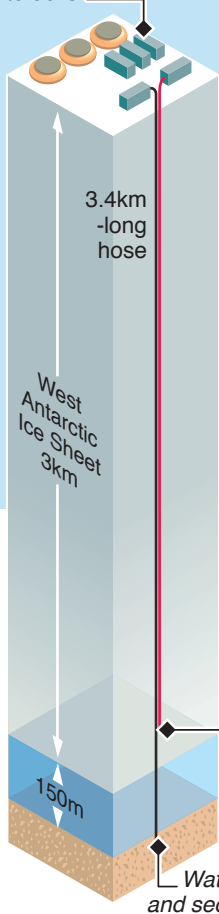


# Probing Antarctica's subglacial lakes

A team of British scientists hopes to become the first to take samples from a lake three kilometres beneath the Antarctic ice sheet, as they search for life in the extreme environment – isolated from the outside world for at least 125,000 years – to explore the limits to life on Earth

## UNDER THE SURFACE

1.5MW boiler to heat 30,000 litres of water to 90°C



## SAMPLING SUBGLACIAL LAKES

### Lake Ellsworth

Drilling to begin Nov 2012  
UK



### Lake Vostok

Drilling to resume Dec 2011  
Russia



### Lake Whillans

U.S. team expected to break through in 2012

### HOT WATER DRILL

Operating continuously for three days

Hot water sprayed at 2,000psi to create 360mm borehole. Freezing shrinks borehole by 6mm/hour

Single-celled organisms e.g. archaea, have been found in Antarctica

