

Report of the Directors  
—of—  
The Consolidated  
Mining and Smelting  
Company  
of Canada, Limited

For Year ending September 30th, 1916

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BOARD OF DIRECTORS

W. D. MATTHEWS, Toronto	President
GEO. SUMNER, Montreal	Vice-President
JAS. J. WARREN	Managing Director
Sir EDMUND B. OSLER	Toronto
CHARLES R. HOSMER	Montreal
H. S. OSLER	Toronto
W. L. MATTHEWS	Toronto
J. C. HODGSON	Montreal
WM. FARWELL	Sherbrooke, Que.
J. KITTO, Secretary	

Transfer Agents

THE TORONTO GENERAL TRUSTS CORPORATION, TORONTO  
THE ROYAL TRUST COMPANY . . . . . MONTREAL

The  
Consolidated Mining and Smelting  
Company of Canada, Limited

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DIRECTORS' REPORT

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*To the Shareholders of  
The Consolidated Mining & Smelting Company  
of Canada, Limited.*

Gentlemen:—

Your Directors submit herewith the Eleventh Annual Report of the operations of the Company for the year ending September 30th, 1916.

The net profit is \$996,496.35, after writing off \$278,386.44 for depreciation of plant and equipment and charging Profit and Loss Account with \$598,745.85 expended in development on your properties. The Balance to the credit of Profit and Loss Account now stands at \$2,278,458.73.

The main increase in Property Account has been through the issue of \$1,500,000 of stock at par for the \$2,000,000 of Common Stock of The West Kootenay Power & Light Company, Limited. The reasons for this purchase were fully gone into at the Special Meeting held when the purchase was authorized.

The new issue (about \$2,100,000) offered to the shareholders on the 1st November, 1916, has been almost entirely subscribed for. The rights to shares not taken up are largely held abroad. Subscriptions no doubt will be received just so soon as the shareholders entitled have had time to reply to the circular.

Your operations at the Smelter, Refineries and mines are continually expanding, entailing increased responsibilities on your officials. Especially is this so when the demands for lead, copper and zinc for war purposes are so insistent. The output of these metals is sold for months ahead.

Notwithstanding the heavy shipments of ore from your different mines, the ore reserves have been well maintained. Nevertheless it is the policy of your directors to acquire and develop other properties from time to time so that if any particular mine should become exhausted, a successor would be ready to take its place. With such a large section of the main Rocky Mountain range tributary to your Smelter, it should not be difficult to provide at least as large an ore tonnage as has been available in the past.

The overdraft is abnormally high, but as it is represented by a stock of metals actually on hand at the close of the year, it will be speedily liquidated.

You will find printed, following the report of your officials, the Financial Statement, Profit and Loss Account, and the Report of the General Manager of the West Kootenay Power and Light Company, Limited, all of the Common Stock of which is now owned by you.

Toronto, December 26th, 1916.

W. D. MATTHEWS,  
*President.*

# FINANCIAL STATEMENT

## Balance Sheet as at September 30th, 1916

### LIABILITIES

CAPITAL—	
Authorised:	
600,000 Shares of \$25 each	\$15,000,000.00
Issued and Fully Paid:	
337,112 Shares of \$25 each	\$8,427,800.00
SUNDRY BANKS:	
Bank of Montreal:	
Loan and Overdraft	\$2,281,134.81
Pay Roll Accounts overdrawn	7,117.83
	2,288,252.64
ACCOUNTS PAYABLE AND UNPAID DIVIDENDS	1,173,030.97
DIVIDEND PAYABLE OCTOBER 1ST, 1916	210,695.00
ADVANCES BY IMPERIAL MUNITIONS BOARD TOWARDS COST OF ADDITIONS TO ZINC PLANT (REPAYABLE OUT OF ZINC PRODUCED)	600,000.00
RESERVE, INCLUDING PROVISION FOR CLAIMS AWAITING ADJUSTMENT	35,990.94
PROFIT AND LOSS ACCOUNT—	
Balance at September 30th, 1915	\$2,058,299.88
Profit twelve months ended September 30th, 1916	996,496.35
	\$3,054,796.23
LESS Dividend No. 19 declared December 10th, 1915	\$145,125.00
Dividend No. 20 declared March 10th, 1916	209,830.00
Dividend No. 21 declared June 3rd, 1916	210,687.50
Dividend No. 22 declared September 2nd, 1916	210,695.00
	776,337.50
	2,278,458.73
	\$15,014,228.28

