Data Repository- Benyon
U-Pb geochronologic analyses of detrital zircon (Nu HR ICPMS)

Zircon crystals are extracted from samples by traditional methods of crushing and grinding, followed by separation with a Wilfley table, heavy liquids, and a Frantz magnetic separator. Samples are processed such that all zircons are retained in the final heavy mineral fraction. A large split of these grains (generally thousands of grains) is incorporated into a 1" epoxy mount together with fragments of our Sri Lanka standard zircon. The mounts are sanded down to a depth of ~20 microns, polished, imaged, and cleaned prior to isotopic analysis.

U-Pb geochronology of zircons is conducted by laser ablation multicollector inductively coupled plasma mass spectrometry (LA-MC-ICPMS) at the Arizona LaserChron Center (Gehrels et al., 2006, 2008). The analyses involve ablation of zircon with a Photon Machines Analyte G2 excimer laser (or, prior to May 2011, a New Wave UP193HE Excimer laser) using a spot diameter of 30 microns. The ablated material is carried in helium into the plasma source of a Nu HR ICPMS, which is equipped with a flight tube of sufficient width that U, Th, and Pb isotopes are measured simultaneously. All measurements are made in static mode, using Faraday detectors with $3x10^{11}$ ohm resistors for ^{238}U, ^{232}Th, ^{208}Pb-^{206}Pb, and discrete dynode ion counters for ^{204}Pb and ^{202}Hg. Ion yields are ~0.8 mv per ppm. Each analysis consists of one 15-second integration on peaks with the laser off (for backgrounds), 15 one-second integrations with the laser firing, and a 30 second delay to purge the previous sample and prepare for the next analysis. The ablation pit is ~15 microns in depth.

For each analysis, the errors in determining $^{206}Pb/^{238}U$ and $^{206}Pb/^{204}Pb$ result in a measurement error of ~1-2% (at 2-sigma level) in the $^{206}Pb/^{238}U$ age. The errors in measurement of $^{206}Pb/^{207}Pb$ and $^{206}Pb/^{204}Pb$ also result in ~1-2% (at 2-sigma level) uncertainty in age for grains that are >1.0 Ga, but are substantially larger for younger grains due to low intensity of the ^{207}Pb signal. For most analyses, the cross-over in precision of $^{206}Pb/^{238}U$ and $^{206}Pb/^{207}Pb$ ages occurs at ~1.0 Ga.

^{204}Hg interference with ^{204}Pb is accounted for measurement of ^{202}Hg during laser ablation and subtraction of ^{204}Hg according to the natural $^{202}Hg/^{204}Hg$ of 4.35. This Hg is correction is not significant for most analyses because our Hg backgrounds are low (generally ~150 cps at mass 204).

Common Pb correction is accomplished by using the Hg-corrected ^{204}Pb and assuming an initial Pb composition from Stacey and Kramers (1975). Uncertainties of 1.5 for $^{206}Pb/^{204}Pb$ and 0.3 for $^{207}Pb/^{204}Pb$ are applied to these compositional values based on the variation in Pb isotopic composition in modern crystal rocks.

Inter-element fractionation of Pb/U is generally ~5%, whereas apparent fractionation of Pb isotopes is generally <0.2%. In-run analysis of fragments of a large zircon crystal (generally every fifth measurement) with known age of 563.5 ± 3.2 Ma (2-sigma error) is used to correct for this fractionation. The uncertainty resulting from the calibration correction is generally 1-2% (2-sigma) for both $^{206}Pb/^{207}Pb$ and $^{206}Pb/^{238}U$ ages.

Concentrations of U and Th are calibrated relative to our Sri Lanka zircon, which contains ~518 ppm of U and 68 ppm Th.

The resulting interpreted ages are shown on Pb*/U concordia diagrams and relative age-probability diagrams using the routines in Isoplot (Ludwig, 2008). The age-probability diagrams show each age and its uncertainty (for measurement error only) as a normal distribution, and sum all ages from a sample into a single curve.

References:

Gehrels, G.E., Valencia, V., Ruiz, J., 2008, Enhanced precision, accuracy, efficiency, and spatial resolution of U-Pb ages by laser ablation–multicollector–inductively coupled plasma–mass spectrometry: Geochemistry, Geophysics, Geosystems, v. 9, Q03017, doi:10.1029/2007GC001805.

Gehrels, G.E., Valencia, V., Pullen, A., 2006, Detrital zircon geochronology by Laser-Ablation Multicollector ICPMS at the Arizona LaserChron Center, in Loszewski, T., and Huff, W., eds., Geochronology: Emerging Opportunities, Paleontology Society Short Course: Paleontology Society Papers, v. 11, 10 p.

Ludwig, K.R., 2008, Isoplot 3.60. Berkeley Geochronology Center, Special Publication No. 4, 77 p.

Stacey, J.S., and Kramers, J.D., 1975, Approximation of terrestrial lead isotope evolution by a two-stage model: Earth and Planetary Science Letters, v. 26, p. 207-221.

Data Table DR1

1. Location: 1AA/02-11-084-07W4/00

Analysis	U	206Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±	error	206Pb*	±	207Pb*	±	206Pb*	±	Best age	±	Conc
	(ppm)	204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(Ma)	(%)
BENYON 356-92	774	32577	1.9	20.0735	3.3	0.1864	3.5	0.0271	1.2	0.34	172.6	2.0	173.6	5.6	186.4	76.5	172.6	2.0	NA
BENYON 356-76	378	20556	3.2	20.4959	5.5	0.2429	5.7	0.0361	1.4	0.25	228.7	3.2	220.8	11.2	137.8	128.8	228.7	3.2	NA
BENYON 356-36	193	15394	2.7	21.0886	10.6	0.2378	10.7	0.0364	1.7	0.16	230.3	3.9	216.6	20.9	70.4	252.5	230.3	3.9	NA
BENYON 356 2	280	23115	1.9	20.1039	7.1	0.2536	7.2	0.0370	0.9	0.12	234.1	2.1	229.5	14.8	182.9	166.5	234.1	2.1	NA
BENYON 356 21	174	20877	1.8	19.8673	8.0	0.2686	8.8	0.0387	3.8	0.43	244.8	9.2	241.6	19.0	210.4	184.7	244.8	9.2	NA
BENYON 356-45	213	134278	2.3	19.6226	11.0	0.3014	11.3	0.0429	2.4	0.21	270.8	6.3	267.5	26.5	239.1	254.4	270.8	6.3	NA
BENYON 356-95	928	61719	2.0	19.4924	1.5	0.3094	1.8	0.0437	1.1	0.60	276.0	2.9	273.8	4.4	254.4	33.7	276.0	2.9	NA
BENYON 356-40	671	94355	3.3	19.2901	1.9	0.3349	2.3	0.0469	1.3	0.57	295.2	3.8	293.3	5.8	278.4	43.1	295.2	3.8	NA
BENYON 356-64	78	11303	1.3	18.4519	10.4	0.5182	11.2	0.0694	4.0	0.36	432.3	16.9	424.0	38.9	379.1	235.5	432.3	16.9	114.0
BENYON 356-102	205	34172	1.6	17.8086	3.9	0.5614	4.2	0.0725	1.3	0.32	451.2	5.8	452.4	15.2	458.4	87.2	451.2	5.8	98.4
BENYON 356 19	90	14452	1.9	17.8886	6.6	0.6542	7.0	0.0849	2.4	0.35	525.2	12.3	511.1	28.1	448.4	145.8	525.2	12.3	117.1
BENYON 356-74	103	15398	3.2	17.9372	5.5	0.6598	5.8	0.0858	1.9	0.33	530.8	9.8	514.5	23.5	442.4	122.1	530.8	9.8	120.0
BENYON 356-56	185	87366	5.3	15.0068	3.1	1.1161	4.6	0.1215	3.3	0.73	739.0	23.3	761.1	24.4	826.4	64.9	739.0	23.3	89.4
BENYON 356-34	401	111235	1.7	15.2784	0.7	1.1632	1.2	0.1289	1.0	0.80	781.5	7.0	783.4	6.5	788.9	14.9	781.5	7.0	99.1
BENYON 356-103	96	55821	2.7	13.8104	3.1	1.7410	3.5	0.1744	1.6	0.45	1036.2	15.3	1023.8	22.7	997.4	63.8	997.4	63.8	103.9
BENYON 356-82	123	52260	1.3	13.7212	3.7	1.3386	8.6	0.1332	7.7	0.90	806.2	58.7	862.6	49.8	1010.6	74.4	1010.6	74.4	79.8
BENYON 356 1	117	55636	2.4	13.5813	1.7	1.7634	2.0	0.1737	0.9	0.48	1032.5	9.0	1032.1	12.8	1031.3	35.2	1031.3	35.2	100.1
BENYON 356 15	115	40800	2.8	13.5120	1.6	1.7734	2.2	0.1738	1.5	0.68	1033.0	14.1	1035.8	14.1	1041.7	32.1	1041.7	32.1	99.2
BENYON 356 3	118	28005	3.2	13.4835	1.6	1.7913	2.1	0.1752	1.3	0.63	1040.6	12.5	1042.3	13.5	1046.0	32.4	1046.0	32.4	99.5
BENYON 356 13	442	140674	3.2	13.4705	0.3	1.8389	1.0	0.1797	0.9	0.94	1065.1	9.0	1059.5	6.4	1047.9	6.6	1047.9	6.6	101.6
BENYON 356-52	413	156812	1.1	13.4590	0.3	1.8303	1.1	0.1787	1.0	0.95	1059.6	9.9	1056.4	7.0	1049.6	7.0	1049.6	7.0	101.0
BENYON 356-53	429	155724	3.0	13.4119	0.5	1.8419	1.6	0.1792	1.5	0.94	1062.4	15.2	1060.5	10.8	1056.7	10.9	1056.7	10.9	100.5
BENYON 356-61	505	136984	4.3	13.3865	0.4	1.8248	2.7	0.1772	2.6	0.99	1051.5	25.4	1054.4	17.4	1060.5	8.8	1060.5	8.8	99.1
BENYON 356-42	165	115750	1.3	13.2787	2.2	1.9500	3.2	0.1878	2.4	0.74	1109.4	24.2	1098.5	21.6	1076.8	43.7	1076.8	43.7	103.0
BENYON 356-66	456	172380	15.9	12.9864	0.6	2.0992	1.4	0.1977	1.2	0.89	1163.0	13.0	1148.5	9.5	1121.3	12.4	1121.3	12.4	103.7
BENYON 356-41	566	283165	2.5	12.5945	0.3	2.2180	1.6	0.2026	1.6	0.98	1189.3	17.4	1186.7	11.5	1182.1	6.9	1182.1	6.9	100.6
BENYON 356-49	183	99338	2.7	12.4270	1.4	2.2913	2.0	0.2065	1.4	0.72	1210.2	15.9	1209.6	14.2	1208.5	27.5	1208.5	27.5	100.1
BENYON 356-59	69	36242	2.1	12.3149	2.4	2.4321	2.9	0.2172	1.7	0.58	1267.2	19.7	1252.1	21.1	1226.3	46.7	1226.3	46.7	103.3
BENYON 356-58	341	158630	2.7	11.7949	0.5	2.6586	1.9	0.2274	1.8	0.96	1321.0	22.0	1317.0	14.1	1310.5	10.1	1310.5	10.1	100.8
BENYON 356-37	302	140646	5.5	11.4367	0.6	2.4761	2.7	0.2054	2.6	0.97	1204.2	29.0	1265.1	19.7	1370.2	12.5	1370.2	12.5	87.9
BENYON 356-90	177	59575	2.8	9.8992	0.8	4.0785	1.1	0.2928	0.8	0.68	1655.6	11.2	1650.0	9.1	1642.9	15.1	1642.9	15.1	100.8
BENYON 356-63	194	145788	1.6	9.8971	0.6	4.2554	5.0	0.3055	5.0	0.99	1718.3	74.8	1684.8	41.1	1643.3	11.1	1643.3	11.1	104.6
BENYON 356-48	421	406388	1.8	9.8434	0.2	4.0682	1.1	0.2904	1.1	0.99	1643.7	15.6	1648.0	8.9	1653.4	3.5	1653.4	3.5	99.4
BENYON 356-29	187	117404	4.4	9.4161	0.6	4.6242	1.2	0.3158	1.1	0.88	1769.2	16.8	1753.6	10.3	1735.2	11.0	1735.2	11.0	102.0
BENYON 356-62	107	56304	2.5	9.3851	0.9	4.7050	3.0	0.3203	2.8	0.95	1791.0	44.0	1768.1	24.9	1741.2	17.2	1741.2	17.2	102.9
BENYON 356-44	69	35572	2.4	9.1800	1.0	4.8167	1.4	0.3207	1.0	0.68	1793.1	14.9	1787.8	11.8	1781.6	18.7	1781.6	18.7	100.6
BENYON 356-33	314	352705	3.3	9.1495	0.3	4.7668	0.8	0.3163	0.8	0.95	1771.7	11.9	1779.1	6.8	1787.7	4.8	1787.7	4.8	99.1
BENYON 356-50	196	89127	1.7	9.1262	0.6	4.9797	2.4	0.3296	2.3	0.97	1836.4	36.5	1815.9	19.9	1792.3	10.1	1792.3	10.1	102.5
BENYON 356-86	445	440931	19.0	9.1211	0.3	4.9640	1.3	0.3284	1.3	0.98	1830.5	21.0	1813.2	11.3	1793.4	4.6	1793.4	4.6	102.1
BENYON 356-32	202	160344	2.4	9.0289	0.7	4.8505	0.9	0.3176	0.6	0.65	1778.2	8.8	1793.7	7.3	1811.8	12.0	1811.8	12.0	98.1
BENYON 356-35	240	60831	2.2	9.0286	0.3	4.9165	0.8	0.3219	0.8	0.94	1799.2	11.8	1805.1	6.8	1811.9	5.0	1811.9	5.0	99.3
BENYON 356 12	280	144631	2.1	8.9610	0.4	4.8281	1.4	0.3138	1.3	0.95	1759.3	20.4	1789.8	11.8	1825.5	8.1	1825.5	8.1	96.4
BENYON 356-43	45	23045	1.1	8.9520	2.0	5.2660	2.3	0.3419	1.1	0.50	1895.8	18.7	1863.4	19.5	1827.4	35.9	1827.4	35.9	103.7
BENYON 356-84	308	94203	3.4	8.9425	0.3	4.5040	4.6	0.2921	4.6	1.00	1652.1	66.9	1731.7	38.2	1829.3	5.6	1829.3	5.6	90.3
BENYON 356-69	123	157535	1.1	8.9349	0.8	5.0065	2.1	0.3244	1.9	0.92	1811.3	30.1	1820.4	17.6	1830.8	15.1	1830.8	15.1	98.9
BENYON 356 14	91	40749	1.0	8.8440	1.1	5.2117	1.3	0.3343	0.7	0.56	1859.2	11.9	1854.5	11.2	1849.3	19.7	1849.3	19.7	100.5
BENYON 356 20	83	46199	1.4	8.8400	1.0	5.2275	1.2	0.3352	0.7	0.57	1863.3	11.1	1857.1	10.3	1850.1	18.0	1850.1	18.0	100.7
BENYON 356-97	117	95421	0.6	8.8344	0.5	5.3926	1.0	0.3455	0.9	0.88	1913.2	14.3	1883.7	8.4	1851.3	8.4	1851.3	8.4	103.3
BENYON 356-30	279	114331	2.8	8.8251	0.2	5.1260	0.9	0.3281	0.9	0.97	1829.1	14.1	1840.4	7.8	1853.2	4.2	1853.2	4.2	98.7
BENYON 356-38	116	23290	1.0	8.8250	1.5	5.1236	2.5	0.3279	2.0	0.79	1828.4	31.4	1840.0	21.3	1853.2	28.0	1853.2	28.0	98.7
BENYON 356 7	291	313355	1.1	8.8210	0.3	5.4420	1.1	0.3482	1.1	0.97	1925.8	17.7	1891.5	9.5	1854.0	5.1	1854.0	5.1	103.9
BENYON 356 16	201	209630	1.4	8.7892	0.4	5.3687	1.6	0.3422	1.6	0.97	1897.4	25.6	1879.9	13.7	1860.6	7.1	1860.6	7.1	102.0
BENYON 356 24	168	153878	0.9	8.7504	0.4	5.4039	1.4	0.3430	1.4	0.96	1900.8	22.4	1885.5	12.2	1868.6	7.2	1868.6	7.2	101.7
BENYON 356 23	199	202015	2.7	8.7035	0.5	5.4525	1.5	0.3442	1.4	0.95	1906.8	23.4	1893.2	12.8	1878.3	8.6	1878.3	8.6	101.5
BENYON 356 22	199	107576	1.5	8.6788	0.5	5.6197	1.3	0.3537	1.2	0.93	1952.4	21.0	1919.1	11.5	1883.4	8.5	1883.4	8.5	103.7
BENYON 356-83	217	127337	1.2	8.5965	0.4	5.7239	3.2	0.3569	3.2	0.99	1967.3	53.5	1935.0	27.5	1900.5	6.8	1900.5	6.8	103.5
BENYON 356-31	69	80619	1.3	8.5339	1.0	5.4962	1.2	0.3402	0.8	0.62	1887.5	12.5	1900.0	10.6	1913.6	17.3	1913.6	17.3	98.6
BENYON 356-68	299	246963	19.2	8.5267	0.3	5.5258	2.6	0.3417	2.6	1.00	1894.9	42.7	1904.6	22.5	1915.1	4.6	1915.1	4.6	98.9
BENYON 356-75	382	272441	3.0	8.4463	0.3	5.6641	1.1	0.3470	1.0	0.97	1920.1	16.9	1925.9	9.1	1932.1	4.6	1932.1	4.6	99.4
BENYON 356-104	169	338609	1.9	8.4372	0.4	5.6973	1.5	0.3486	1.4	0.96	1928.0	23.9	1931.0	13.0	1934.1	7.8	1934.1	7.8	99.7
BENYON 356-57	25	14798	0.4	8.4052	2.2	5.8849	2.8	0.3587	1.7	0.62	1976.2	29.4	1959.0	24.2	1940.9	39.1	1940.9	39.1	101.8
BENYON 356 4	316	263588	0.9	8.3980	0.4	5.8004	1.4	0.3533	1.3	0.96	1950.3	21.9	1946.5	11.7	1942.4	6.9	1942.4	6.9	100.4
BENYON 356-85	36	39520	0.7	8.3650	2.2	5.4941	2.7	0.3333	1.5	0.55	1854.5	23.7	1899.7	23.0	1949.4	39.9	1949.4	39.9	95.1
BENYON 356-79	263	352415	1.4	8.3485	0.3	6.1436	1.8	0.3720	1.7	0.98	2038.8	30.1	1996.5	15.3	1953.0	5.9	1953.0	5.9	104.4
BENYON 356-101	570	208165	2.5	8.2615	0.2	6.0529	1.5	0.3627	1.5	0.99	1994.9	25.8	1983.5	13.2	1971.6	2.7	1971.6	2.7	101.2
BENYON 356-27	49	87317	1.3	8.2117	2.3	6.1372	2.5	0.3655	1.1	0.44	2008.2	18.9	1995.6	21.9	1982.4	40.1	1982.4	40.1	101.3
BENYON 356 25	20	15922	2.3	8.0933	3.5	6.1947	4.1	0.3636	2.2	0.53	1999.3	37.2	2003.7	35.7	2008.2	61.4	2008.2	61.4	99.6
BENYON 356-51	71	60049	2.9	7.5014	1.0	7.3958	1.8	0.4024	1.5	0.84	2179.9	28.4	2160.5	16.3	2142.0	17.3	2142.0	17.3	101.8
BENYON 356-46	137	80915	1.2	7.4633	0.9	7.1052	3.3	0.3846	3.2	0.96	2097.7	57.4	2124.7	29.7	2150.9	15.9	2150.9	15.9	97.5
BENYON 356-88	50	47226	1.1	6.8858	1.2	8.0606	4.3	0.4026	4.2	0.96	2180.8	77.3	2237.8	39.2	2290.4	20.2	2290.4	20.2	95.2
BENYON 356-93	73	43105	2.0	6.5432	1.4	9.3498	2.2	0.4437	1.7	0.78	2367.2	33.1	2372.9	19.7	2377.8	23.1	2377.8	23.1	99.6
BENYON 356-89	62	51293	2.2	6.4766	1.8	9.3567	5.0	0.4395	4.6	0.93	2348.5	90.7	2373.6	45.5	2395.2	31.2	2395.2	31.2	98.0
BENYON 356 5	68	48725	6.3	6.0910	0.6	10.6474	1.3	0.4704	1.1	0.89	2485.2	23.6	2492.8	11.9	2499.1	9.9	2499.1	9.9	99.4
BENYON 356-77	34	27008	0.8	5.9388	0.8	11.5358	1.9	0.4969	1.8	0.91	2600.3	37.7	2567.5	18.0	2541.6	13.2	2541.6	13.2	102.3
BENYON 356-100	146	385550	2.8	5.7826	0.2	12.4294	1.3	0.5213	1.3	0.99	2704.6	28.8	2637.4	12.4	2586.2	3.2	2586.2	3.2	104.6
BENYON 356-96	83	51231	2.3	5.6351	1.9	11.2032	5.3	0.4579	5.0	0.93	2430.1	100.4	2540.2	49.6	2629.3	31.6	2629.3	31.6	92.4
BENYON 356-80	129	156496	1.8	5.5324	0.4	13.3192	1.3	0.5344	1.3	0.95	2760.1	28.6	2702.5	12.6	2659.8	6.7	2659.8	6.7	103.8
BENYON 356-70	300	496444	3.5	5.5084	0.4	11.9673	1.0	0.4781	1.0	0.94	2519.0	20.1	2601.8	9.6	2667.0	5.8	2667.0	5.8	94.5
BENYON 356-98	58	51124	1.2	5.4860	1.0	13.4424	2.7	0.5348	2.5	0.93	2761.8	56.5	2711.2	25.6	2673.7	16.5	2673.7	16.5	103.3
BENYON 356-99	76	133004	0.7	5.4445	0.3	13.5258	1.2	0.5341	1.1	0.97	2758.7	25.4	2717.1	11.0	2686.3	4.8	2686.3	4.8	102.7
BENYON 356-73	81	49279	0.8	5.4001	0.5	13.4005	1.2	0.5248	1.1	0.92	2719.6	25.0	2708.3	11.6	2699.8	7.9	2699.8	7.9	100.7
BENYON 356 18	124	88220	1.0	5.3700	0.3	12.4030	1.5	0.4831	1.5	0.97	2540.6	31.0	2635.4	14.3	2709.1	5.6	2709.1	5.6	93.8
BENYON 356-55	217	156925	3.0	5.3649	0.3	13.5548	1.3	0.5274	1.2	0.98	2730.6	27.6	2719.1	12.0	2710.6	4.2	2710.6	4.2	100.7
BENYON 356-78	132	85952	0.8	5.3619	0.3	13.6096	1.0	0.5293	1.0	0.95	2738.3	21.9	2722.9	9.8	2711.5	5.4	2711.5	5.4	101.0
BENYON 356-67	53	51220	0.7	5.3600	1.0	13.7879	2.0	0.5360	1.8	0.86	2766.7	39.8	2735.2	19.4	2712.1	17.1	2712.1	17.1	102.0
BENYON 356-65	48	76760	1.7	5.3571	0.9	13.5929	3.7	0.5281	3.6	0.97	2733.6	80.7	2721.8	35.3	2713.0	14.6	2713.0	14.6	100.8
BENYON 356-47	679	534444	8.9	5.3248	0.1	12.1773	1.7	0.4703	1.7	1.00	2484.8	35.5	2618.2	16.2	2723.0	2.2	2723.0	2.2	91.3
BENYON 356-80	64	70059	0.8	5.3154	0.5	13.9349	3.3	0.5372	3.3	0.99	2771.7	73.6	2745.3	31.3	2725.9	8.0	2725.9	8.0	101.7
BENYON 356 11	614	448271	3.2	5.3046	0.2	14.1123	1.6	0.5429	1.6	0.99	2795.7	35.5	2757.3	14.9	2729.2	3.1	2729.2	3.1	102.4
BENYON 356-71	135	246006	1.7	5.2856	0.4	14.3562	1.3	0.5503	1.3	0.95	2826.6	29.3	2773.5	12.7	2735.1	6.6	2735.1	6.6	103.3
BENYON 356-94	66	62491	0.7	5.2500	0.8	14.1556	4.7	0.5390	4.7	0.99	2779.3	105.4	2760.2	45.0	2746.3	13.4	2746.3	13.4	101.2
BENYON 356 17	89	117223	1.4	5.1696	1.0	12.9097	2.8	0.4840	2.6	0.93	2544.8	54.0	2673.1	26.0	2771.6	16.3	2771.6	16.3	91.8
BENYON 356 9	43	58033	2.0	5.1687	0.8	15.0896	1.7	0.5657	1.5	0.87	2890.0	34.2	2820.9	16.1	2771.9	13.6	2771.9	13.6	104.3
BENYON 356-60	106	93200	3.8	4.8719	0.4	16.4802	0.9	0.5823	0.8	0.91	2958.2	19.6	2905.1	8.7	2868.5	6.3	2868.5	6.3	103.1
BENYON 356-39	118	201617	1.0	4.8538	0.1	15.8459	0.5	0.5578	0.5	0.97	2857.6	10.8	2867.6	4.6	2874.5	1.9	2874.5	1.9	99.4
BENYON 356-72	45	61110	5.7	4.7426	0.8	17.0977	1.7	0.5881	1.5	0.88	2981.8	36.4	2940.3	16.5	2912.1	13.0	2912.1	13.0	102.4
BENYON 356-87	104	173142	3.6	4.2511	0.4	20.0029	1.8	0.6167	1.7	0.97	3096.9	41.8	3091.5	17.0	3088.0	6.8	3088.0	6.8	100.3

