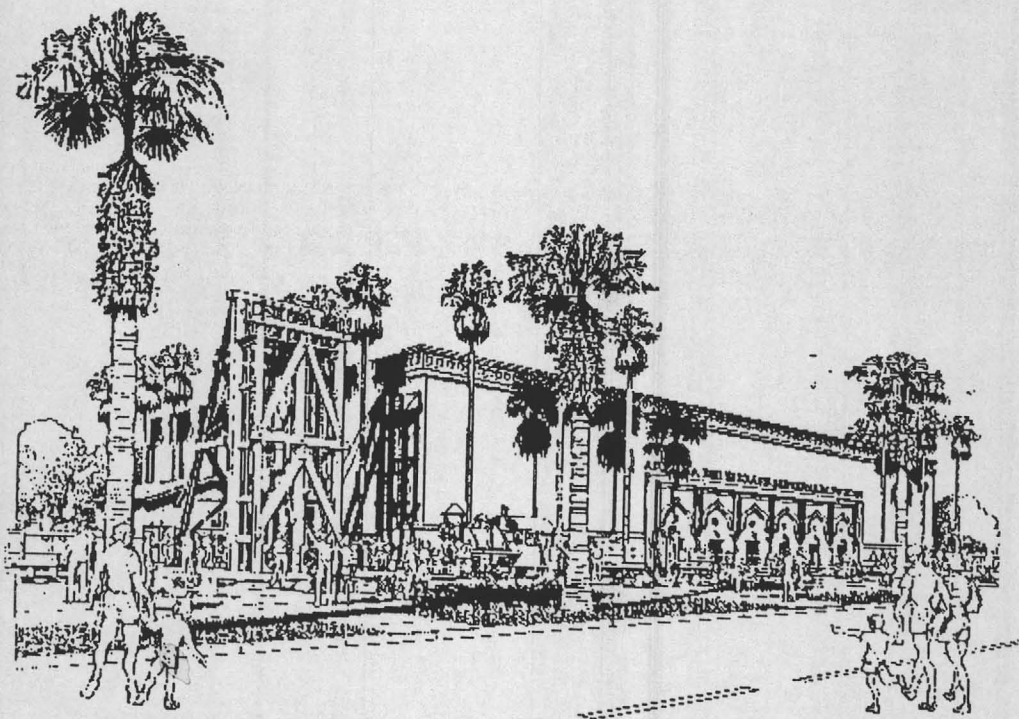


DEPARTMENT OF MINES AND MINERAL RESOURCES

62nd ANNUAL REPORT FY 2000/2001

W. 'Doug' Sawyer
Director



State of Arizona



Arizona Department of Mines and Mineral Resources
1502 W. Washington
Phoenix, Arizona 85007

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Director

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Ann Turney, Administrative Assistant

Tina Mendoza, Secretary

Arizona Mining & Mineral Museum

Susan Celestian, Museum Curator

Scott Poland, Education Curator

Janice Adams, Tour Guide *

Liz Anderson, Tour Guide *

Ann Baker, Tour Guide *

Shirley Cote, Tour Guide*

Joanne Hesterman, Tour Guide*

Alice Rosenfeld, Tour Guide*

**Part Time, non appropriated funds*



Arizona Department of Mines and Mineral Resources

1502 West Washington, Phoenix, AZ 85007 Phone (602) 255-3795

Toll Free in Arizona 1-800-446-4259 FAX (602) 255-3777

Honorable Jane Dee Hull, Governor
State of Arizona
1700 West Washington
Phoenix, Arizona 85007

November 5, 2001

Dear Governor Hull:

The Annual Report for the Arizona Department of Mines and Mineral Resources for the fiscal year 2000/2001 is herein submitted in compliance with A.R.S. Section 27-106.

This fiscal year has been one of change for our department as Glenn Miller retired after almost 15 years of combined service and we added Scott Poland as the Education Curator. We also added a new member to the Board of Governors—David C. Ridinger, former executive director of the Arizona Mining Association.

Omya Corporation has completed construction of a plant in Superior that will process limestone into chemical and food-grade calcium carbonate. The limestone is mined north of the town on forest service land. Our department published an industrial minerals study that lead to the exploration and investment in the mine and new \$30,000,000 plant.

Cambior completed its arduous task of obtaining the necessary federal approvals to begin mining copper at the Carlotta Mine located near Miami. Unfortunately, low copper prices has precluded Cambior from beginning development of the mine and appurtenant facilities. In the late 1980's Cambior's exploration team approached our department and asked about favorable copper exploration areas. We pointed them to the Carlotta mine area and our involvement lead directly to the \$60,000,000 investment in design, permitting, equipment, personnel, and land acquisition that has been spent in the Miami area.

Applied Chemical Magnesias Corporation (ACM) completed a mine and plant to process brucite, a naturally occurring form of magnesium hydroxide. Brucite has a number of uses including acid neutralization, fire retardant, animal feed supplement, and food additive. The plant and mine are located in western Arizona near Oatman.

The present staff consists of eight FTE's funded by the general fund, five part-time employees (funded by profits from the Museum Gift Shop), and a dedicated group of volunteers provide quality service to the Department's customers and visitors. During the 2000-2001 school year approximately 25,000 children visited and toured our museum. We also assisted the Arizona Mining Association as they educate teachers about the importance minerals in our society.

Governor Hull

November 5, 2001

Page 2

As we look to and prepare for the future, we believe that the major focus of our efforts will continue to be the dissemination of information about mining and mineral occurrences in Arizona as well as, the education of school-aged children about the importance of mining and how mining products are used in our everyday lives.

Even though the Arizona Copper mining industry is going through one of its periodic down cycles, Arizona mining still contributes over \$ 2 billion dollars annually to our economy. Due to continued construction of houses, roads and other infrastructure items, we foresee no end to the need for sand, aggregate, cement, decorative rock and other industrial minerals that are mined here in Arizona. In fact, the department has received a record number of requests for information from miners and producers regarding industrial minerals. Overall mining is healthy and will continue to grow in Arizona for the foreseeable future.

Should you have any questions or need additional information, please do not hesitate to contact me. I wish you the best in all your endeavors.

Sincerely,

A handwritten signature in black ink, appearing to read "Willis D. Sawyer", with a long horizontal flourish extending to the right.

Willis D. "Doug" Sawyer
Director ADMMR

**DEPARTMENT OF MINES AND MINERAL RESOURCES
EXPENDITURE REPORT
FISCAL YEAR 2001**

Appropriated Fund #1000

Personal Services	\$277,783.38
Employee Related Expenses	61,507.17
In-State Travel	5,978.59
Out-of State Travel	383.32
Operating Expenses	*360,681.26
Non-Capital Equipment	7,456.72
Capital Equipment	6,599.82
Total Expenditures	\$720,390.26

*Note: \$319,200.00 of this was to DOA for Rent

****Mines & Mineral Resources Fund #3156**

<u>Beginning</u> <u>Balance</u>	<u>Income</u>	<u>Expenses</u>	<u>Ending</u> <u>Balance</u>
\$96,364.12	\$134,522.86	\$107,336.91	\$123,550.07

***Note: Funds acquired from donations and gift shop sales.*

DEPARTMENT OF MINES AND MINERAL RESOURCES

Agency Mission

It is the mission of the Arizona Department of Mines and Mineral Resources (ADMMR) to promote the development of the mineral resources of the state through technical outreach and education. The purpose of this promotion is to encourage economic development in the mining and mineral resource industry. Our patrons or customers are the minerals industry, operators of small mines, prospectors, educators, the general public, elected officials and other state, local, and federal agencies.

Agency Description

The ADMMR has three primary functions. The first function is to provide technical assistance to miners, exploration geologists, prospectors and others who are developing our state's mineral resources. This technical assistance includes studies of opportunities and problems facing small miners and investigation of their properties to assist in their development.

The second function is to maintain an information bank and library of mineral and mining information. The information consists of books, studies, maps, films and videotapes, individual mines files, and other archival documents.

The Third function is to manage the mineral museum as the state's depository for collecting, cataloging, and displaying mineral specimens, various ores, gemstones, and lapidary material

The Arizona Department of Mines and Mineral Resources is divided into two functional programs to fulfill the agency's statutory duties. These programs are the Mineral Resources Information Center and the Arizona Mining and Mineral Museum.

Inquiries from the public for information and assistance consume a large portion of staff

time. The ADMMR technical staff provided information to 1,863 people during the last fiscal year. The Arizona Mining and Mineral Museum welcomed 36,597 general public visitors to the museum. In addition programs in the museum were provided to 16,770 students. Public contacts are the primary process through which the objectives of the agency are carried out.

The ADMMR maintains a proactive role in encouraging the development of Arizona's mineral resources. ADMMR's advocacy roles include involvement with the Arizona Mining Association, Arizona Rock Products Association, AMIGOS, Arizona Association of Industries (member), State, county and local industrial development agencies and commissions and chambers of commerce throughout Arizona.

Public testimony is given at numerous regulatory hearings and community meetings for permits at current and planned Arizona mining operations.

Special interest earth science clubs and natural resource organizations' monthly meetings are hosted by the ADMMR. Such groups have membership's whose interests are parallel with ADMMR's duties to promote the development of the mineral resources of the state through outreach and education.

In addition, the Department assists mine developers planning new operations in Arizona by introducing them to legislators, business associations, industry lobbyists, appropriate consultants, and regulators.

The Agency represents Arizona mining at non-mining symposiums such as the Arizona Association of Industries Environmental Summit.

ADMMR responds with official letters and written statements of support for mine development, environmental impact statements, letters to editors, and anti-mining news items.

Arizona Department of Mines and Mineral Resources

1502 West Washington, Phoenix, AZ 85007 Phone (602) 255-3795
1-800-446-4259 in Arizona FAX (602) 255-3777 www.admmr.state.az.us

Director's Report October 12, 2000

1) **National Minerals Education Conference:** The Arizona Mining Association (AMA) sponsored the director's attendance to the 9th Annual National Minerals Education Conference in Spokane during the week of July 17th through 21st. The conference was well attended by representatives of the mining industry and particularly those companies involved with base and precious metals mining. The week long conference was quite an eye opener as I was exposed to a number of different educational and public relations outreach programs. The quality of the displays and speaker presentations was outstanding and reflected a deep commitment to informing and educating the public about extracting minerals for our consumption. In some respects it was discouraging to see how many corporate resources are being expended to educate the citizenry about the products that we demand and consume every day. But in another respect it was encouraging to see and hear the depth of commitment, the quantity of resources and quality of the people involved in the various outreach efforts.

An added benefit of my attendance was the opportunity to interface with the various AMA team members who attended the conference. I was very impressed with their depth of knowledge and commitment to the education of children about the importance of minerals.

2) **Mine Expo 2000:** The director attended the International Mine Expo in Las Vegas on October 8th through 10th. In addition to seeing the latest in mining equipment, services and technology, I was able to meet a number of Arizona copper mining personnel and AMA members.

