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BLUE RIDGE, COLORADO, QUARTZITE SUCCESSION

Rock descriptions

The Proterozoic metasedimentary succession and crystalline basement rocks exposed along Blue Ridge were mapped and described by Reuss (1974), and the following unit descriptions are summarized largely from his work with additional data from the UNM Advanced Field Camp. Basement exposures are dominated by weakly foliated to locally mylonitic, coarse-grained granodiorite of the Paleoproterozoic Twin Mountain batholith (ca. 1705 Ma; Bickford et al., 1989) but also locally include feldspathic biotite schist and gneiss. Basement granitoids are overlain by a 15–25 m thick layer of quartzite pebble conglomerate on the northern side of the metasedimentary succession (Figs. 2A and 2D). Quartzite pebbles are 0.5–2.0 cm in size, and the surrounding matrix consists of quartz, muscovite, and well-rounded zircon up to 0.1 mm in size. The lower 5–10 m of conglomerate also contain up to 20% microcline crystals that are 0.5–2.0 cm in size and contain numerous quartz and muscovite inclusions and black tourmaline veinlets. These clasts are interpreted to represent igneous material derived from the underlying granitoid basement. Between the conglomerate and basement granitoid rocks is a thin (5–10 m), poorly-exposed zone of phyllitic material that locally contains large granitic clasts (Fig. 2D). This zone is interpreted to be a regolith that represents part of the underlying granodiorite that was sub-aerially exposed and heavily weathered prior to deposition of the conglomerate.

The quartzite pebble conglomerate is overlain by quartzite and schist that are exposed in eight northeast-trending, subvertical layers ranging in thickness from 15 to 350 m (Fig. 2A). The contact between conglomerate and quartzite ranges from sharp to gradational, and isolated lenses of conglomerate occur within the upper units of the quartzite. Based on the gradational stratigraphic progression from highly-weathered granitoid basement to basal conglomerate to quartzite and schist, the basal conglomerate and, therefore, the entire metasedimentary succession, is interpreted to be in unconformable depositional contact with underlying plutonic basement rocks. Quartzite is relatively pure (80–95% quartz with 1–10% muscovite), and individual quartz grains range in size from 0.5 to 5.0 mm and are strongly recrystallized with interlocking, sutured grain boundaries. Tabular cross-bedding is well preserved (Fig. 2C) with individual bed thicknesses between 0.1 and 0.4 m thick, and paleocurrent analysis corrected for deformation suggests a dominant current direction from the north-northeast. Oscillation ripple marks are also locally preserved and have an average amplitude and wavelength of 0.5–1.5 cm and 2–5 cm, respectively. Schist layers are dominated by quartz, biotite, and muscovite but also presently contain a variety of metamorphic minerals including garnet + sillimanite + andalusite + staurolite ± cordierite ± actinolite. Interlayered beds of quartzite and/or quartz pebble conglomerate are common.

Structural relationships

After deposition, the protoliths of the metasedimentary succession experienced two major phases of deformation and metamorphism. The first phase (D_1/M_1) involved development of a bedding-parallel foliation accompanied by growth and/or recrystallization of biotite, muscovite, staurolite, and locally cordierite (Reuss, 1974). The second phase of deformation (D_2) produced the 4-km-wavelength Gooseberry Gulch syncline (Fig. 2B), the dominant structure at Blue Ridge (Fig. 2A). D_2 folding was accompanied by amphibolite-facies metamorphism (M_2) and local development of a subvertical, axial-planar foliation (S_2). It is difficult to determine whether or not basement granitoids were folded with the overlying succession. The southern limb of the syncline is cut by a ductile shear zone that juxtaposes steeply-dipping quartzite and schist against strongly-deformed, locally-mylonitic granodiorite, omitting nearly 1 km of stratigraphic thickness from the lower part of the metasedimentary succession (Fig. 2B; Reuss, 1974). Deformation is most intense within 5–10 m of the granodiorite/quartzite contact and grades into weakly-foliated granodiorite across a distance of 20–30 m. The shear zone fabric is subparallel with S_2 in the quartzite succession and, thus, is interpreted to have formed during the late stages of D_2 shortening. The folded succession is also cut by a series of 60–180 m left-lateral, en-echelon folds that postdate development of the main syncline. These folds are interpreted to have formed during the late stages of D_2 or during a later deformation event (D_3; Reuss, 1974).

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Table DR1. U-Pb Isotopic Data and Ages for Samples from Blue Ridge, Colorado

Fraction		Weight [mg]	Concentration U [ppm]	Concentration Pb^R [ppm]	Measured Common Pb^T [pg]	$^{206}Pb/^{204}Pb$	*Corrected Atomic Ratios $^{208}Pb/^{206}Pb$	$^{206}Pb/^{238}U$		$^{207}Pb/^{235}U$		$^{207}Pb/^{206}Pb$		Ages (Ma) $^{206}Pb/^{238}U$	$^{207}Pb/^{235}U$	$^{207}Pb/^{206}Pb$
Foliated granodiorite (J01-BR3; Lat N 38°35.041′, Long W 105° 18.258′)																
Z1	single clr euh prsm abr	0.002	249	73.7	1	8048	0.0614	0.29561	78	4.2446	114	0.10414	14	1669	1683	1699
Z2	md-sm clr euh prsm abr	0.002	197	59.6	7	1113	0.0654	0.30106	78	4.3315	124	0.10435	18	1697	1699	1703
Z3	md clr euh prsm abr	0.003	181	54.8	3	3667	0.071	0.30026	92	4.3256	132	0.10448	16	1693	1698	1705
Sheared granodiorite (K00-BR-25; Lat N 38°33.697′, Long W 105° 18.258′)																
Z1	sm-md pnk sbhd prsm abr	0.001	125	38	2	1559	0.0807	0.29885	80	4.3113	132	0.10463	18	1686	1696	1708
Z2	sm-md clr sbhd abr	0.002	90	28.7	2	2640	0.1275	0.30225	118	4.3263	172	0.10381	28	1702	1698	1693
Z3	sm-md euh prsm clr abr	0.003	158	49.8	13	786	0.1213	0.29929	74	4.2958	122	0.10410	18	1688	1693	1698
Z4	md euh clr abr	0.004	185	58.4	10	1419	0.1307	0.2976	70	4.2775	110	0.10425	16	1679	1689	1701
Cross-cutting pegmatite dike (K00-BR-26; Lat N 38°33.697′, Long W 105° 18.258′)																
Z1	v sm clr-pnk sbhd prsm abr	0.001	210	59.1	4	467	0.064	0.28056	94	4.0002	268	0.10341	56	1594	1634	1686
Z2	v sm pnk-brn sbhd prsm abr	0.001	116	33	6	272	0.1089	0.27299	98	3.9369	496	0.10459	114	1556	1621	1707
Z3	sm pnk euh prsm abr	0.002	335	82.6	6	2130	0.0993	0.24061	56	3.0009	76	0.09045	12	1390	1408	1435
Cross-cutting pegmatite dike (J03-BR4; Lat N 38°33.697′, Long W 105° 18.258′)																
Z1	md clr-bge sbhd abr	0.002	480	145	20	1084	0.0776	0.29664	70	4.333	106	0.10594	14	1675	1700	1731
Z2	sm euh clr abr	0.002	92	29.2	2	1469	0.1184	0.30166	76	4.3307	136	0.10412	22	1700	1699	1699
Z3	md clr sbhe nabr	0.001	119	30.3	21	98	0.0937	0.25038	76	3.0991	316	0.08977	80	1440	1432	1421

Abbreviations: abr=abraded; brn=brown; bge=beige; clr=clear; euh=euhedral; lg=large; md=medium; nabr=not abraded; pnk=pink; prsm=prisms; sm=small; sbhd=subhedral; v=very

*Ratios corrected for fractionation, 1 pg and 0.25 pg laboratory Pb and U blanks respectively and initial common Pb calculated using Pb isotopic compositions of Stacey and Kramers (1975). All fractions of zircon are extensively abraded (Krogh, 1982) unless otherwise noted. Two-sigma uncertainties on isotopic ratios are reported after the ratios and refer to the final digits. Pb^R refers to radiogenic Pb; Common Pb^T refers to total common Pb.

Table DR2. U-Pb Isotopic Data and Ages for Detrital Zircon Sample from Phantom Canyon, Colorado

Fraction		Weight [mg]	Concentration U [ppm]	Concentration Pb^R [ppm]	Measured Common Pb^T [pg]	$^{206}Pb/^{204}Pb$	*Corrected Atomic Ratios $^{208}Pb/^{206}Pb$	$^{206}Pb/^{238}U$		$^{207}Pb/^{235}U$		$^{207}Pb/^{206}Pb$		Ages (Ma) $^{206}Pb/^{238}U$	$^{207}Pb/^{235}U$	$^{207}Pb/^{206}Pb$
Phantom Canyon quartzite (J03-PC1; Lat N 38°35.041′, Long W 105° 18.258′)																
Z9	sm-md clr pcs abr	0.004	239	52	88	171	0.1421	0.2028	50	2.9159	134	0.10428	36	1190	1386	1702
Z18	single md-lg clr abr	0.006	115	35.8	7	1578	0.1919	2.7767	66	3.9914	102	0.10425	16	1580	1632	1701
Z43	single md clr abr	0.003	219	38.9	3	2585	0.0799	0.17465	42	2.5093	64	0.1042	14	1038	1275	1700

Abbreviations: abr=abraded; clr=clear; g=large; md=medium; pcs=pieces; sm=small

*Ratios corrected for fractionation, 1 pg and 0.25 pg laboratory Pb and U blanks respectively and initial common Pb calculated using Pb isotopic compositions of Stacey and Kramers (1975). All fractions of zircon are extensively abraded (Krogh, 1982) unless otherwise noted. Two-sigma uncertainties on isotopic ratios are reported after the ratios and refer to the final digits. Pb^R refers to radiogenic Pb; Common Pb^T refers to total common Pb. Zircon fraction numbers correspond to LA-ICP-MS analysis numbers reported in Jones (2005).

Table DR3. Detrital zircon LA-ICP-MS data

#	N	^{206}Pb/^{204}Pb†	Isotopic ratios (corrected) ^{207}Pb*/^{235}U	± (abs)	^{206}Pb*/^{238}U	± (abs)	^{207}Pb*/^{206}Pb*	± (abs)	Ages (Ma) ^{207}Pb*/^{235}U	± (abs)	^{206}Pb*/^{238}U	± (abs)	^{207}Pb*/^{206}Pb*	± (abs)	Disc. (%)
Sample J03-PC1: Quartzite, Phantom Canyon, Colorado															
1	20	4,881	1.429	0.272	0.0991	0.0182	0.1046	0.0029	901	114	609	107	1707	50	-47.92
2	19	6,474	2.927	0.199	0.2008	0.0119	0.1057	0.0028	1389	52	1179	64	1727	49	15.01
3	19	19,041	2.386	0.359	0.1626	0.0239	0.1064	0.0028	1238	108	971	132	1739	48	-27.49
4	20	6,948	2.926	0.188	0.2062	0.0113	0.1029	0.0028	1389	49	1209	60	1677	50	12.05
5	12	2,201	1.021	0.083	0.0731	0.0052	0.1014	0.0030	715	42	455	31	1649	54	-57.19
6	14	5,210	2.125	0.148	0.1467	0.0091	0.1050	0.0030	1157	48	883	51	1715	52	-31.08
7	9	9,990	1.682	0.126	0.1167	0.0080	0.1045	0.0031	1002	48	711	46	1706	54	-40.81
8	18	17,429	3.840	0.235	0.2626	0.0136	0.1060	0.0028	1601	49	1503	69	1732	48	3.82
9	10	8,340	3.054	0.462	0.2167	0.0315	0.1022	0.0029	1421	116	1265	167	1665	53	9.37
10	19	5,534	2.643	0.193	0.1855	0.0120	0.1033	0.0028	1313	54	1097	65	1685	50	18.17
11	18	9,638	3.336	0.209	0.2293	0.0122	0.1055	0.0028	1490	49	1331	64	1724	49	8.47
12	18	10,025	2.627	0.193	0.1802	0.0119	0.1058	0.0028	1308	54	1068	65	1727	49	21.77
13	15	34,516	3.780	0.262	0.2455	0.0149	0.1117	0.0031	1589	56	1415	77	1827	50	8.09
14	19	16,990	3.740	0.227	0.2559	0.0131	0.1060	0.0028	1580	49	1469	67	1732	49	4.62
15	19	5,613	1.602	0.157	0.1122	0.0104	0.1035	0.0028	971	61	686	60	1688	50	-41.59
16	12	13,224	3.648	0.264	0.2520	0.0160	0.1050	0.0029	1560	58	1449	83	1714	51	4.78
17	11	13,916	4.103	0.317	0.2806	0.0191	0.1061	0.0030	1655	63	1594	96	1733	52	2.03
18	19	22,161	3.827	0.241	0.2655	0.0143	0.1045	0.0027	1598	51	1518	73	1706	48	3.05
19	20	5,661	3.907	0.293	0.2593	0.0172	0.1093	0.0029	1615	61	1486	88	1787	48	5.25
20	20	8,443	3.708	0.253	0.2582	0.0152	0.1042	0.0028	1573	54	1480	78	1700	49	3.75
21	19	2,432	1.248	0.079	0.0890	0.0048	0.1017	0.0028	822	36	549	29	1656	51	-49.68
22	19	6,910	2.652	0.308	0.1832	0.0201	0.1050	0.0028	1315	86	1084	110	1714	49	20.11
23	19	7,670	4.146	0.269	0.2861	0.0156	0.1051	0.0028	1663	53	1622	78	1716	50	1.31
24	17	6,802	2.429	0.346	0.1668	0.0229	0.1056	0.0028	1251	102	995	126	1725	50	-25.80
25	18	8,348	3.713	0.245	0.2565	0.0145	0.1050	0.0028	1574	53	1472	74	1714	49	4.21
26	19	9,069	2.866	0.222	0.1985	0.0139	0.1047	0.0028	1373	58	1167	75	1709	50	15.06
27	19	7,192	1.010	0.491	0.0695	0.0332	0.1054	0.0029	709	248	433	200	1721	50	-63.65
28	14	16,272	3.705	0.233	0.2528	0.0134	0.1063	0.0029	1573	50	1453	69	1737	50	5.10
29	17	7,379	1.314	0.153	0.0924	0.0103	0.1031	0.0028	852	67	570	61	1681	50	-49.49
30	18	3,688	1.864	0.155	0.1286	0.0097	0.1051	0.0029	1068	55	780	55	1716	51	-36.99
31	20	7,794	1.451	0.232	0.1000	0.0155	0.1053	0.0028	910	96	614	91	1719	49	-48.19
32	11	11,469	4.078	0.329	0.2723	0.0196	0.1086	0.0031	1650	66	1552	99	1776	51	3.53
33	12	1,562	3.616	0.291	0.2416	0.0149	0.1086	0.0041	1553	64	1395	77	1775	69	7.58
34	19	8,816	2.649	0.284	0.1778	0.0180	0.1080	0.0030	1314	79	1055	99	1766	51	24.32
35	17	11,807	3.478	0.289	0.2359	0.0179	0.1069	0.0029	1522	65	1365	93	1748	49	7.88
36	20	17,169	2.993	0.194	0.2052	0.0117	0.1058	0.0028	1406	49	1203	62	1728	48	13.85
37	17	9,855	3.225	0.195	0.2222	0.0113	0.1053	0.0029	1463	47	1293	60	1719	50	9.72
38	19	12,041	3.395	0.217	0.2343	0.0129	0.1051	0.0028	1503	50	1357	67	1716	49	7.42
39	9	3,704	1.744	0.164	0.1278	0.0108	0.0990	0.0033	1025	61	775	62	1605	62	-32.21
40	19	11,137	3.446	0.210	0.2350	0.0120	0.1064	0.0029	1515	48	1361	63	1738	50	7.81
41	19	8,924	3.545	0.220	0.2445	0.0128	0.1052	0.0028	1537	49	1410	66	1717	50	5.85
42	15	6,592	2.962	0.196	0.2022	0.0115	0.1063	0.0029	1398	50	1187	62	1736	50	14.93
43	20	11,174	2.465	0.154	0.1701	0.0094	0.1051	0.0028	1262	45	1013	52	1716	49	25.41
44	19	18,860	4.172	0.285	0.2869	0.0171	0.1055	0.0028	1669	56	1626	86	1723	49	1.35
45	19	18,549	3.299	0.213	0.2255	0.0127	0.1061	0.0028	1481	50	1311	67	1734	49	9.44

#	N	$^{206}Pb/^{204}Pb^{\dagger}$	Isotopic ratios (corrected) $^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Ages (Ma) $^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Disc. (%)
46	14	7,733	3.455	0.215	0.2360	0.0123	0.1062	0.0030	1517	49	1366	64	1734	51	7.56
47	16	6,672	3.431	1.042	0.2368	0.0701	0.1051	0.0029	1512	239	1370	365	1716	50	7.01
48	19	18,424	3.776	0.230	0.2582	0.0133	0.1060	0.0028	1588	49	1481	68	1733	49	4.35
49	13	5,704	1.678	0.207	0.1155	0.0136	0.1053	0.0030	1000	78	705	78	1720	52	-41.91
50	19	40,608	3.477	0.206	0.2369	0.0119	0.1065	0.0028	1522	47	1370	62	1739	48	7.54
51	19	29,102	3.071	0.270	0.2093	0.0172	0.1064	0.0028	1426	67	1225	92	1739	48	13.15
52	20	24,861	3.770	0.229	0.2550	0.0130	0.1072	0.0029	1586	49	1464	67	1752	49	5.13
53	15	9,928	3.101	0.262	0.2146	0.0166	0.1048	0.0028	1433	65	1253	88	1711	50	11.08
54	19	26,882	3.738	0.225	0.2552	0.0130	0.1062	0.0028	1579	48	1465	67	1736	48	4.78
55	17	10,922	4.075	0.266	0.2787	0.0155	0.1060	0.0028	1649	53	1585	78	1732	49	2.18
56	19	15,508	4.051	0.300	0.2765	0.0183	0.1063	0.0028	1644	60	1573	92	1736	48	2.46
57	20	4,183	2.031	0.116	0.1399	0.0068	0.1053	0.0028	1126	39	844	38	1719	50	-33.38
58	16	13,240	3.558	0.228	0.2429	0.0133	0.1062	0.0029	1540	51	1402	69	1736	50	6.49
59	20	15,790	4.259	0.299	0.2912	0.0179	0.1061	0.0028	1685	58	1647	90	1733	49	1.16
60	19	8,072	2.607	0.150	0.1779	0.0087	0.1063	0.0028	1303	42	1055	48	1737	49	23.04
61	20	9,552	3.475	0.217	0.2205	0.0118	0.1143	0.0030	1522	49	1285	62	1869	48	14.26
62	17	4,184	2.127	0.123	0.1462	0.0071	0.1055	0.0029	1158	40	880	40	1723	50	-31.56
63	19	7,407	3.544	0.217	0.2448	0.0125	0.1050	0.0029	1537	48	1412	65	1714	50	5.75
64	9	24,965	3.421	0.228	0.2401	0.0135	0.1034	0.0030	1509	52	1387	70	1685	54	5.82
65	17	6,037	1.447	0.097	0.0996	0.0060	0.1054	0.0029	909	40	612	35	1721	50	-48.48
66	18	10,188	3.982	0.274	0.2737	0.0163	0.1055	0.0029	1631	56	1560	82	1724	50	2.51
67	19	23,875	3.258	0.215	0.2222	0.0129	0.1063	0.0028	1471	51	1293	68	1738	48	10.20
68	19	17,564	3.766	0.230	0.2566	0.0132	0.1064	0.0028	1586	49	1473	68	1739	49	4.67
69	19	13,473	3.569	0.215	0.2436	0.0123	0.1063	0.0028	1543	48	1406	64	1736	49	6.39
70	16	17,318	3.991	0.257	0.2799	0.0153	0.1034	0.0028	1632	52	1591	77	1686	50	1.38
71	19	11,463	3.823	0.234	0.2584	0.0132	0.1073	0.0029	1598	49	1482	68	1754	49	4.73
72	19	12,107	3.336	0.200	0.2276	0.0115	0.1063	0.0028	1489	47	1322	61	1736	49	9.10
73	11	7,017	1.938	0.171	0.1330	0.0109	0.1057	0.0030	1094	59	805	62	1726	52	-35.92
74	17	4,304	2.081	0.133	0.1430	0.0079	0.1056	0.0029	1143	44	861	45	1725	50	-32.65
75	18	18,381	3.329	0.220	0.2266	0.0131	0.1065	0.0028	1488	52	1317	69	1741	48	9.41
76	14	15,975	3.538	0.226	0.2477	0.0135	0.1036	0.0028	1536	51	1426	70	1689	50	4.85
77	19	22,511	4.337	0.276	0.2947	0.0160	0.1067	0.0028	1700	53	1665	80	1744	48	1.05
78	19	18,906	3.740	0.232	0.2553	0.0135	0.1063	0.0028	1580	50	1466	69	1736	48	4.78
79	13	14,875	3.741	0.249	0.2519	0.0143	0.1077	0.0030	1580	53	1448	74	1761	51	5.73
80	20	4,459	3.672	0.235	0.2554	0.0137	0.1043	0.0028	1565	51	1466	70	1702	50	4.11
81	20	20,412	5.950	0.440	0.4064	0.0260	0.1062	0.0028	1969	64	2199	119	1735	48	-2.95
82	15	9,668	4.308	0.285	0.2953	0.0165	0.1058	0.0029	1695	54	1668	82	1729	50	0.80
83	19	9,783	4.359	0.304	0.3017	0.0183	0.1048	0.0028	1705	58	1700	90	1711	49	0.14
84	16	1,524	2.081	0.146	0.1509	0.0087	0.1000	0.0029	1142	48	906	49	1624	54	-26.12
85	18	11,449	4.445	0.307	0.3044	0.0182	0.1059	0.0028	1721	57	1713	90	1730	49	0.21
86	11	22,354	5.525	0.790	0.3787	0.0520	0.1058	0.0030	1905	123	2070	243	1729	52	-2.57
87	17	3,540	2.513	0.166	0.1751	0.0099	0.1041	0.0029	1276	48	1040	55	1699	51	22.54
88	19	9,417	4.200	0.271	0.2866	0.0157	0.1063	0.0028	1674	53	1625	78	1736	49	1.56
89	19	5,235	4.409	0.297	0.3002	0.0170	0.1065	0.0029	1714	56	1692	84	1741	50	0.62
90	20	8,744	4.066	0.278	0.2789	0.0165	0.1057	0.0028	1648	56	1586	83	1727	49	2.08
91	19	11,111	3.875	0.278	0.2628	0.0166	0.1069	0.0028	1609	58	1504	85	1748	48	4.07

#	N	$^{206}Pb/^{204}Pb^{\dagger}$	Isotopic ratios (corrected) $^{207}Pb^{*}/^{235}U$	± (abs)	$^{206}Pb^{*}/^{238}U$	± (abs)	$^{207}Pb^{*}/^{206}Pb^{*}$	± (abs)	Ages (Ma) $^{207}Pb^{*}/^{235}U$	± (abs)	$^{206}Pb^{*}/^{238}U$	± (abs)	$^{207}Pb^{*}/^{206}Pb^{*}$	± (abs)	Disc. (%)
92	18	14,795	4.062	0.253	0.2672	0.0140	0.1103	0.0030	1647	51	1526	71	1804	49	4.59
93	20	5,643	4.693	0.458	0.3284	0.0292	0.1036	0.0028	1766	82	1831	142	1690	51	-1.45
94	19	8,925	4.305	0.281	0.2985	0.0165	0.1046	0.0028	1694	54	1684	82	1707	49	0.30
95	15	5,882	2.859	0.352	0.1963	0.0228	0.1056	0.0029	1371	93	1155	123	1725	50	16.26
96	16	12,378	4.456	0.286	0.2840	0.0154	0.1138	0.0031	1723	53	1612	77	1861	49	3.71
97	16	2,822	2.893	0.192	0.1977	0.0110	0.1061	0.0030	1380	50	1163	59	1734	51	16.13
98	19	22,603	4.089	0.256	0.2796	0.0149	0.1061	0.0028	1652	51	1589	75	1733	48	2.12
99	18	18,793	3.606	0.221	0.2453	0.0128	0.1066	0.0028	1551	49	1414	66	1742	49	6.27
100	20	14,023	3.472	0.208	0.2388	0.0120	0.1055	0.0028	1521	47	1380	63	1722	48	6.84
101	18	22,272	3.615	0.226	0.2529	0.0135	0.1037	0.0027	1553	50	1454	69	1691	49	4.20
102	19	2,273	0.597	0.076	0.0415	0.0049	0.1043	0.0029	475	49	262	30	1702	51	-81.30
103	17	13,521	3.188	0.200	0.2272	0.0122	0.1018	0.0027	1454	49	1320	64	1657	50	7.22
104	19	16,362	3.712	0.226	0.2539	0.0131	0.1060	0.0028	1574	49	1458	67	1733	49	4.89
105	19	2,516	2.191	0.135	0.1503	0.0078	0.1057	0.0029	1178	43	902	44	1727	51	-30.54
106	19	6,469	2.843	0.525	0.1947	0.0348	0.1059	0.0028	1367	139	1147	188	1730	49	16.89
107	20	7,707	4.013	0.256	0.2752	0.0149	0.1057	0.0028	1637	52	1567	75	1727	49	2.43
108	19	15,033	5.507	0.402	0.3722	0.0236	0.1073	0.0028	1902	63	2040	111	1754	48	-2.26
109	19	19,519	3.987	0.261	0.2723	0.0154	0.1062	0.0028	1632	53	1553	78	1735	48	2.83
Sample J01-BR1: Quartzite, Blue Ridge, Colorado															
1	20	15,227	4.628	0.244	0.3076	0.0137	0.1091	0.0029	1754	44	1729	68	1785	48	0.68
2	19	12,684	4.308	0.227	0.2917	0.0129	0.1071	0.0029	1695	43	1650	64	1751	49	1.37
3	18	10,871	4.392	0.235	0.2996	0.0135	0.1063	0.0028	1711	44	1689	67	1737	49	0.61
4	17	16,626	4.736	0.251	0.3054	0.0136	0.1125	0.0030	1774	44	1718	67	1840	48	1.55
5	15	1,577	3.681	0.282	0.2321	0.0152	0.1150	0.0035	1567	61	1345	80	1880	54	11.92
6	19	15,473	6.446	0.394	0.4429	0.0232	0.1055	0.0028	2039	54	2364	103	1724	49	-3.27
7	15	8,542	5.419	0.305	0.3374	0.0160	0.1165	0.0032	1888	48	1874	77	1903	49	0.30
8	8	1,845	6.406	1.569	0.4088	0.0930	0.1137	0.0036	2033	215	2209	426	1859	58	-2.29
9	20	12,230	5.245	0.283	0.3326	0.0150	0.1144	0.0031	1860	46	1851	73	1870	48	0.20
10	17	17,232	4.411	0.235	0.3011	0.0136	0.1062	0.0028	1714	44	1697	67	1736	49	0.49
11	18	10,740	4.991	0.268	0.3165	0.0143	0.1144	0.0031	1818	45	1772	70	1870	48	1.16
12	13	3,508	6.117	0.422	0.4196	0.0245	0.1057	0.0031	1993	60	2258	111	1727	53	-3.12
13	18	6,268	4.604	0.252	0.3105	0.0141	0.1076	0.0030	1750	46	1743	69	1759	50	0.19
14	19	13,236	5.030	0.268	0.3246	0.0146	0.1124	0.0030	1824	45	1812	71	1838	48	0.29
15	16	4,163	4.657	0.272	0.3208	0.0157	0.1053	0.0029	1760	49	1794	76	1719	51	-0.82
16	11	1,614	2.767	0.404	0.1865	0.0248	0.1076	0.0033	1347	109	1102	135	1759	56	20.70
17	19	6,800	4.407	0.236	0.3003	0.0134	0.1064	0.0029	1714	44	1693	66	1739	49	0.59
18	19	13,283	4.564	0.242	0.3056	0.0137	0.1083	0.0029	1743	44	1719	67	1771	48	0.64
19	15	2,533	4.657	0.328	0.3165	0.0192	0.1067	0.0030	1760	59	1773	94	1744	52	-0.32
20	20	14,435	4.079	0.211	0.2724	0.0119	0.1086	0.0028	1650	42	1553	60	1776	48	3.51
21	19	6,328	4.219	0.223	0.2813	0.0123	0.1088	0.0029	1678	43	1598	62	1779	49	2.67
22	19	17,772	4.618	0.244	0.3093	0.0138	0.1083	0.0028	1753	44	1737	68	1771	48	0.41
23	20	12,293	4.681	0.248	0.3088	0.0138	0.1099	0.0029	1764	44	1735	68	1798	48	0.77
24	19	8,526	4.363	0.231	0.3001	0.0133	0.1054	0.0028	1705	44	1692	66	1722	49	0.38
25	20	9,336	4.431	0.234	0.3042	0.0134	0.1057	0.0028	1718	44	1712	66	1726	49	0.17
26	19	8,361	4.504	0.246	0.3108	0.0143	0.1051	0.0028	1732	45	1744	70	1716	49	-0.33

			Isotopic ratios (corrected)						Ages (Ma)						
#	N	$^{206}Pb/^{204}Pb^{\dagger}$	$^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	$^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Disc. (%)
27	12	6,289	4.344	0.259	0.3007	0.0152	0.1048	0.0030	1702	49	1695	75	1711	52	0.20
28	19	7,771	4.877	0.277	0.3383	0.0162	0.1046	0.0029	1798	48	1878	78	1706	51	-1.67
29	15	14,535	4.599	0.256	0.3182	0.0150	0.1048	0.0029	1749	46	1781	73	1711	50	-0.78
30	17	17,097	4.576	0.247	0.3112	0.0142	0.1066	0.0029	1745	45	1747	70	1743	49	-0.05
31	14	7,226	5.824	0.355	0.4008	0.0206	0.1054	0.0029	1950	53	2173	95	1721	50	-2.96
32	19	14,747	4.468	0.235	0.2972	0.0131	0.1090	0.0029	1725	44	1677	65	1784	49	1.40
33	20	28,325	5.063	0.269	0.3277	0.0147	0.1121	0.0029	1830	45	1827	72	1833	47	0.06
34	12	1,056	4.461	0.387	0.2686	0.0196	0.1204	0.0037	1724	72	1534	100	1963	55	7.42
35	19	2,148	6.309	0.412	0.4305	0.0230	0.1063	0.0029	2020	57	2308	104	1737	51	-3.15
36	19	7,471	4.144	0.219	0.2870	0.0126	0.1047	0.0028	1663	43	1626	63	1709	50	1.15
37	20	15,844	4.634	0.250	0.3178	0.0145	0.1058	0.0028	1755	45	1779	71	1728	49	-0.58
38	13	2,376	5.879	0.403	0.3723	0.0213	0.1145	0.0034	1958	60	2040	100	1872	54	-1.38
39	20	14,135	6.533	0.423	0.4481	0.0252	0.1057	0.0028	2050	57	2387	112	1727	49	-3.27
40	15	8,385	4.553	0.247	0.3058	0.0139	0.1080	0.0029	1741	45	1720	69	1765	50	0.56
41	16	6,477	5.425	0.299	0.3281	0.0151	0.1199	0.0032	1889	47	1829	73	1955	48	1.43
42	17	10,030	5.007	0.312	0.3427	0.0186	0.1060	0.0028	1820	53	1899	89	1731	49	-1.60
43	18	9,259	5.176	0.353	0.3570	0.0217	0.1052	0.0028	1849	58	1968	103	1717	49	-2.17
44	19	11,160	4.362	0.229	0.2992	0.0132	0.1057	0.0028	1705	43	1687	66	1727	49	0.50
45	16	7,793	4.948	0.305	0.3413	0.0182	0.1052	0.0028	1811	52	1893	88	1717	50	-1.68
46	19	6,473	3.800	0.199	0.2652	0.0115	0.1039	0.0028	1593	42	1516	59	1696	50	2.90
47	10	1,117	5.748	0.562	0.3937	0.0320	0.1059	0.0034	1939	85	2140	148	1730	59	-2.82
48	13	7,113	3.856	0.210	0.2629	0.0121	0.1064	0.0030	1604	44	1505	62	1738	51	3.89
49	18	7,093	4.026	0.224	0.2753	0.0129	0.1061	0.0029	1640	45	1568	65	1733	50	2.50
50	20	6,532	4.142	0.222	0.2854	0.0128	0.1052	0.0028	1663	44	1619	64	1719	49	1.40
51	19	6,723	4.612	0.248	0.3077	0.0137	0.1087	0.0029	1751	45	1729	68	1778	49	0.60
52	13	8,445	5.579	0.340	0.3835	0.0198	0.1055	0.0029	1913	52	2093	92	1723	51	-2.70
53	19	22,557	5.252	0.278	0.3200	0.0144	0.1190	0.0031	1861	45	1790	70	1942	47	1.81
54	11	948	1.862	0.268	0.1260	0.0157	0.1072	0.0035	1068	95	765	90	1752	60	-39.54
55	16	8,716	4.158	0.227	0.2857	0.0132	0.1055	0.0029	1666	45	1620	66	1724	50	1.45
56	20	9,568	4.682	0.262	0.3233	0.0154	0.1050	0.0028	1764	47	1806	75	1715	49	-0.98
57	14	5,834	4.654	0.297	0.3223	0.0178	0.1047	0.0029	1759	53	1801	87	1710	52	-0.99
58	17	7,431	4.418	0.241	0.3073	0.0140	0.1043	0.0028	1716	45	1728	69	1701	50	-0.31
59	19	10,899	4.958	0.301	0.3415	0.0181	0.1053	0.0028	1812	51	1894	87	1720	49	-1.66
60	19	11,170	5.882	0.363	0.4048	0.0216	0.1054	0.0028	1959	54	2191	99	1721	49	-3.01
61	17	12,223	4.587	0.247	0.3043	0.0138	0.1093	0.0029	1747	45	1713	68	1788	49	0.95
62	20	8,084	15.172	1.142	0.5688	0.0373	0.1934	0.0051	2826	72	2903	153	2772	43	-0.47
63	17	7,899	5.525	0.328	0.3716	0.0187	0.1078	0.0030	1905	51	2037	88	1763	50	-2.18
64	19	6,002	4.625	0.249	0.3080	0.0138	0.1089	0.0029	1754	45	1731	68	1781	49	0.62
65	16	1,696	11.220	1.105	0.4703	0.0417	0.1730	0.0048	2542	92	2485	183	2587	47	0.59
66	19	10,271	6.635	0.417	0.4594	0.0247	0.1047	0.0028	2064	55	2437	109	1710	49	-3.36
67	20	22,592	6.338	0.391	0.4364	0.0233	0.1053	0.0028	2024	54	2334	105	1720	48	-3.25
68	16	8,714	5.439	0.323	0.3575	0.0182	0.1103	0.0030	1891	51	1970	86	1805	50	-1.47
69	16	4,826	5.055	0.281	0.3265	0.0151	0.1123	0.0031	1829	47	1822	73	1837	49	0.16
70	16	6,091	6.718	0.500	0.4626	0.0303	0.1053	0.0029	2075	66	2451	133	1720	50	-3.33
71	16	7,336	6.381	0.413	0.4451	0.0247	0.1040	0.0028	2030	57	2374	110	1696	50	-3.39
72	20	8,411	12.018	0.722	0.4686	0.0238	0.1860	0.0049	2606	56	2478	104	2707	43	1.40

#	N	^{206}Pb / $^{204}Pb^{\dagger}$	Isotopic ratios (corrected) $^{207}Pb^*$ / ^{235}U	± (abs)	$^{206}Pb^*$ / ^{238}U	± (abs)	$^{207}Pb^*$ / $^{206}Pb^*$	± (abs)	Ages (Ma) $^{207}Pb^*$ / ^{235}U	± (abs)	$^{206}Pb^*$ / ^{238}U	± (abs)	$^{207}Pb^*$ / $^{206}Pb^*$	± (abs)	Disc. (%)
73	20	7,214	4.522	0.241	0.3026	0.0134	0.1084	0.0029	1735	44	1704	67	1773	49	0.87
74	20	2,901	5.015	0.318	0.3491	0.0185	0.1042	0.0029	1822	54	1930	88	1700	52	-2.08
75	14	5,348	4.694	0.272	0.3226	0.0155	0.1055	0.0030	1766	48	1802	76	1723	52	-0.86
76	11	5,532	4.018	0.342	0.2747	0.0213	0.1061	0.0031	1638	69	1564	108	1734	54	2.58
77	14	6,396	4.328	0.245	0.2993	0.0143	0.1049	0.0029	1699	47	1688	71	1712	51	0.31
78	19	11,797	7.214	0.419	0.4043	0.0200	0.1294	0.0034	2138	52	2189	92	2090	46	-0.72
79	15	3,247	6.474	0.424	0.4480	0.0242	0.1048	0.0030	2042	58	2386	108	1711	52	-3.34
80	16	5,094	4.914	0.272	0.3126	0.0144	0.1140	0.0031	1805	47	1754	71	1864	50	1.35
81	19	10,561	4.164	0.219	0.2877	0.0127	0.1050	0.0028	1667	43	1630	64	1714	49	1.15
82	18	9,276	4.531	0.262	0.3132	0.0156	0.1049	0.0028	1737	48	1756	76	1713	49	-0.50
83	19	6,568	4.020	0.211	0.2732	0.0120	0.1067	0.0029	1638	43	1557	61	1744	49	2.89
84	18	6,357	3.615	0.188	0.2457	0.0107	0.1067	0.0029	1553	41	1416	55	1744	49	6.26
85	14	4,657	4.224	0.256	0.2930	0.0151	0.1046	0.0029	1679	50	1656	75	1706	51	0.66
86	18	8,904	5.481	0.337	0.3812	0.0202	0.1043	0.0028	1898	53	2082	94	1701	49	-2.80
87	20	10,401	4.300	0.229	0.2959	0.0133	0.1054	0.0028	1693	44	1671	66	1722	49	0.66
88	16	3,929	5.032	0.297	0.3146	0.0156	0.1160	0.0032	1825	50	1763	77	1896	50	1.61
89	15	3,455	4.008	0.223	0.2774	0.0127	0.1048	0.0029	1636	45	1578	64	1711	51	1.97
90	12	2,401	4.773	0.318	0.3319	0.0184	0.1043	0.0031	1780	56	1848	89	1702	54	-1.48
91	13	3,002	3.687	0.229	0.2558	0.0135	0.1045	0.0030	1569	50	1468	69	1706	53	4.14
92	19	9,373	4.428	0.234	0.2969	0.0131	0.1082	0.0029	1718	44	1676	65	1769	49	1.22
93	19	17,732	5.799	0.404	0.3978	0.0249	0.1057	0.0028	1946	60	2159	115	1727	48	-2.89
94	20	11,764	4.251	0.223	0.2871	0.0127	0.1074	0.0028	1684	43	1627	63	1755	48	1.80
95	15	2,575	4.087	0.231	0.2826	0.0130	0.1049	0.0030	1652	46	1604	65	1713	52	1.55
96	19	11,513	4.239	0.222	0.2903	0.0128	0.1059	0.0028	1682	43	1643	64	1730	48	1.18
97	20	8,937	4.195	0.221	0.2822	0.0125	0.1078	0.0029	1673	43	1603	63	1763	48	2.34
98	20	7,219	4.462	0.254	0.2827	0.0138	0.1145	0.0031	1724	47	1605	69	1872	48	4.04
99	19	8,160	4.335	0.234	0.2990	0.0136	0.1052	0.0028	1700	45	1686	68	1717	49	0.40
100	20	8,918	4.554	0.241	0.3077	0.0137	0.1073	0.0028	1741	44	1729	67	1755	48	0.31
101	20	658	3.641	0.318	0.2470	0.0168	0.1069	0.0034	1559	70	1423	87	1748	59	6.15
102	19	11,264	16.286	1.009	0.5050	0.0265	0.2339	0.0061	2894	59	2635	113	3079	42	2.52
Sample J01-BR2: Basal conglomerate, Blue Ridge, Colorado															
1	17	3,942	3.642	0.203	0.2502	0.0115	0.1056	0.0029	1559	44	1440	59	1724	51	5.21
2	16	6,383	4.272	0.252	0.2943	0.0147	0.1053	0.0029	1688	49	1663	73	1719	50	0.74
3	20	14,401	4.551	0.273	0.3138	0.0163	0.1052	0.0028	1740	50	1759	80	1718	48	-0.48
4	19	10,163	4.670	0.288	0.3213	0.0172	0.1054	0.0028	1762	52	1796	84	1721	49	-0.82
5	20	13,584	4.433	0.253	0.3044	0.0147	0.1056	0.0028	1719	47	1713	73	1725	49	0.15
6	15	3,005	3.801	0.247	0.2587	0.0142	0.1066	0.0030	1593	52	1483	73	1741	52	4.45
7	18	14,581	5.413	0.434	0.3720	0.0273	0.1055	0.0028	1887	69	2039	128	1724	49	-2.48
8	17	9,236	3.695	0.205	0.2551	0.0118	0.1051	0.0029	1570	44	1465	61	1716	50	4.41
9	10	4,319	4.077	0.295	0.2785	0.0175	0.1062	0.0031	1650	59	1584	88	1735	54	2.24
10	20	13,658	4.667	0.268	0.3211	0.0156	0.1054	0.0028	1761	48	1795	76	1721	49	-0.81
11	18	21,021	3.948	0.215	0.2710	0.0125	0.1057	0.0028	1624	44	1546	63	1726	49	2.82
12	18	12,981	4.314	0.257	0.2977	0.0153	0.1051	0.0028	1696	49	1680	76	1716	49	0.47
13	19	25,248	4.539	0.263	0.3108	0.0154	0.1059	0.0028	1738	48	1745	76	1730	49	-0.17
14	11	3,019	4.246	0.362	0.2917	0.0221	0.1056	0.0031	1683	70	1650	110	1724	54	0.99

			Isotopic ratios (corrected)						Ages (Ma)						
#	N	$^{206}Pb/^{204}Pb^{\dagger}$	$^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	$^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Disc. (%)
15	19	13,415	3.935	0.216	0.2715	0.0125	0.1051	0.0028	1621	44	1548	64	1717	49	2.62
16	19	14,287	4.405	0.259	0.3057	0.0154	0.1045	0.0028	1713	49	1719	76	1706	49	-0.16
17	20	6,039	4.080	0.231	0.2801	0.0131	0.1056	0.0029	1650	46	1592	66	1726	51	1.96
18	16	1,507	4.365	0.284	0.2929	0.0150	0.1081	0.0033	1706	54	1656	75	1767	56	1.50
19	20	3,971	3.373	0.235	0.2309	0.0142	0.1060	0.0029	1498	55	1339	74	1731	50	8.37
20	17	14,352	4.145	0.231	0.2840	0.0134	0.1058	0.0028	1663	46	1612	67	1729	49	1.67
21	17	11,168	4.021	0.223	0.2783	0.0130	0.1048	0.0028	1638	45	1583	65	1710	49	1.88
22	19	50,968	3.949	0.213	0.2703	0.0124	0.1060	0.0028	1624	44	1542	63	1731	48	2.98
23	16	2,069	3.184	0.342	0.2168	0.0211	0.1065	0.0031	1453	83	1265	112	1740	53	11.43
24	16	15,531	3.977	0.229	0.2723	0.0134	0.1059	0.0029	1630	47	1553	68	1730	49	2.76
25	14	6,144	4.208	0.256	0.2895	0.0149	0.1054	0.0029	1676	50	1639	75	1722	51	1.13
26	5	11,599	3.860	0.281	0.2658	0.0162	0.1053	0.0038	1605	59	1520	83	1720	66	3.25
27	20	9,782	4.356	0.244	0.3008	0.0141	0.1050	0.0028	1704	46	1695	70	1715	49	0.25
28	20	31,981	3.818	0.205	0.2617	0.0118	0.1058	0.0028	1597	43	1499	60	1728	49	3.85
29	19	17,715	4.118	0.225	0.2830	0.0131	0.1055	0.0028	1658	45	1606	66	1724	48	1.68
30	20	6,957	3.913	0.216	0.2697	0.0124	0.1052	0.0029	1616	45	1539	63	1718	50	2.81
31	20	15,928	3.950	0.214	0.2714	0.0124	0.1056	0.0028	1624	44	1548	63	1724	48	2.76
32	18	13,950	4.133	0.229	0.2842	0.0133	0.1055	0.0028	1661	45	1613	67	1723	49	1.56
33	19	11,922	3.925	0.215	0.2711	0.0125	0.1050	0.0028	1619	44	1546	63	1714	49	2.62
34	9	5,165	4.266	0.277	0.2926	0.0159	0.1058	0.0032	1687	53	1654	79	1727	56	0.98
35	20	14,777	4.273	0.241	0.2938	0.0140	0.1055	0.0028	1688	46	1661	70	1723	49	0.82
36	16	7,951	3.874	0.219	0.2681	0.0127	0.1048	0.0029	1608	46	1531	65	1711	50	2.86
37	17	12,232	4.171	0.241	0.2857	0.0140	0.1059	0.0029	1668	47	1620	70	1730	50	1.54
38	19	11,140	3.899	0.212	0.2675	0.0122	0.1057	0.0028	1614	44	1528	62	1727	49	3.19
39	18	14,768	3.958	0.216	0.2724	0.0125	0.1054	0.0028	1626	44	1553	64	1721	49	2.59
40	19	9,135	4.241	0.240	0.2906	0.0139	0.1059	0.0028	1682	47	1644	69	1729	49	1.15
41	18	14,992	3.696	0.200	0.2544	0.0116	0.1054	0.0028	1571	43	1461	59	1721	49	4.61
42	19	13,816	4.449	0.277	0.3065	0.0167	0.1053	0.0028	1721	52	1723	82	1719	48	-0.05
43	19	7,391	4.139	0.234	0.2845	0.0134	0.1055	0.0029	1662	46	1614	67	1724	50	1.56
44	19	14,922	3.874	0.210	0.2661	0.0122	0.1056	0.0028	1608	44	1521	62	1724	49	3.29
45	19	35,148	3.864	0.208	0.2649	0.0120	0.1058	0.0028	1606	43	1515	61	1728	49	3.50
46	19	5,704	4.128	0.236	0.2867	0.0136	0.1044	0.0029	1660	47	1625	68	1704	51	1.10
47	18	4,879	4.356	0.444	0.2993	0.0284	0.1056	0.0029	1704	84	1688	141	1724	50	0.47
48	13	3,792	3.868	0.229	0.2667	0.0130	0.1052	0.0030	1607	48	1524	66	1718	53	3.13
49	20	6,550	4.075	0.229	0.2789	0.0130	0.1060	0.0029	1649	46	1586	65	1731	51	2.14
50	20	13,735	4.050	0.226	0.2798	0.0133	0.1050	0.0028	1644	46	1590	67	1714	49	1.80
51	18	10,020	3.997	0.223	0.2756	0.0129	0.1052	0.0028	1634	45	1569	65	1717	49	2.23
52	14	2,478	4.389	0.288	0.3018	0.0164	0.1055	0.0030	1710	54	1700	81	1723	53	0.28
53	18	18,525	4.169	0.231	0.2879	0.0135	0.1050	0.0028	1668	45	1631	68	1715	49	1.15
54	18	4,043	3.231	0.181	0.2211	0.0103	0.1060	0.0029	1465	43	1288	54	1731	50	10.25
55	12	5,994	3.406	0.250	0.2348	0.0154	0.1052	0.0030	1506	58	1360	80	1718	52	7.37
56	16	5,310	4.014	0.234	0.2760	0.0136	0.1055	0.0029	1637	47	1571	69	1722	50	2.27
57	15	3,025	3.729	0.229	0.2564	0.0130	0.1055	0.0030	1578	49	1471	67	1723	53	4.38
58	10	3,257	3.366	0.527	0.2314	0.0341	0.1055	0.0032	1497	122	1342	178	1723	56	8.09
59	15	4,151	4.055	0.243	0.2789	0.0139	0.1054	0.0030	1645	49	1586	70	1722	52	2.01
60	11	5,535	3.663	0.270	0.2522	0.0164	0.1053	0.0031	1563	59	1450	85	1720	54	4.87

#	N	$^{206}Pb/^{204}Pb^{†}$	Isotopic ratios (corrected) $^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Ages (Ma) $^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Disc. (%)
61	18	10,092	4.173	0.243	0.2929	0.0146	0.1033	0.0027	1669	48	1656	73	1685	49	0.38
62	13	7,134	3.847	0.230	0.2663	0.0133	0.1048	0.0030	1603	48	1522	68	1710	53	3.04
63	18	10,344	3.899	0.224	0.2743	0.0134	0.1031	0.0028	1614	46	1562	68	1681	49	1.78
64	16	3,522	3.280	0.305	0.2256	0.0192	0.1055	0.0030	1476	72	1311	101	1722	53	9.14
65	20	6,389	3.940	0.226	0.2703	0.0131	0.1057	0.0028	1622	46	1543	66	1726	49	2.89
66	14	5,881	3.000	0.345	0.2053	0.0224	0.1060	0.0030	1408	88	1204	120	1731	52	13.91
67	17	7,377	4.188	0.261	0.2881	0.0155	0.1054	0.0028	1672	51	1632	78	1722	50	1.23
68	20	2,878	4.718	0.289	0.3241	0.0164	0.1056	0.0029	1771	51	1810	80	1725	50	-0.91
69	13	5,365	3.461	0.264	0.2371	0.0162	0.1059	0.0030	1518	60	1372	85	1729	53	7.26
70	16	5,420	4.020	0.234	0.2772	0.0135	0.1052	0.0029	1638	47	1577	68	1718	51	2.10
71	18	11,100	4.519	0.258	0.3122	0.0151	0.1050	0.0028	1734	47	1751	74	1714	49	-0.43
72	13	1,269	5.201	0.506	0.3563	0.0289	0.1059	0.0035	1853	83	1964	138	1730	61	-2.04
73	12	1,790	4.677	0.430	0.3207	0.0256	0.1058	0.0032	1763	77	1793	125	1728	55	-0.72
74	16	7,379	4.323	0.268	0.2980	0.0159	0.1052	0.0029	1698	51	1682	79	1718	50	0.46
75	18	14,400	6.041	0.505	0.4237	0.0324	0.1034	0.0027	1982	73	2277	147	1686	49	-3.34
76	17	5,102	4.399	0.262	0.3060	0.0153	0.1043	0.0028	1712	49	1721	76	1701	50	-0.24
77	19	8,603	5.447	0.340	0.3736	0.0199	0.1057	0.0028	1892	54	2046	94	1727	49	-2.48
78	19	8,232	6.203	0.425	0.4293	0.0255	0.1048	0.0028	2005	60	2303	115	1711	49	-3.26
79	18	6,647	4.895	0.319	0.3387	0.0192	0.1048	0.0028	1801	55	1880	92	1711	49	-1.64
80	11	1,984	5.450	0.627	0.3753	0.0386	0.1053	0.0031	1893	99	2054	181	1720	55	-2.57
81	7	3,027	5.962	0.515	0.4059	0.0300	0.1065	0.0035	1970	75	2196	138	1741	60	-2.92
82	13	2,570	3.795	0.277	0.2623	0.0161	0.1049	0.0033	1592	59	1502	82	1713	58	3.51
83	13	2,784	3.181	0.204	0.2186	0.0118	0.1055	0.0031	1452	50	1275	62	1723	54	10.57
84	7	491	5.004	0.720	0.3271	0.0352	0.1110	0.0050	1820	122	1824	171	1815	81	-0.10
85	16	7,007	4.406	0.281	0.3030	0.0167	0.1055	0.0029	1714	53	1706	83	1722	50	0.20
86	17	2,388	4.976	0.341	0.3391	0.0194	0.1064	0.0030	1815	58	1883	94	1739	52	-1.40
87	17	5,218	5.569	0.371	0.3824	0.0218	0.1056	0.0029	1911	57	2088	102	1725	50	-2.67
88	10	735	3.722	0.311	0.2485	0.0159	0.1086	0.0037	1576	67	1431	82	1776	62	6.52
89	17	13,710	4.279	0.242	0.2932	0.0140	0.1058	0.0028	1689	47	1657	70	1729	49	0.96
90	16	14,364	3.914	0.218	0.2695	0.0126	0.1053	0.0029	1616	45	1538	64	1720	50	2.87
91	14	4,886	3.974	0.244	0.2726	0.0142	0.1057	0.0029	1629	50	1554	72	1727	51	2.67
92	15	13,598	3.799	0.213	0.2613	0.0124	0.1054	0.0029	1592	45	1496	63	1722	50	3.79
93	14	4,769	3.821	0.241	0.2635	0.0142	0.1052	0.0029	1597	51	1508	72	1717	51	3.45
94	15	32,397	3.917	0.218	0.2727	0.0129	0.1042	0.0028	1617	45	1554	65	1700	50	2.23
95	16	16,998	3.930	0.217	0.2699	0.0126	0.1056	0.0028	1620	45	1540	64	1725	49	2.91
96	14	4,028	3.350	0.219	0.2299	0.0129	0.1057	0.0030	1493	51	1334	68	1726	53	8.41
97	14	5,233	3.888	0.246	0.2687	0.0145	0.1049	0.0030	1611	51	1534	74	1713	52	2.83
98	15	10,193	3.649	0.216	0.2508	0.0127	0.1055	0.0029	1560	47	1443	65	1723	51	5.11
99	8	2,015	3.324	0.252	0.2273	0.0144	0.1061	0.0035	1487	59	1320	76	1733	60	9.08
100	11	7,340	3.730	0.265	0.2565	0.0161	0.1055	0.0031	1578	57	1472	83	1722	53	4.36
101	13	4,628	3.707	0.291	0.2528	0.0178	0.1064	0.0030	1573	63	1453	92	1738	51	5.14
102	14	6,694	3.800	0.235	0.2623	0.0139	0.1051	0.0029	1593	50	1502	71	1715	51	3.56
103	18	8,686	4.016	0.225	0.2773	0.0131	0.1050	0.0028	1637	46	1578	66	1715	49	2.04
104	19	17,388	4.171	0.235	0.2888	0.0139	0.1047	0.0028	1668	46	1635	69	1710	49	1.02
105	10	6,465	3.873	0.270	0.2660	0.0162	0.1056	0.0031	1608	56	1520	82	1725	54	3.32
106	13	2,826	3.316	0.207	0.2275	0.0118	0.1057	0.0031	1485	49	1322	62	1726	54	8.86

			Isotopic ratios (corrected)						Ages (Ma)						
#	N	$^{206}Pb/^{204}Pb^{\dagger}$	$^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	$^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Disc. (%)
107	15	4,488	3.615	0.236	0.2495	0.0141	0.1051	0.0029	1553	52	1436	73	1716	51	5.15
108	19	22,727	4.975	0.316	0.3437	0.0192	0.1050	0.0028	1815	54	1904	92	1714	48	-1.79
109	19	12,518	4.170	0.237	0.2889	0.0138	0.1047	0.0029	1668	47	1636	69	1709	50	1.00
J02-MP4: Quartzite, Sangre de Cristo Mountains, Colorado															
1	20	14,994	4.181	0.268	0.2886	0.0158	0.1051	0.0027	1670	52	1635	79	1715	48	-1.11
2	19	13,218	3.985	0.248	0.2766	0.0146	0.1045	0.0027	1631	51	1574	74	1705	48	-1.95
3	6	8,810	4.146	0.322	0.2885	0.0188	0.1042	0.0034	1663	64	1634	94	1701	61	-0.91
4	19	8,161	4.208	0.269	0.2894	0.0156	0.1055	0.0028	1676	52	1639	78	1722	49	-1.14
5	20	24,012	3.987	0.249	0.2760	0.0147	0.1048	0.0027	1632	51	1571	74	1710	48	-2.09
6	20	20,788	3.770	0.230	0.2610	0.0135	0.1048	0.0027	1586	49	1495	69	1710	48	-3.62
7	18	17,187	3.857	0.242	0.2707	0.0144	0.1033	0.0027	1605	51	1544	73	1685	49	-2.17
8	19	19,166	4.314	0.276	0.3027	0.0165	0.1033	0.0027	1696	53	1705	82	1685	49	0.24
9	19	16,518	4.299	0.274	0.3001	0.0162	0.1039	0.0027	1693	53	1692	80	1695	48	-0.04
10	19	11,042	4.225	0.267	0.2916	0.0156	0.1051	0.0028	1679	52	1650	78	1716	49	-0.88
11	16	10,662	4.282	0.288	0.3001	0.0172	0.1035	0.0028	1690	55	1692	85	1688	50	0.05
12	19	11,217	4.752	0.313	0.3289	0.0184	0.1048	0.0028	1776	55	1833	89	1711	49	1.27
13	19	11,591	4.775	0.331	0.3350	0.0201	0.1034	0.0027	1781	58	1863	97	1686	49	1.75
14	15	8,969	4.954	0.338	0.3404	0.0196	0.1056	0.0029	1812	58	1889	94	1724	50	1.59
15	19	14,217	4.872	0.330	0.3369	0.0194	0.1049	0.0028	1797	57	1872	94	1712	49	1.57
16	19	12,756	5.416	0.378	0.3770	0.0224	0.1042	0.0028	1887	60	2062	105	1700	49	2.74
17	18	15,578	3.864	0.240	0.2682	0.0141	0.1045	0.0028	1606	50	1532	72	1705	49	-2.75
18	19	19,665	3.777	0.232	0.2630	0.0137	0.1042	0.0027	1588	49	1505	70	1700	49	-3.20
19	19	20,643	3.949	0.248	0.2748	0.0147	0.1042	0.0027	1624	51	1565	74	1701	48	-2.05
20	19	6,093	4.164	0.266	0.2876	0.0154	0.1050	0.0028	1667	52	1629	77	1715	49	-1.18
21	18	6,179	3.903	0.246	0.2716	0.0143	0.1042	0.0028	1614	51	1549	73	1701	50	-2.35
22	19	24,391	3.826	0.236	0.2657	0.0139	0.1045	0.0027	1598	50	1519	71	1705	48	-3.00
23	20	11,017	4.806	0.306	0.3051	0.0164	0.1143	0.0030	1786	54	1716	81	1868	47	-1.96
24	20	15,164	4.518	0.291	0.3125	0.0171	0.1049	0.0028	1734	54	1753	84	1712	48	0.47
25	19	10,462	4.279	0.275	0.2966	0.0160	0.1047	0.0028	1689	53	1674	79	1708	50	-0.44
26	19	15,710	4.042	0.254	0.2827	0.0151	0.1037	0.0027	1643	51	1605	76	1691	48	-1.22
27	20	20,239	3.996	0.252	0.2761	0.0148	0.1050	0.0027	1633	51	1572	75	1714	48	-2.13
28	20	11,316	4.202	0.267	0.2929	0.0157	0.1040	0.0027	1674	52	1656	78	1697	49	-0.55
29	20	16,586	3.850	0.239	0.2678	0.0140	0.1043	0.0028	1603	50	1530	71	1701	49	-2.72
30	19	30,639	4.373	0.278	0.2924	0.0158	0.1085	0.0028	1707	53	1653	79	1774	48	-1.64
31	20	31,880	4.661	0.296	0.3110	0.0168	0.1087	0.0028	1760	53	1746	83	1778	47	-0.39
32	20	12,164	4.871	0.325	0.3390	0.0193	0.1042	0.0027	1797	56	1882	93	1700	48	1.75
33	18	14,014	5.098	0.579	0.3571	0.0383	0.1035	0.0028	1836	96	1968	182	1688	49	2.39
34	19	10,885	4.509	0.292	0.3132	0.0172	0.1044	0.0028	1733	54	1757	84	1704	49	0.61
35	18	11,334	4.227	0.272	0.2947	0.0161	0.1040	0.0028	1679	53	1665	80	1697	49	-0.43
36	18	15,123	4.057	0.255	0.2819	0.0150	0.1044	0.0028	1646	51	1601	75	1703	49	-1.47
37	19	14,722	4.504	0.289	0.3137	0.0170	0.1041	0.0027	1732	53	1759	83	1699	48	0.68
38	19	10,251	3.983	0.250	0.2767	0.0146	0.1044	0.0028	1631	51	1575	74	1704	49	-1.92
39	20	13,650	3.990	0.251	0.2776	0.0148	0.1042	0.0028	1632	51	1579	75	1701	49	-1.80
40	19	8,306	4.546	0.298	0.3166	0.0176	0.1041	0.0028	1739	55	1773	86	1699	49	0.83
41	19	11,816	4.910	0.336	0.3444	0.0202	0.1034	0.0027	1804	58	1908	97	1686	49	2.06

