

### Minerals of Arizona Symposium

The fourth annual *Minerals of Arizona* symposium will be held on Saturday, March 23 from 8 am to 5 pm at the Museum. The highly popular symposium is sponsored by the Museum and the Arizona Mineral and Mining Museum Foundation. The \$30 registration fee includes admission to the talks, program abstracts, refreshments, and lunch. The authors of *Mineralogy of Arizona*, Third Edition, Sid Williams, Richard Bideaux, and Ray Grant, are among the featured speakers this year. Call the Museum for more information.

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**NOTE!** Much of Arizona's gemshow season remains: **February 2-11**, Tyson Wells & Quartzsite Pow Wow; **February 8-11**, Tucson, Gem & Mineral Show; **February 24**, Prospectors Day (at the Museum); **February 1-March 3**, Phoenix Gem & Mineral Show; **March 8-10**, Scottsdale Gem & Mineral Show. Call for more information or for Circular 61, *Arizona Gem Shows*.

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## Mineral Resource

### Mined Land Rules

The Arizona Mine Inspector has completed Draft 1 of the Proposed Arizona Mined Land Reclamation Rules to implement provisions of the Arizona Mined Land Reclamation Act. The rules were distributed at a meeting of the Legislature's Natural Resources Committee on September 19, 1995. At a December meeting it was determined that the Arizona Mine Inspectors Office was the agency to receive this assignment. No decision was made on how the program would be funded.

### Uranium in the Arizona Strip

The Arizona Strip Bureau of Land Management District RMP/EIS has designated approximately 1,409,500 acres as open to mineral entry in the Vermillion Resource and Clear Water Point areas. These areas have potential for breccia pipe mineral deposits including uranium, copper, silver, gallium, and germanium. The most recent activity in the area was by Energy Fuels Nuclear, Inc. and Pathfinder Mines Corporation in the area west of Ryan Road and east of Kanab Creek. Most of the activity was centered around Pigeon Point, Gunsight Point, and Clear Water Point. Due largely to economic conditions, work in this area has been curtailed and large portions of the area are now open for staking. According to the BLM Environmental Assessment the release of desert bighorn sheep will not preclude energy and mining interests' exploration and development in the area.

### Equipment Leasing Available Alternatives for Mines

The PFC group, a 16-year-old leasing and financial company offers several programs for mines and mills for qualifying companies. The company's local representatives are George Corfield, P.E. and mining consultant, and Lyn Caringer, PFC's Vice President of the Mining Division. PFC Group can be reached by phone at 602-371-3437 or fax at 602-371-3102.

### Royal Oak Drilling at Copperstone

According to Dan Patch, owner of the Copperstone Mine, Royal Oak Resources has an agreement and is drilling on the property. Copperstone, in La Paz County, is Arizona's most recent gold producer. Reverse circulation drilling was done originally, followed by diamond drilling. Results have been favorable. Patch also owns the Goodman and the Jackpot mines in La Paz County.

### Asarco Wants Feed

Asarco is looking for sources of gold-loaded carbon, precious metal scrap, precious metal-bearing slags, precious metal-bearing silica, CIP carbon, lead drosses, skims, etc. and all form of lead scrap except battery plates and paste, as well as crushed glass. For more information write Asarco's Ore Department at 180 Maiden Lane, New York, NY 10038, or call 212-510-2215.

### Copper Exploration at Bisbee

Phelps Dodge has begun drilling in and around the Lavender Pit in Bisbee to determine how much copper ore remains around the operation that was suspended in 1973. The company plans to drill 25 holes in the immediate area. Company spokesman John Zamar explained that drilling a few holes does not necessarily mean that mining will be resumed.

There is still time to sign up for the *Prospecting for Profit in the 90's* seminar sponsored by the Department and the Superstition Mountain Treasure Hunters Association. It will be held on Saturday, January 20 and includes technical sessions, equipment demonstrations, and breakfast, lunch and steak dinner. Ron Feldman, historian and lecturer, will present his slide show on the Superstition Mountains during dinner. For more information call the Department or Elaine Schrader at 983-3481.

