



KFELS Mod V Jack-up • Year in Service: 2002

GENERAL INFORMATION

Flag: TBD

Year Built: 2002
Builder: Keppel FELS, Singapore
Upgrade: 2011 / 2014
Design: KFELS Mod V Class B
Classification: ABS A-1 self-elevating MODU

MAIN DIMENSIONS

Length: 225 ft
Breadth: 208 ft
Depth: 25 ft
Legs: 3 x triangular 517 ft
Leg Spacing: Longitud. center 129 ft, transv. center 142 ft
Cantilever: Maximum 70 ft from stern to rotary centerline; maximum 15 ft rotary displacement to either side of longitudinal centerline; 50 ft x 30 ft live drilling area aft of hull

Spud Cans: 47.2 ft diameter x 19 ft high
Deck Area: 6,100 ft²

DRAFT AND DISPLACEMENT

Transit Draft: 16 ft
Displacement: 31,351 kips (Transit)

MACHINERY

Main Power: 5 x Cat 3516-B diesel engines rated at 1,855 HP, each driving 1 x Cat 2,150 KVA generator, total 9,275 HP

Power Distribution: 5 x Ross Hill Control 600V, 2,200A SCR system; 1 x Siemens Variable Frequency Drive (VFD) for Top Drive, Type 6SE 7241-2FSOO-3AB0-Z, VT current output 1230, HP 1250)

Emergency Power: 1 x Cat 3516-B diesel engine rated at 1,855 HP, driving 1 x Cat 2,150 KVA generator.

OPERATING PARAMETERS

Water Depth: 350 ft – 400 ft
Drilling Depth: 30,000 ft (Maximum)
Leg Penetration: 25 ft
Air Gap: 120 ft
Transit Speed: 4 – 5 knots
Survival Conditions: At 350 ft Water Depth Capacity: - At 350 ft water depth: wind: 100 knots; waves: 43 ft; period 15.sec (with fixation system)

Criteria Design: 70 knots; waves: 42 ft; -10°C.

DRILLING EQUIPMENT

Derrick: Drecto 170' rated 1,500,000 lbs
Drawworks: National 1625 UDBE, 3 x GE 752 DC motors, total 3,000 HP, Baylor 7838 Elmago National D-495 (49 1/2' max. opening) driven by 1 x GE 752 DC motor, 1,130 HP

Rotary: NOV TDS-8SA-AC, 750 mt
Top Drive: Varco 750 mt rating
Travelling: Varco ST-120 Roughneck
Handling: Haliburton HCS Advantage 15k free placement
Cementing: 3 x National 14-P-220; 7,500 psi mud system
Mud Pumps: 11,000ft 5 1/2" 24.7ppf VM105, VCDS55 Tool Joint; 8,662ft 4" CYX-105 14ppf XT-39 Tool Joint; 8,662 ft 5 1/2" S-135 21.9 lb.ft VCDS55 Tool Joints R2; 8,662 ft 5 1/2" G-105 21.9 lb.ft VCDS55 Tool Joints; 5,513 ft 4" S-135 VX-39 Tool Joint

Drill Collars: 9 1/2"; 8 1/4"; 6 1/2"; and 4 3/4"

HOISTING EQUIPMENT

Crane: 3 x Drecto DNS-48, 120 ft booms, 45 mt @ 25 ft radius, Aux 9 mt @120 ft radius

CAPACITIES

Variable Deck Load: 9,700 kips (drilling)
Cantilever Load: 800 kips (cantilever pipe rack load)
Total Drilling Load: 2,250 kips (combined hook, rotary, setback)
Tubulars in Pipe Rack: 25,000 ft
Liquid Mud: 3,598 bbl
Bulk Mud/Cement: 11,100 ft³
Sacks: 5,000 sacks
Drill water: 15,082 bbl
Potable Water: 2,053 bbl
Brine Storage: 2,229 bbl
Base Oil Capacity: 1,298 bbl
Fuel Oil: 2,584 bbl

WELL CONTROL SYSTEMS

BOP: Cameron "U" 13 5/8" 10,000 psi 4 ram BOP stack; Shaffer spherical blowout preventer 5,000 psi 13- 5/8" 5,000Psi annular (10,000 psi piping)

BOP Handling: J.D Neuhaus model UH-100, 200 mt

Control System: ABB TX392-15BT3X

Diverter: ABB Vetco KFDJ 49 1/2", 500 psi, 36 1/2" bore, 2 x 12" Hydraulic Remote Operated valves
TV System: Hervis / PT30W CCTV system, Monkey Board, Stabbing Board, and Flowline

Choke and Kill: 3-1/16" x 15,000 psi T3

MOORING

Winches: 4 x Marathon LeTourneau / W1500

Wire: 1 1/2" x 2,000 ft anchor wire.

Anchor: Anchor racks available, no anchors fitted

HELIDECK

S-61 75 ft Diameter Rated 20,500 lbs

JACKING AND SKIDDING SYSTEM

Jacking Unit: Keppel Fels – OTD Model 1000FV; **Skid Unit:** Keppel Fels – OTD Model SS200-FL.

ACCOMMODATION

120 berths

30 x 2 man rooms, 12 x 4 man rooms, 2 private rooms, 10 bed TLQ

ADDITIONAL DATA

4 x Brandt VSM-300 Shale Shaker, 3 in 1 VSM300 Mud Cleaner. 300 kip conductor tensioning system – Icon
Watermaker: Two Units, 14,000 gpd each
Others: Skimmer-209bbbls: Dirty Oil 51 bbl

CANTILEVER CAPACITY (kips)

	Reach	+15'	0	-15'
Allow Loads	70'	606	1306	474
Max combined load & setback	46'	2001	2250	1580

Values in table for 900 Kips total setback load