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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 29119-2023

Technical specification of coalbed methane resource prospecting

煤层气资源勘查技术规范

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Foreword

This document is in accordance with the provisions of GB/T 1:1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules for Standardization Documents" drafting. This document replaces GB/T 29119-2012 "Technical Specifications for Exploration of Coalbed Methane Resources": Compared with GB/T 29119-2012, except the structure In addition to adjustments and editorial changes, the main technical content changes are as follows:

a) Changed the terms and definitions of coalbed methane, coalbed methane resources, coalbed methane geological reserves, exploration wells, parameter wells and drainage wells, etc: content (see Chapter 3, Chapter 3 of the:2012 edition);

b) Changed the relevant content in the basic principles of coalbed methane resource exploration, and added coalbed methane resource exploration and green exploration in coal mining areas Basic principles (see Chapter 4, Chapter 4 of the:2012 edition);

c) Changed the stage division of coalbed methane resource exploration, and changed the work tasks and work levels of each stage (see Chapter 5,:2012 edition Chapter 5);

d) Changed part of the content of coalbed methane resource exploration engineering and technical requirements (see Chapter 7 of the:2012 edition of Chapter 6:1 and 6:2);

e) Changed the content of coalbed methane resource exploration in coal resource exploration (see Chapter 7, Chapter 6 of the:2012 edition);

f) The chapter on coalbed methane resources/reserves calculation is deleted, and the relevant content and requirements are simplified and changed to the stage of coalbed methane resource exploration and its engineering: In the chapters of task and work level (see Chapter 8 of the:2012 edition);

g) The content of coalbed methane resource exploration in coal mining areas has been added (see Chapter 8);

h) Deleted the "Regulations on the names, symbols, units and effective digits of the parameters for the calculation of coalbed methane reserves" and "Calculation of coalbed methane resources/reserves Methods" and "Main Contents of Feasibility Study" (see Appendix A, Appendix F and Appendix G of the:2012 edition);

i) The content of "Basic Well Spacing for Estimation of Proven Coalbed Methane Geological Reserves" has been changed (see Appendix D, Appendix C of the:2012 edition): Please note that some contents of this document may refer to patents: The issuing agency of this document assumes no responsibility for identifying patents: This document was proposed by the China Coal Industry Association: This document is under the jurisdiction of the National Coal Standardization Technical Committee (SAC/TC42): This document was drafted by: China Coal Geology Administration, Oil and Gas Resources Strategic Research Center of the Ministry of Natural Resources, China University of Mining and Technology, Yian Lanyan Coal and Coalbed Methane Mining Technology Co:, Ltd:, PetroChina Coalbed Methane Co:, Ltd:, China Coal Geological Group Co:, Ltd:, China United Coalbed Methane Co:, Ltd: Co:, Ltd:, Jiangsu Geology and Mineral Resources Design and Research Institute (Testing Center of China Coal Geology Administration), Hebei Coalfield Geology Bureau, China Coal Science and Engineering Group Xi'an Research Institute (Group) Co:, Ltd: The main drafters of this document: Pan Shuren, Han Zheng, Qin Yong, Li Guofu, Wen Statement, Lin Zhongxiang, Zhang Guchun, Zhang Shouren, Zhang Xinsheng, Zheng Yuzhu, Wu Guoqiang, Fu Xuehai, Zhou Liming, Huang Yong, Zhang Weisheng, Xiong Tao, Zhu Baocun, Liu Yaran, Wang Wenqiang, Wang Fuguo, Zhang Diankun: This document was first published in:2012, and this is the first revision: Technical specification for coalbed methane resource exploration

1 Scope

GB/T 29119-2023 specifies the exploration of coalbed methane resources. CBM is gas adsorbed onto the coal itself rather than held in pore space, so almost nothing from conventional gas exploration transfers: the resource is estimated from gas content and coal thickness rather than from a reservoir volume, and its producibility depends on permeability and on whether the seam can be dewatered. China holds one of the largest CBM resources in the world and has struggled to produce it, which makes the exploration standard consequential. It sets the basic principles, the exploration stages with their tasks and levels of work, the exploration engineering and its technical requirements, and then CBM exploration carried out within coal exploration and within a mining area, covering mines under construction, in production and closed. It replaces GB/T 29119-2012 and took effect on 1 December 2023.

This document establishes the basic principles of coalbed methane resource exploration,

and stipulates the exploration stages, tasks, work levels, exploration engineering and technical standards: technology, coalbed methane resource exploration in coal exploration, coalbed methane resource exploration in coal mining areas, coalbed methane data catalog, comprehensive research and report compilation system requirements: This document applies to the exploration of coalbed methane resources:

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text: Among them, dated references For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to this document:

GB/T 212 Industrial Analysis Methods of Coal

GB/T 13610 Gas Chromatography for Compositional Analysis of Natural Gas

GB/T 19492 Classification of Oil and Gas Mineral Resources and Reserves

GB/T 19559 Determination method of coalbed methane content

GB/T 19560 Coal High Pressure Isothermal Adsorption Test Method

GB/T 30732 Coal industrial analysis method instrument method DZ/T 0216-2020 Coalbed Methane Reserve Estimation Specification DZ/T 0343 Coalbed Methane Proven Reserves Report Compilation Specification

3 Terms and Definitions

The following terms and definitions defined in DZ/T 0216-2020 apply to this document: 3:

1 Coalbed methane coalbedmethane Occurrence in coal seams, the original state of occurrence is mainly adsorbed on the surface of coal matrix particles, and is free in coal cleats, cracks and pores or dissolved Hydrocarbon gas with methane as the main component is dissolved in coal seam water as an auxiliary solution: [Source: DZ/T 0216-2020, 3:1, modified] 3:

2 To be discovered without drilling verification, the coalbed methane estimated through the comprehensive geological conditions, geological law research and geological survey of coalbed methane quantity: 3:

3 After coalbed methane is discovered in well drilling, the amount of coalbed methane is estimated based on data such as seismic, drilling, mud logging, well logging and testing:

Note: Coalbed methane geological reserves include predicted geological reserves, probable geological reserves and proven geological reserves: The degree of knowledge is

in order from low to high: