

E. C. MEANS
LOW MOOR VIRGINIA

January 19th 1914

Dear Aunt Margaret:

Herewith I enclose the usual statements of your financial affairs for the past year - I did not close the books until the 10th inst, so as to include the Street Ry interest as usual. Some of your Christmas checks did not reach the Ashland Trust Bank in time to be included and will have to be shown next year - I have written the numbers, on the list of checks, of those not in. On the whole your income held up very well except from the iron company stocks and you kept your expenditures within your income. Your investments were increased by

Atlantic Coast line Ry Stock \$1000.⁰⁰

Pennsylvania RR Co Stock 3400⁰⁰

Your Covington Real Estate, on account of the floods, did not meet expenses by \$4⁷⁰/₁₀₀ when we consider the floods of Jan'y & April both reached your property probably you were fortunate not to have had a greater loss.

In addition to the expense of cleaning up after the floods, the property was not occupied and no rents collected for quite a period.

E. C. MEANS
LOW MOOR VIRGINIA

ills stocks and bonds have had low values for the past six months but the market is now getting stronger — Pennsylvania RR stock has been down to 107 and is now up to 112 —

I believe the Democratic administration is now getting anxious about the business depression and will try to help matters if they can find some way to do so —

I have secured a blank for the income tax and will study it before making out your list. You will come under the class that have to pay on incomes over \$20,000 — and will have to pay a larger tax than I thought at first.

If I am not detained by a case in court tomorrow I shall go to Philadelphia tomorrow night to attend a Pig Iron Association meeting.

I shall get to see John's school while there.

Mr. Hyman was here Sunday — He does not like Pres. Wilson.

All well —

Wishing you a prosperous New Year

Yours affectionately

E. C. Means

Mr. Winter asked whether she should the clothing bill for Sade Hampton to you or to me — I replied to send it to me — Shall I send it to you before paying it?

CLINTON GILBERT
2 WALL STREET
BANK AND TRUST CO. STOCKS
STANDARD OIL STOCKS
TELEPHONE 2380 RECTOR

We Have Opened a Department for Dealing in Standard Oil Securities.

On this page are shown dividends paid, both Stock and, Cash, since segregation.

The enclosed booklet gives details of all the companies. Further information may be had on application.

| RANGE OF MARKET 1913 | | COMPANY | CAPITAL | PAR VALUE | DIVIDENDS | | CLOSING PRICES, January 24 | | YIELD |
|----------------------|------|---------------------------------------|-------------|-----------|-----------|---------|----------------------------------|-------|--------|
| High | Low | | | | 1912 | 1913 | Bid | Asked | |
| | | Anglo-American Oil Co..... | £2,000,000 | £ 1 | 20% | 25% | † 14 ⁷ / ₈ | 15 | 6.6 |
| * 27 | 16 | Atlantic Refining Co..... | \$5,000,000 | \$100 | 20 | 20 | 800 | 810 | ..... |
| 810 | 580 | Borne-Scrymser Co..... | 200,000 | 100 | 20 | 20 | 300 | 315 | 6.3 |
| 365 | 230 | Buckeye Pipe Line Co..... | 10,000,000 | 50 | 40 | 40 | 181 | 183 | 10.9 |
| 175 | 155 | Chesebrough Mfg. Co., Cons..... | 500,000 | 100 | 50 | 40 | 680 | 695 | 5.7 |
| 695 | 650 | Continental Oil Co., Colo..... | 250,000 | 100 | ..... | ..... | 120 | 135 | ..... |
| 135 | 95 | Crescent Pipe Line Co..... | 3,000,000 | 100 | *70 | † 6 | 220 | 230 | 5.2 |
| †230 | †185 | Cumberland Pipe Line Co..... | 3,000,000 | 50 | 12 | 12 | 61 | 63 | 9.5 |
| 70 | 55 | Eureka Pipe Line Co..... | 1,000,000 | 100 | 6 | 6 | 65 | 70 | 8.5 |
| 98 | 65 | Galena-Signal Oil Co., preferred..... | 2,000,000 | 100 | 30 | 40 | 335 | 345 | 11.5 |
| 395 | 337 | Galena-Signal Oil Co., common..... | 12,000,000 | 100 | 8 | 8 | 133 | 138 | 5.9 |
| 149 | 130 | Indiana Pipe Line Co..... | 5,000,000 | 100 | 16 | *4 †10 | 181 | 183 | 6.5 |
| †210 | †173 | National Transit Co..... | 12,727,572 | 25 | 12 | 12 | 43 | 45 | 6.6 |
| 163 | 112 | New York Transit Co..... | 5,000,000 | 100 | 40 | \$40 | 323 | 329 | 12.2 |
| 57 | 35 | Northern Pipe Line Co..... | 4,000,000 | 100 | 5 | \$10 | 124 | 126 | 7.9 |
| 370 | 368 | Ohio Oil Co..... | 15,000,000 | 25 | 20 | 57 | 156 | 158 | 6.3 |
| 127 | 90 | Prairie Oil and Gas Co..... | 18,000,000 | 100 | 25 | 6 | 445 | 450 | ..... |
| 149 | 120 | Solar Refining Co..... | 2,000,000 | 100 | 20 | *20 35† | 365 | 380 | B..... |
| 447 | 275 | Southern Pipe Line Co..... | 10,000,000 | 100 | 28 | 32 | 250 | 255 | 12.5 |
| †350 | †175 | South Penn Oil Co..... | 12,500,000 | 100 | 30 | *20 †8 | 302 | 305 | C 6.6 |
| 280 | 230 | Standard Oil Co. of California..... | 3,500,000 | 100 | 20 | 20 | 150 | 160 | 12.3 |
| †287 | †188 | Standard Oil Co. of Indiana..... | 45,000,000 | 100 | 2 1/2 | 10 | 285 | 286 | 3.5 |
| 175 | 145 | Standard Oil Co. of Kansas..... | 30,000,000 | 100 | 13 | 32 | 455 | 460 | 6.9 |
| 273 | 163 | Standard Oil Co. of Kentucky..... | 2,000,000 | 100 | 5 | *17 †23 | 465 | 475 | 8.4 |
| 423 | 308 | Standard Oil Co. of Nebraska..... | 1,000,000 | 100 | ..... | \$10 | 665 | 675 | ..... |
| 500 | 266 | Standard Oil Co. of New Jersey..... | 1,000,000 | 100 | 20 | 30 | 480 | 490 | 6.1 |
| 698 | 310 | Standard Oil Co. of New York..... | 98,338,382 | 100 | 20 | 60 | 416 | 417 | C 4.9 |
| 500 | 260 | Standard Oil Co. of Ohio..... | 75,000,000 | 100 | 6 | * 6 | 186 | 187 | ..... |
| 448 | 328 | Swan & Finch Co..... | 3,500,000 | 100 | 5 | 20 | 375 | 385 | 5.2 |
| †183 | †136 | Union Tank Line Co..... | 500,000 | 100 | ..... | 5 | 290 | 300 | ..... |
| 400 | 257 | Vacuum Oil Co..... | 12,000,000 | 100 | ..... | ..... | 98 | 99 | ..... |
| 330 | 175 | Washington Oil Co..... | 15,000,000 | 100 | 6 | 6 | 205 | 208 | ..... |
| 94 | 60 | Pierce Oil Corporation..... | 100,000 | 10 | ..... | 80 | 57 | 59 | ..... |
| 198 | 170 | | 10,500,000 | 100 | ..... | ..... | 92 | 94 | ..... |
| 52 | 23 | | | | | | | | |
| 70 | 30 | | | | | | | | |

* Old capitalization. † New capitalization. § Standard Oil of Kentucky, and Northern Pipe Line Co. have each paid dividends of 5 per cent., payable January 2, 1914. N. Y. Transit regular quarterly 10%, paid January 15. Eureka Pipe Line, 10%, Q., Feb. 2; Indiana Pipe Line, 8%, Q., Feb. 14; S. O. Cal., 2 1/2%, Q., March 16; S. O. Indiana, 3%, Q., and 4%, Ex., Feb. 28; S. O. Kansas, 3%, Q., and 7% Ex., Feb. 28; Anglo-American Oil, 5% Interim and 5% Extra, Jan. 15.

A—Based on 40 per cent. dividend. B—Pays 5 per cent. semi-annually with extra dividends. C—Based on 20 per cent. dividend.

Stock Dividends and Rights Awarded Since Dissolution

| | | |
|------|---------------------------------|---|
| 1912 | Standard Oil of California..... | Rights, 80 per cent., Oct. 31, '12. Stockholders of record, Aug. 31, '12. |
| " | Standard Oil of Indiana..... | Stock dividend of 2900 per cent. Paid May 15, 1912. |
| " | Standard Oil of Nebraska..... | Stock dividend 33 1/3 per cent. April 15, '12. Stockholders of record March 15, '12. |
| " | Swan & Finch..... | Rights, 400 per cent. Aug. 21, '12. Stockholders of record May 21, '12. |
| " | Vacuum Oil Company..... | Rights, 500 per cent. June 1, '12. Stockholders of record Feb. 19, '12. |
| 1913 | Anglo-American Oil Co..... | Stock dividend of 100 per cent. Paid Nov. 26, 1913. |
| " | Continental Oil Co..... | Stock in new company of Colorado, 900 per cent. |
| " | Galena-Signal Oil Co..... | Common stock dividend 50 per cent. May 15, '13. Stockholders of record March 31, '13. |
| " | Solar Refining Company..... | Stock dividend of 300 per cent. Stockholders of record June 30, '13. Paid June 30, '13. |
| " | South Penn Oil Company..... | Stock dividend of 300 per cent. Payable July 31, 1913. |
| " | South Penn Oil Company..... | Rights to subscribe to 100 per cent. of holdings at par. Subscription to Aug. 1, 1913. |
| " | Standard Oil of Kansas..... | Stock dividend of 100 per cent. Stockholders of record May 31, '13. Paid June 30, '13. |
| " | Standard Oil of Nebraska..... | Stock dividend of 25 per cent. Stockholders of record May 20, '13. Paid June 20, '13. |
| " | Standard Oil of New York..... | Stock dividend of 400 per cent. Stockholders of record June 13, '13. Paid June 30, '13. |
| " | Waters-Pierce Oil Co..... | Cash \$1250 and 2625 per cent. of stock in new company July 25, 1913 |
| 1914 | Standard Oil Co., Ky..... | Cash \$200 and rights 200 per cent. Stockholders of Jan. 31. Paid Feb. 14. |
| " | Standard Oil Co., Cal..... | Rights, 10 per cent. Stockholders of record Feb. 2. |

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,

PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

July 28th 1914

Dear Aunt Margaret:

Your letter 26th inst received -
I shall write to the Collector of Internal Revenue,
Lexington, Kentucky, that your Income Tax will be
returned to the Collector 3^d District New York City

Your Donations Account was:

| | |
|---------------------------------------|--------------|
| Paid Dr. Winter for Sade Hampton | \$ 2250. |
| Paid A. D. & M. Co Store Hampton Acck | 300. |
| Deducted from your Expense account | <u>3500.</u> |
| Total | \$ 6050. |

I spoke to you about it in Oakland and you said it
would be about the same as last year so I deducted
the \$3500. You may recall that one time you had
Sade Hampton's payments in your amount when I had
already allowed for it, so this time I was afraid of getting
it too high.

John Seaton needed to be told about collecting Wood's
he held one of mine for over 6 months last year.

All are well here -

With love affectionately

E. C. Means

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

February 2nd 1914

Dear Aunt Margaret:

Herewith I hand you Form 1040 - Income Tax - Please sign it on page 3, middle of page at place marked x. Then take it to the bank and make affidavit and return it to me. I shall then forward it to the Collector of Internal Revenue - 3rd District of New York - 167 - 3rd Ave.

It covers everything from Mar 1st to Dec 31st 1913 as required under the law - I would sign it as your agent but on page 4. Section 2 the right for me to sign for you does not seem to exist at present. So I shall have to trouble you to do so.

Page 2. Section 3. Covers Rents, Interest on notes + bank deposits. Page 3. Section 1. Covers 5/6 of my compensation for the year, Mar to Dec inclusive. I wrote to the Collector and asked him whether it was a proper deduction and he replied "yes" - It is interesting to note that you will not have to pay anything more for 1913. ~~For~~ For 1914 you will probably have to pay something over the minimum - as it will cover the full 12 months instead of 10 months as this year does -

Yours of Jan'y 29th received with Means + Russell check

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

#2

I shall send the bill for Sade Hampton's clothing before paying it - It has not come yet.

Ruby goes to Suffolk Va tomorrow for a weeks visit with Mrs John B. Pinner -

All are well

With love. Affectionately:

E. C. Means

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

Feb'y 28th 1914

Dear Aunt Margaret:

Your letter 26th just received -
Today I am sending check for One thousand Dollars
(\$1000⁰⁰) to the Garfield Nat Bank for credit
your account -

I shall await your further advices about
the bonds -

Am glad to learn you kept warm during
the recent cold weather - I think Ruby must
have referred to the lowmoor dining room
as it is usually cold in the morning - It has
not sufficient radiation - I do not recall
that there was any similar trouble in your house.

