



# PNWFM



## President's Message Toby Seim

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Greetings All,

Summer is here and the mineral collectors are out from hibernation! The previous few months have been quite busy for me. I started a new job in Aerospace that requires 120 miles (roundtrip) of driving each day; it can be exhausting at times. Despite acquiring a busier schedule, I have found some time to

plan for summer collecting; my focus is to do more prospecting in less explored areas. I highly encourage everyone get out to field collect this season and if you can, bring somebody who hasn't been introduced to the activity. By inviting a friend who has never been collecting, you could spark a new interest for them and help the advancement/growth for our hobby in general. Now that's exciting to think about!

**Symposium – Specimen Mines of the West**

Our 2019 Symposium is scheduled for October 18<sup>th</sup> – 20<sup>th</sup> at the Red Lion Hotel in Kelso Washington. The theme is Specimen Mines of the West and Allan Young has put great effort towards acquiring an all-star cast of speakers, featuring Erin Delventhal, Alex Homenuke, Virgil Lueth and Les Presmyk. I am excited to see what our attendance will look like and also to visit with some of my favorite vendors. As a satellite dealer, I learned a valuable lesson last year... If you wait to book your room last minute, you have an increased chance to be exiled as a dreaded upstairs dealer.

### Specimen Mines of the West (lineup)

#### **Erin Delventhal**

*The Blanchard Mine, New Mexico*

#### **Alex Homenuke**

*The Highland Bell Mine, British Columbia*

*The Keno Hill – Galena Hill Area, Yukon*

#### **Virgil Lueth**

*The Chino Mine, New Mexico*

*The Magdalena Mining District, New Mexico*

#### **Les Presmyk**

*The Red Cloud Mine, Arizona*

*The Pioneer District, Arizona*

### Whatcom Museum

The Whatcom Museum is a big beautiful, large scale museum right in the heart of downtown Bellingham. Over the past few months I have been meeting regularly with their staff, in hopes to meet several of our PNWFM goals by

providing an Exhibition containing our Pacific Northwest specimens. The exhibition titled "*What Lies Beneath*" has been approved and will open mid-August through February. This has been a great avenue for our members to participate, and still can participate within our PNWFM Chapter. Several FM members have already contributed by lending specimens, providing information (Historical/Geological) and donating their effort with planning. Although deadlines are approaching, I encourage you to reach out and ask how you can participate towards this exciting project.



### Washington Pass Clean-Up

The annual Washington Pass Clean-Up is scheduled a little bit later this year. Saturday September 7<sup>th</sup>-8<sup>th</sup> is determined to be a good date acknowledging the temperature will not be too hot and perhaps the smoke will be clearing from the trending wild fires. I will be reaching out to the Forest Service to discuss camping without a Pass. It's important to understand the reason for conducting this event is preserving the environment, which helps keep Washington Pass open for present and future collecting. If the smoke turns out to be too thick, we will entertain moving the clean-up to Hansen Creek for a day trip, a locality that is in desperate need of tidying up. We will send information out as the Sept 7<sup>th</sup> creeps closer.

Thanks to the Members for actively supporting and our Organizers & Board for the effort towards making our Friends of Mineralogy – Pacific Northwest Chapter continually progress the advancement of minerals.  
-Toby Seim, President, PNWFM

# Friends of Mineralogy *Specimen Mines of the West*

October 18–20, 2019 Kelso, Washington

Featuring Talks by:

Erin Delventhal  
Alex Homenuke  
Virgil Lueth  
Les Presmyk

Main Floor Dealers:

Earth's Treasures, Lehigh Minerals,  
Pacific Rim Gem & Mineral, & XTAL

And More:

World-class displays  
Auctions  
Dozens of room dealers  
Banquet  
Contests



[pnwfm.org](http://pnwfm.org)

Blanchard mine Linarite photo by Douglas Merson

It  
is  
time  
to  
start  
planning  
on  
attending

! ! !

## PNWFM Meeting Minutes at the Seattle Mineral Market

May 19, 2019

President, Toby Seim opened the meeting. Nine members were present. Minutes from the January 12, 2019, meeting were approved. Treasurer, Bruce Kelley, had flyers available for members to pass out at upcoming rock shows and presented a bill to pay for printing the flyers. Bruce provided a treasurer's report. Bruce provided information needed to change bank account signers and the address.

Action Items:

Motion: Pacific Northwest Friends of Mineralogy shall update the signers for our Umpqua Bank account to:

Bruce Kelley, Treasurer  
351 Reef Road, Nordland, WA 98358  
425-591-5329; [Bruce.kelley@gmail.com](mailto:Bruce.kelley@gmail.com)

Karen Hinderman, Secretary  
4 Dove Street, Longview, WA 98632  
360-920-7221; [gkmhind@comcast.net](mailto:gkmhind@comcast.net)

Toby Seim, President  
541 Lakeside Dr., Sedro-Woolley, WA 98284  
360-920-4237; [anotherlevelfit@gmail.com](mailto:anotherlevelfit@gmail.com)

Motion Seconded. Motion Passed.

Motion: Pacific Northwest Friends of Mineralogy shall change the mailing address for Umpqua Bank account to: PNWFM, c/o Bruce Kelley, 351 Reef Road, Nordland, WA 98358

Motion seconded. Motion Passes.

Gary Hinderman, Vice President, will be checking the storage unit and preparing a report that includes damages that need repair on cases and how much space is available in the room.

Whatcom Museum Report by Toby: Toby, Wes Gannaway, John Lindell, and Joe George met with the museum directors and came up with a plan for proceeding on a display. The display will include Washington State specimens and be divided into six mineral environments: ocean basalts of southwest WA; Cascade igneous; Contact Zones – scarns and fossils; North Eastern WA – Rockies, older rocks, petrified wood, mining history; North Eastern WA – flood basalts; and Marine Sediments – Chuckanut sediments and Marine Pillow Basalt; and two processes: rocks that show slickenside (fault slip) and photographs that show glacial movement. Specimens will be on loan to the museum for six months from August through January. Our organization will be fulfilling one of our goals to educate the public. The museum would like posters, pictures, maps, collections stories and videos included in the display, as well as larger specimens that can be touched by the public. We, the board, are asking for members who have quality specimens or know someone who has quality specimens/photos/posters, or would be willing to be interviewed for a story, to please contact any board member asap. Brittany Burkhardt volunteered to interview

members who are willing to tell collector stories. If you are contacted by a member of the board or a member who is assisting in this endeavor, please be open to the idea of loaning some of your precious specimens for the public to enjoy and learn from.

Rice Northwest Museum of Rocks and Minerals – Julian Gray would like for our group to re-engage with the Rice Museum by providing specimens for a display case. We will revisit this in October.

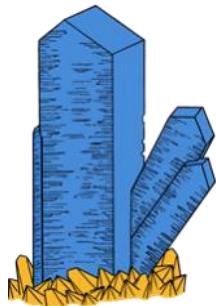
Noble Witt Plaque has been updated at the Rice Museum. Bruce will send the 2018 plaque to Mary Toland.

**Symposium Updates:** Official theme – Specimen Mines of the West. Speakers have all been confirmed. Doug Merson will once again put together our packets and make the name tags. Doug also has a sandwich board tripod that he will make posters of the schedule to display. Brittany Burkhardt, has contacted main floor dealers and will soon be working on the satellite dealers. Karen Hinderman asked for a new plan for the cases. After a discussion we decided to change the floor plan for cases from a square to two rows.

Meeting adjourned.

Karen Hinderman, Secretary

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**<http://www.diamonddanpublications.net/>**

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[www.SwarfSystems.com](http://www.SwarfSystems.com)

## NEW SAPPHIRE DISCOVERY IN CANADA!

### Story and Photos by Stuart “Tate” Wilson

To be published in Rock and Gem in September, used with their permission



Infamous Canadian prospector Herb Hyder holding a large sapphire crystal from his newly discovered Blue Jay claim.

was. After a long drive down winding dirt roads we arrived at camp just before sundown. We hastily got a fire going while preparing dinner and chatted up a storm. The funniest thing happened as just then a grouse comes running out of a bush and joins us at the fire! The chatty bird ended up joining us every day for breakfast and dinner.

The following morning Herb and I were eager to wake up and make the hike to the

sapphire claim. With the discovery being so recent we were both excited to get up there, assess the situation and see what we could collect. The hike up provided the perfect opportunity to learn more about Herb's past and discover what brought him down the path he is on right now.

Herb's mother was from Maine, and as a child he spent some time growing up there. This is where, at 5 years old, he remembers his first experience digging gemstones. He collected rose quartz from the local pegmatites. Ever since then he has been hooked.

