New toxodontid (Notoungulata) from the Early Miocene of Mendoza, Argentina

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Online Supplementary Information 1

SUPPLEMENTARY MATERIAL 1. CA-TIMS U-Th-Pb isotopic data for the Level-2 sample, Aisol Formation.

	Compositional Parameters						Radiogenic Isotope Ratios								Isotopic Ages					
Sample (a)	$\frac{Th}{U}$ (b)	$^{206}Pb^*$ x10^{-13} mol (c)	mol % $^{206}Pb^*$ (c)	$\frac{Pb^*}{Pb_c}$ (c)	Pb_c (pg) (c)	$\frac{^{206}Pb}{^{204}Pb}$ (d)	$\frac{^{208}Pb}{^{206}Pb}$ (e)	$\frac{^{207}Pb}{^{206}Pb}$ (e)	2σ % err (f)	$\frac{^{207}Pb}{^{235}U}$ (e)	2σ % err (f)	$\frac{^{206}Pb}{^{238}U}$ (e)	2σ % err (f)	corr. coef.	$\frac{^{207}Pb}{^{206}Pb}$ (g)	2σ ± (f)	$\frac{^{207}Pb}{^{235}U}$ (g)	2σ ± (f)	$\frac{^{206}Pb}{^{238}U}$ (g)	2σ ± (f)
Nivel-2																				
z2	0.656	0.1295	96.01%	8	0.45	452	0.211	0.048113	0.981	0.020937	1.051	0.003156	0.095	0.778	104.84	23.13	21.04	0.22	20.31	0.02
z4	0.828	0.2182	97.46%	13	0.47	710	0.267	0.047201	0.625	0.019769	0.676	0.003038	0.092	0.623	59.43	14.88	19.88	0.13	19.55	0.02
z5	0.605	0.1717	96.14%	8	0.57	468	0.195	0.046881	0.919	0.019575	0.985	0.003028	0.092	0.759	43.19	21.92	19.68	0.19	**19.49**	**0.02**
z6	0.617	0.1500	96.00%	7	0.52	451	0.199	0.046950	0.951	0.019591	1.020	0.003026	0.092	0.786	46.67	22.67	19.70	0.20	**19.48**	**0.02**
z1	0.603	0.1579	96.59%	9	0.46	530	0.194	0.046487	0.862	0.019397	0.924	0.003026	0.087	0.765	22.95	20.63	19.51	0.18	**19.48**	**0.02**
z3	0.545	0.3167	96.88%	9	0.85	579	0.176	0.046894	0.737	0.019561	0.794	0.003025	0.082	0.743	43.85	17.57	19.67	0.15	**19.47**	**0.02**

(a) z1, z2 etc. are labels for single zircon grains or fragments annealed and chemically abraded after Mattinson (2005); **bold** indicates results used in weighted mean calculations.

(b) Model Th/U ratio iteratively calculated from the radiogenic 208Pb/206Pb ratio and 206Pb/238U age.

(c) Pb* and Pbc represent radiogenic and common Pb, respectively; mol % $^{206}Pb^*$ with respect to radiogenic, blank and initial common Pb.

(d) Measured ratio corrected for spike and fractionation only. Fractionation estimated at 0.17 +/- 0.03 %/a.m.u. for Daly analyses, based on analysis of NBS-981 and NBS-982.

(e) Corrected for fractionation, spike, and common Pb; all common Pb was assumed to be procedural blank: 206Pb/204Pb = 18.042 ± 0.61%; 207Pb/204Pb = 15.537 ± 0.52%; 208Pb/204Pb = 37.686 ± 0.63% (all uncertainties 1-sigma).

(f) Errors are 2-sigma, propagated using the algorithms of Schmitz and Schoene (2007).

(g) Calculations are based on the decay constants of Jaffey et al. (1971). 206Pb/238U and 207Pb/206Pb ages corrected for initial disequilibrium in 230Th/238U using Th/U [magma] = 3.

SUPPLEMENTARY MATERIAL 2. LA-ICPMS U-Pb geochronologic analyses and trace element concentrations for the Level-2 sample, Aisol Formation.

