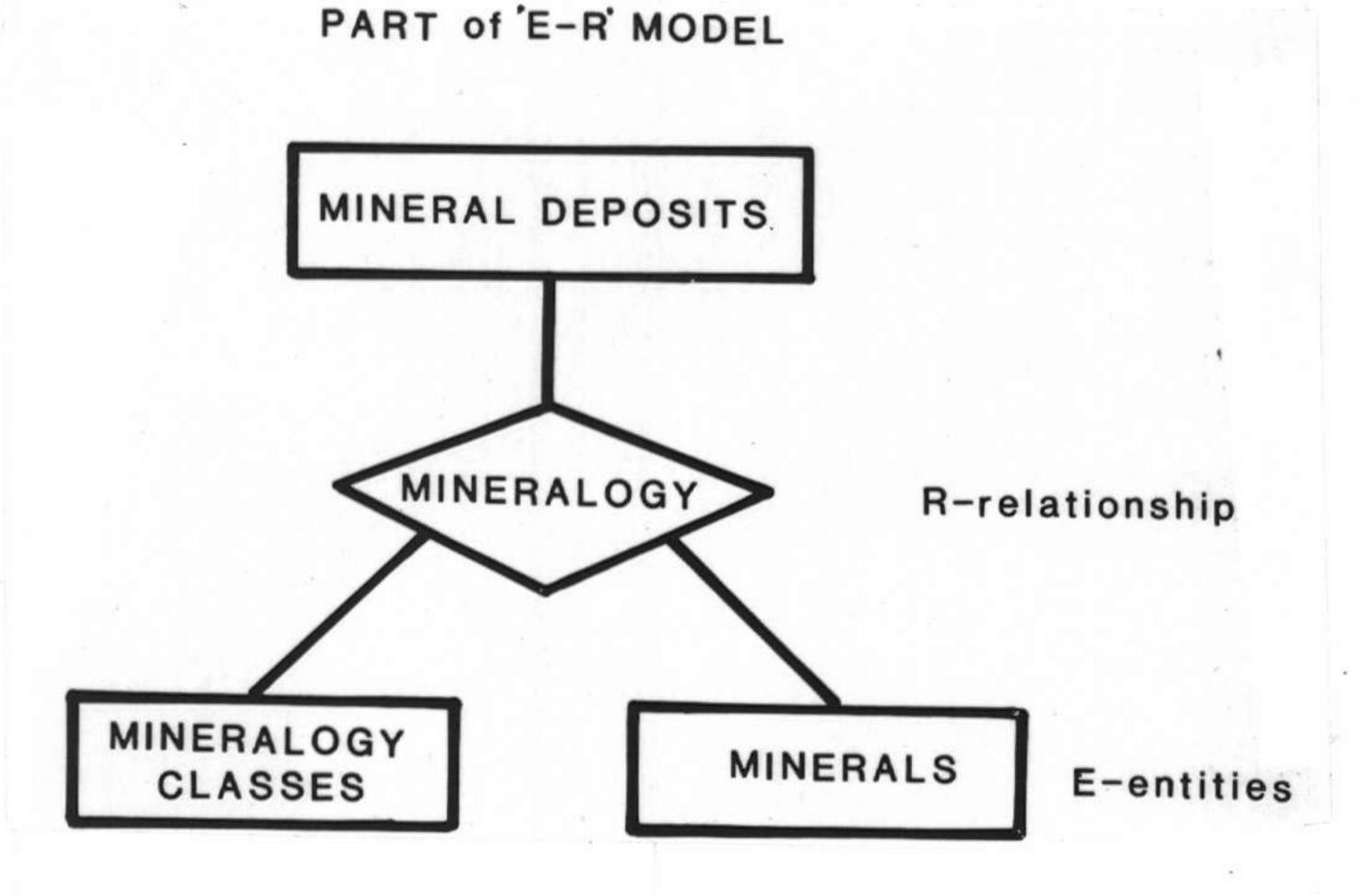## MINFILE/vax

### INTRODUCTION

The Geological Survey Branch manages a computer-based mineral inventory system called MINFILE, which contains in excess of 10,000 occurrence descriptions for all of British Columbia. Information on 50% of the occurrences in the file has been updated. Improved computer access and search capabilities have been developed for both mainframe and microcomputers.

Historic and current geological information is summarized, coded and stored in the MINFILE relational database. MINFILE contains information on metallic, industrial mineral and coal occurrences. An occurrence is defined as in-situ bedrock or placer mineralization either on surface, in drill holes or underground workings: it does not include float, geochemical or geophysical anomalies.

The information contained in this database is a valuable reference and research tool for mineral exploration, academic studies and resource management.

