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TAX REFORM ACT OF 1969

H.R. 13270

PART A—TESTIMONY TO BE RECEIVED TUESDAY, SEPTEMBER 30, 1969

PART B—ADDITIONAL STATEMENTS

(Topic: Natural Resources: Depletion Allowances, Exploration Expenses, Production Payments (Hard Minerals))

COMMITTEE ON FINANCE
UNITED STATES SENATE
RUSSELL B. LONG, *Chairman*

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Natural Resources: Depletion Allowances, Exploration Expenses, Production Payments (Hard Minerals)

SUMMARY OF SENATOR PROXMIRE'S STATEMENT ON OIL TAXES BEFORE SENATE FINANCE COMMITTEE, September 30, 1969

Senator William Proxmire, (D-Wis.) on behalf of Senators Brooke, Kennedy, McGovern, McIntyre, Mondale, Muskie, Nelson, Pell and Stephen Young proposed:

1 - Elimination of foreign tax credits for payments to foreign governments which are really disguised royalty payments, although such payments would be deductible as ordinary business expenses.

2 - Establishment of a 3 tier domestic depletion allowance which would allow the full 27½% depletion allowance on the first $5 million of gross income from oil and gas properties, 21% on the gross income from $5 and $10 million and 15% for everything over $10 million.

Senator Proxmire also supported the provisions in the House tax reform bill that would eliminate foreign depletion allowances and ABCs and production payments which are bookkeeping techniques to shift income from year to year to avoid taxes.

This proposal would raise more than 3 times more revenue than Treasury's proposal.

A more radical approach was suggested by Senator Proxmire if the Committee decided to discuss capitalization of intangibles. He offered for the Committee's consideration a direct drilling subsidy of 25% of intangible expenses on exploratory wells. According to preliminary estimates, for every 10 wells drilled by the average wildcatter under such a plan he would receive about $75,000 more to explore with than he now gets. Over 10 years the plan would raise an additional $2½ billion in revenue while providing $100 million a year for research into the extraction of oil from coal and oil shale.

The Proxmire tax package would continue the incentives for the small independent producers while, at the same time, would prevent the major oil companies from abusing the tax structure.

SENATOR PROXMIRE
STATEMENT BEFORE
SENATE FINANCE COMMITTEE

OIL TAX REFORM REQUIRED

Mr. Chairman, I appreciate the opportunity to testify before the Senate Finance Committee as it considers one of the most important issues facing Congress -- tax reform.

I have long felt that the tax privileges of the oil industry constituted one of the most glaring inequities in the entire tax structure. However, because the Chairman and I have spent much time discussing this general question and the Committee has many other witnesses to hear, I would like to concentrate on 2 changes in H.R. 13270 which I propose to protect the small, independent oil producers who are doing the actual domestic exploration but which, at the same time, would require the major oil companies that have been enjoying fantastic profits to pay their fair share of the tax burden.

My proposal, which is supported by Senators Brooke, Kennedy, McGovern, McIntyre, Mondale, Muskie, Nelson, Pell and Stephen Young and by the Kansas Independent Oil & Gas Association which represents 1300 members, makes 2 changes in the House bill:

1 - It eliminates tax credits for foreign taxes which are really disguised royalty payments on overseas production, although it does allow such payments as ordinary business deductions.

2 - It establishes a 3 tier domestic depletion allowance. It allows the full 27½% depletion allowance on the first 5 million dollars of gross income from oil and gas properties, 21% on gross income between $5 and $10 million, and 15% for everything over $10 million gross.

This proposal which is included at the conclusion of my statement is designed to give the small, independent oil producers the incentive they need to explore for domestic sources of oil while, at the same time, closing the major tax loopholes.

Any tax system which requires 2.2 million people under the poverty level to pay federal income taxes, yet allows Atlantic Richfield to earn over $465 million between 1964 and 1967 without paying one red cent in federal income taxes clearly requires revision. Imagine, gigantic Atlantic Richfield paid less in federal income taxes than the janitor who cleaned this room last night!

Atlantic Richfield is only one example of the low income tax burden borne by the oil industry. The reason the federal income tax burden on the oil industry is so low is clearly shown when we realize that only 44 to 51% of the actual profit of the oil industry is considered to be taxable income whereas 97% of the actual profit for other manufacturing concerns is considered to be taxable income. However, rather than go over the intricacies of the tax structure here I have included at the end of my statement a copy of an analysis I delivered on the Senate Floor.

According to the Treasury Department's Tax Reform Studies and Proposals, submitted to this Committee, the long term revenue loss to the American taxpayer as a result of the percentage depletion allowance was $1.3 billion in 1968. If we include the revenue loss due to intangible expensing, the oil industry received from just these two loopholes a tax benefit worth $1.6 billion in 1968. This money was spent by the American taxpayers just as surely as if Congress had appropriated the money -- with

only one important difference: no one examined the expenditure to see who was getting it and whether it was worth the cost. I think this point is crucial!

When one compares the Congressional scrutiny of programs costing far less than the tax benefits of the oil industry, it is crystal clear that Congress would not have approved anywhere near the $1.6 billion primarily benefitting the gigantic major oil companies. The $1.6 billion in back door spending on just these two loopholes is 3 times what was budgeted in fiscal 1969 for Federal law enforcement, 15 times as much as the cost of running the Federal judicial system, 3 times the budgeted amount for school lunch and food stamp programs, 5 times as much as is budgeted for low rent public housing and 4 times the allotment for the Alliance for Progress.

There is no question in my mind that these tax incentives are probably the most inefficient way of encouraging domestic exploration and development. Most of the tax incentives are going to the major oil companies which can accomodate themselves to a changed tax situation quite well. They have the financial wherewithall and knowledge to cope with almost any change in the tax situation, but this is not true for the independent oilmen who seem to be doing most of the domestic exploration and development, if we exclude the outer continental shelf and Alaska. The small oilmen are the ones who are really caught in the cost price squeeze. This is not true for the majors. For example, Standard Oil of New Jersey found enough capital to make Enjay, its petrochemical affiliate, the second largest petrochemical producer in the world without any apparent strain on its capital resources.

My proposal is designed to enable the independent oilmen to continue to explore as they have in the past and, perhaps, with renewed vigor while forcing the major oil companies which have used this gigantic flow of tax free cash to buy into other businesses to pay their fair share of the tax burden borne by all of us. It would also raise more than 3 times as much revenue as the Treasury's proposals.

DOMESTIC OIL DEPLETION ALLOWANCE

According to the Treasury Department's tax reform study I mentioned before, the oil depletion allowance is a most inefficient way to encourage the domestic exploration for oil. The CONSAD report upon which the Treasury Department based its conclusions indicated that only $150 million worth of oil at the inflated domestic price was discovered that would not have been found without the incentive of the oil depletion allowance. In other words, the oil depletion allowance and intangible expensing provisions cost the American taxpayers over $10 for every $1 of additional discovered reserves -- and this is figured on the inflated domestic oil price which is about $1.50 more per barrel than foreign oil delivered to the United States. So for tax expenditures of $1.6 billion, we encourage the development of only $150 million in oil reserves. How inefficient can you get?

The rationale for the depletion allowance is supposedly rooted in national security. Without the depletion allowance, so the argument goes, we would not explore for the oil which we need in order to protect ourselves from possible interruptions in our oil supply.

This myth was destroyed by the CONSAD report. CONSAD, after a detailed study of the oil industry, found that we would experience a mere 7% decline in our discovered oil reserves, from a 12 year reserve to an 11 year reserve. Surely, if the need arose, we could discover the needed reserves within 11 years or, at least, find alternative supplies.

Why then should we continue to pay and pay and pay for something we don't need and only benefits gigantic oil companies fully able to take care of themselves?

The first change I suggest should be made in H.R. 13270 is to include a sliding scale oil depletion allowance for domestic producers so that those most in need of incentives, the small wildcatters, get them. My proposal is to give oil producers grossing less than $5 million a year from oil and gas properties the full 27½% depletion allowance, give those oil producers grossing between $5 and $10 million a year a 21% depletion allowance and give those oil producers grossing over $10 million a year a 15% depletion allowance. These depletion allowances would be applicable only to domestic production; they would not be allowed on foreign production which does not benefit our national security. This would allow the small producers the full benefit of the oil depletion allowance and would help them compete against the major oil companies which have all the advantages big fully integrated companies have over little independent companies.

Along the same line I would like to endorse the provision in H.R. 13270 eliminating the mineral production payments and ABC transactions which allow oil companies to shift taxable income from year to year to minimize even further any Federal income taxes they might owe.

Finally, I would like to suggest to the Committee for its consideration a much more radical approach. Much discussion has appeared about the pros and cons of requiring the capitalization of intangibles. If the Committee decides to discuss requiring the capitalization of intangibles, I think they also ought to discuss adopting a direct drilling subsidy. The plan which I have attached to the end of my statement provides a direct drilling subsidy of 25% of the intangible costs on exploratory wells. For every 10 wells drilled, the average wildcatter would have about $75,000 more money to explore with, yet, in 10 years the Federal Government would receive about $2½ billion in additional revenue even after spending $100 million a year on research into the extraction of petroleum from coal and oil shale.

FOREIGN TAX CREDITS AND DEPLETION

If national security is really the basis for all the tax incentives enjoyed by the oil industry, I cannot understand why the Internal Revenue Code gives greater tax incentives for foreign exploration and development than it does for domestic exploration and development.

Under the present system, royalty payments disguised as tax payments to foreign governments are written off dollar for dollar against U.S. taxes owed. The only reason for such special treatment seems to be that the mineral rights in these countries are owned by the government rather than private individuals as in the United States. If I were of an ironical frame of mind, I would say that these bastions of free enterprise -- the major oil companies -- were actually encouraging socialism.

Why should U.S. taxpayers be required to pay taxes to these foreign governments, just because of a quirk in these foreign governments' law? Make no mistake about it, 50¢ of every dollar paid by the oil companies to these foreign countries is paid by the American taxpayer.

What national security justification exists for that?

This money paid to the foreign countries is clearly a legitimate business expense and should be treated as such. The Internal Revenue Code should allow the oil companies to deduct these royalty payments disguised as foreign taxes from their earnings as a legitimate business expense; but the oil companies should not be allowed to continue to write off such payments dollar for dollar against U.S. taxes owed.

Finally, I think we must ask what purpose does the foreign depletion allowance serve? If encouragement of domestic exploration and development is the purpose of the depletion allowance, then allowing a foreign depletion allowance is contrary to such a purpose and is clearly contrary to the stated purpose of the oil import program. I am delighted that the House recognized this and eliminated foreign depletion allowances in H.R. 13270.

Between the foreign depletion allowance and foreign tax credits we have encouraged the oil industry to explore abroad to the detriment of domestic exploration. We have, in effect, created a monster. Supposedly, in the name of national security we have enacted tax incentives to explore for domestic sources of oil, yet, the way it works there are even greater tax incentives to explore for foreign oil sources. And, to add the finishing touch, these incentives are theoretically supposed to lower the price of oil. Yet, the oil import program and state market proration

laws force the consumers to pay ever higher prices for oil. Thus, not only does the consumer have to pay higher prices for oil than he should, he is forced to bear a great part of the oil industry's tax burden.

The taxpayer has had it. The middle class, the people who live on a salary, can no longer remain the forgotten class. They will no longer continue to subsidize the oil industry by paying high oil prices and by shouldering the oil companies' tax burden. Let us put the oil industry back into a free marketplace and let them compete. The major oil companies are not babies who require constant mothering. They are very powerful. Let us treat them as such.

Mr. Chairman, my proposal is, I think, a moderate one. It will still allow the oil industry to deduct from their gross income their actual costs of foreign exploration and development and their actual cash outlays for royalty payments to foreign countries. At the same time, it will bring in about $2.1 billion a year in new revenue while encouraging domestic rather than foreign exploration which is, after all, the supposed purpose of all the oil industry's tax incentives.

91 Congress

1 Session

S._____

H.R. 13270

IN THE SENATE OF THE UNITED STATES

Referred to the Committee on FINANCE and ordered to be printed.

Ordered to lie on the table and to be printed.

AMENDMENT

Intended to be proposed by Mr. Proxmire, Brooke, Kennedy, McGovern, McIntyre, Mondale, Muskie, Nelson, Pell, and Stephen Young

to S._____, a bill

H.R. 13270, an Act to reform the income tax laws,

viz: On page 273, line 13, strike all through line 18, page 273 and insert the following:

SEC. . PERCENTAGE DEPLETION RATES FOR OIL AND GAS WELLS.

(a) GRADUATED RATES FOR DOMESTIC WELLS.--Section 613 (relating to percentage depletion) is amended--

(1) by striking out in subsection (a) "Specified in subsection (b)" and inserting in lieu thereof "specified in subsections (b) and (d)";

(2) by striking out paragraph (1) of subsection (b) and inserting in lieu thereof the following:

"(1) DOMESTIC OIL AND GAS WELLS.--The percentage applicable under subsection (d) (1)."; and

(3) by striking out subsection (d), and by inserting after subsection (c) the following new subsections:

"(d) OIL AND GAS WELLS LOCATED IN UNITED STATES.--

"(1) PERCENTAGE DEPLETION RATES.--In the case of domestic oil and gas wells, the percentage referred to in subsection (a) is as follows:

"(A) 27½ percent-- to the extent that, for the taxable year, the taxpayer's gross income from the property, when added to (i) the taxpayer's gross income from all other domestic oil and gas well properties, and (ii) the gross income from domestic oil and gas well properties of any taxpayer which controls the taxpayer and of all taxpayers controlled by or under common control with the taxpayer, does not exceed $5,000,000;

"(B) 21 percent--to the extent that, for the taxable year, the taxpayer's gross income from the property, when added to (i) the taxpayer's gross income from all other domestic oil and gas well properties, and (ii) the gross income from domestic oil and gas well properties of any taxpayer which controls the taxpayer and of all taxpayers controlled by or under common control with the taxpayer, exceeds $5,000,000 but does not exceed $10,000,000; and

"(C) 15 percent--to the extent that, for the taxable year, the taxpayer's gross income from the property, when added to (i) the taxpayer's gross income from all other domestic oil and gas well properties, and (ii) the gross income from domestic oil and gas well properties of any taxpayer which controls the taxpayer and of all taxpayers controlled by or under common control with the taxpayer, exceeds $10,000,000.

"(2) DOMESTIC OIL AND GAS WELLS.--For purposes of this section, the term 'domestic oil and gas well' means an oil or gas well located on property in the United States or on the outer Continental Shelf (within the meaning of section 2 of the Outer Continental Shelf Lands Act).

"(3) CONTROL DEFINED.--For purposes of paragraph (1), the term 'control' means--

"(A) with respect to any corporation, the ownership, directly or indirectly, of stock possessing more than 50 percent of the total combined voting power of all classes of stock entitled to vote, or the power (from whatever source derived and by whatever means exercised) to elect a majority of the board of directors, and

"(B) with respect to any taxpayer, the power (from whatever source derived and by whatever means exercised) to select the management or determine the business policies of the taxpayer.

"(4) CONSTRUCTIVE OWNERSHIP OF STOCK.--The provisions of section 318 (a) (relating to constructive ownership of stock) shall apply in determining the ownership of stock for purposes of paragraph (3).

"(5) APPLICATION UNDER REGULATIONS.--This subsection shall be applied under regulations prescribed by the Secretary or his delgate.

"(e) OIL AND GAS WELLS LOCATED OUTSIDE THE UNITED STATES.--In the case of oil and gas wells, other than domestic oil and gas wells, the allowance for depletion under section 611 shall be determined without reference to this section."

(b) EFFECTIVE DATE.--The amendments made by subsection (a) shall apply to taxable years beginning after the date of the enactment of this Act.

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SEC. . ROYALTIES PAID IN THE FORM OF FOREIGN TAXES.

(a) DENIAL OF TREATMENT AS TAXES.--Section 903 (relating to taxes in lieu of income, etc., taxes) is amended by striking out the period at the end thereof and inserting in lieu thereof the following: ", but such term does not include any amount paid (whether or not denominated or imposed as a tax) to any foreign country or possession of the United States which--

(1) is determined on the basis of the ownership of oil and gas or oil and gas rights by the government of such foreign country or possession, or is otherwise in the nature of a royalty payment, or

(2) is determined on the basis of a constructive or artificial selling price of minerals or mineral products."

(3) Any foreign "tax" as aforesaid or any foreign tax in excess of U.S. taxes on oil and gas properties shall be deemed to be an ordinary and necessary business expense within the meaning of section 162.

(b) EFFECTIVE DATE.--The amendment made by subsection (a) shall apply to taxable years beginning after the date of the enactment of this Act.

United States of America

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SPECIAL TAX TREATMENT FOR OIL INDUSTRY INJURES NATION'S SECURITY

Mr. PROXMIRE. Mr. President, I am very grateful to the distinguished Senator from Louisiana for lifting the quorum call. It is most appropriate that he should be the man who should do it, because I am going to speak on oil this afternoon. I expected to make a fairly short speech, and perhaps it will be short.

Mr. LONG. Mr. President, will the Senator yield?

Mr. PROXMIRE. Yes, indeed.

Mr. LONG. If my friend the Senator from Wisconsin can tell me something I do not know about oil, I am very anxious to hear it.

Mr. PROXMIRE. Mr. President, I doubt whether anybody can tell the Senator from Louisiana anything he does not know about oil; he is very expert in this area, as he has demonstrated time and again on this floor, especially when he enlightens this Senator.

Mr. President, the time has come for Congress to take dead aim at the notorious depletion allowance, which too long has served as an obstacle to tax reform. The Senator from Louisiana (Mr. LONG) has invited any interested Senator to submit amendments to his committee, and when the tax bill comes to the Senate, I intend to take him up on his offer when the matter is before his committee.

Mr. LONG. Mr. President, will the Senator yield?

Mr. PROXMIRE. Yes, indeed.

Mr. LONG. The Senator is going to get a better chance than that. He is going to get a chance to vote against every businessman in America. We will give the Senator a broad opportunity.

Mr. PROXMIRE. I am sure the Senator from Louisiana will give me every opportunity that I desire to vote on tax legislation, and I certainly do not intend to vote against every businessman in America. I intend to vote against the surtax when it comes up.

Mr. LONG. Will the Senator yield further?

Mr. PROXMIRE. Yes, indeed.

Mr. LONG. Does the Senator know what the biggest loophole is in the tax law? What is the biggest tax loophole?

Mr. PROXMIRE. I would like to know the opinion of the Senator from Louisiana.

Mr. LONG. Capital gains. What is the Senator's opinion on that one?

Mr. PROXMIRE. I think the capital gains law, as presently drafted, could be construed, perhaps, as a loophole. However, I would not want to, although I am sure some Senators would, repeal it outright, because I think there is some merit to it.

Mr. LONG. Will the Senator yield further?

Mr. PROXMIRE. I yield.

Mr. LONG. The Democratic policy committee invited Mr. Stanley Surrey, whom they regarded, I assume, as the best tax reformer there is in America, to come down and explain his views on taxes for them, and he did not even mention depletion among the major items. He said capital gains is the biggest loophole there is. Is the Senator prepared to vote to do something about capital gains?

Mr. PROXMIRE. Mr. President, the difficulty with discussing this whole subject is that it is a matter of value judgments. I am shocked and surprised that Mr. Surrey did not mention oil depletion, because I have great respect for Mr. Surrey, and I think this is certainly something that ought to be discussed by as expert a man as he certainly is.

Nevertheless, I will not defer in my judgment as to where reform should come to Mr. Surrey or anyone else. It is not strictly a matter of expertise; it is a matter of where I think there is more need for reform. I think there is more need in the area of oil depletion than in most other areas. Furthermore, I am sure it is the most notorious loophole.

Mr. LONG. Mr. President, I am sure the Senator from Wisconsin is getting ready to respond to my speech, in which I showed with charts and tables that the oil industry pays more taxes than anyone else.

Mr. PROXMIRE. I am sure they pay less than anybody.

Mr. LONG. It took the Senator from Wisconsin almost a month to prepare that speech. I am sure he is now going to argue that they pay more taxes than somebody.

Mr. PROXMIRE. I intend to show that they pay less taxes than almost everybody.

Mr. LONG. The point is that the biggest loophole in the tax law is capital gains, and if you had any advice, the people advising you would tell you the best loophole is real estate, but money-wise, there is more money in capital gains. So it just depends on whether you are talking about quality or quantity. Quality-wise, real estate; quantity-wise, capital gains. It just depends on what you have in mind, whether you are talking about volume or whether you are talking about percentage points.

Does the Senator know, aside from those two, what is the next biggest steal?

Mr. PROXMIRE. May I say to the Senator from Louisiana, he can talk about quality and quantity all he wants to, but what I am saying is we could reduce the oil depletion allowance and could increase revenues to the Treasury with, I think, a fairly modest reduction, by about $600 million. I realize that there are other areas where the return to the Treasury might be greater. You might consider those loopholes. The Senator has properly pointed out two of them which would raise more money, obviously, than if we would remove the oil depletion allowance entirely, and I have not proposed that, nor does any Senator that I know of. I am proposing to reduce it, at most, to 15 percent for the large producers, and not at all for the small ones.

Mr. LONG. Mr. President, I am going to give the Senator an opportunity to vote on the depletion allowance, as I promised him. Is he willing to do something about capital gains?

Mr. PROXMIRE. I will take a long, hard look at it. I shall not vote for any amendment until I find out what it is. It depends on a number of things.

Mr. LONG. You see, Senator, you can afford, in your position from Wisconsin, to tax the oil people, just like I can afford to tax the dairy farmers. We do not have a great many dairy cows in Louisiana. We run some old, catch-as-catch-can beef cows, but in dairy farming as such we are an importer. So I guess I could afford to put a real heavy tax on the dairy farmers.

Mr. PROXMIRE. We just want to be treated like everyone else.

Mr. LONG. The people of the Senator's State are being treated better than most people, if I do say it, even those in the dairy farming business. The Senator's people get the benefit of this capital gains advantage, and so do mine. If the Senator wants a reform in the tax laws, I would like some indication from the Senator from Wisconsin that he would be willing to vote to do something about capital gains, which is the big one in terms of dollars.

Mr. PROXMIRE. Let me say to the

Senator from Louisiana that I will be very much interested in his capital gains amendment. I am sure it will be an amendment that will have a great deal of merit; and if I were to guess at this point, I would guess that I would probably support it. But I think that the Senator would certainly expect any Senator to want to take a look at the amendment, and listen to the argument of the Senator from Louisiana, before he makes up his mind.

Mr. LONG. That is fair. Now, quality-wise, the biggest advantage there is in any business seems to be in real estate. Would the Senator be willing to vote to do something about the tax advantages that exist in the real estate business?

Mr. PROXMIRE. I make the same answer as on the other area, as to real estate capital gains. I think it is just a matter of taking a good look at the amendment, and seeing what the very able staff the Senator has been using suggests, what their arguments are, and what the committee report says, and then make up my mind. I just do not know. Again, I think there is a good possibility I would vote for that.

Mr. LONG. If the Senator is interested in comprehensive tax reform, he ought to be interested in the situation of the people who just do not pay anything, just zero.

There is old Mrs. Gotrocks; she inherited stock in the Houdini Co. let us say. The stock is now worth 10,000 times what it was worth, and it looks as though she is going to owe a 77 percent tax on a million dollars of income that she has spent.

So she takes a million dollars worth of her stock, and puts that over into the Mrs. Gotrocks Foundation. Mind you, she has paid no tax on the enhanced value. When she inherited the stock, it was worth only 1 cent a share, and now it is worth $1,000 a share. But she transfers the stock from Mrs. Gotrocks to the Mrs. Gotrocks Foundation, and as a result of transferring $200,000 worth of stock from her own personal account to her foundation account—which she still controls, and votes the stock—and does not invest a penny of it in charity, mind you, she thereby avoids paying any taxes.

It is not well to do something about that? That is a complete fraud and fake, based on a law that was passed to let a nun who had taken a vow of poverty contribute her money to charity.

Is the Senator willing to confine it to the case of that Philadelphia nun, so Mrs. Gotrocks cannot contribute to the Gotrocks Foundation, and get away with deducting $200,000 in taxes?

Mr. PROXMIRE. I believe I would be very willing to support the Senator's amendment. The Senator has made a very able argument in favor of it.

Once again, I would like to take a look at the whole amendment before listening to the argument and making a final commitment. It sounds as if the Senator is making a strong case.

Mr. LONG. Mr. President, not all of the people in the oil business are successful. I know a lot of them who have lost everything that they put in it.

The successful ones pay roughly one-third of their gross income in Federal income taxes. That is Federal taxes and does not count the fact that they pay many other local taxes. For example, they pay 10 percent of their gross income in my State before getting anything. Actually they pay about 43 percent of their gross in taxes.

Is the Senator all that confident that taxpayers who are paying on that basis are favored taxpayers?

Mr. PROXMIRE. Mr. President, at this point I inquire if I have the floor.

The PRESIDING OFFICER. The Senator from Wisconsin has the floor.

Mr. PROXMIRE. I say to my friend the Senator from Louisiana that I will continue to answer him on that subject in some detail. However, I think it would be much more orderly and useful to the Senator from Louisiana and me if I might proceed for another 15 or 20 minutes before replying further to the Senator from Louisiana.

Mr. LONG. Would the Senator answer one more simple question, yes or no?

Mr. PROXMIRE. I will not agree to answer anything until I know what the question is. I will be happy to listen to the question.

Mr. LONG. Will the Senator yield for one question?

Mr. PROXMIRE. I yield for one question.

Mr. LONG. The best I remember, the last time we debated the matter, I took the floor and the Senator left the floor rather than listen to me. Would the Senator be willing to stay around this time?

Mr. PROXMIRE. All Senators have to leave the floor at times. I had been on the floor for a long time on that occasion. I came back later.

The Senator implied that he had driven me off the floor. I suppose that in some ways the senatorial winds can do all kinds of things.

I did have to leave the floor. It is one of those things that we cannot avoid. However, I did come back before the Senator finished.

Mr. LONG. On the last occasion, the Senator refused to yield for a question. I said that if I knew as little as the Senator did, I would not yield. The Senator did not yield, and when I took the floor, he left.

Mr. PROXMIRE. I listened to the Senator for a long time.

Mr. LONG. The Senator did not listen for long.

Mr. PROXMIRE. I will give the Senator a copy of my speech. If he wishes to, he may follow it, and I will be delighted to answer questions later.

Mr. LONG. I make the same promise. When the Senator gets through, I will consider it here today or on some future day. I will give the Senator a response. I enjoy the running debate.

Coming from a State that produces no oil, the Senator is anxious that we pay all the taxes. If I came from a State that produced no oil, I would be eager for oil producers to pay all the taxes.

I daresay the dairy farmers are not paying as much as the oil people.

The running debate will not come to an end.

Mr. PROXMIRE. I am sure the running debate will not come to an end. However, I am convinced that the dairy farmers of Wisconsin want to pay the same taxes as people elsewhere. They want to be treated the same. We do not want to impose any unfair or discriminatory taxes on people who produce oil in Louisiana or elsewhere.

I strongly favor some depletion allowance which would be favorable to them. I favor repealing other taxes. If we give in on the surtax and do not insist and fight for tax reform, we will never get ahead.

Mr. President, I have always felt that the oil industry pays too little in taxes any way you look at it. My distinguished colleague, the Senator from Louisiana (Mr. LONG), disagrees and on May 16 made a speech on the floor of the Senate defending his position.

POINTS TO BE MADE

Because the subject of the oil industry's privileged tax position is so complex, as a guide to my remarks, I would like to list the points I will make.

First. Both the Senator from Louisiana and I agree that the oil industry pays less in Federal taxes than other industries. The Senator from Louisiana indicated that the oil industry pays 24 percent of its net income in Federal taxes, compared to about 40 percent for all industries. Based on his data, my analysis indicates the disparity is even greater: 22.2 percent for the oil industry versus 44.2 for other industries.

Mr. LONG. Mr. President, will the Senator yield?

Mr. PROXMIRE. I will be happy to yield to the Senator from Louisiana after I have finished. I realize that the Senator disagrees with the statement I have just made. I will be delighted to go over it point by point later on.

Mr. LONG. Will the Senator yield for one simple question?

Mr. PROXMIRE. I yield for one simple question.

Mr. LONG. Mr. President, both the Senator and I agree that the oil people pay less in Federal income taxes. If the Senator wants to use the words "all taxes," then I shall prove that they pay more than anyone else.

Mr. PROXMIRE. I am including everything when I say that.

Based on this data, my analysis indicates the disparity is even greater: 22.2 percent for the oil industry versus 44.2 percent for other industries. However, if book pretax net earnings derived from SEC reports, the figures which are used to determine dividends, are used as the measure, the oil refining industry only pays 11 percent of its net income in Federal taxes, compared to 40.8 percent for all manufacturing concerns.

Second. Even if we add all State, local, and foreign taxes, including severance, property, and production taxes, to the Federal taxes paid by the oil industry, its total tax burden is still lower than just the Federal tax burden on other industries.

Third. Our tax policy should not interfere with the forces of the market

economy, unless there is a compelling national need to do so. A nonneutral tax policy adopted without adequate justification causes misallocation and waste of our scarce domestic resources and, thus, injures our national security.

Fourth. Even if we accept the thesis that the oil industry needs special incentives to explore for oil, the present tax structure is an inefficient inconsistent, wasteful, and unfair way of achieving this goal. Let me go over each of those adjectives because I mean each of them. It is inefficient because it costs the American taxpayer over $10 in lost tax revenue for every $1 in additional reserves. It is inconsistent because it gives greater tax incentives to explore for oil abroad than here at home. Foreign royalty payments disguised as taxes are written off dollar for dollar against U.S. taxes owed, whereas such payments here are ony deductible from income. It is wasteful because it encourages overcapitalization in the oil industry to such an extent that it takes $2 worth of capital in the oil industry to produce what $1 worth of capital will produce in other industries. Finally, it is unfair because it allows big income taxpayers to hide large amounts of income from taxation thereby shifting the tax burden onto those less able to pay.

Mr. LONG. Will the Senator yield?

Mr. PROXMIRE. I wish the Senator would wait until I finish my remarks so that we may have an orderly debate and have some continuity in my remarks.

Mr. LONG. I have been reading the remarks of the Senator. The Senator has mentioned my name time after time. The Senator has declined to yield to me.

I will read the speech and I will ask one simple question and leave. It is this simple. Is the oil industry the only industry receiving benefits on foreign income, or does everybody get such benefits?

Mr. PROXMIRE. There is not any question——

Mr. LONG. The answer is yes, is it not?

Mr. PROXMIRE. Comprehensively, the answer is yes.

Mr. LONG. So, the Senator did not know what he was talking about. He said that everybody gets it.

There is a man whispering to the Senator. He is supposed to know something about taxes. Where did he come from?

Mr. PROXMIRE. This is Mr. Martin Lobel, a very able man who has done some very fine work.

It seems to anger the Senator that Mr. Lobel has whispered to me. He is one of the most efficient men I have known on the Hill. If the Senator wants to attack him, I am sure it will not bother Mr. Lobel.

Mr. LONG. What bothers me is that the last time he whispered something in the Senator's ear, the Senator did not say anything.

I ask the Senator what he said this time?

Mr. PROXMIRE. Some of the advantages of having staff members on the floor is that one can listen to what they say. Or it does not have to do what people who peer in one's car, whether it be the Senator from Louisiana or Mr. Lobel.

I am sure there have been things that the Senator from Louisiana has whispered in my ear that he would not want me to say audibly on the floor and that there are things I have whispered in his ear that I would not want him to say audibly on the floor.

Mr. LONG. That is a fair proposition. The Senator may make his speech and I will not interrupt him any more.

Mr. PROXMIRE. Fifth. Congress must take immediate steps to cure this cancer in our economy. Congress must develop a much more rational and less expensive means of achieving the supposed objective of our present system—a secure source of oil during emergencies.

TAX FACTS

On the basic issue, Senator LONG and I agree. The oil companies do pay a much lower proportion of their earnings to the Federal Government in taxes than do other industries.

Senator LONG's figures show that the oil industry pays about 24 percent of its net income in Federal taxes, while the average manufacturing company pays 42 percent of its net income in Federal taxes.

However, these figures overstate the actual tax burden on the oil industry because net income as defined for tax purposes does not include substantial amounts that have been deducted through the use of tax loopholes. Net income for tax purposes or taxable income, if you wish, is usually lower than actual income or in the accountant's term, pretax book net income and the smaller the basis against which tax burden is measured the greater the apparent tax burden.

The taxable income of the oil industry is approximately half of its actual income. According to the Statistics of Income for 1965, published by the Internal Revenue Service, only 44 to 51 percent of the oil industry's actual income—depending on how one treats the tax credit—is considered to be taxable income, whereas 97 percent of the actual income of all manufacturing concerns, excluding the refining industry, is considered to be taxable income. Thus, any attempt to compare tax burdens on the basis of taxable income is going to greatly overstate the true tax burden on the oil industry, even if, as my good friend Senator LONG has done, we add to the taxable income the amounts excluded on account of the depletion allowance. The depletion allowance is only one of many tax loopholes enjoyed by the oil industry. The oil industry also enjoys many other tax loopholes such as intangible expensing which allows the oil industry to write off in 1 year expenses that other industries must capitalize over a number of years. Still another privilege which it enjoys is the ability to write off loyalty payments disguised as tax payments to foreign governments dollar for dollar against U.S. taxes owed.

A much more accurate comparison of the tax burden on the oil industry as compared with other industries can be obtained from the actual income figures of the various industries published by the Securities and Exchange Commission and the Federal Trade Commission. These figures I want to emphasize represent the actual income of the industries; these figures are the ones used by the companies themselves when reporting their income to their stockholders. Based on these figures, all manufacturing corporations paid 40.8 percent of their pretax earnings in Federal taxes in 1968, whereas in 1968 the petroleum refining industry paid only 11 percent of its pretax earnings in Federal taxes.

Mr. LONG. Mr. President, will the Senator from Wisconsin graciously yield one more time?

Mr. PROXMIRE. Very well; I yield.

Mr. LONG. Would the Senator mind correcting his remarks and say "income tax"? It is Federal income taxes on which these people receive a break. In terms of overall taxes they pay more than anybody else does. As to one particular tax, the petroleum industry does get a break. It is the only way they can operate, considering that they are the most heavily taxed of all taxpayers in America.

So when the Senator says "Federal tax," would he be willing to say "Federal corporate income tax" or "Federal personal income tax," as the case may be?

Mr. PROXMIRE. I shall talk about the total tax burden in a minute. I do exclude, it is true, the Federal excise tax. My assumption is that that is a tax paid by the user of gasoline. When the Senator from Louisiana and I go to a gasoline station and buy gas, we pay taxes. The dealer indicates the amounts of Federal excise tax and State tax.

My computation, according to the way I have figured the tax, is of the amount borne by the user, not by the industry.

Mr. LONG. The Senator is excluding State taxes?

Mr. PROXMIRE. That is correct. I am speaking only of Federal taxes.

Mr. LONG. Would the Senator mind explaining who pays more money to friendly foreign governments than anybody else on earth, so far as industry is concerned? I am speaking about friendly foreign governments. Who pays more taxes to them than anybody else? The Senator can say it in one word. Can he say what industry it is?

Mr. PROXMIRE. That depends on the kind of taxes the Senator is talking about. Is he referring to income taxes? If he wants to construe royalty payments as taxes, as the petroleum industry is able to construe them, so far as the Internal Revenue Service is concerned, it is true that the petroleum industry does make higher payments; that is true. I do not have any figures to vertify that. If the Senator tells me that that is the fact, I will agree that it is.

Mr. LONG. One of the representatives of the biggest overseas oil company in America—I think it is the biggest oil company in America—is a friend of mine who has the same name as mine, although we are no relation. He is a Texan; I am from Louisiana. I spoke with him about reducing the depletion allowance for overseas oil.

He said, "Senator, you can reduce it all you want to; but after the foreign governments get through putting it to

us," we have so many excess tax credits to carry over we will not owe any money here. Cut our foreign depletion all you want to and we still would owe you nothing. The same, however, would not be true of some smaller companies." And what does the other fellow pay to foreign governments? All other countries tax the foreign operations of their companies on a more generous basis than we tax ours—or in some cases do not tax them at all. I think the Senator from Wisconsin knows that, does he not? If he does not, he ought to find it out. Let the Senator's assistant whisper it in his ear.

Mr. PROXMIRE. I will ask Mr. Lobel to take a seat on the couch.

The PRESIDING OFFICER (Mr. SAXBE in the chair). The Senator from Wisconsin has the floor. Does he yield to the Senator from Louisiana?

Mr. PROXMIRE. No; I shall continue with my speech.

Mr. LONG. Does the Senator mean that he is not going to answer my question?

Mr. PROXMIRE. No; I shall not yield further until I have finished my speech, which will be in a relatively few minutes if I am not interrupted.

As a matter of fact, even if we use Senator LONG's figures, the disparity between the tax burden on the oil industry and other industries is greater than he has indicated. An accurate comparison of relative tax burdens requires that we exclude the oil industry from the figures for all industries, otherwise the low tax burden on the oil industry which has such a large percentage of all industries' profits will drag down the average tax burden on all industries. Likewise, I have added back into the figures for the oil industry the approximate amount of tax revenue lost because of intangible expensing. On this basis, using Senator LONG's own figures, we find that the Federal tax burden on all industries, exclusive of the oil industry, amounted to 44.2 percent of their income, while the tax burden on the oil industry, which is admittedly overstated, amounted to only 22.2 percent.

TOTAL TAX BURDEN

I now come to the subject of the total tax burden. The Senator from Louisiana has just raised the point about taxes by foreign governments.

Even if we include State and local and foreign taxes to the Federal income taxes paid by the oil industry, the oil industry pays less in taxes than most industries pay in Federal taxes alone.

Senator LONG inserted a table beginning on page 15261 in the May 16 CONGRESSIONAL RECORD showing the total tax burden, including State, local, foreign, and Federal taxes of some of the major refiners. These figures include severance, production, and property taxes which, as Senator LONG quite correctly pointed out, my previous figures did not include.

Because I have a small staff, I could not go through all the figures as Senator LONG's Finance Committee staff did. However, because the amount of taxes paid by Atlantic Richfield seems to be a bone of contention, I did examine those figures in detail. My analysis indicates that Senator LONG inadvertently overstated the total tax burden on Atlantic Richfield and, I would assume, on the other oil companies reported.

For example, according to Senator LONG's table, Atlantic Richfield paid no Federal taxes on a net pretax income of $145,259,000 in 1967. It supposedly paid 10.5 percent of its income, or $15,264,000, in foreign and State taxes. It also supposedly paid 22.6 percent, or $32,991,000, of its income in severance, production, and property taxes. However, even if we assume that the foreign taxes are really taxes and not disguised royalty payments, these percentages greatly overstate the tax burden on Atlantic Richfield.

In order to find out what percentage of its net income Atlantic Richfield paid in taxes we have to find out what its net income was before taxes. This is done by taking the after tax net income and adding back the amount of taxes paid by Atlantic Richfield.

I can understand how the Senator from Louisiana (Mr. LONG) became confused. According to Atlantic Richfield's annual report for 1967, its pretax income was the figure quoted by the Senator from Louisiana, $145,259,000. However, it also stated that its after tax income was $130,005,000. This means that Atlantic Richfield only added back the foreign and State taxes. It did not add back the severance, production and property taxes which the Senator from Louisiana (Mr. LONG) has included in his chart. If we add back all the taxes paid by Atlantic Richfield to its after tax income, we find that its total tax burden is much lower than indicated.

Atlantic Richfield paid the following percentages of its total pretax income in taxes in 1967:

Federal taxes	0
State and foreign taxes	10.5
Severance, production, and property taxes	16.6

This means that Atlantic Richfield paid a grand total of 27.1 percent of its income in all taxes, Federal, State, local, and foreign. Compare this with just the Federal tax burden borne by the average manufacturing company of 40-plus percent. And they, too, must pay State and local taxes as does the oil industry, probably at a higher rate because of their greater payroll taxes, and so forth.

TAX POLICY GOALS

Although the analysis of Senator LONG's figures shows conclusively that the oil industry does not pay any where near the amount of taxes, Federal, State, local, or foreign, paid by other industries, we ought not to become lost in figures. We ought to look behind the figures. We ought to examine the tax policies which allow the oil industry to escape taxes paid by other industries, what the consequences are, and whether they can be justified.

The Federal income tax is perhaps the best measure for comparing relative tax burdens in various industries since it is by far the most important tax on return to invested capital. As such it should be as neutral as possible; that is, the return to capital invested in one use should not be taxed more heavily than capital invested in another use—unless there is an overwhelming national need.

In the United States, our economic policy has been to rely upon the market forces to allocate scarce economic resources and to intrude upon the market forces only when there is a compelling need to do so. Unequal tax treatment is a clear intrusion upon market forces. If Federal taxes treat income from a certain industry more favorably than other industries, over time under competitive conditions, capital will flow into the favored industry until the return on capital in that industry is equal to the return from capital invested in less favored industries. This leads to a misallocation of scarce capital, inflationary pressures, and waste.

If I may quote from Profesor of Economics Walter J. Mead's, testimony before the Senate Antitrust and Monopoly Subcommittee:

> The effect of favored tax treatment is to reduce tax costs for oil companies relative to firms in other industries. These measures taken together substantially raise the expected after-tax profit rates on oil industry exploration and development rates in what would otherwise be submarginal uses of scarce capital. Investment in petroleum exploration and development is indeed expanded to the point where the after-tax return is approximately equal to that which may be obtained on alternative uses of capital. . .
>
> Oil industry spokesmen have defended their various subsidies with the question "If we receive all the subsidies which our critics allege, why is our rate of return on invested capital not substantially higher than other nonsubsidized industries?" The answer to this question is that a subsidy will raise the profit rate at the point in time at which it is conferred.
>
> Its effects, however, are eroded away with time a producers react to their more profitable situation by expanding into otherwise submarginal areas. This expansion leads to a decline in the rate of return toward a normal yield and to resource misallocation as well.

Mr. President, what I am saying is that the subsidy to the oil industry does not result in higher profits. It results in misallocation of resources as more capital enters the oil industry, to take advantage of the tax privileges which the industry enjoys.

NATIONAL SECURITY AND OIL TAXES

The supposed justification for the special treatment enjoyed by the oil industry is national security, although the recent attack on the Treasury Department commissioned study of the oil depletion allowance by the Mid-Continent Oil and Gas Association seemed to be based on the premise that if we change the depletion allowance the price of gasoline will go up.

The catechism chanted so long by the oil industry that they actually believe it is that if the oil industry does not have all these special tax breaks and other governmental instructions into the market on behalf of oil then our country would be in dire straits—we would become utterly dependent for oil upon those rascals in the Middle East who are just waiting for that to happen so they can shut us off.

First, a few facts about the domestic oil industry ought to be established. It is a

very healthy and powerful industry by any criteria. In 1968 the combined net profits of the 12 largest U.S. oil companies was just a fraction under $5 billion. Each of those 12 companies, moreover, has set new profit records in each of the last 4 years. Just 4 years ago, the profits of these 12 companies totaled $3.7 billion. During that short span of time, they have, thus, increased their profits by just under $1.3 billion—a 33.5-percent increase.

According to a survey by the First National City Bank of New York published in its April 1969 Monthly Economic Newsletter, a total of 2,250 manufacturing companies showed a net income of $26 billion in 1968. Of the 2,250 companies, the 99 oil companies had a total net income of $6.1 billion or almost 25 percent of the after tax earnings of the entire list. And, according to the same survey, the oil companies as a group enjoyed the second highest return on sales of 9 percent, almost twice the average return for all companies surveyed. Although the oil industry's return on invested capital was 12.8 percent, just under the 13.1-percent average for the entire 2,250 companies, this is the result of our tax policy as was indicated in Professor Mead's testimony. What happens is that capital comes into the hands of industry to achieve that purpose.

Even if we accept the thesis that our national security requires special incentives to encourage domestic exploration for oil, the present tax incentives are inefficient, inconsistent, wasteful and unfair ways of achieving this goal. I will not touch upon the other governmental intrusions into the marketplace on behalf of oil which accentuate the waste of scarce capital such as the mandatory oil import program and State market proration laws which guarantee high oil prices, because I have spoken about them before. However, I do not think we ought to forget that the oil industry is the beneficiary of many governmental favors in addition to all those tax breaks.

No one, least of all myself, would deny that national security should be our prime consideration. However, all the governmental distortions of the free marketplace to benefit the oil industry have actually been impairing our national security. Our national security requires that we have a strong economy which in turn requires that we do not waste our resources. Here we have governmental policies which affirmatively encourage waste of scarce capital and, I might add, depletion of our natural resources all, irony of ironies, in the name of national security.

INEFFICIENT

Almost all the tax benefits enjoyed by the oil industry are tax credits. These are general policy tools which benefit any activity that qualifies under the particular tax provision. Direct appropriations or expenditures, on the other hand, can be as selective or as broad as Congress wishes.

The tax policies we have now are supposed to encourage the exploration for domestic sources of oil, yet they are so general the oil industry receives tax benefits for activities they would have undertaken even without the tax breaks. In other words, although tax credits are supposed to subsidize the exploration for oil they also subsidize all the other activities of the oil companies which they would have undertaken even without the tax subsidy.

The oil depletion allowance and intangible expensing in 1968 cost the American taxpayers $2.25 billion in lost tax revenue according to the Treasury Department's Tax Reform Studies and Proposals submitted to the Finance Committee. However, in order to be fair to the oil industry, I think I ought to use the estimated long range revenue loss of $1.6 billion a year. This $1.6 billion was spent just as if Congress had appropriated it with one big difference: Congress had no say in how it was spent. The big problem with such "back door spending" is that it is seldom reviewed by either Congress or the executive branch, accurate data on its costs and benefits are often difficult to obtain, and too frequently it is wasted on activities which would have been undertaken without it.

This point may be seen easily when we compare the congressional scrutiny devoted to the money spent because of the depletion allowance and the money directly expended for other projects costing far less. The $1.6 billion in back door spending on the oil depletion allowance and intangible expensing is three times what was budgeted during fiscal 1969 for Federal law enforcement, 15 times as much as the cost of running our Federal judicial system, three times the budgeted amount for school lunch and food stamp programs, five times as much as is budgeted for low-rent public housing, and four times the allotment for the Alliance for Progress.

The percentage depletion allowance is an extraordinary tax benefit because it permits the tax-free recovery of an average of 1¼ times the original investment in an oil well. For this reason, the percentage depletion deduction is a subsidy, not merely a mechanism for the recovery of capital investment. In addition, that portion of the percentage depletion deduction which represents ordinary tax-free recovery of capital investment costs is usually recovered more rapidly than would be allowed by the usual depreciation methods which other industries are required to use. Thus, percentage depletion confers two benefits: deductions about 19 times in excess of actual costs, and accelerated deductions of initial costs.

It is also remarkably inefficient. The Treasury Department estimated in its study:

> The Federal Government is paying, in tax benefits, about $1.6 billion for resources which the market values at $0.16 billion.

In effect, we are paying over $10 for every $1 in additional oil reserves.

But, says the oil industry:

> If we eliminate the depletion allowance our reserves will disappear and we will become dependent upon those who control middle eastern oil.

The Treasury Department analysis indicates that this is just not true. If the depletion allowance were completely eliminated, the Treasury Department report estimates that instead of a 12-year oil reserve we would only have an 11-year reserve. Surely, this is enough time to compensate for any conceivable interruption of our oil supply.

Finally, I might add, the depletion allowance feeds the fires of inflation. We saw, just a few months ago, how the oil companies raised their prices for crude oil in order to get a larger depletion allowance and thus hide more of their income from taxation.

The intangible expensing provisions of the tax code are also extraordinary because they permit the immediate tax-free recovery of most of the costs of exploring and drilling for oil. Other industries can only recover their capital investments over the approximate life of the capital equipment. For example, a farmer in Wisconsin who buys a tractor can only recover his capital investment in it over a period of years as the tractor wears out. If, however, he had enough money to invest in oil exploration and drilling, he could recover his capital investment in 1 year.

As a matter of fact, the American consumer does not even get the benefit of the lower oil prices that he should from these tax subsidies. Theoretically, the oil depletion allowance, intangible expensing, and all the other tax loopholes benefiting the oil industry, are subsidies paid for by the American taxpayer in increased taxes and should result in lower oil prices. Yet, the anachronistic State market proration laws—laws which forbid the oil companies in Texas or Louisiana to pump at more than 50 percent of capacity, and, as a matter of fact, Texas just cut their allowable production of 400,000 barrels for July, because that is all the oil companies wanted to buy—keep the price of oil at artificially high levels and thus deprive the taxpaying consumers of the lower prices they should be getting.

I can think of no better way to sum up the deficiencies of these tax provisions than by quoting from the Treasury Department's tax study which I mentioned before:

> Percentage depletion is a relatively inefficient method of encouraging exploration and the resultant discovery of new domestic reserves of liquid petroleum. This is in part due to the low sensitivity of desired reserve levels to the price subsidy represented by percentage depletion, and in part to the inefficiency of the allowance for this purpose, since over 40% of it paid for foreign production and non-operating interests in domestic production.

The report went on to note, and I think this is very significant, because the report is the first impartial analysis of the cost of oil's special tax privileges to the American taxpayers—

> The investigations reviewed during the course of the study were in substantial agreement that the current situation was one of economic inefficiency, and that any *changes were almost certain to be beneficial to the economy in the long run.*

Let me repeat that:

> Any changes were almost certain to be beneficial to the economy in the long run.

There are so many changes, Mr. President, downward in which the depletion allowance would be reduced.

INCONSISTENT

Although the supposed justification for all of oil's tax loopholes is the alleged need for more incentives to explore for domestic sources of oil, our tax policy is contrary to such a goal, because it gives greater incentives to explore in foreign countries than here at home. This seems unbelievable, but it is true.

Royalty payments which are disguised as taxes to foreign countries, particularly in the Middle East, the area which is most likely to cut off our supplies of foreign oil, are credited against U.S. taxes owed. This means that every dollar paid by the oil companies to these foreign countries in disguised royalty payments is $1 less they owe to the U.S. Government. Yet, such payments here in the United States are only deductible from ordinary income, not from the amount of taxes owed by the companies

The American consumer and taxpayer is being taken both ways Not only is he bearing a great part of the oil industry's fair share of the tax burden, because of these great tax incentives to explore abroad, but he is also prevented from benefiting from all this inexpensive foreign oil, because the oil import program limits the amount of the inexpensive foreign oil that can enter the U.S. market. All this is done in the name of "national security."

Surely, this type of thinking could not pass the muster of any rational man. The only reason that the over $1.6 billion in taxes is being spent this way is that Congress has not really reviewed the oil tax situation since 1926, when the depletion alowance was set at its present level. This is the great fault of tax credits. They are not subject to continuing scrutiny and justification. They grow and imbed themselves in our economy until any connection with their original rationale is purely coincidental.

Surely, Congress can devise some much cheaper way to provide for a secure source of oil during emergencies. Between the oil import program and all of oil's tax loopholes, the American consumer and taxpayer is being forced to subsidize the oil industry by over $7 billion a year. It is unbelievable that we cannot devise a much cheaper and more effective way of protecting ourselves from emergency interruptions of our oil supplies.

