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May 19, 1982

Members of the Advisory Committee

Mr. Munroe's Arizona Presentation

As requested at the meeting of the Committee today, attached is a copy of Mr. Munroe's presentation earlier this month to the employee and community groups in Arizona.

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EXPLORATION DEPARTMENT

George B. Munroe's Presentation at Ajo, Arizona - May 8, 1982

Despite the nature of the occasion which brings us together, I am very pleased to have the opportunity to speak directly to so many employees of the New Cornelia Branch and members of their families and other residents of the Ajo community. It is truly unfortunate that we have been forced to stop our copper production, but I can assure you there were very compelling reasons to do so.

I know how seriously this decision affects the employees who have been laid off, and I believe that each one of you deserves an explanation of the conditions and circumstances which have led to this action. I also felt that this would be best accomplished by meeting directly with you and giving you the opportunity to know first hand the kinds of adverse conditions the Company faces and to give you the opportunity to ask any questions you may have. My colleagues and I will do our best to provide the answers.

Phelps Dodge has been mining copper in Arizona for 100 years. As you can imagine we have had our good periods and our bad, and today's is one of the worst: taking into account the value of the dollar, the price the Company receives for a pound of copper today is lower than it has been at any time in this century, except for very brief periods following World Wars I and II, and the deep depression of the 1930's.

In order to fully appreciate the situation in which we find ourselves, bear in mind that a copper producer has little or no control over the price at which its copper can be sold. As you are painfully aware, when the cost of producing and marketing an automobile or a household appliance rises, those increased costs tend to show up in the price you have to pay for the product. This is true of almost all consumer goods. Not so with copper.

Copper is produced all over the world, and the market for copper is a world market. The copper you produce here at Ajo has to compete with copper produced in Canada, South America, Africa, Asia, Europe and Australia. Essentially the price for copper at any particular time is the same all over the world. And no U.S. producer can continue operating for very long when its cost of producing a pound of copper approaches or exceeds the price for which it can be sold. It's as simple as that.

The United States is still the largest producer of newly mined copper in the world, but an alarming trend has developed in the past 30 years which has seen the U.S. losing more and more of its share of world copper production. Most of the new mines that have been developed in that period have been developed outside the U.S., many of them in newly emerging third world countries (call for Slide No. 1). On the chart the blue

Before looking at some of the reasons for these high costs I would like to share with you a picture of what has happened in the past 11 years to the relationship between Phelps Dodge's cost to produce a pound of copper and the price we realize for the sale of that same pound of copper (call for Slide No. 2). The red upper line on this graph depicts the course of the U.S. producer price per pound of copper in constant dollars between 1970 and the end of 1981. The blue lower line shows Phelps Dodge's cost of producing a pound of copper over the same period of time, also in constant dollars. When I use the term constant dollars I mean that when the effects of inflation are factored out, Phelps Dodge was getting the equivalent of \$1.58 per pound for copper in 1970 whereas in 1981 we received an average of 85.1 cents per pound, and today we are receiving only 78 cents a pound.

As you can see, for 1981 there was a margin of only a little more than one cent between our costs and our selling price. In the fourth quarter of 1981 the intolerable occurred and these two lines crossed, with our costs exceeding our selling price. This relationship worsened in the first quarter of 1982, when prices failed to cover our costs by more than 10 cents a pound.

Very few copper mines throughout the free world are operating at a profit at today's prices, and as I stated, our U.S. mines are even worse off. Why is this? There are a number of reasons. I will mention and discuss the four most important of these.

The first reason is that most foreign mines have richer ore bodies than we have. If the percentage of copper in the ore is high, it is obvious that more copper will be realized per ton of ore mined and thus each pound will cost less to produce.

The second reason is that most foreign mine, mill and smelter complexes are not subject to the same stringent and costly environmental requirements that we are in the United States.

The third reason is that some foreign mines receive subsidies from their governments or have access to low-interest loans from international financing agencies.

And the fourth reason is that the wages and fringe benefits paid to workers in most foreign copper mining operations are substantially lower than those paid by Phelps Dodge.

Clearly there is nothing that can be done about the first reason for our higher costs - the difference in ore grade in mines throughout the world. The average grade of copper reserves for the major free world producing countries (excluding

the U.S.) in 1976 was 1.58% copper.* In contrast, the ore Phelps Dodge mined in 1981 averaged less than half that grade--less than 0.7% copper, and only 0.5% here at Ajo.

