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ANNUAL REPORT
St. Joseph Lead Company
FOR THE FISCAL YEAR ENDING
DECEMBER 31, 1914

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FOR THE FISCAL YEAR ENDING

DECEMBER 31, 1914

OFFICES: 61 Broadway, New York, N. Y.

Bonne Terre, Missouri.

PRESIDENT'S ANNUAL REPORT TO THE STOCKHOLDERS
OF THE
ST. JOSEPH LEAD COMPANY.

GENERAL.

The fiscal year has been changed to end December 31st, in each year instead of April 30th, as heretofore.

The combined net income of the St. Joseph Lead Company and its affiliated companies for the period of eight months from May 1st to December 31st, 1914, was \$966,317.41. The combined net income for the calendar year 1914 was \$1,547,275.33. Owing to the decreased demand for lead the companies have been running 75% capacity since October. Had it not been for this fact, the year's earnings would have been substantially greater. Dividends to the amount of \$258,390.92 were paid from the net income of the calendar year 1914. Comparison is invited to the statement of the Company's liabilities at December 31st, 1914 (page 10) and the Company's liabilities at April 30th, 1914 (page 17, Annual Report for the fiscal year ending April 30, 1914). The average price received for lead at East St. Louis for the calendar year was \$74 per ton, the lowest in sixteen years, as compared to the price for the previous fiscal year of \$81 per ton. The output of pig lead at the smelter for the calendar year 1914 was 77,404 tons as compared with 65,615 tons produced in the previous fiscal year. For the purpose of future comparisons, operating reports, earnings, etc., are given for the calendar year 1914.

LABOR.

Labor conditions in the district are satisfactory. The contract between the State Board of Mediation and the companies expired on August 26 and was not renewed. Wages, however, were not reduced and are higher than in many years.

A system of old age pensions has been put into effect, the companies now having reached an age where many old and faithful employees are no longer fit for efficient work.

NEW CONSTRUCTION.

The details of new construction will be found in the operating reports. The plant is now so thoroughly modernized that there is no need of extensive additional work in the immediate future.

MINES AND MILLS.

Detailed reports of operations are attached. Attention is called particularly to the fact that in the mines the grade of ore has been maintained and the costs still further reduced.

SMELTER.

It should be noted that recovery of lead from concentrates has been still further increased. The recovery of over 96% for the month of December is the highest on record.

DOE RUN LEAD COMPANY.

Since my last report the St. Joseph Lead Company has acquired by purchase 2284 shares of the stock of the Doe Run Lead Company. The St. Joseph Lead Company at this time owns over 98% of the stock of the Doe Run Lead Company.

The total output of concentrates of this company is purchased under contract by the St. Joseph Lead Company. Detailed reports of its operations and earnings are attached.

MISSISSIPPI RIVER & BONNE TERRE RAILWAY COMPANY.

The results of operation of the Railroad under the present General Manager, to whom all departments are responsible, are better than the promises of my previous report. As compared with the calendar year 1912, the total operating expenses have been reduced by \$160,753.92, the ratio of operating expenses being 53.7 as against 67.7% in 1912, and this in the face of the fact that owing to the reduction in passenger rate from three cents to two cents per mile, causing a reduction in passenger revenue of \$11,915.94, and owing to the reduction of seventeen cents per ton in the rate on bituminous coal, causing a reduction of \$44,560.74 in the gross receipts from coal tonnage.

BONNE TERRE FARMING & CATTLE COMPANY.

This company has been handled with skill and economy during the past year. The principal matters of interest are the closing of the company's store in Bonne Terre, the starting of an insurance fund by which the company insures its own houses and a plan by which employees can more readily become owners of the houses in which they live. These matters are all taken up in detail in the report of the Secretary and General Manager.

New York, February 15th, 1915.

CLINTON H. CRANE,
President.

ST. JOSEPH LEAD COMPANY.
Condensed General Balance Sheet—December 31, 1914.

ASSETS.

LAND	\$ 6,732,542.16 ✓
BUILDINGS AND EQUIPMENT.....	4,064,509.33
INVESTMENTS:	
Capital Stocks, Bonds, and Notes of Subsidiary Companies. \$9,644,667.02	
Other Notes Receivable.....	40,126.36
Total Investments.....	9,684,793.38 ✓
SIX PER CENT. GOLD NOTES IN TREASURY—PAR VALUE.....	225,000.00 ✓
CASH IN SINKING FUND FOR REDEMPTION OF SIX PER CENT. GOLD NOTES	250,942.70 ✓
WORKING AND TRADING ASSETS	753,504.97 ✓
CURRENT ASSETS:	
Cash	\$ 395,599.04 ✓
Accounts Receivable.....	253,343.99 ✓
Total Current Assets.....	648,943.03
DUE FROM AFFILIATED COMPANIES.	36,855.61 ✓
DEFERRED ACCOUNTS.....	379,637.35 ✓
TOTAL.....	<u>\$22,776,728.53</u>

LIABILITIES.

CAPITAL STOCK— ^{492,262} 1,409,405 SHARES OF \$10.00 EACH.....	\$14,094,050.00 ✓
SIX PER CENT. GOLD NOTES, DUE JANUARY 1, 1918	2,239,000.00 ✓
MISSISSIPPI RIVER & BONNE TERRE RAILWAY LOAN, DUE OCTOBER 1, 1931, AT 5%	2,415,934.45 ✓
CURRENT LIABILITIES:	
Notes Payable.....	\$347,023.92 ✓
Accounts and Wages Payable.....	149,278.05 ✓
Accrued Accounts.....	5,973.97 ✓
Total Current Liabilities.....	502,275.94
DUE TO AFFILIATED COMPANIES.....	618,476.06 ✓
RESERVE FOR DEPRECIATION OF BUILDINGS AND EQUIPMENT AND FOR OTHER PURPOSES.....	363,364.93 ✓
PROFIT AND LOSS SURPLUS.. ..	2,543,627.15 ✓
TOTAL.....	<u>\$22,776,728.53</u>

THE DOE RUN LEAD COMPANY.

Condensed General Balance Sheet—December 31, 1914.

ASSETS.

PLANT PROPERTY:

Land	\$11,771,802.91
Plant and Equipment.....	<u>2,737,480.42</u>
Total Plant Property ..	\$14,509,283.33
INVESTMENTS.....	18,310.00
CASH IN SINKING FUND FOR REDEMPTION OF FIRST MORTGAGE BONDS..	938.70
TREASURY STOCK—34 SHARES.....	3,400.00
WORKING AND TRADING ASSETS.....	151,265.46
CURRENT ASSETS:	
Cash	\$ 53,705.09
Accounts Receivable....	<u>8,412.88</u>
Total Current Assets.	62,117.97
DUE FROM AFFILIATED COMPANIES.....	509,381.65
DEFERRED ACCOUNTS.....	10,103.38
TOTAL.....	<u><u>\$15,264,800.49</u></u>

LIABILITIES.

CAPITAL STOCK—65,783 SHARES OF \$100.00 EACH.....	\$6,578,300.00
FIRST MORTGAGE, SINKING FUND, 6%, THREE-YEAR, GOLD BONDS	986,000.00
NOTES PAYABLE, DUE APRIL 1, 1915.....	53,500.00
CURRENT LIABILITIES.....	99,183.29
DUE TO AFFILIATED COMPANIES.....	1,239,476.98
RESERVES FOR DEPRECIATION OF PLANT AND EQUIPMENT AND FOR OTHER PURPOSES.....	303,297.56
PROFIT AND LOSS SURPLUS.....	6,005,042.66
TOTAL.....	<u><u>\$15,264,800.49</u></u>

MISSISSIPPI RIVER & BONNE TERRE RAILWAY.

Condensed General Balance Sheet—December 31, 1914.

ASSETS.

PROPERTY INVESTMENT:
Road and Equipment:

Road.....	\$2,420,763.35
Equipment..	1,172,091.19

Total Road and Equipment \$3,592,854.54

Securities Pledged..... 2,415,934.45

Other Investments..... 12,187.28

Total Property Investment..... \$6,020,976.27

WORKING ASSETS:

Cash..... \$ 59,431.05

Accounts Receivable... 35,866.38

Materials and Supplies and other Working Assets..... 49,935.31

Total Working Assets... 145,232.74

DUE FROM AFFILIATED COMPANIES..... 46,768.43

ACCRUED INTEREST, NOT DUE..... 31,250.00

DEFERRED DEBIT ITEMS:

Cash and Securities in Sinking and Redemption Funds ... \$ 94,577.48

Other Deferred Debit Items..... 12,952.34

Total Deferred Debit Items..... 107,529.82

TOTAL \$6,351,757.26

LIABILITIES.

CAPITAL STOCK, 30,000 SHARES OF \$100.00 EACH..... \$3,000,000.00

FUNDED DEBT:

First Mortgage, Sinking Fund, 20-year, 5% Gold Bonds.... \$2,500,000.00

Equipment Mortgage 5% Gold Notes..... 150,000.00

Equipment Notes Favor American Car & Foundry Company 15,100.35

Total Funded Debt..... 2,665,100.35

WORKING LIABILITIES:

Traffic and Car Service Balances Due to Other Companies. . 37,473.93

Accounts Payable..... 17,390.33

Total Working Liabilities..... 54,864.26

ACCRUED LIABILITIES NOT DUE..... 33,350.00

DUE TO AFFILIATED COMPANIES..... 75,518.46

DEFERRED CREDIT ITEMS..... 3,372.76

PROFIT AND LOSS SURPLUS..... 519,551.43

TOTAL..... \$6,351,757.26

NOTE.—The Railway had a contingent liability at December 31, 1914, of \$250,000.00 as guarantor of the notes of the St. Francois County Railroad Company.

BONNE TERRE FARMING & CATTLE COMPANY.

Condensed General Balance Sheet—December 31, 1914.

ASSETS.

PROPERTY:

Land (Surface Value only).....	\$430,758.25	
Buildings—Bonne Terre, Herculanum and Leadwood....	302,629.05	
Land and Buildings—St. Louis.....	24,500.00	
Live Stock, Implements, etc.....	19,621.65	
Electric Power Lines and Equipment—Bonne Terre.....	8,630.39	
Total Property.....		\$786,139.34

WORKING ASSETS.....		39,601.58
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CURRENT ASSETS:

Cash.....	\$ 13,749.30	
Accounts Receivable.....	8,699.83	
Total Current Assets.....		22,449.13

DUE FROM AFFILIATED COMPANIES.....		40,773.96
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DEFERRED ITEM.....		10,810.50
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TOTAL		<u>\$899,774.51</u>
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LIABILITIES.