2. Location: 1AB/06-34-084-07W4/0

Analysis	U	206Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±	error	206Pb*	±	207Pb*	±	206Pb*	±	Best age	±	Conc
	(ppm)	204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(Ma)	(%)
BENYON 293-30	366	25958	1.2	19.7700	3.9	0.2449	4.7	0.0351	2.5	0.53	222.5	5.5	222.4	9.3	221.8	91.4	222.5	5.5	NA
BENYON 293-98	150	17636	1.3	21.0558	7.3	0.2322	7.7	0.0355	2.6	0.34	224.7	5.8	212.0	14.8	74.1	173.5	224.7	5.8	NA
BENYON 293-101	284	23977	1.0	19.7531	3.8	0.2857	5.3	0.0409	3.6	0.68	258.6	9.1	255.2	11.9	223.8	88.6	258.6	9.1	NA
BENYON 293-27	126	14408	2.3	18.3387	11.1	0.3550	11.3	0.0472	2.1	0.18	297.4	6.1	308.5	30.1	393.0	249.7	297.4	6.1	NA
BENYON 293-9	280	28131	1.2	18.9063	3.6	0.4380	3.7	0.0601	0.7	0.20	376.0	2.7	368.9	11.5	324.2	82.6	376.0	2.7	NA
BENYON 293-2	249	28899	1.5	18.7133	3.5	0.4463	4.3	0.0606	2.4	0.57	379.1	9.0	374.7	13.4	347.4	79.6	379.1	9.0	NA
BENYON 293-72	177	17027	1.6	19.7555	4.4	0.4323	5.9	0.0619	3.9	0.66	387.4	14.6	364.8	18.0	223.5	101.8	387.4	14.6	NA

BENYON 293-97	162	18623	3.7	18.0945	4.3	0.4992	4.9	0.0655	2.3	0.46	409.0	8.9	411.1	16.4	423.0	95.9	409.0	8.9	96.7
BENYON 293-90	144	24896	4.1	18.7181	4.7	0.4859	5.4	0.0660	2.7	0.49	411.8	10.7	402.1	18.1	346.9	107.2	411.8	10.7	118.7
BENYON 293-86	27	3761	2.5	27.1216	46.0	0.3377	46.1	0.0664	2.4	0.05	414.6	9.8	295.4	118.6	-565.9	1299.9	414.6	9.8	NA
BENYON 293-77	352	43712	3.3	18.1289	1.5	0.5100	2.2	0.0671	1.6	0.74	418.4	6.5	418.4	7.4	418.7	32.7	418.4	6.5	99.9
BENYON 293-19	102	14140	1.8	18.6385	7.7	0.4964	8.2	0.0671	2.6	0.32	418.7	10.7	409.3	27.5	356.5	174.8	418.7	10.7	117.5
BENYON 293-33	118	16602	1.1	18.0138	2.9	0.5251	3.9	0.0686	2.5	0.65	427.8	10.5	428.6	13.6	432.9	65.4	427.8	10.5	98.8
BENYON 293-51	244	32467	1.7	17.7308	3.4	0.5684	3.7	0.0731	1.5	0.41	454.7	6.8	457.0	13.8	468.1	75.3	454.7	6.8	97.1
BENYON 293-45	73	9968	1.8	18.9401	11.5	0.5592	11.7	0.0768	2.0	0.17	477.1	9.1	451.0	42.5	320.1	261.8	477.1	9.1	149.0
BENYON 293-83	38	15591	3.5	14.3884	5.4	1.5152	6.0	0.1581	2.4	0.41	946.3	21.5	936.5	36.5	913.6	112.0	913.6	112.0	103.6
BENYON 293-103	150	70242	3.3	14.0743	2.1	1.6068	2.4	0.1640	1.2	0.48	979.0	10.5	972.8	15.1	958.9	43.2	958.9	43.2	102.1
BENYON 293-28	111	49368	1.7	14.0382	1.5	1.5655	1.9	0.1594	1.1	0.57	953.4	9.5	956.6	11.6	964.2	31.4	964.2	31.4	98.9
BENYON 293-94	48	62363	1.9	13.9956	4.0	1.6229	5.5	0.1647	3.8	0.69	983.0	35.0	979.1	34.8	970.3	81.5	970.3	81.5	101.3
BENYON 293-37	83	34529	1.7	13.8951	3.6	1.6484	4.2	0.1661	2.1	0.50	990.7	19.4	988.9	26.6	985.0	74.1	985.0	74.1	100.6
BENYON 293-88	116	16524	2.3	13.8005	1.9	1.7469	2.3	0.1748	1.3	0.56	1038.7	12.1	1026.0	14.6	998.9	38.0	998.9	38.0	104.0
BENYON 293-7	113	46620	3.3	13.7985	1.5	1.6923	2.2	0.1694	1.6	0.72	1008.6	15.1	1005.6	14.2	999.2	31.3	999.2	31.3	100.9
BENYON 293-18	446	115794	8.4	13.7131	0.7	1.7105	3.9	0.1701	3.9	0.98	1012.8	36.4	1012.5	25.3	1011.8	15.1	1011.8	15.1	100.1
BENYON 293-8	270	71460	3.6	13.6730	0.7	1.8007	1.2	0.1786	1.0	0.83	1059.1	10.1	1045.7	8.1	1017.7	13.9	1017.7	13.9	104.1
BENYON 293-4	118	53198	2.0	13.6695	0.9	1.7041	2.6	0.1689	2.4	0.93	1006.3	22.8	1010.1	16.8	1018.3	19.0	1018.3	19.0	98.8
BENYON 293-46	194	71103	2.3	13.6583	1.2	1.7372	1.5	0.1721	0.9	0.60	1023.6	8.6	1022.4	9.8	1019.9	24.8	1019.9	24.8	100.4
BENYON 293-32	43	14616	1.5	13.6521	5.8	1.7813	6.2	0.1764	2.1	0.35	1047.1	20.6	1038.6	40.1	1020.8	117.1	1020.8	117.1	102.6
BENYON 293-35	53	16786	2.6	13.6291	4.3	1.7847	4.8	0.1764	2.2	0.46	1047.4	21.7	1039.9	31.5	1024.2	86.7	1024.2	86.7	102.3
BENYON 293-26	169	67012	2.1	13.6244	2.0	1.7736	2.1	0.1753	0.8	0.39	1041.0	7.9	1035.8	13.8	1024.9	39.6	1024.9	39.6	101.6
BENYON 293-69	216	56263	4.0	13.6216	0.8	1.7473	1.4	0.1726	1.2	0.82	1026.5	11.2	1026.2	9.3	1025.3	16.7	1025.3	16.7	100.1
BENYON 293-85	101	50372	1.9	13.6073	1.8	1.6975	4.2	0.1675	3.8	0.90	998.4	35.4	1007.6	27.1	1027.5	37.1	1027.5	37.1	97.2
BENYON 293-40	164	48750	1.7	13.5603	1.5	1.8589	2.7	0.1828	2.2	0.82	1082.4	22.0	1066.6	17.8	1034.5	31.1	1034.5	31.1	104.6
BENYON 293-84	150	45608	2.2	13.5495	1.3	1.8478	1.9	0.1816	1.4	0.71	1075.6	13.4	1062.7	12.6	1036.1	27.1	1036.1	27.1	103.8
BENYON 293-95	199	61782	3.0	13.5306	1.3	1.7588	1.7	0.1726	1.2	0.68	1026.4	11.1	1030.4	11.1	1038.9	25.6	1038.9	25.6	98.8
BENYON 293-60	132	45339	1.5	13.5238	1.5	1.7510	2.0	0.1717	1.3	0.66	1021.7	12.4	1027.5	12.9	1039.9	30.4	1039.9	30.4	98.3
BENYON 293-56	54	40165	2.0	13.4673	2.7	1.7891	3.1	0.1748	1.6	0.52	1038.2	15.6	1041.5	20.4	1048.4	54.0	1048.4	54.0	99.0
BENYON 293-48	355	125214	1.3	13.4509	0.4	1.7938	0.9	0.1750	0.8	0.90	1039.6	7.6	1043.2	5.7	1050.9	7.8	1050.9	7.8	98.9
BENYON 293-53	205	79215	4.0	13.4483	0.7	1.7830	1.8	0.1739	1.6	0.91	1033.6	15.4	1039.3	11.5	1051.2	14.4	1051.2	14.4	98.3
BENYON 293-43	110	51275	1.3	13.4425	1.7	1.9117	1.9	0.1864	0.9	0.46	1101.7	8.6	1085.2	12.5	1052.1	33.6	1052.1	33.6	104.7
BENYON 293-49	142	125460	4.2	13.4086	2.2	1.9124	3.6	0.1860	2.8	0.79	1099.6	28.5	1085.4	23.8	1057.2	44.0	1057.2	44.0	104.0
BENYON 293-34	138	28888	2.7	13.4051	1.5	1.8044	2.1	0.1754	1.5	0.70	1042.0	14.0	1047.1	13.6	1057.7	30.1	1057.7	30.1	98.5
BENYON 293-76	166	53664	1.9	13.3869	1.2	1.8887	1.7	0.1834	1.2	0.72	1085.4	11.9	1077.1	11.1	1060.5	23.5	1060.5	23.5	102.4
BENYON 293-21	110	33391	2.0	13.3828	1.6	1.8796	2.7	0.1824	2.2	0.80	1080.3	22.0	1073.9	18.2	1061.1	32.8	1061.1	32.8	101.8
BENYON 293-38	264	70331	1.1	13.3774	0.8	1.9210	1.3	0.1864	1.1	0.79	1101.7	10.7	1088.4	8.9	1061.9	16.6	1061.9	16.6	103.8
BENYON 293-47	1207	268964	7.3	13.3627	0.1	1.8609	1.1	0.1803	1.1	0.99	1068.9	11.3	1067.3	7.6	1064.1	2.3	1064.1	2.3	100.4
BENYON 293-36	26	6620	2.5	13.3476	9.1	1.9969	9.6	0.1933	3.1	0.32	1139.3	32.5	1114.5	65.4	1066.4	183.9	1066.4	183.9	106.8
BENYON 293-100	331	39171	1.3	13.3353	0.9	1.8582	1.6	0.1797	1.3	0.81	1065.4	13.0	1066.3	10.7	1068.2	19.0	1068.2	19.0	99.7
BENYON 293-16	141	67302	1.2	13.2889	2.7	1.8900	3.4	0.1822	2.0	0.60	1078.7	20.0	1077.6	22.4	1075.2	54.3	1075.2	54.3	100.3
BENYON 293-6	64	30136	1.6	13.2604	3.6	1.8816	3.7	0.1810	0.7	0.20	1072.2	7.4	1074.6	24.3	1079.5	72.0	1079.5	72.0	99.3
BENYON 293-3	80	23290	2.2	13.2603	2.0	1.8810	2.3	0.1809	1.1	0.49	1071.9	11.1	1074.4	15.3	1079.5	40.3	1079.5	40.3	99.3
BENYON 293-10	130	68191	2.7	13.2238	1.3	1.8674	1.9	0.1791	1.5	0.75	1062.1	14.2	1069.6	12.8	1085.1	25.7	1085.1	25.7	97.9
BENYON 293-87	247	305563	3.4	13.2095	0.4	1.9223	3.0	0.1842	3.0	0.99	1089.7	29.7	1088.9	20.0	1087.2	7.9	1087.2	7.9	100.2
BENYON 293-5	115	60537	1.6	13.1793	1.6	1.9074	2.8	0.1823	2.3	0.82	1079.6	22.8	1083.7	18.6	1091.8	31.9	1091.8	31.9	98.9
BENYON 293-54	178	135362	3.6	13.1237	2.2	1.8399	5.9	0.1751	5.5	0.93	1040.3	52.4	1059.8	38.6	1100.3	43.3	1100.3	43.3	94.6
BENYON 293-31	234	110651	3.0	13.1143	1.5	1.9425	5.6	0.1848	5.4	0.96	1092.9	54.4	1095.8	37.7	1101.7	30.9	1101.7	30.9	99.2
BENYON 293-1	347	163443	9.4	13.0740	0.6	1.9933	1.4	0.1890	1.3	0.90	1116.0	13.1	1113.2	9.7	1107.9	12.6	1107.9	12.6	100.7
BENYON 293-25	55	31895	2.1	13.0027	3.2	1.8819	4.9	0.1775	3.7	0.75	1053.2	35.5	1074.7	32.4	1118.8	64.6	1118.8	64.6	94.1
BENYON 293-22	76	47398	2.6	12.9854	2.6	2.1145	3.5	0.1991	2.4	0.68	1170.7	25.6	1153.5	24.3	1121.4	51.7	1121.4	51.7	104.4
BENYON 293-93	42	14860	2.0	12.9300	4.5	2.0272	4.8	0.1901	1.7	0.35	1122.0	17.4	1124.7	32.4	1129.9	88.9	1129.9	88.9	99.3
BENYON 293-24	266	92598	3.2	12.9261	1.2	2.0364	3.1	0.1909	2.8	0.91	1126.3	28.9	1127.7	20.8	1130.6	24.8	1130.6	24.8	99.6
BENYON 293-55	49	21680	1.5	12.8826	4.1	2.1018	4.4	0.1964	1.7	0.39	1155.9	18.1	1149.4	30.5	1137.3	81.2	1137.3	81.2	101.6
BENYON 293-41	276	391410	3.8	12.8211	0.8	2.1181	1.6	0.1970	1.3	0.84	1158.9	13.9	1154.7	10.7	1146.8	16.6	1146.8	16.6	101.1
BENYON 293-74	84	14503	2.0	12.8016	0.7	2.1473	2.4	0.1994	2.3	0.96	1171.9	24.3	1164.2	16.4	1149.8	13.1	1149.8	13.1	101.9
BENYON 293-59	174	124391	3.5	12.7449	1.5	2.1506	1.9	0.1988	1.2	0.61	1168.8	12.5	1165.3	13.3	1158.6	30.2	1158.6	30.2	100.9
BENYON 293-96	258	155635	2.8	12.7109	0.8	2.1293	1.5	0.1963	1.3	0.86	1155.4	13.9	1158.4	10.5	1163.9	15.2	1163.9	15.2	99.3
BENYON 293-64	410	182496	3.8	12.6280	1.2	2.2067	6.7	0.2021	6.6	0.98	1186.6	71.6	1183.2	46.9	1176.9	23.4	1176.9	23.4	100.8
BENYON 293-68	598	270461	2.2	12.6056	0.3	2.1808	0.7	0.1994	0.6	0.90	1172.0	6.6	1174.9	4.8	1180.4	6.0	1180.4	6.0	99.3
BENYON 293-104	188	456796	4.3	12.6025	1.1	2.2112	1.5	0.2021	1.0	0.69	1186.6	11.3	1184.6	10.5	1180.9	21.4	1180.9	21.4	100.5
BENYON 293-81	105	145752	2.9	12.5581	1.4	2.1455	1.8	0.1954	1.2	0.68	1150.6	13.1	1163.6	12.7	1187.8	26.7	1187.8	26.7	96.9
BENYON 293-99	264	95221	2.9	12.5226	0.7	2.2572	1.4	0.2050	1.2	0.88	1202.2	13.5	1199.0	9.8	1193.4	13.1	1193.4	13.1	100.7
BENYON 293-65	98	53757	3.4	12.4097	1.3	2.3295	3.2	0.2097	2.9	0.91	1227.0	32.3	1221.3	22.6	1211.3	26.0	1211.3	26.0	101.3
BENYON 293-78	112	51269	2.9	12.3600	1.6	2.4049	1.9	0.2156	1.1	0.57	1258.5	12.7	1244.1	13.9	1219.2	31.1	1219.2	31.1	103.2
BENYON 293-73	166	67991	3.5	12.3248	0.7	2.3468	2.5	0.2098	2.4	0.96	1227.6	27.0	1226.6	18.0	1224.7	14.5	1224.7	14.5	100.2
BENYON 293-14	257	109531	1.9	12.3019	0.4	2.3229	3.0	0.2073	3.0	0.99	1214.2	32.9	1219.3	21.3	1228.4	7.2	1228.4	7.2	98.8
BENYON 293-20	36	16338	2.8	12.2597	3.7	2.5247	4.3	0.2245	2.2	0.50	1305.5	25.5	1279.2	31.5	1235.2	73.6	1235.2	73.6	105.7
BENYON 293-70	652	276950	2.4	12.1930	0.2	2.4379	2.2	0.2156	2.2	0.99	1258.5	25.1	1253.9	15.9	1245.9	4.5	1245.9	4.5	101.0
BENYON 293-102	40	19846	1.7	11.8883	2.5	2.5273	3.1	0.2179	1.8	0.58	1270.8	20.7	1279.9	22.5	1295.2	49.1	1295.2	49.1	98.1
BENYON 293-23	91	40483	2.9	11.5314	1.2	2.6925	1.9	0.2252	1.5	0.79	1309.2	17.8	1326.4	14.2	1354.3	22.9	1354.3	22.9	96.7
BENYON 293-12	112	40477	2.3	11.3987	6.0	3.1558	11.1	0.2609	9.3	0.84	1494.4	124.1	1446.4	85.5	1376.6	115.5	1376.6	115.5	108.6
BENYON 293-67	131	61675	2.3	11.3344	0.6	2.8507	1.2	0.2343	1.0	0.87	1357.2	12.6	1369.0	8.9	1387.4	11.3	1387.4	11.3	97.8
BENYON 293-79	131	64709	0.5	11.0958	0.7	3.0055	2.4	0.2419	2.3	0.95	1396.4	29.0	1409.0	18.4	1428.1	13.8	1428.1	13.8	97.8
BENYON 293-52	210	165425	1.9	11.0614	0.6	3.1566	1.0	0.2532	0.8	0.82	1455.2	10.5	1446.6	7.5	1434.1	10.6	1434.1	10.6	101.5
BENYON 293-62	157	86832	2.9	10.9828	0.8	3.1471	1.2	0.2507	0.9	0.78	1442.0	12.2	1444.3	9.4	1447.7	14.7	1447.7	14.7	99.6
BENYON 293-89	101	42033	1.9	10.9500	1.5	3.2249	2.0	0.2561	1.3	0.66	1469.9	17.2	1463.2	15.3	1453.4	28.0	1453.4	28.0	101.1
BENYON 293-63	182	87700	3.9	10.8995	0.9	3.2205	3.1	0.2546	3.0	0.96	1462.1	39.2	1462.1	24.3	1462.1	17.5	1462.1	17.5	100.0
BENYON 293-92	206	212295	1.6	10.8874	0.3	3.2260	3.3	0.2547	3.3	0.99	1462.8	42.9	1463.4	25.6	1464.2	6.6	1464.2	6.6	99.9
BENYON 293-61	50	27500	1.1	10.3524	2.0	3.6872	2.4	0.2768	1.3	0.55	1575.5	18.5	1568.6	19.2	1559.4	37.5	1559.4	37.5	101.0
BENYON 293-58	233	102586	1.8	10.0463	0.5	4.0129	1.8	0.2924	1.7	0.96	1653.5	24.5	1636.8	14.2	1615.5	9.2	1615.5	9.2	102.4
BENYON 293-105	52	26852	1.5	9.9402	1.8	4.0514	2.7	0.2921	2.1	0.76	1651.9	30.0	1644.6	22.0	1635.2	32.5	1635.2	32.5	101.0
BENYON 293-13	100	46056	1.7	9.8841	0.8	4.1412	4.1	0.2969	4.1	0.98	1675.7	60.0	1662.5	33.9	1645.7	14.4	1645.7	14.4	101.8
BENYON 293-91	82	65122	1.6	8.9064	0.9	5.1141	1.4	0.3303	1.2	0.80	1840.1	18.4	1838.5	12.2	1836.6	15.5	1836.6	15.5	100.2
BENYON 293-17	185	88182	18.7	8.7452	1.3	5.3182	1.5	0.3373	0.8	0.51	1873.7	12.6	1871.8	12.9	1869.6	23.4	1869.6	23.4	100.2
BENYON 293-57	94	58103	1.5	8.5153	0.9	5.6513	1.6	0.3490	1.3	0.83	1929.9	22.0	1924.0	13.7	1917.6	15.9	1917.6	15.9	100.6
BENYON 293-75	40	39235	1.9	5.4819	1.1	12.7407	1.3	0.5065	0.7	0.54	2641.9	15.2	2660.7	12.2	2675.0	18.1	2675.0	18.1	98.8
BENYON 293-66	94	67883	2.5	5.4477	0.4	13.5111	1.7	0.5338	1.7	0.97	2757.6	37.5	2716.1	16.3	2685.3	6.9	2685.3	6.9	102.7
BENYON 293-11	48	64949	1.4	5.4232	0.6	13.2766	1.1	0.5222	0.9	0.82	2708.5	20.4	2699.5	10.6	2692.8	10.5	2692.8	10.5	100.6
BENYON 293-82	48	74678	1.0	5.4049	0.5	13.1226	2.9	0.5144	2.9	0.99	2675.4	63.8	2688.5	27.8	2698.4	7.7	2698.4	7.7	99.2
BENYON 293-15	48	54151	0.8	5.3885	0.7	13.5192	1.5	0.5283	1.3	0.87	2734.5	28.4	2716.6	13.9	2703.4	11.9	2703.4	11.9	101.2
BENYON 293-42	167	152078	0.9	5.3128	0.2	13.9439	1.2	0.5373	1.1	0.98	2772.1	25.6	2745.9	10.9	2726.7	3.6	2726.7	3.6	101.7

3. Location: 1AA/02-11-084-07W4/0

Analysis	U	206Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±	error	206Pb*	±	207Pb*	±	206Pb*	±	Best age	±	Conc
	(ppm)	204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(Ma)	(%)
BENYON 286-30	131	617	1.9	17.2315	29.1	0.1522	29.5	0.0190	5.1	0.17	121.5	6.1	143.9	39.6	531.0	649.1	121.5	6.1	NA
BENYON 286-61	235	20188	1.9	18.4025	3.8	0.4427	4.2	0.0591	1.8	0.43	370.1	6.5	372.2	13.1	385.2	85.2	370.1	6.5	NA
BENYON 286-29	175	2781	1.4	17.9133	3.6	0.4862	5.0	0.0632	3.5	0.69	394.8	13.3	402.3	16.6	445.4	79.9	394.8	13.3	NA
BENYON 286-85	281	32931	7.7	18.1903	2.4	0.5008	2.5	0.0661	0.9	0.34	412.4	3.4	412.2	8.6	411.2	53.4	412.4	3.4	100.3
BENYON 286-82	415	52559	3.5	18.0073	2.8	0.5078	3.4	0.0663	1.9	0.57	413.9	7.7	417.0	11.5	433.7	61.4	413.9	7.7	95.4
BENYON 286-73	501	46521	1.0	18.3161	1.6	0.5174	2.0	0.0687	1.2	0.58	428.5	4.8	423.4	7.0	395.7	37.0	428.5	4.8	108.3
BENYON 286-3	375	21965	2.2	17.5647	4.5	0.5629	6.8	0.0717	5.1	0.75	446.4	22.0	453.4	24.7	488.9	98.4	446.4	22.0	91.3
BENYON 286-69	261	80459	2.5	18.0907	3.4	0.5500	3.8	0.0722	1.7	0.43	449.1	7.2	445.0	13.7	423.4	76.6	449.1	7.2	106.1
BENYON 286-48	421	118976	5.7	17.3697	1.6	0.6333	2.0	0.0798	1.1	0.58	494.8	5.4	498.2	7.8	513.5	35.4	494.8	5.4	96.4
BENYON 286-62	181	2629	1.2	17.8511	4.4	0.6349	5.7	0.0822	3.7	0.64	509.2	17.9	499.2	22.7	453.1	98.6	509.2	17.9	112.4
BENYON 286-47	429	15400	0.8	17.0593	1.9	0.7318	2.5	0.0905	1.6	0.64	558.7	8.4	557.6	10.6	553.0	41.8	558.7	8.4	101.0
BENYON 286-66	75	11999	0.9	16.2543	10.6	0.7882	10.8	0.0929	2.4	0.22	572.8	13.1	590.2	48.5	657.5	226.9	572.8	13.1	87.1
BENYON 286-71	449	27959	1.2	16.6915	1.4	0.8152	2.0	0.0987	1.4	0.72	606.7	8.4	605.4	9.1	600.3	30.0	606.7	8.4	101.1
BENYON 286-33	231	24593	1.2	16.3700	3.3	0.8540	3.8	0.1014	2.0	0.51	622.6	11.7	626.8	17.9	642.3	70.6	622.6	11.7	96.9
BENYON 286-55	230	56054	1.2	16.5367	2.4	0.8467	2.5	0.1016	0.8	0.33	623.5	4.8	622.9	11.7	620.5	51.1	623.5	4.8	100.5
BENYON 286-46	362	266085	3.6	14.0387	1.1	1.6559	2.0	0.1686	1.7	0.84	1004.4	15.4	991.8	12.5	964.1	21.9	964.1	21.9	104.2
BENYON 286-22	29	13218	0.7	14.0292	8.9	1.7555	9.3	0.1786	2.7	0.29	1059.4	26.6	1029.2	60.3	965.5	182.0	965.5	182.0	109.7
BENYON 286-38	157	35270	1.2	13.8666	2.0	1.7134	2.7	0.1723	1.9	0.69	1024.9	17.9	1013.6	17.6	989.2	40.6	989.2	40.6	103.6
BENYON 286-31	150	13321	2.5	13.8190	1.5	1.6824	2.0	0.1686	1.3	0.66	1004.5	12.1	1001.9	12.5	996.2	29.9	996.2	29.9	100.8

