Record Nr. UNINA9910299454003321 Autore Wang Da Titolo The China Continental Scientific Drilling Project [[electronic resource]]: CCSD-1 Well Drilling Engineering and Construction / / by Da Wang, Wei Zhang, Xiaoxi Zhang, Guolong Zhao, Rugiang Zuo, Jialu Ni, Gansheng Yang, Jun Jia, Kaihua Yang, Yongyi Zhu, Wenwei Xie, Wenjian Zhu, Peifeng Zhang, Lasheng Fan, Jianliang Ye, Yongping Wang Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 2015 **ISBN** 3-662-46557-4 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (375 p.) Springer Geology, , 2197-9545 Collana Disciplina 622.5 Soggetti Structural geology Engineering geology Engineering—Geology Foundations Hydraulics Structural Geology Geoengineering, Foundations, Hydraulics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Nota di contenuto Background -- Drilling Engineering Design -- Well Site and Drilling Equipment -- Construction Situation -- Hard Rock Deep Well Core Drilling Techniques -- Diamond Core Drill Bit.-Reaming Drilling Techniques of Hard Crystalline Rock -- Well-Deviation Control Techniques for Strong Dipping Strata -- Drilling Fluids and Solids Control Technology -- Casing and Well Cementation -- Drilling Data Acquisition -- Technical Economical Analysis.

Sommario/riassunto

This book comprehensively introduces the drilling theory and practice behind CCSD-1 well drilling, the first stage of a key national scientific engineering project of China. In addition to access to variety of data and information accumulated decade during the project's decade-long operation, readers also gain insight into state-of-the-art techniques and most recent achievements in China's scientific drilling industry.

Specifically, this work introduces the drilling engineering design, well site construction, and equipment and construction situation. It also provides a minute description on the new techniques that were developed for tackling the technical difficulties, expounds in detail the core drilling techniques for hard rock deep well, and treats diamond core drill bits, reaming drilling techniques in hard crystalline rocks, well-deviation control techniques for strong dipping strata, and much more. In summary, this book offers a valuable resource for engineers and technicians who engage in scientific drilling and a variety of resource drilling engineering; teachers and students who are interested in this field will also gain plentiful information. Prof. Da Wang, the former deputy director of China Geological Survey, was the director of the Engineering Centre, chief engineer and drill-site general director of China Continental Scientific Drilling Project.