3) **Mine Fraud:** The ADMMR sent the Chief Engineer to the 2000 Mining Fraud Conference, a regional meeting of attorneys, securities personnel and mining professionals. The meeting was held in Las Vegas, Nevada. Suspicious mining activity continues to crop up in Arizona. While the Internet is creating new business and commerce opportunities for legitimate enterprises, it is also providing an effective tool for disseminating false and misleading mining information and for raising capital from unsuspecting investors. The ease of creating a "slick" website and producing professional appearing mining reports may mislead potential investors into fraudulent mining ventures. The majority of the suspicious Arizona mining activity that our staff has become aware of is related to gold and platinum group metals. While Arizona has had historical gold mining operations and continues to produce gold from copper operations, there are no known platinum group mines in Arizona. The ADMMR staff continue to exercise professionalism and restraint when dealing with public inquiries about various mining companies and website claims.

4) **Museum Activities:** The next meeting of the Museum Advisory committee is scheduled for October 17th. You may recall that the purpose of the Committee is to continue planning and construction of interim displays for the museum. The director continues to meet with mining industry representatives as well as manufacturers who use Arizona mining products. The purpose of the meetings is to raise awareness of the museum and the 40,000 people (25,000 school-aged children) who annually visit the museum. The following are a list of companies that have expressed some level of interest in developing museum displays:

- a. Omya Corporation—Calcium carbonate
- b. Owens Corning—fiberglass and insulation

- c. Sitix—Silicon for wafers and other semiconductors
- d. Salt River Project—water, power, copper, and coal

Currently, five areas of interest were identified during the June meeting:

- 1. Display Cases
- 2. Copper Corner
- 3. Stope
- 4. Arizona Map
- 5. House of Minerals

The "Display Cases" subcommittee was created to develop a "design" for new cases to replace some of the existing mineral display cases. Some of these cases date to the turn of the century and are in need of replacement. Other cases are not viewable by small children or those in wheel chairs. Sue Celestian has agreed to act as the subcommittee chairperson. The committee is investigating "off-the shelf" cases as opposed to custom-made cases.

The "Copper Corner" subcommittee was created to develop a portion of the museum to display copper minerals from the various mining districts around the state. The general plan would involve creating a new display for each of the districts as well as an interpretive display that ties copper minerals to appliances and manufactured goods that contain copper products. Diane Bain has agreed to act as the subcommittee chairperson. The director has contacted Phelps Dodge and ASARCO to determine the level of interest by individual mine properties.

The "Stope" subcommittee was created to develop the former stage area into an underground stope model. This stope idea has been depicted in the original design concept for the ADMMR building, but has never been funded by either the legislature or private sources. Charlie Connell has agreed to act as the subcommittee chairperson.

The "Arizona Map" subcommittee was created to develop a map showing the active mines in Arizona as well as describing some of these operations. Ken Phillips has agreed to act as the subcommittee chairperson.

The "House of Minerals" subcommittee was created to build a portion of a faux house that depicts the many industrial and base minerals that are necessary to build, maintain, and operate a modern house. In addition to a 3-d house model built to scale, plans include a touch screen display to describe the various components in the house and where they were derived. Doug Sawyer has agreed to act as the subcommittee chairperson. The materials have been purchased to build the house, but construction will not commence until after Family Day on October 21, and 22.

After the preliminary design has been completed for each of the projects, the ADMMR will solicit donations from various industry companies to complete the exhibits. The donations may include time, building materials, educational materials, and funding.

5) Copper Competition: The ADMMR has proposed to both Phelps Dodge and the AMA to assist in a K-12, statewide "Copper Competition". The competition would be designed to around using copper, copper-products, or copper by-products in the following areas:

- a. Copper in the Home
- b. Copper in Science/Industry
- c. Copper in Art

d. Copper in Essay

The ADMMR made a presentation to the AMA Public Relations Committee in June and two follow-up presentations in September and October. The next step is to convene a working group that will flesh out the details and develop a written proposal for presentation to the Board of Governors or both the AMA and ADMMR. The working group is tentatively set to meet in late December and will be composed of 4 representatives of the AMA and ADMMR and 6 to 8 teachers.

6) **Proposed Budget:** The ADMMR prepared the 2002-2003 bi-annual budget. Based on input from conservative legislative members and consultants, we have prepared a budget that includes several critical issues, but no monies for new displays. Summary sheets are attached for your review. In general, we are requesting budget for 4 areas:

- a. Two new phones
- b. Emergency paging system
- c. Internet/E-mail connections
- d. ADOA pass through costs

7) **Legislative Contact:** Representative Galen Updike (District 29) has proposed a legislative luncheon to investigate interest in developing natural resources/mining educational modules at the ADMMR. He has also proposed amending the current state law that allows individuals to direct up to \$200 of state tax liability to a public educational institution. The amendment would allow individuals to direct up to \$200 to public institutions such as the ADMMR that are involved with student education.

**ACTIVITIES AND CURRENT EVENTS FROM THE ADMMR MINING AND MINERAL RESOURCE
INFORMATION, PROMOTION AND DEVELOPMENT PROGRAM
1ST QUARTER, 2000-2001
(OCTOBER 12, 2000)**

Directory of Active Mines in Arizona *printing conditions and timing to change*

The *Directory of Active Mines in Arizona* for the year 2001 will be published in late winter of 2001. Historically the information contained in the directory was obtained through technical staff contact with each full time mining operation in October of the year proceeding the title date of the Directory. The Directory was then released in January of the title year. Thus the 1999 Directory contained data collected in the early fall of the previous year. Due to waiting for information from the Grupo Mexico, S.A. de C.V acquired ASARCO Inc., release of the 2000 Directory was delayed until late spring of 2000. The Directory will thus contain 2001-year information collected in early 2001. McGraw-Hill, through *Southwest Contractor* magazine has for many years printed the Directory for us as a donation. They have changed their directory content and printing arrangement and have withdrawn their gift of printing.

Copper Price Closed at 95.00¢ Per Pound Tuesday October 11, 2000.

Copper - 95.0 cents per lb.; cathode - full plate, U.S. destinations, 2000.

Copper - 90.25 cents per lb., N.Y. Mercantile, spot, 3:34 p.m., Tuesday October 11, 2000.

The cathode price is 10 cents higher than price quoted for Friday July 7, 2000 reported at the last Board of Governors' meeting.

Ironwood National Monument Directly Impacts Future Mines

As part of the current administration's "environmental legacy" the Iron Wood National Monument was decreed in the Silver Bell - Ragged Top Mountains of Pima County. These lands border Asarco's Silver

Bell copper mine and overlay important copper deposit exploration targets. The designation will limit Asarco's ability to expand their mine, will prohibit continued exploration of nearby copper targets, and stop most uses of State Trust Lands within the boundaries of the monument. Many in the mining and mineral resources industry feel the designation of this and other National Monuments in the west by administrative order is illegal. Further some feel it is part of the threat by the Secretary of Interior to get even with the mining industry over his Union Labor-Morenci Mine-Arizona National Guard problems that occurred during his failed attempt to win the Democratic nomination for president.

Religion Impacts Mines

An environmental litigation attorney was once referenced as saying that global warming was the ultimate environmental bonanza. It's very scary, can't be seen, tasted, or measured in real time, and its horrid affects, if any, are promoted as not measurable until it's too late in the future. Native Americans religion is being used in the same manner. It now seems every proposed new mine and many existing mines are said to be desecrating a Native American religious site. Further such sites cannot be inventoried in advance of mine development so as to be avoided or described in such a manner that they might be mitigated. One existing mine (White Vulcan), one mine in the permitting stage (Alpha Calcit Marble), and an area of high mineral potential (NE corner – Goldwater Military Range) are thus currently being shut down, denied, or locked up.

Gypsum, Limestone, Vermiculite, Perlite, Iron Oxides, Mica, Pumice, and Clay Inquiries Received

The technical staff of the Department responds to inquiries about Arizona's mineral resource potential from many potential developers and consumers of minerals. Examples include:

- Gypsum for fireproofing and agriculture
- Limestone for cement and functional fillers and extenders
- Vermiculite for fireproofing
- Perlite for lightweight aggregate
- Iron Oxides for pigments
- Mica for strength fillers
- Pumice for lightweight aggregate and fabric treatment
- Clay for soil supplements

Merchant Power Plants and Mineral Resource Development

Recent announcements of plans to build as many as seven large, natural gas fired, steam driven, cogeneration, electric generating stations have had very little impact on demand for Arizona mineral resources. These generating stations are very large industrial plants and use a large amount of metal and nonmetal building materials in their initial construction. Unfortunately their operation and maintenance consume only limited amounts of new mineral resources other than natural gas. Other than maintenance materials the only significant industrial minerals used in their operation are cooling water treatment chemicals such as lime, and soda ash.

Continued Arizona Population Growth Spurs Demand for Mineral Resources

Inquiries for sand and gravel, building stone, decorative boulders, and landscape stone have dominated the requests for industrial mineral deposit data. These same commodities have accounted for the majority of requests for permitting information and assistance.

Continued Arizona Population Growth Limits Ability to Develop New Mines

Limited amounts of private lands, rapid population growth and increases in personal wealth have combined to encourage development of private lands in rural and remote areas of Arizona. These same private lands were often originally patented as mining claims and remote area ranch headquarters. As these lands are essentially suburbanized their new residents often end up in vocal opposition the any planned mine development in their vicinity. Since minerals can only be mined were they are found and

were often found in remote areas, there was historically little local residential opposition to their development.

Mineral Information Center Staff Time Favors Information Dissemination

Over 50% of the technical staffs' time is spent disseminating information in the form of long detailed telephone conversations, in office conferences, and by assembling and shipping data packages. Often these are tabulated as merely an office visitor or a telephone contact in statistical compilations. We are told by are users that these intensive efforts are the most useful and appreciated activities of the technical staff.

Single Day Example Of Public Contact

The following list is a typical example of the mining information and public contacts made by one Information Center professional on September 21:

- Ace Collier of Bouse, Arizona called regarding sand and gravel mining near Bouse from a mining claim that after considerable discussion was actually an expired BLM material sale. He was upset because the Lake Havasu BLM had taken down his "No Trespassing" signs, but he doesn't have a new sale. He hoped our "*Laws and Regulations...*" book would tell him he had the right to keep people out. It was explained that as it was public land and because he didn't have a current BLM contract, the BLM likely wasn't going to allow his signs. Somehow he believed that the No Lien Notice provision in the Arizona Revised Statutes gave him the right to post the signs and be absolved of any responsibility for the public's possible injury.
- A State Land Department geologist for was assisted with mine file information in the Cave Creek area. Their interest relates to State Trust Lands that could have their value reduced by classification for open space preservation.
- A State Land Department geologist with that agency's real estate office was assisted regarding problems with phony assayers (or real assayers releasing phony results). Dr. Ralph Pray's resent article from California Mining Journal on the subject was pertinent and a copy was provided.
- Discussed both the applicable chemistry and economics of vermiculite conversion from biotite mica using acid reactions.
- Related to the above discussion, biotite mica occurrences and prospecting methods were provided to Steve Irwin
- Recommended Arizona Geological Survey Bulletin. 191 and USGS Bulletin 582 to Rob Vugdaveen of Asarco's Discovery Center. He was searching for Santa Cruz County mining history information.
- Provided information on the potential economics of continued copper production from oxide copper deposits to Gavin Bridge, Professor of Geography at the University of Oklahoma.

