

Mingshuai Zhu, John Wakabayashi, Daniel Pastor-Galán, Fuqin Zhang, Ariuntsetseg Ganbat, Laicheng Miao, Shunhu Yang, and Zeli Wang, 2022, Large-scale Permo-Triassic back-arc extensions of the Mongol- Okhotsk Ocean: GSA Bulletin, <https://doi.org/10.1130/B36644.1>.

Supplemental Material

Figure S1. Discrimination diagrams for the granite dikes in the Monhhan ophiolite.

Table S1. Major and trace element compositions of the Monhhan ophiolite and intruding granite.

Table S2. LA-ICP-MS zircon U-Pb analytical data for the gabbro, intruding granite, and associated sandstone in the Monhhan ophiolite.

Table S3. Lu–Hf data for zircons from the gabbro and intruding granite in the Monhhan ophiolite.

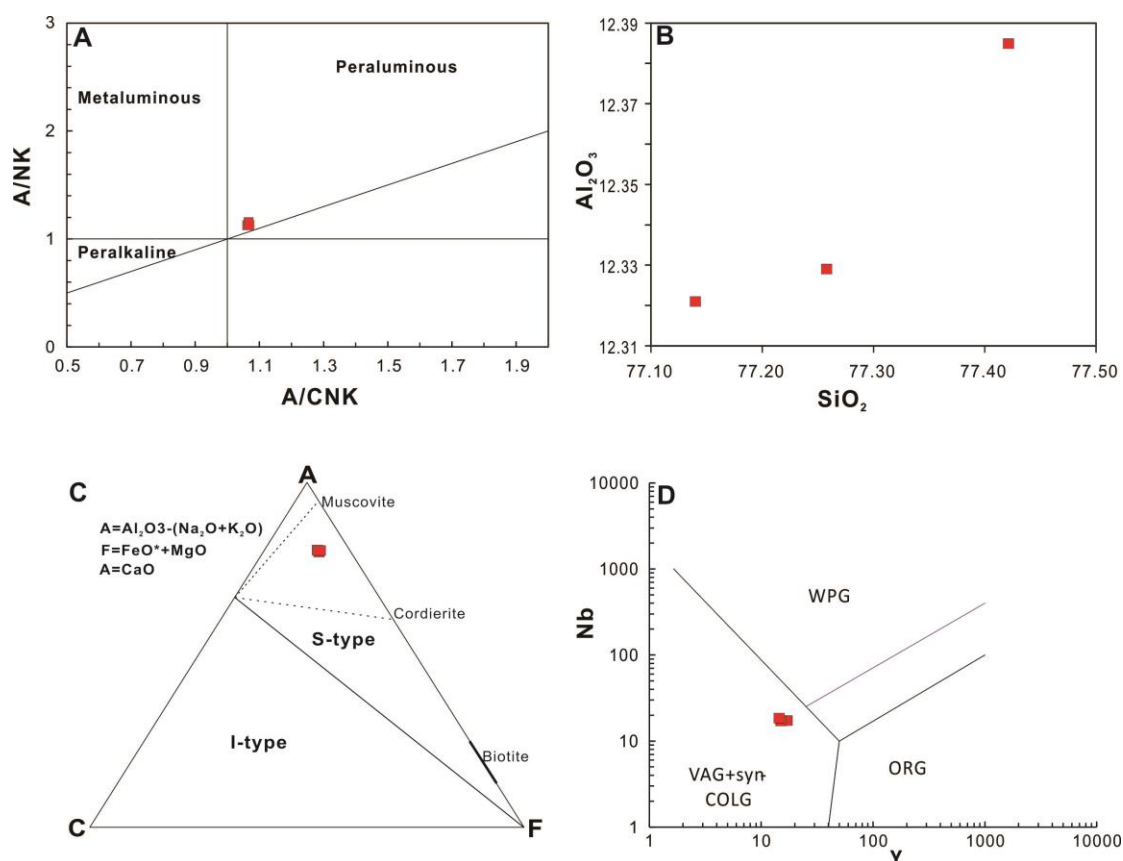


Figure S1. Discrimination diagrams for the granite dykes in the Monhhan ophiolite. (A) A/NK vs. A/CNK diagram (Maniar and Piccoli, 1989); (B) Al_2O_3 versus SiO_2 diagram; (C) ACF diagram (White and Chappell, 1977); (D) Nb versus Y diagram (Pearce et al., 1984).

