



**Denver Gem & Mineral Guild
Founded March 1964**

1420 S. Reed Street
Lakewood, Colorado, 80232

AFMS Silver Medal Club 2016



March 2022

TIPS & CHIPS

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**HTTP://WWW.DENVERGEM.ORG OR
HTTP://DENVERGEM.ORG AND FACEBOOK!!!
EMAIL = MINERALGUILD@GMAIL.COM**

March 11, 7:00 PM ZOOM (Because of COVID and convenience).
Don't miss the DGMG March meeting, via Zoom, from the warm comfort of
your favorite sofa!

Join Zoom Meeting
[https://us02web.zoom.us/j/82484018373?](https://us02web.zoom.us/j/82484018373?pwd=cm9yYjFnT0V0V0tHYWtsNDhjMlZlU09)
[pwd=cm9yYjFnT0V0V0tHYWtsNDhjMlZlU09](https://us02web.zoom.us/j/82484018373?pwd=cm9yYjFnT0V0V0tHYWtsNDhjMlZlU09)

PETE'S TRIP TO TUCSON!

I attended the Tucson Gem and Mineral Show this year, and I'll give a review of the many things about it, for the March club meeting presentation. The show had been cancelled last year, so the last time it was held was in 2020, which was their 66th annual show. So that makes this year's their 67th, not-quite-annual-now, show. If you can believe it, I have attended the Tucson Show every year since my first time, in 1974, when we took our son, Brian (age then, 2 months!) to it. The theme of this year's show was "The Show that Glows" (= fluorescent minerals), plus featuring, "The Apatite Supergroup." The "black light" displays, organized by the Fluorescent Mineral Society, were a big, special, and very popular part of the show. They wanted to have a sub-theme of minerals for which there could be theme displays that could showcase some "showy" minerals that did not require UV light displays in a darkened room; hence, "Apatite" was added. By making it the "Apatite Supergroup", the display could encompass not just apatite itself, but the related, of many very colorful, minerals such as vanadinite, mimetite, pyromorphite, and many more, hence, "The Apatite Supergroup". Apatite was also an appropriate topic to tie to the Fluorescence theme, since apatite is a common fluorescent mineral too (in various colors!). It will be a fun presentation for me to talk and show you about the Tucson Show, and I think you'll all enjoy it.

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THE SUPPLEMENT—THE 2022 DGMG SHOW!

59 years of DGMG Kudos, Celebrations, & Events

2022 DGMG Officers & Chairmen

President:: Joe Walkowich
Vice President: Pete Modreski
Secretary: **OPEN PRO-TEM:** Marj Becker
Treasurer: Deb Baldwin;
Treasurer Ass't's: Joe Walkowich, Beth Simmons
Hospitality: **EVERYONE!**
Ways & Means:
 Dave Sanchez, Gideon Breithaupt, Sandra Lucero
Membership: Joe Walkowich **Ass't:**
Claims Manager: Fred Ceconi
Editor: Beth Simmons: **Ass't:** Marj Becker
Historian/Librarian: Kathy Honda
Webmaster: Bob Johnson; **Ass't..** Joe Walkowich
Show Chairman: Beth Simmons
Dealer Chairman: Linda Burns
Field Trips: Committee
Grab Bags: Kathy Honda, Susanne Peach
Merchandise: Sandra Lucero
Council Rep: **VACANT:** **Alt.** Linda Burns
Denver Show Rep: Kathy Honda
Sunshine: Sandra Lucero
Party planning: Deb Baldwin, Marj Becker
RMFMS Rep: Kathy Honda
Outreach: Susanne Peach; Bob Johnson
Inventory manager: Linda Burns

An "Assistant" is the officer's backup in case of illness or other reason they can't do their job.
 Every officer needs an "Assistant"!
 Join up! Say YES when asked!

Quote of the month:

Once mineralogists
 describe something,
 they hate to let go of it.

Dr. Bill Cordua
 U. Wisconsin, River Falls
 via Littleton G&M Club newsletter

February Sunshine Spotlight

CONTACT **SANDRA LUCERO** 303-726-3829
[gardengal001\(@\)yahoo.com](mailto:gardengal001(@)yahoo.com)

TO
 INFORM HER OF SUNSHINE REQUESTS

DGMG condolences to friends and relatives of Norm Bennett, Roger's younger brother, who died the end of January in California.

Sympathies to friends of Bill Chirnside.
 Obits in this newsletter.

Also sympathies to Linda Burns (#354) and her sister Joan Kinsley on the death of their brother from Florissant on February 22, just before our show.

Get well wishes to Bob Pfeifer (#368) after his hospital episode.
 And to Johnny Gilbert after a long stay in the hospital.

WELCOME NEW MEMBERS!!!

Dr. Lou Taylor
 Sue Ogden (from Enid, OK)
 Burwell, Jennifer
 Lens, Larry
 Dubas, Gail
 Hopkins, Alison
 McCartney Galloway, Susun
 Montañó, Steven
 Montañó, Yvonne
 Nagel, Julie
 Nagel, Justin
 Nugent, Sabrina
 O'Neill, Michael
 Roybal, Aren
 Roybal, Stacy
 Roybal, West
 Spelman, Justin
 Chansamouth, Vilakone
 Yamiolkoski, Ronald
 Yamiolkoski, Jean

18 signed up
 at the show!

Welcome

THE DENVER GEM AND MINERAL GUILD—59 Years old!



Founded in 1964, the Denver Gem and Mineral Guild pursues exploration, experimentation, and education in the earth sciences; the discovery, development and preservation of minerals and mineral deposits; and the advancement, encouragement and utilization of the principles of art and craftsmanship as applied to gems and minerals.

The Guild meets on the second Friday of the month at 7:00 pm at the Wheat Ridge United Methodist Church, 38th & Wadsworth, Wheat Ridge, except for June, July, August, and December. Picnics, field trips, and parties replace regular meetings those months.

Deadline for article submission for the Tips & Chips is the 20th of each month. Email photos and articles to editor Beth Simmons at mineralguild@gmail.com. Exchange with other newsletters is invited, and reprinting of material from this newsletter with proper attribution is encouraged.

2022 DGMG CALENDAR OF EXCITING EVENTS

A persistent page—watch monthly for additions! PUT THIS ON YOUR FRIDGE!!!

Dear Friends of Eldon Hunewell -

There will be a Remembrance gathering for Eldon on Saturday, April 2, at 1pm at Wheat Ridge United Methodist Church, 7530 W 38th Ave., Wheat Ridge, CO. Eldon would have been 79 years young on this day, so we thought it would appropriate to celebrate his life on his day of birth. This will be a simple gathering of friends to share stories about their time with Eldon, special memories, and hopefully a gentle laugh or two, as Eldon loved a good chuckle. For those of you who wish to write down a story to share with Eldon's family, that would be greatly appreciated, as no family members will be attending this gathering. The family will be burying Eldon's ashes in Oklahoma, next to his deceased family members, the end of April.

Feel free to forward stories to be shared to lori.baer@gmail.com. Someone else will read them if you are not comfortable doing so. Also, there will be light refreshments served. Anyone wanting to help with refreshments, please contact Lori. Thank you. The gathering will be in the church gym; enter from the parking lot, located behind the church on the south side.

We will be asking for a minimal donation to help cover the cost of this gathering, including a donation to the church, refreshments, a hearing impaired interpreter, etc. All monies left over will be given to one of Eldon's favorite charities, probably the Wild Animal Sanctuary, or a cat rescue facility. Any contribution is very much appreciated. Thank you.

**March 11th Meeting—ZOOM—
Pete Modreski's
TOUR OF TUCSON**

**April 8th Meeting FACE-TO-FACE
Brian Walko, FLUORESCENCE
Wheat Ridge U.M. Church
7:00.**



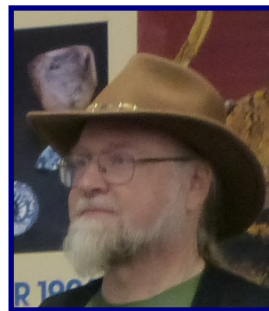
PRESIDENTIAL MESSAGE

We did it again! Thanks to the hard work of our Guild members, both new and old, we had a remarkable Jewelry, Gem & Mineral Show! This year we had a record attendance of 2,900 visitors and sold over 1,300 grab bags to support the School of Mines Scholarship Fund. We had so many folks buying grab bags that we had to get extras from CMS/Council, and we are very grateful for their help in this area.

The dealers brought a variety of interesting items to sell and, with record visitors, we had plenty of people to snap those treasures up at reasonable prices and take them home. Education is a hallmark of our club and our exhibitors provided beautiful and enlightening displays that were enjoyed by all! We thank them for the time, effort, and passion it took to put these displays together and for sharing them with us.

And, of course, a special thanks goes out to show chair Beth Simmons and dealer chair Linda Burns for once again pulling this all together and keeping it on track!

Congratulations and thanks again to all our volunteers, dealers, and exhibitors for making this a truly successful show!



Joe Walkowich (Ed. Note—the hardest worked bee at the show!)

DGMG 2022 President

The Show That Glowed at the 2022 Tucson Gem & Mineral Show®

By Brian Walko, FMS Rocky Mountain Chapter Lead (OUR SPEAKER FOR APRIL!)