Publications - Projects Completed by the Mineral Resource Information Center in the 1st Quarter

- Produced *Arizona Mineral Resource*, No. 26
- Completed editing *Directory of Active Mines in Arizona - 2000*.
- Completed and released *Active Mines Map- 2000*
- Compiled and revised Circular 87, *County Agencies Concerned with Mining and Mineral Resources in Arizona*
- Annual Report 61 - *Annual Report of the Arizona Department of Mines and Mineral Resources 1999-2000*

WWW.ADMMR.STATE.AZ.US Website Continues To Evolve

New pages continue to be created. Their addition to the website is awaiting our obtaining direct control of the Departments website.

Questionable Mining Promotion Activity Continues in Arizona

The staff continues to cooperate with Corporation Commission Securities Division, the Arizona Attorney General's Office and similar agencies in other states on previously reported suspicious mining activities. Earlier cooperative efforts with the BLM resulted in their producing a report that fails to validate a site of a promoted gold, platinum, and platinum group metals deposit in Nevada. The report reveals problems with a registered Arizona assayer among others. Of particular interest are assay results from an Arizona registered assayer that fail to report high grade platinum group metal content in check samples of known high grade specimens from Stillwater's Montana platinum-palladium mine. This same assayer often reports very high results from known blanks as well as from barren samples submitted to him by questionable promoters.

Numerous contacts were received from potential investors contacting ADMMR for information. Contacts were made with the Nevada Attorney Generals Office and the Nevada Division of Minerals. These agencies are part of the Nevada Mine Fraud Task Force. We have attended the 2000 Mining Fraud Conference in Las Vegas last week. Arizona Securities Division and US BLM employees also attended from Arizona.

Cement Raw Materials

An investment group continues researching the feasibility of an additional cement plant in Arizona. Suggestion and data has been provided as to sources of raw materials in addition to limestone to feed the cement plant. The group has located mining claims and hired consultants to evaluate their limestone deposit.

Argentine and Chilean Company and Italian Equipment Manufacturer Continue Toward New Ceramic Tile Factory

Based on information provided by ADMMR, possible sources of clay in Arizona were pinpointed by an Italian ceramic materials consultant and an Italian tile plant equipment company manager. An Arizona consulting geologist has been retained for further evaluations of there target deposits. Initial reconnaissance for a plant has been expanded from northwestern Arizona to include southern California.

Arizona Construction Boom Continues to Drive Inquiries for New Material Sources

Inquiries for sand and gravel, building stone, decorative boulders, and landscape stone continue to dominate the requests for industrial mineral deposit data and new mine startup guidance.

Prospectors, Property Holders, Investors, and Consultants Encouraged to File With Department

The staff of the Mineral Resource Information Center encourages the filing of mineral resource technical data with the agency. Although there is no legal requirement for anyone to file such data it is often to their benefit to do so. It provides an extra copy available in a public place as well as allowing the staff the use of the data in carrying out the objectives of the agency.

Prospectors, property holders and consultants are also encouraged to provide the ADMMR with a technical summary of any mineral property they hope to promote, joint venture, or sell. The staff can then make the property known to a large audience of possible developers.

Sale of Excess Books via Ebay.com

We have raised \$655.33 by auctioning off 39 select excess books or maps on the Internet site Ebay.com

Arizona Department of Mines and Mineral Resources

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1-800-446-4259 in Arizona FAX (602) 255-3777 www.admmr.state.az.us

Director's Report January 18, 2001

1) **National Science Teachers Association Conference:** The department in conjunction with the Arizona Mining Association (AMA), Arizona Rock Products Association (ARPA), SME, and others sponsored an information booth at the Southwest Regional Conference that was held at the Phoenix Civic Plaza in December of last year. The ADMMR coordinated mineral and financial donations for the 3-day event. Representatives of the ADMMR, AMA, consultants and various mining company employees staffed the information booth. Over the course of the 3-day event, over 1400 mineral kits were distributed to teachers primarily from Arizona but also New Mexico, Southern California, Nevada, and Colorado.

2) **Museum Activities:** The last meeting of the Museum Advisory committee held on December 4th. You may recall that the purpose of the Committee is to continue planning and construction of interim displays for the museum. The director continues to meet with mining industry representatives as well as manufacturers who use Arizona mining products. The purpose of the meetings is to raise awareness of the museum and the 40,000 people (25,000 school-aged children) who annually visit the museum. The following are a list of companies that have expressed some level of interest in developing museum displays:

- e. Omya Corporation—Calcium carbonate
- f. Owens Corning—fiberglass and insulation
- g. Sitix—Silicon for wafers and other semiconductors
- h. Salt River Project—water, power, copper, and coal

Five museum projects have been identified:

- 6. Display Cases
- 7. Copper Corner
- 8. Stope
- 9. Arizona Map
- 10. House of Minerals

In late December, the director and board member Jim Miller met with Dan Speck of United Metro to discuss their participation in the stope project. Mr. Speck was receptive to the idea and a follow-up meeting is scheduled for next week. Plans for the five projects are in various stages of planning, materials acquisition, and implementation. The director also met with representatives of Salt River Project community affairs department. They have a desire to work with the ADMMR, but are assessing opportunities.

3) **Copper Competition:** The ADMMR has proposed to both Phelps Dodge and the AMA to assist in a K-12, statewide "Copper Competition". The competition would be designed to around using copper, copper-products, or copper by-products in the following areas:

- e. Copper in the Home
- f. Copper in Science/Industry

- g. Copper in Art
- h. Copper in Essay

The department and AMA have a meeting scheduled on Saturday February 17th to flesh out the concept and finalize the concept. After finalization, a written proposal will be prepared for presentation to the Board of Governors or both the AMA and ADMMR.

4) **Proposed Budget:** The ADMMR prepared the 2002-2003 bi-annual budget. Based on input from conservative legislative members and consultants, we have prepared a budget that includes several critical issues, but no monies for new displays. Summary sheets are attached for your review. In general, we are requesting budget for 4 areas:

- e. Two new phones
- f. Emergency paging system
- g. Internet/E-mail connections
- h. ADOA pass through costs

The department has a budget hearing scheduled for Friday January 19, 2001. The budget recommendations are attached for your review. In summary, JLBC has concurred with the OSPB with the loan exception being an additional \$7,500 for the installation of a public address system for non-fire emergencies and notification of visitors.

**ACTIVITIES AND CURRENT EVENTS FROM THE ADMMR MINING AND MINERAL RESOURCE
INFORMATION, PROMOTION AND DEVELOPMENT PROGRAM**

2ND QUARTER, 2000-2001

(JANUARY 18, 2001)

Copper Price Closed at 88.00¢ Per Pound Tuesday.

- Copper - 88.0 cents per lb.; cathode - full plate, U.S. destinations, January 16, 2000.
- Copper - 82.50 cents per lb., N.Y. Mercantile, spot, 3:14 p.m., Tuesday January 16, 2000.
- The cathode price is 7 cents lower than price quoted for Tuesday October 11, 2000 reported at the last Board of Governors' meeting.

Clinton - Babbitt Eco-Legacy Limits Future Mines

2 million acres lost to mining in 2000!

Monuments Created in Arizona in 2000	Acres
Grand Canyon Parashant	1,014,000
Agua Fria	71,000
Ironwood Forest	129,000
Vermillion Cliffs	29,000
Sonoran Desert National Monument*	486,000
"Legacy" TOTAL	1,993,000

- The Eco-lobby vociferously supports the creation of these monuments partly because they believe the land will be protected from real estate developers and irresponsible mining. But these monuments are primarily on Federal lands that are not subject to private development. "Irresponsible mining" is only an emotionally charged term used by anti-mining activists. It no longer exists as a way of doing business. Too late the outdoors recreation public is beginning to realize that these "Legacy" designations have a much bigger impact than on just real estate development and mining. People are finding their favorite place for target shooting, rock collecting, picnicking, camping, trail bikes, 4-wheeling, and walking closed to easy access and their activities prohibited. Yet most of these same people when poled as to whether they felt lands and wild areas should be protected always say yes.

Partial Update of the USGS's MRDS Database

- ADMMR hosted a meeting attended by 3 scientists from the USGS Keith Long, Phillip Moyle and Steve Ludington. They discussed ADMMR's interest and ability to perform and update of 118 "significant metal deposits" for a partial update of the USGS's MRDS database. It would include confirming existing information, improving the reference information, determine current ownership, operational status, and reserve information. It is estimated the project would take about 60 days. The USGS is interested in providing partial funding for the project as well as providing software. The project will hopefully be funded during the Federal budget year October 2001- September 2002.

Mineral Information Center Staff Time Favors Information Dissemination

Over 50% of the technical staffs' time is spent disseminating information in the form of long detailed telephone conversations, in office conferences, and by assembling and shipping data packages. Often these are tabulated as merely an office visitor or a telephone contact in statistical compilations. We are told by are users that these intensive efforts are the most useful and appreciated activities of the technical staff. Some examples:

- Researched and compiled the 1980, 1990 and 1998 Arizona copper production to produce a tabulation of quantities copper recovered by SX-EW from that recovered in concentrates for Phelps Dodge to use in showing industry trends.
- Compiled a special tabulation of the ore mined, the copper produced and mine capacity for Tohono, Superior and Twin Buttes mines for the period 1980 - 1985 for Asarco.
- Assisted Phelps Dodge in researching information to help them in their acquisition and maintenance of water rights. The official records of regulator agencies were only available back to 1985, not far enough to establish necessary historical rights.
- Provided historical copper production, employment, and a snapshot of Arizona's copper mining industry circa 1975 to Jack Gracie of Asarco to use on an Arizona water commission panel he serves on. He estimates that leach SX-EW copper production uses about one fourth the water compared to conventional concentration.

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- Completed and released *Active Mines Map- 2000*
- Compiled Circular 87, *County Agencies Concerned with Mining and Mineral Resources in Arizona*
- Annual Report 61 - *Annual Report of the Dept. of Mines and Mineral Resources 1999-2000*

- Completed Circular 88, *Arizona Mining Update, 2000*
- Produced Circular 89, *Federal Agencies Concerned with Mining and Mineral Resources in Arizona*
- Revised ADMMR *Publication List*

WWW.ADMMR.STATE.AZ.US Website Continues To Evolve

Updated, improved, and new pages continue to be created. The **Frequently Asked Questions** page contains answers to many of the questions usually posed to the staff by the public.

- Mineral rights and mining claims
- Gold panning
- Arizona mining update
- Assaying and registered assayers
- Mining company stock certificates
- Mining consultants
- Mining scams

New pages of information and links to other websites have been added. Copies of these pages are attached to this report.



Government links



New. Prospecting. |. Online Resources



New. Mineral and Education links -Events



New. Rockhound and Tourist Information

SUSPICIOUS MINING ACTIVITIES

High Palladium and Platinum Prices are Incentives for Suspicious Mining Activities

- Palladium's current price of \$1,050.00 per tr. oz. and platinum's of \$632.00 per tr. oz. are the stuff mine scams are made of. Un-assayable ores, unbelievably high grades, and purporting of easily recoverable values by secret methods are the mainstays of questionable promotions. The staff continues to cooperate with Corporation Commission Securities Division, the Arizona Attorney General's Office and similar agencies in other states on previously reported mining activities. Numerous contacts continue to be received from potential investors contacting ADMMR for information. We attended the 2000 Mining Fraud Conference in Las Vegas last week presented by the Nevada Department of Mineral Resources, Nevada Attorney General, and the Nevada Bureau of Mines and Geology. Arizona Securities Division and US BLM employees also attended from Arizona.

