1928

Anaconda Copper Mining Company

CAPITAL STOCK

December 31, 1928

Authorized,	6,000,000 shares, $50 each	$300,000,000
Issued,	3,648,311 shares, $50 each	182,415,550

OFFICERS

Chairman of the Board . . .	JOHN D. RYAN
President	CORNELIUS F. KELLEY
Vice-President	BENJAMIN B. THAYER
Vice-President	JAMES R. HOBBINS
Vice-President	ROBERT E. DWYER
Secretary and Treasurer . .	ALBERT H. MELIN
General Auditor	JAMES DICKSON
Assistant Secretary	RALPH D. COLE
Assistant Treasurer	DAVID B. HENNESSY

DIRECTORS

Percy A. Rockefeller	John D. Ryan
Benjamin B. Thayer	Cornelius F. Kelley
George H. Church	John A. Coe
Nicholas F. Brady	Andrew J. Miller

Albert H. Melin

OFFICES

Anaconda, Montana
25 Broadway, New York

To the Shareholders of
Anaconda Copper Mining Company:

The outstanding development of the copper industry during the year 1928 was the extraordinary increase in domestic consumption which developed during the second quarter and continued throughout the year.

World production, as reported by the American Bureau of Metal Statistics, amounted to 1,916,471 tons, total stocks decreasing 17,798 tons, indicating world consumption of 1,934,-269 tons, or 10.93 per cent more than 1927, the previous high record. This compares with a normal increase of 6 per cent. Export shipments from North and South America were 674,-221 tons as compared with 641,865 tons during the prior year, an increase of 5.04 per cent; while consumption of new copper in the United States was approximately 947,803 tons, or 20.33 per cent greater than in 1927. World stocks of refined copper at the end of the year (only a part of which was available for shipment) amounted to 81,779 tons compared with 114,514 tons at the beginning of the year and a peacetime maximum of 420,845 tons at May 1, 1921.

The price of copper at the beginning of the year was 13.86c. It declined to 13.675c on March 2, and at the close of the year was 16.275c. The average for the year, as reported by the Engineering and Mining Journal, was 14.57c, being an increase of 1.65c over 1927 average price. Silver also increased in average price from 56.37c to 58.176c, while lead and zinc decreased from 6.755c and 6.242c respectively to 6.305c and 6.027c.

The increase in the income of your Company over that of the prior year was due both to increased copper price and to the expansion of operations.

Acquisition of Clark Properties

In August your Company purchased from interests representing the heirs of the late Senator Clark, all of their mining, milling and lumber interests located in Montana and Idaho, together with the Butte Electric Railway Company and the Montana Hardware Company, for the sum of $4,456,824.58.

Corporate Changes

$36,857,000 par value of the $50,000,000 Fifteen Year 7% Convertible Debentures, due February 1, 1938, were exchanged for stock of your Company in accordance with the terms of the Trust Indenture, increasing the number of shares outstanding from 3,000,000 as of January 1, 1928, to 3,648,311 at the close of business December 31, 1928. Most of the remaining debentures have since been converted.

The $16,933,000 par value Ten Year Series A 6% Secured Gold Bonds due January 1, 1929, were paid and retired at maturity.

Butte, Anaconda & Pacific Railway Company First Mortgage 5% Sinking Fund Gold Bonds, due 1944, were decreased to $2,250,000 at December 31, 1928.

Dividends

In 1928 dividends amounting to $14,419,034.00 were declared by your Company, compared with $9,000,000 the prior year. The quarterly rate of distribution was increased from $.75 to $1.00 on June 26, 1928, to $1.50 on December 24, 1928, and to $1.75 per share on February 2, 1929.

Construction

Expenditures for extensions and improvements to buildings and machinery, including items previously authorized, totalled $4,460,595.98, and were distributed as follows:

Butte Mines	$1,250,985.50
Reduction Works, Anaconda	1,253,188.71
Reduction Works, Great Falls	170,994.95
Slag Treating Plant, East Helena	71,677.39
The American Brass Company	1,210,217.75
Raritan Copper Works	229,565.37
International Smelting Company	171,460.11
Miscellaneous Construction	102,506.20

Results of Operations

Butte Mines

Following is a summary of the results of the operations of your Company, its departments and its subsidiary and affiliated companies.

Development

Drifts, cross-cuts, raises, winzes and shafts in the development work of the Company were extended 34.60 miles, as compared with 30.67 during the year 1927, an increase of 12.81 per cent.

