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川西北碧口地块老河沟岩体和筛子岩岩体地球化学特征及其构造环境 [点此下载全文](#)

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摘要:

老河沟岩体和筛子岩岩体位于碧口地块西南部。岩体的 SiO_2 (69.89%~71.69%) 和 Al_2O_3 含量均很高, A/CNK在1.04~1.12之间, 为硅和铝过饱和类型, 属典型的强过铝质花岗岩。稀土元素总量 150.42×10^{-6} , 稀土元素配分曲线呈右倾型, 具有弱的负铈异常。高场强元素(Ta、Nb、Ti等)具有明显的正异常, Ba、Sr等)具有明显的正异常。岩体可能是以杂砂岩成分为主的沉积岩部分熔融形成的花岗质岩浆上升侵位源成因类型。老河沟岩体和筛子岩岩体具有后碰撞岩浆活动的特征, 是印支期华北和扬子地块碰撞导致地壳加厚形成于同碰撞(挤压环境)向碰撞后(伸展环境)转化阶段, 为后造山花岗岩类。

关键词: [强过铝质花岗岩](#) [地球化学](#) [构造环境](#) [后碰撞](#) [碧口地块](#)

Geochemical Features and Tectonic Setting of the Laohegou Granite and the Shaiziyan in Northwest Sichuan [Download Fulltext](#)

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Abstract:

The Louhegou granite and the Shaiziyan granite, located in southern margin of Bikou block. petrography and geochemical are reported, the source and tectonic setting of the granite are discussed. results show that the Louhegou granite and the Shaiziyan granite have high SiO_2 (69.89%~71.69%) composition, A/CNK=1.04~1.12. It is a type with supersaturation of Al and Si, a typical stromeyerite. The ΣREE has the range of 33.13×10^{-6} ~ 150.42×10^{-6} , REE diagram shows rightward in abnormality. The trace elements geochemistry was characterized by evidently negative anomaly of Ta, Nb, of Rb, Ba, Sr. The Louhegou granite and the Shaiziyan granite show post collisional granitic characteristics. They are post orogenic granite, and are typical crust source petrogenesis. These granites mass are in collisional granites resulted from the crustal thickening caused by the collision between the North China massif during the Indosinian. These rocks were transitional environment of compressional orogeny.

Keywords: [strongly peraluminous granites](#) [geochemistry](#) [tectonic setting](#) [post collision](#) [Bikou](#)