I am having a try with a new dentist. I
judge he is better than my old one. In any
event he finds much more work to do which
the former dentist over looked -

All well - With love

Affectionately:

E. C. Means

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

March 11th 1914

Dear Aunt Margaret:

We are having another snow storm today - after a fine day yesterday -

Ruby is at Covington with ^{dentist} - We are trying a new one who seems to find trouble overlooked by the one we have been going to - He also is more modern in his treatment -

John R. returns next week Thursday for his Spring vacation - Harriet will be home a week later -

Mrs. Kingo keeps well -

You asked about the cold weather at Northampton - Harriet wrote that it was 8° below one day - They have had lots of snow -

The bonds reached New York safely and have been stamped tax free.

The stock market seems very dull but I presume it will not keep the people away from the Hot Springs in April & May -

Will Seaton & I are going to directors meeting in New York next week

With love - Affectionately:

E. C. Means



GEO. C. BROWN,
MANAGING DIRECTOR

HOTEL MARTHA WASHINGTON

EXCLUSIVELY FOR WOMEN

29 EAST 29TH STREET
NEW YORK

New York, March 20th, 1914

Mr. E. C. Means,
Low Moor, Va.,

Dear Sir:-

By some mistake receipt was not sent you
for check received on the 2nd inst. I am enclosing
same herewith.

In this connection I would be glad to have
you make the check for \$160.00 instead of \$160.10
as there is no charge for collection.

Very truly yours,
HOTEL MARTHA WASHINGTON

Manager

GCB/MS.

Dear Aunt:

Please note above - Following your
request I have been adding the 10¢ for collection -
John is at home enjoying his vacation
Harrier will return Friday -
All are well with love
E. C. Means

Nov 3 1914

THE LOW MOOR IRON COMPANY OF VIRGINIA

THE LOW MOOR IRON COMPANY OF VIRGINIA

New York, March 30th, 1914.

To the Shareholders of

The Low Moor Iron Company of Virginia.

Herewith I have the pleasure to submit Balance Sheet of The Low Moor Iron Company as at December 31st, 1913, which has been audited by Messrs. Deloitte, Plender, Griffiths & Co., Accountants and Auditors of New York, whose certificate is attached thereto.

Yours truly,

FRANK LYMAN.

Treasurer.

THE LOW MOOR IRON COMPANY OF VIRGINIA

CONDENSED BALANCE SHEET—DECEMBER 31st, 1913

| ASSETS | LIABILITIES |
|--|---|
| Virginia—Real Estate, Mines, Buildings, Furnaces, Coke Ovens, Railroads, Machinery, Etc. Book Value at this date..... | Capital— Common Stock: Authorized—15,000 Shares of \$100.00 each..... |
| \$1,102,708.78 | \$1,500,000.00 |
| Potts Creek Valley—Real Estate, Buildings, Washer, Railroads, Machinery, Etc. Book Value at this date..... | Issued—10,500 Shares of \$100.00 each..... |
| 232,804.37 | \$1,050,000.00 |
| \$1,335,513.15 | Preferred Stock—7% Cumulative: Authorized—5,000 Shares of \$100.00 each..... |
| Deduct: | \$ 500,000.00 |
| Sinking Fund—Virginia..... | Issued—4,174 Shares of \$100.00 each..... |
| 55,387.24 | 417,400.00 |
| \$1,280,125.91 | First Mortgage 6% Gold Bonds: 500 Bonds of \$1,000.00 each..... |
| West Virginia—Real Estate, Mines, Buildings, Coke Ovens, Railroads, Machinery, Etc. Book Value at this date..... | 500,000.00 |
| \$ 580,735.10 | Consolidated Mortgage 5% Bonds: 4,000 Bonds of \$1,000.00 each..... |
| Deduct: | \$1,000,000.00 |
| Reserve for West Virginia Lands..... | Less: |
| \$25,500.00 | Reserved in hands of Trustee to redeem First Mortgage 6% Gold Bonds: 500 Bonds of \$1,000.00 each..... |
| Sinking Fund—West Virginia..... | 500,000.00 |
| 11,702.99 | \$ 500,000.00 |
| 37,202.99 | Deposited as Collateral for Loans: 8 Bonds of \$1,000.00 each \$ 8,000.00 |
| \$1,823,658.02 | Deposited with Mr. Frank Lyman as Collateral for Loan of \$75,000.00 and as security for his endorsement of the Company's Notes: 492 Bonds of \$1,000.00 each..... |
| Railroad Locomotives and Cars, Live Stock, Carts, Wagons, Harness, Etc., as per Inventories of this date..... | 492,000.00 |
| 78,247.67 | 500,000.00 |
| Materials and Supplies, Coal, Coke, Ore and Limestone, Pig Iron, Merchandise, Etc., as per Inventories of this date..... | Loans on Notes Payable..... |
| 306,614.80 | 329,000.00 |
| Payments in advance on account of Contracts, Etc..... | Sundry Creditors..... |
| 9,540.52 | 32,147.28 |
| Interest on loans paid in advance..... | Accrued Interest on First Mortgage 6% Gold Bonds..... |
| 2,528.49 | 5,000.00 |
| Sundry Debtors on Open Account..... | Reserve for Cumulative Dividend on Preferred Stock: Balance of Account, June 30th, 1911..... |
| \$ 71,278.95 | 2,182.38 |
| Less: | NOTE—Dividends Accrued and Unpaid to December 31st, 1913, amount to..... |
| Reserve for Doubtful Debts..... | \$ 79,132.08 |
| 5,679.13 | Accrued Wages..... |
| Notes Receivable..... | 9,508.05 |
| 16,479.06 | Potts Creek Royalties—G. T. Thayer, Mason Mathews and J. A. Holley, Trustees..... |
| Cash in Banks and on hand..... | 2,989.34 |
| 75,931.63 | |
| Profit and Loss Account: Balance to debit of Account at this date..... | |
| 96,429.92 | |
| Forward | Forward |
| \$2,475,029.93 | \$2,348,227.05 |

THE LOW MOOR IRON COMPANY OF VIRGINIA

CONDENSED BALANCE SHEET—DECEMBER 31st, 1913 (Continued)

| ASSETS | LIABILITIES |
|----------------|---|
| Forward | Forward |
| \$2,475,029.93 | \$2,348,227.05 |
| | Potts Creek Royalties—Old Lease Suspense Account..... |
| | 13,940.17 |
| | Received in advance on account of Pig Iron Contracts..... |
| | 10,818.51 |
| | Hospital and Burial Funds..... |
| | 8,131.20 |
| | Reserves: |
| | For Furnace Repairs..... |
| | \$ 39,727.90 |
| | Insurance Fund..... |
| | 19,756.46 |
| | Casualty Fund..... |
| | 31,803.09 |
| | For Outstanding Scrip at Stores..... |
| | 2,625.55 |
| | 93,913.00 |
| | \$2,475,029.93 |

Having audited the Books of Account of the Company for the year ended December 31st, 1913, with the Vouchers and other records, we certify the above Balance Sheet, in our opinion, fully and fairly represents the position of the Company at that date.

DELOITTE, PLENDER, GRIFFITHS & CO.
Accountants and Auditors.

NEW YORK, MARCH 6TH, 1914.

[March 17, 1914]

Tables prepared by

E. C. Means

re. ore + coal land

utilization

Principally Lowmoor

E. C. MEANS
1806 LEXINGTON AVENUE
ASHLAND, KENTUCKY

Jordan Sand
Shipped to Electric Ore Separator
Mar 17th 1914
Iron 30.24%

Results Test Electric Ore Sep Cr
77# Mar 17th 1914 Iron
100 Crude 17.02 70.54
45 Concentrate 37.85 33.10
11 Middlings 13.88 75.58
44 Tailings 2.46 95.10
Total Iron recovered 19.64%

Jordan or May 6th - 1914
Phase - .40

$$\begin{aligned}
644 \times 150 &= 96.600 \\
564 \times 125 &= 70.500 \\
360 \times 100 &= 36.000 \\
778.66 \times 100 &= 77.800 \\
96.96 \times 100 &= 9.700 \\
267.5 \times 100 &= 26.750 \\
16.1 \times 60 &= 960 \\
99.0 \times 60 &= \underline{5.940} \quad \# 324.250 \\
100. \times 80 &= 8.000 \\
500.27 \times 80 &= 40.000 \\
267.5 \times 80 &= 21.400 \\
272.2 \times 80 &= 21.770 \\
391.5 \times 80 &= 31.320 \\
280.0 \times 50 &= 14.000 \\
696. \times 60 &= \underline{41.760} \\
&502.500
\end{aligned}$$

Plains + Develop. 382.037

Inventories 33.116

917.653

Costs 91.000

826.653

40% Crude Ore
value 1 ton = \$1.65
100 tons = 165.

60 tons 47% washed = 156.60
Saving 40 x .50 = 20.00

Over washing 12.50 7.50
value for comparison 164.10

$$60 \times 47 + 40 \times 29.5 = 4000$$

$$61.1 \times 47 + 38.9 \times 29 =$$

$$63.3 \times 47 + 36.7 \times 28 =$$

$$65. \times 47 + 35 \times 27 =$$

$$66.6 \times 47 + 33.4 \times 26 =$$

$$68.1 \times 47 + 31.9 \times 25 =$$

$$69.5 \times 47 + 30.5 \times 24 =$$

42% Crude Oil

Value 1 tm = \$194.

100 tms = 194.00

74 tms 47% washed = 193.64

Daring 26 x 50 = 13.00

Less overwashing 12.50 50

Value for comparison 193.64

$74 \times 47 + 26 \times 27 = 4200$

41% Crude Oil

Value 1 ton = \$1.80

100 tons - 180.

68 tons 47% washed = 177.48

Saving $32 \times .50 = 16.00$

less washing 12.50 3.50

Value for comparison 180.98

$68 \times 47 + 32 \times 288 = 4100$

44% Cude ore

value 1 ton = \$ 2,220.00

100 tons = \$ 222,000

93 tons 46% ^{@ 2.148} washed = 230.64
less cost washing 12.50
Saving Royalty & Freight 3.675 8.82
Value for comparison 221.82
 $93 \times 46 + 7 \times 174 = 4400$

87 tons 47% ^{@ 2.61} washed = 227.07
less cost washing 12.50
Saving Royalty & Freight 6.82 5.68
Value for comparison 221.39
 $87 \times 47 + 13 \times 24 = 4400$

83 tons 48% ^{@ 2.74} washed = 227.42
less cost washing 12.50
Saving Royalty & Freight 8.925 3.57
Value for comparison 223.85
 $83 \times 48 + 17 \times 245 = 4400$

78 tons 49% ^{@ 2.87} washed = 223.86
less cost washing 12.50
Saving Royalty & Freight 11.55 .95
Value for comparison 222.89
 $78 \times 49 + 22 \times 26 = 4400$

43% Crude Ore
Value 1 ton = \$2.08
100 tons = 208.

81 tons 47% washed = 211.41
less cross washing 12.50
Savings 19x50 9.50 3.00
Value for comparison 208.40

$$81 \times 47 + 19 \times 26 = 4300$$

$$81.5 \times \text{''} + 18.2 \times 25 = \text{''}$$

$$82.6 \times \text{''} + 17.4 \times 24 = \text{''}$$

Longdale Ore
Draw - Insol -

40.94 - 29.02
40.32 28.20
41.

42.23 26.92

43.46 27.92
43.56 22.80

44.35 18.30
44.35 26.
44.80 23.12
45.24 21.40
45.

