EIGHTH ANNUAL REPORT

●

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

JULY 1, 1946 TO JUNE 30, 1947

●

CHAS. H. DUNNING
Director

OFFICIAL FILE

Since civilization began it has been axiomatic that a nation's mineral resources and production are a measure of its degree of civilization, and its place among nations.

Production increases resources. An active producing industry begets search, development, research, and improved technology. These in turn bring forth commercial ore from sources heretofore unimagined, and add to our resources faster than production depletes them.

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DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA

Board of Governors:

Weldon C. Humphrey, Tombstone, Arizona, Chairman
(Reappointed with term expiring January 31, 1952)
(Resigned as Chairman July 1, 1947)

Dr. N. H. Morrison, Phoenix, Arizona
(Elected Chairman July 1, 1947)
(Term expires January 31, 1949)

T. E. Steele, Ajo, Arizona
(Term expires January 31, 1950)

H. F. Mills, Humboldt, Arizona
(Term expires January 31, 1949)

J. E. Layton, Chloride, Arizona
(Died November 1946)

Edwin W. Mills, Salome, Arizona
(Appointed May 23, 1947 to fill unexpired term of J. E. Layton—Term expires January 31, 1948)
(Elected Vice Chairman July 1, 1947)

Personnel:

Chas. H. Dunning, Phoenix, Arizona, Director
W. C. Broadgate, Prescott, Arizona, Special Assistant
A. C. Nebeker, Prescott, Arizona, Field Engineer, Northern District
Roger I. C. Manning, Phoenix, Arizona, Field Engineer, Southern District
J. E. Busch, Tempe, Arizona, Part-time Statistician
Lorraine Porter, Office Secretary, Resigned March 1, 1947
Mrs. George D. Hunt, Office Secretary, Since March 1, 1947

Offices:

Headquarters Office
Mineral Building, Phoenix, Arizona—Telephone 4-7034

Field Office
Prescott, Arizona, Basement, Court House

To Honorable Sidney P. Osborn, Governor
State of Arizona
Phoenix, Arizona

Dear Governor Osborn:

In compliance with Chapter 27, Laws of 1939, creating the Department of Mineral Resources, the following report of the activities of the Department from July 1, 1946 to June 30, 1947 is hereby respectfully submitted.

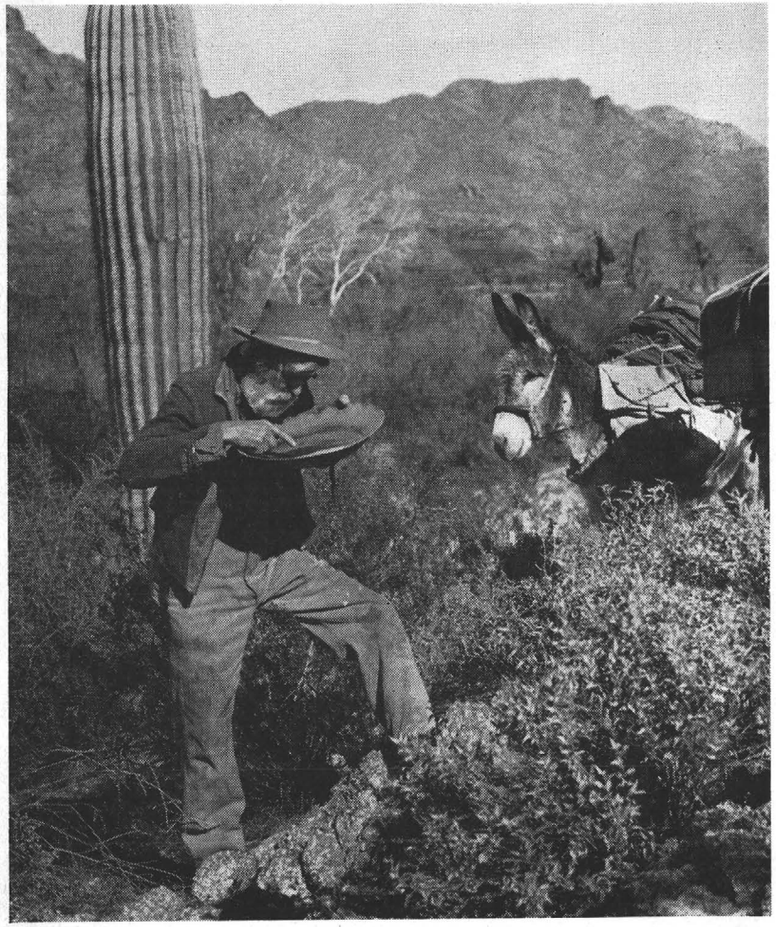
Before completing this report this year it was evident that our mailing list, due to special requests for the report, had greatly increased, and at the same time the cost of printing has increased. As our budgeted funds for this purpose have remained stationary, the only solution for us has been to drastically reduce the number of pages in the report. We hope that we have done so without diminishing the value of the report, and the interest it has created among its readers in the past.

