***Supplement 1***

**Part1. Results of geochemical studies of granitoids of the Krasnoleninsky arch.**

*Khotylev A.O., Mayorov A.A., Khydoley A.K., Ershova V.B., Kalmykov G.A., Khubanov V.B., Chervyakovskaya M.V.* “Granitoid massifs of the Krasnoleninsky arch (Western Siberia): Composition, structure, age and conditions of formation,” *Geotectonics.* no.2 (Supplement 1) (2021). *Geotectonics* © *Pleiades Publishing, Ltd.*

**Table 1.** Table of contents of petrogenic oxides (results of geochemical studies of granitoids of the Krasnoleninsky arch).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Well** | Sample | SiO2 | TiO2 | Al2O3 | Fe2O3 total | CaO | MgO | MnO | Na2O | K2O | P2O5 | S total | LOI |
| **A** | 1 | 63.44 | 0.35 | 20.14 | 2.15 | 0.88 | 0.35 | 0.01 | 6.84 | 2.24 | 0.16 | 1.63 | 2.30 |
| **A** | 2 | 64.72 | 0.35 | 18.24 | 2.65 | 0.34 | 0.64 | 0.02 | 5.50 | 2.60 | 0.16 | 1.65 | 3.75 |
| **A** | 3 | 62.68 | 0.40 | 18.40 | 2.27 | 2.23 | 0.77 | 0.02 | 5.85 | 3.37 | 0.19 | 0.80 | 2.75 |
| **A** | 4 | 62.43 | 0.37 | 19.40 | 2.03 | 1.59 | 0.68 | 0.01 | 5.69 | 3.37 | 0.17 | 0.77 | 3.21 |
| **A** | 5 | 65.06 | 0.37 | 16.81 | 2.45 | 2.40 | 0.76 | 0.02 | 5.28 | 3.31 | 0.17 | 0.91 | 2.16 |
| **A** | 6 | 65.80 | 0.36 | 16.79 | 2.94 | 2.51 | 1.22 | 0.04 | 5.71 | 3.29 | 0.19 | <0.02 | 0.89 |
| **A** | 7 | 65.26 | 0.33 | 17.34 | 2.50 | 2.41 | 1.02 | 0.03 | 5.89 | 3.64 | 0.17 | <0.02 | 1.13 |
| **A** | 8 | 64.97 | 0.34 | 17.50 | 2.44 | 2.32 | 1.24 | 0.03 | 5.78 | 3.73 | 0.17 | <0.02 | 1.23 |
| **A** | 9 | 62.16 | 0.32 | 19.28 | 2.51 | 2.83 | 1.20 | 0.03 | 6.81 | 2.91 | 0.16 | <0.02 | 1.57 |
| **B** | 10 | 62.88 | 0.30 | 19.05 | 2.51 | 3.01 | 1.21 | 0.03 | 6.62 | 2.83 | 0.17 | <0.02 | 1.12 |
| **B** | 11 | 63.62 | 0.33 | 18.56 | 2.78 | 2.72 | 1.16 | 0.04 | 5.99 | 3.19 | 0.18 | <0.02 | 1.18 |
| **B** | 12 | 64.67 | 0.30 | 16.83 | 2.63 | 2.82 | 0.94 | 0.04 | 5.75 | 2.88 | 0.16 | 0.55 | 2.21 |
| **B** | 13 | 64.18 | 0.35 | 17.26 | 2.83 | 2.61 | 1.10 | 0.04 | 5.83 | 3.06 | 0.16 | 0.56 | 1.79 |
| **B** | 14 | 63.79 | 0.34 | 17.88 | 2.71 | 3.07 | 1.06 | 0.04 | 5.96 | 3.14 | 0.20 | <0.02 | 1.56 |
| **B** | 15 | 66.40 | 0.39 | 15.95 | 3.30 | 2.64 | 1.27 | 0.04 | 4.99 | 3.31 | 0.20 | <0.02 | 1.23 |
| **B** | 16 | 69.26 | 0.42 | 14.80 | 3.41 | 2.39 | 1.42 | 0.04 | 4.60 | 3.33 | 0.14 | ‒ | 0.45 |
| **C** | 17 | 65.18 | 0.58 | 18.47 | 3.05 | 0.23 | 1.01 | 0.08 | 0.24 | 3.15 | 0.06 | <0.02 | 6.50 |
| **C** | 18 | 65.55 | 0.55 | 17.31 | 3.39 | 0.35 | 1.01 | 0.08 | 0.26 | 3.62 | 0.06 | <0.02 | 6.22 |