WASTEFUL

Because all these special tax privileges have riddled the economic fabric of our country, gigantic sums of scarce capital have fallen through these loopholes and been wasted. I have already touched upon this point before and do not wish to belabor it, but I do wish to point out the findings of one of our leading tax experts, Arnold Harberger. Writing for the Joint Economic Committee in its study entitled "Federal Tax Policy for Economic Growth and Stability," he indicated that it takes about $2 worth of capital investment in oil exploration to produce as much product as $1 of capital invested in other industries. This, in effect, confirms Professor Mead's statement about the uneconomic conditions in the oil industry because of the oil loopholes. As a matter of fact, Professor Adelman of MIT estimates that if these economic inefficiencies which are encouraged by our tax laws could be eliminated, the price of oil could drop by as much as $1 a barrel. Professor Steele of the University of Houston went even further He indicated that about 95 percent of our present output would still be produced if the price of oil dropped from its present level of about $3.50 a barrel to $2 a barrel.

How can we encourage these uneconomic conditions in the name of "national security"?

UNFAIR

Our tax policy is supposed to be fair. Fairness in taxation means two things: First, taxpayers with similar incomes should pay similar taxes, and second, persons with higher incomes should be taxed more heavily than persons with lower incomes.

Our tax policy so far as oil is concerned is not fair to the American taxpayer. Those taxpayers who derive their income from oil pay lower taxes, if any, than those who get their income from other sources. This is not fair. The source of the income should not make any difference as to the amount of taxes paid. Why should a person whose income is from wages or salary have to pay more in taxes than someone who gets his income from oil?

Second, all the oil tax loopholes allow many high-income taxpayers to escape from paying taxes or from paying their fair share of taxes. This was pointed out dramatically by former Secretary of the Treasury, Joseph W. Barr, in testimony before the Joint Economic Committee. One hundred and fifty-five individuals with adjusted gross incomes exceeding $200,000 in 1967 paid no Federal income tax.

Now, I do not claim that all these 155 individuals with incomes over $200,000 who did not pay any Federal taxes relied exclusively on the oil tax loopholes to escape taxation; but I do say the oil tax provisions are one of the most important loopholes through which this income escaped taxation.

I think that we in Congress should also pay close attention to the statement of Henry H. Fowler, Mr. Barr's predecessor as Secretary of the Treasury:

> Under present law, 2.2 million families with incomes below the poverty level are required to pay Federal income taxes . . . On the other hand, there are a sizable number of individuals with very high incomes who pay little or no income tax. Indeed, although the Federal income tax is designed and understood to be progressive, the fact is that many persons with incomes of $1 million or more actually pay the same effective rate of tax as do persons with incomes only 1/50th as large.

How can we in Congress allow a system to continue which taxes 2.2 million families with incomes below the poverty level, yet allows people with incomes over $200,000 a year to escape paying any taxes at all? Why should those below the poverty level be forced to pay the taxes that should be paid by the oil barons?

WE MUST DO BETTER

If I may quote from the Department of the Interior's study, "U.S. Petroleum Through 1980":

> (Government) has sought to encourage discovery of oil and gas by favorable tax treatment, by limiting imports, by making public lands available for mineral leasing, and by regulating production to provide order and stability while avoiding the physical Waste of resources. In doing so it has involved itself in matters of both supply and price.

We have achieved the goal stated by the Interior Department's report; we have encouraged the discovery of oil and gas. But at what cost?

The cost to the American consumer and taxpayer for just the oil import program and some of the tax loopholes is in excess of $7 billion a year.

The justifications for such excessive costs are unconvincing.

I ask unanimous consent that articles by Patrick Young of the National Observer and Spencer Rich of the Washington Post be printed in the RECORD at the conclusion of my remarks.

The PRESIDING OFFICER. Without objection, it is so ordered.

(See exhibit 1.)

Mr. PROXMIRE. Mr. President, both of these reporters are fine, hardnosed newspapermen beholden to no one and both of these reporters reached the conclusion that the oil industry's defense of its favored position has not been persuasive.

I cannot believe there is not a more efficient and less expensive way of providing for a secure supply of oil during emergencies than the present system. The cost of the present system has run away because its costs have not been visible. I can assure you that if Congress had to make a direct appropriation for such a program the costs would not be anywhere near $7 billion a year. Certainly we need oil for our national security, but we need lots of other things for our national security, too. One of these is a strong economy which does not waste its resources.

I think quite clearly that the oil industry should be placed on an even footing with other industries The oil tax loopholes should be closed. This would go far toward quelching the impending "taxpayers revolt" by putting fairness back into the tax system.

To conclude, I think then we ought to find out, as the Shultz study of the oil import program seems to be doing, what are our actual needs for oil during emergencies. We should then ascertain what is the most efficient, inexpensive way of assuring that supply. It might be a grant to develop the technology needed to produce oil from oil shale economically or it might be cheaper to discover oil pools on Federal land and then keep that oil in reserve until needed.

Whatever solution we decide upon, one thing is clear: The present privileged position of the oil industry must go.

EXHIBIT 1

[From the National Observer, May 26, 1969]

THE UNIQUE STATUS OF AN INDUSTRY: HOW TAX BREAKS HAVE NOURISHED THE OIL BUSINESS

(NOTE.—This is the last of a series of articles that explore firsthand and in depth the oil industry's singular position and prerogatives in America today. The articles were prepared by staff writers August Gribbin, Michael Malloy, and Patrick Young and senior editor Edwin A. Roberts, Jr.)

In the late Nineteenth Century, the amassing of great wealth from oil was enhanced by the easy ethics of the age. In more recent times, many new oil fortunes have arisen and swelled, and they have swelled in fair measure because the industry enjoys an assortment of tax breaks that no other business can match.

Consider:

Atlantic Richfield Co. reported income before taxes of $377,942,000 in the years 1965 through 1967, but the company paid no Federal income taxes.

Standard Oil of California reported income before taxes in 1967 of $513,067,000 and paid $6,000,000 in Federal corporate income taxes, or 1.2 per cent.

How can this be done? How is it possible to earn so much and pay little or no Federal income taxes? The answer is that the Federal tax structure provides a host of unusual tax sanctuaries for the oil industry.

These tax sanctuaries are related to the controversial Machiasport plan, by which Occidental Petroleum Corp. hopes to erect a huge refinery in the tiny town of Machiasport at the northeastern tip of Maine. The plan represents a sophisticated attempt to hurdle the Federal import quota system for oil. It is the import quota system, which was explained in detail in The National Observer of May 5, as well as restrictions on domestic production, which were examined in The National Observer of May 12, that combine with petroleum's special tax breaks to give the U.S. oil industry a unique status in the economy—and to force the American consumer to pay artificially high prices for many oil products.

It is this unique status that the battle over Machiasport has placed in the spotlight, and the industry is preparing to meet assaults from any direction.

CASH FOR CHANCY PROJECTS

Uncommon tax advantages provide the industry with an uncommonly large cash flow, which the industry argues is required for its gigantic and often chancy operations. What are these tax advantages?

Take a look at the more important ones:

Percentage depletion

Oil and natural gas well operators may deduct 27.5 percent of the gross revenues of each property before paying taxes, unless this figure totals more than 50 percent of the net income of the property before deducting the depletion allowance. Thus, if gross revenues on a property total $100,000, the producer may take $27,500, before figuring his taxes, so long as the net income of the property after expenses is $55,000 or more. If however, the net income was, say, $50,000, the producer would be limited to 50 per cent of that, or $25,000.

Intangible drilling costs

These include such costs of developing a producing well as wages, fuel, repairs, hauling supplies, and other expenses that do not have a salvage value. These "intangibles" may be deducted from gross revenues the first year. Similar expenses incurred by other manufacturers must be capitalized and written off over a number of years.

Foreign tax credits

U.S. companies operating abroad may claim credit for taxes paid to foreign governments on nearly a dollar-for-dollar basis. Thus if a company owed $75,000 to Uncle Sam on its profits earned in, say, Saudi Arabia and had paid $60,000 in taxes to the Saudi Arabian government, the foreign-tax credit would eliminate the taxes on that operation due the U.S. Treasury. Critics, however, say that taxes paid Middle East governments by U.S. oil companies are based on artificial prices, and that some of these taxes should be treated as expenses of doing business and should not be allowed to fully wipe out the companies' U.S. tax debt.

Western Hemisphere trade deduction

This provision allows U.S.-owned companies doing 95 per cent of their business outside the United States but within the Western Hemisphere to a special deduction in figuring their Federal taxes. In effect, it reduces the tax rate by 14 points, currently from 52.8 per cent to 38.8 per cent. This is done before any foreign tax credits or depletion allowances are taken. It is a provision that mostly favors companies in the business of extracting minerals, like oil.

These sanctuaries are used in combination with still other advantages. An example will indicate what a resourceful accountant might do for his oilman client.

Assume the oilman drills a well that costs $100,000 and produces gross revenues of $100,000 in its first year. Between 75 and 90 per cent of his expenses will be intangible drilling costs, which can be written off in the first year. These include rental of a drilling rig and the salaries of crewmen. Assume intangible costs of $80,000 and production costs of $5,000. The gross income of $100,000 minus $85,000 in intangibles and production costs would leave an income of $15,000.

But he would not pay income taxes on $15,000; he would pay them on $7,500.

Here's why: The depletion allowance for oil and gas is 27.5 per cent of the gross income, but this may not exceed 50 per cent of the net income of the property. In this example, the depletion allowance equals $27,500. But the oilman, because of the 50 per cent limit, could claim only $7,500 in depletion. If he chose this method, therefore, the oilman would have a taxable income of $7,500.

The next year, however, assuming again a gross revenue of $100,000 and production costs of $5,000, the oilman could take his full percentage depletion allowance of $27,500 and his taxable income would be $67,500.

But a technique known as "carved-out production payments" would save the operator many tax dollars. In his first year of operation, the oilman's intangible costs limited the amount of depletion he could claim to $7,500. But if he sold his second year's production in advance—that is, during his first year of operation—he would have a first-year gross income of $200,000. And a gross income of $200,000 minus intangibles and production costs of $85,000 would result in a first-year net income of $115,000.

The percentage depletion allowance would equal $55,000 (27.5 per cent of $200,000) and the oilman would not have reached the limit of 50 per cent of net income, or $57,500. Thus, although his gross income for the first year was $200,000, he would have a taxable income of only $60,000.

There is yet another aspect of this device. Since the oilman has already received payment for the oil he produces in his second year of operation, he will have no income at all in his second year. But he will have production costs of $5,000, which he can then report as an operating loss. And so, he will be able to claim a tax refund from the Government on this "loss" by carrying it to earlier years without affecting his depletion allowance, or by applying the "loss" to income from other sources.

The net effect of this maneuver is that the oilman would have taxable income—after selling the production payment—of $60,000 in the first year and minus $5,000 in the second year. Without the sale of the production payment, his taxable income would be $7,500 in the first year and $67,500 in the second year. The sale of the production payment thus reduces his taxable income for the two years by $12,500.

There is another form of production payment called the "ABC deal." It does not lend itself to simple explanation, but perhaps a sample offered in a U.S. Treasury Department report makes the effect sufficiently clear.

"In a recent ABC transaction," reports the Treasury Department, "a major oil company purchased all the coal properties of another corporation, subject to a reserved production payment of $460,000,000 payable out of a large percentage of the net profits to be derived from the operation of the coal properties by the buyer. Under present rules, the buyer excludes from income the $460,000,000 of profits derived from its operation of the coal properties and paid over to the holder of the production payment.

"This feature alone represents a Federal income tax saving to the oil company of approximately $175,000,000 over the payout period, or an annual tax saving of between $10,000,000 and $18,000,000 per year depending on the actual length of the payout period. (It was estimated that it would take 7 to 16 years to discharge the production payment out of profits derived from the operation of coal properties.)

"In addition, all of the costs of mining the coal used to discharge the production payment were deducted by the buyer even though it capitalized those costs on its books as a cost of acquiring the coal properties."

The Treasury says that in 1966, ABC transactions totaled $1.8½ billion (for all extractive industries) and resulted in a loss of revenue to the Federal Government of $85,000,000. Carved-out production payments totaled $540,000,000 in 1966—up from $214,000,000 in 1965—and cost the Federal Government $70,000,000 in revenue.

FROM THE JOHNSON YEARS

These figures are taken from reports issued by the Treasury Department during the Johnson Administration; the reports included a long list of tax-reform proposals. They make up four volumes titled *Tax Reform Studies and Proposals U.S. Treasury Department*. The first three volumes are Treasury Department studies. The fourth is an examination of tax provisions affecting the oil and gas industry, prepared for the Treasury by the CONSAD Research Corp. of Pittsburgh.

Neither the Johnson nor Nixon administrations has endorsed the far-ranging reforms sought by Treasury specialists. But the reports were sent to Capitol Hill and released jointly by the House Ways and Means Committee and the Senate Finance Committee.

Included in the Treasury's reports is this comment:

"In effect, the price of crude oil in the United States is being underwritten by import controls, by state controls on production, and by favorable tax provisions . . ."

The oil industry's tax advantages affect not only its less privileged competitors but the whole national economy as well.

The CONSAD report states: The oil and gas producing industry accounts for about 1.5 per cent of the Gross National Product. [Reckoned at an annual rate of $93.4 billion in the first quarter of 1969.] By most conventional standards it is not a highly concentrated industry, but with so enormous an output, each of the largest firms is a giant in the economy. The five top domestic producers together account for 20 per cent of the output, the top 20 for 50 per cent.

According to the U.S. Bureau of Mines, the value of crude oil at the wellhead in 1967 was $9.4 billion, and the value of natural gas was $2.9 billion. The value of natural gas liquids, liquid fuels extracted from natural gas, was $1.2 billion. The value of products shipped from U.S. refineries in 1967—the latest year

for which figures are available—was $20 billion.

The oil industry concedes that it is very big and very important. Indeed, its size and essentiality are often cited by industry spokesmen to defend its preferential treatment by the tax laws, just as they are cited to defend the import quota system and state-level controls on domestic production. What the industry prefers not to emphasize are ... profits.

Consider some statistics contained in the "Monthly Economic Letter" for April of this year, published by the First National City Bank of New York City. A survey of 2,350 manufacturing companies, divided into 41 categories, showed a net income in 1968 of $26 billion. Ninety-nine oil producing and refining companies had a total net income last year of $6.1 billion, or almost 23 per cent of the after-tax earnings of the entire list of 2,250 companies.

Significant, too, is the percentage of return on sales, also calculated in the First National City Bank study. Fifty-five aircraft and space companies had a return of 2.8 per cent. Eleven auto and truck manufacturers had 5.8 per cent. Ninety-two printing and publishing firms recorded a return on sales of 6.2 per cent.

The 99 petroleum companies? They enjoyed a return on sales of 9.0 per cent. Only the drug industry scored higher, with 12 drug makers reporting a return on sales of 9.5 per cent.

The oil industry, however, does not place as much importance on these figures as it does on those that reflect its rate of return on investment. And, indeed, the First National City Bank reports that the average rate of return on net worth for the 2,350 companies surveyed was 13.1 per cent in 1968, up from 12.6 per cent in 1967. The 99 oil companies, however, had a return on net worth in 1968 of 12.9 per cent, compared with 12.8 per cent in 1968. So in terms of return on investment, the oil industry is slightly below the national average.

Some oilmen, moreover, say the difference is greater than it seems because the figures do not reflect what it actually costs to replace extracted oil.

"If oil companies figured in what it is costing them to replace their oil, it could cut their return on investment by one-half," declares Minor Jameson, Jr., executive vice president of the Independent Petroleum Association of America.

It is at this point that the debate over preferential tax treatment for the oil industry approaches the heart of the matter. Most independent economists have a ready answer for Mr. Jameson.

Prof. Walter J. Mead, professor of economics at the University of California, Santa Barbara, told the Senate subcommittee in March of this year:

"The effect of favored tax treatment is to reduce tax costs for oil companies relative to firms in other industries. These measures taken together substantially raise the expected after-tax profit rates on oil industry exploration and development investments in what would otherwise be submarginal uses of scarce capital. Investment in petroleum exploration and development is indeed expanded to the point where the after-tax return is approximately equal to that which may be obtained on alternative uses of capital. . . .

"Oil industry spokesmen have defended their various subsidies with the question, 'If we receive all the subsidies which our critics allege, why is our rate of return on invested capital not substantially higher than other nonsubsidized industries?' The answer to this question is that a subsidy will raise the profit rate at the point in time at which it is conferred.

"Its effects, however, are eroded away with time as producers react to their more profitable situation by expanding into otherwise submarginal areas. This expansion leads to a decline in the rate of return toward a normal yield and to resource misallocation as well."

And here Professor Mead adds an interesting observation in the light of the industry's particularly visible troubles earlier this year.

"The oil spillage case in the Santa Barbara Channel is directly related to the subsidy system. Leases were purchased and drilling occurred in the California offshore area because such operations were made profitable by the subsidy legislation. Under free market conditions, oil prices would be substantially lower, tax costs substantially higher in the oil industry, and the profit inducement to buy leases in the Channel would probably be lacking.

"To develop oil from such sources is to use up more economic value than is produced. In addition to this probable waste of resources, we have the external cost (aptly called 'spillover costs' even before this oil spillage case) of environmental pollution."

Oil industry spokesmen speak frequently about domestic taxes paid as a percentage of gross revenue. The Petroleum Industry Research Foundation, for example, recently published a report showing that the industry paid 5.1 cents on each dollar of gross revenue in 1964 and 1965. This includes Federal, state, and local taxes, but *excludes* state and Federal product taxes. The study showed all business corporations paid an average of 4.5 cents on each dollar of gross revenue.

THE ACCENT ON GROSS

So, set forth in these terms, the oil industry pays six-tenths of a cent per gross-revenue dollar more than the average of all industries.

But the comparison is in gross revenue, and does not take into consideration the cost of doing business. Thus if a company doing $10 billion a year volume had business costs of $9 billion, it would probably pay less in taxes than a $10 billion-a-year business with costs of $8 billion. The oil industry's ratio of expenses to gross revenue is lower than that of many other industries.

The oil industry contends that in 1966 it was responsible for $10.5 billion in taxes. Testifying before the House Ways and Means Committee, M. A. Wright, chairman of Humble Oil, a subsidiary of Jersey Standard, declared:

"Aggregate tax payments on oil industry operations in 1966 were $10.5 billion, including $8 billion of excise and sales taxes on oil products. These payments provided 8 per cent of all receipts of the Federal, state, and local governments."

But that $8 billion Mr. Wright refers to was not paid by the oil companies. It was paid by, among other customers, the motorists who buy gasoline at the industry's thousands of filling stations.

Now consider data from the Treasury's tax-reform study, which shows "estimates of the effective tax rates actually paid by corporations, as a group and for several industries." Here are the 1965 figures on "actual (Federal) tax on total net income:"

[In percent]

All industries	37.8
Petroleum	21.1
Other mineral industries	24.3
Lumber	39.5
Commercial banks	24.4
Other manufacturing	43.3

Only mutual savings banks (8.3 per cent) and savings and loan associations (14.8 per cent), among the categories considered, had lower effective tax rates than the oil industry.

Oilmen contend the price of gasoline has been remarkably stable in a period of general inflation. But, according to the Oil and Gas Journal of April 14, 1969, the average price of regular gasoline—excluding taxes—has increased 7.4 per cent since April 1966, and 5.9 per cent since the last week in December 1968.

Its many tax privileges give the oil industry tremendous cash flows and thus very great financial leverage. Some critics argue that this gives oil an unfair advantage over competing industries. But the industry insists the nature of its business requires that heavy cash flow.

"It is essential because so much of our investment is such high risk that it isn't bankable," says John J. Scott, general counsel of Mobil Oil. Mr. Scott cited as an example Mobil's operations in Venezuela. Prior to and during World War II, Mobil invested between $45,000,000 and $50,000,000 in that country before getting any return on its investment. "If we did not have the cash flow, we could not have done it," Mr. Scott says.

What would happen to the industry's oil reserves if the depletion allowance and deductions for intangibles were eliminated?

Frank N. Ikard, president of the American Petroleum Institute, offers this reply:

"I can tell you one thing that is spectacular: The size of the investment in exploration and development the industry is going to have to make to meet the needs of the American people over the next 15 years. As a rough estimate, domestic oil exploration and development outlays will have to be increased about 50 per cent. This means going from a little less than $4.5 billion annually up to somewhere around $6 or $7 billion. An industry that has to make such a big boost in its spending has to make profits to do its job."

Some industry sources say oil needs more tax breaks, not less. Harold M. McClure, Jr., president of the Independent Petroleum Association of America, cited figures before the House Ways and Means Committee that showed a 40 per cent reduction in the number of wildcat test wells drilled in 1968 compared with the number drilled in 1956.

"It should be recognized," said Mr. McClure, "that part of these decreases can be attributed to wider well spacing and increased efficiencies in all phases of drilling and producing operations."

It's interesting that Mr. McClure should use the year 1956 as a comparative figure for 1968 drilling operations. Says the CONSAD report: "The number of wells being drilled reached a peak in 1955-56, but has since declined steadily back to its 1949 level, over 30 per cent below the peak."

Mr. McClure told the senators further: "To re-emphasize the degree of risk, only 2 out of every 100 new field wildcats drilled are likely to find a field large enough to be profitable. . . . To sum up the situation as to incentives for petroleum exploration and development in the United States, there is an obvious need for more—not less—economic stimuli." A wildcat is an experimental or exploratory well.

Mr. McClure uses the term "economic stimuli." In the oil business there are stimuli within stimuli. It is not only the major tax privileges themselves that benefit the industry; it is also the accounting involutions that they make possible. A good example of such an involution can be found in the uses to which the depletion allowance is put.

Simply stated, oil companies shift expenses, for tax purposes, to the wellhead, where depletion may be claimed, from refinery or transportation costs that do not qualify for this deduction.

In a Senate speech recently, Sen. William Proxmire, Wisconsin Democrat and critic of oil-industry privileges, described the answers

he received from the Interior Department to questions he had posed:

"Apparently," said Senator Proxmire, "Interior had made an analysis which demonstrates that integrated companies shift income from refining and marketing to oil production in order to minimize tax liabilities by maximizing percentage depletion. This analysis is correct as was shown by Texaco's recent action in increasing the price it would pay for crude oil by 20 cents a barrel.

"Since Texaco produces most of the crude oil it refines, the increased cost on the 11,000 net barrels a day it buys from outsiders will be more than offset by the larger depletion allowances it will claim on the oil which it sells to itself. Apparently, Texaco felt the 1.9 per cent of its income paid in Federal income taxes in 1967 was too high."

While Senator Proxmire singled out Texaco as an example, that company is hardly alone in taking advantage of the tax laws as they are on the books.

One of the laws on the books permits oil companies to deduct from their U.S. tax obligation the income taxes they pay to foreign governments. To get as much revenue as possible from the oil companies, oil nations in the Middle East and elsewhere base their tax schedule on "posted prices," which are set arbitrarily and are almost always higher than the actual price the companies get for their oil.

The result is that American companies must pay foreign governments more in taxes than they would if the taxes were figured on the true price for which oil can be sold. Thus, a portion of the foreign tax is considered by many critics as not a tax but a royalty. Therefore, so the argument goes, U.S. companies should be permitted to deduct from their U.S. taxes only that part of foreign taxes that are truly taxes. The other part, which would be considered as royalties, would then be figured as just another business expense.

The oil companies, who are being overcharged by foreign governments, don't like the system of posted prices any more than the U.S. Treasury Department does, but they say there's nothing they can do about it.

The House Ways and Means Committee has about two dozen bills of various sorts that deal with reforming the tax structure as it affects oil. One House bill would eliminate entirely the depletion allowance as it relates to foreign wells; Maine's Edmund Muskie has introduced a similar bill.

Rep. Henry Reuss, Wisconsin Democrat, has introduced a major tax reform package, one section of which would drop oil and gas depletion allowances, presently 27.5 per cent, and allowances for 41 other minerals, presently at 23 per cent, down to 15 per cent.

In introducing his bill on Jan. 20 of this year, Mr. Reuss told the House: "Ideally, percentage depletion should be replaced with cost depletion. But since we are not living in an ideal world, this title provides only that the oil depletion allowance be reduced by less than one-half, from 27.5 per cent to 15 per cent, the percentage now applicable to over 40 other minerals."

Mr. Reuss and his supporters are not overly optimistic about changing oil's depletion allowance, especially now that President Nixon has reiterated his support of the allowance as it stands.

Nevertheless, says Mr. Reuss, "There is a general sentiment among taxpayers that they are getting a little depleted too."

In the American system of making law, it is far easier to establish prerogatives than to abolish or reduce them. To the beneficiary, preferential treatment becomes first a comfort, then a custom, and finally a necessity. And the progression can be carried still one step further. What of the nation's best interests? The late Sam Rayburn wasn't the only friend of oil to know when to turn solemnly and face the American flag.

THE DEPLETION ALLOWANCE

The 27.5 per cent depletion allowance for oil and natural gas is probably the best known of all business tax exemptions. Here's how it came to be:

The Sixteenth Amendment, which became effective on March 1, 1913, made it legal for Congress to assess income taxes. The Revenue Act passed on Oct. 3, 1913, provided that in computing income subject to taxation, producers of ores and all other natural deposits could claim a depletion deduction not to exceed 5 per cent of the gross value of the output at the mine or well.

In 1916 the law was changed, removing the limitation, but specifying that the total depletion allowable over the life of the property could not exceed the capital originally invested, or, if the purchase of the property was made before March 1, 1913, the fair market value as of that date.

A second provision was introduced in 1918 allowing "discovery value depletion." The estimated discovery value was substituted as the value to be amortized for all wells found after March 1, 1913. It wasn't until 1926 that discovery value depletion was replaced by today's system of percentage depletion for oil and natural gas.

Under the 1926 law, any oil or gas producer, or anyone with a financial interest in a well, can deduct 27.5 per cent of his gross income realized from the sale of oil or gas, but this must not exceed 50 per cent of the net income of the property.

Why 27.5 per cent? Because the House of Representatives wanted the figure to be 25 per cent and Senate wanted 30 per cent. The 27.5 per cent figure for oil and gas is the highest depletion allowance; other minerals receive smaller allowances. Metals, for instance, qualify for 15 per cent.

The U.S. Treasury Department reports that, on an average, petroleum producers recover 19 times the cost of their producing wells through percentage depletion.

[From the Washington (D.C.) Post, June 9, 1969]

OIL INDUSTRY LASHES BACK AT CRITICS

(By Spencer Rich)

The oil industry, under sharp attack by economists before a Senate subcommittee for a system of subsidies that may cost the public anywhere from $2.7 billion to $7 billion a year, got in some whacks of its own at hearings over recent weeks.

But the industry failed to answer several of the most damaging charges leveled by earlier witnesses. Its case for continuation of at least some lush benefits must be rated as plausible but not yet quite convincing.

The basic outlines of the dispute are well known by now. The industry enjoys a number of tax benefits—including a depletion allowance and the overseas tax credit—that are available in equal measure to no other industry.

The net benefit to the industry in taxes saved as a result of these special provisions may be as much as $2 billion a year.

In addition, an import quota system started in 1959 limits total annual imports to about one-fifth of the 5 billion barrels of oil consumed in this country annually.

More important, it keeps low cost Middle Eastern crude oil, which could be sold at $2 a barrel delivered to the Eastern Seaboard, out of the country except in quota amounts.

Together with production limitations imposed by the states of Texas and Louisiana, which produce three-quarters of U.S. oil, the import system keeps the domestic price of oil delivered to the East Coast at nearly $3.50 a barrel—or about $1.50 more a barrel than the potential price of imported oil.

Economists estimated that as a result of this differential, the public pays anywhere from $2.7 billion to $7.2 billion more for its oil than would be the case if the world price of oil were in effect in the U.S.

Industry witnesses—including Harold McClure of the Independent Petroleum Assn., which represents smaller domestic operators, M. A. Wright of Humble Oil (Standard of New Jersey's operating subsidiary in this country) and Robert Dunlap of Sun Oil—justified this system as necessary to maintain U.S. national security.

Without the financial incentives provided by tax breaks and import barriers, they said, U.S. discovery and development of new domestic oil reserves would fall off and the U.S. would soon be dependent upon foreign nations for an unacceptably large portion of its supplies. This would make it vulnerable to diplomatic blackmail, they contended.

Wright of Humble estimated that with continued import barriers, relaxed slightly to allow more foreign oil in as U.S. needs increased this Nation would be able to supply 67 per cent of its needs from domestic sources by 1985. With import controls removed, he said, the figure would drop to 46 per cent, which he said was too low for national security.

Sen. Philip A. Hart, (D-Mich.), who presided over the hearings as chairman of the Senate Antitrust Subcommittee, kept digging into this argument at different vulnerable spots, as did some of his staff members. By the time the latest innings were over, he had succeeded in considerably reducing its cogency.

For example, Hart kept going back to the potential of the nation's huge known reserves of oil shale, which contain at least 600 billion barrels of potentially recoverable oil—over 100 years' supply. The shale, located mainly in Colorado, cannot now be converted into oil at a commercial price and for this reason industry spokesmen pooh-poohed it as a possible national security reserve.

But they did not really answer the point Hart seemed to be making: the shale is there and if we knew how to convert it we could save a substantial amount of spending on

THE TAXES COMPANIES PAY—FEDERAL CORPORATE INCOME-TAX PAYMENTS FOR 1967 OF THE NATION'S 15 LARGEST OIL REFINERS

Name	Net income before tax	Federal tax	Percent	Earnings after all taxes
Standard (New Jersey)	$2,000,283,000	$166,000,000	7.9	$1,232,283,000
Gulf	956,968,000	74,147,000	7.8	578,287,000
Texaco	887,986,000	17,500,000	1.9	754,[illegible],000
Mobil	594,563,000	26,900,000	4.5	385,393,000
Standard (California)	513,067,000	6,000,000	1.2	421,667,000
Standard (Indiana)	366,067,000	74,021,000	20.2	282,250,000
Shell	342,022,000	44,940,000	13.1	284,649,000
Phillips	227,796,000	52,255,000	22.9	164,015,000
Conoco	241,362,000	30,031,000	12.4	148,962,000
Cities Service	166,200,000	32,347,000	19.6	127,837,000
Union	163,820,000	10,400,000	6.3	144,963,000
Sun	146,946,000	24,700,000	16.8	108,578,000
Atlantic	146,[illegible],000	(1)	0.0	130,005,000
Marathon	138,920,000	3,700,000	2.7	73,[illegible],000
Getty	132,702,000	3,687,000	2.8	118,[illegible],000
Total	7,125,000,000	[illegible],623,000	8.0	4,[illegible],407,000

[1] None.

Source: Oil Week.

new exploration for well oil. Why not allow much more imported oil into the country, save a few billion dollars a year and devote a portion of that to cracking the problem of making the shale convertible into oil at a competitive price?

Interior Secretary Walter J. Hickel has estimated it would cost $1 billion to achieve a [illegible] development breakthrough on shale. But even if it cost five times that figure, it would still be equal to only a single year's added costs resulting from oil import barriers. The same argument goes for efforts to convert the Nation's massive coal reserves to oil and gas. The Interior Department is spending only $13 million this year on research on shale and coal liquefaction and gasification.

Hale and his chief economist, Dr. John Blair, also kept bringing up the problem of tax incentives to domestic exploration, and the industry never answered.

If the purpose of the whole system of tax breaks and import barriers is to provide U.S. companies with incentives to devote money to exploring for oil here, then why keep in existence tax benefits that encourage money to be diverted into overseas discovery?

About 25 per cent of depletion allowances claimed by U.S. companies covers overseas holdings. In addition, U.S. law permits oil companies to subtract—dollar for dollar—from their U.S. taxes any taxes paid to foreign governments.

Royalties can only be deducted from taxable income, but taxes can be taken directly off the tax bill in the full amount paid.

One apparent result is that a very high proportion of total charges to U.S. companies by foreign governments are classified as "taxes" by those governments, while a much smaller portion are called royalties.

Another unanswered question is just how much security the U.S. is actually buying. Nobody seemed to have any hard figures—worked out on a gallons a day basis for various activities—on how much oil the U.S. really needs to protect its welfare. Must it really be 60 per cent? Or could it be less?

Industry witnesses conceded that at present rates of discovery and increasing demand, the U.S. will be increasing its imports over the next generation anyhow. The inference of industry critics was obvious—why not increase them a little faster and save all that money by getting a bit more low cost foreign crude now?

The exact character of the national security problem was also a little vague. Wright of Humble appeared to concede at one point that it was not really possible to insist that domestic production remain high in order to plan for nuclear war.

That kind of situation would alter conditions so radically that normal calculations of oil need would probably be meaningless.

But then, Sen. Edward M. Kennedy (D-Mass.) indicated, it would be a whole new ball game. In anything short of an all-out war, he argued at least some U.S. supplies from abroad would be available: from Canada, Venezuela and Caribbean nations, which now supply the U.S. with nearly all its imports; or from one of the many new producers whose desperate race for markets is flooding the world with oil and causing what appears to be a long-term downtrend in oil prices everywhere but in the United States.

The Hart hearings are now recessed and the dispute is moving to a new arena. In about a week and half, the Cabinet Committee on Oil Imports, headed by Labor Secretary George P. Shultz, will begin receiving documents arguing for and against the present import program. It is to come up with recommendations on the future of the program in six months.

Mr. PROXMIRE. Mr. President, I suggest the absence of a quorum.

MEMORANDUM

A Ten Year Program of Mineral
Exploration and Research Activity

Revised

This memorandum establishes a framework for a ten year Federal program of mineral exploration and research work. This program is designed to redirect to the areas of greatest need the increased tax revenues which would be produced if intangible drilling and development costs were capitalized rather than expensed.

Present tax situation. Under present law, intangible drilling costs may be expensed currently. See section 263 (c) of the Internal Revenue Code. This special tax privilege applies both to exploratory wells and to development wells drilled in established fields. The first year revenue gain that would be realized if drilling costs were capitalized rather than expensed is approximately $750 million. See attachment A. This revenue gain would decrease gradually at a rate of about $50 million per year as increased tax deductions were claimed with respect to capitalized drilling costs. However, a long-term revenue gain of about $300 million annually can be anticipated as a result of capitalization of intangible drilling costs for tax purposes. See attachment A.

Present direct expenditures. Estimated fiscal 1970 appropriations for the United States Geological Survey, the Bureau of Mines, the Office of Coal Research, and the Office of Oil and Gas are approximately $195 million, of which approximately $100 million is for the Geological Survey, approximately $80 million for the Bureau of Mines, approximately $13 million for the Office of Coal Research, and the remainder for the Office of Oil and Gas. See attachment B.

The proposal. Under the proposal, intangible drilling and development costs would be capitalized and recovered through depletion over the useful life of a well. Over a ten year period, this change would increase tax revenues by $5,250 million. See attachment C. Simultaneously, a program of Federal research assistance and Federal assistance in exploratory drilling would be commenced. This research and exploration program will cost $300 million per year. These funds will be used for the following purposes:

a. Increased geologic mapping, including mapping of Federal lands on the outer continental shelf . . . . . $50 million

b. Research on techniques for extracting liquid fuels from coal and oil shale:

Oil shale	$50 million	
Coal	$50 million	
	$100 million	$100 million

c. Payment of 25 percent of the intangible costs incurred in drilling domestic exploratory wells for petroleum and natural gas . . . . . $150 million

Total . . . . . $300 million

Drilling payments under the proposal would be includible in gross income for tax purposes. As used above, the term "exploratory wells" refers to wells which are classified as exploratory by the American Association of Petroleum Geologists. Approximately 8,000 such wells are drilled annually. See attachment D. The total cost of drilling and equipping such wells is approximately $775 million annually (of which about 80 percent is attributable to intangible costs). See attachment E.

Results of Proposal. The result of this proposal will be to focus Federal assistance to the mineral industries on the areas of greatest need, and to eliminate Federal assistance for low priority projects--such as development drilling in established oil and gas fields. The proposal will more than double Federal assistance for exploration and research, from the present $195 million annually to approximately $500 million annually. Over a ten year period, the proposal will produce an additional $3 billion to finance Federal exploration and research assistance for minerals producers, and will simultaneously result in a permanent increase in Federal tax revenues of at least $2,250 million. See attachment C.

The individual wildcatter who makes a business of drilling exploratory oil and gas wells will be substantially better off under this proposal than under existing law, because the net cost of his drilling program will be decreased. This is spelled out in detail in Appendix F. Consequently, the proposal should provide a substantial stimulus to exploratory drilling by wildcatters.

Statement of Joe M. Barr — JEC Jan 17, 1969

January 14, 1969

Tax Expenditures: Government Expenditures Made Through the Income Tax System

The Annual Report of the Secretary of the Treasury for fiscal year 1968 includes an exhibit which presents Government expenditures for 1968 made through the income tax system (Exhibit 29). The availability of the budget for fiscal year 1970 enables us to present an updating of tax expenditures to cover the fiscal years 1968, 1969, and 1970 on a basis consistent with the 1970 budget data and classifications. The following statement is a condensed and revised version of the exhibit in the Secretary's 1968 Annual Report with the updated figures.

Purpose of Analysis

This analysis extends the budget to include Government expenditures made through the income tax system. The present Federal income tax structure contains a large number of special deductions, credits, exclusions, exemptions, and preferential rates designed to achieve various social and economic objectives. Most of these special provisions serve ends similar in nature to those served by direct Government expenditures or loan programs, and they affect the private economy in the same way. In a specific functional area the Government may have direct expenditures, direct Federal loans, Federal insurance or guarantees of private loans, and interest subsidies which represent alternative methods of accomplishing the purpose which the special tax provision seeks to achieve or encourage. This analysis, together with the fuller presentation in the Secretary's Annual Report, will permit a better understanding of the amount and allocation of resources on both the outlay and revenue side of the 1970 budget.

Extractive industries may choose between two methods of recovering capital costs invested in the development of natural resources. Under one method, actual outlays to the extent not immediately expensible may be deducted as "cost depletion" over the productive life of the property, much as other businesses may take deductions for the depreciation of capital goods. Alternatively, businesses in the extractive industries may deduct a prescribed percentage of gross income (at rates ranging from 27.5 percent for oil and gas to 5 percent for certain minerals, but not more than 50 percent of net income) where such "percentage depletion" exceeds "cost depletion." Percentage depletion is not limited to the cost of the investment as is cost depletion. The basis for "cost depletion" is reduced to the extent certain costs are recovered through expensing of exploration and discovery costs and intangible drilling costs. There is no comparable reduction in "percentage depletion" to allow for costs which are allowed as expenses.

Royalties from coal or iron ore deposits are treated as capital gains.

Table 4. Natural Resources

Tax expenditures (in millions of dollars)	1968
Expensing of exploration and development costs	300 1/
Excess of percentage over cost depletion	1,300 1/
Capital gains treatment of royalties on coal and iron ore	5
Total	1,605

Budget outlays plus tax expenditures (in billions of dollars)	1968	1969	1970
Budget outlays:			
Expenditures	1.7	1.9	1.9
Net lending	*	*	*
Total	1.7	1.9	1.9
Tax expenditures	1.6	1.7	1.7
Total budget outlays plus tax expenditures	3.3	3.6	3.6
Tax expenditures as percent of budget outlays	94%	90%	90%

1/ In the absence of the expensing of exploration and development costs and percentage depletion, the first year revenue effect would be $750 million and $1.5 billion, respectively. The difference from the estimates shown which are based on long-run effect is due to the fact that taxpayers with mineral properties would initially have little or no tax basis because of deductions in prior years.

*Less than $50 million.

THE BUDGET OF THE UNITED STATES GOVERNMENT

FISCAL YEAR 1970

29

33-758 O - 69 -- No. 14 -- 3

ANALYSIS OF BUDGET AUTHORITY AND OUTLAYS BY AGENCY (In thousands of dollars)—Continued

Account and functional code		1968 enacted	1969 estimate	1970 estimate	Increase or decrease (−)	Explanation
DEPARTMENT OF THE INTERIOR—Continued						
MINERAL RESOURCES						
Geological Survey						
Federal Funds						
General and special funds:						
Surveys, investigations, and research 609	NOA	86,919	88,675 +1,792	97,228	6,761	Increase includes urban and heavy use topographic mapping, Earth Resources Observation Satellite program, Outer Continental Shelf resource evaluation, earthquake damage reduction program, urban hydrology, ground water studies, oil shale appraisals, and special mapping projects.
	Exp.	89,430	90,823	93,928	3,105	
Miscellaneous appropriations (permanent, indefinite):						
(Water resources and power) 401	NOA	1				(Payments are made to small lead and zinc producers to stabilize mining operations.)
(Mineral resources) 603	Exp.	229	380	231	−149	
Intragovernmental funds:						
Advances and reimbursements 609	Exp.	−1,571				
Total Federal funds Geological survey.	NOA	86,920	90,467	97,228	6,761	
	Exp.	88,088	91,203	94,159	2,956	
Bureau of Mines						
Federal Funds						
General and special funds:						
Conservation and development of mineral resources 603	NOA	36,442	37,996	39,983	1,987	Increase provides for research on solid waste removal and on mining methods to control methane, partially offset by decreases in marine mining and metallurgy.
	Exp.	36,240	38,430	39,400	970	

Health and safety.....609	NOA	10,777	11,532	14,732	3,200	Increase provides for additional inspection of coal, metal and nonmetallic mines and for additional research on methods of coal dust control.
	Exp.	10,385	11,876	14,600	2,724	
General administrative expenses 403	NOA	1,573	1,647	1,647	----------	Provides for administrative support of research and resource development work at about the same level.
	Exp.	1,570	1,621	1,660	39	
Solid waste disposal.....403	NOA	3,367	317	----------	−317	This program is now to be included in the Conservation and development of mineral resources appropriation.
	Exp.	3,427	3,300	464	−2,836	
Miscellaneous appropriations .403	Exp.	15	50	----------	−50	(No expenditures are anticipated in 1970.)
Public enterprise funds:						
Helium fund: 403						
Authorization to spend debt receipts.	NOA	10,200	10,200 [a] 10,000	20,200	----------	Estimate continues conservation of helium at previous level.
Contract authorization (permanent, indefinite).	NOA	5,164	----------	----------	----------	
	Exp.	29,838	16,337 [a] 10,000	22,539	−3,798	
Intragovernmental funds:						
Advances and reimbursements.403	Exp.	53	180	301	121	
Total Federal funds Bureau of Mines.	NOA	73,524	77,742	82,612	4,870	
	Exp.	81,528	81,794	78,964	−2,830	
Trust Funds						
Contributed funds (permanent).403	NOA	2,692	1,000	1,000	----------	(Decrease in expenditures results from termination of some cooperative agreements with non-Federal agencies.)
	Exp.	1,207	1,600	1,300	−300	
Office of Coal Research						
Federal Funds						
General and special funds:						
Salaries and expenses.....403	NOA	10,900	13,700	13,300	−400	Despite decrease estimate continues construction of three pilot plants for the conversion of coal to liquid and gaseous fuels and other allied research.
	Exp.	11,856	13,800	14,300	500	

[a] Proposed for separate transmittal under existing legislation, other than pay supplemental.
[b] Proposed for separate transmittal, civilian pay act supplemental.

ANALYSIS OF BUDGET AUTHORITY AND OUTLAYS BY AGENCY (In thousands of dollars)—Continued

Account and functional code		1968 enacted	1969 estimate	1970 estimate	Increase or decrease (−)	Explanation
DEPARTMENT OF THE INTERIOR—Continued						
MINERAL RESOURCES—Continued						
Office of Coal Research—Continued						
Trust Funds						
Cooperation with States (permanent)..... 403	Exp.	6	88	----------	----------	(The Secretary is authorized to accept financial assistance in connection with coal research and development.)
Office of Oil and Gas						
Federal Funds						
General and special funds: Salaries and expenses..... 403	NOA	783	819 ▲75 •48	1,082	140	1969 supplemental provides for improved handling of applications of the Oil Import Administration. Increase in 1970 provides for additional workload.
	Exp.	722	868 ▲70	1,083 ▲5	150	
Total Federal funds Office of Oil and Gas.	NOA	783	942	1,082	140	
	Exp.	722	938	1,088	150	
Total Federal funds mineral resources.	NOA	172,187	182,851	194,222	11,371	
	Exp.	182,194	187,735	188,511	776	
Total trust funds mineral resources.	NOA	2,092	1,688	1,688	----------	
	Exp.	1,213	1,688	1,300	−388	

ATTACHMENT C

Financial Results of a Ten Year Program of Mineral Exploration and Research Activity Coupled with a Requirement that Intangibles be Capitalized for Tax Purposes.

Year	Increased Tax Revenues	Exploration and Research Appropriations	Permanent Increase in Federal Revenues
1	750 million	300 million	450 million
2	700 million	300 million	400 million
3	650 million	300 million	350 million
4	600 million	300 million	300 million
5	550 million	300 million	250 million
6	500 million	300 million	200 million
7	450 million	300 million	150 million
8	400 million	300 million	100 million
9	350 million	300 million	50 million
10	300 million	300 million	0
Totals	$5,250 million	3,300 million	2,250 million

broad public-land leasing power

THE DEPARTMENT of Interior favors extending competitive bidding to wildcat lands in the federal domain in some circumstances.

But, according to a statement filed with the Public Land Law Review Commission (PLLRC), this method would be used only when competitive interest is shown by noncompetitive offers. Competitive bidding is the means provided by statute for selling federal offshore leases. On federal lands onshore, it is limited to proven structures.

Interior's comments were made as part of the commission's massive review of mineral leasing law. Changes will be recommended to Congress when the PLLRC winds up its work Dec. 30, 1970.

Mitchell Melich, Interior solicitor, also proposed that the secretary be given broad discretion in leasing matters now defined by statute.

The proposal would allow the secretary "to permit exploration and lease or sell deposits in the manner and under terms and conditions determined best under various circumstances."

This would leave room for negotiated grants for special purposes, such as to foster research or encourage exploration and development.

The secretary could choose from among various methods to obtain fair market value—such as bonus bidding, rental bidding, and royalty bidding and could adjust other sale or leasehold terms accordingly.

The proposal in effect calls for the secretary to manage the federal domain under general statutory standards, stressing his initiative, rather than act passively "under inflexible statutory strictures."

Interior also expressed support for:

- Consolidated oil and gas or all mineral leasing laws into a single statute.
- Removing all acreage limitations on leasehold interests.
- Permitting corporate holding of leases where alien stock ownership from a nonreciprocating country does not exceed 10%.
- Extending the primary term of leases committed to a federal unit plan for the life of the unit.

Area	No. of wildcats 1969	1968
Rockies	830	596
Mid-Continent	770	768
Gulf Coast	554	601
Southwest	1,334	1,047
West Coast	114	146
Other	519	600
Total	4,121	3,758

*All of Texas included in Southwest

Perky drilling rate tops last year's 6-month pace

THE INDUSTRY could very well push well completions above 1968 totals if the rest of 1969 is as good as the first half was. If successful in topping 1968's total of 32,914 completions, it will be the first advance in yearly completion totals since 1964.

The American Petroleum Institute reports that well completions in the U.S. were up 5.7% over the 1968 first half. Total footage also was up to the tune of 8%.

And this total drilling gain comes despite a slower second quarter than in 1968. Second quarter totals in the U.S. stood at 7,170 wells compared to 7,282 during the same period of 1968.

The final total for the first 6 months, however, stands at 14,149 wells completed compared with 13,382 during the first half of 1968. Footage drilled in the U.S. passed 69.9 million ft compared to 64.7 million in the first half of 1968.

But the real story is the healthy wildcatting revival. Wildcatters drilled 4,121 tests during the first half compared to 3,758 in the 1968 period. This is an increase of 9.7%.

Explorers got more for their efforts, too. The success ratio in exploration during the first 6 months was 18.8% compared to 17.5% in the same period of 1968.

Drilling looking up. Along with the first half totals, there are other good signs in the wind for the rest of 1969.

The number of active rotary rigs in the U.S. this year has shown a steady increase and the curve upward looks stronger and smoother than in the past couple of years.

Oklahoma and Texas have registered increases in wildcatting so far this year. Texas explorers put down 1,229 wildcats during the first half compared to 978 in the same period of 1968. Sooner drillers have finished 271 exploratory holes compared to 195 in the first half of 1968.

Kansas hasn't caught up with last year's completion rate yet, but is expected to any week now.

Rockies too. The Rocky Mountain states also are sharing in the increased activity. Wildcatting in Wyoming, Montana, Colorado, Arizona, North Dakota, South Dakota, and Utah is up 39.3% over last year's count.

More increases are expected for the remainder of the year as drillers continue to probe Wyoming and Montana's Powder River basin and into eastern Colorado's Las Animas arch counties.

Drilling records in Wyoming this year could fall across the board, with increases in total wells, wildcats, and footage. Montana's statistics also are climbing as activity continues around Bell Creek.