Mine Production

The various mining properties owned by the Company produced the following tonnages:

	Copper Ore and Precipitates	Zinc Ore	Lead-Zinc Ores	Phosphate Rock	Coal
Butte Mines	3,013,494.68	18,159.07	....	....	....
Anselmo	28,628.64	1,874.74	....	....	....
Elm Orlu	4,676.14	87,405.93	....	....	....
Utah-Delaware	1,879.92	....	114,231.61	....	....
Utah-Delaware Leasers	31,105.53	....	23,545.39	....	....
Conda	....	....	....	19,882.50	....
Conda Leases	....	....	....	24,378.39	....
Diamondville	....	....	....	....	338,945.20
Washoe	....	....	....	....	161,498.80

Production of zinc ore was limited to the amount necessarily extracted in the course of development work, because of the low price which prevailed for zinc throughout the year and the available tonnage of custom concentrates.

Miscellaneous Products

Miscellaneous production consisted of:

129,900,676	feet,	lumber.
1,837	tons,	phosphoric acid.
17,045	"	Anaconda Treble Superphosphate.
2,166	"	ammonium phosphate.
38,298	"	sulphuric acid.
8,358	"	arsenic.
56,389,386	pounds,	zinc oxide.
18,759,583	"	white lead.
891,180	"	cadmium.
24,986	"	selenium.
347	"	tellurium.
459,650	"	nickel sulphate.
755,462	"	copper sulphate.
126.87	ounces,	platinum.
524.78	"	palladium.

Slag Treating Plant—East Helena, Montana

This plant operated satisfactorily, treating 68,127.05 tons of slag assaying 15.1% zinc, from which there was produced 10,479.45 tons of fume assaying 71% zinc, which was shipped to the electrolytic zinc plant at Great Falls, Montana.

Reduction Works

The plants of the Company treated the following tonnages:

	Concentrators	Smelters	
	Ore	Cupreous Material	Material Lead
Anaconda Copper Concentrator	2,975,205.95	....	....
Anaconda Zinc Concentrator	416,387.57	....	....
Timber Butte Concentrator	125,686.65	....	....
Tooele Concentrator	427,340.00	....	....
Rico Concentrator	33,905.09	....	....
Anaconda Smelter	....	648,939.82	....
Tooele Smelter	....	117,028.69	294,525.72
Miami Smelter	....	219,401.90	....

Production, including purchased and toll material, was as follows:

	Copper. Lbs.	Lead. Lbs.	Silver. Ozs.	Gold. Ozs.
Anaconda	247,577,554	....	6,165,122.55	36,563.820
Tooele	20,654,286	145,613,624	8,439,371.50	65,117.076
Miami	121,746,288	....	239,748.00	6,637.557

Refineries

Copper

The output of copper refinery at Great Falls was 263,141,497 pounds cathodes, of which 252,679,922 pounds were melted into shapes.

The metal output of the Raritan Copper Works was 391,124,387 pounds fine copper, 17,073,357.72 ounces silver, and 157,641.775 ounces gold.

Zinc

The zinc plants treated 17,864.98 tons of ore produced by the mines of the Company and 686,304.05 tons of ores and concentrates purchased from other producers located in Montana, Utah and Idaho, a total of 704,169.03 tons.

The electrolytic zinc refineries at Anaconda and Great Falls produced 321,122,464 pounds zinc, 16,303,797 pounds zinc in dross, and residue from which there were recovered 24,524,208 pounds lead, 2,575,697 pounds copper, 3,887,284.64 ounces silver, and 10,989.526 ounces gold.

Lead

The International Lead Refining Company at East Chicago, Indiana, treated 88,499.41 tons lead bullion, from which there were produced 165,511,434 pounds common lead, 7,148,635 pounds antimonial lead, 7,805,496.36 ounces silver, and 40,985.793 ounces gold.

Rod and Wire Mill

The mill at Great Falls rolled into rods 164,331,731 pounds of copper; 44,445,199 pounds of rods were drawn into wire, of which 16,337,054 pounds were made into strand. 37,218,686 pounds of rods were shipped from this mill to the Kenosha plant of The American Brass Company to be drawn into wire.

The American Brass Company

The output of manufactured products of the various plants for the year 1928 established a new high record of 778,397,151 pounds, an increase of 135,485,973 pounds over the output for 1927. The manufactured products were distributed among the various plants as follows:

Ansonia	167,462,497	pounds
Buffalo	92,384,621	"
Detroit	81,263,464	"
Hastings	116,590,312	"
Kenosha	125,594,262	"
Torrington	72,751,109	"
Waterbury	100,252,021	"
Toronto	22,098,865	"
	778,397,151	pounds.