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Table S1. Major and trace elements compositions of the Monhhan ophiolite and intruding granite.

Sample	MOE-327	MOE-333	MOE-341	MOE-342	MOE-343	MOE-312	MOE-314	MOE-315	MOE-316	MOE-317
rock	harzburgite	harzburgite	gabbro	gabbro	gabbro	gabbro	basalt	basalt	basalt	basalt
SiO ₂	40.59	39.98	55.17	57.71	56.79	58.41	50.43	50.40	50.51	51.00
TiO ₂	0.01	0.01	0.713	0.646	1.096	1.32	2.81	2.82	2.85	2.82
Al ₂ O ₃	0.52	0.58	21.40	18.44	16.09	14.95	14.37	14.39	14.37	14.30
Fe ₂ O ₃ T	7.89	7.55	3.16	3.46	4.32	5.72	12.05	11.90	11.87	10.97
MnO	0.073	0.079	0.095	0.189	0.184	0.290	0.207	0.202	0.204	0.253
MgO	38.95	39.55	1.32	1.86	2.57	2.10	4.49	4.62	4.54	4.61
CaO	0.09	0.15	11.20	11.37	9.78	10.41	7.85	7.89	7.90	8.82
Na ₂ O	0.00	0.00	5.58	4.70	3.83	3.46	4.17	4.04	4.17	3.88
K ₂ O	0.00	0.00	0.345	0.515	3.747	1.46	1.34	1.40	1.34	1.87
P ₂ O ₅	0.009	0.023	0.269	0.217	0.377	0.666	0.80	0.78	0.80	0.79
LOI	11.40	11.48	0.72	0.49	0.56	1.04	1.11	0.98	0.98	0.74
Sum	99.52	99.42	99.97	99.59	99.35	99.81	99.62	99.41	99.55	100.04
Mg#	92.0	92.4	49.4	55.5	58.1	46.1	46.5	47.5	47.1	49.5
Li	4.51	3.99	1.83	2.24	4.50	2.23	18.7	18.3	16.9	15.8
Be	0.14	0.47	3.07	4.22	2.53	1.30	1.49	1.46	1.62	1.52
Sc	6.36	5.35	5.60	10.4	16.0	18.2	31.8	31.6	32.7	31.8
V	33.0	19.4	29.0	53.0	117	113	303	309	318	305
Cr	2943	2535	1.87	9.87	17.3	4.87	60.7	65.7	63.0	60.6
Co	79.3	111	3.97	11.8	11.2	9.85	24.6	23.7	31.4	20.7
Ni	1142	2301	4.58	10.7	12.8	5.49	29.2	30.7	30.2	29.0
Cu	4.05	5.78	3.94	4.57	8.35	19.4	19.4	22.5	24.4	23.6
Ga	1.94	1.56	21.4	16.0	17.9	15.8	21.6	21.2	22.0	20.9

