Fourth Annual Report

Falconbridge Nickel Mines Limited

For the Year Ending December 31st, 1932

Falconbridge Nickel Mines Limited

Falconbridge - Ontario

PRESIDENT

T. LINDSLEY

VICE-PRESIDENTS

HALSTEAD LINDSLEY

J. GORDON HARDY

SECRETARY and TREASURER

NORMAN F. PARKINSON

DIRECTORS

THAYER LINDSLEY

HALSTEAD LINDSLEY

J. GORDON HARDY

W. S. MORLOCK

NORMAN F. PARKINSON

MINE SUPERINTENDENT

ERNEST CRAIG, Falconbridge, Ontario

CONSULTING METALLURGIST

ANTON GRONNINGSATER

TRANSFER AGENTS and REGISTRARS

TORONTO SHARE TRANSFER COMPANY, LIMITED,
100 Adelaide St. West, Toronto

AUDITORS

CLARKSON, GORDON, DILWORTH, GUILFOYLE & NASH
Toronto

FALCONBRIDGE NICKEL MINES LIMITED

Report of Directors

100 Adelaide Street West, Toronto,
February 11th, 1933.

To the Stockholders of
Falconbridge Nickel Mines Limited.

The Directors submit their report and the audited statements of accounts for the year ended December 31st, 1932, together with the reports of the Consulting Engineer, the Consulting Metallurgist and the Mine Manager.

The Profit and Loss Statement shows the very satisfactory outcome of the year's operations. Sales of almost three million dollars were made, and the profits, after taxes, but before depreciation, etc., amounted to over one million dollars.

Owing to the large accumulation of cash in the Treasury towards the close of the year, it was considered advisable to place a portion of this sum in seasoned gold stocks, and shares in Lake Shore Mines, Teck-Hughes Gold Mine and Wright-Hargreaves Mines, to the extent of $260,878.31 were purchased.

It is again our pleasure to express our sincere appreciation of the successful results attained during a difficult year by Mr. Hardy, Mr. Gronningsater, Mr. Craig and the entire staff.

On behalf of the Board.

T. Lindsley,
President.

Toronto, Ontario, February 6th, 1933.

Mr. Thayer Lindsley, President,
and the Board of Directors,
Falconbridge Nickel Mines Limited.

Dear Sirs,

Together with the accompanying Balance Sheet and Profit and Loss Statement, the facts and figures as to the operations at your Mine and Smelter at Sudbury, and at your Refinery in Norway—covered carefully by Mr. Ernest Craig and Mr. Anton Gronningsater —speak for themselves. I would therefore, confine myself to the following general remarks:

MINE

The accompanying map shows clearly the progress made in our opening-up of the mine during 1932. The 350-foot level received the major attack and was extended further into new ground than any other heading. The 500 and 750 levels were also commenced and are responding as expected. Development was preferably kept away from the east end of the mine, owing to a strong fault-zone crossing the ore-bearing contact in that direction, and acting as a water-course which we are not desirous of draining at this time. The western section responded kindly to the work done, and may be said to have replaced all the ore smelted during the year plus some 200,000 tons more. Ore-reserves at the end of the year have accordingly been increased to 2.9 million tons, averaging 2.25% nickel and .93% copper. Of this tonnage over two million lie above the present bottom of the mine (1,000 feet) and promise say eleven years' life at the rate of 200,000 tons per year, which is present maximum expectancy of production. The rest of the reserve tonnage lies beneath the 1,000 foot level, and was intersected by diamond-drilling. A glance at the map will show the relation that our present workings bear to the total extent of our holdings, and calls attention to the fact that these present workings cover but a fraction of our holdings known to be ore-bearing.

