

Mineral Resource

MINING NEWS

Morenci Produces 1 Billion Pounds of Copper in 1996

Morenci mine, Greenlee County, set a new record of 1,019,308,593 pounds of copper in 1996 making it the largest copper producer in the United States. The production represents 56percent of Phelps Dodge's total production, 27 percent of the US production, and 5 percent of the world's production. Congratulations Phelps Dodge.

Gold Institute Predicts 20% Increase in Gold Production

According to the Gold Institute, the worldwide demand for gold is at a historic high and currently 44 percent above the total annual production of the world's gold mines. Gold Institute President John Lutley claims that higher productivity and competitiveness has placed the United States gold producers in a position to capture an expanding share of the world market. His position was supported by a study from the University of Nevada's Natural Resource Industry Institute which forecasts a 20 percent increase in gold production over the next two years.

The study claims that there will be a resurgence in capital spending in that time frame and the US will bring approximately 43 million ounces of new reserves into production by 1999. Current US production exceeds 10 million ounces and approximately two-thirds of this total was produced by Nevada. Arizona's production has slipped well below 100,000 ounces per year as our major copper producers continue to switch to solvent extraction electro win methods. Arizona's gold production would show a significant increase if we could find an extraction method for gold and silver that would piggyback on the solvent extraction for copper.

New Bonding Requirements on BLM Lands

On February 28, 1997, the Bureau of Land Management published a final rule in the Federal Register that amends the surface regulations to require bonding of all operations greater than casual use on BLM land.

In brief, the rule requires submission of or certification of financial guarantees to cover 100 percent of the cost of reclamation for all operations greater than casual use. The rule also requires that all bonds submitted directly to or certified to BLM be accompanied by a Professional Engineer's certification of reclamation costs.

Existing notices are affected if there is change in any of the activities described in the notice or if there is any surface disturbance not described in the notice.

For further information contact any BLM field office or the State Office at 222 North Central Ave., Phoenix, AZ 85004, phone 602-214-9200

Supreme Court Softens ESA in Landmark Decision

In a unanimous decision in the case of Bennet et al v. Plenert et al, the Supreme Court ruled that parties with economic interests, such as ranchers, farmers, and developers, have standing and can sue and challenge measures taken to protect species under the Endangered Species Act (ESA). This landmark decision restricted the ability of Federal agencies to 'take' lands through the process of restriction. This law was previously interpreted by some agencies as a way to tie up lands to do a study on habitats of a species that may be placed on the protected, endangered, threatened or nearly threatened status list.



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

Arizona Department of Mines & Mineral Resources, 1502 W. Washington, Phoenix, AZ 85007
602-255-3791, toll-free in Arizona 1-800-446-4259
H. Mason Coggin, Director



Roy Miller, shown here with Polly Rosenbaum, is leaving the Department's Board of Governors after 10 years of service. Roy has been a tireless worker and a loyal friend to the Department and to the industry.

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Address Correction Requested

| ARIZONA MINE DEVELOPMENT | | | |
|------------------------------|---------|--------------------------|--|
| Mine/County | Commod. | Company | Activity |
| Bagdad/Yavapai | Cu | Cyprus | Major expansion program |
| Cochise/Cochise | Cu | Phelps Dodge | Drilling and feasibility |
| Carlotta/Gila | Cu | Carlotta | Permitting near completion, record of decision & final EIS expected soon |
| Copperstone UG/ La Paz | Au | Royal Oak | Drilling, 500,000 oz. reserve defined |
| Cyclopic/Mohave | Au | Nevada Pacific | Permitted, now seeking funding |
| Florence in-situ/Pinal | Cu | BHP | Permitting is near completion |
| Helvetia-Rosemont/Pima | Cu | Asarco | Initial applications for land exchange |
| Magma/Pinal | Cu | BHP | Idle, exploration drilling continuing |
| Mineral Park/Mohave | Cu | Cyprus | In-situ leach pilot, possible sale |
| Mission/Pima | Cu | Asarco | New underground division |
| Mohave/Mohave | Au, Ag | Combined Metals | Carbon column recovery plant constructed in '95 |
| Morenci/Greenlee | Cu | Phelps Dodge | Expanded cathode production; Land exchange approved by BLM |
| New Cornelia/Pima | Cu | Phelps Dodge | Additional drilling and engineering feasibility |
| Old Reliable-Am. Eagle/Pinal | Cu, Au | AMT | Favorable drill results |
| Oracle Ridge/Pima | Cu | Hibernia | Idle, possible sale |
| Pinto Valley/Gila | Cu | BHP | Major expansion permitted |
| Ray/Pinal | Cu | Asarco | Major expansion in progress |
| Safford-San Jaun/Graham | Cu | Phelps Dodge | Land exchange, permitting open pit leach SX-EW |
| San Manuel/Pinal | Cu | BHP | Lower K-orebody start up complete |
| San Manuel/Pinal | Cu | BHP | Oxide pit shut down in '95, in-situ leach continues |
| Sanchez/Graham | Cu | Phelps Dodge | Permitted in '95 |
| Santa Cruz/Pinal | Cu | Asarco | In-situ leach program achieves pilot production |
| Silver Bell/Pima | Cu | Asarco | New SX-EW, production expected by mid-'97 |
| Tohono/Pinal | Cu | Cyprus | Closing down? no reserves listed in Cyprus 1997 Form 10-K |
| United Verde/Yavapai | Zn | Phelps Dodge and Cominco | 21 million ton resource of 6.6% zinc |
| Yarnell/Yavapai | Au | Bema Gold | Permitting Au heap leach |



New Board Member Named

Sydney Hoff Hay has been appointed to the Department's Board of Governors by Governor Fife Symington. Hoff Hay is the owner of the association management and political consulting firm of Southwest Policy Group. She is also Executive Director of AMIGOS, a trade association of companies that supply the mining industry, President of the Lincoln Caucus, and Executive Director of the Arizona School Choice Trust.

Hoff Hay earned her Bachelor of Science degree Summa Cum Laude with honors from Kansas Newman College. She resides in Scottsdale with her husband, Dan and her son Andrew. Her hobbies include skiing, golf, travel, and her 1955 T-bird.

Copperstone Drilling Program Complete

Royal Oak Mines has completed the second phase of its exploration drilling program at the Copperstone gold property in La Paz, County. The program was to test the extension of the deposit that was mined by Cyprus about five years back and to see if the property could support an underground mining operation. The drill results were satisfactory and indicate a vein 20 to 25 feet in width carrying values ranging from 0.20 to 1.55 oz per ton in gold. Current estimates describe approximately 500,000 ounces of gold with a potential for additional tonnage and grade. The deposit is hosted in a relatively untested brecciated limestone near the open pit.

Pinto Valley Expansion Permitted

A Decision Notice by the USDA, Forest Service reported finding no significant impact from BHP's planned expansion of the Pinto Valley operation in Gila County. This will add approximately 10 years to economic life of the Pinto Valley operation.

AMT's Drilling Favorable at Copper Creek

Additional drilling at the Old Reliable and American Eagle properties in Copper Creek by AMT continues to show favorable results from a high grade (+1 percent) zone. This high and dry area may provide a source of quick return for the company if they decide to sink a decline on the property. They are continuing to drill in the area.

Students from Litchfield Elementary School enjoy a field trip to Bagdad mine sponsored by the Museum and aided by a grant from the Arizona Mining Association.

