

ATTENTION CLAIMMANTS

DO NOT FORGET!!

Mining claim rental fees are due in the Bureau of Land Management state office by

August 31, 1995

Claim holders owning part or all of 10 claims or less may qualify for a waiver from rental fees. Applications for the waiver are also due by the same date.



Arizona Department of Mines & Mineral Resources
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ARIZONA

No. 9 July, 1995

Mineral Resource

MINING

AZCO SELLS SANCHEZ

AZCO announced that it has agreed to sell 100% of its Sanchez Project and 70% of its Piedras Verdes Copper Project to Phelps Dodge for \$40 million. This agreement will give AZCO working capital and provide two valuable properties to Phelps Dodge. The Sanchez Project located east of Safford is fully permitted. If Phelps Dodge brings this property into production it will be the first open pit copper mine to be started in a new district in Arizona since Asarco's Sacaton pit in 1976. Acquiring Sanchez places Phelps Dodge in control of this new copper district.

Historical Perspective

Bear Creek Exploration, a subsidiary of Kennecott Copper, was active in the district in the 1950's and announced plans to consider the Atomic Energy Commission's Plowshare program to use underground nuclear blasting to break a large tonnage of low grade copper ore into fragments that could be leached in place. This announcement triggered a major acquisition and exploration program in the district that included most of the major copper mining companies in the US. Inspiration Consolidated Copper Company acquired the Sanchez property during this rush.

Discoveries by Phelps Dodge, Inspiration, and Producers Chemicals were soon reported. Kennecott was sinking a shaft on their property in 1965 for the purpose of exploration and development. Phelps Dodge followed with an exploration and test shaft in 1968, and Inspiration announced a major testing program for a heap leaching operation at Sanchez. Producers Chemicals Company was producing copper by leaching and precipitation early in the 1970's at the San Juan. Phelps Dodge continued to develop their Safford property by sinking shafts and doing underground development.

Most activity in the district stopped in the early 1980's as copper prices slumped. Inspiration dropped their lease on the Sanchez and returned it to its owners,

"C. N. Schuette was examining a quicksilver mine near Durango City. Heading home, he boarded the train for Canitas, on the Mexico City - El Paso line. His train was late, he missed the connection, and had to stay in Canitas all night. The only hotel was an adobe structure, a veritable posada or fonda out of Don Quixote - equal accommodations for man and beast. It was called the Gran Hotel Ritz, according to an enormous sign to this effect. Schuette asked the proprietor why it was called the Gran Hotel Ritz. "Por el prestigio, señor, por el prestigio."

So Edward Wisser recalled an experience of a friend in his journal, *Reminiscences of Mexico*, a delightful collection of stories from his 15 years of travel as a geologist in Mexico in the 1930's and '40's. His day-to-day experiences are recounted in vivid language and good humor.

This journal is only one of many unpublished reports, mine files, photographs, and maps recently donated to the Department. Cataloging and storage of the various collections is proving to be almost overwhelming. Open-file reports of the collections are in various stages of progress. Open-file Report 95-13, *Listing of the Grover Heinrichs Collection*, is available

William Sorsen, et al. Phelps Dodge was letting their underground workings flood and Kennecott ceased activity in the district. Phelps Dodge eventually acquired Kennecott's holdings in the San Juan.

Sorsen provided copies of technical data to ADMMR and requested help in finding a qualified company to pursue the deposit. Department engineers encouraged numerous companies and individuals to consider the property. Based on the data and encouragement provided, Richard C. Moores II and John Dreier optioned the property in 1989 and formed a new company

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called Arizona Copper Company that went on to become AZCO. AZCO developed plans and acquired permits to operate an open pit mine and SX-EW facility. When AZCO was unable to raise the \$100 million in the market or through private offerings, Phelps Dodge bought AZCO's interest.

Phelps Dodge's 1994 Annual Report announced resources totaling 2,050 million tons in this district. Sanchez adds another 170 million tons to that total.

VICTOR VERITY

The Arizona mining industry has lost Victor Verity, age 91. He was a 1927 graduate of the University of Arizona with a degree in Mining Engineering. He returned to the U of A to receive his doctor of law degree in 1936. Verity practiced international mining law in Tucson until his semi-retirement in 1982. He served as president of the Rocky Mountain Mineral Law Foundation and a member of the Western Governors Conference on Mining Law. He was a long time friend of the Department and one of the original authors of *Laws and Regulations Governing Mineral Rights in Arizona*.

