

Lake George Gem & Mineral Club

Club News

December, 2019



NOTE: LGGM Club meetings in October through March will start at 10:00 a.m.

LGGM Club Show Committee: At 9:00 a.m. on December 14th the 2020 LGGMC Annual Gem and Mineral Show Committee will be having a meeting immediately before the monthly club meeting. If anyone is interested in being part of this committee we would love to have you join us. If you have any questions please contact me (Carol Kinate) at kinatec@aol.com or 719-648-9015.

Program for the Month: Saturday, December 14, 2019, 10:00 a.m.

The Annual LGGM Club Towel Show

In place of a program after the business and elections, we will have the annual "Towel Show". Bring some or the most interesting rocks or mineral specimens you have found or purchased this year, or something you have made recently from rocks. Table space for displays is limited, so each display should be limited to the amount that will fit on a small towel like a hand towel or dish towel.

In addition to your geologic display, all members are invited to bring a snack or dessert to share. (5 or 6 servings is plenty as there will be lots of people bringing the snacks.) The club will provide coffee, tea, lemonade etc., as well as plates, utensils and napkins.

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Election of Officers for 2020:

During the December 14th LGGM Club meeting, we need to elect people to fill the following positions for 2020: President, Vice President, Secretary and Treasurer. To date, there are no nominees for any of these offices for the coming year. You may send nominations to Richard Kawamoto at kawahome@wildblue.net or you can nominate someone during the club meeting on December 14th. You must have the nominee's permission before nominating them.

Bob Baker has offered to continue as the Educational Program Coordinator. Dave Alexander is willing to continue as Field Trip Coordinator, and Jerrolynn Kawamoto is willing to continue as Newsletter Editor. However, if another club member would like to take on any of these positions, please let us know.

SCHEDULE OF LGGM CLUB PROGRAMS, FIELD TRIPS & EVENTS			
Date(s)	What	Where	Leader/Notes
No additional field trips are scheduled for 2019.			
Presentations and Field Trips for 2020 will be added to in future newsletters after they are confirmed.			

COMING EVENTS OUTSIDE THE LGGM CLUB: (Nearby gem, mineral, fossil and geology events that you may enjoy.)

- **Cañon City Geology Club**, meets on the 2nd Monday of the month at 6PM in the United Methodist Church, Cañon City
- **Columbine Gem & Mineral Society**, meets on the 2nd Thursday of each month, 6:30PM in the meeting room, Mt. Shavano Manor, 525 W. 16th (at J St.), Salida
- **Colorado Springs Mineralogical Society**, meets on the 3rd Thursday of each month at 7PM in the Mt. Carmel Veteran's Service Center, 530 Communication Circle, Colorado Springs;
- **Pueblo Rockhounds**, meets on the 3rd Thursday of each month at 6:30PM in the Westminster Presbyterian Church, 10 University Circle, Pueblo.

Pete Modreski suggests the following upcoming events:

Mon., Dec. 2, 3:00-4:00 p.m., DMNS Earth Sciences Colloquium, **"The Fossil Atmospheres Project: A novel experiment to test CO₂ proxies using citizen scientists"**, Richard Barclay, Smithsonian Institute. VIP Room at Denver Museum of Nature & Science, all are welcome.

Wed., Dec. 4, 4:00 p.m., CU Geological Science Colloquium, **Bighorn River geomorphic mapping and sediment tracers**, by Melissa Foster, U.S. Bureau of Reclamation. Benson Earth Sciences Auditorium (180).

Sat., Dec. 7, 2:30-5:30 p.m., **WIPS (Western Interior Paleontological Society) Annual Auction Fundraiser**, Clements Center, 1580 Yarrow St., Lakewood. All are welcome.