CAPITAL STOCK—50,000 SHARES OF \$10.00 EACH.....	\$500,000.00	
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CURRENT LIABILITIES.....	31,892.75	
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DUE TO AFFILIATED COMPANIES.....	3,658.25	
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RESERVES FOR DEPRECIATION OF BUILDINGS AND FOR OTHER PURPOSES..	19,453.93	
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PROFIT AND LOSS SURPLUS.....	344,769.58	
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TOTAL.....		<u>\$899,774.51</u>
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ST. JOSEPH LEAD COMPANY AND AFFILIATED COMPANIES.

Summary of Consolidated Income and Profit and Loss for the Year Ended December 31, 1914, after Eliminating Inter-Company Interest, Dividends and Rentals.

	Consolidation Total. Eliminations.		St. Joseph Lead Company.	The Doe Run Lead Company	Mississippi River & Bonne Terre Railway.	Bonne Terre Farming & Cattle Company.	St. Francis County Railroad Company.
Net Profit from Operations.....	\$2,317,039.63	.....	\$961,394.96	\$1,010,044.37	\$299,966.97	\$29,008.47	\$16,624.86
Other Income.....	110,646.19	\$304,492.35	169,218.78	99,044.55	144,377.18	2,498.03	.....
Gross Income.....	\$2,427,685.82	\$304,492.35	\$1,130,613.74	\$1,109,088.92	\$444,344.15	\$31,506.50	\$16,624.86
Income Charges.....	880,410.49	289,674.45	644,658.08	354,209.52	150,058.49	7,200.59	13,958.26
Net Income for the Year.....	\$1,547,275.33	\$14,817.90	\$485,955.66	\$754,879.40	\$294,285.66	\$24,305.91	\$2,666.60
Profit and Loss Credits.....	67,185.51	.....	54,002.50	.....	8,589.67	4,538.32	55.02
Profit and Loss Gross Surplus for the Year.....	\$1,614,460.84	\$14,817.90	\$539,958.16	\$754,879.40	\$302,875.33	\$28,844.23	\$2,721.62
Profit and Loss Charges.	82,489.14	.....	29,993.62	22,841.94	10,618.89	17,720.99	1,313.70
Profit and Loss Surplus for the Year before Deducting Divi- dends.....	\$1,531,971.70	\$14,817.90	\$509,964.54	\$732,037.46	\$292,256.44	\$11,123.24	\$1,407.92
Dividends Declared from Sur- plus for the Year.....	258,390.92	.....	258,390.92	.....	.....	.....	.....
Profit and Loss Surplus for the Year.....	\$1,273,580.78	\$14,817.90	\$251,573.62	\$732,037.46	\$292,256.44	\$11,123.24	\$1,407.92
Profit and Loss Surplus, January 1, 1914.	8,237,190.35	.....	2,386,013.86	5,273,005.20	227,294.99	348,646.34	2,229.96
Profit and Loss Gross Surplus..	\$9,510,771.13	\$14,817.90	\$2,637,587.48	\$6,005,042.66	\$519,551.43	\$359,769.58	\$3,637.88
Dividends Declared from Surplus Accumulated Prior to January 1, 1914.....	94,142.43	14,817.90	93,960.33	.....	.....	15,000.00	.....
Profit and Loss Surplus, De- cember 31, 1914.....	\$9,416,628.70	.....	\$2,543,627.15	\$6,005,042.66	\$519,551.43	\$344,769.58	\$3,637.88

ST. JOSEPH LEAD COMPANY AND AFFILIATED COMPANIES.

Statement of Liabilities at December 31, 1914 (with Inter-Company Accounts Eliminated).

	Total.	St. Joseph Lead Company.	The Doe Run Lead Company.	Mississippi River & Bonne Terre Railway.	Bonne Terre Farming & Cattle Company.
First Mortgage, 6%, Sinking Fund, Gold Bonds, Due March 1, 1915—Less Cash in Sinking Fund and Bonds in Treasury.	\$973,061.30	.....	\$973,061.30	.....	.....
First Mortgage, 5%, Sinking Fund, Gold Bonds, Due October 1, 1931—Less Cash in Sinking Fund and Bonds in Treasury.	2,394,921.95	.....	.....	\$2,394,921.95	.....
Five Per Cent., Equipment, Gold Notes—Less Amount Deposited with Trustee.....	139,488.07	.....	.....	139,488.07	.....
Equipment Notes in Favor of The American Car & Foundry Company.....	15,100.35	.....	.....	15,100.35	.....
Six Per Cent., Gold Notes, Due January 1, 1918—Less Cash in Sinking Fund and Bonds in Treasury.....	1,763,057.30	\$1,763,057.30	.....	.....	.....
Notes Payable.....	400,523.92	347,023.92	53,500.00	.....	.....
Traffic and Car Service Balances Due to Other Companies..	37,473.93	.....	.....	37,473.93	.....
Accounts and Wages Payable.....	268,796.86	149,278.05	72,497.28	16,483.40	\$30,538.13
Unclaimed Dividends.....	88.80	.....	.....	.....	88.80
Unclaimed Wages.....	57.27	.....	57.27	.....	.....
Accrued Accounts:					
Taxes.....	12,186.64	3,852.90	6,233.74	2,100.00	.....
Interest	52,213.45	2,042.95	20,183.00	29,987.50	.....
TOTAL.....	\$6,056,969.84	\$2,265,255.12	\$1,125,532.59	\$2,635,555.20	\$30,626.93

NOTE:—The Railway has a contingent liability of \$253,000 as endorser of the notes of the St. Francois County Railroad Company.

REPORT ON MINE AND MILL OPERATIONS OF ST. JOSEPH LEAD COMPANY.

During Calendar Year 1914.

BONNE TERRE DIVISION.

PRODUCTION.

The mine operations resulted in a production of 508,649 tons of ore.

There were milled a total of 505,123 tons, of which 418,739 tons were treated in the Bonne Terre Mill; 17,627 tons in the Leadwood Mill; and 68,757 tons in the Rivermines Mill. From the above, concentrate and metallic lead was obtained as follows:

	Tons Ore Treated.	Tons Concentrate Obtained.	Tons Metallic Lead Obtained.
At Bonne Terre... ..	418,739	23,654.80	15,615.97
At Leadwood.....	17,627	1,350.98	898.97
At Rivermines.....	68,757	3,320.51	2,177.96

So that the total ore mined at Bonne Terre resulted in a production of 28,326.29 tons of mill product, containing 18,692.90 tons of metallic lead.

Mine operations were curtailed the middle of October and production decreased about 25 per cent., and milling operations were discontinued at Bonne Terre Mill.

In the following the results of the various departments are outlined:

PROSPECTING.

During calendar year 159 diamond drill holes were put down—drilling a total of 61,753 feet at a total cost of \$26,579.78 or 43 cents per foot, equal to an expenditure of 5 cents per ton of ore mined.

Of the 159 holes drilled, 59 showed pay ore, 50 were indicative, and 50 holes contained only traces or were blank.

The results of prospecting were very satisfactory, as ore was disclosed considerably in excess of the amount mined during the year.

Drilling operations were discontinued in the month of November.

DEVELOPMENT.

A total of 1,753 lineal feet of development work was done at a cost of \$15,025.76 or \$8.57 per foot, showing an expenditure of 3 cents per ton of ore mined.

MINING.

Up to the time of curtailment, all ore mined in this district was hoisted from No. 1 Shaft, and treated in the Bonne Terre Mill, after which, in order to avoid re-crushing at Leadwood, the portion of ore shipped to Leadwood Mill was hoisted at No. 2 Shaft, and all ore hoisted at No. 1 Shaft was shipped to the Doe Run Mill No. 3 at Rivermines.

Of the total of 508,649 tons of ore mined in the Bonne Terre Mines, 229,125 tons was mined from an area of 2.55 acres of virgin ground. The remainder of 279,524 tons came from areas previously worked, covering an area of 2.57 acres. So that more than half of the ore came from areas previously worked.

The total acreage mined amounted to 5.12 acres, which furnished an average of 99,171 tons per acre.

The total cost of mining was \$322,354.27, giving an average cost of \$0.6337 per ton of ore mined. This, compared with the cost of mining during the fiscal year, shows a reduction of 16 cents per ton.

MILLING.

The Bonne Terre Mill treated 418,739 tons of ore, resulting in a production of 23,654.80 tons of dry concentrate, containing 15,615.97 tons of metallic lead, so that 74.5 lbs. of Pb. was recovered per ton of ore milled, at a total cost of \$142,659.16 or 34.07 cents per ton of ore.

LEADWOOD DIVISION.

PRODUCTION.

The mine operations in this district resulted in a production of 516,878 tons of ore.

The Mill treated 515,948 tons of this ore during calendar year and produced therefrom 35,601 tons of concentrate containing 23,795.45 tons of metallic lead.

A curtailment of 25 per cent. in mine production took place middle of October.

Results obtained in the various departments are as follows:

PROSPECTING.

A total of 131 diamond drill holes were put down, of which 45 cut pay ore, 3 were indicative, 81 blank or contained only traces, 2 were abandoned. A total of 55,507 feet were drilled at a cost of \$33,901.52, or an average of 61 cents per foot, showing an expenditure of 6.5 cents per ton of ore mined.

The drilling results were very satisfactory, as they added to reserves considerably more ore than was mined during period of calendar year.

Drilling operations were discontinued in December.

DEVELOPMENT.

A total of 1,640 lineal feet of development work was done at a cost of \$8,393.45 or \$5.12 per foot, showing an expenditure of 1.6 cents per ton of ore mined.

MINING.

From two to three shafts were operated up to time of curtailment, when Hunt Shaft was closed down permanently and permitted to fill; and henceforth all ore mined was hoisted at No. 12 Shaft.

The 516,878 tons ore mined came from an area of 10.72 acres of ground, distributed as follows:

2.076	Acres	at	Mine	No.	11.
5.34	"	"	"	"	12.
3.30	"	"	"	"	14.

The average production per acre amounted to 48,198 tons.

The total cost of mining was \$387,928.60, giving an average of 75 cents per ton of ore, which is equal to the cost during the previous year.

MILLING.

The mill treated a total of 515,948 tons of the above ore mined, resulting in a production of 35,601.47 tons dry concentrates containing 23,795.45 tons of metallic lead, which is equivalent to 92.2 lbs. of metallic lead per ton of ore milled, at a total milling cost of \$149,339.63, or an average of 28.94 cents per ton of ore.

ELECTRIC POWER PRODUCED AND CONSUMED IN MINE AND MILL OPERATIONS

During Calendar Year 1914.