### ASSETS

MINES, MINERAL CLAIMS AND SHARES IN OTHER COMPANIES—	
Balance September 30th, 1915	\$5,332,769.28
Expenditure twelve months to September 30th, 1916	\$ 132,116.06
West Kootenay Power & Light Company, Limited, Common Stock purchased at 1,500,000.00	1,500,000.00
	6,964,885.34
MINING, SMELTING, CONCENTRATING AND REFINING PLANTS—	
Balance September 30th, 1915	2,025,045.53
Construction twelve months to September 30th, 1916	2,326,021.23
	4,351,066.76
LESS Depreciation	278,386.44
	4,072,680.32
SMELTER PRODUCT ON HAND AND IN TRANSIT TO REFINERIES—	
Pig Lead, Zinc, Bullion, Matte, Bluestone and Antimony	37,039.97
ORE AND METALS ON HAND AND IN TRANSIT TO SMELTER AT SEPTEMBER 30TH, 1916—	
(Value of metal contents corrected to Market quotations:)	
Ores on hand	\$1,139,693.62
Refinery Metals on hand	1,424,386.28
Ore in transit to Smelter	81,814.30
	2,645,894.20
	2,682,934.17
MINE AND SMELTER STORES AND MATERIALS	803,356.10
ACCOUNTS RECEIVABLE	282,094.49
INSURANCE AND TAXES PAID IN ADVANCE	17,536.03
CASH IN BANKS AND ON HAND—	
Head Office, Toronto	185,066.07
Mine Offices	121.79
Sundry Pay-Roll Bank Accounts	5,553.97
	190,741.83
	\$15,014,228.28

### Auditor's Report

We have audited the Accounts of The Consolidated Mining & Smelting Company, Limited, for the twelve months ended September 30th, 1916, including the Mines and Smelter Accounts maintained at the Offices at Marysville, Rossland and Trail. Inventories of Ore and Smelter Products at September 30th, 1916, are as certified by the Company's officials; the values of the Metal Contents have been corrected to market values of that date, and the estimated cost of refining products in course of treatment has been deducted. Stores and Materials on Hand at the Mines and Smelter have been taken at book values. Subject to the foregoing, we certify that the above Balance Sheet is, in our opinion, properly drawn up so as to exhibit a correct view of the financial position of the company as at date of closing the Accounts, September 30th, 1916.

VANCOUVER, B.C., December 7th, 1916.

HELLIWELL, MACLACHLAN & CO.,  
Chartered Accountants.

# PROFIT AND LOSS ACCOUNT

For the Twelve Months ending September 30th, 1916

To Smelter Product on hand and in transit from Smelter to Refineries at September 30th, 1915.....	\$	179,448.00
“ Ores and Metals on hand and in transit to the Smelter at September 30th, 1915.....		966,864.00
“ Customs Ore, Lead & Bullion purchased.....		2,913,426.00
“ Freight on Ore from Company's Mines.....		204,545.70
“ Mining, Smelting and General Expenses:		
“Molly Gibson” Mine.....	\$	10,761.22
“Richmond Eureka” Mine.....		279.65
“Maestro” Mine.....		1,255.56
“Highland” Mine.....		45,036.25
“No. 1” Mine.....		11,879.72
“St. Eugene” Mine.....		21,516.73
“Sullivan” Mine.....		244,115.96
“Le Roi” Mine.....		379,506.71
“Centre Star” Mine.....		615,506.44
“No. 7” Mine.....		1,417.41
“Ben Hur” Mine.....		14,996.91
“Lucky Thought” Mine.....		16,430.98
“Emma” Mine.....		16,377.14
“Ottawa” Mine.....		5,757.83
Trail Smelter and Refineries.....		2,496,285.78
		3,881,124.00
To Development Expenses:		
“Highland” Mine.....	\$	12,648.83
“No. 1” Mine.....		22,460.48
“Sullivan” Mine.....		82,298.03
“Le Roi” Mine.....		93,033.86
“Centre Star” Mine.....		370,104.65
“Lucky Thought” Mine.....		6,678.86
“Emma” Mine.....		9,499.01
“Silver Dollar” Mine.....		2,022.13
		598,745.65
To Depreciation.....		278,386.00
“ Directors' Fees.....		8,800.00
“ Sundry Items written off, including Bad Debts.....		5,040.50
“ Balance—Profit.....		996,496.65
		\$10,032,878.95