Rb	1.24	0.77	8.76	14.8	92.1	35.6	43.4	46.2	45.2	55.5
Sr	6.06	7.91	1011	1048	845	606	490	484	493	879
Y	1.65	1.91	39.7	17.5	33.3	34.3	53.2	51.6	53.4	52.0
Zr	50.1	51.6	461	302	481	217	260	251	256	256
Nb	0.43	0.35	18.1	8.49	13.3	15.8	11.9	10.9	11.5	11.0
Cs	0.66	0.85	0.28	0.33	1.16	0.41	2.83	3.29	4.43	3.17
Ba	13.3	19.3	91.3	187	1609	300	547	620	610	641
La	1.75	2.16	56.9	24.5	47.6	55.3	32.8	29.9	31.6	37.5
Ce	3.14	3.68	119	51.6	99.6	113	74.1	67.3	71.9	72.5
Pr	0.36	0.41	14.1	6.45	11.8	12.6	9.88	9.19	9.75	9.71
Nd	1.24	1.35	52.9	25.6	44.9	44.5	44.3	41.4	44.2	42.7
Sm	0.26	0.26	10.1	4.64	8.97	10.6	9.99	9.55	10.5	10.1
Eu	0.051	0.049	2.34	0.65	1.58	2.24	3.42	3.33	3.64	3.58
Gd	0.23	0.22	7.67	3.52	7.19	8.44	10.2	9.64	10.1	10.1
Tb	0.038	0.040	1.20	0.55	1.06	1.30	1.62	1.58	1.65	1.59
Dy	0.23	0.24	6.82	3.13	6.15	6.80	9.49	9.12	9.72	9.34
Ho	0.051	0.061	1.31	0.58	1.10	1.31	1.87	1.83	1.92	1.82
Er	0.15	0.19	3.91	1.74	3.22	3.80	5.07	4.89	5.18	5.04
Tm	0.039	0.050	0.60	0.25	0.46	0.53	0.73	0.69	0.74	0.71
Yb	0.16	0.22	3.95	1.68	2.97	3.50	4.60	4.50	4.69	4.62
Lu	0.029	0.037	0.61	0.26	0.47	0.51	0.68	0.65	0.71	0.65
Hf	1.24	1.43	10.3	7.84	12.5	5.59	6.19	6.01	6.20	6.13
Ta	0.11	0.13	1.23	0.61	0.80	1.08	0.67	0.63	0.67	0.62
Pb	0.62	0.85	15.7	7.57	12.1	29.2	7.97	9.28	11.9	14.5
Th	0.44	0.51	9.50	3.69	22.8	12.1	3.15	2.61	2.87	2.77
U	0.31	0.54	2.84	4.71	7.01	1.99	1.08	0.92	1.00	1.32

Sample	MOE-318	MOE-319	MOE-320	MOE-334	MOE-335	MOE-336	MOE-322	MOE-322-1	MOE-322-2
rock	basalt	basalt	basalt	basalt	basalt	basalt	granite	granite	granite
SiO ₂	51.13	47.45	47.37	47.07	46.81	47.22	77.26	77.42	77.14
TiO ₂	2.64	1.85	1.84	1.51	1.91	1.51	0.09	0.09	0.09
Al ₂ O ₃	14.57	16.66	16.58	18.53	17.21	18.58	12.33	12.39	12.32
Fe ₂ O ₃ T	11.32	10.83	10.72	8.72	10.13	8.85	0.59	0.60	0.59
MnO	0.208	0.173	0.162	0.143	0.158	0.145	0.01	0.01	0.01
MgO	4.50	7.51	7.50	7.56	7.38	7.61	0.10	0.11	0.11
CaO	8.03	7.48	8.36	8.50	9.39	9.10	0.40	0.40	0.39
Na ₂ O	4.43	3.20	2.99	2.40	2.68	2.47	3.33	3.36	3.35
K ₂ O	1.15	1.38	1.31	1.89	1.13	1.46	4.93	4.94	4.94
P ₂ O ₅	0.73	0.27	0.26	0.38	0.46	0.40	0.02	0.02	0.02
LOI	1.06	3.41	3.00	2.89	2.44	2.68	0.59	0.52	0.54
Sum	99.75	100.21	100.09	99.58	99.70	100.03	99.64	99.85	99.50
Mg#	48.1	61.8	62.0	66.9	62.9	66.7	28.28	29.43	29.62
Li	20.0	55.9	56.5	104	91.1	94.1	4.26	4.35	4.38
Be	1.67	0.93	0.92	1.30	1.50	1.27	3.37	3.44	3.62
Sc	30.3	29.3	30.0	23.9	30.5	24.6	0.87	0.91	0.88
V	293	230	234	159	208	160	4.31	3.76	3.88
Cr	61.9	124	128	114	120	115	2.63	2.67	2.81
Co	24.4	42.1	37.2	38.5	42.3	40.6	0.93	0.91	0.95
Ni	33.7	98.6	101	112	98.2	114	3.48	2.93	2.67
Cu	25.7	61.9	65.3	43.5	54.0	48.0	5.41	5.40	5.56
Ga	22.0	19.2	19.6	17.5	19.2	17.7	16.3	16.1	16.7
Rb	35.8	88.1	75.2	247	140	187	174	171	176

