8 - CALDWELL - DEPLETION OF MINES & FORESTS

# An Accounting Treatise
# on the
# Depletion of Mines and Forests

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A thesis presented to the Academic Faculty of the University of Virginia in candidacy for the degree of Master of Science.

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# Depletion of Mines and Forests

by

Frederick N. Caldwell.

Before the adoption of the Revenue Act of 1917 the depletion of mineral deposits and timber resources had probably received less attention in accounting than any other phase of accounts. Prior to this time, the general accounting procedure for the utilization of natural resources was to determine total profits by deducting the amount of money invested from the amount of money received from operations. By such method, profits could not be easily reckoned until the mineral deposit or timber supply had been completely exhausted. This practice was found impossible in many cases as the investments often exceeded the returns. Even to-day this inaccurate method is sometimes employed, but in cases where profits have been made and taxes are pressing, the study of depletion has been given prompt attention.

Mineral deposits and timber resources are classed under the head of wasting assets. Wasting assets may be described as assets subject to exhaustion or depletion. These assets should be distinguished from depreciating assets in that the former simply give out, whereas the latter become useless due to wear and tear, decrepitude,

inadequacy, or obsolescence. In the case of mines and timber, the supply is depleted. In the case of buildings, machinery, and the like, the assets are not used up, but worn out. The law distinctly draws a line of demarcation between these two classes of assets, when it stipulates that in the case of mines and timber, that not only dividends should be paid to the owner or lessee, but also a certain portion of capital, in order that at the exhaustion of the resource that the owner or lessee will have received his original investment. Depletion in accounting is used for the purpose of distinguishing capital from profits. Such distinction is the primary purpose of every accounting practice.

W. B. Reed in his Coal Mine Accounting defines depletion as " an account set up to take care of the exhaustion of minerals taken out of the land." The fundamental principle in this definition is that provision should be made for the exhaustion of the resource. This principle can be applied to timber resources, oil wells, or to any other wasting assets. Through the depletion account adequate charges to cost should be made to return to the owner the full cost or value of the property, less any remaining value in the surface, by putting aside a reserve

fund with an equal charge to cost of an ample amount per unit to return the investment. Failure to set aside such fund will necessitate the owner writing off large losses at the exhaustion of the resource. Such oversight in management is liable to prevent the corporation from returning the invested capital to the stockholders.

Again, the depletion of mines and timber may be defined as the using up of recoverable units by extraction or displacement from their natural positions. Distinction should be made here between total units and recoverable units. Total units represent the whole supply of the resource. Recoverable units represent only that part of the resource which can be worked and depleted. Although any value or computation of natural resources is merely an estimate, as it is practically impossible to know the exact number of units which nature has provided, a fairly close estimate can be made. An approximation of the contents of a mine can be made to a high degree of accuracy by an expert engineer. The number of feet of timber on a tract of land can be reckoned closely by a method known as "cruising". A closer estimate of the number of units can be made in the case of timber than in

the case of minerals. Even though the exact value of the resource cannot be determined, an estimate for depletion is much better than making no allowance at all.

The Income Tax Laws lay down certain definite rules concerning depletion, which follow fairly good accounting practice. Inasmuch as an accurate determination of the income tax is one of the main uses of depletion, corporations with wasting assets should follow these rules as closely as conditions permit.

The regulations for the depletion of mines and timber are fundamentally the same, however they differ in certain details on account of the variation in the nature of the two resources.

The Revenue Act of 1921, section 214, states that in the case of mines and timber, a reasonable allowance for depletion should be made, based upon cost which includes cost of development, if not otherwise deducted, " provided, that in case of such properties acquired prior to March 1, 1913, the fair market value of the property on that date shall be taken in lieu of cost up to that date. Provided further, that in case of mines discovered

by the taxpayer, on or after March 1, 1913, and not acquired as the result of purchase of a proven tract or lease, where the fair market value of the property is materially disproportionate to the cost, the depletion allowance shall be based upon the fair market value of the property at the date ~~date~~ of discovery, or within thirty days thereafter. And provided further, that such depletion allowance based on discovery value shall not exceed the net income, computed without allowance for depletion, from the property upon which the discovery is made, except where such net income so computed is less than the depletion allowance based on cost or fair market value as of March 1, 1913."

