

Tenth Annual Report
Falconbridge Nickel Mines
Limited

*For the Year Ending
December 31st, 1938*

Falconbridge Nickel Mines Limited



HEAD OFFICE

25 King Street West, Toronto

PRESIDENT

J. Gordon Hardy

VICE-PRESIDENTS

T. Lindsley

H. S. Munroe

SECRETARY and TREASURER

Norman F. Parkinson

DIRECTORS

J. Gordon Hardy
Halstead Lindsley
T. Lindsley

W. S. Morlock
H. S. Munroe
H. Whittingham

OPERATING STAFF

Manager at Mine and Smelter	- - - - -	Ernest Craig
Manager at Refinery	- - - - -	S. B. Steen
Consulting Metallurgist	- - - - -	Anton Gronningsater

TRANSFER AGENTS and REGISTRARS

Toronto Share Transfer Company, Limited
25 King Street West, Toronto

AUDITORS

Clarkson, Gordon, Dilworth & Nash
Toronto

FALCONBRIDGE NICKEL MINES LIMITED

Report of Directors

Toronto, January 23rd, 1939.

To the Shareholders of
Falconbridge Nickel Mines Limited.

Attached herewith your Board of Directors present the Annual Report on operations for the year 1938, together with the duly audited Balance Sheet and Statement of Earnings as of December 31st.

You will note that the year's business shows a final net, after all charges, of \$1,777,858.02 or 53.2c per issued share, and that \$211,336.02 of that amount, or 6.3c per share, was derived from an accumulation of adjustments, running back to 1932, now taken into account. The usual dividends for the year, in the amount of \$1,001,276.09, totalling 30c per share, were paid, bringing the total dividends paid to date to \$5,716,238.09.

Production of refined metals exceeded the output of 1937 by 27% in nickel and 32% in copper, reflecting not only full-time operations at the Refinery—no strike as there was in 1937—but also resolute steps taken to bring as much as possible of our inventory-in-process into mobile form. Deliveries to consumers registered an increase as to volume of 8% in nickel and 23% in copper over 1937, but the gross value of these sales only exceeded 1937 by 5%. This shows the effect of the considerable drop in copper prices, together with some recession in that of nickel.

Your plants are being maintained in first-class condition and betterments have been provided where necessary. The orderly development of your mining property has continued to yield satisfactory returns, as will be noted from the attached report.

In common with most industries, 1938 was for us a year of uncertainties and alarms but its ultimate outcome was responsive to the efforts exercised. Results will be dealt with more in detail at the Annual Meeting and duly reported to you.

By order of the Board,

J. GORDON HARDY,
President.

FALCONBRIDGE NICKEL MINES LIMITED

TENTH ANNUAL REPORT

YEAR 1938

Falconbridge, Ontario,
January 10th, 1939.

Mr. J. Gordon Hardy, President,
and the Board of Directors,
Falconbridge Nickel Mines Limited.

Dear Sirs:

Please receive herewith my report covering the operation at Falconbridge for the year ending December 31st, 1938. Satisfactory performance of all units is indicated by a somewhat higher production rate, especially evident during the last quarter of the year.

MINE DEVELOPMENT

Combined development footages on all levels during the year were as follows:

Drifting and Cross-Cutting (including Slashing)	8,014 feet
Raising (including Slashing)	2,274 feet
Fill Passes (including Slashing)	422 feet
Diamond Drilling	3,083 feet
Station Cutting	51,428 cu. feet
Shaft Sinking	643 feet

Of the total 8,014 feet of drifting and cross-cutting, 5,877 feet were along the ore zone, with some 2,821 feet driven on levels hitherto unexplored, except by previous diamond drill holes. The 2100 level was opened up for 1,786 feet westerly from No. 5 Shaft, disclosing ore of about average grade but with continuity and width hardly measuring up to the zone at the 1750 horizon. The 1400 level was driven easterly and westerly from No. 1 Shaft for a total distance of 794 feet, and showed an average width of 14.5 feet at better than average grade. Some 241 feet on the 1750 level in the same area indicated the continuation of grade and width to this horizon.

Practically all the balance of drifting on the ore zone was carried out in connection with extensions of stope areas. This work included the westerly advance of the 1200 level drift to a point 887 feet west of No. 1 Shaft. In No. 5 Shaft area, advances were made westerly on the 200 level and both easterly and westerly on the 325 level for stoping purposes—easterly to connect with the fill pass system on the 625 level, and westerly on both 825 and 1000 levels for stope extension. Where these drifts extended beyond the limits of ore reserve blocks, the ore disclosed was at least equal in grade and width to that developed in contiguous blocks.

