Таблица 1.

Результаты лазерного 40Ar/39Ar датирования санидинового трахита (лампроита) Талахтахской диатремы.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Точка | 40Ar(нсм3) | 40Ar/39Ar | ± | 38Ar/39Ar | ± | 37Ar/39Ar | ± | 36Ar/39Ar | ± | Ca/K | Возраст, млн лет | ± |
| XIV\_5 | 2267.8 | 140.169 | 0.017 | 0.0179 | 0.0001 | 0.0415 | 0.0245 | 0.0021 | 0.0001 | 0.005 | 1282.6 | 17.3 |
| XIV\_9 | 1393.4 | 147.687 | 0.019 | 0.0177 | 0.0001 | 0.0415 | 0.0235 | 0.0004 | 0.0001 | 0.005 | 1334.5 | 17.8 |
| XV\_9 | 1336.9 | 175.613 | 0.046 | 0.0187 | 0.0002 | 0.0765 | 0.0443 | 0.0073 | 0.0002 | 0.009 | 1492.8 | 19.2 |
| XIV\_7 | 357.2 | 128.569 | 0.050 | 0.0201 | 0.0005 | 0.1444 | 0.0895 | 0.0072 | 0.0003 | 0.017 | 1194.3 | 16.5 |
| XV\_4 | 52.6 | 193.214 | 0.350 | 0.0593 | 0.0022 | 0.1901 | 0.6627 | 0.1266 | 0.0036 | 0.023 | 1386.5 | 19.5 |
| XIV\_8 | 544.1 | 143.222 | 0.059 | 0.0191 | 0.0002 | 0.2597 | 0.0999 | 0.0031 | 0.0003 | 0.031 | 1300.6 | 17.5 |
| XIV\_10 | 1743.3 | 145.307 | 0.019 | 0.0176 | 0.0001 | 0.2757 | 0.0116 | 0.0000 | 0.0000 | 0.033 | 1320.1 | 17.7 |
| XV\_2 | 331.9 | 170.788 | 0.064 | 0.0208 | 0.0003 | 0.3303 | 0.1022 | 0.0033 | 0.0004 | 0.040 | 1471.5 | 19.0 |
| XIV\_4 | 260.6 | 116.785 | 0.029 | 0.0217 | 0.0005 | 0.5090 | 0.0954 | 0.0024 | 0.0005 | 0.061 | 1121.1 | 15.8 |
| XV\_1 | 678.9 | 177.264 | 0.057 | 0.0210 | 0.0002 | 1.6487 | 4.4352 | 0.0162 | 0.0002 | 0.198 | 1487.1 | 19.1 |
| XIV\_3 | 657.2 | 103.552 | 0.022 | 0.0187 | 0.0002 | 2.5121 | 2.4530 | 0.0031 | 0.0002 | 0.301 | 1021.7 | 14.7 |
| XV\_1 | 3347.4 | 83.703 | 0.005 | 0.0186 | 0.0000 | 3.1127 | 0.5894 | 0.0048 | 0.0000 | 0.374 | 860.1 | 12.9 |
| XV\_13 | 914.3 | 174.445 | 0.051 | 0.0192 | 0.0002 | 10.4281 | 2.8864 | 0.0081 | 0.0002 | 1.251 | 1484.7 | 19.1 |
| XV\_2 | 297.8 | 170.653 | 0.110 | 0.0217 | 0.0005 | 22.0416 | 12.2244 | 0.0064 | 0.0005 | 2.645 | 1465.2 | 19.0 |
| XIV\_1 | 266.8 | 41.484 | 0.007 | 0.0207 | 0.0002 | 22.3353 | 4.7470 | 0.0111 | 0.0001 | 2.680 | 450.4 | 7.5 |
| XV\_8 | 1272.2 | 173.597 | 0.043 | 0.0216 | 0.0002 | 35.0461 | 2.5378 | 0.0121 | 0.0002 | 4.206 | 1472.7 | 19.0 |
| XV\_9 | 1323.9 | 176.080 | 0.021 | 0.0190 | 0.0002 | 37.3272 | 3.0687 | 0.0111 | 0.0001 | 4.479 | 1489.1 | 19.1 |
| XIV\_6 | 562.2 | 130.193 | 0.033 | 0.0203 | 0.0002 | 37.3991 | 5.9962 | 0.0035 | 0.0002 | 4.488 | 1212.9 | 16.7 |
| XIV\_6 | 483.9 | 130.433 | 0.033 | 0.0194 | 0.0004 | 43.3899 | 12.2934 | 0.0038 | 0.0004 | 5.207 | 1214.0 | 16.7 |
| XIV\_11 | 164.7 | 137.299 | 0.105 | 0.0177 | 0.0011 | 55.4191 | 26.3712 | 0.0054 | 0.0011 | 6.650 | 1257.2 | 17.2 |
| XV\_5 | 37.5 | 172.795 | 0.547 | 0.0486 | 0.0042 | 67.9472 | 83.3109 | 0.0673 | 0.0039 | 8.154 | 1368.3 | 19.7 |
| XV\_11 | 158.9 | 173.747 | 0.228 | 0.0275 | 0.0019 | 69.8331 | 21.7665 | 0.0285 | 0.0012 | 8.380 | 1444.7 | 18.9 |
| XV\_7 | 89.5 | 182.201 | 0.430 | 0.0373 | 0.0021 | 140.0393 | 34.5607 | 0.0428 | 0.0032 | 16.805 | 1469.9 | 19.9 |

