



CONTACT INFORMATION

Mining Records Curator
Arizona Geological Survey
1520 West Adams St.
Phoenix, AZ 85007
602-771-1601
<http://www.azgs.az.gov>
inquiries@azgs.az.gov

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01/04/96

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: COPPER HILL

ALTERNATE NAMES:

AZ COMMERCIAL PROPERTY
BLACK HAWK PATENT MS 524
EUREKA PATENT MS 2593
COPPER HILL PATENT MS 535

GILA COUNTY MILS NUMBER: 540

LOCATION: TOWNSHIP 1 N RANGE 15 E SECTION 15 QUARTER SE
LATITUDE: N 33DEG 25MIN 30SEC LONGITUDE: W 110DEG 46MIN 18SEC
TOPO MAP NAME: GLOBE - 7.5 MIN

CURRENT STATUS: PRODUCER

COMMODITY:

COPPER
SILICON QUARTZITE
URANIUM
SILVER

BIBLIOGRAPHY:

ADMMR COPPER HILL MINE FILE
RANSOME F L GEO GLOBE COPPER DIST USGS PP 12
1903 P 154
BLM MINING DISTRICT SHEET 171
USAEC 172-480 GILA CTY PRELIM RECONN REP 1953
PETERSON N P GEO & ORE GLOBE-MIAMI DIST USGS
PP342 1962 P 104-106, AZ MGN JRL. 11-1919P41
ELEVATORSKI E A AZ IND MIN 1978 P 31



Copper Hill Silica Flux - Flux for Inspiration

6/20/80



Copper Hill Mine Gila County - Flux for Inspiration

6/20/80

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1988

TRIPLE NICHOL INC.

R.R. 1, Box N 123, Globe - Phone 425-7006 - Employees 75.

President Monty Nichols

Copper Hill Mine T1N R15E Sec. 15
Silica flux for copper smelters - Northwest of Globe.

Reymert Mine T2S R11E Sec. 22
Silver bearing silica flux for copper smelters - West of Superior.

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1989

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President Monty
Nichols

Copper Hill Mine TIN R15E Sec. 15

Silica flux for copper smelters - Northwest of Globe.

ABSTRACTED FROM ADMMR ACTIVE MINES DIRECTORY, 1992

Gila County

KESSON & KESSON

1201 E. Marshall, Phoenix, AZ 85014 - Phone 277-9883 - Employees: 12.

Owner David Kesson

Copper Hill Mine T1N R15E Sec. 15

Silica flux for copper smelters - Northwest of Globe.

Magma Limestone T1S R12E Sec. 35

Limestone for San Manuel lime plant - East of Superior.

1915 ARIZONA COMMERCIAL

Recent Developments at Property Have Been Very Favorable—Has Already Made a Good Small Mine

Recent developments at the Arizona Commercial property have been very favorable. The drift on the 1400-foot level of the Copper Hill property is showing an improved quality of ore and an upraise from that level disclosed 30 feet of 15% sulphide ore.

The Eureka shaft has been opened now, down to the 700-foot level and ore is being encountered, particularly in a drift east toward the Superior & Boston. The Eureka shaft is opening the property just east of the ore body which the Iron Cap is working and which has produced some very high grade ore.

An upraise is being made from the 12th to the 10th level of the Copper Hill and when completed the management will have five levels in which to stoze ore. Drifting on the 1400 is not being pushed rapidly owing to the fact that water comes in and time must be allowed for draining it out. Altogether, Arizona Commercial looks well and has already made a good small mine.

Arizona Commercial

This company earned \$211,774 in 1915 or equal to 81c per share. During this period the company produced 44,353,094 tons of ore from which there was extracted 3,592,274 pounds of copper; 16,511,514 ounces of silver and 232,624 ounces of gold. Regarding development, on the tenth level a drift was run about 700 feet to the Budget Fault which cuts the vein about the center of the property. The possibilities of finding ore in commercial quantities on this level east of the fault are good, so says President Chas. S. Smith. The directors have decided to install a power plant and additional pumping machinery the last of this week will be in the neighborhood of \$75,000.

