

Sandstone provenance and insights into the paleogeography of the McMurray Formation from detrital zircon geochronology, Athabasca Oil Sands, Canada

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URANIUM–LEAD GEOCHRONOLOGIC ANALYSES OF DETRITAL ZIRCON (NU HIGH-RESOLUTION INDUCTIVELY COUPLED PLASMA MASS SPECTROMETRY)

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-in. 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.

Uranium–lead (U–Pb) geochronology of zircons is conducted by laser ablation multicollector inductively coupled plasma mass spectrometry (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 high-resolution ICPMS, which is equipped with a flight tube of sufficient width that U, thorium (Th), and Pb isotopes are measured simultaneously. All measurements are made in static mode, using Faraday detectors with 3×10^{11} ohm resistors for ^{238}U , ^{232}Th , ^{208}Pb – ^{206}Pb , and discrete dynode ion counters for ^{204}Pb and ^{202}Hg (mercury). Ion yields are ~0.8 mv/ppm. Each analysis consists of 1 15-sec integration on peaks with the laser off (for backgrounds), 15 1-sec integrations with the laser firing, and a 30-sec 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 $^{206}\text{Pb}/^{238}\text{U}$ and $^{206}\text{Pb}/^{204}\text{Pb}$ result in a measurement error of approximately 1%–2% (at 2-sigma level) in the $^{206}\text{Pb}/^{238}\text{U}$ age. The errors in measurement of $^{206}\text{Pb}/^{207}\text{Pb}$ and $^{206}\text{Pb}/^{204}\text{Pb}$ also result in approximately 1%–2% (at 2-sigma level) uncertainty in age for grains that are greater than 1.0 Ga, but are substantially larger for younger grains due to low intensity of the ^{207}Pb signal. For most analyses, the crossover in precision of $^{206}\text{Pb}/^{238}\text{U}$ and $^{206}\text{Pb}/^{207}\text{Pb}$ ages occurs at approximately 1.0 Ga.

The ^{204}Hg interference with ^{204}Pb is accounted for in measurement of ^{202}Hg during laser ablation and subtraction of ^{204}Hg according to the natural $^{202}\text{Hg}/^{204}\text{Hg}$ of 4.35. This Hg 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 $^{206}\text{Pb}/^{204}\text{Pb}$ and 0.3 for $^{207}\text{Pb}/^{204}\text{Pb}$ are applied to these compositional values based on the variation in Pb isotopic composition in modern crystal rocks.

Interelement fractionation of Pb/U is generally approximately 5%, whereas apparent fractionation of Pb isotopes is generally less than 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 $^{206}\text{Pb}/^{207}\text{Pb}$ and $^{206}\text{Pb}/^{238}\text{U}$ ages. Concentrations of U and Th are calibrated relative to our Sri Lanka zircon, which contains approximately 518 ppm U and 68 ppm Th.

The analytical data are reported in the following tables. Uncertainties shown in these tables are at the

1-sigma level, and include only measurement errors. Analyses that are greater than 20% discordant (by comparison of $^{206}\text{Pb}/^{238}\text{U}$ and $^{206}\text{Pb}/^{207}\text{Pb}$ ages) or greater than 5% reverse discordant (in italics in the data tables) are not considered further.

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. Composite age probability plots are made from an in-house Excel program that normalizes each curve according to the number of constituent analyses, such that each curve contains the same area, and then stacks the probability curves.

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- The following information is applicable for each data table.
- Analyses with >10% uncertainty (1-sigma) in $^{206}\text{Pb}/^{238}\text{U}$ age are not included.
 - Analyses with >10% uncertainty (1-sigma) in $^{206}\text{Pb}/^{207}\text{Pb}$ age are not included, unless $^{206}\text{Pb}/^{238}\text{U}$ age is <500 Ma.
 - Best age is determined from $^{206}\text{Pb}/^{238}\text{U}$ age for analyses with $^{206}\text{Pb}/^{238}\text{U}$ age <1000 Ma and from $^{206}\text{Pb}/^{207}\text{Pb}$ age for analyses with $^{206}\text{Pb}/^{238}\text{U}$ age >1000 Ma.
 - Concordance is based on $^{206}\text{Pb}/^{238}\text{U}$ age/ $^{206}\text{Pb}/^{207}\text{Pb}$ age. Value is not reported for $^{206}\text{Pb}/^{238}\text{U}$ ages <500 Ma because of large uncertainty in $^{206}\text{Pb}/^{207}\text{Pb}$ age.
 - Analyses with $^{206}\text{Pb}/^{238}\text{U}$ age >500 Ma and with >20% discordance (<80% concordance) are not included.
 - Analyses with $^{206}\text{Pb}/^{238}\text{U}$ age >500 Ma and with >5% reverse discordance (<105% concordance) are not included.
 - All uncertainties are reported at the 1-sigma level, and include only measurement errors.
 - Systematic errors are as follows (at 2-sigma level): [sample 1: 2.5% ($^{206}\text{Pb}/^{238}\text{U}$) and 1.4% ($^{206}\text{Pb}/^{207}\text{Pb}$)]. These values are reported on cells U1 and W1 of NUagecalc.
 - Analyses conducted by laser ablation multicollector ICPMS, as described by Gehrels et al. (2008).
 - The U concentration and U/Th are calibrated relative to Sri Lanka zircon standard and are accurate to ~20%.
 - Common Pb correction is from measured ^{204}Pb with common Pb composition interpreted from Stacey and Kramers (1975).
 - Common Pb composition assigned uncertainties of 1.5 for $^{206}\text{Pb}/^{204}\text{Pb}$, 0.3 for $^{207}\text{Pb}/^{204}\text{Pb}$, and 2.0 for $^{208}\text{Pb}/^{204}\text{Pb}$.
 - The U/Pb and $^{206}\text{Pb}/^{207}\text{Pb}$ fractionation is calibrated relative to fragments of a large Sri Lanka zircon of 563.5 ± 3.2 Ma (2-sigma).
 - The U decay constants and composition are as follows: $^{238}\text{U} = 9.8485 \times 10^{10}$, $^{235}\text{U} = 1.55125 \times 10^{10}$, $^{238}\text{U}/^{235}\text{U} = 137.88$.
 - Weighted mean and concordia plots determined with Isoplot (Ludwig, 2008). Data tables are listed with the sample number (e.g., CW1) followed by the location of the well, given in the Canadian Dominion Land Survey format. See text for description.

CW1 (1AA/13-24-082-10W4/00)

Analysis	U (ppm)	206Pb 204Pb	U/Th	Isotope Ratios						Apparent Ages						Best age		Conc (%)	
				206Pb* 207Pb*	± (%)	207Pb* 235U*	± (%)	206Pb* 238U*	± (%)	error corr.	206Pb* 238U*	± (Ma)	207Pb* 235U*	± (Ma)	206Pb* 207Pb*	± (Ma)	206Pb* 207Pb*	± (Ma)	
CW-1-10	210	32782	2.4	21.2570	7.5	0.1951	7.6	0.0301	1.5	0.19	191.1	2.8	181.0	12.7	51.4	179.1	191.1	2.8	NA
CW-1-06	194	16850	1.2	18.3647	8.8	0.3089	9.1	0.0411	2.3	0.26	259.9	6.0	273.3	21.9	389.8	198.7	259.9	6.0	NA
CW-1-38	152	35034	1.4	18.8902	6.0	0.3130	6.5	0.0429	2.4	0.37	270.7	6.3	276.5	15.8	326.1	136.5	270.7	6.3	NA
CW-1-25	140	34643	3.7	19.5411	3.3	0.3282	3.9	0.0465	2.1	0.53	293.1	5.9	288.2	9.7	248.7	75.6	293.1	5.9	NA
CW-1-24	121	23668	0.8	19.0901	3.2	0.3505	3.3	0.0485	0.9	0.28	305.5	2.8	305.1	8.7	302.2	72.5	305.5	2.8	NA
CW-1-74	183	23241	0.8	18.6930	2.2	0.3985	2.5	0.0540	1.2	0.48	339.2	4.0	340.5	7.3	349.9	49.7	339.2	4.0	NA
CW-1-53	119	40696	1.0	18.8231	2.5	0.4611	2.9	0.0829	1.6	0.53	393.5	5.9	385.0	9.4	334.2	56.3	393.5	5.9	NA
CW-1-34	120	105404	1.8	17.9131	3.5	0.5209	3.8	0.0877	1.6	0.41	422.1	6.3	425.7	13.2	445.4	77.2	422.1	6.3	94.8
CW-1-47	114	36367	1.1	18.2888	4.4	0.5130	4.6	0.0860	1.1	0.24	424.3	4.6	420.4	15.8	399.3	99.7	424.3	4.6	108.3
CW-1-99	100	31975	0.8	18.0580	3.1	0.5570	3.4	0.0730	1.4	0.42	453.9	6.3	449.5	12.5	427.5	89.6	453.9	6.3	108.2
CW-1-20	136	51030	0.9	18.1801	2.9	0.5538	3.0	0.0730	0.9	0.29	454.3	3.8	447.5	10.8	412.4	64.1	454.3	3.8	110.2
CW-1-15	174	104283	0.8	17.5311	3.0	0.5773	3.1	0.0734	0.9	0.30	456.7	4.1	462.8	11.7	493.1	66.2	456.7	4.1	92.6
CW-1-58	268	86994	2.9	17.7906	1.6	0.5762	1.7	0.0743	0.7	0.41	462.3	3.1	462.0	6.4	460.6	34.8	462.3	3.1	100.4
CW-1-01	117	42326	0.8	17.4735	4.3	0.5899	5.1	0.0748	2.8	0.55	464.7	12.6	470.8	19.3	500.4	94.4	464.7	12.6	92.9
CW-1-60	123	37798	0.9	17.3421	1.5	0.6184	1.8	0.0778	1.0	0.54	482.8	4.6	488.8	7.1	517.0	33.9	482.8	4.6	93.4
CW-1-87	27	21070	1.5	18.4761	8.5	0.6795	8.8	0.0911	2.3	0.26	561.8	12.5	526.5	36.1	376.2	100.9	561.8	12.5	149.3
CW-1-52	35	26014	1.3	17.3185	9.6	0.7318	9.8	0.0919	1.9	0.19	566.9	10.3	557.6	42.1	520.0	211.5	566.9	10.3	109.0
CW-1-98	82	34587	1.4	16.4690	4.6	0.8632	4.8	0.1031	1.4	0.28	632.6	8.2	631.9	22.5	629.3	98.7	632.6	8.2	100.5
CW-1-82	80	18492	0.9	16.2534	4.7	0.8794	4.8	0.1037	1.1	0.23	635.8	6.8	640.7	23.0	657.7	101.2	635.8	6.8	96.7
CW-1-55	202	110999	1.4	16.3752	1.8	0.9043	2.0	0.1074	0.9	0.46	657.6	5.8	654.0	9.7	641.7	38.5	657.6	5.8	102.5
CW-1-54	37	40885	2.5	14.0384	3.5	1.6422	3.7	0.1672	1.1	0.30	996.7	10.2	986.6	23.2	964.1	71.5	964.1	10.2	103.4
CW-1-41	87	80370	2.9	13.8220	0.9	1.7239	1.4	0.1728	1.0	0.73	1027.6	9.4	1017.5	8.8	995.8	19.0	995.8	19.0	103.2
CW-1-7	190	201797	2.4	13.7473	0.8	1.7093	1.1	0.1704	0.8	0.68	1014.5	7.1	1012.0	7.2	1006.7	16.7	1006.7	16.7	100.8
CW-1-78	32	19334	1.2	13.7258	3.6	1.7548	3.8	0.1747	1.3	0.34	1037.9	12.4	1028.9	24.5	1009.9	72.2	1009.9	72.2	102.8
CW-1-79	182	167833	4.1	13.6601	1.0	1.6822	1.9	0.1667	1.6	0.84	993.7	14.3	1001.8	11.8	1019.6	20.4	1019.6	20.4	97.5
CW-1-17	83	72418	2.8	13.6523	1.7	1.7571	2.2	0.1740	1.4	0.63	1034.0	13.0	1029.8	14.0	1020.8	34.3	1020.8	34.3	101.3
CW-1-72	111	107716	1.8	13.6428	1.8	1.7317	1.9	0.1714	0.8	0.42	1019.5	7.8	1020.4	12.5	1022.2	35.7	1022.2	35.7	99.7
CW-1-40	103	144172	2.4	13.6287	0.8	1.8118	1.1	0.1791	0.8	0.69	1062.0	7.5	1049.7	7.3	1024.3	16.3	1024.3	16.3	103.7
CW-1-32	124	81965	2.3	13.6246	1.0	1.7893	1.5	0.1768	1.2	0.78	1049.5	11.7	1041.6	10.0	1024.9	19.4	1024.9	19.4	102.4
CW-1-44	74	63717	1.5	13.6091	1.5	1.7921	2.0	0.1769	1.3	0.66	1049.9	12.9	1042.6	13.2	1027.2	30.9	1027.2	30.9	102.2
CW-1-12	46	84191	2.2	13.5749	2.6	1.7935	2.9	0.1766	1.2	0.41	1048.2	11.2	1043.1	18.6	1032.3	52.7	1032.3	52.7	101.5
CW-1-11	199	314276	2.4	13.5577	0.8	1.7804	1.0	0.1751	0.6	0.64	1040.0	6.2	1038.3	6.6	1034.9	15.9	1034.9	15.9	100.5
CW-1-68	125	156217	4.8	13.5260	0.9	1.7756	1.2	0.1742	0.9	0.71	1035.2	8.4	1036.6	7.9	1039.6	17.3	1039.6	17.3	99.6
CW-1-100	214	183253	1.9	13.5138	0.8	1.7096	4.2	0.1676	4.1	0.98	998.6	37.9	1012.1	26.8	1041.4	17.2	1041.4	17.2	95.9
CW-1-5	267	405447	2.7	13.4615	0.5	1.8238	1.0	0.1781	0.9	0.90	1056.4	9.0	1054.1	6.8	1049.3	9.2	1049.3	9.2	100.7
CW-1-94	34	27513	1.2	13.4144	5.1	1.8597	5.4	0.1809	1.7	0.31	1072.0	16.6	1066.9	35.8	1056.3	103.7	1056.3	103.7	101.5
CW-1-57	120	438129	1.2	13.3128	1.2	1.9089	1.7	0.1843	1.2	0.72	1090.5	12.0	1084.2	11.1	1071.6	23.3	1071.6	23.3	101.8
CW-1-59	99	6393	2.7	13.2799	4.6	1.6753	5.8	0.1814	3.5	0.60	964.3	31.0	999.2	36.7	1076.6	92.6	1076.6	92.6	89.6
CW-1-96	64	43812	0.9	13.1598	0.9	1.9848	1.9	0.1984	1.7	0.89	1118.3	17.5	1110.3	13.0	1094.8	17.9	1094.8	17.9	102.1
CW-1-77	68	60273	1.0	13.1523	1.5	1.9014	1.9	0.1814	1.2	0.65	1074.5	12.2	1081.6	12.7	1095.9	29.2	1095.9	29.2	98.0
CW-1-93	134	142888	4.0	13.1395	0.5	1.9636	2.0	0.1871	1.9	0.97	1105.8	19.8	1103.1	13.6	1097.9	10.5	1097.9	10.5	100.7
CW-1-21	53	34313	1.2	13.1267	2.4	1.9084	3.0	0.1817	1.8	0.59	1076.2	17.4	1084.0	19.8	1099.8	47.9	1099.8	47.9	97.9
CW-1-19	56	57594	0.7	13.9331	2.7	2.0491	2.8	0.1922	0.8	0.28	1133.3	8.2	1132.0	19.3	1129.5	54.2	1129.5	54.2	100.3
CW-1-101	120	117596	2.2	12.8939	1.1	2.0922	1.2	0.1957	0.6	0.51	1151.9	6.6	1146.2	8.4	1135.5	20.9	1135.5	20.9	101.4
CW-1-36	25	28754	1.3	12.8608	6.6	2.1169	6.8	0.1975	1.8	0.26	1161.6	18.8	1154.3	46.9	1140.6	130.6	1140.6	130.6	101.8
CW-1-73	113	78287	2.2	12.8515	0.8	2.0806	1.1	0.1939	0.7	0.68	1142.6	7.6	1142.4	7.3	1142.1	15.7	1142.1	15.7	100.1
CW-1-42	29	20916	1.3	12.7964	3.4	2.1727	5.8	0.2016	4.8	0.82	1184.1	51.8	1172.3	40.7	1150.6	66.6	1150.6	66.6	102.9
CW-1-3	144	265499	2.1	12.7865	0.8	2.1637	1.4	0.2007	1.1	0.83	1178.8	12.4	1169.5	9.6	1152.1	15.1	1152.1	15.1	102.3
CW-1-49	30	40332	1.5	12.7168	3.1	2.2140	3.2	0.2042	0.9	0.29	1197.8	10.1	1185.5	22.5	1163.0	61.0	1163.0	61.0	103.0
CW-1-33	72	32395	2.1	12.6480	1.8	2.2639	2.5	0.2077	1.8	0.72	1216.4	20.2	1201.1	17.9	1173.8	35.2	1173.8	35.2	103.6
CW-1-26	337	116484	4.5	12.6064	0.6	2.2004	0.9	0.2012	0.7	0.76	1181.7	7.5	1181.2	6.4	1180.3	11.8	1180.3	11.8	100.1
CW-1-61	88	106533	2.2	12.5374	1.1	2.1537	2.7	0.1958	2.4	0.91	1152.9	25.6	1166.3	18.5	1191.1	21.6	1191.1	21.6	96.8
CW-1-31	242	390303	0.8	12.5138	0.5	2.3142	1.1	0.2100	1.0	0.90	1229.0	11.0	1216.6	7.7	1194.8	9.1	1194.8	9.1	102.9
CW-1-84	102	105816	2.1	12.4995	4.1	2.1524	4.3	0.1951	1.4	0.32	1149.1	14.6	1165.8	29.8	1197.1	80.2	1197.1	80.2	96.0
CW-1-83	194	468248	3.9	12.4396	0.6	2.3012	1.3	0.2076	1.1	0.89	1216.1	12.6	1212.7	9.0	1206.6	11.3	1206.6	11.3	100.8
CW-1-103	134	100140	1.1	12.3562	1.0	2.3238	1.5	0.2083	1.2	0.77	1219.5	13.2	1219.6	10.9	1219.8	19.1	1219.8	19.1	100.0
CW-1-75	56	59501	1.7	12.3157	1.8	2.3215	3.1	0.2074	2.5	0.81	1214.7	27.8	1218.9	22.0	1226.2	35.7	1226.2	35.7	99.1
CW-1-63	136	163396	1.4	11.8085	1.1	2.5927	2.0	0.2220	1.6	0.82	1292.7	19.3	1298.6	14.7	1308.3	22.1	1308.3	22.1	98.8
CW-1-28	57	120080	1.0	11.7274	1.5	2.7213	1.8	0.2315	1.0	0.55	1342.1	12.4	1334.3	13.7	1321.7	29.8	1321.7	29.8	101.5
CW-1-70	165	284974	0.6	11.7043	0.5	2.6885	1.5	0.2282	1.4	0.94	1325.2	16.3	1325.3	10.8	1325.5	9.9	1325.5	9.9	100.0
CW-1-62	9	10371	1.6																

CW2 (1AA/13-24-082-10W4/00)

Analysis	U (ppm)	206Pb 204Pb	U/Th	Isotope Ratio				206Pb* 238U	±	error corr.	Apparent Age				206Pb* 207Pb*	±	Bestage		Conc (%)
				206Pb* 207Pb*	± (%)	207Pb* 235U*	±				206Pb* 238U*	±	207Pb* 235U	±			206Pb* (Ma)	± (Ma)	
CW2-55	122	19325	1.9	19.4042	7.5	0.2204	8.1	0.0310	3.0	0.37	196.9	5.9	202.2	14.9	264.8	173.5	196.9	5.9	NA
CW2-15	221	22932	0.9	19.2536	2.3	0.2808	3.2	0.0392	2.3	0.71	247.9	5.6	251.3	7.2	282.7	52.3	247.9	5.6	NA
CW2-96	92	18876	1.0	18.3158	6.5	0.3030	6.7	0.0403	1.5	0.22	254.4	3.7	268.8	15.7	395.8	145.7	254.4	3.7	NA
CW2-45	248	76247	1.4	18.3007	1.9	0.4508	2.4	0.0598	1.4	0.58	374.5	5.0	377.7	7.5	397.6	43.3	374.5	5.0	NA
CW2-68	46	10278	1.1	19.1577	17.6	0.4330	17.8	0.0602	2.8	0.16	376.6	10.4	365.3	54.8	294.1	404.5	376.6	10.4	NA
CW2-63	91	46807	1.1	18.8076	6.8	0.4493	7.3	0.0613	2.7	0.37	383.4	10.0	376.8	22.9	336.0	153.2	383.4	10.0	NA
CW2-98	164	37597	0.7	18.3597	3.9	0.4614	4.1	0.0614	1.2	0.29	384.3	4.5	385.2	13.1	390.4	87.6	384.3	4.5	NA
CW2-46	258	75676	0.8	18.0486	1.8	0.5016	2.5	0.0657	1.7	0.68	410.0	6.8	412.8	8.5	428.6	41.1	410.0	6.8	95.7
CW2-73	89	28622	1.3	17.7971	5.7	0.5179	6.1	0.0668	2.1	0.34	417.1	8.3	423.7	21.1	459.8	126.8	417.1	8.3	90.7
CW2-12	97	26296	0.6	17.7888	4.9	0.5231	5.1	0.0675	1.5	0.30	421.0	6.3	427.2	17.9	460.8	108.9	421.0	6.3	91.4
CW2-106	325	72927	1.4	18.3594	1.1	0.5088	2.8	0.0678	2.6	0.92	422.6	10.4	417.6	9.5	390.4	24.1	422.6	10.4	108.2
CW2-90	186	33829	1.9	18.3897	1.6	0.5204	3.7	0.0694	3.3	0.90	432.6	14.0	425.4	12.9	386.7	36.8	432.6	14.0	111.9
CW2-8	413	193558	1.1	17.8599	0.8	0.5529	1.5	0.0716	1.2	0.82	445.9	5.2	446.8	5.3	452.0	18.7	445.9	5.2	98.6
CW2-4	203	39645	0.6	17.9138	2.9	0.5513	3.7	0.0716	2.3	0.61	446.0	9.8	445.9	13.4	445.3	65.2	446.0	9.8	100.2
CW2-21	351	187980	2.1	17.8054	0.7	0.5731	2.3	0.0740	2.2	0.95	460.3	9.6	460.0	8.4	458.8	16.3	460.3	9.6	100.3
CW2-90	126	30687	1.2	17.9500	3.2	0.5689	3.7	0.0741	1.8	0.49	460.5	8.1	457.3	13.6	440.8	71.8	460.5	8.1	104.5
CW2-32	39	14503	1.1	18.3000	7.9	0.5640	8.3	0.0749	2.5	0.31	465.4	11.3	454.2	30.2	397.7	176.5	465.4	11.3	111.7
CW2-54	63	28163	1.0	17.2806	3.4	0.7113	4.9	0.0891	3.5	0.71	550.5	18.2	545.5	20.5	524.8	75.2	550.5	18.2	104.9
CW2-9	270	117086	1.6	15.6761	1.1	0.8274	2.1	0.0941	1.8	0.87	579.6	10.1	612.2	9.7	734.7	22.5	579.6	10.1	78.9
CW2-55	249	158008	1.1	16.0629	0.7	0.9484	1.6	0.1105	1.5	0.90	675.6	9.4	677.2	8.0	682.9	14.8	675.6	9.4	98.9
CW2-92	444	450184	0.7	14.1832	0.5	1.4934	1.0	0.1536	0.9	0.90	921.2	8.0	927.7	6.3	943.1	9.4	943.1	9.4	97.7
CW2-101	204	193188	8.8	13.8353	0.8	1.7340	2.1	0.1740	2.0	0.93	1034.1	18.9	1021.2	13.7	993.8	16.1	993.8	16.1	104.1
CW2-18	233	145942	3.2	13.7745	0.6	1.6797	0.8	0.1678	0.5	0.66	1000.0	5.1	1000.3	5.3	1002.7	12.7	1002.7	12.7	99.7
CW2-77	85	66204	2.0	13.7057	1.5	1.7266	1.9	0.1716	1.2	0.62	1021.1	11.3	1018.5	12.5	1012.9	31.0	1012.9	31.0	100.8
CW2-41	124	107370	1.8	13.7030	1.6	1.7123	2.6	0.1702	2.0	0.75	1013.1	19.2	1013.1	16.7	1013.3	32.5	1013.3	32.5	100.0
CW2-35	126	125270	1.3	13.6046	1.6	1.7149	2.8	0.1692	2.2	0.81	1007.8	20.9	1014.1	17.8	1027.9	33.2	1027.9	33.2	98.0
CW2-31	83	64434	2.2	13.5935	1.3	1.7337	1.7	0.1709	1.1	0.64	1017.2	10.3	1021.1	10.9	1029.5	26.3	1029.5	26.3	98.8
CW2-38	60	90422	0.9	13.5930	2.7	1.7280	3.2	0.1704	1.8	0.56	1014.1	16.7	1019.0	20.5	1029.6	53.7	1029.6	53.7	98.5
CW2-42	27	9566	1.6	13.5842	4.3	1.7807	4.6	0.1754	1.4	0.31	1042.0	13.5	1038.4	29.7	1030.9	87.9	1030.9	87.9	101.1
CW2-72	54	42888	1.2	13.4496	2.8	1.8189	3.6	0.1774	2.2	0.62	1052.9	21.5	1052.3	23.3	1051.1	56.2	1051.1	56.2	100.2
CW2-25	114	47733	1.6	13.4232	2.2	1.8077	3.5	0.1760	2.6	0.76	1045.0	25.4	1048.2	22.6	1055.0	45.2	1055.0	45.2	99.1
CW2-61	61	39059	2.0	13.4046	1.7	1.8738	1.9	0.1822	0.9	0.48	1078.8	9.0	1071.5	12.6	1057.8	33.8	1057.8	33.8	102.0
CW2-43	130	104342	0.9	13.3979	0.8	1.8150	1.3	0.1764	1.0	0.77	1047.1	9.7	1050.5	8.5	1058.8	16.8	1058.8	16.8	98.9
CW2-22	24	10580	1.0	13.3933	6.3	1.7577	6.6	0.1707	2.0	0.31	1016.2	19.1	1030.0	42.7	1059.5	126.4	1059.5	126.4	95.9
CW2-99	91	45507	3.0	13.3142	1.6	1.8659	2.7	0.1802	2.1	0.80	1067.9	21.1	1069.1	17.6	1071.4	31.9	1071.4	31.9	99.7
CW2-105	134	155336	1.4	13.2824	1.1	1.9160	2.4	0.1846	2.2	0.89	1091.9	21.7	1086.7	16.2	1076.2	22.1	1076.2	22.1	101.5
CW2-50	182	146187	1.6	13.2773	0.6	1.8993	1.8	0.1829	1.8	0.95	1082.8	17.5	1080.8	12.2	1077.0	11.1	1077.0	11.1	100.5
CW2-79	199	132877	1.9	13.2409	0.6	1.8939	1.1	0.1819	0.9	0.83	1077.2	8.9	1078.9	7.2	1082.5	12.1	1082.5	12.1	99.5
CW2-29	54	39606	1.5	13.2049	1.7	1.9299	2.0	0.1848	0.9	0.48	1093.3	9.4	1091.5	13.2	1088.0	34.6	1088.0	34.6	100.5
CW2-96	50	65655	1.1	13.1742	2.0	1.9022	3.0	0.1818	2.2	0.74	1076.6	22.3	1081.9	20.1	1092.6	40.5	1092.6	40.5	98.5
CW2-44	52	35080	1.8	13.1557	2.8	1.9182	3.1	0.1830	1.4	0.45	1083.5	13.7	1087.4	20.5	1095.4	55.2	1095.4	55.2	98.6
CW2-64	290	187065	1.9	13.0861	0.8	2.0501	2.6	0.1946	2.5	0.95	1146.1	26.2	1132.3	17.9	1106.0	15.9	1106.0	15.9	103.6
CW2-62	41	25094	1.7	13.0774	2.9	1.9335	3.0	0.1834	0.9	0.30	1085.4	9.0	1092.7	20.3	1107.4	57.8	1107.4	57.8	98.0
CW2-48	45	58280	2.4	13.0317	2.1	2.0565	4.7	0.1944	4.2	0.90	1145.0	44.1	1134.5	32.1	1114.3	41.3	1114.3	41.3	102.8
CW2-49	100	73616	4.3	12.9174	1.4	2.0517	2.3	0.1922	1.9	0.80	1133.4	19.6	1132.9	16.0	1131.9	27.8	1131.9	27.8	100.0
CW2-52	55	30642	0.9	12.8873	1.5	2.1137	1.9	0.1976	1.2	0.61	1162.2	12.3	1153.3	3.1	1136.6	30.1	1136.6	30.1	102.3
CW2-103	205	149942	1.7	12.8544	0.5	2.0559	1.8	0.1917	1.7	0.96	1130.4	17.6	1134.3	12.1	1141.7	10.4	1141.7	10.4	99.0
CW2-11	89	85683	2.5	12.8504	1.2	2.0615	1.9	0.1921	1.4	0.76	1132.9	14.7	1136.1	12.7	1142.3	23.8	1142.3	23.8	99.2
CW2-34	131	151258	1.8	12.8494	1.4	2.0905	2.4	0.1948	2.0	0.82	1147.4	20.6	1145.7	16.5	1142.4	27.5	1142.4	27.5	100.4
CW2-75	57	29642	1.8	12.7896	1.3	2.0837	3.0	0.1933	2.7	0.90	1139.1	27.9	1143.9	20.5	1151.6	26.4	1151.6	26.4	98.9
CW2-93	111	17766	1.4	12.7804	1.1	2.1453	2.5	0.1989	2.2	0.85	1169.1	23.5	1163.5	17.1	1153.1	22.7	1153.1	22.7	101.4
CW2-34	200	180749	1.3	12.7487	0.8	2.1815	1.4	0.2017	1.2	0.83	1184.5	13.0	1175.2	10.1	1158.0	15.8	1158.0	15.8	102.3
CW2-67	116	77494	1.7	12.7153	1.2	2.1697	1.7	0.2001	1.2										

