

# ATWOOD EAGLE



The ATWOOD EAGLE is a column stabilized semi-submersible drilling unit currently rated to drill to 25,000 feet in water depths of up to 5,000 feet. The ATWOOD EAGLE is equipped with three (3) mud pumps, a Varco TDS-4 top drive system, and a Cameron 18-3/4" x 10,000 PSI BOP stack complete with two dual rams and two annular preventers. The rig is very well equipped and outfitted for drilling, completion, and intervention duties and has excellent subsea tree and template handling capabilities.

## CHARACTERISTICS

Type Of Vessel	Semisubmersible
Rig Design	Upgraded Korkut New Era
Water Depth	5,000 ft.
Drilling Depth	25,000 ft.
Year of Construction	1982
Year of Upgrade	2002
Variable Load	5,000 ST
Drilling Draft	55 ft.
Operating Displacement	31,883 ST

## PRINCIPAL DIMENSIONS

Length	325 ft.
Beam	235 ft.
Hulls	2
Beam	52.5 ft.
Depth	25 ft.
Baseline to Main Deck	95 ft.
Baseline to Pipe Rack	108 ft.
Baseline to Drill Floor	128.25 ft.

## CAPACITIES

Liquid Mud	3,624 bbls.
Bulk Material	10,000 cu. ft.
Sack Storage	5,120 sacks
Liquid Mud	4,950 bbls.
Drill Water	16,464 bbls.
Fuel	6,255 bbls.
Ballast Water	87,808 bbls.
Base Oil	2,390 bbls.
Brine	2,630 bbls.
Riser Displacement	2,578 bbls.
Accommodations	120 persons (plus 5 bed sick bay)



# ATWOOD EAGLE

## MOORING SYSTEM

### Chains

Eight (8) 3/4" ORQ + 20% x 3,200 ft. each minimum break load 1,427,000 lbs

### Anchors

Eight (8) 12 Metric Ton Stevpris

### Wire

Eight (8) 10,000 ft. each 3.5 diameter 6x47 WS+1WRC, RHRL preformed EEEIPS with minimum break load 1,450,000 lbs

### Mooring Winch System

Four (4) Amclyde Model CTW350/52 double combination traction winch/windlass, with eight (8) each take-up reels for wire storage. (System capable of mooring in water depths to 7,500 ft. in non-harsh environment areas)

## DRILLING EQUIPMENT

### Drawworks

Oilwell E-3000 driven by three (3) GE-752 DC motors with Dratech 9650 electric brake and National Oilwell M/E 3000 disc brake

### Derrick

185' Pyramid with 1,200,000 lb. static hook load capacity (w/ 12 lines)

### Motion Compensator

Western Gear HC-650-20-25 (650,000 lb. 25 ft. stroke) 1,600,000 lbs. locked

### Rotary Table

National Oilwell Model D-605 with 60 1/2" opening and Hagglund CA70 hydraulic motor

### Crown Block

Pyramid 600 ton

### Traveling Block

Western Gear 650 ton

### Swivel

Oilwell PC-650

Iron Roughneck - Varco Model ST-120

### Top Drive

Varco TDS-4H c/w RBS

### Drillers Cabin

Petron drillers cabin and console with network distributed drilling data (3D) for monitoring approximately 90 items

### Drill Pipe

15,000 ft., 5 1/2", 21.9 lb. grade S-135DP with NK-DSTJ connections

5 1/2", 3 1/4" ID, heavywall drill pipe with NK-DSTJ connections

### Drill Collars

Nine (9) 9 1/2" OD x 2 7/8" ID x 30' long spiral collars with 7 5/8" reg connections; twenty-two (22) 8 1/4" OD x 2 13/16" ID x 30' long spiral collars with 6 5/8" Reg connections; twenty-seven (27) 6 1/2" OD x 2 13/16" ID with NC50 connections.

## BOP EQUIPMENT

### Divertor System

Regan KFDS-CSO with 14" divertor lines, 16" flowline and 10 degree flex

### Flex Joint

18 3/4" with 21" Vetco HMF connection and 10 degree flex

### Riser Connector

Vetco H-4, 18 3/4" 10,000 PSI WP

### Annular BOP's

Two (2) Shaffer 18 3/4" 5,000 PSI WP

### Ram Preventers

Two (2) Cameron double type "U" 18 3/4" 10,000 PSI WP

### Wellhead Connector

Vetco H-4, 18 3/4" 10,000 PSI WP

### BOP Accumulator Unit

NL Shaffer air-electric, 3,000 PSI

### Hydraulic Control Pods

Two (2) NL Shaffer fully redundant with pressure bias system

## RISER EQUIPMENT

### Marine Riser

Sixty-six (66) jts. Vetco 21" OD x 5/8" wall x 75 ft. long with HMF flanged connectors, each with two (2) each 3.75" ID, 15ksi WP integral choke and kill lines; one (1) 3.826" ID 5ksi WP mud booster line; one (1) 2.496" ID 5ksi WP integral hydraulic supply line

### Riser Pup Joints

One (1) each length: 25 ft., 31.25 ft., 37.5 ft., 43.75 ft. and 50 ft. long

### Slip Joints

Two (2) Vetco 60' stroke with integrated SDL tensioning ring and Vetco HMF flanged connections

### Riser Tensioning Units

Four (4) 160,000 lbs. Western Gear dual tensioners; four (4) 80,000 lbs. single tensioners; all with 50 ft. line travel; total riser tensioning capacity on 1,600,000 lbs.

