

Coogan pg 1 of 1

Table DR1: Trace element concentrations in zircons from mid-ocean ridges

sample	147-894G-9R3 70-76				NZ 10-14				3369-1431				6K458-5c		153 923A 8R2 13-19		
analysis	1	2	3	1	2	3	4	5	6	1	2	1	2	1	2	1	2
Mg	1.4	0.1	0.1	0.1	17.8	0.1	0.0	1.4	0.1	0.0	0.0	1.6	4.6	0.2	0.1		
P	527	436	363	871	1,422	802	480	371	468	410	451	250	195	953	877		
Ca	1.3	0.3	0.4	0.4	2.5	0.6	0.5	3.6	0.3	0.3	0.3	2.4	4.8	0.3	0.3		
Ti	16.6	21.5	13.3	7.5	6.6	14.1	9.2	10.7	8.9	15.7	16.1	8.7	6.9	15.6	15.8		
Ti(49)								11.5	8.3	14.8	16.9	9.6	6.9	15.5	16.2		
V	1.0	0.8	0.5	0.3	0.5	0.2	0.1	0.1	0.1	0.4	0.4	0.3	0.1	0.2	0.2		
Fe	4.4	3.4	3.3	3.8	94.2	0.3	8.2	11.2	3.5	4.5	3.3	6.9	7.7	3.2	3.5		
Mn	0.3	0.3	0.3	0.3	1.5	0.3	0.3	0.3	0.3	0.3	0.2	0.4	0.3	0.3	0.3		
Ga	b.d.	0.0	b.d.	0.0	0.1			0.0	0.0	b.d.	b.d.	0.0	0.1	b.d.	0.0		
Sr	2.9	2.7	2.3	4.0	3.7	16.9		2.0	2.2	2.2	2.5	3.8	1.7	4.1	4.7		
Y	2,488	1,934	1,369	2,987	4,323	4,519	2,248	1,677	1,488	2,034	2,511	2,681	992	3,318	2,979		
La	0.03	0.02	0.04	0.02	0.19	0.02		0.02	0.01	0.03	0.02	0.02	0.03	0.04	0.01		
Ce	6.96	4.71	5.28	14.35	31.37	5.17	3.74	2.84	3.97	3.06	3.35	2.80	1.34	12.34	11.65		
Pr	0.22	0.17	0.04	0.09	0.18	0.26	0.04	0.06	0.04	0.15	0.20	0.16	0.04	0.19	0.17		
Nd	4.16	3.58	0.95	2.32	3.63	4.94	1.58	1.95	0.86	3.85	3.76	2.91	1.05	4.58	3.63		
Eu	1.59	1.77	0.80	1.33	1.23	2.47	1.54	1.12	0.56	1.39	1.79	1.93	1.15	2.83	2.51		
Dy	255	205	136	295	426	498	250	179	139	214	266	235	96	355	326		
Ho	96	76	53	115	167	189	93	67	57	78	99	106	38	133	120		
Yb	721	538	423	896	1,199	1,342	700	489	502	517	667	1,232	430	947	849		
Lu	161	118	96	194	253	315	168	109	117	114	146	305	109	213	193		
Hf	12,227	11,324	12,964	12,615	14,467	1,218	1,424	11,606	12,448	11,141	11,608	6,365	8,244	12,389	12,570		
Th	19	10	11	33	135	33	12	7	8	7	11	26	7	9	8		
U	32	17	19	82	232	54	28	17	26	15	23	47	13	20	18		

Ti(49) - Ti concentration based on analysis of mass 49

b.d. - below detection limit