Total exploratory wells drilled in the United States—April-June 1969

State or district	Oil wells* Wells	Oil wells* Footage	Gas wells† Wells	Gas wells† Footage	Dry holes Wells	Dry holes Footage	Total Exploratory Wells Wells	Total Exploratory Wells Footage	Cumulative Totals: Exploratory Wells January-June 1969 Wells	1969 Footage	1968 Wells	1968 Footage
Alabama	...	.....	...	.....	4	31,942	4	31,942	14	131,391	11	73,317
Alaska	...	.....	...	.....	4	24,465	4	24,465	8	49,261	5	63,744
Onshore	...	.....	...	.....	4	24,465	4	24,465	8	49,261	n/a	n/a
Offshore	...	.....	...	.....	...	.....	...	.....	...	.....	n/a	n/a
Arizona	1	3,590	...	.....	6	17,754	7	21,344	8	24,345	2	9,947
Arkansas	5	27,547	2	18,293	20	103,906	27	149,746	48	275,834	47	222,634
California	5	34,766	1	5,026	58	313,735	64	353,528	106	617,313	141	871,568
North	1	5,062	1	5,026	21	141,779	23	151,867	36	238,470	40	230,957
Central Coastal	1	13,239	...	.....	8	46,502	9	59,741	14	81,028	16	101,413
East Central	1	8,857	...	.....	27	116,892	28	125,749	47	251,191	63	318,228
South	2	7,608	...	.....	2	8,563	4	16,171	8	42,951	11	92,185
Offshore	...	.....	...	.....	...	.....	...	.....	1	3,673	11	130,785
Colorado	8	46,581	4	22,766	83	454,010	95	523,357	140	743,496	87	448,239
Florida	1	11,987	...	.....	5	39,102	6	51,089	6	51,089	2	22,508
Georgia	...	.....	...	.....	1	7,580	1	7,580	1	7,580	...	.....
Illinois	6	16,015	...	.....	47	102,296	53	118,311	101	215,844	102	221,533
Indiana	3	5,457	2	2,770	30	46,404	35	54,631	62	96,625	61	81,742
Iowa	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
Kansas	35	123,825	3	10,173	126	842,549	264	976,547	499	1,876,477	573	1,978,333
Kentucky	6	10,495	6	14,467	48	82,027	60	106,989	105	183,702	176	222,148
Louisiana	12	133,268	28	374,511	142	1,467,786	182	1,975,565	370	3,932,828	431	4,939,034
North	...	.....	2	16,400	15	83,850	17	100,250	65	393,816	50	282,674
South	9	99,178	24	334,298	102	1,121,672	135	1,554,148	238	2,778,340	205	2,603,582
Offshore	3	35,090	2	23,813	25	262,264	30	321,167	67	760,672	176	2,112,778
Michigan	1	4,838	..	.....	33	106,074	34	110,912	62	209,346	68	227,381
Mississippi	5	49,515	...	.....	83	636,654	88	686,169	170	1,318,888	159	1,210,779
Missouri	...	.....	...	.....	...	.....	...	.....	6	1,673	4	6,655
Montana	8	64,689	1	4,011	76	418,699	85	487,399	182	1,000,756	163	614,721
Nebraska	2	10,592	...	.....	51	240,458	53	251,050	87	418,392	119	621,922
Nevada	...	.....	...	.....	1	7,004	1	7,004	12	66,223	...	.....
New Mexico	13	87,654	4	37,222	69	478,712	86	603,598	105	703,141	69	438,180
East	10	71,731	2	32,598	61	454,953	73	559,282	84	645,874	63	421,680
West	3	15,933	2	4,624	8	23,759	13	44,316	21	57,267	6	16,500
New York	...	.....	...	.....	...	.....	...	.....	1	5,718	3	9,325
North Dakota	4	34,151	...	.....	17	123,961	21	158,112	39	305,382	20	123,413
Ohio	...	.....	3	16,170	4	20,078	7	36,248	21	98,413	30	117,423
Oklahoma	20	122,855	11	71,184	84	440,971	115	635,010	271	1,586,992	195	1,126,742
Pennsylvania	2	3,297	...	.....	8	30,169	10	33,466	22	75,456	36	99,314
South Dakota	...	.....	...	.....	3	15,110	3	15,110	9	38,129	...	.....
Tennessee	...	.....	1	604	1	560	2	1,164	7	5,927	11	17,713
Texas	87	524,395	49	494,344	465	2,857,937	601	3,876,676	1,229	8,037,268	978	6,192,635
Dist. 1	1	1,350	...	.....	25	112,659	26	114,009	62	281,448	31	103,955
Dist. 2	1	9,859	2	13,759	41	306,411	44	330,029	77	578,982	84	621,827
Dist. 3	6	36,639	10	109,040	63	486,004	79	631,683	155	1,245,019	132	1,079,545
Dist. 4	11	70,880	10	78,780	80	462,037	101	611,697	219	1,468,780	130	882,417
Dist. 5	1	7,663	8	91,837	21	157,881	30	257,381	48	434,953	39	349,972
Dist. 6	6	42,799	5	45,111	30	207,967	41	295,877	75	548,110	59	387,218
Dist. 7B	13	58,725	2	9,198	65	220,208	80	283,131	150	529,898	125	445,813
Dist. 7C	5	27,016	2	14,180	35	135,576	42	176,772	89	383,557	98	534,864
Dist. 8	19	125,929	4	73,000	25	162,367	48	361,296	101	783,531	90	644,487
Dist. 8A	5	39,204	...	.....	26	211,189	31	250,393	74	572,891	49	324,509
Dist. 9	17	90,967	3	20,241	26	131,240	46	242,448	109	524,371	93	420,049
Dist. 10	2	13,364	2	25,848	4	34,147	8	73,359	16	141,740	27	241,703
Offshore	...	.....	1	13,350	24	230,251	25	243,601	54	543,988	21	186,276
Utah	1	5,860	...	.....	4	20,095	5	25,956	22	92,840	20	93,822
Virginia	...	.....	...	.....	...	.....	...	.....	7	6,291	...	.....
West Virginia	2	3,360	10	47,758	13	58,555	25	109,673	47	214,677	40	173,877
Wyoming	26	199,820	4	27,081	105	724,004	135	950,905	353	2,492,527	205	1,381,615
Total—April-June, 1969	253	1,524,567	129	1,143,380	1,691	9,712,599	2,073	12,383,546				
Total—April-June, 1968	247	1,575,745	150	1,287,201	1,660	9,840,047	2,057	12,702,993				
Cum. Total—1969	497	2,991,300	276	2,205,849	3,348	19,686,665	4,121	24,883,814	4,121	24,883,814		
Cum. Total—1968	418	2,474,248	241	1,904,553	3,099	17,291,463	3,758	21,670,264			3,758	21,670,264

*Includes multiple completion wells which produce gas from one or more zones but oil from at least one zone. †Includes multiple completion wells which produce gas from all zones. Gas wells also include so-called condensate wells.

Joint Association Survey
(Section 2)

Estimated Expenditures & Receipts
of U. S. Oil and Gas Producing Industry

~~1965~~ 1966

TABLE I

ESTIMATED EXPENDITURES FOR FINDING, DEVELOPING, AND PRODUCING OIL AND GAS IN THE UNITED STATES, 1966

EXPENDITURES[1]	Millions of Dollars
1. Exploration:	
a. Drilling and Equipping Exploratory Wells	$ 775
b. Acquiring Undeveloped Acreage	577
c. Lease Rentals and Exp. for Carrying Leases	180
d. Geological and Geophysical	378
e. Contributions Toward Test Wells	28
f. Land Dept., Leasing, & Scouting	70
g. Other incl. Direct Overhead	128
h. Total Exploration	2,136
2. Development:	
a. Drilling & Equipping Development Wells	1,557
b. Lease Equipment	459
c. Improved Recovery Programs	187
d. Other incl. Direct Overhead	119
e. Total Development	2,322
3. Production:	
a. Prod. Expenditures incl. Direct Overhead	1,895
b. Production or Severance Taxes	430
c. Ad Valorem Taxes	212
d. Total Production	2,537
4. G & A Overhead Not Reported Elsewhere	
a. Allocated to Exploration	195
b. Allocated to Development	168
c. Allocated to Production	310
e. Total G & A Overhead	673
5. Drilling & Production Platforms	113
6. Total Expenditures[2]	$ 7,781

[1] Expenditure items are identified by numbers and letters which are the same as those on the 1966 questionnaire for Section 2.

[2] Exclusive of federal, state, and local income taxes; payments of interest; payments for the retirement of debt; and payments to owners as return on investment.

APPENDIX F

Effect of Proposal on Oil and Gas Wildcatters

The best way to compare the present system of subsidizing exploratory drilling through intangibles deductions with the proposed program of direct payments is to compute the net cost to the individual operator of incurring intangible drilling costs under both systems. (The net cost of incurring tangible costs is not affected by the proposal, and, therefore, need not be considered). To be realistic, such a comparison should take both unsuccessful and successful wells into account, because wildcatters drill many more unsuccessful wells than successful wells.

Under the present system of subsidizing drilling through the tax system, an investor who incurs $100,000 of intangible costs is able to expense those costs in the year incurred, whether or not the well is successful. This expensing saves the investor $50,000 in taxes if he is in the 50 percent marginal tax bracket. Therefore, the net cost to the investor of incurring $100,000 of intangible costs is $50,000.

Under the direct subsidy proposal, the investor who incurs $100,000 in intangible costs for exploratory drilling would put up $75,000 and receive a $25,000 direct payment (which he would include in income). If the well is not successful, he would expense the $100,000 intangible cost as a dry hole cost. His net deductions are $75,000 ($100,000 less the $25,000 included in income). The tax saving on the net deductions is $37,500, assuming a 50 percent marginal tax rate. Therefore, the net cost of the dry hole is only $37,500 ($75,000 less $37,500). The driller of the unsuccessful well is therefore better off under the direct subsidy proposal, because he is out-of-pocket only $37,500, instead of $50,000 as under present law.

If the well is successful, the investor will again put up $75,000 and will receive a direct payment of $25,000 which he will include in income. The investor will capitalize $100,000 in intangibles and will recover the capitalized intangibles through depletion over the useful life of the well. (The capitalization of intangibles may increase the total depletion deductions claimed, but this effect will probably be small and will be ignored in this analysis). Therefore, the net cost of drilling a successful well will be $87,500 (i.e. $100,000 in intangibles, less a $25,000 direct payment, plus a $12,500 tax on that payment). The net cost incurred by a driller of a successful well will therefore be greater by $37,500 under the direct payment proposal than under the existing tax subsidy system. These increased costs will normally be paid from the proceeds of production from the successful well.

However, as wildcatters frequently point out, most exploratory wells are not successful, and, as shown above, the net cost of a dry hole under the direct subsidy proposal is less than under present law. For this reason, the driller of exploratory wells will be better off under the direct payment proposal when we consider both his sucessful and his unsuccessful wells.

For example, if we assume that one exploratory well in ten is successful, the average driller of ten exploratory wells would experience a decrease in his net cost for his entire drilling program under the direct payment proposal. On the nine unsuccessful wells, the investor would be better off under the proposed system to the tune of $12,500 per well or $112,500. On the one successful well, the investor would be worse off to the extent of $37,500 ($87,500 less $50,000). Thus, over the ten well program -- nine unsuccessful and one successful -- the investor would be better off to the extent of $75,000 ($112,500 less $37,500). This should provide a substantial stimulus to exploratory drilling by lessening the financial risks that are inherent in such drilling.

SUMMARY OF THE STATEMENT OF
SENATOR GORDON ALLOTT
BEFORE THE
SENATE FINANCE COMMITTEE
SEPTEMBER 30, 1969

A. Contrary to the statement by the Treasury, the amendments to section 613(b) and (c)(4) of the Internal Revenue Code on pages 273 and 281 of the bill, pertaining to oil shale, should be retained.

1. Changing the point of application of the 15% depletion allowance to the first point at which it is of any use, i.e., after retorting, is a minimum reform.

2. This reform is equitably required to bring the oil yielding rock within the range of treatment already given comparable minerals.

3. Only with this reform will it, perhaps, be possible to even initiate private development and availability of this vast oil resource for future energy needs of the country. Such development is now prevented by applicable tax laws.

B. The House passed bill neglected a required reform. Molybdenum, which until recent years was a little known metal, has not been specifically named in section 613(b)(2) of the Internal Revenue Code.

1. Section 613(b)(2) provides the depletion rate for all non-ferrous industrial metals used as ferro-alloys except for molybdenum. The failure to specifically so designate it for that section causes it to fall in the category of unnamed metals which receive a lower depletion rate but which are different than molybdenum.

2. The apparently unintended discrimination should cause a Committee amendment to place molybdenum in its proper category but the emergence of this metal as one with many vital and unique modern-day roles, such as for rocket motors and in new electronic procedures, evidences further the exigency of making this change.

C. The effects of one of the foundation tax reforms in the House passed bill require the serious consideration of this Committee. The proposed revision to section 4943 of the Code (beginning at page 34 of the bill) would work gross inequities on some existing private foundations in requiring them, in effect, to divest themselves of all stock in excess of 20% of any stock they own in any business enterprise.

1. The purpose of the amendments, to restrict foundations to charitable ventures and eliminate a tax shelter, would not be served, but to the contrary, the justification for any special treatment of foundations would be frustrated.

2. As examples, in Colorado there are two existing foundations, which would be adversely affected with no resulting correction of a tax inequity, the El Pomar Foundation and the Helen G. Bonfils Foundation. In both instances the intentions of the transfer of the stock as well as of the creators of the Foundations themselves would be frustrated and the Foundations rendered unable to accomplish their purposes.

STATEMENT BY
SENATOR GORDON ALLOTT
SENATE FINANCE COMMITTEE
SEPTEMBER 30, 1969
RE: H.R. 13270, TAX REFORM ACT OF 1969

Mr. Chairman, I appreciate the opportunity to appear before you this morning to discuss three provisions of H.R. 13270 which are of paramount concern to the Rocky Mountain Region.

These are:

1. The proposed change in the point of application of the oil shale depletion allowance.

2. The change in the depletion allowance for molybdenum.

3. The inequitable ramifications of those provisions of H.R. 13270 which require divestiture by all foundations of the voting stock of a business enterprise.

I. OIL SHALE DEPLETION ALLOWANCE

I invite the Committee's attention to the proposed change in the point of application of the oil shale depletion allowance which is found on page 281 of H.R. 13270. This provision amends section 613(c)(4) of the Internal Revenue Code to permit the depletion allowance on the oil shale to be taken after the retort process. This important change is accomplished by simply adding a new subparagraph "(H)" to section 613(c)(4) which defines those treatment processes considered as mining.

Mr. Chairman, this is a sample of oil shale as it comes out of the ground.

Obviously, rock in this state has no commercial value. To apply a 15% depletion allowance on rock in this state is meaningless. This oil shale must undergo complicated and expensive retort processes in order to derive the liquid kerogen necessary for the production of oil. Only after the completion of the retort process, therefore, is there a glimmer of economic value. The House bill recognizes this economic reality and would apply the depletion allowance to the post-retort state of processing.

This is but an infinitesimal fraction of the enormous reserves which are found in Colorado, Wyoming and Utah. It is estimated that in Colorado 800 billion barrels of oil lie embedded in the oil shale formations. A great portion of this treasure-house of energy resource is owned by the Federal Government. Despite the fact that these fantastic reserves have been known for over a hundred years the development of a viable oil shale industry remains a complete nullity.

This country has failed to develop an economic method of converting this rock into liquid petroleum. Costs of production have been too great to offer industry the incentive to invest the necessary capital to develop commercial production facilities. As was pointed out in the 1967 hearings before the Antitrust and Monopoly Subcommittee, the magnitude of investment for a 50,000 barrel per day mine and retort facility exceeds $100 million.

Failure to develop realistic and equitable Federal tax incentives has had a direct bearing on the unwillingness of business management to commit the huge blocks of capital requisite for the development of an oil shale industry.

Mr. Chairman, I want to assure members of this Committee that industry has not been timid in the expenditure of capital for research and development to determine the most feasible method of producing shale oil from oil shale. It has been estimated that at least $100 million has been spent by both private industry and the Federal Government to test the economic feasibility of oil shale production.

These research and development expenditures have only succeeded in proving that it is economically infeasible to produce shale oil under the present tax structure. The retention of the House proposal would be the first step on the road to providing the necessary economic incentives to create a viable oil shale industry.

Mr. Chairman, the Administration has opposed the retention of this provision in the House bill. The Administration has proposed additional incentive "should be granted in terms of the research and development objective." The Administration feels this proposal would constitute "an important breach in the principle that percentage depletion is to be computed on gross income from mining, not manufacturing to any extent."

Mr. Chairman, I believe these objections simply are not in accord with the facts.

First, as I previously stated, government and industry have invested nearly $100 million in oil shale research and development. Accordingly, to suggest that further research and development efforts should be expended simply overlooks the realities of the present situation.

With regard to the Administration's second objection, under existing law, treatment processes are considered mining for the purpose of applying the depletion allowance to ores or minerals which are not customarily sold in the form of the crude mineral product (26 United States Code 613 (c) (4) (D)). Examples covered by this section are: lead, zinc, copper, gold, silver, uranium, fluorspar ores, and potash.

Mr. Chairman, present tax law even considers the loading of coal or sulfur for shipment as part of the treatment process. The House bill only extends the treatment process to include the retorting of oil shale. As such, it is only "half a loaf" as compared to coal and sulfur since even after retorting the shale oil is not acceptable as refinery feedstock because retorted shale oil is hydrogen-deficient and requires hydrogenation before it is acceptable to a pipeline.

I point this out because the proposed definition of "treatment processes" specifically excludes hydrogenation, refining, or any other processes subsequent to retorting as they may apply to oil shale.

For the present, however, I only ask that the House passed provision be retained to include these other necessary commercial processes necessary for marketability of the product. Let us see what effect this provision will have upon the possibilities of creating an incentive for the development of an oil shale industry. If the present provision does not provide sufficient inducement I may be back.

Mr. Chairman, despite the importance of the recent North Slope discovery, projections indicate a requirement for a mix of conventional and synthetic fuels in the future. Because of a long lead-time involved, action is necessary now to provide the tax climate to assure existence of an adequate oil shale industry in the 1980's. The tremendous capital outlays, the development of advanced technology, and the long lead-time should allay any sudden fear of a flood of shale oil on the market.

Mr. Chairman, this provision in H. R. 13270 is an investment in the future energy needs of this country and a hedge against potential interdiction of foreign supply lines. As such, to paraphrase Neil Armstrong's famous exclamation from the moon, this would be the first small step for oil shale development in the Rocky Mountain Region, but it would be a giant leap forward for the economic development of this most important energy resource.

Mr. Chairman, for these reasons, I urge the Committee to retain the provision amending section 613(c)(4), found on page 281, line 2 of H. R. 13270, as passed by the House of Representatives.

Mr. Chairman, at this point in the hearing record, I would like to have inserted the statement of the Colorado Governor's Oil Shale Advisory Committee on this same subject.

(Statement attached)

II. MOLYBDENUM DEPLETION ALLOWANCE

On another subject, Mr. Chairman, and with the Committee's indulgence, I should like to point out one inequity in our tax structure which the House bill fails to correct.

This involves the question of equitable depletion treatment for molybdenum.

Mr. Chairman, molybdenum is the only non-ferrous metal to be excluded from the 23% depletion allowance category set forth in section 613(b)(2) of the Revenue Code. Under present law molybdenum receives 15% under the provisions of section 613(b)(6). It is my belief that due to its unique properties, it should receive the same depletion treatment afforded those industrial metals enumerated in section 613(b)(2). Molybdenum is the only ferro-alloy not included in this section.

As you know, the House bill would reduce the depletion allowance on section 613(b)(2) industrial metals down to 17%. Molybdenum would be reduced under the House bill to 11%.

I want to make it clear that the objection I raise here today is the continued discrimination against molybdenum. My concern is that this continued discrimination against molybdenum is due to an oversight and perhaps a lack of information with regard to the strategic uses and unique characteristics of this metal.

Molybdenum is a vitally important metal which is chiefly used by the steel industry as an alloying element. Over 80% of molybdenum produced is used in this alloying with iron and steel in making tool steels, stainless steels, and a wide range of constructional alloy steels, as well as special steels for corrosion resistance and elevated temperature service. Molybdenum also has smaller but growing use in such "space age" applications as rocket motors and electronics. Molybdenum was classified as a strategic mineral under the Korean excess profits tax and it has been stockpiled as a strategic and critical material by the United States Government.

At the present time molybdenum is entitled to only a 15% percentage depletion allowance, whereas all the other important ferro-alloys used in making alloy steel are entitled to 23%. These other alloys are chromite, columbium, manganese, nickel, tungsten, and vanadium. There appears no reasonable basis for this discrimination. In fairness, molybdenum should be included in the 23% category. Equity would seem to require that it should be treated no differently than other ferro-alloy materials and, therefore, it would be appropriate at this time to transfer molybdenum to section 613(b)(2)(B) of the Internal Revenue Code.

III. REQUIREMENT OF DIVESTITURE BY ALL FOUNDATIONS OF VOTING STOCK OF BUSINESS ENTERPRISES

Finally, Mr. Chairman, I should like to direct the Committee's attention to certain inequitable results which would develop if the proposed revision of section 4943 of the Internal Revenue Code actually became law. The provision in question is found at page 34 of H.R. 13270. This section provides that if a foundation owns more than 20% of the voting stock of a business enterprise it must divest itself of sufficient stock to bring such holdings to no more than 20%.

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Mr. Chairman, we have several unique foundations, the charitable purposes of which would be severely imperiled if this proposed change actually becomes law -- among these are the Helen G. Bonfils Foundation and the El Pomar Foundation.

In 1961, the Helen G. Bonfils Foundation received a gift of a 42% stock interest in the Denver Post, subject to the restriction that the stock was to be sold at a fair price to a trust for the benefit of the employees of that newspaper as the employees purchase interests in the trust. The object of this plan was to insure that (a) the value of the stock would be devoted to charitable purposes and (b) the Post would survive as a vigorous and independent newspaper owned by its employees. More than 400 Post employees have purchased interests in the trust in expectation of the full implementation of the plan.

The Post stock was thus received by the Foundation subject to a plan requiring complete disposition of such stock in a manner serving the public interest in maintaining independent newspapers. Accordingly, no substantial legislative purpose would be served, while a desirable and socially useful plan would be frustrated, if this stock were required to be disposed of at a rigidly fixed time schedule as contemplated by the provisions of the House bill dealing with this subject.

This situation will be more fully explained by former Ambassador Arthur Goldberg when he appears before your Committee on October 8.

Mr. Chairman, the El Pomar Foundation of Colorado Springs is another Colorado foundation which may be severely hampered in its charitable activities if this divestiture provision of the House bill is enacted into law.

Created under the provisions of the will of Spencer Penrose in 1937, the El Pomar Foundation contributes to public, educational, scientific, and other benevolent purposes in order to encourage and promote the well-being of the inhabitants of Colorado. The entire state has been the beneficiary of this unique and worthwhile foundation.

One of the principal assets of the Foundation, however, is the El Pomar Investment Company which in turn owns and operates the Broadmoor Hotel. The directors of the El Pomar Investment Company have consistently placed service to the community and the general welfare of the inhabitants high on their list of priorities. Like the Green Briar and the Homestead, the Broadmoor has placed primary emphasis on the excellence of its service and facilities, far above the level which would be maintained to maximize profits. I am sure that those of you who have stayed at the Broadmoor will undoubtedly agree with me that this is an outstanding asset to Colorado.

I am very concerned that under the proposed revision of section 4943 suggested in the bill, the El Pomar Foundation will be required to divest itself of its relationship with the Broadmoor Hotel.

I have been particularly impressed by the arguments developed in opposition to the enactment of the proposed section 4943 as they relate to the El Pomar Foundation. Because these arguments are developed in greater detail by Mr. Russell Tutt, President of the El Pomar Foundation, I should like to ask that his entire statement be included at the conclusion of my remarks on this subject.

Mr. Chairman, in conclusion, I believe that there is a great deal of merit in enacting certain limitations on the activities of foundations which are clearly beyond the realm of charitable or benevolent concern. On the other hand, I do believe that amendments to section 4943 might be adopted to assure that this section is structured in such a way so as to assure that foundations exist for charitable purposes and not for perpetuating donor control or for tax evasion.

Mr. Chairman, and members of the Committee, I thank you for your attention on these important matters this morning.

ATTACHMENT

STATEMENT OF THE COLORADO GOVERNOR'S OIL SHALE ADVISORY COMMITTEE BEFORE THE SENATE FINANCE COMMITTEE

September 30, 1969

The Colorado Governor's Oil Shale Advisory Committee urges the Senate Finance Committee to retain the provisions of House Bill 13270 insofar as such bill applies to the depletion allowance provided for oil derived from oil shale.

I. HOUSE BILL 13270 ELIMINATES THE PRESENT INEQUITY WHICH RESULTS FROM THE TREASURY'S CONSTRUCTION OF SECTION 613(c)(4) OF THE 1954 REVENUE CODE THAT THE RETORTING OF OIL SHALE IS NOT A TREATMENT PROCESS CONSIDERED AS MINING WITHIN THE MEANING OF THAT SECTION.

Treasury has discriminated against oil produced from oil shale in favor of oil from conventional sources by holding that the 15 percent depletion allowance applies to crushed oil shale rock rather than retorted oil. There is no market for the crushed oil shale rock since the vast quantities of rock required for the processing of oil from shale are too great to permit transportation of crushed oil shale significant distances from the mine portal. Therefore, the only way to determine the value of such crushed rock is to attribute to it that portion of the value of the first marketable product (retorted oil) which the aggregate cost of mining and crushing bear to all costs necessary to obtain such retorted oil. Since mining and crushing constitute approximately 50 percent of the total cost of processing oil from shale prior to hydrogenation or other refining, the crushed oil shale rock has a value of approximately 50 percent of the value of the retorted oil. Thus the effect of Treasury's position is to accord the oil shale industry an effective depletion allowance not of 15 percent, but of approximately 7-1/2 percent. The deterrent effect of Treasury's position upon would-be investors in the oil shale industry is obvious.

Students of the industry look forward to oil shale as a supplemental source of crude to shore up the dwindling domestic reserves. It is inequitable to burden the new industry with a depletion rate which represents less than half of the rate intended by Congress and an even smaller fraction of the rate available to the conventional oil industry.

Treasury's present position not only discriminates against oil from oil shale as compared with conventional oil, but will result in discrimination between different methods of processing oil shale. Each process for the retorting of oil shale will result in a different depletion allowance, depending upon the relative cost of the process to the aggregate costs of mining and crushing. In the event that the extraction of oil from shale by an "in situ" process becomes feasible, the inequities created by the Treasury's position become even more apparent. Since no mining or crushing would be used, the depletion allowance would have to apply to the value of the retorted oil.

The elimination of the inequity by the House Bill is consistent with the intent of the drafters of Section 613(c)(4). It achieves the result which Senator Byrd hoped would be effected by the Secretary of the Treasury in enacting Section 613(c)(4)(H). In explaining the final bill to the Senate, he said:

> . . . . "The conference agreement also adds a new subparagraph (H) to provide administrative flexibility in the application of this provision by providing that the Secretary or his delegate may by regulation provide for the allowance of any other treatment process which is not specifically denied in the other subparagraphs of paragraph (4). Your Committee hopes that the Secretary will use this subparagraph to equalize treatment insofar as possible under the different processing techniques and with respect to competitive minerals." (Underlining supplied for emphasis.)

Since Treasury has failed to avail itself of the remedies provided in Section 613 (c)(4)(H), we urge the Senate to eliminate the inequity by adopting the provision already passed by the House.

II. THE HOUSE PROVISION IS CONSISTENT WITH THE INTENT OF CONGRESS IN ENACTING SECTION 613(c)(4).

Oil shale is clearly a mineral intended to come within the ambit of Section 613(c)(4)(D) as one "which is not customarily sold in the form of the crude mineral product." Retorting is a substantially equivalent process . . . "used in the separation or extraction of the product or products from the ore or the mineral or minerals from other material from the mine or other natural deposit."

A process virtually identical to the retorting of oil shale is the furnacing of quicksilver ores now included under subparagraph (D) of Section 613(c)(4). The inclusion of retorting of oil shale as a treatment process considered as mining, therefore, does no violence to the spirit or the letter of Section 613(c)(4).

III. HOUSE BILL 13270 WILL NOT DEPRIVE THE TREASURY OF REVENUE.

Although the commercial production of oil shale is in the final states of development, there is no shale oil production yielding revenue to the Treasury at the present time. Accordingly, enactment of the House provision dealing with oil shale will not adversely affect revenues of the Federal Government. Indeed, enactment of the House provision will eliminate one of the present major obstacles to the development of a new domestic industry needed to supplement domestic sources of petroleum and will add a substantial source of revenue for the United States Treasury.

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American Mining Congress

Summary

of the

American Mining Congress

Statement

Before the

Senate Finance Committee

on H.R. 13270

Depletion Rates. Percentage depletion deductions have been provided by Congress for some hard minerals since 1932. Under present law virtually all minerals are entitled to percentage depletion. Prior to 1932, Congress recognized that mineral deposits were irreplaceable, wasting assets by providing depletion deductions based upon the discovery value of the mines or deposits. The depletion provisions have been reviewed frequently by Congress, and attempts to eliminate or reduce percentage depletion have always been rejected.

Demand for minerals in the United States is expected to increase to four times the present level by the year 2000. Worldwide demand will increase even more. Since mineral production in the United States is not expected to increase nearly as much, we must also increasingly rely on foreign sources for minerals.

The mining industry will require tremendous amounts of capital investment to meet the future demand. Mining now requires more capital per employee than any other industry and its ability to attract capital will depend upon the after-tax rate of return. If the industry is to generate the capital to meet the increased demands of the future, then the present depletion rates should not be cut.

Effective Dates. We suggest that all the tax-imposing provisions of the bill be applied prospectively only.

Mining Exploration. In view of the changes in sections 615 and 617, we urge that taxpayers who have elected to treat their exploration expenditures under section 615 be given another opportunity to elect section 617 treatment. We also suggest that, in explaining the mine exploration expenditure provisions of the bill in its report, the Committee make it clear that expenditures after the development stage is reached are to be treated as development (or production) expenditures.

* Submitted by Fred W. Peel, Chairman, Tax Committee.

Contd. . . . .

Mineral Production Payments. We believe that if proceeds from sale of mineral production payments are treated as loans for purposes of depletion computations, the mining industry should not be prevented from accelerating income for other purposes on the same basis as other taxpayers.

Depreciation. We suggest that buildings constructed by mining companies to house their mining and beneficiation facilities and for related operations be permitted to continue to use double declining balance and sum-of-the-years digits depreciation subject to full recapture of depreciation as ordinary income against profit on sale. We also suggest provision in the law for the depreciation guideline lives so taxpayers may use useful lives at least as short as guideline lives without regard to a reserve ratio test.

"Hobby Loss" Provision. We urge that, if section 213 is retained in the bill, it be revised to make it clear that it does not apply to unprofitable activities carried on as segments of an overall trade or business conducted with a reasonable expectation of realizing profit.

Foreign Mining. We suggest that the entire subject of foreign tax credits and changes from domestic depletion rates be put over for consideration when the Treasury makes its comprehensive proposals on taxation of foreign income. Any changes in our tax laws that would discourage American mining firms from securing and developing foreign mineral deposits would be contrary to the national interest.

We urge rejection of section 431 of the House bill. Taxpayers get no double benefit from incurring losses in foreign countries. We also urge rejection of section 432 of the House bill. This provision would penalize taxpayers paying bona fide foreign income taxes by presuming conclusively, without any inquiry into the facts, that all the foreign taxes on mining income are royalties.

We also urge rejection of the Treasury's alternative to section 432 and rejection of the idea of a 60% limit on creditable foreign taxes on mining income, which is mentioned in the Treasury's statement but no recommended.

Conclusion. The American mining industry has a vital role and has performed it well under our present tax system. It has an even bigger job to do in the future, and it would certainly be inadvisable to set up tax barriers to block the accomplishment of that job by changing the present tax treatment of the industry.

American Mining Congress

Statement

of the

American Mining Congress

on H. R. 13270

by

Fred W. Peel, Chairman, Tax Committee

to the

Senate Committee on Finance

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September 30, 1969

Mr. Chairman:

My name is Fred W. Peel. I am the Chairman of the Tax Committee of the American Mining Congress and I appear before you today to present the position of the Mining Congress on the provisions of H.R. 13270 that are of particular concern to the mining industry.

The American Mining Congress is a trade association founded in 1897. Its membership is composed of (1) United States companies that produce and process a majority of the nation's ferrous and nonferrous metals, coal, and industrial and agricultural minerals, and (2) United States companies that manufacture mining equipment and supplies. Its headquarters are in Washington, D. C. It coordinates the efforts of the mining industry to present to the

Federal Government its views on developing and maintaining a strong and healthy industry.

DEPLETION RATES

In the form in which it passed the House, H.R. 13270 would reduce the present percentage depletion rate for minerals now eligible for 23% to 17%, a 26.1% reduction; for most minerals now eligible for a 15% rate to 11%, a 26.6% reduction; for minerals now eligible for a 10% rate, a reduction to 7%, a 30% reduction; for clay, shale, and slate now eligible for a 7-1/2% rate, a reduction to 5%, a 33-1/3% reduction; and for sand, gravel, and other minerals now eligible for a 5% rate, a reduction to 4%, a 20% reduction.

The changes in percentage depletion rates made by the House bill should be considered in the light of (1) the problems of the past that the depletion provisions of the present law were designed to solve; (2) the extent to which the provisions of present law have become integral parts of the basic economic structure of the industry; and (3) the role percentage depletion can be expected to perform in the future.

History of Taxation of the Mining Industry

When the Corporate Excise Tax Act of 1909 was enacted, mining companies contended that profits from mining operations were not subject to ordinary income tax because the miners were disposing of their capital assets--the mineral deposits being wasting, irreplaceable assets. The Supreme Court

decided, however, that the profit was taxable as ordinary income, notwithstanding the fact that the minerals could not be replaced as manufactured inventory could. Stratton's Independence v. Howbert, 231 U.S. 399; Von Baumback v. Sargent Land Co., 242 U.S. 503. These decisions set the stage for the subsequent problem of fitting the disposition of irreplaceable mineral deposits into an income tax system designed primarily to tax profits on replaceable items. The Supreme Court also held that mining companies were not entitled to depletion deductions under the 1909 Act since there was no provision in the Act for such a deduction.

Ever since the enactment of the first income tax law in 1913, the mining industry has been allowed a deduction for depletion. The Revenue Act of 1913 limited this deduction to 5 percent of the gross value at the mine of the minerals produced. The Revenue Act of 1916 abandoned the 5 percent of gross value limitation and allowed a reasonable allowance for depletion not to exceed the market value in the mine of the products. This Act also permitted the taxpayer to compute his depletion deduction on the basis of the cost of the property or its fair market value as of March 1, 1913, whichever was the greater.

The Revenue Act of 1918 continued the allowance of a depletion deduction based on cost or the March 1, 1913 value, but in addition provided also for discovery depletion with respect to mines "discovered by the taxpayer on or after March 1, 1913 and not acquired as a result of purchase of a proven tract or lease, where the fair market value of the property is materially disproportionate to the cost." In such cases the depletion allowance was

based upon the fair market value of the property at the date of discovery or within 30 days thereafter. Discovery value depletion was the forerunner of the present percentage depletion provisions of the income tax laws.

The Revenue Act of 1921 amended the discovery depletion provision to limit the depletion allowance based on discovery value to the net income from the property. The Revenue Act of 1924 further limited the depletion deduction based on discovery value to 50 percent of the net income from the property.

The Revenue Act of 1926 incorporated the concept of percentage depletion into the tax law for the first time. That Act substituted a percentage depletion deduction for oil and gas wells of 27-1/2 percent of gross income from the property, limited to 50 percent of the net income from the property. This deduction was in lieu of discovery value depletion. The administration of the discovery depletion provisions had been difficult and complex. The Senate Committee on Finance recommended the percentage depletion approach "in the interest of simplicity and certainty." No change was made in this Act in the method of computing the depletion deduction in the case of the mining industry.

Apparently as a result of a "Preliminary Report on Depletion" prepared by the staff of the Joint Committee on Internal Revenue Taxation in 1929 that was critical of the application and results of discovery depletion, Congress extended percentage depletion to metal mines, sulphur, and coal mines at the respective rates of 15, 23, and 5 percent in the Revenue Act of 1932. Discovery value depletion was no longer allowed for those minerals. Mines other than

those entitled to percentage depletion still had the choice between cost depletion and discovery value depletion.

There were no further changes in the depletion provisions until the Revenue Act of 1942 extended percentage depletion to fluorspar, rock asphalt, and ball and sagger clay at the 15 percent rate applicable to metal mines. The Revenue Act of 1943 also extended the percentage depletion provision to a new group of nonmetallic minerals at a 15 percent rate: flake graphite, vermiculite, potash, beryl, feldspar, mica, lepidolite, spodumene, talc, and barite. With the exception of potash, the extension of percentage depletion to these minerals was for the war period only. This Act also incorporated into the tax law for the first time a definition of "gross income from mining" on which the percentage depletion deduction was computed. This provision was an outgrowth of controversies between the mining industry and the Treasury Department over what operations were mining processes for depletion purposes.

In 1947 Congress made permanent the extension of percentage depletion to the nonmetallic minerals that had been granted percentage depletion in 1943 for the duration of the war and added the names of the following minerals to the list entitled to the 15 percent rate: china clay, bentonite, gilsonite, thenardite or sodium sulfate, trona, pyrophyllite, and bauxite.

In the Revenue Act of 1951 percentage depletion was applied to about 30 new nonmetallic minerals at rates varying from 5 to 15 percent. This Act also changed the tax treatment of both exploration and development expenditures.

When the Internal Revenue Code of 1954 was enacted, all minerals were granted percentage depletion at rates varying from 5 to 23 percent except soil, sod, dirt, turf, water, or mosses or minerals from sea water, the air, or similar inexhaustible sources. With the extension of percentage depletion to virtually all minerals, the discovery depletion provision was dropped completely.

In the 1954 Code and at times subsequent to its enactment, the percentage depletion rates for various minerals were increased. Except for the changes in the rates and except for an amendment clarifying the definition of "gross income from mining," there have been no substantial amendments to the depletion provisions applicable to the mining industry since the enactment of the 1954 Code.

Reviews of Percentage Depletion

The percentage depletion provisions have survived constant attack since they first became part of our tax laws. Full scale efforts by the Treasury Department to eliminate or reduce the benefits of these provisions were made in 1942 and again in 1950. On each occasion the Treasury's recommendations were rejected and percentage depletion allowances were extended to additional minerals.

The percentage depletion provisions were incorporated into the 1954 Code, which was the product of a thorough review of the whole income tax system. Finally, Congress rejected proposals made by the administration in 1963 that would have had the effect of lowering the depletion deductions of all of the mineral industries.

A discussion of the several previous reviews of these provisions would not be complete without reference to the recommendation made by the President's Materials Policy Commission, the so-called Paley Commission, in its June 1952 report. This report said:

> In short, the device of percentage depletion as an incentive to minerals exploration is not without its limitations. But no alternative method of taxation has come to the Commission's attention or could be devised by the Commission which, in its judgment, promises to overcome these limitations and still achieve the desired results, particularly not without seriously dislocating well established capital values and other arrangements in the industries concerned, with highly adverse effects on supply. Taking the practical situation as it finds it, the Commission believes that any radical alteration of the existing tax arrangements would be undesirable.

To summarize--the present percentage depletion provisions are traceable to the very beginning of the federal income tax. They are a part of our fundamental tax structure and have a sound economic justification. It is important that this background be understood by those aiming at percentage depletion as one of the targets for tax reform. Not only were there good reasons for Congress' enactment, but percentage depletion has become an integral part of the economics of one of our most important industries.

The Mining Industry Today

In the year 1967, there were over 15,000 metallic, nonmetallic, and coal mines in the country. See Appendix A for a breakdown of metallic and nonmetallic mines by size and mineral. The mining industry produced tonnages in 1967 valued at over $10 billion with 350,000 production workers. Their wages and salaries in 1967 totaled almost $2.5 billion. The mining

industry's contribution to the overall economy was well expressed by Hollis M. Dole, who, as Assistant Secretary--Mineral Resources, in the Department of Interior, testified before the Subcommittee on Minerals, Materials and Fuels of the Senate Interior Committee on July 9, 1969 that:

> . . . U.S. minerals provide only some 3 percent of the Gross National Product. But this is only the beginning--it is only the point of an inverted pyramid which depicts our industrial economy resting upon a small but absolutely essential minerals base.
>
> The impact of that 3% GNP directly results in 40% of the GNP and indirectly accounts for nearly 75%.
>
> Let's look at it another way: if you were to select 100 * men as representative of the work force directly dependent upon minerals production in the U.S., you would find that it requires only 3 of these men to mine the ore but it takes 14 to produce the metal and 83 to fabricate, distribute and sell the ultimate product. If we could get our "man in the street" to appreciate some of these facts, we would be making a good start.

Future Mineral Requirements

The Bureau of Mines has predicted United States mineral demand to increase by more than 4 times by the year 2000, whereas domestic mineral production projected on the basis of 20-year trends can only be expected to little more than double by the end of the century. The Bureau of Mines is also predicting that there will be a fivefold increase in worldwide demand by the year 2000.

According to the latest Bureau of Census median projection, the population of the U.S. is expected to reach 320 million people by the year 2000. As the standard of living of the expanding population increases, so does the per capita consumption of minerals. These factors are expected to

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account for a doubling of mineral demand by 1985 and further expansion to more than 4 times present demand by 2000. This is not surprising since, over the past century while our population grew more than 400 percent, our minerals consumption grew more than 4,000 percent. By the year 2000 per capita demand for minerals in the U.S. is expected to rise from $150 per year to approximately $420.

The following table has been compiled from the Bureau of Mines projections of United States demand and production for some of the basic minerals in the years 1985 and 2000. Also included are the projected requirements for these same minerals by the rest of the world based upon a projected world population climb to 6-1/2 billion by the year 2000 coupled with expectations of increased per capita consumption.

FUTURE MINERALS REQUIREMENTS
As Projected by U.S. Bureau of Mines
for the years 1985 and 2000

(In million short tons)

MINERAL ELEMENT	U.S. DEMAND			U.S. PRODUCTION		REST-OF-WORLD DEMAND		
		Projected Requirements		Projected Upon Trend Of Last 20 Years			Projected Requirements	
	1967	1985	2000	1967	2000	1967	1985	2000
Aluminum	3.7	11.6	29.9	0.4	0.4	5.8	12.0	23.2
Copper	1.5	2.6	4.0	.9	2.1	4.0	8.5	11.8
Iron	85.7	118.0	144.0	54.8	38.0	298.9	573.0	807.0
Lead	.7	.8	1.1	.3	-0-	2.4	3.8	5.0
Magnesium	2.1	3.4	5.1	2.0	3.7	6.5	12.0	16.7
Manganese	1.2	1.8	2.4	.1	-0-	7.1	13.9	18.8
Phosphorus	3.8	6.4	10.5	5.4	8.8	7.6	21.3	36.0
Potassium	3.4	6.3	10.8	2.7	5.9	10.3	22.5	38.0
Sodium	17.3	32.7	60.4	16.5	28.6	35.4	66.2	102.0
Sulphur 1/	9.3	18.0	32.0	9.1	12.6	18.0	51.0	92.0
Uranium	.001	.05	.2	.001	.049 2/	.001	.08	.2
Zinc	1.3	2.4	3.5	.5	.3	4.0	6.0	8.6
				(In million pounds)				
Molybdenum	54.5	88.0	130.0	88.9	167.9	82.5	122.0	170.0
Nickel	364.9	470.0	550.0	29.2	87.4	614.0	850.0	1000.0
Tungsten	13.9	34.4	64.2	9.3	13.5	52.5	96.1	126.5

1/ Millions of long tons
2/ Based on AEC procurement only

Source: Compiled from Bureau of Mines Commodity Statements, January 31, 1969

The predictions of increased consumption are understandable when one c nsiders the increases that have already taken place. For example, 20 years ago the United States consumed 12 pounds of aluminum per capita; today U.S. consumption is approximately 41 pounds per capita. Over the same 20-year period, Japanese consumption of aluminum has increased from 1/2 pound to 15 pounds. Copper consumption in the developing foreign countries is increasing at about the same rate. If the rest of the world should increase its per capita consumption of copper by the year 2,000 to our present level, this would require annual production of 15 times the amount now needed.

Our primary concern is with future United States demand. The increasing gap between United States demand and domestic production, of course, will have to be supplied by imports. Pointing out the growing interdependence of domestic and foreign sources of supplies in what is becoming a world natural resources economy, Dr. Walter R. Hibbard, former Director of the Bureau of Mines, said in September of 1966:

> Experience indicates that in mineral-related areas about 60% of the investment flow abroad is to cover depreciation, with the remaining 40% going into expansion. In view of this ratio, it becomes clear that a high level of capital input must be maintained to avoid jeopardizing the total value of these foreign investments. Studies also indicate that the net return on foreign investments must remain close to recent levels. Only in this way can enough new capital be generated to sustain investment rates that can assure a continuing ability to meet expanding demands for products. . . .
>
> This problem is intensified and complicated by the shifting economic, political, and social patterns that accompany other changes in our world. . . .
>
> As with the United States, the appetite of West Europe and Japan for mineral raw materials has outrun the capacities of economically viable indigenous resources. . . .

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> Today, virtually every industrialized country is actively searching the world for mineral resources that can be developed to help supply their home demands.

In view of the particularly long lead-time in the mining industry, the projections of increasing gaps between demand and production are of serious concern. Lead-time is particularly important in the search for and development of foreign mineral deposits. Should the Congress, upon review in a few years of any additional tax burdens placed on U.S. mining abroad, decide that the additional taxes were a mistake, the opportunities which arose in the interim will have been lost forever, and the U.S. as a nation will become increasingly reliant on foreign-controlled sources of raw materials.

As the report of the Paley Commission made clear in 1952, the problem of meeting future demand for minerals is not one of the existence or nonexistence of mineral resources. Instead, the problem is whether the United States might find itself priced out of world markets for minerals or be forced to rely on less desirable sources. The one meaningful criterion is the cost of producing a unit of a given mineral. This criterion is central to consideration of the tax treatment of the mining industry today, because the tax treatment cannot be considered in a vacuum; taxes are not the only cost increase the mining industry faces. Increasingly, the industry will meet federal, state, and local pollution control, health and safety requirements, increasing acquisition costs--in addition to higher taxes--all at a time when it must somehow find ways of profitably extracting the lower-grade deposits that remain.

Tax Treatment and the Future

For most minerals the tremendous future demands will be handled by a four-pronged approach:

1. More extensive (and intensive) exploration,
2. Mining lower-grade ore deposits,
3. More research in mineral recovery methods and mining methods, and
4. More intensive investment input in mechanized facilities.

All four of these solutions require more capital--much more capital. As far as the accessible areas of the world are concerned, the deposits that reveal themselves with surface outcrops have already been discovered. Today a minerals exploration program usually starts with aerial photos and may continue with geochemical surveys, aeromagnetic surveys, electromagnetic surveys, ground magnetometer surveys, induced polarization, gravity surveys, and, eventually, diamond drilling or trenching. All of this adds up to tremendous expenditures. Furthermore, these exploration techniques have by no means eliminated the risk that the exploration will be unsuccessful. The process is risky as well as costly.

Mineral deposits are irreplaceable and, by and large, the best ones go first. Thus, as we attempt to meet the increased demand over the next 30 years, we will necessarily be forced to go to less desirable deposits--that is, those with a lower percentage of mineral content, those that are more difficult to extract because of a higher ratio of overburden to the mineral, and those that are less accessible and more distant from markets.

Research and experimentation in methods of improving the efficiency of the recovery of desired minerals from crude ores and the improvement of mining techniques have helped the mining industry to maintain production even though the richer mineral deposits have been depleted.

In general, the great production efficiencies have come from increased mechanization and use of large-scale equipment. If the mining industry is to fill the increased demand for its products from less desirable deposits it will have to turn to heavier and heavier capital investment. The mining companies included in Fortune magazine's most recent survey of the 500 largest corporations had capital assets of $134,000 per employee--by far the largest investment per employee for any category of industry. This figure of $134,000 per employee is understandable when you realize that some companies are now hauling ore from open pits in trucks that carry over 100 tons a load. A 100-ton truck may cost as much as $185,000. A dragline operated by two men may cost as much as $10 million.

The magnitude of the total investment needed to put a large-scale, mechanized mine in operation is so great that it presents unique problems of availability of capital. For example, the Kennecott Copper Corporation recently spent $100 million in a program at its Bingham Canyon open pit copper mine in Utah merely to maintain copper production at its past levels. The Freeport Sulphur Company is considering a program for an Indonesian copper deposit in a remote area, where transportation facilities will have to be built as well as mining facilities, and it is anticipated that the cost will be in excess of $100 million.

The long lead-time--which means funds expended may not begin to yield a return for years--intensifies the industry's capital problems. For example, American Metal Climax, Inc. is engaged in a project to bring the Henderson

molybdenum mine, located in Empire, Colorado, into production. The total outlay will be approximately $200 million. The mine will have a capacity of 50 million pounds of molybdenum a year. It has already been in development for 4 years, and it will not be producing until the mid-1970's.

In connection with the rising cost of mining, it should be pointed out that additional costs have already been imposed upon the mining industry in connection with pollution control, mine reclamation, and mine safety. Mentioning these facts should not be construed to indicate that the mining industry is opposed to reasonable regulations in these three areas, but merely to direct attention to additional cost factors that already must be taken into consideration by a mining company in determining whether to go forward with a projected mining operation.

The decision to undertake a mining operation is made, in its simplest terms, by comparing the rate of return--after income taxes--on the funds that must be tied up in the project with the after-tax yield if the funds are invested in something else, taking into account differences in risks. In making the necessary projections before a new project is undertaken, a company will make its computations of after-tax rate of return and cash flow on the basis of the deductibility of preproduction expenditures and on the basis of the depletion allowances.

If depletion deductions are cut, some of these projects simply will not pass the test of an acceptable after-tax rate of return at present price levels. In the long run, failure to develop new sources would cut mineral supply. The effect would be to slow down the development of the whole economy and by

imposing higher costs for minerals would eventually result in passing on the additional tax burden to the mineral consumers.

It would be a great mistake to view the mining industry as a static industry where the government could reap a windfall in tax revenues by cutting back on deductions on existing operations after the mining companies were committed to these operations on the assumption that the present tax treatment would continue. Entirely aside from the unfairness of such an approach, it would be self-defeating because the mining industry is not a static industry. Our economy is dependent for the foreseeable future on the mining industry making the investments necessary for a tremendous increase in production. We operate in a free enterprise system and we depend upon the after-tax rate of return to direct the flow of capital into one industry or another. Even if the managers of the mining companies wanted to make unprofitable investments in further increases in production, the capital would simply not be forthcoming. Investors would no longer be attracted to the industry. The mining industry must be able to offer investors at least a rate of return that is competitive with other industries. It should be able to offer a better rate than other, less risky investment prospects. To put it simply, if the country expects the mining industry to generate the investment capital to meet the increased demands of the future as it has successfully met increased demand in the past, then the present depletion rates should not be cut.

In view of the phenomenal projected mineral needs for both the United States and the rest of the world, it seems clear that to achieve any progress we must move forward from existing policies rather than to cut back. Clearly, a cut in depletion would increase costs, rendering already low-grade domestic mines even less economically viable, and making United States-owned foreign ventures less competitive vis-a-vis foreign-owned enterprises seeking the valuable deposits in the emerging countries. This nation can ill-afford such a "giant step backwards."

The importance of the after-tax rate of return is illustrated by the example of one company that has reported to us that it went into a uranium mining operation several years ago, at a time when uranium had an uncertain future, on the basis of a discounted cash-flow rate of return analysis that showed the return on a 1,000 ton-per-day operation would be reduced by more than 75 percent if the 23 percent depletion allowance for uranium were not taken into account. The company reported that it undoubtedly would have decided to discontinue the operation in the absence of the depletion deduction. Another company has estimated that its sales price for uranium would have to be increased more than 10 percent to maintain the same net after-tax income if the percentage depletion allowance were to be eliminated. Another company that has opened a relatively small copper-zinc mine in a depressed area--an operation that required an initial outlay of more than $4 million--reported that under the discounted cash flow method it uses to evaluate investments, it is doubtful that it would have undertaken the project if it were not for the percentage depletion deduction.

Perhaps a more striking example of the importance of the present tax treatment is a case described to us by a company that was considering developing a copper deposit in an African country. This country required, however, that the mine be owned and operated by a corporation organized under the laws of that country. The effect of this would have been that when the income from the mine was first subject to tax by the United States it would be subject to tax as dividend income and thus would not be eligible for a percentage depletion deduction. The company eventually decided to withdraw from the project, though it had spent several hundred thousand dollars on it, because the inability to use the percentage depletion deduction reduced the after-tax return to the point where it was no longer an economically viable investment. This deposit was subsequently developed by foreign companies.

The present tax treatment of the mining industry has been built into the investment structure of the industry, and into its price structure. Decisions to open new mines or expand existing mines have been made on the basis of the present provisions of the Internal Revenue Code. The prices charged for mineral products and, indirectly, prices throughout the economy have been determined by the supply of minerals evoked by the present tax structure.

Annual surveys of the First National City Bank for the years 1960 through 1968 show an average profit after taxes as a percentage return on net worth of 11.2 percent for the mining industry compared with 12.15 percent for manufacturing industries. It is clear from these figures that the owners of the mining companies are not getting an undue profit after taxes because of their tax treatment.

It would be ironic if the Senate should cut back on depletion rates for the mining industry in the same Congress in which it passed S.719. In passing S.719, the Senate has endorsed the principle of recognition of the national interest in the American mining industry. Surely the first token of that recognition will not be an increase in tax burden aimed directly at the mining industry.

We strongly urge that depletion rates applicable to the mining industry under present law be retained by this Committee.

