

# APEX RIG COMPARISON



## APEX<sup>XC+</sup>

### DRAWWORKS:

Prep DMI-2000 Dual-Speed (2000 HP), (1) AC Induction Motor (2000 HP) 1 3/8" Drill Line

### POWER:

Four Caterpillar 3512 Engines with 1365 KW Generators, Dual Fuel and High-Line Power Capable

### AC DRIVE SYSTEM:

Current Power AC Drive House Top Drive Control Integrated Into AC House

### MAST:

1,000,000 LBS Mast with 142' Clear Height. Raised and lowered with single stage hydraulic cylinders. Block and top drive remain in mast during transit.

### SUBSTRUCTURE:

Advanced Box-on-Box with setback capacity of 1,000,000 LBS, Floor Height 28', Rotary Beam Clearance 24' Hydraulic walking system capable of moving the mast and substructure 150' X by 30' Y with full setback capacity.

### BLOCK HOOK:

500 Ton Block with E-Z Becket Quick Attachment

### DRILLERS CABIN:

Current Power Controls with Drawworks, Interface Controls, Joy Stick Control with Emergency Shut Down, Crown & Floor Saver

### PUMPS:

Three (3) 2,000 HP, Triplex Mud Pumps Each Independently Powered by one (1) 2,000 HP AC induction motor, 7,500 PSI Circulating System

### MUD PITS:

Two (2) Tank System - 1,000 BBL Capacity with 100 BBL Slug Pit, Two (2) 50 BBL Capacity Trip Tanks

### SOLIDS EQUIPMENT:

Brandt King Cobra Triple Shaker Vacuum Degasser 72" Mud Gas Separator Six (6) Mud Agitators

### BOP'S:

As required by contract 40 Ton BOP Lifting System and Transport Skid

### ACCUMULATOR:

7-Station 350 Gallon Accumulator

### CHOKE MANIFOLD

10,000 PSI Choke Manifold

### TOP DRIVE

Varco TDS-11 (500 Ton) High Torque Top Drive (HTTD)

### ROTARY TABLE:

375 (37 1/2") Independent Rotary Driven by One (1) Hydraulic Motor

### DRILL PIPE:

As required by contract

### DRILL COLLARS:

8" & 6 1/2" Drill Collars (quantity and size subject to availability)

### AUXILIARY EQUIPMENT:

Base EDR System, PC-3000 Hydraulic Catwalk, Fuel Tank - 15,000 Gallon Capacity Water Tank - 500 BBL Capacity, Rig Manager and Crew Quarters, FR120 Iron Roughneck, High Torque FR 120 Capable, Dedicated Safety Meeting House Man Rider

## APEX<sup>XC</sup>

### DRAWWORKS:

Alta Rig Systems Two-Speed (1500HP) Powered by One (1) AC Induction Motor, 1 3/8" Drill Line

### POWER:

Four Caterpillar 3512-C Engines (1476 HP Each) With Kato Generators Dual Fuel Capable, High-Line Power Capable

### AC DRIVE SYSTEM:

Omron VFD Drive House Top Drive Integrated Into AC DriveHouse

### MAST:

Cantilevered Three-Section (750,000 LBS) 142' Clear Height. Raised and lowered with single stage hydraulic cylinders. Block and top drive remain in mast during transit.

### SUBSTRUCTURE:

Advanced Box-on-Box, Setback Capacity of 600,000 LBS, Floor Height 28', Rotary Beam, Clearance 24'. Hydraulic walking system capable of moving the mast and substructure 250' X by 30' Y with full setback.

### BLOCK HOOK:

500 Ton Block with E-Z Becket Quick Attachment

### DRILLERS CABIN:

Omron Control System, Joystick control with emergency shutdown crown and floor saver.

### PUMPS:

Three (3) 2,000 HP Triplex mud pumps each independently powered by one (1) 2,000 HP AC induction motor

### MUD PITS:

Round-bottom two (2) tank system - 1,000 BBL capacity

### SOLIDS EQUIPMENT:

Brandt King Cobra Triple Venom Shakers

### BOP'S

As required by contract, 40 Ton BOP Hoist, BOP Transport Skid

### ACCUMULATOR

7-Station Accumulator

### CHOKE MANIFOLD

10,000 PSI Choke Manifold

### TOP DRIVE

Varco TDS11 High Torque Top Drive (HTTD)

### ROTARY TABLE:

C 275 (27 1/2") National Style Independent Rotary Table driven by one (1) hydraulic motor

### DRILL PIPE

As required by contract

### DRILL COLLARS

8" and 6 1/2" Drill Collars (quantity and size subject to availability)

### AUXILIARY EQUIPMENT:

Pason EDR (Base System) Pipe Wrangler 3500 Hydraulic Catwalk w/Walking Package, Fuel Tank (15,000 gallon capacity), Water Tank (500 barrell capacity), Rig Manager and Crew Quarters, Omron Control System (AutoDriller) NOV ST-80-C Iron Roughneck, Omron Oscillator, Safety House, Man Rider

## APEX<sup>XK</sup>

### DRAWWORKS:

Alta Rig Systems Single Speed (1500HP) 1 3/8" Drill Line

### POWER:

Three Caterpillar 3512-C Engines AC Drive System: AC Drive House Omron Controls

### TOP DRIVE:

Varco TDS-11 SA (500 Ton) \*HTTD Upgrade Available\*

### MAST:

750,000 LBS mast with 142' Clear Height.

