Table A2. LA-ICP-MS spot analyses of the magmatic, metamorphic and hydrothermal K-feldspars in the Xiaoqinling area.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Mineral | Sample No. | Range | Sc | V | Cr | Mn | Cu | Zn | Ga | Ge | Rb | Sr | Y | Ba | La | Ce | Eu | W | Pb |
| ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| H-Kfs | DH365-2 | Max | 6.77 | 3.22 | 207.99 | 0.92 | 57.82 | 3.96 | 31.72 | 4.98 | 218.31 | 90.51 | 0.03 | 1467.80 | 0.03 | 0.04 | 0.16 | 0.17 | 16.80 |
| (5) | Min | 5.48 | - | 5.67 | - | 1.52 | 0.10 | 17.55 | - | 192.24 | 6.78 | 0.01 | 78.58 | - | - | - | 0.03 | 2.24 |
| DH435-4 | Max | 10.20 | - | 79.30 | 0.77 | 1.58 | 18.51 | 16.10 | 9.82 | 202.62 | 378.12 | - | 2641.75 | 0.12 | 0.12 | 1.00 | 0.87 | 90.76 |
| (2) | Min | 3.11 | - | 11.37 | - | - | - | 15.33 | 3.15 | 177.90 | 82.95 | - | 1082.41 | 0.03 | - | 0.12 | 0.28 | 32.47 |
| DH470-2 | Max | 7.67 | 99.81 | 19.90 | 48.39 | 6.10 | 44.31 | 17.12 | 2.37 | 114.74 | 167.91 | 0.03 | 1820.35 | 0.05 | 0.01 | 0.12 | 0.18 | 54.79 |
| (4) | Min | 2.57 | 0.14 | 3.00 | 1.03 | 0.13 | 0.34 | 4.39 | - | 77.97 | 14.47 | 0.01 | 188.24 | - | - | 0.03 | - | 7.39 |
| M-Kfs | DH365-2 | Max | 7.03 | 0.36 | 124.79 | 2.73 | 0.90 | 0.51 | 23.51 | 2.82 | 207.36 | 132.33 | 0.05 | 2163.90 | 0.55 | 0.38 | 0.27 | - | 40.77 |
| (3) | Min | 6.40 | 0.19 | 10.41 | 0.19 | - | - | 14.55 | 0.85 | 182.53 | 46.48 | 0.04 | 997.58 | 0.04 | - | 0.10 | - | 17.68 |
| DH400-2 | Max | 5.48 | 0.69 | 6.77 | 0.30 | 2.66 | 0.75 | 15.30 | 3.08 | 365.33 | 443.57 | 0.09 | 4421.22 | 8.66 | 4.65 | 2.26 | 0.23 | 12.43 |
| (4) | Min | 3.05 | - | - | - | 0.18 | - | 12.12 | - | 195.78 | 186.81 | - | 2788.31 | 0.06 | 0.04 | 0.56 | - | 5.65 |
| DH435-4 | Max | 4.27 | 2.37 | 13.74 | 808.75 | 0.83 | 16.62 | 15.98 | 1.13 | 246.72 | 466.28 | 3.61 | 3064.61 | 0.46 | 1.08 | 0.33 | 1.89 | 144.91 |
| (3) | Min | 2.67 | - | 6.97 | - | 0.73 | 1.79 | 14.52 | - | 210.37 | 101.34 | 0.01 | 1385.61 | 0.01 | 0.02 | 0.13 | 0.28 | 25.95 |
| DH470-3 | Max | 2.06 | 0.16 | 135.55 | 0.88 | - | 5.18 | 50.28 | 0.26 | 126.99 | 1026.57 | 0.06 | 3285.31 | 0.30 | 0.13 | 0.05 | 0.16 | 13.78 |
| (3) | Min | 1.20 | - | 7.59 | - | - | 3.20 | 43.89 | - | 105.51 | 9.03 | 0.02 | 63.40 | - | - | - | - | 4.63 |