Thurs., Dec. 10, 6:30 p.m., **"Funiculars of Golden Colorado"**, by Barb Warden, goldentoday.com; at "Golden Beer Talks" at the Buffalo Rose, 1119 Washington Ave., Golden. For more info see <http://goldenbeertalks.org/>

Fri.-Sat.-Sun., Dec. 13-15, **Flatirons Gem & Mineral Show, "Rocks & Rails"**, Boulder County Fairgrounds, 9595 Nelson Rd., Longmont CO, Main Exhibit Building. 10 a.m. – 5 p.m. each day. Held in conjunction with the Boulder County Model Railroad Club Show.

Thurs., Dec. 19, 5:30 p.m., **Colorado Scientific Society Annual Meeting**, 2019 President's Address (Tom Casadevall, USGS), and potluck dinner. Shepherd of the Hills Church, 11500 W. 20th Ave., Lakewood; all welcome.

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For more lecture series during the year see:

Colorado Café Scientifique in Denver, monthly lectures on science topics held either at Blake Street Station or Brooklyn's, Denver; open to the public, no charge other than refreshments you may choose to purchase; see <http://cafescicolorado.org/> .

Colorado Scientific Society (3rd Thursday, 7 p.m.), see <http://coloscisoc.org/> . Meets at Shepherd of the Hills Church, 11500 W. 20th Ave., Lakewood CO, except when noted.

CU Geological Science Colloquium (Wednesdays, 4 p.m.)
see <http://www.colorado.edu/geologicalsciences/colloquium>

CSU Dept. of Geoscience Seminars (Fridays, 4 p.m.),
see <https://warnercnr.colostate.edu/geosciences/geosciences-seminar-series/>

Van Tuyl Lecture Series, Colorado School of Mines, (Thursdays, 4 p.m.): <https://geology.mines.edu/events-calendar/lectures/>

Denver Mining Club (Mondays, 11:30), see <http://www.denverminingclub.org/> .

Denver Museum of Nature and Science, Earth Science Colloquium series, 3:00-4:00 p.m., VIP Room unless noted, day of the week varies. Museum admission is not required; see <http://www.dmns.org/science/research/earth-sciences/>

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Denver Region Exploration Geologists Society (DREGS; 1st Monday, 7 p.m.), <http://www.dregs.org/index.html>

Florissant Scientific Society (FSS); meets monthly in various Front Range locations for a lecture or field trip; meeting locations vary, normally on Sundays at noon; all interested persons are welcome to attend the meetings and trips; see <http://www.fss-co.org/> for details and schedules.

Golden Beer Talks (2nd Tuesday, 6-8 p.m.), at the Buffalo Rose, 1119 Washington Ave., Golden. Doors open at 6; Talk begins at 6:35; Intermission – 7-7:15; Q&A/clean up 7:15-8. “Golden’s grassroots version of TED talks, Expand your mind with a beer in your hand”, <http://goldenbeertalks.org/>

Nerd Night Denver is a theater-style evening featuring usually 3 short (20-minute) TED-style talks on science or related topics; held more-or-less monthly at the Oriental Theater, 4335 W. 44th Ave., Denver; drinks are available; for ages 18+. Admission is \$6 online in advance, \$10 at the door. See <https://www.nerdnitedenver.com/>.

Rocky Mountain Map Society (RMMS; Denver Public Library, Gates Room, 3rd Tuesday, 5:30 p.m.), <http://rmmaps.org/>

Western Interior Paleontological Society (WIPS); beginning January 2019, WIPS will meet on the 1st Monday of the month, 7 p.m., at Lowry Conference Center, 1061 Akron Way, Denver. See <http://westernpaleo.org/>

LGGM Club News:

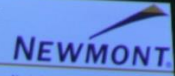
Doug White, Chief Geologist at the Newmont/CC&V Gold Mine at Cripple Creek, gave a well-illustrated talk that included:

- the history of the Cripple Creek gold deposit
- Newmont's involvement in this and other gold-mining operations, world-wide
- geology of the deposit
- open-pit mining of the deposit
- ore processing
- history of gold production
- future possible plans for the operation

See Bob Carnein's pictures (below).