It still remains a fact that many persons who may read this report do not have a clear conception of the Department of Mineral Resources, its organization, history, functions or duties. For the benefit of these people I am again starting the report with an outline and review of the Department.

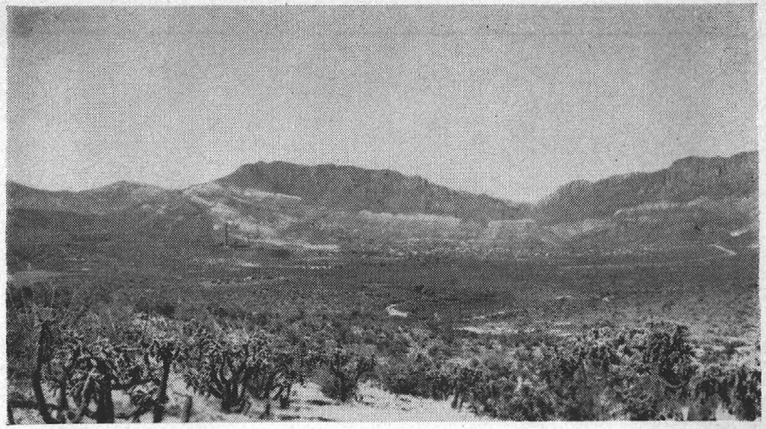
Respectfully submitted,

CHAS. H. DUNNING
Director

Phoenix, Arizona
September 19, 1947



The old time prospector with his burro, bacon and beans and gold pan, may be gone with the passenger pigeon. But a bit of incentive could bring forth a new race of prospectors with Jeeps, electronic machines, ultra-violet lamps, and Geiger counters.



Superior, Arizona from the distance. Note smelter stack.

The start of a large open pit mine.

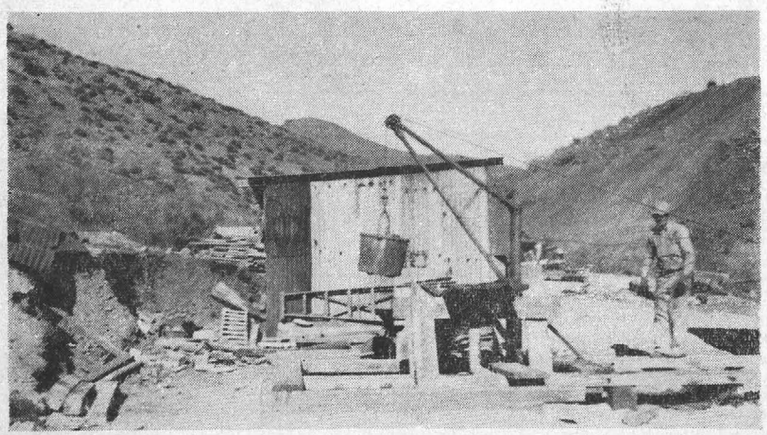
THE DEPARTMENT

Law and History

The Arizona Department of Mineral Resources was creatated by the fourteenth legislature in House Bill No. 103, Chapter 27, which became a law on March 1, 1939, and functioning started immediately thereafter.

The following appropriations have been provided by the legislature since the organization of the department:

July 1, 1939 to June 30, 1940	$30,000.00
July 1, 1940 to June 30, 1941	30,000.00
July 1, 1941 to April 17, 1942	None
(During this period the Department was supported on a limited scale by private donations.)	
Apr. 17, 1942 to June 30, 1942	$10,170.00
July 1, 1942 to June 30, 1943	40,680.00
July 1, 1943 to June 30, 1944	33,000.00
July 1, 1944 to June 30, 1945	33,000.00
July 1, 1945 to June 30, 1946	28,252.00
July 1, 1946 to June 30, 1947	28,252.00
July 1, 1947 to June 30, 1948	33,125.00
July 1, 1948 to June 30, 1949	33,125.00



Large mines were once small mines or prospects

Purpose and Objectives

The Department was created for the purpose of furnishing aid in the promotion and development of the mineral resources of the state, with particular view to assisting small mine owners and operators along semi-technical and general economic lines. The Department cooperates with, but does not encroach upon the field of the private engineer or the more technical bureaus.

Many persons confuse the Department with the Arizona Small Mine Operators Association. There is no direct connection between the two. The Department is state financed while the A.S.M.O.A. is a membership organization having chapters in all mining communities. The two organizations work very closely together and it has been the policy of the Department to have its field engineers attend meetings of the A.S.M.O.A. throughout the state, where any operator having problems within the scope of the Department can interview the engineer and, if advisable, arrange a visit to his property.

Organization and Personnel

The Department is controlled by a Board of Governors consisting of five members from various parts of the state. These members of the Board of Governors serve without compensation. They outline the policies of the Department and employ the Director. The Director in turn employs such field and office force as is consistent with the appropriation and with the policies of the Board.

