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**SANS 10299-4:2003**

Edition 1.1

# **SOUTH AFRICAN NATIONAL STANDARD**

## **Development, maintenance and management of groundwater resources**

### **Part 4: Test-pumping of water boreholes**

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**Table of changes**

<b>Change No.</b>	<b>Date</b>	<b>Scope</b>
Amdt 1	2003	Amended to delete the introduction, introduce normative references, renumber the subsequent clauses and delete the definitions, since reference has now been made to SANS 10299-0.

**Acknowledgement**

The SABS Standards Division Standards wishes to acknowledge the valuable contribution made by Mr John Weaver, Geohydrologist, Stellenbosch.

**Foreword**

This South African standard was approved by National Committee SABS/TC 138, *Water and sanitation – Equipment and systems*, in accordance with procedures of the SABS Standards Division, in compliance with annex 3 of the WTO/TBT agreement.

This edition cancels and replaces the first edition (SABS 0299-4:1998).

A vertical line in the margin shows where the text has been modified by amendment No. 1.

SANS 10299 consists of the following parts, under the general title *Development, maintenance and management of groundwater resources*:

*Part 0: Glossary of terms.*

*Part 1: The location and siting of water boreholes.*

*Part 2: The design, construction and drilling of boreholes.*

*Part 4: Test-pumping of water boreholes.*

*Part 5: The design, selection and performance of pumping equipment for production boreholes.*

*Part 6: The installation and commissioning of pumping equipment for production boreholes.*

*Part 7: The rehabilitation of water boreholes.*

*Part 8: The management of water boreholes.*

*Part 9: The decommissioning of water boreholes.*

Annex A forms an integral part of this part of SANS 10299.

**Compliance with a standard cannot confer immunity from legal obligations.**

**Reaffirmed and reprinted in April 2016.  
This document will be reviewed every five years  
and be reaffirmed, amended, revised or withdrawn.**

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## **Development, maintenance and management of groundwater resources**

### **Part 4:**

#### **Test-pumping of water boreholes**

### **1 Scope**

**1.1** This part of SANS 10299 covers requirements for the test-pumping of a water borehole in order to obtain information about its possible long-term pumping rate.

**1.2** The information can also be used to determine and check

- a) for the purpose of groundwater resource evaluation, the aquifer characteristics, i.e. the ability of the aquifer to store and transmit groundwater,
- b) the existence of barriers or recharge boundaries,
- c) the spacing of production boreholes in the production well field,
- d) borehole construction performance or well efficiency, and
- e) the design of the production system, i.e. the pump size and the reticulation system.

### **2 Normative reference**

The following standard contains provisions which, through reference in this text, constitute provisions of this part of SANS 10299. All standards are subject to revision and, since any reference to a standard is deemed to be a reference to the latest edition of that standard, parties to agreements based on this part of SANS 10299 are encouraged to take steps to ensure the use of the most recent edition of the standard indicated below. Information on currently valid national and international standards can be obtained from the SABS Standards Division.

SANS 10299-0, *Development, maintenance and management of groundwater resources – Part 0: Glossary of terms.* **Amdt 1**

### **3 Definitions**

**Amdt 1** |

For the purposes of this part of SANS 10299, the definitions given in SANS 10299-0 apply. **Amdt 1** |