



GENERAL (U.S.)

Shipyard Delivery	Dec – 2015
Classification Agency	ABS 1A, (E), "Drillship", AMS, ACCU, CDS, DPS-3, UWILD, CRC, HELIDK(SRF), DLA, OHCM, HAB+
Design	DSME e-Smart Ultra Deepwater Drillship
Dimensions	238m x 42m x 19m
Moonpool	Approx. 25m x 12.6m (34.9m x 9.7m at main deck)
Water Depth	Design: 3,660m (12,000 ft) Equipped: 3,050m (10,000 ft)
Max. Drilling Depth	12,190m (40,000 ft)
Variable Deck Load	Operating / Survival and Transit: 25,000 mT.
Operating Draft	12 m
Transit Draft	9 m
Max. Wave Height	Normal Drilling: 15 ft, Max Operating: 24 ft
Helideck Capacity	Sikorsky S-92, S-61N or equivalent c/w refueling system

DRILLING EQUIPMENT

Derrick	NOV Dual Activity, 24 m x 18 m Base, 64m high, Load 1400 shT (1200 mT) in main rig & 1100 shT (998 mT) in aux rig. Max combined load 2000shT, Main rig max 1400shT, Aux Rig max 1100shT. API-4F 3rd Edition E2/U2
Racking Capacity	6 $\frac{5}{8}$ " Landing String – 90 stands x 135 ft (12,150 ft) 6 $\frac{5}{8}$ " Drill pipe–180 stands x 135 ft (24,300 ft) 5 7/8" Drill pipe-208 stands x 135 ft (28,080 ft) 5 7/8" HWDP-16 stands X 130 ft (2,160 ft) 6 $\frac{5}{8}$ " HWDP – 15 stands x 130 ft (1,950 ft) 9 $\frac{1}{2}$ " Drill collars– 10 stands x 120 ft (1,200 ft) 7" Drill Collars-8 stands x 120 ft (960 ft) 8" or 8-1/4" Drill Collars-8 stands – 120 ft (960 ft) 7", 9 $\frac{5}{8}$ " or 14" casing (Adjustable) - 153 stands BHA 4 stands

Drawworks	Main: NOV SSGD-1400, 9000HP with eight AC motors Aux: NOV SSGD-1250, 6900HP with six AC motors
Rotary Table	NOV RST-755, 75 $\frac{1}{2}$ ", hydraulically driven, 15 rpm, 1375 shT capacity NOV RST-605, 60 $\frac{1}{2}$ ", hydraulically driven, 20 rpm, 1000 shT capacity
Iron Roughneck	2x NOV ST-160 or ARN-270 (TBC) Iron Roughneck used for Well Center Operations and Offline.
Top Drive	Main and Auxiliary well centers NOV model TDX-1250, on both well centers, 1,134 mT (1250 shT) capacity, AC motor driven, 105,000 ft lbs max continuous torque @130rpm, 2 x 1340 hp water cooled AC induction motors

CAPACITIES

Diesel Fuel Oil	8500 m3 / 53,465 bbls
Fresh Water	2100 m3/ 13,209 bbls
Base Oil	1000 m3/ 6,290 bbls
Brine	1000 m3 / 6,290 bbls
Drill-water	3500 m3/ 22,015 bbls
Liquid Mud	3300 m3/ 20,756 bbls
Bulk Storage	1040 m3 / 36700 ft3
Sack Storage	10,000 sacks



OTHER PARTICULARS

Accommodations	200 Persons
Mud Pumps	NOV 4 x 14-P-220 model - 2200 HP, Gear driven, 7,500 psi (plus space for 5th pump)
Mud Manifold	API 6A PSL dual 5" ND 7,500 psi WP
Cement Manifold	API 6A PSL single 3" ND 15,000 psi WP
Cement Unit	Ultra-deepwater Cementing Package, 15000 psi pressure (supplier TBD)
Mud Cleaning	8 x VSM 300 double deck shakers, 2 x 20 cone desilter mud cleaners
Motion Compensator	Main Rig – Top mounted, active / passive Compensator Static load: 1270mT (1400 shT). Comp. load 680 mT (750 shT) and 7620 mm (25ft) stroke Aux Rig – Top mounted, active / passive Compensator Static load: 1134mT (1250 shT). Comp. load 454 mT (500 shT) and 7620 mm (25ft) stroke

