QCI-736   ULTRAcheck™ WP/DMR-QA Demands Quality Check Sample

Please read these instructions carefully before using the quality check sample concentrate.

1. **Storing the Sample**
   This product should be stored at 4°C. It is stable for three months, or until opened.

2. **Preparing the Sample for Use**
   Add approximately 750 mL of reagent water into a 1 liter volumetric flask (class A). Open the vials one at a time and transfer to a clean sample container. Use a volumetric pipet (class A) to transfer 20 mL of the concentrate from the sample container to the 1 liter flask. Dilute to volume with reagent water. Mix well. Analyze samples as soon as possible after preparation.

3. **Analyzing the Sample**
   A blind check sample is used to evaluate the quality of the analytical data generated by the laboratory, consequently, use the method that is normally used to analyze for these particular analytes.

   The maximum holding time for BOD and CBOD analyses is 48 hours if stored at 4°C. If COD, TOC, or both cannot be analyzed within the usual holding time after sample preparation, an aliquot may be preserved by using 0.2 mL of concentrated sulfuric acid per 100 mL (pH <2). The acid preserved aliquot should be stored at 4°C, and analyzed as soon as possible.

   To achieve proper oxygen depletion in the BOD and CBOD tests, test the sample in a dilution series, such as 4%, 8%, and 16%. For CBOD, the use of a nitrifying inhibitor is recommended.

4. **Applicable Methods**
   Analyte | US EPA Method(s)
   --- | ---
   Biochemical Oxygen Demand (BOD) | 405.1
   Chemical Oxygen Demand (COD) | 410.1, 410.2, 410.3, 410.4
   Total Organic Carbon (TOC) | 415.1, 415.2

   Note: To determine Carbonaceous Biochemical Oxygen Demand (CBOD), a nitrification inhibitor must be added to the sample solution according to the protocol being used.

5. **Analyte Concentrations**
   The certificate showing the reference values and advisory ranges is sealed in an envelope, to be opened after the analysis is completed. The advisory ranges represent QC acceptance criteria for analyte recovery following applicable US EPA methodologies. These ranges are based on interlaboratory data, and are included solely as guides for acceptable performance. Each laboratory should develop criteria for judging acceptable method performance based on the intended use of data.