There was a large increase in the demand for Anaconda Brass Pipe and the various patented alloys — Anaconda Phosphor Bronze, Tobin Bronze Welding Rods, Everdur, Ambrac Sheets and Condenser Tubes. Tempaloy, a new alloy susceptible of heat treatment and having very great tensile strength, has been developed.

Railways

	Tons Freight	Passengers Carried
Butte, Anaconda & Pacific Railway Company	5,041,424	16,629
Tooele Valley Railway Company	946,326	508,841

Companies Controlled But Not Wholly Owned

North Lily Mining Company

The North Lily mine, in the Tintic Mining District of Utah, was operated on a development basis for the first half of the year 1928 from the Tintic Standard mine, only sufficient ore being extracted to pay for the cost of equipping and of developing the property. In the latter part of May the shaft and surface plant of the North Lily were put into operation, and mining was begun by the North Lily Mining Company. In July the mine began the production of approximately 200 tons per day, which has been continued since that time. During the year there were mined 49,962 tons lead ore, from which there were produced 23,683,375 pounds lead, 729,153.56 ounces silver, and 6,351.789 ounces gold.

Park City District

During the year, International Smelting Company acquired a majority stock ownership of Park Nelson Mining Company and Park Premier Mining Company. The latter company holds a 51% interest in Park Central Mining Company, Park Empire Mining Company and Park Cummings Mining Company.

These companies collectively own more than five thousand acres of land in what may prove to be the easterly extension of the Park City belt of mineralization. Development of these properties will be financed by funds advanced by International Smelting Company.

Walker Mining Company

Operations at the Walker mine were conducted throughout the year. 486,156 tons of ore were broken. The concentrator made an average recovery of 91.294%. 391,275 tons of ore, averaging 1.443% copper were treated, from which 22,653.70 tons of concentrates, averaging 22.755% copper were produced. There were sold to the smelter 22,544.86 tons ore and concentrates yielding 9,613,856 pounds fine copper, 202,313.62 ounces silver, and 13,011.201 ounces gold.

Arizona Oil Company

Operations of the Arizona Oil Company during the year resulted in the production of 174,102 barrels of oil.

Foreign Companies

Silesian-American Corporation

Control of this company is vested in Silesian Holding Company, of which your Company owns a majority of the shares. A dividend of 7% on the preferred shares of Silesian-American Corporation was paid during the year and the principal amount of its outstanding bonds was reduced to $12,429,000 at December 31, 1928.

The properties of its Polish subsidiary, Giesche Spolka Akcyjna, operated as satisfactorily throughout the year as the low price of 5.467c per pound zinc prevailing in European markets, permitted.

The subsidiary companies produced approximately 133,467,000 pounds zinc, 13,953,000 pounds lead, 2,976,000 metric tons coal, 103,590 tons 60° Bé sulphuric acid, 67,360 tons superphosphate and mixed fertilizers, and manufactured large quantities of zinc sheets, zinc battery cups, lead sheets, pipe, shot, litharge, brick and sundry other products.

The greater part of new construction and plant modernization was completed at December 31, 1928, the new electrolytic zinc plant starting operations at the end of the year.

Since acquisition of control by your Company, Giesche Spolka Akcyjna expended to December 31, 1928, $7,604,132.54 for new construction, plant modernization and mine development.

Santiago Mining Company

There was no change in the condition of Santiago Mining Company's affairs.

Andes Copper Mining Company
Chile Copper Company

Copies of the annual reports of Andes Copper Mining Company and of Chile Copper Company are attached hereto for your information.

Financial

The Consolidated Balance Sheet and Income Account for 1927 included Andes Copper Mining Company. The Consolidated Accounts for 1928 do not include Andes, as the equity of Anaconda was decreased below 75%, due to the conversion of the Andes Convertible 7% Debentures.

There is attached hereto a Consolidated Balance Sheet showing the financial condition of the Company and its subsidiary companies at the close of business December 31, 1928, together with an Income Statement for the year, certified to by Messrs. Pogson, Peloubet & Company, Certified Public Accountants.

JOHN D. RYAN,
Chairman of the Board.

CORNELIUS F. KELLEY,
President.

New York, N. Y., April 30, 1929.