Cripple Creek: Historic Production



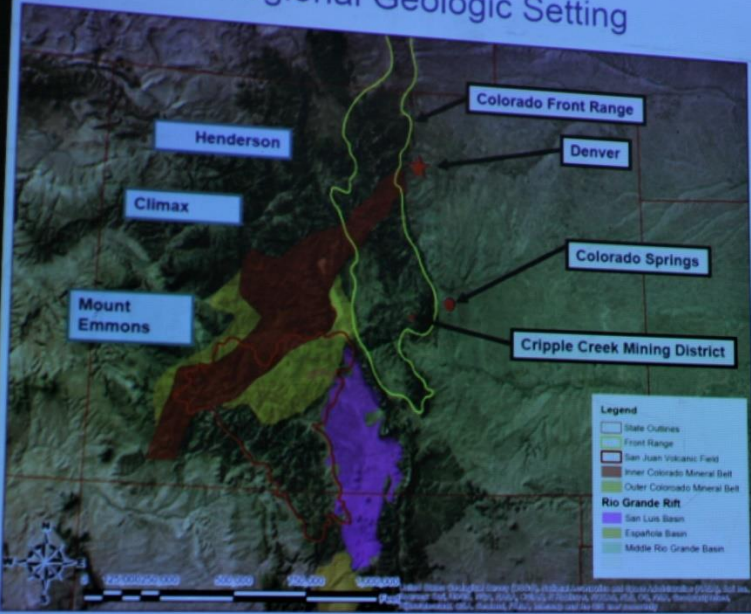
The cumulative production of the district is currently 26.0M ounces. The majority of those ounces came from the Southern and Eastern Sub-Basins.

In 2017 the site reached production of 450K oz. A level not seen since 1918, when between 392K and 408K oz were produced. Another major milestone for the district.



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CC&V: Regional Geologic Setting



Architectural Framework:

- Age: Mid-Tertiary Age, Hydrothermally Potassic Altered, Alkaline Volcanic Complex, 33 – 29 Ma
- Regional Host Rocks: Precambrian Granites & Metamorphic Units
- Diatreme Host Rocks: Diatreme Breccia, Phonolite Breccia, Phonolite to Lamprophyres
- Primary District Structures: Subvertical strike slip faults - NW, NNE, N-S thrust faults - E-W
- Mineralization: Age of Mineralization ~ 29.5 – 26.6 Ma
Low Sulphidation – Telluride Gold/Silver System
- Alteration Types: Alkali feldspar + specularite, K-metasomatism + pyrite pyroxene and biotite (high temp)
- Rocks with ≥ 14 wt% K₂O from K-metasomatism are intimately associated with mineralization (disseminated and structurally controlled)
- Quartz – fluorite-carbonate veining is closely associated with gold-silver mineralization (structurally controlled)
- Ore Types:
 - (1) Broad Zones Of Low-Grade, Gold-Pyrite Mineralization, Microfracture Disseminated
 - (2) Discrete Fracture Zones Of High-Grade, Gold-Silver Tellurides.
 - (3) Native Gold

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Interesting Geological Articles Online:

From **Wayne Orlowski** we have the following links:

Men of Rock 1, 2 &3: BBC documentaries on the historical development of geologic thought. What an accent!

Men of Rock 1 of 3 - Iain Stewart tells the story of James Hutton, the founding father of geology.

https://www.youtube.com/watch?v=FYful2uZLmg&feature=youtu.be&fbclid=IwAR3kdEydA33FvUXF_rAcLmfU-whcHDQUcAgzzoy9kujLP-Tu2FQt3OWf-TI

Men of Rock 2/3 Moving Mountains- Legendado 720p

<https://www.youtube.com/watch?v=w8k5iqCnUnM>

Men of Rock 3 of 3 The Big Freeze

<https://www.youtube.com/watch?v=K7Ej2-mFslQ>

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The Central Bank of Mongolia – also known as Mongol Bank – has launched its Sinraptor coin as a part of the New Dinosaur Coin Series. The silver 999 coins are 38.61 mm and Gold 9999 coins are 11 mm.

