

Minutes of the 02/18/03 Westside Board Meeting

Mineral Council Minutes 2-18-2003

Dave Sanders opened the meeting at 7:35pm.
The Treasurers report was read.

WagonMaster Report:

Ed Lehman was provided a copy of the Walker Valley Lease that was reviewed at the meeting. Ed is trying to get hold of the correct official to work out remedies to some of the damages done at the Walker Valley site. The lease expiration/renewal is May 2004.

June 2003 NW Rockies trip to Montana discussed.

Everett Show coming up. Is biggest map selling show. The Council will provide the Everett Snow a special display case of material from the sites we will have for field trips this year.

Old Business:

Thanks to Bruce Himko for the organizing of the Mineral Council's display collections. The stones are now in individual storage containers and labeled. We have approximately 3 display cases worth of material.

We cannot locate the Canadian Wagonmaster field information. The site we had for them is no longer functioning. We hope to find a contact in the Canadian clubs to swap information on field trips with.

New Business:

Discussed lease opportunities on other sites in similar situation to Walker Valley. Determined that both claims and leases are more the responsibility of local area clubs. Also discussed Mineral Council's role in developing Forest Plans and Environmental Impact Statements that set aside rockhounding sites for public use.

Discussed prospecting areas and sites in the Mt Loop Highway area. Crystals and geodes are being found in some areas.

Meeting Adjourned.

Walker Valley History

Ed Lehman

Walker Valley quartz crystals were first discovered in 1972 by a local farmer chasing cattle.

The rock formation was created about 30 million years ago by volcanic action. The gas bubbles have filled, or partially filled with clear quartz, amethyst, calcite, siderite, goethite, hisingerite, and agate.

Local clubs and the Washington State Mineral Council have had agreements with the Washington State Department of Natural Resources for many years. The WSMC has held a 10 year lease that began in 1994 for educational, scientific and recreational rock collecting.

The area has seen much activity by many groups such as rock clubs, Boy Scouts from the neighboring camp, 4-H clubs, schools, geology classes, and just plain family recreationalists. Over the years there have been may hundreds of people enjoying the area.

There is material from Walker Valley at the Burke Museum at the University of Washington and soon at the Rice Museum in Oregon, plus many other public displays. Anyone who has been to a Northwest Rock and Gem show has seen Walker Valley crystals displayed.

Walker Valley has been featured in a least two national magazines, and I have personally helped with 5 large newspaper spreads on Walker Valley as a recreational family activity.

Over the last year, logging activity has removed hundreds of yards of geode bearing material, which they have a legal right to do, but recent logging has removed the tree upon which our sign with collecting regulations and contact information. Additionally, our recent excavations have been filled and logging slash has been piled on top of the main deposit. It will take several hundred man-hours to remove the overburden to create a good collecting area once again.

There are also posts on the spur access road, a gate will soon follow. This will make access to the site difficult or impossible for some people.

We need your help to let the State of Washington. Department of Natural Resources know our concerns to keep this site open to all. We are all taxpayers, the land belongs to us, not a state agency.

Contact:

Stan Kurowski
Walker Valley DNR manager
360-856-3500

Doug Sutherland
Commissioner of Public Lands DNR
PO Box 47701
Olympia, WA 98504-7001
e-mail: cpl@wadnr.gov

Northwest Rockies

Ever hear of the NW Rockies group? I had, but I thought it was a rock club group from Sedro Wooley and that was too far away for me. Actually, The NW Rockies have members from Canada down through Oregon.

The NW Rockies is a 4H associated juniors rockhounding group. They have meetings each month, picnics, fishing trips and field trips once a month.

In my interview with Kathy Earnst, of the NW Rockies, I learned that they have adult members in their group and welcome everyone. If you look at the Mineral Council's field trip list for the year, you will see that the NW Rockies put most of their trips on it to share with everyone.

This summer they will take a week long trip rockhounding in Montana for their members! That will be a terrific vacation trip. I can't wait to sign up! For more information, you can contact Kathy Earnst at ph. 360-856-0588.

SLABS, CABS, & GAB 2/03

Agate is Rich in Fiber!

Sometimes chalcedony, including agate, is described as a fine-grained quartz, but the real case isn't that simple. There are lots of clues for this. Arrowheads and other stone tools are harder and more durable when made from chalcedony rather than coarse quartz. On the other hand, coarse quartz is better to grind up as a concrete additive than chalcedony. The chalcedony causes various chemical reactions in the concrete, which can fail, quartz is unreactive. With the advance of modern analytical tools, the reasons for these differences can finally be investigated.

Chalcedony has a microscopically fibrous structure, made of evenly spaced silica rods. More surprising is the fact that the fibers show a regularly alternating pattern of elongation - some parts being "length fast" and some parts "length slow". This means that in part of a particular fiber, light travels faster parallel to the long axis of the fiber.

In other parts of the fiber, the light travels slower parallel to the fiber length. This further implies that the silicon and oxygen atoms for some reason regularly twist or change in orientation as each fiber grew. Mineralogists are still trying to figure out why the fibers twist and what different forms of silica are intertwined with each other.

It is these intergrown fibers that give chalcedony its great strength and durability. The peculiar structure also give chalcedony its unexpected chemical reactivity in concrete. One theory for the growth of the fibers is being developed by two researchers, Yifeng Wang and Enrique Memo, at the the Indiana University. They envision agate as developing as fingers of silica growing progressively outward into a cavity filled with siliceous "media". They do not specify as to whether this "media" is a solution or a gel. The first step is the formation of a coating of silica around the cavity. The coating (this being the real world) won't be smooth. In some places, the coating will bulge out slightly into the "media". It is these bulges which will grow rapidly outward into the solution to form the fibers. Impurities in the solution (such as iron or copper) will slow the growth briefly until these impurities precipitate as their own mineral on top of or between the silica fibers. Once the impurities' concentration is briefly reduced in this manner, silica growth will proceed again. Withdrawal of silicon makes the solution richer in impurities, causing them to form another layer. This rhythmic precipitation is repeated many times as the agate grows. These layers of impurities show up as the color banding that characterizes agate.

The Pegmatite 3/02, via Coastal Waves 11/02,
via Yakima Mineral News 1/03