A valuation at the "discovery date" should be determined if acquired prior to March 1, 1913, if a "discovery date" is claimed, except if the property was acquired after March 1, 1913, the depletion charge is based on cost if a "discovery" is not claimed.

In the case of timber, the depletion charge is based " upon cost if acquired after February 28, 1913, or upon the fair market value as of March 1, 1913, if acquired prior thereto."

Arguments are advanced by some accountants that

cost or market, whichever is the lower should determine the value of the mineral deposit or the tract of timber. Such practice, they argue, makes for conservatism, and that good business can be conducted only on this basis. If minerals and timber are considered as stock-in-trade to the corporation, cost or market value, whichever is the lower, would seem to be the correct method of valuation. On the other hand, if these resources are considered as fixed assets, valuation should be based on cost. But mineral deposits and timber resources are neither current nor fixed assets, since they are neither used up in the daily operation of the business nor held for permanent investment. Wasting assets are more in the nature of deferred items, as they are gradually used up over a long period of time. Valuation at cost will also be favored because it is easy to determine. The promoter often desires to value the mine or tract of timber at market value in order to make his project appear as large as possible to investors. Market value is indeed very difficult to determine, but it is not beyond estimation. A footnote on the balance sheet should be used to indicate the method employed in

valuation, and if this is done, any valuation should not be misleading. As stated before, however, the law lays down certain guiding principles, which represent fairly good accounting practice, and as far as possible, these principles should be followed.

## FAIR MARKET VALUE.

If the property was acquired prior to March 1,1913, the "fair market value" on that date serves as a basis for the depletion charge. A "fair market value" is considered that amount which would induce a willing owner to sell and a willing buyer to purchase.

In the determination of the "fair market value", the law strictly provides that " where the fair market value at a specified date is used for the basis of depletion deductions, such value must be determined subject to the approval of the commissioner, by the owner of the property in the light of the conditions or circumstances known at that date regardless of later discoveries or developments of later improvements in extraction or mining methods."

A procedure known as the " Present Value Method"

is often used, and is recommended by the Tax Commission in determining the "fair market value" of property at a given date. The first requisite to this method is that annual dividends must yield a good annual rate of interset on the investment, and at the same time allow a certain sum set aside each year, which invested soundly at compound interest, will return the investment at the exhaustion of the resource. Several other factors enter into the determination of the "fair market value" of mineral deposits under this method- the total supply of the resource in terms of the ordinary unit paid for in the product marketed, the average quality of the mineral reserves, the probable percentage of extraction in each period or operation, the approximate operating life of the business in terms of years, the cost of production excluding depletion and depreciation, and lastly, the rate of interest proportionate to the risk for the particular resource. Mineral deposits of different grades and locations should be taken into consideration and valued separately. When these factors mentioned above cannot be determined by past operations, they must be obtained from other evidence, such as the general character of the deposit, the topographical

characteristics of the district, in which the deposit is located, the intensity of mineralization, the period of operation, the expected output of the mine, and so forth.

In the determination of the "fair market value" of timber, several factors must also be taken into account. Weight should be given to the character and quality of the timber in relation to its age, size, kind, etc., number of feet per acre, location, total supply of timber, accessibility to markets, topographical features, freight rates, and so forth. It is also fundamental that the value of the timber be segregated from the value of the land. These two elements of value can be fairly easily allocated, since the area of the land is generally known, on which a fair value can be placed.

In estimating the quantity of ore in the mine, the law prescribes certain rules, which must be complied with by the taxpayer. The owner must estimate each property separately in terms of tons, pounds, or some other common measure, of mineral reasonably believed to exist, or to have existed at the "basic date". The term "basic date" is used here to represent the date

of valuation. The estimate of the mineral products for the purpose of depletion should include ores in sight or developed, deposits which are believed to exist on the basis of substantial evidence for purpose of valuation, as to quantity only when these deposits have been estimated by geologic data to a high degree of probability, and as to grade according to the best evidence available.

In determining the quantity of timber, the number of feet, cords, or some other unit should be estimated by expert cruisers. Checking the estimation is not undesirable, as in many cases little care is exercised in making the cruise.

## COST.

Cost of property means full cost, which includes all costs incurred prior to operation. This would include not only the initial cost of securing the tract, but also those costs, such as recording the title, lawyers' fees, clearing ground, and so forth. It is very important that no inflation or fictitious values

enter into the valuation, or else the accounts will not show a true statement of affairs.

