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

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Replacing GB/T 23506-2017

The gas-fuel power set for oil production drilling site

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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 23506-2017 "Gas Power Units for Oil Production Wells".

In addition to structural adjustments and editorial changes, the main technical changes are as follows.

- Changed the representation method of unit model (see Chapter 4, Chapter 4 of the 2017 edition);
- Deleted the "vibration" requirements for the "normal operating conditions" of the unit [see 5.1.1.2c) of the 2017 edition];
- Changed the basic requirements for explosion-proof systems of units (see 5.1.1.7, 5.1.1.7 of the 2017 edition);
- Changed the basic requirements for vehicle-mounted installation of the unit (see 5.1.1.8, 5.1.1.8 of the 2017 edition);
- Added basic requirements for unit safety and fire protection (see 5.1.1.10 and 5.1.1.11);
- Added gas supply requirements for "associated gas, casing gas and coalbed methane" (see 5.1.2.2);
- Changed the fuel requirements (see 5.1.3, 5.1.3 of the 2017 edition);
- Increased engine oil requirements (see 5.1.4);
- Added the requirement for rapid cut-off of the control system gas source [see 5.9.1d)];
- Changed the noise limit requirements (see Table 1, 5.10.1 of the 2017 edition);
- Deleted the replacement rate requirements for diesel/natural gas dual-fuel generator sets (see 5.10.2 of the 2017 edition);
- Changed the unit heat rate requirements (see Table 1, 5.10.3 of the 2017 edition);
- Changed the pollutant emission limit requirements (see Table 1, 5.10.4 of the 2017

edition);

- Changed the rated slip requirements of the unit (see Table 1, 5.10.5 of the 2017 edition);
- Deleted the requirements for unit safety and fire protection (see 5.14 and 5.15 of the 2017 edition);
- Changed the safety protection requirements for components with projectile hazards (5.14.2.2, see 5.16.2.2 of the 2017 edition);
- Changed the protection requirements and identification requirements for parts that may cause danger (see 5.14.2.3, 5.16.2.3 of the 2017 edition and 5.16.2.4);
- Changed the requirements for test oil (see 6.1.4, 6.1.4 of the 2017 edition);
- Added test requirements for oil heating devices (see 6.2.10.3);
- Added unit thermal balance test requirements (see 6.2.18);
- Deleted the safety inspection and fire inspection requirements (see 6.3.18 and 6.3.19 of the 2017 edition).

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed and coordinated by the National Technical Committee for Standardization of Petroleum Drilling Equipment and Tools (SAC/TC96).

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This document was first published in 2009, revised for the first time in 2017, and this is the second revision.

1 Scope

This document specifies the model representation method, requirements, tests, inspection rules, marking, packaging, transportation, etc. of gas power units in oil production wells. and storage.

This document applies to the design, manufacture, inspection and acceptance of gas power units (hereinafter referred to as "units") at oil well sites.

The gas-powered units of other equipment and the power units driven by other fuel engines

shall be implemented accordingly.

Note. The unit is mainly used to drive onshore oil field equipment such as oil pumping units, crude oil transfer pumps, compressors, and operating lifting machinery (such as workover machines).

2 Normative references

GB/T 191

GB 1589

GB/T 4556

GB/T 6072.1

GB/T 6072.3

GB/T 6072.5

GB/T 6388

GB/T 7184

GB 11122

GB/T 14097

GB/T 14363

GB/T 16471

GB 19147

GB/T 20136-2006

GB/T 20651.2

GB 20891

GB/T 21404

GB/T 23821

3 Terms and definitions

The following terms and definitions apply to this document.