The long and tedious task of rewriting and updating Laws and Regulations has fallen to John Lacy for the past several editions. John paid Verity the following tribute at the memorial services in Tucson: "One of the greatest tributes to Vic, in my opinion, was the plaque given to him by his friends in the Arizona mining industry after his term as president of the Rocky Mountain Mineral Law Foundations. The plaque, containing a mounted mining lamp, was inscribed to Vic as the provider of light in dark places. Vic was able to see the essence of problems and of people and made every day of living a joy."



Do you need this information in an alternative format? Please call the Department office at 255-3791.

MINING TERMS

How many of these mining terms do you know? We found them in the 1907 edition of the *Copper Handbook* (and did not know very many of them).

- ARROBA - A Spanish weight of 25.36 pounds avoirdupois. In Portuguese, 32.38 pounds
- BAL - Cornish for mine
- KINDLY - The appearance of rock carrying or promising to carry good mineral values
- MINERS INCH - The amount of water that will flow through an opening one inch square under a six-inch head which is 2,274 cubic feet in 24 hours, or 94.3/4 cubic feet per hour, equal to 655 wine gallons or 593 imperial gallons per hour
- MOMME - A Japanese weight equal to 3.75 grams or 2.4113 penny weights
- PICUL - A Chinese weight of 133 1/3 pounds
- POOD - A Russian weight of 36.112 pounds avoirdupois
- PRILL - Cornish for selected ore secured by cobbing
- RAGGING - Cornish for rough cobbing; broken lumps of ore of medium size
- VARA - A Spanish-American measure of length of 33 inches
- WHEAL - Cornish for mine. Synonymous with bal

SEEKING MEMBERS

The Mining Foundation of the Southwest has two goals: 1) Increase public knowledge and awareness of the mining industry and its importance to the economic health of this country, and 2) Assist schools and universities of the southwest at all levels in teaching the future engineers upon whose shoulders will fall the burden of maintaining the industry's viability.

Over the years the Foundation has helped raise money for modernizing the mining exhibit at the Arizona Historical Society Museum in Tucson, underwritten the publication costs of books such as *History of Mining in Arizona Volumes I and II*, provided computers to the Mining Department of the University of Arizona, and made speakers available to elementary schools. Currently the Foundation aids in recruiting students, provides books to high school and college libraries, and may soon provide college scholarships to students in mining related fields.

For more information call Jack E. Thompson at 520-318-3532.

KENNISON DATA ACQUIRED

Another significant collection of mine and prospect data has been added to ADMMR's library. In May, the files of John E. Kennison were donated by geologist Clark Arnold of Tucson.

The majority of the collection concerns the geology and exploration of porphyry copper deposits in central and southern Arizona, especially the Mission district. The commodities discussed at other Arizona properties include gold, silver, zinc, and tungsten. The data was gathered from the mid-1950's through the 1980's. The collection also describes copper and other deposits in the western United States and Sonora, Mexico.

MUSEUM NOTES

BORAS HEADFRAME UPDATE

The grant funds from the Arizona State Historic Preservation Office for the Boras Headframe became available this May and the contract was signed at the end of the month. The funds were held up because of a depletion of state lottery funds due to large winners in the Lotto game and gaming on Indian reservations drawing players from the lottery.

Negotiations are underway for an additional \$15,000 that should complete the headframe erection, hoist house, interpretative signing, and walkways.

The next planned major expenditure for exhibits will be funding for the "Car Made From Rocks." The Department has already acquired \$5,100 for this project with a promise of an additional \$5,000 next year. Your contributions are appreciated and tax deductible.



ADMMR will be assisting in the National Hardrock Mining Championship to be held during the Arizona State Fair on October 27 in the main arena beginning at 10:00 am. The event, sponsored by the Arizona Lottery, has a full day of contests scheduled that include mucking, spike driving, jack leg drilling, and hand drilling. The teams will be selected from mining competitions held throughout the western states and will represent the best athletes in the sport.