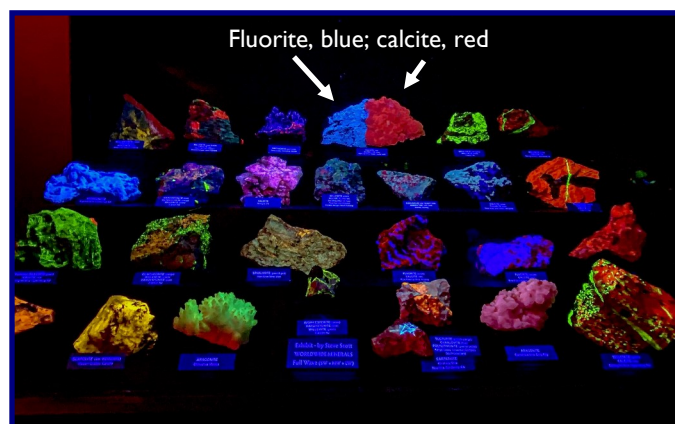
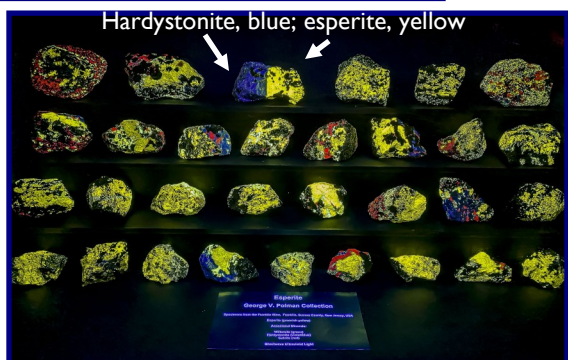
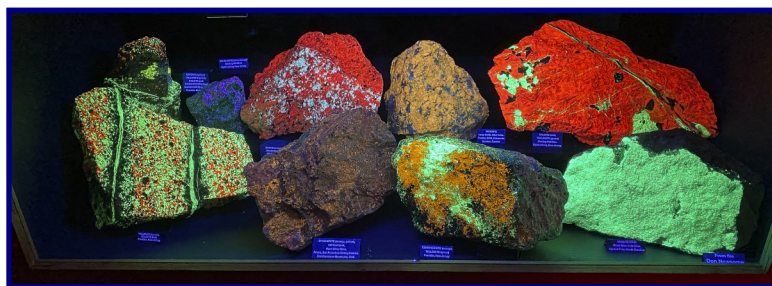
In 1996 the Fluorescent Mineral Society (FMS) celebrated its 25th anniversary at the Tucson Gem and Mineral Show® (TGMS). The FMS had over 80 cases of fluorescent minerals on display. The FMS' 50th anniversary was in 2021. Unfortunately, COVID delayed the celebration until 2022. In recognition of this milestone, the TGMS invited the FMS to feature a world-class exhibit of fluorescent minerals at the show. 50 cases were on display. Here is the story behind accomplishing this historic event.

The FMS has several veterans of the 1996 TGMS and several people were experienced with running local fluorescent shows or fluorescent rooms within larger Gem and Mineral shows. This was the case with our Denver Gem and Mineral Show. Planning was a three year effort. A planning team solicited FMS members to display and coordinated with TGMS and the Tucson Convention Center on space and power requirements. We determined the logistics of getting cases, lights, and minerals to Tucson.

Several "FMS Expresses" transported exhibits from New England, Franklin, NJ, Seattle, and the Denver area. Exhibiting FMS members who did not own UV display lights, UV Systems, Inc. sold them at a discount or made rentals available. TGMS loaned FMS many cases for displaying. FMS members added black paper to darken the case and supplied risers and shelves for optimum display. Next came the case setup. Exhibitors hung their lamps and placed their minerals. After the specimens were arranged, the labels were placed, and the front glass secured.

The TGMS lasted 4 days. During this time FMS members acted as docents and provided security for the room. In my estimation several thousand people visited the Fluorescent Room. It was the highlight of the 2022 TGMS.

Photographing the cases was extremely difficult. TGMS rules prohibited removing the glass. Thus, reflections from the red safety lighting and photographing through glass did not create high quality photos. Here are a few case photos (ed. Note—I think Brian did great!).



Pete's Mineralogy Class

Monday evenings, 7:00 pm, ZOOM

The class are online, via Zoom. Every week for as long as seems necessary or as long as interest lasts. Here is an outline of what I expect we'll cover in the first half dozen classes:

DGMG Mineral Class outline

1. What minerals are—COVERED
2. How we recognize minerals—COVERED
3. Crystal systems—COVERING
4. Chemistry of minerals
5. Testing minerals by physical properties—COVERED
6. Environments where minerals occur

Following these, we can study some of the major groups of minerals. As you can imagine, this could be pretty open-ended, so we'll see how the class progresses and how much interest there is!

Pete Modreski

See you on ZOOM! on March 7, 2022 at 7:00 pm and then on ZOOM for the March meeting.

More about Pete's talk:

I might add, that the TGMS (Tucson Gem and Mineral Society) is very protective (just as the Denver Show Committee is) of the trademarked name, "Tucson Gem and Mineral Show", so it is always emphasized that this exact name can only be used for the "Main" show, held in the Tucson Convention Center. There are of course, many, many other, independent, gem and mineral and fossil and jewelry shows held all over town, just as in Denver. These range from very high-class, and restricted to documented gemstone dealers, to very informal setups of tents in parking lots. The city of Tucson and the news media are careful, when they are talking about "all" the shows taking place in town, and which begin operation well back into January, to refer to them by generic names such as "Tucson Gem, Mineral & Fossil Showcase", "Tucson Gem Shows", or the like. I'll be talking and showing pictures related to all the shows, but probably with an emphasis on the main TGMS Show. And of course, if I say "all the shows" that must be taken not literally, as I cannot claim to have visited all of them; nor did I even try to, and nor do I think, that any one human being could even manage to visit them all, in the available time!

Everyone who goes to "Tucson" probably does so with a somewhat different intention and expectation, and of course, I had my own "agenda" in going. Some look for collector specimens, gemstones, fossils, fluorescents, rare gems, cutting material, "high-end" specimens, ultra-high-end specimens, "metaphysical stones", and so on. I'll, of course, be partly focused on my own perspectives, but I'll try to at least make reference to all the others. (My own agenda including hiking in the Catalina Mountains there as well as seeing the show, which, of course, cut into my possible time of seeing "all" the shows!) In addition to the displays, an excellent program of lectures is given at the show, and I attended quite a few of these, including an all-day Mineral Symposium on Saturday, jointly sponsored by the TGMS, FMS, and MSA (Mineralogical Society of America), so I'll be talking about some of these lectures too, which focused on those joint topics of fluorescence and the apatite group (OK, I'll be formal and technical again, and say "supergroup"!).

Linda Burns (#354) was honored at the DGMG Show with a plaque to commemorate the five years she served as President of the Guild.

THANK YOU, **LINDA!**



Membership numbers were given out to every member until 2010.

So if a member has a number, I've added that to the notes or lists.

Donation to DGMG from the descendants of Orville and Ginger Dunn #57 & 58

The **Dunns** were early members of the Guild, having joined in 1967. **Orville** served as vice president in 1968, president-elect in 1969, and as president in 1970. **Ginger**, his wife, was treasurer in 1969, 1970, 1971 and Secretary in 1973. Orville took faceting lessons from Gerry Hess and his faceting machines were purchased by **Ron Snelling (#237)**. His cabbng material, slabs, and sets of drawers with assorted contents came to the Guild. We will have a "sorting and labeling day" sometime this spring.

CENTER NOTE:

Did you know **Richard M. Pearl**, famous mineral collector and author, was elected a life-time member of the Guild in March of 1966???

Norm Bennett—#138

long time ago member and officer

By **Beth Simmons #276** and **Roger Bennett #151**

Norm Bennett joined the Guild as member #138 in 1975, when he served as club claims manager. He was Vice President in 1976, was crowned king in 1976, then served as President in 1977. He was field trip chair in 1978 and later in 1984, membership chairman in 1979, and in charge of Ways and Means in 1981 and 1982, when he was show chairman for the show at Bear Valley. Photos are from the Guild archives, thanks to **Marjie Payne** (#301) who scanned them all.

His older brother, **Roger** #151, long term Guild member, sent this information along with the story about the toilet.

When we moved back to Denver in 1974, **Norm** got us to go on some field trips with the club. We joined and **Norm** and I went on many trips to Utah with other guys. Great times for all of us. Everything was fine for many years.

He and **Dianne** (#137) had 3 boys. **Mike** (#194), **Marc** (#199), and **JJ**. Basically all were raised by **Dianne** because in February 1991, **Norm** and **Dianne** were divorced.

Norm then moved to California where he ran a gold mining operation. Then things went bad. Eventually, he became like a recluse and didn't communicate directly with anybody in his family including me and my sister except by text. He did come back here once when our mom died. He had a boat and did a lot of deep sea fishing near a town of Rio Vista where he lived.

Recently, he was in the hospital for a week and didn't want any of his family to know. Apparently he was well liked out there but had no friends that we know of. We only found out about his death because his older son, **Mike**, who usually talked to him about weekly finally found out he had been released from the hospital because they couldn't do anything for him.

He died on January 27, 2022.

At a popcorn party



Nice legs!



On top of Antero, with **Bert Hanou** (#157), **Bob Park** (#130) and **Paul Blankenheim** (#182)



King **Norm Bennett** with Queen **Eleanor Weigand** (#135)

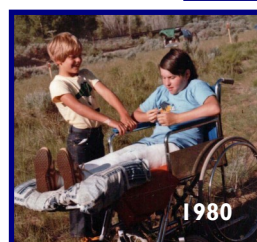
Obviously one of those jokes Santa often played on members—
“On a camping trip to the club claim, **Norm** was sleeping in his truck. He had to get up to pee and got lost and had trouble finding his truck. The gift was an emergency substitute for the great outdoors!”



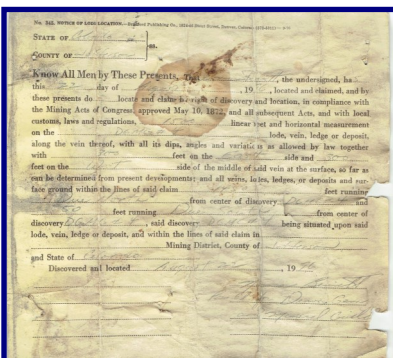
Chris Tomkus (#296) crowns **Mike Bennett** #194 Junior King

JJ Bennett & Danny Tomkus #211

Certificate that marked DGMG claim #4, signed by **Norm Bennett**



Learning to facet from **Gerry Hess** (#146) at the North Valley Mall



William Chirnside, Lakewood, Colorado, by Mark Jacobson

William “Bill” Chirnside III was a well known collector of Mount Antero minerals, winning many trophies for his discoveries and fully dedicated to the Denver mineral collecting community. He was field trip leader for several mineral groups and volunteered at the annual Denver Gem and Mineral Show, helping organize the Museum exhibits and being friends with numerous field collectors. His mineral collection was donated to his alma mater, the Colorado School of Mines Geology Museum. Today, the best of his specimens can be viewed on exhibit.