<https://news.mn/en/789425/?fbclid=IwAR00HzuDHMTSan0wF7Jyz020zsl7dHQrrOsjlriSLnlHolCNxWRC3y6o2j8>

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Sand

The overwhelming bulk of the sand we harvest goes to make concrete, and for that purpose, desert sand grains are the wrong shape. Eroded by wind rather than water, they are too smooth and rounded to lock together to form stable concrete.

The competition for sand has grown so intense that in many places criminal gangs have gotten into the trade, digging grains up by the megatonne to sell on the black market.

Violence over the sand trade in recent years has taken lives in Kenya, Gambia, and Indonesia. In India, “sand mafias”, as the local press calls them, have injured hundreds and killed dozens of people. The victims include an 81-year-old teacher and a 22-year-old activist who were separately hacked to death, a journalist burned to death, and at least three police officers run over by sand trucks.

There is so much demand for certain types of construction sand that Dubai, which sits on the edge of an enormous desert, imports sand from Australia. That’s right: exporters in Australia are literally selling sand to Arabs.

https://www.bbc.com/future/article/20191108-why-the-world-is-running-out-of-sand?ocid=global_future_rss

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DIVIDERS

A set of dividers is a tool I find very useful in laying out the geometry of a piece I'm making. It has two needle-like tips with an adjustment to set the spacing between them. They can be used to transfer a measurement. Let's say you need a 7mm wide strip of sheet metal. Set the spacing between the divider tips to 7 mm on the ruler. Then lay the sheet on the bench, put one tip against the edge, and run the dividers down the edge scribing a line parallel to the edge.

Dividers can be used to mark equal segments of a line or arc. For instance, assume a line between A and B that might be straight or curved, and you want to divide it into 5 equal lengths. Set the dividers to an estimate of the distance. Starting at Point A, use the dividers to mark off five lengths along the line. If you end up short of Point B, lengthen the distance on the dividers. If you end up overshooting Point B, shorten the length of your dividers. After a few tries, the length on the dividers will be the exact distance you need to mark the 5 segments.

Dividers can let you quickly find the center of a circular disk. With one tip of the dividers at the edge of the disk, set the other tip to an estimate of where the center might be. Fix one tip of the dividers at the 3 o'clock position and scribe an arc with the other tip near the center. Do this again from the 6 o'clock, 9 o'clock, and 12 o'clock positions. The arcs at the center will form a small four-sided box, and the center of the box is at the center of the disk.



With the holidays coming up soon, one of Brad's "How To" jewelry books is a great way to help a friend learn a few new skills. See all the books at Amazon.com/author/bradfordsmith

Notes from the Editors

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Bob Carnein's article this month explains "mineral type localities" and the enormous variety of them in Colorado that provides a unique opportunity for rockhounds in our state.

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Many of us enjoy rock collecting on our vacations and travels to other places. Bob Baker discusses two of the mines he has visited recently, how he was able to access them and the types of rocks and minerals found there. If you also find exceptional rock collecting opportunities on your travels, we would welcome hearing about them and seeing your photos.

Colorado Type Localities

by **Bob Carnein**

In case you couldn't find enough things to be thankful for last month, consider this: according to Mindat.org (accessed November, 2019), Colorado has produced 877 valid mineral species and is the type locality for 87. Type localities for minerals are places from which a mineral was first described in the scientific literature. Currently, 5527 mineral species are recognized for the whole planet, so about 16 percent of those can be found somewhere in the Centennial State. Mindat lists over 13,000 Colorado mineral localities, so the opportunities for the collector are almost unlimited!

This and some subsequent articles will focus on Colorado type localities. As you will see, they are not necessarily the sources of the best specimens, but they are of historic importance and produced the specimen(s) that are the standard by which all others are measured. Type specimens can generally be found in major museum or university research collections.

Because of my interest in crystallography, I recently acquired 2 specimens of a Colorado type mineral that happens to fall, alphabetically, at the end of the list. The mineral is one that many of you probably never heard of but that has recently been found as superb crystals at a locality in Iran. It is *zunyite*, named for the Zuni mine (note spelling), located on Anvil Mountain in the Red Mountain mining district, San Juan County, Colorado.

