

The Sierra Pelonaogram



April 2022

... Member of the California Federation of Mineralogical Society Inc. ...

The Sierra Pelona Rock Club is a non-profit organization founded in 1959 with the objective to sponsor activities and promote interest and education in: mineralogy, lapidary, geology, paleontology and related subjects.



Chlorastrolite

Article and photo by
Lindsay Black of Wild Superior Gems
wildsuperiorgems.com

Chlorastrolite (Greenstone, Turtle Back, Isle Royale Greenstone, Star Stone) is one of the most difficult materials to achieve perfect Cabochons. I have seen the statements of, "wish I could have a slice of that", as if these are chunks of Jasper that could be sliced to make perfect shapes. Far from the actual reality of what goes into polishing these stones. Chlorastrolite is formed in Amygdaloid basalt and is found in nodule/veins. These stones need to be extracted from the basalt stone which is extremely difficult. It's difficult for two primary reasons. 1) The basalt can be extremely hard 2) These gems are brittle and when trying to extract the stones usually crack or shatter. (For inexperienced collectors) These stones cannot be cut with a trim saw unless you want them to shatter. Since the nodules can have varying hardnesses and quality within the same nodule. A lapidarist needs to delicately grind away the outer layers and any inclusions while following the best pattern. No matter how much of the original stone needs to be ground away, a perfect stone is always the goal. Most inclusions run deep into the stone rendering the stone low quality if not properly removed. Cracks are very common, especially in big stones. So special measures/standards need to be understood in order to yield a higher percentage of high quality exc.



President's Message

Can you believe it's already April? What a great time to head to the desert with collecting in mind! Julie Tinoco has a good trip lined up this month, be sure to look for her emails detailing the day.

We also have the Open House at Placerita Canyon Nature Center coming up in May. Heidi has sent out an email with a flyer attached. This is a great community event, and a great time to get to know the many groups that operate here in Santa Clarita as many of them will have booths there too.

We are still on a mission to find a place to meet. I am hoping that with restrictions mostly being lifted, we will have better luck. In the meantime, we still have Zoom, although I know so many of you are "Zoomed" out.

That's about all I can think of for now, have a wonderful Spring, enjoying this amazing weather for as long as it lasts. I hope to see all of you at the meeting next Tuesday. (Zoom).

Bill Webber, President, SPRC



Officers:

President – Bill Webber
Vice-President – Julie Tinoco
Secretary: Tina White
Treasurer – Shana Bruner-Ruiz
Federation Director (CFMS/AFMS) --Don Cogan

Chairpersons:

Claim--Linda Jenkins
Donation Rock Table--Dianne Wholleben
Equipment--Bill Webber
Field Trips – Julie Tinoco
Historian -Open
Hospitality – Ron Rackliffe
Membership – Heidi Webber
Website-- Larry Holt
Pelonagram Publisher, Editor – Heidi Webber
Programs –Tina White
Publicity –Open
Sunshine--Linda Jenkins

The Sierra Pelona Rock Club, is a member of the California and American Federation of Mineralogical Societies, Inc. (CFMS/AFMS). The general club meetings (Open to the public) are at 7:30 PM, on the 3rd Tuesday of each month at: Currently via Zoom

Contact the Club or the Sierra Pelonagram Editor at:
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Newhall, Ca. 91322
Or e-mail: hwebber50@gmail.com
Visit the SPRC website www.sierrapelona.com

SPRC General Meeting

March 15, 2022

Meeting started at 7:04 p.m.

Placerita Nature Center Open House 5/14 (Heidi W.)

- Rock saw to show slabs
- Display cases with coprolite, shark teeth (Martin)
- Display case of Omid's jewelry with him showing how he works
- Wheel for candy and rocks
- No sales; only drawings/games
- Discussion of where everyone will be set up (US, Astronomy, Hiking Club)
- We need more "Tumble" – Tina to contact Ron L.
- Bill has the big tumbler again and will put it to work

Field Trip (Julie T.)

- Saturday, March 26th, and Sunday March 27th
- Afton Canyon
- Fluorite, Sagenite, Bloodstone, Jasper, Agate, Chalcedony, Calcite, Fire Agate
- Encourages dry camping; could be windy so trailers likely not advised
- Hotel in Barstow (or Baker?)
- 4WD advisable/AWD was enough last time; Martin & Larry have 4WD trucks and will shuttle (riders to contribute for gasoline).
- Julie will be sending out an email with information
- Those who will go are to email Julie with their schedule (days, approx. hours)

Presentation on Fluorite (Tina W.)

