

Title (en)

APPARATUS AND METHOD FOR MEASURING NITROGEN CONTENT IN AQUEOUS SYSTEMS.

Title (de)

VERFAHREN UND VORRICHTUNG ZUR BESTIMMUNG DES STICKSTOFFGEHALTES IN WÄSSRIGEN SYSTEMEN.

Title (fr)

APPAREIL ET PROCEDE DE MESURE DE LA TENEUR EN AZOTE DE SYSTEMES AQUEUX.

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Application

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Abstract (en)

[origin: WO9407134A1] A method and apparatus for determining Total Nitrogen Content and/or Combined Nitrate-Nitrite Nitrogen Content in an aqueous system is disclosed. To measure the Total Nitrogen Content, an oxidation tube (12) having an oxidation catalyst (32) receives a carrier gas (20) including oxygen and a sample (13) of the aqueous system. The oxidation tube (12) converts the aqueous sample (13) to a product gas including nitrogen dioxide. The nitrogen dioxide is then converted to nitric oxide in a reaction chamber (14) having a liquid chemical reduction agent (41). The nitric oxide is received and measured to determine the Total Nitrogen Content by a detection apparatus (18). To measure the Combined Nitrate-Nitrite Nitrogen Content in the aqueous system, a second aqueous sample (43) is injected into the reaction chamber (14) and converted to a second quantity of nitric oxide. The second quantity of nitric oxide is received and measured by the detection apparatus (18).

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