BENYON 286-18	120	18024	2.7	13.7901	1.4	1.6916	1.6	0.1692	0.8	0.47	1007.6	7.2	1005.4	10.5	1000.4	29.4	1000.4	29.4	100.7
BENYON 286-40	179	32284	3.6	13.7488	2.0	1.7081	2.2	0.1703	0.9	0.42	1013.9	8.5	1011.6	14.0	1006.5	40.3	1006.5	40.3	100.7
BENYON 286-53	29	49948	1.4	13.7464	8.6	1.8271	9.0	0.1822	2.5	0.28	1078.7	25.3	1055.2	59.0	1006.9	175.0	1006.9	175.0	107.1
BENYON 286-17	184	25903	1.1	13.7233	1.8	1.5995	2.2	0.1592	1.2	0.55	952.4	10.8	970.0	13.8	1010.3	37.4	1010.3	37.4	94.3
BENYON 286-23	83	29201	1.0	13.7084	2.2	1.7330	3.1	0.1723	2.2	0.71	1024.8	21.1	1020.9	20.3	1012.5	45.1	1012.5	45.1	101.2
BENYON 286-56	267	33589	3.0	13.6856	0.6	1.7276	2.2	0.1715	2.1	0.96	1020.2	19.8	1018.8	14.1	1015.9	12.3	1015.9	12.3	100.4
BENYON 286-64	242	88974	3.0	13.6664	1.5	1.7658	3.0	0.1750	2.6	0.86	1039.7	24.9	1033.0	19.5	1018.7	30.7	1018.7	30.7	102.1
BENYON 286-50	199	106235	1.9	13.5614	1.0	1.8151	2.0	0.1785	1.7	0.87	1058.9	16.6	1050.9	12.8	1034.3	19.4	1034.3	19.4	102.4
BENYON 286-36	236	60225	2.1	13.5109	1.3	1.8139	2.1	0.1777	1.6	0.76	1054.7	15.2	1050.5	13.5	1041.8	27.3	1041.8	27.3	101.2
BENYON 286-75	400	54092	4.1	13.4897	0.6	1.8403	1.6	0.1801	1.5	0.93	1067.2	14.8	1060.0	10.7	1045.0	12.1	1045.0	12.1	102.1
BENYON 286-2	171	58395	3.4	13.4638	1.2	1.8311	1.6	0.1788	1.1	0.67	1060.5	10.8	1056.7	10.8	1048.9	24.5	1048.9	24.5	101.1
BENYON 286-27	98	41521	1.9	13.3868	2.8	1.8929	4.4	0.1838	3.5	0.78	1087.6	34.6	1078.6	29.5	1060.5	56.0	1060.5	56.0	102.6
BENYON 286-9	134	51726	2.2	13.3867	1.2	1.9184	2.0	0.1863	1.6	0.80	1101.0	16.3	1087.5	13.5	1060.5	24.6	1060.5	24.6	103.8
BENYON 286-79	301	43833	3.7	13.3723	0.7	1.8355	1.7	0.1780	1.5	0.91	1056.1	15.1	1058.2	11.2	1062.6	14.3	1062.6	14.3	99.4
BENYON 286-11	224	27529	0.9	13.3706	1.7	1.7160	3.8	0.1664	3.4	0.89	992.3	31.0	1014.5	24.3	1062.9	35.1	1062.9	35.1	93.4
BENYON 286-91	398	7224	2.8	13.2708	1.0	1.6139	4.7	0.1553	4.6	0.98	930.8	40.0	975.6	29.5	1077.9	19.1	1077.9	19.1	86.3
BENYON 286-49	294	60069	2.9	13.2211	0.8	1.9975	1.8	0.1915	1.6	0.90	1129.7	16.8	1114.7	12.1	1085.5	15.5	1085.5	15.5	104.1
BENYON 286-63	167	2553	0.9	13.2166	2.0	1.8772	3.6	0.1799	3.0	0.83	1066.6	29.5	1073.1	23.9	1086.1	40.0	1086.1	40.0	98.2
BENYON 286-59	129	24760	2.5	13.1389	1.2	1.9667	2.3	0.1874	1.9	0.86	1107.3	19.6	1104.2	15.2	1098.0	23.3	1098.0	23.3	100.9
BENYON 286-54	17	4252	1.3	13.1182	9.0	1.9144	10.2	0.1821	4.7	0.46	1078.6	47.0	1086.1	68.2	1101.1	181.3	1101.1	181.3	98.0
BENYON 286-84	224	68959	3.7	12.9904	1.2	2.0178	1.8	0.1901	1.3	0.74	1121.9	13.5	1121.5	12.0	1120.7	23.6	1120.7	23.6	100.1
BENYON 286-24	76	39440	2.1	12.8125	3.5	2.1621	4.0	0.2009	1.9	0.49	1180.2	21.0	1168.9	27.7	1148.1	69.1	1148.1	69.1	102.8
BENYON 286-81	98	24185	1.8	12.7842	2.0	2.2272	3.4	0.2065	2.7	0.80	1210.2	29.8	1189.6	23.6	1152.5	39.9	1152.5	39.9	105.0
BENYON 286-14	348	122645	2.6	12.7686	0.6	2.0843	0.9	0.1930	0.7	0.77	1137.7	7.2	1143.6	6.1	1154.9	11.3	1154.9	11.3	98.5
BENYON 286-57	258	23792	2.6	12.7542	1.5	2.2039	2.3	0.2039	1.7	0.76	1196.1	18.7	1182.3	15.8	1157.2	29.3	1157.2	29.3	103.4
BENYON 286-8	149	35734	3.4	12.7422	1.5	2.0980	2.6	0.1939	2.1	0.80	1142.4	21.7	1148.1	17.7	1159.0	30.4	1159.0	30.4	98.6
BENYON 286-5	135	61727	2.3	12.7284	1.7	2.2150	2.2	0.2045	1.4	0.61	1199.4	14.9	1185.8	15.5	1161.2	34.6	1161.2	34.6	103.3
BENYON 286-6	139	64092	1.4	12.4411	1.0	2.2735	1.7	0.2051	1.3	0.78	1202.9	14.0	1204.1	11.6	1206.3	20.5	1206.3	20.5	99.7
BENYON 286-78	304	58547	7.4	12.1522	0.7	2.2447	4.3	0.1978	4.2	0.99	1163.7	44.9	1195.1	30.0	1252.4	12.8	1252.4	12.8	92.9
BENYON 286-76	285	22030	1.8	11.8046	2.1	2.6759	3.7	0.2291	3.0	0.82	1329.8	36.2	1321.8	27.0	1308.9	40.2	1308.9	40.2	101.6
BENYON 286-13	146	64239	1.7	11.7484	1.1	2.6834	2.2	0.2286	1.9	0.87	1327.4	22.9	1323.9	16.1	1318.2	20.5	1318.2	20.5	100.7
BENYON 286-95	263	204090	3.2	11.6104	0.6	2.8141	1.2	0.2370	1.1	0.85	1370.9	13.0	1359.3	9.2	1341.1	12.4	1341.1	12.4	102.2
BENYON 286-35	120	34330	1.5	11.4169	1.2	2.7825	4.9	0.2304	4.7	0.97	1336.6	57.1	1350.9	36.5	1373.5	23.5	1373.5	23.5	97.3
BENYON 286-4	220	124598	1.5	11.3753	1.0	2.8595	1.9	0.2359	1.6	0.84	1365.4	20.1	1371.3	14.6	1380.5	20.1	1380.5	20.1	98.9
BENYON 286-77	67	25161	1.6	11.3707	1.6	2.9381	2.1	0.2423	1.4	0.67	1398.7	17.7	1391.8	16.0	1381.3	30.2	1381.3	30.2	101.3
BENYON 286-93	210	6518	3.7	11.0833	0.7	3.1374	3.3	0.2522	3.2	0.98	1449.8	41.7	1441.9	25.3	1430.3	13.9	1430.3	13.9	101.4
BENYON 286-88	174	65881	1.9	10.9416	1.2	3.1958	2.0	0.2536	1.6	0.79	1457.0	20.3	1456.1	15.2	1454.8	22.7	1454.8	22.7	100.2
BENYON 286-92	282	111805	1.4	10.8556	0.3	2.9961	1.9	0.2359	1.9	0.99	1365.3	22.9	1406.6	14.3	1469.8	5.2	1469.8	5.2	92.9
BENYON 286-72	123	21370	1.2	10.8335	1.2	3.4094	1.8	0.2679	1.3	0.73	1530.1	17.8	1506.6	14.1	1473.7	23.4	1473.7	23.4	103.8
BENYON 286-19	362	188503	2.4	10.7328	0.6	3.3526	1.7	0.2610	1.6	0.94	1494.8	21.4	1493.4	13.4	1491.4	10.9	1491.4	10.9	100.2
BENYON 286-15	84	53321	1.7	10.6502	1.3	3.3730	2.0	0.2605	1.5	0.75	1492.6	20.5	1498.2	16.0	1506.0	25.4	1506.0	25.4	99.1
BENYON 286-58	86	29351	1.0	10.4945	1.9	3.2803	3.2	0.2497	2.6	0.81	1436.8	33.3	1476.4	24.9	1533.7	35.5	1533.7	35.5	93.7
BENYON 286-1	39	15465	0.8	9.9902	3.4	4.1051	4.8	0.2974	3.4	0.70	1678.6	49.7	1655.3	39.3	1625.9	64.1	1625.9	64.1	103.2
BENYON 286-66	153	46992	2.7	9.0332	0.3	4.9352	1.1	0.3233	1.1	0.95	1806.0	16.6	1808.3	9.3	1811.0	6.2	1811.0	6.2	99.7
BENYON 286-67	185	63475	2.4	8.9933	0.5	5.2452	1.6	0.3421	1.5	0.95	1896.9	24.5	1860.0	13.3	1819.0	8.4	1819.0	8.4	104.3
BENYON 286-39	154	30946	29.0	8.9407	0.4	5.1231	1.1	0.3322	1.0	0.91	1849.0	15.9	1839.9	9.2	1829.6	7.9	1829.6	7.9	101.1
BENYON 286-90	70	50186	1.0	8.7321	1.0	5.6596	1.4	0.3584	1.1	0.74	1974.7	18.1	1925.2	12.3	1872.3	17.2	1872.3	17.2	105.5
BENYON 286-74	166	8501	1.1	6.2193	0.4	11.5416	2.9	0.5206	2.8	0.99	2701.7	62.5	2568.0	26.8	2464.0	7.1	2464.0	7.1	109.6
BENYON 286-45	390	37142	1.7	6.0301	0.5	10.0546	3.9	0.4397	3.9	0.99	2349.4	75.9	2439.8	35.9	2516.0	8.6	2516.0	8.6	93.4
BENYON 286-10	242	24485	2.2	5.9653	1.0	11.0816	2.9	0.4794	2.7	0.94	2524.8	56.1	2530.0	26.6	2534.2	16.6	2534.2	16.6	99.6
BENYON 286-37	142	32432	0.6	5.7207	0.6	12.4094	3.1	0.5149	3.0	0.98	2677.4	66.4	2635.9	29.1	2604.2	10.5	2604.2	10.5	102.8

4. Location: 1AB/06-34-084-07W4/0

Analysis	U	206Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±	error	206Pb*	±	207Pb*	±	206Pb*	±	Best age	±	Conc
	(ppm)	204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(Ma)	(%)
BENYON 269 42	207	2225	1.5	18.7596	8.8	0.1759	9.6	0.0239	3.8	0.39	152.4	5.7	164.5	14.6	341.8	199.9	152.4	5.7	NA
BENYON 269 57	127	10688	1.5	19.6456	16.0	0.2023	16.9	0.0288	5.4	0.32	183.2	9.8	187.1	28.9	236.4	371.0	183.2	9.8	NA
BENYON 269 31	247	11511	1.3	19.5029	3.7	0.2899	4.6	0.0410	2.7	0.59	259.1	6.9	258.5	10.5	253.2	86.0	259.1	6.9	NA
BENYON 269 82	183	28028	0.6	19.2098	5.5	0.3553	6.6	0.0495	3.7	0.56	311.5	11.2	308.7	17.7	287.9	126.4	311.5	11.2	NA
BENYON 269 59	595	4203	3.8	17.6985	4.3	0.4506	4.8	0.0578	2.0	0.43	362.5	7.1	377.7	15.0	472.1	95.2	362.5	7.1	NA
BENYON 269 89	266	22330	1.2	18.2094	3.0	0.4638	4.1	0.0612	2.7	0.67	383.2	10.1	386.9	13.1	408.8	67.9	383.2	10.1	NA
BENYON 269 95	302	29122	2.0	18.3882	2.3	0.4602	3.6	0.0614	2.8	0.77	384.0	10.3	384.4	11.5	386.9	51.9	384.0	10.3	NA
BENYON 269 24	563	83220	1.3	18.4673	1.5	0.4684	2.0	0.0627	1.4	0.69	392.2	5.4	390.1	6.6	377.3	33.2	392.2	5.4	NA
BENYON 269 67	709	76634	13.7	18.1056	1.0	0.4931	1.2	0.0648	0.8	0.62	404.5	3.0	407.0	4.1	421.6	21.6	404.5	3.0	95.9
BENYON 269 32	178	14456	1.9	17.8238	5.0	0.5139	5.6	0.0664	2.4	0.43	414.7	9.5	421.1	19.2	456.5	111.9	414.7	9.5	90.8
BENYON 269 71	396	49598	7.8	18.0769	2.3	0.5188	4.5	0.0680	3.9	0.86	424.2	16.0	424.3	15.8	425.1	52.0	424.2	16.0	99.8
BENYON 269 40	142	16308	2.9	18.0683	4.4	0.5221	5.0	0.0684	2.3	0.46	426.6	9.6	426.5	17.3	426.2	98.4	426.6	9.6	100.1
BENYON 269 80	321	12816	5.5	17.0893	6.6	0.5702	7.4	0.0707	3.3	0.45	440.2	14.1	458.1	27.2	549.2	143.9	440.2	14.1	80.2
BENYON 269 3	320	66146	8.1	18.1906	1.5	0.5484	1.9	0.0723	1.1	0.59	450.3	4.9	443.9	6.8	411.1	33.9	450.3	4.9	109.5
BENYON 269 38	341	56235	2.2	18.2426	2.0	0.5560	2.3	0.0736	1.2	0.49	457.6	5.1	448.9	8.5	404.7	45.7	457.6	5.1	113.1
BENYON 269 86	208	42387	0.5	17.7778	2.8	0.5768	3.3	0.0744	1.7	0.50	462.4	7.4	462.4	12.2	462.2	62.8	462.4	7.4	100.0
BENYON 269 88	135	16724	2.0	17.4527	5.0	0.6070	5.6	0.0768	2.4	0.44	477.2	11.3	481.6	21.3	503.0	109.8	477.2	11.3	94.9
BENYON 269 69	228	37215	1.5	16.9532	2.4	0.7238	2.6	0.0890	1.2	0.44	549.6	6.1	552.9	11.2	566.6	51.6	549.6	6.1	97.0
BENYON 269 53	209	46116	5.5	14.7102	2.7	0.9291	6.5	0.0991	5.9	0.91	609.3	34.2	667.1	31.7	867.9	56.5	609.3	34.2	70.2
BENYON 269 8	222	42895	1.8	15.0929	1.9	1.1727	2.4	0.1284	1.5	0.62	778.6	11.0	787.9	13.2	814.5	39.7	778.6	11.0	95.6
BENYON 269 1	87	75449	0.7	14.0153	2.7	1.6032	5.0	0.1630	4.3	0.85	973.2	38.4	971.4	31.4	967.4	54.2	967.4	54.2	100.6
BENYON 269 98	159	54103	2.2	13.9869	1.7	1.5809	2.4	0.1604	1.8	0.73	958.8	15.6	962.7	15.0	971.6	33.7	971.6	33.7	98.7
BENYON 269 35	23	8602	0.7	13.6552	7.7	1.7934	9.0	0.1776	4.6	0.51	1053.9	44.4	1043.1	58.4	1020.4	156.2	1020.4	156.2	103.3
BENYON 269 17	184	55592	2.6	13.6414	1.2	1.7539	1.7	0.1735	1.3	0.72	1031.5	12.0	1028.6	11.2	1022.4	24.3	1022.4	24.3	100.9
BENYON 269 37	173	78742	2.3	13.5565	1.0	1.7378	1.5	0.1709	1.1	0.73	1016.8	10.5	1022.6	9.9	1035.0	21.1	1035.0	21.1	98.2
BENYON 269 36	141	88796	2.9	13.5305	2.2	1.8049	2.9	0.1771	1.9	0.66	1051.2	18.6	1047.2	19.0	1038.9	44.2	1038.9	44.2	101.2
BENYON 269 4	462	374374	2.5	13.5093	0.4	1.7955	1.1	0.1759	1.0	0.91	1044.6	9.6	1043.8	7.1	1042.1	9.0	1042.1	9.0	100.2
BENYON 269 49	58	3352	1.6	13.5048	7.1	1.7344	8.1	0.1699	3.8	0.47	1011.4	35.3	1021.4	52.0	1042.8	144.0	1042.8	144.0	97.0
BENYON 269 99	194	36897	2.5	13.4923	1.2	1.8889	1.8	0.1848	1.4	0.76	1093.4	14.0	1077.2	12.2	1044.6	24.1	1044.6	24.1	104.7
BENYON 269 102	140	19934	1.7	13.4890	2.6	1.8104	2.8	0.1771	1.1	0.39	1051.2	10.8	1049.2	18.5	1045.2	52.6	1045.2	52.6	100.6
BENYON 269 75	587	253047	4.3	13.4363	0.5	1.9050	1.1	0.1856	1.0	0.87	1097.7	9.8	1082.8	7.4	1053.0	11.1	1053.0	11.1	104.2
BENYON 269 39	337	4518	2.1	13.3812	2.3	1.7554	2.5	0.1704	1.1	0.45	1014.1	10.6	1029.2	16.4	1061.3	45.7	1061.3	45.7	95.6
BENYON 269 106	80	24844	2.8	13.3558	3.2	1.8492	3.7	0.1791	1.8	0.50	1062.2	18.0	1063.2	24.3	1065.1	64.2	1065.1	64.2	99.7
BENYON 269 93	325	176853	2.8	13.3229	0.6	1.8939	1.0	0.1830	0.8	0.79	1083.4	7.8	1079.0	6.5	1070.1	11.9	1070.1	11.9	101.2
BENYON 269 65	182	76144	1.7	13.1899	1.0	1.9434	1.7	0.1859	1.4	0.81	1099.2	14.3	1096.2	11.6	1090.2	20.2	1090.2	20.2	100.8
BENYON 269 104	484	143086	2.3	13.0578	0.4	2.0782	1.9	0.1968	1.8	0.98	1158.2	19.6	1141.6	12.9	1110.3	7.5	1110.3	7.5	104.3
BENYON 269 64	140	58189	1.4	12.9327	2.0	2.0938	2.8	0.1964	2.1	0.72	1155.9	21.8	1146.8	19.5	1129.5	39.0	1129.5	39.0	102.3
BENYON 269 28	897	4587	9.6	12.9294	2.1	1.8278	2.7	0.1714	1.7	0.63	1019.8	16.4	1055.5	18.0	1130.1	42.3	1130.1	42.3	90.2
BENYON 269 29	174	133337	2.1	12.8261	0.9	2.1610	2.0	0.2010	1.8	0.90	1180.8	19.1	1168.6	13.7	1146.0	17.0	1146.0	17.0	103.0
BENYON 269 58	482	160220	2.3	12.8132	0.5	2.1550	0.8	0.2003	0.7	0.81	1176.7	7.4	1166.7	5.9	1148.0	9.8	1148.0	9.8	102.5
BENYON 269 22	256	77798	2.8	12.8053	0.9	2.1313	1.7	0.1979	1.5	0.86	1164.3	16.0	1159.0	12.1	1149.2	17.8	1149.2	17.8	101.3
BENYON 269 72	621	7494	2.4	12.7456	1.1	1.7073	3.2	0.1578	2.9	0.93	944.7	25.8	1011.3	20.2	1158.5	22.7	1158.5	22.7	81.5
BENYON 269 30	134	98431	6.2	12.7042	0.9	2.2176	2.6	0.2043	2.5	0.94	1198.5	26.9	1186.6	18.3	1164.9	17.5	1164.9	17.5	102.9
BENYON 269 92	301	143959	2.3	12.6381	0.7	2.2152	2.2	0.2030	2.1	0.95	1191.7	22.4	1185.9	15.2	1175.3	13.9	1175.3	13.9	101.4
BENYON 269 62	196	23504	3.4	12.6081	0.7	2.2325	1.7	0.2041	1.5	0.91	1197.5	16.8	1191.3	11.9	1180.0	14.2	1180.0	14.2	101.5
BENYON 269 107	216	55560	2.3	12.4032	5.0	2.1292	5.4	0.1915	2.2	0.41	1129.7	23.1	1158.3	37.6	1212.3	97.6	1212.3	97.6	93.2
BENYON 269 87	293	18725	3.2	12.3928	1.6	2.3582	2.8	0.2120	2.3	0.82	1239.3	26.2	1230.1	20.3	1214.0	32.1	1214.0	32.1	102.1
BENYON 269 55	49	36742	2.1	12.3801	5.9	2.3883	6.2	0.2144	2.0	0.31	1252.5	22.3	1239.1	44.7	1216.0	116.7	1216.0	116.7	103.0
BENYON 269 20	248	85994	2.1	12.3688	0.7	2.2472	1.6	0.2016	1.5	0.89	1183.9	15.8	1195.9	11.5	1217.7	14.5	1217.7	14.5	97.2
BENYON 269 61	247	366056	2.5	12.3173	0.9	2.4387	1.6	0.2179	1.4	0.84	1270.5	15.7	1254.1	11.7	1225.9	17.3	1225.9	17.3	103.6
BENYON 269 54	116	79495	2.5	12.1637	1.1	2.4780	3.1	0.2186	2.9	0.94	1274.5	33.6	1265.6	22.4	1250.6	20.7	1250.6	20.7	101.9
BENYON 269 90	138	21598	2.7	11.9247	2.3	2.5418	3.4	0.2198	2.6	0.75	1281.0	29.7	1284.1	24.9	1289.3	43.9	1289.3	43.9	99.4
BENYON 269 96	163	60745	1.8	11.8186	1.2	2.7043	1.4	0.2318	0.7	0.51	1344.0	8.8	1329.6	10.5	1306.6	23.5	1306.6	23.5	102.9
BENYON 269 12	292	74873	2.5	11.7159	0.5	2.6810	2.1	0.2278	2.1	0.97	1323.0	24.7	1323.2	15.7	1323.6	10.2	1323.6	10.2	100.0
BENYON 269 84	92	38523	1.4	11.5502	1.8	2.7482	2.4	0.2302	1.5	0.64	1335.6	18.4	1341.6	17.7	1351.1	35.4	1351.1	35.4	98.9
BENYON 269 85	242	12990	0.9	11.5182	0.9	2.8309	2.8	0.2365	2.7	0.95	1368.4	32.8	1363.8	21.0	1356.5	17.2	1356.5	17.2	100.9
BENYON 269 16	58	36908	2.2	11.4953	2.4	2.8488	2.6	0.2375	1.1	0.41	1373.7	13.3	1368.5	19.6	1360.3	45.7	1360.3	45.7	101.0
BENYON 269 63	232	141802	1.4	11.0790	0.5	3.1123	1.0	0.2501	0.9	0.87	1438.9	11.2	1435.7	7.7	1431.0	9.3	1431.0	9.3	100.6
BENYON 269 41	70	91194	1.8	10.9960	1.5	3.2433	1.7	0.2587	0.9	0.53	1483.0	12.0	1467.6	13.3	1445.4	27.8	1445.4	27.8	102.6
BENYON 269 91	150	53030	1.1	10.9572	0.6	3.2304	1.3	0.2567	1.1	0.88	1473.0	14.7	1464.5	9.9	1452.1	11.4	1452.1	11.4	101.4

BENYON 269 21	198	137822	2.2	10.7983	0.7	3.3306	1.8	0.2608	1.7	0.92	1494.1	22.6	1488.3	14.4	1479.9	13.7	1479.9	13.7	101.0
BENYON 269 9	149	8947	0.9	10.5463	2.0	3.3978	3.0	0.2599	2.2	0.75	1489.3	29.7	1503.9	23.5	1524.5	37.7	1524.5	37.7	97.7
BENYON 269 19	242	179328	2.9	10.5194	0.6	3.5199	1.4	0.2685	1.3	0.92	1533.4	17.8	1531.7	11.2	1529.3	10.4	1529.3	10.4	100.3
BENYON 269 11	289	249024	1.2	10.4260	0.6	3.6170	1.5	0.2735	1.4	0.93	1558.6	19.1	1553.3	11.8	1546.1	10.6	1546.1	10.6	100.8
BENYON 269 105	687	6743	0.8	10.1133	0.5	2.9132	2.8	0.2137	2.7	0.98	1248.4	31.0	1385.3	21.1	1603.1	10.2	1603.1	10.2	77.9
BENYON 269 33	131	72893	3.1	10.0284	0.6	4.1231	1.4	0.2999	1.2	0.90	1690.8	18.5	1658.9	11.3	1618.8	10.9	1618.8	10.9	104.4
BENYON 269 56	215	209592	1.3	9.2129	0.8	4.7072	1.7	0.3145	1.6	0.90	1763.0	24.3	1768.5	14.7	1775.1	13.8	1775.1	13.8	99.3
BENYON 269 101	44	19182	0.8	9.1553	1.2	4.9195	1.7	0.3267	1.3	0.73	1822.2	20.1	1805.6	14.7	1786.5	21.9	1786.5	21.9	102.0
BENYON 269 74	316	391674	1.9	9.0621	0.2	5.0301	1.4	0.3306	1.4	0.99	1841.3	22.9	1824.4	12.3	1805.2	4.4	1805.2	4.4	102.0
BENYON 269 78	188	110299	2.4	9.0304	0.5	5.0948	2.2	0.3337	2.2	0.98	1856.2	34.9	1835.2	18.8	1811.5	8.8	1811.5	8.8	102.5
BENYON 269 43	129	2394	0.3	8.9381	1.9	4.1243	4.0	0.2674	3.5	0.88	1527.4	47.6	1659.1	32.5	1830.2	34.0	1830.2	34.0	83.5
BENYON 269 100	66	45827	3.3	8.7043	1.0	5.4742	1.2	0.3456	0.8	0.63	1913.5	12.9	1896.6	10.7	1878.1	17.5	1878.1	17.5	101.9
BENYON 269 70	177	53100	2.6	8.6120	0.6	5.6614	1.4	0.3536	1.3	0.91	1951.8	21.8	1925.5	12.3	1897.3	10.7	1897.3	10.7	102.9
BENYON 269 25	176	154419	2.7	8.6081	0.4	5.5852	1.4	0.3487	1.4	0.95	1928.4	22.9	1913.8	12.4	1898.1	7.8	1898.1	7.8	101.6
BENYON 269 46	526	4662	1.6	8.3061	0.6	5.9769	1.6	0.3601	1.4	0.93	1982.5	24.5	1972.5	13.5	1962.0	10.5	1962.0	10.5	101.0
BENYON 269 60	185	6070	2.7	8.1219	0.6	5.9778	1.4	0.3521	1.3	0.92	1944.7	22.2	1972.6	12.5	2002.0	9.9	2002.0	9.9	97.1
BENYON 269 23	60	41286	1.0	7.6327	1.1	7.0635	1.6	0.3910	1.1	0.72	2127.6	20.3	2119.5	13.8	2111.6	18.9	2111.6	18.9	100.8
BENYON 269 77	209	143742	1.7	7.2308	0.2	8.0390	2.5	0.4216	2.4	1.00	2267.7	46.8	2235.4	22.2	2206.0	3.9	2206.0	3.9	102.8
BENYON 269 94	250	7404	1.5	6.4754	4.4	10.1814	9.1	0.4782	8.0	0.87	2519.2	165.9	2451.4	84.4	2395.6	75.5	2395.6	75.5	105.2
BENYON 269 5	710	235085	8.1	6.0667	1.2	11.1013	1.6	0.4885	1.0	0.62	2564.0	20.6	2531.7	14.6	2505.8	20.7	2505.8	20.7	102.3
BENYON 269 6	122	175932	2.3	5.8832	0.5	11.5802	2.0	0.4941	1.9	0.97	2588.5	41.1	2571.1	18.6	2557.4	8.5	2557.4	8.5	101.2
BENYON 269 48	161	123247	1.9	5.8620	0.2	11.7089	1.5	0.4978	1.5	0.99	2604.4	32.0	2581.4	14.1	2563.4	2.8	2563.4	2.8	101.6
BENYON 269 50	55	61914	1.2	5.8299	0.7	11.7491	1.5	0.4968	1.3	0.88	2600.0	27.5	2584.6	13.6	2572.6	11.4	2572.6	11.4	101.1
BENYON 269 2	80	59682	0.6	5.7790	1.0	11.5370	1.4	0.4835	1.0	0.71	2542.7	21.3	2567.6	13.4	2587.3	16.9	2587.3	16.9	98.3
BENYON 269 7	56	98158	0.7	5.4873	0.6	13.7317	2.9	0.5465	2.8	0.98	2810.6	64.0	2731.4	27.2	2673.3	10.2	2673.3	10.2	105.1
BENYON 269 97	125	146526	2.5	5.4183	0.2	13.4810	1.8	0.5298	1.8	0.99	2740.5	39.7	2714.0	16.9	2694.3	3.6	2694.3	3.6	101.7
BENYON 269 76	120	48760	1.7	5.4140	0.4	11.5872	16.6	0.4550	16.6	1.00	2417.4	335.2	2571.6	156.6	2695.6	6.0	2695.6	6.0	89.7
BENYON 269 10	43	15127	1.1	5.4120	1.5	13.2912	2.1	0.5217	1.4	0.69	2706.4	32.0	2700.6	19.7	2696.2	24.9	2696.2	24.9	100.4
BENYON 269 13	71	57181	1.2	5.3237	0.5	13.5805	1.4	0.5244	1.3	0.93	2717.6	28.1	2720.9	12.9	2723.3	8.2	2723.3	8.2	99.8
BENYON 269 26	58	55003	1.7	5.3150	0.5	13.9220	1.0	0.5367	0.8	0.84	2769.5	18.5	2744.4	9.2	2726.0	8.6	2726.0	8.6	101.6
BENYON 269 27	213	498705	1.1	5.2812	0.3	13.4577	1.2	0.5155	1.2	0.98	2679.9	25.7	2712.3	11.4	2736.5	4.3	2736.5	4.3	97.9

5. Location: 1AA/06-18-085-06W4/0

Analysis	U	206Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±	error	206Pb*	±	207Pb*	±	206Pb*	±	Best age	±	Conc
	(ppm)	204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(Ma)	(%)
BENYON 250-30	498	21745	1.2	21.6160	5.9	0.1264	6.3	0.0198	2.0	0.32	126.5	2.5	120.8	7.1	11.3	143.0	126.5	2.5	NA
BENYON 250-60	686	30087	1.8	20.2329	2.7	0.1665	3.2	0.0244	1.7	0.54	155.6	2.7	156.4	4.7	168.0	63.6	155.6	2.7	NA
BENYON 250-35	256	2191	1.0	20.3174	12.4	0.1672	13.1	0.0246	4.2	0.32	156.9	6.5	157.0	19.0	158.3	290.8	156.9	6.5	NA
BENYON 250-105	611	32417	4.4	19.9420	5.4	0.1819	5.8	0.0263	2.1	0.37	167.4	3.5	169.7	9.0	201.8	124.5	167.4	3.5	NA
BENYON 250-42	65	11013	0.6	20.7374	11.2	0.3199	11.6	0.0481	3.0	0.26	302.9	8.8	281.8	28.5	110.2	264.4	302.9	8.8	NA
BENYON 250-90	169	21363	0.9	19.2316	4.8	0.3782	5.0	0.0527	1.4	0.28	331.4	4.6	325.7	14.1	285.3	110.7	331.4	4.6	NA
BENYON 250-94	140	26560	0.8	18.3396	5.1	0.3970	5.7	0.0528	2.4	0.42	331.8	7.8	339.5	16.4	392.9	115.4	331.8	7.8	NA
BENYON 250-58	256	33879	5.2	18.2354	4.1	0.4504	6.0	0.0596	4.3	0.73	373.0	15.7	377.6	18.8	405.6	91.7	373.0	15.7	NA
BENYON 250-57	199	37566	1.3	18.6559	3.9	0.4492	5.3	0.0608	3.6	0.68	380.3	13.4	376.7	16.7	354.4	87.4	380.3	13.4	NA
BENYON 250-12	155	27270	0.6	19.2367	7.1	0.4470	7.2	0.0624	1.3	0.18	390.0	4.9	375.2	22.7	284.7	162.6	390.0	4.9	NA
BENYON 250-79	212	18881	3.2	18.6693	3.7	0.4680	4.3	0.0634	2.3	0.52	396.1	8.8	389.8	14.1	352.8	83.7	396.1	8.8	NA
BENYON 250-86	347	42825	4.2	18.5473	1.3	0.4787	3.2	0.0644	2.9	0.91	402.3	11.2	397.2	10.4	367.5	29.8	402.3	11.2	109.5
BENYON 250-54	427	115663	1.1	18.1730	1.7	0.5015	2.5	0.0661	1.8	0.73	412.6	7.2	412.7	8.4	413.3	37.9	412.6	7.2	99.8
BENYON 250-88	249	19990	2.5	18.0587	2.5	0.5050	2.9	0.0661	1.4	0.48	412.8	5.5	415.1	9.8	427.4	56.5	412.8	5.5	96.6
BENYON 250-41	212	36065	4.2	18.2972	2.4	0.5022	3.1	0.0666	2.0	0.65	415.9	8.2	413.2	10.6	398.0	53.2	415.9	8.2	104.5
BENYON 250-21	164	17759	4.3	18.6396	4.3	0.4936	4.5	0.0667	1.4	0.30	416.4	5.5	407.3	15.3	356.3	97.9	416.4	5.5	116.8
BENYON 250-23	239	29361	6.9	18.4370	3.6	0.5046	4.2	0.0675	2.1	0.51	420.9	8.7	414.8	14.2	381.0	80.1	420.9	8.7	110.5
BENYON 250-92	185	32347	1.2	18.4590	2.9	0.5043	3.9	0.0675	2.7	0.69	421.2	11.1	414.6	13.4	378.3	64.4	421.2	11.1	111.3
BENYON 250-22	64	8118	0.9	18.9550	12.4	0.4952	12.5	0.0681	2.1	0.17	424.6	8.7	408.5	42.2	318.3	282.0	424.6	8.7	133.4
BENYON 250-18	325	32688	7.2	18.0932	2.0	0.5208	2.4	0.0683	1.3	0.55	426.1	5.5	425.7	8.4	423.1	45.4	426.1	5.5	100.7
BENYON 250-13	573	48818	1.4	17.7388	1.1	0.5321	3.9	0.0685	3.7	0.96	426.9	15.5	433.2	13.8	467.1	24.8	426.9	15.5	91.4
BENYON 250-52	157	26334	0.6	17.3491	2.7	0.5674	3.3	0.0714	1.8	0.56	444.6	7.9	456.4	12.1	516.1	59.9	444.6	7.9	86.1
BENYON 250-83	119	36025	1.7	17.1957	4.5	0.6935	5.9	0.0865	3.7	0.64	534.7	19.1	534.9	24.4	535.6	99.0	534.7	19.1	99.8
BENYON 250-73	140	19443	2.6	16.6753	3.5	0.7159	4.8	0.0866	3.3	0.69	535.3	17.0	548.2	20.4	602.4	75.5	535.3	17.0	88.9
BENYON 250-70	176	53888	4.4	16.1284	2.7	0.8621	4.0	0.1008	3.0	0.74	619.4	17.8	631.3	19.0	674.2	57.8	619.4	17.8	91.9
BENYON 250-19	217	62584	1.3	15.1020	1.5	1.1794	1.7	0.1292	0.9	0.51	783.2	6.5	791.0	9.5	813.2	31.3	783.2	6.5	96.3
BENYON 250-72	148	63780	2.8	13.9532	0.9	1.6732	2.5	0.1693	2.3	0.93	1008.4	21.8	998.4	16.0	976.5	19.0	976.5	19.0	103.3
BENYON 250-80	602	268894	3.3	13.8383	0.3	1.6955	0.9	0.1702	0.9	0.94	1013.0	8.3	1006.8	6.0	993.4	6.4	993.4	6.4	102.0
BENYON 250-1	132	103147	2.3	13.8277	1.9	1.7099	2.1	0.1715	0.9	0.42	1020.3	8.3	1012.2	13.3	994.9	38.4	994.9	38.4	102.5
BENYON 250-101	354	38632	7.2	13.7685	1.5	1.3548	7.2	0.1353	7.0	0.98	817.9	53.9	869.6	42.0	1003.6	30.9	1003.6	30.9	81.5
BENYON 250-33	73	27730	1.9	13.7422	3.9	1.6608	4.3	0.1655	1.8	0.43	987.4	16.9	993.7	27.4	1007.5	79.2	1007.5	79.2	98.0
BENYON 250-103	82	39673	4.5	13.7277	2.2	1.7004	2.5	0.1693	1.2	0.48	1008.3	11.5	1008.7	16.3	1009.6	45.2	1009.6	45.2	99.9
BENYON 250-14	1111	624094	7.9	13.7257	0.2	1.6418	0.7	0.1634	0.7	0.95	975.9	6.1	986.4	4.5	1009.9	4.5	1009.9	4.5	96.6
BENYON 250-95	337	83844	3.4	13.7222	0.7	1.6940	0.9	0.1686	0.6	0.67	1004.3	5.9	1006.3	6.0	1010.4	14.1	1010.4	14.1	99.4
BENYON 250-65	69	27644	1.4	13.6226	2.9	1.7889	3.1	0.1767	1.2	0.39	1049.2	11.9	1041.4	20.4	1025.2	58.3	1025.2	58.3	102.3
BENYON 250-39	42	23504	2.8	13.5869	7.5	1.7455	7.8	0.1720	2.4	0.30	1023.1	22.5	1025.5	50.7	1030.5	151.2	1030.5	151.2	99.3
BENYON 250-59	531	273447	5.3	13.5653	0.4	1.7551	1.2	0.1727	1.1	0.95	1026.9	10.7	1029.1	7.7	1033.7	7.7	1033.7	7.7	99.3
BENYON 250-99	101	43523	0.5	13.5594	2.2	1.8259	2.8	0.1796	1.8	0.62	1064.6	17.3	1054.8	18.7	1034.6	45.0	1034.6	45.0	102.9
BENYON 250-20	403	150764	21.5	13.5333	0.8	1.7814	2.3	0.1748	2.2	0.93	1038.8	20.8	1038.7	15.1	1038.5	16.9	1038.5	16.9	100.0
BENYON 250-55	262	122394	2.4	13.5254	0.9	1.8122	1.4	0.1778	1.1	0.79	1054.8	10.7	1049.9	9.1	1039.7	17.3	1039.7	17.3	101.5
BENYON 250-66	260	55633	2.4	13.4900	1.3	1.8315	1.7	0.1792	1.1	0.64	1062.5	10.7	1056.8	11.1	1045.0	26.1	1045.0	26.1	101.7
BENYON 250-11	116	37246	0.9	13.4811	2.3	1.8730	3.1	0.1831	2.1	0.66	1084.1	20.6	1071.6	20.6	1046.3	47.0	1046.3	47.0	103.6
BENYON 250-27	800	117673	47.7	13.4786	0.3	1.8380	1.0	0.1797	0.9	0.96	1065.2	9.2	1059.1	6.4	1046.7	5.5	1046.7	5.5	101.8
BENYON 250-15	65	29683	4.0	13.4730	2.1	1.8592	2.7	0.1817	1.7	0.62	1076.1	16.5	1066.7	17.6	1047.5	42.1	1047.5	42.1	102.7
BENYON 250-25	144	21182	1.1	13.4601	3.6	1.7985	3.7	0.1756	1.1	0.29	1042.7	10.6	1044.9	24.5	1049.5	72.2	1049.5	72.2	99.4
BENYON 250-78	327	240254	2.5	13.4384	0.6	1.8677	0.9	0.1820	0.6	0.71	1078.1	6.4	1069.7	6.0	1052.7	12.8	1052.7	12.8	102.4
BENYON 250-76	403	132992	4.8	13.4065	0.4	1.8530	1.0	0.1802	0.9	0.92	1067.9	9.2	1064.5	6.7	1057.5	8.0	1057.5	8.0	101.0
BENYON 250-71	405	152751	5.6	13.3827	0.4	1.8877	2.4	0.1832	2.4	0.98	1084.5	24.0	1076.8	16.2	1061.1	8.8	1061.1	8.8	102.2
BENYON 250-98	231	86289	0.8	13.3355	0.8	1.9103	1.0	0.1848	0.6	0.62	1092.9	6.3	1084.7	6.8	1068.2	16.3	1068.2	16.3	102.3
BENYON 250-84	467	539152	5.9	13.3313	0.7	1.8826	2.0	0.1820	1.8	0.93	1078.0	18.1	1075.0	13.0	1068.8	14.8	1068.8	14.8	100.9
BENYON 250-5	66	21963	1.8	13.3230	2.3	1.9036	2.6	0.1839	1.2	0.45	1088.5	11.6	1082.4	17.3	1070.1	46.6	1070.1	46.6	101.7
BENYON 250-8	336	141982	1.8	13.2296	0.4	1.9739	3.0	0.1894	3.0	0.99	1118.1	30.9	1106.6	20.5	1084.2	8.5	1084.2	8.5	103.1
BENYON 250-7	279	55504	1.4	13.1987	1.4	1.3666	4.9	0.1308	4.6	0.96	792.6	34.6	874.7	28.5	1088.9	28.7	1088.9	28.7	72.8
BENYON 250-82	405	223009	2.6	12.8557	0.6	2.0879	1.2	0.1947	1.1	0.87	1146.7	11.0	1144.8	8.3	1141.4	11.6	1141.4	11.6	100.5
BENYON 250-100	138	93805	2.4	12.8396	0.9	2.1755	3.3	0.2026	3.2	0.96	1189.2	34.2	1173.2	22.9	1143.9	18.6	1143.9	18.6	104.0
BENYON 250-17	288	105847	2.3	12.7851	0.6	2.1450	1.7	0.1989	1.6	0.94	1169.4	16.9	1163.4	11.7	1152.4	11.5	1152.4	11.5	101.5
BENYON 250-49	85	18084	1.9	12.7763	2.0	2.0385	3.9	0.1889	3.3	0.85	1115.4	33.4	1128.5	26.2	1153.7	40.6	1153.7	40.6	96.7
BENYON 250-77	105	31995	2.7	12.7397	1.0	2.1035	3.2	0.1944	3.1	0.95	1144.9	32.3	1149.9	22.3	1159.4	19.6	1159.4	19.6	98.8
BENYON 250-93	130	76679	1.7	12.7187	1.4	2.1366	2.2	0.1971	1.7	0.78	1159.7	17.8	1160.7	14.9	1162.7	26.9	1162.7	26.9	99.7
BENYON 250-47	421	115662	1.8	12.7183	0.3	2.2076	1.4	0.2036	1.4	0.98	1194.8	14.7	1183.5	9.7	1162.7	5.7	1162.7	5.7	102.8
BENYON 250-96	303	87057	3.9	12.7178	0.9	2.2362	1.3	0.2063	0.8	0.67	1208.9	9.2	1192.5	8.8	1162.8	18.6	1162.8	18.6	104.0
BENYON 250-28	54	31698	3.0	12.7123	3.8	2.2582	4.3	0.2082	2.0	0.47	1219.2	22.4	1199.3	30.0	1163.7	74.4	1163.7	74.4	104.8
BENYON 250-63	125	63172	2.9	12.6784	1.3	2.1637	5.1	0.1990	4.9	0.96	1169.7	52.5	1169.5	35.3	1169.0	26.7	1169.0	26.7	100.1
BENYON 250-38	81	28165	1.8	12.6774	1.9	2.1964	3.4	0.2019	2.8	0.83	1185.8	30.7	1179.9	23.9	1169.1	38.2	1169.1	38.2	101.4
BENYON 250-36	156	96378	2.2	12.6561	1.4	2.2282	1.6	0.2045	0.9	0.57	1199.6	10.2	1189.9	11.5	1172.5	26.9	1172.5	26.9	102.3
BENYON 250-62	158	63901	3.2	12.5374	0.5	2.2829	1.8	0.2076	1.8	0.97	1215.9	19.6	1207.0	12.9	1191.1	9.2	1191.1	9.2	102.1
BENYON 250-85	182	70117	2.0	12.4914	1.2	2.2734	2.1	0.2060	1.7	0.82	1207.3	18.7	1204.1	14.7	1198.3	23.5	1198.3	23.5	100.7
BENYON 250-50	135	37719	3.8	12.1518	1.4	2.5341	2.0	0.2233	1.4	0.69	1299.5	16.0	1281.9	14.3	1252.5	27.7	1252.5	27.7	103.8
BENYON 250-9	440	178473	1.3	12.1485	0.4	2.4713	1.0	0.2177	0.9	0.90	1269.9	10.7	1263.7	7.4	1253.0	8.6	1253.0	8.6	101.4
BENYON 250-45	170	84597	2.5	12.0089	1.1	2.5532	1.5	0.2224	1.0	0.65	1294.4	11.2	1287.4	10.7	1275.6	21.7	1275.6	21.7	101.5
BENYON 250-48	75	29712	0.9	12.0033	1.4	2.6025	1.8	0.2266	1.1	0.62	1316.5	13.4	1301.4	13.4	1276.5	27.9	1276.5	27.9	103.1
BENYON 250-4	118	41753	2.5	11.9501	1.4	2.5783	2.3	0.2235	1.8	0.80	1300.1	21.7	1294.5	16.9	1285.1	26.8	1285.1	26.8	101.2
BENYON 250-69	37	20327	2.2	11.7118	5.3	2.8069	5.9	0.2384	2.5	0.42	1378.5	30.9	1357.4	44.1	1324.3	103.3	1324.3	103.3	104.1
BENYON 250-75	122	172704	2.2	11.1165	0.8	3.1714	1.7	0.2557	1.5	0.87	1467.8	19.2	1450.2	13.0	1424.6	15.8	1424.6	15.8	103.0
BENYON 250-46	93	77923	2.3	11.0639	1.2	3.0468	3.2	0.2445	2.9	0.92	1410.0	37.2	1419.4	24.3	1433.6	23.4	1433.6	23.4	98.4
BENYON 250-26	143	81356	2.7	10.9527	0.8	3.2243	1.0	0.2561	0.6	0.62	1470.0	8.0	1463.0	7.6	1452.9	14.7	1452.9	14.7	101.2
BENYON 250-6	210	130796	1.0	10.8273	0.8	3.2260	1.6	0.2533	1.4	0.88	1455.6	18.8	1463.4	12.7	1474.8	14.7	1474.8	14.7	98.7
BENYON 250-64	67	41390	2.2	10.7763	2.2	3.3260	2.5	0.2599	1.2	0.49	1489.6	16.3	1487.2	19.7	1483.7	41.7	1483.7	41.7	100.4
BENYON 250-97	479	44160	3.1	10.7528	0.4	3.4254	1.0	0.2671	0.9	0.90	1526.2	11.7	1510.2	7.5	1487.8	8.0	1487.8	8.0	102.6
BENYON 250-2	157	93826	1.8	10.6673	0.7	3.4562	1.1	0.2674	0.9	0.81	1527.5	12.4	1517.3	8.9	1502.9	12.6	1502.9	12.6	101.6

BENYON 250-91	168	297517	2.3	9.6200	0.5	4.4877	2.8	0.3131	2.7	0.98	1756.0	42.0	1728.7	23.1	1695.8	9.0	1695.8	9.0	103.6
BENYON 250-104	104	35128	2.5	9.5267	0.9	4.1057	3.0	0.2837	2.9	0.95	1609.9	40.7	1655.4	24.5	1713.7	17.0	1713.7	17.0	93.9
BENYON 250-43	68	62692	1.7	9.3028	1.5	4.6915	2.8	0.3165	2.4	0.84	1772.8	36.7	1765.7	23.7	1757.3	28.2	1757.3	28.2	100.9
BENYON 250-51	234	102777	0.8	8.9468	0.5	5.0808	2.2	0.3297	2.2	0.98	1836.9	34.9	1832.9	19.0	1828.4	8.7	1828.4	8.7	100.5
BENYON 250-10	288	2798	5.3	8.8981	1.3	4.6541	2.1	0.3003	1.7	0.78	1693.0	24.7	1759.0	17.9	1838.3	24.4	1838.3	24.4	92.1
BENYON 250-81	155	18109	0.9	8.7903	0.7	5.3489	7.2	0.3410	7.1	1.00	1891.5	117.0	1876.7	61.4	1860.3	12.3	1860.3	12.3	101.7
BENYON 250-44	242	9329	1.9	8.5017	0.8	5.0500	3.5	0.3114	3.4	0.97	1747.5	51.7	1827.7	29.4	1920.4	14.3	1920.4	14.3	91.0
BENYON 250-31	96	73213	0.4	5.3894	0.3	13.4534	0.9	0.5259	0.9	0.95	2724.0	19.4	2712.0	8.6	2703.1	4.5	2703.1	4.5	100.8
BENYON 250-67	64	65721	1.3	5.3473	0.3	13.7940	3.3	0.5350	3.3	1.00	2762.3	73.3	2735.7	31.0	2716.0	4.6	2716.0	4.6	101.7
BENYON 250-37	59	47296	2.8	5.2362	0.4	14.1731	1.4	0.5382	1.4	0.96	2776.1	31.1	2761.4	13.6	2750.6	6.8	2750.6	6.8	100.9
BENYON 250-16	261	442981	3.3	4.7889	0.6	16.5979	1.8	0.5765	1.7	0.94	2934.4	39.5	2911.9	17.1	2896.4	9.9	2896.4	9.9	101.3
BENYON 250-29	106	97673	1.0	4.5624	0.2	17.1812	5.4	0.5685	5.4	1.00	2901.8	126.9	2945.0	52.2	2974.7	3.6	2974.7	3.6	97.5
BENYON 250-102	101	97394	1.6	3.9578	0.3	22.2950	1.8	0.6400	1.8	0.98	3188.9	44.2	3196.7	17.3	3201.6	5.0	3201.6	5.0	99.6

