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Program of Pattern Evaluation of Total Organic Carbon Analyzers

总有机碳分析仪型式评价大纲

(English Translation)

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Introduction

This type of evaluation based on the outline JJF 1016 "Measuring Instruments type evaluation outline guidelines for the preparation", JJF 1015 "count Evaluation of the amount of equipment type and type approval of universal norms "and JJF 1001" common measurement terms and definitions of "compilation.

The outline of the type evaluation technical indicators reference JJG821-2005 "Total Organic Carbon Analyzer", GB/T 11606-2007 "Environmental test methods for the analysis instrument", HJ/T 104-2003 "total organic carbon (TOC) of water quality automatic analyzer Technical requirements "and other technical regulations.

This type of evaluation outline for the first release.

Total Organic Carbon Analyzer Type Evaluation Outline

1 Scope

This type of evaluation outline provides for total organic carbon analyzer product groupings, requirements, test methods, and results processing Determine the rules for laboratory TOC analyzer type evaluation.

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2. References

JJG821-2005 Total Organic Carbon Analyzer GB/T 11606-2007 analytical instruments environmental test methods HJ/T 104-2003 Total Organic Carbon (TOC) technical requirements for water quality automatic analyzer these documents contain provisions which through reference in this syllabus constitute provisions of this outline. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this outline, however, the drum Reed whether the latest versions of these files according to the parties that this outline agreement. Those who do not note cited date Use, the latest versions apply to this outline.

3 Terms

3.1 total carbon Total organic carbon and inorganic carbon in water and, referred to as TC.

3.2 TOC totalorganiccarbon Total organic carbon in water, referred to as TOC.

3.3 Total Inorganic Carbon Total inorganic carbon in water, referred to as TIC.

4 Overview

Total Organic Carbon Analyzer (hereinafter referred to as TOC analyzer) measuring principle according to which type of detector into presumptuous San infrared (NDIR) detection and conductivity detection method. NDIR detection method is divided into Subtraction and direct measurement law. Subtraction is the same test sample were twice injected into the reactor, one of which would have all the elements of carbon oxide Carbon dioxide, another one in which the inorganic carbon dioxide into oxygen, carbon dioxide measured by the difference between the two to get the total Organic carbon. Direct measurement test sample is first acidified, then ventilation blowing inorganic carbon in the sample, then the remaining the total carbon dioxide into oxygen, total organic carbon obtained by the NDIR detector, which is also known as non-organic purged Carbon (NPOC) measurement method. Conductivity detection method is by first measuring the total carbon sample conductivity value, then there is measured all organic carbon oxidation of the sample conductivity, total organic carbon in the sample is calculated by the difference between the two conductivity values.

TOC analyzer mainly use the following formula to calculate the total organic carbon content in the sample.

TOC = total carbon - Total Inorganic Carbon TOC analyzer main methods of oxidation combustion catalytic oxidation, wet oxidation, wet oxidation which way is adopted

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