



materials engineering research
laboratory

TEST CERTIFICATE

This document certifies that

WTT80

from

Trelleborg Sealing Solutions

passed the requirements of

**NORSOK M-710 in respect of rapid gas decompression
resistance in 97/3% CH₄/CO₂ at 150 bar and 100°C,
with high groove fill (ca90%).**

Passed by :

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Date:

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Rapid gas decompression

MERL has subjected WTT80 O-rings manufactured by Trelleborg Sealing Solutions to a multi-cycle rapid gas decompression test according to Norsok M-710¹, and detailed below. After 10 cycles, all of the seals met the acceptance criterion of the standard. The results indicate that WTT80 elastomer can be considered for use at temperatures and pressure up to the test limits, with high groove fill.

O-ring details

Compound	WTT80
Size	312 (BS 1806)
Section diameter, nominal	5.33 mm
Internal diameter	15.24 mm

Test Conditions

Groove fill	90%
Temperature	100°C
Pressure	150 bar
Gas	97/3 mol% CH ₄ /CO ₂
Total cycles	10
Soak period	24 hours (initial exposure period; 72 hrs)
Depressurisation rate	20 bar per minute
Dwell at ambient pressure	1 hour

Summary

O-ring	NORSOK rating	Overall NORSOK rating	PASS /FAIL
1	3310	3310	PASS
2	3000		
3	1000		

¹ Norsok M-710, "Qualification of non-metallic sealing materials and manufacturers", Rev. 2, October 2001.