CW3 (1AA/13-24-082-10W4/00)

Analysis	U (ppm)	206Pb 204Pb	U/Th	Isotope Ratio						Apparent Age				Best age (Ma)	±	Conc (%)			
				206Pb* 207Pb* (%)	±	207Pb* 235U* (%)	±	206Pb* 238U (%)	±	error corr.	206Pb* 238U* (Ma)	±	207Pb* 235U (Ma)				±	206Pb* 207Pb* (Ma)	±
CW3-97	288	26578	1.3	20.0533	6.7	0.2543	7.2	0.0370	2.6	0.36	234.2	5.9	230.1	14.9	188.8	157.0	234.2	5.9	NA
CW3-43	348	46662	1.6	18.1797	2.4	0.4628	2.9	0.0610	1.6	0.57	381.8	6.1	386.2	9.3	412.5	53.5	381.8	6.1	NA
CW3-46	100	43315	3.1	18.3654	5.7	0.4672	5.9	0.0622	1.5	0.26	389.2	5.8	389.2	19.1	389.7	128.0	389.2	5.8	NA
CW3-86	116	39942	1.8	17.9159	8.1	0.5237	8.3	0.0680	1.8	0.22	424.4	7.4	427.6	28.9	445.0	179.8	424.4	7.4	95.4
CW3-25	266	46909	1.8	18.2949	1.7	0.5138	2.5	0.0682	1.9	0.74	425.2	7.8	421.0	8.7	398.3	38.0	425.2	7.8	106.7
CW3-62	120	27334	1.4	18.5301	6.7	0.5373	7.0	0.0722	1.9	0.28	449.5	8.4	436.7	24.8	369.6	151.3	449.5	8.4	121.6
CW3-56	141	59000	0.8	17.3331	1.4	0.6285	2.4	0.0790	1.9	0.80	490.2	8.9	495.2	9.2	518.1	30.8	490.2	8.9	94.6
CW3-8	65	20787	1.4	17.0689	3.1	0.7158	3.6	0.0886	1.9	0.52	547.4	9.8	548.2	15.2	551.8	67.0	547.4	9.8	99.2
CW3-22	111	40184	0.6	16.7225	1.4	0.8046	3.9	0.0976	3.7	0.94	600.2	21.2	599.4	17.9	596.3	29.8	600.2	21.2	100.7
CW3-101	299	80735	3.2	16.1215	1.4	0.9315	2.4	0.1089	1.9	0.81	666.4	12.1	668.4	11.6	675.1	29.8	666.4	12.1	98.7
CW3-29	309	66073	2.3	15.6758	0.8	1.0540	1.9	0.1198	1.7	0.90	729.6	11.9	730.9	10.0	734.7	17.5	729.6	11.9	99.3
CW3-61	37	20813	3.0	14.3373	3.9	1.5491	4.3	0.1611	1.8	0.43	962.8	16.4	950.1	26.4	921.0	79.4	921.0	79.4	104.5
CW3-20	1042	5862	7.0	13.8595	0.4	1.4671	1.0	0.1475	0.9	0.92	886.8	7.9	917.0	6.2	990.3	8.2	990.3	8.2	89.6
CW3-31	79	55543	1.9	13.7582	1.4	1.6652	2.1	0.1662	1.6	0.77	990.9	14.8	995.3	13.4	1005.1	27.4	1005.1	27.4	98.6
CW3-21	256	171170	3.9	13.7161	0.4	1.7252	2.1	0.1716	2.1	0.98	1021.1	19.4	1018.0	13.5	1011.3	8.6	1011.3	8.6	101.0
CW3-44	350	317633	1.5	13.5974	0.3	1.7857	1.4	0.1761	1.4	0.98	1045.6	13.7	1040.3	9.4	1028.9	6.0	1028.9	6.0	101.6
CW3-7	254	465438	3.7	13.5817	0.6	1.8078	2.5	0.1781	2.4	0.97	1056.5	23.1	1048.3	16.0	1031.3	12.4	1031.3	12.4	102.4
CW3-45	61	49758	2.6	13.5807	2.2	1.8513	5.3	0.1823	4.8	0.91	1079.8	47.7	1063.9	34.9	1031.4	45.3	1031.4	45.3	104.7
CW3-96	49	46209	1.9	13.5578	4.1	1.8533	5.0	0.1822	2.8	0.57	1079.2	28.3	1064.6	33.2	1034.8	83.7	1034.8	83.7	104.3
CW3-95	339	96252	4.2	13.5405	0.8	1.7734	1.7	0.1742	1.5	0.88	1035.0	14.6	1035.8	11.3	1037.4	16.7	1037.4	16.7	99.8
CW3-92	63	24428	0.9	13.5193	3.7	1.7264	4.3	0.1693	2.2	0.51	1008.1	20.5	1018.4	27.9	1040.6	75.7	1040.6	75.7	96.9
CW3-38	57	74171	2.0	13.5128	2.1	1.7942	2.6	0.1758	1.6	0.62	1044.2	15.8	1043.4	17.2	1041.6	41.8	1041.6	41.8	100.3
CW3-90	124	47379	2.0	13.5063	1.9	1.8049	2.2	0.1768	1.2	0.51	1049.5	11.2	1047.2	14.6	1042.5	38.8	1042.5	38.8	100.7
CW3-78	71	29970	3.9	13.4713	3.7	1.7564	3.9	0.1716	1.1	0.28	1021.0	10.1	1029.5	25.1	1047.8	75.2	1047.8	75.2	97.4
CW3-67	57	22997	2.8	13.4212	2.7	1.7648	4.6	0.1718	3.7	0.81	1021.9	34.9	1032.6	29.7	1055.3	54.7	1055.3	54.7	96.8
CW3-102	104	28035	2.5	13.4193	2.6	1.8572	5.1	0.1808	4.4	0.86	1071.1	43.1	1066.0	33.7	1055.6	52.8	1055.6	52.8	101.5
CW3-34	35	29018	0.6	13.3994	2.3	1.8200	2.5	0.1769	0.9	0.36	1049.9	8.9	1052.7	16.5	1058.6	47.3	1058.6	47.3	99.2
CW3-40	98	61749	3.1	13.3757	0.9	1.8536	1.9	0.1798	1.6	0.87	1066.0	15.8	1064.7	12.2	1062.1	18.6	1062.1	18.6	100.4
CW3-30	44	39116	0.9	13.2732	1.2	1.8845	1.6	0.1814	1.0	0.65	1074.7	10.3	1075.7	10.5	1077.6	24.1	1077.6	24.1	99.7
CW3-99	232	147704	2.9	13.1529	1.2	1.9600	1.6	0.1870	1.0	0.63	1104.9	10.2	1101.9	10.7	1095.8	24.9	1095.8	24.9	100.8
CW3-12	92	92030	2.2	13.0377	1.1	2.0308	1.7	0.1920	1.3	0.76	1132.4	13.4	1125.9	11.6	1113.4	21.9	1113.4	21.9	101.7
CW3-2	136	17162	2.7	13.0367	9.0	1.8513	9.2	0.1750	2.2	0.23	1039.8	20.8	1063.9	60.8	1113.5	179.0	1113.5	179.0	93.4
CW3-66	170	53625	2.3	12.8410	1.1	2.0787	2.1	0.1936	1.8	0.85	1140.8	19.0	1141.8	14.7	1143.7	22.8	1143.7	22.8	99.7
CW3-72	102	109044	1.9	12.7711	1.5	2.0039	4.7	0.1856	4.4	0.95	1097.5	44.6	1116.8	31.6	1154.5	30.2	1154.5	30.2	95.1
CW3-84	63	41003	2.9	12.7267	2.9	2.1060	3.3	0.1944	1.6	0.49	1145.1	16.7	1150.8	22.6	1161.4	56.8	1161.4	56.8	98.6
CW3-88	540	355919	10.1	12.6790	0.7	2.1624	2.2	0.1988	2.1	0.95	1169.1	22.0	1169.0	15.1	1168.9	13.8	1168.9	13.8	100.0
CW3-23	305	57432	1.9	12.6748	0.4	2.2089	3.3	0.2031	3.3	0.99	1191.7	35.7	1183.9	23.1	1169.5	8.4	1169.5	8.4	101.9
CW3-104	181	123832	2.2	12.5320	0.8	2.2200	1.4	0.2018	1.1	0.82	1184.9	12.4	1187.4	9.7	1192.0	15.5	1192.0	15.5	99.4
CW3-91	66	36256	2.0	12.4529	4.5	2.1808	5.8	0.1970	3.7	0.63	1159.0	38.7	1174.9	40.6	1204.4	89.4	1204.4	89.4	96.2
CW3-63	165	116015	2.5	12.2616	1.3	2.3679	1.6	0.2106	1.0	0.64	1231.9	11.8	1233.0	11.7	1234.9	24.6	1234.9	24.6	99.8
CW3-11	223	224140	2.5	12.2310	0.5	2.3929	1.6	0.2123	1.5	0.95	1240.9	17.3	1240.5	11.5	1239.8	9.7	1239.8	9.7	100.1
CW3-7	436	417950	6.5	12.1859	0.2	2.4610	1.3	0.2175	1.3	0.98	1268.7	14.8	1260.7	9.4	1247.0	4.5	1247.0	4.5	101.7
CW3-53	199	301876	5.3	12.1115	0.5	2.3976	1.9	0.2106	1.9	0.97	1232.0	21.2	1241.9	14.0	1259.0	8.9	1259.0	8.9	97.9
CW3-64	109	84822	1.8	12.0190	2.9	2.4278	3.3	0.2116	1.7	0.50	1237.5	18.6	1250.9	23.9	1274.0	56.1	1274.0	56.1	97.1
CW3-103	85	40435	0.7	11.6739	2.2	2.6476	2.8	0.2242	1.8	0.63	1303.8	20.8	1314.0	20.8	1330.5	42.6	1330.5	42.6	98.0
CW3-65	202	142819	1.5	11.6510	0.6	2.7055	2.1	0.2286	2.0	0.96	1327.3	23.8	1330.0	15.3	1334.3	11.0	1334.3	11.0	99.5
CW3-35	84	61924	1.8	11.5580	0.4	2.7776	1.7	0.2328	1.6	0.97	1349.3	20.0	1349.5	12.7	1349.8	8.6	1349.8	8.6	100.0
CW3-37	77	117432	2.0	11.4084	1.2	2.8900	4.8	0.2391	4.7	0.97	1382.1	58.4	1379.3	36.5	1374.9	22.1	1374.9	22.1	100.5
CW3-28	62	197401	2.3	10.9621	2.2	3.2956	6.7	0.2620	6.3	0.95	1500.2	85.0	1480.0	52.4	1451.2	41.8	1451.2	41.8	103.4
CW3-47	72	106645	1.6	10.9484	0.7	3.2732	1.8	0.2599	1.7	0.92	1489.4	22.1	1474.7	14.0	1453.6	13.1	1453.6	13.1	102.5
CW3-19	123	140230	1.2	10.8508	0.4	3.2931	1.4	0.2592	1.3	0.97	1485.5	17.8	1479.4	10.8	1470.6	6.9	1470.6	6.9	101.0
CW3-58	117	311277	4.6	10.7680	0.5	3.3694	1.1	0.2631	0.9	0.88	1505.9	12.4	1497.3	8.3	1485.2	9.7	1485.2	9.7	101.4
CW3-81	141	69253	3.0	10.6318	0.7	3.3224	1.1	0.2562	0.9	0.78	1470.3	11.8	1486.3	9.0	1509.3	13.5	1509.3	13.5	97.4

KE1 (1AA/08-19-084-06W4/00)

Analysis	U (ppm)	206Pb 204Pb	U/Th	206Pb* 207Pb*	Isotope Ratios						Apparent Ages						Best age (Ma)	± (Ma)	Conc (%)
					± 235U*	± 207Pb*	± 206Pb*	± error corr.	206Pb* 238U*	± 207Pb* 235U	± 206Pb* 207Pb*	± 206Pb* (Ma)							
KC-1-39	47	2498	3.1	27.2403	224.4	0.0932	224.5	0.0184	7.5	0.03	117.6	8.8	90.5	196.8	-577.7	0.0	117.6	8.8	NA
KC-1-86	340	44103	0.8	19.7543	4.8	0.1741	4.9	0.0249	0.7	0.15	158.8	1.2	163.0	7.4	223.6	112.0	158.8	1.2	NA
KC-1-35	67	8280	1.6	19.4796	13.9	0.2463	14.1	0.0348	1.8	0.13	220.5	3.9	223.6	28.2	255.9	321.9	220.5	3.9	NA
KC-1-25	168	24991	1.9	20.4695	4.3	0.2855	4.6	0.0424	1.5	0.32	267.6	3.8	255.0	10.3	140.8	101.4	267.6	3.8	NA
KC-1-10	196	37025	1.5	18.2275	3.3	0.4769	3.6	0.0631	1.4	0.39	394.2	5.3	396.0	11.7	406.6	73.3	394.2	5.3	NA
KC-1-32	245	70526	1.7	18.1418	2.1	0.4851	3.0	0.0638	2.1	0.70	398.9	8.3	401.6	10.1	417.1	48.0	398.9	8.3	NA
KC-1-16	189	66995	3.6	18.3547	3.3	0.4957	3.5	0.0660	0.9	0.25	411.9	3.5	408.8	11.6	391.0	75.0	411.9	3.5	105.4
KC-1-28	195	51563	1.7	18.0485	2.6	0.5086	3.3	0.0666	2.1	0.64	415.5	8.5	417.5	11.4	428.6	57.5	415.5	8.5	96.9
KC-1-13	99	10038	1.4	17.6507	3.4	0.5324	3.7	0.0682	1.3	0.36	425.0	5.5	433.4	13.0	478.1	75.8	425.0	5.5	88.9
KC-1-14	377	213922	4.1	17.8636	1.6	0.5280	1.7	0.0684	0.5	0.31	426.6	2.2	430.5	6.1	451.5	36.4	426.6	2.2	94.5
KC-1-85	218	72608	0.8	18.1139	2.1	0.5341	2.4	0.0702	1.2	0.48	437.2	4.9	434.5	8.5	420.6	47.4	437.2	4.9	104.0
KC-1-104	53	21441	1.5	18.6373	5.7	0.5207	6.1	0.0704	2.1	0.34	438.4	8.9	425.6	21.2	356.6	129.6	438.4	8.9	122.9
KC-1-62	104	20094	0.8	18.5499	6.6	0.5286	6.7	0.0711	0.9	0.13	442.9	3.9	430.9	23.6	367.2	149.9	442.9	3.9	120.6
KC-1-88	238	124863	0.4	17.8117	2.6	0.5644	2.7	0.0729	0.7	0.26	453.7	3.1	454.4	9.9	458.0	58.2	453.7	3.1	99.0
KC-1-76	134	54017	1.1	17.5642	4.3	0.6104	4.7	0.0778	1.8	0.39	482.8	8.5	483.8	18.0	489.0	94.9	482.8	8.5	98.7
KC-1-44	240	5288	0.5	16.8864	2.8	0.6627	3.0	0.0812	1.1	0.37	503.1	5.3	516.3	12.0	575.0	60.0	503.1	5.3	87.5
KC-1-69	208	52962	0.9	17.1775	2.4	0.6569	2.6	0.0818	1.0	0.40	507.1	5.0	512.7	10.4	537.9	52.1	507.1	5.0	94.3
KC-1-38	103	60439	2.3	17.2996	2.7	0.6796	2.8	0.0853	0.8	0.27	527.5	3.8	526.5	11.7	522.4	60.0	527.5	3.8	101.0
KC-1-2	49	19340	1.1	17.4131	6.8	0.7208	7.2	0.0910	2.5	0.35	561.6	13.6	551.1	30.8	508.0	149.3	561.6	13.6	110.5
KC-1-71	128	44454	0.9	16.9569	2.2	0.7473	2.5	0.0919	1.2	0.48	566.8	6.5	566.7	11.0	566.1	48.4	566.8	6.5	100.1
KC-1-105	13	4783	0.9	15.3968	22.1	0.8634	22.8	0.0964	5.6	0.25	593.4	32.0	632.0	107.9	772.6	471.1	593.4	32.0	76.8
KC-1-84	129	71224	2.1	16.8944	2.9	0.7895	3.2	0.0967	1.2	0.38	595.3	6.8	590.9	14.2	574.1	63.8	595.3	6.8	103.7
KC-1-94	184	90319	1.5	16.6450	1.5	0.8254	2.6	0.0996	2.1	0.81	612.3	12.1	611.1	11.7	606.4	32.3	612.3	12.1	101.0
KC-1-63	141	185431	0.8	16.1910	2.0	0.8833	2.7	0.1037	1.9	0.69	636.2	11.5	642.8	13.0	665.9	42.3	636.2	11.5	95.5
KC-1-31	47	34876	1.6	14.6012	3.1	1.4498	3.8	0.1535	2.1	0.57	920.7	18.3	909.8	22.6	883.4	64.2	883.4	64.2	104.2
KC-1-26	30	19710	0.7	14.5878	4.1	1.4291	6.3	0.1512	4.8	0.76	907.7	40.4	901.2	37.5	885.2	84.4	907.7	40.4	102.5
KC-1-29	303	201885	2.9	14.1641	0.2	1.5791	0.8	0.1622	0.7	0.97	969.1	6.7	962.0	4.8	945.9	3.9	945.9	3.9	102.5
KC-1-97	129	172540	2.7	14.0778	1.1	1.6256	1.8	0.1660	1.5	0.81	989.9	13.7	980.2	11.6	958.4	22.1	958.4	22.1	103.3
KC-1-64	25	19080	2.6	14.0117	5.9	1.6144	6.3	0.1641	2.0	0.32	979.3	17.9	975.8	39.3	968.0	121.5	968.0	121.5	101.2
KC-1-102	71	45332	1.6	13.9031	1.4	1.7055	2.1	0.1720	1.5	0.74	1023.0	14.5	1010.6	13.3	983.8	28.5	983.8	28.5	104.0
KC-1-96	127	98214	5.6	13.6645	1.3	1.7520	1.8	0.1736	1.3	0.71	1032.1	12.4	1027.9	11.9	1019.0	26.1	1019.0	26.1	101.3
KC-1-30	33	16959	2.5	13.6468	4.0	1.7290	4.1	0.1711	1.1	0.28	1018.3	10.8	1019.4	26.6	1021.6	80.4	1021.6	80.4	99.7
KC-1-80	24	28292	1.7	13.6348	4.7	1.7914	5.1	0.1771	1.8	0.36	1051.4	17.6	1042.3	33.1	1023.4	96.0	1023.4	96.0	102.7
KC-1-89	49	51902	1.8	13.6296	3.5	1.7494	4.1	0.1729	2.2	0.54	1028.2	21.3	1026.9	26.8	1024.2	70.6	1024.2	70.6	100.4
KC-1-70	83	69189	1.0	13.5342	1.8	1.7887	2.0	0.1756	0.8	0.41	1042.8	8.0	1041.3	13.2	1038.4	37.3	1038.4	37.3	100.4
KC-1-72	98	83551	1.4	13.5024	1.8	1.8038	2.1	0.1766	1.1	0.53	1048.6	10.7	1046.8	13.6	1043.1	35.7	1043.1	35.7	100.5
KC-1-65	117	73346	1.7	13.4339	1.5	1.8917	2.4	0.1843	1.9	0.79	1090.5	19.3	1078.2	16.1	1053.4	29.6	1053.4	29.6	103.5
KC-1-59	77	116266	1.9	13.4199	1.4	1.8433	1.8	0.1794	1.2	0.66	1063.7	11.9	1061.0	12.0	1055.5	27.5	1055.5	27.5	100.8
KC-1-81	91	54423	1.5	13.4030	1.7	1.8618	2.2	0.1810	1.4	0.63	1072.3	13.9	1067.6	14.8	1058.0	34.9	1058.0	34.9	101.3
KC-1-17	157	120246	2.5	13.3786	0.8	1.8832	1.4	0.1827	1.2	0.84	1081.9	11.6	1075.2	9.2	1061.7	15.1	1061.7	15.1	101.9
KC-1-73	94	72748	6.1	13.3509	1.4	1.9071	1.6	0.1847	0.9	0.55	1092.4	8.9	1083.6	10.8	1065.9	27.4	1065.9	27.4	102.5
KC-1-6	167	176342	2.0	13.3468	0.4	1.8810	1.4	0.1821	1.4	0.95	1078.4	13.4	1074.4	9.4	1066.5	8.8	1066.5	8.8	101.1
KC-1-3	155	91148	0.6	13.3414	1.4	1.8822	1.6	0.1821	0.9	0.54	1078.5	8.6	1074.8	10.7	1067.3	27.3	1067.3	27.3	101.1
KC-1-91	562	609755	5.6	13.3246	0.5	1.8726	1.2	0.1810	1.1	0.92	1072.3	10.6	1071.5	7.7	1069.8	9.1	1069.8	9.1	100.2
KC-1-42	171	164750	3.0	13.2870	0.9	1.9006	1.4	0.1832	1.1	0.78	1084.2	10.8	1081.3	9.2	1075.5	17.2	1075.5	17.2	100.8
KC-1-22	77	58376	2.9	13.2858	1.7	1.8830	1.8	0.1814	0.7	0.40	1074.8	7.2	1075.1	12.1	1075.7	33.8	1075.7	33.8	99.9
KC-1-7	132	9689	1.6	13.2572	2.6	1.8367	2.9	0.1766	1.2	0.43	1048.4	11.9	1058.7	19.0	1080.0	52.5	1080.0	52.5	97.1
KC-1-52	104	99020	1.4	13.2410	1.4	1.9091	2.3	0.1833	1.8	0.79	1085.2	18.3	1084.3	15.5	1082.5	28.6	1082.5	28.6	100.3
KC-1-56	83	70197	1.8	13.2246	1.7	1.8884	2.6	0.1811	1.9	0.74	1073.1	18.8	1077.0	17.1	1085.0	34.8	1085.0	34.8	98.9
KC-1-103	59	40171	1.6	13.2023	1.6	1.8922	2.2	0.1812	1.4	0.66	1073.5	14.1	1078.4	14.4	1088.3	32.7	1088.3	32.7	98.6
KC-1-1	20	16575	1.1	13.1750	4.3	1.8136	4.5	0.1733	1.4	0.32	1030.3	13.5	1050.4	29.5	1092.4	85.8	1092.4	85.8	94.3
KC-1-12	126	2548	1.0	13.1341	4.6	1.6720	5.2	0.1593	2.4	0.47	952.7	21.4	997.9	32.8	1098.7	91.2	1098.7	91.2	86.7
KC-1-15	125	174032	2.7	13.0898	0.9	1.9361	2.0	0.1838	1.7	0.88	1087.7	17.3	1093.6	13.1	1105.5	18.4	1105.5	18.4	98.4
K																			

KE2 (1AA/08-19-084-06W4/00)

Analysis	U (ppm)	206Pb 204Pb	U/Th	206Pb* 207Pb*	±	Isotope Ratios		206Pb* 207Pb*	±	error corr.	Apparent Ages		206Pb* 207Pb*	±	Best age (Ma)	±	Conc (%)		
						235U* (%)	238U* (%)				238U* (Ma)	235U* (Ma)							
KE2-35	279	46810	1.6	20.1161	1.9	0.2080	2.9	0.0303	2.2	0.75	192.7	4.1	191.8	5.1	181.5	45.3	192.7	4.1	NA
KE2-37	645	150795	1.9	18.7001	0.9	0.3960	2.6	0.0537	2.4	0.93	337.3	7.8	338.8	7.4	349.1	20.9	337.3	7.8	NA
KE2-63	103	48730	4.5	17.6316	4.0	0.4914	8.4	0.0628	7.4	0.88	392.8	28.2	405.8	28.1	480.5	87.3	392.8	28.2	NA
KE2-16	398	252391	0.6	18.5391	1.3	0.4718	2.2	0.0634	1.8	0.81	396.5	6.8	392.5	7.1	368.5	28.5	396.5	6.8	NA
KE2-74	155	45269	2.1	18.0058	4.1	0.5032	4.3	0.0657	1.5	0.34	410.2	5.8	413.8	14.7	433.9	90.3	410.2	5.8	94.5
KE2-65	126	29894	2.6	18.6973	3.5	0.4924	3.9	0.0668	1.8	0.45	416.6	7.1	406.5	13.1	349.4	79.0	416.6	7.1	119.3
KE2-45	81	32403	2.6	17.6741	3.0	0.5351	4.5	0.0686	3.4	0.75	427.7	14.1	435.2	16.0	475.2	65.7	427.7	14.1	90.0
KE2-58	80	24490	1.1	18.1931	3.3	0.5416	3.8	0.0715	2.0	0.52	445.0	8.6	439.5	13.6	410.8	72.9	445.0	8.6	108.3
KE2-23	84	50775	1.1	17.8834	3.6	0.5676	4.5	0.0736	2.7	0.60	457.9	12.0	456.5	16.6	449.1	80.6	457.9	12.0	102.0
KE2-75	164	121814	0.8	17.5953	2.1	0.5889	2.4	0.0751	1.2	0.49	467.1	5.3	470.2	9.1	485.1	46.3	467.1	5.3	96.3
KE2-15	139	78242	0.8	17.3043	1.5	0.6985	2.6	0.0877	2.2	0.83	541.7	11.4	537.9	11.0	521.8	31.9	541.7	11.4	103.8
KE2-1	109	65140	2.3	14.0374	1.4	1.5779	3.0	0.1606	2.6	0.88	960.4	23.2	961.6	18.4	964.3	29.0	964.3	29.0	99.6
KE2-26	49	33700	1.5	13.9276	1.6	1.5887	3.8	0.1605	3.5	0.91	959.5	30.9	965.8	23.9	980.3	33.1	980.3	33.1	97.9
KE2-76	86	70069	2.4	13.8667	1.4	1.6967	2.4	0.1706	1.9	0.80	1015.6	17.8	1007.3	15.1	989.2	28.7	989.2	28.7	102.7
KE2-87	515	840713	4.7	13.8196	0.3	1.7017	1.0	0.1706	0.9	0.96	1015.2	8.8	1009.2	6.3	996.1	5.8	996.1	5.8	101.9
KE2-59	76	76231	2.1	13.7240	1.3	1.7646	2.8	0.1756	2.5	0.88	1043.1	23.9	1032.5	18.2	1010.2	26.5	1010.2	26.5	103.3
KE2-13	200	195366	4.9	13.6979	0.7	1.7035	3.4	0.1692	3.3	0.98	1007.9	30.8	1009.9	21.5	1014.0	13.3	1014.0	13.3	99.4
KE2-53	89	70029	0.8	13.6435	1.5	1.7095	4.3	0.1692	4.1	0.94	1007.5	37.9	1012.1	27.8	1022.1	30.5	1022.1	30.5	98.6
KE2-15	159	258882	2.12	13.6361	0.8	1.6635	3.6	0.1645	3.5	0.97	981.8	32.0	994.7	22.9	1023.2	16.8	1023.2	16.8	96.0
KE2-25	52	51551	1.6	13.5645	1.8	1.8423	5.7	0.1812	5.4	0.95	1073.7	53.4	1060.7	37.5	1033.8	36.5	1033.8	36.5	103.9
KE2-89	194	249183	2.2	13.5641	0.7	1.7509	1.5	0.1723	1.3	0.87	1024.5	12.4	1027.5	9.7	1033.9	15.1	1033.9	15.1	99.1
KE2-17	173	128736	1.9	13.5538	0.8	1.7669	2.7	0.1737	2.6	0.96	1032.4	25.2	1033.4	17.8	1035.4	15.3	1035.4	15.3	99.7
KE2-3	58	29911	1.7	13.5390	1.9	1.7173	3.2	0.1686	2.5	0.79	1004.5	23.3	1015.0	20.4	1037.6	39.4	1037.6	39.4	96.8
KE2-8	226	182343	2.2	13.5257	0.6	1.7682	2.7	0.1735	2.6	0.97	1031.1	25.1	1033.9	17.6	1039.6	12.4	1039.6	12.4	99.2
KE2-67	337	275615	3.1	13.5101	0.5	1.8287	1.9	0.1792	1.8	0.96	1062.5	17.4	1055.8	12.2	1042.0	11.1	1042.0	11.1	102.0
KE2-48	38	17219	2.6	13.4583	3.8	1.7921	4.5	0.1749	2.5	0.55	1039.2	24.0	1042.6	29.5	1049.7	76.0	1049.7	76.0	99.0
KE2-30	72	53245	0.8	13.4570	2.4	1.7640	3.9	0.1722	3.1	0.80	1024.0	29.5	1032.3	25.3	1049.9	47.4	1049.9	47.4	97.5
KE2-41	345	310336	1.2	13.3715	0.4	1.8394	2.9	0.1783	2.8	0.99	1057.6	27.6	1059.3	18.8	1062.8	8.1	1062.8	8.1	99.5
KE2-91	133	108452	2.4	13.3708	1.2	1.8515	2.3	0.1795	2.0	0.86	1064.9	19.6	1064.5	15.3	1062.9	23.9	1062.9	23.9	100.2
KE2-55	127	286126	1.8	13.2906	0.8	1.9142	1.6	0.1845	1.3	0.85	1091.6	13.6	1085.0	10.6	1075.0	16.7	1075.0	16.7	101.5
KE2-85	115	311417	1.6	13.2953	0.8	1.8980	3.0	0.1829	2.9	0.96	1082.7	29.3	1080.4	20.3	1075.6	18.2	1075.6	18.2	100.6
KE2-52	144	274594	1.7	13.2891	0.3	1.9298	1.1	0.1857	1.1	0.95	1098.1	10.7	1091.5	7.4	1078.2	2.9	1078.2	2.9	101.8
KE2-47	84	55379	0.9	13.2438	1.8	1.8819	3.4	0.1808	2.9	0.85	1071.1	28.4	1074.7	22.4	1082.0	35.2	1082.0	35.2	99.0
KE2-27	125	137615	2.2	12.9663	0.7	2.0131	3.9	0.1893	3.8	0.98	1117.7	38.8	1119.9	26.2	1124.4	14.6	1124.4	14.6	99.4
KE2-95	40	26309	1.0	12.9186	2.4	1.9675	2.9	0.1843	1.6	0.55	1090.7	16.1	1104.5	19.6	1117.4	48.3	1117.4	48.3	96.4
KE2-31	26	20028	1.2	12.9163	3.0	2.0536	4.1	0.1924	2.7	0.66	1134.2	28.1	1133.5	27.8	1132.1	60.5	1132.1	60.5	100.2
KE2-66	293	316574	2.8	12.7436	0.6	2.1636	1.7	0.2000	1.6	0.94	1175.2	17.3	1169.4	11.9	1158.8	11.6	1158.8	11.6	101.4
KE2-73	66	40571	2.6	12.7435	1.3	2.1294	3.7	0.1968	3.5	0.94	1158.2	37.2	1158.4	25.9	1158.8	26.0	1158.8	26.0	99.9
KE2-93	48	53308	2.6	12.7371	2.4	2.1630	4.7	0.1998	4.0	0.86	1174.3	43.4	1169.2	32.6	1159.8	47.2	1159.8	47.2	101.3
KE2-86	102	84876	2.0	12.6988	1.1	2.1865	1.7	0.2014	1.3	0.77	1182.7	13.9	1176.8	11.8	1165.8	21.2	1165.8	21.2	101.5
KE2-90	47	34807	2.0	12.6974	2.2	2.1597	4.0	0.1989	3.3	0.83	1169.3	35.3	1168.2	27.6	1166.0	43.8	1166.0	43.8	100.3
KE2-85	63	59030	3.2	12.6949	1.6	2.1708	2.8	0.1998	2.3	0.83	1174.5	24.7	1171.7	19.3	1166.4	30.9	1166.4	30.9	100.7
KE2-77	45	44535	1.1	12.6589	1.6	2.1545	2.4	0.1978	1.8	0.74	1163.5	19.0	1166.5	16.7	1172.0	32.0	1172.0	32.0	99.3
KE2-64	66	69758	4.0	12.6529	0.8	2.1926	2.7	0.2012	2.6	0.95	1181.8	27.9	1178.7	18.9	1173.0	16.1	1173.0	16.1	100.8
KE2-6	74	60640	1.4	12.6417	1.1	2.1704	2.9	0.1990	2.7	0.92	1169.9	29.1	1171.6	20.5	1174.7	22.3	1174.7	22.3	99.6
KE2-51	38	120750	2.1	12.5867	2.1	2.1854	3.7	0.1995	3.0	0.82	1172.6	32.2	1176.4	25.6	1183.4	41.6	1183.4	41.6	99.1
KE2-21	29	50685	2.1	12.5609	3.0	2.1806	4.4	0.1987	3.3	0.74	1168.1	35.0	1174.9	30.8	1187.4	58.8	1187.4	58.8	98.4
KE2-2	57	71446	2.8	12.5409	2.5	2.2381	4.4	0.2036	3.6	0.82	1194.5	39.4	1193.1	31.0	1190.5	49.9	1190.5	49.9	100.3
KE2-22	53	146659	1.6	12.4955	2.0	2.2188	3.6	0.2011	3.0	0.82	1181.1	31.9	1187.0	25.1	1197.7	39.9	1197.7	39.9	98.6
KE2-18	95	69144	1.0	12.4212	1.2	2.2804	2.3	0.2054	2.0	0.85	1204.5	21.5	1206.2	16.3	1209.5	24.2	1209.5	24.2	99.6
KE2-96	36	39594	1.6	12.2523	2.5	2.4431	3.1	0.2171	1.8	0.59	1266.6	21.3	1255.4	22.4	1236.4	49.0	1236.4	49.0	102.4
KE2-14	182	204135	2.9	12.2518	0.5	2.3893	3.0	0.2123	3.0	0.99	1241.1	33.8	1239.4	21.8	1236.4	10.2	1236.4	10.2	100.4
KE2-101	56	113826	1.3	12.1883	1.9	2.4353	2.5	0.2153	1.6	0.66	1256.8	18.7	1253.1	18.0	1246.6	36.8	1246.6	36.8	100.8
KE2-61	78	100592	3.4	12.07															

