

NOTES ABOUT THE ORIGIN OF CARBONADO IN BAHIA, BRAZIL.

HARALYI, N., SCHULTZ-GUTTNER, R. A., IGC-UNESP, Rio Claro, IGc.-USP

Carbonado is the most enigmatic form of carbon. It appears as coke-like grains and shows sintered polycrystalline aggregates with a porous texture and a black surface finish. Larger crystals are bonded by a matrix of small crystals. On breaking these aggregates, most show a silvery surface which darkens rapidly by exposure to the atmosphere. These strange features and the isotope data have been explained by an impact metamorphic origin. Evidences of a mantle/crustal origin are presented here by a find of two octahedral diamonds covered epitaxially by a thick Carbonado layer in perfect crystallographic orientation at Andaraí, Bahia, well known for its Carbonado deposits. The presence of cavities in the Carbonado layer may be explained by former inclusions now lost or by skeletal growth due to high carbon supersaturation. Carbonates and metallic Titanium as solid inclusions, besides microcrystalline SiO₂, deep in some inclusions may confirm our proposition of mantle/deep crust origin for these Andaraí Carbonados.