



The "PACIFIC MISTRAL" is an upgraded Samsung 10,000 design dynamically-positioned drillship capable of operating in moderate to harsh environments and water depths up to 3,048 m (10,000 ft) using 18¾" BOP and 21" OD marine drilling riser.



Pacific Mistral UDW Drillship (Hull # 1864)

GENERAL

Flag:	Liberia
Owner:	Pacific Mistral Ltd., a subsidiary of Pacific Drilling Limited
Manager	Pacific Drilling Services Inc.
Year Built:	2011
Design:	Samsung 10000 Double Hull
Builder:	Samsung Heavy Industries, South Korea
Classification:	ABS +A1(E), "Drilling Unit", +AMS, +ACCU, +DPS-3, NBLES, DLA, CDS

OPERATING PARAMETERS

Maximum transit speed:	12 knots	
Operating conditions:	Wave: 22ft	Wind 52: knots
Station-keeping conditions:	Wave: 28ft	Wind 60: knots
Storm conditions:	Wave: 47ft	Wind 100: knots
Water depth:	Equipped: 10,000ft (3,048m)	Maximum: 12,000ft (3,657m)
Drilling depth:	Equipped: 35,000ft (10,668m)	Maximum: 37,500ft (11,430m)

MAIN DIMENSIONS / CAPACITIES

Length:	748 ft	228 m
Breadth:	137 ft	42 m
Depth:	62 ft	19 m
Transit draft:	28 ft	8.5 m
Operating draft:	39 ft	12 m
Maximum load displacement	105,800 ST	96,000 MT
Variable deck load – Operating	22,046 ST	20,000 MT
Variable deck load – Transit	18,188 ST	16,500 MT
Variable deck load – Survival	22,046 ST	20,000 MT
Brine	5,030 bbls	800 m ³
Base oil:	5,030 bbls	800 m ³
Active mud:	6,290 bbls	1,000 m ³
Reserve mud:	6,290 bbls	1,000 m ³
Liquid (Riser) Mud:	-	-
Waste Mud / Reserve mud:	3,000 bbls	478 m ³
Sacks:	10,000 sacks	
Drill water:	17,612 bbls	2,800 m ³
Potable water:	8,176 bbls	1,300 m ³
HFO / Diesel:	47,758 bbls / 3,145 bbls	7,500 m ³ / 500 m ³
Pipe racks:	Storage for 3,000 MT of drill pipe and casing	
Riser storage:	Storage for 126 joints of 90 ft length, with buoyancy	
Well test area:	Storage area aft designed for up to 2,500 MT of well test equipment.	
Helideck:	89 ft Aluminium Pancake Octagon, rated for Chinook	
ROV:	ROV deployed over side, space for one port and one starboard full spread	
Moonpool:	94 ft x 41 ft (28.8 m x 12.5 m)	
Accommodation:	200 berths	
Burner Boom:	1 Each 80' Swan neck burner boom installed on aft ship, ship will weather vane	



Pacific Mistral UDW Drillship



MACHINERY

Main power:	6 x 7,000 kW Wartsila 16V32/40 720 RPM, each driving one 7,000 kW 11,000 V generators
Power distribution:	11 kV, 440 V, 60 Hz, 3-Phase Drilling Drive System
Emergency power:	1 x 1,350 kW driving 1 x 1,350 kW generator 440 V system
Cranage:	4 x 85 MT electro-hydraulic knuckle-boom cranes at 59 ft radius

STATION-KEEPING

Positioning:	Kongsberg-Simrad System for DP-3 Operations
Propulsion:	6 x 5,500 kW variable speed AC drives
Thrusters:	6 x Rolls Royce Aquamaster fixed pitch Azimuthing in water removable thrusters
Ref. System:	Dual redundant DGPS or equivalent; Dual HiPAP hydro acoustic position reference system

DRILLING EQUIPMENT

NOTE: Derrick & drilling equipment are outfitted for singledrilling activity plus stand-building in auxiliary derrick, Trip-saver cart can be added to facilitate multi-well operations

Derrick:	200 ft x 60 ft x 80 ft derrick to handle 135 ft-tubular with 1 x NOV 2000 kips compensating crown block plus Active Heave Compensator
Draw-works:	1 x NOV SSGD-5750, 2000 kips single speed gear driven by 1150 HP AC motors with 2" drill line
Rotary:	1 x Varco BJ RST 60.1/2" hydraulic
Top drive:	1 x Hydralift HPS 1000-2E-AC-KT, 2000 kips
Travelling block	1 x NOV 2000 kips, 7 x 72" sheaves
Motion Comp.:	1 x NOV CMC-1000-25 with 25 ft max stroke, static load 2000 kips; compensating load 1000 kips
Mud Pumps:	4 x NOV 14-P-220, 7500 psi
Cementing Unit:	Third Party Services – Schlumberger CPS-665, remote control, LAS
Shale Shakers:	7 ea. VSM 300 shale shakers
Degasser:	2 x NOV D-1000 vacuum degasser + inline degasser
Centrifuges:	2 x Brandt HS 3400 centrifuges with 45 HP power pack and control system
Drill-pipe:	10,000 ft 6.5/8" Casing landing string with 6.5/8" FH connections, V-150, 50.41lbs/ft 25,000 ft 5.7/8" Drill string with 585 Turbotorque connections, S-135, 26.30 lbs/ft 10,000 ft 5" Drill string with GPDS50 connections, S-135, 19.50 lbs/ft
Drill-collars/ HWDP:	12 x 9 1/2", 30 x 8 1/4", 30 x 6 3/4" / 40 x 5 7/8" HWDP, 40 x 5" HWDP
Pipe Handling:	Outfitted to facilitate offline tubular handling with system consisting of: Dual Hydro-Racker System HR-IV (for 3.1/2" to 13.5/8" tubulars) 2 x Hydratong MPT-200 (for 3.1/2" to 9.3/4" tool-joints) 1 x NOV MHP-10-15 x 90 Power Mousehole (for max tubular size 15" x 90 ft)

SUBSEA SYSTEMS

BOP:	2 x Shaffer NXT 18 3/4" 15K triple (rated to 10,000ft); 1 x Shaffer 18 3/4" 10K annular, Vetco SHD H4 18 3/4" 15K wellhead connector
LMRP:	1 x Shaffer 18 3/4" 10K annular; Vetco ExF H4 18 3/4" 15K High Angle Release LMRP connector
BOP / Xmas tree Handling:	1 x BOP trolley with skid rated 420 tons. 1 x BOP gantry crane with dual lifting hoists 1 x Xmas Tree base plate trolley rated 200 tons; 2 x Xmas Tree storage cart rated 120 tons 1 x Multipurpose lowering cart for X-tree hang off
Control System:	Shaffer Multiplex Control System (for 10,000ft operations)
Riser Details:	Shaffer 21" OD, 90 ft joints with Class H couplings & 15K 4.1/2" ID C&K lines
Choke & Kill:	3.1/16" x 15K C&K Manifold H ₂ S Service
Diverter:	Shaffer CSO (or equivalent) with 60.1/2" bore, 500 psi
Riser Tensioner:	8 x Dual Wireline 200kips with 50 ft stroke