

ICS 75.020
CCS E 13



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

GB/T 24956-2010

**Recommended practice for petroleum and natural gas
industries -- Drill stem design and operating limits**

石油天然气工业 钻柱设计和操作限度的推荐作法

(English Translation)

Issued on: August 9, 2010

Implemented on: December 1, 2010

Issued by: Standardization Administration of China

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Foreword

This standard is equivalent to using API RP 7G.1998 16th edition Recommended Practice for Drill Stem Design and Operating Limits (1998 entered into force on

12 Yue 1, May 2000 Errata) "drill string design and operating limits recommended practice," including its Amendment 1.2003.

This standard is equivalent translation API RP 7G.1998 16th edition.

To facilitate the practical use of this standard, the following editorial changes made.

The term --- the "Recommended Practice" to "this standard";

--- Remove Special Notice, API 16.8 Introduction and Overview of other information elements;

--- Maps, tables are arranged in accordance with the provisions of GB/T 1.1-2000 of;

--- International standard formula to explain the symbol "=" according to national standard GB/T 1.1 requirement to "---";

--- Technical corrections and amendments incorporated into the body of international standards in the text of the margin by a vertical wire (|) were Identification;

--- According to GB/T 20000.2 requirements, an increase in the Appendix B Appendix NA reference standard to adopt standard conditions; increased appendix NB Imperial units and conversion of legal units of measurement.

Appendix A of this standard is a normative appendix, Appendix B, NA, NB appendix informative.

The standard proposed by China National Petroleum Corporation.

This standard by the National Standardization Technical Committee of Oil and Gas.

This standard was drafted. Drilling Technology Research Institute of Xinjiang Petroleum Administration Bureau.

1.1 Coverage

This standard includes not only the selection of the drill string assembly, but also consider the deviation control, drilling fluid, drilling pressure and speed, as well as other operations program.

Section 1.2 Coverage the first chapter provides a step 4,5,6,7 select the drill string assembly, the first 8,9,10,11,12 and 15 are related to normal can cause the drillstring Reduced operating force limits Chapter 13 contains the identification and the old drill pipe inspection and classification steps of the old tubing and other components of the drill string, Chapter 14 contains information about the downhole tool welding instructions, Chapter 16 contains the classifications cone bit.

2 References

(Other references see Appendix B).

APIRP5C1 casing, tubing and use the recommended maintenance practices Formulas and Calculations APIBul5C3 casing, tubing, drill pipe and line pipe properties APISpec7 rotary drilling the drill string assembly specifications APIRP7A1 rotary shouldered connection thread grease Recommended practice test APIRP13B-1 water-based drilling fluids standard field test procedures recommended practice APIRP13B-2 oil-based drilling fluids standard field test procedures recommended practice ASTM1) D3370 standard practice of water samples NACE2) MR0175 oilfield equipment with anti-sulfide stress cracking metal material Above standard country to adopt international standards. See Appendix NA.

1) American Society for Testing Materials (address. 100BarrHarborDrive, WestConshocken, Pennsylvania19428)

2) the National Association of corrosion engineers (POBox218340, Houston, Texas77218-8340)

3 Terms and Definitions

The following terms and definitions apply to this standard.

Flexural strength than bendingstrengthratio Rotary shoulder inside, with the outer thread tightened, male fittings flexural modulus of section at the top of the last threaded engagement with the external threads of the outer joint Bending section modulus ratio within the threaded joint.

Chamfer diameter beveldiameter Rotary shouldered connection outer diameter of the contact surface.

Drill short section bitsub Usually it ends internal thread for connecting the drill bit and drill string joints.