KE3 (1AA/08-19-084-06W4/00)

Analysis	U (ppm)	206Pb 204Pb	U/Th	Isotope Ratios								Apparent Ages								Conc (%)
				206Pb* 207Pb*	±	207Pb* 235U*	±	206Pb* 238U	±	error corr.	206Pb* 238U*	±	207Pb* 235U	±	206Pb* 207Pb*	±	Bestage (Ma)	±		
KE3-65	409	38078	0.5	20.0932	3.0	0.1766	3.3	0.0257	1.3	0.39	163.8	2.1	165.1	5.0	184.2	70.5	163.8	2.1	NA	
KE3-103	289	41792	1.9	19.5473	3.4	0.2709	3.9	0.0384	1.7	0.45	242.9	4.1	243.4	8.4	248.0	79.4	242.9	4.1	NA	
KE3-84	48	1028	0.9	17.0406	21.0	0.4094	21.3	0.0506	3.0	0.14	318.2	9.5	348.5	62.8	555.3	463.5	318.2	9.5	NA	
KE3-101	674	420764	0.9	18.8878	0.9	0.3805	3.6	0.0521	3.5	0.97	327.5	11.3	327.4	10.2	326.4	19.5	327.5	11.3	NA	
KE3-91	130	48853	0.9	18.6318	5.9	0.4461	6.3	0.0603	2.0	0.32	377.3	7.4	374.5	19.6	357.3	133.7	377.3	7.4	NA	
KE3-45	233	51085	1.6	18.5927	2.9	0.4874	3.2	0.0657	1.2	0.37	410.3	4.7	403.1	10.6	362.0	66.4	410.3	4.7	113.3	
KE3-96	467	182895	13.5	18.2355	1.1	0.4999	1.2	0.0661	0.6	0.46	412.7	2.3	411.6	4.2	405.6	24.8	412.7	2.3	101.7	
KE3-58	119	33673	0.7	17.8867	3.0	0.5110	3.3	0.0663	1.4	0.41	413.8	5.5	419.1	11.3	448.7	66.8	413.8	5.5	92.2	
KE3-20	132	82353	0.9	17.7315	3.4	0.5231	3.7	0.0673	1.3	0.36	419.7	5.4	427.2	12.8	468.0	76.0	419.7	5.4	89.7	
KE3-94	47	15448	1.1	17.9183	11.0	0.5341	11.7	0.0694	3.9	0.34	432.6	16.5	434.5	41.4	444.8	245.9	432.6	16.5	97.3	
KE3-4	40	12815	1.2	19.8979	10.7	0.4855	11.0	0.0701	2.6	0.24	436.5	11.0	401.8	36.5	206.9	248.1	436.5	11.0	211.0	
KE3-30	100	26760	1.7	17.9065	2.5	0.5511	2.9	0.0716	1.5	0.51	445.6	6.5	445.7	10.5	446.2	55.5	445.6	6.5	99.9	
KE3-17	165	29053	0.7	17.0578	4.7	0.5856	4.7	0.0725	0.8	0.17	450.9	3.6	468.1	17.8	553.2	101.9	450.9	3.6	81.5	
KE3-86	271	83671	1.1	17.8818	1.7	0.5640	2.3	0.0732	1.6	0.68	455.1	7.1	454.2	8.6	449.3	38.0	455.1	7.1	101.1	
KE3-50	159	56674	1.3	17.8738	3.5	0.5909	3.9	0.0766	1.7	0.43	475.8	7.7	471.5	14.7	450.3	78.1	475.8	7.7	105.7	
KE3-8	129	37059	1.2	17.3062	3.4	0.6746	4.3	0.0847	2.6	0.60	523.9	12.9	523.5	17.6	521.5	75.7	523.9	12.9	100.5	
KE3-3	34	18006	1.8	14.4237	3.0	1.4474	3.4	0.1514	1.7	0.50	908.9	14.5	908.8	20.6	908.6	61.5	908.6	61.5	100.0	
KE3-6	159	138102	2.7	14.3540	0.7	1.4995	1.3	0.1561	1.2	0.87	935.1	10.2	930.2	8.2	918.6	13.6	918.6	13.6	101.8	
KE3-80	193	147511	1.8	14.0811	1.0	1.5750	1.8	0.1609	1.5	0.83	961.5	13.1	960.4	11.0	957.9	20.3	957.9	20.3	100.4	
KE3-66	86	139990	1.7	13.9659	1.5	1.5948	1.9	0.1615	1.2	0.63	965.3	10.7	968.2	11.8	974.7	29.9	974.7	29.9	99.0	
KE3-57	40	45558	0.9	13.8784	4.3	1.6151	4.9	0.1626	2.2	0.44	971.0	19.4	976.1	30.5	987.5	88.5	987.5	88.5	98.3	
KE3-11	27	9793	0.9	13.8755	6.3	1.4575	7.0	0.1467	3.0	0.43	882.3	24.8	913.0	42.3	987.9	129.2	987.9	129.2	89.3	
KE3-90	81	31956	1.8	13.8367	2.2	1.6646	2.4	0.1670	1.0	0.41	995.8	9.3	995.1	15.5	993.6	45.3	993.6	45.3	100.2	
KE3-35	69	41262	2.2	13.8193	1.1	1.7042	2.0	0.1708	1.7	0.83	1016.6	16.0	1010.1	13.1	996.2	22.8	996.2	22.8	102.0	
KE3-105	118	118436	1.1	13.7433	1.1	1.6919	2.2	0.1686	1.9	0.87	1004.6	17.9	1005.5	14.2	1007.3	22.6	1007.3	22.6	99.7	
KE3-70	209	127137	2.2	13.7140	0.6	1.7264	3.5	0.1717	3.4	0.98	1021.6	32.5	1018.4	22.4	1011.7	12.4	1011.7	12.4	101.0	
KE3-52	322	448897	2.7	13.7076	0.4	1.7299	1.0	0.1720	0.9	0.90	1023.0	8.7	1019.7	6.6	1012.6	9.0	1012.6	9.0	101.0	
KE3-62	196	125739	7.0	13.6707	0.9	1.7387	1.6	0.1724	1.4	0.84	1025.3	12.8	1023.0	10.4	1018.1	17.9	1018.1	17.9	100.7	
KE3-75	23	13163	1.9	13.5922	5.5	1.8303	5.9	0.1804	2.1	0.35	1069.3	20.6	1056.4	38.9	1029.7	112.0	1029.7	112.0	103.8	
KE3-59	121	256948	1.7	13.5765	1.1	1.7433	2.7	0.1717	2.5	0.91	1021.2	23.4	1024.7	17.5	1032.1	22.3	1032.1	22.3	98.9	
KE3-56	114	451440	0.8	13.5587	1.4	1.7681	2.3	0.1739	1.8	0.78	1033.4	17.3	1033.8	15.1	1034.7	29.2	1034.7	29.2	99.9	
KE3-55	74	36322	1.1	13.5584	2.5	1.7257	2.9	0.1697	1.4	0.49	1010.4	13.2	1018.2	18.5	1034.8	50.5	1034.8	50.5	97.7	
KE3-22	362	557502	2.0	13.5186	0.3	1.7701	1.1	0.1736	1.1	0.96	1031.7	10.1	1034.6	7.2	1040.7	6.0	1040.7	6.0	99.1	
KE3-74	82	36149	2.1	13.5157	1.7	1.8002	1.9	0.1765	0.7	0.38	1047.6	6.8	1045.5	12.3	1041.1	35.2	1041.1	35.2	100.6	
KE3-88	90	76010	1.5	13.4510	1.1	1.8502	2.3	0.1805	2.0	0.88	1069.7	19.9	1063.5	15.2	1050.8	22.4	1050.8	22.4	101.8	
KE3-15	845	27923	4.0	13.4469	0.8	1.7688	2.0	0.1725	1.8	0.91	1025.9	17.4	1034.1	13.0	1051.4	16.5	1051.4	16.5	97.6	
KE3-1	33	30091	1.3	13.4449	4.4	1.8488	4.7	0.1803	1.5	0.31	1068.5	14.4	1063.0	30.7	1051.8	89.0	1051.8	89.0	101.6	
KE3-43	138	143808	2.3	13.4423	1.1	1.8408	1.5	0.1795	1.0	0.68	1064.0	9.8	1060.1	9.6	1052.1	21.5	1052.1	21.5	101.1	
KE3-76	81	54282	2.4	13.3940	2.6	1.8344	2.9	0.1782	1.3	0.44	1057.1	12.5	1057.9	13.3	1059.4	53.0	1059.4	53.0	99.8	
KE3-18	72	98879	0.8	13.3727	1.8	1.8020	2.5	0.1748	1.8	0.72	1038.4	17.5	1046.2	16.6	1062.6	35.6	1062.6	35.6	97.7	
KE3-89	300	199205	2.6	13.3702	0.6	1.7663	2.2	0.1713	2.1	0.96	1019.1	20.0	1033.2	14.4	1063.0	12.7	1063.0	12.7	95.9	
KE3-97	125	114341	2.6	13.3165	1.8	1.8229	3.6	0.1761	3.2	0.87	1045.4	30.6	1053.7	23.8	1071.1	35.6	1071.1	35.6	97.6	
KE3-44	46	35932	0.9	13.2119	2.5	1.8522	2.7	0.1775	0.9	0.34	1053.2	8.8	1064.2	17.7	1086.9	50.7	1086.9	50.7	96.9	
KE3-40	54	43917	1.2	13.1767	2.6	1.9059	3.4	0.1821	2.2	0.64	1078.6	21.4	1083.1	22.5	1092.2	52.0	1092.2	52.0	98.8	
KE3-82	126	10105	1.2	13.1582	3.5	1.8284	3.7	0.1745	1.2	0.33	1036.8	11.7	1055.7	24.0	1095.0	69.1	1095.0	69.1	94.7	
KE3-79	54	61980	1.8	12.9035	2.1	2.0263	2.9	0.1896	2.0	0.68	1119.4	20.1	1124.4	19.4	1134.0	41.5	1134.0	41.5	98.7	
KE3-9	96	77423	3.0	12.8533	1.4	2.1451	2.8	0.2000	2.5	0.87	1175.1	26.4	1163.5	19.5	1141.8	27.3	1141.8	27.3	102.9	
KE3-16	128	78934	1.6	12.8375	1.2	2.1478	1.7	0.2000	1.2	0.71	1175.2	12.9	1164.4	11.8	1144.2	23.8	1144.2	23.8	102.7	
KE3-85	87	119970	1.9	12.8345	0.8	2.1083	1.4	0.1963	1.2	0.84	1155.2	12.5	1151.5	9.7	1144.7	15.4	1144.7	15.4	100.9	
KE3-33	105	107845	4.0	12.7797	0.8	2.2086	2.8	0.2047	2.6	0.96	1200.5	29.0	1183.8	19.4	1153.2	16.3	1153.2	16.3	104.1	
KE3-38	115	104542	4.2	12.7698	0.8	2.1294	1.8	0.1972	1.7	0.91	1160.4	17.7	1158.4	12.6	1154.7	15.0	1154.7	15.0	100.5	
KE3-10	86	98485	1.7	12.7628	1.1	2.1220	1.2	0.1964	1.8	0.86	1156.1	19.0	1156.0	14.4	1155.8	21.1	1155.8	21.1	100.0	
KE3-48	182	156971	1.8	12.7617	0.5	2.1195	1.2	0.1962	1.1	0.91	1154.7	11.6	1155.2	8.3	1156.0	9.9	1156.0	9.9	99.9	
KE3-12	46	45171																		

KE4 (1AA/08-19-084-06W4/00)

Analysis	U (ppm)	206Pb		U/Th	206Pb*		Isotope Ratios		206Pb*	±	error	Apparent Ages		206Pb*	±	206Pb*	±	Best age	±	Conc
		204Pb	206Pb		207Pb*	(%)	235U*	(%)				238U	(%)							
KE4-31	123	15972	0.8	19.6677	6.6	0.2838	7.0	0.0405	2.2	0.31		255.8	5.4	253.7	15.7	233.8	153.1	255.8	5.4	NA
KE4-63	215	27612	2.4	19.2540	4.1	0.3370	4.3	0.0471	0.9	0.22		296.4	2.7	294.9	10.9	282.7	94.9	296.4	2.7	NA
KE4-68	155	48801	2.4	18.2714	2.3	0.4565	3.9	0.0605	3.2	0.81		378.7	11.8	381.9	12.5	401.2	51.1	378.7	11.8	NA
KE4-35	192	65812	1.7	18.0747	2.0	0.5068	2.3	0.0664	1.2	0.51		414.7	4.7	416.3	7.8	425.4	43.6	414.7	4.7	97.5
KE4-101	218	61112	0.9	18.4938	3.6	0.4974	4.1	0.0667	1.9	0.48		416.3	7.8	409.9	13.7	374.0	80.5	416.3	7.8	111.3
KE4-60	205	50118	1.3	18.2569	2.2	0.5045	2.5	0.0668	1.1	0.44		416.9	4.4	414.8	8.4	403.0	49.7	416.9	4.4	103.5
KE4-20	282	71386	3.3	18.2145	1.6	0.5131	2.0	0.0678	1.2	0.62		422.7	5.0	420.5	6.9	408.2	35.3	422.7	5.0	103.6
KE4-5	145	20740	0.8	17.4964	2.5	0.5598	2.7	0.0710	1.0	0.37		442.4	4.3	451.4	9.9	497.5	55.4	442.4	4.3	88.9
KE4-102	187	24696	1.5	18.0816	2.7	0.5466	3.2	0.0717	1.7	0.53		446.3	7.2	442.8	11.3	424.5	59.8	446.3	7.2	105.1
KE4-70	82	17288	1.0	18.6298	3.9	0.5445	4.4	0.0736	2.0	0.46		457.6	8.9	441.4	15.6	357.5	87.3	457.6	8.9	128.0
KE4-7	102	35302	1.9	17.9948	4.7	0.5722	4.9	0.0747	1.1	0.23		464.3	5.0	459.4	17.9	435.3	105.2	464.3	5.0	106.7
KE4-15	44	8463	0.5	17.0998	10.3	0.6125	10.6	0.0760	2.1	0.20		472.0	9.7	485.1	40.7	547.8	226.4	472.0	9.7	86.2
KE4-69	47	87108	2.0	14.1373	4.4	1.5354	4.8	0.1574	1.9	0.40		942.5	16.9	944.7	29.6	949.7	90.1	949.7	90.1	99.2
KE4-86	103	116048	1.7	13.7713	1.5	1.7332	1.9	0.1731	1.2	0.63		1029.2	11.6	1021.0	12.6	1003.2	30.9	1003.2	30.9	102.6
KE4-55	202	163768	2.4	13.7013	0.9	1.7464	1.5	0.1735	1.2	0.80		1031.6	11.1	1025.8	9.4	1013.5	17.5	1013.5	17.5	101.8
KE4-10	17	9031	1.8	13.6992	6.2	1.7751	6.8	0.1764	2.7	0.40		1047.1	26.4	1036.4	44.1	1013.8	125.9	1013.8	125.9	103.3
KE4-41	52	29520	1.7	13.6624	2.2	1.7676	2.8	0.1751	1.7	0.62		1040.4	16.6	1033.6	18.1	1019.3	44.2	1019.3	44.2	102.1
KE4-94	75	68334	3.6	13.6417	2.5	1.7792	3.1	0.1760	1.8	0.58		1045.3	17.4	1037.9	20.3	1022.4	51.6	1022.4	51.6	102.2
KE4-67	263	257750	2.9	13.6075	0.6	1.7403	2.1	0.1718	2.0	0.97		1021.8	19.2	1023.6	13.6	1027.4	11.1	1027.4	11.1	99.4
KE4-43	242	122268	2.5	13.6059	0.5	1.7897	1.7	0.1766	1.6	0.95		1048.4	15.9	1041.7	11.2	1027.7	10.4	1027.7	10.4	102.0
KE4-4	73	58908	2.2	13.5920	1.9	1.7417	2.2	0.1717	1.1	0.50		1021.4	10.2	1024.1	14.0	1029.8	37.9	1029.8	37.9	99.2
KE4-29	124	105166	2.9	13.5810	1.0	1.7834	1.3	0.1757	0.7	0.59		1043.2	7.1	1039.4	8.2	1031.4	20.7	1031.4	20.7	101.1
KE4-62	26	18613	1.7	13.5563	5.1	1.8402	5.4	0.1809	1.7	0.33		1072.0	17.2	1059.9	35.3	1035.1	102.6	1035.1	102.6	103.6
KE4-33	79	78252	1.2	13.5212	2.1	1.7934	2.7	0.1759	1.7	0.64		1044.3	16.6	1043.0	17.6	1040.3	41.9	1040.3	41.9	100.4
KE4-89	28	77446	0.8	13.5127	5.5	1.8561	5.8	0.1819	1.8	0.32		1077.4	18.2	1065.6	38.2	1041.6	111.0	1041.6	111.0	103.4
KE4-54	191	204026	5.1	13.5044	0.8	1.8205	1.1	0.1783	0.8	0.71		1057.7	7.4	1052.9	7.0	1042.8	15.2	1042.8	15.2	101.4
KE4-19	345	287306	3.4	13.4957	0.6	1.8476	1.1	0.1808	0.9	0.84		1071.6	9.1	1062.6	7.2	1044.1	12.2	1044.1	12.2	102.6
KE4-93	131	110115	1.7	13.4825	1.1	1.8321	1.8	0.1791	1.4	0.78		1062.3	13.5	1057.0	11.5	1046.1	22.0	1046.1	22.0	101.5
KE4-96	30	41324	2.3	13.4644	4.3	1.7592	4.5	0.1718	1.4	0.31		1022.0	13.3	1030.6	29.1	1048.8	86.2	1048.8	86.2	97.4
KE4-48	57	68364	2.4	13.4417	3.4	1.8102	3.7	0.1765	1.2	0.34		1047.7	12.0	1049.1	24.0	1052.2	69.4	1052.2	69.4	99.6
KE4-88	58	52471	1.2	13.4075	1.5	1.8221	1.9	0.1772	1.2	0.60		1051.6	11.2	1053.4	12.6	1057.4	31.0	1057.4	31.0	99.5
KE4-52	67	59374	1.4	13.3322	1.3	1.8484	1.8	0.1787	1.2	0.68		1060.0	11.8	1062.8	11.8	1068.7	26.5	1068.7	26.5	99.2
KE4-98	46	46156	0.9	13.3218	2.4	1.8597	2.7	0.1797	1.1	0.41		1065.2	10.6	1066.9	17.6	1070.3	49.0	1070.3	49.0	99.5
KE4-103	122	69499	1.9	13.3207	1.9	1.8917	2.2	0.1828	1.1	0.51		1082.0	11.2	1078.2	14.6	1070.4	37.9	1070.4	37.9	101.1
KE4-51	86	66284	1.3	13.3024	1.3	1.8679	3.5	0.1802	3.3	0.93		1068.1	32.2	1069.8	23.3	1073.2	25.6	1073.2	25.6	99.5
KE4-13	73	88688	1.2	13.2806	1.6	1.9465	1.9	0.1875	1.0	0.52		1107.8	9.9	1097.2	12.7	1076.5	32.4	1076.5	32.4	102.9
KE4-28	60	52712	1.2	13.2267	2.2	1.9301	2.5	0.1852	1.1	0.46		1095.0	11.5	1091.6	16.7	1084.6	44.5	1084.6	44.5	101.0
KE4-12	35	28426	1.2	13.2062	4.6	1.9119	6.2	0.1831	4.2	0.68		1084.0	42.0	1085.2	41.6	1087.8	92.1	1087.8	92.1	99.7
KE4-47	56	67758	0.8	13.1806	1.3	1.9112	2.0	0.1827	1.5	0.75		1081.7	15.3	1085.0	13.6	1091.6	27.0	1091.6	27.0	99.1
KE4-73	38	26632	1.1	13.1728	4.6	1.8494	5.2	0.1767	2.4	0.46		1048.9	22.9	1063.2	34.1	1092.8	92.2	1092.8	92.2	96.0
KE4-16	47	26059	0.8	13.1276	2.4	1.9218	3.1	0.1830	1.9	0.61		1083.2	18.6	1088.7	20.4	1099.7	48.5	1099.7	48.5	98.5
KE4-95	148	77680	2.1	13.0416	0.6	1.9864	1.4	0.1879	1.3	0.91		1109.9	13.2	1110.9	9.6	1112.8	11.8	1112.8	11.8	99.7
KE4-79	68	46817	1.3	12.9662	1.3	2.0524	2.3	0.1930	1.9	0.83		1137.6	20.0	1133.1	15.7	1124.4	25.3	1124.4	25.3	101.2
KE4-39	52	60591	2.4	12.9497	1.4	2.0265	1.7	0.1903	0.8	0.50		1123.1	8.6	1124.4	11.3	1126.9	28.6	1126.9	28.6	99.7
KE4-23	27	16380	0.8	12.8720	5.1	2.1653	5.9	0.2021	3.0	0.50		1186.8	32.3	1170.0	41.1	1138.9	101.6	1138.9	101.6	104.2
KE4-81	54	58779	0.9	12.8718	2.9	2.1120	3.2	0.1972	1.3	0.40		1160.1	13.6	1152.7	21.9	1139.0	57.8	1139.0	57.8	101.9
KE4-75	143	104126	2.2	12.8236	0.8	2.1354	1.4	0.1986	1.2	0.84		1167.8	12.8	1160.3	9.9	1146.4	15.4	1146.4	15.4	101.9
KE4-92	88	45846	1.4	12.8074	1.7	2.1335	3.0	0.1982	2.4	0.82		1165.5	25.8	1159.7	20.5	1148.9	33.9	1148.9	33.9	101.4
KE4-58	101	115796	1.2	12.7787	0.6	2.1553	1.2	0.1997	1.1	0.87		1174.0	11.4	1166.7	8.5	1153.3	12.2	1153.3	12.2	101.8
KE4-71	272	153492	2.2	12.7529	0.6	2.0946	3.1	0.1937	3.0	0.98		1141.6	31.8	1147.0	21.3	1157.3	12.0	1157.3	12.0	98.6
KE4-82	109	86699	0.8	12.7301	1.3	2.0925	2.5	0.1932	2.1	0.85		1138.6	22.4	1146.3	17.4	1160.9	26.8	1160.9	26.8	98.1
KE4-30	31	27006	1.9	12.7051	3.3	2.1862	3.4	0.2014	0.8	0.25		1183.1	9.1							

LA1(100/10-20-077-07W4/00)

