

# Tellus Survey Periodic Table

## Inorganic geochemistry of shallow topsoil in Ireland

This Periodic Table presents the inorganic geochemical data for 111 analytes measured in shallow topsoil samples (nominally c. 5–20 cm depth) across Ireland. Samples were collected between 2011 and 2017, as part of the Tellus geochemical survey project of Geological Survey Ireland.

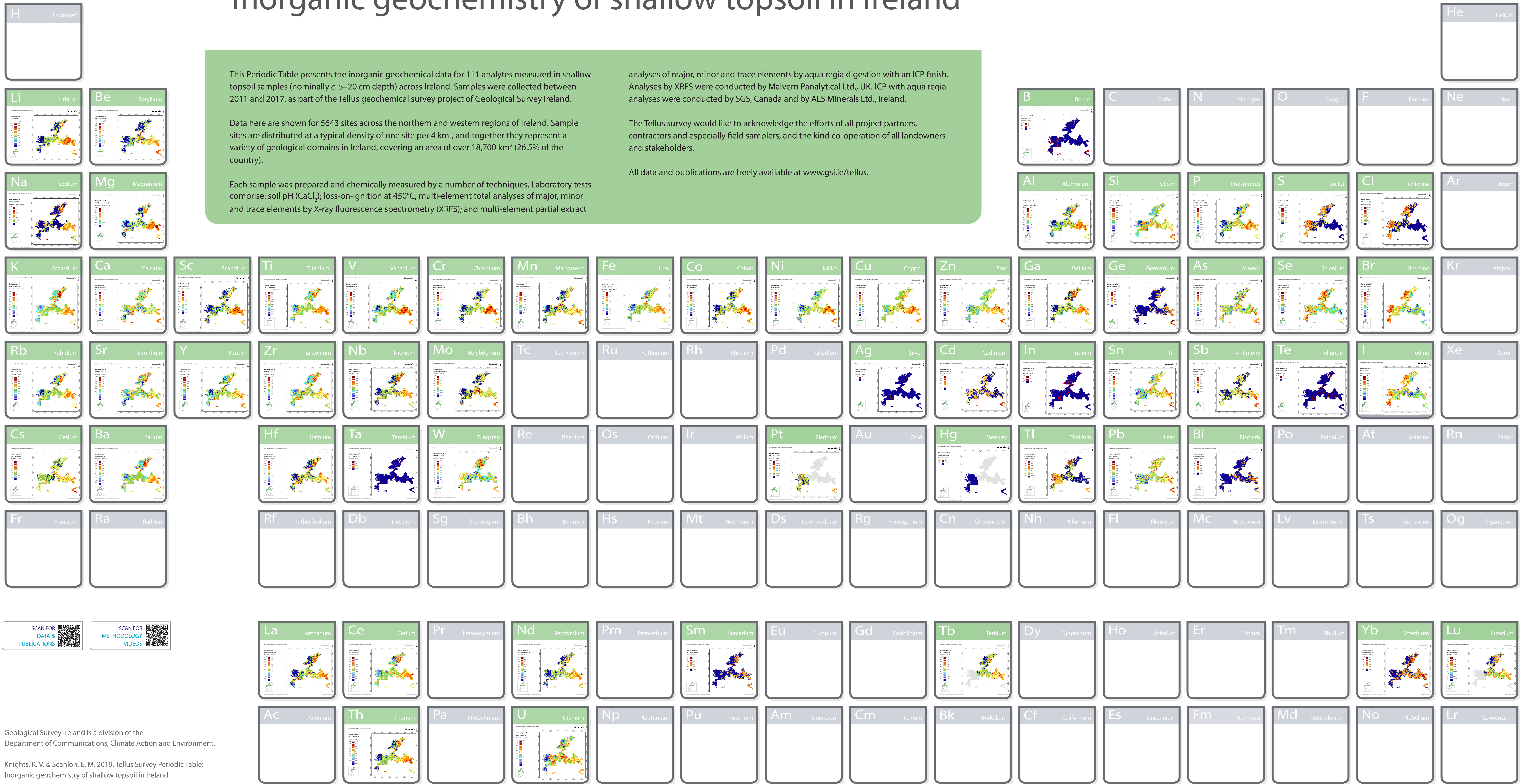
Data here are shown for 5643 sites across the northern and western regions of Ireland. Sample sites are distributed at a typical density of one site per 4 km<sup>2</sup>, and together they represent a variety of geological domains in Ireland, covering an area of over 18,700 km<sup>2</sup> (26.5% of the country).

Each sample was prepared and chemically measured by a number of techniques. Laboratory tests comprise: soil pH (CaCl<sub>2</sub>); loss-on-ignition at 450°C; multi-element total analyses of major, minor and trace elements by X-ray fluorescence spectrometry (XRFs); and multi-element partial extract

analyses of major, minor and trace elements by aqua regia digestion with an ICP finish. Analyses by XRFs were conducted by Malvern Panalytical Ltd., UK. ICP with aqua regia analyses were conducted by SGS, Canada and by ALS Minerals Ltd., Ireland.

The Tellus survey would like to acknowledge the efforts of all project partners, contractors and especially field samplers, and the kind co-operation of all landowners and stakeholders.

All data and publications are freely available at [www.gsi.ie/tellus](http://www.gsi.ie/tellus).



Geological Survey Ireland is a division of the Department of Communications, Climate Action and Environment.

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