Zunyite, $Al_{13}Si_5O_{20}(OH,F)_{18}$, is a rare silicate mineral first described by W.F. Hillebrand in 1884 (Hillebrand, 1884). Hillebrand (1853-1925) received a bachelor's degree at Cornell University
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before moving to Europe, where he received a PhD. from the University of Heidelberg in 1875. After additional education (sort of like a “post-doc” today), he began his professional career as an assayer in Leadville before going to work as a chemist for the US Geological Survey in 1880 (Wikipedia, accessed November, 2019). After nearly 20 years as a chemist at the USGS, he continued his career as a chemist with the National Bureau of Standards.

At the Zuni mine, zunyite occurs as tiny (up to 5 mm), sparkling (it has a vitreous luster) tetrahedral (Figure 1) crystals whose unusual shape no doubt caught the attention of someone using a hand lens or microscope to examine rock samples from the mine (Figure 2).

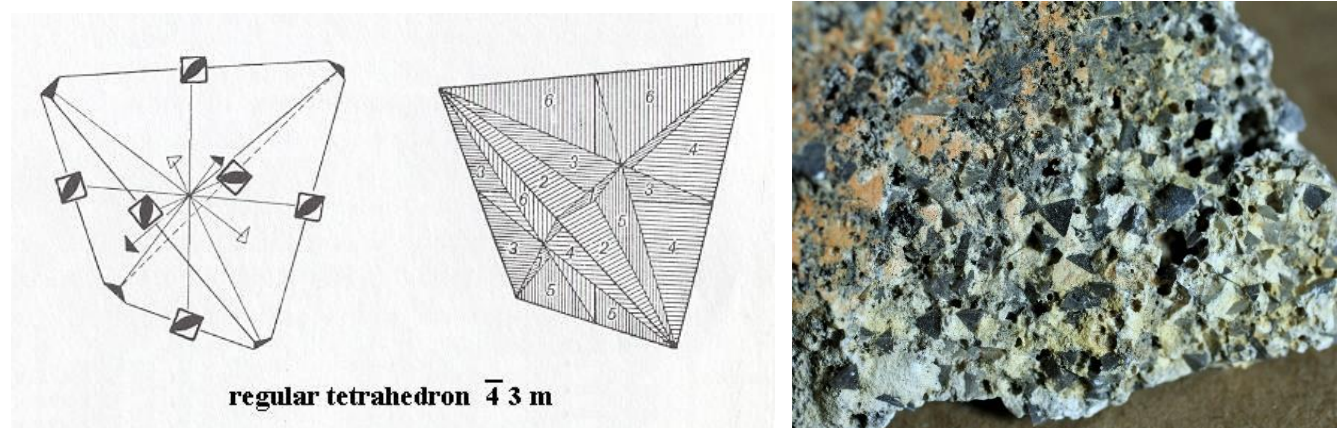


Figure 1. Tetrahedron, showing symmetry elements (www.metafysical.nl)

Figure 2. Tetrahedral zunyite crystals in diaspore from the type locality. (Carnein photo and specimen)

As indicated by the name, tetrahedral crystals have 4 faces (Figure 1). They are relatively uncommon among the hundreds of minerals that occur in the isometric crystal system.

The Zuni mine, which was primarily a silver mine, was discovered in 1881 and was located about 3 miles north of Silverton. Mindat.org (accessed November, 2019) lists 27 recognized minerals for the mine, including baryte, bournonite, diaspore, enargite, zunyite, and a variety of copper, lead, zinc, and silver sulfides and sulfosalts (see Hlava, *et al.*, 1994 and Moats, *et al.*, 1996). At the type locality, zunyite resulted from hydrothermal alteration of volcanic rocks.

