

## Vessel Capability Trials for Dynamically Positioned Mobile Offshore Drilling Units

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### Abstract

Over the last three years, Diamond Offshore Drilling, Inc. (DODI) commissioned the Dynamically Positioned (DP) semi-submersible Mobile Offshore Drilling Unit (MODU) **Ocean Confidence** and the DP ship-shaped MODU **Ocean Clipper** after upgrades to several systems on both vessels including propulsion and the dynamic position control system. This paper will compare and contrast the vessel capability trials (typically called sea trials on a ship) for the **Ocean Confidence** and the **Ocean Clipper**. Tests to characterize propulsion plant vibration behavior were conducted. Additionally, speed and maneuvering tests were performed to satisfy regulatory authority requirements (USCG) and to verify performance. Based on this experience, the authors would like to suggest a minimum required test plan for sea trials that can be used to commission and objectively evaluate the performance of the two types of DP MODUs.

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