April 1916

Arizona Commercial 1915

The advance in Arizona Commercial is on receipt of advice that the management has found the ore in the upraise from the 1400 foot to the 1300 foot level. This is what the management has been looking for and expecting.

Profits of the Arizona Commercial Company for the first 8 months of this year have averaged \$17,000 monthly, or at the rate of \$341,000, or \$2.10 per share, per annum. With an increase in output early next year dividends of 50 cents quarterly would seem a natural expectation as the company has a comfortable working capital of about \$600,000 and no large construction expenses ahead.

Arizona Commercial 10-1916

This company has declared a quarterly dividend of 50c a share, payable October 31 to holders of record Oct. 15. In declaring this dividend the directors have taken into consideration the prospect of paying federal war and excess income taxes.

ARIZONA COMMERCIAL

Strength Based on Reports of Excellent Underground Conditions and Output 1915

The strength in Arizona Commercial today is based on excellent reports of underground conditions and output. The most important development for some time has been the cutting through the Budget fault on the twelfth level. The superintendent reports that the ore is found richer on the east side of the fault, thus showing its continuation. The effect of the fault has been found merely to have been to displace the ore body vertically 150 feet and laterally 20 feet. The ore body was continuous through the fault and is a disseminated chalcopryite and glance averaging 6 per cent for the entire width with the best ore on the footwall or east side.

The developments on the 1400-foot level have not fulfilled the hopes of the management yet but Superintendent Boy is confident of the outcome of developments there. A cross cut is being run from the Eureka shaft and it is expected to get ore soon, the same as in the Iron Cap property adjoining.

Production for the first eight days of August was 1,400 tons and it is expected to maintain that rate of output. Underground conditions generally are excellent. The grade of smelting ore is about 5½ per cent copper and the concentrating ore is running 4 per cent. The last 35 feet of the raise from the 1300-foot level to the 1400-foot was in ore.

Arizona Commercial 11-1915

At the present time Arizona Commercial is turning out 500,000 lbs. of copper per month which results in a splendid profit after the payment of all charges.

Drifting on the 1400-foot level continues to show excellent results and there is every reason to believe that the company is assured of developing a profitable mine.

In spite of heavy exploratory and development expenses Arizona Commercial has accumulated a cash surplus of approximately \$150,000.

COPPER HILL
(Arizona Commercial Mine)

GILA COUNTY

AEC 172-480, p. 50. Black Hawk. In AEC files. U_3O_8 0.014

ABM Bull. 125, pp 24, 28, 29, 35-38

ABM Bull. 129, pp 21, 28, 29.

USGS P.P. #12, p 154

USGS P.P. #342, p 104-110

ABM Bull. 180, p. 149

Arizona Mining Journal 1-1-22 p. 15

" " " 5-1-22 p. 22

" " " 12/1/22, p. 37

" " " 12/15/22, p. 19

~~MAP - Upstairs in the flat file Drawer 7 Arizona Commercial Mining Co. -
Copper Hill Mine. (AZ Library and Archives map)~~

Maps 0004-07 thru 0004-11

Located 0465-02-01

MINES NEAR COPPER HILL, ARIZONA

The Amount of Development at Arizona Commercial and Superior and Boston Is Described with Some Detail.

One of the conspicuous features of mining at Globe during the last year has been the development of the vein system to the east of the Old Dominion ground. This is not a new part of the camp for some mining was done on the main vein years ago but during the last year the amount of work done has been far greater than in any previous year. This development work has found considerable ore and the vein system is giving much promise, but the public seems to have lost all sense of proportion in regard to things when it came to placing value on the shares. A little knowledge is a dangerous thing, and the finding of a little ore often has a dangerous effect when everything is done to excite the imagination as to what this ore might develop into.

As a result of all this development it has been found that the Black Hawk-Great Eastern veins has considerable promise at depth, while in two other veins in that part of the camp ore has been found. In a nut shell that is about all that the development has shown so far and for that matter about all that it could be expected to show in that length of time. But from the stock quotations and the way that they soared for a while, one would think that another Anaconda was being shown up.

