

REPORT
of the
**Anaconda
Copper Mining Company**

For the Year Ended December 31st, 1921

N11069

PNYC00006099

Anaconda Copper Mining Company

CAPITAL STOCK

Authorized and Issued, 3,000,000 shares, \$50 each \$150,000,000

OFFICERS

<i>Chairman of the Board</i>	. . .	JOHN D. RYAN
<i>President</i>		CORNELIUS F. KELLEY
<i>Vice-President</i>		B. B. THAYER
<i>Secretary and Treasurer</i>	. . .	A. H. MELIN
<i>General Auditor</i>		J. T. ROBERTS
<i>Assistant Secretary</i>	. . .	R. D. COLE
<i>Assistant Treasurer</i>	. . .	D. B. HENNESSY

DIRECTORS

William Rockefeller	John D. Ryan
B. B. Thayer	Cornelius F. Kelley
George H. Church	Charles F. Brooker
Nicholas F. Brady	Andrew J. Miller
	A. H. Melin

OFFICES

ANACONDA, MONTANA
25 BROADWAY, NEW YORK

*To the Shareholders of the
Anaconda Copper Mining Company:*

An available supply of copper far in excess of the demand for consumption resulted in the demoralization of the industry during the year 1921.

The industrial depression that had become acute in the last quarter of 1920, continued beyond the first of the year, resulting in a greatly restricted demand. The surplus stocks resulting from the sudden termination of the war, and which had been carried over, showed no substantial decrease during the year, as production had been maintained at a level about equal to current consumption. Quantities of copper and brass scrap continued to be marketed. The result was a rapid increase during the first quarter, of refinery stocks.

The market price for the metal declined to less than 12 cents a pound, while the cost of production remained relatively high, due to prevailing wages, freight rates, and the cost of supplies.

To meet the situation a suspension of operations was unavoidable, and accordingly the Company's production ceased about April 1st, the mines remaining closed to the end of the year. Notwithstanding similar action was taken by nearly all of the larger producers, refinery stocks continued to increase until May, due to the refining of blister copper produced prior to the shutdown. From May to the close of the year stocks showed a gradual decline, production from mines in the United States having been reduced to less than 20% of the normal operating maximum. The price continued low, declining to about 11.63c per lb. in August, then gradually advancing to about 14 cents at the close of the year.

Under these conditions it was impossible to avoid sustaining a heavy loss during the year. The aggregate of all items entering into the profit and loss statement is \$16,999,555.19, which upon analysis is shown to be due to the following general causes:

(a) \$3,188,745.34 resulting from marketing metals in the liquidation of stocks at prices below the cost of production and carrying charges as set up in the inventory of December 31, 1920.

(b) \$2,886,637.26 from the adjustment of inventories of copper, lead and zinc to the respective market price of these metals at December 31, 1921.

(c) \$5,243,669.20 was due to interest, bond discount and depreciation charges.

(d) \$5,680,503.39 was expended during the non-operating period for maintenance of the property and necessary organization. Included in this amount are the sums expended in the various communities, either solely or largely dependent upon the operations of your Company, for the relief of former employees and their families.

Convinced that in order to protect the business of the Company, it should be placed in a position to control the outlets of its metals and to promote the sale and dis-

tribution of copper and brass products, negotiations were initiated for the purchase of the shares of The American Brass Company. You have heretofore been advised of the details of this transaction. You are now informed that it was consummated February 10, 1922, when more than ninety-nine percent (99%) of the Brass shares were acquired by your Company and its subsidiary, the United Metals Selling Company.

Upon its becoming assured that these negotiations would be successful, operations were resumed, the mines starting production January 16, 1922.

An interesting development resulting from the efforts to promote the use of both copper and zinc, has been the perfection of the Anaconda metal shingle. Roofing is a use for which copper and zinc, particularly the former, are peculiarly adapted. Heretofore, the cost of sheet copper and the difficulty of securing its proper application to roofs, has greatly retarded its use. The Anaconda shingle solves the problem. Although not perfected until October, an operating plant and selling organization have been developed, and the product is now being marketed.

