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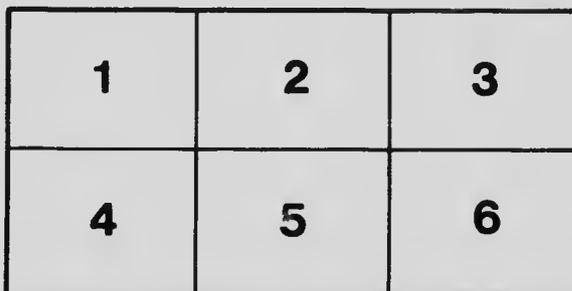
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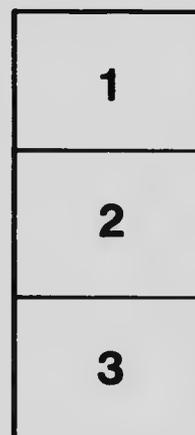
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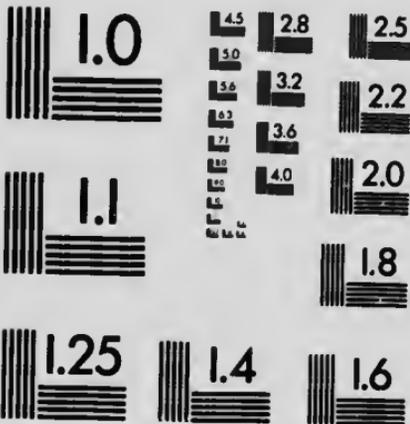
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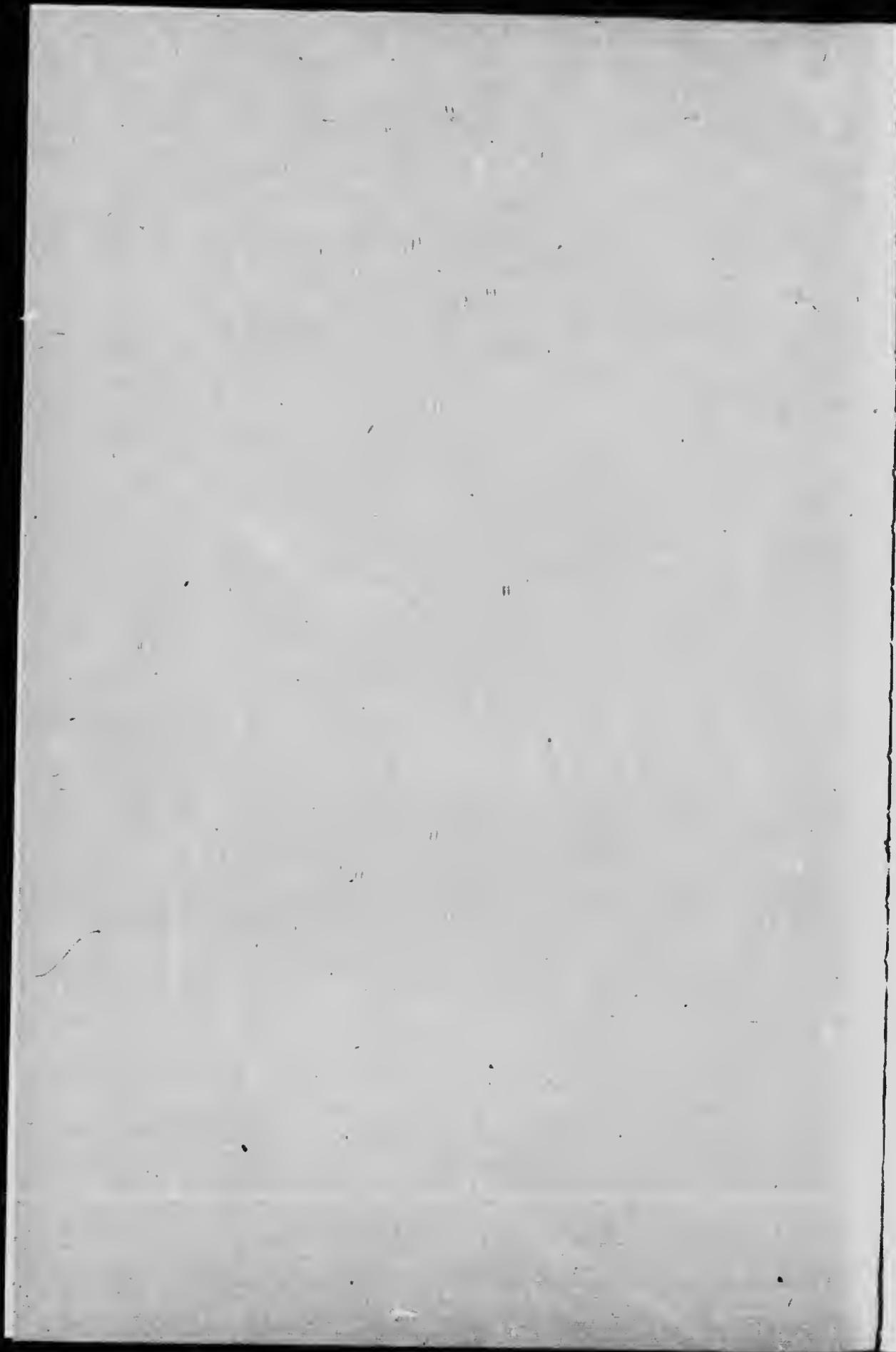
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*The  
Facts  
about*