The Rivermines power plant was in full operation up to the end of October, 1914, since which time but one or two engines have been operating intermittently.

During the entire period of twelve months it required 18,655,672 K.W. hours to operate the Doe Run mines and mill. Of this amount the Rivermines plant generated 9,941,992 K.W. hours at an average cost of \$.01228 per K.W. hour. The remainder of 8,713,680 K.W. hours was purchased from the St. Joseph Lead Company at an average cost at Rivermines of \$.01287 per K.W. hour, which brings the average cost of the total A. C. power used to \$.01255 per K.W. hour.

Up to the latter part of October the average A. C. power required hourly for the operation of the Doe Run plants, during working days, amounted to 2,700 K.W. hours per hour. Of this amount, 1,400 K.Ws. per hour were generated at the Rivermines plant, the remainder of 1,300 K.Ws. per hour were purchased from the St. Joseph Lead Company.

When, in October, both Companies curtailed production, the power requirements were reduced to such an extent that the closing down of one of the two gas power plants was feasible. As the Rivermines power plant had been operating for a number of years under maximum load conditions, so that only the most necessary repairs could be made during Sundays, it was found desirable to temporarily close this plant, giving an opportunity for a thorough overhauling. This is being done at present.

The present power requirements of the Doe Run Lead Company amounts to 2,100 K.W. per hour, and is being supplied by the St. Joseph Lead Company.

In order to secure the highest efficiency from the power purchased, two of the Rivermines generators are being operated as synchronous motors, increasing the power factor about 20%, while at the same time the power factor of the St. Joseph Lead Company's plants is improved. A further saving was accomplished by the installation of a second 110 line between Leadwood and Doe Run No. 8 Shaft, where considerable line loss had existed, due to small transmission line.

In order to secure maximum output from the turbine installation of the Leadwood plant, consisting of two 1,000 K.V.A. steam turbines, which were found to be able to carry 20% overload continuously, the Leadwood boiler plant was

increased, and all boilers were equipped with mechanical stokers, and the Companies are now receiving the benefit of this installation.

The Bonne Terre gas engine plant, which is running in parallel with the Leadwood power plant, is operating since October to maximum capacity, all three engines and a gas compressor being in operation, producing power for the Bonne Terre mines, and sending the balance to Doe Run Lead Company, via Leadwood, at the rate of 18,000 K.W. hours per day.

The total power generated at Bonne Terre during the calendar year amounted to 9,069,425 K.W. hours, at a cost of \$.00962 per K.W. hour.

There were consumed in Bonne Terre 7,215,463 K.W. hours, and sent to Rivermines, via Leadwood, 1,853,962 K.W. hours.

The total electric power production at the Leadwood plant amounted to 13,364,023 K.W. hours, including both A. C. and D. C. current. This was produced at a cost of \$100,723.96—averaging \$.00753 per K.W. hour.

Of this amount, 7,753,382 K.W. hours was sold to Doe Run Lead Company, and 131,686 K.W. hours was furnished St. Joseph Lead Company's No. 15 Shaft. The balance of 5,478,955 K.W. hours was used in mine and mill operations at Leadwood.

IMPROVEMENTS MADE DURING CALENDAR YEAR 1914.

BONNE TERRE DIVISION.

PLANT ADDITIONS (Charged to Capital Account).

Shaft No. 7.

Installation of a 400 gallon electric driven pump, and pipe connections through main drift and air drill hole into city main, for the purpose of supplying Bonne Terre with drinking water, at a cost of \$3,959.69.

Shaft No. 15.

Installation of electric driven turbine pump for mine drainage at a cost of \$1,321.22.

Mill.

In order to eliminate mill delays on account of small ore bin capacity over rolls, all bins were remodeled and considerably enlarged and belt feeders from

screens to elevators and additional slime settling tanks were installed in basement of mill, all at a total expense of \$4,181.24.

Flotation Plant.

The construction of the flotation plant was commenced in February, and the plant was placed in operation in April. Its final construction was not completed before August, when the last of the four thickening tanks was installed. The total expenditure for the plant was \$23,909.94.

Power Plant.

The only additional plant equipment installed consisted of three motors to replace steam engines driving exhausters in the gas plant. This installation cost \$1,787.96.

The total net expenditures charged to Plant Account, after deducting machinery transferred and sold, amounting to \$22,218.50, was \$14,377.33.

PLANT ADDITIONS (Charged to Expense).

Shaft No. 1.

The old steam hoist engine was equipped with electric motor drive, and in connection with this installation, the sheave wheels and tower were raised 8 feet to allow more space between skip and sheave wheels.

Shaft No. 2.

A 400-gallon electric driven pump was installed to deliver No. 2 Mine water to the main water reservoir. This pump and motor was removed from No. 7 Mine. The connection into the main reservoir line was also made from the underground pumps at Mine No. 1. The purpose of these two installations was to eliminate practically all pumping by the Big River Pump Station.

After the electrification of the steam hoist and all heretofore steam driven machinery, the operation of the Bonne Terre steam boiler plant was discontinued, except for heating purposes, and water gas runs in the gas plant.

The various transformer equipments were rearranged so as to take care of peak loads occurring during mining periods and further increase the transformer efficiency.

A lumber shed was constructed, so that stock lumber would be protected from the weather.

LEADWOOD DIVISION.

PLANT ADDITIONS (Charged to Capital Account).

Mine No. 11.

Installation of a bulkhead to seal underground pump house from mine proper, cost \$1,460.66.

Mines Nos. 12-14.

Air locomotives purchased, cost \$2,612.24.

Installation of drinking water pump, cost \$844.00.

Installation of a 1,000-gallon electric pump for mine drainage with necessary cable and transformers, cost \$5,176 19.

Mill.

Installation of 2 concentrating tables, cost \$747.88.

One chat flush pump, cost \$574.30.

Installation of electric driven pump and pipe line for return of clear water from flotation settling tanks to mill, cost \$1,830.27.

Installation of 4 middlings crushing rolls, cost \$11,009.23.

Flotation Plant.

The construction of the flotation plant, \$20,625.54.

Sand classifier, \$3,103.06.

Dewatering wheel, \$720.35.

Power Plant.

The 10 boilers of the Leadwood Steam Plant were equipped with automatic stokers at a cost of \$18,300.37.

Two additional boilers and stokers were added at a cost of \$10,437.32.

Building over additional boiler cost \$868.45, and extension of coal bin and coal trestle \$2,327.06.

The entire plant was equipped with an ash removal system, which including drains and launders cost \$2,787.14, and a coal handling equipment costing \$2,634.47.

Construction of concrete wall on the south end of outside coal storage bin for the purpose of flooding coal in case of spontaneous combustion was installed at a cost of \$960.04.

An addition of two panels was made to the switchboard costing \$946.04.

Installation was made of an electric driven pump and spray system for cooling condenser water, costing \$2,651.69.

Installation of transformers to take care of four roll motors was made, costing \$2,300.68.

A water meter was installed for measuring all boiler feed water. This installation cost \$920.12.

Installation of one larger condenser removal pump and turbine, cost \$817.37.

An electric pump was transferred from Bonne Terre to the Big River Pump Station to supplant the steam driven pump. Installation was made at a cost of \$3,333.82.

Total expenditures charged to Plant Account, deducting \$2,360 for machinery sold, was \$95,150.19.

PLANT ADDITIONS (Charged to Expense).

Fan in power house.

Watt-hour meters added to switchboard to measure incoming and outgoing current.

Draft gauges on all boilers.

Extension to chat conveyor at mill.

Water lines supplant air lines for cleaning mineral and chat conveyors in mill.

O. M. BILHARZ,
General Superintendent.

REPORT ON MINE AND MILL OPERATIONS OF THE DOE RUN LEAD COMPANY

During Calendar Year 1914.

PRODUCTION.

The mining operations resulted in the production of a total of 966,273 tons of ore.

There were milled in No. 3 Mill at Rivermines, 967,976 tons of Doe Run ore. from which the Mill made 56,783.52 tons of mill product containing 39,228.93 tons of metallic lead.

Mine operations were partially curtailed the middle of October, which accounted for a proportionate decrease in production, otherwise the Company's mine output would have exceeded the million mark.

The results in the various departments are outlined in the following:

PROSPECTING.

Was confined to Company's property and during the period, 203 diamond drill holes, or 97,060 feet were drilled, at a total cost of \$54,314.02, or 55.9 cents per foot of hole, showing an expenditure of 5.6 cents per ton of ore mined.

Of the total holes drilled, 23 discovered pay ore, 79 were indicative and 101 either contained traces or were blank or abandoned.

While the number of pay holes was small, these, with the large number of indicative holes, will, no doubt, with additional drilling, disclose ore reserves in excess of the area mined during the calendar year.

DEVELOPMENT.

During the period 6,997 lineal feet of drifts were run to ore reserves at a total cost of \$73,686.02, or \$10.53 per foot, resulting in an expenditure of 7.6 cents per ton of ore mined. This includes 1,401 feet of development work done in opening up ore body at No. 3 Shaft, which is now in shape for production.

MINING.

Five shafts were in operation during the first 9½ months of the calendar year, after which time four shafts were operated.

Of the 966,273 tons mined—Shafts Nos. 1, 4 and 8 furnished an average of 227,000 tons each, while Shaft No. 6 furnished 162,881 tons, and Shaft No. 9 furnished 121,271 tons.

The acreage of ground cut to produce this tonnage was 16.43 acres, each acre producing an average of 58,808 tons of ore.

The maximum production per acre was obtained at Shaft No. 8, viz.: 85,986 tons. The minimum production per acre at Shaft No. 9, viz.: 44,422 tons.

The total cost for Mining amounted to \$634,947.14, giving an average of 65.6 cents per ton. This is a reduction of 5 cents per ton as compared with fiscal year 1913, and was principally due to the introduction of drills of the jack-hammer type, and an increase of about ¾ tons per man shift employed.

MILLING.

All ore from Company's shafts was milled in No. 3 Mill at Rivermines, and a total of 967,976 tons were treated during calendar year, resulting in a production of 56,783.52 tons of concentrates containing 39,228.93 tons of metallic lead, which is equivalent to a recovery of 81 lbs. of metallic lead per ton of ore treated, at a total Milling Cost of \$262,861.28 or 27 cents per ton of ore.

IMPROVEMENTS MADE DURING CALENDAR YEAR 1914

DOE RUN LEAD COMPANY.

PLANT ADDITIONS (Charged to Capital Account).

Shaft No. 1.

Installation 2½" electric driven pump.....	\$287.15
Incline hoist (purchased St. Joe Lead Co.).....	1,073.66

Shaft No. 4.

