Exploration of the East African Rift System in the Lake Albert Area, Uganda

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Exploration Area 2 over northern Lake Albert and adjacent onshore areas was acquired by a Hardman/Tullow joint venture in 2001. Lake Albert is located on the border between Uganda and the Democratic Republic of Congo and is approx. 140 km long and 40 km wide. The lake is in the western arm of the East African Rift and while the area was virtually unexplored there were a number of positive features including aeromagnetic and gravity data suggesting up to 5,000 metres of sediment and numerous oil seeps. One of the best seeps, which was within the area, demonstrated the presence of a lacustrine algal oil source.

Hardman recorded a 1,589 km seismic survey on the lake in 2003 using a small multi-channel seismic system mounted on a fishing vessel. The survey defined the overall basin geometry, including northern and southern depocentres and a shallower eastern platform. The depocentres are separated by a structural nose which is a focus for both structuring and migration. The survey identified a number of leads including a large trap against the platform-bounding fault. In early 2005 an onshore/transition survey of 220 km was recorded and delineated similar prospects onshore, along the basin-bounding fault, at shallower depths (approximately 1,200 – 1,800 m). Oil seeps on the bounding fault near the prospects, indicated that oil charge was likely.

Mputa-1, the first of the current two well program, recovered oil from wireline samples and confirmed the existence of a petroleum system in the basin. The result provides encouragement for further exploration and appraisal drilling.