

1a.4 Layer 04 Great Artesian Basin base of Rolling Downs Group surface

Abstract	<p>Layer 04 Base of Rolling Downs Group 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 Rolling Downs Group.</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 76022.</p>
Lineage	<p>SOURCE DATA:</p> <p>Stratigraphic well picks were sourced from PEPS-SA (South Australian Department for Manufacturing, Innovation, Trade, Resources & Energy, 2011) and the QPED (Geological Survey of Queensland, 2010) and GABLOG (Habermehl 2001) databases. Base Wallumbilla interpretation from seismic and water bore data from Dixon and Hodgkinson (2011) was used.</p> <p>BOUNDARIES:</p> <p>The layer boundary was modified from DERM (2005) and 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. Dixon, O. and J. Hodgkinson (2011). The base of the Wallumbilla Formation in the Eromanga, Surat, Carpentaria and Laura Basins - regional correlation of a key stratigraphic surface, the C-Horizon. Record 2011/04. Brisbane, Geological Survey of Queensland. DERM (2005). Hydrogeological framework report for the Great Artesian Basin Water Resource plan area: version 1.0. Unpublished report. Brisbane, Queensland Department of Environment and Resource Management. Prepared by the Queensland Department of Natural Resources and Mines: 150. 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 131.7798; East 151.2102; North -9.6092; South -32.7737
Scale	1:2500000

