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Temporal and spatial trends of Late Cretaceous-early Tertiary underplating of Pelona and related schist beneath southern California and southwestern Arizona

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Details of Palinspastic Reconstruction

The following is a detailed description of the approach taken for the palinspastic reconstruction of Figure 8. Note that Figures 3 and 9 utilize aspects of this reconstruction as well.

An ideal palinspastic restoration for interpreting detrital zircon suites within the Pelona and related schists would take into account all compressional, extensional, translational, and rotational deformation since deposition of the schist protolith. Construction of such a map, however, is hindered by insufficient, ambiguous, and/or contradictory evidence regarding Cenozoic deformational history. Furthermore, geologic uncertainty is compounded by geometric complexities associated with drafting an accurate, balanced reconstruction for such a large area of inhomogeneous, multiphase deformation. Easiest, and what we concentrated on here, was to restore those strike-slip faults oriented sub-parallel to the continental margin (e.g., San Andreas, San Gabriel, San Jacinto, Punchbowl, San Gregorio-Hosgri, Rinconada-Reliz, etc.). We also utilized paleomagnetic data of Luyendyk et al. (1985; see also Dickinson, 1996) to back-rotate the western Transverse Ranges. The position of this region along the western edge of the map minimizes the problem of maintaining continuity between units. In contrast, we did not restore any east-west-trending left-lateral faults, such as the Garlock fault or those of the eastern Transverse Ranges. Balancing the complex gaps and overlaps which would result from unslipping these faults is beyond the scope of this study. For similar reasons, we did not correct for inferred rotations in the eastern Transverse Ranges or southern Sierra Nevada and Mojave Desert (Kanter and McWilliams, 1982; Luyendyk et al., 1985; Dokka and Ross, 1995). Nor did we take into account middle to late Tertiary extension which affected the region from Death Valley southeastward to the corridor of the lower Colorado River (e.g., Davis and Coney, 1979), despite the fact that extension has greatly altered the surface geology compared to Late Cretaceous-early Tertiary time. Notwithstanding these limitations, we consider that Figure 8 accurately portrays the *first-order* distribution of basement terranes within southern California and adjacent areas during Late Cretaceous-early Tertiary time; i.e., during the time of deposition of the schist protolith.

Construction of Figure 8 required consideration of a prominent controversy regarding the partitioning of slip between the various strands of the San Andreas fault system in southern California. Some workers consider that the approximately 300 km of slip necessary to close the Gulf of California is taken up by 240 km of displacement on the San Andreas fault (*sensu stricto*) and 60 km on the San Gabriel fault (Crowell, 1962; Ehlig, 1981; Dillon and Ehlig, 1993). Others, however, have argued for 160 km of slip on the San Andreas fault, 40 km on the San Gabriel fault, and 100-110 km on the San Francisquito-Fenner-Clemens Well fault (Frizzell et al., 1986, Matti and Morton, 1993; Powell, 1993). Large displacement on the San Francisquito-Fenner-Clemens Well fault, however, is difficult to reconcile with geologic constraints (Richard, 1993; Dickinson, 1996). Dickinson (1996) proposed that the above controversy can be reconciled by taking into account transrotational motions. However, as already noted, we emphasized strike-slip faulting over rotation, because the former is geometrically simpler. Furthermore, we agree that the San Francisquito-Fenner-Clemens Well fault does not have a major strike-slip component, and thus utilized the “large-slip” (240 km) option for the San Andreas fault. We do not mean to suggest that controversy over fault offsets in southern California is resolved; nonetheless, we do not believe that the conclusions reached here about provenance of the schist would be measurably altered by substituting one of the alternate fault reconstructions.

The palinspastic reconstruction was generated from a simplified, present-day geologic base compiled from sources listed below. Primary references were Jennings (1977) and Powell (1993) for California, Richard et al. (2000) for Arizona, and Burchfiel et al. (1992) for Nevada. The reconstruction was created using the AutoCAD 2000 drafting software. Restorations were carried out by (1) moving parts of the map specified distances along faults based on interpretations in the literature or (2) moving parts of the map the distances necessary to bring inferred correlative units into alignment across fault traces. In the second case, offset was determined by measuring the length of fault segment between the starting and final locations of the moved units. Faults with slip of less than ~10 km were generally ignored, because they were considered inconsequential relative to the precision and accuracy of the reconstruction (e.g., Elsinore fault).

Because many fault traces are curved, it was commonly necessary to rotate domains after sliding them along faults in order to minimize gaps and overlaps. Most such rotations are not constrained by paleomagnetic data and are not explicitly denoted in the following step-by-step explanation of the reconstruction, except where necessary to avoid ambiguity.

Because of major differences in fault systems north and south of the Transverse Ranges, reconstructions of these alternate parts of the map area are, to a certain extent, independent. This is reflected in the following sequence of steps, where restoration is performed first for the Transverse Ranges and areas to the south (steps 1-14), then for the region to the north (steps 15-23). Distances specified below are to restore right-lateral faults, except where noted.

Steps in the Reconstruction

1. Restore entire Peninsular Ranges 262 km parallel to trace of San Andreas fault in southeastern California [300 km for opening of the Gulf of California minus 26 km on the San Jacinto fault and 12 km on the Elsinore fault (Dickinson, 1996)].
2. Unslip San Jacinto fault 26 km (Dickinson, 1996).
3. Move block between Mission Creek and Banning faults 185 km to vicinity of Chocolate Mountains (Dillon and Ehlig, 1993).
4. Move Verdugo Mountains and slice between Sierra Madre and San Gabriel fault 40 km along the south branch of the San Gabriel fault (Dillon and Ehlig, 1993).

5. Move southeast San Gabriel Mountains 3 km on the San Antonio fault (left-lateral) to align the north branch of the San Gabriel fault with the Icehouse Canyon fault and the south branch with the Stoddard Canyon fault (May and Walker, 1989; Matti and Morton, 1993).
6. Delete Simi Hills and eastern Santa Monica Mountains because of space problems associated with opening of the Los Angeles basin.
7. Move western Transverse Ranges 60 km along San Gabriel fault (Dillon and Ehlig, 1993).
8. Move Mount Pinos block along the San Gabriel fault to a location opposite the west end of the Sierra Pelona (~60 km; Dillon and Ehlig, 1993).
9. Translate San Gabriel Mountains and western Transverse Ranges an arbitrary distance to the southwest away from the San Andreas fault in order to prevent overlaps that would otherwise develop from step 10. This creates a gap along the San Andreas fault that is closed in step 12.
10. Move sliver between the Punchbowl and San Andreas faults (Blue Ridge) to the east end of the Sierra Pelona (~45 km; Powell, 1993). This aligns the Fenner and San Francisquito faults.
11. Move block south of the north branch of the San Gabriel fault (including Verdugo Mountains and southeastern San Gabriel block) to line up displaced segments of the Mount Lowe intrusion (~20 km; Ehlig, 1981).
12. Move San Gabriel Mountains and western Transverse Ranges to align the Sierra Pelona and Blue Ridge with the Orocopia Mountains (235 km; Crowell, 1962; Ehlig, 1981). Rotate the San Gabriel block clockwise to minimize gaps and overlaps, but not the not the western Transverse Ranges, which will be treated in step 13 based on paleomagnetic data.

13. Rotate entire western Transverse Ranges 56° counterclockwise according to paleomagnetic data of Luyendyk et al. (1985) from Piru-Simi domain of Dickinson (1996). Rotate Mono-Ojai, Refugio-Santa Cruz, and San Miguel-Santa Rosa domains of Dickinson (1996) an additional 24° ccw. (Dickinson infers total rotations of 77°, 85°, and 78°, respectively, for these three domains. We simplify and assume an average 80° rotation for all three domains.). The differential rotation of the western and eastern domains of the western Transverse Ranges introduces a distortion of the map pattern.
14. Move Cucamonga block 40 km along Stoddard Canyon-Banning fault (May and Walker, 1989; Matti and Morton, 1993).
15. Restore 110 km of slip for the following individual blocks, which lie west of the San Gregorio-Hosgri fault (Hall, 1991; Dickinson, 1996): (a) Block of mostly Franciscan complex in vicinity of Piedras Blancas, (b) block of Franciscan complex and Upper Cretaceous sediments (Pfeiffer slab) in vicinity of Point Sur, (c) Pigeon Point sediments.
16. Move Montara Mountain block to opposite Ben Lomond block (~40 km; Kistler and Champion, 1991; Powell, 1993).
17. Move Gualala, Bodega Head, and Point Reyes blocks ~150 km along San Gregorio-Hosgri fault (Powell, 1993; Dickinson, 1996).
18. Move all units west of Rinconada-Reliz fault 45 km (Powell, 1993).
19. Move all units in northern and central California west of the San Andreas fault such that the Gabilan Range is restored adjacent to the San Emigdio Mountains as shown by Powell (1993). According to Powell (1993, p. 47), this involves 295 km of slip. Distance measured along the length of the San Andreas fault in our reconstruction is 290 km.
20. Of the units moved in step 19, rotate all those from the Gabilan Range to the southeast counterclockwise to account for the relatively easterly trend of the Mojave Desert strand of the San Andreas fault (i.e., to close the gap between units west and east of the San

Andreas fault). Translate (without rotating) those regions northwest of the Gabilan Range (e.g., Gualala area, Montara Mountain, Ben Lomond, Point Reyes, etc.) slightly (kilometer scale) to the southwest to avoid overlap with the region northeast of the San Andreas fault.

21. Rotate Eocene sediments northeast of the Rinconada fault in the southern Coast Ranges 65° clockwise in order to avoid overlap with the central Transverse Ranges. In essence, this forces the southern Coast Ranges to make a right-stepping bend at the intersection of the San Andreas and San Gabriel faults in order to remain outboard of the latter.
22. Rotate Campanian-Maastrichtian sediments southwest of the Rinconada fault in the southern Coast Ranges 27° clockwise in order to avoid overlap with the central Transverse Ranges (similar to rotation of Eocene rocks described in step 21). Truncate southeasternmost extent of these sediments to avoid overlap with western Transverse Ranges.

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ION MICROPROBE U-Pb DATA TABLES

(see Appendix 3 for analytical procedure)

98237 **(Pelona Schist; East Fork)**

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb*$[b] %	$^{207}Pb*$[b] %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
79 ± 2	82 ± 6	99.5	91.7	-	349	98	12.0[e]	98-237-11-09
81 ± 2	80 ± 4	99.9	97.6	-	1553	348	11.8[e]	98-237-12-24
82 ± 3	82 ± 7	99.3	88.7	-	327	131	11.9[e]	98-237-12-13
82 ± 2	81 ± 4	99.8	95.8	-	597	24	11.7[e]	98-237-12-09
84 ± 4	74 ± 20	96.3	56.3	-	83	65	11.1[e]	98-237-12-22
85 ± 3	86 ± 6	99.9	97.6	-	1333	936	11.8[e]	98-237-11-11
86 ± 2	90 ± 14	94.9	52.9	-	173	74	11.7[e]	98-237-12-25
87 ± 4	75 ± 13	97.7	67.4	-	164	29	11.3[e]	98-237-12-08
87 ± 3	81 ± 7	98.8	81.9	-	280	86	11.2[e]	98-237-12-06
87 ± 3	77 ± 5	98.8	79.9	-	462	124	10.9[e]	98-237-12-15
87 ± 3	92 ± 9	99.4	90.9	-	316	145	12.0[e]	98-237-11-04
88 ± 3	72 ± 17	97.1	60.5	-	133	82	11.4[e]	98-237-12-03
89 ± 3	81 ± 12	98.2	73.9	-	184	52	11.3[e]	98-237-12-07
89 ± 4	87 ± 23	96.2	59.0	-	101	60	11.7[e]	98-237-12-23
91 ± 4	80 ± 15	98.1	72.3	-	149	159	11.0[e]	98-237-12-17
94 ± 3	89 ± 9	97.1	64.8	-	227	112	10.6[e]	98-237-11-01
94 ± 3	92 ± 3	99.7	95.0	-	1170	94	11.4[e]	98-237-12-21
95 ± 3	98 ± 5	100	104	-	876	315	11.5[e]	98-237-12-01
95 ± 4	94 ± 23	97.1	65.9	-	91	39	11.8[e]	98-237-11-06
98 ± 3	91 ± 10	98.2	73.8	-	194	110	11.0[e]	98-237-12-20
107 ± 4	106 ± 13	99.3	88.7	-	95	53	11.8[e]	98-237-12-19
107 ± 3	102 ± 8	98.8	82.4	-	546	267	11.2[e]	98-237-12-02
108 ± 3	106 ± 7	99.6	93.0	-	320	139	11.6[e]	98-237-12-12
108 ± 3	109 ± 7	98.4	78.1	-	910	95	10.8[e]	98-237-12-16
121 ± 3	107 ± 14	98.3	74.3	-	4226	246	11.2[e]	98-237-12-04
158 ± 5	157 ± 8	99.9	99.0	-	957	535	11.7[e]	98-237-12-10
159 ± 5	129 ± 39	82.0	17.6	-	161	113	11.5[e]	98-237-12-14
173 ± 5	125 ± 29	88.2	23.8	-	145	137	10.9[e]	98-237-11-02
236 ± 6	203 ± 10	98.2	73.7	-	545	240	10.8[e]	98-237-11-12
257 ± 6	*303 ± 11*	96.4	66.7	679 ± 72	332	53	11.3[e]	98-237-11-05
1871 ± 47	*1792 ± 24*	99.6	97.1	1700 ± 9	952	41	10.9[e]	98-237-12-11

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.905 \pm 0.024$ determined from AS-3 std. zircon
[e] Analyzed 03/23/2000: $RSF_{Pb/U} = 2.000 \times UO^+/U^+ - 14.57$ for UO^+/U^+ values in the range $11.3 < UO^+/U^+ < 12.3$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 3.7%.

98240 (Pelona Schist; San Gabriel Mnts. - Blue Ridge)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
81 ± 1	72 ± 4	98.9	81.3	-	644	-	8.31[e]	98240-02-07
84 ± 1	89 ± 8	98.4	77.0	-	201	-	8.37[e]	98240-02-15
84 ± 4	115 ± 61	85.1	30.4	-	203	-	9.94	98240-03-15
85 ± 1	83 ± 4	99.3	88.7	-	421	-	8.48[e]	98240-02-19
88 ± 1	100 ± 16	96.9	67.0	-	696	-	10.1[f]	98240-03-13
91 ± 2	78 ± 12	97.7	65.5	-	172	-	8.88[e]	98240-03-04
93 ± 1	64 ± 11	97.2	55.7	-	199	-	8.33[e]	98240-02-12
93 ± 1	64 ± 15	97.0	53.7	-	199	-	8.13[e]	98240-02-08
94 ± 4	84 ± 69	86.2	23.6	-	264	-	9.78[f]	98240-04-07
97 ± 1	82 ± 5	98.9	79.8	-	552	-	8.62[e]	98240-03-06
97 ± 1	106 ± 8	99.0	86.5	-	794	-	10.1[f]	98240-04-02
97 ± 1	96 ± 13	97.7	70.4	-	725	-	9.86[f]	98240-03-10
98 ± 1	107 ± 14	98.1	76.4	-	732	-	9.58[f]	98240-03-04
98 ± 1	75 ± 17	96.5	52.0	-	175	-	8.34[e]	98240-02-18
99 ± 1	91 ± 3	99.1	83.9	-	862	-	8.26[e]	98240-02-03
100 ± 1	89 ± 10	98.4	74.6	-	292	-	8.50[e]	98240-03-01
100 ± 1	88 ± 6	98.5	75.6	-	516	-	8.11[e]	98240-02-10
101 ± 8	96 ± 126	80.2	17.9	-	79	-	9.87[f]	98240-03-12
101 ± 1	92 ± 4	99.1	84.6	-	662	-	8.29[e]	98240-02-13
101 ± 2	89 ± 7	98.6	76.6	-	398	-	8.59[e]	98240-02-16
102 ± 1	94 ± 5	98.8	80.4	-	389	-	8.45[e]	98240-03-03
103 ± 2	125 ± 21	96.3	64.4	-	338	-	10.0[f]	98240-04-01
104 ± 4	73 ± 59	89.1	24.1	-	374	-	9.91[f]	98240-04-04
105 ± 2	92 ± 7	98.6	76.4	-	292	-	8.55[e]	98240-03-05
106 ± 2	99 ± 29	95.2	51.5	-	482	-	9.86[f]	98240-03-02
108 ± 1	107 ± 1	99.8	97.2	-	1215	-	8.47[e]	98240-02-09
109 ± 3	66 ± 26	94.5	34.8	-	66	-	8.24[e]	98240-02-11
109 ± 2	112 ± 31	95.3	54.4	-	306	-	9.54[f]	98240-03-01
109 ± 1	87 ± 8	97.9	66.1	-	277	-	8.72[e]	98240-02-14
110 ± 1	109 ± 15	93.4	42.4	-	254	-	8.02[e]	98240-02-02
113 ± 2	140 ± 21	97.1	70.6	-	295	-	10.1[f]	98240-03-08
115 ± 2	106 ± 4	99.2	86.3	-	613	-	8.45[e]	98240-02-05
115 ± 1	109 ± 3	99.6	92.1	-	640	-	7.92[e]	98240-02-01
117 ± 1	115 ± 1	99.8	95.8	-	1480	-	8.49[e]	98240-02-21
121 ± 1	118 ± 3	99.5	90.6	-	941	-	8.47[e]	98240-03-02
125 ± 2	117 ± 23	95.9	56.0	-	564	-	10.8[f]	98240-03-09
131 ± 1	114 ± 8	96.9	59.4	-	467	-	8.12[e]	98240-02-06
132 ± 3	115 ± 51	80.9	17.7	-	598	-	9.31[f]	98240-04-05
138 ± 2	221 ± 31	95.3	66.3	-	347	-	10.3[f]	98240-03-07
148 ± 3	177 ± 39	95.6	60.9	-	279	-	10.1[f]	98240-03-03

98240 (continued)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*}$[b] %	$^{207}Pb^{*}$[b] %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
169 ± 5	269 ± 66	94.0	60.4	-	138	-	10.0 [f]	98240-03-11
179 ± 1	177 ± 2	99.9	98.0	-	1765	-	8.64 [e]	98240-02-17
969 ± 5	*1086* ± *4*	99.9	98.7	1327 ± 6	533	-	8.54 [e]	98240-02-20

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.

[b] Radiogenic Pb calculated using ^{204}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$

[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.

[d] $^{232}Th^+$ and $^{208}Pb^+$ not measured.

[e] Analyzed 09/18/1998: $RSF_{Pb/U} = 1.453 \times UO^+/U^+ - 7.303$ for UO^+/U^+ values in the range $7.38 < UO^+/U^+ < 8.70$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 1.3%.

[e] Analyzed 04/04/1999: $RSF_{Pb/U} = 1.642 \times UO^+/U^+ - 8.423$ for UO^+/U^+ values in the range $8.44 < UO^+/U^+ < 10.0$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 3.4%.

98241 (Pelona Schist; Sierra Pelona)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
68 ± 2	58 ± 9	96.9	60.2	-	487	-	9.08[f]	98241-06-02
69 ± 1	73 ± 3	99.9	97.6	-	313	-	9.12[e]	98241-05-15
71 ± 1	71 ± 4	99.6	93.6	-	376	-	9.35[e]	98241-05-02
73 ± 1	68 ± 7	99.1	85.9	-	402	-	9.26[e]	98241-05-13
75 ± 3	73 ± 24	92.9	41.9	-	303	-	8.85[f]	98241-07-11
75 ± 2	77 ± 7	97.7	71.4	-	801	-	8.81[f]	98241-07-19
75 ± 2	69 ± 24	94.0	44.7	-	370	-	9.00[f]	98241-06-13
77 ± 2	*94 ± 7*	99.1	88.0	-	171	-	8.93[f]	98241-07-13
78 ± 2	77 ± 12	97.0	64.8	-	503	-	8.82[f]	98241-06-07
79 ± 1	78 ± 2	99.8	96.4	-	1100	-	9.58[e]	98241-06-06
80 ± 1	81 ± 2	99.9	97.5	-	1210	-	9.37[e]	98241-05-06
80 ± 1	79 ± 7	99.3	88.5	-	215	-	9.18[e]	98241-05-09
81 ± 1	83 ± 4	99.8	97.3	-	314	-	9.02[e]	98241-05-07
81 ± 3	68 ± 28	91.0	32.2	-	196	-	8.80[f]	98241-06-15
82 ± 2	90 ± 14	97.2	68.1	-	240	-	9.01	98241-06-09
83 ± 2	82 ± 7	99.4	90.9	-	124	-	9.87[e]	98241-05-05
84 ± 2	81 ± 9	99.3	88.5	-	188	-	8.82[e]	98241-05-12
85 ± 2	72 ± 16	95.7	51.9	-	358	-	8.88[f]	98241-06-01
85 ± 2	89 ± 4	99.8	96.2	-	369	-	9.14[e]	98241-05-01
85 ± 2	84 ± 4	99.3	89.5	-	1270	-	8.84[f]	98241-06-06
85 ± 3	*110 ± 14*	97.4	73.3	-	171	-	8.99	98241-06-12
87 ± 1	78 ± 6	98.9	82.1	-	503	-	9.58[e]	98241-06-01
87 ± 3	67 ± 17	95.4	47.7	-	503	-	8.67[f]	98241-07-01
87 ± 3	95 ± 31	93.4	46.6	-	104	-	8.94[f]	98241-06-05
89 ± 3	*124 ± 17*	97.1	72.8	-	316	-	8.53[f]	98241-07-09
89 ± 3	90 ± 6	98.7	81.8	-	1500	-	8.17[f]	98241-07-06
92 ± 3	93 ± 15	97.9	73.4	-	215	-	8.64[f]	98241-07-10
99 ± 2	103 ± 6	99.0	85.7	-	590	-	8.88[f]	98241-07-18
143 ± 2	132 ± 15	96.8	61.7	-	247	-	9.64[e]	98241-06-05
175 ± 7	198 ± 27	97.6	73.0	-	289	-	8.40[f]	98241-07-05
216 ± 7	201 ± 24	97.5	68.1	-	440	-	8.34[f]	98241-07-04
236 ± 4	235 ± 6	99.8	97.3	-	398	-	9.18[e]	98241-06-04
241 ± 3	245 ± 4	99.9	97.7	-	1383	-	9.03[e]	98241-05-03
253 ± 6	240 ± 13	99.0	85.3	-	343	-	9.00[f]	98241-07-15
414 ± 6	*569 ± 7*	100	99.8	1253 ± 23	542	-	9.13[e]	98241-05-11
1040 ± 18	*1158 ± 12*	99.9	99.1	1387 ± 18	225	-	9.06	98241-05-10
1341 ± 21	*1402 ± 13*	100	99.6	1496 ± 6	2209	-	9.36[f]	98241-07-14
1452 ± 13	*1540 ± 8*	99.9	99.3	1663 ± 8	1094	-	9.41[e]	98241-05-17
1480 ± 41	*1576 ± 28*	99.8	98.2	1706 ± 24	59	-	9.73[e]	98241-05-18
1483 ± 21	*1580 ± 13*	99.9	99.4	1712 ± 10	214	-	9.62[e]	98241-06-02
1514 ± 39	1557 ± 25	99.7	97.3	1615 ± 22	467	-	8.30[f]	98241-07-07
1552 ± 28	*1609 ± 17*	100	99.6	1686 ± 10	388	-	9.03	98241-07-12
1567 ± 27	*1645 ± 16*	100	99.6	1747 ± 22	330	-	9.33[e]	98241-05-16

98241 (continued)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
1579 ± 46	*1673 ± 39*	99.4	95.3	1794 ± 52	85	-	8.97 [f]	98241-07-02
1593 ± 39	*1672 ± 26*	99.8	98.5	1773 ± 16	138	-	9.62 [f]	98241-07-08
1602 ± 26	*1646 ± 16*	100	99.7	1702 ± 13	172	-	9.42 [e]	98241-06-03
1616 ± 36	*1681 ± 22*	99.9	99.1	1763 ± 20	98	-	9.17 [e]	98241-05-014
1620 ± 20	1626 ± 12	99.9	99.1	1634 ± 10	379	-	9.35 [e]	98241-06-07
1643 ± 41	1664 ± 24	99.5	96.3	1690 ± 24	170	-	8.92 [f]	98241-07-03
1710 ± 40	1696 ± 24	99.8	98.5	1679 ± 12	219	-	8.77	98241-07-016

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.

[b] Radiogenic Pb calculated using ^{204}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$

[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.

[d] $^{232}Th^+$ and $^{208}Pb^+$ not measured.

[e] Analyzed 02/06/1999: $RSF_{Pb/U} = 2.500 \times UO^+/U^+ - 16.83$ for UO^+/U^+ values in the range $8.98 < UO^+/U^+ < 9.34$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 2.8%.

[f] Analyzed 04/02/1999: $RSF_{Pb/U} = 2.500 \times UO^+/U^+ - 16.09$ for UO^+/U^+ values in the range $8.44 < UO^+/U^+ < 10.0$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 4.2%.

9957 (Rand Schist; San Emigdio Mnts.)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
93 ± 2	89 ± 19	92.9	41.6	-	343	113	8.77[e]	9957-04-06
94 ± 1	90 ± 5	98.4	77.5	-	1814	843	8.76[e]	9957-04-03
94 ± 4	89 ± 36	85.4	24.0	-	289	115	9.58[f]	9957-06-21
96 ± 6	100 ± 46	90.4	35.4	-	121	54	9.84[f]	9957-06-10
100 ± 2	97 ± 13	96.3	59.3	-	709	315	8.63[e]	9957-02-03
102 ± 3	101 ± 24	90.8	35.9	-	207	89	9.54[f]	9957-06-20
103 ± 3	118 ± 28	96.6	65.2	-	266	100	9.78[f]	9957-06-26
103 ± 3	107 ± 20	95.7	57.0	-	457	210	9.67[f]	9957-06-19
106 ± 2	105 ± 17	94.9	51.4	-	464	209	8.31[e]	9957-02-08
107 ± 1	97 ± 14	90.2	32.3	-	544	132	8.37[e]	9957-04-05
109 ± 1	106 ± 6	98.2	75.0	-	934	595	8.66[e]	9957-02-10
106 ± 5	100 ± 27	88.4	29.0	-	414	154	9.40[f]	9957-06-05
111 ± 1	107 ± 8	98.4	77.7	-	803	273	8.52[e]	9957-04-02
114 ± 2	110 ± 10	95.9	56.9	-	341	102	8.26[e]	9957-02-06
115 ± 1	115 ± 7	97.6	70.4	-	1116	397	8.34[e]	9957-04-04
115 ± 2	112 ± 5	99.3	89.1	-	1110	518	8.33[e]	9957-02-05
120 ± 3	118 ± 8	98.8	82.3	-	1012	446	8.33[e]	9957-02-01
128 ± 3	116 ± 18	95.9	54.8	-	413	164	9.25[f]	9957-06-04
167 ± 3	174 ± 20	97.5	70.6	-	533	159	8.79[e]	9957-04-01
216 ± 5	194 ± 39	90.1	32.8	-	83	40	9.00[e]	9957-02-11
397 ± 6	381 ± 25	92.3	42.5	-	239	64	8.55[e]	9957-02-09
1868 ± 20	*1765 ± 14*	99.0	92.0	1644 ± 20	393	193	8.27[e]	9957-02-02

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.806 \pm 0.004$ (11/29/99); $RSF_{Th/U} = 0.901 \pm 0.005$ (02/03/2002) determined from AS-3 std. zircon
[e] Analyzed 11/29/1999: $RSF_{Pb/U} = 1.666 \times UO^+/U^+ - 8.249$ for UO^+/U^+ values in the range $8.19 < UO^+/U^+ < 8.97$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 4.3 %.
[f] Analyzed 02/03/2002: $RSF_{Pb/U} = 2.00 \times UO^+/U^+ - 12.6$ for UO^+/U^+ values in the range $9.28 < UO^+/U^+ < 9.74$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 3.3%.

CD7 (Orocopia Schist; Western Castle Dome Mnts.)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
78 ± 4	99 ± 14	100	104	-	183	187	11.9[e]	CD7-03-02
79 ± 3	73 ± 15	97.4	66.2	-	125	25	11.8[e]	CD7-02-06
96 ± 8	99 ± 10	99.9	98.8	-	796	507	10.7[e]	CD7-03-04
97 ± 6	98 ± 18	97.0	65.3	-	112	38	11.9[e]	CD7-05-14
115 ± 9	97 ± 8	98.5	76.2	-	1063	174	11.2[e]	CD7-05-12
147 ± 5	138 ± 7	99.3	88.2	-	344	252	12.0[e]	CD7-02-10
173 ± 6	177 ± 8	99.7	95.7	-	435	155	11.7[e]	CD7-02-12
175 ± 9	183 ± 25	99.1	86.8	-	67	19	11.7[e]	CD7-02-19
181 ± 7	175 ± 9	99.3	89.6	-	488	21	11.9[e]	CD7-02-05
182 ± 9	178 ± 16	99.9	98.1	-	235	152	11.2[e]	CD7-03-10
187 ± 8	198 ± 14	99.9	98.9	-	344	218	11.0[e]	CD7-05-15
197 ± 12	198 ± 22	99.2	88.1	-	141	96	10.8[e]	CD7-03-07
207 ± 9	*237 ± 15*	101	111	541 ± 105	596	444	11.8[e]	CD7-02-15
238 ± 8	236 ± 10	99.8	96.6	-	451	45	11.6[e]	CD7-02-13
254 ± 9	265 ± 12	100	101	-	350	166	11.5[e]	CD7-03-01
255 ± 9	260 ± 13	100	101	-	224	73	11.7[e]	CD7-02-18
270 ± 11	262 ± 12	100	100	-	389	41	10.9[e]	CD7-02-14
325 ± 28	*394 ± 28*	100	103	822 ± 57	406	102	11.3[e]	CD7-03-03
610 ± 22	627 ± 29	97.5	74.0	688 ± 96	56	24	13.8[e]	CD7-02-01
959 ± 56	984 ± 62	98.6	86.4	1040 ± 139	21	9	11.4[e]	CD7-02-11
1136 ± 51	1172 ± 44	99.9	99.2	1237 ± 68	62	25	11.9[e]	CD7-03-09
1139 ± 64	1150 ± 45	99.8	98.1	1170 ± 37	237	36	11.6[e]	CD7-03-11
1192 ± 41	1208 ± 32	99.8	97.6	1238 ± 44	155	50	11.5[e]	CD7-02-04
1209 ± 53	1220 ± 44	100	101	1241 ± 64	91	56	11.7[e]	CD7-02-20
1237 ± 50	1237 ± 43	100	101	1237 ± 71	48	25	11.7[e]	CD7-02-02
1270 ± 67	1206 ± 68	98.6	86.3	1092 ± 151	20	14	11.5[e]	CD7-02-08
1372 ± 56	*1512 ± 36*	99.8	98.2	1713 ± 37	912	65	11.7[e]	CD7-02-03
1450 ± 64	1492 ± 58	99.0	91.9	1551 ± 83	37	24	11.7[e]	CD7-03-13
1482 ± 40	*1590 ± 25*	100	103	1737 ± 17	444	79	11.6[e]	CD7-02-07
1575 ± 53	1509 ± 30	99.9	99.3	1417 ± 12	242	21	11.0[e]	CD7-02-09
1693 ± 40	1671 ± 22	100	100	1644 ± 16	714	77	11.3[e]	CD7-05-20
1718 ± 100	1701 ± 64	100	101	1679 ± 55	196	65	11.2[e]	CD7-05-18
1745 ± 43	1738 ± 24	100	99.9	1728 ± 10	968	39	11.2[e]	CD7-05-21

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.907 \pm 0.014$ determined from AS-3 std. zircon
[e] Analyzed 03/25/2000: $RSF_{Pb/U} = 2.500 \times UO^+/U^+ - 18.83$ for UO^+/U^+ values in the range $11.4 < UO^+/U^+ < 12.1$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 5.1 %.

CD9 (Orocopia Schist; Western Castle Dome Mnts.)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
77 ± 2	69 ± 34	93.7	39.1	-	173	112	9.79	CD9-13_17
169 ± 3	152 ± 20	98.2	71.6	-	345	235	9.66	CD9-12_03
170 ± 2	167 ± 14	99.3	87.6	-	537	635	9.78	CD9-13_18
1202 ± 24	1205 ± 20	100	101	1211 ± 38	212	120	9.74	CD9-12_05
1232 ± 40	1206 ± 66	98.6	85.3	1159 ± 162	64	84	9.49	CD9-13_19
1469 ± 29	1455 ± 16	99.8	97.9	1434 ± 18	193	85	9.42	CD9-12_10
1571 ± 30	1611 ± 17	99.8	98.2	1663 ± 13	261	131	9.62	CD9-12_12
1578 ± 31	1616 ± 22	99.7	97.0	1667 ± 27	188	83	9.80	CD9-12_13
1579 ± 14	*1624 ± 8*	100	99.7	1682 ± 6	1750	69	9.73	CD9-12_16
1749 ± 26	1725 ± 15	100	99.8	1696 ± 17	415	160	9.53	CD9-12_11

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.946 \pm 0.004$ determined from AS-3 std. zircon
[e] Analyzed 07/25/2000: $RSF_{Pb/U} = 2.500 \times UO^+/U^+ - 16.08$ for UO^+/U^+ values in the range $9.35 < UO^+/U^+ < 9.78$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 3.0 %.

DR1656 (Sierra de Salinas; Sierra de Salinas)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
77 ± 2	80 ± 13	96.4	61.5	-	277	131	11.0[e]	DR1656-12-16
81 ± 2	75 ± 25	93.8	44.3	-	253	165	10.7[e]	DR1656-13-05
82 ± 2	84 ± 21	92.5	41.9	-	178	82	10.8[e]	DR1656-12-22
83 ± 2	83 ± 7	98.1	74.3	-	328	76	10.2[e]	DR1656-12-10
87 ± 1	87 ± 5	98.3	76.7	-	464	11	10.3[e]	DR1656-12-15
87 ± 1	88 ± 11	97.8	72.5	-	239	86	9.86[e]	DR1656-12-18
90 ± 2	89 ± 3	99.5	92.4	-	602	259	10.3[e]	DR1656-12-06
91 ± 2	90 ± 12	98.1	74.0	-	349	61	10.1[e]	DR1656-12-05
93 ± 1	91 ± 3	99.5	92.1	-	1444	202	10.4[e]	DR1656-12-07
97 ± 2	88 ± 10	97.2	64.6	-	347	210	10.1[e]	DR1656-12-24
99 ± 1	98 ± 19	96.0	57.7	-	264	2	10.3[e]	DR1656-12-14
105 ± 2	94 ± 17	95.5	51.8	-	129	52	10.1[e]	DR1656-12-17
106 ± 3	81 ± 21	95.8	49.7	-	148	69	10.5[e]	DR1656-12-09
110 ± 3	94 ± 15	96.6	58.4	-	124	20	9.74[e]	DR1656-12-01
112 ± 2	112 ± 9	98.8	83.3	-	234	3	10.0[e]	DR1656-12-23
112 ± 2	103 ± 13	91.7	36.8	-	376	12	10.5[e]	DR1656-12-21
117 ± 3	117 ± 11	98.6	80.9	-	149	48	9.97[e]	DR1656-13-09
118 ± 3	115 ± 21	96.4	60.1	-	109	37	10.3[e]	DR1656-12-11
172 ± 5	160 ± 56	92.8	41.0	-	142	85	10.5[e]	DR1656-13-01
187 ± 2	*398 ± 4*	99.8	98.9	1934 ± 18	701	123	9.85[e]	DR1656-13-08
198 ± 2	199 ± 7	99.2	88.1	-	468	121	10.5[e]	DR1656-13-02
206 ± 40	*601 ± 116*	98.8	87.6	2655 ± 302	1993	55	10.5[e]	DR1656-12-12
766 ± 14	*829 ± 16*	99.6	95.5	1004 ± 37	236	254	10.2[e]	DR1656-12-04
898 ± 32	*1045 ± 23*	97.1	77.6	1367 ± 76	1425	31	9.92[e]	DR1656-13-07
1293 ± 18	1315 ± 14	99.9	98.8	1352 ± 13	280	102	10.3[e]	DR1656-12-08
1304 ± 16	1332 ± 11	100.0	99.6	1377 ± 9	540	24	10.3[e]	DR1656-13-10
1526 ± 24	*1603 ± 14*	100.0	99.6	1707 ± 10	652	33	10.4[e]	DR1656-12-02
1570 ± 19	*1613 ± 12*	99.8	98.4	1669 ± 9	298	34	10.4[e]	DR1656-13-03

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.851 \pm 0.005$ determined from AS-3 std. zircon
[e] Analyzed 06/11/2001: $RSF_{Pb/U} = 1.869 \times UO^+/U^+ - 11.53$ for UO^+/U^+ values in the range $9.21 < UO^+/U^+ < 10.5$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 2.2 %.

JM80102 **(Sierra de Salinas; Gablian Range)**

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
80 ± 2	79 ± 11	98.9	83.4	-	1221	11	9.77[e]	JM80-03-05
81 ± 3	87 ± 44	94.1	47.7	-	295	91	10.5[e]	JM80-03-16
82 ± 1	82 ± 6	99.1	86.8	-	869	3	10.1[e]	JM80-03-14
83 ± 2	79 ± 14	85.3	23.8	-	318	3	9.41[e]	JM80-03-15
88 ± 3	82 ± 21	98.0	71.8	-	91	27	9.42[e]	JM80-03-12
88 ± 2	88 ± 13	98.6	80.2	-	897	18	9.78[e]	JM80-03-03
91 ± 1	96 ± 4	99.7	94.6	-	446	113	10.5[f]	JM80-02-04
92 ± 1	94 ± 5	98.8	82.6	-	380	12	9.91[f]	JM80-02-08
94 ± 2	102 ± 21	98.5	79.4	-	320	134	9.65[e]	JM80-03-01
102 ± 2	*127 ± 4*	101	116	637 ± 48	2021	704	9.63[e]	JM80-03-07
107 ± 2	103 ± 19	98.0	73.1	-	242	59	10.0[e]	JM80-03-13
110 ± 14	194 ± 207	87.8	35.0	-	54	33	9.24[e]	JM80-03-04
111 ± 2	115 ± 20	98.6	80.9	-	853	230	9.98[e]	JM80-03-06
119 ± 2	110 ± 16	96.9	62.2	-	84	30	10.9[f]	JM80-02-05
121 ± 7	139 ± 94	94.1	47.2	-	223	40	9.79[e]	JM80-02-01
125 ± 6	38 ± 104	54.1	1.9	-	523	48	10.6[e]	JM80-03-17
129 ± 8	140 ± 124	91.9	37.9	-	65	14	9.87[e]	JM80-03-02
159 ± 2	164 ± 6	99.6	94.4	-	243	154	10.8[f]	JM80-02-03
186 ± 9	186 ± 9	99.9	98.9	-	1432	141	8.33[e]	JM80-03-08
305 ± 6	*393 ± 13*	95.2	62.5	950 ± 71	1208	11	9.80[e]	JM80-03-10
390 ± 6	*402 ± 9*	99.6	94.4	476 ± 36	410	18	9.38[e]	JM80-03-09
611 ± 13	*741 ± 12*	99.4	93.9	1157 ± 23	725	3	9.45[e]	JM80-03-11
1178 ± 8	1169 ± 6	99.7	97.4	1152 ± 14	590	42	10.2[f]	JM80-02-06

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.

[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$

[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.

[d] Calculated from measured Th^+/U^+: $RSF_{Th/U}$ = 0.913±0.009 (03/18/2001); 0.909±0.007 (06/13/01) determined from AS-3 std. zircon

[e] Analyzed 03/18/2001: $RSF_{Pb/U} = 2.439 \times UO^+/U^+ - 15.89$ for UO^+/U^+ values in the range $8.46 < UO^+/U^+ < 10.1$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 4.3 %.

[f] Analyzed 06/13/2001: $RSF_{Pb/U} = 1.353 \times UO^+/U^+ - 6.320$ for UO^+/U^+ values in the range $10.0 < UO^+/U^+ < 10.6$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 0.8 %.

KE4 (Orocopia Schist; Eastern Castle Dome Mnts.)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
81 ± 1	74 ± 9	92.4	38.5	-	692	225	9.78[e]	KE4-13-10
87 ± 2	81 ± 11	91.9	37.5	-	663	138	9.52[e]	KE4-13-02
129 ± 2	106 ± 22	90.4	30.8	-	406	230	10.1[e]	KE4-13-06
172 ± 2	149 ± 12	98.1	72.2	-	434	449	9.73[e]	KE4-13-03
201 ± 25	234 ± 55	69.7	14.4	-	446	96	10.3[e]	KE4-12-02
221 ± 5	213 ± 52	97.7	70.6	-	187	86	10.0[e]	KE4-12-04
244 ± 3	239 ± 10	99.6	93.0	-	393	163	10.1[e]	KE4-13-11
317 ± 20	*397 ± 21*	99.5	94.8	892 ± 82	428	33	9.84[e]	KE4-12-03
1009 ± 13	*1188 ± 32*	99.6	96.9	1529 ± 78	1030	382	9.94[e]	KE4-13-07
1640 ± 23	1659 ± 13	99.9	99.5	1682 ± 7	851	14	9.91[e]	KE4-13-01
1704 ± 22	1688 ± 17	100	99.9	1669 ± 18	859	17	9.78[e]	KE4-12-01
1741 ± 23	1700 ± 17	99.7	97.3	1649 ± 25	132	41	9.43[e]	KE4-13-08

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.925 \pm 0.013$ determined from AS-3 std. zircon
[e] Analyzed 03/17/2001: $RSF_{Pb/U} = 2.481 \times UO^+/U^+ - 16.21$ for UO^+/U^+ values in the range $8.93 < UO^+/U^+ < 10.1$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 4.1 %.

KE6 (Orocopia Schist; Eastern Castle Dome Mnts.)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
69 ± 1	60 ± 16	91.3	34.3	-	1253	76	10.7[e]	KE6-10-01
80 ± 2	73 ± 26	96.5	58.5	-	588	147	9.52[e]	KE6-10-06
81 ± 3	98 ± 41	96.1	61.7	-	143	62	9.70[e]	KE6-09-07
85 ± 3	88 ± 30	94.0	47.3	-	90	5	10.6[e]	KE6-10-03
86 ± 2	86 ± 6	99.3	89.3	-	1667	86	9.66[e]	KE6-10-09
87 ± 2	86 ± 9	98.8	82.6	-	1125	260	10.2[e]	KE6-09-03
88 ± 2	88 ± 2	99.4	90.3	-	5037	383	10.4[e]	KE6-10-02
120 ± 2	106 ± 31	95.1	49.5	-	744	133	9.78[e]	KE6-10-10
151 ± 6	100 ± 78	92.2	30.1	-	143	109	9.46[e]	KE6-10-08
164 ± 3	168 ± 14	99.2	87.8	-	433	124	9.70[e]	KE6-09-06
174 ± 6	186 ± 68	96.6	63.5	-	166	99	9.88[e]	KE6-09-02
175 ± 8	169 ± 26	98.7	80.9	-	435	370	9.79[e]	KE6-09-04
196 ± 5	191 ± 21	98.5	79.0	-	296	57	9.60[e]	KE6-10-07
259 ± 4	238 ± 12	99.2	88.1	-	636	207	9.02[e]	KE6-10-04
1221 ± 38	1211 ± 72	98.3	84.5	1193 ± 176	15	10	9.61[e]	KE6-10-11
1250 ± 21	*1307 ± 17*	99.9	98.7	1402 ± 19	1201	25	10.0[e]	KE6-09-01
1267 ± 18	*1322 ± 13*	99.9	98.8	1411 ± 14	604	37	9.87[e]	KE6-09-05
1545 ± 17	*1660 ± 27*	100	103	1808 ± 46	149	59	10.8[e]	KE6-10-05

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.925 \pm 0.013$ determined from AS-3 std. zircon
[e] Analyzed 03/17/2001: $RSF_{Pb/U} = 2.481 \times UO^+/U^+ - 16.21$ for UO^+/U^+ values in the range $8.93 < UO^+/U^+ < 10.1$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 4.1 %.

KE224031 (Orocopia Schist; SE Orocopia Mtns.)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
73±2	82±12	98.2	77.9	-	328	363	9.96[e]	KE224031-05-14-01
77±2	*95±12*	99.0	87.1	-	365	233	9.78[e]	KE224031-05-09-01
79±2	122±18	99.8	98.3	-	176	122	10.4[e]	KE224031-05-11-01
108±2	114±10	99.1	87.3	-	776	369	9.89[e]	KE224031-05-05-01
160±5	169±11	99.6	94.4	-	476	364	9.85[e]	KE224031-05-06-01
517±15	*563±22*	99.9	99.1	757±108	237	36	10.3[e]	KE224031-05-04-01
1204±28	1180±74	98.9	89.3	1137±189	119	155	9.67[e]	KE224031-05-10-01
1213±45	1338±38	100	103	1543±64	134	69	10.4[e]	KE224031-05-13-01
1466±25	1442±17	100	99.6	1406±24	732	240	9.66[e]	KE224031-05-01-01
1727±54	1676±51	99.5	95.6	1614±99	191	355	9.53[e]	KE224031-05-17-01

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.859±0.005$ determined from AS-3 std. zircon
[e] Analyzed 7/15/2003: $RSF_{Pb/U} = 2.703 \times UO^+/U^+ - 18.46$ for UO^+/U^+ values in the range $9.32 < UO^+/U^+ < 9.91$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 2.3%.

KE24033 **(Orocopia Schist; SE Orocopia Mtns.)**

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
161±5	149±26	96.7	61.5	-	153	154	9.58[e]	KE24033-06-05-01
164±4	160±37	96.7	62.6	-	201	293	9.88[e]	KE24033-06-02-01
164±3	157±16	98.9	84.1	-	624	763	9.81[e]	KE24033-06-14-01
170±4	*197±10*	101	111	-	609	633	9.83[e]	KE24033-06-09-01
174±5	*153±16*	98.0	71.4	-	227	128	9.80[e]	KE24033-06-11-01
1358±142	1236±120	97.4	76.3	1031±253	21	15	9.24[e]	KE24033-06-13-01
1414±79	1439±63	99.7	97.1	1476±96	53	34	9.74[e]	KE24033-06-01-01
1628±35	1666±23	100	102	1713±24	293	68	9.93[e]	KE24033-06-07-01
1778±54	1701±38	99.1	92.7	1607±69	92	77	9.53[e]	KE24033-06-04-01

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.859±0.005$ determined from AS-3 std. zircon
[e] Analyzed 7/15/2003: $RSF_{Pb/U} = 2.703 \times UO^+/U^+ - 18.46$ for UO^+/U^+ values in the range $9.32 < UO^+/U^+ < 9.91$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 2.3%.

KE127021 (Orocopia Schist; SE Orocopia Mtns.)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
78±2	93±25	97.5	72.6	-	172	123	10.0[e]	KE127021_7-09-01
98±2	98±12	98.7	81.2	-	578	429	9.78[e]	KE127021_07-01-1
174±3	168±10	99.0	85.0	-	822	441	9.31[e]	KE127021_07-07-1
237±3	251±11	99.8	96.3	-	512	205	9.89[e]	KE127021_07-04-1
1124±59	1128±65	98.6	86.9	1136±168	27	13	9.87[e]	KE127021_07-06-1
1281±23	1298±20	99.5	95.3	1325±27	413	103	9.51[e]	KE127021_07-05-1
1662±37	1699±25	100	100	1744±25	218	62	10.0[e]	KE127021_7-15-01
1736±20	1738±11	100	101	1741±13	1783	218	10.4[e]	KE127021_7-11-01
1770±36	1753±24	99.9	99.6	1733±34	605	410	9.84[e]	KE127021_7-08-01
1774±56	1796±28	100	102	1821±27	239	44	10.2[e]	KE127021_07-02-1

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.859 \pm 0.005$ determined from AS-3 std. zircon
[e] Analyzed 7/15/2003: $RSF_{Pb/U} = 2.703 \times UO^+/U^+ - 18.46$ for UO^+/U^+ values in the range $9.32 < UO^+/U^+ < 9.91$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 2.3%.

MW10 (Orocopia Schist; Marcus Wash)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
72 ± 3	99 ± 38	87.0	31.4	-	424	375	9.92	MW10-10-15
89 ± 3	95 ± 48	92.9	40.6	-	161	250	9.39	MW10-10-09
96 ± 2	99 ± 15	97.9	71.3	-	534	58	9.69	MW10-10-01
152 ± 5	162 ± 49	94.6	48.6	-	112	116	9.89	MW10-10-04
155 ± 4	165 ± 22	97.9	71.6	-	211	243	9.89	MW10-10-03
170 ± 2	172 ± 22	98.3	74.7	-	338	594	9.73	MW10-10-02
172 ± 9	160 ± 103	90.1	29.6	-	69	89	9.46	MW10-10-14
210 ± 4	*295 ± 23*	99.8	98.0	1035 ± 162	270	206	9.66	MW10-10-11
1247 ± 34	*1702 ± 36*	104	136	2318 ± 65	111	116	9.52	MW10-10-16
1250 ± 24	1220 ± 34	99.1	89.8	1167 ± 88	124	79	9.45	MW10-10-17
1272 ± 33	1259 ± 72	98.3	83.2	1237 ± 174	45	39	9.42	MW10-10-08
1653 ± 21	1655 ± 19	99.6	96.5	1658 ± 32	155	44	9.73	MW10-10-12
1748 ± 49	1731 ± 54	99.0	91.4	1712 ± 95	57	49	9.45	MW10-10-13

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.946 \pm 0.004$ determined from AS-3 std. zircon
[e] Analyzed 07/25/2000: $RSF_{Pb/U} = 2.500 \times UO^+/U^+ - 16.08$ for UO^+/U^+ values in the range $9.35 < UO^+/U^+ < 9.78$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 3.0%.

NR1 (Orocopia Schist; Neversweat Ridge)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
69 ± 1	66 ± 2	99.4	89.3	-	3218	204	9.71[e]	NR1-04-03
73 ± 2	17 ± 16	51.4	1.3	-	679	55	9.33[e]	NR1-04-09
73 ± 3	79 ± 26	97.9	72.3	-	227	134	8.46[e]	NR1-04-01
76 ± 1	76 ± 8	98.6	80.1	-	476	99	9.88[e]	NR1-04-04
81 ± 2	40 ± 19	90.4	20.5	-	421	90	9.45[e]	NR1-04-10
92 ± 2	55 ± 41	70.4	7.4	-	310	77	10.3[e]	NR1-04-11
115 ± 2	108 ± 4	99.1	85.7	-	1103	99	9.39[e]	NR1-04-02
160 ± 4	150 ± 44	96.8	61.8	-	204	161	9.78[e]	NR1-04-07
254 ± 3	254 ± 6	99.7	95.8	249 ± 56	2786	284	10.1[e]	NR1-04-05
660 ± 20	*771 ± 27*	96.0	68.7	1107 ± 91	430	24	9.47[e]	NR1-04-06
1113 ± 14	*1311 ± 11*	99.7	97.5	1651 ± 12	884	41	9.67[e]	NR1-04-08

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.924 \pm 0.011$ determined from AS-3 std. zircon
[e] Analyzed 03/18/2001: $RSF_{Pb/U} = 2.481 \times UO^+/U^+ - 16.23$ for UO^+/U^+ values in the range $8.46 < UO^+/U^+ < 10.1$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 5.0%.

