

**Item DR 3: SIMS U-Pb spot analyses**

**Table DR3.** SIMS U-Pb spot analyses - Clast-poor impact melt.

Sample/ spot no. <sup>1</sup>	U [ppm]	Pb [ppm]	Th/U meas- ured	$f^{206}\text{Pb}^2$ [%]	Ratios <sup>3</sup>										Discord- ance [%]			
					$^{206}\text{Pb}/^{238}\text{U}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{206}\text{Pb}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{235}\text{U}$ $\pm\sigma$ [%]	Error cor- relation	$^{206}\text{Pb}/^{238}\text{U}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{206}\text{Pb}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{235}\text{U}$ $\pm\sigma$ [%]	Age [Ma] <sup>3</sup>	$^{207}\text{Pb}/^{206}\text{Pb}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{235}\text{U}$ $\pm\sigma$ [%]				
n6007_01	4225.48	119.41	0.74	5.85	0.022623	3.593535	0.06432	8.64305	0.20063	9.36034	0.38391	144.2	5.1	752.1	183.3	185.7	16.0	80.8
n6007_02	958.17	262.07	0.78	1.51	0.210525	4.849679	0.10511	2.47986	3.05111	5.44693	0.89035	1231.6	54.6	1716.3	45.6	1420.5	42.5	28.2
n6007_03	306.70	18.85	0.50	2.00	0.049122	4.386308	0.09043	3.17260	0.61249	5.41342	0.81027	309.1	13.3	1434.7	60.5	485.1	21.1	78.5
n6007_03a	456.34	28.16	0.66	0.87	0.047968	1.388083	0.08994	1.71769	0.59483	2.20844	0.62853	302.0	4.1	1424.2	32.8	474.0	8.4	78.8
n6007_03b	451.01	13.45	0.40	2.14	0.024816	2.069855	0.07242	3.87098	0.24778	4.38962	0.47153	158.0	3.2	997.6	78.7	224.8	8.9	84.2
n6007_04	3757.12	92.06	0.49	2.54	0.020516	2.677001	0.05606	4.91200	0.15858	5.59411	0.47854	130.9	3.5	454.8	109.2	149.5	7.8	71.2
n6007_05	4159.28	123.57	0.49	1.68	0.024790	4.904623	0.06059	3.79554	0.20709	6.20173	0.79085	157.9	7.7	624.6	81.9	191.1	10.9	74.7
n6007_06	603.36	30.46	3.06	4.21	0.029208	3.448778	0.08141	4.06849	0.32784	5.33355	0.64662	185.6	6.3	1231.3	79.9	287.9	13.5	84.9
n6007_06a	326.50	30.68	5.82	6.14	0.049671	1.523916	0.08176	4.81373	0.55995	5.04919	0.30181	312.5	4.7	1239.8	94.5	451.5	18.6	74.8
n6007_07	2247.74	46.67	0.28	0.81	0.018448	1.530912	0.04859	2.34218	0.12359	2.79812	0.54712	117.8	1.8	128.1	55.1	118.3	3.1	8.0
n6007_07a	2962.63	67.45	0.60	2.03	0.018460	1.134658	0.05021	2.73044	0.12779	2.95681	0.38374	117.9	1.3	204.6	63.4	122.1	3.4	42.4
n6007_07b	2428.46	53.66	0.42	2.44	0.018913	1.243054	0.04749	3.25113	0.12383	3.48067	0.35713	120.8	1.5	73.7	77.3	118.5	3.9	-63.9
n6007_07c	2001.26	48.80	0.54	2.08	0.020011	1.417812	0.05548	2.82409	0.15307	3.16001	0.44867	127.7	1.8	431.5	63.0	144.6	4.3	70.4
n6007_09	1759.09	258.31	0.71	0.60	0.114577	4.994109	0.08017	2.59396	1.26653	5.62759	0.88743	699.3	33.2	1201.2	51.1	830.8	32.4	41.8
n6007_10	2279.30	85.15	0.63	1.31	0.030093	6.630326	0.06653	3.80873	0.27605	7.64641	0.86712	191.1	12.5	823.1	79.6	247.5	16.9	76.8
n6007_11	186.35	74.92	0.65	{0.01}	0.308175	2.621961	0.11026	1.14083	4.68520	2.85940	0.91696	1731.7	39.9	1803.7	20.7	1764.6	24.2	4.0
n6007_12	1491.16	44.69	0.78	30.43	0.023699	3.585844	0.05926	51.04965	0.19364	51.17543	0.07007	151.0	5.4	576.6	1339.3	179.7	88.0	73.8
n6007_13	290.00	15.40	0.55	1.08	0.041679	2.277660	0.08523	2.11437	0.48982	3.10778	0.73289	263.2	5.9	1320.9	41.0	404.8	10.4	80.1
n6007_14	1917.71	70.45	0.82	1.03	0.028473	2.656344	0.06260	2.76155	0.24574	3.83175	0.69325	181.0	4.7	694.5	58.9	223.1	7.7	73.9
n6007_15	352.91	11.52	0.57	19.12	0.028834	2.208511	0.05987	40.35464	0.23801	40.41503	0.05465	183.2	4.0	598.7	973.2	216.8	82.1	69.4
n6007_16	1023.86	313.44	0.53	0.04	0.245712	2.356958	0.09033	0.83415	3.06015	2.50021	0.94270	1416.3	30.0	1432.4	15.9	1422.8	19.3	1.1
n6007_17	1161.50	210.99	0.33	1.16	0.149068	3.095336	0.10135	2.28540	2.08303	3.84761	0.80448	895.7	25.9	1648.9	42.4	1143.2	26.7	45.7
n6007_18	773.63	39.56	0.57	1.41	0.041115	3.403079	0.08274	3.60649	0.46907	4.95860	0.68630	259.7	8.7	1263.2	70.5	390.5	16.2	79.4
n6007_19	1107.65	32.57	0.58	2.66	0.023388	4.848491	0.06867	4.93130	0.22144	6.91560	0.70109	149.0	7.1	888.8	102.0	203.1	12.8	83.2
n6007_19a	1663.94	61.60	0.19	2.99	0.031773	3.306634	0.07587	4.90312	0.33239	5.91391	0.55913	201.6	6.6	1091.8	98.3	291.4	15.1	81.5