By Sales of Smelter Product, Ore, etc.....		\$7,203,807.34
“ Smelter Product on hand and in transit from Smelter to Refineries at September 30th, 1916.....		37,039.97
“ Ore and Metals on hand and in transit to the Smelter at September 30th, 1916:—		
(Value of Metal contents corrected to Market quotations)		
Ores on hand.....	\$1,139,693.62	
Refinery Metals on hand.....	1,424,386.28	
Ore in transit to Smelter.....	81,814.30	
		2,645,894.20
“ Rents and Sundry Revenue.....		62,804.11
“ West Kootenay Power and Light Company, Limited, Dividends.....		83,333.33

**\$10,032,878.95**

# Managing Director's Report

TORONTO, December 26th, 1916.

To the *Directors*  
of *The Consolidated Mining and Smelting Company*  
of *Canada, Limited.*

Gentlemen:—

I submit herewith the Financial Statement (including Profit and Loss Account) for the year ending September 30th, 1916, also the reports of the Comptroller, the Metallurgical Manager and the Manager of Mines.

## ZINC

The electrolytic Zinc Plant began operations in the month of March, 1916. Before it was completed, at the request of the Imperial Munitions Board, further contracts were entered into for an increased supply of zinc, which rendered necessary very large additions to the plant as originally designed. These are well under way, but delays in deliveries of electrical machinery will prevent much increased production before early in 1917.

The original plant is now working satisfactorily.

In the beginning a number of difficulties were met with and had to be overcome. These were perhaps necessarily incidental to the standardization of the production in a large way of electrolytic zinc. Doubtless improvements in methods will be made as the operations proceed.

## COPPER

The completion of the copper refinery marks an epoch in the metallurgical history of Canada. During the War, both refined copper and zinc are readily saleable for munitions purposes; after it is over, there is no reason why the entire output of these metals should not be absorbed by the Canadian metal trades and fabricated by Canadian workmen—a condition possible only because these metals will then be available in a refined state.

## LEAD

The production for the year was slightly less than in the preceding years. This is attributable to the unusually severe weather conditions of last Winter.

## GOLD AND SILVER

The production of these precious metals varies more from year to year than the production of the base metals, as the metal content in the gold and silver ores is not stable.

## ACID PLANTS

The addition of sulphuric and hydrofluosilicic acid plants makes our refineries independent and at a time when a supply from outside sources is both unreliable and abnormally high in price.

While the prices of metals ruled high during most of the year, profits do not show a corresponding advance because of the greatly increased costs of operating the mines, the Smelter and the Refineries. Many supplies have doubled in price—all have appreciated very markedly. The workmen have had substantial advances in wages. Labor disturbances in the coal mines have curtailed the production of coke, which has forced us to restrict our activities and has affected operating costs injuriously.

Finally the carrying on of heavy construction work while ordinary production was being maintained inevitably increased the cost of ordinary production. This condition will not be a serious factor from now on, as construction (except in the Zinc Plant) is almost completed.

## MINES

There have been no extraordinary occurrences. The usual policy of keeping development well advanced has been followed.

Shipments from the Rossland Mines are being confined as much as possible to ores carrying as high a copper content as can be mined to advantage.

Speaking broadly, the Rossland Mines are gold mines rather than copper mines. During the War the returns will not be as great as if there were a higher copper content, but after the War, and during normal conditions (which will ultimately prevail) these mines will show up to much better advantage.

## MANAGEMENT

During the year the scope of the Company's operations having become much broadened, it became necessary to divide the responsibilities in order to secure the greatest efficiency.

