



# FESAus Monthly Technical Meeting

## *“Bahariya Formation: Lessons in Data Acquisition”*

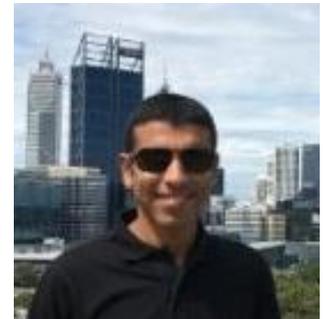
AbdelRahman Elkhateeb- Denali Formation Evaluation Services

### **Abstract:**

The Bahariya Formation is considered one of the main high potential reservoirs in Western Desert in Egypt. The Early Cenomanian reservoir has complicated lithology and stratigraphy with large facies variations over short and long distances. The reservoir extends across the Western Desert and is encountered at various depth ranges starting from 5000 ft down to 10000 ft, with completely different facies from one field to the other. The lithology within Bahariya Formation includes sandstone, as main reservoir lithology, various clay types, limestone, siltstone and dolomite. The sandstone reservoir is of high hydrocarbon potentials drilled in a large number of fields, while the dolomite is localized at certain locations with low potential and much lower permeability. In Meleiha Concession, one field has shown very good potential with zero water cut for relatively long period of time. Some wells were thought to be water-bearing from the well logs, then proven of high hydrocarbon potential with minor water cut. The management decided to take a conventional core to study the reservoir at very late stage despite the field promising outcome, which delayed a better planned reservoir management and better understanding of the field potential at early stage of the field life. The logs acquired in the field were basic with basic core measurements despite the reservoir complexity. The reservoir is producing from 5 different layers out of 6, with high irreducible water saturation and moderate to high permeability.

### **About the Presenter:**

**AbdelRahman Elkhateeb** has been working in the industry for 10 years locally in Egypt and internationally in Netherlands, Denmark and Norway. He started in Eni's JV in Cairo before moving to Dana Petroleum Egypt, then to Dana Petroleum Netherlands before recently moving to Australia. Currently a PhD (Formation Evaluation) student at Curtin University, AbdelRahman has founded Denali Formation Evaluation Services, established in Perth to provide FE services to operators. AbdelRahman holds two masters degrees, one in Geoscience/Petrophysics from Cairo University and one from Heriot-Watt University in the UK in Petroleum Engineering.



**DATE:** Tuesday 14<sup>th</sup> March 2017, 12:00 – 1:30 PM **VENUE:** Hotel IBIS- 334 Murray Street, Perth

**COST:** Members \$30.00; Non Members \$40.00; Students/Retirees \$10.00

Online registration at [www.fesaus.org](http://www.fesaus.org)

Note: limited seats for unregistered attendees may be available: \$50.00 cash door charge

