

KARAKTERISTIK TEKSTUR URAT KUARSA EPITERMAL SULFIDASI RENDAH
TAMBANG BAWAH TANAH PROSPEK AHMAD LEVEL 450-490 DAERAH PONGKOR,
KECAMATAN NANGGUNG, KABUPATEN BOGOR, PROVINSI JAWA BARAT

SARI

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Daerah Pongkor masuk ke dalam fisiografi regional kompleks bayah yang merupakan salah satu mineralisasi yang sangat potensial di Jawa bagian barat menurut Milesi dkk., 1998. Daerah telitian merupakan prospek dengan tipe endapan epitermal sulfidasi rendah yang berasosiasi dengan urat – urat yang terbentuk. Penelitian ini dilakukan dengan tujuan untuk mengetahui hubungan antara karakteristik tekstur urat kuarsa dan alterasi mineralisasi untuk mengetahui model zonasi urat kuarsa epitermal menurut Buchanan, 1981 dalam Morrison, 1990. Berdasarkan pengamatan makroskopis pada sampel *handspacimen* conto urat dan didukung dengan analisis petrografi serta slab menunjukkan kehadiran beberapa tekstur urat kuarsa; pada tekstur pertumbuhan primer ditemukan tekstur Masif, Banded Kalsedon, Crustiform-Colloform, zonal, Comb; pada tekstur rekristalisasi ditemukan tekstur Sugary, Vuggy, Botryoidal, Feathery, Ghost sphere, Moss, dan Drussy; pada tekstur *replacement* ditemukan tekstur Mold, Saccharoidal, Lattice Bladed, Parallel Bladed, dan Intersecting Bladed. Pada urat – urat yang ada di prospek Ahmad ditemukan fasies urat yang ditemukan berupa fasies *Carbonat Quartz* (CQ), fasies *Manganese Oxide-Quartz* (MOQ), fasies *Banded Opalline Quartz* (BOQ) yang memotong fasies MOQ, fasies *Grey Sulfide-Quartz* (GSQ), fasies *Late Geodic-Quartz* (LGQ) yang hadir secara acak di fasies – fasies lain. Zona himpunan mineral alterasi yang didapat pada daerah penelitian berupa Zona Kuarsa + Klorit – adularia – kalsit ± Epidot ± Illite, Zona Kuarsa + Kaolinit + Illit ± Kalsit, Zona Monmorilonit – Karbonat ± Klorit, Zona Klorit – Smektit – Kalsit ± Kuarsa. Karakteristik kadar Au-Ag yang tinggi berdasarkan data *fire assay* pada conto bor ditemukan pada tekstur tumbuh primer berupa *Crustiform* ataupun *Colloform* dengan bentuk *layer* mineral sulfida. Zonasi urat kuarsa epitermal Buchanan, 1981 dalam Morrison, 1990 yang diperoleh pada urat ars 1 terletak di zona super kalsedoni bagian bawah hingga zona super colloform crustiform pada bagian atas, urat ars 2 terletak di zona super colloform crustiform pada bagian zona atas, urat ars 3 terletak di zona super colloform crustiform pada bagian zona bawah dekat dengan zona pendidihan (*boiling*), urat ars 4 terletak di bagian zona super colloform crustiform pada bagian zona atas, urat ars 5 terletak di zona colloform crustiform bagian bawah terlihat dengan berkembangnya tekstur crustiform dan adanya tekstur lattice bladed, sedangkan pada urat ars 6 terletak di zona super colloform crustiform pada bagian bawah zona, paling dekat dengan zona pendidihan dengan ditemukannya tekstur intersecting bladed dan mineral bijih ekonomis banyak terbentuk di urat tersebut.

Kata Kunci : Tekstur Urat, Alterasi, Mineralisasi, Pongkor

TEXTURAL CHARACTERISTICS OF LOW SULFIDATION EPITHERMAL QUARTZ VEIN OF AHMAD PROSPECT UNDERGROUND MINE LEVEL 450-490 PONGKOR AREA, NANGGUNG SUBDISTRICT, BOGOR DISTRICT, WEST JAVA PROVINCE

ABSTRACT

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Pongkor area area falls within the regional physiography of the Bayah complex, which is one of the most potential mineralization in western Java according to Milesi et al., 1998. The study area is a prospect with low sulfidation epithermal deposit types associated with veins formed. This research was conducted with the aim to determine the relationship between the textural characteristics of quartz vein and alteration mineralization to determine the zoning model of epithermal quartz veins according to Buchanan, 1981 in Morrison, 1990. Based on macroscopic observations on the handspacimen samples of the vein samples and supported with petrographic and slab analysis showed the presence of several textures of quartz veins; in the primary growth texture found Massive, Banded Chalcedonic, Crustiform-Colloform, zonal, Comb; on the recrystallization texture textures are found Sugary, Vuggy, Botryoidal, Feathery, Ghost sphere, Moss, and Drussy; on replacement textures, Mold textures were found, Saccharoidal, Lattice Bladed, Parallel Bladed, and Intersecting Bladed. In the veins in ahmad prospect, the vein facies found were Carbonat Quartz (CQ) facies, Manganese Oxide-Quartz (MOQ) facies, and Manganese Oxide-Quartz facies. Oxide-Quartz (MOQ) facies, Banded Opalline Quartz (BOQ) facies that cuts the MOQ facies, Grey Sulfide-Quartz (GSQ) facies, Late Geodic-Quartz (LGQ) facies that is randomly present in other facies. The alteration mineral set zones obtained in the study area are Quartz + Chlorite – adularia – calcite ± Epidote ± Illite Zone, Quartz + Kaolinite + Illite ± Calcite Zone, Montmorillonite – Carbonate ± Chlorite Zone, Chlorite – Smectite – Calcite ± Quartz Zone. High Au-Ag grade characteristics based on fire assay data on drill samples are found in primary growth textures in the form of Crustiform or Colloform with the form of sulfide mineral layers. The epithermal quartz vein zonation of Buchanan, 1981 in Morrison, 1990 obtained in ars 1 vein is located in the lower super chalcedony zone to the crustiform super colloform zone in the upper part, ars 2 vein is located in the crustiform super colloform zone in the upper zone, ars 3 vein is located in the crustiform super colloform zone in the lower zone close to the boiling zone, Ars 4 vein is located in the super colloform crustiform zone in the upper zone, Ars 5 vein is located in the lower colloform crustiform zone seen with the development of crustiform texture and the presence of lattice bladed texture, while the Ars 6 vein is located in the super colloform crustiform zone in the lower zone, closest to the boiling zone with the discovery of intersecting bladed texture and many economic ore minerals formed in the vein.

Keywords: Vein Texture, Alteration, Mineralization, Pongkor