DNV·GL

Certificate No:
TAD000007M

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Kill and Choke Equipment

with type designation(s)
Choke, Model SCC

Issued to
Expro Americas LLC
Houston TX, United States

is found to comply with
DNV-OS-E101 Drilling Plant October 2013
and DNV GL AS' understanding of the implementation and interpretation of:
PSA's "Regulations relating to design and outfitting of the facilities etc. in the petroleum activities" (THE FACILITIES REGULATIONS), Last amended 16 December 2014, Ch.VIII

Application :

Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.

THIS CERTIFICATE IS A RENEWAL OF D-5168.
This Certificate is valid until **2021-02-03**.

Issued at **Houston** on **2016-02-04**

for **DNV GL**

DNV GL local station: **Approval CMC – Houston**

Approval Engineer: **Xiangwen (Maggie) Wang**

Christian Nilsen
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

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Job Id: **262.1-013413-2**
Certificate No: **TAD000007M**

Product description

- Model 'SCC' Chokes, 5,000 & 10,000 psi, SCC205 & SCC210 with Trim Size 1"

Reference standards/codes

- API 6A, *Specification for Wellhead and Christmas Tree Equipment*, 20th Edition
- API 16C, *Specification for Choke and Kill Equipment*, 2nd Edition
- ISO 15156-3, *Petroleum and Natural Gas Industries for use in H_2S containing environment in Oil and Gas Production,* 2nd Edition
- NORSOK Standard D-SR-007, *Well Testing Systems*, 1996 Edition
- ASME Section VIII Div. 2, *Boiler & Pressure Vessel Code – Alternative Rule*, 2007 Edition
- ASME B1.1, *Unified Inch Screw Threads*, 1989 Edition
- ASME B1.5, *ACME Screw Threads*, 1997 Edition

Application/Limitation

- Max. Working Pressure: 5,000 & 10,000 psi
- Actuator Working Pressure Range: 1,100 to 1,500 psi
- Min. Design Temperature: -20 °F
- Max. Design Temperature: 250 °F/350 °F
- Service: Standard/Sour H_2S
- API 6A Material Class: DD & EE
- API 6A PSL: 3
- API 6A PR: 1

Note: DNV GL surveyor to check materials used in each project for Material Class trim.

Type Approval documentation

Tests carried out

1. DOC. #ER-1979-01 Rev. A, 'API 6A/16C Seal Immersion Test Report'.
2. DOC. #XP-1570-01 Rev. K, 'Hydrostatic and Function Testing of Expro Products'.

Marking of product

For traceability the following marking is to be carried out on each product:

1. Serial No. & Manufacturer's name or trademark.
2. Marking shall be in accordance with DNV-OS-E101 Ch. 2 Sec.6 1.3 and requirements of API 6A.

Certificate Retention Survey

For retention of the Type Approval, DNV GL's surveyor shall perform a survey every second year in accordance with DNV GL's Class Programme DNVGL-CP-0338, Section 4

Other conditions/comments

1. Procedures related to testing, welding, NDT, and other quality control requirements are to be reviewed/approved by DNV GL's local surveyor.
2. DNV GL ref.: Project No. PP144466.

END OF CERTIFICATE