SUN TIDE

SYGNA TIDE as shown, SUN TIDE similar

VARD 1 07 PSV

Vessel Characteristics

Length, Overall:	310.7 ft	94.7 m
Beam:	68.9 ft	21 m
Depth:	27.9 ft	8.5 m
Maximum Draft:	23.1 ft	7 m
Light Draft:	11.8 ft	3.6 m
Minimum Height:	92.9 ft	28.3 m
Freeboard:	4.8 ft	1.5 m
Displacement:	9,090 lt	9,240 mt
Deadweight:	5,540 lt	5,630 mt
Clear Deck Space:	223 x 57 ft	68 x 18 m
Clear Deck Area:	12,300 ft^2	1,140 m^2
Deck Strength AFT:	2,050 lb/ft^2	10 t/m^2
Class Notations:	DNV: +1A1, Offshore service vessel(Supply), Battery(Power), Clean(Design), COMF(C-3, V-2), DK(+), DYNPOS(AUTR), E0, ESV(DP[HIL-IS], PMS[HIL-IS]), HL(2.8), LFL(*), NAUT(OSV(A)), Recyclable, SFz	

Capacities

Deck Cargo:	3,610 lt	3,670 t
Fuel Oil:	367,000 gal	1,390 m^3
Potable Water:	38,500 gal	150 m^3
Fresh Water:	215,000 gal	810 m^3
Drill/Ballast Water:	704,000 gal	2,670 m^3
Bulk Tanks (6 tanks):	10,600 ft^3	300 m^3
Liquid Mud (2.8 SG*): *Max Structural Specific Gravity	6,310 bbl	1,000 m^3
Methanol:	950 bbl	150 m^3
Base Oil:	960 bbl	150 m^3
Brine:	2,530 bbl	400 m^3
Fire Fighting Foam:	900 gal	3.4 m^3

TIDEWATER

Find out more **tdw.com**

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SUN TIDE

Further specifications

Machinery

Diesel Electric Hybrid Vessel			500 kWh Battery
Propulsive/Total HP:			5,900 / 10,400
Z-Drives:			Yes
Propellers (2):			AZP120, 2200KW CPP
Primary Generators (3):	2,460 kw	690 v	60 hz
Driven by:			RRM C25:33L8ACD
Emergency Generators (1):	180 kw	690 v	60 hz
Driven by:			SCANIA DI 12 64M
Bow Thruster (3):			2x RR TT2400 DPN TT FP, 1x TCNS 73/15 SWING DOWN
Driven by:			2x 1200KW, 1x 880KW ELECTRIC MOTORS
Total Thrust:		55 st	49.9 mt

Deck Equipment

Anchors (2):	4050 KG SPEK
Anchor Chain:	260 m of 50 mm chain per side
Windlass:	2x 15 MT RR MW170F/50 K3
Crane (1):	4 t @ 12 m
Aux. Crane (1):	2 t @ 10 m
Tugger (2):	10 t RRM

Accommodations

No. of Berths:	28
Cabins:	14x1-man & 7x2-man
Certified to Carry:	28
Galley seating:	16
Hospital:	Yes

Registration

Flag: NORWAY		**Home Port:** SKUDENESHAVN
Hull Number: 815		**IMO N^{O}:** 9665786
Year Built: 2014		**Call Sign:** LGPT
Builder:		Vard Langsten
Tonnage (ITC):	4797 GT	1911 NT

Performance*

Fuel Consumption Vs Speed		
Maximum:	19.2 m³/day (210 gph) @ 15 knots	
Cruising:	12.2 m³/day (130 gph) @ 12 knots	
Economical:	10.1 m³/day (110 gph) @ 11 knots	
Standby:	2.2 m³/day (24.2 gph) @ 0 knots	
Range @ 12 Knots:	32,700 nm	
Transfer Rates		
Fuel Oil:	880 gpm @ 300 ft	200 m³/h @ 92 m
Fresh Water:	880 gpm @ 300 ft	200 m³/h @ 92 m
Drill/Ballast Water:	880 gpm @ 300 ft	200 m³/h @ 92 m
Bulk:	29.5 cfm @ 190 ft	50.1 m³/h @ 57 m
Liquid Mud:	330 gpm @ 800 ft	75 m³/h @ 240 m
Base Oil:	330 gpm @ 300 ft	75 m³/h @ 92 m
Brine:	440 gpm @ 800 ft	100 m³/h @ 240 m
Methanol:	330 gpm @ 300 ft	75 m³/h @ 92 m

