



Thermal (CO₂-rich) water in Bad Liebenzell

The town of Bad Liebenzell features multiple “Quellen”, both of the thermal and CO₂-rich type. The Paracelsus-Therme is well known for its healing effects (Hänel, 2020).

See also

[Thermal water of Bad Wildbad](#)

Anomalies

Several springs with a temperature between 12.8 and 16 °C, as well as water with a temperature up to 34 °C extracted from depth, have been reported in Bad Liebenzell (Göb et al., 2013; Hänel, 2020; Käß and Käß, 2008). These values are slightly to significantly elevated compared to the maximum temperature of 12 °C for shallow groundwater (< 500 m). The Paracelsusquelle II also qualifies as CO₂-seep, given its CO₂-content of 2800 mg/l (Hänel, 2020). Similar to the situation in Bad Wildbad, thermal (CO₂-rich) water approaches the surface naturally in the Nagold-valley through the fractured Forbach granite of the Nord-Schwarzwald granite complex (Käß and Käß, 2008). It is unclear why the CO₂-enrichment does not occur everywhere in Bad Liebenzell, nor in Bad Wildbad.

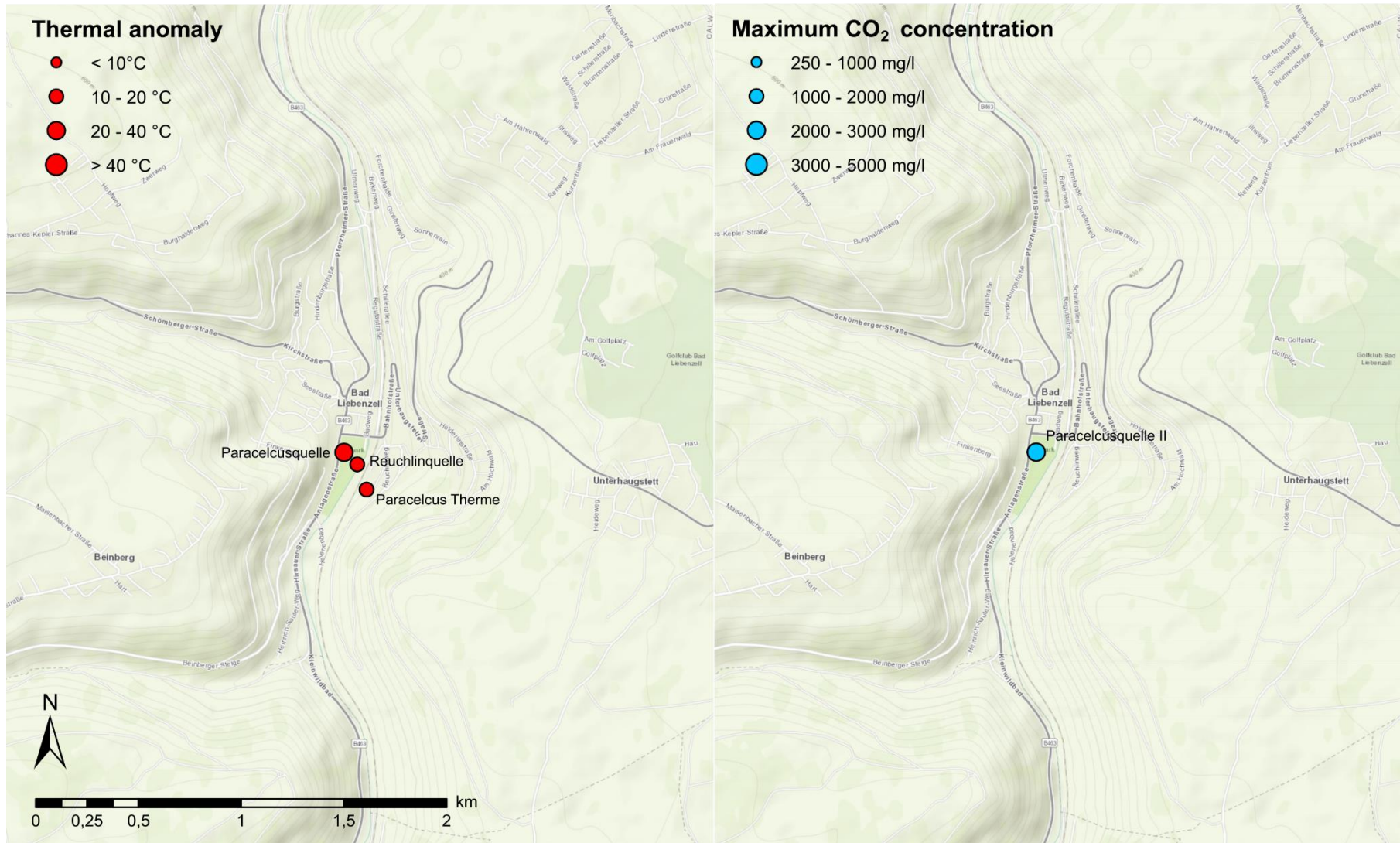


Figure 1: Thermal (CO₂-rich) water in Bad Liebenzell



Data

ID	Coordinates	T	Depth	TDS°	Cl	Na	SO ₄	Free CO ₂	He	³ He/ ⁴ He	Analysis year	References
		°C	m	g/l	mg/l	mg/l	mg/l	mg/l	ppmv			
Paracelsus Therme	48°46'09" North 08°43'59" East	25.3		1.17	505	484	68.3				2013	Göb et al. (2013)
Paracelcusquelle	48°46'13" North 08°43'57" East		207								2002	Käβ and Käβ (2008)
		25.7		517	420	68.5	49.5				2003	Hänel (2020)
				1,41	510	420	68				<2021	Bad Liebenzell (2021)
Paracelcusquelle II	48°46'14" North 08°43'54" East				258	246	46.2	2800			2002	Hänel (2020)
Reuchlinquelle	48°46'15" North 08°43'54" East	30 – 34									<2020	Hänel (2020)
Quelle next to the Helenenquelle	Exact location not known	14.8	0								<2008	Käβ and Käβ (2008)
Walzenquelle, Reuchlinweg	Exact location not known	12.8	0								<2008	Käβ and Käβ (2008)
Küchenquelle	Exact location not known	16	0								<2008	Käβ and Käβ (2008)

° TDS = Total Dissolved Solids

References

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- Hänel, M., 2020. Wasserquellen-Atlas. <http://www.quellenatlas.eu/39994.html>
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