Coordination

While the Department has functions and objectives that are peculiar to itself, much of its service must be in coordination and cooperation with other state and government agencies. The Department also works very closely with the Chambers of Commerce both within Arizona and in other states.

FINANCIAL STATEMENT

A financial statement for the fiscal year July 1, 1946 to June 30, 1947 is attached herewith.

DEPARTMENT OF MINERAL RESOURCES

STATEMENT OF EXPENSES

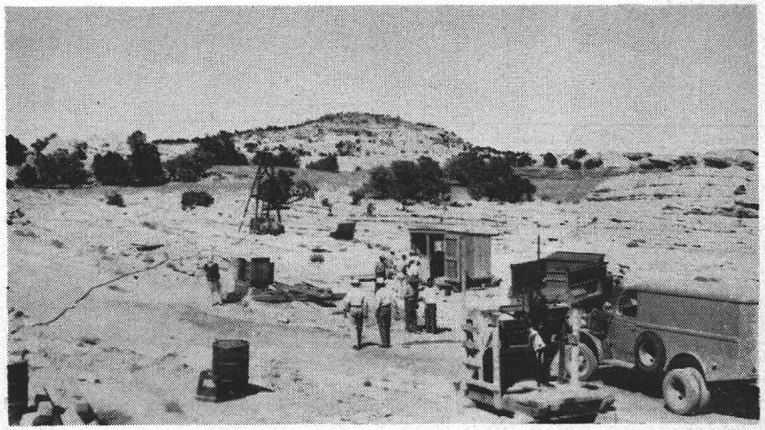
July 1, 1946 to June 30, 1947

	Appropriation for Year	Expenditures for Year	Balance Returned to State
PERSONAL SERVICES:	$19,880.00	$19,826.15	$ 53.85
CURRENT EXPENDITURES - TRAVEL:	5,400.00	4,797.74	602.26
CURRENT EXPENDITURES - OTHER:			
Rent		1,390.70	
Postage		255.00	
Tel. & Tel.		174.54	
Printing		455.72	
Equip. Maintenance		112.05	
Assays		127.25	
Office Supplies		173.55	
Insurance		81.71	
Miscellaneous		66.74	
	2,847.50	2,837.26	10.24
CURRENT EXPENDITURES-SUBSCRIPTIONS & DUES:	25.00	19.67	5.33
CAPITAL OUTLAY:	100.00	99.16	.84
	$28,252.50	$27,579.98	$672.52

requirements of expanding industrial demands and to make us secure and self-sufficient as a nation.

There are a great many restrictive conditions placed in the path of the mining industry today. Among these are excessive taxes, unreasonably SEC regulations, land withdrawals, and a host of minor directives and regulations. It is seemingly impossible to remove these restrictions in the near future, but the premium price plan did tend to balance the situation so that some incentive remained to find and develop new mines.

Most mining people have an inborn rugged individualism or they would be in some other line of business. Few favor subsidies as such; few want something for nothing, or more than their share. But most of them realize that unless various restrictive conditions and influences can be eliminated, some sort of artificial incentive is necessary to bring about the development of new mines and to sustain the metal production so essential to our national economy and security.



Drilling for copper in Northern Arizona.

MINERAL BUILDING

Mineral Building and Offices of the Department. State Fairgrounds, Phoenix

Offices

During the legislative session early in 1947 the legislature passed a law and made an appropriation of $7,900 permitting the Department to install its offices in the Mineral Building at the State Fairgrounds, Phoenix. Arrangements were made with the State Fair Commission whereby the Department pays a nominal rent for the office space.

Excellent offices of a permanent nature have been installed and the arrangement is working out very satisfactorily.

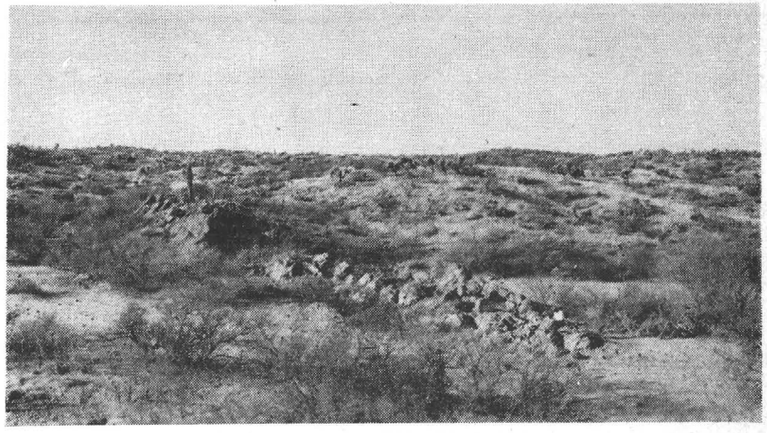
The mineral exhibit already on hand is widely acclaimed for its beauty and for typifying Arizona commercial ores, but it is somewhat lacking in the variety of specimens included. The Department will augment and round out the collection as specimens are available without cost, or can be gathered by its field force.