Table DR3 (continued). SIMS U-Pb spot analyses - Clast-poor impact melt.

Sample/ spot no. <sup>1</sup>	U [ppm]	Pb [ppm]	Th/U measured	f <sup>206</sup> Pb <sup>2</sup> [%]	Ratios <sup>3</sup>										Discordance [%]		
					<sup>206</sup> Pb/ <sup>238</sup> U ±σ [%]	<sup>207</sup> Pb/ <sup>235</sup> U ±σ [%]	<sup>207</sup> Pb/ <sup>206</sup> Pb ±σ [%]	Error con- relation	<sup>206</sup> Pb/ <sup>238</sup> U ±σ [%]	<sup>207</sup> Pb/ <sup>206</sup> Pb ±σ [%]	Age [Ma] <sup>1</sup>	<sup>207</sup> Pb/ <sup>206</sup> Pb ±σ [%]	Discordance [%]				
n6007_20	510.53	78.37	0.48	0.70	0.119544	5.336821	0.10630	0.73179	1.75204	5.38676	0.99073	727.9	1736.8	13.4	1027.9	35.4	58.1
n6007_21	5021.34	107.98	0.12	0.73	0.019722	1.360505	0.04987	1.23025	0.13560	1.83425	0.74172	125.9	188.7	28.6	129.1	2.2	33.3
n6007_22	365.33	168.89	1.96	0.08	0.258824	2.193139	0.10736	0.53288	3.83142	2.25695	0.97173	1483.8	1755.1	9.7	1599.4	18.3	15.5
n6007_23	319.37	48.14	0.43	1.03	0.123698	3.133662	0.10247	1.50899	1.74767	3.47806	0.90098	751.8	1669.3	27.9	1026.3	22.7	55.0
n6007_24	1410.65	133.83	0.46	0.49	0.076430	6.196978	0.08284	1.36623	0.87300	6.34580	0.97655	474.8	1265.5	26.7	637.2	30.5	62.5
n6007_25	468.28	126.26	0.48	0.27	0.219325	1.631977	0.09047	0.55483	2.73578	1.72371	0.94678	1278.3	1435.4	10.6	1338.2	12.9	10.9
n6007_26	1541.14	138.84	2.02	2.01	0.055750	4.056599	0.08550	1.97462	0.65721	4.51167	0.89914	349.7	1326.9	38.2	512.9	18.3	73.6
n6007_27	2819.65	185.99	0.67	1.18	0.051874	16.681582	0.08136	3.78345	0.58192	17.10525	0.97523	326.0	1230.2	74.3	465.7	66.0	73.5
n6007_28	402.28	70.60	0.68	0.25	0.135340	7.849171	0.10059	1.00653	1.87715	7.91344	0.99188	818.3	1635.1	18.7	1073.1	53.8	50.0
n6007_29	418.75	134.49	0.77	0.22	0.246856	1.847317	0.10698	0.45117	3.64139	1.90161	0.97145	1422.2	1748.7	8.3	1558.6	15.3	18.7
n6007_30	750.77	26.55	0.71	1.95	0.026159	2.252334	0.07510	2.55736	0.27088	3.40780	0.66094	166.5	1071.3	51.4	243.4	7.4	84.5
n6007_31	547.18	57.06	0.48	0.56	0.083510	2.721392	0.10034	1.11815	1.15533	2.94215	0.92497	517.0	1630.4	20.8	779.8	16.1	68.3
n6007_32	614.90	172.28	1.23	0.13	0.221319	3.974256	0.10591	0.45693	3.23188	4.00044	0.99346	1288.8	1730.2	8.4	1464.8	31.5	25.5
n6007_33	746.89	24.50	0.64	1.22	0.026141	3.196030	0.07084	1.99250	0.25533	3.76625	0.84860	166.4	952.8	40.8	230.9	7.8	82.5
n6007_34	1010.55	199.48	0.50	0.03	0.160895	7.063208	0.08928	0.87065	1.98053	7.11667	0.99249	961.7	1410.1	16.7	1108.9	49.2	31.8
n6007_35	2852.10	117.53	1.99	2.47	0.025148	2.507344	0.05576	4.73818	0.19334	5.36070	0.46773	160.1	442.9	105.5	179.5	8.9	63.8
n6007_36	1838.70	138.99	0.30	1.99	0.065415	4.479506	0.08637	2.41008	0.77905	5.08670	0.88063	408.5	1346.6	46.5	584.9	22.9	69.7
n6007_37	1955.14	98.43	1.84	3.76	0.032289	3.764961	0.07625	8.31562	0.33948	9.12823	0.41245	204.9	1101.8	166.9	296.8	23.8	81.4
n6007_38	534.27	188.08	0.59	0.05	0.275552	3.254191	0.10761	0.36849	4.08860	3.27499	0.99365	1568.9	1759.4	6.7	1652.0	27.1	10.8
n6007_39	2461.31	67.20	0.91	1.13	0.020476	1.976843	0.05384	2.31245	0.15199	3.04226	0.64980	130.7	364.2	52.2	143.7	4.1	64.1
n6007_39a	3294.29	92.48	1.14	2.60	0.019927	1.068128	0.05235	3.88538	0.14384	4.02953	0.26508	127.2	300.9	88.7	136.5	5.2	57.7
n6007_40	854.51	161.24	0.61	0.23	0.150028	6.104126	0.10287	0.80048	2.12791	6.15639	0.99151	901.1	1676.5	14.8	1157.9	43.4	46.3
n6007_41	425.37	9.52	0.55	12.84	0.017553	2.036359	0.06503	19.00682	0.15738	19.11560	0.10653	112.2	775.2	408.3	148.4	26.7	85.5
n6007_41a	233.85	9.85	0.60	5.60	0.033433	1.543830	0.07783	8.09492	0.35879	8.24082	0.18734	212.0	1142.6	161.5	311.3	22.3	85.5
n6007_41b	337.82	11.60	0.45	12.27	0.027697	1.629307	0.08142	11.92940	0.31094	12.04015	0.13532	176.1	1231.6	235.9	274.9	29.4	81.4