Inconsistencies in Depletion Rates Under the Bill

The blanket reductions were made without regard to the fact that coal logically should have been in a higher rate category than 10% before any reduction was applied since all other fuels have higher rates and the general category of "other minerals" has a rate of 15%. For example, if coal were to be treated as entitled to a 15% depletion rate before any cuts were considered, then even the 26.6% cut proposed in the House bill for minerals entitled to the 15% depletion rate would leave it with depletion at the rate of 11%.

Even those minerals that were excepted in the House bill from the cut in the 15% depletion rate (gold, silver, oil shale, copper, and iron ore) were excepted from the cut only with respect to domestic deposits. Since we are concerned with the scarcity of these minerals and since we must rely on foreign sources (except in the case of oil shale), there is no reason for cutting their depletion rate in the case of foreign deposits.

Technically, it is not clear what the provision in the bill for a 15% rate for domestic gold mines and silver mines actually means. With occasional exceptions, gold and silver are produced in this country as by-products from

mines whose products of principal value are lead, zinc, or copper. While historically the reference in the law to "metal mines" has been interpreted as providing a depletion rate for metals not otherwise provided for by name in the Code, this interpretation is proposed to be overturned in the pending proposed regulations under section 613. These proposed regulations would treat as eligible for the present 15% rate for metal mines all mineral products from such mines, whether these products are metals or not (unless the products are eligible for a 23% rate under section 613(b) (2) (B)). If this interpretation, which we think is erroneous, should be applied to the House version of H.R. 13270, the 15% rate for gold or silver mines in the United States would presumably not be available for gold and silver produced from other metal mines in the United States. For example, the rate of depletion on silver from a lead-zinc mine might be cut to 11%, even though the depletion rate on the lead-zinc itself would be 17% (23% under present law). Furthermore, under this interpretation, the effect of the language of the House bill would be to reduce the depletion rate on iron ore from a domestic mine from 15% to 11% where the iron existed in the ground in combination with other metals if the predominant value of the product from the mine was of the other metals or minerals. This is not a theoretical example; it occurs where iron sinter (which is in direct competition with the iron in taconites) is obtained from sulfide ore. This is a technical problem that could be solved by deleting the word "mines" from proposed section 615(b) (3) (A).

EFFECTIVE DATES

The bill as it passed the House is inconsistent in its treatment of effective dates for the various provisions. Retroactive application of taxes should

be avoided wherever possible. Otherwise, some taxpayers will be taxed under provisions of which they had no knowledge. This is true even though a provision is made effective on the date of some announcement by the Ways and Means Committee or on the date that some proposal was made by the Treasury Department. All taxpayers cannot be expected to keep in touch that closely with legislative developments. In fact, in a complex area such as the tax law, taxpayers find it difficult to keep up with changes actually enacted into law.

An example of a retroactive effective date is the one proposed with respect to mineral production payments. Treatment of such payments as loans is made applicable, in the House bill, to production payments created on or after April 22, 1969. Another example is in the application of recapture rules to section 615. These rules would be effective for exploration expenditures after July 22, 1969.

We suggest that all the tax-imposing provisions of the bill be applied prospectively only.

MINING EXPLORATION

The bill makes the so-called recapture provisions of section 617 applicable to expenditures after July 22, 1969 to which section 615 applies. It also allows foreign exploration expenditures to qualify for deduction under section 617 subject to a $400,000 limitation on total expenditures. The net effect of the two changes is virtually to eliminate the difference in tax effect between section 615 and section 617. Under the bill, both sections will apply to foreign as well as domestic exploration expenditures (within the $400,000 limitation) and deductions under both will be subject to recapture--that is, the amount of exploration deduction previously taken on a property that becomes a producing

mine will be recaptured either by immediate inclusion in income or by denying an equivalent amount of depletion deductions for the mine. The only difference remaining between section 615 and 617 treatment is that there will be an overall limit of $400,000 on deductions under 615, including domestic as well as foreign exploration expenditures, whereas domestic exploration expenditures in excess of $400,000 can be deducted under section 617.

Under these circumstances, it would be unfair to hold taxpayers to an earlier election to deduct exploration expenditures under section 615 instead of under section 617. The reason for electing section 615--i.e., no recapture--disappears under the bill, so taxpayers should no longer be bound by their earlier election of section 615 now that the terms of the provision on which the election was based have been changed. We urge that taxpayers be permitted another election between deducting exploration expenditures under section 615 and under section 617.

In revising the Code provisions for mine exploration deductions the Committee should take this opportunity to make it unmistakably clear that expenditures after a mine reaches the development stage are not to be treated as exploration expenditures for tax purposes. Instead, they are either development expenditures or production expenditures after the mine has left the exploration stage. It would seem unnecessary to labor this obvious point in view of the statements in this Committee's report on the 1950 Act when the predecessors of the present sections 615 and 616 were enacted, but there has been a persistent misunderstanding of Congress' intent, culminating in an interpretation by the Court of Appeals for the Seventh Circuit in its opinion

in Santa Fe Pacific Railroad Co. v. United States, 378 F.2d 72 (7th Cir. 1967). Regardless of whether or not the Court reached the correct result on the facts in that case, the opinion misinterpreted the consequences Congress intended to be drawn from the shift from the exploration stage to the development stage. The opinion in the Santa Fe case reached the remarkable conclusion that, having provided for deduction of exploration expenditures (within limits) during the exploration stage and having provided for deduction of development expenditures after the mine reached the development stage, Congress meant to treat taxpayers as having exploration expenditures after the exploration stage had ended that were not deductible either as exploration expenditures or as development expenditures.

A fair reading of the Treasury Regulations under sections 615 and 616 bears out our interpretation. See Regs.§§1.615-1(a) and 1.616-1(a). We suggest that the Committee state in its report on the mine exploration expenditure provisions of this bill, that expenditures after the development stage is reached are to be treated as development (or production) expenditures.

MINERAL PRODUCTION PAYMENTS

We believe that we should bring to your attention a discriminatory effect that would result if the provision of the House bill that would treat sales of carved-out mineral production payments as loans is adopted in its present form. Production payments are a type of advance sales. The abuse in the use of carved-out production payments was cited in the Ways and Means Committee report as primarily involving the impact of the 50 percent of net income limitation on the percentage depletion deduction. The discrimination arises from the fact

that all other taxpayers have the opportunity of accelerating income for other purposes through advance sales. Under the loan approach in the House bill, this right would be taken away from the mining industry where advance sales are accomplished by carving out and selling mineral production payments.

The American Mining Congress believes that if proceeds from sale of mineral production payments are treated as loans for purposes of depletion computations, the mining industry should not be prevented from accelerating income for other purposes on the same basis as other taxpayers.

DEPRECIATION

Section 521 of the House bill would deny 200% declining balance and sum-of-the-years digits depreciation on new real estate construction (other than housing). The provision in the House bill appears to go far beyond the alleged abuse at which it is aimed. Industrial buildings constructed by the business firms that use them have not been used for quick write-off and resale at capital gain rates. Any possibility of abuse in the case of industrial buildings can be guarded against by providing for full recapture at ordinary income rates of all depreciation deductions previously taken against profit on disposition. It is not desirable to discourage investment in such buildings by denying the depreciation deductions in early years that are provided by present law.

We suggest that buildings constructed by mining companies to house their mining and beneficiation facilities and for related operations be permitted to continue to use double declining balance and sum-of-the-years digits depreciation with full recapture of excess depreciation as ordinary income against profit on sale.

We also suggest preservation of the simplicity and certainty of the depreciation guideline lives by law so that taxpayers may continue to use useful lives at least as short as guideline lives without regard to the reserve-ratio test. Taxpayers who wish to establish useful lives shorter than guideline lives should be allowed to use the reserve-ratio test to establish their eligibility for such shorter lives.

SECTION 213 OF THE BILL

Section 213 of the bill is designed to curb the use of so-called "hobby loss" deductions to offset income. While the problem is one of deduction of expenditures that are for the personal enjoyment of individuals, it is not clear that the provision in the bill would be limited to individuals. If it applies to deductions by corporations, then there is a serious danger that it will, at the very least, create an unwarranted presumption of tax avoidance that will have to be rebutted in lengthy disputes with Revenue agents in the case of many -- conceivably nearly all -- mining companies. This problem with the House bill arises from the failure of the bill to provide a workable standard for recognizing losses incurred for the personal enjoyment of individuals and from the fact that the bill would apply to an "activity" carried on by a taxpayer, without defining "activity". If an "activity" means something less than a trade or business, then many "activities" carried on by mining companies in the course of conducting their businesses might be considered as carried on without a reasonable expectation of realizing a profit. We urge that, if section 213 is retained in the bill, it be revised to make it clear that it does not apply to unprofitable activities carried on as segments of an overall trade or business conducted with a reasonable expectation of realizing profit.

FOREIGN MINING

Percentage Depletion on Foreign Mines and Deposits Should be Retained

While the House bill does not repeal percentage depletion on foreign mines and deposits in the case of the hard minerals, amendments have been offered to this Committee that would do so. Furthermore, the House bill has cut the depletion rates on all minerals from foreign deposits and has eliminated foreign percentage depletion in the case of oil and gas wells outside the United States.

Enactment of legislation that would eliminate percentage depletion on mines located outside the United States would violate the principle of tax neutrality. Any cuts in depletion rates on foreign deposits would be detrimental, not only to our mining industry, but to our country as a whole.

United States policy toward the development and operation of foreign mining by United States companies should not vacillate from year to year. If our Government discourages foreign mining, even for a short period of years, we will have to live with the consequences for generations. The results of a repeal of percentage depletion for foreign mines by our Government would be irreversible because the foreign mineral deposits that would be developed by nationals of other countries as a result would be lost to our companies forever--even though the minerals are essential to our domestic economy.

The Treasury has stated to the Committee that it is presently developing and plans to present to Congress comprehensive proposals relating to the U. S. taxation of foreign income. A thorough review of our present philosophy toward the taxation of foreign income is certainly desirable, and,

with that review in prospect, it seems pointless for the Committee to develop detailed modification of the present system in this bill. Furthermore, if there are basic changes made later in the system for taxing foreign income it will be necessary to adopt complex provisions for phasing out the provisions of sections 431 and 432 of the House bill. We suggest that the entire subject of foreign tax credits and changes from domestic depletion rates be put over for consideration when the Treasury makes its comprehensive proposals.

Minimal Revenue From Increasing United States Taxes

The United States would gain virtually no revenue from denying or reducing percentage depletion on foreign mineral deposits or other similar tax changes. Foreign mining income is subject to income tax in the foreign country, which is eligible for credit against United States tax. Where the effect of eliminating or cutting foreign depletion deductions is to raise the U. S. effective tax rate above that imposed by the foreign country, the foreign country can be expected to raise its own taxes by an equivalent amount.

The sentiment encountered in the countries in which mineral resources are located, even though generous tax incentives are offered by them, is these countries are determined that taxes on income earned therein should be paid there rather than to the country from which the investment originated.

Many provisions in foreign countries for reduced tax rates are explicitly geared to the tax rates in the capital exporting country. For example, in Peru, Article 56 of the Peruvian Mining Code, as amended by Law 16892, promulgated February 4, 1968, after providing for reductions of tax rates on income from mines or ore deposits by executive agreement, provides, "The

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aggregate of the profits tax rate plus that of the complementary tax, in case of foreign enterprise, shall in no case be less than the global rate of tax charged in the country or countries where the investments originate, provided that the differences entail obligation to pay taxes in those countries." In other countries tax agreements made with individual companies provide for increasing rates to offset any increase in United States tax.

In any event, the existence of an automatic provision for increasing taxes to offset an increase in our taxes merely means that the offsetting will take place immediately. In other countries the same result will follow gradually, so that any appreciable increase in revenues to the United States Treasury will soon disappear.

The Committee report on the House bill recognizes, in giving the revenue effect of the provision to deny percentage depletion on foreign oil and gas wells, that any theoretical revenue gain will be eliminated in later years by increased foreign taxes. The report says, "Although a more substantial gain of $90 million appears possible from repeal of foreign percentage depletion, it is assumed that in early years these gains will be partially offset by unused tax credits and in later years will be eliminated by increased foreign taxes." (Part 1, p. 138) Thus, the effect is to increase the tax cost to United States taxpayers without increasing our Government's revenues. In the words of Assistant Secretary Cohen's statement to the Finance Committee, "The end result will be that the U. S. taxpayer will pay additional taxes to those countries but no additional tax to the United States."

In some countries the tax laws contain percentage depletion deduction provisions modeled after ours--sometimes with the same depletion rates as are

provided in our law. Obviously, we could not expect those rates to remain in effect if we were to eliminate or reduce percentage depletion on foreign deposits.

Discriminating Against Foreign Mining Violates the Tax Neutrality Concept

If Congress were to change the tax law to discriminate against foreign mining this would be contrary to the principle of tax neutrality that is the theoretical justification for the United States taxing income worldwide.

A strong argument can be made for taxing only income that is earned in this country. Our Government has rejected that approach, however, on the theory that, insofar as our tax rates control the situation, the income of a United States-based firm should be taxed on approximately the same basis regardless of where it arises. So long as we follow that principle, we should not discriminate against income from foreign sources. Elimination of percentage depletion on foreign mineral deposits would, of course, do just that.

Thus, if Congress continues the policy of taxing United States taxpayers on their worldwide income to achieve tax neutrality, foreign mining should not be discriminated against in our tax system.

Our Reliance on Foreign Minerals

At the outset it should be recognized that the mining industry must go where the minerals are. And many of them are not in the United States--in some cases domestic reserves can supply a part of our requirements, and in others there are no domestic reserves. The following table shows imports as a percent of United States consumption in 1967 for the most important minerals:

Table 1

Metals and Nonmetals--Imports as a Percent of Consumption, 1967

Commodity	Imports as Percent of Consumption
Metals	
Bauxite	80.5
Beryllium (11 percent BeO)	100
Cadmium	13.7
Cobalt	58.8
Copper	33.5
Gold	14.8
Iron Ore	35.
Lead	41.2
Manganese Ore (35 percent or more Mn)	86.6
Mercury	35.0
Molybdenum	2.0
Nickel	82.3
Platinum Group	91.4
Silver	32.5
Tin	66.3
Titanium:	
(a) Ilmenite concentrate	22.6
(b) Rutile concentrate	100.
Tungsten	12.3
Uranium (U_3O_8 content)	14.3
Vanadium	.8
Zinc	41.0
Nonmetals	
Asbestos	89.5
Barite (primary)	38.8
Boron	32.0
Clays	.2
Diatomite	0
Feldspar (crude)	.1
Fluorspar	83.6
Graphite (natural)	100.
Gypsum	33.5
Mica:	
(a) Block and film	93.6
(b) Splittings	78.9
Phosphate Rock	.5
Potash (K_2O equivalent)	41.2
Salt	6.9
Sulfur and pyrites	17.6

Note: Data based on 1967 Minerals Yearbook, vol. I and II, Metals, Minerals and Fuels, U. S. Bureau of Mines, U.S. Bureau of Mines' Commodity Statements (supplement to Bureau of Mines' Strategic Plan), January 1969.

The same point is illustrated by the following table, which shows United States production of a number of minerals in 1967 as a percent of world production:

Table 2

United States Mineral Production as a Percent of World Production, 1967

Mineral	U. S. Production as a Percentage of World Production
Cement	14
Feldspar	39
Fluorspar	13
Gypsum	42
Phosphate Rock	46
Potash	20
Salt	35
Sulphur Elemental	47
Bauxite	4
Copper (content of ore and concentrate)	17
Gold	4
Iron Ore	13
Lead (content of ore and concentrate)	10
Mercury	10
Molybdenum (content of ore and concentrate)	71
Nickel	3
Silver	12
Tungsten concentrate (60% tungsten dioxide)	14
Vanadium	47
Zinc (content of ore and concentrate)	10

Source: Minerals Yearbook, 1967, Vol. I-II, Table 62, page 59, and Vol. III, Table 10, page 37.

Even the present relationship of domestic production to domestic demand understates our future dependence on foreign sources for minerals. As we pointed out earlier in this statement, the Bureau of Mines is predicting United States mineral demand to increase by more than four times by the year 2000, whereas domestic mineral production projected on the basis of 20-year trends can only be expected to little more than double by 2000. Furthermore, the Bureau of Mines is predicting a fivefold increase in worldwide demand for minerals by the end of the century.

Thus we are faced with a widening gap between domestic mineral supply and domestic mineral consumption, and the problem of obtaining adequate supplies from foreign sources is complicated by an even more rapid increase in foreign demand for minerals.

Facing this future, any changes in our tax laws that would discourage American mining firms from securing and developing foreign mineral deposits would be contrary to the national interest.

Our Interest in Controlling Foreign Mineral Sources

There is a clear national interest in the control of foreign mineral sources to assure an adequate supply of basic minerals for domestic need. The world supply of commercial mineral deposits is limited, and other industrialized countries are actively acquiring control of foreign mineral deposits.

A further important advantage of having the foreign sources of minerals for United States consumption owned by United States firms is the assurance of reasonable prices. The United States should not let itself get into a position where it can be exploited by foreign producers withholding supplies from the market or exerting monopolistic pressures to force payment of unreasonably high prices.

Furthermore, foreign operations that are United States owned will buy machinery and equipment from United States manufacturers and the engineering and construction will be performed by U.S. companies. Additionally, U.S. owned companies are more likely to use U.S. smelters and refiners to process their foreign ores and concentrates.

Balance of Payments Benefits

United States ownership of foreign mineral operations benefits our balance of payments. Direct foreign investment in mining and smelting abroad, according to the Office of Business Economics in the Department of Commerce, produced a total dollar inflow over the eight-year period, 1960-1967, of over $3.2 billion, of which $2.2 billion were from branch profits, $940 million were from dividends, and $85 million were from interest. Reflecting a steadily rising trend, the 1967 figures totaled $596 million, composed of $413 million branch profits, $167 million dividends, and $16 million interest.

Taking into account the inflow from royalties, license fees, rentals, management fees, and service charges, total mining and smelting dollar inflow exceeded net capital outflows by more than $2.1 billion for the eight-year period, 1960-1967. The net capital inflow for 1967 was $320 million.

(The outflow figures for these statistics are contained in the October 1968 edition of the Survey of Current Business published by the U.S. Department of Commerce. They include reinvested earnings of foreign branches as well as net capital transfers by United States parent companies.)

Thus the mining industry is now making a substantial contribution to our balance of payments--even when only the direct benefits from remitted profits are taken into account. Other indirect benefits include lower cost imported raw materials than would be possible if they were purchased from foreign-owned companies and better opportunities for our exporters to supply machinery and equipment to mines owned by United States firms.

The profits remitted to the United States are derived only in part from supplying minerals to the United States; they also result from supplying foreign ores and concentrates to foreign markets. These foreign markets will offer increasing opportunities as other countries increase their level of industrial activities and require more mineral supplies.

Erosion of Tax Incentives Offered by Foreign Countries

If depletion deductions are eliminated or reduced, or if changes are made in the foreign tax credit that result in higher effective U.S. tax rates on foreign mining, the tax incentives offered by many foreign countries will be undercut.

A substantial number of foreign countries are still eager to encourage private capital to develop their mineral resources. To make this possible they offer a variety of measures to lower the income tax burdens of the mining

companies--resulting in tax rates that are comparable to U.S. effective tax rates with percentage depletion. Typical effective tax rates applicable to mining income are 37% in Indonesia, 40% in Nigeria, 36% in the Philippines, 25% in Thailand, and 33-1/3% in Canada.

As an example, in Indonesia, following the overthrow of the Sukarno regime in 1965 by the present Suharto government, the government enacted Law No. 1 on January 10, 1967. The purpose of Law No. 1 was to provide a favorable climate so, as the preamble of the law states, "that foreign capital should be utilized to the maximum extent to accelerate the economic development of Indonesia and to be used for fields and sectors which within a short time cannot as yet be achieved by Indonesian capital itself." Law No. 1 provided the authority for the government in their contract negotiations with potential foreign investors to grant specific tax exemptions and relief in the form of lower corporate tax rates, a tax holiday period up to five years, exemption from taxes on dividends, exemption from import duties, accelerated depreciation, carryover of operating losses, and other tax incentives. Pursuant to Law No. 1, the Indonesian Government, in 1968, promulgated Mining Regulation No. 18/1968. Besides other tax incentives, this law reduced the Indonesian corporate income tax rate of 60% to tax rates as shown in the table on the following page.

Category of Minerals	Corporate Tax Rate 1 - 10th years	11 - 30th years
(1) Copper, Lead, Zinc, Iron, Titanium, Manganese, Mercury, Molybdenum, Antimony, Asbestos, Chromite, Iodine, Natural Asphalt, Diamond, Sulphur, Kaoline, Jarosite.	35.0%	42.0%
(2) Nickel, Cobalt, Bauxite	37.5%	45 %
(3) Tin	40.0%	48 %

These lower tax rates would become meaningless to United States companies if U.S. percentage depletion on foreign deposits were repealed.

Tax Treatment of Companies From Some Competing Countries

United States mining companies compete with companies from other developed countries for the opportunity to develop and operate foreign mines. Many of these countries actively assist their nationals through favorable tax treatment. These include the following:

France: Unless they elect a different type of tax treatment, French companies are exempted from tax on income from foreign sources.

French companies may elect to consolidate one or more of their foreign branches or subsidiaries, subject to Government approval, for an agreed period. In such case nonferrous mining operations have a 15% depletion allowance for three years (with a 50% of net income limitation), with the depletion allowance placed in a reserve for reinvestment within five years. Electing companies can credit foreign tax against French tax, subject to a per country limitation.

Japan: Although Japan has a 48% effective corporate tax rate and a Japanese company is taxed on its worldwide income (with a foreign tax credit allowed), a Japanese company can charge up to 50% of its investment in a less-developed country against taxable income. This is an addition to a reserve that must eventually be restored to income, but, in effect, the taxes may be deferred up to 10 years.

Netherlands: Although the Netherlands provide no specific tax incentives for investments by a Dutch company in a less-developed country, if a Dutch company operates abroad through a foreign subsidiary the profits generated by the foreign subsidiary are not subject to Dutch income tax when they are repatriated. The only requirement for this treatment is that the subsidiary's profits be subject to tax in the foreign country--regardless of the form the tax takes and no matter how low the tax rate.

If American mining companies operating abroad are handicapped by a heavier United States tax burden they will be placed at a serious competitive disadvantage vis-a-vis firms based in countries whose tax systems do not negate the advantages offered by countries with undeveloped mineral resources or, in some cases, actively encourage investment in these countries.

Investment by U.S. companies in foreign mining has been concentrated in Canada and in the less-developed countries, as is evidenced by the following table showing mining and smelting foreign direct investment at the end of 1967.

Table 3

Mining and Smelting Industry
Year End Book Value by Major Areas - 1967

	$ Millions	%
Canada	2,337	48.5
Latin American Republics	1,218	25.3
Other Western Hemisphere	431	9.0
Africa	398	8.3
Oceania	322	6.7
Europe	61	1.3
Asia	43	0.9
Total	4,810	100.0

Source: U.S. Commerce Department, Survey of Current Business, October, 1968, Table 3, page 24.

While Canada has by far the largest share of our foreign mining investment, even there a large share of the investment is in areas of Canada that are not themselves developed.

In addition to the obvious economic advantages to the United States of developing the mineral resources of foreign countries, important foreign policy considerations are involved. The United States has a vital interest in helping less-developed countries, and certainly should not revise its tax system to undercut the attempts of these countries to attract private capital for development.

The arguments set forth above with respect to reduction or elimination of percentage depletion on mineral deposits located in foreign countries apply with equal force to any reduction of percentage depletion generally or to changes in the application of the present U.S. foreign tax credit provisions

having the same adverse effect on U.S. mining companies operating abroad as the elimination of percentage depletion on foreign mineral deposits.

Foreign Tax Credit After Loss Years (Sec. 431)

It is a common occurrence in the development of mining properties to incur heavy expenses during the development stage. These result in losses until the producing stage of the mine is reached. In some cases where mines are developed abroad the foreign countries permit these losses to be carried forward or achieve a similar result by making income from the mine tax-free or by taxing it at a reduced rate during the early years of the producing stage. In other cases, however, the foreign country may provide little or no relief from its taxes on the profits after the initial losses have ceased and the mine becomes profitable.

The House bill would require a taxpayer using the per-country limitation on the foreign tax credit to carry forward losses incurred in a foreign country and use them to reduce income from such country in subsequent years before computing the limitation of the foreign tax credit to be allowed for income taxes paid to that country. Contrary to the Ways and Means Committee report, this adjustment is not limited to cases where the foreign country loss produced a United States tax benefit. This proposed loss carryover, which works to the taxpayer's disadvantage, is unlimited in time--unlike the usual loss carryforward that is limited to five years.

The justification for this provision given in the Ways and Means Committee's report is that under present law a United States taxpayer with

losses in a foreign country can obtain "what in effect is a double tax benefit." This is not correct. In fact, he pays no less income taxes, United States and foreign, than a taxpayer with the same income and losses whose operations are all within the United States.

The bill does not take account of the fact that a foreign country may allow losses to be carried back to earlier years (as our own tax system does). Consequently, it may require in total U.S. and foreign income taxes far in excess of the ostensible tax rates in some cases. This is illustrated by the following example of a Canadian branch operation of a U.S. corporation, assuming a 50% tax rate in both the U.S. and Canada:

	Taxable Income (loss)	Canadian Tax	U.S. Tax (per the bill) Gross Tax	Foreign Tax Credit	Net Tax
1972	$100,000	0*	$50,000	0	$50,000
1973	(100,000)	0	(50,000)***	0	(50,000)
1974	100,000	$50,000	50,000	($25,000)**	25,000
1975	100,000	50,000	50,000	(25,000)**	25,000
Total	$200,000	$100,000	$100,000	($50,000)	$50,000
		Total tax		$150,000	
		Overall effective tax rate		75%	

*1973 loss carried back to 1972 for Canadian tax purposes. Full refund on 1972 Canadian taxes secured, hence no foreign tax credit

**Special limitation under the bill

***Assumes other U.S. taxable income in 1973 sufficient to absorb the loss

If this provision of the House bill becomes law, the effect will be to impose higher income tax burdens on taxpayers with foreign operations--contrary to the principle of tax neutrality that is used to justify imposing United States tax on foreign income. Essentially, the complaint should be directed against

the foreign taxing authority that fails to allow the initial years' losses to be carried forward, rather than against the United States taxpayer. Instead of sacrificing the United States taxpayer as the House bill would do, the Treasury might attempt to negotiate tax treaties with the countries involved to coordinate their tax treatment with our own. We urge that this unjustified restriction on the foreign tax credit be eliminated from the bill.

If this provision is retained in the bill, at least it should be rewritten to establish as a general principle that it will apply only to the extent foreign losses are actually utilized to reduce tax on income from domestic sources and that the losses so utilized will be taken into account in computing the per-country limitations for subsequent years only when the foreign country has not allowed the loss either as a carry-back or as a carry-forward or through the provision of tax holidays or exemptions.

Special Foreign Tax Credit Limitation on Mining Income (Sec. 432)

The House bill would apply a separate limitation on the foreign tax credit with respect to all mining income from each country in which any property producing mining income meets one of three tests. The committee report says that these tests are "to isolate those cases in which it is likely that the income taxes represent, at least in part, royalties." The three tests are whether the foreign country:

(1) requires payment of a bonus or royalty,

(2) holds substantial mineral rights with respect to the property, or

(3) imposes any income taxes on mining income at an effective rate higher than on other income.

The three tests are treated as conclusive presumptions that the income taxes paid represent royalties to some extent, yet they are, at best, flimsy reasons for even suspecting that the taxes represent royalties. The fact that a royalty is paid is certainly not an indication that the tax paid is also a royalty. The fact that the foreign government holds mineral rights is no indication that a royalty is appropriate--for instance, the taxpayer may be paying substantial royalties to other persons with interests in the minerals or in the surface lands. Finally, the effective tax rate test is ambiguous in its application and even if the tax rate is higher on mineral income, the reason may be based on some policy consideration of the foreign government that has nothing to do with substitution for a royalty.

Even if the tests were valid, it would be unfair to impose the special limitation with respect to all mineral income from a country because the foreign government holds rights of some sort in a portion of it. Any limitations based on these tests should be applied only to the excess amounts determined to be royalties, rather than applying to the entire amount of the taxes on mining income paid to the country. Furthermore, this provision is more harsh than the Administration proposal that Congress rejected in 1963, which at least would have permitted foreign income taxes paid on mining income in one country to be credited against U. S. taxes on mining income in other foreign countries. Finally, the illogic of this provision can be illustrated by the fact that it will apply to a situation where the foreign tax rate plus the royalty paid to the foreign government is less than the tax rates paid by other types of taxpayers in the same country.

In many cases mining companies process their minerals in a foreign country beyond the depletion cut-off point under section 613. For example, ore may be mined in a foreign country and converted or transported in nonmining operations in the same country. Under the provision in the bill, the income attributable to processing beyond the depletion cut-off point would not be mineral income and, therefore, would require a different limitation computation for foreign tax credit purposes. The foreign government, however, will continue to impose a single income tax on the profit from the entire operation (as we do in this country), and it would be unfair to divide this tax arbitrarily and compute the foreign tax credit for each portion under a different limitation.

This provision would penalize taxpayers paying bona fide foreign income taxes by presuming conclusively, without any inquiry into the facts, that all the foreign taxes on mining income are royalties. The Mining Congress urges that this attempt to fragment the foreign tax credit be eliminated from the bill.

The Treasury's Suggested Alternative To Section 432

The Treasury opposes the provisions of section 432 of the House bill, citing as the basis for its opposition some of the same objections that we make here. The Treasury has, however, recommended an alternative to section 432 that is based upon the belief that, somehow, there is a "special problem connected with foreign mineral income." The Treasury's alternative would deny use against other foreign income of excess foreign tax credits that result from the U. S. percentage depletion deduction.

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This alternative is not as onerous as section 432 of the House bill, and it is not based upon the contrary-to-fact assumption that virtually every foreign income tax on mining income is in part a royalty. There are, however, serious objections to the Treasury's proposed alternative. It is a variation on a proposal that was made by the Treasury in 1963 and 1964 and finally rejected by Congress when the Revenue Act of 1964 was passed.

The Treasury proposal is subject to the criticism that it attempts to segregate a specific category of income and compare the U. S. and foreign income tax rates on it. While this has the appearance of precision, the appearance is illusory because neither the United States nor most foreign countries really impose schedular taxes on separate categories of income without regard to their impact on the taxpayer. Furthermore, it is not fair to segregate the activity of mining up to the depletion cut-off point from all the other related activities that a mining company engages in in a foreign country. Many of these other activities, such as the operation of railroads, warehouse and shipping facilities, stores, and power plants, are required because of the absence of an adequate economic infrastructure to support mining activities in the less developed countries. Also, in more and more cases the mining companies are finding it necessary or advisable to extend their operations in foreign countries beyond the pure mining stage to include further activities such as smelting, refining, and even processing into finished products. It would be highly artificial and unfair to segregate the profits from strictly mining operations from the activities beyond the mining depletion cut-off point and apply a separate foreign tax credit limitation to them.

The principal effect of an excess foreign tax credit is in averaging out the impact of U. S. and foreign taxes over a period of years. The net effect is that the company pays a total tax at least equal to the effective United States tax rate.

If the approach suggested in the Treasury alternative should be adopted, the U. S. would be taking a step toward an infinitely more complex foreign tax credit system in which we would engage in a hopeless attempt to match foreign taxes against U. S. taxes on an item-by-item basis.

We urge rejection of the Treasury alternative proposal as well as section 432 of the House bill.

60% Limit on Creditable Foreign Taxes

The Treasury's comments on the House bill mentioned the possibility that foreign tax credit might be denied to the extent that foreign taxes exceed 60% of foreign mineral income from a particular country. This is not recommended by the Treasury, however, and, after pointing out that not all high foreign tax rates can be properly characterized as royalty substitutes and that it is difficult to justify treating high foreign mining taxes differently from other high foreign taxes, the Treasury statement concludes its discussion of the point by stating, "we believe it preferable to deal with high foreign tax rates in a general context". It is difficult to understand why the Treasury found it necessary to discuss the point at all at this time since it prefers to postpone consideration until it brings up its comprehensive proposals on U. S. taxation of foreign income. We certainly agree that it would be inappropriate to adopt any such limitation on the foreign tax credit at this time.

In a sense, denying foreign tax credit on taxes in excess of a specified rate is a form of interference with the taxing system of a foreign country. Furthermore, if applied to a specific type of income such as mining income, the limitation is subject to the criticism, made above, that it unrealistically fragments the foreign taxes that are imposed on operations in the foreign country as a whole.

Such a provision would clearly seem to violate our obligations under many of our tax treaties. (Indeed, sections 431 and 432 of the House bill probably also violate our treaty obligations.)

Continental Shelf Source Rule

The Treasury statement recommends that, for purposes of the foreign tax credit, the definition of the United States be amended to include the continental shelf of the United States "with respect to the exploration for natural resources" and that the definition of "foreign country" should include the continental shelf pertaining to the foreign country. We do not understand the scope of this recommendation, and in fact, we do not understand that the scope of the continental shelf itself has been precisely defined. In view of this uncertainty and in the absence of any demonstrated need for immediate action, we suggest that this proposal be deferred and considered in conjunction with the Treasury's comprehensive proposals on the U. S. taxation of foreign income when these proposals are presented to Congress.

We reemphasize our earlier point that any legislation dealing with the taxation of foreign income should be deferred pending completion of the comprehensive Treasury study of this area.

CONCLUSION

The American mining industry has a vital role in the development and maintenance of our economy. It has performed that role well under our present tax system, and in the process the mining companies have not made after-tax profits out of line with those of industry in general. With an expanding population and an expanding economy before us, the mining industry has an even bigger job to do. It would be the height of folly to set up tax barriers to block the accomplishment of that job by cutting back on the present tax treatment of the mining industry.

Respectfully submitted,

American Mining Congress

Fred W. Peel

Fred W. Peel, Chairman
Tax Committee

Appendix A

Number of domestic metal and nonmetal mines in 1967, by commodity and magnitude of crude ore production

Commodity	Total number of mines	Less than 1,000 tons	1,000 to 10,000 tons	10,000 to 100,000 tons	100,000 to 1,000,000 tons	1,000,000 to 10,000,000 tons	More than 10,000,000 tons
Metals:							
Antimony	[illegible]	[illegible]	......	......	......	[illegible]	......
Bauxite	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......
Beryllium	[illegible]	[illegible]	[illegible]	......	......	......	......
Copper	134	61	11	16	[illegible]	16	[illegible]
Gold:							
Lode	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......
Placer	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......
Iron ore	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Lead	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......
Manganese ore	[illegible]	[illegible]	[illegible]	[illegible]	......	......	......
Mercury	11[illegible]	[illegible]	10	13	......	......	......
Molybdenum	[illegible]	[illegible]	......	......	[illegible]	[illegible]	[illegible]
Silver	7[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......	......
Tin	[illegible]	[illegible]	[illegible]	......	......	......	......
Titanium Concentrate	[illegible]	......	......	......	[illegible]	[illegible]	......
Tungsten	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......	......
Uranium	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......	......
Zinc	17[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......	......
Other [1]	[illegible]	[illegible]	......	......	[illegible]	......	......
Total	1,372	610	210	194	[illegible]	[illegible]	8
Nonmetals:							
Abrasives [2]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......	......
Asbestos	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......
Barite	[illegible]	10	[illegible]	16	10	[illegible]	......
Boron minerals	[illegible]	......	......	......	......	[illegible]	......
Clays	1,[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......	......
Diatomite	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......	......
Feldspar	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......	......
Fluorspar	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......	......
Gypsum	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......	......
Kyanite	[illegible]	......	......	......	[illegible]	......	......
Marl, greensand	[illegible]	[illegible]	[illegible]	......	......	......	......
Mica: Flake	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......	......
Olivine	[illegible]	[illegible]	[illegible]	[illegible]	......	......	......
Perlite	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......	......
Phosphate rock	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Potassium salts	[illegible]	......	......	......	[illegible]	[illegible]	......
Pumice	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......	......
Salt	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......
Sodium carbonate (natural)	[illegible]	......	......	[illegible]	[illegible]	[illegible]	......
Stone:							
Crushed and broken	4,[illegible]	[illegible]	[illegible]	1,[illegible]	1,[illegible]	[illegible]	1
Dimension	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......	......
Sulfur:							
Frasch-process mines	[illegible]	......	[illegible]	4	[illegible]	[illegible]	......
Other mines	[illegible]	[illegible]	......	......	......	......	......
Talc, soapstone, and pyrophyllite	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	......	......
Vermiculite	[illegible]	[illegible]	......	[illegible]	[illegible]	......	......
Wollastonite	[illegible]	[illegible]	......	[illegible]	......	......	......
Other [3]	[illegible]	......	[illegible]	[illegible]	[illegible]	......	......
Total	[illegible]	619	1,[illegible]	[illegible]	[illegible]	[illegible]	4
Grand total	[illegible]	1,[illegible]	1,[illegible]	[illegible]	[illegible]	[illegible]	12

[1] Magnesium, nickel, and rare-earth metals.
[2] Emery, garnet, and tripoli.
[3] Aplite, graphite, lithium minerals, magnesite, and sodium sulfate (natural).

Source: Minerals Yearbook, 1967, Vols. I-II, Table 6, page 78

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NATIONAL COAL ASSOCIATION
COAL BUILDING
WASHINGTON, D. C. 20036

September 30, 1969

Summary of Principal Points
Made by the National Coal Association
to the Senate Finance Committee *

I. Instead of being cut to 7% depletion, coal should be given the 15% depletion rate applicable to the minerals in the "all other" category--because:

(a) The domestic energy market is (and will be for about two decades) peculiarly vulnerable to imported energy, because there is a short-term glut of low-cost foreign oil and residual oil (which competes with coal in U. S. power plants). Without import controls (and there are none today on residual oil) and without appropriate tax incentives for domestic production, the United States within a relatively short period of years would have an "energy" deficit in the balance of trade amounting to $10 billion to $20 billion--and no country could survive with such a huge trade deficit in one item.

(b) The U. S. has abundant supplies of coal in the ground--but we already have a coal shortage and it threatens to get far worse. Government policies in fields other than taxation (such as promotion of atomic competition, limitation of coal's sulfur content, and unduly harsh legislation on mining practices) have reduced the incentive to invest in coal productive capacity. That incentive should not be further decreased by detrimental tax changes. Without incentive to invest in coal mining, the Nation's economy will grind to a virtual halt, because coal is essential to the electric power industry and to the steel industry.

(c) The Nation must have adequate supplies of coal. It is better for the economy to stimulate investment in coal mines through special incentives than through the alternative route--high prices which would follow mineral shortages caused by destruction of special incentives.

(d) Coal is far more important to the economy than many of the minerals in the "all other" category, which currently are allowed 15 percent depletion. Coal currently receives 10 percent and this would be cut to 7 percent by the House bill. Instead, coal should be placed in the "all other minerals" category presently receiving 15 percent.

* Submitted by Price O'Brien, General Counsel.

II. The repeal of present treatment of mineral production payments should be prospective only.

III. Any additional incentives allowed for the purpose of stimulating the production of synthetic fuels from oil shale should also be allowed for the production of synthetic fuels from all other minerals (including coal).

IV. Existing depreciation guidelines should be sanctioned by legislation, with simultaneous elimination of the need to meet the "reserve ratio" test.

V. Instead of eliminating fast depreciation for "industrial buildings," such buildings should be included within the depreciation guidelines of the particular industry involved, with the revenue protected by taxing at ordinary income rates all depreciation taken in the future and recovered on sale of such buildings.

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NATIONAL COAL ASSOCIATION
COAL BUILDING
WASHINGTON, D. C. 20036

September 30, 1969

STATEMENT OF

NATIONAL COAL ASSOCIATION

to the

SENATE FINANCE COMMITTEE

on

H.R. 13270

- - -

Mr. Chairman:

The United States has a greater supply of coal reserves than any other country in the world. Yet the United States is already faced with a shortage of coal production--a shortage that threatens to develop into a national crisis. These two statements appear to be contradictory--but they are not. I will explain why this situation has come to pass, and I hope you will understand that while the actions you take in the tax treatment of the industry cannot avoid the forthcoming shortage, they can mitigate that shortage in the future.

The coal industry is an important part of the Nation's total energy picture. Without an abundant supply of energy (most of which must come from domestic sources if we are to maintain a balance of trade), the United States cannot remain a first-class Nation. As the Atomic Energy Commission stated in its 1962 "Report to the President,"

> "Next to the land, the water, and the air, without which we could not exist at all, energy is by far the most important of our terrestrial resources. Without it our industrial society would be impossible. In common with the other three, it has no substitute."

We cannot afford to import a large portion of our energy. In 1967 the Nation's total bill for raw energy was over 15 billion dollars (domestic crude oil at the well, $8.9 billion; domestic natural gas at the well, $2.9 billion; coal at the mine, $2.6 billion; plus energy trade deficit, $1.2 billion). Our 1967 energy trade deficit was composed of a deficit in petroleum and petroleum products of about $1.6 billion, deficit in natural gas of about $65 million, minus surplus in coal exports of about $500 million.

Today's $15 billion a year bill for energy will double in about 20 years--to about $30 billion. The cost of finding and producing foreign oil is so much lower than the cost of finding and producing domestic oil that without import controls a very great share of our energy bill will be supplied by imports. With transportation of liquified natural gas, imports of natural gas will increase by leaps and bounds. Even our low-cost coal is vulnerable to imports--we have in recent years lost most of the utility market on the Eastern Seaboard to imported residual oil. Controls on imports are constantly being relaxed, and there are now serious efforts underway in Congress to eliminate such controls altogether.

Domestic energy markets are extremely vulnerable to foreign supplies of energy, and this situation may continue for as much as 20 or 25 years. American coal can be produced more cheaply than coal anywhere else in the world, but there is a "glut" of foreign oil which may exist for two decades or more (until per capita consumption of energy in the rest of the world increases, as it must eventually). Our domestic oil and gas cannot compete with low-cost foreign oil and gas, and even our low-cost coal is vulnerable to foreign residual oil with its low transportation costs.

We realize the subject before this Committee is taxes, not import controls. But the subjects go hand in hand, where energy is concerned. Without import controls, and without adequate tax incentives for domestic energy sources (oil and gas, uranium, and coal), this Nation within 20 years will have an energy trade deficit of $10 billion to $20 billion a year. No nation on earth--not even the United States--can survive with such a huge trade deficit in a single item.

The picture of future coal production is even more alarming than the general energy picture. Our coal reserves constitute about 80 percent of our total energy reserves (including oil and gas, oil shale, and uranium). But coal in the ground cannot be used to make steel. Coal in the ground cannot be used to generate electricity (and over half of the Nation's electricity today is generated by coal).

Until this decade, the coal industry managed to maintain sufficient productive capacity to meet the Nation's needs (in fact, the industry usually maintained substantial excess productive capacity, so much so that it was able to take up a large portion of the wartime energy demand increases). It did this in spite of several handicaps:

(a) The natural risks involved in all mining; that is, unexpected natural conditions underground which can, and often do, result in total loss of investment.

(b) An inadequate tax incentive--10% depletion, compared to 27½ for oil and gas, 23 for uranium, and 15% for "all other minerals."

(c) An abnormally low rate of profit during the frequent and prolonged periods when coal was in ove-supply.

During this decade, however, the situation has changed very drastically, and we are approaching a drastic energy shortage--particularly a shortage of coal productive capacity--which can cause national disaster by shutting down our steel industry and by shutting down a large portion of the Nation's electric power plants. Coal is already in short supply--and some 25 million tons of coal this year will have to be taken out of the limited stockpiles maintained by consumers. Attached to this statement is a reprint from BUSINESS WEEK of July 5, 1969, entitled "The Coal Bin is Running Short." It tells part of the story. It does not tell all of the story. The reasons why our excess productive capacity has disappeared, and the reasons why the situation is going to become much more critical in the future, are as follows:

(1) With the advent of higher wages in the coal mines, it became necessary to mechanize to the greatest extent possible in order to keep coal competitive with other forms of energy.

This greatly increased the capital cost of new mines, requiring a much higher "return after taxes" to make the investment attractive enough to induce necessary risk capital.

(2) Early in this decade atomic power "arrived" as a threat to coal's future in its largest growth market--the utility market. It is now clear that atomic power was "oversold" and that even if the best hopes of the Atomic Energy Commission are realized, the Nation will still need two or three times as much coal by the end of the century, for the production of electricity, as it uses for that purpose today. Nevertheless, the damage was done--the supply of capital for new coal mines dried up, and new mines were opened only after the utility customers signed long-term contracts to buy the coal. The utilities underestimated the need for coal--and there does not today exist the coal productive capacity to fill the gap caused by that underestimate. Furthermore, the confidence of the investor in coal's future is still being undermined by an annual expenditure of $200 million by the Federal Government in an effort to improve atomic power's competitive position vis-a-vis coal.

(3) In recent years, stimulated by the Federal Government, states and municipalities have begun to impose restrictions on the sulfur content of coal--without waiting the few years necessary for full development of the technology to remove the sulfur. This, too, has reduced the availability of risk capital for coal mines.

(4) At this moment, the Labor Committees in both House and Senate are pushing legislation on "health and safety" in coal mining. To the extent that such legislation will actually result in improved health and safety for coal miners, we cannot and do not object to it--but we point out that it will of necessity add substantially to the cost of producing coal, with "guesstimates" ranging in the neighborhood of 20 percent.

Far worse, however, is that these bills as they stand will impose "respirable dust" levels so strict (about twice as strict as the British levels, and Britain has been held up as the "model" in this respect) that the levels may be impossible for a substantial number of mines to meet. This means those mines may have to be shut down, and the capital investment therein lost. Far worse from the standpoint of the country, the coal production from such mines will be lost.

With all these threats--and the difficulty of obtaining an adequate trained labor force--some powerful incentives must be provided for people to risk their money in new coal mines in the future.

Tax incentives alone cannot do the necessary job--if you made the coal industry tax-free, it might not be sufficient in and of itself to overcome all the other government-sponsored threats to investment in new coal mines. But tax incentives can help mitigate the situation. By the same token, tax penalties can make the situation worse. Before setting forth our recommendations for changes in the bill before you, let me point out that the bill contains several provisions which are severely damaging to the coal industry and which thereby decrease the willingness of the investor to open a new coal mine.

(a) The bill repeals the present tax benefits of production payments. While we as an industry have not contended that present treatment should be retained, and while we do not now contend that it should be retained, we do want you to realize that the change is adding a heavy burden to the coal industry.

(b) The repeal of the investment credit is a particularly severe blow to the coal industry. As previously stated, a modern coal mine requires a great deal of machinery. Repeal of the credit increases the cost of the machinery, thereby increasing the amount of capital which runs the risk of complete loss because of the many government-sponsored policies outlined above.

(c) The bill takes away from the smaller companies (the ones that elected section 615) the ability to deduct exploration expenditures without subsequent "recapture."

(d) The extension of the surtax is more damaging to the coal industry than it is to other industries, because of our long-term contracts. Most corporations can and do treat Federal income taxes the same way they treat wages or depreciation--eventually they are passed on to the consumer as just another cost. Because of our long-term contracts the coal industry is unable to do that.

RECOMMENDATIONS

I. Coal should be given the 15% depletion rate applicable to "all other minerals" and the limitation on taxable income from the property should be liberalized for the marginal or near-marginal producers.

Coal is limited to 10% depletion in existing law--and cut to 7% in the bill before this Committee. Without disparaging the minerals listed in the "all other minerals" category, we want to point out that few if any minerals are more essential

to this country's future economic health than coal is. It should, as a minimum, be given the rate for "all other minerals," which under existing law is 15%. We believe that rate should not be cut; if it must be cut, then coal should be placed in that category and placed at 11%. Preferably, the entire group (including coal) should be put at 15%, because we cannot maintain our economy without the incentives to produce the minerals that make possible our housing, our automobiles, our air conditioning, and the other necessities of a modern industrial society.

The rate of percentage depletion can have an important effect on coal exports. While foreign oil is cheaper than American coal, in foreign markets, as a source of energy, the steel industries of the world must have metallurgical coal. As a consequence, we are exporting today about $500 million worth of coal per year--which the Government regards as a very important asset in the country's fight to maintain a balance of trade. At the present time, because of an unexpected upsurge in world steel production and because of a world-wide tight supply of metallurgical coal, competitive pricing is not the most significant factor in the volume of coal exports. Under normal conditions, however, the export market for metallurgical coal demands competitive pricing. Adding to the tax burden of United States coal exports will, when the current sellers' market comes to an end, handicap the coal industry in its effort to aid in the balance of payments problem through coal exports.

In addition, we urge that consideration be given to liberalization of the allowance for marginal or near-marginal mines. The limitation of the allowance to 50 percent of the taxable income from the property does not impose a burden on the highly successful mines, but it does restrict the allowance of the mines which are marginal or near-marginal from a profit standpoint.

II. Effective date of production payment change.

We are not objecting to the repeal of the present treatment of mineral production payments--but we do want to point out that repeal of that treatment does

substantially increase the industry's tax burden and thereby increases the need for proper incentives through other features of the tax laws.

In view of the very great lapse of time between the first "notice" of intention to act on production payments (April 22, 1969) and the probable date of enactment of "tax reform" legislation, we believe the effective date of the repeal should be changed to apply only to production payments entered into after the date of enactment of the legislation--or, perhaps, after the end of the 1969 calendar year. We are not trying to defend continuation of this treatment. Nevertheless, it was a treatment that grew out of the position of the Internal Revenue Service. Our people have relied upon that position in "tax planning." Probably it should be changed. But it is not necessary to change it retroactively--and April 22, 1969, is quite "retroactive" for a bill which may become law in December or, possibly, in February of 1970.

III. Synthetic fuels -- cut-off point.

A Committee amendment was adopted on the Floor of the House to provide that oil shale's depletion shall be computed, roughly, at that point where it is equivalent, or nearly equivalent, to crude oil. When Congressman Aspinall asked for this treatment before the Ways and Means Committee, he included in his request coal and any other minerals used to make synthetic oil and gas.

Depending primarily on import control policies, it may be many years before it is economic to make synthetic gas and oil out of other minerals--such as coal and oil shale. When it does become economic, there should be no discrimination. All the evidence indicates that our vast coal reserves will be more adaptable, from an economic standpoint, for this purpose than oil shale will be.

Any mineral used to make synthetic oil and gas should receive the same tax incentive as any other mineral used for the same purpose. We therefore ask you to add to the oil shale amendment a provision which will state, in substance, that:

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> Equivalent in result "ordinary treatment processes" will be extended to any mineral used to make synthetic oil and gas, under regulations prescribed by the Secretary, but such treatment processes shall in no event go beyond the point where the product is equivalent in composition and value to crude oil at the well or raw gas at the well.

In testifying before this Committee, Treasury officials objected to the oil shale amendment on the ground that it would extend depletion to cover "manufacturing" activities. They stated, however, they were sympathetic to the objective of giving tax incentives to promote the production of synthetic oil from oil shale, and would attempt to come up with recommendations to accomplish this end. If the Treasury officials do recommend an alternative method of furnishing the necessary incentives, such alternative method should be made applicable to all minerals used for the same purpose.