Foreign mines have enjoyed the advantage of higher ore grades for many years, but in the past we have succeeded in offsetting some of that advantage by being more productive than our foreign competitors, both by "working smarter" than they did and by developing and using superior technology. Unfortunately our technological edge is rapidly disappearing, and we are not going to be able to regain that advantage until the Company is able to make sufficient earnings to buy and install the new and expensive equipment required.

Let's turn now to the second reason for our higher costs - the adverse treatment of the U.S. copper industry with respect to environmental regulations. Phelps Dodge has already spent more than \$300 million at our smelters in our efforts to comply with air quality regulations. These air pollution facilities cause substantial increases in our energy costs and other operating costs. The overall effect of these environmental requirements is to add between 10 and 15 cents a pound to our costs of producing copper. Like any other costs, this is something we can't just pass on through our price. Additional expenditures of nearly \$200 million, in 1980 dollars, will be necessary to bring the Morenci and Ajo smelters into compliance with air quality requirements under present law and regulations. Of this, \$45 million would have to be spent here at Ajo even though, with the present control equipment and procedures, we are able to meet all ambient air standards for sulfur dioxide and even though the smelter is not contributing significantly to high levels of particulate matter. Frankly, it appears unlikely that we can justify putting that kind of money into the Ajo smelter, and unless we can work out some alternative with EPA, or get some help from the Congress, we may be forced to close the smelter.

Also, unless the law is changed, we will be forced to close the Douglas smelter no later than the end of 1987, and perhaps sooner, because we cannot economically justify the \$500 million it would cost to modify that smelter to conform with the requirements of the present law and regulations. We can, and do, work hard to try to obtain realistic laws from the Congress and state legislatures, and reasonable interpretations of those laws by EPA and the state air pollution enforcement agencies. If we had not made these costly efforts and if we had been required to comply with the regulations as they existed in Arizona in 1970, all three of our Arizona smelters would have been shut down long ago. Much has been accomplished, but activist and zealous national and regional environmental groups continue to attack us and, in fact, one such group has recently announced its intention to force the early closure of the Douglas smelter.

^{*} Table 3-7 U.S. Copper Industry, Sousa, U.S. Bureau of Mines (Deleting non-free world and U.S. reserves).

There also is nothing we can do with respect to the third reason for our unfavorable cost position in comparison with foreign mines - the favorable economic treatment they receive from their home governments. Many of these foreign mines are in underdeveloped countries and receive government subsidies and low interest loans - the latter often underwritten by the U.S. taxpayer through international lending agencies. Those mines also generally operate near capacity even in the face of low world copper prices, in order to export copper and provide cash needed for the purchase of goods and services that are scarce or non-existent in these copper-rich countries. This tends to result in a world oversupply of copper, unduly lengthening periods of low prices.

The fourth reason I listed is the fact that labor costs in most foreign mines are considerably lower than those borne by Phelps Dodge in Arizona; in fact, the largest single component of all our operating costs is the cost of labor. In 1981 Phelps Dodge's labor costs were more than 30 cents per pound of copper produced. According to a recent Bureau of Mines study, the labor portion of U.S. production costs is as much as 10 cents per pound higher than in other major copper producing countries like Chile and the Philippines. Our labor cost disadvantage would be even greater than that except for the fact that our American workers are considerably more productive than foreign copper miners. Still the same \$8.00 that Phelps Dodge pays for 40 minutes of work from the average Ajo employee would buy more than a full shift of work from the average mining employee at a large South American copper operation. Yet those South American employees are operating the same kinds of equipment that we have here at Ajo, and the copper that is produced at Ajo must compete with the copper that comes out of that South American mine.

