

Appendix 1.

Unit Sample locality	GoP L-03	GoP L-05	GoP L-06	GoP L-07	GoP L-09	GoP L-09	in GoP L-03	in GoP L-09	in GoP L-09	YaL L-01	YaL L-02	YaL L-04	in YaL L-02	in YaL L-03	AIL L-08
Sample No.	03-1	05-2	06-2	07-1	09-1 host	09-2 host	xx-2	09-1 mi	09-2 mi	01	02-2	04-6	02-4	03-3	08-1
<i>Major XRF (wt.%)</i>															
SiO ₂	63.47	60.74	62.42	58.83	61.63	62.04	51.61	53.88	52.91	59.18	58.87	63.41	51.26	49.52	59.29
TiO ₂	0.51	0.63	0.53	0.66	0.61	0.59	1.03	0.79	0.97	0.68	0.69	0.52	0.97	1.08	0.66
Al ₂ O ₃	16.77	17.15	17.08	17.32	16.97	16.86	17.86	17.57	18.26	17.31	17.39	16.66	18.25	17.98	17.33
Fe ₂ O ₃	5.40	6.68	5.69	7.32	6.14	6.02	10.25	8.92	9.52	7.00	7.33	5.40	9.73	10.54	6.99
MnO	0.15	0.15	0.14	0.17	0.16	0.15	0.21	0.22	0.20	0.16	0.17	0.14	0.17	0.19	0.17
MgO	2.08	2.42	2.34	2.94	2.62	2.54	4.63	5.49	4.49	3.04	3.09	2.11	5.04	5.96	2.97
CaO	5.26	6.04	5.79	7.02	5.89	5.73	9.84	8.93	8.94	6.89	6.82	5.37	10.33	11.33	6.71
Na ₂ O	3.56	3.40	3.38	3.04	3.47	3.47	2.70	2.58	2.87	3.30	3.31	3.46	2.68	2.26	3.35
K ₂ O	2.57	2.35	2.31	2.33	2.28	2.36	1.49	1.45	1.55	2.15	2.12	2.53	1.31	1.14	2.17
P ₂ O ₅	0.21	0.26	0.25	0.27	0.22	0.23	0.23	0.24	0.24	0.23	0.29	0.23	0.22	0.15	0.29
Total	99.97	99.82	99.93	99.91	100.00	99.99	99.85	100.06	99.94	99.93	100.09	99.84	99.96	100.15	99.92
<i>Trace XRF (ppm)</i>															
Sc	11.6	14.3	11.8	14.1	17.8	15.7	32.8	25.8	28.2	20.7	15.6	10.5	32.4	39.9	13.8
V	114.4	132.0	129.8	162.8	93.5	92.5	342.3	127.3	171.7	237.9	158.7	113.2	317.4	344.6	143.9
Cr	6.0	17.7	11.8	5.8	11.5	11.6	21.8	123.8	15.5	21.4	7.5	7.7	36.4	36.7	7.0
Co	11.9	16.3	14.3	16.2	14.9	13.9	27.6	26.5	29.0	20.5	17.4	12.4	32.8	34.1	18.0
Ni	4.7	6.8	7.5	4.8	7.9	7.2	16.1	36.6	15.9	11.2	8.3	5.5	20.8	28.6	7.6
Cu	15.0	27.9	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
Rb	81.4	64.0	79.4	76.1	69.2	74.2	41.4	44.8	42.7	62.9	63.8	81.6	37.7	28.9	67.8
Zn	56.8	64.7	56.5	63.0	59.3	59.3	90.5	70.1	74.9	59.1	56.3	47.6	76.8	85.4	60.9
Sr	428.9	444.4	478.1	488.8	423.7	422.0	423.4	432.4	435.5	430.1	520.2	435.7	437.7	402.2	513.4
Y	19.6	20.4	17.3	21.8	19.6	20.8	24.4	21.3	23.6	22.0	25.4	19.8	23.1	24.5	21.8