ANACONDA COPPER MINING COMPANY
and Subsidiary Companies
Consolidated Balance Sheet—31st December, 1928

ASSETS

FIXED:		
Mines and Mining Claims, Coal Mines, Timber Lands, Phosphate Deposits, Water Rights and Lands for Reduction Works, Refineries and Manufacturing Plants	$101,350,593.97	
Buildings and Machinery at Mines, Reduction Works, Refineries, Manufacturing Plants, Saw-mills, Foundries, Waterworks and Railroads	133,635,929.14	
Investments in sundry companies	144,430,458.56	$379,416,981.67
DEFERRED CHARGES and discount on bonds		8,527,752.78
CURRENT:		
Supplies on hand, advances on Ores and Expenses prepaid	$ 16,031,053.33	
Metals and Manufactured Products in process and on hand—at cost, less reserve	55,671,170.63	
Accounts Receivable	20,202,545.63	
Marketable Securities	2,506,024.68	
Cash	23,327,615.06	117,738,409.3
		$505,683,143.7

We have examined into the affairs of Anaconda Copper Mining Company and of its Subsidia Companies and have verified the Assets, Liabilities and Income shown above. The Net Income is af-r deducting all Development expenditure of the year, Depletion of Coal and Timber Lands and Deprecia-tion of Plants and Equipment.

We hereby certify that this Balance Sheet shows the financial condition at 31st December, 1928, of the Companies as an aggregate whole and that the accompanying Income Account for the year ended tha date is correct as stated.

POGSON, PELOUBET & CO.,
Certified Public Accountants

New York and Butte, 2nd April, 1929.

ANACONDA COPPER MINING COMPANY
and Subsidiary Companies

Consolidated Balance Sheet—31st December, 1928

LIABILITIES

Capital Stock of Anaconda Copper Mining Company: Authorized, 6,000,000 shares of $50.00 each Issued, 3,648,311 shares		$182,415,550.00
Minority Interest in Subsidiary Companies		1,864,020.86
Bonds Outstanding:		
First Consolidated Mortgage Series A 6% Sinking Fund Gold Bonds, due 1953	$104,401,000.00	
Fifteen year 7% Convertible Debentures, due 1938	13,143,000.00	
Butte, Anaconda & Pacific Railway Co. First Mortgage 5% Sinking Fund Gold Bonds, due 1944	2,250,000.00	119,794,000.00
Reserve for Depreciation		50,165,071.06
Current:		
Notes Payable	$ 13,000,000.00	
Interest and Taxes accrued	4,853,944.45	
Accounts and Wages payable	11,481,491.58	
Dividend No. 102 payable 18th February, 1929	5,472,466.50	
Ten year Series A 6% Secured Gold Bonds, due 1929	16,933,000.00	51,740,902.53
Surplus:		
Balance 31st December, 1927	$ 86,048,369.57	
Premium on capital stock issued on conversion of 7% Debentures and other surplus adjustments	3,899,483.17	
	$ 89,947,852.74	
Net Income of the year 1928, per Income Account annexed	24,174,780.59	
	$114,122,633.33	
Deduct, Dividends Nos. 99, 100, 101 and 102	14,419,034.00	99,703,599.33
		$505,683,143.78

Note—In order to comply with the Government Income Tax requirements for the purpose of computing depletion, an additional valuation of the mining property as of 1st March, 1913, has been recorded upon the books of the Company; but, for the sake of uniformity, the result of those entries has been omitted from the current statements.

ANACONDA COPPER MINING COMPANY
and Subsidiary Companies

Consolidated Income Account—Year Ended 31st December, 1928

EXPENSE

Metals and Manufactured Products in process and on hand at beginning of year		$ 53,323,615.93
Ores and Concentrates and Metals purchased		75,566,510.20
Mining, Reduction and Refining of Metals		47,294,093.19
Manufacturing Expenses, including Selling		84,281,244.13
Cost of Merchandise sold and Operation of Public Service Companies		2,235,949.41
Administration Expense and Federal taxes		2,391,445.98
Balance from Operations carried down		26,106,228.80
		$291,199,087.64

Amount charged off this year for Depreciation and Obsolescence		$ 5,296,438.30
Interest, including discount on bonds		10,359,604.70
Balance, Net Income:		
Carried to foregoing Balance Sheet	$ 24,174,780.59	
Apportioned to Minority Interest	10,363.64	24,185,144.23
		$ 39,841,187.23

ANACONDA COPPER MINING COMPANY
and Subsidiary Companies

Consolidated Income Account—Year Ended 31st December, 1928

INCOME

Sales of Metals and Manufactured Products	$222,602,539.36
Tolls, Royalties, Rentals, etc.	9,764,005.17
Sales of Merchandise and Revenue from Public Service Companies	3,161,372.48
Metals and Manufactured Products in process and on hand at end of year	55,671,170.63
	$291,199,087.64

Balance from Operations brought down	$ 26,106,228.80
Income from Investments and marketable securities	13,734,958.43
	$ 39,841,187.23

