## **DNV-GL**



**OIL & GAS** 

# NOBLE DENTON MARINE SERVICES

Marine warranty

# PIONEERS OF MARINE WARRANTY SURVEYING

DNV GL is a leading authority on operational risks and the feasibility of working practices across all aspects of marine operations in the oil and gas industry.

Our Noble Denton marine services have been active in the marine warranty market for more than half a century. We technically audit the readiness of marine operations, and provide independent and impartial advice for vessel owners, operators and underwriters. By safeguarding life, property and the environment, we help our customers to manage risk and build sustainable businesses that balance commercial demands with safety and social responsibilities.

Noble Denton pioneered the marine warranty concept for the North Sea in the 1960s and, as part of DNV GL, our offer is now stronger than ever. We have more expertise, an extended global reach and greater flexibility in responding to industry needs. The support of a global network of 4,000 oil and gas experts enables us to set the standard in shaping a safer, smarter and greener offshore industry, in partnership with our customers.

Our independent teams of master mariners and specialist engineers lead the field in project approvals for all aspects of temporary phase marine operations, from the construction yard to installation and hook-up. We specialise in the site specific approval of mobile offshore drilling units (MODUs), including jack-ups, semi-submersibles, tender barges and drill ships. Our involvement in establishing international standards for this work enables our teams to provide the most accurate and informed assessments for our customers.

## SERVICE PROVIDER TO THE TALLEST STRUCTURE EVER MOVED BY MANKIND

Our Noble Denton marine services team have played a key role in the inspection, towage and installation of some of the world's most important and innovative offshore structures. This included providing marine approvals to the tallest structure ever moved by mankind: the 472-metre high Troll A platform in the North Sea

Installing any new asset takes careful planning, but the Troll A posed additional challenges due to its considerable size and 656,000-ton weight.

Our teams of experienced mariners and technical advisors supported the customer throughout the design, construction and implementation phases of the new platform. They evaluated the operational risks, inspected the design, plans and progress, and oversaw the load-out, deck-mating, towout and installation, in order to ensure the project's success.







#### Marine warranty services in detail

Our Noble Denton marine services provide marine warranty for complex operations associated with the construction, towage and installation, and decommissioning of steel jackets, concrete structures, floating production facilities, and pipelines and subsea equipment.

We offer impartial technical audits, expert risk evaluation and feasibility assessments to verify the requirements of an operation, as presented in the operator's scope of work and identified in the insurer's policy wording. Our services include:

## Engineering and operations document review and approval

Our global teams of specialist engineers, mariners and naval architects work with customers to review documents related to a wide range of temporary phase marine operations and land transportation. These include:

- Location survey analysis review and approval for a range of cases including jack-up rig moves and semi-submersibles
- Load-out analysis review and approval for lifting, skidding and roll-on/off procedures
- Transportation analysis review and approval, including sea-fastening, stability, motion response and structural strength

- Installation analysis review and approval for procedures such as lifting, up-ending, pile drivability mooring and float-overs
- Pipelay document analysis and procedure review.

### On-site surveillance

We attend the world's most complex marine operations, providing independent oversight on behalf of operators, vessel owners and underwriters. Our services include:

- Condition and suitability surveys for a wide range of vessels, including barges, construction vessels and transportation vessels. CMID. OVID
- Load-out attendance (floating, lifted, skidded or trailered), including equipment, rigging and procedural verification
- Towage surveys, including vessel audits, tow gear inspections and route planning reviews
- Transportation surveys, including the verification of sea fastening completion, tow approvals, acceptable weather criteria approvals and personnel reviews
- Installation attendance, including the verification of launches, up-end and set down processes, piling, float-overs, lifting and setting, heavylifts and pipelay
- Rig move marine warranty surveys/towmaster.

### SAFER, SMARTER, GREENER

## Setting the standard

We have contributed significantly to developing guidelines, standards rules and global best practice in marine operations. But, with the oil and gas sector working on more complex projects in increasingly challenging environments, we believe that the benchmark can always be higher.

Every year, we invest 5% of our revenue back into research and development to keep us at the forefront of our customers' challenges. That results in more robust standards and, when you combine those with the deep technical expertise we bring to the complete asset lifecycle, you get true risk reduction.

www.dnvgl.com

#### About DNV GL

DNV GL enhances safety, increases reliability and manages risks in oil and gas projects and operations. Our industry experts offer local access to global best practice in every hydrocarbon-producing country. Driven by a curiosity for technical progress, we provide a neutral ground for collaboration; creating competence, sharing knowledge and setting industry standards. For more information, visit: www.dnvgl.com