DIGEST OF "SEVERANCE TAXES "AS DISCUSSED BY A. B. PARSONS, CONSULTING ENGINEER, IN "TAXATION OF MINING ENTERPRISE" (1950)
With Record of Change in Rates Since 1950. Also Discussion By Utah's State Tax Commission in 1954 and By Minnesota's Property Tax Director in 1959.

In 1950, Mr. A. B. Parsons, consulting engineer and former Secretary of the American Institute of Mining Engineers, undertook the study of mine taxation, federal, state and local, at the request of the Director of the U. S. Bureau of Mines. The result was a 112-page report of as thorough a coverage of mine taxation as has ever been rendered, before or since.

Following are excerpts of Mr. Parsons' comments on the "Severance Tax Applied to Mining Enterprise.":

> "Perhaps the most controversial tax is the so-called Severance Tax, that, as shown on the accompanying table, has been legislated into the tax structure of 13 of the 25 mining states under study. The basis for the tax is the privilege of removing or severing 'natural resource' materials from the earth's crust-either the solid or the liquid portion. Products of rivers, lakes, and the ocean, as well as of the forests are subject to the tax; but it is clear that minerals are the principal objects of severance taxation.
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> "The distinctive characteristic of a true severance tax is that it shall be measured by the quantity produced and shall be computed by applying to such quantity specific rates expressed in dollars and cents per ton, per ounce, per barrel, or other unit. Alternatively the measure may be the gross value of the material removed or severed during the tax period, in which case the rate is a fixed percentage of the money value. Except for a few instances where a specified minimum quantity or value is exempt, the tax is 'proportional' - that is to say, the rate is the same, irrespective of the volume or size of the measure. The significant point is that the tax prevails even if little or no profit is realized from the operation of producing. Presumably production will not continue long in the absence of some profit; but the tax is a fixed charge that can represent the margin that dictates whether a taxpayer does or does not stay in business.
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> "Perhaps because the name 'severance' has acquired a sour reputation in mining circles, state legislatures have often avoided putting a tag on their new tax - even though it possesses all the attributes of a severance tax. For example, the following are true severance taxes: (a) South Dakota's 'ore' tax; (b) Utah's 'occupation' tax; (c) Montana's 'metal-mine-license' tax; (d) Arizona's 'sales' tax; and (e) Oklahoma's 'gross-production' tax. On the other hand, Minnesota's 'occupation' tax which, as the subject of heated controversy, has been condemned as a severance tax, does not in reality come into that category.

"Opponents of the severance tax point to the fact that the tax is not imposed, ordinarily, as an alternative to the property tax; on the coutrary it is usually an additional levy directed toward a single industry, and to that extent is discriminatory. Nevertheless the legislatures of a great many states have been, and still are, (1950), giving active consideration to the enactment of severance taxes. Moreover, in several of the States already having a severance tax, agitation for increased rates has been a feature of each meeting of the legislature. The principal contentions of the advocates and opponents of the tax may be out-lined as follows:

<u>The Severance Tax</u>

<u>Arguments in favor</u>:

1. Characterized by ease and economy of administration.

2. Possesses certainty and clarity, and avoids arbitrary and capricious administration. The quantity produced, or the gross market value of such output, is subject to ready and accurate determination.

3. Tends to provide stability of revenue from year to year, assuming that output is reasonably uniform.

4. Provides a convenient instrument by which a State government can participate in tax revenues based on the exploitation of natural resources without encroaching in the field of property taxation which local governments strive to preempt.

5. Recognizes the "common heritage" theory which holds that basically mineral resources are the property of the state, and that as a consequence the state should be reimbursed to some extent, through taxation, for the depletion of such resources.

6. Promotes desirable conservation of desirable mineral resources for the use of "future generations". This argument is based on the philosophy that "hoarding" minerals in the ground is true conservation. (See argument 6 below).

7. Recognizes the criterion of "ability to pay" to the extent that the tax is imposed only on producing mines. Properties under initial development or temporarily shut down for any reason are not subject to this tax. (See argument 1 below).

<u>Arguments against</u>:

1. Violates the criterion of "ability to pay" to the extent that neither volume of output nor gross sales value is a reliable criterion of such ability. (See argument 7 above).

2. Constitutes a handicap to the "marginal" producer by increasing the critical grade of ore that can be mined profitably.

3. Reduce the size of the target for new exploratory activity by increasing the critical grade of workable ore.

4. Tends to compel the mining of richer ores to the exclusion of the poorer. This applies to the selection of ore in a given mine; and to the selection of one mine among many.