Table DR3 (continued). SIMS U-Pb spot analyses - Clast-poor impact melt.

Sample/ spot no. <sup>1</sup>	U [ppm]	Pb [ppm]	Th/U meas- ured	$f^{206}\text{Pb}^2$ [%]	Ratios <sup>3</sup>										Discord- ance [%]			
					$^{206}\text{Pb}/^{238}\text{U}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{206}\text{Pb}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{235}\text{U}$ $\pm\sigma$ [%]	Error cor- relation	$^{206}\text{Pb}/^{238}\text{U}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{206}\text{Pb}$ $\pm\sigma$ [%]	Age [Ma] <sup>3</sup>	$^{207}\text{Pb}/^{235}\text{U}$ $\pm\sigma$ [%]	Discord- ance [%]					
n6007_42	5990.86	175.74	1.06	1.74	0.021642	3.012367	0.05221	1.82827	0.15580	3.52377	0.85487	138.0	4.1	294.7	41.7	147.0	4.8	53.2
n6007_43	1316.48	144.86	0.74	0.15	0.086470	9.373799	0.08426	2.40552	1.00463	9.67753	0.96861	534.6	48.3	1298.6	46.8	706.2	50.5	58.8
n6007_44	235.90	11.72	0.65	8.00	0.039584	1.711146	0.09053	14.17757	0.49407	14.28046	0.11982	250.3	4.2	1436.6	273.2	407.7	49.1	82.6
n6007_45	513.41	14.02	0.33	9.14	0.022842	2.274646	0.06534	12.55804	0.20580	12.76239	0.17823	145.6	3.3	785.5	266.1	190.0	22.4	81.5
n6007_45a	485.83	13.80	0.33	9.50	0.023937	1.264029	0.07216	8.66573	0.23817	8.75743	0.14434	152.5	1.9	990.5	177.0	216.9	17.3	84.6
n6007_45b	946.88	21.11	0.21	9.92	0.020118	1.300321	0.05430	11.87598	0.15061	11.94695	0.10884	128.4	1.7	383.4	269.2	142.5	16.0	66.5
n6007_46	161.74	59.18	0.47	0.07	0.292716	1.892212	0.10873	0.72097	4.38845	2.02491	0.93447	1655.1	27.7	1778.3	13.2	1710.2	16.9	6.9
n6007_47	2408.98	111.68	0.10	0.84	0.041505	4.771195	0.07695	4.13850	0.44037	6.31597	0.75542	262.2	12.3	1119.9	82.6	370.5	19.8	76.6
n6007_48	3594.16	98.91	0.35	3.97	0.023899	2.334877	0.06225	5.70015	0.20513	6.15982	0.37905	152.3	3.5	682.8	122.0	189.5	10.7	77.7
n6007_49	7103.58	142.86	0.91	17.52	0.015334	1.405678	0.05918	33.44862	0.12512	33.47814	0.04199	98.1	1.4	573.8	781.3	119.7	38.5	82.9
n6007_50	1683.44	140.63	0.69	1.26	0.066264	13.923515	0.08927	3.55080	0.81565	14.36915	0.96899	413.6	56.0	1410.0	68.0	605.6	67.8	70.7
n6007_51	671.68	27.63	0.34	6.05	0.033573	2.444181	0.07064	10.10833	0.32698	10.39963	0.23503	212.9	5.1	946.9	208.1	287.3	26.4	77.5
n6007_51a	715.43	31.52	0.57	7.34	0.034196	1.897517	0.07888	6.03823	0.37189	6.32936	0.29980	216.8	4.0	1169.0	119.8	321.1	17.6	81.5
n6007_51b	523.29	25.58	0.57	1.99	0.038012	1.284502	0.08364	2.60234	0.43839	2.90209	0.44261	240.5	3.0	1284.3	50.7	369.1	9.0	81.3