| **C** | 19 | 66.36 | 0.53 | 17.89 | 2.71 | 0.25 | 0.95 | 0.05 | 0.28 | 4.14 | 0.05 | <0.02 | 5.43 |
| **C** | 20 | 65.01 | 0.64 | 19.02 | 2.53 | 0.18 | 1.07 | 0.03 | 0.26 | 3.88 | 0.07 | 0.04 | 6.00 |
| **C** | 21 | 67.98 | 0.49 | 16.42 | 1.84 | 1.30 | 0.87 | 0.03 | 2.53 | 3.59 | 0.07 | <0.02 | 3.87 |
| **C** | 22 | 66.10 | 0.66 | 18.31 | 2.47 | 0.24 | 1.14 | 0.02 | 0.36 | 4.09 | 0.04 | <0.02 | 5.31 |
| **C** | 23 | 54.42 | 0.74 | 25.27 | 5.74 | 0.34 | 0.86 | 0.14 | 0.20 | 4.39 | 0.07 | 0.02 | 7.38 |
| **C** | 24 | 54.59 | 0.82 | 25.21 | 5.58 | 0.29 | 0.94 | 0.09 | 0.20 | 5.59 | 0.08 | 0.02 | 6.09 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **C** | 25 | 56.57 | 0.82 | 24.46 | 4.70 | 0.23 | 1.03 | 0.03 | 0.32 | 6.05 | 0.06 | 0.02 | 5.24 |
| **C** | 26 | 62.03 | 0.56 | 16.79 | 3.77 | 4.25 | 0.79 | 0.04 | 3.20 | 3.77 | 0.14 | 0.02 | 4.27 |
| **C** | 27 | 66.18 | 0.50 | 18.77 | 3.93 | 0.59 | 1.07 | 0.06 | 0.56 | 3.03 | 0.07 | ‒ | 5.69 |
| **C** | 28 | 66.02 | 0.51 | 18.28 | 4.39 | 0.58 | 1.15 | 0.04 | 0.58 | 3.38 | 0.06 | ‒ | 5.31 |
| **C** | 29 | 68.14 | 0.48 | 16.42 | 2.87 | 1.29 | 1.48 | 0.02 | 2.60 | 3.23 | 0.08 | ‒ | 3.50 |
| **E** | 34 | 71.59 | 0.38 | 13.87 | 1.98 | 1.46 | 1.03 | 0.03 | 4.02 | 2.42 | 0.11 | 0.16 | 1.93 |
| **E** | 35 | 68.36 | 0.45 | 15.34 | 2.35 | 1.79 | 1.31 | 0.03 | 4.44 | 2.24 | 0.18 | 0.10 | 2.19 |
| **E** | 36 | 67.33 | 0.48 | 14.01 | 2.43 | 4.81 | 1.34 | 0.06 | 3.75 | 2.31 | 0.19 | 0.34 | 1.61 |
| **J** | 37 | 66.54 | 0.43 | 15.82 | 3.97 | 2.53 | 1.07 | 0.05 | 6.43 | 1.14 | 0.13 | ‒ | 1.69 |
| **J** | 38 | 47.18 | 0.95 | 13.64 | 10.91 | 11.42 | 8.51 | 0.18 | 2.55 | 0.97 | 0.12 | 0.01 | 3.20 |
| **J** | 39 | 61.08 | 0.58 | 14.66 | 6.68 | 5.19 | 1.48 | 0.13 | 4.35 | 2.28 | 0.15 | ‒ | 3.18 |
| **J** | 40 | 66.94 | 0.45 | 15.04 | 4.40 | 2.87 | 1.06 | 0.07 | 6.15 | 0.97 | 0.11 | 0.01 | 1.75 |
| **K** | 41 | 59.80 | 0.69 | 18.36 | 4.37 | 2.64 | 2.64 | 0.06 | 4.05 | 2.29 | 0.11 | 0.05 | 4.73 |
| **K** | 42 | 55.17 | 0.62 | 16.93 | 6.29 | 4.69 | 3.34 | 0.12 | 4.07 | 2.02 | 0.12 | 0.13 | 6.16 |
| **K** | 43 | 59.46 | 0.48 | 18.07 | 4.61 | 2.30 | 1.74 | 0.05 | 6.53 | 1.67 | 0.12 | 0.22 | 4.16 |
| **K** | 44 | 64.85 | 0.43 | 18.16 | 2.75 | 1.05 | 1.38 | 0.03 | 7.01 | 1.26 | 0.10 | 0.35 | 2.50 |
| **K** | 45 | 65.74 | 0.41 | 14.86 | 3.53 | 2.31 | 3.29 | 0.06 | 4.76 | 1.29 | 0.07 | 0.02 | 3.57 |

Note: contents in are given in weight %; all iron converted to total Fe2O3 total.