SMELTER

The average grade of ore smelted in 1932 — 2.50% nickel and 1.04% copper — is somewhat above the average of our reserves. This was determined by the exigencies of our one-unit direct-smelting plant, requiring as it does a relatively low-silica ore to function economically, and thereby necessitating hand-sorting of the ore as mined. The answer to this restriction was, of course, the installation of a concentrating plant for the higher-silica ore, together with the sintering equipment and increased smelting capacity that this called for. With the easier financial position achieved during the year, it became possible to authorize the construction of this betterment, and progress on it has been such that it should come into operation in April. It will not only allow greater mining freedom, but will also add to our production.

REFINERY

The production shown of refined nickel and copper had added to it this year our initial output of the precious metals. The amount is not large, but even with the exceedingly low prices obtained, it accounted for a net income of $52,700. Quality of the nickel output is being continually stressed, with process-refinements attacking the last traces of so-called impurities. In order to care for the increased production that will come forward in

1933 from the Smelter, expansion of the Refinery was also commenced in the latter part of the year. When completed it will give an annual capacity of around 4,200 metric tons of refined nickel, with the accompanying copper. In this connection it must be remembered that 700 long tons are earmarked for toll customers under contract, so that with this deduction we will have over seven and a half million pounds refined nickel capacity for our own uses. This gears into our proposed smelter output.

SALES

It will be noted that our production of refined nickel in 1932, totalled 5,408,373 lbs. Our sales on the other hand aggregated 7,844,648 lbs., thereby permitting us to move the stock carried forward from 1931 and end the year with only a modest surplus. Copper was sold practically as produced, our cathodes having met with acceptance in Scandinavia particularly. Considering the above sales-volume in relation to our expected production when the current expansion of plant goes into effect, it will be seen that the two are approximately equal. In other words, this expansion was required not only to give flexibility to our operations, but also to take care of our trade. The outlook for the new year is encouraging. We have a good backlog of forward sales, and there is an indication that business, in Europe particularly, is permitting our customers to increase their takings.

No review would be complete without giving grateful acknowledgment of the efficient and loyal service rendered by the staff and employees.

Yours very truly,

J. Gordon Hardy,

Consulting Engineer.

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Consolidated Balance
with Comparative Figu

ASSETS

	Dec. 31, 1932	Dec. 31, 1931
Current Assets—		
Cash on Hand and in Banks	$1,137,026.82	$ 114,191.41
Accounts Receivable—Trade	125,313.71	114,369.85
—Sundry	30,513.24	18,598.54
Securities at cost (Market Value, 31st Dec., 1932, $378,584.00)	362,301.34	6,600.00
	$1,655,155.11	$ 253,759.80
Amount Receivable on Investments sold (In Suit)	$ 30,000.00	$ 30,000.00
Inventory—Refined Metals at cost	$ 117,791.35	$ 628,486.67
Matte on hand and in Process at cost	260,654.56	303,432.40
	$ 378,445.91	$ 931,919.07
Property Account—		
Mine, Smelter and Refinery Buildings, Machinery and Equipment	$2,627,827.41	$2,209,013.61
Less: Depreciation written off	538,151.65	326,503.89
	$2,089,675.76	$1,882,509.72
Mining Properties and Claims	2,558,638.29	2,555,985.53
	$4,648,314.05	$4,438,495.25
Deferred Expenditures—		
Mine Development Expenditures to 31st Dec., 1930	$ 392,349.87	$ 392,349.87
Less: Written off to Mining Operations	95,588.81	55,153.01
	$ 296,761.06	$ 337,196.86
Broken Ore in Stopes	106,922.25	59,669.91
Deferred Refinery Expenses		19,371.88
Mining and Refinery Supplies, etc.	113,334.80	99,496.25
Prepaid Expenses	6,961.64	2,592.01
Incorporation Expenses		2,270.00
Commission on Shares Sold		175,000.00
	$ 523,979.75	$ 695,596.91
Raffineringsverket Aktieselskap—		
Special Advance recoverable as a tonnage charge on customs metals as and when refined, less repayments	$ 195,503.44	$ 209,298.40
Deficit		$ 252,641.92
	$7,431,398.26	$6,811,711.35

AUDIT[illegible]

We have audited the accounts of Falconbridge Nickel Mines Limite[illegible] Sheet the Assets and Liabilities of Falconbridge Nikkelverk Aktieselskap as [illegible]ne-dated Balance Sheet correctly sets forth the combined position of the Companies at

Toronto, 15th February, 1933.