Installation of 2½" electric driven pump for water supply (on surface)	375.50
Lidgerwood electric hoist.....	4,725.00
20 H.P. high pressure air compressor transferred from Mine 6 to 4 and \$1,268.27 credited to No. 6 Shaft.	

Shafts Nos. 2-3.

4" 5-stage electric pump of 150 H.P. capacity.....	2,200.00
Remodeling old compressor building into a change room for U. G. men.....	886.60

Shaft No. 6.

20 H.P. electric driven air compressor transferred from shops..	550.00
Another compressor of same size was purchased from St. Joe Lead Co., and erected at No. 6 Shaft.....	578.39

Shaft No. 8.

No plant additions were made at this shaft.

Shaft No. 9.

Transferred and installed two small electric driven pumps.....	562.90
--	--------

Mill No. 3.

During the calendar year the sum of.....	9,820.88
was spent on the additional sections in course of construction at Mill #3. This finishes this work. The above expenditure being for com-	

pletion of the building, replacement of Woodbury jigs by screens, 1 Hancock jig, and the installation of electric equipment, piping, dewatering wheel, conveyors, etc.

Flotation Plant.

Construction of flotation plant, cost.....	25,155.71
R. R. trestle extension of the ore unloading track.....	379.81

Shops.

No plant additions made here.

Tenement Houses.

At Nos. 8 and 9 Shafts the sum of.....	16,295.19
was spent for the erection of miners' cottages, which were moved from Doe Run.	

Miscellaneous.

Among further improvements may be mentioned the installation of a 6" pipe line between Shafts Nos. 4 and 2 to be used for either air or water.....	1,308.70
--	----------

The net expenditure for the calendar year, for plant additions, after deducting \$26,055.06 for machinery sold, scrapped, and insurance credits, amounted to..... \$42,974.11

This amount was charged to Capital Account.

PLANT ADDITIONS (Charged to Expense).

Shaft No. 3.

A ventilating system consisting of an electric driven blower was placed in lower mine drift.

Meters were installed on all air compressors.

No. 2 Plant.

Various improvements were made, such as building an addition to stable, machine shop tool room, new oil house, and installation of a new heating equipment throughout the shops, served by No. 2 Boiler Plant.

Power Plant.

The principal improvements made during the calendar year charged to operating expenses, were as follows:

In the gas plant, 3 steam engines operating the exhausters, were replaced by electric motors.

Four wet scrubbers on the Loomis-Pettibone producers were replaced by 36" spiral riveted pipes with inside spraying arrangements.

Larger pipe connections between main gas header and gas engines were installed.

Two gas engines were equipped with new piston rod system, and all other necessary repairs required for a successful operation of the plant were kept up.

O. M. BILHARZ, Jr.
General Manager.

ST. JOSEPH LEAD COMPANY

REPORT COVERING OPERATION

OF

HERCULANEUM PLANT

FOR YEAR 1914

HERCULANEUM, MO., January 19th, 1915.

HERCULANEUM PLANT OF THE ST. JOSEPH LEAD COMPANY

DEPARTMENTS.

- | | |
|-----------------------------|--|
| 1—Yard Department. | 10—Bag House. |
| 2—Sampling Department. | 11—Maintenance. |
| 3—Matte Crusher. | 12—Office (Time Keeping and Accounting). |
| 4—Holthoff Roaster. | 13—Construction. |
| 5—Wedge Roaster. | 14—Railway Service. |
| 6—Mixing Room and Ore Bins. | 15—Labor Conditions and Hygiene. |
| 7—Sintering Plant. | 16—Operating Costs. |
| 8—Blast Furnace Plant. | 17—Cost of Pig Lead Production. |
| 9—Refinery. | 18—Lead Losses and Recoveries. |
-

1—Yard Department.

The operation of the Yard Department, which includes the unloading and reloading of all materials used in the operation of the plant has been conducted in a thorough and systematic manner, more and more contract work being introduced wherever possible. While it is not possible to unload the concentrates by contract, owing to the congested condition of our trestle and the necessity of putting a fairly large gang on each car to unload it quickly, this work has been done pretty economically, owing to the fact that the mix room crew attend to the bedding in their spare time and the plan of having the yard department and the roasting department, to which department the raw materials go first, under one head, has resulted in eliminating any working at cross purposes. The sampling and the weighing are under the head of the Yard Department.

During the year all the railroad tracks and trestles within the plant proper have been purchased from the railroad by the Lead Company. The heavy job of rebuilding the trestles, which was begun two years ago is about completed, two trestles having been entirely rebuilt with frame bents, and the other trestles having concrete piers put under all the bents. A new cross over has been installed on the south end of the plant yards, which enables the plant switch engine to get to its storage tracks without interfering with the main line. This cost some \$700.00 and had made available one hour more per day use of our switch engine during its working period.

About all the concrete flooring needed has now been installed. The locomotive crane makes it possible to handle stock piles and material cheaply and promptly.

2—Sampling Department.

The new sampling building completed shortly before the beginning of this fiscal year has proved adequate and efficient for handling the sampling business of the plant. It is interesting to note that every material received here is sampled once a day, outside of concentrates, each car of which is sampled. This department is an independent one and under its own foreman, and while the expense is some \$450.00 per month, marked efficiency in the metallurgical work has been obtained by having absolute data on which to base loss figures and metallurgical calculations. The accuracy of our sampling methods has been verified by repeated checks, which together with frequent cut off clean ups make our recovery figures thoroughly accurate and dependable.

The track scale has been again completely rebuilt and new timbers and mechanism have been installed. This scale is tested once a month against a weighed car of pig lead. All the smaller scales in the plant are tested once a week and written reports of their condition filed.

3—Matte Crusher.

This plant now consists of two Blake crushers and two 30" x 14" rolls and is in a good state of repair. It is expected that this will be used for crushing the stock of weathered matte on hand here for pre-roasting after the granulating plant is in operation. The lime rock crusher, which is in the same building, is undergoing extension. Cast iron linings have been installed in all the chutes.

4—Holthoff Roaster.

This roaster has again demanded a large amount of maintenance work. Concrete piers have been put under all the columns and the driving mechanism. Fuel oil has been substituted for producer gas for heating.

5—Wedge Roaster.

The Wedge Roaster has been maintained in continuous operation. No changes or alterations having been needed or made.

6—Mixing Room and Ore Bins.

Pug mills have been installed for breaking up the flotation product now being received and delivering the same in a continuous and uniform stream on the

main mixer belt, thereby enabling this material to be incorporated into the roaster charge. Considerable new timbering and planking has been put in by way of maintenance.

7—Sintering Plant.

The reconstructed Sintering Plant, which has been built entirely of steel to replace the one that was destroyed by fire in June, 1913, is a model in every way for this class of work. Two additional machines have been added, making a total of eight. The new design was laid out to make the handling of material as simple and direct as possible and a large amount of conveying machinery has been eliminated. The distributing system to each individual machine has now been arranged so that the entire mix is discharged to it, making the feed to each individual machine uniform and therefore to a large extent the product. At the head of each machine is a 40-ton steel bin, which makes storage for eight hours. New and improved oil burners have been installed and it is expected that the consumption of oil will be materially reduced over past years.

8—Blast Furnace Plant.

The fourth and last blast furnace was remodeled and enlarged early in the year. The plant has now four 42" x 192" blast furnaces, completely equipped and in operating shape. Both the roasting department and the smelting department are in shape now to easily handle 12,000 tons of concentrate per month.

The new steel flue completed the previous year of acid resisting iron is standing up perfectly and has proved itself adequate and efficient in handling the fumes from the furnaces.

The charge car, which was put in two years ago is still working perfectly, having required very little maintenance.

The maintenance on this department has shown a very marked decrease in costs and outside of the slag cars, the whole department is in absolutely first class shape.

9—Refinery.

As mentioned in previous reports, cast-steel kettles were substituted for cast iron, some of which have now been in use three years against the previous life of six months for cast iron ones. None of the kettles show any signs of deterioration. The production for the fiscal years ending

1906.....	43,700.6 Tons	1911.....	58,229.5 Tons
1907.....	52,877.0 Tons	1912.....	62,922.2 Tons
1908.....	49,647.7 Tons	1913.....	66,847.1 Tons
1909.....	54,113.8 Tons	1914.....	65,615.5 Tons
1910.....	62,191.3 Tons	1914 (Calendar).....	77,404.7 Tons

10—Bag House.

The Bag House, which was started in April after a delay of two weeks on account of a fire in one of the chambers has operated continuously and successfully and has saved to the company an average of 100 tons of metallic lead per month. The mechanical shaking device has operated well. The whole operating force consists of one man per shift. It is expected that an additional chamber will be equipped shortly when the delay of three days once a month which is occasioned by cleaning out, will be eliminated, making an added saving of, roughly, \$750.00 per month.

11—Maintenance.

This department has been reorganized and a system of shop order tickets and tool house tickets installed and much more accurate check is being kept of the charge out of materials than heretofore. We are now able to get accurate cost data on individual repair jobs. There have been a number of large maintenance items put through during the year, which in a sense are in the nature of construction. A milling machine has been added to the equipment of the machine shop and also a shaper.

12—Office (Time-Keeping and Accounting).

The Herculeum Office is now making out all its own reports, same being audited by the auditor, thus relieving the general office of a large amount of detail labor. In addition to this this office is also handling the billing of lead shipments, formerly handled by the railroad.

13—Construction.

Flotation Product. A system has been devised and installed for the handling of flotation product. This was a problem new to everybody and involved considerable experimenting, but the question has now been solved in a fitting manner so that the plant is now handling the current receipts from the mills and it is expected shortly to have the accumulation of some 1,000 tons turned into pig lead.

Refinery. A steel flue has been installed so that the gases from the refining furnaces may be sent through to the stack or through the bag house as the temperature of the blast furnace gases may require. The addition to the refining plant for the desilverizing and further refining of our lead is well under way. This plant was designed after consultation with the best authorities and includes the latest design of stirring apparatus, pumps, press, etc. Nearly all of the material for its construction is now on the ground.

Granulating Plant. This item, which is planned to obviate the necessity of crushing our raw matte is very nearly completed. It consists of an overhead

traveling craneway to take the matte from the forehearth, a storage furnace of the copper converter type and a granulator proper with a mechanical loading device. Having the matte in a disintegrated form will enable us to commence to work up the large accumulation of matte on hand here and convert this dead asset into cash, at the same time reducing our fluxing cost.