PART of 'E-R' MODEL



### MINFILE/vax DATABASE DESIGN

MINFILE/vax is a relational database programmed for a VAX computer. This powerful analytical tool is accessed by using third and fourth generation computer languages and will provide information-output in response to specified queries.
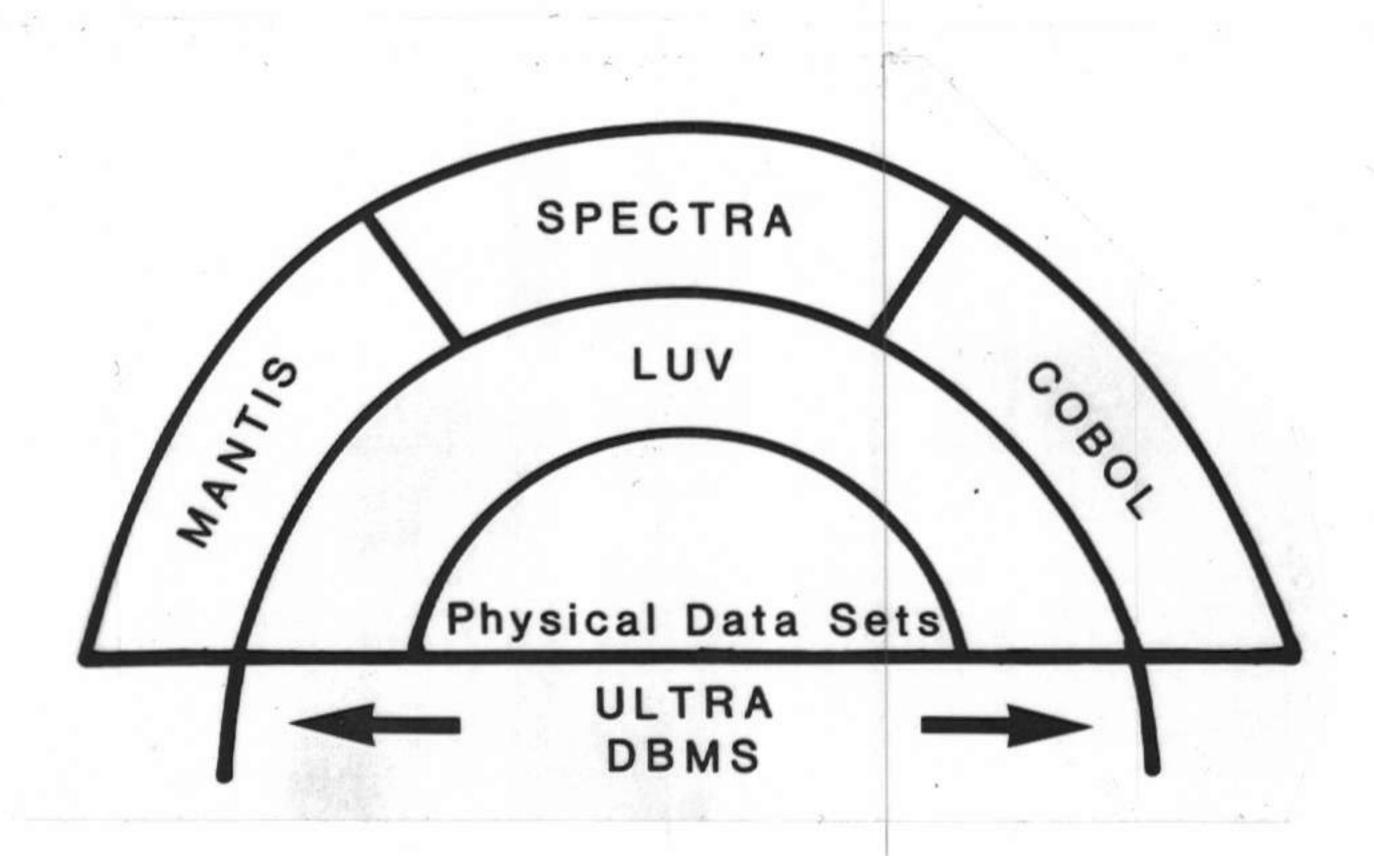
The database design uses an 'entity-relationship' model comprised of tables of codes (entities), with interrelated tables of deposit data, containing common MINFILE numbers. These codes, for such things as rock and mineral names, save computer file space and result in substantial improvements in database access and file management.

The strength of the MINFILE system is its ability to efficiently search, sort and manipulate data entered into various information fields.

### COMPUTER SOFTWARE

ULTRA*, a directory driven database management system (DBMS), was designed for VAX computers using the VMS operating system. The user interacts with the database either by input screens or through the Logical User Views (LUVS). LUVS insulate programs written in COBOL, FORTRAN, BASIC or MANTIS* from the physical data sets.

SPECTRA* is a fourth generation language used to query sets of data. Customized SPECTRA searches enable extraction of information to produce output reports.



### INPUT/DATA COLLECTION

Deposit information is compiled and entered into appropriate data fields. Descriptions of the occurrences are written and coded by Ministry geologists using standard codes listed in the MINFILE Coding Manual. Historic information cited includes Ministry reports, published articles and industry assessment report data. Comprehensive geological decriptions and bibliographies are provided for each deposit. Production, reserves and best assay data are also compiled. Brief work histories are planned. Collectively, this information forms an excellent database that can be used to evaluate mineral occurrence characteristics and distribution.

### AVAILABLE OUTPUT AND COSTS

Data stored in MINFILE/vax is available in the following formats:

- Hardcopy printouts by map sheet (variable cost)
- Mineral Occurrence Maps - 1:250 000 scale ($3.00/map)
- Data diskettes - 5 1/4 inch ($5.00/diskette)

Data diskettes, arranged in standard ASCII format files, contain the entire database for each map sheet. The files, once loaded onto a hard disk, are processible by common database management programs or by MINFILE/pc, a custom search program developed by the Branch (see MINFILE/pc Pamphlet). A utility diskette to assist loading of the data accompanies the data diskettes. Data by NTS map sheet is being released periodically as the coded information becomes available.

Other products include:

- MINFILE Coding Manual ($7.50)
- Property File photocopies ($0.25/page)
- MINFILE/pc Search Program (no charge)

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MINFILE: A Mineral Deposit System