NR2 **(Orocopia Schist; Neversweat Ridge)**

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
55 ± 1	53 ± 12	87.3	27.2	-	188	47	11.9[e]	NR2-08-18
61 ± 1	59 ± 4	96.3	58.6	-	1447	182	11.3[e]	NR2-07-16
62 ± 1	61 ± 2	99.4	90.3	-	1352	17	10.4[e]	NR2-09-02
62 ± 1	62 ± 2	98.9	83.3	-	933	12	10.6[e]	NR2-07-24
63 ± 2	61 ± 7	99.0	84.8	-	394	241	10.4[e]	NR2-07-21
64 ± 2	57 ± 12	92.3	37.7	-	1608	71	9.84[e]	NR2-07-18
66 ± 2	25 ± 9	67.8	4.2	-	1032	92	10.4[e]	NR2-08-12
67 ± 2	43 ± 13	68.2	7.1	-	632	117	10.5[e]	NR2-08-03
68 ± 2	64 ± 3	91.2	35.5	-	1793	59	10.4[e]	NR2-09-16
68 ± 2	61 ± 13	95.5	51.6	-	1914	452	10.4[e]	NR2-08-01
69 ± 1	62 ± 4	99.2	86.7	-	1007	396	10.8[e]	NR2-09-22
70 ± 1	63 ± 5	98.4	76.0	-	318	83	10.8[e]	NR2-09-11
71 ± 2	53 ± 25	67.0	7.9	-	257	57	10.4[e]	NR2-09-10
72 ± 1	80 ± 8	93.0	46.0	-	489	213	11.1[e]	NR2-09-07
73 ± 2	71 ± 2	96.1	58.0	-	1482	207	10.5[e]	NR2-09-06
73 ± 2	70 ± 7	96.6	60.8	-	273	44	10.1[e]	NR2-07-20
74 ± 2	69 ± 19	92.8	40.4	-	497	64	10.6[e]	NR2-07-22
74 ± 2	74 ± 2	97.7	70.8	-	4758	51	10.4[e]	NR2-09-05
77 ± 2	81 ± 6	98.9	83.9	-	329	222	10.4[e]	NR2-09-04
80 ± 2	83 ± 3	99.9	98.5	-	1380	251	12.0[e]	NR2-07-13
83 ± 3	98 ± 14	99.6	94.8	-	123	148	11.0[e]	NR2-07-17
84 ± 2	76 ± 7	90.3	32.4	-	1038	410	10.4[e]	NR2-09-20
86 ± 2	65 ± 4	97.3	60.6	-	601	137	11.0[e]	NR2-09-13
87 ± 2	87 ± 6	97.1	65.5	-	1123	255	10.5[e]	NR2-08-19
130 ± 3	116 ± 6	97.5	66.6	-	486	166	10.6[e]	NR2-08-15
134 ± 4	108 ± 19	95.6	50.3	-	135	206	11.0[e]	NR2-07-15
146 ± 3	124 ± 6	98.2	73.3	-	771	269	10.1[e]	NR2-09-03
160 ± 4	152 ± 8	95.7	55.3	-	1121	315	10.2[e]	NR2-07-09
166 ± 3	166 ± 6	93.5	46.0	-	1822	70	10.9[e]	NR2-09-21
651 ± 14	*756 ± 16*	98.4	84.4	1083 ± 31	236	26	11.2[e]	NR2-09-09
772 ± 15	*937 ± 14*	98.3	85.3	1349 ± 19	383	46	11.0[e]	NR2-07-10
1224 ± 26	*1348 ± 19*	98.9	90.8	1551 ± 18	283	41	10.2[e]	NR2-08-02
1428 ± 31	1452 ± 24	100.0	101.0	1488 ± 36	136	78	10.7[e]	NR2-07-19
1667 ± 37	1638 ± 27	99.4	95.3	1600 ± 37	222	93	10.0[e]	NR2-09-08
1687 ± 36	1667 ± 21	99.5	95.9	1642 ± 8	1036	10	10.1[e]	NR2-07-05

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.865 \pm 0.011$ determined from AS-3 std. zircon
[e] Analyzed 03/25/2000: $RSF_{Pb/U} = 2.000 \times UO^+/U^+ - 12.48$ for UO^+/U^+ values in the range $10.6 < UO^+/U^+ < 11.5$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 4.7%.

OR307 (Orocopia Schist; Orocopia Mnts.)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
90 ± 3	82 ± 27	93.8	40.7	-	212	68	10.1[e]	OR307-06-16
91 ± 2	87 ± 20	96.9	59.9	-	424	217	9.76[e]	OR307-06-14
93 ± 3	90 ± 21	96.7	58.6	-	315	136	9.74[e]	OR307-06-12
96 ± 3	94 ± 41	93.6	41.0	-	169	77	9.89[e]	OR307-06-04
100 ± 3	*222 ± 22*	103	137	1858 ± 163	299	139	9.57[e]	OR307-06-17
106 ± 3	94 ± 22	95.9	50.8	-	77	34	9.63[e]	OR307-06-11
108 ± 6	96 ± 80	89.4	26.6	-	83	38	9.72[e]	OR307-06-11
162 ± 5	137 ± 29	97.3	60.7	-	66	23	9.66[f]	OR307-02-12
170 ± 4	168 ± 21	98.5	77.2	-	175	81	9.53[f]	OR307-02-03
179 ± 3	180 ± 19	98.8	81.1	-	70	35	9.52[f]	OR307-02-10
1445 ± 13	*1419 ± 8*	100	99.6	1380 ± 12	618	107	9.51[f]	OR307-02-01
1460 ± 12	*1425 ± 8*	100	99.8	1373 ± 8	812	57	9.60[f]	OR307-02-11
1627 ± 31	1659 ± 20	99.7	97.5	1700 ± 23	374	160	9.70[e]	OR307-06-01
1732 ± 28	1737 ± 20	99.9	98.8	1743 ± 29	123	81	9.73[f]	OR307-02-04

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.

[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$

[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.

[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.961\pm0.004$ (07/25/2000); 0.956 ± 0.004 (07/27/2000) determined from AS-3 std. zircon

[e] Analyzed 07/25/2000: $RSF_{Pb/U} = 3.155 \times UO^+/U^+ - 22.42$ for UO^+/U^+ values in the range $9.32 < UO^+/U^+ < 9.72$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 3.7%.

[f] Analyzed 07/27/2000: $RSF_{Pb/U} = 2.500 \times UO^+/U^+ - 16.14$for UO^+/U^+ values in the range $9.32 < UO^+/U^+ < 9.91$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 2.1%.

OR312A (Orocopia Schist; Orocopia Mnts.)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*}$[b] %	$^{207}Pb^{*}$[b] %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
83 ± 2	84 ± 5	99.3	89.5	-	720	317	7.85[e]	OR312A-02-01
88 ± 2	85 ± 8	98.8	81.6	-	448	420	8.00[e]	OR312A-02-02
172 ± 4	189 ± 27	98.7	83.4	-	216	254	9.14[e]	OR312A-02-03
186 ± 3	174 ± 10	99.3	88.3	-	1144	889	7.91[e]	OR312A-02-04
233 ± 4	243 ± 8	99.8	97.0	-	633	136	7.67[e]	OR312A-02-05
1430 ± 26	1415 ± 18	99.7	97.4	1392 ± 21	204	57	8.03[e]	OR312A-02-06
1435 ± 30	1432 ± 33	99.9	98.7	1428 ± 64	110	112	7.90[e]	OR312A-02-07
1458 ± 22	1603 ± 18	101	105	1799 ± 21	143	43	7.96[e]	OR312A-02-08
1747 ± 35	1713 ± 23	99.6	97.0	1671 ± 21	224	65	8.02[e]	OR312A-02-09
1804 ± 27	1770 ± 16	99.9	99.1	1730 ± 21	524	285	7.77[e]	OR312A-02-10

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.752 \pm 0.009$ (01/30/2002) determined from AS-3 std. zircon
[e] Analyzed 01/30/2002: $RSF_{Pb/U} = 2.000 \times UO^+/U^+ - 11.35$ for UO^+/U^+ values in the range $7.76 < UO^+/U^+ < 8.25$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 2.9%.

OR313 **(Orocopia Schist; Orocopia Mnts.)**

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
94 ± 2	101 ± 7	99.4	91.3	-	708	436	8.32[e]	OR313-03-4
106 ± 2	116 ± 19	98.0	76.0	-	213	123	7.95[e]	OR313-03-2
154 ± 5	162 ± 31	97.4	69.8	-	240	217	8.32[e]	OR313-03-7
204 ± 5	207 ± 21	98.4	78.7	-	228	46	8.22[e]	OR313-03-9
1416 ± 33	1412 ± 35	99.7	97.0	1405 ± 69	103	122	7.88[e]	OR313-03-1
1686 ± 40	1735 ± 34	98.5	89.4	1795 ± 52	106	51	8.13[e]	OR313-03-8
1703 ± 22	1733 ± 13	100	102	1769 ± 13	1959	636	8.08[e]	OR313-03-3
1824 ± 20	1785 ± 11	100	100	1740 ± 6	2820	141	8.42[e]	OR313-03-6
2370 ± 27	2374 ± 15	99.0	94.9	2378 ± 16	636	376	8.27[e]	OR313-03-5

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.752 \pm 0.009$ (01/30/2002) determined from AS-3 std. zircon
[e] Analyzed 01/30/2002: $RSF_{Pb/U} = 2.000 \times UO^+/U^+ - 11.35$ for UO^+/U^+ values in the range $7.76 < UO^+/U^+ < 8.25$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 2.9%.

OR314 **(Orocopia Schist; Orocopia Mnts.)**

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
85 ± 3	85 ± 18	96.5	58.5	-	337	162	9.32[e]	OR314-05-10
86 ± 3	86 ± 15	97.4	65.6	-	468	348	9.44[e]	OR314-05-04
96 ± 2	100 ± 9	98.8	81.5	-	676	380	9.67[e]	OR314-05-01
141 ± 4	145 ± 22	97.3	65.7	-	260	134	9.71[e]	OR314-05-11
163 ± 4	153 ± 18	98.4	75.4	-	614	886	9.64[e]	OR314-05-09
243 ± 6	238 ± 9	99.5	91.7	-	1850	2113	9.14[e]	OR314-05-14
729 ± 21	*986 ± 24*	*101*	*114*	*1611 ± 25*	519	200	9.43[e]	OR314-05-08
1277 ± 50	1257 ± 68	98.2	82.7	1222 ± 137	72	42	9.22[e]	OR314-05-17
1379 ± 29	*1489 ± 22*	*99.9*	*99.1*	*1650 ± 19*	1492	91	9.35[e]	OR314-05-22
1444 ± 33	*1536 ± 21*	*99.8*	*98.2*	*1665 ± 8*	1003	43	9.43[e]	OR314-05-25
1801 ± 45	1756 ± 31	99.7	97.1	1702 ± 31	285	126	9.31[e]	OR314-05-02
1830 ± 45	*1746 ± 27*	*99.6*	*96.7*	*1646 ± 32*	830	677	9.19[e]	OR314-05-06
1905 ± 40	*1834 ± 22*	*99.9*	*98.8*	*1755 ± 11*	899	125	9.02[e]	OR314-05-20

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.901 \pm 0.005$ (02/03/2002) determined from AS-3 std. zircon
[e] Analyzed 02/03/2002: $RSF_{Pb/U} = 2.00 \times UO^+/U^+ - 12.6$ for UO^+/U^+ values in the range $9.28 < UO^+/U^+ < 9.74$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 3.3%.

OR77b (Orocopia Schist; Orocopia Mnts.)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
86 ± 2	68 ± 24	96.2	49.8	-	105	51	9.45	OR77B-03-07
88 ± 2	87 ± 9	98.8	81.0	-	244	119	9.63	OR77B-03-10
90 ± 2	82 ± 11	98.1	70.8	-	194	77	9.94	OR77B-03-02
96 ± 1	94 ± 5	98.7	79.4	-	768	28	9.62	OR77B-03-13
108 ± 1	108 ± 2	99.8	95.4	-	1249	170	9.34	OR77B-03-14
114 ± 2	112 ± 9	99.6	92.3	-	147	56	9.49	OR77B-03-22
116 ± 2	116 ± 8	99.2	87.0	-	255	42	9.63	OR77B-03-04
1054 ± 10	*1135 ± 9*	99.3	92.5	1293 ± 18	597	58	9.80	OR77B-03-09
1155 ± 9	*1232 ± 8*	99.7	97.0	1368 ± 9	1194	236	9.89	OR77B-03-08
1270 ± 12	*1316 ± 9*	100	101	1392 ± 12	472	67	10.10	OR77B-03-01
1689 ± 42	1716 ± 25	100	101	1749 ± 26	105	35	9.64	OR77B-03-06

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U}$ = 0.956±0.004 (07/27/2000) determined from AS-3 std. zircon
[e] Analyzed 07/27/2000: $RSF_{Pb/U} = 2.500 \times UO^+/U^+ - 16.14$for UO^+/U^+ values in the range $9.32 < UO^+/U^+ < 9.91$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 2.1%.

OR15A (Orocopia Schist; Orocopia Mtns.)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
71±1	65±9	98.8	80.9	-	486	275	9.76[e]	OR15A-03-07-01
71±2	84±16	95.9	61.1	-	328	157	9.89[e]	OR15A-03-02-01
72±3	68±31	93.7	43.5	-	173	45	9.97[e]	OR15A-03-18-01
73±1	68±11	98.1	73.3	-	507	387	9.94[e]	OR15A-03-23-01
79±3	86±31	93.6	47.3	-	128	221	9.58[e]	OR15A-03-21-01
87±1	85±7	99.4	89.5	-	1158	855	9.71[e]	OR15A-03-10-01
97±2	93±5	99.3	89.2	-	1114	311	9.79[e]	OR15A-03-05-01
99±2	105±10	99.1	87.1	-	482	268	9.88[e]	OR15A-03-08-01
144±3	143±10	99.4	91.2	-	468	109	9.72[e]	OR15A-03-13-01
1542±35	*1630±26*	100	100	1745±34	192	74	10.3[e]	OR15A-03-14-01

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.859 \pm 0.005$ determined from AS-3 std. zircon
[e] Analyzed 7/15/2003: $RSF_{Pb/U} = 2.703 \times UO^+/U^+ - 18.46$ for UO^+/U^+ values in the range $9.32 < UO^+/U^+ < 9.91$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 2.3%.

OR337 (Orocopia Schist; Orocopia Mtns.)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
62 ± 2	54 ± 22	91.9	35.6	-	135	77	10.8[e]	OR377-02-30-01
72 ± 2	67 ± 7	98.2	74.5	-	608	378	9.91[e]	OR337-02-08-01
73 ± 2	71 ± 22	95.1	51.5	-	397	267	10.3[e]	OR337-02-06-01
75 ± 2	75 ± 15	97.8	71.2	-	427	322	9.78[e]	OR377-02-14-01
77 ± 4	88 ± 27	95.4	57.6	-	232	242	10.1[e]	OR337-02-05-01
81 ± 2	82 ± 10	98.0	73.6	-	539	96	9.98[e]	OR377-02-12-01
109 ± 3	93 ± 24	95.0	48.0	-	256	90	10.2[e]	OR337-02-03-01
136 ± 7	142 ± 30	95.7	57.7	-	205	92	9.50[e]	OR337-02-02-01
1337 ± 20	*1392 ± 26*	100	103	1478 ± 56	559	699	10.2[e]	OR377-02-10-01
1724 ± 41	1782 ± 27	100	102	1851 ± 43	116	60	9.87[e]	OR377-02-16-01

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.859±0.005$ determined from AS-3 std. zircon
[e] Analyzed 7/15/2003: $RSF_{Pb/U} = 2.703 \times UO^+/U^+ - 18.46$ for UO^+/U^+ values in the range $9.32< UO^+/U^+ <9.91$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 2.3%.

PK144b (Orocopia Schist; Peter Kane Mnts.)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
71 ± 1	71 ± 4	97.7	67.7	-	1625	665	9.84[e]	PK114B-05-05
77 ± 1	62 ± 11	97.5	61.1	-	483	217	9.53[f]	PK114B-04-04
77 ± 1	79 ± 8	98.5	77.2	-	741	417	9.70[e]	PK114B-05-10
79 ± 2	72 ± 10	97.4	63.5	-	728	442	9.98[e]	PK114B-05-12
81 ± 2	82 ± 8	99.3	87.8	-	289	173	9.27[f]	PK114B-04-09
85 ± 4	102 ± 31	95.9	58.3	-	61	37	9.60[f]	PK114B-04-02
89 ± 2	83 ± 9	98.3	73.3	-	1170	581	9.46[e]	PK114B-05-02
96 ± 1	97 ± 4	99.7	94.3	-	516	191	9.49[f]	PK114B-04-03
101 ± 1	98 ± 4	99.8	96.3	-	722	278	9.48[f]	PK114B-04-01
107 ± 5	97 ± 61	91.5	32.3	-	112	71	9.73[e]	PK114B-05-07
138 ± 4	128 ± 40	91.0	32.1	-	407	156	9.52[f]	PK114B-04-05

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.961\pm0.004$ (07/25/2000); 0.956±0.004 (07/27/2000) determined from AS-3 std. zircon
[e] Analyzed 07/25/2000: $RSF_{Pb/U} = 3.155 \times UO^+/U^+ - 22.42$ for UO^+/U^+ values in the range $9.32 < UO^+/U^+ < 9.72$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 3.7%.
[f] Analyzed 07/27/2000: $RSF_{Pb/U} = 2.500 \times UO^+/U^+ - 16.14$for UO^+/U^+ values in the range $9.32 < UO^+/U^+ < 9.91$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 2.1%.

PR150 (Rand Schist; Portal Ridge)

^{206}Pb/^{238}U Age[a] ± 1σ (Ma)	^{207}Pb/^{235}U Age[a] ± 1σ (Ma)	^{206}Pb*[b] %	^{207}Pb*[b] %	^{207}Pb/^{206}Pb Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO$^+$/U$^+$	Analysis ID
86 ± 5	51 ± 69	84.4	15.0	-	236	-	8.13	PR150-04-14
87 ± 3	88 ± 45	86.7	27.1	-	221	-	8.51	PR150-02-01
87 ± 4	84 ± 47	89.0	30.4	-	277	-	8.42	PR150-02-12
87 ± 4	117 ± 53	86.4	32.3	-	160	-	8.29	PR150-04-13
89 ± 3	82 ± 43	91.5	35.7	-	427	-	8.33	PR150-02-14
89 ± 1	90 ± 7	97.6	70.4	-	1003	-	8.27	PR150-04-05
90 ± 1	88 ± 9	97.3	66.5	-	736	-	8.52	PR150-03-10
91 ± 2	106 ± 21	94.7	54.4	-	253	-	8.40	PR150-04-06
92 ± 5	142 ± 79	82.3	28.8	-	151	-	8.31	PR150-02-10
92 ± 3	107 ± 46	86.9	30.5	-	117	-	8.61	PR150-02-20
92 ± 1	99 ± 8	98.5	80.1	-	1200	-	8.40	PR150-03-08
93 ± 1	*115 ± 10*	98.1	78.5	-	398	-	8.29	PR150-03-09
93 ± 1	*110 ± 8*	98.4	81.1	-	630	-	8.31	PR150-04-12
94 ± 1	97 ± 11	97.3	68.0	-	811	-	8.36	PR150-03-05
95 ± 3	102 ± 38	87.6	30.0	-	236	-	8.58	PR150-02-21
98 ± 3	132 ± 54	86.8	33.5	-	292	-	8.49	PR150-03-02
99 ± 3	87 ± 43	88.6	27.7	-	273	-	8.02	PR150-04-02
99 ± 11	111 ± 167	67.9	11.4	-	55	-	8.46	PR150-02-04
100 ± 1	103 ± 9	98.1	75.6	-	2815	-	8.24	PR150-03-13
102 ± 2	102 ± 26	94.0	47.3	-	492	-	8.27	PR150-03-17
103 ± 3	*152 ± 30*	94.3	58.3	-	287	-	8.17	PR150-03-16
112 ± 1	134 ± 15	96.4	65.2	-	456	-	8.31	PR150-02-11
113 ± 8	*257 ± 103*	82.8	39.1	1928 ± 735	50	-	8.69	PR150-02-08
116 ± 2	120 ± 17	96.7	63.6	-	829	-	8.05	PR150-03-19
116 ± 6	97 ± 92	81.8	17.1	-	145	-	8.44	PR150-02-19
119 ± 6	119 ± 85	81.2	19.8	-	60	-	8.28	PR150-04-07
119 ± 7	202 ± 107	77.9	25.8	-	51	-	8.18	PR150-02-16
121 ± 9	*310* ± 119	77.2	33.9	2182 ± 705	65	-	8.05	PR150-04-11
125 ± 2	130 ± 20	96.4	61.4	-	489	-	8.41	PR150-02-03
140 ± 3	140 ± 39	91.4	38.3	-	168	-	8.44	PR150-03-01
153 ± 4	162 ± 55	90.4	36.8	-	144	-	8.41	PR150-03-04
158 ± 9	245 ± 113	84.6	33.4	-	87	-	8.11	PR150-03-18
170 ± 7	234 ± 89	86.6	34.6	-	78	-	8.20	PR150-04-09
189 ± 2	195 ± 13	98.3	78.1	-	569	-	8.53	PR150-03-03
196 ± 3	239 ± 39	94.2	54.4	-	239	-	8.05	PR150-02-17
1123 ± 14	*1225 ± 21*	98.9	90.2	1408 ± 44	275	-	8.17	PR150-03-14
1298 ± 7	*1320* ± 7	99.3	93.5	1356 ± 10	1617	-	8.24	PR150-03-07

PR150 (continued)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
1387 ± 16	1381 ± 17	99.3	93.3	1372 ± 28	171	-	8.60	PR150-04-20
1435 ± 13	1414 ± 8	99.9	98.9	1381 ± 8	997	-	8.16	PR150-03-20
1472 ± 13	1483 ± 9	99.8	98.2	1500 ± 11	693	-	8.35	PR150-03-06

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.

[b] Radiogenic Pb calculated using ^{204}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$

[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.

[d] $^{232}Th^+$ and $^{208}Pb^+$ not measured.

[e] Analyzed 08/26/1999: $RSF_{Pb/U} = 1.795 \times UO^+/U^+ - 9.689$ for UO^+/U^+ values in the range $7.93 < UO^+/U^+ < 8.85$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 1.4%.

RA169 (Rand Schist; Rand Mnts.)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*}$[b] %	$^{207}Pb^{*}$[b] %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^{+}/U^{+}	Analysis ID
79 ± 3	76 ± 5	99.0	83.9	-	307	148	8.73[e]	RA169-04-06
84 ± 2	93 ± 9	99.4	90.8	-	161	94	8.66[e]	RA169-02-12
85 ± 3	74 ± 20	97.0	61.4	-	122	58	8.87[e]	RA169-02-02
85 ± 2	85 ± 14	97.3	66.7	-	235	92	8.88[e]	RA169-02-08
86 ± 2	89 ± 7	99.5	91.5	-	292	209	8.59[e]	RA169-02-21
88 ± 5	87 ± 8	99.2	87.5	-	336	151	8.47[e]	RA169-04-07
90 ± 3	99 ± 6	100	102	-	427	420	8.71[e]	RA169-03-13
91 ± 1	91 ± 4	99.4	90.0	-	594	403	8.54[e]	RA169-04-08
91 ± 2	96 ± 13	97.3	68.4	-	544	271	8.80[e]	RA169-02-16
93 ± 2	91 ± 7	98.8	82.2	-	285	154	8.66[e]	RA169-02-07
93 ± 2	84 ± 5	98.8	81.5	-	377	190	8.38[e]	RA169-04-14
94 ± 4	112 ± 61	83.1	24.8	-	51	20	8.96[e]	RA169-02-18
94 ± 2	95 ± 5	99.4	90.6	-	325	62	8.57[e]	RA169-03-12
95 ± 2	98 ± 13	97.1	66.4	-	366	163	8.64[e]	RA169-02-10
96 ± 2	100 ± 5	99.8	97.3	-	465	342	8.65[e]	RA169-03-06
97 ± 4	127 ± 40	92.5	47.8	-	63	38	8.57[e]	RA169-03-01
98 ± 2	94 ± 4	99.5	91.7	-	820	521	8.45[e]	RA169-03-16
102 ± 2	97 ± 5	99.4	90.3	-	474	259	8.40[e]	RA169-06-02
103 ± 4	119 ± 17	99.4	91.1	-	207	140	8.16[e]	RA169-02-01
109 ± 4	119 ± 17	97.6	71.9	-	69	22	8.48[e]	RA169-04-09
110 ± 2	99 ± 17	81.6	18.6	-	397	278	9.06[e]	RA169-02-11
111 ± 2	110 ± 5	99.2	87.4	-	745	239	8.53[e]	RA169-03-03
111 ± 2	117 ± 5	99.9	97.6	-	849	180	8.66[e]	RA169-02-04
112 ± 3	132 ± 35	95.6	59.7	-	59	27	8.74[e]	RA169-02-06
112 ± 3	122 ± 15	97.4	70.2	-	106	50	8.62[e]	RA169-02-03
114 ± 4	114 ± 28	95.0	52.0	-	77	25	8.63[e]	RA169-02-14
115 ± 5	121 ± 14	98.2	76.5	-	99	49	8.49[e]	RA169-04-05
116 ± 5	119 ± 9	98.9	84.8	-	137	46	8.49[e]	RA169-04-10
118 ± 5	104 ± 36	82.1	18.8	-	177	15	8.37[e]	RA169-04-17
121 ± 3	122 ± 13	98.2	75.9	-	53	10	8.45[e]	RA169-04-13
128 ± 3	125 ± 6	99.1	86.1	-	257	70	8.60[e]	RA169-02-19
131 ± 2	125 ± 7	99.1	86.1	-	238	104	8.18[e]	RA169-06-01
140 ± 5	136 ± 15	98.6	79.8	-	136	56	8.42[e]	RA169-03-04
155 ± 6	160 ± 11	99.4	91.5	-	169	121	8.66[e]	RA169-04-11
156 ± 7	150 ± 45	90.3	34.0	-	84	28	8.26[e]	RA169-04-15
156 ± 5	160 ± 47	95.6	56.0	-	35	10	8.77[e]	RA169-02-20
164 ± 13	164 ± 17	99.0	85.5	-	78	26	8.83[e]	RA169-04-02
184 ± 6	188 ± 26	98.2	76.4	-	226	67	8.33[e]	RA169-02-05
193 ± 3	194 ± 10	99.4	90.3	-	140	41	8.51[e]	RA169-04-12
208 ± 25	212 ± 25	100	102	-	1017	726	8.17[e]	RA169-03-18
331 ± 7	*356 ± 10*	98.7	83.8	523 ± 48	1323	184	8.85[e]	RA169-02-13
508 ± 10	*696 ± 15*	98.2	84.8	1361 ± 40	259	108	8.29[e]	RA169-04-19
1342 ± 35	1356 ± 21	100	100	1378 ± 15	684	60	9.05[e]	RA169-03-02

RA169 (continued)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
1347 ± 50	1435 ± 59	101	110	1569 ± 107	94	89	9.15 [e]	RA169-04-01
1550 ± 47	1603 ± 29	99.8	98.4	1674 ± 36	338	113	8.77 [e]	RA169-03-08
1629 ± 63	1657 ± 36	99.8	98.8	1691 ± 38	364	135	8.66 [e]	RA169-03-15

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.

[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$

[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.

[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.823 \pm 0.004$ determined from AS-3 std. zircon

[e] Analyzed 11/29/1999: $RSF_{Pb/U} = 2.326 \times UO^+/U^+ - 14.12$ for UO^+/U^+ values in the range $8.22 < UO^+/U^+ < 9.04$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 4.1%.