Power Plant. At the day of writing the steam end of the low pressure turbine bought from old Doe Run has been tried out and works successfully. This installation should make a marked saving in our power costs, as by it we are able to make use of the exhaust steam from all the simple engines heretofore exhausting into the atmosphere. It is expected to run the matte crusher, the lime rock crusher, the bag house, the Wedge roaster, the Holthoff roaster and the town lights from alternating current from this source, thus relieving the load on our direct current generators, one of which it is expected can be shut down. We have also moved a motor generator set from Leadwood to be used as a balancing set in case more A.C. current is generated than needed. Should the turbine be shut down for any reason this set can be reversed and A.C. current generated with it to take care of the bag house motor, etc.

Steam Hammer. A 600-pound steam hammer has been installed in the blacksmith shop, enabling this department to operate more economically and to handle more and heavier work. Several tools such as bending rolls, forge and other small equipment have been made locally, which greatly facilitate maintenance.

14—Railway Service.

Owing to the introduction of the mutual demurrage agreement, whereby the plant gets credit on its per diem statement for cars unloaded within the allowed limit of two days, the average amount of demurrage per month has been reduced from some \$350.00 to \$50.00. The introduction of the crossover at the south end has enabled us to run with one switch engine all the summer months. In the winter when we use the Thaw House we have to have a night crew.

15—Labor Conditions and Hygiene.

Labor conditions at Herculanum are in very good shape. The average working man being of much higher class than heretofore, largely due to the very healthy working conditions now prevalent. Very few new cases of lead poisoning have developed in the last year. There has been no labor shipped to Herculanum from labor agencies during the past two years.

The streets and alleys of the town were thoroughly cleaned and considerable road has been made with the ashes from the plant.

16—Operating Costs.

The operating costs of the plant have been quite steady and reliable in spite of greatly reduced tonnages, caused by the curtailment of mine production the latter part of 1914, which condition of necessity makes it more difficult to make good costs, as some one-fifth of the expense of operating is fixed, irrespective of tonnages handled. While no great improvement is shown in the average cost per ton of concentrate treated for the year, the showing is really better than that of previous years, on account of the fact that the plant now bears practically every item of expense incurred by it. Many of these expenses were heretofore charged to the general expense account of the company. The additional expense of operating the bag house and flotation plant has also been incurred. When commercial conditions warrant handling full tonnage again the operating cost per ton of concentrate should, beyond question, be lower than ever before.

17—Cost of Pig Lead Production.

The cost of producing a ton of pig lead during the year 1914 shows a fair improvement over 1913 and is the lowest ever attained, being some \$2.25 per ton better than the cost of making lead four years ago. This improvement has been due, largely to better recoveries but in quite some measure, especially in 1914 to the fact that the grade of concentrate received from the mills has been substantially higher.

18—Lead Losses and Recovery.

The lead recovery has shown a steady and consistent improvement, month by month, until now it is pretty nearly up to the maximum possible, being well over 96%, a gain of more than 5% in four years. As one per cent. of lead is worth about \$4,800.00 per month with lead at \$3.75 per cwt., the importance of this matter is clear. This better recovery has been obtained by improved work in every department of the plant, divided roughly as follows:

First—Roasting	1½%
Second—Furnace Tops.....	1½%
Third—Slag Loss.....	½%
Fourth—Flue	¼%
Fifth—Bag House.....	1½%

In this particular, which is the most important item of efficiency, the plant shows its greatest gain.

CONSTRUCTION FOR THE YEAR 1914.

	Items.	Total Spent During Year Ending January 1, 1915.
Power Plant.....	.....	\$18,184.09
Sintering Plant (including Flotation Plant, \$1,499.15).....	.....	48,565.62
Matte Crusher.....	.....	120.86
Blast Furnace Plant:		
Blast Furnace No. 1	\$3,198.06	
Matte Handling System	20,094.25	
Refinery.....	1,924.30	25,216.61
Bag House.....	.....	38,463.45
General Plant Equipment:		
Fire Line.....	\$585.93	
Water Works (Meters not charged to Plant)....	3,098.36	
Machine Shop (Steam Hammer).	1,029.01	
Tracks, Trestles and Scales.....	711.22	5,424.52
Total Construction for 1914		<u>\$135,975.15</u>

Respectfully submitted,

WM. ALLEN SMITH,
Mgr.

MISSISSIPPI RIVER & BONNE TERRE RAILWAY.

BONNE TERRE, MO., January 20th, 1915.

MR. CLINTON H. CRANE, President,
61 Broadway, New York, N. Y.

DEAR SIR:—

I beg to advise complete report of the Revenues, Expenses and General Accounts for the calendar year 1914 have been sent you by the Auditor, and would like to call your attention to the following deductions from such report:

Gross Earnings for calendar year 1914, \$692,556.80, as compared with \$692,844.03 for calendar year 1913, a decrease of \$287.23.

Operating Revenue for calendar year 1914, \$320,616.51, as compared with \$244,058.48 for calendar year 1913, an increase of \$76,558.03.

The Net Income from operation for calendar year 1914, \$293,482.99 as compared with \$191,235.79 for calendar year 1913, an increase of \$102,247.20.

Operating Expenses for calendar year 1914, \$371,940.29, as compared with \$448,785.55 for calendar year 1913, a decrease of \$76,845.26. The Operating Ratio, year 1914, 53.7% as compared with year 1913, 64.8%, a decrease of 11.1%.

I attach hereto the following Exhibits giving statistical and other information covering operation of the road:

Exhibit A. Freight Traffic year 1914, by months, compared with the year 1913:

Year.	Tons.	Freight Revenue.	Switching Revenue.	Total Freight Revenue From Transportation.
1914.....	2,059,755	\$563,390.26	\$19,922.45	\$583,312.71
1913.....	1,808,790	534,142.45	37,157.55	571,300.00
Increase.....	250,965	\$29,247.81	.....	\$12,012.71
Decrease.....	.....	.....	\$17,235.10	.....

Exhibit B. Freight Traffic year 1914 showing tonnage and revenue by commodities, compared with the year 1913.

Exhibit C. Passenger Traffic for year 1914, by months, compared with the year 1913:

Year.	Number Passengers Carried. Earning Revenue.	Revenue.
1914.....	342,432	\$85,056.55
1913.....	312,931	90,799.70
Increase.....	29,501	.....
Decrease.....	.....	\$5,743.15

Exhibit D. Comparative Freight and Passenger Traffic Statistics, giving number of tons and passengers carried, earning revenue, and average receipt and distance haul per ton and passenger, per mile, etc.

Exhibit E. Comparative statement of Train, Locomotive and Car Miles. The increased locomotive miles for 1914 over 1913 is brought about through a re-classification or division of locomotive performance, resulting in a more accurate classification of mileage made.

Exhibit F. List of equipment and review of repairs made on locomotives, passenger and freight train cars, for calendar year 1914, with explanatory notes.

Exhibit G. Track mileage with review of principal items of renewals, etc. during calendar year 1914, with explanatory notes.

Exhibit H. Comparative statement of Operating Expenses and Earnings for three calendar years, 1912, 1913 and 1914.

For complete details and all changes in equipment trust obligations and other financial items, see Auditor's report submitted you.

We have been very fortunate in our operations during the year, having had no serious train accidents and only minor derailments. There have been no injuries of any sort to passengers; and to our trainmen there has been one death and but few minor cases of personal injury. All these have been amicably adjusted.

I trust that the information contained in the exhibits forwarded you will make clear the details of operation for the past year.

For the very good showing in the reduction of operating expenses, due credit must be given to the hearty co-operation of the Heads of Departments and employees.

Yours truly,

F. J. THOMURE,
General Manager.

Exhibit "A"

STATEMENT

Showing Tonnage and Revenue for Calendar Year January, 1914, to December, 1914, inclusive, as compared with similar period 1913.

Month.	TONS.				REVENUE.			
	1914.	1913.	Inc.	Dec.	1914.	1913.	Inc.	Dec.
January....	168,977	135,552	33,425	.....	\$44,582.78	\$45,815.69	.....	\$1,232.91
February....	142,299	124,893	17,406	.....	38,036.92	42,095.77	.....	4,058 85
March.....	169,058	141,680	27,378	.....	49,322.44	46,280.08	\$3,042.36	.....
April.....	178,371	183,343	.....	4,972	48,463.87	50,491.57	.....	2,027.70
May.....	202,782	174,097	28,685	.....	52,200.74	50,031.67	2,169.07	.....
June.....	176,287	156,829	19,458	.....	47,969.26	43,718.56	4,250.70	.....
July.....	166,677	141,038	25,639	.....	47,245.99	40,917.24	6,328.75	.....
August....	184,781	95,697	89,084	.....	51,780.13	30,799.27	20,980.86	.....
September..	183,084	122,228	60,856	.....	51,651.03	37,875.87	13,775.16	.....
October....	175,123	175,012	111	.....	49,182.12	51,634.56	.....	2,452.44
November..	151,588	191,042	.....	39,454	42,526.02	51,128.97	.....	8,602.95
December..	160,728	167,379	.....	6,651	43,145.30	46,105.98	.....	2,960.68
Totals.....	2,059,755	1,808,790	302,042	51,077	\$566,106.60	\$536,895.23	\$50,546.90	\$21,335.53
Net.....	.....	.....	250,965	.....	.....	.....	\$29,211.37	.....

NOTE.—The adjustment of revenue overcharges, etc., through the General Accounts accounts for the slight differences as between figures given in letter, compiled from Auditor's statistics, and figures shown above.

STATEMENT **Exhibit "B"**
Showing Freight Tonnage and Revenue by Commodities, for Calendar Year January, 1914, to December, 1914, inclusive,
as Compared with Similar Period 1913.