As most timber and mineral resources permit operation for several years, generally fifteen or twenty, it is obvious that interest and taxes will accrue on the properties before the resources are exhausted. The question arises as to whether such expenditures should be treated as operating expenses or as capital outlays. If these costs are large, it would seem that present operating revenues would be overburdened by a direct charge to operation. For this reason they may be capitalized. The depletion charge would then reflect the actual value of the resource when it is worked. On the other hand, charging interest and taxes to operating cost would be the more conservative method, and operators having a limited supply of timber or minerals gain nothing by capitalizing them.

## REVALUATION.

Revaluation of mines is not allowed after March 1,1913, except in the case of discoveries, and then any discovery will be given a "fair market value". Revaluation for timber

is also not allowed for the purpose of depletion after this date. But in the case of both mines and timber, the unit or value may be changed by the commissioner if proper evidence shows that the present depletion rate is inadequate to take care of the valuation as of March 1,1913, or of cost if acquired subsequent to this date.

## ACCOUNTS.

In mining corporations the following accounts are those usually affected by depletion:

| Debit Accounts | Credit Accounts |
|---|---|
| Ore Deposits or Property | Profit and Loss |
| Development | Reserve for Depletion |
| Undeveloped Resources | Surplus Appreciation |
| Depletion | Reserve for Decline in Value of Deposits. |

The Undeveloped Resources account represents those properties whose ore supply is either unknown in whole or in part, and whose supply has not been estimated in any way. Newly acquired property should be debited to this account until prospecting begins, when it is transferred to the Development account. The Undeveloped Resources account may be regarded as the first step towards the production of minerals, and shows merely the cost of the mineral right.

The Development account represents property whose ore supply is either unknown in whole or in part, but is in the process of development--but not yet producing minerals. All costs incurred in prospecting, developing, and the like, should be charged to this account. Some of the most ordinary charges to the Development account are the costs of shafts or driving more than fifty feet through any material other than the ore mined, planes, slopes or tunnels, grading, timbering, labor for building track, and so forth. Sales of mineral during this period, not exceeding the cost of production, may be credited to Development.

Royalties paid before production begins may be debited to the Development account, but may be paid out of future operations. The law permits development costs to be added to the capital investment, or to be charged directly to maintenance. Each corporation must determine its own policy concerning these costs, but in case they are of any size, it would seem best to capitalize them.

As soon as the property under development becomes producing, it is transferred to a subdivision of the Property account, or it may be left in the same account to be amortized over a period of depletion. The subdivision of the Property account or the Development account itself, as the case may be, at the end of the period, divided by the estimated tons of mineral in the ground at the beginning of the year to be recovered by this development, equals the rate per ton for the year. This rate multiplied by the number of tons produced during the year determines the amount of amortization to be charged to the Property or Development account. A credit of the same amount is made to Accrued Depreciation

of Development or some such account.

The equipment of the mine should be under a separate account, and a certain amount of depreciation should be written off periodically.

The Ore Deposits or Property account represents the value of the mineral in the land which can be recovered. To this account should be charged the cost of the mineral rights, exclusive of any value remaining in the land after the mineral has been extracted. This amount is transferred from the Development account. Cost of prospecting and developing, not including any charge for extraction after the discovery of the deposit, is also transferred from the Development account to the Property account.

A third charge to the Ore Deposits account is the amount of appreciation added to take care of the "discovery value", or "fair market value" as at March 1, 1913, or for other reasons. This amount represents the increase in the value of the property since the "basic date", and should be considered only in the sense of unearned profits. A corresponding credit is made to Surplus Due

to Appreciation, Appreciation Unearned, Anticipated Profits, or some account with an appropriate title. Care must be taken not to use the surplus account for this purpose, as this account should be credited only with the amount of profits earned and with other funds available for dividends.

If appreciation is taken into consideration, the property account will then represent the present value of the deposit, including cost of mineral rights, cost of prospecting and developing, which may have been reduced previously by a depreciation allowance or a decline in the market value before operation began; a decline in the value of the deposit before extraction from the land and diminished by any depletion chargeable to the Reserve for Decline in Value or Ore Deposits account. At any time this fund and the reserve should equal each other; appreciation or additional value on account of income tax regulations or other causes. Consideration should be given to this added value, if reduced by any depletion sustained. This fund at all times should equal the Reserve for Appreciation.