RA170 (**Rand Schist; Rand Mnts.**)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*}$[b] %	$^{207}Pb^{*}$[b] %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
79 ± 2	80 ± 15	96.7	62.4	-	522	-	8.72[e]	RA170-06-10
89 ± 3	51 ± 56	84.0	13.9	-	229	-	8.70[e]	RA170-06-09
89 ± 2	89 ± 29	92.8	42.1	-	361	-	8.62[e]	RA170-06-07
91 ± 2	*113 ± 16*	95.9	63.1	-	301	-	8.46[e]	RA170-08-12
92 ± 2	107 ± 24	93.7	49.8	-	541	-	8.41[e]	RA170-06-17
92 ± 2	118 ± 26	93.9	53.2	-	401	-	8.55[e]	RA170-08-05
92 ± 2	102 ± 24	95.8	59.0	-	458	-	8.34[e]	RA170-07-17
93 ± 2	106 ± 31	93.9	49.8	-	424	-	8.16[e]	RA170-07-10
93 ± 2	*134 ± 28*	93.5	54.3	-	349	-	8.70[e]	RA170-08-03
94 ± 2	*129 ± 26*	94.9	59.3	-	298	-	8.32[e]	RA170-07-04
94 ± 2	101 ± 18	95.2	54.8	-	708	-	8.19[e]	RA170-08-15
94 ± 2	*136* ± 15	97.2	74.5	-	238	-	8.42[e]	RA170-06-22
94 ± 2	135 ± 39	91.1	45.7	-	295	-	8.51[e]	RA170-07-20
94 ± 2	*140 ± 29*	95.0	61.8	-	471	-	8.31[e]	RA170-07-19
94 ± 1	*112* ± 6	98.9	86.1	-	658	-	8.47[e]	RA170-06-13
96 ± 4	130 ± 60	89.5	39.4	-	212	-	8.32[e]	RA170-06-18
97 ± 3	124 ± 32	95.7	62.3	-	377	-	8.34[e]	RA170-06-22
107 ± 3	106 ± 43	91.2	37.0	-	339	-	8.42[e]	RA170-06-15
108 ± 3	*167* ± 38	90.8	47.3	-	156	-	8.14[e]	RA170-08-16
112 ± 2	*169* ± 33	93.6	56.5	-	295	-	8.65[e]	RA170-06-06
112 ± 3	138 ± 51	90.3	39.8	-	217	-	8.48[e]	RA170-06-02
115 ± 1	119 ± 7	98.6	80.4	-	1000	-	8.33[e]	RA170-07-05
118 ± 3	159 ± 42	90.0	41.1	-	203	-	8.30[e]	RA170-06-21
120 ± 3	152 ± 41	93.1	49.6	-	209	-	8.41[e]	RA170-08-13
121 ± 2	133 ± 23	96.6	64.2	-	425	-	8.28[e]	RA170-07-06
121 ± 4	*219 ± 40*	93.9	62.7	1474 ± 350	191	-	8.31[e]	RA170-07-11
123 ± 3	140 ± 39	93.0	46.7	-	313	-	8.46[e]	RA170-06-14
124 ± 3	147 ± 24	96.8	67.4	-	372	-	8.25[e]	RA170-07-01
125 ± 3	160 ± 42	93.7	52.9	-	255	-	8.56[e]	RA170-08-04
127 ± 5	189 ± 67	89.5	42.4	-	209	-	8.43[e]	RA170-07-21
128 ± 4	157 ± 62	89.3	37.2	-	176	-	8.21[e]	RA170-06-23
130 ± 5	134 ± 64	87.5	29.0	-	161	-	8.33[e]	RA170-08-14
135 ± 6	168 ± 93	86.3	30.9	-	92	-	8.33[e]	RA170-07-02
142 ± 6	*255 ± 82*	90.6	50.8	1492 ± 635	171	-	8.56[e]	RA170-06-01
197 ± 4	227 ± 42	94.9	56.6	-	235	-	8.45[e]	RA170-06-12
208 ± 7	*319 ± 10*	98.7	87.8	1231 ± 61	855	-	8.53[e]	RA170-07-18

RA170 (continued)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*}$[b] %	$^{207}Pb^{*}$[b] %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
361 ± *5*	*547* ± *9*	99.3	93.6	1421 ± 31	868	-	8.34 [e]	RA170-06-04
469 ± *10*	*701* ± *40*	97.7	82.7	1542 ± 121	196	-	8.41 [e]	RA170-08-05
1507 ± *32*	*1587* ± *26*	99.1	93.3	1696 ± 32	104	-	8.82 [e]	RA170-08-06

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.

[b] Radiogenic Pb calculated using ^{204}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb$ = 18.7; $^{207}Pb/^{204}Pb$ = 15.6; $^{208}Pb/^{204}Pb$ = 37.9

[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.

[d] $^{232}Th^+$ and $^{208}Pb^+$ not measured.

[e] Analyzed 08/26/1999: $RSF_{Pb/U}$ = 1.795 x UO^+/U^+ - 9.689 for UO^+/U^+ values in the range 8.26< UO^+/U^+ <8.85. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 0.9%.

SG532 **(Pelona Schist; San Gabriel Mnts. - East Fork)**

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
74 ± 2	73 ± 12	97.5	65.3	-	518	169	9.87[e]	SG532-06-02
74 ± 2	60 ± 26	92.6	33.1	-	111	33	9.81[e]	SG532-06-14
74 ± 2	73 ± 26	95.1	48.2	-	252	121	9.72[e]	SG532-06-13
77 ± 2	77 ± 31	93.4	40.9	-	176	97	9.58[e]	SG532-06-11
78 ± 1	81 ± 13	98.2	73.3	-	523	200	9.69[e]	SG532-06-01
93 ± 4	120 ± 41	93.2	47.2	-	101	84	9.85[e]	SG532-06-07
251 ± 4	226 ± 24	97.4	64.5	-	165	66	9.79[e]	SG532-06-04
1471 ± 14	*1526 ± 9*	100	99.5	1602 ± 9	526	8	9.76[e]	SG532-06-08
1731 ± 27	1752 ± 18	99.8	98.5	1777 ± 23	535	335	9.51[e]	SG532-06-12
1753 ± 15	1757 ± 9	100	99.8	1761 ± 8	645	141	9.94[e]	SG532-06-06

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.

[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$

[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.

[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.953 \pm 0.006$ determined from AS-3 std. zircon

[e] Analyzed 7/26/2000: $RSF_{Pb/U} = 2.500 \times UO^+/U^+ - 16.26$ for UO^+/U^+ values in the range $9.32 < UO^+/U^+ < 9.91$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 3.1%.

SG533 (Pelona Schist; San Gabriel Mnts. - East Fork)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
69 ± 5	110 ± 87	40.3	5.9	-	62	22	11.1[f]	SG533-03-05
73 ± 1	72 ± 4	99.6	93.2	-	354	34	19.0[e]	SG533-02-01
75 ± 1	68 ± 15	97.3	64.7	-	394	201	11.2[f]	SG533-03-03
76 ± 2	69 ± 21	96.0	55.4	-	213	103	11.2[f]	SG533-04-14
77 ± 1	78 ± 8	99.1	86.5	-	1122	451	11.7[f]	SG533-03-13
78 ± 2	75 ± 18	97.1	64.6	-	328	56	11.0[f]	SG533-04-25
78 ± 1	82 ± 17	97.4	68.6	-	525	239	11.2[f]	SG533-04-18
78 ± 1	75 ± 13	98.0	72.1	-	833	320	11.1[f]	SG533-03-04
80 ± 1	75 ± 16	97.6	67.9	-	141	34	16.1[e]	SG533-02-10
80 ± 1	79 ± 6	99.1	85.7	-	981	375	11.2[f]	SG533-03-10
81 ± 1	80 ± 14	97.8	71.2	-	682	192	11.4[f]	SG533-04-15
81 ± 1	80 ± 17	97.2	65.6	-	447	108	11.3[f]	SG533-02-24
84 ± 1	83 ± 2	99.8	96.0	-	2538	382	11.2[f]	SG533-04-20
84 ± 1	83 ± 2	99.8	96.3	-	1618	225	16.7[e]	SG533-02-08
85 ± 3	37 ± 62	42.5	1.7	-	461	140	10.4[f]	SG533-04-02
88 ± 1	70 ± 16	78.3	14.0	-	566	205	12.4[f]	SG533-02-21
89 ± 1	83 ± 6	99.0	84.6	-	688	399	14.8[e]	SG533-02-17
93 ± 1	86 ± 11	93.6	43.3	-	3844	272	11.6[f]	SG533-04-05
96 ± 3	56 ± 51	92.5	28.4	-	114	27	11.4[f]	SG533-03-20
97 ± 1	87 ± 9	91.7	36.2	-	263	150	15.5[e]	SG533-02-04
104 ± 1	104 ± 9	99.0	85.4	-	781	278	12.1[f]	SG533-03-16
107 ± 3	114 ± 40	95.5	55.9	-	225	115	11.5[f]	SG533-03-06
107 ± 1	105 ± 5	99.3	88.5	-	800	20	13.1[e]	SG533-02-20
116 ± 3	123 ± 35	96.5	63.0	-	132	57	10.9[f]	SG533-02-23
176 ± 2	171 ± 21	98.5	79.4	-	470	341	11.0[f]	SG533-04-27
225 ± 3	214 ± 14	98.9	83.8	-	180	82	16.0[e]	SG533-02-03
238 ± 3	247 ± 19	99.5	92.3	-	167	76	18.4[e]	SG533-02-06
243 ± 12	271 ± 86	96.9	67.4	-	69	8	16.1[e]	SG533-02-13
1337 ± 13	*1411 ± 8*	99.9	98.8	1525 ± 13	1592	68	11.2[f]	SG533-04-09
1385 ± 20	*1569 ± 34*	102	115	1827 ± 60	71	39	12.1[f]	SG533-03-12
1551 ± 14	*1596 ± 10*	99.9	99.0	1656 ± 12	703	51	11.0[f]	SG533-03-11
1669 ± 13	1680 ± 9	100	101	1693 ± 12	249	11	16.4[e]	SG533-02-22

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.988 \pm 0.010$ (session1); 0.946 ± 0.007 (session 2) determined from AS-3 std. zircon
[e] Analyzed 03/23/2000: $RSF_{Pb/U} = 0.784 \times UO^+/U^+ - 0.185$ for UO^+/U^+ values in the range $16.5 < UO^+/U^+ < 18.0$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 1.8%.
[f] Analyzed 03/23/2000: $RSF_{Pb/U} = 0.971 \times UO^+/U^+ - 1.679$ for UO^+/U^+ values in the range $10.9 < UO^+/U^+ < 12.3$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 3.1%.

SG69 (Pelona Schist; San Gabriel Mnts. - East Fork)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*}$[b] %	$^{207}Pb^{*}$[b] %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
82 ± 2	70 ± 21	95.7	48.7	-	279	207	9.64	SG69-07-01
83 ± 2	86 ± 21	89.4	30.3	-	235	111	9.70	SG69-07-08
98 ± 1	96 ± 16	97.5	65.4	-	505	180	9.58	SG69-07-11
126 ± 2	121 ± 7	98.6	77.0	-	903	352	9.63	SG69-07-05
148 ± 5	143 ± 23	97.4	65.4	-	70	75	9.70	SG69-07-14
152 ± 2	145 ± 16	97.7	67.9	-	362	88	9.77	SG69-07-04
159 ± 3	149 ± 17	97.9	69.3	-	165	159	9.49	SG69-07-13
162 ± 3	161 ± 21	96.8	60.6	-	198	107	9.63	SG69-07-02
1450 ± 32	1474 ± 30	99.7	96.7	1509 ± 50	103	86	9.72	SG69-07-10
1777 ± 25	*1712 ± 13*	99.9	98.6	1634 ± 10	474	136	9.36	SG69-07-06

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.953 \pm 0.006$ determined from AS-3 std. zircon
[e] Analyzed 7/26/2000: $RSF_{Pb/U} = 2.500 \times UO^+/U^+ - 16.26$ for UO^+/U^+ values in the range $9.32 < UO^+/U^+ < 9.91$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 3.1%.

SP10 (**Pelona Schist; Sierra Pelona**)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
92 ± 1	87 ± 15	96.4	56.3	-	712	403	9.69[e]	SP10-05-02
96 ± 1	97 ± 16	97.2	64.1	-	1055	291	9.99[e]	SP10-05-04
97 ± 1	79 ± 9	92.0	32.0	-	771	369	9.57[e]	SP10-05-05
98 ± 1	75 ± 11	95.3	43.6	-	1412	488	10.2[e]	SP10-05-03
98 ± 1	95 ± 8	98.7	78.7	-	648	204	9.84[e]	SP10-05-18
98 ± 2	91 ± 28	95.4	49.2	-	228	59	9.73[e]	SP10-05-07
98 ± 2	103 ± 21	97.4	66.3	-	428	144	9.76[e]	SP10-05-06
100 ± 2	99 ± 16	97.6	66.8	-	421	129	9.66[e]	SP10-05-16
111 ± 15	90 ± 235	69.4	7.4	-	499	186	9.66[e]	SP10-05-01
114 ± 2	111 ± 12	94.1	44.1	-	271	139	9.67[e]	SP10-05-08

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.953 \pm 0.006$ determined from AS-3 std. zircon
[e] Analyzed 7/26/2000: $RSF_{Pb/U} = 2.500 \times UO^+/U^+ - 16.26$ for UO^+/U^+ values in the range $9.32 < UO^+/U^+ < 9.91$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 3.1%.

SP-25D (Pelona Schist; Sierra Pelona)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb*$[b] %	$^{207}Pb*$[b] %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
77 ± 3	72 ± 58	85.9	21.5	-	251	69	10.3[e]	SP25D-03-05
83 ± 2	75 ± 34	92.5	35.6	-	258	87	9.88[e]	SP25D-03-07
91 ± 1	95 ± 19	96.9	62.0	-	793	330	9.70[e]	SP25D-03-01
92 ± 1	92 ± 15	97.1	62.6	-	506	41	9.87[e]	SP25D-03-11
95 ± 3	109 ± 35	95.9	57.2	-	287	59	9.68[e]	SP25D-03-03
96 ± 2	95 ± 33	94.6	46.4	-	405	238	9.60[e]	SP25D-03-06
96 ± 1	87 ± 9	98.5	74.8	-	1053	501	9.71[e]	SP25D-03-10
101 ± 2	109 ± 15	98.5	78.4	-	155	64	9.71[e]	SP25D-03-02
105 ± 2	102 ± 19	97.3	63.6	-	457	123	9.94[e]	SP25D-03-09
106 ± 3	96 ± 35	95.0	46.2	-	235	66	9.97[e]	SP25D-03-08

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.953±0.006$ determined from AS-3 std. zircon
[e] Analyzed 7/26/2000: $RSF_{Pb/U} = 2.500 \times UO^+/U^+ - 16.26$ for UO^+/U^+ values in the range $9.32< UO^+/U^+ <9.91$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 3.1%.

TR-23 (Orocopia Schist; Trigo Mnts.)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*}$[b] %	$^{207}Pb^{*}$[b] %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
59 ± 1	58 ± 4	99.3	88.5	-	1581	45	9.96[f]	TR23-05-12
67 ± 1	58 ± 13	96.4	56.5	-	734	87	10.4[e]	TR23-05-03
68 ± 3	72 ± 28	95.5	54.6	-	259	19	10.6[e]	TR23-05-05
82 ± 2	73 ± 11	98.0	71.6	-	477	52	9.80[e]	TR23-05-01
83 ± 2	84 ± 7	99.1	86.3	-	745	284	9.85[e]	TR23-05-04
92 ± 2	89 ± 13	98.3	75.7	-	197	58	9.70[f]	TR23-05-06
97 ± 2	96 ± 6	99.4	91.0	-	710	135	9.60[f]	TR23-05-13
113 ± 4	72 ± 22	95.4	42.8	-	272	123	9.60[f]	TR23-05-14
113 ± 2	107 ± 13	96.2	58.2	-	586	353	9.58[f]	TR23-05-11
123 ± 5	153 ± 21	99.4	92.1	-	314	199	8.89[e]	TR23-05-08
125 ± 3	104 ± 14	98.0	69.8	-	192	85	9.63[f]	TR23-05-08
126 ± 2	131 ± 26	96.4	61.4	-	560	90	9.72[f]	TR23-05-04
129 ± 4	129 ± 7	99.8	97.2	-	1264	644	8.33[e]	TR23-05-09
138 ± 3	148 ± 14	98.9	85.3	-	274	136	9.66[f]	TR23-05-05
140 ± 5	130 ± 25	97.6	69.1	-	185	30	10.4[e]	TR23-05-02
154 ± 4	166 ± 38	94.4	51.5	-	114	38	9.24[f]	TR23-05-09
179 ± 35	268 ± 504	79.8	19.0	-	24	8	9.85[f]	TR23-05-10

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.894 \pm 0.008$ (3/19/2001) 8.91 ± 0.07 (4/01/2001) determined from AS-3 std. zircon
[e] Analyzed 3/19/2001: $RSF_{Pb/U} = 2.320 \times UO^+/U^+ - 14.91$ for UO^+/U^+ values in the range $9.13 < UO^+/U^+ < 9.86$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 5.0%.
[f] Analyzed 4/01/2001: $RSF_{Pb/U} = 2.398 \times UO^+/U^+ - 16.57$ for UO^+/U^+ values in the range $9.25 < UO^+/U^+ < 9.85$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 1.7%.

TR-24C (Orocopia Schist; Trigo Mnts.)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
68 ± 10	116 ± 148	69.1	17.4	-	95	57	9.63[e]	TR24C-02-02
82 ± 4	-24 ± 81	63.7	-2.8	-	263	153	9.61[f]	TR24C-03-12
83 ± 2	78 ± 14	98.3	75.3	-	377	98	9.76[f]	TR24C-03-16
108 ± 3	113 ± 29	92.6	42.6	-	619	194	9.71[f]	TR24C-03-09
111 ± 14	46 ± 209	50.6	2.1	-	501	29	9.98[e]	TR24C-02-03
147 ± 3	139 ± 10	98.9	83.4	-	775	619	9.83[f]	TR24C-03-10
166 ± 3	164 ± 15	95.8	57.0	-	639	372	10.0[f]	TR24C-03-06
171 ± 2	165 ± 8	99.2	87.2	-	550	553	9.49[f]	TR24C-03-19
173 ± 8	*299 ± 78*	98.3	85.3	1456 ± 516	112	151	9.02[e]	TR24C-03-02
189 ± 9	167 ± 70	84.5	21.8	-	208	139	10.0[f]	TR24C-03-13
206 ± 6	208 ± 24	98.9	84.2	-	321	35	9.70[f]	TR24C-03-11
225 ± 3	224 ± 6	99.2	88.5	-	2085	293	9.71[f]	TR24C-03-07
1132 ± 47	*1341 ± 32*	99.4	95.5	1693 ± 36	377	53	9.68[f]	TR24C-03-08
1270 ± 11	*1435 ± 8*	99.8	98.2	1689 ± 11	1558	91	9.90[f]	TR24C-03-18
1475 ± 27	1474 ± 16	99.9	98.8	1471 ± 19	414	12	9.47[e]	TR24C-02-04
1623 ± 28	1648 ± 16	100	99.9	1679 ± 6	1004	96	9.90[f]	TR24C-03-15
1689 ± 50	1715 ± 41	100	101	1746 ± 53	60	37	10.0[e]	TR24C-03-01

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb$ = 18.7; $^{207}Pb/^{204}Pb$ = 15.6; $^{208}Pb/^{204}Pb$ = 37.9
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U}$ = 0.894±0.008 (3/19/2001) 8.91±0.07 (4/01/2001) determined from AS-3 std. zircon
[e] Analyzed 3/19/2001: $RSF_{Pb/U} = 2.320 \times UO^+/U^+ - 14.91$ for UO^+/U^+ values in the range $9.13 < UO^+/U^+ < 9.86$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 5.0%.
[f] Analyzed 4/01/2001: $RSF_{Pb/U} = 2.398 \times UO^+/U^+ - 16.57$ for UO^+/U^+ values in the range $9.25 < UO^+/U^+ < 9.85$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 1.7%.

UG1417A (Orocopia Schist; Gavilan Hills)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
74 ± 1	84 ± 9	99.2	88.7	-	509	-	10.7[f]	U-01417-03-18
74 ± 3	90 ± 40	95.7	95.7	-	389	-	10.2[e]	U-01417-03-12
75 ± 2	99 ± 19	99.7	99.7	-	506	-	9.65[e]	U-01417-03-02
75 ± 3	61 ± 44	93.3	37.4	-	397	-	11.1[f]	U-01417-04-10
75 ± 1	96 ± 16	98.4	98.4	-	664	-	10.1[e]	U-01417-02-15
75 ± 2	72 ± 32	93.9	93.9	-	877	-	9.75[e]	U-01417-02-03
76 ± 2	71 ± 18	96.1	96.1	-	779	-	10.0[e]	U-01417-03-05
76 ± 2	85 ± 22	95.5	95.5	-	1031	-	10.4[e]	U-01417-02-12
76 ± 2	91 ± 14	99.4	99.4	-	692	-	10.2[e]	U-01417-03-06
77 ± 3	*154 ± 41*	96.9	96.9	-	203	-	10.0[e]	U-01417-02-18
77 ± 2	94 ± 18	99.2	99.2	-	500	-	9.92[e]	U-01417-03-08
78 ± 1	73 ± 17	97.5	67.1	-	394	-	10.9[f]	U-01417-04-11
78 ± 5	71 ± 79	89.5	27.4	-	214	-	11.3[f]	U-01417-04-13
78 ± 1	71 ± 14	97.4	65.4	-	2510	-	11.2[f]	U-01417-04-15
78 ± 2	71 ± 21	97.8	97.8	-	1214	-	9.74[e]	U-01417-02-02
78 ± 2	84 ± 29	95.7	56.8	-	383	-	11.6[f]	U-01417-04-12
79 ± 11	29 ± 224	74.0	4.5	-	86	-	11.7[f]	U-01417-04-05
80 ± 2	109 ± 31	96.7	96.7	-	685	-	10.0[e]	U-01417-03-16
81 ± 3	85 ± 43	93.7	46.2	-	619	-	11.9[f]	U-01417-04-01
82 ± 3	94 ± 43	95.4	55.6	-	486	-	11.1[f]	U-01417-04-14
82 ± 2	*121 ± 25*	95.2	95.2	-	509	-	9.84[e]	U-01417-02-13
83 ± 2	74 ± 28	96.0	54.3	-	676	-	12.0[f]	U-01417-04-09
83 ± 4	92 ± 57	93.3	43.6	-	197	-	10.9[f]	U-01417-04-16
83 ± 1	77 ± 9	99.0	99.0	-	1691	-	10.2[e]	U-01417-03-01
83 ± 3	86 ± 45	92.5	92.5	-	548	-	9.68[e]	U-01417-02-06
84 ± 4	94 ± 53	92.4	42.9	-	293	-	12.0[f]	U-01417-04-02
85 ± 4	*162 ± 54*	95.6	68.0	-	175	-	12.0[f]	U-01417-04-08
88 ± 2	72 ± 31	95.5	95.5	-	687	-	10.0[e]	U-01417-02-16
90 ± 6	143 ± 86	87.4	36.7	-	275	-	12.0[f]	U-01417-04-06
93 ± 10	108 ± 157	85.2	85.2	-	295	-	10.4[e]	U-01417-03-17
96 ± 4	115 ± 53	95.3	95.3	-	278	-	10.0[e]	U-01417-03-11
98 ± 3	104 ± 21	97.5	97.5	-	804	-	10.1[e]	U-01417-03-09
114 ± 7	143 ± 90	90.4	90.4	-	155	-	9.54[e]	U-01417-02-08
140 ± 3	133 ± 38	96.2	96.2	-	702	-	9.80[e]	U-01417-02-07
248 ± 5	232 ± 34	96.9	96.9	-	655	-	9.85[e]	U-01417-02-10
282 ± 4	274 ± 40	97.6	70.7	-	333	-	12.0[f]	U-01417-04-03
1419 ± 16	*1536 ± 11*	99.8	99.8	1702 ± 14	2279	-	9.70[e]	U-01417-02-04
1551 ± 10	*1595 ± 15*	99.7	97.7	1654 ± 32	271	-	10.9[f]	U-01417-03-19
1650 ± 43	1665 ± 27	99.4	99.4	1684 ± 42	262	-	9.92[e]	U-01417-02-11
1664 ± 38	1643 ± 32	99.6	99.6	1616 ± 51	225	-	9.49[e]	U-01417-02-14
1672 ± 23	1696 ± 15	99.8	99.8	1725 ± 22	847	-	9.68[e]	U-01417-02-09
1675 ± 24	1678 ± 18	99.8	99.8	1683 ± 23	702	-	9.89[e]	U-01417-02-05

UG1417A (continued)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*}$[b] %	$^{207}Pb^{*}$[b] %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
1699 ± 11	1686 ± 25	99.3	94.2	1670 ± 49	281	-	11.2 [f]	U-01417-03-20
1741 ± 13	1711 ± 29	99.0	92.4	1675 ± 58	210	-	11.6 [f]	U-01417-04-04
1749 ± 69	1752 ± 45	99.5	99.5	1754 ± 55	105	-	10.0 [e]	U-01417-03-04

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.

[b] Radiogenic Pb calculated using ^{204}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb$ = 18.7; $^{207}Pb/^{204}Pb$ = 15.6; $^{208}Pb/^{204}Pb$ = 37.9

[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.

[d] $^{232}Th^+$ and $^{208}Pb^+$ not measured.

[e] Analyzed 11/13/1998: $RSF_{Pb/U}$ = 2.283 x UO^+/U^+ - 14.43for UO^+/U^+ values in the range 9.53< UO^+/U^+ <10.0. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 1.7%.

[f] Analyzed 11/28/1998: $RSF_{Pb/U}$ = 0.797 x UO^+/U^+ + 1.944 for UO^+/U^+ values in the range 10.9< UO^+/U^+ <11.3. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 0.6%.

UG-1500 (Orocopia Schist; Gavilan Hills)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*}$[b] %	$^{207}Pb^{*}$[b] %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
108 ± 3	71 ± 42	61.1	5.5	-	584	61	8.91[e]	UG1500-06-13
109 ± 2	114 ± 17	86.0	27.2	-	921	887	10.1[e]	UG1500-06-04
111 ± 2	108 ± 3	99.2	87.1	-	2116	1143	9.65[e]	UG1500-06-07
117 ± 2	113 ± 3	99.2	87.9	-	2113	690	9.47[e]	UG1500-06-15
136 ± 2	138 ± 4	99.0	85.4	-	568	265	9.16[e]	UG1500-06-16
192 ± 2	183 ± 13	90.6	35.4	-	373	39	9.73[e]	UG1500-06-11
274 ± 4	*168 ± 42*	63.0	5.8	-	320	138	9.32[e]	UG1500-06-18
343 ± 17	265 ± 137	72.8	11.2	-	1431	68	7.70[e]	UG1500-06-14
1073 ± 23	*1020 ± 18*	99.2	91.0	907 ± 33	137	49	9.45[e]	UG1500-06-02
1811 ± 27	*1752 ± 21*	99.0	92.8	1683 ± 34	301	234	9.63[e]	UG1500-06-01

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.
[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$
[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.
[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.851 \pm 0.005$ determined from AS-3 std. zircon
[e] Analyzed 6/11/2001: $RSF_{Pb/U} = 1.869 \times UO^+/U^+ - 11.53$ for UO^+/U^+ values in the range $9.21 < UO^+/U^+ < 10.5$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 2.2%.