Notes.	COMMODITY.	1914.		1913.		INCREASE.		DECREASE.	
		Tons.	Revenue.	Tons.	Revenue.	Tons.	Revenue.	Tons.	Revenue.
A	Agricultural Products.....	14,689	\$15,668.91	9,160	\$10,150.25	5,529	\$5,518.66	...	...
	Animal Products (Live Stock) ..	797	684.60	669	572.01	128	112.59	...	...
	Coal—Anthracite.....	700	578.44	868	614.60	...	...	168	\$36.16
B	Coal—Bituminous	262,122	69,322.25	280,229	90,333.53	...	...	18,107	21,011.28
	Coke.....	27,784	9,139.20	34,996	11,677.32	...	...	7,212	2,538.03
	Lead Concentrates.....	194,299	116,022.17	168,054	101,999.34	26,245	14,022.83	...	...
C	Lead Bearing Rock.....	1,205,827	142,664.38	807,404	86,889.35	398,423	55,775.03	...	...
D	Stone, Sand, etc.....	36,146	10,601.77	41,484	12,235.38	...	...	5,338	1,633.61
	Mill Cinder and Scale.....	41,112	10,161.26	44,076	11,385.09	...	...	2,964	1,223.83
	Chat.....	142,138	22,896.69	287,488	45,129.78	...	...	145,350	22,233.09
	Pig Lead.....	74,366	56,214.22	69,170	52,559.54	5,196	3,654.68	...	...
	Mine Products Miscellaneous ..	1,464	1,210.08	2,130	1,628.14	...	...	666	418.06
D	Forest Products.....	10,861	7,735.66	12,597	9,543.74	...	...	1,736	1,808.08
D	Manufactures.....	22,148	35,151.93	24,173	34,202.57	...	949.36	2,025	...
D	Merchandise	17,620	59,386.30	17,795	58,115.10	...	1,271.20	175	...
E	Miscellaneous.....	7,682	8,668.65	8,497	9,859.49	...	...	815	1,190.84
	Totals.....	2,059,755	\$566,106.60	1,808,790	\$536,895.23	435,521	\$81,304.35	184,556	\$52,092.98
	Net Increases.....					250,965	\$29,211.37		

NOTES.

A. Agricultural Products.—Owing to protracted drouth, hay crop in this territory was a total failure and increase shown in this item is almost entirely accounted for by hay shipped in.

B. Coal—Bituminous.—Decrease in tonnage and revenue accounted for by decreased consumption of coal for steam purposes; and also by the fact that during the first five months of 1913 we earned 20 cents per ton more on soft coal than after that period, when the reduced rates on coal became effective.

C. Lead Bearing Rock.—Apparent increase in tonnage and revenue principally accounted for by the fact that road movements have taken the place of switch movements to a considerable extent, causing a corresponding shrinkage in switching revenue.

D. Stone, Sand, etc.; Forest Products, Manufactures, Merchandise.—Shrinkage in tonnage of these commodities indicates the bad business conditions that have prevailed in this territory during the past year. It is, however, pleasing to observe that on our highest class tonnage, viz: Manufactures and merchandise, notwithstanding the volume of business, was less, the revenue was more in 1914 than in 1913, indicating that we have made the best of discouraging rate conditions and of divisional arrangements with other lines on through traffic.

E. Miscellaneous.—Includes such commodities as household goods, emigrant movables, empty packages returned, junk, scrap iron, ice, etc.

Exhibit "C"

COMPARISON OF PASSENGER TRAFFIC

For Calendar Year, January, 1914, to December, 1914, Inclusive, vs. Same Period 1913

Month.	PASSENGERS CARRIED.				REVENUE.			
	1914.	1913.	Inc.	Dec.	1914.	1913.	Inc.	Dec.
January....	25,628	23,003	2,625	.....	\$6,404.00	\$7,112.33	.....	\$708.33
February ..	22,431	21,952	479	.....	5,421.92	6,668.50	.....	1,246.58
March.	27,091	24,671	2,420	.....	6,409.64	7,422.02	.....	1,012.38
April.....	28,542	22,516	6,026	.....	7,055.19	7,583.29	.....	528.10
May.....	31,838	25,129	6,709	.....	7,981.97	8,306.41	.....	414.44
June.....	30,176	24,850	5,326	.....	7,398.72	8,080.36	.....	681.64
July.....	35,338	31,186	4,152	.....	8,754.09	7,813.76	\$940.33	
August ...	30,301	29,835	466	.....	7,927.28	8,435.93	.....	508.65
September..	29,105	26,981	2,124	.....	7,484.31	6,903.80	580.51	
October ...	29,251	27,057	2,194	.....	7,639.95	7,306.12	333.83	
November..	25,844	26,974	.....	1,130	6,178.81	6,988.77	.....	809.96
December..	26,887	28,777	.....	1,890	6,219.63	7,468.82	.....	1,249.19
Total....	342,432	312,931	32,521	3,020	\$84,875.51	\$90,180.11	\$1,854.67	\$7,159.27
Net			29,501	.....	.....	.....	.....	\$5,304.60

NOTE.—It will be observed that although travel was much heavier the first six months of 1914 than for similar period 1913, decreases in revenue are shown during that entire period. This is due to the fact that during that period fares were on basis of Three cents per Mile, and on and after July 1, 1913, on basis of Two cents per Mile.

Above figures compiled from train collections and vary slightly from the actual revenue figures.

Exhibit "D"

FREIGHT AND PASSENGER TRAFFIC.

ITEMS.	January 1st to December 30th, 1914.			January 1st to December 31st, 1913.		
	Number Distance Dollars.	Cts.	Mills.	Number Distance Dollars.	Cts.	Mills.
FREIGHT:						
Number of Tons Carried of Freight Earning Revenue.....	2,059,755	.....	.....	1,808,790	.....	.....
Number of Tons Carried One Mile.....	20,683,468	.....	.....	20,743,370	.....	.....
Number of Tons Carried One Mile per Mile Road.....	292,057	.....	.....	292,902	.....	.....
Average Distance Haul of One Ton (Miles).....	10.04	.....	.....	11.46	.....	.....
TOTAL FREIGHT REVENUE.....	563,390	26	.....	534,142	45	.....
Average Amount Received for Each Ton of Freight.....	.....	27	352	.....	29	530
Average Receipts per Ton per Mile.....	.....	02	723	.....	02	057
TOTAL FREIGHT EARNINGS.....	583,812	71	.....	571,379	18	.....
Freight Earnings per Mile Road.....	8,243	61	.....	8,068	04	.....
Freight Earnings per Train Mile.....	.....	530	964	.....	584	986
Average Number Tons Freight per Train Mile.....	194.93	.....	.....	227.15	.....	.....
Average Number Tons Freight per Loaded Car Mile.....	.....	31.15	.....	29.58	.....	.....
Average Number Loaded Cars per Train Mile.....	.....	6.26	.....	7.68	.....	.....
Average Earnings per Loaded Car Mile.....	.....	8.48	.....	7.62	.....	.....
PASSENGER:						
Number Passengers Carried Earning Revenue.....	342,432	.....	.....	312,931	.....	.....
Number Passengers Carried One Mile.....	4,283,706	.....	.....	3,857,835	.....	.....
Number Passengers Carried One Mile per Mile Road.....	80,219	.....	.....	72,244	.....	.....
Average Distance Carried.....	12.51	.....	.....	12.32	.....	.....
TOTAL PASSENGER REVENUE.....	85,056	55	.....	90,799	70	.....
Average Amount Received from Each Passenger.....	.....	24	839	.....	29	016
Average Receipts per Passenger per Mile.....	.....	01	986	.....	02	354
TOTAL PASSENGER EARNINGS.....	100,349	51	.....	106,380	52	.....
Passenger Earnings per Mile of Road.....	1,879	20	.....	1,992	14	.....
Passenger Earnings per Train Mile.....	.....	122	453	.....	111	893
Average Number Passenger Cars per Train Mile.....	2.94	.....	.....	3.01	.....	.....
Average Number Passengers per Train Mile.....	52.27	.....	.....	40.57	.....	.....
Average Number Passengers per Car Mile.....	17.79	.....	.....	13.48	.....	.....
MILES OF ROAD OPERATED: { FREIGHT.....70.82						

TRAIN, LOCOMOTIVE AND CAR MILES.

January 1st to Dec. 31st, 1914.

ITEMS.	This Year.	Last Year.	Increase.	Decrease.
TRANSPORTATION SERVICE:				
Freight Train Miles, Ordinary.....	98,702	89,205	9,497	....
Freight Train Miles, Light.....	5,468	336	5,132	....
Passenger Train Miles.....	79,646	92,979	....	13,333
Mixed Train Miles	2,303	1,918	385	....
Special Train Miles, Freight.....	120	126	....	6
Special Train Miles, Passenger.....	217	920	....	703
TOTAL TRANSPORTATION SERVICE: TRAIN MILES.....	186,456	185,484	972	....
Freight Locomotive Miles, Principal.....	98,702	89,205	9,497	....
Freight Locomotive Miles, Helper.....	5,806	7,196	....	1,390
Freight Locomotive Miles, Light.....	5,468	336	5,132	....
Passenger Locomotive Miles, Principal.....	79,646	92,979	....	13,333
Passenger Locomotive Miles, Helper.....	....	....	....	....
Passenger Locomotive Miles, Light.....	2,827	1,252	1,575	....
Mixed Train Locomotive Miles, Principal	2,303	1,918	385	....
Mixed Train Locomotive Miles, Helper.....	....	....	....	....
Mixed Train Locomotive Miles, Light.....	....	....	....	....
Special Locomotive Miles, Principal.....	330	1,046	....	716
Special Locomotive Miles, Helper.....	....	....	....	....
Special Locomotive Miles, Light.....	7	....	7	....
Train Switching Locomotive Miles.....	37,257	....	37,257	....
Yard Switching Locomotive Miles.....	47,823	89,939	....	42,116
TOTAL TRANSPORTATION SERVICE: LOCOMOTIVE MILES.....	280,169	283,871	....	3,702
Freight Train Car Miles, Loaded.....	673,143	700,608	....	27,465
Freight Train Car Miles, Empty.....	421,986	451,097	....	29,111
Freight Train Car Miles, Caboose.....	93,643	85,580	8,063	....
PASSENGER TRAIN CAR MILES:				
Passenger.....	175,315	226,163	....	50,848
Sleeping, Parlor and Observation.....	....	....	....	....
Dining Cars.....	....	....	....	....
Other Passenger Cars.....	60,728	55,260	5,468	....
MIXED TRAIN CAR MILES:				
Freight, Loaded.....	2,607	2,520	87	....
Freight, Empty.....	....	21	....	21
Freight, Caboose.....	....	....	....	....
Passenger.....	2,674	1,925	749	....
Sleeping, Parlor and Observation.....	....	....	....	....
Dining Cars.....	....	....	....	....
Other Passenger Cars.....	2,072	1,918	154	....
SPECIAL TRAIN CAR MILES:				
Freight, Loaded.....	681	633	48	....
Freight, Empty.....	....	147	....	147
Freight, Caboose.....	131	126	5	....
Passenger.....	975	1,054	....	79
Sleeping, Parlor and Observation.....	....	....	....	....
Dining Cars.....	....	....	....	....
Other Passenger Cars.....	....	....	....	....
TOTAL TRANSPORTATION SERVICE: CAR MILES.	1,433,955	1,527,052	....	93,097
WORK SERVICE:				
Work Train Miles.....	6,122	1,678	4,444	....
Work Service Locomotive Miles.....	6,122	1,678	4,444	....
Work Service Car Miles.....	13,525	2,376	11,149	....