IV. Depreciation guidelines and the "reserve ratio" test.

With the forthcoming repeal of the investment credit, it is imperative that Congress provide a more balanced climate for the investment of capital in new productive equipment. The Treasury Department is currently conducting a study of possible methods of accomplishing this, through depreciation revisions and other possible changes. That appears to be a long-term proposition, and we believe there are two actions which can be taken by Congress now, without any appreciable effects on the revenue estimates for this legislation. Those two actions are as follows:

> (a) Provide legislative sanction for the existing depreciation guidelines, simultaneously eliminating the need to meet the "reserve ratio" test.
>
> (b) Permit inclusion of "industrial buildings" within the depreciation guidelines, but provide for taxation at ordinary income rates for all depreciation taken in the future and recaptured on sale of such industrial buildings.

Several years ago the Treasury Department promulgated its shortened depreciation guidelines, to facilitate recovery of capital investment. Unfortunately, Treasury officials felt bound by statute to maintain a tie between these shortened

guidelines to "useful lives," and they accomplished this by imposing an impossible, unworkable "reserve ratio" test--which, when fully effective, will limit use of the guidelines to those who actually retire their equipment in the shortened guideline periods rather than in the ordinary "useful life" period. Former officials of the Treasury Department insisted that this "reserve ratio" test was an incentive to modernize; they contended taxpayers would discard still-useful equipment in order to be eligible for the shortened guideline lives.

We believe the view that the "reserve ratio" test is an incentive to modernize is in error, because the incentive to invest in new equipment depends on the probability of, and the timing of, return of capital. The reserve ratio test, by delaying the return of capital, reduces the incentive to invest in modern equipment and contributes to the inability of the United States to compete with the nations which give more adequate incentive for modernization.

The effect of the reserve ratio test has been postponed, administratively, to the point where it has not been felt in the past but is about to affect many taxpayers--an increasing amount each year. As it becomes effective, it not only takes away the shortened depreciation lives set forth in the guidelines, but it lengthens them beyond the actual "useful lives" to make up for the previous shortening.

The depreciation guidelines constituted an important administrative reform of depreciation--granting an incentive for investment in equipment through shorter capital recovery, and eliminating a great deal of non-productive controversy over depreciation lives. The revenue cost of that reform has already been absorbed. Legislative sanction of that reform, coupled with repeal of the reserve ratio test, will not affect the revenue estimates of the bill before you. Unless Congress takes this action, the administratively-granted reform will be eliminated--with overcompensation, increasing depreciation lives to make up for the previous shorter lives. Without Congressional action in this regard, the reserve ratio test will further retard the

investment of the capital necessary to keep the economy going, and further increase the danger of a real depression.

The bill before you limits depreciation on buildings constructed after July 25, 1969, to 150% of straight-line depreciation, and treats gain on sale of buildings as ordinary income to the extent that accelerated depreciation taken in the future is in excess of straight-line depreciation. The "real estate tax shelter" does not involve industrial buildings--those buildings which house equipment which is an integral part of extraction of minerals, manufacture and distribution. Industrial buildings generally are not sold--unless an entire business is sold. At one time, when former officials of the Treasury were instituting the depreciation guidelines for personal property, they indicated they would be willing to consider shorter useful lives for industrial buildings if all gain on sale were treated as ordinary income to the extent of depreciation taken and recaptured on sale.

We believe Congress should provide for taxation at ordinary income rates with respect to all depreciation taken in the future and recovered on sale of "industrial buildings," and in return therefor Congress should permit inclusion of such industrial buildings within the guideline lives (without reserve ratio test) provided for the industries in which such buildings are involved.

V. Multiple corporations.

The House bill phases out the use of "multiple corporations." We can and do understand the objective--where a business is split into 50 or 200 corporations for purposes of tax savings, something should be done about it. But there are many situations where multiple, or separate, corporations are required for sound business reasons (other than tax savings). We ask that you retain the present tax treatment of multiple corporations where the taxpayer can demonstrate that there is a sound business reason (independent of and apart from tax savings) for the use of multiple corporations.

VI. Mineral exploration expenditures.

Under existing law, many small companies and individuals engaged in the mining industry have elected Section 615, which allows a total of $400,000 exploration expenditures to be deducted without subsequent recapture of the tax benefit. However, after they reach the $400,000 level they are not allowed to take any further deductions. The larger companies have, by and large, elected Section 617, which permits them to deduct exploration expenditures without limitation but subject to "recapture" of the tax benefit if the exploration is successful.

Under the bill as passed by the House, the small companies which elected Section 615 are made subject to "recapture." However, the limitation on their deductions has not been removed. It should be removed, so that 615 taxpayers will be treated the same as 617 taxpayers. We understand this was a legislative oversight and that it will be corrected.

We appreciate the opportunity to present our views to the Committee.

Respectfully submitted,

NATIONAL COAL ASSOCIATION

By_____
Brice O'Brien
General Counsel

Business Week
July 5, 1969 Volume 2079

Resources

The coal bin is running short

A combination of recurrent strikes in the nation's bituminous coal fields and steadily rising demand for U. S. coal is now beginning to threaten coal supplies for some basic U. S. industries. This week, with production in the year's first half about 16-million tons lower than 1968's first half, thousands of miners began their annual two-week vacation. Their mood was so volatile that nobody could be sure of when they would return to work.

While output dropped, demand increased. The National Coal Assn., the coal operators' trade group, last week forecast that demand this year would be 16-million tons above last year's consumption of 549.5-million tons—up as much as the half-year's output was down. "These are the most aggravated shortages we've had since the Suez crisis of 1957," says William Bellano, president of Island Creek Coal Co., third-ranked U. S. producer.

Running low. As of now, the main impact of shortage seems to fall on domestic steelmakers. Unable to buy all the coking coal they need for blast furnaces, they are wrestling with what one steel official calls a "hand-to-mouth situation." Metallurgical coal stocks, as of May 1, constituted a 32-day supply (35 to 50 days is normal). But one large steel producer says that if there were a mine walkout of three weeks or so in the next two months, blast furnace operations would have to be curtailed. Another says even a two-week strike could put steel in such a bind it might possibly ask for government help.

Foreign steel producers, notably the Japanese, have increased their demands for U. S. low-sulfur, metallurgical coal. Since air pollution codes are also forcing other domestic coal users into the low-sulfur market—and only 20% of all coal mined is low-sulfur (1.5% or less sulfur content)—an acute shortage has developed in this category.

Meanwhile, coal inventories at electric utilities have decreased from the normal 90-day supply to less than 80. This is not unusually low, says the U. S. Bureau of Mines, and the utilities contend they have plenty of coal. But coal industry officials insist that if production-losing strikes coincide with summertime's peak power demands, some coal-fired power stations might be forced to schedule "brownouts," or temporary power reductions.

Strikes. Most of this year's drop in production is attributed to work stoppages, such as the strike that closed West Virginia mines (which produce 30% of U. S. coal) for three weeks in February and March. The walkout forced passage of a state compensation law for black lung, coal workers' pneumoconiosis, a disease associated with the inhalation of coal dust. There have been slowdowns and wildcat strikes for many other reasons.

"There's a general unrest stemming from the black lung problem, as well as disappointment with last year's contract," says Otes Bennett, Jr., president of North American Coal Corp. "It's worse than I've ever seen it." North American, which has no West Virginia mines, says it lost 300,000 tons of production this year because of wildcats.

Now reports are boiling up from the coal fields that miners will simply stay off the job at the end of their vacations, to dramatize their health and safety demands. In any case, unrest is certain to continue, and most industry and union sources predict further strikes.

Legislators and coal operators have a record of long inaction on miners' problems. So miners are now convinced that only by agitation will they gain a strong federal coal mine health and safety act. Bills are pending in the labor committees of both houses of Congress—and rank-and-filers in the United Mine Workers, led by union dissidents and sparked by crusader Ralph Nader and other critics of the UMW leadership, will be staging rallies, marches, and possibly strikes to push for the strongest possible legislation.

Furthermore, a power struggle between UMW President W. A. (Tony) Boyle and his challenger, executive board member Joseph (Jock) Yablonski, may erupt into wilder strife inside the union before next December's election. "I expect sporadic striking to continue in the industry till after the union election in December," says Island Creek's Bellano. "We don't see any evidence that either the international union or the district union offices have got the miners under control."

More needed. But if labor unrest explains part of the shortage, it doesn't account for all of it. U. S. productive capacity simply has not kept pace with expanding demand in several sectors:

- Electrical utilities, which last year consumed 54% of U. S.-mined coal, have increased their demands because of delay in bringing new nuclear-powered generating stations on line.
- Foreign steelmakers, especially the Japanese, are rapidly increasing their demands for low-sulfur coal.

When demand began to rise in the mid-1960s—after a decade of shrinking coal markets—the operators didn't want to invest in costly new mines unless a utility would sign a 20-year or 30-year contract for the mine's entire output. And many utilities underestimated their coal needs, because they expected the nuclear power boom to develop faster than it has.

Meanwhile, the low-sulfur coal market is extremely tight because of the new air pollution regulations aimed at cutting the amount of sulfur dioxide spewed into the air by coal-fired boilers. In St. Louis, for instance, many industrial users are unable to buy low-sulfur coal in order to meet new state regulations. And last week Chicago postponed for a year a regulation limiting coal use to 2.5% sulfur coal, because there isn't much low-sulfur coal mined near Chicago.

Coal war. The largest low-sulfur coal fields are the Pocahontas fields, in Virginia and southern West Virginia. Almost the entire output of this coal is tied up by utilities with long-term contracts, by U. S. steelmakers, and by the Japanese. The Pocahontas fields are also the largest source of low-sulfur, low-volatile coal for steelmaking; the best coke for blast furnaces is made by blending low-volatile and high-volatile coal.

Japanese steel producers boosted their demands for U. S. coal from 7.8-million tons in 1966 to 15.8-million last year, most of it low-volatile coal. Then, this year, they markedly increased their demands for high-volatile coal.

Though not all coal executives agree, one official of a large company contends that the heavy Japanese demand is upsetting price relationships. "The Japanese are offering more money than the domestic steelmakers. And this is having a disruptive effect on prices."

Uptight. The Japanese, air pollution regulations, the needs of electric utilities, and the demands of the UMW's rank and file must, at times, seem to be closing in on a steelmaker such as, for example, Armco Steel Corp.

Armco owns some "captive" mines, but it must buy about 20% of its high-volatile and all of its low-volatile coal from outside mines. It has built up its inventories somewhat for the mines' vacation period. But "if we had a series of work stoppages, and we had to buy some coal on a spot basis," says an Armco executive, "we might find the supply very tight."

S U M M A R Y

AMERICAN IRON ORE ASSOCIATION

STATEMENT

ON

TAX REFORM ACT OF 1969

INTRODUCTION

The American Iron Ore Association endorses statement of American Mining Congress and limits testimony to Sections 431, 432, 501 and 521 of HR 13270 as those sections specifically affect iron ore mining industry.

HISTORY

History of depletion traced. Bridge between cost and percentage depletion discussed.

PERCENTAGE DEPLETION RATES

The depletion rate for iron ore should be retained at 15% for domestic production as provided for in HR 13270. We also believe 15% should be retained for foreign production and we explain this under our discussion on Foreign Tax Credit.

ECONOMIC FACTORS AND NATIONAL SECURITY

A viable, healthy iron ore mining industry is essential to security of nation. Enormous capital investment has been made by the industry and vast sums will be required in the future to provide the necessary iron ore to maintain our present standard of living. It is necessary to maintain adequate return on investment in iron ore mining industry in order to provide future capital requirements.

FOREIGN TAX CREDIT

Extractive industries should not be singled out for adverse treatment in computation of foreign tax credit. Present rules with respect to computation of foreign tax credit should be retained and the provisions of HR 13270 relating to this subject should be rejected.

REAL ESTATE DEPRECIATION

Depreciable industrial real estate constructed or acquired for taxpayer's own use should not be denied the use of accelerated depreciation. Section 521(a) of HR 13270 should be rejected.

CONCLUSION

The necessity for long range planning in the iron ore mining industry and the requirement for long range financial commitments makes a strong case for the premise that changes in legislation should reflect a fundamental rule of fair play that taxpayers are entitled to reasonable certainty in making choices of business and investment arrangements.

*Submitted by John R. Greenlee, Chairman, Tax Committee.

September 30, 1969

STATEMENT

OF THE

AMERICAN IRON ORE ASSOCIATION

TO THE

COMMITTEE ON FINANCE

UNITED STATES SENATE

ON

HR 13270 -- THE TAX REFORM ACT OF 1969

BY

JOHN R. GREENLEE, CHAIRMAN

TAX COMMITTEE

AMERICAN IRON ORE ASSOCIATION

September 30, 1969

C O N T E N T S

The American Iron Ore Association limits its presentation to a discussion of percentage depletion and the importance of percentage depletion to the iron ore mining industry and the Nation; a discussion of Sections 431 and 432 of HR 13270 dealing with the computation of the foreign tax credit; and Section 521 of HR 13270 affecting the depreciation of real estate. The statement consists of seven parts, namely:

STATEMENT

OF THE

AMERICAN IRON ORE ASSOCIATION

TO THE

COMMITTEE ON FINANCE

UNITED STATES SENATE

ON

HR 13270 -- THE TAX REFORM ACT OF 1969

BY

JOHN R. GREENLEE, CHAIRMAN

TAX COMMITTEE

AMERICAN IRON ORE ASSOCIATION

MR. CHAIRMAN

MEMBERS OF THE COMMITTEE ON FINANCE:

My name is John R. Greenlee. I am the Director of Taxes of The Hanna Mining Company, Cleveland, Ohio.

I welcome and appreciate this opportunity to appear before you today in my capacity as Chairman of the Tax Committee of the American Iron Ore Association. The American Iron Ore Association is a trade association representing companies which mine over 94% of the iron ore produced in the United States and Canada. The Association headquarters is located at 600 Bulkley Building, in Cleveland, Ohio.

INTRODUCTION

Our testimony today will deal with Sections 431, 432, 501 and 521 of HR 13270 as passed by the House of Representatives on August 7, 1969. Sections 431 and 432 of that bill affect the computation of the credit for foreign taxes, Section 501 is concerned with the taxation of income derived from the mining of natural resources, and Section 521 deals with the depreciation of real estate. We have purposely limited our discussion to the application of these provisions as these proposed changes affect the iron ore mining industry.

We have collaborated with the American Mining Congress in the preparation of the statement presented to your Committee by them and concur with it. We wish to add however, certain points that have particular reference to the iron ore mining industry.

HISTORY

The statement of the American Mining Congress has traced the development of the legislative history of percentage depletion in some detail which we will not repeat. We would add to that history the following additional facts.

In the early years of the income tax, depletion was based on what the taxpayer had paid for the acquisition of the mineral deposit. This was Cost Depletion which is still a part of the law today. Between cost and percentage depletion, which first became a part of the law in 1926, came Discovery Value Depletion. This method is the "missing link" which connects the original cost depletion with percentage depletion. What discovery value depletion sought to do was to allow depletion to be based on the value of the deposit rather than the cost of acquiring it, i.e., the capital value created, rather than the cost of its creation. Because of the many difficulties encountered in administration, discovery value gave way to percentage depletion. Percentage depletion represented an effort to allow roughly the same amount of depletion as had been

realized under discovery value. Discovery value, as stated earlier, was enacted to prevent the taxation of the capital value created. Percentage depletion was introduced to present similar results but with substantially fewer administrative problems. It again recognized that an equitable tax system must and should take into account the capital value of mineral resources and exclude such value from a tax on income. This is a fact that seems to be lost in the discussions of percentage depletion in the tax reform movement.

We emphasize one fact which we think is not generally understood. Mineral industries must operate, not only under economic laws which hold for other industries, but also under conditions which hold only for the mineral industry. There are at least three principal factors that distinguish the mineral industry from other types of business:

1. The irregular distribution of mineral deposits;
2. The high risk of exploration and development; and
3. The exhaustibility of the capital assets without a reasonable manner of replacement.

Certain provisions of the Internal Revenue Code were developed to recognize the unique position of the mineral industries and were inserted into the law for sound and thoroughly considered reasons. They have been reviewed periodically and have been found on a continuing basis to fulfill the purpose and need for which they were originally enacted.

PERCENTAGE DEPLETION RATES

The percentage depletion rate of 15% on domestic iron ore as set forth in the House Bill should be retained for the reasons stated under the caption "Economic Factors and National Security". There is equal validity for maintaining the 15% rate for foreign iron ore deposits for the reasons later discussed under the caption "Foreign Tax Credit". Most importantly, in light of the operation of the foreign tax credit provisions, the denial of full

depletion on foreign deposits would result in the U. S. taxpayer paying additional tax to the foreign countries and no additional tax to the United States. No reasonable distinction can be made between domestic and foreign depletion rates as applied to the production of iron ore and we therefore strongly urge that both remain at 15%.

ECONOMIC FACTORS AND NATIONAL SECURITY

A viable, healthy iron ore mining industry (and the industry it supports -- the basic steel industry) is absolutely essential to the security of our nation.

For almost forty years, percentage depletion has been and continues to be an important factor in the making of decisions to expend money on mining as compared to other investment opportunities.

What makes the iron ore mining industry unique? Never before in the history of that industry has capital in such enormous amounts been so requisite to survival in the industry. Plants to process the present reserves of iron ore in order to make them acceptable in the current market require tremendous capital investments. For example, the top 500 industrial companies in the United States, as listed by Fortune magazine, require an average investment of $19,000 per employee, whereas iron ore processing plants today require an investment in the order of $150,000 per employee. A capital investment of at least $35 million is needed for each million tons of annual capacity. Since 1954 the iron ore industry has invested $2.5 billion in mining facilities. The industry faces an even larger capital investment program in future years to provide for the expanding needs of our domestic steel industry.

The enormous future capital requirements of the iron ore mining industry may be illustrated by a quote from a recent book, "Affluence in Jeopardy" written by Charles F. Park, Jr., Professor of Geology and of Mineral Engineering at Stanford University:

"In the year 1967 the per capita consumption (of iron) in the United States was about one ton per year; a comparable world figure was 0.17 ton per person. To double the population of the world by the year 2000 and simply to maintain the same per capita consumption of iron means doubling its production, i.e., producing about 550 million more tons annually. Should the present population of the world raise its consumption of 0.17 tons per year to that of the United States, then 3.25 billion tons, or an increase to 6 times our present production, would be required annually. In the event that the population of 6½ billion people in the year 2000 will require one ton per person per year, as we in the United States now do, then the current annual production of 550 million tons would have to be increased 12 times. Such figures clearly show the difficulties inherent in supplying man with the amounts of iron he needs if he continues to expand numerically at the projected rate. Such figures allow for no greater per capita use of iron and steel than that of the United States today, and yet even here people are hoping for higher standards of living that will require greater per capita consumption of both."

Where are these capital funds to be obtained? Fundamentally, capital funds can be obtained only by (1) attracting new investment, or (2) by retaining profits in the business. Both of these sources exist only if there is an adequate return on investment in the iron ore mining industry.

FOREIGN TAX CREDIT

The American Iron Ore Association strongly urges that the present rules for the computation of the foreign tax credit be retained. Sections 431 and 432 of HR 13270 as drafted miss the point of the foreign tax credit. In attempting to eliminate a possible "double benefit" these sections of the House Bill do violence to other sections of the code and should be rejected.

From the enactment of the first income tax law in 1913 the taxation philosophy of the United States has been predicated on the pattern of applying the income tax to all United States citizens on a world-wide basis regardless of residency or source of income. The U. S. citizen is also taxed by most foreign countries on income arising from sources within their respective borders regardless of his U. S. citizenship. Without these foreign tax credit provisions the resulting double taxation of foreign source income would render foreign operations competitively impossible. As a result, almost from the

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inception of the initial income tax act the device of the foreign tax credit has been a cardinal part of our law. This concept is generally followed for all business operations and is not applicable exclusively to mineral operations. The extractive industries should not be singled out for adverse treatment.

Any restrictive changes in the computation of the foreign tax credit should particularly be avoided while the present extremely difficult repatriation rules are being imposed by the Office of Direct Foreign Investment.

Adequate world-wide, long-term reserves of iron ores must be maintained under the control of United States based corporations for the economic well-being of our country. It is essential therefore, to adopt tax policies which encourage domestic producers to seek the raw materials available for U. S. consumption regardless of where these raw materials are found. To do otherwise would result in the development of these additional sources of raw materials by non-nationals who may or may not be concerned with the best interest of the national defense of the United States and the economic well-being of its iron and steel industry. Therefore the encouragement of American companies to secure mineral rights in foreign countries is essential from the standpoint of the continued economic growth of our country.

The present proposals adversely affect our international competitive position. American capital must develop foreign iron ore reserves, not only to complement our domestic supplies but in order that United States controlled operations can effectively compete in the foreign markets for iron ore.

Since foreign income taxes paid by U. S. companies are allowed as credits against U. S. income taxes otherwise payable, the tendency of mineral producing countries is to raise their income taxes at least to a level that will absorb the full allowable credits. Thus any increase in the U. S. effective tax rate would not be likely to increase U. S. tax revenues. This might, however, increase foreign revenues with adverse effect on U. S. balance of

payments and with resulting tax disadvantage to U. S. Companies in comparison with their foreign competitors in world markets. This is particularly true with respect to iron ore operations in Canada.

Apart from these considerations, however, Section 431 of the House Bill provides for recapture of foreign tax credit even in cases where no U. S. tax benefit was ever received, and Section 432 imposes foreign tax credit limitations in cases where the foreign government has an ownership position in minerals even though mining companies may pay foreign income taxes at a lesser effective rate than other corporate taxpayers generally. These provisions should be rejected.

REAL ESTATE DEPRECIATION

Section 521(a) of the House Bill denies the use of the double declining balance or the sum of the years-digits methods to new depreciable real property (other than residential housing). The bill would also limit depreciation of used property to the straight-line method. This would result in a serious impact on the cash flow of the iron ore mining industry.

These provisions are broad enough in scope to include depreciable industrial real estate constructed or acquired for use as an integral part of a mining operation. There can be no relationship between the use of such industrial property and the use of certain non-industrial real property which would require a change in the depreciation of real estate. Thus, the reasons set forth in the report of the Committee on Ways and Means are inapplicable to this industry and the industry that it supports, i.e., steel.

Opportunities for tax avoidance which the Committee's action seeks to eliminate do not exist with respect to depreciable real estate used in the iron ore mining industry. We do not oppose the recapture provisions in the bill -- these provisions provide ample protection against so-called abuses in this area. A mine building or a beneficiation plant constructed or acquired for the

taxpayer's own use should not be denied the use of accelerated depreciation. The restrictive provisions are even more important in light of the proposed repeal of the investment credit.

CONCLUSION

The necessity for long-range planning presents particular problems in the iron ore mining industry. Correlative to this problem and necessary to its solution are long-range financial commitments. In consummating such financial commitments taxpayers must rely on tax ground rules that exist at the time the commitment is made. Any change in legislation -- irrespective of its merit -- ought to reflect a fundamental rule of fair play that taxpayers are entitled to the fulfillment of reasonable certainty in their choices of business and investment arrangements. A persuasive argument on this ground alone can be made to leave the rules as they are.

In summary, therefore, we strongly urge that:

1. The depletion rate for iron ore be retained at 15% for both domestic and foreign production;
2. The present rules with respect to the computation of the foreign tax credit be retained and the provisions of HR 13270 relating to this subject be rejected; and
3. The present accelerated depreciation provisions as they relate to industrial real property should be retained and Section 521(a) of HR 13270 should be rejected.

Respectfully submitted,

John R. Greenlee
Chairman
Tax Committee
American Iron Ore Association

A Summary of the Principal Points of the Statement Presented by Charles E. Brady - Witness for the National Sand and Gravel Association

The sand and gravel industry, according to the U. S. Bureau of Mines, is the largest non-fuel mineral industry in the United States and the demand for sand and gravel "is greater than the combined demand for the rest of the non-fuel non-metallic minerals."

In 1968 our industry produced 918-million tons of sand and gravel. According to the Bureau of Mines, the country's need for sand and gravel of suitable quality between 1970 and 2000 will necessitate production of almost 66-billion tons - a staggering figure! To meet this demand for sand and gravel, the basic construction material, we must on the average double our record-breaking 1968 production in each of those 30 years.

Ours is a privately owned and managed small-business industry, making available in every area of the United States a valuable and essential natural resource, without which this country could not fight a war, prepare for the possibility of another war, maintain this country's high standard of living, and make it possible to undertake a program for urban development and housing on a large scale to accommodate the predicted increase of 100-million people in the metropolitan areas by 1992.

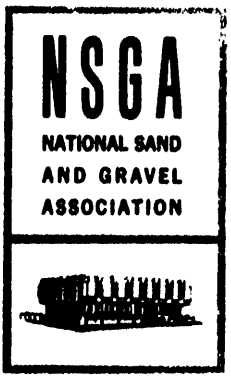
Sand and gravel is not an inexhaustible natural resource. There is a widespread assumption in this country that the availability of sand and gravel is unlimited. The very opposite is the fact: in the latest statistical study of sand and gravel reserves conducted by the Association, in 1963, it was estimated then that, on a national average, currently-held reserves had a life expectancy of 24 years. This estimate was based on an annual rate of production which has substantially increased since 1963 and which all forecasts predict will further increase dramatically. Additionally, the average

life expectancy of reserve deposits is substantially less in major metropolitan areas where the demand for sand and gravel is the highest.

One day our country will surely discover that the largest member of the mining family is being driven farther and farther away from its point of use and that, therefore, the cost of construction of all types will be substantially increased, because transportation costs are the dominating factor in sand and gravel prices.

Land costs for sand and gravel deposits have risen alarmingly in the last 15 years. These costs will increase, thus aggravating a problem which is more serious in the case of the sand and gravel industry than in any other natural resource industry. Since sand and gravel operations must be located close to the metropolitan areas which provide our principal markets, our industry must pay many times the price for land paid by other natural resource industries. Without a percentage depletion allowance of at least 5 per cent, we will not be able to locate and acquire the land which is necessary to produce the sand and gravel which the country must have in order to sustain its building and construction program.

No other mining industry is so widely dispersed as our industry. Our operations are found in every state of the Union. The modest 5 per cent depletion allowance for sand and gravel has been indispensable to our industry in meeting the heavy capital charges involved in locating and obtaining sand and gravel deposits of the necessary quality and reasonably close to the metropolitan areas which are our principal markets. I have described our 5 per cent depletion allowance as modest. It is! Its continuation is necessary if our industry is going to be able to turn out the billions of tons of sand and gravel which we will be called upon to produce in the years ahead.



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TELEPHONE: 587-1400, AREA CODE 301

September 30, 1969

Statement by
Charles E. Brady, President
Material Sales Company
Salisbury, North Carolina

Speaking for the
National Sand and Gravel Association

In re:

Tax Reform Act of 1969
H.R. 13270

- - - - - - - -

Committee on Finance
United States Senate

Russell B. Long, Chairman

My name is Charles E. Brady. I am Chairman of the Committee on Taxation and past-President of the National Sand and Gravel Association. I am also President of the Material Sales Company, Salisbury, North Carolina. I appreciate the opportunity afforded me by your Committee to speak for the sand and gravel industry of the United States in asking your Committee to continue the present percentage depletion rate of 5 percent for the sand and gravel industry, which the House of Representatives would reduce by 20 percent to 4 percent.

It should be noted at the outset that no public official or any private agency has ever at any time criticized or made objection to the 5 percent rate for the sand and gravel industry, authorized by the Congress in 1951. The House Ways and Means Committee did not give us an opportunity to be heard before it made its recommendation to the House. I have no doubt that many members of the House, had it not been for the closed rule under which the bill was considered, would have voted against the reduction in our modest percentage depletion allowance, had there been an opportunity to do so.

It seems quite obvious that the across-the-board reductions in the percentage depletion allowance for minerals and metals were prompted by the strong criticism of the percentage depletion rate for petroleum. Yet in reducing that particular rate, the House reduced the rate for almost all minerals heretofore granted percentage depletion by the Congress.

Sand and gravel is not an inexhaustible natural resource. Our industry, says the U. S. Bureau of Mines, is the largest non-fuel mineral industry in the United States. In 1968, according to a report of the Bureau, our industry produced 918 million tons of sand and gravel, the value of which exceeded one billion dollars. The Bureau added that the

demand for sand and gravel "is greater than the combined demand for the rest of the non-fuel nonmetallic minerals."

Our industry plays a vital role in the Nation's economy, in war and peace. Our industry is proud to be able to say that it has bought and leased land at high cost and has bought and installed equipment at equally high cost without governmental subsidy or financing in any form. Ours is a privately owned and managed small-business industry, making available to the United States in every area of our country a valuable and essential natural resource, without which this country could not fight a war, prepare for the possibility of another war, maintain this country's high standard of living, and make it possible for our country to undertake a program for urban development and housing on a large scale to accommodate the predicted increase of 100 million people in the metropolitan areas by 1992.

Let me go a bit farther in my effort to make it clear to this Committee that ours is indeed an essential industry. Our country could not have airports; our country could not have defense plants, without using sand or gravel or both as the first step in building these structures. We could not have public utilities such as electricity, water, telephone, gas and sanitary facilities; our country could not have homes, schools, colleges, churches, commercial structures, shopping centers, parking lots - all of the essential elements of community living in the United States, unless sand and gravel of a suitable quality is available at an economical price.

I emphasize the latter because there is seemingly a popular assumption in this country that, while other natural resources may be limited in both availability and quality, this is not true of sand and gravel. The very opposite is the fact: In the last statistical study of

sand and gravel reserves conducted by the Association in 1963, it was estimated then that, on a national average, currently held reserves had a life expectancy of 24 years. It should be pointed out, however, that this estimate was based on an annual rate of production which has substantially increased since 1963 and which all forecasts predict will further increase dramatically. Additionally, average life expectancy of reserve deposits is substantially less in major metropolitan areas where the demand for sand and gravel is the highest.

One day our country will surely discover that the largest member of the mining family is being driven farther and farther away from the sites at which sand and gravel is used and that therefore the cost of construction of all types will be substantially increased, because transportation costs are the dominating factor in sand and gravel prices. The farther we are removed from the markets we serve, the higher the cost and the greater the price which the country will have to pay to carry on a great construction program.

Let me give you a brief review of how the demand for sand and gravel of suitable quality at a reasonable price has grown in just recent years. Our production in 1955 totaled 592 million tons. In 1956, production increased to 625 million tons; in 1959, production totaled 730 million tons. You will quickly see that as compared with 1955, our production in 1968 had increased by more than 50 percent to 918 million tons, a staggering increase which I believe will impress this Committee.

Even so, however, the American Society of Planning Officials stated that in the 30-year period from 1962 to 1992, construction facilities for the projected increase of 100 million people in metropolitan areas

would make it necessary for the sand and gravel industry to produce 45 billion tons of sand and gravel in these 30 years. Even if our current rate of production were not increased at all in the 30-year period, our industry would still have to produce 27 billion tons of sand and gravel!

The U. S. Bureau of Mines, in a study entitled "Cumulative Demand Projections for Sand and Gravel", estimates that in the period between 1970 and the year 2,000, construction demands would make it necessary for the sand and gravel industry to produce "in the range from 57.2 to 65.6 billion tons." It is clear from these impressive data developed by two reputable organizations, one private and the other public, that our industry must produce close to 66 billion tons of sand and gravel in the next 30 years.

To produce anywhere near that much sand and gravel, our industry must be able to locate and develop land with sand and gravel deposits of suitable quality, locations which are close to metropolitan areas in order to avoid excessive transportation costs. This brings up still another problem: where in the world is our industry going to find the deposits to produce so much sand and gravel in 30 years, and how is it going to be financially able to acquire such land unless the Congress of the United States permits our industry to continue to use its present percentage depletion allowance of five percent?

Due to prevailing misconceptions about the vital role which the sand and gravel industry plays, and due also to expanding metropolitan areas which cover up valuable sand and gravel reserves which will thus be forever unavailable to us for sand and gravel development, our industry has to contend with unduly restrictive zoning controls. Some land planners, uninformed about the growing scarcity of good quality material near enough

to the point of use to be economically feasible, have imposed unbearable zoning requirements on the sand and gravel industry.

Yet in other areas, there is a gratifying awareness by land planners that the country must have sand and gravel if it is not to stand still. In some jurisdictions, zoning regulations set aside specific areas for sand and gravel production, the codes stipulating that sand and gravel is an important natural resource and that it must be made available to the people living in their jurisdictions.

Privately financed non-public construction dominates our country's great construction program. Our country is continuing to move forward with a construction program which, while taking due account of defense and public works, is still motivated principally by investors who use their own money to show their faith in our country's future. Reflected here is the characteristic determination of the United States never to stand still in its advance toward a better way of life. To prepare our defenses and to build the things which are essential to our way of life, this country must be able to obtain sand and gravel of good quality at a reasonable cost.

The National Sand and Gravel Association understands and accepts the necessity for intelligent zoning standards. We recognize that there is a growing over-all land shortage in our industry. We have cooperated with the Department of the Interior and with the American Society of Planning Officials in the development of performance standards which will reserve to the communities the availability of sand and gravel of good quality and which will demonstrate to the public that we recognize the legitimate public interest in the way we operate. We have done everything within our power to be a good neighbor.

We believe that this image of our industry as a good neighbor is already recognized in responsible circles. In a speech at our 50th Annual Convention in 1966, John A. Carver, Jr., then Under Secretary of the Department of the Interior, said that "your industry was already in the vanguard of a belated national effort" to conserve our country's natural resources. He added this observation of our work: "Let me say, here and now, that the work you have done in encouraging your members to follow the excellent example of those who have been most successful in site rehabilitation is entitled to the highest commendation and I take great pleasure in extending that recognition - unstintingly." This was a compliment which we shall always treasure.

Land costs have risen at a skyrocketing rate, as you know, in the past 15 years. There is no indication that these costs will decline, thus aggravating a problem which is perhaps more destructive in the case of the sand and gravel industry than in any other natural resource industry. Since sand and gravel operations must be located close to the metropolitan areas which provide our principal markets, members of our industry must pay many times the price for land paid by other natural resource industries.

Our industry must warn the country that without a percentage depletion allowance of at least 5 percent, we will not be able to locate and acquire the land which is necessary to produce the sand and gravel which the country must have in order to sustain its building and construction program - public or private. The 5 percent depletion allowance for sand and gravel has been indispensable to our industry in meeting the heavy capital charges involved in obtaining sand and gravel deposits of suitable quality.

The first step toward sand and gravel production is exploration for new sources of supply, and then a determination of the characteristics

and quantities of material. The sand and gravel must be examined as to mineral composition, quantity and nature of impurities, soundness, strength and size of grading. In order to meet the wide range of increasingly strict specifications, the question of whether the material can be economically produced to meet requirements is one that can be answered only by sound engineering judgment, based on experience coupled with careful survey of the deposit and the market for its products.

No other mining industry is so widely dispersed as our industry. Our operations are found in every state of the Union and in most of the counties and cities. I have described our 5 percent allowance as very modest. It is! I sincerely believe that if the Congress were to make an independent analysis of the percentage depletion rate for sand and gravel, it too would agree that the 5 percent allowance is indeed modest and that its continuation is necessary in order to turn out the billions of tons of sand and gravel which we will be called upon to produce in the years ahead.

Our industry has built its own plants and bought or leased its own land. We have not sought or obtained governmental help in financing our industry's operations or in any other device for protecting our industry in one way or another. Ours is a characteristically free enterprise business. We intend to keep it that it way. Taxation problems, however, are very real ones and costs of operation mount every year. Essential to our ability to survive is a percentage depletion allowance which reflects the realities in the case of an industry which has never failed the United States, in war or in peace. We ask that the 5 percent depletion rate for sand and gravel be continued.

SUMMARY OF PRINCIPAL POINTS

STATEMENT OF NATIONAL INDUSTRIAL SAND ASSOCIATION*

On Section 501(a) of H.R. 13270

Filed with the Senate Finance Committee

on September 26, 1969

(1) The National Industrial Sand Association is an industry association representing approximately 85 percent of the production of industrial sands in the United States. Industrial sand is a general term for quartzite and also quartz sand and pebbles used or sold for purposes dependent upon their silica content or their chemical or refractory properties. It should not be confused with construction sand used as a concrete aggregate.

(2) Industrial sand is presently authorized percentage depletion at 15 percent; under the House bill, the allowable rate would be cut to 11 percent.

(3) The National Industrial Sand Association opposes the proposed rate reduction and wishes to draw the following points to the attention of the Senate Finance Committee:

(a) The proposed rate reduction is not tax reform but is a retreat from the long-standing and successful National policy to encourage the development of mineral resources.

* Submitted by Earle T. Andrews, Member of the Taxation Committee.

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(b) This change in National policy was not based upon any study of either the industrial sand industry or the mining industries generally.

(c) Industrial sand is a small industry, the total production in 1967 amounted to about 25,000,000 tons valued at $86,000,000. It is clear that the proposed rate reduction will not greatly increase National revenues but will be a substantial cutback for individual producers.

(d) The proposed rate reduction would be a serious dislocation to the economics of the industrial sand industry. Adequate supplies of industrial sand are not easily located, developed, or processed into marketable levels of purity; and lower percentage depletion allowances will adversely affect the capital values of industrial sand producers which are needed to provide an adequate supply of this important mineral.

Statement of the National Industrial Sand Association
Regarding Section 501(a) of H.R. 13270
Filed with the Senate Finance Committee
on September 26, 1969

I am Earle T. Andrews, a member of the Taxation Committee of the National Industrial Sand Association of Silver Spring, Maryland, and am submitting this statement on behalf of all members of the Association. I am also Chairman of the Board, Pennsylvania Glass Sand Corporation, Hancock, West Virginia. We appreciate this opportunity of presenting our views to the Committee on the provisions of Section 501(a) of H.R. 13270.

The National Industrial Sand Association is an industry association representing approximately 85 percent of the production of industrial sands in the United States. Industrial sand is a general term for quartzite and also quartz sand and pebbles used or sold for purposes dependent upon their silica content or their chemical or refractory properties. Industrial sand is a primary raw material used in the manufacture of glass, chemicals, electrical porcelains and other silica based products and as metallurgical sand required in the manufacture of ferrous and nonferrous metal products. These constitute the primary markets although there are over 100 industrial and technical

commercial uses requiring the unique chemical and physical properties of industrial sand. Construction sand used as a concrete aggregate and for other general building purposes and industrial sand are dissimilar in origin, in methods of processing and are mutually exclusive in use.

Industrial sand is presently authorized percentage depletion at 15 percent; */ under the House bill, the allowable rate would be cut to 11 percent. The Ways and Means Committee reported that it believes (1) "that even if percentage depletion rates are viewed as a needed stimulant at the present time they are higher than is needed to achieve the desired beneficial effect on reserves;" and (2) "that there is need to strike a better balance than now exists between the objective of encouraging the discovery of new reserves and the level and revenue cost of percentage depletion allowances."

The National Industrial Sand Association opposes the proposed reduction in the existing 15 percent depletion

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*/ There is no rate specified for industrial sand as such. Quartzite, however, is specifically entitled to depletion at the 15 percent rate. The legislative history of the 1954 Code also states clearly that the 15 percent rate is intended for quartz sand and quartz pebbles when used or sold for purposes dependent upon their silica content or their chemical or refractory properties.

rate. The conclusions of the Ways and Means Committee were not based upon any study of either the industrial sand industry or the mining industries generally. Indeed, it is doubtful that the Committee even considered the impact of the proposed rate reductions on any minerals other than oil and gas.

The United States has long had a National policy carefully designed to assure an adequate supply of mineral raw materials to meet the requirements of an expanding economy and the needs of security, and to bring about an orderly and wise use of this country's natural mineral resources. Mineral resources are wasting assets, and percentage depletion recognizes this fundamental reality -- presently available mineral deposits are gradually being exhausted by the extractive industries and additional reserves must be found and obtained.

Percentage depletion and the National minerals policy generally have fostered the development of this country's natural mineral resources which in turn is tied directly to the United States' amazing economic growth. Dr. Walter R. Hibbard, Jr., Director of the Bureau of Mines, stated, at hearings on mineral shortages before the Subcommittee on Minerals, Materials and Fuels of the Senate Interior Committee on March 21, 1968, that:

> "Our mineral production is 2.9% of the U.S. GNP but it has a direct impact on 40% of the U.S. GNP and an indirect impact on nearly 75% of the U.S. GNP. It makes a dollar turn around several times. It makes resources grist for the economic mill." See Page 32.

Tax reform, whether it be intended to eliminate inequities, to redistribute the burdens of taxation, or to simplify the assessment of liability, should not be allowed to reverse unintentionally the National minerals policy. If the proposed rate reductions are intended to change this policy, as the report of the Ways and Means Committee indicates, the full impact of these changes, not merely the symbolism of reform and the revenue gain, should be thoroughly considered.

Industrial sand is a small industry. As reported by the Department of Interior, total production of industrial sand in 1967 amounted to 25,323,000 short tons and was valued at $85,855,000. The amount of the aggregate percentage depletion deduction for industrial sand is not available, but the total value of the industry's production establishes that the proposed rate reduction cannot increase National revenues substantially. Individual producers of industrial sand, however, will be confronted by a sharp cutback of almost 27 percent in their allowable depletion deduction.

Percentage depletion has become an integral part of the economics of the industrial sand industry. The proposed rate reduction would be a serious dislocation. Prices would need to be raised substantially to offset the lower depletion deductions. The impact of the rate reduction is not likely to be overcome satisfactorily by price increases, and the likely consequences include curtailed exploration and development of new deposits; less research into mineral recovery methods, especially for lower grade deposits; and slower modernization of operating methods. These consequences would be significant in the case of industrial sand. Industrial sand uses require a high purity silica and the present state of technology offers no means of beneficiating a quartz grain in which extrinsic elements in so-called solid solution exceed permissible limits. This is the controlling criterion in the final selection of industrial sand deposits, and the geologic characteristics presently required are restricted to very limited areas.

Adequate supplies of industrial sand are not easily located, developed or processed into marketable levels of purity. Extensive exploration and development and sophisticated and expensive processing are required to meet today's demands much less the increasing needs of the future.

The conclusion that must be drawn is that the economic dislocation of the proposed percentage depletion rate reduction will affect the capital values -- the risk element -- of industrial sand producers with adverse effects on supply of this important mineral.

The other provisions of the House bill applicable to all businesses serve whatever may be the reasonable demands of tax reform on the mining industry.

STATEMENT OF

S. JAMES CAMPBELL

ON BEHALF OF

NATIONAL CRUSHED STONE ASSOCIATION

BEFORE THE

SENATE COMMITTEE ON FINANCE

IN CONNECTION WITH THE COMMITTEE'S CONSIDERATION OF

H. R. 13270, THE TAX REFORM ACT OF 1969

SEPTEMBER 30, 1969

SUMMARY OF

STATEMENT OF S. JAMES CAMPBELL

ON BEHALF OF NATIONAL CRUSHED STONE ASSOCIATION

BEFORE THE

SENATE COMMITTEE ON FINANCE

IN CONNECTION WITH THE COMMITTEE'S CONSIDERATION OF

H. R. 13270, THE TAX REFORM ACT OF 1969

The reasons which caused the Congress in 1951 to grant the crushed stone industry a depletion allowance of 5% on construction aggregates and 15% on chemical and agricultural stone today even more compellingly require the continuance thereof.

Without any question, stone is vital to the growth of this nation. Its use is required to maintain our network of transportation facilities: For highways, for train roadbeds, for airstrips. Stone is needed for dams, for building of all kinds. Stone (agricultural limestone) is essential for a bountiful agricultural production. It is necessary for the production of steel and many other products.

The demand for stone is ever increasing. The U. S. Bureau of Mines projects that stone production will have to increase by 50-75% by 1985 and by approximately 150% by 2000, if the needs therefor are to be fulfilled.

Incentive in the form of the depletion allowance is needed if the production of stone is to meet those projections, for marketable stone is becoming more difficult to locate, the capital investment required to open and develop a stone quarry is becoming greater and so are the risks attendant upon the stone producing business.

The cost of the machines and equipment one must have to open and operate a quarry can easily run between one and two million dollars, and this does not count the cost of the land. Yet a stone producer is never certain after he has located a deposit and made the necessary investment that such investment will not be lost by reason of risks other than those normal to any business. Both the quality and the quantity of the stone may fail in their expectations due to the uncertainties that accompany any mining operation.

But the stone producer is also subjected to other risks of an entirely different, but equally unpredictable, nature: He may find himself "zoned out" of business entirely by new zoning laws, or he may be "forced out" financially because of the cost of complying with newly passed air, water and noise regulations.

The foregoing reasons require the continuance of the present depletion rates. We believe that a change in a tax provision is not a "reform", if the reasons which prompted the

provision originally remain valid. We submit that we have shown they do remain valid. No one has suggested, insofar as this industry is concerned, that they do not.

The depletion allowance is not a "loop hole". It is not a special provision favoring a few. It is the incentive the Congress has provided to induce any person to invest his money in the stone producing business in order that the requirements of this nation for stone products will be fulfilled.

We urge this Committee to retain the present rates of depletion for the crushed stone industry in order that the needs of this nation will be properly supplied in 1985 and in 2000.

STATEMENT OF

S. JAMES CAMPBELL

ON BEHALF OF NATIONAL CRUSHED STONE ASSOCIATION

BEFORE THE

SENATE COMMITTEE ON FINANCE

IN CONNECTION WITH THE COMMITTEE'S CONSIDERATION OF

H.R. 13270, THE TAX REFORM ACT OF 1969

My name is S. James Campbell. I am Executive Vice President of Harry T. Campbell Sons' Company, Towson, Maryland.

This statement, filed by the National Crushed Stone Association of which I am the spokesman today, is submitted on the behalf of its members and all other stone producers for the purpose of informing the members of this Committee and the members of the Senate generally of the reasons the depletion rates now allowed upon the mining and production of crushed stone for construction, chemical, flux and agricultural limestone uses should not be reduced.

By the Revenue Act of 1951, Congress determined that companies engaged in the mining and production of crushed stone required a depletion allowance in order to encourage the search for, and the production of, products that were vital to the economy

and well-being of this country. [1/] That decision was sound then and the reasons which made it sound at that time today serve not only to ratify its soundness but to compel the continuance of the present depletion rates.

We believe that tax "reform" should be based upon a need to eliminate or modify those tax provisions which, although sound when passed, no longer serve the purpose they were intended because the reasons therefor no longer exist. But a change in a tax provisions is not "reform" if the original reasons for such provision require its continuance.

To appreciate that those reasons which made the original granting of the depletion allowance to the crushed stone industry a sound decision today require that the existing rates be continued -- if not increased --, the facts surrounding the crushed stone industry, including the risks attendant thereto, and the demand for its products must be examined.

1. The Products of the Crushed Stone Industry are Vital to the Growth and Security of the Nation.

Stone may not have the glamour that copper, gold, silver, oil shale and iron ore have, but its production is just as essential

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1/ The rate of 5% is allowed on construction aggregates and 15% on chemical and agricultural stone. Under the provisions of H.R. 13270, the rates would become, respectively, 4% and 11% (Sec. 501(b)(7) and (8)).

to the growth and security of this country as the production of any of those minerals.

Take transportation -- stone must be produced to provide roads on which cars and trucks can move, roadbeds on which trains can travel and airfields so planes may operate. Take construction -- stone must be produced for buildings and dams to be erected. Take agriculture -- without agricultural limestone farm production would not flourish. Take steel -- without fluxing stone steel could not be produced. All of the foregoing industries are basic ones and stone is required for each. But it is also a necessary ingredient for the products of many other industries -- paint, glass, pharmaceutical to name a few. We need not labor the point that stone is an essential and critical product to the economy of this nation, for the myriad uses to which stone in its many forms is put can leave no doubt that its production has been, is and will continue to be an absolute necessity to the growth and security of this nation.

2. The Future Demand for the Products of This Industry.

In 1951, the year Congress granted the crushed stone industry a depletion allowance and established the present rates, 364,484,000 tons of stone were produced and used in the United States. By 1968, -- just 17 years thereafter -- the members of this industry

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were, with the assistance of the depletion allowance, able to more than double that rate of production and thereby to keep pace with the great demands for its products. But the 815,946,000 tons produced in 1968 must be increased, according to the latest projections of the U. S. Bureau of Mines, between 50% and 75% by 1985 to stay abreast of the requirements of this nation and it must be more than doubled by the year 2000 if the stone producing industry is to fulfill its obligations to serve the needs of the burgeoning population.

To accomplish the goals forecast by the U. S. Bureau of Mines, the existing depletion rates allowed the stone producing industry must be retained -- if not increased --, as we shall show below.

3. The Economics of the Crushed Stone Industry.

To appreciate that any lowering of the present depletion rates granted the crushed stone industry will adversely affect the production of stone, the facts relative to the production of stone must be understood.

The crushed stone business is not one to be undertaken by the faint-hearted. Today, it is a business that entails heavy capital investment and many risks. I am afraid that too many people have the mistaken idea that all one has to do to produce stone is

to buy some land and to start digging. Such is not the fact.

The production of stone requires heavy capital investment. Conservatively speaking, it will cost between one million dollars and two million dollars to open a quarry and place it in operation. First one must strip the overburden which requires heavy loading equipment (shovels, bull dozers, pans and trucks), the cost of which can be $50,000-$90,000. After stripping, one must have one or more heavy shovels ($80,000-$210,000 a piece), quarry trucks ($45,000-$75,000 each), a primary crusher -- which can weigh up to 150 tons ($100,000-$250,000), heavy duty conveyors ($45,000-$300,000), secondary and tertiary crushers ($50,000-$100,000), screening and washing equipment ($150,000-$250,000), dust collectors ($70,000-$230,000), and various miscellaneous items (such as dryers, bins, loading equipment, delivery trucks and trailers, and weighing stations). Thus, it may be seen that one cannot open a stone quarry without making a very heavy investment in machines and equipment. And this does not include the cost of the land, including land needed as buffer area, nor the exploration costs incurred to locate the deposit.

What risks face the man who must decide whether to put that kind of money into a stone producing operation beyond those that are faced ordinarily by any business venture? There are many.

One must disabuse himself of the thought that stone is stone and that any stone is marketable stone. To comply with the specifications of the several states and the Federal Government that deal with highway construction, for example, one must produce stone of particular densities, hardness, soundness, gradation, particle shape and other requirements depending on the area. If one is to service agricultural needs, one must have limestone that is of high calcium and/or high magnesium content. Special qualities must exist in stone that is used for flux. In short, a good portion of the stone that is in the ground is not of marketable quality.

Moreover, that which is of marketable quality is becoming more difficult and more costly to find. This is due not only to the past and the present great demand for stone products, but it is also the result of the advancement in the knowledge of the characteristics of stone and, as a consequence, the creation of more specialized specifications by purchasers of stone. And it is due also to the fact that a number of otherwise available marketable reserves cannot be utilized today because of zoning restrictions which preclude quarrying operations in certain areas. The hunt for available reserves of stone that will meet particular market requirements encompasses more than a stroll across the country side. Utilization of geographical and geological information and exploration

techniques by professional geologists are prerequisites in the search for stone of particular characteristics, all of which entails large expense. An area which preliminarily appears feasible is first subjected to one or more of a number of general survey techniques (aerial photography, surficial mapping, etc.) and then to core drilling. A scientific analysis of the core samples is made to determine the characteristics of the stone. Should the desired characteristics be found, the area is then re-mapped on the basis of such cores to determine if a commercially feasible quantity is available. Should the available information thus obtained so indicate, the great investment necessary to open a quarry is made. Nevertheless, certain very real risks remain.

