**Table S2**. Chemical and isotopic composition of stream waters

| Sample ID | Ca (mg/L) | Mg (mg/L) | Na (mg/L) | K (mg/L) | $HCO_3$ (mg/L) | $SO_4$ (mg/L) | Cl (mg/L) | $NO_3$ (mg/L) | F (mg/L) | $SiO_2$ (mg/L) | Al (µg/L) | Fe (µg/L) | $\delta^{18}O$ (‰ vs SMOW) | $\delta D$ (‰ vs SMOW) | $\delta^{13}C$ (‰ vs PDB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ARR01 | 19.6 | 8.98 | 4.58 | 0.65 | 90 | 7.38 | 7.23 | 2.94 | 0.05 | 9.0 | 2.0 | <5 | -5.75 | -31.2 | -10.95 |
| ARR02 | 6.9 | 8.47 | 2.73 | 0.32 | 55 | 4.10 | 4.60 | 2.22 | 0.05 | 14.0 | 1.0 | <5 | -7.31 | -43.1 | -8.58 |
| ARR03 | 13.4 | 10.51 | 4.04 | 0.67 | 85 | 6.26 | 6.07 | 2.49 | 0.06 | 18.0 | 4.0 | 5.0 | -6.78 | -39.3 | -11.41 |
| TEI01 | 21.9 | 3.96 | 3.52 | 0.63 | 80 | 6.18 | 4.91 | 2.48 | 0.07 | 2.0 | 1.0 | <5 | -7.37 | -43.6 | -8.38 |
| TEI02 | 24.3 | 6.79 | 5.62 | 1.16 | 95 | 8.52 | 8.18 | 2.22 | 0.07 | 9.0 | 0.0 | <5 | -7.33 | -43.3 | -9.09 |
| TEI03 | 28.7 | 10.06 | 7.18 | 1.23 | 120 | 12.49 | 10.42 | 2.36 | 0.08 | 12.0 | 3.0 | 5 | -6.71 | -39.9 | -9.28 |
| ORB01 | 4.1 | 2.81 | 2.72 | 0.40 | 25 | 3.52 | 2.84 | 0.83 | 0.04 | 7.9 | 0.0 | 10 | -7.76 | -47.9 | -14.27 |
| ORB02 | 6.0 | 5.87 | 2.84 | 0.25 | 42 | 3.20 | 4.11 | 1.57 | 0.06 | 12.0 | 2.0 | 5.0 | -8.19 | -49.7 | -10.2 |
| ORB03 | 3.6 | 5.54 | 3.14 | 0.57 | 32 | 3.72 | 4.51 | 3.11 | 0.05 | 7.0 | 1.0 | <5 | -7.33 | -43 | -10.77 |
| ORB04 | 6.4 | 5.86 | 3.56 | 0.38 | 45 | 2.94 | 5.09 | 2.01 | 0.06 | 11.0 | 1.0 | 5 | -7.96 | -48.3 | -8.42 |
| ARR01-1 | 11.4 | 5.90 | 3.92 | 0.25 | 55 | 5.75 | 6.56 | 3.00 | 0.06 | 8.7 | 1.0 | <5 | -6.77 | -39.5 | -8.21 |
| ARR02-1 | 6.7 | 7.42 | 2.99 | 0.12 | 50 | 4.82 | 4.89 | 2.98 | 0.05 | 13.2 | 1.0 | 5 | -6.96 | -40.6 | -8.12 |
| ARR03-1 | 10.4 | 7.39 | 3.80 | 0.37 | 60 | 5.65 | 6.28 | 2.78 | 0.08 | 6.3 | 1.0 | 5 | -6.56 | -36.9 | -6.59 |
| TEI01-1 | 16.1 | 3.51 | 3.68 | 0.50 | 60 | 5.82 | 5.48 | 2.51 | 0.07 | 9.3 | 3.0 | <5 | -6.96 | -40.3 | -6.98 |
| TEI02-1 | 13.9 | 4.61 | 5.12 | 0.51 | 55 | 7.81 | 8.27 | 2.90 | 0.06 | 2.6 | 1.0 | <5 | -6.91 | -40.0 | -6.92 |
| TEI03-1 | 24.1 | 7.82 | 6.21 | 0.65 | 100 | 10.25 | 9.64 | 1.93 | 0.09 | 5.4 | 1.0 | <5 | -6.49 | -37.4 | -8.08 |
| ORB01-1 | 4.6 | 2.92 | 2.80 | 0.41 | 25 | 4.16 | 3.44 | 1.16 | 0.07 | 1.7 | 1.0 | <5 | -7.21 | -43.2 | -9.95 |
| ORB02-1 | 5.1 | 4.04 | 3.07 | 0.08 | 30 | 3.73 | 4.79 | 0.99 | 0.04 | 11.3 | 2.0 | 10 | -7.64 | -46.6 | -9.02 |
| ORB03-1 | 4.7 | 4.20 | 3.91 | 0.20 | 30 | 3.86 | 5.98 | 0.96 | 0.04 | 2.3 | 5.0 | <5 | -7.66 | -47.0 | -9.35 |
| ORB04-1 | 2.4 | 3.75 | 2.94 | 0.27 | 20 | 3.89 | 4.80 | 1.61 | 0.03 | 8.6 | 2.0 | 5 | -7.07 | -40.5 | -8.31 |