



## RIG FLEET SPECIFICATIONS

Rig Type	Independent Leg Self Elevating Cantilever Jack-Up
Design	Baker Marine Corp., BMC-150-H
Previous Names	<i>Marawah</i>
Year Constructed	1983
Built By	Nippon Kokan Shipbuilding, Japan
Classification	ABS + A1, IMO MODU 1979
Flag	Russia
Min/Max Water Depth	5 m to 45 m (16 ft to 148 ft)
Max Drilling Depth	4.570 m (15,000 ft)
Accommodation	74 berths
Helideck	19 x 24 m (63 x 80 ft) rated for Mi-8
Operating Conditions	Wave: 10.6 m (35 ft) @ 9.8 sec; Wind: 70 knots; Surface Current: 1.5 knots
Storm Conditions	Wave: 13.7 m (45 ft) @ 14 sec; Wind: 100 knots
Upgrades	Major upgrade 1998 by Aker Rauma Offshore Oy at Krasnye Barrikady Shipyard in Astrakhan, Russia

## VESSEL

### TECHNICAL DIMENSIONS

Hull Dimensions	53 m x 54 m x 5.5 m (174 ft x 176 ft x 18 ft)
Loadline Draft	3.8 m (12 ft 6 in)
Lightship Draft	3.1 m (10 ft 2 in)
Variable Deck Load (VDL)	Operating: 1,427 mt (1,573 st) Transit: 675 mt (744 st) Jacking: 904 mt (997 st) Survival: 904 mt (997 st)

### MACHINERY

Main Power	4 x Caterpillar D 3512 (1,000 hp) driving 4 x Kato A2667800000 1,150 kW generators, 600 V @ 1,200 rpm, 60 Hz
Emergency Power	1 x Cat 3412TA, 460 kW, 480 V, 60 Hz
Power Distribution	Tech Power Controls SCR, 600V
Deck Cranes	2 x BLM 4GCE electric cranes, 144 kW; High speed: 5 mt (5.5 st) @ 26 m (85 ft); Low speed: 20 mt (22 st) @ 26 m (85 ft)

### JACKUP SPECIFICATIONS

Legs	3 x Triangular 67.7 m (222 ft); Usable below hull: 52.9 m (174 ft)
Leg Spacing	Longitudinal 33.5 m (110 ft); Transverse 36.6 m (120 ft)
Spud Cans	Hexagonal, 99 m <sup>2</sup> (1,061 ft <sup>2</sup> ) each
Jacking System	BMC, rack and pinion system
Cantilever	Transverse: 3 m (10 ft) each side of center Longitudinal: 12.2 m (40 ft) from transom

### STORAGE CAPACITIES

Liquid Mud	270 m <sup>3</sup> (1,700 bbl)
Drill Water	520 m <sup>3</sup> (3,280 bbl)
Potable Water	520 m <sup>3</sup> (1,250 bbl)
Fuel Oil	240 m <sup>3</sup> (1,500 bbl)
Bulk Mud/Cement	170 m <sup>3</sup> (6,000 ft <sup>3</sup> )
Sack Material	137 m <sup>2</sup> (1,500 ft <sup>2</sup> )

### MOORING EQUIPMENT

Winches	4 x Fukushima, 45.5 mt (50.0 st) holding
Anchors	4 x Vicinay 3.175 mt (3.5 st)
Anchor Wire	4 x 1,015 m (3,330 ft) x 1¼" (31.75 mm)

## JACK-UP "ASTRA"



## DRILLING PACKAGE

### DERRICK

Manufacturer/Type	Pyramid
Dimensions	45 m x 9 m x 9 m (147 ft x 30 ft x 30 ft)
Max Hook Load	420 mt (463 st) with 10 lines
Racking Capacity	160 stds 5½" DP plus 10 stds 8" Collars
Setback Capacity	200 mt (220 st)

### DRAWWORKS

Manufacturer/Type	National 1320 UE
HP Rating	2,000 hp driven by 2 GE 752 DC motors
Brakes	Emalgco 7838 with battery back-up

### TOP DRIVE

Manufacturer/Type	Varco IDS-1
Output Power	1,000 hp
Rated Capacity	454 mt (500 st)
Continuous Torque	35,000 ft lbs @ 155 rpm

### ROTARY TABLE

Manufacturer/Type	Ideco
Rated Capacity	576 mt (635 st)
Max. Opening	37½" (952.5 mm)

### MUD PUMPS

Manufacturer/Type	2 x National Oilwell 12P160 Triplex
HP Rating	1,600 hp (each)
Max. Pressure	5,000 psi (345 bar)

### SOLIDS CONTROL

Shale Shakers	3 x Brandt VSM 300
Mud Cleaner	Brandt ATL-16/2 with 2 x 8" desander stages and 16 x 4" desilter stages
Centrifuge	Brandt HS 3400 VSFD

### WELL CONTROL SYSTEMS

BOP Stack	1 x 18¾" (476 mm) x 5,000 psi (345 bar) Shaffer annular; 1 x 18¾" (476 mm) x 10,000 psi (690 bar) Cameron type U single ram, H <sub>2</sub> S certified; 1 x 18¾" (476 mm) x 10,000 psi (690 bar) Cameron type U double ram, H <sub>2</sub> S certified
Diverter	ABB Vetco KFDJ 30" (762 mm) nominal, 27½" (698.5 mm) ID, 500 psi (34 bar) WP
Control System	Koomey Model MB-600-155B
Choke & Kill	Shaffer 10,000 psi (690 bar) C&K manifold with 2 x hydraulic Swaco chokes and one manual choke; H <sub>2</sub> S certified