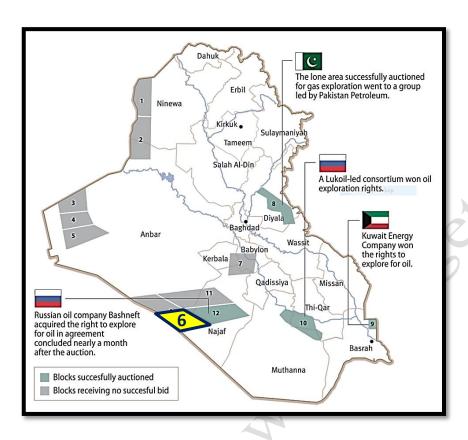
Target Exploration

Energy Geosciences Research & Development





Geology and Hydrocarbon Prospectivity of

Southern Block 6 Western Desert

IRAQ

Target Exploration Report Tar36

The Report

This study is an assessment of the prospectivity and hydrocarbon potential of Blocks 1 (2001) which covers the southern half of Block 6 (2012) of the Western Desert of Iraq.

MOO data package of Block-1, published and unpublished data on the geology of the Western Desert of Iraq, and previous exploration activities data and maps of Block-1 (2001) including well data in and in neighbouring areas were analysed in this report leading to conclusions and precise recommendations pertinent to pre-Exploration and Production agreement.

The review of the hydrocarbon potential of the area used the following data and information:

- 1. A brief general information note on Block-1 prepared by the Oil Exploration Company in the Republic of Iraq, which includes Gravity and Magnetic interpretation maps.
- 2. Paper copies of ten seismic lines totalling 500 km. representing different parts of the Block and different vintages of survey.
- 3. Several geological reports and symposium papers, both in Arabic and in English published between 1986 and 1997, plus other published and unpublished reports and studies on the geology of the area.

Through this review, the stratigraphic succession from surface to the Upper Jurassic was correlated in the wells within and around the studied block. This correlation provided good control on the stratigraphy of the upper 6,000 feet of the geological column. Below that depth, stratigraphic data in the area of Block-1 were extrapolated from the study of the Jurassic and the Triassic outcrops in the Rutbah-Ga'ara uplift, and from a few wells located further to the north and east, which penetrated the Paleozoic sequences.

Ten seismic sections were examined; key formations corresponding to the reflective horizons were identified. These horizons were marked on the seismic sections to determine their continuity and to look for any structural anomalies such as faulting or folding that may be of interest to the interpreter. Form few shot points, depth conversion of the velocity readings was made in an attempt to interpret the depth in meters of certain reflective horizons. In this review, each of the ten seismic sections is described and interpreted qualitatively under the subtitle of "Seismic Sections".

In conclusion, the positive elements of Blocks 12 and 6 are highlighted, and the data needed for a further and more reliable technical evaluation are included in the recommendations. The study revealed the presence of some interesting leads and plays which are worthy of further investigations.

Report Chapters

Section		
1. Summary	2	
2. Introduction	3	
3. Geological Setting	5	
4. Stratigraphic Analysis	7	
5. Structural Analysis	15	
6. Source Rocks, Maturation and Migration	21	
7. Conclusions, Leads and Recommendations	25	
8. References	31	
9. Figures	31	
10. Enclosures: Information Sheets, Bouger, Residual Gravity, Vertical Magnetic, Total Aeromagnetic	45-62	
Anomalies Maps, Location Map of Structural Leads, and Seismic Base Map of Western Desert, Iraq.		

Illustrations

Fig. 1: Location map of Block-1.	31
Fig. 2: Tectonic map of Iraq.	32
Fig. 3: Tectonic map of South-western Iraq.	33
Fig. 4: Generalized Stratigraphic column of Central Iraq.	34
Fig. 5: Stratigraphic column of Block-1.	35

Figs. 6a and 6b: Stratigraphic correlation of wells in the area of Block-1.				
Fig .7: Regional stratigraphic correlation of wells in south and southwest Iraq.				
Fig. 8: Paleozoic lithostratigrahy of Iraq.	39			
Fig. 9: Isopach map of the Tertiary cover in Block-1.	40			
Fig. 10: Isopach map of the Aruma Group in Block-1.	40			
Fig. 11: Isopach map of the Upper Wasia Group in Block-1.	41			
Fig. 12: Isopach map of the section from top Mauddud to top Gotnia in Block-1.				
Fig. 13: Structural contours on top of Tayarat Formation in Block-1.	42			
Fig. 14: Structural contours on top of Mishrif Formation in Block-1.	42			
Fig. 15: Structural contours on top of Mauddud Formation in Block-1.	43			
Fig. 16: Structural contours on top of Gotnia Formation in Block-1.	43			
Fig. 17: Prospectivity map showing the structural and stratigraphic leads identified in Block-1.	44			



This report is immediately available from

Target Exploration

Click here to order your copy

For further information, contact: M. Casey, Target Exploration Consultants, 65 Kenton Court, London W14 8NW, UK.

Tel: (+44) (0) 207 371 2240 Email: target@targetexploration.com www.targetexploration.com

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