Bill Chirnside passed away from a stroke on December 23, 2021. He was born in Marblehead, Massachusetts on January 17, 1943 to William “Bill” II and Barbara “Babs” Ellen (former Belanger) Chirnside. Bill has two siblings, a younger sister, Wendy (former Chirnside) Coughlin, and a younger brother, Wayne Chirnside. Bill grew up in Marblehead, attended Marblehead Public schools, and graduated Marblehead High School in 1961. Bill was cremated and buried alongside his beloved wife, Donna Rose (former Hughston) Chirnside (1946-2008), at Waterside Cemetery in Marblehead, Massachusetts.

During his teen years, Bill developed an avid interest in rock collecting, starting a mineral collection in 1957 and riflery. After high school, he enrolled at the Colorado School of Mines, Golden. Academic challenges, reputedly in calculus, though caused him to temporarily drop out. He returned to the Boston area, thoroughly westernized with a full beard, Stetson hat and flannel shirt where he worked for a surveying company on road construction in the Boston area. After some away time, saving money for out of state tuition, he re-enrolled at the Colorado School of Mines, Golden and graduated with an EM degree in 1974. He spent his career in the Cartography Division of the U. S. Geological Survey in Lakewood, Colorado and retired as a Supervisory Cartographer, Department of Cartography in 2004.

Although Bill field collected across Colorado and in the neighboring states of Utah and Wyoming, he specialized in two localities – Topaz Valley (The Cove) in the Thomas Mountains of Juab County, Utah and the Mount Antero - Mount White area, Chaffee County, Colorado. In Utah, as a U. S. Geological Survey employee he was not allowed to stake claims, but he collected with his friend, Howard Bachman, who staked the Milehigh no. 1 claim in Topaz Valley, Thomas Range, Juab County, Utah. On Mount Antero-Mt. White, Bill prospected on open land until he retired in 2004 when he staked three claims, the Bowditch No. 1, 2 and 3 on Mt. White and the Bowditch Millsite along the west side of the 4WD road up Mount Antero just before the first switchback above treeline.

His mineral collecting in Topaz Valley, Juab County, Utah and association with professional mineralogists at the U.S. Geological Survey led to two co-authored articles based on specimens he collected (Foord et al. 1995a, b) and a presentation at the Friends of Mineralogy symposium on precious gemstones in 2002 (Chirnside 2002).

Bill joined the North Jeffco Gem and Mineral Club in 1985 and the Friends of Mineralogy – Colorado Chapter (FMCC) in February 1990. For the North Jeffco Gem and Mineral Club, he became their Field Trip Chairman in 1987 (assisted by **Eldon Hunewell** his friend and work colleague at the U. S. Geological Survey) and continued in that position alone in 1988. One of these early field trips was to Topaz Mountain, Thomas Range, Juab County, Utah in June 1988. This led to this locality becoming one of his specialized collecting areas.

Bill Chirnside’s activity with Friends of Mineralogy led to his becoming their president during 1998-2001, and afterwards a director of 2002-2004. In May 2001, he led with Donna Hughston as his partner, a joint FMCC and North Jeffco Gem and Mineral Club multi-day field trip to the Black Mountain spodumene pegmatite and the Copper Mountain pegmatite district. He was also a member of Denver Miners Club, a group that was informally known as the “Ragged Ass Miners”, a homebrewer of beer, and a member of the American Homebrewers Association since at least 2000. Along the way, he had also acquired a Blaster’s license which was used after 2004 for legally removing boulders from his Bowditch claims.



(con’t. next page)

September 2008. The Mount Antero ‘Road gang’ special exhibit. Members of the ‘road gang’ from the left: Tim Hilsten, John Melby, Tom Miller, Bill Hutchinson, **Jeff Self**, and Bill Chirnside. Bill Hutchinson photo.

At the 2008 September show, his fellow Mount Antero collectors who for many years had worked together annually to open and maintain the Mount Antero 4WD road above treeline ("The Mount Antero Road Gang") organized a special mineral display of their Mount Antero minerals. Previously, during the February 2008 Tucson Gem and Mineral Show, Bill loaned his best Mount Antero-Mount White specimens of bertrandite, phenakite and fluorite for exhibit in a special Mount Antero case as part of the American Treasures show exhibits.

He joined the Denver Gem and Mineral Show Committee in 2002 (and stayed involved until 2018), helping to coordinate the institutional (museums, et al.) exhibits with Donna Hughston. His involvement with the Denver Gem and Mineral Show lead to his becoming the Vice President in 2006 and President for 2007- 2009 of the Greater Denver Gem and Mineral Council, the umbrella organization that finances the annual Denver Gem and Mineral Show.

Bill first met Donna Rose Hughston during their time as volunteers at the Denver Gem and Mineral Show when Donna joined the Denver Show committee circa 1997. Donna had moved to the Denver area previously, working as an Administrative Assistant at American Water Works Association, and with her developing interest in mineral collecting had joined the Gates Gem and Mineral Club in 1997. By September 1999, the two were inseparable as partners both in life, hobby and the Denver Gem and Mineral Show committee. They formally married in September of 2006. Both were also members of the North Jeffco Gem and Mineral Club. The couple enjoyed mineral collecting and travel until Donna became ill after the September 2008 Denver Gem and Mineral Show and did not recover. Her death profoundly affected Bill, an emotional loss from which he never recovered.

Bill donated his entire collection to the Geology Museum at the Colorado School of Mines prior to his passing. Some of his best specimens, from Mount Antero and Topaz Mountain, Juab County, Utah were put on display in late 2021. Many of his Mount Antero specimens have been illustrated in mineral books and magazines including *Minerals of Colorado* (1997) and *American Treasures* (2008).

As a successful field collector and volunteer at the annual Denver Gem and Mineral Show, he was well integrated into the Colorado Mineral community with an abundance of friends and connections. He was always calm and gentle with a track record of competency and diligence. He will be missed.



Bertrandite, West side of Mount Antero. Received the Prospectors' Trophy in 1994. 2.2 cm wide. Jeff Scovil photo.

Acknowledgments:

This memorial of Bill was created with the memories provided by Wendy Coughlin, **Judy Knoshag**, **Jeff Self**, and Bill Hutchinson.

Publications

Foord, E. E., W. Chirnside, F. E. Lichte, and P. H. Briggs. 1995a. Pink topaz from the Thomas Range, Juab County, Utah. *Mineralogical Record* 26(1): 57-60.

Foord, E. E., W. Chirnside, A. M. Davis, F. E. Lichte, and K. J. Esposito. 1995b. A new U-Ti-Ca-HREE hydrated oxide and associated niobium rutile from Topaz Valley, Utah. *Mineralogical Record* 26(2): 123-128.

Chirnside, William. 2002. Pink topaz from the Thomas Range, Juab County, Utah. In *Gemstone deposits of Colorado and the Rocky Mountains*. Program and abstracts, published by Friends of Mineralogy, Colorado Chapter, p. 46.



June 2005, Bill Chirnside with Prospector, the dog, digging out the last snow drift just south of the parking bench on Mount Antero. Donna Chirnside photo.



The My Stars pit on the Bowditch No. 1 claim. From the Left: Bill Chirnside, Chris Rayburn, and Tim Hilsten. July 2013, Mark Jacobson photo



Bill Chirnside and Donna Hughston at the 2002 September Gem and Mineral Show. Denver Gem and Mineral Show photo archives

2022 Denver Gem & Mineral Show
Information Packet for
Exhibitors, Clubs, Competitors

Time to start the wheels rolling on the 2022 Denver Show:

Dates - **September 8, 9, 10 and 11, 2022**

Location – The Colorado Convention Center, 700 14th Street, Denver.

This year's Theme – **COLLECTING COLORADO**

Granted, the theme language is somewhat general, and even ambiguous, but we are not looking for exhibits such as “one bottle of beer from each of Colorado’s breweries.”

Within our earth science context, we *are* looking for exhibits that feature Colorado minerals, fossils, agates, meteorites, and even ephemera like mining memorabilia, equipment, documents, etc.

Exhibited material *need NOT* be self-collected.

The corona virus pandemic curtailed many of our normal social activities, but, hopefully, our determined field collectors escaped to their favorite collecting grounds so self-collected exhibits would be especially welcome.

This year we are asking for the usual **non-competitive exhibits** from individual collectors and museums.

In addition, we are offering the following **competitive exhibit** options:

Both Adult and Junior Prospector Competitions. Because of the pandemic, the collecting period for eligible specimens will extend from the end of the 2019 show to the beginning of the 2022 show.

The Species Competition. See entry form (next month) for the 8 categories & instructions.

The Best of Fossil Competition. See entry form for instructions.

Hoping you are able to join us,
Larry Havens, Exhibit Chair



DENVER GEM AND MINERAL GUILD

Marj Becker—Acting Secretary

MINUTES, February 11, 2022 Board meeting

Nine board members attended.

The meeting was called to order by President **Joe Walkowich** at 6PM.

Note: **Bob Pfeifer** is in the hospital. **Kathy Honda** is also recovering from an injury.



Show Status

Bob Johnson is going to do the fluorescent exhibit. **Bob Pfeifer** will be sure that the geode cracking will be available.

Food for show: **Deb** wrote a check for \$500 to be spent on food during the show. An estimate was provided about quantity of food and drinks.

