1500hp AC Rigs. General overview

BOP Trolley System

1,500 HP AC Rigs

Load Rating - 1,000,000 lbs
Nom. Drilling Depth - 15,000 ft
Skidding System - Yes
Setback Capacity - 490,000 lbs

Substructure

Substructure – Front View

Substructure – Lateral View

1500hp AC Rigs. General overview

Pumping & Treatment Equipment

Triplex Mud Pumps

Mud Pumps – F-1600 – 5,000 PSI
Mud Tanks – 1975 Bls
Shale Shakers - Mongoose Pro
Desilter – Mi Swaco 8T4
Desander – Mi Swaco 212

Shale Shakers

Mud Hoppers

Mud Pit Room

1500hp AC Rigs. General overview

Well Control Equipment

Double Ram Preventer

Choke Manifold

Single Ram Preventer

Accumulator– FKQ720-6
Double Ram Preventer – 5,000 PSI
Single Ram Preventer – 5,000 PSI
Annular Preventer – 13 5/8” 5K PSI
Choke Manifold – 5K PSI – 4 1/16”

Annular Preventer

1500hp AC Rigs. General overview

Drawworks

Hoisting Equipment

Drawworks – Bomco 1,500 HP – JC-50DB
Drilling Line – 1 3/8” 6x19” EIPS IWRC
Crown Block – 7x60” 1,000,000 lbs
Travelling Block – 6x60” 1,000,000 lbs

Rig Floor

Driller’s Cabin

Rotating Equipment

Top Drive System - BPM - DQ70BSC – 500 Tons
Rotary Table – ZP375 37 ½” – 1,072 Kw Motor
Note: Includes different sizes of Slips

Top Drive

1500hp AC Rigs. General overview

Gen-Set Room

Power Generation

Engines – 3 CAT 3512 B
Generators – 3 CAT SR4B
Auxiliary Gen-Set – C15
Power Transfer – AC, VFD House

Engine

Skidding System

Auxiliary Equipment

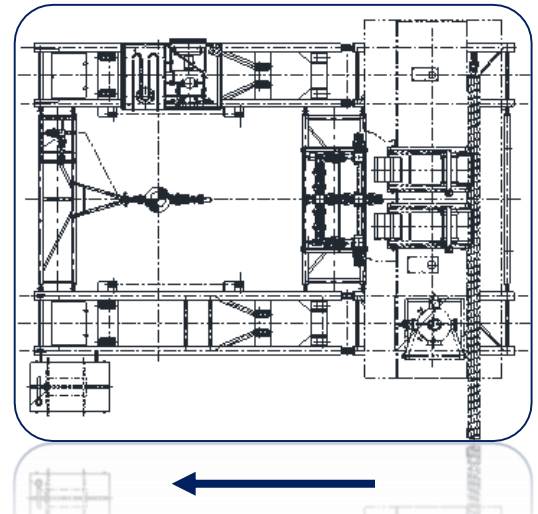
Skidding System – Yes – 120 M
Compressors – Two (2) – Sullair LS-12-50HH
Gas Detection System - Yes

Compressors

1500hp AC Rigs. General overview

Benefits of Skidding System

- Skidding Procedures can be done with pipes stacked on Setback.
- Rig does not need to be rigged down with each load.
- Decreased drilling time per well, resulting in higher profitability and significant cost savings.
- Suitable for pad style and multi-well drilling fields.
- Efficient space distribution.



Dual Direction Cylinders→ Allows Skidding Procedures in both directions (Forward & Backwards)

1500hp AC Rigs. General overview

Skidding System

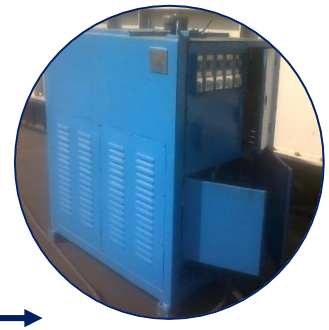
Matting Board

Tracks

SKIDDING SYSTEM COMPONENTS

Hydraulic Cylinders

HPU



1500hp AC Rigs. General overview

Hydraulic Displacement System

1. 

   Hydraulic Power Unit

2. 

   Hydraulic Control

3. 

   Dual Direction Hydraulic Cylinders

1500hp AC Rigs. General overview

1

Provides the Hydraulic Power to operate the Skidding System with a Maximum Pressure of 3770 PSI.

2

Directs the Hydraulic Pressure from the high pressure lines to the cylinders in order to move the rig package

3

Hydraulic Cylinder Stroke	0.5 Meters
Max Working Pressure	3770 Psi
Max Moving Speed	0.3 Meter/Min
Max Moving Length	100 Meters

1500hp AC Rigs. General overview

System Specifications

Maximum Weight Moved (Ton)	540
Tracks Height (mm)	436
Tracks Length (Meters)	32
Single Track Length (Meters)	4
Maximum Moving Speed (Meters/Min)	0.3
Step Distance (Meters)	0.5
Wind Speed Permitted in Skidding (Meters/Seg)	8

1500hp AC Rigs. General overview– Skidding System

Skidding Procedure

1. Perform a Pre Job Meeting before Skidding
2. Take leveling readings with Surveyor.
3. Check that the hydraulic system (lines, valves, pumps) work properly and have not any leak
4. Locate the hydraulic cylinders on the front (According with the Skidding Direction). Connect to the hydraulic system.
5. Turn on the Hydraulic Unit. Operate slowly the control lever. Ensure that the Hydraulic Cylinders be aligned.
6. Move the Rig by 0.5 m. Repeat the procedure until the final distance.
7. After each step, locate the track on front of the Rig in the direction of the movement. Repeat the procedure until necessary.
8. Recommended Pressure for the Rig Skidding approximately 1450 psi.