Let us present them to you for your consideration. Besides those risks that are inherent in the production of any mineral that lies beneath the surface of the land -- in the case of stone production unexpected "sink-holes," water intrusions and faults which reduce the quantity of stone that was anticipated and upon which the determination to invest was made --, other risks are faced by a stone producer. One of these is attributable to the empirical nature of stone, that is, stone does not always perform in actual use as the tests thereof indicate it will. Although the

core samples and the stone when produced at the quarry may have passed the applicable specifications, such stone still may prove unsatisfactory in actual use. When this phenomenon occurs, that stone is excluded by the purchasing party for future use, despite its theoretical acceptability, and the stone producer's investment in that quarry is lost.

Another risk the stone producer runs is that, having made an investment in a quarry because the stone met certain specifications, the purchasing parties may change their specifications in such a manner as to eliminate that stone from consideration. When this is done, the stone producer's investment in that quarry may be rendered valueless because -- unlike a manufacturer of a product -- there is often nothing he can do to change the characteristics of his product to meet the newly specified quality requirements.

But there are other most significant kinds of risks we face today -- risks that, because of the ever expanding population, are ever more present -- those arising from zoning and related legislation. Time and again land that had been purchased by a stone producer for future development as a quarry has been "zoned out" for that purpose with the result that the added investment made in the land for such purpose is a total loss. Of even greater threat to the stone producer is the chance that his land which is currently

being worked as a quarry and the investment in the machines and equipment used in such operation will be rendered of substantially less -- or of no -- value by zoning and related restrictions which require that he stop using the land as a quarry. Goldblatt v. Town of Hempstead, 369 U.S. 590 (1962).

Not only do we face the risk of being "zoned out" of business by zoning and related laws without any recourse, but some of those laws now require that mining for stone be undertaken only when it is done underground. Such requirement not only increases greatly the actual cost of producing stone, but the possibility of underground water problems and of ceiling failures due to unsuitable stone structures add greatly to the risks of producing needed stone.

As adjuncts to the zoning problems which confront us, there are those that arise by reason of air and water pollution legislation. The additional costs that can be -- and are -- imposed by such legislation can make a currently profitable operation a losing one.

The possibility of being either "zoned out" of business or of being forced out by the extra costs attributable to air and water pollution legislation is becoming greater each year. This is due to the simple fact that our population is growing at such a great rate that our once rural areas are now residential areas

whose residents would prefer that a stone producer close his existing operations and move elsewhere. Although we seek constantly to effect anti-pollution and anti-noise measures that will make stone producing operations more acceptable to our neighbors, there is more and more pressure being mounted by citizens' groups to close quarries that now find themselves surrounded by homes. It is an ever present risk that confronts those of us in the stone producing business and adds to our reluctance to open new quarries.

We ask your favorable consideration of our plea that the present rates of depletion granted the stone producers not be reduced. For one to venture the very heavy capital investment required to find and to open a stone quarry in the face of the extraordinary uncertainties that face this industry -- the many possibilities to lose a great portion or all of one's investment by reason of factors that cannot be controlled by the investor -- requires that he have the necessary incentive. The present depletion rates have served this purpose in the past: The stone that was needed to fulfill the demands of the nation in the Fifties and Sixties was supplied because Congress had provided that incentive necessary to persuade people to take the risk of investing their money in this business. The future demand for the products of this industry are such that additional supply must be found if that demand is to be met. Yet despite

the fact that the risks of this business have increased as have its costs -- and neither this Committee nor the Ways and Means Committee has heard any testimony to the contrary -- a reduction in those rates which provided the incentive to produce the needed stone in the past has been proposed in H.R. 13270. Such action, in our judgment, will cause the capital required to find and open the new quarries that will be required to meet that demand to move to other fields where fewer risks are involved. As I said earlier, a change in a tax provision is not a "reform" if the reasons which prompted the provision originally remain valid. We submit that we have shown that they do remain valid. No one has suggested they do not.

The depletion allowance is not a "loop hole". It is not a special provision favoring a few. It is the incentive the Congress has provided to induce any person to invest his money in the stone producing business in order that the requirements of this nation for stone products will be fulfilled.

I would add one more consideration: Because of the heavier capital investment required to purchase the great machines and equipment needed in the mining industry generally, the investment tax credit has been particularly helpful in keeping our operations abreast of the many innovations recently made in mining machines and equipment. If that tax credit is withdrawn, as seems likely, and there

is a reduction of the depletion allowance, this industry will suffer greater tax consequences than will other industries.

We urge this Committee to retain the present rates of depletion for the crushed stone industry in order that the needs of this nation will be properly supplied in 1985 and in 2000.

SUMMARY OF PRINCIPAL POINTS

STATEMENT OF NATIONAL LIME ASSOCIATION BEFORE THE SENATE FINANCE COMMITTEE ON H.R. 13270, SEPTEMBER 30, 1969

H. R. 13270 ("Tax Reform Act of 1969") would reduce the 27-1/2% oil depletion allowance to 20% and prohibit its use on foreign oil production. Apparently almost as an afterthought (and certainly without adequate hearings on the subject) the Ways and Means Committee also included in H. R. 13270 a provision reducing the percentage depletion rate for all other minerals - other than gold, silver, oil shale, copper and iron ore mined from deposits in the United States - by amounts roughly proportionate to the reduction in the rate for oil. As a consequence, H. R. 13270 would generally reduce the depletion rate for limestone from 15% to 11%, with the reduction being from 5% to 4% where the limestone is used as road stone or for similar purposes.

Reasons for Opposing Drastic Reduction in Depletion Rate for Limestone When Used as Other than Common Stone

1. High quality limestone is indispensable in the manufacture of iron and steel and in the beneficiation of copper ore and copper refining. For example, on the average, about 1/3 ton of limestone is required to produce one ton of steel. It is difficult to reconcile no cut in the depletion rates for iron and copper ores when limestone is slashed. All these basic materials should be given equal treatment with their current 15% rate maintained.

2. Known reserves of high quality ("metallurgical grade") limestone in this country are in relatively short supply. This grade of limestone comprises only 2% to 3% of known limestone reserves. The discovery of new deposits is becoming increasingly difficult and expensive.

3. The limestone industry for at least the past ten years has been experiencing slender and narrowing profit margins because of a cost-price squeeze in the industry. A substantial cut in the depletion allowance for this strategically important industry, because of the public clamor for cutting oil and gas depletion rates, is both unfair and short-sighted.

4. In addition to the cost-price squeeze, there are many deterrents to limestone exploration and development, including necessary expenditures to comply with air pollution standards. As a consequence, reduction in depletion rates on limestone at the present time could not be more poorly timed.

Statement of Philip L. Corson, Chairman

National Lime Association Tax Committee

before the Senate Finance Committee on H. R. 13270
September 30, 1969

The National Lime Association wishes to protest the proposed cutback in the depletion rate on limestone embodied in the Tax Reform Bill. H.R. 13270. We will greatly appreciate your serious consideration of the following arguments in support of our position. The protestant is a national trade association, representing over 85% of the U. S. commercial lime industry production capacity. Its products are quicklime and hydrated lime made by calcining at high temperatures high quality limestone. Members of the association also sell crushed and ground limestone to the metallurgical and chemical process industries and for other purposes.

High Grade Limestone

For lime manufacture and for the metallurgical and chemical uses, the highest quality of stone is demanded to satisfy stringent specifications on purity. Generally such limestone must meet a minimum of 95% total carbonate content (calcium carbonate plus magnesium carbonate). In some regions the minimum total carbonate content specified is 97% or even 98%, in addition to maximum tolerances on specific impurities, such as silica, iron, and sulfur.

Essentiality of Limestone

Unappreciated by the layman is the basic essentiality of limestone and its first product - lime - to modern industry. Directly or indirectly limestone, as stone or lime, enters into the manufacture of most finished products and many other basic commodities. It is low cost, unglamorous, and taken-for-granted, but it is one of the few most basic building blocks around which industry revolves. In most instances its uses are vital and irreplaceable.

Iron and Steel

Limestone is indispensible in the manufacture of iron and steel as a flux (purifier) in which impurities are removed as a molten slag. There are no substitutes, at least, that are even remotely economically feasible. In addition dolomitic limestone and lime are required as refractory materials. A vast tonnage of limestone (as stone) and as lime are used annually by the steel industry. In 1967, according to the U. S. Bureau of Mines, 41.3 million tons of limestone (as stone and its equivalent as lime) were consumed by the U. S. steel industry as follows:

	Millions of Tons
Blast Furnace flux	21.06
Open Hearth flux	3.80
Misc. flux: foundries, cupolas, electrics	2.88
Dol. limestone refractory	.46
for lime flux *	9.36
for dol. lime refractory *	3.76
TOTAL	41.32

*Since 2 tons of limestone are required to make 1 ton of lime, the lime figures were doubled for conversion to a limestone equivalent.

Since 127.4 million tons of steel were produced in 1967, from the above limestone total it is apparent that nearly 1/3 ton of limestone was required per ton of steel. Since it is as essential as iron ore for pig iron and steel, it is difficult to reconcile that no cut in the depletion rates is proposed for domestic iron ores when limestone is ignored. Where is the equity in such treatment? Both of these basic materials should be given equal treatment with their current rates of 15% maintained.

Other Industrial Uses

In addition much lesser (but significant) tonnages are required in the beneficiation of copper ore and copper refining; for the manufacture of alumina and magnesia from which metallic aluminum and magnesium are obtained by reduction. Lime is even employed in the concentration of gold and silver ores and other non-ferrous metals. Again, a cut in depletion rates is avoided for copper ore. Yet limestone and lime are also essential to the manufacture of copper. Similarly gold and silver ores are proposed to be exempt from a rate cutback, yet lime is used in the winning of these metals.

In chemicals manufacture it is required in the Solvay process for soda ash and caustic soda manufacture; for calcium carbide, an important source of acetylene; for many calcium inorganic and organic salts, ie., phosphates, hypochlorites, stearates, etc; pesticides; paints and protective coatings.

It is essential in glass manufacture. Next to sand, limestone-lime and soda ash, are the major raw materials used in glass. Lime is essential to the sulfate (kraft) process for paper pulp manufacture, and limestone whiting is used for paper coating and as a filler. Lime is required for municipal water purification and softening and in sewage and industrial waste treatment processes to reduce stream pollution. All sugar manufactured requires lime; the limestone factor in a ton of beet sugar is nearly ½ ton. It is the major ingredient in animal feed to provide calcium. There are many other uses. In the growing movement to arrest air pollution limestone and hydrated lime may offer possibly the most economical method of absorbing sulfurous fumes from industrial exhaust gases through neutralization. If this materializes, expanded quarry operations would be required to satisfy this huge new demand.

Thus, it is apparent that without high grade limestone modern industry would cease, and in time of war it is just as strategic as steel, iron ore, petroleum, and coal. This fact was specifically recognized by Congress during the Korean War when chemical and metallurgical grade limestone was exempted from the Excess Profits tax as a strategic mineral. Thus, for defense and our civilian economy it is clear that this industry should be encouraged.

Relative Scarcity of High Grade Limestone

The foregoing metallurgical and chemical uses of limestone and lime that demand high purity stone total currently about 72 million tons per year. Such a massive annual withdrawal of our natural resources obviously depletes the existing deposits. Limestone is no different from any other mineral; its quarries and mines also are exhaustible. To replace exhausted deposits, systematic costly geologic exploration and exploitation is essential.

Attached to this testimony is a report by Dr. Kenneth K. Landes, Prof. of Geology, University of Michigan entitled "Metallurgical Limestone Reserves in the U. S." (2nd edition). In this report Dr. Landes delineates the principal areas of the country that are the sources of high grade limestone and outlines the problems encountered in exploration work. He concludes that "the discovery of new deposits is becoming increasingly difficult and expensive." This grade of limestone comprises only 2% to 3% of known existing limestone reserves. Dr. Landes is regarded as this country's foremost authority on limestone exploration and reserves and he has spent over 40 years in investigative work on limestone.

Cost-Price Squeeze

As evidence of the highly competitive nature of the limestone business, the average FOB price of crushed and broken limestone for all purposes only advanced 3% in the 10-year period from 1957 to 1967, according to the U. S. Bureau of Mines* When the prices of nearly all commodities were soaring, many alarmingly so, during this inflationary decade, it must mean that the price of limestone is about the most uninflated of all U. S. commodities. The specifics on comparative limestone prices between these two years is set forth as follows:

	Av. F.O.B. price per net ton in bulk	
Use Category	1957	1967 **
Concrete and roadstone	$1.32	$1.32
Metallurgical flux	1.42	1.52
Agricultural Liming	1.66	1.76
Lime manufacture	1.50	1.73
Sugar refining	2.39	2.38
Asphalt filler	2.60	3.00
Glass manufacture	2.98	3.33
Average for all limestone	1.34	1.38

**current (1969) average prices are estimated to be close to 1967 figures, perhaps 2% higher.

During this same period labor and capital equipment costs soared about 50% for this industry. The only explanation for this paradox is that the industry mechanized considerably during this period, increasing its output per manhour. This and the unremitting competitive pressures peculiar to this industry can be the only possible explanation. Considerable by-product limestone acts as a depressant on prices. In balance it means that the industry has been working with slender and narrowing profit margins.

The typical limestone producer is often a small manufacturer, usually a family-owned or closely-held company. The impact of a cut in depletion rates would hurt him proportionately much more than the large corporations and conglomerates that are protected by diversification. The total FOB plant value of all crushed and broken limestone produced in the U. S. was only $763 million in 1967, less than the income of just one of any of the 191 largest corporations*** in this country during that year. Yet the country for strategic reasons needs the output of our relatively small industry.

*1957 Minerals Yearbook, p. 1095
1967 Minerals Yearbook, p. 1081-2

***Fortune magazine corporate statistics

Risks in Limestone Extraction

Limestone operations are often beset with most of the hazards characteristic of the mining industry. Following are the principal problems encountered, the solutions of which are usually either very costly or insurmountable forcing each year a number of producers to abandon their business.

1. Flooding of quarries and mines will occur from underground springs and streams or torrential rains. In many cases continuous or intermittent pumping at considerable cost will control this problem, but there have been many quarries abandoned due to inability to adequately control flooding or the costs involved proved to be prohibitive.

2. Irregularities in limestone deposits is a continuing problem. In the direction of the quarry or mine expansion or strike, abrupt faults may occur in the deposit or thick layers of impure or unsalable stone or shale may be encountered overlying the desired stone. Stratas of overburden will frequently deepen to the point that the cost of stripping the deposits becomes prohibitive. Due to these situations that even with the most prudent geologic and engineering practices are not always predictable, drastic revamping of the quarry layout is often necessary. Frequently the only economical solution is to start over afresh and develop a new deposit at another location, but the same risks may prevail at the new location.

3. Sudden increases or changes in the competitive status quo of transportation costs can create an economic crisis for some limestone producers. Being such a low cost commodity, the shipping range is much more restricted than with most commodities, and transportation costs will range from 50% to 250% of the mill price of the material. As an example, the sudden emergence of low-cost water transportation can cause certain producers, dependent on higher-priced rail or truck traffic to lose their major markets. A producer, who has to move to another quarry 10 to 20 miles farther away from his processing plant and railhead due to insurmountable problems encountered, may find the added transportation costs attendant to this move more than he can absorb.

4. Changes and tightening of quality specifications on limestone can render deposits obsolete and force companies out of business. As an example, a consumer may decide that it must have limestone with a lower sulfur content (from 0.1% to 0.05%) or higher carbonate content (from 95% to 97%) even though it will cost him more. Unless the current limestone supplier can beneficiate his stone to meet the more exacting specifications, he may face a serious loss of business that in some cases can be disastrous.

5. Rezoning in recent years is proving to be an increasing booby-trap for producers located near large metropolitan areas. 15 to 20 years ago such problems could not be reasonably anticipated, but then who could have forseen the tremendous growth of many urban areas as suburbs began inundating the adjoining rural areas forming satellite cities and more suburbs with their complex shopping centers, beltways and cloverleafs that absorbed great chunks of land.

The limestone operation that was built up in a farming environment may be today surrounded by expensive suburban homes, high rise apartments, and shopping centers. The noise from blasting, dust, and truck traffic irritates the new residents, who along with public officials harass the limestone operator as a nuisance. If the operator decides to move his plant to a new quarry site a few miles away on property that he has owned as a strategic limestone reserve, he may find that even this area may be zoned as non-conforming for industrial operations, like limestone, even though his purchase of the land greatly pre-dated the zoning.

Deterrents to Limestone Exploration

There are, of course, untouched deposits of high grade limestone that can never be exploited, at least, in the forseeable future. The deposits are too small or are of marginal quality and do not justify the capital investment for exploitation. In other instances, are located too deep under the earth or they are located in remote, inaccessible areas where transportation problems are insurmountable and markets too distant.

However, in recent years increasingly lime operators have been denied other potentially productive limestone properties. Land located in or on the fringe of the burgeoning suburbs that only a few years ago was rural is now zoned non-conforming to industrial business, like limestone, chemical or heavy industry. Philadelphia and surrounding cities and the Chicago area have thousands of acres of land underlain with high quality limestone that are irrevocably committed to urbanization and blanketed with high cost housing, shopping centers, schools, etc.

Beyond urban areas are large country estates, country clubs, etc. where land values have skyrocketed so high in recent years that it is increasingly uneconomic for limestone exploitation. High acreages have been retired in recent years from public use for national and state parks, some of which have otherwise exploitable limestone deposits. The vital interstate highway program with the huge acreage it has devoured has similarly reduced exploration prospects.

Air Pollution Problems

In addition with the state and federal drive against air pollution, limestone companies are being forced to invest heavily in elaborate dust control equipment and systems in order to comply with recent stringent air pollution standards on particulate matter. In extreme cases the capital investment involved to conform to the exacting dust control standards approximates one-fourth of the total plant investment.

Conclusion

Consequently, a reduction in depletion rates on limestone at the present time could not be more poorly timed. But with the many problems described above, this industry needs profit stimulation, not a financial penalty, to justify the many risks inherent in this business.

Accordingly, we respectfully ask you to restore to the Tax Reform Bill the current 15% depletion rate on limestone as well as the 5% rate on construction aggregates, in which limestone also plays an important role. In so doing, the best interest of the country, as well as the limestone industry, will be served.

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METALLURGICAL LIMESTONE RESERVES

IN THE UNITED STATES

(Second Edition)

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July, 1963

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ILLUSTRATIONS

SUMMARY AND CONCLUSIONS

High quality ("metallurgical grade") limestone is just as essential to the making of steel as iron ore; it is also necessary for the burning of lime and for the manufacture of many chemicals. Limestone, the rock, is common and abundant in the United States, but metallurgical stone constitutes only a very small part of the total volume of limestone rock. It is a valuable, essential, and exhaustible mineral resource.

Metallurgical stone occurs in deposits within geologic formations. Geologic maps show the areas of outcrop of formations and groups of formations, some of which are notable for their high quality limestone deposits. It should be observed, however, that the workable deposits themselves occupy but an insignificant part of the total area covered by the formations. In many places where a formation is mapped, erosion has stripped away all of the good stone, or due to environmental conditions at time of deposition good stone was never present in this area, or the overburden is too thick for removal, or the good stone is too deeply buried beneath poor stone to permit profitable exploitation.

The popular concept of an unlimited supply of limestone must be abandoned so far as metallurgical grade stone is concerned. Every metallurgical limestone quarry or mine today is working a deposit which has definite boundaries, either physical or economic, or both, beyond which exploitation cannot go. Many of these deposits will reach those boundaries within the next ten years. The writer of this report, who has been investigating limestone deposits in various parts of the United States during the last 37 years, knows of only two metallurgical grade limestone deposits that he believes will still be yielding metallurgical stone 50 years hence. Of course, new deposits will be discovered in the future as in the past, but their discovery is becoming increasingly difficult and expensive.

The conclusion is inescapable that metallurgical limestone is a valuable natural resource occurring in deposits definitely limited as to recoverable volume. Each year's withdrawals from a deposit of metallurgical grade limestone exhaust the value of the property.

July, 1963

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DEFINITIONS

Some words have different meanings to different people. In many instances the same word may have a much more restricted meaning to the scientist than it has for the man in the street, and even for the man in industry who may use the word constantly. Therefore, in order to avoid confusion some of the more common terms used in this report are defined in the following paragraphs as they are used herein. For practical reasons the terminology followed tends to favor the trade usage rather than the academic definition.

Limestone. The word "limestone" without qualifying adjective as used in this report is a sedimentary rock composed largely of the mineral calcite (calcium carbonate) or the mineral dolomite (calcium-magnesium carbonate) or mixtures of the two.

High calcium limestone. A limestone consisting dominantly of the mineral calcite. When the term "limestone" is used in scientific reports, high calcium limestone is implied.

Dolomite. Limestone rock composed chiefly of the mineral dolomite (calcium-magnesium carbonate). Limestones which are mixtures of the minerals calcite and dolomite may be referred to as "dolomitic limestones" or "magnesian limestone." Where the end use does not depend upon the chemical composition dolomitic rocks are referred to as a limestone in accord with the first definition above.

Carbonate rock. A very convenient term to include all stone covered by the three preceding definitions. It is derived from the fact that both calcite and dolomite are carbonate minerals.

Metallurgical stone. A term applied to all carbonate rocks which are used as a flux in metallurgical processes, such as in the blast furnace to assist in the conversion of iron ore to pig iron and in the open hearth furnace where pig iron becomes steel. Dolomite is also used as a refractory in furnace linings. As can be seen in Table 1 both high calcium limestone and dolomite have metallurgical uses.

Chemical stone. Carbonate rock that is used by the chemical industry.

Lime. The product obtained by heat treatment in a kiln of either high calcium limestone or dolomite. The heat treatment drives off carbon dioxide leaving either calcium oxide or the oxides of calcium and magnesium (in the case of dolomitic raw material).

Lime is sold either as quicklime which unites vigorously with water, or the water is added prior to sale in which case it is marketed as hydrated lime.

Cement stone. A high calcium limestone which can be used in the manufacture of cement. Portland cement specifications limit the amount of magnesium oxide to 5% which means that the raw material cannot run over 3%. However, argillaceous (clay) impurities may be present up to about 25%; in fact if they are not present in adequate proportion in the rock, clay or similar raw material from outside sources has to be added.

Commercial stone. Stone used in concrete aggregate and as road metal. Also referred to as "road stone".

Place value. Limestone, even that of highest grade, is a bulk commodity with a relatively low value per ton. In consequence most limestone buyers pay more for transporting the raw material than the cost of the stone at its source. For this reason limestone as well as other mineral bulk commodities are said to have "place value". A high-grade limestone in Montana would have very low place value, the place value of a limestone of equal grade in eastern Iowa would be much higher, and such a stone within the city limits of Chicago would be at the very top in place value.

USES AND SPECIFICATIONS

Usable and not usable limestones. Both high calcium limestone and dolomite which can be used for metallurgical and chemical purposes are scarce in terms of the total volume of limestone within the United States. Somewhat larger, but still limited in volume, is the limestone that can be used commercially, mainly for concrete aggregate and as road metal. The remaining limestone is either too impure chemically or inadequate physically for any use whatsoever. Wherever there are limestones this completely non-usable stone is by far the most abundant, occupying many cubic miles of the earth's crust.

Metallurgical limestone specifications. Limestones that are satisfactory for metallurgical or chemical uses as stone, or satisfactory for raw material for the production of calcined products, may be classified in four grades as follows:

Table I

		A-1	A-2	B-1	B-2
Silica	less than	1.0%	3.0%	1.0%	2.0%
Alumina	" "	1.5	1.5	1.5	1.5
Sulfur	" "	0.1	0.1	0.1	0.1
Magnesia	" "	5.0	5.0	21.8	21.8

These specifications are arbitrarily made to provide a means of identifying various classes of limestone since there are no generally agreed upon standards. Silica, alumina and sulfur are impurities. Magnesia is an active basic agent, but limestones with varying proportions of magnesia may have different uses.

Uses of metallurgical stone. Over half of the total volume of stone here classified as "metallurgical" consumed annually is used as blast furnace flux. The blast furnace is the fundamental unit in the conversion of iron ore to pig iron. An average of 800 pounds of limestone is used in producing each ton of pig iron. The function of the flux is to furnish basic constituents, namely lime and magnesia, which will combine with the acid compounds normally present in an ore, such as silica and alumina, and remove them in the form of the resulting slag at the top of the molten metal in the blast furnace. Also the flux is very important in the removal of sulfur present in the coke in the blast furnace charge. Because the efficiency of the flux is dependent upon the amount of basic elements it can contribute, it becomes obvious that the presence of such compounds as silica and

alumina in the flux itself serves to reduce the effectiveness of the flux as a metallurgical agent. It is, of course, possible to compensate for these increases in acid compounds in a flux by the addition of more flux. However, this practice has its limitations because it not only increases the slag volume, decreasing the furnace capacity, but in addition more coke is required to heat the additional stone to flux the acid compounds already in the stone and further, the addition of more coke to a blast furnace means that more impurities present in the coke have to be fluxed as well. Therefore, grade A-2 stone is used only where the delivered cost of A-1 stone is more than the additional costs involved in using an A-2 fluxstone obtainable near by.

The presence of magnesia does not seem to interfere with the fluxing property of limestone; in fact some blast furnace operators specify from 5 to 9% MgO in the belief that with such stone they obtain a more satisfactory slag. Therefore, B-1 (and even B-2) grade stone may be used either directly as a blast furnace flux, or as a supplementary material to be added to the A-1 charge.

Metallurgical stone can only be used in lump form. The fines produced during mining and processing must be agglomerated or marketed elsewhere. Pulverulent types of limestone such as chalk and marl cannot be used for metallurgical purposes, regardless of purity, unless agglomerated.

Most of the conversion of pig iron to steel is done in the open hearth furnace. During this operation from 130 to 370 pounds of flux, depending upon the amount of phosphorus that has remained in the pig iron, is added for each ton of steel produced. A-1 (or A-2) grade stone is used for this purpose; the dolomitic limestones (B-1 and B-2) are not used.

Dolomite is refractory and is used in lining basic open hearth steel furnaces. Only B-1 grade, and that at or close to the pure dolomite end of the calcium-magnesium series, can be used.

One of the most important uses of calcined limestone (lime) is as a flux in the production of steel. Chemical stone, used in making such products as soda ash and calcium carbide, and in the refining of beet sugar, must be of A-1 grade in most instances, although B-1 stone is used in quantity for some purposes. Quality plasters can be made only from A-1 or B-1 stone.

The utilization of the various grades of limestone as metallurgical stone is summarized in the following table:

Table II

Grade	Blast Furnace Flux	Open Hearth Flux	Furnace Linings	Lime	Chemicals
A-1	Yes	Preferred	No	Yes	Yes For more uses than B-1
A-2	Yes	Yes	No	No	No
B-1	Yes Usually as a supplement to A-1	No	Yes	Yes	Yes
B-2	Yes	No	No	No	No

The total metallurgical grade stone production is roughly one-eighth of the annual domestic crushed limestone produced (the amount of limestone mined for building stone is relatively insignificant). The remaining seven-eighths of the crushed stone has many uses, especially in concrete and road metal, and as cement stone.

It can be seen from the above table that either nearly pure high calcium limestone (A-1) or nearly pure limestone composed chiefly of the mineral dolomite (B-1) are essential to practically all metallurgical operations except in fluxing the blast furnace charge where A-2 (or B-2) quality stone can be used if necessary. Only the B-1 stone can be used as refractory material for steel furnaces.

Variations in quality in natural deposits of limestone. Nearly pure deposits of high calcium limestone (A-1) or dolomite (B-1) are due to a combination of favorable geological conditions both at time of deposition and subsequently. The sea in which the carbonate minerals were being deposited must have been clear; no streams on nearby land surfaces were bringing in sand, silt, or clay particles to be deposited contemporaneously with the carbonate grains. Subsequently no circulating ground waters precipitated silica or sulfides in that particular rock.

Limestones vary in quality both vertically and laterally. Vertical changes are the result of changed environments in the geological past. Just as a limestone may be succeeded by a shale, sandstone, or other rock due to different conditions of deposition at different times, so may a pure limestone be succeeded by a highly impure limestone (such as a shaly or cherty limestone). Likewise limestones vary laterally in purity due to different environmental conditions at time of deposition, or due to more active ground water circulation subsequently. Lateral variations are not as sudden as vertical changes. but may be just as complete. Many instances are known of limestones merging into shales and even sandstones laterally.

It may be concluded that a deposit of nearly pure stone is the result of an unusual combination of circumstances and that this combination was in effect locally but not regionally so the deposit is definitely limited in scope. Consequently every deposit of high-grade limestone may be looked upon as a lens. Some lenses are small, covering but a few acres, and others are large, covering several square miles. Many metallurgical stone operations cease, not because the limestone becomes exhausted, but because the high-grade lens within the limestone formation has been worked out.

Quarrying and underground mining costs compared. Most stone is produced in open cut quarries. Underground mining is much more expensive, and is resorted to only where (1) no surface stone of adequate quality is available, and (2) the consuming district is so remote from open cut quarries that local stone can be mined and delivered cheaper.

Because of much cheaper production costs the outcrop deposits of metallurgical limestone constitute the number one domestic reserve. This stone carries down the regional dip from the outcrop and may underlie, at varying depths, hundreds of square miles of younger rocks. It therefore constitutes a secondary reserve, which will be considered in this report in the discussion on geographical distribution which follows. But it should also be remembered that (1) quality varies laterally, and in many instances A-1 stone in the outcrop becomes A-2 or less pure stone down the dip, and (2) not only does it cost much more to mine stone underground, but those already high costs increase with greater depth so that the potential value of a deeply buried limestone, even though it be of the highest quality, is highly questionable.

Deterrants to continued operation of metallurgical limestone quarries. In many parts of the United States there are dozens of abandoned quarries. Reasons for abandonment follow:

Public pressure. Although a quarry may be started in a rural area and antedate all zoning restrictions, it subsequently may become completely surrounded by residences and subject to harassment by the new neighbors who resent the presence of an industrial plant in their midst even though it was there first. Suits to abate either noise of blasting, plant operation, and truck movement, or dust may lead to the abandonment of a high-grade deposit before exhaustion.

Condemnation for highway and other purposes. Large reserves of high-grade limestone in the Chicago area and no doubt elsewhere have been retired from development through condemnation of a part of the quarry area for expressway use.

Increased thickness of overburden. In quarry operations there is an economic limit due to cost of overburden removal and disposal in order to uncover the stone beneath. When this limit is reached, usually due to increased thickness of overburden

as the quarry is extended, the operation must end.

Increased cost with increased depth. This is an especially potent factor in terminating operations in underground mines. In addition to increased operating costs with increased depth every ton of stone produced from a deeper level also has to pay its prorata share of the cost of sinking the shaft to that level.

Pumping costs. Many limestones are very porous and some are even cavernous. Where these limestones lie below the water table either in quarries or underground mines, the pumping expense may eat up the entire profit margin and cause the operation to cease even though high quality stone is still present.

Changes in quality or in quality specifications. As a quarry or mine expands from the original area of operation, relatively slight changes in the chemical character of the rock may make it no longer acceptable to buyers. For example, an increase in the sulfur content of even as little as .01% may shut down an operation. Likewise a tightening of the sulfur requirements by the same amount could have the same effect.

Increased mine to market transportation costs. As with all bulk commodities the major cost is usually transportation. If these costs increase perceptibly the stone may become priced out of its market. Likewise, stone from more distant sources but traveling a cheaper route such as by water, may be able to compete successfully with stone from nearby. For example lake stone (term applied to limestone produced along the shores of the Great Lakes and transported by ship) can move inland for considerable distances invading markets hitherto held by local producers.

Exhaustion of deposit. Many limestone operations have closed down in the past and will continue to close down in the future because exploitation of the deposit has completely exhausted it.

Deterrents to opening up new deposits. Many adequate deposits of metallurgical grade limestone with excellent place value cannot be developed for the following reasons:

Zoning. Zoning restrictions have now spread from the city into the township and even the county. Therefore, in most metropolitan areas today current mining or quarrying operations are nonconforming and no new operations can be initiated even though a company may have owned mineral property for many years within the sub-

sequently restricted area. As a consequence, producers supplying such necessities to urban development as stone, sand, and gravel now have to discover and develop deposits many miles (and many transportation dollars) distant from the concentrated market area.

Urban spread. Even without zoning the ever expanding urbanized area has removed, and will continue to remove, large deposits of limestone from ever being developed. For example, within the last twenty years in eastern Pennsylvania valuable high-grade limestone deposits have been covered by subdivisions, shopping complexes, and drive-ins.

Rural development. Beyond the urbanized zones are large areas covered by country estates and country clubs. The land thus covered is too expensive for acquisition for limestone exploitation.

Parks. Some very large areas are not available for mineral development because they lie within federal, state, or county parks. Examples are wilderness parks, national parks, local parks, parkways, and bird and game refuges. More land is retired for these purposes every year. We even have had recent examples of some states leasing park or game land for mineral development and then refusing the necessary permits to start the development.

Expressways and interchanges. Every year more expressways are built and each year the rights-of-way become wider and the acreage covered by the interchanges becomes greater. Without doubt a considerable tonnage of high-grade limestone becomes no longer available in this manner.

The search for new supplies. Because of the ever expanding market due to increased consumption, and the annual abandonment of many limestone quarries for reasons stated previously, the major limestone producers have to be continuously searching for new reserves. The discovery of such new reserves becomes increasingly difficult because of prior discovery and development, man-made restrictions on areas where stone can be exploited, and the necessity of finding the stone where its transportation cost to market will not be prohibitive.

The search for new supplies is also expensive. Geologists must be employed to locate

prospects, land must be optioned, and the prospects core drilled for thickness of overburden and quantity and quality data. It may take months of searching and exploration to obtain a single adequate deposit of metallurgical grade limestone.

DISTRIBUTION OF METALLURGICAL LIMESTONE RESOURCES

Each state in the United States containing significant and accessible reserves of limestone of metallurgical grade is discussed in this section. The state by state summaries are based almost entirely on published information; their accuracy, completeness, and freshness are therefore no better than the quality and dating of the source material. In every instance where specific publications were available on the limestone resources of a state those publications are listed at the end of the pertinent discussion.

Analytical data are not available for many deposits, and the available information is questionable for others. In many instances the published analyses are for isolated "grab" samples which are rarely typical of the deposit as a whole. Only where the deposit has been sampled by the technical methods employed in industry can the analyses be averaged to give a reliable picture of the chemical character of the "run of mine" stone. Where adequate chemical information is lacking the best clues to the quality of a deposit are to be found by a survey of its utilization, including changes in its marketability across the years. Although a premium grade stone may be sold for low quality uses, an inferior stone cannot be marketed for metallurgical purposes, especially in recent years.

It will be noted that some of the references consulted, although the latest available, are of such vintage that the information obtained can hardly be considered up-to-date, especially in regard to areas of current exploitation. However, this report is primarily concerned with the reserve picture, and it can be stated that, as a general rule, the reserve situation has deteriorated instead of improved since the publication of the source data. This has been due to the subsequent exhaustion of many deposits and to the increased quality of stone demanded by the metallurgical market. New discoveries have failed to equal these losses in the metallurgical stone reserve supply.

Ninety per cent of the limestone produced and sold as fluxing stone in the United States in 1961 came from the following seven states:

Rank	State	Production in M tons
1	Michigan	10,565
2	Pennsylvania	4,924
3	Ohio	4,433
4	West Virginia	1,480
5	Alabama	1,269
6	Virginia	972
7	Illinois	737
	Total	24,380

In addition there was considerable production of limestone as chemical stone and for burning chemical lime.

In the following description of metallurgical grade limestone by states, the seven leading states in fluxstone production will be taken up first, in decreasing order of annual output. States of lesser importance as sources of this type of stone will follow, in order of geographic location, from east to west.

All state rankings are based on 1961 production figures as published in the Minerals Yearbook for 1961, Vol.1, pp. 1157-1158.

Maps are included for the states which supply most of the metallurgical limestone produced in the United States. On these maps are patterns showing the areas in which certain geologic formations, know to contain local deposits of metallurgical grade stone, occur. Two points should be kept in mind in using these maps. First, the pattern refers to the top of the bed rock surface and not to the top of the ground; tens and even hundreds of feet of glacial deposits, wind blown sand, river alluvium, or even deep soil may lie between the surface and the bed rock. Secondly, the commercially usable high-grade deposits occupy only a small fraction of the area covered by a formation pattern, therefore the map does not pinpoint a possible quarry or mine site, but it does give the geologist a less-than-statewide area in which to hunt.

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Michigan

Michigan's rank in the production of metallurgical limestone is due to a combination of strategic location in respect to the Great Lakes waterborne commerce and the presence of high quality stone in unusual abundance. Three formations (Fig. 1), the Burnt Bluff, Engadine, and Dundee-Rogers City are exploited for metallurgical stone in Michigan.

Burnt Bluff formation. The Burnt Bluff formation crosses the southern part of the Northern Peninsula from the Garden Peninsula to the east side of Drummond Island. A large lens of high calcium limestone (A-1) in the Burnt Bluff dolomite is quarried north of Port Inland.

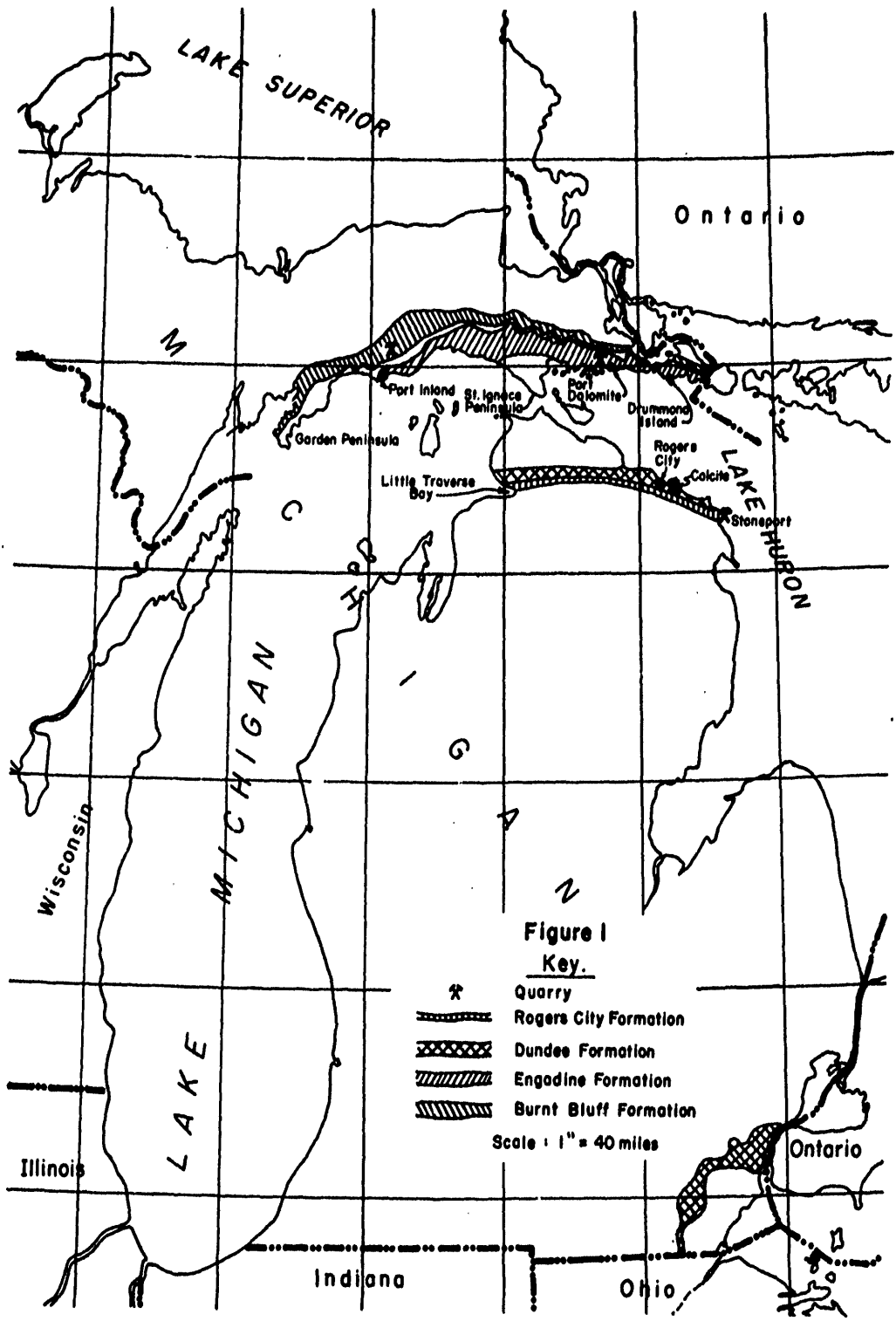
Engadine formation. The Engadine formation at the top of the Niagaran series contains some dolomite of B-1 grade. This formation crops in the Northern Peninsula only, from the Lake Michigan shore near the Schoolcraft-Mackinac County line eastward across the foot of the St. Ignace Peninsula to southern Drummond Island. It is quarried north of Port Dolomite and on Drummond Island. The amount of stone of B-1 grade in this formation is definitely limited by local topography and structural geology. The southerly dip, which carries the Engadine beneath the lake waters in a relatively short distance, makes underground mining virtually out of the question.

Dundee-Rogers City. An exceptionally large deposit of A-1 grade stone lies within the Dundee-Rogers City formations southeast of the town of Rogers City. These rocks are quarried at Calcite and Stoneport. The belt occupied by the Dundee-Rogers City extends from False Presque Isle north and west to Little Traverse Bay. However, west of Black Lake, and perhaps west of Rogers City, the cover of glacial drift is too thick to permit exploitation of the underlying limestone. Down the dip, to the southwest of the outcrop zone between Rogers City and False Presque Isle, the Rogers City-Dundee stone continues beneath successively younger formations. The distance down-dip over which it retains A-1 quality is now known, but it is probable that a large reserve exists in the first few miles basinward from the outcrop. This reserve cannot be tapped, however, until prices justify underground mining.

To the southeast from False Presque Isle the Rogers City-Dundee stone disappears beneath Lake Huron. The Dundee formation reappears in a belt of few outcrops which crosses the corner of southeastern Michigan. Unfortunately, however, this stone loses its A-1 quality between northeastern and southeastern Michigan.

Limestone of metallurgical grade was shipped from the following ports (Figure 1) during the 1961 season:

Port	Formation	Type	Tonnage (M tons)
Port Inland	Burnt Bluff	High calcium	3,591
Port Dolomite	Engadine	Dolomite	2,330
Drummond Island	Engadine	Dolomite	2,048
Calcite	Dundee-Rogers City	High calcium	12,567
Stoneport	Dundee-Rogers City	High calcium	3,552
		Total	24,088


LAKE SUPERIOR
Ontario
MICHIGAN
LAKE HURON
Wisconsin
Illinois
Indiana
Ohio
Ontario
Port Inland
St. Ignace Peninsula
Port Dolomite
Drummond Island
Garden Peninsula
Rogers City
Calcite
Little Traverse Bay
Stoneport
Figure I
Key.
Quarry
Rogers City Formation
Dundee Formation
Engadine Formation
Burnt Bluff Formation
Scale : 1" = 40 miles

During the same year the fluxstone production was recorded as 10,565 M tons, so over half of the lake stone produced was used for other purposes, including as chemical, cement, lime, refractory, and commercial stone.

Michigan contains many other limestone and dolomite beds beside those mentioned, but all other known deposits of adequate size for large scale quarry operations are below A-2 and B-2 grade.

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Pennsylvania

The production of limestone is a major industry in Pennsylvania, and Pennsylvania is a leading state in its annual output of limestone of all types. It is second in metallurgical stone production. Although Pennsylvania is underlain by many cubic miles of carbonate rock, the percentage that is of metallurgical and chemical grade is quite small.

The metallurgical stone resources of Pennsylvania occur in various formations of early Paleozoic age (Ordovician and Cambrian) in central and eastern Pennsylvania and in the late Paleozoic (Carboniferous) Vanport limestone of western Pennsylvania (Fig. 2). Four areas produce most of the metallurgical grade stone from the early Paleozoic rocks, whereas the production of Vanport limestone comes mainly from a single county in western-most Pennsylvania.

Early Paleozoic limestones. The four areas where Ordovician and Cambrian limestones are exploited are (1) Centre and Mifflin Counties in central Pennsylvania, (2) the Lebanon Valley of southeastern Pennsylvania, (3) the Philadelphia dolomite district, and (4) Adams and York Counties, also in southeastern Pennsylvania.

Centre County in central Pennsylvania contains the highest grade limestone (A-1) in quantity in the state. The Valentine formation ("Bellefonte ledge") crops out along the limbs of the Nittany anticline on opposite sides of Nittany Valley. On the northwest flank the beds are vertical, but the southeastern flank dips from 18° to 45°. Although formerly quarried to a considerable extent, most of the Valentine formation now comes from underground mines in the Bellefonte area and across the valley near Pleasant Gap. This stone is used as furnace flux, for chemical purposes, and for lime burning.

The Annville limestone, which like the Valentine is also of Ordovician age, is the A-1 stone which is quarried in the Lebanon Valley of southeastern Pennsylvania. The strata in this area have been tilted beyond the vertical so that they now dip from 30° to 50° south. The Annville likewise is used for lime burning and chemical and metallurgical purposes. In addition some is shipped into the Lehigh Valley cement district for mixing with the local cement rock in order to bring it within magnesia specifications.

Large quarries to the northeast and southwest of Philadelphia produce high-grade dolomite (B-1) from Cambrian rocks. Southeastern Pennsylvania also contains high calcium limestone of similar age. Centers of production are near Hanover in Adams County and in the vicinity of Thomasville in York County.

The east coast steel mills are largely dependent for their metallurgical stone upon the Cambrian dolomite and high calcium limestone deposits of southeastern Pennsylvania. However, both here and in the Lebanon Valley land values are very high and the urban spread westward from the Philadelphia metropolitan area have limited greatly the available reserves for future development.

The Carboniferous Vanport limestone of western Pennsylvania is produced today mainly in the Hillsville-Bessemer district of Lawrence County, but many quarries and underground mines have operated in the past in other parts of the Vanport outcrop area, especially in Armstrong and Butler Counties to the east. The Vanport stone is of marginal quality chemically (mostly A-2) and its furnace use has been due to its place value, lying as it does on the periphery of the Pittsburgh-Youngstown steel district. The Vanport is quite variable in thickness; where exploited it has an average thickness of about 18 feet, but due to erosion prior to deposition of overlying formations this limestone has been cut out altogether in many places. It lies nearly flat, which makes possible quarry operations

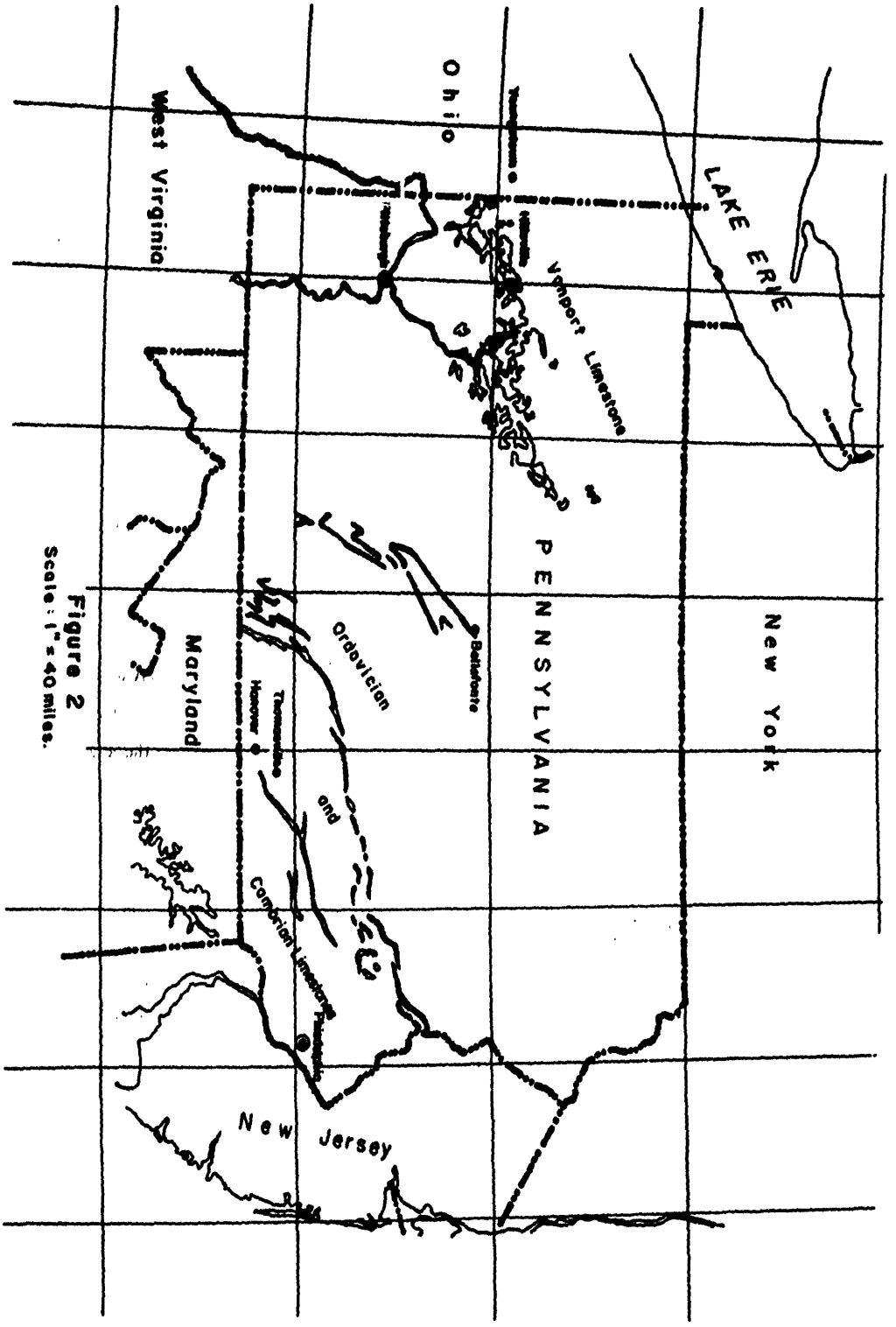

Figure 2
Scale: 1" = 40 miles.

in the Hillsville-Bessemer area, but farther to the east this ledge crops out along the sides of steep walled valleys so it has been necessary to follow the limestone bed beneath the overlying rock by underground mining in order to exploit it.

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Ohio

Ohio ranks third in metallurgical limestone and first in lime production. Two rock groups, the Niagara and the Columbus, are the principal sources of metallurgical stone. The distribution of these rocks in Ohio is shown on Figure 3.

Niagaran dolomite. The only really high quality carbonate rock occurring in abundance in Ohio is the Niagaran dolomite which underlies a considerable area in western Ohio. Local names used for this rock include Peebles, Lilley, Cedarville and Guelph. The best stone appears to be localized in the northern part of the Niagaran outcrop to the southeast of Toledo in the general vicinity of Woodville. Here is the largest lime burning district in the United States. Because of the purity of the dolomite the lime is likewise high-grade and is used in chemical manufacture. Raw (unburned) dolomite is also shipped directly to chemical and steel plants. There is a large reserve of dolomite in the Woodville area, but future development will involve the removal of more and more overburden per ton of stone produced because the localities where thick dolomite lies at shallow depth are being

exhausted.

Although the map shows another and larger outcrop band of Niagaran rock, crossing from Indiana into west central Ohio and continuing down to (and across) the Ohio River into Kentucky, most of this stone is B-2 or lower in grade.

Columbus limestone. The Columbus limestone, an A-2 stone, is the principal source of fluxing stone and chemical stone in Ohio. It extends from Kelleys Island in Lake Erie to south of Columbus (Fig. 3). The workable deposits at the north end of this zone have been largely exhausted. Abandoned quarries are numerous both on Kelleys Island and south of Sandusky Bay on the mainland.

As a general rule the Columbus limestone increases in silica and magnesia content with depth, so the downward limit of exploitation, so far as furnace stone is concerned, is an assay level rather than a geologic contact. Chert bands may be present locally at higher levels in the Columbus formation. However, in spite of its marginal chemical character for use as metallurgical stone is concerned, this limestone is so close to major consuming centers that it has unusually high place value.

The Columbus limestone dips to the east from the outcrop band and is mined at a depth of 2248 feet at Barberton, southwest of Akron, for chemical stone. The limestone exploited by this mining operation is also cherty.

Formations not shown on Ohio map. The Vanport limestone of Carboniferous age is extensively quarried in western Pennsylvania (see Pennsylvania) and some of the workings extend across the line into Ohio.

The Brassfield formation, somewhat older than the Niagaran but still of Silurian age, crops out in southwestern Ohio where it is practically the only commercial limestone. Chemically the stone is A-2 in grade. Its exploitation is handicapped by the fact that is has maximum thickness of only about 12 feet, except locally where it may be as much as 20 feet.

Various other formations are quarried in Ohio for crushed stone, but are too impure for metallurgical use.

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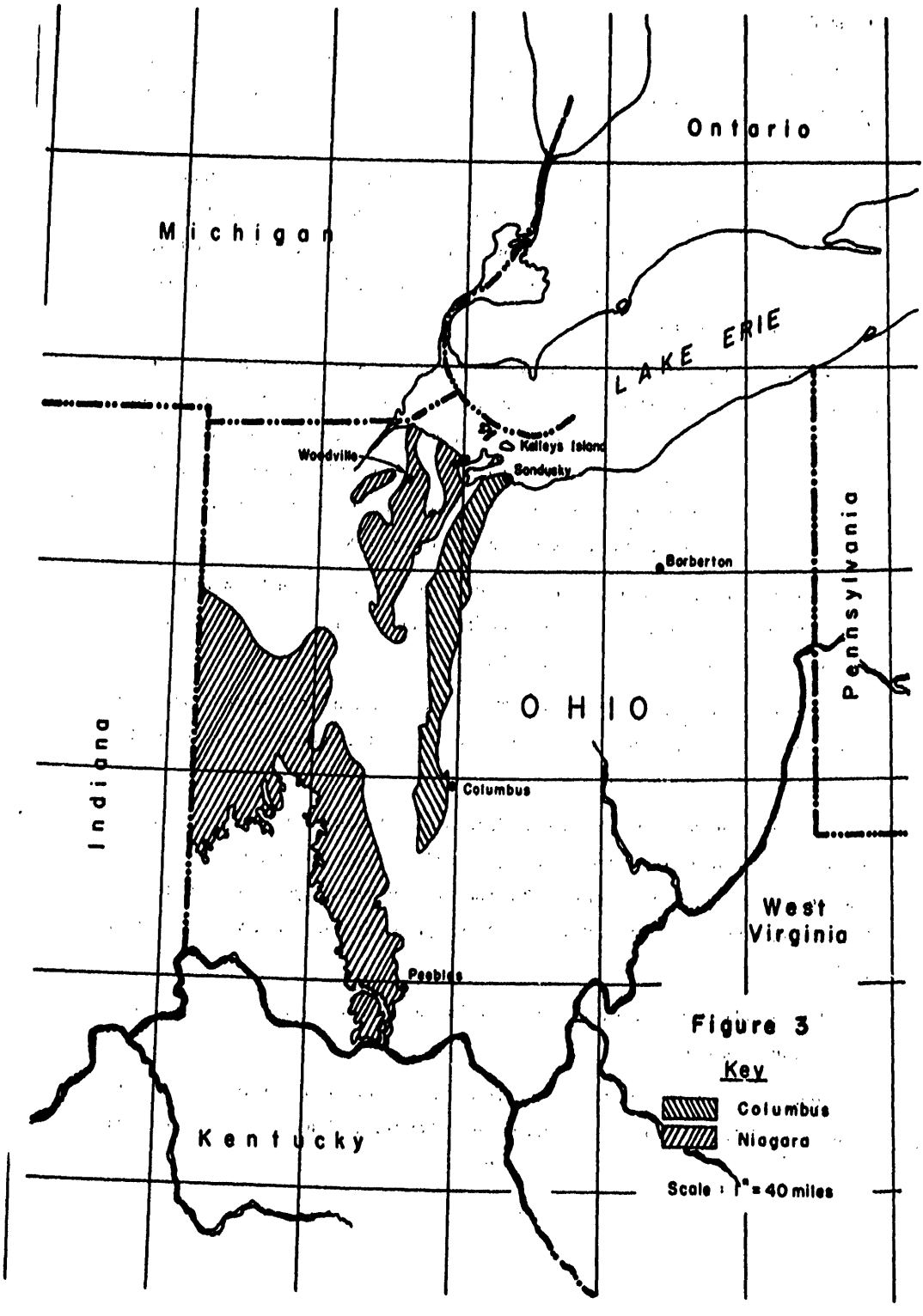
Ontario
Michigan
LAKE ERIE
Woodville
Kelleys Island
Sandusky
Barberton
Pennsylvania
OHIO
Indiana
Columbus
West Virginia
Peebles
Kentucky
Figure 3
Key
Columbus
Niagara
Scale : 1" = 40 miles

Ohio Geological Survey, Bulletin 49, 1951, 364 pp.; Clinton R. Stauffer, "The Geological Section at the Limestone Mine, Barberton, Ohio", American Journal of Science, Volume 242, May 1944, pp. 251-271; Wilber Stout, "Dolomites and Limestones of Western Ohio", Ohio Geological Survey, Bulletin 42, 1941, 446 pp.

West Virginia

West Virginia is the fourth state in the United States in annual production of metallurgical stone. In addition to a considerable volume of fluxstone, this state ranks high among the lime producing states, and also produces some dead-burned dolomite for refractory purposes. The metallurgical stone is confined to the Ordovician Mosheim limestone and Cambrian Tomstown dolomite which lie within the band of rocks which cuts across the northeastern or "panhandle" corner of West Virginia between Maryland and Virginia (Fig. 4).

Mosheim limestone. This is the only high quality limestone (A-1) in West Virginia. It crops out in Berkeley County and to a lesser extent in Jefferson County. It averages less than 1% silica and 2% magnesia, and is likewise low in alumina. The Mosheim, therefore, makes a very fine fluxstone and is ideal for lime burning.

Due to close folding and erosion the Mosheim limestone occurs in more or less isolated pockets. Many of the individual deposits have been completely worked out, and other pockets are so small that they cannot be profitably exploited. The volume of Mosheim stone yet to be quarried or mined in West Virginia is relatively small.

Tomstown dolomite. The Tomstown formation is a true dolomite of B-1 rank. Chemical analyses made of samples of this stone obtained from active quarries have shown a uniform silica content of less than 1%. It is quarried in considerable volume for refractory purposes. The center of the Tomstown exploitation is in the vicinity of Millville in Jefferson County. Like the Mosheim limestone the Tomstown dolomite occurs in infolded deposits, many of which have already been worked out and the remainder are definitely limited as to reserves.

References: J. B. McCue, J. B. Lucke, H. P. Woodward, "Limestones of West Virginia", West Virginia Geological Survey, Vol. 12, 560 pp., 1939; G. P. Grimsley, "Jefferson, Berkeley, and Morgan Counties", West Virginia Geological Survey, County Reports, 644 pp., 1916.

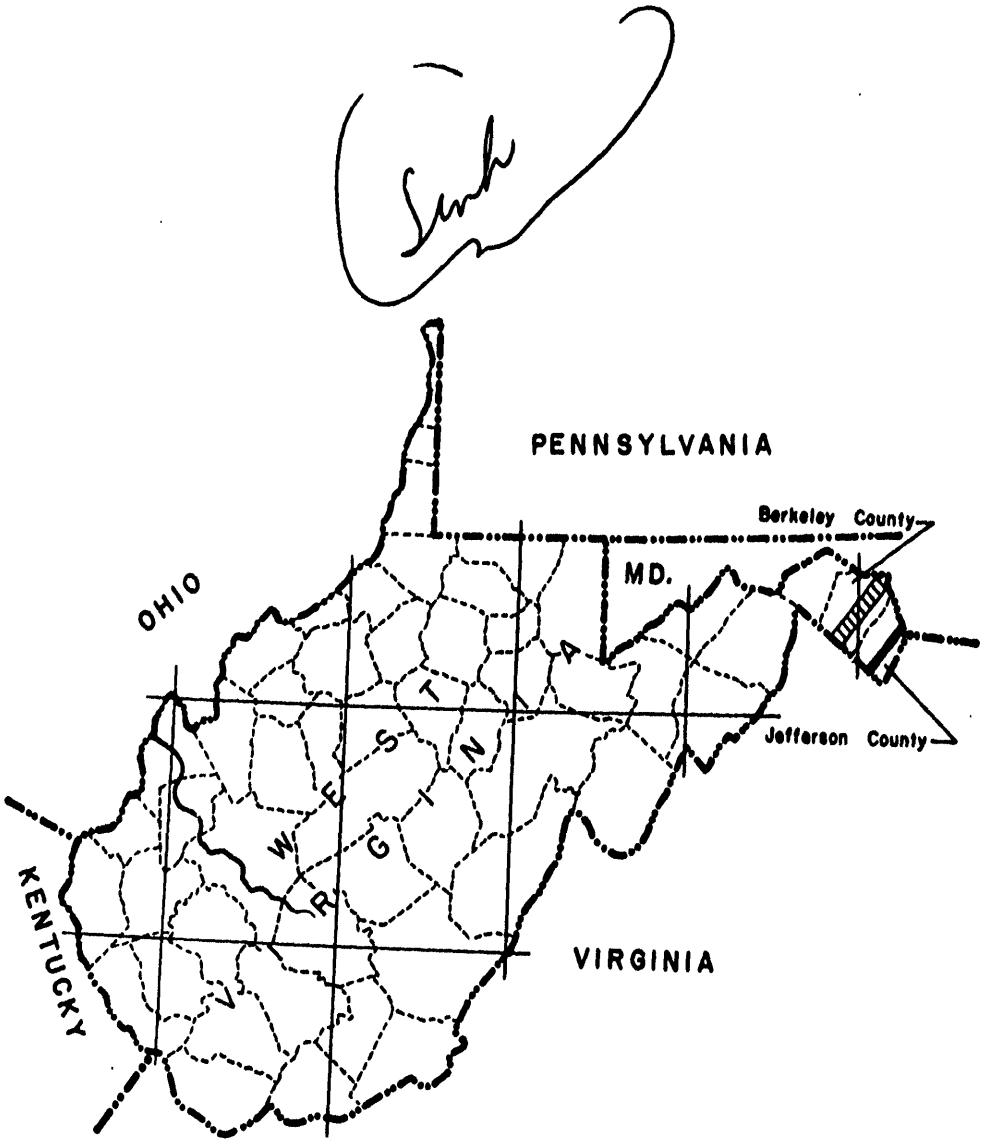

Figure 4

KEY

Mosheim high calcium limestone belt

Tomstown dolomite belt

Scale: 1" = 40 mi

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Alabama

Alabama ranks fifth in annual output of fluxstone and eighth in lime. Most of the crushed limestone produced is used for flux in the Birmingham iron furnaces. The Alabama fluxstone and lime rocks occur in both Cambro-Ordovician and Mississippian formations (Figure 5).

Cambro-Ordovician formations. The largest quarries are in the Upper Cambrian Katona (Knox) dolomite in the vicinity of Birmingham. Some ledges run less than 1% silica in carload lots and so qualify for B-1 rating. Some lump dolomite is also mined in this district for refractory purposes. Dolomite and limestone of Lower Ordovician (Beekmantown) age are also quarried, especially in Shelby County, for both chemical and metallurgical uses.

Mississippian formations. Mississippian limestone has been rather extensively mined and quarried in Shelby, Jefferson, Blount, and Etowah counties, for flux in the Birmingham iron district. These limestones are A-2 in grade as a general rule. As yet untapped deposits occur along the Tennessee River in northern Alabama.

References: Hugh D. Palliser, "Alabama", in Industrial Minerals and Rocks, Chapter 8, "The Carbonate Rocks", American Institute of Mining, Metallurgical, and Petroleum Engineers, 1960, pp. 151-159; Benjamin Gildersleeve and James L. Calver, "Guntersville Reservoir Quarry Site Limestone Investigations", Tennessee Valley Authority, April 1943, 95 pp.

Virginia

Virginia is sixth in fluxstone and seventh in lime production. It also has a considerable chemical stone industry. The metallurgical stone resources of Virginia are confined to the upper Cambrian and Ordovician belt of rocks which crosses the western part of the state from northeast to southwest (Fig. 6). Topographically this region is known as the Appalachian Valley and in it are found over thirty lime plants and fluxstone and chemical stone quarries. Both high calcium limestone and dolomite are present in this belt of carbonate rock. Some stone of A-1 and B-1 quality is present, larger quantities of A-2 and B-2 are available, but the greater part of the limestone in Virginia (as elsewhere) is not of metallurgical grade.

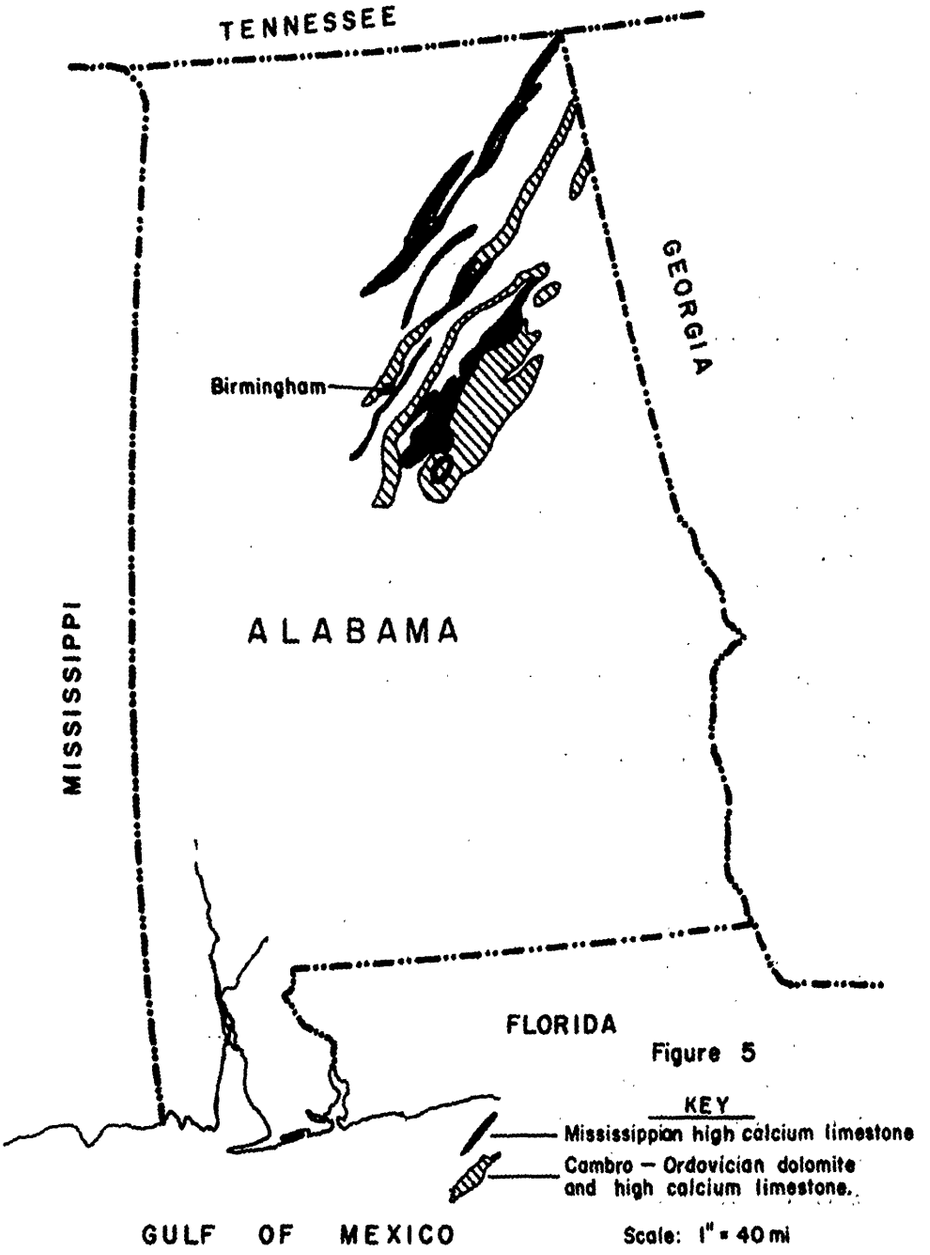
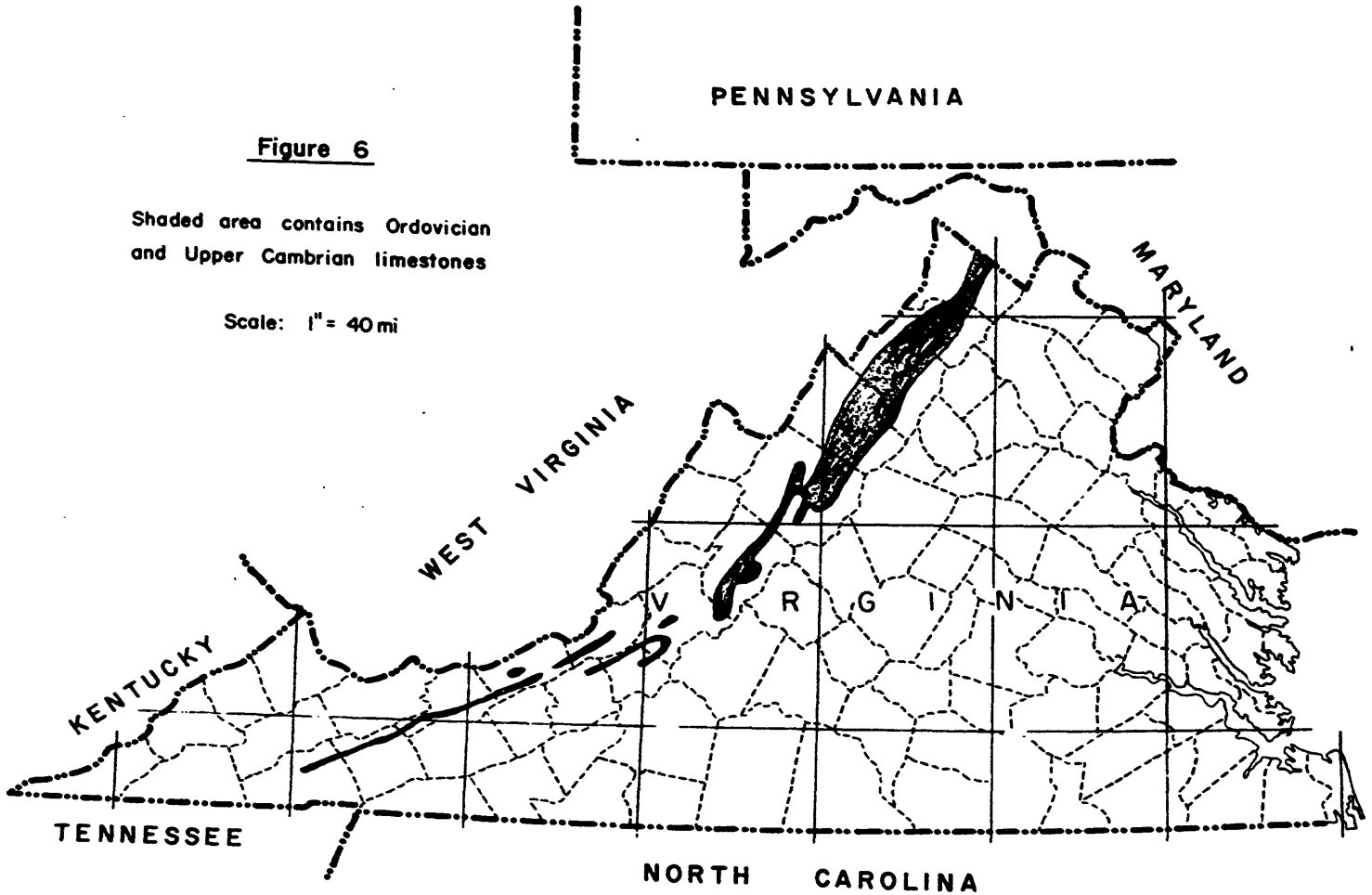

TENNESSEE
GEORGIA
Birmingham
ALABAMA
MISSISSIPPI
FLORIDA
KEY
Mississippian high calcium limestone
Cambro – Ordovician dolomite and high calcium limestone.
GULF OF MEXICO
Scale: 1" = 40 mi

Figure 5

Figure 6

Shaded area contains Ordovician and Upper Cambrian limestones

Scale: 1" = 40 mi



Because of the pockety nature of the infolded early Paleozoic limestones of Virginia the quarriable reserves of the individual deposits are quite limited. Furthermore, the Virginia stone lessens in place value to the southwest of the West Virginia panhandle because of increasing distance to steel centers in the northeastern United States, and to tide water.

References: William Randall Brown, "Geology and Mineral Resources of the Lynchburg Quadrangle, Virginia", Virginia Division of Mineral Resources, Bulletin 74, 1958, 99 pp.; Raymond S. Edmundson, "Industrial Limestones and Dolomites in Virginia, James River District West of the Blue Ridge", Virginia Division of Mineral Resources, Bulletin 73, 1958, 137 pp.; Byron N. Cooper, "Industrial Limestones and Dolomites in Virginia, Clinch Valley District", Virginia Geological Survey Bulletin 66, 1945, 259 pp.; R. S. Edmundson, "Industrial Limestones and Dolomites in Virginia, Northern and Central Parts of the Shenandoah Valley", Virginia Geological Survey, Bulletin 65, 1945, 194 pp.; Byron N. Cooper, "Industrial Limestones and Dolomites in Virginia, New River-Roanoke River District", Virginia Geological Survey, Bulletin 62, 1944, 98 pp.

Illinois

Illinois is the first state in the annual production of crushed limestone. Most of this stone is used in concrete aggregate and for road metal, in which Illinois is the leading producer. It ranks seventh in the production of fluxstone, and is also a large producer of lime. Although several formations are worked in Illinois for metallurgical stone the leading areas are in Silurian (Niagaran), Mississippian, and Ordovician rocks (Figure 7).

Niagaran dolomite. Illinois has considerable production of dolomite of B-1 grade quarried from the Niagaran dolomite outcrop zone of northeastern Illinois (including Cook County). Some quarry sections here are unusually thick and fairly pure, but this situation is not true throughout the outcrop belt. Dolomite is extensively quarried in Chicago and vicinity for use in lime burning and for fluxstone, as well as for other volumetrically much more important uses. Although there is a considerable quantity of Niagaran dolomite of good quality not yet quarried in the Chicago district, most of it is not available because of high land costs, zoning laws, and highway construction. Many of the quarries are completely surrounded by built-up areas. The quality of the Niagaran stone becomes poorer to the south, and at Kankakee in Kankakee County the dolomite runs from three to ten percent silica.

Mississippian limestones. A belt of middle Mississippian limestones crops out in the bluffs of the Mississippi River both upstream and downstream from the Alton-East St. Louis industrial area. Included are the Salem, St. Louis, and Sainte Genevieve limestones. They are mined and quarried for many purposes, including lime burning, fluxstone, and chemical manufacture. The stone is high calcium limestone and is mostly of A-2 quality, but some of the ledges qualify for A-1 classification. Occurring as it does in the St. Louis metropolitan area, this stone is high in place value.

The same series of limestones also crosses the southern tip of Illinois from the Mississippi River to the Ohio River.

The next oldest Mississippian limestone, the Burlington, is not shown on the map because it rarely qualifies for metallurgical or chemical uses. It is, however, an important source of lime in the Quincy area where it is both mined and quarried. In some quarries the upper part of the Burlington may run as much as 50% chert.

Kimmswick limestone. This much older limestone of Ordovician age occurs in patches along the Mississippi River between Quincy and Alton, below East St. Louis, and north of Cairo (Figure 7). It has been mined in a deposit below East St. Louis as a source of lime. A part at least of this stone is of A-1 quality.

References: J. E. Lamar, "Illinois", in Chapter 8 "The Carbonate Rocks", American Institute of Mining, Metallurgical, and Petroleum Engineers, Industrial Minerals and Rocks, 1960, pp. 168-170; James W. Baxter, "Salem Limestone in Southwestern Illinois", Illinois State Geological Survey, Circular 284, 1960, 32 pp.; J. E. Lamar, "Limestone Resources of Extreme Southern Illinois", Illinois State Geological Survey, Report of Investigations 211, 1959, 81 pp.; H. B. Willman, "High Purity Dolomite in Illinois", Illinois State Geological Survey, Report Investigations 90, 1943, 89 pp.; J. E. Lamar and H. B. Willman, "High Calcium Limestone Near Morris, Illinois", Illinois State Geological Survey, Report of Investigations 23, 1931, 26 pp.; J. E. Lamar, "Limestone Resources of the Pontiac-Fairbury Region", Illinois State Geological Survey, Report of Investigations 17, 1929, 27 pp.; Frank Krey and J. E. Lamar, "Limestone Resources of Illinois", Illinois Geological Survey, Bulletin 46, 1925, 392 pp.

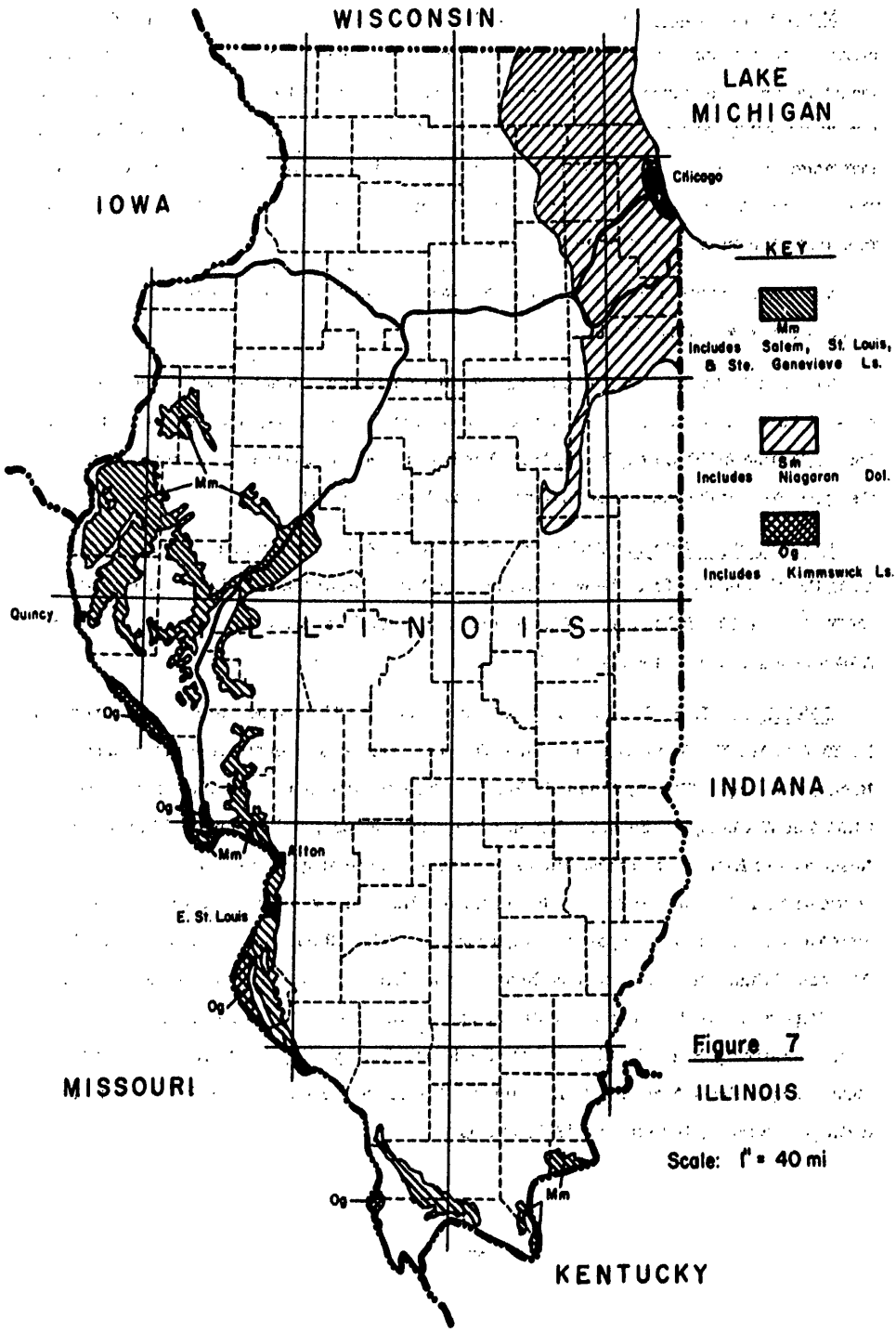

WISCONSIN
LAKE MICHIGAN
IOWA
Chicago
KEY
Mm
Includes Salem, St. Louis, & Ste. Genevieve Ls.
Sm
Includes Niagaran Dol.
Og
Includes Kimmswick Ls.
Mm
Quincy
ILLINOIS
Og
Og
INDIANA
Mm
Alton
E. St. Louis
Og
MISSOURI
ILLINOIS
Scale: 1" = 40 mi
Og
Mm
KENTUCKY

Figure 7

Other States

There are, or course, other states containing high calcium limestone and dolomite of metallurgical grade, and there is some production from those states of limestone for fluxing and chemical purposes. These states produce relatively small quantities of such stone for one of three reasons (1) the deposits are small and the reserves inadequate for large scale production; (2) the stone does not meet usual flux and chemical stone specifications, but is exploited locally because of abnormally high place value of the deposit; or (3) the deposits are remote from metallurgical or chemical markets so is low in place value and has a very limited market for furnace or chemical use.

Massachusetts. Massachusetts dropped from fourth place in lime production in 1932 to sixteenth place in 1961, probably due to the working out of the higher grade stone deposits. All of the commercial limestone deposits in this state are in Berkshire County in western Massachusetts. The calcareous formations are Cambrian and Ordovician in age. Some A-1 limestones are present and some of the dolomites and dolomitic limestones are of B-1 grade. The higher quality stone is burned for lime, and a few thousand tons are marketed each year for flux.

Reference: T. Nelson Dale, "The Lime Belt of Massachusetts", U. S. Geological Survey, Bulletin 744, 1923, 71 pp.

New York. Although New York ranks eighth among the states in crushed limestone production, its annual output of fluxstone and lime rock is relatively insignificant. Most of New York's limestone is below A-2 or B-2 in grade and is used in concrete aggregate, road metal, and railroad ballast. The metallurgical stone resources are largely confined to Precambrian dolomite and Silurian limestone.

Some of the Grenville dolomite (Precambrian) which occurs in St. Lawrence and Jefferson Counties in northern New York is B-1 in grade. It has been quarried near Natural Bridge, Jefferson County, and dead-burned for use as a refractory. Likewise some of the Precambrian dolomites in Westchester and Dutchess Counties north of New York City are B-1 in grade and have been exploited for lime manufacture. These occurrences are, however, local in character and because of the variable silica content of the Precambrian carbonate formations it is very unlikely that large deposits of B-1 grade stone are to be found in the New York-New England province.

From the available analyses there appears to be little or no A-1 Silurian stone in New York in quarriable volumes. The Clinton limestone becomes fairly pure in the western part of the state and is there of A-2 grade. It has been extensively quarried in the vicinities of LeRoy and Stafford, Genesee County, and Lockport and Gasport, Niagara County, for use as flux in the blast furnaces of the Buffalo district. Waterborne A-1 grade stone from Michigan and rail-borne high calcium limestone from Ontario have replaced local fluxstone in this district in recent years.

Devonian limestone has been exploited for many years near Syracuse for the manufacture of soda ash and other chemicals.

References: F. M. Swain, "Limestone and Dolomite Along the Pennsylvania Railroad System in New York", Pennsylvania State College, School of Mineral Industries Experiment Station, Dec. 1944 , 13 pp.; David H. Newland, "The Mineral Resources of the State of New York, Bulletin N. Y. State Museum, Nos. 223, 224, pp. 255-268, 1921.

Maryland. Maryland is unimportant as a source of metallurgical stone, but does produce a little lime. The same Ordovician formations which contain the better quarry ledges in southeastern Pennsylvania to the north and in the "pan-handle" of West Virginia and in northwestern Virginia to the south cross western Maryland at almost its narrowest part, passing through Frederick and Washington counties. A-2 stone is quarried and burned for lime at several communities in the former county, and at Cavetown in Washington County. These infolded limestone bodies are lenticular and decidedly limited in volume.

Reference: R. B. Neuman, "St. Paul Group, A Revision of the 'Stones River Group' of Maryland and Adjacent States", Geological Society of America, Volume 62, March 1951, pp. 267-324.

Indiana. Indiana, although the leading producer of limestone building stone, ranks tenth in crushed limestone and only an insignificant percentage of this material is used for metallurgical purposes. The reason for this is the virtual absence of metallurgical grade stone in quarriable deposits except the Salem limestone which is more valuable for building purposes. Niagaran rock, the outcrop of which extends into Indiana from the northwest, is not suitable for furnace use. The only limestones which are quarried in volume are the Sainte Genevieve, Salem, and other Mississippian formations. These are exploited in Washington and Harrison Counties in southern Indiana for roadstone.

To the northwest, in Lawrence and Monroe Counties, the Salem high calcium limestone is quarried in considerable volume for dimension stone; some lime is burned and a little furnace flux is sold as by-products of the building stone industry.

References: Duncan J. McGregor, "Indiana" in Chapter 8 "The Carbonate Rocks", American Institute of Mining, Metallurgical, and Petroleum Engineers, Industrial Minerals and Rocks, 1960, pp. 162-164; John B. Patton, "Crushed Stone in Indiana", Division of Geology, Indiana Department of Conservation, Report of Progress No. 3, April 1949, 47 pp.

Tennessee. Tennessee produces considerable crushed limestone, but most is below A-2 or B-2 in grade. Some stone is sufficiently pure, however, for lime burning. The lime rocks occur in both Cambro-Ordovician and Mississippian formations. Within the broad belt of Cambro-Ordovician formations crossing southeastern Tennessee are several limestones and dolomites which are locally of A-1 or B-1 grade. Some of the purest limestones in Tennessee are the upper Mississippian Gasper oolite and Sainte Genevieve limestone which occur in deposits up to 150 feet in thickness in the Highland Rim area.

References: R. G. Sterns, "Tennessee", in Chapter 8 "The Carbonate Rocks", American Institute of Mining, Metallurgical, and Petroleum Engineers, Industrial Minerals and Rocks, 1960, pp. 173-174; George I. Whitlach, "Limestone and Lime", Tennessee Geological Survey, Markets Circular No. 10, April 1941, 38 pp.

Wisconsin. Only minor amounts of limestone quarried in Wisconsin are used for lime and flux. By far the greater part of the production goes into concrete aggregate, road metal, and agricultural stone.

The only metallurgical stone quarried is the Niagaran dolomite which crops out in a broad band parallel to the Lake Michigan shore line from the Door Peninsula to northeastern Illinois. The largest lime production is in Manitowoc County. Lime is or has been burned in Sheboygan, Fond du Lac, Dodge, and Ozawkie counties. The Niagaran dolomite used for lime burning ranges in grade from B-1 to B-2. Scattered analyses show a silica content varying from .02% to 8.2%, with over half above 1%.

Reference: Edward Steidtmann, "Limestones and Marls of Wisconsin", Wisconsin Geological Survey, Bull. 66, 1924, 208 pp.

Iowa. Devonian limestones in eastern Iowa are quarried mainly for commercial stone, but a small percentage is sold as fluxing stone. The only lime plant in the state produces chemical and industrial lime from a Devonian limestone in Scott County.

Reference: H. Garland Hershey, "Iowa", in Chapter 8 "The Carbonate Rocks", American Institute of Mining, Metallurgical, and Petroleum Engineers, Industrial Minerals and Rocks, 1960, pp. 176-178.

Missouri. Missouri ranks third in the annual production of lime. The yearly output of fluxstone is negligible, but much of the lime is used for metallurgical purposes. Some of the lime is obtained from the Ordovician Kimmswick formation, but most is burned from limestones of Mississippian age.

The Trenton Kimmswick formation contains deposits of metallurgical grade limestone in eastern Missouri south of St. Louis. It is actively exploited for lime rock in Jefferson and Sainte Genevieve Counties.

Mississippian formations outcrop in a broad band fringing the Ozark uplands area and extending northward into northeastern Missouri and western Illinois. The Mississippian rocks are predominantly limestones, and some of the limestones contain deposits of metallurgical grade stone. Three centers of lime production have been established in the belt of Mississippian outcrop. The largest of these is in the vicinity of Sainte Genevieve in Sainte Genevieve County. Here the lime rock is the Spergen formation. To the west, in southwestern Missouri, is a second lime producing district. The largest plants are in Greene County in and near Springfield. The third district is in the vicinity of Hannibal in northeastern Missouri, where the Mississippian Burlington limestone is quarried and burned.

References: W. C. Hayes, W. V. Searight, and J. W. Koenig, "Missouri", in Chapter 8 "The Carbonate Rocks", American Institute of Mining, Metallurgical, and Petroleum Engineers, Industrial Minerals and Rocks, 1960, pp. 170-173; E. R. Buckley and H. A. Buehler, "The Quarrying Industry of Missouri", Missouri Bureau of Geology and Mines, 2nd series, Volume 2, 1904, 371 pp.

Texas. Texas has risen from a relatively small lime industry in 1946 to sixth place; in fluxing stone it has risen to ninth place. The state contains many limestones, but metallurgical grade stone is scarce.

The smelters of the El Paso district furnish a market for metallurgical lime and fluxstone obtained from Ordovician and Lower Cretaceous limestones which crop out in the immediate vicinity.

The principal lime rock in Texas is the Austin chalk formation (Cretaceous) which averages only 70 to 90 per cent calcium carbonate, but locally may have adequate purity for exploitation. This formation is quarried and burned for lime in several places in east central Texas, especially in Comal, Travis, and Williamson Counties. Chemical lime is produced south of San Antonio and shipped to the growing industrial area about Corpus Christi. Bedrock limestone has to compete with dredged oyster shell for the high quality stone market along the Gulf coast.

Colorado. About 20 per cent of Colorado's annual crushed limestone production is used as a flux in the Pueblo iron furnaces and in the smelters of Colorado's mineral belt. Most of the limestones in this state are too impure for metallurgical purposes, but two formations, occurring in the Mississippian and the upper Cretaceous, are locally adequate for fluxstone and lime burning.

The Leadville and other massive limestones of the Mississippian system are exploited in Colorado for metallurgical stone. Biggest production is at Monarch west of Salida in Chaffee County where fluxstone is quarried for use at Pueblo and Leadville. Another Mississippian limestone deposit at Rockwood north of Durango in La Plata County, southwestern Colorado, has been developed for both lime rock and flux.

The Timpas member of the Cretaceous Niobrara formation is exploited in east central Colorado, especially in Pueblo, El Paso and Fremont counties, for cement, lime, and flux.

Reference: John W. Vanderwilt, "Mineral Resources of Colorado", Colorado Mineral Resources Board, 1947, pp. 244-246.

Utah. Utah is the eighth state in fluxstone production, immediately following Illinois. About one-third of the crushed limestone produced in this state is used as a fluxing stone, not only in the copper smelters and steel plants within the state, but also in similar plants in California and in the El Paso, Texas, area. Limestones are scarce in the southwest so metallurgical grade stone here has high place value and can also travel unusual distances to market.

Leading counties for metallurgical and lime burning stone are Tooele and Utah. In addition to fluxing stone, dolomite is also quarried for refractory uses.

California. California is the leading state in the production of portland cement. It is ninth in lime production. This state also produces refractory dolomite, chemical stone, and fluxing stone, but the quantities are small because there is very little metallurgical grade stone in California. For this reason, steel companies have gone as far away as Utah, British Columbia, and Alaska in seeking stone of the quality needed.

The California limestones, used mainly in the manufacture of portland cement and in lime burning, are mostly of Paleozoic age. They occur as inliers in the highly folded Mesozoic and Cenozoic sedimentary and volcanic rocks. The deposits are discontinuous and individual deposits have a relatively short life.

Limestone has been reported from 52 of the 58 counties of California. During 1961 nineteen lime plants were in operation in thirteen counties; four-fifths of the total production came from plants in northern California. Much of the lime produced is used in open hearth steel furnaces and by the chemical industry.

Although most of the limestone produced is high calcium stone, dolomite also is produced and is used as a refractory and for chemical purposes.

References: Earl W. Hart, "Geology of Limestone and Dolomite Deposits in the Southern Half of Standard Quadrangle, Tuolumne County, California", The California Division of Mines, Special Report 58, 1959, 25 pp.; Oliver E. Bowen, Jr. and Cliffton H. Gray, Jr., "Geology and Economic Possibilities of the Limestone and Dolomite Deposits of the Northern Gabilan Range, California", California Division of Mines, Special Report 56, 1959, 40 pp.; O. E. Bowen, Jr., "Mineral Commodities of California", California Division of Mines, Bulletin 176, 1957, pp. 113-120, 293-306; William B. Clark, "The Cool-Cave Valley Limestone Deposits, El Dorado and Placer Counties, California", California Journal of Mines and Geology, Volume 50, Nos. 3 and 4, July-October 1954, pp. 439-466; Oliver E. Bowen, Jr., "Geology and Mineral Deposits of Barstow Quadrangle, San Bernardino County, California", California Division of Mines, Bulletin 165, April 1954, pp. 160-170.

RESERVE PICTURE

It was determined during the preparation of the first edition of this study 15 years ago, by inquiries sent to members of the National Lime Association, that the average life expectancy of the metallurgical grade limestone deposits then being worked was less than 30 years, and that an average of $10,000 was being spent by each responding company each year in the search for new deposits. Since then many deposit life expectancies have been shortened by increases in quality specifications, or by condemnation of valuable stone land for highway (including interchanges) rights-of-way, or for other reasons.

Likewise the search for adequate undiscovered limestone deposits has become more and more difficult, and more and more expensive.

It can be assumed that most of the limestone of metallurgical grade that will be needed fifty years hence has not yet been discovered, and the finding of it will not be cheap.

SUMMARY OF PRINCIPAL POINTS

STATEMENT OF NATIONAL LIMESTONE INSTITUTE, INC. *

On Section 501(a) of H.R. 13270

Filed with the Senate Finance Committee

on September 26, 1969

(1) The National Limestone Institute, Inc. is an industry association composed of some 549 limestone producers located in 34 states. Its members produce aggregates for highways and other construction, agricultural limestone, and other limestone products.

(2) The National Limestone Institute opposes the proposed reductions under the House bill in the existing percentage depletion rates for limestone from 15 and 5 percent to 11 and 4 percent.

(3) Percentage depletion recognizes that mineral resources are wasting assets and is an important part of the National minerals policy to assure an adequate supply of natural resources at a reasonable cost to the consuming public. The proposed rate reductions indicate a significant change in this policy and should be carefully considered. They were not based upon any study of either the limestone industry or the mining industries generally, and it is unlikely that the Ways and Means Committee even considered them in terms of any mining industries other than oil and gas.

(4) The economic impact of the proposed rate reductions would be severe in the case of individual producers in the limestone industry. It is an industry of small businesses and modest profit margins. The average price of limestone has actually decreased from $1.40 per ton to $1.38 per ton since 1950, when limestone was granted percentage depletion, although the producers' costs have increased substantially during the same period.

(5) Investors in the limestone industry need the incentive of percentage depletion to develop limestone deposits and produce marketable limestone products efficiently in order to meet the demand for limestone which has almost tripled since 1950 and which is expected to continue to grow parallel to the trends in population and gross national product.

* Submitted by Paul W. Seitz, First Vice-Chairman of the Board of Directors.

STATEMENT OF NATIONAL LIMESTONE INSTITUTE, INC.

On Section 501(a) of H. R. 13270

Filed with the Senate Finance Committee

on September 26, 1969

I am Paul W. Seitz, First Vice-Chairman of NLI's Board of Directors, and am submitting this statement on behalf of all members of the National Limestone Institute. I am also President of May Stone and Sand, Inc., of Fort Wayne, Indiana. National Limestone Institute's members appreciate this opportunity of presenting to the Committee its views on Section 501(a) of H. R. 13270.

The National Limestone Institute, Inc. is an industry association composed of some 549 limestone producers located in 34 states. Its members produce aggregates for highways and other construction, agricultural limestone, and other limestone products.

Limestone is presently entitled to a 15 percent depletion rate unless it is used, or sold for use, as riprap, ballast, road material, rubble, concrete aggregates or for similar purposes. The rate for limestone used for these purposes is 5 percent.*/ Under the House bill, the allowable rates would be cut from 15 and 5 percent to 11 and 4 percent.

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*/ Under the 1939 Code only metallurgical grade and chemical grade limestone were entitled to 15 percent. During those years substantial controversy developed over the classification of a limestone deposit, and several litigated cases failed to develop a satisfactory distinction between metallurgical and chemical grade and other limestone. The matter was resolved in the 1954 Code by elimination of the metallurgical and chemical grade classification and introduction of the end-use test under which limestone used for aggregates, etc. is entitled to only 5 percent. The present statutory rule is a rational classification, and National Limestone Institute believes that a classification based on metallurgical and chemical grade is not sound.

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The National Limestone Institute opposes the proposed reductions in the existing percentage depletion rates.

Percentage depletion was made available to limestone in 1951 as part of the National minerals policy to provide an adequate supply of all minerals to satisfy the demands of an expanding economy and the requirements of security and to assure an orderly development of the Nation's natural mineral resources. Percentage depletion is a fundamental part of this National policy. It recognizes that mineral resources are wasting assets and that new reserves must be found and developed.

During the years percentage depletion has been available, the limestone industry has participated in the Nation's economic growth. According to statistics published by the Bureau of Mines, production has almost tripled. */ All segments of the limestone industry have contributed to this growth. As is the case with the mining industry generally, the impact of limestone's growth has been felt directly in construction, agriculture and the many other industries using limestone products, and indirectly throughout the economy. **/

Any change in National policy that would adversely affect the growth of the mining industries should be carefully considered. The symbolism of tax reform and revenue gains should not be allowed to change this country's successful minerals policy. The proposed percentage depletion rate reductions would

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	1950	1967 (including small quantities of dolomite)	
Short tons	180,918,910	Short tons	568,902,000
Value	$252,755,827	Value	$783,135,000

**/ Hearings on Mineral Shortages Before the Subcommittee on Minerals, Materials, and Fuels of the Senate Committee on Interior and Insular Affairs, 90th Cong., 2d Sess., 32 (1968).

change this policy, however, even though the decisions of the Ways and Means Committee were not based upon any study of either the limestone industry or the mining industries generally. It is unlikely that the Committee even considered the proposed rate reductions in terms of any mining industries other than oil and gas. The mining industries should not be the unfair victims of tax reform.

The economic posture of the limestone industry should be understood in order to evaluate the impact of the proposed percentage depletion rate reductions. Although the volume of limestone production has grown impressively, the industry continues to be primarily small businesses. As the Bureau of Mines' statistics cited above indicate, the average selling price of limestone since 1950, a period of National growth—and generally rising prices—has actually decreased from $1.40 per ton in 1950 to $1.38 per ton in 1967. On the other hand, the industry has not escaped cost increases prevailing in the Nation's economy. Air and water pollution control, noise control, and compliance with land zoning requirements have been additional factors in increasing costs. The consequence has been that the industry has spent large sums to develop limestone deposits and produce marketable limestone products efficiently in order to be competitive with other minerals, especially those also suitable for use as aggregates. */ Nevertheless, profit margins have been narrow.

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*/ Modernization is discussed, for example, at pages 1067-68 of Minerals Yearbook, 1967, of the Department of Interior.

Although the aggregate percentage depletion deduction for limestone is not available, it is very doubtful that the proposed rate reduction will yield a meaningful increase in revenues. The impact on individual producers, however, will be significant. As is the case in the mining industries generally, percentage depletion has become an integral part of the economics of the limestone industry, and maintenance of the existing percentage depletion rates is necessary to avoid serious dislocations. These rates are not generous— 15 percent is the rate for minerals generally and 5 percent is the minimum rate. Cutbacks from these levels in an industry of small businesses and modest profits will have adverse consequences, including possible price increases and reduced expenditures to find and obtain new deposits and to modernize operating methods.

It is inevitable that the economic dislocation of the House proposal will affect the capital values —the risk element— of limestone producers with adverse effects on supply. The impact on the Nation would be significant. The Bureau of Mines has projected massive increases in the demand for limestone during the remainder of this century. Its growth will closely parallel trends in population and gross national product. Although reserves of limestone are substantial, they are being depleted at a high rate. The Bureau of Mines has reported */

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*/ These facts and many other important considerations are discussed in Hearings on Mineral Shortages before the Subcommittee on Minerals, Materials, and Fuels of the Senate Committee on Interior and Insular Affairs, 90th Cong., 2d Sess., 77 (1968), and at pages 884-893 of Mineral Facts and Problems, 1965 Edition, a publication of the Department of Interior.

that "exacting specifications determine the marketability of stone in important instances and sources adequate for such needs at reasonable costs are not unlimited," and further that "because of the variety of industrial uses the local availability of stone that will meet specifications of local markets influences the industrial and economic development potential of an area."

SUMMARY OF PRINCIPAL POINTS IN SUPPORT OF CONTINUED 15% DEPLETION FOR GYPSUM MINES AND QUARRIES.

The gypsum industry is generally opposed to any reduction in percentage depletion.

The principal market for the gypsum mining industry is products used in residential construction which has been artificially depressed by the Federal Reserve policy of high interest rates. The need for residential construction, particularly in urban centers is a pressing national problem. The gypsum industry has in the past and hopes in the future to aid in solving this problems but this takes funds which are restricted because of depressed housing.

The gypsum mining industry thus requests continued percentage depletion at the same rate under the precedent established by continued accelerated depreciation for residential construction.

STATEMENT OF GYPSUM ASSOCIATION IN SUPPORT OF CONTINUED 15% DEPLETION FOR GYPSUM MINES AND QUARRIES.*

Preliminary Statement

The Gypsum Association on behalf of its members oppose any reduction in percentage depletion rates. In the alternative, the Association requests relief for gypsum from the general 30% reduction in percentage depletion rates which had been proposed. Others have capably presented the argument against reducing depletion allowance for any industry. To avoid repetition we simply state our concurrence and deal here with the alternative should the Congress not see fit to maintain depletion allowances at their present level.

The gypsum mining industry, more than any other, is a part of the construction industry. It is substantially devoted to housing. How to increase construction of single and multi-family housing units is currently one of the country's most pressing problems. The need is obvious but the obstacles are almost insurmountable. Rising costs, labor problems, high interest rates and lack of funds, particularly in urban areas which have been greatly restricted by the tight money policies used to combat inflation, are paramount.