### Pod Line Tensioning Units

Two (2) Western Gear single line with 40 ft. line travel and maximum line load capacity of 16,000 lbs each

### Guideline Tensioning Units

Four (4) Western Gear single line with 40 ft. line travel and maximum line load capacity of 16,000 lbs each.

## MUD SYSTEM

### Mud Pumps

Three (3) Oilwell A-1700PT triplex each driven by two (2) GE-752DC motors, 5000 psi system

### Charging pumps

Three (3) 6" x 8" centrifugal with 100HP electric motors

### Mud Mixing Pumps

Four (4) 6" x 8" centrifugal with 100HP electric motors

### Mud Conditioner

Unitized with Brandt LCM 3D/CM-2 cascade shaker; three (3) each 12" cones and twenty-four (24) 4" cones rated at 1,500 GPM

### Shaleshaker

Five (5) Brandt VSM300 Balance Elliptical Shakers

### Degasser

Burgess Magna Vac Model 1000, rated at 1,000 GPM

### Mud Gas Separator

48" diameter x 17' tall with 10" vent line to derrick top

### Gumbo Box

Brandt with gumbo chain scalper unit

## POWER SYSTEM

### AC Generator

Two (2) EMD-16-645-E9B diesel engines 2,925 HP each driving EMD-2,100KW AC generators; one (1) EMD-16-645-E8 diesel engine 1,950 HP driving EMD-1,400KW AC generator

### Emergency Generator

One (1) Caterpillar D-3412 diesel engine driving one (1) 550 EKW 600 VAC at 1,800 RPM generator with independent motor control center

### Power Distribution

Ten (10) Bay IPS SCR system with 600 VAC/750 VDC; six (6) 2,000 amp and four (4) 1,200 amp transformers

## AUXILIARY EQUIPMENT

### Cranes

One (1) Seatrax Series 60, model 6032, with 140 ft. boom with load rating of 61,620 lbs. at 90 ft. Port Side. One (1) Seatrax Series 80 Model 8032 with 150 ft. boom with load rating of 105,061 lbs. at 100 ft. Starboard Side

### Bridge Crane

Two (2) 60 ton hydraulic bridge cranes for handling BOP stack

### Gantry Crane

Craneman 45 ton with two (2) 22 1/2 ton hoists for handling riser and tubulars

### BOP Handling System

BOP Transportation System with cart tracks and three (3) handling carts for skidding of BOP LMRP/Subsea trees

### Life Boats

One (1) Schat Harding Model MCB26, Two (2) Norsafe Model JYT85T, 60 person capacity, totally enclosed survival craft

### Life Rafts

Five (5) 25 person davit launched

### Rapid Deploy Rescue Craft

One (1) crane launched 6.5m rescue boat with 144HP motor. Maximum capacity 15 persons.

### Mooring Line Tension

Martin Decker Load cell with Allen Bradley Panel View Plus 1250 installed in Anchor winch houses and Ballast Control Room

### Vessel Positioning and Riser Angle Reference System

Kongsberg Simrad HPR410D Acoustic Positioning System

### Drilling Instrumentation

Petron driller cabin containing Petron Networked Distributed Drilling Data (3D) Instrumentation System consisting of:

1) Integrated drilling recorder function

2) Dual rig floor touch screen display with dual master panel capability

3) Drilling data hub monitoring:

a) Top drive torque

b) Top Drive RPM

c) Hydraulic hook load

d) Hydraulic tong torque

e) Crown sensor depth and ROP

f) Mud pump pressure (2) each

g) Cement pump pressure

h) Casing/annular pressure

i) Flow sensor

4) Mud pit data hub monitoring:

a) Riser boost pressure

b) Mud pump strokes (3 each)

c) Mud pit volume – thirteen (13) sensors in main mud pit system (three [3] pits have dual sensors) and two (2) sensors in trip tank

5) Drilling data hub and Mud pit data hub are networked to workstation in Toolpusher's office and Company Rep's office (optional)

6) Drillers console consisting of controls, gauges, and lights for the control and monitoring of approximately 90 items

### Ballast Control System

Electronic control board with readouts on all tanks

### Heliport

Hydro Marine Aluminum 83' x 83', designed to ABS MODU Rules 1997, accommodating a Sikorsky S-61N helicopter

### Communication System

Full GMDSS Compliance

### Distillation Units

Alfa-Laval Model DPU36C125 with heater rated at 14,500 GPD capacity

### Sewage Treatment System

Omnipure 12M812-27

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