The geochemistry of the sedimentary rocks of the Pretoria Group, Transvaal Sequence

by

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with XRF and ICP-AAS

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SAMPLE LOCATIONS

Generally, a farm name (location name with number), as shown in the geological maps 1 : 250,000 of South Africa, is given as sample location. Other names refer to cities, villages, dams, nature reserves, passes or rivers (location name without number).

Botswana:

Location of GOSSAN and STRAT drillholes is given by Key (1983), and location of LES drillhole by Piper and Kreimeyer (1992).

Drillhole:	STRAT 1 (Hekpoort Formation):	ST-1XX
	STRAT 2 (Silverton Formation):	ST-3XX
	STRAT 3 (Rayton Formation):	ST-4XX
	STRAT 4 (Upper Timeball Hill Fm.):	ST-2XX
	GOSSAN 1 (Lower Timeball Hill Fm.):	G-3XX
	GOSSAN 2 (Rooihoogte Fm.):	G-1XX
	GOSSAN 3 (Rooihoogte Fm.):	G-2XX

Western Transvaal

WT-1 to WT-7:	Zeerust town.
WT-8 to WT-10:	Klein Marico Poort 242
WT-11 to WT-13 :	Rykvoorby
WT-14:	Braklaagte
WT-15 to WT-20:	Leeuwfontein
WT-21 to WT-24:	Bloemfontein
WT-25 to WT-29:	Zandpoortjie
WT-30:	Doornrivier
WT-31 to WT-33:	Zeerust town
WT-34 to WT-45:	Magozastad
WT-46 to WT-48:	Rietvlei
WT-49 to WT-60:	Zyferfontein 293
WT-61 to WT-62:	Doornkraal
WT-63 to WT-79:	Doornkraal 110
WT-80:	Zamenkomst
WT-81:	Schuinsdrift 75
WT-82 to Wt-86:	Madikwe
WT-87 to WT-93:	Renosterhoek
WT-94 to WT-95:	Rietfontein 453
WT-96 to WT-97:	Kwaggashoek 448
WT-98 to WT-99:	Diepkloof 446
WT-100:	Rietvallei 406
WT-101 to Wt-103:	Brakfontein 404

WT-104 to WT-105:	Swartruggens town
WT-106:	Nooitgedacht
WT-107 to WT-111:	Rusvoorbei 383
WT-112 to WT-115:	Lindleyspoort 220
WT-116:	Holfontein
WT-148 to WT-150:	Elandshoek 269
WT-151:	Vogelstruisdraai 258
WT-152 to WT-155:	Kameelnek 278
WT-156 to WT-157:	Langverwacht 275
WT-158 to WT-160:	Welgevonden 130
WT-161:	Naauwpoort 137
WT-162:	Olifantsnekdam
WT-163 to WT-165:	Roodekloof 326
WT-166 to WT-168:	Middelfontein 361
WT-169:	Elandsfontein 366
WT-170 to WT-182:	Waterval 462
WT-183:	Broodskraal 316
WT-184 to WT-187:	Doornlaagte 319
WT-188:	Kortfontein 461
WT-189:	Olievenfontein 434
WT-190:	Kleinfontein 463
WT-191:	Roerfontein 465
WT-192:	Goede Hoop 490
WT-193 to WT-195:	Rietfontein 487
WT-196 to WT-197:	Kwaggasnek 485
WM-1 to WM-4:	Hettiesvilla 424
WSIQ-1 to WSIQ-3:	Krokodildrift 217
WSI-1 to WSI-11:	Krokodildrift 217
WSIK-1 to WSIK-4:	Krokodildrift 217
WSIN-1 to WSIN-7:	Hoëbome 232
WDQ-1 to WDQ-2:	Hoëbome 232
WDW-1 to WDW-4:	Blokkloof 422

Northwestern Transvaal:

WT-117 - WT-118:	Zandrivierspoort 443
WT-119 - WT-120:	Donkerpoort 344
WT-121:	Haakdoorndrift 373
WT-122 to WT-139:	Buffelshoek 350
WT-140 to WT-147:	Ben Alberts Nature Reserve

Western Fragments:

RF-1 to RF-3:	Zandfontein 476
RF-4 to RF-7:	Rheebokrand 481
RF-8 to RF-12:	Welgenacht 514

RF-13:	Blokdrift 512
RF-14 to RF-15:	Nieuwpoort 516
RF-16 to RF-17:	Haartebeestfontein 511
RF-18 to RF-21:	Leeuwpoort 544
CRT-1 to CRT-13:	Motlhabe River
CRT-14:	Olifantskop 425
CRT-15 to CRT-33:	Liverpool 543
CRT-34 to CRT-47:	Vaalkop 426
CRT-48 to CRT-51:	Buffelspoort 149
CRT-52 to CRT-57:	Ga-Rasai
CRT-58 to CRT-59:	Atoom 384

Central Transvaal:

P-1 to P-14:	Zonderwater 482
P-15 to P-36:	Pretoria stad
All UVS & UVM samples:	Vlakfontein 523
UV-7 to UV-40:	Pretoria East
UV-41 to UV42:	Pretoria - Mathaiea
UV-43 to UV-48:	Pretoria - Verwoerdburg
UV-49 to UV-51:	Pretoria
UV-52 to UV-68:	Pretoria - Garsfontein
UV-69 to UV-76:	Pretoria - Mamelodi
UV-77 to UV-78:	Pretoria - Pinaarspoort
UV-79 to UV-80:	Gemoedsrus
UV-81 to UV-95:	Pretoria
UV-96 to UV-107:	Schurveberg
UV-108 to UV-109:	Pelindaba
UV-110 to UV-116:	Rietfontein 485
UV-117 to UV-119:	Pelindaba
UV-120 to UV-128:	Skeerpoort 477
UV-129 to UV-135:	Dwarsvlei 503
UV-136 to UV-139:	Weltevreden 517
UV-140 to UV-147:	Hekpoort 504
UV-148 to UV-152:	Doornboschfontein 513
UV-153 to UV-159:	Steenekoppie 153
UV-160:	Waalbank 512
UV-161 to UV-165:	Kliprand 390
UV-166 to UV-168:	Pretoria - Sammy Marks Estates

Eastern Fragments:

DTU-1 to DTU-9:	Ntwane
DTQ-1 to DTQ-5:	Ntwane
DTO-1 to DTO-3:	Ntwane
DDW-1 to DDW-5:	Ntwane

DDQ-1 to DDQ-4:	Ntwane
DRB-1 to DRB-5:	Ntwane
DD-1:	Ntwane
VTQ-1 to VTQ-6:	Marble Hall 29JS
VDW-1 to VDW-4:	Schorpamore 743
VDQ-1 to VDQ-5:	Rostockkop 744
VMA-1 to VMA-8:	Vlakfontein 723
VMA-C:	Vlakfontein 723
DSQ-1 to DSQ-6:	Kruisrivier 74
DMG-1 to DMG-7:	Goedgedacht 72
DLQ-1 to DLQ-4:	De Wagendrift 79

Northeastern Transvaal:

ET-1:	Moeijelyk 412
ET-2:	Rostock 410
ET-3 to ET-4:	Koedoeskop 408
ET-5 to ET-8:	Voorspoed 305
ET-9 to ET-16:	Jacobskop 411
ET-17 to ET-19:	Lot 297
ET-20 to ET-28:	Doerdegelid 278
ET-29:	The Shelter 121
ET-30 to ET-33:	Wimbledon 122
ET-34:	Kgopopneng
ET-35 to ET-38:	Praktiseer 275
ET-39 to ET-46:	Frankfort 260
ET-47 to ET-50:	Edendale 124
ET-51 to ET-72:	Morgenzon 125
ET-73 to ET-81:	Naboomskoppie 263
ET-82 to ET-85:	Haakdoorn Hoek 282
ET-86 to ET-98:	Krovellenbos 132
ET-99 to ET-101:	Morgenzon 125
ET-102 to ET-103:	Annesley 104
ET-104 to ET-118:	Wimbledon 122
ET-119:	Grootplaats 406
ET-120 to ET-123:	Goedhoek 304
ET-124:	Fonteinplaats 427
ET-125:	Naauwpoort 441
ET-126:	Manoge
ET-127 to ET-131:	Olifants 479
ET-132 to ET-136:	Spelonk 428
ET-137:	Pramkoppies
ET-138 to ET-140:	Doorloop 486
ET-141:	Zuiping 487
ET-142:	Middlekop 445
ET-143 to ET-144:	Potgietersrus - Townlands
ET-145:	Planknek 43

ET-146: to ET-156:	Vier-en-twintig Revier 49
ET-157 to ET-159:	Preussen 48
ET-160 to ET-162:	Rooipoort 46

Eastern Transvaal:

VHT-1 to VHT-13:	Klipfontein 385
VM-1 to VM-6:	Rustenburg
VM-7 to VM-10:	Dorpsrivier
ET-164 to ET-283:	Long Tom Pass
ET-284 to ET-298:	Steenkampsberg Pass
ET-299:	Kraaibosch 55
ET-300 to ET-301:	Rooikrans 57
ET-302:	Boschfontein 15
ET-303 to ET-319:	Jaap se Hoogte
ET-320 to ET-345:	Santa railway station
ET-346	Zuikerboschhoek 80
ET-347 to ET-355:	Kwaggashoek 66
ET-356 to ET-375:	Watervalsrivier Pass
ET-376 to ET-379:	Lakenvlei 355
ET-380 to ET-382:	Elandsfontein 322
ET-383 to ET-384:	Blaauwboschkraal 346
ET-385 to ET-388:	Vlugtfontein 330
ET-389 to ET-394:	Hartebeestfontein 333
ET-395:	Houtboschfontein 335

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14
	WT-4	WT-92	WT-93	WT-60a	G-101	G-102	G-103	G-104	G-105	G-107	G-108	G-109	G-110	G-111
SiO2	58.08	59.92	60.52	59.07	73.94	60.10	88.44	61.67	71.39	62.60	60.39	59.95	61.62	56.59
TiO2	0.38	0.82	0.67	0.71	0.39	0.34	0.22	0.82	0.58	0.83	0.87	0.77	0.78	0.78
Al2O3	7.10	19.96	20.25	22.23	16.41	24.50	6.15	16.02	8.39	17.95	18.64	17.00	17.21	18.17
Fe2O3	26.98	8.59	6.91	6.14	1.20	3.18	0.78	12.75	14.07	9.11	9.82	10.13	9.57	10.39
MnO	0.37	0.04	0.00	0.05	0.01	0.00	0.01	0.07	0.08	0.06	0.01	0.03	0.23	0.34
MgO	0.04	0.70	0.91	0.99	0.69	0.86	0.28	0.35	0.52	0.51	0.62	2.20	0.01	2.99
CaO	0.00	0.00	0.00	0.00	0.08	0.07	0.00	0.00	0.00	0.00	0.03	0.02	0.08	0.00
Na2O	0.01	0.00	0.00	0.12	0.02	0.11	0.01	0.06	0.01	0.01	0.02	0.05	0.02	0.01
K2O	0.02	5.64	6.03	5.87	4.26	6.30	1.45	3.56	0.39	3.21	3.61	3.00	3.33	3.54
P2O5	0.10	0.11	0.14	0.11	0.08	0.05	0.08	0.16	0.07	0.03	0.08	0.12	0.12	0.07
Cr2O3	0.01	0.02	0.01	0.03	0.00	0.00	0.01	0.01	0.00	0.01	0.02	0.01	0.01	0.02
NiO	0.02	0.02	0.02	0.02	0.01	0.00	0.00	0.01	0.03	0.01	0.00	0.05	0.01	0.01
H2O-	0.92	0.15	0.18	0.32	0.10	0.12	0.07	0.28	0.38	0.59	0.40	0.94	0.96	1.22
LOI	5.52	4.18	4.09	4.28	2.87	4.39	1.34	4.43	4.25	5.05	5.34	5.78	5.89	6.04
TOTAL	99.55	100.15	99.73	99.94	100.06	100.02	98.84	100.19	100.16	99.97	99.85	100.05	99.84	100.17
Zn	36	36	55	104	11	26	6	127	164	90	96	981	126	110
Cu	68	30	186	28	32	62	9	127	215	60	51	39	36	42
Ni	63	44	106	97	36	25	18	122	185	66	45	472	118	112
Co	26	8	9	5	4	<3	4	25	64	25	<3	17	24	36
Ga	11	29	28	34	19	27	9	18	10	23	24	23	24	25
Mo	3	<2	2	<2	4	2	9	<2	4	4	<2	<2	<2	<2
Nb	9	20	22	22	11	14	6	9	9	20	20	20	19	18
Zr	281	174	130	176	139	126	88	139	257	198	189	187	173	158
Y	20	30	26	34	20	20	15	24	26	41	36	44	36	37
Sr	3	33	35	77	40	68	34	50	20	40	33	25	29	35
Rb	<2	236	245	211	197	292	72	174	22	162	176	152	173	174
U	<5	10	13	5	11	17	11	10	<5	5	12	14	12	8
Th	13	23	25	24	21	22	10	<5	10	25	27	23	24	27
Pb	<5	<5	6	23	31	63	57	<5	8	15	29	16	20	28
Cr	204	135	170	287	39	57	65	242	217	226	254	238	221	243
V	166	134	123	131	63	52	107	168	164	147	166	146	154	155
Ba	311	518	667	1314	9932	14706	3714	5663	333	1192	1221	1070	1075	976
Sc	16	10	14	8	11	13	<8	32	17	24	19	24	20	24
As	<10	<10	<10	<10	<10	<10	52	28	29	<10	<10	<10	<10	<10
S	349	88	114	116	310	233	243	274	325	303	335	268	328	263
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	13	<8	10	<8	8	<8	<8	<8	8	<8	<8	<8	<8
Bi	<10	7	6	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	9	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	88	n.d.	34	n.d.	n.d.	n.d.	52	40	n.d.	46

	#15	#16	#17	#18	#19	#20	#21	#22	#23	#24	#25	#26	#27	#28
	G-112	G-113	G-114	G-115	G-116	G-201	G-201A	G-201B	G-202	G-203	G-204	G-205	G-206	G-207
SiO2	55.99	55.74	60.57	63.03	64.44	63.32	53.98	58.03	60.15	57.10	57.52	56.24	55.99	56.31
TiO2	0.73	0.81	0.65	0.65	0.64	0.88	0.78	0.90	0.84	0.76	0.80	0.72	0.80	0.88
Al2O3	19.32	18.97	17.45	15.93	14.20	17.90	17.24	18.84	17.10	18.46	19.05	18.92	18.38	19.10
Fe2O3	10.07	10.96	8.79	9.47	10.01	8.54	9.59	9.72	9.47	10.40	10.45	10.53	11.45	10.65
MnO	0.04	0.10	0.33	0.05	0.18	0.01	0.07	0.03	0.06	0.18	0.06	0.10	0.06	0.06
MgO	3.43	3.18	3.21	3.75	3.86	0.48	0.56	1.48	2.44	2.23	1.74	3.23	3.67	3.92
CaO	0.00	0.02	0.17	0.04	0.19	0.00	0.00	0.02	0.02	0.05	0.00	0.03	0.00	0.36
Na2O	0.03	0.02	0.01	0.02	0.03	0.01	0.02	0.01	0.02	0.02	0.01	0.03	0.00	0.01
K2O	3.72	3.75	3.77	3.29	2.62	3.32	3.01	3.39	3.01	3.41	3.70	3.62	3.25	3.58
P2O5	0.06	0.09	0.12	0.08	0.12	0.05	0.08	0.14	0.11	0.13	0.15	0.07	0.10	0.09
Cr2O3	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.03	0.03	0.02	0.00	0.01	0.01	0.02
NiO	0.01	0.02	0.01	0.01	0.01	0.00	0.01	0.01	0.02	0.01	0.02	0.01	0.01	0.01
H2O-	0.74	0.75	0.30	0.19	0.08	0.60	9.33	1.37	1.11	1.33	0.93	0.87	0.64	0.34
LOI	5.82	5.77	4.82	3.96	4.01	4.79	5.09	5.92	6.02	5.65	5.47	5.44	5.65	5.12
TOTAL	99.98	100.20	100.22	100.49	100.41	99.91	99.78	99.89	100.40	99.75	99.90	99.82	100.01	100.45
Zn	143	235	117	79	92	30	125	259	141	124	258	128	117	108
Cu	30	155	40	35	32	29	96	24	36	41	59	54	66	100
Ni	115	130	96	83	76	23	101	141	114	122	165	119	116	109
Co	29	36	25	26	23	<3	24	9	27	34	27	44	34	29
Ga	23	24	23	19	20	20	24	23	24	25	27	27	22	24
Mo	<2	<2	4	<2	4	<2	4	<2	4	<2	3	5	<2	<2
Nb	18	18	17	13	13	22	20	21	19	20	18	17	20	19
Zr	151	157	135	119	127	214	192	190	191	163	157	164	156	157
Y	30	36	28	21	21	41	39	39	37	38	40	32	39	37
Sr	29	34	39	20	15	41	32	29	27	35	41	33	31	34
Rb	193	194	193	160	130	167	181	179	164	185	202	192	168	188
U	11	12	6	12	7	10	12	10	7	11	9	12	12	10
Th	30	23	14	13	12	28	26	22	26	23	20	22	20	22
Pb	13	20	40	12	5	18	29	15	21	34	18	38	46	49
Cr	238	217	222	194	201	258	224	245	234	248	248	218	228	221
V	158	166	148	126	123	150	150	160	145	152	158	154	163	169
Ba	1039	1040	988	812	621	1340	1164	1162	945	1054	1114	1110	941	1046
Sc	22	24	24	15	12	14	16	23	19	16	18	16	18	25
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	265	214	327	301	365	350	339	269	283	280	277	257	219	286
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	7	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	53	n.d.	35	n.d.	21	54	n.d.	n.d.	46	n.d.	55	n.d.	n.d.	49

	#29	#30	#31	#32	#33	#34	#35	#36	#37	#38	#39	#40	#41	#42
	G-208	G-209	G-210	G-211	G-213	G-214	G-215	G-219	G-220	G-221	G-222	G-223	ET-170	ET-171
SiO2	56.05	58.27	56.01	58.27	59.61	56.98	53.44	61.59	60.12	60.69	62.78	60.56	79.52	68.11
TiO2	0.88	0.75	0.81	0.57	0.71	0.63	0.63	0.70	0.61	0.66	0.64	0.70	0.18	0.79
Al2O3	19.55	17.57	22.07	17.92	16.87	17.77	14.17	17.68	18.53	17.40	16.69	18.80	6.15	20.58
Fe2O3	10.10	10.33	9.82	10.50	10.35	11.67	14.96	7.70	7.87	8.73	7.56	7.58	11.34	0.74
MnO	0.04	0.05	0.19	0.37	0.23	0.10	1.01	0.05	0.04	0.10	0.04	0.03	0.41	0.02
MgO	4.06	4.59	1.65	3.77	3.85	4.31	3.93	3.42	3.72	3.81	3.42	3.78	0.44	0.00
CaO	0.33	0.10	0.01	0.23	0.29	0.24	0.16	0.07	0.08	0.16	0.21	0.22	0.00	0.00
Na2O	0.16	0.28	0.00	0.01	0.01	0.02	0.03	0.01	0.02	0.02	0.01	0.02	0.02	0.16
K2O	3.91	3.03	3.31	3.68	3.37	3.46	2.97	4.45	4.79	4.06	4.04	3.66	0.77	6.45
P2O5	0.23	0.05	0.14	0.11	0.08	0.11	0.04	0.18	0.08	0.11	0.16	0.08	0.00	0.00
Cr2O3	0.03	0.02	0.01	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.00	0.00
NiO	0.01	0.02	0.01	0.01	0.00	0.01	0.02	0.01	0.01	0.00	0.01	0.01	0.00	0.00
H2O-	0.17	0.16	0.29	0.14	0.26	0.18	0.14	0.13	0.17	0.11	0.11	0.24	0.20	0.16
LOI	4.81	4.80	5.44	4.87	4.51	4.51	9.17	4.08	4.21	4.33	4.21	4.18	2.07	3.31
TOTAL	100.33	100.02	99.76	100.45	100.15	99.99	100.67	100.09	100.25	100.18	99.89	99.86	101.10	100.32
Zn	103	115	181	107	90	95	64	66	68	68	65	61	79	14
Cu	89	97	215	64	46	28	91	78	47	42	55	40	15	5
Ni	111	102	157	100	92	100	166	71	70	75	72	74	36	4
Co	31	27	41	26	27	34	41	16	15	18	19	14	<3	5
Ga	23	20	21	24	19	22	17	22	24	21	18	23	4	28
Mo	2	2	<2	<2	2	<2	16	9	4	3	6	4	3	10
Nb	19	18	16	16	17	14	15	18	16	18	17	18	8	15
Zr	168	160	168	162	128	128	141	158	129	137	144	138	67	205
Y	49	33	38	32	27	28	30	32	31	34	34	31	11	57
Sr	50	35	38	25	23	24	33	18	21	21	19	23	9	36
Rb	200	161	175	184	166	172	145	180	192	175	178	197	36	220
U	15	13	8	13	8	10	12	12	9	11	15	13	<5	14
Th	25	23	20	20	14	19	18	29	25	22	25	25	8	25
Pb	37	18	23	19	21	17	70	16	24	19	29	10	13	29
Cr	222	206	177	200	214	230	198	205	179	190	176	177	52	144
V	158	142	155	144	131	143	131	130	138	130	126	134	31	184
Ba	1117	872	1309	1110	852	755	493	511	604	515	536	594	574	5121
Sc	27	15	20	21	19	19	17	10	10	15	12	16	21	25
As	<10	<10	37	<10	<10	<10	67	21	<10	<10	10	<10	<10	<10
S	358	370	5129	386	386	302	4401	745	445	986	2271	373	105	83
Sb	9	8	<8	<8	<8	8	8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	7	<10	<10	<10	8	<10	<10	<10	7	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	10
B	n.d.	41	n.d.	47	44	38	11	55	51	45	53	57	19	180

	#43	#44	#45	#46	#47	#48	#49	#50	#51	#52	#53	#54	#55	#56
	ET-172	WT-2	WT-3	WT-5	WT-6	WT-7	WT-60	WT-134	WT-150	WT-196	G-106	G-117	G-212	ET-164
SiO2	72.90	93.26	94.95	62.88	65.90	82.89	76.42	97.52	62.16	88.94	79.96	75.23	60.15	96.40
TiO2	0.60	0.01	0.02	0.35	0.57	0.17	0.08	0.01	0.34	0.06	0.43	0.39	0.69	0.01
Al2O3	16.15	1.43	0.85	7.64	7.59	3.39	3.62	0.86	9.89	1.84	4.66	11.90	17.67	1.39
Fe2O3	1.00	3.84	3.07	22.86	19.78	10.47	15.43	0.83	16.06	6.48	11.42	4.10	9.24	0.22
MnO	0.00	0.06	0.04	0.06	0.05	0.03	0.39	0.01	0.18	0.06	0.03	0.01	0.04	0.00
MgO	0.35	0.00	0.00	0.00	0.20	0.00	0.05	0.00	3.55	0.12	0.16	1.59	3.84	0.00
CaO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.03	0.03	0.13	0.28	0.00
Na2O	0.12	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.02	0.02
K2O	4.60	0.03	0.00	0.00	0.45	0.09	0.22	0.09	0.45	0.29	0.13	3.02	3.66	0.36
P2O5	0.00	0.08	0.04	0.07	0.12	0.10	0.13	0.03	0.09	0.18	0.07	0.07	0.08	0.02
Cr2O3	0.00	0.01	0.04	0.03	0.02	0.00	0.02	0.00	0.01	0.00	0.02	0.00	0.01	0.00
NiO	0.00	0.01	0.01	0.01	0.02	0.01	0.02	0.00	0.03	0.02	0.01	0.00	0.01	0.00
H2O-	0.08	0.08	0.07	0.55	0.51	0.23	0.66	0.03	1.09	0.14	0.24	0.13	0.13	0.02
LOI	2.67	0.89	0.62	5.15	4.38	2.18	2.84	0.11	5.45	1.85	2.84	3.15	4.39	0.26
TOTAL	98.47	99.70	99.73	99.60	99.61	99.56	99.88	99.49	99.82	100.01	100.00	99.74	100.21	98.70
Zn	16	9	12	26	31	15	169	6	79	19	95	30	94	5
Cu	8	5	9	32	24	30	35	<3	10	8	108	15	38	<3
Ni	5	14	9	54	39	16	102	<3	116	13	62	46	90	<3
Co	5	3	4	<3	<3	<3	5	<3	8	5	18	13	18	3
Ga	26	<3	<3	3	17	8	7	<3	10	<3	7	15	22	<3
Mo	<2	8	10	10	5	4	3	8	<2	7	9	6	4	7
Nb	13	3	<2	3	11	5	5	3	11	4	5	9	14	<2
Zr	163	44	35	292	353	108	98	32	159	37	51	96	135	70
Y	47	7	6	19	21	13	18	4	25	6	14	17	25	6
Sr	33	5	10	<2	4	4	3	4	10	69	14	19	23	4
Rb	176	<2	<2	<2	28	7	19	4	120	10	8	151	186	9
U	12	<5	<5	<5	<5	5	8	<5	<5	<5	8	10	9	<5
Th	17	<5	<5	<5	9	<5	<5	<5	11	7	<5	9	19	<5
Pb	14	5	<5	8	6	<5	<5	<5	<5	10	10	6	11	<5
Cr	81	162	207	297	258	138	92	115	74	32	220	160	217	114
V	153	57	50	202	174	106	109	30	78	41	199	92	137	28
Ba	3672	95	42	59	127	25	463	45	221	300	76	818	994	141
Sc	11	<8	9	16	14	<8	10	<8	<8	<8	16	13	20	8
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	23	<10	39	<10	<10
S	62	92	95	245	279	197	179	65	258	1895	311	4539	650	<50
Sb	<8	<8	<8	9	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	9	11	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	10	<8	<8	10	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	131	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	37	53	11

	#57	#58	#59	#60	#61	#62	#63	#64	#65	#66	#67	#68	#69	#70
	ET-165	WT-148	WT-149	WT-87	WT-90	ET-163	ET-166	ET-167	ET-168	WT-8	WT-9	WT-10	WT-11	WT-12
SiO2	97.57	11.97	16.39	92.97	95.36	97.83	96.15	89.21	97.63	63.53	66.33	63.30	61.30	64.23
TiO2	0.00	0.12	0.15	0.12	0.03	0.00	0.00	0.09	0.02	0.73	0.68	0.76	0.75	0.68
Al2O3	0.87	2.49	3.35	1.96	0.00	0.87	1.82	5.67	1.10	17.60	16.21	18.91	18.51	16.59
Fe2O3	0.22	1.21	2.17	1.23	1.37	0.19	0.23	1.06	0.27	8.53	7.80	8.40	9.41	8.97
MnO	0.00	0.12	0.27	0.08	0.08	0.00	0.00	0.00	0.00	0.04	0.02	0.01	0.04	0.02
MgO	0.00	0.53	0.40	1.27	1.15	0.00	0.00	0.00	0.00	0.43	0.80	0.07	1.06	0.49
CaO	0.00	40.93	39.65	0.03	0.16	0.00	0.00	0.00	0.00	0.08	0.13	0.03	0.03	0.02
Na2O	0.00	0.00	0.02	0.04	0.00	0.02	0.03	0.12	0.02	0.28	0.29	0.24	0.29	0.25
K2O	0.23	0.18	0.13	0.60	0.02	0.23	0.48	1.58	0.29	3.07	2.74	2.15	3.08	2.38
P2O5	0.00	0.00	0.00	0.06	0.07	0.00	0.01	0.00	0.00	0.09	0.09	0.06	0.21	0.18
Cr2O3	0.02	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.02	0.01	0.01	0.00
NiO	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.02	0.02	0.02
H2O-	0.03	0.47	0.54	0.08	0.06	0.03	0.03	0.03	0.01	0.33	0.31	0.26	0.34	0.31
LOI	0.18	35.80	33.27	0.78	0.46	0.16	0.35	1.03	0.18	4.70	4.32	5.37	4.71	4.30
TOTAL	99.12	93.86	96.39	99.22	98.76	99.33	99.10	98.79	99.55	99.44	99.75	99.59	99.76	98.44
Zn	7	17	15	113	124	5	5	9	11	89	167	41	85	72
Cu	<3	19	25	6	<3	<3	<3	3	<3	33	44	91	46	63
Ni	<3	28	62	6	4	<3	<3	7	<3	67	82	25	62	77
Co	3	8	27	5	4	4	<3	2	6	10	15	5	13	7
Ga	<3	<3	<3	<3	<3	<3	<3	<3	<3	22	22	24	25	24
Mo	9	<2	<2	<2	5	8	5	7	14	3	4	3	5	4
Nb	<2	6	6	<2	<2	<2	<2	4	3	17	13	17	16	16
Zr	251	45	91	25	<2	112	30	153	624	263	229	261	226	215
Y	8	22	29	<2	<2	4	4	10	10	31	42	40	49	44
Sr	4	15	13	10	<2	<2	6	7	4	110	65	65	141	125
Rb	6	18	17	23	<2	5	12	40	6	161	150	140	170	166
U	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	11	6	<5
Th	<5	8	6	<5	<5	<5	<5	<5	<5	19	13	23	17	15
Pb	<5	<5	9	15	11	<5	<5	6	5	18	19	13	12	14
Cr	256	<14	94	51	123	155	80	149	335	122	95	94	107	89
V	<14	41	41	29	<14	<14	21	35	18	137	120	147	154	147
Ba	103	281	534	55	<16	100	171	559	211	644	636	509	668	608
Sc	<8	39	31	<8	<8	9	<8	<8	<8	18	14	<8	14	15
As	<10	<10	<10	27	11	<10	<10	<10	<10	19	23	12	28	13
S	<50	465	343	<50	<50	<50	<50	<50	<50	174	154	130	132	143
Sb	<8	<8	<8	<8	<8	<8	<8	8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	9	19	<8	<8	<8	9	10	<8	<8	12	<8
Bi	<10	<10	<10	5	<10	<10	<10	<10	<10	<10	9	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	10	n.d.	n.d.	n.d.	n.d.	16	13	84	16	n.d.	n.d.	n.d.	n.d.	n.d.

	#71	#72	#73	#74	#75	#76	#77	#78	#79	#80	#81	#82	#83	#84
	WT-13	WT-31	WT-32	WT-33	WT-49	WT-50	WT-51	WT-52	WT-53	WT-54	WT-55	WT-56	WT-57	WT-58
SiO2	63.83	66.92	62.38	64.65	61.21	57.87	77.23	77.80	59.36	67.57	55.31	65.95	60.58	57.72
TiO2	0.70	0.74	0.71	0.71	0.74	0.71	0.61	0.52	0.71	0.57	0.74	0.70	0.69	0.66
Al2O3	17.95	16.16	18.03	17.27	22.14	10.47	10.64	10.14	19.94	14.32	20.10	16.69	19.99	19.61
Fe2O3	7.91	7.65	8.08	8.22	6.14	23.61	6.28	6.22	10.32	9.64	13.39	8.50	9.54	11.76
MnO	0.02	0.02	0.01	0.03	0.03	0.11	0.02	0.02	0.01	0.04	0.03	0.00	0.00	0.01
MgO	0.33	0.70	0.65	0.72	0.13	0.25	0.05	0.03	0.14	1.14	1.63	0.29	0.07	0.36
CaO	0.03	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.03	0.51	0.07
Na2O	0.25	0.32	0.34	0.36	0.48	0.00	0.05	0.05	0.34	0.26	0.27	0.32	0.41	0.20
K2O	3.22	2.82	3.54	3.09	4.34	0.18	2.26	2.32	3.72	2.02	2.62	2.99	2.97	3.25
P2O5	0.10	0.02	0.08	0.10	0.02	0.29	0.05	0.03	0.08	0.58	0.18	0.08	0.17	0.07
Cr2O3	0.03	0.02	0.01	0.01	0.03	0.03	0.03	0.01	0.01	0.01	0.02	0.01	0.01	0.01
NiO	0.02	0.02	0.02	0.01	0.01	0.03	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.02
H2O-	0.33	0.20	0.28	0.22	0.21	1.02	0.25	0.23	0.50	0.42	0.39	0.29	0.32	0.58
LOI	4.36	3.90	4.64	4.28	4.03	5.89	2.48	2.26	4.78	3.91	5.32	4.22	5.29	5.86
TOTAL	99.08	99.49	98.77	99.72	99.51	100.46	99.96	99.64	99.92	100.49	100.08	100.09	100.56	100.18
Zn	49	69	89	70	63	137	37	20	43	102	111	57	43	133
Cu	27	33	28	33	17	146	38	9	58	75	104	32	65	49
Ni	55	72	85	52	21	96	27	28	46	57	69	58	38	114
Co	11	11	10	13	9	26	8	7	3	10	4	7	<3	7
Ga	26	21	27	24	28	24	14	16	26	18	28	23	30	28
Mo	5	3	3	<2	4	3	10	2	4	<2	<2	4	<2	4
Nb	17	14	17	15	18	15	12	10	14	14	14	13	15	15
Zr	226	310	201	236	180	415	335	255	177	140	158	229	174	167
Y	34	29	23	27	25	36	25	21	29	95	38	28	23	31
Sr	73	81	71	83	168	4	43	38	90	316	146	81	116	62
Rb	175	160	184	170	193	12	101	101	196	106	143	157	151	148
U	5	11	8	<5	11	10	5	5	<5	11	10	10	14	<5
Th	20	17	17	15	17	23	17	12	18	7	19	14	18	15
Pb	12	18	18	19	52	39	27	21	34	21	55	24	29	20
Cr	98	95	101	101	237	124	79	58	98	46	118	77	109	83
V	148	125	156	145	162	414	110	82	158	103	156	142	149	130
Ba	687	541	669	580	1310	74	471	387	773	920	633	517	723	571
Sc	11	10	15	19	16	17	<8	<8	19	<8	18	14	16	15
As	12	17	12	20	13	67	41	18	30	22	<10	24	<10	<10
S	124	134	128	383	86	210	104	89	107	99	127	150	151	150
Sb	12	<8	<8	<8	<8	15	<8	8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	8	<8	<8	<8	8	<8	<8	<8	23	<8	10
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	8	<8	<8	<8	<8	9	<8	<8	<8	<8	11	<8	<8	8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#85	#86	#87	#88	#89	#90	#91	#92	#93	#94	#95	#96	#97	#98
	WT-59	WT-94	WT-95	WT-193	WT-194	WT-195	UV-7	UV-8	UV-43	UV-44	UV-45	UV-46	UV-83	UV-84
SiO2	69.60	57.20	56.28	58.69	48.95	57.74	54.94	42.86	55.34	58.55	55.96	56.81	54.20	56.06
TiO2	0.54	0.66	0.63	0.61	0.57	0.66	0.79	0.64	0.83	0.79	0.80	0.71	0.73	0.70
Al2O3	16.60	21.54	21.93	19.68	18.56	21.59	27.62	25.31	19.59	19.75	21.39	21.39	25.17	18.53
Fe2O3	1.88	10.52	10.24	11.51	21.84	9.71	7.19	17.82	12.41	9.76	10.89	10.29	7.11	13.32
MnO	0.02	0.03	0.01	0.00	0.02	0.00	0.00	0.01	0.02	0.02	0.01	0.03	0.00	0.00
MgO	0.75	1.06	0.74	0.08	0.11	0.05	0.20	0.16	0.27	0.20	0.25	0.23	0.28	0.26
CaO	0.00	0.00	0.00	0.00	0.07	0.02	0.00	0.00	0.00	0.01	0.09	0.12	0.06	0.07
Na2O	0.07	0.30	0.35	0.01	0.32	0.37	0.34	0.13	0.27	0.34	0.33	0.31	0.39	0.33
K2O	4.93	3.69	3.97	3.50	3.21	3.71	3.43	2.78	2.35	3.08	2.74	3.30	3.39	2.02
P2O5	0.02	0.07	0.23	0.17	0.29	0.18	0.06	0.13	0.28	0.22	0.23	0.20	0.18	0.12
Cr2O3	0.00	0.00	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.01	0.02	0.02	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.03
H2O-	0.18	0.48	1.89	0.25	0.29	0.27	0.36	3.15	1.61	1.51	0.75	0.88	1.99	3.43
LOI	6.15	4.97	3.44	4.36	4.68	4.90	5.90	7.48	6.49	5.06	5.69	5.67	5.92	5.43
TOTAL	100.75	100.54	99.75	98.88	98.93	99.21	100.83	100.48	99.46	99.30	99.14	99.95	99.43	100.30
Zn	33	136	95	18	27	28	18	26	49	56	29	51	40	110
Cu	16	123	86	21	46	32	37	34	72	38	45	35	31	35
Ni	27	149	76	43	39	19	21	40	34	40	36	38	34	238
Co	5	13	9	<3	<3	<3	3	5	34	11	3	18	4	<3
Ga	22	32	29	21	20	23	36	34	26	26	26	25	33	33
Mo	2	<2	<2	<2	5	3	5	3	4	5	<2	<2	3	<2
Nb	10	14	13	15	16	16	18	18	15	17	19	19	19	19
Zr	136	136	136	158	140	159	167	121	179	192	177	174	144	158
Y	34	33	44	25	28	27	25	25	40	33	35	35	27	30
Sr	69	92	188	95	92	109	141	135	124	102	122	115	134	106
Rb	202	195	207	171	161	186	166	151	127	164	169	177	192	119
U	<5	7	8	<5	11	<5	6	<5	19	18	8	6	4	6
Th	14	17	21	23	30	29	25	25	19	19	25	23	27	22
Pb	15	40	35	38	58	28	27	50	18	13	22	15	26	10
Cr	60	111	116	118	212	115	214	371	232	160	212	163	187	203
V	136	150	162	146	195	143	166	260	192	152	182	136	165	150
Ba	6229	385	1292	784	707	841	671	884	509	770	681	952	891	607
Sc	11	12	16	15	17	18	22	16	19	18	<8	10	14	15
As	<10	19	16	13	46	10	24	16	31	<10	21	<10	49	19
S	7280	101	98	248	362	194	50	130	384	287	371	281	227	335
Sb	<8	<8	<8	<8	25	<8	16	<8	<8	<8	<8	13	<8	16
Sn	<8	<8	<8	<8	17	<8	<8	<8	11	<8	<8	<8	<8	15
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	8	<8	8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#99	#100	#101	#102	#103	#104	#105	#106	#107	#108	#109	#110	#111	#112
	UV-90	UV-91	UV-92	UV-102	UV-103	UV-104	UV-129	UV-130	UV-131	UV-132	UV-133	UV-134	UV-135	UV-136
SiO2	50.23	51.99	61.75	54.80	53.98	56.10	58.83	52.06	54.98	55.00	71.31	54.82	55.24	58.08
TiO2	0.71	0.68	0.55	0.76	0.74	0.73	0.70	0.77	0.76	0.72	1.08	0.84	0.67	0.69
Al2O3	26.12	24.74	18.77	23.75	23.30	22.98	22.49	26.43	24.49	21.97	17.07	23.95	23.58	21.62
Fe2O3	9.58	8.79	6.07	8.20	10.68	8.52	5.42	7.22	7.59	9.20	2.31	6.87	7.13	9.29
MnO	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.02
MgO	0.30	0.22	0.16	0.36	1.54	0.50	0.21	0.23	0.21	0.52	0.33	0.29	0.23	0.17
CaO	0.00	0.01	0.01	0.12	0.11	0.14	0.02	0.05	0.05	0.44	0.00	0.05	0.01	0.00
Na2O	0.29	0.24	0.44	0.49	0.39	0.48	0.39	0.39	0.41	0.38	0.32	0.57	0.37	0.40
K2O	3.20	3.20	2.71	2.86	2.55	2.98	3.19	3.69	3.27	3.82	4.59	5.27	3.68	3.51
P2O5	0.13	0.33	0.12	0.07	0.17	0.10	0.12	0.06	0.08	0.18	0.03	0.24	0.13	0.17
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.02	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.01
H2O-	2.17	3.06	4.50	2.58	0.90	1.21	2.52	2.44	2.02	1.81	0.08	0.84	2.69	0.81
LOI	7.30	6.89	4.70	6.14	5.61	5.91	5.58	6.59	6.25	5.54	2.73	4.99	5.91	5.20
TOTAL	100.05	100.16	99.79	100.15	100.01	99.67	99.48	99.94	100.14	99.61	99.87	98.74	99.65	99.97
Zn	68	74	28	72	147	70	43	78	72	28	23	97	53	54
Cu	40	51	29	46	27	30	22	21	34	37	23	31	28	33
Ni	74	52	23	65	103	100	27	49	64	52	22	43	30	48
Co	4	5	<3	7	7	6	11	9	14	10	6	<3	10	13
Ga	28	29	20	29	29	29	28	35	30	28	22	33	31	27
Mo	<2	3	<2	<2	<2	<2	10	<2	3	<2	4	<2	<2	3
Nb	18	18	15	26	24	22	18	18	18	17	23	20	16	17
Zr	145	138	156	153	142	154	165	161	172	152	397	197	138	152
Y	32	36	21	23	54	29	27	25	26	31	36	54	26	29
Sr	104	122	112	96	168	112	128	118	102	134	60	198	111	88
Rb	170	169	136	152	127	162	192	202	174	207	166	259	200	180
U	10	12	8	9	12	10	22	8	13	5	<5	11	<5	13
Th	24	22	16	28	25	26	23	28	23	24	28	25	28	25
Pb	24	34	12	12	13	15	18	19	16	30	10	23	25	30
Cr	220	199	153	219	225	212	174	240	205	194	231	236	193	206
V	166	159	97	156	156	154	133	174	146	168	155	177	163	149
Ba	817	822	558	690	623	735	955	981	882	828	584	1228	892	763
Sc	14	17	16	14	12	22	9	15	21	14	15	19	12	18
As	49	67	13	<10	<10	<10	<10	<10	33	<10	<10	<10	15	17
S	430	239	239	161	211	217	195	222	298	205	295	142	203	223
Sb	12	14	<8	11	10	<8	9	<8	9	<8	<8	<8	<8	14
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	7	7	<10	<10	<10	<10	7
W	<8	14	9	<8	<8	<8	<8	11	11	<8	<8	<8	<8	11
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	59	57	53	70	120	138	61	61

	#113	#114	#115	#116	#117	#118	#119	#120	#121	#122	#123	#124	#125	#126
	UV-137	UV-138	UV-139	DTU-1	DTU-2	DTU-4	DTU-5	DTU-6	DTU-7	DTU-8	DTU-9	VTU-1	VTU-2	VTU-3
SiO2	59.72	58.77	48.68	57.70	56.86	65.17	56.99	55.66	54.70	56.55	76.48	55.65	54.16	53.38
TiO2	0.68	0.63	0.72	0.84	0.80	0.69	0.77	0.69	0.71	0.58	0.86	0.72	0.75	0.73
Al2O3	22.09	22.57	25.16	20.65	22.29	20.19	25.84	23.70	26.06	19.05	9.26	25.43	25.19	26.76
Fe2O3	6.87	7.18	10.50	9.22	9.16	4.02	2.60	9.11	7.68	6.95	6.57	8.82	9.42	9.55
MnO	0.00	0.02	0.01	0.04	0.04	0.08	0.06	0.02	0.02	0.02	0.03	0.02	0.03	0.03
MgO	0.22	0.22	0.24	1.00	0.97	0.88	1.24	1.07	1.07	1.03	1.12	0.66	0.51	0.62
CaO	0.03	0.00	0.00	0.10	0.04	0.13	0.58	0.08	0.11	0.14	0.05	0.00	0.00	0.00
Na2O	0.48	0.47	0.31	0.68	0.79	2.07	2.32	0.32	0.25	0.12	0.06	0.28	0.23	0.20
K2O	3.61	3.74	3.37	4.14	4.19	3.21	4.75	4.38	4.22	4.61	2.08	3.31	3.36	3.25
P2O5	0.10	0.24	0.18	0.11	0.08	0.01	0.32	0.11	0.11	0.04	0.10	0.08	0.08	0.08
Cr2O3	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.08	0.03	0.00	0.00
NiO	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.00	0.00	0.00
H2O-	1.16	1.23	4.22	0.52	0.43	0.25	0.29	0.46	0.24	0.28	0.11	0.15	0.16	0.19
LOI	5.04	5.36	6.72	4.68	4.45	3.19	3.30	4.86	4.05	9.20	3.07	4.79	5.17	4.56
TOTAL	100.01	100.44	100.12	99.69	100.12	99.90	99.07	100.48	99.23	98.58	99.90	99.94	99.06	99.35
Zn	51	120	55	26	35	58	43	34	35	148	195	9	12	10
Cu	29	67	33	19	4	42	11	6	8	88	181	29	33	37
Ni	47	47	48	71	52	57	52	70	42	83	160	48	41	44
Co	6	13	25	32	13	18	23	11	19	20	29	14	14	23
Ga	27	31	32	30	31	25	34	29	29	23	15	30	30	35
Mo	<2	<2	6	<2	<2	<2	2	<2	2	<2	2	2	<2	2
Nb	16	17	19	14	17	16	17	17	16	13	11	16	16	16
Zr	140	134	131	145	144	183	159	139	135	134	114	142	148	142
Y	28	29	43	31	38	25	43	24	25	34	27	24	24	27
Sr	118	116	123	71	31	73	65	66	35	51	55	26	32	41
Rb	203	203	183	266	361	254	402	307	375	211	94	170	161	153
U	11	12	13	6	9	7	10	13	7	5	<5	6	10	6
Th	20	24	24	18	24	21	26	12	30	25	<5	30	22	29
Pb	37	40	7	12	9	23	12	<5	11	62	77	10	10	9
Cr	174	157	204	208	189	169	211	193	218	170	733	239	240	245
V	146	127	198	215	205	154	167	151	168	143	108	160	168	165
Ba	837	808	1450	750	809	707	609	847	591	1049	1679	596	592	626
Sc	14	<8	18	23	17	29	16	15	13	18	16	18	13	16
As	<10	26	21	34	13	58	39	28	30	160	460	30	37	19
S	175	133	198	110	60	460	50	70	130	670	1600	80	<50	<50
Sb	<8	<8	<8	<8	<8	<8	<8	8	<8	<8	23	<8	<8	<8
Sn	<8	<8	<8	8	<8	13	8	<8	8	<8	<8	<8	<8	<8
Bi	<10	<10	6	<10	<10	<10	<10	10	<10	7	<10	<10	<10	<10
W	10	12	10	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	60	59	22	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#127	#128	#129	#130	#131	#132	#133	#134	#135	#136	#137	#138	#139	#140
	VTU-4	VTU-5	VTU-6	VTU-7	VTU-8	DTU-3	WT-141	WT-142	WT-143	WT-145	WT-146	G-301	G-302	G-304
SiO2	53.78	56.30	53.48	56.02	56.05	57.29	63.99	58.25	62.52	61.94	42.24	78.92	58.50	54.76
TiO2	0.73	0.72	0.71	0.73	0.70	1.15	0.61	0.68	0.62	0.58	0.88	0.28	0.87	0.79
Al2O3	24.21	25.21	26.54	25.05	24.46	23.63	18.95	20.03	19.56	17.64	17.29	5.31	18.86	19.55
Fe2O3	11.26	8.99	9.25	9.02	9.24	9.73	7.52	10.38	6.46	9.56	22.13	10.47	9.21	9.13
MnO	0.03	0.01	0.01	0.02	0.03	0.04	0.00	0.03	0.03	0.06	0.30	0.02	0.07	0.02
MgO	0.59	0.60	0.53	0.58	0.54	1.03	0.16	0.19	0.69	0.71	3.16	1.24	1.63	3.37
CaO	0.00	0.02	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04
Na2O	0.21	0.27	0.18	0.25	0.20	0.89	0.25	0.28	0.17	0.12	0.00	0.00	0.08	0.08
K2O	3.12	3.89	3.39	3.23	3.23	4.44	3.63	3.51	4.51	4.09	4.94	0.05	2.75	3.86
P2O5	0.16	0.09	0.10	0.04	0.09	0.26	0.05	0.09	0.06	0.08	0.06	0.08	0.07	0.12
Cr2O3	0.00	0.02	0.00	0.00	0.00	0.01	0.02	0.02	0.00	0.00	0.01	0.00	0.00	0.00
NiO	0.00	0.01	0.00	0.00	0.00	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.00	0.01
H2O-	0.17	0.15	0.11	0.13	0.14	0.06	0.23	0.48	0.51	0.35	0.80	0.34	1.57	1.44
LOI	4.64	4.28	4.80	4.36	5.01	1.32	4.24	4.83	4.54	4.15	6.85	2.70	4.89	5.68
TOTAL	98.90	100.56	99.10	99.43	99.69	100.14	99.66	98.78	99.69	99.29	98.68	99.42	98.52	98.85
Zn	16	15	13	10	11	24	16	29	139	134	40	63	73	154
Cu	38	39	43	43	41	8	15	25	53	47	37	42	50	33
Ni	56	34	32	46	51	63	11	22	77	61	107	86	55	122
Co	30	18	16	19	21	32	3	7	5	9	4	<3	20	15
Ga	32	35	31	32	32	26	24	21	20	23	18	<3	26	23
Mo	<2	<2	2	<2	2	<2	2	<2	<2	2	<2	<2	<2	<2
Nb	15	16	16	15	18	16	15	17	15	16	16	5	20	22
Zr	140	138	142	166	158	144	159	168	143	123	166	80	193	183
Y	27	31	26	27	24	29	18	25	34	18	20	11	40	38
Sr	38	48	48	30	32	64	59	68	45	41	32	10	39	32
Rb	149	181	165	162	150	265	164	163	193	210	234	5	170	188
U	11	5	10	6	8	9	<5	8	<5	<5	6	7	14	9
Th	15	29	25	22	26	18	24	25	21	19	21	5	21	26
Pb	9	13	8	6	11	6	25	31	27	31	6	44	18	13
Cr	225	213	231	229	223	229	120	130	118	95	109	204	244	235
V	158	152	176	160	160	172	129	149	137	131	209	184	146	137
Ba	672	698	863	676	596	662	632	660	1048	707	939	73	1215	1112
Sc	11	17	16	19	12	<8	19	8	9	11	18	18	21	19
As	41	<10	24	45	26	<10	25	20	27	<10	<10	<10	<10	<10
S	150	<50	2000	<50	<50	70	178	226	205	272	409	120	160	70
Sb	<8	10	<8	<8	<8	<8	<8	<8	18	<8	11	11	<8	<8
Sn	<8	10	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	10
Bi	<10	<10	<10	<10	<10	<10	7	<10	<10	<10	<10	8	<10	5
W	<8	<8	<8	<8	<8	8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	63	55

	#141	#142	#143	#144	#145	#146	#147	#148	#149	#150	#151	#152	#153	#154
	G-305	G-306	G-308	G-309	G-310	G-311	G-312	G-313	G-314	G-315	G-303	ET-15	ET-17	ET-18
SiO2	52.11	56.59	59.56	56.54	59.78	58.06	55.73	53.92	53.66	54.39	54.83	61.50	59.87	71.94
TiO2	0.76	0.66	0.35	0.86	0.79	0.84	0.81	0.77	0.80	0.58	0.82	0.75	0.69	0.60
Al2O3	19.55	17.97	21.18	12.95	16.40	17.77	19.33	19.84	19.85	19.02	19.09	22.82	20.10	14.39
Fe2O3	11.41	9.98	3.78	19.72	10.14	9.90	10.68	11.06	10.25	11.32	9.63	7.52	7.85	1.77
MnO	0.13	0.17	0.07	0.25	0.11	0.10	0.06	0.07	0.07	0.06	0.03	0.01	0.04	0.02
MgO	3.83	4.87	2.96	4.11	4.75	4.69	4.76	5.00	5.35	4.97	3.30	0.99	1.44	0.51
CaO	0.03	0.23	0.44	0.31	0.22	0.31	0.23	0.17	0.43	0.43	0.02	0.45	0.32	0.04
Na2O	0.07	0.07	0.16	0.04	0.85	1.02	0.91	0.75	0.78	0.52	0.09	0.86	0.58	0.45
K2O	3.67	3.76	5.17	0.97	2.51	3.14	3.35	3.64	3.86	3.98	3.57	2.04	3.94	3.94
P2O5	0.17	0.19	0.11	0.17	0.16	0.16	0.18	0.20	0.34	0.22	0.15	0.20	0.02	0.00
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
NiO	0.02	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.02	0.01	0.05	0.01	0.01	0.00
H2O-	1.16	0.17	0.10	0.14	0.20	0.13	0.14	0.20	0.21	0.23	1.61	0.03	0.83	0.19
LOI	5.66	4.40	6.02	4.30	3.95	4.10	4.22	4.46	4.55	4.47	5.62	2.04	3.84	5.36
TOTAL	98.57	99.07	99.91	100.38	99.88	100.24	100.41	100.09	100.17	100.20	98.81	99.22	99.54	99.21
Zn	136	76	223	195	95	92	94	101	95	88	934	46	80	26
Cu	149	38	54	18	21	31	25	28	115	15	29	4	5	14
Ni	136	95	69	153	94	90	105	108	111	110	509	50	53	13
Co	40	26	13	75	25	29	30	38	30	23	19	19	17	5
Ga	20	28	25	12	23	19	22	24	27	24	27	34	33	23
Mo	<2	<2	9	<2	19	<2	<2	<2	<2	<2	<2	<2	<2	3
Nb	18	15	14	10	19	22	22	21	21	18	23	16	14	14
Zr	145	133	149	201	182	189	171	155	157	156	183	166	143	185
Y	32	26	24	20	32	37	36	37	48	30	44	38	26	22
Sr	35	24	60	20	47	59	59	62	68	69	31	92	64	49
Rb	194	183	231	42	123	146	166	171	176	186	183	67	147	167
U	15	10	18	5	8	9	9	10	12	8	8	14	11	<5
Th	26	12	13	<5	26	23	23	23	23	24	24	21	18	19
Pb	23	12	44	<5	54	22	47	23	12	15	18	8	23	24
Cr	223	220	62	254	223	236	234	236	228	218	248	193	171	142
V	148	129	37	251	107	129	131	135	136	120	145	151	153	154
Ba	1121	942	9799	1751	728	776	812	840	923	1163	1275	721	1448	1643
Sc	20	18	11	29	19	15	23	22	21	17	20	14	14	18
As	<10	<10	38	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	120	200	5360	210	140	130	150	200	260	242	90	66	156	1554
Sb	9	<8	<8	<8	11	<8	19	<8	13	<8	11	<8	<8	<8
Sn	<8	<8	19	<8	<8	<8	20	9	<8	<8	10	<8	<8	<8
Bi	5	10	8	<10	6	11	<10	12	11	<10	5	<10	<10	6
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	56	38	76	n.d.	34	44	41	43	49	32	57	n.d.	n.d.	n.d.

	#155	#156	#157	#158	#159	#160	#161	#162	#163	#164	#165	#166	#167	#168
	ET-19	ET-96	ET-97	ET-98	ET-200	ET-173	ET-176	ET-177	ET-178	ET-179	ET-180	ET-181	ET-182	ET-183
SiO2	68.02	63.89	67.53	66.81	51.87	69.07	66.31	67.11	66.34	52.21	50.76	51.86	46.18	52.40
TiO2	0.59	0.78	0.50	0.62	0.83	0.69	0.65	0.65	0.59	0.74	0.81	0.73	0.85	0.72
Al2O3	15.84	18.99	15.92	17.82	27.58	18.17	17.70	16.57	16.14	26.81	26.70	26.71	29.40	26.13
Fe2O3	2.37	6.13	7.33	6.46	7.42	1.14	5.87	5.12	5.09	9.67	10.33	10.91	12.39	10.19
MnO	0.00	0.02	0.01	0.02	0.03	0.00	0.02	0.02	0.03	0.03	0.03	0.04	0.02	0.03
MgO	0.77	0.75	1.01	1.18	2.17	0.66	0.27	0.57	0.80	1.09	1.10	1.23	0.28	1.08
CaO	0.06	0.33	0.13	0.21	0.12	0.00	0.00	0.00	0.00	0.20	0.22	0.26	0.13	0.24
Na2O	0.52	0.68	0.71	0.84	1.27	0.09	0.12	0.18	0.14	0.69	0.63	0.66	0.60	0.67
K2O	4.29	3.57	2.60	2.85	3.92	5.05	3.81	4.28	4.31	3.15	3.18	2.83	3.45	3.03
P2O5	0.02	0.04	0.00	0.04	0.21	0.02	0.04	0.00	0.00	0.12	0.23	0.16	0.24	0.20
Cr2O3	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.00
NiO	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
H2O-	0.39	0.26	0.10	0.13	0.05	0.39	0.47	0.39	0.49	0.26	0.43	0.31	0.97	0.22
LOI	6.36	3.52	3.01	3.19	4.63	3.26	3.63	3.37	4.58	4.23	4.63	4.03	6.88	4.07
TOTAL	99.23	98.96	98.85	100.20	100.10	98.54	98.89	98.26	98.51	99.20	99.06	99.73	101.42	98.98
Zn	74	59	77	62	53	22	100	144	107	79	71	77	50	78
Cu	61	11	16	15	13	20	97	188	127	22	15	18	54	16
Ni	18	41	49	48	47	9	56	43	30	61	62	63	70	65
Co	3	6	14	13	16	<3	4	<3	<3	9	16	15	14	7
Ga	25	28	21	21	36	27	26	20	21	37	39	37	41	42
Mo	<2	<2	3	<2	<2	5	<2	<2	<2	<2	<2	<2	<2	3
Nb	15	16	14	15	21	14	19	16	16	19	20	17	19	17
Zr	169	189	168	188	146	182	174	162	159	129	135	127	140	128
Y	23	30	14	18	40	122	38	51	66	37	48	45	41	38
Sr	55	84	71	86	187	41	63	56	61	120	142	110	124	111
Rb	185	208	147	170	187	213	128	165	169	159	159	143	177	149
U	7	8	8	9	11	15	10	8	11	12	8	11	15	12
Th	17	15	10	16	27	26	20	17	19	30	30	29	30	28
Pb	15	23	19	20	13	48	46	28	38	36	33	31	36	31
Cr	120	136	95	110	209	216	153	126	140	213	216	209	248	204
V	103	126	101	112	169	510	107	94	97	187	188	188	215	185
Ba	2307	990	659	731	1176	1614	1896	1982	2034	684	777	604	674	656
Sc	16	21	19	22	22	<8	21	10	16	20	16	31	23	19
As	<10	<10	<10	<10	<10	<10	<10	10	<10	10	11	<10	10	17
S	1939	116	96	82	<50	96	93	67	107	78	151	96	193	75
Sb	<8	<8	<8	<8	<8	<8	<8	18	10	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	16	<8	<8	<8	8	<8	<8
Bi	<10	<10	<10	<10	8	<10	<10	<10	<10	<10	<10	<10	6	<10
W	<8	<8	<8	<8	<8	14	<8	<8	<8	11	<8	<8	10	11
B	n.d.	n.d.	n.d.	n.d.	n.d.	206	166	n.d.	166	65	83	96	n.d.	103

	#169	#170	#171	#172	#173	#174	#175	#176	#177	#178	#179	#180	#181	#182
	ET-184	ET-185	ET-186	ET-187	ET-188	ET-189	ET-190	ET-191	ET-192	ET-193	ET-194	ET-195	ET-196	ET-197
SiO2	44.65	40.35	46.70	55.99	49.68	43.81	51.09	54.24	54.28	55.34	37.96	44.13	41.60	52.05
TiO2	0.83	0.85	0.84	0.71	0.90	0.90	0.80	0.68	0.66	0.79	0.98	1.03	1.33	1.14
Al2O3	29.43	31.68	29.84	24.62	31.58	30.79	27.79	23.09	23.43	23.10	33.62	29.12	27.77	22.36
Fe2O3	11.57	9.82	8.49	7.39	10.12	11.35	7.66	9.88	9.93	9.85	13.33	13.38	14.87	11.71
MnO	0.00	0.00	0.01	0.01	0.02	0.00	0.00	0.02	0.02	0.04	0.01	0.02	0.03	0.03
MgO	0.07	0.14	0.43	0.77	0.45	0.07	0.48	0.75	0.61	0.68	0.25	0.34	0.33	0.91
CaO	0.10	0.00	0.19	0.06	0.00	0.07	0.08	0.21	0.21	0.21	0.22	0.23	0.25	0.13
Na2O	0.71	0.42	2.69	1.76	0.25	0.81	0.90	0.68	0.66	0.66	0.82	0.73	0.79	0.63
K2O	3.40	2.83	3.13	3.67	2.20	3.10	3.17	2.65	2.69	2.80	3.53	3.37	3.70	2.71
P2O5	0.07	0.12	0.13	0.07	0.12	0.13	0.06	0.36	0.34	0.28	0.24	0.29	0.12	0.12
Cr2O3	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.00	0.00
NiO	0.01	0.01	0.01	0.00	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
H2O-	1.32	3.81	0.68	0.29	1.02	0.73	1.02	0.97	0.83	0.98	1.43	0.87	1.59	0.75
LOI	6.31	8.63	5.66	3.90	4.18	6.85	5.68	5.28	5.00	4.64	8.06	7.02	6.58	6.06
TOTAL	98.47	98.66	98.80	99.24	100.58	98.62	98.74	98.82	98.67	99.38	100.49	100.57	98.96	98.60
Zn	12	32	71	32	115	28	91	118	105	115	42	33	82	24
Cu	33	71	61	42	27	48	71	47	9	18	142	26	72	20
Ni	68	60	100	46	92	86	104	76	112	98	79	42	76	39
Co	4	4	36	19	17	<3	6	19	43	42	<3	3	28	13
Ga	44	46	42	33	43	44	41	37	34	33	48	35	47	31
Mo	<2	<2	<2	<2	<2	<2	<2	<2	<2	3	<2	4	<2	3
Nb	19	22	18	17	21	21	19	16	16	16	20	21	19	16
Zr	148	160	139	138	157	160	139	143	146	167	161	188	182	197
Y	27	21	26	34	56	29	35	27	120	45	30	30	27	22
Sr	149	72	184	151	27	163	124	121	189	129	190	188	117	48
Rb	186	145	152	154	88	181	174	158	154	157	195	187	177	108
U	14	11	10	10	5	13	4	7	11	14	12	10	10	10
Th	33	34	33	23	33	27	30	21	22	21	28	31	21	18
Pb	41	25	17	9	16	33	10	29	21	22	57	41	38	8
Cr	244	252	253	165	252	248	199	161	132	159	300	239	316	258
V	225	213	206	143	216	206	202	166	145	175	306	254	336	236
Ba	830	631	639	757	590	843	794	644	972	831	898	859	1111	599
Sc	20	25	23	14	21	23	12	21	13	18	36	24	33	31
As	10	12	10	23	<10	21	30	<10	<10	<10	<10	<10	58	12
S	215	170	141	112	170	199	109	92	74	125	241	215	256	299
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	8	<8	<8	<8	<8	<8	<8	<8	12	8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	10	<8	<8	<8	<8	<8	<8	<8	<8	8	9	<8	<8	9
B	n.d.	47	n.d.	105	n.d.	73	n.d.	86	n.d.	50	n.d.	54	n.d.	53

	#183	#184	#185	#186	#187	#188	#189	#190	#191	#192	#193	#194	#195	#196
	ET-198	ET-199	CRT-50	G-307	ET-204	ET-206	ET-207	UV-47	UV-48	UV-81	UV-82	UV-85	UV-86	UV-87
SiO2	40.84	53.03	56.71	87.03	62.57	40.17	57.35	62.47	59.87	53.68	40.98	55.39	63.94	52.45
TiO2	0.97	0.99	0.68	0.08	0.67	0.98	0.57	0.61	0.68	0.80	0.93	0.84	0.75	0.82
Al2O3	33.33	26.97	21.96	1.39	18.92	29.66	22.64	18.21	17.23	27.89	31.64	22.04	19.07	23.11
Fe2O3	8.65	7.28	7.45	6.01	8.94	13.49	9.63	9.93	12.32	6.14	12.35	8.64	6.39	12.21
MnO	0.00	0.00	0.05	0.10	0.05	0.00	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01
MgO	0.33	0.04	1.35	1.53	1.06	0.00	0.27	0.13	0.17	0.19	0.19	0.26	0.17	0.19
CaO	0.05	0.01	0.26	0.27	0.06	0.09	0.12	0.00	0.03	0.06	0.00	0.03	0.06	0.04
Na2O	1.20	1.01	0.58	0.02	0.93	1.33	1.22	0.38	0.28	0.69	0.80	0.38	0.49	0.28
K2O	6.29	4.72	2.07	0.30	2.57	3.82	2.25	2.49	2.63	3.40	4.77	3.58	3.51	2.63
P2O5	0.16	0.05	0.06	0.22	0.02	0.33	0.08	0.22	0.30	0.25	0.33	0.28	0.17	0.31
Cr2O3	0.00	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.01
H2O-	0.59	0.68	1.45	0.06	0.23	1.32	0.55	0.91	0.79	0.54	0.76	1.96	0.46	0.74
LOI	5.99	5.55	6.69	3.20	3.47	7.46	5.47	4.49	5.05	6.10	7.28	5.78	4.30	6.63
TOTAL	98.41	100.37	99.31	100.21	99.50	98.65	100.17	99.86	99.37	99.75	100.04	99.20	99.33	99.43
Zn	50	81	49	11	7	41	24	40	26	43	55	58	32	42
Cu	33	67	32	214	<3	53	23	23	48	51	83	58	10	45
Ni	84	64	47	8	3	42	52	31	32	21	42	42	25	31
Co	6	14	13	8	4	<3	9	9	4	6	5	9	6	9
Ga	51	39	29	<3	<3	54	26	21	24	34	33	28	25	25
Mo	<2	<2	6	12	9	19	8	14	2	6	5	<2	4	4
Nb	21	18	17	<2	<2	29	16	14	18	20	21	15	18	16
Zr	167	137	163	15	93	243	202	189	201	143	185	163	292	153
Y	28	27	29	14	8	108	17	23	31	35	38	41	31	37
Sr	235	180	69	16	5	332	117	107	101	274	403	148	123	124
Rb	318	205	92	14	<2	250	166	144	143	192	275	183	180	133
U	10	10	8	6	<5	11	<5	10	13	12	20	11	9	9
Th	29	29	16	<5	<5	34	13	19	18	32	32	25	22	27
Pb	28	17	11	13	11	48	26	14	22	31	40	8	<5	24
Cr	243	162	176	155	135	248	120	132	161	192	209	199	184	206
V	192	132	174	33	128	199	107	129	121	154	182	194	122	220
Ba	1599	1099	580	53	586	813	311	570	1002	1604	4531	898	759	707
Sc	25	15	13	<8	27	28	14	11	11	17	15	13	11	19
As	10	13	13	49	<10	13	<10	<10	<10	15	10	29	10	50
S	180	128	90	13000	180	541	158	270	311	238	255	281	380	255
Sb	<8	<8	<8	8	<8	<8	<8	<8	<8	11	<8	<8	12	<8
Sn	11	<8	<8	<8	<8	<8	<8	8	<8	<8	<8	11	<8	<8
Bi	<10	<10	<10	13	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	9	<8	<8
B	n.d.	23	n.d.	7	n.d.	n.d.	46	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#197	#198	#199	#200	#201	#202	#203	#204	#205	#206	#207	#208	#209	#210
	UV-88	UV-89	WT-47	WT-48	WT-97	WT-118	WT-151	WT-192	ET-6	ET-7	ET-13	ET-94	ET-95	ET-102
SiO2	82.46	56.35	90.58	96.52	87.59	96.95	97.11	87.08	96.71	94.55	95.54	98.69	97.26	97.33
TiO2	0.22	0.68	0.09	0.02	0.09	0.00	0.04	0.02	0.05	0.07	0.04	0.00	0.05	0.03
Al2O3	6.87	23.60	2.82	0.78	2.37	0.78	1.43	2.38	1.14	1.49	1.17	0.14	0.42	0.67
Fe2O3	6.32	8.80	4.63	1.59	8.19	1.00	0.44	8.06	0.99	2.94	2.45	0.30	1.24	1.43
MnO	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00
MgO	0.05	0.20	0.03	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaO	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Na2O	0.13	0.40	0.00	0.00	0.00	0.01	0.01	0.45	0.04	0.08	0.07	0.07	0.03	0.02
K2O	0.98	3.12	0.17	0.01	0.01	0.02	0.32	0.00	0.39	0.46	0.33	0.02	0.00	0.05
P2O5	0.17	0.25	0.02	0.03	0.10	0.06	0.04	0.09	0.06	0.15	0.03	0.00	0.00	0.01
Cr2O3	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
H2O-	0.44	0.69	0.07	0.06	0.12	0.04	0.01	0.12	0.02	0.04	0.01	0.00	0.01	0.10
LOI	2.08	5.64	0.95	0.35	1.26	0.28	0.38	1.18	0.43	0.22	0.29	0.15	0.36	0.22
TOTAL	99.81	99.74	99.40	99.40	99.79	99.16	99.80	99.43	99.83	100.01	99.93	99.37	99.37	99.86
Zn	19	36	23	6	27	7	6	11	6	7	6	4	14	10
Cu	18	31	7	<3	6	<3	<3	3	<3	<3	<3	<3	<3	<3
Ni	14	30	9	4	12	3	<3	10	<3	<3	5	<3	3	<3
Co	5	4	9	7	4	4	3	5	5	3	5	4	3	5
Ga	5	28	4	<3	3	<3	<3	3	<3	<3	<3	<3	<3	<3
Mo	13	4	7	9	7	6	6	7	7	10	9	5	13	9
Nb	8	18	<2	<2	3	<2	3	3	<2	<2	<2	<2	<2	<2
Zr	79	142	60	27	81	32	91	37	35	132	58	29	290	39
Y	11	28	11	4	8	<2	4	6	3	6	5	<2	5	3
Sr	38	139	13	5	9	3	11	16	12	12	6	5	3	5
Rb	54	171	8	<2	<2	<2	16	<2	13	16	13	<2	<2	4
U	6	14	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Th	9	19	5	<5	<5	6	<5	12	<5	<5	<5	<5	<5	<5
Pb	10	17	7	<5	24	<5	<5	<5	<5	<5	<5	<5	<5	<5
Cr	186	161	76	108	113	38	92	87	107	146	117	73	147	129
V	67	163	70	26	71	27	35	70	20	33	30	18	20	15
Ba	287	805	70	31	21	<16	313	54	141	165	74	25	20	50
Sc	<8	17	<8	<8	11	<8	<8	<8	8	7	<8	<8	12	16
As	11	10	11	18	19	<10	<10	13	<10	<10	<10	<10	<10	<10
S	302	205	70	78	135	66	62	153	1256	49	56	<50	<50	<50
Sb	<8	<8	8	<8	<8	<8	<8	<8	<8	6	<8	<8	<8	<8
Sn	<8	<8	<8	<8	8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	11	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#211	#212	#213	#214	#215	#216	#217	#218	#219	#220	#221	#222	#223	#224
	ET-103	ET-122	ET-123	ET-125	ET-145	ET-202	ET-203	DTQ-1	DTQ-2	DTQ-3	DTQ-6	DTQ-7	VTQ-1	VTQ-2
SiO2	98.09	101.05	96.92	97.06	91.90	95.62	94.51	94.26	98.83	95.54	96.92	97.41	95.92	97.83
TiO2	0.00	0.00	0.04	0.05	0.07	0.02	0.84	0.05	0.00	0.07	0.03	0.02	0.04	0.01
Al2O3	0.71	0.00	0.67	0.79	2.39	1.78	1.14	4.02	0.65	1.31	1.08	0.70	1.54	0.40
Fe2O3	0.55	0.00	1.12	1.33	3.48	0.74	2.39	0.49	0.80	2.55	1.14	1.21	0.72	0.55
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.05	0.00	0.00	0.21	0.14	0.19	0.12
CaO	0.02	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.02	0.00	0.00	0.00
Na2O	0.02	0.01	0.00	0.01	0.07	0.04	0.01	0.03	0.03	0.02	0.09	0.12	0.01	0.01
K2O	0.00	0.02	0.12	0.13	0.68	0.17	0.07	1.26	0.07	0.00	0.08	0.00	0.16	0.04
P2O5	0.00	0.02	0.00	0.00	0.02	0.01	0.00	0.02	0.01	0.03	0.02	0.01	0.00	0.00
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00
NiO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
H2O-	0.06	0.02	0.01	0.03	0.03	0.14	0.10	0.02	0.03	0.03	0.02	0.04	0.07	0.09
LOI	0.02	0.21	0.23	0.24	0.35	0.45	0.41	0.42	0.25	0.67	0.25	0.32	0.59	0.20
TOTAL	99.47	101.33	99.11	99.65	98.99	98.97	99.68	100.62	100.67	100.23	99.87	99.99	99.24	99.25
Zn	4	5	4	3	7	7	4	8	6	10	7	22	7	<3
Cu	<3	<3	<3	<3	<3	<3	<3	4	<3	15	<3	<3	<3	<3
Ni	<3	<3	4	<3	4	6	4	<3	<3	<3	<3	3	3	<3
Co	5	<3	4	4	5	8	2	3	4	3	8	<3	3	5
Ga	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Mo	9	9	9	12	7	8	9	11	11	24	11	9	7	10
Nb	<2	<2	<2	<2	<2	<2	<2	2	<2	3	<2	2	<2	<2
Zr	28	58	140	81	80	69	49	62	28	79	24	22	57	34
Y	<2	3	5	3	7	6	4	<2	2	4	2	<2	<2	2
Sr	3	7	3	28	14	7	6	7	7	16	5	8	5	4
Rb	<2	4	4	4	20	7	3	25	6	<2	6	5	10	6
U	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	11	<5	<5	<5
Th	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	6	<5	<5
Pb	<5	<5	<5	<5	<5	<5	<5	7	15	133	13	8	6	5
Cr	127	144	169	162	133	101	144	202	185	199	203	211	203	216
V	15	33	31	32	33	27	30	24	16	86	24	18	22	17
Ba	<16	22	15	62	388	123	197	107	60	35	21	35	59	24
Sc	<8	12	<8	<8	<8	16	<8	<8	<8	9	<8	<8	8	<8
As	<10	<10	<10	<10	<10	<10	<10	<10	13	26	<10	<10	<10	10
S	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	11	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	4	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#225	#226	#227	#228	#229	#230	#231	#232	#233	#234	#235	#236	#237	#238
	VTQ-3	VTQ-4	VTQ-5	VTQ-6	CRT-10	CRT-11	CRT-12	CRT-13	CRT-16	CRT-17	CRT-48	CRT-49	WT-119	WT-123
SiO2	98.56	97.64	98.56	95.10	94.93	94.47	94.44	98.32	98.58	96.56	98.29	98.48	96.47	96.95
TiO2	0.00	0.00	0.00	0.06	0.20	0.24	0.22	0.19	0.27	0.17	0.21	0.18	0.01	0.00
Al2O3	0.35	1.01	0.40	1.73	2.31	2.59	0.88	0.20	0.70	0.30	0.51	0.40	2.07	0.48
Fe2O3	0.44	0.56	0.39	1.28	1.30	2.10	3.47	1.21	1.13	1.45	1.26	0.40	0.74	1.54
MnO	0.00	0.00	0.00	0.00	0.02	0.03	0.03	0.01	0.01	0.02	0.04	0.01	0.01	0.01
MgO	0.21	0.14	0.22	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaO	0.00	0.00	0.00	0.00	0.05	0.02	0.07	0.05	0.05	0.05	0.03	0.01	0.00	0.00
Na2O	0.01	0.02	0.01	0.02	0.04	0.05	0.00	0.00	0.04	0.01	0.03	0.02	0.03	0.02
K2O	0.01	0.24	0.07	0.23	0.67	0.48	0.04	0.00	0.02	0.06	0.15	0.17	0.53	0.00
P2O5	0.00	0.00	0.01	0.16	0.04	0.04	0.08	0.09	0.03	0.04	0.03	0.02	0.02	0.11
Cr2O3	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
NiO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
H2O-	0.01	0.01	0.01	0.09	0.09	0.12	0.24	0.13	0.12	0.17	0.06	0.04	0.04	0.05
LOI	0.15	0.27	0.23	0.46	0.41	0.62	0.70	0.17	0.43	0.38	0.31	0.19	0.33	0.35
TOTAL	99.74	99.89	99.91	99.39	100.06	100.76	100.17	100.37	101.38	99.21	100.92	99.92	100.27	99.52
Zn	6	5	5	8	9	6	9	7	6	7	8	5	7	7
Cu	<3	<3	<3	4	<3	<3	65	<3	3	9	<3	<3	<3	<3
Ni	<3	<3	<3	3	5	5	10	7	7	10	8	6	<3	<3
Co	4	3	5	3	6	4	24	4	3	4	5	3	<3	3
Ga	<3	<3	<3	<3	7	<3	6	3	<3	<3	<3	<3	<3	<3
Mo	10	8	10	8	5	6	9	8	7	10	6	6	6	14
Nb	2	2	<2	3	2	3	3	<2	6	8	3	2	3	3
Zr	25	29	22	150	59	109	193	43	336	121	80	34	46	41
Y	2	2	<2	3	8	9	22	10	7	8	11	8	4	3
Sr	9	8	6	15	22	7	17	7	5	6	4	3	10	<2
Rb	<2	17	2	14	21	11	3	<2	2	<2	7	5	19	<2
U	<5	<5	6	<5	6	<5	7	<5	5	11	7	<5	<5	<5
Th	<5	<5	<5	<5	<5	<5	9	<5	<5	14	<5	<5	<5	<5
Pb	5	<5	<5	10	<5	<5	<5	<5	<5	18	<5	<5	<5	<5
Cr	214	190	181	229	128	162	215	191	213	249	140	142	99	146
V	22	<14	14	34	17	28	47	31	36	30	26	20	29	28
Ba	<16	18	28	40	284	167	86	39	34	36	48	52	79	49
Sc	10	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
As	<10	<10	12	11	<10	<10	69	<10	<10	<10	<10	<10	<10	48
S	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	76	98
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	8	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	6	<10	<10
W	<8	<8	<8	<8	<8	<8	15	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#239	#240	#241	#242	#243	#244	#245	#246	#247	#248	#249	#250	#251	#252
	WT-147	ET-201	ET-208	ET-205	WT-34	WT-35	WT-46	WT-98	WT-99	WT-100	WT-101	WT-102	WT-191	WT-36
SiO2	94.23	53.22	56.74	78.43	60.17	60.61	63.49	59.25	60.05	62.78	61.44	59.79	70.34	56.60
TiO2	0.01	0.83	0.70	0.10	0.73	0.64	0.58	0.70	0.67	0.56	0.63	0.61	0.45	0.87
Al2O3	0.69	27.45	23.82	4.93	24.68	22.11	14.47	23.62	22.47	20.49	22.47	22.95	15.85	22.92
Fe2O3	4.14	7.01	7.48	12.33	5.59	7.27	14.19	7.11	7.12	6.71	6.19	6.42	6.53	7.74
MnO	0.01	0.03	0.02	0.06	0.08	0.02	0.01	0.04	0.01	0.03	0.02	0.01	0.01	0.01
MgO	0.00	2.04	1.86	0.46	0.23	0.13	0.02	0.51	0.12	1.20	0.12	0.08	0.03	0.41
CaO	0.00	0.02	0.10	0.00	0.04	0.08	0.00	0.00	0.00	0.74	0.00	0.53	0.03	1.64
Na2O	0.01	0.56	0.88	0.02	0.16	0.44	0.05	0.54	0.58	0.34	0.49	0.48	0.46	1.21
K2O	0.00	4.54	3.53	0.02	3.26	3.36	1.74	3.52	3.25	3.39	3.79	3.15	2.52	1.94
P2O5	0.06	0.14	0.12	0.04	0.08	0.12	0.06	0.07	0.07	0.13	0.06	0.09	0.06	0.08
Cr2O3	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01
NiO	0.01	0.01	0.01	0.00	0.02	0.01	0.01	0.01	0.02	0.02	0.01	0.02	0.00	0.02
H2O-	0.05	0.06	0.11	0.30	0.18	0.15	0.50	0.31	0.40	0.28	0.39	0.57	0.30	0.48
LOI	0.38	4.47	4.88	1.94	3.50	4.43	4.68	4.46	5.42	3.59	4.94	5.36	3.50	5.53
TOTAL	99.60	100.38	100.25	98.63	98.72	99.38	99.81	100.15	100.19	100.26	100.55	100.06	100.08	99.46
Zn	8	34	36	44	46	19	29	57	44	81	46	114	21	46
Cu	<3	17	33	39	8	43	18	29	29	7	28	37	15	29
Ni	5	37	42	69	53	23	51	41	50	54	29	105	12	57
Co	<3	14	7	14	14	8	<3	13	8	17	13	11	<3	7
Ga	<3	33	30	10	34	30	19	31	28	23	24	27	14	27
Mo	86	<2	<2	9	5	10	3	5	3	<2	4	<2	3	5
Nb	3	18	18	5	18	17	13	18	17	15	17	24	12	13
Zr	27	148	173	55	202	202	252	206	218	157	169	165	192	160
Y	<2	42	25	15	20	26	27	33	28	31	29	27	24	38
Sr	10	125	113	7	199	186	88	160	155	160	149	173	134	340
Rb	3	225	206	<2	157	230	113	191	191	189	200	178	125	107
U	<5	12	11	5	<5	11	15	6	13	5	6	7	<5	9
Th	<5	29	16	9	21	20	15	23	20	24	29	24	15	18
Pb	<5	13	19	5	19	16	16	34	28	13	23	24	25	13
Cr	113	194	169	209	124	78	105	70	58	102	68	63	52	165
V	28	152	122	127	140	134	150	154	115	127	123	115	125	179
Ba	31	1508	690	75	706	751	486	643	637	730	899	579	632	347
Sc	<8	17	19	10	19	19	9	12	19	16	10	13	14	16
As	<10	<10	<10	<10	27	32	<10	13	<10	<10	34	10	<10	51
S	107	60	<50	83	266	209	189	60	124	106	319	234	172	1293
Sb	<8	<8	11	<8	<8	<8	<8	9	<8	<8	10	9	14	<8
Sn	<8	<8	24	<8	8	11	<8	10	<8	<8	22	<8	<8	11
Bi	<10	11	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	15	<8	<8	<8	<8	115
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#253	#254	#255	#256	#257	#258	#259	#260	#261	#262	#263	#264	#265	#266
	WT-37	WT-38	WT-39	WT-40	WT-41	WT-42	WT-43	WT-44	WT-45	UV-30	UV-31	UV-32	UV-33	UV-34
SiO2	60.28	64.28	63.41	60.54	57.45	58.29	55.78	65.48	61.16	58.94	57.82	57.93	59.41	59.20
TiO2	0.86	0.82	0.78	0.63	0.73	0.75	0.80	0.95	0.89	0.66	0.66	0.73	0.70	0.67
Al2O3	21.48	19.20	18.90	20.88	24.12	25.46	27.44	20.63	22.84	21.66	22.37	23.37	19.51	19.24
Fe2O3	6.38	7.40	5.60	8.33	7.13	6.18	5.05	5.63	7.36	8.16	8.24	6.97	8.98	9.61
MnO	0.03	0.00	0.06	0.04	0.01	0.05	0.03	0.01	0.03	0.04	0.00	0.01	0.02	0.03
MgO	0.18	0.07	0.22	0.30	0.23	0.23	0.16	0.23	0.17	1.89	0.23	0.68	0.81	0.89
CaO	0.46	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.19	0.01	0.00	0.00
Na2O	0.77	0.70	1.65	0.69	2.03	0.31	0.50	0.17	0.20	0.45	0.94	0.46	0.12	0.02
K2O	3.41	2.38	3.70	3.64	3.23	3.20	4.79	2.96	3.11	4.44	3.72	5.10	4.07	5.56
P2O5	0.04	0.08	0.00	0.18	0.06	0.01	0.06	0.01	0.10	0.07	0.13	0.10	0.20	0.24
Cr2O3	0.02	0.04	0.00	0.01	0.00	0.02	0.04	0.03	0.02	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02
H2O-	0.30	0.35	0.36	0.24	0.47	0.40	0.41	0.32	0.24	0.26	0.79	0.43	1.46	1.02
LOI	4.50	3.86	4.32	4.21	5.28	4.32	4.57	3.63	4.02	3.90	4.33	4.20	4.75	4.37
TOTAL	98.71	99.88	99.01	99.70	100.75	99.23	99.64	100.06	100.15	100.55	99.43	100.00	100.04	100.87
Zn	23	18	20	42	30	31	56	38	34	118	31	75	92	49
Cu	21	47	24	23	56	44	23	22	32	32	27	53	58	40
Ni	23	20	28	49	22	25	23	10	15	71	39	57	106	75
Co	11	<3	8	26	3	4	5	3	4	20	4	6	12	22
Ga	29	28	26	30	29	30	33	27	30	28	31	29	30	27
Mo	3	7	5	4	4	3	3	4	8	<2	<2	<2	<2	<2
Nb	14	13	18	14	15	15	15	13	13	16	16	17	16	15
Zr	159	178	175	144	163	175	163	179	160	162	153	183	174	168
Y	34	31	23	51	25	25	18	37	32	41	30	26	35	26
Sr	224	206	198	171	136	127	165	124	117	105	213	111	97	54
Rb	146	127	218	179	170	135	247	142	141	204	187	234	201	331
U	6	8	5	10	5	4	<5	9	8	9	<5	6	10	<5
Th	15	15	16	20	17	19	16	17	18	25	23	22	18	18
Pb	28	27	17	40	28	38	42	42	35	15	27	<5	29	64
Cr	132	104	120	101	133	111	157	195	202	156	166	155	161	178
V	181	140	170	145	151	166	178	187	192	118	134	116	159	155
Ba	685	533	866	806	624	680	924	641	632	725	578	1098	897	567
Sc	20	16	18	15	18	16	13	16	19	11	14	8	19	<8
As	76	11	47	29	31	33	55	16	46	<10	19	<10	<10	<10
S	4291	245	6029	1066	5216	10780	3944	144	146	340	100	240	50	60
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	17	16	8	11	9	<8	8	<8	<8	<8	<8	<8	<8	12
Bi	<10	<10	<10	<10	<10	8	<10	<10	<10	5	<10	<10	<10	<10
W	<8	<8	24	<8	<8	<8	<8	<8	<8	10	9	<8	<8	8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#267	#268	#269	#270	#271	#272	#273	#274	#275	#276	#277	#278	#279	#280
	UV-35	UV-37	UV-38	UV-39	UV-41	UV-42	UV-49	UV-51	UV-96	UV-97	UV-98	UV-99	UV-100	UV-101
SiO2	60.63	56.67	62.14	56.11	59.77	56.70	74.42	76.65	57.98	55.74	57.42	74.51	47.22	72.75
TiO2	0.69	0.74	0.58	0.78	0.65	0.67	0.34	0.32	0.65	0.70	0.63	0.58	0.79	0.21
Al2O3	18.52	18.59	12.75	25.09	19.44	21.63	12.61	11.50	22.68	21.28	20.84	11.27	25.83	8.87
Fe2O3	9.38	12.41	15.11	5.80	9.33	8.75	4.61	4.35	7.98	9.86	9.56	7.49	13.31	14.22
MnO	0.01	0.01	0.00	0.00	0.04	0.01	0.01	0.01	0.11	0.02	0.02	0.02	0.04	0.06
MgO	1.20	0.45	0.14	0.18	1.00	0.22	0.26	0.57	0.37	0.80	0.92	1.11	0.27	1.44
CaO	0.02	0.07	0.00	0.04	0.13	0.10	0.02	0.02	0.20	0.12	0.21	0.11	0.08	0.08
Na2O	0.29	0.29	0.00	0.43	0.39	0.64	0.09	0.07	1.01	0.71	0.53	0.38	0.38	0.04
K2O	3.42	3.47	1.15	5.63	3.34	3.49	1.35	1.70	3.12	2.59	3.26	1.35	3.07	0.05
P2O5	0.31	0.38	0.35	0.20	0.20	0.25	0.03	0.06	0.13	0.17	0.09	0.04	0.15	0.06
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.02	0.03	0.01	0.01	0.02
H2O-	1.27	2.15	1.95	0.43	0.64	1.95	1.39	1.11	1.00	1.47	1.60	0.41	1.36	0.26
LOI	4.37	4.95	5.52	4.68	4.82	5.45	4.25	3.64	5.07	5.45	4.77	2.73	6.87	2.57
TOTAL	100.12	100.20	99.70	99.38	99.76	99.87	99.39	100.00	100.31	98.93	99.88	100.01	99.38	100.63
Zn	101	64	47	18	68	28	36	69	74	117	107	71	40	164
Cu	54	89	60	44	55	46	11	12	77	74	42	21	14	32
Ni	70	112	34	23	69	47	22	13	65	123	171	67	24	73
Co	15	6	4	5	13	<3	5	<3	14	3	20	8	21	31
Ga	25	26	21	31	25	25	31	23	24	28	28	10	32	13
Mo	2	<2	<2	<2	<2	4	<2	<2	<2	3	2	5	3	5
Nb	14	14	10	21	13	17	11	14	89	42	36	75	27	43
Zr	169	168	327	185	159	156	273	313	163	136	119	222	133	72
Y	33	33	29	29	28	18	20	44	48	30	28	20	24	15
Sr	113	112	126	109	145	181	10	6	231	128	176	53	105	20
Rb	172	171	60	261	164	185	79	119	181	142	180	75	164	<2
U	<5	9	7	10	<5	6	<5	<5	8	13	10	7	11	7
Th	16	16	11	22	17	24	10	17	24	20	23	13	25	13
Pb	27	41	46	19	26	21	8	5	18	96	20	17	33	34
Cr	168	206	415	206	155	160	32	20	155	203	178	170	226	265
V	150	161	137	154	139	158	37	20	113	168	136	114	239	210
Ba	628	762	571	1308	876	709	1052	541	698	645	998	457	1001	105
Sc	23	22	17	16	<8	14	11	<8	12	20	12	15	18	11
As	10	<10	<10	<10	<10	13	<10	<10	33	17	17	<10	40	<10
S	50	80	120	40	208	205	227	226	173	182	186	197	201	165
Sb	<8	16	<8	<8	<8	<8	<8	<8	8	<8	<8	12	<8	<8
Sn	8	<8	<8	<8	<8	<8	<8	<8	18	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	8	10	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#281	#282	#283	#284	#285	#286	#287	#288	#289	#290	#291	#292	#293	#294
	UV-118	UV-119	UV-149	UV-150	UV-151	UV-152	UV-153	UV-154	UV-155	UV-156	UV-157	UV-158	UV-159	UV-36
SiO2	62.32	61.24	58.76	54.23	48.45	58.84	63.78	55.83	60.91	61.15	58.21	70.17	61.58	55.70
TiO2	0.66	0.72	0.65	0.74	0.85	0.67	0.58	0.79	0.63	0.77	0.68	0.44	0.71	0.23
Al2O3	20.91	22.45	21.25	24.19	28.86	21.33	18.35	23.74	17.67	21.74	21.00	16.06	21.82	10.23
Fe2O3	6.34	5.53	6.54	8.05	6.24	8.29	6.47	8.58	10.46	5.16	8.49	5.17	5.74	21.92
MnO	0.00	0.02	0.00	0.00	0.00	0.03	0.00	0.07	0.02	0.00	0.01	0.00	0.01	0.03
MgO	0.33	0.31	0.24	0.18	0.23	0.82	0.26	0.22	0.00	0.04	0.14	0.17	0.13	0.80
CaO	0.13	0.04	0.08	0.01	0.11	0.09	0.09	0.72	0.09	0.68	0.04	0.06	1.65	0.25
Na2O	0.51	0.54	0.45	0.43	0.61	0.57	0.44	0.61	0.40	1.03	0.52	0.51	0.85	0.05
K2O	3.48	3.42	3.20	3.98	5.24	3.70	3.67	3.59	2.94	3.36	2.50	2.98	2.48	0.13
P2O5	0.10	0.17	0.04	0.19	0.15	0.19	0.02	0.20	0.18	0.10	0.16	0.13	0.07	2.30
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.01	0.02	0.01	0.02	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.02
H2O-	0.64	0.50	3.92	2.00	2.66	0.77	2.33	0.88	0.64	1.07	1.98	0.35	0.47	2.31
LOI	4.87	5.51	4.78	5.52	6.07	4.58	3.69	5.17	4.60	4.16	5.70	3.62	4.02	6.22
TOTAL	100.30	100.47	99.92	99.54	99.48	99.90	99.70	100.41	98.55	99.27	99.44	99.67	99.54	100.19
Zn	29	44	58	86	66	80	16	60	50	73	45	43	40	121
Cu	13	8	26	26	19	29	78	42	42	61	35	59	40	198
Ni	32	74	49	98	47	125	40	62	41	57	29	43	21	130
Co	<3	11	6	<3	3	24	4	42	24	4	12	11	5	18
Ga	24	29	24	28	29	21	23	30	21	27	25	19	24	14
Mo	3	<2	6	2	<2	<2	<2	<2	<2	<2	2	<2	<2	<2
Nb	18	17	16	18	21	15	13	15	11	15	15	11	16	10
Zr	222	213	243	184	218	193	161	172	126	151	196	150	159	51
Y	27	28	24	25	31	24	19	47	21	40	31	18	31	182
Sr	118	121	128	190	201	104	65	203	109	217	127	167	276	1772
Rb	180	178	176	216	289	182	170	195	148	173	131	143	132	13
U	8	<5	8	10	11	8	<5	6	<5	<5	13	5	5	26
Th	22	23	18	18	27	16	18	24	12	14	21	10	21	12
Pb	<5	21	29	23	25	10	<5	33	37	12	18	50	14	388
Cr	190	182	176	197	203	145	131	179	158	205	174	97	194	167
V	140	138	136	161	174	128	154	146	135	179	131	108	160	120
Ba	677	689	668	1102	1242	740	979	736	736	672	549	786	627	4494
Sc	12	18	9	11	16	12	<8	10	<8	16	10	14	12	14
As	12	22	20	13	<10	<10	<10	12	13	10	<10	12	<10	51
S	171	160	186	235	181	189	196	186	188	122	189	224	1652	370
Sb	12	11	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	20
Sn	<8	18	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	63	39	87	71	28	56	33	79	67	21	44	n.d.