Rope lights have been purchased for guiding the "back area" to identify the walkway. (**Linda**)

Wednesday afternoon vehicles will be loaded to go to venue. Cases will be picked up. Things will be delivered on Thursday morning.

Strong helpers will be needed to move cases and materials into the venue.

Dinner report: Club volunteers will be able to pay for their dinners at the show. Vendors' meals will be paid by the club. Buffet is American. She will provide the dessert.

There is need for help getting the cases, tables, electricity, etc., set up; **Deb** has usually been in charge of the electricity.

Life membership proposal for Richard Parsons: **Richard** was not included in the last approval of Life Memberships.

Motion made, seconded, and approved to approve him for life membership.

There will be two obituaries in the newsletter.

Suggestions for finding a permanent Club Secretary

We will need a permanent secretary as soon as we begin meeting in person. As long as we are meeting on ZOOM, **Marj** can take minutes.

Presentation: **Bob Pfeifer** is planning to be at the meeting; **Bob Johnson** and **Linda** will also present.

Pete's Class: **Marj** complimented both **Pete** and **Beth** for their efforts in the class.

There being no further business, the meeting was adjourned at 7:40 PM.

MINUTES, February 11, 2022 On-Line Zoom Meeting DGMG GENERAL MEETING

The meeting was called to order by President **Joe Walkowich** at 7:00 PM. Twenty-five people attended

Approval of Secretary's Minutes: Motion made, seconded, and approved to accept the minutes as printed in the *T&C* newsletter.

Treasurer's Report: Checking: \$15,759.56; Regular Savings: 5,990.01; Time Deposit: \$4,097.29, Motion made, seconded, and approved to accept the report.

Business Subjects:

SHOW Information

Bob Pfeifer is in the hospital and is preparing for a procedure regarding his heart. However, he has helpers who will help with the responsibilities he usually takes care of.

Wednesday, equipment, will be loaded into trucks and other vehicles. Thursday, the 29 cases will be ready for transport.

Deb will run the electric lines.

Thursday: Be at the Fair Grounds by 9 AM to do the work to get ready for the show.

We need hosts to guide guests through the fluorescent display.

Sandra is in charge of food which is available in the kitchen. **Bob** will be making taco soup. Other food donations are greatly appreciated.

Joe gave directions about how to sign up for volunteering. Volunteers are needed.

Friday night dinner for volunteers and dealers. **Beth** reported about this dinner.

Sunday: People's choice award is announced on Sunday at 4:30 PM; winner receives an award of a beautiful crystal plaque.

Saturday: The officers will receive certificates in recognition for their work during 2021.

Need to find a permanent Club Secretary As long as we are having ZOOM meetings, **Marj** can take the minutes, but not after we have in-person meetings.

Vests-Vests are available from **Sandra**.

Life membership proposal for Richard Parsons: **Richard** was not included in the last approval of Life Memberships. Motion made, seconded, and approved to approve him for life membership.

Presentation: Bob Pfeifer, Bob Johnson, and Linda Burns: Utah Excursion

Bob Pfeifer presented from his hospital room!!!.

There being no further business, the meeting was adjourned at 9:30 PM.

Aquamarine—Birthstone for March, Colorado's State Gemstone by Beth Simmons

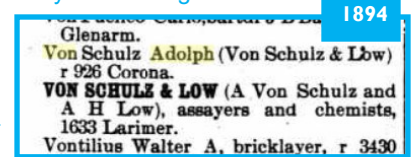
The first mention of aquamarine made from Colorado is in J. Alden Smith's 1870 "Catalogue of the Principal Minerals of Colorado with Annotations on the Local Peculiarities of Several Species" as transcribed in Mark Jacobson's book "Pioneer Colorado Minerals: J. Alden Smith and his Minerals of Colorado 1866 to 1882." But it wasn't from Mt. Antero's treasure trove which weren't reported until 1882! It was from JEFFERSON COUNTY!

"Beryl-From **Bear Creek**, below **Harrington's saw mill**, and on **Tiffany's Rancho**. A few very good specimens of aquamarine have been obtained at the latter locality." In the 1880 catalogue, Smith put a "S" after the entry, indicating that it was found by A. von Schulz (p. 97, 118)

So where was **Harrington's saw mill** and more particularly, **Tiffany's Rancho**? And who was **A. von Schulz**?



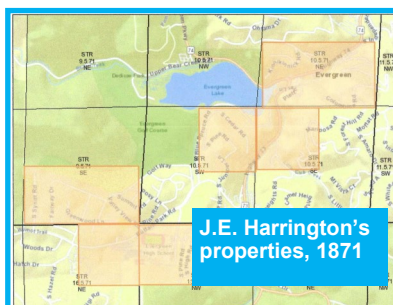
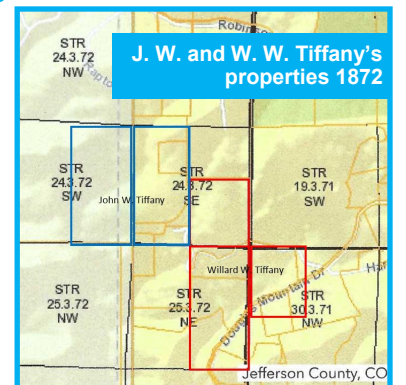
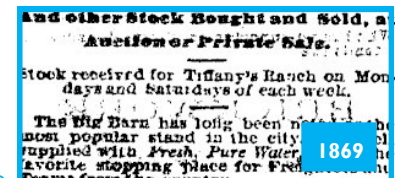
Adolphus von Schulz, was born in Saxony, Germany in 1842, and graduated from the University of Freiburg in Germany, as a chemist and assayer. After arriving in the United States in 1864, he worked as assistant manager of Miner's Smelting Company in Golden. He was then employed by Nathaniel P. Hill and H. R. Wolcott at Black Hawk, then at the Argo Smelter near Denver. he served as territorial assayer in Central City after taking over from E. E. Burlingame in 1872. He continued in that office at least until 1874. A charter member of the Colorado Scientific Society, he served on the initial Executive Committee in 1874 and 1875 and then again in 1916. Eventually von Schulz partnered with A.H. Low in their own chemical laboratory in Denver. Von Schulz lived in the Denver region from the late 1870s until he died in 1924 and was buried in Fairmount Cemetery.



The names **Tiffany's Rancho** and **Harrington's sawmill** predate the establishment and naming of "Bear Creek," later called Morrison. Probably because it wasn't mentioned by Eckel in his 100-Year Record of "Minerals of Colorado" published in 1961, **Tiffany's Rancho** is NOT listed among the sites of JeffCO in the "Minerals of Colorado" book.



John W. Tiffany, was born Mar. 24, 1817, in Mexico, Oswego County, NY; by 1860 he made the move to Colorado. At first he joined with a fellow named Baker and ran a "forwarding" business. Then in 1865, he appears on the tax assessment list, in Central City as a merchant living on High Street. His ranch, apparently parts of sections 24, 25, and 30 laid along the border between Jefferson and Gilpin Counties, near Douglas Mountain and date from 1869 according to the 1873 delinquent tax list. He died May 30, 1882. John's son, **Willard W. Tiffany**, was born in New York Oct. 31, 1844. In 1866, he was assistant superintendent of the Central Methodist Episcopal Sunday School. In the 1871 Rocky Mountain directory W.W. Tiffany was listed as a miner, but he was actually running his father's general store at No. 1, Register Block (Masonic Building), in Central City. Before 1869, he had taken up acreage along the border between Gilpin and



Jefferson Counties in T3S, R72W, SE1/4SE1/4, section 24, near his father's acreage, which was probably "the Tiffany Ranch." In 1882, Willard served as a clerk in the Central City post office where he earned \$180/year but \$1200/year in 1883. In the 1885 census he is listed with his mother Mary. By 1887, he had moved to Denver where his business, Waugh and Tiffany, was at 2230 Vine Street. He died Jan. 10, 1888 and is buried in Riverside Cemetery.

Jerome Harrington owned many sections of property in Jefferson County, some of which bordered or crossed Bear Creek just east and south of what is now Evergreen. Harrington was born in Niagara County, New York, and worked as a farmer in New York, Michigan, and Illinois before coming west during the Rocky Mountain Gold Rush, arriving in Denver on June 15, 1859. He worked as a miner in Gilpin and Clear Creek Counties prior to purchasing his ranch

along Bear Creek in 1862. In 1864, he purchased "the old water mill at Evergreen," and established lumber mills throughout the Evergreen area between 1864 and 1876. He was treasurer of the Bergen Park farmers' club in 1873 and served three years as Jefferson County commissioner. In 1876 he sold his Bear Creek properties and moved to southern Park County, settling near Hartsel. At the time of his death in Colorado Springs in 1899, Harrington was one of the largest landowners and ranchers in South Park..

The nearest beryl-bearing property to **Harrington's Mill** listed in the *Minerals of Colorado* along Bear Creek is about two miles northeast of Bear Creek in Evergreen near Kittredge, which could have been considered "below Harrington's saw mill." The closest beryl-bearing property to Tiffany's Ranch listed along the JeffCO/Gilpin County line is north of Guy Hill, about three miles to the northeast, so may have been on the fringe of **Tiffany's Rancho**. The original source of the aqua information is excellent, so there must have been SOMETHING this color somewhere!

Thanks to Ronda Frazier, JeffCO archivist, for help tracking the properties and Dave Forsythe, Gilpin County Historical Society Archivist, for finding the photo. Find-A-Grave, and the Colorado Historic Newspaper website, plus Eckel, et. al., *Minerals of Colorado* and Jacobson's *Pioneer Colorado Minerals* were excellent sources of information.

Historical Perspective of the Crystals of Topaz Butte, Colorado submitted by **Beth Simmons**

To follow up on the wonderful exhibits of Colorado minerals at the show, this article discusses the most famous collecting area in Colorado, which lies north of Florissant and Lake George. The Guild even has a claim along with the Lake George club near Wigwam Creek.

