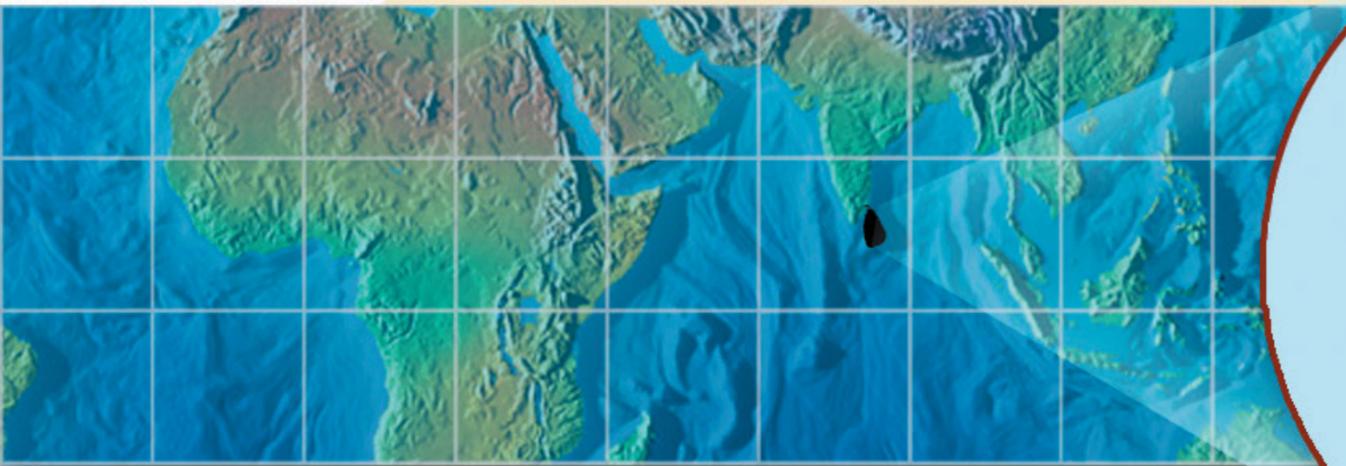




INTERNATIONAL

Sri Lanka – Petroleum Geological Report



Using satellite-derived gravity, the Sri Lankan margin can be separated into ten geologically self-consistent segments. The most prospective region is the west coast Colombo Segment, where new seismic has revealed multiple structural and stratigraphic objectives, albeit mostly in deepwater settings. There are interpreted oil slicks, plus possible DHIs. The play ingredients for the three Cauvery Basin segments in the Palk Strait (Mannar, Pambon and Jaffna) are established by existing wells, at least two of which had shows. Water depths are shallow, but the seismic is of poor quality and the detailed play architecture of this region remains to be defined.

The gravity results suggest that the published depths to basement contours are in need of substantial revision and thus, prospectivity is more widespread than presently perceived. New seismic, or the reprocessing of existing seismic, is urgently required. There are oil fields to the north in India and there were shows in at least two of the Sri Lankan wells. The Mullaitivu Segment hosts a previously unrecognized extension of the Palk Strait horst and graben province, above which sediments derived from the modern Cauvery Delta are expected to be present. This segment is the only one likely to merit early follow-up, apart possibly from the short east coast Trincomalee Segment, which is interpreted as including a deepwater fan system, thinness of section indicates minimal prospectivity elsewhere in relation to the known plays.

Accounts of the pre-rift succession in northern Sri Lanka suggest that a novel Petroleum System may exist related to mid-Jurassic lacustrine, oil-prone sources. Lacustrine rocks of this age are an important source in southern and south-western Australia. In addition, shallow marine source rocks of this age are widely developed around the margins of the western Indian Ocean. Plate tectonic reconstructions show that these marine source rocks can be expected to exist close to the western oceanic margins of Sri Lanka. Whether marine or lacustrine, an older source rock section would greatly increase prospectivity where the cover section is less thick. In association with GeolInsight Limited and Gladestry Associates, UK

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