SELLING PRICE OF ARIZONA COMMERCIAL.

Since the beginning of the year Arizona Commercial has sold as high as \$50.75, while Superior & Boston sold as high as \$18 a share. There are 120,000 shares in the Arizona Commercial and an indebtedness of about \$450,000, while in the Superior & Boston there are 248,827 shares outstanding. Consequently within the year the public has seen fit to judge these mines that are little more than prospects as having a valuation of \$6,500,000 and \$4,478,000 respectively. It makes one wonder what the public can be thinking of. There used to be a time when a mine had to be a pretty good one to be worth a million dollars, but since it has been possible for brokers to boost and put up the price of the stock by means of market letters and interviews with "prominent mining men" who have just been through a certain mine and are sure that they never saw the equal of such and such a mine, it seems necessary for a mining property to be kited to valuation in the millions before the public will take any notice of it.

Even at the time that I visited the mines in question the shares were selling at \$35 and \$15.50 respectively. Since then there has been a decided drop in the shares of the Arizona Commercial company as the share at present are selling only at about \$19 at present, while the shares in Superior & Boston are quoted at about \$13. The recent drop in the price of Granby, the slump, in Utah Consolidated, North Butte, Calumet & Arizona, and the notorious Utah Copper from its high mark of \$60.50 even after the bolstering that it has had from Boston Consolidated and the shares that it succeeded in coaxing from holders of Nevada Consolidated stock, the fall in Shannon, Old Dominion and other copper stocks, all seem to indicate that the public is getting some idea of the return that it must receive on a mining share in order that it can get a fair run for its money. This is indeed encouraging to mining in general provided that the next fake scheme that the market riggers get up to send the price of stocks soaring is not nibbled at by the public as was the much talked of copper merger that for a while succeeded in getting practically all the mining papers to take stock in it, although even a tyro in market affairs could see that the smoke was entirely too much for the amount of action that was being obtained in the details of the merger itself.

The two main companies in the part of the Globe camp under discussion are, as has already been intimated, the Arizona Commercial and the Superior & Boston. But on account of the favorable developments in these properties the Arizona Michigan Mining Company is prospecting for the continuation farther to the east of the Superior & Boston ground, while the National Mining Exploration Company is prospecting to the west of the Arizona Commercial. As a result of this activity a branch of the Arizona Eastern is being built into that part of the camp. This will soon be completed.

The main prospecting of the Arizona Michigan is being done at the Telfair shaft where it is hoped that the crosscut driven to the Old Dominion fault zone will find ore, but as it is only 500 ft. below surface it seems to be too high to get below the leached zone. As yet it has not reached the fault zone, I believe. The National company had a small two-compartment shaft down about 850 ft. when I was there and crosscutting was to begin soon. But it would seem from the situ-

ation of the shaft that even if the vein was found and ore in it of good grade that there would be a strong chance that the ore found in that part of the company's ground would apex in some of the Arizona Commercial claims. Both the Arizona Michigan and the National are prospects pure and simple. I do not believe that they make any pretense to be anything else. On the other hand the two others are valued as if they were mines.

ARIZONA COMMERCIAL.

The Arizona Commercial owns two areas of ground, one near the Gray mine of the Old Dominion company and the other farther to the east next the Superior & Boston. At present all the work is being confined to the latter ground where the Black Hawk vein has been opened to the seventh level. Near the Gray it owns five claims in which a sulphide vein said to be 10 to 12 ft. wide has been prospected to a depth of 800 ft., but the workings are now under water. So probably the ore in the mine is as yet only of small quantity. At the Black Hawk shaft the company owns an area three claims wide and two claims long that takes in about 3000 ft. along the Black Hawk vein and about that length also along the Old Dominion fault zone. The company as yet has done no prospecting on the Old Dominion zone.

The Black Hawk-Great Eastern vein is a shattered zone in the sediments that is about forty feet wide. In this crushed zone the ore is found along one side or the other or sometimes in the center. The ore is a carbonate being thoroughly oxidized down to the bottom level. The vein strikes east of north and dips about 55 deg. to the northwest. At surface the country is covered with diabase, but in depth the sediments of the Apache group, supposedly of Cambrian age, come in. On the 500-ft. and the 600-ft. levels the wall rocks are either limestone or shale, while on the 700-ft. the foot wall is all quartzite and the hanging wall is partly quartzite and partly shale. These are the levels being worked now.