Since the initial discovery, several other Colorado localities for zunyite have been documented. These include: the Animas mining district (San Juan County); the Rosita Hills district (Custer County); the Rico district (Dolores County); the Red Mountain district (Ouray County); and the Bonanza and Embargo districts (Saguache County) (Eckel, 1997).

Although there are dozens of world-wide localities, what are probably the world’s best zunyite crystals started to dribble out of Iran in 2018, when they appeared at the Munich Mineralientage (mineral show). The crystals come from the Qualat-e-Balat salt dome, Bandar Abbas, Hormozgan, on the coast of Iran (Moore, 2019). By Colorado standards, many of these are huge, reaching nearly an inch (25 mm) on edge. They appear as nearly perfect red-brown loose crystals, or, more rarely, matrix pieces, that combine a dominant tetrahedron with “beveled edges”, which are cube faces (Figure 3). Associated minerals include gypsum and tiny hematite crystals; hematite inclusions may explain the red color.



Figure 3. Rare matrix specimen of zunyite with hematite and gypsum. Qualat-e-Balat salt dome, Iran. (Carnein photo and specimen)

From a crystallographic point of view, it seems odd that the world's best crystals of 2 other tetrahedral minerals also occur in salt deposits. These are chambersite $[\text{Mn}_3(\text{B}_7\text{O}_{13})\text{Cl}]$, which occurs (among other places) in the Barbers Hill salt dome, Chambers County, Texas; and boracite $[\text{Mg}_3(\text{B}_7\text{O}_{13})\text{Cl}]$, which occurs near Hannover, Lower Saxony, Germany (Figures 4 and 5). Like zunyite, these minerals are considered to be "classics" among serious mineral collectors. Although Colorado has some salt deposits, neither mineral is known to occur here.



Figure 4. Chambersite crystals (to 5 mm) Barbers Hill salt dome, Texas. (Carnein photo and collection)

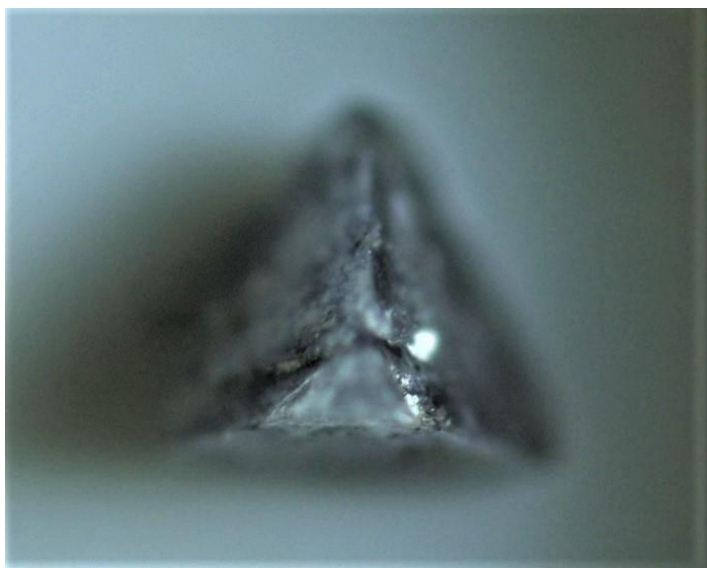


Figure 5. Boracite crystal (3 mm) from near Hannover, Germany. (Carnein photo and collection)

Note When I was researching this article, I discovered that my friend Mike Nelson has also talked about zunyite at his blogspot (csmsgeologypost, accessed November, 2019). Check out Mike's articles there or in the CSMS Pick & Pack.

References Cited

Eckel, E.B., 1997, *Minerals of Colorado, Updated and Revised by RR. Cobban, et al.*: Golden, Colorado, Fulcrum Publishing.

Hillebrand, W.F., 1884, On zunyite and guitermanite, two new minerals from Colorado: *Proceedings of the Colorado Scientific Society*, vol. 1, p. 124-131.

Hlava, P.F., A.G. Hampson, and W.P. Moats, 1994, Zunyite and other minerals of the Zuni mine, San Juan County, Colorado (abs.): 15th Annual New Mexico Mineral Symposium, Nov. 12-13, 1994, Socorro, New Mexico, p. 12-14.

