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News about products and services from the Geological Survey of New South Wales

Geoscientific Data Warehouse upgrades

Upgrades to the Geoscientific Data Warehouse (GDW) include:

- four new Field Observations layers in Google Earth, including observations that display photos when clicked
- additional fields in the drillhole search tool
- the ability to highlight a title or title applications
- display of core library fields in the drillhole summary list
- an advanced DIGS® search page
- 'Create Table' statements that enable users to create GDW tables and import all CSV files into their database system

Contact: David Collins, Senior Geoscientist Data Systems, david.collins@industry.nsw.gov.au

New powerful advanced searching for DIGS® reports

A new advanced search for DIGS® reports is available through the Geoscientific Data Warehouse. This utility is an alternative to the search page used for the DIGS® online system. It operates on a copy of the DIGS® database that has been replicated to the data warehouse overnight, and provides advanced search capabilities not available in the standard DIGS® search page including 'and'/'or' statements, 'contains' and 'not contains', wildcards and much more.

New spatial search for DIGS® reports

The Geoscientific Data Warehouse now enables a spatial search for DIGS® reports using the spatial tool in the GDW. It provides a list and details of all reports located in a selected area. Clicking on a title in the list will open the Report Summary and Document List in DIGS® for the complete report.

Direct links to GDW services

DIGS® advanced search: http://dwh.minerals.nsw.gov.au/CI/warehouse?content=digs
Maps for Mobile devices: http://dwh.minerals.nsw.gov.au/CI/warehouse?content=mobileapps
For enquiries go to: http://dwh.minerals.nsw.gov.au/CI/warehouse/entry/feedback

Radiogenic isotope database update

The GSNSW has updated its radiogenic isotope database with 227 new analyses (126 Sm/Nd, 42 Ar/Ar, 45 U/Pb, and 16 K/Ar) from scientific papers and unpublished material. Go to the GDW— geochronology. GSNSW regularly updates its databases from in-house and externally published sources. Please let us know of any gaps in our datasets.

Contact: John Greenfield, Team Leader, regional.mapping@industry.nsw.gov.au, 02 4931 6728

Bore core recently accepted at Mineral Resources core libraries

View a list of non confidential bore core accepted at the WB Clarke Geoscience Centre, Londonderry July 2012–February 2013. No core was accepted at the EC Andrews drill core facility, Broken Hill.

Contact: Kevin Capnerhurst, Senior Geologist Databases, kevin.capnerhurst@industry.nsw.gov.au

2012 DIGS® open file reports list

The 2012 DIGS® open file reports list is available online. It contains 26 coal, 504 mineral and 106 petroleum reports.

Contact: Wenlong Qian, Senior Geoscientist, wenlong.qian@industry.nsw.gov.au, 02 4931 6556

Free NSW Explorers Directory 2013

The NSW Explorers Directory 2013 is a mini DVD which showcases mineral exploration in NSW and details 118 junior and mid-tier exploration companies — many seeking partners. It has information on current hot prospects, prospective ground, and active mines and developments in NSW. It contains geology, mineral occurrence and geophysics data as Google Earth KMZ files, ESRI shapefiles and Arc Reader PMF format.

East Riverina Mapping Project

The east Riverina area is prospective for a range of deposit-styles, including intrusion-related tin–tungsten deposits (e.g. Ardlethan), orogenic gold (e.g. Mount Adrah) and copper–gold porphyry systems (e.g. The Dam prospect). There is also potential to find new outcrops of the Cobar Supergroup equivalents that are prospective for base metals.
Increasing land use pressure in the east Riverina region requires updating of existing geological data to enable informed land use decisions. The project incorporates geological mapping, a ground gravity survey (see below), a hydrogeochemical survey (see below) and tin prospectivity analysis. Products will be 1:100 000 scale geological maps, a 3D model of the basement geology and reports on exploration models and geophysical modelling.

Contact: John Greenfield, Team Leader, regional.mapping@industry.nsw.gov.au, 02 4931 6728

Riverina gravity survey

GSNSW is conducting a low impact, helicopter-borne gravity survey over the Young, Wagga Wagga, Albury and Kosciuszko regions, covering the Cootamundra, Wagga Wagga and Tallangatta (NSW portion) 1:250 000 map sheet areas in southern central NSW. Approximately 18 000 readings will be taken on a 2 km x 2 km grid. The survey will commence in early May and take three months to complete.
The data will be used to prepare a 3D geological model of the region and provide information on the distribution of different rock types at depth.