The mine was worked down to the 500-ft. level by means of the old Black Hawk incline shaft, but it was decided to develop the mine by means of a vertical shaft as the Black Hawk was not in very good condition. This vertical shaft was located so that it cut the vein and as at Globe the water is confined almost entirely to the veins, there was a lot of trouble with water that might otherwise

have been avoided. At one time the flow of water was over three thousand gallons a minute, but gradually that has diminished until it is now only about 2,200 gal. a minute.

The mine is now well equipped with pumps, but at first when the water was struck there was considerable difficulty in keeping the mine from flooding. In order to handle the water there are two columns provided, one an 8-in. and the other a 12-in. pipe. For pumping in the shaft there are two 14x8x12-in. Prescott sinkers having a capacity of 650 gal. a minute. On the 500-ft. level there is a 500-gal. Prescott station pump, on the 600-ft. level a 750-gal. and 1000-gal. Prescott station pump and on the 700-ft. level a 1000-gal. Prescott. All these pumps are of the triple-expansion, duplex, pot-valve type. At present the pumps are run by steam from the boilers at the collar of the shaft, but it is planned

from the upper stopes where there is much iron in the ore and the grade is therefore lower than in the copper stopes. Yet this ore has to be mined so as to get the iron necessary for fluxing the ore. But even when using considerable of this iron ore 15 to 20% of limestone has to be added to the furnace. About 150 men are working underground. **EXTENT OF THE ORE DEVELOPED.**

On the 500-ft. level a stope 200 ft. long has been developed in which the ore in places swells to a width of 25 ft. but the average width of the ore is not over 15 ft. This is the lower-grade, the hematite, ore with copper carbonate scattered through it. This ore extends through the 400-ft. level and some distance above. On the 600-ft. level there are four stopes with good carbonate ore in them. In all, these stopes have a length of about 625 ft. The ore varies from three feet in width up to 20 ft.

of ore developed in the mine when I was there, but it appears that on account of ore shortage the smelter is to be shut down, according to late reports in the Boston Financial News that seems to be fighting the battles of Arizona Commercial. It surely appears that the money that was spent on the smelter could have better been spent in the mine as the developments do not warrant the building of a smelter, and while the smelter is well designed and, although small, is well equipped, still it does not seem that the saving that can be made by the company's doing its own smelting can be very great.

The Black Hawk is a good, strong vein. The ground being developed by the Arizona Commercial has much promise, but the developments are not such as would justify anything but the expectation of a good, small mine. Its value is purely speculative, and it is very questionable whether it has anywhere near its present market-value.

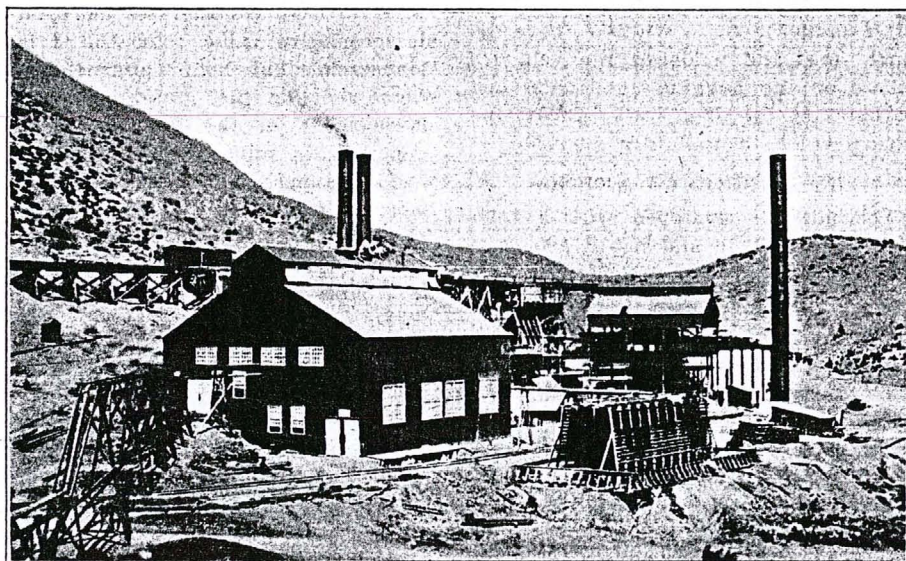
SUPERIOR AND BOSTON.

