

APPENDIX 3

Whole-rock geochemical results of the Jawornik granitoids

Sample	GJ25	GJ34	GJ97	GJ104	GJ106	GJ111	GJ117	GJ148B	GJ90	GJ131	GJ140	GJ87	GJ100	GJ109	GJ136	GJ149	GJ151	GJ78B	GJ78A	GJ79	GJ6	GJ9	GJ57	GJ44
	HBG	HBG	HBG	HBG	HBG	HBG	HBG	HBG	BG	BG	BG	BG	BG	BG	BG	BG	BG	BMG	BMG	BMG	BMG	BMG	BMG	MG
SiO ₂	68.42	68.53	67.69	66.56	67.46	68.13	67.90	68.37	69.19	68.59	68.10	69.74	68.81	69.39	71.55	70.88	65.26	70.02	69.65	69.33	70.76	71.13	68.47	75.81
Al ₂ O ₃	15.56	15.01	15.26	15.75	15.89	15.95	15.07	15.63	15.10	15.13	15.77	14.66	15.55	15.30	15.03	14.90	14.58	16.62	16.54	16.47	15.36	15.30	16.72	14.73
Fe ₂ O _{3T}	2.20	2.45	2.02	2.85	2.58	2.28	2.56	2.61	2.00	2.63	2.22	2.28	1.84	1.76	1.16	1.68	3.38	1.51	1.59	1.59	1.90	2.26	2.33	0.84
MnO	0.038	0.042	0.028	0.048	0.050	0.038	0.043	0.037	0.033	0.045	0.046	0.028	0.027	0.027	0.018	0.028	0.061	0.032	0.033	0.033	0.043	0.046	0.051	0.010
MgO	1.42	1.77	1.42	2.21	1.95	1.64	2.38	1.79	1.52	2.10	1.82	1.22	1.36	1.31	0.59	1.24	3.85	0.82	0.88	0.88	1.37	1.55	1.64	0.30
CaO	2.66	1.81	2.83	2.33	2.29	2.72	2.83	2.35	1.77	2.28	1.93	1.09	1.65	1.15	0.53	1.63	2.27	2.08	2.33	2.33	1.66	1.61	2.42	1.03
Na ₂ O	4.30	4.24	4.57	4.13	4.36	4.57	4.21	4.44	4.15	4.77	4.48	4.72	4.76	4.86	5.33	4.66	3.72	5.55	5.51	5.49	4.39	5.01	5.01	3.09
K ₂ O	3.73	3.31	3.41	3.51	3.54	3.37	3.88	3.61	3.78	2.47	3.58	4.01	3.70	4.03	3.85	3.14	3.55	1.79	1.58	1.54	3.83	1.92	1.83	2.66
TiO ₂	0.338	0.360	0.303	0.392	0.359	0.317	0.321	0.399	0.287	0.306	0.314	0.372	0.255	0.287	0.201	0.242	0.452	0.220	0.225	0.225	0.273	0.331	0.290	0.109
P ₂ O ₅	0.12	0.13	0.10	0.12	0.11	0.10	0.13	0.12	0.10	0.15	0.10	0.09	0.09	0.12	0.09	0.09	0.18	0.04	0.06	0.06	0.11	0.13	0.12	0.03
LOI	0.96	1.47	1.37	1.67	1.51	1.11	0.74	0.78	1.09	0.60	1.71	0.97	1.01	1.14	0.74	0.64	1.70	0.87	0.79	0.79	0.57	0.75	0.98	1.56
Total	99.75	99.11	99.00	99.56	100.08	100.22	100.06	100.12	99.02	99.06	100.07	99.19	99.05	99.38	99.09	99.13	98.99	99.56	99.17	98.73	100.26	100.03	99.86	100.17