Zr	125.1	117.9	122.8	109.9	116.1	119.0	78.0	86.1	88.8	108.0	109.4	129.0	76.0	60.4	112.5
Ba	993.4	893.6	971.5	899.3	938.2	968.8	494.8	631.0	579.9	812.1	833.4	989.6	484.0	376.4	845.9
Pb	5.0	4.3	4.5	3.0	4.1	4.5	5.0	3.2	3.5	3.3	3.6	9.3	3.7	2.9	3.4
<i>Trace ICP-MS (ppm)</i>															
Nb	3.98	3.49	3.62	3.47	3.68	3.86	3.22	2.73	2.66	3.67	3.44	4.29	2.13	1.80	3.38
La	23.63	22.10	22.54	21.57	21.48	23.41	15.37	16.86	17.64	22.49	27.78	25.42	13.65	11.03	21.65
Ce	47.78	45.33	44.98	45.50	42.86	45.76	31.21	36.83	37.14	45.60	48.57	51.03	30.74	24.95	45.89
Pr	5.34	5.35	5.08	5.34	4.90	5.21	4.57	4.56	4.82	5.46	6.58	5.78	3.90	3.62	5.39
Nd	20.22	20.67	19.04	21.07	18.74	19.91	19.58	18.48	19.97	21.58	26.65	21.79	17.01	16.26	21.57
Sm	3.97	4.30	3.83	4.48	3.95	3.90	4.70	4.16	4.48	4.62	5.22	4.37	3.99	4.24	4.51
Eu	1.11	1.23	1.11	1.34	1.13	1.18	1.38	1.26	1.35	1.36	1.52	1.18	1.28	1.30	1.35
Gd	3.51	3.94	3.36	4.01	3.58	3.62	4.54	4.05	4.32	4.33	4.95	3.93	4.06	4.36	4.06
Tb	0.53	0.57	0.49	0.59	0.52	0.55	0.71	0.61	0.69	0.62	0.72	0.56	0.62	0.69	0.60
Dy	3.14	3.42	2.86	3.47	3.10	3.25	4.20	3.52	4.02	3.76	4.15	3.35	3.63	4.09	3.54
Ho	0.65	0.72	0.61	0.76	0.68	0.69	0.90	0.75	0.87	0.79	0.89	0.73	0.77	0.85	0.75
Er	1.97	2.18	1.86	2.21	2.06	2.07	2.56	2.23	2.50	2.37	2.61	2.10	2.25	2.51	2.23
Tm	0.31	0.33	0.30	0.34	0.31	0.31	0.39	0.33	0.36	0.36	0.40	0.34	0.33	0.36	0.33
Yb	2.12	2.27	1.96	2.32	2.19	2.19	2.50	2.22	2.42	2.40	2.63	2.27	2.17	2.29	2.27
Lu	0.35	0.37	0.33	0.37	0.36	0.35	0.39	0.35	0.37	0.38	0.42	0.36	0.33	0.36	0.36
Hf	2.99	2.83	2.88	2.82	2.86	2.86	2.10	2.18	2.22	2.87	2.70	3.12	1.91	1.65	2.72
Ta	0.28	0.25	0.26	0.23	0.25	0.27	0.16	0.17	0.17	0.24	0.23	0.28	0.14	0.11	0.23
Th	10.32	9.52	10.03	8.75	9.85	9.53	4.73	6.36	5.13	9.21	8.53	12.42	4.39	3.47	8.31
U	2.63	2.14	2.32	1.96	2.20	2.35	1.43	1.14	1.28	2.25	2.06	2.92	1.14	0.97	2.18
<i>Isotope TIMS</i>															
⁸⁷ Sr/ ⁸⁶ Sr	0.703278	0.703392	0.703281	0.703338			0.703266	0.703213	0.703162	0.703358	0.703251	0.703249		0.703258	
2SE	13	13	12	13			13	13	11	13	13	12		13	
¹⁴³ Nd/ ¹⁴⁴ Nd	0.512883	0.512872	0.512867	0.512888			0.512870	0.512862	0.512866	0.512866	0.512880	0.512881		0.512867	
2SE	10.0	10.0	9.7	9.6			9.7	9.9	9.6	9.7	9.6	9.9		9.1	