5. Tends to contract the overall mineral resources of the State and Nation.

6. Frustrates and defeats conservation of valuable mineral resources. This contention is based on the philosophy that the true objective of conservation is not to lock up minerals in the ground, but to develop, produce, and consume them under the single test of efficient, prudent, and beneficial use in the public interest. (See argument 6, above).

7. From the standpoint of any given state, the tax tends to drive venture capital, seeking to engage in the business of mining,to other states; to undermine the entire economy of such state by limiting desirable expansion and healthy growth.

It may be pertinent at this time to reiterate the fundamental reason for the direct conflict between the two conceptions of conservation. Many laymen look upon reserves in the form of ore deposits as a store of metal not unlike the 24 billion dollars' worth of gold bullion lying in deeply buried valts at Fort Knox, Kentucky. They know that the gold could be drawn upon at will. Copper or lead existing in an ore deposit, even though large, have an entirely different character as a source of supply. Moreover, the continuous replenishment of the aggregate reserve flowing from the unrelenting search for new ore, is an important phase of sound conservation."

SEVERANCE TAXES - MEASURED BY PHYSICAL OUTPUT OR GROSS VALUE
As Outlined in "Taxation of Mining Enterprises"
A Report To The U. S. Bureau of Mines By
A. B. Parsons, Consulting Engineer
(June 1950)

State	Designation	Rate - Ore	Notes
ALABAMA	Privilege License	$0.03 per ton	Petroleum: 4 per cent of market value. Coal: $0.015 per ton.
ARIZONA	Sales	1 per cent of market value (A)	No exemptions.
ARKANSAS	Production	$0.10 per ton	Iron ore, sulphur, salt, petroleum: 4 per cent of market value.
LOUISIANA	Severance	$0.10 per ton	Sulphur: $1.03 per long ton.
MISSISSIPPI	Sales	2 per cent of market value	Petroleum: $0.06 per barrel or 6 percent of market value, whichever is greater.
MONTANA	Metal-Mine License	1 per cent of market value (B)	Progressive rate: $100,000 exempt.
NEW MEXICO	Severance	0.125 per cent of "gross sales value"	Copper: 0.5 per cent; potash: 2.5 per cent.
OKLAHOMA	Gross Production	0.75 per cent of market value	Petroleum: 5 per cent of market value.
SO. DAKOTA	Ore	4 per cent of market value	Output from 100,000 tons exempt; Rate reduced from 6 per cent in 1945.
TEXAS	Production	$1.272 per long ton (sulphur)	Petroleum: $0.04125 per barrel or 4.125 per cent of market value, whichever is greater.
UTAH	Occupation	1 per cent of market value	$50,000 exempt.
W. VIRGINIA	Business and Occupation	2.6 per cent of market value	Petroleum: 3.9 per cent of market value. Coal: 1.3 per cent of market value.

A. The sales (severance) tax rate in Arizona was 0.5 per cent from July 1, 1933, until July 1, 1935, when the rate was increased to 1 per cent. A second increase, effective July 1, 1959, brings the tax rate to 1.5 per cent.

B. Rate raised from 1 per cent to 1-1/4 per cent in 1957.

Because the States of Arizona, Montana, New Mexico and Utah are the leading producers of low-grade copper ores, digests of their particular forms of severence taxes are herewith given in detail.

DIGEST OF ARIZONA SALES (SEVERANCE) TAXES

In his digest of Arizona taxes, Mr. Parsons had this to say in reference to sales taxes:

> "3. Sales (Severance) Tax - The measure for this tax is the statutory gross sales value of ore, concentrate, or metal 'at the time it enters interstate commerce'. A company that mined, concentrated, smelted and refined in the State of Arizona would be taxed on the sales value of metals produced with deductions allowed for the cost of transportation of ore or concentrate to the smelter and refinery and of finished metal to the place of sale.
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> "On the other hand, a mining company shipping and selling ore or concentrate to a custom smelter would be taxed on the 'net smelter return'. In effect, he would deduct from the sales value of the recoverable metals in his shipment all costs for transportation, smelting, refining, and marketing. If the smelting and/or refining were done in Arizona, an additional appropriate sales tax on that particular 'mine product' would be paid by the smelting and refining company, although that company would take the tax into account in its smelting charge or some other item of its 'settlement sheet' with the mines.
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> "The uniform rate is 1 percent". (The Arizona Legislature in 1959, raised the rate 50 percent to $1\frac{1}{2}$ percent).

