

ATWOOD BEACON



CHARACTERISTICS

Type of Vessel	KFELS Mod V Enhanced B-Class Deepwater Independent Leg Jack-Up
Water Depth	400 ft. nominal rating as presently equipped with 517 ft. leg. Leg length can be increased to 545 ft. with slightly reduced environmental rating. 18 ft. minimum
Jacking	Rack/Pinion with Leg Locking System and single stage preload capability
Drilling Depth	36,000 ft. nominal rating
Classification	ABS A1
County of Registry	Marshall Islands

PRINCIPAL DIMENSIONS

Hull Length	234 ft.
Hull Breadth	208 ft.
Hull Depth	25 ft.
Leg Length	517 ft.
Spud Can	47.2 ft. dia.

CANTILEVER

Reach	70 ft. from transom
Transverse Travel	15 ft. either side CL
Load Capacity	1,604 kips on CL @ 70 ft. 2,000 kips on CL @ 62 ft. 2,500 kips on CL @ 52 ft.

(Depending on combination of total load, can skid longitudinally and transversely with up to 850 kips set back and up to full day rack load rating)

CAPACITIES

Fuel	2,577 bbls.
Drill Water	19,920 bbls.
Potable Water	2,053 bbls.
Liquid Mud	4,950 bbls.
Base Oil	647 bbls.
Bulk Tanks	11,100 cu. ft.
Sack Storage	5,000 sacks
Variable Load - (Operating)	7,500 kips
Variable Load - (Survival)	5,600 kips
Accommodations	112 persons (plus 5 bed sick bay)

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POWER SYSTEM

Diesel Engines – Five (5) Caterpillar Model 3516B, 1855HP @ 1200 RPM, Total of 9,275HP

Generators – Five (5) KATO, 600 VAC, 1500 KW, 2500 KVA

Emergency Generator – One (1) Caterpillar Model 3508; 1000 BHP, 750KW with Caterpillar Model SR4 Generator

SCR System – 600V switchboard with six (6) NOI Ross Hill 2,200 amp drive bays

DRILLING EQUIPMENT

Rating – Nominally rated for 36,000 ft. well depth with 750 ton drilling system

Derrick – Woollslayer 160 ft. with 36 x 36 ft. base; 1,500,000 lbs. Static Hook Load with 850 kips setback with room for approximately 368 stands of 5 7/8" drillpipe, 10 stands of hevi-wate and 10 stands of 8 1/4" drill collars.

Crown Block – Woollslayer 750 tons with 7 each 60" sheaves plus 1 each 84" fast line sheave/1 each 60" dead line sheave, all grooved for 1 5/8" wire rope.

Drawworks – NOI Ensco C3-type II, 3,300HP with three (3) GE752 High Torque 1,100HP Motors; Dynamic Motor Braking, One (1) 36" hydraulic disc brake and one (1) Baylor Type 9650 Eddy Current Braking.

Top Drive – Varco TDS 8SA with GE A20 AC motor, rated at 1,200HP continuous, 1,500HP intermittent with VFD variable speed AC motor drive. Continuous drilling torque 65,500 foot pounds @ 100RPM and 100,00 max break-out torque foot pounds.

Rotary – Oilwell 49 1/2" with GE752 High Torque 1,100HP DC motor

Traveling Block – Woollslayer 750 ton with Sheaves for 1 5/8" Wireline

Auto Driller – Cyber Base System and Kinetic Energy Monitoring System (KEMS) with WOB or ROP via dynamic electric motor braking

High Torque Make Up/Breakout – VARCO ST-80 Iron Roughneck "Tork Winder" with 145,000 ft. lb, 140 degree single stroke make-up and one (1) NOI Hydraulic Cathead rated at 140,000 ft. lbs

Tubular Handling – Varco PS-30 and BX elevators

Drive Pipe Tension System – Rated at 500,000 lbs with four (4) each motion compensated hydraulic jack cylinders located on transom

Drilling Instrumentation – NOI Cyber Base System (2 chairs)

Offline Make-up – Forward mousehold with Varco air operated slips, Varco ST-80 and Access Tools handling system

MUD SYSTEM

Have the ability to mix and circulate any two (2) of three (3) separately stored mud systems simultaneously.