#	N	^{206}Pb / $^{204}Pb^{\dagger}$	Isotopic ratios (corrected) $^{207}Pb^*$ / ^{235}U	± (abs)	$^{206}Pb^*$ / ^{238}U	± (abs)	$^{207}Pb^*$ / $^{206}Pb^*$	± (abs)	Ages (Ma) $^{207}Pb^*$ / ^{235}U	± (abs)	$^{206}Pb^*$ / ^{238}U	± (abs)	$^{207}Pb^*$ / $^{206}Pb^*$	± (abs)	Disc. (%)
42	14	4,971	4.731	0.325	0.3269	0.0189	0.1049	0.0029	1773	58	1823	92	1713	51	1.16
43	20	4,018	3.983	0.259	0.2826	0.0149	0.1022	0.0030	1631	53	1605	75	1664	54	-0.84
44	20	10,399	3.866	0.240	0.2696	0.0141	0.1040	0.0027	1607	50	1539	72	1697	49	-2.48
45	20	22,597	3.851	0.236	0.2679	0.0139	0.1043	0.0027	1603	49	1530	71	1701	48	-2.72
46	18	11,877	3.858	0.241	0.2693	0.0142	0.1039	0.0028	1605	50	1537	72	1695	49	-2.46
47	20	11,274	4.050	0.254	0.2826	0.0150	0.1040	0.0027	1644	51	1604	75	1696	48	-1.30
48	19	9,717	4.290	0.274	0.2982	0.0161	0.1043	0.0028	1691	53	1683	80	1702	49	-0.25
49	19	12,728	3.985	0.250	0.2777	0.0146	0.1041	0.0028	1631	51	1580	74	1698	50	-1.75
50	18	13,340	3.961	0.249	0.2774	0.0147	0.1035	0.0027	1626	51	1578	74	1689	49	-1.62
51	20	61,588	11.770	0.901	0.4626	0.0303	0.1845	0.0048	2586	72	2451	133	2694	43	-1.53
52	9	4,752	4.876	0.472	0.3342	0.0285	0.1058	0.0035	1798	82	1859	138	1728	61	1.31
53	19	12,443	6.126	0.453	0.4285	0.0269	0.1037	0.0027	1994	65	2299	122	1691	49	3.34
54	18	20,600	5.598	0.426	0.3920	0.0261	0.1036	0.0027	1916	66	2132	121	1689	49	3.04
55	12	15,384	4.304	0.295	0.2987	0.0175	0.1045	0.0029	1694	57	1685	87	1706	51	-0.26
56	20	24,333	4.442	0.283	0.3080	0.0167	0.1046	0.0027	1720	53	1731	82	1707	48	0.28
57	8	266	5.627	0.569	0.3015	0.0224	0.1354	0.0050	1920	87	1699	111	2169	65	-6.89
58	18	5,013	4.670	0.327	0.3253	0.0187	0.1041	0.0031	1762	58	1816	91	1699	55	1.24
59	20	28,000	4.686	0.309	0.3158	0.0179	0.1076	0.0028	1765	55	1769	88	1759	48	0.11
60	16	7,856	5.149	0.371	0.3622	0.0223	0.1031	0.0028	1844	61	1993	105	1681	50	2.57
61	19	7,192	4.876	0.332	0.3403	0.0195	0.1039	0.0028	1798	57	1888	94	1695	51	1.84
62	20	15,892	4.221	0.266	0.2928	0.0156	0.1046	0.0027	1678	52	1656	78	1707	48	-0.68
63	14	14,596	4.425	0.297	0.3070	0.0176	0.1045	0.0028	1717	56	1726	87	1706	50	0.24
64	19	10,632	4.566	0.300	0.3185	0.0177	0.1040	0.0028	1743	55	1782	87	1696	49	0.95
65	19	8,015	4.659	0.311	0.3251	0.0185	0.1039	0.0028	1760	56	1815	90	1695	49	1.26
66	20	16,461	4.847	0.323	0.3240	0.0185	0.1085	0.0028	1793	56	1809	90	1775	48	0.37
67	20	13,759	4.167	0.262	0.2887	0.0154	0.1047	0.0028	1668	52	1635	77	1709	48	-1.01
68	19	12,332	4.196	0.266	0.2910	0.0156	0.1046	0.0028	1673	52	1646	78	1707	49	-0.81
69	20	21,416	5.210	0.374	0.3645	0.0227	0.1037	0.0027	1854	61	2004	107	1691	48	2.55
70	19	5,998	4.111	0.261	0.2878	0.0153	0.1036	0.0028	1657	52	1631	77	1690	50	-0.81
72	20	14,604	4.177	0.264	0.2909	0.0155	0.1041	0.0028	1669	52	1646	78	1699	49	-0.71
73	19	12,742	4.354	0.272	0.2821	0.0149	0.1120	0.0029	1704	52	1602	75	1831	48	-3.44
74	20	7,886	4.055	0.254	0.2842	0.0150	0.1035	0.0027	1645	51	1613	75	1687	49	-1.05
75	20	11,938	5.637	0.401	0.3954	0.0240	0.1034	0.0027	1922	61	2148	111	1686	49	3.10
76	19	20,914	4.466	0.294	0.3097	0.0175	0.1046	0.0027	1725	55	1739	86	1707	48	0.38
77	19	14,488	4.433	0.288	0.3083	0.0171	0.1043	0.0027	1719	54	1732	84	1702	48	0.36
78	19	18,310	3.874	0.240	0.2690	0.0141	0.1045	0.0027	1608	50	1536	72	1705	48	-2.67
79	16	18,585	3.942	0.249	0.2747	0.0147	0.1041	0.0028	1622	51	1565	74	1698	49	-2.01
80	15	13,070	4.248	0.276	0.2870	0.0158	0.1073	0.0029	1683	53	1627	79	1755	50	-1.80
81	18	14,649	3.836	0.239	0.2673	0.0141	0.1041	0.0028	1600	50	1527	72	1698	49	-2.72
82	19	26,175	5.017	0.327	0.3248	0.0180	0.1120	0.0029	1822	55	1813	88	1833	47	-0.21
83	20	13,040	4.008	0.249	0.2779	0.0146	0.1046	0.0027	1636	51	1581	74	1707	48	-1.86
84	13	17,376	4.100	0.269	0.2863	0.0158	0.1039	0.0029	1654	54	1623	79	1694	52	-0.99
85	10	21,779	4.138	0.285	0.2866	0.0168	0.1047	0.0030	1662	56	1624	84	1709	52	-1.18
86	17	9,196	4.900	0.331	0.3436	0.0196	0.1034	0.0028	1802	57	1904	94	1686	50	2.03
87	19	24,137	5.937	0.422	0.3813	0.0232	0.1129	0.0030	1967	62	2082	108	1847	48	1.82
88	18	19,282	4.553	0.297	0.3173	0.0176	0.1041	0.0027	1741	54	1776	86	1698	48	0.87

#	N	$^{206}Pb/^{204}Pb^{\dagger}$	Isotopic ratios (corrected) $^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Ages (Ma) $^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Disc. (%)
89	20	28,295	9.812	0.709	0.4232	0.0261	0.1682	0.0044	2417	67	2275	118	2539	44	-2.00
90	19	24,023	6.411	0.459	0.4068	0.0248	0.1143	0.0030	2034	63	2200	114	1869	47	2.20
91	19	19,565	5.615	0.413	0.3929	0.0250	0.1037	0.0027	1918	63	2136	116	1691	49	3.04
92	18	30,830	5.672	0.392	0.3759	0.0221	0.1094	0.0029	1927	60	2057	104	1790	48	2.09
93	19	10,926	4.111	0.260	0.2864	0.0153	0.1041	0.0028	1657	52	1623	77	1699	49	-1.04
94	16	9,845	4.056	0.258	0.2827	0.0152	0.1040	0.0028	1645	52	1605	76	1698	50	-1.32
95	18	16,273	4.109	0.259	0.2855	0.0152	0.1044	0.0028	1656	51	1619	76	1703	49	-1.18
96	20	19,730	3.905	0.242	0.2709	0.0142	0.1045	0.0027	1615	50	1546	72	1706	48	-2.50
97	18	18,725	4.602	0.313	0.3211	0.0188	0.1039	0.0027	1750	57	1795	92	1696	48	1.08
98	20	22,274	5.460	0.397	0.3890	0.0245	0.1018	0.0027	1894	62	2118	114	1657	48	3.19
99	19	15,101	5.091	0.341	0.3480	0.0198	0.1061	0.0028	1835	57	1925	95	1734	48	1.76
100	17	14,933	3.994	0.252	0.2800	0.0150	0.1035	0.0028	1633	51	1591	75	1687	49	-1.39
101	18	18,194	4.826	0.309	0.3098	0.0168	0.1130	0.0030	1789	54	1740	83	1848	48	-1.34
Sample ORT-N: Quartzite, Ortega Formation, Tusas Mountains, New Mexico															
1	19	30,746	3.984	0.293	0.2730	0.0173	0.1059	0.0028	1631	60	1556	88	1729	48	2.68
2	12	2,500	3.061	0.277	0.2114	0.0164	0.1050	0.0031	1423	69	1236	87	1715	54	11.92
3	11	4,054	3.384	0.532	0.2306	0.0341	0.1064	0.0031	1501	123	1338	179	1739	53	8.60
4	13	6,790	3.850	0.294	0.2485	0.0161	0.1124	0.0031	1603	62	1431	83	1838	51	7.85
5	20	5,697	7.111	0.567	0.2828	0.0197	0.1824	0.0048	2125	71	1605	99	2675	44	21.67
6	17	5,615	3.776	0.283	0.2523	0.0161	0.1085	0.0029	1588	60	1450	83	1775	49	5.94
7	15	4,693	4.508	0.365	0.3012	0.0207	0.1086	0.0030	1732	67	1697	102	1776	51	1.00
8	11	2,669	4.092	0.370	0.2806	0.0213	0.1058	0.0032	1653	74	1594	107	1728	56	1.95
9	19	3,739	4.347	0.616	0.2986	0.0394	0.1056	0.0029	1702	117	1684	195	1724	50	0.51
10	20	23,635	5.375	0.424	0.3685	0.0249	0.1058	0.0028	1881	68	2022	117	1728	48	-2.37
11	18	6,958	4.252	0.309	0.2930	0.0179	0.1052	0.0028	1684	60	1656	89	1719	49	0.83
12	20	10,216	3.717	0.272	0.2560	0.0160	0.1053	0.0028	1575	58	1469	82	1720	49	4.38
13	11	4,970	3.723	0.284	0.2511	0.0160	0.1075	0.0031	1576	61	1444	83	1758	53	5.76
14	16	23,301	4.318	0.356	0.2869	0.0209	0.1092	0.0029	1697	68	1626	105	1785	49	2.26
15	15	5,790	4.560	0.363	0.3002	0.0203	0.1102	0.0030	1742	66	1692	101	1802	50	1.43
16	20	7,989	5.065	0.405	0.3486	0.0238	0.1054	0.0028	1830	68	1928	114	1721	49	-1.89
17	19	10,510	5.081	0.420	0.3497	0.0250	0.1054	0.0028	1833	70	1933	119	1721	49	-1.92
18	17	1,855	4.115	0.331	0.2812	0.0184	0.1061	0.0030	1657	66	1598	92	1734	52	1.98
19	18	15,982	3.826	0.266	0.2625	0.0155	0.1057	0.0028	1598	56	1503	79	1727	48	3.74
20	14	7,631	5.254	0.597	0.3456	0.0361	0.1103	0.0030	1861	97	1914	173	1804	50	-1.05
21	19	13,921	4.380	0.322	0.3007	0.0188	0.1056	0.0028	1709	61	1695	93	1726	48	0.39
22	19	7,620	4.923	0.414	0.3361	0.0245	0.1062	0.0028	1806	71	1868	118	1736	49	-1.31
23	13	4,943	3.635	0.267	0.2461	0.0149	0.1071	0.0031	1557	58	1418	77	1751	52	6.34
24	16	4,923	4.316	0.329	0.2960	0.0189	0.1058	0.0029	1696	63	1671	94	1727	50	0.74
25	12	5,414	3.455	0.356	0.2291	0.0215	0.1094	0.0031	1517	81	1330	113	1789	51	10.15
26	19	14,412	4.489	0.335	0.3088	0.0197	0.1054	0.0028	1729	62	1735	97	1722	49	-0.15
27	11	4,963	3.787	0.295	0.2653	0.0171	0.1035	0.0031	1590	63	1517	87	1688	55	2.76
28	15	7,093	3.713	0.273	0.2568	0.0159	0.1049	0.0029	1574	59	1473	82	1712	50	4.14
29	19	23,357	4.067	0.286	0.2781	0.0166	0.1061	0.0028	1648	57	1582	84	1733	48	2.24
30	20	11,852	3.959	0.281	0.2735	0.0164	0.1050	0.0028	1626	58	1559	83	1714	49	2.38
31	19	11,140	3.656	0.251	0.2453	0.0142	0.1081	0.0029	1562	55	1414	73	1767	48	6.81

#	N	$^{206}Pb/^{204}Pb^{\dagger}$	Isotopic ratios (corrected) $^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Ages (Ma) $^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Disc. (%)
32	20	6,903	4.018	0.310	0.2761	0.0183	0.1056	0.0028	1638	63	1571	93	1724	49	2.30
33	19	12,941	3.940	0.317	0.2694	0.0191	0.1061	0.0028	1622	65	1538	97	1733	48	3.10
34	12	1,896	3.986	0.388	0.2737	0.0226	0.1056	0.0031	1631	79	1560	114	1725	54	2.53
35	15	2,171	3.818	0.292	0.2620	0.0162	0.1057	0.0030	1597	62	1500	83	1726	52	3.78
36	16	10,403	3.579	0.248	0.2400	0.0140	0.1081	0.0029	1545	55	1387	73	1768	49	7.67
37	20	14,217	4.637	0.370	0.3194	0.0222	0.1053	0.0028	1756	67	1787	108	1719	48	-0.75
38	19	19,135	5.232	0.411	0.3599	0.0241	0.1054	0.0028	1858	67	1982	114	1722	48	-2.20
39	19	11,995	3.596	0.250	0.2434	0.0144	0.1071	0.0028	1549	55	1404	75	1751	48	6.76
40	12	1,566	4.707	0.469	0.3220	0.0266	0.1060	0.0032	1768	83	1799	130	1732	55	-0.74
41	15	5,686	4.995	0.533	0.3464	0.0333	0.1046	0.0029	1818	90	1917	159	1707	51	-1.94
42	18	7,737	4.641	0.407	0.3201	0.0247	0.1052	0.0028	1757	73	1790	121	1717	49	-0.81
43	19	8,601	4.030	0.292	0.2779	0.0170	0.1052	0.0028	1640	59	1581	86	1718	49	2.03
44	20	17,277	4.503	0.355	0.3000	0.0207	0.1089	0.0029	1731	66	1691	103	1780	48	1.15
45	11	835	3.959	0.387	0.2668	0.0199	0.1076	0.0036	1626	79	1524	101	1760	60	3.84
46	16	9,157	5.029	0.517	0.3465	0.0323	0.1053	0.0028	1824	87	1918	155	1719	49	-1.84
47	19	31,766	4.693	0.391	0.3223	0.0238	0.1056	0.0028	1766	70	1801	116	1725	48	-0.83
48	19	9,151	3.664	0.260	0.2554	0.0153	0.1041	0.0028	1564	57	1466	79	1698	49	4.04
49	16	9,581	4.789	0.484	0.3309	0.0303	0.1050	0.0028	1783	85	1843	147	1714	50	-1.31
50	20	6,230	5.299	0.446	0.3649	0.0262	0.1053	0.0028	1869	72	2006	124	1720	49	-2.35
51	19	9,382	5.090	0.403	0.3517	0.0237	0.1050	0.0028	1834	67	1942	113	1714	49	-2.04
52	16	1,822	4.079	0.328	0.2796	0.0181	0.1058	0.0030	1650	65	1589	91	1728	53	2.04
53	13	5,545	4.363	0.733	0.3015	0.0481	0.1049	0.0029	1705	139	1699	238	1713	51	0.18
54	19	13,873	4.025	0.293	0.2771	0.0172	0.1053	0.0028	1639	59	1577	87	1720	48	2.15
55	19	9,619	3.905	0.288	0.2695	0.0170	0.1051	0.0028	1615	60	1538	86	1716	49	2.81
56	16	7,772	3.890	0.285	0.2700	0.0167	0.1045	0.0028	1612	59	1541	85	1705	50	2.56
57	15	9,880	3.829	0.276	0.2657	0.0161	0.1045	0.0029	1599	58	1519	82	1706	50	3.02
58	17	2,406	3.580	0.291	0.2443	0.0161	0.1063	0.0033	1545	64	1409	83	1737	57	6.31
59	12	22,042	10.271	1.570	0.3853	0.0562	0.1934	0.0055	2460	141	2101	261	2771	47	6.98
60	19	12,201	3.937	0.282	0.2602	0.0159	0.1097	0.0029	1621	58	1491	82	1795	48	5.28
61	15	9,498	3.965	0.314	0.2737	0.0188	0.1051	0.0028	1627	64	1560	95	1716	50	2.38
62	12	3,655	3.157	0.255	0.2097	0.0145	0.1092	0.0031	1447	62	1227	77	1785	52	14.47
63	15	5,398	5.136	0.409	0.3506	0.0233	0.1062	0.0029	1842	68	1937	111	1736	50	-1.82
64	15	1,890	4.552	0.397	0.3112	0.0222	0.1061	0.0031	1740	73	1747	109	1733	53	-0.16
65	18	12,634	5.926	0.492	0.3961	0.0280	0.1085	0.0029	1965	72	2151	129	1775	48	-2.59
66	15	2,795	5.742	0.567	0.3574	0.0304	0.1165	0.0033	1938	85	1970	145	1904	51	-0.61
67	19	16,659	5.463	0.440	0.3772	0.0259	0.1050	0.0028	1895	69	2063	121	1715	48	-2.64
68	14	4,337	5.498	0.497	0.3779	0.0290	0.1055	0.0030	1900	78	2067	136	1723	52	-2.60
69	13	1,874	5.122	0.597	0.3585	0.0357	0.1036	0.0032	1840	99	1975	169	1690	57	-2.41
70	20	9,048	4.879	0.379	0.3360	0.0222	0.1053	0.0028	1799	66	1867	107	1720	49	-1.46
71	9	525	5.198	0.722	0.3320	0.0345	0.1136	0.0042	1852	118	1848	167	1857	66	0.10
72	20	14,257	3.821	0.268	0.2554	0.0153	0.1085	0.0028	1597	57	1466	78	1775	48	5.51
73	13	2,926	3.541	0.453	0.2440	0.0285	0.1052	0.0030	1536	101	1408	147	1719	53	5.96
74	14	3,813	4.581	0.366	0.3154	0.0210	0.1054	0.0029	1746	67	1767	103	1721	51	-0.53
75	12	6,918	5.236	0.462	0.3625	0.0274	0.1048	0.0029	1859	75	1994	130	1710	51	-2.36
76	13	5,790	3.668	0.372	0.2511	0.0230	0.1059	0.0030	1564	81	1444	119	1730	52	5.21
77	19	14,196	3.557	0.241	0.2375	0.0135	0.1086	0.0029	1540	54	1374	70	1776	49	8.28

