Table S3. The SHRIMP U–Th–Pb isotopic compositions of zircon from the manganiferous quartzite

Spot no.	Texture*	U (ppm)	Th (ppm)	Th/U	Common ^{206}Pb (%)	^{207}Pb*/ ^{206}Pb*	± %	^{208}Pb*/ ^{206}Pb*	± %	^{206}Pb*/ ^{238}U	± %	^{207}Pb/^{206}Pb age (Ma)	^{206}Pb/^{238}U age (Ma)	Discord -ance (%)
Sample 23-1F														
1.1	dc	600	13	0.02	0.20	0.05655	1.2	0.0077	56	0.0822	0.9	474 ± 26	510 ± 14	-8
2.1	dc	548	246	0.46	0.63	0.05617	2.0	0.0082	56	0.0880	0.9	459 ± 45	544 ± 15	-19
3.1	dc	714	7	0.01	0.07	0.05606	1.0	0.0036	118	0.0833	0.9	455 ± 23	516 ± 14	-14
4.1	dr	949	8	0.01	-0.06	0.05729	1.1	0.0064	77	0.0926	1.0	503 ± 24	571 ± 17	-14
5.1	dr	537	26	0.05	1.59	0.11589	0.6	-0.0190	43	0.3025	1.0	1894 ± 10	1703 ± 47	10
5.2	oc	340	156	0.47	1.38	0.13428	0.7	0.1223	9	0.3697	1.2	2155 ± 12	2028 ± 63	6
6.1	dr	342	7	0.02	0.02	0.05579	1.2	0.0054	34	0.0806	0.3	444 ± 27	500 ± 4	-13
6.2	dr	528	17	0.03	0.38	0.05735	2.0	0.0052	63	0.0815	0.3	505 ± 45	505 ± 4	0
7.1	dc	571	4	0.01	-0.05	0.05689	0.8	0.0035	48	0.0831	0.3	487 ± 18	514 ± 4	-6
8.1	bc	60	6	0.11	0.28	0.05200	5.3	0.0317	14	0.0802	0.4	285 ± 120	497 ± 6	-76
9.1	dc	329	4	0.01	-0.06	0.05634	1.0	0.0063	29	0.0824	0.3	466 ± 23	510 ± 4	-10
10.1	bc	148	26	0.18	3.49	0.07636	7.6	0.0219	78	0.0994	0.5	1104 ± 153	611 ± 10	46
11.1	ic	121	13	0.12	0.03	0.05463	2.8	0.0410	11	0.0842	0.7	397 ± 60	521 ± 11	-32
12.1	dc	174	30	0.18	7.50	0.16325	0.6	-0.1307	6	0.3202	0.8	2490 ± 10	1791 ± 38	27
13.1	dc	657	42	0.07	0.36	0.05629	2.5	0.0214	26	0.0868	0.7	464 ± 53	537 ± 12	-16
14.1	dc	361	6	0.02	-0.04	0.05778	1.3	0.0062	57	0.0817	0.7	521 ± 29	506 ± 10	3
15.1	dc	942	13	0.01	0.00	0.05685	0.8	0.0031	108	0.0832	0.7	486 ± 17	515 ± 10	-6
16.1	dr	502	5	0.01	0.12	0.05667	1.3	0.0025	136	0.0809	0.7	479 ± 28	502 ± 10	-5
17.1	oc	489	101	0.21	-0.01	0.05782	1.1	0.0740	6	0.0883	0.7	523 ± 24	546 ± 11	-4
18.1	dc	767	36	0.05	3.60	0.08673	1.3	-0.0499	9	0.0980	0.7	1354 ± 24	602 ± 13	57
19.1	dc	396	663	1.73	1.88	0.05756	5.1	0.0190	38	0.0796	0.7	513 ± 93	494 ± 11	4
20.1	dc	614	7	0.01	0.28	0.05776	1.2	0.0041	82	0.0819	0.7	521 ± 26	507 ± 10	3
21.1	dc	371	9	0.03	0.04	0.05780	1.2	0.0076	50	0.0802	0.7	522 ± 26	498 ± 11	5
22.1	dc	325	4	0.01	0.26	0.05925	1.2	-0.0015	252	0.0819	0.7	576 ± 27	507 ± 10	12
23.1	dc	561	20	0.04	0.41	0.05803	1.4	0.0038	115	0.0801	0.9	531 ± 30	497 ± 13	7
24.1	dr	644	43	0.07	0.52	0.05848	1.8	0.0253	16	0.0912	0.7	548 ± 39	563 ± 11	-3
25.1	dc	611	11	0.02	0.59	0.05786	1.6	0.0024	147	0.0782	0.7	524 ± 33	485 ± 10	8
26.1	ic	293	81	0.28	1.88	0.07380	1.7	0.0606	12	0.1184	1.1	1036 ± 33	721 ± 24	31
27.1	ic	28	27	0.98	4.12	0.07581	10.5	0.2401	6	0.0784	1.2	1090 ± 174	487 ± 18	56

*b, bright CL; d, dark CL; c, core; r, rim; o, oscillatory zoned.

Errors are 1σ estimates. All the isotopic compositions were calculated using the ^{207}common Pb correction method except for ^{207}Pb*/^{206}Pb* ratios corrected by ^{204}Pb. Pb* denotes radiogenic Pb. Concordance was calculated from ^{207}Pb/^{235}U and ^{206}Pb/^{238}U ages.