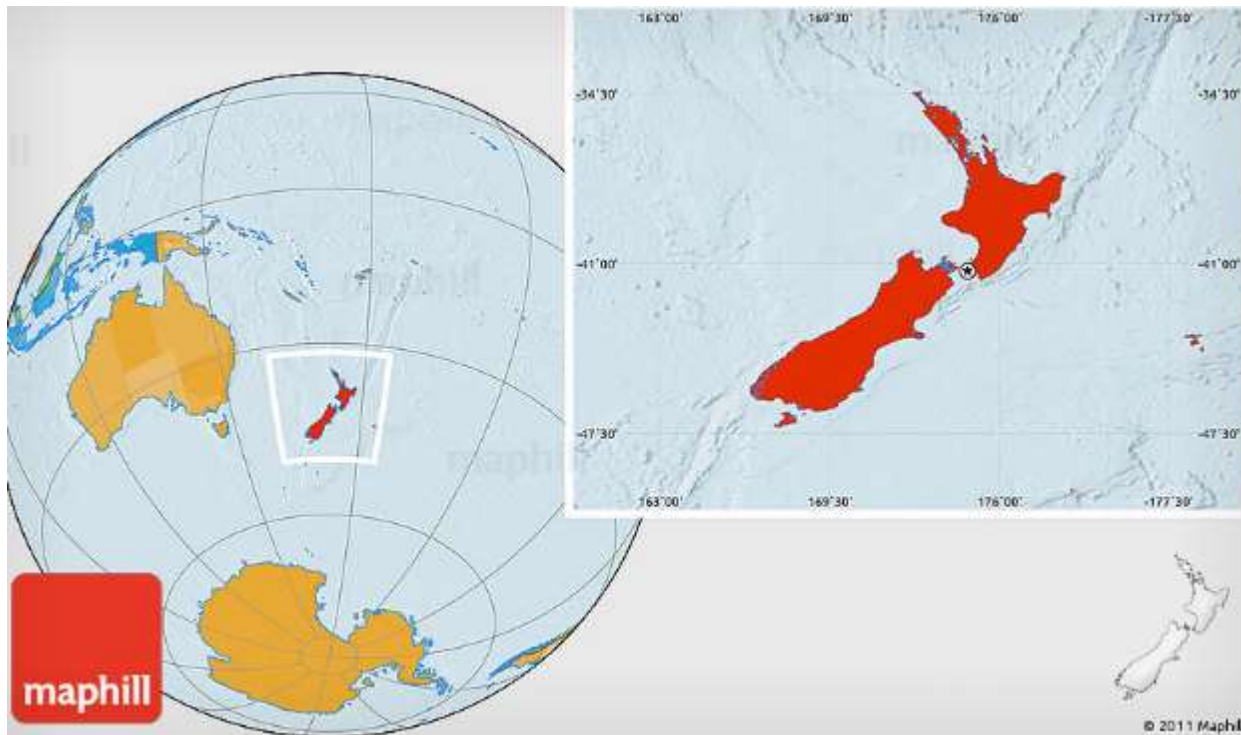
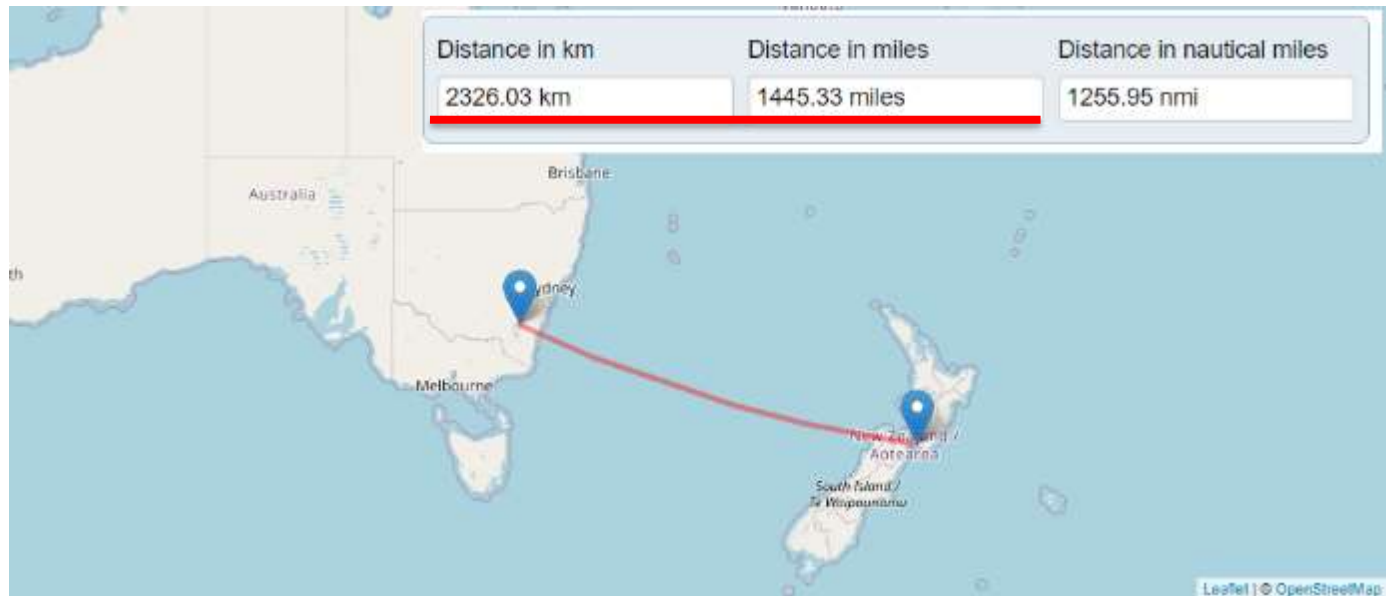


Critical element concentration in high temperature producing geothermal fluids in New Zealand