Conservatism in business sanctions the practice of valuing inventories at cost or market, whichever is the lower. Since ore deposits for a mining company are often considered analagous to stock-in-trade for a mercantile establishment, it is argued that cost or market, whichever is the lower, should be the principle of valuation. The Commission of Internal Revenue does not approve of this method for computing the income tax. In order to practice conservatism and meet the requirements of the law at the same time, a reserve account must be set up for any decline in the value of ore deposits. A true statement of affairs may be seen by reading the asset account and the reserve account in connection with each other. A reserve account of this nature should equal the amount by which the cost of units left in the ground exceeds the market value at a particular date. The reserve account is credited and a corresponding charge is made to Profit and Loss. The amount of the depletion sustained on that part lost by the decline of market value should be charged to the reserve, and a credit should be made to the subdivision of the Ore

Deposits account. It might be mentioned here that for purposes of taxation additions to reserves are not deductible.

When the Surplus Appreciation account is set up, it is credited with the additional value allowed, and the Ore Deposits account is charged with the same amount. The Appreciation account is debited with the amount of depletion sustained on that part of the Ore Deposits account, which makes up appreciation. A corresponding credit is made to the subdivision of the Ore Deposits or Property account.

Two general methods are now used for handling the depletion charge. By one method the amount of depletion sustained on the deposit for the period is credited to the asset account, and Operations or Profit and Loss is debited. By this procedure no reserve account is set up, but the property account contains in itself the book value of the resource. The second method makes use of two new accounts, namely, Depletion and Reserve for Depletion. The Depletion account is debited with the amount of depletion sus-

tained, and Reserve for Depletion is credited. When the books are closed at the end of the fiscal period, the balance of the Depletion account is closed into Profit and Loss. By use of the latter method the Property account is not used as a dumping ground for an item, which for sake of clearness should be segregated; the original value of the property is shown; the amount of depletion allowed up to the particular date; and by reading the property account and the reserve account together, the net value of the resource may be determined.

The functions of the accounts affected by depletion may be summed up in the following manner:

### Undeveloped Resources

| Debit: | Credit: |
|---|---|
| (1) For cost or market value of property, whose ore supply is wholly or partly unknown, and whose supply has not been estimated in any way.<br>(2) For newly acquired property until prospecting begins.<br>(3) For mere cost of mineral right. | (1) For transfer to Development account when prospecting begins. |

### Development.

| Debit: | Credit: |
|---|---|
| (1) For cost or market value of property, whose ore supply is wholly or partly unknown, but is in the process of development. | (1) For sales of mineral during the period of development, not exceeding the cost of production. |
| (2) For all costs incurred in prospecting. | (2) For transfer to Property account when property becomes producing. |
| (3) For royalties paid before production begins. | (3) For amortization charges over the period of depletion. # |

#This entry is made when the development costs are amortized through the Development account. When this method is employed an additional account is set up which shows:

### Depreciation of Development.

| Debit: | Credit: |
|---|---|
| (1) For amortization charges over the period of depletion. | (1) For Profit and Loss. |

### Ore Deposits or Property.

| Debit: | Credit: |
|---|---|
| (1) For transfer from Development account when property becomes producing. This amount includes cost or market value of recoverable minerals, mineral rights, developing and prospecting.<br>(2) For amount of appreciation to take care of the "discovery value" as at March 1, 1913, or for other causes. | (1) For amount of depletion sustained on that part of ore deposits which makes up appreciation.<br>(2) For amount of depletion sustained on Ore Deposits#<br>(3) For amount of depletion sustained on that part of the cost of the deposits which has been lost through decline in market value. |

#Entry (2) is employed when Reserve for Depletion is not used. A corresponding charge is made to Profit and Loss.

For reasons previously stated, use of the reserve account is recommended. This account will show:

### Reserve for Depletion.

| | Credit: |
|---|---|
| | (1) For amount of depletion sustained on Ore Deposits |

### Depletion.

| Debit: | Credit: |
|---|---|
| (1) For amount of depletion sustained on Ore Deposits. | (1) For Profit and Loss. |

### Surplus Appreciation.

| Debit: | Credit: |
|---|---|
| (1) For amount of depletion sustained on that part of ore deposits which makes up appreciation. | (1) For amount of appreciation to take care of the "discovery value" as at March 1, 1913, or for other reasons. |