- Merryjane showed her yellow (ish) fluorite orb & purple Hello Kitty
- Trina hefted her GIANT slab of rhyolite with emerald green fluorite – that she found where our March field trip is going!

Meeting ended at 8:14 p.m.



April

Lynne Alexander
Greg Mazourek
Yolanda Resnik
Michael Shane

May

Therese Colvin
Lise Meyers

SPRC Board Meeting

April 5, 2022

Meeting opened at 7:04 p.m.

Attendees:

- Heidi Webber, Bill Webber, Don Cogan, Ron Rackliffe, Julie Tinoco, Shana Ruiz and Tina White

Minutes

Were in the Pelonagram, accepted unanimously

Financials

Emailed out today; Julie questioned refund from Blue Hose/Heidi explained we're no longer using them. Accepted unanimously.

CFMS Show

Club Presence

- If SPRC had a paid table \$100, would need sales permit, tax form must be submitted w/in 30 days; additional named insurance, larger table \$400
- If we had a table, we would have to be there for 3 full days, setup Thurs/break down Sun.
- Julie believes this event includes the trip to our Claim that Ruth had asked her to lead; if it is, Julie suggests it be our Club's May trip.
- General opinion is we'd likely not make more than the \$100, would have difficulty staffing our booth full-time

Meeting Place

- Shana has a lead for an office in Canyon Country - \$50/month, upstairs without an elevator.
- Tina to re-re-re-contact COC and Greenbrier management
- Friendly Valley? A church? A car dealership? Sheriff's station? Elks/Moose/Rotarians?

Placerita Open House

- We will be sharing space with the herpetological society
- Martin will be taking his "stuff"
- Room for us to have a saw to cut geodes purchased in Gift Shop
- We will have the wheel with tumbled rocks, etc.
- Ron R. says he has enough that we don't need to contact Ron L. about more
- Side note: We've been invited to Gilcrest Farms all weekends they're open, so we'll need lots of tumble for that

Equipment

- Ron R. is interested in large saw the Club now has
- Julie is interested in the grinder/polisher Tina will have soon
- Bill bought coarse grit (2 boxes @ 44# ea.), hardware for machines damaged in our last workshop, a new expandable wheel, more sand belts, 10" blade, Si-C sanding belt. \$466.00 thus far. Unanimous approval for reimbursement to Bill W.
- Still need a new motor or new gearing on the one Ron R. provided; Bill will update us.

Web Hosting

- Now on Larry Holt's private server for \$99/year

By-Laws Question

- Don wondering if there is a \$ amount that doesn't need Board approval; apparently not.

Field Trip

- Our usual weekend is Easter weekend
- April 23rd to Acton; more research on specific sites by any or all of us. Evelyn will be here that weekend.
- May 7th w/AV Group to Claim
- Finds being reported in Acton off Hubbard Road – later in May?
- Some folks going to Mariposa show this next weekend with "outing" on Sunday; Julie will remain the group asking she be notified if going

Meeting adjourned at 8:17 p.m.

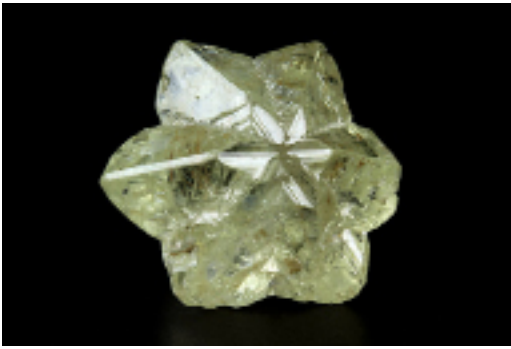


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Chrysoberyl

The mineral or gemstone chrysoberyl is a beryllium aluminate with the formula BeAl_2O_4 . The name chrysoberyl is derived from the Greek words χρυσός chrysos and βήρυλλος beryllos, meaning “a gold-white spar”. Despite the similarity of their names, chrysoberyl and beryl are two entirely different gemstones, although they both contain beryllium. Chrysoberyl is the third hardest commonly encountered natural gemstone and lies at 8.5 on the Mohs scale of mineral hardness, between corundum (9) and topaz (8).

The ordinary chrysoberyl is yellowish-green and transparent to translucent. When the mineral has a good pale green to yellow colour and is transparent, it is used as a gemstone. The three main varieties of chrysoberyl are: ordinary yellow-green chrysoberyl, cat's eye or cymophane, and alexandrite. Yellow-green chrysoberyl was referred to as “chrysolite” during the Victorian and Edwardian eras, which caused confusion since that name was also used for mineral olivine (‘peridot’ as a gemstone); this name is no longer used in the gemological nomenclature.