| DH505-4 | Max | 2.49 | 0.35 | 14.99 | 0.46 | 1.43 | 3.10 | 45.73 | 0.80 | 147.47 | 6.89 | 0.02 | 156.50 | 0.06 | 0.02 | 0.05 | 0.24 | 3.12 |
| (3) | Min | 2.01 | - | - | - | - | - | 36.92 | - | 138.46 | 1.46 | - | 81.75 | - | - | - | - | 1.98 |
| DH540-4 | Max | 2.20 | 0.33 | 66.33 | 11.45 | 1.91 | 4.73 | 21.39 | 1.02 | 236.89 | 308.50 | 13.24 | 1544.60 | 55.67 | 19.99 | 5.67 | 0.16 | 40.86 |
| (3) | Min | 1.72 | 0.16 | 37.17 | 0.70 | - | - | 14.00 | - | 143.61 | 112.16 | 0.07 | 739.32 | 0.47 | 0.22 | 0.17 | - | 30.29 |
| H-Kfs | CE800-1 | Max | 1.49 | 0.37 | 6.65 | 15.68 | - | 6.33 | 19.10 | 4.53 | 217.84 | 15.60 | 0.03 | 850.26 | - | 0.06 | 0.06 | 1.03 | 11.51 |
| (3) | Min | 0.93 | 0.10 | - | 0.76 | - | 0.60 | 14.44 | 2.13 | 163.72 | 4.77 | - | 285.47 | - | - | - | 0.08 | 6.08 |
| CE800-4 | Max | 0.69 | - | 1.16 | 0.14 | 41.65 | 3.06 | 56.32 | 1.88 | 246.20 | 19.15 | 0.02 | 498.66 | 0.02 | - | 0.03 | 0.02 | 9.17 |
| (2) | Min | 0.44 | - | - | - | 17.34 | 1.82 | 56.21 | - | 213.99 | 6.34 | - | 151.90 | - | - | - | - | 6.29 |
| CE800-5 | Max | 6.51 | 7.83 | 199.57 | 9.35 | 16.57 | 29.79 | 53.82 | 3.54 | 294.99 | 102.29 | 5.33 | 348.09 | 0.30 | 0.33 | 0.08 | 20.37 | 7.07 |
| (6) | Min | 0.27 | - | 10.40 | - | 0.48 | - | 17.16 | - | 242.81 | 5.37 | - | 162.37 | - | - | - | 0.06 | 4.44 |
| M-Kfs | CE800-4 | Max | 0.91 | 0.15 | 15.22 | - | 45.39 | 0.84 | 37.72 | 5.41 | 264.03 | 580.47 | 0.01 | 2497.93 | 1.29 | 0.46 | 0.31 | 0.26 | 37.33 |
| (2) | Min | 0.48 | 0.13 | 2.11 | - | 14.55 | - | 14.70 | - | 257.13 | 74.57 | - | 1206.91 | 0.13 | 0.09 | 0.08 | 0.12 | 13.60 |
| CE800-5 | Max | 5.81 | 67.19 | 12.51 | 202.08 | 1.44 | 24.23 | 18.84 | 3.60 | 303.51 | 944.02 | 0.71 | 4937.61 | 10.31 | 6.79 | 0.90 | 4.32 | 122.98 |
| (3) | Min | 0.76 | 0.47 | 6.49 | 1.28 | - | 2.06 | 11.24 | - | 265.15 | 538.65 | 0.03 | 2838.74 | 5.36 | 5.02 | 0.44 | 0.21 | 88.13 |

Table A2 (Continued)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Mineral | Sample No. | Range | Sc | V | Cr | Mn | Cu | Zn | Ga | Ge | Rb | Sr | Y | Ba | La | Ce | Eu | W | Pb |
| ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| H-Kfs | FC1000-7 | Max | 32.12 | 191.77 | 237.82 | 193.23 | 2.23 | 38.23 | 43.09 | 8.97 | 356.22 | 70.79 | 0.13 | 2946.70 | 0.34 | 0.42 | 0.14 | 45.91 | 5.65 |
| (3) | Min | 2.50 | 0.39 | 4.57 | 0.38 | - | 1.41 | 9.43 | 1.30 | 156.33 | 25.08 | 0.02 | 2762.40 | 0.03 | 0.01 | 0.05 | 0.35 | 1.52 |