Heretofore the exhibit has been open to the public only during fair time, or on special request, but the Department now plans to have it open during all business hours under the care of a part time custodian. There have already been a great

many visitors, and with the coming of cooler weather and the tourist season, we expect a large increase.

State Fair:

The State Fair will take place this year from November 7th to 16th and the Fair Commission has again arranged with Mr. Arthur Flagg, head of the Arizona Mineralogical Society, to supervise the mineral exhibit. Mr. Flagg has amplified the previous arrangements, and this year will have competitive exhibits as well as private displays. We feel that the attraction will exceed anything in the past, and the Department is co-operating with Mr. Flagg in every way possible.



A typical ore vein outcrop

Committee Hearing

In September 1947 a Select Committee on Small Business, of the House of Representatives, will hold hearings throughout the west. The Arizona meeting will be in Phoenix on September 29th. Suggestions and criticism from those in the field are invited.

The interim report of this committee indicates that they are attacking the task set before them with vigor and understanding. This task is to survey the field and make recommendations that will increase our mineral resources and production, and thereby, our national self-sufficiency and security.

It is interesting to note that most of the recommendations incorporated in their interim report are the same as the ideas and "economics" that the Department originated and has been trying to promulgate for several years.

We hope the findings of this committee will bear weight in future acts of Congress and in directives and regulations instituted by Washington authorities.

Premium Price Plan

The Presidential veto of the extension of the Premium Price Plan was an unexpected blow to the small mining industry. It appears that from thirty to fifty of the small mines in the state will be forced to close. The total production from these mines is in the neighborhood of 125 cars per week, totalling over $3,000,000 per year.

While this production is not a big factor in the total output from Arizona, and no doubt those who were employed can find other work, the worst feature is that development will be curtailed and incentive for finding new deposits will be removed. Also, the metal production from many marginal orebodies and partially mined orebodies, greatly needed in our national economy, will be irretrievably lost.

Arizona and our whole nation need new mines. We need them to take the place of those becoming depleted; to fill the

WASHINGTON ACTIVITIES

Laws Attempted

Approximately fifty bills pertaining to mining were initiated in the two houses of Congress. Many, of course, were duplicate or companion bills. Duplicate bills of those passed will drop out, but other bills initiated will retain their status quo for the further sessions of this Congress.

Bill Passed

Bills passed by Congress directly affecting mining are as follows:

To extend the Premium Price Plan (later vetoed by the President);
To repeal the excise tax on copper;
To restore percentage depletion for certain minerals and and others;
To extend import contrals on antimony and tin;
To extend life of RFC for one year. (However Section 14 pertaining to mining loans was deleted);
(In Alaska only)—Bills suspending assessment work and permitting mining in beds of navigable streams in Alaska.

Reclaiming and remilling old mill tailings

	GOLD	SILVER	COPPER	LEAD	ZINC
	oz.	oz.	lbs.	lbs.	lbs.
1936	322,408	8,386,043	422,550,000	21,376,000	7,178,000
1937	332,694	9,422,552	576,956,000	24,708,000	10,052,000
1938	305,043	7,479,153	421,594,000	21,142,000	11,628,000
1939	316,453	7,824,004	524,224,000	21,542,000	13,422,000
1940	294,807	7,075,215	562,338,000	26,532,000	30,912,000
1941	315,392	7,498,260	652,634,000	31,276,000	32,986,000
1942	253,651	7,064,467	786,774,000	29,544,000	37,044,000
1943	171,810	5,713,889	806,362,000	27,454,000	39,354,000
1944	112,162	4,394,039	716,606,000	33,414,000	58,154,000
1945	77,223	3,558,216	574,406,000	45,734,000	80,452,000
1946 (est)	78,300	3,400,000	582,000,000	47,500,000	85,000,000

ARIZONA'S PLACE IN METAL PRODUCTION

General

During the year of 1946 Arizona produced $114,527,200 in gold, silver, copper, lead and zinc, and probably an additional $30,000,000 in minor metals and non-metallics. This constitutes an increase of about 10% over the previous year.

The first half of 1947 shows production still increasing at an accelerated rate, and barring unforeseen contingencies, 1947 should break all records.

In total value of combined non-ferrous metallic minerals Arizona leads all the states. In the production of copper the state ranks first; in the production of silver it is third, and in gold fifth. Among western states it is second in zinc and third in lead.

The tabulation on the opposite page shows Arizona's production of gold, silver, copper, lead and zinc for the past ten years.

Gold and Silver

Higher operating costs in the face of a stationary price for gold and a nearly stationary price for silver have practically precluded the operation of straight gold-silver mines, and the production obtained from Arizona has been mostly as a by-product in the mining of base metals. Before the war there were some 900 mines producing gold and silver in Arizona. Following the war very few of these resumed operation unless they had other supporting metals.

