

Minutes of the 09/20/05 West Side Board Meeting

Vice President Mike Messenger called the meeting to order at 7:35pm.

Kathy Earnst gave the Treasurer report.

Bob Pattie submitted a bill for newsletter expenses

Bob also presented the board with a quote for printing 100 color and 100 BW map books. A motion was m/s/p to make more map books at the quoted price.

Kathy would like to drop Key Bank for two of our accounts and find another bank that will not charge us service fees. Kathy will report back at the next board meeting.

Wagonmaster

The Lake Wenatchee fieldtrip was well attended and everyone came home with plenty of garnets.

Stu reported that 16 people went on the Rockies trip to Utah. Over seven collecting sites were visited and much material was collected. Side trips to Zion, Bryce Canyon, and the Grand Canyon national parks were an added bonus.

Old business:

The new outhouse at Redtop is really well built.

There has been no news from Walker Valley about new locks being needed. Stu reported that the road has a deep cut across it that makes it impassable to most cars. Fortunately it's only about a quarter mile to the dig site.

New business:

The nomination process needs to start in order to be able to elect new officers at the November meeting.

The Place Café has been reserved for the meeting in November.

The Boeing club contacted the board about placing an advertisement for their new show in the newsletter. The board decided that rather than having ads like the Federation newsletter that we would treat this show announcement as a news article since this is the inaugural show.

Wagonmaster's:

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Meeting adjourned,

Submitted by Glenn Morita, secretary pro-tem

A New Show

After several years' absence, a new Rock and Gem Show will occupy the Expo Hall at the Western Washington Fairgrounds in Puyallup.

The South Sound Gem, Opal and Mineral Show will take place on November 11th through 13th, co-sponsored by the Northwest Opal Association and the Boeing Employees' Mineralogical Society.

The show's opening on Friday, Veterans' Day (a school holiday), will feature free admission for all students from kindergarten through high school when a student is accompanied by a parent or adult. School class groups, including their teachers will be admitted free.

The show will feature individuals' display cases containing lapidary, faceting and jewelry arts, along with mineral and fossil collections. Special displays will include mineral groups provided by the Rice Museum, Hillsboro, OR; an array of Ellensburg blue agate; faceted gemstones; a representation of an infant carved from marble (Italian, circa 18th C.); and a towering model of the Space Needle constructed of petrified wood and stone from Washington state.

Thirty-three retail dealers will be offering their products, including gemstones, opals, minerals, rough rock and slabs, jewelry, beads, findings, fossils, books, lapidary equipment and tools.

Approximately a dozen demonstrators will be showing their skills in such areas as gemstone faceting, opal cutting and carving, wirewrapping, gem identification, beading and intarsia.

In the Junior Section, among a variety of activities, children will have the opportunity to search for rough sapphires in a tray of gravel; try their luck on the spinning wheel to win polished agates, jasper, or crystals – and maybe an occasional faceted sapphire. Kids can crawl into a dark, mysterious "mine" and bring out various rocks and minerals.

There will be a silent auction, a fluorescent mineral display, a raffle and door prizes. Food will be available at the concession booth in the building. The show is wheelchair accessible and parking is free in the Gold Lot located across the street from the Fair Gold Gate entrance.

Show times are 10 a.m. to 6 p.m. Friday and Saturday, and 10 a.m. to 5 p.m. Sunday.

Admission is: Adults - \$4.00, Seniors - \$3.00, Students - \$2.00, and children with a parent or adult - free. A single ticket purchase is good for all three days of the show.

Multifaceted Mineral: Intense heat, pressure bear new form of silica

Sid Perkins

By squeezing a sample of quartz to pressures higher than those deep within Earth while zapping the material with a laser, scientists have created an exotic mineral previously unknown on Earth. They speculate that it may occur naturally on some large planets.

Silicon dioxide, or silica, is one of Earth's most common chemical compounds. It makes up more than 60 percent of the planet's crust. The substance is also one of nature's most diverse. Its atoms aggregate in forms as common as quartz crystals and as exotic as coesite and stishovite, minerals formed by the intense pressures generated when extraterrestrial objects such as comets and asteroids strike Earth's surface.

TIGHT SQUEEZE

In this depiction of a silicon dioxide crystal, white balls represent oxygen atoms while the blue octahedrons enclose silicon atoms. The red lines show results of the pressure-induced movement of atoms that has increased the number of oxygen neighbors for each silicon atom from six to eight.

In all, there are at least seven naturally occurring crystalline forms of silica on Earth, says Kei Hirose of the Tokyo Institute of Technology.

Now, scientists report yet another form. Hirose and his colleagues took a mixture of quartz crystals and silica glass and compressed it between two small diamonds to pressures approaching 3 million times the pressure exerted by the atmosphere at sea level. They also heated the sample with a laser to temperatures of up to 1,700°C. The diffraction pattern of X rays fired through the material provided information about the arrangements of atoms in the silica.

At low pressures, six oxygen atoms surround each silicon atom in a silica crystal. In their experiments, Hirose and his team noted that silica's atomic arrangement became more compact at temperatures above 1,525°C and pressures above 2.6 million atmospheres. This version of silica is at least 5 percent denser than any known low-pressure form. In the dense configuration—predicted years ago but never before synthesized—each silicon atom has eight neighboring oxygen atoms. The researchers describe their feat in the Aug. 5 Science.

