



## ENSCO 107

### GENERAL INFORMATION

**Flag:** Liberian  
**Previous Name(s):**  
**Year Built:** 2006  
**Builder:** Keppel FELS, Singapore  
**Upgrade:** N/A  
**Design:** Keppel FELS KFELS MOD V B Class "Bigfoot"  
**Classification:** A.B.S. A-1 self-elevating mobile Offshore Drilling unit.

### MAIN DIMENSIONS

**Length:** 234ft (314ft including Helideck)  
**Breadth:** 208ft (225 ft including Anchor Racks)  
**Depth:** 25ft  
**Legs:** 3 x triangular 517ft  
**Leg Spacing:** Longitudinal leg center 129ft  
 transverse leg center 142ft.  
**Cantilever:** Min. 19ft 6", max. 70ft from stern to rotary centerline; Max. 15ft rotary displacement to either side of longitudinal centerline; 50ft 6" x 30ft live drilling area aft of hull  
**Spud Cans:** 53ft diameter x 15ft high.  
**Deck Area:** Main deck storage capacity 6,100ft<sup>2</sup>

### DRAFT AND DISPLACEMENT

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

### MACHINERY

**Main Power:** 5 x Cat 3516-B diesel engine each driving 1 x Cat SR4B 1,383KW generator; total 9,275Hp.  
**Power Distribution:** 4 x M&I 600V, 2,200A SCR system for mud pumps; 4 x M&I variable frequency drives for AC top drive and AC dwks.  
**Emergency Power:** 1 x Cat 3508-B diesel engine rated at 914 Hp driving 1 x Leroy Somer 600KW generator.

### OPERATING PARAMETERS

**Water Depth:** 350ft – 400ft  
**Drilling Depth:** 30,000ft (Maximum)  
**Leg Penetration:** 25ft  
**Air Gap:** 120ft  
**Transit Speed:** 4.5Kt – 5Kt  
**Survival Conditions:** At 350ft water depth: wind: 100kt; waves: 43ft; period 15s (with fixation system)  
**Criteria Design:** 70kt wind; 40ft wave; -10°C temp.

### DRILLING EQUIPMENT

**Derrick:** Woolslayer 160ft x 35ft x 35ft, rated 1,500,000lb static hook load capacity.  
**Drawworks:** Varco/ADS-10DT, 3,000Hp.  
**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:** Haliburton HCS Advantage  
**Mud Pumps:** 3 x lewco W-2215, 2,200Hp; 7,500Psi  
**Drill Pipe:** 20,000ft x 5 1/2" x 24.7lb.ft S-135 HT-55 tool jts.  
**HWDP:** 30 x 5 1/2"  
**Drill Collars:** 6 x 9 1/2"; 18 x 8 1/4"; 24 x 6 3/4"; 24 x 4 3/4".

### HOISTING EQUIPMENT

**Crane:** 3 x Favco Model 7.5/10K 10t, 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:** 3,891bbl  
**Bulk Mud/Cement:** 11,100ft<sup>3</sup>  
**Sacks:** 5,000 sacks  
**Drill Water:** 20,089bbl  
**Potable Water:** 2,000bbl  
**Brine Storage:** 1,000bbl  
**Base Oil Capacity:** 1,002bbl  
**Fuel Oil:** 2,950bbl  
**Others:** Trip Tank 2 x 37bbl

### WELL CONTROL SYSTEMS

**BOP:** Varco SLX 18 3/4" 10,000Psi 4 ram BOP stack (2 - Doubles); Shaffer 18 3/4" 5,000Psi annular.  
**BOP Handling:** 2 x MOS 75t tandem chain hoists.  
**BOP Tensioning:** 4 x 55T – BOP Tensioning Cylinder System  
**Control System** Koomey model T60360-3S, 3,000Psi, 42 bottles x 15 gal capacity  
**Diverter:** ABB Vetco KFDJ 49 1/2" 2,000Psi with 2 x 12" remote controlled valves & 1 x 14" remote controlled valve.  
**Choke and Kill:** Cameron 3-1/16" x 15,000 psi

### MOORING

**Winches:** 4 x LeTourneau W-1500.  
**Wire:** 2500ft of 1-3/8" wire.  
**Anchors:** 4 x Flipper Delta, 5,000Kg.

**HELIDECK** S-92; 74ft diameter; 20,400lb.

### JACKING AND SKIDDING SYSTEM

Keppel FELS with self-positioning fixation system.

### ACCOMMODATION

112 berths  
 15 x 2 man staterooms with private T&S, 37 x 2 man staterooms with shared T&S, 2 x 4 man staterooms with private T&S) with gymnasium, recreation rooms, 6 x offices, control room, conference room, radio room and 2-bed hospital

### ADDITIONAL DATA

**Shale Shakers:** 4ea NOV VSM 300  
**Mud Cleaners:** 1ea NOV Brandt VSM 300, desander: 24x4"  
**Desilter:** 2 x Brandt DG-10 1,000 gpm vacuum degasser  
**Conductor Tension:** 200 MT conductor tensioning system,  
**Offline Capabilities:** Varco "Phantom" rotating Mousehole, Varco Foxhole Spider Mousehole.  
**Driller Controls:** MDT/Varco Amphion flex chair drilling controls and instrumentation  
**Pollution Control:** Single point discharge.  
**Watermaker:** 1 X Specific Controls – RO Watermaker // 1 x Alpha Laval Watermaker – combined output of 375 bbls per day.

### CANTILEVER CAPACITY (kips)

	Reach	+15'	0	-15'
Max combined load & setback	70'	563	1500	563
	38'	2156	2300	2156