Nav/Comms Equipment

Radar(s):	2
Depth Sounder:	1
Gyro Compass:	3
Wind Speed Indicators:	2
Doppler Log:	1
Radio:	3 x VHF; 1 x SSB
Sat Com:	1X INMARSAT-C

Special Equipment

Dynamic Positioning:	DP-2
Ref. Systems:	3 x MRU; 2 x DGPS 1 x Microwave-based; 1 x Laser-based
Mud Circulation System/ Mud Mixers:	Yes/Yes
Tank Cleaning:	Yes
Rescue Boat:	10-Man FRC
Gas Detection:	Yes
Reefer Sockets:	30x 230V 16A
Misc:	Special Prod. Capacity - 401.4 m3; MSD; Eye Wash Station; HPR Trunk

*Approximate values assuming Ideal Conditions

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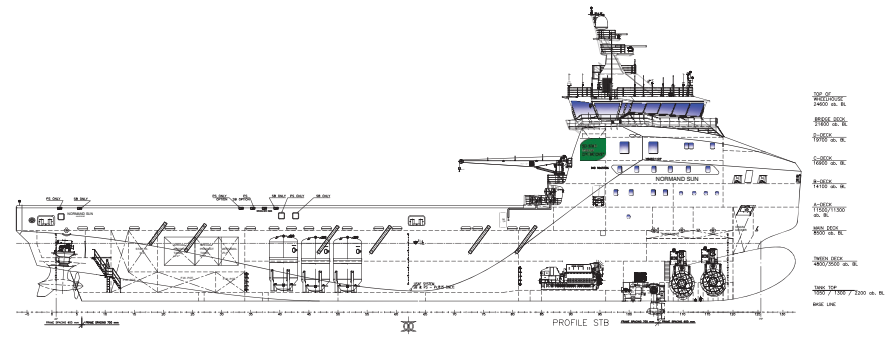
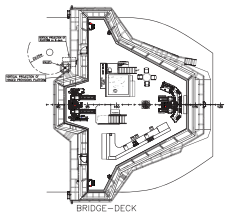
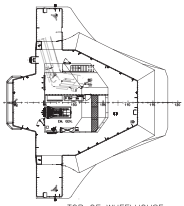
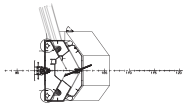
SUN TIDE

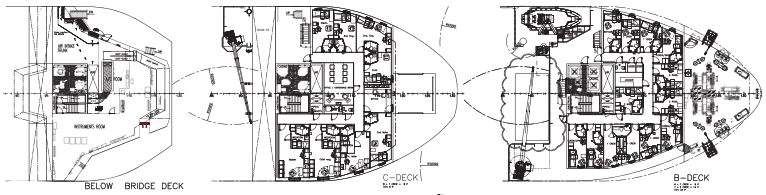
General Arrangement (Current configuration may vary.)