**FEDERAL**





# FEDERAL ZINC AND LEAD COMPANY LIMITED

*No Personal Liability*

AUTHORIZED CAPITAL: \$3,000,000

## *Directors*

**T. O. LYALL**

*President*

General Contractor  
President Montreal City Land Co.  
President Lyall Realities

**J. C. BEIDELMAN**

*Vice-President*

Mining Engineer

**E. A. WRIGHT**

*Secretary-Treasurer*

*of Wright & Kingan, Accountants*

**Hon. J. L. PERRON, K.C., M.L.C.**

*of Perron, Taschereau, Rinfret, Vallée  
& Genest, Solicitors*

**Lt.-Col. P. D. L. LYALL**

General Contractor



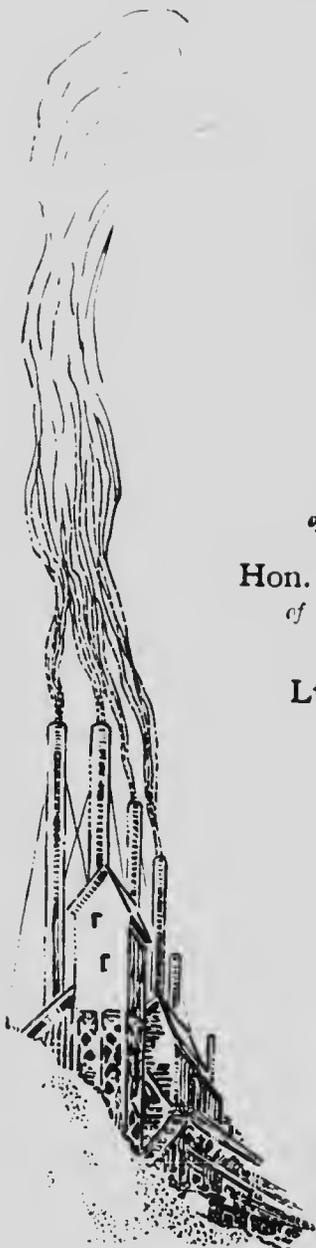
HEAD OFFICE

Guarantee Building  
285 Beaver Hall Hill

MONTREAL

Office for Sale of Stock

244 ST. JAMES STREET - MONTREAL



TN380

F4

F34

1918



*The Federal Mines are located near the headwaters of Berry Mountain Brook, in the Northern part of the projected Township of Lemieux, in the Gaspé Peninsula, Quebec.*

**T**HE SUCCESS of the Federal Zinc and Lead Company, Limited, will be the outcome of fixed conditions that can be weighed intelligently on the basis of the reports of disinterested engineers, as well as of the company's own officials.