45.92 16.80
46.14 17.48
46.14 17.60

46.98 15.60

47

47.48 17.36

47.71 15.82 15.12
48.16 17.20

48.53 15.70 9.96
14.00
49.28 12.60
15.50

49.50 17.40 0.604
49.73 12.99 8.55
50.62 11.36
51 9.40 9.07

On hullow A - 3 skips coke
6040 lime affects gas -

On Cornington - 6000 lbs coke
6320 lime affected gas
6240 " did not

Interpretation

the A 3 skips would be
between 5734 and 5968
or 5851 lbs -

3 cokes 2000 lbs 6000 - 1 Big Pull
 3 ores 3760 " 11280 } 1 Big Pull
 2 bins 3000 . 6000 }

3 cokes 3000 = 6000 = 1 Big Pull
 2 ores 3760 7520 } = 1 Big Pull
 1 module 2720 2720 }
 2 bins 3000 6000 }

Big Pulls 58° 116° 174° 232°
 290° 348° 406° 464°

30,000 lbs cokes

Pressure Change Proposed

29 Skips 30

3 Blanks 10

7½ Big Pull 10

~~24~~ 24 Buggies 25

g g g g
 N F D F

F N F N

Feb 1912

44 of field

One 2.272 = 5089 lbs

Cost 1.39 2780 "

Time 1.20 = 2688 "

5089 : 2780 :: x : 6200

52

5089 : 2780 :: 11349 : 6200

39

44% 5089 : 3200 :: 9860 : 6200

47 4764 : 3200 :: 9230 : 6200 6%

Time

2688 : 2780 :: x : 6200

2688 : 2780 :: 5995 : 6200

44% 2688 : 3200 :: 5208 : 6200

47% 2688 : ~~4764~~⁵⁰⁸⁹ :: 4875 : 9230

11349 x .52 = ~~5137~~ 5902

6200 x .10 x 1.5

Records

Mar 21 1904 237 tons

Apr 20 1904 223 tons

Week April 23/04 1445 - 45%

Oct 24/08 1423 - 43%

Month April 04 - 5861 = 45.1%

Coke per ton iron

| | |
|--------------------|---------------------|
| 37.0% . 3698 lbs - | 39.0 - 3416 |
| .1 3683 | .1 3404 |
| .2 3669 | .2 3392 |
| .3 3654 | .3 3380 |
| .4 3639 | .4 3368 |
| .5 3624 | .5 - 3356 |
| .6 3610 | .6 - 3344 |
| .7 3595 | .7 3332 |
| .8 3580 | .8 3320 |
| .9 3565 | .9 3308 |
| 38.0 - 3550 | 40.0 3296 |
| 1 3536 | 1 3285 ² |
| 2 3523 | 2 3274 ⁴ |
| 3 3510 | 3 3263 ⁶ |
| 4 3496 | 4 3252 ⁸ |
| 5 - 3483 | 5 3242 |
| 6 3469 | 6 3231 ² |
| 7 3456 | 7 3220 ⁴ |
| 8 3443 | 8 3209 ⁶ |
| 9 3429 | 9 3198 ⁸ |

41.0 - 3188⁶

1 3177⁴

2 3166⁵

3 3156²

4 3145⁶

5 3135

6 3124⁴

7 3113⁸

8 3103²

9 3092⁶

42.0 - 3082

1 3073⁴

2 3064⁸

3 3056²

4 3047⁶

5 3039

6 3030⁴

7 3021⁸

8 3013²

9 3004⁶

43.0 - 2996

1 2987⁶

2 2979²

3 2970⁸

4 2962⁴

5 2954

6 2945⁶

7 2937²

8 2928⁸

9 2920⁴

44.0 - 2912

1 2904⁶

2 2897²

3 2889⁸

4 2882⁴

5 2875

6 2867⁶

7 2860²

8 2852⁸

9 2845⁴

45.0 - 2838 lbs 47.0 - 2704

1 2831

1 - 2698

2 2824

2 - 2693

3 2817

3 - 2687

4 2810

4 - 2681

5 2803

5 - 2776

6 2796

6 - 2670

7 2789

7 2664

8 2782

8 2659

9 2775

9 2653

46.0 2768

48.0 - 2648

1 2761

1 2643

2 2755

2 2638

3 2749

3 2633

4 2742

4 2628

5 2736

5 2623

6 2729

6 2618

7 2723

7 2613

8 2717

8 2608

9 2710

9 2603

| | | Estimated | |
|------|------|-----------|------|
| 49.0 | 2598 | 51 | 2500 |
| 1 | 2593 | | |
| 2 | 2589 | 52 | 2450 |
| 3 | 2585 | | |
| 4 | 2580 | 53 | 2400 |
| 5 | 2576 | | |
| 6 | 2572 | 54 | 2350 |
| 7 | 2567 | | |
| 8 | 2563 | 55 | 2300 |
| 9 | 2558 | | |
| 50.0 | 2554 | 56 | 2250 |

57 - 2200

| | |
|-----------------------------|--------|
| April 21 st 1914 | 4 ears |
| Cornington Coke | 5320 |
| Kilmer " | 5640 |

Coal Land Values

Tonnage per acre 4500
Rate of mining 25000 tons monthly
Value Royalty 10¢ per ton
Interest 6%

$$\underline{650 \text{ acres}} \times 4500 = 2,925,000$$

$$\text{Royalty value} = \$292,500$$

Period $9\frac{3}{4}$ years

Annual payments of \$30,000

$$\text{Compounded 9 years} = 344,700$$

$$10^{\text{th}} \text{ year} = \underline{22,500}$$

$$\text{Total value} \$367,200$$

$$\text{Present value } 367,200 \div 1.765507 =$$

$$207,985 \text{ or } \$320 \text{ per acre}$$

$$\underline{1548.75 \text{ acres}} \times 4500 = 6,969,375 \text{ tons}$$

$$\text{Royalty value} = 696,937.50$$

Period $23\frac{1}{4}$ years

Annual payments of 30,000

Compounded

$$1,409,700$$

$$6,937,500$$

$$1,416,637$$

$$\text{Present value } 1,416,637.50 \div 3.87269$$

$$= 366,062 \text{ or } \$236 \text{ per acre}$$

Virginia Water Proportion

| | |
|-----------------------------------|-------------------|
| 1 st 10,000 KW monthly | 1 $\frac{3}{4}$ ¢ |
| next 20,000 " " | 1 $\frac{1}{2}$ ¢ |
| next 20,000 " " | 1 $\frac{1}{4}$ ¢ |

20% reduction for any part
used at night -

Delivery alternating 3 phase
60 cycle 2200 volt.

Meter on 2200 volt -

Minimum \$40 per month

60 days -

1 K. W. = 1 $\frac{1}{3}$ H.P.

Mules.

Producers. & Langdale Sludge

Sales.

One to mix with D.A.

length time to run Cov.

Fleerwick.

Poplar Timber & Moss

Virginia
Haloid Process

Nov 19th

Laboratory test Jordan Ore $\frac{1}{8}$ "

| | Curds | Calc Conc. | | Wrights |
|-------|-------|------------|-------|------------------|
| Iron | 36.39 | 38.44 | 54.65 | H 49.34 |
| Sulph | 37.40 | 39.50 | 14.77 | T 50.66 |
| | Tails | | | Efficiency |
| Iron | 22.45 | | | % Iron recovered |
| Sulph | 63.70 | | | 70.1% |

Jordan Ore $\frac{1}{4}$ " + Under

| | Curds | Calc | Conc | Tails |
|---------|---------|-------|-------|------------------|
| Iron | 36.39 | 38.44 | 54.30 | 22.20 |
| Sulph | 37.40 | 39.50 | 14.03 | 64.60 |
| | Wrights | | | Efficiency |
| Wrights | 49.94 | | | % Iron recovered |
| Tails | 50.06 | | | 70.6% |

Coal lands

| | Fee | Mineral | Lease |
|----------------|----------------|----------------|----------------|
| Boaga | | 96.96 | |
| Coal Run lease | | | 917.10 |
| | | | 301.00 |
| | | | 433.10 |
| Davis-Preston | 267.50 | 778.66 | |
| Ellis | 99. | | |
| Gaines | 696.17 | 280.00 | |
| Hays Mining | | 100.00 | |
| Myles | 176.25 | 215.25 | |
| Newman | 272.20 | | |
| Poor Farm | 360.00 | | |
| Richards | 16.10 | | |
| Sanger | | 267.50 | |
| Sanger JF | | 500.00 | |
| Stewart | 1218.00 | | |
| Withrow | | | 126.90 |
| | | | 37.70 |
| Totals | 3005.22 | 2238.64 | 1814.80 |

Deductions Surface

Cemetery . 4
 C & O Mapor 1.9
 C & O Right of Way
 Fayette Tract 2

Bonds Lowell

| | |
|--------------|----|
| Bullard | 14 |
| Gordon Guard | 20 |
| " Mrs | 10 |
| Meaus M A | 23 |
| " Mrs E C | 8 |
| " T H | 10 |
| " H | 1 |
| Maynard | 8 |
| Seaton | 9 |
| Tapp | 52 |
| A. N. B. | 25 |
| Harrison L B | 15 |
| " C S | 18 |
| " B W | 1 |

Lineation for ten iron

| | |
|---------------|--------------|
| 37.0% - 1.560 | 40% - 1.328 |
| 1 1.552 | 1 1.320 |
| 2 1.544 | 2 1.313 |
| 3 1.536 | 3 1.306 |
| 4 1.529 | 4 1.299 |
| 5 1.52 | 5 1.292 |
| 6 1.512 | 6 1.285 |
| 7 1.504 | 7 1.278 |
| 8 1.496 | 8 1.271 |
| 9 1.488 | 9 1.264 |
| 38.0 - 1.480 | 41.0 - 1.257 |
| 1 1.471 | 1 1.250 |
| 2 1.464 | 2 1.243 |
| 3 1.456 | 3 1.236 |
| 4 1.448 | 4 1.229 |
| 5 1.441 | 5 1.222 |
| 6 1.433 | 6 1.216 |
| 7 1.425 | 7 1.209 |
| 8 1.417 | 8 1.202 |
| 9 1.410 | 9 1.195 |
| 39.0 - 1.403 | 42.0 - 1.188 |

42.09, 1.188

1 1.181

2 1.175

3 1.168

4 1.162

5 1.156

6 1.150

7 ~~1.144~~

8 1.137

9 1.131

43.0 - 1.125

1 1.119

2 1.113

3 1.107

4 1.101

5 1.095

6 1.089

7 1.083

8 1.077

9 1.071

44.0 - 1.065

1 1.0595

2 1.054

3 1.0485

4 1.043

5 1.0375

6 1.031

7 1.0265

8 1.021

9 1.0155

45.0 - 1.010

1 1.005

2 1.000

3 .995

4 .990

5 .985

6 .980

7 .975

8 .970

9 .965

46.0 - 960

46.090 - .960

1 .9555

2 .951

3 .9465

4 .942

5 .9375

6 .933

7 .9285

8 .924

9 .9195

47.0 - .915

1 .911

2 .907

3 .903

4 .899

5 .895

6 .891

7 .887

8 .883

9 .879

48.0 - .875

1

2 .8724

3

4

5

6

7

8

9

49.0 - .862

1

2

3

4

5

6

7

8

9

39.0 - 1.403

1 1.395

2 1.387

3 1.380

4 1.372

5 1.365

6 1.357

7 1.350

8 1.342

9 1.335

6000 lbs Corn 6320 Stone poor grass

" " " 6240 " good "

1000 " " 1060 " poor "

" " " 1040 " good "

| | | |
|-----------|------|---------------------------|
| Hands | 54 | |
| Howelloor | 3579 | Fee |
| | 1404 | Mineral |
| Dolly Ann | 2887 | Fee |
| | 144 | Lower Steel |
| Fenwick | 4867 | Fee |
| | 35 | = 1/2 of 70 |
| Stack | 827 | |
| Moss Run | 711 | 14508 14508 |

Potts Creek

| | | |
|---------|--------|--------------------|
| Trecker | 325. | |
| Robison | 98. | Part Sold |
| Britt | 185.62 | |
| Childs | 160. | Sold 1914 |
| " | 151. | " |
| Dunphin | 143. | |
| Pearson | 249.5 | Sold 1914 |
| Carter | 18.5 | " 1/30.62 15584.62 |

| | | | |
|------|---------|------|------|
| Coal | Fee | 3075 | |
| | Mineral | 2239 | |
| | Lease | 1817 | 7128 |

Bath County

Pauther Gap 493 acres

Falling Springs Marl

Dissol 2.28

CaCO_3 94.54

P_2O_5 .075

Phos .033

| | Average all below | Lead | Iron | Plus | Mang |
|------------------------------------|-------------------|-------|-------|-------|-------|
| Fan Tunnel | | 14.92 | 49.72 | 0.69 | 0.91 |
| Stone level Slope | | 16.00 | 49.10 | .63 | .58 |
| Bottom Can level shaft? | | 24.14 | 43.49 | .58 | .41 |
| 70' level Slope | | 12.56 | 50.56 | -.82 | -.59 |
| Slope bottom Can level - Centre | | 5.04 | 57.41 | 1.10 | .46 |
| " " " " Upper end | | 3.80 | 56.08 | 1.00 | .39 |
| " " " " near " " | | 2.80 | 55.20 | -.66 | -1.40 |
| " " " " near " " | | 25.78 | 40.18 | .44 | 2.48 |
| Slope 120' level | | 7.99 | 57.55 | .39 | .43 |
| " 90' " | | 11.59 | 49.68 | -1.03 | -4.15 |
| " 110' " | | 1.60 | 57.63 | 1.37 | .50 |
| Shaft 40' " | | 4.80 | 57.41 | .51 | .39 |
| " 60' " | | 18.78 | 47.38 | -.60 | -.39 |
| " 80' " | | 35.44 | 38.86 | .35 | .39 |
| " 20' " | | 38.62 | 36.43 | .16 | .20 |

Longdale Ore Dec 1913

Huff - Electro Static Separator

Longdale Slush 3/27/16

Insol Sum

Sampled Slush 48.92 25.53

| Average 9 samples | | | Inval. | Iron | Phos | Manq | Zn |
|-------------------|-----------|-------------|--------|-------|------|-------|-----|
| | | | 10.35 | 49.12 | .75 | 3.28 | |
| Slope | Car level | upper end | 12.40 | 49.95 | .67 | 1.32 | .60 |
| " | " | Centre | 7.00 | 52.83 | .66 | 1.73 | |
| " | 70' | " | 7.02 | 49.72 | 1.12 | 2.97 | |
| " | 90' | " | 4.60 | 42.95 | .71 | 12.04 | .79 |
| " | 110' | " | 5.46 | 48.61 | .82 | 6.60 | |
| " | 120' | " | 7.00 | 54.96 | .72 | 1.07 | |
| Shaft | Car level | - 450' from | 23.98 | 43.06 | .89 | .90 | |
| " | | 450' to | 13.40 | 48.61 | .60 | 2.39 | |
| " | 40' " | | 12.30 | 51.39 | .57 | .49 | |