6. Location: 1AA/06-18-085-06W4/0

Analysis	U	206Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±	error	206Pb*	±	207Pb*	±	206Pb*	±	Best age	±	Conc
	(ppm)	204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(Ma)	(%)
BENYON 190 27	437	33255	1.3	19.6308	3.2	0.2747	4.4	0.0391	3.0	0.68	247.3	7.3	246.4	9.7	238.1	74.7	247.3	7.3	NA
BENYON 190 29	55	4277	1.1	19.8653	23.1	0.3642	23.3	0.0525	3.1	0.13	329.7	9.9	315.4	63.2	210.7	540.9	329.7	9.9	NA
BENYON 190 55	55	9330	1.8	21.4192	25.6	0.3657	26.0	0.0568	4.2	0.16	356.2	14.5	316.4	70.7	33.2	622.7	356.2	14.5	NA
BENYON 190 67	434	30172	12.7	18.5812	2.9	0.4273	3.0	0.0576	1.0	0.32	360.9	3.4	361.3	9.2	363.4	64.7	360.9	3.4	NA
BENYON 190 5	103	15916	1.0	19.5255	13.7	0.4117	13.8	0.0583	1.9	0.14	365.3	6.8	350.1	40.8	250.5	315.4	365.3	6.8	NA
BENYON 190 35	194	34815	1.3	17.6757	5.3	0.5241	5.6	0.0672	1.8	0.32	419.2	7.1	427.9	19.4	475.0	116.7	419.2	7.1	88.2
BENYON 190 96	164	37077	1.0	17.9804	2.9	0.5306	3.2	0.0692	1.4	0.45	431.3	6.0	432.2	11.3	437.1	63.9	431.3	6.0	98.7
BENYON 190 99	214	12988	3.8	16.9702	6.9	0.5671	7.4	0.0698	2.6	0.35	434.9	10.9	456.1	27.1	564.4	150.4	434.9	10.9	77.1
BENYON 190 28	172	31347	2.0	17.6838	3.5	0.5639	3.7	0.0723	1.2	0.33	450.2	5.3	454.1	13.5	474.0	76.9	450.2	5.3	95.0
BENYON 190 8	424	84348	1.5	17.7900	0.8	0.5669	1.4	0.0731	1.1	0.80	455.1	4.9	456.0	5.1	460.7	18.6	455.1	4.9	98.8
BENYON 190 58	294	48476	1.0	18.5437	4.0	0.5477	4.1	0.0737	0.7	0.17	458.2	3.1	443.5	14.7	368.0	90.5	458.2	3.1	124.5
BENYON 190 97	178	33384	1.8	17.4897	4.3	0.6029	4.7	0.0765	1.7	0.37	475.1	7.8	479.1	17.8	498.3	95.5	475.1	7.8	95.3
BENYON 190 98	290	29572	4.0	15.1794	4.6	0.7133	6.4	0.0785	4.5	0.70	487.3	21.0	546.7	27.1	802.5	96.2	487.3	21.0	60.7
BENYON 190 102	254	90901	1.8	16.8367	2.6	0.7399	2.8	0.0903	1.2	0.41	557.6	6.2	562.3	12.1	581.5	55.6	557.6	6.2	95.9
BENYON 190 37	51	13611	2.6	14.2845	4.1	1.5676	4.9	0.1624	2.8	0.56	970.1	25.0	957.5	30.6	928.5	83.9	928.5	83.9	104.5
BENYON 190 85	118	42559	2.2	13.8540	1.1	1.6560	1.5	0.1664	1.0	0.65	992.2	8.8	991.8	9.4	991.1	23.0	991.1	23.0	100.1
BENYON 190 77	171	37017	3.2	13.8268	1.4	1.4824	2.2	0.1487	1.7	0.78	893.4	14.5	923.2	13.5	995.1	28.1	995.1	28.1	89.8
BENYON 190 70	72	12405	3.2	13.8001	3.5	1.6192	3.8	0.1621	1.4	0.38	968.2	12.8	977.7	23.8	999.0	71.4	999.0	71.4	96.9
BENYON 190 47	246	77645	3.7	13.7692	1.4	1.6559	1.9	0.1654	1.3	0.67	986.5	11.8	991.8	12.2	1003.5	29.1	1003.5	29.1	98.3
BENYON 190 23	365	177908	4.5	13.7690	0.5	1.6881	1.9	0.1686	1.8	0.96	1004.3	17.1	1004.0	12.1	1003.5	10.2	1003.5	10.2	100.1
BENYON 190 12	561	283813	7.3	13.7414	0.5	1.7361	1.3	0.1730	1.2	0.93	1028.8	11.7	1022.0	8.5	1007.6	9.9	1007.6	9.9	102.1
BENYON 190 87	195	145676	3.1	13.6991	0.9	1.7631	1.6	0.1752	1.4	0.85	1040.6	13.4	1032.0	10.7	1013.9	17.6	1013.9	17.6	102.6
BENYON 190 57	137	60494	4.8	13.6973	1.2	1.7062	2.0	0.1695	1.6	0.80	1009.3	14.8	1010.8	12.8	1014.1	24.4	1014.1	24.4	99.5
BENYON 190 69	200	138826	3.1	13.6795	0.7	1.7241	1.2	0.1710	0.9	0.79	1017.9	8.6	1017.5	7.5	1016.8	14.6	1016.8	14.6	100.1
BENYON 190 50	387	107576	2.6	13.6691	0.7	1.7185	1.4	0.1704	1.2	0.85	1014.1	11.0	1015.5	8.8	1018.3	14.6	1018.3	14.6	99.6
BENYON 190 105	177	16731	3.0	13.6566	2.2	1.6664	2.8	0.1651	1.7	0.62	984.8	15.7	995.8	17.8	1020.2	44.6	1020.2	44.6	96.5
BENYON 190 2	315	278732	168.6	13.6292	0.9	1.7229	2.4	0.1703	2.3	0.93	1013.8	21.2	1017.1	15.6	1024.2	18.0	1024.2	18.0	99.0
BENYON 190 21	343	185742	3.6	13.6199	1.0	1.8070	1.9	0.1785	1.6	0.85	1058.8	16.1	1048.0	12.7	1025.6	20.6	1025.6	20.6	103.2
BENYON 190 3	137	50054	2.5	13.6096	2.6	1.7896	2.8	0.1766	1.1	0.40	1048.6	10.8	1041.7	18.3	1027.1	52.2	1027.1	52.2	102.1
BENYON 190 25	138	56296	2.7	13.5900	2.0	1.7854	2.3	0.1760	1.1	0.49	1045.0	10.7	1040.2	14.7	1030.0	39.7	1030.0	39.7	101.4
BENYON 190 68	199	76146	3.3	13.5720	1.0	1.7728	1.3	0.1745	0.9	0.65	1036.9	8.2	1035.5	8.6	1032.7	20.4	1032.7	20.4	100.4
BENYON 190 92	318	90752	2.9	13.5339	1.0	1.7917	1.4	0.1759	1.0	0.69	1044.4	9.4	1042.4	9.3	1038.4	20.9	1038.4	20.9	100.6
BENYON 190 18	218	78443	2.3	13.5020	1.2	1.8919	2.3	0.1853	2.0	0.86	1095.7	20.4	1078.3	15.6	1043.2	23.8	1043.2	23.8	105.0
BENYON 190 80	102	46987	2.7	13.5012	2.4	1.8216	2.7	0.1784	1.2	0.43	1058.1	11.2	1053.3	17.5	1043.3	48.6	1043.3	48.6	101.4
BENYON 190 30	176	59828	1.7	13.4940	1.2	1.8043	2.8	0.1766	2.5	0.89	1048.3	24.1	1047.0	18.2	1044.4	25.2	1044.4	25.2	100.4
BENYON 190 15	552	58431	3.0	13.4483	0.4	1.7909	1.3	0.1747	1.2	0.95	1037.8	11.5	1042.2	8.2	1051.2	7.7	1051.2	7.7	98.7
BENYON 190 82	84	21240	1.9	13.4396	3.3	1.7143	7.0	0.1671	6.2	0.88	996.1	56.8	1013.9	44.7	1052.5	66.0	1052.5	66.0	94.6
BENYON 190 66	1128	20811	7.0	13.4017	0.6	1.7567	1.1	0.1707	0.9	0.82	1016.2	8.4	1029.6	7.1	1058.2	12.7	1058.2	12.7	96.0
BENYON 190 56	85	35150	1.4	13.3441	2.8	1.8800	3.5	0.1819	2.1	0.59	1077.6	20.7	1074.0	23.4	1066.9	57.3	1066.9	57.3	101.0
BENYON 190 33	165	96054	1.7	13.3210	1.4	1.9280	3.1	0.1863	2.7	0.88	1101.1	27.5	1090.8	20.6	1070.4	29.1	1070.4	29.1	102.9
BENYON 190 103	928	11697	2.3	13.0791	0.9	1.8291	5.0	0.1735	5.0	0.98	1031.4	47.3	1056.0	33.1	1107.1	17.8	1107.1	17.8	93.2
BENYON 190 16	79	5668	1.0	12.9958	2.8	1.9655	3.1	0.1853	1.5	0.47	1095.7	14.8	1103.8	21.2	1119.9	55.6	1119.9	55.6	97.8
BENYON 190 62	609	223709	4.9	12.9863	0.6	1.9619	1.5	0.1848	1.4	0.93	1093.0	13.8	1102.5	9.9	1121.3	11.0	1121.3	11.0	97.5
BENYON 190 75	90	58109	3.6	12.9406	2.6	1.9993	3.3	0.1876	2.0	0.60	1108.6	20.0	1115.3	22.1	1128.3	52.1	1128.3	52.1	98.2
BENYON 190 36	81	20776	3.5	12.8684	1.6	2.0705	2.7	0.1932	2.2	0.80	1138.9	22.6	1139.1	18.4	1139.5	31.9	1139.5	31.9	100.0
BENYON 190 19	157	44409	2.0	12.8540	3.1	2.0829	5.5	0.1942	4.6	0.83	1144.0	48.0	1143.2	37.8	1141.7	61.2	1141.7	61.2	100.2
BENYON 190 86	886	12836	2.6	12.8287	0.4	2.0379	1.2	0.1896	1.1	0.93	1119.3	11.2	1128.3	8.0	1145.6	8.6	1145.6	8.6	97.7
BENYON 190 59	308	110579	2.0	12.8031	0.6	2.0707	2.3	0.1923	2.2	0.96	1133.7	22.9	1139.2	15.7	1149.6	12.2	1149.6	12.2	98.6
BENYON 190 34	75	8431	2.2	12.8025	3.2	2.0976	4.1	0.1948	2.4	0.60	1147.2	25.6	1148.0	27.9	1149.7	64.5	1149.7	64.5	99.8
BENYON 190 101	182	45584	3.5	12.7977	1.6	2.0335	2.0	0.1887	1.3	0.63	1114.6	13.0	1126.8	13.8	1150.4	31.2	1150.4	31.2	96.9
BENYON 190 90	242	97803	2.2	12.7887	0.6	2.0796	1.1	0.1929	0.9	0.81	1137.0	8.9	1142.1	7.3	1151.8	12.5	1151.8	12.5	98.7
BENYON 190 13	122	45262	1.1	12.7818	1.8	2.1387	2.0	0.1983	0.9	0.45	1166.0	9.7	1161.4	14.0	1152.9	35.8	1152.9	35.8	101.1
BENYON 190 11	211	70987	2.5	12.7689	1.2	2.1111	4.7	0.1955	4.6	0.97	1151.1	48.3	1152.4	32.6	1154.9	23.0	1154.9	23.0	99.7
BENYON 190 64	202	75525	2.1	12.7504	1.2	2.0867	3.0	0.1930	2.8	0.92	1137.4	29.2	1144.5	20.8	1157.7	23.2	1157.7	23.2	98.2
BENYON 190 54	558	256637	2.0	12.7466	0.2	2.1521	0.7	0.1990	0.7	0.96	1169.7	7.1	1165.7	4.8	1158.3	3.9	1158.3	3.9	101.0
BENYON 190 17	713	244286	2.4	12.6939	0.3	2.2347	1.1	0.2057	1.0	0.96	1206.1	11.3	1192.0	7.5	1166.5	6.2	1166.5	6.2	103.4
BENYON 190 45	63	41664	2.1	12.6811	3.0	2.1343	4.2	0.1963	2.9	0.70	1155.4	31.0	1160.0	29.0	1168.5	59.4	1168.5	59.4	98.9
BENYON 190 10	310	40302	1.9	12.6765	0.8	1.9763	5.2	0.1817	5.2	0.99	1076.3	51.1	1107.5	35.1	1169.3	15.1	1169.3	15.1	92.0
BENYON 190 72	101	63815	2.0	12.6724	1.2	2.1279	4.5	0.1956	4.3	0.96	1151.5	45.8	1157.9	31.2	1169.9	24.6	1169.9	24.6	98.4
BENYON 190 73	139	60722	1.5	12.6547	1.4	2.1884	2.0	0.2009	1.4	0.72	1179.9	15.6	1177.4	14.1	1172.7	27.9	1172.7	27.9	100.6
BENYON 190 7	332	427514	2.7	12.6463	0.5	2.1465	0.9	0.1969	0.8	0.85	1158.5	8.5	1163.9	6.6	1174.0	10.0	1174.0	10.0	98.7
BENYON 190 51	115	57801	2.5	12.6110	2.1	2.1595	2.3	0.1975	0.9	0.40	1162.0	9.6	1168.1	15.8	1179.6	41.3	1179.6	41.3	98.5
BENYON 190 49	76	26253	1.3	12.5499	2.0	2.2264	2.4	0.2026	1.3	0.54	1189.5	14.1	1189.4	16.8	1189.2	39.9	1189.2	39.9	100.0
BENYON 190 1	50	24088	2.4	12.3267	4.3	2.4636	5.8	0.2203	3.9	0.67	1283.2	45.7	1261.4	42.2	1224.4	84.7	1224.4	84.7	104.8
BENYON 190 38	325	215733	2.1	12.2100	0.6	2.4823	2.1	0.2198	2.0	0.97	1280.9	23.7	1266.9	15.3	1243.2	10.9	1243.2	10.9	103.0
BENYON 190 60	196	103586	1.6	12.0788	1.1	2.3904	2.7	0.2094	2.5	0.91	1225.7	27.6	1239.7	19.5	1264.2	22.3	1264.2	22.3	96.9
BENYON 190 20	40	16033	1.6	12.0753	4.0	2.3997	4.6	0.2102	2.2	0.49	1229.7	24.9	1242.5	32.7	1264.8	77.7	1264.8	77.7	97.2
BENYON 190 79	207	65922	2.4	12.0519	1.9	2.3860	5.1	0.2086	4.7	0.93	1221.1	52.7	1238.4	36.6	1268.6	37.7	1268.6	37.7	96.3
BENYON 190 89	67	23273	2.1	11.8767	7.5	2.4657	9.6	0.2124	5.9	0.62	1241.6	67.1	1262.0	69.2	1297.1	146.0	1297.1	146.0	95.7
BENYON 190 14	260	144335	2.3	11.7311	0.7	2.7475	1.7	0.2338	1.6	0.92	1354.2	19.0	1341.4	12.6	1321.1	12.8	1321.1	12.8	102.5
BENYON 190 40	227	111555	2.0	11.6740	1.2	2.7513	1.6	0.2330	1.0	0.64	1349.9	12.3	1342.5	11.8	1330.5	23.6	1330.5	23.6	101.5
BENYON 190 4	156	132620	2.4	11.3781	0.7	2.9481	1.2	0.2433	1.0	0.82	1403.7	12.3	1394.3	9.0	1380.0	13.1	1380.0	13.1	101.7
BENYON 190 81	221	143074	2.6	11.3701	0.7	2.9306	2.9	0.2417	2.8	0.97	1395.4	35.0	1389.8	21.8	1381.4	13.9	1381.4	13.9	101.0
BENYON 190 100	37	28122	1.4	11.1751	2.7	3.0825	4.4	0.2498	3.5	0.79	1437.6	44.7	1428.3	33.6	1414.5	51.1	1414.5	51.1	101.6
BENYON 190 78	252	60472	2.5	11.0185	0.7	3.1115	2.7	0.2487	2.6	0.97	1431.5	33.7	1435.5	20.9	1441.5	13.6	1441.5	13.6	99.3
BENYON 190 32	167	155288	1.4	10.9958	1.1	3.2034	2.1	0.2555	1.8	0.86	1466.6	23.6	1458.0	16.2	1445.4	20.5	1445.4	20.5	101.5
BENYON 190 71	59	36523	2.0	10.9665	2.6	3.1637	5.5	0.2516	4.9	0.88	1446.9	62.9	1448.3	42.4	1450.5	48.9	1450.5	48.9	99.8
BENYON 190 76	133	82409	0.9	10.9258	0.8	3.1606	1.4	0.2504	1.1	0.79	1440.8	14.3	1447.6	10.7	1457.6	16.1	1457.6	16.1	98.8
BENYON 190 41	179	167915	1.4	10.8953	0.6	3.2760	2.5	0.2589	2.4	0.97	1484.1	31.7	1475.4	19.3	1462.9	12.3	1462.9	12.3	101.4
BENYON 190 91	148	136877	2.0	10.8489	0.5	3.3566	1.5	0.2641	1.4	0.94	1510.8	18.4	1494.3	11.4	1471.0	9.5	1471.0	9.5	102.7
BENYON 190 46	117	19728	2.1	10.8424	2.1	3.1104	3.8	0.2446	3.2	0.83	1410.5	40.0	1435.3	29.2	1472.1	40.1	1472.1	40.1	95.8
BENYON 190 94	69	40885	0.9	10.7888	1.4	3.3096	1.7	0.2590	1.0	0.61	1484.6	13.7	1483.3	13.3	1481.5	25.8	1481.5	25.8	100.2
BENYON 190 95	288	181534	1.9	10.7869	0.6	3.2680	1.3	0.2557	1.2	0.90	1467.7	15.5	1473.5	10.2	1481.9	11.0	1481.9	11.0	99.0
BENYON 190 44	150	93338	0.9	10.7264	1.1	3.1661	2.0	0.2463	1.7	0.84	1419.4	22.0	1448.9	15.8	1492.5	20.8	1492.5	20.8	95.1
BENYON 190 9	360	141812	5.5	10.3836	0.4	3.6987	1.4	0.2785	1.3	0.96	1584.0	18.8	1571.1	11.1	1553.7	7.3	1553.7	7.3	101.9
BENYON 190 48	102	19983	1.6	10.3055	1.7	3.5619	2.2	0.2662	1.4	0.62	1521.6	18.3	1541.1	17.4	1567.9	32.4	1567.9	32.4	97.0
BENYON 190 43	142	80280	2.1	9.8817	0.5	4.2637	2.7	0.3056	2.6	0.98	1718.9	39.7	1686.4	22.0	1646.2	9.5	1646.2	9.5	104.4
BENYON 190 65	298	244648	2.6	9.5384	0.3	4.2700	1.0	0.2954	0.9	0.95	1668.4	13.7	1687.6	8.1	1711.5	5.6	1711.5	5.6	97.5
BENYON 190 53	190	94522	1.6	9.5323	0.5	4.3875	1.4	0.3033	1.4	0.93	1707.8	20.3	1710.0	12.0	1712.7	9.5	1712.7	9.5	99.7
BENYON 190 52	170	96889	1.4	9.4139	0.7	4.1113	1.8	0.2807	1.7	0.91	1594.9	23.5	1656.5	14.9	1735.6	13.7	1735.6	13.7	91.9
BENYON 190 6	110	129331	1.7	9.3417	0.9	4.6484	1.4	0.3149	1.2	0.80	1765.0	17.8	1758.0	12.1	1749.7	15.9	1749.7	15.9	100.9
BENYON 190 93	273	149489	2.6	8.9128	0.5	5.0964	0.9	0.3294	0.7	0.84	1835.7	11.8	1835.5	7.5	1835.3	8.7	1835.3	8.7	100.0
BENYON 190 63	178	107157	1.8	8.8895	0.7	5.0547	1.2	0.3259	1.0	0.84	1818.4	16.2	1828.5	10.4	1840.1	12.1	1840.1	12.1	98.8
BENYON 190 84	112	20048	3.7	8.8611	1.1	5.1320	1.8	0.3298	1.4	0.77	1837.5	21.9	1841.4	15.1	1845.8	20.4	1845.8	20.4	99.5
BENYON 190 74	166	88072	1.1	8.8137	0.4	5.2387	1.2	0.3349	1.2	0.95	1861.9	18.8	1858.9	10.4	1855.5	6.8	1855.5	6.8	100.3
BENYON 190 42	102	110269	2.1	5.9529	0.8	10.8337	2.4	0.4677	2.3	0.95	2473.6	47.1	2509.0	22.5	2537.7	13.0	2537.7	13.0	97.5
BENYON 190 39	201	63262	1.5	5.5627	0.4	12.9121	1.3	0.5209	1.3	0.96	2703.1	27.9	2673.3	12.4	2650.7	6.1	2650.7	6.1	102.0
BENYON 190 26	31	43960	0.4	2.9141	1.1	36.3907	1.9	0.7691	1.6	0.82	3677.6	43.8	3677.1	18.8	3676.9	16.5	3676.9	16.5	100.0

