

# DD-1100



**Surface-launched**

**Fluid-assisted**

**Optimum power**

**Reliable innovation**

**Tri-axle suspension mounted thrust frame**

**Great for large diameter and long reach pipeline crossings or utility construction projects**

#### Features and Benefits

- Caterpillar® 700 HP (522 kW) C-18 Tier III Diesel Engine
- 1,100,000 lbs. (500 Tonnes) of Maximum Thrust/Pullback Power
- 100,000 ft-lbs. (136,000 Nm) of Maximum Rotary Torque
- Rack & Pinion 4 Pinion Drive with Adjustable Force Limiter
- Wrench Travels Full Length of Thrust Frame
- Hydraulically Operated Pipe Supports
- 4 in. (102 mm) Fluid Course permits 1,000 U.S. Gallons (3,785 L)/per minute flow
- Accommodates Range II Drill Pipe
- 10° - 18° Variable Drilling Angle
- Floating Spindle™ Allows Simple Makeup and Breakout
- Dedicated Pumps for Rotary and Thrust
- Adjustable Torque Limiter for Rotary and Makeup Force
- Run-On-One-Technology-System (ROOTS) capable

## Technology Spotlight: Wiggle Steer

The *Wiggle Steer System* provides the operator of a directional drill the means to rotate the drill pipe and subsequently the cutting head on the drill string, back and forth over a predetermined range. This back and forth motion would cause the hole made by the cutting head to be more open in a particular direction and therefore facilitate steering of the drilling pipe in that direction under ground.

The Wiggle Steer System will rotate the Drill Pipe in the Makeup (CW) direction while thrusting forward. It will then rotate the Drill Pipe in the Breakout (CCW) direction but will not thrust in the breakout direction. This method reduces the breakout torque and should prevent the drill string tool joints from parting down-hole.