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DEPLETION

By

S. H. Williston\*

The mining industry, especially in the nonferrous metal field, is sick. Depletion of reserves caused by war needs, lack of venture capital, the dearth of new discoveries, encouragement of imports - all are taking their toll. According to the Utah Mining Association in 1939 Utah had 226 "shipping" mines. In February 1950 there were 25 shipping mines, some of them scheduled for early closure. This striking decline is in one of the largest mining states in the country. In the face of such evidence, the Treasury Department has advocated the closing of "loopholes" allowed mining and oil companies in percentage depletion allowances.

The Century Dictionary defines depletion as "the act of emptying, reducing, or exhausting, as the depletion of natural resources." Webster defines it as "impairment of capital; decline in value caused by the consumption or diminution of an asset." Every ton of ore mined depletes by that amount the nonrenewable ore body from which it is mined. The money received for that ton of ore should include a profit plus interest on the investment plus a proportional return of capital, else the investment is an illusion. For income tax purposes the return of capital is depletion allowance and if an investor does not get an adequate depletion allowance, his capital is dissipated. If he is able, he will look to fields other than mining for investment.

Realizing the serious conditions in the mining industry throughout the West, the Ore.-Bin requested Mr. S. H. Williston to discuss the depletion allowance situation from a mine operator's standpoint. Mr. Williston, formerly a member of the Governing Board of the State Department of Geology and Mineral Industries, has had wide experience in mining and oil work.

The Editor.

Discussion of the depletion allowances for oil and metal mining has been filling the newspapers ever since the President and Secretary of the Treasury made an attack upon them as "loopholes" the first month of the year. Far from being loopholes, percentage depletion was definitely provided for by Congress. It has been part of our income tax laws for almost twenty years. While a manufacturing corporation can continue almost indefinitely in operation, purchasing its raw materials on the open market and selling its finished product to the ultimate consumer, all the natural resource industries consume their capital in the normal

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procedures of business and with the exhaustion of the oil, ore, or timber, must go out of business. Congress has recognized this fact ever since 1913. Income taxes were to be levied on income and income taxes were not to be levied on the return of capital.

The history of depletion, especially mining depletion, is a long one. The original depletion base was "discovery value" but since this method of determining depletion involved not only the determination of values of properties, but also estimates as to tonnage of reserves and cut-off points as to what was and what was not ore, the intricacies became so complex that in 1932, as a result of comprehensive study, Congress adopted percentage depletion as the most equitable means for the return of capital tax-free to the oil and mining industries. The figures adopted -  $27\frac{1}{2}$  percent in the case of oil, 22 percent in the case of sulphur, 15 percent in the case of metals, 5 percent in the case of coal - were the close equivalent of what had been granted to those industries under discovery depletion in the preceding twenty years. Only the metal industry was penalized. The study indicated that the metal industry was entitled to approximately 15 percent on the basis of the market price of the metal. When the law was finally approved, depletion allowance was based not on the price of the metal contained, but on the value of the ore or concentrates delivered to the smelters.

When percentage depletion was first granted, individual income taxes were low and the individual stockholder of a mining company was not severely penalized by the fact that no provision was made for percentage depletion allowance to the stockholder. In recent years, with the greatly increased income tax rates and the decline in the value of the dollar, percentage depletion allowances of all types have been effectively cut in half. Under present tax laws the payment of dividends from earnings and depletion allowances to stockholders prior to the liquidation of the company are considered ordinary income and are taxed at graduated rates. To any individual who had a net income of \$8,000, after deductions and taxes, in 1939 and who has managed to maintain his purchasing power by increased income until today, present Federal tax rates effectively deny 50 percent of the depletion to which he is entitled.

The Treasury, in its presentation before the Ways and Means Committee, placed much emphasis on so-called "basis depletion." They inferred that if an oil or mining company were to receive "basis depletion," they would recover their investment in the property. The Treasury failed to disclose the fact that "basis depletion" is based on "allowed or allowable cost depletion" and takes little or no account of losses on unsuccessful ventures. Basis depletion is "allowable" even if a corporation loses money so the Treasury would hold that the investment had been recovered if "allowable" even though the corporation lost money.

Where conditions are such that an individual can invest either in oil or in mining as an individual, he receives a full tax-free depletion allowance. This is frequently possible in the oil industry. It is only rarely possible in the mining industry.

The  $27\frac{1}{2}$  percent depletion rate allowed to oil has apparently been sufficiently high to encourage the exploration for and development of new reserves. The figures for last year would indicate that exploration is up at least 10 percent over a few years ago and much higher than it was in the late thirties.