Sample date Dec 1915

Longdale Slush Pond - old settlings

Sampled by F. U. Humbert with analyzer

| Samples by Humbert # | Al ₂ O ₃ | Level | Iron | P lbs | Mang |
|----------------------|--------------------------------|-------|-------|-------|------|
| 1 | 2.74 | 40.08 | 30.36 | .44 | .90 |
| 2 | 5.24 | 36.74 | 32.35 | .47 | 1.64 |
| 3 | 3.48 | 31.76 | 35.01 | .52 | 1.67 |
| 4 | 3.78 | 35.80 | 33.68 | .46 | 1.56 |
| 5 | 4.18 | 35.88 | 31.69 | .43 | 1.53 |

Longdale Slush Pond, Nov 1913

Samples by J. R. Monteith -
4 lines of holes 50' apart
4 ft deep - 100' across

| | |
|------------------------|-------|
| General Sample of Pond | 27.77 |
| Upper end | 30.01 |
| Middle | 27.55 |
| Lower end | 24.64 |

Longdale - Coarse sand above settling Pond - Jan'y 1914 -

10th Sample ^{20g} — 45.87

On 14 Mesh 40g 2.50% — 45.25

Through 14 " on 20-2nd 20.00" — 44.80

" 20 " " 32 3rd 30.00" — 45.02

" 32 " " 60 3rd 6g 33.75" — 40.32

" 60 " " 1st 6g 13.75" — 37.85

120g Sample

200g

Through 60 on 80 - $\frac{2}{3}$ - 34.49%

" 80 $\frac{1}{3}$ - 39.87%

3rd Sample

on 32 mesh 1st 6g 45.84% — 46.36

Through " " 1st 10g 54.16 — 39.87

3rd Sample

200g

on 60 mesh 2nd 3g - 72.91% — 43.68

Through " " 13g 27.09 — 36.51

Longdale Slush pond
Gardner's Analyses of Richards
Screen Test

| | | |
|-----------|-----------|-----------|
| 1.95% #1 | 25.08% | Jan 24/41 |
| 2.14 " 2. | 23.07 " " | 25.31 |
| 2.10 " 3. | 24.64 " " | 25.85 |
| 2.06 " 4. | 21.72 " " | 27.55 |
| 1.81 " 5. | 26.91 " " | 26.65 |
| 2.00 " 6. | 33.60 " " | 32.43 |
| 1.90 " 7. | 32.40 " " | 32.48 |

Gardner Tg Quinn

Richards Chemist Chemist

Samples - taken from Trifley table

| # | Weight Kilbs | Iron % | Lead % |
|--------------------------------|-----------------|--------|--------|
| 8 Feed | 11.03 | 25.31 | 51.04 |
| 9 Concentrate | 0.46 | 40.32 | 28.20 |
| 10 Middlings | 1.04 | 34.27 | 37.64 |
| 11 Tailings | 6.96 | 22.17 | 54.28 |
| 12 Slimes Slimes | 2.53 | 23.07 | 50.00 |
| Loss | 0.04 | | |

Test by R. H. Richards at M. I. T. April 10th 1914

Longdale Sand from Slush Pond -
miller kiln gravel iron

| | | | | |
|--------------|-------|-------|-------|-------|
| Feed | _____ | 23.07 | 46.44 | 26.43 |
| Discharge #1 | _____ | 7.18 | 47.70 | 26.65 |
| " 2 | _____ | 1.73 | 49.78 | 25.31 |
| Hutch 1 | _____ | .80 | 50.56 | 25.98 |
| " 2 | _____ | .65 | 45.40 | 27.77 |
| Tailings | _____ | 3.73 | 46.30 | 27.55 |
| Slime | _____ | 6.25 | 42.64 | 26.43 |
| Bed & loss | _____ | 2.73 | | |

Pulsator jig Test.

Wetherill Magnet Runs
on Jig Products
R# Richards - April 22 1914

| | weighs | ton |
|------------|--------|-------|
| Feed D 1 | 1.07 | |
| Magnet ic | .43 | 45.69 |
| Iron Mag | .64 | 9.41 |
| Feed D 2 | .84 | |
| Mag | .30 | 45.25 |
| Iron Mag | .54 | 10.30 |
| Feed H 1 | .26 | |
| Mag | .13 | 44.35 |
| Iron Mag | .13 | 6.49 |
| Feed H. 2 | .21 | |
| Mag | .09 | 42.33 |
| Iron Mag | .12 | 8.29 |
| Feed Tails | .92 | |
| Mag | .43 | 40.09 |
| Iron Mag | .49 | 13.89 |

Longdale Prospects

Shaft Mine

#1 Mine

2001 Feb 11

9.20 - 50.17 - 4.29

Electric Ore Separator Co

Joe Weatherly

Longdale - No 1 - Upper third settling pond -
Net Concentration

| Weight | | Iron | Zinc | Phos | Mang |
|--------|--------------|-------|--------|------|-------|
| 15.3 | Concentrates | 40.76 | 23.88% | .53% | 2.47% |
| 29.3 | Sand | 8.06 | 80.74 | .13 | .14 |
| 55.4 | Mud | 27.33 | 41.92 | .43 | 1.81 |
| 100. | Curds | 27.32 | 43.64 | .36 | 2.31 |

Electric Ore Separator Cr
 Longdale Mud - Upper One-third pond

| | | From | Assal |
|--------|----------------------------------|--------|--------|
| 10 lbs | 1. Natural Ore - Mud washed out | 27.28% | 47.98% |
| | 2. " " Settling Mud washed out | 31.47% | 39.50% |
| | 3 Tailings - Sand from | 1.56% | 97.06% |
| 4 lbs | 4 Concentrates 50% Dry Separator | 45.50% | 17.24% |
| 4 lbs | 5 Tailings 50% " " | 2.01% | 93.90% |

14TH ST.

| | | | | | |
|------------|--------|------|------|-----------|----------|
| Richardson | | | | Merriman | |
| Montague | Steele | Elam | Elam | Seiderich | Munbourn |

15TH ST.

LEXINGTON AVE

Sept 3rd 1913

Report of H. O. Brightbill
Reveries using 25% nodules
25% Raw Pyrites
25% Dolomite

Buena Vista - 20% nodules

Princess - $\frac{3}{16}$ nodules
25 Dolomite

Crozier 50% Sinter
all dolomite

Pellaski 50% nodules
25% Dolomite

Radford 50% nodules
25% Dolomite

Ore June 1914
 Brown Hematite
 Relative Values - Cov Fe
 Case \$3.00 - limit \$0.80

| | Dow per ton | | |
|-----|-----------------------|-----------------------|----------|
| | \$ 11.50 | \$ 12.00 | \$ 12.50 |
| 38% | .938 | 1.128 | 1.318 |
| 39% | 1.063 | 1.268 | 1.463 |
| 40 | 1.208 | 1.408 | 1.608 |
| 41 | 1.339 | 1.544 | 1.749 |
| 42 | 1.47 | 1.68 | 1.89 |
| 43 | 1.593 | 1.808 | 2.023 |
| 44 | 1.716 | 1.936 | 2.156 |
| 45 | 1.835 | 2.06 | 2.285 |
| 46 | 1.955 | 2.185 | 2.415 |
| 47 | 2.069 ^{23.5} | 2.304 ^{23.5} | 2.539 |
| 48 | 2.184 | 2.424 | 2.664 |
| 49 | 2.308 ²⁹ | 2.553 ⁵³ | 2.798 |
| 50 | 2.419 ³⁹ | 2.669 ⁶³ | 2.919 |
| 51 | | 2.78 | |
| 52 | | 2.85 | |
| 53 | | 2.95 | |

For handling
 add 25¢

Brown Ore Values June 1914

Car Fee

Capex $\frac{1}{2}$ 3.00

mine .80

Iron per ton

| | <u>13.00</u> | <u>13.50</u> | <u>14.00</u> |
|-----|-----------------------|--------------|--------------|
| 38% | 1.508 ⁺¹⁹⁴ | 1.698 | 1.888 |
| 39 | 1.658 ¹⁹⁵ | 1.853 | 2.048 |
| 40 | 1.808 ²⁰ | 2.008 | 2.208 |
| 41 | 1.954 ^{20.5} | 2.159 | 2.304 |
| 42 | 2.10 ²¹ | 2.31 | 2.52 |
| 43 | 2.238 ^{21.5} | 2.453 | 2.668 |
| 44 | 2.376 ²² | 2.596 | 2.816 |
| 45 | 2.51 ^{22.5} | 2.735 | 2.96 |
| 46 | 2.655 ²³ | 2.885 | 3.105 |
| 47 | 2.774 ^{23.5} | 3.009 | 3.244 |
| 48 | 2.904 ²⁴ | 3.144 | 3.384 |
| 49 | 3.043 ^{24.5} | 3.288 | 3.533 |
| 50 | 3.169 ²⁵ | 3.419 | 3.669 |

Ore -

Barren Idemite
Furnace Yields.

Relative Values.

| | | | | |
|--------|-----------------|-----------------|-----------------|-----------------|
| Fe 37% | .756 | 1.512 | 1.12 | .93 |
| " 38 | .839 | 1.678 | 1.40 | 1.11 |
| " 39 | .920 | 1.840 | 1.26 | 1.06 |
| " 40 | 1.000 | 2.000 | 1.40 | 1.20 |
| " 41 | 1.078 | 2.156 | 1.54 | 1.34 |
| " 42 | 1.154 | 2.308 | 1.68 | 1.47 |
| " 43 | 1.229 | 2.458 | 1.81 | 1.59 |
| " 44 | 1.303 | 2.606 | 1.93 | 1.71 |
| " 45 | 1.375 | 2.75 | 2.06 | 1.83 |
| " 46 | 1.446 | 2.892 | 2.18 | 1.95 |
| " 47 | 1.516 | 3.032 | 2.30 | 2.07 |
| " 48 | 1.583 | 3.166 | 2.42 | 2.18 |
| " 49 | 1.647 | 3.294 | 2.53 | 2.29 |
| " 50 | 1.705 | 3.41 | 2.63 | 2.39 |
| " 51 | | | | |
| " 52 | | 13.50 | 12.00 | 11.50 |
| 53 | | | | |
| 54 | @ 2.80 @ .80 | @ 3.00 @ .80 | @ 3.00 @ .80 | @ 3.00 @ .80 |
| 55 | @ @ | @ @ | @ @ | @ @ |

1904.15

how much Fee
Enter 3.00 him .82 1/2
40 q. - 2.10 diff 2 1/2

| | | | |
|----|--------------|--------------|--------------|
| | <u>11.50</u> | <u>12.00</u> | <u>12.50</u> |
| 36 | .89 | <u>1.07</u> | 1.25 |
| 37 | 1.037 | 1.222 | 1.407 |
| 38 | 1.178 | 1.368 | 1.558 |
| 39 | 1.316 | 1.511 | 1.706 |
| 40 | 1.45 | 1.65 | 1.85 |
| 41 | 1.581 | 1.786 | 1.991 |
| 42 | 1.715 | 1.925 | 2.135 |
| 43 | 1.840 | 2.055 | 2.270 |
| 44 | 1.965 | 2.185 | 2.405 |
| 45 | 2.086 | 2.311 | 2.536 |
| 46 | 2.208 | 2.438 | 2.668 |
| 47 | 2.326 | 2.561 | 2.796 |
| 48 | | | |
| 49 | | | |
| 50 | | | |

| ap | Tons | lbs |
|----|-------|---------|
| 37 | 2.7 | |
| 38 | 2.631 | |
| | 2 | |
| 39 | 2.564 | |
| 40 | 2.500 | |
| 41 | 2.439 | |
| 42 | 2.381 | |
| 43 | 2.325 | 5208 |
| 44 | 2.272 | 5089 |
| 45 | 2.222 | |
| 46 | 2.174 | 4869.76 |
| 47 | 2.127 | 4764.48 |
| 48 | 2.083 | |
| 49 | 2.040 | |
| 50 | 2.000 | |

59.8 Fe
14.5 H₂O

Washed

57.64 = 0

50 = 13

40 = 30

30 = 47

20 = 64

10 = 81

0 = 98.

Calcinid

66.32 = 0

60 = 9.04

50 = 23.32

40 = 37.60

30 = 51.88

20 = 66.16

10 = 80.45

0 = 94.73

Theoretical

Washed at 212

0 = 100

10 = 83.108

20 = 66.216

30 = 49.324

40 = 32.432

50 = 15.54

59.2 = 0

Theoretical

Calcinid

0 = 100

10 = 85.7143

20 = 71.4285

30 = 57.1429

40 = 42.8572

50 = 28.5715

60 = 14.2858

70 = 0.