			Isotopic ratios (corrected)						Ages (Ma)						
#	N	$^{206}Pb/^{204}Pb^{\dagger}$	$^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	$^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Disc. (%)
78	9	14,340	3.789	0.307	0.2558	0.0178	0.1074	0.0031	1590	65	1468	92	1756	54	5.10
79	19	20,325	3.533	0.260	0.2256	0.0144	0.1136	0.0030	1535	58	1311	76	1857	48	12.73
80	19	4,794	3.872	0.292	0.2666	0.0169	0.1054	0.0029	1608	61	1523	86	1720	50	3.18
81	11	3,845	3.979	0.486	0.2752	0.0299	0.1049	0.0036	1630	99	1567	151	1712	63	2.19
82	19	16,498	5.270	0.406	0.3371	0.0222	0.1134	0.0030	1864	66	1873	107	1854	48	-0.19
83	17	9,361	3.630	0.256	0.2511	0.0149	0.1049	0.0028	1556	56	1444	77	1712	49	4.85
84	20	3,424	4.490	0.397	0.3101	0.0236	0.1050	0.0029	1729	73	1741	116	1715	50	-0.31
85	13	5,713	3.812	0.302	0.2634	0.0178	0.1049	0.0029	1595	64	1507	91	1713	52	3.40
86	13	7,049	4.240	0.353	0.2952	0.0212	0.1042	0.0029	1682	68	1667	105	1700	52	0.43
87	11	6,837	3.918	0.369	0.2730	0.0228	0.1041	0.0030	1617	76	1556	115	1698	53	2.16
88	7	1,782	4.451	0.540	0.2998	0.0294	0.1077	0.0045	1722	101	1691	146	1760	77	0.89
89	13	896	4.040	0.479	0.2631	0.0254	0.1113	0.0036	1642	96	1506	130	1822	58	5.42
90	19	4,486	5.153	0.414	0.3577	0.0239	0.1045	0.0029	1845	68	1971	113	1705	50	-2.28
91	14	12,398	4.086	0.324	0.2819	0.0194	0.1051	0.0029	1652	65	1601	97	1717	50	1.67
92	20	14,992	4.839	0.439	0.3321	0.0270	0.1057	0.0028	1792	76	1849	131	1726	48	-1.25
93	15	8,439	3.844	0.295	0.2541	0.0169	0.1097	0.0030	1602	62	1459	87	1795	49	6.11
94	20	12,631	3.584	0.253	0.2466	0.0149	0.1054	0.0028	1546	56	1421	77	1721	48	5.64
95	8	2,509	4.024	0.441	0.2757	0.0254	0.1059	0.0039	1639	89	1570	128	1729	67	2.42
96	20	11,559	4.506	0.347	0.3098	0.0204	0.1055	0.0028	1732	64	1740	101	1723	49	-0.20
97	10	1,994	5.364	0.521	0.3634	0.0285	0.1071	0.0034	1879	83	1998	135	1750	59	-2.08
98	14	3,260	4.716	0.476	0.3114	0.0277	0.1098	0.0031	1770	85	1748	136	1797	52	0.59
Sample LC-CC-15: Quartzite, Cebolla Canyon, south of Gunnison, Colorado															
1	18	18,165	3.910	0.231	0.2635	0.0131	0.1076	0.0029	1616	48	1508	67	1760	49	4.21
2	15	12,150	4.355	0.279	0.2902	0.0158	0.1088	0.0030	1704	53	1643	79	1780	50	1.90
3	20	14,373	3.980	0.236	0.2699	0.0135	0.1070	0.0028	1630	48	1540	69	1748	48	3.31
4	19	11,239	4.613	0.316	0.3153	0.0189	0.1061	0.0028	1752	57	1767	92	1734	48	-0.38
5	18	13,073	4.364	0.287	0.2966	0.0169	0.1067	0.0028	1706	54	1675	84	1744	48	0.90
6	16	12,021	4.198	0.301	0.2837	0.0180	0.1073	0.0029	1674	59	1610	91	1754	49	2.07
7	11	5,881	3.439	0.282	0.2352	0.0172	0.1060	0.0031	1513	65	1362	90	1732	53	7.63
8	18	11,323	3.707	0.219	0.2523	0.0125	0.1066	0.0028	1573	47	1451	64	1741	49	5.27
9	20	23,333	3.659	0.213	0.2471	0.0122	0.1074	0.0028	1562	46	1424	63	1755	48	6.28
10	20	23,675	3.820	0.225	0.2585	0.0129	0.1072	0.0028	1597	47	1482	66	1752	48	4.68
11	20	4,907	3.002	0.425	0.2024	0.0273	0.1076	0.0029	1408	108	1188	146	1758	49	15.58
12	20	13,155	3.711	0.218	0.2523	0.0124	0.1067	0.0029	1574	47	1450	64	1744	49	5.32
13	18	13,856	4.080	0.256	0.2791	0.0150	0.1060	0.0028	1650	51	1587	76	1732	49	2.15
14	17	12,076	4.071	0.246	0.2700	0.0138	0.1094	0.0029	1649	49	1541	70	1789	49	4.00
15	17	8,361	3.856	0.232	0.2523	0.0128	0.1108	0.0030	1604	49	1450	66	1813	49	6.74
16	20	22,590	3.778	0.219	0.2515	0.0124	0.1089	0.0028	1588	47	1446	64	1782	48	6.19
17	19	24,859	3.936	0.232	0.2615	0.0130	0.1092	0.0029	1621	48	1497	67	1786	48	4.94
18	15	9,364	3.800	0.231	0.2587	0.0132	0.1065	0.0029	1593	49	1483	67	1741	50	4.44
19	19	33,590	10.235	0.661	0.3865	0.0212	0.1921	0.0050	2456	60	2107	99	2760	43	6.72
20	19	16,146	3.545	0.208	0.2428	0.0120	0.1059	0.0028	1537	46	1401	62	1730	48	6.38
21	17	27,084	3.942	0.233	0.2607	0.0131	0.1096	0.0029	1622	48	1494	67	1793	48	5.18
22	19	11,682	3.866	0.228	0.2618	0.0130	0.1071	0.0028	1607	48	1499	66	1750	49	4.25
23	19	5,756	3.518	0.210	0.2425	0.0121	0.1052	0.0028	1531	47	1400	63	1718	50	6.17

			Isotopic ratios (corrected)						Ages (Ma)						
#	N	$^{206}Pb/^{204}Pb^{\dagger}$	$^{207}Pb^{*}/^{235}U$	± (abs)	$^{206}Pb^{*}/^{238}U$	± (abs)	$^{207}Pb^{*}/^{206}Pb^{*}$	± (abs)	$^{207}Pb^{*}/^{235}U$	± (abs)	$^{206}Pb^{*}/^{238}U$	± (abs)	$^{207}Pb^{*}/^{206}Pb^{*}$	± (abs)	Disc. (%)
24	20	24,634	3.847	0.226	0.2599	0.0130	0.1074	0.0028	1603	47	1489	66	1755	48	4.57
25	19	28,777	4.475	0.279	0.2953	0.0158	0.1099	0.0029	1726	52	1668	79	1798	48	1.74
26	19	3,516	3.818	0.240	0.2621	0.0131	0.1057	0.0032	1597	50	1500	67	1726	55	3.77
27	20	17,050	3.907	0.228	0.2576	0.0127	0.1100	0.0029	1615	47	1478	65	1799	48	5.70
28	20	14,630	3.845	0.225	0.2611	0.0128	0.1068	0.0028	1602	47	1495	66	1746	49	4.25
29	18	8,117	3.721	0.226	0.2556	0.0130	0.1056	0.0029	1576	49	1467	67	1724	50	4.50
30	19	11,898	3.738	0.221	0.2558	0.0127	0.1060	0.0028	1580	47	1468	65	1732	49	4.64
31	19	69,251	3.847	0.225	0.2596	0.0129	0.1075	0.0028	1603	47	1488	66	1757	48	4.63
32	19	13,252	4.484	0.273	0.2871	0.0148	0.1133	0.0030	1728	51	1627	74	1853	48	3.28
33	17	15,776	3.979	0.240	0.2644	0.0135	0.1091	0.0029	1630	49	1512	69	1785	48	4.57
34	17	8,236	4.498	0.278	0.2872	0.0148	0.1136	0.0031	1731	51	1628	74	1857	50	3.34
35	18	9,899	4.534	0.288	0.2971	0.0160	0.1107	0.0030	1737	53	1677	79	1810	49	1.78
36	19	14,802	3.602	0.207	0.2352	0.0115	0.1111	0.0029	1550	46	1362	60	1817	48	9.67
37	20	13,210	3.909	0.253	0.2564	0.0145	0.1106	0.0029	1615	52	1471	74	1809	48	6.06
38	18	13,930	4.343	0.293	0.2927	0.0173	0.1076	0.0029	1702	56	1655	86	1759	49	1.42
39	19	15,324	3.981	0.238	0.2716	0.0137	0.1063	0.0028	1630	49	1549	70	1737	49	2.94
40	19	24,033	4.221	0.267	0.2850	0.0156	0.1074	0.0028	1678	52	1617	78	1756	48	1.99
41	20	17,788	4.274	0.257	0.2821	0.0144	0.1099	0.0029	1688	49	1602	72	1797	48	2.89
42	18	9,325	3.891	0.240	0.2671	0.0139	0.1057	0.0029	1612	50	1526	71	1726	50	3.22
43	18	24,415	4.230	0.255	0.2854	0.0146	0.1075	0.0028	1680	50	1619	73	1757	48	1.97
44	19	7,431	4.004	0.243	0.2750	0.0139	0.1056	0.0029	1635	49	1566	70	1725	50	2.41
45	12	5,879	3.770	0.237	0.2565	0.0133	0.1066	0.0031	1586	51	1472	68	1742	53	4.75
46	19	8,211	4.084	0.248	0.2780	0.0141	0.1065	0.0029	1651	49	1581	71	1741	50	2.38
47	19	13,346	4.006	0.238	0.2721	0.0136	0.1068	0.0028	1635	48	1552	69	1745	48	3.02
48	19	9,429	4.768	0.317	0.3242	0.0185	0.1067	0.0028	1779	56	1810	90	1743	49	-0.72
49	19	9,707	4.001	0.242	0.2755	0.0140	0.1053	0.0028	1634	49	1568	71	1720	49	2.30
50	19	21,830	4.506	0.275	0.3057	0.0158	0.1069	0.0028	1732	51	1719	78	1748	48	0.35
51	20	24,551	4.255	0.255	0.2812	0.0143	0.1097	0.0029	1685	49	1598	72	1795	48	2.93
52	19	12,891	4.495	0.286	0.3021	0.0164	0.1079	0.0029	1730	53	1702	81	1764	49	0.80
53	18	10,055	3.912	0.235	0.2676	0.0134	0.1060	0.0029	1616	49	1529	68	1732	49	3.27
54	19	8,204	3.793	0.239	0.2585	0.0139	0.1064	0.0028	1591	51	1482	71	1739	49	4.44
55	14	16,936	3.946	0.241	0.2632	0.0135	0.1087	0.0030	1623	49	1506	69	1779	50	4.60
56	19	27,476	3.804	0.222	0.2544	0.0126	0.1084	0.0029	1594	47	1461	65	1773	48	5.63
57	6	1,238	3.489	0.382	0.2633	0.0223	0.0961	0.0045	1525	86	1507	114	1550	87	0.68
58	20	13,377	3.743	0.219	0.2546	0.0126	0.1066	0.0028	1581	47	1462	65	1743	48	5.00
59	19	12,322	3.946	0.235	0.2669	0.0134	0.1072	0.0029	1623	48	1525	68	1753	49	3.71
60	20	14,629	3.755	0.221	0.2593	0.0128	0.1050	0.0028	1583	47	1486	65	1715	50	3.89
61	18	19,418	3.801	0.223	0.2535	0.0125	0.1087	0.0029	1593	47	1457	64	1779	48	5.85
62	19	10,304	3.919	0.235	0.2677	0.0134	0.1062	0.0029	1618	48	1529	68	1735	50	3.32
63	19	22,453	3.793	0.222	0.2565	0.0127	0.1073	0.0028	1591	47	1472	65	1753	48	4.95
64	19	16,855	4.016	0.238	0.2670	0.0134	0.1091	0.0029	1637	48	1525	68	1784	48	4.26
65	20	21,967	4.126	0.243	0.2689	0.0134	0.1113	0.0029	1659	48	1535	68	1820	48	4.67
66	15	6,958	3.452	0.246	0.2384	0.0149	0.1050	0.0029	1516	56	1378	78	1715	51	6.73
67	20	20,885	3.957	0.238	0.2615	0.0135	0.1097	0.0029	1625	49	1498	69	1795	48	5.12
68	17	11,739	3.474	0.250	0.2330	0.0150	0.1081	0.0029	1521	57	1350	78	1768	49	8.88
69	14	5,994	3.682	0.246	0.2557	0.0145	0.1045	0.0030	1568	53	1468	74	1705	52	4.14

			Isotopic ratios (corrected)						Ages (Ma)						
#	N	$^{206}Pb/^{204}Pb^{\dagger}$	$^{207}Pb^{*}/^{235}U$	± (abs)	$^{206}Pb^{*}/^{238}U$	± (abs)	$^{207}Pb^{*}/^{206}Pb^{*}$	± (abs)	$^{207}Pb^{*}/^{235}U$	± (abs)	$^{206}Pb^{*}/^{238}U$	± (abs)	$^{207}Pb^{*}/^{206}Pb^{*}$	± (abs)	Disc. (%)
70	20	14,790	4.206	0.258	0.2840	0.0148	0.1074	0.0028	1675	50	1612	74	1756	48	2.08
71	16	8,907	4.203	0.261	0.2781	0.0145	0.1096	0.0030	1675	51	1582	73	1793	49	3.20
72	18	21,048	5.916	0.461	0.3901	0.0271	0.1100	0.0029	1964	68	2123	126	1799	48	-2.33
73	16	11,013	4.062	0.256	0.2760	0.0148	0.1067	0.0029	1647	51	1571	75	1744	50	2.63
74	20	17,358	3.993	0.237	0.2681	0.0134	0.1080	0.0028	1633	48	1531	68	1766	48	3.80
75	17	19,675	4.432	0.309	0.2993	0.0184	0.1074	0.0029	1718	58	1688	91	1755	49	0.87
76	17	11,644	5.822	0.453	0.3845	0.0265	0.1098	0.0029	1950	67	2097	123	1797	48	-2.24
77	18	11,390	4.069	0.256	0.2744	0.0145	0.1075	0.0029	1648	51	1563	73	1758	49	3.01
78	19	13,110	11.844	0.927	0.4718	0.0316	0.1821	0.0048	2592	73	2492	138	2672	43	1.07
79	19	21,184	5.522	0.410	0.3655	0.0238	0.1096	0.0029	1904	64	2008	112	1793	48	-1.81
80	14	4,526	13.510	1.441	0.5236	0.0493	0.1871	0.0051	2716	101	2715	209	2717	45	0.01
81	19	10,907	3.149	0.480	0.2139	0.0315	0.1068	0.0029	1445	117	1250	168	1745	49	12.21
82	18	9,337	3.844	0.238	0.2540	0.0133	0.1098	0.0029	1602	50	1459	68	1795	49	6.13
83	19	12,806	4.297	0.266	0.2754	0.0144	0.1132	0.0030	1693	51	1568	73	1851	48	4.48
84	17	45,395	4.016	0.248	0.2628	0.0138	0.1108	0.0029	1637	50	1504	71	1813	48	5.28
85	18	10,516	3.795	0.233	0.2591	0.0133	0.1062	0.0029	1592	49	1485	68	1736	49	4.30
86	18	18,811	3.734	0.227	0.2539	0.0130	0.1067	0.0028	1579	49	1459	67	1743	49	5.10
87	19	13,004	4.032	0.253	0.2751	0.0145	0.1063	0.0029	1641	51	1567	73	1737	49	2.59
88	18	9,053	7.799	0.596	0.3535	0.0238	0.1600	0.0042	2208	69	1951	113	2456	45	5.75
89	19	23,749	4.615	0.300	0.2986	0.0166	0.1121	0.0029	1752	54	1684	83	1834	47	1.99
90	20	16,680	4.263	0.277	0.2925	0.0163	0.1057	0.0028	1686	53	1654	81	1727	48	0.97
91	19	16,871	4.413	0.312	0.3000	0.0186	0.1067	0.0028	1715	58	1691	92	1743	48	0.66
92	17	9,890	4.692	0.325	0.3193	0.0189	0.1066	0.0029	1766	58	1786	93	1742	49	-0.50
93	15	11,909	4.440	0.329	0.3062	0.0199	0.1052	0.0029	1720	61	1722	98	1717	50	-0.05
94	17	15,228	4.536	0.299	0.3072	0.0173	0.1071	0.0028	1738	55	1727	85	1751	49	0.29
95	16	10,909	5.117	0.374	0.3480	0.0220	0.1066	0.0029	1839	62	1925	105	1743	49	-1.68
96	19	13,130	5.595	0.395	0.3844	0.0231	0.1056	0.0028	1915	61	2097	108	1724	49	-2.71
97	17	15,808	5.645	0.447	0.3724	0.0261	0.1100	0.0029	1923	68	2041	123	1799	49	-1.94
98	18	15,858	4.940	0.347	0.3364	0.0205	0.1065	0.0028	1809	59	1870	99	1740	48	-1.29
99	20	21,817	4.181	0.258	0.2777	0.0145	0.1092	0.0029	1670	50	1580	73	1786	48	3.14
100	19	21,380	5.359	0.385	0.3627	0.0226	0.1072	0.0028	1878	61	1995	107	1752	48	-2.04
101	17	11,964	4.007	0.253	0.2740	0.0146	0.1061	0.0028	1636	51	1561	74	1733	49	2.63
102	18	17,370	5.129	0.347	0.3475	0.0200	0.1071	0.0028	1841	57	1923	96	1750	49	-1.60
Sample Q4u: Quartzite, Upper Q4 unit, Uncompahgre Formation, Needle Mountains, Colorado															
1	20	8,885	4.602	0.321	0.3161	0.0185	0.1056	0.0028	1750	58	1771	91	1725	49	-0.52
2	19	8,885	4.826	0.349	0.3277	0.0200	0.1068	0.0028	1789	61	1827	97	1746	49	-0.86
3	17	5,975	5.078	0.678	0.3355	0.0421	0.1098	0.0030	1832	113	1865	203	1796	49	-0.70
4	18	14,781	5.874	0.589	0.4002	0.0364	0.1064	0.0028	1957	87	2170	168	1739	49	-2.85
5	19	14,301	4.131	0.279	0.2822	0.0160	0.1062	0.0028	1660	55	1603	81	1735	49	1.91
6	19	11,076	5.037	0.362	0.3317	0.0202	0.1102	0.0029	1826	61	1846	98	1802	48	-0.47
7	19	21,492	5.175	0.371	0.3489	0.0212	0.1076	0.0028	1849	61	1929	101	1759	48	-1.57
8	17	6,958	4.982	0.394	0.3295	0.0225	0.1097	0.0030	1816	67	1836	109	1794	49	-0.45
9	20	13,815	4.751	0.338	0.3151	0.0190	0.1094	0.0029	1776	60	1766	93	1789	49	0.27
10	20	6,618	5.796	0.449	0.3897	0.0251	0.1079	0.0030	1946	67	2121	116	1764	50	-2.55
11	19	14,065	5.472	0.457	0.3624	0.0267	0.1095	0.0029	1896	72	1994	126	1791	48	-1.73