Following is a summary of operations conducted during the year.

Copper Department

Mines

Operations at Butte were conducted on a restricted scale during the first three months of the year. There were mined 353,055.50 wet tons of ore and 8,115.64 tons of precipitates were produced.

Concentrator and Smelter

At the concentrator there were treated 373,409.81 tons of ore, 43,053.12 tons of slimes from the ponds, and 224,576.90 tons of tailings.

The Leaching Plant treated 148,900 tons of tailings, from which there were produced 841.68 tons of cement copper.

The Anaconda Smelter, including the Concentrator, treated for all companies 456,492.78 tons of ore. Of the total amount, 395,238.51 tons of ore were produced by the mines of the Company; 54,200.27 tons of ore were either purchased from or treated for other companies; and 7,054.00 tons of material were from the old plants at Anaconda and Butte. No copper ores were treated at Great Falls except a small tonnage of concentrates from Anaconda used for the fluxing of zinc plant residue.

There were produced 36,257,591 pounds of fine copper, 2,269,875.23 ounces of silver, and 8,725.890 ounces gold. Of this production, 32,267,345 pounds fine copper, 2,137,062.25 ounces silver, and 8,618.538 ounces gold were produced for your Company.

Refineries

The refinery at Great Falls produced during the year, 41,842,790 pounds of cathodes, all of which were melted into shapes at that point.

The refinery of the Raritan Copper Works at Perth Amboy, N. J., produced for all companies, 169,700,240 pounds fine copper, 10,370,834.03 ounces silver, and 51,473.676 ounces gold.

Rod and Wire Mill

Operations at the Rod Mill, which were reduced from a two shift basis April 1st to a one shift basis, were further reduced August 1st to a basis of three shifts per week, and entirely suspended on October 19th. The total production of rods for the year was 42,435,436 pounds. Of this amount 17,635,512 pounds were manufactured into wire, of which 12,393,221 pounds were made into strand. The operations of the Wire Mill continued throughout the year, but on a reduced basis.

Zinc Department

Mines

From the Butte Mines of the Company there were produced 58,244.65 wet tons of zinc ore.

Reduction Works

The plants at Anaconda and Great Falls treated 126,514.59 tons of ore and other zinciferous material. Of this amount, 76,435.30 tons of ore were produced by the mines of the Company, and 50,079.29 tons of ore and concentrates were purchased.

The electrolytic plant at Great Falls produced 22,684,264 pounds zinc, 622,273 pounds zinc in dross; and residue from which there were produced 12,008,332 pounds lead, 1,312,379 pounds copper, 2,055,939.48 ounces silver, and 5,268.756 ounces gold.

Miscellaneous Products

Lumber

The sawmills at Bonner and Hope cut 39,832,619 feet of lumber and purchased 241,454 feet, of which 13,276,760 feet were shipped to the departments of the Company, 20,422,673 feet were sold commercially, the major portion going to eastern points, 300,565 feet were used at the mills for repairs and construction, and 1,552,223 feet were supplied to the factory for manufacturing, or a total disposition of 35,552,221 feet; increasing the stocks of finished lumber on hand by 4,521,852 feet; leaving a balance on hand at December 31st, 1921, of 52,940,513 feet.

Coal

At Diamondville, Wyoming, there were produced 292,833.75 tons of coal, 87,592.55 tons of which were shipped to other departments of the Company, 168,093.90 tons were sold commercially and 37,147.30 tons were used at the coal mines.

At Washoe, Montana, there were produced 136,576.20 tons of coal, 44,033.40 tons were shipped to other departments of the Company, 86,632.80 tons were sold commercially and 5,910.00 tons were used at the coal mines.

