5. CONGRESO DE MINERALOGIA Y METALOGENIA, OCTUBRE 2000
(Eds: I. Schalamuk, M. Brodtkorb y R. Etcheverry) INREMI, La Plata, Publicación 6, 408-415

LAS CONDICIONES FiSICO-QUÍMICAS DEL SISTEMA HIDROTERMAL EN EL CERRO CHOIQUE MAHUIDA (RIO NEGRO) OBTENIDAS A PARTIR DEL ESTUDIO DE LAS TEXTURAS DE LA MINERALIZACIÓN.

Pires, Mónica[1]; Garrido, Mirta[1+2] y Dominguez, Eduardo[2+3]
1 UNLPam. Facultad de Ciencias Exactas y Naturales. Uruguay 171, 6300 Santa Rosa.
pires_ovin@cpenet.com.ar

2 UNS. Departamento de Geologia San Juan 670, 8000 Bahia
blanca.mgarrido@criba.edu.ar

3 CONICET edomin@criba.edu.ar

Abstract

Cerro Choique Mahuida Au is a low sulfidation deposit in an epithermal system located at 9 de Julio Department, Rio Negro Province. It is a stockwork structure cementing an hydrothermal breccia. Petrographic study showed opal, chalcedony and quartz as principal and adularia, sericite and gold as minor minerals. They form various textures with a complex paragenetic relation. Masive, colloform, crustiform, cockade, comb, zonal, mosaic, feathery, flamboyant, ghost sphere and pseudobladed were recognized. These textures indicate that the hidrothermal fluid was supersaturated respect to silica throughout the evolution of the deposit. At the beginning of the mineralization the fluid was slightly acid later evolving to slightly alkaline. Temperatures over 270°C are suggested at the beginning of the mineral deposition. The chemical and physical characteristics, the mineral assemblage, and the complex textures suggest that the fluid suffered many boiling events with adiabatic cooling. During some of these events gold was deposited. Textural assemblage corresponds to a zone above a boiling level and probably over the Au-Ag deposition level.