AS 4969.6—2008
Reconfirmed 2018

Australian Standard®

Analysis of acid sulfate soil—Dried samples—Methods of test

Method 6: Determination of acid extractable sulfur in soil residue after peroxide oxidation (S_{RAS})

PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand for Committee EV-009, Sampling and Analysis of Soil and Biota, Working Group EV-009-02-01, Analysis of Acid Sulfate Soil.

The objective of this Standard is to provide a method for the determination of residual acid soluble sulfur (S_{RAS}) in acid sulfate soil after peroxide oxidation.

METHOD

1 SCOPE

This Standard specifies a method for the determination of residual acid soluble sulfur (S_{RAS}) in acid sulfate soil after peroxide digestion (AS 4969.3) and the determination of peroxide sulfur (S_P) (AS 4969.5).

In order to perform this method, AS 4969.3 and AS 4969.5 shall have already been performed on the same test portion.

NOTES:

1 This extraction procedure recovers the relatively insoluble iron and aluminium hydroxy sulfate compounds (e.g. jarosite, natrojarosite, basaluminite) which are not measured to any significant extent in S_P.

2 S_{RAS}, unlike S_{NAS}, (AS 4969.11) does not measure significant sulfur from organic matter as this is removed during rinsing of the soil residue. Some laboratories may prefer to perform S_{NAS} analysis for operational reasons.

3 This procedure would normally only be performed on a soil with a potassium chloride pH < 4.5 (pH_{KCl}, (AS 4969.2) or where jarosite/natrojarosite and similar minerals have been identified in the soil when it was sampled.