| FC1000-8 | Max | 31.35 | 229.82 | 16.26 | 157.63 | 5.60 | 46.87 | 32.78 | 1.10 | 292.54 | 118.26 | 0.50 | 2682.12 | 0.33 | 0.72 | 0.11 | 23.25 | 10.79 |
| (2) | Min | 14.56 | 123.35 | 11.80 | 115.75 | - | 17.09 | 20.86 | - | 217.87 | 36.77 | - | 1736.23 | 0.14 | 0.17 | 0.03 | 18.49 | 6.30 |
| M-Kfs | FC540-1 | Max | 1.91 | 0.40 | 34.87 | 13.11 | 13.98 | 5.58 | 18.48 | 3.55 | 217.73 | 680.18 | 0.08 | 5863.76 | 0.83 | 0.33 | 0.16 | 0.26 | 41.68 |
| (4) | Min | 1.70 | - | - | - | 0.26 | 0.51 | 10.44 | - | 147.14 | 51.84 | 0.01 | 2092.31 | 0.06 | 0.01 | 0.05 | - | 9.46 |
| FC1000-7 | Max | 1.85 | 0.17 | 81.67 | 4.82 | 6.28 | 1.70 | 11.39 | 2.02 | 373.59 | 205.77 | 0.05 | 3010.02 | 3.20 | 2.55 | 0.27 | 0.54 | 12.67 |
| (3) | Min | 0.95 | - | 9.38 | - | - | 0.17 | 10.60 | 1.14 | 141.99 | 68.10 | - | 2744.03 | 0.22 | 0.10 | 0.07 | - | 5.03 |
| FC1000-8 | Max | 1.68 | 0.22 | 20.58 | 1.34 | 16.31 | 1.00 | 16.77 | 1.32 | 194.56 | 263.18 | 0.06 | 3115.86 | 2.12 | 1.56 | 0.27 | 0.60 | 22.90 |
| (2) | Min | 1.32 | 0.07 | 13.97 | 0.22 | 15.58 | 0.27 | 15.29 | - | 170.51 | 216.69 | 0.05 | 2650.88 | 1.43 | 0.80 | 0.02 | - | 15.65 |
| FC1000-9 | Max | 1.20 | 0.05 | 84.44 | 4.74 | 1.83 | 1.00 | 16.31 | 2.54 | 275.95 | 592.85 | 0.08 | 2522.40 | 2.13 | 2.67 | 1.60 | 0.07 | 58.05 |
| (4) | Min | 0.78 | - | - | - | - | - | 14.54 | - | 217.17 | 334.60 | 0.01 | 2125.12 | 0.75 | 0.21 | 0.78 | - | 44.30 |
| G-Kfs | WY-1 | Max | 1.12 | 0.28 | 13.69 | 2.64 | - | 1.85 | 19.51 | 2.75 | 604.80 | 1118.88 | 0.03 | 5732.27 | 0.37 | 0.22 | 0.32 | 0.08 | 56.64 |
| (4) | Min | 0.77 | - | - | 1.72 | - | - | 15.24 | - | 358.72 | 532.54 | 0.01 | 2784.27 | 0.22 | 0.12 | 0.15 | - | 43.90 |
| WY-2 | Max | 0.47 | 0.04 | 3.47 | 4.77 | - | 1.84 | 18.20 | 0.47 | 312.29 | 1470.30 | 0.04 | 15311.41 | 0.96 | 0.44 | 0.64 | 0.06 | 74.83 |
| (2) | Min | 0.38 | 0.03 | 1.45 | 1.68 | - | 1.63 | 15.73 | 0.24 | 298.45 | 869.09 | 0.02 | 4638.33 | 0.30 | 0.10 | 0.32 | - | 54.06 |
| NNS-1 | Max | 1.56 | 0.23 | 16.21 | 58.57 | 3.14 | 3.38 | 12.51 | 1.32 | 300.73 | 956.95 | 0.19 | 8754.14 | 0.21 | 0.49 | 0.85 | 0.11 | 50.23 |
| (4) | Min | 0.43 | - | - | 0.29 | - | - | 10.79 | - | 247.24 | 338.74 | - | 1330.22 | 0.08 | 0.07 | 0.13 | - | 42.67 |

“-”: bellow detection limit