SCHEDULE 2

METHODS OF ANALYSIS

PART I

9f.

EXTRACTION OF PHOSPHORUS BY ALKALINE AMMONIUM CITRATE (PETERMANN'S METHOD) AT AMBIENT TEMPERATURE

SCOPE

1. This method is for the determination of phosphorus soluble in cold alkaline ammonium citrate.

FIELD OF APPLICATION

2. Disintegrated phosphates exclusively.

PRINCIPLE

3. Extraction of phosphorus at a temperature about 20°C with an alkaline solution of ammonium citrate (Petermann's solution) in specific conditions.

REAGENT

4. See Method 9e.

APPARATUS

5.—(5.1) 250 ml graduated flask (for example Stohmann).

(5.2) Rotary shaker, 35-40 turns per minute.

PREPARATION OF THE SAMPLE

6. See Method 1.

PROCEDURE

Extraction

Extraction

7.—(7.1) Weigh to the nearest 0.001 g, 2.5 g of the prepared sample and put it in a 250 ml graduated flask (5.1). Add a little of Petermann's solution (4) at 20°C, shake very hard in order to stop the formation of lumps and to prevent any of the substance adhering to the side of the flask. Make up to the mark with Petermann's solution and close the flask with a rubber stopper.

Shake for two hours on the rotary shaker (5.2). Filter immediately through a dry fluted filter, into a dry container, discarding the first portion of the filtrate.

Determination

(7.2) Determine the phosphorus according to Method 10 on an aliquot part of the clear filtrate.