At Sand Coulee, Montana, there were produced 21,201.85 tons of coal, 17,614.50 tons were shipped to other departments of the Company, 3,479.35 tons were sold commercially, and 108.00 tons were used at the coal mines.

Arsenic

As a by-product of copper smelting operations there were produced 2,467,352 pounds of arsenic, of which 1,055,281 pounds were refined, assaying more than 99% Arsenious Oxide. Sales during the year amounted to 1,888,294 pounds at an average price of 7 cents per pound, of which 1,403,044 pounds were crude and 485,250 pounds were refined.

Sulphuric Acid

The sulphuric acid plant at Anaconda produced 13,562.54 tons of sulphuric acid, averaging 60 Deg. Beaumé. This was supplied to the flotation and leaching plants.

Fertilizer

In order to utilize the excess capacity for the production of sulphuric acid at Anaconda, the Company has entered into the fertilizer field. The phosphate rock treated with sulphuric acid is converted into a product known to the trade as "Treble-Superphosphate," containing approximately 48% phosphoric acid.

This department is as yet in a state of development.

The mines at Conda, Idaho, produced 4,078.70 tons of rock, averaging 32.31% P2O5. The rock crushing plant, together with facilities for mining and shipping rock, were practically completed by the end of the year. The small pilot phosphate plant at Anaconda treated 5,431.57 tons of rock, averaging 32.2% P2O5, of which 2,122.74 tons were produced by the mines and 3,308.83 tons were purchased, from which there were produced 1,805.30 long tons of Treble Superphosphate, averaging 45.99% P2O5.

Butte, Anaconda & Pacific Railway Company

The Railway transported 1,079,160 tons of ore and other freight, and 152,592 passengers. The gross revenues were \$610,383.34; rental and miscellaneous receipts \$14,863.86; operating expenses \$724,536.82; taxes, interest and rental of leased lines, \$239,600.93; net loss, \$338,890.55.

International Smelting Company

International, Utah

The Copper Plant was closed down during the entire year.

The Lead Plant operated on a curtailed basis until July 5th, during which time there were treated 61,707.45 tons of ore, from which there were produced 9,216,564 pounds of fine lead, 1,281,558 pounds of fine copper, 1,529,565.96 ounces silver and 4,297,051 ounces gold. A general clean-up of flue dust and other by-products resulted in production of 1,006,066 pounds of arsenic.

The operations of the Tooele Valley Railway Company were continued throughout the year. The Railway handled during the year 70,100 tons of ore and miscellaneous freight.

Miami, Arizona

The smelter at Miami was down from April 23d until November 17th, when operations were resumed to treat the accumulated concentrates shipped by the Miami Copper Company.

There were treated during the year 104,654.28 tons of concentrates and purchased ores, from which there were produced 50,818,557 pounds of fine copper, 120,897.19 ounces silver, and 1,258.185 ounces gold.

International Lead Refining Company

The refinery at East Chicago, Indiana, treated 7,974.68 tons of lead bullion from the Tooele Plant, and 3,268.31 tons of purchased ore and bullion, from which there were produced 20,683,128 pounds common lead, 914,875 pounds antimonial lead, 2,612,959.96 ounces silver, and 9,020.993 ounces gold.

Anaconda Lead Products Company

The plant was shut down from March 15th to October 16th. There were produced during the year 4,601,553 pounds of white lead; sales amounting to 5,559,418 pounds materially reduced the stocks on hand. The plant is now on an operating basis of about 20 tons of white lead daily.

Walker Mining Company

Mining operations except development work at the Walker Mine and mill were discontinued throughout the year. The ore reserves at the end of the year were estimated at 900,000 tons, averaging 4.2% copper, carrying also values in silver and gold. The tramway to Spring Garden was completed. There are on hand at the mill more than 7,600 tons of concentrates, assaying 19.76% copper, 7.46 ozs. silver per ton, and .19 ozs. gold per ton, which will be shipped to Tooele when smelting operations are resumed.