Since October 1st, 1916, the officers are:

Mr. R. H. Stewart	Consulting Engineer.
Mr. S. G. Blaylock	Assistant General Manager.
Mr. E. H. Hamilton	Metallurgical Manager.
Mr. W. M. Archibald	Manager of Mines.
Mr. T. W. Bingay	Comptroller.
Mr. James Buchanan	Superintendent of Smelter.
Mr. J. E. Miller	Superintendent of Refinery.
Mr. M. E. Purcell	Superintendent Centre Star Group of Mines.
Mr. E. G. Montgomery	Assistant Superintendent do. do.
Mr. E. S. Peters	Superintendent of Le Roi Mines.
Mr. J. K. Crana	Superintendent Sullivan and St. Eugene Mines.
Mr. Fred Chapman	Engineer in charge of construction of the Smelter.

During the year a selling organization for the products of the Company was established and Mr. W. S. Rugh appointed Sales Agent for Canada West of the Province of Quebec. Messrs. Thomas Robertson & Co., Limited, remain selling Agents for the territory covering the Province of Quebec and East thereof.

JAMES J. WARREN,  
*Managing Director.*

# Comptroller's Report

TRAIL, B.C., December 15th, 1916.

Operations for the year show a net profit of \$996,496.35 after writing off \$278,386.44 for Depreciation of Plant and Equipment and charging Profit and Loss account \$598,745.85 expended in development on our properties.

The surplus on the Operation of the Zinc Plant has been written off the Construction account.

The increase in property account during the year is \$1,632,116.06 and this increase includes the purchase of the entire issue of 200,000 shares, with a par value of \$100.00 each, of the common stock of the West Kootenay Power & Light Company, Limited; the purchase of the Emma Mine in the Boundary District; the purchase of the majority interest in the Coast Copper Company, Limited, owning properties in the Quatsino District, Vancouver Island; the purchase of claims in Rossland and Ainsworth camps; also, development done on the properties which have not reached the producing stage.

The increase in Plant account during the year, deducting depreciation has been \$2,047,634.79.

The considerable increase in value of metals on hand, which is reflected in the increased bank advance, is temporary, and is now being rapidly liquidated.

The increase in Stores and materials on hand, though to some extent necessitated by the larger volume of our operations, is chiefly due to the large quantity of construction material at Trail which had not yet been used and charged to various Construction Accounts.

The increase in Accounts payable, which item represents principally current vouchers and wages payable, is due to the general increase in the extent of our operations, together with the extensive program of construction in progress.

Average quotations for metals for the Company's fiscal year as compared with the previous fiscal year are as follows:—

	1916	1915
Montreal lead	\$ 7.74	\$ 5.11
New York silver	60.73	49.01
New York Electrolytic copper	24.43	15.95

Respectfully submitted,

T. W. BINGAY,  
Comptroller.

# Metallurgical Manager's Report

TRAIL, B.C., December 15th, 1916.

The following is a brief statement of the Smelter operations:—

## SMELTER PRODUCTION

	Tons Ore Smelted	Gold Produced Ounces	Silver Produced Ounces	Lead Produced Pounds
1894 to date	4,819,903	1,709,217	24,533,463	414,065,535
1915 to 1916	447,017	98,314	2,285,631	39,974,411
		Copper Produced Pounds	Zinc Produced Pounds	Gross Value
1894 to date		67,643,058	3,088,199	\$81,294,627
1915 to 1916		4,446,080	3,088,199	\$ 7,892,549

The following additions have been made to the plant:—

The Lead Smelter has had improvements in flue connections and top on one furnace; a briquetting plant has been installed for briquetting the flue-dust; a Cottrell dust catching plant has been attached to the Wedge roasters by a new flue.

A new well equipped Sampling room has been added to the Chemical Laboratory and Assay Office.

Large and substantial additions have been made to the Machine Shop and Boiler Shop.

The lead sampling mill, crushing plant with conveyors, bins, etc., also a tube mill for fine grinding, have been completed. An ore bedding system for bedding ores was installed and housed in substantial steel buildings with concrete floors, covering 21,000 sq. ft.