Stope operations were extended by opening some 1,674 lineal feet of new stopes. With the exception of 400 feet on the 1200 level west of No. 1 Shaft, these were all in the No. 5 Shaft area. Accordingly, the ore hoisted from this area was substantially increased for the year under review.

No. 5 Shaft was deepened 643 feet to 2,457 feet, and stations were established at intervals of 175 feet. Diamond drilling from the shaft bottom obtained a good ore intersection easterly from the shaft.

The fill pass system at No. 5 Shaft is now complete from surface to 825 feet.

It is proposed, during 1939, to complete the connections between No. 1 and No. 5 Shafts on the 1750 and 2100 levels, and to open up new ground between the two shafts at various horizons above the 1200 level. In addition, it is proposed to drive westerly from No. 1 Shaft on the 700 level to explore an ore indication which is now being checked by diamond drilling from surface.

ORE PRODUCTION

Mining activities for ore production are summarized below:

Broken Ore Reserves December 31st, 1937	252,579 tons
Ore Broken in Stopes during 1938	360,436 tons
	<hr/>
	613,015 tons
Less: Trammed from Stopes, 1938	437,885 tons
	<hr/>
Broken Ore Balance December 31st, 1938	175,130 tons

When development ore is included, tonnage of ore hoisted tabulates as follows:

Ore Trammed from Stopes, 1938	437,885 tons
Ore from Development, 1938	59,620 tons
	<hr/>
Total ORE HOISTED	497,505 tons

ORE RESERVES

As indicated by the report for the quarter ending September 30th, the second half of 1938 witnessed a lessening of special impetus to mine-development, in view of straitening business conditions. This brought about the abandonment—at least for 1938—of our program to develop enough new ore each year, sufficient to replace the ore extracted during that year and in addition add one million tons to the Ore Reserves.

You will note accordingly that while over one million tons of new ore were indicated by our work of 1938, yet the ore extracted in that year was not also replaced. In other words, we only increased the net Ore Reserves by some 548,000 tons instead of a million. Attention should be drawn to the results from careful systematic development by diamond drilling—now suspended—of the new Levack prospect, listed under "New Ore from Outside Holdings". This covers an investigation as yet only taken to 600 feet from surface, with the ore-shoot continuing on down strongly.

Our Ore Reserve figures then are:

As of December 31st, 1937:

Falconbridge Mine	6,083,601 tons
Outside Holdings	249,000 tons

Total as of December 31st, 1937	6,332,601 tons
Less: Drawn during 1938	497,505 tons

5,835,096 tons

New Ore added during 1938:

From Falconbridge Mine	276,904 tons
From Outside Holdings	769,000 tons

Total Added during 1938	1,045,904 tons
TOTAL as of DECEMBER 31st, 1938	6,881,000 tons

(Averaging 1.80% Ni and 0.97% Cu)

ORE TREATMENT

The Ore Dressing and Reduction Plants record satisfactory operation, the latter showing a loss of only 1.3% of full possible operating time.

Only 5,421 tons of waste was picked and discarded from the hoisted ore. After deducting this amount and adjusting for difference in above-ground storage, the Reduction Plant performance develops as follows:

Total ORE TREATED	490,938	tons
Made up of: Milling Ore	252,866	tons (51.5%)
Smelting Ore	238,072	tons (48.5%)
Matte Produced	14,779.1	short tons
Nickel in Matte	8,012.7	short tons*
Copper in Matte	4,108.5	short tons
	Nickel	Copper
Metals recovered per ton of ore treated	32.64	lbs.
Metallurgical Losses per ton treated	3.49	lbs.
	36.13	lbs.
Indicated Grade of ORE TREATED (After Waste Rejection)	1.81%	0.95%
Indicated grade of ORE HOISTED (Before Waste Rejection)	1.80%	0.94%

CONSTRUCTION

The completion of that "rounding out" program in Mill and Sintering Plant, referred to in our 1937 report, was accomplished during the year, with considerable benefit to the operation resulting.

Failure of the timbered section of No. 1 Shaft through overburden brought on the necessity of enlarging the excavation and carrying a reinforced concrete lining from bedrock to surface, some 55 feet. At the same time, the existing headframe had to be demolished and a new one erected. Though this shaft was out of service for seven weeks as a result, production was not affected.

