

clasts of carbonate rocks such as limestone, dolomite, the clasts of perlitic such as phyllites and the clasts of igneous rocks such as granites are also disseminated in few outcrops [7,8]. The conglomerates are sub rounded to round and disc shaped, dominantly matrix supported and the clasts also exhibit poor orientations (imbrications) [9,10]. The base of the sandstone is sharp and gradational and shows conformable relationship with interbedded shale and claystone beds (Figure 1) [11]. The intervening shale and claystone beds vary in color from dark to light gray, brown and yellow (Figure 1) with thick beds and have embodied plant remains (leaf fossils) [12].

4. CONCLUSIONS

The stratigraphic section was measured in field to estimate thickness and to record all the quagmire of sedimentary information from the rocks. The information plotted on the graphic columnar section (Figure 1) was helpful in understanding the fluvial depositional environment of the Nagri Formation in the area as described below:

- The meandering and braided fluvial system has deposited sandy and pebbly material over shale and claystone.
- The intraformational conglomerates are normally derived from cut banks, deposited and accumulated with reworking.

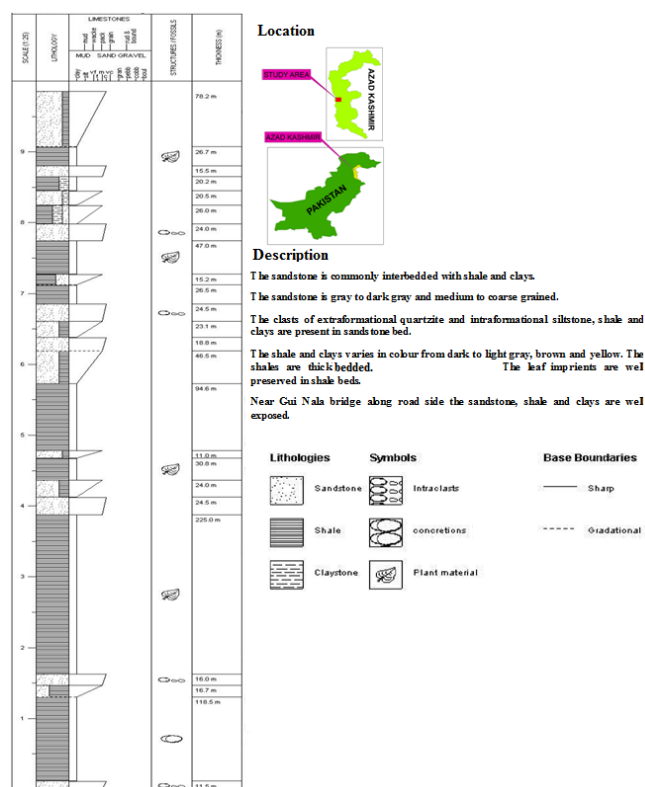


Figure 1: The worked example of graphic columnar section of Nagri Formation (Middle Siwaliks) in District Poonch, Azad Jammu and Kashmir, Pakistan, the area being located towards right hand corner on map.

- The extra formational clasts are accumulated slowly on scour surfaces or on bar tops and even coarse particles form conglomerates in the upper half of channel sand bodies.
- The warm, semiarid and arid climes under hydromorphic conditions are suitable for the origin of calcareous concretions.
- Moreover, the clasts oriented towards Southwest direction indicate the flow direction towards Southwest and the location of hinterland towards Northeast.
- The plant remains (leaf fossils) in shale beds favors continental origin of the rock.

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