On April 13, 2019 a discovery of sapphire unlike any seen before was made near Revelstoke in British Columbia, Canada. I was quick to arrive soon after to meet up with the well known young Canadian prospector Herb Hyder, whom is responsible for the find. For the following three days after my arrival I had the opportunity to not only learn about the infamous prospector's past, I also had the chance to mine alongside him. During my half week mining adventure I got to learn about the local geology and experience this vast wilderness that makes Revelstoke a world class destination, all while pulling out giant sapphire specimens. Over the next few years Herb Hyder's aptly named Blue Jay claim will be producing stunning world class sapphire crystal specimens as well as lapidary material for collectors and artist everywhere.

Herb announced to the world his discovery on the same day he made it via social media platforms like Instagram and Facebook. Once I or anyone else for that matter saw the first pictures of these crystals, we were amazed. They exhibit the most unique concentric hexagonal crystal structure and chatoyance. I was quick to set up an interview with this young prospector and see just what he had going on up there in BC, Canada. A week later I had my bags packed and passport found. Luckily for me, British Columbia is only a day's drive away, and a pleasant one at that. The weather was perfect and the drive through the mountains was beautiful.

Later that afternoon, Herb and I met up in Revelstoke and exchanged quick introductions before heading out into a remote wilderness to where his new claim



Growing up Herb's family was financially less fortunate, so as a teenager he found himself making money doing what he knew best. At this point in time his family was living in Nelson, British Columbia where his father ran a jewelers shop. He told me he would climb up the mountain behind his father's shop and collect quartz specimens to take back down and sell to folks. This way he was able to raise extra funds to buy things like food and candy.

Early on in Herbs adult life, he began working as a prospector for mining companies. He has worked in Mexico, USA, and Canada hiking all over the countryside searching for deposits of gold, silver, and rare earth minerals for mining companies. Often times these locations were so remote he had to be flown in by helicopter.

Things took a turn in 2012 during the economic recession and Herb found himself without consistent work. Since that time he has created work for himself, traveling the greater BC area prospecting for gem deposits to stake claim on. Ever since then he has been making a name for himself and people are starting to notice. He is quickly becoming one of Canada's most well known prospectors.

And that brings us to now. While Herb may not have struck it rich yet, he still follows his passions, even if it means living out of his truck from time to time. He is doing what he loves. He is bringing gemstones to us that would likely never make it to collectors otherwise.

In the mountains surrounding the greater Revelstoke area Herb has found deposits of iolite, smokey quartz, amethyst, fluorite, aquamarine, graphite and now sapphires. Herb has already made a number of noteworthy gem discoveries including his Isometric claim(which has been since sold) where he was finding lovely green and purple color changing fluorite. He is also responsible for finding some of Mt. Odin's best amethyst and smoky quartz crystals. And of course, Herbs iolite claim produces large fist sized nodules of iolite which contain zones of large gem facet grade material.

Finally we made it to the sapphire deposit high up in the mountains after a long hike. If you can imagine; we were up on a steep hillside up against a rock wall full of sapphires and garnets. You would never know it unless you stumbled right upon this spot, which he did. Once we were there, we could see very clearly that the deposit is highly crystalized.

Herb directed me to the wall and explained the geology to me. The corundum sapphire crystals at this locality like those everywhere are the crystalized form of aluminum oxide. The rich blue color of these gems happen when the corundum is rich in iron and titanium. The optical chatoyant effect that is seen in these gems happens when many very thin parallel inclusions occur. Light is reflected back and forth between these bands creating a "silky" effect.

We are not sure as to what these inclusions are yet. They may be rutile, crystals, hollow tubes or other structure types. While this material is highly chatoyant, we have not seen it show an asterism yet. Asterism is what creates a "star" effect. We believe it highly likely to run into this effect soon. As this new gem makes its way into the lapidary market we will surely see many beautiful stones come to light.

The majority of the mountain we are standing on is made up of a metamorphic gneiss created from the tectonic action of the Shuswap metamorphic complex. And in this rock there is a zone where nepheline syenite was accumulated and created an area rich in corundum(sapphire) and garnet crystals of large size. Nepheline syenite is a feldspathoid type rock. You can visibly see feldspar crystals growing along with the corundum crystals. While the deposit was easy to see, he could only collect so much without having to start hard rock mining.