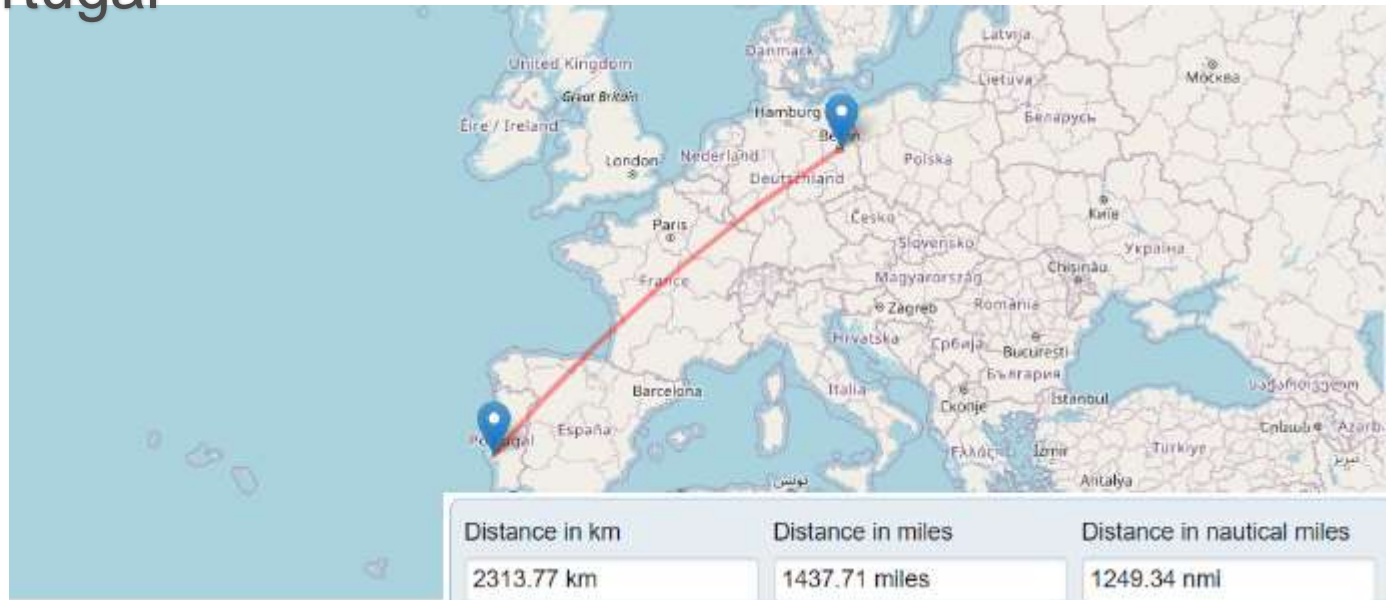
Lucjan Sajkowski – GNS Science



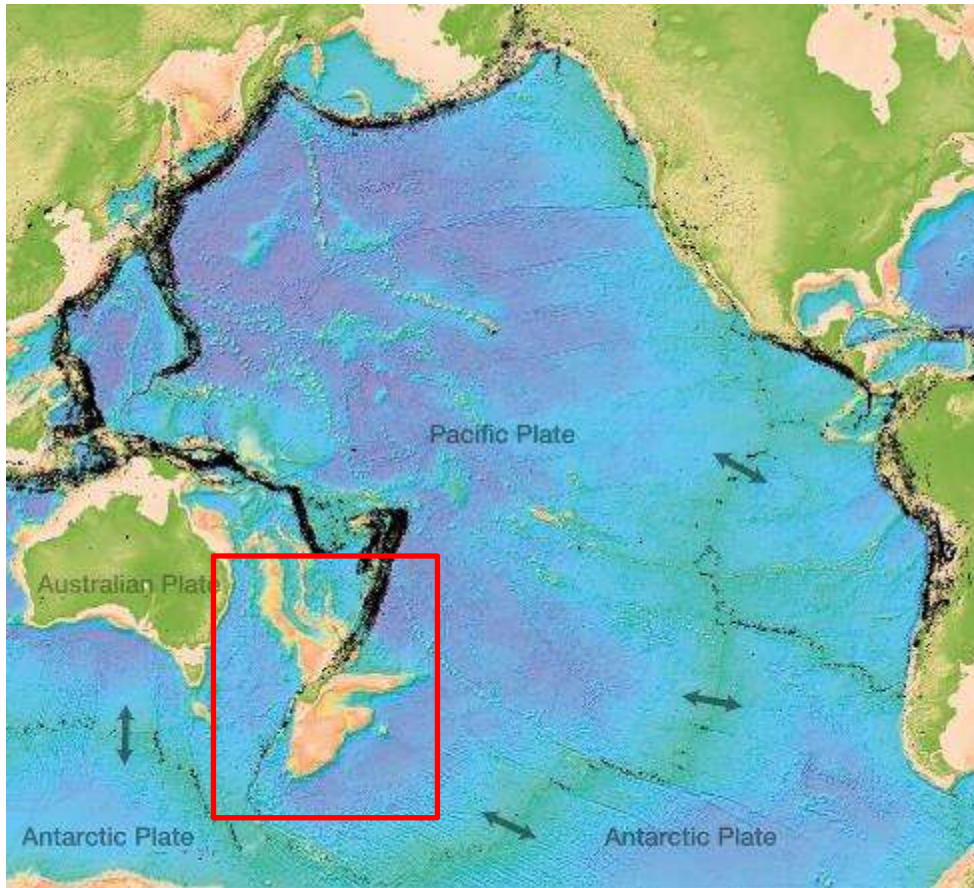
New Zealand - Australia



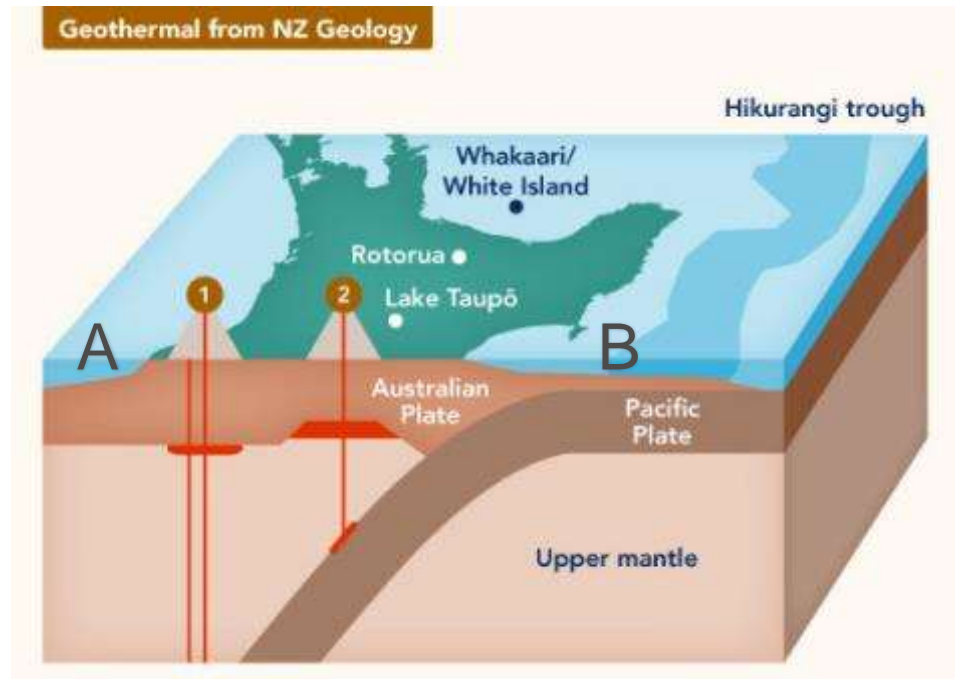
Germany – Portugal



Pacific Ring of Fire