The gypsum industry is particularly hard hit because of its major dependence on construction. It respectfully requests that it not be further penalized, that it be exempt from any reduction which is voted, and allowed to retain its 15% depletion rate. Adequate precedent exists in the policy which already suggests exemption of iron and copper and which proposes to allow for residential construction and the continued use of accelerated depreciation.

* Submitted by Rhyne Simpson, Jr., First Vice President.

Discussion

The Gypsum Association consists of 10 companies which operate over 75 gypsum mines and nearly 80 plants. These companies are:

The Celotex Corporation
The Flintkote Company
Georgia-Pacific Corporation
Gypsum Division
GAF Corporation
Grand Rapids Gypsum Company
Kaiser Gypsum Company, Inc.
National Gypsum Company
Republic Gypsum Company
Texas Gypsum Company
United States Gypsum Company

The gypsum industry mined approximately 10,000,000 tons of gypsum domestically in 1968 based on preliminary Bureau of Mines figures.

The mineral gypsum in the ground is a rock, usually gray in color, which chemically is the dihydrate of calcium sulphate ($CaSO_4.2H_2O$). It is closely related to anhydrite which is calcium sulphate without the water of crystallization ($CaSO_4$). Gypsum has many uses, but its principal use is in the production and manufacture of low cost items, including retarder rock, plaster, lath and wallboard used by the construction industry, mainly in residential housing.

"Retarder" rock is sized crude gypsum used by Portland cement manufacturers as an additive to control the setting time of cement. This use accounted for approximately 3,154,000 tons of gypsum consumed in 1967 (the last year for which figures are available) having a total value of $14,704,000. The principal use of gypsum, however, is to manufacture products primarily used in residential housing (plaster, lath and wallboard). These are products made from calcined gypsum.

When raw gypsum rock is "calcined" or heated to approximately 320° F. literally three quarters of the water of crystallization ($2H_2O$) is boiled off. The resulting dry powdery product is known as stucco or plaster of paris, and is the basic ingredient for wall plaster, lath and wallboard.

Plaster is created by re-adding water to the stucco at the job site and spreading the resulting plastic mass on the desired surfaces where on drying it returns to its original rock state.

Gypsum lath and wallboard consist of materials such as paper or wood sandwiched around a core of reconstituted gypsum. In other words, stucco with the water added back. They are produced at the various gypsum plants located throughout the country.

These calcined products accounted for approximately 9,000,000 tons of gypsum during 1967 with a total value of approximately $342,000,000, over 90% of which was used in building and residential housing.

The calcined products are in great demand in housing as they provide relatively inexpensive walls with great fireproofing qualities. The price of standard 1/2" gypsum wallboard is approximately [redacted] it was in 1959. This undoubtedly is a unique record with today's inflation. Gypsum's fireproofing qualities result from the fact that a temperature of 250° F. releases gypsum's water of crystallization which absorbs heat and in effect puts out fire with water at its source.

The gypsum industry is an integrated mining-manufacturing industry. With minor exceptions, domestic gypsum is mined by the same company which manufactures it into plaster, lath and wallboard. This is due to the fact that it has been proven more economical to locate the plants for producing the calcined products at the mining locations. During the year 1967, there were gypsum mines or plants located in 33 states employing over 21,000 people, as follows:

Crude gypsum mined in the United States, by States

(Thousand short tons and thousand dollars)

State	Active Mines	1967 Quantity	Value
Arizona	W	W	W
California	9	1,241	$3,150
Colorado	4	77	265
Iowa	5	1,219	5,186
Michigan	5	1,422	5,085
Nevada	3	409	1,412
New Mexico	5	155	588
New York	5	570	3,118
Oklahoma	8	804	2,266
South Dakota	1	12	49
Texas	7	984	3,419
Other States	23	2,500	9,845
Total	75	9,393	34,383

Calcined gypsum produced in the United States, by States

(Thousand short tons and thousand dollars)

State	Active Plants	1967 Quantity	Value	Calcining Equipment: Kettles	Calcining Equipment: Other
California	7	584	$7,641	16	9
Georgia	3	464	8,832	15	-
Iowa	5	768	11,477	22	4
Louisiana	W	W	W	W	W
Michigan	4	362	5,929	10	1
New Jersey	4	347	4,056	9	4
New York	7	836	12,265	22	5
Ohio	3	334	4,960	9	1
Texas	7	723	10,519	27	3
Other States	36	3,461	49,788	94	50
Total	76	7,879	115,467	224	77

Because it produces products for the construction industry, and particularly for residential construction, the gypsum industry has been uniquely hard hit by the government's anti-inflationary policies. The Federal Reserve Board, commencing in 1966, embraced an anti-inflationary policy which was primarily directed to allocating resources by increasing borrowing costs. Thus, prime interest rates have increased from 4.5% to 8.5% since 1965, or an increase of approximately 90%. This has had a direct effect on the housing market. In 1965, housing starts were 1,510,000. These shrunk to 1,196,000 in 1966 and revived to 1,543,000 in 1968. However, recent interest rate increases have again depressed housing starts so that it appears starts will drop to an annual rate of 1,000,000 in 1969, or a decline of approximately 33% from 1968. This is in the face of strong indications of an extremely high demand for housing. The long term demand for residential construction is generally measured by four factors: net housing additions, housing vacancies, housing removals and mobile homes. All of these consistently indicate a pent-up demand for 1,800,000 housing starts in 1969.

Further, because of the general lack of money supply, funds which would normally be channeled into home mortgages, such as loans by commercial banks and savings and loan institutions have been absorbed by industry. Even when potential home purchasers are willing to pay the very high interest rates, they are having difficulty obtaining funds from banks because of competition with commercial bank customers at the prime rate. Also, the increase in interest rate has led to problems in granting loans because of some state usury laws. For example, in Illinois up until recently, it was usurious

to loan mortgage money to individuals at a charge of more than 7%, although loans to corporations at any percentage could be made. Under these circumstances, further problems in financing were created for the housing market.

The gypsum industry is undoubtedly unique in its dependence on residential construction. In 1967, approximately 95% of its revenue came from the sale of construction products with 75% being accounted for by products which are primarily used in residential construction. This is much greater than any other mining industry. Other typical mining industries manufacturing construction products had from 9% to 30% of their production accounted for by residential construction products.

While the government's anti-inflationary policy has caused a downtrend in residential construction, government policy, particularly with regard to urban areas, is to stimulate such construction. Currently, the Department of Housing and Urban Development (HUD) headed up by George Romney is actively engaged in a program which has as its objective the development of 3,000,000 residential units per year by 1975, or a growth of approximately 20% per year. In order to implement this program, HUD has started "Operating Breakthrough" and to this end it has declared it will spend $15,000,000 in a research and development program where it will be soliciting bids from various

companies in the construction areas including _____ members of the Gypsum Association. It is recognized that this program will require innovation and a change of existing construction patterns. Such innovation and change of course requires the large expenditures of funds by the various companies with no guarantee of return. So far, there has been no money appropriated by Congress to implement substantial portions of this research and the bulk of the money must be provided by private ventures.

The gypsum industry has demonstrated its initiative and leadership in the development of low cost urban residential housing. Currently, two of the industries' top executives are serving on the Presidents' Committee for urban development. The gypsum industry has or plans to expend over $10,000,000 of its own funds into low cost urban redevelopment. Programs have either taken place or are contemplated in urban centers in New York, Chicago, Detroit, Cleveland and Columbus, Ohio, and involved work not only with the City administrations but local groups and unions. As with any pioneering effort, this has been extremely time consuming and expensive and presently has no guide lines. One of the chief elements in this program has been work with the unions to develop new apprentice programs for the use of gypsum products. For example, arrangements have been currently worked out whereby it is only necessary for a two-year apprentice program to qualify as a journeyman for the hanging of wallboard as contrasted with a general four-year program to becoming a journeyman carpenter. This not only reduces costs but hastens the entry of previously discriminated minority groups into the construction trades.

To the best of our knowledge, the gypsum industry is the only mining industry so completely engaged in a program of urban development. Members of the gypsum industry hope to continue this program not only to stimulate use of their products but as part of their responsibilities as corporate citizens. The industry hopes to participate in "Operation Breakthrough" and other new programs for urban and residential construction.

It is estimated the reduction in percentage depletion rates proposed by the House would cost the gypsum industry approximately $825,000 per year in increased taxes. This coupled with reduction of revenues resulting from the government tight money anti-inflation policy and a cutback in federally financed construction programs is a triple blow on this one industry which will reduce the cash funds available to the gypsum companies. Such reduction, of course, comes at a time when it is most desirable to increase expenditures to help residential housing in general and to attack the revolutionary problems which confront the inner city.

For all of these reasons, if the Congress decides to reduce percentage depletion rates generally, the gypsum industry requests that it be exempted. Such an exemption would be similar to the exemption granted residential construction from the general cutback on accelerated depreciation rates in the House passed Bill. The same policy which dictated no change in depreciation for residential housing should also dictate no change in the depletion granted to the industry whose output is most heavily committed to such construction.

Specifically, the gypsum industry requests the words "gypsum" and "anhydrite" be added after the word "copper" in Section 501(a)(3)(A) of the House Bill so that gypsum and anhydrite from domestic sources, along with gold, silver, copper and iron ore, will be excluded from any general cutback in depletion voted by the Congress.

We thank you for the opportunity to present our views.

GYPSUM ASSOCIATION

By Rhyne Simpson, Jr.
First Vice President

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SUMMARY OF PRINCIPAL POINTS

STATEMENT OF EXPANDED SHALE, CLAY AND SLATE INSTITUTE

On Section 501(a) of H.R. 13270

Filed with the Senate Finance Committee on September 26, 1969

(1) The Expanded Shale, Clay and Slate Institute is an industry association representing approximately 80 percent of the production of sintered lightweight aggregate in the United States. Sintered lightweight aggregate is produced by burning or sintering shales, clays and slates to expand and stabilize them and is sold as concrete aggregate to make lightweight concrete. It is competitive with gravel, sand and crushed stone and replaces an equal volume of these other concrete aggregates.

(2) The percentage depletion rate for shales, clays and slates used as lightweight aggregate was raised from 5 to 7 1/2 percent in 1966 by conference action in lieu of a provision approved by the Senate Finance Committee and the Senate which would have treated as a mining process the burning or sintering of shale, clay and slate used for lightweight aggregate.

(3) The House bill as part of a general reduction in percentage depletion allowances would cut the rate applicable to lightweight aggregate from 7 1/2 percent to 5 percent.

(4) The proposed rate reductions under the House bill, if enacted, will signal a change in the National minerals policy which provided percentage depletion as a stimulus to encourage people to go into the mining business. If such encouragement is no longer considered by Congress to be as important to the public interest, this change in policy will be reflected in diminished growth of the mining industries.

(5) The proposed rate reductions under the House bill were not based upon any study of either the lightweight aggregate industry or the mining industry generally. They should be more carefully considered. For example, the recognition given iron ore in the House bill, under which no deduction is proposed in its 15 percent depletion rate, should also be given to lightweight aggregates because their use in construction effects substantial savings in reinforcing and structural steel.

(6) Lightweight aggregate is a small industry, and the one-third cutback of its percentage depletion deduction amounts to no more than $400,000 and cannot have a significant impact on National revenues. Individual producers, on the other hand, will be substantially affected by a one-third cutback in their already modest percentage depletion allowances.

(7) Lightweight aggregate producers need percentage depletion to undertake the difficult and expensive project of discovery and development of deposits of suitable raw material for lightweight aggregate. The depletion allowance under the House bill of 5 percent based on a pre-kiln cutoff does not offer a satisfactory incentive to make deposits suitable for lightweight aggregate available to the public with the consequent benefits in quality and cost of construction materials.

(8) The Expanded Shale, Clay and Slate Institute opposes the proposed reduction of the percentage depletion rate applicable to lightweight aggregate and urges in the following order of preference:

(a) Enactment at this time of the Senate amendment in 1966 to treat as a mining process sintering or burning of shale, clay and slate used for lightweight aggregate. Other competitive industries such as sand, gravel and crushed stone get percentage depletion on the selling price of their depletable mineral product, and lightweight aggregate producers believe they should receive similar treatment. The maximum tax benefit from a depletion allowance of 5 percent on the selling price of lightweight aggregate is probably no more than $800,000.

(b) Continuation of the 7 1/2 percent rate for lightweight aggregate.

(c) If no other changes are made in the proposed rate reduction, fairness among competitors demands that shale, clay and slate used as lightweight aggregate be allowed a 6 percent rate, a cutback of one-fifth from the present rate. The rates applicable to other concrete aggregates competitive with lightweight aggregate are reduced under the House bill by only 20 percent compared with the one-third reduction in the lightweight aggregate rate.

STATEMENT OF EXPANDED SHALE,
CLAY AND SLATE INSTITUTE

On Section 501(a) of H.R. 13270

Filed with the Senate Finance Committee
on September 26, 1969

I am John W. Roberts, a member of the Percentage Depletion Committee of Expanded Shale, Clay and Slate Institute, and am submitting this statement on behalf of all members of the Institute. I am also President of Solite Corporation, Richmond, Virginia, a member company of the Institute. The Institute's members appreciate this opportunity of presenting to the Committee its views on the provisions of Section 501(a) of H.R. 13270.

The Expanded Shale, Clay and Slate Institute is an industry association representing approximately 80 percent of the production of sintered lightweight aggregate in the United States. Sintered lightweight aggregate is produced from clays, shales, and slates by burning or sintering in a rotary kiln or traveling grate. Before burning or sintering there are no significant uses or markets for the clays, shales and slates from which lightweight aggregate can be and is obtained. Burning or sintering expands and stabilizes the raw material to make it suitable for use as lightweight aggregate. Almost 100 percent of the lightweight aggregate produced in the United States is sold as concrete aggregate

and usually is mixed with portland cement and water by the consumer to make lightweight concrete. Lightweight aggregate is competitive with gravel, sand and crushed stone and replaces an equal volume of these other concrete aggregates.

Clays, shales and slates used or sold for use as sintered or burned lightweight aggregate are presently authorized percentage depletion at 7 1/2 percent; under the House bill, the allowable rate would be cut to 5 percent. The rate applicable to lightweight aggregate was raised from 5 to 7 1/2 percent under the Foreign Investors Tax Act of 1966. At that time the Senate Finance Committee and the Senate approved an amendment to the Foreign Investors Tax Act which would have amended Code Section 613(c)(4) to provide that the sintering or burning of clay, shale and slate used or sold for use as lightweight aggregate would be considered a mining process. The Senate amendment would not have changed the 5 percent rate. The House had not acted on a bill corresponding to the Senate amendment. Under the conference action, the Senate amendment was eliminated and the new rate category of 7 1/2 percent was created to include clay, shale and slate used or sold for use as sintered or burned lightweight aggregate.*/ The lightweight aggregate

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*/ The new rate category also included clay or shale used or sold for use in the manufacture of sewer pipe and brick.

industry had estimated that the maximum tax benefit from the Senate amendment, based upon existing prices and tonnages, probably would be no more than $500,000 annually. The saving under the rate increase has probably been only a minor fraction of the amount that would have been saved under the Senate amendment.

The Expanded Shale, Clay and Slate Institute opposes the proposed reduction in the existing percentage depletion rate for lightweight aggregate. The Institute urges, at the least, (1) continuation of the 7 1/2 percent rate for lightweight aggregate, or preferably, (2) amendment of Code Section 613(c)(4) to treat as a mining process the sintering or burning of clay, shale and slate used or sold for use as lightweight aggregate.

The Institute would also like to draw to the Committee's attention the discrimination between clay, shale and slate used as lightweight aggregate and other competitive concrete aggregates under the House bill. The rate for clay, shale and slate used as lightweight aggregate is reduced from 7 1/2 percent to 5 percent, a one-third cutback. The rate for gravel, sand and crushed stone used as concrete aggregate is reduced from 5 percent to 4 percent, only a one-fifth cutback. If no other changes are made in the proposed rate reductions, fairness among competitors demands that clay,

shale and slate used as lightweight aggregate be allowed a 6 percent rate, a cutback of one-fifth from the present rate comparable to the reduction for competitive concrete aggregates. The higher percentage depletion rate for clay, shale and slate used as lightweight aggregate recognizes that under present law the percentage depletion allowance for them is subject to cutoff before burning or sintering whereas competitive concrete aggregates get percentage depletion on the selling price. While prices for lightweight aggregate are generally somewhat higher than the prices of heavyweight aggregate with which they compete, there cannot be too much difference between the two; otherwise lightweight aggregate would lose out to heavyweight aggregate.

The basic purpose of the percentage depletion allowance has always been to insure an adequate supply of the Nation's natural resources at a reasonable cost to the consuming public. The percentage depletion allowance recognizes that minerals in the ground have no usefulness to the public unless someone has the courage and persistence to spend substantial amounts of risk capital in searching for, finding, acquiring, developing and making them available to consumers.

Any change in National policy that would adversely affect the growth of the mining industries should be carefully considered. The Ways and Means Committee reported that it

believes (1) "that even if percentage depletion rates are viewed as a needed stimulant at the present time they are higher than is needed to achieve the desired beneficial effect on reserves;" and (2) "that there is need to strike a better balance than now exists between the objective of encouraging the discovery of new reserves and the level and revenue cost of percentage depletion allowances." The conclusions of the Ways and Means Committee were not based upon any study of either the lightweight aggregate industry, and especially as the lightweight aggregate industry relates to the iron ore industry, or the mining industries generally. It is unlikely that the Committee even considered the proposed rate reductions in terms of any mining industries other than oil and gas.

The mining of shale, clay and slate for use as lightweight aggregate is a small industry. It consists of approximately 70 plants operating in many parts of the country. In recent years their annual production of aggregates has averaged approximately 7 million tons with an aggregate fair market value of about $45,500,000, although no precise figures are available. The maximum annual percentage depletion deduction based upon the existing 7 1/2 percent rate and the pre-kiln cutoff point is estimated by the industry to be about $1,200,000. The one-third cutback

of this deduction, or $400,000, under the proposed rate reduction cannot have a significant impact on National revenues. Individual producers of lightweight aggregate, however, will be substantially affected by a one-third cut-back in their already modest percentage depletion allowances. The other provisions of the House bill applicable to all businesses serve whatever may be the reasonable demands of tax reform on the lightweight aggregate industry.

The lightweight aggregate industry needs percentage depletion. Only special shales, clays and slates are expansible to as much as several times their original size when they are subjected to high temperatures for use as lightweight aggregate. Discovery and development of a deposit of suitable raw material for lightweight aggregate is a difficult and expensive project. Deposits that are suitable for cement or brick and tile are not ordinarily suitable for lightweight aggregates. To determine the suitability of deposits for production of lightweight aggregates, samples cannot be appraised by chemical analysis alone. The samples must be actually processed in laboratory or pilot plant equipment to determine if bloating characteristics exist and the firing range is acceptable. The raw mineral may bloat too little and be too heavy or it may bloat too much and lack the necessary strength and stability. Bloating may also occur within a narrow temperature range which results in production

problems and makes it difficult to obtain a product of uniform quality. If a material appears to give good results in laboratory and pilot plant tests, then samples of concrete made from the aggregate must be tested for compressive strength, durability under freezing and thawing, modulus of elasticity and many other characteristics to make certain that the aggregates will give good results in actual service.

Even though a deposit of raw material is suitable as to quality, it may not be suitable for development because of other factors. The deposit may lie under an excessive layer of overburden which makes mining too expensive or it may not have access to the necessary water supply, electric power and rail service. The deposit must be located where its production into lightweight aggregates does not violate zoning or other government regulations. If all other factors are favorable, a deposit may still not be economically attractive if it is not within a satisfactory market area.

A depletion allowance of 5 percent based on a pre-kiln cutoff does not offer a satisfactory incentive for the efforts and expenses needed to seek out shale, clay and slate deposits suitable for lightweight aggregates and to make these deposits available to the public with the consequent benefits in the quality and costs of construction materials.

By virtue of their light weight, aggregates made from expanded shales, clays and slates effect substantial savings in reinforcing and structural steel. In the construction of the Chesapeake Bay Bridge, for example, spanning 4.3 miles of open water, lightweight aggregate was used for the concrete deck. The dead weight of the deck was thereby reduced more than 3 million pounds per mile, as contrasted with ordinary concrete, resulting in a great saving in steel.

Prudent National policy indicates that alone these savings in steel are justification for not reducing lightweight aggregate's percentage depletion allowance. The lightweight aggregate industry should be encouraged in order to make these economies generally available in peacetime, and, of course, it is vital that these savings in steel are available during periods of national defense emergency. The recognition given iron ore in the House bill, under which no reduction is proposed in its 15 percent depletion rate, should also be given to lightweight aggregate because of its beneficial effect on meeting the Nation's demands for steel.

Burning or Sintering as a Mining Process

As a preferable alternative to continuation of the 7 1/2 percent depletion rate, Code Section 613(c)(4) should be amended to treat as a mining process the sintering or burning of clay, shale and slate used or sold for use as lightweight aggregate. Justification for this proposal was fully documented in materials made available to Congress in 1965 and 1966, at the time the Senate Finance Committee and the Senate voted for the same provision. The reasons in favor of this proposal can be summarized as follows:

1. Other competitive industries such as sand, gravel and crushed stone get percentage depletion on the selling price of their depletable mineral products. Lightweight aggregate producers believe they should receive similar treatment.

2. Other thermal processes including sintering under some circumstances are allowable as mining under the statute. Sintering of iron ore is basically the same as sintering or burning of lightweight aggregate and is allowable under Revenue Ruling 184.

3. Burning or sintering of lightweight aggregate expands and stabilizes the raw minerals. It does not effect a significant chemical change or produce a finished or manufactured product.

4. Treatment of burning or sintering as a mining process will promote availability of lightweight aggregate with consequent benefit to the public in quality and cost of construction materials. It will also eliminate needless controversies between the industry and the Internal Revenue Service over the theoretical value of the raw mineral at the pre-kiln cutoff point. Lightweight aggregate is a small industry and the maximum tax benefit from a depletion allowance of 5 percent on the selling price is probably no more than $800,000.

SUMMARY OF PRINCIPAL POINTS INCLUDED
IN THE STATEMENT OF THE
CLAY PIPE DEPLETION COMMITTEE
TO THE
COMMITTEE ON FINANCE, UNITED STATES SENATE
ON
CERTAIN FEATURES OF THE TAX REFORM ACT OF 1969

* *

1. The Supreme Court and the Treasury Department have long agreed on the purpose of this wise Congressional tax policy. Thus, the Clay Pipe industry recommends no reduction of its current 7½% depletion allowance.
2. This small industry ($100 million annual sales) plays a vital role in the water pollution control program of the nation. It requires its depletion allowance to assure a continued supply of raw materials and to maintain modernization of its production facilities.
3. Only certain kinds of clay may be used in the successful production of clay sewer pipe. Such clays do not exist everywhere and must be prospected for on a continuing basis. For example, not a single clay pipe plant exists in all of New England. The plants themselves must be located near the deposits, because of the low profit margin in the industry. The history of the industry is replete with plant-closings because of exhaustion or change of quality of the raw materials.
4. Many clay pipe plants are approaching obsolescence. Expansion and modernization are sorely needed, but risk capital is hard to find and would doubtless be less than adequate with a further reduction in the percentage depletion allowance.
5. Limestone and shale (clay), the principal ingredients used in the manufacture of cement, have long enjoyed a 15% depletion allowance while sewer pipe clay has been reduced. Cement pipe is clay pipe's severest competitor. Also, refractory clay purchased for manufacture of sewer pipe, although 15% when mined, becomes 7.5% when used in clay pipe production. We seek an equitable adjustment in our allowance to eliminate these arbitrary competitive disadvantages.
6. Clay used in the manufacture of sewer pipe, supported by IRS Rulings, under earlier law enjoyed a 15% allowance until it was summarily reduced in 1960 to 5%. Its subsequent increase to 71/2% in 1966 was merely a return to 50% of its original allowance. It is clearly unfair to reduce again an already reduced percentage on an across-the-board basis, compared to other minerals which have not heretofore suffered any reductions.
7. Clay used in the manufacture of sewer pipe should be included with that clay which is "used or sold for use for purposes dependent on its refractory properties."

CLAY PIPE INDUSTRY

DEPLETION COMMITTEE

Suite 210

1130 17th Street, N.W. • Washington, D.C. 20036

CLARK SUTHERLAND
Chairman

I. B. ELLIS
Secretary-Treasurer

STATEMENT OF

CLAY PIPE INDUSTRY DEPLETION COMMITTEE

TO THE

COMMITTEE ON FINANCE

UNITED STATES SENATE

ON

CERTAIN FEATURES

OF

THE TAX REFORM ACT OF 1969

Mr. Chairman:

The Clay Pipe Industry Depletion Committee represents nearly ninety percent of the vitrified clay pipe manufacturers in the United States. We take this opportunity to present our views with respect to Section 501(b)(6) of H.R. 13270, the "Tax Reform Act of 1969".

Clark Sutherland
Chairman of the
Depletion Committee

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COMMENTS AND RECOMMENDATIONS

The percentage depletion should be at least maintained at its present rate for the Vitrified Clay Pipe Industry. The Clay Pipe Industry Depletion Committee believes and recommends that there should be no diminution of the incentives for mineral production provided by a wise Congressional policy of 40 years of successful application.

Relative to the nature and purpose of percentage depletion allowance, the Supreme Court, in the Cannelton Sewer Pipe Company Case 364 U.S. 76 (1960) enumerated as follows:

> "Mineral depletion for tax purposes is an allowance from income for the exhaustion of capital assets. ANDERSON V. HELVERING, 310 U.S. 404 (1940). In addition, it is based on the belief that its allowance encourages extensive exploration and increasing discoveries of addition minerals to the benefit of the economy and strength of the nation".

The Treasury interpretation outlined in a statement submitted to the U.S. Committee on Ways and Means by David A. Lindsay, Assistant to the Secretary of the U.S. Treasury, on March 5, 1959 (1) states:

> "....it is apparent that the percentage depletion allowance was provided by Congress not only to permit recovery of the investment in the wasting asset but also to provide incentives for exploration necessary for replenishment of the wasting asset by the discovery and development of additional deposits."

It would appear that the Supreme Court and the Treasury are in agreement on the nature and basic purpose of percentage depletion. The manufacturers of vitrified clay pipe support these views and hereby submit the following arguments to support our contention that there should be no diminution of the incentives for mineral production in our industry.

The Clay Pipe Industry is a small one, measured against any one of the giant corporations of America. Total sales in 1968 amounted to approximately $100 million (Bureau of Census). But, our industry plays a vital role in the national program

to control the pollution besetting our nation's waters by supplying an essential ingredient -- long-life sewage facilities. This is particularly true in urban areas, since many cities recommend clay pipe for sanitary sewerage systems. This is a necessary, highly specialized, low-profit industry. Curtailment of the current percentage depletion allowed the manufacturers of clay pipe would cause severe disruption of an industry which provides an indispensable feature in the nation's housing and construction program.

MANUFACTURING AND EXPLORATION

Clay sewer pipe must have the necessary strength, chemical resistance, lack of porosity, dimensional control, and other product characteristics to meet the exacting requirements of Federal and ASTM Specifications.

Only a restricted number of clays have the properties and purity to make an acceptable clay sewer pipe. Among the many qualities necessary in the clay mix is sufficient refractoriness so that the pipe does not deform at the high temperatures necessary to product vitrification. Many other essential characteristics such as plasticity, and the ability to dry and fire into a salable product all impose restrictions on acceptable clays for sewer pipe manufacture. Contrary to widely-held and erroneous views, such clays are not available just anywhere for the taking. There is not, for example, a single vitrified clay pipe plant extant in all of New England, for the simple reason that this great region possesses insufficient refractory clay deposits.

The importance of proper and adequate raw materials for a clay sewer pipe plant cannot be over-emphasized. Upon the quality and quantity of this supply is based the ability to produce a marketable product at a profit. Upon this factor is based the investment of the plant and equipment costing millions of dollars. Clay sewer pipe plants are highly specialized but <u>not</u> highly profitable operations and are <u>not</u> readily convertible to other types of manufacturing.

In order to be sure that this investment is secure, clay sewer pipe companies maintain exploration departments to prospect for new deposits. They are staffed by men skilled in the science of finding clay beds (in many areas a difficult task), in recognizing

the potential ceramic properties and in determining the quality and quantity of materials present in the deposits. This determination usually involves core drilling, elaborate and costly sampling procedures and dozens of laboratory tests on a single deposit.

Test samples must be subjected to all of the processes of pipe making. If the laboratory tests and all of the other factors appear favorable, plant runs must be made in several sizes of pipe under standard manufacturing conditions. This is the ultimate criteria. These plant runs may cost more than all the prospecting, drilling and laboratory testing procedures before them, and yet may finally indicate that the use of the deposit is not feasible.

A modern clay sewer pipe plant is a highly specialized manufacturing facility which is inescapably wedded to its clay deposits. The characteristics of its grinding and screening equipment, extrusion equipment and dies, the heat and humidity cycles of its dryers, and the recirculation, burning and cooling methods in its kilns are all based on the characteristics of the raw material upon which it must feed.

If the clay deposit must be changed for another or its ceramic properties change, the resultant costs in adapting the plant's facilities are enormous. When the clay supply is exhausted, the plant has lost its value unless another source can be located where the clay can be obtained at equally low cost. Because of the low profit margin in the industry, it is impracticable to ship clays into the facility at any great distance under normal competitive conditions.

The history of the industry is replete with examples of clay product plants closing because of a lack or a change of their raw materials.

Depletion is an incentive to plant expansion to help meet the health and pollution control needs of the Nation. Many clay pipe plants are approaching obsolescence by today's standards. Expansion and modernization are definitely needed in this era of expanding population but because of the low profit potential it is difficult to obtain risk capital and ploughed back earnings have not always been adequate to meet the needs for expansion in the United States.

In many metropolitan areas in the United States sanitary conditions are deplorable. The Business and Defense Service Administration of the U.S. Department of Commerce, estimates that some 40 million people need new or improved sewage collection systems.

The clay pipe industry is highly essential to the health and welfare of our people. Members of the industry are well aware of the need for new plants to increase production for tomorrow's needs and are moving forward in that direction within their limited financial ability to do so. Continuation of the allowance for percentage depletion under the law as now written will provide our taxpayers with some of the funds which will be needed to finance expansion and modernization and exploration.

ADDITIONAL RECOMMENDATION FOR EQUITABLE ADJUSTMENT

We understand and concur in the difficult efforts of the Committee to revise our income tax laws so that all may share in the burdens fairly. It is in this spirit that we invite the attention of the Committee to the discrimination inherent in the present provisions which authorize for limestone (used in the manufacture of cement) a percentage depletion of 15%, whereas the allowance for clay (used in the manufacture of sewer pipe) is one-half that amount. We do not protest the higher rate; we believe that the availability and cost of recovery of natural resources should be the major factors in the determination of the allowable rate. Nevertheless, we do believe that equity is not served by a double allowance for clay's major competitor (concrete pipe made from cement) producing its product in all 50 states while sewer pipe clay is mined in less than half that number. Furthermore, the Committee should be aware that the shale (clay), which forms another basic ingredient of cement, is also entitled to a current 15% allowance. This fact of tax life adds one more weight to the competitive imbalance which favors clay pipe's competitors.

Under earlier law, refractory and fire clay used in the manufacture of clay pipe was allowed the 15% rate, just as even now refractory clay used in making fire brick is allowed the higher rate. Please refer to Internal Revenue Ruling 56-59 which defined refractory clay and included this sentence: "In this connection, fire clay used to enable sewer pipe to retain its shape and dimensions under extremely high temperatures required for vitrification is considered to be used as refractory fire clay."

Subsequent legislation unfairly and probably inadvertently reduced clay pipe's allowance through failure to recognize the essentiality of refractory clay to the manufacture of clay sewer pipe whereby it had obtained its original standing with refractory clay at 15%. It is also of interest to observe the singular inequity which arises in those instances where clay pipe manufacturers purchase fire clay for use in the manufacture of clay pipe. Although fully entitled to the 15% depletion allowance in the possession of the seller, the rate on this self-same material drops dramatically to 7.5% when put to use in the production of vitrified clay sewer pipe.

We believe the United States Senate Committee on Finance will welcome this opportunity to correct a long-standing inequity by restoring the depletion allowance of clays used in the manufacture of vitrified clay sewer pipe through revision of Sections 501(b)(6) and 501(b)(4)(B) of H.R. 13270 to include in the latter a specific reference to vitrified clay sewer pipe.

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(1) Page 22 of Hearings before the Committee on Ways and Means, House of Representatives Eighty-Sixth Congress, first session, on the legislative proposal of the Treasury Department specifying the treatment processes which shall be considered mining for the purpose of computing percentage depletion in the case of mineral products, March 5, 6, 9, 10 and 11, 1959.

PART B—ADDITIONAL STATEMENTS

September 26, 1969

Statement by the
National Association of Marble Producers
and the
Marble Institute of America
to the
Senate Finance Committee

Title V, Section 501. Natural Resources
Percentage Depletion
H.R. 13270

The National Association of Marble Producers is an association of American marble producers (quarriers) of approximately 95 percent of the natural quarried domestic marble and travertine production.

The Marble Institute of America is the American marble industry's national trade association of companies engaged in producing (including almost all the members of the National Association of Marble Producers), importing, wholesaling, manufacturing and contracting for approximately 85 percent of domestic marble sales.

Marble production in the United States is a declining industry at a time when production of most other non-precious minerals is growing at a pace comparable to that of the growth of the Gross National Product. This decline is due partly to unlimited importation of foreign fabricated marble and partly to the increased use of simulated marble and other manufactured competitive materials.

Unlike the gigantic oil and gas industry, the marble producing industry enjoys no protection from foreign competition. There is no quota for imported fabricated marble, such as the oil and gas industry has, and which enables that industry to keep prices artificially high. The tariff on imported fabricated marble was only 21 percent ad val and lowered further by the GATT agreement at 10 percent per year to

* Submitted by Jon A. Hagerich, Executive Director, Marble Institute of America.

10.5 percent by December 30, 1973. This rate is so low that it plays no effective part in protecting the marble producing industry in the United States from foreign imports.

For example, Italian marble can be quarried, fabricated, and shipped to the United States for about 40 percent of the cost of U. S. produced marble of a comparable quality shipped to the same building site.

The total United States sales of marble in 1966 increased to 48 percent above 1956, while the sales of domestically fabricated marble decreased 2 percent. During the same period, the United States sales of imported fabricated marble increased by 534 percent. This staggering gain in sales of imported fabricated marble was made possible by the 40 percent cost differential and the lowering of tariffs.

The presently authorized depletion rate for marble is 15 percent. In 1968, this amounted to approximately $1,900,000. The Tax Reform Act of 1969, as passed by the House, would cut this rate to 11 percent, a reduction of more than 26 percent, about the same as that of the multi-billion-dollar quota-protected oil and gas industry.

The additional tax revenue from marble production represented by the proposed change would amount only to approximately $530,000., assuming continuation of production at the 1968 rate, a doubtful assumption. Contrasted with this drop-in-the-bucket benefit to the Treasury, the amount represents a crucial decrease in the after-tax-revenue of the domestic marble producers. There is a desperate need on the part of the American marble industry to find new deposits of sound quality marble more easily quarried, to devise and perfect new

means of more efficient quarrying of known deposits in order to cope to some extent with unchecked foreign competition. Such exploration, research and development is costly, but promise to keep alive an old, honored and specialized industry, which makes an aesthetic and quality contribution to building construction at a time when the need for such a contribution is evident to every eye.

The National Association of Marble Producers and the Marble Institute of America oppose the proposed reduction in the existing 15 percent depletion rate for marble. The action of the Ways and Means Committee was not based on study of the marble industry, or of the mining industry generally. The action appears rather to have been based on conclusions reached from examination of the special circumstances of the oil and gas industry, rich in itself and highly favored by tax laws even with reduction in the depletion allowance.

The effect of the Ways and Means Committee action would be to make the poor poorer. It is submitted that if the policy reflected by the Tax Reform Act of 1969, indeed is the tentative policy of the Congress, the proposed change should be the subject of a thoroughgoing study of its effect, rather than by a decision reached without consideration of the effect on the subject industry.

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Statement

of the

Florida Phosphate Council

on H.R. 13270

by

Maywood W. Chesson
President
Florida Phosphate Council

to the

Senate Committee on Finance

- - - -

September 22, 1969

SUMMARY OF STATEMENT

1. In the original drafting of H.R. 13270, no consideration was apparently given to the impact of a decrease in percentage depletion on individual minerals. This kind of "across the board" treatment, without recognizing the characteristics and economic condition of each mineral, is patently unfair.

2. Phosphate and other minerals directly related to the manufacture of fertilizer for the production of food for U. S. and world populations (sulfur, potash, limestone and dolomite) deserve special consideration.

3. Phosphate reserves in the United States are smaller than those in competing countries, and the grade of deposits in the U. S. is generally lower than that of foreign reserves.

4. Foreign competition for worldwide phosphate markets is steadily increasing, in some cases aided and abetted by government-managed industries not necessarily susceptible to normal cost and supply-demand factors.

5. Proximity of foreign phosphate producers to foreign markets and resultant favorable freight rates puts U. S. producers in an even more severe competitive position.

6. Three successive bad-weather planting seasons in the United States and foreign competitive factors forced phosphate production declines in the U. S. in 1968 and has further driven the U. S. phosphate industry, especially in Florida, into a serious recession.

7. A decrease in the percentage depletion allowance would amount to an added cost for U. S. producers which would be a further detriment to our already precarious competitive position.

Continued on next page--

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8. As the world faces a long-term population surge and an expected increase in demands for foods, fertilizers are playing an ever-growing role. A reduction in percentage depletion on the agricultural minerals named in number 2 above would seriously damage the current economic position of these minerals and inhibit their future development in the United States.

9. We therefore urge that H.R. 13270 be amended to restore the percentage depletion on phosphate, potash, limestone and dolomite to 15% and sulfur to 23%.

Mr. Chairman:

As President of the Florida Phosphate Council, I am submitting to you for distribution to your Committee the position of the Florida Phosphate Council on the provisions of H.R. 13270 that are of particular concern to the phosphate mining industry.

The Florida Phosphate Council, whose members are listed below, is a non-profit trade association representing most of the firms mining and/or processing phosphate rock in the State of Florida.

Agrico Chemical Company
American Cyanamid Company
Borden, Inc. - Chemical Division/Smith-Douglass
CF Chemicals, Inc.
Central Farmers Fertilizer Company/Central Phosphates, Inc.
Farmland Industries, Inc.
W. R. Grace & Co., Agricultural Chemicals Group
International Minerals & Chemical Corporation
Mobil Chemical Company
Occidental Chemical Company
Royster Company
Swift Agricultural Chemicals Corp.
USS Agri-Chemicals

The Council is grateful for this opportunity to express its views on tax reform, a subject of increasing concern on the part of American business due to the heavy tax burden and the impact on the economy. We believe the entire nation shares this concern. It is our hope that these hearings will aid in developing a program of tax reform consistent with the economic needs of our nation, with the least detrimental effect on taxpayers and on economic growth.

The Florida Phosphate Council believes that attainment and maintenance of a sound domestic mining industry requires

recognition in the tax laws that certain minerals used in the manufacture of fertilizers, such as phosphate, hold a unique position in the nation's and the world's welfare and economy and deserve a degree of consideration that, unfortunately, was apparently not given in the "across the board" reductions in percentage depletion as proposed in this bill. Other minerals in this agriculture category include potash, sulfur, limestone, and dolomite.

We submit that tax reform should take into account the characteristics of <u>each</u> extractive industry and cannot be adequately or equitably accomplished without close study of each mineral industry. They are not all alike, and sweeping, class treatment of them is patently unfair.

We can find no evidence that the singular merits of each segment of the mining industry were recognized or considered prior to the introduction of H.R. 13270. Instead, a general form of legislation has been proposed that is all-encompassing, placing all types of natural resources into large groups, ignoring the differences and uniqueness of each.

Therefore, we feel it is incumbent on this Congress to fully examine and determine all the facts relating to each different type of mining. Only then can a fair and equitable finding be made and proper reform accomplished.

I will now direct my remarks specifically to the phosphate industry and our strong and justifiable opposition to the proposed reduction in the depletion rate from 15% to 11% -- a 26.6% differential.

Phosphate rock is unique in that it is the basic source of the element phosphorus, which is essential in the makeup of every living cell, tissue and organism. Humans must have phosphorus for survival -- they obtain it from the food consumed in their daily diets. There is no substitute -- natural or synthetic.

Phosphate is indispensable in the manufacture of fertilizers and plant foods used to feed the hungry people of the world -- both here and abroad, notably in the underdeveloped nations.

There are four major phosphate producing regions in the United States. Florida is the largest producer, followed by a quadrangle of states in the West: Idaho, Montana, Utah and Wyoming. North Carolina is a new producer, but growing in importance. Tennessee is the fourth ranked phosphate mining area of this country.

Production in these areas accounts for approximately 46% of the total world output of phosphate. In 1968 U. S. production amounted to an estimated 40 million tons.

It must be considered, however, that despite this high percentage of world production, the economically recoverable reserves in the United States as a percentage of estimated world phosphate reserves is considerably lower -- less than 30% of the world total. This factor becomes even more critical when one considers that much of the higher grade phosphate rock in this country -- especially in Florida -- is being exhausted. This means that in the future, exploration, extraction and processing of lower grade ores will substantially increase mining costs in the U.S.

On the other hand, much of the phosphate in Morocco, the Spanish Sahara and other areas of the world is of higher grade than that found here and the reserves are much larger.

Also consider the fact that much of the United States' competition for international phosphate markets is either government owned, dominated or supported. Such is the case in Soviet Russia -- second largest producer in the world -- and Morocco, third ranking producer and the world's largest exporter of phosphate rock. This means that prices from these competitive sources may not reflect cost structures nor a supply/demand circumstance.

The depletion allowance is one of the primary reasons United States phosphate producers have been able to maintain a fair share of world markets in the face of this adversity.

Still another factor in favor of foreign producers is the decided delivery cost advantage which invariably enters into the overall cost of a high volume, bulk commodity such as phosphate.

Since more than one third of this nation's total phosphate production is shipped to foreign countries, this factor is extremely important. In reality, the cost of shipping a ton of phosphate often is more than the price of the rock itself, which points up the critical competition involved in selling to customers in Western Europe and Great Britain. Morocco is closer to these markets than we are and can deliver cheaper.

For example: The ocean freight rate from Tampa, Florida, to Rotterdam on phosphate is $5.00 to $5.25 per long ton, but the rate from Casablanca, Morocco, to Rotterdam is about $3.25 per long

ton. Morocco can ship to Italy in small vessels for about $3.00 per long ton, as compared to our rate of $5.00 to the same ports in Italy. The rate from Casablanca to Spain or Greece in small vessels is about $3.00 to $4.00 per ton, comparable to a rate from Tampa of $8.00 to $9.00 in the same size vessels.

These factors alone justify the continuation of the present 15% depletion allowance on phosphate. Any weakening of our world-wide marketing ability would lead straight to economic recession. It is not an understatement to affirm that any reduction in the phosphate industry's depletion allowance would place this industry in a most hazardous competitive position in the world markets.

There are, moreover, other unique features about the phosphate industry which deserve your attention and consideration before a decision on the depletion allowance on this mineral is reached.

At this very moment, the United States phosphate industry is in the throes of a most difficult period. In addition to the rigorous foreign competition already described, domestic production in 1968 fell below previous years and indications are that 1969 will be even worse.

The reason for this unfortunate condition is one that neither government nor business can quickly remedy. Unprecedented weather conditions that have prevailed over the major farming and fertilizer consuming areas of the United States for the past three years have drastically curtailed sales and pushed inventories to new highs. For the first time in over 20 years, the 1969 planting season showed a drop in the demand for domestic plant nutrients.

As a result, prices have been slashed, revenues have diminished further, and dwindling financial return to fertilizer manufacturers is sinking even lower.

Adding to our problems is the fact that a tremendous expansion program was initiated a few years ago, largely on the basis of projected purchases for the AID program of our government. Gearing production to meet these anticipated needs, our firms made long-range commitments that were non-retractable when AID funds were drastically reduced.

This combination of developments has resulted in employment cutbacks in the Florida phosphate fields from a high in January 1967 of 10,400 workers to an estimated 9,000 today. Industry payrolls which reached a record high of $71.7 million in 1966 have sagged to $68 million in 1968, despite incremental wage increases. Total earnings this year are expected to drop still lower.

I can tell you gentlemen quite frankly that nobody is making money in the phosphate business today. The industry is sick.

I submit to this committee that the proposal for reducing the depletion allowance on phosphate could not have come at a more unfortunate time. And I cannot overstate the results which such action would bring about.

It comes at a time when those companies which deal primarily in fertilizer materials are struggling to survive.

H.R. 13270, as it passed the House, would reduce the phosphate depletion rate from 15% to 11% -- or a reduction of 26.6%. This reduction would amount to approximately 13¢ for every ton of phosphate rock mined. Now, what would this added cost of 13¢ a ton do to us?

In the domestic market, the producer would be required to absorb this additional cost on top of a dwindling profit margin -- or to increase prices. The latter is just not possible in today's market picture. The former might well put some of us out of business.

If the U. S. producer adds 13¢ to foreign sale prices -- which already hang in balance on the basis of pennies a ton -- it is safe to assume that a majority of this nation's phosphate rock exports would be lost to foreign competition.

Should this occur, this nation would immediately lose millions annually in balance of payments, phosphate miners in this country would have no place for their production, and the eventual result would be a depression on an already burdened phosphate mining industry.

To this point my remarks have dealt primarily with factors which are germane only to the phosphate mining industry and may not apply to other extractive industries.

There are other types of mining which do have many things in common, such as land reclamation requirements after mining is completed, air and water pollution control installations to protect the environment, and the very substantial tax load which we are already bearing. The extractive industries are active in all these areas.

With respect to taxes, in most of the communities where we operate in Florida, the phosphate industry is literally the backbone of the tax structure. Our companies paid more than $6.5 million in property taxes in 1968. In Polk County, Florida, center

of operations, phosphate tax payments accounted for more than 20% of the total county ad valorem tax roll in 1968. The phosphate industry also is subject to the same type of sales and use taxes as other industries.

Finally, let me summarize briefly the justification for continuing the depletion allowance on phosphate at 15% and the other agriculture minerals at their present rates.

It has been recognized that minerals in the ground have no usefulness to the people until someone has the courage and persistence to expend substantial amounts of risk capital in searching for, finding, acquiring, developing and making them available to consumers.

Most of the advanced countries in the world today recognize that their minerals and natural resources form the basic foundation for economic strength and growth, and have provided necessary encouragement in one form or another for their production.

The practical effect of percentage depletion is greater production of minerals at a lower price, and an inducement for increased use of the nation's natural resources.

Without recognition in the tax laws of the capital value being depleted by production, taxes would be devouring the capital of mineral producers and depriving them of the funds needed to replace reserves in order to remain in business and continue to supply essential minerals.

The extraordinary risks involved in searching for and producing minerals, the long time lag between investment and

production, and the possibility of a total loss of the investment in unsuccessful ventures, with no possibility of converting to another type of business, are among the factors that make percentage depletion necessary. With the demand for natural resources to meet the requirements of our advancing civilization, and the ever-increasing risks and cost in replacing depleted reserves, it is more essential than ever that we maintain the present tax treatment of natural resources in order to assure the nation's economic growth.

Percentage depletion aids in keeping the mining industry competitive with foreign mineral producers and provides funds for use in mineral research and recovery methods, resulting in mineral conservation; it provides funds for exploration of continuing mineral deposits and the development of mines; it provides the funds for the construction of plants designed to give a better and fuller use of the nation's natural resources.

With respect to the phosphate industry specifically, allow me to summarize:

--The phosphate industry is unique in its makeup. Little or no attention was given to the specifics of this industry or to the other agricultural minerals or to the total impact of a reduction in percentage depletion on these minerals before the introduction of H.R. 13270.

--Phosphate rock is an indispensable ingredient in the manufacture of fertilizer for which there is no substitute, natural or synthetic. It is truly a mineral of life, essential in the diets of all mankind.

--United States economically recoverable phosphate reserves are smaller than those of foreign producers, and the grade of domestic deposits is generally lower than that of foreign competition.

--A reduction in the depletion allowance for phosphate would severely damage United States producers from exporting to international markets.

--The phosphate industry in this country is in the midst of a depressed period, and a reduction of the depletion allowance would drive marginal producers to the brink of disaster.

--The basic premise of the depletion allowance as originally constituted makes it mandatory that this policy be continued in order to assure orderly development of natural resources, continued growth, and, hopefully, prosperity.

Taking all of the above into consideration, it would seem to me most appropriate that the agricultural minerals -- such as phosphate, potash, sulfur, limestone, and dolomite -- be continued at the same percentage depletion allowance as now exists, sulfur at 23% and 15% for the others, so that these vital ingredients in chemical fertilizers can continue to survive and play their part in providing the necessary plant foods, so that farm crops, both at home and abroad, might produce the bountiful foods to feed the ever-growing population of the world. With the specter of a doubled world population by the year 2000, this is certainly not the time to impede in any way the reasonable growth of these vital mineral industries, and so I ask this Committee to consider most seriously the restoration of these minerals I have named to their present percentage depletion rates, for humanitarian as well as economic reasons.

STATEMENT OF

CHARLES E. BRADY, PRESIDENT

MATERIAL SALES COMPANY

SALISBURY, NORTH CAROLINA

BEFORE THE SENATE FINANCE COMMITTEE ON H.R. 13270

THE TAX REFORM ACT OF 1969

September 25, 1969

I am Charles E. Brady, President of Material Sales Company, Salisbury, North Carolina. Material Sales Company is sales representative for quartzite produced by Lessees of B. V. Hedrick Gravel and Sand Company and W. R. Bonsal Company of Lilesville, North Carolina; and for Becker Sand and Gravel Company of Cheraw, South Carolina.

Quartzite is the mined raw material from which the metal silicon and its many alloys are produced. The metal silicon is not found as such in nature. Quartzite is reduced in an electric furnace along with an oxidizing agent to produce the pure metal silicon. Some of the companies producing this metal are: Electrometallurgical Division of Union Carbide Corporation, Electrometallurgical Division of Air Reduction Corporation, Interlake Steel Corporation, Foote Mineral Corporation, Ohio Ferro-Alloys Corporation, Tennessee Metallurgical Company, and others.

The metal silicon is not unlike aluminum in appearance. It is very hard, has great tensile strength, is light, and highly heat resistant. Because of these qualities it is used in alloys of iron (Ferro-Silicons), alloys of steel and manganese, alloys of steel and chrome, and it is essential in the making of aluminum used in automobiles, trucks, airplanes, and in the hundreds of other aluminum products. Silicon is extremely important in times of peace, and its use and importance multiplies in times of national emergencies.

The purity of the quartzite (SiO_2 content) is essential in making the grade of silicon needed to make the high quality alloys needed in modern metallurgy. Consequently the prime source of this quartzite is from Marlboro County, South Carolina, and from Harnett and Anson Counties in North Carolina. The quartzite produced from these sources by the aforementioned companies, whom we represent, analyzes 99.5% SiO_2 and better.

cessible physically and economically, are so scarce as to appear non-existent at this moment. I urge you to encourage this industry, small in size, but of key importance to our economy.

Thank you.