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Bibliography of Borehole Geophysics as Applied to Ground-Water Hydrology

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By Ticie A. Taylor and Joyce A. Dey

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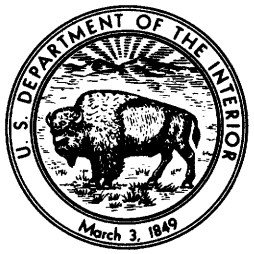

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CONTENTS

BIBLIOGRAPHY OF BOREHOLE GEOPHYSICS AS APPLIED TO GROUND-WATER HYDROLOGY

By T. A. TAYLOR and J. A. DEY

ABSTRACT

Most of the references on borehole geophysics that are relevant to ground-water hydrology are contained in this bibliography, but it does not include every reference that is available under each subject heading; the literature is much too extensive to compile a complete listing.

Some of the references may appear under more than one subject heading because the references commonly relate to more than one main topic. Many articles have been cross-referenced in order to assist the reader in locating an article. For example, the article entitled, "Application of the acoustic televiewer to the characterization of hydraulic fractures in geothermal wells" is listed under both "Acoustic televiewer," and "Geothermal".

The bibliography is intended to lead the reader to other articles on borehole-geophysical logging and related subjects, because each article cited also will have a list of references, which may be more specialized, covering many subjects with related applications, such as physics, mathematics, chemistry, geology, electronics, acoustics, hydrology, and surface geophysics. However, not all of these related subject headings could be included in this bibliography.

INTRODUCTION

A bibliography was developed to help Earth scientists who were having difficulty in locating and obtaining adequate information on borehole geophysics as applied to ground-water hydrology. Because many of the articles on this broad subject are published in technical journals or proceedings/transactions that have a limited distribution, a system to categorize these publications for easy referral was developed. The U.S. Geological Survey has been developing this listing for 20 years for agency use, but the numerous requests for copies of the listing made it imperative that it be published.

The original listings subsequently have been entered into a computer, which makes it easier to modify and update by adding new articles as they become available. Furthermore, a user can quickly obtain a listing of references on a specific topic, or by a specific author, without searching through hundreds of pages of reference listings. Because this bibliography is stored in a computer, it can and will be updated as the need occurs.

The organization is for the users' convenience. Subject headings, as listed in the table of contents, comprise the main divisions of the publication. Author citations are listed alphabetically under each subject, giving complete title and publication data. The subject headings primarily deal with the principal method of well logging or the dominant application of the publication within the broad field of ground-water hydrology, such as waste disposal, geothermal, and oil shale, or both. An author index for the papers cited has been included at the end of this publication, as a further aid to the user.

No specific time period was established for articles to be included, but a cutoff date of July 1983 was necessary. Nor do the articles have a geographic boundary—many of the articles have been written by authors world-wide. Most of these articles are in English, or have been translated into English. However, a few articles in the original French were included, which have not been formally translated, but have been indicated by placing the label "(French)" in the listing.

The large volume of published material currently available makes it impossible for any one individual or small group to review and list all publications related to borehole geophysics as applied to ground-water hydrology. Other, professional, retrieval methods such as abstracting and indexing of journal articles (U.S. Department of Commerce, 1981) and developing computer-based storage and retrieval systems (University of Tulsa, 1983) are additional tools for meeting this need.

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