GSA DATA REPOSITORY ITEM

TABLE 2. SHRIMP U-Th-Pb ANALYSES OF TITANITE. ALL UNCERTAINTIES ARE QUOTED AT 1 SIGMA LEVEL

	Th/U	Common Pb (%)	Uncorrected $^{207}Pb/^{206}Pb$	Uncorrected $^{238}U/^{206}Pb$	$^{206}Pb/^{238}U$	Age $^{206}Pb/^{238}U$ (Ma)
UHP sample						
DM-1.1	1.72	40	0.4081 ± 158	108.33 ± 4.33	0.00552 ± 27	35.5 ± 1.8
DM-2.2	1.96	35	0.3614 ± 113	122.66 ± 3.68	0.00530 ± 19	34.1 ± 1.2
DM-3.1	1.59	23	0.2545 ± 95	139.52 ± 3.93	0.00551 ± 17	35.4 ± 1.1
DM-5.3	2.18	35	0.3626 ± 87	120.19 ± 3.83	0.00537 ± 19	34.5 ± 1.2
DM-6.1	1.56	23	0.2575 ± 103	136.96 ± 4.44	0.00559 ± 20	35.9 ± 1.3
DM-7.1	1.99	20	0.2293 ± 115	147.94 ± 4.38	0.00539 ± 18	34.6 ± 1.2
DM-8.1	1.70	33	0.3408 ± 101	120.68 ± 3.87	0.00558 ± 20	35.9 ± 1.3
DM-8.2	1.80	28	0.3010 ± 152	132.49 ± 4.30	0.00541 ± 22	34.8 ± 1.4
DM-10.1	1.67	27	0.2937 ± 137	124.54 ± 5.66	0.00582 ± 29	37.4 ± 1.9
DM-11.1	1.95	38	0.3917 ± 128	116.42 ± 3.46	0.00529 ± 20	34.0 ± 1.3
Inherited cores						
DM-12.1	2.11	39	0.4022 ± 107	44.48 ± 1.58	0.01361 ± 55	87.1 ± 3.5
DM-5.1	2.34	10	0.1353 ± 39	59.60 ± 1.47	0.01515 ± 38	96.9 ± 2.4
DM-12.2	2.62	25	0.2676 ± 79	40.53 ± 1.28	0.01861 ± 63	119 ± 4
DM-31.1	3.05	6	0.1078 ± 25	28.03 ± 0.76	0.03343 ± 91	212 ± 6
DM-30.1	2.16	3	0.0824 ± 24	27.52 ± 0.91	0.03509 ± 116	222 ± 7
DM-13.2	8.08	12	0.1618 ± 31	22.32 ± 0.55	0.03929 ± 99	248 ± 6
DM-5.2	3.13	3	0.0806 ± 18	24.22 ± 0.72	0.04000 ± 119	253 ± 7
LP sample						
1019-6.1	0.53	25	0.2311 ± 41	155.96 ± 3.29	0.00484 ± 11	31.1 ± 0.7
1019-5.1	0.72	41	0.3573 ± 74	122.86 ± 3.10	0.00477 ± 14	30.7 ± 0.9
1019-9.1	0.45	33	0.2920 ± 93	124.10 ± 3.29	0.00542 ± 18	34.9 ± 1.1
1019-36.1	0.81	58	0.4835 ± 147	92.21 ± 3.29	0.00453 ± 27	29.1 ± 1.7
1019-32.1	0.73	45	0.3842 ± 99	114.89 ± 3.28	0.00478 ± 27	30.8 ± 1.1
1019-34.1	0.67	26	0.2400 ± 41	151.92 ± 3.27	0.00488 ± 11	31.4 ± 0.7
1019-27.1	0.79	53	0.4435 ± 125	93.36 ± 2.73	0.00504 ± 23	32.4 ± 1.5
1019-29.2	0.74	34	0.3047 ± 67	128.54 ± 2.87	0.00510 ± 51	32.8 ± 0.9
1019-21.2	0.47	28	0.2598 ± 117	148.39 ± 4.73	0.00482 ± 19	31.0 ± 1.2
1019-21.3	0.39	25	0.2363 ± 36	152.74 ± 2.45	0.00489 ± 8	31.5 ± 0.5
1019-18.2	0.57	31	0.2795 ± 67	141.63 ± 3.77	0.00487 ± 14	31.3 ± 0.9
1019-33.1	0.63	30	0.2689 ± 64	137.57 ± 3.18	0.00511 ± 13	32.9 ± 0.9
1019-6.3	0.74	36	0.3175 ± 72	125.56 ± 2.65	0.00509 ± 13	32.7 ± 0.8
1019-5.2	0.70	44	0.3796 ± 69	115.79 ± 2.63	0.00480 ± 13	30.9 ± 0.9
HP domains						
1019-6.2	0.60	32	0.2843 ± 85	130.66 ± 4.24	0.00523 ± 19	33.6 ± 1.2
1019-36.2	0.49	28	0.2565 ± 60	137.48 ± 3.12	0.00524 ± 13	33.7 ± 0.9
1019-32.2	0.70	40	0.3485 ± 92	121.24 ± 4.22	0.00493 ± 20	31.7 ± 1.3
1019-34.2	0.61	25	0.2368 ± 50	148.68 ± 3.23	0.00502 ± 12	32.3 ± 0.8
1019-29.1	0.84	41	0.3554 ± 112	112.66 ± 3.33	0.00522 ± 20	33.6 ± 1.3
1019-21.1	0.70	53	0.4458 ± 128	91.12 ± 2.75	0.00513 ± 24	33.0 ± 1.6
1019-18.1	0.42	23	0.2188 ± 56	149.45 ± 3.48	0.00515 ± 13	33.1 ± 0.8
Inherited cores						
1019-27.3	3.36	20	0.1987 ± 37	37.86 ± 1.40	0.02112 ± 79	135 ± 5
1019-27.2	4.13	10	0.1264 ± 29	24.99 ± 0.75	0.03596 ± 109	228 ± 7