Hanwha
Drilling

OUTLINE SPECIFICATION FOR

TIDAL ACTION



GENERAL

OWNER:	Hanwha Drilling
BUILDER:	Hanwha Ocean (South Korea)
YEAR BUILT / UPGRADES / SERVICE START:	2025
DESIGN:	Hanwha Ocean e-SMART
FLAG / CLASSIFICATION:	Marshal Islands / ABS
NOTATION:	
DRILLING/WATER DEPTH:	40,000ft / 12,000ft
VARIABLE LOAD:	24,000mt
TRANSIT SPEED:	12.5 kts
DRAFTS:	Operating 12.0m / Transit 9.0m
PRINCIPLE DIMENSIONS:	238.4m (LOA) 230.0m (LBP) 42.0m (Breadth) 19.0m (Depth)
POB:	200 persons (10 cabins for 1 person / 95 cabins for 2 persons)
MOONPOOL SIZE:	24.8m x 12.6m

CRANES

CRANE:	Three (3) X NOV Knuckle boom crane OC4000KCE, 100mT - 8.0m (5 fall block)
AHC CRANE:	One (1) X AHC Knuckle boom crane OC4475KSCE, Hook reach below main deck 12008 ft (3660m)
PIPE HANDLING CRANE:	One (1) X NOV PC1891KCE, 3, 5mT (Pipehandling) to 9mT (General Handling) at working radius between 3.2 m to 22.3 m

DRILLING EQUIPMENT

DERRICK:	DDBN-1400/100-59X78.7 / 20X20 / 210 NOV Dual Dynamic bottle neck
HOISTING CAPACITY @ ELEVATOR:	Main well, 1250 ST (1134 mT) / Aux well 1000 ST (907 mT)
DRAWWORKS:	Main well, NOV SSGD-1400-9000 59-100-10.5-FMM-NE-CLAC Drawworks, 9000 hp / Aux well, NOV SSGD-1000-5750-55-82-10.5-FMM-NE-CLAC Drawworks, 5750 hp
COMPENSATOR:	Main well, CMC-E-1500-2800, Dynamic Capacity: 1500 kips (608t), Static Capacity: 2800 kips (1270t), Stroke: 29.2ft (8.89m), AHC Aux well, CMC-1000-25, Dynamic Capacity: 1000 kips (454t), Tripping Capacity: 2000 kips (907t) Stroke: 29.2ft (8.89m), Effective Stroke: 25ft (7.6m), AHC
TOP DRIVE:	Main well, NOV TDX-1250, Aux well, NOV TDX-1250, Rated 1250st
ROTARY TABLE:	Main well, NOV RST 755, 75 ½", Rated 1375st, torque max 45,000 ft / lbs / Aux well, NOV RST 605, 60 ½", Rated 1,000st, torque max 45,000 ft / lbs
TRAVELING BLOCK:	Main well, NOV 878TB-1400 , 8 X 78" GROOVED SHEAVES, 2 1/8" wire line Aux well, NOV HBT-1000, 7 X 72" GROOVED SHEAVES, 2" wire line
ACS / PIM / MMC	
MUD PUMPS:	Four (4) NOV 14-P-220 AC triplex pumps, 7,500 psi, Titan BX relief, Space for a future mud pump giving a total of 5
CEMENTING:	Halliburton-ISO Advantage Combo Cementing, Max working pressure 20,000 psi

TUBULAR HANDLING

HydraTong:
Main well, NOV MPT-270 with Mud bucket, Tubular range 3-1/2" to 10", M / U Torque 27000 Nm, B/U Torque 270000 Nm KT-20000 Casing Tongs

Racking System:
Two (2) NOV Hydraracker IV ER, tubular range 2-7/8" to 14" PUE Size 1 – one set: 2 7/8" TO 9 3/4", PUE Size 2 – one set: 10" TO 14" RBS-IV allows back up from 10-20 foot above the rig floor and handles pipe sizes from 4 3/4" TO 8 3/4" OD tool joints with 100,000 FT-LBS of torque

Pipe Catwalk:
NOV CWS-P15-45HS, Tubular range 2-2/8" TO 30", pipe transfer 16.5st

Mousehole:
NOV MHP15-20x95

WELL CONTROL/SUBSEA EQUIPMENT

BOP:	One (1), NOV Shaffer NXT, 7ea RAM, 18-3/4" Bore, 15,000 psi working pressure
LMRP:	One (1), NOV, 2ea Annular, 18-3/4" Bore, 10,000 psi working pressure
BOP HANDLING CRANE:	NOV / BOP Crane, 2 x 300 mT+ 2 x 25 mT capacity
C&K MANIFOLD:	NOV T3, 20,000 psi Max working pressure
RISER PIPE:	NOV, 21" X 90ft length X 110 Joints
RISER TENSIONERS:	Eight (8) NOV WRT-225-50 Capacity: 225,000 lbs each, Stroke: 50ft
HANDS-FREE GOOSENECK:	NOV, Max Working Pressure Choke and Kill lines: 15000 psi / Mud Booster lines: 7500 psi / Hydraulic lines: 5000 psi
X-MAS HANDLING:	NOV X-MAS tree trolley SWL 160mt & Riser hang-off 1000mt, X-MAS Skidding SWL 150mt
DIVERTER:	NOV 21-1/4" 500 psi working pressure, 2 x Overboard, 1 x flowline, 1 x trip tank, 1 x mud standpipe

TANK & STORAGE CAPACITIES

FUEL OIL:	9,280 m3
FRESH WATER:	1,896 m3
DRILLWATER:	3,541 m3
BRINE:	1,314 m3
BASE OIL:	1,314 m3
LIQUID MUD ACTIVITY:	2,271 m3
LIQUID MUD RESERVE:	1,119 m3
BULK BARITE / BENTONITE:	588 m3
BULK CEMENT:	392 m3

OTHER

HELIDECK:	Sikorsky S-61N and Sikorsky S-92, HMI system

MARINE & POWER SYSTEM

MAIN ENGINE:	SIX (6EA) X STX-MAN 16V32 / 40 4 Stroke, trunk piston, V-type x 6sets, 6 x 8,000kW
GENERATOR TYPE:	ABB / AMG 0900LT10 LSE 6 x 7650kW; (9000kVA)
EMERGENCY GENERATOR:	STX-Cummins model: QSK60DMGE (MCRS), 1700kW 1800 rpm
MAIN SWBD:	ABB / UniGear ZS1 single LSC2B-PM HVIR infrared optical windows installed
DRILLING VFD:	ABB / ACS800 LC Multidrive 3 Split, 3x7, 6MVA=22.8MVA
THRUSTERS:	Six (6) X Rolls Royce Azimuth Thruster UUC 455 / 3800 FP, 5500kw
THRUSTER DRIVE:	ABB / 6 x ACS6000
DYNAMIC POSITIONING:	Kongsberg Maritime SDP-23, DP-3 installation, HPR-DGPS
BALLAST TRATMENT SYSTEM:	SAMKUN89 - ARA Plus 2x AP-650 (650m3 / h)
FRESH WATER GENERATOR:	3x Alfa Laval ORCA 50 4.5%-50m3 / day each
FIREFIGHTING SYSTEMS:	WaterMist / Inergen / Fixed Foam System Helideck Area and Mud Process Area / FM200 (DMER, CCU room) HFC227 gas agent / Autro Safe-4 / Autronica (Fire detection system)

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