7. Location: 1AB/06-34-084-07W4/0

Analysis	U	206Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±	error	206Pb*	±	207Pb*	±	206Pb*	±	Best age	±	Conc
	(ppm)	204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(Ma)	(%)
BENYON 247-21	844	44309	1.7	20.5332	3.9	0.1221	4.3	0.0182	1.8	0.42	116.2	2.1	117.0	4.7	133.5	90.6	116.2	2.1	NA
BENYON 247-90	614	58470	1.8	18.5386	1.7	0.4423	2.1	0.0595	1.2	0.56	372.4	4.2	371.9	6.5	368.6	39.2	372.4	4.2	NA
BENYON 247-10	387	22656	2.2	18.5368	2.3	0.4448	2.9	0.0598	1.9	0.64	374.4	6.8	373.6	9.2	368.8	51.1	374.4	6.8	NA
BENYON 247-55	203	41219	2.2	18.1946	3.7	0.4941	4.6	0.0652	2.7	0.59	407.2	10.6	407.7	15.3	410.6	82.2	407.2	10.6	99.2
BENYON 247-65	156	20583	1.5	19.0654	5.9	0.4906	6.4	0.0678	2.4	0.38	423.1	10.0	405.3	21.4	305.1	135.1	423.1	10.0	138.7
BENYON 247-1	319	44801	1.3	18.0688	2.0	0.5283	2.4	0.0692	1.4	0.58	431.5	5.9	430.7	8.6	426.1	44.5	431.5	5.9	101.3
BENYON 247-2	298	34032	1.2	16.9040	3.1	0.7237	4.0	0.0887	2.5	0.63	548.0	13.2	552.8	17.0	572.9	67.3	548.0	13.2	95.7
BENYON 247-48	169	30072	1.8	16.5579	3.9	0.8068	4.3	0.0969	1.9	0.43	596.1	10.6	600.7	19.7	617.7	84.8	596.1	10.6	96.5
BENYON 247-37	215	10746	0.7	16.0531	3.7	0.8923	6.5	0.1039	5.3	0.81	637.1	31.9	647.6	30.9	684.2	80.0	637.1	31.9	93.1
BENYON 247-58	185	32167	1.5	16.1928	1.7	0.9179	3.4	0.1078	3.0	0.87	659.9	18.8	661.2	16.7	665.7	35.7	659.9	18.8	99.1
BENYON 247-19	39	33553	1.7	14.3010	7.6	1.5672	7.9	0.1626	2.2	0.27	970.9	19.6	957.3	49.2	926.1	156.9	926.1	156.9	104.8
BENYON 247-7	220	78691	0.9	14.0683	1.7	1.4005	7.9	0.1429	7.7	0.98	861.0	62.3	889.2	46.9	959.8	34.8	959.8	34.8	89.7
BENYON 247-76	68	21247	1.9	13.9644	3.4	1.5492	3.7	0.1569	1.4	0.37	939.6	11.9	950.2	22.6	974.9	69.4	974.9	69.4	96.4
BENYON 247-63	143	44955	4.9	13.8601	2.0	1.7179	2.9	0.1727	2.1	0.72	1026.9	19.8	1015.2	18.5	990.2	40.5	990.2	40.5	103.7
BENYON 247-14	26	6360	1.3	13.8601	8.7	1.6730	9.5	0.1682	3.8	0.40	1002.1	35.4	998.3	60.7	990.2	178.2	990.2	178.2	101.2
BENYON 247-91	55	7765	2.3	13.7852	3.8	1.7609	4.8	0.1760	2.9	0.62	1045.4	28.4	1031.2	30.9	1001.2	76.2	1001.2	76.2	104.4
BENYON 247-20	83	27262	1.5	13.7605	3.1	1.7334	3.4	0.1730	1.5	0.43	1028.6	13.9	1021.0	22.0	1004.8	62.5	1004.8	62.5	102.4
BENYON 247-93	54	26748	2.4	13.7574	4.2	1.7056	4.7	0.1702	2.0	0.43	1013.1	18.8	1010.6	30.0	1005.3	86.0	1005.3	86.0	100.8
BENYON 247-24	188	123752	2.7	13.7466	0.9	1.7089	1.4	0.1704	1.1	0.78	1014.2	10.2	1011.9	9.0	1006.9	17.8	1006.9	17.8	100.7
BENYON 247-94	225	58276	2.8	13.7010	1.3	1.7232	1.6	0.1712	0.9	0.57	1018.9	8.6	1017.2	10.3	1013.6	26.7	1013.6	26.7	100.5
BENYON 247-62	40	11951	1.3	13.6911	2.8	1.7099	4.1	0.1698	3.0	0.73	1010.9	27.7	1012.2	26.0	1015.0	56.3	1015.0	56.3	99.6
BENYON 247-56	65	17222	1.6	13.6095	4.0	1.8674	4.2	0.1843	1.3	0.30	1090.5	12.6	1069.6	28.0	1027.1	81.7	1027.1	81.7	106.2
BENYON 247-59	133	17703	4.1	13.5893	1.1	1.7341	1.4	0.1709	0.9	0.60	1017.1	8.2	1021.3	9.3	1030.2	23.2	1030.2	23.2	98.7
BENYON 247-8	47	15204	2.3	13.5575	3.4	1.8797	3.7	0.1848	1.6	0.43	1093.3	16.2	1074.0	24.7	1034.9	68.0	1034.9	68.0	105.6
BENYON 247-5	173	55672	1.3	13.5362	1.6	1.8326	1.9	0.1799	1.1	0.57	1066.5	10.9	1057.2	12.7	1038.1	32.1	1038.1	32.1	102.7
BENYON 247-39	160	59639	3.0	13.5307	1.0	1.7875	3.2	0.1754	3.0	0.95	1041.9	29.0	1040.9	20.7	1038.9	20.1	1038.9	20.1	100.3
BENYON 247-28	264	92427	1.7	13.5093	1.1	1.7691	1.5	0.1733	1.1	0.71	1030.5	10.4	1034.2	9.9	1042.1	21.8	1042.1	21.8	98.9
BENYON 247-38	132	30084	2.8	13.4857	1.1	1.7698	4.1	0.1731	4.0	0.97	1029.2	37.7	1034.5	26.6	1045.7	21.5	1045.7	21.5	98.4
BENYON 247-50	86	43759	2.1	13.4789	3.0	1.8238	4.9	0.1783	3.9	0.79	1057.7	37.7	1054.1	32.0	1046.7	59.9	1046.7	59.9	101.1
BENYON 247-22	32	20840	1.4	13.4125	5.0	1.9731	8.9	0.1919	7.4	0.83	1131.9	76.9	1106.4	60.4	1056.6	101.2	1056.6	101.2	107.1
BENYON 247-101	98	16605	2.1	13.3805	1.5	1.8719	1.9	0.1817	1.3	0.65	1076.0	12.5	1071.2	12.8	1061.4	29.4	1061.4	29.4	101.4
BENYON 247-46	192	70453	1.3	13.3614	1.0	1.8424	1.6	0.1785	1.2	0.77	1059.0	12.2	1060.7	10.6	1064.3	20.6	1064.3	20.6	99.5
BENYON 247-100	48	12965	1.1	13.3391	6.7	1.9093	6.9	0.1847	1.7	0.24	1092.7	17.0	1084.3	46.1	1067.6	134.7	1067.6	134.7	102.3
BENYON 247-17	107	44325	4.5	13.3082	1.6	1.8672	1.9	0.1802	1.1	0.55	1068.2	10.5	1069.5	12.8	1072.3	32.3	1072.3	32.3	99.6
BENYON 247-47	267	112651	1.6	13.2823	0.9	1.9794	1.6	0.1907	1.3	0.82	1125.1	13.8	1108.5	11.0	1076.2	18.7	1076.2	18.7	104.5
BENYON 247-32	50	6964	3.2	13.2388	4.6	1.8983	5.1	0.1823	2.1	0.41	1079.4	20.7	1080.5	33.8	1082.8	93.1	1082.8	93.1	99.7
BENYON 247-6	239	59792	1.0	13.2186	0.7	1.8992	1.2	0.1821	1.0	0.81	1078.3	9.5	1080.8	7.8	1085.8	13.7	1085.8	13.7	99.3
BENYON 247-84	98	3755	2.4	13.1177	2.9	1.9481	3.2	0.1853	1.3	0.39	1096.1	12.6	1097.8	21.3	1101.2	58.4	1101.2	58.4	99.5
BENYON 247-64	105	38918	2.5	12.8324	1.5	2.0643	2.9	0.1921	2.5	0.86	1132.9	25.7	1137.0	19.7	1145.1	29.3	1145.1	29.3	98.9
BENYON 247-42	166	67648	3.2	12.7799	1.1	2.0641	3.7	0.1913	3.5	0.95	1128.5	36.8	1137.0	25.5	1153.1	22.6	1153.1	22.6	97.9
BENYON 247-96	177	67890	3.2	12.7167	1.0	2.0979	4.1	0.1935	4.0	0.97	1140.2	41.7	1148.1	28.2	1163.0	19.3	1163.0	19.3	98.0
BENYON 247-35	31	14871	2.0	12.6676	8.0	2.1178	8.2	0.1946	1.4	0.17	1146.1	14.9	1154.6	56.3	1170.7	159.2	1170.7	159.2	97.9
BENYON 247-82	125	40173	2.8	12.6203	1.2	2.3452	2.3	0.2147	1.9	0.86	1253.6	22.2	1226.1	16.1	1178.1	23.0	1178.1	23.0	106.4
BENYON 247-71	89	35784	3.0	12.5920	2.9	2.1403	4.0	0.1955	2.7	0.68	1150.9	28.8	1161.9	27.8	1182.5	58.2	1182.5	58.2	97.3
BENYON 247-34	36	12210	1.6	12.1583	3.9	2.2499	4.5	0.1984	2.1	0.47	1166.7	22.6	1196.8	31.3	1251.5	76.7	1251.5	76.7	93.2
BENYON 247-81	131	24879	1.7	11.8962	1.6	2.5635	2.4	0.2212	1.8	0.74	1288.1	20.9	1290.3	17.6	1293.9	31.4	1293.9	31.4	99.5
BENYON 247-49	90	40313	2.3	11.4230	1.8	2.9615	3.0	0.2454	2.4	0.80	1414.5	30.1	1397.8	22.5	1372.5	34.4	1372.5	34.4	103.1
BENYON 247-4	172	71587	1.8	11.2722	0.7	3.0535	2.8	0.2496	2.7	0.97	1436.6	34.8	1421.1	21.3	1398.0	13.3	1398.0	13.3	102.8
BENYON 247-26	106	34358	2.5	10.8998	1.1	3.3304	2.4	0.2633	2.2	0.90	1506.6	29.6	1488.2	19.1	1462.1	20.3	1462.1	20.3	103.0
BENYON 247-51	33	30340	0.5	10.8152	2.5	3.2821	3.2	0.2574	2.1	0.65	1476.7	27.7	1476.8	25.2	1476.9	46.7	1476.9	46.7	100.0
BENYON 247-40	69	32583	4.2	10.8092	1.4	3.2008	1.6	0.2509	0.9	0.54	1443.3	11.4	1457.3	12.6	1477.9	26.1	1477.9	26.1	97.7
BENYON 247-103	388	111116	2.5	10.0286	0.4	3.9917	1.4	0.2903	1.3	0.95	1643.2	19.2	1632.5	11.3	1618.8	7.8	1618.8	7.8	101.5
BENYON 247-53	293	81347	1.6	9.7860	0.4	4.1636	2.6	0.2955	2.6	0.99	1669.0	38.4	1666.9	21.6	1664.2	7.7	1664.2	7.7	100.3
BENYON 247-70	161	1748	3.7	9.2624	3.2	4.4516	4.0	0.2990	2.4	0.61	1686.6	36.3	1722.0	33.1	1765.3	57.7	1765.3	57.7	95.5
BENYON 247-31	225	76566	1.4	9.2601	0.2	4.6045	2.0	0.3092	2.0	0.99	1737.0	30.3	1750.1	16.7	1765.8	4.2	1765.8	4.2	98.4
BENYON 247-61	124	180861	2.1	9.2239	0.6	4.7817	1.2	0.3199	1.1	0.88	1789.2	16.8	1781.7	10.3	1772.9	10.7	1772.9	10.7	100.9
BENYON 247-44	84	39326	2.5	9.1676	1.3	4.7889	2.7	0.3184	2.4	0.87	1782.0	36.9	1783.0	22.9	1784.1	24.5	1784.1	24.5	99.9
BENYON 247-74	157	90373	2.7	9.1636	0.5	4.8056	2.0	0.3194	1.9	0.97	1786.7	29.7	1785.9	16.4	1784.9	8.3	1784.9	8.3	100.1
BENYON 247-68	110	55546	1.5	8.9520	0.7	5.0562	2.0	0.3283	1.8	0.93	1830.0	29.0	1828.8	16.6	1827.4	13.0	1827.4	13.0	100.1
BENYON 247-3	56	30688	1.8	8.9292	0.9	5.1693	1.5	0.3348	1.2	0.79	1861.5	19.6	1847.6	13.0	1832.0	16.8	1832.0	16.8	101.6
BENYON 247-12	63	64580	3.1	8.9162	1.4	5.2077	1.7	0.3368	1.0	0.59	1871.1	16.4	1853.9	14.5	1834.6	24.9	1834.6	24.9	102.0
BENYON 247-45	87	83120	1.3	8.9114	1.2	5.0974	1.7	0.3295	1.1	0.67	1835.7	17.9	1835.7	14.2	1835.6	22.3	1835.6	22.3	100.0
BENYON 247-30	138	139864	3.1	8.9060	0.5	5.0891	1.6	0.3287	1.6	0.96	1832.2	24.8	1834.3	13.8	1836.7	8.5	1836.7	8.5	99.8
BENYON 247-11	51	63344	0.5	8.8963	1.3	5.1256	1.7	0.3307	1.1	0.65	1841.8	17.5	1840.4	14.2	1838.7	22.9	1838.7	22.9	100.2
BENYON 247-83	59	31636	1.0	8.8816	1.5	5.2635	2.6	0.3391	2.1	0.81	1882.1	34.8	1863.0	22.4	1841.7	27.7	1841.7	27.7	102.2
BENYON 247-60	112	46085	1.7	8.8730	0.8	5.1869	1.6	0.3338	1.4	0.87	1856.8	22.9	1850.5	13.8	1843.4	14.3	1843.4	14.3	100.7
BENYON 247-9	54	52228	0.8	8.8563	1.2	5.1716	3.0	0.3322	2.7	0.91	1848.9	43.2	1847.9	25.1	1846.8	22.1	1846.8	22.1	100.1
BENYON 247-105	207	38349	1.9	8.8395	0.4	5.0583	1.9	0.3243	1.9	0.97	1810.6	29.6	1829.1	16.3	1850.2	7.8	1850.2	7.8	97.9
BENYON 247-25	94	37263	1.9	8.8350	0.5	5.3593	2.8	0.3434	2.8	0.99	1903.0	46.1	1878.4	24.2	1851.2	8.4	1851.2	8.4	102.8
BENYON 247-104	194	34372	0.9	8.8217	0.5	4.9553	3.4	0.3170	3.4	0.99	1775.3	52.8	1811.7	29.1	1853.9	9.9	1853.9	9.9	95.8
BENYON 247-78	86	17524	1.1	8.8154	1.1	5.2931	2.1	0.3384	1.8	0.84	1879.0	29.4	1867.7	18.3	1855.2	20.8	1855.2	20.8	101.3
BENYON 247-41	68	40324	1.8	8.8012	0.7	5.2399	1.2	0.3345	1.0	0.80	1860.0	15.5	1859.1	10.2	1858.1	13.0	1858.1	13.0	100.1
BENYON 247-69	44	21556	0.7	8.7918	1.4	5.2663	1.7	0.3358	1.0	0.58	1866.4	16.3	1863.4	14.9	1860.0	25.7	1860.0	25.7	100.3
BENYON 247-23	92	21414	2.5	8.7811	0.7	5.3047	1.4	0.3378	1.2	0.86	1876.3	20.0	1869.6	12.2	1862.2	13.1	1862.2	13.1	100.8
BENYON 247-67	88	50368	2.6	8.7731	0.9	5.2938	1.5	0.3368	1.2	0.81	1871.4	20.2	1867.9	13.0	1863.9	15.9	1863.9	15.9	100.4
BENYON 247-87	109	104261	1.7	8.7055	0.9	5.4232	1.5	0.3424	1.2	0.80	1898.2	20.1	1888.5	13.1	1877.8	16.4	1877.8	16.4	101.1
BENYON 247-33	63	22591	4.5	8.6597	0.9	5.3544	1.6	0.3363	1.3	0.83	1868.8	21.8	1877.6	13.8	1887.3	16.1	1887.3	16.1	99.0
BENYON 247-85	37	5091	1.0	8.6443	3.0	5.5999	3.6	0.3511	1.9	0.54	1939.8	32.4	1916.1	30.9	1890.5	54.4	1890.5	54.4	102.6
BENYON 247-13	107	9046	2.2	8.5926	4.1	5.2704	6.7	0.3284	5.3	0.79	1830.9	84.1	1864.1	57.2	1901.3	74.2	1901.3	74.2	96.3
BENYON 247-72	130	59294	1.8	7.8082	0.6	6.7855	1.9	0.3843	1.8	0.95	2096.2	31.5	2083.8	16.4	2071.6	10.1	2071.6	10.1	101.2
BENYON 247-97	196	39353	1.9	6.2847	0.5	8.5846	1.2	0.3913	1.1	0.90	2128.8	19.4	2294.9	10.8	2446.3	8.9	2446.3	8.9	87.0
BENYON 247-77	147	14126	2.5	6.1305	0.6	9.9038	2.2	0.4404	2.2	0.96	2352.2	42.6	2425.9	20.7	2488.2	10.4	2488.2	10.4	94.5
BENYON 247-99	161	13795	2.2	5.9089	1.4	11.1430	3.1	0.4775	2.7	0.88	2516.5	56.8	2535.2	28.7	2550.1	24.1	2550.1	24.1	98.7
BENYON 247-27	72	45022	1.8	5.9035	0.6	11.3242	1.2	0.4849	1.1	0.88	2548.4	22.5	2550.2	11.3	2551.6	9.6	2551.6	9.6	99.9
BENYON 247-89	74	47818	2.2	5.8628	0.3	11.5799	1.0	0.4924	0.9	0.97	2581.0	20.1	2571.1	9.1	2563.2	4.2	2563.2	4.2	100.7
BENYON 247-88	161	123040	1.3	5.8568	0.2	11.7445	1.4	0.4989	1.4	0.99	2609.0	29.2	2584.3	12.9	2564.9	2.9	2564.9	2.9	101.7
BENYON 247-43	86	121979	2.2	5.8500	0.3	11.4888	0.8	0.4874	0.8	0.93	2559.6	16.0	2563.7	7.6	2566.9	4.8	2566.9	4.8	99.7
BENYON 247-54	18	16767	1.5	5.5904	1.8	12.5014	2.3	0.5069	1.4	0.61	2643.3	31.2	2642.8	22.0	2642.5	30.7	2642.5	30.7	100.0
BENYON 247-16	12	4405	2.3	5.5004	3.1	12.9030	6.0	0.5147	5.2	0.85	2676.8	113.2	2672.6	57.0	2669.4	52.1	2669.4	52.1	100.3
BENYON 247-73	91	31396	1.1	5.4677	0.4	12.6942	1.4	0.5034	1.3	0.96	2628.3	28.4	2657.2	12.9	2679.3	6.5	2679.3	6.5	98.1
BENYON 247-52	113	104300	2.4	5.4556	0.4	13.0868	1.5	0.5178	1.5	0.97	2689.9	32.3	2685.9	14.3	2682.9	6.3	2682.9	6.3	100.3
BENYON 247-98	69	55663	1.1	5.4517	0.5	13.0762	1.4	0.5170	1.3	0.94	2686.6	28.0	2685.2	12.8	2684.1	7.6	2684.1	7.6	100.1
BENYON 247-86	90	64866	0.9	5.4508	0.5	13.1815	1.1	0.5211	1.0	0.90	2703.9	21.4	2692.7	10.2	2684.4	7.8	2684.4	7.8	100.7
BENYON 247-29	93	112194	0.8	5.4336	0.6	13.0890	1.5	0.5158	1.4	0.90	2681.4	29.9	2686.1	14.2	2689.6	10.7	2689.6	10.7	99.7
BENYON 247-18	45	82363	1.0	5.4143	0.5	12.9754	2.4	0.5095	2.4	0.98	2654.6	51.3	2677.9	22.7	2695.5	8.3	2695.5	8.3	98.5
BENYON 247-36	205	250172	4.4	5.2761	0.2	14.2623	4.6	0.5458	4.6	1.00	2807.5	105.6	2767.3	44.1	2738.1	2.7	2738.1	2.7	102.5
BENYON 247-102	77	12886	3.9	4.7855	0.5	15.9061	1.5	0.5521	1.4	0.95	2833.7	32.6	2871.2	14.3	2897.5	7.9	2897.5	7.9	97.8
BENYON 247-66	25	22224	2.1	4.7379	1.0	16.8026	1.9	0.5774	1.6	0.86	2938.0	38.5	2923.6	18.2	2913.7	15.7	2913.7	15.7	100.8
BENYON 247-75	72	63838	2.4	4.7057	0.5	17.1442	2.2	0.5851	2.2	0.98	2969.6	51.7	2942.9	21.3	2924.8	7.3	2924.8	7.3	101.5

8. Location: 1AB/06-34-084-07W4/0

Analysis	U	206Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±	error	206Pb*	±	207Pb*	±	206Pb*	±	Best age	±	Conc
	(ppm)	204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(Ma)	(%)
BENYON 316-6	873	31222	1.7	21.0684	4.3	0.1531	4.4	0.0234	0.9	0.21	149.1	1.4	144.7	6.0	72.7	102.8	149.1	1.4	NA
BENYON 316-74	764	40576	1.7	20.4705	2.9	0.1634	3.8	0.0243	2.5	0.65	154.5	3.8	153.7	5.4	140.7	67.8	154.5	3.8	NA
BENYON 316-83	104	4422	0.3	24.4034	21.6	0.1453	21.9	0.0257	3.5	0.16	163.7	5.7	137.7	28.2	-288.9	555.9	163.7	5.7	NA
BENYON 316-79	437	21931	5.4	20.7171	6.2	0.1729	6.9	0.0260	3.0	0.44	165.3	5.0	161.9	10.3	112.5	146.6	165.3	5.0	NA
BENYON 316-22	177	10534	2.7	20.4762	7.6	0.1868	7.9	0.0277	2.1	0.26	176.4	3.6	173.9	12.6	140.0	179.0	176.4	3.6	NA

