

Routine Core Analysis data of reservoir rocks, Phanerozoic and Neoproterozoic basins of Western Australia

by

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Abstract

The Energy Systems Atlas is a collection of new geological map layers designed to help explorers identify each of the essential elements and processes of a petroleum system: source, reservoir, seal, burial, maturation, stratigraphic framework, structure, trap formation and migration. To help assess the reservoir potential, Routine Core Analysis (RCA) data including porosity, permeability, grain density, bulk density, lithology, water and oil saturation measurements within the Phanerozoic and some Proterozoic basins of Western Australia have been compiled from new and legacy data submitted to or generated by the Geological Survey of Western Australia (GSWA). These datasets are useful for assessing reservoir quality and quantity. The RCA data have been compiled from reports submitted to GSWA including from petroleum companies, other government departments, academic institutions and research bodies as well as new analysis arranged by GSWA covering the majority of Western Australian sedimentary basins. New RCA data will be added as they become open file.

The geology of the reservoir rocks and descriptions of the data and methods of all RCA data are outlined in the original reports, which are included in the attribute tables for all data in the Energy Systems Atlas. GSWA publications are available from [DMIRS eBookshop](http://www.dmirs.wa.gov.au/wapims). Unless otherwise stated the depths are given as metres measured depth.

How to access

The **Energy Systems Atlas** is best accessed using the Western Australian Petroleum and Geothermal Information Management System ([WAPIMS](http://www.wapims.wa.gov.au)). This online interactive mapping system allows data to be viewed and searched together with other datasets. The Energy Systems Atlas RCA analyses of measured porosity, permeability, bulk and grain density, lithology and pore fluid saturation are also available as a data package on request from WAPIMS/requests form.

Recommended reference

Brooks, DM and Irimies, F 2021, Routine Core Analysis data of reservoir rocks, Phanerozoic and Neoproterozoic basins of Western Australia: Geological Survey of Western Australia, digital dataset, <www.dmirs.wa.gov.au/wapims>.

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