Sr	712	652	754	773	734	777	42.7	42.1	42.6
Y	50.7	30.7	30.2	27.8	34.9	28.4	15.5	15.7	17.1
Zr	249	149	150	185	242	189	62.6	62.3	63.8
Nb	11.9	3.01	2.91	4.93	6.63	5.15	17.2	17.1	17.2
Cs	2.24	2.21	1.97	6.96	6.49	6.28	2.48	2.45	2.54
Ba	512	297	320	329	289	279	74.1	72.7	74.6
La	30.6	8.92	8.45	14.2	17.4	14.3	14.8	15.1	15.5
Ce	71.5	24.2	22.9	35.1	43.8	35.7	27.4	27.9	28.2
Pr	9.42	3.83	3.71	4.86	6.03	4.87	3.43	3.44	3.50
Nd	42.6	18.9	18.0	21.7	27.3	21.7	11.8	12.4	12.6
Sm	9.89	5.03	4.75	5.09	6.35	5.31	2.50	2.43	2.52
Eu	3.25	1.81	1.91	1.95	2.18	1.91	0.38	0.40	0.41
Gd	9.33	5.31	5.45	5.30	6.57	5.09	1.80	1.90	2.00
Tb	1.52	0.91	0.90	0.88	1.02	0.83	0.33	0.33	0.36
Dy	9.04	5.30	5.25	5.04	6.20	5.08	2.12	2.03	2.27
Ho	1.83	1.10	1.09	0.99	1.23	1.04	0.49	0.47	0.53
Er	4.85	2.94	2.95	2.79	3.38	2.80	1.52	1.52	1.68
Tm	0.69	0.41	0.41	0.39	0.49	0.39	0.27	0.28	0.31
Yb	4.44	2.70	2.66	2.43	3.04	2.42	2.16	2.11	2.36
Lu	0.65	0.38	0.40	0.37	0.45	0.37	0.34	0.34	0.37
Hf	5.86	3.37	3.42	3.76	4.75	3.72	3.87	4.01	4.19
Ta	0.67	0.20	0.19	0.33	0.45	0.32	1.18	1.19	1.17
Pb	7.75	3.43	3.32	7.19	4.56	18.8	32.4	32.0	33.1
Th	3.54	0.29	0.27	0.46	0.66	0.50	30.9	31.6	31.8
U	1.23	0.12	0.12	0.16	0.23	0.17	1.40	1.35	1.45

Table S2. LA-ICPMS zircon U–Pb analytical data for the gabbro, intruding granite and associated sandstone in the Monhhan ophiolite.

Spot	Th ppm	U ppm	Th/U	$^{207}\text{Pb}^*/^{235}\text{U}$	1 σ	$^{206}\text{Pb}^*/^{238}\text{U}$	1 σ	Rho	$^{207}\text{Pb}/^{235}\text{U}$ Ma	1 σ	$^{206}\text{Pb}/^{238}\text{U}$ Ma	1 σ	$^{207}\text{Pb}/^{206}\text{Pb}$ Ma	1 σ
Sample MOE-325 gabbro														
1.1	272	388	0.70	0.2804	0.009	0.039383	0.00044	0.33	251	8	249	3	333	80
2.1	173	215	0.80	0.2730	0.013	0.039411	0.00058	0.31	245	10	249	4	206	111
3.1	315	411	0.77	0.6512	0.018	0.079775	0.00085	0.38	509	11	495	5	565	64
4.1	150	219	0.69	0.2778	0.013	0.040388	0.0006	0.32	249	10	255	4	211	118
5.1	565	463	1.22	0.2809	0.01	0.040811	0.00059	0.42	251	8	258	4	211	82
6.1	257	443	0.58	0.6340	0.017	0.081550	0.00106	0.48	499	11	505	6	478	63
7.1	269	283	0.95	0.2721	0.01	0.040046	0.00057	0.38	244	8	253	4	167	81
8.1	323	354	0.91	0.2824	0.011	0.041050	0.0005	0.31	253	9	259	3	187	91
9.1	174	432	0.40	0.5779	0.015	0.071321	0.00094	0.50	463	10	444	6	561	57
10.1	235	408	0.58	0.2941	0.011	0.037938	0.00053	0.37	262	9	240	3	457	83
11.1	184	284	0.65	0.2919	0.013	0.040121	0.00056	0.31	260	10	254	3	322	96
12.1	171	275	0.62	0.6366	0.021	0.079342	0.00088	0.34	500	13	492	5	528	67
13.1	170	245	0.70	0.2967	0.013	0.040910	0.00059	0.34	264	10	258	4	320	102
14.1	148	205	0.72	0.2763	0.013	0.040180	0.00056	0.30	248	10	254	3	206	115
15.1	122	191	0.64	0.2640	0.011	0.039331	0.00049	0.31	238	9	249	3	124	91
16.1	143	203	0.70	0.2924	0.016	0.040422	0.00069	0.31	260	13	255	4	298	119
17.1	138	213	0.65	0.2893	0.012	0.039566	0.0006	0.35	258	10	250	4	346	106
18.1	117	529	0.22	0.5839	0.014	0.074708	0.00071	0.40	467	9	464	4	472	52
19.1	287	413	0.69	0.8925	0.142	0.087784	0.01539	1.10	648	76	542	91	1102	234
20.1	130	210	0.62	0.2863	0.011	0.039622	0.00056	0.38	256	9	250	3	309	89
21.1	231	341	0.68	0.2945	0.01	0.040931	0.00066	0.47	262	8	259	4	287	77
22.1	150	221	0.68	0.2770	0.012	0.039860	0.00059	0.34	248	10	252	4	209	96

