Table 3. Zircon Lu-Hf LA-MC-ICPMS analytical data from the Purrido formation samples.

	$^{176}Yb/^{177}Hf$ [a]	±2σ	$^{176}Lu/^{177}Hf$ [a]	±2σ	$^{178}Hf/^{177}Hf$	$^{180}Hf/^{177}Hf$	Sig_{Hf} [b] (V)	$^{176}Hf/^{177}Hf$	±2σ [c]	$^{176}Hf/^{177}Hf_{(t)}$	εHf(t) [d]	±2σ	T_{DM2} [e] (Ga)	age [f] (Ma)	±2σ
Sample G03-8															
a-02	0.0266	23	0.00102	7	1.46714	1.88680	5	0.282304	30	0.282285	4.3	0.9	1.48	982	114
a-04	0.0236	20	0.00075	5	1.46718	1.88673	9	0.281909	26	0.281886	4.3	0.9	1.99	1603	21
a-05	0.0269	24	0.00085	5	1.46719	1.88661	9	0.281891	26	0.281865	3.6	0.9	2.03	1605	41
a-07	0.0603	50	0.00185	12	1.46718	1.88707	4	0.282084	40	0.282039	2.6	1.3	1.83	1290	29
a-08	0.0261	25	0.00077	6	1.46722	1.88694	8	0.282142	28	0.282125	3.3	0.8	1.71	1186	51
a-09	0.0165	16	0.00050	3	1.46718	1.88663	10	0.282134	22	0.282124	-0.7	0.6	1.78	1011	34
a-10	0.0781	67	0.00252	15	1.46726	1.88690	5	0.282877	46	0.282857	12.3	1.3	0.59	439	9
a-12	0.0228	19	0.00072	4	1.46723	1.88670	10	0.282148	20	0.282132	3.3	0.6	1.70	1177	44
a-14	0.0931	75	0.00325	21	1.46717	1.88687	7	0.282853	39	0.282829	10.4	1.0	0.66	397	10
a-16	0.0225	18	0.00075	5	1.46716	1.88667	11	0.282221	27	0.282214	-10.2	0.6	1.84	450	13
a-17	0.0138	12	0.00050	4	1.46716	1.88660	9	0.281936	26	0.281922	4.0	0.9	1.95	1532	37
a-19	0.0129	17	0.00042	6	1.46715	1.88667	11	0.281959	22	0.281949	0.7	0.7	1.98	1346	51
a-20	0.0331	29	0.00104	7	1.46709	1.88636	4	0.282123	29	0.282100	1.9	0.9	1.77	1165	42
a-25	0.0570	48	0.00171	10	1.46721	1.88673	12	0.282159	27	0.282123	1.5	0.8	1.74	1112	39
a-26	0.0440	47	0.00158	13	1.46716	1.88661	4	0.282224	41	0.282192	3.6	1.3	1.62	1096	88
a-27	0.0330	31	0.00110	10	1.46715	1.88652	5	0.282186	28	0.282162	3.6	0.8	1.65	1144	50
a-28	0.0159	17	0.00056	5	1.46722	1.88689	5	0.282174	33	0.282168	-9.2	0.8	1.88	567	20
a-29	0.0282	25	0.00126	10	1.46713	1.88632	5	0.282240	48	0.282230	-10.7	1.4	1.83	401	10
a-31	0.0342	34	0.00114	10	1.46714	1.88665	5	0.282045	34	0.282017	1.3	1.1	1.88	1267	41
a-33	0.0213	20	0.00080	8	1.46718	1.88638	9	0.282130	27	0.282112	3.1	0.8	1.73	1198	49
a-36	0.0218	27	0.00091	9	1.46715	1.88655	6	0.282191	30	0.282171	3.4	0.9	1.65	1118	25
Sample G07-1															
1.2	0.0923	79	0.00258	17	1.46720	1.88660	7	0.282870	27	0.282851	11.1	1.0	0.62	393	4
2	0.0484	40	0.00135	9	1.46721	1.88643	7	0.282905	29	0.282895	12.7	0.7	0.53	397	5
3.1	0.0353	35	0.00100	8	1.46731	1.88701	8	0.282889	24	0.282882	10.9	0.5	0.59	333	9
3.2	0.1203	98	0.00324	20	1.46725	1.88655	9	0.282890	29	0.282868	11.2	0.7	0.60	373	2

