

# Re-opening the iconic Highway 1

After heavy rain caused mudslides which closed sections of the iconic Highway 1 in California, drilling equipment supplied by Hütte Bohrtechnik was used to stabilise the slopes above the road

**D**uring the winter of 2016/17 excessive rain fall in California caused significant problems on the coastal highway. Officials said there were



*A Hütte Bohrtechnik rig was used during slope stabilisation work on Highway 1 in California after heavy rain caused mudslides*

17 storm-related work sites in Marin County, most of those on Highway 1, as rainwater cracked roads and undermined road beds.

As a direct result of these problems, the Highway section between Muir Beach and Stinson Beach (a roughly five-mile stretch), dipped, cracked and slipped due to mudslides. Thus, the key section of Highway 1 to the north the saw no through-traffic from February 2017 until it was finally re-opened in May 2018. While it was initially planned to re-open that section of the road in early September 2017, this date had to be pushed back as equipment and other problems arose.

For re-construction works on Highway 1, anchors needed to be installed to provide slope stabilisation and to prevent the road from washing away again.

It was planned for the project to average approximately two holes per day with two machines. However, when it switched to using one Hütte Bohrtechnik HBR 605 drill rig with double head HG28/HG13 the average went up 2-3 holes per day with one machine only.

Using 219mm x 2m casing with 114.3mm outside diameter x 2m, 3.5in API REG rods with a 6in DTH hammer with a button bit casing crown the contractor was able to install 300 anchors at drilled depths of 30-35m. ▼