The depletion rates for mining are apparently far too low since exploration for and development of new metal reserves within the United States is now not over a third of what it was in 1940 and the mining industry, unlike the oil industry, is in a considerably worse position as far as exploration, development, and reserves are concerned, than it was before the war.

Actually, both the oil industry and the mining industry are turning into inflated postwar dollars raw materials discovered and developed at prewar costs. If profits were calculated on the cost of replacing those reserves at present prices, many, if not most, balance sheets would provide dismal reading.

Mr. Henry Fernald, one of our most eminent mining tax authorities, has shown that if an individual investor with an income of \$16,000, after deductions and taxes, is to invest in a new mining corporation which is operated in regular mining fashion, the company will have to earn, before taxes, more than 1500 percent in its 14 years of life for the investor to be better off than he would have been if he had bought tax exempt bonds. Should the investor have an income greater than that, it is most improbable for him to profit through corporate investment in mining and if he has an income less than that, the hazards of the industry are such that it would probably be inadvisable for him to take the gamble.

There is likewise a very strong reason to believe that larger mining companies could better serve their stockholders by setting aside the corporation depletion allowances, exhausting their ore reserves and liquidating the companies. Only the most phenomenal successes for exploration and development expenditures from depletion allowances can return to the stockholders in the companies that follow that policy more than an early liquidation would give them. These are very apparent reasons for the decline in exploration for metals within the United States.

Should Congress adopt the recommendation of the President and the Secretary of the Treasury, wildcatting for oil would be immediately curtailed and exploration and development in the mining industry would be still further reduced below its present dangerously low level.

The United States can become a "have not" nation, not because large strategic mineral reserves are lacking but because no financial reward is obtainable for finding and developing them.

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#### THIS YEAR'S ASSESSMENT WORK

##### Federal Law

It seems unlikely that Congress will declare a moratorium on assessment work for the current assessment year. Therefore holders of unpatented mining claims should plan to do their assessment work before July 1, 1950, in order to maintain their possessory rights.

The Federal statute governing assessment work reads "On each claim located after the 10th day of May, 1872, and until a patent has been issued therefor, not less than \$100 worth of labor shall be performed or improvements made during each year." The year referred to is now called the "assessment year." It begins at noon of July 1 and ends at noon of July 1 of the following year. Although the law reads "during each year," it has been held that work begun but not finished before noon of July 1 will satisfy the statute if the work is prosecuted "diligently" until completed. Thus, this year, work should be started before noon of July 1 and if not finished on that date, it should be continued with reasonable diligence. It is always safest to plan the work so that it will be finished and recorded before July 1. Then there can be no question raised concerning the "diligence" of the claim owner.

##### State Law

Oregon law requires that within 30 days after the work has been performed an affidavit must be made and recorded in the mining records of the county in which the claim is located setting forth the following:

- (1) The name of the claim or claims if grouped and the book and page of the record where the location notice of said claim or claims is recorded.
- (2) The number of days' work done and the character and value of the improvements placed thereon, together with the location of such work and improvements.
- (3) The date or dates of performing said labor and making said improvements.
- (4) At whose instance or request said work was done or improvements made.

- (5) The actual amount paid for said labor and improvements, and by whom paid, when the same was not done by the owner or owners of said claim. (L. 1939, ch. 8, sec. 1, p. 19)

#### Claims on O&C lands

Holders of mining claims located on Oregon and California Railroad revested lands and Coos Bay Wagon Road grant lands of western Oregon must file a proof of labor also with the U.S. District Land Office, now located at Swan Island, Portland, according to a provision in the law which reopened these revested lands to exploration, location, entry, and disposition under the general mining laws, reading as follows:

"The owner of any unpatented mining claim located upon any of such lands shall file for record in the United States district land office of the land district in which the claim is situated. . . ; within sixty days after the expiration of any annual assessment year, a statement under oath as to the assessment work done or improvements made during the previous assessment year, or as to compliance, in lieu thereof, with any applicable relief Act."

O and C lands were made up originally of odd-numbered sections. There have been some exchanges and therefore these lands now contain some even-numbered sections. A claim owner who is not certain whether or not his claim lies within these revested lands should request information concerning the status of his claim from the Bureau of Land Management, Swan Island, Portland.

#### Questions

Questions concerning assessment work most frequently asked the Department are taken up below.

