



Wickenburg Gem & Mineral Society, Inc.

P.O. Box 20375, Wickenburg, Arizona, 85358

E-Mail — wgmssociety@gmail.com

www.wickenburggms.org

The purpose of this organization shall be to educate and to provide fellowship for people interested in rocks and minerals; to foster love and appreciation of minerals, rocks, gems, and the Earth.

Membership shall be open to all interested people.

McCRACKEN MINE

**aka Atlanta Mine, Signal-Senator Mine,
Blacksmith Tunnel, McCracken Lead Mine,
Alta Mine**

Latitude 34.4414047 W; Longitude 113.7757712 N

The April field trip was to the McCracken Mine. Since no one sent me any pictures, I thought I'd write a bit about the history of the mine. I hope everybody had a good time and found some pretty rocks!

The silver-rich McCracken Lode was discovered on August 17, 1874, by "Chloride Jack" Owens and Jack McCracken. The McCracken Mine (or group of mines) was started, and ultimately several other mines opened. The lode runs north/south across McCracken Peak. It averages 6-37 feet wide (up to 80 feet wide), and is traceable, directly and indirectly, for 10-15 miles.

The "Palace Chamber", the entrance to which was just below the summit of McCracken Peak, produced \$875,000 in silver, with ore averaging 13-30 ounces/ton silver. Ore from the Palace Chamber came in as high as \$2,700/ton silver. And in the 1800s, silver sold for 0.22 cents/ounce!

There was over 700 feet of shafts, over 1200 feet of tunnels, and 7 large chambers.. The primary ore minerals were horn silver chlorides (ex. chlorargyrite), bromides (ex. bromargyrite), sulfides of silver (ex. acanthite and argentite), and some galena. The mines primarily produced lead, silver, and zinc, secondarily produced calcium, gold, and manganese, and thirdly barium/barite.

Costs associated with mining in the 1800s were:

- First class milling ore—\$96/ton
- Secondary class milling ore—\$65/ton
- Labor (mine and mill) - \$4/day
- Haulage of ore to mill—\$12/ton

Continued.....

During 1876-1877, the town of Signal (and adjacent Virginia City) grew in support of the mines and 100 miners. There was a stamp mill, 5 stores, 3 restaurants, 3 saloons, and a brewery. It must have had at least 1 church and a school, but I find no mention of either. In addition, water had to be carted from Castenado's Well, 8 miles away. From the Google Earth image, on page 3, you can see how remote the site is even today.

In the 1800s, there were fewer and worse roads than today, and the town of Signal was quite remote. It took 6 months for ordered supplies to arrive. Freight from San Francisco was delivered to Yuma (after rounding Baja California), transported by barge upriver to Aubrey Landing, and from there by wagon and mule teams the 35 miles to Signal. Once the Atlantic and Pacific Railroad passed by within 40 miles, that time was substantially shortened!

McCracken Consolidated Mining Company built two mills — one a 20-stamp, and the other a 10-stamp. The first was sited in Greenwood City and the other built in 1878, in Virginia City (close enough to Signal to be considered the same town).

Greenwood City (population 400) had a mill prior to the establishment of the McCracken Mine. In 1874, it was purchased in foreclosure by a group of senators, and milled \$1.5 million in silver. The town had two of the country's nicest saloons. In addition, there were 2 blacksmiths, a barber shop, general store, and a doctor.

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Meeting Minutes — April 10, 2015

Craig Jones called the meeting to order at 7:00 pm. Total attendance was 24, with 3 visitors.

The program was guest speaker Matt Plis, of the BLM, who spoke to us about abandoned mine safety.

There was a walking stick left on site on the McCracken Mine field trip. If anyone lost theirs, contact Craig Jones.

The 2014 club scholarship recipient, Madison Mueller, gave us an update on her progress in college.

The March minutes and treasurer's report were given and approved as read.

Karen reported on the gold nugget that will be raffled off at the next Gem and Mineral Show.

Old Business: We are waiting for the school district approval of our proposal to purchase tables to be used at the Gem and Mineral Show.

Karen and Jim Coulter turned in a tri-fold example for the club application form.

There are still no applications for the club scholarship. May 1, 2015 is the deadline.

Debbie Keiser made a motion to contribute \$100 to the Wickenburg High School Graduation Party, and had Madison talk about the party she attended, and the donated gifts to the graduating students. The motion was approved by the club.

Field Trips: No new trips are scheduled. There was a discussion on the problems we had on the McCracken Mine trip, and suggestions were made to help alleviate them on future trips.

Joe Barvinchak presented some Arizona placer gold books he is selling.

Show and Tell winner was Lloyd Cochran.

Door Prize winners were Julie Zimmerlee, Karen Coulter, and Larry Wilkinson.

