

COEXISTENCE OF EUCLASE AND EMERALD AT CHIVOR, COLOMBIA.

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The euclase-bearing emerald mines of Colombia are situated in the Central part of the Eastern Cordillera. These BE-mineralizations are found in lower Cretaceous marine sedimentary rocks of black shale affinity. The geological evidences imply a strong tectonic control. Euclase together with quartz and emerald occurs in voids and nodules, often accompanied by veins of carbonate. To unravel the conditions of formation, fluid and solid inclusions have been investigated. The fluids were defined as hot (330-360 deg.C) solutions with about 40 to 50 % NaCl equivalent salinity. Their appearance is very much like those contained in emeralds from the various emerald mines of the Eastern Cordillera, namely solid-liquid-gas type inclusions with total homogenization by salt dissolution. These results corroborate earlier data and the mineral association is quite a good indicator of the P and T conditions of the emerald formation in the Eastern Cordillera of Colombia.