom contracts which are to be self-liquidating, any funds received from P.A.I.T., and costs of process control at the mine and refinery. As for the refinery, it is scheduled to show a profit of about \$15,000 after bearing the cost of new product development and sales and promotion expense.

Looking at the corporate forecast as a whole, a net loss on operations of \$107,000 is projected, offset by other income to produce a net profit for the year of \$482,000, compared with a projected net loss on operations of \$152,000 in 1965, offset by other income to produce a net profit of \$1,270,000. Following discussion and upon motion of Messrs. James and Hadley, the operating forecasts as presented to the meeting, and calling for total operating expenses of \$14,157,000 were approved.

OUTLOOK FOR URANIUM DEMAND

Mr. Gilchrist noted that the company would, starting early in 1967, sell to the government stockpile, and he anticipates that the price, with escalation, will by that time be about \$5.10. He pointed out that the presence of the stockpile means that Canadian mines will not be under any pressure to sell at bargain prices in order to maintain a viable industry. Mr. Gilchrist believes that world demand will dictate some firm contracts by 1968, and that demand will climb rather sharply after 1970. The stockpile will act as a cushion to allow for an orderly expansion of mines, should demand exceed the then possible output. His view is that Switzerland may be the first country into the market. They are committed to nuclear power entirely, for reasons of air pollution and the maintenance of tourist attractions which might be eliminated if the remaining hydro power sites were developed.

MINE DEVELOPMENT AND ORE RESERVES

Dr. Buffam referred to the mine development programme which has been laid down for the next five years, aimed at having the mine developed by 1970 to the bottom of the Fay shaft. Lateral development in 1966, in terms of both drifting and raising, will be greater than in the past year, and directed mainly to developing the west Fay and lower Verna ore bodies.

Ore reserves at August 1st indicated that reserves had been maintained and increased by one month's ore during the previous year. Present reserves represent about five years' ore, but this includes only proved and probable ore. It is significant that more ore is now being put in sight than is being mined. Moreover, ore reserve grade of .21% is in excess of the average grade being mined of .193%. He noted, however, that the optimum tonnage is less at the lower depths with not quite so many tons per vertical foot. For this reason, among others, it appears that the time has arrived to look at some surface showings, and a programme of surface evaluation with a budget of \$170,000, as more particularly set out in the minutes of the Executive Committee Meeting, will be undertaken during the current year.

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1966 CAPITAL BUDGETS

The forecast of capital expenditures for the year is \$1,076,520 as more particularly set out in the appendix attached hereto. In considering the individual items, the Board noted that the Executive Committee had already scrutinized in detail the Beaverlodge expenditures which constitute the major portion of the estimate. Satisfactory explanations of the need for all items in the budget were forthcoming, and upon motion of Messrs. Sydie and Hadley, the capital expenditure forecast was approved.

DIVIDEND

Upon motion of Messrs. Hadley and Sydie, a dividend was declared payable December 17th 1965 to the Receiver General of Canada in the amount of \$1,500,000.

RESOLUTION FOR USE OF COMPANY SEAL BY BEAVERLODGE MANAGEMENT

Mr. Gilchrist explained that it would be much more convenient and less time-consuming if Beaverlodge management were able to apply the Company seal to documents necessary for implementation of the Company's Uranium City Housing Programme. Accordingly, the following resolution was passed, upon motion of Messrs. James and Sydie:

"WHEREAS from time to time, in implementing the Company's policy of financial assistance to employees in the purchase of houses in Uranium City, it is necessary to execute Transfers of Land and Discharge of Mortgage under the Saskatchewan Land Titles Act, and

WHEREAS the transmitting of these documents to Head Office for execution is time-consuming and cumbersome,

NOW, THEREFORE, be it resolved:

THAT the Manager or the General Superintendent of the Beaverlodge Operation, together with either the Chief Accountant or the Personnel Officer of the said operation be and they are hereby authorized to execute under the Company seal, Transfers of Land or Discharges of Mortgage required under the Saskatchewan Land Titles Act in connection with the implementation of the Company's policy of housing assistance to its employees residing in the Municipal District of Uranium City, and

THAT the Secretary be and he is hereby authorized to provide to the Beaverlodge Operation a duplicate of the Company seal to be used for the aforementioned purpose and no other."

CHRISTMAS GRATUITIES

Upon motion of Messrs. James and Hadley, it was resolved that the practice of granting a Christmas Gratuity to employees, as in past years, be continued for 1965.

DATE OF NEXT MEETING

It was the consensus of the meeting that Friday, March 4th 1966, would be a suitable date for the next meeting of the Board.

NTCL CAPITAL PROGRAMME FOR 1966

Mr. Gilchrist advised the Board that, on the previous day, the directors of Northern Transportation Company Limited had approved a capital expenditure programme of \$3,200,000, all but \$300,000 for shore installations or equipment, and in view of this very substantial expenditure, he wished to inform the Board of the reasons therefor.

He reviewed the purchase by Northern Transportation Company Limited of Yellowknife Transportation Company and two associated companies, and he noted that the integration of personnel and equipment had gone well. A profit of \$1,405,000 had been earned in the first year, an increase of \$432,000 over 1964. Because of this, and the anticipated satisfactory profits of future years, it can be assumed that pressure will be brought to bear for tariff reductions.

Mr. Gilchrist would be prepared to effect a reasonable reduction in bulk oil rates for 1966, since this is a commodity which affects all customers, but he does not favour a substantial across-the-board cut in all rates. Rather, he considers that these increased earnings present an excellent opportunity to carry out a much-needed major capital expenditure programme. Included in the programme would be the renovation or replacement of a number of run-down shore facilities, particularly housing and mess halls, and the re-location of the Tuk-Tuk terminal which was originally located on an unfavourable site because the desirable area at Cache Point was then required by the DEW Line; now, however, this site is being made available. The completion of these highly desirable projects, combined with the absolutely essential warehousing, ship-yards,

and improvements to the dock and waterfront at Hay River, will bring the Company's shore facilities up to a very satisfactory standard for the foreseeable future.

The Board, upon motion of Messrs. Sydnie and James, gave its approval to this substantial expenditure by the subsidiary.

ADJOURNMENT

There being no further business, upon motion being duly made and seconded, the meeting was adjourned.

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS OF ELDORADO
MINING AND REFINING LIMITED, HELD IN TORONTO, ONTARIO, ON
SEPTEMBER 10TH, 1965, COMMENCING AT 9:45 A.M.

Present: Messrs. W.M. Gilchrist
 F.R. Hadley
 W.F. James
 John E. Sydie
 W.G. Thompson
 * W.J. Bennett

In attendance: Messrs. R.C. Powell
 J.C. Orr
 C. Baschenis
 A. Thunaes
 H.E. Lake
 B.S.W. Buffam

* for a limited time - see page 402

PRELIMINARY MATTERS

Notice of the meeting having been duly given and a quorum being present, the meeting was declared to be regularly constituted. The President occupied the chair and Mr. Powell acted as secretary of the meeting.

MINUTES OF PREVIOUS MEETING

The Chairman reviewed the minutes of the Board's meeting of May 27, 1965, which minutes had been previously circulated to the Directors. Upon motion of Messrs. James and Hadley, the minutes were approved.

BUSINESS ARISING OUT OF THE MINUTES

Mr. Gilchrist advised the Board that the integration of the Yellowknife Transportation Company and its affiliates with Northern Transportation Company had proceeded successfully and the combined operation gives promise of quite a successful year which would lead to some token rate reductions for next year. This should help to forestall any criticism of Northern's new monopoly position. Mr. Gilchrist indicated that some considerable capital expenditures would be required next year to replace shore equipment and accommodation, to install ways and shops at Hay River, and probably for the construction of another vessel for the Arctic to be in service by 1967.

Referring to the changes in the pension plan, which had been authorized at the last Board Meeting, Mr. Gilchrist said that governmental approval of these changes was expected any day.

MINUTES OF MEETING OF EXECUTIVE COMMITTEE HELD JULY 14, 1965

Upon motion of Messrs. James and Sydie the decisions taken by the Committee were ratified and the minutes, previously circulated, were approved.

Referring to the Committee's consideration of the possibility of refining stockpiled concentrates owned by the government, Mr. Gilchrist advised the Board that he had placed a brief before the Advisory Committee on Atomic Energy and that he is optimistic that government approval for refining the stockpile will be forthcoming.

FINANCIAL AND PRODUCTION STATEMENTS FOR 7 MONTHS ENDING
JULY 31, 1965

The President laid before the meeting an Interim Report on the operations for the first seven months of the year. A copy of this is attached as Appendix "A". He noted that sales revenue was 13% short of target, due largely to a reduction in the feed ratio of Beaverlodge concentrates entered to the refinery process, for metallurgical reasons. However, since the

shortfall pounds were high-priced pounds, they have had an exaggerated percentage effect in reducing profit, and the net income from operations for the period was therefore only 60% of target. When these pounds are entered in 1966, there will be a corresponding favourable impact at that time.

The number of pounds of U_3O_8 produced at the mine to July 31st was only 90% of target and cost per pound was 12% above target. The shortfall and higher costs reflect mechanical troubles with both the autogenous grinding unit and the stripper condenser. However, Mr. Gilchrist informed the meeting that August performance had been much improved. The shortfall of 102,000 pounds at July 31 had been reduced to 42,000 pounds by the end of August, and the year-to-date cost had been reduced from \$5.73 to \$5.36. There is no reason to believe now that the shortfall cannot be made up before the year-end and the cost target of \$5.13 achieved.

Mr. Gilchrist noted that sales are now at the U.K. contract price of \$5.37, and commencing in 1967, deliveries will be under the government stockpiling programme at \$4.90 per pound. Accordingly, every effort must be made to effect economies and reduce operating costs to show a profit at these prices. Mr. Gilchrist pointed out, however, that by the end of this year, mine fixed assets will have been virtually fully depreciated, and if production of 150,000 pounds per month is achieved, the direct mine cost should be under \$4.70 per pound. A cost of less than \$3.50 per pound is a reasonable expectation, should demand be such as to justify an output of the capacity 210,000 pounds per month.

In reviewing the detailed financial statements, it was observed that net profit for the first seven months was \$1,857,000, essentially the same as in last year's comparable period. However, this included some sales of high-price pounds, and with sales for the balance of the year being at the \$5.37 price, it is unlikely that any profit will accrue and the net profit for the year may well be less than the profit for the first seven months.

Mr. Gilchrist noted that while the refinery shows a net revenue of \$125,000 for the year-to-date, this is exclusive of cumulative charges of \$464,000 for refinery product development and idle plant depreciation.

Research and Development expenditures of \$452,000 are \$10,000 above the budget for the year-to-date.

CAPITAL EXPENDITURES

The Chairman presented a list of additional capital expenditures and recommended their authorization. Of the total \$117,855 requested, \$90,000 is for a duplicate and improved stainless steel reboiler and stripper condenser. This is used to reduce the volume of solutions by boiling and condensing steam for use in washing the filters. The proposed unit will replace one which has recently failed due to corrosion in the boiler tubes. The new unit will have a non-corrosive type of boiler tube. The original unit will also be repaired and the duplication will make possible much greater flexibility.

Upon motion of Messrs. Hadley and Thompson, the requested capital expenditures as listed hereunder were approved:

Beaverlodge

Stainless Steel Reboiler and Stripper Condenser	\$90,000
Redler Precipitate Conveyor	10,000
Pneumatic Concreting Machine for underground	6,300
Electronic Recorder for ore sorting plant	5,800
Pump for lime plant control	2,530
Compressor, 315 C.F.M., for Bolger Pit use	1,650
Aneroid Barometer for mine ventilation surveys	650
Portable Transmitter-Receiver for field parties	375
	<u>\$117,305</u>

Refinery

Balance for Enriched AL-U processing area	<u>550</u>
	<u>\$117,855</u>

COLLECTIVE BARGAINING WITH THE BEAVERLODGE LOCAL OF THE INTERNATIONAL UNION OF MINES, MILL AND SMELTER WORKERS.

Mr. Gilchrist reviewed the seven months of negotiations which had now led to a three year agreement commencing September 1, 1965. A detailed outline of the settlement is attached to these minutes as Appendix "B". He noted that in terms of cents per man hour, the three year agreement provides for an average increase of 24.3¢. Total dollar cost of the settlement will be approximately \$664,000 or about 10.8¢ per pound of U₃O₈.

The Board agreed that in the light of recent wage and fringe benefit packages negotiated in various industries, the settlement appeared quite favourable to the company.

Upon motion of Messrs. Sydnie and Thompson, the action of management in effecting this settlement was approved.

REMOVAL OF VICE PRESIDENT, ADMINISTRATION AND FINANCE

Mr. Gilchrist informed the Board that, in late June, he had advised Mr. D.G. Scott that his services would not be required after the end of that month. This step was taken as one means of reducing administration costs. Other action taken in this area includes discontinuance of the NEWS-MAG publication, and termination of the services of the public relations consultant, of Mr. J.G. McNiven who now retires on pension, and of Mr. C.S. Parsons as metallurgical consultant.

He had, Mr. Gilchrist stated, come to the conclusion, in considering how economies could be effected, that the need for a Vice President, Finance, no longer existed. He had informed Mr. Scott that he would be continued on the payroll until December 31, 1965, and that he would be free to use the office as a base for seeking other employment, and be provided with a reasonable travel expense allowance for up to six weeks. Mr. Scott indicated that he considered these terms unsatisfactory. He asked that his salary be continued through 1966, and that he be provided with a pension of \$500 monthly at age 65. Mr. Gilchrist had refused these terms, and Mr. Scott had retained J.G. Edison as counsel. It is apparent, however, that Mr. Edison has no intention of taking the matter to the Courts, but rather intends to use a political

* extended to June 30, 1966 per J.C. On 000085

approach. To this end, the Minister and his Executive Assistant have been briefed.

The Board, after discussion, approved the termination of Mr. Scott's services and declined to recommend any change in the settlement offered to Mr. Scott by the President.

Mr. W.J. Bennett was present during the discussion of this matter.

AMENDMENT TO BY-LAW NO. 13

Mr. Gilchrist stated that the duties of the former office of Vice President, Administration and Finance, would be shared by the Treasurer, for financial matters, and by Mr. C. Baschenis for administrative matters. To this end, he proposed that an office of Director of Administration should be created, to be held by Mr. Baschenis. Accordingly, upon motion of Mr. Hadley and Dr. James, an amendment to By-Law No. 13, as set out in Appendix "C" attached, was duly enacted, and upon the same motion Mr. C. Baschenis was appointed to the position of Director of Administration.

BANKING RESOLUTIONS

The President noted that, with the recent change in duties of officers, some re-alignment of accounting responsibilities had been made, requiring changes in bank signing authority.

Accordingly, on motion of Messrs. Thompson and Sydnie, it was resolved that, in respect of all bank accounts operated by the Company with the Royal Bank of Canada, Port Hope, Ontario, the list of persons set out in the Schedule attached to the Resolution of this Board of February 27, 1964, be amended by adding the following:-

Director of Administration

Procedures and Budget Officer

APPOINTMENT OF PENSION TRUSTEE

Mr. Gilchrist advised that, as a consequence of Mr. D.G. Scott's termination of employment, it would be necessary to remove him as a Trustee of the Pension Plan, and he recommended Mr. C. Baschenis as a replacement. Accordingly, upon motion of Mr. Hadley and Mr. Thompson, the following resolution was adopted:

"WHEREAS by Resolution of the Board of Directors of Eldorado Mining and Refining Limited passed at a meeting held December 4, 1963, Mr. D.G. Scott was appointed a Trustee of the Eldorado Pension Plan (1959), and

WHEREAS Mr. Scott is no longer employed by the Company, and

WHEREAS it is deemed advisable to appoint Mr. C. Baschenis to act as a Trustee in place of Mr. Scott.

NOW THEREFORE BE IT RESOLVED that Mr. D.G. Scott be and he is hereby removed as a Trustee of the said Pension Plan, and Mr. C. Baschenis be and he is hereby appointed a Trustee of the said Pension Plan, effective as of this date."

REPORT ON ORE RESERVES

Dr. Buffam stated that he had just returned from the mine, and that the ore reserves had been completely recalculated as at August 1st. Proved and probable ore at that date stood at 1,410,000 tons grading 209%, an increase of 25,000 tons since the first of the year, after mining 311,000 tons in the seven months. This reversal of the trend to lower reserves is encouraging and confirms the predicted movement into an ore-making cycle.

Dr. Buffam reported also that three interesting finds had been made this summer by prospectors working in the previously-staked claim blocks, and that he will recommend a diamond drilling programme on these in 1966, possibly going underground by 1967.

SALARIES

Mr. Gilchrist recommended, and upon motion of Messrs. Thompson and Sydnie, the Board authorized the following salary increases to be effective August 1, 1965:

The Treasurer	\$1,200.00 per annum
The Manager, Research and Development Division	\$1,000.00 per annum

By the same motion, the salary of the Director of Administration was established at \$14,000.00 per annum, effective August 1, 1965.

DATE OF NEXT MEETING

It was agreed that the Board would next meet in Toronto on Friday, December 3, 1965, to consider, among other things, the 1966 estimates. The directors asked that the estimates, if possible, be sent out before the Board meeting, for advance study.

ADJOURNMENT

Upon motion, the meeting adjourned at 11:45 a.m.

W. M. Gilchrist
Chairman

R. C. Powell
Secretary

INTERIM REPORT SUMMARY - 1965 TO JULY 31

	<u>This Year 7 Months</u>	<u>% of Target for this period</u>	<u>Last Year 7 Months</u>
Sales Revenue	\$11,186,755	87 (A)	\$9,200,065
Cost of Sales & Development, etc.	10,508,210	90	8,066,036
Net Income from Operations	678,545	60 (B)	1,134,029
Ore Procure. and Other Income	1,178,388	93	2,524,533
Total Income	1,856,933	77	3,658,562
Provision for Taxes	- (C)		1,835,000
Net Profit	<u>1,856,933</u>	77	<u>1,823,562</u>
Pounds sold	1,250,924 (Av. \$8.43)(D)	91	797,448 (Av. \$10.35)
Pounds produced at Mine	943,424	90	1,137,736
Total cost per pound	\$5.73	112	\$8.30 (E)
Cash and Investments	\$12,590,064 (F)	106	\$19,621,311
Working Capital	\$19,323,405	-	\$18,085,683
Expenditures on Plant & Equipment \$	187,502	-	\$ 706,681
Total Employees	865	-	830
Salaries and Wages	\$ 3,396,075	-	\$ 3,286,049

- (A) The 13% shortfall from target for sales revenue is largely due to a reduction in the feed ratio of Beaverlodge concentrates entered to refinery solvent process, for metallurgical reasons. There will be a corresponding favourable impact on 1966 operations when the deferred material is processed and sold.
- (B) The above-noted shortfall, which amounts to about 125,000 pounds, has an exaggerated percentage effect in profit reduction because each of these high-priced pounds would have added about \$2 to net income.
- (C) Large capital cost allowances available for tax calculation, together with deductions for depletion and research, will substantially eliminate taxable income for 1965.
- (D) The \$8.43 average selling price for 1965 to date is comprised of:
769,130 pounds at \$10.35 and 481,794 pounds at \$5.37.
- (E) The \$8.30 cost last year included depreciation at \$1.80 pound and Lorado \$1.65 pound.
- (F) Cash and Investments have been reduced by 7 million from the year-ago position due to our repaying advances made earlier for deferment of Beaverlodge production (6 1/2 million) and our increased involvement in financing the U.K. contract (2 million).

**Notes on Renewal of Beaverlodge
Collective Bargaining Agreement
Effective September 1, 1965**

The labour contract with Local 913 of the International Union of Mine, Mill and Smelter Workers, which expired on March 31, was renewed effective September 1, 1965 following negotiation and conciliation proceedings extending over seven months.

The terms of renewal, hereinafter summarized, are based on the report which was issued by the Board of Conciliation on August 23 and approved by the members of the bargaining unit in a referendum vote on September 3.

1. Term of agreement:

3 years from September 1, 1965 to August 31, 1968.

2. Selective rate adjustments:

2 - 17 cents per hour, primarily involving trade categories and averaging 1.25¢ across-the-board.

3. General wage increases:

8¢ per hour effective September 1, 1965

8¢ per hour effective September 1, 1966

7¢ per hour effective September 1, 1967

In lieu of retroactive pay employees on payroll on signing date to receive a lump sum settlement of \$60, to be pro-rated for employees hired after March 31, 1965.

4. Shift differential:

The existing varying premiums for afternoon (6¢), night (7¢) and graveyard shifts (9¢) to be changed to a flat rate differential of 9¢ per hour.

5. Weekend premium:

Shift workers scheduled to work between midnight Friday and midnight Sunday to receive a premium of 15 cents per hour.

6. Local allowance:

The "cost of living bonus" payable to employees domiciled in Uranium City to be raised from \$8 to \$16 a month retro-active to April 1, 1965.

7. Improvements in group insurance benefits:

Weekly indemnity - raised from \$35 to \$50 per week and extended from 13 to 26 weeks maximum with provision for payment from 1st day of illness if hospitalized.

Life insurance - increased from \$3000 to \$5000 with double indemnity in case of non-occupational accidental death or dismemberment.

8. Tool allowance:

In a collateral letter the Company to agree to replace a tradesman's personal tools lost or damaged through no fault of the employee.

9. Severance Pay:

The Company to confirm in a letter that in event of complete mine shutdown employees affected will receive a severance allowance of one week's pay at basic wage rates for each year of continuous service up to a maximum of \$500, which maximum may become the subject of discussion between the Company and the Union in future negotiations or in the event of a shutdown, whichever occurs first.

10. Miners' incentive bonus:

In a supplementary letter the Company to concede that an employee questioning the application of incentive rates or standards may, if he desires, be accompanied by two other mine department employees designated by the Union.

Estimated Cost of Settlement

(in thousands of dollars)

	1965 Apr-Dec	1966	1967	1968 Jan-Aug	Total
Retroactive pay	34.4	-	-	-	34.4
Selective adjustments	3.3	10.0	10.0	6.7	30.0
General wage increases	21.3	85.3	146.7	122.7	376.0
Shift differential	2.3	7.0	7.0	4.7	21.0
Weekend premium	2.0	6.0	6.0	4.0	18.0
Local allowance	9.3	28.0	28.0	18.7	84.0
Group insurance	2.7	8.0	8.0	5.3	24.0
Tool allowance	.7	2.0	2.0	1.3	6.0
Burden on wage items (12.5%)	9.1	17.0	24.7	19.6	70.4
Total	85.1	163.3	232.4	183.0	663.8
Manhours	600,000	800,000	800,000	533,333	2,733,333
Cents per manhour	14.2	20.4	29.0	34.3	24.3
Cents per pound	6.3	9.1	12.9	15.2	10.8

Port Hope, Ontario
September 7, 1965

PROPOSED AMENDMENT TO BY-LAW NO: 13

WHEREAS By-Law No: 13, passed March 27, 1953, provides in part that the officers of the Company shall be a President, one or more Vice-Presidents, a Secretary, a Treasurer, an Assistant Secretary and an Assistant Treasurer, and

WHEREAS it is proposed that the said By-Law No: 13 be amended to add to the list of officers a "Director of Administration", and to set forth the responsibilities of the office:

NOW, THEREFORE, be it resolved that By-Law No: 13, passed March 27, 1953, be and it is hereby amended as follows:-

1. The first sentence of the By-Law is deleted and the following substituted therefor:

"The officers of the Company shall be a President, one or more Vice-Presidents, a Secretary, an Assistant Secretary, a Treasurer, an Assistant Treasurer, and a Director of Administration."

2. An additional paragraph is added reading as follows:-

"The duties of the Director of Administration shall be in the fields of organization, policy planning, personnel, salary administration, industrial relations, fringe benefits, communications, and pensions, and he shall also perform such other duties as may be required of him by the Board of Directors."

MINUTES OF A MEETING OF THE EXECUTIVE COMMITTEE OF
ELDORADO MINING AND REFINING LIMITED HELD IN THE OFFICE
OF DR. W.F. JAMES, TORONTO, ONTARIO, JULY 14TH 1965,
COMMENCING AT 10.00 A.M.

Present: Mr. W.M. Gilchrist
W.F. James
G. Lawson

In attendance: Mr. R.C. Powell
J.C. Orr
B.S.W. Buffam

PRELIMINARY MATTERS

Notice having been duly given and the full committee being present, the meeting was declared to be regularly constituted for the transaction of business. Mr. Gilchrist presided and Mr. Powell acted as secretary.

CONTRIBUTION TO THE MCGILL PROJECT FOR DEVELOPMENT
OF MINING ENGINEERS

Mr. Gilchrist recalled that at a meeting on December 1st 1964, the Board had considered a request from McGill University for a contribution towards a project designed to offer post-graduate training, leading to either a diploma or Master's degree in mining engineering, for selected engineering graduates. At the time, the Board had agreed to make a contribution of \$3,000 per year in 1965 and 1966. Mr. Gilchrist now advised the Committee that he considered the amount of this contribution to be inadequate in comparison with contributions being made by other mining companies of comparable size and financial ability. He noted also that the response to the appeal has been excellent and that a number of graduates have now been chosen for the first year's work.

After some discussion the Committee, upon motion of Messrs. Lawson and James, authorized a total payment of \$10,000 in 1965 (i.e., \$7,000 in addition to the \$3,000 already paid), without commitment for 1966 or future years at this time.