##### How is the value of assessment work determined?

Lindley<sup>1</sup> states that according to the Supreme Court of Montana an approved method of arriving at the value of assessment work done is as follows:

"In determining the amount of work done upon a claim, or improvements placed thereon for the purpose of representation, the test is as to the reasonable value of the said work or improvements - not what was paid for it or what the contract price was, but it depends entirely upon whether or not the said work or improvements were reasonably worth the said sum of one hundred dollars."

In more detail Lindley writes in the same section:

"In estimating the value of the labor performed the jury should consider the distance of the mine from the nearest point where labor could be procured, the cost of maintaining men while the labor was being performed, the current rate of wages, and any other necessary and reasonable expense which might be incurred in the performance of the said labor."

Ricketts<sup>2</sup> writes on sufficiency of performance:

"The test of the sufficiency of the annual expenditure is the reasonable value: not what was paid nor the contract price, but whether the expenditure tends to facilitate the development or actually promotes or directly tends to promote the extraction of mineral from or improve the property or be necessary for its care or the protection of the mining works thereon or pertaining thereto."

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<sup>1</sup> Lindley, Curtis H., Lindley on Mines, Third Edition, San Francisco, 1914, section 635, pp. 1578, 1579, and 1580.

<sup>2</sup> Ricketts, A. H., American Mining Law, Bull. 123, California Div. of Mines, San Francisco, 1943, section 491, p. 296.

May work done on one claim be applied on a group of contiguous claims?

Ricketts<sup>3</sup> gives instructions in answer to this question as follows:

"A general system may be adopted for the improvement and working of contiguous claims held in common. In such case the expenditure required under the law may be made upon any one of them, or upon adjacent patented lands, or upon public lands, but the expenditure of money or labor must be equal in value to that which would be required on all the claims if they were separate and independent. The claims must be contiguous, and each location thus associated must, in some way, be benefited by the work done or money expended as labor performed or improvements made upon or for a location therein. Assessment work which has no reference to the development of all the locations will not be sufficient. It is not necessary for a claimant to prepare plans and specifications with regard to how he intends to develop his location. A court should not substitute its judgment for that of the claimant as to the wisdom and expediency of the 'plan.' Yet it remains a question whether the requirement of the law has been fulfilled, i.e., that the work is such that, if continued, it will lead to a discovery and development of the veins or ore bodies that are supposed to be in the locations, or, if these are known that the work will facilitate the extraction of the ores, or be necessary for the care and protection of the property. . . .

"The natural and reasonable presumption is that all the work is done as a part of the 'plan' or system, and, as such applicable to all the locations within the group; still the burden of proof as to the sufficiency of the expenditure rests with its claimants."

Also in this connection Lindley<sup>4</sup> states:

"Obviously, a tunnel, the portal of which is situated at a higher elevation than some of the claims in a group and projected in a direction away from them, could hardly aid in the development of such lower claims.

"As water is essential to the development and working of placers, expenditures made in constructing ditches, flumes, and pipe-lines, for the purpose of conducting water to the property for use on such property, will undoubtedly satisfy the law. The cost of a survey preliminary to the location of a ditch for the development of the claim will not, however, be credited on the required statutory expenditure, where the ditch has not been dug."

May work be done outside of the boundary of a claim to apply as assessment work on the claim or group of claims?

On this point Ricketts<sup>5</sup> says:

"Work done in good faith outside of the limits of a mining claim for the purpose of prospecting or working it, will hold the claim the same as if done within the boundaries of the location itself. But it must be made to appear that the work is of value to the claim upon which it is sought to apply such work. The work may be done at a distance from the property and may consist, say, in the turning of a stream, or the introduction of water, or the construction of a flume to carry off the debris or waste material, or the construction of a road or trail outside of the limits of the claim, or the construction of a tunnel made solely with reference to the development of the claim, or the sinking of a shaft and running drifts therefrom."

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<sup>3</sup>Ricketts, A. H., op. cit., sections 488 and 490, pp. 293, 295.

<sup>4</sup>Lindley, Curtis H., op. cit., section 631, p. 1562.

<sup>5</sup>Ricketts, A. H., op. cit., section 486, pp. 290, 291.

From Lindley:<sup>6</sup>

"Work done outside of the claim upon another patented claim, if for the benefit of the one unpatented, may be considered as work done upon it. In cases of consolidation of claims, it is not necessary, in order to have its due share of such work or improvements credited to each claim, that such group of claims should all be embraced in the same proceedings for patent. If the mining laws are complied with in other respects, such claims may be applied for and entered singly or otherwise, and at different times, without in any way impairing the right to have the value of such share credited to them respectively. But where improvements not situated upon the claim are alleged to have been made for the development of such claim, it must be clearly demonstrated that such improvements have a direct tendency to such development. They must have direct relation to the claim, or be in reasonable proximity to it."

