

Trip to the Culver-Baer mine, N fork of Sulphur creek, Cloverdale, Mayacmas mts, Sonoma Co., CA, USA.

By Tim Greenland
Lyon, France

Sunday 05/08/2011 with E. and S. Cisneros, Bill Spence (President BAM) and Stan Bogosian (BAM member; knows the mine)

Left Gene and Sharon's house around 07.15 AM with borrowed 3lb hammer, chisel mattock etc + my kit, rucksack binocs and new laser LWUV (Gift from Gene). Gene drove us through San Francisco, over the Golden Gate Bridge on the 101 to Healdsburg where we left the 101 to meet up with BS and SB at the local Macdonald's... After a second breakfast and introductions we followed SB's car up Alexander valley Rd to the right, then left along 128, to right turn onto Geyser Rd. After about 5 – 6 miles along twisty roads, arrive at a roadside area under large pines to park car (large parking pull off on left of road a couple of hundred yards further along). Mine is visible below,



Gene, Sharon, Bill and Stan

down a steep grassy slope. Shouldered packs and rations and started down avoiding the numerous poison oak bushes. At top of slope disturbed a sunbathing garter snake, which left rapidly. Rattlesnakes

may sometimes be encountered on the dumps! After a strenuous climb down, came to dumps with many large boulders (not interesting according to SB) with a workface with a couple of partially boarded-up adits in the background.



A little further along came to the main dumps spilling down the steep slope and following natural run-off channels down to creek bed below under some three levels of benches into the mineralized zone.

Large boarded-off adit visible at upper level – not easily accessible without adequate gear...



Started collecting in a siliceous serpentine/ sandstone context. Much of matrix is cemented with fine chalcedony and sometimes coated with chalky white bobular magnesite material. In numerous places, small vughs lined with drusy quartz that is often transparent and brilliant – and sometimes accompanied by interesting stuff! Red cinnabar patches frequent, ranging from earthy and dull to brilliant crystalline seams. Of course, when trying to trim blocks, the split generally occurs perpendicular to the HgS seams, not along them! Some specimens show brilliant acicular HgS xtls. The HgS is frequently accompanied by green accretions of Pecoraite and sometimes pale-to-bright yellow Idrialite (not on Mindat list, but identified by SB previously) that fluoresces strongly white, even in daylight, under LWUV laser excitation. All the people on the trip were most generous in passing me ‘interesting’ pieces to collect, to the detriment of their own hoards...

But I did manage to find a fair few of my own once used to the matrix. Gene found a vugh with a lot of pecoraite and some cinnabar on the second bench. It was overhung by some moderate sized loose blocks but I managed to work it from the side to remove the main block to a safe distance for demolition without incident... A bit further along there was an occurrence of acicular cinnabar on the face, but the overhanging rocks were of a size and instability as to discourage further excavation – even by me... The hammer I had borrowed proved disappointing and was quickly losing chunks of the hitting face on each blow on rock or chisel. I’m afraid that I returned a very damaged tool to gene at the end of the day – a poor reward for his generosity! Still the hammer got its own back for my mistreatment of it. At one point I slipped on the steep dump slope, missed my footing and tried to save myself with my hammer hand .The hammer bounced off a boulder and caught me a smart right cross on the left lower lip! No real harm done, but I’ll look like the victim of domestic violence for a few days yet!

In mid afternoon, G and S and BS had finished up. G and S had done a major demolition job on a large boulder with rich idrialite seams and amassed a good few other pieces.



Stan and Gene

Sharon is hoping for some residual millerite among her peoraites – several of which show a radiating needle shape, probably betraying their origin. We packed up, heaved the much heavier rucksacks onto our backs and started back up again. SB remained somewhere down in the creek, only detectable by occasional sounds of hammering, and we started off up again without our guide to the locality. I doubt that we took the ideal route back up, but the area where we had left the cars was recognizable. It is a steep, stiff climb out of there, particularly for G and S, who were toting really heavy backpacks. My rucksack was lighter (I don't want to overload a Boeing 747 on my way home), but I was nonetheless glad to slip it off again when we finally reached the vehicles. While waiting for SB to re-emerge from the

depths, Sharon explored along the road and discovered a big slickensided serpentine boulder



as well as numerous other pieces like a chunk of jasper that might have been polish-able, but we had enough to keep us happy. After a longish wait, during which we discussed the difficulty of getting an injured man out of there (no cell phone signal) – especially if snake-bitten, we saw a heavily-laden figure stumping up the slope towards us and BS went back to help him carry his big sledge hammer. Despite the load and the steepness of the slope SB was chattering happily to BS as they approached us. That man has energy!