ADMMR Testimony

- The operators of an alleged mining investment scheme based in Arizona have agreed to pay more than \$460,000 in restitution and fines to settle charges they violated state securities laws. Calumet Slag offered investors shares in a venture to extract gold and silver from smelter slag in a heap in the Black Hills of South Dakota. Nyal Niemuth provided background information and testimony on behalf of the Securities Division of the Arizona Corporation Commission that assisted in ending the case. Investors had been told that the slag contained over \$15 million in

gold and silver values. Legitimate analysis showed that economically recoverable values were contained in the slag.

Prospectors, Property Holders, Investors, and Consultants Encouraged to File With Department

- The staff of the Mineral Resource Information Center encourages the filing of mineral resource technical data with the agency. Although there is no legal requirement for anyone to file such data it is often to their benefit to do so. It provides an extra copy available in a public place as well as allowing the staff the use of the data in carrying out the objectives of the agency.
- Prospectors, property holders and consultants are also encouraged to provide the ADMMR with a technical summary of any mineral property they hope to promote, joint venture, or sell. The staff can then make the property known to a large audience of possible developers.
- While in Tucson for the SME conference a meeting was held with Walt Heinrichs to discuss the donation of his file collection to ADMMR.

Dr. George Leaming's Report on the Economic Impact of the Arizona Copper Industry 1999

- In 1999, the Arizona copper industry had a combined direct and indirect impact on the Arizona economy of nearly \$6.2 billion, down from the \$9.2 billion in 1998. The report is now available from the Arizona Mining Association.

Computer related

- During December printers were distributed so that each floor now has a laser as well as an inkjet color printer. Printer sharing rights have been arranged so that any PC can use any printer in the building.
- ADMMR's website has had all but 2 of the previous web pages updated and nine new pages have been added. These pages have the date they were last updated, navigation tool bars, the ability to e-mail ADMMR's Webmaster with suggestions, comments, or broken links, and improved navigation. Many of the pages contain links to external resources useful to our industry's members. Improvements underway will include making mining claim forms and more of the circulars available on line.

Bureau of Land Management New "3809" Will Add Costs and Impediments for Mining and May Outright Prohibit Valid Claims

- On November 21 the Bureau of Land Management (BLM) issued new, stricter regulations for mining operations. Called the 'final rule' by the BLM, the regulations are a revision of the Surface Management Regulations for Locatable Mineral Operations (43 CFR 3809) and encompass a variety of changes in the way the BLM oversees mining and exploration activity conducted under the 1872 Mining Law and its many revisions. The new regulations are applicable to public lands where the surface and mineral estates are managed by BLM and split estate lands where BLM manages the mineral estate. The regulations do not apply to Forest Service lands.
- The mining industry particularly objects to the new, expanded definition of 'unnecessary or undue degradation' included in the new regulations. This new definition includes a provision for preventing "Substantial Irreparable Harm". Industry fears that this provision will give the BLM unlimited veto power over new and revised mining operations. On January 3, 2001 the National Mining Association filed suit in the United States District Court for the District of Columbia to protect the industry against this arbitrary and unnecessary regulation.
- The suit is based on authority of the Federal Land Policy and Management Act, the existing 3809 Rules, the defendants' failed attempts at Legislative Mining Law "Reform", the circumventing Congress in development of the New 3809 Rules, and the development of the New 3809 Regulations in light of the NRC (National Research Council) Report. The National Mining Association has but forth a number of arguments in an effort to obtain a Stay of the regulations.

The Association argues that BLM's New 3809 regulations go beyond the NRC report, Congress restricted BLM's authority and it was not permitted to promulgate regulations that go beyond the NRC recommendations, the new 3809 regulations are inconsistent with the NRC report, BLM violated the Regulatory Flexibility Act and the APA, BLM's pattern of RFA non-compliance, BLM violated the RFA by failing to consider significant alternatives, the FEIS shows that BLM's FRFA unreasonably underestimates the economic impacts of the proposed rule, BLM violated the notice and comment requirements of the RFA, as well as the APA, BLM violated the National Environmental Policy Act by failing to adequately consider all reasonable alternatives, NMA will suffer irreparable injury if prompt relief is not granted by the court, and a stay is in the public interest and there is no injury to other interested parties.

- Unless a court injunction stops them, the rules are due to take effect January 20, 2001. The final rule appeared in the Federal Register on November 21, 2000 and may be viewed at the Federal Register website - www.access.gpo.gov.

ADMMR May Have a Role in the Implementation of the new "3809" Regulations

Ralph Costa of the Arizona State office of the BLM has taken a lead role in preparing guideline for the new "3809 Regulations" He sees it as an opportunity for ADMMR, as advocates for the mining industry, to assist him in developing guidelines which will be used by the BLM to enforce the new regulations. If the regulations survive a court suit against them, this is an excellent opportunity to limit the zeal with which the regulation will be enforced.

NSTA Convention

- On December 7 - 9 the Department assisted the Society for Mining Metallurgy and Exploration (SME) in staffing an exhibit booth and providing minerals for teachers' kits for the National Science Teachers Association's (NSTA) regional convention held at the Phoenix Civic Plaza.
- Over 2000 science teachers primarily from Arizona, California, New Mexico, Nevada, and Utah, but from many other states as well, attended the convention and most of them stopped by the SME booth for information and a teachers' kit.
- NSTA's mission is to promote excellence and innovation in science teaching and learning. The convention was planned to respond to the changing professional development needs of science educators.
- The Department supplied 2000 samples of 14 different rocks and minerals for the kits. We in turn wish to thank those in the Arizona mineral industry who provided the large quantity of materials that were required. Contributors include: Applied Chemical Magnesia Corporation, Arizona Rock Products Association, Asarco Incorporated, Coconino Cinders and Materials, Drake Sandstone Products, Gypsum Association, Kilauea Crushers, Inc., Phelps Dodge Corporation, Pinal Gypsum Company, Salt River Project, Southwestern Mineral Associates, Superior Marble Company, and Morton Salt.

Arizona Department of Mines and Mineral Resources

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Director's Report April 18, 2001

1) **Copper Competition:** The ADMMR has proposed to both Phelps Dodge and the AMA to assist in a K-12, statewide "Copper Competition". As proposed, the competition would be open to Arizona school-aged children and be designed around using copper, copper-products, or copper by-products in the following areas:

- i. Copper in the Home
- j. Copper in Science/Industry
- k. Copper in Art
- l. Copper in Essay

A group that included teachers and AMA staff met in September 2000 to discuss the Copper Competition. The group had a number of helpful recommendations to the original proposal. These suggestions included more details, a proposed budget, a scaled down "pilot" competition, and a focus group of educators to help identify the necessary details.

The department and AMA held a focus group meeting on Saturday February 17th to act upon the recommendations and finalize the concept proposal. The focus group consisted of two department representatives, three teachers familiar with the AMA minerals education outreach and Gail Lichtenhan from the AMA.

The results of the focus group are a revised proposal to partner with the AMA on a pilot competition to be held during the Fall 2001 school year.

2) **Museum Activities:** The Museum Advisory committee continues to meet on a regular basis to plan for new exhibits and the development of the upstairs mezzanine.

Five museum projects have been identified:

- 11. Display Cases
- 12. Copper Corner
- 13. Stope
- 14. Arizona Map
- 15. House of Minerals

We are currently working with APS to make signs for the Boras Head Frame and locomotive. The signs will be laser-etched, anodized aluminum and mounted on a post. Charlie Connell is coordinating the effort with the Palo Verde Nuclear Plant's sign shop.

We are also working with Purcell Tires to obtain an off-road tire and shovel bucket for display near the front of the building. Purcell's has committed to locating the tire and shovel bucket and trying to arrange for transportation to the building.

The display cases sub-committee is developing plans for several standard display cases to replace the existing display cases, some of which are over 60 years old. Scott Poland, Education Curator, has made contact with museum display builders from both the Heard and Phoenix Art Museums. It is our hope that these display builders will provide guidance and resources to assist our efforts.

The Copper Corner sub-committee is working on a layout for the first of 7 to 9 planned displays for the southwest corner of the building. The first display will feature the Morenci District.

Charlie Connell continues to work on the stope display plans. He will devote more time and effort to the stope once the headframe and outside exhibit are completed.

The Arizona Map showing locations of active mines and mineral locations has been put on hold.

Ken Phillips continues to work on the House of Minerals. We expect detailed plans to be available in the next 4 to 6 weeks after which we will begin construction.

3) **Proposed Budget:** The ADMMR prepared the 2002-2003 bi-annual budget. The Office of Strategic Planning and Budget requested that we prepare several proposals for a 5 % decrease in budget to accommodate an expected decrease in state revenue. It is our understanding that the legislature passed its proposed budget without a 5% decrease.

4) **New Staff:** We are pleased to welcome our new Education Curator, Scott Poland, to the department. Scott brings a wealth of marketing talent and energy to the department as we try to develop new displays and increase our mining and minerals promotional and educational activities. Scott has a BA and MBA and has worked for in publishing and for non-profits. The Board can expect a call from Scott in the near future, as we need your assistance in a number of areas.

**ACTIVITIES AND CURRENT EVENTS FROM THE ADMMR MINING AND MINERAL RESOURCE
INFORMATION, PROMOTION AND DEVELOPMENT PROGRAM
3RD QUARTER, 2000-2001
(APRIL 18, 2001)**

Copper Price Closed at 88.00¢ Per Pound Tuesday.

- Copper - 80.0 cents per lb.; cathode - full plate, U.S. destinations, April 17, 2001.
- Copper - 76.15 cents per lb., N.Y. Mercantile, spot, 3:11 p.m., Tuesday April 17, 2001.
- The cathode price is 8 cents lower than price quoted for Tuesday January 16, 2001 reported at the last Board of Governors' meeting.

Arizona Copper Production

- The copper industry benefited from an average annual copper price (producer cathode) that increased 12.2 cents per pound to 88 cents for 2000, and although still low, this was a 16% increase over the century-low (constant dollars) price of 1999. Negative impacts occurred from dramatically increased costs for diesel, natural gas and electricity as well as shortages and interruptions of energy related to the California electricity crisis that forced production cutbacks. Adding to producers difficulties were large amounts of rain during the 4th quarter and for those with by-production of molybdenum a falling price.

- Copper use, however, remains strong and inventories of copper fell throughout 2000. The International Copper Associations reported in 1999 that copper consumption in the US grew 30% from 1992 to 1998, a compound annual growth rate of 4.5%.