Must assessment work be done on each 20 acres of an association placer claim?

Again quoting from Ricketts:<sup>7</sup>

"Annual assessment work is not required upon each twenty-acre lot of an association placer claim. In other words, no greater annual expenditure is required upon an association claim of one hundred and sixty acres, or less, than upon an individual location of twenty acres, or less."

What is or is not good assessment work?

This question has to do with quality rather than quantity of work. Standard works on mining law cite numerous examples in answer to this question. Allowable work is specified by Ricketts<sup>8</sup> as follows:

". . . The labor may be done upon the vein or lode or in a tunnel or upon or below the surface. Work done upon the vein or lode is something more than taking rock therefrom, from time to time, and testing it for the purpose of finding pay ore. Work may consist of unwatering the claim or in the erection of a flume to carry away water or waste, or in the introduction of water or the turning of a stream. The erection of machinery and other works or of a building, if of benefit to the claim and not too distant therefrom, or the building of a road or trail or the clearing of brush from a mining claim to facilitate the work thereon, may be sufficient. Reasonable compensation may be allowed for the use or for the sharpening of tools used, but not the purchase price thereof. The value of powder, fuse, candles, rails, and timber actually used, but not the cost of transporting them, may be counted. Reasonable compensation for the daily use of horses employed in drawing cars or in raising ore, etc., but not their cost; livery hire, feed or shoeing, may be treated as labor performed. Reasonable value of meals furnished to men while employed in 'assessment work,' but not the cost of tableware, house furnishing, provisions, nor tobacco, may be counted. . . .

"Diamond drill holes on lode claims and drill tests on placer claims in connection with dredging operations upon adjoining land and the searching for lodes within placer claims have been held to be sufficient compliance with the law.

"The services of a watchman are sufficient, if necessary to preserve the excavations, the structure erected to work the claim or to preserve personal property; but they are not sufficient when he merely lives upon the claim or warns others from locating it. Negotiations, traveling, preparations for work, contracts and the like, can in no sense be said to be work done on the claim. Personal expenses incurred and the time spent for the purpose of getting work

<sup>6</sup>Lindley, Curtis H., op. cit., section 631, p. 1560.

<sup>7</sup>Ricketts, A. H., op. cit., section 490a, p. 296.

<sup>8</sup>Ricketts, A. H., op. cit., section 484, pp. 288, 289, 290.

to operate the mill or the services of a person whose time is spent in endeavoring to obtain means for the development of property are, also, in no sense labor performed upon the claim."

Van Nuys<sup>9</sup> illustrates examples of proper and improper assessment work as follows:

"Prospecting work: Open cuts; prospecting tunnel; diamond drillings; shafts; etc.

Developing work: Mine timbering; shaft or tunnel following vein; blocking out ore; etc.

Mining: Stoping; removing ore from mine or to mill; etc.

Miscellaneous: Trails and roads; tramways; mine rails, candles, fuse, powder used; mine machinery, including transportation and installation, if for permanent use; powder house, tool house, blacksmith shop, ore bins, etc. . . .

"Illustrations of work not allowed as assessment work:

Buildings not strictly necessary for development or mining; such as a miner's cabin, bunk house, boarding house, etc.

Tools and other loose equipment; but their current rental value may be counted.

A mill or smelter, and repairing same; ore crushing and treatment being a manufacturing process.

Traveling; services of engineer or geologist; gathering samples and assaying; all being too remote.

Assessment work benefiting a group of claims in common cannot be apportioned according to actual benefit to each claim but only pro rata. Assume a group of three claims, Nos. 1, 2, and 3, and that owner does work on No. 1 for benefit of all three, but a relocater proves work worth only \$200. Effect not decided in this State (Washington, Ed.), but courts of other states disagree. Do not be caught in this trap; do the full value."

#### Credit for work done in 1948-1949

Public Law 107 (Act of June 17, 1949) which suspended annual assessment work for the assessment year ending July 1, 1949, contained a specification as follows:

" . . . Provided further that any labor performed or improvements made on any such mining claim during the year ending July 1, 1949, may be credited against the labor or improvements required to be performed or made for the year ending at 12 o'clock Meridian on the first day of July 1950."

This law did not contain specific directions to the claim holder on the method of obtaining formal credit for assessment work done for the assessment year ending July 1, 1949, which could be credited as work for the following assessment year. To clarify this provision, Representative Engle of California introduced a bill (HR 6406) which passed the House February 13, 1950, and is now (April 4, 1950) pending in Senate Interior and Insular Affairs Committee. This bill contains the following provision:

"That every claimant of a mining claim in the United States who wishes to obtain the benefits conferred by the second proviso (preceding quotation, Ed.) to the first section of the Act of June 17, 1949, may file, or cause to be filed, in the office where the location notice or certificate is recorded, on or before 12 o'clock Meridian on the first day of July 1950, a statement of the labor performed or improvements made on any such mining claim during the year ending July 1, 1949, or such statement may be included as part of the annual notice of the performance of assessment work for the year ending at 12 o'clock Meridian on the first day of July 1950."

F.W.L.

<sup>9</sup>Van Nuys, M. H., An outline of Mining Laws of the State of Washington, State Division of Mines and Mining, Olympia, 1940, pp. 24, 25.

## HAYDITE PLANT STARTS OPERATION

A new industry in the nonmetallies field for Oregon started operation April 21 when Governor Douglas McKay threw the switch which started the kiln rolling at the Smithwick Concrete Products Company plant in Portland. The plant will produce 300 yards of finished material a day on a 24-hour, 7-day week basis. Shale is being quarried in Washington County a few miles south of Vernonia and shipped by rail to the kiln. The quarry will employ four to six men, while twelve men will be used at the plant. The kiln measures 100 feet in length by 8 feet in diameter. The plant is unique in that it contains an after-cooler which also serves as a pre-heater for incoming air to the kiln. Haydite is a trade name owned by the American Aggregate Company of Kansas City, Missouri, for a lightweight aggregate made from expanded shale.

It is reported that some of the output from this new plant will be used for the aggregate for the decking of the Tacoma-Narrows Bridge which is being rebuilt by the Washington Toll Bridge Authority.

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## ROCK AND MINERAL BOOKLET PUBLISHED

The Department has recently published a 50-page booklet entitled "A description of some Oregon rocks and minerals," by Hollis M. Dole. This booklet includes a classification of rock types and tells how to identify the more common rocks and minerals of the State. Major uses and occurrences are listed. Because the booklet is chiefly intended to accompany the rock and mineral sets which the Department loans to schools, and does not belong to the regular series of Department publications, no copies will be mailed to exchange libraries. A limited number of the booklets are available, however, and may be purchased at 40¢ per copy.

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## METAL MARKETS

E&MJ Metal and Mineral Markets issue of April 20, 1950, reports that metal markets were all active. Copper advanced one cent per pound during the preceding week, making the price 19½ cents, Connecticut Valley points. Zinc was raised to 11 cents per pound, East St. Louis. Lead was maintained at 10½ cents per pound, New York, although sales improved and the undertone of the market was characterized as steady to fair. Steel operations are up to 100 percent capacity, which is reflected in demand for manganese ore, most of which has been imported. (Whether or not the large demand for manganese ore for current steel operations prevents accumulation for stockpiling purposes is not mentioned. Ed.) Chrome ore is reported to be in more active demand. Foreign silver was unchanged at 71 3/4 cents a troy ounce. The price of quicksilver remains at \$71-\$73 per flask for spot metal. It was reported that the European quicksilver cartel has been dissolved and that sellers of Spanish and Italian quicksilver will go their separate ways. There is no indication that dissolution of the cartel has so far affected the market price in this country.

The State Department has issued a list of commodities on which tariff concessions will be sought in order to increase our imports and relieve dollar shortage in foreign countries. The list covers 2500 items and includes lead, zinc, nickel, manganese metal, and most ferro alloys. Copper is not mentioned. Negotiations will be conducted with some seventeen countries at meetings scheduled to begin in England September 28, 1950.

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## U.S. GOLD AND SILVER EXPORTS AND IMPORTS IN FEBRUARY 1950

Gold held under earmark at the Federal Reserve Banks increased during February by \$50,410,868 to \$4,416,911,057. Total exports of gold were \$4,118,545 of which \$1,180,880 was to Portugal and \$1,091,997 to Syria. Total imports of gold were \$4,350,062 of which \$1,788,169 was from Taiwan (Formosa). Total exports of silver were \$29,921. Total imports of silver were \$4,355,313, of which \$1,409,869 were from Mexico.

(From World Trade News, U.S. Department of Commerce, April 13, 1950.)

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