1 = 1.7

Estimated Insolubles

| | From | Insol | Part in iron |
|--|------|---------|--------------|
| | 25% | — 55.5% | |
| | 30 | 47.0 | |
| | 35 | 38.5 | |
| | 36 | 36.8 | |
| | 37 | 35.1 | |
| | 38 | 33.4 | .8787 |
| | 39 | 31.7 | .8127 |
| | 40 | 30.0 | .7500 |
| | 41 | 28.3 | .6902 |
| | 42 | 26.6 | .6333 |
| | 43 | 24.9 | .5789 |
| | 44 | 23.2 | .5271 |
| | 45 | 21.5 | .4777 |
| | 46 | 19.8 | .4304 |
| | 47 | 18.1 | .3849 |
| | 48 | 16.4 | .3416 |
| | 49 | 14.7 | .2998 |
| | 50 | 13.0 | .2600 |
| | 51 | 11.3 | |
| | 52 | 9.6 | |
| | 53 | 7.9 | |

Silica 91% of insoluble

$$1 = 1.4284$$

Calculated Rich Patch Or
Estimated Insolubles

9m

$$40 = 3760$$

41

42

43

44

45

46

47

48

49

$$50 = 23.32$$

51

52

53

54

55

56

57

58

59

$$60 = 9.04$$

2-15-12

Ore Values

40 lb
sample
for analysis

| Room | Per ton | | Unit |
|------|----------|------|------|
| 36% | \$ 1.008 | | 2.8 |
| 37 | 1.169 | | 3.1 |
| 38 | 1.326 | 1.02 | 3.5 |
| 39 | 1.478 | 1.17 | 3.8 |
| 40 | 1.628 | 1.32 | 4.0 |
| 41 | 1.775 | 1.47 | 4.3 |
| 42 | 1.919 | 1.61 | 4.6 |
| 43 | 2.058 | 1.75 | 4.8 |
| 44 | 2.197 | 1.89 | 5.0 |
| 45 | 2.332 | 2.03 | 5.2 |
| 46 | 2.465 | 2.16 | 5.4 |
| 47 | 2.595 | | 5.5 |
| 48 | | | |

1914
Bre Values for Haloid

| Don | Donal | Partur |
|-----|---------|--------|
| 60. | - 9.04 | \$3.39 |
| 59 | - 10.46 | 3.29 |
| 58 | - 11.89 | 3.19 |
| 57 | - 13.32 | 3.08 |
| 56 | - 14.75 | 2.97 |
| 55 | - 16.18 | 2.85 |
| 54 | - 17.61 | 2.74 |
| 53 | - 19.03 | 2.63 |
| 52 | - 20.46 | 2.51 |
| 51 | - 21.89 | 2.40 |
| 50 | - 23.32 | 2.28 |
| 49 | - 24.75 | 2.16 |
| 48 | - 26.18 | 2.04 |
| 47 | - 27.60 | 1.92 |

| | 1901 Fennick Trasbood | 1901 Rich Patch | 1901 Low Moor Trasbood | 1901 Low Moor Lump | 1901 Rich Patch | Rich Patch |
|-------------------|-----------------------------|--------------------|------------------------------|--------------------------|--------------------|------------|
| Metallie Iron | 43.617 | 43.918 | 47.135 | 42.613 | 37.185 | 41.808 |
| Silica | 23.850 | 23.960 | 14.120 | 21.740 | 30.560 | |
| Phosphorus | .298 | .297 | .484 | .333 | .256 | .496 |
| Manganese | .641 | .324 | .699 | .605 | .583 | .793 |
| Alumina | 2.409 | 1.876 | 1.870 | 4.261 | 1.702 | 2.600 |
| Sulfur | .015 | .018 | .022 | .018 | .018 | .069 |
| Organic | 3.150 | 5.980 | 9.120 | 9.280 | 7.950 | |
| Insoluble | 5.068 | 4.127 | 5.404 | 1.053 | 4.530 | |
| Zinc | 26.730 | 25.620 | 15.290 | 23.710 | 34.270 | 28.92 |
| | .843 | .489 | .560 | .417 | .345 | |
| Calcium Carbonate | | | .015 | .161 | | |

Complete Analysis

1915 Feb 23rd

wrights per cu ft

Wongdale Ore - 125 #

Jordan " 114 $\frac{2}{3}$

Modules 134 $\frac{2}{3}$

April 26th 1913

Ore from near Dagger Springs

Dressel Fee Wang

26.50 43.70 .27

25.70 43.46 .34 On $\frac{1}{8}$

27.02 43.01 .30 . $\frac{1}{16}$

35.14 37.90 .30 Through $\frac{1}{16}$

Sampled by Mr. Wild.

Oct 20th 1913

Dressel Fee Mr

Vine ore 4.54 2.87 54.37

Vine ore 10.58 50.25 3.24

Griffin ore 25.00 40.99 1.94

Shanadeah ^{Moist} 6.00 24.42 29.78 } 13.04
Wipacumli } 13.36

Feb 20th 1914

" 33.34 21.94 } 15.18

" } 13.20

Ore from Barney Johnson's place
on Cedar Creek, Bath County

| | | |
|---------------------------|-------|-------|
| May 28 th 1914 | Insol | Down |
| Boy Ore | 13.10 | 46.37 |
| Hard dense Ore | 3.26 | 66.08 |

May 28th 1914.

Ore from McCallister land near
Cornington Switch back on Dolly
Amen RR. Sample by Poole

| | | | |
|-------|-------|--------|------|
| Insol | Down | P. box | Mary |
| 12.34 | 48.61 | 1.11 | 2.18 |

offer to purchase lump ore

| | | |
|-----------|------|----------|
| 42 to 45% | 1.65 | job cars |
|-----------|------|----------|

| | | |
|---------|------|-----|
| 45 + up | 2.00 | " " |
|---------|------|-----|

F.O. 6
 furnace Saving

Value 100 tons Crude 40% = \$165.00
 " 50 " " " 47" = 130.50 + 13.75 = 144.25
 " 60 " " " " = 156.60 + 8.50 = 165.10
 " 70 " " " " = 182.70 + 3.25 = 185.95

| | <u>70</u> | <u>60</u> | <u>50</u> |
|---------------|--------------|--------------|--------------|
| Saving | | | |
| Royalty | .25 | | |
| C+O | .175 | | |
| L.R.R. | .10 | | |
| | <u>.525</u> | <u>.525</u> | <u>.525</u> |
| | 30 | 40 | 50 |
| | 15.750 | 21.00 | 26.250 |
| Less Frashing | <u>12.50</u> | <u>12.50</u> | <u>12.50</u> |
| | 3.25 | 8.50 | 13.75 |

Scale of Prices for
Falling Spring Ore

Feb 2nd 1914

Handed to Mr. Bathright

| Delivered Crr. Fee | Crude Ore | 12 th |
|--------------------|-----------|------------------|
| 42 to 43% Iron | 1.40 | 2.00 1.68 |
| 43 " 44 " " | | 2.14 |
| 44 " 45 " " | 1.70 | 2.28 1.93 |
| 45 " 46 " " | | 2.42 |
| 46 " 47 " " | 1.95 | 2.56 2.18 |
| 47 " 48 " " | | 2.70 |
| 48 " 49 " " | 2.15 | 2.83 2.42 |
| 49 " 50 " " | | 2.96 |
| 50 and over | 11.50 | 3.00 12.00 |

Under 42% - Not wanted - will
be rejected -

Broken to pass through a 6" ring

Analyses Canton Laboratories

Iron 57.45

Phos .776

SiO₂ 4.05

Water 16.18 (11.08)

lime 60 .10

MgO .10

SO₃ .07

Falling Springs Ore
 Ohio C. Barker Fert. Co

| can | 1914 | Ship date | Inst | Draw |
|-------|-------|------------------|-------|---------------|
| 54385 | Mar | 26 th | 19.14 | 20.96 - 45.47 |
| 24027 | April | 13 th | | 15.62 49.50 |
| | | May | .512 | Phos. 78 |
| 25299 | April | 13 th | | 11.26 51.09 |
| 17411 | " | 21 | | 21.18 46.26 |
| 19115 | " | 26 | | 16.90 48.16 |
| 21272 | May | 9 | | 21.90 45.47 |
| 57103 | " | 20 | | 22.30 44.68 |
| 54922 | " | 21 | | 19.00 46.14 |
| 24686 | " | 27 | | 24.80 44.12 |
| 50784 | " | 29 | | 22.02 45.10 |
| 95000 | June | 6 | | 22.24 46.14 |
| 56664 | " | 3 | | 26.70 41.00 |
| 52444 | " | 10 | | 20.08 45.92 |
| 18933 | " | 12 | | 22.66 45.47 |
| 25599 | " | 19 | | 20.18 44.80 |
| 55648 | " | 24 | | 21.20 43.90 |

Oriskany Ore July 1914

45% - \$2.25 -
dry for mine
ASOC

10¢ up
15¢ down

| | Sample | | Insol | Perm |
|-------|------------|----------------|-------|-------|
| 18699 | Fee | | 18.10 | 48.38 |
| " | Mine | 48.22 | 16.86 | 48.16 |
| 18797 | Fee | | 18.40 | 45.92 |
| " | Mine | 47.43 | 16.94 | 47.71 |
| 16640 | 48.02 Fee | | 16.94 | 48.82 |
| | Mine | 48.02 | 18.29 | 49.05 |
| 19281 | Fee | | 15.32 | 49.28 |
| 19322 | Mine | 48.22 | 16.26 | 49.28 |
| 19156 | 48.02 Fee | | 16.64 | 49.72 |
| 20756 | 48.16 Mine | 48.02 | 15.66 | 49.95 |
| 18618 | Fee | | 20.00 | 47.48 |
| 19149 | Mine | 44.95 46.33 | 21.34 | 47.04 |
| 19248 | Fee | | 19.20 | 47.26 |
| " | Mine | 46.73 | 19.31 | 47.48 |
| 19904 | Fee | | 16.34 | 48.60 |
| " | Mine | 45.25 | 17.34 | 48.86 |
| 18883 | Fee | | 15.86 | 48.92 |
| | Mine | | 19.00 | 47.04 |
| 18630 | " | | 19.60 | 46.81 |
| | Fee | | 18.96 | 47.18 |

Iron Age Nov 12 1914

from B. Phillips

"Concentration by the Taltra Process"
"Beneficiation of Brown Iron Ores"

Consumption of Fuel

For drying (and partly calcining) 9.92¢
71.4 lb. Illinois Coal, per ton ore

For calcining (roasting) 29.32¢
211 lb. Illinois Coal, per ton dried ore.

For drying and calcining, fuel cost
was 39.24¢ per ton of ore.

^{Dryer}
Cylinder Kiln 125' long 10' diam
inclined $\frac{3}{4}$ " to 18° , 1 R.P.M., ore
travels 2 ft per min.

Pulverized coal, ^{80 to 100 mesh} blown in lower end
of cylinder by Aero pulverizer -

lower part cylinder 300° F upper 200° F

Fan, exhausts, 35,000 cu ft per min.

^{Calcining Kiln}
125 ft long 9 ft diam, partly lined
with fire brick - 1000° F lower end.

| Grade | Crude | Dry | 38.76% Fe Calcined over $\frac{1}{2}$ " |
|------------------|-------|-------|--|
| Iron | 32.74 | 42.36 | 55.23 |
| Silica | 26.77 | 26.80 | 14.80 |
| Alumina | 6.65 | 9.83 | 10.43 |
| Sulfur | .041 | .003 | Tr |
| Phos | .075 | .085 | 0.098 |
| Free water | 11.33 | | |
| Comb. " | 8.70 | | |

46% of Crude Ore
into 52% Fe

8-6-12

Ore from Porter A. Clarke
Sample from "High Place"
on Craig's Creek

| | |
|------------------|--------|
| Quartz | 6.76 |
| SiO ₂ | 10.64 |
| Mer | 39.84 |
| P | .315 |
| Zn | .92 |
| Pb | 2.18 |
| Tr Cu + Co | traces |

Robert h Pierre font
140 Columbia Heights

Pyrites Cinders

2/13/12

From Pulp Mill

#1 - Iron 49.61

Lead 12.68

Sul 5.84

From Taylor & Co - Savannah

Iron 61.65 - 62.44

Lead 1.68 2.56

Sul 1.70 .863

Zn .061

Cu .22

Pb .54

Co .30

Mn .098

From A. D. Ladeaux 3/26/12

Iron 61.04

Lead 6.96

Sul .433

From Eustis

Iron 61.32

Lead 7.50

Sul .044

Pyrites

Sample from
Southern States Phos Fertilizer Co
Savannah Ga

Insol 7.48
Fe 56.02
Sul .557

5/27/12 Baker Chemical Co

Ba = .302

BaSO₄ - .513

6/29/12 Ashepor Fert. Co
Charleston, S C
1914

Insol 3.50 2.42 - 2.52 1.76

Fe 63.00 65.40 65.10 65.00

S 1.10 1.15 1.05 .72

Pb .12 | ^{Moisture} 15.00 16.00 15.40

Cu .19

Zn .095

our part residue 2000 to 5000 tons
annually -

Pyrites

June 8th 1914

2 cars from B. Mitchell & Co.

shipped from Wilmington N.C.