Moats, W.P., A.G. Hampson, and P.F. Hlava, 1996, Zunyite and associated minerals from the Zuni mine, San Juan County, Colorado: *Rocks and Minerals*, vol. 71, p. 94-101.

Moore, T.P., 2019, Ste.-Marie-aux-Mines show 2019: *The Mineralogical Record*, vol. 50, p. 645-656.

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ACE OF DIAMONDS MINE by **Bob Baker**

I have always wanted to find a Herkimer diamond, finally on our Fall Foliage trip we were able to include a stop in the Herkimer, New York area. There are two Herkimer diamond mines located near each other in Middleville, New York about 10 miles from Herkimer, New York; the Ace of Diamonds and the Herkimer Diamond Mine. Herkimer diamonds are clear, double terminated quartz crystals. The “diamonds” are located in a matrix of 450 million year old dolomite. The dolomite contains small vugs of druzy quartz, Herkimer diamonds, or calcite. The Herkimer Diamond Mine is a more polished operation with museum, gift shop, cafeteria, and modern facilities. The Ace of Diamonds is very rustic offering a small shop with tools for rent and a few items for sale. For a daily fee of \$10 you can collect all day. Of course we chose the Ace of Diamonds.



We had some success finding a few Herkimers lodged in the dolomite vugs and were told they were more valuable than the ones found loose.

Ted Smith, owner of the Ace of Diamonds, was hard at work excavating more material for us to search through. Ted clears the top soil until he reaches the dolomite, then he drills down to the layer containing the vugs and using a 350 ton hydraulic rock fracturer he splits the rock into manageable sizes. The matrix is then transported to several areas to be explored by the daily visitors.

We also tried our hand at sluicing. Using 2 sluice pans with different sized screen we dug from a dirt pile and sifted the material in a running water trough. We found several “diamonds” this way.



You will need: small spade, crack hammer or hand sledge, eye protection, screening pans, and something to put your treasure in. The Ace of Diamonds will rent equipment if you need anything.

For more information see the Ace of Diamonds website at <https://herkimerdiamonds.com/>.

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BLUE POINT AMETHYST MINE

by **Bob Baker**

While on a Fall Foliage trip, we crossed the Canadian border just north of Grand Portage, MN. pulling our new 5th wheel trailer. We were over-prepared for the border crossing after reading several online accounts of what to expect. I handed the Canadian officer a 3 page detailed list, prepared by Leesa, of all the food items in our trailer. He glanced at the paper, rolled his eyes and waved us through. Thunder Bay, Ontario is less than an hour north of the border and for us an opportunity to rest and explore the shore of Lake Superior. Ontario, Canada is known for its amethyst mines near the shore of Lake Superior, part of the Great Basin of the Great Lake region. Thirty-five miles east of the city of Thunder Bay there are several amethyst mines near the town of Pearl.

We chose to visit the Blue Amethyst Mine because of the good online reviews. Lyndon Swanson, owner of the Blue Point Amethyst Mine welcomed us to his mine and walked us up to the open trench mine that he continues to work with explosives and excavator. The large trench, 300 feet long and 50 feet wide showed plenty of purple color in the walls and several large cavities recently exposed at the head wall promised the potential of amethyst filled pockets. A large visible seam of amethyst ran diagonally up the vertical wall which Lyndon will work on next year. Lyndon tells me that the host rock is mudstone and limestone. Although purple was the prominent color there was some orange/red hematite stained amethyst and a limited amount of amethyst so dark it appears black. Most of the amethyst is in clusters of small crystals.



The fee for collecting is \$25 for a 5 gallon bucket. We easily filled 2 large buckets with amethyst from the several large mounds of material that Lyndon has available for us to collect. No collecting from the open trench is allowed.

If you would like more information about the geology of the Great Lakes region, you may enjoy the following link:

www.museum.mtu.edu/sites/default/files/AESMM_Web_Pub_1_Great_Lakes_Geology_0.pdf.