Many thousands of dollars have been expended during the last four years to verify the richness of the deposits, before one dollar's worth of stock is offered to the public.

The ability of the enterprise to produce substantial profits has been definitely established. Shareholders in the Federal Zinc and Lead Company, Limited, are not speculators, in any sense of the word, but are financing an enterprise for the profitable development of one of the resources of the Province of Quebec, and as such are entitled to the rewards that will accrue to them.

## The Solid Basis of FACTS

**Z**INC and LEAD have for many years been very live issues in the United States of America, centering largely on the wealthy Joplin-Oklahoma fields, from which were shipped in 1918, over \$25,000,000 worth of these products.

Canada has heard little of these metals because productive operations in the Dominion, so far, have been confined to a small number of mines, which, owing to the complex nature of the ores, have not been very profitable.

The discovery of the deposits owned and leased by the Federal Zinc and Lead Company, Limited, will result in a radical change in the situation.

Instead of Canada producing less than one per cent of the world's zinc supply, she will not only be able to meet all her own needs in this metal, but will have a substantial surplus for export.

The time has come to permit public participation in the enterprise. The sum of \$400,000 is required to put the property on a commercial basis, with modern concentrating mill, smelter,

and the necessary transportation facilities and equipment.

An issue of 100,000 shares, par value \$5.00 per share, is offered from the Treasury Stock of the Company, at a price of \$4.00 per share, fully paid and non-assessable.

The cautious investor will demand to be shown:

**FIRST**, that Zinc and Lead deposits of great interest exist in the Province of Quebec.

**SECOND**, what has been done to verify the value of the deposits.

**THIRD**, what has been accomplished to date.

**FOURTH**, what remains to be done to put the property on a producing basis.

The fullest investigation is welcomed, and any information not already placed in the hands of interested parties will be given to the best of our ability.

**FEDERAL ZINC AND LEAD COMPANY  
LIMITED**

A handwritten signature in cursive script, reading "F. O. Hyall".

*President*

**AUTHORIZED CAPITAL : \$3,000,000**

## The Mineral Wealth of Quebec

**I**N the year 1900, the Province of Quebec produced in mineral wealth \$2,546,076. In 1918, the last authentic record, the corresponding figure was \$18,707,762—an increase of 635 per cent.

**Steady  
Increase**

For fifteen years mineral production has increased steadily, with the exception of the years 1914 and 1915, when the world upheaval retarded normal development in mining as it did in many other fields of industry.

To forecast the future of the Province is not within the scope of a presentation of facts, yet to any engineer or geologist the conclusion is inevitable that Quebec is in the earliest stages of the development of her mineral wealth. Her resources appear to be inexhaustible.

**\$9,019,899  
in Asbestos**

In Asbestos alone, Quebec's production in 1918 was over nine million dollars. This easily leads all other products of the mines for the Province. Whether this lead can be maintained in view of the discovery of Zinc and Lead in the Gaspé Peninsula remains to be seen.

**Zinc and  
Lead**

Zinc and Lead are considered together in engineering circles because they usually are associated in Nature. The ore usually contains both Zinc Blende and Galena (Sulphide of Lead) in varying proportions.

The value of Zinc and Lead deposits depends as much on the milling possibilities of the ore as upon the tonnage, and such deposits as have been worked commercially in this Province have not attracted the most favorable notice because of the presence of iron and other impurities which rendered the ore difficult to treat economically.

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## THE FACTS ABOUT FEDERAL

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It will be readily understood, then, that when ore samples were produced, rich in yellow Zinc Blende and the dark grey Galena, interest was aroused, and the statement that wide veins of such ore had been discovered in the Gaspé Peninsula was received with due caution.

This was in 1915.



ORE TAKEN OUT WITH PICK AND SHOVEL.

### **Personal Investigation**

The obvious course, in view of the high assay of the ores, was to investigate the alleged source and secure mining right to the property, if it proved anything like as rich as the samples indicated.

As a result of this investigation we acquired by lease, staking and purchase, 1,146 acres of mining property unrivalled in the Dominion of Canada.