YN-17 (Orocopia Schist; Yellow Narrows)

$^{206}Pb/^{238}U$ Age[a] ± 1σ (Ma)	$^{207}Pb/^{235}U$ Age[a] ± 1σ (Ma)	$^{206}Pb^{*b}$ %	$^{207}Pb^{*b}$ %	$^{207}Pb/^{206}Pb$ Age ± 1σ (Ma)	U[c] (ppm)	Th[d] (ppm)	UO^+/U^+	Analysis ID
100 ± 2	94 ± 18	95.4	49.3	-	414	163	9.44[e]	YN17-02-01
156 ± 2	140 ± 15	98.3	72.8	-	365	387	9.85[e]	YN17-02-18
159 ± 3	124 ± 22	97.5	60.6	-	347	492	9.77[e]	YN17-02-09
168 ± 3	174 ± 42	97.7	69.6	-	169	274	9.74[e]	YN17-02-07
178 ± 2	188 ± 11	99.4	89.9	-	567	377	9.46[e]	YN17-02-05
184 ± 5	199 ± 43	96.4	60.0	-	119	31	9.73[e]	YN17-02-08
1129 ± 51	1178 ± 121	96.2	68.7	1279 ± 325	17	14	9.77[e]	YN17-02-14
1170 ± 42	1151 ± 61	98.0	79.6	1115 ± 168	47	49	9.71[e]	YN17-02-15
1187 ± 38	1210 ± 56	98.9	88.3	1251 ± 132	45	33	9.73[e]	YN17-02-16
1228 ± 27	1205 ± 27	99.6	95.2	1165 ± 65	158	121	9.63[e]	YN17-02-12
1377 ± 15	*1441 ± 13*	99.9	99.0	1538 ± 22	334	73	9.96[e]	YN17-02-17
1642 ± 17	1657 ± 11	99.9	99.3	1677 ± 13	390	57	9.92[e]	YN17-02-13
1668 ± 27	1665 ± 17	99.9	98.9	1662 ± 15	354	61	9.64[e]	YN17-02-02
1672 ± 17	1689 ± 12	100	101	1711 ± 13	817	312	9.86[e]	YN17-02-11

[a] Analytical precision only. Reflects counting errors and does not include calibration uncertainties.

[b] Radiogenic Pb calculated using ^{208}Pb as a proxy for common Pb. Assumed composition of common Pb is $^{206}Pb/^{204}Pb = 18.7$; $^{207}Pb/^{204}Pb = 15.6$; $^{208}Pb/^{204}Pb = 37.9$

[c] Calculated from measured $U^+/94Zr_2O^+$. Assumes a mean U-content of 550 ppm in AS-3 std. zircon.

[d] Calculated from measured Th^+/U^+: $RSF_{Th/U} = 0.961 \pm 0.004$ determined from AS-3 std. zircon

[e] Analyzed 7/26/2000: $RSF_{Pb/U} = 2.500 \times UO^+/U^+ - 16.15$ for UO^+/U^+ values in the range $9.32 < UO^+/U^+ < 9.72$. Assumes AS-3 std. Zircon is 1099 Ma. Calibration scatter defined by AS-3 std. zircon $^{206}Pb/^{238}U$ age results was ± 2.9%.

$^{40}Ar/^{39}Ar$ DATA TABLES

(see Appendix 4 for analytical procedure)

98-237 Muscovite (5.5mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1] x10^{-1}	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1]	$^{36}Ar/^{39}Ar$ [1] x10^{-4}	$^{39}Ar_K$ [2] (mol) x10^{-15}	$\Sigma\ ^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age [5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-5}
1	500	11	120.5	519.8	-	369.8	2.430	0.4620	9.044	10.94 ± 2.63	15.09 ± 3.62	8.319 ± 0.04	307.6 ± 7.40
2	600	10	32.11	24.02	-	52.02	7.122	1.816	51.05	16.48 ± 0.72	22.68 ± 0.98	31.39 ± 0.39	163.3 ± 6.70
3	680	10	36.78	13.41	-	26.10	14.43	4.560	78.16	28.82 ± 0.23	39.47 ± 0.32	27.37 ± 0.03	71.45 ± 2.13
4	740	13	37.47	12.09	-	8.923	26.19	9.540	92.17	34.59 ± 0.11	47.27 ± 0.15	26.87 ± 0.05	23.97 ± 0.81
5	800	10	39.82	11.66	-	5.980	26.92	14.66	94.81	37.80 ± 0.54	51.61 ± 0.73	25.27 ± 0.34	15.11 ± 1.02
6	850	10	41.51	11.75	-	5.611	45.63	23.33	95.33	39.60 ± 0.06	54.02 ± 0.08	24.24 ± 0.02	13.60 ± 0.42
7	900	13	44.45	11.87	-	5.820	129.7	48.00	95.54	42.48 ± 0.32	57.89 ± 0.43	22.62 ± 0.16	13.17 ± 0.18
8	950	10	43.98	11.91	-	4.468	112.8	69.44	96.40	42.41 ± 0.05	57.79 ± 0.06	22.87 ± 0.02	10.22 ± 0.18
9	1000	10	43.90	11.90	-	4.255	92.07	86.94	96.53	42.39 ± 0.05	57.77 ± 0.06	22.91 ± 0.01	9.748 ± 0.339
10	1150	13	44.81	12.17	-	8.517	39.01	94.36	93.74	42.04 ± 0.49	57.30 ± 0.66	22.44 ± 0.25	19.11 ± 0.46
11	1350	10	45.96	12.21	-	9.160	29.66	99.99	93.47	43.01 ± 0.37	58.60 ± 0.50	21.87 ± 0.18	20.04 ± 0.43

[1] Corrected for backgrounds (mean values in (mol): m/e40 = $9.4x10^{-17}$; m/e39 = $6.6x10^{-17}$; m/e38 = $3.5x10^{-17}$; m/e37 = $4.8x10^{-17}$; m/e 36 = $6.6x10^{-17}$), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 297.5 ± 0.5), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed: 08-19-2001)

[2] Normalized to 100% delivery to mass spectrometer

[3] Includes static line blank

[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254; $^{36}Ar/^{39}Ar_{Ca}$ = 0.000265; $^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)

[5] Assumes trapped argon is atmospheric. J-factor = 0.007676 (assumes Fish Canyon sanidine = 27.8 Ma)

[6] Corrected for static line blank and nucleogenic interferences

98-240 Muscovite (4.8mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1] x10^{-1}	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1] x10^{-3}	$^{36}Ar/^{39}Ar$ [1] x10^{-4}	$^{39}Ar_K$ [2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age [5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-5}
1	500	10	244.0	760.9	124.1	772.8	4.854	0.706	6.340	15.52 ± 1.32	21.31 ± 1.81	4.102 ± 0.00	316.9 ± 1.80
2	600	10	39.91	15.65	110.3	55.89	11.35	2.357	57.77	23.23 ± 0.80	31.82 ± 1.09	25.21 ± 0.08	140.2 ± 6.80
3	700	10	32.97	11.98	33.29	15.42	41.20	8.349	85.27	28.19 ± 0.32	38.54 ± 0.43	30.56 ± 0.05	46.84 ± 3.26
4	780	10	34.07	11.80	4.989	10.26	58.42	16.85	90.21	30.79 ± 0.10	42.05 ± 0.14	29.57 ± 0.03	30.29 ± 0.97
5	820	10	37.75	11.89	-	11.46	51.15	24.28	90.19	34.11 ± 0.14	46.52 ± 0.18	26.67 ± 0.02	30.58 ± 1.20
6	860	10	40.72	11.74	0.323	10.51	89.13	37.25	91.66	37.36 ± 0.17	50.90 ± 0.23	24.71 ± 0.04	25.96 ± 1.31
7	900	10	38.51	12.09	-	7.318	67.90	47.12	93.59	36.09 ± 0.10	49.19 ± 0.13	26.14 ± 0.03	19.13 ± 0.75
8	1000	10	39.05	11.72	1.113	4.320	290.7	89.41	96.02	37.53 ± 0.05	51.12 ± 0.07	25.77 ± 0.02	11.13 ± 0.41
9	1100	10	40.55	11.66	9.564	4.381	68.33	99.34	96.07	39.01 ± 0.09	53.11 ± 0.13	24.81 ± 0.01	10.81 ± 0.77
10	1350	10	62.53	12.09	641.7	63.85	4.519	99.99	69.33	43.94 ± 1.84	59.71 ± 2.45	16.05 ± 0.09	99.80 ± 9.80

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 2.3×10^{-16}; m/e39 = 7.3×10^{-17}; m/e38 = 2.1×10^{-17}; m/e37 = 2.4×10^{-17}; m/e 36 = 1.2×10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 294.7 ± 1.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed: 01-14-2002)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254; $^{36}Ar/^{39}Ar_{Ca}$ = 0.000265; $^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)
[5] Assumes trapped argon is atmospheric. J-factor = 0.007659 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

98-241 Muscovite (5.7mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$[1] x10^{-1}	$^{38}Ar/^{39}Ar$[1] x10^{-3}	$^{37}Ar/^{39}Ar$[1] x10^{-2}	$^{36}Ar/^{39}Ar$[1] x10^{-3}	$^{39}Ar_K$[2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$[3] (%)	$^{40}Ar^*/^{39}Ar_K$[4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$[6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$[6] ± 1σ x10^{-5}
1	500	10	319.8	330.2	10.73	98.82	5.036	0.663	8.637	27.68 ± 2.57	37.78 ± 3.47	3.129 ± 0.01	309.1 ± 2.70
2	600	10	50.81	15.89	19.40	6.663	13.65	2.459	60.76	31.02 ± 0.59	42.29 ± 0.79	19.78 ± 0.04	130.8 ± 3.90
3	700	10	42.62	12.78	14.50	2.156	42.68	8.075	84.57	36.12 ± 0.11	49.14 ± 0.15	23.60 ± 0.03	49.98 ± 0.83
4	780	10	43.07	12.22	0.888	1.029	59.73	15.93	92.24	39.78 ± 0.09	54.05 ± 0.12	23.35 ± 0.02	23.99 ± 0.66
5	820	10	44.49	11.99	1.079	0.997	51.85	22.75	92.69	41.30 ± 0.17	56.08 ± 0.22	22.61 ± 0.06	22.47 ± 0.87
6	860	10	46.04	11.72	2.566	0.946	82.19	33.57	93.33	43.01 ± 0.11	58.37 ± 0.15	21.84 ± 0.02	20.52 ± 0.73
7	900	10	46.46	11.92	3.250	0.746	144.9	52.63	94.71	44.02 ± 0.07	59.72 ± 0.09	21.64 ± 0.02	15.96 ± 0.39
8	1000	10	46.00	11.88	17.02	0.629	268.9	88.01	95.64	44.03 ± 0.05	59.73 ± 0.07	21.85 ± 0.02	12.76 ± 0.19
9	1100	10	50.56	12.24	27.94	0.998	62.93	96.29	93.99	47.59 ± 0.07	64.47 ± 0.09	19.87 ± 0.01	18.37 ± 0.40
10	1350	10	55.86	13.12	88.31	2.636	28.19	99.99	86.64	48.55 ± 0.12	65.74 ± 0.16	17.97 ± 0.01	43.20 ± 0.70

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 2.2x10^{-16}; m/e39 = 7.2x10^{-17}; m/e38 = 2.0 x10^{-17}; m/e37 = 2.5x10^{-17}; m/e 36 = 1.2x10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 294.7 ± 1.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed: 02-19-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254; $^{36}Ar/^{39}Ar_{Ca}$ = 0.000265; $^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)
[5] Assumes trapped argon is atmospheric. J-factor = 0.007645 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

99-57 Biotite (5.6mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$[1] x10^{-1}	$^{38}Ar/^{39}Ar$[1] x10^{-3}	$^{37}Ar/^{39}Ar$[1] x10^{-4}	$^{36}Ar/^{39}Ar$[1] x10^{-4}	$^{39}Ar_K$[2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar*$[3] (%)	$^{40}Ar*/^{39}Ar_K$[4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$[6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$[6] ± 1σ x10^{-5}
1	500	10	95.26	85.44	360.1	225.7	8.925	0.923	29.47	28.38 ± 0.91	33.12 ± 1.05	10.52 ± 0.01	237.4 ± 3.20
2	600	10	60.05	17.07	143.4	85.46	35.95	4.642	57.24	34.59 ± 0.23	40.28 ± 0.26	16.71 ± 0.02	142.8 ± 1.20
3	680	10	83.75	15.77	69.18	45.05	82.22	13.15	83.65	70.22 ± 0.15	80.86 ± 0.16	11.97 ± 0.01	53.91 ± 0.52
4	740	15	82.31	14.97	35.54	22.25	102.5	23.75	91.56	75.52 ± 0.13	86.81 ± 0.15	12.18 ± 0.02	27.09 ± 0.31
5	780	10	81.18	14.82	22.56	17.51	47.68	28.68	92.98	75.79 ± 0.11	87.12 ± 0.13	12.35 ± 0.01	21.62 ± 0.44
6	840	10	83.90	15.31	38.14	26.94	45.70	33.41	89.91	75.72 ± 0.20	87.04 ± 0.22	11.95 ± 0.01	32.18 ± 0.78
7	900	15	83.14	14.84	45.11	18.91	60.72	39.69	92.76	77.33 ± 0.39	88.85 ± 0.44	12.06 ± 0.05	22.79 ± 0.56
8	1000	10	85.00	14.84	58.70	17.74	121.1	52.22	93.44	79.55 ± 0.12	91.33 ± 0.14	11.80 ± 0.02	20.90 ± 0.12
9	1100	10	81.10	14.68	32.07	9.916	300.5	83.30	95.98	77.95 ± 0.04	89.55 ± 0.04	12.36 ± 0.00	12.25 ± 0.09
10	1350	15	80.56	14.47	36.25	8.583	161.4	99.99	96.44	77.81 ± 0.42	89.38 ± 0.47	12.45 ± 0.07	10.67 ± 0.10

[1] Corrected for backgrounds (mean values in (mol): m/e40 = $9.4x10^{-16}$; m/e39 = $1.1x10^{-16}$; m/e38 = $6.1x10^{-17}$; m/e37 = $9.3x10^{-17}$; m/e 36 = $1.2x10^{-16}$), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed: 09-25-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224; $^{36}Ar/^{39}Ar_{Ca}$ = 0.0003; $^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)
[5] Assumes trapped argon is atmospheric. J-factor = 0.006528 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

99-57 Muscovite (5.5mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1] x10^{-1}	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1] x10^{-3}	$^{36}Ar/^{39}Ar$ [1] x10^{-4}	$^{39}Ar_K$ [2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age [5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-5}
1	500	10	241.6	444.4	37.35	710.2	4.878	0.796	13.00	31.51 ± 2.33	43.05 ± 3.15	4.143 ± 0.02	294.2 ± 3.20
2	600	10	72.79	14.55	47.46	75.18	8.980	2.263	68.82	50.36 ± 0.49	68.33 ± 0.65	13.78 ± 0.05	103.5 ± 2.00
3	700	10	73.33	12.41	37.43	29.79	20.70	5.642	87.48	64.30 ± 0.20	86.78 ± 0.27	13.68 ± 0.01	40.64 ± 0.88
4	780	10	74.30	12.35	17.54	23.70	33.34	11.09	90.12	67.06 ± 0.29	90.42 ± 0.38	13.50 ± 0.01	31.94 ± 1.31
5	820	10	71.12	11.98	4.715	13.52	45.57	18.53	93.92	66.87 ± 0.19	90.17 ± 0.25	14.11 ± 0.03	19.06 ± 0.64
6	860	10	70.19	11.89	2.146	8.586	79.81	31.56	95.96	67.40 ± 0.11	90.86 ± 0.15	14.30 ± 0.01	12.27 ± 0.45
7	900	10	69.32	11.99	3.495	6.992	59.58	41.29	96.57	67.00 ± 0.14	90.34 ± 0.19	14.48 ± 0.01	10.11 ± 0.68
8	1000	10	69.08	11.88	2.955	6.404	108.8	59.05	96.80	66.94 ± 0.16	90.25 ± 0.21	14.53 ± 0.01	9.293 ± 0.71
9	1100	10	68.98	11.75	9.637	5.870	145.4	82.80	97.06	67.00 ± 0.16	90.34 ± 0.21	14.55 ± 0.02	8.503 ± 0.64
10	1350	10	70.32	12.22	70.35	7.665	105.3	99.99	96.40	67.86 ± 0.15	91.47 ± 0.20	14.27 ± 0.01	10.67 ± 0.70

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 2.4x10^{-16}; m/e39 = 7.5x10^{-17}; m/e38 = 2.2x10^{-17}; m/e37 = 2.6x10^{-17}; m/e 36 = 1.3x10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 294.7 ± 1.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed: 02-20-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254; $^{36}Ar/^{39}Ar_{Ca}$ = 0.000265; $^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)
[5] Assumes trapped argon is atmospheric. J-factor = 0.007664 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

CD9 Muscovite (5.9mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$[1] x10^{-1}	$^{38}Ar/^{39}Ar$[1] x10^{-3}	$^{37}Ar/^{39}Ar$[1] x10^{-3}	$^{36}Ar/^{39}Ar$[1] x10^{-4}	$^{39}Ar_K$[2] (mol) x10^{-14}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$[3] (%)	$^{40}Ar^*/^{39}Ar_K$[4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$[6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$[6] ± 1σ x10^{-5}
1	500	10	166.8	215.0	76.46	526.5	1.108	1.042	6.582	11.00 ± 0.83	15.14 ± 1.14	6.005 ± 0.01	316.1 ± 1.70
2	600	10	36.77	15.24	84.47	46.68	2.289	3.194	61.73	22.80 ± 0.28	31.25 ± 0.39	27.38 ± 0.04	127.2 ± 2.60
3	700	10	30.48	12.14	50.38	15.60	5.938	8.777	84.00	25.65 ± 0.09	35.13 ± 0.12	33.09 ± 0.03	51.17 ± 0.93
4	780	10	30.70	12.01	6.545	8.486	9.181	17.41	90.90	27.94 ± 0.04	38.23 ± 0.06	32.85 ± 0.01	27.82 ± 0.48
5	820	10	32.03	11.88	3.445	6.325	10.13	26.94	93.27	29.91 ± 0.02	40.90 ± 0.03	31.47 ± 0.02	19.88 ± 0.17
6	860	10	32.58	11.87	1.278	4.970	14.31	40.39	94.63	30.86 ± 0.02	42.19 ± 0.03	30.93 ± 0.02	15.36 ± 0.13
7	900	10	32.31	11.77	0.610	5.128	16.88	56.26	94.45	30.55 ± 0.06	41.76 ± 0.08	31.19 ± 0.05	15.99 ± 0.24
8	1000	10	32.55	11.87	-	3.343	38.20	92.18	96.12	31.31 ± 0.02	42.78 ± 0.03	30.97 ± 0.02	10.35 ± 0.12
9	1100	10	34.31	11.97	6.968	6.705	6.127	97.94	93.32	32.08 ± 0.04	43.83 ± 0.06	29.37 ± 0.03	19.64 ± 0.32
10	1350	10	35.44	12.30	42.37	9.916	2.189	99.99	90.65	32.29 ± 0.10	44.11 ± 0.13	28.42 ± 0.05	27.86 ± 0.75

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 2.5x10^{-16}; m/e39 = 7.9x10^{-17}; m/e38 = 2.1x10^{-17}; m/e37 = 2.5x10^{-17}; m/e36 = 1.2x10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 294.7 ± 1.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed: 02-21-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254; $^{36}Ar/^{39}Ar_{Ca}$ = 0.000265; $^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)
[5] Assumes trapped argon is atmospheric. J-factor = 0.007666 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

KE1B Biotite (5.8mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar^{1}$ x10^{-1}	$^{38}Ar/^{39}Ar^{1}$ x10^{-3}	$^{37}Ar/^{39}Ar^{1}$ x10^{-3}	$^{36}Ar/^{39}Ar^{1}$ x10^{-3}	$^{39}Ar_K{}^{2}$ (mol) x10^{-14}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^{*3}$ (%)	$^{40}Ar^*/^{39}Ar_K{}^{4}$ ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar^{6}$ ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar^{6}$ ± 1σ x10^{-5}
1	500	10	170.7	158.5	136.7	65.41	12.50	1.322	-	-	0 ± 0	5.864 ± 0.013	38.34 ± 0.24
2	600	10	69.93	47.10	86.57	18.90	39.68	5.519	19.91	13.92 ± 0.19	16.48 ± 0.22	14.34 ± 0.02	27.08 ± 0.09
3	680	10	46.74	40.57	44.35	6.237	105.5	16.68	60.17	28.12 ± 0.12	33.12 ± 0.14	21.50 ± 0.04	13.38 ± 0.07
4	740	14	41.78	27.35	5.558	2.209	155.3	33.11	83.80	35.03 ± 0.03	41.17 ± 0.04	24.06 ± 0.01	5.311 ± 0.02
5	780	10	42.34	27.53	4.241	2.241	70.76	40.59	83.73	35.50 ± 0.08	41.72 ± 0.09	23.74 ± 0.03	5.317 ± 0.05
6	840	10	45.90	28.08	12.66	3.586	41.65	44.99	76.28	35.09 ± 0.20	41.23 ± 0.23	21.89 ± 0.02	7.843 ± 0.14
7	900	16	46.46	27.45	13.88	3.898	52.02	50.50	74.62	34.73 ± 0.12	40.82 ± 0.14	21.63 ± 0.05	8.422 ± 0.05
8	1000	10	42.53	27.73	11.47	2.709	136.6	64.94	80.62	34.32 ± 0.07	40.34 ± 0.08	23.63 ± 0.03	6.395 ± 0.03
9	1100	10	40.62	27.59	4.048	1.700	243.9	90.73	87.05	35.38 ± 0.06	41.57 ± 0.06	24.75 ± 0.02	4.205 ± 0.03
10	1350	14	45.05	27.94	9.228	2.687	87.65	99.99	81.81	36.90 ± 0.11	43.34 ± 0.13	22.31 ± 0.02	5.987 ± 0.08

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 2.8x10^{-16}; m/e39 = 9.7x10^{-17}; m/e38 = 5.1x10^{-17}; m/e37 = 8.1x10^{-17}; m/e 36 = 9.7x10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed: 09-14-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224; $^{36}Ar/^{39}Ar_{Ca}$ = 0.0003; $^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)
[5] Assumes trapped argon is atmospheric. J-factor = 0.006589 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

KE1B Muscovite (5.4mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$[1] x10^{-1}	$^{38}Ar/^{39}Ar$[1] x10^{-3}	$^{37}Ar/^{39}Ar$[1] x10^{-3}	$^{36}Ar/^{39}Ar$[1] x10^{-4}	$^{39}Ar_K$[2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$[3] (%)	$^{40}Ar^*/^{39}Ar_K$[4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$[6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$[6] ± 1σ x10^{-5}
1	500	10	151.2	83.42	77.52	455.8	9.384	0.881	10.79	16.35 ± 1.19	19.32 ± 1.40	6.624 ± 0.02	301.8 ± 2.60
2	600	10	50.27	15.63	118.1	74.74	15.47	2.333	55.65	28.07 ± 0.44	33.05 ± 0.51	19.98 ± 0.04	148.6 ± 2.90
3	680	17	41.39	13.55	127.1	31.38	40.73	6.155	77.22	32.01 ± 0.14	37.65 ± 0.16	24.29 ± 0.02	75.29 ± 1.13
4	741	14	38.69	12.60	13.48	15.51	45.66	10.44	87.49	33.90 ± 0.22	39.84 ± 0.26	25.99 ± 0.14	40.21 ± 0.82
5	800	10	40.32	12.56	9.207	15.53	53.82	15.49	87.99	35.52 ± 0.07	41.72 ± 0.08	24.94 ± 0.02	38.65 ± 0.53
6	850	10	42.16	12.48	6.377	16.42	87.33	23.69	87.91	37.09 ± 0.09	43.55 ± 0.11	23.85 ± 0.02	39.10 ± 0.72
7	900	13	42.03	12.63	3.018	11.66	217.9	44.14	91.25	38.37 ± 0.24	45.03 ± 0.27	23.92 ± 0.13	27.86 ± 0.40
8	950	10	40.91	12.61	2.776	9.495	143.1	57.57	92.56	37.88 ± 0.06	44.46 ± 0.07	24.58 ± 0.04	23.32 ± 0.17
9	1000	10	41.89	12.77	3.035	11.75	125.7	69.37	91.13	38.19 ± 0.06	44.83 ± 0.07	24.00 ± 0.03	28.18 ± 0.30
10	1150	15	41.90	12.61	2.798	6.448	320.0	99.40	94.90	39.77 ± 0.05	46.66 ± 0.06	23.99 ± 0.03	15.45 ± 0.06
11	1350	11	54.40	13.80	33.12	44.47	6.430	99.99	74.90	41.07 ± 0.76	48.15 ± 0.88	18.46 ± 0.09	81.90 ± 4.46

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 1.7x10^{-16}; m/e39 = 9.7x10^{-17}; m/e38 = 5.4x10^{-17}; m/e37 = 8.2x10^{-17}; m/e36 = 1.0x10^{-16}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed: 08-28-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224; $^{36}Ar/^{39}Ar_{Ca}$ = 0.0003; $^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)
[5] Assumes trapped argon is atmospheric. J-factor = 0.006587 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