<sup>1</sup>n6007 is the lab ID corresponding to the clast-poor impact melt sample.

<sup>2</sup>Percentage of common  $^{206}\text{Pb}$  in measured  $^{206}\text{Pb}$ , calculated from the  $^{206}\text{Pb}$  signal assuming present-day Stacey and Kramers (1975) model terrestrial Pb-isotope composition.

<sup>3</sup>Values corrected for common Pb where  $^{204}\text{Pb}$  exceeds the detection limit.

Table DR3 (continued). SIMS U-Pb spot analyses - Clast-rich impact melt.

Sample/ spot no. <sup>1</sup>	U [ppm]	Pb [ppm]	Th/U measured	$f^{206}\text{Pb}^2$ [%]	Ratios <sup>3</sup>										Discordance [%]			
					$^{206}\text{Pb}/^{238}\text{U}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{206}\text{Pb}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{235}\text{U}$ $\pm\sigma$ [%]	Error correlation	$^{206}\text{Pb}/^{238}\text{U}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{206}\text{Pb}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{238}\text{U}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{235}\text{U}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{206}\text{Pb}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{238}\text{U}$ $\pm\sigma$ [%]				
n6008_02	1404.75	159.73	0.77	0.47	0.09014	12.28338	0.08399	1.22097	1.04392	12.34391	0.99510	556.4	65.8	1292.3	23.8	725.9	66.1	56.9
n6008_03	1315.47	45.29	1.16	1.89	0.02439	4.40175	0.06424	3.15078	0.21604	5.41321	0.81315	155.3	6.8	749.7	66.6	198.6	9.8	79.3
n6008_04	1995.69	107.42	0.02	6.54	0.04721	6.91390	0.07844	4.86689	0.51059	8.45509	0.81772	297.4	20.1	1158.1	96.7	418.8	29.4	74.3
n6008_05	1559.59	94.20	1.26	3.40	0.04202	1.78358	0.07853	8.51752	0.45496	8.70226	0.20496	265.3	4.6	1160.2	169.5	380.7	28.0	77.1
n6008_06	1430.71	35.65	0.70	0.93	0.01942	1.55564	0.05158	2.81216	0.13811	3.21376	0.48406	124.0	1.9	266.8	64.6	131.4	4.0	53.5
n6008_06a	1381.97	33.23	0.69	2.81	0.01907	1.37034	0.04949	7.09763	0.13015	7.22871	0.18957	121.8	1.7	170.9	166.2	124.2	8.5	28.7
n6008_06b	1230.30	30.76	0.58	1.56	0.01994	1.26017	0.05825	4.71357	0.16013	4.87912	0.25828	127.3	1.6	539.1	103.2	150.8	6.9	76.4
n6008_07	617.94	177.70	0.62	0.37	0.22655	2.79486	0.10367	1.30048	3.23822	3.08261	0.90665	1316.4	33.4	1690.8	24.0	1466.4	24.2	22.1