	#295	#296	#297	#298	#299	#300	#301	#302	#303	#304	#305	#306	#307	#308
	ST-201	ST-202	ST-203	ST-204	ST-205	ST-206	ST-207	ST-208	ST-209	ST-210	ST-211	ST-212	ST-213	ST-214
SiO2	58.96	59.12	57.63	58.23	54.83	59.26	58.85	57.17	56.71	55.44	55.69	55.31	59.13	58.35
TiO2	0.62	0.62	0.62	0.63	0.62	0.66	0.61	0.67	0.64	0.66	0.62	0.63	0.66	0.59
Al2O3	22.17	23.28	20.49	21.73	21.95	22.34	21.41	22.75	21.78	21.08	21.73	20.93	20.93	20.47
Fe2O3	7.23	5.86	9.62	7.61	7.47	7.11	7.97	8.75	8.65	9.88	8.21	9.27	7.58	7.98
MnO	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.03	0.04	0.03	0.02
MgO	0.88	0.72	0.83	1.00	1.19	1.21	1.45	1.72	1.67	1.83	1.55	1.75	1.69	1.70
CaO	0.00	0.09	1.08	0.12	0.18	0.23	0.46	0.10	0.41	0.70	1.02	0.75	0.14	0.29
Na2O	0.30	0.34	0.27	0.25	0.26	0.27	0.30	0.32	0.38	0.40	0.42	0.40	0.45	0.37
K2O	2.62	3.23	2.50	2.76	2.87	2.77	2.74	2.92	2.85	2.72	2.96	2.95	2.96	3.22
P2O5	0.02	0.00	0.64	0.03	0.09	0.05	0.26	0.08	0.04	0.35	0.52	0.31	0.04	0.00
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00
H2O-	0.88	0.82	1.07	1.35	2.27	0.90	0.86	0.58	0.85	0.71	0.72	0.73	0.80	0.81
LOI	5.65	5.51	5.70	5.70	8.01	5.46	5.54	5.29	5.38	5.55	5.45	5.58	5.68	6.37
TOTAL	99.34	99.60	100.46	99.42	99.76	100.28	100.48	100.38	99.40	99.37	98.92	98.65	100.09	100.17
Zn	81	54	76	68	86	73	93	86	84	137	80	99	96	110
Cu	23	32	57	41	36	53	36	32	40	43	40	36	48	61
Ni	44	40	47	44	47	46	49	54	54	51	56	53	51	71
Co	9	14	8	7	9	14	17	15	12	8	21	14	17	22
Ga	29	28	28	26	26	26	29	28	25	29	27	26	26	20
Mo	3	4	7	<2	<2	2	<2	<2	4	<2	<2	<2	<2	<2
Nb	19	18	17	16	17	16	16	15	16	15	16	16	17	14
Zr	174	160	140	133	131	130	124	131	128	122	120	119	116	122
Y	29	28	62	25	25	25	39	27	26	43	59	41	32	38
Sr	84	90	86	82	72	76	78	80	86	81	89	85	84	89
Rb	152	186	153	161	167	160	165	172	167	165	175	172	174	188
U	8	7	10	<5	<5	9	11	7	14	6	15	7	<5	14
Th	24	24	22	20	23	21	22	21	19	15	24	17	22	20
Pb	24	42	65	27	31	53	69	45	26	43	45	44	38	69
Cr	133	125	120	117	126	125	124	139	149	132	130	130	129	132
V	126	140	139	134	150	131	146	140	148	134	147	149	150	139
Ba	471	538	434	482	474	456	488	507	507	484	497	517	510	552
Sc	14	13	9	12	16	16	16	19	19	16	19	17	14	20
As	14	17	30	16	19	84	31	22	10	14	104	22	20	31
S	237	234	233	281	290	352	398	523	2172	707	865	767	638	1614
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	10	<8	<8	<8
Bi	<10	<10	<10	9	<10	<10	<10	<10	<10	6	7	<10	<10	<10
W	<8	<8	<8	8	<8	<8	<8	<8	<8	8	<8	<8	<8	<8
B	72	n.d.	n.d.	71	n.d.	86	n.d.	87	n.d.	71	78	71	75	87

	#309	#310	#311	#312	#313	#314	#315	#316	#317	#318	#319	#320	#321	#322
	ST-215	ST-216	ST-217	ET-86	ET-87	ET-88	ET-89	ET-90	ET-91	ET-92	ET-93	ET-146	ET-147	ET-148
SiO2	53.55	56.16	57.84	57.32	58.21	56.36	54.77	65.68	60.76	54.95	61.88	54.74	57.97	60.07
TiO2	0.65	0.59	0.67	0.73	0.76	0.99	1.02	0.98	1.02	0.94	0.89	0.73	0.81	0.88
Al2O3	21.22	22.66	19.42	22.79	21.90	19.78	19.22	14.27	16.27	18.48	14.40	20.73	18.69	16.13
Fe2O3	11.25	9.10	8.01	6.52	7.51	9.25	11.40	7.85	10.33	10.75	9.40	8.57	8.66	11.59
MnO	0.04	0.04	0.02	0.02	0.03	0.07	0.04	0.07	0.05	0.03	0.07	0.06	0.04	0.05
MgO	2.12	1.82	1.69	0.85	1.06	1.83	2.16	1.68	1.93	1.21	1.42	1.62	1.20	1.07
CaO	0.67	0.35	0.16	0.22	0.17	3.00	0.28	2.41	0.35	0.66	1.54	0.31	0.72	0.63
Na2O	0.38	0.44	0.43	0.59	0.56	3.27	0.39	2.87	0.37	0.35	1.45	0.74	1.25	1.54
K2O	3.00	3.51	2.73	5.31	5.10	0.68	2.94	0.10	2.43	2.76	1.32	4.54	3.78	3.10
P2O5	0.28	0.18	0.01	0.08	0.11	0.10	0.05	0.05	0.13	0.16	0.05	0.13	0.09	0.14
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
NiO	0.01	0.00	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.00	0.01	0.01
H2O-	0.66	0.58	0.98	0.42	0.21	0.40	1.76	0.40	1.26	3.47	2.92	1.67	2.09	1.31
LOI	5.21	5.05	7.13	4.22	3.99	2.84	5.12	2.36	4.38	4.91	3.52	4.41	3.70	2.84
TOTAL	99.04	100.48	99.10	99.08	99.62	98.57	99.16	98.72	99.29	98.72	98.87	98.25	99.01	99.36
Zn	114	101	119	75	72	97	114	85	99	97	93	85	65	78
Cu	32	35	81	28	58	29	56	4	35	23	8	11	30	6
Ni	62	55	78	67	49	66	78	52	68	61	65	51	55	52
Co	13	10	30	20	18	26	30	25	31	21	26	15	18	21
Ga	26	29	25	33	34	25	29	15	21	31	22	31	27	25
Mo	<2	<2	<2	<2	3	3	<2	<2	<2	<2	<2	<2	<2	3
Nb	16	14	15	16	14	14	14	13	12	11	11	15	13	12
Zr	135	112	136	167	161	168	136	183	194	128	155	135	198	331
Y	42	33	53	26	25	26	28	24	31	41	20	32	25	18
Sr	82	106	88	119	103	269	52	182	47	48	87	76	119	134
Rb	181	195	168	215	214	38	156	2	119	182	111	178	179	155
U	8	<5	6	7	6	7	8	5	5	6	<5	23	8	7
Th	21	14	18	20	20	17	13	19	9	13	12	29	26	17
Pb	27	38	29	27	48	55	16	29	15	11	21	10	14	15
Cr	143	134	145	154	147	196	194	159	163	164	135	169	172	116
V	129	131	147	143	140	213	228	175	194	218	173	184	158	146
Ba	546	603	490	970	1034	169	650	14	479	680	431	1488	1208	889
Sc	15	18	16	18	17	17	29	22	24	26	16	23	25	27
As	<10	<10	37	14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	554	815	2265	138	119	117	101	106	102	104	105	141	138	123
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	11	18	13	<8	<8	<8
Bi	6	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	9	8	<8
B	67	77	73	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#323	#324	#325	#326	#327	#328	#329	#330	#331	#332	#333	#334	#335	#336
	ET-149	ET-150	ET-151	ET-152	ET-153	ET-155	ET-156	ET-157	ET-158	ET-12	ET-71	ET-72	ET-99	ET-100
SiO2	56.47	59.15	59.77	58.09	61.90	62.42	60.42	59.90	56.13	60.52	60.14	61.28	63.66	60.25
TiO2	0.72	0.73	0.83	0.74	0.66	0.62	0.52	0.74	0.56	0.00	0.81	0.77	0.91	0.80
Al203	19.76	19.19	19.92	20.63	19.42	16.05	19.64	20.27	24.32	0.00	15.12	14.47	18.23	18.11
Fe203	8.72	7.14	8.82	7.65	6.25	7.73	5.26	10.97	5.78	35.89	10.76	10.66	8.53	8.92
MnO	0.02	0.05	0.04	0.04	0.02	0.04	0.02	0.03	0.00	0.02	0.04	0.03	0.05	0.03
MgO	1.14	1.08	1.16	0.57	0.53	1.25	1.03	0.35	0.55	0.96	2.27	2.21	1.90	1.44
CaO	0.43	0.30	0.30	0.21	0.14	0.60	0.36	0.05	0.09	0.12	1.22	0.85	0.24	0.34
Na20	0.63	0.60	0.52	0.63	0.88	1.41	1.58	0.29	0.49	1.44	0.57	0.63	0.59	0.67
K20	4.38	4.27	1.81	4.11	4.20	3.22	4.19	3.36	5.29	0.11	1.24	2.10	3.04	2.76
P205	0.15	0.13	0.18	0.12	0.11	0.04	0.01	0.07	0.05	0.06	0.07	0.02	0.15	0.11
Cr203	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00
NiO	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.00
H20-	2.18	1.92	1.66	1.76	1.28	1.68	1.92	0.93	0.78	0.06	2.76	1.89	0.72	1.72
LOI	4.32	4.07	4.05	4.23	3.78	3.38	3.82	5.11	4.38	0.95	3.53	3.15	3.02	2.99
TOTAL	98.92	98.64	99.14	98.78	99.17	98.44	98.77	102.07	98.43	100.13	98.54	98.06	101.13	98.14
Zn	72	64	52	38	33	71	49	60	97	7	92	83	72	58
Cu	13	7	3	17	44	8	4	33	41	16	19	41	39	47
Ni	53	47	53	51	33	47	25	56	83	11	66	66	50	53
Co	13	18	11	20	16	16	8	17	5	<3	16	22	12	14
Ga	29	29	27	31	27	21	28	27	33	<3	24	19	24	23
Mo	<2	<2	<2	<2	6	<2	<2	<2	<2	3	<2	<2	<2	<2
Nb	15	14	15	16	15	12	15	12	18	4	12	13	14	15
Zr	151	182	154	175	252	148	151	120	153	3	165	167	159	160
Y	22	24	19	22	24	24	18	23	20	5	28	29	28	27
Sr	67	61	52	75	91	164	171	60	104	4	133	122	44	52
Rb	196	170	188	199	190	159	143	178	292	9	115	154	180	188
U	<5	10	5	8	8	5	9	5	8	<5	<5	<5	<5	8
Th	23	23	24	23	17	13	12	18	21	<5	21	12	18	14
Pb	7	10	12	12	8	11	<5	31	25	<5	14	21	22	25
Cr	153	163	149	166	152	113	72	172	83	99	222	211	175	174
V	160	165	155	167	148	127	101	172	110	22	170	155	167	140
Ba	1062	859	867	932	873	929	1281	696	899	14	579	562	621	679
Sc	21	11	23	21	15	17	12	20	24	<8	17	23	26	19
As	<10	<10	<10	<10	<10	<10	<10	15	10	<10	<10	<10	12	22
S	128	112	115	102	91	174	110	175	110	68	114	117	76	103
Sb	8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	8	<8	<8	<8	<8	<8	<8	<8	11	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	8	<8	9	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#337	#338	#339	#340	#341	#342	#343	#344	#345	#346	#347	#348	#349	#350
	ET-101	ET-209	ET-210	ET-211	ET-212	ET-213	ET-214	ET-215	ET-216	ET-217	ET-218	ET-219	ET-220	ET-221
SiO2	58.56	38.93	45.23	52.96	55.09	56.01	55.57	54.53	63.90	61.58	61.51	55.34	60.98	59.88
TiO2	0.84	0.99	0.60	0.85	0.79	0.85	0.78	0.73	0.65	0.68	0.62	0.77	0.68	0.68
Al2O3	20.47	25.01	32.61	21.15	24.30	20.60	22.44	23.02	17.08	16.81	18.23	23.46	19.19	21.36
Fe2O3	9.32	12.94	4.39	12.06	6.37	10.48	9.86	9.80	10.85	10.92	8.51	8.49	10.17	7.45
MnO	0.04	0.01	0.00	0.02	0.01	0.00	0.03	0.00	0.06	0.00	0.05	0.00	0.06	0.02
MgO	1.37	0.33	0.36	0.88	0.91	0.51	1.14	0.13	0.17	0.26	1.13	0.31	1.32	0.84
CaO	0.42	0.00	0.03	0.00	0.00	0.00	0.04	0.02	0.04	0.10	0.92	0.20	0.19	0.14
Na2O	0.48	0.38	0.99	0.40	0.57	0.42	0.92	1.21	0.97	1.04	0.93	1.21	0.95	1.30
K2O	2.73	3.36	6.87	3.26	5.05	2.96	3.18	2.82	2.26	2.49	2.83	3.92	2.40	2.79
P2O5	0.13	0.10	0.18	0.07	0.05	0.05	0.04	0.04	0.07	0.52	0.83	0.14	0.10	0.06
Cr2O3	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
NiO	0.00	0.01	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.01
H2O-	1.91	11.35	1.57	1.10	0.58	0.64	0.26	0.68	0.69	0.51	0.13	0.32	0.15	0.29
LOI	2.83	6.37	5.73	5.72	4.80	5.85	4.58	5.58	4.15	4.28	3.35	4.72	3.72	4.18
TOTAL	99.10	99.81	98.56	98.48	98.52	98.38	98.85	98.56	100.89	99.20	99.04	98.88	99.93	99.00
Zn	71	42	22	86	83	82	83	32	27	33	49	13	72	71
Cu	36	34	42	28	26	48	47	29	32	76	21	22	43	5
Ni	59	113	26	80	44	95	84	52	55	33	53	26	56	62
Co	18	<3	4	<3	9	<3	20	<3	<3	<3	17	<3	10	6
Ga	27	37	40	30	33	28	29	31	30	31	28	36	26	31
Mo	4	<2	<2	<2	<2	<2	7	<2	3	<2	<2	<2	3	<2
Nb	14	19	19	16	16	16	17	20	18	16	15	18	15	16
Zr	157	182	195	134	158	158	213	202	341	229	294	229	245	220
Y	23	20	27	70	33	54	28	116	60	96	79	28	28	42
Sr	38	101	390	103	120	89	143	166	115	441	186	220	134	161
Rb	186	266	477	205	335	188	175	160	123	139	159	229	127	164
U	<5	15	11	10	5	6	15	12	9	31	13	11	10	6
Th	21	26	52	21	30	21	23	27	22	20	24	26	21	21
Pb	25	38	54	16	15	13	20	21	16	26	30	32	16	17
Cr	206	308	<14	233	158	218	171	163	140	134	113	168	152	138
V	162	221	70	185	151	175	152	165	156	156	136	181	134	156
Ba	642	676	1384	619	909	608	689	614	470	1278	810	952	538	674
Sc	23	17	<8	35	23	24	15	21	13	18	19	21	13	15
As	16	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	99	124	193	76	180	96	191	<50	224	218	80	187	118	97
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	13	<8	<8	<8	16	<8	<8	<8	<8	<8	13	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	14	<8	13	<8	<8	<8	<8
B	n.d.	n.d.	81	n.d.	90	n.d.	84	103	n.d.	106	n.d.	96	n.d.	105

	#351	#352	#353	#354	#355	#356	#357	#358	#359	#360	#361	#362	#363	#364
	ET-222	ET-223	ET-224	ET-225	ET-226	ET-227	ET-228	ET-229	ET-230	ET-231	ET-232	ET-233	DTO-1	DTO-2
SiO2	58.71	63.08	60.08	56.44	56.00	58.01	59.36	60.01	49.06	57.21	58.07	63.34	62.49	62.07
TiO2	0.68	0.49	0.71	0.76	0.77	0.68	0.66	0.64	0.58	0.57	0.55	0.60	0.63	0.64
Al2O3	21.16	17.60	19.61	21.16	22.70	20.93	19.39	19.15	20.01	20.76	20.30	16.67	20.67	21.57
Fe2O3	8.60	8.60	8.85	9.70	7.84	8.48	7.39	8.11	8.65	8.63	8.56	9.28	5.86	5.96
MnO	0.03	0.01	0.05	0.03	0.05	0.04	0.00	0.01	0.01	0.02	0.03	0.01	0.01	0.01
MgO	0.96	1.29	1.39	1.02	1.40	1.35	0.13	0.83	0.16	1.45	2.07	1.03	1.05	0.94
CaO	0.35	0.00	0.34	0.05	0.13	0.00	0.02	0.00	0.00	0.00	0.00	0.03	0.14	0.07
Na2O	1.22	1.02	0.82	0.75	0.87	0.45	0.39	0.34	0.33	0.28	0.30	0.21	0.54	0.36
K2O	2.55	2.74	2.76	3.03	3.82	3.45	3.38	2.75	2.71	2.74	3.36	2.82	3.55	3.41
P2O5	0.13	0.13	0.30	0.06	0.38	0.21	0.02	0.10	0.04	0.06	0.02	0.04	0.21	0.06
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.00
NiO	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.00
H2O-	0.40	0.28	0.31	0.51	0.25	0.70	3.46	1.52	12.71	1.00	0.69	0.94	0.15	0.19
LOI	4.41	3.67	3.92	4.88	4.41	5.21	5.51	5.26	5.48	6.05	5.02	5.03	3.28	3.37
TOTAL	99.21	98.92	99.14	98.39	98.62	99.51	99.74	98.72	99.74	98.78	98.98	100.03	98.59	98.65
Zn	98	84	95	92	89	171	41	136	42	157	91	136	38	37
Cu	35	35	37	40	27	69	29	56	36	64	42	38	9	14
Ni	57	43	62	74	62	83	23	69	96	89	70	68	40	34
Co	4	8	7	4	16	3	<3	3	<3	9	5	12	11	11
Ga	28	28	28	29	34	29	27	28	35	27	28	24	24	27
Mo	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Nb	16	16	16	16	18	16	12	12	15	12	12	11	15	17
Zr	195	216	166	166	177	154	170	134	139	116	215	131	224	188
Y	40	34	47	20	94	53	16	35	20	28	23	32	34	23
Sr	195	145	145	149	308	142	95	90	95	72	78	81	63	61
Rb	133	141	154	166	199	168	152	136	150	137	168	143	238	285
U	6	5	13	11	22	8	16	7	11	8	<5	<5	8	5
Th	21	22	23	15	26	20	22	18	23	22	16	19	24	19
Pb	28	19	35	15	23	36	31	34	29	24	21	25	12	12
Cr	144	140	136	159	148	143	93	112	108	110	208	112	161	161
V	140	146	163	167	184	159	121	136	140	118	89	94	115	123
Ba	654	622	663	709	1293	1066	883	1078	1196	870	1373	2167	682	826
Sc	17	13	14	27	22	17	24	12	19	22	17	19	<8	12
As	11	12	41	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	13
S	199	<50	89	141	94	114	101	163	109	148	127	147	50	150
Sb	14	<8	<8	<8	<8	<8	<8	<8	<8	13	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	10	<8	<8	<8	<8	<8	<8	<8	9
Bi	7	<10	<10	<10	<10	<10	<10	<10	<10	6	<10	<10	<10	<10
W	<8	<8	<8	<8	10	<8	10	<8	<8	<8	<8	<8	8	<8
B	n.d.	92	n.d.	79	n.d.	83	n.d.	62	n.d.	63	n.d.	47	n.d.	n.d.

	#365	#366	#367	#368	#369	#370	#371	#372	#373	#374	#375	#376	#377	#378
	DTO-3	CRT-7	CRT-8	UV-40	ST-218	ST-219	ST-220	ST-221	ST-223	ST-224	ST-225	ST-226	ST-227	ST-228
SiO2	61.73	53.55	51.67	86.07	62.82	61.56	61.78	63.78	60.51	61.99	63.40	61.26	61.39	63.80
TiO2	0.61	0.84	0.88	0.14	0.56	0.66	0.65	0.63	0.61	0.64	0.61	0.56	0.64	0.58
Al2O3	19.99	22.48	24.91	3.68	19.02	21.85	20.21	19.69	18.12	19.83	18.03	17.27	18.66	17.46
Fe2O3	6.95	5.90	5.71	6.34	7.66	4.19	6.79	5.81	5.75	7.54	8.36	12.15	8.85	8.07
MnO	0.03	0.02	0.03	0.00	0.03	0.03	0.03	0.02	0.09	0.03	0.04	0.06	0.04	0.03
MgO	0.64	2.15	2.20	0.00	1.56	1.00	1.49	1.31	1.26	1.61	1.44	2.04	1.62	1.49
CaO	0.07	0.47	0.66	0.00	0.11	0.94	0.31	0.10	3.62	0.31	0.34	0.16	0.20	0.16
Na2O	0.50	0.31	0.39	0.00	0.51	0.62	0.68	0.74	0.62	0.67	0.64	0.37	0.57	0.51
K2O	4.11	5.87	6.15	0.08	2.78	3.62	3.24	2.99	2.90	2.95	2.47	2.06	2.81	2.49
P2O5	0.01	0.09	0.31	0.09	0.00	0.01	0.08	0.00	0.46	0.07	0.02	0.06	0.00	0.00
Cr2O3	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.01	0.01	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00
H2O-	0.32	2.34	2.26	0.78	0.61	0.56	0.58	0.69	0.48	0.59	0.63	0.42	0.55	0.42
LOI	3.48	5.68	6.00	1.98	4.39	4.91	4.29	4.12	6.22	4.33	4.08	4.15	4.03	4.04
TOTAL	98.45	99.71	101.21	99.16	100.05	99.95	100.14	99.88	100.64	100.56	100.06	100.57	99.36	99.05
Zn	32	59	158	10	88	51	67	58	57	71	81	114	83	77
Cu	12	10	25	23	12	31	24	22	21	21	24	19	27	23
Ni	46	147	178	11	40	27	44	34	38	41	43	60	57	34
Co	17	12	17	4	9	6	14	5	21	8	4	22	23	5
Ga	25	25	31	9	20	25	30	22	21	26	22	26	23	23
Mo	<2	3	2	<2	3	<2	3	3	<2	2	3	3	3	4
Nb	17	15	17	4	16	18	19	19	16	18	16	15	18	18
Zr	201	129	126	44	172	223	235	220	191	205	220	201	242	248
Y	20	41	43	8	26	23	29	26	39	27	23	28	28	30
Sr	67	20	23	49	72	103	91	87	89	83	81	55	83	79
Rb	251	185	198	7	169	197	183	173	160	168	140	117	155	149
U	<5	<5	<5	<5	11	6	14	13	13	11	8	20	11	5
Th	22	<5	<5	<5	20	28	20	21	20	19	20	21	20	20
Pb	11	<5	7	8	22	38	25	23	29	22	24	64	31	21
Cr	164	565	584	210	101	116	109	114	100	123	106	96	118	117
V	138	190	178	73	114	123	118	122	120	121	105	99	128	100
Ba	770	759	809	31	539	611	618	563	515	556	460	406	515	492
Sc	15	19	18	<8	11	<8	16	10	14	<8	18	10	<8	<8
As	<10	<10	14	<10	11	<10	<10	<10	13	<10	<10	<10	32	<10
S	300	<50	<50	106	411	391	374	371	346	401	414	381	366	352
Sb	<8	8	<8	<8	<8	<8	<8	<8	<8	<8	7	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	11	<8	<8	8	9
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	73	83	82	81	78	83	80	54	83	81

	#379	#380	#381	#382	#383	#384	#385	#386	#387	#388	#389	#390	#391	#392
	ST-231	ST-232	ST-222	ST-229	ST-230	WT-104	UV-105	ET-236	ET-234	ET-235	WT-109	WT-171	WT-172	WT-173
SiO2	60.46	58.52	67.04	60.02	58.89	89.30	65.46	91.47	89.97	81.38	48.44	54.60	55.92	49.64
TiO2	0.67	0.68	0.48	0.61	0.65	0.03	0.47	0.16	0.09	0.22	1.44	0.51	0.70	1.54
Al203	20.25	20.95	15.05	20.61	20.24	2.48	13.86	3.62	4.01	7.34	35.85	15.93	14.99	31.94
Fe203	7.61	6.99	6.93	7.95	10.02	7.19	7.79	1.84	2.45	5.66	1.39	8.67	12.33	2.81
MnO	0.04	0.04	0.03	0.04	0.04	0.00	0.03	0.02	0.01	0.00	0.00	0.10	0.25	0.01
MgO	1.58	1.53	1.26	1.61	1.99	0.00	2.00	1.25	0.19	0.29	0.19	2.14	5.23	0.40
CaO	0.83	0.72	0.71	0.47	0.05	0.00	0.30	0.00	0.00	0.00	0.00	15.08	5.82	0.18
Na20	0.85	0.75	0.55	0.69	0.59	0.00	0.21	0.04	0.06	0.03	1.15	0.00	1.32	1.09
K20	2.94	3.15	1.92	3.30	2.81	0.04	3.44	0.36	0.00	0.96	6.52	0.04	1.15	8.04
P205	0.27	0.04	0.00	0.00	0.04	0.03	0.04	0.07	0.00	0.00	0.01	0.10	0.10	0.04
Cr203	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.04	0.02	0.01	0.01
NiO	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.02	0.02	0.02
H20-	0.50	0.29	0.43	0.17	0.24	0.34	2.30	0.06	0.21	0.49	0.13	0.14	0.09	0.07
LOI	3.98	5.10	3.90	4.26	4.41	1.11	3.43	1.32	2.02	2.77	5.14	1.70	1.88	4.38
TOTAL	99.98	98.76	98.30	99.73	99.97	100.54	99.34	100.21	99.01	99.14	100.31	99.05	99.81	100.17
Zn	76	78	69	86	103	16	76	10	47	21	13	22	76	10
Cu	38	50	22	26	23	23	38	<3	32	27	3	100	64	40
Ni	51	49	39	39	54	16	57	4	25	16	49	38	94	79
Co	13	12	8	<3	3	6	14	7	7	11	3	6	38	5
Ga	26	29	21	28	24	3	18	<3	5	10	35	21	14	33
Mo	30	8	2	2	3	8	<2	<2	7	7	3	<2	<2	2
Nb	15	17	16	16	16	5	16	5	5	7	15	6	9	15
Zr	152	160	192	173	189	39	302	80	75	141	234	76	109	231
Y	38	32	20	25	27	7	18	8	6	11	14	32	29	35
Sr	128	100	71	108	103	11	46	13	5	16	202	508	114	122
Rb	161	177	114	182	153	2	223	20	<2	47	311	<2	50	407
U	10	10	7	8	9	<5	8	<5	5	5	5	<5	<5	10
Th	20	20	14	18	20	10	16	<5	6	8	20	8	10	21
Pb	20	16	29	46	23	52	17	<5	32	16	55	<5	10	36
Cr	140	152	90	113	119	141	136	141	114	174	291	46	35	93
V	140	149	99	120	118	107	107	29	22	68	475	187	238	620
Ba	561	615	365	693	612	38	858	140	43	553	1945	75	394	800
Sc	8	12	13	11	12	<8	<8	<8	<8	14	53	27	30	51
As	<10	<10	<10	<10	<10	13	<10	<10	<10	<10	<10	<10	<10	<10
S	301	352	311	251	233	171	93	<50	192	308	144	165	153	<50
Sb	<8	<8	<8	<8	<8	<8	<8	11	<8	<8	<8	<8	<8	<8
Sn	8	<8	<8	8	8	<8	<8	<8	<8	<8	<8	10	13	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	37	37	63	73	28	n.d.	n.d.	10	8	n.d.	n.d.	n.d.	n.d.	n.d.

	#393	#394	#395	#396	#397	#398	#399	#400	#401	#402	#403	#404	#405	#406
	WT-174	WT-175	WT-176	WT-177	WT-178	WT-179	ST-105	ST-106	ST-107	ST-108	ST-110	ST-111	CRT-1	CRT-2
SiO2	46.28	60.20	62.87	49.86	44.40	44.33	55.85	57.41	59.68	46.08	54.92	59.94	95.18	93.09
TiO2	1.90	0.73	1.27	1.45	1.15	0.99	0.81	0.81	0.83	0.48	1.07	1.10	0.22	0.20
Al2O3	37.51	20.72	25.29	35.84	34.60	33.77	21.56	22.09	22.82	10.47	24.17	22.36	1.38	1.30
Fe2O3	1.73	10.06	4.10	4.70	7.22	10.07	10.62	8.07	7.17	35.73	9.23	7.65	1.78	3.60
MnO	0.00	0.05	0.03	0.02	0.00	0.02	0.03	0.03	0.02	0.04	0.02	0.01	0.03	0.15
MgO	0.22	0.95	0.10	0.10	0.07	0.00	1.67	1.18	1.04	0.93	0.89	0.81	0.00	0.00
CaO	0.31	0.09	0.22	0.00	0.00	0.00	0.33	0.22	0.13	0.78	0.22	0.22	0.18	0.08
Na2O	1.28	0.00	0.55	0.53	0.15	0.27	0.29	0.39	0.37	0.03	0.46	0.51	0.07	0.05
K2O	6.45	2.08	2.95	2.53	2.37	1.58	3.03	3.24	3.09	0.82	4.07	3.35	0.53	0.33
P2O5	0.08	0.10	0.13	0.15	0.10	0.11	0.22	0.23	0.09	0.65	0.14	0.13	0.03	0.06
Cr2O3	0.00	0.02	0.01	0.03	0.04	0.06	0.00	0.00	0.03	0.00	0.04	0.01	0.00	0.00
NiO	0.02	0.06	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01	0.02	0.01	0.00	0.00
H2O-	0.08	0.55	0.16	0.18	0.41	0.34	0.47	0.48	0.38	0.18	0.47	0.40	0.32	0.29
LOI	4.11	3.25	2.62	3.59	8.70	7.14	4.71	4.50	4.92	2.68	4.42	4.30	0.69	1.11
TOTAL	99.97	98.86	100.32	99.00	99.23	98.70	99.60	98.66	100.57	98.88	100.14	100.80	100.41	100.26
Zn	8	148	15	15	9	10	56	43	33	34	26	28	19	13
Cu	7	165	46	23	10	8	8	26	30	19	10	107	156	357
Ni	94	354	85	74	78	94	51	42	57	91	119	107	10	13
Co	<3	34	22	11	<3	<3	9	8	19	<3	10	16	18	33
Ga	37	28	23	34	30	29	26	28	27	21	31	31	<3	<3
Mo	<2	3	<2	7	<2	<2	<2	<2	<2	15	4	3	10	14
Nb	20	16	14	20	14	15	18	19	17	10	20	19	5	5
Zr	295	165	250	261	177	194	210	229	247	238	251	265	57	165
Y	69	49	426	57	34	28	41	39	36	35	45	38	8	15
Sr	175	28	78	57	48	31	111	96	94	98	123	122	13	11
Rb	336	133	151	135	130	89	153	146	134	40	192	161	18	14
U	9	5	6	11	8	9	10	10	7	14	11	13	11	8
Th	20	23	25	26	15	16	24	20	26	10	16	26	<5	5
Pb	35	10	9	15	<5	<5	14	16	17	31	17	12	<5	<5
Cr	124	201	122	304	386	459	149	175	226	382	341	275	215	221
V	694	148	322	267	253	263	169	163	187	256	256	215	34	40
Ba	662	573	520	457	290	146	405	414	367	168	542	500	559	293
Sc	83	27	43	44	38	35	14	16	14	21	31	17	<8	<8
As	<10	<10	<10	<10	<10	<10	<10	<10	18	<10	<10	<10	12	18
S	61	155	146	100	126	127	695	562	1296	318	337	476	181	80
Sb	16	<8	<8	<8	<8	15	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	14	8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	16	<8	20	<8	<8	<8	<8	<8	<8	<8	<8	8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	227	284	281	4	157	166	n.d.	n.d.

	#407	#408	#409	#410	#411	#412	#413	#414	#415	#416	#417	#418	#419	#420
	CRT-3	ET-239	ET-241	ET-242	ET-242A	ET-240	WT-110	WT-111	WDW-1	WDW-2	WDW-3	WDW-4	ET-252	ET-243
SiO2	69.80	45.91	69.28	53.28	54.98	41.87	54.16	36.21	92.94	93.89	95.22	97.73	82.22	77.60
TiO2	0.54	1.13	0.72	0.90	0.88	1.19	1.38	1.00	0.15	0.11	0.09	0.07	0.20	0.37
Al2O3	13.22	27.88	16.16	23.03	24.09	18.12	34.22	36.30	2.30	2.53	1.30	0.63	7.80	11.91
Fe2O3	4.88	10.88	4.50	9.88	7.82	27.03	4.01	20.78	1.39	0.65	0.28	0.23	5.55	2.99
MnO	0.07	0.39	0.06	0.04	0.00	0.02	0.01	0.04	0.01	0.01	0.01	0.00	0.01	0.00
MgO	0.01	2.19	1.90	1.91	0.10	0.12	0.07	0.13	1.18	1.18	1.16	1.04	1.24	0.53
CaO	1.13	0.03	0.01	0.01	0.00	0.06	0.00	0.00	0.08	0.00	0.00	0.01	0.00	0.00
Na2O	3.11	0.13	0.08	0.13	0.15	0.04	0.48	0.64	0.10	0.14	0.09	0.05	0.05	0.12
K2O	4.82	5.03	3.97	6.53	7.59	0.02	1.77	1.20	0.62	0.59	0.40	0.02	1.31	3.61
P2O5	0.00	0.09	0.09	0.15	0.02	0.02	0.14	0.15	0.06	0.06	0.05	0.04	0.08	0.00
Cr2O3	0.00	0.00	0.00	0.00	0.02	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.01	0.01	0.01	0.01	0.02	0.01	0.04	0.00	0.00	0.00	0.00	0.00	0.00
H2O-	0.59	0.17	0.08	0.11	0.35	3.57	0.18	0.46	0.01	0.03	0.05	0.02	0.07	0.12
LOI	0.65	5.93	3.02	4.41	4.67	8.10	3.54	3.45	0.48	0.47	0.42	0.15	1.84	2.03
TOTAL	98.82	99.77	99.88	100.39	100.68	100.22	100.01	100.44	99.32	99.66	99.07	99.99	100.37	99.28
Zn	72	133	50	27	30	53	16	34	7	<3	4	<3	6	16
Cu	8	61	42	108	109	41	29	66	<3	<3	<3	<3	7	85
Ni	8	78	58	52	50	200	46	162	<3	<3	<3	<3	20	23
Co	5	30	34	53	7	<3	4	31	<3	4	4	4	5	4
Ga	18	31	14	30	36	23	33	43	<3	<3	<3	<3	6	14
Mo	11	<2	6	<2	<2	<2	4	2	4	<2	7	6	<2	7
Nb	17	14	14	20	16	14	18	11	<2	<2	<2	<2	5	8
Zr	535	175	185	224	182	241	261	178	77	101	45	98	98	219
Y	49	26	29	25	27	18	34	30	5	6	6	4	12	16
Sr	158	29	30	68	62	5	94	96	16	11	16	15	27	32
Rb	112	354	198	327	324	<2	72	78	25	17	12	<2	74	171
U	8	6	13	7	10	10	7	6	<5	<5	<5	<5	11	9
Th	8	11	16	33	29	13	20	21	<5	<5	<5	<5	7	15
Pb	8	181	224	474	112	43	25	34	7	7	8	<5	9	253
Cr	111	407	196	258	191	275	353	442	134	156	180	166	167	205
V	15	309	132	187	164	153	312	373	23	20	15	15	55	101
Ba	2305	7897	744	1105	972	18	527	324	475	808	478	39	330	817
Sc	8	45	22	20	32	20	44	60	<8	9	<8	<8	<8	19
As	<10	<10	47	49	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	<50	120	<50	80	158	419	143	305	<50	<50	<50	<50	<50	169
Sb	<8	<8	<8	<8	<8	<8	<8	10	<8	<8	10	<8	<8	<8
Sn	<8	22	<8	<8	<8	<8	<8	10	8	<8	<8	<8	19	<8
Bi	<10	<10	12	<10	<10	<10	<10	<10	<10	<10	7	7	<10	<10
W	<8	<8	<8	<8	<8	13	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	60	124	97	261	17	n.d.	n.d.	20	16	20	10	n.d.	45

	#421	#422	#423	#424	#425	#426	#427	#428	#429	#430	#431	#432	#433	#434
	ET-244	ET-245	ET-246	ET-247	ET-250	ET-251	ET-253	ET-9	ET-10	ET-11	ET-104	ET-159	DDW-1	DDW-2
SiO2	76.68	61.39	78.55	93.76	82.32	64.20	93.15	97.58	96.39	98.13	97.07	90.09	95.82	95.83
TiO2	0.19	0.63	0.15	0.04	0.13	0.46	0.02	0.01	0.03	0.00	0.00	0.06	0.05	0.10
Al2O3	11.76	18.90	9.39	1.17	6.84	18.13	2.59	1.12	1.50	1.04	0.16	4.38	2.75	1.77
Fe2O3	4.99	6.55	6.06	3.20	5.06	6.80	1.90	0.49	0.92	0.46	1.99	2.88	0.67	0.55
MnO	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MgO	0.29	0.59	0.26	0.18	0.16	0.65	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na2O	0.20	0.32	0.12	0.00	0.04	0.13	0.02	0.03	0.06	0.03	0.03	0.09	0.06	0.04
K2O	2.84	4.29	2.57	0.01	0.12	5.16	0.71	0.32	0.42	0.26	0.00	1.15	0.56	0.55
P2O5	0.02	0.08	0.00	0.00	0.00	0.06	0.00	0.05	0.06	0.02	0.00	0.01	0.00	0.01
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H2O-	0.08	2.56	0.12	0.10	0.40	0.15	0.03	0.02	0.04	0.02	0.08	0.08	0.06	0.02
LOI	2.13	3.37	1.80	0.79	3.36	3.40	0.53	0.23	0.23	0.23	0.39	0.84	0.75	0.32
TOTAL	99.18	98.68	99.02	99.25	98.43	99.15	99.14	99.86	99.66	100.19	99.72	99.58	100.72	99.19
Zn	11	17	17	8	17	18	8	5	6	4	10	6	8	6
Cu	6	15	12	4	37	12	<3	<3	<3	<3	48	3	<3	<3
Ni	7	22	13	4	51	43	4	<3	4	3	3	11	3	<3
Co	3	<3	3	3	3	4	5	4	4	<3	6	3	3	4
Ga	15	22	11	<3	4	21	3	<3	<3	<3	<3	4	4	<3
Mo	3	<2	4	8	7	6	7	12	9	8	7	7	4	8
Nb	8	14	6	<2	3	13	<2	<2	<2	<2	<2	3	4	5
Zr	154	379	147	67	103	260	55	46	65	52	5	62	48	250
Y	22	39	18	5	9	29	4	7	6	5	<2	8	3	4
Sr	51	117	34	3	7	35	12	13	14	12	3	28	6	5
Rb	132	221	108	<2	6	190	29	10	15	10	<2	37	40	41
U	8	6	<5	<5	7	11	<5	<5	5	<5	<5	6	<5	<5
Th	9	20	13	<5	10	16	<5	<5	<5	<5	<5	<5	<5	<5
Pb	12	20	10	5	9	11	<5	<5	<5	<5	<5	8	5	<5
Cr	41	135	97	140	178	134	119	162	143	128	134	125	161	185
V	44	87	51	28	38	79	36	23	28	30	24	20	24	33
Ba	329	376	271	<16	123	850	799	100	121	125	97	302	70	67
Sc	11	13	<8	13	<8	12	8	<8	<8	<8	<8	<8	<8	<8
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	111	50	84	96	256	98	<50	105	73	61	751	<50	<50	<50
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	6	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	46	n.d.	28	2	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#435	#436	#437	#438	#439	#440	#441	#442	#443	#444	#445	#446	#447	#448
	DDW-3	DDW-4	DDW-5	VDW-1	VDW-2	VDW-4	ET-51	ET-52	ET-54	ET-55	ET-56	ET-58	ET-59	ET-60
SiO2	95.36	80.37	57.48	87.55	90.85	91.43	96.32	92.99	78.30	97.21	96.85	68.28	81.48	80.07
TiO2	0.20	0.32	0.83	0.06	0.06	0.03	0.03	0.06	0.35	0.02	0.03	0.32	0.17	0.21
Al2O3	2.65	7.73	24.00	6.43	4.17	3.45	1.02	3.34	10.68	0.49	0.87	18.96	10.17	9.31
Fe2O3	0.55	7.25	4.14	2.97	2.72	2.27	0.95	1.31	3.18	0.55	0.56	1.60	1.01	3.92
MnO	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.00
MgO	0.00	0.15	0.36	0.25	0.05	0.08	0.25	0.09	0.25	0.00	0.00	0.67	0.14	0.13
CaO	0.00	0.00	0.31	0.00	0.00	0.00	0.01	0.06	0.15	0.00	0.15	0.20	0.05	0.03
Na2O	0.05	0.13	0.12	0.06	0.06	0.03	0.18	0.09	0.53	0.03	0.05	0.42	0.11	1.09
K2O	0.76	2.05	7.08	1.71	1.10	0.90	0.06	0.16	1.70	0.10	0.00	3.72	0.04	0.49
P2O5	0.00	0.08	0.48	0.03	0.06	0.02	0.00	0.02	0.01	0.01	0.00	0.00	0.00	0.00
Cr2O3	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H2O-	0.05	0.09	0.26	0.04	0.04	0.02	0.09	0.28	0.84	0.04	0.10	0.61	1.44	0.94
LOI	0.57	1.33	3.57	1.03	0.66	0.72	0.52	1.54	2.79	0.34	0.57	4.27	4.18	2.80
TOTAL	100.20	99.51	98.66	100.15	99.77	98.95	99.43	99.97	98.78	98.80	99.18	99.05	98.80	98.99
Zn	10	9	79	7	<3	7	13	19	34	4	7	12	13	17
Cu	<3	4	68	<3	<3	3	7	8	17	<3	<3	5	<3	19
Ni	<3	16	80	<3	<3	<3	6	16	23	<3	5	12	33	20
Co	4	8	6	3	4	4	3	4	6	3	4	<3	4	4
Ga	<3	7	27	5	9	7	<3	<3	16	<3	<3	29	8	10
Mo	7	5	<2	8	9	5	6	6	4	11	12	7	8	4
Nb	6	9	15	6	6	4	<2	<2	10	<2	<2	6	5	16
Zr	184	377	165	67	79	56	66	33	165	37	117	283	137	103
Y	4	16	55	8	7	9	4	5	11	4	5	15	8	25
Sr	5	18	59	17	9	12	5	4	19	3	5	25	6	17
Rb	53	121	322	76	54	43	<2	5	58	7	<2	124	<2	27
U	<5	5	13	<5	<5	<5	<5	<5	6	<5	<5	6	8	8
Th	6	7	16	9	<5	<5	<5	<5	8	<5	<5	13	<5	<5
Pb	<5	7	11	<5	8	<5	<5	8	7	<5	<5	<5	<5	25
Cr	205	288	290	162	196	181	126	101	153	160	171	158	144	137
V	30	42	163	27	22	20	22	25	86	17	<14	69	42	74
Ba	63	689	2274	424	455	327	53	31	296	60	21	687	89	82
Sc	<8	<8	27	<8	<8	<8	11	1	9	<8	13	8	14	16
As	<10	<10	<10	<10	<10	<10	<10	<10	9	<10	<10	<10	<10	<10
S	<50	80	<50	300	<50	70	76	88	164	<50	<50	1091	219	191
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	8	<8	<8	<8	<8	<8	<8	<8	<8	12	<8
Bi	<10	<10	<10	12	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	8	<8	11	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#449	#450	#451	#452	#453	#454	#455	#456	#457	#458	#459	#460	#461	#462
	UV-53	UV-56	UV-65	UV-66	UV-67	UV-68	UV-93	UV-94	UV-95	UV-108	UV-117	UV-123	UV-124	UV-126
SiO2	58.12	53.41	62.54	65.63	60.19	58.44	63.80	55.67	57.24	61.07	62.03	62.88	53.74	56.08
TiO2	0.76	0.76	0.76	0.79	0.82	0.80	0.81	0.82	0.77	0.69	0.81	0.95	0.90	0.84
Al2O3	21.97	22.11	19.65	19.23	20.44	20.33	19.67	22.86	21.57	17.77	19.05	20.37	23.66	23.11
Fe2O3	10.86	12.18	6.78	4.98	7.50	8.41	6.25	8.82	10.29	9.55	7.33	8.82	10.22	8.42
MnO	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.02	0.00	0.05	0.05	0.00
MgO	0.15	0.28	0.22	0.22	0.72	0.41	0.22	0.69	0.19	0.82	0.59	1.09	0.45	0.34
CaO	0.02	0.06	0.00	0.06	0.07	0.00	0.12	0.08	0.04	0.25	0.07	0.00	0.05	0.03
Na2O	0.17	0.48	0.92	0.89	0.94	0.38	0.69	0.32	0.45	0.67	0.46	0.31	0.43	0.22
K2O	1.92	2.37	2.85	3.08	3.04	4.29	3.41	4.60	2.24	2.51	3.92	1.83	2.42	3.06
P2O5	0.16	0.17	0.12	0.13	0.19	0.18	0.15	0.17	0.17	0.11	0.13	0.08	0.09	0.16
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.03	0.03	0.02	0.03	0.01
H2O-	0.25	1.63	0.92	0.56	0.73	1.35	0.61	0.61	1.61	1.50	0.97	0.23	1.21	0.37
LOI	4.78	6.54	4.76	4.22	5.02	4.73	4.22	5.02	5.03	4.57	4.12	3.55	5.89	6.52
TOTAL	99.17	100.01	99.54	99.80	99.69	99.34	99.97	99.68	99.61	99.56	99.51	100.18	99.14	99.16
Zn	19	34	24	14	89	11	25	71	32	108	41	87	136	88
Cu	31	47	28	14	76	100	51	37	44	47	10	50	32	51
Ni	42	49	33	23	187	52	41	129	69	126	107	107	234	48
Co	4	10	11	3	14	6	8	3	<3	10	12	21	27	7
Ga	24	25	24	23	26	29	20	35	21	22	27	25	31	23
Mo	<2	2	3	4	3	3	6	<2	3	<2	3	4	<2	<2
Nb	13	16	17	15	15	15	17	18	16	17	17	22	18	18
Zr	234	199	208	225	260	223	209	202	250	191	207	282	228	205
Y	34	38	41	33	44	45	37	43	39	33	34	40	36	35
Sr	64	138	163	136	93	45	119	119	109	71	77	66	141	91
Rb	97	110	136	144	144	176	153	245	115	124	177	112	131	164
U	<5	10	11	9	9	9	13	13	8	<5	6	14	<5	5
Th	9	23	18	22	24	21	15	18	13	19	15	21	27	24
Pb	15	20	20	17	<5	<5	19	15	33	12	14	23	35	16
Cr	202	196	181	163	167	250	191	213	181	194	212	318	232	182
V	149	172	148	130	129	164	139	179	154	147	134	150	187	165
Ba	549	422	552	721	814	907	673	681	660	660	699	585	556	740
Sc	17	18	23	13	13	23	24	19	21	12	15	16	19	19
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	202	242	197	412	217	249	227	337	250	136	126	161	177	199
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	8	13
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	15	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	10	10	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	100	78	97

	#463	#464	#465	#466	#467	#468	#469	#470	#471	#472	#473	#474	#475	#476
	UV-127	UV-128	UV-143	UV-144	UV-52	UV-54	UV-55	UV-109	UV-125	UV-142	UV-57	UV-58	UV-61	UV-62
SiO2	61.90	62.43	59.22	53.85	16.08	17.66	49.40	43.28	51.83	44.50	50.98	53.96	54.04	56.86
TiO2	0.83	0.78	1.08	0.88	0.33	0.32	0.82	0.79	0.93	0.60	0.76	0.78	0.81	0.83
Al2O3	20.78	19.39	26.19	23.60	10.97	11.91	22.03	19.97	23.55	16.94	19.93	21.72	21.91	22.76
Fe2O3	7.31	7.52	9.04	13.57	64.31	63.95	16.49	31.16	16.48	31.45	15.16	12.62	11.23	7.85
MnO	0.03	0.04	0.02	0.08	0.04	0.02	0.02	0.10	0.07	0.04	0.08	0.02	0.02	0.03
MgO	0.52	0.52	0.83	1.40	0.44	0.22	0.34	1.04	1.28	1.05	2.21	0.32	1.07	0.92
CaO	0.38	0.30	0.18	0.24	0.14	0.35	0.04	0.01	0.00	0.79	0.05	0.08	0.01	0.07
Na2O	0.27	0.26	0.14	0.20	0.02	0.07	0.13	0.23	0.11	0.21	0.29	0.29	0.38	0.51
K2O	2.84	2.80	0.15	2.23	0.30	1.52	1.89	0.58	1.10	0.24	2.18	2.52	3.86	4.58
P2O5	0.07	0.18	0.31	0.23	0.69	0.59	0.27	0.15	0.09	0.69	0.18	0.21	0.16	0.11
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.02	0.02	0.01	0.02	0.03	0.01	0.01	0.03	0.02	0.02	0.09	0.01	0.06	0.03
H2O-	0.31	0.60	0.36	0.22	1.54	0.58	1.09	0.15	0.15	0.32	1.39	1.31	0.85	0.66
LOI	4.99	5.02	2.80	3.28	4.64	2.88	7.75	3.12	4.03	2.37	6.48	6.51	5.73	5.17
TOTAL	100.25	99.86	100.33	99.80	99.53	100.08	100.28	100.63	99.64	99.22	99.78	100.35	100.13	100.38
Zn	125	103	66	96	60	22	79	76	132	58	246	43	141	87
Cu	20	27	46	193	137	43	52	108	127	52	90	46	68	18
Ni	85	86	77	94	120	58	71	118	125	66	717	59	374	240
Co	6	5	25	25	8	8	7	<3	25	40	23	7	7	13
Ga	25	26	29	31	26	24	32	28	29	26	21	29	24	30
Mo	<2	2	7	<2	10	19	<2	3	<2	8	<2	2	<2	<2
Nb	18	18	19	18	9	8	18	21	20	11	15	16	17	20
Zr	217	217	234	199	98	97	175	227	190	254	187	205	207	225
Y	35	36	43	45	40	45	39	44	37	40	35	45	44	43
Sr	87	92	160	67	118	260	81	46	43	91	98	120	126	194
Rb	161	130	9	121	15	74	92	33	60	14	117	120	180	219
U	6	6	7	<5	10	10	7	9	6	<5	<5	7	8	8
Th	23	21	21	22	36	28	15	33	21	10	23	17	17	24
Pb	13	<5	10	31	74	102	16	22	26	15	20	23	27	45
Cr	189	175	334	237	538	533	227	638	307	387	238	201	208	197
V	151	140	125	188	585	606	209	575	246	339	159	159	152	167
Ba	466	1077	93	504	265	750	475	213	580	125	658	529	870	1025
Sc	13	13	32	18	26	30	19	33	26	26	16	21	19	17
As	<10	<10	<10	<10	<10	<10	<10	<10	11	<10	<10	<10	<10	<10
S	199	208	148	114	242	624	272	185	163	163	222	251	186	234
Sb	<8	11	16	<8	<8	27	<8	<8	9	20	<8	14	<8	<8
Sn	<8	<8	<8	<8	<8	<8	14	<8	<8	13	14	<8	10	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	12	9	<8	<8	<8	<8	<8	<8	<8
B	103	104	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	48	n.d.	n.d.	n.d.	n.d.	n.d.

	#477	#478	#479	#480	#481	#482	#483	#484	#485	#486	#487	#488	#489	#490
	UV-63	UV-64	ET-248	ET-249	ET-254	ET-395	WT-25	WT-26	WT-27	WT-28	WT-64	WT-65	WT-66	WT-67
SiO2	56.27	53.83	59.60	55.43	56.51	55.40	59.54	55.33	44.45	32.71	65.20	57.72	53.87	56.82
TiO2	0.82	0.78	0.93	0.98	0.84	0.96	0.78	0.82	1.09	0.59	0.85	1.30	1.26	1.21
Al2O3	22.55	24.49	23.37	23.72	20.89	23.69	22.76	24.18	27.83	22.14	16.61	30.94	28.20	27.48
Fe2O3	9.22	9.35	4.08	7.47	10.27	8.13	8.85	11.47	20.34	33.52	13.43	1.96	12.17	9.66
MnO	0.01	0.00	0.00	0.01	0.03	0.00	0.05	0.04	0.01	0.01	0.02	0.01	0.06	0.03
MgO	0.27	0.20	0.52	0.60	0.91	0.39	1.14	0.81	0.03	0.23	0.15	0.08	0.74	0.27
CaO	0.10	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na2O	0.38	0.33	0.24	0.25	0.26	0.41	0.13	0.04	0.05	0.55	0.25	0.33	0.00	0.19
K2O	2.93	3.00	5.31	5.87	4.28	3.42	2.73	2.14	0.33	3.99	1.15	1.78	0.63	1.23
P2O5	0.21	0.15	0.00	0.03	0.27	0.03	0.10	0.09	0.26	0.14	0.10	0.01	0.11	0.17
Cr2O3	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.01	0.03	0.07	0.02	0.02	0.02	0.02
NiO	0.01	0.01	0.01	0.01	0.01	0.00	0.02	0.02	0.02	0.03	0.02	0.01	0.03	0.03
H2O-	1.03	1.10	0.37	0.27	0.51	0.74	0.31	0.77	0.23	0.17	0.14	0.23	0.25	0.19
LOI	6.24	6.50	4.71	4.67	4.46	5.36	3.01	3.12	4.06	4.93	2.22	6.02	2.65	2.82
TOTAL	100.04	99.74	99.15	99.31	99.29	98.53	99.43	98.84	98.73	99.08	100.16	100.41	99.99	100.12
Zn	43	29	65	59	142	20	58	37	6	9	22	12	183	44
Cu	27	45	123	21	55	30	30	102	29	35	17	78	310	46
Ni	62	42	68	53	115	38	93	63	33	87	55	44	169	117
Co	<3	5	4	6	18	<3	26	24	<3	<3	13	9	46	17
Ga	29	27	32	34	30	34	34	32	36	36	23	30	31	36
Mo	2	<2	3	<2	<2	<2	<2	3	4	<2	3	<2	15	4
Nb	18	17	17	18	17	18	13	18	19	10	15	16	18	17
Zr	204	230	253	264	199	295	180	222	255	171	254	253	226	250
Y	38	37	33	35	56	52	35	41	58	40	51	35	34	50
Sr	117	118	70	78	98	30	45	43	421	305	44	47	49	52
Rb	151	151	223	243	169	182	156	116	11	195	61	66	31	58
U	6	<5	5	7	12	<5	8	6	9	6	8	9	6	<5
Th	21	28	17	21	17	26	15	22	18	27	11	14	19	11
Pb	21	11	20	25	14	9	15	11	15	27	8	13	14	8
Cr	202	174	255	236	218	129	155	158	333	552	164	250	283	267
V	177	160	142	160	152	143	176	186	331	514	118	270	277	288
Ba	665	606	320	280	678	1012	382	622	200	872	375	555	151	296
Sc	20	18	31	22	17	22	15	19	54	50	17	40	29	28
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	191	206	143	185	107	195	90	130	235	99	112	121	125	73
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	12	<8	<8	<8	<8
Sn	<8	<8	<8	11	8	<8	17	15	<8	9	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	12	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	161	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#491	#492	#493	#494	#495	#496	#497	#498	#499	#500	#501	#502	#503	#504
	WT-68	WT-69	WT-70	WT-71	WT-72	WT-73	WT-74	WT-75	WT-112	WT-113	WT-180	WT-181	WT-182	ET-255
SiO2	43.87	46.00	55.44	54.48	56.43	56.99	58.18	51.29	55.68	48.75	56.62	61.02	60.86	75.69
TiO2	0.88	0.91	1.30	1.37	1.22	1.05	1.21	1.17	1.08	0.28	0.85	0.85	0.86	0.23
Al2O3	34.25	31.69	30.53	31.38	31.19	27.00	29.29	25.84	27.73	15.44	23.01	22.79	22.94	13.66
Fe2O3	8.78	9.86	8.52	9.36	6.84	10.54	9.01	16.15	11.45	32.86	11.26	7.06	6.36	3.89
MnO	0.02	0.01	0.01	0.04	0.04	0.05	0.03	0.12	0.06	0.02	0.06	0.07	0.02	0.00
MgO	0.12	0.12	0.20	0.26	0.19	0.43	0.19	0.33	0.67	0.07	0.79	0.56	0.95	0.03
CaO	0.06	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na2O	1.14	1.20	0.00	0.03	0.16	0.05	0.00	0.00	0.00	0.26	0.00	0.13	0.19	0.25
K2O	5.25	4.02	0.86	1.21	1.52	1.39	0.70	1.09	1.04	0.65	2.22	3.22	4.28	2.66
P2O5	0.11	0.05	0.14	0.07	0.08	0.06	0.12	0.13	0.12	0.08	0.22	0.19	0.10	0.01
Cr2O3	0.07	0.06	0.03	0.04	0.02	0.03	0.04	0.05	0.05	0.05	0.00	0.02	0.01	0.00
NiO	0.01	0.02	0.02	0.03	0.01	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.01	0.02
H2O-	0.16	0.32	0.33	0.23	0.24	0.16	0.17	0.44	0.18	0.09	0.66	0.35	0.30	0.22
LOI	6.11	5.87	2.27	1.71	2.46	2.07	1.39	3.00	1.72	1.01	3.86	3.25	3.26	3.04
TOTAL	100.83	100.21	99.65	100.21	100.40	99.84	100.35	99.64	99.81	99.58	99.57	99.53	100.14	99.70
Zn	19	17	42	51	32	48	44	101	86	22	98	43	54	12
Cu	87	34	122	51	164	81	49	155	145	24	55	27	16	33
Ni	49	96	77	134	74	113	80	162	140	49	73	49	62	156
Co	10	3	17	18	10	32	16	44	22	<3	22	10	23	16
Ga	34	35	39	33	34	35	34	37	33	20	27	24	26	13
Mo	<2	<2	2	3	3	<2	2	3	3	3	2	3	3	5
Nb	10	10	16	17	14	16	14	15	17	6	17	16	16	5
Zr	143	173	248	262	230	273	232	208	221	111	196	229	208	213
Y	28	24	59	42	34	39	40	46	39	19	32	41	39	13
Sr	164	164	38	54	32	41	20	15	42	54	49	100	104	54
Rb	197	171	66	73	81	82	37	70	53	42	163	150	163	111
U	<5	<5	9	5	11	<5	8	<5	5	6	<5	5	6	<5
Th	10	12	14	16	14	14	18	10	25	20	25	19	23	10
Pb	26	20	8	13	12	18	6	14	15	15	27	34	76	<5
Cr	388	304	261	288	283	219	306	254	387	254	133	126	100	179
V	251	294	274	260	313	182	205	304	244	341	186	158	144	49
Ba	917	750	222	411	502	354	130	264	275	704	466	805	675	1317
Sc	41	36	37	40	47	31	29	37	34	27	23	20	18	14
As	<10	<10	<10	<10	<10	<10	11	<10	<10	<10	<10	<10	<10	<10
S	111	175	118	103	114	131	91	178	139	140	295	187	128	122
Sb	15	<8	<8	9	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	8	11	<8	<8	<8	<8	<8	<8	12	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	60

	#505	#506	#507	#508	#509	#510	#511	#512	#513	#514	#515	#516	#517	#518
	ET-256	ET-257	ET-258	ET-259	ET-260	ET-261	ET-266	WT-77	WT-78	WT-114	WT-115	ET-263	ET-264	ET-267
SiO2	81.30	73.10	77.86	79.05	71.38	79.03	75.48	59.51	56.12	88.85	82.91	88.91	92.02	50.42
TiO2	0.23	0.32	0.19	0.18	0.67	0.18	0.24	0.82	0.88	0.14	0.65	0.20	0.15	0.97
Al2O3	9.84	14.74	12.08	11.98	17.08	11.83	13.97	23.72	24.66	5.19	8.34	6.22	2.66	29.08
Fe2O3	3.22	3.77	3.23	2.53	2.59	3.64	4.64	7.93	12.88	3.57	4.63	1.28	1.69	4.63
MnO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.05	0.04	0.01	0.01	0.01	0.02
MgO	0.00	0.01	0.00	0.01	0.41	0.38	0.21	0.90	1.15	0.07	0.14	1.24	1.22	2.64
CaO	0.00	0.00	0.00	0.00	0.02	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Na2O	0.24	0.27	0.25	0.28	0.37	0.28	0.37	0.19	0.00	0.05	0.13	0.11	0.05	0.83
K2O	2.26	3.31	2.55	2.74	4.28	2.48	1.64	3.39	2.91	0.77	1.82	0.47	0.25	4.80
P2O5	0.02	0.00	0.00	0.00	0.03	0.07	0.05	0.07	0.05	0.00	0.03	0.07	0.08	0.05
Cr2O3	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.02	0.00	0.02	0.00	0.00	0.00
NiO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.02	0.05	0.01	0.00	0.00	0.02
H2O-	0.00	0.23	0.21	0.13	0.13	0.20	0.54	0.44	0.24	0.20	0.16	0.10	0.05	0.27
LOI	2.03	3.05	2.68	2.42	2.84	2.38	3.97	2.89	1.47	1.45	1.70	1.93	1.10	6.25
TOTAL	99.14	98.80	99.05	99.32	99.81	100.57	101.14	99.93	100.45	100.38	100.55	100.54	99.28	99.99
Zn	9	13	8	8	9	8	18	74	86	7	6	5	5	85
Cu	5	3	<3	<3	<3	3	22	7	64	<3	<3	<3	<3	193
Ni	16	35	22	12	16	21	39	80	69	7	13	23	7	166
Co	4	6	<3	<3	3	<3	6	32	26	4	<3	5	<3	10
Ga	11	20	13	14	19	14	12	33	36	4	7	4	<3	37
Mo	5	3	3	5	5	<2	5	3	4	5	3	4	7	<2
Nb	5	7	3	5	15	<2	5	13	18	6	12	5	<2	19
Zr	245	290	142	201	600	113	241	199	231	123	565	192	136	321
Y	13	20	11	9	23	14	14	42	45	21	33	11	12	45
Sr	52	54	51	73	88	66	29	97	32	12	12	12	8	99
Rb	93	136	106	116	181	97	62	191	129	39	74	31	14	204
U	<5	<5	<5	<5	<5	<5	<5	7	9	<5	<5	<5	<5	11
Th	5	<5	<5	<5	15	<5	<5	18	17	10	17	<5	5	23
Pb	<5	9	<5	<5	7	<5	6	21	23	<5	5	10	<5	11
Cr	164	172	84	124	301	112	189	135	183	39	74	224	206	290
V	39	50	39	44	77	44	41	164	169	34	54	47	40	175
Ba	1284	935	1163	1339	1320	1433	1091	806	513	485	1461	568	421	564
Sc	18	12	10	<8	14	12	20	19	21	<8	9	<8	13	23
As	<10	<10	<10	<10	<10	<10	<10	22	12	<10	<10	<10	<10	<10
S	122	144	121	112	78	122	342	59	111	254	171	<50	<50	<50
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	19	<8	<8	<8	<8	<8	10
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	5
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	48	93	106	50	299	97	n.d.	n.d.	n.d.	n.d.	n.d.	78	89	727

	#519	#520	#521	#522	#523	#524	#525	#526	#527	#528	#529	#530	#531	#532
	ET-268	WT-120	UV-23	P-28	P-29	P-30	P-31	P-32	P-33	P-34	P-35	P-36	WT-14	WT-85
SiO2	56.86	96.81	95.67	96.70	95.01	95.80	95.20	95.16	96.94	97.44	97.79	96.91	94.84	97.17
TiO2	0.90	0.02	0.06	0.22	0.31	0.22	0.23	0.20	0.30	0.29	0.20	0.18	0.05	0.05
Al2O3	22.36	0.94	2.35	1.27	2.37	1.78	1.85	1.84	0.74	0.75	0.28	0.55	2.63	1.47
Fe2O3	7.16	1.10	1.23	0.62	0.90	0.51	0.47	1.11	0.63	0.66	0.95	0.26	0.85	0.70
MnO	0.04	0.01	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00
MgO	3.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaO	0.01	0.00	0.00	0.02	0.03	0.02	0.02	0.02	0.03	0.03	0.03	0.02	0.00	0.00
Na2O	0.40	0.01	0.00	0.02	0.00	0.02	0.05	0.04	0.07	0.02	0.01	0.02	0.00	0.00
K2O	4.14	0.20	0.60	0.19	0.29	0.17	0.35	0.36	0.05	0.20	0.01	0.20	0.42	0.27
P2O5	0.08	0.08	0.04	0.01	0.04	0.04	0.03	0.00	0.02	0.03	0.03	0.02	0.14	0.02
Cr2O3	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
H2O-	0.18	0.03	0.14	0.02	0.06	0.07	0.05	0.04	0.04	0.08	0.03	0.04	0.07	0.02
LOI	5.03	0.12	0.38	0.62	0.91	0.84	0.64	0.60	0.26	0.21	0.57	0.25	0.74	0.31
TOTAL	100.64	99.35	100.47	99.70	99.93	99.48	98.90	99.38	99.09	99.72	99.91	98.46	99.75	100.02
Zn	59	5	8	14	18	20	9	7	7	5	11	6	6	6
Cu	11	<3	10	<3	<3	<3	<3	<3	<3	<3	<3	<3	2	3
Ni	92	<3	4	5	7	6	7	6	14	5	7	<3	4	<3
Co	15	3	4	5	4	4	4	3	5	3	<3	<3	5	3
Ga	26	<3	5	5	<3	3	3	5	<3	<3	<3	<3	4	3
Mo	<2	8	<2	5	8	9	7	4	4	9	10	10	7	8
Nb	18	3	3	3	3	3	5	2	3	3	<2	<2	<2	<2
Zr	456	51	77	93	282	166	191	64	125	111	47	49	62	66
Y	45	4	8	10	10	12	6	9	16	10	7	3	8	6
Sr	63	6	7	3	3	3	3	6	7	8	8	4	41	9
Rb	169	10	21	7	12	6	15	12	3	6	<2	7	17	11
U	12	<5	<5	5	<5	<5	5	6	<5	<5	<5	<5	<5	<5
Th	24	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Pb	12	<5	<5	5	<5	18	9	13	5	5	17	7	<5	<5
Cr	243	124	338	153	228	200	199	134	180	190	214	171	87	70
V	135	23	24	14	26	23	14	24	25	32	24	16	27	17
Ba	717	125	53	132	211	144	253	118	49	54	29	58	367	187
Sc	14	<8	10	<8	<8	<8	3	<8	<8	<8	<8	<8	<8	<8
As	<10	<10	10	<10	<10	<10	<10	<10	<10	11	<10	<10	<10	10
S	<50	<50	<50	<50	<50	310	50	80	<50	<50	810	<50	266	58
Sb	16	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	8	<8
Sn	10	<8	<8	<8	16	<8	<8	10	10	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	6	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	175	n.d.	n.d.	15	n.d.	129	n.d.	96	n.d.	32	n.d.	41	n.d.	n.d.

