

Supporting Information

Ce–Nd separation by solid-phase micro-extraction technique and its application in high-precision $^{142}\text{Nd}/^{144}\text{Nd}$ measurements in geological materials

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Table S-1. Analytical results for JNdi-1 Nd standard obtained between Jan. 2013 and Sep. 2014

Run No.	$^{142}\text{Nd}^+$ (V)	$^{142}\text{Nd}/^{144}\text{Nd}$	2 SE	$^{143}\text{Nd}/^{144}\text{Nd}$	2 SE	$^{145}\text{Nd}/^{144}\text{Nd}$	2 SE	$^{148}\text{Nd}/^{144}\text{Nd}$	2 SE	$^{150}\text{Nd}/^{144}\text{Nd}$	2 SE	$^{146}\text{Nd}/^{144}\text{Nd}_m$
JNdi-1 1	2.94	1.1418376	0.0000044	0.5121032	0.0000017	0.3484063	0.0000012	0.2415807	0.0000017	0.2364511	0.0000017	0.722807
JNdi-1 2	3.25	1.1418401	0.0000044	0.5121042	0.0000016	0.3484044	0.0000012	0.2415813	0.0000016	0.2364508	0.0000017	0.722262
JNdi-1 3	3.13	1.1418355	0.0000042	0.5121027	0.0000017	0.3484056	0.0000012	0.2415794	0.0000016	0.2364504	0.0000017	0.722491
JNdi-1 4	3.09	1.1418399	0.0000043	0.5121020	0.0000017	0.3484049	0.0000012	0.2415837	0.0000017	0.2364540	0.0000020	0.723118
JNdi-1 5	3.02	1.1418396	0.0000044	0.5121039	0.0000017	0.3484040	0.0000011	0.2415816	0.0000017	0.2364528	0.0000019	0.723230
JNdi-1 6	3.05	1.1418364	0.0000041	0.5121029	0.0000016	0.3484054	0.0000011	0.2415817	0.0000017	0.2364518	0.0000018	0.722532
JNdi-1 7	2.87	1.1418353	0.0000042	0.5121015	0.0000018	0.3484052	0.0000013	0.2415827	0.0000021	0.2364530	0.0000022	0.723370
JNdi-1 8	2.71	1.1418380	0.0000044	0.5121040	0.0000017	0.3484051	0.0000013	0.2415822	0.0000017	0.2364522	0.0000019	0.722927
JNdi-1 9	3.22	1.1418402	0.0000042	0.5121021	0.0000015	0.3484060	0.0000011	0.2415794	0.0000016	0.2364518	0.0000016	0.722246
JNdi-1 10	2.91	1.1418350	0.0000041	0.5121019	0.0000017	0.3484058	0.0000012	0.2415798	0.0000017	0.2364499	0.0000019	0.722553
JNdi-1 11	2.86	1.1418338	0.0000043	0.5121013	0.0000017	0.3484053	0.0000012	0.2415803	0.0000016	0.2364510	0.0000019	0.722087
JNdi-1 12	3.01	1.1418341	0.0000043	0.5121025	0.0000016	0.3484062	0.0000012	0.2415795	0.0000016	0.2364506	0.0000018	0.721893
JNdi-1 13	2.75	1.1418400	0.0000044	0.5121034	0.0000018	0.3484054	0.0000012	0.2415829	0.0000018	0.2364520	0.0000019	0.722643
JNdi-1 14	3.19	1.1418404	0.0000040	0.5121039	0.0000016	0.3484057	0.0000012	0.2415802	0.0000016	0.2364512	0.0000017	0.722242
JNdi-1 15	3.16	1.1418376	0.0000042	0.5121021	0.0000016	0.3484062	0.0000012	0.2415807	0.0000016	0.2364526	0.0000017	0.722509
JNdi-1 16	2.68	1.1418364	0.0000043	0.5120997	0.0000019	0.3484044	0.0000013	0.2415784	0.0000018	0.2364511	0.0000020	0.721793
JNdi-1 17	2.91	1.1418331	0.0000041	0.5120999	0.0000018	0.3484044	0.0000013	0.2415780	0.0000018	0.2364502	0.0000020	0.721286
JNdi-1 18	3.56	1.1418332	0.0000040	0.5121030	0.0000016	0.3484067	0.0000011	0.2415784	0.0000015	0.2364502	0.0000017	0.722108
JNdi-1 19	3.02	1.1418297	0.0000045	0.5120982	0.0000017	0.3484052	0.0000011	0.2415790	0.0000017	0.2364492	0.0000020	0.721051
JNdi-1 20	3.83	1.1418370	0.0000032	0.5121002	0.0000011	0.3484037	0.0000008	0.2415818	0.0000011	0.2364526	0.0000012	0.722140
JNdi-1 21	4.09	1.1418329	0.0000040	0.5120993	0.0000015	0.3484039	0.0000010	0.2415815	0.0000014	0.2364521	0.0000016	0.722024
JNdi-1 22	4.01	1.1418383	0.0000034	0.5120996	0.0000012	0.3484033	0.0000008	0.2415809	0.0000012	0.2364527	0.0000013	0.722438
JNdi-1 23	4.42	1.1418356	0.0000039	0.5120991	0.0000014	0.3484038	0.0000009	0.2415819	0.0000012	0.2364540	0.0000015	0.722200