Unit names as in Table 1. Sample localities are shown in Fig. 3.

オープンファイル

小杉・他 Appendix 1.

Appendix 1. (continued)

Unit Sample locality	AiL L-08	AiL L-11	AiL L-13	in AiL L-14	in AiL L-08	in AiL L-08	BeL L-15	BeL L-15	BeL L-16	in BeL L-15	in BeL L-15	in BeL L-15	in BeL L-16	dike L-07	dike L-07
Sample No.	08-2	11-1	13-1	14-2	08-3	08-4	15-1	15-2	16-1	15-4	15-5	15-6	16-2	07-4	07-6
<i>Major XRF (wt.%)</i>															
SiO ₂	59.10	58.90	62.30	50.96	53.81	54.08	55.68	57.76	58.99	53.07	54.25	47.72	48.61	52.59	52.36
TiO ₂	0.67	0.69	0.57	0.99	0.83	0.83	0.81	0.73	0.69	0.87	0.87	1.15	1.12	0.88	0.90
Al ₂ O ₃	17.28	17.69	16.96	18.12	18.46	18.19	17.30	16.95	16.55	17.02	17.55	18.10	18.01	17.04	17.11
Fe ₂ O ₃	7.19	7.24	6.08	10.44	8.98	9.06	7.95	7.30	6.98	10.26	8.41	10.86	10.67	9.41	9.34
MnO	0.17	0.17	0.16	0.19	0.19	0.19	0.16	0.16	0.17	0.25	0.17	0.17	0.18	0.18	0.17
MgO	2.99	3.03	2.23	5.03	4.06	4.09	4.17	3.70	3.49	5.13	4.61	6.46	6.11	5.32	5.49
CaO	6.62	6.45	5.48	10.24	8.59	8.47	8.60	7.85	7.30	9.59	9.18	11.82	11.35	10.33	10.56
Na ₂ O	3.32	3.31	3.42	2.57	2.99	3.00	2.95	3.06	3.05	2.60	2.88	2.34	2.36	2.61	2.55
K ₂ O	2.14	2.05	2.46	1.14	1.57	1.64	2.06	2.23	2.31	1.26	1.91	1.31	1.09	1.46	1.44
P ₂ O ₅	0.28	0.27	0.24	0.24	0.34	0.35	0.21	0.21	0.19	0.15	0.21	0.20	0.20	0.17	0.16
Total	99.77	99.81	99.91	99.92	99.81	99.89	99.88	99.93	99.73	100.18	100.02	100.13	99.71	99.97	100.08
<i>Trace XRF (ppm)</i>															
Sc	15.3	16.4	14.3	34.8	17.3	18.2	26.7	22.3	21.4	34.6	29.4	40.5	40.8	41.8	43.1
V	178.0	145.7	193.6	284.6	195.3	195.2	248.6	217.0	196.9	334.2	273.9	393.8	375.5	304.2	310.3
Cr	8.5	8.5	8.3	37.5	8.3	7.7	35.8	27.9	29.3	24.5	38.7	57.3	65.5	68.6	73.1
Co	17.6	19.6	14.8	28.1	24.2	22.9	24.3	19.9	18.1	37.2	26.5	33.2	33.8	31.7	32.2
Ni	7.3	7.7	5.5	8.9	9.3	8.8	15.1	13.1	12.7	15.8	16.3	24.3	24.4	22.9	23.2
Cu	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
Rb	63.1	57.9	76.4	27.4	43.5	35.8	59.8	67.9	70.6	35.5	55.3	22.8	17.8	43.2	40.7
Zn	55.2	60.6	59.0	75.8	60.3	67.0	66.6	66.8	-	90.0	73.1	66.2	83.9	72.1	71.9
Sr	504.4	510.8	438.1	501.1	616.3	606.5	450.7	439.5	415.9	466.4	456.1	463.6	451.3	451.3	448.0
Y	22.8	17.1	19.5	22.8	23.8	24.2	20.5	19.5	20.6	20.7	20.5	19.5	21.5	20.0	19.4
Zr	114.0	113.5	131.4	70.1	94.4	93.6	88.6	96.8	98.7	78.7	81.9	54.8	58.7	69.6	70.1
Ba	843.0	885.9	961.3	365.5	629.0	635.4	740.5	814.9	843.8	540.4	674.8	418.1	452.5	518.4	471.9
Pb	2.7	3.1	3.9	3.8	1.7	2.2	4.6	7.1	5.2	7.5	6.6	3.2	2.8	3.7	3.1
<i>Trace ICP-MS (ppm)</i>															