	#533	#534	#535	#536	#537	#538	#539	#540	#541	#542	#543	#544	#545	#546
	WT-152	WT-169	WT-188	WDQ-1	WDQ-2	ET-262	ET-269	ET-265	ET-63	ET-64	ET-85	ET-120	ET-121	ET-124
SiO2	92.17	94.74	93.70	95.97	96.97	98.05	93.59	91.33	95.43	96.42	82.46	87.80	81.20	94.32
TiO2	0.07	0.03	0.08	0.13	0.06	0.06	0.09	0.14	0.06	0.02	0.15	0.18	0.08	0.02
Al2O3	3.15	1.38	3.07	1.11	0.64	0.21	0.90	5.36	1.13	1.26	7.03	4.55	3.66	2.27
Fe2O3	1.53	0.73	1.47	0.38	0.22	0.28	1.91	1.32	1.15	0.51	6.35	4.78	12.37	2.04
MnO	0.01	0.00	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.00
MgO	0.00	0.00	0.00	1.12	1.14	1.22	1.39	0.36	0.00	0.00	0.00	0.00	0.00	0.00
CaO	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.10	0.05	0.00
Na2O	0.03	0.00	0.00	0.03	0.01	0.01	0.00	0.03	0.08	0.05	0.23	0.12	0.13	0.04
K2O	0.85	0.09	0.63	0.37	0.23	0.11	0.11	1.12	0.25	0.34	2.14	1.44	1.14	0.69
P2O5	0.03	1.14	0.05	0.04	0.03	0.06	0.04	0.08	0.00	0.02	0.02	0.00	0.04	0.00
Cr2O3	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
NiO	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H2O-	0.02	0.54	0.04	0.01	0.03	0.01	0.02	0.04	0.03	0.02	0.03	0.02	0.03	0.02
LOI	0.52	0.57	0.62	0.29	0.12	0.14	0.54	0.53	0.40	0.24	1.14	0.61	0.65	0.39
TOTAL	98.40	99.23	99.68	99.51	99.45	100.15	98.60	100.41	98.53	98.89	99.56	99.60	99.36	99.79
Zn	6	10	6	<3	<3	5	25	6	8	4	10	9	13	5
Cu	5	6	<3	<3	<3	<3	9	<3	2	<3	3	<3	6	<3
Ni	<3	<3	8	<3	<3	<3	12	5	3	<3	12	3	17	<3
Co	<3	4	<3	5	<3	<3	7	5	3	3	5	6	<3	4
Ga	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	8	5	4	<3
Mo	5	10	7	6	6	4	6	9	9	8	3	8	10	10
Nb	3	5	3	<2	<2	<2	<2	3	5	<2	8	6	5	<2
Zr	52	217	159	83	50	42	64	63	110	35	147	127	63	49
Y	10	7	8	9	6	4	4	5	8	6	16	7	16	5
Sr	27	53	9	5	8	5	5	7	6	6	22	28	30	8
Rb	35	2	19	15	7	6	<2	6	13	9	82	50	43	26
U	6	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	<5	<5
Th	7	7	8	<5	<5	<5	<5	7	<5	<5	6	5	6	<5
Pb	<5	<5	<5	<5	<5	6	10	<5	5	<5	9	<5	8	<5
Cr	86	89	80	143	175	158	190	125	103	105	58	142	161	157
V	33	25	31	13	21	20	37	18	22	20	40	41	50	17
Ba	515	157	564	124	73	51	45	124	30	214	583	596	404	230
Sc	<8	<8	<8	<8	<8	<8	9	<8	8	<8	<8	<8	10	11
As	<10	<10	<10	<10	<10	<10	11	<10	<10	<10	<10	<10	<10	<10
S	<50	891	88	<50	<50	<50	<50	67	<50	<50	64	<50	130	<50
Sb	<8	<8	<8	<8	<8	<8	<8	8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	12	<8	<8	13	<8	<8	8	<8
Bi	<10	<10	<10	6	8	<10	9	<10	<10	<10	<10	7	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	15	n.d.	n.d.	50	10	20	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#547	#548	#549	#550	#551	#552	#553	#554	#555	#556	#557	#558	#559	#560
	ET-137	ET-142	ET-143	ET-144	DDQ-1	DDQ-3	DDQ-4	VDQ-1	VDQ-2	VDQ-3	VDQ-4	VDQ-5	CRT-5	CRT-34
SiO2	97.99	92.57	78.93	84.41	98.53	98.32	97.59	95.57	93.86	96.78	96.97	96.19	96.30	98.56
TiO2	0.04	0.03	0.14	0.07	0.04	0.02	0.02	0.02	0.04	0.06	0.05	0.00	0.23	0.16
Al2O3	0.72	3.82	9.86	7.03	0.60	1.15	0.89	2.33	3.46	1.26	1.12	1.29	1.09	0.52
Fe2O3	0.45	1.67	2.73	2.03	0.29	0.39	0.33	0.66	0.56	0.47	0.86	0.48	0.73	0.46
MnO	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
MgO	0.00	0.16	0.18	0.03	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00
CaO	0.00	0.04	0.87	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01
Na2O	0.06	0.05	4.12	2.95	0.06	0.02	0.06	0.08	0.12	0.04	0.00	0.06	0.01	0.03
K2O	0.14	0.84	1.23	0.81	0.10	0.10	0.19	0.44	0.83	0.26	0.14	0.28	0.33	0.17
P2O5	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02
Cr2O3	0.00	0.02	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H2O-	0.03	0.02	0.20	0.24	0.05	0.02	0.04	0.02	0.02	0.02	0.03	0.03	0.04	0.03
LOI	0.12	0.31	0.83	0.68	0.29	0.31	0.29	0.53	0.59	0.25	0.33	0.29	0.34	0.17
TOTAL	99.55	99.55	99.11	98.80	99.99	100.34	99.41	99.66	99.50	99.14	99.50	98.62	99.12	100.14
Zn	6	6	22	12	11	8	8	6	6	5	5	5	7	4
Cu	<3	<3	<3	<3	3	<3	<3	3	<3	3	<3	<3	<3	<3
Ni	3	5	6	4	<3	<3	<3	<3	<3	<3	4	<3	6	<3
Co	4	5	6	3	3	5	4	5	<3	<3	<3	<3	5	3
Ga	<3	<3	13	7	<3	<3	<3	<3	14	3	<3	<3	<3	<3
Mo	13	10	4	8	7	6	10	8	12	10	10	9	9	7
Nb	<2	<2	<2	<2	2	<2	2	3	2	3	3	2	3	2
Zr	364	79	82	48	33	26	30	61	101	81	44	34	66	59
Y	6	3	11	6	4	3	5	3	7	4	<2	4	7	3
Sr	11	18	438	284	8	3	6	2	9	6	5	9	7	5
Rb	4	22	34	24	7	7	11	16	31	12	11	10	15	4
U	<5	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	7	<5	<5
Th	<5	<5	14	<5	<5	<5	<5	<5	<5	9	7	<5	<5	<5
Pb	<5	<5	26	10	<5	7	<5	<5	<5	7	<5	21	<5	<5
Cr	142	153	88	98	182	188	227	194	200	211	211	200	191	160
V	20	18	43	30	25	21	28	16	26	20	24	15	38	23
Ba	98	378	418	278	53	20	60	61	157	43	57	61	102	155
Sc	<8	9	8	12	<8	8	<8	<8	<8	<8	<8	<8	<8	<8
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	<50	<50	<50	98	<50	<50	<50	<50	130	<50	<50	<50	<50	<50
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	7
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#561	#562	#563	#564	#565	#566	#567	#568	#569	#570	#571	#572	#573	#574
	CRT-35	CRT-36	CRT-37	CRT-38	CRT-39	CRT-40	CRT-41	CRT-42	CRT-43	CRT-44	CRT-45	CRT-46	CRT-47	CRT-58
SiO2	98.84	98.25	97.38	94.90	98.00	98.27	94.50	97.35	99.61	97.55	96.79	81.87	81.46	99.11
TiO2	0.16	0.17	0.18	0.18	0.18	0.21	0.39	0.22	0.18	0.25	0.33	0.36	0.50	0.23
Al2O3	0.14	0.68	0.96	2.41	0.84	0.64	0.65	0.55	0.15	0.37	0.56	5.05	3.38	0.60
Fe2O3	0.76	0.72	0.51	0.69	0.29	0.30	2.28	0.80	0.41	1.12	1.52	8.60	9.92	0.76
MnO	0.02	0.03	0.01	0.02	0.01	0.01	0.02	0.02	0.01	0.01	0.03	0.05	0.04	0.02
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
CaO	0.03	0.05	0.03	0.06	0.02	0.04	0.03	0.07	0.01	0.03	0.02	0.03	0.15	0.10
Na2O	0.04	0.02	0.06	0.14	0.05	0.04	0.01	0.02	0.03	0.02	0.03	0.03	0.01	0.02
K2O	0.05	0.16	0.26	0.32	0.22	0.19	0.00	0.00	0.00	0.00	0.00	2.18	0.00	0.21
P2O5	0.07	0.01	0.03	0.03	0.04	0.02	0.03	0.13	0.02	0.03	0.06	0.13	0.57	0.05
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H2O-	0.03	0.01	0.03	0.06	0.02	0.01	0.04	0.05	0.02	0.03	0.03	0.24	0.27	0.04
LOI	0.17	0.23	0.28	0.68	0.23	0.14	0.40	0.47	0.23	0.33	0.42	2.57	2.51	0.25
TOTAL	100.31	100.33	99.73	99.49	99.90	99.87	98.35	99.68	100.67	99.74	99.79	101.11	98.81	101.39
Zn	4	7	5	6	5	5	9	9	6	6	9	15	40	4
Cu	<3	<3	<3	4	<3	<3	<3	<3	<3	<3	<3	41	95	<3
Ni	3	5	5	6	6	5	7	9	5	5	8	22	32	5
Co	4	6	<3	5	4	<3	<3	5	4	4	<3	7	<3	4
Ga	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	4	5	<3
Mo	9	9	7	7	5	7	13	11	6	7	11	8	7	8
Nb	2	2	3	3	3	<2	6	2	<2	4	4	7	10	3
Zr	46	46	80	61	58	48	975	194	65	299	455	128	169	69
Y	<2	4	7	7	5	4	14	13	3	6	9	11	149	8
Sr	4	4	4	5	5	3	4	15	5	5	5	43	156	7
Rb	2	7	8	11	7	4	<2	<2	<2	<2	<2	<2	2	8
U	<5	<5	<5	<5	6	<5	5	<5	<5	<5	<5	<5	13	<5
Th	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	16	<5
Pb	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	8	<5
Cr	225	169	197	185	190	192	273	274	192	240	249	226	229	166
V	12	22	28	<14	23	34	55	27	21	44	39	105	75	20
Ba	27	112	176	78	242	170	53	52	41	61	62	168	1243	52
Sc	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	9	<8	<8
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	<50	<50	<50	80	<50	<50	110	300	120	70	160	340	470	<50
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	10	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#575	#576	#577	#578	#579	#580	#581	#582	#583	#584	#585	#586	#587	#588
	CRT-59	CRT-6	WT-23	WT-153	WT-163	WT-164	WT-121	WT-80	WT-166	WT-167	WT-189	WSI-6	WSIG-1	WSIG-2
SiO2	96.70	76.85	56.03	66.72	60.39	63.21	63.37	66.09	64.73	61.50	59.69	89.23	63.78	63.20
TiO2	0.21	0.22	1.21	0.76	0.73	0.79	0.00	0.75	0.61	0.75	0.54	0.22	0.64	0.70
Al2O3	0.61	12.40	14.46	20.97	20.56	18.44	0.32	15.40	13.36	13.78	14.19	3.88	15.53	13.35
Fe2O3	1.13	1.51	12.54	1.62	8.43	9.04	35.64	0.58	0.51	1.20	3.27	0.50	2.38	2.71
MnO	0.01	0.03	0.18	0.02	0.08	0.05	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.02
MgO	0.00	0.00	5.23	0.38	3.42	3.22	0.25	0.83	0.71	0.81	4.75	1.20	2.31	2.32
CaO	0.04	0.19	4.37	0.00	0.41	0.38	0.00	0.05	0.00	0.64	0.00	0.00	0.13	0.05
Na2O	0.02	4.73	5.92	0.12	0.90	0.76	0.03	0.10	0.00	2.52	0.05	0.06	0.07	0.11
K2O	0.16	3.53	0.04	3.35	2.81	2.08	0.01	4.48	3.97	2.33	2.42	0.79	2.76	4.47
P2O5	0.01	0.03	0.15	0.03	0.08	0.08	0.02	0.02	0.04	0.05	0.03	0.03	0.05	0.07
Cr2O3	0.00	0.00	0.00	0.04	0.01	0.02	0.04	0.02	0.00	0.00	0.01	0.00	0.00	0.00
NiO	0.00	0.00	0.02	0.01	0.02	0.01	0.01	0.01	0.00	0.01	0.02	0.00	0.01	0.01
H2O-	0.04	0.28	0.21	0.26	0.16	0.14	0.05	0.29	0.11	0.49	1.06	0.06	1.61	0.73
LOI	0.34	0.40	0.37	5.27	1.75	1.40	0.55	12.20	14.93	15.30	13.69	3.13	9.50	11.30
TOTAL	99.27	100.17	100.73	99.55	99.75	99.62	100.31	100.83	98.98	99.39	99.74	99.11	98.78	99.04
Zn	4	14	93	15	172	118	12	8	15	18	38	8	38	24
Cu	<3	<3	87	36	23	37	20	3	26	21	40	<3	10	16
Ni	7	8	79	38	76	87	20	7	6	8	116	<3	82	133
Co	5	4	31	4	25	29	<3	5	3	3	10	4	10	15
Ga	<3	22	20	25	23	19	<3	26	16	16	14	6	19	14
Mo	6	8	<2	2	2	4	<2	3	3	3	3	<2	<2	<2
Nb	<2	9	6	13	11	13	5	11	12	15	10	6	13	14
Zr	57	81	121	141	112	123	7	154	152	173	127	62	169	179
Y	10	31	49	27	25	24	<2	21	35	20	23	8	19	28
Sr	7	22	47	47	108	79	3	19	19	114	31	19	27	17
Rb	6	81	<2	124	144	103	<2	187	120	83	116	29	122	196
U	<5	<5	<5	<5	<5	<5	<5	8	<5	7	11	<5	13	6
Th	<5	9	6	16	17	12	<5	11	18	15	18	<5	12	8
Pb	<5	<5	6	13	18	14	<5	7	7	23	8	18	22	25
Cr	192	133	44	205	147	147	252	56	51	46	24	108	144	128
V	27	21	355	118	156	172	30	149	163	164	176	35	206	150
Ba	47	403	75	665	412	916	28	755	8228	3308	971	2113	1608	1999
Sc	<8	<8	30	18	22	13	<8	18	14	10	<8	<8	12	13
As	11	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	<50	<50	86	621	395	195	90	710	436	1581	2622	<50	220	520
Sb	<8	<8	<8	<8	<8	<8	14	<8	10	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	11	10
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	7	51	n.d.	n.d.	96	21	65	n.d.	4	6

	#589	#590	#591	#592	#593	#594	#595	#596	#597	#598	#599	#600	#601	#602
	WSIG-3	WSIN-4	WSIN-5	WSIN-6	WSIN-7	WT-168	WSI-3	WSI-4	WSI-5	WT-16	WT-21	WT-22	WT-81	WT-82
SiO2	67.43	73.22	56.15	56.81	60.60	62.81	64.32	64.02	64.26	52.58	52.13	51.60	55.86	77.82
TiO2	0.07	0.49	0.63	0.61	0.70	0.79	0.60	0.61	0.62	0.41	1.52	1.54	1.44	0.59
Al203	1.39	12.08	18.19	18.84	19.70	20.98	15.61	16.98	16.18	11.32	13.19	13.51	13.59	7.99
Fe203	1.74	3.30	1.91	3.96	4.80	6.56	5.72	6.14	4.80	7.88	15.49	14.90	12.59	6.53
MnO	0.16	0.07	0.02	0.06	0.04	0.05	0.04	0.03	0.02	0.16	0.26	0.25	0.29	0.13
MgO	16.51	2.88	2.20	4.93	2.42	1.16	2.53	2.69	2.62	11.86	5.41	5.26	7.03	1.91
CaO	8.96	0.60	0.20	0.21	0.08	0.00	0.26	0.34	0.17	12.82	5.43	5.27	3.77	3.45
Na20	0.11	1.85	0.60	0.91	0.72	0.15	0.15	0.14	0.18	0.77	5.85	5.72	4.61	0.71
K20	0.17	0.97	4.08	2.37	3.30	3.12	3.47	2.93	3.19	0.39	0.13	0.12	0.11	0.03
P205	0.05	0.06	0.05	0.07	0.07	0.08	0.06	0.07	0.07	0.03	0.15	0.13	0.13	0.06
Cr203	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.02	0.00	0.01	0.01	0.00
NiO	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
H20-	0.27	0.15	0.26	0.14	0.63	0.24	0.66	0.52	0.74	0.04	0.07	0.12	0.18	0.20
LOI	2.69	3.96	15.09	10.17	6.45	3.84	4.93	4.93	5.78	1.32	0.10	0.23	0.31	0.57
TOTAL	99.56	99.63	99.38	99.08	99.51	99.80	98.36	99.41	98.64	99.61	99.75	98.68	99.94	100.01
Zn	60	50	17	60	47	106	197	414	138	183	107	112	131	49
Cu	6	60	15	22	36	35	35	30	37	5	104	86	43	24
Ni	37	140	28	13	24	42	66	70	55	51	85	82	87	70
Co	7	70	4	7	7	14	12	6	5	17	43	42	36	15
Ga	4	140	23	24	20	25	14	14	19	14	21	20	19	9
Mo	<2	<2	<2	<2	<2	3	<2	<2	<2	4	<2	<2	<2	5
Nb	6	8	12	13	13	19	13	14	13	7	8	7	8	6
Zr	16	130	123	112	139	225	144	135	145	94	141	144	165	155
Y	54	16	19	14	23	33	15	19	30	24	65	61	49	21
Sr	15	78	31	26	46	56	40	57	31	55	45	43	108	77
Rb	6	68	178	138	182	154	161	164	146	26	<2	<2	<2	<2
U	<5	6	7	10	<5	11	6	7	8	<5	<5	<5	<5	6
Th	<5	12	13	14	12	25	10	14	11	6	<5	<5	5	<5
Pb	8	16	14	9	18	26	23	21	16	8	9	11	8	10
Cr	84	118	118	110	108	167	140	136	124	116	25	<14	58	89
V	98	71	109	97	105	133	111	98	117	89	466	431	281	117
Ba	73	195	558	665	497	860	916	521	1014	108	<16	88	105	147
Sc	11	10	16	23	19	18	14	15	18	18	29	34	32	12
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	120	760	2540	1890	130	204	140	1200	160	87	81	76	418	34
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	11	9	17	9	14	<8	<8	<8	15	12	<8	<8	15	<8
Bi	8	9	<10	<10	9	9	<10	<10	9	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	4	n.d.	n.d.	n.d.	n.d.	132	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#603	#604	#605	#606	#607	#608	#609	#610	#611	#612	#613	#614	#615	#616
	WT-83	WT-154	WT-155	WT-158	WT-160	WT-165	WT-183	WT-184	WT-185	WT-186	WT-187	WSIN-1	WSIN-2	WSIN-3
SiO2	53.81	65.98	61.98	63.35	58.23	51.99	64.35	53.51	60.14	54.49	54.43	57.83	52.25	55.32
TiO2	1.49	0.65	0.54	0.44	0.57	0.55	0.70	1.54	0.65	0.50	0.54	1.35	1.76	0.67
Al2O3	13.01	14.59	14.23	10.41	13.59	14.61	15.54	14.61	17.70	15.31	14.26	12.26	14.25	15.09
Fe2O3	15.08	0.59	3.08	7.80	8.56	9.32	7.00	15.30	10.93	8.44	8.13	13.32	15.40	8.93
MnO	0.21	0.00	0.05	0.11	0.12	0.14	0.09	0.24	0.10	0.11	0.14	0.20	0.20	0.15
MgO	4.41	0.48	3.21	4.20	5.39	5.70	2.10	5.11	3.60	5.56	7.31	6.31	5.53	7.21
CaO	7.58	1.57	1.81	9.51	6.82	12.77	1.37	5.53	1.03	3.56	8.34	3.92	4.24	6.19
Na2O	4.50	4.75	2.93	1.75	4.56	1.02	1.25	4.09	0.39	2.70	3.45	3.30	4.09	4.76
K2O	0.04	0.81	1.89	0.05	0.66	0.47	2.82	0.11	2.73	0.71	0.31	0.15	0.04	0.06
P2O5	0.15	0.07	0.09	0.11	0.07	0.09	0.04	0.08	0.10	0.00	0.00	0.15	0.16	0.11
Cr2O3	0.00	0.00	0.01	0.03	0.01	0.02	0.01	0.00	0.00	0.02	0.01	0.00	0.00	0.00
NiO	0.02	0.01	0.01	0.02	0.01	0.03	0.01	0.02	0.01	0.02	0.02	0.02	0.01	0.01
H2O-	0.19	1.08	0.86	0.72	0.08	0.06	1.33	0.08	0.07	3.97	0.48	0.32	0.27	0.24
LOI	0.09	8.74	8.40	0.31	0.84	2.60	3.04	-0.05	1.24	4.42	2.09	0.28	0.25	1.06
TOTAL	100.58	99.32	99.09	98.81	99.51	99.37	99.65	100.17	98.69	99.81	99.51	99.41	98.45	99.80
Zn	112	9	71	61	55	78	116	126	135	87	59	84	138	65
Cu	27	21	29	7	7	102	5	92	<3	121	93	138	184	87
Ni	84	18	64	94	81	103	55	109	82	101	57	88	114	95
Co	42	5	9	21	25	33	18	49	31	20	22	30	36	37
Ga	23	13	11	10	11	16	15	16	21	13	11	14	17	11
Mo	<2	3	<2	3	<2	5	<2	<2	4	<2	<2	<2	<2	<2
Nb	7	15	10	8	9	9	13	9	13	6	4	11	14	10
Zr	140	168	122	77	91	81	140	149	117	67	69	119	185	79
Y	60	22	22	22	23	27	28	42	28	18	26	44	64	21
Sr	74	99	116	126	154	117	111	132	64	105	139	114	143	199
Rb	<2	37	100	3	22	21	182	2	145	26	10	9	<2	5
U	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	5	<5	<5
Th	<5	16	14	7	13	7	13	6	10	9	9	<5	<5	<5
Pb	<5	26	22	<5	<5	6	21	5	15	7	7	17	10	8
Cr	<14	86	102	246	174	243	83	20	112	257	248	147	158	303
V	390	80	125	124	190	224	101	366	136	143	230	340	371	225
Ba	38	830	1314	44	343	94	607	117	316	415	263	261	49	802
Sc	31	19	15	19	25	29	17	31	21	26	31	34	46	29
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	67	548	299	98	106	5189	299	103	96	160	320	90	80	830
Sb	9	<8	<8	<8	12	<8	<8	<8	<8	<8	<8	8	<8	22
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	10
Bi	<10	<10	<10	7	<10	8	<10	<10	<10	<10	6	6	7	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	33	n.d.	8	n.d.	n.d.	n.d.

	#617	#618	#619	#620	#621	#622	#623	#624	#625	#626	#627	#628	#629	#630
	UV-9	UV-10	UV-11	UV-12	UV-13	UV-14	UV-15	UV-16	UV-17	UV-18	UV-79	UV-80	UV-110	UV-111
SiO2	58.40	57.46	67.02	59.07	59.47	54.15	56.73	58.15	56.52	56.69	56.66	58.37	56.29	63.33
TiO2	0.70	0.71	0.61	0.73	0.85	0.64	0.78	0.74	0.73	0.79	0.74	0.69	0.84	0.77
Al2O3	19.61	20.23	14.46	19.51	21.61	18.37	20.19	20.03	18.69	19.16	20.20	20.64	18.47	15.20
Fe2O3	8.42	8.08	6.73	10.10	6.71	11.07	10.84	8.04	8.98	9.30	7.27	8.43	9.25	7.31
MnO	0.05	0.06	0.04	0.07	0.01	0.15	0.09	0.02	0.04	0.03	0.23	0.02	0.04	0.09
MgO	2.66	2.01	0.88	1.68	0.44	0.22	0.43	0.60	0.75	0.49	1.74	0.72	2.33	1.97
CaO	0.23	0.00	0.00	0.04	0.00	0.00	0.06	0.04	0.04	0.05	0.36	0.18	0.58	0.52
Na2O	0.44	0.41	0.05	0.40	0.44	0.19	0.47	0.74	0.28	0.30	0.34	0.48	0.72	0.86
K2O	2.85	3.15	2.37	3.51	4.83	2.19	2.93	2.79	2.33	2.35	3.36	3.07	3.68	2.38
P2O5	0.07	0.05	0.11	0.09	0.06	0.10	0.06	0.05	0.05	0.07	0.10	0.07	0.10	0.04
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.02	0.02
H2O-	1.60	2.12	3.86	0.91	0.80	6.92	2.00	4.71	5.48	5.71	3.38	1.42	3.70	2.85
LOI	5.56	5.90	4.64	5.19	4.54	5.85	5.46	4.77	5.74	5.67	5.26	5.18	4.13	3.97
TOTAL	100.60	100.19	100.78	101.32	99.77	99.86	100.05	100.70	99.64	100.62	99.66	99.28	100.15	99.31
Zn	136	196	77	95	15	25	49	109	197	170	128	85	83	59
Cu	12	7	37	35	35	30	42	32	40	57	28	25	31	5
Ni	72	62	39	128	23	40	107	75	104	73	114	86	80	65
Co	20	18	5	33	8	61	44	10	13	8	41	18	22	20
Ga	23	29	20	24	30	24	29	27	26	27	27	25	31	23
Mo	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Nb	11	12	10	11	17	15	12	11	10	13	18	13	17	14
Zr	105	107	199	106	234	175	110	110	108	109	150	106	141	151
Y	25	28	23	20	33	31	20	28	25	25	40	28	30	19
Sr	61	59	44	40	45	15	45	58	36	27	50	45	101	92
Rb	151	180	142	189	212	120	160	157	181	154	198	163	201	117
U	<5	<5	8	<5	6	<5	6	<5	<5	<5	8	7	6	5
Th	12	12	11	12	20	12	14	13	11	13	20	12	14	13
Pb	15	16	30	19	10	6	20	10	27	22	27	<5	19	11
Cr	177	181	211	187	144	109	245	165	177	178	225	169	440	267
V	159	149	105	157	140	107	169	155	155	161	162	162	202	182
Ba	530	481	621	537	1664	1115	399	440	401	359	932	556	605	706
Sc	26	23	<8	22	21	14	22	26	18	18	16	14	23	13
As	<10	11	<10	<10	<10	<10	<10	<10	<10	<10	10	<10	<10	<10
S	<50	<50	60	<50	<50	80	100	<50	<50	<50	155	197	106	131
Sb	<8	<8	<8	<8	<8	<8	<8	50	<8	<8	<8	14	<8	<8
Sn	<8	9	9	<8	10	13	<8	82	<8	<8	<8	<8	<8	<8
Bi	6	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	8	<8	<8	<8	<8	<8	8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#631	#632	#633	#634	#635	#636	#637	#638	#639	#640	#641	#642	#643	#644
	UV-112	UV-113	UV-114	UV-115	UV-116	UV-145	UV-161	UV-162	UV-163	UV-164	UV-165	UV-166	UV-167	UV-168
SiO2	63.11	59.42	60.53	57.34	66.94	67.28	63.87	64.36	66.80	66.41	63.07	56.42	56.43	56.47
TiO2	0.69	0.81	0.79	0.78	0.73	0.68	0.71	0.77	0.62	0.72	0.86	0.72	0.76	0.72
Al2O3	14.79	17.96	17.57	17.95	15.98	16.14	17.32	17.25	14.99	14.66	16.84	20.25	19.76	19.90
Fe2O3	8.44	8.01	7.74	8.23	6.80	4.53	6.12	6.52	8.10	8.96	8.70	9.08	8.51	9.60
MnO	0.04	0.04	0.06	0.05	0.01	0.02	0.08	0.07	0.12	0.11	0.05	0.04	0.05	0.06
MgO	1.77	2.14	2.00	2.27	0.45	1.53	2.71	2.47	2.54	2.46	2.33	1.28	1.86	2.59
CaO	0.54	0.45	0.51	0.43	0.05	0.14	0.80	0.64	0.82	0.62	0.38	0.08	0.02	0.16
Na2O	0.77	0.77	0.69	0.52	0.22	0.08	0.95	0.59	1.40	0.77	0.74	0.16	0.23	0.48
K2O	2.35	3.49	3.90	4.28	2.65	3.50	3.11	3.37	2.28	2.59	3.52	3.40	3.40	2.76
P2O5	0.07	0.11	0.10	0.03	0.19	0.02	0.34	0.33	0.19	0.10	0.08	0.00	0.03	0.02
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.02	0.02	0.02
H2O-	2.39	2.48	1.79	2.20	0.59	0.73	0.33	0.62	0.24	0.77	1.02	2.32	3.38	1.33
LOI	4.09	4.39	4.22	4.55	4.73	4.89	3.18	3.54	0.89	1.71	2.14	5.31	4.98	4.82
TOTAL	99.07	100.08	99.91	98.64	99.36	99.56	99.54	100.55	99.00	99.89	99.74	99.08	99.43	98.93
Zn	80	89	88	69	28	227	72	75	107	110	114	116	146	172
Cu	43	53	40	31	18	48	22	24	5	6	21	20	41	10
Ni	108	63	74	77	27	89	113	82	52	60	69	118	96	99
Co	18	15	27	22	<3	18	40	27	22	26	25	16	14	21
Ga	18	24	22	25	21	21	22	19	19	19	19	27	25	26
Mo	<2	<2	2	<2	3	2	2	3	4	7	3	<2	<2	<2
Nb	15	14	14	13	16	13	12	14	13	14	16	13	10	10
Zr	175	157	156	136	195	177	166	172	133	138	152	112	111	103
Y	26	25	28	28	22	18	34	52	28	24	25	24	30	28
Sr	117	112	113	89	42	17	99	124	82	60	70	50	52	65
Rb	125	175	197	207	88	149	154	156	161	186	214	190	176	149
U	<5	<5	<5	6	5	7	<5	<5	<5	<5	<5	7	<5	6
Th	11	15	12	16	17	14	14	14	9	7	17	8	14	6
Pb	19	19	25	14	28	11	10	5	16	13	20	16	10	15
Cr	285	329	331	401	282	128	202	212	174	242	236	162	157	148
V	167	194	184	190	121	153	174	182	113	138	152	142	118	150
Ba	470	607	619	701	733	996	610	862	332	466	491	585	711	520
Sc	16	18	16	19	9	13	16	15	11	<8	13	13	21	21
As	<10	<10	<10	<10	<10	11	<10	11	<10	<10	<10	<10	<10	<10
S	678	176	123	129	270	163	5571	1838	191	182	172	214	191	150
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	9	<8	<8	11	<8
Sn	<8	<8	<8	<8	<8	12	<8	12	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	6	<10	<10	7	<10	<10	<10	8	<10	<10
W	<8	<8	10	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#645	#646	#647	#648	#649	#650	#651	#652	#653	#654	#655	#656	#657	#658
	UV-77	UV-78	UV-148	LES-10	LES-11	LES-12	LES-13	LES-33	LES-34	ST-301	ST-302	ST-303	ST-305	ST-309
SiO2	64.62	63.88	67.90	66.63	68.71	68.10	66.14	65.19	66.71	63.42	65.43	63.59	62.55	59.77
TiO2	0.76	0.71	0.70	0.72	0.61	0.73	0.73	0.62	0.64	0.64	0.63	0.63	0.65	0.67
Al2O3	15.35	15.50	14.61	14.63	12.07	14.01	14.01	14.97	14.43	14.17	14.12	16.11	14.94	18.25
Fe2O3	7.11	7.44	6.31	6.89	6.54	6.52	7.47	6.14	6.80	6.15	7.85	6.11	7.23	6.60
MnO	0.07	0.09	0.03	0.03	0.10	0.04	0.07	0.02	0.01	0.08	0.03	0.03	0.06	0.07
MgO	2.26	3.02	1.75	3.61	2.91	2.65	3.14	2.49	2.58	2.98	2.73	2.53	3.13	2.85
CaO	0.56	0.90	0.86	0.36	1.29	0.64	0.90	0.61	0.39	1.55	0.51	0.72	1.59	1.40
Na2O	1.57	1.78	1.26	0.03	0.88	0.78	0.82	0.83	1.01	0.05	0.01	0.05	0.06	0.06
K2O	2.63	2.79	2.06	3.36	2.27	2.81	2.37	2.80	2.30	2.24	1.92	3.05	2.40	3.21
P2O5	0.11	0.14	0.10	0.06	0.06	0.05	0.00	0.06	0.11	0.09	0.03	0.06	0.01	0.14
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
NiO	0.01	0.01	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.01
H2O-	1.22	0.29	1.71	0.31	0.22	0.23	0.25	0.23	0.23	1.26	1.44	0.97	0.91	1.04
LOI	3.59	2.85	2.63	3.95	4.80	3.84	4.20	4.23	4.18	6.34	5.00	5.47	6.46	6.18
TOTAL	99.86	99.40	99.94	100.58	100.47	100.40	100.11	98.19	99.39	98.98	99.70	99.33	100.00	100.26
Zn	72	66	71	75	81	87	102	71	72	94	73	64	74	80
Cu	54	6	13	18	4	5	5	9	12	11	14	23	49	6
Ni	83	74	51	60	51	49	59	52	47	51	56	58	60	63
Co	25	20	19	7	13	5	22	9	12	11	14	13	12	15
Ga	17	19	17	21	11	18	16	19	18	21	19	21	18	24
Mo	2	<2	<2	<2	4	<2	4	<2	2	<2	<2	<2	<2	<2
Nb	11	13	11	13	10	12	11	13	13	12	12	12	13	11
Zr	172	166	150	158	141	166	150	173	155	154	162	148	144	118
Y	25	28	27	26	23	25	24	31	29	28	31	27	27	27
Sr	103	99	91	31	46	44	46	62	56	41	40	49	46	46
Rb	91	89	125	154	99	130	112	157	130	122	110	163	129	178
U	7	<5	<5	<5	<5	<5	<5	8	7	7	<5	8	5	6
Th	15	18	10	10	10	10	10	15	14	11	16	12	18	15
Pb	9	7	10	8	8	8	6	13	15	29	9	13	29	6
Cr	168	189	121	120	94	99	100	99	96	79	91	86	93	102
V	157	142	147	132	99	116	118	93	108	103	108	112	101	143
Ba	963	760	454	345	526	307	271	481	385	488	419	616	537	741
Sc	12	17	18	16	9	17	20	19	18	13	17	17	14	12
As	19	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	207	202	145	787	4414	1262	443	272	348	248	240	258	314	270
Sb	<8	<8	8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	10	<8
Bi	<10	<10	<10	<10	7	7	<10	<10	<10	<10	<10	7	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	10	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	88	n.d.	n.d.	n.d.	n.d.

	#659	#660	#661	#662	#663	#664	#665	#666	#667	#668	#669	#670	#671	#672
	ST-310	ST-311	ST-312	ST-313	ST-357	LES-7	LES-14	LES-15	LES-17	LES-19	LES-29	LES-30	LES-31	LES-32
SiO2	59.58	58.50	59.32	60.71	59.46	44.30	60.24	51.24	50.09	51.10	48.09	56.48	60.94	61.66
TiO2	0.64	0.64	0.66	0.74	0.62	0.21	0.70	0.55	0.54	0.52	0.44	0.43	0.58	0.56
Al2O3	18.64	18.19	18.81	19.62	13.13	5.01	15.53	10.96	11.70	10.76	9.34	8.77	13.25	13.53
Fe2O3	6.58	6.95	7.07	6.50	11.71	4.29	6.98	5.10	6.07	6.46	3.96	4.05	5.21	6.59
MnO	0.08	0.16	0.10	0.04	0.25	0.32	0.06	0.17	0.13	0.03	0.05	0.07	0.05	0.03
MgO	2.69	3.15	2.83	2.47	3.91	10.41	3.49	6.64	6.53	7.08	7.33	5.58	3.94	3.79
CaO	1.27	1.82	1.19	0.56	1.97	13.74	2.15	8.20	7.88	7.84	10.01	7.82	3.39	2.74
Na2O	0.10	0.19	0.41	0.59	0.30	0.61	0.47	0.91	0.51	0.86	0.96	1.41	0.85	0.81
K2O	3.49	2.95	3.11	3.55	2.08	0.24	3.83	2.20	2.57	1.49	1.49	1.20	2.17	2.19
P2O5	0.13	0.13	0.19	0.16	0.13	0.06	0.05	0.07	0.02	0.06	0.17	0.21	0.17	0.16
Cr2O3	0.01	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00
NiO	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.00
H2O-	0.84	0.66	0.61	0.50	0.14	0.34	0.26	0.14	0.15	0.15	0.14	0.11	0.15	0.17
LOI	6.23	6.49	5.46	4.68	6.35	20.42	6.47	14.24	13.94	13.67	17.59	13.78	8.45	7.26
TOTAL	100.29	99.86	99.79	100.13	100.06	100.46	100.24	100.42	100.13	100.04	99.58	99.92	99.16	99.49
Zn	85	74	70	64	92	32	71	66	69	71	55	58	64	70
Cu	9	5	12	23	8	15	6	8	3	7	11	3	5	8
Ni	61	73	66	67	14	36	50	40	49	49	38	29	39	46
Co	13	15	18	14	3	14	14	7	19	14	10	7	6	7
Ga	27	24	26	23	16	5	20	13	11	11	13	9	17	15
Mo	<2	<2	<2	<2	3	3	<2	3	2	<2	<2	<2	<2	<2
Nb	12	13	13	13	15	5	11	10	11	11	9	7	12	13
Zr	119	122	118	119	229	35	138	108	102	111	105	114	126	136
Y	27	28	26	25	34	12	25	21	21	17	19	23	26	28
Sr	47	50	52	55	51	43	56	47	48	43	63	64	62	59
Rb	189	175	178	196	86	10	186	105	129	78	84	66	136	127
U	<5	<5	6	<5	5	<5	7	<5	<5	<5	<5	<5	<5	6
Th	16	15	17	12	20	<5	11	8	9	<5	11	8	16	8
Pb	9	9	7	17	10	11	7	8	7	6	24	66	10	14
Cr	95	92	101	104	109	92	100	65	74	75	36	56	83	67
V	176	111	122	115	87	104	131	95	101	82	71	63	105	96
Ba	761	881	665	733	447	83	759	207	249	239	415	349	553	417
Sc	14	15	22	18	<8	27	19	20	19	14	18	15	15	12
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	189	298	296	305	641	2419	441	480	320	326	725	514	639	345
Sb	<8	<8	<8	<8	10	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	8	<8	8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	129	120	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#673	#674	#675	#676	#677	#678	#679	#680	#681	#682	#683	#684	#685	#686
	ST-314	ST-315	ST-318	ST-319	ST-320	ST-321	ST-322	ST-324	ST-325	ST-327	ST-328	ST-329	ST-330	ST-331
SiO2	53.85	54.68	58.38	57.89	65.36	62.24	51.93	56.27	59.55	49.49	54.31	53.58	55.68	54.75
TiO2	0.67	0.61	0.80	0.75	0.67	0.75	0.62	0.63	0.61	0.49	0.56	0.50	0.52	0.54
Al2O3	17.16	14.15	20.46	19.54	14.49	19.33	17.73	17.65	16.50	13.33	12.45	11.55	11.36	12.16
Fe2O3	5.80	8.72	7.40	7.92	6.08	5.28	9.48	7.32	5.62	5.54	5.12	5.16	5.11	6.46
MnO	0.16	0.29	0.08	0.08	0.11	0.05	0.14	0.10	0.04	0.05	0.05	0.05	0.05	0.03
MgO	2.90	4.48	2.53	2.68	2.38	2.10	3.04	2.62	2.37	2.40	2.34	4.11	3.81	2.89
CaO	5.98	4.19	0.22	0.24	1.30	0.36	0.39	0.52	0.27	0.41	0.63	0.39	0.81	0.99
Na2O	0.23	0.62	0.82	1.09	1.76	1.48	0.94	0.89	1.56	1.83	1.75	1.84	1.75	1.46
K2O	2.94	1.79	3.41	3.28	1.80	3.10	3.01	3.05	2.63	2.07	1.89	1.78	1.48	2.13
P2O5	0.18	0.16	0.14	0.14	0.25	0.19	0.15	0.12	0.16	0.12	0.13	0.13	0.15	0.13
Cr2O3	0.01	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
NiO	0.01	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
H2O-	0.89	0.19	0.27	0.31	0.60	0.41	0.27	0.39	0.30	0.87	0.87	0.73	0.65	0.66
LOI	9.69	10.12	5.51	5.71	5.37	4.88	11.46	10.91	10.11	23.46	20.03	19.23	18.35	17.21
TOTAL	100.47	100.00	100.05	99.63	100.17	100.20	99.17	100.48	99.73	100.08	100.14	99.06	99.73	99.41
Zn	123	128	88	100	87	87	81	93	64	60	68	59	68	64
Cu	22	12	15	14	11	16	18	19	19	32	32	23	25	35
Ni	57	71	69	75	52	61	85	73	52	122	76	68	69	58
Co	14	15	19	12	11	12	15	11	11	12	10	8	10	10
Ga	21	17	25	24	19	23	22	21	19	16	17	14	17	16
Mo	<2	<2	<2	<2	<2	3	2	<2	5	3	7	9	6	6
Nb	12	12	13	12	12	15	12	13	12	9	11	9	9	9
Zr	108	129	133	131	156	178	110	117	124	116	174	144	164	158
Y	27	27	25	29	29	31	24	23	27	22	23	20	22	23
Sr	55	62	61	64	64	70	59	57	62	69	81	67	73	85
Rb	159	99	187	174	101	167	171	162	136	109	109	101	100	115
U	<5	7	8	10	9	5	<5	<5	6	8	9	8	8	8
Th	9	8	15	12	15	19	11	14	11	9	14	11	13	13
Pb	50	53	15	17	14	26	14	19	19	19	25	16	23	21
Cr	91	76	118	119	91	112	104	108	83	92	82	87	83	95
V	95	100	140	128	103	117	114	115	108	135	117	110	112	107
Ba	655	392	747	679	430	733	731	683	697	522	514	510	499	574
Sc	12	16	16	12	8	16	17	12	11	13	18	16	10	13
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	19	28	27	25	25
S	313	504	638	442	711	631	1937	3066	6673	19433	20004	16710	18365	30176
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	8	12	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	7	<10	<10	<10	<10	<10	<10	10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	123	n.d.	n.d.	123	155	159	119	n.d.	118	n.d.	160

	#687	#688	#689	#690	#691	#692	#693	#694	#695	#696	#697	#698	#699	#700
	ST-332	ST-333	ST-334	ST-335	ST-337	ST-338	ST-358	ST-359	LES-1	LES-3	LES-5	LES-6	LES-8	LES-9
SiO2	58.01	58.92	49.33	49.14	50.19	55.56	65.15	63.53	40.55	38.58	51.18	51.00	53.27	55.62
TiO2	0.57	0.63	0.52	0.49	0.49	0.56	0.72	0.67	1.76	1.61	0.88	0.57	0.54	0.79
Al2O3	13.50	13.73	11.56	11.47	11.39	13.34	17.92	16.82	18.68	17.07	16.01	14.54	12.96	12.71
Fe2O3	5.35	4.72	5.36	4.28	5.85	4.91	5.21	6.55	11.03	14.44	11.11	9.01	8.86	9.97
MnO	0.04	0.02	0.03	0.04	0.05	0.02	0.02	0.01	0.02	0.05	0.03	0.06	0.07	0.07
MgO	3.42	2.07	3.86	4.75	6.31	2.24	1.77	1.90	15.78	17.47	12.05	11.27	10.15	11.05
CaO	0.42	2.10	1.05	1.26	0.55	0.94	0.15	0.28	0.25	0.28	0.16	2.88	2.43	1.29
Na2O	1.16	1.26	1.24	1.12	1.04	1.39	0.50	0.96	0.02	0.29	1.66	1.38	0.70	0.02
K2O	2.45	2.59	2.23	2.21	2.14	2.47	4.20	3.22	2.31	0.48	0.14	0.97	0.46	1.16
P2O5	0.14	0.81	0.15	0.14	0.10	0.11	0.14	0.12	0.15	0.12	0.05	0.04	0.04	0.08
Cr2O3	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.02	0.00	0.03	0.02	0.01	0.05
NiO	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.00	0.02	0.01	0.02	0.02	0.01	0.02
H2O-	0.43	0.42	0.63	1.05	0.55	0.69	0.21	0.21	0.72	0.80	0.38	0.32	2.01	0.37
LOI	11.51	12.79	23.81	24.32	20.14	17.00	4.38	5.00	8.50	8.70	6.17	7.91	7.25	7.03
TOTAL	97.01	100.08	99.80	100.29	98.81	99.26	100.39	99.27	99.81	99.90	99.87	99.99	98.76	100.23
Zn	120	74	61	57	80	38	61	62	73	79	62	79	63	91
Cu	29	31	40	29	31	33	24	13	10	215	33	57	55	54
Ni	47	61	102	80	65	69	32	52	153	137	160	108	116	116
Co	9	10	10	11	8	13	8	28	39	63	34	26	36	31
Ga	19	15	15	16	15	16	21	22	24	22	15	13	12	14
Mo	7	10	18	10	3	5	<2	5	<2	<2	<2	<2	<2	<2
Nb	13	12	9	8	10	8	14	16	10	11	7	5	6	9
Zr	163	159	127	116	126	135	158	229	152	149	88	66	68	98
Y	23	23	19	19	21	21	27	29	55	59	38	24	20	25
Sr	86	103	80	81	79	97	56	54	9	8	12	28	13	10
Rb	138	133	114	106	107	131	158	130	81	18	7	28	18	34
U	4	6	6	10	4	9	8	<5	11	<5	<5	10	<5	7
Th	13	14	8	11	9	14	17	15	8	8	8	5	5	<5
Pb	14	21	19	18	17	29	100	60	11	6	<5	10	<5	9
Cr	89	91	96	90	83	113	131	127	265	170	425	330	378	478
V	126	167	182	131	122	144	130	95	599	595	412	277	240	253
Ba	777	328	704	626	759	950	771	571	154	98	45	139	59	56
Sc	14	15	14	9	14	10	18	15	47	42	50	33	29	26
As	25	31	50	42	19	35	34	66	<10	<10	<10	<10	<10	<10
S	16878	16977	26794	18976	16570	16810	4526	9094	1043	1684	727	2140	2488	2305
Sb	8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	187	155	157	142	n.d.	233	186	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#701	#702	#703	#704	#705	#706	#707	#708	#709	#710	#711	#712	#713	#714
	ST-336	CRT-4	ET-271	ET-273	ET-277	ET-391	ET-392	ET-393	ET-272	ET-274	ET-275	ET-276	ET-278	ET-279
SiO2	29.08	55.67	61.18	63.06	61.26	66.76	70.06	63.49	58.60	60.25	60.14	60.25	65.14	59.59
TiO2	0.22	0.97	0.80	0.75	0.85	0.67	0.74	0.66	0.78	0.90	0.83	0.83	0.78	0.71
Al2O3	5.36	21.17	25.37	19.46	20.17	16.93	16.85	17.17	22.62	21.53	23.86	22.13	22.70	19.96
Fe2O3	10.22	6.33	0.85	7.51	6.98	4.10	1.72	6.57	6.43	7.86	4.19	6.80	1.30	7.21
MnO	0.24	0.04	0.01	0.02	0.05	0.03	0.02	0.04	0.00	0.00	0.00	0.00	0.00	0.03
MgO	20.66	2.20	1.41	1.42	2.15	2.13	2.34	3.03	0.21	0.11	0.38	0.18	0.24	1.74
CaO	0.82	0.31	0.07	0.08	0.02	0.07	0.02	0.01	0.08	0.05	0.03	0.01	0.01	0.02
Na2O	0.38	0.34	1.78	0.00	0.80	0.09	0.10	0.08	1.60	1.71	1.46	0.99	0.78	0.72
K2O	0.78	5.46	2.87	2.64	2.65	4.35	4.46	3.66	2.54	2.42	2.92	3.09	3.04	2.73
P2O5	0.06	0.02	0.08	0.10	0.09	0.08	0.12	0.10	0.06	0.05	0.02	0.06	0.09	0.10
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
NiO	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00
H2O-	0.31	1.94	0.21	0.09	0.22	0.27	0.13	0.30	0.47	0.39	0.29	0.48	0.48	0.85
LOI	31.00	4.64	5.40	4.20	5.50	3.78	3.16	4.67	5.06	4.62	4.61	4.96	5.03	5.42
TOTAL	99.14	99.09	100.03	99.33	100.75	99.26	99.72	99.78	98.46	99.93	98.73	99.78	99.59	99.08
Zn	58	38	7	20	84	44	11	167	21	22	13	22	19	177
Cu	14	18	10	59	55	38	20	13	36	30	19	33	11	22
Ni	31	129	22	13	42	9	4	44	52	101	17	56	11	57
Co	<3	17	4	8	14	14	<3	13	3	<3	<3	3	5	9
Ga	8	26	30	25	25	23	22	21	29	25	31	31	29	26
Mo	<2	5	<2	4	<2	4	<2	<2	<2	<2	10	<2	<2	<2
Nb	4	22	20	19	18	13	15	14	16	16	17	17	14	14
Zr	55	146	253	238	209	145	165	141	245	236	216	263	194	186
Y	10	38	96	49	35	13	17	31	49	47	55	36	25	70
Sr	56	20	153	166	87	23	27	20	166	150	125	105	125	149
Rb	42	183	136	142	148	167	206	155	116	111	145	166	151	138
U	5	<5	11	7	11	5	7	<5	7	<5	11	6	8	7
Th	<5	10	26	23	14	17	13	15	25	26	22	21	16	14
Pb	14	<5	25	93	32	22	51	10	13	10	12	30	61	24
Cr	27	528	148	119	149	128	137	114	102	91	126	125	106	120
V	70	166	124	126	128	114	99	85	128	113	148	133	109	137
Ba	257	724	1487	1316	827	1003	999	968	1625	884	1857	711	795	774
Sc	11	17	16	18	16	15	16	18	24	22	19	27	23	25
As	<10	<10	<10	59	13	66	39	<10	<10	<10	28	<10	<10	<10
S	10580	1800	<50	<50	<50	<50	<50	<50	126	139	138	159	177	142
Sb	<8	<8	<8	10	<8	16	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	10	14	14	10	17	<8	<8	8	8	<8	<8
Bi	<10	<10	<10	<10	10	6	7	<10	7	<10	<10	<10	<10	<10
W	<8	9	<8	<8	<8	<8	<8	<8	<8	<8	<8	10	<8	<8
B	n.d.	n.d.	231	129	116	n.d.	n.d.	n.d.	137	122	1670	126	139	106

	#715	#716	#717	#718	#719	#720	#721	#722	#723	#724	#725	#726	#727	#728
	ET-280	ET-281	ET-282	ET-389	ET-390	ET-394	ET-383	ET-385	ET-373	ET-374	ET-375	ET-361	ET-367	ET-370
SiO2	60.07	60.84	61.34	63.75	75.28	64.65	58.56	56.47	62.43	62.90	63.53	65.57	68.08	70.48
TiO2	0.74	0.74	0.75	0.59	0.70	0.64	0.67	0.74	0.56	0.53	0.53	0.77	0.68	0.59
Al2O3	20.92	20.34	20.35	17.18	14.93	16.66	21.23	18.20	15.47	17.90	14.71	15.51	13.69	12.41
Fe2O3	7.26	7.21	6.73	7.33	1.51	7.18	8.39	11.76	7.40	4.89	5.75	7.41	5.11	5.12
MnO	0.01	0.00	0.00	0.01	0.00	0.03	0.06	0.04	0.28	0.15	0.16	0.11	0.08	0.11
MgO	0.84	0.25	0.34	1.81	0.82	2.00	2.66	1.00	4.55	3.19	3.23	3.76	3.05	2.82
CaO	0.01	0.00	0.00	0.00	0.00	0.01	0.36	0.00	0.07	0.03	0.20	1.19	1.01	1.27
Na2O	0.98	0.69	0.85	0.11	0.06	0.07	0.99	0.10	0.13	0.27	0.86	1.85	2.62	2.10
K2O	3.01	2.99	3.06	3.57	2.78	2.56	2.97	2.05	3.02	4.48	2.39	2.40	2.66	2.24
P2O5	0.04	0.05	0.09	0.02	0.05	0.06	0.03	0.06	0.04	0.03	0.02	0.16	0.11	0.21
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00
NiO	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.00	0.00
H2O-	0.37	0.62	0.34	0.70	0.28	0.95	0.40	2.21	1.43	1.05	2.13	0.12	0.21	0.22
LOI	4.62	4.81	4.82	4.13	2.80	4.00	2.41	6.03	4.65	4.64	4.72	2.16	2.79	2.55
TOTAL	98.87	98.54	98.68	99.20	99.21	98.82	98.74	98.68	100.05	100.09	98.24	101.02	100.09	100.12
Zn	63	31	53	246	19	137	133	186	138	75	68	96	51	33
Cu	23	59	25	12	9	7	7	79	66	22	18	7	16	40
Ni	39	36	59	93	8	47	78	99	134	94	85	59	32	34
Co	4	<3	<3	14	<3	16	28	<3	9	10	14	9	5	10
Ga	30	27	27	22	20	23	33	29	23	25	20	17	14	8
Mo	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Nb	16	15	16	12	11	12	13	9	13	11	12	14	12	11
Zr	210	209	226	124	216	130	107	111	153	141	155	175	190	173
Y	44	42	30	52	22	35	26	41	35	26	32	28	22	20
Sr	92	82	92	29	21	18	101	14	13	16	35	173	203	201
Rb	150	157	154	160	140	164	189	84	133	195	127	148	153	131
U	<5	<5	<5	7	6	<5	<5	<5	10	10	6	5	7	8
Th	21	24	22	19	18	11	14	11	12	8	17	17	10	7
Pb	27	21	32	<5	13	7	19	9	11	7	<5	20	26	36
Cr	164	139	127	88	86	65	173	205	109	82	81	138	156	153
V	129	142	141	80	106	82	157	193	140	125	116	97	89	110
Ba	703	586	1103	1097	937	1314	485	1020	1220	2160	1299	494	770	847
Sc	20	20	26	18	12	15	28	35	20	25	25	14	10	9
As	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	167	153	199	154	126	130	135	220	331	244	266	<50	120	5680
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	19	10	7
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	108	115	129	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#729	#730	#731	#732	#733	#734	#735	#736	#737	#738	#739	#740	#741	#742
	ET-371	ET-357	ET-358	ET-360	ET-362	ET-363	ET-364	ET-365	ET-366	ET-368	ET-369	ET-372	ET-384	ET-30
SiO2	68.39	54.98	62.22	65.48	73.01	65.38	66.70	65.15	63.43	66.55	69.45	67.23	59.08	64.07
TiO2	0.61	0.70	0.63	0.77	0.49	0.71	0.54	0.66	0.74	0.65	0.72	0.57	0.69	0.63
Al2O3	13.29	18.83	16.05	15.18	12.03	15.34	14.93	15.08	15.87	14.19	14.60	13.57	21.69	15.81
Fe2O3	5.69	7.36	6.32	6.84	4.45	4.29	6.42	6.45	6.36	6.54	4.92	6.60	9.00	7.92
MnO	0.09	0.17	0.11	0.09	0.07	0.05	0.14	0.07	0.12	0.12	0.08	0.08	0.08	0.14
MgO	3.07	3.27	2.60	2.42	2.07	2.46	2.81	2.34	2.43	2.40	1.78	2.32	2.90	2.60
CaO	1.69	1.65	2.76	2.78	1.01	0.67	2.16	1.54	1.96	0.99	1.14	1.80	0.47	0.83
Na2O	2.56	1.44	3.05	2.30	1.50	1.33	2.26	4.21	2.48	1.82	2.85	2.14	1.12	1.32
K2O	1.38	2.65	1.53	2.26	2.61	3.97	2.58	2.43	4.53	3.27	2.59	2.13	2.80	4.05
P2O5	0.13	0.11	0.25	0.10	0.03	0.02	0.27	0.31	0.28	0.16	0.05	0.02	0.07	0.15
Cr2O3	0.00	0.01	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.01
NiO	0.00	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00
H2O-	0.29	2.50	1.91	0.38	0.17	0.57	0.39	0.08	0.10	0.25	0.39	0.55	0.33	0.08
LOI	2.71	4.76	3.00	1.71	2.50	4.13	1.56	1.00	1.03	2.14	2.67	2.19	2.27	1.05
TOTAL	99.90	98.44	100.44	100.31	99.97	98.92	100.78	99.33	99.33	99.08	101.25	99.20	100.52	98.66
Zn	68	75	401	98	64	55	103	67	120	63	42	76	167	89
Cu	14	65	48	263	24	23	9	5	5	22	77	33	14	11
Ni	48	57	107	29	31	27	59	62	49	31	28	25	85	59
Co	14	16	16	10	5	4	12	16	7	5	7	6	31	19
Ga	10	25	21	19	16	21	22	24	18	19	21	16	29	22
Mo	<2	<2	<2	<2	<2	4	<2	<2	<2	<2	<2	<2	3	4
Nb	10	13	9	11	9	12	10	15	13	10	9	9	12	10
Zr	175	148	121	175	122	187	142	207	194	160	209	128	100	166
Y	21	26	24	20	20	21	24	31	27	21	21	17	28	25
Sr	278	186	342	206	173	178	189	242	286	194	188	267	93	187
Rb	139	171	77	146	154	204	141	116	228	182	136	149	173	178
U	<5	<5	<5	8	<5	7	11	9	11	12	<5	7	<5	7
Th	14	16	16	8	9	18	19	31	27	15	13	9	9	15
Pb	42	29	97	22	21	36	20	37	47	24	33	39	18	35
Cr	174	208	175	106	75	122	91	119	129	105	137	85	161	227
V	78	106	137	83	105	144	94	105	105	92	133	75	166	98
Ba	502	1118	446	222	754	1028	1258	1571	1930	980	807	491	419	1135
Sc	12	29	27	11	<8	21	13	21	19	21	15	11	33	18
As	<10	<10	11	<10	<10	<10	<10	<10	41	<10	<10	<10	<10	<10
S	80	184	282	388	134	260	166	132	90	181	267	1203	141	106
Sb	<8	<8	<8	<8	<8	<8	<8	<8	8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	11	<8	<8	14	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	6
W	<8	<8	<8	<8	<8	11	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#743	#744	#745	#746	#747	#748	#749	#750	#751	#752	#753	#754	#755	#756
	ET-31	ET-32	ET-33	ET-35	ET-36	ET-38	ET-74	ET-75	ET-78	ET-79	ET-80	ET-82	ET-83	ET-84
SiO2	66.71	61.95	67.52	69.93	69.31	68.70	63.57	66.49	65.53	64.50	62.78	65.63	59.39	66.80
TiO2	0.61	0.68	0.79	0.58	0.57	0.45	0.59	0.55	0.55	0.63	0.68	0.80	0.97	0.74
Al2O3	15.09	17.07	14.39	12.82	12.86	12.28	14.94	14.69	14.36	15.38	16.09	19.59	23.15	16.37
Fe2O3	6.51	8.06	7.01	5.84	5.69	8.37	6.64	6.03	6.19	6.59	0.88	3.35	5.07	5.22
MnO	0.11	0.15	0.06	0.05	0.04	0.06	0.05	0.05	0.06	0.05	0.01	0.08	0.13	0.12
MgO	2.17	2.57	1.98	1.70	1.65	2.47	2.42	2.81	2.38	2.65	0.69	0.76	0.90	1.23
CaO	1.32	1.09	1.37	2.39	2.42	2.56	1.22	1.18	2.53	0.87	0.86	0.36	0.25	0.28
Na2O	1.86	1.42	2.04	2.54	2.68	1.15	0.56	0.57	0.78	0.16	1.04	1.30	1.10	1.51
K2O	3.31	4.50	2.22	1.51	1.45	2.13	3.26	3.42	2.83	3.52	3.02	3.83	3.16	3.15
P2O5	0.15	0.12	0.24	0.03	0.01	0.04	0.04	0.02	0.06	0.05	0.03	0.02	0.01	0.02
Cr2O3	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
H2O-	0.20	0.21	0.23	0.57	0.57	0.82	2.16	0.40	0.76	1.20	1.45	0.47	0.85	0.29
LOI	1.15	1.27	1.02	2.13	2.14	1.03	3.62	3.22	3.25	3.36	10.95	3.17	3.29	3.00
TOTAL	99.19	99.10	98.87	100.09	99.39	100.06	99.07	99.43	99.28	98.96	98.48	99.36	98.28	98.73
Zn	80	99	84	67	64	84	202	45	105	72	20	48	106	58
Cu	26	25	3	22	4	11	11	5	2	5	35	30	29	4
Ni	55	82	48	58	66	57	57	57	50	60	12	23	75	24
Co	15	22	12	14	15	20	13	11	12	15	4	9	16	8
Ga	22	29	19	10	16	17	20	21	18	25	24	31	29	23
Mo	4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Nb	11	10	14	10	8	7	13	12	11	13	11	18	19	14
Zr	158	166	184	95	101	73	134	118	120	122	149	183	207	205
Y	26	27	36	19	22	12	19	25	24	18	20	31	34	25
Sr	216	231	123	55	57	45	57	44	77	33	86	108	93	116
Rb	157	195	132	81	80	122	170	191	146	214	91	141	140	129
U	<5	7	7	<5	<5	<5	5	5	<5	<5	6	5	7	6
Th	13	13	12	11	12	9	12	8	18	17	19	19	21	15
Pb	29	36	10	21	17	6	10	6	13	<5	15	27	22	33
Cr	203	231	134	110	112	86	78	88	99	93	149	117	199	107
V	102	135	114	122	118	150	113	99	97	105	155	112	161	104
Ba	962	1474	659	153	160	508	1160	1224	938	965	3275	930	898	735
Sc	12	15	20	23	18	26	20	20	22	17	19	11	20	23
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	126	122	164	156	204	142	127	124	116	147	1002	171	135	483
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	10	<8	8
Bi	<10	<10	<10	<10	6	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#757	#758	#759	#760	#761	#762	#763	#764	#765	#766	#767	#768	#769	#770
	ET-126	ET-129	ET-131	ET-132	ET-133	ET-134	ET-135	ET-136	ET-50	ET-105	ET-106	ET-107	ET-108	ET-109
SiO2	57.82	62.95	63.99	56.44	58.51	56.12	59.72	62.44	63.01	70.83	57.42	62.36	61.76	60.37
TiO2	0.75	0.64	0.60	0.80	0.80	0.80	0.79	0.77	0.77	0.41	0.72	0.70	0.76	0.64
Al2O3	21.48	15.54	14.78	21.59	21.78	21.60	21.26	19.71	15.72	13.97	14.35	14.55	14.43	14.80
Fe2O3	9.88	8.38	7.29	10.17	9.15	9.57	8.90	7.80	3.10	3.44	10.36	3.23	5.57	4.91
MnO	0.11	0.11	0.08	0.08	0.10	0.07	0.10	0.08	0.04	0.08	0.06	0.05	0.06	0.08
MgO	2.50	2.72	2.67	3.22	2.90	2.82	2.78	2.92	1.83	1.71	1.58	1.62	2.41	3.02
CaO	0.38	0.84	2.19	0.50	0.66	0.37	0.58	0.99	0.61	0.95	0.94	1.86	0.79	0.79
Na2O	0.61	1.05	3.01	1.15	1.16	2.82	0.98	1.34	0.95	3.62	2.15	3.67	2.23	3.30
K2O	3.11	3.82	2.33	2.53	3.08	2.96	2.65	2.52	3.82	1.10	2.05	1.60	2.56	2.25
P2O5	0.02	0.16	0.21	0.07	0.09	0.03	0.05	0.05	0.01	0.05	0.05	0.00	0.01	0.03
Cr2O3	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.01
NiO	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01
H2O-	0.16	0.22	0.34	0.26	0.15	0.27	0.13	0.12	0.36	0.80	1.44	0.61	1.32	1.02
LOI	1.45	2.49	1.76	2.20	1.74	2.31	1.41	1.65	8.50	1.88	7.76	8.83	6.91	8.20
TOTAL	98.27	98.93	99.26	99.02	100.16	99.75	99.36	100.43	98.72	98.84	98.88	99.08	98.82	99.43
Zn	152	85	49	145	154	156	147	157	37	137	78	62	127	133
Cu	<3	2	26	12	14	4	13	33	31	136	76	31	50	29
Ni	65	74	66	80	70	80	66	71	25	46	49	30	67	91
Co	31	21	21	30	26	27	28	26	9	13	6	11	6	16
Ga	33	19	17	33	32	33	31	31	26	10	19	16	19	19
Mo	<2	6	4	5	3	<2	<2	3	<2	<2	<2	<2	<2	<2
Nb	13	9	10	15	15	15	12	12	9	7	8	11	10	10
Zr	116	166	162	114	111	111	114	116	129	81	142	148	133	125
Y	28	23	21	29	24	22	24	27	18	20	24	28	23	28
Sr	61	88	241	76	101	69	98	99	66	153	95	104	54	49
Rb	180	197	141	188	172	187	153	133	157	32	115	93	133	92
U	<5	<5	<5	<5	5	<5	<5	<5	<5	<5	<5	<5	<5	8
Th	12	10	12	14	16	10	11	13	11	11	16	10	12	9
Pb	16	15	9	15	28	13	17	22	17	95	27	24	18	23
Cr	237	260	206	230	215	244	223	197	188	105	225	219	221	163
V	169	116	120	157	158	162	159	151	152	71	150	108	128	132
Ba	464	904	518	496	513	479	622	485	5940	10786	1379	813	1682	1909
Sc	27	21	17	25	26	27	28	25	22	11	28	23	19	21
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	10	<10	<10	<10	<10
S	95	125	149	98	67	90	56	92	1913	1008	3934	3184	196	417
Sb	<8	11	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	11	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	6	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	10	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#771	#772	#773	#774	#775	#776	#777	#778	#779	#780	#781	#782	#783	#784
	ET-110	ET-111	ET-49	ET-112	ET-116	ET-117	ET-44	ET-45	ET-114	WT-24	WT-159	WSIQ-1	WSIQ-2	WSIQ-3
SiO2	64.08	64.43	62.48	52.56	65.82	68.21	47.60	57.90	29.77	97.59	87.07	84.30	87.60	88.59
TiO2	0.58	0.70	0.78	0.43	0.48	0.51	0.44	0.48	0.23	0.01	0.40	0.30	0.28	0.20
Al2O3	14.32	14.01	19.87	11.13	15.30	14.14	10.45	10.01	6.29	0.73	4.81	5.59	4.55	4.41
Fe2O3	4.30	1.08	6.87	4.41	3.41	3.78	3.46	2.48	2.11	0.45	2.70	2.89	1.84	1.66
MnO	0.08	0.00	0.04	0.05	0.03	0.02	0.60	0.29	0.03	0.01	0.05	0.06	0.07	0.04
MgO	3.28	0.35	1.59	5.34	4.97	1.95	7.66	4.89	3.02	0.00	0.13	1.61	1.38	1.31
CaO	1.11	1.50	0.22	7.47	3.36	0.98	5.18	2.47	27.45	0.00	1.60	3.18	2.76	1.65
Na2O	3.69	4.97	1.33	0.59	0.60	0.31	1.28	1.55	0.23	0.00	0.00	0.03	0.00	0.00
K2O	1.41	1.03	3.30	0.22	2.70	2.02	1.06	1.59	0.06	0.03	0.09	0.07	0.04	0.14
P2O5	0.04	0.09	0.02	0.04	0.08	0.04	0.02	0.02	0.01	0.00	0.07	0.10	0.05	0.05
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
NiO	0.01	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.00
H2O-	0.44	0.55	0.25	6.74	0.33	2.21	2.81	1.78	3.62	0.02	0.26	0.26	0.21	0.14
LOI	4.60	9.91	2.93	9.76	1.91	4.65	17.96	15.83	24.74	0.21	1.59	1.52	1.08	1.25
TOTAL	97.94	98.62	99.69	98.74	98.99	98.83	98.53	99.30	97.56	99.06	98.79	99.91	99.86	99.44
Zn	91	10	65	149	169	103	78	33	69	6	14	34	26	25
Cu	42	34	22	18	1	25	20	17	25	<3	21	<3	<3	6
Ni	88	3	32	33	36	54	100	66	18	6	59	17	10	5
Co	13	6	13	6	6	6	4	7	4	4	6	6	7	5
Ga	17	17	31	14	19	19	15	14	10	<3	3	<3	<3	<3
Mo	3	4	<2	<2	<2	<2	11	7	<2	12	9	<2	4	<2
Nb	10	11	14	10	8	11	11	6	6	<2	6	8	6	4
Zr	120	150	204	102	125	139	94	108	60	40	364	262	227	174
Y	27	13	32	24	15	16	8	13	31	5	17	21	13	21
Sr	78	78	97	38	77	59	64	63	41	3	48	28	33	14
Rb	52	9	158	20	141	85	35	81	4	<2	12	6	7	16
U	<5	6	<5	<5	<5	<5	7	8	<5	<5	<5	5	7	<5
Th	11	13	20	13	9	16	12	13	5	<5	9	<5	<5	<5
Pb	25	30	24	12	36	19	14	13	13	<5	<5	9	11	11
Cr	166	134	143	77	130	117	84	69	<14	153	144	116	106	109
V	136	134	125	72	96	95	204	162	37	24	80	36	26	26
Ba	4821	893	1166	141	494	1206	1082	841	136	62	298	108	55	50
Sc	23	14	20	20	21	15	26	21	40	<8	9	<8	<8	<8
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	686	13693	975	381	84	1049	799	432	370	49	175	80	80	100
Sb	<8	<8	8	<8	<8	<8	<8	<8	<8	<8	<8	15	<8	<8
Sn	<8	<8	10	<8	10	16	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	9	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#785	#786	#787	#788	#789	#790	#791	#792	#793	#794	#795	#796	#797	#798
	WSIR-3	LES-2	LES-4	ST-354	ST-355	ST-356	LES-16	ST-339	ST-340A	ST-340B	ST-342A	ST-342B	ST-342C	ST-342D
SiO2	95.62	95.80	91.45	85.68	79.61	68.46	56.99	68.74	49.01	37.45	25.49	24.87	29.85	41.09
TiO2	0.08	0.09	0.12	0.10	0.18	0.59	0.61	0.23	0.61	0.34	0.40	0.29	0.27	0.12
Al2O3	1.04	0.92	1.83	5.00	7.35	17.54	13.49	7.63	17.59	10.29	10.15	8.20	8.46	4.74
Fe2O3	0.38	0.97	1.37	5.79	7.81	4.29	6.64	15.95	18.72	40.58	50.91	51.72	51.62	43.64
MnO	0.00	0.00	0.01	0.00	0.02	0.00	0.07	0.16	0.01	0.03	0.03	0.03	0.02	0.01
MgO	1.10	0.96	1.92	0.71	1.43	1.22	4.64	2.94	1.61	1.27	1.23	1.18	1.11	0.69
CaO	0.00	0.17	0.46	0.52	0.37	0.24	4.60	0.48	1.96	1.71	0.88	1.49	1.78	3.82
Na2O	0.04	0.01	0.02	0.02	0.03	0.56	0.64	0.02	0.20	0.10	0.06	0.04	0.07	0.10
K2O	0.18	0.08	0.10	0.74	1.01	4.15	2.76	0.12	3.21	1.46	1.34	0.82	1.10	0.53
P2O5	0.04	0.05	0.00	0.35	0.31	0.18	0.07	0.28	1.62	1.32	0.64	1.20	1.34	2.69
Cr2O3	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00
NiO	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.03	0.02	0.01	0.00
H2O-	0.10	0.04	0.04	0.03	0.05	0.18	0.27	0.05	0.20	0.16	0.10	-0.03	0.17	0.10
LOI	0.49	0.89	1.51	1.51	2.22	3.24	9.40	3.96	5.55	5.41	8.27	9.16	3.94	2.59
TOTAL	99.07	99.99	98.83	100.45	100.39	100.67	100.18	100.56	100.30	100.14	99.53	98.99	99.74	100.12
Zn	<3	6	12	17	37	31	72	55	39	35	38	43	30	18
Cu	<3	<3	5	<3	18	<3	3	14	15	20	33	35	34	30
Ni	<3	8	10	11	22	16	56	21	53	35	145	195	38	29
Co	5	5	6	5	7	4	12	16	<3	<3	283	530	<3	<3
Ga	<3	2	<3	6	8	21	17	5	26	18	19	15	18	13
Mo	<2	11	6	6	3	2	2	7	10	19	48	27	21	17
Nb	<2	<2	2	4	9	16	11	9	17	9	12	10	10	6
Zr	40	68	88	68	121	193	121	152	230	159	181	121	167	72
Y	7	10	13	10	18	22	24	17	53	49	50	49	64	34
Sr	10	6	3	17	20	43	64	17	60	59	69	66	80	65
Rb	13	4	6	38	45	164	164	8	128	62	53	37	47	21
U	5	<5	<5	<5	<5	5	7	<5	20	27	28	21	26	12
Th	<5	<5	<5	<5	6	13	<5	<5	9	9	17	<5	<5	<5
Pb	6	<5	<5	9	9	10	10	8	12	16	35	45	32	27
Cr	156	135	139	101	106	112	84	106	188	140	153	130	151	82
V	19	38	46	52	85	99	93	134	141	438	329	274	418	319
Ba	83	20	<16	504	256	1218	762	63	1650	840	1088	635	765	306
Sc	8	<8	8	<8	<8	<8	19	10	25	20	12	15	22	15
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	<50	910	339	852	1727	360	422	1725	299	258	26071	46018	2055	545
Sb	<8	<8	<8	<8	<8	8	<8	<8	<8	10	8	34	22	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	12	<8	<8	14
Bi	8	<10	<10	<10	<10	<10	<10	<10	<10	<10	6	<10	<10	6
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	9	<8
B	22	n.d.	n.d.	27	n.d.	n.d.	n.d.	n.d.	n.d.	7	n.d.	n.d.	n.d.	n.d.

	#799	#800	#801	#802	#803	#804	#805	#806	#807	#808	#809	#810	#811	#812
	ST-342E	ST-343	ST-345	ST-346	ST-347	ST-348	ST-350	ST-351A	ST-351B	ST-352A	ST-352B	ST-352C	ST-353	ST-353B
SiO2	21.28	14.86	14.70	19.08	17.65	26.79	21.75	24.57	22.00	27.42	37.41	39.36	43.30	54.70
TiO2	0.20	0.19	0.25	0.17	0.17	0.18	0.25	0.25	0.35	0.23	0.33	0.28	0.29	0.71
Al2O3	6.51	6.00	6.84	5.70	5.42	5.65	7.92	7.48	9.34	7.41	9.79	7.69	10.56	19.89
Fe2O3	64.93	72.71	71.47	69.04	69.86	60.27	59.96	59.66	49.41	55.43	39.83	40.72	35.32	11.35
MnO	0.03	0.01	0.00	0.02	0.02	0.02	0.02	0.01	0.09	0.01	0.03	0.02	0.02	0.00
MgO	0.72	0.61	0.69	0.72	0.68	0.71	0.91	0.68	1.66	0.91	1.30	1.03	1.20	1.28
CaO	1.19	1.44	1.33	1.47	1.86	1.32	1.52	1.10	2.62	1.31	2.34	2.91	0.67	1.70
Na2O	0.02	0.01	0.02	0.00	0.00	0.02	0.07	0.02	0.08	0.03	0.07	0.08	0.04	0.37
K2O	1.14	1.14	1.18	0.95	0.89	0.86	1.39	1.51	1.48	1.13	1.20	1.05	1.73	4.21
P2O5	0.94	0.94	1.03	1.04	1.16	0.94	0.99	0.80	1.08	0.93	1.75	2.12	0.54	1.04
Cr2O3	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.02	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01
H2O-	0.15	0.08	0.13	0.09	0.14	0.11	0.14	0.16	0.19	0.20	0.18	0.18	0.20	0.39
LOI	2.64	2.01	2.23	2.35	2.16	2.79	4.06	3.34	10.25	3.57	5.30	4.14	5.42	4.12
TOTAL	99.77	100.01	99.89	100.63	100.02	99.67	98.99	99.59	98.55	98.59	99.54	99.59	99.29	99.77
Zn	16	17	18	13	13	14	23	14	32	24	39	27	32	33
Cu	39	50	41	40	33	38	38	35	27	31	26	39	35	13
Ni	27	16	31	32	22	40	27	40	50	41	57	35	43	44
Co	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	5
Ga	12	21	22	18	12	16	20	18	20	17	19	12	21	27
Mo	30	30	30	36	28	28	31	27	16	18	18	19	14	146
Nb	11	10	8	8	12	9	12	10	14	14	7	9	10	16
Zr	174	162	172	149	143	128	181	188	134	151	165	196	253	195
Y	80	91	96	72	72	53	83	94	74	55	43	40	53	39
Sr	71	89	78	74	81	57	80	67	86	61	102	74	41	81
Rb	47	48	49	37	34	32	59	58	77	57	50	43	73	168
U	34	38	18	22	28	18	25	24	21	21	14	8	15	17
Th	18	25	6	19	21	7	24	14	6	21	9	<5	10	16
Pb	45	34	38	40	41	34	35	43	25	35	24	26	19	19
Cr	194	175	178	147	162	123	162	199	160	148	119	119	172	131
V	717	852	798	713	741	570	699	743	401	519	257	316	411	119
Ba	740	747	712	599	634	525	956	1073	966	1987	4588	2224	1362	1770
Sc	17	20	18	19	13	12	22	22	16	21	13	16	16	11
As	30	17	18	37	19	8	<10	22	<10	<10	<10	<10	<10	<10
S	436	280	266	368	406	454	395	1004	372	1140	1002	639	430	434
Sb	58	50	42	33	10	<8	28	20	30	8	<8	<8	14	<8
Sn	<8	<8	<8	<8	9	11	<8	<8	<8	<8	<8	8	<8	<8
Bi	7	<10	<10	<10	<10	<10	<10	<10	<10	<10	8	<10	<10	<10
W	8	10	17	8	9	8	16	8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	157

	#813	#814	#815	#816	#817	#818	#819	#820	#821	#822	#823	#824	#825	#826
	ST-353C	WT-156	UV-59	UV-60	WT-17	WT-19	UVM-19	UVM-21	UVM-311	UVM-321	UVM-322	ET-306	ET-308	ET-310
SiO2	58.64	82.73	79.94	71.70	60.87	65.26	63.06	58.40	49.91	53.81	54.40	60.43	63.24	60.31
TiO2	0.65	0.19	0.50	0.57	0.71	0.87	0.74	1.11	1.30	1.17	1.20	0.80	0.75	0.76
Al2O3	18.28	5.42	12.40	15.24	18.58	16.23	17.43	25.19	27.45	26.23	26.24	19.04	18.09	18.62
Fe2O3	10.99	5.01	1.09	2.21	4.80	4.46	8.73	2.23	5.57	4.07	3.59	6.34	5.06	6.52
MnO	0.01	0.06	0.01	0.01	0.06	0.02	0.00	0.01	0.00	0.00	0.00	0.06	0.05	0.04
MgO	1.22	1.03	2.77	2.33	1.76	1.33	0.55	1.15	1.34	1.20	1.24	2.50	2.03	2.35
CaO	1.25	3.42	0.33	0.16	0.68	0.81	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
Na2O	0.34	0.03	0.56	0.35	0.75	1.63	0.04	0.08	0.07	0.09	0.07	0.13	0.12	0.22
K2O	3.92	0.09	0.18	2.07	4.53	4.47	3.49	7.89	7.20	6.22	6.00	6.08	5.44	5.77
P2O5	0.95	0.05	0.08	0.09	0.02	0.13	0.13	0.07	0.02	0.05	0.06	0.06	0.06	0.05
Cr2O3	0.00	0.00	0.00	0.00	0.05	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.01
H2O-	0.37	0.12	0.11	0.49	1.88	1.00	1.53	0.60	1.08	1.23	1.59	0.29	0.29	0.54
LOI	3.78	1.36	1.77	3.31	4.43	3.32	4.45	3.67	5.21	5.11	5.15	4.02	4.05	3.53
TOTAL	100.41	99.53	99.75	98.54	99.13	99.57	100.16	100.41	99.16	99.19	99.54	99.76	99.19	98.72
Zn	33	37	7	12	40	32	79	53	75	78	74	55	54	92
Cu	20	<3	4	9	10	35	44	9	14	14	14	18	13	33
Ni	50	32	57	85	66	42	20	26	28	27	24	27	14	41
Co	7	6	11	16	18	8	<3	7	<3	7	7	5	7	9
Ga	23	5	13	21	27	22	26	38	40	37	32	27	29	27
Mo	74	6	5	<2	<2	3	2	<2	<2	<2	<2	<2	3	<2
Nb	18	6	9	11	12	13	15	18	26	19	16	13	11	12
Zr	202	115	116	141	172	225	467	312	341	322	308	247	378	211
Y	36	17	15	23	33	28	41	43	52	56	53	30	24	34
Sr	76	30	25	19	92	127	102	62	64	191	165	24	37	22
Rb	152	3	9	105	162	153	111	249	217	194	198	281	310	380
U	17	<5	5	12	<5	<5	10	13	11	9	6	6	6	6
Th	16	<5	10	17	10	14	16	24	24	26	25	16	16	17
Pb	12	<5	7	<5	27	20	22	24	30	47	48	<5	<5	5
Cr	119	100	178	134	383	229	217	252	298	260	258	190	147	190
V	105	42	173	249	108	146	119	180	179	159	162	112	110	129
Ba	1630	111	161	734	1432	977	399	804	918	920	841	1102	1039	1238
Sc	19	10	13	16	15	19	11	17	27	29	31	17	24	22
As	<10	<10	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	314	113	203	233	341	2659	70	<50	157	165	138	182	141	168
Sb	<8	<8	<8	<8	<8	<8	12	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	20	25	<8	<8	<8	9	<8	<8	<8	<8	9	8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	8	<10	<10	<10
W	<8	<8	<8	<8	<8	11	8	9	<8	<8	<8	<8	<8	<8
B	36	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	67	10	24

	#827	#828	#829	#830	#831	#832	#833	#834	#835	#836	#837	#838	#839	#840
	ET-314	ET-315	VM-2	VM-3	VM-4	VM-5	VM-6	VM-7	VM-8	VM-9	VM-10	VM-1	DMG-1	DMG-2
SiO2	53.68	64.91	67.42	56.46	63.35	77.61	60.10	49.95	71.15	49.95	60.19	62.30	95.59	96.54
TiO2	0.92	0.56	0.59	0.81	0.74	0.35	0.69	0.89	0.53	1.05	0.71	0.75	0.06	0.02
Al203	22.34	15.63	15.34	20.44	17.34	10.15	17.79	23.33	18.20	32.19	25.09	16.43	1.50	1.52
Fe203	9.65	6.00	6.12	7.61	6.06	3.27	7.52	10.58	1.03	0.98	1.02	7.33	0.48	0.59
MnO	0.06	0.00	0.04	0.07	0.05	0.04	0.04	0.02	0.00	0.00	0.00	0.07	0.00	0.00
MgO	1.35	0.58	2.45	3.54	3.16	1.25	3.29	1.48	0.67	0.88	0.71	3.59	0.05	0.02
CaO	0.00	0.00	0.31	0.21	0.57	0.50	0.46	0.00	0.00	0.00	0.00	0.64	0.00	0.00
Na20	0.27	0.13	0.87	0.27	0.53	1.68	0.59	0.12	0.04	0.10	0.06	0.56	0.04	0.05
K20	5.66	2.66	3.73	5.01	4.66	2.34	4.02	5.89	2.10	5.14	2.90	5.78	0.36	0.42
P205	0.01	0.01	0.10	0.10	0.10	0.04	0.09	0.14	0.06	0.01	0.01	0.10	0.00	0.00
Cr203	0.07	0.03	0.00	0.00	0.02	0.00	0.00	0.04	0.01	0.00	0.00	0.02	0.00	0.01
NiO	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.00
H2O-	0.39	4.35	0.33	0.39	0.16	0.10	0.37	0.50	0.46	0.59	0.51	0.08	0.05	0.05
LOI	4.87	4.13	2.80	4.26	3.10	1.48	3.91	5.52	5.56	8.27	7.54	1.72	0.35	0.63
TOTAL	99.28	99.00	100.10	99.17	99.85	98.81	98.87	98.47	99.81	99.17	98.74	99.38	98.48	99.85
Zn	59	11	75	75	74	30	82	56	16	19	15	87	7	9
Cu	80	22	17	27	17	19	25	23	14	14	22	9	<3	<3
Ni	83	40	30	38	59	19	34	57	22	21	45	41	<3	3
Co	24	7	12	21	10	3	20	29	17	11	9	11	3	5
Ga	36	22	20	28	22	9	29	29	15	24	28	25	<3	3
Mo	<2	4	<2	<2	<2	3	<2	<2	4	2	7	<2	9	8
Nb	17	11	11	11	10	8	13	14	10	17	12	12	2	3
Zr	184	214	198	177	201	309	171	215	517	701	685	209	105	133
Y	39	23	18	29	22	16	36	35	27	32	31	30	6	2
Sr	35	17	116	103	109	139	126	67	29	44	33	103	4	9
Rb	208	59	167	162	170	97	155	258	92	211	118	252	20	39
U	13	6	<5	16	<5	4	15	13	7	18	<5	19	<5	5
Th	21	19	9	21	12	10	27	19	20	25	22	7	<5	<5
Pb	10	5	11	11	19	11	13	6	26	37	19	14	7	<5
Cr	918	556	126	196	162	106	147	439	149	216	148	149	199	180
V	186	120	74	129	108	37	115	193	80	142	89	102	28	29
Ba	1698	1183	720	767	537	609	1237	1075	466	774	577	584	47	243
Sc	27	17	11	19	17	9	14	<8	12	<8	15	17	<8	<8
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	778	137	2300	100	790	4030	260	60	50	<50	80	3160	<50	50
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	9	12	8	<8	<8	<8	<8
Bi	<10	<10	<10	11	7	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	225	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#841	#842	#843	#844	#845	#846	#847	#848	#849	#850	#851	#852	#853	#854
	DMG-3	DMG-4	DMG-5	DMG-6	DMG-7	ET-162	ET-2	ET-3	ET-20	ET-22	ET-23	ET-29	ET-119	ET-127
SiO2	93.00	97.37	96.42	94.62	96.10	92.58	98.28	92.29	95.05	94.00	89.92	98.77	98.31	98.02
TiO2	0.34	0.03	0.04	0.08	0.08	0.13	0.02	0.07	0.06	0.04	0.07	0.04	0.02	0.03
Al2O3	3.60	1.24	1.20	2.15	1.94	3.01	0.78	3.93	2.11	3.08	4.84	0.72	0.54	0.37
Fe2O3	0.89	0.53	0.48	0.46	0.61	1.14	0.37	0.45	0.49	0.51	0.85	0.41	0.54	0.56
MnO	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
MgO	0.00	0.04	0.00	0.00	0.05	1.27	0.00	0.00	0.00	0.12	0.08	0.00	0.00	0.00
CaO	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.51	0.00	0.39	0.13	0.00	0.07	0.02
Na2O	0.04	0.02	0.02	0.02	0.04	0.04	0.04	0.72	0.14	0.75	1.12	0.04	0.06	0.01
K2O	1.03	0.27	0.37	0.68	0.58	0.73	0.51	0.83	0.98	0.30	2.10	0.26	0.07	0.03
P2O5	0.00	0.02	0.01	0.06	0.01	0.10	0.00	0.00	0.00	0.02	0.06	0.01	0.02	0.02
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.02	0.00
NiO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H2O-	0.06	0.07	0.04	0.10	0.07	0.04	0.01	0.07	0.04	0.06	0.09	0.02	0.04	0.03
LOI	0.70	0.44	0.35	0.56	0.49	0.76	0.13	0.69	0.46	0.56	0.44	0.25	0.13	0.12
TOTAL	99.66	100.03	98.93	98.73	99.97	99.84	100.14	99.58	99.33	99.85	99.70	100.52	99.82	99.21
Zn	10	5	7	17	7	4	5	8	8	6	7	5	7	5
Cu	<3	<3	<3	3	3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Ni	5	<3	<3	<3	4	<3	6	12	8	38	4	27	3	4
Co	<3	4	3	4	<3	7	3	3	7	5	6	5	4	5
Ga	4	<3	<3	4	<3	<3	<3	3	<3	4	3	<3	<3	<3
Mo	9	7	8	8	8	4	10	11	3	7	7	9	12	14
Nb	4	3	2	2	3	<2	<2	<2	3	<2	<2	<2	<2	<2
Zr	130	80	92	127	122	59	62	57	52	62	87	77	44	60
Y	7	2	<2	15	6	4	3	3	8	5	7	<2	5	3
Sr	15	12	4	19	8	7	18	54	24	34	83	8	9	6
Rb	38	13	14	26	25	30	11	23	31	17	53	7	4	<2
U	<5	<5	<5	<5	<5	6	<5	<5	<5	<5	<5	<5	<5	<5
Th	<5	<5	<5	<5	6	<5	<5	<5	<5	<5	6	<5	<5	<5
Pb	<5	<5	5	9	5	6	<5	<5	<5	<5	9	<5	<5	<5
Cr	196	195	198	189	185	172	148	166	143	121	114	144	167	199
V	29	24	15	23	22	34	20	24	<14	<14	20	20	17	<14
Ba	223	70	174	722	147	89	216	365	343	38	645	107	62	43
Sc	<8	<8	<8	<8	<8	<8	16	5	9	9	4	<8	<8	<8
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	<50	<50	<50	50	<50	<50	67	69	68	76	92	52	<50	<50
Sb	<8	<8	<8	<8	<8	8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	7	<10	7	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#855	#856	#857	#858	#859	#860	#861	#862	#863	#864	#865	#866	#867	#868
	ET-128	ET-138	ET-160	ET-161	WT-122	WT-18	WT-20	WT-116	WT-162	UV-22	UV-69	UV-70	UV-205	UV-300
SiO2	98.74	93.71	97.18	93.23	97.85	88.02	98.62	99.05	98.00	91.93	78.84	92.70	96.71	94.76
TiO2	0.00	0.05	0.01	0.14	0.04	0.30	0.04	0.01	0.02	0.14	0.76	0.18	0.07	0.06
Al2O3	0.00	3.09	0.65	3.96	0.85	3.23	0.79	0.42	0.38	2.79	5.92	3.24	1.59	1.63
Fe2O3	0.41	0.58	0.49	1.10	0.61	4.43	0.57	0.54	0.68	2.99	10.25	1.98	1.14	1.70
MnO	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.02	0.01	0.00	0.00	0.02	0.02	0.00
MgO	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.16	0.06	0.00	0.00
CaO	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.07	0.08	0.00	0.00
Na2O	0.00	0.03	0.01	0.04	0.02	0.16	0.00	0.01	0.00	0.01	0.12	0.13	0.00	0.00
K2O	0.00	1.52	0.13	0.53	0.15	0.32	0.05	0.03	0.00	0.59	1.16	0.72	0.18	0.21
P2O5	0.00	0.00	0.00	0.02	0.03	0.02	0.00	0.06	0.05	0.05	0.11	0.06	0.00	0.00
Cr2O3	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.00
H2O-	0.04	0.05	0.03	0.02	0.03	0.32	0.02	0.05	0.03	0.18	0.36	0.15	0.09	0.07
LOI	0.04	0.35	0.17	0.42	0.15	1.82	0.23	0.18	0.20	0.74	1.63	0.68	0.47	0.56
TOTAL	99.23	99.39	98.67	99.46	99.77	98.71	100.35	100.38	99.40	99.42	99.39	100.00	100.28	98.99
Zn	4	8	7	6	6	8	5	13	6	52	29	9	18	20
Cu	<3	<3	<3	<3	<3	53	<3	<3	<3	42	39	4	4	10
Ni	3	5	<3	<3	<3	12	3	15	<3	5	34	11	8	8
Co	4	3	5	3	<3	4	8	3	<3	4	<3	<3	4	<3
Ga	<3	<3	<3	3	<3	5	<3	<3	<3	4	<3	<3	<3	<3
Mo	14	12	11	9	8	9	13	8	11	<2	2	11	<2	<2
Nb	<2	<2	<2	3	3	8	<2	2	<2	5	25	5	3	5
Zr	25	49	39	177	55	656	203	34	55	78	116	225	47	70
Y	4	4	3	6	5	15	6	3	5	9	19	19	5	11
Sr	4	11	7	5	10	29	5	4	5	11	28	10	5	9
Rb	<2	43	6	16	<2	17	<2	4	<2	23	38	24	11	7
U	<5	<5	<5	<5	<5	<5	<5	<5	<5	6	<5	<5	<5	<5
Th	5	<5	<5	<5	<5	5	<5	<5	<5	<5	6	8	<5	<5
Pb	<5	<5	9	<5	<5	<5	<5	13	<5	16	10	<5	<5	22
Cr	177	161	149	94	114	98	187	163	161	326	261	227	46	130
V	16	28	<14	32	26	58	28	24	14	24	75	42	11	<14
Ba	<16	328	61	104	69	129	45	54	26	51	452	218	76	<16
Sc	<8	<8	17	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	9
As	<10	<10	<10	<10	<10	10	<10	<10	<10	<10	<10	<10	<10	<10
S	<50	<50	<50	<50	<50	1008	94	122	<50	<50	234	370	<50	<50
Sb	8	<8	<8	<8	9	<8	<8	<8	<8	<8	10	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	5	<10	<10	<10	8
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	10	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#869	#870	#871	#872	#873	#874	#875	#876	#877	#878	#879	#880	#881	#882
	P-15	P-16	P-17	P-18	P-19	P-20	P-21	P-22	P-23	P-24	P-25	P-26	P-27	ET-305
SiO2	98.66	98.49	99.71	98.68	96.45	99.30	97.56	99.24	96.77	99.03	98.92	98.19	99.98	81.18
TiO2	0.15	0.17	0.15	0.16	0.18	0.16	0.18	0.16	0.24	0.14	0.16	0.14	0.16	0.35
Al2O3	0.24	0.19	0.00	0.24	0.63	0.25	1.62	0.00	0.81	0.00	0.19	0.00	0.00	9.21
Fe2O3	0.47	0.36	0.38	0.61	0.85	0.45	0.58	0.25	0.88	0.48	0.32	0.36	0.35	2.07
MnO	0.01	0.00	0.02	0.02	0.01	0.02	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.01
MgO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.74
CaO	0.01	0.02	0.00	0.02	0.01	0.03	0.02	0.01	0.00	0.01	0.02	0.00	0.00	0.01
Na2O	0.00	0.00	0.01	0.01	0.02	0.00	0.01	0.03	0.05	0.01	0.01	0.01	0.00	0.31
K2O	0.06	0.09	0.03	0.06	0.05	0.02	0.26	0.04	0.17	0.03	0.10	0.01	0.00	1.90
P2O5	0.01	0.01	0.00	0.05	0.03	0.03	0.01	0.01	0.01	0.06	0.01	0.03	0.02	0.09
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H2O-	0.02	0.01	0.02	0.06	0.09	0.01	0.04	0.02	0.01	0.03	0.02	0.02	0.02	0.27
LOI	0.20	0.12	0.05	0.20	0.42	0.14	0.33	0.06	0.23	0.08	0.12	0.04	0.14	2.53
TOTAL	99.83	99.46	100.37	100.11	98.74	100.41	100.61	99.83	99.18	99.88	99.88	98.81	100.69	99.67
Zn	8	7	6	7	4	3	4	5	7	4	6	6	5	22
Cu	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	9
Ni	4	4	3	7	6	<3	3	3	6	<3	6	4	4	17
Co	<3	3	3	4	5	<3	3	<3	3	4	5	3	<3	5
Ga	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	6
Mo	7	7	11	8	8	5	9	8	9	6	9	10	8	<2
Nb	3	<2	2	1	3	4	4	2	3	2	<2	<2	3	6
Zr	37	46	31	39	85	65	58	30	126	36	55	29	27	261
Y	7	5	4	7	7	7	9	6	10	7	4	7	7	17
Sr	5	4	3	3	6	6	6	5	9	4	4	2	2	42
Rb	<2	<2	<2	<2	2	<2	10	2	7	<2	2	<2	<2	75
U	<5	<5	<5	6	<5	<5	5	<5	<5	<5	<5	<5	<5	8
Th	<5	<5	<5	3	<5	<5	<5	<5	<5	2	<5	<5	<5	<5
Pb	16	16	8	15	11	13	5	<5	13	8	15	<5	<5	15
Cr	184	205	210	249	214	191	165	178	200	167	170	191	205	120
V	20	18	15	19	25	20	22	9	34	22	<14	19	18	42
Ba	30	24	24	20	36	30	38	29	62	23	34	20	28	866
Sc	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	3	<8	<8	<8
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	90	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Sb	<8	<8	<8	<8	<8	<8	9	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	12
Bi	<10	<10	<10	<10	<10	<10	<10	6	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	11	n.d.	8	n.d.	5	n.d.	6	n.d.	22	n.d.	2	n.d.	1	n.d.