Analysis	U (ppm)	206Pb 204Pb	U/Th	206Pb* 207Pb*	Isotope Ratios				206Pb* 238U	±	error corr.	Apparent Ages				206Pb* 207Pb*	±	Bestage		Conc (Ma)
					±	235U*	±	238U				±	207Pb* (Ma)	±	235U (Ma)			±	206Pb* (Ma)	
LA1-94	232	33532	1.7	19.7952	3.2	0.2902	3.6	0.0417	1.6	0.44	263.1	4.0	258.7	8.1	218.9	74.0	263.1	4.0	NA	
LA1-9	162	16941	0.7	17.9292	3.7	0.4833	4.6	0.0628	2.7	0.59	392.9	10.2	400.3	15.1	443.4	82.2	392.9	10.2	NA	
LA1-97	97	44579	2.0	18.2198	8.0	0.5065	8.2	0.0669	1.7	0.21	417.7	7.0	416.1	28.0	407.5	179.4	417.7	7.0	102.5	
LA1-57	241	86294	0.7	17.6059	1.4	0.5741	2.3	0.0733	1.8	0.78	456.1	7.9	460.7	8.5	483.8	31.3	456.1	7.9	94.3	
LA1-50	273	122966	1.0	17.6527	1.1	0.6023	1.8	0.0771	1.4	0.78	478.8	6.4	478.7	6.8	477.9	24.6	478.8	6.4	100.2	
LA1-33	287	179994	2.2	16.7302	1.4	0.7893	2.3	0.0958	1.8	0.80	589.6	10.3	590.7	10.2	595.4	29.3	589.6	10.3	99.0	
LA1-17	135	110342	2.5	14.4505	1.6	1.3451	2.8	0.1410	2.3	0.82	850.2	18.2	865.4	16.3	904.7	33.3	850.2	18.2	94.0	
LA1-101	79	114970	2.0	13.7874	1.0	1.6800	1.7	0.1680	1.4	0.82	1001.0	12.6	1001.0	10.6	1000.8	19.3	1000.8	19.3	100.0	
LA1-72	788	834048	18.2	13.7475	0.3	1.7480	1.6	0.1743	1.6	0.98	1035.7	14.9	1026.4	10.3	1006.7	6.0	1006.7	6.0	102.9	
LA1-45	99	102954	2.1	13.7389	0.9	1.7293	1.8	0.1723	1.5	0.86	1024.9	14.6	1019.5	11.5	1008.0	18.5	1008.0	18.5	101.7	
LA1-51	48	27609	0.7	13.6958	3.0	1.7901	3.4	0.1778	1.7	0.50	1055.0	16.6	1041.9	22.3	1014.3	60.1	1014.3	60.1	104.0	
LA1-46	63	41487	2.4	13.6762	1.7	1.7850	2.4	0.1771	1.8	0.73	1050.9	17.1	1040.0	15.8	1017.3	33.8	1017.3	33.8	103.3	
LA1-92	72	65972	0.7	13.6455	1.5	1.7235	2.1	0.1706	1.6	0.73	1015.2	14.7	1017.3	13.7	1021.8	29.4	1021.8	29.4	99.4	
LA1-1	59	62515	2.8	13.5292	2.1	1.8163	2.6	0.1782	1.5	0.57	1057.2	14.2	1051.3	16.8	1039.1	42.6	1039.1	42.6	101.7	
LA1-18	125	88678	2.5	13.5257	0.9	1.8191	2.0	0.1785	1.8	0.89	1058.5	17.5	1052.4	13.3	1039.6	19.0	1039.6	19.0	101.8	
LA1-69	32	33778	0.6	13.5245	4.9	1.8184	6.2	0.1784	3.7	0.61	1058.0	36.5	1052.1	40.5	1039.8	99.1	1039.8	99.1	101.8	
LA1-16	46	58119	1.0	13.5092	2.9	1.8381	3.2	0.1801	1.5	0.45	1067.5	14.3	1059.2	21.2	1042.1	58.0	1042.1	58.0	102.4	
LA1-100	89	75184	1.4	13.5086	1.4	1.8446	1.9	0.1807	1.3	0.68	1070.9	12.6	1061.5	12.4	1042.2	28.1	1042.2	28.1	102.8	
LA1-83	120	130696	1.4	13.4397	1.3	1.8892	2.0	0.1841	1.5	0.77	1089.6	15.1	1077.3	13.0	1052.5	25.3	1052.5	25.3	103.5	
LA1-54	131	83404	1.7	13.4214	0.8	1.8714	1.1	0.1822	0.8	0.71	1078.8	7.7	1071.0	7.2	1055.3	15.4	1055.3	15.4	102.2	
LA1-21	115	89669	2.7	13.3780	1.4	1.9138	2.0	0.1857	1.4	0.71	1098.0	14.1	1085.9	13.2	1061.8	28.2	1061.8	28.2	103.4	
LA1-49	71	52392	0.2	13.3482	2.2	1.8619	2.7	0.1802	1.5	0.57	1068.3	15.1	1067.7	17.8	1066.3	44.4	1066.3	44.4	100.2	
LA1-32	176	194330	2.5	13.3350	1.1	1.8952	2.0	0.1833	1.6	0.83	1084.9	16.1	1079.4	13.0	1068.3	22.2	1068.3	22.2	101.6	
LA1-102	133	122476	2.2	13.3259	0.8	1.9481	1.3	0.1883	1.1	0.80	1112.1	11.0	1097.8	9.0	1069.6	16.2	1069.6	16.2	104.0	
LA1-95	43	25171	1.0	13.2855	2.9	1.8643	3.5	0.1796	2.0	0.57	1065.0	19.8	1068.5	23.3	1075.7	58.1	1075.7	58.1	99.0	
LA1-6	72	114378	1.7	13.2591	1.2	1.9143	1.8	0.1841	1.4	0.77	1089.3	13.8	1086.1	12.0	1079.7	23.2	1079.7	23.2	100.9	
LA1-4	102	199362	4.6	13.0830	0.9	2.0145	1.7	0.1912	1.4	0.83	1127.6	14.6	1120.4	11.5	1106.5	18.7	1106.5	18.7	101.9	
LA1-63	93	87493	2.0	13.0771	1.1	2.0263	3.1	0.1922	2.9	0.93	1133.2	29.9	1124.4	21.0	1107.4	22.8	1107.4	22.8	102.3	
LA1-65	400	405717	3.8	12.8374	0.3	2.1558	0.9	0.2007	0.9	0.95	1179.2	9.3	1166.9	6.3	1144.2	5.5	1144.2	5.5	103.1	
LA1-38	117	112259	2.1	12.7904	0.8	2.1105	2.1	0.1958	1.9	0.92	1152.6	19.9	1152.3	14.1	1151.5	16.1	1151.5	16.1	100.1	
LA1-61	107	96083	2.5	12.7596	0.9	2.1919	2.0	0.2028	1.8	0.89	1190.6	19.1	1178.5	13.7	1156.3	17.5	1156.3	17.5	103.0	
LA1-7	202	61493	1.3	12.6214	0.6	2.1753	1.9	0.1991	1.8	0.95	1170.6	19.0	1173.2	13.0	1177.9	11.3	1177.9	11.3	99.4	
LA1-48	27	2380	0.9	12.4620	8.6	2.0257	11.8	0.1831	8.0	0.68	1083.8	80.1	1124.2	80.2	1203.0	169.8	1203.0	169.8	90.1	
LA1-84	17	24579	1.3	12.3829	4.9	2.4327	5.7	0.2185	2.9	0.51	1273.8	33.8	1252.3	41.4	1215.5	97.4	1215.5	97.4	104.8	
LA1-44	115	126295	1.0	12.3449	1.1	2.3576	2.0	0.2111	1.7	0.85	1234.6	19.0	1229.9	14.2	1221.6	20.7	1221.6	20.7	101.1	
LA1-66	335	345660	1.1	11.8632	0.4	2.6464	0.8	0.2277	0.8	0.90	1322.4	9.0	1313.6	6.2	1299.3	7.2	1299.3	7.2	101.8	
LA1-93	35	64997	1.9	11.8053	1.8	2.5795	2.5	0.2209	1.8	0.71	1286.4	20.7	1294.8	18.3	1308.8	34.3	1308.8	34.3	98.3	
LA1-96	28	2570	1.3	11.7323	7.6	2.4160	8.3	0.2056	3.3	0.40	1205.2	36.7	1247.4	59.8	1320.9	147.7	1320.9	147.7	91.2	
LA1-68	31	24252	1.3	11.2811	2.8	3.0467	3.1	0.2493	1.4	0.46	1434.7	18.4	1419.4	23.8	1396.5	53.1	1396.5	53.1	102.7	
LA1-73	193	616806	3.3	10.8613	0.4	3.3903	1.0	0.2671	1.0	0.92	1525.9	12.9	1502.2	8.1	1468.8	7.5	1468.8	7.5	103.9	
LA1-28	93	165830	1.1	10.0356	0.7	4.0651	2.0	0.2959	1.9	0.94	1670.8	27.5	1647.3	16.2	1617.5	12.5	1617.5	12.5	103.3	
LA1-53	105	138622	1.3	9.8621	0.7	4.1428	1.5	0.2963	1.3	0.88	1673.0	19.5	1662.8	12.3	1649.9	13.0	1649.9	13.0	101.4	
LA1-29	199	368838	10.2	9.0572	0.3	5.0541	0.7	0.3320	0.7	0.93	1848.1	10.8	1828.4	6.1	1806.1	4.8	1806.1	4.8	102.3	
LA1-64	149	190053	3.7	9.0445	0.4	5.1155	1.1	0.3356	1.1	0.95	1865.3	17.7	1838.7	9.8	1808.7	6.5	1808.7	6.5	103.1	
LA1-2	100	112164	0.8	8.9955	0.9	5.1078	1.2	0.3332	0.8	0.69	1854.1	13.1	1837.4	10.0	1818.6	15.5	1818.6	15.5	102.0	
LA1-58	84	179737	3.3	8.9928	0.5	5.1995	0.9	0.3391	0.8	0.83	1882.4	12.3	1852.5	7.8	1819.1	9.3	1819.1	9.3	103.5	
LA1-23	71	336810	3.4	8.9835	0.5	5.0911	1.3	0.3317	1.2	0.93	1846.6	19.4	1834.6	11.1	1821.0	8.9	1821.0	8.9	101.4	
LA1-71	26	41269	3.7	8.9605	1.7	5.2072	2.1	0.3384	1.2	0.60	1879.0	19.9	1853.8	17.5	1825.6	29.9	1825.6	29.9	102.9	
LA1-35	92	179424	1.4	8.9539	0.9	5.2250	1.6	0.3393	1.3	0.81	1883.3	21.0	1856.7	13.6	1827.0	17.1	1827.0	17.1	103.1	
LA1-31	82	102320	1.0	8.9230	0.7	5.2062	1.5	0.3369	1.3	0.89	1871.8	21.6	1853.6	12.8	1833.2	12.6	1833.2	12.6	102.1	
LA1-81	75	149152	1.9	8.9194	0.7	5.3328	1.1	0.3450	0.9	0.80	1910.6	14.3	1874.1	9.3	1834.0	11.9	1834.0	11.9	104.2	
LA1-86	10	18387	0.4	8.9187	5.1	5.2965	5.6	0.3426	2.2	0.39	1899.2	35.4	1868.3	47.5	1834.1	92.8	1834.1	92.8	103.5	
LA1-89	53	163842	0.9	8.9162	0.9	5.2683	1.5	0.3407	1.2	0.82	1890.0	20.4	1863.7	13.0	1834					

LA2(100/10-20-077-07W4/00)

Analysis	U (ppm)	206Pb		U/Th	206Pb*		Isotope Ratios		206Pb*		error		206Pb*		Apparent Ages		206Pb*		Bestage		Conc	
		204Pb	±		204Pb	±	207Pb*	±	207Pb*	±	207Pb*	±	207Pb*	±	238U*	±	207Pb*	±	(Ma)	±	(Ma)	±
LA2-21	17	5131	1.3	17.6218	24.6	0.5012	24.8	0.0641	3.4	0.14	400.3	13.4	412.5	84.4	481.8	550.9	400.3	13.4	83.1			
LA2-61	148	65213	1.0	17.8620	2.5	0.5045	2.9	0.0654	1.5	0.50	408.1	5.9	414.7	10.0	451.7	56.4	408.1	5.9	90.3			
LA2-5	198	66733	8.6	18.1699	2.2	0.4969	3.2	0.0655	2.4	0.73	408.9	9.4	409.6	10.9	413.7	49.2	408.9	9.4	98.8			
LA2-95	110	111041	0.9	18.6531	4.1	0.4919	4.5	0.0685	1.8	0.40	415.3	7.2	406.2	15.0	354.7	92.7	415.3	7.2	117.1			
LA2-83	472	206712	1.8	17.9664	0.5	0.5186	0.9	0.0676	0.7	0.79	421.5	2.6	424.2	3.0	438.8	12.0	421.5	2.6	96.1			
LA2-57	70	20895	1.4	17.2489	4.4	0.5545	4.9	0.0694	2.1	0.42	432.4	8.6	448.0	17.7	526.8	97.4	432.4	8.6	81.8			
LA2-22	66	28304	0.8	17.7376	7.3	0.5460	7.8	0.0702	2.8	0.36	437.6	12.0	442.4	28.1	467.3	162.1	437.6	12.0	93.7			
LA2-63	130	70233	1.0	17.5764	2.5	0.6121	2.7	0.0780	1.0	0.35	484.3	4.5	484.9	10.5	487.5	56.0	484.3	4.5	99.4			
LA2-78	45	21529	1.6	17.3159	10.0	0.7014	10.2	0.0881	2.0	0.20	544.2	10.6	539.7	42.7	520.3	219.8	544.2	10.6	104.6			
LA2-101	90	52963	0.9	14.4859	4.1	0.8980	9.0	0.0943	8.0	0.89	581.2	44.7	650.6	43.4	899.7	84.4	581.2	44.7	64.6			
LA2-90	73	42417	1.1	16.5271	2.6	0.8063	2.9	0.0966	1.3	0.45	594.7	7.4	600.4	13.3	621.7	56.7	594.7	7.4	95.7			
LA2-1	263	166024	1.2	16.5416	0.8	0.8071	2.0	0.0968	1.8	0.91	595.8	10.4	600.8	9.1	619.8	18.1	595.8	10.4	96.1			
LA2-7	95	61134	0.9	16.4118	3.6	0.8263	4.0	0.0984	1.6	0.39	604.8	9.0	611.6	18.2	636.8	78.2	604.8	9.0	95.0			
LA2-72	255	49721	0.5	16.5119	0.8	0.8305	1.1	0.0995	0.7	0.67	611.2	4.3	613.9	5.1	623.7	18.0	611.2	4.3	98.0			
LA2-69	57	26136	1.4	16.3483	4.2	0.8569	4.7	0.1016	2.1	0.45	623.8	12.4	628.4	21.9	645.2	90.1	623.8	12.4	96.7			
LA2-24	69	26363	0.8	16.2854	2.1	0.8725	3.3	0.1031	2.6	0.77	632.3	15.4	636.9	15.6	653.5	44.8	632.3	15.4	96.8			
LA2-31	201	109513	2.4	15.3302	1.5	0.9455	1.9	0.1051	1.2	0.60	644.4	7.1	675.7	9.5	781.8	32.1	644.4	7.1	82.4			
LA2-84	59	47426	1.4	14.4757	1.6	1.4707	3.2	0.1544	2.7	0.87	925.6	23.6	918.4	19.1	901.1	32.3	901.1	32.3	102.7			
LA2-96	119	150488	1.8	13.9937	1.1	1.5814	1.6	0.1605	1.1	0.68	959.5	9.5	962.9	9.8	970.6	23.4	970.6	23.4	98.9			
LA2-103	37	35647	2.7	13.9426	3.5	1.4450	3.9	0.1461	1.7	0.43	879.2	13.7	907.8	23.5	978.1	72.2	978.1	72.2	89.9			
LA2-41	112	151341	2.3	13.9334	1.2	1.6793	1.8	0.1697	1.3	0.74	1010.5	12.3	1000.7	11.2	979.4	24.1	979.4	24.1	103.2			
LA2-99	144	60502	1.7	13.8257	0.5	1.6670	3.4	0.1672	3.4	0.99	996.4	31.0	996.1	21.5	995.2	9.3	995.2	9.3	100.1			
LA2-50	32	28715	3.2	13.7888	3.1	1.7380	3.5	0.1738	1.8	0.45	1033.1	15.2	1022.7	22.7	1000.6	63.9	1000.6	63.9	103.2			
LA2-37	76	90765	2.4	13.7635	1.0	1.6818	1.6	0.1679	1.3	0.81	1000.4	12.2	1001.7	10.4	1004.3	19.5	1004.3	19.5	99.6			
LA2-79	63	65942	1.7	13.7316	1.8	1.7191	3.3	0.1712	2.7	0.84	1018.7	25.8	1015.7	20.9	1010.9	35.7	1009.1	35.7	101.0			
LA2-100	380	253012	4.9	13.7212	0.5	1.6747	1.4	0.1687	1.3	0.94	993.7	11.8	999.0	8.7	1010.6	9.7	1010.6	9.7	98.3			
LA2-86	196	190763	5.9	13.6841	0.7	1.7260	1.2	0.1713	1.0	0.82	1019.3	9.4	1018.3	7.8	1016.1	14.0	1016.1	14.0	100.3			
LA2-67	43	44939	1.3	13.6835	2.6	1.7904	2.9	0.1777	1.2	0.43	1054.3	12.1	1042.0	18.7	1016.2	52.4	1016.2	52.4	103.8			
LA2-29	20	15338	1.1	13.6101	5.6	1.8268	5.9	0.1803	2.0	0.33	1068.7	19.4	1055.1	38.8	1027.1	112.9	1027.1	112.9	104.1			
LA2-73	17	20501	1.1	13.5880	3.8	1.7233	5.2	0.1698	3.6	0.68	1011.2	33.3	1017.2	33.5	1030.3	76.8	1030.3	76.8	98.1			
LA2-27	47	75410	2.2	13.5336	3.4	1.7858	4.8	0.1753	3.4	0.71	1041.2	32.7	1040.3	31.3	1038.5	68.5	1038.5	68.5	100.3			
LA2-66	335	277506	2.5	13.4550	0.3	1.8157	1.5	0.1772	1.4	0.97	1051.6	13.7	1051.1	9.5	1050.2	7.0	1050.2	7.0	100.1			
LA2-98	100	86537	1.5	13.4409	1.8	1.8254	2.2	0.1779	1.2	0.54	1055.7	11.5	1054.6	14.3	1052.4	36.9	1052.4	36.9	100.3			
LA2-88	66	55041	2.3	13.4304	1.2	1.8618	1.7	0.1813	1.2	0.71	1074.3	12.0	1067.6	11.2	1053.9	24.0	1053.9	24.0	101.9			
LA2-97	201	115265	0.9	13.4174	0.7	1.8209	1.6	0.1772	1.4	0.90	1051.6	13.7	1053.0	10.3	1055.9	13.9	1055.9	13.9	99.6			
LA2-80	123	99138	1.1	13.4110	0.7	1.8045	1.9	0.1755	1.8	0.93	1042.4	17.5	1047.1	12.7	1056.8	14.3	1056.8	14.3	98.6			
LA2-75	98	86879	1.9	13.4021	1.0	1.8090	2.5	0.1758	2.3	0.92	1044.2	22.1	1048.7	16.3	1058.2	19.7	1058.2	19.7	98.7			
LA2-10	72	59611	1.6	13.3837	1.0	1.8990	1.7	0.1843	1.4	0.82	1090.6	14.1	1080.7	11.4	1060.9	19.7	1060.9	19.7	102.8			
LA2-25	98	65627	5.2	13.3569	1.3	1.9310	2.2	0.1871	1.8	0.81	1105.4	17.8	1091.9	14.5	1065.0	25.7	1065.0	25.7	103.8			
LA2-66	96	113676	1.4	13.3190	1.5	1.8397	2.3	0.1777	1.8	0.78	1054.5	17.8	1059.8	15.4	1070.7	29.4	1070.7	29.4	98.5			
LA2-9	59	43018	2.6	13.3087	2.1	1.8382	2.5	0.1774	1.5	0.58	1052.9	14.4	1059.2	16.8	1072.2	41.7	1072.2	41.7	98.2			
LA2-2	93	62768	1.7	13.2969	1.6	1.9315	1.9	0.1863	1.1	0.57	1101.2	10.9	1092.1	12.7	1074.0	31.5	1074.0	31.5	102.5			
LA2-87	101	218251	2.9	13.2934	0.7	1.9174	2.6	0.1849	2.5	0.96	1093.5	25.8	1087.2	17.6	1074.5	14.7	1074.5	14.7	101.8			
LA2-104	32	51539	1.3	13.2765	2.7	1.8390	3.2	0.1771	1.6	0.51	1051.0	16.0	1059.5	21.1	1077.1	55.1	1077.1	55.1	97.6			
LA2-48	66	38356	1.6	13.2569	2.7	1.8501	3.1	0.1779	1.8	0.51	1055.4	15.6	1063.5	20.5	1080.0	53.6	1080.0	53.6	97.7			
LA2-12	121	99789	0.7	13.2405	1.2	1.8672	1.9	0.1793	1.5	0.77	1063.2	14.7	1069.5	12.8	1082.5	24.7	1082.5	24.7	98.2			
LA2-26	48	63169	1.3	13.2117	2.1	1.8849	2.4	0.1806	1.1	0.44	1070.3	10.4	1075.8	15.7	1086.9	42.5	1086.9	42.5	98.5			
LA2-49	109	161569	1.4	13.0771	1.7	1.9569	2.3	0.1856	1.5	0.66	1097.5	15.3	1100.8	15.4	1107.4	34.4	1107.4	34.4	99.1			
LA2-92	53	104233	1.1	13.0456	1.8	2.0503	2.1	0.1940	1.2	0.55	1143.0	12.2	1132.4	14.6	1112.2	35.6	1112.2	35.6	102.8			
LA2-39	98	78255	2.0	12.9424	1.4	2.0876	1.8	0.1960	1.2	0.65	1153.6	12.4	1144.7	12.4	1128.1	27.5	1128.1	27.5	102.3			
LA2-44	38	30242	1.2	12.8983	2.7	2.1158	3.7	0.1979	2.5	0.68	1164.2	26.8	1154.0	25.6	1134.8	54.5	1134.8	54.5	102.6			
LA2-64	101	100159	1.4	12.7700	0.9	2.1339	4.0	0.1976	3.9	0.97	1162.6	41.2	1159.8	27.5	1154.7	17.8	1154.7	17.8	100.7			
LA2-20	151	78043	2.2	12.7584	0.7	2.0802	2.2	0.1925	2.1	0.95	1134.8	22.3	1142.3	15.4	1156.5	13.4	1156.5	13.4	98.1			
LA2-94	203	227338	1.6	12.7006	0.5	2.1693	1.5	0.1998	1.4	0.95	1174.4	15.4	1171.3	10.5	1165.5	8.9	1165.5	8.9	100.8			
LA2-52	184	135748	2.2	12.6505	0.5	2.1927	2.4	0.2012	2.4	0.97	1181.7	25.8	1178.7	17.1	1173.4	10.8	1173.4	10.8	100.7			
LA2-54	60	101917	1.6	12.6468	1.1	2.1673	1.9	0.1988	1.6	0.81	1168.8	16.9	1170.6	13.5	1173.9	22.4	1173.9	22.4	99.6			
LA2-39	59	72791	2.0	12.5871	1.8	2.1996	2.5	0.2008	1.7	0.67	1179.6	17.9	1180.9	17.3	1183.3	36.5	1183.3	36.5	99.7			
LA2-28	189	144545	9.5	12.5795	0.6	2.2395	1.8	0.2043	1.6	0.93	1198.5	18.0	1193.5	12.4	1184.5							

LA3(100/10-20-077-07W4/00)

Analysis	U (ppm)	Isotope Ratios										Apparent Ages									
		206Pb 204Pb	U/Th	206Pb* 207Pb*	±	207Pb* 235U*	±	206Pb* 238U	±	error	206Pb* 238U*	±	207Pb* 235U	±	206Pb* (Ma)	±	Bestage (Ma)	±	Conc (%)		
LA-3-103	73	24165	3.2	17.7396	5.8	0.5150	6.0	0.0663	1.6	0.28	413.6	6.3	421.8	20.6	467.0	127.7	413.6	6.3	88.6		
LA-3-71	274	103558	1.4	18.1855	1.3	0.5078	2.4	0.0670	2.0	0.84	417.9	8.1	417.0	8.2	411.8	29.4	417.9	8.1	101.5		
LA-3-49	92	99782	1.1	17.5988	3.7	0.5456	3.9	0.0696	1.4	0.36	433.9	6.0	442.1	14.1	484.7	81.0	433.9	6.0	89.5		
LA-3-93	196	60236	1.5	17.6728	1.5	0.5729	2.1	0.0734	1.4	0.67	456.8	6.1	459.9	7.6	473.3	33.9	456.8	6.1	96.1		
LA-3-28	95	52823	1.8	17.5317	4.8	0.5983	5.1	0.0761	1.6	0.32	472.7	7.5	476.2	19.4	493.1	106.9	472.7	7.5	95.9		
LA-3-80	220	57494	1.5	17.4560	2.1	0.6172	3.8	0.0781	3.2	0.83	485.0	14.8	488.1	14.8	502.6	47.1	485.0	14.8	96.5		
LA-3-51	118	40974	1.2	17.7586	2.6	0.6147	2.8	0.0792	1.1	0.38	491.2	5.1	486.5	10.8	464.6	57.2	491.2	5.1	105.7		
LA-3-74	133	54741	3.3	17.2079	2.5	0.6443	3.6	0.0804	2.6	0.73	498.5	12.5	504.9	14.3	534.0	53.8	498.5	12.5	93.4		
LA-3-1	123	49232	1.3	17.1257	2.9	0.6807	4.2	0.0846	2.9	0.71	523.2	14.8	527.2	17.1	544.5	64.3	523.2	14.8	96.1		
LA-3-88	270	27629	1.1	16.9659	1.7	0.7318	1.8	0.0900	0.5	0.31	555.8	2.9	557.6	7.7	564.9	37.0	555.8	2.9	98.4		
LA-3-27	126	48796	0.9	16.8132	1.1	0.7749	1.5	0.0945	1.0	0.68	582.0	5.6	582.6	6.6	584.6	23.9	582.0	5.6	99.6		
LA-3-9	80	26790	0.9	14.6022	22.3	0.8969	23.1	0.0950	6.2	0.27	585.0	34.4	650.1	111.3	883.2	465.6	585.0	34.4	66.2		
LA-3-105	167	79926	0.7	16.4776	1.5	0.8454	2.1	0.1010	1.5	0.69	620.5	8.6	622.1	9.9	628.2	33.2	620.5	8.6	98.8		
LA-3-85	209	91514	1.5	16.3476	1.5	0.8810	5.0	0.1045	4.8	0.96	640.4	29.3	641.5	23.9	645.3	32.0	640.4	29.3	99.3		
LA-3-38	174	160967	2.6	14.2237	1.1	1.5311	1.3	0.1580	0.7	0.53	945.4	5.8	942.9	7.7	937.3	21.8	937.3	21.8	100.9		
LA-3-79	154	178699	3.0	14.2186	1.2	1.4774	3.5	0.1523	3.3	0.94	914.1	28.0	921.1	21.2	938.0	25.1	938.0	25.1	97.5		
LA-3-37	79	155240	2.1	14.0858	2.6	1.5526	3.0	0.1586	1.4	0.47	949.0	12.3	951.5	18.3	957.2	53.5	957.2	53.5	99.1		
LA-3-44	61	61626	4.7	13.9947	1.5	1.6395	1.7	0.1664	0.9	0.51	992.3	8.0	985.5	10.9	970.5	30.3	970.5	30.3	102.2		
LA-3-76	57	38763	1.3	13.9734	2.2	1.6162	2.6	0.1638	1.2	0.49	977.8	11.3	976.5	16.1	973.6	45.8	973.6	45.8	100.4		
LA-3-95	60	36992	1.9	13.7699	1.8	1.7229	2.0	0.1721	0.9	0.47	1023.5	9.0	1017.1	13.0	1003.4	36.3	1003.4	36.3	102.0		
LA-3-10	58	54807	1.7	13.6390	2.2	1.7585	2.5	0.1740	1.2	0.47	1033.9	11.3	1030.3	16.3	1022.8	45.0	1022.8	45.0	101.1		
LA-3-5	164	189635	4.9	13.5945	0.8	1.7703	2.4	0.1745	2.3	0.94	1037.1	21.6	1034.6	15.6	1029.4	16.5	1029.4	16.5	100.8		
LA-3-6	164	102369	1.7	13.5740	0.5	1.7968	1.0	0.1769	0.9	0.86	1050.0	8.7	1044.3	6.8	1032.4	10.7	1032.4	10.7	101.7		
LA-3-47	205	209995	23.9	13.5643	0.7	1.7452	1.4	0.1717	1.2	0.86	1021.4	11.3	1025.4	9.0	1033.9	14.5	1033.9	14.5	98.8		
LA-3-22	123	136439	3.9	13.5550	0.9	1.7535	1.2	0.1724	0.7	0.64	1025.2	7.1	1028.4	7.5	1035.3	18.1	1035.3	18.1	99.0		
LA-3-62	88	69936	1.2	13.4934	1.7	1.8264	2.0	0.1787	1.1	0.55	1060.1	10.8	1055.0	13.1	1044.5	33.5	1044.5	33.5	101.5		
LA-3-59	123	115484	2.8	13.4764	0.6	1.7672	1.5	0.1727	1.3	0.92	1027.1	12.6	1033.5	9.4	1047.0	11.7	1047.0	11.7	98.1		
LA-3-66	43	29701	1.8	13.4260	3.3	1.8530	3.8	0.1804	1.8	0.47	1069.3	17.5	1064.5	24.8	1054.6	66.8	1054.6	66.8	101.4		
LA-3-14	182	199557	2.3	13.4194	0.6	1.7857	0.9	0.1738	0.6	0.71	1033.0	6.1	1040.3	5.8	1055.6	12.7	1055.6	12.7	97.9		
LA-3-61	137	127824	2.8	13.4153	1.4	1.8003	3.2	0.1752	2.8	0.89	1040.5	27.0	1045.6	20.6	1056.2	29.0	1056.2	29.0	98.5		
LA-3-96	118	68236	1.6	13.3643	1.1	1.9019	1.8	0.1843	1.5	0.80	1090.7	14.8	1081.8	12.3	1063.9	22.4	1063.9	22.4	102.5		
LA-3-78	65	78443	2.0	13.1948	2.2	1.8998	3.9	0.1818	3.2	0.82	1076.8	31.5	1081.0	25.7	1089.5	44.2	1089.5	44.2	98.8		
LA-3-58	61	43932	1.2	13.1676	1.9	1.9345	2.4	0.1847	1.4	0.60	1092.8	14.4	1093.1	16.0	1093.6	38.3	1093.6	38.3	99.9		
LA-3-98	44	47354	0.8	13.0715	1.9	1.9096	2.4	0.1810	1.4	0.59	1072.6	14.0	1084.4	15.9	1108.2	38.5	1108.2	38.5	96.8		
LA-3-86	44	34906	2.0	13.0587	3.2	2.0665	3.3	0.1957	0.7	0.22	1152.3	7.7	1137.8	22.3	1110.2	63.4	1110.2	63.4	103.8		
LA-3-30	62	68642	2.3	13.0221	1.4	2.0523	1.7	0.1938	1.0	0.58	1142.1	10.6	1133.1	11.9	1115.8	28.3	1115.8	28.3	102.4		
LA-3-52	160	103789	2.5	12.9843	0.5	2.0329	1.2	0.1914	1.1	0.91	1129.2	11.3	1126.6	8.1	1121.6	9.7	1121.6	9.7	100.7		
LA-3-34	35	27104	1.5	12.9294	2.6	1.8382	4.3	0.1724	3.4	0.80	1025.2	32.2	1059.2	28.1	1130.1	51.5	1130.1	51.5	90.7		
LA-3-31	42	37522	0.9	12.9040	2.7	2.0720	3.3	0.1939	1.8	0.56	1142.6	19.1	1139.6	22.4	1133.9	53.8	1133.9	53.8	100.8		
LA-3-50	29	17849	1.3	12.8440	4.7	2.0135	5.2	0.1876	2.3	0.44	1108.2	23.5	1120.1	35.4	1143.2	93.0	1143.2	93.0	96.9		
LA-3-64	73	82134	1.5	12.8357	1.4	2.0681	3.0	0.1925	2.6	0.88	1135.1	27.5	1138.3	20.6	1144.5	28.4	1144.5	28.4	99.2		
LA-3-53	103	109003	2.2	12.8096	0.8	2.0972	1.3	0.1948	1.0	0.76	1147.5	10.5	1147.9	9.0	1148.5	16.8	1148.5	16.8	99.9		
LA-3-3	139	282261	1.6	12.7320	0.9	2.2411	1.4	0.2069	1.0	0.75	1212.5	11.4	1194.0	9.6	1180.6	17.8	1180.6	17.8	104.5		
LA-3-8	46	45818	1.4	12.7068	1.9	2.0749	2.2	0.1912	1.0	0.45	1128.0	10.1	1140.5	14.9	1164.5	38.5	1164.5	38.5	96.9		
LA-3-12	75	106418	1.7	12.7002	1.5	2.1562	1.9	0.1986	1.3	0.67	1167.8	13.8	1167.0	13.5	1165.6	28.8	1165.6	28.8	100.2		
LA-3-40	68	155792	2.0	12.6865	1.4	2.0876	2.1	0.1921	1.6	0.74	1132.6	16.3	1144.7	14.6	1167.7	28.4	1167.7	28.4	97.0		
LA-3-35	30	18899	0.9	12.6500	2.1	2.0989	2.5	0.1926	1.3	0.52	1135.3	13.7	1148.5	17.3	1173.4	42.4	1173.4	42.4	96.7		
LA-3-55	47	55066	0.9	12.6300	2.0	2.1559	3.8	0.1975	3.2	0.84	1161.8	33.8	1167.0	26.1	1176.6	40.0	1176.6	40.0	98.7		
LA-3-41	127	137829	2.2	12.5152	0.9	2.2204	1.2	0.2015	0.8	0.64	1183.6	8.4	1187.5	8.4	1194.6	18.2	1194.6	18.2	99.1		
LA-3-54	32	48964	0.9	12.5023	2.3	2.2104	2.5	0.2004	1.0	0.39	1177.6	10.4	1184.3	17.3	1196.6	44.8	1196.6	44.8	98.4		
LA-3-81	160	154642	1.2	12.4774	0.9	2.3470	2.8	0.2124	2.7	0.95	1241.5	30.0	1226.6	20.0	1200.6	18.0	1200.6	18.0	103.4		
LA-3-60	56	102298	2.7	12.4415	1.8	2.2682	1.9	0.2047	0.8	0.40	1200.4	8.6	1202.5	13.7	1206.2	35.0	1206.2	35.0	99.5		
LA-3-26	80	79450	1.2	12.4028	0.8	2.2557	1.5	0.2029	1.3	0.85	1190.9	14.1	1198.6	10.7	1212.4	15.8	1212.4	15.8	98.2		