It is a matter of serious concern to us that average hourly earnings in the copper industry have increased at a faster rate than in most industries in the country. The Bureau of Mines report* shows that in the 10-year period between 1970 and 1979, the straight time wage rate for the average copper industry employee increased by 150%, but the increase for the average "all manufacturing" employee was only 100% and wages of the average employee in "the private sector, excluding agriculture," went up Thus copper industry wages have been increasing half even less. again as fast as wages in the two broader groups. The result, just within the state of Arizona, is shown on this next slide. ** (Call for Slide No. 3). The slide you are looking at shows the average 1980 weekly earnings in various industries in Arizona. The bar at the top of the chart represents the average weekly pay

^{*} The U.S. Copper Industry, Sousa, Bureau of Mines. ** "The Copper Industry's Impact on the Arizona Economy," Dr. George F. Leaming, 1981.

upper line represents the total amount of copper produced in the free world each year from 1950 through 1981. The red lower line represents U.S. production. As you can see, free world production has increased dramatically while growth of U.S. production has been relatively small. As a result where the U.S. mined 34% of free world copper in 1952 its share by 1981 was down to 23%. In recent decades the average cost of producing copper in the United States has been higher than in most foreign countries, and this remains true today.

As I've stated, the price we receive for our copper is largely beyond our control. The industry has for many years engaged in active research and development efforts to identify additional uses for copper and to foster programs which would increase the use of copper. Over the long haul these research and development efforts help to maintain the demand for copper and the level of consumption of copper and thus serve to bolster the world price. But these are long term measures which do not solve our short term problems.

The other half of the cost/selling price equation is the higher costs experienced by U.S. copper producers and specifically by Phelps Dodge.

In just three years, from 1978 to 1981, Phelps Dodge's cost of producing a pound of copper has increased by 44%. These increasing costs, in conjunction with declining copper prices, actually caused the Corporation's mines to operate at a loss during the fourth quarter of 1981.

So far in 1982 the experience has been even worse and on April 22nd Phelps Dodge reported a first quarter loss in excess of \$19 million. The protracted recession in the economy, particularly as reflected in the housing, construction and automobile markets, has so diminished the demand for copper that the price we now realize for a pound of copper is considerably less than the amount it costs us to produce it — at any of our mines. As a result the cash drain on the Company from the beginning of the year until April 9, when the suspension of operations was announced, was averaging almost \$1 million per operating day.

Few companies can withstand such a cash hemorrhage for more than a brief period of time. For the future of the Corporation, and the future of all of us who depend on it for our livelihoods, management decided, and our Board of Directors agreed, that operations should be halted. All of us hope that we can start production again at an early date, but it looks clear to us now that we may have to remain closed beyond June 1. There has been some improvement in copper prices and some tentative signs that the U.S. economy may be starting to pick up, but conditions have not improved enough to allow us to reopen by June 1. I do not know at this time how long we will have to stay shut down.

in the Arizona copper industry in 1980: \$458, far and away larger than in other industries and \$85 a week higher than the next highest.

A big part of that difference has been caused by the cost-of-living adjustments, or COLA. Cost-of-living adjustments now represent \$5.19 of everyone's straight-time hourly wage. The index used for calculating these increases, which is called the CPI, is the government's estimate of what it costs the average wage earner or clerical employee to live in a major urban area. I don't think that index has been an appropriate way to measure the effects of inflation on our employees.

The CPI is based on prices of food, clothing, shelter, fuels, transportation fares, and other goods and services that people buy for day-to-day living.

Two components which make up more than 25% of the CPI are the "medical expense" element and the "homeownership" element. Here at Ajo most Phelps Dodge employees live in houses provided by the Company, at rents that The Company deliberately keeps low. The Company provides the hospital and, with few exceptions, pays all of the medical expenses of employees and dependents alike. Thus changes in the homeownership element of the CPI and the medical element, both of which have been increasing faster than the overall CPI, have little relevance to our employees here at Ajo.

Now I would like to show you a series of slides which demonstrates what has been happening to the relationship between the price of copper, the CPI, and Phelps Dodge wage rates. (Call for Slide No. 4a). The slide on the screen depicts the course of the price of copper during the 11-year period 1971 to 1981. (Call for Slide 4b). This slide compares the CPI with the copper price from the previous slide over the same 11-year period.

Now, over these two lines let's superimpose the average Phelps Dodge wage rate for the same period. (Call for Slide No 4c). You will note that the Phelps Dodge wage line far outstrips both the copper price and the CPI.