GENERAL

Nine dwellings, including two staff residences, were erected in the townsite during the year. This brings the total to 154, of which 16 are for staff members. These dwellings are all occupied by Falconbridge employees.

I wish to record my appreciation of the loyal assistance and co-operation given by staff and employees throughout the year.

Respectfully submitted,

E. CRAIG,
Manager.

FALCONBRIDGE NIKE
and its subsidiaries
FALCONBRIDGE NIKEL
Consolidated Balance Sheet
with Comparative Figures

ASSETS

	31st December 1938	31st December 1937
Current Assets:		
Cash on hand and in banks in Canada, United States and Norway	\$ 1,630,169.50	\$ 913,364.14
Accounts Receivable—Trade	203,711.11	149,238.49
—Sundry	19,629.17	21,731.00
Notes Receivable—Ventures Limited, a shareholder		74,106.00
Securities at cost:		
Investments—miscellaneous (market value \$428,315)	362,174.22	665,782.19
Investment in associated companies' shares	31,300.00	30,300.00
	<u>\$ 2,246,984.00</u>	<u>\$ 1,854,521.82</u>
Inventory determined from book records and certified by responsible officials:		
Refined metals at cost	\$ 646,362.78	\$ 220,971.39
Matte on hand and in process at cost	949,850.65	887,233.33
	<u>\$ 1,596,213.43</u>	<u>\$ 1,108,204.72</u>
Property Account:		
Mine, smelter and refinery buildings, machinery and equipment	\$ 7,791,846.38	\$ 7,129,737.04
Less: Depreciation written off	3,732,823.21	3,046,900.95
	<u>\$ 4,059,023.17</u>	<u>\$ 4,082,836.09</u>
Mining properties and claims	3,033,228.74	2,945,521.63
	<u>\$ 7,092,251.91</u>	<u>\$ 7,028,357.72</u>
Deferred Expenditures, Supplies, etc.:		
Mine development expenditures less amounts written off to mining operations	\$ 220,803.28	\$ 324,977.26
Broken ore in stopes		99,121.05
Mining and refinery supplies, etc.	261,045.50	293,370.02
Prepaid expenses and deferred charges	65,014.91	70,900.22
	<u>\$ 546,863.69</u>	<u>\$ 788,368.55</u>
Raffineringsverket Aktieselskap:		
Special advance recoverable as a tonnage charge on custom metals as and when refined, less repayments		\$ 40,648.06
Deposit with Municipality of Kristiansand re power supply	\$ 70,001.10	70,001.10
	<u>\$11,552,314.13</u>	<u>\$10,890,101.97</u>

AUDITORS' REPORT

We have audited the accounts of Falconbridge Nickel Mines Limited for the year ended 31st December, accounts of your company's wholly owned subsidiary, Falconbridge Nikkilverk Aktieselskap. The assets, liabilities and in the consolidated statements of earnings and surplus. The earnings for the year include adjustments applicable Subject to the foregoing we report that in our opinion the above consolidated balance sheet and related consolidated consistent with the preceding year, so as to exhibit a true and correct view of the state of the combined companies' of our information, the explanations given us and as shown by the books. We have received all the information at Toronto, Canada, 2nd February, 1939.

EL MINES LIMITED

the subsidiary

VERK AKTIESELSKAP

, 31st December, 1938

or 31st December, 1937

LIABILITIES

	31st December 1938	31st December 1937
Capital Stock:		
Authorized 5,000,000 shares no par value		
Issued 3,337,507 shares no par value	\$ 7,038,395.94	\$ 7,038,395.94
Current Liabilities:		
Accounts payable	\$ 127,240.64	\$ 238,107.43
Wages payable	68,104.84	61,093.38
Unclaimed dividends	1,898.58	1,764.96
Reserve for taxes	270,000.00	240,000.00
	<u>\$ 467,244.06</u>	<u>\$ 540,965.77</u>
Interest on Raffineringsverket Aktieselskap advance not taken into revenue		\$ 40,648.06
Earned surplus	\$ 4,046,674.13	3,270,092.20

On behalf of the Board:

J. Gordon Hardy, Director.

T. Lindsley, Director.

\$11,552,314.13

\$10,890,101.97

THE SHAREHOLDERS

have examined the report of Mr. Oscar Boman, State authorized auditor, on the audit which he has conducted of the
ating results of Falconbridge Nikkelverk Aktieselskap have been incorporated in the above consolidated balance sheet
or years amounting in the aggregate to \$211,336.02; these are described in a note following the earnings statement.
ts of earnings and surplus have been drawn up in accordance with accepted principles of accounting and on a basis
at 31st December, 1938, and of the results of their operations for the year ending on that date, according to the best
ations we have required.