### Reserve for Decline in Value of Deposits.

| Debit: | Credit: |
|---|---|
| (1) | (1) For decline in value of deposits. |

### Decline in Value of Deposits.

| Debit: | Credit: |
|---|---|
| (1) For decline in value of deposits. | (1) For Profit and Loss. |

## COMPUTATION OF DEPLETION

The amount of the depletion charge for the fiscal period is calculated by the relation of the number of units worked during this period to the estimated whole. The computation of depletion for minerals is based upon three known quantities, and one unknown quantity. Two of the known quantities are definitely determined, while one is an estimate. The average method of calculating depletion may be stated in the following way:

$$\frac{\text{Capital Investment}}{\text{Recoverable Units}} \text{ multiplied by } \begin{array}{l}\text{Number of Units}\\ \text{Extracted}\\ \text{During Period}\end{array}$$

$$\text{equals } \begin{array}{l}\text{Depletion}\\ \text{Sustained}\end{array}$$

To state this formula another way:

$$\frac{\text{Cost Price or Appraised Value}}{\text{Estimated No. of Units to be Extracted}} \text{ equals}$$

$$\begin{array}{c}\text{Estimated Cost}\\ \text{of}\\ \text{Each Unit}\end{array} \text{ multiplied by } \begin{array}{l}\text{Quantity Extracted}\\ \text{During the Period}\end{array}$$

$$\text{equals } \begin{array}{l}\text{Depletion Allowed}\\ \text{For the Period.}\end{array}$$

This method serves a fairly good purpose for simple calculation, but it does not conform with conservative business methods. The rate for each unit employed the first year should not be employed the last year. Good business practice, as well as good accounting practice, demands larger allowances during the earlier years of the life of the mine, than during the later years when the output is uncertain. The average method is indeed accurate, but it is not recommended because it is not conservative.

Montgomery states in his Auditing Theory and Practice, that when "a flat purchase price, as a result of bargaining, or an appraisal, is not based on definite gross figures reduced to present worth, the rough and ready average basis is about as satisfactory as any other, provided the total quantity and the life are understated as much as good practice permits."

The investor expects to receive the same yearly rate of return over the life of his investment. An example will show that the average method does not accomplish this purpose. Let us assume that a mine

costing $50,000 has an estimated supply of 500,000 tons of ore, that 50,000 tons of ore are mined annually, and that 10 cents is set aside for each ton extracted. If 50 cents per ton represents the net profit after the depletion charge has been made, the profit for the first year would be $25,000. If the depletion reserve, $5,000, is invested at 5% interest, and profits are paid out to stockholders, the income of the mine is increased the second year by $250, the third year by $512.50, and so on. If both depletion reserve and profits are distributed, there will be an increasing return on a decreasing investment. The profits at the end of the tenth year will be $25,000 on an investment of $5,000, a return of 500%.

In place of the same depletion reserve for each year, consideration should be given to the decreasing investment, or the income from the funded reserve. Some accountants favor the allowance of interest on deposits, while others argue that no depletion at all should be allowed until the value of the property shrinks or falls below cost.

Report on

BITUMINOUS COAL PRODUCTION, COST AND INCOME

of

__________________________

For__________ 19__

| Account No. | COST | | |
|---|---|---|---|
| 1 | MINING COST | Amount | Per Ton |
| 2 | LABOR | | |
| 3 | Mining | | |
| 4 | Yardage and Dead Work | | |
| 5 | Day Work | | |
| 6 | Power Plant Labor | | |
| 7 | Mine Office and Superintendence | | |
| 8 | ........................... | | |
| 9 | Total Labor | | |
| 10 | OTHER CHARGES AT MINE | | |
| 11 | Supplies and Expense | | |
| 12 | Power Plant Fuel-Tons....Price $.... | | |
| 13 | Power Plant Supplies | | |
| 14 | Electric Current Purchased | | |
| 15 | ............................. | | |
| 16 | Loss or Gain on Explosives and Smithing (Gain in Red) | | |
| 17 | Total Other Charges at Mine | | |
| 18 | COST AT MINE | | |
| 19 | OVERHEAD | | |
| 20 | Royalty | | |
| 21 | Depletion | | |
| 22 | Depreciation | | |
| 23 | Contingent Reserve | | |
| 24 | Taxes (Other than Income and Excess Profit) | | |
| 25 | Insurance (General) | | |
| 26 | Insurance (Liability or Workmen's Comp) | | |
| 27 | Officers' Salaries and Expenses (....%) | | |
| 28 | Other General Office Salaries and Expenses (...%) | | |
| 29 | General Expense | | |
| 30 | ................. | | |
| 31 | Total Overhead | | |

