

1a.3 Layer 03 Great Artesian Basin base of Mackunda Formation and equivalents surface

Abstract	<p>Layer 03 Base of Mackunda Formation and equivalents surface</p> <p>Surface produced for the Great Artesian Water Resource Assessment (GABWRA) by Geoscience Australia (http://www.ga.gov.au). This surface was created for 3D visualisation of the Base of Mackunda Formation and equivalents.</p> <p>The surface is available in the following formats</p> <ol style="list-style-type: none"> 1. GOCAD surface (.ts) 2. ESRI grid 3. ASCII grid (.grd) <p>Use limitations:</p> <ol style="list-style-type: none"> 1. GOCAD surface requires program capable of reading GOCAD *.ts (triangulated surface) files 2. ASCII grid data requires re-interpolation by end-user resulting in minor differences to accompanying GOCAD *.ts surface <p>This layer is part of a set comprised of:</p> <p>Layer 01 3-second Digital Elevation Model surface (catalogue #75990)</p> <p>Layer 02 Base of Cenozoic surface (catalogue #75991)</p> <p>Layer 03 Base of Mackunda Formation and equivalents surface (catalogue #76021)</p> <p>Layer 04 Base of Rolling Downs Group surface (catalogue #76022)</p> <p>Layer 05 Base of Hooray Sandstone and equivalents surface (catalogue #76023)</p> <p>Layer 06 Base of Injune Creek Group surface (catalogue #76024)</p> <p>Layer 07 Base of Hutton Sandstone surface (catalogue #76025)</p> <p>Layer 05-07 Base of Algebuckina Sandstone surface (catalogue #76952)</p> <p>Layer 08A Base of Evergreen and Marburg formations (catalogue #76026)</p> <p>Layer 08B Base of Poolowanna Formation (catalogue #76953)</p> <p>Layer 09 Base of Precipice Sandstone and equivalents surface (catalogue #76027)</p> <p>Layer 10 Base of Jurassic-Cretaceous sequence surface (catalogue #76028)</p> <p>This dataset and associated metadata can be obtained from www.ga.gov.au, using catalogue number 76021.</p>
Lineage	<p>SOURCE DATA:</p> <p>Stratigraphic picks were sourced from exploration and stratigraphic drilling documented in PEPS-SA (South Australian Department for Manufacturing, Innovation, Trade, Resources & Energy, 2011), QPED database (Geological Survey of Queensland, 2010) and GABLOG database (Habermehl 2001). Seismic interpretation of Senior and Associates (1997) was used for contour constraints.</p> <p>BOUNDARIES:</p> <p>The layer boundary was modified from Habermehl and Lau (1997) / Welsh (2000)</p> <p>PROCESSING:</p> <p>For details on data processing, refer to "The three-dimensional visualisation of the Great Artesian Basin: A report to the Australian Government from the CSIRO Great Artesian Basin Water Resource Assessment" Nelson G. et. al 2012</p> <p>REFERENCES:</p> <ol style="list-style-type: none"> 1. Geological Survey of Queensland (2010). "Queensland Petroleum

	<p>Exploration Data (QPED) database." Retrieved 25 September 2011, from <http://mines.industry.qld.gov.au/geoscience/geoscience-wireline-log-data.htm>.</p> <ol style="list-style-type: none"> South Australian Department for Manufacturing, Innovation, Trade, Resources & Energy (2011) "Petroleum Exploration and Production System - South Australia (PEPS-SA)". Version 2011-06-15. Retrieved from http://www.pir.sa.gov.au/petroleum/access_to_data/peps-sa_database Habermehl, M. A. (2001). Wire-line logged water bores in the Great Artesian Basin, Australia - digital data of logs and water bore data acquired by AGSO. Australian Geological Survey Organisation Bulletin 245. Canberra, Bureau of Rural Sciences: ix, 98 p. Senior and associates (1997). Geoscience Australia internal data set and contour interpretations by Senior B. Canberra, Groundwater Group, Environmental Geoscience Division, Geoscience Australia. Habermehl, M. A. and J. E. Lau (1997). Hydrogeology of the Great Artesian Basin Australia (Map at scale 1:2,500,000). Canberra, Australian Geological Survey Organisation. Welsh, W.D. 2000. GABFLOW: A steady state groundwater flow model of the Great Artesian Basin, Bureau Rural Sciences. Canberra. Nelson GJ, Carey H, Radke BM and Ransley TR (2012). The three-dimensional visualisation of the Great Artesian Basin. A report to the Australian Government from the CSIRO Great Artesian Basin Water Resource Assessment. CSIRO Water for a Healthy Country Flagship, Australia.
Extent	West 133.4552; East 146.8898; North -10.2160; South -30.3394
Scale	1:2500000