n6008_08	403.78	18.00	0.68	0.55	0.03473	6.03027	0.08124	1.73781	0.38900	6.27568	0.96090	220.1	13.1	1227.3	34.1	333.6	18.0	82.1
n6008_08a	469.17	28.89	0.60	0.38	0.04914	1.56522	0.08441	1.48449	0.57187	2.15722	0.72557	309.2	4.7	1301.9	28.8	459.2	8.0	76.2
n6008_09	1294.55	197.33	0.52	0.10	0.12533	3.41343	0.08678	1.49277	1.49962	3.72557	0.91622	761.2	24.6	1355.7	28.8	930.2	23.0	43.9
n6008_10	1647.61	140.22	0.66	0.22	0.06741	3.71527	0.09183	0.50492	0.85355	3.74943	0.99089	420.5	15.1	1463.9	9.6	626.6	17.7	71.3
n6008_11	174.89	57.16	0.75	0.31	0.25188	2.97293	0.10781	1.05843	3.74413	3.15573	0.94208	1448.2	38.7	1762.7	19.3	1580.9	25.6	17.8
n6008_12	723.88	111.49	0.69	0.61	0.11714	9.20932	0.09741	1.33642	1.57322	9.30578	0.98963	714.1	62.6	1575.1	25.0	959.7	59.5	54.7
n6008_13	1158.82	31.63	0.09	1.78	0.02516	1.66678	0.06369	2.90888	0.22096	3.35257	0.49716	160.2	2.6	731.4	61.7	202.7	6.2	78.1
n6008_14	1320.32	31.53	0.57	3.33	0.01935	1.58169	0.05284	8.92521	0.14099	9.06428	0.17450	123.5	1.9	322.1	203.8	133.9	11.4	61.6
n6008_14a	1839.85	47.53	0.95	2.54	0.01918	1.24122	0.04882	9.14796	0.12912	9.23178	0.13445	122.5	1.5	139.1	216.0	123.3	10.8	12.0
n6008_14b	2170.69	52.73	0.83	1.47	0.01850	1.14046	0.05085	4.61000	0.12971	4.74897	0.24015	118.2	1.3	234.0	106.5	123.8	5.6	49.5
n6008_15	257.22	82.44	0.52	0.12	0.25501	1.62019	0.10677	0.50973	3.75427	1.69848	0.95390	1464.3	21.3	1745.1	9.3	1583.0	13.7	16.1
n6008_16	317.35	89.93	1.08	0.18	0.21580	2.02683	0.10604	0.83298	3.15512	2.19132	0.92493	1259.6	23.2	1732.4	15.3	1446.3	17.0	27.3
n6008_17	1105.96	42.42	0.92	4.67	0.02864	3.43779	0.07282	9.55331	0.28759	10.15303	0.33860	182.1	6.2	1009.0	194.7	256.7	23.3	82.0
n6008_17a	1454.09	37.38	1.08	10.04	0.01867	1.26284	0.04519	11.97707	0.11631	12.04347	0.10486	119.2	1.5	-45.6	294.1	111.7	12.8	361.2
n6008_17b	641.20	37.16	0.75	3.67	0.04361	2.14163	0.08863	4.52512	0.53291	5.00633	0.42778	275.2	5.8	1396.1	86.9	433.7	17.8	80.3
n6008_18	358.70	15.85	0.76	2.41	0.03467	5.32668	0.07714	4.50415	0.36877	6.97573	0.76360	219.7	11.5	1124.8	89.9	318.7	19.3	80.5
n6008_19	739.56	15.48	0.75	12.29	0.01649	2.40859	0.04559	20.77984	0.10364	20.91897	0.11514	105.4	2.5	-24.0	518.4	100.1	20.1	539.9

Table DR3 (continued). SIMS U-Pb spot analyses - Clast-rich impact melt.