LA4(100/10-20-077-07W4/00)

Analysis	U (ppm)	206Pb 204Pb	U/Th	206Pb* 207Pb*	Isotope Ratios				±	error corr.	206Pb* 238U*	Apparent Ages				±	206Pb* 207Pb*	±	Best age (Ma)	±	Conc (%)
					±	207Pb* (%)	±	238U				±	207Pb* (Ma)	±	235U						
LA4-58	93	12187	1.2	18.7499	9.7	0.3060	10.0	0.0416	2.6	0.26	262.8	6.7	271.1	23.9	343.0	220.2	262.8	6.7	NA		
LA4-82	96	28868	0.7	17.9733	2.8	0.5065	3.3	0.0680	1.8	0.54	412.2	7.2	416.1	11.3	437.9	62.2	412.2	7.2	94.1		
LA4-1	133	58734	2.7	18.4155	4.1	0.5048	4.7	0.0674	2.2	0.47	420.6	8.9	414.9	15.9	383.6	92.4	420.6	8.9	109.6		
LA4-33	53	16084	1.2	19.0888	9.5	0.5275	9.8	0.0730	2.8	0.28	454.4	12.1	430.1	34.5	302.3	215.9	454.4	12.1	150.3		
LA4-90	100	40287	2.2	17.1989	3.1	0.6260	3.9	0.0781	2.4	0.61	484.7	11.1	493.6	15.2	535.2	67.3	484.7	11.1	90.6		
LA4-3	74	39317	1.6	14.3250	1.7	1.5484	2.2	0.1609	1.4	0.65	961.6	12.5	949.9	13.4	922.7	33.9	922.7	33.9	104.2		
LA4-6	51	46571	1.6	14.1587	4.0	1.5721	4.7	0.1614	2.5	0.54	964.8	22.6	959.3	29.1	946.7	81.0	946.7	81.0	101.9		
LA4-5	65	54774	2.9	13.8030	1.4	1.7155	2.3	0.1717	1.8	0.79	1021.7	17.1	1014.3	14.7	998.5	28.8	998.5	28.8	102.3		
LA4-55	280	217184	1.5	13.7279	0.6	1.7147	1.6	0.1707	1.5	0.92	1016.1	14.0	1014.0	10.4	1009.6	12.8	1009.6	12.8	100.6		
LA4-49	187	84995	2.5	13.6489	0.6	1.7719	1.8	0.1754	1.7	0.94	1041.8	16.3	1035.2	11.7	1021.3	12.8	1021.3	12.8	102.0		
LA4-47	57	30727	1.1	13.6174	2.3	1.8224	3.0	0.1800	2.0	0.66	1066.9	19.6	1053.5	19.9	1026.0	46.3	1026.0	46.3	104.0		
LA4-36	68	56792	0.9	13.5701	2.1	1.7824	2.6	0.1754	1.5	0.58	1041.9	14.3	1039.0	16.6	1033.0	42.1	1033.0	42.1	100.9		
LA4-61	47	64228	1.3	13.5322	2.4	1.8647	3.5	0.1830	2.6	0.74	1083.4	25.9	1068.6	23.3	1038.7	48.3	1038.7	48.3	104.3		
LA4-94	196	229032	3.0	13.5040	0.8	1.8019	1.3	0.1765	1.0	0.79	1047.7	9.7	1046.2	8.3	1042.9	15.5	1042.9	15.5	100.5		
LA4-54	146	81890	2.4	13.4991	1.2	1.8623	2.1	0.1823	1.7	0.80	1079.7	16.5	1067.8	13.6	1043.6	24.7	1043.6	24.7	103.5		
LA4-73	69	48125	2.8	13.4738	2.3	1.8197	3.1	0.1778	2.1	0.67	1055.1	20.3	1052.6	20.5	1047.4	47.1	1047.4	47.1	100.7		
LA4-21	104	77948	2.1	13.4163	1.8	1.8624	2.8	0.1812	2.2	0.78	1073.6	21.6	1067.8	18.5	1056.0	35.3	1056.0	35.3	101.7		
LA4-78	122	70627	4.7	13.4150	0.9	1.8774	1.7	0.1827	1.5	0.85	1081.5	14.8	1073.1	11.6	1056.2	18.4	1056.2	18.4	102.4		
LA4-63	25	34105	2.2	13.3607	3.3	1.7810	4.2	0.1726	2.6	0.62	1026.3	24.8	1038.5	27.4	1064.4	66.5	1064.4	66.5	96.4		
LA4-29	83	90323	1.9	13.3441	1.6	1.8798	2.0	0.1819	1.2	0.60	1077.5	12.2	1074.0	13.5	1066.9	32.9	1066.9	32.9	101.0		
LA4-62	106	113707	1.6	13.3183	2.1	1.9019	2.4	0.1837	1.0	0.44	1087.2	10.4	1081.8	15.7	1070.8	42.6	1070.8	42.6	101.5		
LA4-70	104	91480	3.7	13.3076	1.4	1.9355	2.3	0.1868	1.8	0.80	1104.1	18.7	1093.4	15.4	1072.4	27.6	1072.4	27.6	103.0		
LA4-79	81	64930	3.0	13.2972	1.7	1.8404	2.2	0.1775	1.5	0.66	1053.2	14.1	1060.0	14.5	1074.0	33.3	1074.0	33.3	98.1		
LA4-26	42	21736	2.6	13.2627	1.7	1.9681	2.4	0.1893	1.7	0.69	1117.7	17.0	1104.7	16.1	1079.2	34.6	1079.2	34.6	103.6		
LA4-19	26	21797	1.4	13.2578	5.0	1.9030	5.2	0.1830	1.2	0.23	1083.2	11.8	1082.1	34.5	1079.9	101.2	1079.9	101.2	100.3		
LA4-103	80	40066	2.0	13.2231	2.1	1.8754	2.4	0.1799	1.2	0.50	1066.2	11.8	1072.4	16.0	1065.2	41.9	1065.2	41.9	98.3		
LA4-39	63	73806	1.8	13.1933	0.9	1.9537	2.4	0.1869	2.3	0.92	1104.8	22.9	1099.7	16.4	1089.7	18.8	1089.7	18.8	101.4		
LA4-85	160	80757	1.6	13.0768	0.9	1.8522	2.6	0.1757	2.4	0.94	1043.3	23.5	1064.2	17.1	1107.4	17.7	1107.4	17.7	94.2		
LA4-43	34	20819	1.7	13.0616	3.4	1.9869	4.2	0.1882	2.5	0.59	1111.7	25.3	1111.1	28.2	1109.7	67.1	1109.7	67.1	100.2		
LA4-69	37	41391	0.8	13.0028	2.4	2.0756	3.4	0.1957	2.4	0.70	1152.4	25.1	1140.8	23.2	1118.8	47.9	1118.8	47.9	103.0		
LA4-87	29	30279	2.4	12.9932	4.6	2.0896	5.1	0.1969	2.3	0.45	1158.7	24.5	1145.4	35.1	1120.3	90.8	1120.3	90.8	103.4		
LA4-8	124	206929	1.5	12.9871	0.8	2.0338	1.5	0.1916	1.3	0.86	1129.8	13.8	1126.9	10.5	1121.2	15.6	1121.2	15.6	100.8		
LA4-27	25	21893	2.8	12.9231	3.6	2.0425	5.2	0.1914	3.7	0.72	1129.1	38.3	1129.8	35.2	1131.0	71.8	1131.0	71.8	99.8		
LA4-10	254	115615	1.2	12.9111	0.5	2.1184	1.3	0.1984	1.2	0.92	1166.6	33.2	1154.8	9.3	1132.9	10.7	1132.9	10.7	103.0		
LA4-64	54	78445	2.4	12.8545	1.7	2.1852	4.6	0.2037	4.2	0.93	1195.3	46.1	1176.3	31.7	1141.6	34.0	1141.6	34.0	104.7		
LA4-22	29	23130	2.6	12.8013	5.3	2.1677	5.9	0.2013	2.7	0.46	1182.1	29.2	1170.7	41.2	1149.8	104.6	1149.8	104.6	102.8		
LA4-25	114	160199	4.0	12.7506	0.9	2.1931	1.7	0.2028	1.4	0.83	1190.4	15.0	1178.8	11.6	1157.7	18.4	1157.7	18.4	102.8		
LA4-23	20	15298	1.0	12.7172	6.9	2.1239	7.5	0.1959	2.7	0.37	1153.2	28.9	1156.6	51.6	1162.9	137.7	1162.9	137.7	99.2		
LA4-16	79	110630	1.8	12.6952	0.8	2.0908	1.8	0.1925	1.6	0.89	1135.0	16.4	1145.8	12.1	1166.3	15.6	1166.3	15.6	97.3		
LA4-99	95	302925	1.2	12.6940	1.1	2.1434	3.0	0.1973	2.8	0.93	1161.0	29.6	1162.9	20.8	1166.5	21.8	1166.5	21.8	99.5		
LA4-81	156	121534	1.8	12.6376	0.6	2.1908	1.8	0.2008	1.7	0.94	1179.6	18.3	1178.1	12.6	1175.4	12.5	1175.4	12.5	100.4		
LA4-44	89	86015	0.8	12.5431	1.0	2.2860	2.3	0.2080	2.1	0.90	1217.9	23.4	1208.0	16.5	1190.2	19.8	1190.2	19.8	102.3		
LA4-20	106	81092	1.7	12.5429	1.1	2.2374	1.8	0.2035	1.5	0.81	1194.3	16.3	1192.8	12.9	1190.2	21.1	1190.2	21.1	100.3		
LA4-100	41	43536	1.1	12.4939	3.0	2.2867	4.1	0.2072	2.9	0.69	1213.9	31.6	1208.2	29.2	1197.9	58.8	1197.9	58.8	101.3		
LA4-102	79	59069	1.6	12.4622	1.5	2.2475	3.5	0.2031	3.2	0.90	1192.2	34.4	1196.0	24.7	1202.9	29.9	1202.9	29.9	99.1		
LA4-91	125	227697	2.3	12.4005	0.6	2.3724	2.1	0.2134	2.0	0.95	1246.7	22.8	1234.3	15.1	1212.7	12.6	1212.7	12.6	102.8		
LA4-17	56	16682	1.4	12.3466	1.9	2.3594	2.3	0.2113	1.3	0.56	1235.6	14.3	1230.4	16.2	1221.3	37.0	1221.3	37.0	101.2		
LA4-15	35	51206	1.1	12.2272	2.7	2.4346	3.1	0.2159	1.5	0.47	1260.2	16.7	1252.9	22.2	1240.4	53.1	1240.4	53.1	101.6		
LA4-76	317	9640	2.0	12.2164	1.4	2.4029	1.8	0.2129	1.1	0.60	1244.3	11.9	1243.5	12.6	1242.1	27.5	1242.1	27.5	100.2		
LA4-45	38	25433	2.3	12.1777	3.3	2.6549	4.3	0.2268	2.8	0.64	1317.6	32.8	1316.0	31.5	1313.4	63.3	1313.4	63.3	100.3		
LA4-68	39	54040	2.0	11.7050	1.6	2.6977	2.0	0.2290	1.3	0.63	1329.3	15.4	1327.8	15.0	1325.4	30.4	1325.4	30.4	100.3		
LA4-35	73	74047	1.2	11.4170	1.3	2.9955	1.9	0.2480	1.4	0.73	1428.3	17.6	1406.5	14.4	1373.5	24.9	1373.5	24.9	104.0		
LA4-83	16	11797	0.7	11.3814	5.1	3.0470	5.4	0.2515	1.7	0.31	1446.3										

LB1(1AB/08-14-077-08W4/00)

Analysis	Isotope Ratios													Apparent Ages						Best age						Conc
	U (ppm)	206Pb 204Pb	U/Th	206Pb* 207Pb*	±		207Pb* (%)	235U* (%)	206Pb* 238U	±		error corr.	206Pb* 238U*	±		207Pb* 235U	Ma	206Pb* 207Pb*	±		Best age (Ma)	±				
					(%)	(%)				(%)	(%)			(%)	(%)				(%)	(%)		(%)	(%)			
LB-1-98	194	14206	1.4	18.9337	9.0	0.1778	9.3	0.0244	25.5	0.27	155.5	3.9	166.1	14.3	320.9	204.6	155.5	3.9	NA							
LB-1-31	118	6998	1.9	17.9959	19.1	0.1876	19.9	0.0245	5.7	0.29	156.0	8.8	174.6	31.9	435.1	428.0	156.0	8.8	NA							
LB-1-17	83	23415	0.7	18.6569	15.6	0.3509	16.2	0.0475	4.4	0.27	299.1	12.8	305.4	42.8	354.2	354.4	299.1	12.8	NA							
LB-1-106	14	1649	73.1	11.0006	117.4	0.6522	117.7	0.0520	8.6	0.07	327.0	27.4	509.8	510.9	1444.6	118.8	327.0	27.4	NA							
LB-1-104	387	67787	1.3	18.4603	3.0	0.3985	7.1	0.0533	6.4	0.90	335.1	20.9	340.5	20.5	378.1	67.8	335.1	20.9	NA							
LB-1-4	260	36674	2.8	18.8868	3.9	0.4100	4.7	0.0562	2.7	0.57	352.2	9.3	348.8	14.0	326.5	88.0	352.2	9.3	NA							
LB-1-4	553	103507	0.9	18.4428	1.9	0.4381	2.0	0.0586	0.7	0.35	367.1	2.5	368.9	6.2	380.2	42.1	367.1	2.5	NA							
LB-1-42	100	14132	1.3	18.7569	9.6	0.4426	9.9	0.0602	2.7	0.27	376.9	9.7	372.1	31.0	342.2	217.5	376.9	9.7	NA							
LB-1-30	87	15278	1.5	18.6643	11.5	0.4600	12.0	0.0623	3.4	0.28	398.9	12.9	384.3	38.5	353.4	261.4	389.4	12.9	NA							
LB-1-66	131	18289	1.0	19.2183	8.2	0.4585	10.2	0.0639	6.0	0.59	399.9	23.4	383.2	32.5	286.9	187.4	399.4	23.4	NA							
LB-1-70	64	8399	2.5	20.5530	9.7	0.4392	10.6	0.0655	4.4	0.41	408.8	17.3	369.7	33.0	131.2	228.5	408.8	17.3	311.5							
LB-1-84	94	18966	1.3	18.6802	10.4	0.5430	10.6	0.0665	2.0	0.19	414.9	8.0	440.4	37.8	575.9	226.3	414.9	8.0	72.0							
LB-1-86	133	19241	1.7	18.6775	4.1	0.4923	4.8	0.0667	2.6	0.53	416.2	10.4	406.5	16.2	351.8	92.5	416.2	10.4	118.3							
LB-1-110	91	20093	1.1	17.5230	8.2	0.5298	8.6	0.0673	2.5	0.29	420.1	10.3	431.7	30.3	494.1	181.7	420.1	10.3	85.0							
LB-1-62	193	56090	1.1	18.1815	3.9	0.5225	4.4	0.0689	2.1	0.48	429.5	8.6	426.8	15.2	412.2	96.1	429.5	8.6	104.4							
LB-1-108	120	17548	1.0	18.8449	8.1	0.5073	8.5	0.0693	2.4	0.29	432.1	10.2	416.6	28.9	331.6	184.0	432.1	10.2	130.2							
LB-1-15	295	69083	1.0	17.8061	2.5	0.5452	2.7	0.0704	1.0	0.38	438.6	4.3	441.9	8.9	458.7	56.2	438.6	4.3	95.6							
LB-1-112	370	63791	3.5	17.9718	2.4	0.5638	3.4	0.0735	2.3	0.69	457.1	10.3	454.0	12.3	438.1	53.9	457.1	10.3	104.3							
LB-1-18	205	54005	4.9	16.1010	4.0	0.6382	7.8	0.0745	6.7	0.86	463.4	29.8	501.2	30.8	677.9	86.2	463.4	29.8	68.4							
LB-1-60	241	36647	1.4	17.4635	3.4	0.5893	4.0	0.0746	2.1	0.52	464.0	9.3	470.4	15.1	501.7	75.4	464.0	9.3	92.5							
LB-1-37	31	9859	1.5	23.2442	35.3	0.4450	35.5	0.0750	4.0	0.11	466.3	18.0	373.8	111.5	-166.3	902.4	466.3	18.0	NA							
LB-1-37	240	37694	0.9	17.6154	2.6	0.5948	8.0	0.0760	7.5	0.95	472.2	34.3	473.9	30.2	482.6	56.7	472.2	34.3	97.8							
LB-1-96	106	24299	1.5	17.5938	6.3	0.5991	6.6	0.0764	1.9	0.29	474.9	8.7	476.7	24.9	485.3	138.6	474.9	8.7	97.9							
LB-1-13	58	18136	0.8	18.3630	12.8	0.5859	13.0	0.0779	2.4	0.19	483.7	11.3	468.3	48.9	393.3	287.9	483.7	11.3	123.0							
LB-1-34	128	31288	1.3	17.2036	4.0	0.7608	4.2	0.0949	1.3	0.32	584.6	7.5	574.5	18.6	534.6	88.1	584.6	7.5	109.4							
LB-1-27	326	86490	13.2	16.5121	1.7	0.8349	2.0	0.1000	1.1	0.55	614.3	6.6	616.3	9.5	623.7	36.9	614.3	6.6	98.5							
LB-1-102	220	118432	1.9	16.4350	2.6	0.8591	2.9	0.1024	1.3	0.43	628.5	7.5	629.6	13.6	633.8	56.3	628.5	7.5	99.2							
LB-1-35	174	127341	2.7	14.2307	2.1	1.5629	2.7	0.1613	1.8	0.65	964.0	15.9	955.6	16.9	936.2	42.3	936.2	15.9	103.3							
LB-1-105	62	33605	1.9	13.9577	6.3	1.5851	6.4	0.1605	1.3	0.20	959.4	11.6	964.4	40.1	975.9	128.8	959.7	11.6	98.0							
LB-1-23	85	31678	8.8	13.8553	2.0	1.7402	4.2	0.1749	3.7	0.88	1038.9	35.8	1023.5	27.3	990.0	40.3	990.0	40.3	104.8							
LB-1-39	66	24341	2.0	13.7953	3.5	1.7115	4.1	0.1712	2.1	0.52	1018.9	20.0	1012.9	26.2	999.7	70.9	999.7	70.9	101.0							
LB-1-40	159	61630	7.1	13.7927	2.2	1.6952	2.9	0.1696	1.9	0.85	1009.8	17.5	1006.7	18.2	1000.0	43.8	1000.0	43.8	101.0							
LB-1-54	71	52068	2.2	13.6352	2.8	1.7790	3.5	0.1759	2.1	0.80	1044.7	20.1	1037.8	22.6	1023.3	56.2	1023.3	56.2	102.1							
LB-1-60	274	96610	2.7	13.6185	1.4	1.7599	2.6	0.1738	2.3	0.85	1033.1	22.4	1030.6	17.8	1025.8	29.1	1025.8	29.1	99.7							
LB-1-85	48	22749	1.6	13.5826	3.7	1.7554	4.4	0.1730	2.4	0.54	1025.5	22.7	1029.3	28.5	1031.1	74.8	1031.1	74.8	100.7							
LB-1-68	40	17645	4.9	13.5701	2.2	1.7534	4.8	0.1730	2.4	0.54	1025.5	22.7	1029.3	28.5	1031.1	74.8	1031.1	74.8	100.7							
LB-1-24	164	20342	4.0	13.5701	2.2	1.7534	4.8	0.1730	2.4	0.54	1025.5	22.7	1029.3	28.5	1031.1	74.8	1031.1	74.8	100.7							
LB-1-2	160	92696	2.1	13.5205	0.8	1.7976	1.4	0.1763	1.2	0.81	1046.6	11.1	1044.0	9.3	1040.4	16.7	1040.4	16.7	100.6							
LB-1-63	463	185164	0.0	13.3966	0.5	1.8726	1.4	0.1819	1.3	0.92	1077.6	12.9	1071.5	9.3	1059.0	11.0	1059.0	11.0	101.8							
LB-1-100	107	146938	0.8	13.3940	1.8	1.8977	4.3	0.1844	3.8	0.90	1090.7	38.6	1090.3	28.3	1059.4	36.5	1059.4	36.5	103.0							
LB-1-89	107	171206	3.0	13.3695	2.9	1.8365	3.4	0.1781	1.9	0.55	1056.4	18.5	1058.6	22.6	1063.1	57.6	1063.1	57.6	99.4							
LB-1-2	282	135902	3.1	13.3389	0.6	1.9334	2.7	0.1870	2.6	0.97	1105.4	26.4	1092.7	17.9	1067.7	13.0	1067.7	13.0	103.5							
LB-1-10	116	47361	1.1	13.3272	2.4	1.9379	3.3	0.1873	2.3	0.69	1106.28	23.1	1094.3	22.2	1069.4	48.4	1069.4	48.4	103.5							
LB-1-94	90	32590	1.6	13.3207	2.7	1.8075	3.1	0.1746	1.6	0.51	1037.6	14.9	1048.2	20.1	1070.4	53.3	1070.4	53.3	96.9							
LB-1-14	299	94904	4.1	13.2355	1.2	1.7151	3.3	0.1646	3.1	0.94	982.5	28.5	1014.2	21.4	1083.3	23.4	1083.3	23.4	90.7							
LB-1-114	267	119518	2.8	13.2293	0.8	1.9184	1.9	0.1841	1.7	0.91	1089.2	19.9	1087.5	12.5	1084.3	15.8	1084.3	15.8	100.0							
LB-1-95	488	222320	10.0	13.1519	0.9	1.9190	1.6	0.1830	1.2	0.80	1093.6	12.4	1087.7	10.4	1096.0	18.8	1096.0	18.8	98.9							
LB-1-59	39	34273	0.7	13.0279	8.4	1.9545	8.9	0.1847	2.9	0.33	1092.5	29.3	1080.0	59.9	1114.9	168.4	1114.9	168.4	98.0							
LB-1-69	45	25371	1.8	12.9654	3.3	2.1152	4.2	0.1989	2.5	0.61	1169.4	27.2	1153.8	28.7	1124.5	65.6	1124.5	65.6	94.0							
LB-1-12	111	43552	2.5	12.9370	1.6	2.0193	4.4	0.1895	4.1	0.93	1118.5	42.0	1122.0	29.9	1128.9	32.5	1128.9	32.5	101.1							
LB-1-52	76	32995	1.6	12.9168	2.2	2.1561	3.6	0.2020	2.8	0.78	1186.0	30.0	1167.0	24.7	1132.0	44.5	1132.0	44.5	104.8							
LB-1-63	64	9684	0.8	12.8988	6.7	1.7959	11.1	0.1680	8.8	0.80	1001.1	82.0	1044.0	72.3	1134.7	132.6	1134.7	132.6	88.2							
LB-1-6	316	191817	3.1	12.8495	0.8	2.1489	1.0	0.2003	0.6	0.59	1176.7	6.3	1164.7	6.9	1142.4	16.1	1142.4	16.1	103.0							
LB-1-53	68	28957	1.9	12.8306	2.4	2.1629	4.5	0.2013	3.8	0.85	1182.2	41.4	1169.2	31.3	1145.3	47.1	1145.3	47.1	103.2							
LB-1-1	535	327601	1.5	12.7427	0.4	2.2290	1.6	0.2060	1.6	0.97	1207.5	17.6	1194.2	11.5	1158.9	8.4	1158.9	8.4	104.2							
LB-1-74	74	39805	1.7	12.7266	3.8	2.0830	4.4	0.1923	2.2	0.50	1133.6	22.4	1143.2	30.0	1161.5	75.2	1161.5	75.2	97.6							
LB-1-73	215	77907	5.7	12.7237	0.9	2.1819	2.1	0.2013	1.9	0.89	1182.6	20.1	1175.3	14.5	1161.9	18.8	1161.9	18.8	1							

LB2(1AB/08-14-077-08W4/00)