The Superior & Boston while it has been boosted considerably on the market has not been as conspicuous in that respect as has been the Arizona Commercial. The S. & B. owns a much larger area of ground than does the Arizona Commercial and although the length that it has developed of ore on the main vein, which is called the Great Eastern instead of the Black Hawk as in the ground of the other company, is not nearly as long, still it has five veins passing through its ground and on three of these veins ore carrying better than 4% copper, which probably is about as low as these companies can mine at a profit, has been developed.

These veins from north to south are the Old Dominion, Great Eastern, Limestone, Black Oxide, and Iron King. All these dip to the north except the Old Dominion, which is practically vertical where cut on the fourth level from the McGaw shaft, dipping 88 deg. to the south. At that point the vein matter was 21 ft. wide but was badly leached and carried no copper, although it assayed 3 oz. in silver, and was heavily stained with iron.

This company shut down during the slump and did not resume work until Sept. 15, 1909, but by Feb. 8 the company had begun to make regular shipments averaging up to the last of March about 90 tons a day, carrying about 9% copper, 5 oz. silver, 25% iron and 45% insoluble. This ore comes from the Great Eastern vein, where stoping is going on above the sixth level.

The main work is being done at the McGaw shaft, a vertical shaft having two 4½x5-ft. hoisting compartments and a



Arizona Commercial Smelter.

to run them from the central power plant at the smelter nearby. The cost of the pumping is about 10c. per thousand gallons.

The Eureka shaft is about 100 ft. west of the eastern end line of the group, and up to the present all the prospecting has been done to the east of the shaft for it is thought that the orebodies are more promising on that end of the vein than the other as they all have a pitch in that direction. The ore is mined by the square-set method and most of the filling is obtained from the vein itself. The cost of the ore is said to be about \$2.50 a ton delivered at the collar of the shaft, but this does not include the cost of development or of pumping which would bring the cost to double that amount. The mine was producing at the time of my visit there in March about 200 tons of ore a day that averaged about 6% copper. Considerable of this ore came

and has an average width in these stopes of about 9 ft. The bulk of the values are of course in the carbonate but there are some bunches of chalcocite found on this level that in a few instances have been two feet wide. Much of the ore has been mined above the 600-ft. level.

Development on the 700-ft. level has been held back greatly by the fight with the water, but that has been overcome now and the work was progressing with good speed at the time of my visit. The drift was following the foot wall and was in promising ground, but no ore had been found. Since then I have heard that the ore has been found on the 700-ft. level. A winze sunk from the 600-ft. level was in ore almost down to the 700-ft. level, it is said. No doubt ore will be found on that level and probably fully as much as on the 600-ft. level.

The superintendent stated that there was at least a year and a half supply

IRON CAP? For

5x7-ft. pump compartment. This was 610 ft. deep the last of March and was being sunk deeper. From this shaft it is planned to prospect all the veins at depth, although at present the Gardner vein is being prospected through the shaft by that name. From the McGaw shaft to the Gardner it is 2900 ft., from the McGaw to the Limestone shaft, lately abandoned as that vein will be prospected from the McGaw, is 1800 ft., while the Great Eastern shaft is 850 ft. from the McGaw.

LIMESTONE AND BLACK OXIDE VEINS.

On the Great Eastern, the Limestone and the Black Oxide veins commercial ore has been found, while on the other two veins there is a very promising surface showing. It is expected that the Old Dominion will soon be cut on the sixth level. The Limestone vein has a body of ore carbonate developed on it upon the third level from the Limestone shaft at a depth of 300 ft. This ore is 5 ft. wide and assays from 5% to 8% copper and carries much iron, but as it was thought more economical to confine the work as much as possible to a few shafts the company has decided to wait until the McGaw shaft has been sunk to a depth of 800 ft. before any more development is done on that vein.