Sample/ spot no.¹	U [ppm]	Pb [ppm]	Th/U meas- ured	f <sup>206</sup> Pb² [%]	Ratios³										Discord- ance [%]			
					<sup>206</sup> Pb/ <sup>238</sup> U	±σ [%]	<sup>207</sup> Pb/ <sup>206</sup> Pb	±σ [%]	<sup>207</sup> Pb/ <sup>238</sup> U	±σ [%]	Error cor- relation	<sup>206</sup> Pb/ <sup>238</sup> U	±σ [%]	<sup>207</sup> Pb/ <sup>206</sup> Pb		±σ [%]	<sup>207</sup> Pb/ <sup>238</sup> U	±σ [%]
n6008_19a	760.33	17.35	0.76	16.91	0.01750	1.25842	17.88893	0.05703	0.13757	17.93313	0.07017	111.8	1.4	492.6	402.3	130.9	22.3	77.3
n6008_19b	540.70	11.58	0.68	19.84	0.01708	1.79388	23.61188	0.04346	0.10234	23.67993	0.07576	109.2	1.9	-141.0	608.7	98.9	22.6	177.4
n6008_20	878.44	22.91	0.34	5.29	0.02195	2.20571	8.01438	0.06181	0.18706	8.31237	0.26535	140.0	3.1	667.7	172.2	174.1	13.4	79.0
n6008_20a	855.43	24.26	0.39	17.36	0.02361	1.76885	26.86353	0.05262	0.17131	26.92170	0.06570	150.4	2.6	312.5	640.9	160.6	40.8	51.9
n6008_21	499.75	42.93	0.62	0.97	0.068142	5.184678	0.09304	0.09304	0.87420	5.49293	0.94388	425.0	21.4	1488.8	34.4	637.8	26.4	71.5
n6008_22	803.05	30.90	0.90	1.83	0.028548	5.277635	0.07223	0.07223	0.28430	8.20182	0.64347	181.5	9.4	992.4	127.9	254.1	18.6	81.7
n6008_23	618.28	108.76	1.24	0.26	0.134621	5.730670	0.10271	0.94438	1.90653	5.80796	0.98669	814.2	44.0	1673.7	17.5	1083.4	39.4	51.4
n6008_24	471.17	135.92	0.42	0.04	0.231449	7.273779	0.10519	0.44469	3.35699	7.28736	0.99814	1342.1	88.7	1717.7	8.2	1494.4	58.7	21.9
n6008_25	220.06	69.74	0.81	0.47	0.248073	2.585279	0.10806	0.10806	3.69600	2.88340	0.89661	1428.5	33.2	1766.9	23.3	1570.5	23.3	19.2
n6008_26	828.62	203.74	0.44	0.03	0.196546	1.860600	0.10570	0.34501	2.86450	1.89232	0.98324	1156.7	19.7	1726.6	6.3	1372.6	14.3	33.0
n6008_27	562.32	104.86	0.75	0.13	0.142822	5.741448	0.10373	0.52637	2.04260	5.76553	0.99582	860.6	46.4	1691.8	9.7	1129.8	40.1	49.1
n6008_28	1086.27	137.48	0.61	0.70	0.098556	7.393105	0.09941	0.09941	1.35084	7.42131	0.99620	605.9	42.9	1613.0	12.0	867.9	44.3	62.4
n6008_29	240.46	14.55	0.57	0.62	0.047571	2.214212	0.08877	2.16333	0.58224	3.09560	0.71528	299.6	6.5	1399.2	41.5	465.9	11.6	78.6
n6008_30	3116.68	151.12	0.57	1.03	0.039086	3.927282	0.06102	0.06102	0.32885	5.16561	0.76027	247.2	9.5	640.0	72.2	288.7	13.1	61.4
n6008_31	283.85	53.27	0.82	1.13	0.140490	5.147980	0.10306	0.10306	1.99626	6.41868	0.80203	847.4	41.0	1679.9	70.9	1114.2	44.4	49.6
n6008_32	1569.00	65.75	0.51	0.32	0.034118	3.089185	0.07474	0.07474	0.35158	3.36713	0.91745	216.3	6.6	1061.4	27.0	305.9	8.9	79.6
n6008_33	558.00	14.30	0.67	4.12	0.020329	1.823666	0.05407	0.05407	0.15155	11.22267	0.16250	129.7	2.3	373.9	251.2	143.3	15.1	65.3
n6008_33a	492.70	33.98	0.61	1.91	0.054965	1.417558	0.08895	0.08895	0.67413	2.51857	0.56284	344.9	4.8	1403.1	39.9	523.2	10.4	75.4
n6008_33b	471.07	11.15	0.69	12.23	0.018500	1.311556	0.04725	0.04725	0.12052	24.16533	0.05427	118.2	1.5	61.8	598.3	115.5	26.7	-91.1
n6008_34	260.61	26.88	0.66	0.38	0.081824	8.645481	0.09563	0.09563	1.07886	8.87084	0.97460	507.0	42.3	1540.5	37.4	743.1	47.9	67.1
n6008_35	543.93	93.01	0.77	0.31	0.132353	5.241691	0.10326	0.10326	1.88444	5.29550	0.98984	801.3	39.6	1683.6	13.9	1075.6	35.8	52.4
n6008_36	586.37	201.93	0.53	{0.01}	0.266136	4.501199	0.10720	0.10720	3.93381	4.54067	0.99131	1521.2	61.3	1752.4	10.9	1620.7	37.4	13.2
n6008_37	831.70	109.44	0.93	0.25	0.099345	5.039410	0.09816	0.09816	1.34463	5.13638	0.98112	610.6	29.4	1589.6	18.6	865.2	30.4	61.6
n6008_38	266.88	34.57	0.63	6.75	0.104448	4.638139	0.09859	0.09859	1.41985	12.41790	0.37350	640.4	28.3	1597.7	216.4	897.3	76.8	59.9
n6008_39	240.25	76.79	0.68	0.18	0.246593	1.739407	0.10677	0.10677	3.63007	1.88091	0.92477	1420.9	22.2	1744.9	13.1	1556.1	15.1	18.6

Table DR3 (continued). SIMS U-Pb spot analyses - Clast-rich impact melt.