#	N	$^{206}Pb/^{204}Pb^{\dagger}$	Isotopic ratios (corrected) $^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Ages (Ma) $^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Disc. (%)
12	20	11,750	4.950	0.363	0.3396	0.0213	0.1057	0.0028	1811	62	1885	102	1727	48	-1.53
13	19	16,239	4.295	0.293	0.2956	0.0171	0.1054	0.0028	1692	56	1670	85	1721	48	0.67
14	17	6,821	4.748	0.373	0.3265	0.0221	0.1055	0.0029	1776	66	1821	107	1723	50	-1.05
15	19	13,113	4.759	0.348	0.3252	0.0203	0.1061	0.0028	1778	61	1815	99	1734	49	-0.87
16	11	4,430	5.713	0.471	0.3576	0.0247	0.1159	0.0034	1933	71	1971	117	1894	53	-0.70
17	19	16,641	5.164	0.387	0.3545	0.0227	0.1056	0.0028	1847	64	1956	108	1726	48	-2.03
18	16	6,613	3.218	0.242	0.2185	0.0144	0.1068	0.0029	1461	58	1274	76	1746	50	11.22
19	19	2,394	3.142	0.280	0.2131	0.0166	0.1069	0.0030	1443	69	1245	88	1748	51	12.49
20	19	6,434	3.973	0.331	0.2647	0.0196	0.1089	0.0029	1629	68	1514	100	1781	48	4.46
21	20	15,981	5.566	0.402	0.3533	0.0216	0.1143	0.0030	1911	62	1950	103	1868	48	-0.76
22	19	12,174	5.069	0.373	0.3450	0.0215	0.1066	0.0028	1831	62	1911	103	1742	49	-1.59
23	19	32,579	5.553	0.466	0.3794	0.0281	0.1062	0.0028	1909	72	2073	131	1734	48	-2.55
24	18	3,601	5.461	0.509	0.3739	0.0304	0.1059	0.0029	1894	80	2048	143	1730	50	-2.47
25	16	6,663	4.229	0.309	0.2933	0.0182	0.1046	0.0029	1680	60	1658	91	1707	50	0.64
26	20	17,229	4.662	0.328	0.3201	0.0191	0.1056	0.0028	1760	59	1790	93	1725	48	-0.72
27	19	3,690	3.810	0.274	0.2585	0.0157	0.1069	0.0029	1595	58	1482	80	1747	50	4.58
28	19	12,135	4.616	0.327	0.3188	0.0191	0.1050	0.0028	1752	59	1784	94	1714	49	-0.77
29	17	13,921	4.872	0.353	0.3344	0.0205	0.1057	0.0028	1797	61	1860	99	1726	49	-1.34
30	19	20,921	4.744	0.336	0.3132	0.0189	0.1098	0.0029	1775	59	1757	93	1797	48	0.48
31	19	39,671	4.732	0.319	0.2975	0.0170	0.1154	0.0030	1773	57	1679	85	1886	47	2.83
32	20	41,369	4.443	0.298	0.2925	0.0166	0.1102	0.0029	1720	56	1654	83	1802	48	2.04
33	20	38,612	4.140	0.277	0.2816	0.0160	0.1066	0.0028	1662	55	1599	81	1742	48	2.08
34	19	7,349	5.044	0.387	0.3463	0.0226	0.1056	0.0028	1827	65	1917	108	1726	49	-1.77
35	19	19,482	4.814	0.340	0.3217	0.0194	0.1085	0.0029	1787	59	1798	94	1775	48	-0.26
36	18	19,761	4.988	0.368	0.3418	0.0216	0.1058	0.0028	1817	62	1895	104	1729	48	-1.59
37	15	15,800	5.937	0.575	0.3903	0.0341	0.1103	0.0030	1967	84	2124	158	1805	49	-2.30
38	20	3,353	2.972	0.213	0.1843	0.0113	0.1169	0.0032	1401	54	1091	61	1910	49	27.79
39	16	12,015	4.510	0.319	0.3115	0.0186	0.1050	0.0028	1733	59	1748	91	1714	49	-0.40
40	18	21,406	4.701	0.330	0.3206	0.0191	0.1064	0.0028	1767	59	1793	93	1738	48	-0.61
41	15	9,684	5.598	0.502	0.3830	0.0303	0.1060	0.0029	1916	77	2090	141	1732	50	-2.64
42	20	11,180	5.357	0.398	0.3656	0.0229	0.1063	0.0028	1878	64	2009	108	1736	49	-2.24
43	19	6,522	5.289	0.404	0.3598	0.0233	0.1066	0.0028	1867	65	1981	110	1742	49	-2.04
44	14	5,191	4.453	0.400	0.3056	0.0243	0.1057	0.0029	1722	75	1719	120	1726	51	0.09
45	14	5,103	5.634	0.473	0.3847	0.0275	0.1062	0.0029	1921	72	2098	128	1735	51	-2.64
46	18	23,716	4.859	0.356	0.3335	0.0210	0.1057	0.0028	1795	62	1855	101	1726	49	-1.30
47	13	13,542	5.756	0.464	0.3800	0.0262	0.1099	0.0030	1940	70	2076	122	1797	50	-2.14
48	17	19,046	5.964	0.486	0.4085	0.0286	0.1059	0.0028	1971	71	2208	131	1730	49	-3.00
49	20	18,916	5.899	0.484	0.4008	0.0285	0.1067	0.0028	1961	71	2173	131	1745	48	-2.83
50	19	24,098	5.156	0.388	0.3374	0.0220	0.1108	0.0029	1845	64	1874	106	1813	48	-0.62
51	16	10,318	4.381	0.315	0.2981	0.0182	0.1066	0.0029	1709	59	1682	90	1742	49	0.78
52	14	6,932	4.634	0.367	0.3208	0.0216	0.1048	0.0030	1755	66	1793	105	1710	52	-0.91
53	17	17,490	4.382	0.326	0.3002	0.0194	0.1059	0.0028	1709	61	1692	96	1729	49	0.47
54	13	2,437	3.763	0.331	0.2574	0.0194	0.1060	0.0031	1585	71	1477	100	1732	53	4.44
55	20	18,933	5.325	0.396	0.3336	0.0213	0.1158	0.0031	1873	63	1856	103	1892	48	0.38
56	19	29,524	4.688	0.323	0.2933	0.0172	0.1159	0.0030	1765	58	1658	86	1894	47	3.33
57	19	13,679	4.327	0.305	0.2952	0.0178	0.1063	0.0028	1698	58	1667	88	1737	49	0.92

#	N	$^{206}Pb/^{204}Pb^{\dagger}$	Isotopic ratios (corrected)						Ages (Ma)						Disc. (%)
			$^{207}Pb^{*}/^{235}U$	± (abs)	$^{206}Pb^{*}/^{238}U$	± (abs)	$^{207}Pb^{*}/^{206}Pb^{*}$	± (abs)	$^{207}Pb^{*}/^{235}U$	± (abs)	$^{206}Pb^{*}/^{238}U$	± (abs)	$^{207}Pb^{*}/^{206}Pb^{*}$	± (abs)	
58	19	9,703	4.223	0.293	0.2603	0.0154	0.1177	0.0031	1679	57	1492	79	1921	47	7.79
59	12	9,089	4.556	0.339	0.2934	0.0185	0.1126	0.0032	1741	62	1659	92	1842	51	2.54
60	13	6,896	4.522	0.347	0.3199	0.0206	0.1025	0.0030	1735	64	1789	100	1671	54	-1.29
61	18	5,178	6.010	0.555	0.4105	0.0330	0.1062	0.0029	1977	80	2217	151	1735	49	-3.00
62	20	13,007	4.336	0.300	0.2944	0.0172	0.1068	0.0028	1700	57	1663	86	1746	49	1.10
63	20	14,936	5.064	0.371	0.3450	0.0215	0.1065	0.0028	1830	62	1911	103	1740	48	-1.61
64	20	12,214	4.894	0.349	0.3333	0.0200	0.1065	0.0029	1801	60	1854	97	1740	49	-1.16
65	19	56,511	4.989	0.341	0.3057	0.0178	0.1184	0.0031	1817	58	1719	88	1932	47	2.78
66	19	18,926	4.433	0.301	0.2939	0.0169	0.1094	0.0029	1718	56	1661	84	1789	48	1.74
67	20	32,755	4.834	0.339	0.3202	0.0192	0.1095	0.0029	1791	59	1791	94	1791	48	0.00
68	19	15,225	6.079	0.514	0.3839	0.0285	0.1149	0.0030	1987	74	2094	133	1878	48	-1.66
69	20	16,102	13.316	1.203	0.4771	0.0369	0.2024	0.0053	2702	85	2515	161	2846	43	2.03
70	17	21,386	4.783	0.346	0.3295	0.0203	0.1053	0.0028	1782	61	1836	99	1720	49	-1.20
71	20	15,920	4.242	0.285	0.2812	0.0160	0.1094	0.0029	1682	55	1597	80	1790	48	2.86
72	20	15,660	4.802	0.355	0.3312	0.0211	0.1051	0.0028	1785	62	1844	102	1717	48	-1.31
73	18	16,875	4.419	0.303	0.2852	0.0166	0.1124	0.0030	1716	57	1617	83	1838	48	3.24
74	20	13,866	4.764	0.349	0.3187	0.0201	0.1084	0.0028	1779	61	1784	98	1773	48	-0.12
75	18	30,996	11.413	0.942	0.4431	0.0312	0.1868	0.0049	2557	77	2364	140	2714	43	2.50
76	17	9,285	5.021	0.389	0.3334	0.0223	0.1092	0.0029	1823	66	1855	108	1787	49	-0.70
77	19	3,565	8.886	0.967	0.3696	0.0368	0.1744	0.0047	2326	99	2027	173	2600	45	6.20
78	20	6,033	4.434	0.340	0.3083	0.0199	0.1043	0.0030	1719	64	1732	98	1702	53	-0.35
79	19	24,643	4.881	0.364	0.3355	0.0216	0.1055	0.0028	1799	63	1865	104	1723	48	-1.41
80	19	14,469	4.771	0.348	0.3295	0.0206	0.1050	0.0028	1780	61	1836	100	1715	48	-1.25
81	20	58,012	4.069	0.269	0.2686	0.0151	0.1099	0.0029	1648	54	1534	77	1797	48	4.30
82	10	11,277	4.140	0.297	0.2673	0.0161	0.1123	0.0032	1662	59	1527	82	1838	52	5.19
83	18	9,522	4.506	0.322	0.2806	0.0172	0.1165	0.0031	1732	59	1594	86	1903	48	4.78
84	19	36,108	4.658	0.324	0.3102	0.0184	0.1089	0.0029	1760	58	1741	90	1782	48	0.48
85	19	27,229	3.784	0.249	0.2605	0.0145	0.1054	0.0028	1589	53	1492	74	1721	48	3.86
86	18	12,089	4.848	0.343	0.3032	0.0182	0.1160	0.0031	1793	60	1707	90	1895	48	2.48
87	16	8,862	4.688	0.356	0.3216	0.0207	0.1057	0.0030	1765	64	1797	101	1727	51	-0.77
88	20	11,716	4.924	0.353	0.3391	0.0205	0.1053	0.0028	1806	61	1882	99	1720	49	-1.58
89	10	10,465	4.256	0.377	0.2950	0.0232	0.1046	0.0030	1685	73	1667	115	1708	53	0.54
90	17	13,454	4.665	0.328	0.3154	0.0187	0.1073	0.0029	1761	59	1767	92	1754	49	-0.16
91	19	34,239	5.691	0.449	0.3791	0.0259	0.1089	0.0029	1930	68	2072	121	1781	48	-2.23
92	20	19,622	4.067	0.272	0.2755	0.0156	0.1071	0.0028	1648	54	1569	79	1750	48	2.77
93	20	15,424	4.132	0.276	0.2789	0.0157	0.1074	0.0028	1661	55	1586	79	1756	49	2.54
94	19	4,242	5.100	0.423	0.3418	0.0232	0.1082	0.0034	1836	70	1895	111	1770	58	-1.22
95	19	20,791	4.537	0.314	0.2999	0.0176	0.1097	0.0029	1738	58	1691	87	1794	48	1.34
96	19	21,500	3.789	0.250	0.2592	0.0144	0.1060	0.0028	1590	53	1486	74	1732	48	4.21
97	20	20,917	4.023	0.267	0.2715	0.0153	0.1075	0.0028	1639	54	1548	77	1757	48	3.29
98	20	16,694	4.966	0.362	0.3396	0.0212	0.1061	0.0028	1814	62	1885	102	1733	48	-1.48
99	19	8,954	4.824	0.346	0.3214	0.0195	0.1088	0.0029	1789	60	1797	95	1780	49	-0.18
100	11	4,645	5.032	0.571	0.3434	0.0354	0.1063	0.0031	1825	96	1903	170	1736	53	-1.58
101	18	11,983	5.201	0.403	0.3437	0.0231	0.1098	0.0029	1853	66	1904	111	1795	48	-1.05
102	19	16,077	4.654	0.333	0.3201	0.0196	0.1054	0.0028	1759	60	1790	96	1722	49	-0.75
103	19	17,782	4.771	0.342	0.3257	0.0199	0.1063	0.0028	1780	60	1817	97	1736	48	-0.87

			Isotopic ratios (corrected)						Ages (Ma)						
#	N	$^{206}Pb/^{204}Pb^{\dagger}$	$^{207}Pb^{*}/^{235}U$	± (abs)	$^{206}Pb^{*}/^{238}U$	± (abs)	$^{207}Pb^{*}/^{206}Pb^{*}$	± (abs)	$^{207}Pb^{*}/^{235}U$	± (abs)	$^{206}Pb^{*}/^{238}U$	± (abs)	$^{207}Pb^{*}/^{206}Pb^{*}$	± (abs)	Disc. (%)
104	16	4,994	4.657	0.377	0.3144	0.0220	0.1074	0.0029	1760	68	1762	108	1756	50	-0.07
105	14	6,093	6.798	0.799	0.4446	0.0471	0.1109	0.0031	2085	104	2371	210	1814	51	-2.90
106	10	1,768	3.989	0.349	0.2708	0.0191	0.1068	0.0036	1632	71	1545	97	1746	61	3.18
107	20	15,985	4.466	0.308	0.3058	0.0178	0.1059	0.0028	1725	57	1720	88	1731	48	0.13
108	19	15,928	4.277	0.305	0.2926	0.0179	0.1060	0.0028	1689	59	1655	89	1732	49	1.04
109	18	15,955	4.778	0.353	0.3269	0.0207	0.1060	0.0028	1781	62	1824	101	1732	49	-0.97
110	16	14,987	5.985	0.511	0.3668	0.0275	0.1183	0.0032	1974	74	2015	130	1931	48	-0.72
Sample Q4l: Quartzite, Lower Q4 unit, Uncompahgre Formation, Needle Mountains, Colorado															
1	19	10,748	4.733	0.340	0.3128	0.0176	0.1098	0.0038	1773	60	1754	87	1795	63	0.49
2	12	5,222	4.523	0.333	0.3170	0.0199	0.1035	0.0030	1735	61	1775	97	1687	53	-0.98
3	20	8,036	4.788	0.310	0.3198	0.0174	0.1086	0.0029	1783	54	1789	85	1776	49	-0.15
4	18	5,703	5.054	0.344	0.3468	0.0199	0.1057	0.0028	1828	58	1919	95	1726	49	-1.79
5	20	23,877	4.434	0.280	0.2989	0.0160	0.1076	0.0028	1719	52	1686	80	1759	48	0.95
6	19	18,614	5.674	0.398	0.3775	0.0227	0.1090	0.0029	1927	61	2065	106	1783	48	-2.18
7	20	7,232	5.256	0.374	0.3546	0.0218	0.1075	0.0028	1862	61	1956	104	1758	48	-1.76
8	20	6,456	5.889	0.397	0.3623	0.0206	0.1179	0.0031	1960	59	1993	98	1925	47	-0.61
9	19	12,746	4.672	0.303	0.3176	0.0174	0.1067	0.0028	1762	54	1778	85	1744	48	-0.38
10	19	16,895	4.466	0.283	0.2975	0.0160	0.1089	0.0029	1725	53	1679	79	1781	48	1.34
11	15	9,739	4.360	0.280	0.2831	0.0153	0.1117	0.0030	1705	53	1607	77	1827	49	3.27
12	20	6,696	4.040	0.269	0.2774	0.0159	0.1056	0.0028	1642	54	1578	80	1725	48	2.19
13	18	8,462	4.062	0.256	0.2826	0.0150	0.1042	0.0028	1647	51	1604	75	1701	49	1.38
14	10	10,243	4.289	0.395	0.2948	0.0248	0.1055	0.0030	1691	76	1665	124	1723	52	0.76
15	19	9,912	4.293	0.295	0.2886	0.0173	0.1079	0.0028	1692	57	1635	86	1764	48	1.80
16	20	4,704	4.455	0.295	0.3038	0.0168	0.1063	0.0029	1723	55	1710	83	1737	50	0.34
17	18	13,827	4.208	0.267	0.2935	0.0158	0.1040	0.0027	1676	52	1659	79	1697	49	0.50
18	19	7,566	4.360	0.277	0.2999	0.0161	0.1054	0.0028	1705	53	1691	80	1722	48	0.40
19	18	4,067	4.921	0.324	0.3175	0.0174	0.1124	0.0030	1806	55	1777	85	1839	49	0.72
20	18	7,926	4.444	0.289	0.3056	0.0169	0.1055	0.0028	1720	54	1719	83	1722	49	0.04
21	10	327	4.965	0.571	0.2733	0.0248	0.1317	0.0049	1813	97	1558	125	2121	65	9.97
22	9	2,948	4.439	0.329	0.3021	0.0187	0.1066	0.0032	1720	61	1702	92	1741	55	0.50
23	19	11,289	4.672	0.300	0.3090	0.0168	0.1096	0.0029	1762	54	1736	83	1793	48	0.70
24	13	2,985	2.617	0.219	0.1754	0.0133	0.1082	0.0030	1305	62	1042	73	1769	51	25.46
25	19	11,317	4.281	0.269	0.2851	0.0151	0.1089	0.0029	1690	52	1617	76	1781	48	2.37
26	19	18,692	4.721	0.307	0.3085	0.0171	0.1110	0.0029	1771	54	1733	84	1816	48	1.02
27	19	7,525	11.363	0.839	0.4419	0.0277	0.1865	0.0049	2553	69	2359	124	2711	43	2.53
28	19	7,109	4.380	0.281	0.2993	0.0162	0.1062	0.0028	1709	53	1688	80	1734	48	0.60
29	18	4,925	5.125	0.387	0.3488	0.0229	0.1066	0.0029	1840	64	1929	109	1742	50	-1.72
30	18	9,084	4.845	0.322	0.3232	0.0183	0.1087	0.0029	1793	56	1805	89	1778	48	-0.30
31	17	3,606	4.777	0.329	0.3259	0.0190	0.1063	0.0029	1781	58	1819	92	1737	50	-0.87
32	17	3,555	5.430	0.419	0.3660	0.0244	0.1076	0.0029	1890	66	2010	115	1759	50	-2.07
33	15	7,569	5.311	0.397	0.3593	0.0233	0.1072	0.0029	1871	64	1979	110	1753	50	-1.94
34	18	10,133	4.935	0.332	0.3204	0.0184	0.1117	0.0030	1808	57	1792	90	1827	48	0.41
35	18	7,363	5.618	0.398	0.3631	0.0221	0.1122	0.0030	1919	61	1997	104	1835	48	-1.39
36	19	9,509	4.839	0.331	0.3293	0.0194	0.1066	0.0028	1792	58	1835	94	1741	48	-0.98
37	19	19,815	4.047	0.251	0.2745	0.0144	0.1069	0.0028	1644	50	1564	73	1747	48	2.82