There is probably no other question asked so frequently of our Department as "When is gold going up?". Press articles, some public officials who might know, and some columnists with hunches or tips, frequently predict that the price of gold will be arbitrarily raised in the near future. Authoritative sources, however, definitely deny that any such move is being considered.

The subject of gold and silver is exceedingly deep and can scarcely be discussed here. Some feel that the price should be raised to some sort of parity with increased production costs;

MISCELLANEOUS ACTIVITIES

Field

Field work has continued during the year much as heretofore, but starting July 1, 1947 more stress is being laid on the examination of mines, and meetings will be attended less frequently.

During the year the Department has assisted in placing several good mines or prospects in competent hands and, generally speaking, our recommendations have worked out well. We feel that this is one of the most important functions of the Department, and with the changes in organization that have taken place we should be able to accomplish more in the future.

The government is no longer building mine access roads, and RFC mine loans have been greatly curtailed, so our activity in assisting operators along these lines is not as great as it was during the war. Four RFC loans totalling $33,200 were approved during the year, but since Congress extended the RFC act with the deletion of the special mine loan clause (Sect. 14), it is now possible for mines to obtain loans only on what amounts to a regular banking basis. Washington headquarters have recently announced that their field office in Arizona will be maintained to service commitments already made.

Office

Our monthly list of active mines has been in such demand that for budgetary reasons it has become necessary to divide the mailing list into a bi-monthly basis. This service seems to be appreciated, especially by those in the business of furnishing equipment and supplies to mines.

Our files of mines are continually being revised and brought up to date as accurate information from the field is obtained. Consequently our ability to furnish to those with capital the type of information they desire is continually being increased, as is also their confidence in us.

It is of the utmost economic importance that Arizona should maintain or increase its healthy mineral production. Those who advocate a policy of assessing the mine "all they can stand" seemingly forget that mining is a competitive business and that metal prices are not set by Arizona producers. No mine lasts forever and new ones must be developed to take the place of those that become depleted.

The development of a new mine requires a large amount of money, and if mining in Arizona is at a competitive disadvantage with other states or nations, mining money will be diverted to those other areas with the result that mineral production and the taxes the industry can pay will gradually decrease here.

The mining industry is different from other industries. It is not like raising an annual crop or starting a factory. Mines must be both discovered **and** developed.

Arizona has the possibilities for an abundance of new resources and for increased production along both metallic and non-metallic lines. It is also a fact that there is an abundance of venture capital prepared to take the speculative chances pertaining to the development of new mines. We should, however, take care that we do not cause this capital to become gun shy of Arizona, and end up in a position where other industries, perhaps less able, must carry the tax burden heretofore carried by mining.

others advocate permitting a "free" market—both domestic and foreign, which would enable producers to take advantage of foreign prices. Some can't see the policy of expending energy to dig gold only to bury it again at Fort Knox, and some foreign diplomats brazenly suggest that we divide up our gold and start all over again.

The United States owns about two-thirds of the world's gold supply, or 21.5 billion dollars at $35 per ounce, and, whether or not it is a technically useless asset, history has long proven that gold and its step-child, silver, are the only mediums of exchange in which most of the population of the world has confidence. An imaginative story recently circulated is rather to the point. It pictures an archeologist unearthing a vessel of paper currency in Egypt or Greece. When issued it was the best in the world. Today is it worthless. But if it had been gold it would have even greater purchasing power now than when it was buried. No wonder our currency takes a premium everywhere. History repeats itself and continually proves the enduring value of metallic money as against "managed currency".

The situation regarding silver is somewhat different. Silver has come into such great industrial use that consumption for industrial purposes now exceeds total production. The price of foreign silver, however, is not controlled by the supply and industrial demand. One has but to witness the gyrations in the world price to realize that silver has become an international political football. During the last year the U. S. Mint buying price has been 91 cents for domestic production, but the foreign price has fluctuated wildly in the range between that price and 60 cents.

Copper, Lead and Zinc

COPPER production in Arizona comes mostly from very large, long-life mines. Arizona exceeds all other states in the production of copper by a very wide margin.