Subduction under the North Island



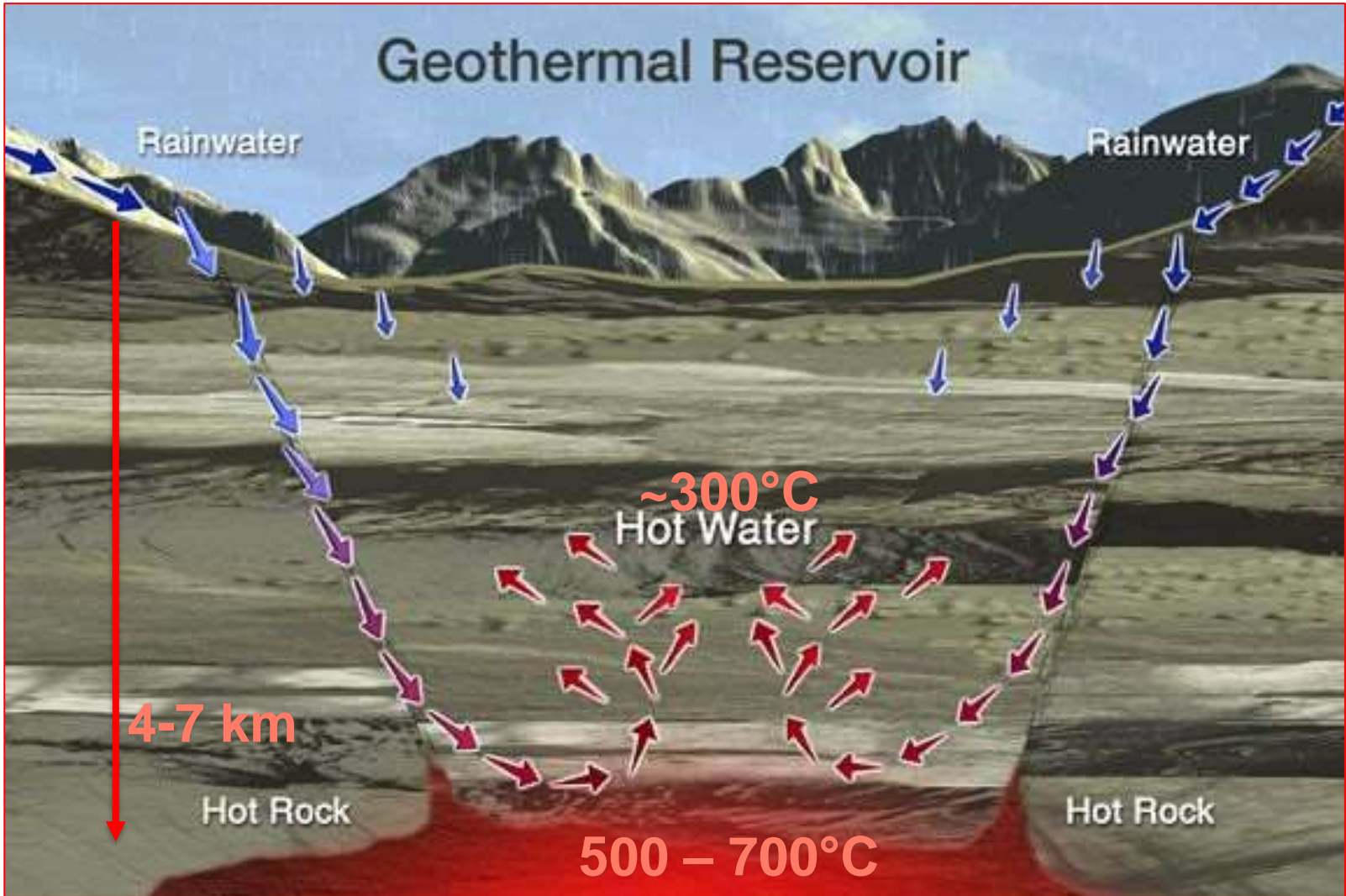


Figure by Sanjeev Kumar Gupta

New Zealand's geothermal resources

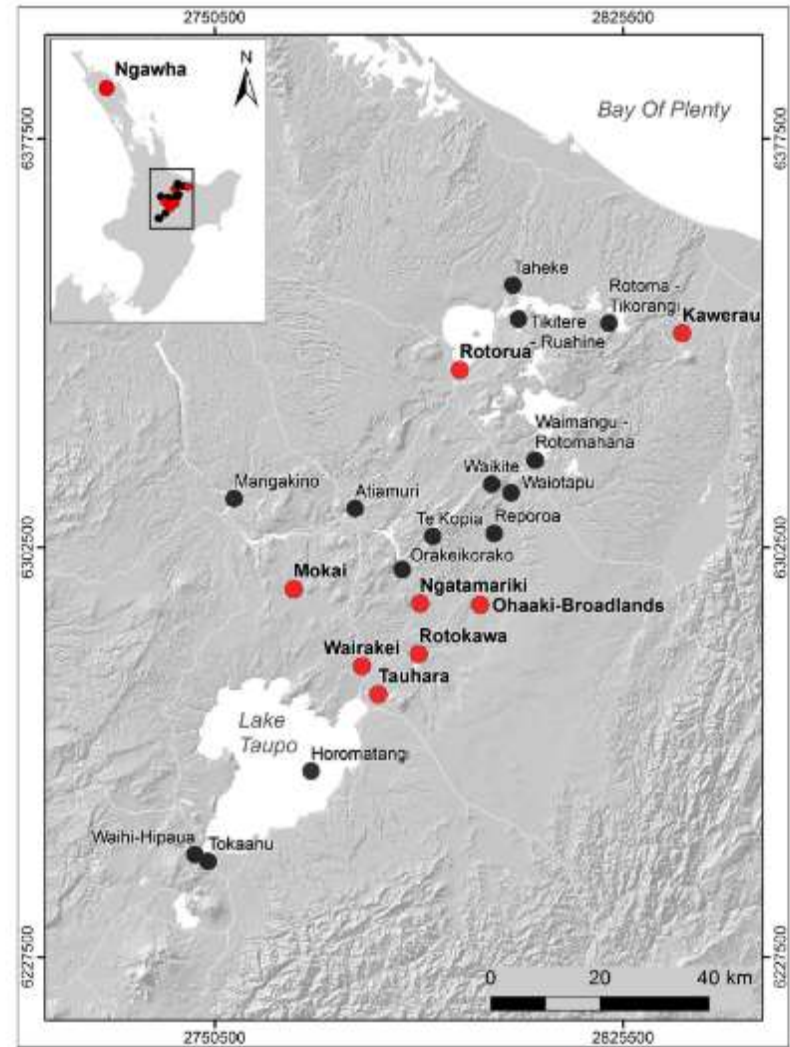
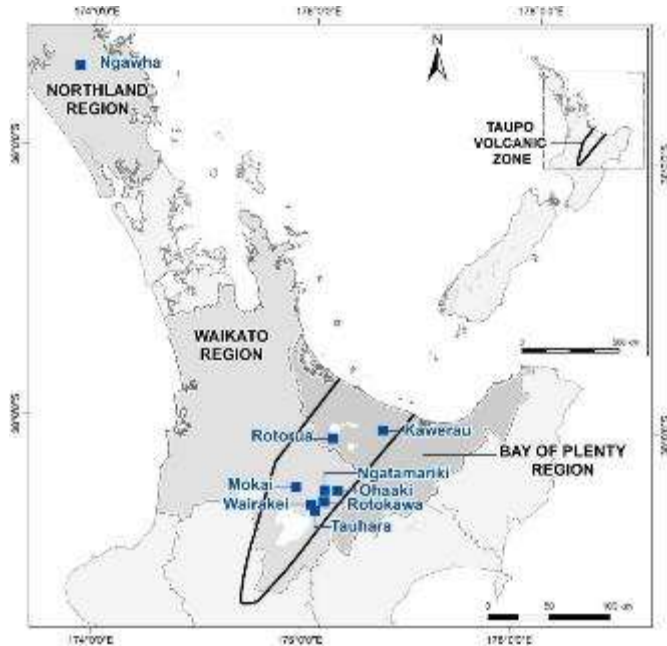


Figure 2.1. Geothermal areas in the TVZ and Ngawha discussed in the text. • Fields with compositional data in bold.

20%

of NZ's electricity is produced
by geothermal energy

New Zealand's geothermal resources



Use of Geothermal energy (NZ Focused)



