DNV·GL

Certificate No:
TAD00000CB

TYPE APPROVAL CERTIFICATE

This is to certify:

That the Valve

with type designation(s)
3 1/8"-5K Magnum Manual F.E.

Issued to
Worldwide Oilfield Machine, Inc. (WOM)
HOUSTON TX, United States
PUNE, India

is found to comply with
DNVGL-OS-E101 – Drilling plant, Edition July 2015
DNVGL-SI-0166 - Verification for Compliance with Norwegian shelf regulations - Ch.2 Sec.7 DRILL(N), July 2015

Application :

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

This Certificate is valid until **2021-04-28**.

Issued at **Houston** on **2016-04-29**

for **DNV GL**

DNV GL local station: **Certification & Inspection Services**

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

Christian Nilsen
Head of Section

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

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Job Id: **262.1-022192-1**
Certificate No: **TAD00000CB**

Product description

- 3 1/8" 5K Model Magnum Manual Gate Valve

Reference standards

- API 6A, '*Specification for Wellhead and Christmas Tree Equipment*', 20th Edition
- NACE MR0175/ISO 15156, '*Petroleum and Natural Gas Industries – Material for Use in H_2S – Containing Environments in Oil and Gas Production'*, 2nd Edition

Application/Limitation

- Max. Working Pressure: 5,000 psi
- Min. Design Temperature: -20 °F
- Max. Design Temperature: 350 °F
- Service: H_2S
- API 6A Material Class: CC, DD, EE
- API 6A PSL: 3/3G
- API 6A PR: 2

Note: DNV GL surveyor to check each project for material class trim

Type Approval documentation

Tests carried out

1. PR-2 test report# ENG.TEST.MAG.003

Marking of product

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

1. Serial No.
2. Manufacturer's name or trademark.
3. Marking shall be in accordance with DNVGL-OS-E101 and requirements of API 6A.

Periodical assessment

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. PP150835-032FF.

END OF CERTIFICATE