After stowing the packs and gear in the vehicles and SB changing his gear we started back down towards civilization, joining the 101 above Healdsburg. We left the 101 at Santa Rosa to go to an In-and-out Burgher restaurant, where we got a good wash up of exposed skin surfaces in case of inadvertent contact with poison oak, then a welcome meal. I had a proper American meal – Hamburger, French fries and Coca-Cola... I'm learning! Drove on back to San Jose, unloaded a minimum, a quick wash and fell into bed!

A great day – beyond expectations and up to best hopes...

05/08/2011



Stan and Gene



Tim





Tim and Gene

Some specimens found at the Culver Baer Mine May 8, 2011

Thirteen minerals (including chalcedony as a variety of Quartz) are reported from the Culver Baer mine in Mindat, but idrialite is not present in the list, although represented as a photo without any warning notice... On examining the specimens we brought home, I believe that we may have collected about half of them... The gangue we found accompanying the specimens was generally quartz – sometimes as chalcedony, but I saw no Baryte, Calcite or Magnesite in my specimens – at least not as recognizable structures. We found cinnabar as earthy crusts, microcrystalline druses and well formed acicular needles, often enclosed or overgrown by quartz. At least one of my specimens of the earthy cinnabar has a tiny globule of native mercury at the centre of a ‘rosette’ of cinnabar (ca 2mm diameter) – and other tiny globules scattered around elsewhere on the specimen.



Acicular cinnabar occurs as flattened needles in quartz on thin veins in the country rock that are exposed on breakage along the veining. Unfortunately, the old-time 2 inch sprays were not found (at least by me!)



Sometimes, vughs allow more growth



And occasionally well-formed free –standing needles may be found.

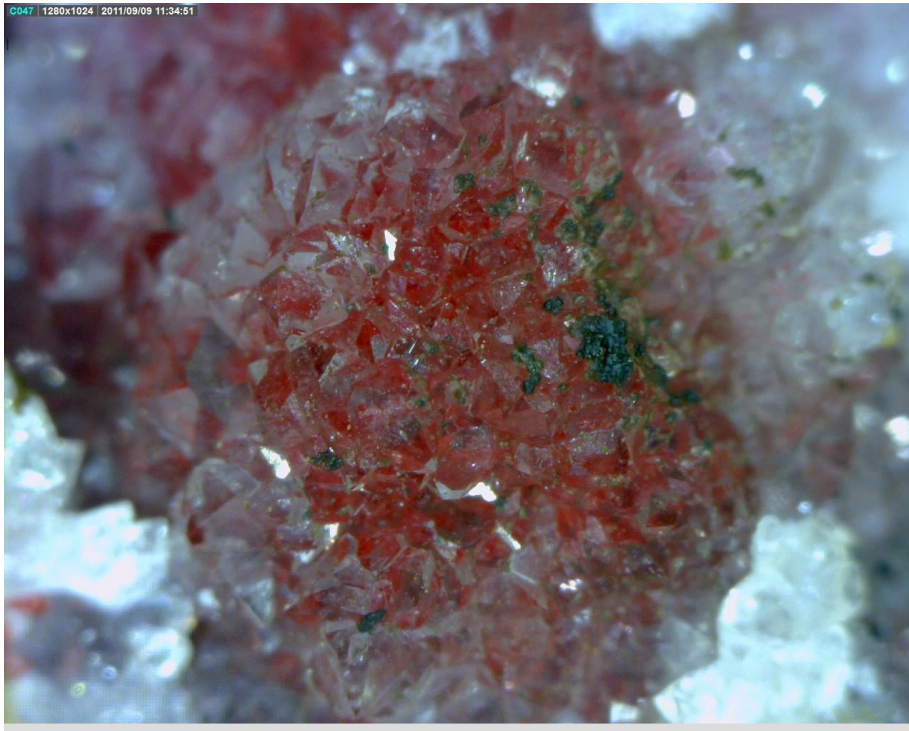


On one of my specimens, one can see how these sometimes got coated by quartz, then dissolved leaving epimorphs with a square hole in the middle.

