UNILOG - A COMPUTER BASED UNIFIED DRILL CORE LOGGING SYSTEM

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ABSTRACT

The UNILOG drill core logging program is a portable-computer based multi-commodity core logging database management system being developed by Cameco. The UNILOG program is the logical outcome of the use of the Cameco developed HP-1000 mini-computer based ULOG drill core logging program that has been in use since 1983.

Portable computers, printers and plotters are used at the exploration site. Drill core lithological, alteration, structural and sampling information is recorded using simple codes relating the features to specific depths in the drill hole. This coded data is subsequently entered into the computer data base using menu driven data input screens. With subsequent data input verification and editing, the database storage process is complete.

A full range of powerful user-defined database retrieval functions are available to allow for the display, storage and reporting of data that are of interest.

Graphical representations of the database are accomplished through the UNIGRAPH program module. Graphic capabilities include deviated sectional and plan view maps of drill hole lithological, alteration, structural and assay data. UNILOG generated database files can also be transferred to spreadsheets and other graphics programs. Anticipated future developments include the continued refinement of the program and database links to a geographic information system.

UNILOG is currently used on the majority of Cameco's exploration projects. It is an innovative exploration tool which has assisted in the standardization of core descriptions and allowed for a more reliable compilation, correlation and interpretation of large geological databases. Drill hole data can be thoroughly evaluated within the time frame of the current program, allowing the geologist to select successive drill hole locations based upon a more rigorous technical appraisal.