Respectfully submitted,
Sue Jones, Secretary



Photo by Stan Celestian

Native Silver — herringbone twin crystallization habit. Specimen is 1.8 inches wide.

Locality: Batopilas, Chihuahua, Mexico

Photo by Stan Celestian



Native Silver — wires — on Acanthite. Specimen is a bit over 3 inches tall.

Locality: Freiberg, Erzgebirge, Saxony, Germany.

Photo from *Exceptionalminerals.com*

Silver-Copper "Half Breed"
This 'cobble' is about 3.5 inches long and weighs 12.4 ounces.

Locality: Quincy Mine, Houghton County, Michigan

Photo by Stan Celestian



Photo by Stan Celestian

NOTES FROM THE EDITOR

Have a geological interest? Been somewhere interesting? Have pictures from a club trip? Collected some great material? Write a short story (pictures would be great). I'd like topic suggestions also.

Deadline for the newsletter is the end of the month.

Mail or Email submissions to:
Susan Celestian, editor
6415 N 183rd Av
Waddell, AZ 85355
azrocklady@gmail.com

<http://www.wickenburggms.org/>

If you ever have photos from a club field trip, send a couple to Dale, for posting on the website.

.....McCracken Mine from page 1

However, residents had to pay over \$1000/year for private mail delivery

Virginia City's 20-stamp mill was built in 1878, making the one at Greenwood City obsolete. As mentioned, Virginia City and Signal could be considered one town, with the post office in Signal. When the mill burned down, the mine closed, 1879-1881. Signal's (probably including Virginia City) population peaked at 800, and the town was abandoned by 1932.

Periods of Active Mining

| | |
|-----------|-----------|
| 1874-1884 | 1902-1903 |
| 1919-1924 | 1931-1960 |
| 1980-1981 | 1984-1985 |

It is interesting that the mine was in full operation as late as 1985. An article in the Mohave Daily Miner reveals some information. At that time, the mine was owned by The Arizona Silver Continental Corp. of Vancouver, B.C., Canada. According to the mine geologist, in a slow day they produced \$18,000 in silver. Every day 500 tons were shipped to Mindy Mill in Yucca. Essentially, the ore rock being worked was backfill, that was too low-grade to work in the past — and to make a profit in the 1980s, the ore needed to be at least 10% silver. (We mine copper ores today that are 0.5-1% copper.) In addition, since it was backfill, it was easy digging!

Continued.....

Today, the mine's patented claims are owned by Teck Resources, of Vancouver, B.C., Canada. In 2010, the company spent \$1 million closing the mine to conform to safety to the public and wildlife habitat preservation. Fifty mine openings were located, of which 47 were closed. Bat gates cost \$140,000 of the total.

There aren't many structures left in the area, but it is a popular rockhounding destination. The more common minerals found there are:

- | | |
|--------------|--------------|
| Anglesite | Fluorite |
| Aurichalcite | Galena |
| Barite | Hematite |
| Calcite | Hemimorphite |
| Cerussite | Quartz |
| Dolomite | Siderite |

Resources:

- <http://southwest.library.arizona.edu/Mindat.org>
- [Mohave Daily Miner](http://www.mohavedailyminer.com)
- [Wikipedia](http://en.wikipedia.org)
- www.nuggetshooters.com
- www.ghosttowns.com
- www.mineclosure2010.com
- www.westernmininghistory.com



UPCOMING AZ MINERAL SHOWS

May 16-17 - Pinetop, AZ White Mountain Gem & Mineral Club; Hon-Dah Conference Center; 777 Highway 260; Sat 9-6, Sun 10-4; Admission \$2.00, seniors 70+ Free, students and children 18 and under free. Dinosaur Exhibit.

May 23-24 - Sedona, AZ CKM Productions LLC; Sedona Red Rock High School; 995 Upper Red Rock Loop Road; Sat 10-5, Sun 10-4; Admission \$3 adults.

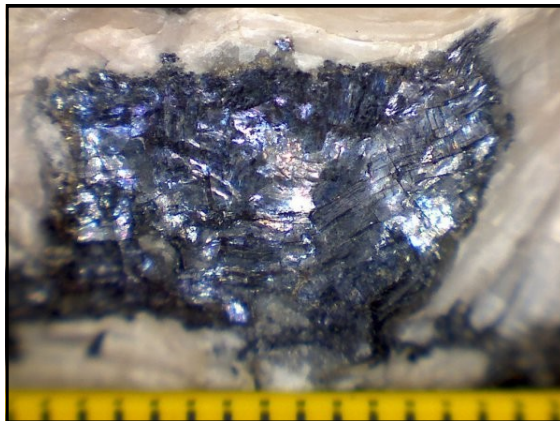
June 5-7 - Flagstaff, AZ Coconino Lapidary Club, Outdoor Market At Silver Saddle; 9001 N Hwy 89 (Hwy 89 and Silver Saddle Rd, 3.5 miles north of Flagstaff Mall); Fri-Sun 9-4; Admission is Free.

