

Story: Radioactive minerals

(Priestley, R., 2006)

Page 2. West Coast uranium rush, 1955-56

By the mid-1950s uranium was in hot demand to fuel the developing nuclear weapons and energy programmes in the United States and the United Kingdom. Following advice from the United States Atomic Energy Commission, in December 1954 New Zealand's Geological Survey enlisted the help of amateur and weekend prospectors with the publication of a booklet, *Prospecting for radioactive minerals in New Zealand*.

The booklet provided information on the field properties of radioactive deposits, and on likely places to find them. For those not able to pay for a Geiger counter, there were simple instructions on how to make one. Uranium prospecting was promoted as a weekend or summer hobby.

New Zealand's first uranium find

In the Buller Gorge two bush-clad peaks – Mt Cassin and Mt Jacobsen – are named after the prospectors Frederick Cassin and Charles Jacobsen, who in November 1955 discovered uranium in the road cutting near Hawks Crag.

The sprightly septuagenarians had finished their day with a few drinks in the Berlins Hotel and, on the drive home, stopped to relieve themselves at the side of the road next to Batty Creek. Here Jacobsen put the Geiger counter on the rock face. The counter ticked wildly and the needle went off the scale. The excited pair spent the night at the Berlins Hotel, returning to Batty Creek the next morning to gather rock samples and take them to Wellington.

Cassin and Jacobsen's find excited the media and other prospectors, especially as Cassin claimed that they had found one of the most highly radioactive deposits in the world.

Uranium fever hits the West Coast

Reports of Cassin and Jacobsen's find gave other prospectors clues on where to look. By 14 November there were two new uranium finds, both close to Reefton — and a new air of hope and prosperity on the West Coast. Hotels presented parting guests with radioactive rock fragments; shop windows attracted customers with displays of uranium-bearing rock; and the Berlins Hotel had its busiest afternoon's trade since the gold rush 90 years earlier.

By 23 November more detailed analysis showed that the high levels of uranium oxide in Cassin and Jacobsen's initial samples were anomalous; further samples from the same location contained only one-quarter to one-hundredth of the first samples' levels. Their discovery was found to come from a small volcanic dyke rich in radioactive zircon. The surrounding rock — the unusual sedimentary deposit called Hawks Crag Breccia — contained scattered patches of uranium-bearing minerals that had previously been overlooked.

Rewards under the Atomic Energy Act

In recognition of their discovery, in 1956 Cassin and Jacobsen were each awarded £100 under the Atomic Energy Act 1945. An amendment to the act in 1957 established a new schedule of rewards and in 1958 a further £400 each was awarded to Charles Jacobsen and the estate of the late Frederick Cassin in acknowledgement of the first discovery of uranium in New Zealand.

How to cite this page:

Rebecca Priestley, 'Radioactive minerals - West Coast uranium rush, 1955–56', Te Ara - the Encyclopedia of New Zealand, http://www.TeAra.govt.nz/en/radioactive-minerals/page-2 (accessed 20 August 2020) Story by Rebecca Priestley, published 12 Jun 2006