*There is no reason why the mineral wealth of this country should pass into the hands of foreign interests.*

*This is a matter for Canadians to profit by.*

## The Provincial Geologist's Report

### Full Report on Request

**W**E submit with this book a part of the report of M. Adhémar Mailhiot to the Department of Colonization, Mines and Fisheries for the Province of Quebec. If you prefer the full report, write to the department in Québec for the Report on Mining Operations During the Year 1917.

The report, which will amply repay a careful reading, speaks for itself. No better or more unprejudiced evidence could be offered that the development of these deposits is a sound and thoroughly practical enterprise.

### A Sound Enterprise

The few extracts quoted here confirm our finding with regard to the astonishing amount of ores readily available and the purity of the Zinc and Lead sulphides.

### Ore Easy to Concentrate

"The galena in the veins of the projected township of Lemieux occurs in the shape of grains of all dimensions from small flakes to cubes measuring 2 inches. Sometimes it forms with the blende solid masses weighing over 1,000 pounds. The gangue of the metalliferous veins, formed of quartz and dolomite, makes the ore easy to concentrate by the ordinary mechanical processes."

"The blende of the deposits in Lemieux township is very pure and almost free from iron ; its color varies between waxy yellow and reddish brown. . . . Like the galena it is coarsely crystallized and presents wide cleavage facets."

### Geological Inference

"As the deposits are fillings of great fractures of the earth's crust, it would seem that they must go down to the base of the slaty sedimentary rocks. At the slight depth reached (115 feet) some veins show an

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**T H E F A C T S A B O U T F E D E R A L**

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**Length and  
Depth**

increase in the volumes of ore while its character remains the same. There are outcroppings of ore not distant from each other between which are differences of level of several hundred feet and it is almost certain that the highest deposits go down in depth at least to the level of the lowest ones (about 400 feet). The natural inference is that these veins must go down to considerable depths, for it is generally admitted that the length of a fissure is proportionate to a certain extent to its depth."



MCKINLAY VEIN (As shown in Provincial Report)

**Every Caution  
Exercised**

Instead of issuing stock to finance the development of the property, it was decided to adopt a plan only feasible where ultimate results are assured.

It was foreseen that if the properties were developed to a point where the company could assume the status of an industrial enterprise of assured success, the issue would be taken up by discriminating investors at a fair valuation, as an established business.

**At Private  
Expense**

So far we have assumed the onus of expense. Now the Federal Mines are in a position to produce ore in commercial quantities.



McKinlay Vein

Stores and

*Panoramic View of Pri*

It is to be understood that the Federal Reserve Bank and Lead on the Market the day the price of gold was that were possible, why make the issue of gold subscribed is necessary to complete the program of production equipment and not till then will the market the rich products of these mines

The present issue is 100,000 shares of Treasury  
Price for this issue : \$4.00 per share,



Stores and Cabins

Tunnel Entrance

Federal Shaft Head

*Part of Federal Mines*

The Federal Mines will not place Zinc  
by the present issue is subscribed. If  
the issue at all? The money to be  
complete the milling, smelting and transpor-  
then will Canada be able to put on the  
se mines.

Treasury Stock (Par Value, \$5.00 per share)  
r share, fully paid and non-assessable

## The Federal Mines To-Day

### Developed Property

**T**HE virgin forest on the hill-side has given place to shafts and shafthouses, power plants, tunnels and ore dumps, cabin and stores, offices, stables, and farm.

Eight thousand tons of ore are on the dump ;  
Seventy-five acres are ready for mining operations ;  
Three shafts have been sunk ;

The Federal shaft is down 142 feet (160 feet on the vein).

The Bois Shaft is down 64 feet.

The Gilker Shaft is down 18 feet.

A total of 224 feet of shaft-sinking.

### Underground Development

With this must be considered the 1202 feet of drifts, opening up rich ore veins, and 390 feet of crosscutting, a total underground development of 1816 feet.

These are plain figures, not guarded inferences. They confirm the statement that the property is in an advanced stage of development for production ; and they represent a very concrete expenditure on the part of those who have supplied finances thus far.