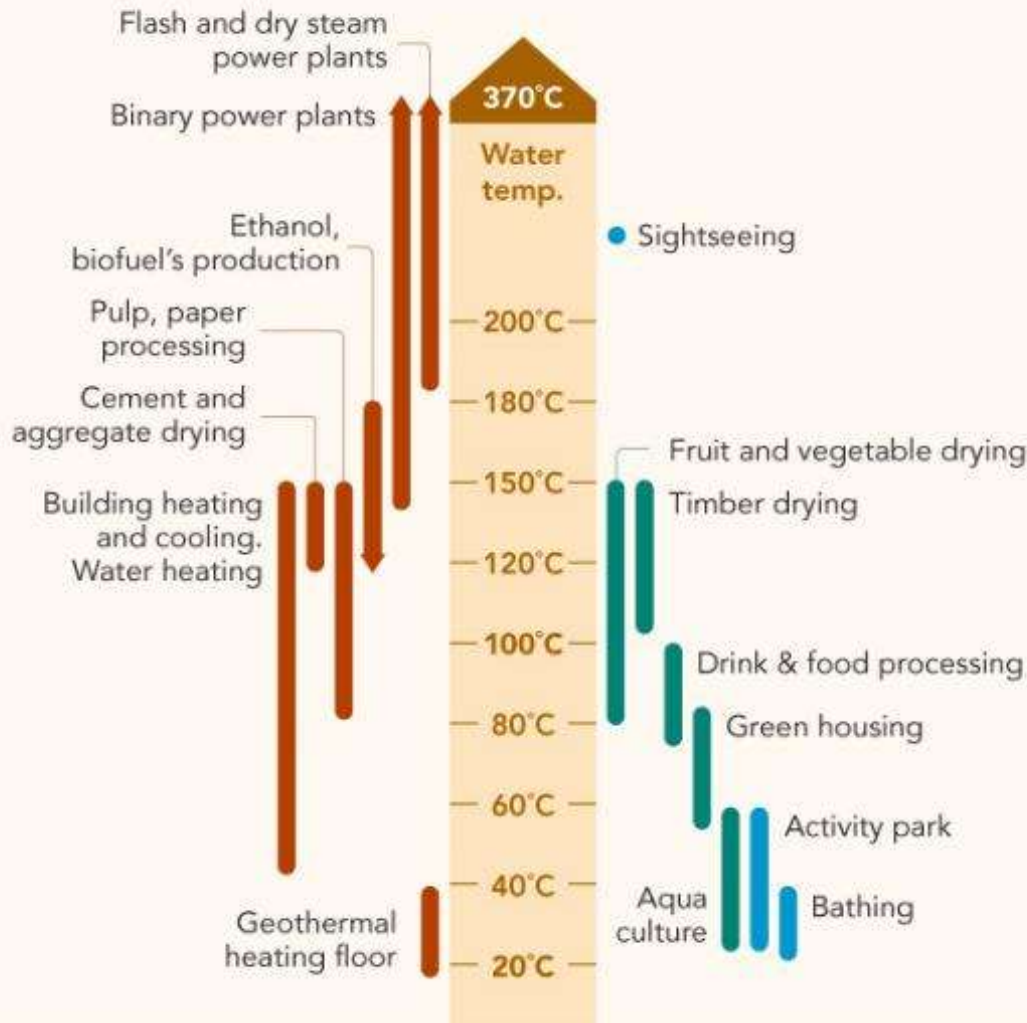
Industrial Use



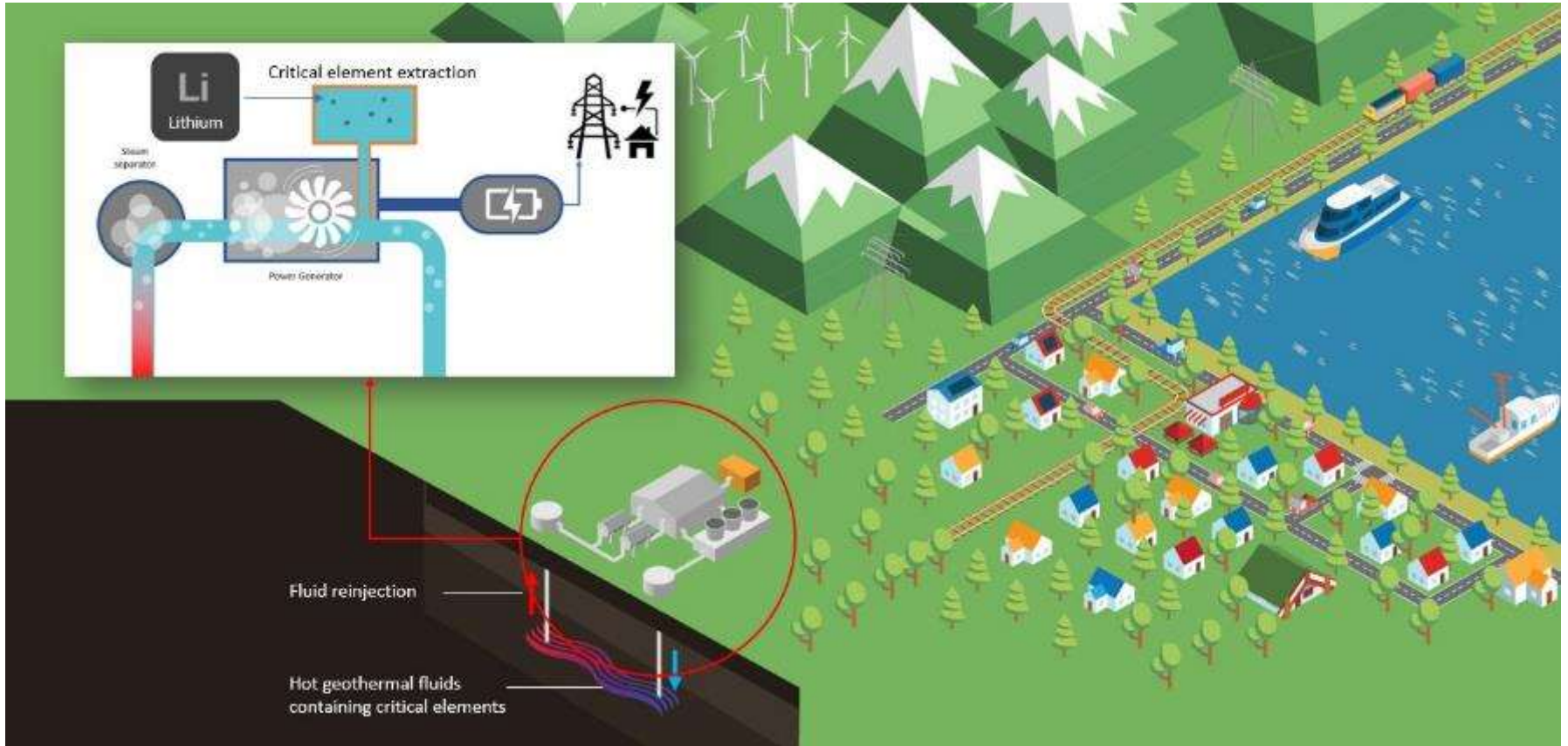
Agricultural Use



Tourism Use



Elements Extraction



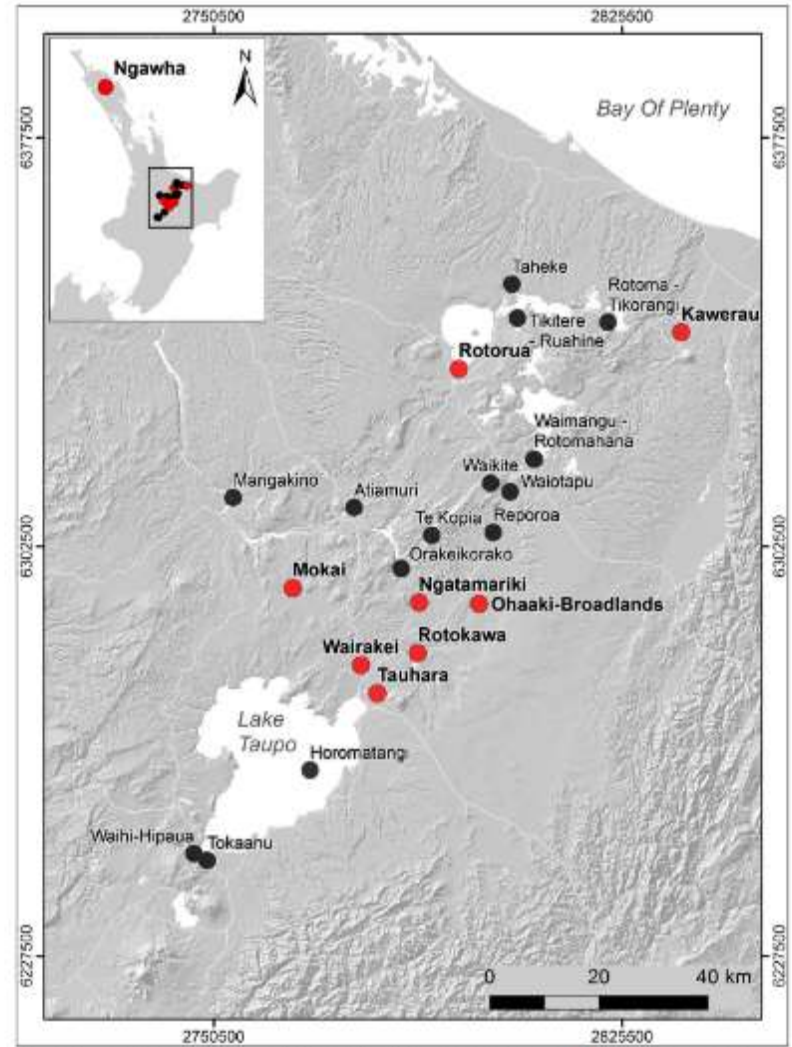