Chrysoberyl Occurrence

Chrysoberyl forms as a result of pegmatic processes. Melting in Earth's crust produces relatively low-density molten magma, which can rise up to the surface. As the main magma body cools, the water initially present at low concentrations became more concentrated in the molten rock because it could not be incorporated into the crystallization of solid minerals. The remaining magma thus becomes richer in water, and also in rare elements that similarly do not fit into the crystal structures of the major rock-forming minerals. Water extends the temperature range downwards before the magma becomes completely solid, allowing the concentration of rare elements to proceed to the point where they produce their own distinctive minerals. The resulting rock is igneous in appearance but formed at a low temperature by a water-rich melt, with large crystals of common minerals such as quartz and feldspar, but also with elevated concentrations of rare elements such as beryllium, lithium or niobium, often forming their own minerals; this is called pegmatite. The high-water content of the magma made it possible for the crystals to grow rapidly, so that the pegmatite crystals are often quite large, increasing the likelihood of gems forming.

Chrysoberyl may also grow in country rocks near pegmatites, when pegmatite-rich Be- and Al-rich fluids react with surrounding minerals. It can therefore be found in mica shales and in contact with the metamorphic deposits of dolomitic marble. Because it is a hard, dense mineral that is resistant to chemical alteration, it can be wetted out of rocks and deposited in river sands and gravels in alluvial deposits with other gem minerals such as diamonds, corundum, topaz, spinel, granite and tourmaline. When found in such places, there will be rounded edges instead of sharp, wedge-shaped shapes. Much of the chrysoberyl mined in Brazil and Sri Lanka is recovered from placer, as the host rocks have been severely weathered and eroded.

If the pegmatite fluid is rich in beryllium, beryllium or chrysoberyl crystals may form. Beryl has a high ratio of beryllium to aluminium, while the opposite is true of chrysoberyl. Both are stable with a common quartz mineral. Some chromium would also have had to be present to form alexandrite. However, beryllium and chromium do not tend to occur in the same rock types. Chromium is most common in mafic and ultramafic rocks where beryllium is extremely rare. Beryllium is concentrated in felsic pegmatites where chromium is almost absent. Therefore, the only situation where alexandrite can grow is when Be-rich pegmatite fluids react with Cr-rich country rock. This unusual requirement explains the rareness of this chrysoberyl variety.

Physical Properties of Chrysoberyl

Cleavage: {110} Distinct, {010} Imperfect, {??} Imperfect

Color: Blue green, Brown, Brownish green, Green, Gray.

Density: 3.5 – 3.84, Average = 3.67

Diaphaneity: Transparent to translucent

Fracture: Brittle – Generally displayed by glasses and most non-metallic minerals.

Habit: Prismatic – Crystals Shaped like Slender Prisms (e.g. tourmaline).

Habit: Tabular – Form dimensions are thin in one direction.

Habit: Twinning Common – Crystals are usually twinned.

Hardness: 8.5 – Chrysoberyl

Luminescence: Non-fluorescent.

Luster: Vitreous (Glassy)

Streak: white

What is chrysoberyl used for?

Chrysoberyl is not present in large deposits to be used as a beryllium ore. Its only used as a gemstone due to its very high hardness and its unique properties.

How much is chrysoberyl worth?

Chrysoberyl has recently been marketed for tens of thousands of dollars, with alexandrite chrysoberyl often hitting over \$100,000.

Read more : <https://www.geologypage.com/2020/10/chrysoberyl-one-of-the-worlds-most-expensive-gemstone.html#ixzz7QSVQtdSL>

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Mariposa Trip
By Julie Tinoco

On the weekend of April 9, 2022 a few of us from the club went to the Mineral and Gem Show of Mariposa. The weather was perfect for exploring the indoor and outdoor booths. There were rocks and minerals in their natural state. Beads, slabs, and finished jewelry all available for purchase.

Later in the day Ron Lawrence., Martin Schreiner., Larry Patrich. and I went looking for Mariposite. After finding a location in Coulterville that wasn't too dangerous to collect from, the hammers and large chisels came out. With some effort Martin and Larry did most of the heavy work chipping away at the Mariposite that will be donated to the club.

The following day turned into a restful drive between Mariposa and Hornitos. A quiet place to wonder around and take scenic pictures.

A huge thank you goes to Larry's mother-in-law Marilyn for her gracious hospitality and the invitation to camp on her property in Mariposa. Additionally, to Marilyn and Larry's wife Dori for cooking some of our delicious meals.

A wonderful time was had by all.