Sample/ spot no. <sup>1</sup>	U [ppm]	Pb [ppm]	Th/U meas- ured	$f^{206}\text{Pb}^2$ [%]	Ratios <sup>3</sup>										Discord- ance [%]			
					$^{206}\text{Pb}/^{238}\text{U}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{235}\text{U}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{206}\text{Pb}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{238}\text{U}$ $\pm\sigma$ [%]	$^{206}\text{Pb}/^{238}\text{U}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{206}\text{Pb}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{235}\text{U}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{238}\text{U}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{206}\text{Pb}$ $\pm\sigma$ [%]	$^{207}\text{Pb}/^{235}\text{U}$ $\pm\sigma$ [%]				
n6008_40	134.29	21.61	0.71	1.89	0.126531	4.326211	0.10442	2.99382	1.82169	5.26109	0.82230	768.0	31.4	1704.1	55.1	1053.3	35.1	54.9
n6008_41	1447.87	168.20	0.15	1.33	0.102511	20.325217	0.09236	4.23368	1.30549	20.76147	0.97899	629.1	123.0	1474.9	80.4	848.1	127.0	57.3
n6008_42	4124.29	116.59	0.65	1.47	0.022793	2.457085	0.05502	3.79099	0.17290	4.51762	0.54389	145.3	3.5	412.9	84.8	161.9	6.8	64.8
n6008_43	1184.86	101.37	0.96	0.74	0.064805	5.494633	0.09224	2.91969	0.82418	6.22218	0.88307	404.8	21.6	1472.3	55.4	610.4	29.0	72.5
n6008_44	134.62	6.81	2.18	2.32	0.033426	2.207947	0.07698	4.56720	0.35477	5.07290	0.43524	212.0	4.6	1120.6	91.2	308.3	13.6	81.1
n6008_45	587.67	67.57	0.61	0.23	0.091305	2.972532	0.09797	1.02864	1.23338	3.14548	0.94502	563.2	16.1	1585.9	19.2	815.9	17.8	64.5
n6008_46	571.23	10.42	0.65	10.28	0.014619	2.951384	0.04969	31.82987	0.10015	31.96640	0.09233	93.6	2.7	180.4	795.6	96.9	30.0	48.1
n6008_47	520.29	109.33	1.00	0.20	0.157836	3.385598	0.10443	1.02079	2.27275	3.53614	0.95743	944.7	29.8	1704.4	18.8	1203.9	25.2	44.6
n6008_48	366.92	99.30	0.55	0.19	0.216306	1.904721	0.10466	0.80986	3.12133	2.06974	0.92027	1262.3	21.9	1708.3	14.9	1438.0	16.0	26.1
n6008_49	275.47	71.25	0.69	0.40	0.198764	6.929819	0.10575	1.46344	2.89815	7.08266	0.97842	1168.7	74.5	1727.4	26.9	1381.4	54.9	32.3
n6008_50	1204.91	44.99	0.94	3.25	0.027826	1.820732	0.06300	4.91454	0.24170	5.24097	0.34740	176.9	3.2	708.1	104.7	219.8	10.4	75.0
n6008_51	1257.99	81.72	0.36	0.46	0.053035	4.413921	0.08383	0.91877	0.61297	4.50853	0.97902	333.1	14.3	1288.5	17.9	485.4	17.5	74.1
n6008_52	266.90	12.18	0.81	30.54	0.038728	4.536281	0.09130	57.54351	0.48751	57.72204	0.07859	244.9	10.9	1452.8	1353.4	403.2	212.9	83.1

<sup>1</sup>n6008 is the lab ID corresponding to the clast-poor impact melt sample.<sup>2</sup>Percentage of common  $^{206}\text{Pb}$  in measured  $^{206}\text{Pb}$ , calculated from the  $^{206}\text{Pb}$  signal assuming present-day Stacey and Kramers (1975) model terrestrial Pb-isotope composition.<sup>3</sup>Values corrected for common Pb where  $^{206}\text{Pb}$  exceeds the detection limit.

Table DR3 (continued). SIMS U-Pb spot analyses - Suevitic breccia.

