



EGYPT UPSTREAM GATEWAY
MINISTRY OF PETROLEUM & MINERAL RESOURCES

Western Desert:

**3D Regional Post-Stack Merge –
Accelerated Regional Evaluation**





Egypt – Western Desert



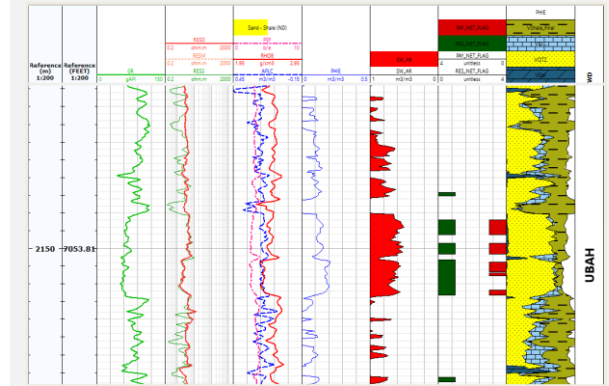
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Accelerated Regional Evaluation

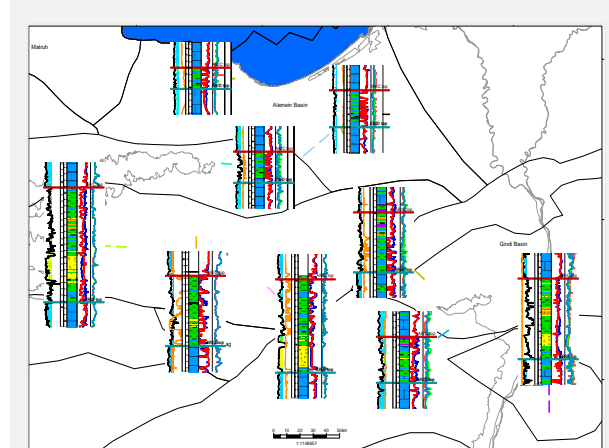
EUG regional team currently works on fully integrated regional evaluation from basin scale to prospect level to effectively support bid rounds and promote acreage in local and global markets. This type of evaluation is a key enabler for the market to understand the prospectivity and value of bid round blocks, global market dynamics, and potential client interest.

Understanding the well data in the study region is critical for delineating the petroleum system elements in the study area. As a result, the well logs of more than 40 wells in the study area have been harmonized to let explorers evaluate the wells faster. A structured wells' folders database, a consistent petrophysical log layouts, a LAS files, and wells correlation sheets with details on data and report availability were also given.

The workflow started with an integrated formation evaluation that aims to identify possible promising zones based on wireline and mud logs. It then moved on to integrating borehole images with available core data and thin sections to analyze and interpret the reservoir lithofacies. Finally, structural mapping was completed using a combination of seismic features, including edge detection, coherence, and spectral decomposition.

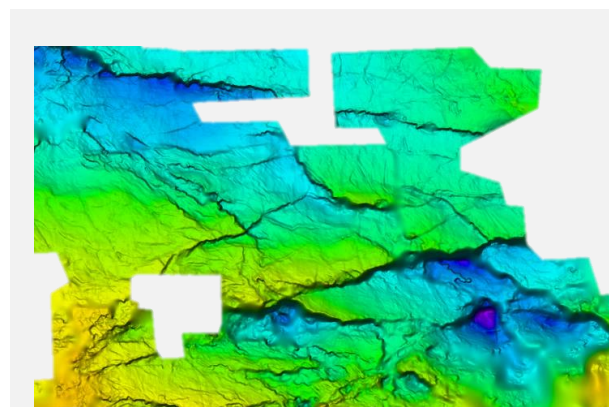
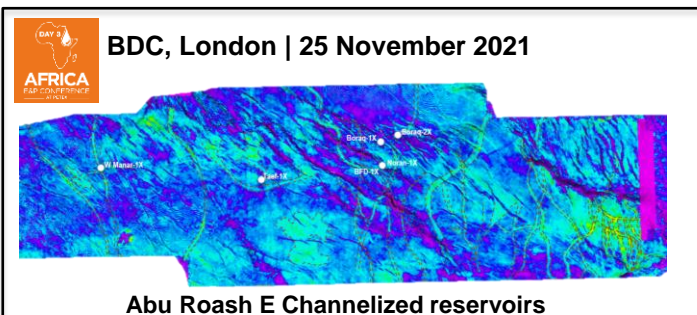


Integrated Petrophysical Evaluation



Log Signature Map

Deliverables (Regional scale)
Data mining sheets & Dashboards
Penetration charts
Regional TWT structure maps
Attributes maps
Integrated Petrophysical evaluation (log signature maps)
Well Summary Sheet
Lead polygons



Regional TWT Structure Map