Таблица 2. Составы (в мас. %) санидина, биотита и хлорита из санидиновых трахитов (лампроитов) Талахтахской диатремы.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| № | SiO2 | Al2O3 | TiO2 | FeOtot | MgO | CaO | Na2O | K2O | P2O5 |
| Санидин (от 1 до 3 мас.% FeOtot) | | | | | | | | | |
| TD-32-1\_4 | 66,62 | 16,83 |  | 2,21 | 0,36 | 0,21 | 0,33 | 13,44 |  |
| TD-32-3\_2 | 62,75 | 17,87 |  | 2,69 | 1,04 | 0,16 | 0,43 | 15,05 |  |
| TD-32-3\_7 | 63,29 | 17,12 |  | 1,31 |  |  | 0,28 | 17,99 |  |
| TD-32-4\_1 | 64,7 | 18,29 |  | 0,98 |  |  | 0,28 | 15,75 |  |
| Санидин (от 0,1 до 1 мас.% FeOtot) | | | | | | | | | |
| TD-32-2\_3 | 64,69 | 18,3 |  | 0,76 | 0,21 |  |  | 16,04 |  |
| TD-7-12\_8 | 65,18 | 18,12 |  | 0,75 | 0,24 |  |  | 15,71 |  |
| TD-32-4\_4 | 65,02 | 17,64 |  | 0,72 |  |  |  | 16,62 |  |
| TD-7-12\_2 | 65,92 | 17,8 |  | 0,39 | 0,18 |  |  | 15,71 |  |
| TD-32-1\_7 | 65,18 | 18,26 |  | 0,35 |  |  |  | 16,21 |  |
| TD-32-4\_5 | 66,68 | 18,07 |  | 0,34 | 0,31 |  |  | 14,6 |  |
| TD-7-2\_4 | 65,58 | 18,02 |  | 0,32 |  |  |  | 16,07 |  |
| TD-32-4\_3 | 66,22 | 18,72 |  | 0,29 |  |  |  | 14,49 |  |
| Санидин ксеноморфный | | | | | | | | | |
| TD-32-2\_2 | 64,88 | 18,23 |  |  |  |  |  | 16,89 |  |
| TD-32-1\_3 | 65,61 | 18,42 |  |  |  |  |  | 15,97 |  |
| TD-7-3\_3 | 65,38 | 18,23 |  |  |  |  |  | 16,39 |  |
| Санидин мелкозернистый, микролитовый, часто в агрегатах | | | | | | | | | |
| TD-7-13\_2 | 59,4 | 18,44 | 0,28 | 4,47 | 5,59 |  |  | 11,82 |  |
| TD-7-13\_4 | 57,95 | 18,21 | 2,24 | 3,87 | 6,97 |  |  | 10,57 |  |
| TD-7-2\_3 | 59,94 | 17,91 | 0,73 | 4,47 | 3,95 | 0,22 |  | 12,78 |  |
| Биотит | | | | | | | | | |
| TD-32-1\_5 | 50,2 | 19,52 | 0,2 | 6,33 | 7,32 | 2,62 | 0,32 | 7,12 | 1,86 |
| TD-32-2\_1 | 51,62 | 16,23 | 1,02 | 8,66 | 6,74 | 0,28 | 0,19 | 10,76 |  |
| TD-7-13\_1 | 45,04 | 16,87 | 0,47 | 11,76 | 16,87 | 0,23 |  | 4,95 |  |
| TD-7-13\_3 | 53,04 | 17,33 | 1,2 | 6,36 | 17,33 | 0,37 |  | 9,47 |  |
| Хлорит | | | | | | | | | |
| TD-7-12\_7 | 33,75 | 14,84 |  | 14,87 | 21,36 | 0,18 |  | 1,07 | 0,77 |

Примечание: состав определен SEM BSE методом на приборе Tescan, аналитик Н.С. Карманов; отсутствие данных означает - не обнаружено.