#535157, 41314 - ^{total} 2.56 ^{#e} 59.80

Sulphur 2.50%

June 10th 1914 - Naylor & Co. Savannah

Dural. Iron. Sul.

2.12 - 62.72 - 1.72

2.04 - 61.15 - 2.40

2.10 - 59.58 - 2.54

2.50 - 58.24 - 2.59

3.30 - 57.79 - 2.12

2.52 - 57.79 - 2.75

2.34 - 58.24 - 2.59

3.04 - 57.12 - 2.55

Pipites

July 1914
Va Car Chem Co Wilmington
6058000 2.54 63.19 1.28

Jan 20 1914
Charleston S.C. Chamber of Commerce
said J. Ross Hanabain Pres
Planters Fertilizer & Phosphate Co
could give information about Pipites
used annually in Charleston
Charleston S.C.

Total Annual output Cinders
Estimated at 50,000 tons

Savannah 30,000 tons
Wilmington 20,000 "

Nicolls Kiln 40 x 8
Capacity 8000 tons monthly

Charleston S.C

1944

U.R. White Sulph

4-30-12

| | | |
|-----------------|--------|---------------------------------|
| 6 cars | 4 cars | 5/7 |
| 4.50 % Moisture | 5.00 | 12 cars 6.20 |
| 63.40 Fe | 64.79 | 64.23 |
| .094 S | .106 | .0825 |
| Insal | 4.20 | Zn .04 Pb .44 Cu .28 C |
| CaO | .25 | |
| MgO | .10 | |

| | | |
|-------------|-------------|------------|
| 5/21-6 cars | 5/28-5 cars | 6/4-4 cars |
| Mois 7.50 | 2.50 | 3.00 |
| Iron 66.92 | 63.56 | 64.01 |
| Sul .089 | .093 | .101 |
| Insal | | 4.46 |

| | | |
|-------------|-------------|-------------|
| 6/11-4 cars | 6/18-8 cars | 6/26-7 cars |
| Mois 4.00 | 4.00 | 6.00 |
| Fe 63.45 | 63.90 | 64.40 |
| S .090 | .093 | .101 |

| | | |
|------------|------------|-------------|
| 7-2-5 cars | 7/6-6 cars | 7/19-4 cars |
| Mois 8.00 | 8.00 | 2.00 |
| Fe 64.55 | 63.90 | 64.50 |
| S .086 | .082 | .096 |

Princess Furnace Modules
Glen Milton Va

| | |
|--------------------------------|--------|
| Iron | 15.150 |
| SiO ₂ | 10.120 |
| Fe | 58.690 |
| Al ₂ O ₃ | .310 |
| CaO | 1.120 |
| MgO | 1.110 |
| S | .241 |
| P | .033 |
| Mn | .112 |
| Cu | .238 |
| Pb | .130 |
| Ba | .235 |
| Zn | 2.40 |
| TiO ₂ | Trace |

Analyses by Kaufman

Pulp Mill Pyrites Cinder

May 1912

| | |
|--------------------------------|-------|
| Insol | 11.80 |
| Fe | 48.90 |
| Al ₂ O ₃ | 1.35 |
| CaO | 2.92 |
| MgO | 1.05 |
| S | 4.86 |
| Zn | 4.10 |
| Pb | .15 |
| Cu | .31 |
| As | .024 |
| P | .014 |
| Mn | .194 |
| Ba | 2.38 |
| <hr/> Ba SO ₄ | 4.05 |

Kauffmann

Oct 8 1912

Pulp Mill Moderized Cinder

| Sample #1 | #2 |
|-------------|-------|
| Sulp 0.22 | 0.60 |
| Iron 54.82 | 56.56 |
| Insol 11.60 | 11.91 |

It had more coal than
in moderizing

April 1913

| | |
|-------|--------|
| Sulp | .00024 |
| Iron | 55.66 |
| Insol | 6.40 |
| Phos | .014 |
| Mang | .19 |
| Lead | .518 |
| Zinc | 3.96 |
| Cu | .76 |

Iron Age Oct 24th 1912

| | Cost of Preparing Porous | Rotary Kiln | False Work Heat + Pressure | Waste |
|-----------|-----------------------------|----------------|----------------------------------|------------|
| Fuel | \$0.05 | .39 | .35 | .25 |
| Labor etc | <u>.45</u> | <u>.61</u> | <u>1.25</u> | <u>.25</u> |
| Total | 0.50 | 1.00 | 1.60 | .50 |

Iron Age Mar 5th 1914

Two units Dwight-Lloyd

Producing labor[#] 0.18

Ignition .06

Repairs .06

Power (8.8 Kw-hr)
per ton .16

.46

Including \$1.00 to 1.25

Phos Sintering Plant - Ashland Ky - April 1914
Samples taken by Robert Lipscomb and Don Sulf

| | | | | |
|----|------------------------------------|-------|-------|------|
| #1 | Raw pyrites | 13.72 | 56.56 | 1.32 |
| 2 | Fines in center cars | 22.30 | 49.95 | .95 |
| 3 | Sinter - 8% Carbon - coarse breeze | 16.76 | 55.10 | .78 |
| 4 | " - 1 pt flue dust 3 pts pyrites | 19.90 | 54.18 | .35 |
| 5 | " 1 " " " 1 " " | 18.90 | 53.98 | .66 |

Ashtland Sintering Plant

Capacity 60 tons daily
One 30' ^{5x6x1} belt pan each 20 min.
use 150 cu ft Natural gas to
ignite each pan - 0.85 tons per car.
10 horse power motors conveying
50 fan HP
4 men in attendance.

3 grate bars renewed daily, think
malleable iron better or stronger
bar - Grates covered with slag
mixture $\frac{1}{2}$ fine dust $\frac{1}{2}$ roll
scale or $\frac{1}{2}$ blue belly -

Scale sinters better than pyrite

3 cars per hour
1 hour burning per car $\frac{1}{2}$ dust
134.600 lbs 24 hours $\frac{1}{2}$ pyrite
with scale 45' per car
or 1 car every 15 min

(over)

June 1914

Cost of operation per day
of 24 hours -

40% Fine dust

60 " Pyrites -

Capacity - 60 tons

Labour

6 Men, 12 hours - $72 \times 17\phi = 12.20$

2 foremen, " $24 \times 18 = 4.36$

Power 350 K.W.H. at $2\phi = 7.00$

Lubrication 12 Hrs @ $17\phi = 2.05$

Repairs - 3 grate bars @ $\$1.75 = 5.25$

Supplies = 2.00

Insurance = 1.50

Refractories = 1.90

Depreciation 15% on $\$10,000. = 5.00$

40.26

$\frac{40.26}{60} = 67\phi$ cost per ton Sinter

Low Moor Water Supply

^{supply}
McDonnell Pump 6 x 6 x 10

Reservoir

2 x 24.5 ft per min = 72 gal

2 x 39.2 " " " = 115 "

30 rev per min = 40 lb pressure

48 " " " = 65 " pressure

Town pressure ^{at pump} " 60 lb

Reservoir " " 65 " fills

" dead pressure 55 "

Roanoke Sinter

July 1914

| | 22 cars - 9 cars | 18 cars | 5 cars | 18 cars | 15 cars | 7 cars |
|---------|------------------|---------|--------|---------|---------|--------|
| Mois | 4.00 | 3.80 | 4.00 | 3.20 | 3.00 | 2.50 |
| Iron | 63.30 | 64.00 | 63.20 | 63.50 | 63.20 | 63.60 |
| Copper | .34 | .30 | .38 | .30 | .36 | .36 |
| Sulf | .20 | .16 | .21 | .16 | .21 | .13 |
| Sulph | 8.20 | 7.73 | 8.25 | 8.25 | 8.40 | 7.72 |
| Zinc | 1.44 | 1.40 | 1.46 | 1.52 | 1.38 | 1.38 |
| Phos | .026 | .035 | .029 | .030 | .028 | .0244 |
| Calc | .58 | .47 | .43 | .56 | .40 | .39 |
| Arsenic | .019 | .022 | .017 | .018 | .021 | .021 |
| Lead | .18 | .14 | .18 | .14 | .21 | .16 |
| Mang. | .017 | .017 | .020 | .018 | .016 | .019 |

Augustus D Ledoux - 75 William St - New York

Christmas Campaign
Red Cross
Dec 1917

5th Arranged for room

13th Arranged for Gas & Electric

7 Stamped Envelopes 4.55

14 " " .20

15 Twine .20

Rubber Bands .10

Tom Ward .25

17 Stamps 5.00

Application Blanks
Nos 191 to 240 Mrs H R Davis

Red Cross
Rural Workers

Van Horn

P.O. Lockwood Ky

J. S. McGlothlin

Rush R.F.D.

Elias Kettle

June 13th 1914 Mill Scale 71.68
2.10

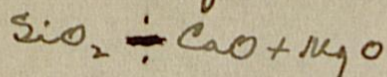
Slag

SiO₂ ratio to CaO + MgO

assuming 3% for CaS etc

| | CaO $\frac{105}{100}$ | MgO $\frac{100}{100}$ | $\frac{105}{100}$ |
|--------------------------------|-----------------------|-----------------------|-------------------|
| Fe ₂ O ₃ | | | |
| Al ₂ O ₃ | SiO ₂ .95 | | 1.05 |
| 12% | 41.46 | 42.5 | 43.54 |
| 11 | 41.95 | 43.0 | 44.05 |
| 10 | 42.43 | 43.5 | 44.57 |
| 9 | 42.92 | 44.0 | 45.08 |
| 8 | 43.41 | 44.5 | 45.59 |
| 7 | 43.90 | 45.0 | 46.10 |
| 6 | 44.39 | 45.5 | 46.61 |
| 5 | 44.87 | 46.0 | 47.13 |
| 4 | 45.36 | 46.5 | 47.64 |

Slag -



Assuming neutrals as 3%

| SiO_2 | MgO | CaO | |
|----------------|--------------|--------------|----------|
| 42.5 | 12 | 42.5 | 1. to 1. |
| 43.0 | 11 | 43.0 | |
| 43.5 | 10 | 43.5 | |
| 44.0 | 9 | 44.0 | |
| 44.5 | 8 | 44.5 | |
| 45.0 | 7 | 45. | |
| 45.5 | 6 | 45.5 | |
| 46.0 | 5 | 46.0 | |

| | | | |
|-------|----|-------|-------------|
| 41.46 | 12 | 43.54 | .95 to 1.05 |
| 41.95 | 11 | 44.05 | |
| 42.43 | 10 | 44.57 | |
| 42.92 | 9 | 45.08 | |
| 43.41 | 8 | 45.59 | |
| 43.90 | 7 | 46.10 | |
| 44.39 | 6 | 46.61 | |
| 44.87 | 5 | 47.13 | |

3% Silicon

$$\text{Coke } 6200 \times 13.5\text{¢} = \$8.37$$

$$\text{lime } 6200 \times 4.0 = 2.48$$

$$\text{Ore } 11200 \times 1.2 = 13.44$$

$$\text{Labor } \$122.60 \div 71 = 1.72$$

$$\text{Overcharges} = .50$$

$$11200 \div 2240 = 5 \text{ tons}$$

$$5 \times 43\% = 2.15$$

$$1 = 12.33$$

$$\text{Fe. Repair } .50$$

$$\underline{12.83}$$

5% Silicon

$$6200 \times 13.5\text{¢} = 8.37$$

$$5120 \times 4.0 = 2.048$$

$$10000 \times 1.2 = 12.00$$

$$122.60 \div 7.1 = 1.72$$

$$\text{other } .50$$

$$\underline{24.638}$$

$$1000 \div 2240 = 44\% \checkmark$$

$$44\% \times 45 = 2 \checkmark$$

$$1 = 12.319$$

$$.50$$

$$\underline{12.82}$$

2

Stores -

Iron Age Mar 7 1912

| From | Coarse sand |
|---------------|-------------|
| 1000 to 1100° | 50 lbs |
| 1100 to 1200 | 40 " |
| 1200 to 1300 | 30 " |
| 1300 to 1400 | 20 " |

Moqain above 1400, too hard on stone

Ashtland Slag 2/24/12
SiO₂ 38.48
Al₂O₃ + Fe₂O₃ 14.04

Covington Fe Slag 5/4/12
Furnace making pipe iron
with 1/8 Blue Belly - Surround
1/8 nodules Charleston

| | | | |
|------------------|-------|--------------------------------|--------|
| SiO ₂ | 40.92 | SiO ₂ | 40.920 |
| Oxide | 6.48 | Al ₂ O ₃ | 5.919 |
| | | Fe ₂ O ₃ | .561 |
| CaO | 51.18 | CaO | 50.225 |
| MgO | .69 | MgO | .1690 |
| S | .72 | CaS | 1.230 |
| Mn | .288 | MnS | 1.455 |

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

April 3rd 1914

Dear Aunt Margaret:

Your 1st inst with Five
Duck dividend check is at hand -

I thank you for the picture of your home -
● We have greatly enjoyed the vacation visits
of the children - John returned Tuesday and
Harriet returns Monday - Both were sent
to the dentist while here - and Harriet has had
quite a lot of work done on her teeth - John
has been having his teeth straightened by a dentist
in Philadelphia who apparently does no filling -
● It is a day for specialists but it is more
expensive for the patients -

The farming operations are under way - Pruning
of trees, grape vines etc is finished - Plowing done
and potatoes planting - Ruby is hustling indoors
and outdoors - I think you both like to be busy
and can find much to do about your homes -

The trout fishing has commenced and we
had them for breakfast today

With love, Affectionately

E. C. Means

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

April 13th 1914

Dear Aunt Margaret:

I thank you for the Easter gift which you sent to me - No doubt Ruby has written you promptly about the beautiful plant - She left here last night for Philadelphia and I am keeping house alone. The Presbyterian minister spent the night with me. We are enjoying a real Spring day and hope the winter is now over - It has been a long one -

Have planted two almond trees and 4 hazel nut bushes in the yard - last year planted pecan trees -

I enclose some blanks for you to sign to be used later for Income Tax - Please return them to me after signing -

It now looks as if I cannot attend the directors meeting on the 22nd at Ashland because of a law suit

With love

J. C.

Yours affectionately

E. C. Means

Southern Sociological Congress

NASHVILLE, TENNESSEE

This is to Certify That Mrs. C. C. Means,
of Law Moore, Va. has been nominated for membership
in the Southern Sociological Congress and that said nomination has been approved and entered on the lists
of the Congress Membership. On receipt of the membership fee of \$2.00, the General Secretary is au-
thorized to issue a membership certificate to the aforesaid Nominee and to secure to him all the rights and
powers of membership in the Congress for one year, including the privileges of the floor for discussion, of voting
and holding office and of securing, free of charge, the publications of the Congress, together with the large vol-
ume of proceedings giving a complete report of the Third Congress to be held in Memphis, May 6 to 10, 1914.