23.1	495	602	0.82	0.2828	0.01	0.040276	0.00066	0.45	253	8	255	4	213	69
24.1	119	188	0.63	0.2859	0.011	0.039942	0.00056	0.36	255	9	252	3	300	97
25.1	114	173	0.66	0.2792	0.014	0.039912	0.00059	0.29	250	11	252	4	243	125
26.1	381	458	0.83	0.2749	0.01	0.040505	0.00057	0.39	247	8	256	4	143	81
27.1	482	643	0.75	0.2836	0.008	0.040294	0.00052	0.48	254	6	255	3	256	73
28.1	139	227	0.61	0.2856	0.011	0.038661	0.00047	0.31	255	9	245	3	354	89
29.1	110	179	0.61	5.6394	1.553	0.097030	0.0229	0.86	1922	238	597	135	3189	211
30.1	269	593	0.45	0.6293	0.014	0.079372	0.00096	0.56	496	9	492	6	506	46
31.1	387	616	0.63	0.6133	0.016	0.079245	0.00092	0.45	486	10	492	6	443	53
32.1	129	197	0.66	0.2877	0.015	0.040952	0.00057	0.27	257	12	259	4	235	119
33.1	209	465	0.45	0.5882	0.016	0.076525	0.00115	0.54	470	10	475	7	435	56
34.1	258	487	0.53	0.6253	0.014	0.080356	0.00093	0.51	493	9	498	6	465	55
35.1	147	224	0.65	0.2859	0.013	0.040447	0.00059	0.32	255	10	256	4	254	110
36.1	215	234	0.92	0.2770	0.01	0.040119	0.00057	0.38	248	8	254	4	187	80
Sample MOE-321 granite														
1.1	650	559	1.16	0.2715	0.009	0.038982	0.00068	0.51	244	7	247	4	213	50
2.1	201	207	0.97	0.3224	0.019	0.040711	0.00085	0.35	284	15	257	5	502	120
3.1	241	363	0.66	0.2925	0.023	0.039009	0.00079	0.26	261	18	247	5	365	162
4.1	463	363	1.27	0.2887	0.011	0.040593	0.00051	0.32	258	9	257	3	254	81
5.1	285	396	0.72	0.2949	0.01	0.040707	0.00056	0.42	262	8	257	3	320	80
6.1	420	560	0.75	0.3042	0.009	0.041173	0.00049	0.41	270	7	260	3	345	57
7.1	356	396	0.90	0.3121	0.013	0.041426	0.0005	0.29	276	10	262	3	389	82
8.1	469	490	0.96	0.3004	0.009	0.040584	0.0005	0.40	267	7	256	3	354	75
9.1	216	257	0.84	0.2810	0.011	0.039581	0.00051	0.32	251	9	250	3	254	92
10.1	265	280	0.94	0.3062	0.016	0.039776	0.00056	0.26	271	13	251	3	432	108
11.1	242	353	0.68	0.2807	0.01	0.040863	0.00048	0.32	251	8	258	3	183	118

