

**O-rings in compound H9T21, supplied by  
Trelleborg Sealing Solutions**

have been tested according to the requirements of

**NORSOK M-710 Edition3: 2014 and BS EN ISO 23936-2  
[ISO23936-2:2011(E)]  
(Rapid gas decompression resistance)**

**PASSED**

Test gas:	90/10 mol% CH <sub>4</sub> / CO <sub>2</sub>
Test temperature:	100 ±2 °C
Test pressure:	150 bar (15 MPa)
Number of cycles:	8
Decompression rate:	20 bar/minute
Seal Size:	312 (ISO 3601-1/AS 568)

Helen Coates  
Scientist

24<sup>th</sup> August 2015  
Date

Element Hitchin has been assessed to BS EN ISO 9001 by the British Standards Institution (BSI) and is a registered firm under the BSI Quality Assurance scheme for the provision of professional and technical services.



**Element Materials Technology**

Wilbury Way, Hitchin, Hertfordshire, SG4 0TW, United Kingdom. T: +44 (0) 1462 427850 F: +44 (0) 1462 427851  
info.hitchin@element.com www.element.com

Element Hitchin verify that O-rings in compound **H9T21** supplied by Trelleborg Sealing Solutions have been subjected to a multi-cycle RGD test under the conditions detailed below.

**RGD TEST COMMISSIONED BY**

Trelleborg Sealing Solutions

**SEAL COMPOUND DETAILS**

Seal Manufacture	Trelleborg Sealing Solutions	
Supplied by	Trelleborg Sealing Solutions	
Compound name/number/reference	3595	
Elastomer type to ASTM D1418	HNBR	
Lot/Batch No.	B/N 120207529	
Seal type	O-ring	
Manufacturing method	Not disclosed	
Seal size (ISO3601-1/AS 568)	312	
CSD (nominal)	mm	5.33
Mean CSD (actual, radial)	mm	5.39

**RGD TEST CONDITIONS**

Temperature	°C	100±2
Pressure	MPa (bar)	15 +1/-0.5 (150 +10/-5)
No. of cycles		8
Dwell between cycles	hour	1
Decompression rate (average)	MPa/min (bar/minute)	2 (20)
Gas type	mol%	90/10 CH <sub>4</sub> /CO <sub>2</sub>

**SEAL HOUSING DETAILS CONDITIONS**

Seal compression direction	Radial	
Groove ID	mm	25.36
Groove OD	mm	16.00
Groove width	mm	5.66
Squeeze (average)	%	13.0
Groove fill (area basis)	%	86
Number of seals tested	4	

**ISO TEST SEAL RATINGS**

SEAL REPLICATE	RATING	PASS/FAIL
1	0000	Pass
2	2200	Pass
3	2000	Pass
4	2000	Pass

**OVERALL RATING**

PASS

**GENERAL**

Test laboratory	Element Materials Technology, Hitchin, U.K.	
Test date	24 <sup>th</sup> July 2015 to 3 <sup>rd</sup> August 2015	
Test gas certified and available	YES/NO	YES
Transducer calibration available	YES/NO	YES
P/T log available	YES/NO	YES

TEST LABORATORY STAMP/SIGNATURE



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