JNdi-1 24	3.36	1.1418375	0.0000037	0.5120994	0.0000013	0.3484028	0.0000009	0.2415828	0.0000012	0.2364566	0.0000014	0.722459
JNdi-1 25	4.08	1.1418334	0.0000040	0.5120989	0.0000014	0.3484031	0.0000010	0.2415810	0.0000013	0.2364547	0.0000015	0.722172
JNdi-1 26	4.58	1.1418382	0.0000037	0.5120997	0.0000013	0.3484039	0.0000009	0.2415818	0.0000013	0.2364543	0.0000013	0.722360
JNdi-1 27	4.21	1.1418403	0.0000032	0.5120999	0.0000012	0.3484032	0.0000008	0.2415818	0.0000011	0.2364535	0.0000012	0.722486
JNdi-1 28	4.83	1.1418391	0.0000036	0.5121003	0.0000013	0.3484040	0.0000009	0.2415819	0.0000012	0.2364531	0.0000014	0.722191
JNdi-1 29	4.11	1.1418367	0.0000034	0.5120995	0.0000012	0.3484046	0.0000009	0.2415814	0.0000011	0.2364546	0.0000012	0.722177
JNdi-1 30	4.76	1.1418392	0.0000037	0.5120998	0.0000014	0.3484045	0.0000009	0.2415805	0.0000013	0.2364525	0.0000014	0.721634
JNdi-1 31	4.54	1.1418360	0.0000037	0.5120996	0.0000014	0.3484047	0.0000009	0.2415815	0.0000012	0.2364538	0.0000014	0.722088
JNdi-1 32	4.32	1.1418374	0.0000038	0.5120987	0.0000013	0.3484031	0.0000009	0.2415820	0.0000013	0.2364551	0.0000014	0.722265
JNdi-1 33	4.01	1.1418377	0.0000034	0.5120996	0.0000013	0.3484031	0.0000008	0.2415815	0.0000012	0.2364546	0.0000013	0.722422
JNdi-1 34	4.65	1.1418394	0.0000037	0.5120996	0.0000013	0.3484032	0.0000009	0.2415821	0.0000013	0.2364547	0.0000014	0.722362
JNdi-1 35	4.12	1.1418374	0.0000033	0.5121001	0.0000012	0.3484027	0.0000008	0.2415822	0.0000011	0.2364546	0.0000012	0.722510
JNdi-1 36	3.01	1.1418308	0.0000043	0.5120995	0.0000016	0.3484042	0.0000012	0.2415822	0.0000016	0.2364520	0.0000017	0.721799
JNdi-1 37	3.13	1.1418345	0.0000043	0.5120990	0.0000016	0.3484034	0.0000011	0.2415795	0.0000016	0.2364527	0.0000016	0.720378
Mean		1.1418367		0.5121009		0.3484045		0.2415810		0.2364525		
2 SD		0.0000055		0.0000036		0.0000022		0.0000028		0.0000034		
2 RSD (%)		0.00048		0.00070		0.00064		0.00114		0.00145		

Note: The average $^{142}\text{Nd}^+$ beam signal strength (in volts as measured on $10^{11}\Omega$) in sequence S1 (Table 2) is noted for all analyses. The measured average value for $^{146}\text{Nd}/^{144}\text{Nd}_m$ in sequence S1 is shown for reference.