

**PETROGRAPHY AND GEOCHEMICAL CHARACTERISTICS
OF THE SRISAILAM SEDIMENTS IN CHITRIAL AREA,
NALGONDA DISTRICT, ANDHRA PRADESH**

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Abstract

The Srisailam Formation is mainly arenaceous sequence and is represented by basal pebbly quartzite / grit, quartzite-shale intercalated sequence and quartzite units. This sequence acts as cover rock for 'unconformity related type' of uranium deposits in Srisailam Sub-basin. The quartzite exhibits bedding, current bedding, ripple marks, load casts and slump structures. Presence of glauconite in feldspathic arenite indicates shallow marine to tidal flat depositional environment. While various discrimination diagrams show evidence of 'Passive continental margin' to transitional continental tectonic environment for Srisailam sediments. Chemical Index of Alteration value is in the range of 40 to 79 indicating moderate weathering of granitic provenance as indicated by high K_2O/Na_2O ratio (9.0 to 184.75).

Keywords: Srisailam sediments, Petrography, Geochemistry, Chitrial, Nalgonda.