On the Black Oxide vein ore has been developed not only in an oreshoot in the old Black Oxide tunnel workings but also on the fourth level from the Gardner shaft 485 ft. below the tunnel workings and 415 ft. below the surface. This vein wherever crosscutted is characterized by heavy iron and manganese stained filling. At several places the vein matter was found to have a width of 80 ft., but although the filling was heavily stained with copper no ore was found in the Gardner shaft until one of the crosscuts struck ore about the middle of March. This ore is 13 ft. wide and averages 8.7% copper and about 5 oz. silver. A winze is being sunk on this ore which is undoubtedly the extension in depth of the oreshoot developed in the tunnel. The ore is a carbonate and occurs along a limestone-diorite contact. This ore is to be extensively prospected in the near future as the occurrence is considered to be of much importance.

GREAT EASTERN OREBODY.

The main ore supply developed so far is on the Black Hawk-Great Eastern vein. This has been faulted in the S. & B. ground and so the company as yet has only about 250 ft. of ore developed in its ground along this vein. This ore is next the Arizona Commercial line. In fact for ventilation and also for greater safety the workings of the two companies hole into one another. On the sixth level of

the McGraw the ore is 351 ft. long, but is then cut off by the Iron Ledge fault. The company is prospecting for the eastern or thrown portion of this orebody on that level, and no doubt will find it in time.

On the intermediate level between the fifth and the sixth levels the ore has a length of 250 ft., while on the fourth level the orebody is 204 ft. long. This ore has been stoped to a height of 80 ft. above the fourth level, but in a raise the ore has been traced to a height of 150 ft. above that level. In a winze from the sixth level the ore had been developed to a depth of 60 ft. below that level at the time of my visit. Above the fourth level the ore carries much iron, but as the iron contents increases the copper contents decreases. Below the fourth the ore contains less iron and averages about 8% copper and about 5 oz. in silver. The ore varies in width between 6 and 12 ft. and probably averages 8 ft. in width. Above the fourth level the walls of the vein are diorite on the hanging and shales and quartzite on the foot wall. Below the fourth level both walls are quartzite.

THE METHOD OF MINING.

The mine is equipped with a 1000-gal. Prescott pump and has a good surface equipment. The ore is mined by a new system of mining that has much merit. The ore is cut out on the sill floor and a series of chute mouths put in about 25 ft. apart after the level has been timbered over to form a bottom to the stope. The ore is then mined out overhand, the roof being carried at an angle corresponding approximately to the angle of repose of the filling. As soon as the ore has been drawn out of the stope waste is dumped in and allowed to run at its angle of repose down from the raises on each end of the stope. On top of this waste then planks are laid so as to keep the ore from mixing with the waste. After this floor is in, the ore is drilled and shot down, a slice being taken parallel to the slope of the waste filling. As the friction is less on the board slope than of the ore on itself the ore slides down to the chute at the bottom of the board floor.

Gradually the face extends until the two that started at the ends of the stope meet in the center, and all the ore slides down to one chute in the center of the stope. The drilling is done by means of air-hammer drills, and two men are able to break 90 tons between them as the ore is soft and breaks well. As the men are close to the back all the time the method is safe, and by the use of the board slide laid on top of the waste, the ore is gotten into the chutes without any shoveling. Filling is easily and quickly

gotten into the stope so that there is little danger of loosing the stope.

The method has been in use only a few weeks so that it is too soon to give cost figures, but it is certain that the system will be much cheaper than the square-set method. The filling comes from development work in different parts of the mine. The plan on the lower levels is to pull the waste out of the worked-out stopes on the level above for filling on the levels below and to let the walls come in the upper abandoned parts of the mine. This will give very cheap filling for the lower stopes.

CONCLUSION.