Andes Copper Mining Company

CAPITAL STOCK

December 31, 1928
No Par Value

Authorized, 3,600,000 Shares — Issued, 3,577,495 Shares

OFFICERS

Chairman of the Board	JOHN D. RYAN
President	CORNELIUS F. KELLEY
Vice-President	BENJAMIN B. THAYER
Vice-President	WILLIAM WRAITH
Secretary and Treasurer	DAVID B. HENNESSY
General Auditor	JAMES DICKSON
Assistant Secretary and Assistant Treasurer	W. KENNETH DALY

DIRECTORS

Percy A. Rockefeller — John D. Ryan
Benjamin B. Thayer — Cornelius F. Kelley
William Wraith — Albert H. Melin
Nicholas F. Brady — Robert E. Dwyer
James Dickson

Office at 25 Broadway, New York
Mines at Potrerillos, Chile

PNYC00009977

To the Shareholders of Andes Copper Mining Company:

During the year 1928 the metallurgical plant for the treatment of sulphide ores operated satisfactorily both metallurgically and in the performance of its equipment. The tonnage of ore treated in December averaged 14,700 tons per day, and at the present writing is in excess of 15,000 tons per day. The metallurgical plant for the treatment of oxide ores started partial operation in the second quarter of the year, but the plant was not completed until the following quarter.

The sulphide plant produced during the year, blister copper containing 92,469,586 pounds fine copper, 222,675.51 ounces silver, and 14,477.955 ounces gold. The oxide plant produced wire bars amounting to 11,587,471 pounds fine copper, making the total production for the year 104,057,057 pounds, of which 119,083 pounds were used in the plants of the Company.

Sales of copper amounted to 88,926,898 pounds, resulting in a gross income of $8,131,830.18 before deduction of bond interest and discount, taxes, miscellaneous charges and depreciation.

On October 5, 1928, a special dividend of 75c per share was declared, payable December 17, 1928.

On November 8, 1928, notice was given by your Company that all of its Convertible 7% Debentures outstanding would be called for redemption on January 1, 1929, and the entire issue has been converted.

Mining

The ore mined during the year was as follows:

	Short Tons	% Cu.
Sulphide Ore to the Reduction Works	3,865,400	1.51
Oxide Ore to the Leaching Plant	807,976	1.48
Oxide Ore to the Converters	6,426	4.14
Oxide Ore to Storage	1,179,268	2.73
Total	5,859,070	1.75

In addition to this, waste material overlying the Central Oxide Orebody was removed to the extent of 921,390 tons. In all classes of underground openings driven during the year, progress amounted to 99,814 feet. In addition, 4,998 feet of diamond drilling was performed.

South Oxide Orebody

Removal and storage of ore from this orebody was continued until late in December, when all work in this division was suspended, sufficient ore having been removed to prevent loss by caving as a result of extraction operations in the South Sulphide Orebody.

South Sulphide Orebody

With the exception of a relatively small amount of ore obtained in development work, this orebody furnished all the sulphide ore mined during the year.

Central Oxide Orebody

Extraction of ore from this orebody commenced in April, and with the exception of a small tonnage of ore that was reclaimed from storage, all ore sent to the leaching plant was obtained from the Central Oxide Orebody.

Main Adit Ore Bin System

Construction of the bins and loading stations for the handling of sulphide and oxide ore was completed during the year, and virtually all construction work on the ore-passes connecting the bins with the "3184" Intermediate Haulage Level was completed.

Mine-To-Mill Railway

During the year there were transported 4,017,384 wet tons of sulphide ore, 853,459 wet tons of oxide ore and 1,221 cars of miscellaneous freight. There were added to the rolling stock two 45-ton electric locomotives and thirty-four 50-ton capacity ore cars.

Concentrator

At the concentrator there were treated 3,849,337 tons of ore having an average copper content of 1.51%. Concentrates produced amounted to 170,717.69 dry tons having an average copper content of 28.233%.

The recovery in concentration was 82.931% of the total copper, and 93.869% of the sulphide copper contained in the ore.

Leaching Plant

The first oxide ore to be leached was passed through the Crushing Plant in April, and leaching was started in June. Difficulties were encountered in obtaining uniform percolation of leaching solutions through the charge by reason of an excessive amount of fines. After considerable experimental work it was found necessary to remove the fines and store the same for future treatment by special methods. This procedure resulted in uniform leaching operation with satisfactory recoveries so that at the present time the plant is operating at approximately 93% of its rated capacity, which will be brought up to 100% upon the installation of additional equipment in the acid manufacturing plant. 638,784 tons of ore, having an average copper content of 1.481%, were leached during the year.

Acid Plant

Production of sulphuric acid for use in the Leaching Plant was begun in June, and there were produced during the year 21,003 tons of 60° Bé acid.

Purification Plant

At this plant, in which copper-enriched solutions from the Leaching Plant are conditioned for delivery to the Electrolytic Precipitation Plant, operations commenced in June and continued throughout the balance of the year.

Electrolytic Precipitation Plant

This plant started in operation July 13 and thereafter during the year produced 11,833,813 pounds of cathode copper.

Power Plants

The Barquito Power Plant generated 83,053,700 kilowatt-hours; the Montandon Hydroelectric Plant generated 12,827,700 kilowatt-hours, and 15,702,070 kilowatt-hours were generated at the Smelter Power House from waste heat steam.

Water Supply

La Ola pipe line operated satisfactorily and without delay throughout the year. The average flow of water for the year was 22.11 second-feet.

Construction

Construction during the year comprised the following:

Completion of the Metallurgical Plant for the treatment of oxide ore; partial installation of a fifth boiler at the Barquito Power Plant; completion of erection of 72 dwellings.

and partial erection of 72 dwellings; and erection of a locomotive and car repair shop for the mine-to-mill railway.

Land

During the year the Company acquired six parcels of land aggregating 543.44 acres, bringing the total acreage held by the Company to 290,920.21 acres.

Potrerillos Railway Company

During the year there were shipped from Barquito to Potrerillos 82,513 short tons of freight; from Pueblo Hundido to Potrerillos 14,298 tons; and from Potrerillos to Barquito 55,614 tons, making a total of 152,425 tons of material shipped.

Financial

Attached hereto is a Balance Sheet and Income Account for the year 1928, certified to by Messrs. Pogson, Peloubet & Company, Certified Public Accountants.

JOHN D. RYAN,
Chairman of the Board.

CORNELIUS F. KELLEY,
President.

New York N. Y., April 30, 1929.

ANDES COPPER MINING COMPANY

(Including Assets and Liabilities of Potrerillos Railway Company)

Consolidated Balance Sheet—31st December, 1928

ASSETS

Fixed:		
Mines, Mining Claims, Lands and Concessions, including Development	$ 36,687,875.85	
Buildings and Machinery at Mines, Reduction Works, Power Plants, Railways and Port Equipment	47,568,284.33	
Investments	25,309.03	$ 84,281,469.21
Current:		
Supplies on hand and Expenses prepaid	$ 3,626,740.70	
Metals in process and on hand—at cost	1,618,847.21	
Accounts Receivable	4,850,929.97	
Cash	899,300.06	10,995,817.94
		$ 95,277,287.15

LIABILITIES

Capital Stock:		
Authorized, 3,600,000 shares—no par value		
Issued, 3,577,495 shares		$83,247,325.00
Reserve for Depreciation		800,000.00
Current:		
Notes Payable	$ 6,000,000.00	
Interest and Taxes Accrued	885,815.44	
Accounts and Wages Payable	2,358,033.38	
Convertible 7% Debentures, payable 1st January, 1929	122,100.00	9,365,948.82
Surplus:		
Balance 31st December, 1927	$ 250,644.47	
Net Income of the year 1928, per statement annexed	3,933,721.11	
	$ 4,184,365.58	
Deduct, Dividend paid 17th December, 1928	2,320,352.25	1,864,013.33
		$ 95,277,287.15

We have examined into the affairs of Andes Copper Mining Company and Potrerillos Railway Company and have verified the Assets, Liabilities and Income shown above. We hereby certify that this Balance Sheet shows the financial condition of the combined companies at 31st December, 1928, and that the accompanying Income Account for the year ended that date is correct as stated.

POGSON, PELOUBET & CO.,
Certified Public Accountants

New York, 2nd April, 1929.

ANDES COPPER MINING COMPANY

(Including Income of Potrerillos Railway Company)

Consolidated Income Account—Year Ended 31st December, 1928

Operating Revenue:		
Copper sold—88,926,898 pounds at an average of 15.2435 cents per pound		$ 13,555,544.35
Production Cost, less value of silver and gold		5,676,683.11
Operating Profit		$ 7,878,861.24
Other Income		252,968.94
		$ 8,131,830.18
Charges Against Income:		
Taxes and Miscellaneous charges	$ 1,570,527.97	
Interest, including discount on Debentures	2,077,581.10	
For Depreciation of Plant and Equipment	550,000.00	4,198,109.07
Net Income, carried to Balance Sheet		$ 3,933,721.11

Note—In order to comply with the Government Income Tax requirements for the purpose of computing depletion, an additional valuation of the mining property has been recorded upon the books of the Company; but, for the sake of uniformity, the result of those entries has been omitted from the current statements.