BENYON 316-52	284	32476	1.5	20.1402	5.8	0.2467	6.2	0.0360	2.1	0.34	228.2	4.7	223.9	12.5	178.7	136.0	228.2	4.7	NA
BENYON 316-38	206	52234	1.6	19.4733	6.3	0.2595	6.5	0.0367	1.8	0.28	232.1	4.2	234.3	13.7	256.7	144.1	232.1	4.2	NA
BENYON 316-21	232	26963	1.1	19.5842	2.9	0.2655	4.0	0.0377	2.8	0.70	238.6	6.6	239.1	8.6	243.6	66.6	238.6	6.6	NA
BENYON 316-57	273	26512	1.5	19.9842	6.5	0.2646	6.7	0.0384	1.9	0.28	242.6	4.5	238.4	14.3	196.8	150.3	242.6	4.5	NA
BENYON 316-62	401	28012	1.9	19.6561	3.7	0.2805	4.2	0.0400	2.0	0.48	252.7	5.0	251.0	9.3	235.2	84.9	252.7	5.0	NA
BENYON 316-95	368	37466	0.7	18.9015	2.6	0.3607	3.1	0.0494	1.7	0.56	311.1	5.2	312.7	8.3	324.7	58.0	311.1	5.2	NA
BENYON 316-51	154	18057	1.1	18.1359	6.4	0.3911	7.0	0.0514	2.7	0.39	323.4	8.6	335.2	20.0	417.9	144.2	323.4	8.6	NA
BENYON 316-94	610	134058	48.5	18.5118	0.9	0.4385	1.5	0.0589	1.2	0.78	368.8	4.2	369.2	4.6	371.8	21.2	368.8	4.2	NA
BENYON 316-98	561	54970	3.4	18.3691	1.2	0.4587	2.1	0.0611	1.8	0.82	382.4	6.5	383.4	6.9	389.2	27.7	382.4	6.5	NA
BENYON 316-27	51	12620	25.2	19.6363	11.7	0.4316	12.1	0.0615	3.1	0.26	384.5	11.7	364.3	37.1	237.5	270.8	384.5	11.7	NA
BENYON 316-65	267	39564	0.8	17.9306	3.1	0.5179	3.7	0.0674	2.0	0.55	420.2	8.3	423.8	12.9	443.2	69.2	420.2	8.3	94.8
BENYON 316-8	212	34189	1.7	17.4411	2.8	0.6162	3.4	0.0779	1.9	0.56	483.8	9.1	487.4	13.3	504.5	62.6	483.8	9.1	95.9
BENYON 316-35	476	88830	6.9	16.6988	1.0	0.7394	8.6	0.0895	8.5	0.99	552.8	45.2	562.0	37.1	599.4	22.5	552.8	45.2	92.2
BENYON 316-9	155	46548	2.2	16.6071	2.3	0.8122	2.8	0.0978	1.6	0.58	601.7	9.2	603.7	12.6	611.3	48.7	601.7	9.2	98.4
BENYON 316-85	185	30244	1.8	16.5205	1.6	0.8989	3.6	0.1077	3.2	0.89	659.4	19.8	651.1	17.1	622.6	35.2	659.4	19.8	105.9
BENYON 316-64	81	18963	3.1	14.3669	4.5	1.3782	5.2	0.1436	2.6	0.49	865.0	20.7	879.7	30.4	916.7	92.2	865.0	20.7	94.4
BENYON 316-46	247	62116	3.1	13.9181	1.1	1.6149	1.6	0.1630	1.2	0.73	973.5	10.9	976.0	10.3	981.7	22.7	981.7	22.7	99.2
BENYON 316-90	135	44982	2.6	13.7022	0.9	1.7037	2.5	0.1693	2.3	0.93	1008.3	21.6	1009.9	15.9	1013.4	18.2	1013.4	18.2	99.5
BENYON 316-60	46	12901	1.8	13.6332	3.5	1.7512	4.2	0.1732	2.3	0.55	1029.5	21.9	1027.6	27.1	1023.6	70.9	1023.6	70.9	100.6
BENYON 316-40	183	115648	3.0	13.5160	1.2	1.7360	1.8	0.1702	1.3	0.74	1013.1	12.6	1022.0	11.8	1041.1	25.1	1041.1	25.1	97.3
BENYON 316-11	239	129337	5.4	13.4481	0.7	1.8166	1.2	0.1772	1.0	0.80	1051.6	9.6	1051.5	8.1	1051.3	15.1	1051.3	15.1	100.0
BENYON 316-13	311	104460	1.9	13.4480	1.1	1.8178	1.6	0.1773	1.2	0.75	1052.2	11.7	1051.9	10.5	1051.3	21.5	1051.3	21.5	100.1
BENYON 316-39	251	82932	1.2	13.2429	0.5	1.8977	1.3	0.1823	1.2	0.93	1079.4	12.3	1080.3	8.8	1082.2	9.4	1082.2	9.4	99.7
BENYON 316-71	97	28867	1.4	13.1200	1.9	1.9428	2.0	0.1849	0.7	0.36	1093.5	7.1	1096.0	13.3	1100.8	37.2	1100.8	37.2	99.3
BENYON 316-19	114	35976	1.3	13.0575	1.8	2.0078	2.4	0.1901	1.7	0.68	1122.1	17.0	1118.1	16.4	1110.4	35.3	1110.4	35.3	101.1
BENYON 316-2	279	92739	5.7	12.9898	0.8	1.9432	2.6	0.1831	2.5	0.95	1083.7	24.7	1096.1	17.5	1120.8	16.4	1120.8	16.4	96.7
BENYON 316-26	161	62340	2.2	12.9772	2.0	2.0067	2.9	0.1889	2.2	0.74	1115.2	22.3	1117.8	19.8	1122.7	38.9	1122.7	38.9	99.3
BENYON 316-69	216	92086	3.7	12.8745	0.9	1.9895	1.4	0.1858	1.1	0.78	1098.4	11.3	1111.9	9.7	1138.5	17.8	1138.5	17.8	96.5
BENYON 316-7	147	71339	3.1	12.8269	1.3	2.0702	1.9	0.1926	1.4	0.71	1135.4	14.1	1139.0	13.1	1145.9	26.8	1145.9	26.8	99.1
BENYON 316-15	126	50988	2.1	12.6761	0.8	2.1496	2.5	0.1976	2.3	0.95	1162.6	24.9	1164.9	17.1	1169.3	15.7	1169.3	15.7	99.4
BENYON 316-102	130	3053	2.4	11.8685	2.8	2.4305	3.5	0.2092	2.1	0.60	1224.6	23.5	1251.7	25.5	1298.5	55.3	1298.5	55.3	94.3
BENYON 316-100	288	108652	1.0	11.7121	0.3	2.6022	1.0	0.2210	1.0	0.96	1287.4	11.6	1301.3	7.6	1324.2	5.8	1324.2	5.8	97.2
BENYON 316-14	155	59290	2.9	11.3236	0.7	2.8730	1.6	0.2360	1.5	0.91	1365.6	17.9	1374.9	12.1	1389.2	12.7	1389.2	12.7	98.3
BENYON 316-25	39	15119	1.1	11.2951	1.8	2.8827	2.0	0.2361	0.7	0.37	1366.6	9.0	1377.4	14.8	1394.1	35.0	1394.1	35.0	98.0
BENYON 316-47	350	135167	3.6	11.0576	0.4	3.0319	0.9	0.2431	0.8	0.88	1403.0	10.0	1415.7	6.9	1434.7	8.0	1434.7	8.0	97.8
BENYON 316-86	447	403777	2.0	11.0219	0.4	3.1230	1.9	0.2496	1.8	0.98	1436.7	23.6	1438.4	14.4	1440.9	6.7	1440.9	6.7	99.7
BENYON 316-72	346	188743	3.1	11.0129	0.3	3.0674	1.2	0.2450	1.1	0.96	1412.6	14.3	1424.6	8.9	1442.4	5.9	1442.4	5.9	97.9
BENYON 316-81	327	245019	1.7	11.0079	0.4	3.1226	2.3	0.2493	2.3	0.98	1434.8	29.3	1438.3	17.8	1443.3	8.3	1443.3	8.3	99.4
BENYON 316-66	132	89904	1.4	10.9871	1.4	3.1450	2.1	0.2506	1.5	0.74	1441.6	19.5	1443.8	15.8	1446.9	26.5	1446.9	26.5	99.6
BENYON 316-77	134	141715	2.0	10.6375	0.6	3.3686	2.0	0.2599	1.9	0.96	1489.3	25.5	1497.1	15.6	1508.2	10.6	1508.2	10.6	98.7
BENYON 316-89	142	103645	4.5	10.1178	1.2	3.5714	2.7	0.2621	2.5	0.90	1500.4	32.9	1543.2	21.7	1602.2	22.4	1602.2	22.4	93.6
BENYON 316-70	46	37130	1.9	9.9210	1.4	3.9341	2.2	0.2831	1.7	0.76	1606.8	23.6	1620.7	17.7	1638.8	26.4	1638.8	26.4	98.0
BENYON 316-88	261	197572	1.2	9.8397	0.4	3.9698	1.0	0.2833	0.9	0.91	1608.0	12.5	1628.0	7.9	1654.1	7.5	1654.1	7.5	97.2
BENYON 316-92	154	56415	1.1	9.8379	0.5	4.0190	1.9	0.2868	1.8	0.96	1625.3	25.6	1638.1	15.1	1654.4	9.9	1654.4	9.9	98.2
BENYON 316-49	357	352824	2.5	9.8359	0.3	3.9939	1.6	0.2849	1.6	0.99	1616.0	22.9	1633.0	13.2	1654.8	4.6	1654.8	4.6	97.7
BENYON 316-56	243	120007	4.5	9.7022	0.4	4.2646	2.2	0.3001	2.2	0.99	1691.7	32.3	1686.6	18.1	1680.1	6.6	1680.1	6.6	100.7
BENYON 316-59	194	103605	0.6	9.6414	0.8	4.1403	1.6	0.2895	1.4	0.88	1639.1	20.9	1662.3	13.4	1691.7	14.4	1691.7	14.4	96.9
BENYON 316-93	79	37179	2.7	9.4943	1.5	4.0355	1.9	0.2779	1.2	0.63	1580.7	16.9	1641.4	15.5	1720.0	27.2	1720.0	27.2	91.9
BENYON 316-53	154	113462	2.3	9.3756	1.0	4.3987	1.7	0.2991	1.4	0.83	1686.9	21.3	1712.1	14.4	1743.1	17.9	1743.1	17.9	96.8
BENYON 316-55	160	120290	2.4	9.3128	0.5	4.5517	1.2	0.3074	1.1	0.92	1728.1	16.6	1740.5	9.9	1755.4	8.3	1755.4	8.3	98.4
BENYON 316-75	136	19152	3.3	9.3097	0.9	4.5698	2.0	0.3086	1.7	0.88	1733.6	26.4	1743.8	16.4	1756.0	17.0	1756.0	17.0	98.7
BENYON 316-12	498	337437	5.9	9.2945	0.2	4.6870	0.8	0.3159	0.8	0.96	1769.9	12.5	1764.9	7.0	1759.0	4.2	1759.0	4.2	100.6
BENYON 316-16	67	43237	2.6	9.2852	0.9	4.6961	2.1	0.3162	1.9	0.90	1771.4	29.5	1766.5	17.7	1760.8	16.8	1760.8	16.8	100.6
BENYON 316-44	272	147964	1.3	8.9712	0.4	5.0642	1.0	0.3295	0.9	0.90	1836.0	13.9	1830.1	8.2	1823.5	7.7	1823.5	7.7	100.7
BENYON 316-32	89	88659	1.5	8.9525	1.3	5.0574	1.8	0.3284	1.3	0.71	1830.5	19.9	1829.0	15.0	1827.3	22.7	1827.3	22.7	100.2
BENYON 316-73	30	22204	0.9	8.9307	2.8	5.0094	3.1	0.3245	1.5	0.47	1811.5	23.4	1820.9	26.5	1831.7	50.1	1831.7	50.1	98.9
BENYON 316-43	250	185306	0.9	8.9203	0.3	4.9356	1.1	0.3193	1.1	0.97	1786.4	17.4	1808.4	9.7	1833.8	5.0	1833.8	5.0	97.4
BENYON 316-42	35	15248	1.3	8.8879	2.0	5.0823	2.3	0.3276	1.1	0.49	1826.8	18.2	1833.2	19.9	1840.4	37.1	1840.4	37.1	99.3
BENYON 316-105	249	167142	1.5	8.8812	0.4	4.9633	1.2	0.3197	1.1	0.93	1788.2	16.7	1813.1	9.7	1841.7	7.7	1841.7	7.7	97.1
BENYON 316-91	59	46426	1.7	8.8553	1.0	5.1122	1.4	0.3283	1.0	0.69	1830.3	15.7	1838.1	12.2	1847.0	18.9	1847.0	18.9	99.1
BENYON 316-23	236	115658	2.0	8.8430	0.3	4.6984	1.1	0.3013	1.1	0.96	1697.9	16.1	1767.0	9.4	1849.5	5.6	1849.5	5.6	91.8
BENYON 316-34	60	56886	0.5	8.8400	0.8	5.0566	1.2	0.3242	0.8	0.71	1810.2	13.2	1828.9	10.0	1850.2	15.0	1850.2	15.0	97.8
BENYON 316-50	87	46240	2.5	8.8326	1.0	5.1314	1.4	0.3287	1.0	0.68	1832.2	15.6	1841.3	12.1	1851.7	18.9	1851.7	18.9	98.9
BENYON 316-68	205	245425	1.8	8.8281	0.6	5.0402	1.0	0.3227	0.8	0.82	1803.0	12.5	1826.1	8.2	1852.6	10.0	1852.6	10.0	97.3
BENYON 316-37	106	66578	1.6	8.6704	0.8	5.2867	1.2	0.3324	0.9	0.78	1850.2	15.2	1866.7	10.4	1885.1	13.9	1885.1	13.9	98.1
BENYON 316-28	118	90210	2.6	8.6343	0.5	5.4273	1.2	0.3399	1.1	0.91	1886.0	17.9	1889.2	10.3	1892.6	9.1	1892.6	9.1	99.7
BENYON 316-78	271	136414	2.1	8.5975	0.2	5.4555	0.8	0.3402	0.8	0.96	1887.5	12.5	1893.6	6.8	1900.3	3.8	1900.3	3.8	99.3
BENYON 316-104	331	368586	1.4	8.5894	0.4	4.9114	1.1	0.3060	1.0	0.94	1720.8	15.7	1804.2	9.4	1902.0	6.8	1902.0	6.8	90.5
BENYON 316-61	118	73494	2.0	8.5593	0.5	5.4902	1.1	0.3408	1.0	0.91	1890.6	17.0	1899.1	9.7	1908.3	8.2	1908.3	8.2	99.1
BENYON 316-33	51	12365	0.8	8.5350	2.5	5.3629	3.0	0.3320	1.6	0.54	1847.9	25.8	1878.9	25.3	1913.4	44.5	1913.4	44.5	96.6
BENYON 316-84	68	40415	1.2	8.4961	0.9	5.5678	1.3	0.3431	1.0	0.73	1901.5	16.1	1911.1	11.6	1921.6	16.5	1921.6	16.5	99.0
BENYON 316-20	105	68553	1.7	8.4578	0.8	5.6230	1.4	0.3449	1.1	0.80	1910.3	18.0	1919.6	11.7	1929.7	14.6	1929.7	14.6	99.0
BENYON 316-30	119	76122	0.8	8.3047	1.1	5.6559	2.3	0.3407	2.0	0.87	1889.8	32.2	1924.7	19.5	1962.3	19.7	1962.3	19.7	96.3
BENYON 316-45	118	120184	1.5	8.1606	0.6	5.9162	1.2	0.3502	1.1	0.88	1935.4	18.3	1963.6	10.8	1993.5	10.6	1993.5	10.6	97.1
BENYON 316-17	259	12961	1.4	7.8569	0.8	6.2588	1.6	0.3566	1.3	0.85	1966.3	22.5	2012.7	13.6	2060.7	14.4	2060.7	14.4	95.4
BENYON 316-10	85	112701	1.9	7.7829	0.7	6.7650	1.3	0.3819	1.1	0.85	2085.0	19.9	2081.2	11.6	2077.4	12.2	2077.4	12.2	100.4
BENYON 316-31	48	49765	0.7	7.7600	1.4	6.5693	2.8	0.3697	2.4	0.87	2028.1	42.2	2055.2	24.6	2082.6	24.2	2082.6	24.2	97.4
BENYON 316-18	82	101439	1.7	7.6628	0.7	6.7271	1.4	0.3739	1.2	0.86	2047.5	21.4	2076.2	12.5	2104.7	12.7	2104.7	12.7	97.3
BENYON 316-29	18	16350	2.1	7.6010	2.2	6.5340	6.2	0.3602	5.8	0.93	1983.1	98.4	2050.5	54.5	2118.9	39.2	2118.9	39.2	93.6
BENYON 316-48	18	23503	2.8	6.8653	3.0	7.7268	3.7	0.3847	2.1	0.58	2098.4	37.9	2199.7	32.9	2295.6	51.3	2295.6	51.3	91.4
BENYON 316-87	27	28472	0.4	6.0665	1.7	10.2121	3.2	0.4493	2.7	0.85	2392.2	54.9	2454.2	29.8	2505.9	28.5	2505.9	28.5	95.5
BENYON 316-36	97	188025	2.5	5.8057	0.6	11.4670	1.3	0.4828	1.2	0.89	2539.6	24.8	2561.9	12.3	2579.6	9.9	2579.6	9.9	98.5
BENYON 316-4	138	103461	1.4	5.6998	0.3	11.9551	1.4	0.4942	1.4	0.98	2588.9	29.8	2600.9	13.4	2610.3	4.8	2610.3	4.8	99.2
BENYON 316-103	91	138964	1.7	5.6583	0.5	12.0308	2.9	0.4937	2.8	0.99	2586.7	60.4	2606.8	26.9	2622.4	7.7	2622.4	7.7	98.6
BENYON 316-101	406	560240	2.8	5.6563	0.1	10.9179	0.8	0.4479	0.8	0.99	2385.9	15.8	2516.2	7.5	2623.0	2.1	2623.0	2.1	91.0
BENYON 316-54	233	170255	0.5	5.5415	0.3	12.3901	2.0	0.4980	2.0	0.99	2605.1	42.1	2634.4	18.6	2657.1	4.5	2657.1	4.5	98.0
BENYON 316-96	137	245153	1.1	5.5356	0.4	12.3941	1.6	0.4976	1.5	0.97	2603.5	33.2	2634.7	14.9	2658.8	6.0	2658.8	6.0	97.9
BENYON 316-82	253	15107	1.0	5.5023	0.3	11.6596	1.9	0.4653	1.9	0.99	2462.9	38.9	2577.5	18.0	2668.8	5.5	2668.8	5.5	92.3
BENYON 316-76	113	151867	1.4	5.4516	0.3	12.8342	3.0	0.5074	3.0	0.99	2645.7	65.7	2667.6	28.7	2684.2	5.6	2684.2	5.6	98.6
BENYON 316-67	98	108653	1.6	5.3024	0.3	13.8698	2.5	0.5334	2.5	0.99	2755.7	56.3	2740.9	24.0	2729.9	5.1	2729.9	5.1	100.9
BENYON 316-3	55	44355	2.0	5.2868	0.7	13.4956	2.0	0.5175	1.9	0.94	2688.4	42.1	2715.0	19.3	2734.8	11.5	2734.8	11.5	98.3
BENYON 316-97	79	147858	1.2	5.2819	0.4	13.5888	0.9	0.5206	0.8	0.91	2701.5	17.7	2721.5	8.4	2736.3	6.2	2736.3	6.2	98.7
BENYON 316-41	37	32387	1.0	5.2586	0.8	13.4408	1.7	0.5126	1.5	0.87	2667.8	33.0	2711.1	16.3	2743.6	13.8	2743.6	13.8	97.2
BENYON 316-63	111	136194	1.0	5.2505	0.3	13.8282	1.1	0.5266	1.0	0.97	2727.0	23.2	2738.0	10.2	2746.1	4.3	2746.1	4.3	99.3
BENYON 316-99	50	41459	1.6	5.1601	0.6	13.9048	0.8	0.5204	0.6	0.70	2700.8	12.8	2743.2	7.9	2774.6	9.7	2774.6	9.7	97.3
BENYON 316-58	95	90741	2.2	5.0372	0.6	14.8607	1.6	0.5429	1.5	0.93	2795.6	34.5	2806.4	15.6	2814.1	10.1	2814.1	10.1	99.3
BENYON 316-1	27	106464	1.3	5.0010	0.7	14.7153	2.7	0.5337	2.6	0.97	2757.2	58.7	2797.0	25.7	2825.9	10.9	2825.9	10.9	97.6
BENYON 316-5	50	73227	1.0	4.5633	0.5	17.5353	2.6	0.5804	2.6	0.98	2950.2	61.1	2964.6	25.2	2974.4	7.4	2974.4	7.4	99.2

9. Location: 1AB/06-34-084-07W4/0

Analysis	U	206Pb	U/Th	206Pb*	±	207Pb*	±	206Pb*	±	error	206Pb*	±	207Pb*	±	206Pb*	±	Best age	±	Conc
	(ppm)	204Pb		207Pb*	(%)	235U*	(%)	238U	(%)	corr.	238U*	(Ma)	235U	(Ma)	207Pb*	(Ma)	(Ma)	(Ma)	(%)
BENYON 216-40	189	6012	2.6	21.2850	17.3	0.1078	17.5	0.0166	2.9	0.17	106.4	3.1	103.9	17.3	48.3	416.0	106.4	3.1	NA
BENYON 216-12	172	7689	3.3	22.6751	19.4	0.1036	19.8	0.0170	3.7	0.19	108.9	4.0	100.1	18.8	-105.0	481.1	108.9	4.0	NA
BENYON 216-94	1106	31960	1.8	20.2494	3.4	0.1192	3.7	0.0175	1.4	0.39	111.8	1.6	114.3	3.9	166.1	78.4	111.8	1.6	NA
BENYON 216-95	112	2629	2.7	28.6439	23.4	0.0846	24.1	0.0176	6.0	0.25	112.3	6.7	82.5	19.1	-715.7	657.8	112.3	6.7	NA
BENYON 216-98	922	36930	3.1	21.0353	2.6	0.1153	3.1	0.0176	1.7	0.53	112.5	1.8	110.8	3.3	76.4	62.2	112.5	1.8	NA
BENYON 216-15	482	18207	1.2	21.4835	12.2	0.1162	13.8	0.0181	6.4	0.46	115.6	7.3	111.6	14.6	26.1	294.0	115.6	7.3	NA
BENYON 216-101	723	24195	2.1	19.7995	5.1	0.1268	5.4	0.0182	1.9	0.35	116.3	2.2	121.2	6.2	218.4	117.2	116.3	2.2	NA
BENYON 216-25	568	41611	2.6	20.6088	6.4	0.1226	6.6	0.0183	1.5	0.23	117.1	1.8	117.5	7.3	124.8	150.3	117.1	1.8	NA
BENYON 216-63	401	13078	1.6	21.1467	6.5	0.1325	7.1	0.0203	2.9	0.40	129.7	3.7	126.3	8.5	63.8	155.8	129.7	3.7	NA
BENYON 216-53	554	31643	2.4	19.9798	4.1	0.2100	4.3	0.0304	1.2	0.28	193.3	2.3	193.6	7.6	197.3	95.8	193.3	2.3	NA
BENYON 216-24	305	27598	1.7	19.7514	5.6	0.2701	5.8	0.0387	1.5	0.26	244.7	3.6	242.8	12.4	224.0	128.5	244.7	3.6	NA
BENYON 216-100	340	24248	1.6	19.5795	4.7	0.2801	4.8	0.0398	1.1	0.24	251.4	2.8	250.7	10.6	244.2	107.3	251.4	2.8	NA
BENYON 216-42	151	8877	2.2	20.4107	10.5	0.2732	10.7	0.0404	1.7	0.16	255.6	4.4	245.3	23.2	147.5	247.0	255.6	4.4	NA