	#883	#884	#885	#886	#887	#888	#889	#890	#891	#892	#893	#894	#895	#896
	ET-309	ET-319	ET-303	ET-304	ET-307	ET-311	ET-312	ET-313	ET-316	ET-317	ET-318	VM-AN	UVS-1	UVS-2
SiO2	81.78	88.39	76.48	84.18	81.56	83.98	83.29	85.49	94.13	97.66	83.30	75.69	44.41	27.33
TiO2	0.39	0.12	0.49	0.34	0.35	0.40	0.30	0.42	0.03	0.02	0.10	0.55	2.09	2.29
Al2O3	9.15	4.10	13.17	7.54	9.48	7.92	8.65	6.75	3.73	1.14	8.76	14.84	29.64	21.92
Fe2O3	1.49	1.45	2.42	2.04	1.23	2.72	1.50	2.58	0.51	0.36	0.93	1.46	5.31	36.70
MnO	0.03	0.04	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.01
MgO	1.63	1.57	1.01	0.49	0.64	0.74	0.37	0.60	0.50	0.50	1.16	0.51	0.51	0.16
CaO	0.02	0.26	0.21	0.00	0.00	0.05	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.00
Na2O	0.13	0.04	2.74	0.08	0.06	0.07	0.06	0.24	0.01	0.00	0.06	0.09	0.17	0.69
K2O	2.53	1.14	1.87	1.47	3.30	1.18	1.36	2.20	0.28	0.37	2.73	2.19	5.69	1.72
P2O5	0.08	0.07	0.06	0.00	0.00	0.07	0.02	0.10	0.02	0.01	0.00	0.03	0.09	0.18
Cr2O3	0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.04
NiO	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
H2O-	0.33	0.21	0.23	0.29	0.17	0.44	0.38	0.03	0.12	0.05	0.42	0.32	6.00	4.27
LOI	2.26	1.43	1.43	2.29	2.27	2.45	2.87	1.89	1.10	0.24	2.31	4.42	6.42	5.75
TOTAL	99.82	98.82	100.14	98.72	99.06	100.05	98.80	100.30	100.45	100.36	99.80	100.10	100.34	101.07
Zn	21	11	23	11	18	12	7	10	6	4	22	7	73	205
Cu	7	6	6	5	<3	58	9	9	<3	<3	<3	6	22	34
Ni	10	5	9	9	14	15	17	11	15	<3	21	7	76	35
Co	6	12	6	3	<3	<3	13	6	6	4	6	18	6	8
Ga	6	<3	9	9	6	6	7	6	<3	<3	9	9	38	37
Mo	<2	6	6	5	3	7	5	3	6	7	5	6	<2	3
Nb	9	5	6	6	7	7	6	8	<2	<2	4	9	8	9
Zr	273	187	405	435	290	440	333	733	32	43	137	650	131	155
Y	16	4	26	15	13	9	16	23	<2	4	19	25	48	28
Sr	74	23	203	33	92	29	23	38	7	12	38	45	122	153
Rb	79	22	43	60	94	34	33	56	11	7	63	85	187	73
U	5	<5	<5	5	<5	7	8	<5	<5	<5	<5	11	8	21
Th	5	7	9	13	5	10	<5	11	<5	<5	9	14	<5	<5
Pb	18	9	7	<5	22	4	18	10	<5	<5	11	20	231	229
Cr	105	196	84	80	<14	77	73	91	121	94	77	149	354	828
V	31	18	32	48	35	36	19	45	25	19	27	65	332	444
Ba	1039	385	1011	665	988	458	514	707	102	125	992	598	342	221
Sc	9	<8	<8	9	14	<8	10	5	<8	8	<8	<8	67	64
As	<10	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	21
S	<50	60	111	117	115	133	134	187	<50	<50	159	<50	50	150
Sb	<8	11	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	31
Sn	<8	<8	<8	<8	<8	<8	<8	9	<8	<8	<8	<8	<8	<8
Bi	6	<10	<10	<10	<10	<10	<10	<10	<10	7	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	19	n.d.	n.d.	n.d.	15	n.d.	5	n.d.	n.d.	n.d.	n.d.	n.d.

	#897	#898	#899	#900	#901	#902	#903	#904	#905	#906	#907	#908	#909	#910
	UVS-3	UVS-4	UVS-5	UVS-6	UVS-7	UVS-11	UVS-X1	UVS-X2	UVS-25	UVS-13	UVS-14	UVS-21	UVS-22	UVS-24
SiO2	40.43	32.60	32.04	39.41	22.82	38.77	56.84	66.12	68.73	33.89	32.63	24.58	39.40	53.96
TiO2	2.32	3.51	2.21	1.76	2.55	2.07	1.24	1.16	0.48	2.02	1.98	2.35	2.55	1.70
Al203	32.02	38.42	31.38	24.76	17.76	30.22	16.84	19.32	13.64	27.53	26.32	20.85	31.32	21.63
Fe203	11.06	8.93	12.76	18.11	45.08	16.07	11.28	3.77	9.66	22.15	24.66	37.31	13.41	13.73
MnO	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.03	0.03	0.00	0.01	0.00
MgO	0.32	0.16	0.12	0.23	0.36	0.10	0.00	0.02	0.00	0.02	0.31	0.17	0.09	0.01
CaO	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na2O	0.62	0.24	0.29	0.36	0.29	0.50	0.27	0.10	0.00	0.58	0.67	0.63	0.51	0.45
K2O	1.67	0.47	0.65	2.20	1.97	1.33	0.72	1.05	0.56	0.84	2.16	1.39	0.63	0.65
P205	0.15	0.11	0.04	0.04	0.61	0.03	0.12	0.07	0.20	0.20	0.37	0.94	0.19	0.04
Cr203	0.00	0.03	0.02	0.03	0.04	0.00	0.00	0.00	0.00	0.04	0.03	0.06	0.00	0.00
NiO	0.02	0.01	0.01	0.01	0.01	0.03	0.01	0.01	0.01	0.02	0.03	0.02	0.02	0.02
H20-	3.73	11.37	13.32	6.33	0.62	1.40	6.36	1.49	0.62	1.64	1.68	1.71	1.33	1.41
LOI	8.32	5.14	7.30	7.42	8.64	9.21	5.70	6.37	5.51	9.30	8.83	9.32	10.08	6.05
TOTAL	100.67	100.99	100.14	100.71	100.76	99.73	99.39	99.48	99.41	98.26	99.70	99.33	99.54	99.65
Zn	117	47	75	222	1285	198	167	107	292	432	472	1082	766	83
Cu	67	65	70	99	105	60	59	30	54	66	132	224	56	50
Ni	110	61	100	57	74	103	55	20	62	129	111	96	77	73
Co	5	3	7	5	6	<3	<3	<3	<3	<3	<3	<3	<3	<3
Ga	48	51	42	24	30	37	17	21	17	36	37	41	43	26
Mo	<2	<2	<2	<2	3	<2	2	<2	<2	<2	2	3	<2	<2
Nb	9	13	8	8	11	8	10	6	5	8	8	9	9	6
Zr	148	243	171	146	172	142	255	119	67	139	142	173	157	160
Y	30	29	32	20	32	40	33	31	22	34	44	76	47	32
Sr	152	79	34	101	129	101	56	23	33	122	94	71	117	79
Rb	70	20	27	85	80	46	37	45	24	34	78	52	28	25
U	6	9	11	8	31	8	10	7	<5	13	18	29	12	<5
Th	<5	<5	<5	8	<5	<5	6	6	<5	<5	<5	<5	<5	<5
Pb	67	110	34	133	314	449	340	428	386	375	765	1168	206	111
Cr	449	653	584	665	797	402	413	209	215	738	764	1084	445	435
V	306	370	361	298	359	437	332	317	416	375	451	1240	286	357
Ba	325	113	76	230	166	239	295	182	235	278	146	192	231	407
Sc	77	30	52	42	59	64	55	52	70	87	78	116	77	70
As	<10	<10	<10	<10	13	12	<10	13	20	17	19	66	<10	<10
S	160	990	130	170	130	237	235	177	257	283	264	291	199	261
Sb	21	15	<8	<8	<8	8	8	<8	<8	8	20	45	23	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	13	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	10	<8	<8	<8	<8	12	15	11	10	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#911	#912	#913	#914	#915	#916	#917	#918	#919	#920	#921	#922	#923	#924
	UVS-31	UVS-32	UVS-33	UVS-34	UVS-41	UVS-42	UVS-42.5	UVS-44	UVS-51	UVS-52	UVS-101	UVS-102	UVS-103	UVS-111
SiO2	61.16	38.56	51.76	49.78	67.44	70.69	55.60	76.12	34.05	40.81	39.63	43.17	41.09	34.47
TiO2	1.20	2.16	1.48	1.87	0.82	0.67	2.39	0.50	1.99	2.09	3.86	3.24	1.70	1.94
Al2O3	16.46	30.22	21.79	23.40	15.47	13.42	27.23	11.49	27.70	32.15	37.01	38.19	18.00	24.18
Fe2O3	10.76	11.83	11.24	13.12	7.16	6.32	4.74	4.97	12.14	7.11	10.35	10.85	27.91	25.30
MnO	0.02	0.01	0.02	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.00	0.01	0.01	0.00
MgO	0.05	0.42	0.22	0.20	0.00	0.00	0.03	0.00	0.18	0.19	0.05	0.48	0.11	0.24
CaO	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Na2O	0.11	0.21	0.23	0.31	0.04	0.10	0.47	0.00	0.16	0.35	0.27	0.06	0.08	0.12
K2O	1.16	3.60	2.29	2.66	0.60	0.56	3.21	0.26	0.92	1.73	1.68	0.08	1.97	5.26
P2O5	0.15	0.00	0.00	0.14	0.00	0.00	0.05	0.02	0.08	0.02	0.08	0.01	0.22	0.21
Cr2O3	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.03	0.03	0.04	0.00
NiO	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.02
H2O-	2.98	3.88	4.00	1.56	2.31	3.40	0.59	1.82	12.94	4.61	0.90	0.72	2.18	1.49
LOI	5.77	7.97	6.36	6.59	5.70	4.54	4.69	4.25	9.30	9.75	5.40	2.91	6.59	5.89
TOTAL	99.84	98.87	99.40	99.67	99.55	99.71	99.01	99.45	99.51	98.83	99.27	99.76	99.91	99.12
Zn	190	474	234	287	96	75	70	41	1219	365	883	75	686	400
Cu	52	49	58	60	32	39	28	35	74	44	36	26	114	55
Ni	40	61	65	59	33	31	31	33	91	32	54	33	52	48
Co	2	4	<3	<3	<3	<3	<3	<3	19	<3	<3	<3	<3	<3
Ga	20	38	30	28	15	11	23	8	42	41	40	44	16	31
Mo	<2	3	<2	2	<2	<2	<2	2	<2	<2	3	<2	<2	6
Nb	10	9	7	8	8	6	10	9	9	8	15	12	9	8
Zr	281	136	120	158	211	176	186	256	143	132	252	202	176	132
Y	33	44	45	38	26	24	47	22	43	36	52	26	29	35
Sr	70	157	109	158	22	34	193	15	87	139	86	34	80	122
Rb	46	129	87	82	30	28	88	19	36	60	63	4	74	186
U	<5	12	6	14	8	<5	15	<5	9	9	71	16	15	13
Th	8	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	8	<5
Pb	147	209	116	393	50	61	77	50	79	105	279	40	1319	754
Cr	569	555	377	677	316	272	527	263	459	436	707	639	731	457
V	228	430	369	370	204	170	245	149	364	356	409	313	666	585
Ba	171	290	308	515	125	120	566	108	168	126	158	47	368	642
Sc	62	66	70	90	54	49	71	35	59	70	70	74	71	72
As	11	<10	<10	<10	12	17	<10	13	<10	<10	31	<10	16	11
S	258	201	208	255	303	221	145	337	275	147	180	209	360	234
Sb	19	<8	10	<8	15	11	<8	<8	14	<8	12	20	38	16
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	11	13	<8	20
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#925	#926	#927	#928	#929	#930	#931	#932	#933	#934	#935	#936	#937	#938
	UVS-112	UVS-113	UVS-121	UVS-122	UVS-130	UVS-131	UVSS-10	UVSS-15	UVSS-20	UVSS-30	UVSS-35	UVSS-40	UVSS-45	ST-412
SiO2	37.32	58.50	38.76	36.43	75.66	25.63	98.12	97.97	90.01	95.78	84.46	98.02	96.05	94.50
TiO2	2.32	0.46	2.75	2.20	0.86	1.91	0.02	0.02	0.07	0.06	0.37	0.03	0.05	0.10
Al2O3	28.66	8.04	34.31	28.17	10.06	19.19	0.65	1.01	2.16	1.45	5.97	0.95	1.62	1.17
Fe2O3	15.66	26.36	11.82	18.67	7.67	38.96	0.48	0.83	5.55	1.53	4.77	0.69	0.73	0.60
MnO	0.00	0.02	0.01	0.01	0.00	0.01	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.01
MgO	0.28	0.00	0.33	0.23	0.04	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.12
CaO	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.65
Na2O	0.11	0.00	0.39	0.51	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
K2O	4.88	0.23	3.27	2.22	1.20	1.73	0.02	0.02	0.19	0.10	0.33	0.05	0.09	0.18
P2O5	0.09	0.34	0.06	0.11	0.11	0.47	0.00	0.00	0.22	0.01	0.16	0.00	0.00	0.05
Cr2O3	0.00	0.00	0.03	0.03	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.02	0.01	0.02	0.01	0.01	0.03	0.01	0.01	0.01	0.00	0.01	0.01	0.00	0.00
H2O-	3.29	1.33	1.58	2.67	0.89	4.77	0.03	0.04	0.09	0.06	0.34	0.06	0.05	0.01
LOI	6.51	4.04	6.59	8.13	3.22	7.45	0.14	0.23	1.17	0.45	2.41	0.28	0.48	0.61
TOTAL	99.14	99.33	99.93	99.41	99.73	100.44	99.47	100.13	99.50	99.44	98.83	100.09	99.07	99.09
Zn	425	696	147	230	165	727	9	14	174	52	112	17	13	4
Cu	49	359	40	78	36	79	3	<3	75	12	38	6	8	37
Ni	91	43	58	81	19	103	<3	<3	16	6	14	<3	<3	<3
Co	<3	<3	<3	<3	<3	<3	4	<3	4	<3	<3	<3	3	<3
Ga	35	<3	47	41	15	37	<3	<3	<3	<3	3	<3	<3	<3
Mo	<2	4	2	<2	<2	5	<2	<2	<2	<2	<2	<2	<2	4
Nb	9	5	11	10	7	7	2	2	2	3	5	3	2	4
Zr	154	87	181	141	102	155	34	31	53	59	78	41	61	44
Y	37	21	34	33	30	40	8	8	22	14	18	8	11	6
Sr	141	7	141	135	28	26	7	8	30	17	41	7	7	27
Rb	184	22	114	90	50	84	2	<2	9	6	16	3	<2	9
U	10	5	10	15	10	31	<5	<5	8	<5	<5	<5	<5	<5
Th	<5	20	<5	<5	<5	<5	<5	<5	<5	<5	6	<5	<5	<5
Pb	309	5238	98	80	149	298	11	21	1305	185	1160	66	25	7
Cr	471	262	527	483	182	603	<14	<14	107	53	129	33	38	155
V	296	691	417	325	237	521	7	<14	134	47	231	40	36	19
Ba	463	57	368	346	216	130	43	<16	98	79	169	<16	34	415
Sc	65	29	93	97	38	64	<8	10	21	12	21	<8	<8	<8
As	<10	<10	<10	<10	<10	23	<10	<10	40	<10	<10	<10	<10	<10
S	216	404	739	1264	226	304	<50	<50	154	<50	321	<50	<50	80
Sb	<8	83	13	<8	<8	16	<8	<8	16	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	7	<10
W	<8	13	<8	<8	10	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#939	#940	#941	#942	#943	#944	#945	#946	#947	#948	#949	#950	#951	#952
	P-1	P-2	P-3	P-4	P-5	P-6	P-8	P-9	P-10	P-11	P-12	P-13	P-14	ET-347
SiO2	80.67	89.13	99.28	95.75	87.82	89.59	92.75	60.46	93.17	89.58	88.33	98.72	95.01	62.89
TiO2	0.55	0.32	0.24	0.20	0.34	0.37	0.24	1.20	0.17	0.29	0.30	0.18	0.19	0.53
Al2O3	8.77	4.84	0.89	0.80	6.89	5.78	3.74	16.50	1.98	5.67	6.70	1.12	1.88	17.95
Fe2O3	5.04	3.13	0.28	1.57	0.64	0.58	1.00	11.09	2.56	1.57	0.39	0.37	0.88	5.18
MnO	0.01	0.02	0.01	0.02	0.01	0.02	0.01	0.03	0.08	0.01	0.02	0.02	0.01	0.03
MgO	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	4.41
CaO	0.05	0.03	0.03	0.01	0.02	0.02	0.01	0.07	0.04	0.02	0.02	0.02	0.08	0.07
Na2O	0.23	0.08	0.03	0.02	0.12	0.07	0.03	0.03	0.02	0.04	0.04	0.01	0.01	0.20
K2O	2.39	1.26	0.34	0.30	2.19	1.80	1.06	3.36	0.43	1.33	1.89	0.38	0.52	4.61
P2O5	0.04	0.01	0.02	0.03	0.01	0.02	0.01	0.24	0.02	0.04	0.03	0.02	0.04	0.08
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
H2O-	0.07	0.13	0.04	0.06	0.03	0.04	0.10	1.09	0.09	0.10	0.20	0.05	0.05	0.35
LOI	1.33	1.06	0.19	0.21	0.97	0.81	0.72	4.99	0.90	1.19	1.11	0.23	0.62	4.17
TOTAL	99.19	100.01	101.35	98.97	99.04	99.10	99.67	99.27	99.46	99.84	99.03	101.12	99.29	100.47
Zn	11	17	5	11	16	11	10	427	105	31	12	8	20	52
Cu	8	4	3	<3	<3	<3	<3	125	13	<3	<3	<3	<3	<3
Ni	11	6	3	4	5	8	4	84	10	12	4	5	4	27
Co	<3	5	4	<3	4	4	4	25	11	5	5	<3	3	15
Ga	10	<3	<3	<3	8	5	4	21	<3	8	7	<3	5	23
Mo	8	9	9	7	4	9	6	<2	8	6	8	8	3	<2
Nb	14	7	3	3	6	7	3	11	4	4	6	4	2	16
Zr	247	138	93	100	223	213	207	152	58	226	272	59	56	402
Y	27	9	5	7	13	13	18	31	7	17	25	13	9	36
Sr	32	4	5	9	9	13	17	71	10	10	10	8	47	29
Rb	98	49	11	13	63	54	34	115	15	53	52	12	19	169
U	5	<5	<5	<5	<5	<5	<5	6	5	<5	<5	<5	<5	7
Th	9	<5	<5	<5	5	<5	<5	<5	5	5	<5	<5	<5	21
Pb	11	<5	<5	15	7	<5	39	87	161	45	22	17	63	18
Cr	134	190	211	211	143	184	161	58	165	128	130	174	92	93
V	147	43	44	55	29	52	25	345	30	30	28	12	24	55
Ba	535	174	67	67	672	688	152	444	131	175	178	138	253	1088
Sc	<8	<8	<8	<8	<8	<8	<8	24	<8	<8	<8	<8	<8	12
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	<50	<50	<50	<50	<50	<50	<50	220	90	70	<50	<50	<50	<50
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	7	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	5	n.d.	5	n.d.	16	n.d.	n.d.	14	n.d.	10	n.d.	8	n.d.	140

	#953	#954	#955	#956	#957	#958	#959	#960	#961	#962	#963	#964	#965	#966
	ET-348	ET-382	ET-350	ET-380	ET-351	ET-353	ET-355	ET-352	ET-354	ET-381	ET-21	ET-1	ET-24	ET-25
SiO2	61.95	62.90	65.22	60.19	65.39	57.87	67.25	58.67	64.02	49.36	67.25	91.36	80.17	75.31
TiO2	0.54	0.31	0.41	0.70	0.46	0.43	0.58	0.11	0.40	0.67	0.50	0.05	0.10	0.15
Al2O3	18.83	16.89	15.46	16.48	15.93	11.65	16.37	4.06	16.24	17.13	15.31	4.69	9.80	12.63
Fe2O3	4.86	4.66	5.74	6.99	5.39	3.84	3.96	1.97	5.20	7.46	6.65	0.80	1.19	1.46
MnO	0.04	0.02	0.01	0.04	0.04	0.18	0.03	0.45	0.03	0.12	0.04	0.02	0.09	0.10
MgO	4.82	5.03	3.70	3.41	4.75	11.26	4.94	27.41	4.34	4.40	2.46	0.06	0.19	0.35
CaO	0.01	0.02	0.01	0.16	0.86	9.43	0.55	0.18	0.86	1.51	0.52	0.05	0.28	0.23
Na2O	0.18	0.10	0.19	0.24	2.06	1.08	1.27	0.17	3.43	0.20	1.74	0.52	0.96	1.08
K2O	4.35	5.36	4.06	5.83	4.21	2.38	3.87	0.07	1.48	5.36	4.62	1.60	5.32	7.01
P2O5	0.06	0.08	0.01	0.06	0.11	0.09	0.12	0.01	0.00	0.00	0.05	0.01	0.09	0.12
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00
NiO	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00
H2O-	0.40	0.34	0.61	2.14	0.04	0.17	0.09	1.19	1.06	7.19	0.08	0.25	0.16	0.26
LOI	4.55	3.33	3.48	3.31	1.25	1.56	1.61	5.94	2.81	4.32	0.87	0.71	0.54	0.75
TOTAL	100.59	99.04	98.90	99.56	100.50	99.94	100.64	100.23	99.87	97.73	100.11	100.13	98.89	99.45
Zn	68	45	63	74	53	84	72	51	75	107	61	8	8	14
Cu	6	18	<3	82	<3	7	41	23	2	20	3	<3	<3	4
Ni	30	26	45	68	30	36	50	15	38	136	55	7	6	5
Co	14	9	12	20	6	9	13	13	10	16	12	4	8	11
Ga	26	24	21	24	18	13	20	5	21	26	22	6	9	16
Mo	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	6	8	6	<2
Nb	16	14	11	13	11	10	14	5	13	14	9	<2	5	4
Zr	434	200	138	151	251	144	155	43	174	142	157	60	108	156
Y	39	47	23	36	28	20	26	11	32	37	27	3	41	22
Sr	18	33	27	88	186	186	142	5	279	124	148	57	127	155
Rb	168	205	205	228	167	47	179	7	182	152	156	49	126	166
U	<5	10	6	6	13	6	12	<5	7	8	<5	<5	<5	<5
Th	25	19	14	12	15	12	12	9	18	17	9	7	12	8
Pb	24	8	12	33	24	19	28	<5	26	19	22	<5	37	49
Cr	86	66	78	136	130	138	140	<14	74	146	146	120	58	49
V	46	43	58	107	55	60	77	32	62	81	54	16	27	32
Ba	1078	692	511	1152	808	887	733	353	398	1946	825	1103	1496	1886
Sc	12	11	23	25	11	14	15	8	24	17	15	4	6	<8
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	<50	<50	97	193	140	<50	<50	220	86	188	83	92	95	121
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	9	9	<8	<8	19	<8	<8	<8	<8	<8	<8	<8	<8
Bi	14	<10	<10	<10	<10	7	10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	151	7	113	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#967	#968	#969	#970	#971	#972	#973	#974	#975	#976	#977	#978	#979	#980
	ET-26	ET-27	ET-28	ET-140	ET-141	ET-139	ET-378A	ET-299	ET-300	ET-301	ET-302	ET-320	ET-321	ET-322
SiO2	82.54	96.82	97.69	90.47	80.15	86.82	89.87	90.59	85.06	87.14	90.52	86.08	85.02	98.21
TiO2	0.09	0.00	0.02	0.06	0.08	0.12	0.15	0.09	0.13	0.08	0.06	0.09	0.14	0.01
Al2O3	8.70	0.98	0.06	3.84	10.08	6.29	4.33	4.75	6.88	6.79	4.45	7.36	6.59	1.01
Fe2O3	0.88	0.36	0.42	0.48	0.55	1.02	0.68	0.90	2.02	1.47	1.04	1.38	2.68	0.43
MnO	0.16	0.01	0.00	0.01	0.02	0.01	0.00	0.02	0.24	0.04	0.01	0.01	0.05	0.01
MgO	0.13	0.00	0.02	0.00	0.00	0.32	1.58	0.41	0.78	0.18	0.38	0.72	0.61	0.05
CaO	0.26	0.00	0.07	0.36	2.12	1.02	0.01	0.00	0.03	0.00	0.00	0.00	0.00	0.00
Na2O	0.87	0.07	0.04	1.59	4.07	2.23	0.05	0.11	0.23	0.03	0.07	0.04	0.04	0.01
K2O	4.59	0.46	0.00	2.05	0.39	0.75	1.57	2.42	3.30	0.57	1.26	1.01	1.64	0.31
P2O5	0.07	0.01	0.04	0.00	0.01	0.02	0.07	0.02	0.01	0.01	0.02	0.01	0.03	0.01
Cr2O3	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
NiO	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H2O-	0.11	0.03	0.04	0.05	0.14	0.04	0.06	0.08	0.14	0.13	0.06	0.14	0.14	0.04
LOI	0.54	0.21	0.24	0.48	0.75	0.59	0.70	0.69	0.83	2.65	0.55	2.39	1.63	0.22
TOTAL	98.94	98.95	98.64	99.39	98.37	99.26	99.07	100.08	99.65	99.09	98.42	99.23	98.57	100.32
Zn	9	10	8	11	14	11	5	13	14	6	4	8	11	4
Cu	<3	<3	<3	<3	<3	6	<3	4	<3	4	<3	5	5	<3
Ni	4	2	6	5	3	7	<3	7	12	13	5	10	16	4
Co	7	6	4	4	3	3	5	6	11	12	3	7	14	3
Ga	7	<3	<3	5	<3	4	7	7	3	5	<3	9	11	<3
Mo	5	9	14	13	14	12	7	8	6	11	11	7	6	9
Nb	<2	<2	<2	<2	<2	<2	5	3	4	3	5	3	4	<2
Zr	106	23	9	45	198	118	102	127	99	89	62	106	82	32
Y	23	3	3	5	4	5	10	15	15	11	10	9	33	3
Sr	120	19	8	59	205	79	6	44	71	14	26	4	7	5
Rb	106	11	<2	9	10	18	50	78	91	24	41	50	105	16
U	<5	<5	<5	<5	<5	6	<5	7	6	<5	<5	5	<5	<5
Th	5	<5	<5	<5	<5	5	5	<5	13	8	6	5	<5	<5
Pb	43	8	<5	<5	<5	<5	<5	21	29	14	<5	<5	<5	<5
Cr	50	122	192	148	151	123	141	120	100	142	141	89	118	144
V	22	<14	18	20	<14	17	32	32	32	22	17	37	38	<14
Ba	1562	212	16	174	138	233	381	870	1111	201	483	163	263	120
Sc	<8	10	<8	<8	<8	<8	<8	<8	13	10	<8	<8	<8	10
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	78	57	50	72	<50	<50	<50	<50	78	116	<50	90	72	<50
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	7	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	11	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	101	41	16	563	29	5	11

	#981	#982	#983	#984	#985	#986	#987	#988	#989	#990	#991	#992	#993	#994
	ET-323	ET-324	ET-325	ET-376	ET-377	ET-378	DLQ-1	DLQ-2	DLQ-3	DLQ-4	ET-330	ET-332	ET-342	ET-343
SiO2	96.28	92.70	81.42	82.23	85.37	87.17	95.82	96.41	95.42	94.84	38.95	41.25	43.27	40.28
TiO2	0.02	0.12	0.03	0.09	0.10	0.12	0.06	0.05	0.04	0.08	0.25	0.31	0.39	0.34
Al2O3	1.77	5.19	11.51	9.86	8.12	6.78	1.82	1.66	1.63	1.71	7.02	8.05	11.84	10.58
Fe2O3	0.44	0.91	1.22	1.21	0.88	1.66	0.45	0.59	0.68	0.45	3.00	4.37	4.27	3.74
MnO	0.00	0.01	0.02	0.00	0.00	0.05	0.01	0.00	0.01	0.00	0.08	0.13	0.16	0.17
MgO	0.12	0.26	0.21	0.55	0.60	0.55	0.09	0.05	0.13	0.00	21.01	16.37	14.30	21.29
CaO	0.00	0.03	0.00	0.01	0.00	0.02	0.01	0.00	0.00	0.00	17.93	20.96	19.36	15.93
Na2O	0.01	0.02	0.03	0.13	0.07	0.05	1.30	1.17	1.05	1.21	0.09	0.08	0.10	0.10
K2O	0.86	0.44	0.81	3.26	2.11	1.51	0.15	0.04	0.02	0.21	1.44	0.95	0.25	0.01
P2O5	0.00	0.04	0.02	0.04	0.01	0.03	0.00	0.00	0.00	0.00	0.08	0.05	0.11	0.14
Cr2O3	0.00	0.00	0.01	0.00	0.07	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
H2O-	0.03	0.05	0.19	0.08	0.13	0.10	0.06	0.07	0.06	0.05	0.14	0.07	2.34	0.13
LOI	0.31	0.21	4.54	1.54	1.46	1.45	0.22	0.23	0.39	0.29	8.65	7.07	3.70	6.36
TOTAL	99.84	99.98	100.03	99.00	98.92	99.49	100.00	100.28	99.43	98.84	98.64	99.66	100.10	99.07
Zn	10	9	21	10	7	10	10	8	9	8	39	112	42	136
Cu	13	<3	17	<3	<3	<3	<3	3	5	<3	47	28	16	419
Ni	10	11	133	8	3	14	4	6	8	4	24	33	48	35
Co	5	4	6	<3	4	8	6	<3	4	4	7	12	5	22
Ga	<3	<3	10	8	8	6	<3	<3	<3	<3	10	10	15	17
Mo	10	12	4	4	7	10	7	10	8	9	<2	<2	<2	<2
Nb	<2	<2	<2	5	4	4	3	2	2	3	7	8	14	9
Zr	44	33	55	97	100	108	45	40	64	44	52	61	102	80
Y	10	14	13	19	26	14	<2	2	<2	3	11	15	22	22
Sr	6	6	8	12	4	5	10	8	10	11	73	71	45	16
Rb	29	13	43	100	77	50	6	3	4	8	65	65	20	<2
U	5	6	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	8
Th	<5	5	<5	8	5	8	<5	<5	<5	<5	9	<5	12	15
Pb	<5	<5	9	<5	<5	<5	6	<5	6	<5	6	8	15	140
Cr	137	170	138	64	63	119	202	215	211	209	82	96	127	101
V	<14	28	<14	17	21	29	29	18	23	16	42	43	75	58
Ba	294	69	204	780	446	414	64	20	21	74	314	143	136	26
Sc	11	12	10	<8	<8	<8	<8	<8	<8	<8	13	14	20	13
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	12	14	<10	112
S	<50	<50	116	77	<50	116	60	<50	<50	<50	310	90	70	140
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	13	<8
Bi	<10	<10	<10	6	<10	<10	<10	<10	<10	<10	12	6	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	5	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	22	300

	#995	#996	#997	#998	#999	#1000	#1001	#1002	#1003	#1004	#1005	#1006	#1007	#1008
	ET-344	ET-345	ET-329	ET-331	ET-326	ET-327	ET-328	ET-339	ET-340	ET-341	ET-335	ET-336	ET-334	ET-337
SiO2	31.62	42.07	34.50	35.35	53.30	55.04	59.10	58.23	58.33	60.25	93.02	93.83	95.68	83.80
TiO2	0.11	0.40	0.67	0.15	0.59	0.49	0.43	0.52	0.50	0.43	0.10	0.09	0.02	0.06
Al2O3	1.93	10.72	20.65	5.38	19.38	18.11	17.64	17.11	16.82	14.60	2.36	2.62	0.95	10.23
Fe2O3	1.25	3.43	7.48	2.68	8.57	7.42	2.68	7.82	6.35	5.44	0.49	0.58	0.49	0.64
MnO	0.24	0.10	0.13	0.08	0.05	0.08	0.03	0.03	0.04	0.04	0.02	0.01	0.01	0.01
MgO	22.34	18.25	13.50	18.23	6.57	6.62	6.71	5.67	5.57	6.52	1.46	1.40	0.16	0.45
CaO	22.85	21.09	11.77	23.96	0.56	1.09	2.01	1.64	2.84	4.16	0.24	0.03	0.00	0.07
Na2O	0.08	0.07	0.10	0.09	0.15	0.26	0.36	0.53	0.79	0.64	0.01	0.04	0.06	0.04
K2O	0.00	0.01	0.19	0.29	9.08	7.41	7.98	5.68	6.83	5.62	0.41	1.67	0.37	0.89
P2O5	0.03	0.15	0.11	0.03	0.12	0.12	0.13	0.16	0.14	0.12	0.06	0.08	0.02	0.00
Cr2O3	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01
NiO	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
H2O-	0.85	0.25	2.16	0.15	0.39	0.47	0.30	0.10	0.12	0.05	0.07	0.03	0.11	0.18
LOI	17.78	5.74	8.08	12.85	0.00	2.93	2.40	2.24	1.93	1.71	0.91	0.27	2.09	3.65
TOTAL	99.08	102.29	99.37	99.24	98.77	100.04	99.77	99.73	100.26	99.58	99.15	100.65	99.99	100.03
Zn	59	158	57	48	76	95	99	17	26	28	7	8	8	8
Cu	10	995	19	55	11	12	12	9	17	33	<3	<3	7	20
Ni	9	42	81	17	74	57	35	53	50	38	<3	<3	6	37
Co	8	15	18	7	19	16	<3	17	12	4	4	6	5	9
Ga	<3	14	35	10	26	27	21	19	20	14	<3	<3	5	11
Mo	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	5	7	4	8
Nb	6	10	15	5	16	13	19	13	14	11	<2	<2	5	<2
Zr	16	75	155	38	141	132	243	129	120	102	61	70	122	67
Y	4	13	167	11	20	26	38	22	26	16	5	9	10	7
Sr	56	66	6	95	140	166	232	107	191	178	12	17	11	6
Rb	<2	<2	13	20	295	274	307	210	235	197	22	51	31	54
U	<5	8	<5	<5	7	7	<5	9	8	6	<5	5	<5	<5
Th	<5	12	23	<5	23	17	18	22	17	11	5	<5	10	10
Pb	9	16	18	20	10	3	6	<5	16	17	<5	15	16	6
Cr	28	117	267	<14	208	152	91	172	170	167	165	171	59	83
V	19	66	84	33	168	124	70	135	107	85	25	25	29	20
Ba	<16	80	552	102	1012	1034	1618	447	537	707	145	568	270	255
Sc	16	13	30	44	23	18	14	13	14	18	<8	<8	11	9
As	<10	13	<10	<10	13	11	<10	<10	<10	<10	<10	<10	<10	<10
S	180	650	275	384	80	70	<50	<50	<50	<50	<50	<50	179	166
Sb	<8	12	<8	<8	<8	26	13	<8	11	8	10	<8	<8	<8
Sn	16	16	<8	<8	17	<8	<8	16	<8	<8	<8	<8	<8	<8
Bi	7	<10	<10	<10	10	<10	<10	<10	<10	<10	<10	6	<10	<10
W	<8	<8	14	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	55	103	n.d.	n.d.	n.d.	n.d.	n.d.	72	37	19	17	13	23	18

	#1009	#1010	#1011	#1012	#1013	#1014	#1015	#1016	#1017	#1018	#1019	#1020	#1021	#1022
	ET-338	DSQ-1	DSQ-2	DSQ-3	DSQ-4	DSQ-5	DSQ-6	ET-284	ET-286	ET-287	ET-288	ET-289	ET-292	ET-295
SiO2	92.01	96.64	96.45	96.22	94.42	98.00	97.56	97.95	98.41	99.71	98.07	97.88	99.86	93.49
TiO2	0.09	0.14	0.12	0.43	0.68	0.08	0.11	0.03	0.01	0.02	0.07	0.02	0.06	0.04
Al2O3	5.33	0.95	1.46	1.93	2.57	0.70	1.07	1.00	0.19	0.00	0.39	0.65	0.00	4.12
Fe2O3	0.40	0.40	0.37	0.45	0.53	0.37	0.40	0.42	0.37	0.34	0.36	0.33	0.44	0.87
MnO	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MgO	0.26	1.14	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.15	0.04	0.04	0.15	0.40
CaO	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Na2O	0.03	0.01	0.03	0.02	0.05	0.03	0.02	0.02	0.02	0.01	0.02	0.01	0.00	0.01
K2O	0.35	0.31	0.36	0.45	0.65	0.18	0.28	0.11	0.01	0.00	0.04	0.00	0.00	0.38
P2O5	0.02	0.06	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.01	0.04
Cr2O3	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.01	0.00
NiO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H2O-	0.09	0.01	0.06	0.05	0.05	0.06	0.05	0.05	0.04	0.02	0.04	0.03	0.04	0.04
LOI	1.86	0.36	0.23	0.39	0.45	0.23	0.20	0.39	0.21	0.07	0.26	0.31	0.05	0.53
TOTAL	100.45	100.04	99.08	99.94	99.41	99.66	99.69	100.20	99.26	100.33	99.30	99.27	100.62	99.94
Zn	10	7	5	8	7	6	8	7	5	5	6	7	7	5
Cu	3	<3	<3	<3	<3	<3	4	<3	<3	<3	<3	<3	<3	<3
Ni	17	<3	<3	<3	<3	<3	<3	<3	<3	<3	5	3	5	3
Co	8	4	3	3	5	3	4	5	4	3	3	4	3	4
Ga	5	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	3
Mo	10	4	10	9	13	10	9	12	13	13	11	11	15	10
Nb	3	<2	2	15	10	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zr	108	82	117	328	581	80	74	43	46	29	40	46	55	76
Y	8	<2	<2	5	8	<2	9	9	<2	<2	<2	3	<2	7
Sr	6	5	3	3	3	4	9	4	6	5	5	4	<2	5
Rb	33	16	20	22	33	10	14	4	<2	<2	<2	<2	<2	11
U	5	<5	<5	<5	7	<5	<5	<5	<5	<5	<5	<5	<5	<5
Th	6	<5	6	<5	7	<5	<5	16	<5	<5	<5	<5	<5	<5
Pb	<5	<5	7	6	8	<5	5	<5	<5	<5	<5	5	<5	<5
Cr	124	180	212	193	212	219	210	164	198	233	177	181	228	119
V	23	23	30	16	151	28	25	21	21	20	<14	22	<14	28
Ba	167	31	25	77	112	77	58	18	<16	36	<16	<16	<16	100
Sc	18	<8	<8	<8	<8	<8	<8	<8	10	<8	<8	<8	11	<8
As	<10	<10	16	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	106	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	13	<8	<8	<8	<8	<8	<8	8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	10	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	3	8	n.d.	6	n.d.	n.d.	9

	#1023	#1024	#1025	#1026	#1027	#1028	#1029	#1030	#1031	#1032	#1033	#1034	#1035	#1036
	ET-296	ET-298	ET-285	ET-290	ET-294	ET-291	ET-293	VHT-11	VHT-10	VHT-MN	VHT-7	VHT-6	VHT-9	VHT-13
SiO2	94.60	84.93	95.30	78.05	85.49	97.90	94.97	63.00	62.26	71.43	55.67	84.45	61.83	96.88
TiO2	0.02	0.07	0.07	0.26	0.33	0.34	0.04	0.63	0.66	0.27	0.52	0.18	0.56	0.07
Al2O3	3.05	8.44	1.88	11.57	7.28	0.15	1.96	18.18	17.45	4.22	14.23	3.02	13.93	0.46
Fe2O3	0.51	1.24	0.40	1.88	1.49	0.79	0.85	7.19	7.08	1.49	4.46	1.21	4.98	0.37
MnO	0.00	0.01	0.01	0.01	0.01	0.00	0.00	0.05	0.09	0.12	0.13	0.17	0.07	0.02
MgO	0.31	1.16	1.19	1.89	1.48	0.10	0.18	1.78	3.24	1.92	2.62	0.51	2.18	1.17
CaO	0.01	0.99	0.01	0.29	0.03	0.00	0.00	0.37	2.11	16.35	13.47	6.88	8.87	0.04
Na2O	0.02	1.18	0.08	0.17	0.07	0.03	0.05	0.50	1.49	0.14	2.00	0.08	1.86	0.01
K2O	0.68	0.75	0.55	2.95	2.18	0.01	0.17	4.28	4.32	2.27	4.08	1.96	4.13	0.15
P2O5	0.03	0.07	0.05	0.07	0.05	0.00	0.02	0.05	0.13	0.11	0.33	0.03	0.08	0.07
Cr2O3	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H2O-	0.08	0.10	0.04	0.04	0.05	0.04	0.09	0.22	0.12	0.06	0.13	0.12	0.13	0.04
LOI	0.30	0.96	0.57	1.87	1.29	0.12	0.82	2.36	0.99	1.28	1.16	0.79	0.72	0.23
TOTAL	99.62	99.90	100.15	99.05	99.75	99.48	99.15	98.61	99.94	99.66	98.80	99.40	99.34	99.51
Zn	5	7	6	12	<3	8	6	223	95	97	339	78	354	6
Cu	<3	<3	<3	<3	5	<3	3	7	8	11	62	<3	74	<3
Ni	3	<3	<3	11	9	6	5	38	41	5	32	5	20	<3
Co	3	6	6	7	6	3	5	23	17	10	8	12	5	4
Ga	<3	6	5	11	4	<3	4	24	23	<3	14	11	14	<3
Mo	10	8	5	<2	4	13	7	<2	<2	<2	<2	13	2	7
Nb	<2	3	8	6	4	5	4	10	19	8	16	4	13	<2
Zr	56	62	23	144	220	249	109	161	199	267	180	367	224	58
Y	6	5	7	11	5	5	3	31	29	11	32	3	21	<2
Sr	5	260	6	63	15	5	15	128	209	87	203	63	399	9
Rb	19	22	41	92	65	<2	28	282	254	80	214	60	235	8
U	<5	<5	<5	<5	<5	<5	<5	11	8	14	5	19	<5	<5
Th	5	<5	5	16	<5	7	<5	15	21	15	14	<5	19	<5
Pb	<5	5	6	5	7	<5	<5	22	23	18	22	12	32	8
Cr	157	109	164	136	189	226	128	151	174	100	154	136	155	167
V	<14	23	24	42	52	33	23	79	90	20	55	20	56	19
Ba	119	161	66	626	852	<16	363	1138	1296	846	2146	990	2794	96
Sc	<8	<8	<8	9	9	<8	<8	14	12	9	12	8	9	<8
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	<50	53	<50	<50	<50	<50	<50	<50	<50	<50	120	60	50	<50
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	16	<8	8	<8
Sn	<8	<8	<8	<8	13	<8	<8	<8	25	11	18	<8	8	<8
Bi	<10	<10	<10	<10	10	<10	<10	<10	<10	7	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	135	n.d.	n.d.	n.d.	4	6	25	n.d.	n.d.	n.d.	n.d.	24	n.d.

	#1037	#1038	#1039	#1040	#1041	#1042	#1043	#1044	#1045	#1046	#1047	#1048	#1049	#1050
	VHT-1	VHT-2	VHT-3	VHT-4	VHT-5	CRT-52	CRT-53	CRT-54	VMA-1	VMA-2	VMA-3	VMA-4	VMA-5	VMA-6
SiO2	97.40	98.52	98.23	97.71	76.41	35.42	76.53	93.78	91.71	89.85	94.41	89.66	85.34	87.84
TiO2	0.00	0.01	0.01	0.04	0.27	4.99	0.58	0.15	0.51	0.14	0.15	0.11	0.32	0.37
Al2O3	0.69	0.42	0.30	0.75	4.63	8.18	9.48	0.00	2.43	4.52	0.85	5.09	5.70	6.10
Fe2O3	0.29	0.25	0.36	0.36	1.45	15.29	2.55	5.10	3.56	2.29	2.65	1.46	3.87	3.22
MnO	0.00	0.00	0.00	0.00	0.10	0.30	0.04	0.27	0.00	0.00	0.00	0.00	0.00	0.00
MgO	0.04	0.00	0.06	0.22	1.80	7.74	0.74	0.00	0.24	0.32	0.23	0.24	0.25	0.42
CaO	0.00	0.00	0.00	0.00	9.81	12.06	0.80	0.12	0.00	0.00	0.00	0.00	0.00	0.00
Na2O	0.04	0.04	0.05	0.03	0.22	0.13	3.38	0.04	0.00	0.03	0.03	0.04	0.05	0.04
K2O	0.20	0.09	0.09	0.21	2.73	0.20	5.01	0.00	0.71	1.29	0.22	1.66	1.73	2.01
P2O5	0.00	0.00	0.00	0.01	0.09	0.56	0.21	0.05	0.00	0.02	0.00	0.02	0.00	0.04
Cr2O3	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H2O-	0.04	0.04	0.06	0.05	0.10	1.67	0.22	0.05	0.05	0.06	0.08	0.07	0.18	0.10
LOI	0.23	0.14	0.18	0.19	0.76	12.80	1.42	0.37	0.45	0.85	0.18	0.83	1.54	0.97
TOTAL	98.93	99.51	99.34	99.60	98.37	99.37	100.96	99.93	99.66	99.37	98.80	99.18	98.98	101.11
Zn	7	7	3	4	67	115	30	11	6	8	6	6	3	8
Cu	<3	<3	<3	<3	5	201	22	5	<3	<3	<3	<3	3	<3
Ni	<3	<3	11	<3	6	202	15	11	<3	<3	<3	<3	6	3
Co	3	5	7	<3	6	78	7	<3	9	9	<3	3	<3	<3
Ga	<3	<3	<3	3	4	14	6	4	<3	<3	<3	11	6	6
Mo	8	8	10	8	<2	8	4	6	8	3	8	7	7	6
Nb	2	<2	<2	3	7	89	10	2	7	3	4	5	7	4
Zr	65	64	41	120	354	486	169	6	251	73	208	96	308	163
Y	2	<2	<2	<2	9	41	26	5	4	9	5	5	9	6
Sr	8	6	9	7	78	233	70	15	6	16	5	13	9	8
Rb	10	5	2	5	81	9	35	<2	35	63	12	73	81	86
U	<5	<5	<5	9	13	<5	<5	6	<5	<5	5	<5	<5	<5
Th	7	5	<5	<5	<5	9	<5	<5	14	<5	9	12	25	10
Pb	5	<5	10	6	10	14	8	<5	10	13	8	<5	8	<5
Cr	178	196	197	177	127	591	179	174	156	123	209	165	151	158
V	14	14	11	20	28	462	79	33	42	15	34	51	36	44
Ba	74	47	57	78	1537	1945	414	309	186	298	95	254	347	296
Sc	<8	<8	<8	<8	8	35	13	<8	16	<8	<8	<8	<8	<8
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	<50	<50	<50	<50	<50	3980	190	<50	<50	<50	<50	<50	110	50
Sb	<8	<8	<8	8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	7	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	11	<8	<8	8
B	5	13	13	12	5	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#1051	#1052	#1053	#1054	#1055	#1056	#1057	#1058	#1059	#1060	#1061	#1062	#1063	#1064
	VMA-7	VMA-8	RF-8	RF-9	RF-10	RF-11	RF-12	RF-16	RF-1	RF-6	RF-7	RF-13	RF-14	RF-17
SiO2	88.06	87.31	69.49	70.66	73.66	76.59	70.12	59.01	83.47	81.76	82.59	65.79	96.62	71.16
TiO2	0.11	0.12	0.76	0.71	0.60	0.61	0.75	0.77	0.33	0.60	0.54	0.56	0.22	0.33
Al2O3	5.61	6.42	14.99	14.97	9.91	9.34	14.53	19.35	7.10	7.99	7.93	18.42	1.67	14.62
Fe2O3	2.78	1.54	5.69	4.55	8.98	7.35	6.51	8.48	1.89	2.73	2.55	3.13	0.44	2.78
MnO	0.00	0.00	0.02	0.02	0.03	0.03	0.02	0.08	0.02	0.03	0.03	0.02	0.02	0.03
MgO	0.32	0.24	0.45	0.44	0.24	0.25	0.39	1.31	0.11	0.80	0.63	0.93	0.00	0.06
CaO	0.00	0.00	0.05	0.05	0.06	0.04	0.04	0.07	0.13	0.02	0.04	0.07	0.02	0.16
Na2O	0.04	0.05	0.11	0.13	0.13	0.08	0.09	0.09	4.32	0.08	0.06	1.24	0.01	5.83
K2O	1.54	2.03	4.67	5.23	3.00	2.78	4.38	5.30	0.66	3.18	3.03	3.77	0.65	2.91
P2O5	0.04	0.00	0.11	0.07	0.09	0.08	0.09	0.10	0.01	0.09	0.05	0.05	0.03	0.09
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
H2O-	0.10	0.08	0.13	0.11	0.11	0.12	0.10	0.30	0.12	0.05	0.09	0.32	0.03	0.12
LOI	1.24	1.11	2.81	2.35	2.80	2.15	2.06	4.21	0.71	1.59	1.64	4.36	0.46	1.10
TOTAL	99.84	98.90	99.28	99.29	99.61	99.42	99.08	99.09	98.87	98.92	99.18	98.66	100.17	99.19
Zn	10	8	9	12	12	10	9	44	7	6	6	9	4	8
Cu	12	<3	15	11	11	94	81	33	<3	89	66	14	6	4
Ni	<3	3	26	30	28	27	27	145	20	45	43	60	16	17
Co	3	4	<3	3	9	<3	7	23	3	4	5	29	4	3
Ga	6	8	16	15	22	8	9	28	8	8	6	22	<3	11
Mo	5	4	6	8	5	7	7	<2	5	6	7	4	10	3
Nb	4	4	14	17	15	12	11	15	2	7	6	7	3	4
Zr	61	95	406	345	366	978	754	116	92	203	169	331	163	121
Y	9	8	38	32	36	28	31	32	13	142	105	24	7	16
Sr	10	12	38	17	32	15	20	53	19	15	9	58	5	98
Rb	71	82	278	299	257	139	152	319	24	343	311	155	28	129
U	<5	<5	7	9	11	11	9	9	<5	<5	<5	<5	<5	5
Th	<5	11	19	21	23	16	22	8	9	20	7	17	<5	<5
Pb	<5	<5	<5	<5	7	8	9	7	<5	<5	<5	<5	<5	14
Cr	148	134	104	98	99	137	146	165	161	188	205	89	174	75
V	28	25	44	52	46	79	78	116	58	62	48	54	12	37
Ba	260	373	1611	1279	1317	1227	1432	988	111	173	94	1059	115	486
Sc	<8	<8	<8	10	11	<8	<8	15	<8	<8	<8	<8	<8	<8
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	<50	170	50	<50	70	<50	<50	<50	<50	110	90	60	<50	160
Sb	<8	<8	<8	<8	<8	<8	8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	11	<8	12	<8	<8	<8	<8	26	21	<8	10	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	6	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#1065	#1066	#1067	#1068	#1069	#1070	#1071	#1072	#1073	#1074	#1075	#1076	#1077	#1078
	RF-18	RF-19	RF-2	RF-3	RF-4	RF-5	RF-15	LES-18	LES-20	LES-22	LES-23	LES-24	LES-25	LES-26
SiO2	85.78	79.66	75.31	81.77	86.19	86.66	81.38	34.13	20.85	39.82	14.46	24.25	24.52	10.41
TiO2	0.37	0.36	0.42	0.31	0.31	0.29	0.31	0.37	0.15	0.40	0.09	0.24	0.14	0.08
Al2O3	7.09	7.08	11.28	8.03	5.69	6.36	5.59	7.53	3.38	8.61	2.87	4.92	3.44	1.99
Fe2O3	2.06	6.86	3.18	2.48	3.64	2.62	2.78	3.77	2.36	4.42	2.00	1.61	2.99	1.00
MnO	0.00	0.01	0.04	0.05	0.05	0.07	0.02	0.03	0.02	0.06	0.02	0.01	0.07	0.03
MgO	0.16	0.17	0.71	0.71	0.48	0.60	0.16	11.20	13.38	8.88	15.63	12.60	22.46	8.42
CaO	0.01	0.01	0.21	0.12	0.10	0.07	0.06	15.89	22.31	13.24	24.12	20.71	37.11	37.55
Na2O	0.11	0.02	6.84	4.87	0.24	0.14	0.05	0.58	0.89	0.82	0.55	0.81	0.64	0.47
K2O	2.22	1.48	0.21	0.28	1.21	1.96	8.61	1.43	0.55	1.53	0.28	0.95	0.16	0.10
P2O5	0.03	0.05	0.04	0.01	0.01	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H2O-	0.10	0.13	0.14	0.08	0.04	0.06	0.07	0.13	0.08	0.09	0.07	0.08	0.07	0.04
LOI	1.50	2.51	1.08	0.86	1.05	1.15	1.01	25.13	34.77	21.54	38.78	32.63	8.55	38.75
TOTAL	99.43	98.34	99.46	99.57	99.01	100.01	100.07	100.19	98.74	99.41	98.87	98.81	100.15	98.86
Zn	17	42	10	8	8	7	9	35	17	52	40	18	18	44
Cu	<3	4	6	<3	<3	3	3	8	<3	2	<3	<3	<3	6
Ni	12	25	21	23	38	38	40	30	7	35	9	13	4	5
Co	6	6	<3	5	3	7	9	4	4	11	5	4	2	6
Ga	6	8	13	7	9	7	5	8	<3	10	<3	4	<3	<3
Mo	11	12	9	<2	10	4	5	<2	<2	3	<2	<2	<2	<2
Nb	7	7	3	4	5	4	2	7	2	9	5	6	3	2
Zr	115	94	115	95	101	63	89	85	32	90	25	59	29	31
Y	16	18	10	13	12	8	21	14	11	17	9	7	7	5
Sr	3	<2	38	25	21	20	22	41	33	46	37	39	36	65
Rb	145	117	26	45	136	193	159	70	32	87	31	57	19	12
U	<5	<5	<5	<5	5	<5	<5	5	<5	<5	<5	<5	<5	<5
Th	6	<5	<5	6	<5	<5	<5	<5	<5	12	<5	<5	<5	<5
Pb	7	8	<5	<5	<5	<5	<5	11	5	11	11	10	7	60
Cr	150	112	156	143	292	239	176	27	5	39	<14	15	<14	<14
V	23	48	76	56	37	38	35	58	26	55	17	31	35	17
Ba	63	45	108	103	98	155	636	259	68	315	134	184	121	72
Sc	<8	9	<8	<8	<8	8	<8	25	24	14	22	19	31	29
As	<10	14	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	<50	110	<50	<50	<50	<50	60	2044	558	410	601	895	1026	758
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	58	54	<8	<8	40	25	13	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	17	11	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#1079	#1080	#1081	#1082	#1083	#1084	#1085	#1086	#1087	#1088	#1089	#1090	#1091	#1092
	LES-27	LES-28	ET-81	VHT-8	WT-91	WT-197	WT-91	G-118	G-216	G-217	G-218	DRB-2	DRB-1	DRB-3
SiO2	15.74	10.98	42.97	17.35	95.44	98.11	95.44	84.27	84.51	77.26	95.13	97.64	98.45	99.13
TiO2	0.18	0.05	0.53	0.15	0.10	0.00	0.10	0.06	0.03	0.01	0.03	0.06	0.03	0.00
Al203	3.26	1.47	2.65	1.73	1.37	0.53	1.37	1.33	0.48	0.26	0.60	0.07	0.45	0.00
Fe203	1.49	2.79	0.71	0.86	0.94	0.80	0.94	2.71	3.86	2.57	1.58	0.34	0.37	0.23
MnO	0.02	0.06	0.02	0.06	0.03	0.01	0.03	0.19	0.20	0.47	0.05	0.00	0.01	0.00
MgO	16.02	17.22	0.36	1.32	1.24	0.00	1.24	2.26	2.16	3.40	0.35	1.22	0.00	0.00
CaO	23.81	26.15	29.00	47.29	0.01	0.00	0.01	3.00	3.51	6.59	0.36	0.08	0.00	0.00
Na20	0.28	0.23	0.10	0.37	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.02	0.06
K20	0.62	0.16	0.64	0.25	0.36	0.07	0.36	0.31	0.05	0.00	0.15	0.06	0.14	0.00
P205	0.00	0.00	0.02	0.05	0.04	0.14	0.04	0.00	0.00	0.02	0.00	0.06	0.00	0.00
Cr203	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
NiO	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
H20-	0.01	0.06	0.75	0.04	0.02	0.07	0.02	0.04	0.00	0.04	0.04	0.00	0.04	0.05
LOI	37.55	40.30	23.67	29.78	0.41	0.13	0.41	5.63	5.25	9.82	2.11	0.15	0.15	0.18
TOTAL	98.98	99.47	101.42	99.25	99.96	99.87	99.96	99.81	100.08	100.46	100.40	99.68	99.66	99.65
Zn	18	12	9	775	5	6	5	4	7	5	5	5	7	5
Cu	4	<3	26	28	6	3	6	9	6	5	4	<3	<3	<3
Ni	7	3	14	<3	<3	6	<3	7	3	2	11	<3	<3	<3
Co	3	3	9	<3	6	3	6	5	<3	3	7	<3	5	3
Ga	3	<3	8	<3	<3	<3	<3	2	<3	<3	<3	<3	<3	<3
Mo	<2	<2	5	<2	4	7	4	7	8	8	12	<2	6	8
Nb	4	1	8	11	<2	<2	<2	3	<2	2	3	<2	<2	<2
Zr	51	13	112	151	26	7	26	17	9	6	23	6	11	2
Y	7	4	12	18	<2	4	<2	13	4	15	4	<2	<2	<2
Sr	45	51	77	184	17	20	17	22	20	26	5	4	4	3
Rb	39	15	17	22	19	5	19	12	5	4	10	5	13	<2
U	<5	<5	5	16	<5	<5	<5	6	<5	<5	<5	5	<5	<5
Th	<5	<5	8	5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Pb	28	11	23	20	26	8	26	6	6	8	9	7	5	<5
Cr	<14	<14	<14	22	152	46	152	145	116	141	181	167	205	223
V	31	19	54	23	36	31	36	33	32	18	22	22	44	34
Ba	325	124	1299	536	88	114	88	40	<16	<16	<16	26	80	97
Sc	19	26	34	16	<8	<8	<8	13	11	11	<8	<8	<8	<8
As	<10	<10	<10	<10	<10	<10	<10	17	84	23	24	<10	12	13
S	777	413	1230	203	<50	133	<50	5166	7367	1707	3666	<50	50	<50
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Sn	<8	<8	11	<8	11	<8	11	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	6	<10	<10	<10	<10	<10	<10	<10	6	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	12	n.d.	n.d.	n.d.	12	9	7	12	n.d.	n.d.	n.d.

	#1093	#1094	#1095	#1096	#1097	#1098	#1099	#1100	#1101	#1102	#1103	#1104	#1105	#1106
	DRB-4	DRB-5	ET-8	ET-14	ET-154	WSIR-1	WSIR-2	ST-401	ST-402	ST-403	ST-404	ST-405	ST-409	ST-406
SiO2	98.09	98.73	53.40	91.64	69.96	96.60	97.49	61.68	57.21	60.21	58.16	56.48	59.23	58.20
TiO2	0.01	0.00	0.36	0.08	0.17	0.13	0.11	0.44	0.53	0.67	0.62	0.61	0.61	0.61
Al2O3	0.07	0.00	7.51	3.58	2.27	0.85	0.82	12.43	15.29	15.88	16.28	16.35	17.38	19.14
Fe2O3	0.42	0.34	12.84	3.19	25.45	0.40	0.76	8.46	11.36	8.53	9.96	10.04	8.54	8.90
MnO	0.00	0.00	0.08	0.00	0.00	0.02	0.01	0.12	0.14	0.11	0.16	0.17	0.10	0.10
MgO	0.00	0.00	1.53	0.00	0.00	1.13	1.03	3.68	6.32	5.33	5.90	6.12	4.46	4.51
CaO	0.00	0.00	3.07	0.00	0.00	0.03	0.02	9.14	2.04	1.80	1.68	4.73	1.65	1.23
Na2O	0.01	0.01	0.00	0.09	0.06	0.06	0.04	0.08	0.35	0.75	1.05	1.14	0.62	0.64
K2O	0.04	0.00	2.78	1.09	0.65	0.15	0.14	0.03	1.40	1.64	1.67	0.39	2.69	2.16
P2O5	0.00	0.00	12.09	0.03	0.02	0.07	0.15	0.10	0.12	0.15	0.15	0.13	0.19	0.17
Cr2O3	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
NiO	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.01	0.01
H2O-	0.05	0.06	0.33	0.01	0.03	0.06	0.10	0.07	0.63	0.86	0.12	0.09	0.15	0.22
LOI	0.11	0.11	6.36	0.54	0.37	0.54	0.49	3.53	4.90	4.44	4.57	4.39	4.34	4.60
TOTAL	98.80	99.25	100.36	100.26	98.98	100.04	101.16	99.76	100.31	100.41	100.34	100.66	99.97	100.49
Zn	5	4	85	7	3	<3	4	63	101	71	95	97	71	66
Cu	<3	<3	82	<3	10	<3	<3	77	25	46	36	177	20	17
Ni	<3	<3	83	6	23	<3	<3	77	190	169	108	140	98	96
Co	3	3	<3	4	<3	<3	<3	24	45	32	36	49	26	24
Ga	<3	<3	8	5	<3	<3	<3	15	17	17	17	24	17	21
Mo	7	5	<2	8	4	<2	<2	<2	<2	<2	<2	<2	<2	<2
Nb	<2	<2	11	3	<2	<2	<2	9	12	10	11	10	12	17
Zr	4	3	130	39	87	390	126	83	102	127	135	108	142	155
Y	<2	<2	15	11	12	10	5	21	25	25	29	25	24	28
Sr	4	5	853	30	24	9	18	53	84	103	118	176	68	76
Rb	5	<2	69	40	21	9	7	<2	73	85	87	22	141	166
U	<5	<5	4	<5	5	<5	<5	5	6	<5	<5	10	12	9
Th	<5	<5	10	7	<5	<5	<5	6	11	5	15	<5	9	15
Pb	6	<5	6	<5	13	5	6	16	24	22	16	34	26	17
Cr	223	175	217	141	128	137	161	249	540	737	305	392	299	285
V	30	26	75	23	87	16	19	140	190	178	153	152	117	143
Ba	28	26	2192	519	282	162	201	66	464	2599	557	203	837	857
Sc	10	<8	17	<8	<8	<8	<8	21	19	18	22	23	18	16
As	<10	12	<10	<10	<10	<10	<10	40	10	15	10	22	11	17
S	90	<50	170	66	56	<50	70	60	170	330	350	260	340	330
Sb	<8	<8	<8	<8	<8	<8	<8	<8	15	<8	<8	<8	<8	9
Sn	<8	<8	12	10	<8	12	<8	<8	<8	<8	<8	<8	19	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	7	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	29	21	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#1107	#1108	#1109	#1110	#1111	#1112	#1113	#1114	#1115	#1116	#1117	#1118	#1119	#1120
	ST-407B	ST-407D	ST-410	ST-411	ST-414	ST-407C	ST-415	ST-416	ST-417	ST-418	ST-419	ST-420	VMA-C	WT-61
SiO2	59.41	55.74	55.86	55.92	62.16	90.66	58.44	57.69	57.88	78.26	55.72	61.30	86.18	60.94
TiO2	0.66	0.58	0.85	0.60	0.63	0.07	0.60	0.62	0.66	0.21	0.65	0.46	0.19	0.40
Al2O3	16.90	14.39	16.29	16.01	15.57	1.52	17.38	15.76	16.87	6.01	18.26	13.62	6.79	13.91
Fe2O3	9.50	9.10	12.00	13.85	7.57	3.57	9.15	11.76	10.38	8.00	9.83	7.74	2.82	7.69
MnO	0.11	0.21	0.13	0.10	0.14	0.04	0.12	0.12	0.12	0.08	0.16	0.15	0.00	0.16
MgO	4.61	5.47	5.57	4.78	5.92	1.96	4.67	5.53	5.10	2.22	5.42	4.56	0.41	5.37
CaO	2.02	7.50	2.61	1.53	1.62	0.31	2.34	1.43	1.93	2.46	2.03	6.01	0.00	9.21
Na2O	1.22	1.82	0.69	0.57	2.05	0.07	0.61	0.51	0.64	0.27	1.13	0.48	0.04	1.23
K2O	1.89	0.02	1.48	1.86	0.42	0.04	2.31	1.86	1.98	0.50	1.96	0.98	2.29	0.10
P2O5	0.18	0.12	0.30	0.16	0.15	0.06	0.16	0.14	0.16	0.07	0.15	0.10	0.01	0.44
Cr2O3	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
NiO	0.01	0.01	0.02	0.02	0.01	0.00	0.01	0.02	0.02	0.01	0.02	0.01	0.00	0.03
H2O-	0.15	0.05	0.19	0.20	0.10	0.01	0.22	0.19	0.18	0.04	0.16	0.10	0.04	0.08
LOI	4.01	5.14	4.57	4.44	4.24	0.84	4.53	4.76	4.60	2.07	4.86	4.87	1.07	1.00
TOTAL	100.67	100.15	100.57	100.05	100.58	99.15	100.54	100.39	100.52	100.20	100.35	100.38	99.84	100.64
Zn	65	82	88	73	94	20	70	73	79	24	77	73	8	51
Cu	88	95	41	33	148	70	20	28	32	273	50	23	<3	305
Ni	103	89	141	114	111	17	93	159	116	46	122	74	9	179
Co	32	35	39	22	44	9	30	44	36	9	43	30	3	34
Ga	17	10	22	17	15	<3	21	16	21	4	20	14	8	13
Mo	<2	<2	<2	<2	<2	6	<2	<2	<2	<2	<2	<2	3	5
Nb	12	12	12	13	10	5	13	14	13	6	13	10	3	4
Zr	138	109	147	125	126	14	131	136	124	31	135	84	80	72
Y	27	20	29	26	21	<2	28	24	26	7	24	20	8	18
Sr	105	291	126	67	138	7	82	58	72	120	120	45	11	139
Rb	107	7	86	113	27	<2	119	97	116	30	112	47	92	2
U	<5	<5	10	15	5	<5	<5	<5	5	<5	9	7	<5	<5
Th	13	<5	12	7	9	<5	10	13	10	<5	10	14	8	<5
Pb	24	35	31	21	15	<5	21	18	23	32	19	14	7	14
Cr	466	236	751	599	315	184	484	668	340	297	296	195	119	664
V	151	156	188	155	133	31	134	143	143	87	156	132	37	187
Ba	617	52	657	684	194	22	706	649	774	998	686	355	331	166
Sc	21	21	20	19	26	<8	19	17	33	12	23	17	<8	19
As	20	<10	23	<10	<10	<10	<10	<10	<10	<10	<10	23	<10	<10
S	290	220	350	370	350	<50	380	370	350	360	380	190	<50	292
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	10	9	<8	9	<8
Sn	16	<8	10	22	<8	<8	<8	8	15	<8	<8	<8	<8	<8
Bi	<10	<10	5	<10	7	<10	9	10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#1121	#1122	#1123	#1124	#1125	#1126	#1127	#1128	#1129	#1130	#1131	#1132	#1133	#1134
	WT-62	WT-105	WT-106	WT-107	WT-108	WT-190	UV-25	UV-26	UV-28	UV-106	UV-107	UV-120	UV-121	UV-140
SiO2	57.42	63.93	61.02	41.27	55.98	60.02	53.66	55.55	57.43	63.68	54.95	51.20	55.26	60.47
TiO2	0.61	0.43	0.65	0.42	0.52	0.47	0.62	0.61	0.69	0.54	0.61	0.57	0.55	0.52
Al2O3	15.41	11.78	19.11	10.31	16.10	10.91	15.30	14.89	15.24	11.81	15.22	13.04	12.52	12.49
Fe2O3	10.40	7.54	8.05	7.10	8.73	10.12	10.27	11.10	11.22	7.69	10.00	10.95	9.96	7.98
MnO	0.18	0.09	0.08	0.11	0.14	0.16	0.14	0.15	0.14	0.07	0.15	0.16	0.17	0.11
MgO	5.46	5.27	2.20	4.15	4.63	6.98	5.48	6.56	5.25	4.68	5.71	10.10	9.23	6.22
CaO	7.22	7.72	1.13	6.99	10.08	8.99	7.08	4.06	2.09	5.55	5.86	6.36	5.83	6.81
Na2O	1.14	0.76	0.80	0.89	1.53	0.45	1.11	0.71	0.83	0.38	2.08	0.55	0.11	0.94
K2O	0.86	1.43	3.48	0.30	0.98	0.09	1.10	1.70	1.90	1.07	0.46	1.71	0.81	1.06
P2O5	0.09	0.05	0.36	0.06	0.31	0.08	0.15	0.13	0.18	0.09	0.13	0.11	0.09	0.13
Cr2O3	0.04	0.08	0.02	0.02	0.02	0.01	0.00	0.00	0.00	0.01	0.00	0.08	0.08	0.00
NiO	0.02	0.03	0.02	0.02	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.03	0.04	0.02
H2O-	0.18	0.21	0.09	0.14	0.09	0.09	0.84	0.89	0.78	1.26	1.37	0.71	0.40	0.42
LOI	1.29	1.14	2.77	28.16	1.37	1.26	4.16	4.26	4.78	2.74	2.89	4.06	4.43	2.80
TOTAL	100.32	100.46	99.78	99.94	100.51	99.66	99.93	100.64	100.55	99.59	99.45	99.63	99.48	99.97
Zn	75	46	75	69	55	66	75	80	87	60	80	89	75	57
Cu	64	197	26	91	304	41	73	81	69	45	68	30	57	81
Ni	110	184	58	107	126	131	135	198	123	171	127	233	230	125
Co	37	21	17	36	33	44	41	47	50	26	39	48	42	33
Ga	18	13	19	10	21	13	22	20	17	18	15	12	14	16
Mo	<2	6	<2	3	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Nb	7	9	13	8	9	6	11	8	9	15	12	10	7	10
Zr	120	73	178	95	84	73	110	95	127	143	101	93	82	88
Y	23	16	26	24	24	22	28	23	21	19	26	21	19	22
Sr	135	279	116	147	90	28	133	95	50	118	95	57	59	108
Rb	47	81	178	24	56	<2	55	78	82	48	16	73	41	43
U	9	7	<5	9	8	<5	8	<5	7	7	<5	<5	<5	<5
Th	6	<5	22	9	12	12	7	6	12	7	10	9	7	11
Pb	15	20	35	14	15	7	18	15	13	19	16	13	6	24
Cr	291	632	111	163	386	441	571	622	342	483	310	1055	1134	319
V	181	140	154	146	198	192	188	213	172	129	199	194	184	161
Ba	526	1011	1032	250	177	95	453	617	523	389	179	534	327	376
Sc	22	18	10	22	18	25	21	31	27	11	23	20	21	11
As	<10	<10	<10	217	<10	<10	<10	12	<10	<10	<10	<10	<10	<10
S	127	262	232	217	417	145	50	140	96	140	174	146	177	262
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	18	<8	13	12
Sn	<8	13	<8	13	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	5	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	9	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#1135	#1136	#1137	#1138	#1139	#1140	#1141	#1142	#1143	#1144	#1145	#1146	#1147	#1148
	UV-141	ST-118	ST-119	ST-120	ST-121	ST-122	ET-66	ET-68	ET-69	ET-70	ET-237	ET-238	UV-122	ST-109
SiO2	49.07	56.79	53.94	56.96	73.49	58.28	51.05	49.92	54.52	53.75	53.86	53.13	50.77	54.10
TiO2	0.57	0.56	0.59	0.62	0.25	0.59	2.55	2.50	0.59	0.65	0.54	0.52	0.63	0.57
Al2O3	13.90	13.23	13.31	14.38	6.38	13.35	12.39	12.11	14.94	16.44	13.94	13.82	14.17	12.81
Fe2O3	10.35	9.22	12.43	10.00	10.89	13.81	17.92	17.82	10.73	11.53	10.94	10.61	11.69	26.68
MnO	0.18	0.13	0.21	0.17	0.14	0.17	0.21	0.21	0.17	0.20	0.18	0.19	0.18	0.03
MgO	10.02	5.68	7.17	6.81	3.96	6.37	3.59	3.64	5.57	5.44	6.74	8.04	10.53	0.53
CaO	9.00	5.09	6.55	4.42	1.13	0.79	7.94	7.80	7.01	5.73	6.66	6.68	2.58	0.18
Na2O	0.19	0.74	1.34	2.12	0.00	2.12	2.35	2.22	1.34	1.80	1.95	1.48	0.11	0.21
K2O	1.81	1.29	0.18	0.68	0.13	0.02	1.07	1.01	0.67	1.03	0.36	0.97	1.40	1.55
P2O5	0.14	0.04	0.06	0.07	0.06	0.09	0.32	0.33	0.06	0.08	0.04	0.04	0.10	0.19
Cr2O3	0.08	0.03	0.03	0.03	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.02	0.09	0.01
NiO	0.03	0.02	0.02	0.02	0.00	0.02	0.00	0.00	0.01	0.01	0.01	0.02	0.04	0.00
H2O-	0.26	0.07	0.16	0.23	0.09	0.21	0.28	0.62	0.62	0.30	0.10	0.02	1.65	0.28
LOI	4.87	6.54	4.08	3.38	3.51	4.21	0.37	0.83	1.80	2.43	3.09	3.15	5.77	2.69
TOTAL	100.47	99.43	100.07	99.89	100.03	100.10	100.04	99.01	98.03	99.39	98.41	98.69	99.71	99.83
Zn	81	76	83	79	59	82	131	129	70	77	76	76	86	20
Cu	81	71	68	82	10	13	233	255	86	59	61	51	67	15
Ni	228	138	166	160	46	142	56	60	114	111	148	160	277	49
Co	45	39	51	47	31	64	50	46	35	40	43	47	52	<3
Ga	12	12	16	17	6	15	28	29	18	21	13	16	17	15
Mo	<2	3	4	5	1	2	<2	3	<2	<2	4	<2	<2	11
Nb	8	9	5	9	6	6	14	14	7	6	9	6	8	10
Zr	87	96	90	105	56	91	227	222	92	100	93	81	92	254
Y	20	21	23	23	14	19	63	59	24	29	24	50	20	32
Sr	60	59	506	171	12	27	158	162	121	167	94	105	44	79
Rb	55	103	8	29	11	2	43	48	44	48	9	54	86	72
U	7	<5	<5	<5	<5	7	6	<5	<5	<5	<5	<5	<5	<5
Th	7	6	9	10	<5	<5	8	7	12	9	13	6	6	17
Pb	16	11	17	22	15	8	9	9	8	18	14	5	10	23
Cr	1172	475	484	535	124	500	105	89	151	194	495	547	1317	408
V	181	195	212	218	68	192	399	414	201	228	168	190	215	310
Ba	610	372	150	338	43	20	441	484	257	298	160	426	940	289
Sc	20	26	21	22	<8	24	33	29	44	32	35	37	19	20
As	22	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	328	365	349	405	218	289	1343	227	133	118	239	257	136	285
Sb	<8	<8	<8	<8	<8	<8	<8	<8	8	<8	<8	<8	<8	<8
Sn	<8	<8	<8	<8	<8	<8	8	10	<8	8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	6	<10	<10	<10	6	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	11	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#1149	#1150	#1151	#1152	#1153	#1154	#1155	#1156	#1157	#1158	#1159	#1160	#1161	#1162
	ST-112	ST-113	ST-114	ST-115	ST-116	ST-117	ST-101	ST-102	ST-103	ST-104	ET-41	ET-386	ET-387	ET-388
SiO2	40.86	46.80	49.52	43.58	53.52	50.60	64.34	63.05	63.38	66.71	51.12	47.89	53.35	48.21
TiO2	1.04	1.45	1.33	0.96	0.72	0.53	0.79	0.84	0.81	0.58	0.83	0.92	0.85	0.90
Al2O3	32.89	36.91	31.36	23.42	16.91	13.37	18.49	20.39	18.32	13.52	15.04	14.19	13.35	14.55
Fe2O3	12.69	1.58	4.81	21.11	20.11	12.25	5.44	4.26	7.59	10.83	11.24	12.21	10.39	12.80
MnO	0.01	0.00	0.01	0.04	0.09	0.29	0.05	0.00	0.04	0.03	0.22	0.21	0.17	0.21
MgO	0.33	0.28	0.51	1.60	2.14	6.16	0.99	0.91	1.06	1.57	7.67	7.91	5.89	8.14
CaO	0.00	0.04	0.09	0.06	0.04	5.47	0.23	0.05	0.10	0.16	11.22	10.63	11.80	10.37
Na2O	0.93	0.99	0.86	0.35	0.08	0.00	0.20	0.28	0.29	0.09	2.03	2.32	0.53	0.63
K2O	4.64	4.88	4.68	2.21	1.33	0.86	4.43	4.89	3.75	1.65	0.09	0.21	0.14	0.18
P2O5	0.07	0.19	0.00	0.00	0.00	0.02	0.02	0.08	0.14	0.12	0.27	0.11	0.06	0.11
Cr2O3	0.03	0.04	0.10	0.06	0.04	0.02	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00
NiO	0.01	0.01	0.02	0.09	0.05	0.02	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.01
H2O-	0.20	0.23	0.89	0.77	0.37	0.23	0.78	0.67	0.85	0.40	0.04	0.51	0.98	0.11
LOI	5.79	6.86	5.65	5.41	4.39	9.38	4.18	4.10	4.35	4.11	0.62	2.06	2.21	2.94
TOTAL	99.49	100.26	99.83	99.66	99.79	99.20	99.96	99.52	100.70	99.77	100.40	99.18	99.73	99.16
Zn	12	12	15	56	79	174	24	29	51	59	90	99	73	96
Cu	12	<3	<3	165	204	11	558	110	231	25	14	138	112	137
Ni	106	105	151	683	400	174	42	44	39	67	113	132	107	142
Co	3	5	11	92	116	67	17	5	15	39	41	47	33	52
Ga	31	33	37	37	17	13	25	28	22	18	17	10	14	6
Mo	2	<2	2	4	5	<2	4	2	<2	6	<2	<2	<2	<2
Nb	14	13	14	10	9	7	16	16	15	12	7	6	8	8
Zr	189	232	227	162	126	91	205	222	194	157	60	63	62	58
Y	28	33	41	57	28	21	39	40	35	23	23	44	46	33
Sr	130	162	83	47	24	24	45	53	58	64	86	79	75	50
Rb	238	211	211	95	63	61	179	195	155	78	<2	6	6	7
U	8	8	9	8	6	<5	6	11	10	5	7	<5	<5	<5
Th	11	18	17	6	12	<5	15	21	21	11	<5	<5	<5	<5
Pb	25	22	26	8	23	10	8	9	16	27	<5	<5	<5	<5
Cr	348	347	970	801	614	496	137	174	134	109	336	328	302	385
V	717	336	459	364	282	208	157	157	149	103	263	265	249	299
Ba	882	891	661	178	195	87	899	835	762	219	73	268	103	130
Sc	47	56	44	35	26	34	12	12	9	9	27	36	35	30
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	13	<10	<10	<10	<10
S	328	393	351	427	597	385	262	228	264	5961	<50	190	<50	140
Sb	<8	<8	<8	<8	<8	<8	<8	<8	<8	9	9	18	<8	<8
Sn	<8	<8	<8	<8	<8	<8	<8	<8	<8	10	<8	<8	<8	<8
Bi	<10	<10	7	<10	<10	<10	<10	<10	<10	<10	11	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#1163	#1164	#1165	#1166	#1167	#1168	#1169	#1170	#1171	#1172	#1173	#1174	#1175	#1176
	ET-34	ET-39	ET-40	ET-42	ET-43	ET-46	ET-47	ET-48	ET-77	ET-113	ET-118	ET-174	ET-175	DTQ-V
SiO2	50.23	50.30	49.65	49.13	51.52	50.27	52.76	50.55	59.81	50.32	50.07	49.14	38.27	98.82
TiO2	0.88	0.88	0.99	0.79	0.83	0.49	0.48	0.81	0.53	0.60	0.82	0.85	0.39	0.00
Al2O3	16.02	14.86	12.62	14.27	13.74	14.34	15.22	14.00	15.66	14.84	13.84	23.12	23.50	0.00
Fe2O3	11.70	12.73	14.73	12.32	12.18	5.95	9.39	12.02	5.79	7.58	13.12	12.47	22.00	0.33
MnO	0.18	0.19	0.22	0.22	0.25	0.87	0.23	0.20	0.07	0.24	0.20	0.54	0.05	0.00
MgO	6.16	7.38	8.20	7.07	6.85	10.76	7.94	6.50	2.49	10.23	7.15	0.94	0.41	0.00
CaO	9.97	11.51	10.58	13.26	10.94	11.33	9.39	11.61	8.34	6.38	10.30	0.00	0.01	0.00
Na2O	2.77	1.67	2.19	0.86	2.34	1.03	1.40	1.96	0.08	0.42	2.71	0.18	0.09	0.02
K2O	0.12	0.04	0.05	0.04	0.07	0.76	0.66	0.09	2.95	0.72	0.09	6.30	2.50	0.00
P2O5	0.05	0.07	0.07	0.03	0.07	0.00	0.04	0.04	0.06	0.06	0.08	0.04	0.20	0.00
Cr2O3	0.00	0.06	0.05	0.03	0.05	0.00	0.05	0.02	0.00	0.00	0.02	0.13	0.06	0.00
NiO	0.01	0.02	0.02	0.01	0.02	0.01	0.02	0.02	0.00	0.01	0.01	0.07	0.08	0.00
H2O-	0.32	0.04	0.12	0.10	0.15	0.52	0.09	0.22	0.63	3.52	0.16	0.30	1.87	0.16
LOI	0.70	0.56	0.64	0.74	0.66	2.63	0.94	0.94	2.43	4.80	0.69	5.19	9.16	0.25
TOTAL	99.11	100.31	100.13	98.87	99.67	98.96	98.61	98.98	98.84	99.72	99.26	99.27	98.59	99.58
Zn	80	77	98	80	110	123	64	94	113	189	90	339	458	9
Cu	122	52	88	24	11	66	56	124	42	61	29	123	402	<3
Ni	119	119	129	119	126	98	134	130	50	87	129	400	628	<3
Co	39	47	46	45	43	23	40	43	9	15	46	183	70	<3
Ga	19	19	18	15	16	16	16	16	24	17	14	38	28	<3
Mo	<2	3	5	<2	<2	<2	<2	<2	<2	<2	<2	9	7	11
Nb	6	4	3	6	3	8	4	<2	12	11	4	16	19	3
Zr	57	57	67	50	52	55	55	49	131	145	53	335	296	3
Y	27	22	33	22	24	23	23	20	26	46	24	48	76	<2
Sr	90	48	66	78	87	110	71	64	218	57	99	38	18	5
Rb	<2	<2	<2	<2	<2	31	26	<2	101	39	<2	258	107	<2
U	<5	<5	<5	<5	<5	<5	<5	7	5	<5	<5	9	11	<5
Th	<5	6	<5	<5	<5	<5	<5	<5	16	17	<5	13	27	<5
Pb	<5	<5	9	<5	7	16	<5	<5	8	17	6	258	69	60
Cr	327	389	408	346	319	294	526	381	75	94	348	1493	1023	207
V	293	274	332	277	275	252	223	271	75	101	250	212	182	18
Ba	661	29	48	35	<16	1573	708	73	931	416	90	2134	689	38
Sc	48	50	38	50	41	44	43	42	24	18	45	36	13	<8
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	390	247	71
S	258	125	215	98	102	518	173	177	162	249	87	144	282	<50
Sb	<8	<8	<8	<8	<8	<8	<8	<8	10	<8	11	15	<8	<8
Sn	<8	8	<8	<8	<8	16	<8	<8	9	12	17	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	9	<8	<8	<8	<8	<8	<8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#1177	#1178	#1179	#1180	#1181	#1182	#1183	#1184	#1185	#1186	#1187	#1188	#1189	#1190
	ET-285A	ET-297	RF-20	RF-21	UV-146	UV-147	UV-29	ET-270	ET-333	ET-359	ET-37	ET-73	DD-1	UV-72
SiO2	76.00	30.57	98.53	96.93	52.28	44.52	56.21	55.25	56.53	49.65	44.87	47.93	54.22	35.02
TiO2	0.13	0.11	0.14	0.14	1.55	2.04	0.59	0.77	0.26	1.54	1.48	0.91	0.60	5.48
Al2O3	15.75	42.85	0.00	0.11	13.02	15.31	14.82	15.69	12.18	13.31	14.96	15.21	10.04	19.44
Fe2O3	0.42	1.29	0.70	1.25	15.06	19.26	9.95	10.00	8.66	15.60	16.98	13.53	9.73	23.19
MnO	0.00	0.02	0.01	0.03	0.22	0.32	0.14	0.18	0.21	0.22	0.24	0.20	0.21	0.12
MgO	0.13	0.47	0.00	0.00	5.23	5.16	5.19	6.52	11.46	5.58	6.19	7.59	9.86	3.45
CaO	0.00	0.00	0.00	0.01	8.84	7.14	6.56	6.53	5.69	9.29	12.72	10.73	11.12	1.87
Na2O	0.08	0.09	0.01	0.02	1.55	0.95	1.11	2.38	1.42	2.18	0.75	0.90	1.28	0.10
K2O	1.56	0.42	0.00	0.01	0.19	0.39	1.79	0.12	1.29	0.53	0.37	0.12	0.68	4.63
P2O5	0.00	0.26	0.01	0.01	0.14	0.14	0.14	0.09	0.06	0.13	0.21	0.04	0.01	1.42
Cr2O3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.02	0.00	0.14	0.00
NiO	0.00	0.00	0.00	0.00	0.02	0.03	0.02	0.01	0.03	0.02	0.01	0.01	0.02	0.07
H2O-	0.54	2.34	0.03	0.05	0.55	1.46	0.19	0.25	0.13	0.12	0.24	0.13	0.07	0.83
LOI	4.33	20.45	0.21	0.37	1.35	3.41	2.73	3.20	1.80	0.68	0.86	1.00	1.16	4.68
TOTAL	98.94	98.87	99.64	98.93	100.00	100.13	99.44	100.99	99.83	98.85	99.90	98.30	99.14	100.30
Zn	11	9	6	11	119	121	75	129	66	108	154	85	97	194
Cu	8	13	<3	4	64	165	62	130	26	204	31	50	75	21
Ni	5	25	<3	5	119	181	105	85	252	75	108	137	161	570
Co	7	8	4	4	45	79	38	34	47	50	48	50	35	60
Ga	17	20	<3	<3	15	22	19	14	14	24	22	20	11	25
Mo	7	<2	9	16	3	2	<2	4	<2	<2	<2	3	<2	4
Nb	3	4	2	2	9	10	9	9	7	6	5	5	4	191
Zr	254	65	2	17	141	172	112	87	65	115	102	66	61	627
Y	34	9	3	28	51	53	23	70	11	36	45	27	19	73
Sr	15	8	2	4	57	18	172	133	246	163	37	44	87	154
Rb	54	16	<2	3	4	23	99	<2	49	32	14	4	33	197
U	<5	5	<5	<5	<5	6	<5	5	7	<5	<5	<5	<5	14
Th	<5	5	<5	<5	<5	<5	7	<5	5	<5	<5	<5	<5	18
Pb	6	5	<5	<5	7	<5	24	10	12	8	<5	8	6	50
Cr	61	135	132	184	132	133	376	118	825	146	152	405	1567	97
V	<14	30	15	16	517	714	185	242	148	350	351	321	250	322
Ba	566	216	28	41	157	234	324	111	554	172	97	126	212	2102
Sc	<8	21	<8	<8	39	47	26	41	44	35	48	46	40	24
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	137	623	<50	<50	154	189	80	147	231	1037	139	164	<50	242
Sb	<8	<8	<8	<8	<8	9	12	8	<8	<8	<8	<8	<8	<8
Sn	20	<8	<8	<8	13	14	13	<8	<8	<8	<8	<8	<8	<8
Bi	<10	<10	<10	<10	<10	<10	<10	<10	<10	8	7	<10	<10	<10
W	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
B	n.d.	11	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