Copper Production¹ and Price²

Year	US (metric ton)	Arizona (metric ton)	Arizona (billion lbs)	change	cents/lb
1998	1,860,000	1,190,000	2.600		78.6
1999	1,600,000	1,050,000	2.314	-11%	75.9
2000	1,480,000	963,000	2.123	-8%	88.1

1. USGS figures

2 Metals Week – US Producer Cathode

Copper Mine Production (million pounds)

Mine, Company	2000	1999	1998	1997
Morenci, Phelps Dodge and Sumitomo	834	960	1,046	1,084
Ray, Asarco	304	318	335	304
San Manuel, BHP ¹	23	na	271	251
Mission, Asarco	189	200	255	252
Sierrita, Cyprus (PD 2000) ²	245	51	226	246
Bagdad, Cyprus (PD 2000) ²	247	50	215	246
Miami, Cyprus (PD 2000) ²	119	26	164	156
Silver Bell, Asarco and Mitsui	40	46	42	19
Pinto Valley, BHP ¹	38	na	37	157
Tohono, Cyprus (PD 2000)	0	0	8	27
Other	na	na	6	5
Total	2,044	~2,300	2,605.4	2,744

1. June 1, - May 31, annual basis for 1997 and 1998

2. Includes only Phelps Dodge production in 1999.

BHP Merger

A planned merger of Billiton and BHP was announced March 19. The merger would create the world's second largest mining and metals company, valued at \$29 billion. The deal is being presented as a merger of equals although BHP shareholders will emerge with 58 percent of the enlarged group and it will be run from Melbourne, BHP's base.

BHP properties in Arizona include San Manuel, Pinto Valley, and Florence. BHP eliminated 2,200 jobs at San Manuel in June of 1999 when they closed the underground mine and smelter. San Manuel produced 271 million pounds of copper and 23,000 ounces of gold in its final year of operation. Miami's in-situ project contains 172 million tons averaging 0.40 percent copper while Florence oxide resources are 321 million tons averaging 0.34 percent copper.

The effect of the merger on these Arizona mines is unknown at this time.

Partial Update of the USGS's MRDS Database

- ADMMR is continuing to meet with scientists from the USGS to assemble a proposal for the Dept. to update 118 "significant metal deposits" for a partial update of the USGS's MRDS database. The project will allow the ADMMR to confirm existing information, improve the reference information, and determine the current ownership, operational, and reserve information. It is estimated the project would take about 60 days. The USGS would provide partial funding for the project as well as providing software. The project is to be funded during the current Federal budget year October 2001- September 2002. It is expected that outside consulting services will be used by ADMMR to assist in completing the project.

Mining May Begin Again At Mineral Park

- Equatorial Mining has entered into an agreement to sell the Mineral Park mine to Silver Eagle Resources who will be forming a new company named Mercator Minerals. The deal is contingent upon completion of financing by Mercator. Mercator has begun trading in Canada. The Mineral Park property is currently producing about 5 millions pounds of copper by SX-EW annually with no mining. Mercator would like to institute contract mining of 3 million tons of ore per year and expand the EW circuit to achieve recovery of 15 million pounds of copper per year.

Mineral Information Center Staff Time Favors Information Dissemination

Over 50% of the technical staffs' time is spent disseminating information in the form of long detailed telephone conversations, in office conferences, and by assembling and shipping data packages. Often these are tabulated as merely an office visitor or a telephone contact in statistical compilations. Our users tell us that these intensive efforts are the most useful and appreciated activities of the technical staff. Some examples:

- Provided information on Arizona's sand and gravel industry to a company interest in entering the aggregate business in Arizona.
- Discussed gold exploration with a prospector promoter who is particularly interested in restarting gold baring silica flux shipments from the BVO property in La Paz County.
- Discussed and explained mill site claims with a prospector.
- Reviewed locatable verses common variety limestone case histories, and possible problems with getting approved "plan of operations" from the Forest Service for industrial minerals exploration projects. The Forest Service often insists that any discovery made on a nonmetal deposit would be classified as a common variety material and not be allowable under mining claims.
- "Larry" who lives 26 miles northeast of Show Low, and carried on at length about the sacredness of his land and that surrounding him. He went on about how the ants bring up copper, gold, platinum, diamonds, rubies, and aquamarines, and that a secret underground gold mining operation in one of the nearby gold filled caverns was polluting the ground water with cyanide. He thinks the area should be a Hopi religious shrine and he wants to mine the gold, copper, diamonds, and petrified wood but the law must be changed because he can only mine 25 pounds of petrified wood a year (not true). I tried to intersperse some factual information but it was of no use. He says his reports and filings with Jane Hull are not being answered. We were never able to get a full name, or address, or phone number or even an understanding of what he wanted from the ADMMR.
- Discussed sand and gravel deposit development potential in west valley (Phoenix) with a major out-of-state producer.
- Provided information to an office visitor trying to learn about mercury mining and the transportation corridors for shipments of Arizona mercury to gold mining areas in Colorado in the 1890-1910 period.
- Discussed the onyx mines near Mayer and valuation of unpatented mining claims with a Michigan resident. His family had made contact with a loan broker that offered a 64th of a mining claim in Arizona as good faith for being given \$5,000 "bearer" money order to find a lender to finance his family's small business start up. After investigating he found a victim who had previously put up the \$5,000 and then paid another \$5,000 and signed over the piece of the mining claim to a supposed third party who would take the claim as collateral and finance the business. The victim had not yet received any loan money.
- Talked with Robert Detweiler at the Arizona Dept. Of Commerce about Lorenzo Ceramics and their current status in building a ceramic tile plant in Arizona. He reported his last contact was just within the last couple of weeks and that Lorenzo was looking at an idle plant in Bakersfield

California. He explained that he had subsequently sent them information comparing the costs of operating an energy intensive manufacturing plant in Bakersfield verses Mohave or La Paz County Arizona.

- A landscape business owner inquired about removing boulders for decorative landscape uses from State Trust Lands. The typical circumstances regarding boulder production were outlined. He will need to deal with the Land Department, as they are the trust agent.
- Talked with "Joe" in Riverside Calif. About non-cyanide gold leaching methods. Tried to convince him that anytime cyanidation is an amenable method and legal it's the best and safest.
- Assisted a visitor writing article on recreational gold panning in finding photos of historic placer sites.
- Obtained a catalogue of some 900 mine maps in the archives of OSMRE and placed a paper copy with the description of the data set. These maps were earlier in the possession of the USBM.
- Visited the Arizona State Land Dept. to obtain background data and production history of the Camp Grant Quarry for a New Jersey party interested in the BHP properties. Production of quartzite and limestone from the mine totals over 3.5 million tons.
- Recovered files accidentally deleted from several directories on ADMMR's computer LAN.
- Met with Scott Donaldson and discussed possible open filing of article he wrote on mineral material sales in the central Arizona area and provided background information for a new article he is beginning to write on modern mining scams.

Publications - Projects Completed by the Mineral Resource Information Center 1st 9 Months

- Produced *Arizona Mineral Resource*, No. 26
- Produced *Arizona Mineral Resource*, No. 27
- Completed editing *Directory of Active Mines in Arizona - 2000*.
- Completed and released *Active Mines Map- 2000*
- Compiled Circular 87, *County Agencies Concerned with Mining and Mineral Resources in Arizona*
- Annual Report 61 - *Annual Report of the Dept. of Mines and Mineral Resources 1999-2000*
- Completed Circular 88, *Arizona Mining Update, 2000*
- Produced Circular 89, *Federal Agencies Concerned with Mining and Mineral Resources in Arizona*
- Revised ADMMR *Publication List*
- Released Open File Report 01-17 *Arizona Copper Reserves*
- Wrote and edited exploration article for *Mining Engineering*
- In progress - *A History of Mineral Material Trespass On Public Lands in Central Arizona* by W. Scott Donaldson, an outside author. This will probably become a Special Report.
- Begun *Directory of Active Mines in Arizona - 2001*.

SUSPICIOUS MINING ACTIVITIES

Current Activities Followed By ADMMR Staff

- The ADMMR technical is following the news releases and rumors regarding four questionable - promotional mining ventures in Arizona. Information gathered is being provided to the Securities Section of the Arizona Corporation Commission. Each of these ventures involves proposals to recover unrealistically high values of gold and platinum group metals using secret processes. Values are always determined by use on nonstandard assay techniques.
-

ADMMR Goaded By Scam Promoters

- At least investor (or promoter, or shill) has been sending emails to the entire Department staff about our failure to promote suspicious ventures. The text of emails received and our responses follow:

Another company reports platinum in Arizona. Since ADMMR aids in the promotion and development of Arizona's mineral resources through technical research, field investigations, disseminating information through publications and personal contacts when is the department going to begin promoting Arizona's platinum metals?

**Thank you.
Adam Reynard**

International Star Inc. Reports Assay Results.

LAS VEGAS- (BUSINESS WIRE)--March 12, 2001--INTERNATIONAL STAR INC. (OTCBB: ISRI) is pleased to announce fire assay results using Nickel Sulfide Technique on composite samples taken from an open pit area approximately 50 F X 75 F X 30 F in depth and from a stock pile of approximately 750 tons of screened ore which is the material that the company has an option to acquire 1,100,000 tons as reported in the March 5, 2001 press release.

Dear Adam Reynard

As did your nearly identical message of January 25, 2001, your following message came to me from you as bulk mail, thus it must have been sent to many recipients. If it was not a rhetorical question, please provide more details. Further with one major exception, an invitation, my answer is identical to the one I sent to that message.

The news release you attached is not detailed as to location, geology, mineralogy, field sampling methods, number of samples, weight of initial samples, concentration ratios, relation of samples to undisturbed natural material, influence of samples to potential ore deposit, preparation of samples, comparison to blanks, and reference to available assay standard materials.

WITHOUT commenting specifically about any particular mining venture and only speaking generally, in my 30 years of mining experience in Arizona I have never seen any purported economically viable platinum group metal concentrations confirmed.

Further such reports could easily be described as an old story. For over 40 years our staff engineers have listened patiently while we are told how one is going to get rich mining the platinum group metals from their Arizona claim. Further, we are told that this discovery of platinum has remained undiscovered for all these many prospecting years because it can't be assayed by ordinary means. And, that these "Platinum Group Metals" are so unusual that they can only be found by a proprietary special process known only to a select few.

It's always purported that normal types of analysis used where platinum is commercially mined and is a common occurrence, will not work on these special ores. In other words, what we have been told is that the people who mine platinum don't know what they are doing. It never seems to matter that the Canadians, Russians, South Africans, and even those mining palladium and platinum at Stillwater, Montana, have been assaying and mining the metals for a decade to over a century.

There is seldom any information or references we might recommend that would dissuade them from dumping their available capital into such a venture. When I review our statutory duties it is obvious that it is my job, probably even my moral obligation and civic duty, to tell them to use prudence. Yet in the end, there has never been any point. It usually ends up that they spent a lot of money and a lot of time and come up empty handed.

It has been our experience that people who claim these special assay abilities can find platinum in anything from parking lot asphalt to Petunia potting soil. Usually these "assayers" cannot get the same answer twice from the same sample of material if they

don't know that it's the same material. Nor, will the "assayer" be able to determine the right value if the original sample is mixed in a known ratio with a known blank.

I have attached a copy of the Platinum Group Metals chapter from Mineral and Water Resources of Arizona for your general interest.

Further, I recommend you obtain a copy of *Mineral Report, Validity Examination of Six Mining Claims Within the West Half of Section, 14, T. 23 S., R. 63 E., Mount Diablo Meridian, Nevada*, US Department of the Interior, Bureau of Land Management, Serial No. N-63126, by Matthew W. Shumaker and Burrett W. Clay. It is generally applicable to the assay problem I am referring to.

I would like to invite you in to our office for a cup of coffee and an opportunity to chat. It is certainly our desire to fulfill our statutory duties to aid in the promotion and development of Arizona's mineral resources. Further we always encourage anyone considering involvement in a mining venture to obtain independent expertise on their own behalf to evaluate the venture.