PROPULSION & POWER

DP Class	DP-3
DP Control System	Kongsberg Maritime, triple redundant
Main Engines	6 x Hyundai HIMSEN diesel engines c/w Siemens AC 9000 kVA (7650 KW) alternators
Emergency Power	1 Caterpillar diesel engine c/w LEROY SOMER 2,206 kVA (1765 KW) alternator.
Thrusters	6 x 5.5 MW Rolls Royce Ulstein Aquamaster UUC 455 Azimuth (100 mT nominal thrust)

WELL CONTROL AND RISER SYSTEMS

BOP Stacks	2 x NOV Shaffer 18¾" 15,000 psi, 6 x ram NXT BOP (2 triples, – Blind Shear, Casing Shear, Blind shear, 2 VBR rams, 1 FPR,), + 2 x Shaffer 18¾", 10,000 psi Spherical Annular BOP's
Control System	NOV Multiplex (MUX) Control System, 1 backup control system to test second stack

Diverter	1 Diverter x 75½" 500 psi with 2x 16" diverter lines, 12" MGS line, 16" flow line, 8" trip tank line.
C & K Manifold	NOV Mission 3'¼" 15k HP side / 4'¼" 10k LP side
Riser	21" OD / 15k psi Choke & Kill Line, 7.5k psi booster line, 2 x hydraulic lines.
Riser Tensioning	8 x NOV wire line tensioner, 4,000,000 lbs total capacity with maximum stroke of 50ft.
Riser Length	NOV FT-HB Riser, 7/8" Wall, 10,000 ft + 54" buoyancy (75 ft joints)
BOP / Riser HANG Off	1,000 mT SWL hang off trolley (with Adaptor plate) 540mt BOP Trolley

HANDLING SYSTEMS

Cranes	Liebherr 3 x Knuckle Boom cranes, 100 mT max load, Auxiliary hook 15 mT max load Liebherr 1 x Knuckle Boom Active heave compensated 165 mT crane.
Tubular Handling	2 X Hydra RackerHR-IV-ER (Dual system) Stand handling Range: 135 ft tubulars, 4 1/4" DP through 14" Casing Racking config: Parallel Hoist Cap.: 14mT 1 x NOV CWS-P15-45-HB 40 mT capacity pipe handling catwalk suitable for handling 75 ft tubulars 1 x NOV CWM-R55-75 (55 mT capacity) riser catwalk suitable for handling 75 ft riser joints, telescopic joints, diverter, flex joint, spider and gimble as well as pup joints
X-mas Tree Handling	150 mT capacity hydraulically operated X-mas tree trolley. Storage for up to four x-mas trees.
BOP Handling	540 mT capacity hydraulically operated BOP trolley which can accommodate 1000 mT riser hang off adaptor plate
BOP/ LMRP Hoists	SWL 2 x 250 mT + Aux winch SWL 2x30mT hydraulically operated overhead gantry crane for handling of two complete BOPs + LMRPs.



LIFESAVING SYSTEMS

Lifeboats	6 x 70 man capacity, davit launched lifeboats (210% of PoB) + 1 x FRC for 6 persons
Life rafts	16 x 25 man inflatable liferafts (200% of PoB)
Lifejackets	330 lifejackets (200 in accommodation)
Lifebuoys	14 installed in accordance with IMO MODU & SOLAS
Rescue Boat	One Fast rescue boat with capacity for 6 men, launched from a davit of pivot hinged gravity type
Lifebuoys	14 installed in accordance with IMO MODU & SOLAS