WILPHOENIX
WILPHOENIX:
TECHNICAL SPECIFICATIONS

NAME: WILPHOENIX
FLAG: VANUATU
OWNER: WILPHOENIX (MALTA) LTD.
MANAGER: AWILCO DRILLING PLC.
PREVIOUS NAME(S): VINLAND; MAERSK JUTLANDER; GSF ARCTIC II; ARCTIC II

BUILDER: GOTAVERKEN ARENDAL, SWEDEN
DESIGN: FRIEDE & GOLDMAN L-907 ENHANCED PACESETTER SEMI-SUBMERSIBLE
CLASSIFICATION: DNV 1A1 COLUMN STABILISED DRILLING UNIT

> MAIN DIMENSIONS

LENGTH: 308 ft
BREADTH: 206 ft
DEPTH: 116 ft main deck elevation.
COLUMNS: 4 x 35 ft diameter corner columns, with stability boxes 12.5 ft deep x 22.3 ft wide & length of column; 2 x 32 ft diameter centre columns.
PONTOONS: 2 x 260 ft long x 50 ft wide x 25ft deep, with sponsons 5 ft wide x 24 ft deep x 157.4 ft long
DECK AREA: Main deck length 220ft. Main deck width 200 ft. Total deck area 42,400 ft²

> DRAFT AND DISPLACEMENT

OPERATION DRAFT: 64 ft
TRANSIT DRAFT: 25 ft
SURVIVAL DRAFT: 50 ft
OPERATION DISPLACEMENT: 26,353 ton
TRANSIT DISPLACEMENT: 17,556 ton

> MACHINERY

MAIN POWER: 4 x Nohab F312 12-cylinder diesel with maximum continuous power 2652 hp with 4 x Siemens 1808 kW ac generator
POWER DISTRIBUTION: 8 x Siemens SCR power unit, 720V dc 1200amp; 4 x Sundberg AB transformer 1200 kVA; 3 x Sundberg AB transformer 875 kVA
EMERGENCY POWER: 1 x Cummins KTA 50-D (M1) Rated at 1000 kW

> OPERATING PARAMETERS

WATER DEPTH: 1200 ft
MAXIMUM DRILLING DEPTH: 25000 ft
SURVIVAL CONDITIONS:
Wind: 100 knots; wave height: 100 ft; period: 13.5 sec;
DRILLING CONDITIONS:
Wind: 60 knots; wave height: 50ft; period 10 sec
DESIGN CONDITIONS:
Max wind speed: 100 knots;
max wave height: 100 ft
> DRILLING EQUIPMENT

**DERRICK:** Dreco 195ft x 40ft x 40ft, 1,250,000 lb static hook load with 14 lines; Crown block: Maritime Hydraulics, 650 ton

**DRAWWORKS:**
- National 1625 UDBE 3000 hp with 3 x GE 752 motors & disc brake and a Baylor 7838 auxiliary electric brake
- Ideco 49 ½' hydraulic motor driven, non-drilling

**TOP DRIVE:** Maritime Hydraulics DDM-650-HY-C 359, 590 te, continuous drilling torque rating of 40,450 ft/lb @ 265 rpm

**TRAVELLING BLOCK:** Ideco 750 st with retract.

**RISER TENSIONERS:** 8 x 80,000 lb NL Shaffer 50 ft line travel

**GUIDELINE TENSIONERS:** 4 x16,000 lb NL Shaffer, 40 ft line travel

**POD TENSIONERS:** NL Shaffer 2 x16,000 lb, 40 ft travel

**MOTION COMPENSATORS:** Maritime Hydraulics Crown Mounted Compensator MH 1659 270 – 20 with Active Heave, Compensating capacity 596,000lb.

**CEMENTING:** Schlumberger remote operated CPS 679

**MUD PUMPS:**
- 2 x Ideco T-1600, 1600 hp triplex, each driven by 2 x Siemens dc motor, rated to 5000 psi with plungers and high pressure liners; 1 x National Oilwell 12-P-160 1600 hp triplex driven by 2 x GE 752 dc traction motor, rated to 5000 psi with plungers and high pressure liners

> CAPACITIES

**VARIABLE DECK LOAD:** 4167 Tonne

**BULK MUD/CEMENT:** 3778/5777 ft³

**LIQUID MUD:**
- Active - 1716 bbls
- Mud processing - 358bbls
- Reserve - 1445bbls

**SACKS:** 6000 sacks (100 lb ea)

**DRILLWATER:** 13,737bbls

**POTABLE WATER:** 2791 bbls

**FUEL OIL:** 8013 bbls

**OTHERS:** Base Oil 3711 bbls
- Brine 2016 bbls

> SUBSEA SYSTEMS

**BOP:** 1 x 18¾” 15,000psi Vetco H4 E x F Wellhead connector, 1 x Shaffer 15K Triple NXT ram preventer, 1 x Shaffer 15K NXT double ram preventer, 1 x 18¾” 10,000 psi Shaffer annular preventer

**LMRP:** 1 x 18¾” 15,000 psi VETCO HAR connector, 1 x 18¾” 10000 psi Shaffer annular preventer

**BOP HANDLING:** Nomar 235 te BOP Elevator

**CONTROL SYSTEM:** AXON 3000 psi electric powered control system with 5000psi DMAS system

**RISER DETAILS:** 1200 ft x Regan FC8 21”

**DIVERTER:** Regan KFDS-3, 23in nominal size diverter with Regan DR-1 ball joint

**DRILLPIPE:** As required

**DRILLCOLLARS:** As required

**CHOKE AND KILL:** 3 1/16” 15,000 psi wp AXON choke manifold HP/HT ready

> MOORING

**WINCHES:** 4 x Norwinch 2A-76-2 E1-hydraulic double winch

**CHAIN:** 8 x 4250 ft x 3” K4 anchor chain

**ANCHORS:** 8 x 12 te Stevprix MK6 with chain chasers

> CRANES:
- 2 x Liebherr, 120ft boom, 30 te at 31 ft radius; 1 x Liebherr 80 ft boom, 50 te at 31 ft radius

> HELIDECK:
- S-61N, 85 ft x 87 ft

> MOONPOOL:
- 75 ft x 20 ft

> ACCOMMODATION:
- 110 berths – 2 man cabins – extensive additional offices as a result of 2011 upgrades

> ADDITIONAL DATA:
- Solids control: 4 x Derrick 626 Dual Pool Shakers. STEP automated mud mix system