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## Evaluating the Palaeozoic Gas Potential of the Euphrates Graben, Syria

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**René Frijhoff<sup>1</sup>**, Maarten Lechner<sup>2</sup>, Nada Wassouf<sup>2</sup>, Robert Pimentel<sup>2</sup>, Fahed Kabbesh<sup>3</sup>, Bahaa Mahmoud<sup>2</sup>, and Mokhles Ahmad<sup>2</sup>. (1) Al Furat Petroleum Company, P.O. Box 7660, Damascus, Syria, phone: +963 11 618 5233, r.frijhoff@afpc.net.sy, (2) Al Furat Petroleum Company, (3) Syria Shell Petroleum Development, Damascus, Syria

To date no significant discoveries have been made below the Mesozoic in Syria. In the past, most wells stopped drilling when a dry Carboniferous was encountered. The pre-Pennsylvanian section was often unmapped and never a primary objective when the prolific Late Triassic/Early Cretaceous oil play was successfully being explored. With a commitment to drill a well to a depth of 5000 mTVMSL to a Palaeozoic target, a renewed effort was made to explore the sub-Carboniferous geology of the Euphrates Graben. With the Iraqi Ordovician Akkas Gas Field nearby, the uppermost Ordovician has been the main objective of the study. The work has, however, highlighted several secondary targets such as a possible turbidite play in the Silurian and an unknown (Devonian?) sequence that thus far remains undrilled. The main geological risk is the presence of producible reservoir. Although the basin is undersampled, the reservoir appears heavily cemented and in the case of discovery, we anticipate the need to hydraulically fracture the reservoir. The principal execution risk of the project is the anticipated high temperature around TD level (> 180 °C). There is a risk that the well may not reach the planned TD of 5000 mTVMSL and that data acquisition will be compromised in the bottom section of the well. Fortunately, reaching the objective level will not be jeopardised, since it is roughly 1 km above TD. At the time of writing the well is planned to spud in September 2006.

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