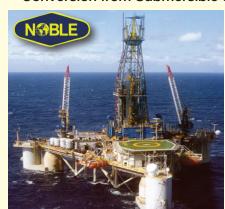
Semi-Submersibles & Drillships

Semi-Submersibles



NOBLE Paul Wolff

Conversion from Submersible to DP Semi-Submersible



- Feasibility Study
- Stability Analysis
- Motion Response
- Mooring Analysis
- Riser Analysis
- Options studied for Increased VDL
 - Column Blisters
- Increased Column Diameter
- Additional Column

ZENTECH Ultra-Deepwater Design Super EVA

- DP-III Capable12,000 Ft. WD
- 40,000 Ft. Drilling Depth
- Dual Functionality on Drill Floor
- **NOBLE Semi-Submersibles**
- Feasibility Study, Basic Design & Complete Detail Design
- 10,000 Ft. WD
- DP-II Class Rigs

- Shipyard Support Team
- Project Management



NOBLE Dave Beard (Shelf Class)



NOBLE Jim Day (Bingo Class)



NOBLE Danny Adkins (Bingo Class)



Additional Zentech Clients include: Atwood Oceanics, Statoil (Petrobras), Japan Drilling Co., Marine Drilling, Pride, Viking Offshore, Moss Maritime

Diamond Offshore Ocean Confidence

- Conversion from Accommodations to Drilling Unit
- Construction Drawings
- Riser gantry crane support, deck superstructures
- Drill floor modifications
- Piping systems
- Moon pool addition
- ROV handling structures
- BOP handling support structure



Semi-Submersibles & Drillships

Drillships



NOBLE Roger Eason

- Conversion to DP-II Class Drillship for **Petrobras Contract**
 - Feasibility Study
 - Basic and Detailed Design to Shipyard
 - Design Engineering to Remove and Replace:
 - Stern Section
 - **Bow Section**
 - Add Port and Starboard Sponsons
- Complete Conversion Engineering

Global Santa Fe Robert F. Bauer

- Upgrade for Deeper Water Depth
 - Study for Upgrade
 - Substructure Analysis
 - Helideck Design
 - Casing Rack Analysis
 - Weight Calculations



ONGC (Oil and Natural Gas Companies, Ltd.) Sagar Shushan

- Mooring Analysis for Drillship
- Quasi-Static and Dynamic Analysis for:
 - Intact
 - Damage
 - Mooring Analysis
 - **Transient Conditions**
- Water Depths of 1,300 ft. to 3,000 ft.



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