

A Raman Analysis of a Green Cabochon for Bull Trout Jade, LLC

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Method and Equipment

Sample was analyzed using a Raman spectrometer with a 532 μm (green light) laser. The spectra were acquired at 1 second acquisition times, generally taken in a series of 10 acquisitions averaged together. The sample was an unfinished green tear drop cabochon reported to be cat's eye nephrite jade.

Resulting spectra were compared to standards that are available from several sources at universities in the USA and Europe.

Source of Samples

The samples were provided by Rodney Cook of Bull Trout, LLC.

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Samples and results

BT10-1

Unfinished tear drop shaped cabochon of green cat's eye nephrite jade.



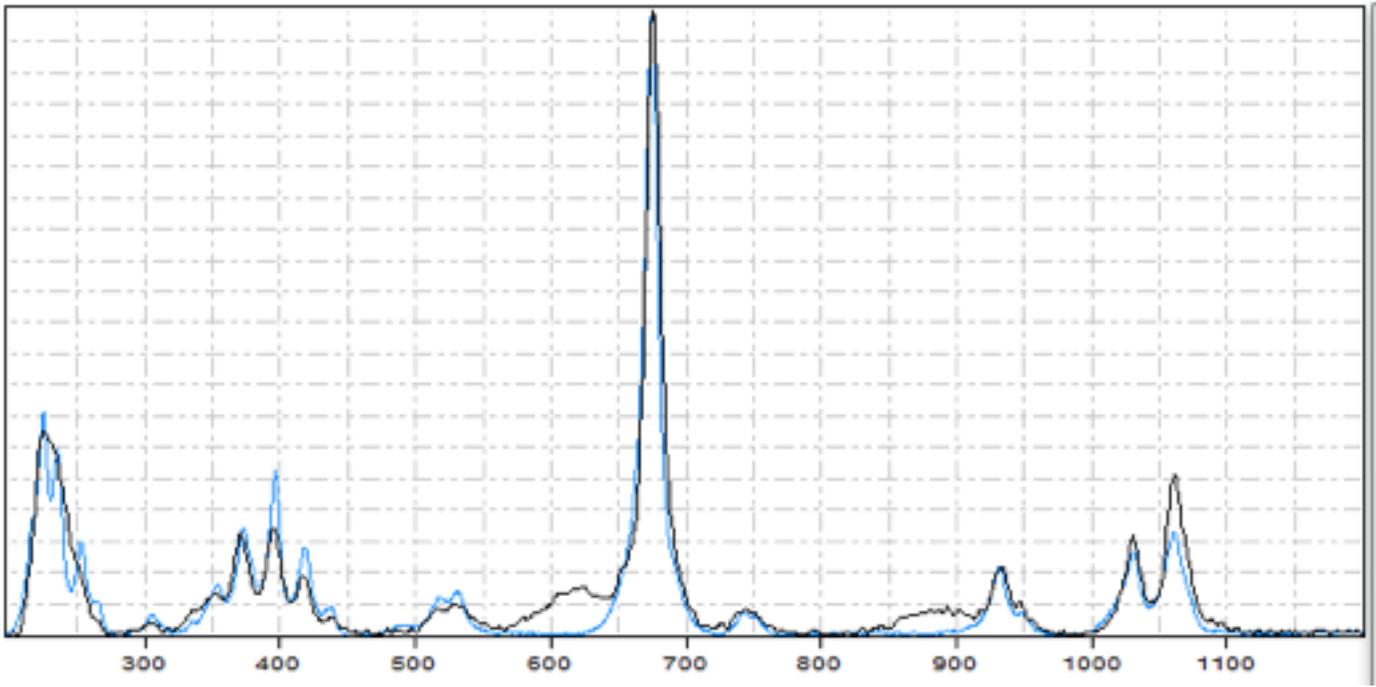
Sample BT10-1 cabochon. The light color top shows the silkiness that creates the cat's eye effect of this nephrite jade.

Analyses

BT10-1a light green center top = tremolite

BT10-1b medium green lower edge = tremolite-actinolite

Continuous acquisitions were taken in all areas of the sample, all acquisitions indicated a tremolite composition or possibly actinolite composition in some areas. Note: tremolite and actinolite are essentially the same mineral with a little more iron in actinolite, thus the Raman or X-ray diffraction patterns are nearly identical, varying more between analyses than they may vary between samples.



BT10-1a spectrum, black is sample, blue is a tremolite standard.