Collecting in the region began in the 1860s and was reported by Smith in 1886 in this extensive article in the Colorado Scientific Society Proceedings. Because it is so important to our club, the article is reproduced in its entirety here. The form symbols (e.g. $\infty P\infty$; if there is an umlaut \sim after the P, in Naumann's symbols, the umlaut was OVER the P) were used extensively during the 1800s, following their derivation by German mineralogist George A. K. F. Naumann in the early 19th century. Also included in this article are citations from Whitman Cross and W. F. Hillebrande's 1882 article in the American Journal of Science and 1885 USGS Bulletin 20, "Mineralogy of the Rocky Mountains. Modern photos of specimens that fit Smith's descriptions update the information.

From Walter B. Smith, 1886, "Notes on the Crystal Beds of Topaz Butte," Colorado Scientific Proceedings, V. 2, p. 108-115

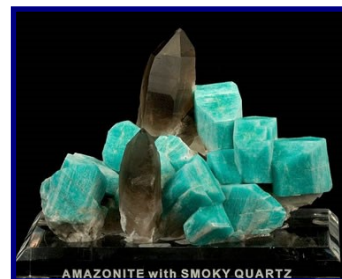
A few amazonstone and smoky quartz crystals with occasional associations with other minerals, have been found on Pike's Peak proper, a few more at its base at Bear Cr., Crystal Park, Specimen Rock and Cheyenne Mt., but by far the greater number of specimens labeled *Pike's Peak* have been obtained from the so-called crystal beds, about twenty miles northwest from that point. This locality has been known for twenty years, but as it is somewhat difficult of access except by going with a camp outfit; few persons have visited the place, aside from an occasional crystal hunter and the ranchmen living in the vicinity, who, with varying success, for twelve or fifteen years have dug and sold an annual crop of specimens.

Topaz Butte, a sharp point five miles due north from Florissant, marks the southern limit of the crystal beds (now known as Crystal Peak). Its summit rises about a thousand feet above the surrounding valleys, and is the highest of a chain of similar bare granite points extending some distance to the north, and known locally as the Crystal Peaks, while Topaz Butte itself, though included as one of the peaks, is often called the "Sore Thumb," or by some "Cheop's Pyramid."

A rectangle, beginning at Topaz Butte and running six miles north along the above ridge, and extending three miles eastward, will include most of the pockets from which the beautiful and well known amazonstone and smoky quartz crystals have been taken. The pockets that have been found within these boundaries-probably more than a thousand in all are generally two to four feet deep, but in the largest one crystals were found to a depth of fifteen or twenty feet. These pockets were originally crystal lined cavities of varied forms and sizes occurring in the granite, but owing to the caving in of the walls through disintegration of the surrounding rock, or, as suggested by Cross (Bulletin 20, USGS), through movement of the rock-mass as in folding or faulting, and the consequent dislocation of the cavities, many crystals are found detached and lying loose in the dirt, often badly bruised or broken, particularly the large quartz crystals. The greatest number of crystallized mineral ever taken from a single pocket in this region would aggregate fully two tons in weight.

Quartz of all shades from colorless (rare) to black and nearly opaque crystals is the most abundant mineral. No rare faces have been observed. Several rhombohedrons, the tetragonal pyramid 2P2 and one or two gyroidal planes are not uncommon in combination with the ordinary prism and rhombohedron. Some very large crystals have been found: one taken from a pocket about ten years ago is between **four and five feet long**, but in several pieces. Several thick entire crystals weighing about 100 lbs. each have also been obtained, from one of which a ball, free of flaws, of uniform color and six inches in diameter could be cut. Crystals of regular shape like those from Switzerland, and many other localities, are very rare, but a tapering form is common, owing to alternating prism and pyramidal planes. Ordinarily the color is deeper at the apex of the crystal. A large amount of quartz from these pockets has been cut for jewelry and ornamental articles by lapidists both in this country and in Germany. The price paid is from 50c. to \$2.00 per pound, depending upon the quality of the stone and the demand for it.

Microcline ranks next in abundance to quartz. The amazonstone variety, when of fine shades of green, is the most prized. White, gray and pinkish crystals also occur. Simple crystals are very numerous, having the usual combination $\infty P\infty$, ∞P , OP , $P\infty$ often with ∞P_3 , $2P\infty$ and $2P\infty$ in addition. I have not observed the macropinacoid ($\infty P\infty$) on any of these crystals, though it occurs rarely at another place in the Pike's Peak region (*Devil's Head*).



Amazonstone showing white caps & Smoky Quartz



Crystal Peak (aka Topaz Butte, Cheops Pyramid)



Large smoky quartz crystals from the Godsend claim, Pikes Peak Historical Museum, Florissant

Twin crystals. The most abundant are *Baveno twins*, sometimes of a large size; a white one found a year or two ago, now in the collection of the Colorado Scientific Society, is 6½ X 6½ X 14 inches and weighs 45 lbs. Fine green ones 4 and 5 inches square and a foot or more long have also been found; they are, of course, much rarer than the small twins. *Manebach twins* are not uncommon, but they never equal the large Baveno twins in size. The larger crystals are very apt to come apart along the twinning plane, unless on a pretty firm base. A few crystals have been found twinned according to two laws—parallel to OP (Manebach law) and also parallel to $\infty P\infty$ (common in albite)—producing double Manebach forms. Carlsbad twins are less numerous here than either of the above kinds, while at the Devil's Head locality, —twenty miles north— they are the most common. Often the development is such that the faces OP and $P\infty$ lie apparently in the same plane producing a form like the simple crystals. Occasionally one is met consisting of three individuals, or a crystal with the middle portion only reversed. Another common variety of twins of this species has the twinning plane $\infty P\infty$ (mentioned under double Manebach twins). The angle from the brachypinacoid to the basal plane is so close to 90° however, that the twinning is not very conspicuous, but is generally shown by a suture line on OP and a reëntering angle along the prism.

Sometimes a pocket is found in which the microcline crystals have a coating of white kaolin a millimeter or so thick, but in most cases the feldspars and quartzes especially, are covered more or less with iron oxide, which is usually removed by the collectors or dealers, by **boiling the specimens in a solution of oxalic acid till the iron is dissolved and then soaking them in water to remove all traces of the acid.**

Some of the choicest colored amazonstone has been cut into gem and ornamental stones, but it is of little value for this purpose. Groups of amazonstone and quartz crystals are often of great beauty when the minerals are of fine color; such groups are often large, weighing from 50 to 100 lbs.

As a rule feldspar crystals from the same pocket are similarly modified and vary but little in color. Green crystals may occur in a pocket but a few feet from one containing white or gray crystals, but **green crystals and white ones are never found in the same pocket.** Some amazonstones are **white-capped** (see photo), to be sure, but this is probably owing to a secondary growth on faces—particularly on OP and the prism. The color of amazonstone crystals is always darker on the faces of ∞P .

Some pockets have been found containing quartz only, others with microcline alone, but in most cases they occur together and often with some of the minerals about to be mentioned.

Albite is common in radiating mammillary forms, grouped about the base of the quartz and microcline crystals—often adding greatly to the beauty of the specimens. It is rare in good separate crystals, though sometimes found of rather small size—not exceeding ¾ of an inch across—having the combination OP, $P\infty$, $\infty P\infty$; sometimes ∞P is shown as a very small face, but it is usually crowded out by $P\infty$, or, when present by $2P\infty$, meeting the base OP. Simple crystals are more numerous than twins—something uncommon with this species. Twins, when they occur, are of the ordinary kind, twinned parallel to the brachypinacoid.

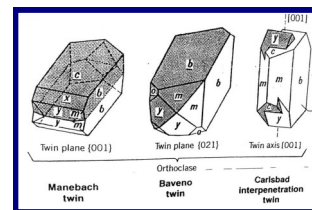
Göthite (*Goethite*) is a secondary mineral in the pockets, rarely occurring in good crystals, but common in mammillary forms radiating from quartz—frequently forming an almost perfect sphere around the apex of the crystal. It also forms on the feldspars and on fluorite. Also, much rarer, in groups of long bright tabular crystals some of which are terminated by the basal plane OP?. Another form is mentioned under pseudomorphs. In many pockets göthite has had several periods of deposition; the different generations being beautifully shown on some pieces. An interesting specimen of this kind, in the collection of Whitman Cross, originally formed around a quartz crystal, which from some cause has been removed and its cast filled by a second generation of göthite.

Limonite is common in nearly every pocket as a thin crust covering the other minerals, also as pseudomorphs, and, in a few large pockets, in thin stalactites, several inches long.

Hematite occurs most abundantly as pseudomorphs (mentioned below) and, like limonite, sometimes as a crust, also, rarely, in short round columns made up of thin plates piled one upon another.

Turgite is occasionally found as a black shining botryoidal crusts on feldspars and quartz (now considered to be an iridescent variety of hematite or goethite.)

Fluorite in twins and simple crystals, with a combination of cube and octahedron faces, has been found on quartz and microcline quite abundantly in some pockets. It is a secondary mineral. Some crystals are 3 or 4 inches across but usually rough, presenting etched surfaces. The colors are white and various shades of green and purple, often combined in the same crystal.



The three types of twinning common in feldspars.



White-capped Amazonstone. DMNS specimen
FMCC webpage



Albite & amazonstone
Mindat.org
Stephen Pochek



Goethite sphere at the tip of a smoky quartz crystal.
Mindat.org,
Mario Pauwels



Fluorite on quartz,
Teller Cty.
Brazarte Minerals

(Con't. next page)

Columbite. An analysis of columbite from this locality has been published by J.L. Smith (American Journal Science, 1877, III, xiii, p. 359). It is of rare occurrence, but occasionally a pocket is struck with quite good small bright crystals implanted on amazonstone.

Cassiterite. This is another rare species, having been found in but two pockets. The pieces I have seen are rough but have a few distorted crystal faces. A few very good twin crystals, an inch or more long, have, however, been obtained.