CAPITAL EXPENDITURES

Two separate groups of capital expenditures were considered by the Committee, as follows:-

(a) Expenditures required for the government uranium stockpiling programme:

Butler type building 80 ft. x 300 ft.	\$100,000
Extension to the present plant warehouse building 75 ft. x 100 ft.	\$ 30,000
Four-ton forklift	\$ 15,000
	<u>\$145,000</u>

Mr. Gilchrist explained that the large Butler building is a duplicate of the building put up in 1963 at the time of the earlier government stockpiling programme. Sufficient land was purchased at that time to more than accommodate this new building. The forklift truck becomes necessary for handling of concentrates at the new storage. The extension to the present plant warehouse is required for the intermediate handling of stockpile concentrates and the subsequent weighing and sampling. This extension is needed because the plant warehouse area was recently reduced in order to provide increased enriched uranium storage. The expenditure for the enriched uranium storage and the reasons for it are set out in the minutes of the May 27th 1965 meeting of the Board.

Mr. Gilchrist informed the Committee that this total expenditure of \$145,000 will be reimbursed to the company from government funds as a part of the stockpiling programme. Upon motion of Messrs. James and Lawson, this capital expenditure was approved.

In the course of this discussion, a question arose as to the government's policy in respect of sales from the new stockpile. Mr. Gilchrist stated that the Department of Finance is opposed to the industry participating in any profits from such sales, but subject thereto, the policy has not been further defined at this time.

(b) Other capital expenditures

Equipment for cobalt development, refinery	\$143,200
Electric heater for spectrographic laboratory, refinery	\$ 950
Inhalator - resuscitator for first aid, refinery	\$ 500
Small compressor unit for Waterloo Lake Power Plant	\$ 650
	<hr/>
	\$145,300
	<hr/>

Following explanation of the need for the last three items, the discussion centered on the proposed expenditure for cobalt development equipment costing \$143,200. Mr. Gilchrist noted that under present tax regulations relating to research expenditures, the net outlay for this equipment is just under \$36,000.

Reviewing the events leading up to this present requirement, Mr. Gilchrist recalled that in 1962, the Board had approved a three-year research programme costing approximately \$700,000 per year, aimed in large part at finding alternative sources of revenue for the refinery. While a number of avenues have been explored, the programme has been most productive in two areas - the development of a process to produce cobalt oxide, and of a method to produce zirconium and fabricate zirconium alloys.

Both the price of, and the demand for, cobalt have recently been increasing and immediate sales can be assured. On the other hand, sales of zirconium are dependent upon power reactors, and could not reasonably be anticipated before late 1967 at the earliest. The Company at the moment is endeavouring to obtain a zirconium alloys development contract from AECL. While certain private companies are also seeking this contract, worth about \$180,000 annually, these companies would have to import zirconium metal, while our Company would eventually be able to use its own.

Development of the cobalt process began with laboratory scale work, followed by a pilot operation at the refinery and then seventeen weeks of plant tests on concentrates. This work came close to defining a workable flowsheet, but no final product was produced from the circuit. Early in 1965, two pilot runs on cobalt speiss, obtained from Cobalt Refinery Ltd., were made. Equipment deficiencies and a lack of suitable control instrumentation hampered these runs, but with increasing operating experience the performance of the circuit was improved and products approaching the desired standards were produced. Results indicate that further work is needed, and this will require control instrumentation, tankage and additional equipment, but the outlook for success is excellent. The proposed equipment, represented by this \$143,200, would permit an operation of 4 tons/day with existing manpower, and three months' operation should suffice to prove success or failure. The same equipment would, if the process is successful, permit an operation of 8/tons/day, with the addition of a few men.

By deliberate decision in June 1963, the orange oxide contract with the USAEC was stretched out, to keep the refinery operating beyond 1964, and it was then recognized that the refinery would operate at a loss on orange oxide production alone. This loss is reduced to the extent of profits made on UO_2 and other products, but sales volume cannot be accurately forecast. The proposed cobalt production will go some further distance towards reducing the calculated loss on the orange oxide contract.

In the "competition with private enterprise" aspect of the cobalt operation, the Committee observed that there is no place in Canada where the speiss from Cobalt Refinery Ltd., can be treated; moreover, there is no silver refinery in Canada which will handle high-cobalt concentrates except at prohibitive penalties. The proposed cobalt operation, therefore, should be welcomed, rather than criticized, by the private mining companies.

Following discussion, it was the Committee's unanimous view that the proposed expenditure for further work on the cobalt process is merely a logical step in carrying out the Board's previously-defined policy of finding alternative sources of revenue for the refinery, and of the even earlier decision that the overall policy should be one of keeping the company in the best possible competitive position.

Accordingly, upon motion of Messrs. James and Lawson, the capital expenditure of \$145,300 was approved. Mr. Gilchrist noted that Treasury Board approval would be required, but he anticipated that, since the expenditure is for a development programme, this would be forthcoming.

POSSIBLE REFINING OF STOCKPILE CONCENTRATES

Mr. Gilchrist advised the Committee that he had mentioned to the Minister, in a preliminary way, the possibility of refining the uranium concentrates which the government will acquire under the stockpiling programme. Apart from the obvious advantage of continuing employment which would accrue to the Company and the community, the refining of these concentrates could place Canada in a position to offer to the utility companies a standard, nuclear grade product, free of the impurities, particularly sodium, which are objectionable and carry heavy penalties in an enrichment plant.

Refining the concentrates would, moreover, reduce handling and storage costs payable by the government, and it has been estimated that refining could be done for an ~~estimated~~^{estimated} incremental cost to the government of about 10 1/2¢ per pound. On the maximum which could be purchased under the five-year stockpiling programme, the total additional cost to the government would be about \$2.6 million.

Mr. Gilchrist proposes to pursue this possibility further with the Minister.

ADJOURNMENT

There being no further business, the meeting was adjourned.

Chairman

Secretary

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS OF ELDORADO
MINING AND REFINING LIMITED, HELD IN TORONTO, ONTARIO, ON
MAY 27TH 1965, IMMEDIATELY FOLLOWING THE ANNUAL GENERAL
MEETING OF SHAREHOLDERS

Present: Messrs. W.M. Gilchrist
F.R. Hadley
W.F. James
John E. Sydie
W.G. Thompson

In attendance: Messrs. R.C. Powell
J.C. Orr
D.G. Scott
A. Thunaes
H.E. Lake
J.C. Burger
B.S.W. Buffam

PRELIMINARY MATTERS

This being the first meeting of the newly-elected Board, Mr. Gilchrist and Mr. Powell acted as temporary chairman and secretary, respectively.

OFFICERS

Upon motion of Messrs. Thompson and Sydie, the following were elected officers of the Company:

President	W.M. Gilchrist
Vice-President, Refining	J.C. Burger
Vice-President, Mining and Exploration	H.E. Lake
Vice-President, Administration and Finance	D.G. Scott
Secretary	R.C. Powell
Treasurer	J.C. Orr
Assistant Secretary	E.C.A. Kelly

and the following to the Executive Committee:

W.M. Gilchrist
W.F. James
Gordon Lawson

REVIEW OF OPERATIONS TO APRIL 30TH 1965

The Chairman called upon the Vice-President, Administration and Finance, to review the 1965 operations to the end of April. Mr. Scott's remarks were as follows:-

"In summary form, the result of operations for the first four months of 1965 as compared with the corresponding period in 1964 is as follows:-

	\$ 000 Omitted		
	<u>1965</u>	<u>1964</u>	<u>Increase</u>
Sales	7,676	4,922	2,754
Net income from operations	1,082	569	513
Ore procurement and other income	945	1,497	(552)
Net profit, after income taxes	1,937	1,031	906
Work force	794	767	27

The 55% increase in sales reflects the delivery of 285,000 more pounds of U_3O_8 so far this year as larger shipments were made, per schedule, direct from Beaverlodge to the United Kingdom.

The costs for mining, milling and refining for the period show an increase of \$2,015,000, or 50%, which is consistent with the percentage increase in sales as indicated above.

Refinery product development in 1965 was substantially higher than the rate established in the corresponding period of last year. Toward the end of 1964 this class of expenditure rose sharply and the new level then reached has been maintained through 1965 to date.

The higher net income from operations results from the additional Beaverlodge product sold in the year to date. Ore procurement income, on the other hand, is substantially reduced due to the smaller volume of deliveries from the participating mines. Other income is less than last year because funds available for investment are lower. The combined effect of the above is that total income before taxes for the comparative periods is closely parallel.

The relatively small provision for income tax is in line with the forecast for 1965 where it was noted that large capital cost allowance still available for use in the tax computation would develop this position.

It should be pointed out that while net income after tax shows an appreciable gain to date over 1964, this favourable position will not be maintained throughout the year. Eldorado has only a small quantity of high-priced pounds now remaining to be sold. Beaverlodge deliveries of our portion of the 12,000 ton British contract commencing in May at a price of \$5.37 per pound will add little to profits. Accordingly, the full year 1965 is forecasted to produce net income some half-million lower than that for 1964.

Production objectives at the mine were not met in the period under review. Some mechanical difficulties were experienced in phasing in the new autogenous grinding plant and a shortfall of 67,800 pounds had accumulated to April 30th, but it is expected to pick up 30,000 pounds of this in May. The difficulties are being gradually overcome and the production shortfall should be made up before year-end.

Lower-than-budgetted production developed unfavourable unit costs. The \$5.21 operating cost per pound is 57 cents higher than forecast, and the total cost of \$5.64 is 60 cents higher. However, costs are expected to be on target by year-end.

Underground activities, except where adversely affected by the milling difficulties, were about as anticipated, with stoping and development work up to schedule. Shaft sinking by contractor's crew was under way at the end of April.

Some difficulty is still being experienced in hiring experienced miners and tradesmen.

Production of orange oxide for the U.S.A.E.C. was 70,000 pounds ahead of schedule for the first four months of 1964. Costs were on target and a modest profit was recorded on this refining service. The contract for 60,250,000 pounds now has an undelivered balance of only 2,240,000 pounds and is scheduled for completion by the end of 1966.

The volume of enriched uranium oxides and alloys produced and sold, while still not large, is assuming increased importance and on sales of some \$48,000 a profit of \$16,000 was earned.

Orders have been received for a number of radiography cameras cast from depleted uranium. These cameras are used for pipe-line inspection and the potential market appears promising.

The Division was primarily concerned during the period with cobalt-nickel extraction processes and development studies on zirconium, including pilot plant tests on these metals. Refinery staff and plant equipment were involved to a considerable degree on these projects, along with the Ottawa facilities.

Rio Algom's Nordic mine was the only property delivering concentrates under the original high-price contracts. Denison continued production under the later British contract, as did Stanrock on a very limited scale employing bacterial leaching.

As noted earlier in the report, Eldorado's income from financing of the British contract was considerably lower than for the corresponding period a year ago as a result of the reduced volume of deliveries.

The financial statements include a report on capital expenditures which shows that of the total of \$523,131 authorized by the Board of Directors, only \$72,411 has been spent in the period under review. However, programmes will be accelerated, particularly at the mine, as more favourable weather prevails and deliveries of equipment are received by water freight. Consideration of the Board will be asked later in the meeting regarding additional approvals in the amount of \$62,773.

Cash and short term investments at \$9,068,000 are down by \$6,294,000 from the year-end. The reduction arises from a temporary advance of \$2,000,000 to N.T.C.L. in connection with the purchase of Yellowknife Transportation, and the company's increased involvement in financing the British contract. During April, a peak financing position of \$28,200,000 was reached and gradual recovery has now begun, but full repayment will not be achieved until 1973. It is expected that the advance to Northern will be substantially liquidated by year-end, and meantime an interest charge is being applied at the rate Eldorado earns on deposits with the Receiver General, currently about 3 1/4%.

Product inventories of \$12,282,000 show a decline of \$2,341,000 since the year began and are comprised of \$3,029,000 in concentrates from other producers, \$4,703,000 of our own production for contract delivery and \$4,550,000 of non-contract precipitate, uranium metal, ceramic fuel and related products. Inventories of general stores have been reduced by \$523,000 largely because of consumption at the mine which is not replaced until the opening of the water navigation season.

Working capital now stands at \$17,824,000 and has changed little since the year-end."

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CAPITAL EXPENDITURES

A statement was presented showing capital expenditures made so far against authorizations. No serious over-expenditures have occurred. A list of additional capital projects, totalling \$62,773 was presented, as follows:-

Beaverlodge

Ace exhaust fan project: re-estimated cost \$29,000; previously authorized \$19,000; increase	\$10,000	
Air conditioning I.B.M. & Engineering sections: re-estimate \$4,300; authorized \$2,700; increase	\$ 1,600	
4-Locomotive batteries for underground	11,002	
Chlorinator for townsite water supply	3,150	
Cylinder car dumper for waste pass	2,226	
Solvent extraction pilot plant	9,450	
Ion exchange pilot plant	<u>1,540</u>	\$38,968

Refinery

Storage facility for enriched uranium	15,000	
Melting coil for Bendix furnace	1,400	16,400

Research and Development

Electric calculator for data evaluation	1,350	
Instrument for temperature and weight loss recording	1,100	
Transducerized tank for ultrasonic cleaning	1,050	
Electroanalyzer for cobalt and nickel solutions	850	
top-loading balance for analytical lab.	650	
Enlarger for zirconium metallography	600	
Paint dryer " "	550	
Printer " "	230	
Negative dryer " "	200	
Heating mantles for special purity compounds	475	
Diaphragm metering pump for special purity compounds	<u>350</u>	7,405
		<u>\$62,773</u>

In speaking to the proposed expenditure of \$9,450 for a Solvent extraction pilot plant at Beaverlodge, Dr. Thunaes explained that the objective is to eliminate the filtration step in treatment of acid leach pulp, thereby increasing uranium recoveries. If successful, the process will recover additional uranium worth four to five times the additional annual expenditure.

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Dr. Thunaes also noted in passing, that both the Oxygen Plant and Calcining Plant are now functioning well and paying off.

Referring to the proposed expenditure of \$15,000 for a storage facility for enriched uranium, Mr. Burger explained that this is necessary to conform with criticality and safety regulations prescribed by the Atomic Energy Control Board.

Following these explanations, upon motion of Messrs. James and Hadley, these expenditures totalling \$62,773 were approved, bringing the 1965 total authorization to \$585,904.

COLLECTIVE BARGAINING

The Chairman presented a summary of the terms for collective bargaining agreements with the Refinery union, and with the R&D union. At the Refinery, a 2-year agreement was concluded, embodying certain selective rate adjustments, a 4-week vacation after 20 years, improvements in group insurance benefits, and a general wage increase of 7¢ per hour on June 1/65 and 9¢ per hour on June 1/66. The average cost per man hour of these improvements will be 6.1% or 18 1/2¢ per hour over the 2-year period, for a total increase in cost over the 2-years of \$78,350.

The R&D agreement will run three years.

It provides for a general increase, and overtime and vacation adjustments to conform with the Canada Labour (Standards) Code. The 3-year average cost will be 8.4%, or 24.1¢ per man hour, for a total increase in cost over three years of \$39,500.

Upon motion of Messrs. James and Hadley, these agreements were confirmed.

Mr. Gilchrist further referred to current negotiations with the Mine Mill and Smelter Workers representing Beaverlodge employees. All efforts to reach agreement, including the services of a conciliation officer, have so far failed. It is believed that failure to come to terms stems chiefly from the Union's determination to stall for time and do nothing which could reflect unfavourably upon the Union until its recent application for Sudbury workers has been decided. At this date, the Company's offer comprises:

...../6

- (1) Improvements in group insurance - welfare
- (2) Provision for severance pay at one week per year up to \$500, in event of mine shutdown
- (3) Selective rate adjustments averaging 1.8¢
- (4) General wage increases of 6¢, 5¢, 5¢, for each of three years.

Excluding the improbable expense of severance pay, this package would cost about 18.9¢ per hour, or 4.93% of the existing average hourly earnings of \$3.83. In view of recent liberal settlements in the mining industry, it is unlikely that a new agreement can be reached on the basis outlined. It is hoped, however, that proceedings before a Board of Conciliation will enable the company to take due credit for the high standard of wages and fringes which the union so far have tried to downgrade. In the light of this year's experience, it is evident that control of the union local has fallen into the hands of less responsible persons than heretofore.

LEASE OF CLAIMS TO ECHO BAY MINES LTD.

The Chairman referred to the proposed lease of certain Port Radium mining claims to the above-noted company, as discussed at the Board's previous meeting. Dr. Buffam had now considered this matter and stated that he concurred in the proposal. Accordingly, upon motion of Messrs. James and Thompson, the proposed leasing was approved.

ACQUISITION OF NEW COMPANIES BY NORTHERN TRANSPORTATION COMPANY LIMITED

The Chairman reviewed the negotiations which culminated in the purchase by NTCL, of Yellowknife Transportation Company; Arctic Shipping Ltd., and Decury Supply Ltd.

He recalled that the firm of MacDonald Currie & Co., reported that on the basis of potential earnings, the Yellowknife companies would be worth between \$1,448,000 and \$1,665,000 to a purchaser other than Northern, but would be worth between \$3,064,000 and \$3,192,000 to Northern because of the elimination of competition and savings attributable to integration. These latter figures were predicated upon 12 1/2 years earnings. Mr. Gilchrist had considered this period too long, and he had arrived at a figure of \$2.7 million, as representative of between ten and eleven years earnings. This figure was subsequently approved by the Minister and accepted by a group of signatory shareholders of the

Yellowknife companies. The transaction was closed on April 29th with a hold-back of \$500,000 against the disclosure of unstated liabilities. This hold-back is payable in three instalments, the last due well after the close of the current navigation season. Mr. Gilchrist reported that the integration of the two companies appears to be going smoothly.

Mr. Gilchrist stated also that the new Arctic supply vessel, the "FRANK BRODERICK" was formally named at a ceremony on May 21st 1965, and is now ready for its maiden voyage about June 10th, to Tuktoyaktuk. The construction had gone well, and the final cost would be very close to the estimate.

PENSION PLAN

The Chairman referred to two features of the pension plan which were a source of irritation to certain employees. The plan, as now constituted, does not provide for payment of interest on the withdrawal of contributions by regular members, whereas interest is paid on withdrawal by temporary members. Certain representatives of employee unions, and individual employees have repeatedly lodged objections to this arrangement, on the grounds that the employee, if he was a member of the superseded plan, was forced to join the present plan, and that any plan of enforced savings should provide for payment of interest. It is considered that this contention has merit. At the same time, if interest is to be paid on regular members' withdrawals, the need for a temporary membership disappears.

Moreover, the plan provides that hourly-rated mine employees must wait two months before entering the plan, and it would be administratively desirable that this provision be eliminated.

Following this explanation, and upon motion of Messrs. Hadley and Sydie, the following resolution was duly passed:

" WHEREAS the Trust Deed between the Company and the Trustees provides that the Trustees may from time to time by instrument in writing vary or amend any provision of the Trust Deed or any provision of the Regulations of the Plan, and

WHEREAS the Plan provides that no interest is payable on withdrawal of contributions by Regular Members, and

WHEREAS representatives of Employee Unions, and individual employees, have repeatedly lodged objections to this provision, on the grounds that the employee was forced to join the Plan and therefore should be entitled to interest on his contributions, and

WHEREAS this contention is considered to have merit, and

WHEREAS the class of Temporary Membership was created to permit payment of accrued interest on refunds due to withdrawing members joining the Company's service with no intention of remaining permanently, and

WHEREAS hourly-rated mine employees must now wait two months before entering the Plan, and

WHEREAS administration of the Plan would be greatly facilitated if there were only one type of membership and conditions of entry;

NOW THEREFORE, be it resolved that, effective with the date on which the necessary Order-in-Council is passed to authorize these amendments:

- (1) the class of Temporary Membership be abolished and
- (2) accrued interest be allowed on withdrawn contributions of all members, and
- (3) the requirement be removed for newly-engaged hourly-rated mine employees to wait two months before entering the Plan. "

DATE OF NEXT MEETING

It was agreed that the next meeting of the Board would be held at the Beaverlodge mine on the morning of September 10th 1965. An Eldorado aircraft, on Sept 9th, will await the arrival in late afternoon of Board members at Edmonton International Airport, and proceed immediately to the mine. Departure from the mine would be scheduled for September 11th.

ADJOURNMENT

There being no further business, the meeting was adjourned.

Minutes signed by

*W.M. Gilchrist
Chairman*

*R.C. Powell
Secretary*

APPOINTMENT OF AUDITORS

Upon motion of Messrs. Sydie and Hadley, it was resolved that the Auditor General of Canada be appointed auditor of the company in accordance with previous practice, for the year 1965.

ADJOURNMENT

There being no further business, upon motion of Messrs. W.F. James and W.G. Thompson, the meeting was adjourned.

W.M.G.
Chairman

R.C.P.
Secretary

Agreed

DECLARATION AS TO MAILING NOTICE
PROVINCE OF ONTARIO

TO WIT:

IN THE MATTER of the Annual Meeting of Shareholders of Eldorado Mining and Refining Limited I, Robert C. Powell, of the Town of Port Hope in the Province of Ontario, the Secretary, do solemnly declare as follows:

1. I am the Secretary of Eldorado Mining and Refining Limited and as such have knowledge of the matters hereinafter declared.
2. A copy of the attached notice of the Annual Meeting of Shareholders of Eldorado Mining and Refining Limited was mailed to each of the persons who on the 13th day of May, 1965, were the registered holders of shares in the capital stock of Eldorado Mining and Refining Limited in a prepaid letter addressed to the last address of each such shareholder as has appeared on the books of the Company.
3. The envelopes so addressed and containing such material were deposited in Her Majesty's Post Office at Port Hope on the 13th day of May, 1965.
4. A copy of the Financial Statements and Annual Report was mailed to each of the persons who on the 7th day of April, 1965 were registered holders of shares in the capital stock of Eldorado Mining and Refining Limited in a prepaid letter addressed to the last address of each such shareholder as has appeared on the books of the Company.
5. The envelopes so addressed and containing such material were deposited in Her Majesty's Post Office at Port Hope on the 7th day of April, 1965.

AND I MAKE THIS SOLEMN DECLARATION conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

DECLARED before me in the Town
of Port Hope in the County of Durham
this 25th day of May, 1965.

L. C. Keeg

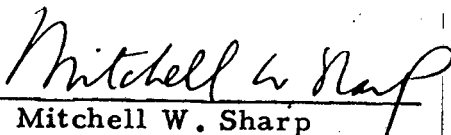
Commissioner for taking oaths in
and for the Province of Ontario.
My Commission expires 19th March
1967.

Robert C. Powell

P R O X Y

I, Mitchell W. Sharp of Ottawa, Ontario, Minister of Trade and Commerce and a shareholder of Eldorado Mining and Refining Limited, hereby appoint William McKenzie Gilchrist as my proxy to vote for me and on my behalf at the Annual General Meeting of the Shareholders of the Company, to be held in Toronto, Ontario on the 27th day of May 1965 at the Royal York Hotel.

DATED this 27th day of May 1965 at Ottawa, Ontario.



Mitchell W. Sharp
Minister of Trade and Commerce

Board Meeting
May 27th 1965

SUMMARY OF MINUTES

MAY 27TH 1965

1. Appointed officers and Exec. Committee
2. Reviewed operations to April 30th 1965
3. Approved Capital Expenditures \$62,773
4. Reviewed two recent Union-Management settlements
5. Approved a lease of seven claims to Echo Bay Mines Ltd.
6. Heard report on acquisition of Yellowknife Transportation Company and affiliates
7. Passed resolution authorizing changes in Eldorado Pension Plan:
 - (a) abolition of temporary membership
 - (b) allowance of interest on withdrawals of all members
 - (c) removal of waiting period for entry of hourly-rated mine employees
8. Set date of next meeting as September 10th 1965 at Beaverlodge.

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS OF
ELDORADO MINING AND REFINING LIMITED
HELD IN TORONTO, ONTARIO, MAY 27TH 1965
COMMENCING AT 10.00 A.M.

Present: Messrs. W.M. Gilchrist
F.R. Hadley
W.F. James
John E. Sydie
W.G. Thompson

In attendance: Messrs. R.C. Powell
J.C. Orr
D.G. Scott
A. Thunaes
H.E. Lake
J.C. Burger
B.S.W. Buffam

PRELIMINARY MATTERS

The meeting, having been called with due notice and a quorum being present, was declared to be regularly constituted.

MINUTES OF BOARD MEETING OF FEB 25TH 1965

Upon motion of Messrs. James and Thompson, the minutes of the Board's meeting of February 25th 1965 were approved in the form previously circulated to Board members.

VENUE OF ANNUAL GENERAL MEETING OF SHAREHOLDERS

The Chairman recalled that the Board had directed that the Annual General Meeting of Shareholders be called for this day, but in Ottawa. By motion of Messrs. Hadley and Sydie, the change of location to Toronto was duly approved.

ANNUAL REPORT 1964

Upon motion of Messrs. Sydie and James, the Annual Report of the directors to shareholders was approved for presentation to the forthcoming Annual General Meeting of Shareholders.

ADJOURNMENT

There being no further business, the meeting was adjourned.

W.M.G.
Chairman

R.C.P.
Secretary

ANNUAL GENERAL MEETING OF SHAREHOLDERS
OF ELDORADO MINING AND REFINING LIMITED, HELD IN
TORONTO, ONTARIO, ON MAY 27TH 1965,
COMMENCING AT 10.15 A.M.