12.1	307	339	0.91	0.2938	0.01	0.039832	0.00061	0.46	262	8	252	4	354	77
13.1	1266	883	1.43	0.2838	0.007	0.040669	0.0005	0.50	254	6	257	3	220	57
14.1	529	519	1.02	0.2927	0.012	0.040858	0.00043	0.25	261	10	258	3	333	93
15.1	521	501	1.04	0.3136	0.011	0.041273	0.00045	0.31	277	9	261	3	409	78
16.1	992	855	1.16	0.3045	0.01	0.039329	0.00048	0.38	270	8	249	3	443	58
17.1	343	400	0.86	0.2901	0.009	0.041058	0.00048	0.39	259	7	259	3	254	68
18.1	309	409	0.75	0.2849	0.01	0.040273	0.00048	0.34	255	8	255	3	250	80
19.1	301	392	0.77	0.2733	0.01	0.040967	0.00055	0.38	245	8	259	3	122	80
20.1	680	626	1.09	0.2631	0.008	0.039565	0.0005	0.44	237	6	250	3	106	65
21.1	671	584	1.15	0.2722	0.007	0.039098	0.00043	0.42	244	6	247	3	213	61

Sample MOE-338 Sandstone

1.1	285	321	0.89	0.2997	0.018	0.04164	0.00093	0.47	266	14	263	6	295	134
2.1	218	291	0.75	0.3088	0.012	0.04368	0.00089	0.49	273	9	276	5	254	87
3.1	240	278	0.86	0.3411	0.029	0.037	0.00099	0.44	298	22	234	6	834	173
4.1	199	266	0.75	0.3071	0.013	0.04309	0.00089	0.54	272	10	272	6	272	98
5.1	1171	1218	0.96	0.3135	0.009	0.04333	0.00087	0.40	277	7	273	5	307	65
6.1	168	196	0.86	0.2982	0.019	0.04321	0.00096	0.39	265	15	273	6	198	142
7.1	105	149	0.71	0.2926	0.019	0.04296	0.00093	0.48	261	15	271	6	168	145
8.1	293	461	0.64	0.5473	0.014	0.0722	0.00143	0.50	443	9	449	9	412	56
9.1	211	223	0.94	0.4910	0.019	0.04184	0.0009	0.43	406	13	264	6	1318	77
10.1	198	221	0.90	0.2983	0.019	0.04321	0.00097	0.31	265	15	273	6	198	144
11.1	168	180	0.93	0.3144	0.015	0.04417	0.00093	0.43	278	12	279	6	269	110
12.1	94	134	0.70	0.3425	0.019	0.04295	0.00092	0.34	299	14	271	6	524	119
13.1	178	419	0.42	0.5258	0.014	0.07026	0.0014	0.43	429	9	438	8	383	59
14.1	141	176	0.80	0.2910	0.015	0.04311	0.00091	0.42	259	12	272	6	146	119
15.1	164	196	0.84	0.3209	0.015	0.04643	0.00097	0.47	283	11	293	6	201	103

