Manual of Petroleum Measurement Standards Chapter 17.4

Method for Quantification of Small Volumes on Marine Vessels (OBQ/ROB)

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Introduction

The purpose of this standard is to provide a method for determining the small volumes of on board quantity (OBQ) prior to loading a vessel or material remaining on board (ROB) a vessel upon completion of discharge.

Method for Quantification of Small Volumes on Marine Vessels (OBQ/ROB)

1 Scope

This standard applies only to quantification by manual gauging of small volumes on marine vessels prior to loading or upon completion of discharge. It does not address clingage, hydrocarbon vapors, cargoes in transit, or cargo pumpability. Refer to API *Manual of Petroleum Measurement Standards* (*MPMS*) Chapter 3.

2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

API *MPMS* Chapter 3 (all relevant sections), *Tank Gauging*

API *MPMS* Chapter 3.1A, *Standard Practice for the Manual Gauging of Petroleum and Petroleum Products*

API *MPMS* Chapter 7, *Temperature Determination*

API *MPMS* Chapter 8.1, *Manual Sampling of Petroleum and Petroleum Products*

API *MPMS* Chapter 12.1.1, *Calculation of Static Petroleum Quantities—Upright Cylindrical Tanks and Marine Vessels*

API *MPMS* Chapter 17.1, *Guidelines for Marine Inspection*

API *MPMS* Chapter 17.2, *Measurement of Cargoes On Board Tank Vessels*

API *MPMS* Chapter 17.11, *Measurement and Sampling of Cargoes On Board Tank Vessels Using Closed and Restricted Equipment*

3 Terms and Definitions

For the purposes of this standard, the following terms and definitions apply. Other terms used in this standard are defined in API *MPMS* Chapter 1 or other API petroleum-measurement standards.

3.1
clingage
Cargo that adheres to all surfaces of the emptied portion of the tank other than bottom surfaces.

3.2
liquid volume
The measurable amount of material that is free-flowing at the time of measurement.

3.3
multipoint gauging
The activity of measuring cargo in a vessel tank through two or more openings in the top of the tank.