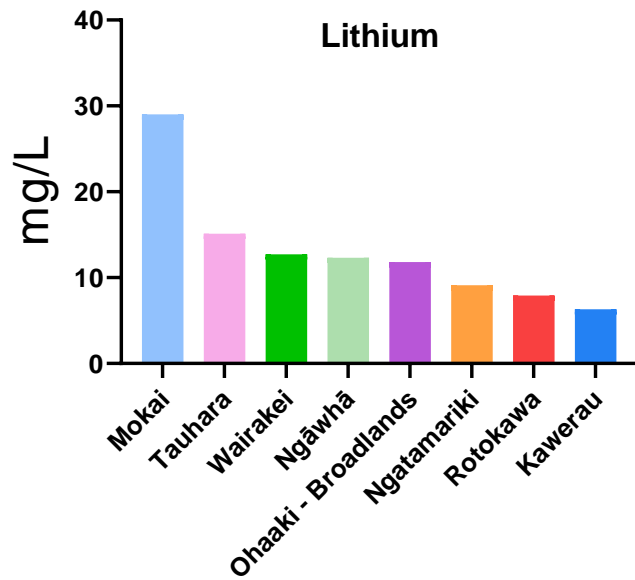
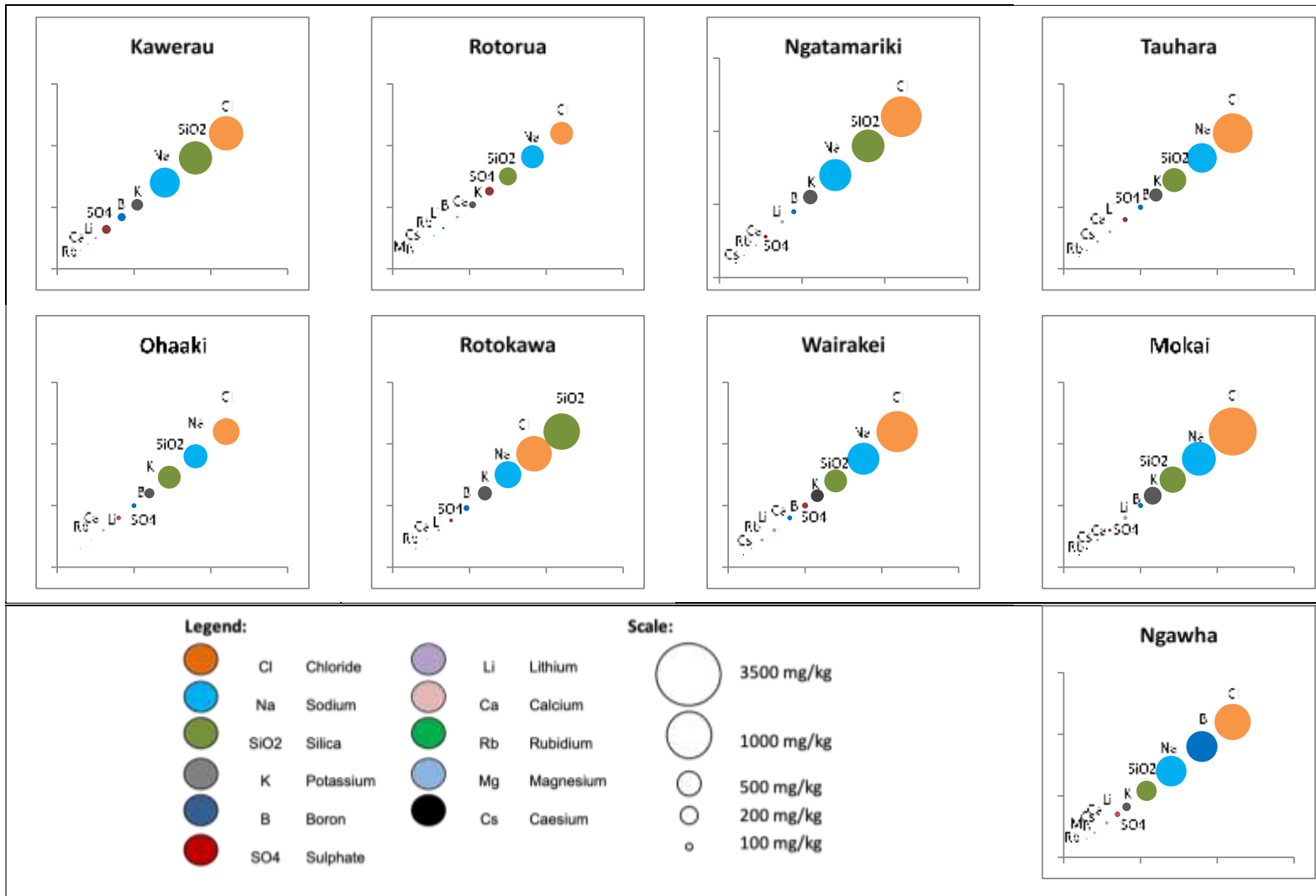


Figure 2.1 Geothermal areas in the TVZ and Ngawhā discussed in the text. • Fields with compositional data in bold.

