

ANALYSIS OF GEOLOGICAL INFORMATION ON COMPUTER FILES

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Computer data files can cope adequately with the ever increasing amount of factual data (quantitative). Besides these measured values, geological information contains a good deal of subjective descriptions and interpretations based on facts (unambiguous, ambiguous, fiction).

Such information can also be stored on a computer file on the condition that the geological terms and codes used are clearly defined and that these definitions are adhered to by the users of the file. This is necessary to maintain the consistency of the file.

At present a large number of different geological files are being used by different geological institutions, universities and industrial companies. In the future the terms and codes used on geological files will have to be standardised, to facilitate the exchange of basic information. Meanwhile the available data on the computer files can be handled mechanically and transferred from one system to another without additional manual work by the geologist.

To increase the practical application of geological data on file, all information should be related to the geographical

position and the depth to which this observation belongs. Layer maps can be obtained mechanically if this information is also related to the stratigraphical interval concerned. Interpretations should always be accompanied by an indication concerning the reliability of this information.

Most files are set up for a specific purpose which determines the pieces of information to be recorded systematically. However, the user should be allowed to introduce additional data-items, especially in geological data files.

Basic geological information must be compiled by the geologist anyhow.

By recording these data in computer compatible format at an early stage of the study, the geologist will have the possibility to take advantage of the ever increasing computer facilities. The information on file can be handled mechanically, providing listings or maps and sections on any scale in an efficient way and at relatively low costs.

Lezing KNGMG 28-11-'73.