EL MINES LIMITED

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VERK AKTIESELSKAP

t, 31st December, 1932
or 31st December, 1931

LIABILITIES

		Dec. 31, 1932	Dec. 31, 1931
Capital Stock—			
Authorized—5,000,000 Shares No Par Value.			
Allotted as at 31st December, 1931	3,199,555 Shares	$6,724,281.64	$6,724,281.64
Less: Subscriptions overdue (In Suit)	4,500 Shares	54,000.00	54,000.00
Issued at 31st December, 1932	3,195,055 Shares	$6,670,281.64	$6,670,281.64
Options outstanding 31st Dec., 1932	265,150 Shares		
Current Liabilities—			
Accounts Payable, Ordinary		$ 58,900.17	$ 55,696.77
Wages Payable		26,211.93	12,268.22
Accounts Payable re New Construction		186,597.33	
Reserve for Taxes		76,000.00	3,229.24
		$ 347,709.43	$ 71,194.23
Commission Payable re Overdue Subscriptions		$ 30,000.00	$ 30,000.00
Interest not taken into Revenue		$ 50,898.57	$ 40,235.48
Surplus		$ 332,508.62	
		$7,431,398.26	$6,811,711.35

Note: On 4th January, 1933, a dividend of 10c per share was declared payable on 20th January, 1933, to Shareholders of record 14th January, 1933.

Contingent Liability—31st December, 1932—

Balance of Contracts for completion of capital expenditures at Refinery $42,000

ERTIFICATE

31st December, 1932, and have incorporated in the above Consolidated Balance ... ntor, A. Lyng. Subject thereto, we report that in our opinion the above Consoli-
ecember, 1932.

CLARKSON, GORDON, DILWORTH, GUILFOYLE & NASH,
Chartered Accountants.

FALCONBRIDGE NICKEL MINES LIMITED

and its wholly owned Subsidiary

FALCONBRIDGE NIKKELVERK AKTIESELSKAP

Consolidated Earnings Statement
Year 1932

Metal Sales (gross)	$2,990,540.44	
Less: Selling and Delivery Expense and Exchange Adjustments	202,622.66	$2,787,917.78
Less: Decrease in Metal Inventories		553,473.16
Income Applicable to 1932 Operations		$2,234,444.62
Operating Costs—Mining, Smelting, Refining, etc.	$1,115,482.34	
Administrative Expense	55,200.56	1,170,682.90
Operating Profit before providing for Taxes, Deferred Development and Depreciation		$1,063,761.72
Non-Operating Revenue		22,480.93
		$1,086,242.65
Provision for Taxes		71,863.75
Profit for the Year, before providing for Deferred Development and Depreciation		$1,014,378.90
Deferred Development written off	$ 40,435.80	
Depreciation	211,522.56	251,958.36
Net Profit for the Year Transferred to Surplus		$ 762,420.54

Surplus Account
31st December, 1932

Net Profit for year 1932, as above		$ 762,420.54
Deduct:		
Deficit at 31st December, 1931	$ 252,641.92	
Incorporation Expenses written off	2,270.00	
Commission on shares sold written off	175,000.00	429,911.92
Balance, 31st December, 1932, carried to Balance Sheet		$ 332,508.62

FALCONBRIDGE NICKEL MINES LIMITED

FOURTH ANNUAL REPORT
YEAR 1932

Falconbridge, Ontario,
January 31st, 1933.

Mr. Thayer Lindsley, President,
and Directors,
Falconbridge Nickel Mines Limited,
100 Adelaide Street West,
Toronto, Ontario.

Dear Sirs,

I beg to submit the following report for the fiscal year ending December 31st, 1932.