- 28,445' Setback of 4" DP
- 25,610' Setback of 5" DP
- 24,854' Setback of 5-1/2" DP

Raised and lowered with hydraulic cylinders. Block and top drive remain in mast during transit.

### SUBSTRUCTURE:

T&T Swing-Up Style Setback Capacity of 600,000 LBS (750,000 LBS with upgrade) Floor Height 28', Hydraulic walking system capable of moving Mast and Sub. System capable of walking with 600,000 LBS full setback capacity, up to 150' X by 30'Y

### PUMPS:

Two (2) or Three (3)

(1600HP) triplex pumps with 7,500psi circulating system

### MUD PITS:

Two (2) tank system with 1,000 bbl capacity with 100 bbl pre mix.

### SOLIDS EQUIPMENT:

Three (3) Shakers Degasser Desander/Desilter Mud Gas Separator

### ROTARY TABLE:

NOV C-275 27-1/2" Independent rotary table

### AUXILIARY EQUIPMENT:

NOV ST-80-C Iron Roughneck Pipe Wrangler Forum 3500 Hydraulic Catwalk

## APEX<sup>PK</sup>

### DRAWWORKS:

NOV DSGD375 Dual Speed (1500HP) 1 3/8 Drill Line

### POWER:

Three Caterpillar 3512-C Engines AC Drive System: AC Drive House NOV Amphion Controls

### TOP DRIVE:

Varco TDS-11 SA (500 Ton) \*HTTD Upgrade Available\*

### MAST:

750,000 LBS mast with 142' Clear Height.

- 25,893' Setback of 5" DP without upgrade
- 27,783' Setback of 5" DP with upgrade
- 25,500' Setback of 5-1/2" DP with upgrade

Raised and lowered with hydraulic cylinders. Block and top drive remain in mast during transit.

### SUBSTRUCTURE:

Lee C. Moore Box-on-Box Setback Capacity of 750,000 LBS Floor Height 25', Hydraulic walking system capable of moving Mast and Sub. System capable of walking with 750,000 LBS full setback capacity, up to 90' X by 30'Y

- 8'+ Clearance in (X-Direction)
- 5' Wellhead Clearance (Y-Direction)

### PUMPS:

Two (2) or Three (3)

K-1600 (1600HP) triplex pumps with 7,500psi circulating system

### MUD PITS:

Three (3) sloped bottom tank system with 1,000 bbl capacity with 100 bbl pre mix.

### SOLIDS EQUIPMENT:

Three (3) Shakers Degasser Desander/Desilter Mud Gas Separator

### ROTARY TABLE:

NOV C-275 27-1/2" Independent rotary table

### AUXILIARY EQUIPMENT:

NOV ST-80-C Iron Roughneck Pipe Wrangler Canrig PC 3000 Hydraulic Catwalk

\*Capabilities dependent on Rig number.

## APEX<sup>WALKING</sup>

### DRAWWORKS:

Alta Rig Systems (1500HP) 1 3/8" Drill Line

### POWER:

Three Caterpillar 3512-C Engines AC Drive System: AC Drive House Omron Controls

### TOP DRIVE:

Varco TDS-11 SA (500 Ton) \*HTTD Upgrade Available\*

### MAST:

750,000 LBS mast with 142' Clear Height.

- 17,856' Setback of 5" DP without upgrade\*
- 26,784' Setback of 5" DP with upgrade\*

### SUBSTRUCTURE:

Hodgson Box-on-Box Setback Capacity of

- 450,000 LBS without upgrade\*
- 650,000 LBS with upgrade\*

Floor Height 25', Hydraulic walking system capable of moving Mast and Sub. System capable of walking with full setback capacity, up to 120' X by 15'Y

- 7' Clearance in (X-Direction)\*

### PUMPS:

Two (2) National FD-1600 (1600HP) triplex pumps: (available)

- 7,500 psi Fluid system\*
- 3rd 1600HP Mud Pump\*

### MUD PITS:

Three (3) tank system with 1,500 bbl capacity with 121 bbl pre-mix tank.

### SOLIDS EQUIPMENT:

Three (3) Shakers Degasser7 Desander/Desilter Mud Gas Separator

### ROTARY TABLE:

NOV ZP-375 (37 1/2") Independent rotary table

### AUXILIARY EQUIPMENT:

NOV ST-80-C Iron Roughneck Pipe Wrangler Forum 3500 Hydraulic Catwalk

\*Capabilities dependent on Rig number