16.1	98	149	0.65	0.3172	0.028	0.04307	0.0011	0.34	280	21	272	7	347	188
17.1	84	117	0.72	0.3799	0.029	0.04309	0.00107	0.34	327	21	272	7	740	156
18.1	260	301	0.86	0.3263	0.016	0.04317	0.00095	0.43	287	13	273	6	405	110
19.1	671	604	1.11	0.2916	0.011	0.03948	0.00083	0.50	260	9	250	5	354	84
20.1	148	192	0.77	0.3127	0.014	0.04433	0.00093	0.55	276	11	280	6	248	104
21.1	119	155	0.77	0.3220	0.016	0.04404	0.00094	0.51	283	13	278	6	331	112
22.1	93	120	0.78	0.3024	0.025	0.04266	0.00105	0.47	268	19	269	6	260	181
23.1	99	121	0.82	0.3534	0.021	0.04404	0.00097	0.42	307	16	278	6	537	126
24.1	277	283	0.98	0.3039	0.023	0.04183	0.00104	0.54	269	18	264	6	316	163
25.1	91	113	0.81	0.3439	0.041	0.04054	0.00125	0.49	300	31	256	8	658	241
26.1	175	189	0.92	0.3219	0.032	0.04206	0.0012	0.43	283	25	266	7	433	214
27.1	239	303	0.79	0.3648	0.014	0.04324	0.00091	0.59	316	10	273	6	646	80
28.1	68	92	0.74	0.3216	0.023	0.04484	0.001	0.31	283	18	283	6	287	160
29.1	151	194	0.78	0.2997	0.015	0.04309	0.00093	0.31	266	12	272	6	216	113
30.1	63	87	0.72	0.3043	0.031	0.04275	0.00111	0.39	270	24	270	7	269	217
31.1	237	239	0.99	0.3205	0.012	0.04536	0.00095	0.39	282	10	286	6	252	88
32.1	193	230	0.84	0.3287	0.016	0.04372	0.00096	0.48	289	12	276	6	394	107
33.1	110	136	0.81	0.2971	0.035	0.04256	0.00126	0.44	264	27	269	8	224	253
34.1	74	105	0.70	0.2965	0.036	0.04256	0.00128	0.39	264	28	269	8	220	262
35.1	223	259	0.86	0.4297	0.021	0.0432	0.00098	0.40	363	15	273	6	991	100
36.1	69	94	0.74	0.3197	0.027	0.04315	0.00105	0.31	282	21	272	7	360	184
37.1	80	113	0.70	0.3011	0.023	0.04285	0.00104	0.55	267	18	271	6	239	173
38.1	82	98	0.83	0.3096	0.022	0.04405	0.00099	0.54	274	17	278	6	241	160
39.1	75	96	0.78	0.3312	0.025	0.04346	0.00102	0.58	291	19	274	6	423	162
40.1	66	86	0.77	0.3070	0.033	0.04282	0.00117	0.55	272	26	270	7	285	234
41.1	332	367	0.90	0.3110	0.011	0.04405	0.00092	0.34	275	8	278	6	250	79

42.1	374	371	1.01	0.3138	0.011	0.04373	0.00091	0.39	277	8	276	6	288	77
43.1	244	292	0.84	0.2924	0.012	0.04355	0.00092	0.50	261	9	275	6	134	92
44.1	240	289	0.83	0.2997	0.012	0.04306	0.00092	0.40	266	10	272	6	218	94
45.1	229	236	0.97	0.3165	0.014	0.04347	0.00094	0.52	279	11	274	6	321	99

Table S3. Lu–Hf data for zircons from the gabbro and intruding granite in the Monhhan ophiolite.

Sample	$^{176}\text{Yb}/^{177}\text{Hf}$	2 σ	$^{176}\text{Lu}/^{177}\text{Hf}$	2 σ	$^{176}\text{Hf}/^{177}\text{Hf}$	2 σ	Age(Ma)	ε_{Hf} (t)	1 σ	TDM(Ma)
Sample MOE-325 gabbro										
2.1	0.021004	0.000670	0.000797	0.000023	0.282742	0.000019	249	4.28	0.67	1002
3.1	0.014540	0.000144	0.000548	0.000004	0.282415	0.000018	495	-1.93	0.63	1583
4.1	0.021527	0.000151	0.000799	0.000008	0.282783	0.000020	255	5.87	0.69	905
5.1	0.016269	0.000038	0.000621	0.000002	0.282769	0.000018	258	5.44	0.63	935
6.1	0.021530	0.000076	0.000815	0.000007	0.282392	0.000018	505	-2.59	0.63	1632
9.1	0.013625	0.000336	0.000511	0.000011	0.282367	0.000019	444	-4.72	0.67	1720
10.1	0.031501	0.001433	0.001145	0.000050	0.282786	0.000018	240	5.59	0.63	911
11.1	0.028131	0.000205	0.001053	0.000006	0.282812	0.000016	254	6.80	0.56	847
12.1	0.010353	0.000131	0.000394	0.000004	0.282408	0.000015	492	-2.16	0.54	1598
13.1	0.022897	0.000424	0.000887	0.000013	0.282800	0.000014	258	6.51	0.48	869
14.1	0.019954	0.000103	0.000791	0.000003	0.282787	0.000014	254	5.99	0.51	898
15.1	0.035726	0.001069	0.001322	0.000040	0.282813	0.000015	249	6.71	0.54	849
16.1	0.019466	0.000157	0.000759	0.000007	0.282823	0.000014	255	7.28	0.49	817
17.1	0.046304	0.001655	0.001634	0.000055	0.282810	0.000016	250	6.58	0.56	858
18.1	0.011813	0.000121	0.000442	0.000004	0.282395	0.000014	464	-3.23	0.49	1645
19.1	0.017036	0.000056	0.000688	0.000001	0.282417	0.000013	542	-0.85	0.48	1554