The future of Arizona as the nation's greatest copper state looks bright. As technological advances are made there seems no reason why Arizona cannot maintain its envied position in copper production, especially if restrictive conditions can be ameliorated and a bit of incentive given to the discovery and development of new mines. We would, in fact, increase our copper

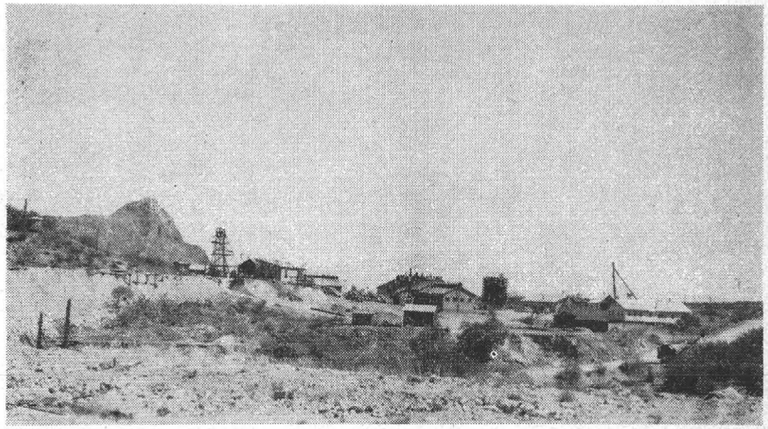
resources faster than production could deplete our potential reserves.

Although the bulk of Arizona's copper production may come from a few large mines, those who claim it is economically useless to encourage the small mines seemingly forget that the present large mines will not last forever and that all large mines were once small mines or prospects.

LEAD production in Arizona is increasing rapidly, largely due to the advance in price. Deposits that were passed over by the prospector as worthless when lead sold at 4 or 5 cents a pound may now be of great economic importance with the price at 15 cents.

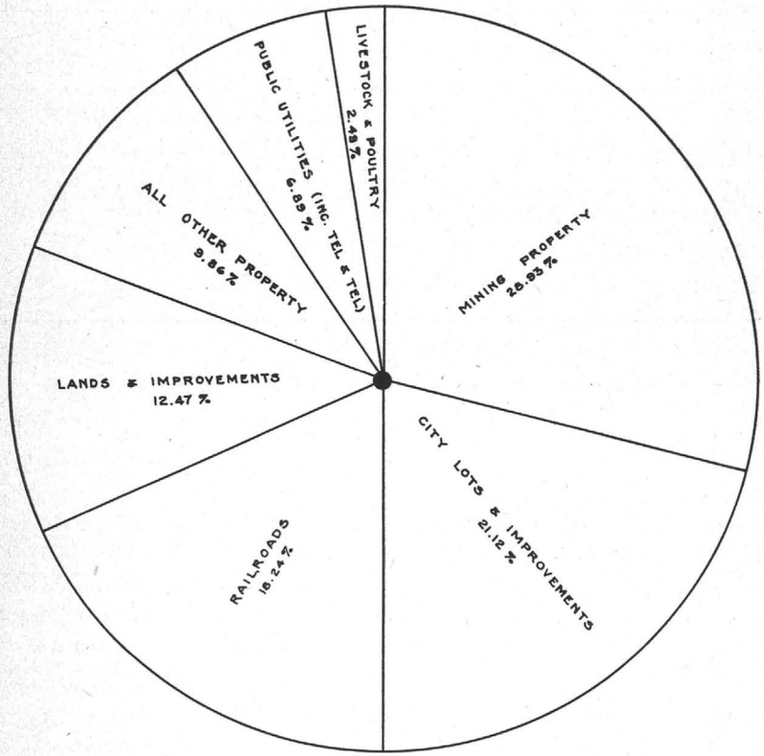
If there could be confidence in the future price of lead sufficient to warrant heavy investments that might require some years to be returned, there is no reason why Arizona could not become first among the states in the production of lead, and fill an important niche in our national requirements.

It has been the Department's policy for several years to lay stress on the long range possibilities of lead. We have felt that the price of lead has a bright future for the following reasons: There are no very large lead mines that could oversupply the



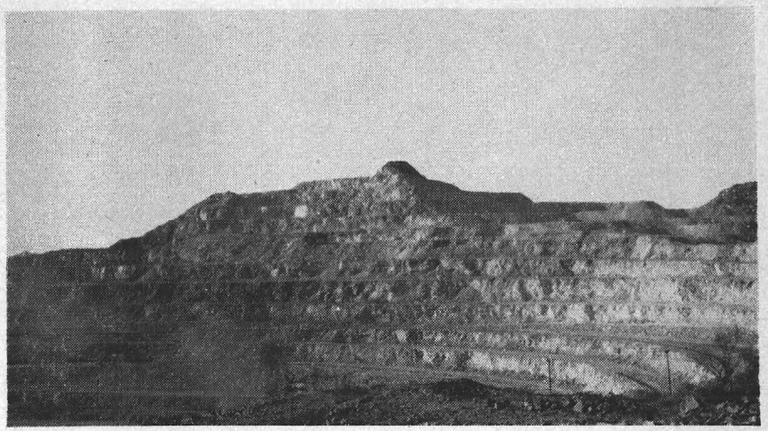
A typical moderate sized Arizona zinc mining operation

The chart below shows the relative position of the mining in Arizona in assessed valuation, which determines taxes for 1946:



All Mining Property	$146,397,024
Livestock and Poultry	12,620,638
City Lots and Improvements	106,909,824
All Other Property	49,930,012
Railroads	92,350,836
Public Utilities (Inc. Tel. & Tel.)	34,834,116
Lands and Improvements	63,130,750

IMPORTANCE OF MINING TO ARIZONA



A large open pit copper mine

Since statistical records have been kept, up to the end of 1946, Arizona has produced nearly four billion dollars worth of gold, silver, copper, lead and zinc. This production is divided as follows:

Gold	$ 271,809,764
Silver	215,943,025
Copper	3,298,071,316
Lead	47,946,324
Zinc	53,259,661

Such wealth of production has, of course, been the prime factor in the development of this youngest state.

market; a large proportion of the lead supply, such as is used in paint and ethyl gasoline, does not come back as scrap; new uses such as shields against atomic particles are in the offing.

