Minutes of the 04/20/04 Westside Board Meeting

The meeting was opened by President Stu Earnst at 7:35pm.

Kathy Earnst gave the treasurer's report.

Emery Bayley of the Bellevue club talked to mineral Council about Richard M Klem Northwest Mineral Collection at Whitman College in Walla Walla (see page 6). He is looking for quality crystallized mineral specimens from the NW for the collection and asked the council to put out the word to the clubs.

Old business:
Ed Lehman displayed pictures of the new steel signs at Walker Valley. The two signs are placed at the gate and a little ways beyond the gate.

The company that made the signs for the council charged $200 for labor and donated the material for the signs. Stu suggested that the council send rockhound related thank you gifts to the folks that made the signs. A motion was m/s/p

We are down to one lock for the gate at Walker Valley. If we continue to lose locks we will have to come up with a cheaper alternative.

Stu is working on the paperwork for the Walker Valley lease .

Bob Pattie reported he was able to make 10 copies before the copier has broke again. The copies he was able to make were also very poor quality. Bob will research alternatives to repairing the copier again.

Wagonmaster's:
Bruce Himko reported on his preparations for the Kalama trip on 4/24-25

Ed reported that the turn out on the Wagonmasters trips has been very good. The number of attendees ranged from 35 to 60 people.

Ed also reported that the Mountain Loop highway had suffered a number of washouts and slides last winter. Due to budgetary constraints, the road will not be repaired until 2006.

It was also reported that the access road to Peek-a-Boo Lake has about a 60 foot "gorge" cutting across the road. It also won't be repaired this year.

Miscellaneous News:
Bob O'Brien is back at Fort Lewis. He has apparently suffered an injury to his back and has also had some hearing loss.

Update on Bob's stolen property: Some one was peddling a large quantity, 180 pounds, of Holley Blue at the Mt Baker show. The person was calling it Ellensburg Blue so it's obvious he didn't know what he was selling.

If anyone encounters someone selling large quantities of quartz crystals/plates, scepters, thundereggs, petrified wood, Montana calcites, etceteras, ask them what it is and where it came from. If they don't seem to know or incorrectly identify the material please contact Ed Lehman and provide any information regarding the seller.

Meeting adjourned,
Submitted by Glenn Morita

From an e-mail from Ed Lehman.
Subject: STOLEN CRYSTALS

Date: Fri, 30 Jan 2004 04:36:51 GMT

Greetings all....This is Bob O'Brien... I am on leave from Iraq for the next week and a half.

The purpose of this is let you know that while I was on active duty in Iraq in the Army, someone entered my property and broke into my house and storage building and took every last rock and crystal that I have collected in the last 15 plus years. They also took identification information, 5,000 board feet of lumber, an 18 inch slab saw, sliding glass doors, Anderson windows, speakers, a Highland Park cabbing machine, a large tumbler and extra barrels, arbors and expandable drums and everything else they could load up and haul out.

Among the rock there was 70+ crates of thundereggs, jaspers and agates, pet wood , talc.

Among the crystals there was Calcite from Gallatin Gateway min. 10 boxes.

Mostly large cabinet specimens not cleaned. Quartz from Big chief, spruce, green ridge and Peterson Mtn.

There was also 5 or 6 - 5 gallon buckets of choice Holley Blue.

There was also Walker Valley and several flats of Rock Candy.

If any of you see any of this entering the market would you please notify the Island County sheriff.

Thanks
Bob OBrien

Killer Comet

The traces of a devastating impact at the time of the world's worst mass extinction, 251 million years ago, may have been detected.

After a decade-long search, US geologists uncovered the suspicious "fingerprints" in the form of cage-like carbon molecules called buckminsterfullerenes. Analysis shows they contain the same blends of helium and argon isotopes found in meteorites.

"For the first time, one wants to take an impact very seriously," comments Harvard University paleontologist Andrew Knoll. However, the lack of the telltale signs of other impacts, such as enriched iridium levels and shocked quartz crystals, leaves some doubts.

Wipe-out
The extinction at the end of the Permian period wiped out most plants, more than 90 percent of marine species, and 70 percent of land animals. Its cause has long been a mystery.

Recent studies showed it took less than 100,000 years both on land and at sea, suggesting a catastrophic impact similar to the one that wiped out the dinosaurs at the end of the Cretaceous, 65 million years ago. However, a lack of impact evidence led many researchers to blame the Permian mass extinction on the massive volcanic eruptions occurring in Siberia at the time.

