

The "PACIFIC SANTA ANA" is an upgraded Dual Load Path Samsung 12,000 design dynamically-positioned drillship capable of operating in moderate environments and water depths up to 3,657 m (12,000 ft) using 18¾" BOP and 21" OD marine drilling riser, adapted for single and dual gradient drilling. In areas where dual activity patent is valid, drillship will operate in single activity only.



## PACIFIC SANTA ANA UDW Drillship

### GENERAL

Flag:	Liberia
Owner:	Pacific Santa Ana SARL
Year built:	2011
Design:	Samsung 12000 Double Hull
Builder:	Samsung Heavy Industries, South Korea
Classification:	ABS classed: A1, Drilling Unit, AMS, ACCU, DPS-3

### OPERATING PARAMETERS

Maximum transit speed:	11.5 knots	
Operating conditions:	Wave: 19 ft	Wind: 50 knots
Station-keeping conditions:	Wave: 28 ft	Wind: 60 knots
Storm conditions:	Wave: 47 ft	Wind: 100 knots
Water depth:	Equipped: 10,000 ft (3,048 m)	Maximum: 12,000 ft (3,657 m)
Drilling depth:	Equipped: 40,000 ft (12,000 m)	Maximum: 40,000 ft (12,186 m)

### 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:	18,740 ST	17,000 MT
Variable deck load – Survival:	22,046 ST	20,000 MT
Brine:	6,290 bbls	1,000 m <sup>3</sup>
Base oil:	3,145 bbls	500 m <sup>3</sup>
Active mud:	6,698 bbls	1,065 m <sup>3</sup>
Reserve mud:	6,290 bbls	1,000 m <sup>3</sup>
Liquid (riser) mud:	3,145 bbls	500 m <sup>3</sup>
Waste mud / reserve mud:	3,145 bbls	500 m <sup>3</sup>
Sacks:	10,000 sacks	-
Drill water:	17,611 bbls	2,800 m <sup>3</sup>
Potable water:	8,176 bbls	1,300 m <sup>3</sup>
Diesel:	38,997 bbls	6,200 m <sup>3</sup>
Pipe racks:	Storage for 3,000 MT of drill pipe and casing	
Riser storage:	Storage for 131 joints of 90 ft length, 21" outside diameter riser with 58" 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 spreads	
Moonpool:	84 ft x 41 ft (25.6 m x 12.5 m)	
Accommodation:	200 berths	
Burner boom:	1 Each 80 ft Swan neck burner boom installed on aft ship, ship will weather vane	

# PACIFIC SANTA ANA

## UDW Drillship



### MACHINERY

<b>Main power:</b>	6 x 7,000 kW STX-MAN 720 RPM, each driving one 7,000 kW 11,000 V generators
<b>Power distribution:</b>	11 kV, 440 V, 60 Hz, 3-Phase Drilling Drive System
<b>Emergency power:</b>	1 x 1,350 kW driving 1 x 1,350 kW generator 440 V system
<b>Crane:</b>	4 x 85 MT electro-hydraulic knuckle-boom cranes at 18 m (59 ft) radius

### STATION-KEEPING

<b>Positioning:</b>	Kongsberg-Simrad System for DP-3 Operations
<b>Propulsion:</b>	6 x 4,500 kW variable speed AC drives
<b>Thrusters:</b>	6 x Rolls Royce Aquamaster fixed pitch Azimuthing in water removable thrusters
<b>Reference system:</b>	Dual redundant DGPS or equivalent; Dual HiPAP hydro acoustic position reference system

### DRILLING EQUIPMENT

<b>Derrick:</b>	200 ft x 60 ft x 80 ft derrick to handle 135 ft-tubular with 2 x NOV 2,000 kips compensating crown block plus AHC
<b>Draw-works:</b>	2 x NOV SSGD-5750, 2,000 kips single speed gear driven by 1,150 HP AC motors with 2" line
<b>Rotary:</b>	1 x Varco BJ RST 75-1/2" hydraulic (Main); 1 x Varco BJ RST 60-1/2" hydraulic (Auxiliary)
<b>Top drive:</b>	1 x TDX-1250, 2,400 kips rotating (Main); 1 x Hydralift HPS 1000-2E-AC-KT, 2,000 kips (Auxiliary)
<b>Travelling block:</b>	2 x NOV 2,000 kips, 7 x 72" sheaves
<b>Motion compensator:</b>	2 x NOV CMC-1000-25 with 25 ft max stroke static load 2,000 kips; compensating load 1,000 kips
<b>Mud pumps:</b>	6 x NOV 14-P-220, 7,500 psi (3 Mud + 3 Seawater for DGD; up to 5 Mud for single gradient)
<b>Cementing unit:</b>	Third Party Services – Schlumberger CPS-665, remote control, LAS
<b>Shale shakers:</b>	7 each VSM 300 shale shakers
<b>Degasser:</b>	2 x Brandt DG-12 vacuum degasser
<b>Centrifuges:</b>	2 x Brandt HS 3,400 centrifuges with 45 HP power pack and control system
<b>Drill-pipe:</b>	10,000 ft 6.5/8" Casing landing string with 6.5/8" FH connections, V-150, 0.813" Wall Thickness 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
<b>Drill-collars / HWDP:</b>	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
<b>Pipe handling:</b>	Outfitted to facilitate offline tubular handling with system consisting of: 2 x Hydra-Racker System HR-IV (for 3.1/2" to 16" tubulars) 2 x Hydratong MPT-200 (for 3.1/2" to 9.3/4" tool-joints)

### SUBSEA SYSTEMS

<b>BOP:</b>	6 Ram cavities: 2 x NOV-Shaffer NXT 18 3/4" 15k triple; 1 x NOV-Shaffer 18 3/4" 10k annular; GE-Vetco SHD H4 18 3/4" 15k wellhead connector
<b>LMRP:</b>	1 x NOV-Shaffer 18 3/4" 10k annular; GE-Vetco ExF H4 18 3/4" 15k High Angle Release LMRP connector
<b>BOP / Xmas tree handling:</b>	1 x BOP trolley with skid rated 470 tons; 2 x 240 ton BOP gantry crane with dual lifting hoists 2 x X-mas tree skids rated 120 tons 1 x Multi-purpose cart rated 1,000 tons (Lower BOP, X-tree handling, riser hang-off capabilities)
<b>Control system:</b>	NOV-Shaffer 5 <sup>th</sup> Gen. Multiplex Control System suitable for 12,000 ft
<b>Riser details:</b>	Shaffer 21" OD; 90 ft joints; Class H FT-DGD 3.5 million lbs; 58" buoyancy – 10,000 ft
<b>Riser gantry crane:</b>	One riser gantry crane with 2x25 MT Hoist
<b>Choke &amp; kill:</b>	3.1/16" x 15k C&K Manifold H2S Service
<b>Diverter:</b>	NOV-Shaffer 21 1/4", 500 psi CSO for 75 1/2" Rotary table
<b>Riser tensioner:</b>	8 x Dual Wireline 225 kips with 50 ft stroke