

ICS 75.080
CCS E 30



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

GB/T 4756-2015

Replacing GB/T 4756-1998

Method for manual sampling of petroleum liquids

石油液体手工取样法

(English Translation)

Issued on: December 31, 2015

Implemented on: June 1, 2016

Issued by: Standardization Administration of China

Table of Contents

Introduction

Introduction

1 Scope

2 Normative references

3 Terms and definitions

4 Principle

5 Device

5.1 General

5.2 Tank sampler

5.3 Barrel heard like

5.4 Pipeline Sampler

5.5 Sample receiver and the sample container

5.6 Container closure

5.7 Sample cooler

6 Safety Precautions

7 Uniform sampling of petroleum liquids

7.1 Introduction

7.2 Preventive Measures

7.3 Sampling tank

7.4 Sampling line

7.5 Tanker (oil gun) sampling

8 Samples of crude oil and other petroleum liquids uneven

8.1 General

8.2 Method

9 Sample deployment

9.1 General

9.2 Of 37 samples were

9.3 Check the effect of stirring

40 9.4 Sample Transfer

Sampling 10 tank residues/deposits

Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard replaces GB/T 4756-1998 "petroleum liquid manual sampling method", compared with the GB/T 4756-1998, the main technical change as follows.

- Increase in the range from fuel oil gun manual sampling the contents (see Chapter 1, 1998 version 1.1);
- Expand the scope of products to be sampled will be sampled product in liquid form to upper temperature limit of 100 °C storage by modifying the 200 °C, removed about product RVP regulations (see Chapter 1, 1998 version 1.2);
- Streamlining the contents of the range, the composition of which remove manual sampling methods, provisions to reduce or eliminate loss of light components tips sampling the method of using undue influence, and a statement of the purpose of sampling to determine the criteria contained in the liquid level is uneven, collection methods sediments (See Chapter 1, 1998 edition of 1.3,1.4,1.5,1.6,1.7 and 1.8);
- Increasing the GB/T 2828.1-2012, GB/T 11146, GB/T 27867 and ISO 1998 (all parts) as a normative reference File, delete the GB/T 1884, GB/T 6533 (see Chapter 2);
- Delete the terms and definitions of the "competent person", "pipeline", "Packaging", "dissolved water" and "free water" totaling five terms (see 1998 edition 3.1,3.4,3.9.3,3.11.1 and 3.11.3);
- Increase "autosampler" in the terminology and definitions, the term "bottom water samples", "closed sampling", "bowl-like", "drain-like", "floating roof-like", "fat Class-like", "open sampling", "portable sampling device", "limited sampling" and "measures to control", "sewage pond-like", "side pot-like", "test Kind", "steam stop valve" and "sample interval" total 16 terms (see 3.3,3.6,3.7,3.9,3.10,3.11,3.12,3.17,3.19, 3.22,3.30,3.32,3.34,3.35,3.40 and 3.41);
- Added "restricted and closed system sampler" and instructions (see 5.2.7) in the device;
- Added "variable volume sample receiver" and instructions (see 5.5) in the device;
- Increase the liquid depth corresponding to the minimum number of sample points (Table 1) (see 7.1) in a homogeneous liquid petroleum sampling methods;
- Increasing the stop valve installed vapor tank sampling (see 7.3.1.4) in a homogeneous liquid petroleum sampling methods;
- Increasing the pressure tank with a sampling valve sampling point (see 7.3.1.5) in a homogeneous liquid petroleum sampling methods;
- Uniform petroleum liquid sampling methods to revise and improve the manual sampling

line, it provides a high vapor pressure liquid sampling point Three methods and sample deployment methods (see 7.4,1998 version 7.5);

--- Increased tanker (oil gun) sampling method (see 7.5) in a homogeneous liquid petroleum sampling methods;

--- Increasing the sampling line content (see 8.2.2) in crude oil and other liquid non-uniform sampling method;

--- Revise and improve the method of homogenizing the sample, increasing the sample receiving type and homogenization temperature rise limits, improve the mixing effect Test methods and decision indicators (see 9.2);

--- Modify the structure of the standard preparation of the sample tank residues/sediments as a special chapter (see Chapter 10, 1998 edition 7.3.5);

--- Modify the structure of the standard preparation of the package alone as a sample chapter (see Chapter 11, 1998 version 7.4).

This standard uses redrafted law revision using ISO 3170:2004 "Liquid petroleum manual sampling method." this standard and ISO 3170:2004 technical differences and their reasons are as follows.

--- Increase the sample from the refueling gun oil content in the range of the first paragraph, this standard specifies explicitly be taken from the fuel oil gun such methods;

--- For the scope of paragraph 3 related to international standards of other special oil sampling, where there are the corresponding national standards and industry standards, are Adjusted accordingly, in order to facilitate the use of standard user with "SH/T 0233" instead of "ISO 4257"; with "GB/T 20603" instead of "ISO 8943"; with "GB/T 13609" instead of "ISO 10715";

Love --- on normative references, this standard has been adjusted technical differences, in order to adapt to China's technical conditions, adjustment Focus is reflected in the status of Chapter 2, "Normative references", the specific adjustments are as follows.

- equivalents adoption of international standards GB/T 2828.1-2012 instead of ISO 2859-1:1999 (see Chapter 11);

- equivalents adoption of international standards GB/T 27867 replaced by ISO 3171. 1988 (see 4.3,5.4 and Chapter 8);

- increase cited GB/T 8929 and GB/T 11146 (see Chapter 9).

--- Cancellation 7.3.1.1.7 paragraph 4, as part of the contents of this section and related content are contradictory, but in its next stage before "certain cases Row sampler shall viscosity liquid depth and adjust the size of the oil-filled pores limit, then the routine samples collected operational requirements. "In order to protect Useful stay delete content

segment;

--- For tankers constructed by a plurality of compartments, increase the sample compartment contents of the selected rule in 7.3.2.1, a user-friendly in the impossible all cabins case of sampling, scientific sampling to determine the minimum number of compartments, but not so excessive downsampling behalf

Table sex;

--- Cancellation contents of the original 7.4.1, 7.4.1 will be headlined by "non-uniform liquid" to "General", and section 7.4 of the suspension as 7.4.1 content to suit the requirements of the preparation of standards;

--- Uniform liquid line manual sampling, for the transfer of bulk oil pipeline, increasing the number of samples and press oil press oil Sampling between the technical content (see 7.4.2), an increase of manual sampling pipeline operability;

--- In the last increase of 7.5 "detailed information on commercial fuel oil sampling gun can be found in Appendices B and C.", and further fine Sampling of tanker technical content reinforcing tanker sampling operability;

--- For bulk transfer of crude oil by pipeline and other petroleum liquids unevenly, increasing the pipeline when using manual sampling equipment Selection, installation and operation of the measures to be taken on the sample (see 8.2.2.1), thereby maximizing oil and other non Uniform oil pipeline manually sampled representation;

--- The 9.3.4.12 changed to "mixing system for testing, measuring water content should not go by centrifugation.", In order to adapt our standards Preparation requirements;

--- Delete all "patents" related terms, to comply with the requirements of the standard preparation;

--- Remove all pressure data in brackets behind the bar units represented by the contents of the units of measurement in line with our habits.

The editorial changes made the following standard.

--- Delete the note range, with "NOTE. This standard may also apply to most non-corrosive liquid chemical products sampling, but it should be strictly these liquid chemical products comply with the corresponding security measures. "instead;

--- Increase under the term "acceptable quality level of 3.1" is defined as "Note. This standard is equivalent to the acceptable quality level GB/T 2828.1-2012 reception quality limit. ";

--- Increase the informative Appendix B, gives a commercial tanker specific sampling method;

--- Increase the informative appendix C, provides the technical requirements and methods