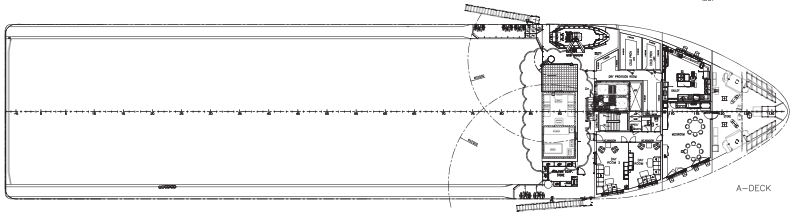


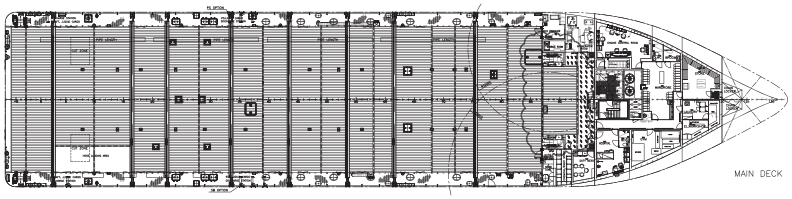

BRIDGE–DECK

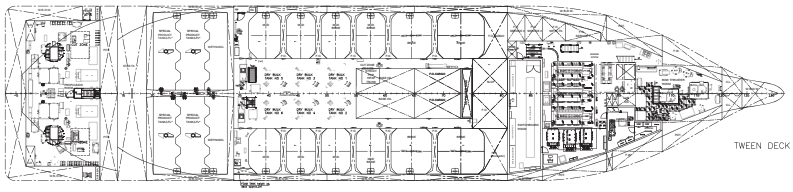

TOP OF WHEELHOUSE

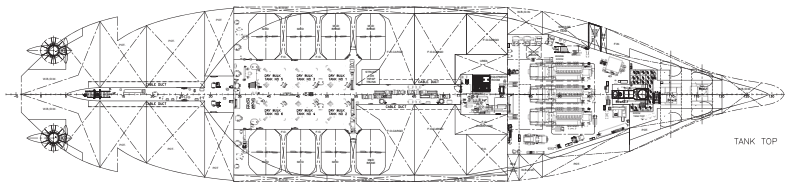

MAST

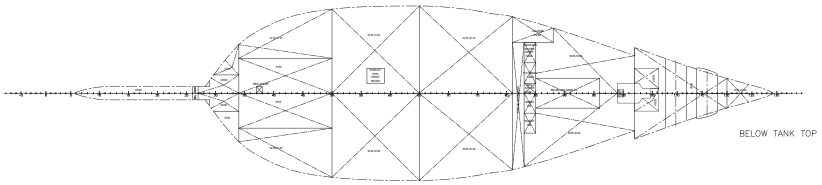



A–DECK


MAIN DECK


TWEEN DECK


TANK TOP


BELOW TANK TOP

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SUN TIDE

Capacity Table

Tank	Contents	Volume m^3	Base Oil	Fuel Oil	Dry Bulk	DW/WB	Potable Water	Fresh Water	Brine	Liquid Mud	Methanol	Lube Oil	Foam	Oil Disp.
01 WB/DW TK	DW/WB	155.9				155.9								
09 WB/DW TK	DW/WB	62.0				62.0								
10 WB/DW TK	DW/WB	44.9				44.9								
11 WB/DW TK	DW/WB	56.5				56.5								
12 WB/DW TK	DW/WB	56.5				56.5								
13 WB/DW TK	DW/WB	51.7				51.7								
14 WB/DW TK	DW/WB	51.7				51.7								
15 WB/DW TK	DW/WB	39.5				39.5								
16 WB/DW TK	DW/WB	47.7				47.7								
61 WB/DW TK	DW/WB	61.6				61.6								
62 WB/DW TK	DW/WB	70.0				70.0								
63 WB/DW TK	DW/WB	131.2				131.2								
64 WB/DW TK	DW/WB	131.2				131.2								
65 WB/DW TK	DW/WB	133.0				133.0								
66 WB/DW TK	DW/WB	136.9				136.9								
67 WB/DW TK	DW/WB	85.5				85.5								
68 WB/DW TK	DW/WB	85..5				85..5								
88 STAB TK 1	DW/WB	341.6				341.6								
89 STAB TK 2	DW/WB	219.0				219.0								
100 WB/DW TK	DW/WB	525.0				525.0								
102 WB/DW TK	DW/WB	109.7				109.7								
103 WB/DW TK	DW/WB	119.5				119.5								
117 WB/DW TK	DW/WB	35.2				35.2								
05 FW TK	Ship's FW	109.1					109.1							
06 FW TK	Ship's FW	36.7					36.7							
04 POT TK	FW	92.8						92.8						
07 POT TK	FW	44.2						44.2						
08 POT TK	FW	108.6						108.6						
17 POT TK	FW	52.9						52.9						
18 POT TK	FW	52.9						52.9						
19 POT TK	FW	73.6						73.6						
20 POT TK	FW	73.6						73.6						
21 POT TK	FW	110.7						110.7						
22 POT TK	FW	110.7						110.7						
106 POT TK	FW	46.2						46.2						
107 POT TK	FW	46.8						46.8						
23 CFO TK	FO	230.4		230.4										
24 CFO TK	FO	230.4		230.4										
25 CFO TK	FO	141.7		141.7										
26 CFO TK	FO	140.5		140.5										
31 CFO TK	FO	134.5		134.5										