Nb	3.32	3.58	3.77	2.11	2.73	2.66	2.48	2.87	3.04	2.58	2.21	1.30	1.52	1.98	1.78
La	21.56	16.10	20.69	11.85	19.70	19.81	15.99	17.49	18.28	15.31	14.57	9.21	12.35	13.03	11.58
Ce	46.81	35.46	42.44	27.67	42.63	40.71	33.36	36.17	37.27	33.61	31.14	21.46	23.97	28.63	25.48
Pr	5.54	4.06	4.97	3.79	5.56	5.26	4.02	4.20	4.33	4.09	3.82	2.91	3.57	3.60	3.30
Nd	22.31	16.17	19.04	16.98	23.37	22.25	16.25	16.97	17.54	16.70	15.72	13.33	15.74	15.31	14.29
Sm	4.68	3.65	3.97	4.30	5.14	4.88	3.78	3.77	3.74	3.88	3.86	3.66	3.92	3.68	3.58
Eu	1.34	1.32	1.16	1.35	1.52	1.46	1.17	1.15	1.15	1.43	1.19	1.19	1.23	1.19	1.12
Gd	4.11	3.36	3.53	4.31	4.73	4.67	3.71	3.69	3.65	3.80	3.88	3.81	4.21	3.75	3.67
Tb	0.62	0.50	0.53	0.69	0.70	0.68	0.56	0.57	0.56	0.59	0.59	0.59	0.64	0.58	0.56
Dy	3.49	3.09	3.09	4.20	4.12	3.95	3.34	3.25	3.24	3.53	3.43	3.56	3.78	3.44	3.33
Ho	0.75	0.67	0.67	0.88	0.88	0.84	0.70	0.67	0.69	0.74	0.72	0.72	0.79	0.73	0.69
Er	2.21	1.97	2.01	2.52	2.55	2.45	2.10	1.98	1.99	2.17	2.14	2.08	2.25	2.09	2.06
Tm	0.35	0.32	0.30	0.37	0.38	0.36	0.30	0.31	0.32	0.33	0.30	0.29	0.39	0.31	0.29
Yb	2.35	2.13	2.08	2.42	2.54	2.38	1.95	2.05	2.07	2.18	1.99	1.81	1.98	2.06	1.98
Lu	0.37	0.35	0.35	0.37	0.40	0.38	0.32	0.32	0.33	0.34	0.32	0.29	0.30	0.31	0.30
Hf	2.71	2.89	3.14	1.91	2.37	2.23	2.25	2.45	2.47	2.21	2.18	1.47	1.44	1.83	1.79
Ta	0.23	0.24	0.27	0.13	0.17	0.16	0.18	0.21	0.23	0.17	0.16	0.09	0.10	0.13	0.13
Th	8.40	9.43	9.97	3.16	6.04	5.48	7.67	8.59	9.06	4.95	6.78	2.74	3.26	4.86	4.90
U	2.35	1.83	2.40	0.78	1.48	1.53	1.84	2.26	2.33	1.20	1.58	0.68	0.76	1.26	1.20
<i>Isotope TIMS</i>															
⁸⁷ Sr/ ⁸⁶ Sr	0.703202	0.703344	0.703024	0.703175			0.703355			0.703379	0.703314	0.703200	0.703285		0.703041
2SE	13	12	11	12			13			13	10	13	13		10
¹⁴³ Nd/ ¹⁴⁴ Nd	0.512886	0.512867	0.512915	0.512871			0.512867			0.512891	0.512849	0.512876	0.512875		0.512882
2SE	9.8	9.6	9.8	10.0			9.4			9.9	9.7	9.9	9.9		9.7

オープンファイル

小杉・他 Appendix 1.

Appendix 2.

Volcano	sample#	SiO ₂ wt. %	⁸⁷ Sr/ ⁸⁶ Sr	2SE	¹⁴³ Nd/ ¹⁴⁴ Nd	2SE
Kariba-yama						
	89704-12	57.9	0.703214	16	0.512871	26
	TOP-COG	53.1	0.703122	15	0.512893	25
	89705-8	58.2	0.703193	17	0.512886	23
Oshima-Oshima						
	A2	54.1	0.703006	13	0.512902	23
	M1-2	52.4	0.703069	13	0.512847	30
	AB-W	56.6	0.703031	27	0.512830	25
	N3	55.6	0.702899	17	0.512955	25
	N5	55.2	0.702886	14	0.512957	25
	S1	57.9	0.703062	15	0.512881	20
	B2	48.2	0.703101	13	0.512872	27
Megata						
	3-1-6	60.7	0.703404	13	0.512919	24
	3-2-10	57.5	0.703389	14	0.512819	23
	4-6-5	48.5	0.703192	13	0.512907	19



横幅8cm