Manual of Petroleum Measurement Standards Chapter 10.4

Determination of Water and/or Sediment in Crude Oil by the Centrifuge Method (Field Procedure)

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Contents

Contents

Determination of Water and/or Sediment in Crude Oil by the Centrifuge Method (Field Procedure)

1 Scope

1.1 This section describes the field centrifuge method for determining both sediment and water or sediment only in crude oil. This method may not always produce the most accurate results, but it is considered the most practical method for field determination of sediment and water. This method may also be used for field determination of sediment. When a higher degree of accuracy is required, the laboratory procedure described in API *MPMS* Ch. 10.3, *Standard Test Method for Water and Sediment in Crude Oil by the Centrifuge Method (Laboratory Procedure)* (ASTM D4007); API *MPMS* Chapter 10.2, *Standard Test Method for Water in Crude Oil by Distillation* (ASTM D4006); or API *MPMS* Chapter 10.9, *Standard Test Method for Water in Crude Oils by Coulometric Karl Fischer Titration* (ASTM D4928); and the procedure described in API *MPMS* Chapter 10.1, *Standard Test Method for Sediment in Crude Oils and Fuel Oils by the Extraction Method* (ASTM D473) or API *MPMS* Chapter 10.8, *Standard Test Method for Sediment in Crude Oil by Membrane Filtration* (ASTM D4807) should be used.

1.2 The requirements of this standard may involve hazardous materials, operations, and equipment. This standard does not purport to address all of the safety problems associated with its use. The user of this standard has the responsibility for establishing appropriate safety and health practices and determining the applicability of regulatory limitations prior to use.

2 Normative References

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any addenda) applies.

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

API *MPMS* Chapter 8.2, *Automatic Sampling of Petroleum and Petroleum Products*

API *MPMS* Chapter 8.3, *Standard Practice for Mixing and Handling of Liquid Samples of Petroleum and Petroleum Products (includes Errata 1 dated March 1995)*

API *MPMS* Chapter 10.1, *Standard Test Method for Sediment in Crude Oils and Fuel Oils by the Extraction Method*

API *MPMS* Chapter 10.2, *Standard Test Method for Water in Crude Oil by Distillation*

API *MPMS* Chapter 10.3, *Standard Test Method for Water and Sediment in Crude Oil by the Centrifuge Method (Laboratory Procedure)*

API *MPMS* Chapter 10.8, *Standard Test Method for Sediment in Crude Oil by Membrane Filtration*

API *MPMS* Chapter 10.9, *Standard Test Method for Water in Crude Oils by Coulometric Karl Fischer Titration*

ASTM D473,[1] *Standard Test Method for Sediment in Crude Oils and Fuel Oils by the Extraction Method*

ASTM D3699, *Standard Specification for Kerosine*

ASTM D4006, *Standard Test Method for Water in Crude Oil by Distillation*

[1] ASTM International, 100 Barr Harbor Drive, West Conshohocken, Pennsylvania 19428, www.astm.org.