CLARKSON, GORDON, DILWORTH & NASH, Chartered Accountants.

FALCONBRIDGE NICKEL MINES LIMITED

and its Wholly Owned Subsidiary

FALCONBRIDGE NIKKELVERK AKTIESELSKAP

Consolidated Earnings Statement

For the Year Ended 31st December, 1938
with Comparative Figures for the Year 1937

	1938	1937
Metal Sales (Gross)	\$6,381,308.62	\$6,079,569.77
Less: Selling and Delivery Expense and Foreign Exchange Adjustment	245,574.86	217,111.86
	<u>\$6,135,733.76</u>	<u>\$5,862,457.91</u>
Add: Increase in Metal Inventories	488,008.71	30,881.53
	<u>\$6,623,742.47</u>	<u>\$5,893,339.44</u>
Operating Costs—Mining, Smelting, Refining, etc.	\$3,827,745.84	\$3,439,445.05
Outside Exploration	2,955.28	21,288.75
Administrative and General Expense	86,245.86	76,951.48
	<u>\$3,916,946.98</u>	<u>\$3,537,685.28</u>
Operating Profit Before Providing for Taxes, Deferred Development and Depreciation	\$2,706,795.49	\$2,355,654.16
Non-Operating Revenue	34,318.18	54,124.43
	<u>\$2,741,113.67</u>	<u>\$2,409,778.59</u>
Provision for Taxes	195,236.02	181,671.28
	<u>\$2,545,877.65</u>	<u>\$2,228,107.31</u>
Profit for the Year Before Providing for Deferred Development and Depreciation	\$2,545,877.65	\$2,228,107.31
Deferred Development Written Off	\$ 248,752.50	\$ 225,271.00
Depreciation	685,922.26	816,564.28
	<u>\$ 934,674.76</u>	<u>\$1,041,835.28</u>
Profit on Sale of Securities	\$1,611,202.89	\$1,186,272.03
Interest on Raffineringsverket Aktieselskap Advance Transferred to Profit and Loss Account	142,423.82	226,188.46
	<u>24,231.31</u>	<u>59,034.58</u>
Net Profit Transferred to Consolidated Earned Surplus	<u>\$1,777,858.02</u>	<u>\$1,471,495.07</u>

Note: The profit shown includes \$128,133.52 representing adjustments of metal inventories and broken ore in stopes applicable to prior years. The provision for depreciation for the year 1938 has been reduced by \$83,202.50 overprovided in prior years.

Consolidated Earned Surplus Account For the Year Ended 31st December, 1938 with Comparative Figures for the Year 1937

	1938	1937
Balance at Beginning of Year	\$3,270,092.20	\$2,799,871.87
Net Profit as Above	1,777,858.02	1,471,495.07
	<u>\$5,047,950.22</u>	<u>\$4,271,366.94</u>
Dividends Paid	1,001,276.09	1,001,274.74
	<u>\$4,046,674.13</u>	<u>\$3,270,092.20</u>
Balance at End of Year	<u>\$4,046,674.13</u>	<u>\$3,270,092.20</u>

Toronto, Ontario,
January 3rd, 1939.

Mr. J. Gordon Hardy, President,
and the Board of Directors,
Falconbridge Nickel Mines Limited.

Dear Sirs:

I beg to submit the following report for the fiscal year ending December 31st, 1938.

Ore Dressing Plant, Mill and Smelter:

The Ore Dressing plant, mill and smelter operated at full capacity throughout the year with the lowest loss of time for interruptions and repairs since the plants were started. This, in connection with the new ball mill and new sintering machine, which were installed during the first half of the year, has permitted a larger tonnage of ore to be treated and a larger metal production than any previous year, without increasing the blast furnace and converter departments. There was a particularly noticeable increase of production during the last quarter of the year.

The tendency to pass more and more work on to the mill has continued, resulting in more flexible operating conditions and better balanced metallurgical practice.