A crushing plant with skip has been installed with belt system for crushing and handling the product from the Huntington-Heberlein pots; substantial skip-way, motor, etc., installed for conveying product to the lead blast furnace bins.

A series of reinforced concrete bins have been built with hoppers, scales, etc., for weighing charges for the Lead blast furnaces, also convenient trestles, tracks, etc., for filling and discharging.

## ZINC PLANT

On October 12th, 1915, the first steel was placed for the erection of the new zinc plant. Since then substantial steel buildings with concrete floors

and the walls have been erected, covering in all 103,641 sq. ft. Machinery and other appliances have been installed.

A **Sulphuric Acid plant** has been erected covering an area of 8,983 sq. ft., built of tile brick and containing two lead chambers, towers, etc., with a capacity of 15 tons per day; also, a **Hydrofluosilicic Acid plant**, covering 1,472 sq. ft., with retorts, tower, etc.

### COPPER PLANT

Two 12 ft. basic lined, electrically operated converters of the Great Falls type were installed; also an Ingersoll-Rand turbine blower with 900 h.p. motor.

There has also been installed, in the blower-room, two 200 k.w. motor-generator sets.

A reverberatory furnace has been built with a stack, moulds, and appliances for casting copper anodes, and equipped with anode cars, tracks, trestles, bins, etc.

The following additions have been made to the Metallurgical plant:—

A complete **Electrolytic Copper Refinery**, including generator-room and equipment, with a daily capacity of twelve (12) tons of refined copper, now (December, 1916) being increased to a daily capacity of seventeen (17) tons of refined copper.

The original building has a floor area of 8,024 sq. ft., besides a basement with concrete floor protected with asphalt. It is splendidly lighted and ventilated and is of steel construction with walls of hollow tile.

The extension will have a floor area of 5,664 sq. ft.

The **Copper melting department** is housed in a separate steel, hollow tile, concrete building, 60 ft. by 60 ft. by 18 ft. high, and contains a substantial melting furnace with stack and other appliances for the casting of refined copper into copper bars or cakes.

A fire-proof two-story addition has been made to the General Office.

**LEAD** Smelter and Lead Electrolytic Refinery were operated as in former years.

**COPPER**—During the year the metallurgy of copper has been developed to completion by the installation and successful operation of a converting plant for the production of blister copper, and, also, the refining by the electrolytic process, and melting into bars or cakes as required by customers.

**ZINC**—The process for the production of electrolytic zinc from Sullivan and other ores has been developed under the difficulties of new plant, new process and limited time.

The operations involve extremely fine grinding of the ore, careful roasting, and leaching with thousands of tons of solution of varying degrees of acidity, and the elimination of the impurities from the solution before electrolysis. Iron, copper, lead, arsenic, cadmium, etc., go into solution in the earlier stages and have to be eliminated to less than one part in one hundred thousand. Most of these elements were reported to be absent from Sullivan ore, and when they made their appearance in the solution methods of treatment and equipment had to be devised for precipitating and filtering them out in the proper place in the process. The repeated handling, clarifying, filtering, etc., of large quantities of muddy corrosive solutions made it necessary to devise new pumps, etc. Questions of temperature, current, etc., in the electrolytic room were overcome successfully, and the process is now working satisfactorily and can be extended indefinitely, producing zinc of great purity.

The process will be eventually reduced to a cost lower than the furnace process.

**SULPHURIC ACID** is successfully produced in the plant and the process can be extended to any capacity desired.

**HYDROFLUOSILICIC ACID** is being manufactured successfully.

**MANGANESE DIOXIDE** is being produced as a bi-product.

A great difficulty overcome has been the organizing or educating of men, to fill the various requirements, at a time when the best men, physically, mentally and temperamentally, were at the Front. The qualities of men best suited for metallurgical occupations are those which make a good soldier and induce him to enlist.

The plant now places Canada in a position to declare her independence of the world for her supply of Lead, Copper, and Zinc all of the highest commercial purity.

