

## SEA DIAMOND

AHTS , 6140 BHP , DP 2



SEA DIAMOND

Principal Particulars		Machinery	
Official Number	SLR10386	Main Engine	2 X GE7 FDM 12, 2 X 3070BHP
Call Sign	9LU2399	Main Generator	Volvo Penta 2 X 380 KW/440 V/3Ph/60 Hz
IMO Number	9468865	Emergency Generator	Volvo Penta 1x 85 KW/440 V/3Ph/60 Hz
Year Of Built	2011	Bow Thruster	2 X 500 KW (HRP)@1200RPM HRP 4000
Hull Number	324	Stern Thruster	1 X 500 KW (HRP)@1200RPM HRP 4000
Port of Registry	Free Town	Propulsion	2 x CPP in Kort Nozzles; BERG Propulsions
Builder	ABG Shipyard Ltd - India	Shaft Generator	2 X 1000 kw Leroy Somer
Flag	Republic of Sierra Leone		
Class	RINA		
Notation	A1,Towing Vessel,Fire Fighting Vessel Class1,Offshore Support Vessel,AMS,DPS-2		

Dimension		Performance	
Length Overall	63.40 M	Bollard Pull	80 T
Length Between Perpendicular	56.52 M	Total BHP	6140 BHP
Breadth Moulded	15.80 M	Speed - Average/ Fuel Consumption	10 knots / 6 MT F.O / 24 H
Depth Moulded	6.80 M	Speed- Maximum / Fuel Consumption	13.0 knots / 11 MT F.O / 24 H
Draft	4.5 M @ Deadwidth 1000T	Fuel Consumption in Port	0.8 MT/ Day / 24 H
Load Draft	5.5 M @ Deadwidth 1886.2 T	Type of Fuel	M G O
Gross Tonnage	1922 T		
Net Tonnage	649 T		

Deck Equipment		Navigation & Communication	
Anchor Windlass	NORCRANE - NCW-AW-GG-38U2-H	GMDSS	JRC
Gypsies	38 MM (Ø) U2 chainsrated pull 6.9 T x 0~10 M / Min	MF/HF	JRC - JSB-296/NCT -196
Warping drum	6.9 T x 0 ~10 M / Min	Inmarsat C	JRC - JUE 85
Chains	Port side - 275 M (L) x 38 MM (dia) Grade U2	VHF Radio	2xJRC JHS-770S
Capstan	Starboard side - 192.5 M (L)x 38 MM (dia) Grade U22 x 8 Tonne x 15 M/Min electro-hydraulic;NORCRANE - NCW-1000-VC-8-H	Navtex Receiver	1 x JRC NCR -333
Tugger Winch	10 Tonne x 15 M / Min (1st Layer) electro-hydraulic; NORCRANE - NCW-1000-TUW-10-H Drum Capacity : 250 M x Ø2 6 MM (S.W.R @ 6 Layers)	SART	2 x JRC - JQX-30A
Deck Crane	1 x SWL 3T, NORCRANE -NCW-SC-058-0312 Outreach 12 M, Hoisting speed 0~20 M/Min Hook travel 25 M	AIS EPIRB	1x JRC- JHS182,1xMCMurdo E5 SMARTFI ND 406
Towing/AH Winch	1 x electro-hydraulic double drum water fall Type	Portable VHF Radios	3 x JRC JHS-7
Upper Drum Cap (Tow)	1000 M (L) x 60 MM (Ø) SW R	Radar	1 x JRC - JMA 5312-6, 1 x JRC - JMA 5332-12
Lower Drum Cap (AH)	1000 M (L) x 60 MM (Ø) SW R	Echo Sounder	1 x JRC - JFE 680
Line Pull	225 MT	GPS	1 x JRC DGPS 224
Stall Pull	225 MT	Gyrocompass	3 x Anschutz Standard 22
Brake Capacity	Remote Control from aft control stand in wheelhouse	Navtex	1 x JRC - NCR 333
Gypsies	2x76 MM (Ø) Chain	Autopilot	1 x NAVIS AP3000
Stern Roller	4.50 M (L) x 2.20 M (dia) SU S316; SWL 200 Mt	BNWAS	1 x Furuno BR500
Shark Jaws	1x electro-hydraulic Karmoy; SWL 300Mt	Magnetic CoMpass	1 x Cassens & Plath
Tow Pins	1x electro-hydraulic retractable Karmoy; SWL 200 MT	Weather Fax	1 x JRC - JAX-9B
Rope Reel	1x electro-hydraulic, Pulling rate 10T @ 20 M/Min Drum Capacity : 1200 M (L) x 60 MM (dia) SWR	Speed Log	1 x JRC - JLN25
Reefer Points	2 x 4 pin x 32 A / 60 Hz	Wind Indicator	3 x Ultrasonic Anemometer (Gill Instrument)
		DP	NAV DP4022
		Joystick	NAV IJS 4002
		REF. System	(2 D.G.P.S fugro sea star) (1x Cyscan)
Cargo Capacities		Fire Fighting System	
Deck Cargo	600 T	<b>External</b>	
Deck Strength	5t / M <sup>2</sup>	FIFI System	Class 1 with water curtain all round
Clear Deck Area	428 / M <sup>2</sup>	Fire Pump	ABS P/S driven by front PTO of M/E Mid driven by BERG
Deck Length	33.0 M	Monitors (water/foam)	2 x 1560 M <sup>3</sup> / h @133 M /50 M at 70 M distance
Deck Width	13.0 M	Oil Dispersant System	spray nozzle: 2x1-1/4" Pumps : 25.3 M <sup>3</sup> /h x 32.5 M
Fuel Oil	796 M <sup>3</sup>	<b>Internal</b>	
Fresh Water	575 M <sup>3</sup>	Emergency Fire Pump	1 x 35 M <sup>3</sup> /hr @ 60 M head; Pumpquip
Ballast/Drill Water	410 M <sup>3</sup>	Capacity: 68L x 17 cylindes	1 x 210 ltrs/min @ 300 bar
Liquid mud/Base Oil	408 M <sup>3</sup>	CO2 system in engine room	Capacity: 68 L x 17 cylindes
Brine	199 M <sup>3</sup>	Fire Detection & Alarm System in living spaces & engine room	
Cement Tank	206 M <sup>3</sup>		
Freezer / Chiller	14 M <sup>3</sup> /10 M <sup>3</sup>		
Foam / Detergent	20.0 M <sup>3</sup> /20.0 M <sup>3</sup>		