As is abundantly clear, ever since 1975 Phelps Dodge's wage rates have outrun the price of copper, and for the past two and a half years those wage rates have continued to rise sharply while the price of copper has actually been declining. An even clearer picture emerges when the effects of inflation are eliminated by converting the wages and prices into constant dollars. (Call for Slide No. 5). On this slide the green upper line shows the course of Phelps Dodge's average wage rate for the same 11-year period as used in the prior slide, but converted to constant 1981 dollars. The red lower line represents the course of the price of copper in constant 1981 dollars. This chart also gives you a graphic idea of the relative performances of the

price of copper and Phelps Dodge's average wage rate -- prices sharply down, wages sharply up.

Now obviously the problems of the copper mining industry and of Phelps Dodge cannot be attributed solely to labor costs. Nevertheless, the cost of labor does represent over 40% of our current cost to produce a pound of copper and if we are to regain our competitiveness, our production costs must be reduced.

The Company has taken many steps in recent months to reduce costs and conserve cash, and we have sought help in this effort from the state and federal governments and from our stockholders and employees. All future cost-of-living adjustments to salaried employees have been discontinued - not postponed, but discontinued - effective April 1, 1982. All salaried employees have had their salaries cut effective May 1st. The salary of everyone making \$40,000.00 or less was reduced by 4%; the salaries of those making over \$40,000.00 were reduced by 4% of the first \$40,000.00 and by 8% of everything in excess of The Company laid off 160 salaried employees from \$40,000.00. Western Operations effective April 9. All non-essential travel and related expenses have been eliminated. Fees paid to members of our board of directors have been reduced by 25%, and the dividend paid to our stockholders has been cut by 75%. Our dividend rate is now at its lowest level since 1946.

This past January I spoke in Phoenix and Tucson to state leaders and pointed out that the state severance tax on copper and the property tax assessment ratio for mines unfairly discriminated against our industry, and added still another cost burden on our copper. I am pleased to report that the state legislature recently passed two bills, and Governor Babbitt signed them into law, that go a long way toward providing fair tax treatment for the mines. These changes in the tax laws in no way provide a "quick fix" for the copper industry in Arizona — in fact, none of the benefits will be felt this year. But in the long run they will help us compete with foreign mines and mines in other parts of the United States, and we appreciate that help.

Certain capital expenditures are necessary every year just to maintain normal levels of operation. Even these expenditures have undergone careful scrutiny and have been postponed or severely curtailed. In addition, we have made formal application to EPA to defer carrying out the Morenci smelter project for 18 months.

We also looked at the possibility of postponing the move of our Douglas administrative personnel into offices we have leased in a new building in Phoenix. Unfortunately, under the terms of our lease, our rent starts as soon as our landlord completes the building and turns the space we have leased over to us, so it is not practical to postpone the move. But we did postpone the planned relocation of our Exploration Department from Douglas to Tucson.

And last, and most painful of all, we shut down all of our copper mines and concentrators and all but one of our smelters on April 17.

With these cost cutting and cash conservation measures undertaken, we believe the time has now come to address the necessary reduction of our labor costs.

Accordingly we have written to each union that represents employees in our Arizona operations and requested that they meet with us to discuss modifications to the COLA clause and to the sections of the contract which establish rates of pay. When we meet with the unions we will also ask them to discuss extending the modified contract beyond June 30, 1983.

What will we be asking for? Our minds are open but we know we need a substantial and immediate decrease in our labor costs. In addition, if we expect to compete long-term in this industry, we cannot continue to have automatic increases in our labor costs that are not matched by increases in productivity.

Where these decreases and changes come from will be up to the bargainers; as far as I am concerned they can come from wages, COLA, fringes, some method of deferring compensation or even something that none of us has yet considered. We have received a number of thoughtful letters from employees suggesting different bases for compensation, and we appreciate receiving those suggestions. If any of you has any thoughts or ideas which you believe would be useful, I encourage you to make them known to us and to your unions. I know that something must be done for the mutual benefit of all of us.

