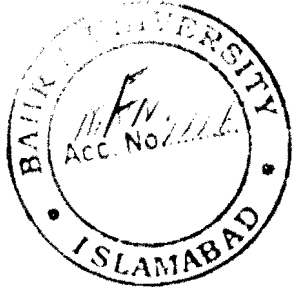


**DEPOSITIONAL ENVIRONMENT AND  
DIAGENESIS OF BHADRAR BEDS, EXPOSED IN  
NURPUR SETHI AREA, CENTRAL SALT RANGE,  
PUNJAB, PAKISTAN**



**A thesis submitted to the Faculty of Earth and Environmental  
Sciences, Bahria University in the partial fulfillment for the  
Degree of Master in Geology**

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## ABSTRACT

Present study is based on the petrographic analysis of outcrop samples of Bhadrar Beds, exposed in Nurpur Sethi Area of the Central Salt Range. Bhadrar Beds, at this location, consist of mostly bioclats of forams which are randomly distributed in micritic matrix. Bhadrar Beds are mainly lime mud supported limestone, constituting predominantly microcrystalline calcite with subordinate skeletal fragments (biocalstic wackestone).

Lithologically limestone beds of Bahdrar Beds are basically wackestone with common forams and echinide fragments embedded in the matrix of limemud. Smaller Rotallidae with sparse texularidae and Suritidae are common along with, some rounded and subrounded burrow looking features filled with dark brown material while the fractures are mostly filled with spary calcite.

Stylolites, sutured seams and microstylolites indicate the influence of pressure solution. Fractures and micro fractures suggest the role of compaction and/or tectonic stress after lithification. Fractures, filled with calcite, indicate late diagenetic cementation. Bhadrar beds are mainly lime mud supported limestone, constituting predominantly microcrystalline calcite with subordinate skeletal fragments (biclastic wackstones). The dominance of very fine grain size of the constituent of deposition. It is, therefore, obvious that under such environments, development of primary porosity in Bhadrar beds is rather dim; and, as matter of fact, no preserved primary porosity was observed in any of the specimen.

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