| Account No. | | Amount | Per Ton |
|---|---|---|---|
| 32 | Total Mining Cost(Divisor-Tons of Production-Account No. 107) | | |
| 33 | SELLING COST | | |
| 34 | Commissions | | |
| 35 | Advertising | | |
| 36 | Bad Accounts | | |
| 37 | Salaries and Expenses of Salesmen and Sales Agencies | | |
| 38 | Officers' Salaries and Expenses...(...%) | | |
| 39 | Other General Office Salaries and Expenses (...%) | | |
| 40 | .................................. | | |
| 41 | .................................... | | |
| 42 | .................................... | | |
| 43 | Less Selling Cost applicable to Items charged against Miscellaneous Income ( Account 83 to 86 inclusive ) | | |
| 44 | Total Selling Cost (Divisor-Total Production Sales-Acct. No. 67) | | |
| 45 | Total Cost Per Ton | | |
| 46 | DEDUCTIONS FROM INCOME | | |
| 47 | Taxes-Income and Excess Profit | | |
| 48 | Interest-(Paid and Accrued) | | |
| 49 | .................................. | | |
| 50 | Total | | |
| 51 | CAPITAL CHARGES | | |
| 52 | Improvements | $ | |
| 53 | Developments | | |
| 54 | | | |
| 55 | Total | | |

Form prepared by Cost Accounting Committee of the National Coal Association for submission to Federal Trade Commission.

# Report on

# BITUMINOUS COAL PRODUCTION, COST AND INCOME

of

______________________

For______________19__

| Account No. | INCOME | | | |
|---|---|---|---|---|
| 56 | COAL SALES (Exclusive of Purchased Bituminous and Anthracite) | Tons of 2000 lbs. | Per Ton | Amount |
| 57 | To Railroads:- | | | |
| 58 | At Tipple | | | |
| 59 | Shipped | | | |
| 60 | Other Shipments:- | | | |
| 61 | Via Rail | | | |
| 62 | Via Water | | | |
| 63 | Coal Coked (including coal washed) | | | |
| 64 | Local Sales-Retail Sales at Mines-(Net Returns) | | | |
| 65 | Power House Fuel | | | |
| 66 | .......................... | | | |
| 67 | Total Production Sales | | | |
| 68 | Cost of Sales | | | |
| 69 | Total Mining Cost (Acct. No. 32) | | $ | |
| 70 | Inventory First of Month | | $ | |
| 71 | Total | | $ | |
| 72 | Inventory Last of Month | | $ | |
| 73 | Total Cost of Sales | | | |
| 74 | Gross Profit on Coal Sold | $ | | |
| 75 | Deduct Selling Cost (Acct. No. 44) | $ | | |
| 76 | Income from Sales | $ | | |

| Account No. | | Amount |
|---|---|---|
| 77 | Miscellaneous Income (Net): | |
| 78 | Heat, Light, and Power | |
| 79 | Dwellings and Farms | |
| 80 | Stores, Miners' Supplies, Commisaries,etc. | |
| 81 | Standard Gauge Railroad Equipment | |
| 82 | Water Transportation Equipment | |
| 83 | Coke and By-Products.......Tons | |
| 84 | Washed Coal................Tons | |
| 85 | Purchased Anthracite.......Tons | |
| 86 | Purchased Bituminous.......Tons | |
| 87 | Other Income (Particularize) | |
| 88 | ................................. | |
| 89 | Total Miscellanecus Income | |
| 90 | Total Income ( Sales and Miscellaneous ) | |
| 91 | Less Deduction From Income | |
| 92 | Net Income | |

## PRODUCTION TONNAGE (2000 pounds)

| | | Prepared | Run-of-Mine- | Slack | Total |
|---|---|---|---|---|---|
| 93 | Sales: | | | | |
| 94 | To Railroads:- | | | | |
| 95 | At Tipple | | | | |
| 96 | Shipped | | | | |
| 97 | Other Shipments:- | | | | |
| 98 | Via Rail | | | | |
| 99 | Via Water | | | | |
| 100 | Coal Coked (Inc'g Coal Washed) | | | | |
| 101 | Local Sales | | | | |
| 102 | Power House Fuel | | | | |
| 103 | Total Sales | | | | |
| 104 | Add-Inventory end of Month | | | | |
| 105 | Total | | | | |
| 106 | Deduct-Inventory First of Month | | | | |
| 107 | PRODUCTION | | | | |

Form prepared by Cost Accounting Committe of National Coal Association for submission to Federal Trade Commission (reverse).