KE3 Biotite (5.3mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1]	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1] x10^{-3}	$^{36}Ar/^{39}Ar$ [1] x10^{-3}	$^{39}Ar_K$ [2] (mol) x10^{-15}	□ $^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-4}
1	500	10	58.30	35.82	63.01	17.17	29.86	4.862	12.60	7.406±0.31	8.668±0.36	17.22±0.05	29.53±0.17
2	600	10	44.52	14.84	45.26	11.57	117.5	23.99	22.72	10.14±0.16	11.86±0.18	22.58±0.05	26.09±0.11
3	680	10	48.97	14.34	37.99	11.23	112.1	42.24	31.74	15.59±0.10	18.20±0.11	20.51±0.01	23.02±0.07
4	740	14	52.85	14.41	31.84	11.96	68.34	53.37	32.57	17.30±0.17	20.18±0.19	19.00±0.02	22.72±0.10
5	780	10	52.68	14.18	28.90	11.26	17.76	56.26	35.77	19.22±0.42	22.41±0.49	19.06±0.01	21.44±0.27
6	840	10	48.01	13.84	30.88	7.893	15.70	58.82	49.77	24.49±0.52	28.51±0.60	20.92±0.04	16.50±0.36
7	900	14	51.03	14.27	32.58	10.13	52.34	67.34	40.65	20.89±0.60	24.34±0.69	19.68±0.19	19.93±0.29
8	1000	10	51.64	14.21	41.61	10.71	102.7	84.07	38.20	19.80±0.11	23.08±0.13	19.45±0.01	20.81±0.07
9	1100	10	54.17	14.48	36.44	12.49	88.78	98.52	31.40	17.08±0.25	19.92±0.29	18.54±0.01	23.13±0.16
10	1350	14	57.67	16.43	181.6	11.15	9.069	99.99	41.66	24.66±0.84	28.70±0.98	17.40±0.05	19.32±0.49

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 9.4x10^{-16}; m/e39 = 1.3x10^{-16}; m/e38 = 7.0x10^{-17}; m/e37 = 9.7x10^{-17}; m/e36 = 1.3x10^{-16}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed: 09-26-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224; $^{36}Ar/^{39}Ar_{Ca}$ = 0.0003; $^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)
[5] Assumes trapped argon is atmospheric. J-factor = 0.006503 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

KE3 Muscovite (6.7mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1] x10^{-1}	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1] x10^{-3}	$^{36}Ar/^{39}Ar$ [1] x10^{-4}	$^{39}Ar_K$ [2] (mol) x10^{-14}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age [5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-5}
1	500	10	99.82	79.16	52.09	287.9	1.275	0.936	14.57	14.57 ± 0.92	17.00 ± 1.06	10.04 ± 0.04	288.9 ± 3.00
2	600	10	43.69	13.93	64.51	62.96	2.130	2.501	56.88	24.92 ± 0.28	28.99 ± 0.32	23.00 ± 0.10	144.4 ± 1.70
3	680	10	42.14	12.60	44.68	39.04	4.579	5.865	72.09	30.42 ± 0.16	35.32 ± 0.18	23.86 ± 0.03	92.82 ± 1.24
4	740	14	38.79	11.99	7.037	18.33	6.611	10.72	85.38	33.16 ± 0.08	38.46 ± 0.09	25.93 ± 0.02	47.48 ± 0.65
5	800	10	39.64	11.88	3.615	12.44	8.878	17.24	90.10	35.75 ± 0.06	41.43 ± 0.06	25.37 ± 0.01	31.52 ± 0.47
6	850	10	39.56	11.90	2.091	7.319	17.87	30.37	93.93	37.18 ± 0.04	43.07 ± 0.05	25.42 ± 0.02	18.59 ± 0.24
7	900	14	39.18	11.88	1.647	5.787	29.43	51.99	95.04	37.25 ± 0.02	43.15 ± 0.03	25.67 ± 0.01	14.84 ± 0.15
8	950	10	38.57	11.93	2.741	6.603	21.04	67.45	94.33	36.40 ± 0.06	42.18 ± 0.07	26.08 ± 0.03	17.20 ± 0.32
9	1000	10	39.19	12.00	2.432	5.444	22.81	84.20	95.30	37.36 ± 0.02	43.28 ± 0.03	25.66 ± 0.01	13.95 ± 0.20
10	1150	17	40.91	12.09	9.141	9.476	11.73	92.82	92.57	37.90 ± 0.04	43.89 ± 0.05	24.58 ± 0.02	23.22 ± 0.25
11	1350	10	41.22	11.82	6.946	6.494	9.771	99.99	94.75	39.08 ± 0.07	45.25 ± 0.08	24.39 ± 0.03	15.79 ± 0.41

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 1.8x10^{-16}; m/e39 = 1.0x10^{-16}; m/e38 = 5.6x10^{-17}; m/e37 = 8.3x10^{-17}; m/e36 = 1.0x10^{-16}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed: 08-26-2001)

[2] Normalized to 100% delivery to mass spectrometer

[3] Includes static line blank

[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224; $^{36}Ar/^{39}Ar_{Ca}$ = 0.0003; $^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)

[5] Assumes trapped argon is atmospheric. J-factor = 0.006499 (assumes Fish Canyon sanidine = 27.8 Ma)

[6] Corrected for static line blank and nucleogenic interferences

KE6 Muscovite (5.1mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$[1]	$^{38}Ar/^{39}Ar$[1] x10^{-3}	$^{37}Ar/^{39}Ar$[1] x10^{-3}	$^{36}Ar/^{39}Ar$[1] x10^{-4}	$^{39}Ar_K$[2] (mol) x10^{-15}	□ $^{39}Ar_K$ (%)	$^{40}Ar^*$[3] (%)	$^{40}Ar^*/^{39}Ar_K$[4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$[6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$[6] ± 1σ x10^{-5}
1	500	10	143.5	82.53	59.80	439.7	10.91	1.060	9.333	13.42 ± 0.66	15.68 ± 0.76	6.978 ± 0.01	306.7 ± 1.50
2	600	10	48.80	14.76	44.87	75.91	16.03	2.617	53.47	26.18 ± 0.34	30.48 ± 0.39	20.59 ± 0.03	156.0 ± 2.30
3	680	10	40.78	12.61	25.92	30.44	31.35	5.661	77.29	31.59 ± 0.22	36.71 ± 0.25	24.66 ± 0.03	74.85 ± 1.77
4	740	16	38.51	12.19	6.159	16.95	50.33	10.55	86.30	33.28 ± 0.07	38.66 ± 0.08	26.12 ± 0.01	44.22 ± 0.60
5	800	10	39.49	12.08	3.890	16.56	47.12	15.12	86.92	34.38 ± 0.10	39.92 ± 0.11	25.47 ± 0.02	42.15 ± 0.81
6	850	10	40.45	11.95	1.779	14.32	83.54	23.24	88.92	36.00 ± 0.05	41.77 ± 0.06	24.86 ± 0.02	35.59 ± 0.24
7	900	19	40.76	12.08	0.844	12.01	261.8	48.66	90.73	36.99 ± 0.07	42.92 ± 0.08	24.67 ± 0.03	29.62 ± 0.32
8	950	10	39.42	12.01	0.760	9.197	164.6	64.64	92.50	36.48 ± 0.08	42.33 ± 0.09	25.51 ± 0.04	23.46 ± 0.44
9	1000	10	40.71	11.89	0.710	7.830	192.1	83.29	93.74	38.18 ± 0.05	44.28 ± 0.06	24.70 ± 0.02	19.33 ± 0.32
10	1150	14	43.22	12.26	4.573	10.50	115.7	94.52	92.26	39.90 ± 0.05	46.25 ± 0.06	23.26 ± 0.02	24.39 ± 0.24
11	1350	10	46.93	12.03	11.89	14.85	56.39	99.99	90.10	42.33 ± 0.06	49.02 ± 0.07	21.41 ± 0.01	31.72 ± 0.45

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 1.7x10^{-16}; m/e39 = 9.3x10^{-17}; m/e38 = 5.1x10^{-17}; m/e37 = 7.7x10^{-17}; m/e 36 = 9.7x10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed: 08-26-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224;$^{36}Ar/^{39}Ar_{Ca}$ = 0.0003;$^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)
[5] Assumes trapped argon is atmospheric. J-factor = 0.006508 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

MW10 Muscovite (5.1mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1] x10^{-1}	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1] x10^{-4}	$^{36}Ar/^{39}Ar$ [1] x10^{-4}	$^{39}Ar_K$ [2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-5}
1	500	10	124.8	121.7	229.6	369.3	18.35	1.903	12.33	15.40 ± 0.64	21.25 ± 0.88	8.032 ± 0.01	296.5 ± 1.70
2	600	10	31.48	13.22	268.8	32.57	28.26	4.834	68.43	21.63 ± 0.14	29.76 ± 0.19	32.02 ± 0.07	104.1 ± 1.30
3	700	10	31.75	12.11	65.80	13.99	47.95	9.806	86.00	27.36 ± 0.10	37.57 ± 0.13	31.75 ± 0.02	44.37 ± 1.03
4	780	10	33.10	11.67	2.902	7.638	66.40	16.69	92.27	30.59 ± 0.04	41.96 ± 0.06	30.44 ± 0.01	23.25 ± 0.43
5	820	10	34.90	11.59	-	7.417	57.12	22.61	92.82	32.45 ± 0.05	44.48 ± 0.07	28.86 ± 0.02	21.42 ± 0.47
6	860	10	37.12	11.84	-	8.912	104.3	33.43	92.13	34.23 ± 0.05	46.88 ± 0.07	27.13 ± 0.03	24.18 ± 0.32
7	900	10	37.05	11.82	-	5.893	178.3	51.92	94.56	35.05 ± 0.03	47.99 ± 0.04	27.18 ± 0.01	16.03 ± 0.23
8	1000	10	36.42	11.82	-	5.057	365.7	89.85	95.15	34.67 ± 0.04	47.47 ± 0.06	27.65 ± 0.03	13.99 ± 0.14
9	1100	10	37.50	11.82	-	5.551	45.28	94.54	94.75	35.61 ± 0.05	48.74 ± 0.07	26.84 ± 0.02	14.91 ± 0.43
10	1350	10	37.62	11.58	144.5	6.099	52.63	99.99	94.39	35.58 ± 0.09	48.70 ± 0.12	26.76 ± 0.06	16.22 ± 0.34

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 2.3×10^{-16}; m/e39 = 7.2×10^{-17}; m/e38 = 1.9×10^{-17}; m/e37 = 2.4×10^{-17}; m/e36 = 1.2×10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 294.7 ± 1.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed: 02-21-2001)

[2] Normalized to 100% delivery to mass spectrometer

[3] Includes static line blank

[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254; $^{36}Ar/^{39}Ar_{Ca}$ = 0.000265; $^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)

[5] Assumes trapped argon is atmospheric. J-factor = 0.007691 (assumes Fish Canyon sanidine = 27.8 Ma)

[6] Corrected for static line blank and nucleogenic interferences

MW11 Muscovite (5.7mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$[1] x10^{-1}	$^{38}Ar/^{39}Ar$[1] x10^{-3}	$^{37}Ar/^{39}Ar$[1] x10^{-2}	$^{36}Ar/^{39}Ar$[1] x10^{-4}	$^{39}Ar_K$[2] (mol) x10^{-14}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$[3] (%)	$^{40}Ar^*/^{39}Ar_K$[4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$[6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$[6] ± 1σ x10^{-5}
1	500	14	122.8	258.1	25.02	333.4	1.290	1.210	19.67	24.20 ± 0.85	33.02 ± 1.14	8.161 ± 0.01	271.6 ± 2.30
2	600	21	57.71	16.16	110.9	97.73	1.856	2.952	50.86	29.47 ± 0.24	40.12 ± 0.33	17.39 ± 0.05	165.0 ± 1.20
3	700	10	60.92	13.93	138.2	78.17	2.726	5.509	63.30	38.69 ± 0.30	52.49 ± 0.40	16.46 ± 0.03	122.8 ± 1.60
4	780	10	51.51	12.64	4.120	30.95	5.645	10.80	81.70	42.14 ± 0.11	57.10 ± 0.14	19.51 ± 0.03	60.18 ± 0.41
5	820	10	52.37	12.82	1.029	29.94	8.526	18.80	82.57	43.28 ± 0.08	58.62 ± 0.11	19.19 ± 0.02	57.39 ± 0.38
6	860	10	48.87	12.49	0.355	15.76	15.88	33.70	89.86	43.96 ± 0.09	59.53 ± 0.12	20.57 ± 0.04	32.41 ± 0.29
7	900	10	47.97	12.30	0.648	12.18	11.89	44.86	91.91	44.12 ± 0.06	59.74 ± 0.08	20.96 ± 0.01	25.49 ± 0.38
8	1000	10	49.19	12.40	0.983	16.36	19.24	62.91	89.60	44.11 ± 0.08	59.72 ± 0.11	20.44 ± 0.02	33.37 ± 0.39
9	1100	10	46.87	12.29	0.482	7.052	38.41	98.95	94.95	44.54 ± 0.06	60.30 ± 0.08	21.45 ± 0.02	15.10 ± 0.23
10	1350	10	64.94	14.08	38.59	65.38	1.124	99.99	69.95	45.68 ± 0.40	61.82 ± 0.54	15.45 ± 0.04	99.50 ± 1.95

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 2.4x10^{-16}; m/e39 = 7.3x10^{-17}; m/e38 = 2.1 x10^{-17}; m/e37 = 2.4x10^{-17}; m/e 36 = 1.3x10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 294.7 ± 1.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed: 02-18-2001)

[2] Normalized to 100% delivery to mass spectrometer

[3] Includes static line blank

[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254; $^{36}Ar/^{39}Ar_{Ca}$ = 0.000265; $^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)

[5] Assumes trapped argon is atmospheric. J-factor = 0.007631 (assumes Fish Canyon sanidine = 27.8 Ma)

[6] Corrected for static line blank and nucleogenic interferences

NR1 Biotite (4.5mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1] x10^{-1}	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1]	$^{36}Ar/^{39}Ar$ [1] x10^{-4}	$^{39}Ar_K$ [2] (mol) x10^{-15}	$\Sigma\ ^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-5}
1	500	10	68.70	44.57	-	207.1	4.852	2.639	10.22	7.244 ± 1.176	9.937 ± 1.609	14.61 ± 0.05	30.26 ± 0.58
2	600	10	30.04	43.67	-	69.80	18.14	12.50	29.97	9.166 ± 0.196	12.56 ± 0.27	33.57 ± 0.09	23.43 ± 0.21
3	680	10	27.52	41.63	-	46.57	28.37	27.93	48.50	13.51 ± 0.12	18.49 ± 0.16	36.67 ± 0.10	17.08 ± 0.13
4	740	15	24.28	41.89	-	29.54	21.41	39.57	61.88	15.30 ± 0.22	20.92 ± 0.30	41.62 ± 0.10	12.30 ± 0.30
5	780	10	25.06	46.62	-	31.11	5.046	42.32	57.89	15.62 ± 0.87	21.35 ± 1.19	40.31 ± 0.07	12.54 ± 1.19
6	840	10	26.55	47.65	-	36.18	7.955	46.64	56.17	15.61 ± 0.36	21.34 ± 0.49	38.03 ± 0.11	13.76 ± 0.45
7	900	15	27.16	49.85	-	40.17	12.88	53.64	53.82	15.04 ± 0.26	20.57 ± 0.35	37.16 ± 0.09	14.93 ± 0.32
8	1000	10	25.66	48.74	-	35.59	33.74	71.99	57.36	14.90 ± 0.15	20.38 ± 0.20	39.35 ± 0.17	14.01 ± 0.14
9	1100	10	23.23	44.03	-	27.01	44.74	96.32	63.91	15.00 ± 0.14	20.51 ± 0.19	43.52 ± 0.02	11.76 ± 0.21
10	1350	14	33.52	39.14	-	58.95	6.765	99.99	45.20	15.85 ± 0.65	21.67 ± 0.88	30.06 ± 0.10	17.72 ± 0.65

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 6.6x10^{-16}; m/e39 = 5.2x10^{-17}; m/e38 = 2.9x10^{-17}; m/e37 = 4.7x10^{-17}; m/e 36 = 5.6x10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 297.5 ± 0.5), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed: 10-02-2001)

[2] Normalized to 100% delivery to mass spectrometer

[3] Includes static line blank

[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254; $^{36}Ar/^{39}Ar_{Ca}$ = 0.000265; $^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)

[5] Assumes trapped argon is atmospheric. J-factor = 0 007625 (assumes Fish Canyon sanidine = 27.8 Ma)

[6] Corrected for static line blank and nucleogenic interferences

OR312A Biotite (5.1mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$[1] x10^{-1}	$^{38}Ar/^{39}Ar$[1] x10^{-3}	$^{37}Ar/^{39}Ar$[1] x10^{-3}	$^{36}Ar/^{39}Ar$[1] x10^{-3}	$^{39}Ar_K$[2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$[3] (%)	$^{40}Ar^*/^{39}Ar_K$[4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$[6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$[6] ± 1σ x10^{-4}
1	500	10	174.9	91.05	172.4	77.84	6.642	0.765	-	-	0 ± 0	5.723 ± 0.01	44.52 ± 0.13
2	600	10	80.13	19.97	50.71	25.51	32.54	4.516	5.701	4.568 ± 0.267	5.399 ± 0.32	12.51 ± 0.01	31.91 ± 0.11
3	680	10	44.09	14.22	20.29	8.979	96.96	15.69	39.35	17.35 ± 0.11	20.42 ± 0.13	22.80 ± 0.02	20.46 ± 0.09
4	740	14	29.02	12.30	2.632	2.031	175.3	35.90	78.46	22.80 ± 0.06	26.79 ± 0.07	34.72 ± 0.02	7.050 ± 0.06
5	780	12	27.49	12.41	2.209	1.461	77.90	44.87	83.18	22.95 ± 0.06	26.96 ± 0.07	36.68 ± 0.02	5.355 ± 0.07
6	840	10	30.52	12.55	3.417	2.217	47.35	50.33	77.32	23.75 ± 0.12	27.89 ± 0.14	33.01 ± 0.02	7.315 ± 0.13
7	900	13	31.09	12.55	3.222	1.897	73.79	58.83	80.94	25.26 ± 0.07	29.66 ± 0.08	32.40 ± 0.04	6.143 ± 0.07
8	1000	10	28.92	12.30	3.497	1.455	176.2	79.14	84.25	24.40 ± 0.07	28.65 ± 0.08	34.85 ± 0.02	5.068 ± 0.08
9	1100	10	27.85	12.29	3.138	1.510	143.4	95.67	83.07	23.17 ± 0.05	27.22 ± 0.06	36.19 ± 0.03	5.463 ± 0.05
10	1350	14	59.41	14.61	34.59	12.38	37.54	99.99	38.04	22.65 ± 0.28	26.61 ± 0.32	16.89 ± 0.04	20.89 ± 0.14

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 3.8×10^{-16}; m/e39 = 1.0×10^{-16}; m/e38 = 5.4×10^{-17}; m/e37 = 8.7×10^{-17}; m/e 36 = 1.0×10^{-16}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed: 09-19-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224; $^{36}Ar/^{39}Ar_{Ca}$ = 0.0003; $^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)
[5] Assumes trapped argon is atmospheric. J-factor = 0.006561 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

OR312A Muscovite (5.0mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1]	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1] x10^{-3}	$^{36}Ar/^{39}Ar$ [1] x10^{-3}	$^{39}Ar_K$ [2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-4}
1	500	10	45.02	358.6	62.93	151.7	1.161	0.6647	0.371	1.686 ± 8.66	1.994 ± 10.2	2.222 ± 0.03	33.71 ± 0.65
2	600	11	21.14	161.4	49.30	69.55	1.239	1.374	2.634	5.661 ± 3.88	6.686 ± 4.58	4.736 ± 0.02	32.93 ± 0.62
3	680	10	14.24	64.53	69.55	42.21	1.328	2.135	11.99	17.46 ± 2.87	20.54 ± 3.36	7.036 ± 0.053	29.69 ± 0.67
4	740	14	8.765	26.37	51.10	23.14	2.429	3.525	21.36	19.10 ± 1.42	22.46 ± 1.66	11.44 ± 0.10	26.45 ± 0.51
5	800	10	5.341	17.58	19.11	10.41	2.350	4.871	40.63	22.43 ± 1.62	26.35 ± 1.89	18.80 ± 0.10	19.57 ± 1.02
6	850	10	4.283	15.79	26.20	7.259	4.252	7.305	48.35	21.18 ± 1.22	24.89 ± 1.42	23.47 ± 0.10	17.02 ± 0.96
7	900	10	3.953	13.26	54.56	4.806	7.190	11.42	62.72	25.15 ± 1.63	29.52 ± 1.90	25.44 ± 0.13	12.19 ± 1.40
8	900	10	3.953	13.26	54.56	4.806	7.190	15.54	62.72	25.15 ± 1.63	29.52 ± 1.90	25.44 ± 0.13	12.19 ± 1.40
9	950	10	3.625	12.94	28.39	3.648	6.905	19.49	68.60	25.27 ± 0.67	29.66 ± 0.78	27.76 ± 0.17	10.10 ± 0.60
10	1000	10	3.730	12.56	9.021	3.583	10.75	25.64	70.33	26.50 ± 0.33	31.09 ± 0.38	26.97 ± 0.15	9.656 ± 0.24
11	1150	17	3.387	12.23	5.987	1.469	48.46	53.39	86.33	29.31 ± 0.23	34.35 ± 0.27	29.72 ± 0.10	4.360 ± 0.20
12	1350	10	3.659	11.91	3.893	1.277	81.41	99.99	88.96	32.60 ± 0.21	38.16 ± 0.24	27.50 ± 0.14	3.508 ± 0.08

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 2.8×10^{-16}; m/e39 = 8.3×10^{-17}; m/e38 = 4.7×10^{-17}; m/e37 = 7.8×10^{-17}; m/e 36 = 8.7×10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed: 09-18-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224; $^{36}Ar/^{39}Ar_{Ca}$ = 0.0003; $^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)
[5] Assumes trapped argon is atmospheric. J-factor = 0.006559 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

OR314 Biotite (5.1mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1] x10^{-1}	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1] x10^{-3}	$^{36}Ar/^{39}Ar$ [1] x10^{-3}	$^{39}Ar_K$ [2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age [5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-4}
1	500	10	228.5	214.3	63.44	78.07	2.642	0.674	-	-	0 ± 0	4.380 ± 0.01	34.19 ± 0.23
2	600	10	146.1	75.18	45.03	48.67	1.854	1.148	1.393	2.068 ± 1.88	2.449 ± 2.22	6.857 ± 0.04	33.36 ± 0.43
3	680	10	101.1	31.32	42.79	31.47	3.212	1.968	7.733	7.929 ± 0.98	9.369 ± 1.15	9.913 ± 0.01	31.18 ± 0.33
4	740	13	73.39	19.63	33.49	21.50	6.008	3.502	13.03	9.665 ± 1.32	11.41 ± 1.56	13.67 ± 0.04	29.37 ± 0.61
5	780	10	58.45	16.49	29.25	15.44	5.584	4.927	21.33	12.64 ± 0.62	14.91 ± 0.73	17.17 ± 0.02	26.49 ± 0.36
6	840	10	50.55	15.52	30.10	11.66	14.37	8.596	31.26	15.90 ± 0.45	18.74 ± 0.52	19.87 ± 0.04	23.15 ± 0.30
7	900	18	39.43	13.81	40.43	6.842	47.24	20.66	48.14	19.03 ± 0.17	22.40 ± 0.20	25.50 ± 0.06	17.42 ± 0.13
8	1000	10	30.50	13.06	11.10	3.275	67.24	37.82	67.43	20.60 ± 0.09	24.25 ± 0.11	33.03 ± 0.02	10.81 ± 0.10
9	1100	10	26.99	12.68	5.463	1.852	100.8	63.55	78.79	21.29 ± 0.04	25.05 ± 0.04	37.36 ± 0.03	6.914 ± 0.04
10	1350	13	26.43	12.72	4.969	1.568	142.8	99.99	81.55	21.58 ± 0.03	25.39 ± 0.03	38.15 ± 0.01	5.976 ± 0.03

[1] Corrected for backgrounds (mean values in (mol): m/e40 = $4.2x10^{-16}$; m/e39 = $8.4x10^{-17}$; m/e38 = $4.7x10^{-17}$; m/e37 = $7.7x10^{-17}$; m/e 36 = $8.8x10^{-17}$), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed: 09-17-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224; $^{36}Ar/^{39}Ar_{Ca}$ = 0.0003; $^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)
[5] Assumes trapped argon is atmospheric. J-factor = 0.006567 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

OR314 Muscovite (5.1mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1] x10^{-1}	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1] x10^{-3}	$^{36}Ar/^{39}Ar$ [1] x10^{-4}	$^{39}Ar_K$ [2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age [5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-5}
1	500	14	96.99	65.80	38.67	270.7	8.079	0.803	17.00	16.81 ± 0.97	19.80 ± 1.13	10.33 ± 0.01	279.6 ± 3.40
2	600	10	37.50	14.02	72.70	45.39	16.12	2.404	62.31	23.93 ± 0.32	28.12 ± 0.37	26.82 ± 0.01	121.2 ± 2.90
3	680	10	31.41	12.50	13.15	15.77	38.68	6.248	83.53	26.54 ± 0.25	31.16 ± 0.29	32.06 ± 0.06	50.43 ± 2.60
4	740	14	32.49	11.98	6.111	8.873	67.12	12.92	90.79	29.65 ± 0.12	34.78 ± 0.14	30.99 ± 0.05	27.44 ± 1.18
5	800	10	34.61	11.94	4.600	7.240	60.77	18.96	92.79	32.25 ± 0.14	37.80 ± 0.16	29.08 ± 0.04	21.01 ± 1.24
6	850	10	38.76	12.16	2.638	10.21	39.60	22.89	91.26	35.52 ± 0.12	41.58 ± 0.14	25.95 ± 0.02	26.48 ± 1.01
7	900	14	40.36	12.06	1.687	7.107	298.2	52.52	94.21	38.04 ± 0.05	44.49 ± 0.06	24.92 ± 0.03	17.69 ± 0.15
8	950	10	39.38	12.00	4.252	7.131	188.4	71.24	94.03	37.05 ± 0.05	43.35 ± 0.06	25.54 ± 0.02	18.18 ± 0.37
9	1000	10	39.61	11.92	3.059	5.598	183.6	89.48	95.20	37.73 ± 0.07	44.14 ± 0.08	25.39 ± 0.04	14.19 ± 0.23
10	1150	15	41.09	12.02	18.17	8.053	95.54	98.98	93.26	38.50 ± 0.03	45.02 ± 0.03	24.47 ± 0.01	19.57 ± 0.10
11	1350	11	57.95	12.94	136.9	62.12	10.30	99.99	66.25	39.50 ± 0.82	46.18 ± 0.95	17.32 ± 0.02	106.9 ± 4.8

[1] Corrected for backgrounds (mean values in (mol): m/e40 = $9.0x10^{-16}$; m/e39 = $9.2x10^{-17}$; m/e38 = $5.0x10^{-17}$; m/e37 = $8.1x10^{-17}$; m/e 36 = $9.4x10^{-17}$), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed: 09-20-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224; $^{36}Ar/^{39}Ar_{Ca}$ = 0.0003; $^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)
[5] Assumes trapped argon is atmospheric. J-factor = 0 006564 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