	#1191	#1192	#1193	#1194	#1195	#1196	#1197	#1198	#1199	#1200	#1201	#1202	#1203
	UV-71	UV-73	UV-74	UV-75	UV-76	UV-200	UV-201	UV-202	UV-203	UV-204	UV-211	UV-301	UV-302
SiO2	51.38	53.65	57.47	63.53	40.66	58.02	53.10	74.62	57.88	55.30	57.96	18.29	50.72
TiO2	0.90	1.68	1.67	0.49	0.33	0.43	0.37	0.27	0.44	0.41	0.47	3.90	7.07
Al2O3	10.54	14.47	14.93	16.08	9.94	14.17	11.02	8.12	13.98	12.44	14.53	6.58	20.88
Fe2O3	11.27	14.21	15.35	11.17	39.77	12.04	26.20	11.95	17.37	16.74	18.11	58.07	8.86
MnO	0.31	0.18	0.11	0.03	0.20	0.20	0.44	0.08	0.03	0.12	0.03	0.03	0.01
MgO	11.45	6.07	2.32	1.06	0.38	6.48	0.42	0.44	0.77	4.64	0.27	0.24	0.59
CaO	3.68	0.20	0.21	0.09	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
Na2O	0.19	0.04	0.09	0.15	0.11	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00
K2O	0.79	1.09	2.21	4.37	0.15	1.98	0.03	0.15	0.52	0.16	0.14	0.65	1.85
P2O5	0.26	0.11	0.25	0.09	0.55	0.05	0.26	0.00	0.05	0.11	0.00	0.84	0.48
Cr2O3	0.10	0.00	0.00	0.05	0.02	0.06	0.05	0.03	0.08	0.06	0.09	0.00	0.00
NiO	0.03	0.06	0.06	0.02	0.03	0.05	0.04	0.03	0.02	0.08	0.02	0.04	0.01
H2O-	0.43	2.96	0.58	0.46	1.19	1.18	1.17	0.87	1.90	2.97	1.54	1.76	1.64
LOI	8.45	5.39	4.41	2.82	7.01	4.89	5.97	3.57	5.56	5.97	6.02	9.15	7.27
TOTAL	99.78	100.11	99.66	100.41	100.37	99.55	99.07	100.13	98.60	99.03	99.18	99.55	99.41
Zn	195	477	363	61	217	400	282	207	263	998	183	958	90
Cu	21	17	15	10	54	21	33	26	67	66	58	248	74
Ni	264	445	453	89	152	343	219	123	149	647	95	246	34
Co	49	165	100	15	90	55	145	29	6	59	<3	62	5
Ga	13	20	21	15	11	16	15	9	18	20	20	16	30
Mo	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	2	5	6
Nb	24	19	16	5	4	6	7	4	8	12	6	138	225
Zr	133	215	214	86	56	70	70	83	83	84	81	561	963
Y	20	36	44	15	16	16	22	19	23	31	21	58	113
Sr	120	21	36	23	5	9	7	6	6	9	6	299	578
Rb	31	60	81	171	6	104	6	8	29	10	9	39	87
U	<5	<5	<5	<5	11	<5	7	<5	6	<5	<5	27	11
Th	<5	<5	<5	<5	7	<5	<5	<5	<5	<5	<5	7	28
Pb	14	5	36	15	11	10	25	12	16	<5	16	163	130
Cr	1519	392	338	1024	990	973	1003	632	1078	983	1226	84	155
V	174	249	198	194	208	203	244	124	231	204	213	346	483
Ba	869	493	1148	534	182	390	238	141	190	213	107	854	1919
Sc	19	24	23	30	27	32	37	21	46	35	43	31	44
As	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
S	428	149	203	191	271	202	263	235	260	242	331	222	223
Sb	13	<8	<8	<8	9	<8	<8	<8	<8	12	<8	<8	<8
Sn	<8	<8	<8	<8	15	<8	<8	<8	<8	<8	<8	23	<8
Bi	<10	<10	<10	<10	<10	11	<10	<10	<10	<10	<10	<10	<10
W	<8	<8	<8	<8	<8	15	<8	<8	<8	<8	<8	<8	8
B	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

APPENDIX 1b

Geochemical analyses of FeO, volatiles and REE

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Sample No.	UV-123	UV-124	UV-126	UV-127	UV-125	UV-131	UV-132	UV-133
SiO2	62.88	53.74	56.08	61.90	51.83	54.98	55.00	71.31
TiO2	0.95	0.90	0.84	0.83	0.93	0.76	0.72	1.08
Al2O3	20.37	23.66	23.11	20.78	23.55	24.49	21.97	17.07
Fe2O3	2.34	7.85	7.80	6.31	3.31	7.59	9.09	2.20
FeO	5.83	2.13	0.56	0.90	11.85	0.00	0.10	0.10
MnO	0.05	0.05	0.00	0.03	0.07	0.01	0.01	0.01
MgO	1.09	0.45	0.34	0.52	1.28	0.21	0.52	0.33
CaO	0.00	0.05	0.03	0.38	0.00	0.05	0.44	0.00
Na2O	0.31	0.43	0.22	0.27	0.11	0.41	0.38	0.32
K2O	1.83	2.42	3.06	2.84	1.10	3.27	3.82	4.59
P2O5	0.08	0.09	0.16	0.07	0.09	0.08	0.18	0.03
C org	0.00	0.01	0.00	0.00	0.01	0.01	0.11	0.15
CO2	0.07	0.04	0.07	0.07	0.04	0.18	0.55	0.37
S leco	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00
H2O-	0.23	1.21	0.37	0.31	0.15	2.02	1.81	0.08
H2O+	4.13	6.08	6.51	5.01	5.30	6.05	4.89	2.22
TOTAL	100.16	99.11	99.15	100.23	99.62	100.12	99.59	99.86
B	100	78	97	103	48	53	70	120
Li	1	10	12	47	15	55	17	1
La	50.0	62.5	22.1	14.8	48.4	19.2	40.6	50.0
Ce	87.1	85.8	25.4	28.8	49.3	36.9	73.8	92.3
Pr	11.3	13.2	4.5	3.1	9.3	2.6	7.5	11.2
Nd	39.8	48.8	17.2	10.9	32.9	6.8	25.2	41.5
Sm	7.0	8.5	3.8	3.1	5.5	2.3	4.9	7.9
Eu	1.3	1.7	0.7	0.6	1.1	0.5	0.9	1.5
Gd	5.6	6.4	3.7	3.2	4.7	2.5	4.2	5.7
Tb	0.9	0.9	0.7	0.6	0.8	0.4	0.6	0.9
Dy	5.6	4.9	4.4	4.1	4.3	2.8	3.7	5.0
Er	3.2	2.5	2.5	2.5	2.5	1.6	2.0	3.0
Tm	0.5	0.3	0.3	0.4	0.4	0.2	0.3	0.4
Yb	3.2	2.5	2.3	2.7	2.7	1.5	2.0	3.2

Sample No.	UV-123	UV-124	UV-126	UV-127	UV-125	UV-131	UV-132	UV-133
REE t	215.5	238.0	87.6	74.8	161.9	77.3	165.7	222.6
K2O/Na2O	5.90	5.63	13.91	10.52	10.00	7.98	10.05	14.34
SiO2/Al2O3	3.09	2.27	2.43	2.98	2.20	2.24	2.50	4.18
C org/S xrf	0.61	0.56	0.50	0.62	0.61	0.34	5.37	5.08
Cr/Th	15.1	8.6	7.6	8.2	14.6	8.9	8.1	8.3
Th/Sc	1.31	1.42	1.26	1.77	0.81	1.10	1.71	1.87
Cr/Zr	1.13	1.02	0.89	0.87	1.62	1.19	1.28	0.58
Co/Th	1.00	1.00	0.29	0.26	1.19	0.61	0.42	0.21
Th/U	1.50	5.41	4.80	3.83	3.50	1.77	4.80	5.61
Al/Zr	382	549	597	507	656	754	765	228
Ti/Zr	20.2	23.7	24.6	22.9	29.3	26.5	28.4	16.3
La/Sc	3.13	3.29	1.16	1.14	1.86	0.91	2.90	3.33
K2O/REE t	84.9	101.7	349.3	379.7	67.9	423.0	230.5	206.2
Eu/Eu*	0.61	0.68	0.56	0.58	0.65	0.63	0.59	0.65
Th/La	0.42	0.43	1.09	1.55	0.43	1.20	0.59	0.56
Ba/La	11.7	8.9	33.5	31.5	12.0	45.9	20.4	11.7
Gd(n)/Yb(n)	1.42	2.07	1.30	0.96	1.41	1.35	1.70	1.44
La(n)/Sm(n)	4.50	4.63	3.66	3.01	5.54	5.25	5.22	3.98
La(n)/Yb(n)	10.56	16.89	6.49	3.70	12.11	8.65	13.72	10.56
Ce/Ce* (Pr)	0.83	0.67	0.57	0.96	0.52	1.08	0.93	0.88
Ce/Ce* (Nd)	0.83	0.66	0.55	0.94	0.50	1.01	0.90	0.87

Sample No.	UV-134	UV-135	WT-164	WT-165	WT-166	WT-167	WT-168	ST-206
SiO2	54.82	55.24	63.21	51.99	64.73	61.50	62.81	59.26
TiO2	0.84	0.67	0.79	0.55	0.61	0.75	0.79	0.66
Al2O3	23.95	23.58	18.44	14.61	13.36	13.78	20.98	22.34
Fe2O3	6.76	7.02	0.27	1.61	0.39	1.09	6.45	2.90
FeO	0.10	0.10	7.89	6.94	0.11	0.10	0.10	3.79
MnO	0.00	0.00	0.05	0.14	0.01	0.01	0.05	0.02
MgO	0.29	0.23	3.22	5.70	0.71	0.81	1.16	1.21
CaO	0.05	0.01	0.38	12.77	0.00	0.64	0.00	0.23
Na2O	0.57	0.37	0.76	1.02	0.00	2.52	0.15	0.27
K2O	5.27	3.68	2.08	0.47	3.97	2.33	3.12	2.77
P2O5	0.24	0.13	0.08	0.09	0.04	0.05	0.08	0.05
C org	0.10	0.08	0.01	1.38	12.64	12.43	0.42	0.12
CO2	0.51	0.33	0.07	0.18	0.37	0.59	0.33	0.66
S leco	0.00	0.00	0.00	0.46	0.01	0.08	0.01	0.00
H2O-	0.84	2.69	0.14	0.06	0.11	0.49	0.24	0.90
H2O+	4.39	5.51	2.19	1.46	1.93	2.23	3.10	5.10
TOTAL	98.73	99.64	99.59	99.44	98.98	99.40	99.78	100.28
B	138	61	51	0	96	21	132	86
Li	4	57	124	7	44	35	22	134
La	110.0	33.3	34.2	12.1	20.0	35.4	48.2	51.2
Ce	112.0	61.2	46.7	2.4	14.7	20.9	75.6	80.0
Pr	21.5	5.8	6.0	2.8	5.8	7.8	10.4	10.3
Nd	74.2	19.3	18.4	9.1	26.2	24.8	37.2	35.0
Sm	12.2	3.5	3.3	2.2	5.2	4.4	6.7	5.3
Eu	2.4	0.7	0.5	0.5	0.9	0.7	1.1	0.9
Gd	9.9	3.0	2.6	2.3	4.3	3.2	4.7	3.7
Tb	1.2	0.5	0.4	0.4	0.7	0.5	0.7	0.6
Dy	5.8	2.8	2.1	2.7	4.4	2.7	3.7	3.4
Er	2.7	1.6	1.1	1.8	2.8	1.4	1.9	2.0
Tm	0.3	0.2	0.2	0.2	0.4	0.2	0.3	0.3
Yb	2.4	1.5	1.3	2.0	3.1	1.6	2.0	2.3

Sample No.	UV-134	UV-135	WT-164	WT-165	WT-166	WT-167	WT-168	ST-206
REE t	354.6	133.4	116.8	38.5	88.5	103.6	192.5	195.0
K2O/Na2O	9.25	9.95	2.74	0.46		0.92	20.80	10.26
SiO2/Al2O3	2.29	2.34	3.43	3.56	4.85	4.46	2.99	2.65
C org/S xrf	7.04	3.94	0.51	2.66	289.91	78.62	20.59	3.41
Cr/Th	9.4	6.9	12.3	34.7	2.8	3.1	6.7	6.0
Th/Sc	1.32	2.33	0.92	0.24	1.29	1.50	1.39	1.31
Cr/Zr	1.20	1.40	1.20	3.00	0.34	0.27	0.74	0.96
Co/Th	0.12	0.36	2.42	4.71	0.17	0.20	0.56	0.67
Th/U	2.27	5.61	2.40	1.40	3.61	2.14	2.27	2.33
Al/Zr	643	904	794	955	465	422	494	910
Ti/Zr	25.6	29.1	38.5	40.7	24.1	26.0	21.0	30.4
La/Sc	5.79	2.77	2.63	0.42	1.43	3.54	2.68	3.20
K2O/REE t	148.6	275.9	178.1	122.1	448.6	224.9	162.1	142.1
Eu/Eu*	0.65	0.64	0.50	0.67	0.57	0.55	0.57	0.59
Th/La	0.23	0.84	0.35	0.58	0.90	0.42	0.52	0.41
Ba/La	11.2	26.8	26.8	7.8	411.4	93.4	17.8	8.9
Gd(n)/Yb(n)	3.34	1.62	1.62	0.93	1.12	1.62	1.90	1.30
La(n)/Sm(n)	5.68	5.99	6.52	3.46	2.42	5.06	4.53	6.08
La(n)/Yb(n)	30.97	15.00	17.78	4.09	4.36	14.95	16.29	15.04
Ce/Ce* (Pr)	0.51	0.96	0.71	0.09	0.32	0.28	0.76	0.78
Ce/Ce* (Nd)	0.50	0.92	0.69	0.10	0.32	0.29	0.75	0.76

Sample No.	ST-214	ST-221	ST-227	ST-232	ST-313	ST-322	ST-337	ST-360
SiO2	58.35	63.78	61.39	58.52	60.71	51.93	50.19	65.47
TiO2	0.59	0.63	0.64	0.68	0.74	0.62	0.49	0.65
Al2O3	20.47	19.69	18.66	20.95	19.62	17.73	11.39	17.97
Fe2O3	0.55	0.28	8.74	0.01	0.61	0.83	3.85	1.22
FeO	6.69	4.98	0.10	6.49	5.30	7.78	1.80	2.96
MnO	0.02	0.02	0.04	0.04	0.04	0.14	0.05	0.02
MgO	1.70	1.31	1.62	1.53	2.47	3.04	6.31	1.90
CaO	0.29	0.10	0.20	0.72	0.56	0.39	0.55	0.34
Na2O	0.37	0.74	0.57	0.75	0.59	0.94	1.04	0.75
K2O	3.22	2.99	2.81	3.15	3.55	3.01	2.14	3.90
P2O5	0.00	0.00	0.00	0.04	0.16	0.15	0.10	0.19
C org	1.68	0.16	0.13	0.04	0.09	3.73	10.09	0.03
CO2	0.81	0.22	0.26	0.55	0.59	4.76	5.24	0.15
S leco	0.04	0.00	0.00	0.01	0.00	0.14	1.79	0.32
H2O-	0.81	0.69	0.55	0.29	0.50	0.01	0.55	0.31
H2O+	4.60	4.29	3.65	5.23	4.59	4.03	3.67	3.73
TOTAL	100.18	99.88	99.36	98.99	100.12	99.24	99.25	99.91
B	87	81	83	37	129	123	142	192
Li	78	101	41	169	65	60	37	22
La	48.3	51.3	51.7	46.7	34.0	33.2	27.5	44.6
Ce	70.2	81.8	89.6	69.6	61.0	45.8	48.6	77.0
Pr	9.4	9.2	8.3	8.1	8.5	5.2	5.8	9.4
Nd	33.5	30.9	25.8	30.3	26.0	16.4	18.4	32.9
Sm	5.3	4.9	4.2	5.3	4.4	2.9	3.4	5.3
Eu	0.9	0.6	0.7	1.0	0.7	0.5	0.5	1.0
Gd	4.2	2.9	2.9	3.9	3.5	2.2	2.7	3.9
Tb	0.7	0.4	0.5	0.6	0.5	0.3	0.4	0.6
Dy	4.2	2.7	2.8	3.7	3.3	2.1	2.7	3.7
Er	2.5	1.7	1.8	2.2	1.9	1.4	1.6	2.1
Tm	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.3
Yb	2.8	2.0	2.2	2.4	2.0	1.6	1.8	2.2

Sample No.	ST-214	ST-221	ST-227	ST-232	ST-313	ST-322	ST-337	ST-360
REE t	182.4	188.7	190.8	174.1	146.1	111.8	113.6	183.0
K2O/Na2O	8.70	4.04	4.93	4.20	6.02	3.20	2.06	5.20
SiO2/Al2O3	2.85	3.24	3.29	2.79	3.09	2.93	4.41	3.64
C org/S xrf	10.41	4.31	3.55	1.14	2.95	19.26	6.09	0.09
Cr/Th	6.6	5.4	5.9	7.6	8.7	9.5	9.2	7.8
Th/Sc	1.00	2.10	2.50	1.67	0.67	0.65	0.64	1.17
Cr/Zr	1.08	0.52	0.49	0.95	0.87	0.95	0.66	0.46
Co/Th	1.10	0.24	1.15	0.60	1.17	1.36	0.89	0.93
Th/U	1.43	1.62	1.82	2.00	2.40	2.20	1.80	2.00
Al/Zr	888	474	408	693	873	853	478	398
Ti/Zr	29.0	17.2	15.9	25.5	37.3	33.8	23.3	16.3
La/Sc	2.42	5.13	6.47	3.89	1.89	1.95	1.96	3.72
K2O/REE t	176.5	158.5	147.3	180.9	243.0	269.2	188.4	213.1
Eu/Eu*	0.56	0.45	0.58	0.64	0.53	0.58	0.49	0.64
Th/La	0.41	0.41	0.39	0.43	0.35	0.33	0.33	0.31
Ba/La	11.4	11.0	10.0	13.2	21.6	22.0	27.6	14.1
Gd(n)/Yb(n)	1.22	1.18	1.07	1.32	1.42	1.11	1.22	1.44
La(n)/Sm(n)	5.74	6.59	7.75	5.55	4.86	7.21	5.09	5.30
La(n)/Yb(n)	11.66	17.33	15.88	13.15	11.49	14.02	10.32	13.70
Ce/Ce* (Pr)	0.73	0.83	0.93	0.78	0.82	0.75	0.87	0.85
Ce/Ce* (Nd)	0.71	0.79	0.88	0.73	0.86	0.70	0.87	0.83

Sample No.	ST-308	G-302	G-305	G-308	G-312	G-315	ET-173	ET-180
SiO2	67.10	58.50	52.11	59.56	55.73	54.39	69.07	50.76
TiO2	0.52	0.87	0.76	0.35	0.81	0.58	0.69	0.81
Al2O3	10.69	18.86	19.55	21.18	19.33	19.02	18.17	26.70
Fe2O3	0.03	9.10	8.35	1.96	0.34	0.53	0.86	2.13
FeO	8.80	0.10	2.75	1.64	9.30	9.71	0.25	7.38
MnO	0.06	0.07	0.13	0.07	0.06	0.06	0.00	0.03
MgO	2.59	1.63	3.83	2.96	4.76	4.97	0.66	1.10
CaO	1.65	0.02	0.03	0.44	0.23	0.43	0.00	0.22
Na2O	1.18	0.08	0.07	0.16	0.91	0.52	0.09	0.63
K2O	0.69	2.75	3.67	5.17	3.35	3.98	5.05	3.18
P2O5	0.19	0.07	0.17	0.11	0.18	0.22	0.02	0.23
C org	0.07	0.00	0.00	1.41	0.05	0.04	0.05	0.13
CO2	1.65	0.15	0.15	0.84	0.15	0.33	0.44	0.44
S leco	0.05	0.00	0.00	0.63	0.00	0.00	0.00	0.00
H2O-	0.23	1.57	1.16	0.10	0.14	0.23	0.39	0.43
H2O+	3.48	4.75	5.82	3.48	5.06	5.18	2.80	4.88
TOTAL	98.98	98.52	98.55	100.06	100.40	100.19	98.54	99.05
B	29	63	56	76	41	32	206	83
Li	91	27	84	33	75	52	29	77
La	17.8	44.9	57.7	29.5	49.0	43.6	155.0	147.0
Ce	29.5	78.1	56.5	53.2	83.3	77.4	78.9	155.0
Pr	4.0	8.5	11.4	6.0	9.3	8.4	51.1	35.9
Nd	11.4	30.1	38.1	19.8	32.0	29.0	204.0	112.0
Sm	3.0	6.0	6.1	3.7	5.4	4.8	35.1	16.2
Eu	0.5	1.1	1.2	0.4	1.0	0.9	7.9	3.2
Gd	3.0	5.2	4.4	2.8	4.3	3.6	29.4	10.2
Tb	0.5	0.8	0.7	0.4	0.7	0.5	4.1	1.5
Dy	2.8	5.0	4.0	2.6	4.0	3.1	21.8	7.1
Er	1.5	2.8	2.3	1.6	2.3	1.8	10.7	3.2
Tm	0.2	0.4	0.3	0.3	0.3	0.3	1.4	0.4
Yb	1.6	2.7	2.5	2.2	2.6	2.1	9.3	3.2

Sample No.	ST-308	G-302	G-305	G-308	G-312	G-315	ET-173	ET-180
REE t	75.8	185.6	185.2	122.5	194.2	175.5	608.7	494.9
K2O/Na2O	0.58	34.38	52.43	32.31	3.68	7.65	56.11	5.05
SiO2/Al2O3	6.28	3.10	2.67	2.81	2.88	2.86	3.80	1.90
C org/S xrf	1.12	0.62	0.83	2.63	3.33	1.65	5.21	8.61
Cr/Th	7.7	11.6	8.6	4.8	10.2	9.1	8.3	7.2
Th/Sc	0.69	1.00	1.30	1.18	1.00	1.41	3.25	1.88
Cr/Zr	0.60	1.26	1.54	0.42	1.37	1.40	1.19	1.60
Co/Th	2.11	0.95	1.54	1.00	1.30	0.96	0.12	0.53
Th/U	1.50	1.50	1.73	0.72	2.56	3.00	1.73	3.75
Al/Zr	492	517	714	752	598	645	528	1047
Ti/Zr	27.1	27.0	31.4	14.1	28.4	22.3	22.7	36.0
La/Sc	1.37	2.14	2.89	2.68	2.13	2.56	19.40	9.19
K2O/REE t	91.0	148.2	198.2	422.0	172.5	226.8	83.0	64.3
Eu/Eu*	0.50	0.59	0.68	0.37	0.61	0.64	0.73	0.71
Th/La	0.51	0.47	0.45	0.44	0.47	0.55	0.17	0.20
Ba/La	11.5	27.1	19.4	332.2	16.6	26.7	10.4	5.3
Gd(n)/Yb(n)	1.52	1.56	1.43	1.03	1.34	1.39	2.56	2.58
La(n)/Sm(n)	3.73	4.71	5.95	5.02	5.71	5.72	2.78	5.71
La(n)/Yb(n)	7.52	11.24	15.60	9.06	12.74	14.03	11.26	31.04
Ce/Ce* (Pr)	0.79	0.89	0.49	0.90	0.86	0.90	0.21	0.49
Ce/Ce* (Nd)	0.82	0.85	0.48	0.88	0.84	0.87	0.22	0.51

Sample No.	ET-187	ET-191	ET-197	ET-271	ET-274	ET-278	ET-280	ET-282
SiO2	55.99	54.24	52.05	61.18	60.25	65.14	60.07	61.34
TiO2	0.71	0.68	1.14	0.80	0.90	0.78	0.74	0.75
Al2O3	24.62	23.09	22.36	25.37	21.53	22.70	20.92	20.35
Fe2O3	3.03	7.02	6.73	0.74	7.75	1.17	4.98	6.62
FeO	3.92	2.57	4.48	0.10	0.10	0.12	2.05	0.10
MnO	0.01	0.02	0.03	0.01	0.00	0.00	0.01	0.00
MgO	0.77	0.75	0.91	1.41	0.11	0.24	0.84	0.34
CaO	0.06	0.21	0.13	0.07	0.05	0.01	0.01	0.00
Na2O	1.76	0.68	0.63	1.78	1.71	0.78	0.98	0.85
K2O	3.67	2.65	2.71	2.87	2.42	3.04	3.01	3.06
P2O5	0.07	0.36	0.12	0.08	0.05	0.09	0.04	0.09
C org	0.00	0.02	0.06	0.13	0.01	0.03	0.04	0.01
CO2	0.18	0.07	0.33	0.33	0.18	0.15	0.40	0.37
S leco	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
H2O-	0.29	0.97	0.75	0.21	0.39	0.48	0.37	0.34
H2O+	4.15	5.47	6.16	4.95	4.44	4.87	4.40	4.45
TOTAL	99.24	98.81	98.60	100.03	99.89	99.59	98.87	98.67
B	105	86	53	231	122	139	108	129
Li	67	68	85	22	30	16	41	14
La	67.1	38.1	23.2	185.0	59.4	61.8	54.8	31.8
Ce	94.7	56.2	42.6	60.4	22.7	103.0	34.2	29.2
Pr	15.0	6.3	4.4	39.7	12.5	14.4	13.7	5.1
Nd	49.5	21.2	12.8	138.0	46.9	49.4	50.0	15.6
Sm	7.8	3.5	3.3	21.1	8.5	8.0	9.0	3.2
Eu	1.8	0.9	0.7	3.4	1.6	1.4	1.7	0.7
Gd	6.2	3.1	2.9	17.3	7.1	5.1	7.0	3.2
Tb	0.9	0.5	0.5	2.3	1.1	0.7	1.1	0.6
Dy	4.8	3.0	2.9	13.1	5.8	3.7	6.4	3.9
Er	2.4	2.0	1.7	7.0	3.4	2.0	3.6	2.6
Tm	0.4	0.3	0.3	0.9	0.5	0.3	0.5	0.4
Yb	2.4	2.3	1.9	6.0	3.2	2.0	3.6	2.8

Sample No.	ET-187	ET-191	ET-197	ET-271	ET-274	ET-278	ET-280	ET-282
REE t	253.0	137.4	97.2	494.2	172.7	251.8	185.6	99.1
K2O/Na2O	2.09	3.90	4.30	1.61	1.42	3.90	3.07	3.60
SiO2/Al2O3	2.27	2.35	2.33	2.41	2.80	2.87	2.87	3.01
C org/S xrf	0.88	2.17	2.01	25.01	0.72	1.69	2.40	0.50
Cr/Th	7.2	7.7	14.3	5.7	3.5	6.6	7.8	5.8
Th/Sc	1.64	1.00	0.58	1.63	1.18	0.70	1.05	0.85
Cr/Zr	1.20	1.13	1.31	0.58	0.39	0.55	0.78	0.56
Co/Th	0.83	0.90	0.72	0.15	0.12	0.31	0.19	0.14
Th/U	2.30	3.00	1.80	2.36	5.21	2.00	4.21	4.41
Al/Zr	944	855	601	531	483	619	527	477
Ti/Zr	30.8	28.5	34.7	19.0	22.9	24.1	21.1	19.9
La/Sc	4.79	1.81	0.75	11.56	2.70	2.69	2.74	1.22
K2O/REE t	145.1	192.9	278.8	58.1	140.1	120.7	162.2	308.8
Eu/Eu*	0.77	0.82	0.68	0.53	0.61	0.63	0.63	0.66
Th/La	0.34	0.55	0.78	0.14	0.44	0.26	0.38	0.69
Ba/La	11.3	16.9	25.8	8.0	14.9	12.9	12.8	34.7
Gd(n)/Yb(n)	2.09	1.09	1.24	2.34	1.80	2.07	1.58	0.93
La(n)/Sm(n)	5.41	6.85	4.43	5.52	4.40	4.86	3.83	6.25
La(n)/Yb(n)	18.89	11.19	8.25	20.84	12.54	20.88	10.29	7.67
Ce/Ce* (Pr)	0.68	0.78	0.93	0.16	0.19	0.79	0.29	0.49
Ce/Ce* (Nd)	0.68	0.74	0.92	0.16	0.18	0.79	0.29	0.47

Sample No.	ET-357	ET-360	ET-363	ET-368	ET-372	ET-347	ET-351	ET-353
SiO2	54.98	65.48	65.38	66.55	67.23	62.89	65.39	57.87
TiO2	0.70	0.77	0.71	0.65	0.57	0.53	0.46	0.43
Al2O3	18.83	15.18	15.34	14.19	13.57	17.95	15.93	11.65
Fe2O3	6.56	2.51	3.31	2.44	5.56	3.56	3.02	0.47
FeO	0.72	3.90	0.88	3.69	0.94	1.46	2.13	3.03
MnO	0.17	0.09	0.05	0.12	0.08	0.03	0.04	0.18
MgO	3.27	2.42	2.46	2.40	2.32	4.41	4.75	11.26
CaO	1.65	2.78	0.67	0.99	1.80	0.07	0.86	9.43
Na2O	1.44	2.30	1.33	1.82	2.14	0.20	2.06	1.08
K2O	2.65	2.26	3.97	3.27	2.13	4.61	4.21	2.38
P2O5	0.11	0.10	0.02	0.16	0.02	0.08	0.11	0.09
C org	0.45	0.03	1.95	0.67	0.06	0.00	0.01	0.00
CO2	0.44	0.18	0.66	0.48	0.29	0,18	0.04	0.15
S leco	0.00	0.01	0.00	0.00	0.05	0.00	0.01	0.00
H2O-	2.50	0.38	0.57	0.25	0.55	0.35	0.04	0.17
H2O+	3.95	1.92	1.62	1.40	1.90	4.15	1.44	1.75
TOTAL	98.42	100.31	98.92	99.08	99.21	100.47	100.49	99.94
B						140	151	7
Li	46	47	30	35	24	97	259	3
La	68.4	20.1	34.5	34.6	33.6	69.0	43.6	27.8
Ce	60.4	25.6	6.6	38.5	42.0	69.5	63.4	40.4
Pr	13.3	3.3	6.3	5.7	5.9	12.9	7.5	4.3
Nd	45.1	7.6	18.7	17.7	18.0	42.8	25.0	13.0
Sm	7.2	2.7	3.8	3.6	3.6	6.8	4.1	3.3
Eu	1.3	1.0	1.0	0.8	0.8	1.0	0.6	0.5
Gd	5.1	2.8	3.4	3.1	2.6	5.3	3.1	2.9
Tb	0.7	0.5	0.4	0.5	0.3	0.8	0.5	0.5
Dy	3.8	2.6	2.6	2.9	1.9	4.7	3.2	2.9
Er	2.0	1.2	1.4	1.6	0.9	2.6	2.0	1.7
Tm	0.3	0.2	0.2	0.2	0.1	0.4	0.3	0.3
Yb	2.0	1.2	1.6	1.7	1.0	2.9	2.3	2.0

Sample No.	ET-357	ET-360	ET-363	ET-368	ET-372	ET-347	ET-351	ET-353
REE t	209.6	68.8	80.5	110.9	110.7	218.7	155.6	99.6
K2O/Na2O	1.84	0.98	2.98	1.80	1.00	23.05	2.04	2.20
SiO2/Al2O3	2.92	4.31	4.26	4.69	4.95	3.50	4.10	4.97
C org/S xrf	24.46	0.77	75.00	37.02	0.50		0.71	
Cr/Th	13.0	13.3	6.8	7.0	9.4	4.4	8.7	11.5
Th/Sc	0.55	0.73	0.86	0.71	0.82	1.75	1.36	0.86
Cr/Zr	1.41	0.61	0.65	0.66	0.66	0.23	0.52	0.96
Co/Th	1.00	1.25	0.22	0.33	0.67	0.71	0.40	0.75
Th/U	3.21	1.00	2.57	1.25	1.29	3.00	1.15	2.00
Al/Zr	673	459	434	469	561	236	336	428
Ti/Zr	28.3	26.4	22.8	24.4	26.7	7.9	11.0	17.9
La/Sc	2.36	1.83	1.64	1.65	3.05	5.75	3.96	1.99
K2O/REE t	126.4	328.5	493.2	294.9	192.4	210.8	270.6	239.0
Eu/Eu*	0.62	1.10	0.83	0.72	0.76	0.49	0.49	0.48
Th/La	0.23	0.40	0.52	0.43	0.27	0.30	0.34	0.43
Ba/La	16.3	11.0	29.8	28.3	14.6	15.8	18.5	31.9
Gd(n)/Yb(n)	2.07	1.89	1.72	1.48	2.11	1.48	1.09	1.18
La(n)/Sm(n)	5.98	4.69	5.71	6.05	5.87	6.39	6.69	5.30
La(n)/Yb(n)	23.11	11.32	14.57	13.75	22.71	16.08	12.81	9.39
Ce/Ce* (Pr)	0.45	0.68	0.10	0.59	0.65	0.51	0.76	0.79
Ce/Ce* (Nd)	0.43	0.67	0.10	0.57	0.63	0.50	0.73	0.75

Sample No.	ET-355	ET-349
SiO2	67.25	63.55
TiO2	0.58	0.42
Al2O3	16.37	18.28
Fe2O3	0.77	4.14
FeO	2.87	0.96
MnO	0.03	0.02
MgO	4.94	3.38
CaO	0.55	0.02
Na2O	1.27	0.15
K2O	3.87	5.06
P2O5	0.12	0.00
C org	0.00	0.01
CO2	0.15	0.07
S leco	0.00	0.00
H2O-	0.09	0.36
H2O+	1.78	3.77
TOTAL	100.64	100.20
B	113	162
Li	147	111
La	42.8	42.9
Ce	63.2	31.2
Pr	6.9	6.9
Nd	22.2	25.1
Sm	3.6	4.3
Eu	0.6	0.6
Gd	2.7	3.4
Tb	0.5	0.6
Dy	2.9	3.6
Er	1.8	2.3
Tm	0.3	0.4
Yb	2.0	2.6

Sample No.	ET-355	ET-349
REE t	149.5	123.9
K2O/Na2O	3.05	33.73
SiO2/Al2O3	4.11	3.48
C org/S xrf		1.08
Cr/Th	11.7	2.8
Th/Sc	0.80	2.08
Cr/Zr	0.90	0.38
Co/Th	1.08	0.64
Th/U	1.00	5.00
Al/Zr	559	517
Ti/Zr	22.4	13.5
La/Sc	2.85	3.58
K2O/REE t	258.9	408.4
Eu/Eu*	0.57	0.46
Th/La	0.28	0.58
Ba/La	17.1	14.0
Gd(n)/Yb(n)	1.09	1.06
La(n)/Sm(n)	7.48	6.28
La(n)/Yb(n)	14.46	11.15
Ce/Ce* (Pr)	0.79	0.39
Ce/Ce* (Nd)	0.75	0.36

APPENDIX 2a

Descriptive Statistical Tables

CONTENTS OF APPENDIX 2a

Hekpoort Formation "felsic" rock facies

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 4 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	4	63.0500	66.710	64.370	.827	1.653	.528018	-.97816
TiO2	4	.5800	.840	.755	.059	.118	-.682137	-.74151
Al2O3	4	13.5200	20.390	17.680	1.464	2.928	-.510986	-.85860
Fe2O3	4	4.2600	10.830	7.030	1.442	2.884	.310265	-1.24081
MnO	4	.0000	.050	.030	.011	.022	-.446378	-1.00000
MgO	4	.9100	1.570	1.133	.149	.298	.655861	-.77340
CaO	4	.0500	.230	.135	.039	.078	.115228	-1.34507
Na2O	4	.0900	.290	.215	.046	.093	-.397276	-1.22143
K2O	4	1.6500	4.890	3.680	.716	1.432	-.525359	-.94549
P2O5	4	.0200	.140	.090	.026	.053	-.323970	-1.23810
H2Om	4	.4000	.850	.675	.099	.198	-.461746	-1.02938
LOI	4	4.1000	4.350	4.185	.058	.116	.559087	-.94767
Zn	4	24.0000	59.000	40.750	8.450	16.899	.043183	-1.80251
Cu	4	25.0000	558.000	231.000	116.907	233.813	.478249	-1.00000
Ni	4	39.0000	67.000	48.000	6.416	12.832	.692129	-.73093
Co	4	5.0000	39.000	19.000	7.165	14.329	.440469	-.90555
Ga	4	18.0000	28.000	23.250	2.136	4.272	-.109425	-1.29117
Mo	4	.0000	6.000	3.000	1.291	2.582	.000000	-1.36000
Nb	4	12.0000	16.000	14.750	.946	1.893	-.621946	-.85127
Zr	4	157.0000	222.000	194.500	13.763	27.526	-.368970	-1.01677
Y	4	23.0000	40.000	34.250	3.902	7.805	-.592137	-.88960
Sr	4	45.0000	64.000	55.000	4.021	8.042	-.121149	-1.22957
Rb	4	78.0000	195.000	151.750	25.921	51.842	-.538221	-.93047
U	4	5.0000	11.000	8.000	1.472	2.944	-.000000	-1.85207
Th	4	11.0000	21.000	17.000	2.449	4.899	-.204124	-1.59259
Pb	4	8.0000	27.000	15.000	4.378	8.756	.435729	-1.15244
Cr	4	109.0000	174.000	138.500	13.395	26.789	.246700	-.97560
V	4	103.0000	157.000	141.500	12.971	25.942	-.704460	-.72771
Ba	4	219.0000	899.000	678.750	155.784	311.568	-.678625	-.75151
Sc	4	9.0000	12.000	10.500	.866	1.732	.000000	-2.00000
As	4	.0000	13.000	3.250	3.250	6.500	.750000	-.66667
S	4	228.0000	5961.000	1678.750	1427.441	2854.881	.749925	-.66676
Sb	4	.0000	9.000	2.250	2.250	4.500	.750000	-.66667
Sn	4	.0000	10.000	2.500	2.500	5.000	.750000	-.66667

Machadodorp Member volcanics

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 17 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	17	38.27000	59.810	50.1524	.9884	4.0754	-.64664	3.94076
TiO2	17	.39000	.990	.7553	.0440	.1814	-.75096	-.75276
Al2O3	17	12.62000	23.500	15.4800	.7426	3.0617	1.86338	2.78909
Fe2O3	17	5.79000	22.000	11.6835	.8857	3.6516	.79273	2.23686
MnO	17	.05000	.870	.2512	.0457	.1883	2.16237	5.26643
MgO	17	.41000	10.760	6.5700	.6892	2.8417	-.87807	.29096
CaO	17	.00000	13.260	9.2729	.9213	3.7987	-1.59404	1.85489
Na2O	17	.08000	2.770	1.3653	.2301	.9485	.01643	-1.46668
K2O	17	.04000	6.300	.8829	.3979	1.6406	2.22039	5.16124
P2O5	17	.00000	.270	.0800	.0159	.0654	1.63266	2.69893
H2O+	17	.04000	3.520	.5694	.2152	.8874	2.27596	5.47129
LOI	17	.56000	9.160	2.2300	.5582	2.3016	1.66246	2.85803
Zn	17	64.00000	458.000	133.7059	25.6031	105.5644	2.07402	3.91156
Cu	17	11.00000	402.000	94.1765	22.0071	90.7374	2.15456	5.94780
Ni	17	50.00000	628.000	162.4706	33.9559	140.0036	2.38820	5.71004
Co	17	9.00000	183.000	48.3529	9.0841	37.4549	2.60977	8.23730
Ga	17	6.00000	38.000	17.8235	1.7198	7.0908	1.19042	2.29910
Mo	17	.00000	9.000	1.4118	.6916	2.8517	1.58548	1.53310
Nb	17	.00000	19.000	7.3529	1.1787	4.8598	.86774	.41285
Zr	17	49.00000	335.000	96.7647	21.0983	86.9903	1.85073	2.61279
Y	17	20.00000	76.000	32.9412	3.5825	14.7710	1.44827	2.11178
Sr	17	18.00000	218.000	78.4706	10.3388	42.6279	1.82627	5.00556
Rb	17	.00000	258.000	34.1765	16.2287	66.9125	2.26054	5.51525
U	17	.00000	11.000	2.2941	.9305	3.8367	1.08811	-.20104
Th	17	.00000	27.000	4.6471	2.0218	8.3362	1.41122	1.12554
Pb	17	.00000	258.000	22.9412	15.2375	62.8256	3.07457	10.04354
Cr	17	75.00000	1493.000	433.7647	81.9553	337.9104	1.97716	4.18509
V	17	75.00000	332.000	240.7647	16.2604	67.0434	-1.21765	1.08670
Ba	17	.00000	2134.000	468.2941	146.9716	605.9796	1.44973	1.67553
Sc	17	13.00000	50.000	36.4706	2.6473	10.9151	-.64309	-.42595
As	17	.00000	390.000	37.4706	26.3768	108.7544	2.38812	5.26067
S	17	.00000	518.000	171.7647	28.9666	119.4323	1.11851	2.37393
Sb	17	.00000	18.000	3.7059	1.5068	6.2125	1.11288	-.08152
Sn	17	.00000	17.000	3.6471	1.4949	6.1638	1.13095	-.09026

Hekpoort Formation tuffs

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 8 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	8	40.8600	54.100	48.7188	1.6488	4.6636	-.426155	-.95479
TiO2	8	.5300	1.450	.9038	.1240	.3508	.367757	-1.26409
Al2O3	8	12.8100	36.910	22.7300	3.4652	9.8010	.255248	-1.57551
Fe2O3	8	1.5800	26.680	13.8650	2.9801	8.4291	.024158	-1.03434
MnO	8	.0000	.290	.0813	.0365	.1032	.978838	.02637
MgO	8	.2800	10.530	2.7600	1.3076	3.6985	1.122994	.40594
CaO	8	.0000	5.470	1.0575	.7030	1.9885	1.328750	1.07596
Na2O	8	.0000	.990	.4413	.1471	.4161	.299941	-1.64741
K2O	8	.8600	4.880	2.6937	.6117	1.7300	.318181	-1.68611
P2O5	8	.0000	.190	.0713	.0289	.0818	.490961	-1.24383
H2O#	8	.2000	1.650	.5775	.1793	.5072	1.052388	.43780
LOI	8	2.6900	9.380	5.7425	.6781	1.9179	.329033	.21927
Zn	8	12.0000	174.000	56.7500	19.9094	56.3123	.942421	.29358
Cu	8	.0000	204.000	59.2500	28.5781	80.8310	.827343	-.69393
Ni	8	49.0000	683.000	243.1250	74.1715	209.7886	1.020377	.39495
Co	8	.0000	116.000	43.2500	15.9819	45.2035	.378036	-1.30572
Ga	8	13.0000	37.000	25.0000	3.6839	10.4198	.047733	-1.81175
Mo	8	.0000	11.000	3.0000	1.3229	3.7417	1.045182	.63015
Nb	8	7.0000	14.000	10.6250	.9625	2.7223	.122567	-1.45785
Zr	8	91.0000	254.000	171.6250	22.6833	64.1581	-.080798	-1.50048
Y	8	20.0000	57.000	32.5000	4.2300	11.9642	.851340	.25293
Sr	8	24.0000	162.000	74.1250	17.7356	50.1638	.549237	-.85039
Rb	8	61.0000	238.000	129.6250	26.9125	76.1201	.401244	-1.62080
U	8	.0000	9.000	4.8750	1.4570	4.1209	-.329380	-1.71397
Th	8	.0000	18.000	10.8750	2.2869	6.4683	-.321082	-1.08711
Pb	8	8.0000	26.000	18.3750	2.6922	7.6146	-.371461	-1.64896
Cr	8	347.0000	1317.000	662.6250	122.1390	345.4612	.691456	-.50845
V	8	208.0000	717.000	361.3750	58.3309	164.9848	1.071890	.77790
Ba	8	87.0000	940.000	515.3750	128.7463	364.1495	.052899	-1.78623
Sc	8	19.0000	56.000	35.1250	4.6845	13.2497	.164237	-1.18370
As	8	.0000	.000	.0000	.0000	.0000	.000000	.00000
S	8	136.0000	597.000	362.7500	46.1398	130.5031	.055446	.21443
Sb	8	.0000	.000	.0000	.0000	.0000	.000000	.00000
Sn	8	.0000	.000	.0000	.0000	.0000	.000000	.00000

Hekpoort Formation lavas

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 27 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	27	41.27000	73.490	56.2052	1.13500	5.8976	.380710	2.05217
TiO2	27	.25000	2.550	.6941	.10309	.5357	2.910636	7.94502
Al2O3	27	6.38000	19.110	13.5641	.45279	2.3528	-.583580	2.15265
Fe2O3	27	7.10000	17.920	10.5574	.50643	2.6315	1.355013	2.25197
MnO	27	.07000	.210	.1544	.00734	.0382	-.509940	-.30456
MgO	27	2.20000	10.100	5.9378	.36054	1.8734	.526405	.25739
CaO	27	.79000	10.080	6.0659	.47540	2.4702	-.728116	-.02362
Na2O	27	.00000	2.350	1.1541	.13262	.6891	.165425	-1.03177
K2O	27	.02000	3.480	.9730	.14308	.7435	1.262800	2.84443
P2O5	27	.04000	.440	.1381	.02150	.1117	1.329705	.74636
H2O■	27	.02000	1.370	.3893	.07159	.3720	1.178380	.61457
LOI	27	.37000	28.160	3.9026	.97623	5.0726	4.001851	17.92175
Zn	27	46.00000	131.000	76.2593	3.64664	18.9485	1.323101	2.73847
Cu	27	10.00000	305.000	96.3704	16.10022	83.6592	1.456632	1.08959
Ni	27	46.00000	233.000	139.4815	9.79292	50.8855	.033003	-.39669
Co	27	17.00000	64.000	40.2222	1.90616	9.9047	-.235666	.51483
Ga	27	6.00000	29.000	16.4444	.96864	5.0332	.610391	.74145
Mo	27	.00000	6.000	1.3333	.38118	1.9807	1.010490	-.36851
Nb	27	4.00000	15.000	8.7778	.55556	2.8868	.555397	-.41506
Zr	27	56.00000	227.000	106.4444	7.99935	41.5658	1.753991	2.74969
Y	27	14.00000	63.000	25.9630	2.29485	11.9244	2.091148	3.81979
Sr	27	12.00000	506.000	121.8889	18.31921	95.1894	2.422194	8.08696
Rb	27	.00000	178.000	47.3333	7.25836	37.7155	1.396795	3.44131
U	27	.00000	9.000	2.7778	.71876	3.7348	.577338	-1.52314
Th	27	.00000	22.000	8.0370	.91128	4.7352	.356600	1.48711
Pb	27	5.00000	35.000	14.6667	1.21365	6.3063	1.021636	2.22495
Cr	27	89.00000	1172.000	462.7778	57.28500	297.6616	.867647	.41845
V	27	68.00000	414.000	196.4444	13.20929	68.6375	1.804395	4.63088
Ba	27	20.00000	1032.000	379.7778	47.98478	249.3362	.966444	1.07773
Sc	27	.00000	44.000	23.0370	1.76099	9.1504	-.104750	.57691
As	27	.00000	217.000	9.2963	8.04046	41.7795	4.541979	21.40002
S	27	50.00000	1343.000	264.7408	45.34796	235.6349	3.482045	14.59274
Sb	27	.00000	18.000	1.8889	.92809	4.8225	2.199556	3.99746
Sn	27	.00000	13.000	1.9259	.81462	4.2329	1.725575	1.64730

Rayton Formation conglomerates

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 19 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	19	55.7200	90.660	61.0637	2.0025	8.7288	2.38439	5.67612
TiO2	19	.0700	.850	.5621	.0396	.1725	-1.40515	2.41431
Al2O3	19	1.5200	19.140	14.8068	.9745	4.2480	-1.95852	3.81250
Fe2O3	19	3.5700	13.850	9.3811	.4917	2.1432	-.43499	1.60912
MnO	19	.0400	.210	.1253	.0085	.0369	.03654	.72174
MgO	19	1.9600	6.320	4.8489	.2708	1.1806	-1.12423	.92302
CaO	19	.3100	9.140	2.8453	.5306	2.3130	1.50643	1.54228
Na2O	19	.0700	2.050	.7732	.1204	.5250	.90399	.49425
K2O	19	.0200	2.690	1.3305	.1952	.8507	-.31734	-1.21202
P2O5	19	.0600	.300	.1453	.0117	.0511	1.02083	2.77453
H2Om	19	.0100	.860	.1963	.0474	.2065	2.11956	4.48471
LOI	19	.8400	5.140	4.1947	.2404	1.0477	-2.07560	4.24729
Zn	19	20.0000	101.000	72.7368	4.8611	21.1892	-1.11737	1.33151
Cu	19	17.0000	273.000	68.3684	15.2256	66.3670	1.73135	2.94645
Ni	19	17.0000	190.000	108.5789	9.4520	41.2005	-.10833	.13816
Co	19	9.0000	49.000	32.0526	2.5859	11.2718	-.53495	-.26299
Ga	19	.0000	24.000	16.0526	1.3668	5.9579	-1.23880	1.47490
Mo	19	.0000	6.000	.3158	.3158	1.3765	3.69480	14.05556
Nb	19	5.0000	17.000	11.2632	.6252	2.7252	-.46517	.74192
Zr	19	14.0000	155.000	113.2632	8.5948	37.4638	-1.39514	1.48802
Y	19	.0000	29.000	22.5789	1.6916	7.3735	-1.87328	3.44383
Sr	19	7.0000	291.000	100.4737	13.8106	60.1991	1.48264	3.47805
Rb	19	.0000	166.000	75.5263	11.4369	49.8524	-.10756	-1.07791
U	19	.0000	15.000	4.8947	1.1288	4.9204	.38334	-1.04747
Th	19	.0000	15.000	8.3684	1.1975	5.2197	-.50257	-.96039
Pb	19	.0000	35.000	21.4737	1.9001	8.2823	-.41369	.72630
Cr	19	184.0000	751.000	402.0000	41.2620	179.8570	.68545	-.73164
V	19	31.0000	190.000	141.1579	8.1629	35.5813	-1.43589	3.17340
Ba	19	22.0000	2599.000	630.3684	128.4564	559.9286	2.07407	6.22885
Sc	19	.0000	33.000	19.2105	1.4581	6.3559	-.91000	3.39040
As	19	.0000	40.000	10.0526	2.6803	11.6832	.83179	.10195
S	19	.0000	380.000	286.8421	25.4210	110.8078	-1.30048	.91543
Sb	19	.0000	15.000	2.2632	1.0674	4.6529	1.55026	1.30587
Sn	19	.0000	22.000	4.7368	1.7636	7.6872	1.08389	-.23227
B	0	--	--	--	--	--	--	--

Rooihoogte Formation conglomerates

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 12 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	12	77.26000	99.130	93.517	2.1015	7.280	-1.10116	.08151
TiO2	12	.00000	.100	.036	.0105	.037	.65476	-.75239
Al2O3	12	.00000	1.370	.544	.1538	.533	.58041	-1.03477
Fe2O3	12	.23000	3.860	1.258	.3410	1.181	.95413	-.09921
MnO	12	.00000	.470	.083	.0408	.141	1.70257	2.74333
MgO	12	.00000	3.400	.989	.3289	1.139	.71077	-.45513
CaO	12	.00000	6.590	1.130	.6128	2.123	1.49133	1.62106
Na2O	12	.00000	.060	.012	.0051	.017	1.63590	2.91089
K2O	12	.00000	.360	.128	.0401	.139	.70972	-.92569
P2O5	12	.00000	.140	.025	.0121	.042	1.65662	2.77425
H2Om	12	.00000	.070	.036	.0063	.022	-.31581	-.76782
LOI	12	.11000	9.820	2.038	.9159	3.173	1.30667	.94531
Zn	12	4.00000	7.000	5.250	.2787	.965	.66010	-.26056
Cu	12	.00000	9.000	3.250	.9222	3.194	.22145	-1.25502
Ni	12	.00000	11.000	2.417	1.0621	3.679	1.13092	.39439
Co	12	.00000	7.000	3.667	.6435	2.229	-.24738	-.78525
Ga	12	.00000	2.000	.167	.1667	.577	2.64619	7.09091
Mo	12	.00000	12.000	6.333	.8469	2.934	-.28093	.65047
Nb	12	.00000	3.000	.667	.3553	1.231	1.12202	-.22560
Zr	12	2.00000	26.000	11.667	2.5947	8.988	.57463	-1.14411
Y	12	.00000	15.000	3.333	1.5292	5.297	1.25182	.54211
Sr	12	3.00000	26.000	12.250	2.5290	8.761	.17768	-1.65718
Rb	12	.00000	19.000	8.083	1.8808	6.515	.46594	-.88546
U	12	.00000	6.000	.917	.6211	2.151	1.60443	1.41020
Th	12	.00000	.000	.000	.0000	.000	.00000	.00000
Pb	12	.00000	26.000	8.917	2.4447	8.469	1.15390	.53704
Cr	12	46.00000	223.000	160.500	14.1210	48.916	-.72141	.64912
V	12	18.00000	44.000	30.333	2.1046	7.291	-.02691	-.53134
Ba	12	.00000	114.000	48.917	12.0965	41.903	.17125	-1.49418
Sc	12	.00000	13.000	3.750	1.6102	5.578	.66065	-1.36553
As	12	.00000	84.000	15.417	6.7728	23.462	1.96971	4.33709
S	12	.00000	7367.000	1514.917	727.1899	2519.060	1.21461	.47430
Sb	12	.00000	.000	.000	.0000	.000	.00000	.00000
Sn	12	.00000	11.000	1.833	1.2360	4.282	1.56997	1.20000
B	4	7.00000	12.000	10.000	1.2247	2.449	-.20412	-1.59259

Pretoria Group Conglomerate Average

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 37 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	37	53.40000	99.130	75.0724	2.9542	17.970	.184250	-1.74437
TiO2	37	.00000	.850	.3284	.0459	.279	.158649	-1.64256
Al2O3	37	.00000	19.140	8.3697	1.2336	7.504	.093906	-1.80917
Fe2O3	37	.23000	25.450	6.4541	.9002	5.475	.962038	1.82149
MnO	37	.00000	.470	.0941	.0151	.092	1.726139	5.51866
MgO	37	.00000	6.320	2.9216	.3745	2.278	.018840	-1.59523
CaO	37	.00000	9.140	1.9119	.3769	2.292	1.470897	1.88113
Na2O	37	.00000	2.050	.4086	.0874	.531	1.403590	1.60135
K2O	37	.00000	2.780	.9168	.1516	.922	.536892	-1.20410
P2O5	37	.00000	12.090	.4170	.3245	1.974	5.586213	31.93129
H2Om	37	.00000	.860	.1278	.0280	.170	2.815893	9.10344
LOI	37	.11000	9.820	3.0684	.3960	2.409	.295244	-.35020
Zn	37	.00000	101.000	41.9459	6.2004	37.715	.159000	-1.74941
Cu	37	.00000	273.000	38.6486	9.4872	57.708	2.315722	6.21105
Ni	37	.00000	190.000	59.8108	9.8771	60.080	.434203	-1.14762
Co	37	.00000	49.000	17.8378	2.7774	16.894	.405887	-1.41717
Ga	37	.00000	24.000	8.8649	1.4458	8.794	.227279	-1.61251
Mo	37	.00000	12.000	2.6216	.5791	3.523	.866333	-.49158
Nb	37	.00000	17.000	6.4595	.9337	5.679	.067697	-1.60071
Zr	37	2.00000	390.000	84.9730	12.3979	75.413	1.556882	5.09280
Y	37	.00000	29.000	14.3243	1.7745	10.794	-.094955	-1.56872
Sr	37	3.00000	853.000	81.1081	23.6638	143.941	4.210380	20.77253
Rb	37	.00000	166.000	47.8378	7.9925	48.617	.707266	-.77635
U	37	.00000	15.000	3.0541	.6974	4.242	1.074353	.20005
Th	37	.00000	15.000	4.9730	.9166	5.575	.421059	-1.41202
Pb	37	.00000	35.000	14.9189	1.6932	10.299	.261135	-1.02414
Cr	37	46.00000	751.000	282.8919	29.6295	180.229	1.233020	.73742
V	37	16.00000	190.000	89.2703	10.0243	60.976	.147273	-1.64401
Ba	37	.00000	2599.000	441.9189	92.7526	564.192	2.228633	5.90561
Sc	37	.00000	33.000	11.5405	1.6465	10.016	.028144	-1.31025
As	37	.00000	84.000	10.1622	2.6654	16.213	2.666935	9.76017
S	37	.00000	7367.000	648.4054	250.5424	1523.990	3.205664	10.44717
Sb	37	.00000	15.000	1.4054	.6096	3.708	2.318416	4.51001
Sn	37	.00000	22.000	3.9459	1.0766	6.549	1.256654	.35714
B	6	7.00000	29.000	15.0000	3.4157	8.367	.619811	-.78289

Pretoria Group Carbonate Average

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 11 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	11	10.4100	42.970	23.2255	3.4033	11.2875	.525747	-.95566
TiO2	11	.0500	.530	.2164	.0462	.1531	.771048	-.43612
Al2O3	11	1.4700	8.610	3.8045	.7012	2.3255	.967198	-.03158
Fe2O3	11	.7100	4.420	2.1818	.3660	1.2139	.422036	-.86950
MnO	11	.0100	.070	.0364	.0065	.0216	.373940	-1.48207
MgO	11	.3600	22.460	11.5900	1.9981	6.6269	-.290139	-.55810
CaO	11	13.2400	47.290	27.0164	3.0492	10.1130	.539060	-.42089
Na2O	11	.1000	.890	.5218	.0782	.2594	-.080500	-1.14785
K2O	11	.1000	1.530	.6064	.1520	.5042	.708717	-.66092
P2O5	11	.0000	.050	.0082	.0048	.0160	1.595711	2.24378
H2Om	11	.0100	.750	.1291	.0628	.2083	2.367774	5.71520
LOI	11	8.5500	40.300	30.1318	2.9260	9.7043	-.817662	.10202
Zn	11	9.0000	775.000	94.3636	68.1993	226.1916	2.449070	6.03002
Cu	11	.0000	28.000	6.7273	3.1366	10.4028	1.222486	.32077
Ni	11	.0000	35.000	11.5455	3.3747	11.1925	1.045709	.13831
Co	11	.0000	11.000	4.6364	.9368	3.1072	.654130	-.01289
Ga	11	.0000	10.000	3.0000	1.1832	3.9243	.649845	-1.08071
Mo	11	.0000	5.000	.7273	.5062	1.6787	1.657941	2.02050
Nb	11	1.0000	11.000	5.2727	.9732	3.2277	.279908	-1.04858
Zr	11	13.0000	151.000	61.6364	12.9974	43.1075	.705863	-.40857
Y	11	4.0000	18.000	10.0909	1.4235	4.7213	.383701	-1.06018
Sr	11	33.0000	184.000	59.4545	13.0818	43.3875	2.085660	4.51576
Rb	11	12.0000	87.000	36.4545	7.4521	24.7158	.813592	-.39942
U	11	.0000	16.000	2.3636	1.4910	4.9452	1.854314	3.42386
Th	11	.0000	12.000	2.2727	1.2656	4.1974	1.271891	.64928
Pb	11	5.0000	60.000	17.9091	4.7126	15.6298	1.677966	2.90706
Cr	11	.0000	39.000	9.8182	4.1818	13.8695	.888626	-.35024
V	11	17.0000	58.000	33.2727	4.6887	15.5505	.514169	-1.16212
Ba	11	68.0000	1299.000	312.4546	107.2109	355.5782	1.862701	3.60968
Sc	11	14.0000	34.000	23.5455	1.8943	6.2827	.090286	-.99760
As	11	.0000	.000	.0000	.0000	.0000	.000000	.00000
S	11	203.0000	2044.000	810.4545	152.2579	504.9823	1.118841	1.29892

Sandstones from the Rooiberg Fragment (Smelterskop and Leeuwpoort Fms.)

css/pc: basic stats — Descriptive statistics in dbl precision; N. of CASES = 13; (MD pairwise deleted)

	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	13	65.79000	96.620	81.3954	2.11232	7.6161	-.212982	.40967
TiO2	13	.22000	.600	.3808	.03221	.1162	.694784	-.61330
Al2O3	13	1.67000	18.420	8.3731	1.18143	4.2597	.921320	.82185
Fe2O3	13	.44000	6.860	2.8569	.39669	1.4303	1.289637	3.31223
MnO	13	.00000	.070	.0300	.00519	.0187	.493405	-.12585
MgO	13	.00000	.930	.4246	.08960	.3230	.075197	-1.54872
CaO	13	.01000	.210	.0785	.01735	.0626	.606530	-.50481
Na2O	13	.01000	6.840	1.8315	.72140	2.6010	.831724	-.86379
K2O	13	.21000	8.610	2.3208	.61755	2.2266	1.559798	2.96654
P2O5	13	.01000	.090	.0400	.00734	.0265	.697781	-.23639
H2Om	13	.03000	.320	.1038	.02049	.0739	1.757346	3.80235
LOI	13	.46000	4.360	1.4631	.27996	1.0094	1.758642	3.36726
Zn	13	4.00000	42.000	10.8462	2.73122	9.8476	2.394391	6.09479
Cu	13	.00000	89.000	15.0000	7.87319	28.3872	1.737839	2.14920
Ni	13	12.00000	60.000	30.6154	3.97192	14.3210	.447316	-.74362
Co	13	.00000	29.000	6.4615	1.97619	7.1253	2.346577	6.11859
Ga	13	.00000	22.000	8.4615	1.41247	5.0927	1.111053	2.28961
Mo	13	.00000	12.000	6.6154	.99059	3.5716	-.083798	-.94814
Nb	13	2.00000	7.000	4.6923	.53571	1.9315	.018191	-1.45274
Zr	13	63.00000	331.000	134.6923	19.53970	70.4514	1.588085	2.67943
Y	13	7.00000	142.000	31.1538	11.63541	41.9520	1.770114	2.30542
Sr	13	.00000	98.000	25.6154	7.39589	26.6663	1.507434	2.27426
Rb	13	24.00000	343.000	139.3077	28.02823	101.0572	.630640	-.25312
U	13	.00000	5.000	.7692	.52077	1.8777	1.701720	1.68182
Th	13	.00000	20.000	5.0000	1.90478	6.8678	1.021585	.08447
Pb	13	.00000	14.000	2.2308	1.25143	4.5121	1.523785	1.58681
Cr	13	75.00000	292.000	166.1538	16.29254	58.7436	.401024	-.00588
V	13	12.00000	76.000	44.9231	4.72915	17.0512	-.141694	-.33562
Ba	13	45.00000	1059.000	249.6923	83.12328	299.7052	1.617768	2.14881
Sc	13	.00000	9.000	1.3077	.88712	3.1986	1.716695	1.77772
As	13	.00000	14.000	1.0769	1.07692	3.8829	2.816170	8.08333
S	13	.00000	160.000	45.3846	15.67357	56.5119	.633329	-.86510
Sb	13	.00000	.000	.0000	.00000	.0000	.000000	.00000
Sn	13	.00000	58.000	19.0000	5.77239	20.8127	.655139	-.75225
B	0	--	--	--	--	--	--	--
CIA	13	37.02289	81.075	62.8732	3.88780	14.0177	-.449563	-1.17766
Si|Al_ox	13	3.57166	57.856	14.0185	3.77979	13.6282	2.484339	6.72427
lgSi|Alx	13	.55287	1.762	1.0419	.07922	.2856	.684681	1.68453
K2O|Na2O	13	.03070	172.200	34.1888	13.61726	49.0977	1.626361	2.80253
lgNa|Kox	13	-2.23603	1.513	-.6913	.35224	1.2700	.506389	-1.09921
Ti|Zr	13	8.09006	27.591	18.7312	1.41791	5.1123	-.586639	.29900
Al|Zr	13	54.22889	639.534	362.3102	42.68581	153.9059	-.084409	-.22826
Al|Ti_ox	13	7.59091	44.303	21.8624	2.57448	9.2824	.846669	.88153
Al|K_ox	13	.64925	53.714	9.7949	4.16889	15.0311	2.004582	3.84282
K|Rb	13	51.65689	449.561	148.2044	30.07035	108.4202	1.528372	2.57346

Makeckaan Formation sandstones

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 8 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	8	85.3400	94.4100	89.2725	.99693	2.8198	.43063	-.43700
TiO2	8	.1100	.5100	.2288	.05370	.1519	.71357	-.74140
Al2O3	8	.8500	6.4200	4.5900	.69191	1.9570	-.83830	-.36769
Fe2O3	8	1.4600	3.8700	2.6712	.31146	.8809	-.12598	-1.21334
MnO	8	.0000	.0000	.0000	.00000	.0000	.00000	.00000
MgO	8	.2300	.4200	.2825	.02351	.0665	.97609	.17278
CaO	8	.0000	.0000	.0000	.00000	.0000	.00000	.00000
Na2O	8	.0000	.0500	.0350	.00567	.0160	-1.09132	.96296
K2O	8	.2200	2.0300	1.3987	.22542	.6376	-.68910	-.55866
P2O5	8	.0000	.0400	.0150	.00627	.0177	.40383	-1.37190
H2Om	8	.0500	.1800	.0900	.01427	.0404	1.19823	1.25854
LOI	8	.1800	1.5400	.8963	.15250	.4313	-.21671	-.68575
Zn	8	3.0000	10.0000	6.8750	.74252	2.1002	-.34284	-.25239
Cu	8	.0000	12.0000	1.8750	1.49329	4.2237	1.65873	2.43048
Ni	8	.0000	6.0000	1.5000	.80178	2.2678	.86814	-.25000
Co	8	.0000	9.0000	3.5000	1.32288	3.7417	.48680	-1.10037
Ga	8	.0000	11.0000	4.6250	1.47524	4.1726	.01468	-1.29546
Mo	8	3.0000	8.0000	6.0000	.65465	1.8516	-.35442	-1.16667
Nb	8	3.0000	7.0000	4.7500	.52610	1.4880	.59750	-.93861
Zr	8	61.0000	308.0000	156.8750	32.21326	91.1129	.41075	-1.17747
Y	8	4.0000	9.0000	6.8750	.74252	2.1002	-.09994	-1.68746
Sr	8	5.0000	16.0000	9.8750	1.30161	3.6815	.22194	-.93238
Rb	8	12.0000	86.0000	62.8750	9.22233	26.0847	-.89056	-.23326
U	8	.0000	5.0000	.6250	.62500	1.7678	1.85616	3.14286
Th	8	.0000	25.0000	10.1250	2.82487	7.9899	.31354	-.18705
Pb	8	.0000	13.0000	4.8750	1.92203	5.4363	.20897	-1.59843
Cr	8	123.0000	209.0000	155.5000	9.01784	25.5063	.82278	.67756
V	8	15.0000	51.0000	34.3750	4.08367	11.5504	-.19647	-.81080
Ba	8	95.0000	373.0000	263.6250	31.54075	89.2107	-.58115	-.32243
Sc	8	.0000	16.0000	2.0000	2.00000	5.6569	1.85616	3.14286
As	8	.0000	.0000	.0000	.00000	.0000	.00000	.00000
S	8	.0000	170.0000	41.2500	23.10206	65.3425	.94489	-.20928
Sb	8	.0000	.0000	.0000	.00000	.0000	.00000	.00000
Sn	8	.0000	.0000	.0000	.00000	.0000	.00000	.00000
B	0	--	--	--	--	--	--	--
CIA	8	73.1332	76.4063	74.6876	.44747	1.2656	.05128	-1.47064
Si|Al_ox	8	13.5997	111.0706	30.6216	11.82299	33.4405	1.67545	2.50884
lgSi|Alx	8	1.1335	2.0456	1.3537	.11073	.3132	1.27432	1.02603
K2O|Na2O	7	7.3333	50.2500	36.5405	5.19023	13.7321	-1.20710	1.18697
lgNa|Kox	7	-1.7011	-.8653	-1.5073	.10859	.2873	1.52029	1.90315
Ti|Zr	8	4.3226	13.6060	9.1349	1.17127	3.3129	-.05517	-1.42155
Al|Zr	8	21.6300	486.7825	227.7197	57.96308	163.9443	.12114	-1.20201
Al|Ti_ox	8	4.7647	53.5000	28.4736	7.07702	20.0168	.07287	-1.60628
Al|K_ox	8	3.0348	3.8636	3.3739	.10281	.2908	.31086	-1.00811
K|Rb	8	152.2033	205.5251	179.5425	5.88325	16.6404	-.03582	-.68007

Houtenbek Formation sandstones

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 5 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	5	96.8800	98.5200	97.7480	.29191	.6527	-.089243	-1.29323
TiO2	5	.0000	.0700	.0260	.01288	.0288	.519905	-1.01560
Al2O3	5	.3000	.7500	.5240	.08477	.1896	.102518	-1.54288
Fe2O3	5	.2500	.3700	.3260	.02379	.0532	-.427553	-1.38217
MnO	5	.0000	.0200	.0040	.00400	.0089	1.073313	.25000
MgO	5	.0000	1.1700	.2980	.22119	.4946	1.000873	.10075
CaO	5	.0000	.0400	.0080	.00800	.0179	1.073313	.25000
Na2O	5	.0100	.0500	.0340	.00678	.0152	-.536678	-.63611
K2O	5	.0900	.2100	.1480	.02577	.0576	-.011793	-1.73210
P2O5	5	.0000	.0700	.0160	.01364	.0305	1.022242	.14377
H2O#	5	.0400	.0600	.0460	.00400	.0089	.603738	-.92188
LOI	5	.1400	.2300	.1940	.01691	.0378	-.247652	-1.18130
Zn	5	3.0000	7.0000	5.4000	.81240	1.8166	-.272238	-1.55785
Cu	5	.0000	.0000	.0000	.00000	.0000	.000000	.00000
Ni	5	.0000	11.0000	2.2000	2.20000	4.9193	1.073313	.25000
Co	5	.0000	7.0000	3.8000	1.15758	2.5884	-.240795	-.80118
Ga	5	.0000	3.0000	.6000	.60000	1.3416	1.073313	.25000
Mo	5	7.0000	10.0000	8.2000	.48990	1.0954	.620752	-.27083
Nb	5	.0000	3.0000	1.0000	.63246	1.4142	.424264	-1.43750
Zr	5	41.0000	120.0000	69.6000	13.31390	29.7708	.779179	-.15915
Y	5	.0000	2.0000	.4000	.40000	.8944	1.073313	.25000
Sr	5	6.0000	9.0000	7.8000	.58310	1.3038	-.259866	-1.37197
Rb	5	2.0000	10.0000	6.0000	1.37840	3.0822	.040982	-1.16482
U	5	.0000	9.0000	1.8000	1.80000	4.0249	1.073313	.25000
Th	5	.0000	7.0000	2.4000	1.50333	3.3615	.386674	-1.54879
Pb	5	.0000	10.0000	5.8000	1.68523	3.7683	-.414430	-.72699
Cr	5	167.0000	197.0000	183.0000	5.83952	13.0576	.045277	-1.55486
V	5	11.0000	20.0000	15.6000	1.69115	3.7815	.070124	-1.51873
Ba	5	47.0000	96.0000	70.4000	8.52408	19.0604	.059031	-1.18859
Sc	5	.0000	.0000	.0000	.00000	.0000	.000000	.00000
As	5	.0000	.0000	.0000	.00000	.0000	.000000	.00000
S	5	.0000	.0000	.0000	.00000	.0000	.000000	.00000
Sb	5	.0000	8.0000	1.6000	1.60000	3.5777	1.073313	.25000
Sn	5	.0000	8.0000	1.6000	1.60000	3.5777	1.073313	.25000
B	4	5.0000	13.0000	10.7500	1.93111	3.8622	-.717633	-.70928
CIA	5	62.5481	73.0569	68.6495	2.11388	4.7268	-.292819	-1.63757
Si¦Al_ox	5	130.2800	327.4333	208.8106	35.69450	79.8153	.351005	-1.01779
lgSi¦Alx	5	2.1149	2.5151	2.2947	.07365	.1647	.103203	-1.35091
K2O¦Na2O	5	1.8000	15.0000	6.2100	2.39251	5.3498	.692303	-.48346
lgNa¦Kox	5	-1.1761	-.2553	-.6655	.16741	.3743	-.149115	-1.29786
Ti¦Zr	4	.9366	7.2341	2.9077	1.45834	2.9167	.700778	-.72450
Al¦Zr	5	33.0812	56.1872	40.9424	4.11523	9.2019	.720832	-.41368
Al¦Ti_ox	4	6.5714	42.0000	24.3304	7.58772	15.1754	-.005406	-1.33279
Al¦K_ox	5	3.0667	4.6667	3.6176	.27524	.6154	.823158	-.14538
K¦Rb	5	149.4360	373.5901	238.6825	50.21681	112.2882	.299478	-1.78826