Yours respectfully,

E. H. HAMILTON,  
*Metallurgical Manager.*

# Manager of Mines' Report

TRAIL, B.C., December 15th, 1916

The Production obtained and the Development work performed at the Company's mines for the year ending September 30th, 1916, are substantially as shown by the following tables:—

## MINE PRODUCTION

	Year 1915-1916 Weight, Tons	1894 to date Weight, ton
Centre Star—Ore.....	176,494	5563,24
Centre Star—Concentrates.....		
Le Roi—Ore.....	133,226	1,950,22
Le Roi—Concentrates.....		61
Sullivan—Lead Ore.....	60,266	355,5
Sullivan—Zinc-Lead Ore.....	30,863	
St. Eugene—Ore.....	746	1,019,2
Number Seven—Ore.....		7,3
Ø Molly Gibson—Ore.....	291	5,37
Ø Number One—Ore.....	3,276	18,1
Ø Highland—Ore.....	1,525	2,88
Ø Highland—Concentrates.....	892	3,5
Ø Maestro—Ore.....	23	4
Ø Richmond-Eureka—Ore.....	36	14,6
Lucky Thought—Ore.....	622	6
Ø Ottawa—Ore.....	85	46
Phoenix Amalgamated—Ore.....		2,49
Ø Silver King—Ore.....		17,23
Ø Ben Hur—Ore.....	5,308	12,0
Emma—Ore.....	4,990	135,

NOTE:—Production given above includes that of previous owners.

Ø Since Company acquired property only. Previous records not available.

## DEVELOPMENT

	Drifting and Crosscutting	Raising	Sinking	Total	Diamond Drilling
Centre Star Group.....	6,728.5	226.0		6,954.5	11,978.0
Le Roi.....	2,688.5	411.0	236.7	3,336.2	5,292.0
Deer Park.....					2,156.0
St. Eugene.....	231.0	48.0	11.0	290.0	
Sullivan.....	3,627.0	119.5		3,746.5	1,547.0
Molly Gibson.....	228.0			228.0	
Number One.....	820.5	262.0	143.1	1,225.6	
Highland.....	585.0	156.0		741.0	
Ottawa.....	174.5	155.0		329.5	
Lucky Thought.....	741.0	119.0	4.0	864.0	
Emma.....	279.0	108.0		387.0	
White Bear.....	409.5	7.5		417.0	
	16,512.5	1,612.0	394.8	18,519.3	20,974.0

making the total development to date in the above mines as follows:—

	Feet	Miles
Centre Star Group.....	205,333.0	38.88
Le Roi.....	84,951.0	16.09
St. Eugene.....	105,639.5	20.00
Sullivan.....	33,070.5	6.26
Molly Gibson.....	10,677.0	2.06
Richmond-Eureka.....	9,497.0	1.80
Number Seven.....	5,934.0	1.12
Phoenix Amalgamated.....	2,581.0	.49
Number One.....	8,381.7	1.59
Highland.....	12,995.5	2.60
Ø Ottawa.....	2,902.5	.55
Ø Silver King.....	3,160.0	.60
Lucky Thought.....	1,075.0	.37
Emma.....	2,412.0	.46
White Bear.....	7,247.0	1.37

\*From July 1st, 1912, only.

Ore Reserves in the Company's mines in Rossland are about the same as last year, there being a slight decrease in those of the Le Roi, which is more than offset by an increase in the Centre Star and War Eagle.

In the Centre Star the ore body mentioned in last year's report as having been encountered by a cross cut from the 6th level has been further developed on the 4th, 5th, 7th, and 8th levels Centre Star and on the 12th War Eagle, with fairly satisfactory results.

In the War Eagle development of the deepest levels was continued without obtaining definitely satisfactory results as to the location of the continuation of ore bodies existing on the 16th level. The possibilities, however, have not been exhausted. Development in the upper levels maintained reserves without opening up new ore bodies of magnitude.

In the Le Roi development was continued on the lower level corresponding to the 13th Centre Star, where a sulphide ore body containing copper values principally was opened up. The winze was sunk to the level of the 14th Centre Star and the exploration of this ground is being continued.

The West drift on the 1650 has been advanced into the White Bear ground, on which a lease has been taken by the Company, and a raise is being made to connect with the White Bear workings, after which exploratory work in the Western section will be continued.

