OOS ENERGY B.V.

SEMI SUBMERSIBLE DRILLING UNIT

FRIDA I

OVERVIEW

The Frida I is a GustoMSC TDS-2500 6th generation ultra-deepwater colum stabilized semi-submersible drilling unit build in 2011 by Gulf Piping in Abu Dhabi. The unit is designed for environments offshore Gulf of Mexico, Brazil and West Africa in up to 2.400 m water depths and can drill up to 10.000 m. Two pontoons and four rectangular shaped stability columns provide the buoyancy. The pontoons include ballast and trim tanks, drill water tanks, fuel tanks, reserve mud tanks, thruster rooms and pump rooms. The columns support the moonpool deck and superstructures and contain the bulk mud and cement tanks, potable water tanks and auxiliary equipment.
The vessel is designed to be positioned and keep station with an eight (8) thruster dynamic positioning system that meets the requirements for DP-2 class notation.
The mobile offshore drilling unit is also equipped with an 8 point mooring system, enabling the unit to work in shallow water depths to 70 m.

The engine/mud house is located at the aft end of the main deck, housing the mud pumps, mud pits and mud processing equipment as well as the generation power plants and controls. The center section of the main deck contains the moon pool, subsea equipment with handling system, substructure and drill floor. The accommodations and auxiliary machinery spaces are located at the forward end of the main deck.

The unit is equipped with a Riser Handling Gantry Crane mounted on tracks which allow it to travel across the whole aft pipe rack deck. The Gantry Crane is composed of two (2) legs supported by carts running on tracks located on the pipe rack deck, forward and aft
The vessel is equipped with an NOV PR40-75HS Catwalk Machine (CWM), The CWM is a horizontal pipe-handling system which safely transports tubular and miscellaneous equipment in and out of the drill floor. The CWM is designed to handle both risers and tubulars, and to improve speed when handling tubulars both running in and out of hole and to give a maximum safety to personnel. The CWM gives an almost "hands-free" operation of the tubulars.

The vessel is equipped with an Amphion SDI (Smart Drilling Instrumentation) from National Oilwell Varco. Operational information is provided to the driller by real-time processing of signals in the system.
Data is presented by means of computer graphics which provides great flexibility.

Four (4) 14-P-220-2.200HP high pressure mud pumps rated for 7.500 psi are installed in the mud pump room. The high pressure suction manifold is equipped with a suction damper and the mud pumps are charged with charging pumps. An arrangement of isolating valves allows each HP pump to discharge into two (2) stand pipes, one riser booster line (at 5.000 psi) and one 3.000 psi seawater header line to the burner booms.

SSDU SPECIFICATION

FRIDA I

GENERAL

Built	: 2011
Class	: DNV-GL
Design	: GustoMSC TDS-2500
Flag	: Panama
Min Water Depth	: 70 m
Max Water Depth	: 2.400 m
Max Drilling Depth	: 10.000 m
Accommodation	: 200 POB
Lifeboat	: 4x 105
Helideck	: Sikorsky S61N & S-92
Helideck compliance	: CAP 437 Rev.6

PRINCIPAL DIMENSIONS

Main deck length	: 76,2 m
Main deck width	: 76,2 m
Lower Hull length overall	: 97,53 m
Lower Hull width overall	: 74,98 m
Moonpool dimensions	: 40,84 x 6,27 m
Keel to main deck	: 30,18 m
Main deck to drill floor	: 43,59 m
Displacement at transit	: 25.177 mt
Displacement at drilling	: 36.108 mt
Variable Load	: 6.800 mt

CRANES

Pedestal mounted	: 2x TSC 240, 64,5 mt
Riser Gantry Crane	: 1x TSC for riser handling, 2x 30 mt hook

POWER PROPULSION

Main Engines	: 10x EMD 710G 4.000 kW
Thrusters	: 8x 2.900 kW Wartsilla
Service speed	: 4 kn
Station Keeping	: DP2, Kongsberg
Mooring	: 8 pnt pre-laid mooring 70 m up to 500 m

DRILLING EQUIPMENT

Derrick	: NOV 2 MM lbs
Pipe Handling Machine	: NOV PRS 8i
Drilling System	: NOV Amphion
Drawworks	: NOV SSGD, SWL 907 mt
Top Drive	: NOV TDS 1000A
Rotary Table	: NOV RST605-2G, 60 ½ "
Motion Compensator	: NOV – Crown Mounted Comp: 454 mt Static: 907 mt
Iron Roughneck	: NOV AR4500

WELL CONTROL

BOP – Rams	: NOV Shaffer, 18 3/4 , 5x Rams, 15k
BOP – Annular	: 2x NOV Shaffer, 10k
Choke Manifold	: NOV, 3 1/16 , 15k
Diverter	: NOV, 21¼ , 500 psi
BOP Control System	: NOV Shaffer
Riser Tensioner	: 10 x 113 mt
Marine Riser	: NOV 21"x 75'
Telescopic joint	: NOV Shaffer 65 ft. stroke

