

Table S3 Carbon-oxygen isotopes of lacustrine carbonates from the Lower Jurassic Ziliujing Fm (Da'anzhai Mem) in GSB

Section	Sample	Depth (m)	Lithology	$\delta^{13}\text{C}$	$\delta^{12}\text{O}$
A4, Shaping section, Ya'an					
	J1z-19S	275.0	Mudstone	-4.07	-12.28
	J1z-20S1	285.0	Dolomitic mudstone	-3.03	-11.13
	J1z-20S2	288.8	Dolomitic mudstone	-2.74	-10.67
	J1z-20S3	289.5	Dolomitic mudstone	-3.48	-11.29
	J1z-20S4	293.9	Dolomitic mudstone	-2.68	-10.50
	J1z-21S1	308.9	Marlstone	-3.60	-11.38
	J1z-21S2	312.6	Marlstone	-2.54	-10.52
	J1z-21S3	315.1	Marlstone	-2.02	-9.91
	J1z-21S4	316.9	Marlstone	-2.48	-10.36
	J1z-21S5	318.6	Marlstone	-2.31	-10.40
A5, Gaodongqiao section, Zigong (Wang et al., 2006)					
	ZG20b1		Shelly wackestone	-3.29	-9.14
	ZG21b1		Shelly mudstone	-4.49	-8.16
	GJ010b7		Shelly mudstone	-0.85	-6.78
	GJ010b6		Shelly mudstone	-2.00	-7.26
	GJ010b5		Shelly mudstone	-1.63	-8.62
	GJ010b4		Shelly wackestone	-2.66	-8.52
	GJ010b3		Shelly mudstone	-1.64	-7.11
	GJ010b2		Mudstone	-2.41	-8.01
	GJ010b1		Mudstone	-1.48	-6.75
A6, Tanba section, Hechuan (Wang et al., 2006)					
	CQ 001b2		Shelly wackestone	-0.08	-7.48
	CQ 001b222		Shelly mudstone	0.76	-6.63
	CQ 001b3		Shelly wackestone	0.35	-8.08
	CQ 001b4		Mudstone	-1.21	-6.15
	CQ 001b5		Shelly wackestone	-3.46	-8.52
	CQ 001b6		Mudstone	1.62	-4.56

Wang, Q. W., Liang, B., Kan, Z. Z.: Carbon and oxygen isotopic compositions of lacustrine carbonates of the Early Jurassic Ziliujing Formation in the Sichuan Basin and their paleolimnological significance, J. Min. Petr., 26(2), 87-91, 2006 (in Chinese with English abstract).