



Designation: D 4382 – 9502

## Standard Test Method for Barium in Water, Atomic Absorption Spectrophotometry, Graphite Furnace<sup>1</sup>

This standard is issued under the fixed designation D 4382; 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.

### 1. Scope

1.1 This test method covers the determination of dissolved and total recoverable barium in most waters and wastewaters.

1.2 This test method was evaluated in the range from 33.5 to 132 µg/L of barium. The range can be increased or decreased by varying the volume of sample injected or the instrumental settings. High concentrations may be diluted but preferably should be analyzed by direct aspiration atomic absorption spectrophotometry.

1.3 This test method has been used successfully with waste treatment plant effluent water, lake water, filtered tap water, and well water. It is the responsibility of the analyst to determine the suitability of the test method for other matrices.

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 and health practices and determine the applicability of regulatory limitations prior to use.*

### 2. Referenced Documents

2.1 *ASTM Standards:*

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<sup>1</sup> This test method is under the jurisdiction of ASTM Committee D-19 on Water and is the direct responsibility of Subcommittee D19.05 on Inorganic Constituents in Water. Current edition approved ~~Sept. 10, 1995~~; March 10, 2002. Published ~~November 1995~~; May 2002. Originally published as D 4382 – 84. Last previous edition D 4382 – 945.