## Freezing weather is knocking out millions of barrels of US oil output



The wintry weather that blanketed parts of Texas in snow and hammered North Dakota with extreme cold has knocked out millions of barrels of US oil production, and the industry is expected to need weeks to restore output to normal levels.

Production across the US was curtailed by about 10mn barrels this week, according to market participants who asked not to be named because the information is private. Losses in the Permian Basin of Texas and New Mexico are estimated at around 6mn barrels and shut-in output in North Dakota's Bakken is seen at close to 3.5mn barrels.

In Midland, in the heart of the Texas Permian, temperatures dipped below freezing in 11 out of the 19 days of this month. The cold has been especially bitter in past few days, with the lows below 20F (-7C) for most of the week, according to Accuweather.

Extremely low temperatures freeze water at the wellhead, shutting in production. Icy roads make it diff icult for vacuum trucks — used to haul away waste water — to reach drill pads, causing drillers to either halt pumping or curtail rates, the people said.

The losses currently amount to lessthan 1% of total US crude production, which is around 13mn barrels a day,but they are expected to linger or even rise in North Dakota. In the city of Williston, at the centre of the Bakken formation, belowfreezing temperatures are expected

throughout the end of the month, posing continued challenges. Oil producers there may need at least a month to restore output to normal levels after more than half of the state's flows were cut off this week, state off icials said.

Natural gas gathering systems that are connected to oil wells

fill up with liquids during extreme cold, disrupting the operation of compressors, said Lynn Helms, North Dakota's mineral resources

director. Crude wells are then shut in to avoid flaring.