

# Australian Standard<sup>®</sup>

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

### Method 2: Determination of $pH_{KCl}$ and titratable actual acidity (*TAA*)

AS 4969.2—2008

#### PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand 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 laboratory method for the determination of  $pH_{KCl}$  and titratable actual acidity (*TAA*) in acid sulfate soil.

#### METHOD

##### 1 SCOPE

This Standard specifies a method for the determination of pH in a 1 M KCl soil suspension and where required titratable actual acidity (*TAA*) in acid sulfate soil.

##### NOTES:

- 1 The *TAA* measurement does not quantitatively recover retained acidity held in iron and aluminium hydroxy-sulfate minerals, such as jarosite,  $KFe_3(SO_4)_2(OH)_6$  and similar minerals. Methods to determine the retained acidity are given in AS 4969.6 and AS 4969.11.
- 2 The suspension from this method can be analysed subsequently to determine KCl extractable sulfur, calcium and magnesium (AS 4969.4).

##### 2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard.

##### AS

1006	Solid-stem general purpose thermometers
2162	Verification and use of volumetric apparatus
2162.1	Part 1: General—Volumetric glassware
2162.2	Part 2: Guide to the use of piston-operated volumetric apparatus (POVA)
2164	Laboratory glassware—One-mark volumetric flasks
2165	Laboratory glassware—Burettes
4969	Analysis of acid sulfate soil—Dried samples—Methods of test
4969.0	Part 0: Introduction and definitions, symbols and acronyms
4969.1	Method 1: Pre-treatment of samples