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GEOLOGICAL SURVEY

Bibliography of Well-Log Applications  
Cumulative Edition (Through 1 September 1990)

by

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This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey  
editorial standards and stratigraphic nomenclature

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## Introduction

The purpose of this bibliography is to emphasize the *application* and various uses of well-log data. The topical organization is loosely based on research interests within the U.S. Geological Survey (USGS). In this edition, I have re-classified many papers and re-organized the structure of the bibliography, adding several new topical areas in the process. The following general criteria are applied to papers to determine whether they will be included: 1) the paper must be written in English, 2) it must be obtainable by a research library, 3) the most of the paper should discuss a particular application of well-log data or have immediate impact on the use of such data. Consequently, papers concerning theoretical or mathematical subjects (i.e., modelling), instrumentation design and development, and laboratory research, are generally excluded. For lack of space, abstracts are excluded (except for extended abstracts) and cross-indexing has been kept to a minimum.

This version of the *Bibliography of Well-Log Applications* is a new, cumulative edition, which combines the original bibliography (Prensky, 1987) with the published annual updates (Prensky, 1987, 1988, 1989) including the one for 1989-90 (in press). The bibliography now has over 2,700 individual citations. No attempt has been made either to cull older citations, which by now may have been superseded by newer papers, or to select the "best" papers on a particular topic. All papers that come to my attention, which meet the criteria stated above, and which could be obtained by the USGS library, are included.

I wish to acknowledge the assistance of the staff at the Denver branch of the USGS library, especially that of Ms. Suzanne Powers. Their diligence, in tracking down and obtaining the papers listed herein, has made this bibliography possible.

## *Cumulative Bibliography on Diskette*

This cumulative edition is available on diskette as well as microfiche. The microfiche copy, released as OF 90-637A, contains 360 pages; there are three Macintosh diskettes (low density, 800K, one for each of parts A-C) containing one text file each, written in Microsoft Word v4.0, released as OF 90-637B; similarly, there are 3 PC diskettes (5-1/4 inch, high density, 1.2Mb) written in WordPerfect v5.0, released as OF 90-637C.

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**V. Acoustic Logging**  
**(Including P and S, Full Waveform, Borehole Seismic, and VSP)**  
 (See also 15. Fracture detection)

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**VI. Nuclear Logging; Geochemical Logging (Elemental Analysis)**  
(See also IV. Cased hole logging; 18. Mineral evaluation)

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(See also V. Acoustic logging; VII. Shaly sands; 15. Fracture detection)

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**XI. Temperature Logging, Determination of Static BHT;  
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## XII. Conditions and Special Situations Affecting Tool Response

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### 3. DETERMINATION OF FACIES AND DEPOSITIONAL ENVIRONMENT

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**15. FRACTURE DETECTION AND EVALUATION;  
WELLBORE BREAKOUTS AND IN SITU STRESS ANALYSIS**  
(See also 19. Ground water; 20. Igneous rocks; 21. Geothermal logging)

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## 19. GROUND WATER APPLICATIONS

(See also 15. Fracture detection; 20. Igneous rocks)

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(See also 15. Fracture detection; 19. Ground water; 21. Geothermal)

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(See also XI. Temperature logging; 15. Fracture detection;  
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