

附表 1 洛布勒花岗闪长岩 LA-ICP-MS 锆石 U-Th-Pb 同位素组成

Appendix table 1 Zircon U-Th-Pb data for granodiorite measured by LA-ICP-MS from Luobule

分析点号	²⁰⁶ Pb	²³² Th	²³⁸ U	Th/U	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ
	10 ⁻⁶				(Ma)		(Ma)		(Ma)							
LBL08-1-3-1-01	79.2	14.9	40.04	0.37	0.04987	0.00	0.12997	0.005	0.01890	0.00	189.1	11	124.1	5.	120.7	2.2
LBL08-1-3-1-02	42.3	8.12	26.40	0.31	0.05198	0.00	0.13419	0.011	0.01873	0.00	284.5	18	127.9	9.	119.6	2.9
LBL08-1-3-1-03	43.8	27.2	29.58	0.92	0.08316	0.00	0.22587	0.010	0.01970	0.00	1273	10	206.8	8.	125.8	2.6
LBL08-1-3-1-04	33.7	10.0	27.17	0.37	0.05239	0.00	0.13503	0.011	0.01870	0.00	302.3	19	128.6	10	119.4	3.0
LBL08-1-3-1-05	30.8	7.03	24.81	0.28	0.05089	0.01	0.13238	0.026	0.01887	0.00	236.0	41	126.2	23	120.5	3.7
LBL08-1-3-1-06	38.3	13.0	38.11	0.34	0.04867	0.00	0.11823	0.007	0.01762	0.00	132.1	15	113.5	6.	112.6	2.3
LBL08-1-3-1-07	30.3	12.8	37.78	0.34	0.05024	0.00	0.12974	0.008	0.01873	0.00	206.3	15	123.9	7.	119.6	2.5
LBL08-1-3-1-08	20.8	9.40	27.85	0.34	0.05001	0.00	0.13101	0.021	0.01900	0.00	195.5	34	125.0	19	121.3	4.6
LBL08-1-3-1-09	34.2	14.8	49.22	0.30	0.04935	0.00	0.12731	0.005	0.01871	0.00	164.4	11	121.7	5.	119.5	2.2
LBL08-1-3-1-10	28.5	12.9	44.94	0.29	0.04982	0.00	0.1284	0.006	0.01869	0.00	186.7	13	122.7	6.	119.4	2.3
LBL08-1-3-1-11	17.3	9.53	30.76	0.31	0.05133	0.00	0.13069	0.011	0.01846	0.00	255.7	20	124.7	10	117.9	2.9
LBL08-1-3-1-12	11.0	9.02	24.31	0.37	0.04852	0.00	0.10966	0.014	0.01639	0.00	124.7	30	105.7	13	104.8	3.6
LBL08-1-3-1-13	20.4	16.4	51.50	0.32	0.05167	0.00	0.13130	0.007	0.01843	0.00	270.6	13	125.3	6.	117.7	2.3
LBL08-1-3-1-14	14.1	11.5	37.67	0.31	0.05087	0.00	0.12895	0.016	0.01838	0.00	234.9	27	123.2	14	117.4	3.6
LBL08-1-3-1-15	31.2	40.9	92.18	0.44	0.06168	0.00	0.14720	0.012	0.01730	0.00	663.1	18	139.4	10	110.6	2.8
LBL08-1-3-1-16	33.5	46.1	112.1	0.41	0.04911	0.00	0.11752	0.004	0.01735	0.00	153.0	10	112.8	4.	110.9	2.0
LBL08-1-3-1-17	14.9	16.4	52.64	0.31	0.04859	0.00	0.11880	0.009	0.01773	0.00	127.9	18	114.0	8.	113.3	2.5
LBL08-1-3-1-18	23.8	44.1	90.73	0.49	0.05006	0.00	0.12782	0.011	0.01851	0.00	197.9	20	122.1	10	118.2	3.0
LBL08-1-3-1-19	17.4	39.1	89.17	0.44	0.04972	0.00	0.11816	0.010	0.01723	0.00	182.1	20	113.4	9.	110.1	2.7
LBL08-1-3-1-20	12.1	23.3	63.31	0.37	0.05165	0.00	0.13473	0.012	0.01891	0.00	270.0	21	128.3	11	120.8	3.1
LBL08-1-3-1-21	17.4	38.3	96.42	0.40	0.05232	0.00	0.13426	0.015	0.01860	0.00	299.4	25	127.9	14	118.8	3.6
LBL08-1-3-1-22	15.3	46.0	100.4	0.46	0.04964	0.00	0.11914	0.008	0.01740	0.00	178.3	17	114.3	7.	111.2	2.4
LBL08-1-3-1-23	11.6	36.2	83.87	0.43	0.04818	0.00	0.11702	0.009	0.01761	0.00	107.9	19	112.4	8.	112.5	2.6
LBL08-1-3-1-24	13.2	51.6	107.9	0.48	0.04848	0.00	0.11736	0.006	0.01755	0.00	122.8	13	112.7	5.	112.1	2.1