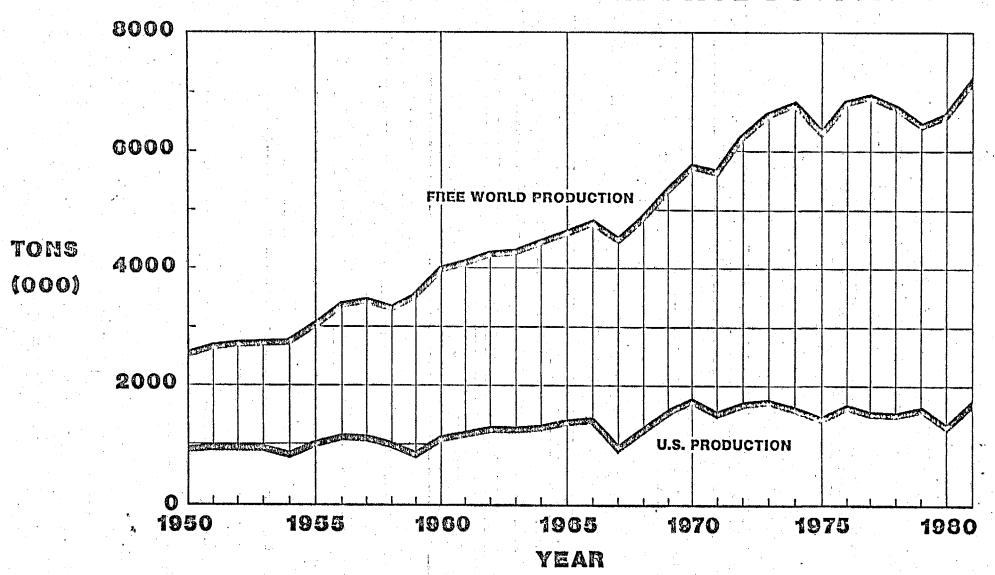
We have already received responses from some of the unions indicating a willingness to meet and discuss these matters, and we look forward with hope to these discussions.

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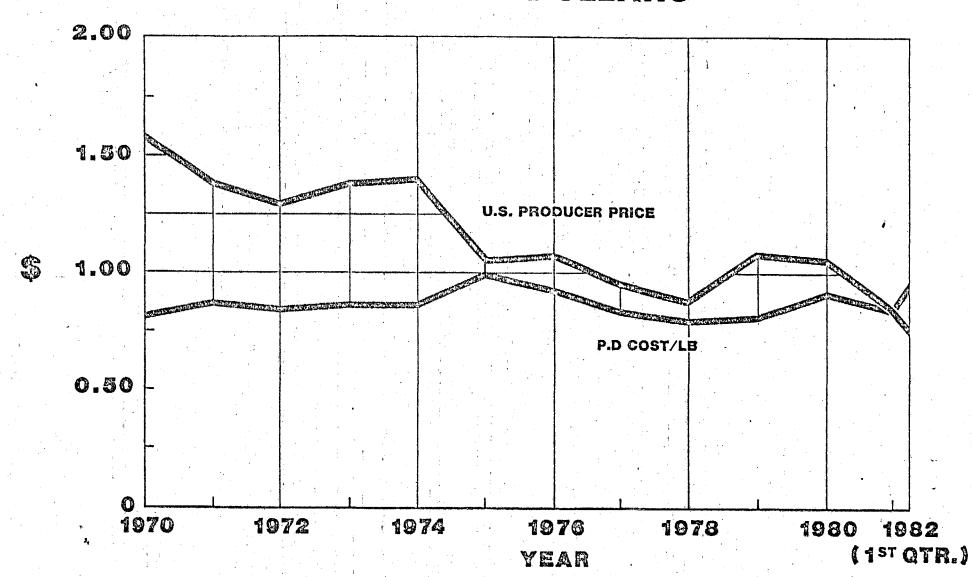
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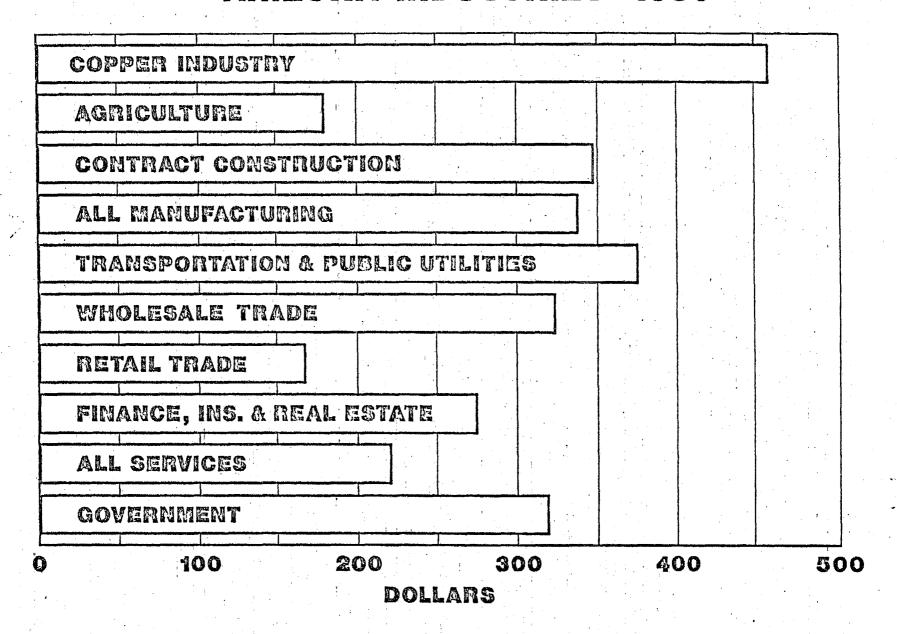
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COPPER PRICE VS COPPER COST IN 1981 DOLLARS



