



ENERGY ENDEAVOUR

Jack Up
Rig and Equipment Overview



RIG SPECIFICATIONS

GENERAL

Rig Energy Endeavour
Flag Liberia
Owner Energy Endeavour Limited
Design Gusto Engineering independent 3-leg self-elevating cantilever jack up
Builder RSV Gusto, Holland
Classification Lloyd's + OU 100 A mobile drilling platform, self-elevating PC

MACHINERY

Main Power 4 X Caterpillar 3516B DITA diesel engine, each driving 1 x Leroy Somer LSA 53 S7 1825 kW generator, 2607 kVA, 600Vac
Power Distribution Hill Graham SCR 6 drive system; 6 X 1800 amp
Emergency Power 1 X Caterpillar D 398TA diesel driving 1 X 566 kW generator

DRILLING EQUIPMENT

Derrick 160 X 30 X 30 ft, 1,000,000 lb; 7 X 60" sheave; Crown block: Dresco 583 ton
Drawworks National 1320-UE with Elmagco brake and driven by 2 X electric motor
Rotary National C-495 hydraulic driven
Top Drive Varco TDS-4H, driven by 1 X GE 752 dc electric motor
Traveling Block/hook: National 660-G-500; swivel: National PC500
Cementing Halliburton Twin HT-400 dual cementing unit driven by 2 X diesel engine
Handling Varco AR3000 Iron Roughneck. Power slips
Mud Pumps 3 X National 12-P-120 triplex pump each driven by 2 X electric motor

MOORING

Winches 4 X Skagit JUW-100 winch
Wire/Chain 4 X 2000 ft X 2" diameter wire
Anchors 4 X 16,500 lb Delta Flipper
Cranage 1 X National OS435 140 ft boom 50 ton; 1 X National OS-215 100 ft boom 38 ton; 1 X Maritime Hydraulics 5 ton for pipe handling
Helideck S-61N; 83 ft diameter
Jacking and Skidding System Electric rack and pinion jacking. Rates: Pontoon: 70 ft/hr; Leg: 110 ft/hr; Holding capacity: 7283 ton per leg
Accommodation 76 berths
Additional Data 1. Mud return system: 3 X Derrick Flo-line shale shaker; 1 X Wellco 5200 vacuum degasser; 2 X Picenco S-2-12 desander; 2 X Picenco T 16-E4 desilter; 2 X Pioneer mud cleaner each with a capacity of 800 gpm; 1 X mud gas separator capacity 20 bbl; 2 X Brandt type Scalang Shaker; 2 X Niro centrifuge 2. Controlled overboard discharge system 3. Safety equipment: Lifesaving and fire-fighting equipment in accordance with Danish Maritime authority, UK DOE/DOT regulations and IMO MODU code

MAIN DIMENSIONS/ DRAFT/DISPLACEMENT

Length 226 ft
Breadth 259 ft
Depth 27 ft
Legs 3X448 ft; leg below hull 370 ft
Cantilever Well centre can be placed 45 ft aft of stern and 13 ft either side of centerline
Spud Tanks 1874 ft²
Transit Draft 15ft (4.6 m) max draft

OPERATING PARAMETERS

Max Water Depth 300 ft
Max Drilling Depth 25,000 ft
Leg Penetration 8 ft maximum
Air Gap 51 ft – 100 ft
Transit Speed 5 knots
Criteria Design Waves: 85 ft; period: 16 sec; wind: 70 knots; current: 1.3 knots
Design Conditions Waves: 85 ft at 16 sec; wind: 70 knots; current: 1.3 knots

CAPACITIES

Variable Deck Load 2651 ton (5,940,000 lb)
Cantilever Load (Simultaneous) rotary: 900,000 lb and setback: 600,000 lb; hook: 1,000,000 lb
Tubulars in Pipe Rack Main deck: 1,001,000 lb; Cantilever deck: 440,000 lb
Bulk Mud/Cement 4500/4500 ft³
Liquid Mud 3908 bbl
Sacks 5000 sacks
Drillwater 5052 bbl
Portable water 1442 bbl
Fuel Oil 3171 bbl
Others Lube oil: 30 bbl; piperack areas 54 X 40 ft and 46 X 65 ft; Atlas water maker 25,000 gpd

BOP SYSTEMS

BOP 2 X NL Shaffer 2000 psi 21-1/4" single ram preventer; 1 X NL Shaffer 2000psi 21-1/4" spherical preventer; 1 X NL Shaffer 5000psi 13-5/8" spherical preventer; 2 x Koomey 15,000 psi 13-5/8" double ram preventer; 1 x Koomey 15,000 psi 13-5/8" double ram preventer
BOP Handling 4 X BOP crane with 37.5 ton capacity each
Control System Koomey R 30,000-3S, 396 gallon, 3000 psi air/electric powered BOP closing unit; 2 X remote station
Diverter 1 X KFDJ, 500psi
Drillpipe 5000ft X 3-1/2" Grade S; 16,000ft X 5" Grade S; 1500ft X 5" Hevi-wate spiral
Drillcollars 30 joints X 6-3/4"; 24 joints X 8"; 9 joints X 9-3/4"
TV system Derrick and flowline monitoring
Choke and Kill 15,000 psi choke manifold for H₂S service with remote controlled chokes