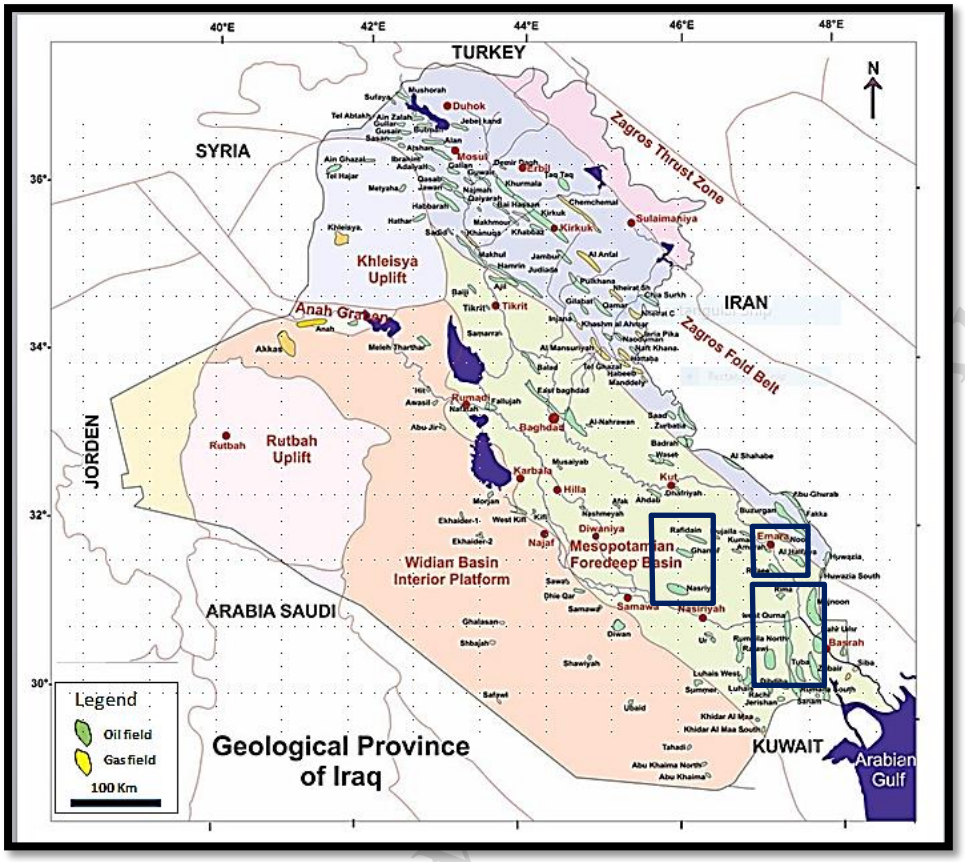
Target Exploration

Energy Geosciences Research & Development



Typical Giant Oil Fields of Southern

IRAQ

Target Exploration Report Tar19

Summary

The subjects of this report are eleven "appraised" giant and supergiant oil and gas fields of **southern Iraq**, they are: they are grouped into **three clusters of appraised fields**; **Southern:** (Majnoon, Nahr Umr, Ratawi, Tuba and West Qurna fields, **Eastern**: (Amara, Halfaya and Noor (Nur) fields) and **Western:** Gharaf, Nasiriya, Rafidain (Abu Amoud) fields.

No	Field	Reservoir	Res. Depth (Meters)	Res. Lithology	Res. Thickness (Meters)	Res. Porosity	Res. Permeability	Gross Pay (Meters)	Net Pay (Meters)	Res. Pres. (PSI)	Res. Temp (°C)	Min °API	Max °API	GOR (M3/STBO)	Free Gas/Cond	Assoc Gas/Cond	Water Cut (%)	Drive Mech.	Reserves (MMSTBOIIP)
1	**Majnoon**																		
2	**N. Umr**																		
3	**W. Qurna**																		
4	**Tuba**																		
5	**Nasiriya**																		
6	**Rafidain**																		
7	**Ratawi**																		
8	**Halfaya**																		
9	**Noor**																		
10	**Amara**																		
11	**Gharraf**																		
Total																			

The Report

The goals of the study were to:

1. Develop an understanding of production and exploration potentials of the listed fields.
2. Estimate their economic significance.
3. Identify their production and development problems.
4. Provide a structural contour and facies maps of the primary reservoirs-seals formations.
5. Compile all available reservoir data in Excel sheets, including the data in the above datasheet.

The fields are subsurface anticlinal traps with variable times of structural growth. They are grouped into three areas, and ranked according to the volume of proven reserves, production capacity and likelihood of discoveries within the field's boundaries and surrounding areas.
Forty proven producible reservoirs encountered in the 11 fields, from the Yamama to the Ghar. The Field sizes were calculated according to trapezoidal volume estimation of proven STOIIP reserves.

The Southern Fields' Cluster Area:
This area (between Longitudes. 47.00-48.00 E. and Latitudes. 30.00-31.30 N.) encompasses the Ratawi, Tuba, Nahr Umr, West Qurna and Majnoon oil fields is economically attractive production/exploration area. The area has proven but partially explored deep potential, several shallow un-appraised or poorly developed reservoirs and few seismic anomalies.

The Western Fields' Cluster Area:
This area (between Longitudes. 45.30-46.30 E. and Latitudes. 31.00-32.00 N.) includes Rafidain (Abu Amoud), Gharaf and Nasiriya oil fields. It is ranked as economically attractive production/exploration area among the three areas under consideration. The Western area has deep and shallow potentials.

The Eastern Fields' Cluster Area:
This area (between Longitudes. 46.30-47.30 E. and Latitudes. 31.30-32.00 N.) includes Noor (Nur), Halfaya and Amara oil fields. The Eastern area has deep potential, shallow potential and undrilled seismic anomaly.

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Enclosure 7: Isopach-facies map of Nahr Umr Formation.
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