

Byford Dolphin

GENERAL

Name: Byford Dolphin

Flag: Singapore

Owner: Fred. Olsen Energy ASA

Manager: Dolphin Drilling Ltd.

Year Built: 1974

Design: Aker H3

Classification: DNV + 1A1, Column Stabilised Drilling Unit

MAIN DIMENSIONS

Length: 355 ft (108,2 m)

Breadth: 221 ft (67,4 m)

Depth: 120 ft (36,6 m)

OPERATING PARAMETERS

Water Depth: 1500 ft (458 m)

Maximum Drilling Depth: 20,000 ft (6096 m)

Transit Speed: Approx. 4,5 knots

Design Conditions:

Wind speed: 169 ft/s (100 knots),

Max wave height: 102 ft (31 m)

CAPACITIES

Variable Deck Load: 3,021 mt

Liquid Mud: 3,981 bbls (534 m³)

Bulk Mud/Cement: 547 mt / 270 mt

DRILLING EQUIPMENT

Derrick: Continental Emsco 22 BDD 168 x 40 x 40 ft with retrofit 10 ft extension in 1996; 1,200,000 lbs static

Drawworks: National 1625 DE (3 x 800 hp)

Rotary: Continental Emsco T-4950, 49 ½", 800 hp

Topdrive: Varco TDS-4

Riser Tensioners: 8 x Rucker Shaffer 80,000 lbs (Total 640,000 lbs capacity)

Motion Compensators: Crown Mounted Compensator, Shaffer CMC-25-600-DA; 25 ft stroke; 600,000lbs capacity

Mud Pumps: 3 x National 12-P-160 Triplex

MACHINERY

Main Power: 4 x Rolls Royce (Bergen) kVGB-12 (4 x 1,910 kVA)

Emergency Power: 1 x MTU (1 x 844 kVA)

Propulsion: In-line Propulsion, 2 x 1700 bhp



SUBSEA SYSTEMS

BOP: Hydril 18 ¾", 15,000 psi

Control System: Shaffer direct hydraulic system retrofitted in 2000

Diverter: Regan KFDS 3

Choke and Kill: McEvoy 3 1/16" 15,000 psi, H2S

MOORING

Winches: 8 x National + 4 x Brattvaag

Wire/Chain: 12 x 4,400 ft 3" ORQ and K4 chain

Anchors: 11 x 15 mt Stevshark and 1 x 15 mt Stevpris

CRANAGE

2 x National OS 435, 120 ft boom, 49 mt capacity

ACCOMMODATION

102 berths