SHAFT-HEAD OF THE FEDERAL VEIN

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**T H E F A C T S A B O U T F E D E R A L**

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BOIS SHAFT AND POWER HOUSE

**Note This !**

The money to be raised by the present stock issue will not be used to defray the cost of work already accomplished, as outlined above, nor for the boilers, compressors, hoists, heaters, and pumps already set up at the mines.

For evidence as to these developments, refer to the provincial report, page 143.

**Ore  
Blocked Out**

As the outcome of the work already done, there have been blocked out, in two veins, 138,188 tons of ore ready to be mined—ore of most gratifying richness, the concentrates showing better than 60 per cent Zinc—some assays showing 65 per cent Zinc—and 80 per cent Lead, practically free from iron, insuring a minimum expense of milling.

*Remote as were the zinc and lead deposits of Australia, control of them was eagerly sought by European interests! Will Canada keep control of the richer ores of Gaspé?*

## The Report of Walter Harvey Weed

**Another  
Geologist**

**W**ALTER HARVEY WEED is one of the leading mining geologists of the United States. For 20 years he was with the United States Geological Survey.

He was commissioned to make a comprehensive investigation of the Federal properties, not only from surface indications but by means of the underground shafts and tunnel.

In the following quotations, your particular attention is directed to the restrained enthusiasm running through his report.

**Very Great  
Possible Value**

"The property is of value and from the evidence at hand may be considered of very great possible value ; it may make one of the great Zinc Mines of the country.

**Many Years  
to Come**

"The geological evidence indicates that the ore will extend a great distance downward. A depth of 1,500 feet, or 15 years' supply for a 200-ton mill from this one ore-shoot is quite possible. This does not take into account the probabilities of a large tonnage from the McKinlay vein, the Bois shaft, or the various other known veins on the cleared part of the property. From the rich float observed for two miles and from the exposures on the Bois tract, it looks as if you had possibilities of ore production for many years to come.

"The ore-body thus far developed may be safely assumed to average 3.8% Lead and 8% Zinc, but . . . the property contains much ore, which, though not as rich as this, yet is capable of yielding a good profit. . . .

**Command  
High Grade  
Prices**

"The quality of the ore is excellent. It is a high grade ore and will command high grade prices as it is devoid of any deleterious elements, comparing favorably with the best ores of the Joplin region.

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*T H E F A C T S A B O U T F E D E R A L*

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OUTCROP OF THE MCKINLAY VEIN

**Favorable  
Production  
Costs**

“Concentration of the ore will in my opinion be easy because of its simple mineral composition and favorable mechanical analysis.

“The actual cost for August, 1918, at producing properties in the Miami-Oklahoma field for combined mining and milling were \$2.41 per ton. These costs can, I believe, be bettered at your property. The average costs for 1917 for 32 operating properties in the Miami-Oklahoma fields were \$1.89, and conditions in Quebec will, I believe, enable you to do as well.

**Veins Well  
Defined**

“The ore occurs in well defined fissure veins whose outcrops on the cleared tracts are distinct and traceable across the claims. . . . While no definite statement as to the genetic relation of ore and rock is perhaps warranted, an experience of many years in the mining fields of North America makes me feel positive that the observed geological relations are **extremely favorable**.

**Persistence  
of Ore**

“The conditions just noted, together with others which need not be described here, show movement indicating **deep fracturing and persistence** of ore values downward.