Eventually, Herb expects to begin hard rock mining. To do this he will have to first begin by doing what he is doing now, removing all dirt and boulders that have built up against the rock face. Once that is complete he can then create a bench by drilling 5-10 feet back into the rock. This creates a flat bench that one can stand on. Then this bench can then be drilled into and either blasted or cracked somehow to process the material. In this fashion he will be able to systematically work the claim. As he goes through the rock crystals will literally pop out of the rock they are contained in!

The rock wall was extremely steep. There appeared to be 5-10 feet of rocks and dirt before more rock wall would be exposed. It will be important to expose more of the wall so we can see how far down the deposit goes. While digging through all this material we will almost certainly find many sapphires in doing so.



We grabbed shovels and started digging straight down and toward the rock wall. This created a natural bench for us to work on, giving us flat ground. We used all the dirt we dug to create a tailings pile that was directed far away from our work area. Every now and again we would uncover a piece or a full sapphire crystal. This was enough to keep us digging. However we also had to remember we had a main goal in mind: to go down and reach the wall. Toward the end of the day of digging we uncovered a large hundred pound boulder that was full of sapphire crystals! It took Herb over an hour to break down this boulder and recover all the crystals that naturally dislodged out of the metamorphic matrix. Many of these crystals showed a bright blue and silver chatoyance and had good crystal structure. They appeared to be stacked and intergrown. I was amazed just how many there were in that rock. At the end of the day though, we were tired.

The next day we decided to take a break and visit some nearby hot springs to relax. This was exactly what we needed

before the following day of digging. Once again, quite similar to our first day of digging, we hit another large hundred pound boulder full of sapphires! Up until then we were happy enough with how everything was going. However this put us over the top with excitement. We knew there would be good specimens coming from that boulder.

This was our last day before I had to head back home, so we packed up and made our way back down the mountain. Our backpacks were full of fabulous sapphire specimens. Back down at our vehicles we took one last look at what we had found and took some last minute photographs. I don't think either of us wanted to leave but we both knew we had to stop for now. I was very happy to be able to purchase a few of these amazing specimens to take home with me. Back at home I have a mineral preparation and lapidary shop, so I was eager to put a little work into these crystals to see how they would clean up. Just as Herb and I assumed, there is huge potential with these fantastic gems. I made many cabochons from rough broken crystals and was pleased to see they all exhibited vivid silver chatoyance and stunning blue and silvery grey growth patterns. They will certainly be popular



once they hit the market as a lapidary stone.

As specimens, these giant sapphire crystals will make a great addition to museum and private collections everywhere. Because the sapphires are found locked in a metamorphic host rock, they can be prepared to be very aesthetic and oftentimes break apart from the rock in a perfect manner. Their natural cleavage makes for a perfect window into the stone revealing its growth patterns and chatoyance.

My trip up to Revelstoke to meet the well known Canadian prospector Herb Hyder proved to be a great time. I enjoyed getting to know him as I was already quite aware of him thru his online presence. Having the opportunity to witness to the local geology first hand and actually collect there with the man who found the spot just a week prior made for a great experience. The mineral and lapidary community should expect to start seeing a small amount of material hit the market end of May 2019. Interested persons may see and learn more by following Herb Hyder on instagram and facebook. Also you should keep your eyes open for more new material at my booth at the Miners Coop in Marana during the big annual Tucson show!

This claim is only one month into production. As Herb is exploring he is already discovering new beautiful mineral specimens and gemstones that were not mentioned yet in this article. Everyone is in agreeance about this claim that we should expect to see much high end material to come out from this new and exciting locality. Keep informed by linking to Herb Hyder by searching his name on social media platforms; Instagram and facebook, or by looking for his material at various dealer booths including my own during the big Tucson and Denver shows.

Please look out for my upcoming follow up articles on the Canadian Prospector Herb Hyder as I return To BC and join up with him to visit his other claims and see what they are all about!



Sapphires from the Blue Jay claim exhibit vivid chatoyancy and strongly contrasting blue and grey crystal growth patterns.



## Mangano-Calcite of Skagit County

### By Sal Noeldner

Fellow Mineral Collectors,

(In remembrance and for posterity's sake)

This is the story of the Mangano-Calcite of Skagit County. I cannot get closer than that here, but feel free to ask me more later. I used to be a drywall hanger and often finished my sheets for the day by early afternoon, allowing afternoon trips to Walker Quarry and surrounding mountains. In this fashion, a systematic survey of the local forest roads and properties were searched for minerals, coming up with many finds. In one recently (2010) blasted quarry, my hanging partner, who shared similar interests in minerals (the "MOLE" of Walker Valley) and I found a piece of rock with one side covered in stepped, lustrous rhombs of calcite containing floating lustrous, crystallized inclusions of a sulphide (probably pyrite) AND a light pink color! All other Calcite specimens found that day were clear and ranged in size from 4" to tiny ones. The specimens seemed to have been blasted out of the floor of the pit, and with little to go on, it didn't seem possible to zero in on the location.

A couple days later, the itch grew too great and I took my son Cedar to see what we could find. A portion of the quarry turned backwards into the hill in a kidney-like shape. The hue of the rock looked decidedly reddish, even purple, and it seemed a good place to start. As happenstance and luck may have it, a recent machine scraping to solidify the old quarry walls had scraped a gash into a clay filled crack lying near vertical about 20' up the steep side. Darned if the clay didn't have a dark purple hue we could see from the floor! We cut steps into the scree lying at the angle of repose and made our way up with tools. A certain rock jutted from the bottom of the crack and stood in our way if we were going to work upwards (a favorite for mineral collectors- using gravity as a helper). A couple of wiggles with small bar and the loose, protruding rock moved quickly, tumbling down to the pit floor. In the first rotation, the back of the rock showed itself to our following eyes- large, pink crystals glowed in the sun and then rotated away! Cries of anguish and excitement mixed thick in the air; mine because of what happens to soft Calcite when bruised, Cedar's because we had found crystals. In hindsight, I know it would have been a difficult time keeping the 300 pound rock from rotating if I HAD known of the largest Mangano-Calcites ever (from this locality) grouped on the other side. We glissaded down in a wink. Crystals fully 3" in length lay clustered on the surface, a nice pink hue except where the edges were crushed by rotating down the slope. I left that boulder on the pit floor and it may still be the only evidence of the crystal-bearing area (Update: the rock has been broken up by unknown others; no evidence is left). Later, when at home, I found the purple clay washed off leaving very few of the light pink Calcites, the majority being clear crystals. The darkest pink seemed to form close to the Rhodonite blebs found in tandem with the purple crack, nearby in the surrounding host rock. The Pink crystals often grew near other Calcites etched till only the bases remained and is a good way to tell pieces from this locality. Cedar and I worked that one vein, following it up the hill till it petered out. I dug down once to see if I could hit it at depth, but time constraints pointed me soon homewards.

A year or two passed with some photos of bright pink Moroccan Mangano-Calcite reaching me. As often smoldering flames do, this renewed one was fanned to brightness by the introduction of someone new to mineral collecting, my soon to be wife, Nikki. As my collection was in storage at the time, it was when I showed a random little shard that her attention became keen. As soon as she saw it, she "was done" and immediately asked to be taken to where it was found. This was possible so we made a plan to get there



when next an opportunity arose. One brisk day soon after, we loaded into the truck and took off with glasses of pink Calcite on. Clouds banks greeted us at the site, momentarily dampening our spirits. But we had rain clothes to don, so minutes later we were knocking out areas of accumulation on the slope near where we had much luck before. Five minutes it took for us to get under a layer of barren rock, finding the exciting purple staining underneath. We zeroed in, dropping down and making a lateral trench across the slope to cut any further veining. Slowly working up now, pieces were carefully barreled up and out, being inspected on each side. I found the first few crystals, but off to the side, Cedar and Nikki were slowly scraping the rotten rock away with skewers and screwdrivers. A gasp and a sudden stop to their efforts drew me close. Crystals just appearing demarcated a 4-5" wide vein traveling near horizontally through the rock, but it was the item just showing between the walls which had caused the gasp.

A perfect flattened rhombohedron lay there in a gritty, clayey vein infilling covering most of it, leave the outer points which held the fitful sunlight like strawberry candy and night sparklers. A beauty to behold, we sat there for a minute or two and took in the sight. Luckily, the color did not wash off that one and it still is one of Nikki's favorites. The supply of specimens had overflowed our few cardboard flats we had brought, calories were needed for further movement, and the fairly consistent drizzle of cloud pee brought a stop to our day.



A couple of weeks later, the opportunity arose again to go, this time with Jake, the youngest. I warned that there was a definite possibility of not finding much, but the view from the site is awesome and ample time beckoned us onward.