Chile Copper Company

CAPITAL STOCK

December 31, 1928

Authorized,	5,400,000 shares, $25 each	. . . .	$135,000,000
Issued,	4,415,499 shares, $25 each	. . . .	$110,387,475

Chile Copper Company and Chile Exploration Company

OFFICERS

Chairman of the Board . .	JOHN D. RYAN
President	CORNELIUS F. KELLEY
Vice-President	BENJAMIN B. THAYER
Vice-President	HERMAN C. BELLINGER
Secretary and Treasurer . .	CHARLES W. WELCH

DIRECTORS

John D. Ryan	Percy A. Rockefeller
Cornelius F. Kelley	Nicholas F. Brady
Benjamin B. Thayer	Andrew J. Miller
George H. Church	Herman C. Bellinger

Robert E. Dwyer

Edward J. Craig, Resident Director, Chile Exploration Company

Office at 25 Broadway, New York
Mines at Chuquicamata, Chile

To the Shareholders of Chile Copper Company:

During 1928, the operating company, Chile Exploration Company, was permitted by the improved condition of the copper market, to utilize to some extent its increased productive capacity, producing 265,863,517 pounds of electrolytic copper. The cost of producing copper in the year 1928 was 8.271c per pound, including in cost, depreciation, taxes, interest and bond discount, but excluding depletion.

Expenditures on construction during the year amounted to $1,394,836.87. Charges to Obsolescence, Profit and Loss, etc., totalled $4,808,641.52. The book value of property accounts was decreased from $160,666,881.94 at the beginning of the year to $157,253,077.29 at the close, a net decrease of $3,413,804.65.

Financial Results

Sales of copper during the year amounted to 282,998,571 pounds, at an average of 15.034c per pound, as compared with sales for the year 1927 of 235,291,177 pounds at an average of 13.294c. The operating profit for the year was $28,159,030.73, as against $18,050,608.87 for the previous year. After including other income and deducting charges against income, taxes, interest and bond discount on bonds, depreciation, etc., there remained a net income for the year of $19,943,864.19, as against $11,085,537.13 for the previous year.

Mining Claims

During the year 1928 the Chile Exploration Company acquired ten new mining claims, abandoned nine mining claims and reduced the area of seven claims from 21 hectares to 7 hectares; four new claims for miscellaneous purposes were acquired.

Mine

The total length of bench faces as of December 31, 1928, was 58,334 feet, as compared with 53,001 feet as of the end of the previous year.

The ore shipped to the plant during the year amounted to a total of 9,463,663 short tons, averaging 1.592% copper, which consisted of 9,455,746 short tons of a grade of 1.592% from the mine proper and 7,917 short tons of a grade of 1.856% loaded from old dumps. In addition 163,921 short tons of ore, averaging 1.13% copper, were placed on stock piles.

Waste removal during the year amounted to a total of 5,535,722 short tons, averaging 0.42% copper.

In blasting operations 11,441 feet of tunnels and 442,430 feet of churndrill holes were blasted during the year.

The north railway outlet for Bench E-1 was completed and electrified and that for Bench C-1 is nearing completion. Electrification of mine railways has been expanded. Of the 46.7 miles of standard gauge railway track at the mine 11.7 miles have been electrified. Eight electric locomotives are now in service at the mine, which at the end of the year were handling 66% of the ore transportation.

Liquid oxygen blasting has proven successful. 3,453,159 short tons of material have been blasted by this method up to the end of the year.

Plant

A total of 9,466,985 short tons of ore was crushed during the year. The average leaching extraction obtained from 859 charges treated was 88.80%, as compared with 88.85% for the previous year. There were produced during the year 265,863,517 pounds of electrolytic copper. The following tabulation shows a comparison of results by quarters:

Period 1928	Ore Crushed Short Tons	Average Per Day	Per Cent Copper in Ore Leached	Per Cent Ampere Efficiency	Per Cent Net Recovery	Pounds Copper Produced
1st Qr.	1,932,111	28,413	1.622	86.06	90.20	53,926,094
2nd Qr.	2,157,534	29,966	1.543	86.12	88.25	59,055,601
3rd Qr.	2,311,156	30,815	1.606	85.73	87.82	69,062,052
4th Qr.	3,066,184	37,392	1.590	82.79	89.03	83,819,770
Year	9,466,985	31,875	1.592	84.93	88.80	265,863,517

Construction

Two new liquid oxygen units, each with a rated capacity of 80 litres per hour, were added, bringing the total capacity of the Liquid Oxygen Plant to 230 litres per hour, which is sufficient to blast about 650,000 short tons of material per month.