#	N	$^{206}Pb/^{204}Pb^{\dagger}$	Isotopic ratios (corrected) $^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Ages (Ma) $^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Disc. (%)
38	16	10,773	4.028	0.256	0.2792	0.0150	0.1047	0.0028	1640	52	1587	75	1708	50	1.78
39	14	5,197	4.650	0.319	0.3076	0.0178	0.1096	0.0031	1758	57	1729	88	1793	51	0.79
40	19	13,246	4.538	0.285	0.2928	0.0156	0.1124	0.0030	1738	52	1656	78	1838	48	2.54
41	17	4,807	5.005	0.421	0.3299	0.0249	0.1100	0.0030	1820	71	1838	121	1800	49	-0.41
42	18	6,597	5.913	0.449	0.3903	0.0256	0.1099	0.0030	1963	66	2124	119	1797	49	-2.35
43	20	5,382	4.890	0.324	0.3325	0.0185	0.1067	0.0028	1801	56	1850	90	1743	49	-1.10
44	19	4,898	7.672	0.524	0.3164	0.0187	0.1759	0.0046	2193	61	1772	91	2614	44	13.09
45	19	6,071	4.531	0.297	0.3127	0.0173	0.1051	0.0028	1737	55	1754	85	1716	49	-0.44
46	20	5,676	4.133	0.264	0.2870	0.0153	0.1044	0.0029	1661	52	1626	76	1705	50	1.08
47	20	10,043	4.429	0.286	0.3046	0.0167	0.1054	0.0028	1718	53	1714	83	1722	48	0.10
48	19	23,927	4.341	0.277	0.2957	0.0161	0.1065	0.0028	1701	53	1670	80	1740	48	0.91
49	20	2,990	3.215	0.199	0.2182	0.0114	0.1069	0.0029	1461	48	1272	60	1747	49	11.31
50	20	22,774	8.736	0.601	0.3913	0.0229	0.1619	0.0042	2311	63	2129	106	2476	44	3.12
51	13	3,843	3.898	0.315	0.2655	0.0191	0.1065	0.0030	1613	65	1518	97	1740	52	3.64
52	19	7,965	13.426	1.462	0.5391	0.0517	0.1806	0.0047	2710	103	2780	216	2659	43	-0.49
53	11	3,394	6.376	0.797	0.4322	0.0499	0.1070	0.0031	2029	110	2316	225	1749	53	-3.11
54	15	3,187	5.088	0.368	0.3437	0.0211	0.1074	0.0029	1834	61	1905	101	1755	50	-1.42
55	17	4,868	6.371	0.620	0.4304	0.0378	0.1074	0.0029	2028	85	2307	171	1755	49	-3.07
56	14	1,467	6.821	0.613	0.4416	0.0336	0.1120	0.0032	2088	80	2358	150	1832	51	-2.80
57	20	5,406	5.038	0.362	0.3390	0.0211	0.1078	0.0028	1826	61	1882	102	1762	48	-1.18
58	19	8,632	4.068	0.258	0.2758	0.0148	0.1070	0.0028	1648	52	1570	75	1748	48	2.71
59	20	14,322	4.865	0.313	0.3164	0.0172	0.1115	0.0029	1796	54	1772	84	1824	48	0.61
60	19	7,605	5.046	0.352	0.3427	0.0205	0.1068	0.0028	1827	59	1900	98	1745	49	-1.48
61	11	1,174	2.474	0.246	0.1547	0.0139	0.1159	0.0034	1264	72	927	77	1895	53	-36.32
62	12	2,480	4.462	0.303	0.2953	0.0166	0.1096	0.0031	1724	56	1668	82	1792	52	1.67
63	19	19,900	4.935	0.322	0.3332	0.0185	0.1074	0.0028	1808	55	1854	89	1756	48	-1.00
64	19	4,277	4.529	0.293	0.3048	0.0165	0.1077	0.0029	1736	54	1715	82	1762	49	0.58
65	19	41,199	10.201	0.715	0.4070	0.0242	0.1818	0.0047	2453	65	2201	111	2669	43	4.10
66	14	4,865	4.379	0.290	0.2952	0.0163	0.1076	0.0030	1708	55	1668	81	1759	51	1.21
67	19	11,951	5.116	0.346	0.3546	0.0203	0.1047	0.0028	1839	57	1956	97	1708	48	-2.17
68	19	2,695	3.264	0.201	0.2208	0.0114	0.1072	0.0029	1472	48	1286	60	1752	49	10.87
69	7	12,336	6.536	1.024	0.3587	0.0538	0.1321	0.0043	2051	138	1976	255	2127	57	1.48
70	20	3,910	4.393	0.282	0.2991	0.0160	0.1065	0.0028	1711	53	1687	80	1741	49	0.70
71	19	10,079	4.784	0.316	0.3238	0.0182	0.1072	0.0028	1782	56	1808	89	1752	48	-0.62
72	9	3,527	6.375	0.599	0.4325	0.0354	0.1069	0.0032	2029	82	2317	159	1748	54	-3.11
73	20	9,119	3.990	0.248	0.2759	0.0145	0.1049	0.0028	1632	51	1570	73	1712	49	2.13
74	20	4,274	4.941	0.340	0.3415	0.0199	0.1049	0.0028	1809	58	1894	96	1713	49	-1.72
75	20	14,409	5.022	0.333	0.3409	0.0192	0.1068	0.0028	1823	56	1891	92	1746	48	-1.40
76	19	12,592	5.119	0.340	0.3411	0.0192	0.1088	0.0029	1839	56	1892	92	1780	48	-1.09
77	20	3,861	4.543	0.309	0.3136	0.0180	0.1051	0.0029	1739	57	1758	88	1716	50	-0.49
78	20	4,386	4.603	0.312	0.3178	0.0182	0.1051	0.0028	1750	57	1779	89	1715	49	-0.71
79	18	3,553	3.998	0.267	0.2650	0.0150	0.1094	0.0030	1634	54	1516	77	1789	50	4.58
80	19	5,568	4.781	0.317	0.3137	0.0177	0.1106	0.0029	1782	56	1759	87	1809	48	0.59
81	15	7,149	4.344	0.285	0.2977	0.0165	0.1058	0.0029	1702	54	1680	82	1729	50	0.63
82	20	5,050	4.743	0.322	0.3321	0.0189	0.1036	0.0028	1775	57	1849	92	1689	50	-1.61
83	18	14,958	4.371	0.281	0.2985	0.0163	0.1062	0.0028	1707	53	1684	81	1735	49	0.67

			Isotopic ratios (corrected)						Ages (Ma)						
#	N	^{206}Pb / $^{204}Pb^{\dagger}$	$^{207}Pb^*$ / ^{235}U	± (abs)	$^{206}Pb^*$ / ^{238}U	± (abs)	$^{207}Pb^*$ / $^{206}Pb^*$	± (abs)	$^{207}Pb^*$ / ^{235}U	± (abs)	$^{206}Pb^*$ / ^{238}U	± (abs)	$^{207}Pb^*$ / $^{206}Pb^*$	± (abs)	Disc. (%)
84	20	10,334	4.453	0.284	0.3081	0.0167	0.1048	0.0027	1722	53	1732	82	1711	48	-0.24
85	17	8,821	4.512	0.293	0.3104	0.0170	0.1054	0.0028	1733	54	1743	84	1722	49	-0.24
86	19	6,524	4.852	0.320	0.3315	0.0184	0.1062	0.0028	1794	56	1846	89	1734	49	-1.14
87	19	13,438	4.409	0.280	0.3025	0.0163	0.1057	0.0028	1714	53	1704	81	1727	48	0.28
88	18	3,892	5.303	0.369	0.3528	0.0207	0.1090	0.0029	1869	59	1948	98	1783	49	-1.49
89	18	13,052	5.074	0.335	0.3374	0.0189	0.1091	0.0029	1832	56	1874	91	1784	48	-0.91
90	12	2,041	5.426	0.415	0.3583	0.0228	0.1098	0.0032	1889	66	1974	108	1797	53	-1.56
91	11	2,218	4.494	0.359	0.3016	0.0207	0.1080	0.0032	1730	66	1699	102	1767	54	0.86
92	15	1,572	4.933	0.357	0.3275	0.0197	0.1093	0.0030	1808	61	1826	96	1787	51	-0.42
93	19	5,048	4.155	0.267	0.2866	0.0156	0.1052	0.0028	1665	53	1624	78	1717	49	1.29
94	19	14,418	5.779	0.403	0.3843	0.0229	0.1091	0.0029	1943	60	2096	106	1784	48	-2.32
95	19	14,605	5.101	0.344	0.3478	0.0200	0.1064	0.0028	1836	57	1924	96	1738	48	-1.71
96	19	13,959	6.177	0.500	0.4288	0.0305	0.1045	0.0027	2001	71	2300	138	1705	48	-3.28
97	19	4,680	4.595	0.308	0.3167	0.0179	0.1052	0.0028	1748	56	1774	87	1718	50	-0.62
98	19	12,049	4.609	0.304	0.3181	0.0179	0.1051	0.0028	1751	55	1780	88	1716	48	-0.72
99	19	6,656	4.690	0.308	0.3242	0.0180	0.1049	0.0028	1765	55	1810	88	1713	49	-1.04
100	18	11,082	4.303	0.278	0.2982	0.0164	0.1047	0.0028	1694	53	1682	81	1708	49	0.34
101	20	5,138	4.696	0.313	0.3267	0.0183	0.1042	0.0028	1767	56	1822	89	1701	49	-1.27
102	20	14,619	4.917	0.327	0.3283	0.0187	0.1086	0.0028	1805	56	1830	91	1777	48	-0.57
Sample J03-NM4: Basal conglomerate, Uncompahgre Formation, Needle Mountains, Colorado															
1		46,844	4.372	0.183	0.2969	0.0124	0.1068	0.0027	1707	35	1676	62	1745	46	0.91
2		22,883	4.355	0.184	0.2924	0.0122	0.1080	0.0028	1704	35	1653	61	1767	47	1.54
3		10,657	4.784	0.205	0.3216	0.0137	0.1079	0.0027	1782	36	1797	67	1764	46	-0.37
4		17,276	4.315	0.179	0.2885	0.0120	0.1085	0.0027	1696	34	1634	60	1774	45	1.95
5		22,286	4.985	0.215	0.3362	0.0145	0.1075	0.0027	1817	36	1869	70	1758	45	-1.11
6		909	2.520	0.141	0.1420	0.0053	0.1287	0.0064	1278	41	856	30	2080	88	67.30
6r		3,086	4.054	0.152	0.2617	0.0094	0.1124	0.0031	1645	31	1498	48	1838	51	5.92
7		4,999	4.157	0.150	0.2767	0.0098	0.1089	0.0029	1666	30	1575	49	1782	48	3.16
8		9,606	4.199	0.174	0.2870	0.0119	0.1061	0.0027	1674	34	1626	60	1734	46	1.50
9		2,436	4.086	0.172	0.2597	0.0106	0.1141	0.0031	1652	34	1488	54	1866	48	6.74
10		15,427	4.575	0.194	0.3070	0.0129	0.1081	0.0027	1745	35	1726	64	1767	46	0.50
11		752	5.955	0.260	0.3401	0.0147	0.1270	0.0032	1969	38	1887	71	2057	45	1.83
11r		1,624	5.867	0.287	0.3690	0.0164	0.1153	0.0035	1956	42	2025	77	1885	55	-1.18
12		2,114	4.028	0.147	0.2572	0.0092	0.1136	0.0029	1640	30	1475	47	1858	47	6.95
13		6,428	4.136	0.171	0.2767	0.0114	0.1084	0.0027	1662	34	1575	58	1773	46	3.03
14		13,475	4.337	0.183	0.2908	0.0121	0.1082	0.0028	1700	35	1645	60	1769	47	1.70
15		4,420	4.241	0.175	0.2817	0.0116	0.1092	0.0027	1682	34	1600	59	1786	46	2.75
16		39,647	4.013	0.165	0.2746	0.0113	0.1060	0.0026	1637	33	1564	57	1731	46	2.55
17		15,376	3.958	0.162	0.2705	0.0111	0.1061	0.0026	1626	33	1543	56	1734	46	3.00
18		13,752	3.982	0.162	0.2676	0.0110	0.1079	0.0027	1631	33	1529	56	1764	45	3.83
19		17,586	3.800	0.139	0.2545	0.0092	0.1083	0.0028	1593	29	1462	47	1771	47	5.55
21		6,487	3.954	0.165	0.2619	0.0107	0.1095	0.0029	1625	34	1500	55	1791	48	4.98
22		38,519	3.976	0.163	0.2727	0.0112	0.1057	0.0026	1629	33	1555	57	1727	45	2.66
23		35,973	4.198	0.174	0.2874	0.0119	0.1060	0.0026	1674	34	1628	60	1731	46	1.43
24		2,001	5.256	0.235	0.3283	0.0141	0.1161	0.0032	1862	38	1830	68	1897	49	0.75

#	N	$^{206}Pb/^{204}Pb^{\dagger}$	Isotopic ratios (corrected)						Ages (Ma)						Disc.
			$^{207}Pb^{*}/^{235}U$	± (abs)	$^{206}Pb^{*}/^{238}U$	± (abs)	$^{207}Pb^{*}/^{206}Pb^{*}$	± (abs)	$^{207}Pb^{*}/^{235}U$	± (abs)	$^{206}Pb^{*}/^{238}U$	± (abs)	$^{207}Pb^{*}/^{206}Pb^{*}$	± (abs)	(%)
25		9,882	4.497	0.191	0.3010	0.0126	0.1083	0.0028	1730	35	1696	63	1772	47	0.96
26		6,632	3.910	0.162	0.2629	0.0107	0.1079	0.0028	1616	33	1505	55	1763	47	4.36
27		32,038	4.526	0.191	0.3079	0.0130	0.1066	0.0026	1736	35	1730	64	1742	45	0.14
28r		18,928	4.122	0.171	0.2819	0.0117	0.1060	0.0026	1659	34	1601	59	1733	46	1.91
28		3,164	4.269	0.180	0.2793	0.0115	0.1108	0.0029	1687	35	1588	58	1813	47	3.41
29		14,701	4.208	0.174	0.2840	0.0118	0.1075	0.0027	1676	34	1612	59	1757	46	2.09
30		40,637	4.090	0.169	0.2800	0.0116	0.1059	0.0026	1652	34	1591	58	1731	46	2.05
31		10,706	4.170	0.173	0.2791	0.0115	0.1084	0.0028	1668	34	1587	58	1772	47	2.78
32		29,534	3.720	0.151	0.2557	0.0104	0.1055	0.0026	1576	32	1468	53	1723	46	4.47
33		20,018	3.903	0.159	0.2634	0.0108	0.1075	0.0027	1614	33	1507	55	1757	45	4.18
34		34,425	4.908	0.211	0.3337	0.0144	0.1067	0.0026	1804	36	1856	70	1743	46	-1.14
35		5,719	4.048	0.167	0.2742	0.0113	0.1071	0.0027	1644	34	1562	57	1750	46	2.90
36		11,381	5.389	0.237	0.3594	0.0158	0.1088	0.0027	1883	38	1979	75	1779	45	-1.74
37		5,717	4.548	0.192	0.3084	0.0130	0.1070	0.0027	1740	35	1733	64	1748	46	0.18
38		43,020	3.919	0.161	0.2679	0.0110	0.1061	0.0026	1618	33	1530	56	1733	46	3.26
39		10,730	4.940	0.211	0.3267	0.0140	0.1097	0.0027	1809	36	1822	68	1794	45	-0.30
40		1,934	4.498	0.161	0.2832	0.0100	0.1152	0.0030	1731	30	1607	50	1883	47	4.16
41		9,319	4.034	0.166	0.2760	0.0114	0.1060	0.0026	1641	33	1571	57	1732	45	2.43
42		16,909	5.260	0.231	0.3571	0.0157	0.1068	0.0027	1862	38	1968	75	1746	46	-1.94
43		2,128	4.586	0.191	0.2900	0.0121	0.1147	0.0029	1747	35	1642	60	1875	45	3.34
44		16,891	4.495	0.189	0.3069	0.0129	0.1062	0.0026	1730	35	1725	64	1736	45	0.13
45		13,509	4.077	0.168	0.2794	0.0115	0.1058	0.0026	1650	34	1589	58	1728	46	2.06
46		5,088	3.964	0.165	0.2670	0.0109	0.1077	0.0028	1627	34	1526	56	1761	48	3.84
47		31,000	4.202	0.174	0.2849	0.0118	0.1070	0.0027	1674	34	1616	59	1749	45	1.89
48		691	3.944	0.149	0.2223	0.0082	0.1287	0.0034	1623	31	1294	43	2080	46	20.38
48r		1,349	4.506	0.161	0.2778	0.0098	0.1176	0.0031	1732	30	1580	49	1921	47	5.42
49		11,843	4.251	0.177	0.2892	0.0120	0.1066	0.0026	1684	34	1637	60	1743	45	1.45
50		732	4.856	0.219	0.2793	0.0115	0.1261	0.0038	1795	38	1588	58	2044	54	7.51
51		2,180	4.293	0.177	0.2765	0.0114	0.1126	0.0028	1692	34	1574	58	1842	45	4.19
52		13,073	4.941	0.213	0.3309	0.0142	0.1083	0.0027	1809	36	1843	69	1771	46	-0.75
53		9,366	4.202	0.174	0.2847	0.0118	0.1071	0.0027	1674	34	1615	59	1750	46	1.93
54		1,354	4.664	0.195	0.2873	0.0119	0.1177	0.0030	1761	35	1628	60	1922	45	4.37
55		22,273	4.262	0.177	0.2883	0.0120	0.1072	0.0027	1686	34	1633	60	1753	46	1.67
56		799	4.977	0.222	0.2795	0.0115	0.1291	0.0039	1815	38	1589	58	2086	53	8.29
57		4,607	4.331	0.181	0.2853	0.0118	0.1101	0.0028	1699	34	1618	59	1801	46	2.64
58		6,140	4.367	0.183	0.2924	0.0122	0.1083	0.0027	1706	35	1653	61	1772	46	1.61
59		3,049	4.277	0.180	0.2844	0.0118	0.1091	0.0029	1689	35	1613	59	1784	48	2.48
60		13,803	4.162	0.172	0.2803	0.0116	0.1077	0.0027	1667	34	1593	58	1761	46	2.49
61		6,129	4.842	0.208	0.3238	0.0138	0.1085	0.0028	1792	36	1808	67	1774	47	-0.38
62		16,099	4.085	0.168	0.2781	0.0115	0.1065	0.0026	1651	34	1582	58	1741	45	2.37
63		2,224	3.903	0.146	0.2515	0.0091	0.1125	0.0031	1614	30	1446	47	1841	49	7.44
64		12,679	4.688	0.202	0.3170	0.0134	0.1072	0.0028	1765	36	1775	66	1753	48	-0.25
65		21,010	4.140	0.171	0.2838	0.0118	0.1058	0.0026	1662	34	1610	59	1729	46	1.69
66		4,076	4.089	0.168	0.2743	0.0113	0.1081	0.0027	1652	34	1563	57	1767	46	3.17
67		12,969	4.390	0.183	0.2944	0.0123	0.1081	0.0027	1710	35	1663	61	1768	45	1.41
68		861	4.662	0.166	0.2722	0.0097	0.1242	0.0031	1760	30	1552	49	2018	45	8.00

