

## Petrography of Megaporphyritic Lava Flow from Belhe-Alkuti Area, Ahmednagar District, Maharashtra, India

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### Abstract

The rare blood-red coloured plagioclase feldspar bearing compound pahoehoe megaporphyritic lava flow belonging to the Deccan Traps occurs in the dug well sections between Belhe and Alkuti villages of Ahmednagar District of Maharashtra. The plagioclase feldspar phenocrysts occur as honey yellow, colourless, white and red in colour. Petrographic studies reveal a high temperature deuteric alteration of olivine and/or opaque minerals within the groundmass and also within the phenocrysts of plagioclase feldspars. This has given rise to blood red colour to all the phenocrysts of plagioclase feldspars of the megaporphyritic lava flow at Belhe-Alkuti area. This phenomenon was observed only in three well cuttings over an area of ~5 km<sup>2</sup>. The giant phenocryst basalt (GPB) flow is recorded in the area on a localised scale and all the phenocrysts in a freshly excavated GPB flow sample are found to be blood red in colour is rare occurrence and not reported from Deccan Volcanic Province (DVP).

**Keywords:** Red plagioclase, Deccan Traps, Megaporphyritic lava flow, Deuteric alteration, Iddingsite/iron oxide