Analysis	U (ppm)	206Pb		U/Th	206Pb*		±	Isotope Ratios		206Pb*	±	error	Apparent Ages		206Pb*	±	Best age	±	Conc
		204Pb	207Pb*		207Pb*	235U*		238U*	235U*		238U*	235U*	238U*	235U*		238U*	235U*		
LB2-102	378	74921	7.8	18.9691	1.3	0.3502	1.6	0.0482	1.0	0.61	303.3	2.9	304.8	4.3	316.6	29.3	303.3	2.9	NA
LB2-90	48	15274	1.1	18.8610	14.9	0.4219	15.3	0.0577	3.2	0.21	361.7	11.4	357.4	46.0	329.6	339.9	361.7	11.4	NA
LB2-7	169	44959	1.0	17.8103	1.5	0.5401	2.6	0.0898	2.1	0.81	434.7	8.8	438.5	9.2	458.2	34.0	434.7	8.8	94.9
LB2-31	65	25012	1.4	17.5974	8.4	0.5556	8.5	0.0709	1.5	0.18	441.6	6.6	445.7	30.8	484.8	184.7	441.6	6.6	91.1
LB2-59	295	111099	1.8	17.7988	1.2	0.5640	2.1	0.0728	1.8	0.83	453.1	7.8	454.1	7.8	459.6	26.5	453.1	7.8	98.6
LB2-34	169	62572	1.4	17.9969	2.1	0.5586	3.4	0.0729	2.7	0.79	453.7	11.9	450.6	12.5	434.8	46.5	453.7	11.9	104.4
LB2-57	111	43617	1.5	17.8004	2.6	0.5747	3.3	0.0742	2.0	0.62	461.4	9.1	461.1	12.2	459.4	56.9	461.4	9.1	100.4
LB2-43	58	23981	0.9	17.9899	6.2	0.5879	6.4	0.0767	1.5	0.24	476.4	6.9	469.5	24.0	435.9	138.3	476.4	6.9	109.3
LB2-4	46	14827	2.1	17.5058	8.6	0.6551	8.9	0.0832	2.3	0.26	515.0	11.4	511.6	35.8	496.3	189.5	515.0	11.4	103.8
LB2-64	287	136119	0.8	17.1780	1.2	0.6909	3.2	0.0861	3.0	0.93	532.3	15.1	533.3	13.2	537.8	25.7	532.3	15.1	99.0
LB2-82	96	64188	2.1	14.1552	1.1	1.5556	1.5	0.1597	1.0	0.68	955.1	9.0	952.7	9.2	947.2	22.3	947.2	22.3	100.8
LB2-13	108	64585	1.5	14.0912	1.5	1.5163	2.2	0.1550	1.6	0.74	928.7	14.1	937.0	13.5	956.4	30.2	956.4	30.2	97.1
LB2-99	125	79569	3.1	13.9919	1.0	1.6196	2.4	0.1644	2.1	0.90	980.9	19.2	977.8	14.8	970.9	21.2	970.9	21.2	101.0
LB2-96	169	334068	1.9	13.8672	0.6	1.6632	1.6	0.1673	1.5	0.92	997.1	13.7	994.6	10.2	989.1	13.0	989.1	13.0	100.8
LB2-15	52	71074	2.5	13.7957	2.4	1.7137	2.7	0.1715	1.2	0.44	1020.2	11.0	1013.7	17.0	999.6	48.4	999.6	48.4	102.1
LB2-49	58	57788	0.9	13.7719	2.4	1.7252	2.7	0.1723	1.2	0.43	1024.9	11.0	1018.0	17.2	1003.1	49.0	1003.1	49.0	102.2
LB2-22	82	44438	1.7	13.7507	1.8	1.6365	2.8	0.1632	2.2	0.76	974.6	19.5	984.4	17.9	1006.2	37.4	1006.2	37.4	96.9
LB2-81	16	13972	1.8	13.7493	7.0	1.6342	8.0	0.1630	3.7	0.47	973.2	33.8	983.5	50.3	1006.4	143.0	1006.4	143.0	96.7
LB2-72	375	273711	4.0	13.7059	0.5	1.7329	1.0	0.1723	0.9	0.90	1024.5	8.9	1020.8	6.7	1012.9	9.2	1012.9	9.2	101.2
LB2-94	118	108074	2.5	13.6730	1.2	1.7269	1.8	0.1712	1.3	0.74	1019.0	12.3	1018.6	11.3	1017.7	24.0	1017.7	24.0	100.1
LB2-66	180	156514	3.2	13.6629	0.6	1.7463	1.7	0.1730	1.6	0.95	1028.9	15.3	1025.8	11.0	1019.2	11.3	1019.2	11.3	100.9
LB2-11	47	31030	1.8	13.6357	3.4	1.7613	3.9	0.1742	1.7	0.45	1035.1	16.7	1031.3	25.0	1023.3	69.8	1023.3	69.8	101.2
LB2-98	39	32665	2.0	13.6347	3.5	1.7431	3.8	0.1724	1.4	0.37	1025.2	13.2	1024.6	24.3	1023.4	70.7	1023.4	70.7	100.2
LB2-103	207	371215	1.6	13.6153	0.7	1.7673	1.6	0.1745	1.5	0.91	1037.0	14.3	1033.5	10.6	1026.3	13.6	1026.3	13.6	101.0
LB2-63	50	27589	0.8	13.6110	3.0	1.7563	3.4	0.1734	1.5	0.44	1030.7	14.0	1029.5	21.7	1026.9	60.9	1026.9	60.9	100.4
LB2-33	33	27597	1.3	13.5442	2.3	1.7505	3.0	0.1720	1.9	0.63	1022.9	17.5	1027.4	19.1	1036.9	46.4	1036.9	46.4	98.7
LB2-40	55	70102	2.3	13.5374	2.0	1.7974	4.6	0.1765	4.2	0.90	1047.7	40.1	1044.5	30.0	1037.9	40.2	1037.9	40.2	100.9
LB2-1	308	333560	2.1	13.5123	0.4	1.7968	0.9	0.1761	0.8	0.89	1045.6	8.0	1044.3	6.0	1041.6	8.4	1041.6	8.4	100.4
LB2-78	73	73400	2.8	13.4765	1.8	1.8636	3.8	0.1822	3.4	0.89	1078.7	33.7	1068.3	25.3	1047.0	35.9	1047.0	35.9	103.0
LB2-12	71	54817	2.2	13.4703	1.9	1.7966	2.5	0.1755	1.5	0.62	1042.5	14.8	1044.2	16.1	1047.9	38.8	1047.9	38.8	99.5
LB2-69	65	61983	1.4	13.4362	1.4	1.8249	1.7	0.1778	1.0	0.59	1055.1	10.0	1054.5	11.4	1053.1	28.4	1053.1	28.4	100.2
LB2-28	53	33368	1.4	13.4299	2.2	1.8658	5.5	0.1817	5.0	0.92	1076.4	49.6	1069.0	36.1	1054.0	44.4	1054.0	44.4	102.1
LB2-6	57	70864	0.9	13.4188	2.9	1.8459	5.5	0.1797	4.6	0.84	1065.1	45.0	1062.0	35.9	1055.7	59.4	1055.7	59.4	100.9
LB2-21	24	42463	2.3	13.3387	5.5	1.9194	5.6	0.1857	0.9	0.16	1098.0	9.0	1087.9	37.2	1067.7	110.6	1067.7	110.6	102.8
LB2-32	173	201165	1.4	13.3194	1.3	1.9075	3.0	0.1843	2.7	0.90	1090.2	26.9	1083.7	19.9	1070.6	26.5	1070.6	26.5	101.8
LB2-77	106	115262	2.0	13.2825	2.1	1.9060	2.4	0.1836	1.2	0.49	1086.7	11.6	1083.2	15.7	1076.2	41.4	1076.2	41.4	101.0
LB2-92	70	218024	1.6	13.2379	2.1	1.8676	2.5	0.1793	1.4	0.56	1063.2	13.8	1069.7	16.5	1082.9	41.4	1082.9	41.4	98.2
LB2-42	23	12742	2.0	13.2155	4.8	1.7349	5.2	0.1663	2.1	0.40	991.6	19.1	1021.6	33.7	1086.3	96.2	1086.3	96.2	91.3
LB2-104	66	82248	1.9	13.2132	1.7	1.8380	2.4	0.1761	1.7	0.70	1045.8	16.0	1059.1	15.6	1086.7	33.9	1086.7	33.9	96.2
LB2-48	82	80025	2.2	13.1972	1.6	1.8783	2.2	0.1798	1.5	0.70	1065.8	15.2	1073.5	14.6	1089.1	31.6	1089.1	31.6	97.9
LB2-24	35	44706	1.0	13.1838	2.2	1.9783	4.0	0.1892	3.3	0.83	1116.8	33.8	1108.1	26.8	1091.1	44.4	1091.1	44.4	102.4
LB2-3	194	72152	1.0	13.1818	1.3	1.9134	1.6	0.1829	1.0	0.60	1083.0	9.8	1085.8	10.9	1091.4	26.0	1091.4	26.0	99.2
LB2-60	67	57413	2.4	13.1687	1.0	1.8737	2.1	0.1790	1.8	0.89	1061.3	17.9	1071.9	13.6	1093.4	19.1	1093.4	19.1	97.1
LB2-36	56	86252	1.3	12.9020	2.2	1.9699	3.0	0.1843	2.0	0.67	1090.6	20.1	1105.3	20.1	1134.3	44.3	1134.3	44.3	96.2
LB2-87	111	108411	1.9	12.8512	0.9	2.0906	3.8	0.1949	3.6	0.97	1147.6	38.3	1147.5	25.8	1142.1	17.9	1142.1	17.9	100.5
LB2-19	72	54707	2.1	12.8346	2.1	2.1020	2.3	0.1957	1.0	0.43	1152.0	10.7	1149.5	16.0	1144.7	41.7	1144.7	41.7	100.6
LB2-16	88	97145	1.7	12.8023	2.1	2.1430	2.8	0.1990	1.8	0.63	1169.8	18.8	1162.8	19.2	1149.7	42.6	1149.7	42.6	101.8
LB2-61	157	123593	1.7	12.7792	1.1	2.1607	1.6	0.2003	1.2	0.74	1176.7	12.8	1168.5	11.1	1153.3	21.3	1153.3	21.3	102.0
LB2-74	21	13697	1.5	12.7597	3.0	2.1994	3.5	0.2035	1.7	0.49	1194.3	18.3	1180.9	24.1	1156.3	60.0	1156.3	60.0	103.3
LB2-29	49	44387	2.8	12.7546	1.2	2.1524	1.8	0.1991	1.4	0.77	1170.5	14.9	1165.8	12.5	1157.1	22.9	1157.1	22.9	101.2
LB2-54	80	111083	1.4	12.7273	0.8	2.1028	1.7	0.1941	1.4	0.86	1143.6	15.0	1149.7	11.5	1161.3	16.9	1161.3	16.9	98.5
LB2-89	71	82149	2.3	12.7133	1.8	2.1170	2.5	0.1952	1.7	0.67	1149.5	17.8	1154.4	17.3	1163.5	36.6	1163.5	36.6	98.8
LB2-35	47	43848	2.6	12.6828	2.7	2.1355	3.5	0.1964	2.3	0.66	1156.1	24.6	1160.4	24.4	1168.3	52.7	1168.3	52.7	99.0
LB2-62	200	227930	3.0	12.6468	0.3	2.2293	1.2	0.2045	1.2	0.96	1199.3	13.0	1190.3	8.7	1173.9	6.9	1173.9	6.9	102.2
LB2-30	77	56333	1.8	12.6169	1.3	2.1808	2.1	0.1996	1.7	0.80	1172.9	18.1	1174.9	14.6	1178.6	24.7	1178.6	24.7	99.5
LB2-23	41	41003	1.8	12.4701	1.1	2.2875	1.9	0.2069	1.6	0.82	1212.2	17.3	1208.4	13.4	1201.7	21.1	1201.7	21.1	100.9
LB2-84	35	44698	1.5	12.4496	2.5	2.2758	2.8	0.2055	1.2	0.44	1204.7	13.5	1204.6	19.7	1204.9	49.5	1204.9	49.5	100.0
LB2-67	87	112903	1.0	12.4191	1.1	2.2546	1.8	0.2031	1.4	0.80	1191.8	15.7	1198.2	12.7	1209.8	21.4	1209.8	21.4	98.5
LB2-14	63	135699	1.5	12.3081	1.3	2.3562	1.7	0.2103	1.2	0.68	1230.6	13.1	1229.4	12.2	1227.4	24.7	1227.4	24.7	100.3
LB2-5	126	575634	2.6	12.2585	1.0	2.3590	1.5	0.2097	1.1	0.76	1227.4	12.6	1230.3	10.5	1235.4	18.8	1235.4	18.8	99

LB3(1AB/08-14-077-08W4/00)

Analysis	U (ppm)	206Pb 204Pb	U/Th	206Pb* 207Pb*	Isotope Ratios				206Pb* 207Pb*	±	error corr.	Apparent Ages				206Pb* 207Pb*	±	Best age (Ma)	±	Conc (%)
					±	207Pb* (%)	±	206Pb* (%)				±	207Pb* (Ma)	±	206Pb* (Ma)					
LB3-1	117	161208	2.7	9.6544	0.5	4.3753	1.0	0.3064	0.8	0.84	1722.7	12.2	1707.7	7.9	1689.2	9.6	1689.2	9.6	102.0	
LB3-2	67	82294	1.7	12.6558	2.2	2.1887	2.7	0.2009	1.5	0.57	1180.1	16.6	1177.4	18.7	1172.5	43.4	1172.5	43.4	100.6	
LB3-3	69	188798	2.8	9.0749	0.8	4.9317	1.8	0.3246	1.6	0.91	1812.1	25.9	1807.7	15.3	1802.6	14.0	1802.6	14.0	100.5	
LB3-4	42	30602	1.0	13.5215	1.8	1.7628	2.4	0.1729	1.6	0.64	1027.9	14.8	1031.9	15.6	1040.3	37.2	1040.3	37.2	98.8	
LB3-5	52	97889	1.6	12.4727	1.2	2.2150	2.6	0.2004	2.3	0.88	1177.3	24.3	1185.8	18.0	1201.3	24.4	1201.3	24.4	98.0	
LB3-6	62	30351	1.0	18.2601	4.8	0.5393	5.0	0.0714	1.6	0.31	444.7	6.7	438.0	17.8	402.6	106.6	444.7	6.7	110.5	
LB3-7	33	102310	0.6	5.1572	0.5	14.3540	1.3	0.5369	1.2	0.93	2770.4	26.5	2773.4	12.0	2775.5	7.5	2775.5	7.5	99.8	
LB3-8	37	31188	1.2	11.9271	2.8	2.5136	3.2	0.2174	1.6	0.48	1268.3	17.9	1276.0	23.3	1288.9	54.7	1288.9	54.7	98.4	
LB3-9	94	56518	2.1	11.4324	1.4	2.6828	2.7	0.2224	2.3	0.86	1294.8	27.0	1323.7	19.9	1370.9	26.6	1370.9	26.6	94.4	
LB3-10	79	58693	1.8	13.7527	1.6	1.7314	2.6	0.1727	2.0	0.78	1026.9	19.0	1020.3	16.5	1005.9	32.2	1005.9	32.2	102.1	
LB3-11	58	81887	0.5	13.7877	1.6	1.7125	2.1	0.1712	1.3	0.63	1019.0	12.4	1013.2	13.3	1000.8	32.6	1000.8	32.6	101.8	
LB3-12	97	62435	2.0	14.1213	1.5	1.5476	2.1	0.1585	1.5	0.71	948.4	13.3	949.5	13.0	952.1	30.4	952.1	30.4	99.6	
LB3-13	140	291516	1.0	11.3364	0.8	2.9173	1.3	0.2399	1.0	0.76	1386.0	12.1	1386.4	9.7	1387.1	16.0	1387.1	16.0	99.9	
LB3-14	33	33245	1.3	10.8047	1.8	3.2621	2.7	0.2556	2.1	0.77	1467.4	27.7	1472.1	21.3	1478.7	33.2	1478.7	33.2	99.2	
LB3-15	102	97139	2.4	13.7462	1.0	1.6826	1.7	0.1678	1.3	0.78	999.7	12.1	1002.0	10.6	1006.9	20.9	1006.9	20.9	99.3	
LB3-16	59	67273	2.1	14.1068	1.3	1.5688	1.8	0.1605	1.1	0.65	959.6	10.2	958.0	10.9	954.2	27.5	954.2	27.5	100.6	
LB3-17	48	64497	2.2	12.5603	2.2	1.7819	2.5	0.1753	1.1	0.45	1041.0	10.7	1038.9	16.0	1034.5	44.3	1034.5	44.3	100.6	
LB3-18	222	48076	1.0	19.3185	2.6	0.3068	3.0	0.0430	1.4	0.49	271.3	3.9	271.7	7.1	275.0	59.2	271.3	3.9	NA	
LB3-19	109	279180	12.7	10.9142	0.9	3.1851	1.3	0.2521	1.0	0.75	1449.4	13.1	1453.6	10.4	1459.6	17.0	1459.6	17.0	99.3	
LB3-20	64	124872	1.3	8.7816	0.8	5.1405	3.4	0.3274	3.3	0.97	1825.8	52.1	1842.8	28.7	1862.1	14.4	1862.1	14.4	98.0	
LB3-21	57	156597	2.2	8.6478	1.0	5.4406	1.4	0.3412	1.0	0.70	1892.6	16.4	1891.3	12.3	1889.8	18.5	1889.8	18.5	100.1	
LB3-23	79	105576	1.4	11.8012	1.3	2.6036	1.8	0.2228	1.3	0.70	1296.9	14.8	1301.6	13.3	1309.5	25.3	1309.5	25.3	99.0	
LB3-24	26	18458	1.8	11.5780	2.7	2.7280	3.6	0.2291	2.4	0.67	1329.6	29.0	1336.1	26.7	1346.5	51.5	1346.5	51.5	98.7	
LB3-25	110	101458	2.0	13.5667	1.0	1.7349	3.1	0.1707	3.0	0.94	1016.0	27.9	1021.6	20.3	1033.5	21.0	1033.5	21.0	98.3	
LB3-26	46	99156	2.6	8.8205	1.2	5.2307	1.5	0.3346	1.0	0.64	1860.7	16.1	1857.6	13.2	1854.1	21.4	1854.1	21.4	100.4	
LB3-27	15	22985	0.7	14.0403	9.5	1.5582	9.7	0.1587	2.3	0.24	949.4	20.2	953.7	60.4	963.9	193.9	963.9	193.9	98.5	
LB3-28	134	84138	0.5	16.5297	1.6	0.8580	2.2	0.1029	1.5	0.70	631.2	9.2	629.0	10.2	621.4	33.5	631.2	9.2	101.6	
LB3-29	118	162730	2.1	11.0834	0.8	3.1027	2.3	0.2494	2.1	0.93	1435.4	27.3	1433.4	17.5	1430.3	16.0	1430.3	16.0	100.4	
LB3-30	70	106330	2.4	13.7104	1.6	1.7899	2.1	0.1760	1.5	0.68	1045.1	14.0	1034.5	13.9	1012.2	32.1	1012.2	32.1	103.2	
LB3-31	93	17763	2.5	12.6137	0.8	2.1546	2.6	0.1971	2.5	0.96	1159.8	26.9	1166.5	18.3	1179.1	14.8	1179.1	14.8	98.4	
LB3-32	46	52770	2.3	12.5354	2.4	2.2214	2.7	0.2020	1.1	0.41	1185.8	12.1	1187.8	18.8	1191.4	48.4	1191.4	48.4	99.5	
LB3-33	39	113355	1.6	5.3287	0.5	13.2375	1.3	0.5116	1.1	0.91	2663.4	24.8	2696.7	11.8	2721.8	8.8	2721.8	8.8	97.9	
LB3-34	82	234588	2.4	8.7500	0.5	5.3392	1.1	0.3389	0.9	0.86	1881.0	15.1	1875.2	9.2	1868.6	9.7	1868.6	9.7	100.7	
LB3-35	61	279714	1.0	8.8069	1.1	5.3310	1.8	0.3405	1.4	0.78	1889.1	22.8	1873.9	15.3	1856.9	20.3	1856.9	20.3	101.7	
LB3-37	17	13977	1.6	14.1329	7.7	1.5880	7.9	0.1628	1.9	0.23	972.2	16.8	965.5	49.5	950.4	158.1	950.4	158.1	102.3	
LB3-38	101	81038	1.7	12.5555	1.7	2.2176	2.1	0.2019	1.2	0.60	1185.7	13.4	1186.6	14.5	1188.3	32.8	1188.3	32.8	99.8	
LB3-39	71	124720	2.5	13.3741	1.1	1.7869	2.2	0.1733	1.9	0.85	1030.4	17.8	1040.7	14.3	1062.4	23.1	1062.4	23.1	97.0	
LB3-40	113	59823	1.4	19.1160	3.9	0.4948	4.3	0.0886	1.7	0.39	427.7	6.9	408.2	14.3	299.1	89.6	427.7	6.9	143.0	
LB3-41	78	155876	1.1	8.9468	0.6	5.0253	1.5	0.3261	1.4	0.93	1819.4	21.8	1823.6	12.6	1828.4	10.2	1828.4	10.2	99.5	
LB3-42	58	108715	2.6	8.6358	0.7	5.4883	1.1	0.3437	0.8	0.74	1904.7	13.0	1898.8	9.1	1892.3	12.7	1892.3	12.7	100.7	
LB3-43	131	37173	0.9	17.7971	4.1	0.5817	4.2	0.0751	0.8	0.19	466.7	3.6	465.6	15.7	459.8	91.3	466.7	3.6	101.5	
LB3-44	19	18346	0.5	12.8237	8.9	1.9388	9.5	0.1803	3.2	0.33	1068.7	31.1	1094.6	63.6	1146.4	177.8	1146.4	177.8	93.2	
LB3-45	73	123167	1.3	9.9126	1.1	4.1565	1.7	0.2988	1.3	0.75	1685.5	18.9	1665.5	13.9	1640.4	20.7	1640.4	20.7	102.7	
LB3-46	99	79886	1.2	13.0087	1.1	1.9700	4.5	0.1859	4.4	0.97	1098.9	44.5	1105.3	30.5	1117.9	21.7	1117.9	21.7	98.3	
LB3-47	152	235367	1.1	13.5670	1.4	1.7534	2.9	0.1725	2.5	0.87	1026.0	23.7	1028.4	18.5	1033.5	28.4	1033.5	28.4	99.3	
LB3-48	54	51844	1.2	9.2481	1.0	4.6846	1.6	0.3142	1.2	0.75	1761.4	18.1	1764.5	13.1	1768.1	19.1	1768.1	19.1	99.6	
LB3-49	192	287644	1.3	12.5243	0.4	2.2849	0.7	0.2075	0.6	0.81	1215.7	6.6	1207.6	5.2	1193.2	8.4	1193.2	8.4	101.9	
LB3-50	72	48156	1.2	14.2445	1.8	1.5633	2.2	0.1615	1.3	0.57	965.1	11.4	955.8	13.9	934.3	37.8	934.3	37.8	103.3	
LB3-60	204	18669	2.0	20.1338	6.9	0.1649	7.1	0.0241	1.7	0.24	153.4	2.6	155.0	10.3	179.4	161.8	153.4	2.6	NA	
LB3-82	75	22287	1.7	17.9992	3.3	0.5283	4.0	0.0690	2.2	0.55	429.9	9.1	430.7	14.0	434.7	74.4	429.9	9.1	98.9	
LB3-106	54	12195	0.9	17.4111	7.1	0.5888	7.5	0.0744	2.4	0.32	462.3	10.8	470.1	28.2	508.3	156.1	462.3	10.8	91.0	
LB3-98	121	50478	2.1	17.4659	4.4	0.5875	5.4	0.0744	3.1	0.58	462.7	14.0	469.3	20.4	501.4	97.6	462.7	14.0	92.3	
LB3-85	358	159427	1.7	17.7661	1.2	0.5913	1.8	0.0762	1.4	0.77	473.3	6.4	471.7	6.9	463.7	25.6	473.3	6.4	102.1	
LB3-65	258	7802	1.2	17.0995	3.															

LB4(1AB/08-14-077-08W4/00)

Analysis	U (ppm)	206Pb 204Pb	U/Th	Isotope Ratios				206Pb*				Apparent Ages				Bestage				Conc (%)
				206Pb*	±	207Pb*	±	206Pb*	±	error	corr.	206Pb*	±	207Pb*	±	206Pb*	±	(Ma)	±	
LB4-35	45	6087	0.7	28.2844	56.9	0.0971	57.4	0.0199	7.8	0.14		127.1	9.8	94.1	51.6	-680.6	####	127.1	9.8	NA
LB4-35	521	86717	1.5	20.2018	3.1	0.1690	3.6	0.0248	1.9	0.53		157.7	3.0	158.6	5.3	171.6	72.0	157.7	3.0	NA
LB4-57	184	16703	1.1	19.8990	6.1	0.2190	7.2	0.0313	3.8	0.52		198.6	7.4	201.1	13.2	230.1	142.1	198.6	7.4	NA
LB4-66	99	12000	1.6	20.2966	6.6	0.2148	6.8	0.0316	1.8	0.26		200.7	3.5	197.6	12.3	160.7	164.2	200.7	3.5	NA
LB4-97	141	26239	1.3	19.3088	3.7	0.2842	4.7	0.0396	2.9	0.62		251.6	7.2	254.0	10.6	276.1	84.6	251.6	7.2	NA
LB4-14	188	6695	1.4	15.2802	13.8	0.5362	16.7	0.0594	9.5	0.57		372.1	34.4	435.9	59.3	788.6	290.0	372.1	34.4	NA
LB4-22	41	12049	1.3	20.2258	17.0	0.4058	17.7	0.0595	4.9	0.28		372.8	17.6	345.9	52.0	168.8	400.3	372.8	17.6	NA
LB4-49	113	26401	1.2	18.2975	5.0	0.4971	5.3	0.0660	1.7	0.32		411.8	6.6	409.7	17.7	398.0	111.8	411.8	6.6	103.5
LB4-76	129	50505	0.6	18.4336	4.1	0.4962	4.4	0.0663	1.7	0.38		414.1	6.7	409.1	14.9	381.4	92.1	414.1	6.7	108.6
LB4-39	159	43616	1.3	17.9143	3.0	0.5206	4.2	0.0676	3.0	0.70		421.9	12.1	425.6	14.7	445.3	66.9	421.9	12.1	94.8
LB4-71	107	53973	1.3	17.8165	6.3	0.5242	6.5	0.0677	1.8	0.28		422.5	7.5	427.9	22.8	457.5	139.0	422.5	7.5	92.4
LB4-69	154	51838	2.1	18.0787	3.6	0.5169	5.0	0.0678	3.5	0.70		422.7	14.1	423.1	17.2	424.9	79.6	422.7	14.1	99.5
LB4-62	160	90960	1.5	17.5370	2.3	0.5347	5.2	0.0680	4.7	0.90		424.2	19.3	434.9	18.5	492.4	49.8	424.2	19.3	86.1
LB4-87	75	25602	0.8	17.6255	4.8	0.5604	5.4	0.0716	2.6	0.49		446.0	11.4	451.8	19.8	481.3	105.1	446.0	11.4	92.7
LB4-24	194	32234	2.0	17.5908	1.7	0.5826	2.6	0.0743	2.0	0.76		462.2	8.8	466.2	9.8	485.6	37.7	462.2	8.8	95.2
LB4-46	93	24907	1.2	17.9986	3.7	0.5718	4.9	0.0746	3.3	0.66		464.0	14.6	459.2	18.2	434.8	81.9	464.0	14.6	106.7
LB4-68	97	35101	1.5	17.5449	4.2	0.5990	5.0	0.0762	2.7	0.55		473.6	12.5	476.6	19.0	491.4	92.0	473.6	12.5	96.4
LB4-45	47	23096	1.3	18.2442	13.6	0.5766	13.9	0.0763	2.9	0.21		474.0	13.1	462.3	51.5	404.5	305.1	474.0	13.1	117.2
LB4-9	174	122567	1.0	16.7050	2.9	0.7711	3.3	0.0934	1.7	0.51		575.7	9.4	580.4	14.7	598.6	61.9	575.7	9.4	96.2
LB4-6	97	18250	1.2	16.4656	3.7	0.8028	4.3	0.0959	2.1	0.48		590.2	11.6	598.4	19.3	629.8	80.7	590.2	11.6	93.7
LB4-19	118	48870	0.7	16.5387	3.7	0.8270	3.9	0.0992	1.4	0.36		609.7	8.2	612.0	18.1	620.2	79.5	609.7	8.2	98.3
LB4-95	250	143757	3.8	16.1199	0.7	0.9501	1.2	0.1111	1.0	0.81		679.0	8.4	678.1	6.0	675.3	15.4	679.0	8.4	100.5
LB4-100	114	149043	2.2	14.1484	1.5	1.4830	2.4	0.1522	1.8	0.76		913.1	15.5	923.4	14.5	948.2	31.7	948.2	31.7	96.3
LB4-79	44	42022	0.9	14.0984	3.7	1.5340	4.0	0.1568	1.4	0.34		939.2	11.9	944.1	24.5	955.4	76.7	955.4	76.7	98.3
LB4-53	209	174487	1.1	14.0581	0.5	1.5383	1.3	0.1568	1.2	0.92		939.2	10.8	945.8	8.3	961.3	10.7	961.3	10.7	97.7
LB4-33	233	208353	3.2	14.0396	0.8	1.4866	2.5	0.1514	2.4	0.94		908.7	20.3	924.5	15.4	961.0	17.1	964.0	17.1	94.3
LB4-104	124	78431	2.7	13.9806	1.2	1.6249	1.5	0.1648	0.9	0.62		983.2	8.7	979.9	9.6	972.5	24.2	972.5	24.2	101.1
LB4-94	67	45892	1.7	13.8562	2.3	1.6739	2.9	0.1682	1.7	0.59		1002.3	15.7	998.7	18.2	990.7	46.9	990.7	46.9	101.2
LB4-4	17	17009	0.4	13.8413	6.9	1.7280	7.1	0.1735	1.9	0.27		1031.2	18.0	1019.0	45.8	992.9	139.7	992.9	139.7	103.9
LB4-2	84	68559	2.4	13.8377	2.3	1.6940	3.4	0.1700	2.6	0.75		1012.2	24.1	1006.3	22.0	993.5	46.6	993.5	46.6	101.9
LB4-50	112	105621	1.1	13.8240	1.1	1.6526	1.8	0.1657	1.4	0.79		988.3	13.1	990.5	11.5	995.5	22.6	995.5	22.6	99.3
LB4-12	47	32062	2.0	13.7292	6.9	1.6336	7.1	0.1627	1.9	0.26		971.5	16.8	983.2	45.0	1009.4	140.0	1009.4	140.0	96.2
LB4-52	34	16655	1.7	13.7229	3.1	1.7134	3.9	0.1705	2.4	0.62		1015.0	22.4	1013.6	24.8	1010.3	61.9	1010.3	61.9	100.5
LB4-99	29	27176	1.9	13.7036	4.3	1.7313	4.9	0.1721	2.3	0.47		1023.5	21.8	1020.2	31.6	1013.2	87.9	1013.2	87.9	101.0
LB4-5	35	18912	1.0	13.6996	5.1	1.7311	5.4	0.1720	1.8	0.34		1023.1	17.1	1020.2	34.7	1013.8	102.9	1013.8	102.9	100.9
LB4-43	71	78365	1.5	13.6308	2.1	1.7789	2.5	0.1759	1.4	0.55		1044.3	13.4	1037.8	16.3	1024.0	42.3	1024.0	42.3	102.0
LB4-64	140	122626	1.5	13.6296	1.3	1.7251	2.4	0.1705	2.1	0.86		1015.0	19.7	1017.9	15.7	1024.2	25.4	1024.2	25.4	99.1
LB4-44	18	9847	0.6	13.6254	8.3	1.7773	8.6	0.1756	2.3	0.26		1043.1	21.8	1037.2	56.1	1024.8	168.6	1024.8	168.6	101.8
LB4-63	67	58525	2.0	13.6112	1.4	1.6945	2.3	0.1673	1.8	0.78		997.1	16.3	1006.5	14.4	1026.9	28.5	1026.9	28.5	97.1
LB4-29	161	296827	1.2	13.5588	1.2	1.7893	2.2	0.1760	1.9	0.86		1044.8	18.6	1041.6	14.7	1034.7	23.4	1034.7	23.4	101.0
LB4-86	92	65741	1.7	13.5529	1.9	1.7605	2.7	0.1730	1.9	0.71		1028.9	18.2	1031.0	17.4	1035.6	38.3	1035.6	38.3	99.4
LB4-15	125	128664	0.8	13.5322	1.1	1.7537	2.8	0.1721	2.5	0.92		1023.8	24.0	1028.5	17.8	1038.7	22.2	1038.7	22.2	98.8
LB4-80	38	34011	1.9	13.5284	2.5	1.8363	3.9	0.1802	2.9	0.76		1067.9	29.0	1058.5	25.5	1039.2	50.9	1039.2	50.9	102.8
LB4-90	85	62348	2.5	13.5116	1.7	1.7938	2.5	0.1758	1.8	0.72		1043.9	17.0	1043.2	16.0	1041.7	34.6	1041.7	34.6	100.2
LB4-65	100	112558	2.3	13.4716	1.5	1.8336	5.9	0.1792	5.7	0.97		1062.4	55.5	1057.6	35.5	1047.8	29.4	1047.8	29.4	101.4
LB4-1	24	13832	1.1	13.4441	4.3	1.8099	5.1	0.1785	2.8	0.54		1047.7	26.7	1049.0	33.2	1051.9	86.0	1051.9	86.0	99.8
LB4-10	23	13066	1.5	13.3727	3.9	1.8688	4.4	0.1813	2.1	0.48		1073.8	21.2	1070.1	29.4	1062.6	78.4	1062.6	78.4	101.1
LB4-28	119	152394	1.9	13.3520	2.0	1.9855	3.0	0.1742	2.3	0.76		1035.0	22.1	1044.9	19.7	1065.7	39.4	1065.7	39.4	97.1
LB4-54	62	39787	1.1	13.3513	1.3	1.8247	2.1	0.1767	1.7	0.81		1048.9	16.7	1054.4	14.1	1065.8	25.5	1065.8	25.5	98.4
LB4-18	117	99429	1.8	13.3288	0.7	1.8621	1.6	0.1800	1.4	0.89		1067.0	13.6	1067.7	10.3	1069.2	14.5	1069.2	14.5	99.8
LB4-91	40	39563	1.5	13.3123	3.0	1.8504	3.4	0.1787	1.7	0.49		1059.7	16.7	1063.6	22.7	1071.7	60.3	1071.7	60.3	98.9
LB4-51	59	7338	1.3	13.2646	2.8	1.7724	3.7	0.1705	2.4	0.64		1014.9	22.3	1035.4	24.1	1078.9	57.1	1078.9	57.1	94.1
LB4-103	53	50593	1.8	13.2604	2.4	1.8957	3.2	0.1823	2.1	0.65		1079.6	20.7	1079.6	21.3	1079.5	48.7	1079.5	48.7	100.0
LB4-25	266	51046	1.9	13.2418	0.6	1.6010	2.1	0.1538	2.0	0.95		922.0	17.2	970.6	13.1	1082.3	12.9	1082.3	12.9	85.2
LB4-20	32	64359	1.0	13.1850	2.0	1.8606	2.4	0.1779	1.3	0.54		1055.6	12.7	1067.2	16.0	1090.9	41.0	1090.9	41.0	96.8
LB4-13	160	39948	2.5	13.1789	1.0	1.5247	1.8	0.1457	1.6	0.85		877.0	12.9	940.4	11.3	1091.9	19.1	1091.9	19.1	80.3
LB4-58	189	211126	2.0	12.9867	0.6	2.0272	1.9	0.1909	1.8	0.95		1126.5	18.6	1124.7	12.9	1121.3	12.3	1121.3	12.3	100.5
LB4-61	65	55662	2.5	12.9694	1.6	2.0249	2.8	0.1905	2.3	0.82		1123.9	23.8	1123.9	19.1	1123.9	32.0	1123.9	32.0	100.0
LB4-47	41	86593	1.6	12.9560	3.0	2.0800	4.4	0.1955	3.1	0.71		1150.8	32.8	1142.2	29.8	1126.0	60.7	1126.0	60.7	102.2
LB4-88	41	27903	1.7	12.9321	3.9	2.1209	4.3	0.1989	1.7											

