

## Australian Standard®

AS 4969.7—2008

**Analysis of acid sulfate soil—Dried samples—  
Methods of test****Method 7: Determination of chromium reducible  
sulfur ( $S_{CR}$ )**

## 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 method for the determination of chromium reducible sulfur ( $S_{CR}$ ) in acid sulfate soil.

## METHOD

**1 SCOPE**

This Standard specifies a method for the determination of chromium reducible sulfur ( $S_{CR}$ ) by iodometric titration of distilled hydrogen sulfide trapped as zinc sulfide.

NOTE: This method determines inorganic sulfides (e.g. pyrite, marcasite, greigite, mackinawite) and elemental sulfur in acid sulfate soil without interferences from organic sulfur and oxidized forms of sulfur such as sulfate.

**2 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

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|--------|---|
| 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   |
| 2166   | Laboratory glassware—One-mark pipettes                                  |
| 2167   | Graduated straight pipettes   |
| 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                                      |