

Appendix 1. Descriptions and whole-rock compositions of Mount Garelo rock samples.		[All analyses performed at the GeoAnalytical Lab, Washington State University. Sample number abbreviated (excludes "03GR" prefix) where noted in text and on map. UTM values in North American Datum 1983, Zone 1 North projection. Abbreviations: bt, biotite; cpx, clinopyroxene; ol, olivine; opx, orthopyroxene; pheno, phenocryst; pl, plagioclase; px, pyroxene; xtl, crystal]																																																									
Sample No.	Unit label	UTM East	UTM North	Sample type	Field description	Major-element oxides, in weight percent, by XRF											Trace elements, in ppm, by XRF											Trace elements, in ppm, by ICP-MS																															
						SiO ₂	TiO ₂	Al ₂ O ₃	FeO	MnO	MgO	CaO	Na ₂ O	K ₂ O	P ₂ O ₅	Ni	Cr	Sc	V	Ba	Rb	Sr	Zr	Y	Nb	Ga	Cu	Zn	Pb	La	Ce	Th	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Ba	Th	Nb	Y	Hf	Ta	U	Pb	Rb	Cs	Sr	Sc	Zr	
03GRMC04	I29	377868	5735810	Lava	Agglutinate/lava from east rim of crater 5 (double explosion crater)	Crystal-poor, pl-cpx, no or few ol	58.15	0.88	17.88	6.80	0.16	2.20	5.34	4.93	3.25	0.41	7.4	7.0	15.3	140.7	1124.2	91.0	503.9	218.9	26.9	4.7	22.6	73.8	88.6	19.2	25.8	53.0	7.7	47.70	6.12	26.59	6.58	1.69	5.63	0.88	5.18	1.06	2.96	0.44	2.91	0.45	1143.19	8.25	5.84	28.82	6.14	0.40	3.47	18.06	95.17	6.30	531.76	15.80	222.85
03GRMC05	I29	378437	5735343	Lava	Two-m block on east rim of crater 2	Crystal-poor, pl-cpx, no or few ol	58.68	0.86	17.68	6.51	0.16	2.19	5.16	4.98	3.38	0.39	5.0	5.2	13.6	132.1	1142.2	96.5	477.4	229.2	26.6	5.0	21.1	67.8	89.2	25.2	26.4	50.1	1.65	5.61	0.86	5.09	1.05	2.91	0.44	2.87	0.45	1127.33	8.49	6.09	28.74	6.25	0.40	3.60	21.70	96.65	6.40	487.07	16.07	228.61					
03GRMC16	I29	378339	5735475	Lava	In situ lava from east rim of crater 3; crystal clots to 1 cm	Groundmass	58.09	0.86	17.79	6.68	0.17	2.37	5.42	4.95	3.30	0.39	6.4	8.5	14.3	134.4	1113.7	93.4	500.7	226.2	27.8	4.7	20.4	75.0	90.0	15.2	24.9	39.5	7.4	46.60	5.97	25.61	6.26	1.62	5.47	0.82	5.03	1.03	2.84	0.43	2.73	0.44	1092.46	8.38	5.77	28.20	5.98	0.39	3.60	15.17	92.19	6.09	494.55	15.93	217.90
03GRMC17	I29	378310	5735570	Lava	Lava from south top of peanut flow; crystal clots to 3 mm	Pl-cpx-andesite(?)	57.92	0.87	17.87	6.83	0.16	2.27	5.48	4.94	3.25	0.41	5.9	6.0	14.9	138.8	1123.2	91.1	508.2	220.4	26.5	4.9	22.2	74.1	91.6	18.2	45.6	8.3	45.52	5.83	25.10	6.06	1.59	5.43	0.85	4.95	0.99	2.81	0.42	2.69	0.43	1097.49	8.38	5.73	27.72	5.90	0.38	3.54	15.94	90.53	6.07	508.31	16.14	215.89	
03GRMC20	I29	378660	5735809	Lava	Front of peanut flow	Pl-cpx-andesite, xtL poor	57.79	0.88	17.93	6.83	0.16	2.33	5.53	4.92	3.24	0.41	3.6	7.4	14.1	142.5	1126.8	90.2	518.5	219.9	27.4	4.4	21.1	44.4	76.6	46.9	14.9	53.3	7.7	46.49	5.96	25.90	6.19	1.63	5.53	0.84	4.98	1.03	2.83	0.42	2.69	0.43	1092.91	8.31	5.64	28.13	5.95	0.37	3.55	14.64	88.70	5.72	513.95	15.88	212.80
03GRMC21	I29	378600	5734980	Lava	Top of crater 1 flow; some crystal clots	Pl-cpx-andesite(?)	58.27	0.86	17.74	6.65	0.17	2.29	5.34	4.96	3.32	0.41	6.6	6.8	14.5	132.0	1123.2	94.2	493.8	226.8	27.0	4.5	20.5	64.2	91.3	15.0	27.6	50.3	8.2	47.35	6.06	26.17	6.44	1.58	5.47	0.86	5.09	1.04	2.93	0.43	2.81	0.45	1116.56	8.77	5.98	28.78	6.06	0.39	3.76	15.43	94.43	6.33	497.73	16.15	224.85
03GRBB09	I29	377512	5736100	Lava	Lava from crater 8 that spills into crater 7	Pl-cpx-andesite(?)	58.01	0.87	18.02	6.67	0.17	2.30	5.45	4.87	3.26	0.40	3.7	4.6	13.8	137.8	1134.3	91.5	509.4	220.7	26.9	5.3	21.1	64.8	89.4	13.8	26.2	49.9	7.1	46.73	6.00	25.90	6.29	1.61	5.39	0.83	4.92	1.01	2.85	0.42	2.69	0.44	1108.39	8.30	5.57	27.38	5.81	0.38	3.53	15.03	91.95	6.15	507.83	15.75	212.13
03GRGM16A	I29	378884	5735058	Lava	Forms delta into sea	Pl-cpx-andesite(?)	58.17	0.86	17.83	6.57	0.16	2.26	5.38	5.05	3.34	0.39	6.1	3.2	14.8	127.9	1135.4	89.2	498.3	225.7	27.5	5.0	21.2	27.4	81.6	15.3	51.2	8.3	46.64	6.01	26.01	6.25	1.64	5.48	0.86	5.08	1.03	2.89	0.43	2.81	0.45	1110.82	8.83	5.83	28.27	6.13	0.39	3.82	14.37	85.89	2.52	489.99	15.73	221.32	
03GRBB16A	p29	376477	5735743	Scoria bomb	Scoria bomb in upper 40 cm of strat section	Pl-cpx-andesite(?)	58.68	0.85	17.89	6.49	0.16	2.10	4.99	5.08	3.37	0.39	4.3	6.7	13.6	120.3	118.9	96.0	497.4	230.5	27.2	4.9	21.9	58.7	91.8	17.2	47.43	6.15	26.53	6.32	1.63	5.29	0.83	5.04	1.04	2.89	0.43	2.76	0.46	1147.73	8.76	5.90	28.56	6.10	0.41	3.76	14.73	226.06							
03GRBB16G	p29	376477	5735743	Pumice	Sample of pumice clasts from pink/oxidized fall at base of crater 1	Pl-cpx-andesite(?)	60.06	0.81	17.83	5.94	0.16	1.81	4.34	5.14	3.56	0.35	4.7	8.3	13.5	94.0	1154.8	102.8	453.3	249.4	29.7	6.0	21.6	46.2	91.3	17.0	25.6	58.7	9.2	49.25	6.25	26.58	6.32	1.59	5.51	0.85	5.09	1.06	2.94	0															