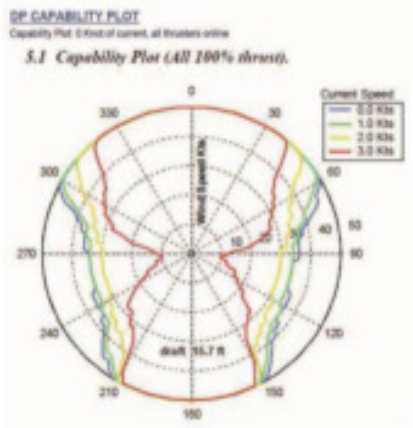
**Pumps** **Safety And Environment**

Fuel Oil	200 M <sup>3</sup> / h x 60 M head
Fresh Water	200 M <sup>3</sup> / h x 60 M head
SWB/Drill Water	200 M <sup>3</sup> / h x 60 M head
Liquid Mud	80 M <sup>3</sup> / h x 60 M head Circulation system 50 M <sup>3</sup> / h x 60 M head
GS / Fire Pump	100 M <sup>3</sup> /h x 80 M head @ 35 kw

Life rafts	4 x 25 Men SOLAS approved type
Fast Rescue Craft	1x9 Men Fast Rescue Boatc / w 2 x 60 HP OBM 3 persons, ≥ 25 knots/Speed 9 persons, ≥ 8 knots
Oily Water Separator Water Maker	1 x 1 M <sup>3</sup> / hr c/w 15 ppm alarm; Industmarine 1 x 10 M <sup>3</sup> / day Reverse Osmosis, Industmarine
Sewage Treatment Plant	1 x 40 Men (3120L/day); Hamworthy ST2A-C

**Accommodation**

Berth cabins	1 X 4
Berth cabins	2 X 8
Berth cabins	2 X 6
Berth cabins	1 X 1
Crew	12
Passengers	38
Total	50

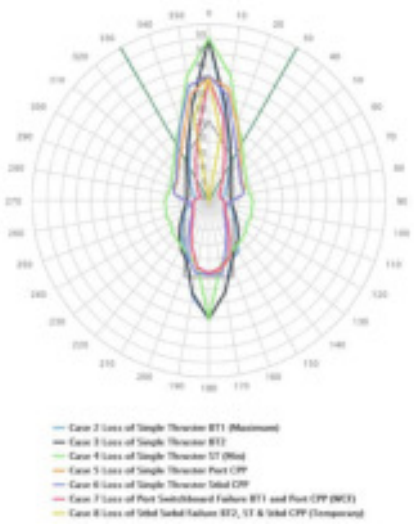


**TANK CAPACITY PLAN**

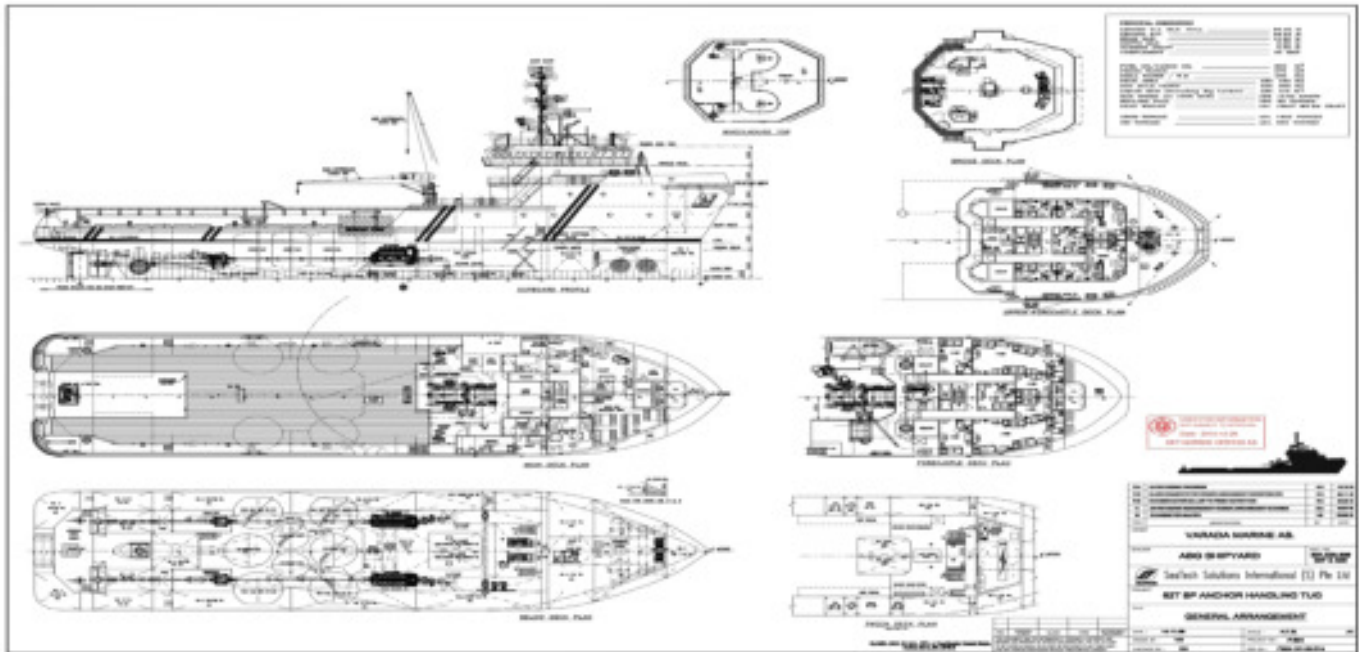
UNITS = M<sup>3</sup>

Tank	Fuel Oil	Fresh Water	Drill Water	Oil Based Mud	Slime	Beer oil
Fuel (2)	81.0 144.0 144.0 81.0 12.0 12.0 148.0 165.0					
Fresh water (2)		101.0 121.4 96.0 96.0 38.0 38.0 51.1 51.1				
Drill water (21)			104.4 114.3 114.3 33.5 33.0 22.5			
Oil Based Mud	85.0 85.0 85.0 85.0 85.0 85.0			85.0 85.0 85.0 85.0 85.0 85.0	85.0 85.0 85.0 85.0 85.0 85.0	85.0 85.0 85.0 85.0 85.0 85.0
<b>Total</b>	<b>1360.7</b>	<b>376.4</b>	<b>217.7</b>	<b>408.0</b>	<b>180.0</b>	<b>408.0</b>

Limiting wind speed in m/s - For L1 and L2 analyses the values are converted from the Beaufort scale







# Draft Scale Table

**SEA DIAMOND**

DATE	TIME	DATE	TIME	Draught (M)	Displacement (T)	Deadweight (T)	Tons per centimetre of immersion	Moment to change trim 1 cm (T/M)	Freeboard (M)
09.03.11	19:47:08	09.03.11	19:47:08	6.0	4100	2300	8.9	41	0.8
				5.9	4000	2200			0.9
				5.8	3900	2100		40	1.0
				5.7	3800	2000	8.8		1.1
				5.6	3700	1900		38	1.2
				5.5	3600	1800	8.7	36	1.3
				5.4	3500	1700		34	1.4
				5.3	3400	1600	8.6	32	1.5
				5.2	3300	1500		30	1.6
				5.1	3200	1400	8.5	28	1.7
				5.0	3100	1300		26	1.8
				4.9	3000	1200	8.4	24	1.9
				4.8	2900	1100		22	2.0
				4.7	2800	1000	8.3	20	2.1
				4.6	2700	900		18	2.2
				4.5	2600	800	8.2	16	2.3
				4.4	2500	700	8.1	14	2.4
				4.3	2400	600	8.0	12	2.5
				4.2	2300	500	7.9	10	2.6
				4.1	2200	400	7.8	8	2.7
				4.0	2100	300		6	2.8
				3.9	2000	200	7.7	4	2.9
				3.8	1900	100	7.6	2	3.0
				3.7	1800	0	7.5	0	3.1
				3.6	1700		7.4		3.2
				3.5	1600		7.3		3.3
				3.4	1500		7.2		3.4
				3.3	1400		7.1		3.5
				3.2	1300		7.0		3.6
				3.1	1200				3.7
				3.0	1100				3.8
				2.9	1000				3.9
				2.8	900				4.0

DENSITY OF THE SEA WATER (T/M3) : 1.025  
 FREEBOARD DEPTH (M) : 6.800  
 SUMMER DRAUGHT (FBS) (M) : 5.500  
 TROPICAL DRAUGHT (M) : 5.615  
 LIGHTSHIP WEIGHT (LWT) (T) : 1804.4