A/CNK	0.98	1.08	0.93	1.06	1.05	0.99	0.93	1.01	1.10	1.10	1.12	1.07	1.15	1.14	1.07	1.03	1.07	1.04	1.05	1.06	1.08	1.06	1.03	1.50
Na ₂ O+K ₂ O	8.03	7.55	7.98	7.64	7.90	7.94	8.09	8.05	7.93	7.24	8.06	8.73	8.46	8.89	9.18	7.80	7.27	7.34	7.09	7.03	8.22	6.93	6.84	5.75
Mg#	80.5	86.3	83.5	88.7	87.4	85.4	89.5	86.5	84.4	88.2	86.6	81.3	82.9	82.4	67.8	81.5	93.2	74.5	75.8	75.8	83.0	84.7	85.4	51.7
V	29	31	28	38	31	30	35	35	22	25	31	20	23	21	9	18	48	18	20	20	24	27	29	0
Cr	25	61	57	56	45	45	73	35	47	76	46	nd	48	37	nd	32	167	37	30	35	44	50	77	nd
Co	86	58	50	57	62	71	63	59	69	77	62	56	51	57	61	44	56	82	85	87	90	57	62	109
Ga	20	20	19	21	22	21	20	21	20	22	20	29	20	22	21	22	22	20	20	20	21	22	19	26
Ge	0.8	1.1	0.8	nd	1.0	1.1	1.0	1.0	0.8	1.2	0.7	1.3	0.7	0.9	0.9	1.0	1.2	0.7	1.0	1.0	1.3	1.3	1.5	1.2
Rb	132	112	149	125	142	129	133	149	133	134	134	218	123	146	150	126	148	82	76	79	148	103	99	103
Sr	618	354	288	442	475	400	538	387	295	302	471	128	338	280	236	253	494	487	459	477	304	302	428	95
Y	16.2	18.9	11.7	13.5	20.0	15.4	16.1	20.0	19.3	16.1	13.9	9.4	18.5	14.4	10.0	14.7	15.5	8.1	8.3	8.6	11.1	12.5	9.6	24.6
Zr	144	148	140	154	147	137	148	172	139	147	139	106	133	134	127	161	188	121	114	117	126	147	120	28
Nb	12.0	12.6	7.4	9.0	12.2	9.5	9.4	11.1	12.3	10.2	8.9	9.7	10.2	10.0	7.8	13.1	10.6	7.3	6.9	7.0	9.7	10.9	7.8	15.9
Sn	4	4	3	3	6	5	5	5	4	6	3	6	5	5	5	6	3	4	3	4	4	4	2	29
Cs	8.9	2.3	2.3	3.4	4.4	7.6	5.4	5.5	6.5	8.3	5.1	6.4	1.9	3.3	2.6	4.7	6.6	3.9	4.2	4.3	8.9	5.8	5.1	2.4
Ba	1 220	1 040	770	1 020	1 030	834	1 130	928	875	396	1 020	465	819	776	760	773	1 070	451	378	390	895	706	432	237
La	22.4	15.2	34.7	29.0	27.4	22.4	30.4	34.3	14.1	24.1	29.9	13.0	32.4	29.6	19.9	19.0	38.8	26.5	27.9	28.4	25.5	29.5	28.1	7.32
Ce	43.2	42.2	55.1	58.4	47.7	46.7	60.0	71.8	39.9	46.1	57.4	30.4	57.9	54.5	40.2	41.7	70.1	51.1	52.0	52.6	49.2	54.7	50.2	15.0