Thank you for your interest in Arizona's mines and mineral resources.

Ken A. Phillips, Chief Engineer
Arizona Department of Mines and Mineral Resources

Arizona Department of Mines and Mineral Resources

MG Gold Accused of Fraud

In a press release dated March, 2001 the Securities Division of the Arizona Corporation Commission announced they have taken action against MG Gold, a company with operations in Arizona. The Corporation Commission has accused the company of fraud in the sale of unregistered securities.

MG Gold, a company that also used the names Mariah International, Guildmark Industries, and Xenolix Technologies, Inc. was named in the action, as well as Alvin C. Johnson, Jr. of Tempe.

According to the action filed by the Division, the company committed fraud by "withholding from investors the fact that the technology the company was relying on had failed for some 20 years to produce any economically viable product from the processing of cinders." The company is accused of press releases that "tout the technology as being on the verge of producing highly successful results. There are no known successful operations in Arizona for extracting economically viable quantities of precious metals from volcanic cinders."

For details on this case and other activities of the Securities Division, call them at 602-542-4242 or visit their web site at www.ccsd.cc.state.az.us/.

Prospectors, Property Holders, Investors, and Consultants Encouraged to File With Department

- The staff of the Mineral Resource Information Center encourages the filing of mineral resource technical data with the agency. Although there is no legal requirement for anyone to file such data it is often to their benefit to do so. It provides an extra copy available in a public place as well as allowing the staff the use of the data in carrying out the objectives of the agency.
- Prospectors, property holders and consultants are also encouraged to provide the ADMMR with a technical summary of any mineral property they hope to promote, joint venture, or sell. The staff can then make the property known to a large audience of possible developers.
- While in Tucson for the SME conference a meeting was held with Walt Heinrichs to discuss the donation of his file collection to ADMMR.

3809 Update

- On March 23 the Bureau of Land Management announced a proposal to suspend the 3809 regulations that amended the rules governing mining operations involving locatable minerals on public lands. The BLM says the suspension will give them time to review the issue in light of

lawsuits and complaints that have been raised since the final rules were published. The BLM also has announced it will republish and reinstate as a final rule the rules that were in place on January 19, 2001, the day before the revised rules became effective.

- The proposed suspension is viewed with relief by the mining community who believe the 3809 regulations gave the BLM unlimited veto power over new and revised mining operations.

COMPUTER RELATED

Email Becoming An Effective Method of Information Distribution

- We are responding to more and more inquiries from the general public sent by e-mail. Accepted practice is that email is less formal than regular correspondence and thus much less time-consuming, yet still provides the information our users desire. E-mail is also less intrusive than phone calls for both caller and receiver and can provide the user with a written record. Hot links to our and other's web pages may also be included. Unless the Department becomes overwhelmed with inquiries via the Internet, which has not been the case so far, this has certainly been an efficient way to disseminate information. (a sample is attached)

WWW.ADMMR.STATE.AZ.US Website Continues To Evolve

- All web pages for the Arizona Department of Mines and Mineral Resources website have been updated. Fourteen new pages have been developed and added to the website. The website serves both those users of the Department's services that have Internet access and the Department's staff. We now have quick ready digital access to many of our publications and answers to common user inquiries. Answers to many of our commonly received inquiries can be assembled from portions of publications on our website to make custom responses to inquiries. For those users without Internet or email access the responses are printed and sent by Fax or mail.

Drilling at Magma Porphyry

- Kennecott Exploration Company is proposing to drill from six drill pad locations on BHP's Magma Porphyry east of Superior. The drill program is expected to last 18 months and operate around the clock.
- BHP reported discovery of the deposit in mid-1998. It is the first major copper discovery in Arizona in many years. The deposit, deeply buried under post-mineral rocks, was first intersected by drill holes from the underground workings of the Magma mine in 1995.

Drilling at Hell's Canyon Limestone

- Stirling Bridge Cement Company is proposing to drill a limestone deposit to determine its size, grade, and amenability for use in making Portland cement for the company's proposed 300,000 ton per year cement plant at Drake.

Think Before You Stake

- Ralph Costa, US Bureau of Land Management has written a guest article for the ADMMR newsletter. It provides a new slant on the possible liabilities of staking mining claims

We at BLM often talk to individuals who have just filed mining claims on old abandoned mines. Usually these people have waited for years for claims to lapse so that they could file on the property. They are often convinced that spoil piles, tailings ponds or the mine itself has vast treasures waiting just for them. Unfortunately, the reality commonly is quite different.

Many historic mines have longstanding environmental problems. Sometimes these problems are not readily apparent and require sophisticated sampling techniques before their true nature can be determined. These problems, under modern environmental laws, can carry with them enormous

liabilities for the clean up and treatment of soil, water and air borne contaminants. New claimants, many of whom have never operated a day on their claim, are completely surprised that they could be held responsible for these cleanups. In the most severe cases, the cost of such work can reach the tens or even the hundreds of millions of dollars. But how do mining claims play into this potential liability?

Mining claims essentially do three things. First, they protect the interest of the claimant against those having no better right to the mineral estate. This is the "historical context" for a mining claim. It protects the claimant against "claim jumpers." Mining claims however, also tell the government that the claimant is aware of and responsible for complying with all the requirements of the laws governing mining. When it comes to the 1872 Mining Law, there are no provisions for recreational or "Sunday" miners. Everyone is treated as a "professional miner" under the law and held to the same strict standards. Finally, a mining claim allows the claimant possession and use of all mineral-related equipment and facilities unless that possession is contested by others. It is easy to see that a mining claim can provide real protection to a claimant to protect his mineral discovery, but it comes with large responsibilities.

We often hear, "Well I'm not using the tailings pond, I'm just sampling it." Sampling is using it. It indicates possession. Under the Comprehensive Environmental Response and Compensation Liabilities Act (CERCLA) an owner, operator and all past owners and operators can be held liable for the cost involved in the clean up or treatment of environmental problems. But what if you never touched that tailings pond?

If you don't want to clean up the mess (a tailings pond for example) and you don't want any responsibility for it, why claim it in the first place?

Under the surface management regulations governing mining claims on BLM lands, claimants and operators can be held liable for the reclamation of historic mining related features such as tailing ponds and spoil piles that may be on their recently filed mining claims. Again, it is a question of proof.

We hope that you can see the real problems as well as the benefits of filing a claim. How can you protect yourself? First, remember that a mining claim isn't necessary for prospecting or mining. If all you plan to do is prospect at a casual use level using only simple hand tools and metal detectors, you are probably better off without a mining claim. If you feel that you must have a claim to gain access to your favorite panning area, you may as an alternative elect to join a prospecting club or other such "joint venture" to spread the risks of filing your own claim.

If you are a more serious explorationist, remember that a "valid" claim must have a discovery of a valuable mineral deposit. In a historic area, remember that the value of the minerals must exceed not only the cost of mining and milling, but also the cost to remediate any known or potential environmental liabilities. The bottom line is this, "Be cautious! THINK BEFORE YOU STAKE!"

Arizona Department of Mines and Mineral Resources

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Director's Report July 18, 2001

1) **Copper Competition:** The ADMMR has proposed to both Phelps Dodge and the AMA to assist in a K-12, statewide "Copper Competition". As proposed, the competition would be open to Arizona school-aged children and be designed around using copper, copper-products, or copper by-products in the following areas:

- m. Copper in the Home
- n. Copper in Science/Industry
- o. Copper in Art
- p. Copper in Essay

A group that included teachers and AMA staff met in September 2000 to discuss the Copper Competition. The group had a number of helpful recommendations to the original proposal. These suggestions included more details, a proposed budget, a scaled down "pilot" competition, and a focus group of educators to help identify the necessary details.

The department and AMA held a focus group meeting on Saturday February 17, 2001 to act upon the recommendations and finalize the concept proposal. The focus group consisted of two department representatives, three teachers familiar with the AMA minerals education outreach and Gail Lichtenhan from the AMA. The results of the focus group were a revised proposal to partner with the AMA on a pilot competition to be held during the Fall 2001 school year.

Update: Recent discussions with AMA representatives revealed that the proposal is still under consideration; however, due to low copper prices and organizational uncertainty within the member companies, the Copper Competition is still under consideration.

2) **Museum Advisory Committee:** The Museum Advisory Committee, consisting of Sue Celestian, Ken Phillips, Scott Poland and Doug Sawyer, was invited to partake in the AMA's June 24th through June 30th Level II training entitled "Prospect to Production". The training was held in Marana, Arizona and consisted of the philosophy and mechanics of developing an educational curriculum. Our team used the training as a team building exercise and to begin formalizing a comprehensive museum interpretive plan.

The results of our initial work may be found in the document entitled: "2001 Draft of Interpretive Master Plan for the Arizona Mining and Mineral Museum." We envision that this draft will be a "living document" that will be modified to accommodate new exhibits and displays.

In addition to the four department members who partook in the Level II training, Glenn Miller, former Museum Curator joined our team and helped guide us through the concepts and mechanics of the training. Mr. Miller has graciously offered "pro bono" services to the team where he will collate and summarize his previous efforts in the area of museum planning and educational outreach.

Five museum projects have been identified:

16. Display Cases
17. Copper Corner
18. Stope
19. Arizona Map
20. House of Minerals

We are currently working with APS to make signs for the Boras Head Frame and locomotive. The signs will be laser-etched, anodized aluminum and mounded on a post. Charlie Connell is coordinating the effort with the Palo Verde Nuclear Plant's sign shop. These signs will be delivered by the end of the month.

We are also working with Purcell Tires to obtain an off-road tire and shovel bucket for display near the front of the building. Purcell's has located a tire in southern Arizona. Charlie Connell and Ken Phillips are working to arrange for transportation to the building and to design/build a stand to display the tire.

Work has begun on the house of minerals. Ken Phillips is coordinating this effort with the U of A Mining and Geological Engineering Department. We hope to partner with a public utility, ARPA, AMA, mineral suppliers and others to create a "home" that displays all the minerals that are used to make our lives livable.

3) Department Budget: The ADMMR bi-annual budget for FY 2002/2003 has been approved. Attached is a copy of the budget. As in the past, approximately one-half of the budget is consumed by rent/building associated expenses. We did receive a line item for the installation of a building wide paging system to provide for non-emergency communications.

4) New Staff: We are pleased to welcome our new Education Curator, Scott Poland, to the department. Scott brings a wealth of marketing talent and energy to the department as we try to develop new displays and increase our mining and minerals promotional and educational activities. Scott has a BA and MBA and has worked for in publishing and for non-profits. The Board can expect a call from Scott in the near future, as we need your assistance in a number of areas.

5.) Fox 10 Morning Show: The Mining and Mineral Museum was featured on the Fox 10 morning show last Monday July 16th. The show features a roving telecast crew and meteorologist who visit a site, interview staff and provide a weather forecast. The ADMMR staff and an army of volunteers arrived on site at 6:30 AM to open the building, set up lapidary displays, and prepare to welcome the Fox 10 crew. They arrived about 7:30 and over the next 90 minutes; they broadcast 7 or 8 times from the museum including four interviews with the director and curator. The staff and volunteers did a fabulous job of presenting the best of what the museum has to offer and deserve a hearty thank you and a job well done.

