



LOCATED IN THE U.S. GULF OF MEXICO, THE RICHMOND IS A CANTILEVER SUBMERSIBLE THAT CAN OPERATE IN WATER DEPTHS BETWEEN 11 FEET AND 70 FEET AND DRILL TO DEPTHS OF APPROXIMATELY 20,000 FEET.



## CHARACTERISTICS

Type Of Vessel	Submersible
Rig Design	Pace Marine
Water Depth	11 ft. min. to 70 ft. max.
Drilling Depth	20,000 ft.
Year of Construction	1982
Years of Upgrade	1986/2000/2007
Variable Load	
Drilling	5,440 kips
Moving	1,500 kips

## PRINCIPAL DIMENSIONS

Length	251.5 ft, mat 224.5 ft.
Beam	206 ft.
Keel to Upper Deck	128 ft.
Keel to Drill Floor	146 ft.

## CANTILEVER

Reach	30' Longitudinal
Transverse Travel	12' either side of center
Load Capacity	Max @ 22.5' centerline; 1600 kips hook/setback; 30' centerline 1275 kip hook/setback

## CAPACITIES

Liquid Mud	2,066 bbls (Pits and Sand Traps)
Bulk Material	10,000 cu. ft.
Sack Storage	3,000 sacks
Drill Water	6,068 bbls.
Fuel	2,500 bbls.
Potable Water	956 bbls.
Variable Load	
Drilling	5,440 kips
Moving	1,500 kips
Accommodations	73 persons (plus one bed sick bay)

## DRILLING EQUIPMENT

### Derrick

Pyramid model 148 ft., 30 ft. base, rated 1,000,000 lbs. hookload, jack knife type

### Drawworks

National model 1320 UE, 2,000 HP with two (2) GE 752 electric motors and Dresco 9650 auxiliary brake with battery back-up

### Top Drive

Varco IDS-1, 500 ton capacity with single rail torque tube guide system

### Rotary

National C-375 independent drive

### Hook/Traveling Block Combination

Varco 500 ton IDS Integrated Block

### Spinning Wrench

Varco SSW-40 pneumatic

## BOP EQUIPMENT

One (1) Regan 30" KFDJ-500 diverter system with 12" diverter lines

One (1) 13-5/8" 5,000 PSI WP Hydril type GK annular

One (1) 13-5/8" 10,000 PSI WP CIW Type "U" Single BOP

One (1) 13-5/8" 10,000 PSI WP CIW Type "U" Double BOP

One (1) CIW model C-162-2-20 accumulator unit, 3,000 PSI, 171 gallons usable capacity

Eleven (11) CIW 2-9/16" Type "F" gate valves

Two (2) CIW 3-1/16" Type "F" gate valves

One (1) CIW 3-1/8" Type "F" gate valves

### Choke-Kill Manifold

Cameron type "F" 10,000 PSI WP gate valves, one (1) Control Flow 2-9/16" super choke, one (1) CIW 2-9/16" positive choke, one (1) CIW 3-1/16" manual choke

## MUD SYSTEM

### Mud Pumps

Two (2) National 12-P-160, 1600HP triplex pumps, each driven by two (2) GE 752 DC electric motors and one (1) LEWCO WH-1300 triplex pump driven by one (1) Caterpillar 3512 diesel engine

### Mud Processing

Three (3) Swaco Model Mongoose PT Shale Shakers total 1,600 GPM

One (1) Swaco Model Mongoose PT Shale Shaker with three (3) cone Desander and ten (10) twin cone desilter

One (1) Brandt DG 10 degasser, capacity 1,000GPM

One (1) 48" diameter mud gas separator

### Drill String

20,000 ft 5" 19.5 ppf Grade G-105 drill pipe, NC50 connections

Thirty (30) each 5" heavyweight drill pipe NC50 connections

Twenty-one (21) each 6 1/2" drill collars, 4 1/2" XH connections

Twelve (12) each 8" drill collars, 6-5/8" Reg. connections

## POWER SYSTEM

### Diesel Engines

Four (4) D-399 Caterpillar 1215HP engines

### Generators

Four (4) KATO 1,030KW 600 VAC

### Emergency Generator

GM Delco 275 KW, GM 12V71 diesel generator unit, 480 volt AC, 60 HZ

### D.C. Distribution

Four (4) 2,000 AMP SCR units

### A.C. Distribution

600VAC distribution center

### Power Factor Unit

One (1) Controlix Corp. unit rated for 1600KVAR

## AUXILIARY EQUIPMENT

### Heliport

72' x 72' designed for Sikorsky 61N (Bell 212 with mast laid down)

### Cranes

Three (3) Link Belt model API-218A

### Waste Treatment Plant

Omnipure 12 MC Type 2

### Air Compressors

Bulk Air

One (1) Quincy Bulk Compressor Model SLP 60 rated at 496 CFM at 40 PSI

### Rig Air

Two (2) Quincy QSI 500, 500 CFM at 125 PSI each

### Air Dryer

One (1) Model Pneuma Tech Air Dryer 1500

### Lifeboats

Two (2) each 44 person watercraft self-propelled, totally enclosed

### Liferafts

Four (4) 20 person davit launched