30 FO TK	FO	63.5		63.5										
32 FO TK	FO	134.5		134.5										
33 FO TK	FO	18.0		18.0										
34 FO TK	FO	18.0		18.0										
35 FO TK	FO	17.8		17.8										
36 FO TK	FO	17.8		17.8										
37 FO TK	FO	28.6		28.6										
38 FO TK	FO	28.6		28.6										
39 FO TK	FO	32.1		32.1										
40 FO TK	FO	32.1		32.1										
41 FO TK	FO	31.3		31.3										
42 FO TK	FO	31.3		31.3										
82 FO SERVICE 1	FO	23.2		23.2										
83 FO SETTL	FO	25.4		25.4										
84 FO SERVICE 2	FO	22.9		22.9										
85 FO SERVICE 3	FO	24.9		24.9										
91 FO DRAIN	FO	4.2		4.2										
92 DRAIN OIL	FO	4.3		4.3										
104 FO	FO	58.0		58.0										
119 FO EMERG	FO	2.5		2.5										
27 BO TK	BO	76.1	76.1											
28 BO TK	BO	76.1	76.1											
51 BRI TK	BRI	93.9							93.9					
52 BRI TK	BRI	93.9							93.9					
53 BRI TK	BRI	107.4							107.4					
54 BRI TK	BRI	107.4							107.4					
71 METH TK	METH	75.6									75.6			
72 METH TK	METH	75.6									75.6			
43 MUD TK	LM	125.0								125.0				
44 MUD TK	LM	125.0								125.0				
45 MUD TK	LM	122.0								122.0				
46 MUD TK	LM	122.0								122.0				
47 MUD TK	LM	126.7								126.7				
48 MUD TK	LM	126.7								126.7				
49 MUD TK	LM	127.9								127.9				
50 MUD TK	LM	127.9								127.9				
55 DRY BULK	DRY BULK	50.1			50.1									
56 DRY BULK	DRY BULK	50.1			50.1									
57 DRY BULK	DRY BULK	50.1			50.1									
58 DRY BULK	DRY BULK	50.1			50.1									
59 DRY BULK	DRY BULK	50.1			50.1									
60 DRY BULK	DRY BULK	50.1			50.1									
77 LO MAIN ENG	LO	11.4										11.4		
80 LO HARBOR ENG	LO	4.0										4.0		
125 FOAM TK	FOAM	3.4											3.4	
Total Volume [m^3]			152.2	1,496.5	300.6	2,665.8	145.8	813.0	402.6	1,003.2	151.2	15.4	3.4	0.0
Spec Sheet Total Volume [m^3]			152.2	1,389.1	300.6	2,665.8	145.8	813.0	402.6	1,003.2	151.2	15.4	3.4	0.0

*Capacities shown are for lead vessel. Actual capacities may vary slightly.

*Capacities shown in **RED** are excluded from the total volume.

*Capacities shown in **BLUE** are included in another Tank's Capacity.

*Capacities shown in **GREEN** are counted for multiple Tank Capacities.

