

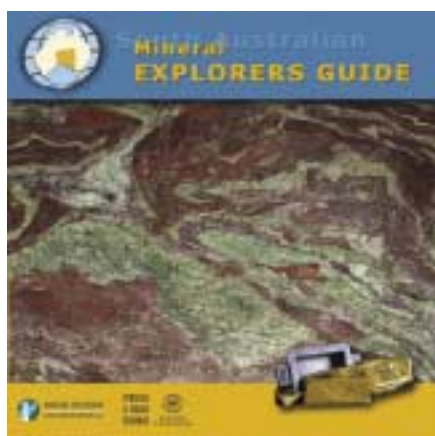
Departmental reports and publications



South Australian Mineral Explorer's Guide

South Australia has a long-term strategy of working with industry and providing quality pre-competitive geoscientific information to achieve results that will deliver long-term benefits to all South Australians. The provision of low-cost, high-quality and up-to-date geoscientific data to industry has resulted in enormous economic benefits for the state. The South Australian Government response to the Resources Task Force Report demonstrates a commitment to the target of making the state a preferred destination for explorers and resource developers. In that report, a specific time-bound vision was articulated — *a resurgent South Australian minerals industry growing to \$3 billion of mineral production and \$1 billion of mineral processing per year by 2020, winning sustainable wealth for Australians.*

The South Australian Mineral Explorer's Guide is part of a broad range of products developed by the Office of Minerals and Energy Resources (MER) and targeted to meet the needs of the minerals industry. The 2002 version of the guide is an extensively updated version of the *Mineral exploration and development in South Australia* volume compiled by Warwick Newton and published in 1996. The 2002 version was produced with the aim of highlighting the enormous potential for mineral deposit discoveries throughout



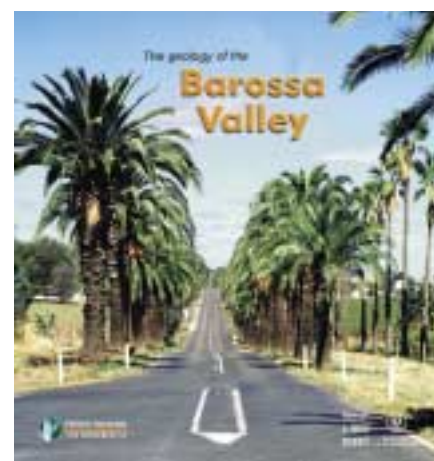
the state. The Explorers Guide, in CD format, reviews the geology of South Australia and places mines, mineral deposits and prospects in their correct geological context, as well as providing information on licensing, regulations and land access.

The Explorers Guide has been produced in a CD format due to the large amount of text, data and figures. It draws on the knowledge and expertise of geoscientific professionals in MER, but still only represents the tip of the iceberg in terms of data and knowledge available to mineral explorers through the agency. South Australia is enjoying an upsurge in exploration activity which commenced in 2002 due in part to new discoveries in the state, including Minotaur's Prominent Hill and Perilya's high-grade zinc at Aroona and Beltana. The opening of Dominion Mining's Challenger gold mine in the Gawler Craton is a significant milestone for the state and heralds a resurgence in gold exploration and mining. The newly announced plans by WMC to examine the feasibility of a significant expansion at Olympic Dam highlights the truly world-class nature of that orebody and, by implication, the prospectivity of the host terrain in the Gawler Craton.

The CD is available from PIRSA Customer Services, ground floor 101 Grenfell Street, or ordered via the PIRSA website (www.minerals.pir.sa.gov.au). The CD, which costs \$20 (plus \$5 postage and handling), also contains MESA Journals 1–27.

The geology of the Barossa Valley

This full-colour brochure describes the progressive evolution of the Barossa Valley, firstly in terms of its geological history since the early Tertiary, and secondly in terms of the usage made of the resulting terranes for vine cultivation by European settlers over the past 160 years.



An ancestral Barossa Valley, produced by faulting and erosion of the Neoproterozoic–Cambrian basement in the Eocene, was progressively filled by cycles of fluvial sedimentation from the mid-Tertiary to the Late Pleistocene. Factors controlling this sedimentation included major fluctuations in sea level, particularly in the Pleistocene, and climatic variations ranging from subtropical to near glacial.

The earliest vineyards in the valley were planted by Lutheran migrants in the mid-1840s, in environments that proved so successful for the propagation of vines that some of the plantings survive to the present day. From these beginnings, the Barossa Valley has gained a world-wide reputation for its outstanding Shiraz wine, with production coming from vineyards underlain by rock formations extending from Neoproterozoic metamorphics to Pleistocene alluvium.

The brochure includes maps of the geology and distribution of vineyards, along with photographs of significant geological and historical sites.

The geology of the Barossa Valley was written and prepared by Bill Fairburn, with assistance from MER. It is available for \$2.00 from PIRSA Customer Services, ground floor 101 Grenfell St Adelaide (ph. 8463 3000).