Supplementary Table 2

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Unit | Sample | Median grain size | Na | Mg | Al | Si | P | S | Cl | K | Ca | Ti | Fe |
|  |  | µm | % | % | % | % | % | % | % | % | % | % | % |
| JVI.1 | S9 | 105.3 | 0.14 | 4.69 | 9.96 | 24.78 | 0.08 | 0.06 | 0.16 | 2.00 | 5.26 | 0.47 | 3.03 |
| JVI.2.1 | S10 | 127.4 | 0.15 | 1.98 | 11.61 | 31.70 | 0.14 | 0.02 | 0.10 | 2.36 | 0.47 | 0.54 | 3.24 |
| JVI.2.2 | S1 | 102.4 | 0.17 | 4.34 | 9.37 | 28.01 | 0.13 | 0.04 | 0.16 | 2.21 | 5.71 | 0.60 | 3.10 |
| JVI.2.2 | S2 | 69.89 | 0.13 | 1.58 | 12.56 | 30.74 | 0.07 | n.d. | 0.16 | 3.03 | 0.35 | 0.53 | 3.55 |
| JVI.2.2 | S3 | 82.79 | 0.11 | 1.49 | 13.49 | 30.48 | 0.07 | n.d. | 0.07 | 2.93 | 0.17 | 0.49 | 3.23 |
| JVI.2.2 | S4 | 74.99 | 0.05 | 1.37 | 13.73 | 31.11 | 0.07 | n.d. | 0.06 | 2.66 | 0.11 | 0.47 | 2.51 |
| JVI.2.3 | S5 | 163.3 | 0.07 | 1.53 | 12.68 | 31.41 | 0.07 | n.d. | 0.01 | 2.49 | 0.22 | 0.47 | 3.30 |
| JVI.2.3 | S6 | 110.2 | 0.02 | 1.83 | 11.79 | 31.22 | 0.07 | n.d. | 0.02 | 2.49 | 1.06 | 0.53 | 3.53 |
| JVI.2.3 | S7 | 89.01 | 0.08 | 1.64 | 12.81 | 31.38 | 0.07 | n.d. | 0.02 | 2.43 | 0.21 | 0.48 | 3.08 |
| JVI.2.3 | S8 | 166.0 | 0.06 | 1.31 | 11.49 | 32.96 | 0.07 | n.d. | 0.05 | 2.29 | 0.22 | 0.54 | 2.91 |
| JVI.2.3 | S11 | 358.2 | 0.04 | 1.15 | 9.79 | 35.37 | 0.05 | n.d. | 0.03 | 1.74 | 0.11 | 0.43 | 2.52 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sample | V | Cr | Mn | Co | Ni | Cu | Zn | Ga | As | Rb | Sr | Y | Zr | Nb | Ba | Nd | Ta | Pb | Th |
|  | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| S9 | 53.3 | 46.7 | 484 | 25.6 | 38.3 | 18.1 | 62.5 | 14.5 | 8.7 | 93 | 79.1 | 25.6 | 335 | 12.0 | 366 | 78.8 | 54.2 | 18.6 | 14.3 |
| S10 | 57.1 | 56.4 | 376 | 25.8 | 33.8 | 18.9 | 62.6 | 15.4 | 4.3 | 90 | 77.4 | 22.1 | 344 | 14.7 | 440 | 72.3 | 46.9 | 18.9 | 13.0 |
| S1 | 53.5 | 49.0 | 445 | 34.5 | 36.5 | 17.5 | 66.1 | 14.6 | 8.6 | 95 | 87.0 | 31.5 | 504 | 15.1 | 346 | 94.4 | 56.0 | 18.8 | 18.9 |
| S2 | 70.4 | 67.0 | 398 | 31.0 | 36.0 | 21.8 | 65.6 | 18.7 | 4.8 | 115 | 84.7 | 29.0 | 443 | 14.9 | 555 | 83.7 | 48.0 | 23.9 | 15.9 |
| S3 | 68.8 | 62.4 | 338 | 25.6 | 34.3 | 20.1 | 58.8 | 17.2 | 5.3 | 104 | 75.0 | 23.2 | 362 | 13.5 | 518 | 78.4 | 43.5 | 20.7 | 13.2 |
| S4 | 53.9 | 50.1 | 257 | 18.8 | 26.0 | 15.6 | 43.6 | 13.7 | 4.2 | 86 | 57.9 | 22.3 | 388 | 11.8 | 500 | 71.1 | 36.9 | 17.4 | 12.6 |
| S5 | 59.5 | 57.8 | 367 | 23.3 | 29.8 | 17.3 | 57.4 | 15.1 | 3.8 | 87 | 74.6 | 19.6 | 257 | 11.6 | 456 | 66.1 | 43.5 | 18.6 | 10.5 |
| S6 | 56.8 | 60.1 | 499 | 29.2 | 35.8 | 18.3 | 64.0 | 17.4 | 8.4 | 111 | 87.7 | 25.0 | 332 | 14.6 | 480 | 78.3 | 52.0 | 21.5 | 14.4 |
| S7 | 62.1 | 58.9 | 348 | 25.7 | 29.0 | 17.0 | 56.3 | 15.8 | 3.1 | 96 | 75.8 | 23.6 | 331 | 12.6 | 469 | 65.6 | 40.1 | 19.6 | 13.0 |
| S8 | 53.0 | 52.2 | 365 | 20.7 | 26.8 | 13.6 | 52.8 | 13.2 | 5.2 | 79 | 66.9 | 20.4 | 325 | 13.3 | 394 | 59.2 | 42.3 | 15.2 | 11.6 |
| S11 | 30.8 | 41.8 | 275 | 17.9 | 22.2 | 11.1 | 43.1 | 11.3 | 3.2 | 62 | 64.7 | 13.1 | 143 | 8.4 | 337 | 30.6 | 40.7 | 13.4 | 6.7 |

The elements Ge, Se, Br, Mo, Ag, Cd, Sn, Sb, Te, I, Cs, La, Ce, Pr, W, Hg, Tl, Bi, and U were not detected.