The Arizona Privilege Sales Tax is claimed by some to include mining because it thus taxes the industry for the "privilege" of doing business. A license fee is charged for this privilege, and Arizona mining companies pay this fee because they collect sales taxes on miscellaneous articles they sell to their employees. Furthermore they pay, as consumers, thousands of dollars in sales taxes on purchases of Arizona goods. This is entirely distinct from paying a tax on the value of ore severed from the ground.

AMOUNT OF SEVERANCE TAXES COLLECTED UNDER THE GUISE OF "SALES" TAXES, IN ARIZONA, SINCE JULY 1, 1933

Source: Arizona State Tax Commission's Biennial Reports

From	To	Amount	Rate
July 1, 1933	July 1, 1934	$ 62,357	½ %
July 1, 1934	July 1, 1935	135,790	½ %
July 1, 1935	July 1, 1936	245,525	1 %
Fiscal Year	1937	512,447	1 %
" "	1938	518,684	1 %
" "	1939	421,441	1 %
" "	1940	576,562	1 %
" "	1941	654,561	1 %
" "	1942	735,522	1 %
" "	1943	855,892	1 %
" "	1944	845,711	1 %
" "	1945	745,736	1 %
" "	1946	579,133	1 %
" "	1947	1,271,978	1 %
" "	1948	1,605,442	1 %
" "	1949	1,838,178	1 %
" "	1950	1,359,838	1 %
" "	1951	2,155,165	1 %
" "	1952	2,037,064	1 %
" "	1953	1,931,759	1 %
" "	1954	2,027,746	1 %
" "	1955	2,670,358	1 %
" "	1956	4,026,667	1 %
" "	1957	3,569,619	1 %
" "	1958	2,620,785	1 %
Total to July 1, 1958		$ 34,003,960*	

* Note: This total does not include the many thousands of dollars in "Sales" Taxes which the mining industry pays on purchases of Arizona goods.

DIGEST OF MONTANA'S METAL-MINE-LICENSE (SEVERANCE) TAX

In his digest of Montana taxes, Mr. Parsons had this to say in reference to the Metal-Mine-License (Severance) Tax:

> "2 The measure for the Metal-Mine-License (Severance) Tax is the gross value of recoverable metal. It is determined by using the published E. & M. J. average prices for metals and reducing them by arbitrary 'differentials' to give so-called Montana prices.
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> "The rates are progressive as follows:

First	$ 100,000	Free
Next	150,000	1/4 of 1 percent
Next	150,000	1/2 of 1 percent
Next	100,000	3/4 of 1 percent
Above	500,000	1 percent."

(In 1957, the 1% rate was increased to 1-1/4%).

From the Revised Codes of Montana, 1947, as amended by Chapter 220, session laws of 1957, the rates on the gross value of product are now as follows:

First	$ 100,000	Free
Next	150,000	1/2 of 1 percent
Next	150,000	3/4 of 1 percent
Next	100,000	1 percent
Above	500,000	1-1/4 percent

DIGEST OF NEW MEXICO'S SEVERANCE AND SALES (OR PRIVILEGE) TAXES

In his digest of New Mexico Taxes, Mr. Parsons had this to say in reference to Severance and Sales or Privilege Taxes:

"4. Severance Tax - In 1949 the legislature amended the Severance Tax law which now reads in part:

> 'Gross value is defined as being the sales value of the severed and saved product at the first marketable point. For such products as have a posted field or market price at the point of production, the value to be reported shall be its field or market price without any deductions except those expenses for hoisting, crushing and loading necessary to place the severed product in marketable form and at a marketable place. For such products as must be processed or beneficiated before sale, the value to be reported shall be the proceeds from the first sale after deducting freight charges subsequent to severance to the point of first sale and the cost of processing and beneficiation.
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> 'The taxpayer hereby is granted an exemption from Taxation of Two Hundred Thousand Dollars ($200,000) annually, which shall be deducted from the gross value as herein defined before computing the tax.'

"The rate on copper is 0.5 percent. The greater part of the proceeds of the tax will go into a 'Severance Tax Permanent Fund', the interest on which after 25 years will be 'used solely for the purposes of replacement of taxes from depleted natural resources; research to discover new supplies of present natural resources; and the erection of new public school buildings.'