Production during the year was affected by several interruptions to operation. The principal of these consisted of delays occasioned through the necessity of having to re-line the furnace and settler, and an eleven day period in December when the furnace was extended from ten to fifteen feet, along with the necessary changes and added equipment to increase the scale of production approximately 50%. The smelter was operated on the increased basis very successfully for the remaining 20 days in December.

MINE DEVELOPMENT

Combined development footages on all levels during the period under review are distributed as follows:

Drifting and Cross-Cutting, including Slashing	2,585 feet
Raising	748 feet
Box Holes	44 only
Station Cutting	26,966 cu. ft.
Diamond Test Drilling	603 feet

Of the total of 2,585 feet of drifting and crosscutting recorded, 526 feet was driven West along the ore zone on the 350-foot level. This drive revealed an average ore width of 7 feet for the total distance of average mine run.

On the 500-foot horizon a station was cut and a main crosscut driven 140 feet North to the ore body. Drives were then made East and West along the ore zone, the former being opened up for a distance of 134 feet in ore. The West drift was extended 924 feet. Although this drift was in ore for the total distance, the first 624 feet was for the greater part low grade over widths of from 20 to 30 feet, while the last 300 feet of the drift showed an average width of 30 feet of ore better than mine run. This ore continues in the present face.

A station was opened up on the 750-foot level and connected by a main drive to the ore body. Not a great deal of work was accomplished on this level during the year; however, the ore appears to be of good grade, with an approximate width of 23 feet.

No extensions were made on the 1,000-foot level during the period under review.

A two-compartment shaft was put down on the 225-foot level 100 feet North of the main shaft, and connected by a series of raises North of the ore body to the 1,000-foot level. This shaft will be equipped for back-filling as well as a permanent mine exit.

ORE RESERVES

Following is a tabulation of ore reserves computed to December 31st, 1932.

Ore Reserves as at December 31st, 1931	2,725,382	tons
Plus New Ore Added 1932	314,648	tons
TOTAL	3,040,030	tons
Less: Hoisted During 1932	159,573	tons
BALANCE	2,880,457	tons
Plus Disseminated Ore on Surface Dump	40,000	tons
Total Ore Reserves December 31st, 1932 (Averaging 2.25% Ni. — .93% Cu.)	2,920,457	tons

MINING

The following table sets forth the result of mining activities during the year.

Broken Ore—In Stopes		
Balance December 31st, 1931	124,407	tons
Broken During 1932	247,004	tons
TOTAL	371,411	tons
Less: Hoisted from Stopes During 1932	144,090	tons
Broken Ore Reserves December 31st, 1932	227,321	tons
Ore Hoisted		
From Stopes	144,090	tons
From Development	15,483	tons
Total Ore Hoisted During 1932	159,573	tons

The small map attached shows the Stoping area and location of Broken Ore Reserves.

CRUSHING, SORTING AND TRANSPORTATION

From the 159,573 tons of ore hoisted, 22.2%, or 35,427 tons of combined waste and disseminated ore was eliminated during the various stages of crushing. The balance of 124,146 tons was transported by the aerial tram to the smelter bins.

SMELTING

The smelter was in operation a total of 341 days during the year. Results tabulate as follows:

Tons Ore Smelted	123,306	
Matte Produced	4,947.6	short tons
Nickel Produced in Matte	2,908.17	short tons
Copper Produced in Matte	1,196.63	short tons
Metals per ton in ore	50.17 lbs. Ni.	—20.91 lbs. Cu.
Metallurgical Losses per ton of ore	3.0 lbs. Ni.	— 1.5 lbs. Cu.

CONSTRUCTION

On September 1st, 1932, authorization was granted to commence work on foundations for a 250-ton Concentrator, Sintering Plant, Smelter extension and the necessary additions to the Crushing Plant and ore bins that would be required to synchronize with these units to effect increased capacity. Early in October further permission was granted to make preparations for the purchase of machinery and equipment essential to the completion of the plant during the Winter months.