Increase in ZINC production in Arizona has been the most spectacular of all, and Arizona now ranks second in production among western states. This has been despite the fact that Arizona must ship its high grade zinc or concentrates to other states for treatment, under a high freight rate and other high costs.

This increase in production has been due to technological advances, to the increase in price, and to the depletion of deposits in other states.

Premium prices entered into the zinc situation in large measure, but now even though premiums have been withdrawn, the zinc industry here will probably find a way to continue production and to expand. Further technological improvements and nearer outlets would help.

Miscellaneous Metallics

During the past year there has been no incentive to produce, and little production, of such metals as manganese, mercury and tungsten. Arizona abounds in low grade resources of all of these. As long as our State Department fails to realize the importance of an actively producing domestic industry in these vital metals, and prefers to sacrifice these minor industries on the block of political or trade expediency, there is little that can be done here to obtain increasing resources or production.

During the last few months, however, probably because some foreign sources of supply have been diverted to other nations, there has been an enlivened demand for tungsten and manganese, and a renewed interest in those fields. The Department is still awaiting the setting up of regulations and specifications from Washington that might permit these metals to be mined and placed in strategic stockpiles.

Uranium

Most in the spotlight of public interest among metals during the past year has been uranium. Copyrighted press stories

about uranium deposits in northern Arizona created some little stir, and as the discovery was made with the cooperation of this Department we have had many calls for more detailed information.

While the people of our nation were most anxious to know how secure we were in uranium resources, for a long time no ruling could be obtained from Washington that would encourage or even permit exploration and development. Lately, the Atomic Energy Commission has given the green light to finding and developing uranium and other "fissionable" materials, and requires only that a license be obtained before actual shipments are made. The price, however, is little, if any, higher than the pre-bomb price; hardly in parity with other metals, and will not stimulate search and development.

Preliminary sampling of the prospect in northwestern Arizona indicates that the deposit may be extensive and contains around 1.5% uranium. At present price schedules this ore would be worth about $28.00 per ton delivered at a Colorado treatment plant. Because of the remoteness of this uranium deposit, the mining and delivery cost would exceed the price, so there is no incentive to explore the property further or search for similar deposits in that area. In the meantime most of our uranium is being purchased from foreign countries.

Surprising as it may seem, uranium is a very common element in the earth's crust. According to Lindgren's extensive studies it is twice as prevalent as zinc, four times as prevalent as lead and almost as prevalent as copper. The trouble is that nature scattered it quite widely instead of concentrating it in a few places. Any nation can obtain all the uranium it wants if it is able to disregard costs. So there seems little use for the hush-hush attitude that has prevailed. It does seem, however, that our country should develop adequate and independent uranium supplies of its own, even if it costs a bit more to produce here.

An interesting feature of the uranium deposit in northwestern Arizona is that the mineral has been classified as "torbernite", a uranium copper phosphate, while the uranium mineral

Present capacity is 18-20 tons per hour, and the treatment consists of drag lining, crushing in hammer mill, drying, scalping by screens, and air separation into various sizes and grades. Most products are shipped in bulk, but very fine sizes need to be sacked. The products have to be hauled six miles for rail loading.

This deposit produces one of the highest grade and purest products in the United States and is in demand for foundry molds, glass and ceramic manufacture, and for scouring powders.