"5. Sales and Privilege Tax - The measure for this tax is the gross receipts from the sale of mine product; and, in respect to metalliferous ores and concentrates sold to a custom smelter, the 'net smelter return' is used. The uniform rate is 0.5 percent. Obviously this tax based on gross receipts is essentially a second severance tax. It is generally referred to as the Emergency School Tax."

Including amendments of 23rd Legislature 1957, the New Mexico Severance Tax law now calls for a rate of 1/2% on gross value of copper ores severed from the ground.

The official school tax law calls for a levy of 1/2% on the sale of the product of metal and mineral mines, and is measured by the gross receipts of sales.

DIGEST OF UTAH'S OCCUPATION (SALES OR SEVERANCE) AND

CORPORATION FRANCHISE TAXES

In his digest of Utah Taxes, Mr. Parsons has this to say in reference to Utah's Occupation (Severance) Tax:

> "3 Occupation (Severance) Tax - The basis of the Occupation tax (actually a severance tax, though not so recognized in the law) is the gross sales value of ore or concentrate at the point of production. The measure consequently is the 'net smelter return', or the equivalent of such return if a company smelts its own ores. From the gross sales value, the cost of the following therefore can be deducted: All transportation (from mine or mill to the eventual place of marketing the refined metal) sampling, smelting, refining, and marketing.
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> "A fixed exemption of $50,000 is provided, the purpose being to give special consideration to 'small' enterprises. The rate is uniform at 1 percent."

An excerpt from Utah Statutes pertaining to Mining Occupation Tax, reads as follows:

> "59-5-67. Occupation tax- Rate - Computation - Annual exemption. - Except as herein otherwise specifically provided, every person engaged in the business of mining or extracting ore or metal containing gold, silver, copper, lead, iron, zinc, tungsten, uranium or other valuable metal in this state shall pay to the state of Utah an Occupation tax equal to one per cent of the gross amount received for or the gross value of metalliferous ore or metals sold - - -
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> "The basis for computing the occupation tax imposed by this act for any year shall be as follows:
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> (a) In the case of mines if the ore or metals extracted is sold under a bona fide contract of sale, the amount of money or its equivalent actually received by the owner, lessee, contractor, or other person operating the mine or mining claim from the sale of all ore or metals during the calendar year, less a reasonable cost, if any, of transporting the ore or metals from the place where mined to the place where, under the contract of sale, the ore or metal is to be delivered. - - -
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> (c) If a mill or other reduction works is operated exclusively in connection with a mine, such mill or reduction works shall be treated as a part of the mine and the cost of operating such mill or reduction works shall, for the purpose of fixing the occupation tax imposed by this act, be regarded as part of the cost of mining and cost of assaying, sampling, smelting, refining, and transportation, only, shall be deducted."

The Utah State Tax Commission, in its "Twelfth Biennial Report", page 33, had this to say about the occupation tax:

> "The mine occupation tax could be classed as a form of sales tax, since the measure is what the ore is worth at the mine mouth; but it is usually classed as a severance tax, the only impost of that class as yet adopted by this state. Under present marketing conditions it is quite probable this tax is paid by the producer, rather than by the consumer."

The tax for the privilege of doing business is labeled a "Corporation Franchise Tax." The State Tax Commission states that the most common measure of the tax is the income for the taxable year covered by the return. Hence it is more in the nature of an income tax, and is distinct from the Sales Tax or the Mine Occupation Tax.

The Corporation Franchise Tax, Individual Income Taxes, Sales Taxes, and the Mine Occupation Taxes are all administered by the Excise Tax Department of the Utah State Tax Commission.

> "Sales Taxes", according to the 12th Biennial Report, "constitute the largest single source of revenue to the state. It is 2 percent sales tax, measured by the price the Consumer pays for tangible personal property, admissions and certain utility services."

Under Article 7 (Mining Occupation Tax), Sec. C of 59-5-67 reads as follows:

> "If a mill or other reduction works is operated exclusively in connection with a mine, such mill or reduction works shall be treated as part of the mine and the cost of operating such mill or reduction works shall, for the purpose of fixing the occupation tax imposed by this act, be regarded as part of the cost of mining and cost of assaying, sampling, smelting, refining, and transportation, only, shall be deducted."

