



## Kvanafjeld, Greenland

Surely a name to conjure with, and likely one that will soon become more widely known, Kvanafjeld is the dark mountain on the far left in this view. It rises above the head of a short, relatively verdant, valley behind the small town of Narsaq, near the southern tip of Greenland. The icebergs in the foreground come from the Eqalo and Qooroq that calve into the heads of the fjords some 50 km inland from Narsaq, and both those glaciers flow for 50 km from Greenland's great interior ice sheet. Snow on the hills, seen in this June photograph, will be gone in late summer, as this is part of the rocky terrain that forms a ring around Greenland's Inland Ice. The key feature of the local geology is the intrusive complex of alkaline igneous rocks that date from 1160 Ma, and now form a wide outcrop mainly on the far side of the mountain and skyline in this view. And that is why Kvanafjeld might well become known around the world. The alkaline suite contains a huge resource of the Rare Earth Elements (REE) that are so vital to the world's micro-electronic industries. The quantities of minerals could well rival the scale of China's giant Bayan Obo mine, which currently dominates REE production, but schemes to develop this Arctic site have become mired in political and environmental debates. When Donald Trump said "Let's buy Greenland", he was widely mocked. But with the Kvanafjeld ores in mind, his comment could yet prove to have been a good idea that we might regret laughing at. The whole world continues to increase its reliance on mobile phones, electronics and battery technology, and thereby demands steady supplies of REE, preferably not subject to control by China's politicians. Under such pressure, it is ever likely that the little fishing town of Narsaq could be transformed into a mining hub and a significant port.

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