Satisfactory progress has been made on this work, and, barring unforeseen delays, the new plant will be in operation some time during the month of April.

GENERAL

Housing facilities were increased during the year, while streets and the new sewerage system were extended throughout the townsite.

The results of the year's operation, both with respect to the expansion program and underground development, have been very encouraging, and much credit is due to the co-operation of the staff and employees.

Respectfully submitted,

E. Craig,

General Superintendent.

Toronto, Ontario,
February 6th, 1933.

Mr. Thayer Lindsley, President,
and Board of Directors,
Falconbridge Nickel Mines Limited.

Dear Sirs,

I beg to submit the following report for the fiscal year ending December 31st, 1932:

SMELTER

The Smelter operated with the normal minor interruptions throughout the year, with the exception of an eleven days' shutdown in December to lengthen the blast furnace.

The performance of the Smelter was very satisfactory, with a slight improvement from the previous year, both in tonnage treated and costs, and with the high metal recovery maintained.

At the end of the year a sintering plant was under construction for the treatment of ore fines and flue dust, together with flotation concentrate from the new concentrating mill now being built. Besides the lengthening of the blast furnace and installation of the sintering plant, the only major change of importance around the Smelter to take care of the increased production is the installation of mechanical haulage of the charge to the blast furnace.

REFINERY

The Refinery operated satisfactorily without any close down during the year, with a somewhat increased production which during the last months reached nine metric tons daily. Several times during the year the production was slightly slowed down on account of lack of matte. Almost the normal amount of custom matte was received during the year.

The department for concentrating of precious metal slimes was working regularly during the year, and shipments of concentrated slimes took place at suitable intervals.

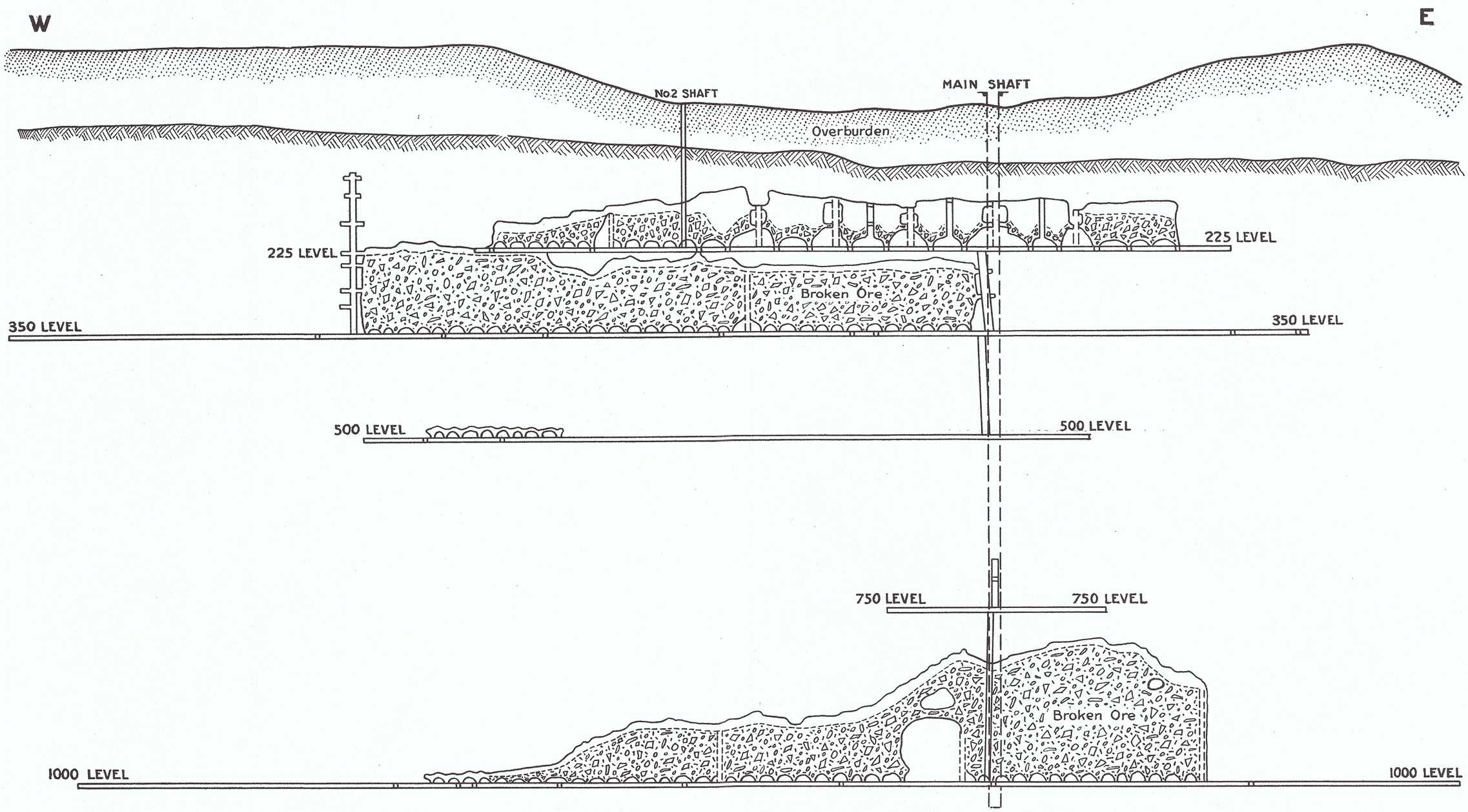
The high quality of the nickel was maintained, and the reputation of the nickel in this respect was extended.