6.) Volunteer Classification: Based on discussions with Risk Management, volunteers are considered State employees as far as liability is concerned. A question was raised regarding volunteers' ability to drive state owned vehicles while performing volunteer activities associated with the department. According to Risk Management, even though volunteers are not paid, get no benefits, and are not covered by workmen's compensation, they are covered by the State's liability insurance coverage. That is to say that if they are involved in an automobile accident while driving a state vehicle, the state will cover damages to the other party, but not the volunteer. The department is assessing its safety requirements with regard to volunteer efforts in the shop and outside exhibits. Attached is a copy of a memorandum summarizing the discussions with Risk Management.

**ACTIVITIES AND CURRENT EVENTS FROM THE ADMMR MINING AND MINERAL RESOURCE
INFORMATION, PROMOTION AND DEVELOPMENT PROGRAM
4TH QUARTER, 2000-2001
(JULY 18, 2001)**

Copper Price Closed at 74.00¢ Per Pound Tuesday.

- Copper - 74.0 cents per lb.; cathode - full plate, U.S. destinations, July 17, 2001.
- Copper - 71.25 cents per lb., N.Y. Mercantile, spot, 3:11 p.m., Tuesday July 17, 2001.
- The cathode price is 6 cents lower than price quoted for Tuesday April 17, 2001 reported at the last Board of Governors' meeting.

Arizona Copper Production

Copper continues to remain over 70% of the value of Arizona's mine production. Copper data included in last months report is continued here.

Copper Production¹ and Price²

Year	US (metric ton)	Arizona (metric ton)	Arizona (billion lbs)	Change	cents/lb
1998	1,860,000	1,190,000	2.600		78.6
1999	1,600,000	1,050,000	2.314	-11%	75.9
2000	1,480,000	963,000	2.123	-8%	88.1

1. USGS figures

2 Metals Week - US Producer Cathode

Copper Mine Production (million pounds)

Mine, Company	2000	1999	1998	1997
Morenci, Phelps Dodge and Sumitomo	834	960	1,046	1,084
Ray, Asarco	304	318	335	304
San Manuel, BHP ¹	23	na	271	251
Mission, Asarco	189	200	255	252
Sierrita, Cyprus (PD 2000) ²	245	51	226	246
Bagdad, Cyprus (PD 2000) ²	247	50	215	246
Miami, Cyprus (PD 2000) ²	119	26	164	156
Silver Bell, Asarco and Mitsui	40	46	42	19
Pinto Valley, BHP ¹	38	na	37	157
Tohono, Cyprus (PD 2000)	0	0	8	27
Other	na	na	6	5
Total	2,044	~2,300	2,605.4	2,744

1. June 1, - May 31, annual basis for 1997 and 1998

2. Includes only Phelps Dodge production in 1999.

Partial Update of the USGS's MRDS Database

- ADMMR is continuing to meet with scientists from the USGS to assemble a proposal for the Dept. to update 118 "significant metal deposits" for a partial update of the USGS's MRDS database. Financing and in-kind contributions by the ADMMR have been discussed. Historical and production data are the most important concerns to the USGS at this time.

The WHITE CLIFFS DIATOMITE mine is closed

ADIT CANYON L.L.C. appears closed down and their telephone has been disconnected. Diatomite from the mine has been sporadically produced over the last fifty years. It has been used for agricultural feed supplements, insecticide carries, fillers, metallurgical insulation, and as a silica source.

ARIZONA OXIDES no longer red iron pigment in Arizona

The company and its Iron Chancellor mining operation have been sold to an Asian producer of natural mineral pigments. The new owners have closed the Iron Chancellor mine in Yavapai County and cancelled their lease with the mine's owner. The new company mines red iron oxide in China. The red hematite from the Arizona mine was used in paints, plastics, concrete products, and as a mold release in castings. The underground mine was operated by Birch Development, an Arizona based small mine contracting firm. The mine may be able to operate in the future as a source of high-grade iron oxide for use in cement manufacture.

CATALINA MARBLE, Incorporated Indian Town Quarry T10S R13E Sec. 32 is idle. Kevin Hall and James B. Fink still hold the white marble property under a state lease. Kevin Hall is now operating JC Rock and is recovering quartzite and other rock from the Johnson Camp mine dumps for landscape and rip-rap. They crush and screen material to make sized material from ½" to 6" X 12" rip-rap and selected landscape boulders. The address for JC Rock is 6860 South Nogales Highway, Tucson AZ 85706 - Phone (520) 573-9948

Mineral Information Center Staff Time Favors Information Dissemination

Over 50% of the technical staffs' time is spent disseminating information in the form of long detailed telephone conversations, in office conferences, and by assembling and shipping data packages. Often these are tabulated as merely an office visitor or a telephone contact in statistical compilations. *Our users tell us* that these intensive efforts are the most useful and appreciated activities of the technical staff. Sometimes this function becomes more of rumor and fear abatement and anti-mining damage control. This can be a more difficult endeavor and not nearly as straightforward as providing technical data. Although it would be easy to dismiss these people as 'nuts' and not spend time on them, their fears are genuine and part of our task is to provide accurate information on mining. We have received numerous calls from people afraid that:

- asbestos is blowing around Arizona from old mines.
- someone is going to come onto their property and start a mine.
- mercury is poisoning the children at Mercury Mine School.
- there may be radioactive material in their yard.
- the 'platinum cartel' is hiding production of Arizona platinum.
-

Some of the fears are more unique. A few years ago a woman was sincerely concerned that Mission mine had a tunnel under her house and the movement of the ore cars was causing her breasts to enlarge.

We recently had a caller from New River who became convinced by reading postings on the Internet, that the World Bank and 'foreign powers' were trying to infiltrate the US mining industry, cleverly sabotage it, and take over America when we ran out of mined resources. The evidence he had compiled was pretty impressive.

We find satisfaction in knowing we usually are able to reassure these callers and calm their fears.

New Publications

Circular 90 – *Mining Claim Forms*

Circular 91 – *Assayers and Assay Offices in Arizona, 2001*

Circular 92 – *Arizona Rockhound Information*

Circular 93 – *Arizona Earth Science Clubs, 2002-02*

Circular 94 – *Arizona Gemshows, 2001-02*

Nyal Niemuth, Mining Engineer – Example of last Quarter's activities

- Reviewed most Arizona mining company web sites for 99-2000 summaries and news releases and exploration data. This will be included in our *Mining Engineering* summary and the USGS Yearly MIS summary articles.
- Contacted Carol Chu at Asarco New York Headquarters and obtained unpublished individual mine production data for use in year our 2000 summaries.
- Contacted the PD's mines that were acquired from Cyprus and PD's corporate office trying to put together the unreported copper production in 1999. We still are unable to get missing 15 days of 1999 production and our existing totals are "odd".
- Pat O'Hara, exploration geologist, reported that about 20 majors and 100 juniors were in attendance at PDAC (Prospectors and Developers Association of Canada) in Toronto. Majors have kept their Canadian exploration staff's unlike the situation in the US.
- Contacted assay offices to update Assay Office circular. Both the printed circular and website versions were updated.
- Attended 2/3 day ESRI Arc Info seminar. It was a new software release and GIS (Geographic Information System) demonstration.
- Upgraded older DOS version of dBase AZMILS printing programs and report forms to run correctly in our Windows version of Visual dBase. Set up Crystal Report on all ADMMR's desktop computers.
- In cooperation with Diane Bain completed major revision of Rockhound/Tourist circular and website version. It is now Circular 92.
- Wrote draft letter to Interior Secretary Gale Norton regarding the new national monuments - in particular the plight of Asarco's Silver Bell operation.
- Presented a map reading program to 32 people at the Leaverites May club meeting.
- Completed SME Mining Engineering Annual review article and sent to editor Steve Kral in early April. In early May completed Arizona MIS article for year 2000 and sent to Arnie Tanner of the USGS.
- Made AZMILS indexes and ordered maps for 7 counties.
- Made another 10 AZMILS on disks. The lowered price and appeal to GIS users has increased sales despite lull in prospecting.
- Converted the new circular Clubs 2001 to html and put on web.
- Attended the SME geology field trip at Morenci and wrote up summary that serves as basis for summer issue of Mineral Resource cover story.
- Learned how to use digital camera, download pictures, and utilize the MS Image Composer. Then prepared efficient jpg images to use in our website.
- Prepared to GIS datasets for Charles Miller of Tucson to use in presentation to PIMA county board of on mineral resources for
- Provided assistance to the Heard Museum of Phoenix in preparing a display on the use and trading of Turquoise. Received a "inside tour" of their collection storage systems and online cataloging and archival systems.
- Completed a much needed clean up of my desk and part of my office. The bad news is that more projects and data have shown up.
- Created 2 new Yavapai AZMILS records.
- Received a Bullard mine report and summary package from Auric Resources.
- Ordered and obtained on CD and at no charge the Arizona State Land Department's ALRIS GIS datasets as EOO format for use in making department maps and publications. Also in a cooperative shared swap with Dan Laux of MagmaChem we have downloaded from

www.gisdatadepot.com Arizona's DRG's for the 1x2 degree, 30x60 minute and over 150 – 1:24,000 series topographic maps in a form compatible for use with MAPINFO 5.5. This represents about a gigabyte of compressed data files. Some of these have been imported and converted and are now ready to use. Copies of DRG topos have been archived to CD-R disks.

- Convinced Dan Laux to spend several days volunteering cataloguing Cambior file donation.
- Supplied lots of background information on copper and copper mining to Capital times writer Dan Burnette for major story on copper.
- Provided SX-EW processing information and graphic flow chart to Dale Nations for use in the next edition of Geology of Arizona. The last edition section on copper processing was badly out of touch with reality. Now that he is retired from NAU he is working to complete the new edition.
- Cleaned up and organized Pubs AM directories and files and archived older data to begin work on new active mines directory.
- With Diane Bain reviewed and changed all publications, website, ADMMR mail list, etc. for 520 to 928 area code changes.

SUSPICIOUS MINING ACTIVITIES

Current Activities Followed By ADMMR Staff

- In a press release dated March, 2001 the Securities Division of the Arizona Corporation Commission announced they have taken action against MG Gold, a company with operations in Arizona. The Corporation Commission has accused the company of fraud in the sale of unregistered securities. The company that also used the names Mariah International, Guildmark Industries, and Xenolix Technologies, Inc. According to the action filed by the Division, the company committed fraud by "withholding from investors the fact that the technology the company was relying on had failed for some 20 years to produce any economically viable product from the processing of cinders." The company is accused of press releases that "tout the technology as being on the verge of producing highly successful results. There are no known successful operations in Arizona for extracting economically viable quantities of precious metals from volcanic cinders."
- We are working with Wendy Coy on Xenolix mining company stock fraud case, principally on coal and precious metal analysis and the range of values for specific deposits. Among other actions a hearing regarding Alvin Johnson's role is scheduled for August 27. Ms. Coy asked Ken Philips and Nyal Niemuth to work with her to provide the State technical expertise at the hearing.

(This has been Stated Before, But It's Important)

Prospectors, Property Holders, Investors, and Consultants Encouraged to File With Department

- The staff of the Mineral Resource Information Center encourages the filing of mineral resource technical data with the agency. Although there is no legal requirement for anyone to file such data it is often to their benefit to do so. It provides an extra copy available in a public place as well as allowing the staff the use of the data in carrying out the objectives of the agency.
- Prospectors, property holders and consultants are also encouraged to provide the ADMMR with a technical summary of any mineral property they hope to promote, joint venture, or sell. The staff can then make the property known to a large audience of possible developers.