Sample/ spot no. <sup>1</sup>	U [ppm]	Pb [ppm]	Th/U measured	f <sup>206</sup> Pb <sup>2</sup> [%]	Ratios <sup>3</sup>										Discordance [%]			
					<sup>206</sup> Pb/ <sup>238</sup> U ±σ [%]	<sup>207</sup> Pb/ <sup>235</sup> U ±σ [%]	<sup>207</sup> Pb/ <sup>206</sup> Pb ±σ [%]	Error correlation	<sup>206</sup> Pb/ <sup>238</sup> U ±σ [%]	<sup>207</sup> Pb/ <sup>206</sup> Pb ±σ [%]	<sup>207</sup> Pb/ <sup>235</sup> U ±σ [%]	Age [Ma] <sup>1</sup>	<sup>207</sup> Pb/ <sup>206</sup> Pb ±σ [%]	<sup>207</sup> Pb/ <sup>235</sup> U ±σ [%]				
n6009_01	4419.76	236.87	0.40	5.13	0.04407	5.25834	0.06216	4.62139	0.37771	7.00053	0.75113	278.0	14.3	679.6	98.9	325.4	19.7	59.1
n6009_02	296.36	7.79	0.63	38.96	0.01858	7.12865	0.09112	51.39192	0.23343	51.88397	0.13740	118.7	8.4	1449.0	1148.0	213.0	104.9	91.8
n6009_03	4219.39	256.53	1.56	7.47	0.03974	8.80817	0.07267	9.03243	0.39815	12.61621	0.69816	251.2	21.7	1004.7	184.1	340.3	37.2	75.0
n6009_05	564.05	196.17	0.94	0.26	0.25713	4.35120	0.10474	0.62648	3.71333	4.39607	0.98979	1475.1	57.6	1709.7	11.5	1574.2	35.8	13.7
n6009_06	895.93	309.44	0.45	0.23	0.27958	3.17603	0.10680	0.61322	4.11682	3.23469	0.98187	1589.2	44.9	1745.5	11.2	1657.6	26.8	8.9
n6009_07	5022.26	234.52	0.33	7.54	0.03680	2.46239	0.08058	4.59826	0.40882	5.21606	0.47208	233.0	5.6	1211.2	90.6	348.0	15.5	80.8
n6009_08	1227.79	83.12	0.76	1.49	0.05346	2.19680	0.08893	1.59934	0.65546	2.71732	0.80844	335.7	7.2	1402.6	30.6	511.8	11.0	76.1
n6009_09	560.70	168.84	0.49	0.52	0.23803	2.51139	0.10622	0.83071	3.48606	2.64522	0.94941	1376.4	31.2	1735.5	15.2	1524.1	21.1	20.7
n6009_10	1412.39	287.93	0.58	0.5	0.16067	1.72818	0.08908	0.47458	1.97332	1.79215	0.96430	960.5	15.4	1405.8	9.1	1106.4	12.1	31.7
n6009_11	479.01	208.09	0.75	0.03	0.32682	1.79297	0.10888	0.42303	4.90616	1.84220	0.97328	1822.9	28.5	1780.7	7.7	1803.3	15.7	-2.4
n6009_13	1536.67	410.91	0.23	0.58	0.22989	3.26707	0.10047	0.45854	3.18454	3.29909	0.99029	1333.9	39.5	1632.8	8.5	1453.4	25.8	18.3
n6009_14	396.85	131.28	0.58	0.14	0.26073	1.90457	0.10692	0.45993	3.84385	1.95931	0.97206	1493.6	25.4	1747.6	8.4	1602.0	15.9	14.5
n6009_15	177.26	70.97	0.80	0.15	0.29899	2.39188	0.10884	0.85972	4.48708	2.54169	0.94106	1686.3	35.6	1780.1	15.7	1728.6	21.3	5.3
n6009_16	303.83	50.92	0.72	0.14	0.12619	2.54169	0.10182	0.74800	1.77160	2.64947	0.95932	766.1	18.4	1657.6	13.9	1035.1	17.3	53.8
n6009_17	852.31	307.38	0.71	0.25	0.27464	2.98455	0.10607	0.54309	4.01655	3.03356	0.98384	1564.3	41.6	1732.9	10.0	1637.6	25.0	9.7
n6009_18	565.38	202.25	0.18	0.07	0.30850	1.88137	0.10794	0.31806	4.59146	1.90806	0.98601	1733.3	28.7	1765.0	5.8	1747.7	16.0	1.8
n6009_19	339.88	152.41	0.88	0.09	0.32673	1.51958	0.10912	0.63733	4.91577	1.64782	0.92218	1822.5	24.2	1784.8	11.6	1805.0	14.0	-2.1
n6009_20	630.51	280.88	0.89	0.04	0.32500	1.44840	0.10838	0.28366	4.85654	1.47591	0.98136	1814.1	22.9	1772.4	5.2	1794.7	12.5	-2.4

<sup>1</sup>n6009 is the lab ID corresponding to the clast-poor impact melt sample.

<sup>2</sup>Percentage of common <sup>206</sup>Pb in measured <sup>206</sup>Pb, calculated from the <sup>204</sup>Pb signal assuming present-day Stacey and Kramers (1975) model terrestrial Pb-isotope composition.

<sup>3</sup>Values corrected for common Pb where <sup>204</sup>Pb exceeds the detection limit.