# Case Study



# Cat Pumps Setting The Standard In The Drilling Industry

Cat Pumps, the world's most reliable pumps, are being used in the drilling industry by Rockbit UK Limited. Rockbit have been using Cat Pumps for a number of years for both drilling fluid and foaming.

In the drilling industry high-pressure positive displacement pumps are the most suitable pumps for delivery of high-pressure water in the following applications:

#### **Drill Blocking / Clogging**

Drill bit/reamer clogging or blocking can occur when drilling through sticky, difficult material like clay. The drill bit/reamer has the ability to discharge high-pressure jets of drilling fluid to remove the clay as a thin slurry away from the drill head and drill string, and also overcome the head of pressure to remove the drill cuttings from the borehole.

#### **Deep Well Drilling**

Deep well drilling is the drilling of a well on land to a depth of 1 mile or more and offshore to a depth of 5 miles or more. These deep wells are drilled to these depths predominantly for natural gas or petroleum; however, the well might be drilled to reach water. The process for drilling a well to such depths is very technical and may incorporate directional drilling in order to reach the natural resource deposits without disturbing existing surface area usage. To lubricate the drill bit at such depths a high lubricant pressure is required to overcome the pressure losses as the fluid travels to the drilling point. The use of foaming agents are also employed to assist with lifting the debris within the foam away from the drilling point whilst minimising the dust at the surface.

Cat pumps has more than 1000 pump models to satisfy the many applications to deliver high-pressure water and other liquids. In particular the Cat Pumps Model 280 has proven itself to be more reliable than its competitors within the drilling industry providing foam to drill heads. Alan Vasey, M.D of Rockbit UK says "These pumps have substantially longer life than the pumps previously used and have never skipped a beat."





## **Application Specifications**

### Removal Of Cuttings In Deep Well Drilling

Cat Pumps Model	280 (popular choice in the industry)
Pressure	69 bar
Flow	11.4 l/min
Fluid	Water
Temperature	Ambient