Nederhorst Formation sandstones

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 5 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	5	83.8000	95.6800	91.6680	2.0569	4.5995	-.842478	-.12556
TiO2	5	.0200	.1000	.0720	.0146	.0327	-.621246	-.77356
Al2O3	5	.9500	10.2300	4.2980	1.6437	3.6754	.645754	-.62467
Fe2O3	5	.4000	.6400	.5200	.0414	.0925	.040982	-1.16482
MnO	5	.0000	.0200	.0100	.0032	.0071	.000000	-.50000
MgO	5	.1600	1.4600	.7460	.2833	.6334	.237514	-1.78798
CaO	5	.0000	.2400	.0680	.0449	.1003	.871774	-.16464
Na2O	5	.0100	.0600	.0360	.0081	.0182	-.128112	-.73140
K2O	5	.3500	1.6700	.7380	.2535	.5669	.735185	-.55555
P2O5	5	.0000	.0800	.0360	.0147	.0329	.248842	-1.42181
H2O#	5	.0300	.1800	.0960	.0248	.0555	.339501	-.71849
LOI	5	.2700	3.6500	1.7560	.5759	1.2878	.275866	-.92412
Zn	5	7.0000	10.0000	8.2000	.4899	1.0954	.620752	-.27083
Cu	5	.0000	20.0000	6.0000	3.7283	8.3367	.789095	-.34162
Ni	5	.0000	37.0000	12.0000	6.9785	15.6045	.635736	-.71251
Co	5	4.0000	9.0000	6.4000	.9274	2.0736	.113047	-1.49081
Ga	5	.0000	11.0000	4.2000	2.0347	4.5497	.355237	-.98617
Mo	5	4.0000	10.0000	6.8000	1.0677	2.3875	.098761	-1.27932
Nb	5	.0000	5.0000	1.6000	1.0296	2.3022	.487808	-1.25187
Zr	5	61.0000	122.0000	85.6000	12.2906	27.4827	.330959	-1.60182
Y	5	5.0000	10.0000	7.8000	.8602	1.9235	-.283262	-1.00548
Sr	5	6.0000	17.0000	10.4000	2.0640	4.6152	.247071	-1.17209
Rb	5	22.0000	54.0000	38.2000	6.1433	13.7368	.098458	-1.58302
U	5	.0000	5.0000	2.0000	1.2247	2.7386	.292119	-1.83333
Th	5	.0000	10.0000	6.2000	1.8547	4.1473	-.365383	-.99645
Pb	5	.0000	16.0000	7.4000	3.4871	7.7974	.110461	-1.74823
Cr	5	59.0000	171.0000	120.4000	22.0581	49.3234	-.109125	-1.59121
V	5	20.0000	29.0000	24.4000	1.4697	3.2863	.055448	-.78524
Ba	5	145.0000	568.0000	281.0000	75.7159	169.3059	.808725	-.22506
Sc	5	.0000	18.0000	7.6000	3.4438	7.7006	.126557	-1.35521
As	5	.0000	.0000	.0000	.0000	.0000	.000000	.00000
S	5	.0000	179.0000	90.2000	38.8283	86.8228	-.100247	-1.74809
Sb	5	.0000	10.0000	2.0000	2.0000	4.4721	1.073313	.25000
Sn	5	.0000	.0000	.0000	.0000	.0000	.000000	.00000
B	5	10.0000	23.0000	16.2000	2.2226	4.9699	.080941	-1.08863
CIA	5	57.6135	92.5653	75.6108	6.8004	15.2061	.050169	-1.60356
Si/Al_ox	5	8.1916	100.7158	40.2797	16.1751	36.1685	.741516	-.31887
lgSi/Alx	5	.9134	2.0031	1.4607	.1831	.4095	-.035573	-1.00812
K2O/Na2O	5	6.1667	41.7500	24.5667	7.3337	16.3986	.050929	-1.69298
lgNa/Kox	5	-1.6207	-.7901	-1.2876	.1607	.3593	.268541	-1.36662
Ti/Zr	5	.9826	9.8262	5.7756	1.4813	3.3123	-.203606	-.89377
Al/Zr	5	41.2160	808.1699	302.6986	131.5527	294.1607	.857360	-.07137
Al/Ti_ox	5	23.6000	170.5000	65.9867	26.8952	60.1394	.927482	-.02551
Al/K_ox	5	1.5689	15.2286	7.3231	2.6275	5.8753	.261048	-1.47306
K/Rb	5	88.0515	271.8498	150.1076	32.7663	73.2678	.727329	-.38325

Silverton Formation
sandstones

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 13 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	13	56.99000	97.590	83.6538	3.3802	12.1875	-.804453	-.16368
TiO2	13	.01000	.610	.2454	.0525	.1893	.754521	-.36654
Al2O3	13	.73000	17.540	5.7608	1.3770	4.9648	1.065057	.68055
Fe2O3	13	.38000	15.950	4.0569	1.1940	4.3051	1.526482	2.47097
MnO	13	.00000	.160	.0377	.0127	.0459	1.314760	1.81072
MgO	13	.00000	4.640	1.4885	.3345	1.2061	1.224663	1.77429
CaO	13	.00000	4.600	1.2331	.4030	1.4532	1.037800	.17250
Na2O	13	.00000	.640	.1054	.0612	.2205	1.708803	1.78090
K2O	13	.03000	4.150	.7315	.3540	1.2764	1.700052	2.27328
P2O5	13	.00000	.350	.1192	.0333	.1202	.817880	-.68218
H2Om	13	.02000	.270	.1269	.0271	.0976	.330369	-1.50124
LOI	13	.21000	9.400	2.2208	.6629	2.3902	2.010786	4.46417
Zn	13	.00000	72.000	25.7692	5.6977	20.5433	.784522	.10553
Cu	13	.00000	21.000	5.1538	2.0965	7.5592	1.037092	-.19722
Ni	13	.00000	59.000	18.5385	5.1048	18.4057	1.297605	.81714
Co	13	4.00000	16.000	6.7692	.9551	3.4437	1.626818	2.24246
Ga	13	.00000	21.000	4.7692	1.9154	6.9060	1.275983	.77301
Mo	13	.00000	12.000	4.7692	1.1444	4.1262	.368570	-1.04715
Nb	13	.00000	16.000	5.7692	1.3357	4.8158	.448929	-.39988
Zr	13	40.00000	364.000	147.5385	26.5293	95.6527	.748364	-.00972
Y	13	5.00000	24.000	15.2308	1.6800	6.0574	-.185502	-1.16276
Sr	13	3.00000	64.000	23.5385	5.2178	18.8132	.722137	-.34342
Rb	13	.00000	164.000	37.1538	16.0300	57.7968	1.530943	1.24955
U	13	.00000	7.000	2.2308	.8332	3.0043	.544276	-1.43824
Th	13	.00000	13.000	2.1538	1.2028	4.3368	1.465362	1.20337
Pb	13	.00000	11.000	6.3846	1.2787	4.6105	-.543207	-1.39298
Cr	13	84.00000	156.000	120.5385	6.1962	22.3406	.229868	-1.10088
V	13	19.00000	134.000	58.3077	10.0265	36.1510	.621750	-.66699
Ba	13	.00000	1218.000	267.6154	100.4407	362.1442	1.474829	1.70924
Sc	13	.00000	19.000	4.1538	1.6903	6.0943	1.062428	.47634
As	13	.00000	.000	.0000	.0000	.0000	.000000	.00000
S	13	.00000	1727.000	524.5385	168.2063	606.4763	1.035322	-.02687
Sb	13	.00000	15.000	1.7692	1.2616	4.5489	2.040672	3.80156
Sn	13	.00000	.000	.0000	.0000	.0000	.000000	.00000
B	2	22.00000	27.000	24.5000	2.5000	3.5355	.000000	-2.00000
CIA	13	47.34060	95.742	68.8367	4.1880	15.0999	.118120	-.97082
Si¦Al_ox	13	3.90308	133.685	38.2583	12.0075	43.2935	1.083115	-.04476
lgSi¦Alx	13	.59141	2.126	1.3285	.1376	.4961	.196547	-.94613
K2O¦Na2O	9	2.33333	37.000	12.0248	4.4492	13.3477	1.083572	-.21563
lgNa¦Kox	9	-1.56820	-.368	-.8890	.1349	.4046	-.660995	-.57941
Ti¦Zr	13	1.49850	30.218	10.2053	1.9656	7.0871	1.669507	3.12030
Al¦Zr	13	69.94321	590.104	222.0425	47.8060	172.3670	.879183	-.37992
Al¦Ti_ox	13	10.22222	73.000	27.4063	5.0342	18.1510	1.197233	1.03108
Al¦K_ox	13	4.22651	113.750	32.7072	9.6522	34.8015	1.029770	.20516
K¦Rb	12	47.44000	210.081	126.7411	14.5577	50.4293	-.036302	-.99145

Strubenkop Formation
silt-/sandstone

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 8 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	8	71.3800	81.300	76.611	1.17386	3.3202	-.18783	-1.04031
TiO2	8	.1800	.670	.280	.05800	.1641	1.59497	2.27802
Al2O3	8	9.8400	17.080	13.148	.78054	2.2077	.28190	-.44366
Fe2O3	8	2.5300	4.640	3.439	.24765	.7005	.17762	-.73306
MnO	8	.0000	.000	.000	.00000	.0000	.00000	.00000
MgO	8	.0000	.410	.131	.06266	.1772	.63796	-1.17407
CaO	8	.0000	.080	.016	.00999	.0283	1.33184	1.33084
Na2O	8	.2400	.370	.289	.01846	.0522	.73091	-.86011
K2O	8	1.6400	4.280	2.740	.27539	.7789	.62712	.21701
P2O5	8	.0000	.070	.023	.00921	.0260	.65235	-.70981
H2O#	8	.0000	.540	.208	.05450	.1542	.91812	1.09043
LOI	8	2.0300	3.970	2.801	.20782	.5878	.63688	.11741
Zn	8	8.0000	18.000	10.625	1.25268	3.5431	.99565	.26352
Cu	8	.0000	33.000	8.250	4.37424	12.3722	1.03971	-.02812
Ni	8	12.0000	156.000	39.625	16.95681	47.9611	1.71835	2.70337
Co	8	.0000	16.000	4.375	1.88923	5.3436	1.08610	.88077
Ga	8	11.0000	20.000	14.500	1.14953	3.2514	.69825	-.77283
Mo	8	.0000	5.000	3.875	.63913	1.8077	-1.10892	.58748
Nb	8	.0000	15.000	5.625	1.52289	4.3074	.98466	1.16306
Zr	8	113.0000	600.000	255.625	53.14332	150.3120	1.33493	1.68830
Y	8	9.0000	23.000	14.625	1.63595	4.6272	.64099	-.52746
Sr	8	29.0000	88.000	58.375	6.19025	17.5087	.07910	-.27361
Rb	8	62.0000	181.000	112.750	12.29946	34.7881	.55783	.21478
U	8	.0000	.000	.000	.00000	.0000	.00000	.00000
Th	8	.0000	15.000	3.750	2.05939	5.8248	.88946	-.37119
Pb	8	.0000	9.000	2.750	1.37256	3.8822	.53677	-1.38303
Cr	8	84.0000	301.000	165.625	23.28621	65.8634	.75521	.39969
V	8	39.0000	77.000	47.875	4.40956	12.4721	1.47399	1.95708
Ba	8	935.0000	1433.000	1235.250	57.05410	161.3734	-.60458	-.51203
Sc	8	.0000	20.000	12.500	2.12972	6.0238	-.78577	.53928
As	8	.0000	.000	.000	.00000	.0000	.00000	.00000
S	8	78.0000	342.000	145.375	28.83137	81.5474	1.66101	2.60360
Sb	8	.0000	.000	.000	.00000	.0000	.00000	.00000
Sn	8	.0000	.000	.000	.00000	.0000	.00000	.00000
B	7	48.0000	299.000	107.571	33.12951	87.6525	1.37902	1.51824
CIA	8	76.3981	85.142	79.187	.95491	2.7009	1.16960	1.09238
Si¦Al_ox	8	4.1792	8.262	6.009	.44526	1.2594	.27748	-.48494
lgSi¦Alx	8	.6211	.917	.770	.03231	.0914	-.05434	-.63275
K2O¦Na2O	8	4.4324	12.259	9.645	.84190	2.3812	-1.07371	1.06238
lgNa¦Kox	8	-1.0885	-.647	-.968	.04872	.1378	1.45100	1.97787
Ti¦Zr	8	5.3678	9.548	6.789	.48752	1.3789	.85050	.00784
Al¦Zr	8	150.6741	554.126	324.804	45.31286	128.1641	.42543	-.51835
Al¦Ti_ox	8	25.4925	66.556	53.474	5.05838	14.3073	-.77329	-.29947
Al¦K_ox	8	3.9907	8.518	5.041	.51120	1.4459	1.65399	2.52559
K¦Rb	8	196.0990	219.601	203.343	2.93487	8.3011	.90478	-.18237

Hekpoort Formation sandstones

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 6 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	6	46.0800	95.180	69.8350	8.3023	20.3363	.221259	-1.48089
TiO2	6	.2000	1.100	.6017	.1626	.3983	.274387	-1.50060
Al2O3	6	1.3000	24.170	12.1500	4.0266	9.8631	.047062	-1.50214
Fe2O3	6	1.7800	35.730	10.4783	5.1689	12.6611	1.225028	.88155
MnO	6	.0100	.150	.0533	.0211	.0516	.937316	.12135
MgO	6	.0000	.930	.4400	.1959	.4799	.014403	-1.97505
CaO	6	.0800	1.130	.4350	.1718	.4208	.660911	-.91993
Na2O	6	.0300	3.110	.7050	.4889	1.1975	1.266005	.96990
K2O	6	.3300	4.820	2.3200	.8121	1.9894	.107672	-1.76524
P2O5	6	.0000	.650	.1683	.0989	.2423	1.206934	.84071
H2Om	6	.1800	.590	.3750	.0589	.1443	.145028	-.93910
LOI	6	.6500	4.420	2.3083	.7158	1.7532	.211792	-1.67603
Zn	6	13.0000	72.000	32.0000	8.5362	20.9093	.996767	.41579
Cu	6	8.0000	357.000	109.5000	55.3225	135.5120	.836488	-.13308
Ni	6	8.0000	119.000	58.0000	21.6333	52.9906	.060317	-1.89036
Co	6	.0000	33.000	13.6667	4.7376	11.6046	.433803	-.60729
Ga	6	.0000	31.000	16.8333	5.7354	14.0487	-.227185	-1.51240
Mo	6	3.0000	15.000	9.5000	2.0453	5.0100	-.238567	-1.46464
Nb	6	5.0000	20.000	12.6667	2.8127	6.8896	-.097059	-1.74159
Zr	6	57.0000	535.000	251.8333	64.8200	158.7758	.610183	-.00638
Y	6	8.0000	49.000	31.6667	6.7511	16.5368	-.369152	-1.34888
Sr	6	11.0000	158.000	87.5000	25.1220	61.5362	-.303143	-1.44719
Rb	6	14.0000	192.000	89.5000	31.2983	76.6648	.198486	-1.60075
U	6	8.0000	14.000	10.8333	1.0138	2.4833	-.038697	-1.41283
Th	6	.0000	26.000	10.8333	3.7275	9.1305	.467134	-.63033
Pb	6	.0000	31.000	11.3333	4.7866	11.7246	.500539	-.66633
Cr	6	111.0000	382.000	257.5000	39.7406	97.3442	-.135926	-.98301
V	6	15.0000	256.000	136.0000	48.0632	117.7302	.023648	-1.92411
Ba	6	168.0000	2305.000	727.8333	321.7087	788.0222	1.240568	.93726
Sc	6	.0000	31.000	12.8333	5.0558	12.3841	.199409	-1.28110
As	6	.0000	18.000	5.0000	3.2558	7.9750	.670337	-1.01460
S	6	.0000	476.000	232.0000	72.4537	177.4745	.005630	-1.26826
Sb	6	.0000	.000	.0000	.0000	.0000	.000000	.00000
Sn	6	.0000	.000	.0000	.0000	.0000	.000000	.00000
B	3	4.0000	166.000	109.0000	52.5642	91.0439	-.380673	-1.50000
CIA	6	51.6294	82.133	70.5446	5.4798	13.4227	-.329236	-1.50163
Si¦Al_ox	6	2.2722	71.608	25.8688	14.0583	34.4357	.536865	-1.49475
lgSi¦Alx	6	.3565	1.855	.9741	.2814	.6892	.447684	-1.49945
K2O¦Na2O	6	1.5498	27.333	9.7452	3.6607	8.9668	1.113362	.72826
lgNa¦Kox	6	-1.4367	-.190	-.8483	.1624	.3979	.212583	-.05646
Ti¦Zr	6	6.0500	25.552	16.4953	3.6975	9.0569	-.086659	-1.81742
Al¦Zr	6	41.7024	509.689	248.2976	77.2047	189.1122	.332190	-1.41707
Al¦Ti_ox	6	6.2727	24.481	16.9971	3.3998	8.3278	-.475412	-1.49577
Al¦K_ox	6	2.6038	12.768	5.7779	1.5531	3.8043	.835971	-.03656
K¦Rb	6	170.1910	357.283	219.3900	29.8241	73.0539	.992615	.17165

Upper Timeball Hill Shale Member
alternating shale and sandstone facies

cas/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 13 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	13	58.5200	86.0700	63.6415	1.91358	6.8995	2.58556	7.12021
TiO2	13	.1400	.6800	.5869	.03879	.1398	-2.44377	6.46183
Al2O3	13	3.6800	21.8500	18.0785	1.25824	4.5367	-2.37101	6.23066
Fe2O3	13	4.1900	12.1500	7.3931	.52736	1.9014	.77503	1.40549
MnO	13	.0000	.0900	.0369	.00582	.0210	.87662	1.74907
MgO	13	.0000	2.0400	1.3792	.13245	.4776	-1.65618	3.66424
CaO	13	.0000	3.6200	.6000	.26477	.9547	2.37278	6.08301
Na2O	13	.0000	.8500	.5792	.05898	.2127	-1.38405	2.36800
K2O	13	.0800	3.6200	2.6523	.23945	.8634	-1.90010	4.31133
P2O5	13	.0000	.4600	.0846	.03726	.1343	1.77897	2.90507
Cr2O3	13	.0000	.0000	.0000	.00000	.0000	.00000	.00000
NiO	13	.0000	.0100	.0015	.00104	.0038	1.70172	1.68182
H2O@	13	.2900	.7800	.5462	.03524	.1271	-.16770	-.11570
LOI	13	1.9800	6.2200	4.2785	.25857	.9323	-.38781	2.10868
Zn	13	10.0000	114.0000	70.0769	6.69047	24.1228	-.72777	1.55479
Cu	13	12.0000	50.0000	25.7692	2.63398	9.4970	1.16356	1.51984
Ni	13	11.0000	60.0000	40.6923	3.57768	12.8995	-.57743	.39872
Co	13	4.0000	23.0000	11.2308	1.93865	6.9899	.54303	-1.06457
Ga	13	9.0000	30.0000	23.2308	1.44628	5.2146	-1.27976	2.43852
Mo	13	.0000	30.0000	4.7692	2.18137	7.8650	2.48467	6.60284
Nb	13	4.0000	19.0000	16.0769	1.07692	3.8829	-2.21373	5.52959
Zr	13	44.0000	248.0000	193.3077	15.01511	54.1378	-1.46787	2.47250
Y	13	8.0000	39.0000	27.4615	2.11410	7.6225	-.82234	1.67407
Sr	13	49.0000	128.0000	84.6154	5.59136	20.1599	.17351	.34475
Rb	13	7.0000	197.0000	150.4615	13.18586	47.5423	-2.01290	4.62770
U	13	.0000	20.0000	10.1538	1.34377	4.8450	-.13937	.50675
Th	13	.0000	28.0000	19.1538	1.71287	6.1758	-2.06300	5.73429
Pb	13	8.0000	64.0000	26.3846	3.71335	13.3887	1.50424	3.04038
Cr	13	96.0000	210.0000	123.2308	8.44147	30.4361	1.71483	3.17272
V	13	73.0000	149.0000	116.3077	5.34500	19.2717	-.44842	.38657
Ba	13	31.0000	618.0000	498.6154	42.56993	153.4881	-2.07695	4.88610
Sc	13	.0000	18.0000	7.6154	1.87951	6.7767	-.02185	-1.47539
As	13	.0000	32.0000	4.3077	2.62235	9.4550	1.94692	3.76909
S	13	106.0000	414.0000	351.2308	22.11194	79.7257	-2.15224	5.18093
Sb	13	.0000	7.0000	.5385	.53846	1.9415	2.81617	8.08333
Sn	13	.0000	11.0000	2.7692	1.21504	4.3809	.81846	-1.00909
B	13	.0000	83.0000	65.5385	7.22408	26.0468	-1.28993	.98779

Upper Timeball Hill Shale Member sandstones

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 3 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	3	58.8900	67.0400	61.9833	2.54929	4.4155	.356735	-1.50000
TiO2	3	.4800	.6500	.5800	.05132	.0889	-.299074	-1.50000
Al2O3	3	15.0500	20.6100	18.6333	1.79485	3.1088	-.378775	-1.50000
Fe2O3	3	6.9300	10.0200	8.3000	.90901	1.5745	.211314	-1.50000
MnO	3	.0300	.0400	.0367	.00333	.0058	-.384900	-1.50000
MgO	3	1.2600	1.9900	1.6200	.21079	.3651	.027369	-1.50000
CaO	3	.0500	.7100	.4100	.19287	.3341	-.173812	-1.50000
Na2O	3	.5500	.6900	.6100	.04163	.0721	.256016	-1.50000
K2O	3	1.9200	3.3000	2.6767	.40391	.6996	-.183664	-1.50000
P2O5	3	.0000	.0400	.0133	.01333	.0231	.384900	-1.50000
H2O#	3	.1700	.4300	.2800	.07767	.1345	.271035	-1.50000
LOI	3	3.9000	4.4100	4.1900	.15133	.2621	-.248019	-1.50000
Zn	3	69.0000	103.0000	86.0000	9.81495	17.0000	.000000	-1.50000
Cu	3	22.0000	26.0000	23.6667	1.20185	2.0817	.287410	-1.50000
Ni	3	39.0000	54.0000	44.0000	5.00000	8.6603	.384900	-1.50000
Co	3	.0000	8.0000	3.6667	2.33333	4.0415	.160469	-1.50000
Ga	3	21.0000	28.0000	24.3333	2.02759	3.5119	.094061	-1.50000
Mo	3	2.0000	3.0000	2.3333	.33333	.5774	.384900	-1.50000
Nb	3	16.0000	16.0000	16.0000	.00000	.0000	.000000	.00000
Zr	3	173.0000	192.0000	184.6667	5.89727	10.2144	-.347885	-1.50000
Y	3	20.0000	27.0000	24.0000	2.08167	3.6056	-.256015	-1.50000
Sr	3	71.0000	108.0000	94.0000	11.59023	20.0749	-.358213	-1.50000
Rb	3	114.0000	182.0000	149.6667	19.70054	34.1223	-.096756	-1.50000
U	3	7.0000	9.0000	8.0000	.57735	1.0000	.000000	-1.50000
Th	3	14.0000	20.0000	17.3333	1.76383	3.0551	-.207827	-1.50000
Pb	3	23.0000	46.0000	32.6667	6.88799	11.9304	.278309	-1.50000
Cr	3	90.0000	119.0000	107.3333	8.83805	15.3080	-.319452	-1.50000
V	3	99.0000	120.0000	112.3333	6.69162	11.5902	-.372047	-1.50000
Ba	3	365.0000	693.0000	556.6667	98.64471	170.8577	-.289889	-1.50000
Sc	3	11.0000	13.0000	12.0000	.57735	1.0000	.000000	-1.50000
As	3	.0000	.0000	.0000	.00000	.0000	.000000	.00000
S	3	233.0000	311.0000	265.0000	23.57965	40.8412	.302511	-1.50000
Sb	3	.0000	.0000	.0000	.00000	.0000	.000000	.00000
Sn	3	.0000	8.0000	5.3333	2.66667	4.6188	-.384900	-1.50000
B	3	28.0000	73.0000	54.6667	13.64226	23.6291	-.308808	-1.50000
CIA	3	77.8857	83.1479	79.9288	1.62889	2.8213	.344403	-1.50000
Si¦Al_ox	3	2.9096	4.4545	3.4254	.51453	.8912	.384897	-1.50000
lgSi¦Alx	3	.4638	.6488	.5256	.06159	.1067	.384895	-1.50000
K2O¦Na2O	3	3.4909	4.7826	4.3454	.42729	.7401	-.384587	-1.50000
lgNa¦Kox	3	-.6797	-.5429	-.6335	.04528	.0784	.384669	-1.50000
Ti¦Zr	3	14.9850	21.1349	18.9114	1.96894	3.4103	-.374833	-1.50000
Al¦Zr	3	414.8940	630.5707	537.4306	63.97194	110.8027	-.246631	-1.50000
Al¦Ti_ox	3	31.1385	33.7869	32.0932	.84914	1.4708	.375607	-1.50000
Al¦K_ox	3	6.2455	7.8385	7.0956	.46300	.8019	-.131326	-1.50000
K¦Rb	3	139.8232	152.4746	147.6095	3.93342	6.8129	-.349949	-1.50000

Magaliesberg Formation
"Bronkhorstspruit" sandstones

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 7 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	7	84.46000	98.120	94.3443	1.9662	5.2021	-.901170	-.22020
TiO2	7	.02000	.370	.0886	.0475	.1256	1.539000	1.94386
Al2O3	7	.65000	5.970	1.9729	.6924	1.8318	1.380630	1.49645
Fe2O3	7	.48000	5.550	2.0829	.8085	2.1392	.724571	-1.02296
MnO	7	.00000	.020	.0043	.0030	.0079	1.077438	.23373
MgO	7	.00000	.000	.0000	.0000	.0000	.000000	.00000
CaO	7	.00000	.010	.0014	.0014	.0038	1.619848	2.16667
Na2O	7	.00000	.000	.0000	.0000	.0000	.000000	.00000
K2O	7	.02000	.330	.1143	.0422	.1118	.870651	-.04384
P2O5	7	.00000	.220	.0557	.0353	.0934	.837523	-.72950
Cr2O3	7	.00000	.000	.0000	.0000	.0000	.000000	.00000
NiO	7	.00000	.010	.0071	.0018	.0049	-.752837	-1.10000
H2O+	7	.03000	.340	.0957	.0413	.1094	1.521554	1.88814
LOI	7	.14000	2.410	.7371	.3069	.8121	1.142347	.62744
Zn	7	9.00000	174.000	55.8571	24.1123	63.7951	.832113	-.43731
Cu	7	.00000	75.000	20.2857	10.2834	27.2073	1.067554	.33146
Ni	7	.00000	16.000	5.1429	2.6853	7.1047	.570122	-1.25630
Co	7	.00000	4.000	1.5714	.7514	1.9881	.291635	-1.77856
Ga	7	.00000	3.000	.4286	.4286	1.1339	1.619848	2.16667
Mo	7	.00000	.000	.0000	.0000	.0000	.000000	.00000
Nb	7	2.00000	5.000	2.7143	.4206	1.1127	1.092005	.59615
Zr	7	31.00000	78.000	51.0000	6.3358	16.7631	.221090	-1.03225
Y	7	8.00000	22.000	12.7143	2.1012	5.5592	.524763	-1.02352
Sr	7	7.00000	41.000	16.7143	5.1765	13.6957	.737210	-.72580
Rb	7	.00000	16.000	5.1429	2.1869	5.7859	.755925	-.28722
U	7	.00000	8.000	1.1429	1.1429	3.0237	1.619848	2.16667
Th	7	.00000	6.000	.8571	.8571	2.2678	1.619848	2.16667
Pb	7	11.00000	1305.000	396.1429	217.6656	575.8890	.740481	-1.05997
Cr	7	.00000	129.000	51.4286	18.8463	49.8627	.412146	-1.11633
V	7	.00000	231.000	70.7143	31.4216	83.1339	.913757	-.06803
Ba	7	.00000	169.000	60.4286	22.8086	60.3458	.568277	-.53214
Sc	7	.00000	21.000	9.1429	3.5885	9.4944	.177799	-1.55078
As	7	.00000	40.000	5.7143	5.7143	15.1186	1.619848	2.16667
S	7	.00000	321.000	67.8571	47.4404	125.5155	1.105258	.34332
Sb	7	.00000	16.000	2.2857	2.2857	6.0474	1.619848	2.16667
Sn	7	.00000	.000	.0000	.0000	.0000	.000000	.00000

Magaliesberg Formation
"Bronkhorstspruit" shales

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 36 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	36	22.8200	76.120	45.2942	2.4799	14.8792	.583649	-.67796
TiO2	36	.4600	3.860	1.9081	.1342	.8051	.067538	.04435
Al2O3	36	8.0400	38.420	24.1308	1.3407	8.0439	-.111555	-.81995
Fe2O3	36	3.7700	45.080	15.9147	1.7534	10.5204	1.201348	.71285
MnO	36	.0000	.030	.0075	.0015	.0087	.982168	.34326
MgO	36	.0000	.510	.1625	.0241	.1448	.648134	-.37104
CaO	36	.0000	.050	.0025	.0015	.0091	4.211536	19.61331
Na2O	36	.0000	.690	.2758	.0355	.2133	.410875	-1.00954
K2O	36	.0800	5.690	1.7558	.2325	1.3953	1.250135	1.20399
P2O5	36	.0000	.940	.1539	.0319	.1912	2.371403	6.74169
Cr2O3	36	.0000	.060	.0147	.0030	.0178	.678973	-.80147
NiO	36	.0100	.030	.0142	.0011	.0065	1.214177	.41195
H2Om	36	.5900	13.320	3.3664	.5421	3.2523	1.827669	3.03388
LOI	36	2.9100	10.080	6.6947	.3117	1.8705	.019152	-.75131
Zn	36	41.0000	1285.000	364.1111	56.9316	341.5897	1.248458	.76189
Cu	36	22.0000	359.000	70.4444	10.3300	61.9799	3.187730	12.00719
Ni	36	19.0000	129.000	63.8056	4.7784	28.6704	.370656	-.76466
Co	36	.0000	19.000	1.8056	.6347	3.8084	2.782648	9.67593
Ga	36	.0000	51.000	30.7500	2.0989	12.5934	-.516348	-.60521
Mo	36	.0000	6.000	1.1111	.2783	1.6695	1.226281	.67473
Nb	36	5.0000	15.000	8.6667	.3450	2.0702	.736794	1.31253
Zr	36	67.0000	281.000	163.9167	7.9630	47.7783	.644109	.30723
Y	36	20.0000	76.000	35.3611	1.8000	10.7999	1.407355	3.68193
Sr	36	7.0000	193.000	90.2778	8.3385	50.0312	-.021078	-1.08572
Rb	36	4.0000	187.000	66.3056	7.7615	46.5690	1.234865	1.23290
U	36	.0000	71.000	12.7778	2.1101	12.6607	2.766176	10.64692
Th	36	.0000	20.000	1.5556	.6766	4.0599	2.964016	10.18246
Pb	36	34.0000	5238.000	422.1389	146.1972	877.1832	4.618108	23.75966
Cr	36	182.0000	1084.000	515.2222	33.5370	201.2218	.460296	.15784
V	36	149.0000	1240.000	389.6111	31.2694	187.6164	2.637857	9.99242
Ba	36	47.0000	642.000	249.1667	23.7885	142.7310	.891154	.41135
Sc	36	29.0000	116.000	66.9167	2.9213	17.5277	.236976	.75185
As	36	.0000	66.000	8.7500	2.2116	13.2695	2.310178	7.62463
S	36	50.0000	1264.000	290.8333	39.2861	235.7168	2.784742	8.26643
Sb	36	.0000	83.000	12.3889	2.7901	16.7405	2.275629	7.07412
Sn	36	.0000	13.000	.3611	.3611	2.1667	5.509259	31.02857
CIA	0	--	--	--	--	--	--	--
K2O\Na2O	33	1.2353	120.000	14.4326	4.1041	23.5764	2.980981	10.52984
Si\Al_ox	36	.8485	7.521	2.3703	.3094	1.8564	1.539252	1.43516
Cr\Th	36	13.1000	217.234	97.4579	6.9937	41.9622	.484661	.47725
Th\Sc	36	.0430	.690	.1006	.0175	.1052	4.868156	25.89351
Cr\Zr	36	1.0273	6.266	3.2475	.1998	1.1989	.452988	.00627
Al\Ti_ox	36	6.9647	28.417	13.7940	.6631	3.9785	1.592760	3.93482
Al\K_ox	36	4.5970	477.375	33.5520	12.9537	77.7223	5.163760	28.25770
Cr\V	36	.3792	2.496	1.4268	.0849	.5094	-.022679	-.57569
V\Ni	36	2.7818	16.070	7.0816	.6208	3.7248	.994506	-.07822
Ni\Co	36	4.3750	43.144	18.6076	1.5929	9.5572	.681927	-.12082
Ti\Zr	0	--	--	--	--	--	--	--

Shales from the Rooiberg Fragment (Smelterskop and Leeuwpoort Fms.)

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 6 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	6	59.0100	76.590	69.922	2.4377	5.9712	-.74376	.08645
TiO2	6	.6000	.770	.700	.0312	.0764	-.38988	-1.53040
Al2O3	6	9.3400	19.350	13.848	1.5180	3.7183	.05519	-1.02465
Fe2O3	6	4.5500	8.980	6.927	.6870	1.6828	-.10167	-1.26716
MgO	6	.2400	1.310	.513	.1636	.4008	1.20191	.84430
CaO	6	.0400	.070	.052	.0048	.0117	.37090	-1.01011
Na2O	6	.0800	.130	.105	.0089	.0217	.14721	-1.61612
K2O	6	2.7800	5.300	4.227	.4463	1.0933	-.32346	-1.48407
P2O5	6	.0700	.110	.090	.0058	.0141	-.00000	-.96000
MnO	6	.0200	.080	.033	.0095	.0234	1.23152	.88519
H2Om	6	.1000	.300	.145	.0313	.0766	1.30744	1.07287
LOI	6	2.0600	4.210	2.730	.3231	.7914	.90522	.14111
Zn	6	9.0000	44.000	16.000	5.6273	13.7840	1.33144	1.13030
Cu	6	11.0000	94.000	40.833	15.2193	37.2796	.46408	-1.43104
Ni	6	26.0000	145.000	47.167	19.5745	47.9475	1.35839	1.19421
Co	6	1.5000	23.000	7.500	3.3417	8.1854	.97371	.24672
Ga	6	8.0000	28.000	16.333	3.1269	7.6594	.29466	-1.09807
Mo	6	.0000	8.000	5.500	1.1762	2.8810	-1.00368	.35970
Nb	6	11.0000	17.000	14.000	.8944	2.1909	-.09509	-1.12500
Zr	6	116.0000	978.000	494.167	127.9412	313.3907	.38237	-.99371
Y	6	28.0000	38.000	32.833	1.4701	3.6009	.17649	-1.04278
Sr	6	15.0000	53.000	29.167	6.0190	14.7434	.45951	-.97804
Rb	6	139.0000	319.000	240.667	31.3035	76.6777	-.37427	-1.47336
U	6	7.0000	11.000	9.333	.6146	1.5055	-.17365	-.89273
Th	6	8.0000	23.000	18.167	2.2718	5.5648	-.83994	-.11376
Pb	6	2.5000	9.000	6.000	1.1475	2.8107	-.36592	-1.46515
Cr	6	98.0000	165.000	124.833	11.5914	28.3931	.22197	-1.53107
V	6	44.0000	116.000	69.167	11.3031	27.6869	.55700	-.71188
Ba	6	988.0000	1611.000	1309.000	85.0611	208.3564	-.07830	-.55363
Sc	6	4.0000	15.000	8.000	1.9149	4.6904	.30042	-1.38050
As	6	.0000	.000	.000	.0000	.0000	.00000	.00000
S	6	25.0000	70.000	36.667	7.8174	19.1485	.78467	-.60744
Sb	6	.0000	8.000	1.333	1.3333	3.2660	1.36083	1.20000
Sn	6	.0000	12.000	3.833	2.4278	5.9470	.54475	-1.47461
B	0	--	--	--	--	--	--	--
CIA	6	71.5089	76.299	74.011	.6385	1.5641	-.15738	-.32269
K2O¦Na2O	6	23.0769	58.889	41.345	4.9702	12.1744	-.05452	-.69625
Si¦Al_ox	6	3.0496	8.200	5.477	.7924	1.9410	.27454	-1.21903
Cr¦Th	6	4.3043	20.625	8.378	2.5289	6.1945	1.18384	.75572
Th¦Sc	6	.5333	2.753	1.976	.3097	.7585	-.94240	.42769
Cr¦Zr	6	.1401	1.422	.428	.2001	.4903	1.32298	1.11460
Al¦Ti_ox	6	15.3115	25.130	19.523	1.4226	3.4846	.30786	-.73671
K¦Rb	6	96.9105	239.229	154.132	19.3345	47.3596	.66282	.01991
Cr¦V	6	1.4224	2.364	1.905	.1335	.3271	-.02632	-.83975
V¦Ni	6	.8000	2.926	1.947	.3349	.8203	.06284	-1.17044
Ni¦Co	6	3.1111	10.000	6.833	1.1735	2.8745	-.20513	-1.57164
Al¦Zr	6	50.5487	882.927	267.314	125.8646	308.3040	1.23001	.90081
Ti¦Zr	6	3.7386	39.788	13.812	5.3623	13.1348	1.17220	.78724

Daspoort Formation shales

css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 8 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	8	50.4200	92.020	71.9500	6.2575	17.6989	-.004556	-1.84456
TiO2	8	.1400	.970	.5888	.1288	.3644	-.286096	-1.69352
Al2O3	8	2.6600	29.080	15.2788	3.7586	10.6308	.030936	-1.76795
Fe2O3	8	1.2800	12.880	5.4713	1.3409	3.7925	.665908	-.17099
MgO	8	.0700	3.470	1.3538	.4126	1.1669	.597519	-.55905
CaO	8	.0000	.010	.0025	.0016	.0046	.945108	-.66667
Na2O	8	.0000	.830	.2200	.0974	.2756	1.255090	1.06586
K2O	8	.2500	4.800	2.3188	.6170	1.7450	.088018	-1.48299
P2O5	8	.0000	.080	.0538	.0098	.0277	-.726118	-.31149
MnO	8	.0100	.050	.0275	.0059	.0167	.020164	-1.70809
H2Om	8	.0500	.440	.2050	.0419	.1186	.623030	.11686
LOI	8	1.1000	6.250	2.7275	.6720	1.9007	.836277	-.55131
Zn	8	5.0000	86.000	40.8750	13.5929	38.4464	.102209	-1.85235
Cu	8	1.5000	193.000	35.1250	23.7749	67.2457	1.550014	2.01417
Ni	8	7.0000	166.000	57.1250	19.7624	55.8964	.693634	-.32310
Co	8	1.5000	32.000	11.8750	4.1022	11.6028	.635885	-.89922
Ga	8	1.5000	37.000	18.5625	5.6009	15.8417	.072347	-1.84099
Mo	8	.0000	7.000	3.2500	.8399	2.3755	-.090921	-.79058
Nb	8	1.0000	19.000	11.5000	2.4128	6.8243	-.245423	-1.37446
Zr	8	123.0000	565.000	277.8750	56.0511	158.5365	.677762	-.70366
Y	8	11.0000	45.000	31.7500	5.2940	14.9738	-.365720	-1.52429
Sr	8	8.0000	99.000	41.8750	13.8040	39.0437	.511450	-1.32801
Rb	8	14.0000	204.000	106.3750	27.0343	76.4646	.066374	-1.64098
U	8	.0000	12.000	4.8750	1.9127	5.4100	.164082	-1.75089
Th	8	2.5000	24.000	14.5625	2.8085	7.9437	-.302656	-1.22966
Pb	8	2.5000	23.000	10.8750	2.7593	7.8045	.379606	-1.10090
Cr	8	39.0000	290.000	174.2500	30.3455	85.8300	-.298610	-1.05358
V	8	34.0000	175.000	102.2500	22.5782	63.8609	.054191	-1.87106
Ba	8	421.0000	1461.000	691.8750	118.4025	334.8929	1.391255	1.65779
Sc	8	4.0000	23.000	13.3750	2.5976	7.3473	-.068873	-1.38757
As	8	.0000	22.000	4.2500	2.9384	8.3109	1.218813	.58740
S	8	25.0000	254.000	86.8750	30.3788	85.9243	.848885	-.33489
Sb	8	.0000	16.000	3.0000	2.1044	5.9522	1.280364	.85952
Sn	8	.0000	19.000	4.8750	2.5735	7.2789	.812942	-.44030
B	4	78.0000	727.000	267.2500	154.7764	309.5528	.707555	-.72299
CIA	8	79.2523	90.020	84.9609	1.3940	3.9429	-.118787	-1.41041
K2O¦Na2O	7	4.2727	17.842	10.3783	2.0780	5.4979	.094334	-1.59891
Si¦Al_ox	8	1.7338	34.594	10.6263	4.0324	11.4054	.989338	.39316
Cr¦Th	8	3.9000	44.890	16.9176	5.8105	16.4346	.860381	-.70538
Th¦Sc	7	.3846	1.889	1.1423	.1976	.5227	.122374	-1.01694
Cr¦Zr	8	.1310	1.515	.7545	.1585	.4482	.243021	-.76133
Al¦Ti_ox	8	12.8308	37.071	26.3136	2.7366	7.7404	-.447196	-.60646
K¦Rb	8	125.8690	204.184	171.9447	10.4911	29.6734	-.217909	-1.39886
Cr¦V	8	.8232	5.150	2.2246	.6076	1.7187	.863642	-.70730
V¦Ni	8	1.0542	5.714	2.9737	.6035	1.7070	.419192	-1.24625
Ni¦Co	8	1.7500	16.600	5.1158	1.7202	4.8655	1.544103	2.14707
Al¦Zr	8	78.1303	630.904	313.9325	75.8614	214.5683	.328967	-1.43163
Ti¦Zr	8	6.2438	24.699	13.0061	2.7483	7.7734	.437540	-1.42044

Dwaalheuwel Formation shales

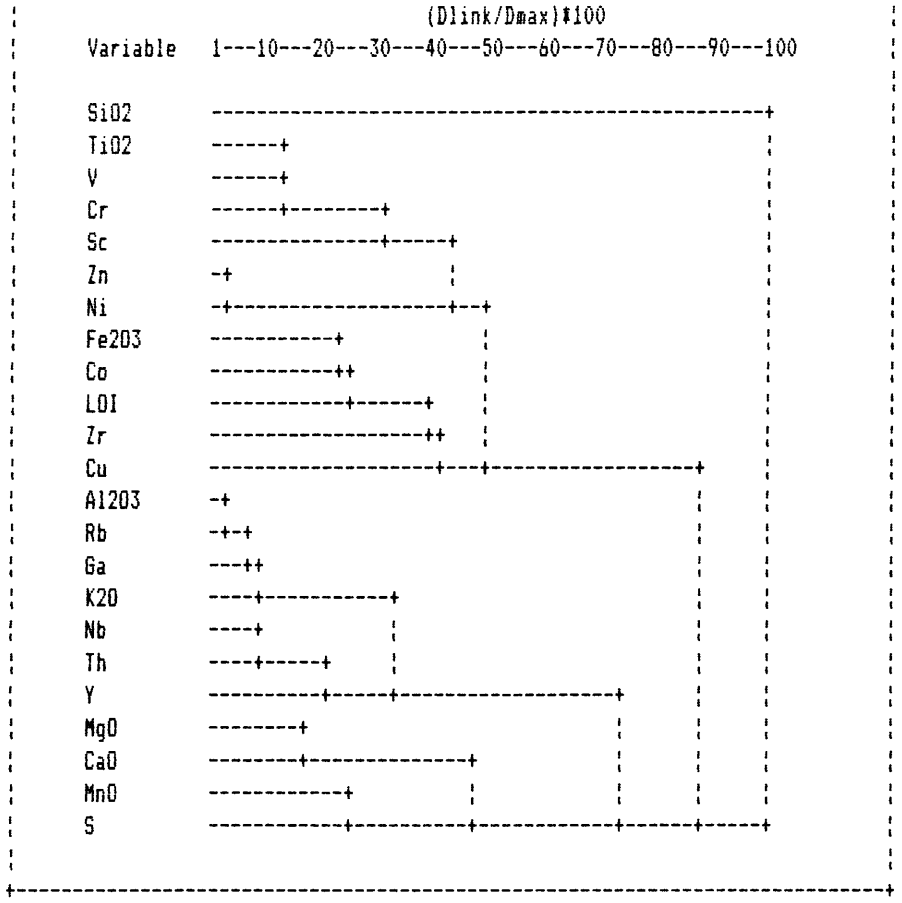
css/pc: basic stats	Descriptive statistics in dbl precision N. of CASES = 7 (MD pairwise deleted)							
	N	Min	Max	Mean	Std.Err.	Std.Dev.	Skewness	Kurtosis
SiO2	7	36.2100	69.280	50.813	4.062	10.747	.284968	-.53317
TiO2	7	.7200	1.380	1.029	.084	.222	.181872	-.91223
Al2O3	7	16.1600	36.300	25.686	2.878	7.615	.164301	-1.28874
Fe2O3	7	4.0100	27.030	12.129	3.259	8.623	.642488	-.78436
MgO	7	.0700	2.190	.917	.385	1.018	.249847	-1.86123
CaO	7	.0000	.060	.016	.008	.022	1.007882	.22920
Na2O	7	.0400	.640	.236	.087	.229	.787070	-.70313
K2O	7	.0200	7.590	3.730	1.075	2.843	.042816	-1.41791
P2O5	7	.0200	.150	.094	.021	.057	-.294836	-1.42292
MnO	7	.0000	.390	.080	.052	.138	1.546945	1.96674
H2O#	7	.0800	3.570	.703	.481	1.272	1.582066	2.06008
LOI	7	3.0200	8.100	4.731	.670	1.774	.795968	-.17013
Zn	7	16.0000	133.000	49.000	14.826	39.226	1.268555	1.22058
Cu	7	29.0000	109.000	65.143	12.153	32.153	.383886	-1.28862
Ni	7	46.0000	200.000	92.286	23.602	62.444	.765782	-.82485
Co	7	1.5000	53.000	22.929	7.259	19.206	.176782	-1.22352
Ga	7	14.0000	43.000	30.000	3.519	9.309	-.353769	-.46623
Mo	7	.0000	6.000	1.714	.918	2.430	.702225	-.77367
Nb	7	11.0000	20.000	15.286	1.128	2.984	.215264	-.80770
Zr	7	175.0000	261.000	206.571	13.214	34.961	.426843	-1.37122
Y	7	18.0000	34.000	27.000	1.877	4.967	-.419796	-.09953
Sr	7	5.0000	96.000	54.857	13.112	34.691	-.083238	-1.35501
Rb	7	1.0000	354.000	193.429	54.727	144.794	-.080211	-1.65525
U	7	6.0000	13.000	8.429	.997	2.637	.536282	-.88070
Th	7	11.0000	33.000	20.429	3.069	8.121	.341848	-1.13556
Pb	7	25.0000	474.000	156.143	60.380	159.751	.940128	.25877
Cr	7	191.0000	442.000	303.143	37.619	99.531	.169075	-1.43671
V	7	132.0000	373.000	232.857	36.219	95.825	.281112	-1.54804
Ba	7	18.0000	7897.000	1655.286	1049.775	2777.444	1.558496	2.00171
Sc	7	20.0000	60.000	34.714	5.842	15.457	.371736	-1.13527
As	7	.0000	49.000	13.714	8.855	23.429	.754437	-1.09320
S	7	25.0000	419.000	178.571	51.688	136.754	.619171	-.63099
Sb	7	.0000	10.000	1.429	1.429	3.780	1.619848	2.16667
Sn	7	.0000	22.000	4.571	3.228	8.541	1.140911	.48255
B	5	17.0000	261.000	111.800	41.412	92.600	.586614	-.51968
CIA	7	74.0084	98.927	85.269	3.723	9.850	.153569	-1.56862
K2O/Na2O	7	.5000	50.600	27.887	9.280	24.552	-.172885	-1.86782
Si/Al_ox	7	.9975	4.287	2.203	.394	1.043	.869246	.49376
Cr/Th	7	6.5862	37.000	17.644	3.923	10.380	.623002	-.22337
Th/Sc	7	.2444	1.650	.712	.178	.472	.904612	.30795
Cr/Zr	7	1.0495	2.483	1.509	.235	.621	.703751	-1.08800
Al/Ti_ox	7	15.2269	36.300	25.201	2.368	6.266	.211578	.17231
K/Rb	7	83.4372	204.091	151.420	16.449	43.519	-.229860	-1.14844
Cr/V	7	1.1314	1.797	1.351	.089	.234	.768233	-.15319
V/Ni	7	.7650	6.783	3.281	.709	1.876	.550058	.02232
Ni/Co	7	.9811	66.890	13.721	8.968	23.726	1.542532	1.94619
Al/Zr	7	397.9633	1079.415	674.533	88.903	235.214	.420196	-.72264
Ti/Zr	7	23.3280	38.704	30.009	2.029	5.367	.188577	-.86053

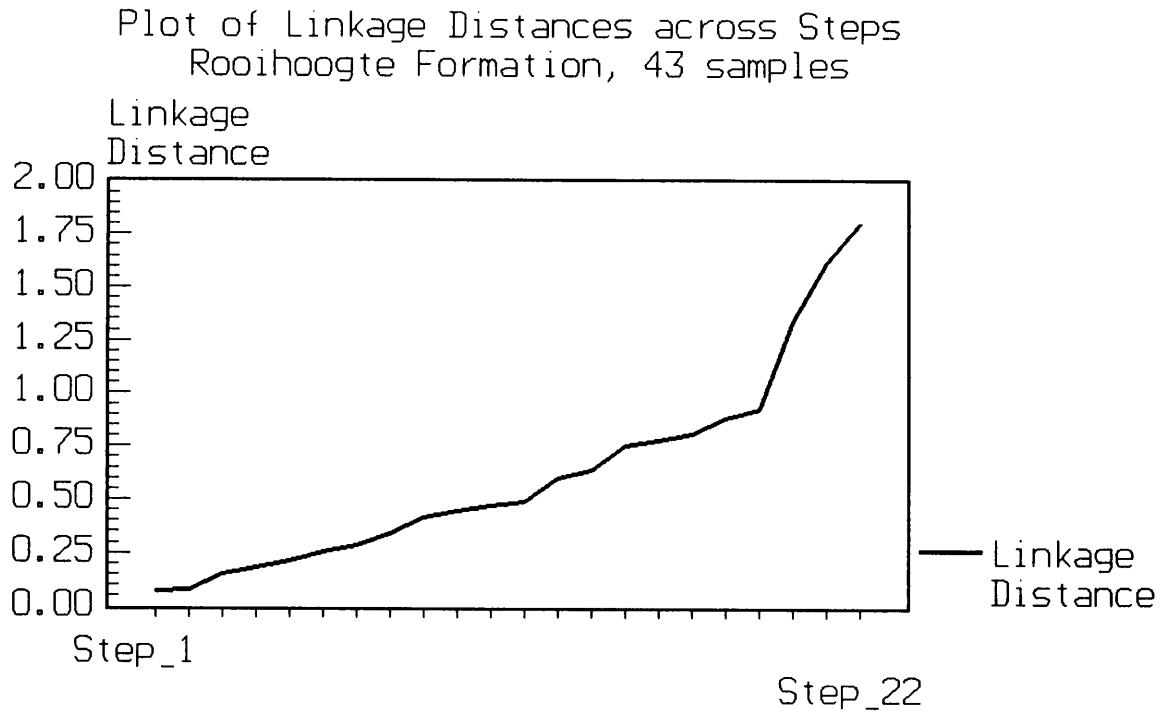
APPENDIX 2b

Cluster Analysis

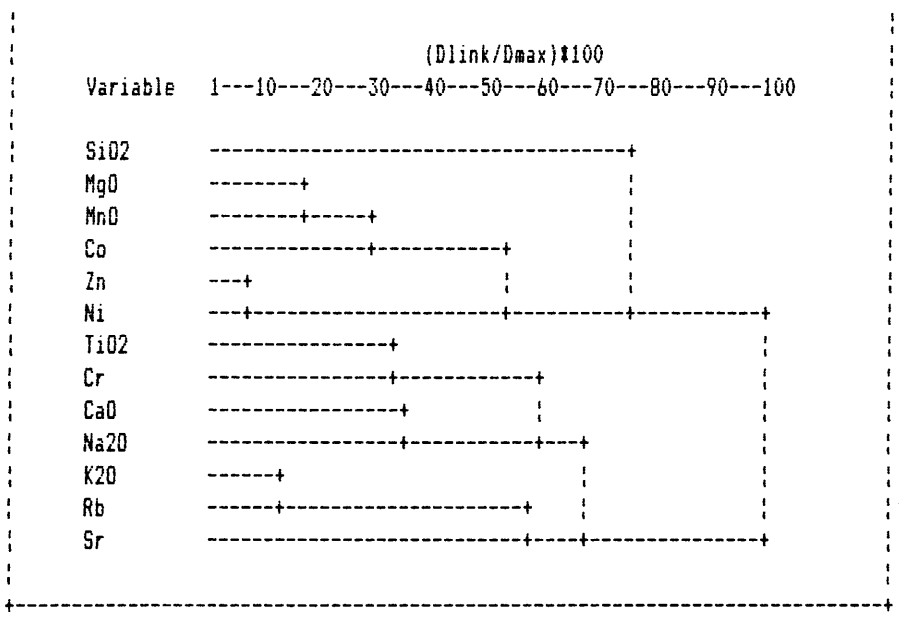
CONTENTS OF APPENDIX 2b

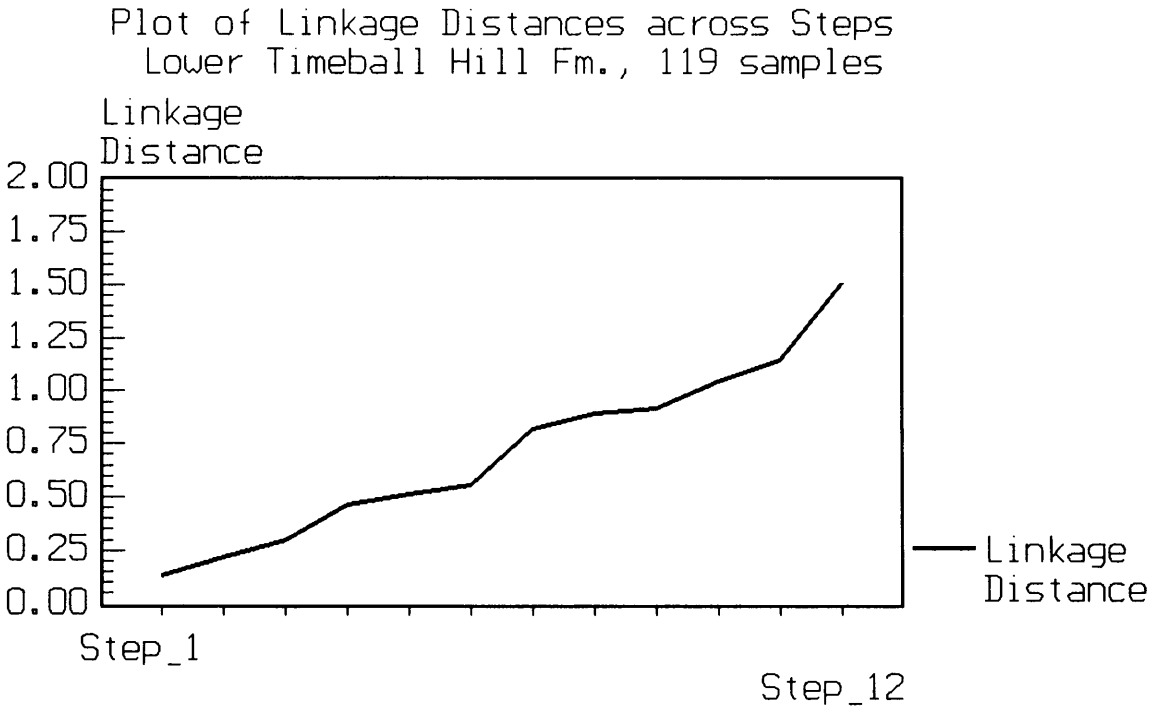
Hierarchical Tree

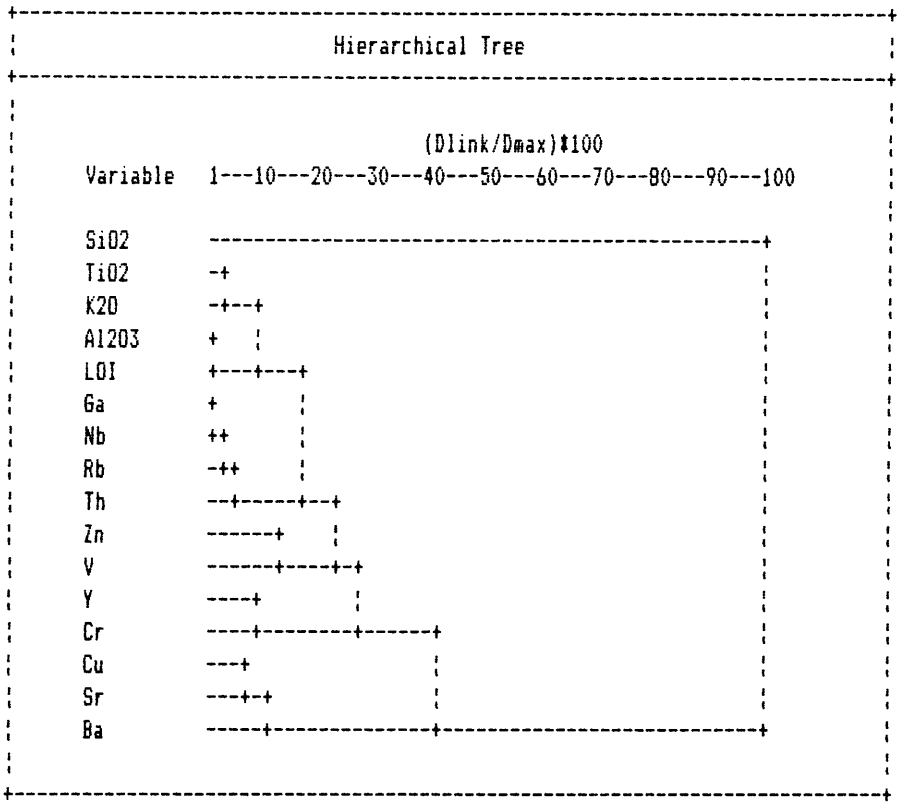


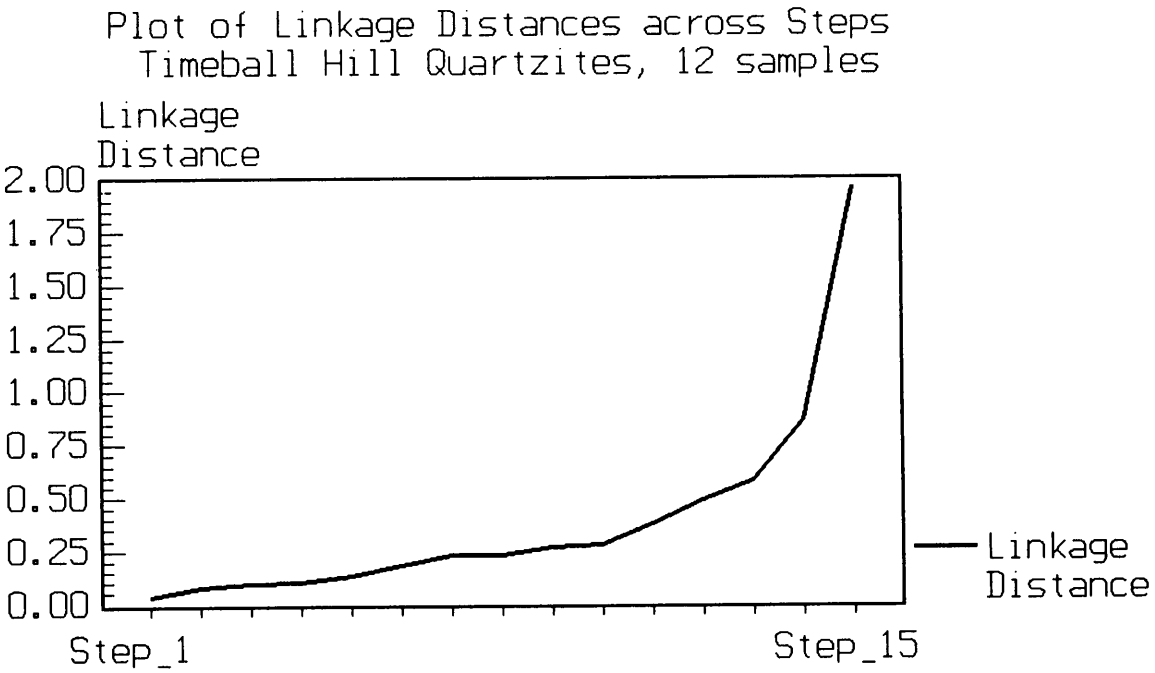


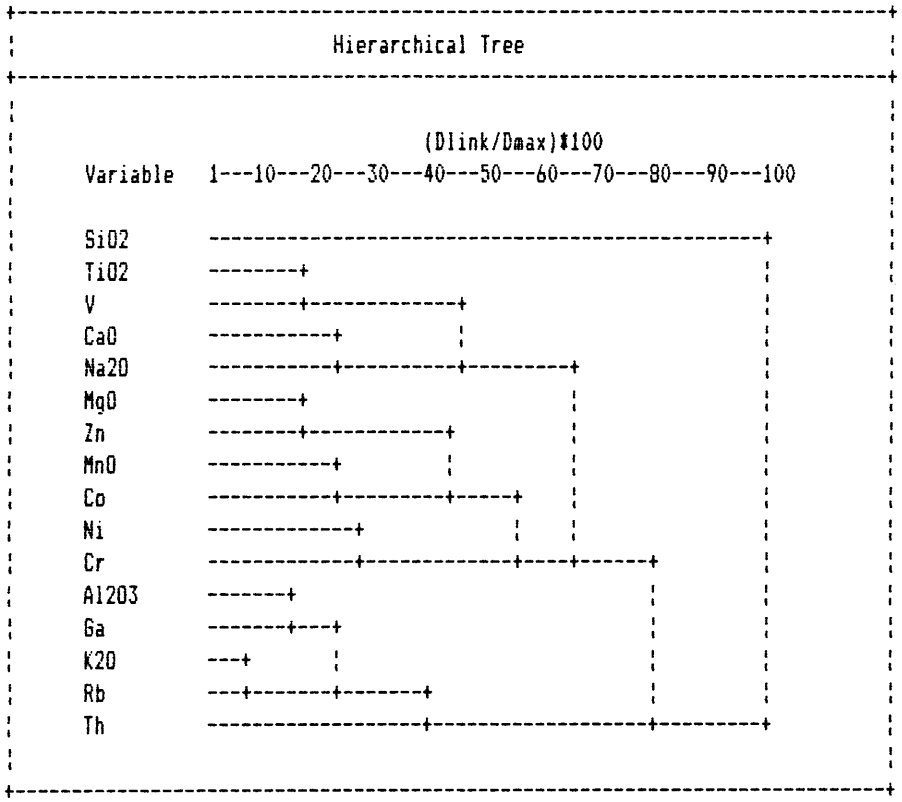
Hierarchical Tree

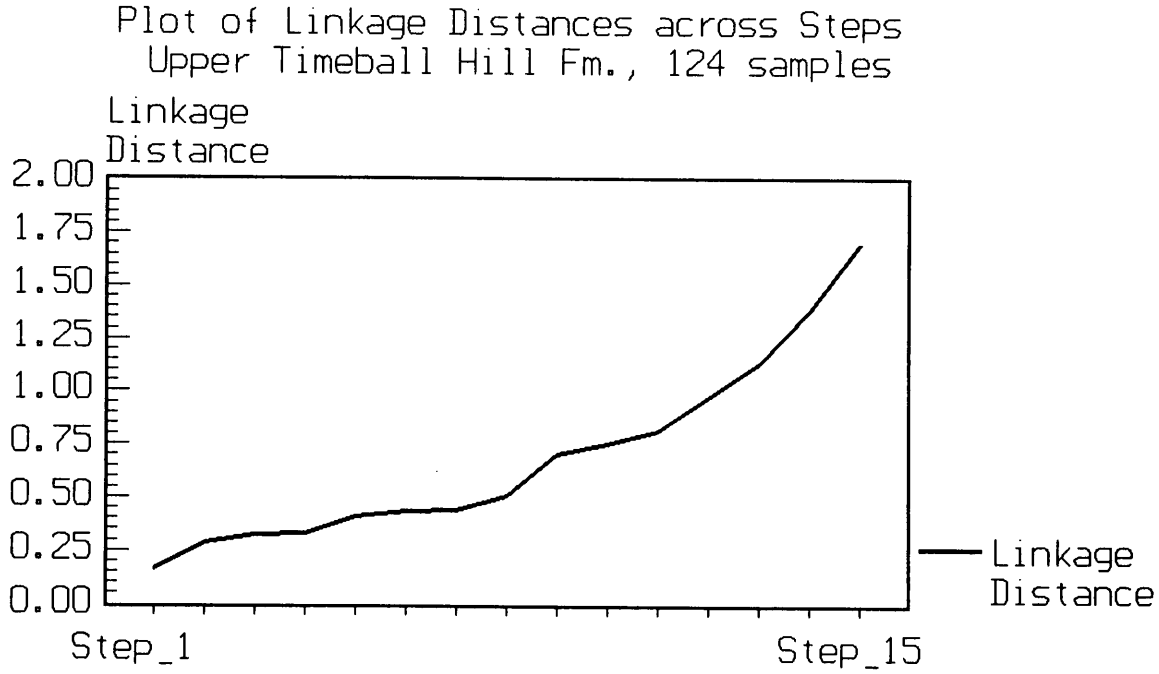


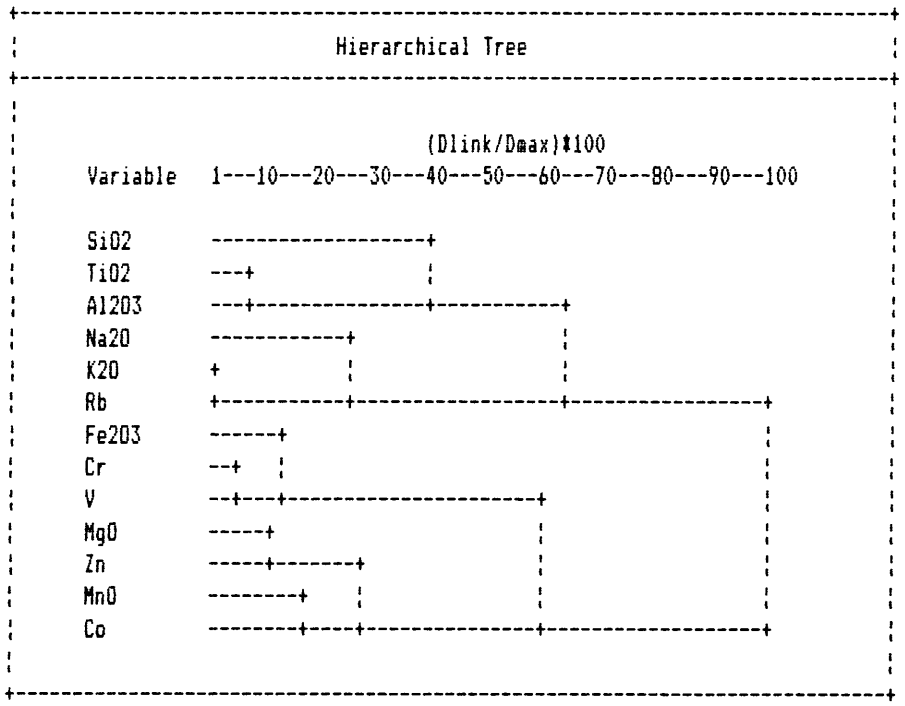


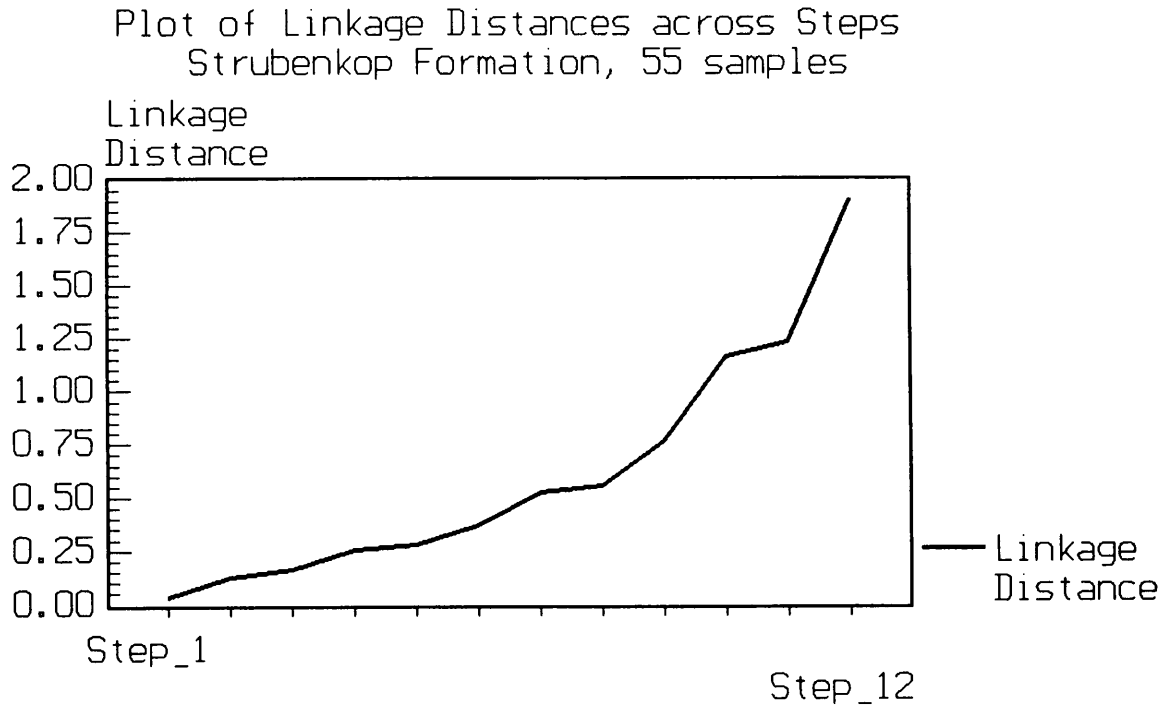


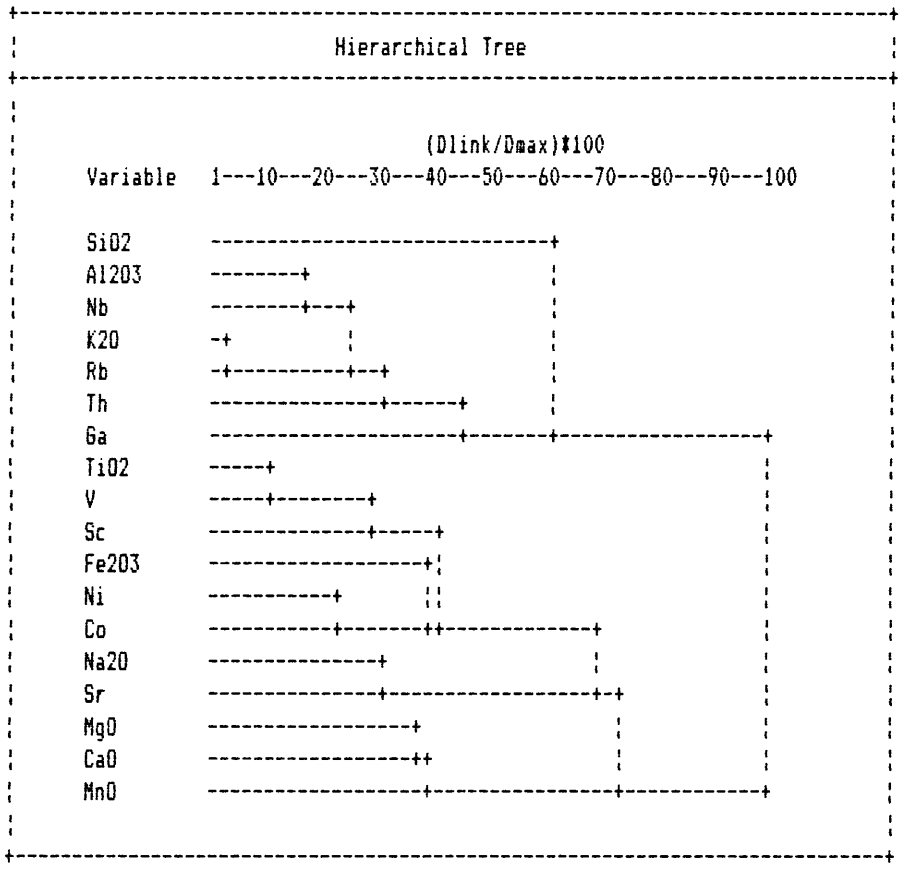


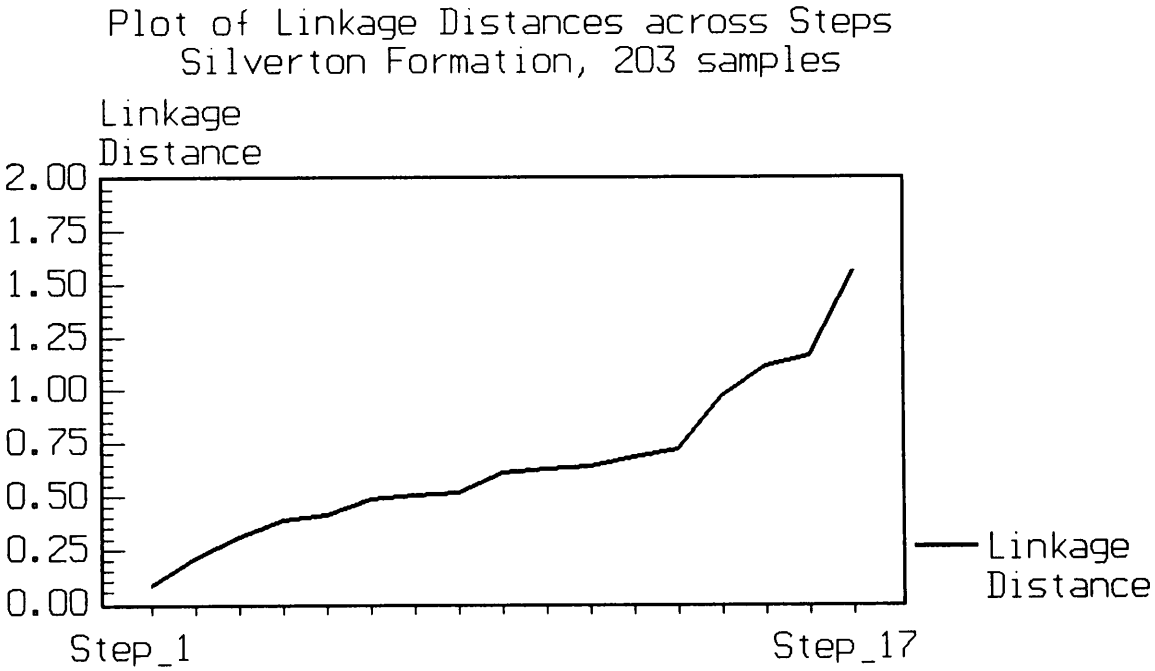








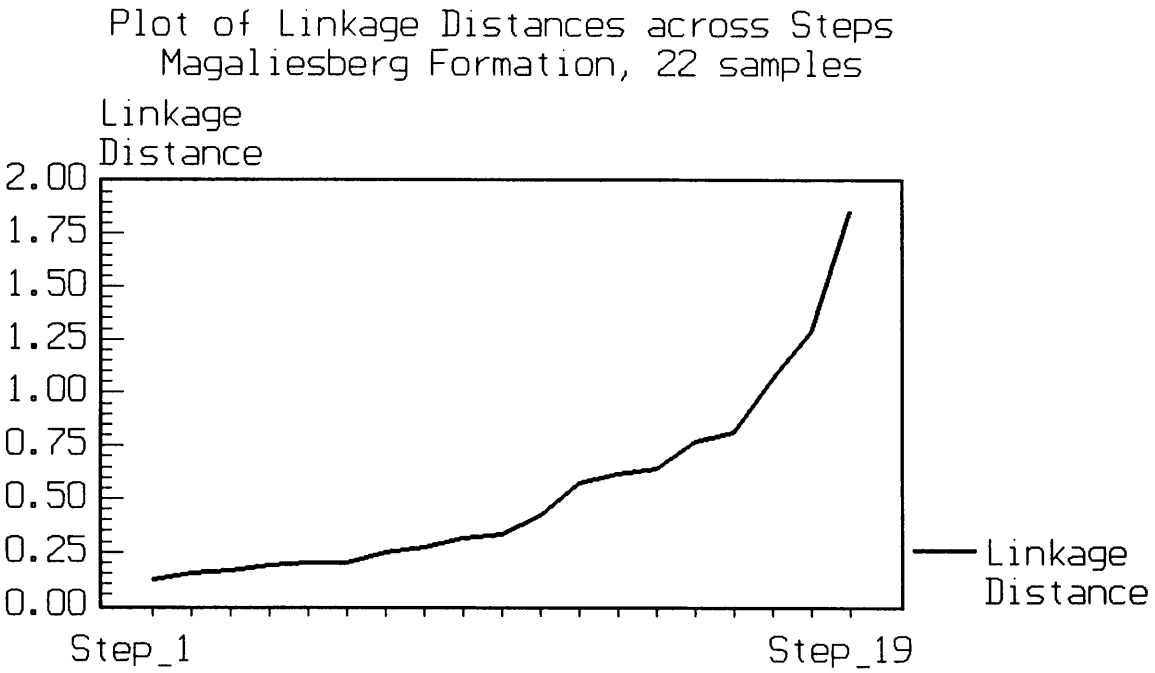




Hierarchical Tree

(Dlink/Dmax)*100

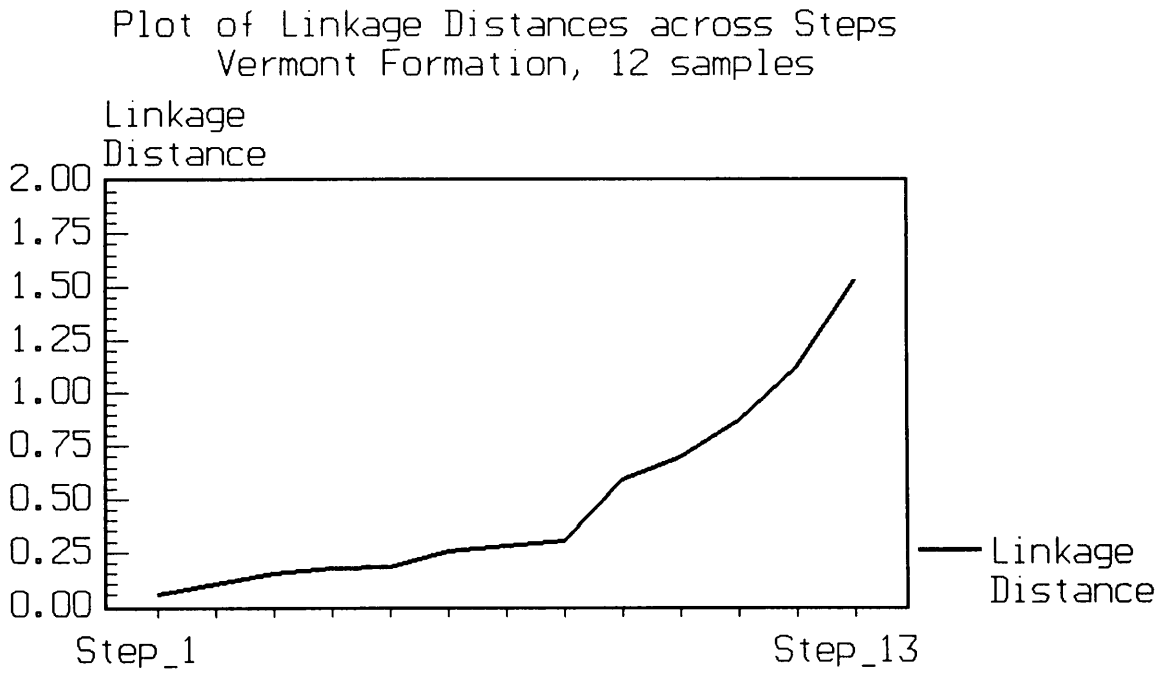
Variable	1---10---20---30---40---50---60---70---80---90---100
SiO2	----------+
CaO	-------+ ¦
Na2O	--+ ¦ ¦
S	--+----+------+----------+
Fe2O3	----------+ ¦
Zn	----------+-----+ ¦
MgO	----+ ¦ ¦
MnO	----+----------+----------+----------+
TiO2	--+ ¦
Nb	--++ ¦
Y	---+--+ ¦
Ga	----+ ¦ ¦
V	----+-+--------+ ¦
U	----------+---+ ¦
K2O	-----+ ¦ ¦
Rb	-----+----------+-------+ ¦
Al2O3	----+ ¦ ¦
LOI	----+--+ ¦ ¦
Th	-------+----------+ ¦ ¦
Cr	----------+------+----------+

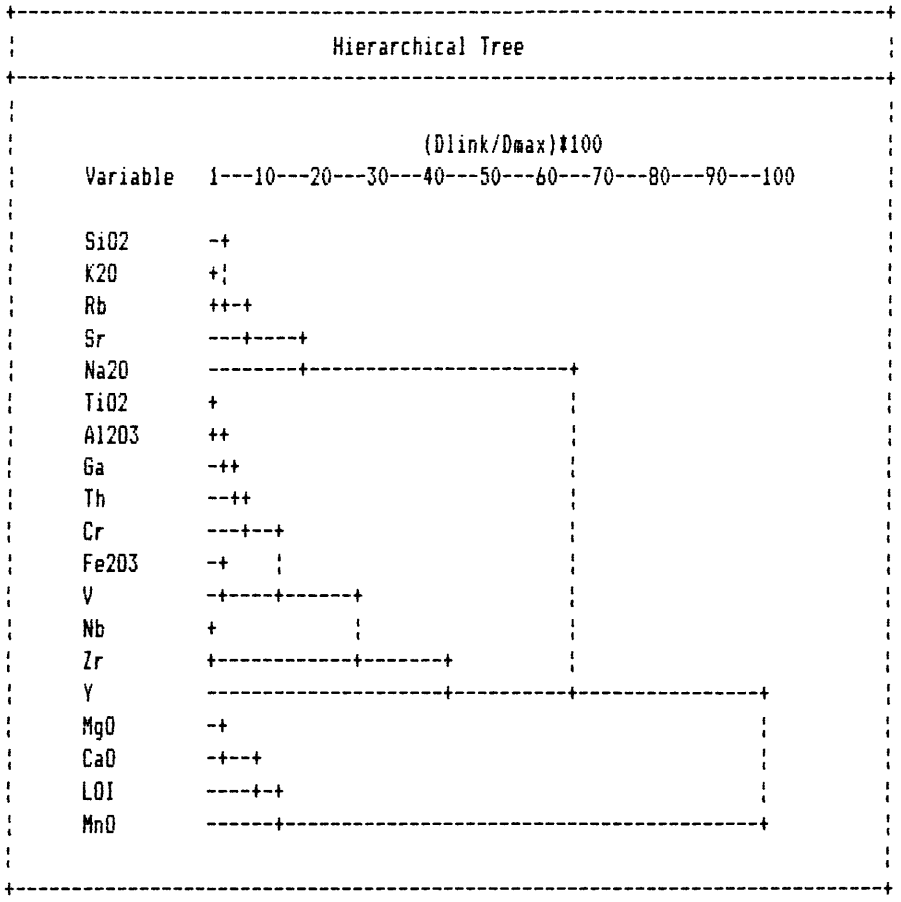


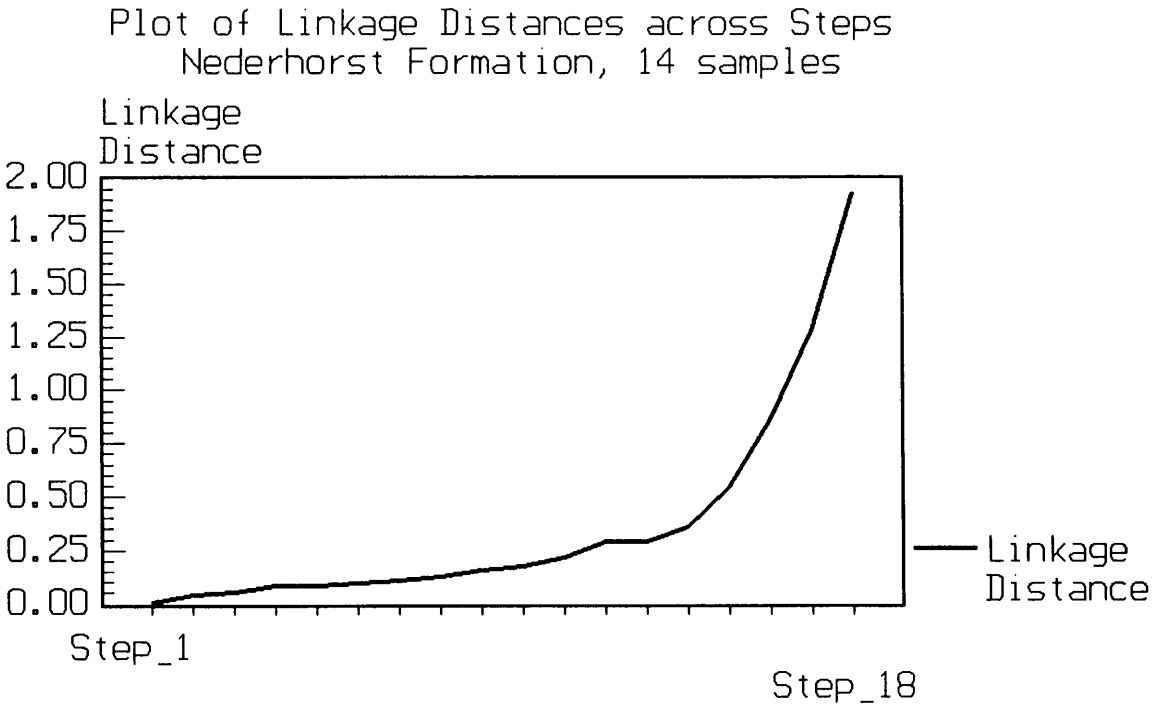
Hierarchical Tree

(Dlink/Dmax)*100

Variable	1---10---20---30---40---50---60---70---80---90---100
Al2O3	+
Ga	+--+
Rb	---+---+
K2O	-------+-------------+
Nb	----+ ¦
Y	----+---+ ¦
Th	--------+------------+-------------------------+
CaO	----------------------------+ ¦
Na2O	--+ ¦
Sr	--+-----------------------+-------+ ¦
Zn	----+ ¦ ¦
Ni	----+-------------+ ¦ ¦
V	--------+ ¦ ¦ ¦
Sc	--------+---------+----------------+-------------+