						Corrected isotope ratios												Dates (Ma)						
Analysis	U ppm	Th ppm	Pb* ppm	Th/U	206Pb/204Pb	206Pb*/207Pb*	±2σ (%)	207Pb*/235U*	±2σ (%)	206Pb*/238U	±2σ (%)	error corr.	238U/206Pb*	±2σ (%)	207Pb*/206Pb*	±2σ (%)	error corr.	207Pb*/206Pb*	±2σ (Ma)	207Pb*/235U	±2σ (Ma)	206Pb*/238U*	±2σ (Ma)	% disc.
Nivel-2 L 13	175.7	68.15	43.84	0.388	1682	12.58	1.8	2.223	4.0	0.203	3.6	0.892	4.93	3.6	0.0795	1.8	0.00	1185	36	1188	28	1190	39	1
Nivel-2 S 68	26.63	12.43	6.464	0.467	198	12.42	6.5	2.158	12.6	0.194	10.8	0.858	5.14	10.8	0.0805	6.5	0.00	1210	127	1168	87	1145	113	6
Nivel-2 L 7	74.18	34.71	16.56	0.468	734	13.11	3.0	1.895	4.8	0.180	3.7	0.781	5.55	3.7	0.0763	3.0	0.00	1103	60	1079	32	1068	37	3
Nivel-2 S 82	115.4	47.96	24.93	0.415	6541	13.68	4.9	1.768	9.1	0.175	7.7	0.841	5.70	7.7	0.0731	4.9	0.00	1016	100	1034	59	1042	74	3
Nivel-2 L 22	122.5	79.68	27.59	0.65	1709	12.95	2.5	1.822	5.5	0.171	4.9	0.886	5.84	4.9	0.0772	2.5	0.00	1127	51	1054	36	1019	46	10
Nivel-2 L 10	179.9	118.1	22.13	0.656	577	17.16	3.4	0.757	4.9	0.0941	3.6	0.728	10.62	3.6	0.0583	3.4	0.00	541	73	572	21	580	20	8
Nivel-2 S 52	338.8	248	28.56	0.732	1454	17.59	4.4	0.488	8.5	0.0623	7.3	0.858	16.06	7.3	0.0568	4.4	0.00	485	97	404	28	389	28	20
Nivel-2 S 71	115.8	75.87	8.582	0.655	307	17.53	6.2	0.440	8.3	0.0560	5.5	0.669	17.86	5.5	0.0571	6.2	0.00	494	136	371	26	351	19	30
Nivel-2 S 64	204.1	78.46	11.76	0.384	1254	19.24	4.1	0.348	5.8	0.0485	4.1	0.699	20.60	4.1	0.0520	4.1	0.00	284	95	303	15	306	12	8
Nivel-2 S 72	242.3	153.1	14.71	0.632	1242	19.73	5.5	0.328	8.6	0.0470	6.6	0.767	21.28	6.6	0.0507	5.5	0.00	227	127	288	21	296	19	31
Nivel-2 S 46	207.3	190	13.73	0.916	240	20.14	6.3	0.315	8.7	0.0459	5.9	0.685	21.76	5.9	0.0497	6.3	0.00	179	147	278	21	290	17	63
Nivel-2 S 41	172.7	74.15	9.441	0.429	360	19.45	5.2	0.319	7.3	0.0450	5.2	0.706	22.24	5.2	0.0514	5.2	0.00	259	119	281	18	284	14	9
Nivel-2 S 40	230.3	109.5	12.81	0.475	654	19.21	5.3	0.322	6.6	0.0448	4.0	0.602	22.31	4.0	0.0521	5.3	0.00	288	120	283	16	283	11	2
Nivel-2 L 15	172.2	43.15	8.775	0.251	57446	19.16	3.4	0.316	5.7	0.0439	4.6	0.802	22.76	4.6	0.0522	3.4	0.00	294	78	279	14	277	12	6
Nivel-2 L 2	275.4	141	14.9	0.512	432	19.29	3.1	0.311	4.7	0.0435	3.5	0.741	23.01	3.5	0.0518	3.1	0.00	279	72	275	11	274	9	2
Nivel-2 L 14	197.7	106.8	10.75	0.54	317	18.44	5.6	0.319	8.0	0.0426	5.7	0.712	23.47	5.7	0.0542	5.6	0.00	381	126	281	20	269	15	30
Nivel-2 S 76	169.3	182.3	10.29	1.077	1529	19.10	6.0	0.296	9.0	0.0411	6.7	0.743	24.34	6.7	0.0523	6.0	0.00	301	137	264	21	260	17	14
