Petroleum Geology of the Precaspian Basin

A non-proprietary report by Blackbourn Geoconsulting

Blackbourn Geoconsulting presents a summary of the geological development and hydrocarbon habitat of the Precaspian Basin.

The report describes the development and petroleum geology of the Precaspian Basin, which lies to the north of the Caspian Sea partly within Russia and partly within Kazakhstan, with its southern margin beneath the North Caspian.

Part I of Volume I of the report begins with a short overview of the geography, geology and exploration history of the area. The remainder of Part I comprises a systematic description of the geological development of the area, beginning with its tectonic development in the context of the basin’s position on the southeastern "corner" of the East European Platform.

This is followed by a review of the stratigraphy and palaeogeography of the basin. Although it now appears broadly circular in plan view, the Precaspian Basin is not symmetrical in structure, and different parts of its margin developed separately and have distinct histories. These are considered in turn:

- Northwestern & Western (Pre-Volzhe) Margins
- Astrakhan Arch and Surrounding Areas
- Eastern Margin
- Southern and Southeastern Margins

Part II of this report on the Precaspian Basin describes the elements of known and potential petroleum systems within the basin. Owing to its great depth, hydrocarbon prospectivity is mostly associated with the basin margins, although some brief notes are included regarding the nature of the deeper basin.
Part II draws on the geological descriptions and interpretations provided in Part I, and is supported by detailed information on individual fields and accumulations provided in Volume II of the report, the Field Database.

Volume II of the report is formed from the relevant sections of Blackbourn Geoconsulting’s Field Database of the Oil and Gas Fields of the Former Soviet Union, with data on around 175 fields in the region, and with illustrative structure maps and cross sections.

The Field Database is broken down into a number of geographic areas in which oil and gas accumulations are known to occur. These hydrocarbon areas relate to the margins of the basin described in Part I of the report:

- Astrakhan Arch
- Enbeksk-Zharkamysskaya Uplift Zone
- Karachaganak-Troitsk Uplift Zone
- Karakul Arch
- Kurilov-Novouzen Uplift Zone
- Lobodinsk-Teplovsk Uplift Zone
- Primorsk Uplift
- Sarpa Trough
- Shchukatsk-North Caspian Uplift Zone
- South Emba Uplift

The report includes stratigraphic correlations, regional cross sections and other large-format enclosures. All maps are georeferenced and are available in ArcGIS format.

Timing & Cost

“The Petroleum Geology of the Precaspian Basin” is available now at a cost of **US $26,000**.

For further details on this report, please visit [www.blackbourn.co.uk/reports/precaspian-basin.html](http://www.blackbourn.co.uk/reports/precaspian-basin.html) or contact Dr Graham Blackbourn at: