GSF Development Driller I — Semisubmersible Drilling Unit

General Description

Design	Friede & Goldman, Ltd.
Delivered	Projected 4th Q. 2003
Quarters capacity	160 persons
Operating water depth	7,500 ft. (2,286 m)
Drilling depth	37,500 ft. (11,430 m)
Maximum drilling variable deck load	7,000 tonnes
Maximum survival variable deck load	7,000 tonnes
Maximum transit payload	5,000 tonnes
Heliport	Equipped to handle MI8 or EH101 15mt
Classification	ABS A1, AMS, CDS, DPS-2

Vessel Dimensions/Displacement

Overall length	324.2 ft. (98.82 m)
Overall width	258.1 ft. (78.68 m)
Main deck length	244.2 ft. (74.42 m)
Main deck width	244.2 ft. (74.42 m)
Depth to main deck	28.2 ft. (8.6 m)
Column dimension	52.0 x 52.0 ft. (15.86 x 15.86 m)
Draft – drilling	65.6 ft. to 55.8 ft. (20.0 m to 17.0 m)
Draft – survival	49.2 ft. (15.0 m)
Draft – transit (Nominal)	27.2 ft. (8.3 m)
Displacement at:	
- Drilling draft	20.0 m = 46,507 tonnes
- Survival draft	15.0 m = 40,936 tonnes
- Transit	8.2 m = 32,442 tonnes

Station Keeping

Simrad SDPM 32 + SDP11 Mooring system – 8/12/16 point chain/wire

Traction winches	API 9A EEEIP 6 x 49 WS 3-1/2 in. wire
Windlasses	3-1/4 in. K4 chain
Storage reels	10,500 ft. wire
Chain lockers 8 each (max. capacity)	8 x 5,260 ft. chain
Chain on board	8 x 3,260 ft. chain
DP Thrusters	8 x 4,300 hp
Position Reference	DGPS, HiPap LBL Multipurpose

Cranes

Deck crane (port)	165 st @ 71 ft. static / 110 st @ 71 ft. dynamic
Deck crane (stbd)	165 st @ 71 ft. static / 110 st @ 71 ft. dynamic
Knuckle boom	1 x 11 st @ 115 ft. pipe/casing handling
Riser gantry crane	1 x 44 st – vertical riser handling
BOP gantry crane	2 x 110 st – BOP & tree handling

Rig Power Systems

Engines	8 x Cat 3612
Alternators	11 kv

Drilling Equipment

Derrick	52 ft. x 57 ft. x 226.25 ft. (15.85 m x 17.37 m x 68.96 m)
Clear Working Height	200 ft (61.00 m)
Drill floor dimensions	56 ft. x 77 ft. (17.1 m x 23.5 m)
Tubular setback capacity	1,000 short tons
Rotary supporting capacity	2,000,000 lbs. static
Hoisting Equipment:	
- Drawworks (Main)	7,000 HP x AHC 1000 st AC drive
- Drawworks (Auxiliary)	4,500 HP x AHC 500 st AC drive
- Traveling block (Main)	1,000 short tons
- Traveling block (Auxiliary)	500 short tons
- Top drive (Main) (in line)	1,000 short tons
- Top drive (Auxiliary) (in line)	500 short tons
Piperacking systems	2 Redundant Bridge Crane Type Rackers
Mud pumps	4 x 2,200 HP x 7,500 psi

Storage Capacities

Liquid storage (upper hull)	6,850 bbls. (1,088 cu. m)
Liquid storage (columns)	11,900 bbls (1,892 cu. m)
Brine	4,875 bbls. (775 cu. m)
Base oil	4,590 bbls. (730 cu. m)
Potable water	4,750 bbls. (755 cu. m)
Drill water	14,490 bbls. (2,304 cu. m)
Fuel oil	20,290 bbls. (3,226 cu. m)
Sack mud storage (on pallets)	5,500 sacks
- Barite/Bentonite	10,445 cu. ft. (295 cu. m)
- Surge tanks	150 cu. ft. (4.25 cu. m)
- Cement	16,950 cu. ft. (480 cu. m)
- Surge tank	150 cu. ft. (4.25 cu. m)

Mud Conditioning Equipment

Gumbo / Scalper conveyor	2
Balanced Elliptical Motion shakers	7
Mud cleaners	2 x Integrated Hydro cyc pkgs(s)
Vacuum degassers	2 x Swaco Hurricane

Well Control Equipment

BOP stack	18-3/4 in. 15,000 psi H_2S service
Two remote control panels	Driller's House/ Bridge
Two stack mounted pods	4th Generation Mux
Mux cable reels	11,000 ft. (±3,353 m)
Marine riser	21 in. CLIP
Quantity.	100 x 75 ft. x 54 in. (flotation/OD)
Slip joints	2 each w/60 ft. stroke
Suspension ring	Motorized
BOP Transporter	Elevator with 400 mt capacity
Auxillary Cart	700 mt capacity
Gantry crane	2 x 100 t + 25 t Aux. Winches

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GlobalSantaFe

Inquiries should be directed to the Marketing Department

Houston 15375 Memorial Drive Houston TX 77079-4101 (281) 925-6000 Fax (281) 925-6010

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Tensioners ..... 12 each x 250 k, 3,000 kips total

Diverter ..... 12 each x 250 k, 3,000 kips total

Diverter lines ..... 16 in. port/stbd. (w/out turns)

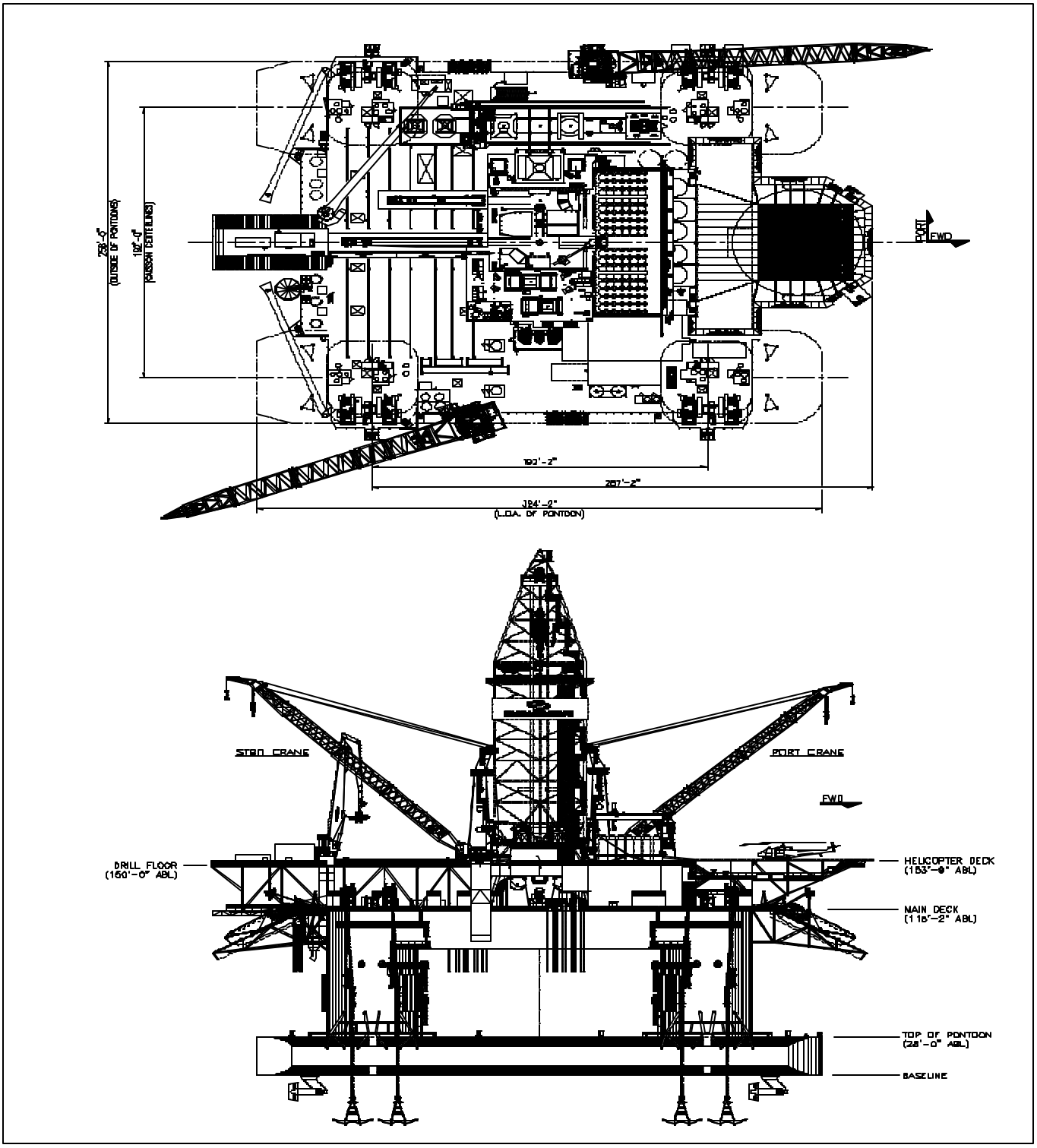
CCTV System ..... 14 Cameras Throughout vessel

Safety Equipment

Lifeboats ..... 4 each 80 person Freefall

Life rafts ..... 8 each x 25 person Davit Launched

Fast Rescue Craft ..... 1 each Rigid Hull Inflatable



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