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**Shelf Reservoirs Produced by Combined Gravity Flow and Storm Deposits: Analogous Model from The Portezuelo Del Tontal Formation (Late Ordovician, Precordillera Argentina, Argentina)**

We present an unusual reservoir model for sandstones with features of both sediment gravity flow and storm influenced deposits. The Portezuelo del Tontal Formation (PTF) is an approximately 2000 m thick succession of interlayered sandstone and rare shale. Similar sandstone successions are interpreted as deposited by "wave-modified turbidity currents" in shoreline to shelf environments. Because the similarity with sediment gravity flows is great, it is necessary to differentiate these deposits from deep-water systems in order to reconstruct the geometry and the sequential organization of the sandstone reservoirs. A 110 m thick section in the upper part of the PTF is monotonously made up of sandstone and thin rare shale strata. Most sandstone strata are identified as bed-events with each being composed of two parts, representing a combination of two phases of sedimentation. The lower part of each bed is formed by massive, medium grain-sized sandstone with sole marks, traction carpet and floating pelitic clasts. It corresponds to the deposition of a concentrated density flow produced by a storm-derived geostrophic current. Very fine grain sandstone, HCS structures and climbing ripples, produced by traction and settling processes of the finest grains by storm wave action, form the upper part of each bed. Storm waves generated gravity flows in shoreface and proximal shelf sands, which were reworked and deposited on earlier storm-deposited sands. The result are tabular sandstone beds, up to 4 m thick, very continuous laterally. Their degree of interconnection was controlled by the frequency and strength of storms that produced them.