MISSISSIPPI RIVER & BONNE TERRE RAILWAY

For Twelve Months Ending December 31st, 1914.

EQUIPMENT.

	On Hand Jan. 1st, 1914.	Retired, Sold or Des- troyed.	CHANGED.		Bought or Built.	On Hand Dec. 31st, 1914.
			From	To		
LOCOMOTIVES:						
Passenger.....	4	.....	.....	.....	.....	4
Freight.....	14	.....	.....	.....	.....	14
Switching.....	4	1	.....	.....	.....	3
Total.....	22	1	.....	.....	.....	21
PASSENGER TRAIN CARS:						
Coaches.....	8	.....	.....	.....	.....	8
Combination..	1	.....	.....	1	.....	2
Bagg. Exp. and Mail.....	3	.....	1	.....	.....	2
Official.....	2	.....	.....	.....	.....	2
Total.....	14	.....	1	1	.....	14
FREIGHT TRAIN CARS:						
Box.....	105	5	.....	.....	.....	100
Flat.....	24	.....	.....	.....	.....	24
Steel Dump.....	1	.....	.....	.....	.....	1
Steel Hopper.....	100	.....	.....	.....	.....	100
A. Dumps.....	575	11	.....	.....	.....	564
A. D. Steel Underframe.....	197	.....	.....	.....	.....	197
D. B. Dumps.	130	.....	.....	.....	.....	130
Mineral.....	40	.....	.....	.....	.....	40
Caboose.....	10	.....	.....	.....	.....	10
Total.....	1182	16	.....	.....	.....	1166

LOCOMOTIVES:

We close the year with eighteen locomotives in service, nine of them in good condition, and nine in fair working condition; three road locomotives are temporarily retired, and will need some repairs before available for service.

Engine No. 3 was sold in November.

During the year nineteen locomotives were taken into the shops for repairs, six of them receiving heavy repairs and thirteen light repairs; three have had new tires and seven have had tires turned. No new flues were applied but five locomotives have had flues pieced and reset, and two, part of flues pieced and reset; three have had flue sheets applied and five were painted and varnished.

PASSENGER TRAIN CARS:

Baggage, Mail and Express Car No. 10 was changed to a combination car in December and put into service to relieve the congested condition of shuttle trains operating on Hoffman Branch and on Main Line between Bonne Terre and Elvins.

FREIGHT TRAIN CARS:

Heavy repairs were made on

A. Dumps	7
Mineral.....	3
Total	10

Of the seven A. Dump cars receiving heavy repairs, two were damaged on other roads and sent home for repairs. Total cost of repairing the seven A. Dump cars was \$541.91, of which sum \$231.36 was billed against other roads.

To provide sufficient equipment of the most suitable kind to handle the mineral regained by the "Flotation" process, three forty-ton capacity steel underframe mineral cars were thoroughly overhauled and practically rebuilt at a cost of \$712.71.

Light repairs were made on :

Box	14
Flat.....	10
Steel Hopper.....	109
A. Dumps.....	407
A. Dumps (steel underframe)	60
D. B. Dumps.....	30
Mineral.....	14
Caboose.....	7
Total.....	651

In redecking 84 of the forty-ton capacity A. Dump cars mentioned above, the ridge pole through the center of the cars was raised high enough to make the "A" complete, thus giving the cars almost 100% self-dumping efficiency. All these cars have been put into the lead-bearing rock service to replace drop-bottom dumps, and A. Dump cars of smaller capacity, enabling us to increase our tonnage with less number of cars and also facilitate the dumping of ore at mills. Above changes made at an expense of \$32.02 per car or total of \$2,689.68.

In addition to above, 8,488 cars received running repairs, *i. e.*, costing less than \$5.00 per car, such repairs being made while cars were in service.

Light repairs were made on 152 foreign cars.

Running repairs were made on 10,831 foreign cars.

Wheels were applied as follows :

50,000 capacity cars	pairs	14
60,000 " "	"	70
80,000 " "	"	176
100,000 " "	"	78
Total.....	"	338

Miner Draft Gear applied on 82 cars.....\$4,145.77

Safety Appliances applied on 141 cars..... 943.26

Ten A. Dump cars, 60,000 capacity, were sold.

Six cars were destroyed, one A. Dump car on foreign road, and five box cars at home, by fire.

MISSISSIPPI RIVER & BONNE TERRE RAILWAY.

For Twelve Months Ending December 31st, 1914.

MAINTENANCE OF WAY AND STRUCTURES.

TRACK MILEAGE.

	Owned by M. R. & B. T.	Private Track.	Total Miles.
Main Line.....	46 46	.....	46.46
Main Line Sidings.....	23 93	9.39	33.32
Hoffman Branch.....	6.78	.	6.78
Hoffman Branch Sidings and Spurs..	2.48	2.42	4.90
Crawley Branch.	3.00	.....	3.00
Crawley Branch Sidings and Spurs.....	3.07	1.00	4.07
Gumbo Branch.....	3.28	.....	3.28
Gumbo Branch Sidings and Spurs.	0.22	1.27	1.49
Mitchell Branch.....	1.32	.....	1.32
Mitchell Branch Sidings and Spurs.....	0.18	0.29	0.47
Turpin Branch.....	3 04	.....	3.04
Turpin Branch Sidings and Spurs.....	0.18	0.38	0.56
Totals.....	93.94	14.75	108.69

By a segregation of tracks and other property, practically completed in June, the mileage of private tracks was increased by 10.97 miles and that owned by the Railway was reduced by a corresponding amount. The other changes in track mileage are due to tracks taken up.

MATERIAL USED.

	Tons Rail.		Pairs Ang. Bars.		Kegs Trk. Bolt.		Kegs Track Spikes.	Tie Plates.		Frogs.		Switch Studs.	Pair Sw. Points.		B. M. Bridge Timber.
	75-lb.	56-lb.	75-lb.	56-lb.	3/4-in.	1/2-in.		Inter.	Joint.	75-lb.	56-lb.		75-lb.	56-lb.	
Old...	80	44													
New..			197	32	38	11	1 63	7,965	1,361	14	3	11	33	5	44-038

	M. L. & Sidings.	Hoffman Branch.	Gumbo-Mitchell.	Crawley.
Switch Ties, sets ...	20	1	4	6
Cross Ties.....	17,365	3,064	2,569	2,012
Woven Wire { Fencing Rods.. }	270			
Barbed Wire, Spools	65			
Posts, Steel.....	45 new			
Posts, Cedar.	239 old			

New Construction has been executed as follows :

SPECIAL AUTHORITIES FOR EXPENDITURE.

Date.	No.	Kind of Work.	Date Completed.	Final Cost.	Disposition of Expense.
5/28/14	1	Stock Pen and Loading Chute, Flucom.	7/21/14	\$92.02	Office and Station Buildings.
6/26/14	2	New Crossover Tracks at Herculanum.	8/ /14	\$699.47	St. Joseph Lead Company.
6/26/14	3	New Team Track at Herculanum.	8/29/14	\$176.44	Construction Maint. of Way.
9/23/14	4	Two Standard Toilet Houses, Platin and Valles Mines.	11/18/14	\$183.66	Office and Station Buildings.

Authority No. 1 was issued upon petition of the farmers in the vicinity of Flucom, who had taken the matter up with the Public Service Commission, with view of forcing us to build same.

Work done under Authority No. 2 makes it possible for the switching crews of the St. Joseph Lead Co. to have access to all tracks west of Main Line, without interfering with Main Line traffic.

The plan of segregation as carried out, made it imperative to build a new team track as covered by Authority No. 3.

Authority No. 4 was issued to carry out suggestions made by the Public Service Commission.

Between Mile Posts 43 and 44 on the Main Line, 0.76 miles of 75-lb. rail was replaced with good second-hand 56-lb. rail. To date, one-third of the 75-lb. rail has been used in making minor repairs at various places; the balance of this rail is in stock available for use where needed.

Siding and crossover, 0.36 miles of track, has been built at Hoffman Branch Junction.

Poor Rock Track, 0.05 mile, at No. 6 Shaft near Derby, has been taken up.

New Water Tank, 14'x 20', 28,000 gallons capacity, has been built at Leadwood.

During the month of October, we experienced considerable trouble due to washouts caused by excessive rains, the most serious of which occurred about 700 feet south of Big River Bridge on Hoffman Branch on October 10th, these washouts entailing approximately \$1,000.00 additional expense to Maintenance of Way Department.

Exhibit "H"

COMPARATIVE STATEMENT OPERATING EXPENSES AND
EARNINGS.

Calendar Years 1912, 1913, 1914.

OPERATING EXPENSES.

Total Operating Expenses, Calendar Year 1912.....	\$532,693.51	.....
Total Operating Expenses, Calendar Year 1913.....	448,785.55	.....
Decrease.....	.....	\$83,907.96
Total Operating Expenses, Calendar Year 1913.....	\$448,785.55	.....
Total Operating Expenses, Calendar Year 1914.	371,940.29	.....
Decrease.....	.....	76,845.26
Total Decrease Operating Expenses, Calendar Year 1914, as compared with Calendar Year 1912.....	.....	\$160,753.22

GROSS EARNINGS.

Gross Earnings, Calendar Year 1912.....	\$786,657.16	.....
Gross Earnings, Calendar Year 1913.....	692,844.03	.....
Decrease.....	.....	\$93,813.13
Gross Earnings, Calendar Year 1913.....	\$692,844.03	.....
Gross Earnings, Calendar Year 1914.	692,556.80	.....
Decrease.....	.....	287.23
Total Decrease Gross Earnings, Calendar Year 1914, as compared with Calendar Year 1912.....	.....	\$94,100 36

ST. FRANCOIS COUNTY RAILROAD COMPANY.

F. J. THOMURE,
Vice-President & General Manager.

BONNE TERRE, Mo., January 21st, 1915.

Mr. CLINTON H. CRANE, President,
Mississippi River & Bonne Terre Ry.,
61 Broadway, New York, N. Y.

DEAR SIR:—

I beg to advise complete report of the Revenues, Expenses and General Accounts for St. Francois County Railroad Co., for calendar year 1914, have been sent you by the Auditor, and would like to call your attention to the following deductions from such report:

Gross Earnings for calendar year 1914, \$44,885.67, as compared with \$46,846.08 for calendar year 1913, a decrease of \$1,960.41.

Operating Expenses for calendar year 1914, \$26,925.57, as compared with \$36,586.46 for calendar year 1913, a decrease of \$9,660.89. The operating ratio, year 1914, 59.9%, as compared with the year 1913, 78.0%, a decrease of 18.1%.