July 31-August 2 - Prescott, AZ Prescott Gem and Mineral Club; Prescott Valley Event Center; 3201 N Main St; Fri-Sat 9-5, Sun 9-4; Admission \$5 adults, \$4 seniors, \$4 students, children 12 and under free.

If you are travelling, a good source for out-of-state (or in-state) gem and mineral shows AND clubs is <http://www.the-vug.com/vug/vugshows.html> or <http://www.rockngem.com/ShowDatesFiles/ShowDatesDisplayAll.php?ShowState=AZ>

For out-of-the-country shows: <http://www.mindat.org/eventlist.php>

A good source for a list of Arizona Mineral Clubs and contact information is http://whitemountain-azrockclub.org/Public_AZ_Clubs_Links.html



Argentiferous Galena from the San Jose Mine, Madrid, Spain. Note the blue tarnish and skewed cubic cleavage typical of silver-bearing galena.

UPCOMING WGMS FIELD TRIPS

NO FIELD TRIPS ARE SCHEDULED, DUE TO SUMMER BREAK

DATES SUBJECT TO CHANGE

If you all have some place that you would like to go, let Bob Bartlett [623-388-0749](tel:623-388-0749), Marty Hagan [602-469-7770](tel:602-469-7770), or Craig Jones [208-681-4770](tel:208-681-4770) know. We have some dates to fill in. This is your club. Let's go out and have some fun.

Check the website for field trip announcements,

Officers and Chairpersons

- President:** Craig Jones208-523-9355
- Vice President:** Martin Hagan 602-469-7770
- Secretary:** Sue Jones 208-523-9355
- Treasurer:** Debra Keiser 928-684-1013
- Program Director:** Dale Keiser 928-684-1013
- Publicity:** currently open position
- Membership:** Roma Hagan 602-469-7662
- Editor:** Susan Celestian 602-361-0739
- Field Trip:** Craig Jones, Bob Bartlett, Marty Hagan
- Show Chair:** Beth Myerson 480-540-2318
- Scholarship Chair:** Steve Hill 928-533-3825
- Historian:** Jeanine Brown 928-684-0489

Meetings are held the **2nd Friday most months** at **Coffinger Park banquet room**. Potluck dessert at 6:30 pm. Business meeting at 7:00 pm. **Exceptions: February and December** meetings are held on the **first Friday of the month**. We don't meet in the summer — **no meetings in June, July or August**.

Membership Dues: \$15.00 Adults per Person
\$ 5.00 Juniors and Students

Meeting Dates for 2015

Wickenburg: Jan 9, Feb 6, Mar 13, Apr 10, May 8, Sept 11, Oct 9, Nov 13, Dec 4,

Stanton meets Thursday after the Wickenburg meetings. Apr 16, May 14, Sept 17, Oct 15, Nov 19, Dec 10 (subject to change)

MINERALS IN OUR EVERYDAY LIVES

SILVER

Formula - Ag (from the Latin, *argentum*)

System - Isometric

Luster - metallic

Color - silver-white; tarnishes dark gray to black

Streak - silver white

Hardness - 2.5-3

Specific Gravity - 10.5

Tenacity - malleable

Cleavage/fracture - none

Morphology - cubes, octahedrons, dodecahedrons, wires, herringbone twins

Melting point - 1761° F

High thermal and electrical conductivity

Uses:

- ◆ Coinage
- ◆ Mirrors: best known reflector of visible light
 - ◆ Jewelry
 - ◆ Awards
 - ◆ Silverware
 - ◆ Dental alloys
 - ◆ Solder and brazings
- ◆ Electrical contacts: superior thermal and electrical conductivity
- ◆ Batteries: for hearing aids, watches, cameras, plus aerospace and defense applications
 - ◆ Paints used to make printed circuits
 - ◆ Solar cells and panels
- ◆ Water purifiers: silver is bioactive, and prevents buildup of bacteria and algae
 - ◆ Reflective window coatings
 - ◆ Musical instruments
- ◆ Industrial catalyst: to produce ethylene oxide (used in flexible plastics and antifreeze) and formaldehyde (used in solid plastics, embalming, and disinfectant)
 - ◆ Industrial wires
 - ◆ Control rods in nuclear reactors
 - ◆ Medical dressings, ointments, and equipment coatings
 - ◆ Clothing (socks), as antibacterial agent, to reduce odors
- ◆ Roofing panels: reflective panels that act as thermal radiators. When placed on a structure's roof, they act as a air conditioner.
 - ◆ Photographic film
 - ◆ X-ray film
- ◆ Paired with superconductors, increases electrical conductivity
 - ◆ Coatings on spacecraft tiles
 - ◆ Wood preservative
- ◆ Silver metal glass: strong and resists deformation