Nivel-2 L 11	147.5	78.79	7.623	0.534	757	20.12	5.4	0.281	6.5	0.0411	3.6	0.552	24.35	3.6	0.0497	5.4	0.00	181	126	252	14	259	9	44
Nivel-2 S 57	71.55	50.57	2.738	0.707	550	18.65	10.4	0.213	12.7	0.0288	7.3	0.574	34.67	7.3	0.0536	10.4	0.00	355	235	196	23	183	13	49
Nivel-2 S 58	204.2	130.3	6.015	0.638	198	10.64	15.6	0.245	17.6	0.0189	8.3	0.469	52.88	8.3	0.0940	15.6	0.00	1508	294	223	35	121	10	93
Nivel-2 S 25	381.7	330	8.863	0.864	5897	20.55	6.5	0.111	7.8	0.0165	4.3	0.553	60.71	4.3	0.0487	6.5	0.00	132	153	106	8	105.3	4.5	20
Nivel-2 S 84	274.7	219	6.159	0.797	206	20.72	6.7	0.109	8.9	0.0164	5.9	0.664	60.80	5.9	0.0483	6.7	0.00	112	158	105	9	105.2	6.2	6
Nivel-2 L 23	293.3	323.9	6.683	1.104	281	21.54	5.2	0.0998	6.7	0.0156	4.1	0.617	64.14	4.1	0.0464	5.2	0.00	20	126	97	6	99.7	4.1	400
Nivel-2 S 49	342.6	178.6	4.761	0.521	553	23.18	8.4	0.0659	11.5	0.0111	7.8	0.682	90.30	7.8	0.0431	8.4	0.00	-160	208	65	7	71.0	5.5	145
Nivel-2 S 66	467.3	345.4	6.706	0.739	104	20.31	6.4	0.0692	8.5	0.0102	5.6	0.662	98.06	5.6	0.0492	6.4	0.00	159	149	68	6	65.4	3.7	59
Nivel-2 L 12	242.1	165.5	3.038	0.684	87	20.88	7.8	0.0631	8.5	0.00955	3.4	0.404	104.66	3.4	0.0479	7.8	0.00	93	184	62	5	61.3	2.1	35
Nivel-2 S 86	103.4	75.64	1.293	0.732	135	21.57	12.7	0.0603	14.3	0.00943	6.5	0.457	106.04	6.5	0.0464	12.7	0.00	17	305	59	8	60.5	3.9	265
Nivel-2 S 44	168.2	81.65	1.944	0.485	64	23.89	10.6	0.0540	12.7	0.00936	7.0	0.552	106.82	7.0	0.0419	10.6	0.00	-235	267	53	7	60.1	4.2	126
Nivel-2 S 63	218.3	117.7	2.394	0.539	616	21.25	12.2	0.0554	14.3	0.00854	7.3	0.515	117.08	7.3	0.0471	12.2	0.00	52	292	55	8	54.8	4.0	5
Nivel-2 L 20	411	487.8	4.487	1.187	49	22.00	9.1	0.0454	10.4	0.00725	5.0	0.479	137.99	5.0	0.0455	9.1	0.00	-31	222	45	5	46.5	2.3	251
Nivel-2 S 70	531.6	320.1	2.945	0.602	55	16.21	17.6	0.0332	21.6	0.00390	12.4	0.576	256.14	12.4	0.0617	17.6	0.00	664	378	33	7	25.1	3.1	96
Nivel-2 S 73	77.98	43.04	0.385	0.552	15	9.47	####	0.0530	####	0.00364	10.6	0.052	275.03	10.6	0.1056	####	0.00	1725	3722	52	104	23.4	2.5	99
Nivel-2 S 81	135	76.03	0.665	0.563	26	11.34	22.2	0.0419	24.6	0.00345	10.5	0.426	290.20	10.5	0.0882	22.2	0.00	1386	426	42	10	22.2	2.3	99
Nivel-2 S 54	294.1	241.8	1.485	0.822	115	13.92	12.8	0.0334	15.1	0.00337	8.1	0.535	296.46	8.1	0.0719	12.8	0.00	982	261	33	5	21.7	1.8	98
Nivel-2 S 83	552.5	404.5	2.455	0.732	94	22.86	12.2	0.0203	14.2	0.00336	7.3	0.512	297.27	7.3	0.0438	12.2	0.00	-125	302	20	3	21.6	1.6	118
Nivel-2 S 29	94.31	57.67	0.397	0.611	18	21.52	26.2	0.0209	28.5	0.00326	11.2	0.394	307.15	11.2	0.0465	26.2	0.00	22	629	21	6	21.0	2.3	5