General

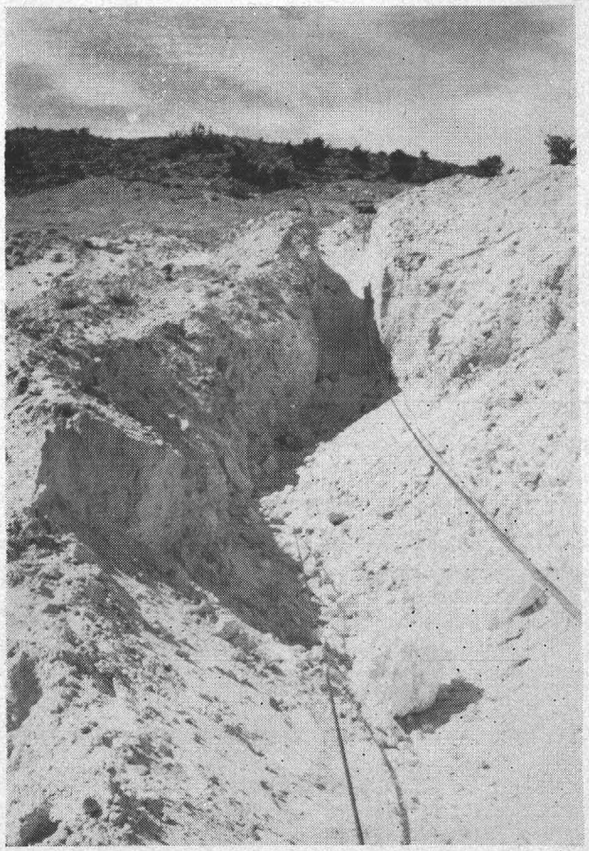
On the whole, the growth of the non-metallics industry has been steady and healthy. Demand and inquiries are increasing and we have frequent inquiry for many items we cannot yet furnish, or in which we cannot economically compete—such as talc, bentonite, special feldspars, phosphate rock, kaolin, etc.

However we do have superior quality in some items that offsets our locational disadvantage, and the production of these items should have a rapid growth and play an important part in the state's economy.

Silica

A new industry that gives promise of becoming of considerable importance in Arizona is the production of high grade silica. Recently an association of Phoenix business men incorporated themselves into a concern to produce silica from a known deposit at Meteor Crater in northern Arizona.

Technological and marketing details have been worked out and contracts or orders now offered them appear to justify an increase in plant capacity of several times the present output.



First operations. Meteor Crater Silica.

prevalent in northeastern Arizona is "carnotite", a uranium-vanadium compound. While carnotite does not fluoresce under the ultra violet light, torbernite does, and this phenomenon may aid greatly in the search for new deposits. Generally speaking, only a few uranium minerals respond to the ultra violet light. The Geiger counter, however, would be quite infallible in the search for, or appraisal of uranium prospects.

ARIZONA NON-METALLICS

Asbestos

Of approximately fifteen asbestos properties located within fifty miles of Globe, Gila County, Arizona, four operated on an uncertain schedule employing, altogether, about sixty men. In addition there were three custom mills in operation part time, two of which, the Globe Asbestos Company and the General Asbestos Company, are located in Globe and the other, the Regal Asbestos Company, is northwest of Globe.

The main trouble with the asbestos industry during the past year seemed to be prices and market conditions for the most common type of fiber found in the Gila County district. By far the greatest market was in the shingle fiber which ranged in price from $14.50 to $42.50 per ton of fiber. These prices are too low to permit the mines to operate under existing conditions. With cheaper power, better transportation and a more stable market, it is possible that several properties in this district could operate and employ a substantial number of men.'

Barite

The Arizona Barite Company of Mesa continued in full production during the year with an active demand for its product.

Some idea of the use and demand for barite may be gained when it is realized that fifty-two **carloads** of barite were recently used in drilling **one** deep oil well in Texas.

The Arizona Barite Company is planning to add flotation equipment to its present plant near Mesa in order to utilize a large amount of low grade ore that exists along with the high grade ore in their mine near Granite Reef Dam.

Gypsum

Mining of gypsum near Winkelman, and processing at Phoenix continued actively throughout the year.

Most of the gypsum mined in Arizona is used in agriculture as a soil conditioner, but the amount used for plaster and fabricated plaster products is increasing.

The Department has had some inquiry for a pure high grade gypsum known as alabaster, and has referred inquiries to those who might be able to produce such a grade.

Mica

An active demand has continued for ground mica and three mines have been in production in the state. One of these is in Mohave County, one in Maricopa County near Buckeye, and one in Pima County near Ajo. Each is equipped with a grinding and screening plant and produces various sized or graded products.

Perlite

Interest in perlite has accelerated during the year. Some months ago the Department compiled a mimeographed booklet on perlite. Requests for this bulletin were so much greater than anticipated that the supply was soon exhausted and a re-run was made. This in turn was exhausted and many requests continue to be received. We are planning to put out a new edition in the near future.

During the year a group of persons interested in perlite organized the "Perlite Standards Association" with a view to bettering the perlite industry through standards in processing and marketing. A meeting of the organization was held in San Francisco in June 1947. Your director was unable to attend this meeting but was named as a member of the advisory committee.

It is hoped that this organization may be able to help the industry in avoiding some of those difficulties and setbacks so often prevalent in any new industry.

In Arizona the Chemi-Cote Perlite Company has continued its pioneer work with success and with increased demand. They are now planning to move their plant from its present location in the downtown area of Phoenix, where they are subject to many difficulties and restrictions, to a new location close to the mines at Superior. They will be better able to supply their demand in their new location.

The Western Perlite Company completed its plant at South 15th Street and S. P. Tracks, Phoenix, and reports that it is operating successfully.