

## Accepted Manuscript

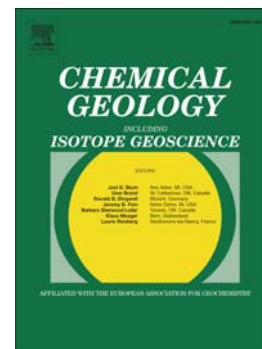
Heterogeneous melt and hypersaline liquid inclusions in shallow porphyry type mineralization as markers of the magmatic-hydrothermal transition (Cerro de Pasco district, Peru)

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**Heterogeneous melt and hypersaline liquid inclusions in shallow  
porphyry type mineralization as markers of the magmatic-  
hydrothermal transition (Cerro de Pasco district, Peru)**

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## **Abstract**

Recently identified occurrences of porphyry-style mineralization evidence the link of the world's second largest known epithermal base metal Cerro de Pasco deposit (Peru) to a porphyry system emplaced at depth. They consist of (i) quartz-monzonite dykes and (ii) the south-western part of the large diatreme-dome complex adjacent to the main ore bodies of Cerro de Pasco, and (iii) stockwork of banded quartz-magnetite-chalcopyrite-(pyrite) porphyry-type veinlets crosscutting trachyte porphyritic intrusion cropping out at surface in the central part of the diatreme-dome complex. The latter porphyry-type mineralization observed at the same erosion level as the main epithermal base metal carbonate-replacement ore bodies is the subject of this work. Geological constraints indicate a shallow emplacement level (depth < 1 km, P < 270 bars), implying rather

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