

Certificate of Test

Freudenberg Oil & Gas Technologies' 13 5/8" x 5,000 psi NBR 162 Ultra annular packing unit was successfully tested with 364 close and open cycles and 52 low/high pressure tests for fatigue design validation in accordance with API 16A, Fourth Edition, section 4.7.3.21 PR1 procedures and acceptance criterion.

Product Details: FOGT 13 5/8" x 5,000 psi Ultra Annular Packing Unit NBR 162

Manufacturer:	Freudenberg Oil & Gas Technologies
Part Number:	10108521-33
Batch Number:	7896-7900
Compound Description:	NBR 162 Elastomer

Test Parameters

Validation Test Standard:	API 16A Fourth Edition PR1, Fatigue Test
BOP Type:	Annular, 13 5/8" x 5,000 psi
BOP Model:	BOP Products Series 800 13-5/8" 5K
BOP Serial Number:	B263-19/BR-008
Wellbore Low Pressure, minimum:	16 bar 227 psi
Wellbore High Pressure, minimum:	348 bar 5044 psi
Closing Pressure, maximum:	109 bar 1580 psi
Test Medium:	Water
Hold Duration:	3 minutes
FOGT Work Order:	2020 142

Test Details

Test Performed by	Freudenberg Oil & Gas Technologies
Test Location	Materials Development & Product Testing Lab 4535 Brittmoore Rd. Houston, TX 77041
Internal Test Procedures	SOP-00125/1, in accordance with API 16A Fourth Edition, PR1
Test Completion Date	August 16, 2020
Test Results	No visible leakage during the hold periods

Authorized by:

Michael LoGiudice



Manager, HOU LAB Facility