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**Voyage Analysis and Reconciliation of Cargo
Quantities**

El Hydrocarbon Management HM 64

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Voyage Analysis and Reconciliation of Cargo Quantities

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Voyage Analysis and Reconciliation of Cargo Quantities

1 Scope

This standard covers guidelines for the reconciliation of marine cargo quantities. These guidelines are intended to provide a basis for analyzing and reconciling the quantity differences (gains/losses) resulting from marine custody transfer movement(s) of bulk liquid hydrocarbon cargoes (e.g. crude oil, petroleum products, liquid chemicals, bio-feeds, bio-fuels, and liquid petroleum gases). As such, the guidelines are complementary too, but do not replace normal inspection procedures.

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 17.1, *Guidelines for Marine Cargo Inspection*

API MPMS Chapter 17.3, *Guidelines for Identification of the Source of Free Water Associated with Marine Petroleum Cargo Movements*

API MPMS Chapter 17.6/EI¹ HM 70, *Guidelines for Determining the Fullness of Pipelines Between Marine Vessels and Shore Facilities*

API MPMS Chapter 17.9/EI² HM 49, *Vessel Experience Factor*

3 Terms, Definitions, Acronyms, and Abbreviations

3.1 Terms and Definitions

For the purposes of this document, the following terms, definitions, acronyms, and abbreviations apply.

3.1.1

apparent loss

A difference in quantity that is not related to a physical loss.

3.1.2

cargo reconciliation

Comparison of delivered/received quantity calculated from shore measurements to the received/delivered quantity calculated from vessel measurements.

3.1.3

complex voyage

Any voyage other than a single-grade cargo movement from one load port to one discharge port.

3.1.4

physical loss or gain

An actual loss/gain of cargo (sometimes referred to as “real loss/gain”).

3.1.5

simple voyage

A single-grade cargo movement from one load port to one discharge port.

¹ Joint publication with Energy Institute, 61 New Cavendish St, London W1G 7AR, United Kingdom, www.energyinst.org.

² See footnote 1.