DIGEST OF MINNESOTA'S "OCCUPATION TAX"

Mr. Parsons describes Minnesota's "Occupation Tax" as follows:

> "The measure for this tax is the net proceeds on shipments made during the preceding year. The tax is often called a severance tax, but that is a misnomer. In fact, it is essentially an income tax (applied exclusively to mining) because the measure is the 'net' rather than the 'gross' value. It is computed by making specific deductions from the sales value of the ore. Deductions include all direct costs of production, transportation, and marketing; and royalties paid to the fee owners of the land. Depreciation is deductible; and currently a so-called 'labor credit' is allowed. This last-named deduction is designed particularly to stimulate production of ore having a relatively high labor-cost. Not deductible are depletion, Federal income tax, interest, and overhead outside the State of Minnesota. The objective is to obtain the net value of the ore at the point of severance or at the mine. The rate imposed at the start, in 1921, was 6 percent; but this has been progressively increased from time to time. From 1947 to 1949 it was 11 percent; and an additional 1 percent was added by the legislature in the latter year."

The Property Tax Director of the Minnesota Department of Taxation states that Mr. Parsons describes Minnesota's Occupation Tax as well today as it did in 1950. "The rate, however, has been changed since then. The present rate is 13.65 gross Tax on the net value less labor credits earned. On taconite concentrate this tax is 12%. There is no sales or production tax on iron ore except that in the case of taconite a tax of 5% per ton of concentrate produced is paid in lieu of ad valorem taxes on the un-mined mineral and production facilities."

As to the attitude of the public towards the removal of taconite ores now profitable by reason of the large expenditures in research and development, the Director states that "the large stake that the population of northeastern Minnesota has in future payrolls appears to be emphasized rather than taxation. At the present time all production facilities used in the production of concentrates from taconite are exempt from taxation. Until recently the 'net' value of concentrates produced from taconite produced no occupation tax. In the latest year for which occupation taxes have been collected the net value subject to the 12%

tax was 25¢ per ton on pellets and sinters produced from taconite. The 1959 Legislature has extended the treatment given hard taconite ores to 'soft' taconite ores."

For a good discussion of the relative merits of ad valorem property taxes and severance taxes, see p 191 et seq. of "Supplementary Report of Legislative Commission on Taxation of Iron Ore" submitted to Minnesota Legislature of 1957.

C O N C L U S I O N

The marked similarity of Arizona's "Sales Tax", (as applied to mining), to New Mexico's "Severance and Sales Taxes", Montana's "Metal Mines License Tax", and Utah's "Mine Occupation Tax", leaves no doubt as to the "severance" feature of the tax. All have the distinctive characteristic of a true severance tax, in that it is measured by the quantity "severed", and computed by applying to such quantity a fixed percentage of the money value.

The "sales" feature of taxing the consumer most certainly does not apply, because in the case of copper production, the producer, and not the consumer, pays the tax. Furthermore, if the tax were applied to the net proceeds from the sale of the finished product, it would partake of the nature of an "income" tax, which Arizona already has - to the tune of 5 percent.

The justification of a severance tax upon Arizona's copper production is questionable because the removal of practically all of this copper during the past forty-odd years has in no way depleted the State's natural resources. As it lay in the ground, the copper was worthless. Brains and capital (and not nature) converted it to something that enriched the State by creating taxable wealth, which returned to the State millions of dollars in income taxes.

The Arizona Privilege Sales Tax is claimed by some to include mining because it thus taxes the industry for the privilege of doing business. A license fee is charged for this privilege, and Arizona mining companies pay this fee and sales taxes collected on miscellaneous articles they sell to their employees. Furthermore they pay, as consumers, thousands of dollars in sales taxes on purchases of Arizona goods. This is entirely distinct from paying a tax on the value of ore severed from the ground.

The Arizona mining companies have been paying what they claim is a severance tax since 1933, but as it amounts to only 1 percent ($1\frac{1}{2}$ percent after July 1,1959), they do so willingly. They strongly object to the principle when it comes to the low-grade mines of the State, and believe they would be justified in fighting any further increases. The effect on future mining investment in Arizona is incalculable.

Regarding the "common heritage" theory which holds that basically mineral resources are the property of the state, and that as a consequence the state should be reimbursed to some extent, through taxation, for the depletion of such resources: This may be the case where a bonanza is involved, but not so in the case of mining low-grade copper ore, which constitutes the bulk of Arizona's mining industry. Before severance, the deposit is really worthless rock, and does not become wealth until the owners, by the use of brains, labor and capital, convert the resource into real wealth. And, since the owners have bought and paid for the property, they (and not nature) really create the wealth. Moreover, the State benefits from the operation by the collection of property and income taxes, her citizens thereby sharing in the "common heritage" to which the Severance Tax proponents claim they are entitled.

Arizona Department of Mineral Resources July, 1959