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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 13908-2020

Replacing GB/T 13908-2002

General requirements for solid mineral exploration

固体矿产地质勘查规范总则

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 13908-2002 "General Rules for Geological Exploration of Solid Minerals" This standard is compatible with GB/T 13908-2002 Compared, the main technical content changes are as follows:

--- Adjusted the rules and regulations;

--- Added basic principles of survey (see Chapter 3);

--- The pre-inspection stage was cancelled, and the connotation of each investigation stage was modified according to GB/T 17766 (see Chapter 4,

4.3 in the.2002 edition);

--- Combining the degree of exploration research and the degree of exploration control into the degree of exploration work (see Chapter 6,

4.2 of the.2002 edition);

--- Added the survey types of "reasonably determine the spacing of the survey project and deploy the survey project" and "effectively verify the continuity of the ore body" Determine the purpose (see 6.1.1.1);

--- Added determination criteria for major ore bodies (see 6.1.1.2), conditions for determining the type of exploration (see 6.1.1.3) and requirements (see 6.1.1.5) and The "Three Lines Principle" (see 6.1.1.6) for determining the type of survey;

--- Increase the connotation of the basic survey engineering distance (see 6.1.2.1);

--- Increased the depth of investigation (see 6.1.4) and the requirements for comprehensive evaluation of comprehensive investigation (see 6.1.5.2);

--- Revised the technical performance research and test requirements for ore processing and smelting (see 5.4, 6.2.5, 6.3.4, 6.4.4, 8.8,.2002 edition) 4.1.4);

--- Increased the principle of determining the proportion of resources and the reference requirements for the proportion of resources in each exploration stage of metal and non-metallic deposits (see 6.3.6,

6.4.6 and Appendix A);

1 Scope

China's national general requirements for solid mineral exploration - the framework standard for the geological investigation of ore deposits, and the document from which the whole family of commodity-specific exploration standards hangs. It specifies the basic principles of solid mineral geological exploration, the purpose and the stages of exploration, the content and the degree of the exploration work, green exploration, the exploration work and its quality, the feasibility evaluation, the conditions for the resource and reserve types, and the estimation of resources and reserves. Exploration is a staged activity, and the staging is the substance of the standard: reconnaissance, general exploration, detailed exploration and exploration proper, each with a defined purpose, a defined density of work and a defined degree of confidence in the result. What that structure exists to prevent is money spent at the wrong resolution - drilling a close-spaced grid on ground that has not been shown to be worth it, or declaring a reserve on data too sparse to support one. The classification of resources and reserves follows directly from the stage and the confidence, and it is the part with the largest consequences: those categories are what appear in a company's accounts, what a mining licence is granted against, and what an investment is justified by, so the conditions under which material may be placed in each are effectively financial rules written in geological language. The clause on green exploration is newer and reflects a real change in practice: it requires the environmental impact of the exploration itself - the access tracks, the drill pads, the drilling fluids, the disturbance - to be minimised

and remediated, in a phase of a project that historically was treated as too temporary to matter. Issued on 28 April 2020 and in force since 1 May 2020, it replaces GB/T 13908-2002.

This standard stipulates the basic principles of solid mineral geological exploration (hereinafter referred to as exploration), the purpose of exploration and the stage of exploration, and Content, degree of exploration work, green exploration, exploration work and its quality, feasibility evaluation, resource reserve type conditions, resource reserve estimation, etc. Claim. This standard is applicable to the overall work deployment of solid mineral exploration at various stages, and is also applicable to guide the exploration specifications and techniques of solid mineral minerals (groups) Technical requirements and the preparation of relevant specifications and procedures.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this article Pieces. For the cited documents without date, the latest version (including all amendments) applies to this document.

GB/T 17766 Classification of reserves of solid mineral resources

3 Basic principles

3.1 Prospecting in accordance with the law, green prospecting, comprehensive survey, rational use and protection of mineral resources.

3.2 The technology is feasible, economically reasonable, and the environment permits.

3.3 Starting from the actual occurrence of mineral resources, to meet the needs of the degree of exploration work and to achieve the purpose of the exploration as a guideline, correct processing methods and objectives , Partial and whole, need and possible relationship.

3.4 Follow the rules of geological prospecting, step by step.

3.5 Survey, research and optimization design.

4 Survey purpose and survey stage

4.1 Purpose of investigation Discover and evaluate deposits (body) that can be further explored or mined, provide relevant geological information for exploration or development decisions, and ultimately mine The construction design provides the necessary geological data to reduce the investment risk of the exploration and development of the deposit and obtain reasonable economic benefits.