At present about 110 men are working at the Superior & Boston, and the mine is shipping between 80 and 90 tons of ore a day to the Old Dominion smelter. The property has a considerable prospective value, in fact the value of the mine is almost entirely speculative. It seems to have considerable more intrinsic speculative value than the Arizona Commercial, but both properties are overvalued for the present amount of development in the ground. At both properties the mines are being worked in a good manner. The management of the Superior & Boston has been the wiser for it let another company do the smelting and saved the money for exploring its ground. Moreover the company has placed its main shaft so that the vein will not be cut before a depth of 1000 ft. is reached. Consequently it will not have at least for a considerable length of time the trouble that the Arizona Commercial has had through placing its vertical shaft so that it cut the vein as near as 600 ft. to the surface.

Ore sorting is a badly neglected phase of mining. Leasers and such companies as are working mines far from a railroad only seem to do much sorting. But in time, as the margin of profit drops, companies in high-grade camps are forced to resort to sorting only to find that it is a blessing in disguise. Cripple Creek is such a camp. On the other hand at mines on the Rand, although the ore is low in grade, sorting pays because of cheap labor. Each year the percentage of rock sorted out before the ore goes to the mill increases on the Rand. Mexicans are especially efficient as ore sorters.

A strike at the Broken Hill mines in Australia last year cost the community in loss of wages and production two and one-half million dollars. All of this might have been prevented if the employes had been willing to keep at work pending the decision of an arbitration court.

Visited the silica flux operations of Charlie Nichols 2½ miles north of Globe. GW WR 1/26/77 _____

KAP WR 6/20/80: In a field interview with Charles Nichols, he reported that he is shipping silica flux to Inspiration's Smelter from the Copper Hills Mine, Gila County. Gilbert Construction Co. does the mining and crushing three to five times a year and stockpiles the crushed ore for Nichols. Nichols then loads and hauls to Inspiration as needed. Although the flux contains some copper and occasionally gold and silver, he does not receive payment for the metal values.

Charles Nichols reported he is planning a silver leaching operation and will provide additional details at a later date.

COPPER HILL
(Arizona Commercial Mine)

GILA COUNTY

Active Mine List 1963 - 3 men

Active 3 men working. FTJ WR 10-1-65

Visited Copper Hill; production off due to strike. Mr. Moores stockpiling. FTJ WR 9-30-66

Active Mine List April 1967 - 3 men

Moores silica operation at a standstill due to strike of copper mines. FTJ WR 9-29-67

Active Mine List Oct. 1967 - 3 men

" " " April 1968 - 3 men

" " " Oct. 1968 - 3 men - silica

Visited Copper Hill, silica; 3 employed. FTJ WR 3-28-69

Active Mine List April 1969 - 3 men - E. M. Moores, Jr.

Visited Copper Hill - interviewed E. M. Moores, Jr. who said operation as usual except trucking which is done by John Duber - under contract. FTJ WR 9-26-69

Active Mine List May 1970 - 3 men - E. M. Moores, Jr.

Active Mine List Oc. 1970 - 3 men - E. M. Moores, Jr.

Strikes at Inspiration from July 1 to July 24 and ASARCO Smelters, Miami first of August had its effect on other mining as Moores Lime and Copper Hill flux mine. FTJ-QR 9/71

The Copper Hill property continued to produce flux ore for the Inspiration smelter. FTJ QR 3rd $\frac{1}{2}$ '72

Active Mine List - October 1972 - Empl. 7

To Copper Hill mine which is now producing under new contract to Charlie Nichols, contractor - Globe-Miami Highway. FTJ WR 6/15/73

The Red Hill silica operation (Moores Silica) was taken over by Charlie Nichols, contractor, of Globe. FTJ Annual Report 6/28/73

To Red Hill mine. Charles Nichols, contractor, Globe-Miami highway is contract mining flux to Inspiration. FTJ WR 10/12/73

DO NOT REPRODUCE

Kelly
WHICH PROPERTY?
IN 15.3 E S 4
COPY IN (P)
8572560
MB

NICHOLS DEVELOPMENT CORPORATION

HEAVY EQUIPMENT RENTAL

Box 167

Globe, Az. 85502

Phone 425-7006 • 425-8116



STATE MINE INSPECTOR

DEC 19 1985

December 16, 1985

State of Arizona - State Mine Inspector
Mr. Vern McCuthen
705 West Wing Capitol Building
Phoenix, Arizona 85007


Dear Mr. McCuthen:

This serves as notification of start-up operations for the Harrington Pit. Nichols Development Corporation will be strip mining and crushing silica at this property for an indefinite length of time.