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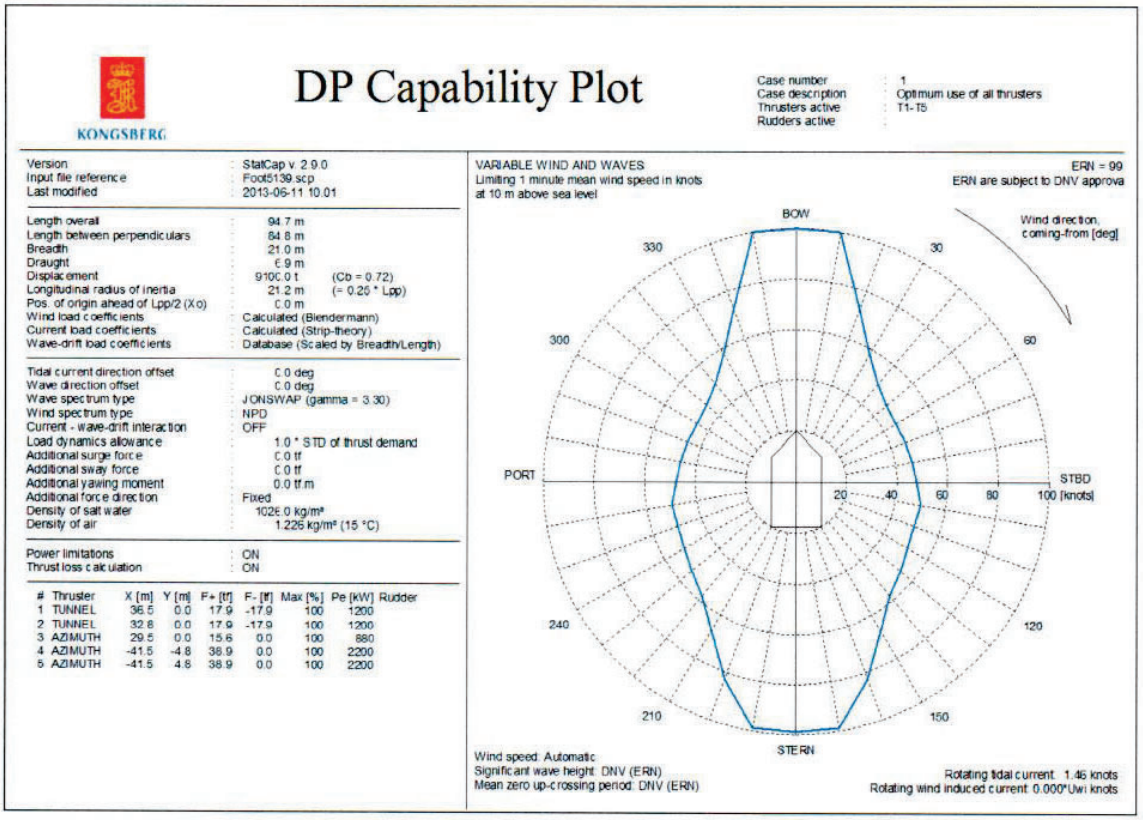
SUN TIDE
DP Capability Plot



KONGSBERG

DP Capability Plot

Case number : 1
Case description : Optimum use of all thrusters
Thrusters active : T1-T5
Rudders active :

Version	: StatCap v. 2.9.0
Input file reference	: Foot5139.scp
Last modified	: 2013-06-11 10.01
Length overall	: 94.7 m
Length between perpendiculars	: 84.8 m
Breadth	: 21.0 m
Draught	: 6.9 m
Displacement	: 9100.0 t (Cb = 0.72)
Longitudinal radius of inertia	: 21.2 m (= 0.25 * Lpp)
Pos. of origin ahead of Lpp/2 (Xo)	: 0.0 m
Wind load coefficients	: Calculated (Blendermann)
Current load coefficients	: Calculated (Strip-theory)
Wave-drift load coefficients	: Database (Scaled by Breadth/Length)
Tidal current direction offset	: 0.0 deg
Wave direction offset	: 0.0 deg
Wave spectrum type	: JONSWAP (gamma = 3.30)
Wind spectrum type	: NPD
Current - wave-drift interaction	: OFF
Load dynamics allowance	: 1.0 * STD of thrust demand
Additional surge force	: 0.0 tf
Additional sway force	: 0.0 tf
Additional yawing moment	: 0.0 tf.m
Additional force direction	: Fixed
Density of salt water	: 1026.0 kg/m³
Density of air	: 1.226 kg/m³ (15 °C)
Power limitations	: ON
Thrust loss calculation	: ON

#	Thruster	X [m]	Y [m]	F+ [tf]	F- [tf]	Max [%]	Pe [kW]	Rudder
1	TUNNEL	36.5	0.0	17.9	-17.9	100	1200	
2	TUNNEL	32.8	0.0	17.9	-17.9	100	1200	
3	AZIMUTH	29.5	0.0	15.6	0.0	100	880	
4	AZIMUTH	-41.5	-4.8	36.9	0.0	100	2200	
5	AZIMUTH	-41.5	4.8	36.9	0.0	100	2200	

VARIABLE WIND AND WAVES
Limiting 1 minute mean wind speed in knots
at 10 m above sea level

ERN = 99
ERN are subject to DNV approva

Wind speed: Automatic
Significant wave height: DNV (ERN)
Mean zero up-crossing period: DNV (ERN)

Rotating tidal current: 1.46 knots
Rotating wind induced current: 0.000*Uwi knots

Figure 10: DP capability envelope for case 1.