LL2 (1AA/02-13-086-07W4/00)

Analysis	U (ppm)	206Pb 204Pb	U/Th	Isotope Ratios						error corr.	Apparent Ages				Bestage (Ma)	Conc (Ma)			
				206Pb* 207Pb*	± (%)	207Pb* 235U*	± (%)	206Pb* 238U	± (%)		206Pb* 238U*	± (Ma)	207Pb* 235U	± (Ma)			206Pb* 207Pb*	± (Ma)	
LL2-65	180	25482	0.7	20.0362	4.2	0.1812	4.4	0.0263	1.4	0.33	167.6	2.4	169.1	6.8	190.8	96.6	167.6	2.4	NA
LL2-72	77	15455	1.0	21.5013	16.0	0.2241	16.2	0.0349	2.4	0.15	221.4	5.1	205.3	30.1	24.1	386.0	221.4	5.1	NA
LL2-16	161	42541	0.9	19.8621	3.7	0.2819	4.5	0.0406	2.5	0.56	256.6	6.3	252.1	10.0	211.0	85.6	256.6	6.3	NA
LL2-45	169	78399	0.9	18.6903	2.5	0.4019	2.7	0.0545	0.9	0.36	341.9	3.1	343.0	7.7	350.2	56.1	341.9	3.1	NA
LL2-58	46	27876	1.8	17.3216	5.7	0.5214	6.1	0.0655	2.1	0.34	409.0	8.3	426.1	21.3	519.6	126.0	409.0	8.3	78.7
LL2-32	102	24005	1.9	18.6181	4.7	0.5026	5.0	0.0679	1.6	0.31	423.3	6.4	413.5	16.9	358.9	106.5	423.3	6.4	117.9
LL2-68	169	76337	1.8	18.4249	1.3	0.5086	2.0	0.0680	1.5	0.75	423.9	6.1	417.5	6.7	382.4	29.1	423.9	6.1	110.8
LL2-30	184	140628	1.1	18.1821	1.5	0.5240	2.2	0.0691	1.6	0.71	430.7	6.5	427.8	7.6	412.2	34.4	430.7	6.5	104.5
LL2-13	76	34554	1.4	18.6774	4.5	0.5110	5.5	0.0692	3.1	0.57	431.4	13.1	419.1	18.8	351.8	101.2	431.4	13.1	122.6
LL2-104	246	98863	0.9	17.9128	1.9	0.5400	2.5	0.0702	1.6	0.66	437.1	7.0	438.4	8.9	445.4	42.1	437.1	7.0	98.1
LL2-41	22	5545	0.9	18.9171	9.5	0.5124	10.1	0.0703	3.5	0.34	437.9	14.8	420.0	34.9	322.9	216.5	437.9	14.8	135.6
LL2-6	195	188039	2.0	18.1252	2.8	0.5426	4.5	0.0713	3.6	0.79	444.2	15.3	440.2	16.1	419.2	61.6	444.2	15.3	106.0
LL2-93	155	45983	1.0	17.7327	3.3	0.5580	3.4	0.0718	0.8	0.24	446.8	3.5	450.2	12.4	467.8	73.3	446.8	3.5	95.5
LL2-99	61	18832	1.9	17.6248	6.1	0.5616	6.2	0.0718	1.1	0.17	447.0	4.7	452.6	22.7	481.4	135.5	447.0	4.7	92.9
LL2-27	85	25344	1.1	18.3495	6.2	0.5421	6.4	0.0721	1.8	0.28	449.0	7.8	439.8	23.0	391.6	138.9	449.0	7.8	114.7
LL2-98	377	168926	1.8	17.2707	0.9	0.6789	1.3	0.0850	0.9	0.71	526.1	4.7	526.1	5.3	526.1	19.9	526.1	4.7	100.0
LL2-77	102	37179	0.9	16.6181	3.1	0.8528	3.4	0.1028	1.5	0.44	630.7	9.1	626.2	16.0	609.9	66.5	630.7	9.1	103.4
LL2-8	29	37512	1.6	14.3241	5.4	1.5420	6.3	0.1602	3.3	0.51	957.8	29.0	947.3	39.1	922.9	112.0	922.9	112.0	103.8
LL2-28	123	38155	1.5	14.0118	1.0	1.5264	1.5	0.1551	1.1	0.74	929.6	9.8	941.0	9.3	968.0	20.6	968.0	20.6	96.0
LL2-37	70	90251	2.2	13.9605	1.7	1.6401	2.8	0.1661	2.2	0.79	990.4	20.4	985.8	17.8	975.5	35.4	975.5	35.4	101.5
LL2-76	23	17623	1.3	13.8882	7.4	1.6104	7.6	0.1622	1.6	0.21	969.0	14.6	974.3	47.7	986.0	151.4	986.0	151.4	98.3
LL2-36	25	30228	1.6	13.8859	3.1	1.6859	4.2	0.1698	2.8	0.67	1010.9	26.1	1003.2	26.5	986.4	63.0	986.4	63.0	102.5
LL2-52	26	45480	1.3	13.8262	3.9	1.5769	4.3	0.1581	1.8	0.41	946.3	15.5	961.1	26.8	995.1	79.9	995.1	79.9	95.1
LL2-53	312	260553	4.3	13.7337	0.3	1.6663	1.4	0.1660	1.4	0.97	989.9	12.4	995.8	8.9	1008.8	7.1	1008.8	7.1	98.1
LL2-75	66	53267	0.8	13.7170	1.8	1.7406	2.0	0.1732	0.9	0.43	1029.5	8.3	1023.7	13.1	1011.2	37.1	1011.2	37.1	101.8
LL2-48	39	41818	1.3	13.6666	3.8	1.7402	4.0	0.1725	1.4	0.35	1025.8	13.4	1023.5	26.1	1018.7	76.8	1018.7	76.8	100.7
LL2-47	91	120612	2.2	13.6451	1.6	1.7242	2.9	0.1706	2.5	0.84	1015.6	23.3	1017.6	18.9	1021.9	32.0	1021.9	32.0	99.4
LL2-38	31	41860	1.0	13.6227	3.9	1.7561	4.3	0.1735	1.7	0.40	1031.4	16.4	1029.4	27.7	1025.2	79.4	1025.2	79.4	100.6
LL2-4	67	85663	2.7	13.6122	2.3	1.8062	3.3	0.1783	2.3	0.70	1057.8	22.2	1047.7	21.2	1026.7	46.9	1026.7	46.9	103.0
LL2-43	28	25087	0.8	13.5567	5.2	1.7956	5.3	0.1765	1.2	0.22	1048.1	11.2	1043.9	34.9	1035.0	105.6	1035.0	105.6	101.3
LL2-35	43	36976	2.4	13.5372	2.5	1.7550	3.2	0.1723	2.0	0.62	1024.8	18.8	1029.0	20.6	1037.9	50.1	1037.9	50.1	98.7
LL2-21	148	132858	3.4	13.5082	1.3	1.6972	1.9	0.1663	1.3	0.71	991.6	12.2	1007.5	11.8	1042.2	26.2	1042.2	26.2	95.1
LL2-9	39	5566	2.9	13.5056	3.8	1.8170	4.2	0.1780	1.8	0.42	1055.9	17.4	1051.6	27.7	1042.6	77.3	1042.6	77.3	101.3
LL2-14	116	72239	2.7	13.4725	0.7	1.8203	1.4	0.1779	1.1	0.85	1055.3	11.1	1052.8	8.9	1047.6	14.5	1047.6	14.5	100.7
LL2-29	75	53479	1.7	13.4628	2.7	1.7786	2.8	0.1737	0.9	0.33	1032.3	8.8	1037.7	18.3	1049.1	53.7	1049.1	53.7	98.4
LL2-74	38	50525	1.5	13.4370	2.9	1.7903	3.5	0.1745	1.8	0.53	1036.7	17.4	1041.9	22.5	1052.9	59.1	1052.9	59.1	98.5
LL2-92	75	71392	2.5	13.4295	2.6	1.8107	4.4	0.1764	3.5	0.80	1047.1	33.9	1049.3	28.7	1054.1	53.1	1054.1	53.1	99.3
LL2-10	214	178222	3.5	13.4247	0.9	1.8172	1.2	0.1769	0.8	0.65	1050.2	7.5	1051.7	7.8	1054.8	18.2	1054.8	18.2	99.6
LL2-5	88	54479	2.9	13.4165	0.9	1.8607	1.7	0.1811	1.4	0.86	1072.7	14.3	1067.2	11.1	1056.0	17.2	1056.0	17.2	101.6
LL2-46	25	16597	2.2	13.3960	5.2	1.7179	5.6	0.1669	2.1	0.37	995.1	19.3	1015.2	36.2	1059.1	105.3	1059.1	105.3	94.0
LL2-64	80	69178	2.8	13.3879	0.8	1.8288	1.9	0.1776	1.7	0.91	1053.7	16.7	1055.9	12.4	1060.3	16.0	1060.3	16.0	99.4
LL2-59	90	75238	1.5	13.3546	1.1	1.7964	1.7	0.1740	1.3	0.76	1034.1	12.2	1044.2	11.0	1065.3	21.9	1065.3	21.9	97.1
LL2-55	183	199413	2.3	13.3021	0.4	1.8621	1.2	0.1796	1.1	0.92	1065.0	10.7	1067.7	7.8	1073.2	9.0	1073.2	9.0	99.2
LL2-33	47	38621	1.5	13.2413	1.9	1.8474	2.4	0.1774	1.4	0.59	1052.8	13.7	1062.5	15.7	1082.4	38.4	1082.4	38.4	97.3
LL2-56	59	7835	1.9	13.2244	2.4	1.8351	2.9	0.1760	1.5	0.54	1045.1	14.8	1058.1	18.8	1085.0	48.3	1085.0	48.3	96.3
LL2-17	192	177848	1.7	13.1614	0.6	1.9402	0.8	0.1852	0.6	0.69	1095.3	5.7	1095.1	5.5	1094.6	11.9	1094.6	11.9	100.1
LL2-86	30	29755	1.2	13.1253	4.9	1.8827	5.0	0.1792	1.0	0.21	1062.7	10.2	1075.0	32.9	1100.1	97.1	1100.1	97.1	96.6
LL2-18	191	234601	1.2	13.0816	0.5	1.9722	1.6	0.1871	1.5	0.96	1105.7	15.2	1106.0	10.6	1106.7	9.2	1106.7	9.2	99.9
LL2-95	83	79408	1.2	13.0589	1.9	1.9575	2.2	0.1854	1.2	0.53	1096.4	11.8	1101.0	14.8	1110.2	37.4	1110.2	37.4	98.8
LL2-61	588	414312	2.9	12.9020	0.2	2.0497	3.3	0.1918	3.3	1.00	1131.1	34.0	1132.2	22.4	1134.3	4.7	1134.3	4.7	99.7
LL2-91	60	80617	2.9	12.8761	1.8	2.0602	2.3	0.1924	1.5	0.62	1134.4	15.1	1135.7	16.0	1138.3	36.3	1138.3	36.3	99.7
LL2-31	69	101223	2.2	12.8666	1.2	2.0434	2.0	0.1907	1.5	0.79	1125.1	16.0	1130.1	13.3	1139.7	23.7	1139.7	23.7	98.7
LL2-67	151	162039	1.9	12.7681	0.9	2.1473	1.3	0.1988	1.0	0.73	1169.1	10.4	1164.2	9.3	1155.0	18.1	1155.0	18.1	101.2
LL2-79	98	226053	3.1	12.7647	0.8	2.11.													

LL3 (1AA/02-13-086-07W4/00)

Analysis	U (ppm)	Isotope Ratios										Apparent Ages										Conc (%)
		206Pb 204Pb	U/Th	206Pb* 207Pb*	± (%)	207Pb* 235U	± (%)	206Pb* 238U	± (%)	error	206Pb* 238U*	± (Ma)	207Pb* 235U	± (Ma)	206Pb* 238U	± (Ma)	Bestage	± (Ma)				
LL3-17	179	35716	0.5	19.5991	6.0	0.1846	6.2	0.0262	1.4	0.23	167.0	2.4	172.0	9.8	241.8	139.2	167.0	2.4	NA			
LL3-69	248	138305	0.5	18.6524	1.6	0.4137	2.7	0.0560	2.2	0.81	351.1	7.4	351.6	8.0	354.8	35.9	351.1	7.4	NA			
LL3-43	50	9916	1.9	19.1688	11.0	0.4249	11.5	0.0591	3.4	0.29	370.0	12.2	359.5	34.9	292.8	252.2	370.0	12.2	NA			
LL3-76	52	17631	1.3	18.0189	13.9	0.4833	14.0	0.0632	1.8	0.13	394.8	7.0	400.3	46.3	432.3	310.4	394.8	7.0	NA			
LL3-41	444	24120	14.6	17.8950	3.1	0.5009	3.7	0.0650	2.0	0.55	406.1	8.0	412.3	12.6	447.6	69.1	406.1	8.0	90.7			
LL3-44	130	38507	0.9	18.3172	2.6	0.4953	3.0	0.0658	1.4	0.47	410.8	5.6	408.5	10.0	395.6	59.0	410.8	5.6	103.9			
LL3-60	146	63228	1.3	18.0298	2.9	0.5080	3.1	0.0664	1.0	0.34	414.6	4.1	417.1	10.5	430.9	64.2	414.6	4.1	96.2			
LL3-28	93	16766	1.7	18.8628	3.5	0.4885	3.9	0.0668	1.7	0.44	417.0	6.9	403.9	13.0	329.4	79.4	417.0	6.9	126.6			
LL3-56	237	31507	1.8	18.0395	3.4	0.5350	4.9	0.0700	3.6	0.73	436.2	15.1	435.1	17.4	429.7	74.9	436.2	15.1	101.5			
LL3-85	84	30019	0.9	17.8971	4.7	0.5446	4.8	0.0707	1.2	0.25	440.3	5.1	441.5	17.3	447.4	103.8	440.3	5.1	98.4			
LL3-52	218	71641	1.1	17.9932	2.2	0.5431	2.4	0.0709	0.8	0.34	441.5	3.4	440.5	8.4	435.5	49.4	441.5	3.4	101.4			
LL3-104	261	101083	0.6	18.0688	1.5	0.5584	2.1	0.0732	1.4	0.68	455.2	6.2	450.5	7.5	426.1	34.0	455.2	6.2	106.8			
LL3-58	175	62772	1.6	17.8934	2.7	0.5678	3.1	0.0737	1.5	0.48	458.3	6.7	456.6	11.5	447.8	60.7	458.3	6.7	102.3			
LL3-98	151	79177	2.7	17.5466	3.9	0.6056	3.9	0.0771	0.9	0.22	478.6	4.0	480.8	15.1	491.2	85.0	478.6	4.0	97.4			
LL3-72	71	38797	0.8	17.3700	5.9	0.6656	6.0	0.0839	1.5	0.25	519.1	7.4	518.0	24.5	513.4	128.8	519.1	7.4	101.1			
LL3-49	78	21841	1.4	16.1230	1.9	0.8817	2.7	0.1031	1.9	0.69	632.6	11.2	641.9	12.7	674.9	41.1	632.6	11.2	93.7			
LL3-92	106	70112	2.0	16.3400	1.3	0.9032	2.4	0.1070	2.0	0.85	655.5	12.7	653.5	11.6	646.3	27.0	655.5	12.7	101.4			
LL3-64	118	101506	1.8	14.0863	1.2	1.5327	1.5	0.1566	0.8	0.55	937.8	7.1	943.6	9.1	957.1	25.5	937.8	7.1	98.0			
LL3-24	100	127467	4.6	14.0364	1.8	1.5875	2.4	0.1616	1.6	0.67	965.7	14.6	965.3	15.1	964.4	36.6	964.4	36.6	100.1			
LL3-34	122	105987	1.8	14.0208	1.7	1.5436	2.1	0.1570	1.3	0.60	939.9	11.0	947.9	12.8	966.7	33.9	966.7	33.9	97.2			
LL3-65	97	69518	1.4	13.9861	1.0	1.5305	2.5	0.1553	2.3	0.91	930.5	19.7	942.7	15.3	971.5	21.1	971.5	21.1	95.8			
LL3-89	81	50494	2.7	13.8806	1.0	1.5796	2.3	0.1590	2.1	0.91	951.3	18.3	962.2	14.2	987.2	19.4	987.2	19.4	96.4			
LL3-57	63	36235	1.2	13.8724	3.4	1.5600	3.5	0.1570	1.0	0.28	939.8	8.6	954.5	21.9	988.4	69.2	988.4	69.2	95.1			
LL3-5	43	41248	0.8	13.8592	1.4	1.6326	1.7	0.1641	0.9	0.56	979.5	8.6	982.9	10.6	990.3	28.3	990.3	28.3	96.5			
LL3-25	26	23220	2.2	13.8183	4.4	1.7148	4.8	0.1719	1.9	0.40	1022.3	18.0	1014.1	30.8	996.3	89.6	996.3	89.6	102.6			
LL3-9	289	225148	2.2	13.7775	0.6	1.7011	2.6	0.1700	2.5	0.97	1012.0	23.6	1008.9	16.6	1002.3	12.2	1002.3	12.2	101.0			
LL3-103	298	314922	3.7	13.7592	0.5	1.7091	0.8	0.1706	0.7	0.85	1015.2	6.8	1012.0	5.4	1005.0	9.1	1005.0	9.1	101.0			
LL3-86	96	82940	1.2	13.7432	1.6	1.7357	2.0	0.1730	1.2	0.58	1028.7	11.0	1021.9	12.8	1007.4	32.8	1007.4	32.8	102.1			
LL3-31	91	83335	1.4	13.6890	1.3	1.7116	3.2	0.1699	2.9	0.92	1011.7	27.5	1012.9	20.5	1015.4	26.0	1015.4	26.0	99.6			
LL3-90	54	82466	2.2	13.6196	1.2	1.7500	1.9	0.1729	1.5	0.78	1027.8	13.8	1027.1	12.0	1025.8	23.4	1025.8	23.4	100.2			
LL3-16	30	21783	1.0	13.5681	4.0	1.7485	5.2	0.1721	3.3	0.64	1023.5	31.3	1026.6	33.4	1033.3	80.2	1033.3	80.2	99.0			
LL3-48	53	30185	1.2	13.5606	1.9	1.7241	2.9	0.1696	2.1	0.73	1009.7	19.6	1017.6	18.4	1034.4	39.3	1034.4	39.3	97.6			
LL3-23	60	58669	0.8	13.5548	1.3	1.8144	2.4	0.1784	2.0	0.84	1058.1	19.8	1050.7	15.8	1035.3	26.5	1035.3	26.5	102.2			
LL3-68	92	63109	2.1	13.5520	1.3	1.7660	3.8	0.1736	3.6	0.94	1031.8	34.2	1033.1	24.6	1035.7	25.5	1035.7	25.5	99.6			
LL3-7	62	49513	2.3	13.5502	1.6	1.7497	1.9	0.1719	1.2	0.60	1022.8	10.9	1027.0	12.5	1036.0	31.4	1036.0	31.4	98.7			
LL3-83	56	51081	2.3	13.5338	2.5	1.8150	3.1	0.1781	1.9	0.60	1056.9	18.4	1050.9	20.5	1038.4	50.5	1038.4	50.5	101.8			
LL3-66	67	50302	1.4	13.5280	1.8	1.8790	3.4	0.1844	2.9	0.85	1090.7	28.7	1073.7	22.4	1039.3	36.5	1039.3	36.5	104.9			
LL3-101	36	43689	0.9	13.5244	2.9	1.7349	3.3	0.1702	1.5	0.46	1013.1	14.1	1021.6	21.2	1039.8	59.0	1039.8	59.0	97.4			
LL3-91	81	93499	1.6	13.4972	2.0	1.7930	2.1	0.1755	0.7	0.34	1042.9	6.9	1042.9	13.9	1043.9	40.5	1043.9	40.5	99.9			
LL3-42	73	62909	0.9	13.4937	2.0	1.7236	2.6	0.1687	1.6	0.63	1004.9	15.0	1017.4	16.4	1044.4	40.0	1044.4	40.0	96.2			
LL3-12	40	52842	0.5	13.4884	1.8	1.7667	1.9	0.1728	0.8	0.41	1027.7	7.5	1033.3	12.5	1045.2	35.5	1045.2	35.5	98.3			
LL3-15	32	27058	0.9	13.4520	4.1	1.8026	4.2	0.1759	1.1	0.26	1044.4	10.5	1046.4	27.6	1050.7	82.5	1050.7	82.5	99.4			
LL3-105	184	202097	8.9	13.4189	0.6	1.8437	1.0	0.1794	0.8	0.79	1063.9	8.1	1061.2	6.8	1055.6	12.8	1055.6	12.8	100.8			
LL3-75	37	36010	1.1	13.3781	2.2	1.8683	2.7	0.1813	1.5	0.56	1073.9	15.1	1069.9	17.9	1061.8	44.8	1061.8	44.8	101.1			
LL3-21	78	97661	0.7	13.3778	1.4	1.7980	1.9	0.1745	1.3	0.70	1036.6	12.7	1044.7	12.4	1061.8	27.4	1061.8	27.4	97.6			
LL3-35	73	89277	2.0	13.3542	1.1	1.8669	1.5	0.1808	1.1	0.70	1071.4	10.6	1069.4	10.1	1065.4	22.0	1065.4	22.0	100.6			
LL3-6	30	30126	1.1	13.3243	4.3	1.8262	5.0	0.1765	2.6	0.53	1047.7	25.4	1054.9	32.8	1069.9	85.5	1069.9	85.5	97.9			
LL3-61	108	194816	1.6	13.2734	1.3	1.7292	2.0	0.1665	1.5	0.76	992.7	14.0	1019.5	12.8	1077.6	25.8	1077.6	25.8	92.1			
LL3-37	189	216311	1.2	13.2154	0.9	1.8973	1.2	0.1819	0.8	0.68	1077.1	8.4	1080.2	8.2	1086.3	18.2	1086.3	18.2	99.1			
LL3-102	31	21361	2.7	13.1649	3.4	1.7284	3.9	0.1650	2.0	0.51	984.7	18.4	1019.2	25.3	1094.0	67.7	1094.0	67.7	90.0			
LL3-10	32	27547	0.8	13.1523	3.0	1.9128	3.5	0.1825	1.7	0.49	1080.4	17.0	1085.6	23.1	1095.9	60.5	1095.9	60.5	98.6			
LL3-19	26	28029	3.2	13.1123	3.8	1.9433	5.6	0.1848	4.2	0.74	1093.2	42.1	1096.1	37.8	1102.0	75.7	1102.0	75.7	99.2			
LL3-26	132	205544	2.3	12.9500	0.6	2.0561	1.3	0.1932	1.2	0.90	1138.4	12.0	1133.8	8.8	1126.4	11.4	1126.4	11.4	101.1			
LL3-20	110	140390	2.0	12.9200	0.7	2.0864	2.6	0.1955	2.5													

LL4 (1AA/02-13-086-07W4/00)

Analysis	U (ppm)	206Pb 204Pb	U/Th	Isotope Ratios								Apparent Ages				Bestage (Ma)	Conc (Ma)		
				206Pb* 207Pb*	±	207Pb* 235U*	±	206Pb* 238U	±	error (%)	206Pb* 238U*	±	207Pb* 235U	±	206Pb* 207Pb*			±	
LL4-1	63	62301	2.2	12.9540	2.5	1.9757	7.0	0.1856	6.5	0.93	1097.6	65.8	1107.2	47.2	1126.3	50.5	1126.3	50.5	97.5
LL4-2	67	117642	1.3	13.3838	2.0	1.8311	3.2	0.1777	2.5	0.78	1054.6	24.1	1056.7	20.9	1060.9	40.5	1060.9	40.5	99.4
LL4-3	109	71952	1.5	11.7074	0.7	2.6822	1.7	0.2277	1.6	0.91	1322.7	18.7	1323.6	12.7	1325.0	13.6	1325.0	13.6	99.8
LL4-4	133	190377	2.6	13.1525	1.1	1.8551	1.8	0.1770	1.5	0.81	1050.4	14.5	1065.3	12.1	1095.9	21.4	1095.9	21.4	95.8
LL4-5	119	70013	2.4	13.3682	1.2	1.8016	1.7	0.1747	1.2	0.68	1037.8	11.2	1046.0	11.1	1063.3	25.0	1063.3	25.0	97.6
LL4-6	31	24000	0.8	13.4619	4.7	1.7936	4.8	0.1751	1.1	0.23	1040.2	10.7	1043.1	31.3	1049.2	94.1	1049.2	94.1	99.1
LL4-7	86	38964	2.9	13.9159	1.6	1.6986	2.5	0.1714	1.9	0.78	1020.0	18.3	1008.0	15.9	982.0	31.6	982.0	31.6	103.9
LL4-8	81	55032	1.6	12.8481	1.3	2.1146	5.0	0.1970	4.8	0.97	1159.4	51.2	1153.6	34.5	1142.6	25.9	1142.6	25.9	101.5
LL4-9	59	36698	1.7	13.0651	2.3	1.9965	2.8	0.1892	1.6	0.59	1117.0	16.9	1114.3	19.0	1109.2	45.6	1109.2	45.6	100.7
LL4-10	76	76186	1.9	9.8628	0.7	4.0442	2.0	0.2893	1.9	0.94	1638.0	27.9	1643.1	16.6	1649.7	12.4	1649.7	12.4	99.3
LL4-11	165	154970	2.1	9.8017	0.6	4.0617	1.6	0.2887	1.5	0.93	1635.2	21.0	1646.7	12.7	1661.2	10.4	1661.2	10.4	98.4
LL4-12	264	109281	2.0	17.7866	2.8	0.5175	3.3	0.0668	1.8	0.53	416.6	7.2	423.5	11.6	461.1	62.7	416.6	7.2	90.3
LL4-13	41	22734	1.5	13.8882	4.1	1.7249	4.5	0.1737	2.0	0.44	1032.7	18.7	1017.8	29.0	986.0	82.6	986.0	82.6	104.7
LL4-14	157	55683	1.1	17.0926	2.0	0.7121	2.5	0.0883	1.5	0.59	545.3	7.9	546.0	10.7	548.7	44.8	545.3	7.9	99.9
LL4-15	25	25618	0.8	13.2403	4.0	1.9140	4.4	0.1838	1.8	0.41	1087.7	18.0	1086.0	29.3	1082.6	80.3	1082.6	80.3	100.5
LL4-16	44	46081	1.6	11.8454	3.8	2.5809	4.2	0.2217	1.8	0.43	1291.0	21.3	1295.2	30.9	1302.3	74.1	1302.3	74.1	99.1
LL4-17	266	69899	1.1	17.5841	1.0	0.5894	1.8	0.0752	1.5	0.85	467.2	7.0	470.5	6.8	486.5	21.0	467.2	7.0	96.0
LL4-18	122	95807	1.4	13.6213	1.5	1.7745	2.8	0.1753	2.3	0.84	1041.3	22.6	1036.2	18.1	1025.4	30.6	1025.4	30.6	101.5
LL4-19	181	110583	1.0	18.1493	2.2	0.5550	2.4	0.0731	1.0	0.41	454.5	4.3	448.2	8.8	416.2	49.6	454.5	4.3	109.2
LL4-20	70	45809	2.3	12.8143	2.2	2.0663	2.7	0.1920	1.6	0.58	1132.4	16.5	1137.7	18.7	1147.8	44.1	1147.8	44.1	98.7
LL4-22	39	47618	2.4	9.6287	1.7	4.1948	2.4	0.2929	1.7	0.70	1656.2	25.1	1673.0	20.1	1694.1	32.1	1694.1	32.1	97.8
LL4-23	117	810393	2.4	4.7860	0.1	16.2337	1.5	0.5635	1.4	1.00	2881.0	33.6	2890.7	13.9	2897.4	2.3	2897.4	2.3	99.4
LL4-24	55	109245	2.3	12.1403	2.2	2.4607	3.0	0.2167	1.9	0.65	1264.2	22.2	1260.6	21.4	1254.3	43.9	1254.3	43.9	100.8
LL4-25	44	82160	193.3	7.6632	0.9	6.6798	4.4	0.3713	4.3	0.98	2035.3	75.6	2069.9	39.0	2104.6	15.4	2104.6	15.4	96.7
LL4-26	18	19467	1.2	12.7116	9.8	2.1753	10.2	0.2005	2.6	0.26	1178.3	28.5	1173.2	70.8	1163.8	194.9	1163.8	194.9	101.2
LL4-27	19	12831	1.3	13.1155	6.8	1.7350	7.2	0.1650	2.5	0.34	984.7	22.7	1021.6	46.5	1101.5	135.7	1101.5	135.7	89.4
LL4-28	100	123740	1.3	11.4205	1.2	2.8282	1.8	0.2343	1.3	0.74	1356.8	16.5	1363.1	13.6	1372.9	23.3	1372.9	23.3	98.8
LL4-29	17	24070	1.5	13.8746	9.8	1.6430	10.5	0.1653	3.8	0.36	986.3	34.6	986.9	66.5	988.0	200.0	988.0	200.0	99.8
LL4-30	41	22886	1.7	13.8134	3.9	1.7038	4.4	0.1707	2.0	0.46	1016.0	19.0	1010.0	28.2	997.0	79.6	997.0	79.6	101.9
LL4-31	535	119765	2.4	20.1182	2.0	0.1809	2.2	0.0264	0.9	0.39	167.9	1.4	168.8	3.4	181.3	47.6	167.9	1.4	NA
LL4-32	292	27819	1.2	20.3649	5.2	0.1789	5.4	0.0264	1.6	0.29	168.1	2.6	167.1	8.4	152.8	122.1	168.1	2.6	NA
LL4-33	103	148543	2.1	11.9943	1.2	2.5300	1.9	0.2201	1.4	0.77	1282.3	16.8	1280.7	13.8	1277.9	23.7	1277.9	23.7	100.3
LL4-34	87	101014	1.5	10.9544	0.8	3.2014	2.4	0.2543	2.3	0.94	1460.9	30.0	1457.5	18.9	1452.6	15.7	1452.6	15.7	100.6
LL4-35	78	41863	1.6	13.2397	1.9	1.8987	3.0	0.1823	2.4	0.79	1079.7	23.9	1080.6	20.2	1082.7	37.2	1082.7	37.2	99.7
LL4-36	71	84965	7.8	12.1570	1.0	2.3260	1.5	0.2051	1.1	0.73	1202.6	12.1	1220.3	10.8	1251.7	20.3	1251.7	20.3	96.1
LL4-38	36	38647	2.2	12.3968	3.5	2.3236	4.1	0.2089	2.0	0.50	1223.0	22.8	1219.5	28.9	1213.3	69.1	1213.3	69.1	100.8
LL4-39	90	225258	2.9	8.8060	0.6	5.2984	2.1	0.3346	2.0	0.96	1860.5	32.6	1858.9	18.0	1857.1	11.2	1857.1	11.2	100.2
LL4-41	28	17058	0.8	13.5836	3.1	1.7418	3.2	0.1716	1.0	0.32	1020.9	9.9	1024.1	20.9	1031.0	62.1	1031.0	62.1	99.0
LL4-42	49	14200	0.7	18.8560	15.0	0.5418	15.8	0.0741	4.8	0.30	460.8	21.2	439.6	56.3	330.2	342.3	460.8	21.2	139.5
LL4-43	409	240783	1.9	12.9592	0.4	2.0144	2.8	0.1893	2.8	0.99	1117.8	28.5	1120.4	19.1	1125.5	7.7	1125.5	7.7	99.3
LL4-44	103	74506	1.8	14.2367	1.5	1.5424	2.2	0.1593	1.6	0.74	952.7	14.5	947.5	13.7	935.4	30.7	935.4	30.7	101.8
LL4-45	277	65705	10.1	18.3139	2.3	0.4919	2.9	0.0653	1.7	0.59	408.0	6.8	406.2	9.7	396.0	52.5	408.0	6.8	103.0
LL4-46	88	132092	1.0	10.9696	1.0	3.3012	3.7	0.2826	3.6	0.96	1503.3	47.9	1481.3	28.9	1450.0	19.3	1450.0	19.3	103.7
LL4-47	103	190645	1.8	11.4595	0.8	2.8052	1.5	0.2331	1.2	0.83	1351.0	14.8	1356.9	10.9	1366.3	15.5	1366.3	15.5	98.9
LL4-48	65	34855	1.1	12.8167	1.9	2.1036	2.3	0.1955	1.4	0.59	1151.3	14.6	1150.0	16.0	1147.5	37.3	1147.5	37.3	100.3
LL4-49	74	67065	2.5	10.7258	1.5	3.2124	2.1	0.2499	1.5	0.72	1437.9	19.8	1460.2	16.6	1492.6	28.3	1492.6	28.3	96.3
LL4-50	51	73170	1.7	13.3409	2.4	1.8585	2.7	0.1798	1.3	0.46	1066.0	12.3	1066.5	17.8	1067.4	48.1	1067.4	48.1	99.9
LL4-51	55	83387	0.9	13.6052	2.8	1.7573	3.2	0.1734	1.6	0.49	1030.8	14.9	1029.9	20.8	1027.8	56.8	1027.8	56.8	100.3
LL4-52	105	63806	2.3	13.7017	1.5	1.7812	2.0	0.1750	1.4	0.70	1039.7	13.5	1031.3	13.1	1013.5	29.5	1013.5	29.5	102.6
LL4-53	67	60555	2.0	14.0008	1.4	1.5877	2.1	0.1612	1.6	0.75	963.5	14.1	965.4	13.0	969.6	28.1	969.6	28.1	99.4
LL4-54	52	87827	1.1	9.3579	1.5	4.6076	2.4	0.3127	1.9	0.78	1754.1	28.6	1750.6	19.9	1746.5	27.4	1746.5	27.4	100.4
LL4-55	28	31561	2.8	13.5839	5.9	1.8435	6.1	0.1816	1.6	0.26	1075.8	15.8	1061.1	40.0	1031.0	118.5	1031.0	118.5	104.4
LL4-56	81	28003	1.0	18.1370	3.8	0.5814	4.1	0.0765	1.5	0.36	475.1	6.8	465.4	15.2	417.7	84.8	475.1	6.8	113.7
LL4-57	26	21984	2.0	13															

Kolmogorov-Smirnov (K-S) statistics

Analysis run on: Wednesday, Feb 27, 2013 @ 11:02:04 AM. Version: 1.0.

K-S P-values using error in the CDF

	CW-1	CW-2	CW-3	KE-1	KE-2	KE-3	KE-4	LA-1	LA-2	LA-3	LA-4	LB-1	LB-2	LB-3	LB-4	LL-2	LL-3	LL-4
CW-1		0.764	0.458	0.038	0.274	0.249	0.318	0.000	0.697	0.847	0.216	0.202	0.270	0.860	0.033	0.897	0.085	0.051
CW-2	0.764		0.330	0.038	0.044	0.899	0.989	0.000	0.850	0.554	0.138	0.879	0.831	0.747	0.104	0.999	0.532	0.228
CW-3	0.458	0.027		0.001	0.315	0.003	0.010	0.000	0.058	0.198	0.924	0.010	0.003	0.432	0.000	0.096	0.002	0.001
KE-1	0.038	0.330	0.001		0.007	0.866	0.295	0.000	0.460	0.086	0.004	0.956	0.167	0.066	0.923	0.407	0.757	0.987
KE-2	0.274	0.044	0.315	0.007		0.025	0.019	0.004	0.158	0.174	0.769	0.018	0.003	0.310	0.000	0.161	0.001	0.001
KE-3	0.249	0.899	0.003	0.866	0.025		0.966	0.000	0.840	0.330	0.018	0.777	0.905	0.277	0.484	0.766	0.916	0.739
KE-4	0.318	0.989	0.010	0.295	0.019	0.025		0.000	0.976	0.488	0.058	0.387	0.999	0.419	0.194	0.961	0.436	0.436
LA-1	0.000	0.000	0.000	0.000	0.004	0.000	0.000		0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LA-2	0.697	0.850	0.058	0.460	0.158	0.840	0.976	0.000		0.478	0.051	0.231	0.722	0.742	0.261	0.945	0.418	0.368
LA-3	0.847	0.554	0.198	0.086	0.174	0.330	0.488	0.001	0.478		0.466	0.149	0.405	1.000	0.025	0.626	0.193	0.054
LA-4	0.216	0.879	0.924	0.004	0.769	0.018	0.058	0.001	0.051	0.466		0.016	0.015	0.290	0.001	0.141	0.006	0.003
LB-1	0.202	0.879	0.010	0.956	0.016	0.777	0.387	0.000	0.231	0.149	0.016		0.159	0.186	0.571	0.748	0.667	0.810
LB-2	0.270	0.831	0.003	0.167	0.003	0.905	0.999	0.000	0.722	0.405	0.015	0.159		0.239	0.218	0.581	0.805	0.440
LB-3	0.860	0.747	0.432	0.066	0.310	0.277	0.419	0.000	0.742	1.000	0.290	0.186	0.239		0.033	0.840	0.118	0.074
LB-4	0.033	0.104	0.000	0.923	0.000	0.484	0.194	0.000	0.261	0.025	0.001	0.571	0.218	0.033		0.180	0.903	1.000
LL-2	0.897	0.999	0.096	0.407	0.161	0.766	0.961	0.000	0.945	0.626	0.141	0.748	0.581	0.840	0.180	0.303	0.303	0.253
LL-3	0.085	0.532	0.002	0.757	0.001	0.916	0.734	0.000	0.418	0.193	0.006	0.667	0.805	0.118	0.903	0.253	1.000	1.000
LL-4	0.051	0.228	0.001	0.987	0.001	0.739	0.436	0.000	0.368	0.054	0.003	0.810	0.440	0.074	1.000	0.253	1.000	

K-S P-values for no error

	CW-1	CW-2	CW-3	KE-1	KE-2	KE-3	KE-4	LA-1	LA-2	LA-3	LA-4	LB-1	LB-2	LB-3	LB-4	LL-2	LL-3	LL-4
CW-1		0.544	0.363	0.023	0.179	0.138	0.242	0.000	0.507	0.749	0.039	0.075	0.187	0.848	0.011	0.754	0.038	0.018
CW-2	0.544		0.018	0.189	0.028	0.565	0.877	0.000	0.465	0.401	0.056	0.717	0.695	0.532	0.031	0.846	0.241	0.091
CW-3	0.363	0.018		0.000	0.315	0.002	0.006	0.000	0.043	0.145	0.454	0.005	0.002	0.339	0.000	0.063	0.001	0.000
KE-1	0.023	0.189	0.000		0.001	0.698	0.155	0.000	0.342	0.025	0.001	0.630	0.104	0.138	0.675	0.138	0.589	0.740
KE-2	0.179	0.028	0.315	0.001		0.010	0.011	0.002	0.034	0.136	0.597	0.012	0.002	0.274	0.000	0.081	0.001	0.000
KE-3	0.138	0.565	0.002	0.698	0.010		0.450	0.000	0.698	0.183	0.006	0.778	0.669	0.082	0.165	0.608	0.851	0.405
KE-4	0.242	0.877	0.006	0.155	0.011	0.450		0.000	0.591	0.279	0.031	0.150	0.959	0.198	0.043	0.748	0.451	0.070
LA-1	0.000	0.000	0.000	0.000	0.002	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LA-2	0.507	0.465	0.043	0.342	0.034	0.698	0.591	0.000		0.123	0.348	0.005	0.157	0.302	0.192	0.941	0.406	0.323
LA-3	0.749	0.018	0.401	0.145	0.279	0.136	0.006	0.001	0.123		0.348	0.005	0.129	0.302	0.004	0.328	0.054	0.017
LA-4	0.039	0.056	0.454	0.001	0.597	0.006	0.031	0.001	0.017	0.348		0.005	0.129	0.080	0.005	0.016	0.002	0.001
LB-1	0.075	0.717	0.005	0.630	0.012	0.778	0.150	0.000	0.157	0.075	0.005	0.129		0.194	0.277	0.643	0.567	0.375
LB-2	0.187	0.695	0.002	0.104	0.002	0.669	0.959	0.000	0.691	0.302	0.007	0.139	0.080	0.194	0.080	0.565	0.494	0.176
LB-3	0.848	0.532	0.339	0.013	0.274	0.082	0.198	0.000	0.454	0.895	0.046	0.277	0.080	0.194	0.005	0.641	0.062	0.006
LB-4	0.011	0.031	0.000	0.675	0.000	0.165	0.043	0.000	0.192	0.004	0.000	0.643	0.277	0.0893	0.097	0.677	0.893	0.174
LL-2	0.754	0.846	0.063	0.138	0.061	0.608	0.748	0.000	0.941	0.328	0.016	0.567	0.494	0.062	0.677	0.263	0.767	0.767
LL-3	0.038	0.241	0.001	0.599	0.001	0.851	0.451	0.000	0.406	0.054	0.002	0.375	0.176	0.066	0.893	0.174		
LL-4	0.018	0.091	0.000	0.740	0.000	0.405	0.070	0.000	0.323	0.017	0.001							

Average K-S P-values using Monte-Carlo

	CW-1	CW-2	CW-3	KE-1	KE-2	KE-3	KE-4	LA-1	LA-2	LA-3	LA-4	LB-1	LB-2	LB-3	LB-4	LL-2	LL-3	LL-4
CW-1		0.535	0.313	0.027	0.217	0.147	0.214	0.000	0.476	0.731	0.104	0.157	0.176	0.809	0.015	0.730	0.058	0.030
CW-2	0.535		0.017	0.154	0.033	0.572	0.774	0.000	0.559	0.413	0.058	0.549	0.652	0.519	0.045	0.802	0.256	0.124
CW-3	0.313	0.017		0.000	0.315	0.002	0.005	0.000	0.035	0.148	0.000	0.005	0.002	0.317	0.000	0.055	0.001	0.000
KE-1	0.027	0.154	0.000		0.002	0.542	0.187	0.000	0.368	0.033	0.001	0.614	0.106	0.034	0.759	0.245	0.578	0.869
KE-2	0.217	0.033	0.315	0.002		0.015	0.014	0.003	0.066	0.147	0.655	0.012	0.003	0.251	0.000	0.086	0.001	0.000
KE-3	0.147	0.572	0.002	0.542	0.015		0.679	0.000	0.738	0.183	0.007	0.662	0.617	0.144	0.281	0.568	0.780	0.494
KE-4	0.214	0.774	0.005	0.187	0.014	0.679		0.000	0.730	0.275	0.000	0.643	0.852	0.233	0.098	0.703	0.422	0.247
LA-1	0.000	0.000	0.000	0.000	0.003	0.000	0.000		0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LA-2	0.476	0.559	0.000	0.368	0.066	0.738	0.730	0.000	0.287	0.287	0.022	0.204	0.307	0.615	0.205	0.887	0.399	0.296
LA-3	0.731	0.413	0.148	0.035	0.147	0.183	0.275	0.000	0.287	0.303	0.303	0.104	0.307	0.895	0.009	0.443	0.076	0.027
LA-4	0.104	0.058	0.850	0.001	0.655	0.007		0.001	0.287	0.303	0.007	0.007	0.115	0.122	0.000	0.050	0.002	0.001
LB-1	0.157	0.549	0.005	0.001	0.614	0.012	0.244	0.000	0.204	0.104	0.007	0.115	0.149	0.149	0.311	0.582	0.546	0.513
LB-2	0.176	0.652	0.002	0.106	0.003	0.617	0.852	0.000	0.615	0.307	0.009	0.115	0.149	0.149	0.073	0.508	0.372	0.188
LB-3	0.809	0.519	0.317	0.034	0.251	0.144	0.233	0.000	0.467	0.895	0.156	0.311	0.073	0.109	0.014	0.641	0.065	0.030
LB-4	0.015	0.045	0.000	0.759	0.000	0.281	0.098	0.000	0.205	0.009	0.000	0.311	0.073	0.058	0.282	0.555	0.787	0.195
LL-2	0.730	0.802	0.045	0.095	0.245	0.086	0.703	0.000	0.887	0.443	0.050	0.546	0.372	0.065	0.109	0.282	0.820	0.820
LL-3	0.058	0.256	0.001	0.578	0.001	0.780	0.422	0.000	0.399	0.076	0.002	0.513	0.188	0.030	0.555	0.195		
LL-4	0.030	0.124	0.000	0.869	0.000	0.494	0.247	0.000	0.296	0.027	0.001				0.787			

D-values using error in the CDF

	CW-1	CW-2	CW-3	KE-1	KE-2	KE-3	KE-4	LA-1	LA-2	LA-3	LA-4	LB-1	LB-2	LB-3	LB-4	LL-2	LL-3	LL-4
CW-1		0.093	0.124	0.200	0.139	0.145	0.139	0.365	0.101	0.087	0.150	0.150	0.143	0.085	0.203	0.081	0.177	0.192
CW-2	0.093		0.212	0.135	0.192	0.081	0.064	0.423	0.087	0.112	0.164	0.082	0.089	0.095	0.173	0.053	0.114	0.147
CW-3	0.124	0.212		0.289	0.139	0.268	0.243	0.305	0.097	0.157	0.080	0.092	0.086	0.127	0.308	0.265	0.179	0.289
KE-1	0.200	0.135	0.289		0.239	0.087	0.144	0.459	0.123	0.180	0.256	0.073	0.161	0.186	0.079	0.127	0.096	0.065
KE-2	0.139	0.192	0.139	0.239		0.210	0.220	0.247	0.160	0.156	0.094	0.217	0.255	0.135	0.304	0.157	0.279	0.285
KE-3	0.145	0.081	0.268	0.081	0.239		0.073	0.428	0.089	0.137	0.221	0.094	0.088	0.142	0.121	0.127	0.080	0.098
KE-4	0.139	0.064	0.243	0.144	0.220	0.073		0.443	0.071	0.123	0.195	0.131	0.053	0.128	0.159	0.073	0.100	0.127
LA-1	0.365	0.423	0.305	0.459	0.247	0.089	0.443		0.390	0.385	0.271	0.429	0.468	0.368	0.512	0.391	0.494	0.508
LA-2	0.101	0.087	0.195	0.123	0.160	0.089	0.071	0.390		0.121	0.195	0.147	0.100	0.097	0.146	0.075	0.132	0.132
LA-3	0.087	0.112	0.157	0.180	0.156	0.137	0.123	0.385	0.121		0.122	0.161	0.129	0.049	0.213	0.107	0.154	0.192
LA-4	0.150	0.164	0.080	0.296	0.094	0.221	0.195	0.271	0.195	0.122		0.220	0.225	0.140	0.280	0.164	0.245	0.260
LB-1	0.150	0.082	0.235	0.073	0.217	0.094	0.131	0.429	0.147	0.161	0.220		0.160	0.153	0.111	0.095	0.102	0.090
LB-2	0.143	0.089	0.265	0.161	0.255	0.082	0.053	0.468	0.100	0.129	0.225	0.160		0.148	0.152	0.111	0.092	0.125
LB-3	0.085	0.095	0.127	0.186	0.135	0.142	0.128	0.368	0.097	0.049	0.140	0.153	0.148		0.205	0.087	0.169	0.183
LB-4	0.203	0.173	0.308	0.079	0.304	0.171	0.159	0.512	0.146	0.213	0.280	0.111	0.152	0.205		0.156	0.081	0.047
LL-2	0.081	0.053	0.179	0.127	0.157	0.095	0.073	0.391	0.075	0.107	0.164	0.095	0.111	0.087	0.156		0.137	0.144
LL-3	0.177	0.114	0.267	0.096	0.279	0.080	0.100	0.494	0.126	0.154	0.245	0.102	0.092	0.159	0.081	0.137		0.047
LL-4	0.192	0.147	0.289	0.065	0.285	0.098	0.127	0.508	0.132	0.192	0.260	0.090	0.125	0.183	0.047	0.144	0.047	

D-values for no error

	CW-1	CW-2	CW-3	KE-1	KE-2	KE-3	KE-4	LA-1	LA-2	LA-3	LA-4	LB-1	LB-2	LB-3	LB-4	LL-2	LL-3	LL-4
CW-1		0.112	0.133	0.212	0.153	0.165	0.149	0.380	0.117	0.096	0.199	0.179	0.155	0.086	0.229	0.095	0.199	0.217
CW-2	0.112		0.221	0.154	0.204	0.112	0.085	0.430	0.121	0.127	0.189	0.097	0.101	0.113	0.205	0.086	0.145	0.175
CW-3	0.133	0.221		0.306	0.139	0.277	0.253	0.331	0.203	0.168	0.126	0.249	0.137	0.137	0.327	0.190	0.279	0.303
KE-1	0.212	0.154	0.306		0.275	0.102	0.166	0.482	0.135	0.213	0.286	0.106	0.176	0.227	0.104	0.165	0.110	0.098
KE-2	0.153	0.204	0.139	0.275		0.232	0.233	0.265	0.203	0.164	0.109	0.223	0.264	0.140	0.307	0.185	0.278	0.304
KE-3	0.165	0.112	0.277	0.102	0.232		0.127	0.438	0.102	0.158	0.246	0.094	0.105	0.181	0.162	0.109	0.088	0.128
KE-4	0.149	0.065	0.253	0.166	0.263	0.127		0.452	0.114	0.146	0.282	0.165	0.157	0.204	0.099	0.126	0.150	0.190
LA-1	0.380	0.430	0.331	0.482	0.265	0.438	0.452		0.409	0.390	0.287	0.430	0.470	0.386	0.513	0.398	0.495	0.515
LA-2	0.117	0.121	0.203	0.135	0.203	0.102	0.114	0.409		0.170	0.222	0.160	0.103	0.123	0.156	0.076	0.128	0.137
LA-3	0.096	0.127	0.168	0.213	0.164	0.158	0.146	0.390	0.170		0.134	0.246	0.167	0.155	0.253	0.135	0.192	0.221
LA-4	0.199	0.189	0.126	0.286	0.109	0.246	0.212	0.387	0.222	0.134		0.248	0.243	0.196	0.324	0.221	0.269	0.285
LB-1	0.179	0.097	0.249	0.106	0.223	0.094	0.165	0.470	0.160	0.181	0.243	0.167	0.162	0.155	0.184	0.113	0.119	0.129
LB-2	0.155	0.101	0.277	0.176	0.264	0.105	0.075	0.470	0.103	0.140	0.243	0.162	0.162	0.155	0.184	0.104	0.119	0.159
LB-3	0.086	0.113	0.137	0.227	0.140	0.181	0.157	0.386	0.123	0.082	0.196	0.162	0.162	0.155	0.248	0.105	0.187	0.244
LB-4	0.229	0.205	0.327	0.104	0.307	0.162	0.204	0.513	0.156	0.253	0.324	0.141	0.184	0.248		0.175	0.103	0.083
LL-2	0.095	0.086	0.190	0.165	0.185	0.109	0.099	0.398	0.076	0.135	0.221	0.104	0.113	0.105	0.175	0.142	0.157	
LL-3	0.199	0.145	0.279	0.110	0.278	0.088	0.126	0.495	0.128	0.192	0.269	0.111	0.119	0.187	0.103	0.142		0.095
LL-4	0.217	0.175	0.303	0.098	0.304	0.128	0.190	0.515	0.137	0.221	0.285	0.129	0.159	0.244	0.083	0.157	0.095	

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

	CW-1	CW-2	CW-3	KE-1	KE-2	KE-3	KE-4	LA-1	LA-2	LA-3	LA-4	LB-1	LB-2	LB-3	LB-4	LL-2	LL-3	LL-4
CW-1		0.268	0.144	0.028	0.081	0.101	0.147	0.000	0.313	0.168	0.130	0.139	0.097	0.165	0.018	0.270	0.050	0.031
CW-2	0.268		0.012	0.195	0.015	0.353	0.335	0.000	0.383	0.205	0.057	0.362	0.184	0.253	0.081	0.358	0.266	0.175
CW-3	0.144	0.012		0.001	0.000	0.002	0.005	0.000	0.029	0.077	0.412	0.006	0.002	0.170	0.000	0.038	0.001	0.000
KE-1	0.028	0.195	0.001		0.003	0.333	0.202	0.000	0.165	0.053	0.002	0.412	0.103	0.042	0.316	0.021	0.310	0.240
KE-2	0.081	0.015	0.000	0.003		0.012	0.007	0.003	0.063	0.067	0.210	0.007	0.002	0.086	0.000	0.055	0.000	0.000
KE-3	0.101	0.353	0.002	0.333	0.012		0.454	0.000	0.174	0.178	0.009	0.239	0.326	0.116	0.304	0.236	0.273	0.398
KE-4	0.147	0.335	0.005	0.202	0.007	0.454		0.000	0.375	0.285		0.206	0.289	0.173	0.163	0.303	0.442	0.321
LA-1	0.000	0.000	0.000	0.000	0.003	0.000	0.000		0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
LA-2	0.313	0.353	0.029	0.165	0.063	0.174	0.375	0.000		0.269	0.037	0.054	0.250	0.325	0.114	0.195	0.063	0.111
LA-3	0.168	0.205	0.077	0.053	0.067	0.178	0.285	0.000	0.269		0.195	0.087	0.187	0.234	0.019	0.253	0.103	0.049
LA-4	0.130	0.057	0.412	0.002	0.210	0.009	0.009	0.001	0.037	0.195		0.009	0.010	0.010	0.000	0.077	0.003	0.001
LB-1	0.139	0.362	0.006	0.412	0.007	0.239	0.206	0.000	0.054	0.067	0.009		0.084	0.077	0.333	0.242	0.189	0.375
LB-2	0.097	0.184	0.002	0.103	0.002	0.326	0.289	0.000	0.010	0.187	0.010	0.084		0.092	0.106	0.152	0.361	0.224
LB-3	0.165	0.253	0.170	0.042	0.086	0.116	0.173	0.000	0.325	0.234	0.219	0.077	0.092	0.034	0.106	0.272	0.048	0.034
LB-4	0.218	0.081	0.000	0.316	0.000	0.304	0.163	0.000	0.114	0.019	0.000	0.333	0.106	0.019		0.094	0.410	0.396
LL-2	0.270	0.358	0.038	0.212	0.055	0.236	0.303	0.000	0.195	0.253	0.077	0.242	0.152	0.272	0.094	0.087	0.087	0.099
LL-3	0.050	0.266	0.001	0.310	0.000	0.273	0.442	0.000	0.063	0.103	0.003	0.189	0.361	0.048	0.410	0.087	0.342	
LL-4	0.031	0.175	0.000	0.240	0.000	0.398	0.321	0.000	0.111	0.049	0.001	0.375	0.224	0.034	0.396	0.099	0.342	