Arizona Oil Company

During the year the Arizona Oil Company produced 328,574 barrels of oil. Production was lower than in previous years, due to a strike of employees throughout the California oil fields, resulting in a temporary close-down of practically all companies operating in the Bakersfield district. Dividends of \$13.70 per share were paid, your Company receiving \$111,792.00 from this source.

South America

Andes Copper Mining Company

Curtailment of operations at Potrerillos went into effect at the beginning of the year, and in consequence the development work done was less than that of the previous year.

Development

Churn drilling to the extent of 4,840 feet was done during the year.

There were added to the ore reserves 10,628,006 tons, averaging 1.493% copper. This additional ore was sulphide ore without superimposed oxides. The total ore reserves at the end of the year were 138,890,509 tons, having a copper content of 1.498%. The amount of work done in drifts, raises and winzes was 11,945 feet.

The main adit was advanced ninety-seven feet. The large flow of water mentioned in last year's report decreased to approximately 1,590 gallons per minute.

Water Supply

No work was done during the year on the La Ola pipe line.

Potrerillos Railway

The Potrerillos Railway, consisting of the main line from Pueblo Hundido to the townsite of Potrerillos, and the line connecting Barquito with the Chilean State Railroad at Chanaral, was operated satisfactorily during the year.

Property

Additional acreage was taken up in the year 1921, making a total of 273,241 acres owned by the Company.

Construction

Construction work was limited to the completion of houses partially finished.

Installation of a pilot unit of sulphur dioxide precipitation was begun April 1st, the balance of the experimental plant being shut down until September 15th. On September 15th experimental work was resumed on the entire plant and continued throughout the year with satisfactory results.

Santiago Mining Company

Lo Aguirre Mine

No development was done at Lo Aguirre during the year.

A revised estimate of ore reserves follows:

	Tons	% Copper
Oxide Ore	4,221,819	1.717
Mixed Ore	2,953,838	2.120
Sulphide Ore	1,774,843	2.405
Total	8,950,500	1.986

There is an extension of the ore bodies in the west section of the property which has not been sufficiently developed to accurately determine and classify the ore existing there. An estimate of this probable ore comes to 41,181,598 tons, containing 2.04% copper.

Africana Mine

The total development for the year was 3,685 feet, consisting of drifts, crosscuts and raises.

All development work in the mine was suspended on May 15th.

The ore reserves on May 15th, 1921, showed an increase of 385,889 short tons, averaging 3.304% copper, the total ore reserves being 2,687,184 tons, having a copper content of 3.655%.

By reason of curtailment of South American activities the entire operation of the Santiago Mining Company was shut down to the extent of leaving only a force of watchmen under competent supervision.

Investments

During the year your Company increased its holdings of stock of the Inspiration Consolidated Copper Company from 285,300 shares to 297,300 shares.

A corporation known as the Zonia Copper Company was organized for the purpose of undertaking the development of a group of mining claims in Yavapai County, Arizona, upon which options had been secured for your Company, the Inspiration Consolidated Copper Company and individuals. Thirty-nine Thousand (39,000) shares of the stock of this Company were issued, the par Ten Dollars (\$10.00) each, of which amount your Company subscribed for Thirteen Thousand (13,000) shares. A shaft was sunk 874 feet and crosscuts run to determine whether or not the property had value. The result was disappointing; work was stopped and the options on the property surrendered. After all expenses have been paid there will remain about Twenty Thousand Dollars (\$20,000.00), together with the salvage value of the equipment, machinery, supplies, etc., to be distributed to the stockholders.

Financial Condition and Plans

Since the increase in its authorized capital stock in 1910, this Company has expanded and integrated its holdings and operations to such an extent that it has changed from a large and important copper mining enterprise, conducted almost entirely within the State of Montana, to one owning and operating mines and industries in many States of this country, and has acquired large and valuable properties in South America.

