# Australian/New Zealand Standard<sup>™</sup>

## **Pipelines—Gas and liquid petroleum**

## Part 5: Field pressure testing





#### AS/NZS 2885.5:2002

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee ME-038, Petroleum Pipelines. It was approved on behalf of the Council of Standards Australia on 8 February 2002 and on behalf of the Council of Standards New Zealand on 20 February 2002. It was published on 4 April 2002.

The following interests are represented on Committee ME-038:

Australian Corrosion Association Australian Gas Association Australian Institute of Petroleum Australian Petroleum Production and Exploration Association Australian Pipeline Industry Association Bureau of Steel Manufacturers of Australia Cooperative Research Centre for Welded Structures Department of Labour New Zealand Department of Minerals and Energy WA Department of Mines and Energy (Qld) Department of Mines and Energy (NT) Department of Natural Resources and Environment (Victoria) Gas Association of New Zealand Ministry of Energy and Utilities NSW Primary Industries and Resources SA Welding Technology Institute of Australia

### Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Australia web site at www.standards.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the on-line catalogue.

Alternatively, both organizations publish an annual printed Catalogue with full details of all current Standards. For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia International or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as 99081.

## Australian/New Zealand Standard<sup>™</sup>

## **Pipelines—Gas and liquid petroleum**

## Part 5: Field pressure testing

Originated as AS 1978-1977. Second edition 1987. Jointly revised and redesignated as AS/NZS 2885.5:2002.

### COPYRIGHT

© Standards Australia/Standards New Zealand

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Jointly published by Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020 ISBN 0 7337 4364 1

2

### PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee ME-038, Petroleum Pipelines, to supersede AS 1978—1987, Pipelines—Gas and Liquid Petroleum—Field pressure testing.

The objective of this Standard is to set out methods for the determination of the strength and the leak-tightness of a pipeline test section.

Major changes in this edition are the replacement of the interpretation of pressure/volume/temperature graphs with a more rigorous and accurate mathematical method, the inclusion of data for the interpretation of tests using petroleum fuels as the testing medium and a mandatory procedure for determining whether a leak test has been successful.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

### CONTENTS

### Page

SECTIO	N 1 SCOPE AND GENERAL	
1.1	BASIS OF SECTION	5
1.2	APPLICATION	5
1.3	PURPOSE OF TESTS	5
1.4	DESIGNATION OF TEST METHODS	6
1.5	REFERENCED DOCUMENTS	6
1.6	DEFINITIONS	6
1.7	TESTING PERSONNEL	8
1.8	NOTATION	8
1.9	CONVERSION TO SI UNITS	
1.10	ROUNDING OF NUMBERS	
SECTIO	N 2 EQUIPMENT AND TEST LIQUID	
2.1	BASIS OF SECTION	9
2.2	ACCURACY, SENSITIVITY, AND REPEATABILITY OF EQUIPMENT	9
2.3	COMMUNICATIONS AND TRANSPORT	11
2.4	INSTALLATION AND LOCATION OF TEST EQUIPMENT	11
2.5	TEST LIQUID	12
2.6	PROCEDURES AND PRECAUTIONS WHERE TEST FLUID IS	
	PETROLEUM LIQUID	12
SECTION 3 PREPARATION FOR TESTS		
3.1	BASIS OF SECTION	13
3.2	SELECTION AND DESIGN OF TEST SECTIONS	13
3.3	TEST PROGRAM	13
3.4	TEST SECTION	14
3.5	SITE WORK	15
anamio		
	N 4 PRESSURE TESTING	1.0
4.1	BASIS OF SECTION	
4.2	FILLING.	
4.3	PRESSURIZATION	
4.4	PRESSURE-CONTROLLED TEST	
4.5	VOLUME/STRAIN-CONTROLLED TEST	
4.6	TEST PRESSURES	
4.7	HOLD PERIOD	20
SECTIO	N 5 ASSESSMENT OF STRENGTH AND LEAK TESTS	
5.1	BASIS OF SECTION	23
5.2	STRENGTH TEST	
5.2	LEAK TEST	
5.5		25
SECTION 6 REINSTATEMENT OF THE TEST SECTION		
6.1	BASIS OF SECTION	26
6.2	REINSTATEMENT	26



This is a free preview. Purchase the entire publication at the link below:

**Product Page** 

S Looking for additional Standards? Visit Intertek Inform Infostore

> Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation