

Open-file mineral exploration data in a digital world

by

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WAMEX via the Web

The Western Australian Department of Minerals and Energy (DME) is custodian of mineral exploration data submitted by tenement holders. The WAMEX database is the means by which the information within these reports is managed and retrieved.

The WAMEX database had previously been accessible to public users in the Department library, its Kalgoorlie office or by remote access (after registration) using emulator software. The user needed to be familiar with the terminology used in the database to conduct a successful search.

In 1999, a web-browser front end named 'WAMEX via the Web' was created to provide more user-friendly, intuitive access to the WAMEX database. This front end caters for the most common search parameters that the majority of customers use to find open-file exploration information. Users are not required to register and the database can be found by clicking on 'Computer Databases' and then 'WAMEX' in the DME web site at www.dme.wa.gov.au.

Searches can be conducted using any of the seven parameters on the search screen. These searchable parameters are:

- Area – 1:250 000 and 1:100 000 map sheets
- Tectonic units
- Target commodities
- Keywords
- Company names
- Tenement number
- WAMEX Item numbers

The value to be searched is selected from the drop-down lists which are attached to most of the fields. A maximum of three values can be selected in most fields. However, as boolean 'OR' operators are the defaults within each field, the greater the number of selections made within the same field, the broader will be the search result. The search result is narrowed by including values from another field, as the default boolean operators between fields are 'AND' operators.

The results of the search are displayed on the second screen and consist of a listing of projects with the WAMEX 'I' number and the duration of the project. The project title can be selected by clicking on it to bring up the third screen in the search results sequence. The third screen displays the following details of the project and reports:

- Item no. (including details of number of volumes, fiche, and release date)
- Project title
- Project reporting period
- Companies
- Commodities
- Map sheets
- Tectonic units
- Annotation (since Item 9800 includes abstracts for individual reports)
- Keywords
- Mineralization
- Assays (elements assayed)
- Remarks
- Map codes
- Tenements
- Prospects/localities

Further information about the individual reports which make up the project reporting may also be obtained from the fourth screen. The details listed on this screen are:

- WAMEX 'A' number
- Number of volumes
- Company
- Type of report
- Tenements covered by the report
- Period of exploration covered by the report
- Prospect or location
- Date report written
- Structure of report

Scanned open-file reports

As well as improving access to the WAMEX database, the Department is now releasing open-file reports in a digital medium.

Figure 1. Main search screen for WAMEX via the Web

Until mid-1999, open-file reports were released as microfiche. These fiche could be viewed at various Departmental offices or purchased if customers had access to microfiche-viewing facilities.

In 1999, standards for 'dumb' (non-optical character recognition) scanning of reports were developed and over 1200 reports representing 364 WAMEX 'items' that were due for release to open file were scanned by a number of contractors.

The hardcopy reports are scanned at 200 dpi resolution and written to CDRoms as Adobe PDF™ files. This format can be read using Adobe Acrobat™, a freely available viewing tool widely used for viewing documents incorporating graphics on the World Wide Web.

Originals up to A3 in size are scanned, when necessary in colour, whereas A2 and larger plans are scanned in grey scales only. 'Thumbnails' of all pages and plans within a report are constructed so that customers can rapidly navigate through large reports.

In addition, any geochemistry, drilling logs or geophysical data (apart from regional aeromagnetic data) that were submitted in digital form with hard-copy reports are 'zipped-up' with the scanned copy of the relevant report. The reports are then zipped up with other open-file reports from the same project to form a file which is indexed with the WAMEX 'I' number of the project.

Adoption of the Adobe PDF™ for release of scanned reports is consistent with the recently released 'Require-

ments For The Submission Of Mineral Exploration Data In Digital Format' that call for voluntary submission of exploration reports to DME in PDF™.

Because of the average large file size, it is not possible at this stage to make scanned reports available over the World Wide Web. The Department has appointed a panel of agents who have the ability to reproduce the scanned reports in the medium required by the customer. In addition, scanned reports are also available for viewing in the DME Library and at the Geological Survey of Western Australia (GSWA) Kalgoorlie Office.

By adopting a strategy of scanning legacy statutory reports as they go onto open file, and releasing guidelines to accept new reports in digital form, GSWA is using a two-pronged attack on the issue of improved access to statutory data. These two strategies, combined with WAMEX via the Web, represent a significant advance in service provided to mineral exploration geologists, both in Western Australia and elsewhere. Improved access to quality exploration data helps to promote Western Australia's prospectivity and reduces risk involved in exploration investment.

With changes in Internet communications technology, GSWA hopes that it will be possible in the medium term to deliver statutory data to customers via the World Wide Web.