Nivel-2 L 5	186.8	142.2	0.998	0.762	43	15.39	28.2	0.0291	29.6	0.00325	9.1	0.307	307.68	9.1	0.0650	28.2	0.00	774	593	29	9	20.9	1.9	97
Nivel-2 S 39	256.8	255.9	1.22	0.997	27	18.46	33.5	0.0243	34.0	0.00325	5.7	0.168	307.96	5.7	0.0542	33.5	0.00	379	754	24	8	20.9	1.2	95
Nivel-2 S 74	488	357.7	2.156	0.733	334	19.45	10.8	0.0227	14.7	0.00320	10.0	0.679	312.38	10.0	0.0514	10.8	0.00	259	248	23	3	20.6	2.1	92
Nivel-2 S 27	89.11	60.46	0.423	0.678	9	18.18	43.2	0.0242	45.0	0.00319	12.7	0.282	313.05	12.7	0.0550	43.2	0.00	412	966	24	11	20.6	2.6	95
Nivel-2 S 79	1869	1674	8.207	0.896	1453	22.97	9.1	0.0191	14.6	0.00319	11.4	0.783	313.93	11.4	0.0435	9.1	0.00	-137	225	19	3	20.5	2.3	115
Nivel-2 S 53	180	139.8	0.821	0.776	239	16.46	23.9	0.0266	24.9	0.00318	6.7	0.269	314.51	6.7	0.0608	23.9	0.00	631	516	27	7	20.5	1.4	97
Nivel-2 S 51	194.3	128.7	0.782	0.662	161	31.53	32.5	0.0137	33.5	0.00313	8.1	0.242	318.98	8.1	0.0317	32.5	0.00	-991	961	14	5	20.2	1.6	102
Nivel-2 S 78	369.2	174.4	1.399	0.472	22	19.87	15.1	0.0215	16.5	0.00310	6.6	0.4	322.97	6.6	0.0503	15.1	0.00	210	350	22	4	19.9	1.3	91
Nivel-2 S 67	1677	1018	6.6	0.607	213	21.42	6.2	0.0198	9.1	0.00307	6.7	0.731	325.67	6.7	0.0467	6.2	0.00	33	149	20	2	19.8	1.3	41
Nivel-2 S 85	340.6	187.5	1.341	0.551	87	21.07	14.3	0.0201	16.4	0.00307	8.0	0.487	325.98	8.0	0.0474	14.3	0.00	72	340	20	3	19.7	1.6	73
Nivel-2 S 43	276.1	180.9	1.143	0.655	27	22.65	20.3	0.0187	21.5	0.00307	7.1	0.329	326.17	7.1	0.0441	20.3	0.00	-102	499	19	4	19.7	1.4	119
Nivel-2 L 18	305.8	255.9	1.245	0.837	544	24.15	11.4	0.0175	12.9	0.00306	6.0	0.47	326.77	6.0	0.0414	11.4	0.00	-262	288	18	2	19.7	1.2	108
Nivel-2 S 34	560.4	404.3	2.395	0.721	197	21.19	9.2	0.0199	12.0	0.00306	7.6	0.638	326.99	7.6	0.0472	9.2	0.00	59	220	20	2	19.7	1.5	67
Nivel-2 S 28	91.14	57.1	0.453	0.627	474	11.65	25.5	0.0362	27.4	0.00306	9.8	0.358	327.16	9.8	0.0859	25.5	0.00	1335	494	36	10	19.7	1.9	99
Nivel-2 S 77	216.8	148.9	0.873	0.687	33	27.16	23.3	0.0155	24.5	0.00305	7.4	0.302	327.68	7.4	0.0368	23.3	0.00	-570	631	16	4	19.6	1.5	104
Nivel-2 S 48	1253	488.6	4.549	0.39	203	22.29	9.3	0.0188	11.6	0.00304	6.9	0.595	328.87	6.9	0.0449	9.3	0.00	-63	227	19	2	19.6	1.3	131
Nivel-2 S 62	925.2	956.4	4.033	1.034	135	20.50	8.3	0.0204	12.3	0.00304	9.1	0.741	329.32	9.1	0.0488	8.3	0.00	137	194	21	3	19.5	1.8	86
Nivel-2 S 61	401.8	222.4	1.635	0.554	88	17.62	9.3	0.0237	11.5	0.00303	6.9	0.595	330.30	6.9	0.0568	9.3	0.00	482	205	24	3	19.5	1.3	96
Nivel-2 S 45	210.4	195	0.91	0.927	38	15.47	18.6	0.0268	20.6	0.00301	8.8	0.43	332.30	8.8	0.0646	18.6	0.00	763	391	27	5	19.4	1.7	98
Nivel-2 S 32	747.5	885.1	3.574	1.184	93	17.07	8.9	0.0243	11.1	0.00301	6.6	0.594	332.43	6.6	0.0586	8.9	0.00	552	195	24	3	19.4	1.3	97
Nivel-2 L 21	585.3	685	2.614	1.17	132	17.45	9.4	0.0237	12.3	0.00300	7.9	0.647	332.84	7.9	0.0573	9.4	0.00	504	206	24	3	19.3	1.5	96
Nivel-2 S 42	494.5	304.9	1.91	0.617	56	22.41	16.8	0.0184	18.5	0.00299	7.6	0.413	333.95	7.6	0.0446	16.8	0.00	-76	412	19	3	19.3	1.5	125
Nivel-2 S 56	270.5	171	1.052	0.632	56	22.81	20.5	0.0181	22.1	0.00299	8.2	0.37	334.81	8.2	0.0438	20.5	0.00	-120	506	18	4	19.2	1.6	116
Nivel-2 S 59	56.6	36.72	0.235	0.649	72	12.53	####	0.0329	####	0.00299	13.5	0.117	334.84	13.5	0.0798	####	0.00	1193	2272	33	37	19.2	2.6	99
Nivel-2 S 55	1033	1521	5.148	1.472	1636	23.05	8.6	0.0179	10.2	0.00298	5.5	0.542	335.13	5.5	0.0434	8.6	0.00	-145	213	18	2	19.2	1.1	113
Nivel-2 S 30	551	686.2	2.551	1.246	722	21.71	10.0	0.0188	12.4	0.00297	7.2	0.585	337.18	7.2	0.0461	10.0	0.00	1	242	19	2	19.1	1.4	2115
Nivel-2 L 4	198.7	133.1	0.756	0.67	20	21.37	12.2	0.0191	13.7	0.00296	6.4	0.464	337.56	6.4	0.0468	12.2	0.00	38	291	19	3	19.1	1.2	50
Nivel-2 S 75	320.7	501.3	1.643	1.563	412	28.08	43.5	0.0144	44.6	0.00294	9.8	0.219	340.60	9.8	0.0356	43.5	0.00	-660	1198	15	6	18.9	1.8	103
Nivel-2 S 35	679.1	928.1	3.214	1.367	8082	22.38	7.4	0.0181	10.1	0.00293	6.8	0.678	341.21	6.8	0.0447	7.4	0.00	-73	181	18	2	18.9	1.3	126
Nivel-2 S 80	345.3	227.6	1.328	0.659	51	25.20	16.0	0.0160	19.1	0.00292	10.4	0.545	342.58	10.4	0.0397	16.0	0.00	-372	416	16	3	18.8	2.0	105
Nivel-2 L 19	1042	1443	4.987	1.385	3818	17.61	7.3	0.0228	9.4	0.00291	6.0	0.635	343.16	6.0	0.0568	7.3	0.00	483	161	23	2	18.8	1.1	96
Nivel-2 L 1	1378	725.3	4.884	0.526	184	20.78	3.7	0.0192	5.0	0.00290	3.3	0.668	344.71	3.3	0.0481	3.7	0.00	105	88	19	1	18.7	0.6	82
Nivel-2 L 3	541.6	483	2.209	0.892	180	21.73	13.6	0.0184	14.4	0.00289	4.7	0.328	345.69	4.7	0.0460	13.6	0.00	-1	329	18	3	18.6	0.9	2348
Nivel-2 L 16	241.5	133.2	0.865	0.551	16	17.81	13.0	0.0222	14.3	0.00287	5.8	0.407	348.74	5.8	0.0561	13.0	0.00	458	289	22	3	18.5	1.1	96
Nivel-2 S 69	497.8	526.1	2.065	1.057	58	18.94	12.2	0.0202	14.2	0.00277	7.3	0.516	360.79	7.3	0.0528	12.2	0.00	320	277	20	3	17.8	1.3	95
Nivel-2 S 37	162	96.11	0.619	0.593	12	15.05	26.8	0.0252	28.5	0.00275	9.7	0.34	364.07	9.7	0.0664	26.8	0.00	820	560	25	7	17.7	1.7	98
Nivel-2 S 26	180	130.6	0.681	0.726	92	29.28	24.1	0.0129	25.7	0.00274	9.0	0.348	365.29	9.0	0.0342	24.1	0.00	-777	681	13	3	17.6	1.6	102
Nivel-2 L 9	135.2	80.87	0.503	0.598	17	20.05	31.0	0.0186	32.0	0.00270	7.9	0.247	370.73	7.9	0.0499	31.0	0.00	189	721	19	6	17.4	1.4	91