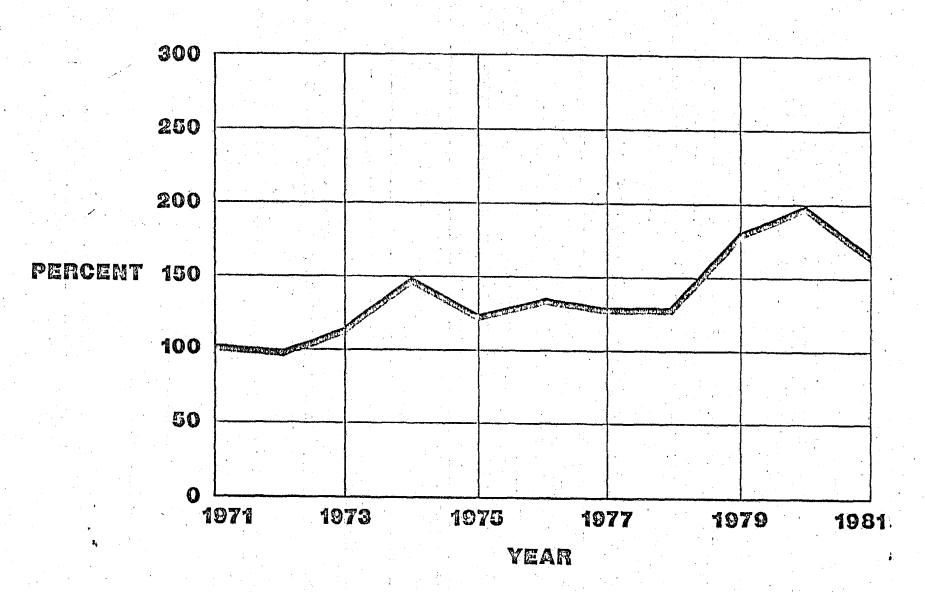


AVERAGE WEEKLY EARNINGS ARIZONA INDUSTRIES-1980



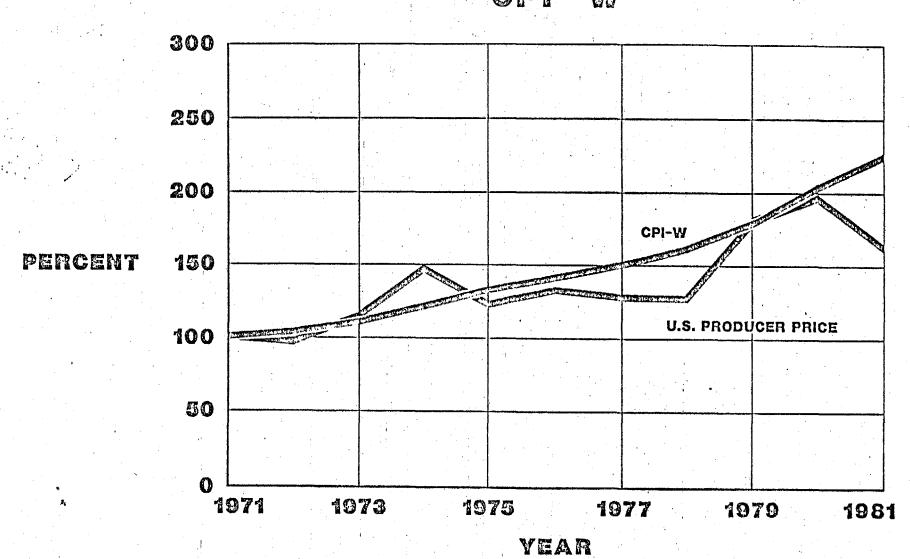


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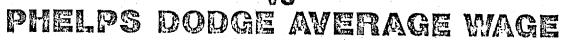
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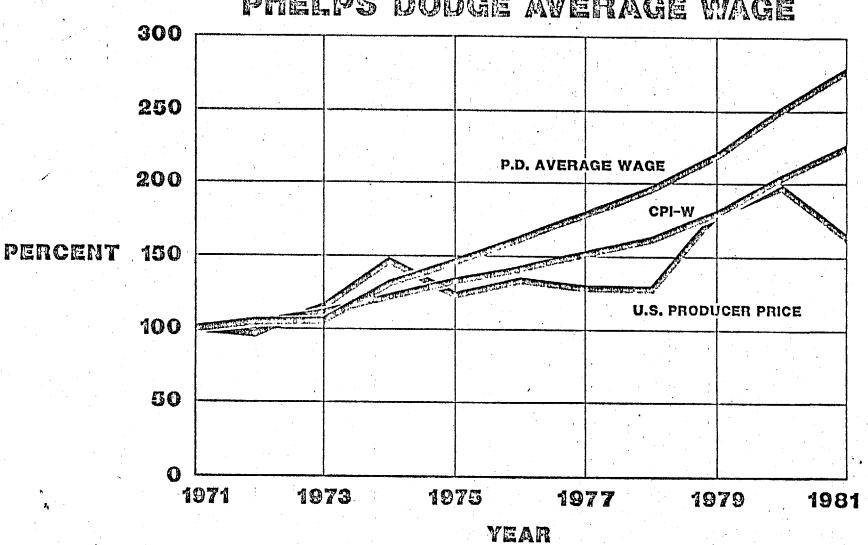