Composition of high temperature producing geothermal fluids in New Zealand 11



from Mroczek et al., 2015

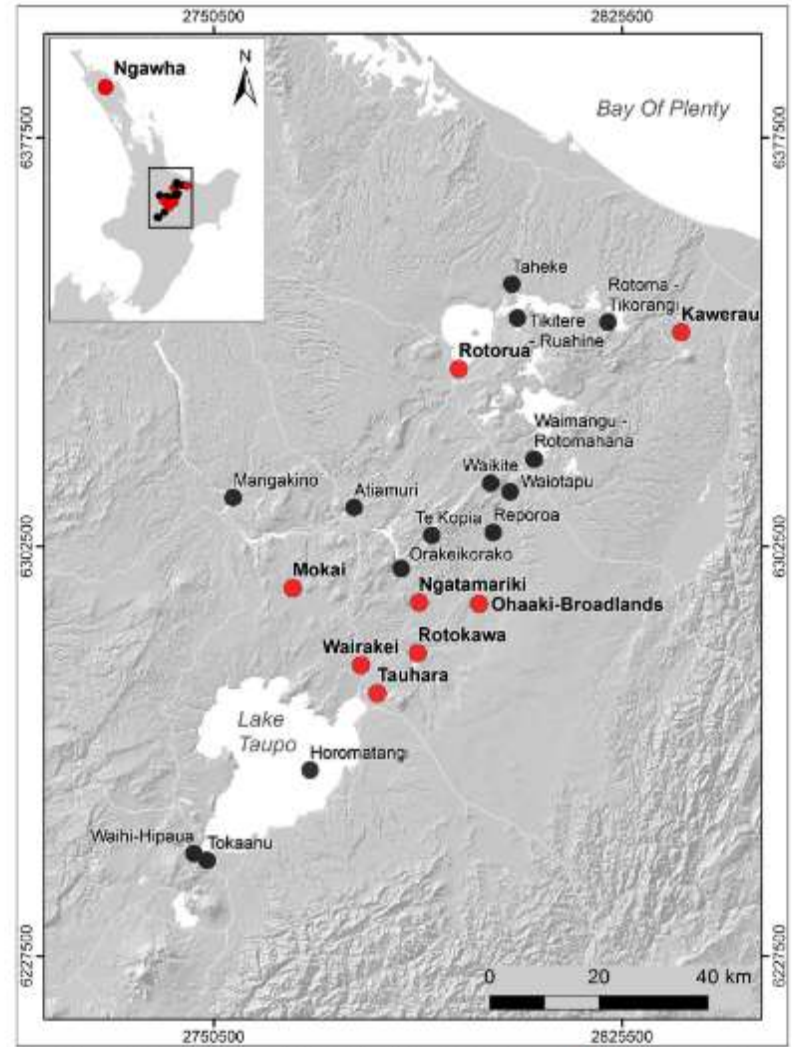
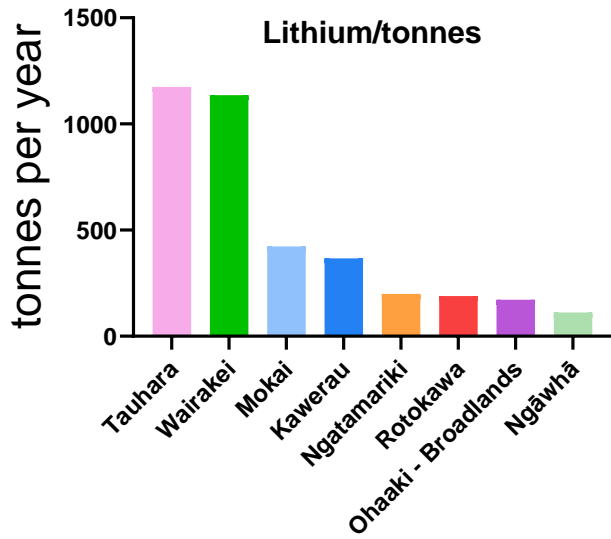


Figure 2.1 Geothermal areas in the TVZ and Ngāwhā discussed in the text. • Fields with compositional data in bold.