In Testimony Whereof, I, W. M. H. MANN, President of the Southern Sociological Congress,
do hereunto place my signature, on this 20 day of April, A. D. 1914.

"The Solid South for a Better Nation"

W. M. H. Mann
PRESIDENT.

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

April 20th 1914

Dear Aunt Margaret:

Your letters of the 15th & 17th received with enclosed Income Tax blanks & City of Ashland Assessment blanks - I have filled out the latter & returned it to J. K. Ellis Assessor -

Ruby returned yesterday from Philadelphia - She had a pleasant visit with her mother & John - Says she finds she cannot shop as fast as she used to do, gets too tired so she takes more time for it.

I am keeping some of your funds in Cincinnati so as to supplement the Ashland Bonds accounts if called upon - Also bonds with ~~with~~ ~~old~~ ~~lv~~ which can be sold quickly if necessary - I have an arrangement with Mr. Richardson to notify me if your balance gets below \$2,000 - These precautions ought to meet any reasonable situation without causing you any inconvenience -

We have a preacher with us for this week. He is conducting revival services here -

With love, Affectionately
E. C. Means

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

April 25th 1914

Dear Aunt Margaret:

Your letter 24th just received
with enclosed New York tax notice -

I am today forwarding to Garfield Nat Bank
a check for One thousand (\$1,000⁰⁰) Dollars for
credit your account -

Our law suit was not tried this term of court
after all - If had known this in time could
have attended A. S. & M. K. meeting -

Low Moor has had a revival meeting and
about 35 ^{mostly children} have decided to join the church - The
Presbyterians get 3, Episcopalians 1 and the
remainder Baptists - We had the preachers

at our house so we have gone to church
regularly -

John has his
first long trousers - Could not be persuaded
to wait long -

All of our apple trees are in bloom -

Ruby is well - Mrs Ringo is in Baltimore

With love affectionately:

E. C. Means

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA,

May 16th 1914.

Dear Aunt Margaret:

Your letter 15th just received. I presume the Mayor of Ashland wishes to make trouble. It may be necessary to consult Mr. Malin if the matter of your legal residence in New York is questioned - I have paid your New York taxes for this year, check for \$445⁰⁰ mailed May 7th to the Receiver of Taxes - This covered all of your personal taxes which are assessed there. As a matter of fact I believe you are paying on some personal property in Ashland (which you are doing on the advice of Mr. Roger) that is also covered in New York - your jewelry etc.

Your account at the Merchants Bk & Trust Co was \$730⁰⁰ and I have not checked against it. Please write me if you should check on it, meantime I shall allow the dividends to accumulate.

In March by paying \$150⁰⁰ in New York your registered bonds were made tax exempt - So you have paid \$595⁰⁰ in New York this year -

Yours with love

E. C. Means

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

June 4th 1914

Dear Aunt Margaret:

Your letter 2nd inst received. Perhaps John Seaton sent you the letter about Texas land - I know nothing about it -

Please sign the enclosed Income Tax certificate and mail it to J. P. Morgan & Co -

Our drought has continued and everything is showing the effects of it - The locusts are busy planting their eggs in the small branches of trees and we shall soon see the results in dead branches - It will be hard on young trees -

I went down to Lynchburg yesterday and managed to sell a small lot of pig iron - The men I met are all anxious for Congress to adjourn and go home -

John comes home next Thursday - Harriet about the 29th - Her house party begins July 1st -

I am arranging to sell some of your bonds and buy non taxable stocks but shall not proceed rapidly -

With love Affectionately

E. C. Means

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

June 9th 1914

Dear Aunt Margaret:

Herewith powers of attorney
to cover sale of your registered bonds by
White, Wald & Co which will avoid the necessity
of bringing them back to Ashland for you to
sign. Please sign them and return to me
and I will witness your signature or you can
have Will Seaton witness your signature -

I have bought for you the following stocks
which are non taxable in Kentucky and New York

100 shares Louisville & Nashville Ry

100 " Norfolk & Western Ry

100 " Southern Pacific Co

and am having White Wald & Co sell some
of your coupon bonds to pay for them, viz:

New York & New Jersey Telephone 5% Bonds

American Tel + Tel Co convertible 4% "

United States Steel Corp. 5% Bonds

Metropolitan Telephone Co 5% "

Carolina & Michigan 5% "

I believe stocks will advance in price faster than
bonds and that you will not lose any thing

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

by selling your bonds and buying stocks now
even if later you resell the stocks and buy bonds.
And if it is decided you must pay taxes
in Kentucky you should have your investments
changed before September when the County + State
make their assessments -

What do you think about the Tobacco Stocks?
Are you willing to buy them?

Yours affectionately:

E. C. Means

P. S. John will be home Thursday - Harriet the 29th

Please notice on the powers of attorney and
where "Miss" is shown please sign "Miss"
but where it is not do not.

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

June 15th 1914

Dear Aunt Margaret:

Your letter 12th inst
with enclosed powers of attorney duly received.

I have forwarded same to White, Weld & Co.

I have not yet sent them the New York City bonds
or any of your stocks which are taxable in
Kentucky - In the event it is decided your
stocks and bonds are taxable in Kentucky we
shall have to sell a number of stocks as well as
the bonds -

In the event of better times, improved business
conditions, stocks will advance in value more
rapidly than bonds, and if it is decided
you do not have to pay taxes on bonds
the stocks now being bought can be sold and
the proceeds invested in bonds with a profit.

This is the reason I have hurried to sell the
bonds.

The stocks you may have to sell
should advance as much as those you may
have to buy so there is not the need for haste
provided the change in investment is made
prior to September to avoid taxes -

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

#2

Your Ashland Fire Brick and Strat Ry
bonds can probably be sold in Ashland
if it becomes necessary - The Hamilton bonds
cannot be sold now but they can be listed
at a low value. By the time we get
your investments changed, some of the
Ashland people will be surprised at the
amount of taxable property you own.
John looks very well -

With love Affectionately:

E. C. Means

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

June 24th 1914

Dear Aunt Margaret:

Herewith Income Tax certificate which please sign and return to me and I shall forward to White, Reed & Co who hold the bonds—

This is the hottest weather we have ever had here at night— Everything is suffering from the drouth, gardens especially— No doubt it has been very hot in Ashland and I wish you were out of it all— Why not get away to the South for a rest?

The assessment on your house and lots should be governed by similar assessments on your neighbors houses & lots— That is, should be equalized with theirs regardless of selling value— Yours cannot be assessed out of proportion to theirs— In New York City sometimes houses & lots are assessed above their selling values— There can be no discrimination. Probably all of your neighbors have had their assessments raised— With love:

E. C. Means

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

June 24th 1914

Dear Aunt Margaret:

Here with bill from
Dr. S. Elizabeth Winter for Sade Hampton's
clothing etc.

- Before paying it I wish to make sure
you approve of it - Please look it over
and return it to me - I wrote to Dr.
Winter several months ago that I would
pay it when she sent it but she delayed
sending it. So I presume she has not
been in a hurry to get the money and
- can stand a few days delay while I send
it to you for approval.

Affectionately:

E. C. Means

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

June 26th 1914

Dear Aunt Margaret:

Yours 25th received with
Fire Brick Co check for \$207- and Mr. S.
Elizabeth Winter bill for \$180⁴⁷ - I am
sending check today in payment the latter -

We are sleeping on the porch now
and find it much pleasanter than in the house
Our thermometer shows 70° to 75° at 10 P.M.
Mrs Rings says it is cool here compared with
Asheband -

I am writing Will Seaton to get your
New York City N.Y. Registered bond, and send
it to White, Wood & Co, the next time he goes
to Cincinnati -

John R has 3 boys coming tomorrow
for two days. Harriet comes Tuesday
She writes there are 700 women at Silver Bay
With love

E. C. Means

DIRECTORS

T. A. FIELD,
Crump & Field.

JOHN RUSSELL,
Pres. Kentucky Iron Coal & Mfg. Co.

JOHN F. HAGER,
Hager & Stewart.

L. R. PUTNAM,
Gen. Mgr. Ashland Steel Co.

C. PRICHARD,
Capitalist.

W. B. SEATON,
President Ashland Coal & Iron Ry. Co.

R. H. VANSANT,
President Vansant, Kitchen & Co.

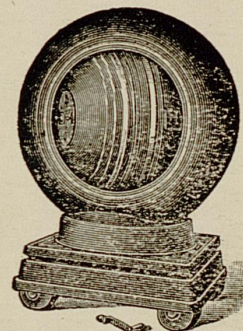
I. AUSTIN KELLY.

CHARLES RUSSELL.

Merchants Bank and Trust Company,

ASHLAND, KY.

STATEMENT JUNE 30, 1914.



OFFICERS

JOHN F. HAGER, R. H. VANSANT,
President. Vice-President.

CHARLES RUSSELL, Cashier.

JOHN M. HOPKINS, Asst. Cashier.

REPORT

— OF THE —

Merchants Bank & Trust Company, Ashland, Ky.

AT THE CLOSE OF BUSINESS ON THE 30th DAY OF JUNE, 1914.

| RESOURCES | LIABILITIES |
|--|---|
| Loans and Discounts .....\$526,975.30 | Capital Stock paid in.....\$125,000.00 |
| First Mortgage Loans..... 70,717.34 | Surplus Fund 67,500.00 |
| Overdrafts 2,235.19 | Undivided Profits 4,603.59 |
| U. S. Bonds 24,000.00 | Due Depositors 603,250.79 |
| Other Stocks and Bonds 72,722.36 | Due to Banks 4,826.77 |
| Banking House 10,000.00 | Dividend No. 16 of 4 per cent..... 5,000.00 |
| Cash in Bank..... 42,944.12 | |
| Due from Banks 60,586.84 | |
| TOTAL.....\$810,181.15 | TOTAL..... \$810,181.15 |

ORE PRODUCTION

| | | | |
|-------------------------|-----------------------|------------|------|
| Low Moor Brown Ore Mine | 1877 to June 30" 1914 | 967640 | Tons |
| Low Moor Fossil Mine | 1905 to June 30" 1914 | 85928 | " |
| Stack Mine | 1882 to June 30" 1914 | 305472 | " |
| Dolly Ann Mine | 1887 to June 30" 1914 | 849402 | " |
| Runsey Mine | 1900 to June 30" 1914 | 80180 | " |
| Fenwick Mine | 1899 to June 30" 1914 | 650281 | " |
| Jordan Mine | 1907 to June 30" 1914 | 420879 | " |
| Longdale Mine, January | 1914 to June 30" 1914 | 10062 | " |
| Low Moor Quarry | 1882 to June 30" 1914 | <u>796</u> | " |
| | Total | 3370640 | " |

LIMESTONE PRODUCTION

| | | | |
|--------------------|-----------------------|-------------|---|
| Low Moor Quarry | 1881 to June 30" 1914 | 1751435 | " |
| Jordan Quarry | 1910 to June 30" 1914 | 2509 | " |
| Panther Gap Quarry | 1909 to June 30" 1914 | <u>2247</u> | " |
| | Total | 1756191 | " |

IRON PRODUCTION

| | | | |
|-------------|-----------------------|---------------|---|
| Furnace "A" | 1880 to June 30" 1914 | 681180 | " |
| Furnace "B" | 1887 to June 30" 1914 | 724605 | " |
| Furnace "C" | 1895 to June 30" 1914 | <u>275217</u> | " |
| | Total | 1681002 | |

COAL PRODUCTION

| | | | |
|---------------|-----------------------|----------------|------|
| Key Moor No 1 | 1900 to June 30" 1914 | 1427937 | Tons |
| Key Moor No 2 | 1903 to June 30" 1914 | <u>334640</u> | " |
| | Total | <u>1762577</u> | " |

Form of Certificate to be presented with coupons or Interest Orders stating whether or not exemption is claimed under Paragraph C, Section II, of the Federal Income Tax Law.