Muscovite. Many pockets contain more or less of this mica, generally attached to amazonstone, but good crystals are not often met; probably the best one yet found is about 2 inches long and more than an inch through. It has a fine, natural basal plane and the prism planes are well defined, but somewhat irregular.

Pseudomorphs after siderite. Attached to quartz or microcline in many pockets are found crystals of limonite, hematite, or göthite, having the form of perfect siderite crystals. For some reason, perhaps because the faces are not curved, these are sometimes referred to pseudomorphs after calcite. A number of crystals from different pockets, well adapted for measurement with the hand goniometer gave result for $R\wedge R$ varying not more than one degree from 107° , the angle of siderite. The rhombohedron R is the general form; on some crystals in connection with it the basal plane O appears. The angles of some of the hematite pseudomorphs are as sharp as they could have been on the siderite itself. Limonite in most cases retains the perfect cleavage of the original mineral. Göthite pseudomorphs are not plentiful. Outwardly they resemble limonite, but, on being broken reveal a radiated structure and their characteristic color.

Pseudomorphs after calcite. Mr. J. G. Hiestand called my attention to these interesting pseudomorphs which have been obtained from but one cavity. The largest one is a scalenohedron nearly 2 inches long, made up of the faces R_3 . The broken ones show a shell of hematite, sometimes covered with a thin crust of turgite, the interior being either cavernous or filled with göthite. The original calcite, as well as most of the other species, crystallized at a later date than quartzes and feldspars, though some of these show two or more periods of growth.

Phenacite (*=Phenakite, Be_2SiO_4) and **Topaz.** On the west side of Crystal Peak, pockets have been found scattered over an area equal perhaps to that on the eastern slope, but they are fewer by far in number. Phenacite and topaz have been found in **three of these pockets**, while neither mineral has been observed on the east side, though the formation, conditions and associations are apparently similar.

A pocket found by Mr. Transue, in 1884, on a debris-covered slope about one-half mile northwest of Topaz Butte, yielded the first phenacites and topazes that were found in this region, which have been described by Cross (and Hillebrand, 1885, Bull. #20, USGS, see below) and the phenacites by W. E. Hidden (Am. Jour. Science, Sept. 1886, p. 210) with notes and figures by Des Cloizeaux (see below). The minerals associated with phenacite in this pocket are topaz, microcline, quartz (smoky and white), albite, fluorite, limonite (pseudomorph after siderite), columbite (very rare) and biotite. At this pocket the writer found fragments of topaz, albite, quartz, and microcline with phenacites attached, and a number of loose lenticular crystals having the development described in the papers referred to above. More phenacites are found on albite than on all the other species; on one piece were fourteen distinct crystals on a surface about three-quarters of an inch square. One small but very perfect twin which has not been studied was also found. It is attached to quartz and consists of two lenticular crystals about 3^{mm} in diameter crossed at an angle of about 90° .

The largest phenacite ever found in this locality is a rough crystal 15^{mm} across. Most crystals are colorless, but those that have been entirely imbedded in gangue are generally of a faint wine color; one was observed having a smoky bluish tinge. All phenacites attached to microcline, here, as well as at the Specimen Rock locality are on the green or amazonstone variety.

It is evident that some of the phenacites crystallized contemporaneously with the quartz and feldspar, as they have been observed in the interior of smoky quartz and of amazonstone crystals, these minerals showing no evidence of a secondary growth. Phenacites have also been found half in quartz and half in microcline where the two minerals are in contact. Other crystals seem to be of a later generation than the original minerals of the cavity, as they occur slightly attached to amazonstone, to albite coating microcline, and entirely imbedded in the limonite crust on some feldspars.

Topaz occurs in the same manner as phenacite and closely associated with it. It has, perhaps, a greater affinity for amazonstone, on prism planes of which are frequently many topazes, lying apparently in all directions; a closer inspection, however, shows that many crystals are in reality arranged in definite positions in regard to the amazonstone. The most common position is that in which the vertical axes of the two species correspond. Other cases occur in which the cleavage planes OP of both minerals coincide. Still other crystals of topaz have the vertical axis parallel to the brachydiagonal of the amazonstone.

I wish to express my obligations to Mr. Houghton, of Florissant, for information concerning the locality, and to his son, Mr. J.S. Houghton, for kindly going over the ground with me and pointing out the most interesting places.

**Phenakite is a rare beryllium silicate mineral found only in a few places in the world. Colorado's Mt. Antero ranks tops in the sites, but these were found before folks started collecting at Mt. Antero.*



Columbite-Fe on microcline, Lake George
Mindat.org
Weinrich Minerals



Phenakite and Limonite pseudomorph after siderite, Mt. Antero, CO (mindat.org, db)

From Whitman Cross and W.F. Hillebrand, 1882, Communications, Notes on some Interesting Minerals occurring near Pike's Peak, Colorado, American Journal of Science, Art. 33, p. 281-285

Think about it! This is just over 30 years of settlement here in Colorado! The USGS mineralogists described phenacite and topaz found TWO YEARS before (c. 1880) by Mr. Thebaut, a prospector of Colorado Springs, associated with feldspar, smoky quartz and zircon, in one of the "pockets" described. Rev. R. T. Cross of Denver told the two authors about these topaz and phenacites from Crystal Park.

Found together, the only ones obtained, the two clear and colorless crystals were both fragments of less than half of the complete crystals. The figure is the smaller crystal, "about natural size." The second one measured nearly 7^{mm} in longest diameter, and had the same faces. No face of the vertical zone appeared; the crystals were flat and lenticular. Forms appearing have been identified as R, -1/2 (-1/2R), -1(R-R), and 2/3-2(3/2P2), and although all faces were too rough to get exact measurements with the reflection-goniometer, the size of the faces and their development allowed measurements with a contact goniometer. The angles between the faces matched those given for phenacite by Dana or Seglimann. There was an imperfect cleavage parallel to i-2 (∞ P2). The specific gravity of the crystal in the figure was 2.967 at 23°C. Naumann-Zirke's "Elemente der Mineralogie" published in Leipzig in 1881, told that phenacite had thus far only been described from four localities—two in the Ural mountains, one in Lothringen, and one in Mexico. A second locale in Mexico listed by Dana and another by Websky brought the total to five, so the Pike's Peak occurrence was the 6th, worldwide, at the time.

In 1885, USGS Bull., 20, p. 69, 70 the U.S.G.S. geologists reported yet another discovery by Hidden.

Phenacite from near Florissant.- Another occurrence of phenacite was discovered during the summer of 1884, near Florissant, in association with the topaz crystals described later on. The crystals here are small, colorless, of lenticular form, and are deposited upon or slightly imbedded in amazon stone crystals, in the same manner as the topaz, which is often present side by side with the phenacite. None seen exceed 5^{mm} in diameter, and crystals of this size in one case form an almost continuous crust upon the surface of a feldspar crystal. More commonly they are attached by an edge, although occasionally in all other positions. These small crystals, while preserving the lenticular form of those from the first locality (Crystal Park), exhibit a development of several new faces. These can be determined with considerable certainty by a reference to the article by Seligmann, reviewing the crystallography of the species. All the present forms are mentioned by him as occurring with very nearly the same relative development upon the phenacite from the Ilmen Mountains, in the Urals. The zonal relations are almost sufficient to determine the new faces, although new measurements were made to insure accuracy.

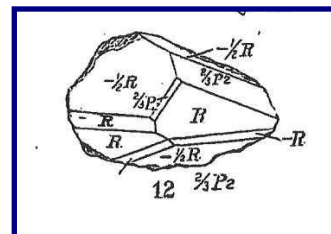
The new forms observed are: -2R, seen in a few crystals in good development; -1/2R3, which appears prominently with six nearly equal faces; R3, of which only three faces were found on any crystal, and which is often not developed at all; ∞ R and ∞ P2, appearing as very narrow faces, which do not produce a prismatic habit in any case and are often wanting. A narrow face sometimes seen between R and -1/2R3 is probably 4/3P2.

And in 1885, Hidden got in on the act with yet more phenakite specimens.

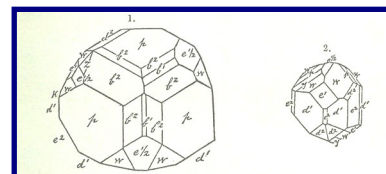
From W. E. Hidden, 1885, Phenacite, a new locality, Am. Jour. Science, V. 31, #171, article 34, p. 249 and 1886, On the Phenacite from Florissant, El Paso County, Colorado, Am. Jour. Science, V. 32, #189, article 22, p. 210-211

Hiestand had collected well-polished, transparent, highly modified crystals that varied in size from one to five mm, (one was as large as 1 cm), lenticular in shape, with little or no prismatic development, that usually were implanted edgewise. Their specific gravity was 2.954, and their forms included 3 different rhombohedrons, 2 scalenohedrons, and 3 prisms. The little crystals had first been considered to be minute perfect topazes, several hundred of which occurred along with the phenakites, still attached to the matrix. However, Hidden decided to send the crystals to Des Cloizeaux in Paris, who measured the angles of the crystals, and proved they weren't topaz. Des Cloizeaux even discovered a small phenakite crystal with bright faces within a quartz crystal! The phenakites had the same association with amazonite as phenacites from the Ural Mountains. Thus they were identified.

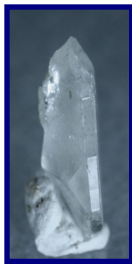
Interestingly, even although Eckel (1961, p. 252) stated that the Florissant locale was the "most productive of phenakites in Colorado, (even more than Mt. Antero at the time!) the minute phenakites have rarely appeared since their original descriptions. Eckel (1961, p. 252) mentioned phenakites being found in the Gold King Mine in Cripple Creek, but there are no photos of them on Mindat.org. There are a number of photographs of El Paso County phenakites from Specimen Rock on Mindat.org, but only two from the Crystal Peak district. A picture of a phenakite on quartz "from Florissant, W. Smith collection 1972," on Mindat.org was taken by Rock Currier but no other information is given about it. Judging by the inch-long scale bar, the phenakite is about a centimeter in diameter. Other than size given by the field of view as 20mm, there is no other information about the Pedro Gonzalez photograph. The 7mm crystal from Willard Wulff's collection from Mineral Auctions was collected sometime in the mid-20th century. Some phenakites are still occasionally being produced because Mark Jacobson says that Ray Berry, Joe Dorris, Ed Over, George White, all famed collectors of Crystal Peak district, all found phenakites. Joe, the only one living of the list, provided photos of phenakite.



