



Designation: D6808 – 02 (Reapproved 2018)^{ε1}

Standard Practice for Competency Requirements of Reference Material Producers for Water Analysis¹

This standard is issued under the fixed designation D6808; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

^{ε1} NOTE—The Keywords section was added editorially in August 2018.

1. Scope

1.1 This practice establishes the general requirements with which a reference materials (RM) producer has to demonstrate that it operates, if it is to be recognized as competent to produce RMs used for water analysis.

1.2 This practice establishes the quality system requirements in accordance with which waters RMs shall be produced. It is intended to be used as part of a RM producer's general quality assurance (QA) procedures. RM producers shall define their scope in terms of the application, the measurement methods used in the homogeneity, stability, and characterization studies.

1.3 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 ASTM Standards:²

D1129 Terminology Relating to Water

¹ This practice is under the jurisdiction of ASTM Committee D19 on Water and is the direct responsibility of Subcommittee D19.02 on Quality Systems, Specification, and Statistics.

Current edition approved Aug. 1, 2018. Published September 2018. Originally approved in 2002. Last previous edition approved in 2012 as D6808 – 02 (2012). DOI: 10.1520/D6808-02R18E01.

² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

D6362 Practice for Certificates of Reference Materials for Water Analysis

2.2 ISO Documents:³

ISO/IEC 17025:1999 General Requirements for the Competence of Calibration and Testing Laboratories

ISO 8402:1994 Quality Management and Quality Assurance—Vocabulary

ISO 10012-1:1992 Quality Assurance Requirements for Measuring Equipment—Part 1: Metrological Confirmation Systems for Measuring Equipment

ISO/IEC Guide 2:1996 Standardization and Related Activities—General Vocabulary

ISO Guide 30:1992 Terms and Definitions used in Connection with Reference Materials

ISO Guide 31:2000 Contents of Certificates and Labels of Reference Materials

ISO/IEC Guide 32:1997 Calibration in Analytical Chemistry and Use of Certified Reference Materials

ISO Guide 34:2000 General Requirements for the Competency of Reference Material Producers

ISO Guide 35:1989 Certification of Reference Materials—General and Statistical Principles

ISO 3534 Series: 1993 Statistics—Vocabulary and Symbols
VIM: 1993 International Vocabulary of Basic and General Terms in Metrology (issued by ISO, IEC, BIPM, IFCC, IUPAC, IUPAP and OIML)

ISO Guide to the Expression of Uncertainty in Measurement: 1995 (issued by ISO, IEC, BIPM, IFCC, IUPAC, IUPAP and OIML)

3. Terminology

3.1 Definitions:

3.1.1 For the purposes of this practice, the definitions given in Terminology D1129, ISO/IEC Guide 2, ISO/IEC 17025, ISO Guide 30, ISO 8402, ISO 3534, VIM, and the following definitions apply.

³ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.