At the end of the year construction work was going on for increasing the capacity of the Refinery by 1,000 metric tons annually.

For the year 1932 the amount of matte received from the Smelter, the Refinery production, the metals in process and the matte on hand at the end of the year is set out in the following table:

	Short Tons	Contents Ni., Lbs.	Contents Cu., Lbs.
Falconbridge Matte Received less refining losses	4,859.604	5,527,518	2,236,299
Produced in marketable form during the year		5,408,373	2,288,897
Metals in process at end of year		1,208,104	334,958
Matte on hand at end of year	22.707	26,077	11,676

Respectfully submitted,
Anton Gronningsater,
Consulting Metallurgist.

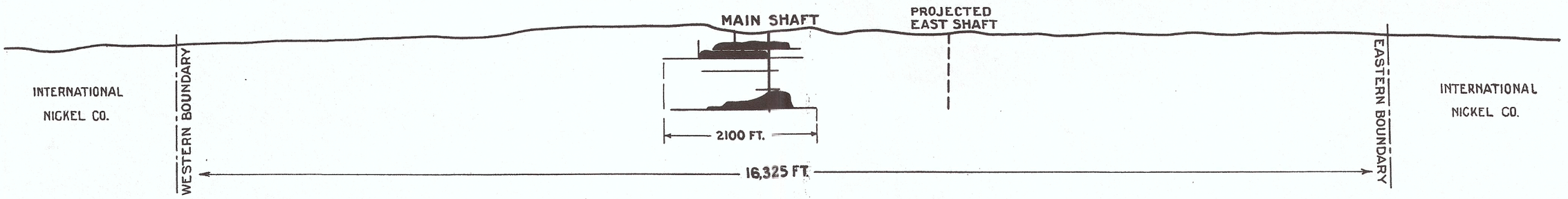


FALCONBRIDGE NICKEL MINES LIMITED

LONGITUDINAL SECTION SHOWING MINE WORKINGS

SCALE: 1 IN. = 150 FT.

STOPES WITH BROKEN ORE



KEY MAP SHOWING LATERAL EXTENT OF PROPERTY

IN RELATION TO WORKINGS

JANUARY 1ST. 1933
THE MAP SPECIALTY CO., TORONTO