OR77B Muscovite (5.7mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1] x10^{-1}	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1]	$^{36}Ar/^{39}Ar$ [1] x10^{-4}	$^{39}Ar_K$ [2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age [5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-5}
1	500	10	102.8	194.9	-	307.4	4.460	0.6915	11.38	11.73 ± 1.20	16.22 ± 1.65	9.750 ± 0.034	299.7 ± 3.9
2	600	10	31.82	15.16	-	37.34	10.51	2.320	64.28	20.54 ± 0.20	28.30 ± 0.28	31.68 ± 0.16	118.3 ± 1.5
3	680	10	28.15	12.32	-	13.06	24.74	6.156	85.23	24.04 ± 0.14	33.09 ± 0.18	35.84 ± 0.04	46.83 ± 1.59
4	740	13	28.38	11.92	-	7.341	37.80	12.02	91.36	25.96 ± 0.11	35.71 ± 0.15	35.55 ± 0.04	26.09 ± 1.33
5	800	10	30.82	11.82	-	7.426	35.62	17.54	91.95	28.38 ± 0.13	39.00 ± 0.17	32.71 ± 0.03	24.29 ± 1.38
6	850	10	35.33	11.93	-	9.585	60.64	26.94	91.21	32.25 ± 0.08	44.26 ± 0.11	28.50 ± 0.03	27.32 ± 0.68
7	900	13	35.99	11.96	-	5.665	138.2	48.38	94.62	34.06 ± 0.04	46.71 ± 0.06	27.98 ± 0.01	15.85 ± 0.38
8	950	10	34.64	12.00	-	5.359	97.27	63.46	94.66	32.81 ± 0.03	45.00 ± 0.05	29.08 ± 0.01	15.58 ± 0.30
9	1000	10	35.75	11.85	-	4.207	133.5	84.17	95.79	34.26 ± 0.06	46.97 ± 0.08	28.17 ± 0.02	11.85 ± 0.56
10	1150	17	37.37	11.93	-	5.022	99.23	99.56	95.32	35.64 ± 0.05	48.84 ± 0.07	26.94 ± 0.02	13.53 ± 0.38
11	1350	10	64.25	13.09	-	63.90	2.865	99.99	69.67	45.12 ± 1.18	61.61 ± 1.58	15.63 ± 0.03	99.84 ± 6.20

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 9.6x10^{-17}; m/e39 = 6.6x10^{-17}; m/e38 = 3.6x10^{-17}; m/e37 = 4.8x10^{-17}; m/e 36 = 6.6x10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 297.5 ± 0.5), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed: 08-19-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254;$^{36}Ar/^{39}Ar_{Ca}$ = 0.000265;$^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)
[5] Assumes trapped argon is atmospheric. J-factor = 0.0077 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

PK114B Muscovite (5.2mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1] x10^{-1}	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1]	$^{36}Ar/^{39}Ar$ [1] x10^{-4}	$^{39}Ar_K$ [2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-5}
1	500	12	173.3	332.5	-	547.4	3.057	0.4785	6.502	11.30 ± 1.47	15.62 ± 2.02	5.778 ± 0.009	316.3 ± 2.9
2	600	10	53.98	20.56	-	98.21	4.675	1.210	45.53	24.71 ± 0.89	33.99 ± 1.21	18.61 ± 0.04	182.8 ± 5.5
3	680	10	42.30	13.04	-	34.87	11.90	3.072	74.84	31.74 ± 0.52	43.55 ± 0.70	23.78 ± 0.04	82.94 ± 4.13
4	740	13	39.47	12.12	-	19.16	21.77	6.479	84.89	33.56 ± 0.10	46.01 ± 0.14	25.50 ± 0.05	48.85 ± 0.65
5	800	10	39.50	12.13	-	17.21	26.20	10.58	86.37	34.16 ± 0.12	46.83 ± 0.17	25.48 ± 0.03	43.85 ± 0.97
6	850	10	41.85	11.95	-	22.02	43.06	17.32	83.79	35.09 ± 0.05	48.09 ± 0.07	24.04 ± 0.01	52.93 ± 0.37
7	900	13	41.50	12.17	-	16.79	141.9	39.52	87.42	36.29 ± 0.04	49.70 ± 0.06	24.24 ± 0.02	40.69 ± 0.23
8	950	10	40.13	12.17	-	13.69	66.62	49.95	89.25	35.84 ± 0.11	49.09 ± 0.15	25.08 ± 0.02	34.32 ± 0.91
9	1000	10	40.49	11.99	-	12.14	76.35	61.90	90.48	36.65 ± 0.29	50.19 ± 0.39	24.85 ± 0.17	30.16 ± 0.65
10	1150	13	38.88	11.88	-	7.604	218.3	96.06	93.56	36.38 ± 0.07	49.82 ± 0.09	25.89 ± 0.04	19.68 ± 0.16
11	1350	10	40.49	11.79	-	10.17	25.17	99.99	91.82	37.23 ± 0.19	50.97 ± 0.25	24.85 ± 0.02	25.29 ± 1.53

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 9.4x10^{-17}; m/e39 = 6.4x10^{-17}; m/e38 = 3.5x10^{-17}; m/e37 = 4.6x10^{-17}; m/e 36 = 6.5x10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 297.5 ± 0.5), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed: 08-19-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254; $^{36}Ar/^{39}Ar_{Ca}$ = 0.000265; $^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)
[5] Assumes trapped argon is atmospheric. J-factor = 0 007697 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

PR150 Muscovite (5.5mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar^{1}$ x10^{-1}	$^{38}Ar/^{39}Ar^{1}$ x10^{-3}	$^{37}Ar/^{39}Ar^{1}$	$^{36}Ar/^{39}Ar^{1}$ x10^{-4}	$^{39}Ar_K$[2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^{*}$[3] (%)	$^{40}Ar^{*}/^{39}Ar_K$[4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar^{6}$ ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar^{6}$ ± 1σ x10^{-5}
1	500	10	107.8	132.8	-	331.3	8.474	1.895	8.941	9.652 ± 0.68	13.37 ± 0.94	9.298 ± 0.01	308.0 ± 2.10
2	600	10	62.12	16.11	-	113.7	7.039	3.469	45.37	28.28 ± 0.60	38.90 ± 0.81	16.16 ± 0.04	183.7 ± 3.20
3	680	24	58.29	13.20	-	40.39	95.10	24.73	79.07	46.10 ± 0.08	62.99 ± 0.11	17.23 ± 0.02	69.59 ± 0.35
4	740	17	55.11	12.45	-	15.40	51.94	36.34	91.24	50.31 ± 0.11	68.63 ± 0.15	18.23 ± 0.02	28.07 ± 0.56
5	800	10	57.62	12.62	-	27.65	18.07	40.38	85.24	49.20 ± 0.27	67.14 ± 0.36	17.43 ± 0.05	48.20 ± 1.30
6	850	10	62.53	13.18	-	45.80	16.62	44.10	77.82	48.74 ± 0.37	66.53 ± 0.49	16.06 ± 0.09	73.54 ± 0.91
7	900	17	60.44	13.14	-	37.23	27.83	50.32	81.30	49.19 ± 0.14	67.13 ± 0.19	16.61 ± 0.01	61.85 ± 0.78
8	950	10	63.09	12.91	-	48.33	23.12	55.49	76.90	48.56 ± 0.32	66.29 ± 0.43	15.91 ± 0.03	76.91 ± 1.61
9	1000	11	57.38	12.64	-	27.03	43.39	65.19	85.60	49.15 ± 0.06	67.07 ± 0.08	17.50 ± 0.01	47.31 ± 0.34
10	1150	18	53.46	12.13	-	9.299	150.2	98.77	94.38	50.46 ± 0.07	68.83 ± 0.10	18.79 ± 0.02	17.48 ± 0.16
11	1350	10	58.85	12.56	-	26.79	5.481	99.99	85.74	50.69 ± 0.74	69.14 ± 0.99	17.06 ± 0.15	45.71 ± 3.16

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 8.1×10^{-17}; m/e39 = 5.1×10^{-17}; m/e38 = 2.8×10^{-17}; m/e37 = 3.8×10^{-17}; m/e 36 = 5.2×10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 297.5 ± 0.5), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed 08-19-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254; $^{36}Ar/^{39}Ar_{Ca}$ = 0.000265; $^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)
[5] Assumes trapped argon is atmospheric. J-factor = 0.007707 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

PR36A Biotite (5.2mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$[1] x10^{-1}	$^{38}Ar/^{39}Ar$[1] x10^{-3}	$^{37}Ar/^{39}Ar$[1] x10^{-4}	$^{36}Ar/^{39}Ar$[1] x10^{-4}	$^{39}Ar_K$[2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$[3] (%)	$^{40}Ar^*/^{39}Ar_K$[4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$[6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$[6] ± 1σ x10^{-5}
1	500	10	98.69	240.5	417.7	271.1	3.842	0.400	18.16	18.40 ± 1.72	21.68 ± 2.01	10.16 ± 0.05	275.2 ± 5.80
2	600	10	79.14	16.03	198.0	107.3	9.972	1.439	58.47	47.21 ± 0.67	55.14 ± 0.77	12.67 ± 0.02	135.9 ± 2.80
3	680	10	69.19	12.82	66.16	45.00	55.70	7.239	80.07	55.68 ± 0.07	64.84 ± 0.08	14.50 ± 0.00	65.21 ± 0.33
4	740	15	63.91	12.32	31.45	18.09	139.7	21.79	91.11	58.34 ± 0.10	67.89 ± 0.12	15.70 ± 0.02	28.39 ± 0.29
5	780	10	62.33	12.14	19.91	11.40	80.47	30.17	93.98	58.74 ± 0.08	68.35 ± 0.09	16.10 ± 0.02	18.34 ± 0.27
6	840	10	62.89	12.26	14.44	13.39	58.42	36.25	93.10	58.71 ± 0.09	68.31 ± 0.11	15.96 ± 0.01	21.36 ± 0.40
7	900	14	66.84	12.48	28.39	29.62	47.97	41.25	86.41	57.87 ± 0.12	67.35 ± 0.13	15.01 ± 0.02	44.44 ± 0.48
8	1000	10	67.68	12.82	42.42	36.99	72.77	48.82	83.43	56.53 ± 0.15	65.82 ± 0.18	14.82 ± 0.01	54.81 ± 0.73
9	1100	10	61.79	12.22	24.57	15.90	255.5	75.43	92.00	56.87 ± 0.08	66.21 ± 0.09	16.24 ± 0.01	25.81 ± 0.35
10	1350	15	62.97	12.14	17.94	11.96	236.0	99.99	93.94	59.21 ± 0.05	68.88 ± 0.05	15.94 ± 0.01	19.05 ± 0.12

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 7.8x10^{-16}; m/e39 = 1.0x10^{-16}; m/e38 = 5.4x10^{-17}; m/e37 = 8.7x10^{-17}; m/e 36 = 1.0x10^{-16}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed: 09-20-2001)

[2] Normalized to 100% delivery to mass spectrometer

[3] Includes static line blank

[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224; $^{36}Ar/^{39}Ar_{Ca}$ = 0.0003; $^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)

[5] Assumes trapped argon is atmospheric. J-factor = 0.006573 (assumes Fish Canyon sanidine = 27.8 Ma)

[6] Corrected for static line blank and nucleogenic interferences

PR36A Muscovite (5.4mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1] x10^{-1}	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1] x10^{-3}	$^{36}Ar/^{39}Ar$ [1] x10^{-3}	$^{39}Ar_K$ [2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-4}
1	500	10	150.3	175.9	291.0	86.83	3.200	0.3522	-	-	-	6.663 ± 0.017	57.81 ± 0.40
2	600	10	96.12	30.18	177.9	41.72	5.433	0.9503	-	-	-	10.43 ± 0.02	43.45 ± 0.37
3	680	15	82.45	18.31	58.95	17.14	16.43	2.758	38.37	31.63 ± 0.18	37.10 ± 0.21	12.16 ± 0.01	20.82 ± 0.07
4	740	14	82.11	13.05	2.473	6.863	25.35	5.549	74.83	61.61 ± 0.38	71.56 ± 0.43	12.21 ± 0.01	8.380 ± 0.155
5	800	10	79.87	12.84	0.7368	6.137	66.64	12.89	76.94	61.51 ± 0.16	71.45 ± 0.18	12.56 ± 0.01	7.706 ± 0.065
6	850	10	64.43	11.92	0.5535	0.8702	168.8	31.47	95.62	61.64 ± 0.06	71.59 ± 0.06	15.57 ± 0.01	1.355 ± 0.026
7	900	15	63.35	11.83	0.7179	0.5427	183.8	51.69	97.03	61.53 ± 0.07	71.47 ± 0.08	15.84 ± 0.01	0.859 ± 0.02
8	950	10	64.28	12.09	1.567	0.9790	85.92	61.15	94.85	61.17 ± 0.16	71.06 ± 0.18	15.61 ± 0.03	1.527 ± 0.050
9	1000	10	66.08	12.01	4.074	1.525	69.41	68.79	92.32	61.35 ± 0.17	71.27 ± 0.20	15.18 ± 0.01	2.314 ± 0.088
10	1150	14	64.04	12.01	1.482	0.7221	280.9	99.71	96.06	61.68 ± 0.10	71.64 ± 0.11	15.67 ± 0.02	1.131 ± 0.040
11	1350	10	110.6	17.38	24.74	16.05	2.592	99.99	54.28	63.01 ± 1.89	73.16 ± 2.15	9.057 ± 0.019	14.53 ± 0.57

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 8.9×10^{-16}; m/e39 = 9.7×10^{-17}; m/e38 = 5.4×10^{-17}; m/e37 = 8.5×10^{-17}; m/e 36 = 1.0×10^{-16}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed: 09-21-2001)

[2] Normalized to 100% delivery to mass spectrometer

[3] Includes static line blank

[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224; $^{36}Ar/^{39}Ar_{Ca}$ = 0.0003; $^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)

[5] Assumes trapped argon is atmospheric. J-factor = 0.006568 (assumes Fish Canyon sanidine = 27.8 Ma)

[6] Corrected for static line blank and nucleogenic interferences

RA138 Muscovite (5.4mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1] x10^{-1}	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1] x10^{-3}	$^{36}Ar/^{39}Ar$ [1] x10^{-4}	$^{39}Ar_K$ [2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age [5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-5}
1	500	10	167.1	109.9	38.24	485.1	10.18	1.197	14.05	23.53 ± 0.74	27.72 ± 0.87	5.993 ± 0.01	290.7 ± 1.50
2	600	10	61.50	16.14	31.41	72.49	26.65	4.331	64.68	39.88 ± 0.20	46.74 ± 0.23	16.32 ± 0.02	118.2 ± 1.10
3	680	10	67.62	13.22	11.34	38.58	47.51	9.918	82.71	56.00 ± 0.16	65.30 ± 0.19	14.84 ± 0.02	57.20 ± 0.70
4	740	14	66.59	12.59	4.930	26.66	72.82	18.48	87.76	58.49 ± 0.05	68.14 ± 0.06	15.07 ± 0.01	40.15 ± 0.24
5	800	10	63.88	12.53	3.076	17.30	83.15	28.26	91.58	58.55 ± 0.07	68.20 ± 0.07	15.71 ± 0.01	27.16 ± 0.22
6	850	10	62.86	12.51	2.647	12.36	112.8	41.52	93.78	58.99 ± 0.06	68.71 ± 0.07	15.96 ± 0.01	19.72 ± 0.29
7	900	14	62.19	12.45	2.002	9.843	176.9	62.33	94.93	59.05 ± 0.08	68.79 ± 0.09	16.14 ± 0.02	15.88 ± 0.27
8	950	10	62.42	12.56	1.796	12.14	104.6	74.63	93.84	58.61 ± 0.06	68.28 ± 0.07	16.08 ± 0.01	19.50 ± 0.24
9	1000	10	63.58	12.85	2.504	15.61	78.74	83.89	92.32	58.75 ± 0.14	68.43 ± 0.16	15.78 ± 0.01	24.63 ± 0.68
10	1150	14	65.53	12.72	5.238	16.28	116.2	97.55	92.27	60.49 ± 0.10	70.43 ± 0.12	15.31 ± 0.02	24.91 ± 0.37
11	1350	10	81.31	14.54	9.335	80.04	20.85	99.99	70.48	57.44 ± 0.48	66.94 ± 0.54	12.33 ± 0.06	98.68 ± 1.34

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 2.7x10^{-16}; m/e39 = 1.0x10^{-16}; m/e38 = 5.5x10^{-17}; m/e37 = 8.3x10^{-17}; m/e 36 = 1.0x10^{-16}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed09-13-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224;$^{36}Ar/^{39}Ar_{Ca}$ = 0.0003;$^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)
[5] Assumes trapped argon is atmospheric. J-factor = 0.006581 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

RA85 Muscovite (5.5mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1] x10^{-1}	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1] x10^{-2}	$^{36}Ar/^{39}Ar$ [1] x10^{-4}	$^{39}Ar_K$ [2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age [5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-5}
1	500	10	78.26	63.47	10.70	216.1	17.77	1.894	18.17	14.26 ± 0.40	16.84 ± 0.47	12.81 ± 0.02	276.6 ± 1.70
2	600	10	59.35	14.13	5.274	63.67	31.79	5.282	67.84	40.36 ± 0.27	47.23 ± 0.31	16.91 ± 0.02	107.4 ± 1.50
3	680	10	61.69	12.74	2.502	27.92	62.60	11.95	86.20	53.24 ± 0.18	62.05 ± 0.21	16.27 ± 0.01	45.30 ± 0.98
4	740	10	63.94	12.14	1.846	19.04	76.40	20.10	90.79	58.11 ± 0.11	67.62 ± 0.13	15.69 ± 0.03	29.80 ± 0.23
5	800	10	63.79	11.98	1.481	14.50	63.55	26.87	92.85	59.30 ± 0.18	68.98 ± 0.21	15.73 ± 0.04	22.74 ± 0.59
6	850	10	63.10	12.07	1.158	10.22	111.7	38.78	94.81	59.87 ± 0.50	69.64 ± 0.57	15.90 ± 0.13	16.19 ± 0.48
7	900	15	63.12	11.96	0.779	7.026	258.4	66.31	96.31	60.82 ± 0.05	70.72 ± 0.05	15.90 ± 0.01	11.13 ± 0.18
8	950	10	63.84	12.08	2.462	8.679	128.2	79.97	95.61	61.07 ± 0.06	71.00 ± 0.07	15.72 ± 0.01	13.53 ± 0.20
9	1000	10	64.29	12.26	1.846	11.76	101.4	90.77	94.21	60.61 ± 0.13	70.47 ± 0.14	15.61 ± 0.03	18.27 ± 0.32
10	1150	17	66.18	12.26	9.509	19.23	82.61	99.58	91.13	60.36 ± 0.12	70.20 ± 0.13	15.16 ± 0.01	28.73 ± 0.52
11	1350	10	150.0	19.99	93.60	298.0	3.961	99.99	41.39	62.56 ± 2.12	72.70 ± 2.41	6.673 ± 0.01	197.1 ± 4.70

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 2.9x10^{-16}; m/e39 = 1.0x10^{-16}; m/e38 = 5.3x10^{-17}; m/e37 = 8.1x10^{-17}; m/e 36 = 9.9x10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed: 09-14-2001)

[2] Normalized to 100% delivery to mass spectrometer

[3] Includes static line blank

[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224; $^{36}Ar/^{39}Ar_{Ca}$ = 0.0003; $^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)

[5] Assumes trapped argon is atmospheric. J-factor = 0.006573 (assumes Fish Canyon sanidine = 27.8 Ma)

[6] Corrected for static line blank and nucleogenic interferences

SG43 Muscovite (5.4mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1] x10^{-1}	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1] x10^{-2}	$^{36}Ar/^{39}Ar$ [1] x10^{-4}	$^{39}Ar_K$ [2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-5}
1	500	10	116.1	238.2	16.02	330.9	3.901	0.393	15.20	18.27 ± 1.23	21.33 ± 1.43	8.627 ± 0.03	285.1 ± 3.50
2	600	10	44.69	15.05	22.83	52.47	8.929	1.292	62.61	29.17 ± 0.77	33.95 ± 0.89	22.48 ± 0.04	116.4 ± 5.80
3	680	10	41.63	13.12	20.37	20.64	22.65	3.573	83.69	35.49 ± 0.28	41.23 ± 0.32	24.15 ± 0.02	48.37 ± 2.23
4	740	14	42.95	12.17	2.286	9.963	41.41	7.745	91.78	39.80 ± 0.17	46.16 ± 0.19	23.41 ± 0.03	23.16 ± 1.26
5	800	10	44.38	11.95	1.791	6.609	45.01	12.28	94.34	42.22 ± 0.28	48.93 ± 0.32	22.65 ± 0.03	14.85 ± 2.12
6	850	10	47.49	11.84	1.077	5.403	140.0	26.38	95.95	45.68 ± 0.04	52.88 ± 0.05	21.16 ± 0.01	11.36 ± 0.29
7	900	15	46.89	11.98	0.647	3.587	407.6	67.43	97.11	45.61 ± 0.07	52.80 ± 0.08	21.43 ± 0.03	7.646 ± 0.206
8	950	10	45.68	11.90	3.243	3.551	177.3	85.29	97.08	44.44 ± 0.49	51.46 ± 0.56	22.00 ± 0.24	7.598 ± 0.254
9	1000	10	45.66	11.99	8.317	3.739	89.10	94.27	96.84	44.40 ± 0.07	51.43 ± 0.08	22.01 ± 0.01	7.680 ± 0.491
10	1150	14	47.54	12.26	73.93	8.388	50.94	99.40	94.99	45.52 ± 0.11	52.70 ± 0.13	21.12 ± 0.03	13.04 ± 0.69
11	1350	10	49.54	13.52	357.4	28.08	5.985	99.99	84.10	44.31 ± 1.38	51.32 ± 1.58	20.22 ± 0.03	35.19 ± 9.43

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 1.1x10^{-15}; m/e39 = 1.2x10^{-16}; m/e38 = 6.8x10^{-17}; m/e37 = 9.8x10^{-17}; m/e36 = 1.3x10^{-16}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed: 09-26-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224; $^{36}Ar/^{39}Ar_{Ca}$ = 0.0003; $^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)
[5] Assumes trapped argon is atmospheric. J-factor = 0.006512 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

SG530 Muscovite (5.2mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar^{1}$ x10^{-1}	$^{38}Ar/^{39}Ar^{1}$ x10^{-3}	$^{37}Ar/^{39}Ar^{1}$ x10^{-3}	$^{36}Ar/^{39}Ar^{1}$ x10^{-4}	$^{39}Ar_K{}^{2}$ (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^{*3}$ (%)	$^{40}Ar^*/^{39}Ar_K{}^{4}$ ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar^{6}$ ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar^{6}$ ± 1σ x10^{-5}
1	500	10	49.53	62.71	72.15	128.7	8.364	1.007	22.19	11.35 ± 1.51	13.30 ± 1.76	20.28 ± 0.13	260.5 ± 10.2
2	600	10	29.63	14.32	86.77	44.99	17.57	3.121	53.81	16.19 ± 0.32	18.94 ± 0.37	34.00 ± 0.10	152.1 ± 3.50
3	680	10	26.89	12.24	54.49	15.58	40.61	8.009	81.77	22.11 ± 0.13	25.82 ± 0.15	37.50 ± 0.08	57.81 ± 1.54
4	740	14	28.68	11.97	12.44	8.077	62.49	15.53	90.54	26.08 ± 0.10	30.41 ± 0.11	35.15 ± 0.04	28.26 ± 1.13
5	800	10	32.12	11.88	10.04	7.335	56.90	22.38	92.02	29.74 ± 0.12	34.64 ± 0.14	31.35 ± 0.03	22.90 ± 1.24
6	850	10	37.91	11.90	7.302	7.097	90.13	33.23	93.48	35.59 ± 0.09	41.38 ± 0.10	26.54 ± 0.02	18.77 ± 0.73
7	900	14	42.30	11.86	4.257	5.505	250.1	63.33	95.48	40.46 ± 0.04	46.96 ± 0.05	23.76 ± 0.02	13.05 ± 0.27
8	950	10	41.17	11.88	4.629	4.297	160.9	82.69	96.15	39.68 ± 0.03	46.08 ± 0.04	24.42 ± 0.01	10.46 ± 0.25
9	1000	10	40.82	11.83	9.456	3.382	91.61	93.72	96.65	39.61 ± 0.05	45.99 ± 0.05	24.63 ± 0.01	8.260 ± 0.36
10	1150	14	45.43	12.18	67.04	8.607	48.74	99.59	93.44	42.72 ± 0.23	49.56 ± 0.26	22.12 ± 0.03	18.60 ± 1.61
11	1350	10	69.44	14.73	584.8	71.54	3.422	99.99	65.69	48.61 ± 2.37	56.29 ± 2.70	14.44 ± 0.04	100.8 ± 11.5

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 8.9×10^{-16}; m/e39 = 9.9×10^{-17}; m/e38 = 5.6×10^{-17}; m/e37 = 8.9×10^{-17}; m/e36 = 1.1×10^{-16}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed: 09-27-2001)

[2] Normalized to 100% delivery to mass spectrometer

[3] Includes static line blank

[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224; $^{36}Ar/^{39}Ar_{Ca}$ = 0.0003; $^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)

[5] Assumes trapped argon is atmospheric. J-factor = 0.006519 (assumes Fish Canyon sanidine = 27.8 Ma)

[6] Corrected for static line blank and nucleogenic interferences

SG531 Muscovite (4.9mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1] x10^{-1}	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1] x10^{-2}	$^{36}Ar/^{39}Ar$ [1] x10^{-4}	$^{39}Ar_K$ [2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-5}
1	500	10	128.4	246.7	7.079	401.3	6.338	1.152	7.449	9.604 ± 1.57	13.19 ± 2.15	7.805 ± 0.04	313.0 ± 4.10
2	600	10	23.86	14.31	15.53	33.34	20.36	4.851	57.75	13.88 ± 0.36	19.03 ± 0.49	42.35 ± 0.17	139.5 ± 5.00
3	700	10	23.16	12.25	18.14	11.02	54.30	14.72	85.22	19.80 ± 0.14	27.09 ± 0.19	43.65 ± 0.03	45.99 ± 2.08
4	780	10	29.43	11.88	0.978	6.069	63.71	26.30	92.89	27.39 ± 0.09	37.37 ± 0.13	34.27 ± 0.03	20.71 ± 1.04
5	820	10	34.22	11.93	0.725	6.316	57.19	36.69	93.64	32.10 ± 0.11	43.72 ± 0.15	29.44 ± 0.06	18.54 ± 0.84
6	860	10	37.69	11.86	0.996	6.264	81.53	51.51	94.32	35.59 ± 0.06	48.41 ± 0.08	26.71 ± 0.01	16.66 ± 0.52
7	900	10	38.61	11.77	0.974	4.836	123.6	73.97	95.58	36.94 ± 0.06	50.22 ± 0.08	26.07 ± 0.01	12.54 ± 0.53
8	1000	10	36.95	11.80	9.576	5.220	112.8	94.46	95.25	35.23 ± 0.10	47.92 ± 0.13	27.25 ± 0.04	13.53 ± 0.80
9	1100	10	38.88	11.57	30.23	13.75	24.73	98.96	89.16	34.81 ± 0.32	47.35 ± 0.43	25.89 ± 0.06	33.52 ± 2.65
10	1350	10	62.01	13.45	600.3	96.97	5.740	99.99	60.33	38.00 ± 0.65	51.63 ± 0.87	16.11 ± 0.02	131.3 ± 3.50