STORAGE CAPACITIES

Potable water	: 400 m^3
Diesel Fuel (MDO)	: 3.465 m^3
Drill Water	: 2.117 m^3
Brine	: 596 m^3
Bulk Barite/Bentonite	: 547 m^3
Bulk Cement	: 272 m^3
Sack material	: 115 m^2
Base Oil	: 596 m^3
Liquid mud – active	: 761 m^3
Liquid mud – reserve	: 1.192 m^3

MUD SYSTEM

Mud pumps	: 4x NOV 14P220; 2.200 hp, 7.500 psi
Shale shakers	: 5x NOV King Cobra II
Trip tank	: 2x 55bbl
Mud Gas Separator	: NOV Brand MGS Poor Boy
Degasser	: NOV Brand DG12

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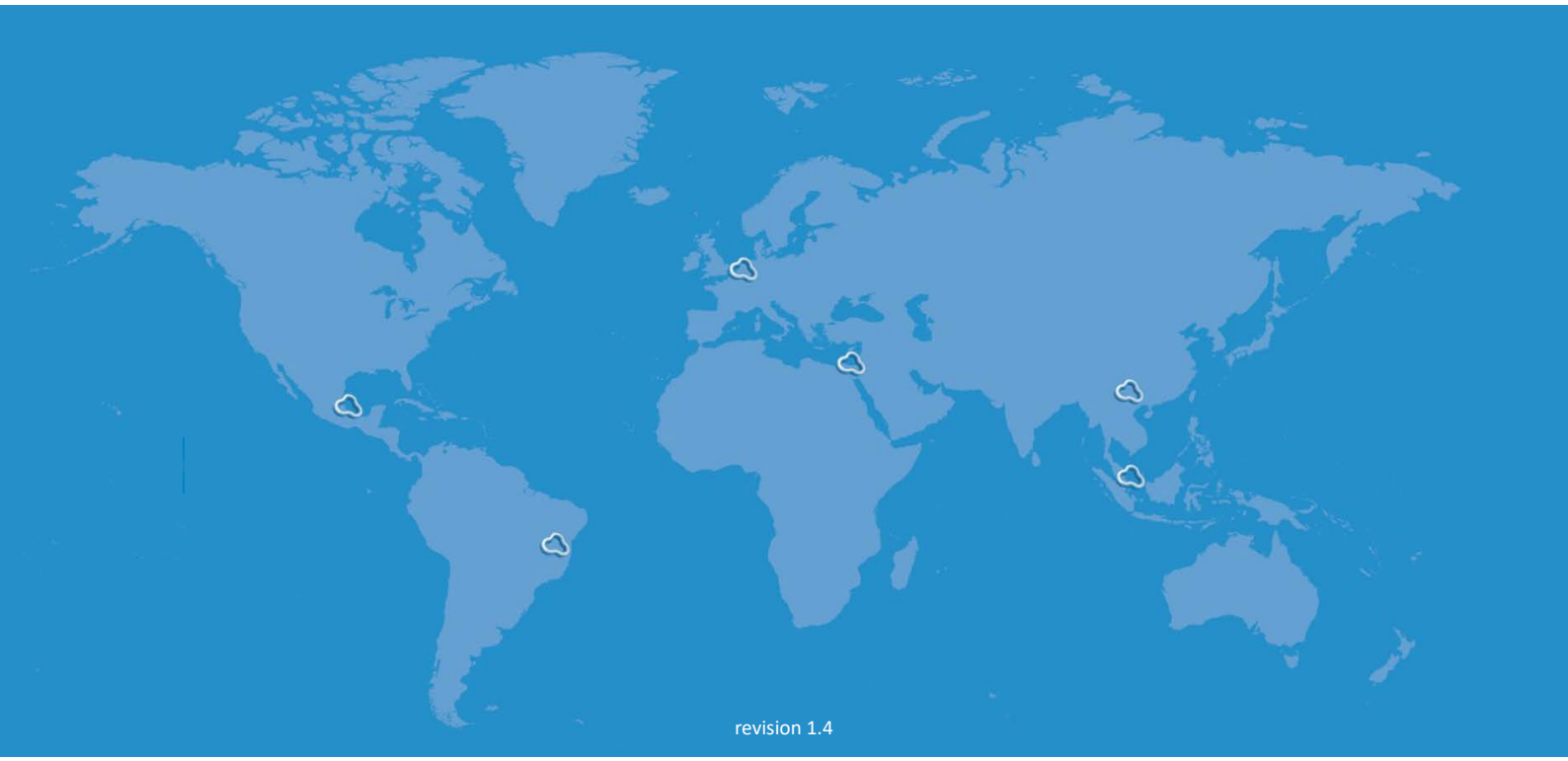

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