

SCHEDULE 2

METHODS OF ANALYSIS

PART II

6.

DETERMINATION OF EXTRACTED PHOSPHORUS — SPECTROPHOTOMETRIC METHOD

Determination

For Total Phosphorus

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5.1.—(5.1.1) Dilute, if necessary, the prepared extract to obtain a phosphorus concentration of about 20 µg/ml. Transfer 10 ml of this solution to a glass stoppered test tube, add 10 ml freshly prepared molybdovanadate reagent (3.2) and mix. Allow to stand for 10 minutes at 20°C and then measure the absorbance of the solution at 430 nm against a freshly prepared reference solution made by adding 10 ml molybdovanadate reagent (3.2) to 10 ml water.

For Water Soluble Phosphorus and Citric Acid Soluble Phosphorus

(5.1.2) Dilute, if necessary, the prepared extract to obtain a phosphorus concentration of about 80 µg/ml. Transfer 25 ml of this solution to a 100 ml conical flask, add 5 ml nitric acid (3.1) and boil gently for 30 minutes. Cool the solution and neutralise with sodium hydroxide solution (3.4). Cool the solution to 20°C, transfer quantitatively to a 100 ml graduated flask and make up to the mark with water. Transfer 10 ml of this solution to a glass stoppered test tube, add 10 ml freshly prepared molybdovanadate reagent (3.2) and mix. Proceed as described in 5.1.1 from “Allow to stand”.