

Resistance of Elastomer Material to Explosive Decompression TEST CERTIFICATE

Requested by : *GREENE TWEED*

Elastomer Material :

- Manufacturer : *GREENE TWEED*
- Reference : *938*
- Batch number : *1001478894*
- Production period : *02/2008*
- Production unit Location :
Town : *Kulpsville*
Country : *USA*

Dimensions :

- Cross- section : *6.99 mm*
- Internal diameter : *113.67 mm*

Has been tested by our Center "Technologies de l'Etanchéité"

Test Protocol derived from : *TOTAL Procedure GS PVV 142 03/01 Rev 01*

Test conditions :

- Fluid : *80 % CH₄, 20 % CO₂*
- Pressure : *190 bar ± 2 bar*
- Temperature : *75°C ± 2 °C*
- Number of decompressions : *5*
- Decompression rate : *190 to 0 bar in 90 s (linear decompression)*
- Soaking times : *72 h and 4 times 48 h*
- Dwell time : *1 h*
- Nominal groove fill : *73 %*
- Actual groove fill : *73,4%*
- Nominal axial compression : *13.7 %*
- Actual axial compression : *13.9 %*

Test result :

- No visible crack on the external surface of three O-rings tested simultaneously.
- The maximum Norsok rating (M710 rev. 02/10/02) is **0000**

In accordance with detailed test report N° *CET0028971/6J1/a* dated *7 April 2008*

Certificate N° *TDE 2008-05* delivered in Nantes, on *14 October 2008*.

By delegation of the General Manager, Philippe DE LACLOS
Yves BIREMBAUT



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Centre Technique, régi par les articles L342.1 à L342.13 du Code de la Recherche

N° Siren 775629074 Code APE 731Z