

Minutes of the 06/15/04 Westside Board Meeting

President Stu Earnst opened the meeting at 7:40PM

Kathy did not attend the meeting so there was no treasurer's report

Bob Pattie submitted a bill for the cost of printing the newsletter and stamps.

Wagonmaster's:

Bill Williams has extended an invitation to the WSMC and member clubs to stay at his place off of HWY 97 for the Heather Lake garnet field trip. Bill has also found a large outcrop of porphyry (chrysanthemum stone) and is willing to guide interested collectors to the site.

Ed and Bob O'Brien have found a new area at First Creek that has been producing lots of nice geodes, many amethyst, and agate. The site is between markers 4 and 5 on the trail on the uphill side.

Old business:

The board discussed the pros and cons of printing the newsletter ourselves or having it done at a print shop.

Depending on the type of copier we used the cost to print a newsletter would be between \$800 to \$1200 annually excluding the cost of stamps. If we were to continue to have the newsletter printed by the same company that has done the last several issues the annual cost is about \$600 excluding the cost of stamps. A motion was m/s/p to continue to have the newsletter printed at the copy shop.

The Walker Valley lease has been renewed for the next 10 years. The cost of the lease has increased to \$564 per year. There is still the issue of the requirement for all vehicle to carry \$100K liability insurance. Stu will review the lease and discuss it with the DNR

Miscellaneous News:

The NW Rockies will be heading out to the Ochoco's on June 26. Stu has pre-tripped the area and reports that access is very good to all the sites.

Meeting adjourned,
Submitted by Glenn Morita

Utah Rocks Help Explain Martian "Blueberries"

Justin Mullins

Rounded rocks in Utah may help explain the peculiar 'blueberries' that NASA's Opportunity rover found embedded in Martian bedrock.

Geologists studying the marble-sized rocks in the deserts of Southern Utah, US, say that these marbles must have formed in the same way as the ones on Mars. And they may provide a unique insight into early conditions on the Red Planet.

The discovery of small spherical nuggets in Martian bedrock that look like "blueberries in a muffin" puzzled planetary scientists when Opportunity stumbled across them in February 2004. NASA determined that they are made of an iron-rich mineral called hematite and others pointed out that similar marbles were to be found on Earth.

Now Marjorie Chan and colleagues at the University of Utah in Salt Lake City have worked out how conditions on Earth determine the size and shape of the marbles, which begin to grow when iron-rich water seeps through bedrock. "We came up with a recipe for the blueberries," says Chan.

Fractures or faults

On Earth, the marbles form in all sorts of sizes and shapes, depending on the structure of the rock and the exact chemical make up of the rock and the water flowing through it.

But the ones on Mars are mainly spherical. Chan says that spheres form only when water seeps through rock that has no joints, fractures or faults that would otherwise allow the water to flow unhindered through the rock. Once a ball starts to form, it builds up layer by layer as the iron precipitates out of the water to form the mineral hematite. The marbles on Mars are thought to be almost pure hematite.

However there are important differences between the Martian and terrestrial spheres, says Phil Christensen, a Mars rover scientist from Arizona State University, Tucson. These differences raise plenty of unanswered questions about how the Mars marbles formed. "The devil is in the detail," says Christensen.

For example, the Utah marbles formed in sandstone which is entirely different to the bedrock on Mars. And the Martian marbles are much more spherical than those found on Earth. "It's an interesting comparison but whether it is a perfect analogue of the formation mechanism on Mars remains to be seen," he says.



This false-color composite image, taken at the outcrop region dubbed 'Berry Bowl' near the Mars Exploration Rover Opportunity's landing site, released by NASA March 18, 2004, shows the sphere-like grains or 'blueberries' that fill Berry Bowl. Of particular interest is the blueberry triplet, which indicates that these geologic features grew in pre-existing wet sediments.

from New Scientist online edition 06/18/04

You Might be From the Pacific Northwest if You:

1. Know the state flower (mildew).
2. You feel guilty throwing aluminum cans or paper in the trash.
3. Use the statement "sun break" and know what it means.
4. Know more than 10 ways to order coffee.
5. Feel overdressed wearing a suit to a nice restaurant.
6. Know more people whom own boats than an air conditioners.
7. Stand on a deserted corner in the rain watching for the "Walk" signal.
8. Consider that if it has no snow or has not recently erupted, it is not a real mountain.
9. Can taste the difference between Starbucks (burnt), Seattle's Best (sorta burnt) and Panache. (Aaah!)
10. Know the difference between Chinook, Coho, Chum, and Sockeye Salmon.
11. You actually understand these jokes and forward them to all your friends in the Northwest or those who used to live there! (To be Continued)

from Stone Age News 06/04

Kunzite

Kunzite, the pale pink to lilac gem variety of the mineral spodumene, is named as a tribute to George Kunz, the legendary gem scholar, gemologist, and gem buyer for Tiffany & C0. At the turn of the century. He was a pioneer in the science now known as gemology. The author of *The Curious Lore of Precious Stones*, Kunz searched the globe for old stories and legends about gems as he searched for new varieties and new deposits.