4	0.0742	67	0.00213	14	1.46720	1.88666	9	0.282846	35	0.282831	10.1	0.9	0.67	379	4
5	0.0842	84	0.00232	19	1.46722	1.88647	9	0.282894	40	0.282877	11.9	1.0	0.57	390	3
7	0.1130	121	0.00384	35	1.46725	1.88627	6	0.282803	64	0.282775	8.3	1.9	0.77	388	4
8	0.1069	89	0.00292	18	1.46718	1.88672	9	0.282900	25	0.282880	11.7	0.5	0.57	374	3
9	0.0631	55	0.00182	12	1.46720	1.88654	9	0.282847	33	0.282833	10.4	0.8	0.66	392	3
11	0.1276	102	0.00360	22	1.46724	1.88680	8	0.282957	37	0.282930	14.0	1.0	0.46	399	4
12.1	0.0426	38	0.00138	12	1.46720	1.88646	9	0.282868	30	0.282857	11.4	0.7	0.61	395	4
12.2	0.0664	86	0.00186	20	1.46720	1.88672	9	0.282852	34	0.282838	10.6	0.9	0.65	391	7
13	0.0439	37	0.00129	9	1.46722	1.88652	7	0.282876	27	0.282866	11.6	0.6	0.59	391	6
14	0.0592	79	0.00178	21	1.46720	1.88665	8	0.282852	34	0.282838	11.1	0.9	0.64	415	3
15	0.1709	237	0.00476	60	1.46721	1.88654	10	0.282764	67	0.282728	6.9	2.0	0.86	398	2
16	0.0894	72	0.00245	15	1.46724	1.88703	8	0.282851	24	0.282833	10.1	0.5	0.66	378	2
17	0.0170	14	0.00070	4	1.46720	1.88659	9	0.282881	20	0.282876	11.4	0.3	0.58	366	7
18	0.0896	137	0.00256	36	1.46721	1.88673	9	0.282893	29	0.282874	12.1	0.7	0.57	400	4
20	0.1014	83	0.00291	18	1.46721	1.88661	10	0.282920	23	0.282898	13.0	0.5	0.52	405	4
21	0.0521	45	0.00151	10	1.46722	1.88662	8	0.282882	33	0.282871	12.1	0.8	0.58	408	6
22	0.1277	151	0.00354	32	1.46717	1.88691	10	0.282761	53	0.282737	6.4	1.5	0.86	363	3
Sample G07-2															
1	0.1385	112	0.00344	21	1.46721	1.88672	8	0.282946	28	0.282922	13.2	0.6	0.49	375	4
2	0.0405	76	0.00118	15	1.46723	1.88651	9	0.282832	38	0.282823	10.1	1.0	0.68	395	2
3	0.1091	91	0.00269	17	1.46722	1.88676	7	0.282893	29	0.282873	12.2	0.7	0.57	409	4
5	0.1315	108	0.00333	21	1.46723	1.88654	6	0.282898	40	0.282873	12.0	1.1	0.58	399	4
6	0.1640	135	0.00396	25	1.46723	1.88667	8	0.282929	33	0.282900	12.9	0.8	0.52	399	3
7	0.1022	83	0.00249	15	1.46724	1.88665	8	0.282907	27	0.282890	11.7	0.6	0.56	360	4
8	0.0630	54	0.00184	13	1.46719	1.88658	8	0.282862	37	0.282848	10.7	1.0	0.63	380	4
9	0.1079	99	0.00295	19	1.46723	1.88672	7	0.282921	26	0.282900	12.5	0.6	0.53	380	4
10	0.1211	118	0.00314	26	1.46720	1.88679	11	0.282886	61	0.282864	11.1	1.8	0.61	372	3
11	0.0945	82	0.00275	18	1.46722	1.88642	10	0.282938	24	0.282918	13.3	0.5	0.49	387	4
13	0.0758	68	0.00212	14	1.46723	1.88680	8	0.282848	40	0.282834	10.1	1.1	0.66	375	4
14	0.0751	63	0.00237	20	1.46720	1.88624	11	0.282921	33	0.282904	12.7	0.8	0.52	380	4
15	0.0762	81	0.00225	15	1.46727	1.88622	11	0.282836	56	0.282820	10.0	1.6	0.68	392	3
16	0.1286	110	0.00347	23	1.46721	1.88659	7	0.282874	58	0.282848	11.1	1.7	0.63	398	4

18	0.1456	148	0.00411	30	1.46719	1.88671	10	0.282878	41	0.282849	10.6	1.1	0.63	374	2
19	0.1021	85	0.00261	16	1.46719	1.88678	7	0.282898	45	0.282879	12.2	1.3	0.57	396	5
20	0.0817	77	0.00231	17	1.46722	1.88661	9	0.282874	40	0.282858	11.0	1.1	0.61	379	2
21	0.0782	86	0.00203	16	1.46719	1.88668	8	0.282876	45	0.282861	11.6	1.2	0.60	398	4
22	0.0808	82	0.00226	16	1.46720	1.88662	7	0.282896	41	0.282880	11.9	1.1	0.57	383	3
23	0.0578	89	0.00159	17	1.46724	1.88632	8	0.282868	34	0.282857	10.8	0.9	0.62	370	2
Session 1															
GJ-1, n=9	0.0102	9	0.00028	1	1.46723	1.88671	12	0.282021	28	0.282017	-13.6	1.0	2.16	606	4
Session 1															
GJ-1, n=12	0.0100	5	0.00027	1	1.46721	1.88673	11	0.282016	22	0.282012	-13.8	0.7	2.2	606	4

[a] $^{176}Yb/^{177}Hf = (^{176}Yb/^{173}Yb)_{true}$ x $^{173}Yb/^{177}Hf)_{meas}$ x $(M_{173(Yb)}/M_{177(Hf)})^{\varepsilon(Hf)}$. The $^{176}Lu/^{177}Hf$ were calculated in a similar way by using the $^{175}Lu/^{177}Hf$.

Quoted uncertainties (absolute) relate to the last quoted figure.

The effect of the inter-element fractionation on the Lu/Hf was estimated to be about 6 % or less based on analyses of the GJ-1 zircon.

[b] Mean Hf signal in volt.

[c] Uncertainties are quadratic additions of the within-run error and the daily reproducibility of the 40ppb-JMC475 solution. Uncertainties for the GJ-1 are 2SD.

[d] Initial $^{176}Hf/^{177}Hf$ and εHf calculated using the age determined by LA-ICP-MS dating (see last two rows).

[e] two stage model age in billion years using the measured $^{176}Lu/^{177}Lu$ of each spot (first stage = age of zircon), a value of 0.0113 for the average continental crust (second stage), and a depleted mantle $^{176}Lu/^{177}Lu$ and $^{176}Hf/^{177}Hf$ of 0.0384 and 0.28325, respectively (for details and references see Gerdes and Zeh, 2006; Earth and Planetary Science Letters, 249, 47-1).

[f] LA-ICP-MS age and error (see table 2 for more details).