20.1	0.026430	0.000149	0.001019	0.000007	0.282782	0.000016	250	5.70	0.55	914
21.1	0.033155	0.000784	0.001261	0.000024	0.282788	0.000014	259	6.02	0.51	900
22.1	0.033491	0.000435	0.001272	0.000016	0.282804	0.000015	252	6.47	0.55	866
23.1	0.028546	0.000337	0.001116	0.000012	0.282792	0.000016	255	6.11	0.57	891
24.1	0.026353	0.000205	0.001033	0.000005	0.282807	0.000014	252	6.62	0.50	857
25.1	0.033648	0.000280	0.001275	0.000011	0.282783	0.000014	252	5.73	0.48	914
26.1	0.023310	0.000236	0.000932	0.000010	0.282809	0.000014	256	6.78	0.48	849
27.1	0.037131	0.000307	0.001379	0.000013	0.282794	0.000013	255	6.14	0.46	890
28.1	0.049891	0.001571	0.001853	0.000059	0.282833	0.000016	245	7.22	0.55	813
30.1	0.014065	0.000110	0.000564	0.000002	0.282401	0.000012	492	-2.46	0.42	1618

Sample MOE-321 granite

1.1	0.072033	0.001848	0.002480	0.000069	0.282904	0.000015	247	9.67	0.52	657
2.1	0.070110	0.004224	0.002465	0.000137	0.282810	0.000018	257	6.58	0.63	863
3.1	0.129278	0.002937	0.004310	0.000077	0.282938	0.000020	247	10.59	0.69	599
4.1	0.062469	0.004705	0.002138	0.000159	0.282848	0.000021	257	7.96	0.73	774
5.1	0.072215	0.000624	0.002545	0.000015	0.282781	0.000017	257	5.53	0.60	931
6.1	0.028887	0.000365	0.001066	0.000015	0.282786	0.000017	260	6.02	0.61	901
7.1	0.020910	0.000564	0.000795	0.000016	0.282770	0.000017	262	5.56	0.59	932
8.1	0.040390	0.001038	0.001560	0.000045	0.282799	0.000020	256	6.34	0.71	878
9.1	0.064813	0.000513	0.002371	0.000014	0.282861	0.000019	250	8.27	0.68	750
10.1	0.050853	0.000389	0.001895	0.000016	0.282759	0.000018	251	4.74	0.64	976
11.1	0.069652	0.001241	0.002509	0.000037	0.282808	0.000021	258	6.52	0.75	868
13.1	0.036058	0.000678	0.001253	0.000018	0.282781	0.000020	257	5.75	0.68	914
14.1	0.089803	0.002107	0.003063	0.000057	0.282772	0.000024	258	5.15	0.86	953
15.1	0.058310	0.000443	0.002072	0.000020	0.282793	0.000020	261	6.11	0.69	894
16.1	0.071062	0.000654	0.002489	0.000017	0.282709	0.000021	249	2.81	0.74	1094

17.1	0.049487	0.001778	0.001788	0.000069	0.282708	0.000024	259	3.11	0.84	1084
18.1	0.057451	0.000965	0.001800	0.000035	0.282770	0.000018	255	5.21	0.62	947
19.1	0.041784	0.000155	0.001517	0.000010	0.282771	0.000019	259	5.38	0.67	939
