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**Sedimentology And Sequence Stratigraphy Of The Bangestan Group, Lurestan Province, Zagros Mts, Iran**

The Albian-Campanian aged Bangestan Group contains some of the most prolific reservoirs of the Zagros hydrocarbon province, predominantly within neritic carbonates of the Sarvak Formation. These units form extensive outcrops in the frontal fold belt of the Northern Zagros mountains, affording a unique opportunity for pseudo-3D reservoir characterisation as an aid to understanding producing fields in the subsurface.

The Albian-aged Kazhdumi Formation (basal Bangestan Gp) comprises a mixed carbonate-clastic sequence characterized by interbedded regressive deltaic facies and transgressive platform carbonates. The top of the Kazhdumi Formation is strongly transgressive. The overlying Lower Sarvak Formation comprises a thick (350 m +) predominantly aggradational section of ramp interior to ramp margin facies. Reservoir heterogeneity is marked, related both to primary facies variations and to late-stage fracture controlled dolomitisation. The top of the Lower Sarvak Formation is marked by a regionally extensive transgression (Earliest Cenomanian) leading to deposition of ammonite-bearing deep ramp/basinal facies.

The Upper Sarvak Formation is up to 270 m thick and divided into 2 strongly progradational ramp sequences separated by a regionally extensive karst surface of Upper Cenomanian-Early Turonian age. Reservoir facies are predominantly developed within "grainy" facies. The top of the Sarvak Formation is represented by a regionally extensive flooding followed by deposition of mudstones of the Surgah Formation. Neritic carbonates of the Ilam Formation abruptly overlie the Surgah Formation and pass retrogradationally into hemipelagic carbonates of the Gurpi Formation related to final drowning of the ramp system in Lurestan.