#	N	$^{206}Pb/^{204}Pb^{\dagger}$	Isotopic ratios (corrected) $^{207}Pb^{*}/^{235}U$	± (abs)	$^{206}Pb^{*}/^{238}U$	± (abs)	$^{207}Pb^{*}/^{206}Pb^{*}$	± (abs)	Ages (Ma) $^{207}Pb^{*}/^{235}U$	± (abs)	$^{206}Pb^{*}/^{238}U$	± (abs)	$^{207}Pb^{*}/^{206}Pb^{*}$	± (abs)	Disc. (%)
69		10,236	4.424	0.185	0.2944	0.0123	0.1090	0.0027	1717	35	1663	61	1783	46	1.61
70		13,660	4.290	0.178	0.2879	0.0120	0.1081	0.0027	1691	34	1631	60	1767	46	1.90
71		1,479	4.513	0.187	0.2767	0.0114	0.1183	0.0030	1733	34	1574	58	1931	46	5.74
72		11,078	3.872	0.158	0.2611	0.0106	0.1075	0.0027	1608	33	1496	54	1758	46	4.47
73		9,579	4.372	0.183	0.2948	0.0123	0.1076	0.0027	1707	35	1666	61	1758	46	1.23
74		5,712	4.085	0.169	0.2712	0.0111	0.1093	0.0028	1651	34	1547	56	1787	46	3.83
75		7,797	3.992	0.164	0.2691	0.0110	0.1076	0.0027	1633	33	1536	56	1759	46	3.58
76		3,057	4.403	0.156	0.2871	0.0101	0.1112	0.0028	1713	29	1627	50	1819	46	2.76
76r		2,403	4.100	0.168	0.2652	0.0108	0.1121	0.0028	1654	33	1516	55	1834	45	5.39
77		13,626	4.522	0.192	0.3010	0.0126	0.1089	0.0029	1735	35	1696	62	1782	48	1.10
78		2,276	5.106	0.222	0.3297	0.0142	0.1123	0.0029	1837	37	1837	69	1837	46	0.00
79		15,657	4.812	0.206	0.3294	0.0141	0.1060	0.0026	1787	36	1835	69	1731	46	-1.08
80		2,414	5.154	0.223	0.3307	0.0142	0.1130	0.0029	1845	37	1842	69	1848	47	0.07
81		2,968	5.188	0.224	0.3332	0.0144	0.1129	0.0028	1851	37	1854	69	1847	45	-0.07
82		4,914	4.616	0.195	0.3053	0.0129	0.1096	0.0028	1752	35	1718	63	1794	46	0.95
83		3,647	5.077	0.225	0.3265	0.0140	0.1128	0.0031	1832	38	1821	68	1845	49	0.26
84		12,148	4.346	0.183	0.2923	0.0122	0.1078	0.0027	1702	35	1653	61	1763	46	1.49
85		3,796	4.656	0.199	0.3101	0.0131	0.1089	0.0028	1759	36	1741	64	1781	47	0.48
86		10,828	4.173	0.172	0.2812	0.0116	0.1076	0.0027	1669	34	1597	58	1759	46	2.38
87		1,275	4.231	0.192	0.2552	0.0104	0.1202	0.0038	1680	37	1465	53	1960	56	9.45
88		17,498	4.013	0.164	0.2690	0.0110	0.1082	0.0027	1637	33	1536	56	1769	45	3.76
Sample J05-VC2: Fall Creek Formation, Vallecito Conglomerate, Needle Mountains, Colorado															
1	19	19,294	3.605	0.215	0.2425	0.0122	0.1078	0.0028	1551	47	1400	64	1763	48	7.14
2	20	17,012	3.609	0.214	0.2440	0.0123	0.1073	0.0028	1552	47	1407	64	1754	48	6.72
3	17	26,961	3.748	0.227	0.2532	0.0131	0.1073	0.0028	1582	49	1455	67	1755	48	5.41
4	20	8,249	3.624	0.218	0.2473	0.0125	0.1063	0.0029	1555	48	1424	64	1737	50	5.88
5	19	41,090	4.329	0.276	0.2937	0.0161	0.1069	0.0028	1699	53	1660	80	1747	48	1.16
6	14	7,028	3.796	0.237	0.2582	0.0135	0.1066	0.0029	1592	50	1481	69	1743	50	4.54
7	19	18,618	4.504	0.292	0.3056	0.0171	0.1069	0.0028	1732	54	1719	84	1747	48	0.34
8	17	8,956	3.577	0.216	0.2419	0.0123	0.1073	0.0029	1544	48	1396	64	1753	50	7.04
9	19	19,637	3.577	0.212	0.2426	0.0122	0.1069	0.0028	1544	47	1400	63	1748	48	6.79
10	19	21,210	4.641	0.303	0.3149	0.0177	0.1069	0.0028	1757	55	1765	87	1747	48	-0.21
11	18	9,539	3.582	0.215	0.2436	0.0123	0.1067	0.0028	1545	48	1405	64	1743	49	6.55
12	20	6,588	3.641	0.219	0.2473	0.0124	0.1068	0.0029	1559	48	1425	64	1745	50	6.03
13	18	11,287	3.590	0.217	0.2438	0.0125	0.1068	0.0028	1547	48	1406	65	1746	49	6.57
14	17	3,505	4.175	0.272	0.2829	0.0153	0.1070	0.0031	1669	53	1606	77	1749	52	2.07
15	19	10,778	3.806	0.230	0.2588	0.0132	0.1067	0.0028	1594	49	1484	68	1743	48	4.47
16	18	10,509	3.889	0.238	0.2620	0.0137	0.1076	0.0028	1611	50	1500	70	1760	48	4.39
17	15	7,066	3.671	0.226	0.2517	0.0131	0.1058	0.0029	1565	49	1447	68	1728	50	5.07
18	18	11,113	3.128	0.193	0.2479	0.0131	0.0915	0.0024	1439	48	1427	68	1457	50	0.51
19	20	7,572	3.973	0.245	0.2715	0.0142	0.1061	0.0028	1629	50	1548	72	1734	49	2.90
22	20	19,783	4.709	0.307	0.3205	0.0180	0.1066	0.0028	1769	55	1792	88	1742	48	-0.56
23	18	10,119	3.949	0.245	0.2688	0.0142	0.1066	0.0028	1624	50	1535	72	1741	49	3.30
24	19	24,218	4.254	0.266	0.2884	0.0154	0.1070	0.0028	1684	51	1634	77	1748	48	1.60
25	18	2,431	4.294	0.316	0.2887	0.0176	0.1079	0.0034	1692	61	1635	88	1764	58	1.79

#	N	$^{206}Pb/^{204}Pb^{\dagger}$	Isotopic ratios (corrected) $^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Ages (Ma) $^{207}Pb^*/^{235}U$	± (abs)	$^{206}Pb^*/^{238}U$	± (abs)	$^{207}Pb^*/^{206}Pb^*$	± (abs)	Disc. (%)
26	20	9,008	4.313	0.271	0.2937	0.0157	0.1065	0.0028	1696	52	1660	78	1740	49	1.07
27	19	13,136	4.958	0.342	0.3356	0.0202	0.1071	0.0028	1812	58	1866	97	1751	48	-1.15
28	14	7,033	3.699	0.230	0.2524	0.0132	0.1063	0.0029	1571	50	1451	68	1737	50	5.16
29	19	25,086	3.558	0.213	0.2414	0.0123	0.1069	0.0028	1540	47	1394	64	1748	48	6.99
30	17	8,185	3.441	0.206	0.2367	0.0119	0.1055	0.0028	1514	47	1369	62	1722	50	7.17
32	19	13,002	3.610	0.219	0.2462	0.0127	0.1063	0.0028	1552	48	1419	66	1737	48	6.04
33	20	19,535	3.648	0.218	0.2478	0.0126	0.1067	0.0028	1560	48	1427	65	1745	48	5.96
34	19	11,165	4.408	0.278	0.3005	0.0161	0.1064	0.0028	1714	52	1694	80	1738	48	0.56
35	19	4,449	3.470	0.212	0.2391	0.0121	0.1053	0.0030	1521	48	1382	63	1719	52	6.70
36	19	7,961	3.561	0.213	0.2430	0.0123	0.1063	0.0028	1541	47	1402	64	1737	49	6.50
37	19	3,838	3.522	0.219	0.2446	0.0125	0.1045	0.0030	1532	49	1410	65	1705	53	5.59
38	19	5,890	3.471	0.211	0.2371	0.0121	0.1062	0.0029	1521	48	1372	63	1735	50	7.39
39	16	6,407	4.014	0.254	0.2749	0.0147	0.1059	0.0029	1637	51	1566	74	1730	50	2.51
40	19	9,895	3.977	0.242	0.2717	0.0140	0.1062	0.0028	1630	49	1549	71	1735	49	2.89
41	19	6,474	4.093	0.282	0.2800	0.0168	0.1060	0.0029	1653	56	1591	85	1732	50	2.07
44	20	20,362	3.515	0.207	0.2397	0.0120	0.1064	0.0028	1531	47	1385	62	1738	48	7.04
45	19	11,621	2.633	0.179	0.1788	0.0108	0.1068	0.0028	1310	50	1060	59	1746	48	23.06
46	19	13,464	3.693	0.222	0.2516	0.0128	0.1064	0.0028	1570	48	1447	66	1739	49	5.32
47	16	28,516	3.534	0.214	0.2409	0.0123	0.1064	0.0029	1535	48	1392	64	1738	49	6.85
48	18	14,739	5.985	0.417	0.4025	0.0239	0.1078	0.0029	1974	61	2181	110	1763	48	-2.75
49	14	4,212	3.954	0.253	0.2710	0.0144	0.1058	0.0030	1625	52	1546	73	1729	52	2.87
50	20	11,936	4.140	0.253	0.2812	0.0145	0.1068	0.0028	1662	50	1597	73	1745	49	2.17
51	19	15,852	4.203	0.274	0.2834	0.0160	0.1076	0.0028	1675	54	1608	80	1758	48	2.17
52	19	37,596	4.853	0.332	0.3285	0.0196	0.1071	0.0028	1794	58	1831	95	1751	48	-0.84
53	15	14,231	3.699	0.227	0.2530	0.0132	0.1060	0.0028	1571	49	1454	68	1732	49	5.00
54	20	39,189	3.679	0.220	0.2498	0.0127	0.1068	0.0028	1567	48	1437	66	1746	48	5.71
55	14	13,004	3.669	0.228	0.2512	0.0131	0.1060	0.0029	1565	50	1444	68	1731	51	5.21
56	20	16,926	3.621	0.216	0.2471	0.0124	0.1063	0.0029	1554	47	1424	64	1736	49	5.88
57	19	12,072	3.761	0.230	0.2561	0.0132	0.1065	0.0029	1584	49	1470	68	1740	50	4.75
58	19	15,351	4.061	0.251	0.2762	0.0145	0.1066	0.0028	1646	50	1572	73	1742	49	2.58
59	19	17,935	3.524	0.209	0.2392	0.0120	0.1068	0.0028	1533	47	1383	63	1746	48	7.31
60	19	26,793	4.350	0.271	0.2955	0.0157	0.1068	0.0028	1703	51	1669	78	1745	48	1.00
61	20	24,950	4.564	0.289	0.3095	0.0168	0.1069	0.0028	1743	53	1738	83	1748	48	0.12
62	18	8,432	3.815	0.240	0.2571	0.0138	0.1076	0.0029	1596	51	1475	71	1760	49	5.01
63	20	9,142	3.420	0.203	0.2335	0.0117	0.1062	0.0028	1509	47	1353	61	1736	49	8.03
64	19	25,823	5.130	0.340	0.3498	0.0198	0.1064	0.0028	1841	56	1934	95	1738	48	-1.78
65	19	23,251	3.567	0.213	0.2440	0.0123	0.1060	0.0028	1542	47	1407	64	1732	49	6.25
66	19	69,362	3.603	0.213	0.2452	0.0123	0.1066	0.0028	1550	47	1414	64	1741	48	6.26
67	19	40,568	3.489	0.207	0.2375	0.0119	0.1066	0.0028	1525	47	1374	62	1741	49	7.47
68	19	11,193	3.623	0.221	0.2460	0.0124	0.1068	0.0030	1555	49	1418	64	1745	52	6.23
69	16	11,107	5.416	0.368	0.3643	0.0209	0.1078	0.0029	1887	58	2003	99	1763	50	-2.00
70	19	18,430	4.328	0.274	0.2948	0.0160	0.1065	0.0028	1699	52	1666	80	1740	48	0.99
71	20	12,325	4.061	0.249	0.2778	0.0144	0.1060	0.0028	1647	50	1580	73	1733	48	2.27
72	18	11,081	4.359	0.273	0.2969	0.0157	0.1065	0.0028	1705	52	1676	78	1740	49	0.84
73	20	21,180	4.317	0.291	0.2930	0.0173	0.1069	0.0028	1697	56	1656	86	1747	48	1.21
74	19	17,459	4.476	0.288	0.3056	0.0169	0.1062	0.0028	1727	53	1719	84	1736	48	0.20

			Isotopic ratios (corrected)						Ages (Ma)						
#	N	$^{206}Pb/^{204}Pb^{\dagger}$	$^{207}Pb^{*}/^{235}U$	± (abs)	$^{206}Pb^{*}/^{238}U$	± (abs)	$^{207}Pb^{*}/^{206}Pb^{*}$	± (abs)	$^{207}Pb^{*}/^{235}U$	± (abs)	$^{206}Pb^{*}/^{238}U$	± (abs)	$^{207}Pb^{*}/^{206}Pb^{*}$	± (abs)	Disc. (%)
75	19	39,780	4.193	0.269	0.2855	0.0159	0.1065	0.0028	1673	53	1619	80	1741	48	1.73
76	14	11,530	4.077	0.257	0.2782	0.0149	0.1063	0.0029	1650	51	1582	75	1736	50	2.29
77	18	28,795	4.513	0.289	0.3063	0.0168	0.1069	0.0028	1733	53	1722	83	1746	48	0.29
78	20	27,520	4.320	0.282	0.2939	0.0166	0.1066	0.0028	1697	54	1661	83	1742	48	1.08
79	18	18,618	3.952	0.243	0.2687	0.0140	0.1067	0.0028	1624	50	1534	71	1744	49	3.36
80	15	14,596	5.360	0.424	0.3670	0.0258	0.1059	0.0029	1878	68	2015	121	1730	50	-2.32
81	15	14,618	3.792	0.235	0.2572	0.0135	0.1069	0.0029	1591	50	1475	69	1748	50	4.77
82	20	20,834	4.009	0.244	0.2730	0.0141	0.1065	0.0028	1636	49	1556	71	1741	48	2.87
83	19	9,663	4.836	0.318	0.3295	0.0184	0.1064	0.0029	1791	55	1836	89	1739	49	-1.01
84	19	12,213	4.724	0.354	0.3202	0.0214	0.1070	0.0028	1772	63	1791	105	1749	48	-0.46
85	15	17,605	3.592	0.220	0.2443	0.0127	0.1066	0.0029	1548	49	1409	66	1742	49	6.42
86	20	16,358	3.888	0.241	0.2635	0.0140	0.1070	0.0028	1611	50	1508	71	1750	48	4.03
87	19	12,441	3.906	0.237	0.2662	0.0138	0.1064	0.0028	1615	49	1521	70	1739	48	3.54
88	10	5,689	5.631	0.460	0.3721	0.0267	0.1098	0.0031	1921	70	2039	126	1795	52	-1.96
89	19	14,814	4.334	0.273	0.2958	0.0159	0.1063	0.0028	1700	52	1670	79	1736	49	0.87
90	19	16,747	3.777	0.230	0.2567	0.0133	0.1067	0.0028	1588	49	1473	68	1744	49	4.74
91	15	19,910	3.936	0.390	0.2685	0.0251	0.1063	0.0029	1621	80	1533	127	1737	50	3.27
92	18	14,343	4.319	0.276	0.2901	0.0158	0.1080	0.0029	1697	53	1642	79	1765	49	1.70
93	15	4,385	3.633	0.242	0.2424	0.0140	0.1087	0.0030	1557	53	1399	73	1778	50	7.51
94	19	14,142	3.623	0.216	0.2470	0.0125	0.1064	0.0028	1555	47	1423	65	1738	48	5.95
95	20	9,525	3.539	0.211	0.2430	0.0122	0.1056	0.0028	1536	47	1402	63	1725	49	6.24
96	19	18,483	3.696	0.221	0.2524	0.0128	0.1062	0.0028	1571	48	1451	66	1735	48	5.14
97	19	23,377	3.506	0.208	0.2396	0.0120	0.1061	0.0028	1529	47	1384	63	1734	49	6.98
98	16	12,692	3.986	0.248	0.2715	0.0143	0.1065	0.0029	1631	50	1548	73	1740	49	3.01
99	19	11,016	3.419	0.205	0.2344	0.0117	0.1058	0.0029	1509	47	1358	61	1728	51	7.67
100	19	10,480	3.446	0.208	0.2360	0.0118	0.1059	0.0030	1515	47	1366	62	1730	52	7.48
101	17	12,035	3.365	0.202	0.2285	0.0115	0.1068	0.0029	1496	47	1327	60	1746	50	9.17
102	15	1,680	3.793	0.242	0.2401	0.0126	0.1146	0.0033	1591	51	1387	65	1874	52	10.15
103	20	11,394	3.717	0.226	0.2524	0.0130	0.1068	0.0028	1575	49	1451	67	1746	48	5.34
104	19	19,785	3.930	0.239	0.2672	0.0139	0.1067	0.0028	1620	49	1526	70	1744	48	3.52
105	19	5,220	3.352	0.208	0.2293	0.0116	0.1060	0.0032	1493	49	1331	61	1732	56	8.67
106	19	38,184	3.475	0.206	0.2345	0.0118	0.1075	0.0028	1522	47	1358	62	1757	48	8.34
107	20	27,917	3.423	0.203	0.2330	0.0116	0.1065	0.0029	1510	47	1350	61	1741	50	8.22

All errors reported at 2-sigma level unless otherwise indicated; # = grain identifier; r = rim analysis on grain where core and rim domains were clearly distinguishable; N = number of analyses used in ratio calculations (max. 20); † = ^{204}Pb corrected for Hg interference; * = radiogenic Pb; Disc. (%) = percent discordance calculated from comparison of $^{207}Pb/^{235}U$ and $^{206}Pb/^{235}U$ ratios. Measured Pb/U ratios corrected for Pb/U fractionation by comparison with in-house standard zircons.