## The Gem Doctor

Blogging from a Gem restoration and Lapidary workshop http://thegemdr.ganoksin.com/blogs/2010/05/08/the-greenway-lap-by-gearloose/bu THE GEM DOCTOR on MAY 8, 2010

## The Greenway lap by Gearloose

I am delighted to relate that I was one of the cutters chosen to test the new Greenway lap. This newest addition to the Gearloose arsenal of fine polishing products is a Chrome Oxide 'sintered' lap. This lap requires nothing other than water to function well and produces no residue of consequence. This is not only important but remarkable.

Chrome Oxide is the choice in many commercial cutting houses, especially in South America, where its ability to polish a wide variety of local gem material quickly and efficiently is a significant advantage. It will outperform Aluminium, Tin and Cerium Oxide in most gem material below 9 Moh's that are hard enough to use in jewellery.

Chrome Oxide has never gained much popularity amongst enthusiast gemcutters because of the most significant caveat, the green stain. Of all the oxide polishes it is by far the messiest and produces the most durable and visible staining of clothes and fingers.

With the introduction of the BATTStiks Chrome Oxide 'crayon', the mess was severely reduced due to the special formulation that not only allows enough polish to be dispensed easily but it is almost impossible to overdo. It's by far the least messy Chrome Oxide formulation that I have tried and as many other faceters are also discovering the clean-up no longer requires a 'surgeon's scrub' and the minor annoyance is more than outweighed by the polishing performance.

The Greenway lap eliminates that minor annoyance

As we have come to learn, Gearloose products usually outperform the manufacturers claims and the Greenway is no exception. Just about everything expected will polish instantly and effortlessly. For those not aware of the versatility of Chrome Oxide this includes most, but not all, jewellery stones softer than Sapphire.

Although my review is in favour of the Greenway lap there are considerations, my needs are more varied than any enthusiast cutter and probably more than most commercial cutters. The Greenway does provide an efficient polish but used as recommended by the manufacturer it does not have the versatility of the Darkside. Several of the reviewers and testers however have proved otherwise by applying additional polishing media and in some cases have declared achieving a superior finish by doing so.

In my opinion such treatment denies the intent but it does show that the Greenway is indeed more versatile than suggested and will provide scratch free polishing beyond its intended use. In spite of this it does not have the versatility of a Darkside if a choice has to be made. For a new cutter, especially if there are cost considerations, the Darkside provides for a greater range of polishable material.

Whilst I consider the BATT and the Darkside laps to be the two most essential polishing laps a cutter should own they both require charging to work. Although not difficult it is an additional skill. The optimal amounts of polishing medium and lubricant necessary to achieve the polish is learned by experience. This does tend to vary with different gemstones but it usually doesn't take many facets to get it right.

It would seem that the Greenway dispenses with the need for such a skill and if careful choices are made in what will be cut it can indeed do so. The careful choices however include size. Sintered laps will always have reduced performance with large facets, the 'bed of nails' effect which reduces effectiveness when spread over a larger area. This applies to sintered cutting as well as polishing laps. The usual solution for polishing laps is to add medium to the lap to speed up the process. Unlike most offerings from the Gearloose laboratory, in my opinion this lap is not an essential must-have for every cutter as it targets a specific area of gem material. It does provide an efficient scratch free polishing advantage for those varieties, which will appeal to most cutters, especially those who specialise in cutting appropriate material.

What is an appropriate material and also anecdotally ironic is Emerald. This lap is the answer to every Emerald cutters dream. Finally a solution to polishing material with surface reaching cracks and veils that doesn't require pretreating with wax or other temporary fillers, doesn't require a prepolish, doesn't cake medium or lap material into them, doesn't promote breakouts and suppresses 'comet trails'. Emeralds rarely come in huge sizes so with a need for nothing other than water being used on the lap, polishing has none of the fear usually associated with it.

What makes this ironic is that many years ago when I first encountered Jon (Gearloose) in an interent forum he was a cutter seething with anger over his Emerald cutting experiences. Along with the usual curses uttered by those encountering green lumps of oil soaked crumbling money Jon vowed never to have anything to do with polishing Emeralds ever again, which is why I have to insist on summarising;

The Greenway Emerald Lap is without doubt the most essential tool for polishing Emeralds and when the stone cost and possible damages are considered the price of this 'insurance' is trivial. I wholeheartedly recommend that every Emerald cutter needs to own this lap and is doing themselves a great disservice if they don't.

Tony (The Gem Doctor)

## Following information is from the manufacturer (Jon Rolfe, Gearloose) Greenway<sup>TM</sup> Integral Chrome Oxide Lap.

The success of the Chrome Oxide BATTSTIKs<sup>TM</sup> in polishing quartzes as well as garnets, tourmaline, the feldspars and peridot did encourage me to incorporate the boundary layer self-burnishing lubrication system used in the DIASTIKs<sup>TM</sup>, together with a hydrophilically-modified version of the Darkside polymer, into a Chrome Oxide polymer "Just Add Water" lap. The polymer has further been modified to allow exceptionally high oxide loading.

Slightly more aggressive than Cerium Oxide on polishing quartzes, it is much more versatile than the Ceria compositions. It does not polish quickly on topaz or spinel, however, and it will probably not be a good candidate for sapphire.

It HAS been a hit with tourmaline, all the beryls including emerald, the quartzes, peridot, garnets, and the feldspars. Others will no doubt find success with other minerals:

Update: Tanzanite report just came in! and now, we have a report for Zircon: David Perry just polished a tourmaline and a zircon on the Greenway<sup>TM</sup>.

For those who want the speed and versatility of Chrome Oxide in a "Just Add Water" lap, with NO green mess... Here it is!