

## USFG 2021 Master Cutting Notes



Originally cut for the *New Mexico Faceters Guild Historical Collection* by Nancy Attaway

Cutting the NMFG Attaway Old Mine introduces the typical topaz challenges. The cutter must identify the primary cleavage plane, and orient the gem in such a way to avoid the plane by about 10 degrees. There are many write-ups for how to orient topaz, and the cutter should become familiar with them.

As long as the rough has adequate depth, the meet-point cutting sequence for the pavilion will be exactly as indicated. This may result in a low yield because of the steep initial angle of Tier 1. An alternative way to start this gem is to treat Tier 6 as a CAM preform, and use this to create an exact girdle outline first. This will result in less material waste, with the shallower angle of Tier 6. This also allows for a more rapid sizing of the width (W). Tier 6 may need final adjustment, but this will still be straight forward. This is what I chose to do. It is entirely up to the cutter.

Once an exact girdle outline is created, cutting may proceed as indicated, through the grit sequences. Tiers 4 and 5 will be the primary challenge of this gem. Each have three simultaneous meet-points, and the facets are long, thin and delicate. Overcutting is a possibility with courser grits, so these facets should not be cut in until 1200 or finer grit.

The crown is very straight forward as long as no errors were introduced in the girdle or pavilion.

Enjoy cutting this historical Old Mine design.

Test cut and evaluation by Jeff Theesfeld