The location is northeast of Globe and can be reached by turning approximately 528 feet south of milepost #254 on the west side of the highway 60.

Any further information that you might require can be obtained through our office at 1750 North Broad Street or by calling 425-7006.

Sincerely,


Diana VJ Flew, Secretary

cc: Mine Health & Safety Administration

RECEIVED

JAN 29 1986

DEPT. OF MINES &
MINERAL RESOURCES

Joe
NICHOLS DEVELOPMENT CORPORATION

HEAVY EQUIPMENT RENTAL

Box 167

Globe, Az. 85502

Phone 425-7006 • 425-8116

STATE MINE INSPECTOR

JAN 14 1985

January 8, 1985

STATE OF ARIZONA - STATE MINE INSPECTOR

705 West Wing

Phoenix, Arizona 85007

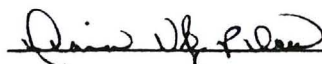
Dear Sir:

This is to notify you that Nichols Development Corporation has started crushing operations at the Copper Hills Silica Pit. We will be mining at Mineral Farms located approximately 2 miles northeast of the present Copper Hills Pit. Mineral Farms will be mined under Contractors ID# C7R.

Notes and add (The Copper Hills Silica Mine, MSHA ID# 0200327 is presently listed as being operated by Triple "N" Enterprises, this name should be changed to Nichols Development Corporation with the same owner, address and location as Triple "N".

If you have any questions, please feel free to contact our office.

Sincerely,



Diana VJ Plew, Secretary

c: Mine Safety and Health Administration
Mr. Jim Lundy, Inspiration Mines Inc.

COPPER HILLS SILICA
MINERAL FARMS 1+2 + MOONLIGHT
(file)



DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Copper Hill Division - Arizona Date November 1, 1961
 Commercial Claims
District Globe area, Gila County Engineer Lewis A. Smith

Subject: Mine visit January, 1959

Owner: Miami Copper Company, Miami, Arizona.

Lessee: E. M. Moores, Jr., Globe, Arizona (Arbor Country Club Manor) A.M.L. 1966

Location: Adjacent to Old Dominion Group to the east (S. 13, T1N, R15E)

Minerals: Copper and silica

Work: The mineralized area is being open-pitted from the top of a steep hill south of and in a sharp bend in Copper Creek. Bulldozer and loader used to load, truck and pile up ore. The quantity of ore extracted is variable as it is geared to smelter requirements at a given time.

Geology: Copper Hill in this area consists of quartzite, which deeper overlies diabase as a sill. The quartzite dips 20-25° SW. On the northeast the quartzite was dropped against diabase by the curved Budget Fault, whereas to the west it was dropped against limestone, quartzite and diabase on that side. Between the two faults the quartzite is traversed by numerous closely spaced parallel fissures which strike N 50° E and dip variably. These fissures apparently have caused very very little displacement. They are filled with quartzitic breccia 2-4' wide which show variable amounts of copper mineralization, some of which was mineable in the past. The quartzite intervening between the fractures, is frequently fissured and shattered and these breaks contain malachite and chrysocolla. This material is comparatively low grade but certain of the better mineralized areas of it are now being mined for silica flux for the International Smelter (now Inspiration Smelter).

Reference is made to USGS P.P. 12, 1903, p. 154.

ARIZONA COMMERCIAL MINE

GILA COUNTY
GLOBE DIST.

SEE: Annual Report of the "Superior and Boston Copper Company" in
BLACK OXIDE MINE (file) Dated 1-3-1908, p 11.

COPPER HILL MINE - Silica - Active 9-58, 2-59, 10-59, 2-60, 9-60, 2-61, 10-61

MINING
WORLD
8/1955