A phenakite crystal from Crystal Park, Colorado, with faces labeled with Naumann's symbols. Cross & Hillebrand, Plate I, fig. 12; also 1882, p. 283



Hidden's original phenakite crystals from Florissant. Hidden, 1886, p. 211



Phenakite on quartz,
Bear Creek Canyon,
Colorado Springs, CO
1.9X1.2X.05 cm



Scalenohedral Phenakite on amazonite, Crystal Peak,
Florissant, CO; Willard Wulff Collection, (CSMS)
Minerals Auctions.com, crystal size 7mm

Phenakite on quartz crystal,
Florissant
scale=1": W. Smith coll., 1972,
Mindat.org, Rock Currier



TOPAZ from Cross and Hillebrande, 1885, U.S.G.S. Bull 320, p. 71

The first topaz specimen identified from Florissant is mainly noteworthy on account of the enormous size of the original crystal from which it came. This specimen is but a corner of a large crystal, the forms appearing being two faces of ∞P_2 , one of ∞P , and one each of $2P_\infty$ and $4P_\infty$. The fragment is about 9^{cm} (3 1/2 in.) in its longest diameter, and if the other faces were developed to correspond to those here seen, the complete crystal must have been nearly or quite **one foot in diameter** parallel to the brachy diagonal. It is clean in parts and has a decided greenish tinge. It was supposed (at first) to be fluor spar by the original collectors, and the other pieces of crystal are undoubtedly lost. The specific gravity of this fragment is 3.578 at 22°C. And it has the composition shown in the chart. Atomic ratio: Si: 1.025: Al₂ 1.000

	XXXIX.
SiO ₂	33.15
Al ₂ O ₃	57.01
F	18.04
O for F	106.20
(W. F. Hillebrand.)	6.75
	99.45

Original chemistry of a large
fragment of a topaz crystal from
Crystal Peak. 1885 (Cross and
Hillebrande, p. 71)

Within a few months a further discovery of topaz was made near Florissant. In this case the crystals were found deposited upon or partially imbedded in amazon stone, albite, or limonite (pseudomorph after siderite). The crystals seen by us were deposited upon different faces of the microcline and so seldom with any parallelism in position that any such coincidence must be considered accidental. The crystals varied from nearly two inches long to almost microscopic. They were deposited singly or in groups and are attached in all positions, so that many of them are quite well terminated at both ends. The forms observed are as follows: ∞P and ∞P_2 , both polished and striated; $4P_\infty$, $2P_\infty$, and $4/3P_\infty$; OP; $2P_\infty$; P and $3/2P$; ∞P_∞ .

Quite characteristic is the prominent development of the brachydomes $4P_\infty$ and $2P_\infty$, the former in particular, the faces of opposite terminations often meeting. $4P_\infty$ is almost uniformly dull, like ground glass while $2P_\infty$ is smooth and brilliant, passing into $4/3P_\infty$ or OP by a roughened line. $4/3P_\infty$ and OP are usually rough through minute irregularities bounded by crystal planes. The base is usually very narrow through the predominance of the brachydomes, the pyramidal planes and the macrodome are quite insignificant when present at all, and the ∞P_∞ is occasionally present as a small, smooth face. No indications of hemimorphism are noticeable, although the faces of opposite ends are seldom symmetrically developed. Some of the crystals have a decided greenish tinge, although many are colorless.

Nearly all crystals from Devil's Head, Crystal Park, and many from Florissant, have been found detached, some being badly broken. The same is true of a large portion of the crystals of the accompanying minerals. Movements of the whole mountain mass, as in folding or faulting, have probably caused this detachment and fracture of the crystals. Particularly noticeable with the topaz, though also observed on smoky quartz, is the fact that all these old fracture planes are healed over, so to speak, and are now covered by drusy surfaces caused by little prominences which are bounded by glistening crystal faces. An examination shows that pyramidal planes of both orders are the most common, the little elevations resembling those upon $2P_\infty$ above described. When the fractured plane is parallel OP there are usually a great number of the pits or etching figures also previously noticed.

Have you got your eyes full of the historical renderings of Crystal Peak mineralogy? Someday, after Bob Carnein and I have figured out Naumann's form-naming system, we'll try to explain it.

References all online!

Cross, Whitman and Hillebrande, W. F., 1882, "Notes on some Interesting Minerals occurring near Pike's Peak, Colorado," *American Journal of Science*, V. 24, #142, Art. 33, p. 281-285

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Eckel, Edwin, 1961, *Minerals of Colorado: A 100-Year Record*, U.S.G.S. Bulletin 1114

Hidden, W. E., 1885, "Phenacite, a new locality," *Am. Jour. Science*, V. 31, #171, Art. 34, p. 249

Hidden, W. E., 1886, "On the Phenacite from Florissant, El Paso County, Colorado," *Am. Jour. Science*, V. 32, #189, Art. 22, p. 210-211

Smith, Walter B., 1886, "Notes on the Crystal Beds of Topaz Butte," *Colorado Scientific Proceedings*, V. 2, p. 108-115



Web and Computer Resources for Rockhounds by **Bob Johnson**

Call me if you have trouble getting logged in—720-514-0266

DGMG on Facebook – by Bob Johnson

The DGMG has two Facebook pages. The first is a “private” group that was first established by former DGMG President Brenda Smith, who has since moved to Florida - but she still checks in on us regularly.
<https://www.facebook.com/groups/712900222148230/>



DENVER GEM AND MINERAL GUILD

Private group · 229 members



Joined

+ Invite

About Discussion Topics Members Events Media

This group is for members and “prospective members” of the DGMG. Only those who have requested to join, and have been approved by the group moderator (me) can see the content of the page or make posts there. In accepting members of that Group, I look for existing membership in the DGMG, or friends of members, or “prospective members” who obviously have an interest in rocks and live in the area. I specifically exclude mineral dealers from other countries who are unlikely to ever be active participants in our club and are only looking for places to advertise. The group rules (which they must agree to when they apply to join) state that only dues paid members of the DGMG (and our Show dealers) are allowed to post things for sale in our Facebook group. One local dealer has recently had their ads removed from the page because they did not meet either of those requirements. Our Facebook group has been growing and now has over 220 members.

I advertise our club meetings there and hopefully someday we will see visitors/new members to our club from that group.



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Web and Computer Resources for Rockhounds by **Bob Johnson**

Call me if you have trouble getting logged in—720-514-0266

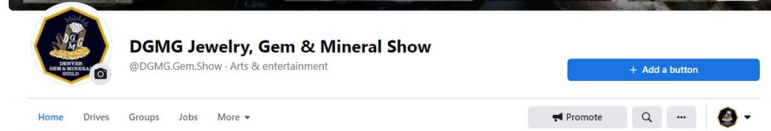
The second (public) group is specifically to advertise our show - but I also advertise our meetings there.

<https://www.facebook.com/DGMG.Gem.Show/>

This page had a “reach” of over 2500 viewers in the month of February 2022. You are encouraged to visit and participate in these DGMG FB groups regularly!

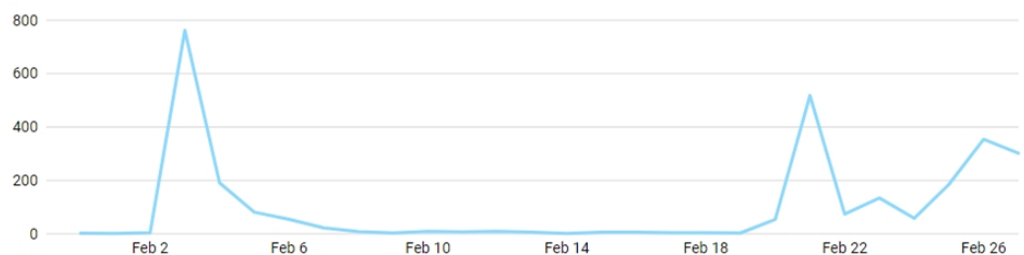


NOTE! – Because the Private group is “Private” you can not share posts from that group to your own FB page, but you CAN share posts from the Show FB page – and most of (my) posts are on *both* pages.



Facebook Page Reach ⓘ

2,528 ↑ 1.4K%



Web Corner addendum

FINALLY – on a totally unrelated but very important topic – with the war in Ukraine, there is a concern of increased cyber-attacks worldwide. See: <https://www.cnbc.com/2022/02/25/will-the-russia-ukraine-crisis-lead-to-a-global-cyber-war.html> and <https://www.govtech.com/blogs/lohrmann-on-cybersecurity/will-the-ukraine-conflict-lead-to-more-global-cyber-attacks>.

Now would be a good time to check your computer's security. Re- read the Web Corner from the September, 2020 Tips and Chips. https://13220728-3f49-4056-5901-c454033c3b54.filesusr.com/ugd/bad138_c41d0efab0504694b45336870ef7d67f.pdf

And, according to a recent notification from AVG.com, there is a rising threat of Emotet in the US.

Emotet spreads primarily as an email scam, using a method called thread hijacking where it replies to stolen email thread conversations and includes malware attachments. Emotet aims to extort money from its victims, steal credentials, or sell access to your computer to other cybercriminals. In the US, you are 20% more likely to become a victim of an Emotet attack compared to the rest of the world. It uses infected attachments, usually word or Excel documents. Once opened, these infected attachments install Emotet malware on your device which then infiltrates your email conversations with messages to all of your friends, containing malware. See: <https://blog.avast.com/why-emotet-remains-an-active-threat-avast>



Web Corner – Web and Computer Resources for Rockhounds –repeat for all our new members!

