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Title of article Rb-Sr resetting ages and chemical characterization of turbidites in an accretionary wedge: Torlesse Complex, Otaki Gorge, New Zealand

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TABLE A-I. MAJOR AND TRACE ELEMENT GEOCHEMICAL ANALYSES OF GRAYWACKES AND ARGILLITES FROM THE TORLESSE COMPLEX OF THE OTAKI GORGE AREA

Sample	30714	30717	30708	30709	30712	30710	30715	30711
Domain	Q	Q	Q	Q	Q	Q	Q	Q
Lithology	A	A	A	A	S	S	S	S
Major Oxides (weight percent)								
SiO_2	53.85	56.72	61.15	61.23	58.06	64.45	69.67	70.48
TiO_2	0.98	0.88	0.75	0.76	0.79	0.48	0.48	0.44
Al_2O_3	21.40	19.37	17.61	17.83	18.85	17.29	13.44	13.62
Fe_2O_3T	6.29	6.50	5.70	6.01	6.49	4.15	3.43	3.21
MnO	0.08	0.08	0.07	0.08	0.08	0.06	0.04	0.04
MgO	2.88	2.74	2.53	2.57	2.77	2.25	1.28	1.29
CaO	1.30	1.16	1.20	1.19	1.37	1.29	2.19	1.82
Na_2O	1.81	2.24	2.24	2.18	2.52	2.32	2.93	3.43
K_2O	5.79	5.07	3.90	3.94	4.57	3.79	2.35	2.39
P_2O_5	0.18	0.15	0.16	0.16	0.22	0.11	0.11	0.09
Loss	4.99	4.67	3.98	3.95	3.99	3.14	3.42	2.75
Total	99.55	99.58	99.29	99.90	99.71	99.33	99.34	99.56
Trace elements (ppm)								
Ba	506	526	539	546	570	524	427	534
Cr	92	79	73	67	76	41	42	41
Cu	31	26	24	24	14	12	6	6
Ga	33	32	24	26	32	24	16	16
Nb	16	15	14	16	13	12	7	7
Ni	30	25	22	25	20	11	8	11
Pb	33	30	28	30	28	27	17	16
Rb	360	316	191	191	226	166	77	77
Sc	17	16	14	13	13	9	10	9
Sr	121	130	155	148	177	230	236	213
Th	21	19	16	17	18	15	11	7
U	5	5	3	5	4	4	3	1
V	169	148	120	122	128	68	72	68
Y	36	34	32	31	33	26	19	18
Zn	132	124	110	109	103	83	57	48
Zr	188	180	153	149	250	137	170	141

NOTES: Sample numbers refer to samples housed in the collection of the Department of Geology, Victoria University of Wellington, New Zealand. Major and trace element analyses are by standard XRF techniques performed at the Analytical Facility, Victoria University of Wellington. Total iron expressed as Fe_2O_3T; Loss = loss on ignition.

Domains: Q=Quarry, P=Pukehinau, BB=Blue Bluff.

Lithology: S=sandstone, A=argillite.

Grid References (all refer to New Zealand topographic map N157): Q=723781, P=738764, BB=756745.

TABLE A-I. CONTINUED

Sample	17847	30713	30716	17843	30722	30723	17846	30720
Domain	Q	Q	Q	P	P	P	P	P
Lithology	S	S	S	A	A	A	A	A
Major Oxides (weight percent)								
SiO_2	71.40	71.83	72.09	58.92	59.08	59.13	59.37	59.46
TiO_2	0.43	0.51	0.51	0.88	0.83	0.83	0.85	0.75
Al_2O_3	14.01	12.83	12.79	19.79	19.33	19.51	19.62	17.58
Fe_2O_3T	3.23	3.84	3.37	7.45	6.65	6.86	7.04	6.04
MnO	0.03	0.07	0.05	0.07	0.10	0.09	0.12	0.08
MgO	1.14	1.33	1.20	1.99	2.21	2.18	2.01	1.89
CaO	2.58	1.29	1.42	0.47	0.42	0.43	0.54	2.21
Na_2O	3.44	3.40	3.74	1.28	1.46	1.54	1.51	1.65
K_2O	1.12	2.18	2.15	3.74	3.97	4.00	3.62	3.49
P_2O_5	0.10	0.13	0.15	0.11	0.10	0.09	0.12	0.12
Loss	3.53	2.09	2.24	5.50	5.62	5.10	5.54	5.49
Total	101.01	99.50	99.71	100.20	99.77	99.76	100.34	98.76
Trace elements (ppm)								
Ba	267	452	445	537	603	628	626	520
Cr	32	50	44	85	84	82	87	74
Cu	7	8	8	26	33	35	27	20
Ga	15	13	14	25	25	23	26	21
Nb	6	6	6	14	13	13	14	12
Ni	13	11	11	34	29	32	36	20
Pb	18	15	13	19	23	27	28	22
Rb	43	83	79	190	189	189	178	165
Sc	10	9	8	17	14	16	16	12
Sr	272	213	222	64	66	69	125	91
Th	8	9	9	18	17	18	18	17
U	1	2	2	3	3	4	3	3
V	58	70	67	176	163	168	181	140
Y	17	21	21	31	33	28	26	26
Zn	51	59	60	121	158	148	135	113
Zr	114	192	196	145	146	147	143	184

