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## Diagenetic Environment of Barail Sandstones in and around Jotsoma Village, Kohima District, Nagaland, India

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### **Abstract**

Present study deals with the diagenetic environment of the Oligocene Barail siliciclastics exposed in and around Jotsoma village of Kohima district, Nagaland, India. Sandstones comprising of very fine to medium sand fractions are hard and compact in nature and belong to sublithic arenite/quartz arenite category. Diagenetic features observed in these sandstones include authigenesis, overgrowth, bending of flaky minerals and other compaction effects. Locomorphic and phylomorphic stages of diagenesis are dominant. A depth range of 900 to 2000m under temperature-pressure conditions ranging between 80-200°C and 1.5-2.5 Kb, respectively has been interpreted as environmental parameters for lithification on the basis of various diagenetic signatures and events.

*Keywords* : Diagenesis, Barail sandstone, Kohima, Nagaland.