

Table V-5. The average compositions of the mixture of 2/3B+1/3G, island arc andesites, Archean upper

	2/3B+1/3G	Island arc andesites	Archean upper crust	Archean bulk crust	Bulk contin -ental crust	Oceanic crust (MORB)
		(1)	(1)	(1)	(1)	(2)
Ag-47	0.08				0.08	0.032h
Al-13 %	8.1	9.5	8.1	8	8.4	8.1
As-33	1.5				1	
Au-79 ppb	3				3	*1.0h
B-5	8.3				10	
Ba-56	410	350	265	220	250	14
Be-4	1.8	1.5			1.5	
Bi-83	0.042				0.06	0.007h
Br-35	2.8					
C-6	270					140
Ca-20 %	5	5.4	4.4	5.2	5.3	8.1
Cd-48	0.12				0.098	0.14h
Ce-58	41	38	42	31	33	12
Cl-17	110					
Co-27	32	25	25	30	29	47
Cr-24	134	55	180	230	185	300e
Cs-55	2.3	1.7			1	0.024
Cu-29	64	60		80	75	74
Dy-66	3.8	3.7	3.4	3.6	3.7	6.3
Er-68	2.2	2.3	2.1	2.2	2.2	4.1
Eu-63	1.1	1.1	1.2	1.1	1.1	1.3
F-9	550					
Fe-26 %	6.2	5.8	6.2	7.5	7.1	8.1
Ga-31	18	18			18	17e
Gd-64	3.9	3.6	3.4	3.2	3.3	5.1
Ge-32	1.5				1.6	1.5h
Hf-72	3	3	3	3	3	3
Hg-80	0.08					
Ho-67	0.77	0.82	0.74	0.77	0.78	1.3
I-53	0.5					
In-49	0.05				0.05	0.071h
Ir-77 ppb	~ 0.2				0.1	*0.046h
K-19 %	1.7	1.3	1.5	0.75	0.91	0.088
La-57	20	19	20	15	16	3.9
Li-3	17	10			13	9e
Lu-71	0.31	0.3	0.31	0.33	0.3	0.59
Mg-12 %	2.8	2.1	2.8	3.6	3.2	4.6
Mn-25	1200	1100	1400	1500	1400	1300e
Mo-42	1.4				1	0.46n
N-7	20					
Na-11 %	2.35	2.6	2.45	2.2	2.3	2
Nb-41	13	11			11	3.5e

	2/3B+1/3G	Island arc andesites (1)	Archean upper crust (1)	Archean bulk crust (1)	Bulk contin -ental crust (1)	Oceanic crust (MORB) (2)
Nd-60	19	16	20	16	16	11
Ni-28	105	30	105	130	105	150
Os-76 ppb						*<0.05h
P-15	1200					700e
Pb-82	10	10			8	0.49
Pd-46 ppb	~1				1	*<0.89h
Pr-59	4.9	4.3	4.9	3.7	3.9	2.1
Pt-78 ppb	~1					
Rb-37	64	42	50	28	32	1.3
Re-75 ppb	0.4				0.5	1.1h
Rh-45 ppb						
Ru-44 ppb	~ 0.1					
S-16	770					800m
Sb-51	0.2				0.2	0.006h
Sc-21	24	30	14	30	30	41
Se-34	0.13				0.05	0.2h
Si-14 %	26.4	27.1	28.1	26.6	26.8	23.6
Sm-62	4.1	3.7	4	3.4	3.5	3.8
Sn-50	2.7				2.5	1.4
Sr-38	410	400	240	215	260	110
Ta-73	1				1	0.19
Tb-65	0.62	0.64	0.57	0.59	0.6	0.89
Te-52	0.005					*0.009h
Th-90	6.3	4.8	5.7	2.9	3.5	0.19
Ti-22	4800	4800	5000	6000	5400	9700
Tl-81	0.32				0.36	0.011h
Tm-69	0.3	0.32	0.3	0.32	0.32	0.62
U-92	1.7	1.3	1.5	0.75	0.91	0.071
V-23	204	175	195	245	230	290e
W-74	1				1	0.028n
Y-39	24	22	18	19	20	36
Yb-70	2.1	2.2	2	2.2	2.2	3.9
Zn-30	93				80	79h
Zr-40	160	100	125	100	100	100

Data sources: (1) Taylor and McLennan (1985); (2) Hofmann (1988); 2/3B+1/3G from Table V-3. e: Engel et al. (1965); h: Hertogen et al. (1980), Laul et al. (1972); m: Moore and Fabbri (1971); n: Newsom et al. (1986). Asterisks represent the concentration ranges for Au: 0.06-6; Ir: 0.001-0.5; Os: < 0.0001-0.09; Pd: < 0.1-7; Te: 0.002-0.017.