Present: Messrs. W.M. Gilchrist
F.R. Hadley
W.F. James
J.E. Sydie
W.G. Thompson

In attendance: Messrs. D.G. Scott
J.C. Burger
H.E. Lake
R.C. Powell
J.C. Orr
A. Thunaes
B.S.W. Buffam

PRELIMINARY MATTERS

The President occupied the chair and Mr. Powell acted as secretary of the meeting. The secretary read a list of five shareholders present representing five shares, and produced a proxy authorizing W.M. Gilchrist to vote 70,493 shares held by the Minister of Trade and Commerce in trust for Her Majesty the Queen in right of Canada - making a total representation of all issued shares save two. The Chairman accordingly declared the meeting to be regularly called and properly constituted for the transaction of business, and directed that a copy of the notice calling the meeting be filed together with the declaration proving mailing of notice.

REVIEW OF MINUTES

Upon motion of Messrs. James and Hadley, the reading of the minutes of the Shareholders Meeting of June 3rd 1964 was dispensed with, and the minutes were taken as read and confirmed.

ANNUAL REPORT

The Secretary of the meeting read the Auditor's Report for 1964, and upon motion of Messrs. Thompson and Hadley, the reading of the Annual Report for 1964 was dispensed with. Upon motion of Messrs. Hadley and Sydie, it was resolved that the Balance Sheet of the company as at December 31st 1964, the Statement of Income and Expenses and the Statement of Surplus for the year ended December 31st 1964, as printed, be approved.

ELECTION OF DIRECTORS

In response to a call from the chair, seven persons were nominated for directorships, as follows:

Messrs. W.J. Bennett
W.M. Gilchrist
F.R. Hadley
W.F. James
Gordon Lawson
J.E. Sydie
W.G. Thompson

There being no further nominations for the seven Board seats, the Chairman declared nominations closed, and those nominated to be duly elected as directors, to hold office until the next Annual General Meeting of Shareholders, or until their successors are elected or appointed.

SUMMARY OF MINUTES

FEB 25TH 1965

1. Reviewed outstanding matters from Dec 1/64 meeting
2. Considered draft of 1964 Annual Report and suggested certain changes
3. Approved capital expenditures of \$112,500
4. Authorized signing of Balance Sheet Dec 31/64
5. Set date of Annual Meeting
6. Considered leasing seven claims to Echo Bay Mines Ltd.
7. Approved changes in Eldorado Pension Plan to provide for integration with C.P.P. and Old Age Security, subject to approval of Department of Finance.
8. Reviewed negotiations with Y.T.C.L.
9. Approval of salary adjustments effective Jan 1/65

MINUTES OF A MEETING OF THE BOARD OF DIRECTORS
OF ELDORADO MINING AND REFINING LIMITED,
HELD IN THE ROYAL YORK HOTEL, TORONTO, ONTARIO,
ON THURSDAY, FEBRUARY 25TH 1965,
COMMENCING AT 2.30 P.M.

Present: Messrs. W.J. Bennett
W.M. Gilchrist
Fred. R. Hadley
W.F. James
Gordon Lawson
John E. Sydie
W.G. Thompson

In attendance: Messrs. J.C. Burger
H.E. Lake
J.C. Orr
R.C. Powell
D.G. Scott
A. Thunaes

PRELIMINARY MATTERS

The President occupied the chair, and Mr. Powell acted as secretary of the meeting. Notice having been given in accordance with the by-laws, the meeting was declared to be regularly constituted, all members of the Board being present.

MINUTES OF PREVIOUS MEETING

Upon motion of Messrs. Sydie and Lawson, the Minutes of the Board's meeting of December 1st 1964 were approved. Certain matters arising out of these Minutes came up for discussion, as follows:

Reference was made to the decision to give financial support to a project at McGill for the development of mining engineers. It was reported that the appeal having had a good response, the programme is now assured, and the Board re-confirmed the grant of \$3,000 in each year 1965 and 1966.

The President reported on his discussion with the Minister about the Company's participation in Expo '67. The Minister had indicated that he did not, at that time, wish to either approve or disapprove of the proposal since the whole matter of participation by government agencies in Expo is under review, but that he would give the President a decision at a later date.

Referring to the directors' memorandum to the Minister about disposal of the Company, Mr. Gilchrist stated that he knew of no firm action having been taken, but it seemed quite possible that recent developments in the uranium supply and demand situation would have some impact upon the consideration of this matter by the government.

On the proposal to undertake a major capital expenditure for a cobalt recovery circuit, capable of 25 T.P.D., Mr. Gilchrist reported that the Minister of Finance has withheld approval of this expenditure until Eldorado's future is clarified. However, development work will continue with a view to reaching a daily throughput of about seven tons in the fourth quarter of the year. This will be possible with a minimum of additional equipment and some rearrangement of facilities which can be a charge to operations. The operation at this scale can be profitable, provided that the uranium circuits bear all overhead; in other words, the cobalt operation can show an incremental profit. Arrangements have been made for a supply of feed material until at least the end of 1965.

Mr. Gilchrist referred to the staking programme adjacent to the Beaverlodge property, which the Board had authorized at the previous meeting. He noted that the area staked was substantially larger than had first been planned - some 27,000 acres vs. an estimated 9,000 acres.

DRAFT OF ANNUAL REPORT - 1964

The Chairman referred to the draft of the 1964 Annual Report which had been sent to Board members in advance of the meeting, and he asked for comments.

Mr. Bennett said that while he was in complete agreement with the views expressed in the President's letter, he was concerned that publication of the following paragraphs would invite criticism:

"As recently as a year ago, our principal worry was how to stimulate enough demand to keep even a few of our uranium mines alive throughout what we thought of as 'the waiting period'. Today, in the light of the very considerable and quite insistent demands that are shaping up for the future, our thoughts may well focus on the need of wise management of this vital resource in the best interests of the nation and of how the world community may be served."..... and

"There are national and international aspects of the position which warrant careful consideration. The approach should be carefully weighed so that the best advantage may be taken, both by the nation and the industry, of the opportunities which will arise. We must avoid squandering our resources and placing in jeopardy the favourable international position we now enjoy."

Mr. Bennett felt that the last sentence in each of these paragraphs could be construed as imputing irresponsibility to a private company in respect of the uranium sale to France, now under consideration, or even that Eldorado is opposed to the sale. In his view, the Board should not, in a published report, appear in this light; but the Board has a duty to make its views on the matter known privately to the Minister.

After some discussion, the meeting found common ground in this position, and it was agreed that the draft letter should be modified to draw attention to the need for skilful exploitation of the country's uranium reserves, without appearing to imply criticism, or to take a negative position in respect to the proposed sale.

In the discussion, the Board recognized that apart entirely from the question of safeguards against use of uranium for weapons - which is a dominant factor in the proposed sale to France - there appears to be need for a government uranium policy, possibly as part of an overall policy of energy resource conservation and exploitation. Mr. Gilchrist reported that, in addition to the proposed contract with France for 50,000 tons, Switzerland, Germany and the UK have recently indicated a definite interest in Canadian uranium. Possible contracts arising out of these interests could easily commit half of Canada's known reserves of uranium. Moreover, on the basis of firm nuclear power projects, and assuming no further discoveries of uranium, there would be less than 5 years' free world reserves remaining by 1980 at prices up to \$10. Mr. Gilchrist noted that about half the mines discovered in the 1950's in Canada were unable to survive at a \$10 price. This points up the obvious desirability of adding to uranium reserves. However, it also raises the question of whether Eldorado should take the lead in exploration as it did in the '40s, or is it Eldorado's function to acquaint the mining industry with the situation and point to the potential rewards of successful exploration, on the assumption that the mining industry will show

an interest in exploring for any mineral if a satisfactory profit potential is indicated. The Board was not unanimous in its views on this point. Some members of the Board felt that the Company should forge ahead with exploration, others that it should be left to private industry with Eldorado acting in a promotional and informational capacity. On this latter point, Mr. Gilchrist observed that the Company's senior geologist has, for the past two years, been engaged exclusively in an intensive study of the geologically-favourable areas within Canada for uranium exploration.

Regarding conservation, this should first of all recognize Canada's own long-term needs; then, assuming that sales to other countries are made, should Canada's original customers - the U.S. and U.K. - be given preferential consideration?

Mr. Gilchrist advised the Board that these and other problems are now being considered by a committee at the Deputy Minister level. He is a member of that committee and has been asked to bring in a recommendation to the Committee on Thursday next.

Turning from the President's letter to the General Report, Mr. Lawson referred to the impression which seems to be given, in the Report, that Eldorado has made and is making a profit on the financing of the UK Third Contract. He suggested that any "profit" beyond that earned on Eldorado's own production, should be clearly identified as an earning in lieu of interest. It was agreed that the draft would be revised in an attempt to meet this objection.

Mr. Lawson also suggested that the General Report should recognize that recent events have served to demonstrate the wisdom of the Company's policy of making expenditures, in the face of declining demand, on mine development, research, and capital projects aimed at lower unit costs. However, not all other directors were convinced that this is an opportune time for such a statement, and the matter was left unresolved.

Mr. Sydie enquired whether, in the event of an upturn in export markets, some advantage would accrue to the refinery. Mr. Gilchrist pointed out that the countries which are potential customers generally have refining facilities, or if not, are anxious to acquire them. For this reason he was not optimistic of success in negotiating large contracts for products beyond the yellowcake stage, but it was agreed that every effort should be made to negotiate for refined products. It was noted, in passing, that some refining work on nuclear fuels would be available relative soon, for Ontario Hydro, but there will be competition since Rio Algom are now preparing to make UO_2 direct from mill solutions. In the meantime, the refinery will continue with the development of the zirconium process and get into the cobalt business to the extent possible.

SIGNATURES ON BALANCE SHEET

Upon motion duly made and seconded, it was resolved that Messrs. J.E. Sydie and F.R. Hadley sign the audited balance sheet as at December 31st 1964 on behalf of the Board.

ANNUAL MEETING

After discussion, the Secretary was instructed to call the Annual General Meeting of Shareholders for Thursday May 27th in Ottawa, to be preceded and followed by meetings of the Board.

CAPITAL EXPENDITURES

The Chairman presented, for consideration of the Board, a list of capital expenditures as follows:-

An over-run in 1964 on the autogenous mill installation amounting to	\$ 46,455.00
Additional for above in 1965	9,745.00
Re-authorization of 1964 lapsed balance for oxygen plant	7,085.00
Additional for oxygen plant	9,800.00
Re-authorization of 1964 lapsed balance re precipitate roaster	3,058.00
additional for precipitate roaster	7,670.00
Re-authorization of 1964 lapsed balance underground crusher	17,578.00
Re-authorization of part of 1964 lapsed balance re battery changing equipment	1,450.00
Filter feed level control system, Beaverlodge	1,600.00
Pickrose Air Motor for slusher operation, Beaverlodge	1,300.00
Blast hole charge for Amex, Beaverlodge	850.00
Air-powered underground water pump, Beaverlodge	780.00
Floor polisher and vacuum cleaner, Beaverlodge	750.00
Nitric acid distribution system, Refinery	1,925.00
Chuck and collets for fuel slug fabrication, Refinery	500.00
R&D. Equipment for measurement of dielectric constant	1,950.00
	<hr/>
	\$112,496.00
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In commenting upon the over-run for the autogenous grinding mill, Mr. Gilchrist noted that this represented about 5% of the estimated cost. He reported that the manufacturer had supplied certain faulty parts and that the operation of the mill had been delayed. However, all direct costs due to the manufacturer's fault will be recovered.

Upon motion of Messrs. Hadley and Thompson, the capital expenditures as above-listed were approved.

PROPOSED LEASE OF PORT RADIUM
MINING CLAIMS TO ECHO BAY MINES LIMITED

Mr. Lake referred to the mining by Echo Bay Mines Limited of certain claims leased from CM&S, and stated that Echo Bay has asked for permission to explore for and mine silver and other metals from seven Eldorado claims adjacent to their present workings. They have proposed a royalty of 3% of net smelter returns. It was the Board's view that Dr. Buffam, the Company's consulting geologist, should be asked to consider the proposal and make a recommendation to management. The Board agreed that, subject to Dr. Buffam's views,

management should work out a royalty arrangement for not more than a ten-year period.

PROPOSED AMENDMENTS TO
PENSION PLAN

The Chairman advised the Board that the Trustees of the Eldorado Pension Plan (1959) were of the opinion that steps should be taken, without delay, to integrate the Eldorado Plan with the Canada Pension Plan and the Old Age Pension in order to assure:

- (a) that the total contributions paid initially by the employee and the Company to the Canada Pension Plan and the Eldorado Plan would not exceed existing amounts.
- (b) that the reduction in benefits effected under the Eldorado Plan would, as far as practicable, permit employees to share in the generous subsidies provided by the Canada Pension Plan, and in no event bring the total level of benefits below that which would have prevailed under the Eldorado Plan before adjustment,
- (c) that no employee would become entitled to benefits in excess of 70% of average final earnings, as now provided in the Eldorado Plan, which could occur if the Canada Pension Plan were super-imposed upon the Eldorado Plan.

Mr. Gilchrist pointed out that if the Canada Pension Plan were super-imposed upon the Eldorado Plan, it would initially cost the Company an additional \$60,000 per year, increasing in later years, but this can be avoided by integration, and the cost maintained at essentially the same level. By further integrating with the Old Age Pension, a saving to the Company of \$45,000 per year on the basis of present enrolment can be achieved, and each employee's overall contribution will be reduced by \$57.00 per year.

At the same time, the Trustees have proposed three improvements in the Eldorado Plan:

- (1) a disability pension, without actuarial reduction.
- (2) a floor under widows' pensions, and -
- (3) a reduction in the impact of the present regulations on benefits of members retiring early.

The disability pension, at present available only at actuarial discount, would be provided after a minimum of three years' employment, at a level based on not less than fifteen years' service, thereby ensuring annual benefits at a minimum of 30% of average final earnings. Similarly, widows' pensions would be made subject to a fifteen-year service minimum, thereby resulting in annual benefits amounting to not less than 15% of average final earnings. Additionally, it is proposed that early retirement benefits be made subject to reduction at a flat rate of .4% for each month not exceeding sixty months of early retirement, in place of the existing regulations based upon variable actuarial adjustments.

The proposed method of integration would be by "the ineligible earnings formula" developed by the Eldorado Plan's actuaries.

The disability and minimum widows' pension improvements are estimated to cost an additional \$34,000 in terms of present enrolment, but this would be more than offset by the annual savings of \$45,000 arising out of integration with the Old Age Pension. Additional costs due to relaxing of early retirement regulations would be of little significance.

Commenting on the proposal, Mr. Lawson expressed the opinion that with the great variety of ideas extant in the pension field at the moment, particularly as to means of integration, it might be unwise to implement the proposal at this time. Mr. Gilchrist noted that, since the proposal envisaged significant changes in the Plan, it would require approval by the Department of Finance, and, after discussion, it was the consensus of the meeting that the proposal should not be presented to that Department unless it carried the approval of the Board. Accordingly, upon motion of Messrs. James and Thompson, the proposed integration and improvements were approved subject to ratification by the Department of Finance. This approval took the form of a resolution attached to these Minutes as an appendix.

NEGOTIATIONS BY NORTHERN TRANSPORTATION COMPANY LIMITED
FOR PURCHASE OF YELLOWKNIFE TRANSPORTATION COMPANY
LIMITED AND ASSOCIATED COMPANIES

Mr. Gilchrist recalled that a meeting on June 3rd 1964, the Board, in company with the directors of Northern Transportation Company Limited, had agreed to entertain a proposal for the purchase by Northern Transportation Company Limited of the Yellowknife Transportation Company and its associated enterprises, provided that all necessary and pertinent information were made available for an assessment of their value. Subsequently, as reported to the Board at its meeting of August 21st 1964, the Minister had authorized NTCL to so proceed. Accordingly, the Minister had invited the Chief Justice of the Supreme Court of British Columbia to appoint an independent appraiser of the physical assets of the Yellowknife companies, and to appoint a firm of financial consultants to appraise the worth of the companies and to make a recommendation to NTCL.

The firm of MacDonald Currie had now reported that, in their opinion, on the basis of potential earnings, the Yellowknife companies would be worth between \$1,448,000 and \$1,665,000 to a purchaser other than Northern, but would be worth between \$3,064,000 and \$3,192,000 to Northern, because of the elimination of competition and savings attributable to integration. The latter figures are predicated upon 12 1/2 years' earnings. Mr. Gilchrist considers this high, and in a meeting with Yellowknife officials recently, he stated that he would recommend to the government a purchase price of \$2.7 million, a figure representative of between 10 and 11 years' earnings. Yellowknife officials have not yet indicated their willingness to accept this figure, nor has Mr. Gilchrist received instructions from the government to increase it.

SALARY ADJUSTMENTS

Upon motion duly made and seconded, the following recommendations by the President for salary increases were approved, effective Jan 1/1965:

Manager - Research and Development Division	\$1,000 per annum
Treasurer	\$1,000 " "
Secretary	\$1,000 " "
Manager - Beaverlodge Operation	\$1,500 " "
Manager - Refinery	\$2,000 " "
Vice-President - Mining and Exploration	\$2,000 " "
Vice-President - Refining	\$2,000 " "
Vice-President - Administration and Finance	\$2,000 " "
General Superintendent - Beaverlodge	\$2,100 " "

ADJOURNMENT

There being no further business, the meeting was adjourned.

L. M. Fitch
Chairman

R. C. Powell
Secretary

Appendix to Minutes of Board Meeting, February 25, 1965

**RESOLUTION OF THE BOARD OF DIRECTORS OF
ELDORADO MINING AND REFINING LIMITED
WITH RESPECT TO THE ELDORADO PENSION PLAN (1959)**

WHEREAS the Trust Deed between the Company and the Trustees provides that the Company and the Trustees may from time to time by instrument in writing vary or amend any of the provisions of the Trust Deed or any provisions of the Regulations pertaining to the Eldorado Pension Plan (1959) ("the Eldorado Plan"), and

WHEREAS in view of the forthcoming inception of the Canada Pension Plan and the government's decision to pay Old Age Security at age 65 instead of 70, it appears desirable to integrate the Eldorado Plan with these two government pensions to the extent allowable, and

WHEREAS it is incumbent upon the Company to comply with any pertinent legislation which may hereafter be enacted requiring standards different from those set forth in the Eldorado Plan, including legislation with respect to portability, and

WHEREAS the Trustees have recommended that the Eldorado Plan should include a minimum disability pension and a minimum widow's pension, and

WHEREAS the Trustees have recommended the adoption of a flat reduction per month in the pensions of members retiring early, in lieu of the existing provision for variable actuarial reductions;

NOW THEREFORE, be it resolved:

- (1) That the Eldorado Plan be integrated with the Canada Pension Plan by means of an "ineligible earnings formula", which formula provides for exclusion from a member's earnings of 26.6% of earnings up to the earnings ceiling of the Canada Pension Plan as from time to time established.
- (2) That the Eldorado Plan be integrated with the Old Age Pension, by increasing ineligible earnings by \$957 as escalated from time to time to give effect to any increases in the amount of Old Age Pension.

...../2

- 2 -

- (3) That such changes be made to the Trust Deed and the regulations of the Eldorado Plan as may be necessary to comply with any pertinent legislation which may be enacted requiring standards different from those set forth in the Eldorado Plan.
- (4) That the present disability provision of the Eldorado Plan be deleted and that disability retirement pensions be made available after a minimum of three year's service, at a level equal to the full amounts of disabled members' accrued normal pensions based in any event on not less than 15 years' service, and without actuarial reduction.
- (5) That eligible widows' pensions be made subject to a 15-year minimum.
- (6) That benefits of members retiring up to 60 months early be made subject to a reduction at a flat rate of .4% for each such month in place of existing arrangements for variable actuarial adjustments.

E. M. + R

H. O

Minutes

Directors

December 1 1964

Present

W. J. Bennett

W. M. Gilchrist

F. R. Hadley

Dr. W. F. James

Gordon Lawson

J. G. Lydie

W. G. Thompson

In attendance

J. C. Burger

H. E. Lake

J. C. Orr

R. C. Powell

D. G. Scott

Dr. B. S. W. Buffam

Dr. A. Kunnas

Minutes of Meeting of August 21 1964 were approved.

Review by Mr. Scott of the operations for the first 10 months of the year. [Highlights were] profit somewhat lower than last year. Sales, net income from operations declined substantially however [there is] greater income from re procurement financing large deferred receivable from U.K. re financial involvement in 12,000 ton contract.

income before taxes \$4,777,000 compared to \$5,088,000 net \$2,387,000 against \$2,638,000 planned stretch out

responsible 1,717,600 lbs of B/U + Pt Radium U₃O₈ sold in 1963

but only 1,060,000 representing a 38% reduction profit earned on these sales \$3,545,000 and 2,263,100 respectively a 33% reduction.

At the refinery the sales volume of orange oxide was down 63% and profit dropped from \$909,200 to \$159,000.

or by 83%. In the 10 month period, the mine produced 1,584,896 lb of U₃O₈ at a cost of \$8.45 per lb. Operating cost of \$4.43 per lb is 10 cents below estimate but total cost of \$8.45 is 19 cents above estimate. Installation of the autogenous grinding mill proceeded on schedule during October and start up was indicated as December 8. Production of orange oxide for U.S.A.E.C. was slightly ahead of schedule and unit cost of 30 cents per lb was 5 cents better than forecast. Only Rio Algom and Eldorado have underdelivered balances under the original contracts. Eldorado's balance, along with our share of the British contract is scheduled to keep the Beaver Lodge mine in production until the end of 1966. Additional capital expenditure approved for \$12,555.

The minutes of the Executive Committee meeting of November 13 were approved.

The Chairman stated that in the light of the company's cash position a dividend payment of \$2,000,000 would appear reasonable. However he referred to the discussion which had taken place at the Executive Committee meeting about the company's participation in Expo '67. To do anything worthwhile in presenting Canada's story of the Nuclear Age, an expenditure of at least \$500,000 is indicated.

The Board took the view that, for an expenditure of this magnitude, there would have to be some advertising value. Following discussion it was carried unanimously that a dividend of \$1.5 m be paid on December 18, 1964 and further that the President present to the Minister [the question whether] a further \$500,000 should be paid as dividend or allocated to participation in Expo under conditions acceptable to the Board.

The practice of giving Christmas gratuities to staff be continued.

Consideration was given to raising salaries of all mining personnel as recruitment into the mining

industry generally was lagging. Several "middle management group" people had left and engineers generally were turning to fields other than mining.

Due to income tax assessment on the "benefit" conferred on the mine manager and his assistant at B/N retroactive salary increases of \$1500 & \$1200 respectively to Jan 1, 1964 have been made.

Approval of expenditure of \$3000 in each of years 1965 and 1966 & a share in 10 engineering scholarships at the firm, was made.

Mr Gilchrist observed that the Cabinet had not yet approved the company's proposal to resume its exploration activities, and the \$200,000 programme included in the year's budget could not go ahead without such approval.

A French concern Motra had staked 100 claims on ground contiguous to the Varna mine. For protection the company staked an additional 200 claims covering 900 acres.

Approval of memorandum to Minister & disposal of company (see attached)

As sent to the ~~Minister~~

THE FUTURE OF ELDORADO

CONFIDENTIAL

The pressures and circumstances that caused the Crown to purchase Eldorado Mining and Refining Limited and its subsidiary, Northern Transportation Company Limited, in 1944 are no longer active and Eldorado's Board of Directors are of the opinion that the value of this national asset cannot be enhanced, or even maintained, now or in the future under the existing ownership arrangement and are prepared to recommend the sale of the parent company to the public and the transfer of its wholly-owned subsidiary, Northern Transportation, to the Department of Transport.

The details of the method of sale would be determined by a working committee appointed by and reporting to the Cabinet or a committee thereof.

Discussion

1. Present Situation

The advent of the atomic weapon in World War II and its further development following the cessation of hostilities in 1945 created a situation of limited supply, which made government control of production and allocation of uranium mandatory. To effectively exercise this control, it was necessary for the Canadian government to take over Eldorado - then the only uranium producer in Canada - and give that organization the responsibility of acting as the government's agent in the buying of uranium from Canadian producers and the resale of it to the United Kingdom and the United States under an arrangement that provided for a fair division of the available supplies between the two nations. Also, in the early years, Eldorado attempted with considerable success to stimulate production within Canada by the use of special price contracts and by expanding its own production and refining activities.

By the late fifties it was apparent that enough ore had been found in the world to satisfy the requirements of the western defence effort and Eldorado ceased to write new production contracts but remained responsible for the administration of the contracts under which deliveries were being made, a responsibility that has decreased to a marked degree with the passage of time. By June 30th, 1965, Eldorado will have only two contracts still active - its own and the one held by Rio Algom Mines Limited. Eldorado's contract will terminate in early 1967. Rio Algom's contract will continue until 1971.

Eldorado's uranium mining and refining operations are somewhat unique in that Eldorado is the only organization in the world that mines uranium and refines it to the compounds required for power reactor fuel and other uses, entirely under one corporate structure. This fact is, and will continue to be, important to Canada in the development of its nuclear power industry.

The company's Beaverlodge mine has the highest grade uranium ore presently being mined in Canada and is capable of a considerably higher rate of production than its current output. The ore reserves are sufficient for nine to twelve years at the present level of activity and no difficulty has been experienced in maintaining this reserve figure. Also, the refinery personnel have now had twenty years of experience in the refining and production of uranium metal and its compounds - a concentration of knowledge and experience that is without parallel in this particular field and which has a

- 2 -

potential for growth in national importance as the world's demand for nuclear power increases. It is the only uranium refinery in Canada.