Contact: David Robson, Chief Geophysicist, david.robson@industry.nsw.gov.au, 02 4931 6717

East Riverina Hydrogeochemistry Project

This *New Frontiers* project, in conjunction with the CSIRO Australian Resources Research Centre and the Deep Exploration Technologies CRC, aims to obtain baseline coverage of hydrogeochemical data to provide a geochemical window to indicators of mineralisation in this area of poor outcrop. The area has good potential for extension of mineralised systems under the cover. Orogenic gold deposits and copper–gold porphyry systems are known to the east and the area contains fractionated S-type granites that are prospective for intrusion-related tin, tungsten, molybdenite and possibly rare earth elements. Wagga Wagga City Council and the NSW Office of Water are helping to locate and access the waterbores. Consequently, landowners are also benefiting from information about water salinity, flow rates and toxicity.

Contact: John Greenfield, Team Leader, regional.mapping@industry.nsw.gov.au, 02 4931 6728

Yathong Trough seismic survey

The seismic survey will explore the subsurface geology of the Yathong Trough to the south of Cobar using three seismic lines with a total length of 250 km. The data will be particularly useful to:

- improve understanding of the geometry of the south-eastern part of the Darling Basin;
- identify potential petroleum reservoirs;
- find deeply buried granites that may be suited to geothermal energy generation;
- identify deep, saline reservoirs suitable for geological carbon dioxide storage

This is a collaborative project with Geoscience Australia which is providing survey design and computer processing support.

Contact: David Robson, Chief Geophysicist, david.robson@industry.nsw.gov.au, 02 4931 6717

Western NSW Basement Interpretation Project

The project aims to create an interpretive geological map of the basement surface of western NSW using high resolution geophysical data sets and available geological information from (limited) outcrop, seismic surveys and drilling. The mapping will be stitched seamlessly into the Statewide Geology Geodatabase, which will provide a single point of truth for best available geological mapping in NSW. Major results include the improved classification of interpreted granite intrusions and recognition of major structures. The study has identified regions where basement occurs at depths viable for mineral exploration. Subtle features in the aeromagnetic data relate to basin structure and stratigraphy which includes sequences in the Cobar Supergroup and the Darling Basin. The study may have applications to petroleum exploration, groundwater investigations and geosequestration work.

Contact: John Greenfield, Team Leader, regional.mapping@industry.nsw.gov.au, 02 4931 6728

Geotourism Map of NSW

GSNSW contributed to the free Geotourism Map of NSW published by Cartoscope Pty Ltd as a TQUAL funded project. It shows 96 geological sites, tours or museums and contains short descriptions of site geology with map references.

Conferences

Resources & Energy Investment Symposium 2013, 19–22 May, Broken Hill

APPEA 2013 Conference and Exhibition 26–29 May Brisbane

Exploration in the House, 18 June, Sydney

Mining NSW Conference, 26–27 June, Orange

NSW Mineral Exploration & Investment 2013 Conference, 17–18 July, Sydney

ASEG–PESA 23rd International Geophysical Conference 11–14 August, Melbourne

Mines & Wines 2013, 11–14 September, Orange

Staff movements

Penny Wood has accepted the full time position of Senior Geologist in MEA
Dr Richard Glen has retired from his position of Senior Principal Research Scientist
Malcolm Drummond has accepted the position of Senior Geologist, Land Use Assessment
Kyle Hughes has commenced as a graduate officer, Regional Mapping & Exploration Geoscience
Andrew Helman has commenced as graduate officer, Land Use Assessment

Products

Geoscience Product Catalogue
Geophysical images and data
Online sales: www.shop.nsw.gov.au
Quarterly Notes

Enquiries

Maps and data packages: geoscience.products@industry.nsw.gov.au
Geophysical images and data: geophysics.products@industry.nsw.gov.au: Tel: 02 4931 6717
Counter sales: mineralpublication.orders@industry.nsw.gov.au Free call: 1300 736 122 Tel: 02 4931 6666
General product enquiries: Michael Hallett michael.hallett@industry.nsw.gov.au: Tel: 02 4931 6724

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View previous issues: http://www.resources.nsw.gov.au/publications/on-the-outcrop
Visit the Geological Survey of New South Wales website where you will find access to online systems DIGS®, MinView, EROL, GDW and GPC, upcoming events, GSNSW news, publications and product information.
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