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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

DZ/T 0054-2014

Replacing DZ/T 0054-1993

**Technical Specification for Directional Drilling
(English Translation)**

Issued on: January 1, 1970

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard is based on the important technical content of DZ/T 0054-1993 "Directional Drilling Technical Specifications", the name and chapter of the standard.

The structure of the section, the technical content of the chapter and the contents of the attachment were supplemented and revised. Compared with DZ/T 0054-1993, except for editorial changes the main technical changes are as follows.

--- The name of the standard was changed to "Directive Drilling Technical Regulations";

--- Added structural content such as "preface", "item" and "references";

--- Added "normative reference documents", "special directional hole drilling", "directional hole trajectory control", "directional drilling measurement and trajectory calculation", etc.

Chapters and technical modifications to the text layout;

--- Selection of directional drilling design, directional drilling equipment and equipment, directional drilling construction technology, prevention of directional drilling accidents and the chapters have been revised considerably;

--- Removed some of the technology is too old and inappropriate, supplemented with new equipment, new appliances, new technologies and new processes;

--- Removed the recommended mud pump, continuous whipstock and hydraulic bottom hole power drill in "Selection of Directional Drilling Equipment and Appliances" with the parameter list; supplement the slanting drilling slanting record table, the final hole acceptance measurement record table and the directional hole axis trajectory coordinate calculation table and other forms;

--- Added two appendices for "orientation tool angle-oriented calculation formula" and "orientation hole axis trajectory calculation method".

This standard was proposed by the Ministry of Land and Resources of the People's

Republic of China.

This standard is under the jurisdiction of the National Land Resources Standardization Technical Committee (SAC/TC93).

This standard was drafted. Institute of Exploration Technology, Chinese Academy of Geological Sciences.

1 Scope

This standard specifies the design of directional drilling, equipment selection, construction technology, trajectory control and measurement, accident prevention and treatment and construction.

Technical requirements such as management.

This standard applies to directional drilling in geological core drilling engineering, survey, engineering construction, hydrology water well drilling and oil and gas well drilling refer to this standard for directional drilling design and construction.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only the dated version applies to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 5005 drilling fluid material specification GB 9151 drilling engineering terminology
AQ2004 Geological Exploration Safety Regulations DZ/T 0227 Geological Core Drilling Procedure

3 Terms and definitions

The following terms and definitions apply to this document. For ease of use, the following is a list of some of the aspects of directional drilling in GB 9151.

Language and definition, and supplement and improve.

Directional drilling directionalborehole Using the natural bending law of the borehole or using an artificial slanting tool to make the borehole bend, forcing the axis of the borehole to extend according to the design trajectory a method of drilling.

Primary directional hole preliminarydirectionalborehole Using conventional techniques and techniques, the directional holes that are naturally inclined and regularly formed by the formation are utilized.

Controlled directional hole controlleddirectionalborehole A boring machine and process

measures are used to drill the borehole axis along the design trajectory.

Main hole mainborehole the borehole axis is the borehole that is first designed and constructed.

Branch hole branchborehole A directional hole that branches off from the main hole.

Horizontal directional hole horizontalborehole the borehole end hole axis is close to the horizontal directional hole.