Refinery:

The Refinery operated steadily and normally throughout the year. The year started with an excess of matte accumulated during the strike of the previous year, but this excess was worked off during the first few months and the production later maintained to balance the matte production.

The normal amount of custom matte was received regularly.

The plant for recovery of liquid SO_2 from roaster gases was started up in September and delivery of the product has been maintained since that time to the satisfaction of our, as yet, only customer. The starting up troubles to be expected with a new plant for a new process are gradually being overcome.

For the year 1938, the amount of metals in matte received from the smelter, the refinery production, the metals in process and metals in matte on hand at the end of the year is set out in the following table:

For Falconbridge Account

	Ni., Lbs.	Cu., Lbs.
Metals in Matte Received, less Refining Losses	15,803,958	7,840,033
Produced in Marketable Form During Year	16,425,735	8,250,642
Metals in Process of Refining at End of Year	3,486,806	803,320
Metals in Matte on Hand at End of Year	882,180	449,412
Total of Falconbridge and Custom Refined Metals Produced	18,665,630	9,785,630

Respectfully submitted,

Anton Gronningsater,
Consulting Metallurgist.

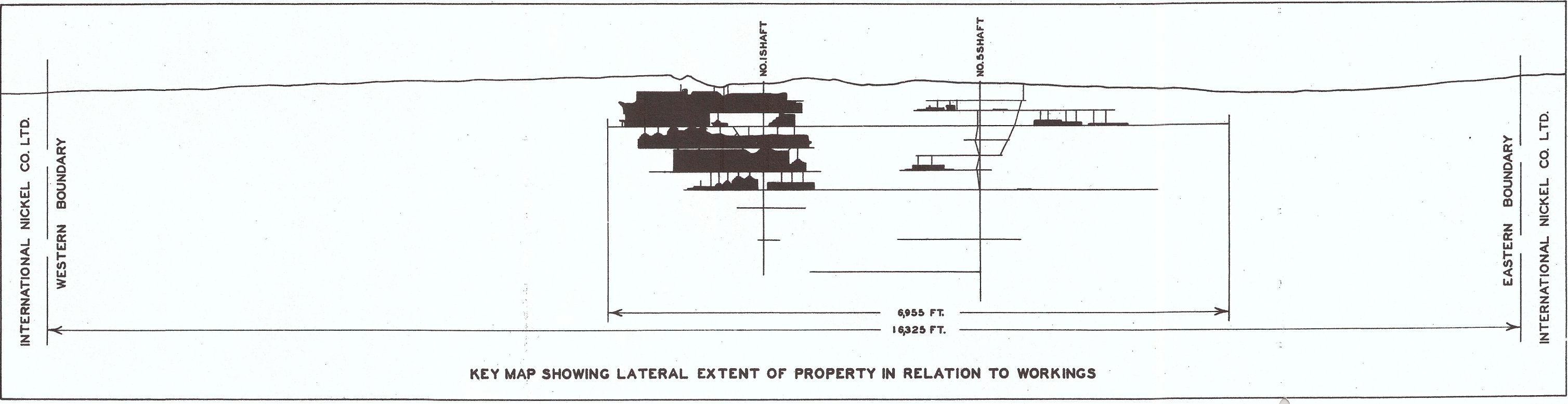
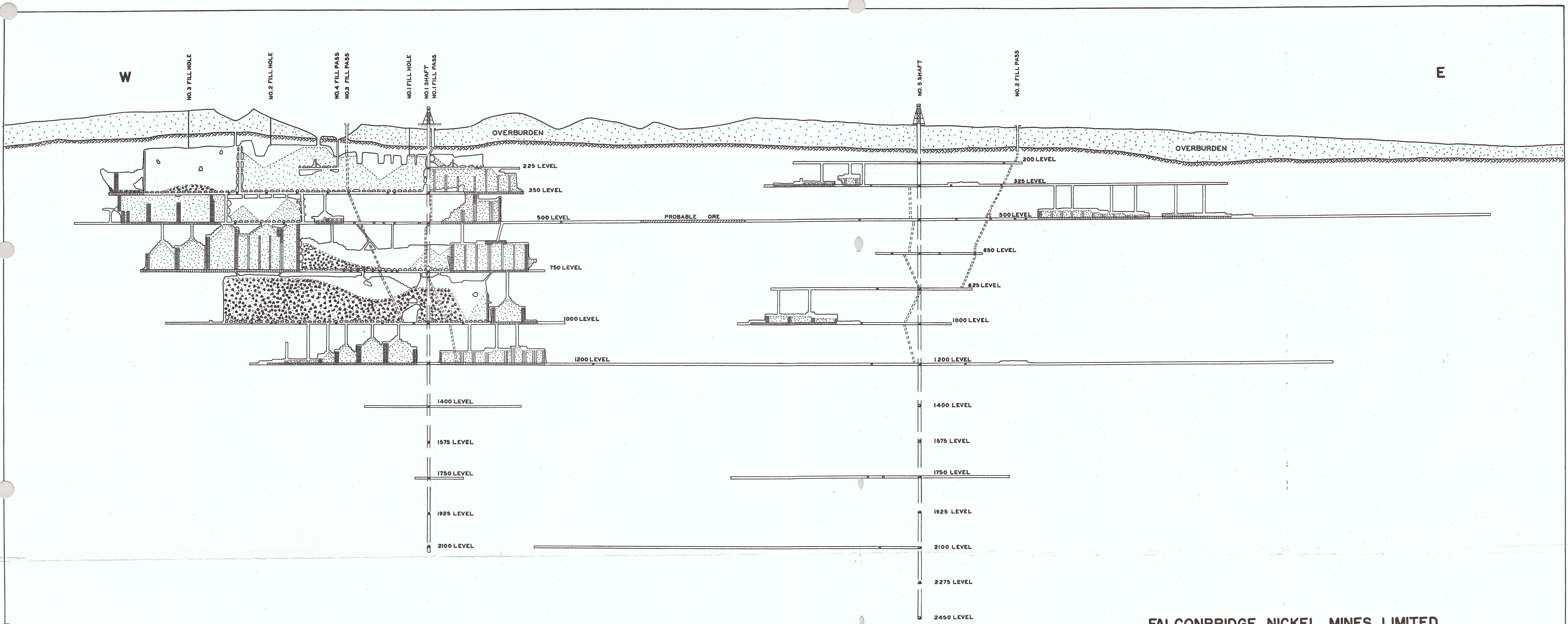
Dividends Paid by Falconbridge Nickel Mines Limited