	Concentrations (ppm)																					
Analysis	P	Ti	Y	Nb	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	Th	U
Nivel-2 L 13	452	10.1	1319	3.08	4.5	22.0	1.61	10.96	9.31	1.47	32.2	10.82	130.4	48.4	209	57.1	656	71.9	6775	1.03	68	176
Nivel-2 S 68	152	16.5	1030	0.97	0.2	2.5	0.22	4.00	8.27	1.11	37.4	12.04	125.0	40.2	159	36.6	396	41.8	5693	0.23	12	27
Nivel-2 L 7	368	15.6	1052	1.74	2.5	8.4	0.92	8.12	6.67	0.52	27.9	10.25	116.7	40.1	161	38.0	435	47.7	6490	0.95	35	74
Nivel-2 S 82	231	7.8	994	5.65		12.6	0.05	1.88	5.13	0.62	30.3	9.59	110.5	37.5	152	37.5	401	40.1	7007	2.25	48	115
Nivel-2 L 22	276	3.4	2076	3.95	0.1	25.6	0.78	12.05	18.84	2.41	74.7	22.28	245.6	79.4	317	79.2	860	91.9	7762	1.69	80	123
Nivel-2 L 10	102	3.1	87	1.04		16.0		0.22	0.15	0.15	2.1	0.61	6.8	2.6	13	3.6	55	8.5	8945	0.37	118	180
Nivel-2 S 52	273	19.7	812	2.83	1.4	16.2	0.44	4.55	5.83	1.09	22.4	7.14	78.7	28.8	120	32.0	363	38.6	6324	1.47	248	339
Nivel-2 S 71	193	16.3	655	0.95		7.0	0.13	2.09	4.59	0.70	18.7	6.22	67.6	23.3	95	24.2	264	30.0	7433	0.70	76	116
Nivel-2 S 64	233	5.4	603	1.05		6.9	0.02	0.95	2.06	0.28	14.0	4.90	58.3	22.1	100	26.6	327	36.0	8311	1.01	78	204
Nivel-2 S 72	183	6.5	691	0.77	0.0	12.7	0.05	1.03	3.38	0.57	16.3	4.97	73.8	24.4	111	30.3	358	41.7	9966	0.88	153	242
Nivel-2 S 46	317	8.0	815	1.02	3.8	18.9	0.82	7.16	7.14	1.63	25.9	7.80	88.3	28.7	117	29.5	346	34.9	8313	0.61	190	207
Nivel-2 S 41	198	6.5	624	1.21		7.1	0.05	0.84	2.34	0.56	12.9	4.71	58.3	21.8	102	26.8	324	37.0	8426	0.83	74	173
Nivel-2 S 40	237	332.5	386	1.21	1.2	11.8	0.45	2.18	1.42	0.46	7.4	2.82	33.3	12.9	59	17.1	227	27.4	9534	0.84	109	230
Nivel-2 L 15	224	4.6	360	0.86	0.0	5.0	0.01	0.39	0.93	0.09	4.9	2.28	32.2	12.2	58	16.6	206	23.6	11504	0.82	43	172
Nivel-2 L 2	180	5.5	554	1.23		9.2	0.06	0.53	2.15	0.39	10.8	3.99	48.6	19.0	88	25.0	293	35.6	10109	0.86	141	275
Nivel-2 L 14	294	15.6	1093	1.91	0.0	7.9	0.09	2.55	5.11	1.04	27.5	9.04	108.9	39.9	169	44.4	511	54.5	7157	0.90	107	198
Nivel-2 S 76	207	8.8	606	3.62	0.0	31.2	0.04	1.33	2.96	0.63	13.5	4.87	58.3	21.0	95	26.3	327	35.2	8612	2.17	182	169
Nivel-2 L 11	162	9.0	1178	1.08		4.4	0.18	3.97	8.89	1.28	39.8	12.40	138.6	45.5	178	42.4	452	46.4	7842	0.49	79	148
Nivel-2 S 57	2631	15.3	747	0.60	19.2	52.7	5.91	37.74	12.21	1.68	25.0	6.98	78.3	28.1	123	32.2	397	44.3	7567	0.45	51	72
Nivel-2 S 58	1353	28.6	780	1.58	10.2	37.0	3.95	22.13	5.77	0.91	16.7	5.71	69.4	26.4	127	35.1	447	52.7	8074	0.74	130	204
Nivel-2 S 25	436	4.8	1591	3.27		36.2	0.09	2.14	5.39	0.49	29.7	10.15	138.1	56.1	256	68.6	827	91.8	8216	1.17	330	382
Nivel-2 S 84	214	4.7	690	1.00		10.9	0.02	0.76	2.29	0.54	11.9	4.35	60.3	23.1	111	31.4	412	47.1	7939	0.65	219	275
Nivel-2 L 23	417	5.1	1672	1.58	2.1	31.3	0.50	4.61	8.40	1.67	31.8	12.03	147.2	57.6	265	73.0	885	115.6	10012	1.00	324	293
Nivel-2 S 49	303	6.3	1075	3.56		14.1	0.11	1.30	3.30	1.43	20.2	6.90	95.3	37.7	180	53.2	702	85.0	8125	1.41	179	343
Nivel-2 S 66	1045	4.5	1537	4.65	6.8	27.6	1.89	10.81	6.48	1.07	27.1	10.88	137.6	54.4	242	67.5	856	95.4	8077	2.20	345	467
Nivel-2 L 12	264	9.5	1031	2.19	0.3	13.0	0.16	1.68	4.04	0.77	19.5	7.09	93.4	35.5	157	44.9	534	62.6	7994	0.92	166	242