In the White Bear the workings have been unwatered; shaft and head frame repaired, and new pumping equipment installed, preparatory to development.

At Kimberley, in the Sullivan mine, the new lower tunnel was advanced. Development work was carried on at the old tunnel level and on the level one hundred feet below. Ore reserves of high grade lead have not been



maintained, but some promising zinc ore stopes have been opened up and considerable tonnages of low grade lead-zinc ore developed. Additional development work is being carried on to increase the reserves of High Grade lead ore.

At the St. Eugene a limited amount of work was done and the upper workings of the mine have been leased.

At Ainsworth, the Number One mine was worked during a portion of the year; the shaft was sunk another one hundred feet and the development of the lower levels was in progress when operations were suspended on account of labour trouble.

Operations at the Highland mine were increased during the year and shipments of crude ore made from the ore-body on No. 5 level. Development of this ore-body and the ground between No. 5 and the Upper workings is being continued.

The lease on the Maestro was renewed and milling ore taken to the Highland mill for concentration.

At the Molly Gibson a small force of men was employed and some crude ore shipped. The mill was not operated.

At the Ottawa mine, near Slovan City, development work and stoping was carried on with a small crew.

The Lucky Thought mine at Silverton has been developed by a crosscut which intersected the vein two hundred feet lower and a connecting raise is now being made to the upper workings preparatory to continuing the development.

The Emma mine, near Eholt, was taken over during the year and equipped. Development of the ore-body is being continued and the mining operation extended.

No work was done on the Richmond-Eureka mine, Sandon; Number Seven mine, Boundary Falls, Phoenix Amalgamated group, Phoenix.

A controlling interest was purchased in the property of the Quatsino Copper Company near Elk Lake, East of the South East arm of Quatsino Sound, Vancouver Island.

Outcrops and development showed the presence of fair copper values, and deeper exploration of the ore bodies is now under way.

Yours respectfully,

W. M. ARCHIBALD,  
*Manager of Mines.*

# THE WEST KOOTENAY POWER and Light Company, Limited

## Report of General Manager for the Year ending August 31st, 1916

*To the President and Directors  
of the West Kootenay Power and Light Company, Limited.*

Dear Sirs:

Our revenue for the year ending August 31st, 1916, after writing off \$25,000.00 for Plant depreciation, shows a net increase of \$41,249.43 over that of the year ending August 31st, 1915.

During the past year the operations of your different Plants have been continuous and the service has given entire satisfaction to our customers. For the year ending August 31st, 1915, our revenue producing load was 8,000.7 H.P., and for the year ending August 31st, 1916, our revenue producing load was 11,152.1 H.P., thus showing an increase in power consumption over previous year.

The producing mines to which we supply power were compelled to decrease their shipments from the month of May, 1916, due to the fact that the reduction works were compelled to curtail operations due to coke shortage brought about by a scarcity of labor in the Crow's Nest Pass section, from which a coke supply is received. The labor shortage was brought about by the recruiting which has been carried on in this particular section of the country. This matter was brought to the attention of the Dominion Government who are now investigating and I am of the opinion that the condition that now exists will be straightened out in the near future.

During the past year we have extended our Plant by the addition of one 20,000 H.P. Distributing Station erected at Smelter, B.C., and also extended our 60,000 volt lines from the main line to said Distributing Station, a distance of three miles. Contract for the apparatus of this station was let September 1st, 1915, and station was ready for operation on January 29th, 1916. This station is of modern construction and the apparatus contained therein of the latest type, and the operations have turned out to our entire satisfaction.

Due to the increased power consumption of the Consolidated Mining & Smelting Company, we were compelled to increase our generator capacity in No. 2 Power House, Upper Bonnington. In January contracts were let to the Allis-Chalmers Manufacturing Company, for the hydraulic end of this installation; the Canadian General Electric Company, for the generator and switching apparatus; and the Canadian Westinghouse Company, for the transformers. I am very pleased to inform you that the above Companies were able to live up to their delivery dates, and it is expected that this Unit will be ready for operation early in November.