## BALANCE SHEET

| Assets | Balance | Changes During Fiscal Year | |
|---|---|---|---|
| | ------19-- | -----Mos. To Date | Month of------- |
| **Current Assets:** | | | |
| Cash | | | |
| Notes Receivable. Customers | | | |
| Notes Receivable. Affiliated Companies | | | |
| Accounts Receivable. Customers | | | |
| Accounts Receivable. Affiliated Companies | | | |
| Accounts Receivable. Miscellaneous | | | |
| Pay Roll Overdraft. | | | |
| Accounts Receivable. Merchandise Dept. | | | |
| Interest Receivable | | | |
| Inventory. Coal | | | |
| Inventory. Merchandise | | | |
| Inventory. Material and Supplies | | | |
| Total | | | |
| **Investments:** | | | |
| United States Government Obligations | | | |
| Bonds-Other than U. S. Government | | | |
| Mortgages | | | |
| Long Term Notes | | | |
| Stocks of Other Companies | | | |
| Loans. Affiliated Companies. | | | |
| Stocks and Bonds. Affiliated Companies | | | |
| Total | | | |
| **Reserve and Sinking Funds** | | | |
| **Fixed Assets:** | | | |
| Coal Lands. Fee | | | |
| Coal Lands. Leaseholds | | | |
| Coal Lands. Undeveloped | | | |
| Mine Plant and Equipment | | | |
| Mine Development | | | |

(Continued on following page)

Stripping Expenses. Deferred
Improvements and Developments in Progress
Storage Yards
Retail Yards
Miscellaneous Non-Operating Property

Total

Deferred:

Prepaid Insurance
Advanced Royalties
Prepaid Interest
Deferred Expenses
Discount on Bonds Sold
Prepaid Taxes
Interest Receivable

Total

Total

## BALANCE SHEET

| Liabilities | Balance ------19-- | Changes During --------Mos. To Date | Fiscal Year Month of------- |
|---|---|---|---|
| Current Liabilities: | | | |
| Notes Payable | | | |
| Notes Payable. Affiliated Companies | | | |
| Accounts Payable. Current | | | |
| Accounts Payable. Affiliated Companies | | | |
| Payrolls. Accrued | | | |
| Interest. Matured | | | |
| Wages Unclaimed | | | |
| Rents Accrued | | | |
| Dividends Declared | | | |
| Dividends Unclaimed | | | |
| Unclaimed Bond Interest Coupons | | | |
| Total | | | |
| Deferred Liabilities: | | | |
| Taxes. Federal Income and Excess Profits | | | |
| Taxes Accrued. General | | | |
| Interest Accrued. (Unmatured) | | | |
| Royalties Not Due | | | |
| Liability Insurance Accrued | | | |
| Compensation Claims Determined | | | |
| Mining Hazard Claims Determined | | | |
| Premium on Bonds | | | |
| Total | | | |
| Reserves: | | | |
| Depletion of Coal Lands. Fee | | | |
| Depletion of Coal Lands. Leaseholds | | | |
| Depreciation of Mine Plant and Equipment | | | |
| Amortization of Mine Developments | | | |
| Depreciation and Obsolescence-Storage Yards | | | |
| Depreciation and Obsolescence-Retail Yards | | | |
| Depreciation and Obsolescence-Miscellaneous | | | |
| General Insurance | | | |

(Continued on following page)

Compensation Insurance
Mining Hazards
Uncollectible Accounts and Notes

Total

Funded Debt:

Bonds. Authorized and Issued
Less: Bonds in Treasury
Mortgages

Total

Capital Stock

Common Stock;
Less: Common Stock in Treasury
Preferred Stock;
Less: Preferred Stock in Treasury.

Total

Surplus:

Sinking Fund Reserves
Surplus Arising from a Revaluation of Assets
Surplus Earned Prior to March 1, 1913
Surplus Earned Subsequent to March 1, 1913

Total

Total

Form taken from Bituminous Coal Mine Accounting by W. B. Reed.

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