Nivel-2 S 86	204	7.9	797	0.91		8.6	0.10	2.03	4.85	1.25	19.4	6.31	75.1	28.8	127	34.6	433	51.3	7558	0.52	76	103
Nivel-2 S 44	149	5.6	412	1.10		6.8	0.02	0.65	1.72	0.68	7.3	2.47	33.3	13.2	65	19.8	276	35.4	7788	0.52	82	168
Nivel-2 S 63	183	6.1	547	1.42		9.2	0.05	0.87	2.17	0.92	10.1	3.88	43.3	17.2	86	23.3	327	39.1	7518	0.51	118	218
Nivel-2 L 20	394	3.8	2424	4.35	0.7	41.9	0.38	5.05	10.74	2.43	55.1	19.13	232.1	87.5	379	100.0	1181	138.3	9328	2.07	488	411
Nivel-2 S 70	948	3.6	6103	23.44	16.0	83.7	8.53	57.37	33.20	4.92	153.3	55.82	675.1	234.5	942	222.0	2291	232.7	6746	3.63	320	532
Nivel-2 S 73	274	6.8	1133	1.06	0.4	6.3	0.23	2.29	4.31	1.12	21.1	8.15	104.8	40.3	183	48.6	585	68.4	7340	0.43	43	78
Nivel-2 S 81	1321	9.1	820	0.81	7.2	18.7	1.71	8.51	3.52	0.84	15.2	5.23	70.6	27.2	132	37.1	472	57.6	7764	0.65	76	135
Nivel-2 S 54	344	7.0	1272	2.03	0.2	18.9	0.10	1.70	4.54	2.05	20.8	7.74	104.1	42.7	202	62.7	856	104.2	7624	0.71	242	294
Nivel-2 S 83	409	4.7	1492	1.91	0.1	20.1	0.11	1.76	4.58	1.47	26.8	10.27	131.0	52.6	257	75.6	967	119.3	9092	1.01	405	552
Nivel-2 S 29	184	3.8	532	0.84		6.5	0.02	0.34	1.70	0.26	8.5	3.86	45.8	18.3	91	26.0	343	39.5	8280	0.71	58	94
Nivel-2 L 5	272	8.2	1350	2.27		9.8	0.02	0.88	3.14	1.36	20.1	8.34	114.3	46.8	220	63.3	818	104.9	7061	0.81	142	187
Nivel-2 S 39	292	8.1	2068	1.06	0.0	12.5	0.39	7.05	14.63	4.33	55.9	17.29	201.4	72.1	307	80.5	976	107.3	6235	0.46	256	257
Nivel-2 S 74	556	3.7	2151	7.04	0.1	36.6	0.10	2.21	7.52	1.47	41.7	14.75	193.2	75.1	335	95.6	1171	126.5	8954	2.75	358	488
Nivel-2 S 27	278	10.6	1542	2.06	0.1	8.8	0.10	2.46	6.66	1.35	34.7	13.62	157.6	57.0	251	65.8	768	79.7	6809	0.52	60	89
Nivel-2 S 79	2205	4.5	5588	19.55	#####	#####	#####	#####	#####	0.66	186.4	45.26	541.1	213.0	884	243.8	2803	299.8	11707	8.90	1674	1869
Nivel-2 S 53	296	6.7	1704	1.02	0.2	9.4	0.20	2.65	6.29	1.22	33.1	12.29	153.9	61.6	283	76.7	872	107.6	6704	0.50	140	180
Nivel-2 S 51	316	7.4	1054	1.41	0.1	10.9	0.07	1.09	3.35	0.47	20.4	7.76	100.8	39.2	178	47.8	553	57.7	8308	0.61	129	194
Nivel-2 S 78	368	2.5	1156	2.38		12.5		0.73	2.61	0.56	17.5	6.80	90.8	36.7	189	56.9	728	83.4	8938	1.30	174	369
Nivel-2 S 67	1161	1.2	4550	17.32		24.4	0.08	1.40	8.25	0.08	74.8	30.80	425.7	167.0	740	192.5	2235	234.6	10919	7.78	1018	1677
Nivel-2 S 85	302	3.0	996	2.38	0.1	15.5	0.07	1.14	1.83	0.48	14.3	5.76	81.3	33.7	163	49.4	630	77.5	8846	1.31	188	341
Nivel-2 S 43	299	3.7	633	1.77	2.1	15.8	0.52	3.16	2.53	0.60	10.5	3.76	50.7	21.9	105	32.8	448	55.0	9321	1.01	181	276
Nivel-2 L 18	285	5.6	960	2.10	0.4	17.1	0.13	1.33	2.99	0.65	16.0	6.09	80.6	31.7	153	43.7	556	66.6	9089	1.17	256	306
Nivel-2 S 34	202	2.8	979	3.03		21.1	0.01	0.82	3.00	0.71	14.6	5.69	80.6	32.9	163	50.0	663	80.5	9807	1.49	404	560
Nivel-2 S 28	340	9.0	2811	2.22	0.1	11.4	0.23	4.31	12.99	3.19	63.2	23.21	303.2	107.3	458	118.4	1315	130.8	6895	0.68	57	91
Nivel-2 S 77	281	5.5	785	1.33	0.2	13.2	0.07	1.95	2.33	0.63	12.1	5.17	68.0	27.4	126	37.2	485	58.3	8023	0.81	149	217
Nivel-2 S 48	1193	3.3	3900	18.43	5.5	32.7	0.92	8.75	10.35	0.27	60.9	26.51	349.9	139.0	632	173.6	1968	218.6	10746	7.04	489	1253
