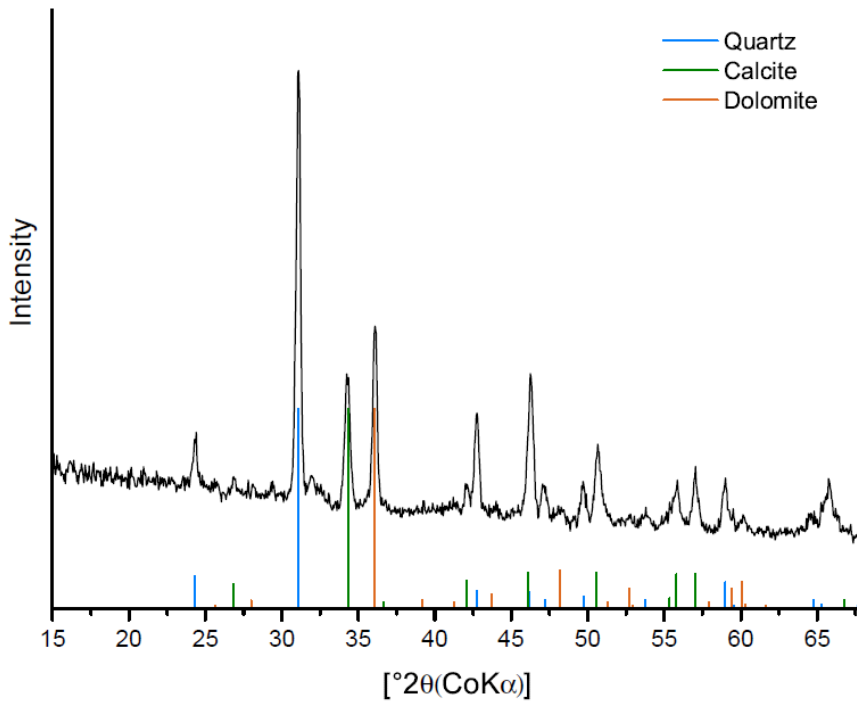


## Supplemental Information



1

2 Figure S1.  $\mu$ XRD analysis of littoral Lake Constance sediment displaying a dominance of  
3 Quartz.

4

5 Table S1. Characteristics of Lake Constance sediment and water column

Sediment characteristics

Porewater (%)	$22.1 \pm 4.3$
Silica (weight %)	$54.8 \pm 2.2$
Carbonate (weight %)	$17.5 \pm 1.3$
Total Fe (weight %)	$1.4 \pm 0.2$

Water column characteristics

pH	$8.2 \pm 0.1$
DOC (mg/L)	$1.8 \pm 0.0$
Nitrate ( $\mu\text{M}$ )	$52.5 \pm 1.1$

6

7