

## ***Characterization of Jordan's in situ oil shale resource***

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*JOSCO - Jordan Oil Shale Company, Jordan*

Jordan Oil Shale Company (JOSCO), a 100% Royal Dutch Shell company, has been granted a 22,270 km<sup>2</sup> concession in Jordan, in order to assess the potential of the Paleogene oil shale strata for production via Shell's proprietary In-situ Conversion process (ICP). Shell's objective is to discover one or more "oil shale sweet spots". Shell secured this Jordan concession on the basis of a regional study of oil shale thickness and richness data from 87 petroleum wells, almost 300 oil shale wells, over 2000 water wells and extensive surface outcrops. To explore and de-risk such a large area in a cost-effective and comprehensive manner, JOSCO has pursued an Own and Operate project model. This involved the purchase of two truck-mounted 50 ton drilling rigs, a logistics fleet, two wireline units and a complete analytical laboratory with equipment for rock-processing, core scanning, core analysis and geochemical measurements, all manned by a mainly Jordanian workforce. This approach will enable Shell to efficiently drill and comprehensively evaluate the acreage within a 3-year assessment phase.

The first phase of drilling across the concession area is under way. When complete, a second phase of drilling which focuses on definition of any candidate sweet spots identified will be initiated. Evaluation to date has confirmed the regional and encouraging nature of the oil shale play. Depth and thickness vary widely across the basin and richness varies both laterally and stratigraphically. The substantial variations observed to date clearly justify the extensive drilling program implemented for this evaluation.