I do solemnly declare that I Mrs. S. C. Ringo (widow)
(Name of Owner)
a citizen or resident of the U. S., and residing at Lawton

Virginia
(Address of Owner)
am the owner of \$ 7000- bonds of the denominations of \$ 500- each, numbers

11, 12, 18, 19, 20, 21, 23, 30, 35, 36, 65, 66, 67, 68
(Par Value)
of the Rehland & Colette Lumber Co known as 1st Mortgage 60
(Name of Debtor Corporation) (Particular Issue of Bonds)

from which were detached the accompanying coupons, due July 1st 1914
(Date of Maturity)
amounting to \$ 210- or upon which there matured
(Date of Maturity)

\$ _____ of registered interest.

I { ~~do not~~ } now claim with respect to the income represented by said interest the benefit of a deduction of \$ 210 allowed under Paragraph C, Section II of the Federal Income Tax Law, the total exemption to which I am entitled thereunder, being \$ 3,000-.

Name _____
Date _____ Address _____

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

July 2nd 1916

Dear Aunt Margaret:

I thank you for forwarding Mr. Hager's letter of June 27th with copy of written protest which he filed with the Board of Supervisors -

As the course to follow in the tax matter seems to involve considerable time and as the result is still in doubt I believe we should continue under our plan of buying securities which are non-taxable both in Kentucky and in New York -

Was glad to get a dividend from the Ashland Iron & Mining Co. Will Seaton should be patted on the back for his good work - I wish we had a better outlook in Virginia.

Harriet arrived Tuesday, looking well, and three of her school mates arrived this morning to remain two weeks - It will be lively -

The fishing season has opened and John & I have been out with fair luck -

Yours affectionately:

E. C. Means

E. C. MEANS
LOW MOOR VIRGINIA

Aug 3rd 1914

Dear Aunt Margaret:

I enclose with dividend
order Louisville & Nashville R R which
please sign and forward -

We are enjoying camp - Last night
Rose, Lily, Bess, Ruby, Silda, Kendall
Fred, John R and Ed. were all present.

About 60 meals were served Sunday with
22 for dinner - We wished you could
have been with us - You would have seen

how your gift to John, for the tents, had
made many people happy -

I ran down in 45 minutes this P. M.
and will return for supper -

With love

Affectionately:

E. C. Means

Lowellwood Aug 21st 1914

Dear Aunt Margaret:

Please sign the enclosed certificate
and forward -

The Camp will continue over this week
It was been quite successful as usual -

The war has temporarily upset business in
pig iron and coal - But should not cause
a long depression - Stock exchange in New York
is still closed - With love Edmunds

FORM TR 181

THE NEW YORK CENTRAL & HUDSON RIVER RAILROAD COMPANY.
TREASURY DEPARTMENT.
GRAND CENTRAL TERMINAL, NEW YORK.

The Regulations of the United States Treasury Department relative to the Federal Income Tax Law require that a certificate of ownership in one of the prescribed forms shall be filed with the debtor corporation, in advance of each payment of registered interest.

We enclose herewith a form that may be appropriate for your use in connection with interest payable on the next interest due date. Should you prefer to use a different form of certificate, the Company will be pleased to forward it upon request.

The certificate, when properly filled in, signed and dated, should be filed with the Company any time prior to the date such interest becomes due, to avoid delay in forwarding of checks.

Respectfully,

EDWARD L. ROSSITER, TREASURER.

INDIVIDUALS AND FIDUCIARIES SHOULD USE ONLY ONE
OF THE ENCLOSED FORMS AS THE CASE MAY BE.

Over

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

Sept 7th 1914

Dear Aunt Margaret:

Your letter 1st inst came while I was away from home. I am sending the Tax Assessment list to the assessor made out as usual.

The European war has upset my plans for reinvesting your property and I am waiting for a more settled condition. The financial situation has not been cleared yet. The Stock Exchange is still closed and will be for some time yet.

No doubt some companies will reduce their dividends as a matter of precaution. This may reduce your income for a time - but I hope it will not be a heavy reduction or of long duration. This being the greatest war in history it is impossible to fore see its results on the affairs of this country.

Harriet E. leaves tomorrow night for college.

All are well.

With love Affectionately:

E. C. Means

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

Sept 8th 1914

Dear Aunt Margaret:

As requested in your letter of the 7th inst I am arranging to have One thousand (\$1000) Dollars placed to your credit at the Garfield Natl Bank. If you are to be in New York soon I may see you there as I expect to go on later in the month.

We are going to a wedding in Clifton Forge this afternoon - A Miss Carpenter marries a man from Boston, Mass -

Mrs Buckner Ringo is to sing at the church before the ceremony - She leaves for New York with Harriet tonight -

With love Affectionately:

E. C. Means

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

Sept 25th 1914

Dear Aunt Margaret:

Herewith copy of letter to Mr. Hager
which I wrote to him yesterday. When I hear from
him will know better what to do about the Oakland

Taxes -

Your inquiry about your income can be answered
by the following comparison for 1913 and 1914 -

| | To Sept 23 rd 1913 | To Sept 23 rd 1914 |
|-----------|-------------------------------|-------------------------------|
| Dividends | 12,812.25 | 13,972.25 |
| Interest | 5,247.62 | 5,871.42 |
| | \$18,059.87 | \$19,843.67 |

The war commencing Aug 1st has not yet affected
your income but it is almost sure to do so
later if the war is long continued - The Washington
Water Power Co will reduce its dividend from 8% to 7%
and I look for other companies to reduce or cut
off their dividends. - Your bank accounts are
in good condition and if you do not increase
your expenditures you need not worry about
the early future - If the war continues throughout
next year we may see very hard times -

With love Yours affectionately: E. C. Means

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

Oct 6th 1914

Dear Aunt Margaret:

Your letter 5th just received,
with enclosed Fire Brick Co check \$207⁰⁰ and the
New York Tax Notice -

I enclose some certificates for you to sign
so that I may be sure to have them on hand -

The stock exchange remains closed in New York
so it is impracticable to sell the remainder of
your bonds and invest in non taxable securities -

It looks like a long war in Europe and business
may continue bad until it is over - Pres. Wilson
is showing good sense in his neutrality policy -

I hope however there will be more Republicans in
the next Congress to prevent bad legislation -

Harriet and John both write cheerfully of the
new school year - Harriet is Chairman of the
Junior Prom for next Spring - She received 121 votes
to 123 votes for president of her class and then
was unanimously elected chairman of Prom, the next
highest honor -

With love Affectionately:

E. C. Means

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

Oct 19th 1914

Dear Aunt Margaret:

Your letter 16th received.

Glad to see you have gone to New York and hope you will be able to make a long visit there.

Mr. Stager replied that we would tender to the tax collector the amount we are willing to pay and decline to pay the remainder. I am going to Ashland tomorrow and will make arrangements accordingly.

Ruby has been shopping in Lynchburg and she did not go to Philadelphia as heretofore.

Mrs. Ringo has been in Baltimore and in New York visiting Mrs. Gordon and Penckner.

The iron business continues dull and the coal business is declining away below normal.

I believe Ashland is better off than many other places, with less idle plants and workmen.

Finances in New York seem to be recovering and that ought to help matters.

With love: Affectionately:

E. C. Means

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

Oct 23rd 1914

Dear Aunt Margaret:

Herewith find check for One thousand (\$1,000-) Dollars to your order as requested in your letter 20th inst-

I returned this morning from Ashland after a pleasant visit with Will, Bess and family - We had a nice auto ride around by Princess yesterday afternoon -

The Ash. Iron & Mining Co did not declare a dividend - Profits were too small and iron is accumulating again - tying up funds - Fire brick Company seems to be doing better than iron companies.

Saw Harry and Aunt Mary but did not see Tom Adams -

Ruby has been going to morning revival services in Clifton Forge - Mrs Ringer still away from home -

I am going to dentist this afternoon -

With love Affectionately
E. C. Means

E. C. MEANS
LOW MOOR VIRGINIA

Nov 26th 1914

Dear Aunt Margaret:

I am writing White, Weld
& Co to mail you check for \$1,000-
You have a large balance with them which I
have delayed reinvesting until affairs become
more settled on account of the war

I sent Mr. Hager a check for \$205¹⁰ which
he cashed and tendered the money to the Ashland
City collector, as the taxes you were willing to pay,
the collector declined to receive it - so an injunction
suit was to have been filed by Mr. Hager ~~this week~~
to restrain the Collector and the City of Ashland
from demanding or collecting the sum of \$1750.
in addition to the \$205¹⁰, and that they be
decreed to accept the \$205¹⁰ as and in full of
satisfaction of all taxes, assessable for the year 1914.

I can sympathise with you over the dentistry
as I am completing a long course -

John goes to see the Army & Navy game Saturday
Harriet is in Hamilton N.Y. with a classmate

All well here - With love, affectionately:

E. C. Means

E. C. MEANS
LOW MOOR VIRGINIA

Dec 22nd 1914.

Dear Aunt Margaret:

I wish you a Merry
Christmas and a Happy New Year in handing
herewith our Christmas gift—

Low Moor, inspite of its quietness and
idleness, is getting the usual holiday spirit—
The returning school children and the usual
visitors are being welcomed as heretofore.

John came Saturday and H.E. comes Thursday.
Mrs Ringer and Ruby are busy with the sending
away of their remembrances to relatives & friends.

With much love

Affectionately:

E. C. Means

Ashland Kentucky

Dec. 22/14

Dear Cooke & Ruby

The enclosed
check for forty dollars, is
for you and Ruby and
the children - ten dollars
each - It goes with my
love and good wishes
for a very merry Christmas
and Happy New Year.
I guess the Seatons are
expecting to have an "big h

old "time" as there are so many young folks around. Of course Rose, Lily and Dexter will have been quarters here, but I do not expect to have any great demonstration.

My leg is not behaving well and I do not go down stairs - I was in bed all last week. Our housemaid left us a week or so ago. We are getting along very well indeed considering but you know a house like this needs two girls. Hoping you will have

no baskets to mar your Christmas festivities and that every thing will turn out as you wish - I am your affectionate Aunt
Mary

E. C. MEANS
LOW MOOR VIRGINIA

Dec 26th 1914-

Dear Aunt Margaret:

I thank you for your

Christmas present-

We thought of you yesterday as entertaining the family at dinner - A jolly crowd around your table -

We had only our family of five - But all were happy with their many remembrances from their friends and relatives - The day was ideal with falling snow covering trees and ground with mantle of white.

Christmas Eve Ruby had her usual tree with neighbors in to help celebrate - The Virginia Reel was danced to music of "Tipperary" from the Victrola -

With love and best wishes for
a Happy New Year

Affectionately:

E. C. Means

7° F at 8 am this morning -

COKE

PIG IRON

COAL

THE LOW MOOR IRON COMPANY OF VIRGINIA

E. C. MEANS,
PRESIDENT AND GENERAL MANAGER

LOW MOOR, VIRGINIA.

Dec 28th 1914

Dear Aunt Margaret:

Herewith three Income Tax certificates and one proxy for your signature. Please return to me and I shall forward them in due course.

Saturday night was the coldest of the year the temperature dropping to 2° below about daylight Sunday morning - This was the second time since we have lived here that the temperature was below zero.

The ground has been covered with snow for over two weeks but the autos keep running, which speaks well for our roads -

John and Harriet stay pretty close at home and do not seem inclined to go to Ashland. Perhaps the cold weather is not inducive to travel -

Have recently bought for you some stock in Pullman Co., Norfolk & Western and Western Union Tel Co and still have plenty of funds in bank for you
With love Affectionately:
E. C. Means

E. C. MEANS
LOW MOOR VIRGINIA

Dec 29th 1914

Dear Aunt Margaret:

Your letter 26th received

this morning with its enclosed checks -

I thank you for your check in my favor for seventeen hundred and five (\$1705-) Dollars in payment for my services as agent, clerk etc during this year - I do not think you should have returned the \$5⁰⁰ - I was careful to look up last years check before sending you our Christmas remembrance and thought I had not exceeded your limit -

I am sending the Fire Brick Co dividend check to Ashland Nat Bank for your credit. \$207 -

We were sorry to learn Harry could not attend your Christmas dinner - He always enjoyed the family gatherings so much - I am glad he can sleep better and he surely enjoys seeing Rose & Lily -

Last night a party from Norton went to Clifton Forge in wagons drawn by mules to see Hyman Howes pictures - It was a fine drive in the moon light with the ground white with snow.

Again thanking you for the check

With love, Affectionately:

E. C. Means