Net Operating Revenue for calendar year 1914, \$17,960.10, as compared with \$10,259.62 for calendar year 1913, an increase of \$7,700.48.

Deductions from Net Operating Revenue for account of taxes, interest on funded debt, etc., calendar year 1914, \$15,293.50, leaving Net Income from operation \$2,666.60; deductions as per above for calendar year 1913, \$13,841.47, leaving a deficit of \$3,581.85, an increase in Net Income of \$6,248.45 over calendar year 1913.

I attach hereto Exhibit "A", giving track mileage, equipment, and review of the principal items of renewals, etc.

For complete details and all changes in equipment trust obligations and other financial items, see Auditor's report submitted you.

We have been very fortunate in our operations during the year, having had no serious accidents and only a few minor derailments. There have been no injuries of any sort to passengers or employees.

I trust that the information contained in the exhibit forwarded you will make clear the details of operation for the past year.

For the very good showing in the reduction of operating expenses, due credit must be given to the hearty co-operation of the Heads of Departments and employees.

Yours truly,

F. J. THOMURE,
General Manager.

Exhibit "A"

ST. FRANCOIS COUNTY RAILROAD COMPANY.

For Twelve Months Ending December 31st, 1914.

MAINTENANCE OF WAY.

Main Line 9.88 miles
 Sidings and Spurs..... 3.05 "

New construction was executed as follows :

SPECIAL AUTHORITY FOR EXPENDITURE.

Date.	No.	Kind of Work.	Date Completed.	Final Cost.	Dis-posit- ion of Expense.
8/28/14	1	Spur for Standard Oil Co., Farmington, Mo.	9/18/14	\$311.22	Standard Oil Company.

Material used in addition to that under Authority No. 1 :

2,896 Cross Ties.
 100 lbs. $\frac{3}{4}$ " Track Bolts.
 40 rods Woven Wire Fencing.

EQUIPMENT.

Passenger.....	1
Combination Passenger.....	2
Trailer.	1
Combination Freight Motor and Express.....	1
Total	5
Ballast Cars.....	1
Flat Cars.....	1
Total	2

Boiler No. 2 at Power Plant has had a new front sheet applied.

Engine No. 2 has had a new piston head applied.

The deep well pump supplying water for the power plant was thoroughly overhauled :
 three hundred feet of new six-inch casing and new pump barrel were applied.

New poles have been set and trolley and feeder lines overhauled as follows :

300 feet on curve at DeLassus.
 300 feet on curve north of Standard Oil Co. Spur.
 800 feet on end of Industrial Line.

A thorough inspection of pole line was made during August and September, and the average life of poles estimated to be three to four years, meaning that practically all of them must be renewed within that time. Forty poles were spliced, thereby materially extending their term of usefulness.

BONNE TERRE FARMING & CATTLE COMPANY.

ROBERT SELLORS,
Secretary and Treasurer.

BONNE TERRE, Mo., December 31, 1914.

Mr. CLINTON H. CRANE, President,
61 Broadway,
New York City.

DEAR SIR:

On September 30, 1914, the following resolution was presented to and unanimously adopted by the Directors of the Bonne Terre Farming & Cattle Company, viz., "Resolved, that the fiscal year of the Company shall terminate on the last secular day in each calendar year and that this resolution shall go into effect at once." In conformity with this resolution the books were closed on December 31, 1914, and I hand you herewith our General Balance Sheet showing our earnings for the twelve months ending on the above date. This statement will enable a proper comparison to be made on December 31, 1915.

The chief features calling for special mention outside the routine business of the year are:

FIRST: The Directors have decided to sell at the different towns houses now owned by the Company and occupied by its employes to such employes on a monthly payment plan. It is proposed, when a man has paid for the house he occupies and the ground on which the house stands, with interest at the rate of eight per cent. on the monthly balance, that a deed shall be handed to him making him the absolute owner of both the surface right of the property and the house. Similar schemes have been adopted elsewhere with great success, and it is hoped that like results may follow here.

SECOND: After considerable discussion it was decided in October, 1914, to put into effect a scheme whereby the Company would carry its own insurance on buildings valued at less than \$1,000.00 each. A detailed schedule was prepared and premiums such as charged by the leading insurance companies are paid into an insurance reserve with the Mississippi Valley Trust Company, which cannot be checked against except by resolution of the Board of Directors. The sum of \$1,971.09 now stands to the credit of this fund, and as the premiums will be regularly paid each year, the interest on which will be compounded semi-annually, the sum will grow to considerable dimensions. We have always taken the greatest care in the erection of the flues of all our houses, and our risks are looked upon as being unusually good ones.

The property generally is in a better condition than it has been for some years and as a whole may be said to be in first-class shape. In the coming spring it is proposed to paint a large number of houses at Herculanum, Bonne Terre and Leadwood. The sum of \$4,070.68 has been reserved for depreciation on the buildings at the above places. In addition to this sum \$5,404.88 was spent during the year for repairs.

Your Company has at Bonne Terre, Herculanum and Flat River 958 leases and it likewise owns at these places 384 houses, the gross rental income from ground leases, house rents and the St. Louis property being \$44,731.40.

Your Company has spent at the different towns during the year the sum of \$3,624.65 for improving the streets and for sanitary details which needed attention.

The General Merchandise Business at Herculanum, Leadwood and Rivermines has been conducted during the year as usual, and after taxes and salaries have been paid and depreciation of fixtures charged off there remains on the twelve months work in this department a net profit of \$5,666.07.

The Farm Department has had to stand a heavy loss due to the fact that its Corn, Hay and Oat crops were absolute failures in consequence of the very severe drouth which affected our entire County. We sold off in the early fall stock to the value of \$2,232.10 rather than buy feed to carry them through the winter, although, we were careful in doing this to retain all our choicest stock. We now have 1 unregistered and 2 registered Hereford bulls and 104 head of registered and choice Hereford cattle. The coming spring will see a great addition to our herd, but such matters are slow in maturing, as nature refuses to be hurried. Our prospects are better than they have been for some time and we confidently look for a good year from an agricultural standpoint. Our net farm profit is \$1,381.64.

The Company has paid in the City of St. Louis and the Counties of Washington, Jefferson and St. Francois the sum of \$14,692.89 in taxes for the twelve months ending December 31, 1914.

The Company has no bonded indebtedness, has given no notes, is well able to meet its current liabilities, and has an interest-bearing balance with the St. Joseph Lead Company, New York, of \$15,206.25.

On April 1, 1914, a dividend of 2 per cent. was declared, and on October 1, 1914, another dividend of 1 per cent. was declared, aggregating 3 per cent. on the \$500,000.00 capital stock of the Company.

Our net income for the twelve months ending December 31, 1914, as per balance sheet, is \$22,429.24, this being equivalent to 4.4 per cent. on the \$500,000.00 capital stock.

Yours respectfully,

ROBERT SELLORS,
Secretary.

RS-AA.

BONNE TERRE HOSPITAL ASSOCIATION.

BONNE TERRE, Mo., Dec. 31, 1914.

Mr. CLINTON H. CRANE, President,
St. Joseph Lead Company,
61 Broadway,
New York City.

DEAR SIR:

In conformity with a motion passed by the Directors of the Bonne Terre Hospital Association, changing the termination of its fiscal year from March 31 to December 31, the hospital books were closed at the end of the calendar year, but, for purposes of comparison, I hand you the Treasurer's statement covering the twelve months ending December 31, 1914. This statement shows a deficit for this period of \$8,080.36.

During the year

114 patients were admitted to the Hospital,
110 operations were performed,
10 deaths occurred, and
2 births took place.

After very thoroughly testing the nurses' training school attached to the Hospital the Directors became convinced that it would be unwise to continue the operations of this school, as the facilities for training the nurses were too limited and the experience they gained was not wide enough in its character to fit them for general nursing work. Consequently, the Directors suspended the operations of this school in November last.

The buildings and grounds have been maintained in first-class shape and in perfect sanitary condition. The Hospital, the Nurses' Cottage, and the furniture and equipment contained therein have been kept properly insured, and everything in connection with each building is in excellent running order to-day.

Although the loss in the operation of the Hospital has been considerable, the institution has been of great advantage to the St. Joseph Lead Company and its subsidiary companies and has proved of considerable value to the community at large.

Yours truly,

ROBERT SELLORS,
Secretary.

RS-AA.

BONNE TERRE HOSPITAL ASSOCIATION.
GENERAL BALANCE SHEET.
Annual Statement, December 31, 1914.

	DEC. 1913.	DEC. 1914.	INCREASE.	DECREASE.
ASSETS:				
Real Estate and Buildings.....	\$51,144.20	\$51,144.20		
Furniture and Fixtures.....	4,000.00	4,000.00		
Cash.....	1,673.19	1,000.10	\$673.09	
Accounts Receivable.....	484.45	493.30		\$8.85
St. Joseph Lead Company.....	346.13	246.68	99.45	
Doe Run Lead Company.....	173.07	246.68		73.61
Miss. River & Bonne Terre Ry.....		496.69		496.69
Insurance Premium Unexpired.....		366.63		366.63
Total Assets.....	\$57,821.04	\$57,994.28	\$772.54	\$945.78
LIABILITIES:				
Charity Fund.....	\$46.85	\$46.85		
Interest Payable Accrued.....	924.00	924.00		
Accounts Payable.....	368.71	1,782.69		\$1,413.98
Reserve for Depreciation.....	2,481.48	1,240.74	\$1,240.74	
Notes Payable.....	54,000.00	54,000.00		
Total Liabilities.....	\$57,821.04	\$57,994.28	\$1,240.74	\$1,413.98

EARNINGS AND EXPENSES.

	DECEMBER, 1914.	TWELVE MONTHS.
Salaries and Labor.....	\$422.50	\$4,424.54
Table Expenses.....	173.06	2,639.39
Drugs and Chemicals.....	19.31	274.65
Furnishings and Equipment.....	2.05	263.46
Building and Grounds.....	2.84	222.72
Interest Accrued.....	90.00	1,068.58
GENERAL EXPENSES:		
Laundry.....	26.42	482.37
Fuel.....	69.71	423.50
Electric Current.....	35.55	392.15
Water.....	30.00	360.00
Insurance Premiums.....		396.43
Oiling Streets.....		12.00
Depreciation.....		1,240.74
Graduation of Nurses.....		210.00
Other General Expenses.....	15.36	397.03
Total General Expenses.....	\$177.04	\$3,914.22
Total Expenses.....	\$886.80	\$12,807.56
Earnings.....	\$367.60	\$4,727.20
DEFICIT.....	\$519.20	\$8,080.36