附表2 隆格尔和洛布勒铁矿侵入岩主量元素(%), 稀土元素和微量元素(10^{-6})分析结果
 Appendix table 2 Major (%), REE and trace elements(10^{-6}) of intrusive rocks of from Longgeer
 and Luobule iron ore deposit

样号	LGR004-4	LGR08-8-1	LGR08-13-	LGR08-13v2	LBI08-1-3-1	LBI08-1-3-2
SiO ₂	66.63	68.83	69.02	68.65	64.33	64.82
Al ₂ O ₃	14.92	14.19	14.56	14.81	15.43	15.51
FeO	3.03	2.96	2.32	2.19	3.47	2.93
Fe ₂ O ₃	2.29	1.37	1.42	1.84	2.04	2.2
MgO	1.83	1.62	1.41	1.4	2.23	2.2
CaO	4.13	3.75	4.01	3.8	4.32	4.6
Na ₂ O	3.19	3.34	3.29	3.21	3.31	3.39
K ₂ O	2.72	3.06	3.05	2.91	2.74	2.42
MnO	0.12	0.1	0.11	0.09	0.14	0.11
TiO ₂	0.63	0.56	0.51	0.5	0.6	0.56
P ₂ O ₅	0.16	0.13	0.12	0.12	0.12	0.12
烧失量	0.68	0.94	0.68	0.54	1.16	1.12
总量	100.33	100.85	100.5	100.06	99.89	99.98
A/NCK	0.95	0.91	0.91	0.97	0.95	0.94
Rb	104	118	118	108	112	98.4
Ba	429	399	400	416	401	372
Th	8.72	12.4	20.2	14.2	11.3	11.4
U	1.17	1.83	2.07	1.41	1.31	1.82
Nb	8.83	7.93	7.70	7.02	6.55	6.23
Ta	0.61	0.60	0.61	0.47	0.51	0.51
K	22 580	25 403	25 320	24 157	22 746	20 090
La	29.2	32.2	27.0	26.4	18.1	19.6
Ce	58.1	61.1	53.9	49.8	35.5	39.5
Pb	20.6	16.2	22.0	17.0	11.6	12.1
Pr	6.58	6.56	5.94	5.39	4.27	4.45
Sr	242	205	221	239	209	209
Nd	25.2	24.2	22.1	20.2	16.8	17.2
P	698	567	524	524	524	524
Sm	5.24	4.75	4.35	4.07	3.63	3.71
Zr	90.0	135	121	121	145	157
Hf	2.53	3.74	3.37	3.23	3.85	4.15
Eu	1.24	1.12	1.13	1.13	1.05	1.01
Ti	3 776	3 356	3 057	2 997	3 596	3 356
Gd	5.55	5.01	4.68	4.28	4.28	4.13
Tb	0.74	0.65	0.60	0.51	0.53	0.50
Dy	5.81	5.12	4.78	4.33	4.54	4.40
Ho	1.23	1.09	1.03	0.91	0.96	0.94
Y	30.1	26.8	25.4	22.8	24.2	23.5
Er	3.62	3.19	3.12	2.74	2.89	2.89
Tm	0.53	0.49	0.46	0.40	0.44	0.43
Yb	3.21	2.91	2.92	2.50	2.69	2.65
Lu	0.54	0.50	0.49	0.42	0.47	0.46
Co	11.9	11.2	8.85	9.33	15.0	15.0
Ni	4.68	4.88	3.78	3.33	7.44	7.14
∑REE	146.82	148.83	132.55	123.11	96.17	101.92
(La/Yb) _N	5.64	6.72	5.78	6.53	4.02	4.46
δEu	0.70	0.70	0.76	0.82	0.81	0.79