

Accepted Manuscript

Fluid Inclusions and Ore Precipitation Mechanism in the Giant Xikuangshan Mesothermal Antimony Deposit, South China: Conventional and Infrared Microthermometric Constraints

Hu A'xiang, Peng Jiantang

PII: S0169-1368(17)30175-0

DOI: <https://doi.org/10.1016/j.oregeorev.2018.02.005>

Reference: OREGEO 2484

To appear in: *Ore Geology Reviews*

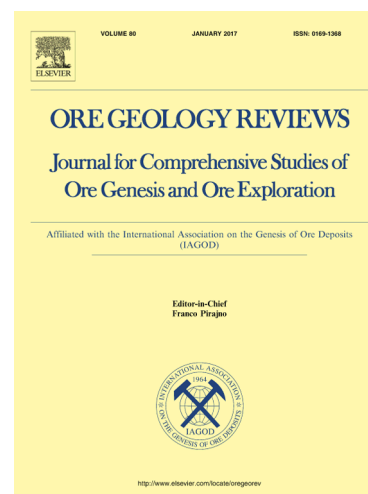
Received Date: 3 March 2017

Revised Date: 22 January 2018

Accepted Date: 2 February 2018

Please cite this article as: H. A'xiang, P. Jiantang, Fluid Inclusions and Ore Precipitation Mechanism in the Giant Xikuangshan Mesothermal Antimony Deposit, South China: Conventional and Infrared Microthermometric Constraints, *Ore Geology Reviews* (2018), doi: <https://doi.org/10.1016/j.oregeorev.2018.02.005>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Fluid Inclusions and Ore Precipitation Mechanism in the Giant Xikuangshan Mesothermal Antimony Deposit, South China: Conventional and Infrared Microthermometric Constraints

HU A'xiang¹, PENG Jiantang^{1, 2*}

¹ School of Geosciences and Info-physics & Key Laboratory of Non-ferrous Metals Metallogenic Prediction of Ministry of Education, Central South University, Changsha 410083, Hunan, China;

² State Key Laboratory of Ore Deposit Geochemistry, Institute of Geochemistry, Chinese Academy of Sciences, Guiyang 550002, Guizhou, China

Abstract

The giant Xikuangshan antimony deposit, located in the Xiangzhong (central Hunan) Basin, South China, is the largest antimony deposit throughout the world. Ore mineral is predominantly stibnite, gangue minerals consist of quartz, calcite, fluorite and barite. The mineral assemblages for ores include early-stage quartz-stibnite, fluorite-quartz-stibnite and barite-quartz-stibnite, and late-stage calcite-stibnite. In spite of numerous researches on the Xikuangshan deposit during the past several decades, the signatures of ore-forming fluid and its ore precipitation mechanism are poorly constrained. In order to characterize the fluids responsible for antimony mineralization, and ascertain the precipitation mechanism for ores in the Xikuangshan ore district, conventional and infrared microthermometric measurements had been performed in this study on fluid inclusions hosted in those transparency minerals (quartz, fluorite and barite) and opaque stibnite,

* Corresponding author. E-mail: jtpeng@126.com

Download English Version:

<https://daneshyari.com/en/article/8909559>

Download Persian Version:

<https://daneshyari.com/article/8909559>

[Daneshyari.com](https://daneshyari.com)