Three (3) LEWCO Model W-2200 2,200HP triplex mud pumps each with two (2) GE752 1,100HP top mounted motors and belt drive configuration and maintenance free dampers. Fluid ends rated for 7,500 psi W.P.

One (1) Brandt 6 ft. Dual Cartridge (two motorized chains) gumbo box

Five (5) Brandt LCM-3D/CM-2 cascading linear motion Shale Shakers

One (1) Brandt LCM-3D/CMC(24/3) Linear motion mud conditioner

Two (2) Brandt model DG10 vacuum Degassers with JP10 Jet Pump Eductor

Two (2) Vortex Ventures "Lobestar" shear/mix Model VVE4-6S/D

One (1) 4 ft diameter by 20 ft 8" high vertical Mud Gas Separator with 10" vent line

Liquid Mud Tanks – 2,178 bbls. active, 1,083 bbls. mud or brine, 838 bbls. brine, 116 bbls. slugging pit, 233 bbls. pre mix, 647 bbls. base oil and 2 trip tanks 35 bbls. each

Drill String -

15,000 ft. 5" 19.50 ppf S-135 with NC50 connections

5,000 ft. 3 1/2" 13.3 ppf S-135 with NC38 connections

30 jts. 5" Hevi-Wate

38 jts. 3 1/2" Hevi-Wate

24 jts. 8 1/4" OD spiral Drill Collars, 6 5/8" Reg. with zip

24 jts. 7" OD spiral Drill Collars, NC50 with zip

12 jts. 4 3/4" OD spiral Drill Collars, NC38 with zip

(Equipped to run 5 7/8" drill string)

BOP and Well Control Equipment (all API 16A H2S rated) -

Diverter System – One (1) 49 1/2" 500 psi WP fixed ABB Vetco KFDJ diverter system with 14" lines running port/stb with 24" and 32" risers

Low Pressure BOP Stack (21 1/4", 2,000 psi WP) -

One (1) Varco-Shaffer Spherical annular BOP

One (1) CIW Type "U" Double ram BOP with blind rams on top and pipe rams on bottom

One (1) Test Stump and one (1) Vetco KFDJ adapter on top of the annular

Two (2) hydraulic and two (2) manual 3 1/8" kill/choke valves

One (1) BOP Stack frame with work platforms, hydraulic lines, kill/choke connectors and runs, etc.

High Pressure BOP Stack (13 5/8", 15,000 psi WP) -

One (1) Varco-Shaffer 10,000 psi WP Spherical annular BOP

Two (2) CIW Type "U" Double ram BOPs with one cavity having booster-operating cylinders for SBRs

One (1) Test Stump and one (1) Vetco KFDJ adapter on top of the annular

Two (2) hydraulic double acting fail safe and two (2) hydraulic double acting 3 1/16" kill/choke valves

Choke-Kill Manifold – 3 1/16" 15,000 psi WP with two (2) remote and two (2) manual chokes

AUXILIARY EQUIPMENT

Heliport – Designed for S61 and S92 Helicopter and fully compliant with CAP 437 regulations

Cranes – Three (3) Seatrax Cranes with 120 ft. booms, two (2) Model 4828 rated at 27.7 tons at 40 ft. radius and one (1) Model 6024 rated at 36 tons at 45 ft. radius

Air Hoists – Nine (9) total

Hydraulic Power Unit – Two (2) 150 HP unit with distribution manifold with individual flow rates and pressures supply up to eleven (11) different units of hydraulic equipment

Watermaker – One (1) waste heat type unit rated at 19,800 total GPD

Air Compressors – Three (3), 125 PSI, each rated at 500 CFM

Fire/Gas Detection System – Total Safety system for fire, combustible and H2S gas

Sewage Treatment – Omnipure

Lifeboats – Four (4) Shat-Harding, 60 person enclosed, self-propelled davit launched lifeboats

Liferafts – Six (6) 25 person Zodiac inflatable liferafts

Rescue Boat – One (1) Schat Harding Mob 17 crane deployed

Mooring Equipment – Four (4) Skagit JUW-075 100,600 lb. line pull winches with two (2) on bow and two (2) on stern with tension and wire length monitoring system. Each with 2,500 ft. of 1 1/2" wire rope and 10,000 lb. LWT anchor.