BENYON 216-99	215	27734	1.7	19.1700	6.6	0.3705	7.2	0.0515	2.9	0.40	323.8	9.1	320.0	19.9	292.6	151.9	323.8	9.1	NA
BENYON 216-10	93	8564	1.0	19.5745	13.7	0.3714	13.8	0.0527	1.3	0.09	331.3	4.0	320.7	37.9	244.7	317.0	331.3	4.0	NA
BENYON 216-46	406	27382	7.8	18.6158	2.4	0.4072	3.0	0.0550	1.8	0.59	345.0	6.0	346.8	8.9	359.2	55.0	345.0	6.0	NA
BENYON 216-75	68	5976	1.4	18.6074	12.3	0.4084	15.4	0.0551	9.3	0.60	345.9	31.2	347.8	45.3	360.2	277.6	345.9	31.2	NA
BENYON 216-29	454	42243	1.5	18.7011	1.8	0.4101	2.6	0.0556	2.0	0.74	348.9	6.6	348.9	7.8	348.9	40.4	348.9	6.6	NA
BENYON 216-7	233	25224	1.9	18.4970	3.8	0.4197	3.9	0.0563	0.9	0.23	353.1	3.1	355.8	11.6	373.6	84.9	353.1	3.1	NA
BENYON 216-92	657	58348	2.4	17.8782	1.8	0.4853	6.6	0.0629	6.3	0.96	393.4	24.2	401.7	21.9	449.7	41.0	393.4	24.2	NA
BENYON 216-58	174	1456	2.0	17.8047	8.4	0.5092	8.6	0.0658	1.8	0.21	410.5	7.2	417.9	29.3	458.9	185.7	410.5	7.2	89.5
BENYON 216-105	208	20197	2.0	17.4903	4.4	0.5473	4.9	0.0694	2.1	0.43	432.7	8.8	443.2	17.5	498.3	97.1	432.7	8.8	86.8
BENYON 216-4	438	88314	3.4	18.0046	1.6	0.5405	2.6	0.0706	2.0	0.77	439.7	8.4	438.8	9.1	434.1	36.5	439.7	8.4	101.3
BENYON 216-9	495	76244	2.2	17.9664	1.5	0.5461	1.6	0.0712	0.7	0.44	443.2	3.1	442.5	5.8	438.8	32.3	443.2	3.1	101.0
BENYON 216-3	238	36323	1.8	17.2967	2.2	0.7028	3.0	0.0882	2.0	0.68	544.7	10.4	540.5	12.4	522.7	47.7	544.7	10.4	104.2
BENYON 216-16	276	44988	0.8	16.4164	1.5	0.7956	1.9	0.0947	1.2	0.64	583.4	6.9	594.3	8.7	636.2	32.0	583.4	6.9	91.7
BENYON 216-88	81	33279	2.6	14.3266	3.6	1.5077	4.0	0.1567	1.6	0.39	938.2	13.7	933.5	24.2	922.5	74.9	922.5	74.9	101.7
BENYON 216-93	138	29989	2.9	14.1041	1.6	1.4983	2.5	0.1533	1.9	0.76	919.2	16.2	929.7	15.1	954.6	32.7	954.6	32.7	96.3
BENYON 216-19	226	145617	2.7	14.0381	1.3	1.5368	1.4	0.1565	0.5	0.37	937.1	4.4	945.2	8.3	964.2	25.6	964.2	25.6	97.2
BENYON 216-33	157	37409	3.0	13.5819	1.5	1.7127	2.4	0.1687	1.9	0.77	1005.0	17.4	1013.3	15.5	1031.3	31.2	1031.3	31.2	97.5
BENYON 216-23	136	46598	2.7	13.5759	2.0	1.7753	2.1	0.1748	0.7	0.32	1038.5	6.4	1036.5	13.6	1032.1	40.2	1032.1	40.2	100.6
BENYON 216-31	98	31013	3.4	13.4382	2.7	1.8006	3.2	0.1755	1.6	0.50	1042.3	15.1	1045.7	20.7	1052.8	55.4	1052.8	55.4	99.0
BENYON 216-89	334	95112	3.1	13.3913	0.8	1.7789	2.8	0.1728	2.6	0.95	1027.4	25.0	1037.8	18.0	1059.8	16.9	1059.8	16.9	96.9
BENYON 216-5	186	60101	2.0	13.3912	2.4	1.8366	3.8	0.1784	3.0	0.78	1058.1	29.3	1058.6	25.3	1059.8	48.5	1059.8	48.5	99.8
BENYON 216-57	225	60046	4.2	13.3816	1.1	1.7726	1.3	0.1720	0.7	0.55	1023.3	7.0	1035.5	8.8	1061.3	22.7	1061.3	22.7	96.4
BENYON 216-103	103	55080	2.4	13.3476	1.7	1.8624	2.5	0.1803	1.8	0.74	1068.5	18.2	1067.8	16.4	1066.4	33.3	1066.4	33.3	100.2
BENYON 216-18	44	12272	2.9	13.0555	4.3	1.9925	4.9	0.1887	2.3	0.47	1114.1	23.4	1113.0	33.1	1110.7	86.4	1110.7	86.4	100.3
BENYON 216-43	64	70427	0.9	12.9875	3.3	1.8923	3.9	0.1782	2.1	0.54	1057.4	20.6	1078.4	25.8	1121.1	65.1	1121.1	65.1	94.3
BENYON 216-56	83	24800	2.1	12.8513	3.1	2.0261	3.6	0.1888	1.8	0.49	1115.1	18.1	1124.3	24.3	1142.1	61.7	1142.1	61.7	97.6
BENYON 216-96	122	52490	2.1	12.8457	1.7	1.9934	1.9	0.1857	0.9	0.45	1098.2	8.9	1113.3	13.2	1143.0	34.6	1143.0	34.6	96.1
BENYON 216-8	118	56672	1.8	12.8169	0.9	2.0667	3.2	0.1921	3.1	0.96	1132.8	32.2	1137.8	22.1	1147.4	17.6	1147.4	17.6	98.7
BENYON 216-68	81	25837	1.7	12.8103	1.9	2.0361	2.9	0.1892	2.1	0.74	1116.9	21.6	1127.6	19.4	1148.4	38.3	1148.4	38.3	97.3
BENYON 216-74	93	30583	1.8	12.7755	1.2	2.1146	2.5	0.1959	2.3	0.89	1153.4	23.9	1153.6	17.6	1153.8	23.3	1153.8	23.3	100.0
BENYON 216-66	155	49190	2.5	12.7365	1.4	2.0958	1.9	0.1936	1.2	0.66	1140.8	12.7	1147.4	12.7	1159.9	27.6	1159.9	27.6	98.4
BENYON 216-55	88	51357	2.7	12.4679	2.3	2.1853	2.7	0.1976	1.4	0.53	1162.5	14.9	1176.4	18.6	1202.0	44.7	1202.0	44.7	96.7
BENYON 216-85	141	63272	3.7	11.9938	1.1	2.5469	2.8	0.2215	2.6	0.92	1290.0	30.8	1285.5	20.8	1278.0	21.1	1278.0	21.1	100.9
BENYON 216-48	150	52587	2.2	11.8576	1.1	2.4272	1.3	0.2087	0.6	0.47	1222.1	6.8	1250.7	9.3	1300.3	22.0	1300.3	22.0	94.0
BENYON 216-69	155	114334	2.9	11.5279	1.3	2.6625	2.1	0.2226	1.6	0.77	1295.6	18.9	1318.1	15.5	1354.8	25.9	1354.8	25.9	95.6
BENYON 216-45	144	84636	2.8	11.5053	0.9	2.6315	2.2	0.2196	2.0	0.91	1279.7	23.0	1309.5	16.1	1358.6	17.9	1358.6	17.9	94.2
BENYON 216-65	200	137798	1.9	11.3330	0.6	2.7656	0.9	0.2273	0.7	0.78	1320.4	8.7	1346.3	7.0	1387.6	11.4	1387.6	11.4	95.2
BENYON 216-78	106	82035	1.1	11.0717	2.1	3.0316	2.3	0.2434	0.9	0.38	1404.5	11.2	1415.6	17.7	1432.3	40.9	1432.3	40.9	98.1
BENYON 216-38	175	59436	1.3	11.0698	0.5	3.0252	1.7	0.2429	1.6	0.95	1401.7	20.0	1414.0	12.8	1432.6	9.8	1432.6	9.8	97.8
BENYON 216-17	439	316749	2.6	10.7779	0.3	3.1505	0.8	0.2463	0.8	0.93	1419.2	9.8	1445.1	6.3	1483.4	5.6	1483.4	5.6	95.7
BENYON 216-44	110	57490	2.2	10.6986	1.1	3.3057	1.2	0.2565	0.5	0.42	1471.9	6.7	1482.4	9.4	1497.4	20.7	1497.4	20.7	98.3
BENYON 216-82	304	207753	2.1	10.6305	0.3	3.1506	3.6	0.2429	3.6	1.00	1401.8	45.2	1445.1	27.8	1509.5	6.5	1509.5	6.5	92.9
BENYON 216-73	163	92928	2.5	10.5880	0.7	3.4235	1.0	0.2629	0.7	0.73	1504.6	9.6	1509.8	7.7	1517.0	12.7	1517.0	12.7	99.2
BENYON 216-22	304	74173	1.8	10.1448	0.4	3.7558	1.2	0.2763	1.1	0.95	1572.9	15.3	1583.3	9.3	1597.3	7.1	1597.3	7.1	98.5
BENYON 216-86	111	48564	1.1	9.8436	0.7	4.0239	1.9	0.2873	1.8	0.93	1627.9	26.1	1639.0	15.8	1653.3	12.8	1653.3	12.8	98.5
BENYON 216-67	161	117225	1.5	9.8385	0.6	4.0411	1.1	0.2884	0.9	0.86	1633.3	13.5	1642.5	8.9	1654.3	10.4	1654.3	10.4	98.7
BENYON 216-49	222	125453	0.9	9.7597	0.5	4.0330	1.4	0.2855	1.3	0.94	1618.9	18.6	1640.9	11.3	1669.2	9.1	1669.2	9.1	97.0
BENYON 216-30	291	139848	1.4	9.5995	0.4	4.2369	2.3	0.2950	2.2	0.99	1666.4	32.9	1681.2	18.7	1699.7	6.8	1699.7	6.8	98.0
BENYON 216-6	95	32458	313.1	9.5320	1.4	3.9919	2.3	0.2760	1.8	0.80	1571.0	25.6	1632.6	18.8	1712.7	25.7	1712.7	25.7	91.7
BENYON 216-59	52	36610	0.8	9.4822	2.0	4.2387	2.3	0.2915	1.2	0.51	1649.0	17.0	1681.6	18.7	1722.3	35.9	1722.3	35.9	95.7
BENYON 216-70	68	56737	2.5	9.4462	1.9	4.0647	4.0	0.2785	3.5	0.88	1583.7	49.2	1647.2	32.4	1729.3	34.4	1729.3	34.4	91.6
BENYON 216-60	54	39187	1.5	9.3628	1.1	4.3946	2.3	0.2984	2.0	0.87	1683.5	29.2	1711.3	18.8	1745.6	20.8	1745.6	20.8	96.4
BENYON 216-32	90	28576	1.2	9.2454	1.4	4.7058	3.5	0.3155	3.2	0.92	1767.9	49.0	1768.3	28.9	1768.7	25.0	1768.7	25.0	100.0
BENYON 216-61	256	192003	2.4	9.1478	0.3	4.9408	1.4	0.3278	1.3	0.97	1827.7	21.4	1809.3	11.7	1788.0	6.3	1788.0	6.3	102.2
BENYON 216-91	201	203782	3.2	9.0427	0.5	4.7995	0.9	0.3148	0.8	0.84	1764.1	12.2	1784.8	7.9	1809.1	9.3	1809.1	9.3	97.5
BENYON 216-14	67	74851	1.6	8.9344	0.8	5.0626	1.8	0.3280	1.6	0.90	1828.9	25.4	1829.9	15.0	1830.9	14.1	1830.9	14.1	99.9
BENYON 216-83	112	52146	1.1	8.9247	0.8	4.8957	4.1	0.3169	4.1	0.98	1774.5	63.1	1801.5	35.0	1832.9	14.6	1832.9	14.6	96.8
BENYON 216-21	64	32624	2.1	8.9081	1.8	4.9987	2.1	0.3230	1.1	0.52	1804.1	16.9	1819.1	17.4	1836.3	31.9	1836.3	31.9	98.3
BENYON 216-34	54	29840	1.2	8.8747	1.1	5.0521	1.7	0.3252	1.3	0.77	1815.0	20.5	1828.1	14.3	1843.1	19.4	1843.1	19.4	98.5
BENYON 216-37	137	77636	2.4	8.8583	0.5	5.0111	1.0	0.3219	0.9	0.89	1799.2	14.4	1821.2	8.8	1846.4	8.6	1846.4	8.6	97.4
BENYON 216-13	232	215626	1.9	8.8573	0.4	5.0790	1.3	0.3263	1.2	0.94	1820.3	19.2	1832.6	10.9	1846.6	7.9	1846.6	7.9	98.6
BENYON 216-64	93	56922	1.1	8.8528	1.2	4.9074	2.4	0.3151	2.0	0.85	1765.7	31.0	1803.5	19.9	1847.5	22.4	1847.5	22.4	95.6
BENYON 216-76	290	184876	1.6	8.8479	0.3	5.1502	0.7	0.3305	0.6	0.91	1840.8	9.7	1844.4	5.7	1848.5	5.1	1848.5	5.1	99.6
BENYON 216-72	145	39210	1.8	8.8254	0.6	5.0906	0.9	0.3258	0.6	0.73	1818.2	9.8	1834.5	7.2	1853.1	10.6	1853.1	10.6	98.1
BENYON 216-50	63	99485	0.7	8.8178	1.5	5.0060	1.8	0.3201	1.1	0.60	1790.4	17.3	1820.3	15.6	1854.7	26.7	1854.7	26.7	96.5
BENYON 216-26	185	155469	0.6	8.7108	0.3	5.2330	0.9	0.3306	0.8	0.94	1841.3	13.2	1858.0	7.5	1876.7	5.4	1876.7	5.4	98.1
BENYON 216-27	233	204970	2.4	8.6034	0.3	5.3297	1.6	0.3326	1.6	0.99	1850.8	26.1	1873.6	14.1	1899.1	4.8	1899.1	4.8	97.5
BENYON 216-87	50	31398	0.8	8.5075	2.0	5.5304	2.2	0.3412	0.8	0.39	1892.6	13.9	1905.3	18.7	1919.2	35.9	1919.2	35.9	98.6
BENYON 216-81	85	76575	11.9	8.4602	3.6	5.1769	4.4	0.3176	2.6	0.58	1778.2	39.7	1848.8	37.7	1929.2	64.8	1929.2	64.8	92.2
BENYON 216-28	88	34909	1.3	8.2283	0.5	5.9935	1.0	0.3577	0.8	0.88	1971.2	14.4	1974.9	8.4	1978.8	8.1	1978.8	8.1	99.6
BENYON 216-1	137	74834	1.9	7.7623	0.6	6.1352	1.4	0.3454	1.3	0.89	1912.6	21.1	1995.3	12.5	2082.0	11.3	2082.0	11.3	91.9
BENYON 216-2	149	116212	1.1	7.3315	0.6	6.3179	1.6	0.3359	1.4	0.91	1867.1	22.9	2020.9	13.6	2181.9	11.1	2181.9	11.1	85.6
BENYON 216-47	62	96232	1.4	6.7874	0.6	8.4125	1.0	0.4141	0.8	0.79	2233.7	14.6	2276.5	8.9	2315.2	10.3	2315.2	10.3	96.5
BENYON 216-62	177	178289	2.3	6.0022	0.4	10.6010	1.5	0.4615	1.5	0.96	2446.1	30.0	2488.8	14.2	2523.8	7.0	2523.8	7.0	96.9
BENYON 216-77	103	127623	2.6	6.0022	0.5	9.9782	1.5	0.4344	1.4	0.95	2325.4	27.2	2432.8	13.6	2523.8	8.0	2523.8	8.0	92.1
BENYON 216-90	60	50035	2.1	5.9636	0.6	10.8676	1.7	0.4700	1.6	0.93	2483.8	32.2	2511.9	15.7	2534.6	10.7	2534.6	10.7	98.0
BENYON 216-35	41	35032	0.6	5.7308	0.8	11.6877	1.2	0.4858	0.9	0.76	2552.4	18.8	2579.7	11.0	2601.2	12.8	2601.2	12.8	98.1
BENYON 216-20	78	65998	0.8	5.5756	0.6	11.6991	3.9	0.4731	3.8	0.99	2497.1	78.8	2580.6	36.1	2646.9	10.3	2646.9	10.3	94.3
BENYON 216-54	86	92795	2.0	5.3852	0.6	12.9737	1.4	0.5067	1.3	0.91	2642.6	28.5	2677.7	13.6	2704.4	9.7	2704.4	9.7	97.7
BENYON 216-71	44	70705	0.9	5.3632	0.6	13.5806	1.0	0.5282	0.8	0.81	2734.1	18.6	2720.9	9.8	2711.1	10.1	2711.1	10.1	100.8
BENYON 216-80	131	211256	1.0	5.3618	0.4	12.8731	2.9	0.5006	2.8	0.99	2616.4	60.9	2670.4	27.0	2711.6	7.3	2711.6	7.3	96.5
BENYON 216-102	165	152503	0.5	5.3408	0.1	13.3161	2.2	0.5158	2.2	1.00	2681.4	48.5	2702.3	20.9	2718.0	2.4	2718.0	2.4	98.7
BENYON 216-39	81	111136	1.2	5.1119	0.3	14.3247	1.6	0.5311	1.6	0.98	2746.0	35.7	2771.5	15.5	2790.0	5.4	2790.0	5.4	98.4
BENYON 216-97	178	324104	4.0	5.0543	0.2	14.5707	1.1	0.5341	1.1	0.98	2758.8	23.9	2787.6	10.4	2808.5	3.8	2808.5	3.8	98.2
BENYON 216-52	93	113634	2.0	4.9319	0.4	14.9452	1.3	0.5346	1.2	0.94	2760.7	27.6	2811.8	12.4	2848.6	7.2	2848.6	7.2	96.9

1. Analyses with >10% uncertainty (1-sigma) in 206Pb/238U age are not included.
2. Analyses with >10% uncertainty (1-sigma) in 206Pb/207Pb age are not included, unless 206Pb/238U age is <500 Ma.
3. Best age is determined from 206Pb/238U age for analyses with 206Pb/238U age <1000 Ma and from 206Pb/207Pb age for analyses with 206Pb/238Uage > 1000 Ma.
4. Concordance is based on 206Pb/238U age / 206Pb/207Pb age. Value is not reported for 206Pb/238U ages <500 Ma because of large uncertainty in 206Pb/207Pb age.
5. Analyses with 206Pb/238U age > 500 Ma and with >20% discordance (<80% concordance) are not included.
6. Analyses with 206Pb/238U age > 500 Ma and with >5% reverse discordance (<105% concordance) are not included.
7. All uncertainties are reported at the 1-sigma level, and include only measurement errors.
8. Systematic errors are as follows (at 2-sigma level): [sample 1: 2.5% (206Pb/238U) & 1.4% (206Pb/207Pb)] These values are reported on cells U1 and W1 of NUagecalc.
9. Analyses conducted by LA-MC-ICPMS, as described by Gehrels et al. (2008).
10. U concentration and U/Th are calibrated relative to Sri Lanka zircon standard and are accurate to ~20%.
11. Common Pb correction is from measured 204Pb with common Pb composition interpreted from Stacey and Kramers (1975).
12. Common Pb composition assigned uncertainties of 1.5 for 206Pb/204Pb, 0.3 for 207Pb/204Pb, and 2.0 for 208Pb/204Pb.
13. U/Pb and 206Pb/207Pb fractionation is calibrated relative to fragments of a large Sri Lanka zircon of 563.5 ± 3.2 Ma (2-sigma).
14. U decay constants and composition as follows: 238U = 9.8485 x 10-10, 235U = 1.55125 x 10-10, 238U/235U = 137.88.
15. Weighted mean and concordia plots determined with Isoplot (Ludwig, 2008).

References:

Gehrels, G.E., Valencia, V., Ruiz, J., 2008, Enhanced precision, accuracy, efficiency, and spatial resolution of U-Pb ages by laser ablation-multicollector-inductively coupled plasma-mass spectrometry: Geochemistry, Geophysics, Geosystems, v. 9, Q03017, doi:10.1029/2007GC001805.

Ludwig, K., 2008, Isoplot 3.6: Berkeley Geochrono9logy Center Special Publication 4, 77 p.

Stacey, J.S., and Kramers, J.D., 1975, Approximation of terrestrial lead isotope evolution by a two stage model: Earth and Planetary Science Letters, v. 26, p. 207-221.

Analysis run on: Tuesday, Jan 15, 2013 @ 04:59:51 PM. Version: 1.0.

K-S Test

K-S P-values using error in the CDF

	9	7	8	2	5	3	6	4	1
9		**0.060**	**0.297**	0.000	0.000	0.001	0.000	**0.303**	0.000
7	**0.060**		**0.550**	0.000	0.000	0.000	0.000	0.046	0.025
8	**0.297**	**0.550**		0.000	0.000	0.000	0.000	0.001	0.046
2	0.000	0.000	0.000		**0.435**	**0.925**	**0.521**	0.027	0.000
5	0.000	0.000	0.000	**0.435**		**0.479**	**0.249**	0.045	0.000
3	0.001	0.000	0.000	**0.925**	**0.479**		**0.694**	**0.151**	0.000
6	0.000	0.000	0.000	**0.521**	**0.249**	**0.694**		**0.052**	0.000
4	**0.303**	0.046	0.001	0.027	0.045	**0.151**	**0.052**		0.000
1	0.000	0.025	0.046	0.000	0.000	0.000	0.000	0.000	

D-values using error in the CDF

	9	7	8	2	5	3	6	4	1
9		0.189	0.138	0.330	0.299	0.302	0.302	0.141	0.301
7	0.189		0.112	0.377	0.345	0.361	0.382	0.200	0.212
8	0.138	0.112		0.445	0.429	0.435	0.435	0.274	0.194
2	0.330	0.377	0.445		0.126	0.086	0.116	0.213	0.580
5	0.299	0.345	0.429	0.126		0.133	0.148	0.203	0.551
3	0.302	0.361	0.435	0.086	0.133		0.111	0.181	0.568
6	0.302	0.382	0.435	0.116	0.148	0.111		0.197	0.567
4	0.141	0.200	0.274	0.213	0.203	0.181	0.197		0.411
1	0.301	0.212	0.194	0.580	0.551	0.568	0.567	0.411	

K-S P-values for no error

	9	7	8	2	5	3	6	4	1
9		**0.048**	0.196	0.000	0.000	0.001	0.000	0.239	0.000
7	**0.048**		0.411	0.000	0.000	0.000	0.000	0.045	0.016
8	0.196	0.411		0.000	0.000	0.000	0.000	0.001	0.034
2	0.000	0.000	0.000		0.278	0.545	0.127	0.018	0.000
5	0.000	0.000	0.000	0.278		0.297	0.151	0.018	0.000
3	0.001	0.000	0.000	0.545	0.297		0.325	0.097	0.000
6	0.000	0.000	0.000	0.127	0.151	0.325		**0.040**	0.000
4	0.239	0.045	0.001	0.018	0.018	0.097	**0.040**		0.000
1	0.000	0.016	0.034	0.000	0.000	0.000	0.000	0.000	

D-values for no error

	9	7	8	2	5	3	6	4	1
9		0.195	0.152	0.338	0.309	0.306	0.316	0.150	0.313
7	0.195		0.125	0.384	0.357	0.360	0.393	0.200	0.221
8	0.152	0.125		0.453	0.434	0.439	0.441	0.279	0.202
2	0.338	0.384	0.453		0.143	0.125	0.167	0.223	0.590
5	0.309	0.357	0.434	0.143		0.154	0.165	0.226	0.551
3	0.306	0.360	0.439	0.125	0.154		0.149	0.196	0.576
6	0.316	0.393	0.441	0.167	0.165	0.149		0.203	0.568
4	0.150	0.200	0.279	0.223	0.226	0.196	0.203		0.416
1	0.313	0.221	0.202	0.590	0.551	0.576	0.568	0.416	

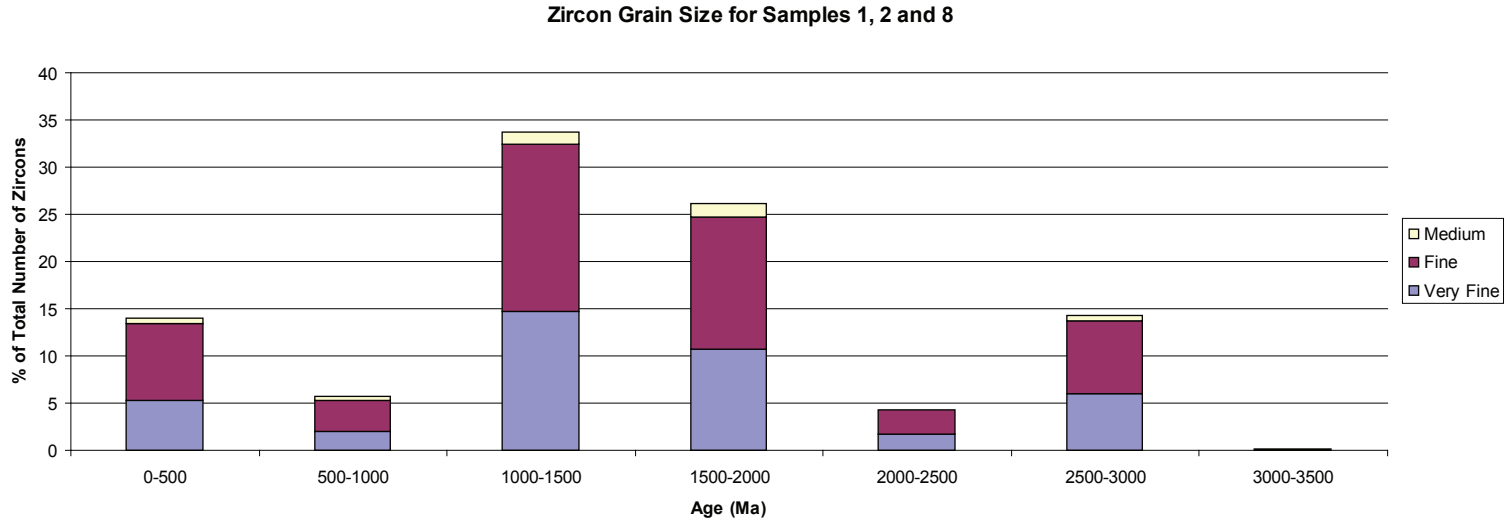
Average K-S P-values using Monte-Carlo

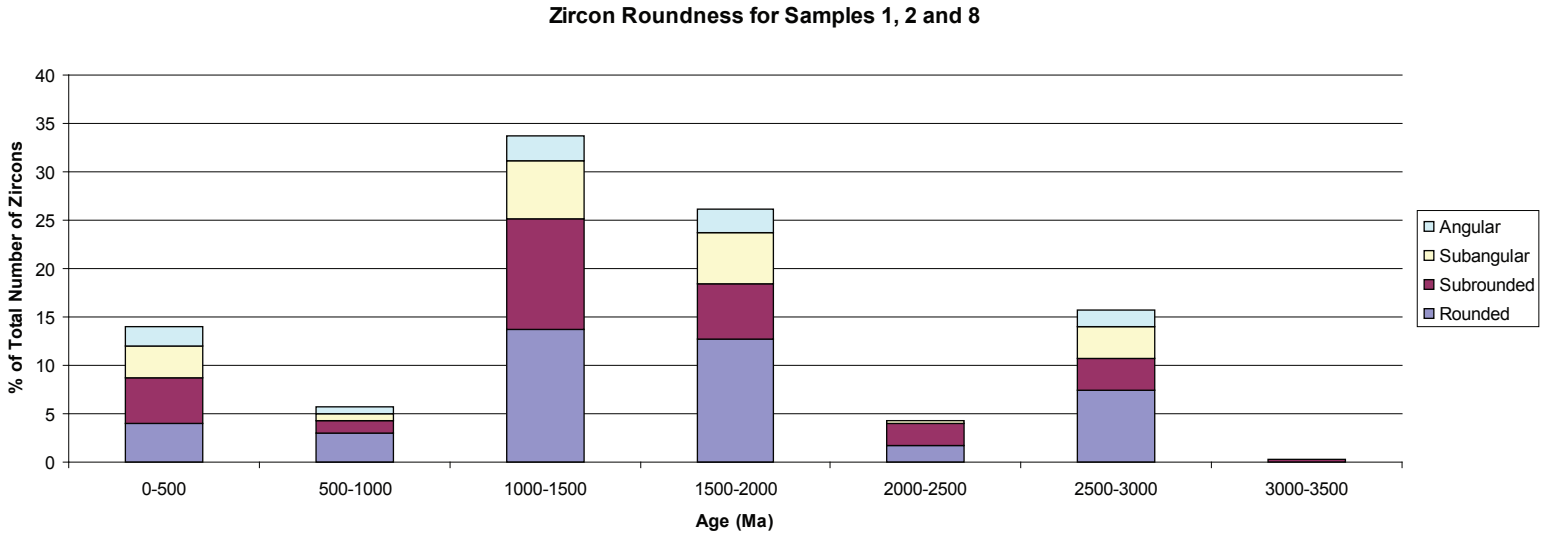
	9	7	8	2	5	3	6	4	1
9		**0.049**	0.178	0.000	0.000	0.001	0.000	0.244	0.000
7	**0.049**		0.425	0.000	0.000	0.000	0.000	**0.037**	0.011
8	0.178	0.425		0.000	0.000	0.000	0.000	0.001	**0.037**
2	0.000	0.000	0.000		0.328	0.703	**0.324**	0.016	0.000
5	0.000	0.000	0.000	0.328		0.374	**0.133**	0.022	0.000
3	0.001	0.000	0.000	0.703	0.374		0.417	**0.096**	0.000
6	0.000	0.000	0.000	**0.324**	**0.133**	0.417		**0.044**	0.000
4	0.244	**0.037**	0.001	0.016	0.022	**0.096**	**0.044**		0.000
1	0.000	0.011	**0.037**	0.000	0.000	0.000	0.000	0.000	

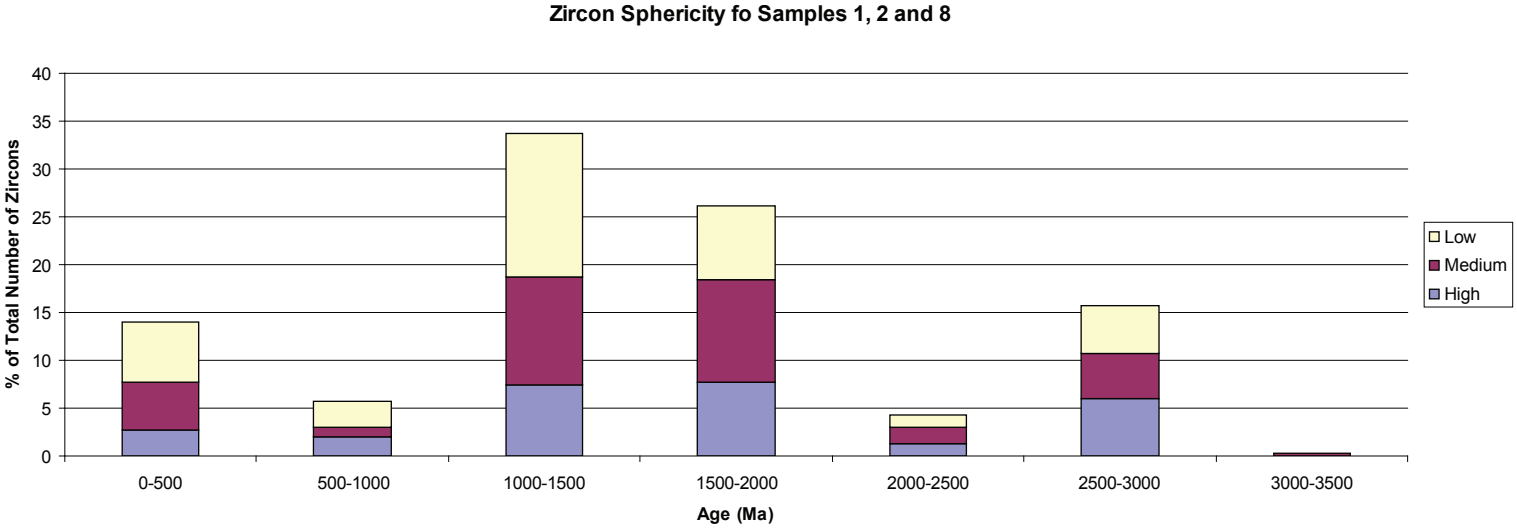
Two std devs. of P-values using Monte-Carlo

	9	7	8	2	5	3	6	4	1
9		**0.012**	0.085	0.000	0.000	0.001	0.000	0.059	0.000
7	**0.012**		0.120	0.000	0.000	0.000	0.000	**0.015**	0.012
8	0.085	0.120		0.000	0.000	0.000	0.000	0.001	**0.022**
2	0.000	0.000	0.000		0.214	0.319	**0.333**	0.016	0.000
5	0.000	0.000	0.000	0.214		0.148	**0.098**	0.023	0.000
3	0.001	0.000	0.000	0.319	0.148		0.345	**0.068**	0.000
6	0.000	0.000	0.000	**0.333**	**0.098**	0.345		**0.014**	0.000
4	0.059	**0.015**	0.001	0.016	0.023	**0.068**	**0.014**		0.000
1	0.000	0.012	**0.022**	0.000	0.000	0.000	0.000	0.000	

Grain Morphology Analysis







Zircon roundness was measured using a comparison to standard frameworks, and sphericity was estimated using a round and elongate grain as endmembers.