The New DGMG Website – by DGMG Webmaster **Bob Johnson**

The 10-year-old DGMG website is back to its old address: **DENVERGEM.org** but the address denvergem.co.education will redirect you there.

Many additional pages will be added to the site in the coming months.

A powerpoint about the rock chimney and pillars at Addenbrooke Park has been posted to the new Members Only page for "Special Programs." <https://denvergem.org/special-programs/>

Here are the procedures for logging into the new Members Only area.

On the top menu, click on Login.

Enter your email address as your username.

Be sure to use the same email address that is listed in the club roster – the email address used to send you the Tips & Chips.

If you have forgotten your password, or if this is your first time logging into the new site, click on "Forgot password" and the system, after asking for your email address again, will automatically send you an email with a link to create your new password.

Please keep our members area secure for everyone by using a strong password.

See these recommendations: <https://blog.avast.com/strong-password-ideas>.

The system will suggest a password. You can use that one, or enter your own.

The *Members Only* area currently contains the most recent members directory in both excel and PDF format, and the DGMG photo albums. There are nearly 200 different albums which contain pictures that go all the way back to 1964 – our founding year.

Clicking on an album name will open that album in Google Photos. The initial album view will show all the pictures in the album (you may need to scroll down to see them all). Clicking on any picture will open a larger view of that one picture and from that view you can scroll left or right to see the individual pictures. To save any picture to your computer, just right click on it and select "save image as". From the Album view, you can click on the 3 dots (in the top menu) to download the whole album.

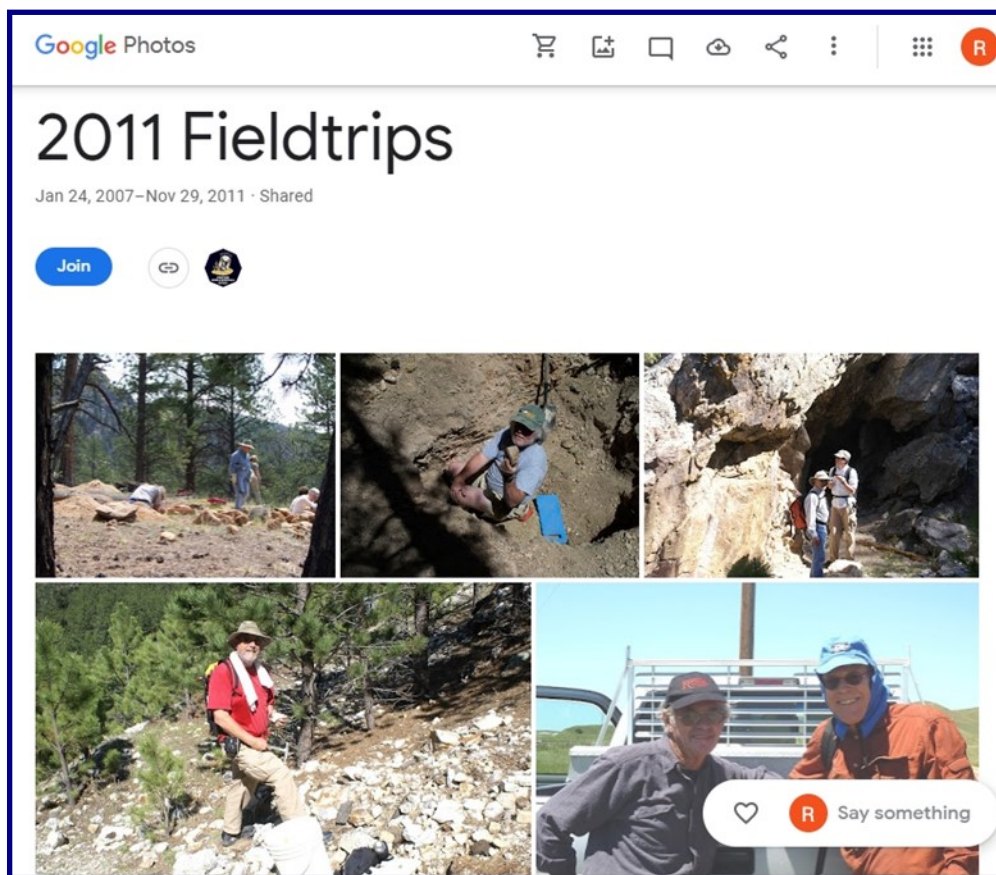
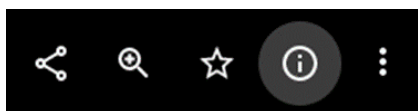
Con't next page



Web Corner – Web and Computer Resources for Rockhounds (con't.)

At the bottom of the screen, you will see a button that says “Say something” Click on that button to leave a comment (about the whole album - from the album view or about an individual picture - from the picture view). You are encouraged to leave your comments and share your stories about these pictures!

The menu at the top of the picture view gives you additional options. The circled “i” will display additional information about that image, and the 3 dots will allow you to order prints, download, or view the pictures as a slideshow.



For more, see *The Ultimate Guide to Google Photos* -<https://techpp.com/2015/12/23/google-photos-guide/>

If you have additional pictures that you would like to add to our collection please contact the webmaster!

Below the Photo Albums are the Videos. Listed there are over 100 videos produced by DGMG Historian Marjorie Payne. They are selectable by categories (All, Fieldtrips, Programs, etc.) Note you will need to hit the “Load More” button at the bottom to be sure that all the videos of any category are actually displayed.

If you have questions, comments, suggestions or any problems logging in to the new site, please contact me, the DGMG webmaster. (The most capable computer guy on the planet –ed.!)

Contact details are at the bottom of the site.



IT'S TIME TO PAY UP! New members from JeffCO, please make sure you sign and send in the liability waiver!

DENVER GEM AND MINERAL GUILD MEMBERSHIP 2022

☐ Renewal

☐ New Membership

Annual Dues:

- Individual=\$15.00

☐ Family=\$25.00 (Family is one or two adults, living at the address, and your children, under 18)

Primary member _____ Birthday _____
Name Month Year

Phone number _____ Email address _____

Spouse/Partner _____ Birthday _____
Name Month Year

	Name	Month	Year
Phone number	Email address		

Anniversary Month _____

Junior Member _____ Birthday _____
Name Month Year

Junior Member _____ Birthday _____
 Name _____ Month _____
 Year _____

Junior Member _____ Birthday _____
 Name _____ Month _____ Year _____

Address _____

City _____ State _____ Zip Code _____

☐ Check this box if you DO NOT want your name, phone number and email address included in the Members Only section of the DGMG website.

interests and Skills (check all that apply)

- Fossils
- Lapidary
- Faceting
- Jewelry
- Have a collection
- Display at shows
- Attend mineral shows
- Willing to volunteer at shows
- Field trips

○ Mineral collector: (list favorites)

☐ Willing to share special skills with others:

Signed: _____ Date: _____

Return membership form, liability form for each person, and payment to Membership Chairman at a monthly meeting or mail to: DGMG

Membership Chairman
1420 S. Reed Street
Lakewood, CO 80232

DENVER GEM AND MINERAL GUILD

RELEASE OF LIABILITY

By signing below, I acknowledge that all activities sponsored or conducted by the Denver Gem and Mineral Guild (DGMG), a non-profit organization, may be hazardous and may result in loss, damage, or death.

With full knowledge of these dangers, and in consideration for my acceptance as a member of the DGMG and participant in any and all field trips **and activities** sponsored by the DGMG, and the services and amenities to be provided by the DGMG in connection therewith, I confirm that I have read the foregoing and voluntarily assume all risks of such damages and hazards occurring in connection with the **activity**. I hereby agree for myself, all of my family, and heirs to **RELEASE** the DGMG and any of its trip leaders, club officers, club members, **hosting property owners** and claim owners, instructors, guides, or representatives from liability, claims, demands, or any causes of action.

I UNDERSTAND THAT THIS IS A LEGAL DOCUMENT AND BY SIGNING IT, I AM GIVING UP MY RIGHT TO SUE OR OTHERWISE MAKE ANY CLAIM against DGMG or any of its trip leaders, club officers, club members, **hosting land owners and claim owners**, instructors, guides, or representatives which may arise during my participation in any and all activities of the DGMG **or activities I conduct as an individual on DGMG owned or leased properties**.

I intend this RELEASE OF LIABILITY to be effective whether or not any loss, damage, injury, or death RESULTS FROM NEGLIGENCE of the DGMG or any of its trip leaders, club officers, club members, hosting land owners, and claim owners, instructors, guides or representatives. I understand that negligence means failure to do an act which a reasonably careful person would do, or the doing of an act which a reasonably careful person would not do, under the same or similar circumstances to protect himself, herself, or others from injury or death.

I agree to be solely responsible for my own safety and to take every precaution to provide for my own safety and well being while participating in the activities of the DGMG. Also, I understand that on DGMG trips, there may not be rescue or medical facilities or expertise, which may be necessary to deal with potential injuries to which I may be exposed. I understand that these risks exist and notwithstanding them, I wish to participate in DGMG activities.

I HAVE READ THIS RELEASE AGREEMENT AND HAVE FULLY INFORMED MYSELF OF ITS CONTENTS BEFORE I HAVE SIGNED IT. ALSO, I PLEDGE TO UPHOLD THE CODE OF ETHICS ATTACHED TO THIS RELEASE.

Printed Name (Please print legibly): _____

Signature: _____ Date: _____

IF UNDER 18 YEARS OF AGE, PARENT OR GUARDIAN MUST READ AND SIGN BELOW

I am the legal guardian of the above minor and have read the above RELEASE. I hereby consent to the terms of the RELEASE on behalf of the named minor, and give my consent to the participation of the above named minor in all activities of the DGMG on the terms stated.

Signature: _____

Date: _____

