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

GB/T 33684-2025

Replacing GB/T 33684-2017

**Technical specification for seismic data interpretation of
petroleum**

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. This document replaces GB/T 33684-2017 "Technical Specification for Interpretation of Seismic Exploration Data". Compared with GB/T 33684-2017, except for the conclusion... Aside from structural adjustments and editorial changes, the main technical changes are as follows:

a) The content of "Terms and Definitions" has been changed (see Chapter 3, Chapter 3 of the.2017 edition);

- b) Some content in the "Basic Work" section has been changed (see Chapter 4, 4.1, 4.2, 4.5, and 4.6 in the.2017 edition), and manual explanations have been removed. (See 4.2.3 in the.2017 edition) and the naming of seismic reflection horizons (see 4.4 in the.2017 edition);
- c) Added content on "Seismic Interpretation Technology Design" (see Chapter 5);
- d) The content of "Structural Interpretation of Seismic Data" has been revised (see Chapter 6, 4.3, Chapter 5, and Chapter 6 of the.2017 edition);
- e) Added technical requirements and quality control content for "seismic sequence stratigraphy interpretation" (see Chapter 7);
- f) The section on "Confirmation of the Rationality of Geological Interpretation of Seismic Data" has been removed (see Chapter 7 of the.2017 edition);
- g) The section on "Drilling Compliance Check of Structural Diagrams" has been removed (see Chapter 8 of the.2017 edition);
- h) Added technical requirements and quality inspection content for "reservoir prediction" (see Chapter 8);
- i) Added content, technical requirements, and quality control details for "Description and Evaluation of Closed-Circle and Dessert Elements" (see Chapter 9);

1 Scope

GB/T 33684-2025 is the Chinese national standard covering turning a seismic volume into a geological picture - the well tie and the synthetic seismogram, the horizon and fault picking, the velocity model and the depth conversion, the attribute analysis, and the uncertainty that has to be stated with the prospect. At 20,000 words. It replaces GB/T 33684-2017, with the acquisition standard GB/T 33583-2025. In force from 1 May 2026. Issued on 5 October 2025, it has been in force since 1 May 2026, replacing GB/T 33684-2017.

This document specifies the basic work, seismic interpretation technology design, and seismic... Data structural interpretation, seismic sequence stratigraphy interpretation, reservoir prediction, trap and sweet spot element description and evaluation, comprehensive geological research, and report writing. Requirements for content and deliverables submission. This document applies to the interpretation of two-dimensional and three-dimensional seismic data in the oil and gas exploration and development industry. It also applies to solid mineral surveys and geothermal resource exploration. This can be used as a reference in areas such as exploration and gas storage site selection.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 8423.1 Terminology for the Oil and Gas Industry - Part

3 Terms and Definitions

The definitions in GB/T 8423.1, GB/T 8423.2, GB/T 18190, GB/T 33583, GB/T 33685 and SY/T 5735 and The following terms and definitions apply to this document.

3.1 In-phase axis seismic event Lines connecting the same phase of each wave in the earthquake record.

3.2 When conducting geological exploration using seismic reflection waves, stratigraphic units are defined based on the characteristics of the reflected waves.

3.3 Standard layer keybed; markerbed It has obvious and easily identifiable characteristic reflections (layers) on the seismic profile and exists over a large area in a single exploration zone.