A research and development division is also maintained, with laboratories in Ottawa, which concerns itself with the extractive metallurgy of uranium, improvement in the methods of production of the various uranium compounds, and recently, with the application of the systems developed at the refinery to the production of other metals which are either not produced in Canada or appear only as by-products in other refinery operations.

The transportation wing of the complex, Northern Transportation Company Limited, which was purchased by Eldorado while it was still a publicly owned corporation, to provide a dependable service for the company's mining operations, and taken over along with Eldorado by the Crown, has in its role as a common carrier in the Mackenzie basin and along the Arctic coast now grown to the point where Eldorado freight is less than 20% of the annual tonnage handled. Northern returns a profit and performs reliably a vital function throughout a sparsely settled area in which the shipping season is relatively short, but it is doubtful if the return would be of interest to private capital without subsidies. No government subsidy is paid at the moment and over the years the company has reinvested a large part of its profits in expanding its service and improving equipment. A dividend has never been paid.

2. Future

From the moment that the defence requirement was satisfied, the direct and detailed control by the Crown of the production and sale of uranium and its compounds became unnecessary. The only real government concern with uranium was then the enforcing of the internal regulations regarding safety in the transportation and use of fissionable and radioactive material and making certain that there was no contravention of government policy when uranium or its compounds were exported. Both these problems fall within the jurisdiction of the Atomic Energy Control Board and outside Eldorado's field of responsibility. The area of the federal government's responsibility has, therefore, undergone a drastic reduction and it is questionable whether or not the agency service Eldorado provides will be needed again in the foreseeable future, and the active remnants of this responsibility could quite easily be transferred to another government department or agency.

The operating side of the company presents quite a different problem. Both the company's mine and refinery can, and will, play an important part in the developing uranium industry for reasons noted in the previous section of this paper, but, in so doing, competition with similar organizations will have an increasing impact on operations, and unless full use can be made of the company's resources and the training and ability of its staff and labour force, the value of the organization, both actual and to the economic welfare of Canada will suffer. It must also be recorded that the mine is the sole support of a community (Uranium City) with a population of approximately 2,000 in a very isolated area, and the refinery supports about 1,000 people in a town (Port Hope) of 8,000.

Whether or not the government should engage in a business in which it would be competing with companies owned by private citizens is a matter of political philosophy well beyond the scope of a paper dealing with a specific

- 3 -

problem, but if the well-being of Eldorado as a viable economic unit is important, a policy decision must be made. Eldorado cannot continue to operate successfully and expand and diversify as it should without at some point competing actively with other companies in the mining and refining industry, and if it is the government's policy not to own a business in a speculative industry or one that is in competition with others and at the same time considers the economic health of Eldorado of importance, a change in ownership of the mining and refining wing is mandatory.

The problem of the transportation unit is quite different to that of the mining and refining complex. The development of the very large area which it serves requires a dependable water transportation service, and, as stated previously, the return on the required investment is not likely to be attractive to private capital for many years unless a government subsidy were provided in certain sections of the system. It would, therefore, appear to be in the public interest to retain ownership of the transportation service. No funds other than the initial investment have been required for Northern Transportation since it became the property of the Crown in 1944, and, as noted, the replacement and improvement of equipment has been paid out of profits, as has the expansion of the service.

The retention of Northern Transportation by the federal government would, however, mean that Northern would lose the various services provided by the parent company at cost. However, these aids, such as the use of the parent company's planes, can be obtained from other sources but the cost would be somewhat greater.

3. Political Considerations

If the Crown continues to retain ownership of the mining and refining side of Eldorado and allows the company to compete without restriction, it will be subjected to continuous pressure from the people who will feel the impact of that competition and those who believe that government should not be involved in a speculative and competitive business. The government will also be subjected to criticism if it retains ownership and restricts the company's operations as such action would have an adverse effect on a valuable Crown asset and the communities dependent on the company's operation for all or a major portion of their support.

On the other hand, if the company or part of it were sold, undoubtedly there would be very vocal and active criticism of the action but it would be relatively short-lived, provided a reasonable price was received and the method of sale was fair from the public point of view.

If this is a fair analysis of the political facet of the problem, it would appear that the sale of the mine and the refinery would be in the best interests of all. Method of sale would, however, have to be carefully planned and executed.

The transportation wing, however, will continue to be politically sensitive whether privately or Crown owned. Any failure of delivery or drop in efficiency could be disastrous to the settlements the company serves, and federal agencies would be called upon to intervene even if the company were privately owned. Therefore, complete control by the government of this Mackenzie freighting service would seem to be the soundest approach from the viewpoint of both the government and the welfare of the people living in the Mackenzie basin and along the western Canadian Arctic coast.

- 4 -

Summary

1. If the federal government is not prepared to allow Eldorado to operate as a normal mining company and still retain ownership, then it would be in the best interest of the government, the communities directly dependent on these operations, and the company, to sell the mining and refining portion of the corporation in order that these operations may compete in their particular field of endeavour without restraint.

2. The transportation element performs a vital service for a very large part of the Canadian north, and although it is self-supporting, the return on the investment is not too attractive and government subsidies would likely be demanded for various parts of the service if ownership passed to private hands. Also, any failure of delivery could be extremely serious for the settlements to which delivery is made, and in the event of such failure, the federal government would have to intervene. It would therefore be prudent for the government to retain ownership of the transportation unit.

Sale of the Company

In order that the sale of the company be generally acceptable, the transaction would have to recognize the following points:

- (1) Ownership of the shares of the company must, if possible, remain in Canada.
- (2) The company could not be sold to one individual or organization.
- (3) Ownership would have to be widespread, which would mean a wide distribution of the shares within Canada in lots and at a price per share that would be within the means of the small investor.
- (4) The company would have to emerge financially sound and under capable management.
- (5) The Crown would have to receive a reasonable price for the company.

General Comment on the Above Points

It would be relatively easy to make certain that the buyers were Canadian nationals in the initial transaction, but after that it might be difficult to have ownership remain in Canada.

The easiest way to dispose of the company would be to ask for tenders and to sell to the highest bidder, but the government would likely be severely criticized for such action. It is believed that the method most acceptable would be to increase the capitalization of the company by several million shares and distribute them across the country on a per capita basis in lots and at a price per share within the reach of the small investor. The price must also be such as to return the government a reasonable amount for the sale of its Crown asset.

Determination of an acceptable price for the shares will be some -

- 5 -

what difficult as it is evident that ideas as to a reasonable figure could vary widely. The final determination would have to be a judgment based on an actuarial assessment of present value and expected performance.

The Development of a Workable Plan of Sale

There are a number of problems attendant upon the proposed sale that would require expert knowledge and advice and the Eldorado Board could not reasonably be expected to provide adequate answers to them all. Therefore, if it is the decision of the Crown to sell the corporation, it is suggested that the government set up a committee, chaired by a prominent public figure preferably a senior judge or chief justice, and made up as follows:

Two government officials of Deputy Minister rank.
Four senior people from the financial and industrial worlds.

The committee would recommend to the Cabinet, or a committee thereof, within three months of the date of its formation, what it believed to be:

- (a) The best corporate structure for the emerging company.
- (b) The amount of working capital required for sound operation, in view of the problems that the company will face in the years immediately ahead.
- (c) The best method of distribution of shares to ensure wide-spread and, if possible, Canadian ownership.
- (d) The price at which the shares could be sold to the public and also return the government a reasonable amount for the sale of the company.
- (e) The composition of a Board that would assure sound management during the two-year period subsequent to the date of sale.

The committee would have the power to call on the members of the Eldorado Board and staff for whatever advice and information they could provide, and also to hire such experts and initiate such studies as were deemed necessary to arrive at sound conclusions. The expenses of the committee would be paid by Eldorado.

Ottawa
December 16/64

Executive Committee Nov 13 1964

Present

W. M. Gilchrist

W. F. James

Gerard Lawson

In attendance

D. G. Scott

H. E. Lake

R. C. Power

J. C. Br

R. M. Berry

A. Thurmes

A. R. Allen

U. E. Tanner

D. S. U. Duffan

A thorough discussion was held on 1965 forecasts and the comparison of them with 1964.

Approval of \$1,457,000 capital expenditures in 1965 of which \$65,050 were carried over from 1964. The major item was \$1,000,000 modification to the solvent extraction plant to permit the production of cobalt-nickel from concentrates available in the Cobalt area of Northern Ontario. In order to confirm the technical and economic feasibility of this project, it is planned to close down the solvent extraction circuit re arrange oxide and to carry out three runs of approx 4 weeks each between February and July. If these runs prove technically + economically feasible then the construction of a 25 Tons per day circuit at a cost of \$1,000,000 will be construction.

E.M.R.

Board Meeting August 21 1964

Present

W. J. Bennett

W. M. Gilchrist

Fred R. Hadley

W. F. James

Gordon Lawson

John E. Lydie

W. C. Thompson

In attendance

D. G. Scott

R. C. Powell

J. C. Orr

Dr. B. S. W. Buffam

The minutes of the June 3 meetings were reviewed. Mr. Gilchrist stated that since that meeting it had become evident that raw material for the cobalt recovery plant would be available from the Cobalt area at acceptable prices. Moreover, cobalt speiss from foreign operation is readily available.

He reported that the Labrador had authorized N.T.C.L. to open negotiations with Yellowknife Transportation Co. and Arctic Shipping on the offer of these companies to sell [their businesses].

It was reported that the bids on the proposed Arctic Vessel were \$200,000 higher than estimate. Since construction of the vessel is essential for delivery, a contract must soon be placed, but it will be necessary to first obtain assurance that the approval required under the F.A.A.

A discussion followed on the abbreviated financial statements to July 31 /64.

Capital expenditures in the sum of \$8,400 were approved.

Dr. Buffam reported that the geo chemical

prospecting programme is proceeding satisfactorily

The future of the company. — See photostats for full details

Fwd. \$ 7,350

Research and Development

Spectrophotometer, Bausch and Lomb, for analytical research	\$ 6,900
Leco inert gas oxygen analyzer, for accurate determination with zirconium and other metals	<u>5,100</u>
	\$12,000

Less amount provided by cancellations:

Research equipment, unallocated balance	\$7,800	
Centrifuge for high purity compounds	<u>3,150</u>	<u>\$10,950</u>

Net additional requirement

\$ 1,050

\$ 8,400

GEOLOGY

The Chairman asked the consulting geologist to report on his recent visit to the mine. Dr. Buffam stated that the geo-chemical prospecting programme is proceeding satisfactorily, and that the results to date indicate that the geo-chemical approach could be useful in mineral exploration. Using the helicopter, 20-30 lakes per day can be sampled.

Dr. Buffam, on the basis of recent intersections obtained in tenth level development, reiterated his earlier opinion that the tons of ore per vertical foot would be maintained, if not slightly improved, as the mine goes to depth.

NEXT MEETING

The Board agreed that the scheduled October 6th meeting should not be held, and that the next regularly scheduled meeting of the Board should be called for December 1st in Toronto. This meeting would consider the 1965 budgets.

THE FUTURE OF THE COMPANY

At this point, approximately 9.45 a.m., the Directors and the Secretary repaired to the office of the Minister of Trade and Commerce, the Hon. Mitchell Sharp. Mr. Gilchrist advised the Minister that the Board had met informally on the previous evening, and he handed the Minister a memorandum of recommendations arising out of that meeting. This memorandum read as follows:-

1. The Company should be allowed to operate as a mining and refining organization, which entails conducting a programme of mineral exploration and the development of markets for the Company's products in competition with others, otherwise the value of this Government-owned asset will deteriorate.

2. The Government is urged to decide whether or not the policy stated in 1. above can be carried out under government ownership. If the decision is that this cannot be done under government ownership, the Board is prepared to make suggestions as to how the mining and refining activities can be disposed of.
3. Northern Transportation should be the sole operator in the Mackenzie water-shed and on the central Arctic coast and remain a Crown company.
4. If Eldorado remains a Crown company, then Northern Transportation could remain a subsidiary of Eldorado. However, if Eldorado is disposed of or the government believes the two companies should, in the public interest, be separated, then Northern should be transferred to the Department of Transport.

In opening discussion, the Minister expressed his agreement that a means must be found to permit the Company to function as would a normal mining company, i.e., to engage in competition with other mining companies, and to carry out exploration. To deny the company the right to do this, would be to effectively deny it an existence beyond 1966 when present firm contracts expire, because its continued operation for a few years would depend largely upon non-uranium activities. At the same time, the Minister recognised the value to the nation of keeping together the Company's personnel, with their unique experience, so as to maintain the Company as a completely integrated supplier of nuclear fuels; and he was conscious of the impact on personnel and the communities of any breakup of the organization. However, he pointed out to the Board that if freedom is granted for exploration, under the present status as a Crown company, the directors would be a select group of persons privy to advance information, who could use such information for personal profit. While he was confident this would not happen, even the presence of an opportunity for it to happen, creates a political problem of some importance to the government.

Dealing with the matter of the risk of public moneys which exploration would entail, it was recognized that some criticism could develop on this score, particularly if substantial moneys were spent without it paying off. In particular, the Department of Finance might look askance at such a move. However, the Minister felt that such criticism could fairly be met. A good case can be made for a government risking money to develop mineral resources. It was his view that the question of financial risk would be of less concern to the government than

- 6 -

the political repercussions of the Company going into exploration, a field traditionally left to the private mining industry.

Considering then the alternative of selling the company - which the Minister personally prefers - he asked the Board's views as to how this might be done. Mr. Gilchrist mentioned three possibilities - (1) the Alberta Trunk Line share distribution formula, to which reference has been made in earlier minutes; (2) call for tenders (3) turn the shares of the Company over to the Canada Council or a University Fund Trust. It was agreed that (2) was not only politically unwise, but presents problems of limiting foreign ownership; and that (3) was not attractive.

The main concern in devising a formula for selling would be to make sure that a strong Board would be available, to take a long view and to give direction to the Company's policies. If the Alberta Trunk Line formula were used, the voting stock would be in the hands of a number of strong mining, industrial and financial organizations, and the great majority of the stock would be non-voting and offered to the public at large. There was a difference of opinion as to how readily a share offering would be accepted by the public - one director felt that such an issue would be easy to sell, another that it would be most difficult and would require a great deal of promotion. It was the consensus that the offering price would have to ensure return of capital with interest, to the investor, and the gamble would be on the Company's post-contract performance. Sufficient cash would have to be left in the Company's Treasury to leave it in a viable position.

It was agreed that, if and after a decision is made that the government would be prepared to sell, there would be no harm in letting it be known that the government is considering ways and means of selling. No one could benefit financially since there is no stock in which to speculate; moreover, it might be useful to the government to have the public know of the problem while it is still being considered.

- 7 -

Turning to the Northern Transportation Company, the Minister stated that the Cabinet, concurring with a Cabinet Committee recommendation, had now authorized NTCL to follow up on the written offers to sell, received some weeks ago from Yellowknife Transportation Co., Ltd., and Arctic Shipping Limited. These negotiations would be aimed at establishing a price and other details of such a sale and purchase, and a report would then be made to the Minister in due course, for further instructions.

The Minister was advised that the Board believes Northern Transportation Company should continue as a Crown company. However, two members of the Board believe NTCL should be moved out of Eldorado, whether or not the latter continues as a Crown company, and should be brought under the Department of Transport. Others feel that NTCL should remain as a part of Eldorado if the latter continues as a Crown company. It was recognized that NTCL obtains some advantage (e.g., air services) from the parent company, and by the same token, that other freight costs benefit from the Eldorado freight handled. On the other hand, it was generally agreed that there is some inconsistency in asking that Eldorado be treated as a "normal mining company" and at the same time, be in the "abnormal" position of owning a captive transportation company when Eldorado provides only about one-fifth of the company's revenue.

The essentiality of service in the area was stressed, and it was agreed that a single private operator could not be expected to provide this without subsidy. This gives weight to the proposal that NTCL should continue to be a Crown company.

Summing up, the Minister asked the Board to prepare a memorandum for him, setting out the problem, and the implications of different courses of action. He urged that this be done promptly, recognizing that an early decision is desirable, especially since the company would have to start this fall putting together its exploration arm. The memorandum should define, among other things:

- (a) the political implications of Eldorado continuing as a Crown company, but with freedom to engage in exploration and competitive non-uranium and uranium enterprises.

- 8 -

- (b) the political implications of selling Eldorado (e.g., ensuring ownership by Canadians).
- (c) the effect on the two communities in which Eldorado provides employment, and the political implications thereof.
- (d) the financial implications to the government of selling Eldorado.
- (e) the means by which a sale could be accomplished.
- (f) what would be included in the sale (e.g., research facilities, NTCL, Eldorado Aviation)?
- (g) the future of the function which Eldorado performs in administering special price uranium contracts.

Mr. Gilchrist advised the Minister that a memorandum would be prepared as soon as possible after Mr. Gilchrist's return from Europe in mid-September. It would be likely to discuss the following points:

Following this discussion with the Minister, the meeting was adjourned. The sale of the uranium plant will be available from the Government of Saskatchewan. However, should there be difficulties in this direction, such as the need for further exploration, the Government of Saskatchewan has now been requested for what has been described as a preliminary study with a view to the sale of the plant.

The report of the Minister of the Interior has indicated that the Government of Saskatchewan is now in a position to sell the plant. The Government of Saskatchewan has now been requested for what has been described as a preliminary study with a view to the sale of the plant. The Government of Saskatchewan has now been requested for what has been described as a preliminary study with a view to the sale of the plant. The Government of Saskatchewan has now been requested for what has been described as a preliminary study with a view to the sale of the plant.

According to the proposed sale of the plant, the Government of Saskatchewan has now been requested for what has been described as a preliminary study with a view to the sale of the plant. The Government of Saskatchewan has now been requested for what has been described as a preliminary study with a view to the sale of the plant. The Government of Saskatchewan has now been requested for what has been described as a preliminary study with a view to the sale of the plant.

9.15am

Annual General Meeting of Shareholders

June 3 1965

Present

W. M. Gilchrist
W. J. Thompson
Godon Lawson
W. J. Bennett
Fred R. Hadley

In attendance

D. G. Scott
R. C. Powell
J. C. Orr
J. C. Furger
H. E. Lake
B. S. W. Buffum

Reading and adoption of the Annual Report.

Election of directors. Those elected were as above
plus Dr James (absent from meeting)

Appointment of A. G. as auditor

Director meeting June 3

9.00 am.

No business was discussed.

Executive Committee

No meetings held up to June 1964.

N.T.C.L.

Shareholders Minutes

June 3 1964

Routine

Directors Minutes

June 3 1964

Review of four months operations
Decision to purchase an Arctic m/v at a cost of
\$1,100,000 to be ready for the 1965 shipping season. However
the use of equipment from the "Sally" should reduce the
cost to \$850,000

Edorado Aviation Ltd

Directors June 3 1964

A review of the operations to April 30 1964 was made

Ratification of purchase of a Bell Helicopter for \$23,000

Board Meeting

June 3 1965

9.30 a.m.

Election of officers as follows

President	W.M. Gilchrist
V-P refining	J.C. Burger
V-P mining + exploration	H. E. Lake
V-P admin + finance	D. G. Scott
Secretary	R. C. Powell
Treasurer	J. C. Orr
Asst. Secretary	E. C. A. Kelly

Executive committee

W.M. Gilchrist
W.F. James
Jordan Lawson

A discussion was held on the financial statements for the four month period to April 30 1964. Highlights were - sales down by 37% from previous year but in line with the forecast for the first 4 months. Costs of mining and refining lower by about the same percentage as drop in sales. Dep'n and amortization of bonds contract \$1.80 + \$1.65 per pound respectively. O.P. income higher in accordance with increased deliveries under 12,000 ton U.K. contract. Investment income lower due to financing of the 12,000 ton contract. Working capital is \$19,284,000 - deferred U.K. receivable \$25,161,000, product inventories \$9,810,000

Refining throughput deliberately 90,000 lbs U₂O₅ higher than forecast in order to make the solvent extraction facilities available for a leaching run on cobalt-nickel concentrates during part of May.

R&D costs related mainly to non-extraction elements, refinery residues and pilot plant production of zirconium fluoride.

Only two producers were still making deliveries under the original U.K. + U.S. contracts - Algoma with a balance of 10,688,000 lbs + Beaver Lodge with a balance of \$1,772,000

17,000,000 lbs remains to be delivered under the 12,000 ton U.K. contract. Heavy long production on both these contracts will end in December 1966.

Additional capital expenditures in the sum of \$113,000 less revised estimates of \$97,000 in previously approved capital expenditures, were approved.

Mr. Gilechrist had recommended to the Minister, who in turn had recommended to the Cabinet that Eldorado should return to the field of exploration.

There was a visual presentation demonstrating the economic and technical feasibility of employing the existing refinery solvent extraction facilities for, amongst other things, the treatment of restart ones. In this respect, steps were taken to ensure that an adequate supply of raw material was assured.

The balance of 1.2 million pounds of Juneau deliveries under the U.K. 12000 ton contract was awarded by the government to Denison on the basis that it would create more man-days of employment by being so awarded.

A lengthy discussion was held on whether

- 1 Yellowknife Transportation Co. should purchase N.T.C.L.
- or 2 N.T.C.L. should purchase Y.T.
- or 3 should the present arrangement of two competing companies continue

It was decided that

1. N.T.C.L. is prepared to carry on as at present
2. The need for providing necessary and efficient service in the area must outweigh the purely economic factors
3. A single operation by the government-owned company would appear to be the best way of providing ~~and~~ service at the lowest cost
4. N.T.C.L. is prepared to entertain a proposal to buy out Y.T.C.

I.T.C.L.'s Arctic vessel M/V Barkolana is to be withdrawn from commission for 1 year and in any case cannot handle all Arctic shipping. A marine architect had been commissioned to proceed with preliminary drawings and specifications for a new vessel of 1000 tons and the Minister had agreed with the decision to build this vessel.

E.M. + R

Minutes

Directors meeting Feb 27 1964

Present W.J. Bennett
W.M. Gilchrist
F.R. Hadley
W.F. James
Gordon Lawson
John E. Lydie
W.J. Thompson
In attendance R.M. Berry
B.S.W. Buffam
H.E. Lake
J.L. Orr
R.C. Powell
D.G. Scott
A. Thunals

Audited financial statements were signed

Consideration of a draft annual report. The draft consisted of the President's letter, followed by the general report, and the financial statements. Considerable discussion developed and minor changes were made.

A review of the financial statements was made.

Mr. Gilchrist advised the Board that in recent months the privately owned Yellowknife Transportation Company and Arctic Shipping Limited had mounted a campaign - in the press and by representations to the government - complaining of unfair competition by N.T.C.L. There had been a meeting at Minister's level in late January to consider these complaints but of that meeting had come an informal working committee, which Mr. Gilchrist believes may shortly recommend to the government that N.T.C.L. should purchase Arctic Shipping Ltd. He

however would prefer to go farther, and purchase both companies.

The chairman presented a list of nineteen proposed capital expenditures totalling \$65,390 additional to the \$1,654,528 authorized at the December 4 meeting. The expenditures were approved.

Negotiations were entered into with Northwest Employers Limited for the rental of Eldorado, Port Radium facilities.

Board of Directors

December 4/63

Approval of August 18/63 minutes

A review of the operations and financial statements for the first ten months of the year was made [Extracts are as follows]

"Net income from operations is \$3,305,000, a reduction of \$2,271,000 from the \$5,576,000 earned in the same period last year. Profits from B/V and P/R sales are \$3,545,000 as compared with \$5,154,000 for 1962 a drop of \$1,609,000. Reduced sales of Port Radium gravity concentrate account for a large proportion of this reduction in profit, as only 39,531 pounds of U_3O_8 were sold in 1963, valued at \$339,000 as compared with 216,524 pounds in 1962 worth \$1,816,000. For metallurgical reasons the remaining inventory of gravity concentrate is being spread over the balance of the orange oxide contract. Beaver Lodge sales rose slightly from 1,611,030 pounds in 1962 to 1,678,068 pounds this year. The average sale price in 1963 has risen approx 13 cents per pound due to larger shipments of higher priced contract material to the U.K., but costs are up approx 58 cents per pound. Profit on sales this year is \$3,303,000 which is down \$603,000 from the \$3,906,000 earned last year.

[There then followed comments on Refinery shipments, R&D costs, revenue from non-operating sources, mining costs, solvent extraction costs, ceramic costs, U.K. account receivable]

"The Canadian Government's uranium stockpiling program, which was announced by the Prime Minister late in June, has been implemented through the signing of contracts with Rio Algom, Denison, & Faraday. By the end of October Rio Algom had already delivered 649,000 pounds of U_3O_8 valued at \$2,960,000 which is held in storage in the new warehouse at Port Hope. Cost of this warehouse was approximately \$100,000.

There was a further capital expenditure authorization of \$32,650

Board of Directors

December 4/63 (Cont.)

A discussion was held on the increased cost due to the fact that mill recoveries at the B/V mine were 85.9% some 2.6% below estimate.

Mr Gilchrist noted that tonnage milled in the year is about 1,500 tons per day. He estimated that if the operation were at 2,000 tons per day the present cost per pound at the mine could be reduced from the current \$4.53 to about \$3.75. Mr Gilchrist, commenting upon the 1963 overall mine operating cost, noted that the total costs for the ten month period had exceeded estimates by only \$27,740 and of this, \$340,046 was not an out of pocket increase, but was due to a change in the amount per ton charged out in writing off the Laramie acquisition cost.

1964 Forecasts and Capital Budget

The operating budget estimates total expenditures of \$14,825,000 and ~~which~~ forecast a sales revenue of \$16,842,000. Net income from operations of \$2,017,000 plus \$3,364,000 income from ore procurement financing and \$625,000 other income, would provide a total net income before taxes of \$6,006,000 and an after tax profit of \$3,006,000. It was approved.

The Capital Budget was approved as follows:

Beaverlodge operation	531,718
Autogenous grinding installation	
Beaverlodge	910,000
Refinery	81,810
R+D	121,000
H.O.	5,000
	<hr/>
	1,654,528

The discussion of these capital budgets concerned itself mainly with the installation of autogenous grinding equipment at Beaverlodge. The Board recognized that, while attractive savings in operating cost, and other advantages

Board of Directors

Dec 4/63

(Cont)

will accrue from this installation, a complete pay out will not be achieved within the present contract period. Nevertheless the Board agreed with the Executive Committee that this installation is simply one further step in keeping with the previously - determined policy that the mine should be treated as a going concern to be kept in as competitive a condition as possible, and which policy has already been the basis for substantial underground development undertaken and committed.

Approval of \$2,000,000 dividend
Negotiations for the purchase of Uranium City Power Company have ceased for the time being
North West Explorers were granted an extension of time for a part payment of \$4,000 re the purchase of the Y&W mining claims.

A decision was made to administer the Pension Plan on the new I.B.M. set up. The number of Trustees of the Pension Plan was also increased from 4 to 5 Mr D.G. Scott was appointed the additional Trustee

Approval of \$1,000 donation to Arctic Institute of Canada, and \$5,000 to North West Passage Co.

Approval of salary increase of \$1,000 p.a. to Manager B/V Operation and \$1,500 for the General Supt. B/V both effective Jan 1/64

E.M.R

1963

Executive Committee meeting

November 18 1963

Present

W.M. Gilchrist
Dr. W.F. James
Mr. Gordon Lawson

In attendance

R.C. Powell
J.C. Bur
D.G. Lott
H.E. Lake
Dr. B.S.W. Buffam
A.R. Allen
S. Boersma
D. A. Thunauer
J.C. Burger
R.M. Berry

Operating and capital forecasts were discussed
[Extracts from these forecasts is as follow].

Mining and refining costs have declined as a result of the fall in sales volume and are shown as only \$7,330,000 for 1964 compared with \$11,513,000 in 1963. While actual production costs at the mine and the refinery will be only slightly lower in total in 1964, a significant proportion of Beaverlodge production will not be sold but will remain in inventory at year end.

"The cost of Lorado contract amortization is lower in 1964 because production from the mine in the new year will all be sold under Beaverlodge parcel where a write-off at \$1.65 per pound applies whereas part of 1963 production is being sold under the Lorado parcel where \$2.15 per pound is amortized. The Lorado pounds sold in 1963 carried a sales premium of 50 cents per pound.

Income from ore procurement financing will rise from \$1,334,000 in 1963 to \$3,364,000 in 1964 as the scale of deliveries from other producers under the 12,000 ton U.K. contract increases as scheduled. It will be recalled that Eldorado's earnings in return for financing this contract are being recorded on the financial statements on a unit basis as deliveries are made

Executive committee

Nov 18/64

(cont)

The provision for income tax has been computed in the same manner as in earlier years. It should be noted however, that there is a small increase in the ratio of tax to income because the greatly increased income from ore procurement financing does not qualify for depletion allowed on profits from mining.

Mr Lawson noted that after allowing for additional capital expenditure, the projected [cash] balance at the end of the year would be very substantial, and it would be difficult to justify the need for retaining all these funds. He therefore recommended that a dividend of \$2 million, representing about 60% of 1963 net earnings after tax, should be declared. The committee agreed.

The chairman presented a list of proposed capital expenditures at Beveridge.

New projects	260,045
Projects under study	253,700
Other	17,973
Autogenous grinding installation	910,000

[savings in operating costs will approximate 35¢ per ton]

A lengthy discussion ensued as to whether, in the light of uncertain markets after 1966, an outlay of this magnitude is justified. The committee recognized that

(a)

(b)

It had been clearly established some years ago as a policy of the company that the mine should be treated as a going concern and kept in condition to be as competitive as possible. This policy is already reflected in the substantial underground development undertaken in the past two years and committed for 1964. Implementing the present proposal would be simply a further step in keeping with this pre-determined policy.

Approval of \$81,000 capital expenditures for the Refinery

Approval of \$126,000 capital expenditures for R.D.

Executive Committee

November 18/63

(Cont)

Stockpiling of Concentrates

Mr Gilchrist advised the Committee that, on the basis of his appraisal of world demand, supported in part by a very recent study by the Euratom Supply Agency it appeared that the Canadian Mining Industry should have a market for 10,000 tons of U_3O_8 by 1975, and further, that the present depressed price would not support a supply of that order. Bearing in mind the lead time necessary for acquiring fuel elements, he is convinced that the power-producing companies or agencies in Europe and Japan will, by 1967, want to be assured of long term supplies, and his hopes are that these consumers will stockpile. Such stockpiling by consumers is immensely better than stockpiling in Canada at taxpayers' expense. The latter not only has the disadvantage of being early, but, to the extent that stockpiles at low prices are available in Canada, the consumer will have no real incentive to stockpile himself. The Committee urged that this view should be urged upon the government, in the event that any extension of the present stockpiling arrangements are being considered; coupled with a view that stockpiling of uranium is not required as a means of providing employment, since there is a current shortage of experienced personnel in the mining industry at large.

Board of Directors

August 18/63

A review of the company's operations for the first six months of the year was made [Extracts are as follows]

Beaverlodge and Port Radium products sold and the orange oxide refining revenue at Port Hope declined in total by \$2,467,000. The operating profits arising from these sources were lower by \$1,500,000.

Sales of products beyond main uranium contracts, and comprised largely of ceramic fuel, uranium carbide, & enriched oxides amounted to \$402,000, which is a reduction of \$136,000 from the comparable figure a year ago. Profits on these sales have improved from \$20,000 in 1962 to \$124,000 in the current period, most of the improvement being due to ceramic.

Revenue from non-operating sources increased by \$497,000 over last year. Income from short term investments and other sources was higher by \$153,000 as additional funds have been available for interest earnings. The remainder of the increase in non operating income is due to service revenue accruing under the 12,000 ton V.K. contract.

In the month of July, production at Macassa Mines Bicoft operation was terminated. This is the first of the major producing companies which adopted the stretch-out arrangement to complete its contract.

On June 26 the Prime Minister announced that the Canadian Government would stockpile uranium produced before July 1, 1964, to maintain employment in the Elliot Lake and Bancroft areas of Ontario. The three mines specifically named by the Government to participate were Rio Algom's Milliken mine, and Dennison and Faraday. A firm contract had been executed with Rio & E.M.R. as agent for the Government for the delivery of 2,378,131 pounds of U_3O_8 at \$4.56 per pound commencing August 1963 and ending July 1, 1964. Negotiations are under way with the other two producers.

Turning to Beaverlodge operation, Mr. Gilchrist noted that unit operating cost per pound of U_3O_8 at \$4.53 was 3% higher than target, due largely to a short fall in production. The aim is to reduce to \$4.10 per pound at the present rate of production.

Board of Directors

August 18/63

(cont.)

and he estimates that as and when the mine reaches a 2000 tons per day rate, costs could be below \$4.00 per pound. He recalled the policy decision of the Board that the operation be treated as a continuing one and the mine kept in shape for the eventual resumption of higher tonnage. Evidence now points to a world price of \$6.00 per pound in the late sixties and up to \$9.00 in the late seventies.

Approval of capital expenditures in the order of \$200,000 was made [Included in this figure] is an item of \$150,000 to provide facilities for stockpiling concentrates arising out of a government decision to purchase concentrates for stockpiling. It is understood that the cost of the building will be reimbursed to the company, along with other stockpiling expenses, over a period of not more than five years and that title will vest in the company.

Excess of revenue over current costs in ore procurement

Mr Gilchrist referred to the discussion which had taken place at the last meeting in respect of this matter. He pointed out that from the inception of deliveries under the 12,000 ton U.K. contract, it had been the practice to offset the administrative costs of the ore procurement division against revenues. Mr Gilchrist advised that the Auditors had approved this treatment, and he considered that it should be continued. The Board agreed.

Upon motion duly made approval was given to writing off \$109,483. worth of uranium metal as a donation to the University of Toronto.

It was reported that Northwest Explorers Ltd had offered to purchase mining claims in the YAW group largely out of subsequent profits. The offer was accepted. Eldorado's advertisement for the A.Y.J. + Eastick claims in the North West Territories and for its four leased claims in Manitoba received no response. The Manitoba claims were abandoned.

Board of Directors

August 18/63 (cont.)

A new collective bargaining agreement with the United Mine Workers of America, ^{refinery employees} covering a two year period ending May 31, 1965 was signed. The cost of the settlement is equivalent to an increase in cost per pound of asbestos cement through put of about 9 cents.

Detailed agreement on pay increases had been reached with the bargaining unit representing R & D employees

Dr Buffam spoke briefly on the current mine development. He stated that the results of drilling in the Wings area had confirmed satisfactory ore showings in anticipated areas. He pointed out that more development work was being done than was required to maintain the mine at the current rate of 1500 tons per day, with a view to getting the mine into a position where it could be raised to 2000 tons per day by 1965 if necessary. Ore reserves at the present time and at the current rate of production are estimated as sufficient for twelve years.

609.1

603.00

900.1

2265
7068
9181

2172
603.00
688

Executive Committee Meeting January 18 1963

Approval of changes to the Eldorado Pension Plan (1959)

1. - highest consecutive five year period in last 10 years to be taken as "average" for pension purposes
2. Adoption of normal retirement age of 60 for pilots - future service of such pilots to be 9%.
3. Maximum of 35 years re employee contributions
4. Changes in rules re children and widows

No change in contributions

Annual General Meeting May 22/63

See directors meeting of same date

Directors meeting May 22/63

Present - W.M. Gilchrist
F.R. Hadley
Dr W.F. James
G. Lawson
J.E. Lydie
W.G. Thompson

In attendance - D. B.S.W. Buffam
J.C. Bow
R.C. Powell
D.G. Scott
* A.R. Allen
* R.E. Barrett
* D.J. Deel
* R.M. Perry
* J.C. Burger
* H.E. Lake
* D. A. Thunauer

* as required.

Election of Officers

The following officers and members of the executive committee were appointed for the ensuing year

President - W.M. Gilchrist
V-P mining & exploration - H.E. Lake
V-P refining - J.C. Burger
V-P admin & finance - D.G. Scott
Secretary - R.C. Powell
Treasurer - J.C. Bow
Asst - sec'y - E.C. Kelly
Executive committee - W.M. Gilchrist
Dr W.F. James
Mr G. Lawson

Financial and Production Statements for the first four months of 1963

Decline in income from 3,162,000 to 2,253,000 - sales volume of B/r and Pt. Radium and of the orange oxide refining service down by 24% due to stretch out - non contract sales doubled to \$311,000 however booked orders have declined from the position a year ago.

Amortization of Torado contract cost, depreciation and pre-production expenses are all based on predetermined rates per pound of U_3O_8 produced and consequently are lower this year than last as a result of reduced production volume.

Research costs, both long-term and new product are greater than before as the impact of the expanding research program is felt.

The increase in sales and promotion expense is almost entirely attributable to additional staff which reflects the emphasis being placed on sales effort.

Revenue from non-operating sources increased by \$317,000 as a result of greater interest income on short-term investments and earnings from our financing of the U.K. 12,000 ton contract. Earnings on the new U.K. contract are being recorded on the financial statements on a unit basis as deliveries are made.

The orange oxide contract with the U.S.A.E.C. for 60,250,000 pounds of U_3O_8 had a balance of 7,214,000 pounds remaining to be delivered after April 30. Through-put will average 700,000 pounds monthly over May and June. As a result of the Board's decision to stretch out the balance of the contract, production for the U.S.A.E.C. will be cut by more than 75% to 135,000 pounds in July and will remain at that monthly level until completion of the contract at the end of 1966. Unit costs will be adversely affected but Refinery management expect that the operation can be continued at a marginal level. By this arrangement, completion date for the contract is extended by 27 months.

There was a shortfall in Ceramic Fuel Production of 11%. This was due to the cancellation of a quantity of UO_2 ordered as an experimental lot for a U.S. Navy Reactor. This

Program had been changed in mid stream, resulting in this cancellation, but the company had recovered a cancellation charge from the customer.

It was observed that the recoverable amount of \$2,551,000 appearing in the Balance Sheet as "excess of costs over revenue in Ore Procurement" is made up of three elements: - the actual excess of prices paid to producers over prices received for deliveries, plus the interest on company's funds used for this financing and taken into the accounts currently as revenue, less the administrative expenses of carrying out the ore procurement function.

A discussion was held on the desirability of writing off ^{or down} the metal on loan to the University of Toronto. A.G.'s opinion to be sought.

It was reported that a study is underway to determine whether the installation of I.B.M. at the Refinery is justifiable.

The Board expresses agreement that the ore should be taken in an orderly manner and not "high-graded", even though "high grading" would undoubtedly produce immediate substantially lower costs.

Approval of numerous items of capital expense totalling \$48490.

It was reported that the Board has heard from Northland Utilities Limited, the parent company of Uranium City Power Company who offered the distribution system for sale at \$225,000. It was agreed that Mr Lake be instructed to negotiate and to arrive, if possible, at a definite price in the order of \$150,000.

Approval was given for "matching contributions" up to a maximum of \$10,000 towards the reconstruction of the Uranium City Arena.

Mr Gilchrist advised the Board of the resignations of Mr Barrett, director of ore procurement and Mr J. M. Douglas manager of the Beaverlodge operation. The Board authorized the payment of two month's salary to each of Messrs Barrett and Douglas, in addition to any accumulated vacation pay.

Appointment of Mr. L. R. Allen as manager of the Beaverlodge operation at \$18,000

Mr Gilchrist stated that Mr. Barrett had prepared a number of charts and a commentary outlining the world uranium supply and demand situation up to 1980, based upon a recently - issued report by Euratom, and supplemented by material and information from other sources. Before screening the charts, Mr Gilchrist observed that the demand projections do not give any considerations to military requirements, and to the extent that such a requirement continues, the dates in the graphs might well move forward by some two years or more. He predicted that by 1970 nuclear power will not only be quite competitive with thermal and most hydro power, but will also have achieved a more satisfactory measure of acceptance by the public, and by utilities. He considered that in view of the lead time necessary, there will be efforts within three years by utilities, particularly abroad, to make contracts for their requirements in the early 1970's, and that prospecting for uranium will have begun by 1970 at the latest to assure supplies for the mid seventies and the eighties.

Minutes

Directors Meeting February 26 1967

Present

W. M. Gilchrist
Frederick R. Hadley
W. F. James
Gordon Lawson
John E. Lydie
V. G. Thompson

In attendance

R. M.	Berry
B. S. W.	Buffam
J. C.	Burger
H. E.	Lake
J. C.	Bur
R. C.	Powell
D. G.	Scott

Approval of Dec 7 minutes

Approval of executive committee minutes of Jan 18

Discussion on the draft annual report. Mr. Gilchrist announced that a survey was soon to be made of production potential and costs in all uranium producing areas of the free world. Consideration was given to the company embracing the possible production of non-uranium metals in the existing solvent extraction plant.

the President stated that the Minister had asked for a submission of the views of the Board as to the future of the company, having in mind the comments and recommendations of the [Glasco Commission]. Mr Gilchrist stated his intention, subject to the Board's approval, to recommend that the Government give serious consideration to selling the company, but only as a complete unit.

Mr. Gilchrist is confident that significant contracts for nuclear fuel purchases will begin to emerge to the industry by about 1967.

Approval was made for the following capital expenditure

Beaverlodge

Sorting plant	Sampling facilities	35,000
Autogenous grinding Pilot plant		60,000
Others		8,875

R + D

Port Hope Refinery

Enriched Uranium circuit enlargement	50,000
Others	375

164,710

Grants to Universities

It was decided "not to superimpose any contribution upon others made from Federal Government funds, even though the request might be from a University located in the immediate area of one of the Company's operations". The Board instructed that the President transmit the above views of the Board to the Minister and ask him for direction in this matter.

Proposed stretchout of VO_3 deliveries

Mr Gilchrist recalled that the U.S.A.E.C refining contract contemplates an average delivery schedule of 250 tons of V_2O_5 per month, varying with the rate of feed. If production is maintained on this level, deliveries under the contract will have been completed by September 1964. This would result in a shutdown of the refinery at that date, with consequent massive lay off, except to the extent that non VO_3 business had developed, and would also give rise to substantial idle plant expenses.

Some thought had now been given to finding an alternative which would prolong employment, and which would help to keep the refinery working into the period where commercial business will become important. A study had shown that the profit for the period 1963-66 after taxes and after absorbing shut down expense between September 1964 and December 1966 could be estimated at \$90,065, and this would involve cessation of

employment for a large proportion of the refinery employees by September 1964. On the other hand, the present rate of production could be cut to 68 tons per month beginning July 1963 through December 1966, and as a result, the after tax position for the four years would be approximately \$360,000 with a lay-off at June 1963 of only some sixty five employees.

The Board agreed that in view of the impact on local employment, the need to keep the refinery alive, and the more favourable profit potential, the proposed stretchout should be adopted, and it was so resolved upon motion of Messrs Lawson and Thompson.

Purchase of Uranium City Power Co.

Consideration was given to the purchase of the electrical distribution system of the above company. The matter will be reconsidered later at which time an appraisal is expected to have been made. It was stated by the V.P. Mr Lake that the Saskatchewan Power Corp. and the Provincial government were agreeable to an Eldorado take over if this can be arranged.

Salaries

Salary increases were as follows, effective January 1, 1963

	Increase	New salary
The President - as president of E.M.R.	-	
" - as president of N.T.C.I.	7,500	7500
V.P. Mining and exploration	1,000	25,000
V.P. Refining	1,000	24,000
V.P. Admin & finance	1,000	24,000
Secretary	2,500	17,000
Treasurer	900	15,300
Manager - ore procurement	1,000	21,000
Manager - heavy loads	1,000	20,000
Manager - R & D	1,000	18,000
Gen Sup't B/V	1,200	15,000

Executive Committee (proposed)

November 19 1962

Present

H. M. Gilchrist
Dr W. F. James
Dr B. S. W. Buffam
D. G. Scott
R. C. Powell
J. L. Orr

1963 annual forecasts were considered at length. The research budget estimates and the research and development budget estimates were studied. These estimates are as follows.

Long term research	140,000	
Research, new products	460,000	
Normal charges to mine + refinery for process development + control services	120,000	
Normal charge to H.O representing metallurgical services and liaison	40,000	760,000
Grants to Universities and Canadian Uranium Research Foundation		102,390
		<hr/> 862,390 <hr/>

The increase in ^{long term and} new product research is \$298,000 over 1962 and reflects the implementation of the Board's decision of July 31 1962 to embark upon a substantially expanded 3 year program of research. Mr Gilchrist stated that investigation of the application of ~~various~~ solvent extraction techniques was proceeding.

Budget for sales and promotion increased for 1963 by 40873 to \$133,280

Budget for H.O reduced by 29,570 - however if all actions were made on the same basis as previously, the saving would be in the order of \$60,000

Cost per pound of U_3O_8 will increase from \$4.36 to \$4.41.
Operating cost per ton milled will rise from \$17.16 to \$17.92, this is mainly due to deliberately reduced production

Refinery costs are expected to improve by \$243,059 and in spite of a proposed reduction of 1 million pounds UO_3 production, the cost per pound will rise only from 22.5¢ to 23.9¢. Production of ceramic fuel (UO_2) will show an increase of some 112,000 pounds and the cost will reduce from \$1.735 to \$1.097

Approval was given to proposed capital expenditures of \$155,750 at Beaverlodge

Approval was given to proposed capital expenditures of \$90,275 plus an unspent carry over of \$15,000 from the previous year with respect to the refinery

Approval was given to proposed capital expenditures totalling \$41,100 pertaining to R+D

Approval was given to an estimate of \$5,000 for furniture & equipment for H.O. purposes.

Mr Gilchrist recalled that the minutes of the Executive Committee's meeting of April 2 1962 recorded that employees moving from Ottawa to Port Hope in connection with the transfer of head office functions, should be held free of loss in respect of the sale of residences in Ottawa and that the Board had ratified this decision. Mr Gilchrist tabled and the committee approved, a list of the losses and expenses claimed, including the cost of moving household effects, in a total of \$13,397.

Consideration was given to moving the balance of the supplies left at Port Radnor to Edmonton. Consideration was also given to selling the supplies to N.T.C. 2 at the written down value of \$1.

Executive Committee of the Board

January 18 1963

Changes in the Pension plan were approved.

E. M. + R

H. v

December 31 1962

Minutes

Directors Meeting September 26 1962

Present

W. M. Gilchrist

W. F. James

J. Lawson

W. G. Thompson

F. R. Hadley

J. E. Lydie

In attendance

J. C. Burger

H. E. Lake

D. G. Scott

B. S. W. Buffam

R. C. Powell

The transfer was authorized of one share to each of Messrs John E. Lydie and Frederick R. Hadley. Upon same motion Messrs Lydie & Hadley were appointed directors of the company.

The minutes of July 31 1962 were reviewed and approved.

Mr Gilchrist reported that he had now made an arrangement with Mr G. M. Jarvis to continue as the company's general counsel, Mr Jarvis to be paid a retainer equivalent to that proportion of his ~~agreement to~~ ~~that proportion of his salary~~ which Eldorado had assumed prior to Mr Jarvis' recent retirement. No termination date had been arranged because he [Gilchrist] is anxious to retain Mr Jarvis' services, at least, until all legal matters arising out of the major uranium contracts had been resolved.

September 28 1962 (Cont)

Mr Gilchrist referred to the decision of the Board taken in July to donate \$30,000 to the Port Hope District Hospital Building Fund in three annual instalments of \$10,000 each commencing in 1962. The Building Fund had been advised of this donation and had now requested that the entire sum be donated in 1962 in order to save the fund certain interest costs. The Board acceded to this request.

In referring to the expanded research program approved at the July Board meeting and subject to the Minister's concurrence, Mr Gilchrist stated that he had received the verbal concurrence of the Minister.

Mr Scott's financial statements for the eight months ended August 31 1962 were presented - highlights were as follows. Operating profit was \$5,444,000 as compared with \$3,726,000 a year ago - after taxes this is \$2,929,000 compared to \$2,076,000. Improvement in Profit is primarily the result of better cost experience coupled with an increase in interest earnings. Sales volume is down by \$2,389,000. Non contract sales amount to \$627,000. Mining costs lower by \$2,618,000. Operating cost of producing V_2O_5 was \$4.29 per lb. and total cost was \$8.00. Work force at Beaverlodge was August 31. Production cost at refinery is 21.9¢ per lb. including depreciation of 5¢. Approximately 12.8 million pounds of orange oxide still remain to be delivered to the U.S.A.E.C under the contract. Loss on ore procurement [due to cross labelling] has increased to \$184,000 and may grow to \$350,000 at year end - this is being treated as a deferred charge and is excluded from the operating results. Eventual recovery of this cost is anticipated commencing after July 1 1963. Cash and short term investments increased during August by 182,000 and have grown since last fiscal year and by \$11,908,000 to a total of \$36,389,000. Total product inventories were valued at \$16,899,000 at August 31 and included \$7,326,000.

precipitate from other producers and \$4,109,000 of precipitate gravity concentrate and refining fee on orange oxide for delivery by Eldorado under the master contracts; as well as \$5,464,000 composed of non-contract precipitate, uranium metal, metal grade oxide, and other related products. General stores inventories were valued at \$3,369,000.

Mr. Gilchrist reviewed the function of Eldorado as a procurement agent for uranium produced by others.

A discussion was held on the ~~small~~ sales of non-contract U_3O_8 in the stockpile [Post Radium production]. "The vigorous sales programme which is being carried out may generate sales volume sufficient to work off this inventory [Post Radium stockpile] in time, but in any event any residue can be used for deliveries at the end of the current A.E.C. - Eldorado contract.

This means the contract is to be completed in 2 1/2 years rather than 1 1/2 years in contract quantities

There was a lengthy discussion on the company's operations. Mr. Gilchrist stressed that the contract for refining orange oxide will be completed in 2 1/2 years [i.e. December 1964] and that there is no likelihood whatever of any further substantial requirement of this nature. However an order for 135,000 pounds of ceramic fuel had been received for a U.S. Navy reactor. This would be a charge against the U.S. A.E.C. - Eldorado raw material contract, but would provide a fee of \$1.20 per pound (against an 80¢ cost) of refining orange oxide into ceramic fuel. Mr. Gilchrist stated that with the cutting of Beaverlodge production to 150,000 pounds per month and with the acquisition of 3,000,000 pounds in the new U.K. contract, the Beaverlodge mine will now have a life until early 1967.

Mr. Gilchrist predicted that the world requirements for uranium for nuclear power reactors will be at least 10,000 tons annually by 1970 and to this must be added the unpredictable military requirements.

The Chairman presented a list of capital expenditures totalling \$61,540.