It acquired in 1910 the greater part of the known profitable area of the Butte District in which its original properties are located, and your officers soon came to the realization that control of the refining and selling of its product was necessary to the proper conduct of the business it was then doing. In pursuance of this policy, the Eastern refineries of the International Smelting and Refining Company at Perth Amboy, N. J., were bought, as were also the copper and lead smelting plants of that Company at Tooele, Utah, the lead refinery at East Chicago, Indiana, and the copper smelter at Inspiration, upon which construction had been begun. The stock of the United Metals Selling Company was acquired, and investments in other companies were made at an aggregate cost of \$41,042,750.17. In order to acquire an additional supply of ore extensive exploration was undertaken, as a result of which the valuable South American properties were acquired. A campaign of reconstruction and exten-

sion of plants was undertaken and consummated. An additional electrolytic refinery at Great Falls was constructed. The Company entered the zinc producing field, bringing into operation a new electrolytic process worked out by its engineers. A zinc concentrator was constructed at Anaconda, and an electrolytic zinc plant at Great Falls, capable of producing 120,000,000 lbs. of high grade zinc per year, was built. These extensions have added greatly to the value of the property.

Having possessed itself with the necessary facilities for the mining and production of copper, zinc and precious metals, the Company determined, in order to market its product continuously and to the best advantage, to enter the fabricating field. The result of these activities has been to bring into existence an integrated industrial enterprise possessing complete facilities for producing from mine and distributing to consumer, copper, zinc and brass products in quantity, constituting a substantial proportion of the world's business in these products.

In accomplishing this expansion of the Company, the directors and officers have endeavored to build for the future, and to follow a conservative policy in the capitalization of acquisitions and in the creation of funded debt, although conscious of the fact that in so doing the present stockholders of the Company were carrying a proportion of the expense that might justly be regarded as unduly burdensome.

The growth of the Company is best summarized by a comparison of assets carried to the balance sheet during the period.

At December 31st, 1909, the end of the year prior to consolidation, the net book value of the Company's assets was \$34,679,216.09. To December 31st, 1921, there was an increase to a net book value of \$236,839,025.09, an addition of \$202,159,809.00. These figures do not include the purchase of the American Brass shares. Payment has been made for the assets acquired by issuing stock at par.....	\$86,562,500.00
and outstanding bonds.....	49,201,700.00
Total	\$135,764,200.00

The balance, a sum of \$66,395,609.00, has been obtained from re-investing earnings of the Company above the amount declared as dividends, which during this period aggregated \$128,873,125.00.

Development of the Potrerillos Mines has added to the known extent of the ore body and has indicated the presence of sulphides richer in grade and of greater tonnage than had been anticipated. This fact has caused a modification in the plan of plant and equipment for the property. These changes involved no sacrifice of any expenditure already made, but will require larger sums to carry the property to adequate production. The purpose to be attained will be to bring into realized profit more quickly the result of mining the richer ores more lately developed. Further details of the property will be found in an appropriate place in the report.

A consideration of the matters briefly referred to in this review of the Company and its future requirements, has induced the directors to believe that the Company's policy should be to provide itself with the additional capital that will be required, by adopting a plan of financing, so that the future may carry its share of the undertaking,

and the Company be placed in a position to resume the payment of dividends as soon as a general improvement in the metal market warrants. The present requirements are not large, but the expenditures which will be distributed over a number of years, and the refunding of the outstanding issue of bonds, if desired, should be provided for. The details of the plan are now being worked out and will be submitted to you as soon as completed, for approval, before any action is taken. Advantage is taken of the issuance of the annual report to make this preliminary statement that you may be informed of what is under consideration.

Attached hereto you will find a consolidated balance sheet showing the financial condition of the Company and its Subsidiary Corporations, at the close of business December 31, 1921, and an income statement for the year, both 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., May 2, 1922.