Four 76-ton combination third-rail and storage battery electric locomotives were added to the mine haulage system and two additional are on order. Third-rail electrification was completed on the S-loop to the mine and on the north approaches to Benches D-1, D-2 and E-1.

Four third-rail and trolley electric locomotives were placed in service on the tailings disposal system.

Straight air train control was installed on the electric and steam locomotives at the mine and on the ore cars.

Railroad lines of 30" gauge in the Plant, with the exception of the small industrial lines, were converted to meter gauge to conform to the change in gauge of the Antofagasta and Bolivia Railway.

Census

The average number of inhabitants in Chuquicamata during 1928 was 13,675, as compared with 15,855 for 1927. At Tocopilla the average number of inhabitants housed by the company during the year 1928 was 757, as compared with 638 for 1927.

The average working force at Chuquicamata during 1928 was 5,233 men, as compared with 5,594 for 1927. At Tocopilla the average working force during 1928 was 449, as compared with 613 for 1927.

Tocopilla Power Station

An average of 51,379 KW was generated. The fuel oil consumption in Tocopilla for the year amounted to 1,338,813 barrels, which represents an oil factor of 0.9938 pounds per KW hour generated, or, conversely, 337.11 KW hours per barrel (42 gallons) of fuel oil.

Financial

Attached hereto you will find a consolidated balance sheet at the close of business December 31, 1928, together with an income statement for the year, certified to by Messrs. Pogson, Peloubet & Company, Certified Public Accountants.

JOHN D. RYAN,
Chairman of the Board.
CORNELIUS F. KELLEY,
President.

New York, N. Y., April 30, 1929.

CHILE COPPER COMPANY
and Subsidiary Companies

Consolidated Balance Sheet—31st December, 1928

ASSETS		
FIXED:		
Property Investment	$ 99,338,600.24	
Plant and Equipment at Mines, Reduction Works, Power Plants, Railroads, Steamships, etc.	57,914,477.05	
	$157,253,077.29	
Less, Reserve for Depreciation of Plant and Equipment	20,950,628.29	$136,302,449.00
DEFERRED CHARGES including discount on bonds		9,346,061.48
CURRENT:		
Supplies on hand and Expenses prepaid	$ 6,369,827.40	
Copper in process and on hand, at cost	1,012,479.33	
Accounts Receivable	11,120,780.33	
Cash and Call Loans	6,369,603.41	24,872,690.47
		$170,521,200.95
LIABILITIES		
CAPITAL STOCK:		
Authorized, 5,400,000 shares of $25.00 each		
Issued, 4,415,499 shares		$110,387,475.00
TWENTY-YEAR 5% GOLD DEBENTURES, due 1947:		
Authorized, $35,000,000.00		
Issued and outstanding		35,000,000.00
RESERVE for Renewals and Replacements, Insurance, etc.		1,099,712.14
CURRENT:		
Interest and Taxes accrued	$ 3,777,186.45	
Accounts and Wages payable	2,797,110.36	6,574,296.81
SURPLUS:		
Surplus 31st December, 1927	$ 9,106,535.81	
Net Income of the year 1928, per statement annexed	19,943,864.19	
	$ 29,050,400.00	
Distributions to stockholders Nos. 21, 22, 23 and 24	11,590,683.00	17,459,717.00
		$170,521,200.95

We have examined into the affairs of Chile Copper Company and of its subsidiary companies and have verified the Assets, Liabilities and Income shown above. We hereby certify that this Balance Sheet shows the financial condition at 31st December, 1928, of the companies as an aggregate whole and that the accompanying Income Account for the year ended that date is correct as stated.

POGSON, PELOUBET & CO.,
Certified Public Accountants.

New York, 2nd April, 1929.

CHILE COPPER COMPANY
and Subsidiary Companies

Consolidated Income Account—Year Ended 31st December, 1928

OPERATING REVENUE:		
Copper sold—282,998,571 pounds at an average of 15.034 cents per pound		$ 42,544,972.71
PRODUCTION COST		14,385,941.98
OPERATING PROFIT		28,159,030.73
OTHER INCOME		928,820.04
		$ 29,087,850.77
CHARGES AGAINST INCOME		
Taxes and Miscellaneous Charges	$ 4,054,920.25	
Interest and Discount on Bonds	2,168,496.62	
For Depreciation and Obsolescence of Plant and Equipment	2,920,569.71	9,143,986.58
NET INCOME, carried to Balance Sheet		$ 19,943,864.19

NOTE—In order to comply with the Government Income Tax requirements for the purpose of computing depletion, an additional valuation of the mining property as of 1st March, 1913, has been recorded upon the books of the Company; but, being made for tax purposes only, the result of those entries has been omitted from the current statements.