Beaver Lodge

Electric installations, Verna Wing	17,250
Equipment for power load shedding	5,000
4 Meco 16" fans	1,200
Static meter	725
Control panels	1200

Refinery Purchase and install one VO_2 Reducing
Furnace with auxiliary equipment 35,550
(This installation is for purpose of fulfilling order
for 135,000 pounds ceramic VO_2 from Nuclear
Materials & Equipment Corp. of Apollo, Penna.
In order that delivery requirements are met,
this second reduction furnace and auxiliary
equipment are necessary to complement
existing equipment.

Ottawa Office

Purchase and installation of air
conditioning unit 615

61540

The Chairman referred to the company's
current cash position of approx \$36,200,000 and he
recalled that the company will require approx \$33,000,000
to finance the stockpile under the third U.K. contract. ...
... Forecasts indicate that in the year of this peak
requirement, the company's cash would reach \$47,000,000
which would be \$7 M more than is needed for financing
the stockpile and for working capital. In view of
this cash position and after some discussion
a dividend of \$3,000,000 was declared payable.

Mr Gilchrist reported that contracts sent
out July 20 to each of the six private producers for a share
of the third U.K. contract had been signed by August 31

Mr Gilchrist stated that he had received a request from the Government of Pakistan ... to make a raw material survey probable that other companies have been similarly approached... further consideration to be given. It was observed that Eldorado's participation in a project of this kind might invite criticism from private consulting firms

Further discussions re the settlement with prospectors took place It was proposed that the 20% formula be applied for all claims except the URA group which would be paid in full.

E.M.R

A.O

Dec. 31 1962

Minutes

Board of Directors July 31 1962

The minutes of the May 18 1962 meeting were reviewed and approved.

The Chairman stated that he had not as yet had an opportunity to discuss with Mr. Jarvis the matter of a retainer for his services as general counsel for the company subsequent to his forthcoming retirement.

He also reported that the reciprocal agreement with the Civil Service Superannuation Plan, as approved by the Board had now been executed.

A discussion was held on the financial statements as at June 30 1962. Mr. Scott noted that Beaver Lodge production has been revised downwards from 185,000 ^{pounds} per month to 150,000 pounds per month to conform with the extension of the delivery period to April 1965. Operating cost per pound of U_3O_8 was \$4.28 and the total cost \$8.01. Mr. Scott stated, in response to a question, that the difference between the figures was due to:

depreciation.

pre-production expense

Toronto write off

Radiore write off

Head Office expense

Saskatchewan royalties

and that the first four of these will have been eliminated coincident with the completion of deliveries under the third U.K. contract.

The usual statement of expenditures versus authorizations was presented, and it was noted that, apart from the ore sorting plant which had exceeded authorization by \$600 the various items were within the authorizations.

Four items of capital expenditure were authorized as follows.

High frequency power supply for study of high temperature processes in the Ottawa laboratory

15,400
000173

Vacuum fraction analyzer	9,600
Three sulphuric acid tanks	1500
Washing machine for mens staff house	580

It was reported that an offer had been received from the Elmina Fertilizer Company for the Port Radium acid plant in the amount of \$30,000. The offer was accepted.

It was announced that C.N. Telegraphs wished to lease company facilities at Port Radium. This would involve Eldo in no cost and would justify one trip per year by Northern Transportation into Great Bear Lake. The arrangement was approved.

Further developments in the settlement with prospectors was discussed. Nothing was finalized however.

The Chairman reported that, by direction of the Minister, the contract which was agreed upon in April last was signed between Eldorado and the Authority on July 30 1961 and that contract between Eldorado and the six private producers had been delivered to the producers on that day. He stated that the producers had been delivered to the producers on that day. He stated that the producers had been advised that the contract could not be negotiated and that they would lapse if not accepted by August 31 at next. Eldorado's share would keep the Beaverledge mine in operation until early 1967.

Approval was given to three payments of \$10,000 each to the Port Hope Hospital.

Approval and detailed description of a new three year research program.

Change in banking resolution.

Minutes of Meeting of the Board of Directors of C.M.A.
May 18 1962 9.30 am

It was reported that no further progress had been made with respect to reaching a settlement with contractor.

Agreement had been reached with respect to collective bargaining at Beaverlodge. This would mean increased costs of \$259,000 over the life of the agreement - however it was felt that this would be offset by increased efficiency.

It was announced that Beaverlodge production was cut back from 185,000 pounds to \$150,000^{lb} with retroactive effect as of January 1.

Resignation of Mr. E.C. Brown & Mr. R.T. Birk.
No further appointments made. Transfer of their shares to Geo. H. Hees

Shareholders Meeting May 18

butie

Board Meeting May 18 10.30

Appointment of officers

Consideration of financial statements for the first three months of 1962. It was commented that ~~representative~~ production is now being scheduled to terminate in April 1965 instead of September 1964. The rates of write off per pound for depreciation and pre-production expense are not affected by this change. Various technical discussions.

Approval of capital expenditures as follows.

Beaverlodge.

#3 loading pocket. Tag shaft

10.565
000175

Signal system - 7ay 16-27 levels	4660
Telephone and light,	1520
X-ray spectrophotometer	6030
Backfill storage tank the plant	23185
Howe weightograph	555
Misc. small items under \$300	970
ore sorting plant	210,000
13th level trolley	15,000
Picking belt - #1 conveyor	9,500

Refinery

Moanum carbide programme equipment	50,000
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Research & Development

Micronija fluid energy mill	1040
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Her Majesty
A reciprocal agreement was entered into with Her Majesty
so that transfer of pension rights would be possible between
the Civil Service Superannuation Account and the Company's
pension plan

Arrangements had been completed with Northern Canada
Power Commission for the purchase ^{see} of a diesel unit with
auxiliary equipment surplus to Beaver Lodge requirements for
\$20,000

Mr Gilchrist stated that in view of the Government's
interest in research and the various expressions of
opinion that have come to his attention in recent months,
he thought that the Company's research policy should
be reviewed in detail and a plan developed with objectives
as definite as circumstances would allow - This was
approved in principle

Executive Committee Meeting of the Board of Directors
May 4 1962

Contract for office space Port Hope Refinery

Mr Gilchrist recalled that at the April 2nd meeting, the Committee had authorized an expenditure for alterations to the present office building and the erection of a small addition to the shops building in order to provide accommodation for head office personnel moving to Port Hope.

The estimate of cost available at that meeting was \$15,000. This estimate had been prepared by the architect, but as a result of a meeting held on May 2 with the designated contractor and the architect, after detailed bids had been received from sub-contractor the firm price submitted was \$134,046. Discussion with the contractor and architect took place on that day, designed to explore means of reducing this figure and as a result a new firm price was established on May 4 of \$116,140. Mr Gilchrist stated that he was satisfied that this represented a realistic and reasonable price for the work and is based upon a 5% profit to the contractor.

... The Committee approved the estimate for this work in an amount of \$117,000.

There was an approval of a cost of \$137,000 for an electric boiler.

E. M. R.

Head Office

Dec 31 1962
~~March 3~~

Minutes of the Executive Committee of the Board of Directors
April 2 1962

Discussion of the status of the U.K. contract for the purchase of 12,000 tons of U_3O_8 .

U.K. Contract for 12,000 tons

Delivery of the 12,000 tons to take place in the period April 1962 to January 1970. Eldorado will extend credit to the U.K.A.E.A. in a manner such that the Authority's payments will extend over the period April 1963 to April 1973. The principal feature of this credit arrangement is that the first 2,400 tons representing \$25,716,000 will be delivered in the period April 1962 to January 1964 and paid for in three equal instalments on April 30 1971, 1972 and 1973. Eldorado will pay the producers for all concentrates so delivered and will use its own funds as necessary to extend credit to the Authority. The required funds will build up to a maximum of \$32,446,000 in the U.K. Financial Year 1964/65, dropping in the next year to approximately \$19,000,000 and to zero by 1973. The net difference between the Authority's payments to Eldorado and Eldorado's payments to the producers (including itself as a producer) amounts to \$8,202,323. This will provide an annual return of 3.67% on Eldorado's funds employed. The Authority will pay Eldorado at the rate of \$5.87 per pound while Eldorado's payments to the producers will average \$5.03 per pound. This average price of \$5.03 per pound to the producers is based upon a pre-determined cost figure for each producer and a pre-determined mark up. The mark up (which is expressed in cents, not percentage) will increase with each year of delivery up to the U.K. financial year 1966/67 but the mark up will be uniform within each year to all producers.

The contract also provides for premium to be paid as an incentive to deferring deliveries - the

longer the deferment, the higher the premium.

Move of Head Office Personnel to Port Hope

Mr. Gilchrist stated that arrangements had been made for the transfer of all Head Office personnel to Port Hope with the exception of himself and the manager of R+D. The move is designed to effect savings estimated at \$70,000 per year after 1962.

Mr. Gilchrist stated that the capital expenditure for alterations to the present office building and the erection of a small addition to the shops building to provide offices for the refinery engineering staff would amount to about \$65,000. The present lease for 150 Kent Street was being cancelled as of June 30 1962 and the D.P.W. was taking over the space under a new lease. D.P.W. would also reimburse Eldorado for the unamortized portion of tenant's improvements i.e. partitions and fluorescent lights.

The committee agreed that persons making the move to Port Hope should be held free of loss in respect of the sale of residences in Ottawa.

E.M. + R

Minutes

Board Meeting February 23 1961

9.45 a.m.

With regard to the approval by the executive committee of a budget for the exploration program in 1961, Mr Gilchrist noted that no decision had yet been received from the Minister with respect to the company's continuing in the exploration field, but he expected a decision within a week.

He reported also on his meeting a short time previously with the President of C.M.S. with respect to the possible purchase of the Wellington Lake Power Plant. He had offered to purchase the plant at a price of approximately \$600,000 but C.M.S. had indicated an unwillingness to sell. Mr Gilchrist had then indicated that Eldorado would give notice of termination to be effective at the end of 1961. It is Mr Gilchrist's opinion that C.M.S. will be prepared

Minutes (cont)

to write a new agreement.

Consideration of the Annual Report of Directors for 1960

Mr. Gilchrist called attention to that part of the President's letter which referred to the affairs of the company being conducted according to generally accepted business principles on the assumption of a continuing life for the enterprise

..... During this discussion, consideration was given to the future of the company, including the possibility of the government's disposing of it, and reference was made to the Minutes of a Board Meeting July 9, 1958. At that meeting, the Board had considered that the company's position as an agency of the Government would become increasingly difficult in that it would be a competitor with other Canadian producers for the limited business available. The Board agreed that the position of the company would shortly have to be clarified because the precise circumstances and

difficulties which had been forecast and discussed at the meeting of July 9 1958 were now arising. Mr Gilchrist recalled that the former Minister had informed him that it was not the policy of the Government to dispose of the Company, but the Board took the view that the subject should be re-opened with the present Minister.

Shareholders Meeting February 23 1961

General discussions -

appointment of A.G. as auditor

Board Meeting February 23 1961 11.00 am

Contract with U.K. A.E.A

Mr Gilchrist stated that nothing had transpired in the matter of the U.K. commitment to buy 24,000,000 pounds of uranium in the period April, 1963 to December 31 1966 since the report he had given to the Board on December 1 1960. Moreover he had heard

nothing from the U.K. about the proposal to explore the possibility of terminating the contract and paying damages. He stated that he expected to resume negotiations with Sir Roger Makins, the chairman of the Authority in April and the Board suggested that Dr W.F. James should take part in these negotiations.

Pacific Western Airlines Take Over

Mr Gilchrist stated that a brief was now in the course of preparation for presentation to the Air Transport Board along with the Price Waterhouse appraisal of P.W.A.'s latest offer. He stated that while the A.T.B. had no authority to order the transfer of Eldorado Aviation operations to P.W.A., the A.T.B. had been asked by the Government to ascertain the facts and report to the minister. Mr Gilchrist had, however, been assured by the Minister that if the A.T.B. were to recommend the acceptance of the

Government Companies Operation Act

P.W.A. offer, the decision to accept the A.T.B.
recommendation would have to be confirmed by the
Cabinet

Additional Uranium Contracts for Fairclay - Bancroft

Mr Gilchrist stated that he had
received instructions from the Cabinet Committee on
Uranium to develop a workable means of prolonging
the life of the Bancroft mines by fifteen months
..... at the same time he tabled a letter which
he had written on February 20 1961 to the Minister
pointing out what he considered to be the
 dangers for the Government and the difficulties
for Eldorado inherent in the implementing of the
proposal

General discussions + reports were made of
divisional operation

Board Meeting July 26 1961

Mr. Gilchrist stated that...

... the board's policy of assuming a continuing life for the company's operations, was contrary to the policy being adopted by some other uranium companies

Mr. Gilchrist went on. [to state] ... the Waterloo Lake hydro power development and the ore sorting plant, together with certain other smaller projects related to cost reduction will bring about a saving of 50 cents per pound which would bring ^{production} ~~construction~~ costs down ... from \$4.54 to \$4.04.

... once the shaft sinking program is completed a further reduction in development expense of 30% - 40% will have been achieved... he went on to point out that if it were essential to reduce costs further, all research and all underground development could be cut out and the mine could be high graded. If this were done, costs would be

drop below #3 and would be competitive with
the lowest cost privately owned producer now
operating on what is essentially a salvage basis

Contract negotiations with U.K.A.E.A

Mr. Gilchrist reported to the Board
on the progress of negotiations with the U.K.A.E.A.
Inasmuch as these negotiations are now being
conducted at Government level, recommendations and
decisions with respect to allocation prices, etc are
not the responsibility of the Board

Legal Action by Amalgamated Rare Earth Miners Limited

The Secretary reviewed the progress in this
litigation as follows.

On March 28 1961 Amalgamated
issued a writ on Tedorade alleging that Tedorade
had repudiated a contract between Tedorade &
Amalgamated and claiming damages of \$8.5 million

The statement of claim subsequently issued by the plaintiff alleges that the repudiation took place on January 13 1961

Dividend

Motion to pay a dividend of \$5,000,000 was duly carried

Possible disposal of the Company

Mr Bennett referred to discussions in the Board and with Government Officials which had taken place commencing with a board meeting held July 9 1958. He noted that a firm recommendation had been made at that time to the Minister, but that no action had been taken nor any reply to the recommendation received.

Mr. Bennett also noted that the Parliamentary Committee on Research, had, in their recent report to

Parliament, recommended that "In view of the functions of Eldorado Mining and Refining Limited as the Government purchasing and sales agent for uranium and as a contract - allocating body, a thorough study of its involvement in the competitive mining field should be made"

Mr. Gilchrist stated that he had received some indication that once the U.K. contract negotiations had been completed and this business suitably allocated to the Canadian Industry, the Government might be prepared to look with interest at a proposal for the sale of the Company, in view of the undoubted embarrassment which its continued existence as a Crown Agency might bring.

Board Meeting October 20 1961

..... In referring to the negotiations with the United Kingdom for the purchase

of 12,000 tons of U_3O_8 , Mr Gilchrist observed that the Minister had been in communication with Sir Roger Makins and had suggested a further meeting of officials. Mr Bennett enquired whether the Authority had acknowledged their obligation to buy and Mr Gilchrist stated that Makins had made it clear that the Authority recognized that obligation but that the question of price was paramount.

Regarding the proposal to take over Hudson's Bay Arctic Operation, the Chairman reported that he had discussed the matter with the Minister seeking his approval in principle to the company entering this field.

Proposed contract with Aircraft Uranium Mines Ltd

Mr Gilchrist reviewed the progress of discussions which had taken place between the Minister & himself.

Board Meeting December 6 1961 [in draft only - not signed]
and not filed in minutes book]

Mr. Gilchrist reported that a contract had been signed with Macassa Gold Mines Limited (Bieroff Division)

[There was a lengthy discussion on the financial statements to October 31 1961 and the operating forecast for 1962]

Possible Settlement with 2 Prospectors

Lengthy discussion was held on the commutation of certain prospectors production bonus rights

New Product Development

A preliminary discussion on the desirability of diversifying the company's business was held. Mr. Gilchrist stated that at this stage no proposal can be made but he expected to be ready to submit a program to the Board at a meeting early in the New Year Mr. Gilchrist went on to say that the

world nuclear fuel business is estimated to be in the order of \$500 million per year by the early 1970's and that the company should be making every effort to get a share of this business.

Possible stretch out of Beaverlodge Production

Mr. Gilchrist referred to the possibility of stretching out Beaverlodge production by cutting back from the present rate of 185,000 pounds per month to perhaps 150,000 pounds. This would extend the mine operation until early 1967. While the economies had not yet been worked out, he noted that the cut back already made to 185,000 pounds had been accomplished without an increase in cost per pound, and that further savings would result from the new ore-sorting plant and the reduced lower costs arising out of the Waterloo Lake plant.

Mr. Lawson enquired whether a cutback would prejudice the position of the company in allocating 000192 7

the new U.K. contract. Mr Gilchrist replied that no action would be taken until the allocation had been made. Mr Binks observed that shutting down a mine was expensive and that some immediate profit could justifiably be sacrificed if, by stretching out, a shutdown could be avoided, and the mine kept alive into the period when further business might be available.

Eldorado Mining and Refining Limited

December 1, 1960 (Directors)

1. Authorized the following additional capital expenditures for the Beaverlodge operation:

2 - G.M.C. Half-ton Pick-up Trucks	\$ 5,500.
Necessary equipment for tabulating installation	2,500.
Bit grinder, motor and accessories	600.
6 - Refrigerators for townsite	1,460.
Electric hoist for machine shop - 5 ton	1,675.
2. ~~Authorized~~ Approved 1961 capital budgets as follows:

Beaverlodge - General	\$ 195,075.
" - ^{ore} Electronic sorting equipment	675,000.
Port Hope - General	42,825.
" - Vacuum melting facilities for casting uran. metal	150,000.
Research and Development -	21,350.
3. Authorized a payment of \$600,000 to Radioactive Uranium Mines Ltd. for the rights to 24 claims and 3 acres contiguous to Beaverlodge property on condition that no royalties be paid beyond those applicable to the second quarter of 1960.
4. Ratified the over-run ^{in 1960} of expenditure of approx. \$20,000 on the new laboratory construction at Port Hope.
5. Approved payment of \$4,800 as damages and \$400 as purchase price for a part of the property to Howard and George Payne as a result of the death of livestock, allegedly as a result of coming in contact with the residues when these ~~were~~ had become transferred to the Payne property due to a landslide caused by heavy rains in the spring of 1960.
6. Approved a contribution to the newly incorporated Canadian Uranium Research Foundation of \$37,390.95 for the 1960-61 year.
7. Authorized that grants to continue three research projects in progress at the U.B.C., U. of Alta., and Queen's be continued.
8. Authorized a Christmas gratuity of a turkey to the hourly-rated refining employees and a bonus of \$25 to each of the salaried staff at the refining and Ottawa.
9. Approved the appointment of Mr. A. G. Scott as Vice-President, Administration and Finance, eff. Nov. 1, 1960 at an annual salary of \$
10. Amended banking resolution dated March 7, 1951, as amended by resolution passed Feb. 15, 1960, re account in Imperial Bank of Canada, Ottawa or elsewhere, to designate, in addition to designated signing authorities, the "Vice-President, Administration and Finance."
11. Amended banking resolution passed May 18, 1955, re bank accounts with Canadian Bank of Commerce, Uranium City, to add to the designated signing authorities, the "Vice-President, Administration and Finance" in sections 2 and 3 of the said resolution.
12. Amended banking resolution passed May 18, 1955 re bank accounts with the Royal Bank of Canada in Ottawa and elsewhere to add the "Vice-President, Administration and Finance" as a designated signing authority.

December 22, 1960 (Executive Committee)

No resolutions of audit interest.

Eldorado Mining and Refining Limited

May 30, 1960 (Directors) Cont'd.

5. ~~Authorized~~ Authorized payment of dividend of \$70 per share (\$4,935,000) on August 2, 1960.

July 5, 1960 (Executive Committee) (Gilchrist - Powell)

1. Approved that construction of the necessary power development at The Waterlakes Second Rapids site to generate 10,000 horsepower be undertaken at an estimated cost of \$3,000,000; that bids be invited on the basis of a fixed fee and, if possible, on the basis of a target price; that Montreal Engineering Co. Ltd. be engaged to supervise construction and represent Eldorado's interests; and that an estimate be obtained on the construction of a power line as an alternative to continuing to rent from Consolidated Mining and Smelting Co. but that every effort be made to obtain a satisfactory rental rate from C.M. & S. to obviate the necessity of a new line.

July 26, 1960 (Directors) (Gilchrist - Powell)

1. Approved the following additional capital expenditures for Beaverlodge:

Alimak Raising Machine	\$22,500.
Pick-up Truck, half-ton	2,500.
Pump, C.I.R., 1-1/2"	1,275.
Welding Wire Feed Unit	410.
Welding Shop Buffer Polished	400.
2. Amended banking resolution re "Accounts Payable Account (Edmonton)" with the Royal Bank of Canada:
Delete para. 2 and substitute therefor: "the Directors, President, Vice-President, M. & E., Secretary, Treasurer, Chief Accountant, Beaverlodge Comptroller, Beaverlodge Chief Mine Accountant."
Delete para. 3 and substitute therefor: "any two of the Directors, President, Vice-President, M. & E., Secretary, Treasurer, Chief Accountant, Beaverlodge Mine Manager, Beaverlodge General Superintendent, B/V Mining Supt'd., B/V Milling Supt'd., B/V Comptroller, B/V Chief Mine Accountant."
3. Authorized the following salary increases eff. June 1, 1960:

General Superintendent, Refining,	increased from \$13,000 to \$13,500 p.a.
Manager	" " " \$15,700 to \$16,200 p.a.
General Superintendent, Beaverlodge,	" " " \$14,000 to \$15,000 p.a.
Manager,	" " " \$17,000 to \$18,000 p.a.

August 16, 1960 (Executive Committee) (Gilchrist - Kelly)

1. Authorized the award of a contract to Peale Construction Co. Ltd., the lowest tenderer, for the construction of the Waterlakes Hydro Project (10,000 h.p.) at cost plus a fixed fee of \$50,000. Total cost is estimated at \$3,000,000 and cost of supervisory staff is estimated by Peale Const. to be \$53,500.
2. Authorized the termination of a sub-lease from Ventures Claims Limited of three mineral claims in the Port Radium which would become renewable on September 30, 1960.
3. Authorized the offer of an appointment as Vice-President, Administration and Finance, to Mr. Donald George Scott (formerly Comptroller of Asarco), in fulfillment of a Price Waterhouse recommendation.

November 2, 1960 (Executive Committee) (Gilchrist - Powell)

1. Mr. Gilchrist reported that a survey made by Price Waterhouse & Co. in appraisal of the offer made by PWA to take over the operations of Eldorado Aviation Ltd. had supported the Board's prior decision to reject the offer on the grounds that it was uneconomical and not in the interest of the parent company.

Eldorado Mining and Refining Ltd.

December 2, 1959 (Directors) (Gilchrist-Powell)

1. Accepted the resignation of Mr. H. H. Haydon as a Director with effect from August 31, 1959.
2. Authorized the transfer of one share of capital stock from H. H. Haydon to W. G. Thompson.
3. Appointed W. G. Thompson to be a Director effective Sept. 1, 1959.
4. Approved bonuses to key personnel who remain on the Port Radium property until the mine is closed in the summer of 1960 as follows: Salaried employees - one month's salary for each 5 years of service or part thereof; Hourly-rated employees - a minimum of \$100 extra for completion of the job.
5. Ratified the increased cost of exploration during 1959 now estimated to be \$400,000.
6. Approved a proposed 1960 exploration programme in the amount of \$540,000. This includes \$70,000 for the purchase of a helicopter but before action in this regard is taken a detailed appraisal of the economies of buying versus renting is to be prepared for study by the Executive Committee.
7. Authorized additional ¹⁹⁵⁹ capital expenditures at Beaverlodge of \$11,425.
8. Approved the 1960 capital budget for Beaverlodge in the amount of \$69,550.
9. Approved the purchase of an additional 160,000 worth of debentures of the Municipality of Uranium City and District.
10. Ratified the agreement made with U.S.A.E.C. which amends the price of refining ore to 39.6¢ per pound for the pounds delivered after July 1, 1959.
11. Authorizing an additional capital expenditure at Port Hope of \$775 for the purchase of an advertising projector.
12. Approved the 1960 capital budget for Port Hope in the amount of \$79,735.
13. Approved the installation of vacuum melting facilities at Port Hope at an expenditure of \$135,000.
14. Approved an amended staff holiday policy for Port Hope personnel which permits an annual vacation of 3 weeks after one year's service to bring this Division into line.
15. Approved the 1960 capital budget for R.D. in the amount of \$59,520.
16. Approved continuance of the research programmes at Canadian Universities beyond the period of the agreements ending Dec. 31/60.
17. Authorized a Christmas gratuity of a turkey to each hourly-rated employee and a \$25. bonus to salaried staff, other than officers, at Ottawa and Port Hope.
18. Approved the appointment of Mr. H. H. Haydon as Consultant on financial and accounting matters at an annual salary of \$7,800, ~~commencing~~ commencing January 1, 1960.
19. Appointed Mr. J. C. Orr as Treasurer with effect from January 1, 1960, succeeding Mr. Haydon who retires Dec. 31, 1959.
20. Authorized the following salary increases effective January 1, 1960:

<u>Name and Position</u>	<u>Increase</u>	<u>New Salary</u>
A. Thuman, Manager, R.D. Division	\$ 500.	\$ 15,500. p.e.
J. B. Speer, Asst. Manager, R.D. Division	500.	13,000. ..
J. C. Orr, Treasurer	2,400.	13,500. ..

