

**Gems & Gemology Data Depository**

Local geological terminology for the Kafubu emerald area (modified after "Handbook for...", 2003).

Local name	Geological name	Description	Significance in exploration/mineralization
Paidas	Unaltered massive/foliated talc-magnetite schist	Green rock with soapy or greasy feel due to presence of talc	Host rock for emerald mineralization (source of chromium)
Chikundulu	Weathered talc-magnetite schist	Very soft, brown, highly weathered material; still retains greasy/soapy feel	(Same as above)
Firestone	Tourmalinite	Altered talc-magnetite schist consisting of tourmaline and minor quartz; hard and compact	Formed by metasomatism of schist that accompanied emerald mineralization; indicator of potential emeralds in the vicinity
Cover	Biotite schist	Altered talc-magnetite schist consisting of foliated black mica	Principal mining target; hosts emerald mineralization that formed by the metasomatism of talc-magnetite schist
Silver mica	Granitic pegmatite	Pink to off-white, coarse-grained rock consisting of quartz, mica, and feldspar	Appear genetically related to hydrothermal veins that supply beryllium
Mpemba	Weathered granitic pegmatite	Soft, light colored vein material; alteration of feldspar to kaolin in granitic pegmatite	(Same as above)
Katanga	Mica schist	Brown to gray rock consisting of muscovite, biotite, and quartz	Regional host rock to talc-magnetite schist; does not directly host emerald mineralization
Ribbon	Narrow quartz vein	White quartz	Indicator of possible larger veins
Whitestone	Large quartz vein	Hard, compact white rock consisting of quartz with little tourmaline	Indicator for the presence of mineralized veins
Beam	Large quartz-tourmaline vein	Mottled white-and-black appearance	Indicator for the presence of mineralized veins
Pointers	Quartz crystals	Clear glassy to white quartz crystals	Indicators of pockets of beryl/emerald mineralization
Chrocopiles	Poor-quality beryl	Very pale green or blue beryl crystals	Indicator of Be mineralization
Bela	Poor-quality Beryl	Pale green beryl crystals	(Same as above)
Ubulungu	Small emerald crystals	Small crystals that are bright green	Too small to be economic, they may indicate better mineralization in the vicinity
Lwankole	Laterite	Brown, hard earthy material at the surface	Presence of fragments of quartz and tourmalinite may be an indicator of mineralization below
Balance	Unconsolidated laterite	Brown, loose earthy material at the surface	(Same as above)

*Handbook for Small Scale Gemstone Miners in Zambia—Geology* (2003) Unpublished document of the Mining Sector Diversification Programme, developed by the School of Mines, University of Zambia, Lusaka, 125 pp.