





Geology and Reserves of Ratawi Field, South IRAQ

cot

Target Exploration Report Tar21

The Report

The <u>Ratawi Field</u> was discovered by Basrah Petroleum Company in 1950 by drilling a prominent closed seismic anomaly on top of Ahmadi Formation at about 70 Kilometres to the west of Basrah city. This discovery became one of the underdeveloped oil fields of South Iraq.

The Ratawi subsurface anticlinal trap is located over the Jurassic Salt Basin (and possibly the Infra-Cambrian Salt Basin as well) in the Interior Stable Arabian Shelf tectonic regime. The N-S trend of the Ratawi field is probably due to interplay of Pre-Cambrian N-S basement faults and Infra-Cambrian salt tectonics. The gentle dip may hide a steeper dip of the structural flanks of the deformable Gotnia salt. The detailed stratigraphic correlation, seismic structural mapping and log analyses revealed that this Arabian Shelf-type of anticline shows evidence of Neocomian, Albian, Turonian and Palaeocene-Oligocene pulses of structural growths, that characterise the multiple reservoirs giant oil fields of the Arabian Shelf.

Report Sections

GEOLOGICAL SETTING
STRUCTURE
1. General
2. Seismic Interpretation
3. Faults

3. STRATIGRAPHY AND DEPOSITIONAL MODEL						
4. RESERVOIR DEVELOPMENTS AND DISTRIBUTION						
4.1. Major Reservoirs						
4.2. Minor Reservoirs						
5. HYDROCARBON OCCURENCES AND DISTRIBUTION						
5.1. Oil and Gas Distribution						
5.2. Sealing Capacity of Shale						
5.3. Overpressures						
5.4. Hydrocarbon Migration						
5.5. Communications with Aquifers						
6. VOLUMETRIC ESTIMATION						
6.1. Methodology						
6.2. Petrophysical Parameters						
6.3. GBV						
6.4. HC Initially in Place						
7. UPSIDES AND RISKS						
8. REFERENCES						
9. ENCLOSURES						

Figures

Figure 1: Location map of studied fields.

Figure 2: Typical stratigraphic column and proven hydrocarbon reservoirs of Southern Iraq.

Figure 3: E-W structural cross-section of Ratawi Field.

Figure 4: N-S structural cross-section of Ratawi Field.

Figure 5: Stratigraphic correlations of the main reservoirs.

Figure 6: Structural contour map of top of Reservoir 1.

Figure 7. Structural contour map of top of Reservoir 2.

Figure 8: Structural contour map of top of Reservoir 3.

Figure 9: Structural contours of Reservoir 4.

Figure 10: Structural contours of Reservoir 5.

Figure 11: Structural contours of Reservoir 6.

Enclosures

Enclosure 1: E-W structural cross-section of Ratawi Field.

Enclosure 2: N-S structural cross-section of Ratawi Field.

Enclosure 3: Stratigraphic correlations of the main reservoirs.

Enclosure 4: Wire -line log interpretation; Well Ratawi-2.	
Enclosure 5: Wire-line log interpretation; Well Ratawi-3.	
Enclosure 6: Wire-line log interpretation; Well Ratawi-4.	
Enclosure 7: Wire-line log interpretation; Well Ratawi-5.	
Enclosure 8: Wire-line log interpretation; Well Ratawi-6.	
Enclosure 9: Wire-line log interpretation; Well Ratawi-7.	
Tables	

Tables

2.1. Revised formation tops Ratawi Field
2.2. Reservoir Parameters; reservoir 1.
2.3. Reservoir parameters; reservoir 2.
2.4. Reservoir parameters; reservoir 3.
2.5. Reservoir parameters; reservoir 4.
2.6. Range of estimated volume of OIIP; reservoir 1.
2.7. Range of estimated OIIP; reservoir 2.
2.8 Range of estimated OIIP; reservoir 3.
2.9. Range of estimated OIIP; reservoir 4.



This report is only available from

Target Exploration

<u>Click to order your copy</u>

For further details contact: M. Casey, Target Exploration Consultants, 65 Kenton Court, London W14 8NW, UK. Tel (+44) (0) 207 3712240

target@TargetExploration.com

www.TargetExploration.com

<u>Home</u>	<u>About Us</u>	<u>Experience</u>	<u>Services</u>	Training	<u>Conferences</u>	Publications	<u>Order Form</u>	
<u>News</u>	<u>Careers</u>	<u>Contracts</u>	<u>Downloads</u>	<u>Uploads</u>	<u>Links</u>	<u>Rep/Software</u>	<u>Contact Us</u>	<u>22-02-202</u> 2