New Stratigraphic Play Identified in the Lower Cretaceous Sequence of Middle Indus Basin Pakistan

Shaista Sultan and Asad Ilyas OMV (Pakistan) Exploration GmbH Shaista.Sultan@omv.com

The Lower Cretaceous C-interval (bounded by transgressive surfaces) of Lower Goru Formation holds quite a significant proportion of total hydrocarbon resource of Middle Indus Basin as appeared through discoveries in Badin (1983, in middle sands) and Sawan (1997 in "C" sands). The later with 2 Tcf reserves field was first from the stratigraphic trap. C Sands deposited in a lowstand system tract as a detached sand body. Therefore seismic geometries similar to Sawan were considered most favorable targets along with the seismic attributes analysis which is main tool to explore the potential of the "C" Sand sequence. Since the seismic attribute analysis is much more reliable for 3D data, OMV acquired a large volume (1,500 sq.km) of 3D seismic in the Middle Indus Basin. Many exploration wells have been drilled targeting the seismic amplitude anomalies together with seismic geometries. Although not all wells were successful, but still this effort led to another gas discovery named as Latif from Intra "C" sand level within C Interval sequence. There are also low velocity shales in the L. Goru interval which can produce high seismic amplitude anomalies and it is difficult to differentiate them from the reservoir sands on normal seismic data. A detailed evaluation of the seismic attributes and their integration with geological data may lead to more discoveries from "C" Sequence in the area.