COMPUTER RELATED

- Converted or OCR'ed (Optical Character Recognition) all of older published circulars to a digital form usable in our present software. About half of them have also been converted to html for use on our website. A few also received minor updates.

- Met with GITA's Gene Martel and IBM's Scot Whitfield to explain our needs as they might affect a statewide proposal for a new state portal and e-commerce site that will serve all agencies and allow us to do e-commerce. They were interested in meeting with ADMMR because most of the e-commerce issues they have considered thus far are on line government licensing renewal procedures. We represent (with our publications, receipt of donations, and limited number of items from the gift shop) the first truly retail consideration for the State's site. Renewals are expected to be where the "big bucks" are; "retail type" functions will come later, maybe by this fall or winter.
- Reviewed upcoming IT (Information Technology) strategic plan and new inventory requirements with Chris Muir of GITA. Plans are due Sept. 30, 2001.

STATISTICAL REPORT FOR ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES JULY 1, 2000 THROUGH JUNE 30, 2001.

(Some data is not available due to partial reporting periods, tabulation startup, and other unforeseen circumstances.)

(Item italicized in parentheses are measurement items in the current strategic plan)

	1 st ¼ 2000-2001	2nd ¼ 2000-2001	3rd ¼ 2000-2001	4th ¼ 2000-2001	Total Fiscal 2000-2001
[1] Visitors Mineral Resource and Development Technical Information Center (upstairs) [Visitors to the mining and mineral resources information center.] <i>(people requesting information on mines & minerals in office)</i>	307	282	629	645	1,863
Number of above using databases, files, library, etc. [Those above who sign in to use files, library materials, maps, or magazines.] <i>(Mineral occurrences research by the public)</i>	175	130	277	542	1,124
Possible new mine startups <i>(Requests for permitting, environmental, and mine startup information)</i>	21	5	3	3	32
[2] Arizona Mining and Mineral Museum [Total of the following five groupings]	5,743	9,836	12,459	8,559	36,597
General Museum Visitors [All Arizona Mining and Mineral Museum visitors]	2,739	3,493	4,507	3,161	13,900
Student Visitors [Number of students and teachers in scheduled school field trips to the Museum]	2,121	5,146	5,729	3,774	16,770
Club Members [Earth science club members using the Museum facility.]	631	941	1,312	1,106	3,990
Americans With Disabilities	91	111	113	174	489
Scouts	161	145	132	147	585
Lapidary Shop Users / Hours	n.a.	175/603	113/666	197/1,1602	485(2,249)
Organized museum tours [Includes schools & other tours]	n.a.	88	94	123	305
[3] Telephone contacts [Incoming and outgoing]	3,206	2,597	2,551	3516	11,870
[4] Letters and information sent out by mail, facsimile, and e-mail.	552	1,433	457	420	2,862

STATISTICAL REPORT FOR ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES JULY 1, 2000 THROUGH JUNE 30, 2001 (CONTINUED)

	1 st ¼ 2000-2001	2nd ¼ 2000-2001	3rd ¼ 2000-2001	4th ¼ 2000-2001	Total Fiscal 2000-2001
Mineral and Rock samples identified for the public	130	178	253	133	694
Total direct patron contacts (1+2+3+4+5)	9,889	14,301	16,206	13,222	53,618
Mining & Mineral Museum Gift Shop sales	\$17,353.00	\$24,755.61	\$37,823.66	\$25,706.20	\$105,638.47
Publication sales	\$1,033.95	\$1,269.90	\$1,771.90	\$2,013.30	\$6,089.05
Mine files and library references used	702	323	745	488	2,258
Technical conferences held	11	6	53	13	83
Meetings attended	12	20	41	72	145
Seminars and symposiums attended	2	7	0	11	20
[5] Programs given and (number of people in attendance)	1(81)	4(153)	5(110)	4(89)	14(433)
Written or public advocacy statements	8	11	5	14	38
Mining/mineral resource properties visited	5	14	35	2	56
Volunteer hours received	2,164	10,490	3,104	3,214	18,972
Donations Cash	\$445.00	\$6,735.00	\$2,737	\$2,544	\$12,461.00
Donations Bulk rock & mineral material (pounds)	1,552	8,109	1,336	2,236	13,233
Donations Individual specimens	148 (*)	442	0.	166	756
Donations *Mine data, libraries, materials, collections [See list at end of table]					
Donations Outgoing [See list at end of table]					
Additions to Museum collection	n.a.	79	34	54	167
(School curriculum programs)				2	2
Teacher mineral kits distributed		102	135	147	384
Additions and corrections to information base					
Museum specimens & information	5,686	6,182	2,214	6,010	20,092
Mineral resources information (Files updated)	188	263	443	1,582	2,476
New / modified internal exhibits (both in galleries and out doors)	3	1	0	2	6
External exhibits			4	0	4
Display cases cleaned, relamped, relabeled, etc.	9	7	2	4	22

- Arizona Public Service donated printing of 2000 copies of the Teacher Kit information booklet.
- Cy W. Greenhalgh donated 84 mining reference books and 55 educational ore and mineral specimens.
- Arizona Public Service donated crane and lifting service.
- 50 sets of sulfide and oxide copper ore specimens were donated Jacobsen Elementary for their mining curriculum.
- *Common Ground* (Caterpillar video), activity book, and coloring book to Bellair Elementary School library.

STATISTICAL REPORT FOR ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES JULY 1, 2000 THROUGH JUNE 30, 2001 (CONTINUED)

- Received book and report collection donation from Jim Matt.
- Keith Halsey returned as a volunteer to continue cataloging historical mine photographs.
- Received book and report collection donation from Jim Weatherby.
- 75 chrysocolla specimens were provided to a mineral education workshop in Missouri.
- Specimens of the 3 rock groups were provided to a Boy Scout group.
- A large group of study specimens consisting of 30 each of gypsum, mica, pyrite, orthoclase, chalcopyrite, hematite, quartz, talc, and calcite, was provided to Bologna Elementary School.
- The "Homeward" Bound organization received a few pounds of small geode halves and miscellaneous minerals.
- The Glendale School District was given a group of study specimens consisting of 6 each of obsidian, magnetite, hematite, quartz, talc, and calcite.
- Obtained 4 additional boxes of John Kinnison exploration files from Clark Arnold of Tucson.
- Obtained (many hundred?) flat and rolled maps produced from Projects of Clark Arnold largely focused on Copper and precious metal exploration.
- Received donation from Janice Coggin of maps on microfilm. Originals are in ADMMR maps collection.
-

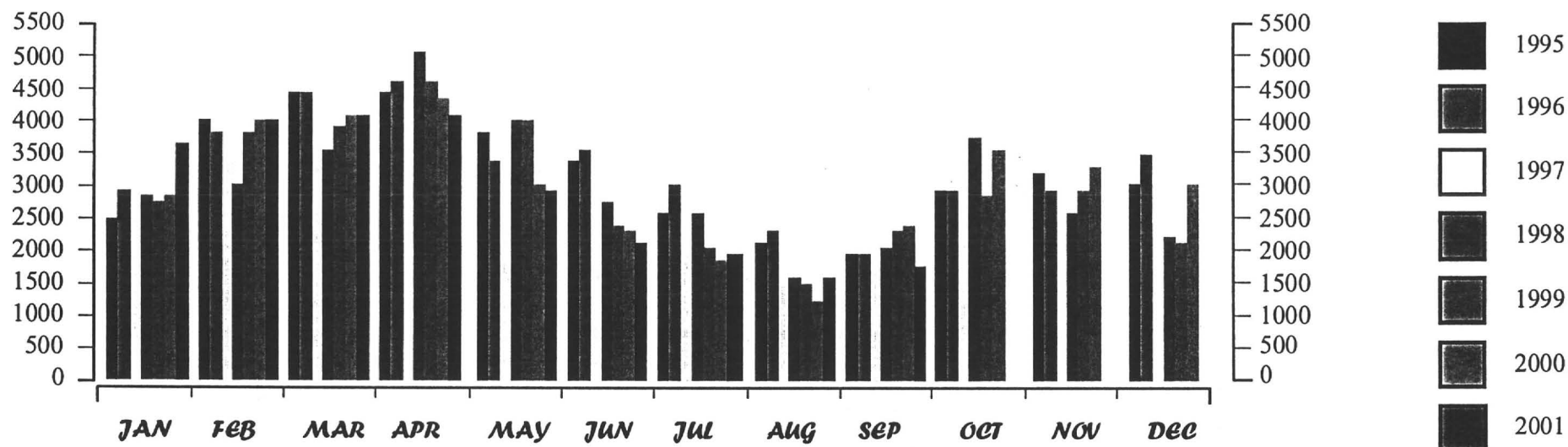
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ANNUAL VISITATION (inc. students) For The Years 1995-2001

	1995	1996	1997	1998	1999	2000	2001
JAN	2453	2897	3332	2857	2765	2852	3703
FEB	4040	3691	4174	2984	3733	3914	3912
MAR	4442	4467	4434	3579	3834	4171	4178
APR	4454	4527	5522	5052	4547	4383	4188
MAY	3816	3339	3151	3937	4000	3109	2888
JUN	3313	3487	2111	2719	2319	2385	2193
JUL	2628	2909	2892	2534	2064	1888	2017
AUG	2051	2189	1475	1514	1470	1262	1654
SEPT	1927	1942	2637	2006	2273	2422	1871
OCT	2935	2972	2655	3650	2741	3576	
NOV	3208	2852	2619	2525	2823	3266	
DEC	2974	3426	2364	2228	2182	2994	
TOTAL	38241	38698	37366	35585	34751	36222	26604

FISCAL YEAR SUMMARY

FY 1995/96 - 38,131
FY 1996/97 - 39,014
FY 1997/98 - 35,770
FY 1998/99 - 35,655
FY 1999/00 - 34,368
FY 2000/01 - 36,470
FY 2001/02 - 5542



ANNUAL STUDENT VISITORS For The Years 1995-2001

	1995	1996	1997	1998	1999	2000	2001
JAN	586	1104	1592	1153	1182	1259	1693
FEB	1941	1778	2331	1285	2236	2053	1899
MAR	2090	2278	2271	1854	2159	2411	2262
APR	2361	2739	3174	3584	3834	2990	2725
MAY	2257	2084	1826	2725	2590	2535	1525
JUN	1492	1201	569	1168	869	993	632
JUL	560	665	1017	1205	622	694	546
AUG	430	449	160	495	308	137	50
SEPT	355	587	1358	777	1219	1290	727
OCT	1435	1570	1320	2165	1426	1361	
NOV	1859	1573	1411	1448	1665	2107	
DEC	1607	1895	898	997	1042	1678	
TOTAL	16973	17923	17927	18856	19152	19508	12014

FISCAL YEAR SUMMARY

Fy 1995/96 - 17,430
Fy 1996/97 - 18,502
Fy 1997/98 - 17,933
Fy 1998/99 - 19,957
Fy 1999/00 - 18,523
Fy 2000/01 - 18,003
Fy 2001/02 - 1323

