



ENSCO 108

GENERAL INFORMATION

Flag: Liberian
Previous Name(s):
Year Built: 2007
Builder: Keppel FELS, Singapore
Upgrade: 2009
Design: Keppel FELS KFELS MOD V B Class
 "Bigfoot"
Classification: ABS A-1 self-elevating MODU

MAIN DIMENSIONS

Length: 234ft
Breadth: 208ft
Depth: 25ft
Legs: 3 x triangular 517ft
Leg Spacing: Longitudinal leg center 129ft, transverse leg center 142ft.
Cantilever: Min. 19'6", Max. 70ft from stern to rotary centerline; Max. 15ft rotary displacement to either side of longitudinal centerline; 50' 6" x 30ft live drilling area aft of hull.
Spud Cans: 53ft diameter x 19ft high.
Deck Area: Main deck storage capacity 6,100ft².

DRAFT AND DISPLACEMENT

Transit Draft: 16ft
Displacement: 35,260 kips. (Transit)

MACHINERY

Main Power: 5 x Cat 3516-B diesel engine each driving 1 x Cat SR4B 1,383 KW generator; total 9,275 HP.
Power Distribution: 4 x M&I 600 V, 2,200A SCR system for mud pumps; 4 x M&I variable frequency drives for AC top drive and AC Drawworks.
Emergency Power: 1 x Cat 3512 - C engine x 1,360 KW

OPERATING PARAMETERS

Water Depth: 350ft - 400ft
Drilling Depth: 30,000ft (Maximum)
Leg Penetration: 25ft
Air Gap: 55ft-120ft subject to extending crane and LB fall wires
Transit Speed: 4.5kt to 5kt
Survival Conditions: At 350ft water depth: wind: 100 knots; 43ft waves; 15 sec period (with fixation system)
Criteria Design: .

DRILLING EQUIPMENT

Derrick: Woolslayer 160ft x 32ft x 35ft; rated 1,500,00 lb static hook load capacity.
Drawworks: Varco/ADS-10DT, 3,000 HP
Rotary: Varco/BJ RST 495, 49 1/2" max opening
Top Drive: Varco TDS-8SA, 750t
Travelling: Varco 750t rating
Handling: Varco PH 100 hydraulic; Varco AR-3200 Iron Roughneck.
Cementing: Dowell Schlumberger (3rd party)
Mud Pumps: 3 x Lewco W-2215, 2,200 HP; 7,500 psi
Drill Pipe: 5 1/2" X105 DP 24.7lb/ft XT54; 4" G-105 14lb/ft XT39
HWDP: 50 x 5 1/2" ; 50 x 4"
Drill Collars: 12 x 9.5"; 24 x 8.5"; 24 x 6 1/2"; 24 x 4 3/4"

HOISTING EQUIPMENT

Craneage: 3 x Favco Model 7.5/10K 10 ton, whip line 45.4MT main line; diesel hydraulic.

CAPACITIES

Variable Deck Load: 9,000 Kips (drilling)
Cantilever Load: 2,300 Kips
Total Drilling Load: 2,300 Kips
Tubulars in Pipe Rack: 30,000ft 5 1/2" DP plus BHA
Liquid Mud: 3,891 bbl
Bulk Mud/Cement: 11,100 ft³
Sacks: 5,000 sacks
Drill Water: 20,089 bbl
Potable Water: 2,000 bbl
Fuel Oil: 3,384 bbl
Others: Trip Tank 2 x 50 bbl.

WELL CONTROL SYSTEMS

BOP: 1 ea. NOV Shaffer 13-5/8" x 10,000psi Annular, 2 ea. Cameron 13-5/8" x 10,000psi U-Type Double - 4 Rams, 1 ea. Drilling Mud Cross 13-5/8" x 10,000 psi
BOP Handling: 2 x 75t tandem BOP hoists.
Control System: Shaffer Model # 20028424, 3,000 psi, 42 bottles x 11 gal capacity.
Diverter: ABB Vetco KFDJ 49 1/2" 2,000psi with 2 x 12" remote controlled valves & 1 x 14" remote controlled valve. 9 bottles x 11gal capacity. Big Bore Diverter Housing Assembly with 40" ID
Choke and Kill: JVS manifold - 10K, EFC choke manifold control system

MOORING

Winches: Foundations for winches provided, none outfitted
Wire: None
Anchors: Anchor racks provided, none outfitted

HELIDECK

S-92; 73ft diameter; 11.9mT - comply with CAP 437 8th edition

JACKING AND SKIDDING SYSTEM

Keppel FELS with self-positioning fixation system.

ACCOMMODATION

120 Certified POB; Four (4) separate single man rooms with private bathrooms

ADDITIONAL DATA

Shale Shakers: 4 x VSM - 300; 1x VSM 300 24/3 Mud Cleaner; 3 x 12" Desander; 24 x 4" Desilter; 2 x Brandt DG-10 1,000 gpm vacuum degasser, 200 MT conductor tensioning system, offline capabilities with Varco "Phantom Mousehole" rotating Mousehole, Varco Foxhole Spider Mousehole, MDT/Varco flex chair drilling controls and instrumentation.
Watermaker: RO & Distillation Units producing up to 100cm/d.
TV System: CCTV system includes cameras in derrick, under substructure, shale shakers and top of jacking houses.

CANTILEVER CAPACITY (kips)

	Reach	+15'	0	-15'
Max combined load & setback	70'	627	1500	764
	36'	2300	2300	2300