



Gemmological and Chemical Characteristics of Yiqisong Peridot, Jilin, People Republic of China

Conclusion

Peridot from Yiqisong, Yanbian of Jilin province, China found in light yellowish green to yellowish green color. Their RI (1.649-1.690), birefringence (0.03-0.04), SG (3.29-3.36) and in both SWUV and LWUV were inert, which are similar to other sources. Internal features showed various shapes of lily pads including wispy veils, tiny crystals and protogenetic chromite crystals (brown to brownish red). Secondary healed fractures which showed iridescent effect are also founded. Moreover, the protogenetic chromite inclusions have never been reported from other peridot sources.

The result of UV/Vis/NIR spectrum showed broad band at 1086 nm with a shoulder at 850 nm weak band were observed from 394 to 635 nm was presented iron (Fe^{2+}). Mid-IR spectra showed several absorption bands from 1046 to 530 cm^{-1} . Contents of MgO (49.43 to 50.87 wt.%) and FeO (8.25 to 9.62 wt.%) were similar to peridot from Vietnam, Sardinia (Italy) and Pakistan.