Buckyballs had previously been found at the end of the Cretaceous, so Luann Becker of the University of Washington in Seattle and colleagues painstakingly analyzed rocks from the end of the Permian.

Extra-terrestrial origin
"We're finding only parts per billion of fullerenes," she told New Scientist. But the concentrations in samples from China and Japan were 50 times higher in the layer that formed at the very end of the period than in nearby layers. Rocks from also Hungary showed some enhancement though at lower concentrations.

The abundance of helium and argon isotopes trapped inside the buckyballs matched the levels found in carbonaceous chondrite meteorites. "We think the fullerenes formed around a star outside our solar system," says Becker, then were carried into the solar system and survived the impact to be scattered around the globe. She estimates the object was six to 12 kilometers across.

The element iridium is relatively rich in meteorites and is found in rocks from the end of the Cretaceous, but not the end of the Permian. This could indicate the Permian object was a comet, composed mostly of ice.

"What is perplexing," says University of Washington paleontologist Peter Ward, is that none of the rocks at the Permian boundary resemble the layers containing Cretaceous impact debris. "Nonetheless, this new methodology is a very powerful one," he told New Scientist.

Jeff Hecht
02/22/01 New Scientist Online Edition

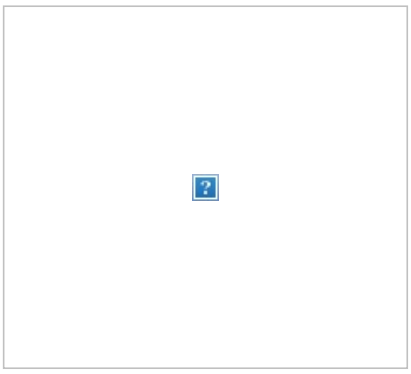
Flaws make it a geologist's best friend

Sid Perkins

To a potential fiancée, flaws in a diamond can warn of a boyfriend with poor judgment—or a thin wallet. To geophysicists, however, some of these flaws may provide priceless clues that are critical to understanding the conditions under which the gems formed.

By analyzing some of a diamond's trapped impurities, an international team has demonstrated a way to measure remnants of the gargantuan pressure that produced a diamond. The scientists, led by Nikolai V. Sobolev of the Russian Academy of Sciences in Novosibirsk, report their results in the Oct. 24 Proceedings of the National Academy of Sciences.

Diamonds form when masses of carbon experience the elevated temperatures and pressures present at least 120 kilometers below Earth's surface. Clumps of material trapped in the carbon end up as flaws that typically reveal a range of pressures that the diamond may have endured during formation. For example, coesite—a particularly dense type of quartz—forms at pressures between about 26,000 atmospheres and 69,000 atm. So, its presence doesn't indicate the specific pressure that created the gem.



This diamond formed at a depth of about 140 kilometers, according to spectroscopic measurements on two coesite inclusions (arrows).

Sobolev/Russian Academy of Sciences

When researchers recently fired single-wavelength beams of X rays and then laser light through two small crystals of coesite trapped in a Venezuelan diamond, the patterns of light scattering from the crystals revealed thatthe material's atoms are more closely packed than they are at atmospheric pressure. The diamond surrounding the coesite had sealed in remnants of the high pressure that had formed the gem, says Ho-kwang Mao, a geophysicist at the Carnegie Institution in Washington, D.C., and a co-author of the report.

The distances between atoms in the coesite indicated that the material is currently under a pressure of about 36,000 atm. That corresponds to a pressure of more than 54,000 atm at the elevated temperatures at which the diamond formed, says Mao.

Mao suggests this technique could help link diamonds from a particular mine or region to the specific conditions under which they were produced.

"This research is an elegant application of single-wavelength spectroscopy," says George E. Harlow, a mineralogist at the American Museum of Natural History in New York. He adds that this technique will provide scientists with a way to learn more directly about the conditions in parts of the Earth's mantle where diamonds are formed.