The new research is "impressive," says Ho-kwang Mao of the Carnegie Institution of Washington (D.C.). Although many scientists have conducted tests at high pressures or high temperatures, "this could very well be the highest combination of pressure and temperature" ever reached in experiments on any mineral, he notes.

The newly produced type of silica probably doesn't exist on Earth. About 2,900 kilometers below Earth's surface, at the boundary between the outer core of molten iron and the mantle of overlying minerals, pressures measure only 1.3 million atmospheres. Most scientists speculate that below that core-mantle boundary, where pressures are even higher, there's no silica.

Hirose's group notes that its new form of silica might exist on large planets, such as Uranus, Neptune, or some of those discovered around distant suns. There, thick atmospheres and massive, rocky cores that likely include silica may exert the immense pressures that could make up the new mineral.

from Science News 8/6/05

Buyer Beware! by Ted Keck, CPRMC

It was a real prize... a beautiful orange-yellow calcite lamp, on a shiny wooden base. How lovely it would be, plugged in and glowing. And the price was right - wholesale, only eight dollars, which meant at the usual markup it would be very affordable and a sure sale. I carried it to the checkout counter, very happy to have spotted it on a back shelf in the big tent at the Franklin wholesale show.

At home I plugged it in and we were not disappointed. The darker orange stripes contrasted well with the paler body of the stone, and it was not too dense, so the light from the standard 7-watt night light bulb easily showed through. We priced it and set it aside on some newspapers.

Two days later the mystery began. The newspapers under the calcite lamp were wet. Suspecting the cats of misbehavior, I moved the lamp to another shelf and cleaned up. There was no smell, but the cats got scolded.

Another two or three days later, we went to pack up the lamp for transport to the show. Wet again!! There was a puddle around it on the shelf, and some small white crystals on the wooden base. What on earth? Then it dawned on me. Cautiously, I touched my tongue to the stone. SALT! HALITE! Oh no, it wasn't calcite at all, but a big orange and white lump of halite. The mystery was solved. On a humid

summer day, the halite pulled water from the air, and continuously dripped as it formed halite crystals on the base. Eventually it would completely dissolve.

We felt pretty foolish. Who would not know halite from calcite? And then we began to hear about other halite lamps out there. At the Tuscarora show two customers said, "Oh no, we can't buy those," referring to our rose quartz lamps. "We each bought one this summer and they drip all the time."

It is the mineral mystery of the year, or should we call it the mineral scam of the year? There must be a lot of these, admittedly beautiful, halite lamps out there. They are lovely to look at but a hazard in your home, weeping and recrystallizing on every surface they sit on. So be aware when you consider buying a mineral lamp. You might want to give it the ultimate test - before you buy it - LICK IT!
from Golden Spike News, 4/04

Tumbler Editor's Note: Of course licking has it's problems. The mineral might turn out to be toxic or it could have been handled by someone with dirty hands, or previously licked by someone with a cold.
from BEMS eTumbler 09/05

The Popcorn Mineral

Perlite, the unique so-called popcorn mineral, is one of the most surprising actors in the entire mineral world. Being highly hydrated variety of volcanic lava, it expands with almost explosive force when brought quickly under high temperatures, between 1600 and 1700 degrees Fahrenheit.

It is found in a number of localities in our western mountains, but some of the best deposits are located near Lovelock, Nevada and Grants, New Mexico.

A carload of crushed raw perlite, when expanded, produces between 10 to 20 carloads of plaster making aggregate, and a cubic foot of the expanded perlite may weigh as little as two pounds. Almost unbelievable, but true, nevertheless. It will expand up to 20 times its original volume.
from Shin Skinner New 12/04 via Petrified Digest 8/05

Field Report from Clarkia, ID Emerald Creek Garnet Dig Site

By Ken Strickland

On 8/27th and 28th, 2005, I spent the two days at Emerald Creek in Idaho digging garnets. Some news from the area is FS Ranger Roger Thrush is no longer at this location. He was promoted within the FS Ranger organization and is now in law enforcement and I suspect is a Game Warden. This leaves only two Rangers at the Emerald Creek site and one is a new Ranger with less than one month of service. Colin Longwood is the Ranger now in charge of the facilities. The office personnel at the St. Joe's Ranger Station in Clarkia has been down-sized to one person as two were released from employment.

The road to the new dig site has been surveyed but not completed! Sluice boxes for washing your gravel are to be installed at the new dig site which is supposed to be on the East Fork of Emerald Creek. No other information about the new site was made available to me at this time.

Meeting at the Ranger Station in St. Maries, ID on 8/29/05 resulted in this article being written by the St. Maries Gazette Record. Although there was no mention of the Emerald Creek site by name, it fell within the boundaries as listed by the newspaper article. Should be interested in voicing your opinion, you can write your support to the St. Joe Ranger District at: Clarkia Work Center, Clarkia, ID 83812. Any outside support may have some saving effect on the Emerald Creek Garnet dig site.
from Rock Rollers 9/05