Nivel-2 S 62	297	4.4	1595	4.45	0.1	35.3	0.05	1.24	5.21	1.39	31.9	11.70	143.4	57.6	268	82.2	1044	120.4	9074	2.07	956	925
Nivel-2 S 61	1925	2.4	1366	3.29	25.9	66.1	9.04	48.57	17.04	0.68	35.5	11.60	137.1	52.4	216	56.0	646	67.5	7562	1.45	222	402
Nivel-2 S 45	1108	7.6	4678	2.06	5.2	28.5	1.97	18.13	26.44	6.23	125.7	42.65	506.5	176.5	748	183.8	2103	223.3	6273	0.59	195	210
Nivel-2 S 32	4690	9.1	3813	4.93	39.7	108.4	10.02	50.16	23.41	2.44	81.3	28.98	357.4	135.0	584	153.3	1808	200.2	6217	1.82	885	747
Nivel-2 L 21	378	6.0	2041	3.20	0.1	24.6	0.23	3.18	6.03	2.36	33.9	12.69	166.4	68.2	331	94.5	1200	152.8	9036	1.19	685	585
Nivel-2 S 42	492	2.7	1643	3.73	0.8	18.8	0.21	1.68	5.00	0.31	25.3	10.79	139.2	57.5	275	77.8	930	105.9	8497	1.95	305	494
Nivel-2 S 56	284	4.0	744	1.90	1.5	14.9	0.36	2.05	2.14	0.29	10.5	4.58	60.3	24.8	124	37.6	499	58.1	8951	1.32	171	270
Nivel-2 S 59	238	15.3	629	0.96		6.2	0.03	0.71	2.02	0.77	12.1	4.48	54.1	21.9	94	26.0	316	36.3	7791	0.37	37	57
Nivel-2 S 55	1032	6.3	7469	11.10	0.1	118.2	1.16	23.21	45.78	11.72	189.4	62.71	723.7	255.2	1072	282.3	3548	360.8	6534	2.60	1521	1033
Nivel-2 S 30	440	3.5	3570	3.51	0.0	47.6	0.51	9.30	20.71	7.60	86.6	28.38	328.2	120.1	536	150.8	1874	218.1	7225	1.46	686	551
Nivel-2 L 4	243	4.3	662	0.97	0.0	12.8	0.03	0.73	1.90	0.73	9.5	3.97	53.6	22.3	112	32.5	422	54.5	9413	0.77	133	199
Nivel-2 S 75	317	6.1	1644	2.78	0.3	23.5	0.18	2.73	6.96	0.83	33.5	12.53	153.8	56.7	246	66.4	773	85.3	6690	1.23	501	321
Nivel-2 S 35	922	9.1	7700	4.89	0.1	62.9	1.88	34.00	65.19	17.20	250.8	77.32	854.3	284.6	1145	283.0	3196	325.1	6516	1.07	928	679
Nivel-2 S 80	246	3.9	769	2.45		16.0	0.03	0.44	1.68	0.39	13.4	4.75	67.5	26.7	127	38.8	507	57.7	8482	1.20	228	345
Nivel-2 L 19	736	6.6	2880	7.12	0.3	27.1	0.19	3.69	8.80	0.39	49.1	19.42	249.0	100.2	456	119.2	1431	169.8	9690	3.67	1443	1042
Nivel-2 L 1	1297	1.3	5702	14.95	0.2	23.0	0.16	2.66	10.73	0.07	85.5	36.71	503.4	202.0	919	232.9	2603	315.4	13041	6.84	725	1378
Nivel-2 L 3	707	1.3	2072	4.80	4.4	27.2	1.54	9.81	6.81	0.40	35.5	13.85	192.4	75.0	331	85.7	991	111.6	10391	2.49	483	542
Nivel-2 L 16	472	4.0	1365	1.80	0.0	8.7	0.03	0.83	3.92	0.25	21.4	8.12	109.3	46.5	218	62.1	769	92.4	8529	1.10	133	242
Nivel-2 S 69	378	2.8	1971	3.96		21.3	0.13	1.54	5.66	0.60	35.6	14.13	175.0	70.9	308	78.8	897	102.0	8439	1.71	526	498
Nivel-2 S 37	140	1.5	459	0.86	0.1	7.6	0.12	1.03	1.48	0.30	8.9	2.85	39.8	16.0	76	22.6	292	35.3	9079	0.62	96	162
Nivel-2 S 26	278	6.0	1743	0.96	0.1	7.2	0.23	4.59	9.12	3.90	40.7	14.01	165.9	60.8	285	79.5	1038	116.7	6461	0.44	131	180
Nivel-2 L 9	357	7.1	999	3.87	0.9	14.6	0.17	1.72	3.17	1.43	16.6	6.32	84.0	32.3	165	47.6	629	83.7	8117	1.39	81	135

Notes:
Isotope ratios and ages are NOT corrected for initial common Pb.
Isotope ratio and apparent age errors do not include systematic calibration errors of 0.68% (207Pb/206Pb) and 2.66% (206Pb/238U) (2 sigma).
Trace element concentrations in ppm, calculated using mean count rate method.
Ablation used a laser spot size of 30 microns, and a laser firing repetition rate of 10 Hz.

Zircon sampling, Tuff Level-2, Aisol Formation