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H. Mason Coggin, Director



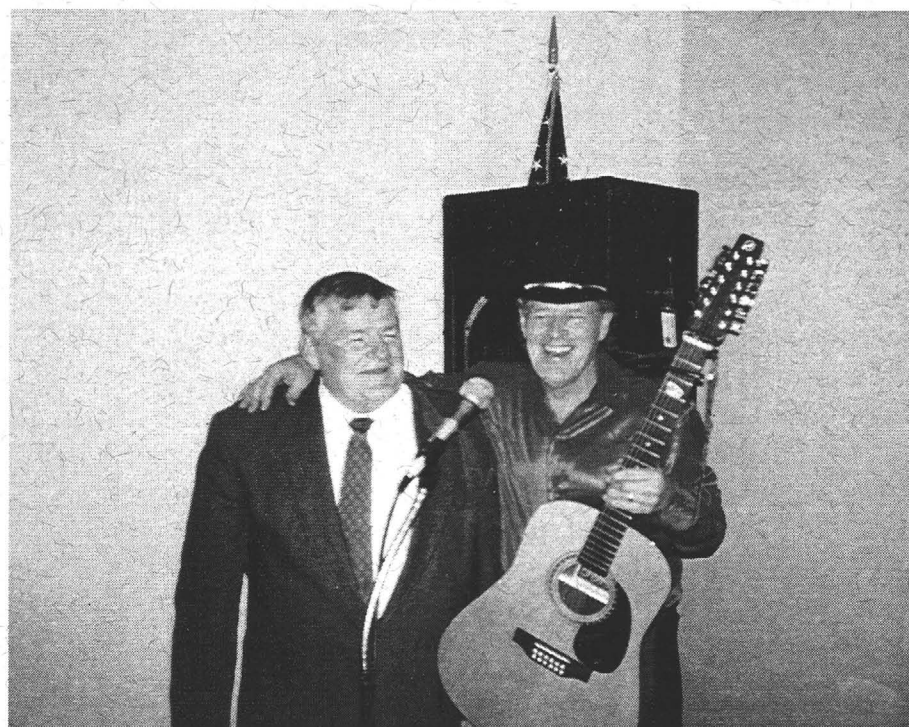
### William C. Epler, 1922-1995

In October mining lost one of its great friends and reporters. Bill Epler, publisher and entrepreneur, has been the driving force of *Pay Dirt* and other publications of Copper Queen Publishing. Bill was the owner of this company since 1960. Epler studied journalism in Nevada, New Mexico, and California before settling in Arizona. He is survived by his wife Betty and a daughter, Nancy Sullivan of Tucson.

The Department is making a memorial to Bill by selling bricks for the Boras Headframe with Bill Epler's name on them. Interested parties should contact Mason Coggin at the Department.

### Boras Headframe Foundations Poured

A team of volunteers, including the Arizona Public Service Company's Drill and Drillers, drilled the foundations and poured concrete for the Boras Headframe on December 20. Concrete for the project was paid for by donations, paving brick purchases, and a matching grant from the State Preservation Office. Foundations for the hoist are expected to be completed by the end of January. Department Director Mason Coggin hopes the headframe, one of the few surviving constructed entirely of wood, will be erected by the end of 1996. The Boras is a gift from the Phelps Dodge Corporation.



Director Mason Coggin and Dolan Ellis at the Department holiday gathering. Ellis, the Arizona State Balladeer, entertained about 150 appreciative guests.

### Atlas Corporation Options Arizona Property

Atlas Corporation of Denver has acquired an option on the Commonwealth project in Cochise County from the Harvest Gold Corporation, a privately held Denver mining company. An independent 1991 engineering report describes the property as a low waste to ore project amenable to open pit mining and heap leaching. The property includes a 1,280 acre land position that has been explored by 126 holes. The mineralization has not been fully defined. Terms include an initial payment of \$125,000 and a minimum exploration and development expenditure of \$425,000. In addition, Atlas will pay Harvest \$25/oz of contained gold based upon a revised reserve study. *From: Mining Record*

### Kalahari Pushes Mexican Hat

Recent activity on the Mexican Hat project in Cochise County is the outcome of a joint venture between Kalahari Resources and Oneida Resources both of Vancouver. Under the terms of Kalahari's agreement they can earn up to a 60 percent interest in the property by spending \$2.25 million and producing a feasibility study. Oneida last worked the property in a 1990 venture with Placer Dome. Dome blocked out 5.8 million tons grading 0.027 ounces per ton in gold. A 40,000 ft. reverse circulation drilling program is planned.

*From: Northern Miner, Dec. 18, 1995*

Coal conveyor at Black Mesa.



### COAL PRODUCTION IN ARIZONA

Coal is second only to copper in economic importance of mineral commodities produced in the State. In 1994 Arizona's coal production was 12,901,000 short tons, having an estimated value of \$300 million. The high-quality coal is strip mined from the Kayenta and Black Mesa mines in central Navajo County. The coal is sub-bituminous with an average quality of 11,000 Btu, 0.5 percent sulfur, and 10 percent ash. All production is from land leased from the Navajo and Hopi Tribes by Peabody Western Coal Company. Indian royalties from coal production run about \$30 million annually. Peabody is the nation's largest coal producer and Kayenta is their largest operation.

Kayenta Mine's production capacity is 8 million tons annually. The coal from the mine is carried by a conveyor system 17 miles to storage silos. From there it is transported by the automated electric-powered trains of the Black Mesa & Lake Powell Railroad to the Salt River Project Navajo Generating Plant 78 miles away.

Black Mesa Mine's annual capacity is 4.5 million

tons. Here, the coal is powdered and mixed with water prior to transport by the world's longest coal-slurry pipeline. The 273-mile journey to the Mohave Generating Station at Laughlin, Nevada takes three days. Both mines are now using 300-ton capacity tractor trailer bottom-dump trucks to transport coal from the mine to the conveyors and pipeline feed plants.

The Peabody operations at Black Mesa are model reclamation programs. Mining and reclamation proceed at the same rate of approximately 500 acres annually. As an area is mined, the topsoil is removed and stored. After mining is completed, the topsoil is returned and the surface is contoured. The resultant reclaimed land, used for grazing, is more productive than the original land.



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