February 15, 1960 (Directors) (Gilchrist-Powell)

1. Approved the expenditure of \$140,000 for the installation of a ~~calcining~~ calcining plant at Beaverlodge. (Cancelled May 30/60)
2. Approved the expenditure of an additional \$231,000 in extending the sinking of the Fay shaft an additional 750 feet beyond the originally planned extension of 900 feet.
3. Approved the expenditure of \$61,000 towards the preparatory work and sinking of a wing between the Ace and Verma ^{p.l. H.}

Keldorado Mining and Refining Ltd.

April 6, 1959 (Directors) cont'd.

- | | |
|--|--------------------|
| 2. President | - W. M. Gilechrist |
| Vice-President in charge of Mining and Exploration | - H. E. Lake |
| " " Refining | - J. C. Burger |
| Treasurer | - W. H. Hodgson |
| Secretary | - R. C. Powell |
| Assistant Treasurer | - J. C. Orr |
| " Secretary | - E. C. A. Kelly |

3. Authorized the payment of a dividend of \$60. per share (\$4,230,000).
4. Authorized an appropriation of \$40,000 towards the study by Montreal Engineering Co. Ltd. on the feasibility of developing power at the Slave River for use in the Beaverlodge area.
5. Authorized the purchase of an additional \$150,000 worth of debentures of the Municipality of Uranium City and District.
6. Authorized a donation of \$20,000 towards the cost of constructing a skating and hockey arena in Uranium City provided that the contribution is tax deductible.

Paid Oct. 21/59 - Udn. 10-5 -	\$15,000.
" Nov. 17/59 - " 11-70 -	5,000.
7. Authorized grants towards sponsored research programmes, as follows:

University of Alberta	\$29,275.
University of British Columbia	23,000.
Queen's University	20,693.

In addition, the Board authorized the retention of Professor T.V. Lord at an annual stipend of \$3,000 to supervise the project at Queen's University.
8. Authorized that, if requested, a further grant of \$15,000 for the carrying out of pure research in the field of age studies of minerals and other aspects of mineralogy be made to the Dept. of Physics, University of Toronto, upon presentation of satisfactory evidence of work accomplished as a result of the previous year's grant.
9. Approved expenditure of \$4,000 for the installation of a dust-tight room for new process research at the Ottawa Lab.
10. Passed a resolution empowering either Mr. J. G. McNeven, Director of Exploration or Mr. H. E. Lake, Vice-President i/c Mining and Exploration to sign Prospectors' Agreements on behalf of the Company.

June 29, 1959 (Directors)

1. Authorized a new capital expenditure of \$3,500 for a tractor overhead loader for Port Radium.
2. Approved additional capital expenditures of \$73,600. for Beaverlodge.
3. Approved the purchase and installation of a gravity concentrate sampling crusher at a cost of \$7,000 for Port Hope.
4. Approved the following salary adjustments with effect from July 1, 1959:

<u>Names & Position</u>	<u>Increase</u>	<u>New Salary</u>
R. M. Berry, General Superintendent, P.H. Refining	\$1,000	\$13,000.
G. C. Brown, Manager, " "	1,000	15,700.
J. C. Burger, V.P. - Refining	1,000	22,000.
J. M. Douglas, Manager, B/V	2,000.	17,000.
H. E. Lake, V.P. - Mining & Exploration	1,000.	22,000.

Eldorado Mining & Refining Ltd.

October 30, 1958 (Board) - (Gilchrist & Powell)

1. Authorized additional capital expenditures of \$41,600. at Beauvalodge.

November 4, 1958 (Board) - (Gilchrist & Powell)

1. Approved Port Radium capital expenditures for 1959 of \$3,205.
2. " Beauvalodge " " " " " \$153,400.
3. " Port Hope " " " " " \$166,830 + \$85,000. for an additional denitrification kettle, installed.
4. " R. & D. " " " " " \$44,080.
5. Authorized a Christmas gratuity of a turkey to hourly-rated employees at Port Hope & R. & D. and of \$25. to salaried staff, other than officers, located at Ottawa & Port Hope.
6. Approved a contract with Western Chemicals Ltd. for the supply by Western of 5,000 tons of Caustic soda at \$85.00 per ton, f.o.b. Tasso Hills, Alta. for a five-year period beginning in 1959, subject however, in the final two years to a labour escalation clause.
Amended Apr. 6, 1959 - "to increase or decrease by the amt. by which the price per ton of caustic soda f.o.b. Eastern Canadian Ports exceeds or is less than \$98.00..." Delete bracketed section.
7. Directed the Secretary to add nuclear hazard liability to the company's present comprehensive public liability policy in respect of the Refining operations. All directed the arrangements be made to carry use and occupancy insurance on the Refining operations.
8. Recommended that an exploration program for a 3-year period be planned for the Port Radium area at an approximate cost for the first year of \$200,000 to \$250,000.
9. Authorized the sale of BIV ore to Lorado Uranium Mines Ltd. at the same price per pound of U₃O₈ as Lorado pays to its other suppliers.

December 9, 1958 (Executive Committee) (Gilchrist)

1. Approved the following appointments, eff. January 1, 1959:
H. E. Lake - Vice-President i/c Mining and Exploration
J. C. Burger - " " " Refining

February 26, 1959 (Executive Committee) (Gilchrist & Powell)

1. Approved the proposed labour agreement to be effective January 1, 1959 to December 31, 1961.
2. Approved the adoption of a new pension plan and left the selection of a Trust Company, who would administer the plan, to the discretion of management.

April 6, 1959 (Directors) - (Gilchrist - Powell)

1. Authorized the transfer of one share of stock from the holdings of the Chairman of the Committee of the P.C. on Scientific and Industrial Research to Mr. H. H. Haydon.
2. Authorized the appointment of Mr. H. H. Haydon as a Director of the Company.

April 6, 1959 (Shareholders) - (Gilchrist - Powell)

1. Selected the following to be directors for the ensuing year: Messrs. R. J. Birks, W. J. Bennett, E. L. Brown, W. M. Gilchrist, H. H. Haydon, W. F. James, J. A. MacAulay.
2. Appointed the Auditor General of Canada to be auditor of the company for the ensuing year.

April 6, 1959 (Directors) - (Gilchrist - Powell)

1. Appointed the following to be members of the Executive Committee: Messrs. E. L. Brown, W. M. Gilchrist, W. F. James.
2. Appointed the following officers for the ensuing year:

Eldorado Mining and Refining Ltd.

June 6, 1958 (Board) - cont'd.

10. Authorized the following salary increases, eff. June 1, 1958:

	<u>Position</u>	<u>Present Salary</u>	<u>Revised Salary</u>
H. E. Lake	Manager, Beaverlodge Operation	\$ 20,000	\$ 21,000
J. G. Burger	" Port Hope Refining	18,800	21,000
R. E. Barnett	Director of Ore Procurement	18,000	20,000
J. G. McNeill	Manager, Port Radium Op.	17,500	18,000
A. Thumaer	Director of Research	14,200	15,000
* H. H. Haydon	Treasurer	10,800	11,400
R. C. Powell	Secretary	12,000	12,600
W. C. Hanesbauer	Asst. Mgr., Port Radium	12,000	12,500
E. B. Speer	Asst. Director of Research	11,700	12,500
J. C. Orr	Assistant Treasurer	10,200	11,100
E. G. Kelly	Assistant Secretary	6,500	7,800

* Receives \$2,200 as Treasurer of Northern Transportation Co. Ltd.

11. Authorized a separation allowance of three months' salary be granted to Mr. W. J. Bennett from May 21, 1958.

12. Authorized a salary of \$30,000 to the President (R. J. Henry) and \$27,500 to the Vice-President (W. J. Gilchrist).

June 25, 1958 (Executive Committee) - (Gilchrist & Powell)

1. Authorized an amendment to the banking resolution relating to the R. & D. Division account with The Royal Bank of Canada to provide for the addition of the names of the Research Co-ordinator and the Superintendent, Metallurgical Laboratories to the names of persons authorized to act as representatives of the company for the purpose of operating this account.

July 9, 1958 (Board) - (Gilchrist & Powell)

1. Authorized the payment of an amount equivalent to his salary for the month of July to the estate of the late R. J. Henry who died on July 6, 1958.
2. Authorized the appointment of Mr. W. M. Gilchrist as President, subject to the Minister's approval, at the salary already established for the office of President.

September 30, 1958 (Executive Committee) - (Gilchrist & Powell)

1. Authorized the following salary revisions eff. July 1, 1958:

	<u>From</u>	<u>To</u>
President of Eldorado Aviation Ltd.	\$ 15,000.	\$ 18,000.
" " Northern Transportation Co. Ltd.	18,000.	20,000.
Treasurer, Eldorado Mining (none of which is to be recovered from NTCL)	13,600.	15,000.
Secretary, " "	12,600.	14,000.

2. Authorized the installation of a second generating unit to the Wellington Lake Power Plant which is under lease from Cominco.

Estimated cost \$550,000, to be recovered by non-payment for power generated until the amt. of such payments, if made, would have equalled the capital cost of the second unit.

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SEPTEMBER

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Thursday, September 20, 1962

000200

Eldorado Mining and Refining Limited

March 27, 1958 (Board) - (Gilchrist & Powell)

1. Authorized the acceptance of an offer of \$8.00 (U.S.) per pound on 1,500,000 pounds of uranium from the Port Radium mine, the price to apply on production after completion of the present contract for 3,150,000 pounds in mid-May, and the price to apply to material upon arrival at Port Hope and not, as formerly, on production.
2. Authorized additional 1958 capital expenditures to cover construction of a house for the Plant Superintendent for \$29,000; stove and refrigerator for the staff residences for \$500; and construction of a cold warehouse, \$95,000.
3. Recorded the report from the Income Tax Division that, for purposes of taxation, the Verna mine will not be considered as a separate mine.
4. Approved Proposal for forging of dingot metal and capital expenditures required:
 - (a) Eldorado to deliver uranium metal dingots from Port Hope to Sorel Industries Ltd., Sorel, P.Q.;
 - (b) Sorel to forge and roll approx. 330,000 lbs. of dingot uranium per year as per Sorel quotation of March 11, revised to a 3-year basis and revised to contain an escalation on labour and power costs;
 - (c) AMF (Atomic) Ltd. to supervise the forging and rolling by Sorel for on behalf of Eldorado, including inspection at various stages, supervision of weighing, packaging and identification of scrap, oxide and metal and delivery of same;
 - (d) Eldorado to provide finished rounds and flats to AECL at \$19.04 per pound;
 - (e) AMF will deliver to Eldorado at Port Hope scrap resulting from further processing of finished rounds and flats by AMF for AECL's account and Eldorado will buy this scrap from AECL;
 - (f) Eldorado to provide certain equipment at the Sorel foundry, title to this equipment to remain with Eldorado, the cost of this equipment estimated to be ~~\$229,250~~ Revised to \$250,000 by Exec. Com. meet. of June 25/58.
5. Authorized the payment of additional claims of \$8,975. to farmers in the Port Hope area for damage to livestock allegedly resulting from contamination of water by refining residues.
6. Authorized the following grants to universities:

University of Alberta	\$ 24,150.
Queen's University	19,750.
University of British Columbia	20,000.
7. Enacted By-Laws Nos. 13 and 14.
8. Approved a loan of \$97,500 to Eldorado Aviation Ltd. to cover the purchase of a DC-3 aircraft from Canadian Pacific Airlines, the loan to bear interest at 5%.
9. Approved increases in salaries eff. January 1, 1958, as follows:

H. L. Lake, Manager, Beaverledge Operation	to \$20,000. p.a.
J. M. Douglas, Asst. " " "	to 15,000. "
G. C. Brown, Asst. Refining Manager	to <u>13,500.</u> Corrected to \$14,700 by Exec. Com. at its meeting of Sept. 30/58.
10. Accepted resignation of Mr. W. J. Bennett as President of the Company, to take effect upon a date to be arranged with the Minister.
11. Appointed Mr. R. J. Henry as President effective upon the taking effect of Mr. Bennett's resignation.

Keldorado Mining and Refining Ltd.

November 20, 1957 (Executive Committee) (Bennett - Powell)

1. Approved a capital expenditure of approx. \$45,000. to cover the purchase of a gas plant to make hydrogen and nitrogen by cracking ammonia, in order to cut the cost of gas required for the green salt process at Port Hope.
2. Approved two projects already undertaken by the R. & D. Division: test work at Mallinckroft - \$6,000.; test work in conjunction with National Lead Co. - \$4,000.
3. Approved additional capital expenditures of \$26,768 to cover the amount by which final costs of the Research Laboratory in Ottawa of \$492,968. exceeded approved estimates of cost.
4. Authorized expenditure of \$7,500 to cover the cost of replacing a sawdust burner in use at the Peace River Sawmill which had been carried away by erosion of the river bank.

December 12, 1957 (Board)

1. Authorized increase in green salt production plant estimate from \$325,000 to \$380,000 and in nitrogen and hydrogen gas plant from \$45,000 to \$90,000 at Port Hope (1958)
2. Authorized sundry capital expenditures at Port Hope amounting to \$224,595 (1958)
3. Authorized capital expenditures at Port Hope: New maintenance shop - \$65,000; Addition of one storey to the present change house and construct a new Guard House - \$77,500; Construct a new laboratory, including furnishings and facilities - \$150,000; Engineering and architectural fees of 5% on above - \$15,000. Total: \$307,500 (1958)
4. Approved 1958 capital budget for R. & D. of \$42,115.
5. Ratified management's decision to lend Lorado Mines a quantity of acid to permit Lorado to increase its mill through-put and to accept from Lorado up to 75 tons of ore per day over a period ending March 31, 1958 to assist Lorado's shippers which otherwise would not be able to operate at full capacity.
6. Directed that the annual subsidy of \$18,000 to Club Keldorado be eliminated from the 1958 operating budget.
7. Authorized the 1958 capital budget for Beaverlodge of \$1,537,900.
8. Approved an increase in the Revolving Housing Loan Fund to a maximum of \$500,000 subject to annual Board review.
9. Approved the 1958 capital budget of \$88,750. for new expenditures and \$17,533. for conversions for Port Radium, including an increase of \$60,000 in the estimate for the solvent plant.
10. Approved Mr. W. J. Bennett's re-entry into the Keldorado Pension Plan on the basis that as of the end of 1957 he would be in the same position pension-wise as he would have been had he never withdrawn from the Keldorado plan. Company contributions which would have been made had Mr. Bennett not withdrawn from the plan in the first place, were approved. This is all made necessary because Mr. Bennett is required to withdraw from the Pension Superannuation Fund because he is not a full time employee of A.E.C.
11. Approved Mr. H. H. Haydon's continuation in the Pension Plan until age 70 or until earlier retirement.
12. Approved Xmas. gratuities of a turkey to each hourly-rated employee at Port Hope, ^{and} \$25. to each salaried employee at Ottawa and Port Hope, with the exception of officers.
13. Authorized salary ~~increments~~ rates of \$25,000 for each of the two Vice-Presidents, eff. Jan. 1, 1958.
14. Amended the banking resolution in respect of the company's R. & D. Division bank acct. by adding the Division Accountant to the list of authorized signatories.
15. Authorized transfer of one share of Northern Transportation stock held by Keldorado Mining to Mr. W. M. Gelbreith, eff. December 10, 1957.

Eldorado Mining and Refining Ltd.

June 12, 1957 (Board) - continued

12. Appointed a Committee consisting of the President, Secretary and Treasurer to study and establish a revised Pension Plan, subject to consideration and approval of the Board before adoption.
13. Approved increases in salaries to the following personnel, effective June 1, 1957.

H. H. Haydon	- Treasurer	\$ 1,000. p.a.
R. G. Powell	- Secretary	1,000. "
J. G. Orr	- Assistant Treasurer	600. "
K. G. Kelly	- " Secretary	500. "
J. G. McKeown	- Manager, Port Radium	1,000. "
W. G. Macnarrow	- Asst. Manager, Port Radium	500. "
J. G. Burger	- Refining Manager, Port Hope	800. "
A. Thomas	- Director, R. & D.	1,000. "
14. Appointed Mr. K. B. Spice to be Assistant Director, Research and Development.

August 13, 1957 (Executive Committee) - Bennett & Powell.

1. Authorized additional capital expenditures at Beaverlodge for 1957 of ^{\$ 134,000 (Per Bd. Res. (Apr. 24/57))} ~~142,000~~.
2. Authorized loans to employees in amounts up to \$5,000 each, to assist in the acquisition or purchase of houses in Uranium City. The loans are to be operated on a Revolving Fund basis, with the maximum total amount outstanding at any one time being \$250,000.
3. Approved the purchase of a DC-4 aircraft by Eldorado Aviation Ltd. at a cost of \$427,742.75 plus sales tax (approx. \$40,000) plus the cost of spare engines of approx. \$75,000. These costs are to be financed by Eldorado Mining & Refining. Eldorado Aviation is to repay this loan semi-annually out of the proceeds of depreciation charged to operating costs. The unpaid balance of the loan is to bear interest at 5% p.a.

September 26, 1957 (Board) - (Bennett & Powell)

1. Authorized the payment of a dividend of \$50. per share (\$3,525,000) on November 1, 1957.
2. Approved an additional capital expenditure of \$458,387 in connection with the Green Salt and Metal Production project at Port Hope.
3. Granted the Charles G. Williams Fellowship to Mr. Frances Sullivan for 1957-58.
4. Authorized grants of up to \$15,000 to the Dept. of Physics, Univ. of Toronto, for ~~mineralogical~~ mineralogical research studies under the direction of Dr. A. D. Maynes during the academic year 1957-58.
5. Authorized the Secretary to bring all employees of the Company and its subsidiaries under the Government Employees Compensation Act as of January 1, 1958, on an assessment basis of 2%.
6. Approved the following staff changes, to be effective January 1, 1958:

R. J. Henry	- Now V/P in charge of Operations, to become Vice-President in charge of Refining, R. & D., and Ore Procurement
W. M. Gilewicz	- Now Manager, B/V operation, to become Vice-President in charge of Western Operations, including the subsidiary companies.
H. E. Lake	- Now Asst. Manager, B/V operation, to become Manager, B/V operation
A. Douglas	- Now Mine Capt., B/V operation, to become Asst. Manager, B/V operation
V. J. Pittson	- Now Exec. Asst. To V/P, to be Mine Superintendent, B/V operation.

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Saturday, September 22

Sunday, September

000204

Eldorado Mining and Refining Ltd.

June 12, 1957 (Shareholders) (Bennett - Powell)

1. Selected the following to be Directors of the Company for the following year: Messrs. W. J. Bennett, R. J. Birks, E. L. Brown, W. F. James, J. A. MacAulay, and R. J. Henry.
2. Appointed the Auditor General of Canada to be auditor of the Company for the ensuing year.

June 12, 1957 (Board) (Bennett - Powell)

1. Appointed the following officers for the ensuing year:

President and Managing Director	-	W. J. Bennett
Vice-President in Charge of Operations	-	R. J. Henry
Treasurer	-	H. H. Haydon
Assistant Treasurer	-	J. L. Orr
Secretary	-	R. L. Powell
Assistant Secretary	-	E. L. A. Kelly
2. Appointed an Executive Committee consisting of Messrs. W. J. Bennett, E. L. Brown, R. J. Henry and W. F. James.
3. Recommended that the Asset and Liability accounts reflecting the transactions in uranium purchased from private producers should be set out separately in the Balance Sheet.
4. Ratified capital expenditures at Port Radium made under Mine Manager's blanket authority:

Remington Rand Adding Machine	\$ 340.
Mumroe Calculator	800.
5. Approved additional capital expenditure in 1957 at Beauclodge of \$180,000 in connection with the Ace-Lay operation and \$119,210 in connection with the Verna operation.
6. Approved the purchase of debentures of the Municipality of Uranium City and District in an amount, not exceeding \$450,000, equivalent to three times the amount of such debentures purchased in 1957 by other persons and businesses in the district.
7. Appropriated \$5,000 to cover settlement of one outstanding claim for alleged damage to livestock by contaminated water originating from Eldorado's Port Radium residue dump, plus any future minor claims.
8. Authorized a grant of \$5,000. to the Geology Dept., University of Saskatchewan, to assist in equipping a geophysical laboratory.
9. Approved the establishment of the C. G. Williams Fellowship in Uranium Metallurgy for the 1957-58 academic year. The amount of the fellowship will be \$1,500., with a further summer supplement under certain conditions of \$800., plus a cash grant to the University Dept. concerned to cover expenses used in the Research Project.
10. Authorized the expenditure of approximately \$100,000. to cover the purchase through AECL of about three tons of uranium metal which is to be loaned to the University of Toronto for use in a sub-critical reactor to be employed in post-graduate training in nuclear engineering, and directed that the item be included in inventory in Eldorado's accounts.
11. Approved the entry into contracts by the Co. for the purchase of uranium from the following Private Producers:

Canadian Dyno Mines limited	-	Quantity 3,321,500 lbs.	-	Basic price - \$10.50
Milliken Lake Uranium Mines Ltd.	-	" 9,143,300 "	-	" " 10.39
Reifor Uranium & Metals Mining Co. Ltd.	-	" 2,053,125 "	-	" " 10.50

Eldorado Mining and Refining Ltd.

April 10, 1957 (Executive) - Continued

2. Approved fee of 5%, plus travel, Telegram and long distance calls to Wright Engineers Ltd. for designing the solvent extraction plant to be constructed at Port Radium.
3. Approved pay increases to employees at Port Radium at equivalent wage rates as those being paid at Beaverlodge, but without shift differentials or overtime premiums, effective January 1, 1957.
4. Approved capital expenditure of \$40,000. (estimated) for an additional boiler for Beaverlodge.
5. Approved a capital expenditure, to be borne by Eldorado Aviation Ltd., to cover the cost of construction of a warehouse at Beaverlodge.
6. Approved and ratified the action of the President in effecting settlement with the Labour Union at Beaverlodge on the following basis:
 - (a) An increase in wages for 1957 to the scale of rates offered by the Beaverlodge management on November 7th, but with the addition of 1¢ per hour for underground employees now at \$1.75 per hour;
 - (b) 5% across-the-board for 1958;
 - (c) A voluntary revocable check-off.
7. Approved the placing of an order with Dow Chemical Co. for 10,000 tons of low chloride caustic soda at a price of \$115.80 per ton F.O.B. Waterways, for delivery to Beaverlodge at 3,000 tons in 1957 and 7,000 tons in 1958.
8. Approved an additional capital expenditure of \$1,155,000 in connection with Green Salt and Metal Plant Project at Port Hope:

Building and services, to house green salt equipment	\$75,000.
Conversion and re-location of green salt equipment	125,000.
Smelter and slag plant (including contingency of \$68,000)	<u>850,000.</u>
	1,050,000.
Contingency of 10%	<u>105,000</u>
	<u>\$1,155,000</u>

Approved
Apr. 11/57

Also approved entry into a target price contract with Catalytic Construction Co. for the engineering, procurement, purchasing and construction of the smelter metal and slag treatment plant, including the modification of the Mathews building, for a target price of \$850,000, inclusive of overhead and contractor's fee, with a bonus clause similar to that of the previous contract with Catalytic.

9. Approved capital expenditure of \$33,330. for equipment for Ammonium Sulfamate and UO₂ Production at Port Hope.
10. Approved additional capital expenditures at Port Hope of \$28,250. to cover Fork-lift truck (\$8,500), Raffinate Heat Exchanger (\$12,500), Security lighting and fencing around newly-purchased property (\$5,100), Fire Extinguishers (\$1,000), Vacuum cleaner (\$750) and Humidistat (\$400).
11. Approved in principle, subject to more detailed estimates, expenditures of \$170,000. to cover New Change House (\$100,000), New Maintenance Shop (\$65,000) and New Right-of-Way (\$5,000).

Cancelled
Dec. 12/57

June 12, 1957 (Board) (Bennett - Powell)

1. Recommended that, in future years, ~~sales~~ ^{costs of sales} and ~~costs of sales~~ ^{sales} of concentrates purchased from others be segregated from sales and cost of sales on Eldorado's product, in the annual Operating Statements.

Cancelled Dec. 12/57

Keldorado Mining & Refining Ltd.

December 17, 1956 (Board) - cont'd.

3. Approved additional 1956 capital expenditures at Beaverlodge of \$71,720.
4. Authorized the mine managers at Port Radium and Beaverlodge to embark upon individual capital expenditures estimated to cost not more than \$5,000. each, the total of such expenditures in any one year not to exceed \$50,000; in addition, the President ^{or} Vice-President may authorize such individual projects estimated to cost not more than \$10,000. each, the total of such expenditures in any one year not to exceed \$50,000. in any one year; all without prior authorization of the Board, but subject to ratification by the Executive Committee as soon as possible thereafter.
5. Ratified additional 1956 capital expenditures on Verna property of \$442,400.
6. Approved 1957 capital budget for Beaverlodge of \$1,704,490.
7. Authorized the Company to subscribe in 1956 for an amount of debentures of the Municipality of Uranium City and District equal to three times the amount of such debentures purchased by other mines, individuals, and business interests in the district. (Keldorado's subscription \$381,000.)
8. Authorized purchase of the building, machinery and equipment of the Peace River Sawmill from Northern Transportation Co. at a price of \$79,565.11.
9. Approved expenditure of \$13,500 for a pipe-line at Port Hope.
10. Approved 1957 capital budget of \$140,295 for Port Hope.
11. Authorized additional expenditure of an estimated \$1,172,710 for the erection of a metal plant at Port Hope.
12. Approved uranium purchase contracts with Canadian uranium producers: Lorado, Can-Met, Northspan, Stanrock, Stanleigh, Rayrock.
13. Authorized a grant of \$50,000. to the Master University towards the construction and operation of a "swimming pool" reactor, and to the indefinite loan of approximately 3 tons of uranium metal, to the Univ. of Toronto.
14. Authorized the institution of a revised job group insurance and welfare plan.
15. Approved Xmas. bonuses of \$25. per person to salaried personnel at Port Hope and Ottawa.