Science News 10/21/00

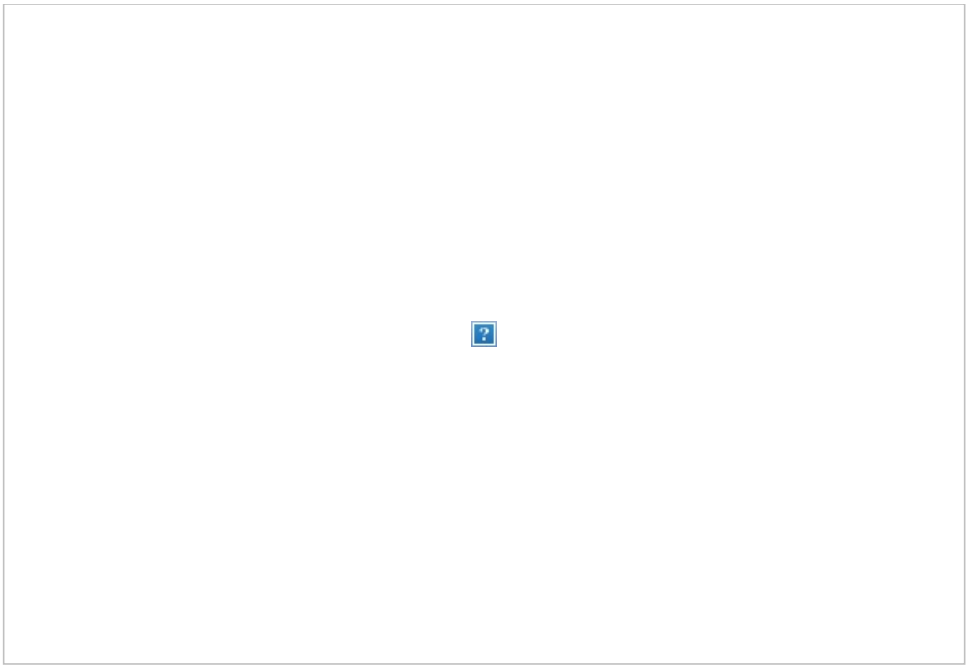
Obsidian Age Determined

Around the year 600 B.C. a great flow of rhyolitic lava spilled into Central Oregon's spectacular Newberry Crater from a vent high in the caldera wall, crating a fine "munitions dump" for ancient hunters.

The black lava quickly chilled into obsidian, a natural glass used by prehistoric Indians to fashion points for their arrows and spears, besides innumerable artifacts for their camp. Many of these items have been found in caves overlooking now vanished lakes of the Fort Rock Valley.

The first white man to visit the high caldera in the past century found much evidence that ancient hunters camped close to the volcanic glass in the Big Obsidian Flow. Nearby were Paulina and East Lakes, with the fine cold spring situated in a rocky embayment of the huge outpouring of glassy rock.

There is also evidence that the ancient hunters carried the material to their base camps where the easily-fractured obsidian was chipped into artifacts.



Big Obsidian Flow, Newberry Crater, Oregon

Glass chips still mark many of the old camps.

Obsidian for arrow tips and spear points was first available at the Big Obsidian Flow about 1,350 years ago. That is the date given the flow by scientists using a new technique in dating volcanic glass and artifacts which is chipped from the black, shiny material, noted for its shell-like fracture.

In the present decade, Irving Friedman and R.L. Smith of the U.S. Geological Survey devised a technique for dating volcanic artifacts by measuring the hydration rind which develops on a surface exposed to the atmosphere. This is called hydration-rind dating, and was used in fixing the approximate year the massive flow of obsidian spilled into the high caldera.

But even before the eruption of the Big Obsidian Flow, hunters of the region had an abundance of volcanic glass in the caldera from which to make artifacts. The Interlake Obsidian Flow has been dated as being about 1,700 years old and the East Lake Flow at 1,900 years old. This dating technique was outlined recently by Norman Peterson.

From Unknown via Stone Age News 4/04

ATTENTION MINERAL COLLECTORS:
Donations of Northwest Mineral Specimens are wanted for

THE RICHARD M. CLEM COLLECTION
OF
NORTHWEST MINERALS

Located at

Whitman College Geology Department
Walla Walla, Washington

A group of alumni are assembling a collection of Northwest Minerals for the Richard Clem Memorial Collection at Whitman College in Walla Walla, WA. Anyone with “exhibit quality” specimens of minerals (quartz, garnet, tourmaline etc.) from the Pacific Northwest who wishes to make a donation to the collection is urged to contact:

Emery Bayley 2539 – 128th Ave. SE Bellevue, WA 98005

(425) 643-5775
or
e-mail: bayley@worldnet.att.net*

At the present time, we are seeking crystal materials only—no agate, jasper or petrified wood. Specimens should be clean and identified as to

mineral name and source location (i.e. county and state). Donors whose material is accepted for the collection will be acknowledged and their donation may be tax deductable. Exceptional specimens may be purchased on a case by case basis depending upon quality and price.

*due to the volume of spam I receive, please put “Whitman collection” or “mineral donation” in the subject line, otherwise your message will be deleted without being read.