Below is a photo of the large amethyst boulder which was given to Lyndon by the nearby Moonlight Mine, which is closed to the public.



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If you are interested in Thunder Bay amethyst, you may also enjoy reading a recent article by Dan Kile which was published in *Rocks & Minerals*:

Kile, D.E., 2019, Mineralogy of the amethyst mines in the Thunder Bay area, Thunder Bay, Ontario, Canada: *Rocks & Minerals*, vol. 94, p. 306-343.

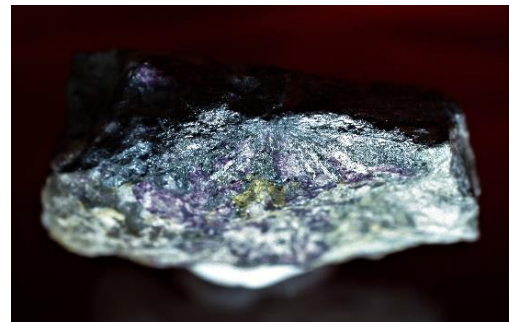
Monthly Mineral Quiz



Last Month's Mineral. Prehnite, $\text{Ca}_2\text{Al}_2\text{Si}_3\text{O}_{10}(\text{OH})_2$,

Prehnite is one of those minerals that often occur in amygdules (fillings of what were originally bubbles) in volcanic rocks, especially basalt. Because it is often an attractive green color, like the sample to the left, it's a favorite among collectors. This specimen, from Kayes region, Mali, is like ones often cut into cabochons by lapidary enthusiasts. Specimens from this locality often have excellent associated epidote crystals. In the US, fine specimens come from the Triassic/Jurassic "trap rocks" of the eastern Appalachians (especially Connecticut, New Jersey, and Virginia). There are a dozen Colorado localities, but none of them are really notable. Unfortunately, some sellers exploit peoples' gullibility with tales of its mystical powers, including precognition. I've had specimens since I was a kid, and, so far, my prehnites haven't been helpful to me.

This Month's Mineral:



This month's mineral (left to right: Bolivia; Romania; Cripple Creek, CO) (Carnein specimens and photos)

The mineral for December is a favorite among collectors because it occurs as attractive (but fragile) specimens from many localities. China and Japan probably have produced the best specimens, with crystals measurable in feet. It is very soft, has a low fusibility (melts in a match flame), metallic luster, and has a moderately high specific gravity (about 4.6). It generally occurs as bladed or prismatic crystals, but, when cleaved, has characteristic striations perpendicular to the lengths of the crystals. It typically occurs in hydrothermal deposits with minerals containing arsenic, mercury, and other metals. What is it?



The Lake George Gem and Mineral Club is a group of people interested in rocks and minerals, fossils, geography and history of the Pikes Peak/South Park area, Indian artifacts, and the great outdoors. The Club's informational programs and field trips provide opportunities to learn about Earth science, rocks and minerals, lapidary work and jewelry making, and to share information and experiences with other members. Guests are welcome to attend, to see what we are about!

The Club is geared primarily to amateur collectors and artisans, with programs of interest both to beginners and serious amateurs. The Club meets on the second Saturday of each month at the Lake George Community Center, located on the north side of US Highway 24 on the east edge of town, sharing a building with the county highway shops. **In the winter, we meet at 10:00AM. From April through October, we meet at 9:00AM, to allow more time for our field trips.**

Our organization is incorporated under Colorado law as a nonprofit educational organization, and is a member of the Colorado, Rocky Mountain, and American Federations of Mineralogical Societies. We also sponsor an annual Gem and Mineral Show at Lake George, where collectors and others may purchase or sell rocks, minerals, fossils, gems, or jewelry. Annual membership dues (Jan. 1 through Dec. 31) are \$15.00 for an individual (18 and over), and \$25.00 for a family (parents plus dependents under age 18). New memberships and renewals are only accepted Jan 1 through March 31 each year.

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