

Minnesota Mineral Resources Database Tipsheet for Minarchive Users

This guide provides information to assist users with the transition from the Minarchive database and web application to its successor, the Minnesota Mineral Resources Database (MMRD).

MMRD purpose and description

The MMRD was created by the Minnesota Department of Natural Resources (DNR) and Minnesota IT Services (MNIT) to preserve, curate, and distribute mineral exploration and other mineral resource-related documents. MMRD is a continuously growing archive featuring thousands of never-before digitized public documents as well as the collection of its predecessor database, Minarchive.

Minarchive and MMRD application comparison

Like Minarchive, the MMRD provides a multi-faceted search application that offers users tools to identify and retrieve documents by attributes and keywords, such as mineral commodity, explorer or agency, time period, and specific geoscientific content.

Compared to the Minarchive attribute search (first released in 1999), the MMRD's search functionality is more flexible and includes a text search, adapts to on-the-fly searches to help users drill down to specific documents of interest. This database also offers a wider range of document details including a preview image. Additional details, illustrations, and tips can be found in the [MMRD User Guide](#).

Minarchive database migration

Minarchive's database stored dozens of attributes about each document, such as scientific content, dates, public land survey, company, and comments. The MMRD also stores these attributes as well, so a migration and translation was carefully planned and run to import the entire Minarchive database to the MMRD and preserve the historical knowledge of the first-generation database.

Significantly, document titles were not created for documents in Minarchive. Rather, document titles were created by combining the public land survey where the document was derived and the number of documents within a collection. For example, a Minarchive title of "059-12-04-008" is the eighth document from in a particular collection from section 4 in township 59 north, range 12 west.

In the MMRD, a construct using the original Minarchive file name and the prefix 'MNA' has been used to identify these documents in MMRD. The MNA title contains digits identifying township-range-section as well as document codes from the original curation. These generic MNA titles will eventually be replaced over time with the richer descriptive MMRD titles seen in non-Minarchive collections. Similarly, the MMRD curation team is continuously evaluating and updating entries to add and improve data from the automated migration.

The Minarchive database contained thousands of records and a downloadable document for the most of them. During migration, it was discovered that just under 800 records had no corresponding DNR-sourced download. Many of these were graduate theses, peer-reviewed scientific journal articles, reports published by federal agencies, the University of Minnesota, and other such organizations, and are in most cases available from their originating source. These records without a downloadable document from DNR have not been republished to the MMRD but will be reassessed as an ongoing task by the MMRD curation team.

MMRD Accessibility

Considerable attention was given to application accessibility, including compliance testing and design for WCAG standards for such things as mouseless navigation, color contrast, and page element tagging. In addition to the application framework, MMRD PDF documents have been processed for text recognition, page structure, and provided rich embedded metadata including attributes from the MMRD.

MMRD, drill holes, and the Drill Core Library

Minarchive has historically been used by many researchers and explorers to review drill logs, assays, and seek drill holes and drill core samples to investigate further. The MMRD serves this usage with clear identification of documents containing drill logs, assays, with document scope 'Drill Hole', and by identifying known drill hole names referenced in any given document. The work of extracting and reporting all identifiable drill hole information from the historical library is ongoing.

More information on access to Drill Core Library holdings including borrowing and sampling policies, contacts, and request forms may be found on the facility's [DNR web page](#).