[1] Corrected for backgrounds (mean values in (mol): m/e40 = $2.4x10^{-16}$; m/e39 = $7.4x10^{-17}$; m/e38 = 2.1 $x10^{-17}$; m/e37 = $2.5x10^{-17}$; m/e 36 = $1.3x10^{-17}$), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 294.7 ± 1.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed: 02-19-2001)

[2] Normalized to 100% delivery to mass spectrometer

[3] Includes static line blank

[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254; $^{36}Ar/^{39}Ar_{Ca}$ = 0.000265; $^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)

[5] Assumes trapped argon is atmospheric. J-factor = 0.007641 (assumes Fish Canyon sanidine = 27.8 Ma)

[6] Corrected for static line blank and nucleogenic interferences

SG532A Muscovite (5.6mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$[1] x10^{-1}	$^{38}Ar/^{39}Ar$[1] x10^{-3}	$^{37}Ar/^{39}Ar$[1] x10^{-2}	$^{36}Ar/^{39}Ar$[1] x10^{-4}	$^{39}Ar_K$[2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$[3] (%)	$^{40}Ar^*/^{39}Ar_K$[4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$[6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$[6] ± 1σ x10^{-5}
1	500	10	210.1	410.5	15.76	648.2	4.871	1.246	8.748	18.44 ± 2.36	25.28 ± 3.21	4.764 ± 0.01	308.7 ± 3.80
2	600	10	18.75	15.01	15.36	33.10	20.98	6.613	46.73	8.832 ± 0.20	12.15 ± 0.28	54.07 ± 0.05	176.8 ± 3.70
3	700	10	15.36	12.09	13.11	10.90	51.15	19.70	77.72	11.99 ± 0.12	16.47 ± 0.16	66.21 ± 0.07	69.86 ± 2.63
4	780	10	18.68	11.82	2.715	6.263	53.12	33.29	88.56	16.60 ± 0.11	22.77 ± 0.15	54.27 ± 0.08	33.60 ± 2.03
5	820	11	24.87	11.85	3.244	6.214	37.56	42.89	91.38	22.80 ± 0.11	31.21 ± 0.15	40.63 ± 0.03	24.90 ± 1.50
6	860	10	30.62	12.07	4.792	6.236	48.95	55.42	93.07	28.56 ± 0.10	39.01 ± 0.13	32.93 ± 0.05	20.12 ± 0.91
7	900	10	33.06	11.93	6.108	4.941	76.43	74.97	94.83	31.39 ± 0.10	42.82 ± 0.13	30.48 ± 0.02	14.57 ± 0.97
8	1000	10	29.31	12.13	54.04	11.44	51.86	88.24	88.84	26.11 ± 0.10	35.70 ± 0.14	34.40 ± 0.08	34.44 ± 0.94
9	1100	10	24.41	12.00	71.65	19.66	21.25	93.67	76.94	18.92 ± 0.23	25.93 ± 0.31	41.37 ± 0.03	73.52 ± 3.17
10	1350	10	29.88	13.26	120.5	30.63	24.73	99.99	71.68	21.54 ± 0.26	29.50 ± 0.36	33.72 ± 0.07	92.61 ± 2.91

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 2.2x10^{-16}; m/e39 = 7.1x10^{-17}; m/e38 = 2.0 x10^{-17}; m/e37 = 2.4x10^{-17}; m/e 36 = 1.2x10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 294.7 ± 1.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed: 02-20-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254; $^{36}Ar/^{39}Ar_{Ca}$ = 0.000265; $^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)
[5] Assumes trapped argon is atmospheric. J-factor = 0.007652 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

SG533 Muscovite (4.9mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$[1] x10^{-1}	$^{38}Ar/^{39}Ar$[1] x10^{-3}	$^{37}Ar/^{39}Ar$[1] x10^{-2}	$^{36}Ar/^{39}Ar$[1] x10^{-4}	$^{39}Ar_K$[2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$[3] (%)	$^{40}Ar^*/^{39}Ar_K$[4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$[6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$[6] ± 1σ x10^{-5}
1	500	10	200.5	374.1	14.54	652.4	8.812	1.444	3.777	7.587 ± 1.41	10.44 ± 1.93	4.993 ± 0.02	325.6 ± 2.40
2	600	10	13.72	14.19	23.17	18.46	29.38	6.258	59.25	8.195 ± 0.26	11.27 ± 0.36	74.24 ± 0.17	132.5 ± 6.50
3	700	10	15.45	12.10	20.28	8.759	69.65	17.67	82.38	12.76 ± 0.13	17.53 ± 0.18	65.82 ± 0.12	54.12 ± 2.84
4	780	10	20.91	11.88	2.149	4.703	76.64	30.23	92.04	19.28 ± 0.13	26.41 ± 0.18	48.42 ± 0.12	22.49 ± 1.95
5	820	10	28.04	11.65	1.716	4.036	63.65	40.66	94.72	26.61 ± 0.07	36.35 ± 0.10	35.99 ± 0.04	14.36 ± 0.83
6	860	10	33.18	11.96	1.639	4.373	108.5	58.45	95.29	31.65 ± 0.04	43.14 ± 0.06	30.37 ± 0.03	13.15 ± 0.36
7	900	10	33.52	11.91	1.521	3.394	140.0	81.38	96.22	32.28 ± 0.06	44.00 ± 0.08	30.06 ± 0.02	10.08 ± 0.51
8	1000	10	30.12	11.87	18.27	5.738	70.52	92.94	93.85	28.32 ± 0.11	38.66 ± 0.15	33.47 ± 0.02	17.59 ± 1.28
9	1100	10	30.63	12.25	43.77	14.38	25.91	97.19	86.06	26.48 ± 0.19	36.17 ± 0.25	32.91 ± 0.05	43.53 ± 2.01
10	1350	10	24.37	13.15	107.1	33.38	17.16	99.99	61.44	15.11 ± 0.59	20.73 ± 0.81	41.42 ± 0.05	126.6 ± 8.30

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 2.1x10^{-16}; m/e39 = 6.9x10^{-17}; m/e38 = 2.0 x10^{-17}; m/e37 = 2.4x10^{-17}; m/e 36 = 1.2x10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 294.7 ± 1.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed: 02-20-2001)

[2] Normalized to 100% delivery to mass spectrometer

[3] Includes static line blank

[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254; $^{36}Ar/^{39}Ar_{Ca}$ = 0.000265; $^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)

[5] Assumes trapped argon is atmospheric. J-factor = 0.007648 (assumes Fish Canyon sanidine = 27.8 Ma)

[6] Corrected for static line blank and nucleogenic interferences

SG81 Muscovite (5.1)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1] x10^{-1}	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1] x10^{-2}	$^{36}Ar/^{39}Ar$ [1] x10^{-4}	$^{39}Ar_K$ [2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age [5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-5}
1	500	10	81.43	158.4	15.13	225.4	6.188	0.6626	17.53	14.74 ± 1.07	17.24 ± 1.24	12.31 ± 0.03	277.0 ± 4.4
2	600	10	33.55	15.39	28.91	38.80	14.31	2.195	63.75	22.12 ± 0.40	25.81 ± 0.46	30.00 ± 0.02	113.8 ± 4.0
3	680	10	37.67	12.77	50.13	19.61	28.57	5.254	83.92	32.11 ± 0.16	37.34 ± 0.18	26.69 ± 0.03	48.36 ± 1.35
4	740	14	41.14	11.94	3.115	8.119	53.72	11.01	92.99	38.54 ± 0.11	44.73 ± 0.12	24.44 ± 0.04	19.62 ± 0.71
5	800	10	44.32	11.79	1.299	6.004	52.91	16.67	94.84	42.34 ± 0.09	49.08 ± 0.10	22.68 ± 0.01	13.53 ± 0.65
6	850	10	46.88	11.79	0.9453	5.254	85.06	25.78	95.82	45.11 ± 0.32	52.25 ± 0.37	21.43 ± 0.14	11.20 ± 0.53
7	900	15	49.68	11.87	0.3778	4.807	280.9	55.86	96.59	48.04 ± 0.06	55.59 ± 0.07	20.22 ± 0.02	9.698 ± 0.284
8	950	10	49.38	11.89	0.3133	4.160	195.4	76.78	96.90	47.93 ± 0.04	55.47 ± 0.05	20.34 ± 0.01	8.443 ± 0.255
9	1000	10	48.39	12.03	0.6701	3.577	119.7	89.60	97.10	47.11 ± 0.08	54.53 ± 0.09	20.76 ± 0.01	7.385 ± 0.515
10	1150	15	49.45	12.27	5.766	5.599	88.49	99.07	95.96	47.62 ± 0.11	55.12 ± 0.12	20.31 ± 0.02	11.02 ± 0.71
11	1350	10	56.17	13.74	30.53	27.00	8.656	99.99	83.16	48.25 ± 0.74	55.83 ± 0.85	17.87 ± 0.07	46.62 ± 4.28

[1] Corrected for backgrounds (mean values in (mol): m/e40 = $1.1x10^{-15}$; m/e39 = $9.5x10^{-17}$; m/e38 = $5.4x10^{-17}$; m/e37 = $8.5x10^{-17}$; m/e 36 = $1.1x10^{-16}$), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed: 09-27-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224; $^{36}Ar/^{39}Ar_{Ca}$ = 0.0003; $^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)
[5] Assumes trapped argon is atmospheric. J-factor = 0.006514 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

SP10 Muscovite (4.2mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$[1] x10^{-1}	$^{38}Ar/^{39}Ar$[1] x10^{-3}	$^{37}Ar/^{39}Ar$[1] x10^{-2}	$^{36}Ar/^{39}Ar$[1] x10^{-4}	$^{39}Ar_K$[2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$[3] (%)	$^{40}Ar^*/^{39}Ar_K$[4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$[6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$[6] ± 1σ x10^{-5}
1	500	10	135.9	222.1	2.452	412.9	8.352	1.172	9.984	13.61 ± 1.63	18.65 ± 2.22	7.374 ± 0.04	304.5 ± 4.00
2	600	10	64.14	15.65	1.826	101.6	17.52	3.631	52.64	33.87 ± 0.48	46.08 ± 0.64	15.65 ± 0.03	159.0 ± 2.50
3	700	10	48.77	12.43	0.2903	29.53	52.64	11.02	81.48	39.79 ± 0.10	54.01 ± 0.13	20.61 ± 0.01	60.85 ± 0.69
4	780	10	45.95	11.97	-	11.73	94.31	24.26	91.82	42.23 ± 0.09	57.27 ± 0.12	21.88 ± 0.01	25.68 ± 0.64
5	820	10	45.51	11.86	-	6.880	91.36	37.08	94.88	43.22 ± 0.05	58.59 ± 0.07	22.10 ± 0.02	15.21 ± 0.30
6	860	10	45.88	11.96	0.0971	8.056	78.64	48.12	94.16	43.24 ± 0.06	58.62 ± 0.08	21.92 ± 0.01	17.65 ± 0.43
7	900	10	45.65	11.93	0.0262	8.052	78.27	59.11	94.13	43.02 ± 0.07	58.33 ± 0.09	22.03 ± 0.03	17.73 ± 0.32
8	1000	10	45.45	11.71	0.553	4.368	268.5	96.79	96.55	43.91 ± 0.05	59.51 ± 0.06	22.13 ± 0.01	9.633 ± 0.31
9	1100	10	51.32	11.94	4.726	17.12	19.84	99.58	89.39	46.04 ± 0.25	62.35 ± 0.34	19.58 ± 0.04	33.28 ± 1.57
10	1350	10	86.54	13.91	161.3	127.5	2.990	99.99	56.80	49.93 ± 1.07	67.52 ± 1.42	11.57 ± 0.03	142.9 ± 4.10

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 2.4x10^{-16}; m/e39 = 7.4x10^{-17}; m/e38 = 2.2 x10^{-17}; m/e37 = 2.5x10^{-17}; m/e 36 = 1.3x10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 294.7 ± 1.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed: 02-19-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254;$^{36}Ar/^{39}Ar_{Ca}$ = 0.000265;$^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)
[5] Assumes trapped argon is atmospheric. J-factor = 0.007638 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

SP25D Muscovite (5.7mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$[1] x10^-1	$^{38}Ar/^{39}Ar$[1] x10^-3	$^{37}Ar/^{39}Ar$[1] x10^-2	$^{36}Ar/^{39}Ar$[1] x10^-4	$^{39}Ar_K$[2] (mol) x10^-15	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$[3] (%)	$^{40}Ar^*/^{39}Ar_K$[4] ± 1σ x10^-1	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$[6] ± 1σ x10^-2	$^{36}Ar/^{40}Ar$[6] ± 1σ x10^-5
1	500	10	143.7	512.7	5.232	447.6	15.95	1.738	7.766	11.17 ± 1.32	15.32 ± 1.81	6.973 ± 0.01	312.0 ± 3.10
2	600	10	55.26	16.62	1.380	92.85	26.84	4.664	49.78	27.58 ± 0.29	37.58 ± 0.39	18.18 ± 0.03	168.7 ± 1.70
3	700	10	47.29	12.80	0.479	49.63	66.39	11.90	68.37	32.37 ± 0.21	44.04 ± 0.29	21.26 ± 0.01	105.5 ± 1.50
4	780	10	43.49	11.93	0.246	23.17	122.4	25.24	83.62	36.40 ± 0.16	49.43 ± 0.22	23.13 ± 0.01	53.57 ± 1.27
5	820	10	44.59	12.01	0.232	19.82	95.16	35.61	86.21	38.48 ± 0.07	52.23 ± 0.09	22.56 ± 0.02	44.69 ± 0.43
6	860	10	45.05	11.94	0.528	18.41	123.0	49.02	87.31	39.36 ± 0.17	53.40 ± 0.22	22.33 ± 0.05	41.06 ± 0.96
7	900	10	43.80	12.10	1.709	16.67	154.8	65.89	88.15	38.63 ± 0.06	52.43 ± 0.08	22.96 ± 0.01	38.18 ± 0.42
8	1000	10	45.79	12.00	10.13	14.16	249.3	93.06	90.41	41.43 ± 0.05	56.17 ± 0.06	21.96 ± 0.02	30.52 ± 0.23
9	1100	10	51.29	12.27	14.26	31.56	54.03	98.95	81.42	41.83 ± 0.17	56.70 ± 0.23	19.59 ± 0.01	61.09 ± 1.11
10	1350	10	72.83	12.92	74.74	96.23	9.592	99.99	61.06	44.75 ± 0.44	60.60 ± 0.59	13.77 ± 0.02	129.9 ± 2.00

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 2.6×10^{-16}; m/e39 = 7.6×10^{-17}; m/e38 = 2.2×10^{-17}; m/e37 = 2.6×10^{-17}; m/e 36 = 1.3×10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 294.7 ± 1.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed: 02-18-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254; $^{36}Ar/^{39}Ar_{Ca}$ = 0.000265; $^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)
[5] Assumes trapped argon is atmospheric. J-factor = 0.007633 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

TR18 Muscovite (5.4mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$ [1] x10^{-1}	$^{38}Ar/^{39}Ar$ [1] x10^{-3}	$^{37}Ar/^{39}Ar$ [1]	$^{36}Ar/^{39}Ar$ [1] x10^{-3}	$^{39}Ar_K$ [2] (mol) x10^{-15}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$ [3] (%)	$^{40}Ar^*/^{39}Ar_K$ [4] ± 1σ x10^{-1}	Age [5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$ [6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$ [6] ± 1σ x10^{-4}
1	500	10	128.7	504.0	0	73.41	2.955	0.862	-	-	-	7.788 ± 0.02	57.17 ± 0.24
2	600	10	36.07	27.31	0	18.82	7.796	3.136	-	-	-	27.91 ± 0.25	52.54 ± 0.68
3	680	12	29.81	16.06	0	6.693	19.58	8.846	32.81	-	-	33.83 ± 0.07	22.65 ± 0.18
4	740	17	28.93	11.83	0	0.759	28.17	17.06	91.22	26.44 ± 0.17	36.22 ± 0.23	34.87 ± 0.03	2.648 ± 0.20
5	800	10	30.73	12.04	0	0.872	22.82	23.72	90.61	27.90 ± 0.21	38.21 ± 0.28	32.81 ± 0.08	2.861 ± 0.22
6	850	10	33.63	11.80	0	0.687	40.84	35.63	93.12	31.35 ± 0.14	42.87 ± 0.19	29.96 ± 0.09	2.059 ± 0.10
7	900	17	33.89	11.94	0	0.513	80.20	59.02	94.73	32.12 ± 0.06	43.92 ± 0.08	29.73 ± 0.03	1.525 ± 0.05
8	950	10	33.51	11.99	0	0.517	38.23	70.17	94.57	31.73 ± 0.06	43.39 ± 0.09	30.07 ± 0.04	1.553 ± 0.05
9	1000	10	34.68	12.05	0	0.459	38.54	81.41	95.24	33.08 ± 0.07	45.20 ± 0.09	29.04 ± 0.05	1.333 ± 0.02
10	1150	13	36.14	12.10	0	0.450	61.34	99.30	95.56	34.56 ± 0.05	47.21 ± 0.07	27.86 ± 0.04	1.254 ± 0.02
11	1350	10	80.87	24.66	0	9.542	2.405	99.99	64.30	52.43 ± 1.20	71.13 ± 1.60	12.40 ± 0.05	11.83 ± 0.49

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 1.0x10^{-16}; m/e39 = 6.2x10^{-17}; m/e38 = 3.4x10^{-17}; m/e37 = 4.7x10^{-17}; m/e 36 = 6.4x10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 297.5 ± 0.5), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed: 08-19-2001)
[2] Normalized to 100% delivery to mass spectrometer
[3] Includes static line blank
[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254; $^{36}Ar/^{39}Ar_{Ca}$ = 0.000265; $^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)
[5] Assumes trapped argon is atmospheric. J-factor = 0.007671 (assumes Fish Canyon sanidine = 27.8 Ma)
[6] Corrected for static line blank and nucleogenic interferences

TR24C Muscovite (5.6mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$[1] x10^{-1}	$^{38}Ar/^{39}Ar$[1] x10^{-3}	$^{37}Ar/^{39}Ar$[1] x10^{-3}	$^{36}Ar/^{39}Ar$[1] x10^{-3}	$^{39}Ar_K$[2] (mol) x10^{-14}	Σ $^{39}Ar_K$ (%)	$^{40}Ar^*$[3] (%)	$^{40}Ar^*/^{39}Ar_K$[4] ± 1σ x10^{-1}	Age[5] ± 1σ (Ma)	$^{39}Ar_K/^{40}Ar$[6] ± 1σ x10^{-2}	$^{36}Ar/^{40}Ar$[6] ± 1σ x10^{-5}
1	500	10	183.1	178.5	121.5	577.7	0.909	0.786	6.684	12.26 ± 0.82	14.37 ± 0.96	5.469 ± 0.01	315.7 ± 1.05
2	600	10	47.04	17.43	149.5	70.28	1.535	2.112	55.47	26.18 ± 0.37	30.55 ± 0.43	21.36 ± 0.03	149.2 ± 2.60
3	680	10	42.87	12.60	96.97	30.26	3.276	4.943	78.68	33.80 ± 0.23	39.34 ± 0.26	23.45 ± 0.09	70.27 ± 1.26
4	740	14	42.12	12.05	11.64	21.42	4.540	8.868	84.37	35.57 ± 0.13	41.38 ± 0.15	23.87 ± 0.04	51.05 ± 0.84
5	800	10	42.78	11.99	7.348	16.57	5.050	13.23	87.99	37.67 ± 0.11	43.79 ± 0.12	23.50 ± 0.01	38.88 ± 0.84
6	850	12	42.17	11.99	4.367	10.18	12.60	24.12	92.32	38.95 ± 0.07	45.26 ± 0.08	23.84 ± 0.01	24.24 ± 0.56
7	900	15	41.37	11.85	2.414	6.517	29.35	49.49	94.80	39.22 ± 0.35	45.58 ± 0.40	24.30 ± 0.21	15.82 ± 0.27
8	950	10	40.90	12.00	3.595	5.581	23.46	69.77	95.40	39.03 ± 0.03	45.36 ± 0.03	24.58 ± 0.01	13.69 ± 0.15
9	1000	14	41.79	11.89	2.714	4.477	25.03	91.40	96.27	40.25 ± 0.07	46.75 ± 0.08	24.06 ± 0.02	10.75 ± 0.46
10	1150	17	42.68	12.08	54.59	10.87	5.515	96.17	91.94	39.30 ± 0.13	45.66 ± 0.15	23.55 ± 0.02	25.21 ± 0.99
11	1350	13	42.94	11.98	77.29	10.46	4.431	99.99	92.31	39.70 ± 0.19	46.12 ± 0.21	23.41 ± 0.04	23.94 ± 1.36

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 1.5×10^{-16}; m/e39 = 1.0×10^{-16}; m/e38 = 5.8×10^{-17}; m/e37 = 8.4×10^{-17}; m/e 36 = 1.1×10^{-16}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 293.2 ± 0.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 06-17-2001; Analyzed: 08-26-2001)

[2] Normalized to 100% delivery to mass spectrometer

[3] Includes static line blank

[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0224; $^{36}Ar/^{39}Ar_{Ca}$ = 0.0003; $^{39}Ar/^{37}Ar_{Ca}$ = 0.000769)

[5] Assumes trapped argon is atmospheric. J-factor = 0.006523 (assumes Fish Canyon sanidine = 27.8 Ma)

[6] Corrected for static line blank and nucleogenic interferences

YN17 Muscovite (5.5mg)

	T (°C)	Time (min.)	$^{40}Ar/^{39}Ar$[1] $\times10^{-1}$	$^{38}Ar/^{39}Ar$[1] $\times10^{-3}$	$^{37}Ar/^{39}Ar$[1] $\times10^{-3}$	$^{36}Ar/^{39}Ar$[1] $\times10^{-4}$	$^{39}Ar_K$[2] (mol) $\times10^{-14}$	$\Sigma\ ^{39}Ar_K$ (%)	$^{40}Ar^*$[3] (%)	$^{40}Ar^*/^{39}Ar_K$[4] $\pm 1\sigma$ $\times10^{-1}$	Age[5] $\pm 1\sigma$ (Ma)	$^{39}Ar_K/^{40}Ar$[6] $\pm 1\sigma$ $\times10^{-2}$	$^{36}Ar/^{40}Ar$[6] $\pm 1\sigma$ $\times10^{-5}$
1	500	10	168.7	331.3	30.11	519.8	0.833	0.544	8.776	14.84 ± 1.49	20.54 ± 2.05	5.938 ± 0.01	308.6 ± 3.00
2	600	10	33.21	13.77	58.59	38.10	1.665	1.630	65.04	21.74 ± 0.17	30.02 ± 0.23	30.34 ± 0.04	115.2 ± 1.70
3	700	10	28.38	12.17	54.52	10.33	4.213	4.379	88.22	25.12 ± 0.12	34.63 ± 0.16	35.55 ± 0.07	36.23 ± 1.22
4	780	10	29.41	11.89	1.836	6.069	6.015	8.303	92.84	27.36 ± 0.05	37.69 ± 0.06	34.30 ± 0.05	20.80 ± 0.16
5	820	10	31.29	11.59	-	6.066	6.187	12.34	93.25	29.23 ± 0.08	40.25 ± 0.10	32.22 ± 0.06	19.62 ± 0.52
6	860	10	34.67	11.93	-	9.239	7.950	17.53	91.26	31.69 ± 0.07	43.58 ± 0.10	29.05 ± 0.01	26.87 ± 0.68
7	900	10	34.43	11.78	-	4.505	16.44	28.25	95.33	32.85 ± 0.04	45.16 ± 0.06	29.26 ± 0.03	13.20 ± 0.22
8	1000	10	34.11	11.72	-	3.594	37.07	52.44	96.08	32.80 ± 0.03	45.09 ± 0.05	29.53 ± 0.02	10.63 ± 0.24
9	1100	10	34.91	11.73	0.089	2.262	16.09	62.94	97.29	33.98 ± 0.05	46.70 ± 0.07	28.86 ± 0.01	6.527 ± 0.49
10	1000	10	34.11	11.72	-	3.608	37.07	87.13	96.07	32.79 ± 0.04	45.09 ± 0.06	29.53 ± 0.02	10.67 ± 0.33
11	1100	10	34.91	11.73	0.089	2.262	16.09	97.62	97.29	33.98 ± 0.05	46.70 ± 0.07	28.86 ± 0.01	6.527 ± 0.49
12	1350	10	38.02	11.39	44.62	10.78	3.645	99.99	90.79	34.62 ± 0.11	47.56 ± 0.15	26.48 ± 0.02	28.23 ± 1.00

[1] Corrected for backgrounds (mean values in (mol): m/e40 = 2.5×10^{-16}; m/e39 = 7.6×10^{-17}; m/e38 = 2.3×10^{-17}; m/e37 = 2.9×10^{-17}; m/e36 = 1.3×10^{-17}), mass discrimination (measured $^{40}Ar/^{36}Ar_{ATM}$ = 294.7 ± 1.7), abundance sensitivity (5 ppm), and radioactive decay (Irradiated: 08-16-2000; Analyzed: 02-21-2001)

[2] Normalized to 100% delivery to mass spectrometer

[3] Includes static line blank

[4] Corrected for atmospheric argon and nucleogenic interferences ($^{40}Ar/^{39}Ar_K$ = 0.0254; $^{36}Ar/^{39}Ar_{Ca}$ = 0.000265; $^{39}Ar/^{37}Ar_{Ca}$ = 0.00086)

[5] Assumes trapped argon is atmospheric. J-factor = 0.007717 (assumes Fish Canyon sanidine = 27.8 Ma)

[6] Corrected for static line blank and nucleogenic interferences