February 15, 1957 (Executive Committee) (Bennett - Powell)

1. The following Port Hope capital expenditures were approved:
 - (a) Purchase of the Scutthorpe Building on the lot contiguous to the Mathews property - \$5,000.
 - (b) Conversion of Mathews Office Building and provision of new furniture - \$10,000.
2. Approved research grants to Queen's University in the amount of \$19,250 and to the University of Alberta in the amount of \$26,425. for the period April 1, 1957 to April 1, 1958.
3. Approved interest rates applicable to housing loans made to Beaverlodge employees of 1%, 2% and 3% respectively for the first 3 years and 4% for the 4th and subsequent years.

April 10, 1957 (Executive Committee) (Bennett - Powell)

1. Approved capital expenditures for the Port Radium operation, as follows: Potato Peeler - \$657.45; Air Winch - \$647.80; Underground Ventilation Fan - \$635.00.

Keldorado Mining and Refining Ltd.

June 6, 1956 - Board (Bennett + Powell)

1. Appointed the following officers for the ensuing year:

President and General Manager	- Mr. W. J. Bennett
Vice-President i/c Operations	- Mr. R. J. Henry
Treasurer	- Mr. H. H. Hodgson
Assistant Treasurer	- Mr. J. C. Orr
Secretary	- Mr. R. L. Powell
Assistant Secretary	- Mr. J. C. A. Kelly

2. Approved expenditure of \$2,700 ^{increased to \$7,500 on Aug. 1/56.} for an enlargement of the present Assay Laboratory at Port Radium.
3. Authorized the entry into a ^{target price} contract with Burns and Sutton for construction of facilities to expand production at Beaverlodge to 2,000 tons per day and providing for a fee to the contractor of approximately 10% on a labour estimate.
4. Resolved that the Nova Group of claims held by the Company be allowed to lapse in September, 1956.
5. Authorized an additional \$10,000. to cover possible damage claims arising out of Pollution of water by refining residues at Port Hope.
6. Approved recommendation that a number of electronic manufacturers be approached with a view to undertaking manufacture of the La Pointe Picker at a royalty to the Company of between 5% to 10% of the sale value of the instrument.
7. Empowered the President or Vice-President to authorize donations at their discretion, in amounts not exceeding \$1,000 in any one calendar year to any single organization or unit thereof, provided that total donations do not exceed \$5,000 in any year without further Board authorization.
8. Approved salary & increases of \$1,000. to R. L. Powell and \$800. to J. C. Orr, eff. June 1, 1956. New rates now: Powell - \$11,000; Orr - \$9,600.

August 1, 1956 (Executive Committee) - Nil items of audit interest.

November 26, 1956 (Executive Committee)

1. Authorized Mr. Burger to negotiate with Mathews Conveyor Co. Ltd. for the purchase of their property, lying contiguous to that of Keldorado and carrying with it a 66-year lease on the land, at a price of approximately \$250,000.
2. Authorized Mr. Burger to negotiate for the purchase of approximately 100 acres of farm land at a price of approximately \$100. per acre at a location which would be suitable for a new refinery.
3. Approved a Xmas. gratuity of a turkey to each of the hourly-rated employees at Port Hope, the total cost of which will approximate \$1,800.

December 17, 1956 (Board) (Bennett + Powell)

1. Approved additional capital expenditures at Port Radium for 1956 of \$32,175.
2. Approved capital expenditures at Port Radium for 1957 of \$34,950.

Keldorado Mining and Refining Ltd.

March 6, 1956 (Board) - (Cont'd)

13. Authorized the assistant secretary to become an additional signatory in connection with the various bank accounts maintained by the Company and authorized the banking resolutions to be amended accordingly.
14. Authorized the amendment of By-law No. 12 to provide for the Assistant Secretary and Assistant Treasurer, to become additional signing officers in the execution of deeds, documents, etc. on behalf of the Company.
15. Approved expenditure of \$8,381.73, being the amount in excess of \$20,000. incurred in connection with Canada's exhibition at the Geneva Conference, the amount of \$20,000 being absorbed by AECL.
16. Authorized salary increase to \$9,600. to Mr. H. H. Hayden, eff. March 1, 1956.

May 23, 1956 (Executive Committee)

1. Approved construction of 12 new housing units at a firm price of \$13,900 each or \$166,800 in all plus the provision of necessary sewer, water and other services to these houses at an estimated cost of \$60,000.
2. Approved miscellaneous capital expenditures totalling \$95,503.30 at Beaverlodge.
3. Approved purchase of a Marchant calculator for Port Radium for \$750.
4. Authorized entry into a contract with Catalytic Construction Co. for the ^{revised to \$254,000. per Aug. 1st Bd. meeting} design and construction of a green salt pilot plant at Port Hope at an estimated cost of \$155,000. and authorized expenditures of up to \$150,000 for a 5 month operation of this pilot plant. (Fee to Catalytic fixed at \$11,380. at Aug. 1 Bd. meeting)
5. Approved grants for the fiscal year ending March 31, 1957 in connection with metallurgy and ore dressing research, as follows: Queen's University, \$19,240; University of Alberta, \$15,100. Also approved grant of \$5,000. to Mr. H. A. Maynes, Univ. of Toronto, to continue research into the measurement of minute quantities of trace materials.

6. Approved salary increases of senior executive personnel to the following rates, eff. June 1, 1956:

W. M. Gilchrist	Manager	Beaverlodge	\$21,000.
H. E. Lake	Asst. Mgr.	"	18,000.
J. E. McNevin	Manager	Port Radium	16,500.
W. C. Macdonald	Asst. Mgr.	" "	11,500.
J. C. Burger	Manager	Port Hope	18,000.
L. R. Montpetit	Purchasing Agent		11,000.
A. Thomas	Director	R. & D. Division	13,200.
R. J. Henry	Vice-President (Operations)		24,000.

June 6, 1956 (Shareholders) (Bennett - Penwell)

1. Selected the following to be Directors of the Company for the ensuing year: Messrs. W. J. Bennett, R. J. Birk, E. L. Brown, W. F. James, J. A. Macaulay and R. J. Henry.
2. Appointed Auditor-General of Canada to be auditor for the ensuing year.

Eldorado Mining and Refining Ltd.

Executive Committee Meeting - December 14, 1955

1. Approved a maximum expenditure of \$12,191,305 for expansion of the Beaverlodge mill to 2,000 tons per day.
Approved further 1956 capital expenditure for Beaverlodge of \$163,900.
Approved pre-production expense in 1956 for the Verna mine of \$474,950.
Approved expenditure totalling \$187,150. in 1956 for equipment required in connection with the mill expansion programs but not included in the R.M. Way estimate.
2. Approved 1956 capital expenditures for Port Hope Refinery of \$87,995.
3. Approved additional 1955 capital expenditures as follows:

Beaverlodge	\$2,438.86
Port Radium	3,600.00
Port Hope	42,258.75

March 6, 1956 - Board

1. Approved payment of dividend of \$35. per share on 70,500 shares outstanding (\$2,467,500) on March 27, 1956.
2. Approved new capital expenditures for Port Radium of \$60,900. and additional expenditures of \$4,500. To previously approved capital expenditures.
3. Authorized entry into a contract with USAEC for sale of 3,500,000 lbs. U3O8 of Port Radium production at a price of \$10.50 per lb. See later - March 27, 1956
4. Authorized capital expenditures totalling \$3,177. at Beaverlodge.
5. Authorized entry into a contract for sale of Beaverlodge production to USAEC at a price of \$10.00 per lb. U3O8.
6. Authorized the purchase of \$250,000. of Beaverlodge Local Development Area debentures when, as and if issued to cover the cost of providing essential water and sewer facilities at Uranium City.
7. Authorized donation of \$500. to the Sask. Provincial Council of the Boy Scouts Association.
8. Authorized entry into a contract with USAEC providing for refining of mine products to orange oxide at a cost of 67¢ per lb. of U3O8.
9. Authorized the President to negotiate sale of Port Hope residues to Vitro Corporation at a price of \$29.75 per dry ton, f.o.b. Vitro's plant at Cannonsburg, Pa.
10. Authorized the award of a contract for the construction of the research laboratory at Turner's Pasture to Alex J. Garwood, Ottawa, at a price of \$295,000.
11. Authorized entry into fixed price contracts for purchase of uranium, as follows:

Canada	2,920,000 lbs. U3O8	@ \$10.19 per lb.	\$29,754,800.
Colorado	4,275,000 " "	@ 10.50 "	44,887,500.
Can. Mex	7,350,000 " "	@ 9.50 "	69,815,000.
12. Appointed Mr. E.C. Kelly as Assistant Secretary of the Company, and authorized him to assume the responsibilities and perform the duties pertaining to the office of Secretary, in the absence of the Secretary.

Eldorado Mining and Refining Ltd.

Extract of Minutes of Meetings of Board of Directors

May 18, 1955 (Cont'd) - 10. Approved the following salary revisions:

Name	Position	Rate Formerly	New Rate	Effective
R. E. Barnett	Manager, Ore Procurement Division	\$ 20,000.	\$ 18,000.	March 1, 1955
W. M. Gilchrist	" , Beaverledge Operation	15,000.	18,000.	Feb. 1, 1955
J. E. McMiner	" , Port Radium Operation	—	15,000.	" 23, 1955
H. E. Lake	Asst. Mgr., Beaverledge Operation	15,000.	15,000.	March 24, 1955
W. C. Nancarrow	" , Port Radium Operation	9,000.	10,200.	June 1, 1955
J. C. Burger	Manager, Port Hope Operation	12,000.	15,000.	" 1, 1955
L. R. Montpetit	Western Purchasing Agent	8,200.	10,000.	" 1, 1955
R. C. Powell	Secretary	9,000.	10,000.	" 1, 1955

December 15, 1955 - 1. Authorized the purchase of \$50,000 worth of Uranium City Union Hospital debentures, dated October 1, 1955, bearing interest at 5% with principal repayable in equal instalments over 20 years, the first interest and principal coupon due December 31, 1956.

2. Approved donations to charitable causes in 1956, by Port Hope Refining, amounting to \$350.
3. Approved of a Xmas. bonus of \$25. to each employee of the Refining and Head Office.
4. Granted salary increase to \$8,800. annually to J. C. Orr, Asst. Treasurer, eff. June 1, 1955.
5. Granted salary increase to \$35,000. annually to W. J. Bennett, President, eff. Dec. 1, 1955.

Executive Committee Meetings

November 11, 1955 - 1. Approved additional 1955 capital expenditures for Beaverledge of \$16,623.47.

2. " " 1955 " " " Port Radium of \$12,920.

3. " " 1955 " " " Port Hope of \$82,200.

4. " " 1955 " " " Re. Catalytic Contract for P. Hope of \$86,290.

5. Authorized Mr. Burger to settle claims for damages made by a group of farmers in respect of contaminated surface drainage from the residue area located in Hope Township on the basis of payments totalling \$10,000.

6. Authorized Mr. Burger to negotiate for the sale of residue at Port Hope to Vitro Rare Metals Co.

7. Authorized construction of a research laboratory at a cost of approximately \$466,232. land has been secured in Jamney's Pasture, Ottawa, from the Dept. of Public Works at a cost of \$5,000.

8. Approved expenditure of approx. \$9,000. to N.R.C. for test work being carried out on fluorizing reduction and fluorination of metal grade oxide, chargeable to R. & D. Division.

Eldorado Mining and Refining Ltd.

Extract of Minutes of Meetings of Board of Directors

- May 18, 1955 - 1. Approved the over-expenditure of \$71,667.39 for capital projects in 1954.
2. Approved payment of Sask. Education and Hospital Tax, both arrears and current.

Extract of Minutes of Annual Meeting of Shareholders - May 18, 1955

1. Elected the following directors for the ensuing year:
W. J. Bennett; R. J. Birks; E. L. Brown; W. F. James; J. A. MacAulay; J. S. Reid; R. J. Henry.
2. Appointed The Auditor General of Canada auditor for the ensuing year.

May 18, 1955 (following Shareholders' meeting) - 1. Appointed the following officers for the ensuing year:

President and Managing Director	-	W. J. Bennett
Vice-President i/c Operations	-	R. J. Henry
Treasurer	-	H. H. Wraydon
Secretary	-	R. C. Powell
Assistant-Treasurer	-	J. C. Orr

2. Authorized the Executive Committee of the Board of Directors to be increased from three to four members.
Elected the following as members of the Executive Committee: W. J. Bennett; W. F. James; E. L. Brown; R. J. Henry.
3. Authorized additional capital expenditures for Port Radium in 1955 of \$19,575.
4. Approved additional capital expenditures for Beaverledge in 1955 of \$100,985.
5. Approved additional capital expenditures of for Port Hope in 1955 of \$74,000.
" " " " " " " re: new process installation of \$120,930.
6. Authorized the construction of a research laboratory at a cost to be determined by the Executive Committee.
7. Approved research grants to Queen's University of \$17,315 and to Univ. of Alberta of \$16,100.
8. Authorized the sale to Atomic Energy of Canada Ltd. of the Co.'s entire stock of radium as of 31/3/55 at a price of \$6.00 per milligram.
9. Authorized new banking resolutions (see Appendix E of Minutes for details) re: all bank accounts.

Eldorado Mining and Refining Limited

Extracts from Minutes of Board of Directors Meetings

Meeting of Board - June 15, 1954 (continued)

Appointment of Officers for 1954-55 -

President and Managing Director	-	W.J. Bennett
Vice-President	-	R.J. Henry
Treasurer	-	H.H. Haydon
Secretary	-	R.C. Powell
Asst. Treasurer	-	J.C. Orr

Capital Expenditure

Capital expenditure (Beaverlodge) for \$149,833 approved in addition to \$926,090 approved March 26, 1954. (Details given on Appendix "B" to Minutes).

Royalties payable to Province of Saskatchewan

A brief contained in Appendix "C" to these minutes indicates that Royalties are payable to the Province of Saskatchewan by Uranium Mines operating in that Province. The brief contains representations for the modification of the bases for calculation of the Royalties.

Meeting of the Board of Directors held on December 17, 1954

Appointment of R.J. Henry as Vice-President in Charge of Operations

Mr. R.J. Henry appointed Vice-President in charge of operations at a salary of \$20,000 p.a. effective December 1, 1954.

Appointment of R. J. Henry as Director

Mr. R.J. Henry appointed director in place of C.G. Williams, deceased.

Royalties payable to Province of Saskatchewan

The Saskatchewan Government had replied to the Company's brief by allowing a 15% rate for the write-off of ^{pre-}production expense and capital equipment, but had made no change in the rate of return on capital employed in *mining*. The Company's brief had requested that this rate be raised from a minimum of 15% of profits to a minimum of 40% of profits.

Port Radium Capital Expenditures 1955

Capital expenditures totalling \$27,900 were approved.

Capital Expenditure Beaverlodge 1954

Additional capital expenditure of \$8,500 was approved.

Eldorado Mining and Refining Limited

Extracts from Minutes of Board of Directors Meetings

Meeting of the Board held on March 26, 1954 ✓

Capital expenditure approved - Port Radium

New X-Ray unit for hospital	\$ 3,500.00
Dorrclaves for slime recovery	7,000.00

Beaverlodge

Amortized expenditure of \$47,000 for autoclave commission research.
Capital expenditure. Additional amortization for sewage disposal,
fire alarm system, grounds and roads - \$17,672.66. ^{\$623500}
1954 new capital expenditure authorized \$302590 }

Exploration Division. Budget for 1954 approved \$216,000.

Bank Signatories. J.E. Hamlin's name be deleted from list of signatories to Bank accounts at Canadian Bank of Commerce, Beaverlodge, Lake Branch i.e. exploration general account & Payroll account.

Carl van Leden's name deleted from list of signatories to accounts at Royal Bank of Canada, New York account, General account and Payroll account.

Meeting of the Executive Committee held on February 10, 1954 ✓

Capital expenditure approved: Cost of various additional installations to assume full tonnage and improved recovery in the concentrator approved in a total of \$623500 on the understanding that the President will arrange with the USAEC for the inclusion of this expenditure in the amount to be amortized under paragraph 3, Article II of Contract AT (49-6) 904. (for details of this expenditure see minutes).

Meeting of the Board - June 15, 1954

Presentation of 1953 financial statements

Meeting of the Shareholders (annual) - June 15, 1954

Election of Directors
Appointment of Auditors

Meeting of the Board(following annual Shareholders Meeting) - June 15, 1954

~~Appointment of Auditors~~

Additional capital expenditures at Port Radium for 1954 of \$8,800.00 approved

A compassionate allowance to the widow of the late J. Lickert of \$3,825.00 approved; this to be paid on a basis set by the President

Additional capital expenditures at Beaverlodge for 1954 of \$149,833 approved

⊗ Purchase of 23 houses at ^{Beaverlodge} from Burns and Dutton Construction Co. for \$137,000.00 approved. Houses to be sold to hourly rate employees

Additional capital expenditures at Port Hope for 1954 of \$30,677.00 approved

Revision of the estimated cost of installing the new Refinery process at Port Hope approved. The revised amount is \$2,657,500.00 and the President is authorized to enter into a contract with Catalytic Construction for the work.

Salary adjustments - ^{eff June 1/54}

R.J. Henry	a	\$250.00	per month increase
A. Thunais	"	83.33	" " "
R.C. Powell	"	83.33	" " "
J. C. Orr	"	66.66	" " "

⊗ See Minutes for terms of sale of these houses.

Eldorado Mining and Refining Limited

Extracts from minutes of Board of Directors Meetings

Meeting held on December 10, 1953 ✓

Company's Cash position

Noted that in December 1952 it had been estimated that the cash deficit at October 31, 1953 would be \$8,875,000. At that date there was a bank loan of \$7,500,000 and a loan from Northern Transportation of \$1,500,000, making a deficit of \$9,000,000. It was anticipated that with receipt of revenues as provided in the contract recently entered into for the sale of the Beaverlodge product, the Company's bank loan would be very substantially reduced by the year-end.

1953 Capital Expenditures - Port Radium

Overexpenditure of \$28,938.41 made in 1953 to complete 1951 and 1952 programmes was approved.

Estimated final cost of 1953 capital expenditure programme exceeded estimate by \$91,633.36. This excess was approved.

1954 Capital Expenditures - Port Radium

Approved an estimate of \$77,500 plus estimated cost of a storage tank \$5,000 to \$8,000.

1954 Capital Expenditure Estimates - Beaverlodge

Budget for 1954 of \$272,160 approved.

Bank Signatures

Mr. E. Tottman given power to sign cheques on the Beaverlodge General Account and the Beaverlodge Payroll Account at the Canadian Bank of Commerce, Beaverlodge Branch. The name of J.E. Hamlin deleted from the list of signatures.

Beaverlodge Exploration Programme for 1954

Approved the exploration budget of \$171,200

Salary of Manager of Refinery

Mr. J.C. Burger's salary raised to \$12,000 per annum from January 1, 1954.

Bank Signatures - Port Hope

Mr. G.C. Brown empowered to sign cheques on the Port Hope General and Payroll accounts at the Royal Bank of Canada. The name of R.M. Berry deleted from the list of signatures.

Appointment of Vice-President

R. J. Henry appointed vice president responsible for the direction of the exploration and mining divisions and such other duties as would be assigned to him by the President from time to time.

Elcorado Mining and Refining Ltd
Extracts from Minutes of Board of Directors and Executive Committee Meetings

Meeting of the Board - June 15, 1953

Correction to minutes of April 16, 1953 meeting - contribution to Uranium City
Hospital should be \$1250.00 not \$6500.00

additional capital expenditures for Port Radium of \$30550.00 approved.

additional capital expenditure for Way Programme at Beaverlodge of \$982,861.00 approved

Charitable donations amounting to \$220.00 for the balance of 1953 for the Refinery
were approved.

In the case of annuitants, former employees who had passed the age of 65 at the
inception of the Company's pension plan and therefore ~~and~~ were ineligible, who upon
reaching the age of 70 are ineligible for the receipt of the Canadian Government old
age pension, the annuity paid by the Company prior to their reaching age 70 may
be continued until the death of the annuitants or until they become eligible
for the old age pension in the amount of \$50.00 per month, or the amount of the
monthly payment made prior to reaching age 70 whichever is the lesser.

Payment of above annuities approved.

Salary adjustments

Mr. G.C. Brown appointed Assistant Refining Manager at Port Hope at a
salary of 600.00 effective July 1, 1953. Appointment and salary approved.

Mr. W.M. Gilchrist's salary as Assistant Manager at Beaverlodge was reviewed
and an increase from \$12,000.00 to \$15,000.00 was approved effective
July 1, 1953

Meeting of Executive Committee - December 2, 1953

Refinery capital expenditures for 1954 of \$13305.00 and ^{also} the purchase of a residence
area approved.

Contract with Catalytic Construction Co for installation of a ^{new} process at Refinery
having an estimated cost of \$2,112,000.00 be entered into by the Co. 000216
the same to be recommended by the Committee to the Board. (over)

Eldorado Mining and Refining Ltd

Extracts (cont)

Meeting of Executive Committee - December 2, 1953 (cont)

Mr. R. J. Henry to be appointed Vice-President, with a view of relieving Mr. Bennett of some of his responsibilities. This proposal to be recommended by the Committee to the Board.

Eldorado Mining and Refining Limited

Extracts from Minutes of Board of Directors Meetings

December 17, 1952 - Board Meeting

Budget figures presented by Division.

Resignation of Mr. A.H. Ross accepted. Mr. J.C. Burger appointed as his successor at Port Hope at \$9,600.

Resolution giving specific authority to borrow from Bank of Montreal.

Approval given to granting Christmas gratuities to Head Office and Refinery staff.

March 26, 1953 ✓

Professor C.G. Williams resigned from Executive Committee.

Mr. E. B. Spice appointed as Manager of Exploration Division.

Compassionate allowance of \$4,500 made to Mrs. Hacker.

Establishment of a Research and Development Division.

Resolution setting up bank accounts for above Division.

Mr. J.C. Orr appointed Assistant Treasurer.

Salary Revision as follows:

Mr. D.B. Angus, Port Radium mill superintendent - \$9,400 plus \$600 living allowance effective Feb. 11, 1953.

Mr. A. ^{Thomas} Thomas, manager of new Research and Development \$11,000 effective May 1, 1953.

Mr. R.J. Henry - Technical Assistant to President - increase of \$3,000 effective April 1, 1953.

Mr. H. H. Haydon, Treasurer - increase of \$1,000 effective Jan. 1, 1953.

Mr. R.C. Powell, Secretary - increase of \$800 effective Jan. 1, 1953.

April 16, 1953 ✓

Discuss of Income Tax liability as Company liable for first time.

Call annual General meeting.

Incorporate new subsidiary- Eldorado Aviation Ltd. with capital of 28,000 common shares of \$1.00 par value.

✓
April 16, 1953 - Annual Meeting - General

Election of Directors

Appointment of auditor

Confirm the incorporation of the new subsidiary - Eldorado Aviation Ltd.

✓
April 16, 1953 - Board Meeting (after annual general meeting)

Appoint officers for the year

Contribution to Uranium City Hospital - \$6,500.

Eldorado Mining and Refining Limited

Extracts from Minutes of Board of Directors Meetings

March 17, 1952 - Board Meeting ✓

Fee of \$200,000.00 to R.M. Way and Co. for consulting services on the Beaverlodge project confirmed

Establishment of bank accounts at Port Radium - signing authorities for same.

Discussion with regards to a new Refinery.

Change in name of Company.

New prospectors' agreement with regards to salary, travel expenses remuneration and royalties for claims staked and transferred to the company.

Business Interruption Insurance - Premium \$22,000.00 annually for \$2,600,000.00 coverage at Port Radium.

Discussion in connection with the attempt to obtain financial assistance from U.S. A.E.C. in order to get Beaverlodge operations into production. This was later vetoed by Mr. Howe re: minutes of June meeting.

✓
June 4, 1952 - Board Meeting

Call annual shareholders meeting.

✓
June 4, 1952 - Board meeting following general meeting

Appointment of officers

Decision made to finance Beaverlodge construction by bank borrowing

Discussion in connection with new Refinery.

New wage contract with Refinery employees approved.

✓
June 4, 1952 - Annual Meeting - General

Election of Directors.

Appointment of auditors.

Ratification of change in name of company.

✓
October 20, 1952 - Board Meeting

Borrow \$1,000,000.00 from Northern Transportation Co.

Dr. Gillanders was requested to resign, his resignation accepted as of October 1, 1952. Mr. H.E. Lake appointed manager at Port Radium and Mr. R.J. Henry, who was made Technical Assistant to the President was to act as Beaverlodge manager pending appointment of a new manager there. x

The position of Secretary-Treasurer to be separated. Mr. R.C. Powell to be Secretary and Mr. H. H. Hayden to be Treasurer.

Discussion of possible sources of power for Beaverlodge. A new plant would cost from \$4,000,000 to \$5,000,000.