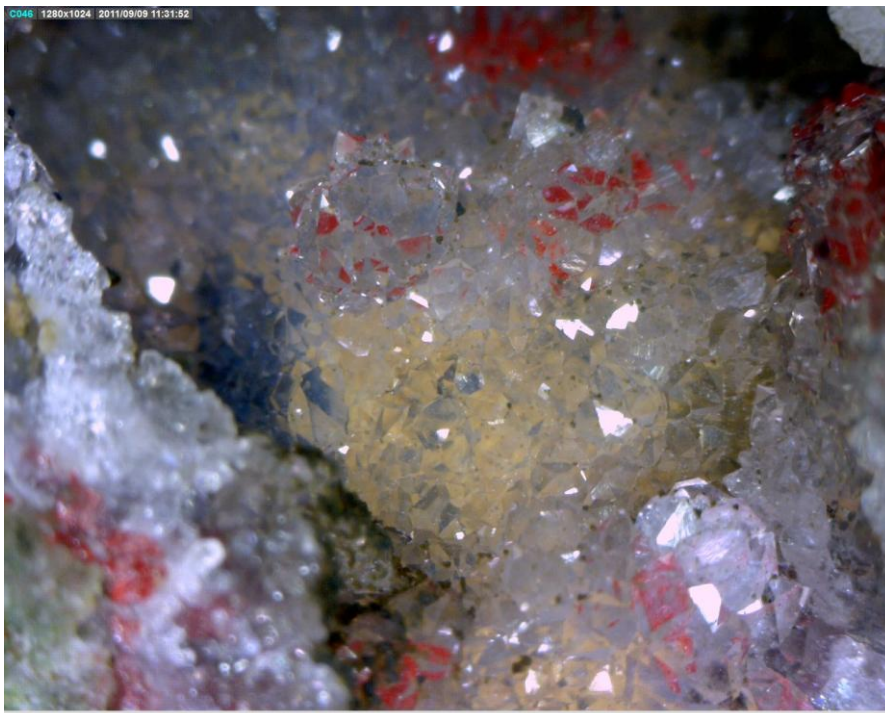


The greenish coating may be pecoraite – a nickel serpentine- or simply tremolite...

Sometimes the cinnabar is completely overgrown by clear quartz making for rather attractive micromount material. The dark green covering on the quartz to the upper right is pecoraite.



Another mineral to be overgrown by clear quartz sometimes is idrialite – an interesting hydrocarbon mineral said to be dimethylbenzphenanthrene ($C_{22}H_{14}$). This can easily be picked up with a UV source (SW or LW), and a laser pen at 407nm allows easy detection in the field even in full daylight! It gives a nice yellow tint to the quartz domes – more nice micros!

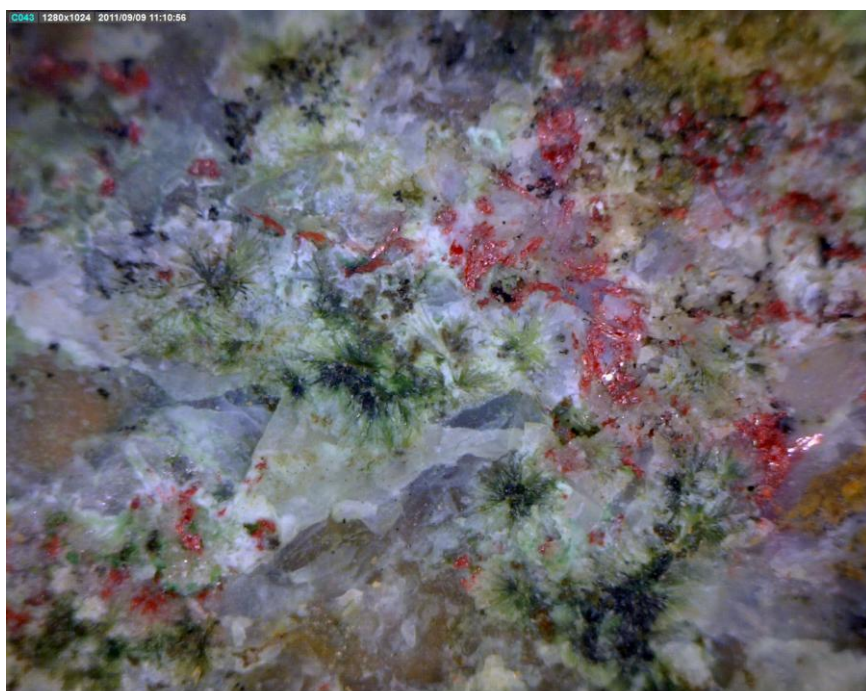


The two specimens above were from a single vugh in a piece of promising matrix, kindly passed to me (as a visitor) by Bill Spence. Many thanks, Bill.

Another interesting occurrence was a vugh in another piece of matrix (found by myself, this time – I sometimes get lucky) which contained quartz with a distinct coating of pecoraite. I was glad to find this, as it is not something I find over here at home.



A hint of the paragenesis of the pecoraite might come from specimens showing radiating dark green needles of pecoraite perhaps after millerite.



In certain pictures, a hint of residual millerite can be picked up as bright golden reflections among the green altered needles.



Not easy to see – and even worse to photograph...

It is possible, even likely, that some of the black lustrous chunky micro-crystals on some of the photos are metacinnabar – but I have not yet done a capillary tube micro-test for Hg on the material... I'll get around to that when I can!

Several of the specimens show tufts of pale green to yellow needles that I believe to be tremolite – but I have taken no photos. They are non-fluorescent and distinct from the needly (possible) pseudomorphs after millerite.

Of the other minerals mentioned by mindat, I have seen no pyrite or chromite – although some of the black material might be chromite, not metacinnabar (or goethite, manganese oxides or something similar...).

It was a really fun trip – and in the best of good company. Thank you all, my friends.

Tim