Your plants, including No. 1 Plant, Lower Bonnington; No. 2 Plant, Upper Bonnington; and No. 3 Plant, Cascade City, and all distributing stations have been maintained in the usual high operating condition. The repairs on all the above Plants have been kept well in hand, and no difficulties have been experienced in the continuous operation of any of these plants.

I have much pleasure in stating that your staff throughout is still up to a very high state of efficiency.

L. A. CAMPBELL,

*Vice-President and General Manager.*

Rossland, B.C., October 25th, 1916.

# WEST KOOTENAY POWER & LIGHT COMPANY, Limited

Balance Sheet as at 31st, 1916

## LIABILITIES

Accounts payable.....	\$	5,939.16
Bills Payable.....		80,000.00
Unclaimed Wages.....		231.51
Cascade Water Power & Light Co.....		6,981.82
Reserve Account.....		32,126.06
		\$125,278.55
Bond Account.....		1,500,000.00
Preferred Shares.....		400,000.00
Common Stock.....		2,000,000.00
		3,900,000.00
Sinking Fund.....		171,167.20
<b>PROFIT AND LOSS ACCOUNT</b>		
Cr. Balance 31st Aug., 1915.....		331,640.05
Net Profit 31st Aug., 1916.....		70,827.86
		402,467.91

\$4,598,913.66

## ASSETS

Pend d'Oreille Property.....	\$	27,368.85
Plant, Buildings, Real Estate and Pole Lines.....		3,733,594.60
Auto, Horse, Furniture and Fixtures.....		9,932.20
Misc. Instruments and Food supplies.....		51,651.40
		\$3,822,547.05
Accounts Receivable.....		48,887.10
Cash on Hand.....		4,482.14
Rossland.....	\$4,158.16	
Montreal.....	323.98	
		82,851.38
South Kootenay Water Power Co.....		128,420.78
Rossland Water and Light Co.....		695.57
Sundry Debtors.....		220.00
H. L. Honert, Deceased.....		212.51
		182,918.10
Charters and Cascade Purchase.....		7,460.08
Sundry Investments.....		389,109.95
Unexpired Insurance and Taxes.....		3,676.18
		400,246.21
Capital Expenditures Rossland Water and Light Co.....		22,035.10
Bond Redemption Account.....		170,913.22
Royal Trust Company (Bond Redemption Acct.).....		253.98
		171,167.20
		\$4,598,913.66

# WEST KOOTENAY POWER & LIGHT CO., Limited

## Profit and Loss Account

To Rosland Operating Expenses .....	\$ 61,110.01	
" Depreciation on Merchandise .....	2,574.71	
		\$ 63,684.72
" Montreal Expenses .....	5,370.51	
" Salaries and Office Expenses .....	4,348.99	
" Trustees' Fees .....	501.55	
" Directors' Fees .....	520.00	
		269,386.95
" Balance carried down .....		269,386.95
		\$338,442.21

By Revenue Account .....

\$ 338,442.21

\$ 338,442.21

To Bond Interest and Dividends .....	\$ 218,000.00	
" Bond Interest .....	\$ 90,000.00	
" Dividend Common Stock .....	100,000.00	
" Dividend Preferred Stock .....	28,000.00	
		269,821.95
" Interest on Demand Loan .....	1,803.59	
" Interest on Bank O.D. Montreal .....	6.25	1,809.84
		25,000.00
" Depreciation on Plant .....	25,000.00	
" Sinking Fund .....	14,400.00	
" Premium on Bonds .....	907.96	
" Bad Debts and Allowances .....	33.35	
" Balance Profit W.K.P. & L. Co. ....	9,670.20	
		\$ 269,821.95

By Balance brought down .....

\$ 269,821.95

" Rents Receivable .....

435.00

\$ 269,821.95

To Cascade Water, Pr. & Lt. Co. Loss .....	26,104.20	
" Balance Net Profit All Companies .....	70,827.86	
		\$ 96,932.06

By Balance Profit W. K.P. & L. Co. ....

\$ 9,670.20

" South Kootenay Water Pr. Co. Profit .....

84,867.21

" Rosland Water & Light Co. Profit .....

2,394.65

\$ 96,932.06