TABLE A-I. CONTINUED

Sample	30718	30721	17844	17845	30719	30731	30729	30724
Domain	P	P	P	P	P	BB	BB	BB
Lithology	A	A	A	A	S	A	A	A
Major Oxides (weight percent)								
SiO_2	59.52	59.64	59.65	59.71	69.23	49.26	51.42	56.66
TiO_2	0.86	0.76	0.88	0.85	0.42	0.97	1.11	0.96
Al_2O_3	19.29	17.97	19.70	19.00	11.66	26.12	23.69	21.37
Fe_2O_3T	6.96	5.91	6.48	6.95	3.20	6.25	6.93	6.15
MnO	0.07	0.08	0.08	0.09	0.05	0.07	0.08	0.05
MgO	2.10	1.86	1.89	2.01	1.09	2.58	2.48	2.26
Cao	0.49	2.08	0.42	0.54	4.64	0.48	0.36	0.33
Na_2O	1.48	1.70	1.66	1.63	2.43	1.86	1.91	2.47
K_2O	3.59	3.54	3.72	3.38	1.58	6.86	5.72	4.72
P_2O_5	0.16	0.11	0.13	0.14	0.09	0.14	0.18	0.15
Loss	4.84	5.71	5.24	5.54	5.22	5.33	5.53	4.69
Total	99.36	99.36	99.85	99.84	99.61	99.92	99.41	99.81
Trace Elements (ppm)								
Ba	624	632	660	616	268	991	873	699
Cr	81	72	86	85	35	100	105	91
Cu	20	19	25	21	6	31	35	29
Ga	25	22	26	25	11	38	32	27
Nb	13	12	14	14	5	18	20	14
Ni	30	23	34	35	10	25	31	25
Pb	25	22	24	29	11	26	30	30
Rb	176	167	182	169	72	315	260	218
Sc	16	14	16	15	10	21	20	17
Sr	70	90	79	121	21	102	81	94
Th	17	17	17	18	10	22	24	21
U	3	3	3	3	1	5	6	4
V	162	140	176	181	60	176	187	165
Y	29	29	32	32	19	31	37	31
Zn	125	113	124	133	69	160	151	123
Zr	158	201	151	147	219	172	187	190

TABLE A-I: CONTINUED

Sample	30419	30726	30728	30725	30727	30418	30730
Domain	BB	BB	BB	BB	BB	BB	BB
Lithology	A	S	S	S	S	S	S
Major Oxides (weight percent)							
SiO_2	59.63	65.60	72.04	72.52	74.23	74.41	74.86
TiO_2	0.86	0.71	0.51	0.50	0.38	0.39	0.42
Al_2O_3	19.83	15.74	13.03	12.47	11.55	12.16	11.04
Fe_2O_3T	5.57	6.11	4.84	4.92	4.01	2.65	4.09
MnO	0.06	0.04	0.05	0.06	0.05	0.04	0.06
MgO	1.95	1.82	1.28	1.40	1.19	0.98	1.11
CaO	0.40	0.36	0.28	0.48	1.30	1.18	1.49
Na_2O	2.51	2.76	3.20	3.21	3.29	4.25	3.21
K_2O	4.32	2.69	1.71	1.50	1.27	1.19	1.12
P_2O_5	0.17	0.16	0.13	0.12	0.09	0.08	0.11
Loss	4.27	3.80	2.31	2.41	2.57	2.06	2.57
Total	99.57	99.79	99.38	99.59	99.93	99.39	100.08
Trace Elements (ppm)							
Ba	618	432	274	275	260	242	208
Cr	70	64	42	49	41	29	37
Cu	16	17	6	6	5	5	4
Ga	25	21	14	13	12	14	11
Nb	15	12	9	7	7	6	9
Ni	20	25	13	15	11	19	13
Pb	25	23	14	18	14	19	13
Rb	198	126	76	67	56	57	50
Sc	14	12	8	9	7	5	6
Sr	109	114	103	114	192	199	139
Th	17	14	11	11	9	8	10
U	3	3	3	2	1	2	3
V	130	109	64	71	57	48	52
Y	34	30	18	22	19	17	21
Zn	109	94	65	65	70	50	49
Zr	256	193	209	216	164	146	257