81.4 USD/kg

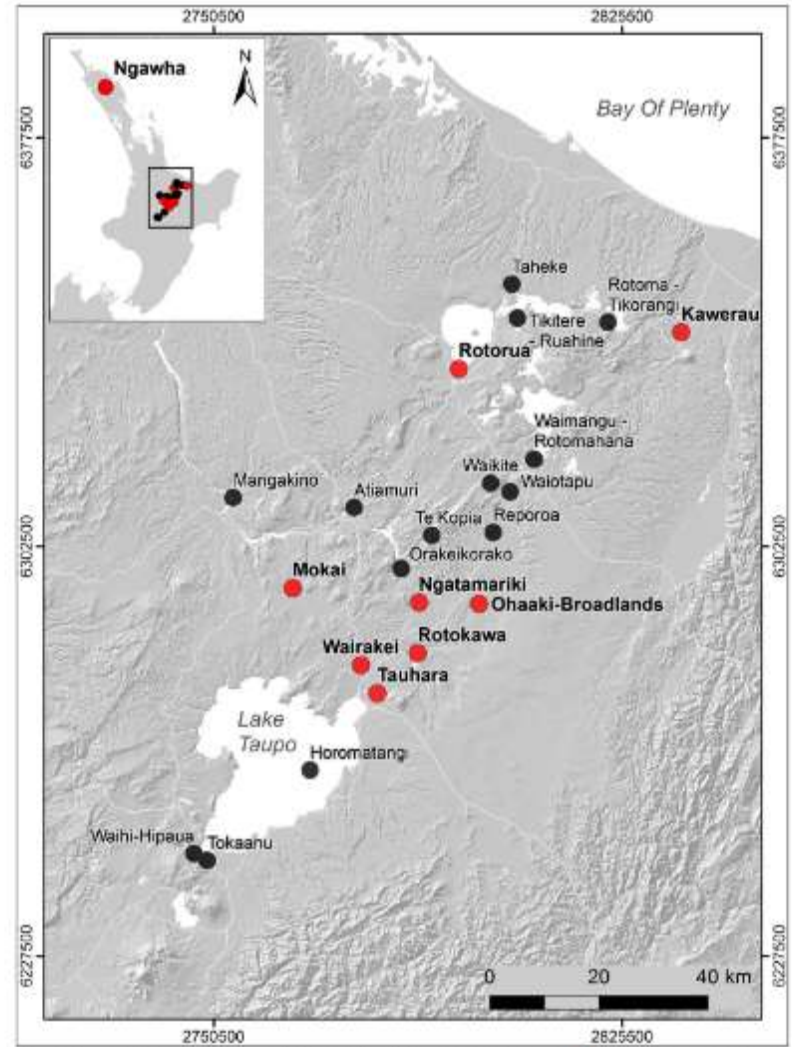
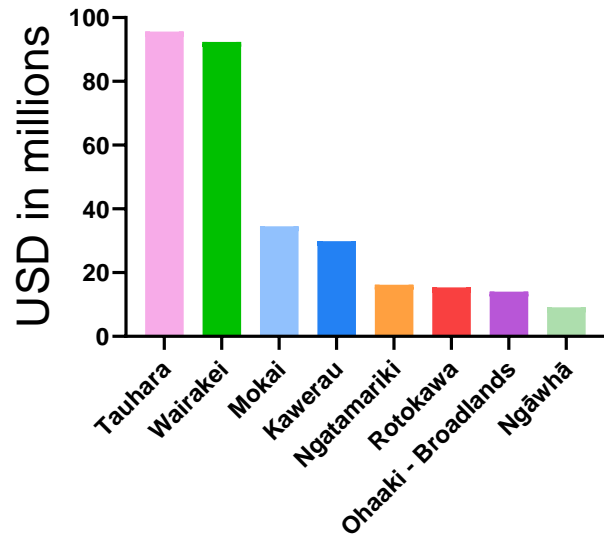
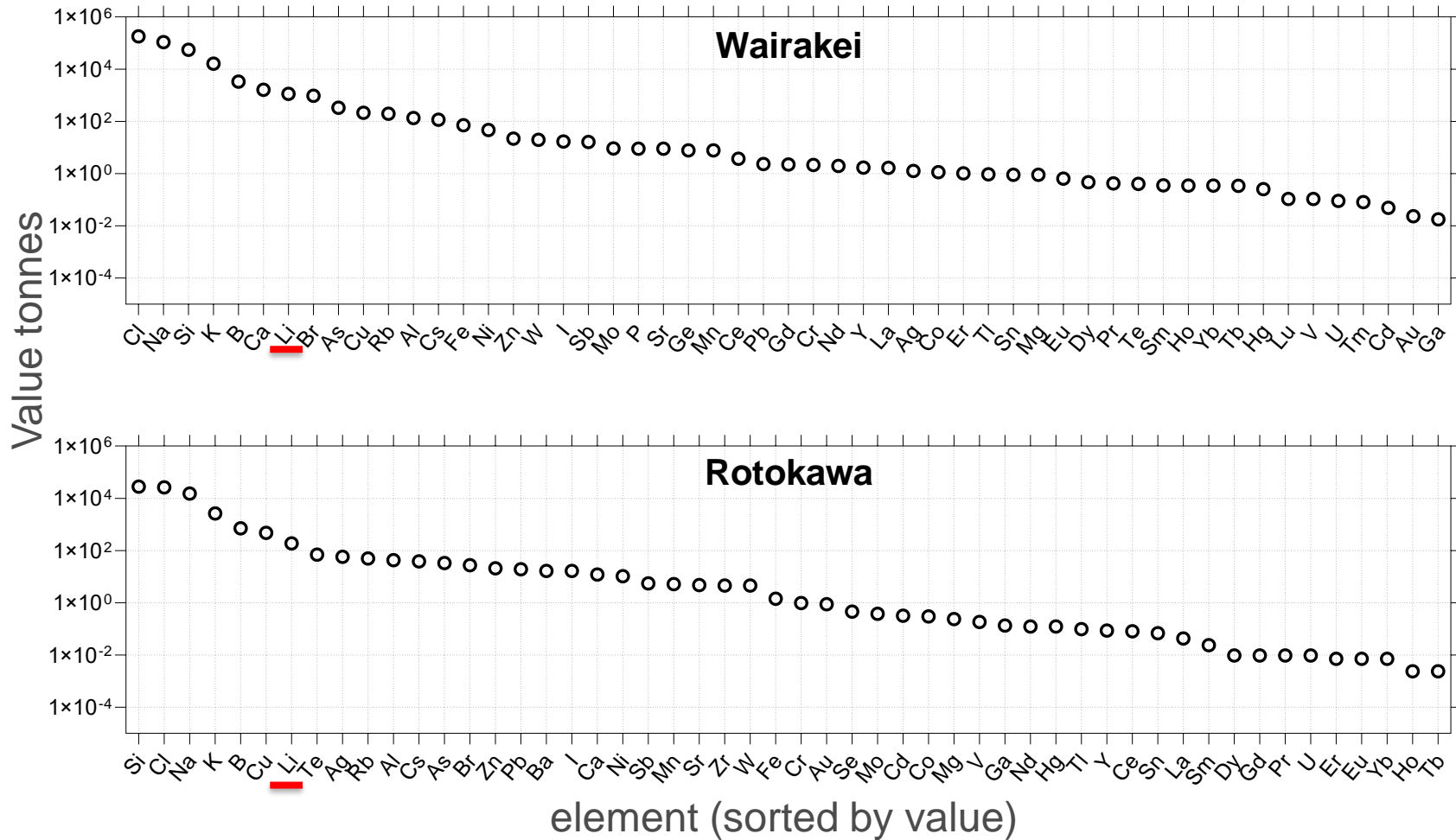


Figure 2.1 Geothermal areas in the TVZ and Ngāwhā discussed in the text. • Fields with compositional data in bold.

Composition of high temperature producing geothermal fluids in New Zealand



Current and future research

- **Lithium leaching experiments**
- **Effects on environment**