Spodumene is a common mineral, but only in a few select localities does it occur in transparent gem form. One gem form is the pink kunzite, and another gem form is the green hiddenite. Kunzite's color is the result of manganese. Its lovely pink color makes kunzite an attractive and desirable gemstone.

Kunzite was first found in Connecticut in 1877. But the first commercially significant deposit was discovered in 1902 in the Pala region of California, where morganite beryl was also first discovered. Kunzite is often found in association with morganite and pink tourmaline, another popular pink gemstone.

Kunzite is strongly pleochroic, meaning there is a color intensity variation when a crystal is viewed from the top or bottom than from other directions. The top and bottom of the crystal reveal the deepest colors and knowledgeable gem cutters take advantage of its effects. For this reason, it is always cut to show the deepest pink color. The deeper pink the kunzite, the more valuable it is.

Kunzite is relatively hard, with a hardness of seven just like quartz. However, kunzite should be handled with care because, like diamond, it

has a distinct cleavage which means a sharp blow, in it lands in the wrong place, can break it in two.

Due to Kunzite's cleavage, splintery fracture and strong pleochroism, it is considered a real gem cutters challenge. Small gems are seldom cut. It is rarely seen in rings, necklaces, or any other forms of jewelry where small stones are required. It is most often used as a pendant stone and as a large decorating stone on ornamental objects.

Kunzite is notorious for fading over time in strong light, especially sunlight. For this reason, it should be considered an evening gemstone. It is sometimes irradiated to restore or enhance its color. Kunzite should also be protected from heat (such as avoiding heater vents and hot cars). It should not be put in a home ultrasonic cleaner.

Top Kunzite can give enduring beauty equal to that of Ceylonese pink sapphire and Brazilian pink topaz. And, large sizes are readily available since it is quite common for this species to produce stones of over 50 carats. The largest faceted kunzite is an 880- specimen on display at the Smithsonian Institute in Washington D.C. Although kunzite for jewelry use is several levels of magnitude smaller, kunzite shows the best color in large sizes. Stones should be at least ten carats to be really in the pink. Kunzite is found in Africa, Canada, Mexico, Myanmar, Sweden, and the U.S. (California, Connecticut, Maine, New Hampshire, South Dakota). Today most kunzite is mined in Brazil, Afghanistan, and Madagascar.

Kunzites from the editor's collection.

The specimen in the two images below displays the pleochroic nature of kunzite.



The specimen on below shows the normal habit of kunzite crystals



from Stone Age News 06/04

What Do Gold and Diamonds Have in Common?

by Celia Tiffany

1. Diamond (a form of carbon) and gold are both classified as Native Elements in the Periodic Table of the Elements: that is they are among the few elements that occur in the Earth's crust in a relatively pure, uncombined form
2. Both crystallize in the cubic system.
3. Both most commonly occur as octahedral crystals.
4. Large deposits of each have been mined in South Africa and in Australia
5. Both are highly valued for use in jewelry, science, and industry.
6. Both have inspired exploration, exploitation, and brutal conquests.

7. Both are outrageously overpriced, but diamonds set in gold remain popular as a pledge of fidelity.

via BEMS Tumbler 6/04; from The Geode, 9/99

Top Ten Good/Bad Things About Being A Newsletter Editor

by Keith Morgan

10. Exchange bulletins provide steady supply of paper for paper mâché and origami.
9. The interesting and different ways people spell your name.
8. Writers who believe a deadline is just a suggestion.
7. If you write an article for your own newsletter, it is very unlikely that you, the editor, will reject it.
6. The relief at getting the whole thing printed and mailed, and then noticing that really big mistake.
5. Realizing that you have to do it all again next month.
4. Paper cuts.
3. The way the editor of the New Yorker refuses to treat you as an equal.
2. (Sorry, no room for this entry.)
1. There's always too much good stuff to print, except when you need it.

from BEMS Tumbler 6/04