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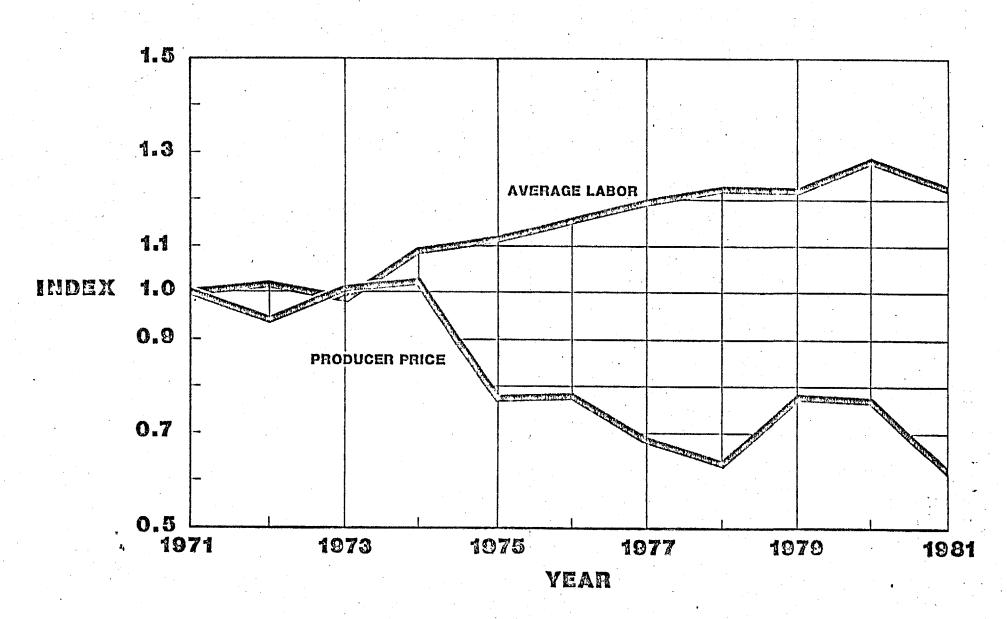
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LABOR RATE VS COPPER PRICE



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WILLIAM B. WADSWORTH