Pr	5.07	3.66	7.31	6.29	6.17	4.92	6.55	7.69	3.44	5.47	6.47	3.11	6.75	6.18	4.26	4.18	8.20	5.69	5.71	5.74	5.25	6.25	5.52	1.90
Nd	17.4	13.4	23.8	20.6	21.2	16.4	21.2	25.0	12.1	17.9	20.9	10.6	21.9	20.3	13.8	13.6	26.4	22.5	18.5	18.7	16.9	20.1	17.6	8.09
Sm	4.01	3.42	4.85	4.65	5.03	3.90	4.76	5.77	3.27	3.82	4.64	2.76	4.94	4.57	3.24	3.24	5.55	3.78	3.83	3.77	3.66	4.43	3.24	2.36
Eu	0.759	0.718	0.924	0.908	0.832	0.774	0.853	0.943	0.592	0.555	0.879	0.408	0.751	0.738	0.629	0.586	0.975	1.01	1.05	1.09	0.747	0.783	1.03	0.321
Gd	2.79	2.54	3.04	2.91	3.79	2.52	3.01	3.48	2.29	2.51	2.89	1.83	3.06	2.73	2.02	2.18	3.28	2.13	2.08	2.18	2.24	2.77	1.89	2.56
Tb	0.49	0.56	0.45	0.51	0.66	0.48	0.56	0.64	0.54	0.47	0.51	0.31	0.56	0.47	0.36	0.44	0.54	0.32	0.32	0.33	0.37	0.47	0.32	0.54
Dy	2.82	3.69	2.51	2.85	3.72	2.72	3.27	3.69	3.37	2.74	2.77	1.73	3.31	2.70	1.93	2.61	2.94	1.61	1.70	1.61	2.10	2.54	1.78	3.83
Ho	0.54	0.69	0.45	0.50	0.68	0.52	0.59	0.70	0.64	0.56	0.49	0.30	0.64	0.49	0.35	0.51	0.54	0.28	0.30	0.30	0.39	0.47	0.33	0.84
Er	1.57	1.92	1.20	1.35	1.80	1.49	1.62	2.00	1.88	1.67	1.38	0.82	1.87	1.41	0.98	1.43	1.47	0.76	0.83	0.83	1.11	1.29	0.95	2.44
Tm	0.240	0.281	0.177	0.209	0.261	0.238	0.246	0.316	0.291	0.292	0.211	0.123	0.290	0.221	0.151	0.235	0.236	0.119	0.131	0.134	0.178	0.190	0.150	0.373
Yb	1.49	1.61	1.09	1.26	1.62	1.49	1.46	1.95	1.83	2.07	1.27	0.75	1.80	1.36	0.94	1.40	1.45	0.82	0.87	0.91	1.12	1.17	1.00	2.21
Lu	0.216	0.213	0.155	0.173	0.212	0.222	0.200	0.252	0.244	0.328	0.170	0.101	0.233	0.195	0.132	0.201	0.202	0.124	0.126	0.128	0.154	0.158	0.142	0.301
Hf	4.9	4.7	4.5	5.0	5.0	4.5	5.0	5.4	5.1	4.9	4.5	4.2	4.4	4.5	4.2	5.4	5.7	3.8	3.4	3.4	4.1	4.9	3.3	1.5
Ta	1.66	1.68	0.82	1.10	1.89	1.34	1.38	1.90	2.30	1.32	1.12	1.22	2.06	1.44	0.85	1.70	1.17	0.99	0.96	0.99	1.37	1.53	1.05	1.52
W	514	357	278	325	393	399	357	322	433	489	353	324	304	333	382	257	268	474	504	511	540	327	334	687
Tl	0.59	0.75	0.86	0.51	0.99	1.00	1.06	0.92	0.70	0.72	0.98	1.37	0.76	0.94	1.06	0.50	1.03	0.24	0.43	0.41	0.99	0.63	0.54	0.39
Pb	19	30	20	9	41	54	51	31	21	12	20	44	39	41	66	14	30	8	22	18	44	32	30	21
Th	15.4	13.2	12.2	17.1	17.3	14.2	20.1	28.5	14.8	15.8	16.9	10.1	22.6	15.6	14.7	17.3	23.4	17.0	15.1	15.3	11.8	14.6	8.94	8.32
U	5.35	3.35	3.03	3.54	4.62	4.41	4.38	5.57	4.72	5.61	3.69	5.89	5.76	5.68	6.36	8.05	7.34	4.66	4.07	4.16	5.04	4.79	2.12	3.51
Eu/Eu*	0.69	0.74	0.73	0.76	0.58	0.75	0.69	0.64	0.66	0.55	0.73	0.55	0.59	0.64	0.75	0.67	0.70	1.08	1.14	1.16	0.80	0.68	1.27	0.40
(La/Yb) _N	10.14	6.36	21.53	15.57	11.43	10.11	14.04	11.86	5.17	7.84	15.92	11.71	12.14	14.62	14.29	9.16	18.10	21.72	21.68	21.08	15.34	16.97	18.92	2.24
(La/Sm) _N	3.52	2.79	4.49	3.92	3.42	3.60	4.01	3.74	2.71	3.96	4.06	2.97	4.13	4.07	3.87	3.68	4.40	4.41	4.58	4.73	4.38	4.19	5.44	1.95
(Gd/Yb) _N	1.51	1.27	2.26	1.87	1.89	1.37	1.67	1.44	1.01	0.98	1.84	1.98	1.37	1.62	1.73	1.26	1.83	2.09	1.94	1.94	1.61	1.90	1.52	0.94
ΣREE	103.0	90.1	135.7	129.6	121.1	104.7	134.6	158.6	84.4	108.6	129.9	66.2	136.4	125.4	88.9	91.3	160.7	116.7	115.3	116.7	108.9	124.8	112.1	48.1

Major elements in wt.%, trace and RE elements in ppm, nd = no data