GEOCHEMISTRY OF METASEDIMENTARY ROCKS OF THE VILA NOVA SUITE IN THE IPITINGA HILLS, NW PARÁ

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The suite is a metavolcanosedimentary sequence with 2.26Ga basal metavolcanics overlain by oxide- and silicate-type BIFs abd continental clastic metasediments. Mean FeOtot contents of oxide-type BIFs are higher than those Of the Yilgarn Craton and of Labrador, but those of silicate-type BIFs are lower. REE concentrations are much higher than those found in Precambrian BIFs from various parts of the world, while chondrite-normalized patterns are similar to those of Proterozoic BIFs and very different from Archaean BIFs.NASC-normalized patterns of oxide-type BIFs are similar to those of modern hydrothermal-associated deposits, while those of the oxide-type BIFs are similar to those of iron-rich clays. The majority of the clastic sediments associated with the BIFs are amphibolite-grade immature metapelites whose REE patterns have strong enrichment of LREE, Eu/Sm, La/Lu and ?REE suggest that the sediment source is continental. We propose that the clastic sediments were deposited soon after opening of a back-arc basin already floor.