

January 2001 Newsletter

The January 16, 2001 Westside board meeting was called to order by President Tom Johanson.

Kathy Earnst presented the treasurer's report.

Ed Lehman presented the Wagonmaster's report. See Field Trips page for the field trips planned for 2001.

- There may possibly be a trip to the Lake Wenatchee area in September.
- The Walker Valley sign has been shot up pretty good. The main pit is also filling up with overburden. Diggers are reminded to throw the overburden out of the pit.
- The Mineral Council is looking for volunteers to help remove remains of the outhouses at Saddle Mt. This is mainly old lumber, etc.

Old business:

- The meeting for July 17 has been removed. We typically don't meet in July unless a special meeting is called.

New business:

- The WSMC wishes to thank the Skagit Rock and Gem club for all of their efforts in maintaining the Walker Valley collecting site. We especially want to thank the club for the new sign (even though it's shot up again).

Meeting adjourned

Walker Valley Sagenite

by Jerry Eagleman

Walker Valley sagenite inclusions occur in both quartz and agate. They are a hair or needle like formation which forms when iron oxide, manganese oxide, or other oxides are present when the agate or quartz is forming. The oxide minerals grow in the quartz or agate when it is in a liquid or gelatinous state. The inclusions grow and are supported by this liquid medium. If the sagenite inclusions grow outside of the gel, the tops of the needles resemble a pincushion.

Sagenite radiates out from a central point or points in the agate or quartz nodule, and I find that tumbling the whole nodule is the best way to find the sagenite bursts. After tumbling you can often see how the sagenite formations are situated in the nodule, and you are then able to plan your cuts to optimize the sagenite bursts.

You can make cabs from sagenitic agate, but you will find that there will be a lot of rough areas due to many of the needles being hollow.

I have found sagenitic agate in the top third of the black rock, and in the lower cliff face. But I have found sagenitic quartz only in the top third of the black rock.

from Rockhound Special 1/2001

How Does a Diamond Saw Work?

by Carolyn Weinberger

One of the fastest ways to grab someone's attention when demonstrating cabochon cutting is to put your finger against the running diamond blade. "Be careful", the viewer always yells. "You'll cut your finger!" When the worst does not happen, the viewer stands there mouth agape.

So, why don't you get hurt when you stick your finger against that diamond blade? The answer is quite simple, you aren't really against it.

The diamond blades we use to slab our rocks or trim our cabs isn't really a saw, it's a very narrow grinding wheel. Small diamonds are bonded into the rim of the blade and become exposed when we push a rock against it.

While the blade rotates and a stone is pushed against the blade, grinding takes place. Exposed surface diamonds grind the stone into a fine powder. The embedded diamonds remain attached to the rim of the blade

via the bonding process, but do breakdown due to wear. Harder stones or extreme pressure when sawing will wear away those diamonds faster than cutting softer stones or using a lighter amount of pressure. (Sound familiar? This is just like using the diamond wheels on a cab machine or a flat lap on a faceting machine.)

Remember to always use a coolant when operating the diamond saw. Coolants not only carry away the fine particles of ground rock, but also keep the blade and the rock from overheating.

from Rock Chips 1/2001
via Gem Cutter's News 1/97

(Editor's note, don't try this with a faceter's trim saw. The blades are very thin and rotate at high RPM and will cut your finger)

Tin Oxide, Acid, Give Rhodochrosite Polish

By Bob Daniel

When cutting rhodochrosite it is important that only water be used in the saw. An oil based product will be absorbed and the stone's color deadened.

After the material is ground to form, sand first on 220 grit, wet, then on 400 grit, wet. For best results use worn sanding cloths.

Tin oxide is perhaps the best polishing agent for rhodochrosite. Some lapidaries report good results from tin oxide that has been mixed with a small amount of vinegar and used on a felt wheel.

Another method is to mix two teaspoons of tin oxide and one level teaspoon of oxalic acid in half a pint of water and use on a leather buff. In this formula, be sure that not more than a third by volume of acid to tin oxide is used or the stone will be damaged. This polishing formula also works well on marble.

from Skagit Gems, 11/2000
via The Tumbler, 9/2000