APPENDIX 2c

Spearman Correlation Coefficients for selected sample sets

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Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 43

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V6	1.00000	-0.39053	-0.50491	-0.51274	-0.31638	-0.48053	-0.13597	0.01014	0.00045	-0.16212	-0.45997	-0.72624	-0.53257	-0.42511	-0.62310	-0.61830
SiO2	0.0	0.0096	0.0006	0.0004	0.0387	0.0011	0.3847	0.9485	0.9977	0.2990	0.0019	0.0001	0.0002	0.0045	0.0001	0.0001
V7	-0.39053	1.00000	0.45620	0.18058	-0.05854	-0.08338	-0.18792	-0.12288	-0.05255	0.25601	0.61980	0.55849	0.45088	0.17476	0.32778	0.18788
TiO2	0.0096	0.0	0.0021	0.2465	0.7092	0.5950	0.2275	0.4324	0.7379	0.0975	0.0001	0.0001	0.0024	0.2623	0.0319	0.2276
V8	-0.50491	0.45620	1.00000	-0.15186	-0.25755	0.04455	-0.08821	-0.05848	0.58826	0.13861	0.23965	0.23844	0.12004	0.15385	0.07503	0.01664
Al2O3	0.0006	0.0021	0.0	0.3310	0.0954	0.7766	0.5738	0.7095	0.0001	0.3754	0.1217	0.1236	0.4432	0.3246	0.6325	0.9157
V9	-0.51274	0.18058	-0.15186	1.00000	0.67071	0.34081	0.09814	-0.02622	-0.52345	0.06262	0.42237	0.54505	0.63496	0.41807	0.70173	0.72616
Fe2O3	0.0004	0.2465	0.3310	0.0	0.0001	0.0253	0.5313	0.8675	0.0003	0.6900	0.0048	0.0002	0.0001	0.0053	0.0001	0.0001
V10	-0.31638	-0.05854	-0.25755	0.67071	1.00000	0.28757	0.20235	-0.13896	-0.41198	0.10428	0.25647	0.38361	0.43187	0.25681	0.45716	0.64325
MnO	0.0387	0.7092	0.0954	0.0001	0.0	0.0615	0.1931	0.3742	0.0061	0.5058	0.0969	0.0111	0.0038	0.0964	0.0021	0.0001
V11	-0.48053	-0.08338	0.04455	0.34081	0.28757	1.00000	0.74047	0.07331	-0.01201	0.17633	-0.18184	0.18199	0.10067	0.24918	0.23898	0.48529
MgO	0.0011	0.5950	0.7766	0.0253	0.0615	0.0	0.0001	0.6404	0.9391	0.2580	0.2432	0.2428	0.5207	0.1071	0.1227	0.0010
V12	-0.13597	-0.18792	-0.08821	0.09814	0.20235	0.74047	1.00000	0.12670	0.08588	0.23697	-0.33397	0.01932	-0.08775	0.13738	-0.00279	0.17834
CaO	0.3847	0.2275	0.5738	0.5313	0.1931	0.0001	0.0	0.4182	0.5840	0.1260	0.0286	0.9021	0.5758	0.3797	0.9858	0.2525
V13	0.01014	-0.12288	-0.05848	-0.02622	-0.13896	0.07331	0.12670	1.00000	0.10097	-0.27106	-0.14782	-0.06286	-0.02470	-0.20342	-0.04900	-0.09721
Na2O	0.9485	0.4324	0.7095	0.8675	0.3742	0.6404	0.4182	0.0	0.5194	0.0787	0.3442	0.6888	0.8751	0.1908	0.7550	0.5352
V14	0.00045	-0.05255	0.58826	-0.52345	-0.41198	-0.01201	0.08588	0.10097	1.00000	0.15789	-0.31961	-0.28278	-0.35171	-0.05536	-0.34558	-0.32780
K2O	0.9977	0.7379	0.0001	0.0003	0.0061	0.9391	0.5840	0.5194	0.0	0.3119	0.0367	0.0662	0.0207	0.7244	0.0232	0.0319
V15	-0.16212	0.25601	0.13861	0.06262	0.10428	0.17633	0.23697	-0.27106	0.15789	1.00000	0.09290	0.14415	0.35315	0.23637	0.39477	0.14156
P2O5	0.2990	0.0975	0.3754	0.6900	0.5058	0.2580	0.1260	0.0787	0.3119	0.0	0.5535	0.3564	0.0202	0.1270	0.0088	0.3652
V16	-0.45997	0.61980	0.23965	0.42237	0.25647	-0.18184	-0.33397	-0.14782	-0.31961	0.09290	1.00000	0.74153	0.75212	0.12726	0.60730	0.37707
H2O-	0.0019	0.0001	0.1217	0.0048	0.0969	0.2432	0.0286	0.3442	0.0367	0.5535	0.0	0.0001	0.0001	0.4161	0.0001	0.0127
V17	-0.72624	0.55849	0.23844	0.54505	0.38361	0.18199	0.01932	-0.06286	-0.28278	0.14415	0.74153	1.00000	0.72774	0.30134	0.73553	0.58294
LOI	0.0001	0.0001	0.1236	0.0002	0.0111	0.2428	0.9021	0.6888	0.0662	0.3564	0.0001	0.0	0.0001	0.0496	0.0001	0.0001
V18	-0.53257	0.45088	0.12004	0.63496	0.43187	0.10067	-0.08775	-0.02470	-0.35171	0.35315	0.75212	0.72774	1.00000	0.32761	0.84608	0.60929
Zn	0.0002	0.0024	0.4432	0.0001	0.0038	0.5207	0.5758	0.8751	0.0207	0.0202	0.0001	0.0001	0.0	0.0320	0.0001	0.0001
V19	-0.42511	0.17476	0.15385	0.41807	0.25681	0.24918	0.13738	-0.20342	-0.05536	0.23637	0.12726	0.30134	0.32761	1.00000	0.48554	0.52362
Cu	0.0045	0.2623	0.3246	0.0053	0.0964	0.1071	0.3797	0.1908	0.7244	0.1270	0.4161	0.0496	0.0320	0.0	0.0010	0.0003
V20	-0.62310	0.32778	0.07503	0.70173	0.45716	0.23898	-0.00279	-0.04900	-0.34558	0.39477	0.60730	0.73553	0.84608	0.48554	1.00000	0.74982
Ni	0.0001	0.0319	0.6325	0.0001	0.0021	0.1227	0.9858	0.7550	0.0232	0.0088	0.0001	0.0001	0.0001	0.0010	0.0	0.0001
V21	-0.61830	0.18788	0.01664	0.72616	0.64325	0.48529	0.17834	-0.09721	-0.32780	0.14156	0.37707	0.58294	0.60929	0.52362	0.74982	1.00000
Co	0.0001	0.2276	0.9157	0.0001	0.0001	0.0010	0.2525	0.5352	0.0319	0.3652	0.0127	0.0001	0.0001	0.0003	0.0001	0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 43

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V22	-0.32616	0.30134	0.72142	-0.23439	-0.19835	-0.17687	-0.20676	0.08849	0.57178	0.05222	0.30861	0.21862	0.10149	-0.04796	0.01573	-0.08584
Ga	0.0328	0.0496	0.0001	0.1303	0.2023	0.2566	0.1834	0.5726	0.0001	0.7395	0.0441	0.1590	0.5173	0.7601	0.9203	0.5842
V23	-0.41119	0.68477	0.51634	-0.06177	-0.16140	-0.01638	-0.16237	-0.22121	0.10400	0.27229	0.57846	0.48708	0.26880	0.10813	0.22196	-0.02920
Nb	0.0062	0.0001	0.0004	0.6940	0.3011	0.9170	0.2982	0.1540	0.5069	0.0773	0.0001	0.0009	0.0813	0.4901	0.1526	0.8526
V24	-0.14893	0.62187	0.26415	0.01288	-0.09840	-0.37676	-0.36039	-0.00363	-0.07452	-0.01388	0.51411	0.40084	0.35544	0.07348	0.23184	0.08719
Zr	0.3405	0.0001	0.0870	0.9347	0.5302	0.0128	0.0176	0.9816	0.6348	0.9296	0.0004	0.0077	0.0193	0.6396	0.1347	0.5783
V25	-0.32116	0.67032	0.36695	0.00121	-0.09639	-0.11990	-0.19871	0.01629	0.04502	0.09907	0.47584	0.47189	0.30779	0.05622	0.21150	0.14317
Y	0.0357	0.0001	0.0155	0.9939	0.5386	0.4438	0.2015	0.9174	0.7744	0.5273	0.0013	0.0014	0.0447	0.7203	0.1734	0.3597
V26	-0.19458	0.37969	0.48217	-0.13341	-0.20995	-0.32911	-0.30158	0.12166	0.27998	-0.00952	0.16373	0.19513	0.01468	0.14648	0.04600	-0.03170
Sr	0.2112	0.0120	0.0011	0.3937	0.1766	0.0312	0.0494	0.4370	0.0690	0.9517	0.2941	0.2099	0.9256	0.3486	0.7696	0.8401
V27	-0.26017	0.13361	0.76666	-0.37908	-0.35629	-0.01790	0.04543	0.05693	0.86499	0.20142	-0.03328	-0.06549	-0.11591	0.05239	-0.12025	-0.19257
Rb	0.0920	0.3930	0.0001	0.0122	0.0190	0.9093	0.7724	0.7169	0.0001	0.1953	0.8322	0.6765	0.4592	0.7386	0.4424	0.2160
V28	-0.13292	-0.03797	0.18104	-0.19377	-0.40874	0.10792	0.20655	0.31047	0.30901	0.04443	-0.21531	-0.02310	-0.22279	0.18074	-0.06608	-0.12181
U	0.3955	0.8090	0.2453	0.2131	0.0065	0.4909	0.1839	0.0427	0.0438	0.7772	0.1656	0.8831	0.1510	0.2461	0.6737	0.4365
V29	-0.22372	0.45922	0.49756	-0.33097	-0.33409	-0.04967	-0.11955	0.01516	0.32468	0.01764	0.32793	0.27520	-0.01020	0.04649	-0.09616	-0.13635
Th	0.1493	0.0020	0.0007	0.0302	0.0286	0.7518	0.4451	0.9231	0.0336	0.9106	0.0318	0.0741	0.9482	0.7672	0.5396	0.3833
V30	-0.33409	0.00166	0.15828	-0.02029	0.08669	0.08377	0.21557	0.04896	0.06764	-0.08142	0.05015	0.28949	-0.06046	0.14691	0.00246	0.14834
Pb	0.0286	0.9916	0.3107	0.8972	0.5804	0.5933	0.1650	0.7552	0.6665	0.6037	0.7494	0.0597	0.7001	0.3472	0.9875	0.3425
V31	-0.40924	0.62004	0.18242	0.41043	0.16852	0.04275	-0.14639	0.01077	-0.22348	0.24461	0.74898	0.67053	0.64910	0.04900	0.50344	0.30981
Cr	0.0064	0.0001	0.2417	0.0063	0.2800	0.7855	0.3489	0.9453	0.1497	0.1139	0.0001	0.0001	0.0001	0.7550	0.0006	0.0432
V32	-0.37992	0.67871	0.33712	0.42142	0.08788	-0.15081	-0.23294	0.00578	-0.03634	0.05356	0.59940	0.54972	0.60095	0.24066	0.47429	0.42607
V	0.0120	0.0001	0.0271	0.0049	0.5752	0.3344	0.1328	0.9707	0.8170	0.7330	0.0001	0.0001	0.0001	0.1201	0.0013	0.0044
V33	0.03968	0.27305	0.26618	-0.26037	-0.35963	-0.53230	-0.29150	0.25074	0.14891	-0.09432	0.14082	0.07662	0.03527	-0.15627	-0.13642	-0.28536
Ba	0.8005	0.0765	0.0845	0.0917	0.0179	0.0002	0.0579	0.1049	0.3406	0.5474	0.3677	0.6253	0.8224	0.3170	0.3830	0.0636
V34	-0.30209	0.48204	0.13724	0.51955	0.34679	0.04306	0.06395	0.04719	-0.18470	0.05898	0.47082	0.53238	0.54157	0.19014	0.44278	0.40017
Sc	0.0490	0.0011	0.3802	0.0004	0.0227	0.7839	0.6837	0.7638	0.2357	0.7071	0.0014	0.0002	0.0002	0.2220	0.0029	0.0078
V35	0.13332	-0.19913	-0.34583	0.09508	0.12200	-0.12327	-0.09478	-0.18508	-0.24924	0.16049	-0.27002	-0.10514	-0.05016	0.33587	0.17543	0.18402
As	0.3941	0.2005	0.0231	0.5442	0.4358	0.4310	0.5455	0.2348	0.1070	0.3039	0.0799	0.5022	0.7494	0.0277	0.2605	0.2375
V36	-0.05773	-0.08254	-0.24692	0.06517	0.26899	0.50723	0.64413	-0.11447	-0.17300	0.21066	-0.22051	0.07926	-0.01416	0.34849	0.05955	0.20373
S	0.7131	0.5987	0.1104	0.6780	0.0811	0.0005	0.0001	0.4648	0.2672	0.1751	0.1553	0.6134	0.9282	0.0220	0.7045	0.1901

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 43

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V6	-0.32616	-0.41119	-0.14893	-0.32116	-0.19458	-0.26017	-0.13292	-0.22372	-0.33409	-0.40924	-0.37992	0.03968	-0.30209	0.13332	-0.05773
SiO2	0.0328	0.0062	0.3405	0.0357	0.2112	0.0920	0.3955	0.1493	0.0286	0.0064	0.0120	0.8005	0.0490	0.3941	0.7131
V7	0.30134	0.68477	0.62187	0.67032	0.37969	0.13361	-0.03797	0.45922	0.00166	0.62004	0.67871	0.27305	0.48204	-0.19913	-0.08254
TiO2	0.0496	0.0001	0.0001	0.0001	0.0120	0.3930	0.8090	0.0020	0.9916	0.0001	0.0001	0.0765	0.0011	0.2005	0.5987
V8	0.72142	0.51634	0.26415	0.36695	0.48217	0.76666	0.18104	0.49756	0.15828	0.18242	0.33712	0.26618	0.13724	-0.34583	-0.24692
Al2O3	0.0001	0.0004	0.0870	0.0155	0.0011	0.0001	0.2453	0.0007	0.3107	0.2417	0.0271	0.0845	0.3802	0.0231	0.1104
V9	-0.23439	-0.06177	0.01288	0.00121	-0.13341	-0.37908	-0.19377	-0.33097	-0.02029	0.41043	0.42142	-0.26037	0.51955	0.09508	0.06517
Fe2O3	0.1303	0.6940	0.9347	0.9939	0.3937	0.0122	0.2131	0.0302	0.8972	0.0063	0.0049	0.0917	0.0004	0.5442	0.6780
V10	-0.19835	-0.16140	-0.09840	-0.09639	-0.20995	-0.35629	-0.40874	-0.33409	0.08669	0.16852	0.08788	-0.35963	0.34679	0.12200	0.26899
MnO	0.2023	0.3011	0.5302	0.5386	0.1766	0.0190	0.0065	0.0286	0.5804	0.2800	0.5752	0.0179	0.0227	0.4358	0.0811
V11	-0.17687	-0.01638	-0.37676	-0.11990	-0.32911	-0.01790	0.10792	-0.04967	0.08377	0.04275	-0.15081	-0.53230	0.04306	-0.12327	0.50723
MgO	0.2566	0.9170	0.0128	0.4438	0.0312	0.9093	0.4909	0.7518	0.5933	0.7855	0.3344	0.0002	0.7839	0.4310	0.0005
V12	-0.20676	-0.16237	-0.36039	-0.19871	-0.30158	0.04543	0.20655	-0.11955	0.21557	-0.14639	-0.23294	-0.29150	0.06395	-0.09478	0.64413
CaO	0.1834	0.2982	0.0176	0.2015	0.0494	0.7724	0.1839	0.4451	0.1650	0.3489	0.1328	0.0579	0.6837	0.5455	0.0001
V13	0.08849	-0.22121	-0.00363	0.01629	0.12166	0.05693	0.31047	0.01516	0.04896	0.01077	0.00578	0.25074	0.04719	-0.18508	-0.11447
Na2O	0.5726	0.1540	0.9816	0.9174	0.4370	0.7169	0.0427	0.9231	0.7552	0.9453	0.9707	0.1049	0.7638	0.2348	0.4648
V14	0.57178	0.10400	-0.07452	0.04502	0.27998	0.86499	0.30901	0.32468	0.06764	-0.22348	-0.03634	0.14891	-0.18470	-0.24924	-0.17300
K2O	0.0001	0.5069	0.6348	0.7744	0.0690	0.0001	0.0438	0.0336	0.6665	0.1497	0.8170	0.3406	0.2357	0.1070	0.2672
V15	0.05222	0.27229	-0.01388	0.09907	-0.00952	0.20142	0.04443	0.01764	-0.08142	0.24461	0.05356	-0.09432	0.05898	0.16049	0.21066
P2O5	0.7395	0.0773	0.9296	0.5273	0.9517	0.1953	0.7772	0.9106	0.6037	0.1139	0.7330	0.5474	0.7071	0.3039	0.1751
V16	0.30861	0.57846	0.51411	0.47584	0.16373	-0.03328	-0.21531	0.32793	0.05015	0.74898	0.59940	0.14082	0.47082	-0.27002	-0.22051
H2O-	0.0441	0.0001	0.0004	0.0013	0.2941	0.8322	0.1656	0.0318	0.7494	0.0001	0.0001	0.3677	0.0014	0.0799	0.1553
V17	0.21862	0.48708	0.40084	0.47189	0.19513	-0.06549	-0.02310	0.27520	0.28949	0.67053	0.54972	0.07662	0.53238	-0.10514	0.07926
LOI	0.1590	0.0009	0.0077	0.0014	0.2099	0.6765	0.8831	0.0741	0.0597	0.0001	0.0001	0.6253	0.0002	0.5022	0.6134
V18	0.10149	0.26880	0.35544	0.30779	0.01468	-0.11591	-0.22279	-0.01020	-0.06046	0.64910	0.60095	0.03527	0.54157	-0.05016	-0.01416
Zn	0.5173	0.0813	0.0193	0.0447	0.9256	0.4592	0.1510	0.9482	0.7001	0.0001	0.0001	0.8224	0.0002	0.7494	0.9282
V19	-0.04796	0.10813	0.07348	0.05622	0.14648	0.05239	0.18074	0.04649	0.14691	0.04900	0.24066	-0.15627	0.19014	0.33587	0.34849
Cu	0.7601	0.4901	0.6396	0.7203	0.3486	0.7386	0.2461	0.7672	0.3472	0.7550	0.1201	0.3170	0.2220	0.0277	0.0220
V20	0.01573	0.22196	0.23184	0.21150	0.04600	-0.12025	-0.06608	-0.09616	0.00246	0.50344	0.47429	-0.13642	0.44278	0.17543	0.05955
Ni	0.9203	0.1526	0.1347	0.1734	0.7696	0.4424	0.6737	0.5396	0.9875	0.0006	0.0013	0.3830	0.0029	0.2605	0.7045
V21	-0.08584	-0.02920	0.08719	0.14317	-0.03170	-0.19257	-0.12181	-0.13635	0.14834	0.30981	0.42607	-0.28536	0.40017	0.18402	0.20373
Co	0.5842	0.8526	0.5783	0.3597	0.8401	0.2160	0.4365	0.3833	0.3425	0.0432	0.0044	0.0636	0.0078	0.2375	0.1901

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 43

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V22	1.00000	0.49220	0.35585	0.42224	0.37844	0.69731	0.17623	0.46273	0.12069	0.19063	0.28519	0.28263	0.01771	-0.53457	-0.47207
Ga	0.0	0.0008	0.0192	0.0048	0.0123	0.0001	0.2583	0.0018	0.4408	0.2208	0.0638	0.0663	0.9103	0.0002	0.0014
V23	0.49220	1.00000	0.55271	0.60852	0.25372	0.26381	0.10795	0.67750	0.05356	0.56748	0.26858	0.04907	0.07497	-0.39653	-0.09035
Nb	0.0008	0.0	0.0001	0.0001	0.1007	0.0874	0.4908	0.0001	0.7330	0.0001	0.0816	0.7547	0.6328	0.0085	0.5645
V24	0.35585	0.55271	1.00000	0.73555	0.27117	0.03694	0.01513	0.48715	0.01406	0.45812	0.58903	0.30147	0.21715	-0.04494	-0.07648
Zr	0.0192	0.0001	0.0	0.0001	0.0786	0.8141	0.9233	0.0009	0.9287	0.0020	0.0001	0.0495	0.1619	0.7748	0.6259
V25	0.42224	0.60852	0.73555	1.00000	0.29346	0.11073	0.18823	0.50074	0.20269	0.45485	0.61390	0.31048	0.31972	-0.23129	-0.05866
Y	0.0048	0.0001	0.0001	0.0	0.0561	0.4796	0.2268	0.0006	0.1924	0.0022	0.0001	0.0427	0.0366	0.1356	0.7087
V26	0.37844	0.25372	0.27117	0.29346	1.00000	0.42850	0.04657	0.13940	0.36161	0.24623	0.30340	0.71028	0.16288	-0.06283	-0.32418
Sr	0.0123	0.1007	0.0786	0.0561	0.0	0.0041	0.7668	0.3727	0.0172	0.1115	0.0480	0.0001	0.2967	0.6890	0.0339
V27	0.69731	0.26381	0.03694	0.11073	0.42850	1.00000	0.29069	0.36936	0.15280	-0.07729	0.10942	0.25803	-0.04379	-0.34466	-0.23307
Rb	0.0001	0.0874	0.8141	0.4796	0.0041	0.0	0.0586	0.0148	0.3280	0.6223	0.4849	0.0948	0.7804	0.0236	0.1325
V28	0.17623	0.10795	0.01513	0.18823	0.04657	0.29069	1.00000	0.29293	0.22988	-0.26289	-0.01964	0.11935	-0.07233	-0.03681	-0.00210
U	0.2583	0.4908	0.9233	0.2268	0.7668	0.0586	0.0	0.0566	0.1381	0.0885	0.9005	0.4459	0.6448	0.8147	0.9894
V29	0.46273	0.67750	0.48715	0.50074	0.13940	0.36936	0.29293	1.00000	0.10374	0.29287	0.17197	0.05031	-0.01691	-0.26709	0.05172
Th	0.0018	0.0001	0.0009	0.0006	0.3727	0.0148	0.0566	0.0	0.5080	0.0567	0.2702	0.7487	0.9143	0.0834	0.7419
V30	0.12069	0.05356	0.01406	0.20269	0.36161	0.15280	0.22988	0.10374	1.00000	0.01633	0.09078	0.29613	0.01537	0.07194	0.06756
Pb	0.4408	0.7330	0.9287	0.1924	0.0172	0.3280	0.1381	0.5080	0.0	0.9172	0.5627	0.0538	0.9220	0.6467	0.6669
V31	0.19063	0.56748	0.45812	0.45485	0.24623	-0.07729	-0.26289	0.29287	0.01633	1.00000	0.56452	0.19367	0.39016	-0.20789	-0.02561
Cr	0.2208	0.0001	0.0020	0.0022	0.1115	0.6223	0.0885	0.0567	0.9172	0.0	0.0001	0.2134	0.0097	0.1810	0.8705
V32	0.28519	0.26858	0.58903	0.61390	0.30340	0.10942	-0.01964	0.17197	0.09078	0.56452	1.00000	0.31842	0.64468	-0.05470	-0.18209
V	0.0638	0.0816	0.0001	0.0001	0.0480	0.4849	0.9005	0.2702	0.5627	0.0001	0.0	0.0374	0.0001	0.7275	0.2426
V33	0.28263	0.04907	0.30147	0.31048	0.71028	0.25803	0.11935	0.05031	0.29613	0.19367	0.31842	1.00000	0.17830	-0.12368	-0.32323
Ba	0.0663	0.7547	0.0495	0.0427	0.0001	0.0948	0.4459	0.7487	0.0538	0.2134	0.0374	0.0	0.2527	0.4294	0.0345
V34	0.01771	0.07497	0.21715	0.31972	0.16288	-0.04379	-0.07233	-0.01691	0.01537	0.39016	0.64468	0.17830	1.00000	-0.13542	-0.06682
Sc	0.9103	0.6328	0.1619	0.0366	0.2967	0.7804	0.6448	0.9143	0.9220	0.0097	0.0001	0.2527	0.0	0.3866	0.6703
V35	-0.53457	-0.39653	-0.04494	-0.23129	-0.06283	-0.34466	-0.03681	-0.26709	0.07194	-0.20789	-0.05470	-0.12368	-0.13542	1.00000	0.30655
As	0.0002	0.0085	0.7748	0.1356	0.6890	0.0236	0.8147	0.0834	0.6467	0.1810	0.7275	0.4294	0.3866	0.0	0.0456
V36	-0.47207	-0.09035	-0.07648	-0.05866	-0.32418	-0.23307	-0.00210	0.05172	0.06756	-0.02561	-0.18209	-0.32323	-0.06682	0.30655	1.00000
S	0.0014	0.5645	0.6259	0.7087	0.0339	0.1325	0.9894	0.7419	0.6669	0.8705	0.2426	0.0345	0.6703	0.0456	0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 22

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V6	1.00000	-0.79819	-0.88167	-0.14233	0.14599	-0.02316	0.49997	0.37811	-0.69811	0.21694	-0.29104	-0.58853	-0.26075	0.01194	-0.15032	-0.16800
SiO2	0.0	0.0001	0.0001	0.5275	0.5168	0.9185	0.0178	0.0827	0.0003	0.3322	0.1888	0.0040	0.2412	0.9579	0.5043	0.4549
V7	-0.79819	1.00000	0.77762	0.00339	-0.14869	-0.01017	-0.38232	-0.33560	0.86352	-0.00628	0.31863	0.34982	0.25552	-0.12657	0.00368	-0.12372
TiO2	0.0001	0.0	0.0001	0.9881	0.5090	0.9642	0.0791	0.1268	0.0001	0.9779	0.1484	0.1105	0.2511	0.5746	0.9870	0.5833
V8	-0.88167	0.77762	1.00000	-0.23772	-0.34249	-0.21739	-0.63793	-0.62595	0.64879	-0.34256	0.37966	0.73913	0.01074	-0.21598	-0.05311	0.01421
Al2O3	0.0001	0.0001	0.0	0.2867	0.1187	0.3311	0.0014	0.0018	0.0011	0.1186	0.0814	0.0001	0.9622	0.3344	0.8144	0.9500
V9	-0.14233	0.00339	-0.23772	1.00000	0.51693	0.54376	0.08552	0.27255	0.13043	0.45428	-0.23616	-0.23433	0.62991	0.52573	0.39322	0.32510
Fe2O3	0.5275	0.9881	0.2867	0.0	0.0138	0.0089	0.7051	0.2198	0.5629	0.0337	0.2900	0.2939	0.0017	0.0120	0.0702	0.1399
V10	0.14599	-0.14869	-0.34249	0.51693	1.00000	0.84779	0.59366	0.68711	0.10699	0.24036	-0.63417	-0.57101	0.29523	0.03424	0.37730	0.40736
MnO	0.5168	0.5090	0.1187	0.0138	0.0	0.0001	0.0036	0.0004	0.6356	0.2813	0.0015	0.0055	0.1822	0.8798	0.0834	0.0599
V11	-0.02316	-0.01017	-0.21739	0.54376	0.84779	1.00000	0.56571	0.62595	0.26256	0.37391	-0.63559	-0.53360	0.55414	-0.01648	0.35932	0.40353
MgO	0.9185	0.9642	0.3311	0.0089	0.0001	0.0	0.0061	0.0018	0.2378	0.0865	0.0015	0.0105	0.0074	0.9420	0.1005	0.0626
V12	0.49997	-0.38232	-0.63793	0.08552	0.59366	0.56571	1.00000	0.81202	-0.30344	0.36898	-0.39299	-0.66327	0.09452	-0.09118	0.25861	0.23466
CaO	0.0178	0.0791	0.0014	0.7051	0.0036	0.0061	0.0	0.0001	0.1698	0.0911	0.0704	0.0008	0.6756	0.6865	0.2452	0.2932
V13	0.37811	-0.33560	-0.62595	0.27255	0.68711	0.62595	0.81202	1.00000	-0.21318	0.17381	-0.42772	-0.74300	0.11183	0.16762	0.38388	0.31702
Na2O	0.0827	0.1268	0.0018	0.2198	0.0004	0.0018	0.0001	0.0	0.3408	0.4392	0.0471	0.0001	0.6203	0.4559	0.0778	0.1506
V14	-0.69811	0.86352	0.64879	0.13043	0.10699	0.26256	-0.30344	-0.21318	1.00000	0.04788	0.08475	0.09091	0.40543	-0.33988	0.02542	-0.14323
K2O	0.0003	0.0001	0.0011	0.5629	0.6356	0.2378	0.1698	0.3408	0.0	0.8324	0.7077	0.6874	0.0612	0.1217	0.9106	0.5249
V15	0.21694	-0.00628	-0.34256	0.45428	0.24036	0.37391	0.36898	0.17381	0.04788	1.00000	-0.26805	-0.38246	0.43152	0.14314	0.00798	0.14630
P2O5	0.3322	0.9779	0.1186	0.0337	0.2813	0.0865	0.0911	0.4392	0.8324	0.0	0.2278	0.0790	0.0449	0.5251	0.9719	0.5159
V16	-0.29104	0.31863	0.37966	-0.23616	-0.63417	-0.63559	-0.39299	-0.42772	0.08475	-0.26805	1.00000	0.50000	-0.16917	0.01934	0.02120	-0.23145
H2O-	0.1888	0.1484	0.0814	0.2900	0.0015	0.0015	0.0704	0.0471	0.7077	0.2278	0.0	0.0178	0.4517	0.9319	0.9254	0.3000
V17	-0.58853	0.34982	0.73913	-0.23433	-0.57101	-0.53360	-0.66327	-0.74300	0.09091	-0.38246	0.50000	1.00000	-0.29177	-0.01535	-0.06102	0.12731
LOI	0.0040	0.1105	0.0001	0.2939	0.0055	0.0105	0.0008	0.0001	0.6874	0.0790	0.0178	0.0	0.1877	0.9460	0.7874	0.5724
V18	-0.26075	0.25552	0.01074	0.62991	0.29523	0.55414	0.09452	0.11183	0.40543	0.43152	-0.16917	-0.29177	1.00000	0.13176	0.07355	0.05179
Zn	0.2412	0.2511	0.9622	0.0017	0.1822	0.0074	0.6756	0.6203	0.0612	0.0449	0.4517	0.1877	0.0	0.5589	0.7450	0.8189
V19	0.01194	-0.12657	-0.21598	0.52573	0.03424	-0.01648	-0.09118	0.16762	-0.33988	0.14314	0.01934	-0.01535	0.13176	1.00000	0.30339	0.16076
Cu	0.9579	0.5746	0.3344	0.0120	0.8798	0.9420	0.6865	0.4559	0.1217	0.5251	0.9319	0.9460	0.5589	0.0	0.1699	0.4748
V20	-0.15032	0.00368	-0.05311	0.39322	0.37730	0.35932	0.25861	0.38388	0.02542	0.00798	0.02120	-0.06102	0.07355	0.30339	1.00000	0.58062
Ni	0.5043	0.9870	0.8144	0.0702	0.0834	0.1005	0.2452	0.0778	0.9106	0.9719	0.9254	0.7874	0.7450	0.1699	0.0	0.0046
V21	-0.16800	-0.12372	0.01421	0.32510	0.40736	0.40353	0.23466	0.31702	-0.14323	0.14630	-0.23145	0.12731	0.05179	0.16076	0.58062	1.00000
Co	0.4549	0.5833	0.9500	0.1399	0.0599	0.0626	0.2932	0.1506	0.5249	0.5159	0.3000	0.5724	0.8189	0.4748	0.0046	0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 22

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V22	-0.80669	0.72349	0.73336	0.14508	-0.06945	0.05101	-0.41647	-0.39529	0.74356	-0.13330	0.27587	0.38085	0.32009	-0.11609	0.06578	-0.04193
Ga	0.0001	0.0001	0.0001	0.5194	0.7588	0.8217	0.0539	0.0686	0.0001	0.5543	0.2140	0.0804	0.1464	0.6069	0.7712	0.8530
V23	-0.79006	0.82182	0.72300	0.01934	-0.35909	-0.24631	-0.49014	-0.41328	0.68887	-0.11599	0.49147	0.44256	0.24409	-0.03865	-0.02675	-0.17234
Nb	0.0001	0.0001	0.0001	0.9319	0.1007	0.2692	0.0206	0.0559	0.0004	0.6072	0.0202	0.0392	0.2736	0.8644	0.9059	0.4431
V24	-0.05479	0.17632	0.36985	-0.62168	-0.70533	-0.71542	-0.53657	-0.73735	0.00621	-0.24054	0.21243	0.50423	-0.39808	-0.24553	-0.63051	-0.55415
Zr	0.8087	0.4325	0.0902	0.0020	0.0002	0.0002	0.0100	0.0001	0.9781	0.2809	0.3426	0.0167	0.0665	0.2707	0.0017	0.0074
V25	-0.78192	0.70746	0.73708	0.08642	-0.33764	-0.21180	-0.51201	-0.50764	0.63259	-0.09750	0.53772	0.48461	0.39706	-0.03383	0.00396	-0.09921
Y	0.0001	0.0002	0.0001	0.7022	0.1243	0.3440	0.0149	0.0159	0.0016	0.6660	0.0098	0.0223	0.0673	0.8812	0.9861	0.6605
V26	0.03672	0.12125	-0.15250	-0.01638	0.04188	0.20785	0.52342	0.35775	0.03728	0.44130	-0.06188	-0.29653	0.35803	-0.06794	-0.09353	-0.02530
Sr	0.8711	0.5909	0.4981	0.9423	0.8532	0.3533	0.0124	0.1021	0.8692	0.0398	0.7844	0.1802	0.1018	0.7639	0.6789	0.9110
V27	-0.49548	0.60288	0.43491	0.23666	0.33066	0.45750	-0.19707	-0.06080	0.82745	0.07298	-0.23425	-0.04857	0.39593	-0.28312	0.02995	0.01308
Rb	0.0190	0.0030	0.0431	0.2890	0.1328	0.0323	0.3794	0.7881	0.0001	0.7469	0.2941	0.8300	0.0681	0.2017	0.8947	0.9539
V28	-0.58741	0.40575	0.39626	0.31735	0.04357	0.10235	-0.28676	-0.23935	0.38940	0.08947	-0.07666	0.25216	0.34643	-0.04489	-0.16019	0.24806
U	0.0040	0.0610	0.0679	0.1501	0.8473	0.6504	0.1957	0.2834	0.0732	0.6922	0.7345	0.2576	0.1142	0.8428	0.4764	0.2657
V29	-0.70838	0.50963	0.75290	-0.22474	-0.52845	-0.33286	-0.60717	-0.55896	0.31928	-0.32658	0.39875	0.63855	0.00822	0.02735	-0.18069	0.01880
Th	0.0002	0.0154	0.0001	0.3146	0.0115	0.1301	0.0027	0.0068	0.1475	0.1380	0.0660	0.0014	0.9710	0.9038	0.4210	0.9338
V30	-0.27165	0.35985	0.45205	-0.54597	-0.53456	-0.41697	-0.06221	-0.37365	0.13182	-0.09595	0.51061	0.41188	-0.02238	-0.40917	-0.17322	-0.13383
Pb	0.2214	0.1000	0.0347	0.0086	0.0104	0.0535	0.7833	0.0867	0.5587	0.6710	0.0152	0.0568	0.9213	0.0586	0.4408	0.5527
V31	-0.54042	0.56674	0.45324	0.17067	-0.21853	-0.31139	-0.38739	-0.24080	0.41594	-0.20337	0.70568	0.44306	-0.07923	0.09585	0.36387	0.04266
Cr	0.0094	0.0060	0.0341	0.4476	0.3285	0.1584	0.0749	0.2804	0.0542	0.3640	0.0002	0.0389	0.7260	0.6713	0.0960	0.8505
V32	-0.76519	0.84591	0.63842	0.20791	-0.22894	-0.15311	-0.47095	-0.29222	0.67006	0.00456	0.48474	0.37853	0.16040	0.18226	0.14726	0.02303
V	0.0001	0.0001	0.0014	0.3532	0.3054	0.4963	0.0269	0.1870	0.0006	0.9839	0.0222	0.0824	0.4758	0.4169	0.5131	0.9190
V33	-0.32985	0.23057	0.14963	0.29870	0.26632	0.23772	-0.05765	0.30025	0.32693	-0.30608	0.23559	0.00282	0.04919	0.18074	0.36723	0.20688
Ba	0.1338	0.3019	0.5063	0.1769	0.2309	0.2867	0.7989	0.1746	0.1375	0.1659	0.2912	0.9901	0.8279	0.4209	0.0927	0.3556
V34	-0.28840	0.55920	0.30823	0.04095	0.08902	0.15298	-0.11931	-0.10906	0.54252	-0.17767	0.20370	-0.00967	0.29613	-0.06182	0.11437	-0.23927
Sc	0.1930	0.0068	0.1628	0.8564	0.6936	0.4967	0.5969	0.6290	0.0091	0.4289	0.3632	0.9659	0.1808	0.7846	0.6123	0.2835
V35	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
As																
V36	0.40480	-0.25664	-0.59362	0.23835	0.57495	0.56481	0.71415	0.81618	-0.10449	0.09664	-0.44193	-0.72183	0.28507	0.09579	0.32665	0.01336
S	0.0617	0.2489	0.0036	0.2854	0.0051	0.0062	0.0002	0.0001	0.6435	0.6688	0.0395	0.0001	0.1985	0.6715	0.1379	0.9529

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 22

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V6	-0.80669	-0.79006	-0.05479	-0.78192	0.03672	-0.49548	-0.58741	-0.70838	-0.27165	-0.54042	-0.76519	-0.32985	-0.28840	.	0.40480
SiO2	0.0001	0.0001	0.8087	0.0001	0.8711	0.0190	0.0040	0.0002	0.2214	0.0094	0.0001	0.1338	0.1930		0.0617
V7	0.72349	0.82182	0.17632	0.70746	0.12125	0.60288	0.40575	0.50963	0.35985	0.56674	0.84591	0.23057	0.55920	.	-0.25664
TiO2	0.0001	0.0001	0.4325	0.0002	0.5909	0.0030	0.0610	0.0154	0.1000	0.0060	0.0001	0.3019	0.0068		0.2489
V8	0.73336	0.72300	0.36985	0.73708	-0.15250	0.43491	0.39626	0.75290	0.45205	0.45324	0.63842	0.14963	0.30823	.	-0.59362
Al2O3	0.0001	0.0001	0.0902	0.0001	0.4981	0.0431	0.0679	0.0001	0.0347	0.0341	0.0014	0.5063	0.1628		0.0036
V9	0.14508	0.01934	-0.62168	0.08642	-0.01638	0.23666	0.31735	-0.22474	-0.54597	0.17067	0.20791	0.29870	0.04095	.	0.23835
Fe2O3	0.5194	0.9319	0.0020	0.7022	0.9423	0.2890	0.1501	0.3146	0.0086	0.4476	0.3532	0.1769	0.8564		0.2854
V10	-0.06945	-0.35909	-0.70533	-0.33764	0.04188	0.33066	0.04357	-0.52845	-0.53456	-0.21853	-0.22894	0.26632	0.08902	.	0.57495
MnO	0.7588	0.1007	0.0002	0.1243	0.8532	0.1328	0.8473	0.0115	0.0104	0.3285	0.3054	0.2309	0.6936		0.0051
V11	0.05101	-0.24631	-0.71542	-0.21180	0.20785	0.45750	0.10235	-0.33286	-0.41697	-0.31139	-0.15311	0.23772	0.15298	.	0.56481
MgO	0.8217	0.2692	0.0002	0.3440	0.3533	0.0323	0.6504	0.1301	0.0535	0.1584	0.4963	0.2867	0.4967		0.0062
V12	-0.41647	-0.49014	-0.53657	-0.51201	0.52342	-0.19707	-0.28676	-0.60717	-0.06221	-0.38739	-0.47095	-0.05765	-0.11931	.	0.71415
CaO	0.0539	0.0206	0.0100	0.0149	0.0124	0.3794	0.1957	0.0027	0.7833	0.0749	0.0269	0.7989	0.5969		0.0002
V13	-0.39529	-0.41328	-0.73735	-0.50764	0.35775	-0.06080	-0.23935	-0.55896	-0.37365	-0.24080	-0.29222	0.30025	-0.10906	.	0.81618
Na2O	0.0686	0.0559	0.0001	0.0159	0.1021	0.7881	0.2834	0.0068	0.0867	0.2804	0.1870	0.1746	0.6290		0.0001
V14	0.74356	0.68887	0.00621	0.63259	0.03728	0.82745	0.38940	0.31928	0.13182	0.41594	0.67006	0.32693	0.54252	.	-0.10449
K2O	0.0001	0.0004	0.9781	0.0016	0.8692	0.0001	0.0732	0.1475	0.5587	0.0542	0.0006	0.1375	0.0091		0.6435
V15	-0.13330	-0.11599	-0.24054	-0.09750	0.44130	0.07298	0.08947	-0.32658	-0.09595	-0.20337	0.00456	-0.30608	-0.17767	.	0.09664
P2O5	0.5543	0.6072	0.2809	0.6660	0.0398	0.7469	0.6922	0.1380	0.6710	0.3640	0.9839	0.1659	0.4289		0.6688
V16	0.27587	0.49147	0.21243	0.53772	-0.06188	-0.23425	-0.07666	0.39875	0.51061	0.70568	0.48474	0.23559	0.20370	.	-0.44193
H2O-	0.2140	0.0202	0.3426	0.0098	0.7844	0.2941	0.7345	0.0660	0.0152	0.0002	0.0222	0.2912	0.3632		0.0395
V17	0.38085	0.44256	0.50423	0.48461	-0.29653	-0.04857	0.25216	0.63855	0.41188	0.44306	0.37853	0.00282	-0.00967	.	-0.72183
LOI	0.0804	0.0392	0.0167	0.0223	0.1802	0.8300	0.2576	0.0014	0.0568	0.0389	0.0824	0.9901	0.9659		0.0001
V18	0.32009	0.24409	-0.39808	0.39706	0.35803	0.39593	0.34643	0.00822	-0.02238	-0.07923	0.16040	0.04919	0.29613	.	0.28507
Zn	0.1464	0.2736	0.0665	0.0673	0.1018	0.0681	0.1142	0.9710	0.9213	0.7260	0.4758	0.8279	0.1808		0.1985
V19	-0.11609	-0.03865	-0.24553	-0.03383	-0.06794	-0.28312	-0.04489	0.02735	-0.40917	0.09585	0.18226	0.18074	-0.06182	.	0.09579
Cu	0.6069	0.8644	0.2707	0.8812	0.7639	0.2017	0.8428	0.9038	0.0586	0.6713	0.4169	0.4209	0.7846		0.6715
V20	0.06578	-0.02675	-0.63051	0.00396	-0.09353	0.02995	-0.16019	-0.18069	-0.17322	0.36387	0.14726	0.36723	0.11437	.	0.32665
Ni	0.7712	0.9059	0.0017	0.9861	0.6789	0.8947	0.4764	0.4210	0.4408	0.0960	0.5131	0.0927	0.6123		0.1379
V21	-0.04193	-0.17234	-0.55415	-0.09921	-0.02530	0.01308	0.24806	0.01880	-0.13383	0.04266	0.02303	0.20688	-0.23927	.	0.01336
Co	0.8530	0.4431	0.0074	0.6605	0.9110	0.9539	0.2657	0.9338	0.5527	0.8505	0.9190	0.3556	0.2835		0.9529

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 22

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V22	1.00000	0.73024	0.02210	0.81123	0.00652	0.50029	0.39829	0.64347	0.16723	0.45548	0.69890	0.40635	0.56108	.	-0.29479
Ga	0.0	0.0001	0.9222	0.0001	0.9770	0.0177	0.0664	0.0012	0.4570	0.0332	0.0003	0.0606	0.0066		0.1829
V23	0.73024	1.00000	0.22868	0.88850	0.07625	0.38294	0.45162	0.60651	0.45113	0.60007	0.79000	0.28613	0.30478	.	-0.30129
Nb	0.0001	0.0	0.3060	0.0001	0.7359	0.0786	0.0349	0.0028	0.0351	0.0032	0.0001	0.1967	0.1678		0.1730
V24	0.02210	0.22868	1.00000	0.13443	-0.21858	-0.02485	0.00743	0.28078	0.35021	-0.08647	0.01356	-0.46132	-0.10521	.	-0.56368
Zr	0.9222	0.3060	0.0	0.5509	0.3284	0.9126	0.9738	0.2056	0.1101	0.7020	0.9522	0.0307	0.6412		0.0063
V25	0.81123	0.88850	0.13443	1.00000	0.10254	0.31525	0.44384	0.66252	0.48868	0.56077	0.71037	0.26829	0.36633	.	-0.35311
Y	0.0001	0.0001	0.5509	0.0	0.6498	0.1530	0.0385	0.0008	0.0210	0.0066	0.0002	0.2274	0.0936		0.1070
V26	0.00652	0.07625	-0.21858	0.10254	1.00000	-0.20028	-0.05662	-0.03143	0.43464	-0.14782	-0.01611	-0.23948	0.05205	.	0.42599
Sr	0.9770	0.7359	0.3284	0.6498	0.0	0.3715	0.8024	0.8896	0.0432	0.5115	0.9433	0.2831	0.8181		0.0481
V27	0.50029	0.38294	-0.02485	0.31525	-0.20028	1.00000	0.30085	0.03567	-0.23033	0.10006	0.40350	0.35470	0.33334	.	-0.02034
Rb	0.0177	0.0786	0.9126	0.1530	0.3715	0.0	0.1737	0.8748	0.3024	0.6577	0.0626	0.1053	0.1295		0.9284
V28	0.39829	0.45162	0.00743	0.44384	-0.05662	0.30085	1.00000	0.46377	0.07391	0.20316	0.45541	0.02916	-0.01785	.	-0.37349
U	0.0664	0.0349	0.9738	0.0385	0.8024	0.1737	0.0	0.0297	0.7438	0.3645	0.0332	0.8975	0.9371		0.0869
V29	0.64347	0.60651	0.28078	0.66252	-0.03143	0.03567	0.46377	1.00000	0.39507	0.30595	0.57831	0.16870	0.26454	.	-0.58777
Th	0.0012	0.0028	0.2056	0.0008	0.8896	0.8748	0.0297	0.0	0.0688	0.1661	0.0048	0.4530	0.2342		0.0040
V30	0.16723	0.45113	0.35021	0.48868	0.43464	-0.23033	0.07391	0.39507	1.00000	0.23131	0.17039	-0.35078	0.06923	.	-0.23316
Pb	0.4570	0.0351	0.1101	0.0210	0.0432	0.3024	0.7438	0.0688	0.0	0.3003	0.4484	0.1095	0.7595		0.2964
V31	0.45548	0.60007	-0.08647	0.56077	-0.14782	0.10006	0.20316	0.30595	0.23131	1.00000	0.77834	0.47415	0.33865	.	-0.27247
Cr	0.0332	0.0032	0.7020	0.0066	0.5115	0.6577	0.3645	0.1661	0.3003	0.0	0.0001	0.0258	0.1232		0.2199
V32	0.69890	0.79000	0.01356	0.71037	-0.01611	0.40350	0.45541	0.57831	0.17039	0.77834	1.00000	0.45367	0.43073	.	-0.36281
V	0.0003	0.0001	0.9522	0.0002	0.9433	0.0626	0.0332	0.0048	0.4484	0.0001	0.0	0.0339	0.0454		0.0970
V33	0.40635	0.28613	-0.46132	0.26829	-0.23948	0.35470	0.02916	0.16870	-0.35078	0.47415	0.45367	1.00000	0.34633	.	0.17170
Ba	0.0606	0.1967	0.0307	0.2274	0.2831	0.1053	0.8975	0.4530	0.1095	0.0258	0.0339	0.0	0.1144		0.4448
V34	0.56108	0.30478	-0.10521	0.36633	0.05205	0.33334	-0.01785	0.26454	0.06923	0.33865	0.43073	0.34633	1.00000	.	0.16866
Sc	0.0066	0.1678	0.6412	0.0936	0.8181	0.1295	0.9371	0.2342	0.7595	0.1232	0.0454	0.1144	0.0		0.4531
V35	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
As															
V36	-0.29479	-0.30129	-0.56368	-0.35311	0.42599	-0.02034	-0.37349	-0.58777	-0.23316	-0.27247	-0.36281	0.17170	0.16866	.	1.00000
S	0.1829	0.1730	0.0063	0.1070	0.0481	0.9284	0.0869	0.0040	0.2964	0.2199	0.0970	0.4448	0.4531		0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 44

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V6	1.00000	-0.49459	-0.84405	-0.78581	-0.39282	-0.25228	-0.06429	-0.16389	-0.34163	-0.51252	-0.42074	-0.78217	-0.61089	-0.57050	-0.53540	-0.30014
SiO2	0.0	0.0006	0.0001	0.0001	0.0083	0.0985	0.6784	0.2878	0.0232	0.0004	0.0045	0.0001	0.0001	0.0001	0.0002	0.0478
V7	-0.49459	1.00000	0.42405	0.54477	0.47982	0.10310	0.65222	0.10856	0.35971	0.40951	0.52162	0.54961	0.38234	0.51010	0.66690	0.20603
TiO2	0.0006	0.0	0.0041	0.0001	0.0010	0.5054	0.0001	0.4830	0.0165	0.0058	0.0003	0.0001	0.0104	0.0004	0.0001	0.1797
V8	-0.84405	0.42405	1.00000	0.53994	0.28110	0.31018	0.02055	0.35201	0.55789	0.37366	0.28713	0.74974	0.50962	0.46638	0.34340	0.28654
Al2O3	0.0001	0.0041	0.0	0.0002	0.0645	0.0404	0.8946	0.0191	0.0001	0.0125	0.0588	0.0001	0.0004	0.0014	0.0225	0.0593
V9	-0.78581	0.54477	0.53994	1.00000	0.48192	0.07016	0.20953	0.12010	-0.00502	0.56678	0.51843	0.63349	0.64050	0.53900	0.62881	0.32897
Fe2O3	0.0001	0.0001	0.0002	0.0	0.0009	0.6509	0.1722	0.4374	0.9742	0.0001	0.0003	0.0001	0.0001	0.0002	0.0001	0.0292
V10	-0.39282	0.47982	0.28110	0.48192	1.00000	-0.02203	0.50322	0.04366	0.03912	0.61823	0.55837	0.47788	0.46634	0.44699	0.68997	0.36331
MnO	0.0083	0.0010	0.0645	0.0009	0.0	0.8871	0.0005	0.7784	0.8010	0.0001	0.0001	0.0010	0.0014	0.0024	0.0001	0.0153
V11	-0.25228	0.10310	0.31018	0.07016	-0.02203	1.00000	-0.04425	0.04239	0.17695	-0.04652	0.05785	0.26614	0.23503	0.34612	0.09613	0.13729
MgO	0.0985	0.5054	0.0404	0.6509	0.8871	0.0	0.7755	0.7847	0.2505	0.7643	0.7092	0.0808	0.1246	0.0214	0.5348	0.3742
V12	-0.06429	0.65222	0.02055	0.20953	0.50322	-0.04425	1.00000	0.15233	0.18411	0.27906	0.44746	0.07216	0.04244	0.22127	0.41160	0.24849
CaO	0.6784	0.0001	0.8946	0.1722	0.0005	0.7755	0.0	0.3236	0.2316	0.0666	0.0023	0.6416	0.7845	0.1489	0.0055	0.1039
V13	-0.16389	0.10856	0.35201	0.12010	0.04366	0.04239	0.15233	1.00000	0.36391	0.15707	-0.09292	0.15144	0.23700	0.00560	0.01078	0.09844
Na2O	0.2878	0.4830	0.0191	0.4374	0.7784	0.7847	0.3236	0.0	0.0152	0.3086	0.5485	0.3264	0.1214	0.9712	0.9446	0.5250
V14	-0.34163	0.35971	0.55789	-0.00502	0.03912	0.17695	0.18411	0.36391	1.00000	0.11871	-0.09996	0.22231	-0.01179	0.03843	0.04304	0.18178
K2O	0.0232	0.0165	0.0001	0.9742	0.8010	0.2505	0.2316	0.0152	0.0	0.4428	0.5185	0.1469	0.9394	0.8044	0.7815	0.2376
V15	-0.51252	0.40951	0.37366	0.56678	0.61823	-0.04652	0.27906	0.15707	0.11871	1.00000	0.41976	0.50294	0.53788	0.48091	0.45834	0.14568
P2O5	0.0004	0.0058	0.0125	0.0001	0.0001	0.7643	0.0666	0.3086	0.4428	0.0	0.0046	0.0005	0.0002	0.0010	0.0018	0.3454
V16	-0.42074	0.52162	0.28713	0.51843	0.55837	0.05785	0.44746	-0.09292	-0.09996	0.41976	1.00000	0.50030	0.41282	0.47938	0.67226	0.30974
H2O-	0.0045	0.0003	0.0588	0.0003	0.0001	0.7092	0.0023	0.5485	0.5185	0.0046	0.0	0.0005	0.0054	0.0010	0.0001	0.0408
V17	-0.78217	0.54961	0.74974	0.63349	0.47788	0.26614	0.07216	0.15144	0.22231	0.50294	0.50030	1.00000	0.65974	0.71159	0.59577	0.22012
LOI	0.0001	0.0001	0.0001	0.0001	0.0010	0.0808	0.6416	0.3264	0.1469	0.0005	0.0005	0.0	0.0001	0.0001	0.0001	0.1511
V18	-0.61089	0.38234	0.50962	0.64050	0.46634	0.23503	0.04244	0.23700	-0.01179	0.53788	0.41282	0.65974	1.00000	0.61172	0.51725	0.22821
Zn	0.0001	0.0104	0.0004	0.0001	0.0014	0.1246	0.7845	0.1214	0.9394	0.0002	0.0054	0.0001	0.0	0.0001	0.0003	0.1362
V19	-0.57050	0.51010	0.46638	0.53900	0.44699	0.34612	0.22127	0.00560	0.03843	0.48091	0.47938	0.71159	0.61172	1.00000	0.55748	0.29109
Cu	0.0001	0.0004	0.0014	0.0002	0.0024	0.0214	0.1489	0.9712	0.8044	0.0010	0.0010	0.0001	0.0001	0.0	0.0001	0.0552
V20	-0.53540	0.66690	0.34340	0.62881	0.68997	0.09613	0.41160	0.01078	0.04304	0.45834	0.67226	0.59577	0.51725	0.55748	1.00000	0.39881
Ni	0.0002	0.0001	0.0225	0.0001	0.0001	0.5348	0.0055	0.9446	0.7815	0.0018	0.0001	0.0001	0.0003	0.0001	0.0	0.0073
V21	-0.30014	0.20603	0.28654	0.32897	0.36331	0.13729	0.24849	0.09844	0.18178	0.14568	0.30974	0.22012	0.22821	0.29109	0.39881	1.00000
Co	0.0478	0.1797	0.0593	0.0292	0.0153	0.3742	0.1039	0.5250	0.2376	0.3454	0.0408	0.1511	0.1362	0.0552	0.0073	0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 44

			V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V22	-0.553		.46917	0.57143	0.61922	0.29263	0.34614	0.02189	0.07954	0.49081	0.51860	0.53961	0.61497	0.63528	0.67608	0.54417
Ga	0.00		0.0013	0.0001	0.0001	0.0539	0.0214	0.8878	0.6078	0.0007	0.0003	0.0002	0.0001	0.0001	0.0001	0.0001
V23	-0.371		0.31632	0.38125	0.66687	0.18407	0.30329	0.17954	0.06080	0.56139	0.39586	0.58156	0.49017	0.64503	0.47315	-0.05917
Nb	0.01		0.0364	0.0107	0.0001	0.2317	0.0454	0.2436	0.6950	0.0001	0.0078	0.0001	0.0007	0.0001	0.0012	0.7028
V24	-0.401		.37273	0.38258	0.23064	-0.10455	0.36651	0.06776	0.36553	0.35041	0.29279	0.50578	0.29933	0.49698	0.42471	0.03490
Zr	0.00		0.0127	0.0104	0.1320	0.4994	0.0144	0.6621	0.0147	0.0197	0.0538	0.0005	0.0484	0.0006	0.0041	0.8220
V25	-0.459		.36999	0.59781	0.64871	-0.08055	0.52111	0.08596	0.27510	0.49243	0.54242	0.48782	0.42737	0.49783	0.77326	0.42145
Y	0.001		0.0134	0.0001	0.0001	0.6032	0.0003	0.5790	0.0707	0.0007	0.0001	0.0008	0.0038	0.0006	0.0001	0.0044
V26	-0.5486		.58149	0.44002	0.16369	0.18292	0.11575	0.19588	0.36661	0.41718	0.13630	0.49836	0.40884	0.45143	0.19086	0.14406
Sr	0.0001		0.0001	0.0028	0.2884	0.2347	0.4543	0.2025	0.0144	0.0048	0.3777	0.0006	0.0059	0.0021	0.2146	0.3509
V27	-0.3011		0.54195	-0.02233	-0.04473	0.21318	0.09638	0.43628	0.90609	0.10416	-0.13320	0.20653	0.08220	-0.03161	-0.04405	0.04721
Rb	0.047		0.0001	0.8856	0.7731	0.1647	0.5337	0.0031	0.0001	0.5010	0.3887	0.1786	0.5958	0.8386	0.7765	0.7609
V28	-0.12089	589	0.09248	0.18650	0.53910	0.27527	0.68403	0.20598	0.14437	0.24019	0.30477	0.22340	0.25738	0.42820	0.39407	0.51901
U	0.4344	097	0.5505	0.2255	0.0002	0.0705	0.0001	0.1798	0.3498	0.1163	0.0443	0.1449	0.0917	0.0037	0.0081	0.0003
V29	-0.44619	308	0.30187	0.47639	0.54664	0.28400	0.23397	0.13194	-0.01496	0.38831	0.41739	0.48251	0.55186	0.65405	0.58415	0.38349
Th	0.0024	729	0.0464	0.0011	0.0001	0.0617	0.1264	0.3933	0.9232	0.0092	0.0048	0.0009	0.0001	0.0001	0.0001	0.0102
V30	-0.27466	16886	0.26873	0.21996	0.05187	0.60088	-0.01295	0.05737	0.03100	0.13056	0.15511	0.37659	0.44933	0.58635	0.14148	0.09494
Pb	0.0712	0.2732	0.0778	0.1514	0.7381	0.0001	0.9335	0.7115	0.8417	0.3983	0.3147	0.0117	0.0022	0.0001	0.3596	0.5399
V31	0.09232	0.22801	-0.13932	-0.02926	-0.05453	0.48120	0.28018	-0.04797	-0.05337	-0.05483	0.16010	0.04062	0.05165	0.33552	0.01759	-0.06693
Cr	0.5512	0.1366	0.3671	0.8505	0.7251	0.0009	0.0655	0.7572	0.7308	0.7237	0.2992	0.7935	0.7391	0.0260	0.9098	0.6660
V32	-0.60337	0.54017	0.49145	0.64308	0.43734	0.07385	0.18075	-0.03703	0.08007	0.59064	0.36707	0.60421	0.42803	0.67783	0.54608	0.10243
V	0.0001	0.0002	0.0007	0.0001	0.0030	0.6338	0.2403	0.8114	0.6054	0.0001	0.0142	0.0001	0.0038	0.0001	0.0001	0.5082
V33	-0.56287	0.56500	0.64396	0.38137	0.26486	0.01193	0.26114	0.38528	0.67933	0.36859	0.28598	0.51070	0.27454	0.22276	0.28179	0.21124
Ba	0.0001	0.0001	0.0001	0.0106	0.0823	0.9387	0.0869	0.0098	0.0001	0.0138	0.0598	0.0004	0.0713	0.1461	0.0639	0.1687
V34	-0.19680	0.12055	0.19827	0.16827	-0.09414	0.24347	-0.10680	0.15057	0.02646	0.09284	0.10340	0.27312	0.40907	0.24516	0.10082	0.13935
Sc	0.2004	0.4357	0.1970	0.2749	0.5433	0.1113	0.4902	0.3293	0.8646	0.5489	0.5042	0.0728	0.0058	0.1087	0.5150	0.3670
V35	-0.13042	-0.12285	0.01224	0.26455	0.08970	0.02929	-0.23268	-0.31521	-0.33853	0.24489	0.18538	0.25607	0.16364	0.35084	0.02506	0.17378
As	0.3988	0.4269	0.9372	0.0827	0.5626	0.8503	0.1285	0.0371	0.0246	0.1091	0.2283	0.0934	0.2885	0.0195	0.8717	0.2592
V36	-0.43287	-0.10191	0.33597	0.41774	0.36044	-0.08810	-0.34268	-0.04182	-0.07872	0.52509	0.06953	0.34555	0.29128	0.14238	0.17864	0.08586
S	0.0033	0.5104	0.0258	0.0048	0.0162	0.5696	0.0228	0.7875	0.6115	0.0003	0.6538	0.0216	0.0551	0.3566	0.2460	0.5795

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 44

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V6	-0.55313	-0.37128	-0.40116	-0.45924	-0.54866	-0.30111	-0.12089	-0.44619	-0.27466	0.09232	-0.60337	-0.56287	-0.19680	-0.13042	-0.43287
SiO2	0.0001	0.0131	0.0070	0.0017	0.0001	0.0470	0.4344	0.0024	0.0712	0.5512	0.0001	0.0001	0.2004	0.3988	0.0033
V7	0.48951	0.41449	0.68571	0.79205	0.32403	0.25021	0.38589	0.27308	0.16886	0.22801	0.54017	0.56500	0.12055	-0.12285	-0.10191
TiO2	0.0007	0.0052	0.0001	0.0001	0.0319	0.1014	0.0097	0.0729	0.2732	0.1366	0.0002	0.0001	0.4357	0.4269	0.5104
V8	0.46917	0.31632	0.37273	0.36999	0.58149	0.54195	0.09248	0.30187	0.26873	-0.13932	0.49145	0.64396	0.19827	0.01224	0.33597
Al2O3	0.0013	0.0364	0.0127	0.0134	0.0001	0.0001	0.5505	0.0464	0.0778	0.3671	0.0007	0.0001	0.1970	0.9372	0.0258
V9	0.57143	0.38125	0.38258	0.59781	0.44002	-0.02233	0.18650	0.47639	0.21996	-0.02926	0.64308	0.38137	0.16827	0.26455	0.41774
Fe2O3	0.0001	0.0107	0.0104	0.0001	0.0028	0.8856	0.2255	0.0011	0.1514	0.8505	0.0001	0.0106	0.2749	0.0827	0.0048
V10	0.61922	0.66687	0.23064	0.64871	0.16369	-0.04473	0.53910	0.54664	0.05187	-0.05453	0.43734	0.26486	-0.09414	0.08970	0.36044
MnO	0.0001	0.0001	0.1320	0.0001	0.2884	0.7731	0.0002	0.0001	0.7381	0.7251	0.0030	0.0823	0.5433	0.5626	0.0162
V11	0.29263	0.18407	-0.10455	-0.08055	0.18292	0.21318	0.27527	0.28400	0.60088	0.48120	0.07385	0.01193	0.24347	0.02929	-0.08810
MgO	0.0539	0.2317	0.4994	0.6032	0.2347	0.1647	0.0705	0.0617	0.0001	0.0009	0.6338	0.9387	0.1113	0.8503	0.5696
V12	0.34614	0.30329	0.36651	0.52111	0.11575	0.09638	0.68403	0.23397	-0.01295	0.28018	0.18075	0.26114	-0.10680	-0.23268	-0.34268
CaO	0.0214	0.0454	0.0144	0.0003	0.4543	0.5337	0.0001	0.1264	0.9335	0.0655	0.2403	0.0869	0.4902	0.1285	0.0228
V13	0.02189	0.17954	0.06776	0.08596	0.19588	0.43628	0.20598	0.13194	0.05737	-0.04797	-0.03703	0.38528	0.15057	-0.31521	-0.04182
Na2O	0.8878	0.2436	0.6621	0.5790	0.2025	0.0031	0.1798	0.3933	0.7115	0.7572	0.8114	0.0098	0.3293	0.0371	0.7875
V14	0.07954	0.06080	0.36553	0.27510	0.36661	0.90609	0.14437	-0.01496	0.03100	-0.05337	0.08007	0.67933	0.02646	-0.33853	-0.07872
K2O	0.6078	0.6950	0.0147	0.0707	0.0144	0.0001	0.3498	0.9232	0.8417	0.7308	0.6054	0.0001	0.8646	0.0246	0.6115
V15	0.49081	0.56139	0.35041	0.49243	0.41718	0.10416	0.24019	0.38831	0.13056	-0.05483	0.59064	0.36859	0.09284	0.24489	0.52509
P2O5	0.0007	0.0001	0.0197	0.0007	0.0048	0.5010	0.1163	0.0092	0.3983	0.7237	0.0001	0.0138	0.5489	0.1091	0.0003
V16	0.51860	0.39586	0.29279	0.54242	0.13630	-0.13320	0.30477	0.41739	0.15511	0.16010	0.36707	0.28598	0.10340	0.18538	0.06953
H2O-	0.0003	0.0078	0.0538	0.0001	0.3777	0.3887	0.0443	0.0048	0.3147	0.2992	0.0142	0.0598	0.5042	0.2283	0.6538
V17	0.53961	0.58156	0.50578	0.48782	0.49836	0.20653	0.22340	0.48251	0.37659	0.04062	0.60421	0.51070	0.27312	0.25607	0.34555
LOI	0.0002	0.0001	0.0005	0.0008	0.0006	0.1786	0.1449	0.0009	0.0117	0.7935	0.0001	0.0004	0.0728	0.0934	0.0216
V18	0.61497	0.49017	0.29933	0.42737	0.40884	0.08220	0.25738	0.55186	0.44933	0.05165	0.42803	0.27454	0.40907	0.16364	0.29128
Zn	0.0001	0.0007	0.0484	0.0038	0.0059	0.5958	0.0917	0.0001	0.0022	0.7391	0.0038	0.0713	0.0058	0.2885	0.0551
V19	0.63528	0.64503	0.49698	0.49783	0.45143	-0.03161	0.42820	0.65405	0.58635	0.33552	0.67783	0.22276	0.24516	0.35084	0.14238
Cu	0.0001	0.0001	0.0006	0.0006	0.0021	0.8386	0.0037	0.0001	0.0001	0.0260	0.0001	0.1461	0.1087	0.0195	0.3566
V20	0.67608	0.47315	0.42471	0.77326	0.19086	-0.04405	0.39407	0.58415	0.14148	0.01759	0.54608	0.28179	0.10082	0.02506	0.17864
Ni	0.0001	0.0012	0.0041	0.0001	0.2146	0.7765	0.0081	0.0001	0.3596	0.9098	0.0001	0.0639	0.5150	0.8717	0.2460
V21	0.54417	-0.05917	0.03490	0.42145	0.14406	0.04721	0.51901	0.38349	0.09494	-0.06693	0.10243	0.21124	0.13935	0.17378	0.08586
Co	0.0001	0.7028	0.8220	0.0044	0.3509	0.7609	0.0003	0.0102	0.5399	0.6660	0.5082	0.1687	0.3670	0.2592	0.5795

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 44

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V22	1.00000	0.39104	0.27560	0.64886	0.51053	0.05638	0.43070	0.62835	0.26676	0.01580	0.51570	0.34842	0.25426	0.19940	0.26364
Ga	0.0	0.0087	0.0702	0.0001	0.0004	0.7162	0.0035	0.0001	0.0801	0.9189	0.0003	0.0205	0.0958	0.1944	0.0838
V23	0.39104	1.00000	0.38317	0.43936	0.35593	0.06595	0.42226	0.44779	0.32505	0.27789	0.49048	0.23355	0.07698	0.10671	0.19923
Nb	0.0087	0.0	0.0102	0.0028	0.0177	0.6706	0.0043	0.0023	0.0313	0.0678	0.0007	0.1271	0.6194	0.4905	0.1948
V24	0.27560	0.38317	1.00000	0.65141	0.30101	0.27364	0.20174	0.17189	0.08087	0.17683	0.63964	0.41396	0.25374	-0.05382	-0.11163
Zr	0.0702	0.0102	0.0	0.0001	0.0471	0.0723	0.1891	0.2646	0.6018	0.2509	0.0001	0.0052	0.0965	0.7286	0.4706
V25	0.64886	0.43936	0.65141	1.00000	0.32397	0.14349	0.36856	0.38844	0.03510	0.01128	0.63133	0.49660	0.20942	0.03265	0.11248
Y	0.0001	0.0028	0.0001	0.0	0.0319	0.3528	0.0138	0.0092	0.8211	0.9421	0.0001	0.0006	0.1725	0.8334	0.4672
V26	0.51053	0.35593	0.30101	0.32397	1.00000	0.42699	0.08206	0.32208	0.25993	0.02414	0.50666	0.55038	0.20008	0.12331	0.17497
Sr	0.0004	0.0177	0.0471	0.0319	0.0	0.0038	0.5964	0.0330	0.0884	0.8764	0.0004	0.0001	0.1929	0.4252	0.2560
V27	0.05638	0.06595	0.27364	0.14349	0.42699	1.00000	0.05970	-0.05196	0.08079	-0.00164	0.01663	0.63413	0.02472	-0.31124	-0.08930
Rb	0.7162	0.6706	0.0723	0.3528	0.0038	0.0	0.7003	0.7376	0.6022	0.9916	0.9147	0.0001	0.8734	0.0397	0.5643
V28	0.43070	0.42226	0.20174	0.36856	0.08206	0.05970	1.00000	0.44965	0.22395	0.34075	0.13290	0.11139	0.05175	-0.07646	-0.17916
U	0.0035	0.0043	0.1891	0.0138	0.5964	0.7003	0.0	0.0022	0.1439	0.0236	0.3898	0.4716	0.7387	0.6218	0.2446
V29	0.62835	0.44779	0.17189	0.38844	0.32208	-0.05196	0.44965	1.00000	0.36213	0.13582	0.44186	0.20599	0.13784	0.08390	0.23130
Th	0.0001	0.0023	0.2646	0.0092	0.0330	0.7376	0.0022	0.0	0.0157	0.3794	0.0027	0.1798	0.3723	0.5882	0.1309
V30	0.26676	0.32505	0.08087	0.03510	0.25993	0.08079	0.22395	0.36213	1.00000	0.50157	0.24179	-0.00855	0.28630	0.25440	-0.07691
Pb	0.0801	0.0313	0.6018	0.8211	0.0884	0.6022	0.1439	0.0157	0.0	0.0005	0.1138	0.9561	0.0596	0.0956	0.6197
V31	0.01580	0.27789	0.17683	0.01128	0.02414	-0.00164	0.34075	0.13582	0.50157	1.00000	0.03736	-0.11496	0.04764	0.06294	-0.52078
Cr	0.9189	0.0678	0.2509	0.9421	0.8764	0.9916	0.0236	0.3794	0.0005	0.0	0.8098	0.4574	0.7588	0.6848	0.0003
V32	0.51570	0.49048	0.63964	0.63133	0.50666	0.01663	0.13290	0.44186	0.24179	0.03736	1.00000	0.36302	0.22464	0.17449	0.34722
V	0.0003	0.0007	0.0001	0.0001	0.0004	0.9147	0.3898	0.0027	0.1138	0.8098	0.0	0.0154	0.1427	0.2573	0.0209
V33	0.34842	0.23355	0.41396	0.49660	0.55038	0.63413	0.11139	0.20599	-0.00855	-0.11496	0.36302	1.00000	0.10849	-0.11950	0.13922
Ba	0.0205	0.1271	0.0052	0.0006	0.0001	0.0001	0.4716	0.1798	0.9561	0.4574	0.0154	0.0	0.4833	0.4398	0.3674
V34	0.25426	0.07698	0.25374	0.20942	0.20008	0.02472	0.05175	0.13784	0.28630	0.04764	0.22464	0.10849	1.00000	-0.13103	0.05963
Sc	0.0958	0.6194	0.0965	0.1725	0.1929	0.8734	0.7387	0.3723	0.0596	0.7588	0.1427	0.4833	0.0	0.3965	0.7006
V35	0.19940	0.10671	-0.05382	0.03265	0.12331	-0.31124	-0.07646	0.08390	0.25440	0.06294	0.17449	-0.11950	-0.13103	1.00000	0.23928
As	0.1944	0.4905	0.7286	0.8334	0.4252	0.0397	0.6218	0.5882	0.0956	0.6848	0.2573	0.4398	0.3965	0.0	0.1177
V36	0.26364	0.19923	-0.11163	0.11248	0.17497	-0.08930	-0.17916	0.23130	-0.07691	-0.52078	0.34722	0.13922	0.05963	0.23928	1.00000
S	0.0838	0.1948	0.4706	0.4672	0.2560	0.5643	0.2446	0.1309	0.6197	0.0003	0.0209	0.3674	0.7006	0.1177	0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 12

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V6	1.00000	-0.81962	-0.87413	-0.51748	0.33089	-0.03880	0.17085	-0.36842	-0.66900	-0.81548	-0.58042	-0.99301	-0.76224	-0.84764	-0.57145	0.05398
SiO2	0.0	0.0011	0.0002	0.0849	0.2935	0.9047	0.5955	0.2386	0.0174	0.0012	0.0479	0.0001	0.0040	0.0005	0.0523	0.8677
V7	-0.81962	1.00000	0.73205	0.38179	-0.23363	-0.08657	-0.22641	0.27944	0.92807	0.81515	0.54291	0.84063	0.79860	0.77544	0.38517	-0.14059
TiO2	0.0011	0.0	0.0068	0.2207	0.4649	0.7891	0.4792	0.3791	0.0001	0.0012	0.0682	0.0006	0.0018	0.0030	0.2163	0.6630
V8	-0.87413	0.73205	1.00000	0.29371	-0.38670	0.15874	-0.09254	0.60000	0.70753	0.56943	0.25175	0.88112	0.64336	0.63748	0.39155	-0.10796
Al2O3	0.0002	0.0068	0.0	0.3541	0.2143	0.6222	0.7748	0.0392	0.0101	0.0533	0.4299	0.0002	0.0240	0.0258	0.2081	0.7384
V9	-0.51748	0.38179	0.29371	1.00000	-0.19136	-0.19401	-0.22068	0.24912	0.24869	0.60458	0.57343	0.49650	0.14685	0.39580	0.61731	-0.26270
Fe2O3	0.0849	0.2207	0.3541	0.0	0.5513	0.5457	0.4907	0.4349	0.4357	0.0373	0.0513	0.1006	0.6488	0.2028	0.0325	0.4094
V10	0.33089	-0.23363	-0.38670	-0.19136	1.00000	0.48665	0.09334	0.02400	-0.29952	-0.48493	-0.21926	-0.36278	-0.21926	-0.39537	-0.22121	0.38158
MnO	0.2935	0.4649	0.2143	0.5513	0.0	0.1086	0.7729	0.9410	0.3442	0.1101	0.4935	0.2465	0.4935	0.2033	0.4896	0.2210
V11	-0.03880	-0.08657	0.15874	-0.19401	0.48665	1.00000	-0.07361	0.28142	-0.05831	-0.34575	-0.23987	-0.01411	-0.03175	-0.07774	0.04270	0.23054
MgO	0.9047	0.7891	0.6222	0.5457	0.1086	0.0	0.8201	0.3756	0.8572	0.2710	0.4527	0.9653	0.9220	0.8102	0.8952	0.4710
V12	0.17085	-0.22641	-0.09254	-0.22068	0.09334	-0.07361	1.00000	0.33575	-0.30129	-0.39359	-0.44135	-0.17085	-0.45559	-0.34229	-0.07182	-0.05129
CaO	0.5955	0.4792	0.7748	0.4907	0.7729	0.8201	0.0	0.2860	0.3413	0.2056	0.1509	0.5955	0.1366	0.2761	0.8245	0.8742
V13	-0.36842	0.27944	0.60000	0.24912	0.02400	0.28142	0.33575	1.00000	0.35852	-0.05996	-0.05614	0.34737	0.01404	0.08963	0.27965	-0.25821
Na2O	0.2386	0.3791	0.0392	0.4349	0.9410	0.3756	0.2860	0.0	0.2525	0.8531	0.8624	0.2686	0.9655	0.7818	0.3787	0.4178
V14	-0.66900	0.92807	0.70753	0.24869	-0.29952	-0.05831	-0.30129	0.35852	1.00000	0.68662	0.45534	0.70403	0.73205	0.70877	0.33393	-0.23252
K2O	0.0174	0.0001	0.0101	0.4357	0.3442	0.8572	0.3413	0.2525	0.0	0.0137	0.1369	0.0106	0.0068	0.0099	0.2888	0.4671
V15	-0.81548	0.81515	0.56943	0.60458	-0.48493	-0.34575	-0.39359	-0.05996	0.68662	1.00000	0.71706	0.83305	0.73112	0.86972	0.50000	-0.18812
P2O5	0.0012	0.0012	0.0533	0.0373	0.1101	0.2710	0.2056	0.8531	0.0137	0.0	0.0087	0.0008	0.0069	0.0002	0.0979	0.5582
V16	-0.58042	0.54291	0.25175	0.57343	-0.21926	-0.23987	-0.44135	-0.05614	0.45534	0.71706	1.00000	0.59441	0.65035	0.73205	0.73724	0.11875
H2O-	0.0479	0.0682	0.4299	0.0513	0.4935	0.4527	0.1509	0.8624	0.1369	0.0087	0.0	0.0415	0.0220	0.0068	0.0062	0.7132
V17	-0.99301	0.84063	0.88112	0.49650	-0.36278	-0.01411	-0.17085	0.34737	0.70403	0.83305	0.59441	1.00000	0.79021	0.85464	0.59262	-0.02159
LOI	0.0001	0.0006	0.0002	0.1006	0.2465	0.9653	0.5955	0.2686	0.0106	0.0008	0.0415	0.0	0.0022	0.0004	0.0423	0.9469
V18	-0.76224	0.79860	0.64336	0.14685	-0.21926	-0.03175	-0.45559	0.01404	0.73205	0.73112	0.65035	0.79021	1.00000	0.84063	0.42330	0.31308
Zn	0.0040	0.0018	0.0240	0.6488	0.4935	0.9220	0.1366	0.9655	0.0068	0.0069	0.0220	0.0022	0.0	0.0006	0.1703	0.3217
V19	-0.84764	0.77544	0.63748	0.39580	-0.39537	-0.07774	-0.34229	0.08963	0.70877	0.86972	0.73205	0.85464	0.84063	1.00000	0.62016	-0.02523
Cu	0.0005	0.0030	0.0258	0.2028	0.2033	0.8102	0.2761	0.7818	0.0099	0.0002	0.0068	0.0004	0.0006	0.0	0.0315	0.9380
V20	-0.57145	0.38517	0.39155	0.61731	-0.22121	0.04270	-0.07182	0.27965	0.33393	0.50000	0.73724	0.59262	0.42330	0.62016	1.00000	0.22509
Ni	0.0523	0.2163	0.2081	0.0325	0.4896	0.8952	0.8245	0.3787	0.2888	0.0979	0.0062	0.0423	0.1703	0.0315	1.0	0.4818
V21	0.05398	-0.14059	-0.10796	-0.26270	0.38158	0.23054	-0.05129	-0.25821	-0.23252	-0.18812	0.11875	-0.02159	0.31308	-0.02523	0.22509	1.00000
Co	0.8677	0.6630	0.7384	0.4094	0.2210	0.4710	0.8742	0.4178	0.4671	0.5582	0.7132	0.9469	0.3217	0.9380	0.4818	0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 12

