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Developing a regional geological framework for the Horn of Africa

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Genel has been actively exploring the Horn of Africa since August 2012 when it was awarded a 75% operated interest in the SL-10-B and SL-13 licences of onshore Somaliland. In November 2012 Genel acquired a 50% interest in the adjacent Odewayne license giving it a total acreage footprint of 40,000km².

Genel's strategy in acquiring this acreage position was to chase Cretaceous through to Triassic objectives developed within Mesozoic rift basins which share some analogies to the prolific Marib-Shabwa & Sayun-Masila oil provinces of Yemen. The area is very much under-explored as political instability limited previous exploration efforts.

In Somaliland the legacy onshore seismic database is limited and well data points are few and far between. Whilst progress is being made towards the acquisition of new onshore seismic Genel has been developing its understanding of the regional tectono-stratigraphic framework through a combination of airborne gravity and magnetics, reconnaissance geological fieldwork and structural setting analysis. The presence of all of the key play elements together with a working petroleum system has been documented from offset wells, reconnaissance fieldwork as well as active seeps which were the focus of a 2015 geochemical survey.

This paper presents the results of this new regional analysis and highlights the exploration potential in these underexplored Mesozoic rift basins.