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## **T H E F A C T S A B O U T F E D E R A L**

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### **Prospects from Unde- veloped Veins**

**"I see no valid reason why these deposits should not be as rich 1,000 feet down as at the surface. "There is practically no pyrite or marcasite in the ore. It does occur, however, but in scanty amounts.**

### **The Undeveloped Portion**

**"The ore seen in the underground workings is typical of that seen in the other veins nearby. From the statement already made, I have shown that the property has a considerable body of Commercial ore already opened up but this is only a very small percentage of what may be expected from deeper and more extensive mine development ; moreover, the property has possibilities of a large tonnage from other veins and from other claims as yet unprospected. The quality of the ore at every point is excellent and it has no troublesome components.**

**"This development is merely indicative of what future work may show. The probable greatest value of the mine is its undeveloped portion.**

**"I can heartily recommend the energetic further development of the property, both by deeper levels in the mine and by extensive prospect work on the ore exposed nearby."**

**The full report may be consulted at the Company's offices.**



**TUNNEL TO 100 FOOT LEVEL ON FEDERAL VEIN**

## What Remains to be Done

### Transportation

“TRANSPORTATION is the one factor lacking,” says Walter Harvey Weed in his report. The Gaspé Peninsula is for the most part undeveloped country, except for a three mile strip along the coast line.

North of the property the hills are almost impassable, so that it is necessary to follow the course of the Grand Cascapedia River for 46 miles to Cascapedia, where the products of the mines can be sent by rail or water routes to New Jersey, Great Britain, or Cleveland, centres of the zinc refining industry.

### Road for Heavy Traffic

The immediate concern, therefore, of the Federal Zinc and Lead Company, Limited, is to construct a suitable road for the heavy traffic it will be called upon to bear, in getting supplies to the mines and in shipping the Zinc concentrates and Pig Lead.

Other developments include a 400-ton-a-day concentrating mill, a lead smelter and the road equipment. The nature of the deposits warrants a thoroughly efficient plant in all details.

### Estimate of Cost

A careful estimate of the cost of the above work is \$400,000, the amount called for by the Directors in making the present issue of stock.

A railroad has been surveyed to pass through the centre of the Gaspé Peninsula, and which will run within six miles of Federal Mines.

It is quite possible that this will further increase the profits from operations. The enterprise will, however, be quite independent as regards this railroad.

## **Further Facts and Figures**

### **Veins, not Pockets**

**T**HE FEDERAL MINES have a great advantage over the Joplin-Oklahoma field, the high grade field of the United States. Federal ores occur in fissure veins of great depth. Oklahoma ores are only in pockets and runs, difficult and expensive to locate, and of relatively short life ; yet the Oklahoma fields have made hundreds wealthy.



**POWER HOUSE ON THE BOIS SHAFT**

### **60-Foot Vein Almost Untouched**

The Federal ores are remarkably free from iron.

As new operations progress there will be increasing production, for the Federal, Bois, and Gilker shafts are only down a fraction of their depth, the 60-foot McKinlay Vein is almost untouched and eleven other veins await development.

The directorate of the Federal Zinc and Lead Company, Limited, is of a calibre to ensure aggressive development along sound business lines.

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## THE FACTS ABOUT FEDERAL

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### **Strategic Position**

The location of the mines in the East and the connection with Casapedia insure cheap freight as denied to the British Columbia mines.

The road which has been surveyed from the Federal Mines is free from swamp and difficult grades.

### **Fuel and Power**

The virgin forests of the Gaspé Peninsula assure an almost unlimited supply of wood close at hand, for construction work and fuel; water power is abundant for electrical development.

### **Significant Figures**

It is confidently expected that a recovery of 95 per cent in concentrates will be made. With zinc concentrates selling on the basis of \$50.00 for 60 per cent ore, one ton of Federal ore should yield \$6.33 in zinc concentrates. The same ton of ore should yield 72 pounds of pig lead at 6 cents a pound, a total of \$10.65 per ton of ore mined.

The amount of ore blocked out to the 100 foot level and ready to be mined is 1,188 tons.

The amount of probable ore between the 100-foot level and 170 below is 193,126 tons.

This is as far as present workings justify a concrete estimate, and cover but three of the veins and does not include the largest.

### **The Men Behind Federal**

The personnel of the Federal Zinc and Lead Company, Limited, is not a group of obscure mining promoters, but of business men of standing in Canada's metropolis, men who would associate themselves only with sound business enterprises. Investors will place implicit confidence in the Board of Directors.



#### THE FEDERAL FARM

*The working community at Federal Mines will be largely self-supporting as regards food supplies. An excellent start has been made with the livestock.*