Dividend Number	Record Date	Dividend Per Share	Amount	
1 to 3	1933	\$0.25	\$ 812,609.97	
4 to 7	1934	0.275	902,173.02	
8 to 11	1935	0.30	997,669.77	
12 to 15	1936	0.30	1,001,234.50	
16 to 19	1937	0.30	1,001,274.74	
				\$4,714,962.00
	1938			
20	March 10th	0.075	250,319.03	
21	June 14th	0.075	250,319.01	
22	Sept. 14th	0.075	250,319.03	
23	Dec. 8th	0.075	250,319.02	1,001,276.09
	Total	\$1.725		\$5,716,238.09



COMPARATIVE SUMMARY OF OPERATIONS AND EARNINGS

Year	Tons Treated	Net Sales	Gross Profit After Taxes
1930	71,626	\$ 68,726.89	
1931	109,520	1,211,229.95	\$ 173,652.18
1932	123,306	2,787,917.78	1,014,378.90
1933	232,661	2,808,328.92	1,505,396.93
1934	272,923	4,001,551.55	1,924,251.00
1935	302,510	4,640,372.57	2,341,489.60
1936	327,783	5,178,812.18	2,597,635.10
1937	438,629	5,862,457.91	2,513,330.35
1938	490,938	6,135,733.76	2,712,532.78

Year	Net Profit after Taxes, Def. Development and Depreciation	Capital Expenditures	Net Current Assets, inc. Metal Inventories (at cost) excluding Broken Ore and Supplies
1930		\$ 332,823.92	\$ 858,598.15
1931	\$ 10,530.69	100,557.43	1,114,484.64
1932	762,420.54	354,496.51	1,685,891.59
1933	1,122,999.28	642,383.03	1,826,058.38
1934	1,415,886.03	205,702.27	2,417,024.75
1935	1,768,558.15	705,617.50	2,860,895.65
1936	1,873,607.05	2,140,624.14	2,057,378.26
1937	1,471,495.07	871,899.98	2,421,760.77
1938	1,777,858.02	662,109.34	3,375,953.37



FALCONBRIDGE NICKEL MINES LIMITED
FALCONBRIDGE MINE
LONGITUDINAL SECTION SHOWING MINE WORKINGS

-  BROKEN ORE IN STOPES
-  FILL IN STOPES