Following the previous outing, I dropped down from the area worked before, tunneling through a couple feet of cracked rock to look for candy. I still cannot believe it, but a third vein became exposed that day to our high excitement. This vein held more clear crystals than pink as well, but the portion that was pink showed SCHILLER! (Much like such seen in pink Calcites from the Old Monroe Quarry.) This made some specimens distinct in luster, making it easy to set them apart, even before cleaning. The back of the truck was soon filled with larger rocks and boxes of wrapped specimens but this was to be the last successful outing at the site.

Two more consecutive trips have shown nothing more and the access gate is now locked year-round it seems. Last year, I began to share the location with others in hope that it may hit again.

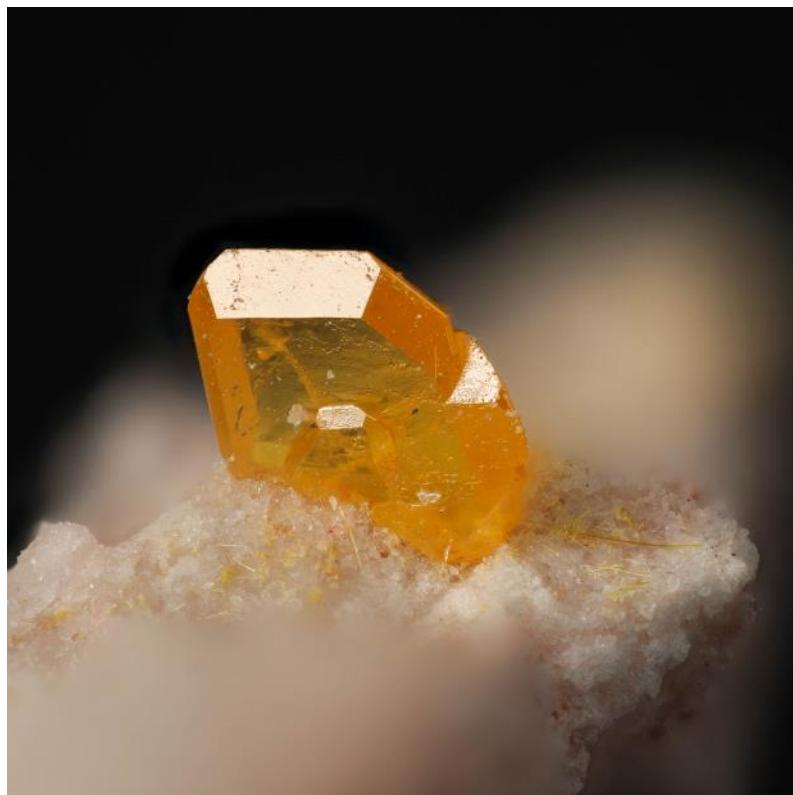
A little over ten years ago, before logging actions on our public lands became digitized and not available for viewing by the general public (even if requested!), I gained access to a printed map with hand-drawn roads showing where active logging operations were occurring. The location for these pink pretties was marked by pencil as the "Helgramite Pit". After some research, I learned these were creatures found in a nearby creek and had nothing to do with the quarrying of rock. The uniqueness of the name has caused it to be little used until now.

Cheers!

Sal



## Eye Candy from Bruce Kelley



Wulfenite from Rowley Mine, Painted Rock District, Maricopa Co., AZ

1.66 mm, Stacking: 130 frames at 5  $\mu\text{m}$ .  
Copyright © 2019, Bruce J Kelley



Clinoclase from Tin Stope, Majuba Hill Mine, Antelope Dist., Pershing Co., NV,  
FOV: 1.78 mm, Stacking: 191 frames at 5  $\mu\text{m}$ . Copyright © 2019, Bruce J Kelley

## Your Editor needs help !!

I need your help in identifying this specimen. I purchased it at a local rock shop but there was not information with it. I have received a couple of guesses as to the minerals (calcite with hematite inclusions and chalcopyrite or silver with a chalcopyrite coating) but no ideas as to location. These are micro minerals. Any help is appreciated. Thanks.





## PACIFIC NORTHWEST CHAPTER FRIENDS OF MINERALOGY

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### MINERAL MEETING CALENDAR

#### 2019:

**Washington Pass Cleanup, September**

**45th annual PNWM Symposium, October 18-20**

Red Lion Inn  
Kelso, WA

**Micro Mineral Study Group,**

November 2, 9:30 am to 4:30 pm  
Camas-Washougal Fire Station #42  
4321 NW Parker Street  
Camas, Washington