ANACONDA COPPER MINING COMPANY
and Subsidiary Companies

Consolidated Balance Sheet—31st December, 1921

ASSETS

FIXED:

Mines and Mining Claims, Coal Mines, Timber Lands, Water Rights and Lands for Reduction Works and Refineries, etc.	\$119,438,110.62
Buildings and Machinery at Mines, Reduction Works, Refineries, Sawmills, Foundries, Waterworks, Railroads, Manufacturing Plants, etc.....	76,285,549.17
Investments in sundry companies.....	16,496,444.04
	<u>\$212,220,103.83</u>

CURRENT:

Supplies on hand, advances on Ores and Expenses prepaid	\$21,989,306.50
Metals and Manufactured Products in process and on hand—at the lower of cost or market.....	17,817,363.59
Accounts Receivable and Cash Assets.....	21,235,831.13
	<u>61,042,501.22</u>
	<u><u>\$273,262,605.05</u></u>

We have examined into the affairs of the Anaconda Copper Mining Company and of its Subsidiary Companies and have verified the Assets, Liabilities and Loss shown above. The Net Loss is after deducting all Development expenditure of the year, Depletion of Coal and Timber Lands and Depreciation of Plants and Equipment.

We hereby certify that this Balance Sheet shows the financial condition at 31st December, 1921, of the Companies as an aggregate whole, and that the accompanying Income Account for the year ending 31st December, 1921, is correct as stated.

POGSON, PELOUBET & CO.,
Certified Public Accountants.

New York and Butte, 20th April, 1922.

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ANACONDA COPPER MINING COMPANY
and Subsidiary Companies
Consolidated Balance Sheet—31st December, 1921

LIABILITIES

CAPITAL STOCK of Anaconda Copper Mining Company:	
Authorized—3,000,000 shares of \$50.00 each; issued—	
2,331,250 shares.....	\$116,562,500.00
MINORITY INTERESTS in Subsidiary Companies.....	2,486,295.12
TEN YEAR SECURED GOLD BONDS, due 1st January, 1929:	
Authorized—\$50,000,000.00	
Outstanding	49,201,700.00
RESERVE FOR DEPRECIATION.....	24,182,834.37
CURRENT:	
Accounts and Wages Payable and Taxes and Interest	
Accrued	13,075,368.31
SURPLUS:	
Balance 31st December, 1920.....	\$84,753,462.44
Net Loss for the year ending 31st December, 1921, per	
Income Account annexed.....	16,999,555.19
	<u>67,753,907.25</u>
	<u>\$273,262,605.05</u>

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 Ending 31st December, 1921

EXPENSE

Metals and Manufactured Products in process and on hand at beginning of year	\$36,516,880.05
Mining, including Development.....	3,786,076.51
Ore Purchases	3,957,200.16
Reduction, including Transportation of Ore.....	5,119,253.62
Refining and Selling, including Transportation of Metals.....	1,250,676.43
Manufacturing Expenses, including Selling.....	5,337,188.60
Administration and Federal Taxes.....	1,220,361.50
	<u>\$57,187,636.87</u>

Balance brought down.....	\$6,257,042.38
Amount charged off this year for Depreciation and Obsolescence.....	2,135,401.31
Interest, including discount on bonds.....	3,108,267.89
Expenditure during suspension of operations.....	5,680,503.39

\$17,181,214.97

ANACONDA COPPER MINING COMPANY
and Subsidiary Companies

Consolidated Income Account—Year Ending 31st December, 1921

INCOME

Sales of Metals and Manufactured Products.....	\$31,097,213.90
Royalties, Tolls, Rentals, etc.....	2,016,017.00
Metals and Manufactured Products in process and on hand at end of year....	17,817,363.59
Balance carried down.....	6,257,042.38

\$57,187,636.87

Income from Investments in sundry companies.....	\$120,025.78
Balance, Net Loss:	
Apportioned to Minority Interests.....	\$61,634.00
Carried to foregoing Balance Sheet.....	16,999,555.19
	<u>17,061,189.19</u>

\$17,181,214.97