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V22	-0.83158	0.74341	0.88422	0.16491	-0.46207	-0.02301	-0.02679	0.48592	0.76099	0.62081	0.44211	0.86316	0.71579	0.77329	0.50797	-0.09209
Ga	0.0008	0.0056	0.0001	0.6085	0.1304	0.9434	0.9341	0.1092	0.0040	0.0312	0.1501	0.0003	0.0088	0.0032	0.0918	0.7759
V23	-0.68433	0.68906	0.75135	0.35275	-0.48665	-0.28470	-0.07900	0.40886	0.74383	0.67731	0.32453	0.73371	0.49385	0.64136	0.39324	-0.35216
Nb	0.0141	0.0132	0.0048	0.2607	0.1086	0.3698	0.8072	0.1870	0.0055	0.0155	0.3034	0.0066	0.1027	0.0246	0.2060	0.2616
V24	-0.17483	0.29422	0.15385	0.44755	0.03189	-0.29984	0.11746	0.35790	0.34326	0.22496	0.43357	0.24476	0.13287	0.16813	0.62436	0.10436
Zr	0.5868	0.3533	0.6331	0.1446	0.9216	0.3437	0.7162	0.2534	0.2747	0.4821	0.1591	0.4433	0.6806	0.6015	0.0300	0.7469
V25	-0.81611	0.94561	0.64799	0.36778	-0.30751	-0.22262	-0.20858	0.12478	0.85439	0.87148	0.70053	0.85464	0.85814	0.85965	0.53358	0.00541
Y	0.0012	0.0001	0.0227	0.2395	0.3309	0.4868	0.5153	0.6992	0.0004	0.0002	0.0112	0.0004	0.0004	0.0003	0.0740	0.9867
V26	-0.86014	0.84413	0.90210	0.21678	-0.48238	-0.05291	-0.21712	0.37544	0.84764	0.72057	0.48951	0.89510	0.85315	0.81611	0.47621	-0.00360
Sr	0.0003	0.0006	0.0001	0.4986	0.1122	0.8703	0.4979	0.2291	0.0005	0.0082	0.1063	0.0001	0.0004	0.0012	0.1176	0.9911
V27	-0.66434	0.72504	0.76923	0.14685	-0.43853	-0.11993	-0.15661	0.48772	0.84413	0.55537	0.46154	0.71329	0.72727	0.72504	0.50090	-0.04678
Rb	0.0185	0.0076	0.0034	0.6488	0.1539	0.7104	0.6269	0.1077	0.0006	0.0609	0.1309	0.0092	0.0074	0.0076	0.0972	0.8852
V28	-0.54482	0.55986	0.48858	0.25659	-0.49094	-0.16489	-0.67984	-0.05644	0.66022	0.72792	0.51670	0.56591	0.61864	0.74824	0.26064	-0.31473
U	0.0670	0.0584	0.1070	0.4208	0.1051	0.6086	0.0150	0.8617	0.0195	0.0073	0.0854	0.0551	0.0320	0.0051	0.4132	0.3191
V29	-0.83158	0.89455	0.78597	0.27719	-0.35206	-0.28673	-0.17859	0.25176	0.81898	0.78836	0.52632	0.87369	0.86316	0.76450	0.36992	0.03070
Th	0.0008	0.0001	0.0024	0.3831	0.2617	0.3662	0.5787	0.4299	0.0011	0.0023	0.0788	0.0002	0.0003	0.0038	0.2366	0.9246
V30	-0.78322	0.42382	0.72028	0.58741	-0.34285	-0.09877	0.07830	0.49123	0.29772	0.57294	0.27972	0.76224	0.32867	0.58144	0.46210	-0.23391
Pb	0.0026	0.1698	0.0082	0.0446	0.2753	0.7601	0.8089	0.1048	0.3473	0.0515	0.3786	0.0040	0.2969	0.0474	0.1304	0.4643
V31	-0.68652	0.84561	0.57793	0.22767	-0.48522	-0.33393	-0.02674	0.01933	0.72456	0.78698	0.35377	0.70753	0.67951	0.69123	0.18728	-0.17304
Cr	0.0137	0.0005	0.0490	0.4767	0.1098	0.2888	0.9343	0.9524	0.0077	0.0024	0.2593	0.0101	0.0151	0.0128	0.5600	0.5907
V32	-0.82517	0.83713	0.69231	0.38462	-0.17940	0.03880	-0.37372	0.14386	0.66900	0.73112	0.57343	0.81818	0.79021	0.64448	0.29631	0.03239
V	0.0010	0.0007	0.0126	0.2170	0.5769	0.9047	0.2314	0.6556	0.0174	0.0069	0.0513	0.0011	0.0022	0.0237	0.3497	0.9204
V33	-0.62937	0.76708	0.57343	0.20979	-0.16744	0.02116	-0.43423	0.16491	0.83012	0.69948	0.41958	0.64336	0.67832	0.79510	0.26103	-0.26990
Ba	0.0283	0.0036	0.0513	0.5128	0.6030	0.9479	0.1584	0.6085	0.0008	0.0113	0.1745	0.0240	0.0153	0.0020	0.4125	0.3962
V34	-0.65611	0.51061	0.68786	0.33864	0.03419	0.32740	0.10413	0.60532	0.36043	0.29078	0.03527	0.59967	0.21870	0.24029	0.04626	-0.32856
Sc	0.0205	0.0898	0.0134	0.2816	0.9160	0.2989	0.7474	0.0370	0.2498	0.3592	0.9133	0.0393	0.4947	0.4519	0.8865	0.2971
V35	-0.51629	0.60519	0.41590	-0.21154	-0.26572	-0.13564	0.08212	-0.21228	0.43279	0.49740	0.20437	0.54139	0.64895	0.48128	-0.00181	0.19188
As	0.0857	0.0371	0.1787	0.5093	0.4039	0.6742	0.7997	0.5077	0.1599	0.0999	0.5240	0.0691	0.0224	0.1132	0.9955	0.5502
V36	0.03853	0.33333	-0.21016	0.16813	-0.29752	-0.80921	0.04635	-0.28295	0.33860	0.40669	0.38879	0.02452	0.14011	0.18596	0.08657	-0.23071
S	0.9054	0.2897	0.5121	0.6015	0.3476	0.0014	0.8863	0.3728	0.2817	0.1895	0.2116	0.9397	0.6641	0.5628	0.7891	0.4706

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 12

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V6	-0.83158	-0.68433	-0.17483	-0.81611	-0.86014	-0.66434	-0.54482	-0.83158	-0.78322	-0.68652	-0.82517	-0.62937	-0.65611	-0.51629	0.03853
SiO2	0.0008	0.0141	0.5868	0.0012	0.0003	0.0185	0.0670	0.0008	0.0026	0.0137	0.0010	0.0283	0.0205	0.0857	0.9054
V7	0.74341	0.68906	0.29422	0.94561	0.84413	0.72504	0.55986	0.89455	0.42382	0.84561	0.83713	0.76708	0.51061	0.60519	0.33333
TiO2	0.0056	0.0132	0.3533	0.0001	0.0006	0.0076	0.0584	0.0001	0.1698	0.0005	0.0007	0.0036	0.0898	0.0371	0.2897
V8	0.88422	0.75135	0.15385	0.64799	0.90210	0.76923	0.48858	0.78597	0.72028	0.57793	0.69231	0.57343	0.68786	0.41590	-0.21016
Al2O3	0.0001	0.0048	0.6331	0.0227	0.0001	0.0034	0.1070	0.0024	0.0082	0.0490	0.0126	0.0513	0.0134	0.1787	0.5121
V9	0.16491	0.35275	0.44755	0.36778	0.21678	0.14685	0.25659	0.27719	0.58741	0.22767	0.38462	0.20979	0.33864	-0.21154	0.16813
Fe2O3	0.6085	0.2607	0.1446	0.2395	0.4986	0.6488	0.4208	0.3831	0.0446	0.4767	0.2170	0.5128	0.2816	0.5093	0.6015
V10	-0.46207	-0.48665	0.03189	-0.30751	-0.48238	-0.43853	-0.49094	-0.35206	-0.34285	-0.48522	-0.17940	-0.16744	0.03419	-0.26572	-0.29752
MnO	0.1304	0.1086	0.9216	0.3309	0.1122	0.1539	0.1051	0.2617	0.2753	0.1098	0.5769	0.6030	0.9160	0.4039	0.3476
V11	-0.02301	-0.28470	-0.29984	-0.22262	-0.05291	-0.11993	-0.16489	-0.28673	-0.09877	-0.33393	0.03880	0.02116	0.32740	-0.13564	-0.80921
MgO	0.9434	0.3698	0.3437	0.4868	0.8703	0.7104	0.6086	0.3662	0.7601	0.2888	0.9047	0.9479	0.2989	0.6742	0.0014
V12	-0.02679	-0.07900	0.11746	-0.20858	-0.21712	-0.15661	-0.67984	-0.17859	0.07830	-0.02674	-0.37372	-0.43423	0.10413	0.08212	0.04635
CaO	0.9341	0.8072	0.7162	0.5153	0.4979	0.6269	0.0150	0.5787	0.8089	0.9343	0.2314	0.1584	0.7474	0.7997	0.8863
V13	0.48592	0.40886	0.35790	0.12478	0.37544	0.48772	-0.05644	0.25176	0.49123	0.01933	0.14386	0.16491	0.60532	-0.21228	-0.28295
Na2O	0.1092	0.1870	0.2534	0.6992	0.2291	0.1077	0.8617	0.4299	0.1048	0.9524	0.6556	0.6085	0.0370	0.5077	0.3728
V14	0.76099	0.74383	0.34326	0.85439	0.84764	0.84413	0.66022	0.81898	0.29772	0.72456	0.66900	0.83012	0.36043	0.43279	0.33860
K2O	0.0040	0.0055	0.2747	0.0004	0.0005	0.0006	0.0195	0.0011	0.3473	0.0077	0.0174	0.0008	0.2498	0.1599	0.2817
V15	0.62081	0.67731	0.22496	0.87148	0.72057	0.55537	0.72792	0.78836	0.57294	0.78698	0.73112	0.69948	0.29078	0.49740	0.40669
P2O5	0.0312	0.0155	0.4821	0.0002	0.0082	0.0609	0.0073	0.0023	0.0515	0.0024	0.0069	0.0113	0.3592	0.0999	0.1895
V16	0.44211	0.32453	0.43357	0.70053	0.48951	0.46154	0.51670	0.52632	0.27972	0.35377	0.57343	0.41958	0.03527	0.20437	0.38879
H2O-	0.1501	0.3034	0.1591	0.0112	0.1063	0.1309	0.0854	0.0788	0.3786	0.2593	0.0513	0.1745	0.9133	0.5240	0.2116
V17	0.86316	0.73371	0.24476	0.85464	0.89510	0.71329	0.56591	0.87369	0.76224	0.70753	0.81818	0.64336	0.59967	0.54139	0.02452
LOI	0.0003	0.0066	0.4433	0.0004	0.0001	0.0092	0.0551	0.0002	0.0040	0.0101	0.0011	0.0240	0.0393	0.0691	0.9397
V18	0.71579	0.49385	0.13287	0.85814	0.85315	0.72727	0.61864	0.86316	0.32867	0.67951	0.79021	0.67832	0.21870	0.64895	0.14011
Zn	0.0088	0.1027	0.6806	0.0004	0.0004	0.0074	0.0320	0.0003	0.2969	0.0151	0.0022	0.0153	0.4947	0.0224	0.6641
V19	0.77329	0.64136	0.16813	0.85965	0.81611	0.72504	0.74824	0.76450	0.58144	0.69123	0.64448	0.79510	0.24029	0.48128	0.18596
Cu	0.0032	0.0246	0.6015	0.0003	0.0012	0.0076	0.0051	0.0038	0.0474	0.0128	0.0237	0.0020	0.4519	0.1132	0.5628
V20	0.50797	0.39324	0.62436	0.53358	0.47621	0.50090	0.26064	0.36992	0.46210	0.18728	0.29631	0.26103	0.04626	-0.00181	0.08657
Ni	0.0918	0.2060	0.0300	0.0740	0.1176	0.0972	0.4132	0.2366	0.1304	0.5600	0.3497	0.4125	0.8865	0.9955	0.7891
V21	-0.09209	-0.35216	0.10436	0.00541	-0.00360	-0.04678	-0.31473	0.03070	-0.23391	-0.17304	0.03239	-0.26990	-0.32856	0.19188	-0.23071
Co	0.7759	0.2616	0.7469	0.9867	0.9911	0.8852	0.3191	0.9246	0.4643	0.5907	0.9204	0.3962	0.2971	0.5502	0.4706

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 12

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V22	1.00000	0.83364	0.30176	0.77505	0.94737	0.90878	0.59788	0.83627	0.63509	0.60281	0.58948	0.67018	0.44425	0.48932	0.05800
Ga	0.0	0.0008	0.3405	0.0031	0.0001	0.0001	0.0400	0.0007	0.0265	0.0380	0.0437	0.0171	0.1479	0.1064	0.8579
V23	0.83364	1.00000	0.48326	0.69260	0.79015	0.80779	0.69149	0.77169	0.68080	0.54772	0.39508	0.73724	0.32028	0.23692	0.27032
Nb	0.0008	0.0	0.1115	0.0125	0.0022	0.0015	0.0127	0.0033	0.0148	0.0653	0.2037	0.0062	0.3101	0.4584	0.3954
V24	0.30176	0.48326	1.00000	0.38879	0.25175	0.44755	0.06327	0.33684	0.19580	0.02102	0.02098	0.16783	-0.11641	-0.21154	0.45534
Zr	0.3405	0.1115	0.0	0.2116	0.4299	0.1446	0.8451	0.2843	0.5419	0.9483	0.9484	0.6021	0.7186	0.5093	0.1369
V25	0.77505	0.69260	0.38879	1.00000	0.85114	0.74956	0.58627	0.91389	0.42032	0.83333	0.78109	0.72855	0.31450	0.65547	0.44912
Y	0.0031	0.0125	0.2116	0.0	0.0004	0.0050	0.0451	0.0001	0.1737	0.0008	0.0027	0.0072	0.3194	0.0207	0.1430
V26	0.94737	0.79015	0.25175	0.85114	1.00000	0.91608	0.65027	0.91930	0.56643	0.72504	0.72727	0.70629	0.41624	0.57007	0.10158
Sr	0.0001	0.0022	0.4299	0.0004	0.0	0.0001	0.0221	0.0001	0.0548	0.0076	0.0074	0.0102	0.1783	0.0530	0.7534
V27	0.90878	0.80779	0.44755	0.74956	0.91608	1.00000	0.63270	0.81404	0.46154	0.54991	0.46853	0.70629	0.20107	0.32268	0.20666
Rb	0.0001	0.0015	0.1446	0.0050	0.0001	0.0	0.0272	0.0013	0.1309	0.0640	0.1245	0.0102	0.5309	0.3063	0.5193
V28	0.59788	0.69149	0.06327	0.58627	0.65027	0.63270	1.00000	0.57143	0.38665	0.42254	0.42883	0.84360	0.06738	0.16940	0.18134
U	0.0400	0.0127	0.8451	0.0451	0.0221	0.0272	0.0	0.0523	0.2144	0.1712	0.1642	0.0006	0.8352	0.5987	0.5727
V29	0.83627	0.77169	0.33684	0.91389	0.91930	0.81404	0.57143	1.00000	0.54737	0.80316	0.77895	0.67720	0.40355	0.64583	0.31810
Th	0.0007	0.0033	0.2843	0.0001	0.0001	0.0013	0.0523	0.0	0.0655	0.0017	0.0028	0.0156	0.1933	0.0233	0.3136
V30	0.63509	0.68080	0.19580	0.42032	0.56643	0.46154	0.38665	0.54737	1.00000	0.36778	0.37762	0.41259	0.56440	0.09680	-0.17163
Pb	0.0265	0.0148	0.5419	0.1737	0.0548	0.1309	0.2144	0.0655	0.0	0.2395	0.2262	0.1826	0.0559	0.7647	0.5938
V31	0.60281	0.54772	0.02102	0.83333	0.72504	0.54991	0.42254	0.80316	0.36778	1.00000	0.69702	0.55692	0.34453	0.79914	0.45614
Cr	0.0380	0.0653	0.9483	0.0008	0.0076	0.0640	0.1712	0.0017	0.2395	0.0	0.0118	0.0600	0.2728	0.0018	0.1361
V32	0.58948	0.39508	0.02098	0.78109	0.72727	0.46853	0.42883	0.77895	0.37762	0.69702	1.00000	0.48252	0.65258	0.64536	0.06655
V	0.0437	0.2037	0.9484	0.0027	0.0074	0.1245	0.1642	0.0028	0.2262	0.0118	0.0	0.1121	0.0214	0.0234	0.8372
V33	0.67018	0.73724	0.16783	0.72855	0.70629	0.70629	0.84360	0.67720	0.41259	0.55692	0.48252	1.00000	0.24692	0.28324	0.17863
Ba	0.0171	0.0062	0.6021	0.0072	0.0102	0.0102	0.0006	0.0156	0.1826	0.0600	0.1121	0.0	0.4391	0.3723	0.5786
V34	0.44425	0.32028	-0.11641	0.31450	0.41624	0.20107	0.06738	0.40355	0.56440	0.34453	0.65258	0.24692	1.00000	0.27128	-0.34630
Sc	0.1479	0.3101	0.7186	0.3194	0.1783	0.5309	0.8352	0.1933	0.0559	0.2728	0.0214	0.4391	0.0	0.3937	0.2702
V35	0.48932	0.23692	-0.21154	0.65547	0.57007	0.32268	0.16940	0.64583	0.09680	0.79914	0.64536	0.28324	0.27128	1.00000	0.24423
As	0.1064	0.4584	0.5093	0.0207	0.0530	0.3063	0.5987	0.0233	0.7647	0.0018	0.0234	0.3723	0.3937	0.0	0.4443
V36	0.05800	0.27032	0.45534	0.44912	0.10158	0.20666	0.18134	0.31810	-0.17163	0.45614	0.06655	0.17863	-0.34630	0.24423	1.00000
S	0.8579	0.3954	0.1369	0.1430	0.7534	0.5193	0.5727	0.3136	0.5938	0.1361	0.8372	0.5786	0.2702	0.4443	0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 124

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V6	1.00000	-0.27398	-0.59311	-0.22072	0.00496	-0.17677	-0.06358	0.01674	-0.30650	-0.23282	-0.33709	-0.65281	-0.29040	-0.16335	-0.35842	-0.00287
SiO2	0.0	0.0021	0.0001	0.0138	0.9564	0.0495	0.4830	0.8536	0.0005	0.0093	0.0001	0.0001	0.0011	0.0699	0.0001	0.9748
V7	-0.27398	1.00000	0.20892	0.13779	0.25358	0.07525	0.18411	0.31607	0.12242	0.07449	0.07904	-0.07703	-0.03181	-0.13253	0.10575	0.10466
TiO2	0.0021	0.0	0.0199	0.1270	0.0045	0.4062	0.0407	0.0003	0.1756	0.4110	0.3829	0.3951	0.7258	0.1423	0.2424	0.2473
V8	-0.59311	0.20892	1.00000	-0.38118	-0.16280	-0.21676	-0.13893	0.05613	0.50769	0.03454	-0.17425	0.44905	-0.10862	-0.00647	-0.06240	-0.17389
Al2O3	0.0001	0.0199	0.0	0.0001	0.0708	0.0156	0.1238	0.5358	0.0001	0.7033	0.0529	0.0001	0.2298	0.9431	0.4912	0.0534
V9	-0.22072	0.13779	-0.38118	1.00000	0.29348	0.30415	0.11368	-0.08889	-0.41227	0.30413	0.23986	0.13294	0.36588	0.25967	0.46524	0.20192
Fe2O3	0.0138	0.1270	0.0001	0.0	0.0009	0.0006	0.2087	0.3262	0.0001	0.0006	0.0073	0.1410	0.0001	0.0036	0.0001	0.0245
V10	0.00496	0.25358	-0.16280	0.29348	1.00000	0.52010	0.34201	0.15645	-0.09103	0.11263	-0.13808	-0.30248	0.32419	-0.17804	0.24561	0.61891
MnO	0.9564	0.0045	0.0708	0.0009	0.0	0.0001	0.0001	0.0827	0.3146	0.2130	0.1262	0.0006	0.0002	0.0479	0.0060	0.0001
V11	-0.17677	0.07525	-0.21676	0.30415	0.52010	1.00000	0.45196	-0.05185	-0.11896	0.06916	0.12233	-0.07616	0.69867	-0.00691	0.44764	0.53137
MgO	0.0495	0.4062	0.0156	0.0006	0.0001	0.0	0.0001	0.5674	0.1882	0.4453	0.1759	0.4005	0.0001	0.9392	0.0001	0.0001
V12	-0.06358	0.18411	-0.13893	0.11368	0.34201	0.45196	1.00000	0.32932	-0.19263	0.22806	0.14726	-0.18602	0.25540	-0.11021	0.11995	0.44397
CaO	0.4830	0.0407	0.1238	0.2087	0.0001	0.0001	0.0	0.0002	0.0321	0.0109	0.1027	0.0386	0.0042	0.2230	0.1845	0.0001
V13	0.01674	0.31607	0.05613	-0.08889	0.15645	-0.05185	0.32932	1.00000	0.11611	0.02894	-0.17578	-0.34063	-0.19225	-0.17325	-0.12604	0.00441
Na2O	0.8536	0.0003	0.5358	0.3262	0.0827	0.5674	0.0002	0.0	0.1991	0.7497	0.0508	0.0001	0.0324	0.0543	0.1631	0.9613
V14	-0.30650	0.12242	0.50769	-0.41227	-0.09103	-0.11896	-0.19263	0.11611	1.00000	0.11882	-0.01433	0.06174	-0.18564	-0.10716	-0.02303	0.02965
K2O	0.0005	0.1756	0.0001	0.0001	0.3146	0.1882	0.0321	0.1991	0.0	0.1887	0.8745	0.4958	0.0390	0.2362	0.7996	0.7438
V15	-0.23282	0.07449	0.03454	0.30413	0.11263	0.06916	0.22806	0.02894	0.11882	1.00000	0.05840	0.09528	0.11771	0.15451	0.15724	0.10969
P2O5	0.0093	0.4110	0.7033	0.0006	0.2130	0.4453	0.0109	0.7497	0.1887	0.0	0.5194	0.2925	0.1929	0.0866	0.0811	0.2252
V16	-0.33709	0.07904	-0.17425	0.23986	-0.13808	0.12233	0.14726	-0.17578	-0.01433	0.05840	1.00000	0.36420	0.17322	0.08781	0.24320	0.02239
H2O-	0.0001	0.3829	0.0529	0.0073	0.1262	0.1759	0.1027	0.0508	0.8745	0.5194	0.0	0.0001	0.0544	0.3321	0.0065	0.8051
V17	-0.65281	-0.07703	0.44905	0.13294	-0.30248	-0.07616	-0.18602	-0.34063	0.06174	0.09528	0.36420	1.00000	0.20092	0.31952	0.21165	-0.18340
LOI	0.0001	0.3951	0.0001	0.1410	0.0006	0.4005	0.0386	0.0001	0.4958	0.2925	0.0001	0.0	0.0252	0.0003	0.0183	0.0415
V18	-0.29040	-0.03181	-0.10862	0.36588	0.32419	0.69867	0.25540	-0.19225	-0.18564	0.11771	0.17322	0.20092	1.00000	0.23054	0.68850	0.39085
Zn	0.0011	0.7258	0.2298	0.0001	0.0002	0.0001	0.0042	0.0324	0.0390	0.1929	0.0544	0.0252	0.0	0.0100	0.0001	0.0001
V19	-0.16335	-0.13253	-0.00647	0.25967	-0.17804	-0.00691	-0.11021	-0.17325	-0.10716	0.15451	0.08781	0.31952	0.23054	1.00000	0.23301	-0.07915
Cu	0.0699	0.1423	0.9431	0.0036	0.0479	0.9392	0.2230	0.0543	0.2362	0.0866	0.3321	0.0003	0.0100	0.0	0.0092	0.3822
V20	-0.35842	0.10575	-0.06240	0.46524	0.24561	0.44764	0.11995	-0.12604	-0.02303	0.15724	0.24320	0.21165	0.68850	0.23301	1.00000	0.28635
Ni	0.0001	0.2424	0.4912	0.0001	0.0060	0.0001	0.1845	0.1631	0.7996	0.0811	0.0065	0.0183	0.0001	0.0092	0.0	0.0013
V21	-0.00287	0.10466	-0.17389	0.20192	0.61891	0.53137	0.44397	0.00441	0.02965	0.10969	0.02239	-0.18340	0.39085	-0.07915	0.28635	1.00000
Co	0.9748	0.2473	0.0534	0.0245	0.0001	0.0001	0.0001	0.9613	0.7438	0.2252	0.8051	0.0415	0.0001	0.3822	0.0013	0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 124

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V22	-0.50426	0.26440	0.58240	-0.12258	-0.04537	-0.16959	-0.23558	0.12577	0.41252	0.11695	-0.10531	0.21982	-0.12708	-0.06606	-0.04590	-0.21989
Ga	0.0001	0.0030	0.0001	0.1750	0.6168	0.0597	0.0084	0.1640	0.0001	0.1958	0.2444	0.0142	0.1596	0.4661	0.6127	0.0141
V23	-0.30160	-0.04356	0.58934	-0.19220	-0.11661	-0.14362	-0.14877	0.12395	0.27509	0.04415	-0.18401	0.24866	-0.05793	-0.03399	0.04532	-0.18283
Nb	0.0007	0.6310	0.0001	0.0325	0.1971	0.1115	0.0991	0.1702	0.0020	0.6264	0.0408	0.0054	0.5228	0.7079	0.6172	0.0421
V24	0.36121	0.07627	-0.06871	-0.20386	-0.15355	-0.37041	-0.27311	0.28534	0.04175	-0.03632	-0.26897	-0.36698	-0.49424	-0.27161	-0.28098	-0.29383
Zr	0.0001	0.3998	0.4483	0.0231	0.0886	0.0001	0.0021	0.0013	0.6452	0.6888	0.0025	0.0001	0.0001	0.0023	0.0016	0.0009
V25	-0.17789	0.05920	0.08461	0.16331	0.01848	0.15847	0.12640	0.00162	-0.11950	0.35027	-0.14497	0.28597	0.28523	0.21733	0.18587	-0.02655
Y	0.0481	0.5137	0.3502	0.0699	0.8386	0.0788	0.1618	0.9857	0.1862	0.0001	0.1082	0.0013	0.0013	0.0153	0.0387	0.7698
V26	-0.01763	0.09209	0.25709	-0.13190	-0.09158	-0.45107	0.02487	0.55465	0.06941	0.12094	-0.32629	-0.04436	-0.22878	0.05442	-0.14164	-0.22515
Sr	0.8459	0.3090	0.0039	0.1442	0.3118	0.0001	0.7839	0.0001	0.4436	0.1809	0.0002	0.6247	0.0106	0.5483	0.1166	0.0119
V27	-0.39147	0.15627	0.53952	-0.25665	-0.10067	-0.01834	-0.13493	0.07362	0.81187	0.16825	-0.01766	0.14132	-0.09605	-0.05175	0.06756	0.06715
Rb	0.0001	0.0831	0.0001	0.0040	0.2659	0.8398	0.1351	0.4164	0.0001	0.0618	0.8457	0.1174	0.2886	0.5681	0.4560	0.4587
V28	-0.30790	-0.01608	0.14815	0.22326	-0.09455	-0.12443	-0.06009	0.10026	-0.01237	0.19012	-0.01290	0.28196	-0.02742	0.12290	0.07592	-0.12947
U	0.0005	0.8593	0.1006	0.0127	0.2962	0.1686	0.5074	0.2679	0.8915	0.0344	0.8869	0.0015	0.7625	0.1739	0.4020	0.1518
V29	-0.31332	-0.01386	0.46918	-0.08733	-0.04882	-0.08851	-0.06504	0.19791	0.27225	0.11136	-0.09613	0.19343	-0.11597	-0.13102	-0.06949	-0.06334
Th	0.0004	0.8786	0.0001	0.3348	0.5903	0.3283	0.4730	0.0276	0.0022	0.2182	0.2882	0.0314	0.1996	0.1469	0.4431	0.4846
V30	-0.19028	-0.12670	0.13369	0.19874	0.00870	-0.03350	-0.09975	-0.25287	-0.16942	0.19194	-0.10226	0.32302	0.13977	0.41044	-0.00129	0.03871
Pb	0.0343	0.1608	0.1388	0.0269	0.9236	0.7118	0.2703	0.0046	0.0600	0.0327	0.2584	0.0003	0.1216	0.0001	0.9886	0.6695
V31	-0.26618	0.52802	0.04757	0.32316	0.04954	0.14936	0.08558	-0.00566	0.07916	0.18797	0.24147	0.02402	0.09717	0.02702	0.32564	0.10412
Cr	0.0028	0.0001	0.5998	0.0003	0.5848	0.0978	0.3446	0.9502	0.3822	0.0366	0.0069	0.7911	0.2830	0.7657	0.0002	0.2498
V32	-0.26186	0.75302	0.07324	0.27187	0.25368	0.09654	0.12924	0.15799	0.01897	0.07608	0.12248	-0.00293	0.00883	-0.10464	0.13094	0.06212
V	0.0033	0.0001	0.4189	0.0023	0.0045	0.2861	0.1526	0.0797	0.8343	0.4010	0.1754	0.9742	0.9225	0.2475	0.1472	0.4931
V33	-0.16920	-0.00692	0.11856	-0.20588	-0.09750	-0.19719	-0.23250	0.12965	0.59268	0.13790	0.12736	-0.04956	-0.15221	-0.04698	0.00118	-0.08248
Ba	0.0603	0.9392	0.1897	0.0218	0.2814	0.0281	0.0094	0.1512	0.0001	0.1267	0.1586	0.5846	0.0915	0.6044	0.9896	0.3624
V34	-0.25900	0.47095	-0.02822	0.27728	0.18197	0.28443	0.13837	0.08430	-0.00595	-0.01687	0.13075	0.04074	0.19786	-0.02991	0.23812	0.09255
Sc	0.0037	0.0001	0.7557	0.0018	0.0431	0.0014	0.1254	0.3519	0.9477	0.8524	0.1478	0.6533	0.0276	0.7416	0.0077	0.3066
V35	-0.06861	-0.01650	0.33949	-0.19766	0.03657	-0.13234	0.03873	-0.10699	-0.03745	0.00199	-0.14117	0.26213	-0.03909	0.16798	-0.17974	0.07367
As	0.4489	0.8556	0.0001	0.0278	0.6868	0.1429	0.6693	0.2369	0.6797	0.9825	0.1178	0.0033	0.6664	0.0622	0.0458	0.4162
V36	-0.02798	-0.28745	0.22503	-0.17252	-0.01801	-0.16975	0.00969	-0.11807	-0.14100	-0.19158	-0.17639	0.26819	-0.05648	0.14368	-0.25642	-0.04230
S	0.7577	0.0012	0.0120	0.0554	0.8427	0.0595	0.9150	0.1916	0.1183	0.0330	0.0500	0.0026	0.5333	0.1114	0.0040	0.6409

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 124

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V6	-0.50426	-0.30160	0.36121	-0.17789	-0.01763	-0.39147	-0.30790	-0.31332	-0.19028	-0.26618	-0.26186	-0.16920	-0.25900	-0.06861	-0.02798
SiO2	0.0001	0.0007	0.0001	0.0481	0.8459	0.0001	0.0005	0.0004	0.0343	0.0028	0.0033	0.0603	0.0037	0.4489	0.7577
V7	0.26440	-0.04356	0.07627	0.05920	0.09209	0.15627	-0.01608	-0.01386	-0.12670	0.52802	0.75302	-0.00692	0.47095	-0.01650	-0.28745
TiO2	0.0030	0.6310	0.3998	0.5137	0.3090	0.0831	0.8593	0.8786	0.1608	0.0001	0.0001	0.9392	0.0001	0.8556	0.0012
V8	0.58240	0.58934	-0.06871	0.08461	0.25709	0.53952	0.14815	0.46918	0.13369	0.04757	0.07324	0.11856	-0.02822	0.33949	0.22503
Al2O3	0.0001	0.0001	0.4483	0.3502	0.0039	0.0001	0.1006	0.0001	0.1388	0.5998	0.4189	0.1897	0.7557	0.0001	0.0120
V9	-0.12258	-0.19220	-0.20386	0.16331	-0.13190	-0.25665	0.22326	-0.08733	0.19874	0.32316	0.27187	-0.20588	0.27728	-0.19766	-0.17252
Fe2O3	0.1750	0.0325	0.0231	0.0699	0.1442	0.0040	0.0127	0.3348	0.0269	0.0003	0.0023	0.0218	0.0018	0.0278	0.0554
V10	-0.04537	-0.11661	-0.15355	0.01848	-0.09158	-0.10067	-0.09455	-0.04882	0.00870	0.04954	0.25368	-0.09750	0.18197	0.03657	-0.01801
MnO	0.6168	0.1971	0.0886	0.8386	0.3118	0.2659	0.2962	0.5903	0.9236	0.5848	0.0045	0.2814	0.0431	0.6868	0.8427
V11	-0.16959	-0.14362	-0.37041	0.15847	-0.45107	-0.01834	-0.12443	-0.08851	-0.03350	0.14936	0.09654	-0.19719	0.28443	-0.13234	-0.16975
MgO	0.0597	0.1115	0.0001	0.0788	0.0001	0.8398	0.1686	0.3283	0.7118	0.0978	0.2861	0.0281	0.0014	0.1429	0.0595
V12	-0.23558	-0.14877	-0.27311	0.12640	0.02487	-0.13493	-0.06009	-0.06504	-0.09975	0.08558	0.12924	-0.23250	0.13837	0.03873	0.00969
CaO	0.0084	0.0991	0.0021	0.1618	0.7839	0.1351	0.5074	0.4730	0.2703	0.3446	0.1526	0.0094	0.1254	0.6693	0.9150
V13	0.12577	0.12395	0.28534	0.00162	0.55465	0.07362	0.10026	0.19791	-0.25287	-0.00566	0.15799	0.12965	0.08430	-0.10699	-0.11807
Na2O	0.1640	0.1702	0.0013	0.9857	0.0001	0.4164	0.2679	0.0276	0.0046	0.9502	0.0797	0.1512	0.3519	0.2369	0.1916
V14	0.41252	0.27509	0.04175	-0.11950	0.06941	0.81187	-0.01237	0.27225	-0.16942	0.07916	0.01897	0.59268	-0.00595	-0.03745	-0.14100
K2O	0.0001	0.0020	0.6452	0.1862	0.4436	0.0001	0.8915	0.0022	0.0600	0.3822	0.8343	0.0001	0.9477	0.6797	0.1183
V15	0.11695	0.04415	-0.03632	0.35027	0.12094	0.16825	0.19012	0.11136	0.19194	0.18797	0.07608	0.13790	-0.01687	0.00199	-0.19158
P2O5	0.1958	0.6264	0.6888	0.0001	0.1809	0.0618	0.0344	0.2182	0.0327	0.0366	0.4010	0.1267	0.8524	0.9825	0.0330
V16	-0.10531	-0.18401	-0.26897	-0.14497	-0.32629	-0.01766	-0.01290	-0.09613	-0.10226	0.24147	0.12248	0.12736	0.13075	-0.14117	-0.17639
H2O-	0.2444	0.0408	0.0025	0.1082	0.0002	0.8457	0.8869	0.2882	0.2584	0.0069	0.1754	0.1586	0.1478	0.1178	0.0500
V17	0.21982	0.24866	-0.36698	0.28597	-0.04436	0.14132	0.28196	0.19343	0.32302	0.02402	-0.00293	-0.04956	0.04074	0.26213	0.26819
LOI	0.0142	0.0054	0.0001	0.0013	0.6247	0.1174	0.0015	0.0314	0.0003	0.7911	0.9742	0.5846	0.6533	0.0033	0.0026
V18	-0.12708	-0.05793	-0.49424	0.28523	-0.22878	-0.09605	-0.02742	-0.11597	0.13977	0.09717	0.00883	-0.15221	0.19786	-0.03909	-0.05648
Zn	0.1596	0.5228	0.0001	0.0013	0.0106	0.2886	0.7625	0.1996	0.1216	0.2830	0.9225	0.0915	0.0276	0.6664	0.5333
V19	-0.06606	-0.03399	-0.27161	0.21733	0.05442	-0.05175	0.12290	-0.13102	0.41044	0.02702	-0.10464	-0.04698	-0.02991	0.16798	0.14368
Cu	0.4661	0.7079	0.0023	0.0153	0.5483	0.5681	0.1739	0.1469	0.0001	0.7657	0.2475	0.6044	0.7416	0.0622	0.1114
V20	-0.04590	0.04532	-0.28098	0.18587	-0.14164	0.06756	0.07592	-0.06949	-0.00129	0.32564	0.13094	0.00118	0.23812	-0.17974	-0.25642
Ni	0.6127	0.6172	0.0016	0.0387	0.1166	0.4560	0.4020	0.4431	0.9886	0.0002	0.1472	0.9896	0.0077	0.0458	0.0040
V21	-0.21989	-0.18283	-0.29383	-0.02655	-0.22515	0.06715	-0.12947	-0.06334	0.03871	0.10412	0.06212	-0.08248	0.09255	0.07367	-0.04230
Co	0.0141	0.0421	0.0009	0.7698	0.0119	0.4587	0.1518	0.4846	0.6695	0.2498	0.4931	0.3624	0.3066	0.4162	0.6409

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 124

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V22	1.00000	0.36238	0.06782	0.13435	0.15617	0.38442	0.24936	0.39160	0.07196	-0.02148	0.22647	0.36061	0.20794	0.02954	-0.08901
Ga	0.0	0.0001	0.4542	0.1368	0.0833	0.0001	0.0052	0.0001	0.4270	0.8128	0.0114	0.0001	0.0205	0.7446	0.3256
V23	0.36238	1.00000	0.11861	0.06913	0.17106	0.42939	0.28860	0.54289	-0.00186	0.06823	0.02436	-0.01580	-0.16136	0.19420	0.11101
Nb	0.0001	0.0	0.1895	0.4455	0.0575	0.0001	0.0012	0.0001	0.9837	0.4515	0.7883	0.8617	0.0734	0.0307	0.2197
V24	0.06782	0.11861	1.00000	-0.10108	0.27071	-0.00753	0.11401	0.12249	-0.29291	-0.00405	-0.10281	0.09879	-0.17024	-0.31948	-0.21242
Zr	0.4542	0.1895	0.0	0.2640	0.0024	0.9339	0.2074	0.1753	0.0010	0.9644	0.2559	0.2750	0.0587	0.0003	0.0179
V25	0.13435	0.06913	-0.10108	1.00000	0.17337	-0.03563	0.24029	0.14373	0.14388	0.06421	0.09738	-0.18343	0.03314	0.10284	-0.03291
Y	0.1368	0.4455	0.2640	0.0	0.0541	0.6944	0.0072	0.1113	0.1109	0.4787	0.2820	0.0414	0.7148	0.2557	0.7168
V26	0.15617	0.17106	0.27071	0.17337	1.00000	-0.05149	0.23451	0.16636	0.15510	-0.10127	-0.00072	0.17908	-0.10574	0.14645	0.14285
Sr	0.0833	0.0575	0.0024	0.0541	0.0	0.5701	0.0088	0.0648	0.0854	0.2631	0.9936	0.0466	0.2425	0.1046	0.1135
V27	0.38442	0.42939	-0.00753	-0.03563	-0.05149	1.00000	0.01327	0.39578	-0.11089	0.12180	0.00841	0.39564	0.06138	0.02492	-0.11569
Rb	0.0001	0.0001	0.9339	0.6944	0.5701	0.0	0.8837	0.0001	0.2202	0.1778	0.9262	0.0001	0.4983	0.7835	0.2007
V28	0.24936	0.28860	0.11401	0.24029	0.23451	0.01327	1.00000	0.33546	0.19011	-0.01606	0.04661	0.11175	0.08411	-0.01754	0.00630
U	0.0052	0.0012	0.2074	0.0072	0.0088	0.8837	0.0	0.0001	0.0344	0.8594	0.6072	0.2166	0.3530	0.8467	0.9446
V29	0.39160	0.54289	0.12249	0.14373	0.16636	0.39578	0.33546	1.00000	0.00084	-0.06585	-0.04622	0.16129	-0.03854	0.01781	-0.01096
Th	0.0001	0.0001	0.1753	0.1113	0.0648	0.0001	0.0001	0.0	0.9927	0.4674	0.6102	0.0735	0.6709	0.8444	0.9039
V30	0.07196	-0.00186	-0.29291	0.14388	0.15510	-0.11089	0.19011	0.00084	1.00000	-0.12225	-0.00804	-0.23516	-0.00731	0.42053	0.25715
Pb	0.4270	0.9837	0.0010	0.1109	0.0854	0.2202	0.0344	0.9927	0.0	0.1762	0.9294	0.0086	0.9358	0.0001	0.0039
V31	-0.02148	0.06823	-0.00405	0.06421	-0.10127	0.12180	-0.01606	-0.06585	-0.12225	1.00000	0.54922	-0.01308	0.18391	-0.10978	-0.34670
Cr	0.8128	0.4515	0.9644	0.4787	0.2631	0.1778	0.8594	0.4674	0.1762	0.0	0.0001	0.8854	0.0409	0.2248	0.0001
V32	0.22647	0.02436	-0.10281	0.09738	-0.00072	0.00841	0.04661	-0.04622	-0.00804	0.54922	1.00000	-0.09794	0.42111	0.00332	-0.24770
V	0.0114	0.7883	0.2559	0.2820	0.9936	0.9262	0.6072	0.6102	0.9294	0.0001	0.0	0.2792	0.0001	0.9708	0.0055
V33	0.36061	-0.01580	0.09879	-0.18343	0.17908	0.39564	0.11175	0.16129	-0.23516	-0.01308	-0.09794	1.00000	0.06409	-0.22684	-0.17868
Ba	0.0001	0.8617	0.2750	0.0414	0.0466	0.0001	0.2166	0.0735	0.0086	0.8854	0.2792	0.0	0.4794	0.0113	0.0471
V34	0.20794	-0.16136	-0.17024	0.03314	-0.10574	0.06138	0.08411	-0.03854	-0.00731	0.18391	0.42111	0.06409	1.00000	-0.09116	-0.31529
Sc	0.0205	0.0734	0.0587	0.7148	0.2425	0.4983	0.3530	0.6709	0.9358	0.0409	0.0001	0.4794	0.0	0.3140	0.0004
V35	0.02954	0.19420	-0.31948	0.10284	0.14645	0.02492	-0.01754	0.01781	0.42053	-0.10978	0.00332	-0.22684	-0.09116	1.00000	0.47739
As	0.7446	0.0307	0.0003	0.2557	0.1046	0.7835	0.8467	0.8444	0.0001	0.2248	0.9708	0.0113	0.3140	0.0	0.0001
V36	-0.08901	0.11101	-0.21242	-0.03291	0.14285	-0.11569	0.00630	-0.01096	0.25715	-0.34670	-0.24770	-0.17868	-0.31529	0.47739	1.00000
S	0.3256	0.2197	0.0179	0.7168	0.1135	0.2007	0.9446	0.9039	0.0039	0.0001	0.0055	0.0471	0.0004	0.0001	0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 12

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V6	1.00000	-0.08757	-0.14011	0.08056	-0.61238	-0.32224	-0.17223	0.44912	-0.08772	0.30336	-0.66900	-0.58494	-0.33275	-0.38096	0.07018	-0.40141
SiO2	0.0	0.7867	0.6641	0.8035	0.0343	0.3070	0.5925	0.1430	0.7863	0.3378	0.0174	0.0457	0.2906	0.2218	0.8284	0.1959
V7	-0.08757	1.00000	0.55245	0.51748	0.12190	-0.40559	0.08421	0.21366	0.57093	0.16902	0.11888	-0.04895	0.50350	0.30987	0.67601	0.68542
TiO2	0.7867	0.0	0.0625	0.0849	0.7059	0.1908	0.7947	0.5049	0.0525	0.5995	0.7129	0.8799	0.0952	0.3270	0.0158	0.0139
V8	-0.14011	0.55245	1.00000	0.25874	-0.32268	-0.12587	-0.35439	-0.25569	0.59194	0.05986	0.22378	0.39161	0.06993	0.02113	0.05954	0.50616
Al2O3	0.6641	0.0625	0.0	0.4168	0.3063	0.6967	0.2584	0.4225	0.0426	0.8534	0.4845	0.2081	0.8290	0.9480	0.8542	0.0931
V9	0.08056	0.51748	0.25874	1.00000	-0.12190	-0.88811	0.02456	0.28722	0.64448	-0.42607	0.27273	-0.14685	0.32867	-0.16902	0.72504	0.33392
Fe2O3	0.8035	0.0849	0.4168	0.0	0.7059	0.0001	0.9396	0.3654	0.0237	0.1673	0.3911	0.6488	0.2969	0.5995	0.0076	0.2888
V10	-0.61238	0.12190	-0.32268	-0.12190	1.00000	0.30117	0.52530	0.03232	-0.14367	-0.10110	0.17568	0.10039	0.26890	0.38634	0.02873	0.16760
MnO	0.0343	0.7059	0.3063	0.7059	0.0	0.3415	0.0795	0.9206	0.6560	0.7546	0.5850	0.7562	0.3980	0.2148	0.9294	0.6026
V11	-0.32224	-0.40559	-0.12587	-0.88811	0.30117	1.00000	0.11228	-0.40981	-0.46585	0.42255	-0.16084	0.27273	-0.25874	0.27465	-0.69002	-0.28823
MgO	0.3070	0.1908	0.6967	0.0001	0.3415	0.0	0.7283	0.1858	0.1269	0.1712	0.6175	0.3911	0.4168	0.3876	0.0130	0.3636
V12	-0.17223	0.08421	-0.35439	0.02456	0.52530	0.11228	1.00000	0.65026	-0.26011	0.05124	-0.12281	-0.47720	0.56492	0.14134	0.32337	-0.25220
CaO	0.5925	0.7947	0.2584	0.9396	0.0795	0.7283	0.0	0.0221	0.4142	0.8743	0.7038	0.1167	0.0556	0.6613	0.3052	0.4291
V13	0.44912	0.21366	-0.25569	0.28722	0.03232	-0.40981	0.65026	1.00000	-0.19474	0.13757	-0.38529	-0.78809	0.43783	-0.23633	0.45263	-0.27817
Na2O	0.1430	0.5049	0.4225	0.3654	0.9206	0.1858	0.0221	0.0	0.5442	0.6699	0.2161	0.0023	0.1546	0.4596	0.1395	0.3813
V14	-0.08772	0.57093	0.59194	0.64448	-0.14367	-0.46585	-0.26011	-0.19474	1.00000	0.01764	0.11559	0.00350	-0.02452	0.16579	0.37544	0.40669
K2O	0.7863	0.0525	0.0426	0.0237	0.6560	0.1269	0.4142	0.5442	0.0	0.9566	0.7206	0.9914	0.9397	0.6066	0.2291	0.1895
V15	0.30336	0.16902	0.05986	-0.42607	-0.10110	0.42255	0.05124	0.13757	0.01764	1.00000	-0.73945	-0.44367	-0.23240	0.03901	-0.25574	-0.30266
P2O5	0.3378	0.5995	0.8534	0.1673	0.7546	0.1712	0.8743	0.6699	0.9566	0.0	0.0060	0.1485	0.4673	0.9042	0.4224	0.3390
V16	-0.66900	0.11888	0.22378	0.27273	0.17568	-0.16084	-0.12281	-0.38529	0.11559	-0.73945	1.00000	0.71329	0.33566	0.36621	0.21016	0.64676
H2O-	0.0174	0.7129	0.4845	0.3911	0.5850	0.6175	0.7038	0.2161	0.7206	0.0060	0.0	0.0092	0.2861	0.2417	0.5121	0.0230
V17	-0.58494	-0.04895	0.39161	-0.14685	0.10039	0.27273	-0.47720	-0.78809	0.00350	-0.44367	0.71329	1.00000	-0.15385	0.17606	-0.32574	0.56591
LOI	0.0457	0.8799	0.2081	0.6488	0.7562	0.3911	0.1167	0.0023	0.9914	0.1485	0.0092	0.0	0.6331	0.5841	0.3015	0.0551
V18	-0.33275	0.50350	0.06993	0.32867	0.26890	-0.25874	0.56492	0.43783	-0.02452	-0.23240	0.33566	-0.15385	1.00000	0.24648	0.73205	0.24956
Zn	0.2906	0.0952	0.8290	0.2969	0.3980	0.4168	0.0556	0.1546	0.9397	0.4673	0.2861	0.6331	0.0	0.4399	0.0068	0.4341
V19	-0.38096	0.30987	0.02113	-0.16902	0.38634	0.27465	0.14134	-0.23633	0.16579	0.03901	0.36621	0.17606	0.24648	1.00000	0.25397	0.43540
Cu	0.2218	0.3270	0.9480	0.5995	0.2148	0.3876	0.6613	0.4596	0.6066	0.9042	0.2417	0.5841	0.4399	0.0	0.4257	0.1572
V20	0.07018	0.67601	0.05954	0.72504	0.02873	-0.69002	0.32337	0.45263	0.37544	-0.25574	0.21016	-0.32574	0.73205	0.25397	1.00000	0.38028
Ni	0.8284	0.0158	0.8542	0.0076	0.9294	0.0130	0.3052	0.1395	0.2291	0.4224	0.5121	0.3015	0.0068	0.4257	0.0	0.2227
V21	-0.40141	0.68542	0.50616	0.33392	0.16760	-0.28823	-0.25220	-0.27817	0.40669	-0.30266	0.64676	0.56591	0.24956	0.43540	0.38028	1.00000
Co	0.1959	0.0139	0.0931	0.2888	0.6026	0.3636	0.4291	0.3813	0.1895	0.3390	0.0230	0.0551	0.4341	0.1572	0.2227	0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 12

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V22	-0.20071	0.53779	0.84008	0.54834	-0.22347	-0.41477	-0.38977	-0.31162	0.80634	-0.26549	0.36556	0.34095	0.15114	0.09558	0.31866	0.54417
Ga	0.5317	0.0713	0.0006	0.0649	0.4851	0.1800	0.2104	0.3241	0.0015	0.4043	0.2426	0.2781	0.6391	0.7676	0.3127	0.0674
V23	-0.06738	0.48145	0.96291	0.07788	-0.41927	0.00708	-0.32683	-0.23228	0.41846	0.17291	0.13452	0.36463	0.07434	0.00000	-0.01064	0.42528
Nb	0.8352	0.1130	0.0001	0.8099	0.1749	0.9826	0.2998	0.4675	0.1758	0.5910	0.6768	0.2439	0.8184	1.0000	0.9738	0.1681
V24	0.33275	0.15385	0.60839	-0.02098	-0.32985	-0.03497	-0.24562	0.15412	0.25919	0.40494	-0.45455	-0.15385	-0.27273	-0.41550	-0.31524	-0.13708
Zr	0.2906	0.6331	0.0358	0.9484	0.2951	0.9141	0.4416	0.6325	0.4159	0.1916	0.1377	0.6331	0.3911	0.1792	0.3182	0.6710
V25	-0.13684	0.35727	0.88617	0.36077	-0.28194	-0.18914	-0.30229	-0.24386	0.72982	-0.05291	0.19264	0.24869	-0.02102	0.02116	0.03158	0.27817
Y	0.6715	0.2542	0.0001	0.2493	0.3746	0.5560	0.3396	0.4450	0.0071	0.8703	0.5486	0.4357	0.9483	0.9479	0.9224	0.3813
V26	0.28421	0.06655	-0.24168	0.19615	0.04130	-0.21716	0.78208	0.88421	-0.10877	0.17990	-0.40280	-0.83012	0.47986	-0.14462	0.38772	-0.48768
Sr	0.3706	0.8372	0.4492	0.5412	0.8986	0.4978	0.0026	0.0001	0.7365	0.5758	0.1942	0.0008	0.1144	0.6538	0.2130	0.1078
V27	0.35789	0.13310	0.39580	0.29072	-0.81171	-0.42382	-0.52548	-0.03158	0.36667	0.05644	0.12259	-0.06655	-0.05954	-0.02116	0.17193	0.09507
Rb	0.2534	0.6801	0.2028	0.3593	0.0013	0.1698	0.0793	0.9224	0.2411	0.8617	0.7043	0.8372	0.8542	0.9479	0.5931	0.7688
V28	0.26693	0.11014	0.28068	0.06750	-0.37524	0.12790	0.33336	0.28295	0.12457	0.43293	-0.27357	-0.29133	0.01776	-0.06440	0.03559	-0.28216
U	0.4016	0.7333	0.3769	0.8349	0.2294	0.6920	0.2897	0.3729	0.6997	0.1598	0.3896	0.3582	0.9563	0.8424	0.9126	0.3742
V29	-0.10778	0.07055	0.81132	0.05997	-0.42863	0.03880	-0.32921	-0.23676	0.24736	-0.00178	0.10582	0.37038	-0.05291	-0.40142	-0.28976	0.05319
Th	0.7388	0.8275	0.0014	0.8531	0.1644	0.9047	0.2961	0.4588	0.4383	0.9956	0.7434	0.2360	0.8703	0.1959	0.3610	0.8696
V30	0.28120	0.63509	0.22807	0.31930	-0.01799	-0.39649	0.26408	0.68366	0.12478	0.21202	-0.09825	-0.46316	0.54737	0.20495	0.56591	0.18519
Pb	0.3760	0.0265	0.4759	0.3117	0.9557	0.2019	0.4069	0.0142	0.6992	0.5083	0.7613	0.1294	0.0655	0.5228	0.0551	0.5645
V31	0.06842	0.74256	0.05954	0.45534	0.28194	-0.36427	0.50967	0.49298	0.37368	0.20635	-0.24518	-0.48687	0.54991	0.17637	0.75789	0.24472
Cr	0.8327	0.0057	0.8542	0.1369	0.3746	0.2444	0.0905	0.1034	0.2315	0.5199	0.4424	0.1084	0.0640	0.5835	0.0043	0.4433
V32	-0.11228	0.63047	0.15412	0.49037	-0.03053	-0.43082	0.45519	0.50000	0.17895	-0.05115	0.30473	-0.25569	0.81611	0.26808	0.79825	0.34859
V	0.7283	0.0280	0.6325	0.1055	0.9250	0.1621	0.1370	0.0979	0.5779	0.8746	0.3355	0.4225	0.0012	0.3995	0.0019	0.2668
V33	-0.40631	0.83916	0.57343	0.48951	0.28324	-0.29371	0.11930	0.03503	0.69352	0.12676	0.13986	0.03497	0.41958	0.14789	0.45884	0.57646
Ba	0.1900	0.0006	0.0513	0.1063	0.3723	0.3541	0.7119	0.9139	0.0124	0.6946	0.6646	0.9141	0.1745	0.6465	0.1335	0.0498
V34	0.05282	0.44992	0.08084	0.63270	-0.23969	-0.74166	0.12698	0.41726	0.20247	-0.40177	0.40071	-0.21090	0.71706	0.10619	0.84155	0.34806
Sc	0.8705	0.1422	0.8028	0.0272	0.4531	0.0058	0.6941	0.1772	0.5280	0.1955	0.1968	0.5106	0.0087	0.7426	0.0006	0.2676
V35	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
As																
V36	-0.25787	-0.01450	-0.34080	0.42782	0.39779	-0.27554	0.15645	0.02542	0.01090	-0.54403	0.55834	0.20303	0.07251	0.21177	0.23971	0.24420
S	0.4184	0.9643	0.2783	0.1653	0.2003	0.3860	0.6273	0.9375	0.9732	0.0675	0.0592	0.5268	0.8228	0.5088	0.4530	0.4443

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 12

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V6	-0.20071	-0.06738	0.33275	-0.13684	0.28421	0.35789	0.26693	-0.10778	0.28120	0.06842	-0.11228	-0.40631	0.05282	.	-0.25787
SiO2	0.5317	0.8352	0.2906	0.6715	0.3706	0.2534	0.4016	0.7388	0.3760	0.8327	0.7283	0.1900	0.8705		0.4184
V7	0.53779	0.48145	0.15385	0.35727	0.06655	0.13310	0.11014	0.07055	0.63509	0.74256	0.63047	0.83916	0.44992	.	-0.01450
TiO2	0.0713	0.1130	0.6331	0.2542	0.8372	0.6801	0.7333	0.8275	0.0265	0.0057	0.0280	0.0006	0.1422		0.9643
V8	0.84008	0.96291	0.60839	0.88617	-0.24168	0.39580	0.28068	0.81132	0.22807	0.05954	0.15412	0.57343	0.08084	.	-0.34080
Al2O3	0.0006	0.0001	0.0358	0.0001	0.4492	0.2028	0.3769	0.0014	0.4759	0.8542	0.6325	0.0513	0.8028		0.2783
V9	0.54834	0.07788	-0.02098	0.36077	0.19615	0.29072	0.06750	0.05997	0.31930	0.45534	0.49037	0.48951	0.63270	.	0.42782
Fe2O3	0.0649	0.8099	0.9484	0.2493	0.5412	0.3593	0.8349	0.8531	0.3117	0.1369	0.1055	0.1063	0.0272		0.1653
V10	-0.22347	-0.41927	-0.32985	-0.28194	0.04130	-0.81171	-0.37524	-0.42863	-0.01799	0.28194	-0.03053	0.28324	-0.23969	.	0.39779
MnO	0.4851	0.1749	0.2951	0.3746	0.8986	0.0013	0.2294	0.1644	0.9557	0.3746	0.9250	0.3723	0.4531		0.2003
V11	-0.41477	0.00708	-0.03497	-0.18914	-0.21716	-0.42382	0.12790	0.03880	-0.39649	-0.36427	-0.43082	-0.29371	-0.74166	.	-0.27554
MgO	0.1800	0.9826	0.9141	0.5560	0.4978	0.1698	0.6920	0.9047	0.2019	0.2444	0.1621	0.3541	0.0058		0.3860
V12	-0.38977	-0.32683	-0.24562	-0.30229	0.78208	-0.52548	0.33336	-0.32921	0.26408	0.50967	0.45519	0.11930	0.12698	.	0.15645
CaO	0.2104	0.2998	0.4416	0.3396	0.0026	0.0793	0.2897	0.2961	0.4069	0.0905	0.1370	0.7119	0.6941		0.6273
V13	-0.31162	-0.23228	0.15412	-0.24386	0.88421	-0.03158	0.28295	-0.23676	0.68366	0.49298	0.50000	0.03503	0.41726	.	0.02542
Na2O	0.3241	0.4675	0.6325	0.4450	0.0001	0.9224	0.3729	0.4588	0.0142	0.1034	0.0979	0.9139	0.1772		0.9375
V14	0.80634	0.41846	0.25919	0.72982	-0.10877	0.36667	0.12457	0.24736	0.12478	0.37368	0.17895	0.69352	0.20247	.	0.01090
K2O	0.0015	0.1758	0.4159	0.0071	0.7365	0.2411	0.6997	0.4383	0.6992	0.2315	0.5779	0.0124	0.5280		0.9732
V15	-0.26549	0.17291	0.40494	-0.05291	0.17990	0.05644	0.43293	-0.00178	0.21202	0.20635	-0.05115	0.12676	-0.40177	.	-0.54403
P2O5	0.4043	0.5910	0.1916	0.8703	0.5758	0.8617	0.1598	0.9956	0.5083	0.5199	0.8746	0.6946	0.1955		0.0675
V16	0.36556	0.13452	-0.45455	0.19264	-0.40280	0.12259	-0.27357	0.10582	-0.09825	-0.24518	0.30473	0.13986	0.40071	.	0.55834
H2O-	0.2426	0.6768	0.1377	0.5486	0.1942	0.7043	0.3896	0.7434	0.7613	0.4424	0.3355	0.6646	0.1968		0.0592
V17	0.34095	0.36463	-0.15385	0.24869	-0.83012	-0.06655	-0.29133	0.37038	-0.46316	-0.48687	-0.25569	0.03497	-0.21090	.	0.20303
LOI	0.2781	0.2439	0.6331	0.4357	0.0008	0.8372	0.3582	0.2360	0.1294	0.1084	0.4225	0.9141	0.5106		0.5268
V18	0.15114	0.07434	-0.27273	-0.02102	0.47986	-0.05954	0.01776	-0.05291	0.54737	0.54991	0.81611	0.41958	0.71706	.	0.07251
Zn	0.6391	0.8184	0.3911	0.9483	0.1144	0.8542	0.9563	0.8703	0.0655	0.0640	0.0012	0.1745	0.0087		0.8228
V19	0.09558	0.00000	-0.41550	0.02116	-0.14462	-0.02116	-0.06440	-0.40142	0.20495	0.17637	0.26808	0.14789	0.10619	.	0.21177
Cu	0.7676	1.0000	0.1792	0.9479	0.6538	0.9479	0.8424	0.1959	0.5228	0.5835	0.3995	0.6465	0.7426		0.5088
V20	0.31866	-0.01064	-0.31524	0.03158	0.38772	0.17193	0.03559	-0.28976	0.56591	0.75789	0.79825	0.45884	0.84155	.	0.23971
Ni	0.3127	0.9738	0.3182	0.9224	0.2130	0.5931	0.9126	0.3610	0.0551	0.0043	0.0019	0.1335	0.0006		0.4530
V21	0.54417	0.42528	-0.13708	0.27817	-0.48768	0.09507	-0.28216	0.05319	0.18519	0.24472	0.34859	0.57646	0.34806	.	0.24420
Co	0.0674	0.1681	0.6710	0.3813	0.1078	0.7688	0.3742	0.8696	0.5645	0.4433	0.2668	0.0498	0.2676		0.4443

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 12

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V22	1.00000	0.70464	0.37610	0.88909	-0.25352	0.37676	-0.02322	0.59220	0.14815	0.17430	0.14437	0.62215	0.28622	.	-0.13850
Ga	0.0	0.0105	0.2282	0.0001	0.4266	0.2274	0.9429	0.0425	0.6459	0.5880	0.6544	0.0308	0.3671		0.6677
V23	0.70464	1.00000	0.60182	0.77664	-0.21100	0.40605	0.36691	0.82143	0.20960	0.02128	0.16668	0.45667	0.05160	.	-0.49555
Nb	0.0105	0.0	0.0384	0.0030	0.5103	0.1903	0.2407	0.0011	0.5132	0.9477	0.6046	0.1356	0.8735		0.1014
V24	0.37610	0.60182	1.00000	0.62347	0.12609	0.23468	0.23804	0.69138	0.29825	-0.06305	-0.26270	0.22378	-0.27065	.	-0.58009
Zr	0.2282	0.0384	0.0	0.0303	0.6962	0.4628	0.4563	0.0128	0.3464	0.8457	0.4094	0.4845	0.3949		0.0480
V25	0.88909	0.77664	0.62347	1.00000	-0.10526	0.40702	0.26159	0.76680	0.15817	-0.01754	0.01930	0.48687	0.03697	.	-0.23244
Y	0.0001	0.0030	0.0303	0.0	0.7447	0.1891	0.4115	0.0036	0.6234	0.9568	0.9525	0.1084	0.9092		0.4672
V26	-0.25352	-0.21100	0.12609	-0.10526	1.00000	-0.05263	0.43777	-0.14488	0.52373	0.46316	0.47544	0.03503	0.33275	.	-0.10169
Sr	0.4266	0.5103	0.6962	0.7447	0.0	0.8710	0.1547	0.6533	0.0805	0.1294	0.1183	0.9139	0.2906		0.7532
V27	0.37676	0.40605	0.23468	0.40702	-0.05263	1.00000	0.26693	0.32156	0.31986	-0.24211	0.29825	-0.05954	0.48064	.	-0.11985
Rb	0.2274	0.1903	0.4628	0.1891	0.8710	0.0	0.4016	0.3081	0.3108	0.4484	0.3464	0.8542	0.1137		0.7106
V28	-0.02322	0.36691	0.23804	0.26159	0.43777	0.26693	1.00000	0.30825	0.18540	0.12813	0.33989	0.01421	-0.04465	.	-0.13999
U	0.9429	0.2407	0.4563	0.4115	0.1547	0.4016	0.0	0.3297	0.5640	0.6915	0.2797	0.9650	0.8904		0.6643
V29	0.59220	0.82143	0.69138	0.76680	-0.14488	0.32156	0.30825	1.00000	-0.02478	-0.29859	-0.09541	0.23281	-0.10816	.	-0.43161
Th	0.0425	0.0011	0.0128	0.0036	0.6533	0.3081	0.3297	0.0	0.9391	0.3458	0.7680	0.4665	0.7379		0.1612
V30	0.14815	0.20960	0.29825	0.15817	0.52373	0.31986	0.18540	-0.02478	1.00000	0.45870	0.63093	0.31228	0.55027	.	-0.01819
Pb	0.6459	0.5132	0.3464	0.6234	0.0805	0.3108	0.5640	0.9391	0.0	0.1336	0.0278	0.3230	0.0638		0.9553
V31	0.17430	0.02128	-0.06305	-0.01754	0.46316	-0.24211	0.12813	-0.29859	0.45870	1.00000	0.56140	0.66900	0.37852	.	-0.07990
Cr	0.5880	0.9477	0.8457	0.9568	0.1294	0.4484	0.6915	0.3458	0.1336	0.0	0.0575	0.0174	0.2250		0.8050
V32	0.14437	0.16668	-0.26270	0.01930	0.47544	0.29825	0.33989	-0.09541	0.63093	0.56140	1.00000	0.43433	0.81691	.	0.18160
V	0.6544	0.6046	0.4094	0.9525	0.1183	0.3464	0.2797	0.7680	0.0278	0.0575	0.0	0.1583	0.0012		0.5722
V33	0.62215	0.45667	0.22378	0.48687	0.03503	-0.05954	0.01421	0.23281	0.31228	0.66900	0.43433	1.00000	0.24253	.	-0.08701
Ba	0.0308	0.1356	0.4845	0.1084	0.9139	0.8542	0.9650	0.4665	0.3230	0.0174	0.1583	0.0	0.4475		0.7880
V34	0.28622	0.05160	-0.27065	0.03697	0.33275	0.48064	-0.04465	-0.10816	0.55027	0.37852	0.81691	0.24253	1.00000	.	0.19317
Sc	0.3671	0.8735	0.3949	0.9092	0.2906	0.1137	0.8904	0.7379	0.0638	0.2250	0.0012	0.4475	0.0		0.5475
V35	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
As															
V36	-0.13850	-0.49555	-0.58009	-0.23244	-0.10169	-0.11985	-0.13999	-0.43161	-0.01819	-0.07990	0.18160	-0.08701	0.19317	.	1.00000
S	0.6677	0.1014	0.0480	0.4672	0.7532	0.7106	0.6643	0.1612	0.9553	0.8050	0.5722	0.7880	0.5475		0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 14

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V6	1.00000	0.51045	0.51209	0.38504	-0.77300	-0.79780	-0.67912	0.79427	0.73267	0.62903	-0.38462	-0.90330	-0.24396	-0.25963	0.38064	-0.24229
SiO2	0.0	0.0622	0.0612	0.1740	0.0012	0.0006	0.0076	0.0007	0.0029	0.0160	0.1745	0.0001	0.4006	0.3701	0.1794	0.4039
V7	0.51045	1.00000	0.95490	0.85132	-0.51221	-0.79208	-0.81188	0.65782	0.54405	0.58094	0.07261	-0.70847	-0.20462	-0.37555	0.93943	0.43660
TiO2	0.0622	0.0	0.0001	0.0001	0.0611	0.0007	0.0004	0.0106	0.0443	0.0294	0.8052	0.0046	0.4829	0.1858	0.0001	0.1186
V8	0.51209	0.95490	1.00000	0.76128	-0.47177	-0.72747	-0.84176	0.63497	0.59846	0.48506	0.23077	-0.67033	-0.06813	-0.41364	0.90869	0.34141
Al2O3	0.0612	0.0001	0.0	0.0016	0.0885	0.0032	0.0002	0.0147	0.0238	0.0787	0.4273	0.0087	0.8170	0.1415	0.0001	0.2322
V9	0.38504	0.85132	0.76128	1.00000	-0.32928	-0.73267	-0.72387	0.53489	0.47797	0.40023	-0.09901	-0.64026	-0.27283	-0.34251	0.88216	0.58324
Fe2O3	0.1740	0.0001	0.0016	0.0	0.2503	0.0029	0.0034	0.0487	0.0839	0.1562	0.7363	0.0136	0.3453	0.2306	0.0001	0.0286
V10	-0.77300	-0.51221	-0.47177	-0.32928	1.00000	0.77743	0.64011	-0.72129	-0.82707	-0.47321	0.42748	0.68662	0.44077	0.27162	-0.28715	0.21976
MnO	0.0012	0.0611	0.0885	0.2503	0.0	0.0011	0.0137	0.0036	0.0003	0.0874	0.1274	0.0067	0.1147	0.3475	0.3195	0.4503
V11	-0.79780	-0.79208	-0.72747	-0.73267	0.77743	1.00000	0.76264	-0.86285	-0.76788	-0.46956	0.25714	0.84176	0.51648	0.44444	-0.67767	-0.01982
MgO	0.0006	0.0007	0.0032	0.0029	0.0011	0.0	0.0015	0.0001	0.0013	0.0903	0.3748	0.0002	0.0586	0.1113	0.0077	0.9464
V12	-0.67912	-0.81188	-0.84176	-0.72387	0.64011	0.76264	1.00000	-0.79648	-0.81188	-0.55373	0.05495	0.79780	0.19121	0.53025	-0.71947	-0.30837
CaO	0.0076	0.0004	0.0002	0.0034	0.0137	0.0015	0.0	0.0007	0.0004	0.0399	0.8520	0.0006	0.5126	0.0511	0.0037	0.2834
V13	0.79427	0.65782	0.63497	0.53489	-0.72129	-0.86285	-0.79648	1.00000	0.70211	0.50836	-0.25664	-0.78763	-0.54205	-0.40754	0.51164	-0.04545
Na2O	0.0007	0.0106	0.0147	0.0487	0.0036	0.0001	0.0007	0.0	0.0051	0.0634	0.3758	0.0008	0.0452	0.1481	0.0615	0.8774
V14	0.73267	0.54405	0.59846	0.47797	-0.82707	-0.76788	-0.81188	0.70211	1.00000	0.28049	-0.19802	-0.73047	-0.25963	-0.44714	0.40859	-0.08820
K2O	0.0029	0.0443	0.0238	0.0839	0.0003	0.0013	0.0004	0.0051	0.0	0.3314	0.4974	0.0030	0.3701	0.1089	0.1469	0.7643
V15	0.62903	0.58094	0.48506	0.40023	-0.47321	-0.46956	-0.55373	0.50836	0.28049	1.00000	-0.28794	-0.66447	0.02658	-0.03326	0.50888	0.35295
P2O5	0.0160	0.0294	0.0787	0.1562	0.0874	0.0903	0.0399	0.0634	0.3314	0.0	0.3181	0.0095	0.9281	0.9101	0.0631	0.2158
V16	-0.38462	0.07261	0.23077	-0.09901	0.42748	0.25714	0.05495	-0.25664	-0.19802	-0.28794	1.00000	0.26593	0.21758	-0.30583	0.24422	0.05286
H2O-	0.1745	0.8052	0.4273	0.7363	0.1274	0.3748	0.8520	0.3758	0.4974	0.3181	0.0	0.3581	0.4549	0.2876	0.4001	0.8576
V17	-0.90330	-0.70847	-0.67033	-0.64026	0.68662	0.84176	0.79780	-0.78763	-0.73047	-0.66447	0.26593	1.00000	0.22637	0.33003	-0.61826	-0.07269
LOI	0.0001	0.0046	0.0087	0.0136	0.0067	0.0002	0.0006	0.0008	0.0030	0.0095	0.3581	0.0	0.4364	0.2492	0.0184	0.8050
V18	-0.24396	-0.20462	-0.06813	-0.27283	0.44077	0.51648	0.19121	-0.54205	-0.25963	0.02658	0.21758	0.22637	1.00000	0.30803	-0.13861	0.27533
Zn	0.4006	0.4829	0.8170	0.3453	0.1147	0.0586	0.5126	0.0452	0.3701	0.9281	0.4549	0.4364	0.0	0.2840	0.6365	0.3407
V19	-0.25963	-0.37555	-0.41364	-0.34251	0.27162	0.44444	0.53025	-0.40754	-0.44714	-0.03326	-0.30583	0.33003	0.30803	1.00000	-0.32709	-0.04631
Cu	0.3701	0.1858	0.1415	0.2306	0.3475	0.1113	0.0511	0.1481	0.1089	0.9101	0.2876	0.2492	0.2840	0.0	0.2537	0.8751
V20	0.38064	0.93943	0.90869	0.88216	-0.28715	-0.67767	-0.71947	0.51164	0.40859	0.50888	0.24422	-0.61826	-0.13861	-0.32709	1.00000	0.52701
Ni	0.1794	0.0001	0.0001	0.0001	0.3195	0.0077	0.0037	0.0615	0.1469	0.0631	0.4001	0.0184	0.6365	0.2537	0.0	0.0528
V21	-0.24229	0.43660	0.34141	0.58324	0.21976	-0.01982	-0.30837	-0.04545	-0.08820	0.35295	0.05286	-0.07269	0.27533	-0.04631	0.52701	1.00000
Co	0.4039	0.1186	0.2322	0.0286	0.4503	0.9464	0.2834	0.8774	0.7643	0.2158	0.8576	0.8050	0.3407	0.8751	0.0528	0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 14

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V22	0.40664	0.89050	0.95250	0.68364	-0.35746	-0.61216	-0.80664	0.60734	0.52102	0.50557	0.30056	-0.56354	0.02210	-0.33850	0.87390	0.44519
Ga	0.1491	0.0001	0.0001	0.0070	0.2096	0.0200	0.0005	0.0212	0.0561	0.0651	0.2964	0.0358	0.9402	0.2365	0.0001	0.1107
V23	0.57269	0.83572	0.90088	0.56229	-0.43952	-0.66740	-0.74670	0.62085	0.57332	0.47947	0.30617	-0.69824	-0.05947	-0.45094	0.77178	0.11589
Nb	0.0323	0.0002	0.0001	0.0363	0.1158	0.0091	0.0022	0.0178	0.0321	0.0828	0.2871	0.0055	0.8400	0.1056	0.0012	0.6932
V24	0.56986	0.89097	0.96810	0.63216	-0.51553	-0.69967	-0.84268	0.67997	0.62996	0.51110	0.21562	-0.66887	-0.03740	-0.43612	0.80396	0.22492
Zr	0.0334	0.0001	0.0001	0.0153	0.0592	0.0053	0.0002	0.0075	0.0158	0.0618	0.4591	0.0089	0.8990	0.1190	0.0005	0.4395
V25	0.45134	0.75749	0.82966	0.52160	-0.30435	-0.58187	-0.67037	0.65033	0.40975	0.48606	0.19691	-0.47567	-0.03319	-0.28018	0.71319	0.22949
Y	0.1052	0.0017	0.0002	0.0558	0.2901	0.0290	0.0087	0.0118	0.1457	0.0780	0.4999	0.0856	0.9103	0.3319	0.0042	0.4300
V26	0.79341	0.29263	0.31429	0.14741	-0.87267	-0.68352	-0.56923	0.67258	0.85369	0.29237	-0.38022	-0.65275	-0.28352	-0.29923	0.09461	-0.36344
Sr	0.0007	0.3100	0.2738	0.6150	0.0001	0.0070	0.0336	0.0084	0.0001	0.3104	0.1799	0.0114	0.3260	0.2987	0.7477	0.2015
V27	0.74780	0.51607	0.58630	0.42858	-0.81494	-0.76550	-0.79427	0.70935	0.99005	0.24972	-0.17257	-0.71019	-0.26107	-0.51164	0.36988	-0.16297
Rb	0.0021	0.0589	0.0276	0.1263	0.0004	0.0014	0.0007	0.0045	0.0001	0.3892	0.5552	0.0044	0.3673	0.0615	0.1930	0.5777
V28	0.44875	0.45870	0.29287	0.49180	-0.32609	-0.40623	-0.45819	0.40418	0.18679	0.85925	-0.38734	-0.57156	-0.04251	-0.02010	0.45397	0.57282
U	0.1075	0.0990	0.3096	0.0741	0.2552	0.1495	0.0994	0.1518	0.5226	0.0001	0.1712	0.0327	0.8853	0.9456	0.1030	0.0323
V29	0.39204	0.91798	0.92140	0.69403	-0.42411	-0.60024	-0.81509	0.58640	0.49114	0.61719	0.24142	-0.60024	-0.06202	-0.41797	0.86033	0.50278
Th	0.1656	0.0001	0.0001	0.0059	0.1307	0.0232	0.0004	0.0275	0.0745	0.0187	0.4057	0.0232	0.8332	0.1370	0.0001	0.0669
V30	-0.27123	-0.04525	-0.10143	-0.04746	0.37889	0.18302	0.33958	-0.09101	-0.47351	-0.05667	0.03308	0.13892	0.13231	0.60707	0.02097	0.19558
Pb	0.3483	0.8779	0.7301	0.8720	0.1816	0.5311	0.2349	0.7570	0.0872	0.8474	0.9106	0.6358	0.6521	0.0213	0.9433	0.5028
V31	0.41099	0.93069	0.83297	0.92849	-0.30787	-0.72747	-0.69231	0.57523	0.35644	0.51164	0.02857	-0.67033	-0.28352	-0.31243	0.93949	0.51322
Cr	0.1443	0.0001	0.0002	0.0001	0.2842	0.0032	0.0061	0.0314	0.2110	0.0615	0.9228	0.0087	0.3260	0.2768	0.0001	0.0605
V32	0.68791	0.91089	0.86813	0.88449	-0.57366	-0.87253	-0.88132	0.75444	0.67327	0.60467	-0.02418	-0.86813	-0.29670	-0.46645	0.89549	0.35903
V	0.0065	0.0001	0.0001	0.0001	0.0320	0.0001	0.0001	0.0018	0.0083	0.0220	0.9346	0.0001	0.3030	0.0927	0.0001	0.2074
V33	0.66154	0.70847	0.81099	0.53025	-0.71541	-0.75385	-0.82857	0.70134	0.86689	0.23921	0.00220	-0.65714	-0.18242	-0.39604	0.57426	-0.08590
Ba	0.0100	0.0046	0.0004	0.0511	0.0040	0.0018	0.0003	0.0052	0.0001	0.4101	0.9941	0.0107	0.5325	0.1610	0.0317	0.7703
V34	-0.15198	0.16445	0.25702	0.17676	0.09009	-0.18550	0.00670	0.07312	0.10068	-0.54619	0.48498	0.02235	-0.14304	-0.17564	0.23157	-0.11311
Sc	0.6040	0.5743	0.3750	0.5455	0.7594	0.5255	0.9819	0.8038	0.7320	0.0433	0.0788	0.9395	0.6257	0.5481	0.4257	0.7002
V35	-0.18279	-0.15615	-0.14623	0.07076	0.32299	0.38264	0.01950	-0.42935	-0.08906	0.12158	-0.20473	0.05606	0.67511	0.41356	-0.05490	0.51539
As	0.5317	0.5940	0.6179	0.8100	0.2600	0.1769	0.9473	0.1255	0.7621	0.6788	0.4826	0.8490	0.0081	0.1416	0.8521	0.0593
V36	-0.84767	-0.47887	-0.48947	-0.41762	0.60315	0.78315	0.69193	-0.87123	-0.65483	-0.43050	0.27366	0.76980	0.41160	0.57242	-0.34635	0.20179
S	0.0001	0.0832	0.0757	0.1373	0.0224	0.0009	0.0061	0.0001	0.0110	0.1244	0.3438	0.0013	0.1437	0.0324	0.2251	0.4891

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 14

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V6	0.40664	0.57269	0.56986	0.45134	0.79341	0.74780	0.44875	0.39204	-0.27123	0.41099	0.68791	0.66154	-0.15198	-0.18279	-0.84767
SiO2	0.1491	0.0323	0.0334	0.1052	0.0007	0.0021	0.1075	0.1656	0.3483	0.1443	0.0065	0.0100	0.6040	0.5317	0.0001
V7	0.89050	0.83572	0.89097	0.75749	0.29263	0.51607	0.45870	0.91798	-0.04525	0.93069	0.91089	0.70847	0.16445	-0.15615	-0.47887
TiO2	0.0001	0.0002	0.0001	0.0017	0.3100	0.0589	0.0990	0.0001	0.8779	0.0001	0.0001	0.0046	0.5743	0.5940	0.0832
V8	0.95250	0.90088	0.96810	0.82966	0.31429	0.58630	0.29287	0.92140	-0.10143	0.83297	0.86813	0.81099	0.25702	-0.14623	-0.48947
Al2O3	0.0001	0.0001	0.0001	0.0002	0.2738	0.0276	0.3096	0.0001	0.7301	0.0002	0.0001	0.0004	0.3750	0.6179	0.0757
V9	0.68364	0.56229	0.63216	0.52160	0.14741	0.42858	0.49180	0.69403	-0.04746	0.92849	0.88449	0.53025	0.17676	0.07076	-0.41762
Fe2O3	0.0070	0.0363	0.0153	0.0558	0.6150	0.1263	0.0741	0.0059	0.8720	0.0001	0.0001	0.0511	0.5455	0.8100	0.1373
V10	-0.35746	-0.43952	-0.51553	-0.30435	-0.87267	-0.81494	-0.32609	-0.42411	0.37889	-0.30787	-0.57366	-0.71541	0.09009	0.32299	0.60315
MnO	0.2096	0.1158	0.0592	0.2901	0.0001	0.0004	0.2552	0.1307	0.1816	0.2842	0.0320	0.0040	0.7594	0.2600	0.0224
V11	-0.61216	-0.66740	-0.69967	-0.58187	-0.68352	-0.76550	-0.40623	-0.60024	0.18302	-0.72747	-0.87253	-0.75385	-0.18550	0.38264	0.78315
MgO	0.0200	0.0091	0.0053	0.0290	0.0070	0.0014	0.1495	0.0232	0.5311	0.0032	0.0001	0.0018	0.5255	0.1769	0.0009
V12	-0.80664	-0.74670	-0.84268	-0.67037	-0.56923	-0.79427	-0.45819	-0.81509	0.33958	-0.69231	-0.88132	-0.82857	0.00670	0.01950	0.69193
CaO	0.0005	0.0022	0.0002	0.0087	0.0336	0.0007	0.0994	0.0004	0.2349	0.0061	0.0001	0.0003	0.9819	0.9473	0.0061
V13	0.60734	0.62085	0.67997	0.65033	0.67258	0.70935	0.40418	0.58640	-0.09101	0.57523	0.75444	0.70134	0.07312	-0.42935	-0.87123
Na2O	0.0212	0.0178	0.0075	0.0118	0.0084	0.0045	0.1518	0.0275	0.7570	0.0314	0.0018	0.0052	0.8038	0.1255	0.0001
V14	0.52102	0.57332	0.62996	0.40975	0.85369	0.99005	0.18679	0.49114	-0.47351	0.35644	0.67327	0.86689	0.10068	-0.08906	-0.65483
K2O	0.0561	0.0321	0.0158	0.1457	0.0001	0.0001	0.5226	0.0745	0.0872	0.2110	0.0083	0.0001	0.7320	0.7621	0.0110
V15	0.50557	0.47947	0.51110	0.48606	0.29237	0.24972	0.85925	0.61719	-0.05667	0.51164	0.60467	0.23921	-0.54619	0.12158	-0.43050
P2O5	0.0651	0.0828	0.0618	0.0780	0.3104	0.3892	0.0001	0.0187	0.8474	0.0615	0.0220	0.4101	0.0433	0.6788	0.1244
V16	0.30056	0.30617	0.21562	0.19691	-0.38022	-0.17257	-0.38734	0.24142	0.03308	0.02857	-0.02418	0.00220	0.48498	-0.20473	0.27366
H2O-	0.2964	0.2871	0.4591	0.4999	0.1799	0.5552	0.1712	0.4057	0.9106	0.9228	0.9346	0.9941	0.0788	0.4826	0.3438
V17	-0.56354	-0.69824	-0.66887	-0.47567	-0.65275	-0.71019	-0.57156	-0.60024	0.13892	-0.67033	-0.86813	-0.65714	0.02235	0.05606	0.76980
LOI	0.0358	0.0055	0.0089	0.0856	0.0114	0.0044	0.0327	0.0232	0.6358	0.0087	0.0001	0.0107	0.9395	0.8490	0.0013
V18	0.02210	-0.05947	-0.03740	-0.03319	-0.28352	-0.26107	-0.04251	-0.06202	0.13231	-0.28352	-0.29670	-0.18242	-0.14304	0.67511	0.41160
Zn	0.9402	0.8400	0.8990	0.9103	0.3260	0.3673	0.8853	0.8332	0.6521	0.3260	0.3030	0.5325	0.6257	0.0081	0.1437
V19	-0.33850	-0.45094	-0.43612	-0.28018	-0.29923	-0.51164	-0.02010	-0.41797	0.60707	-0.31243	-0.46645	-0.39604	-0.17564	0.41356	0.57242
Cu	0.2365	0.1056	0.1190	0.3319	0.2987	0.0615	0.9456	0.1370	0.0213	0.2768	0.0927	0.1610	0.5481	0.1416	0.0324
V20	0.87390	0.77178	0.80396	0.71319	0.09461	0.36988	0.45397	0.86033	0.02097	0.93949	0.89549	0.57426	0.23157	-0.05490	-0.34635
Ni	0.0001	0.0012	0.0005	0.0042	0.7477	0.1930	0.1030	0.0001	0.9433	0.0001	0.0001	0.0317	0.4257	0.8521	0.2251
V21	0.44519	0.11589	0.22492	0.22949	-0.36344	-0.16297	0.57282	0.50278	0.19558	0.51322	0.35903	-0.08590	-0.11311	0.51539	0.20179
Co	0.1107	0.6932	0.4395	0.4300	0.2015	0.5777	0.0323	0.0669	0.5028	0.0605	0.2074	0.7703	0.7002	0.0593	0.4891

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 14

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V22	1.00000	0.85715	0.94138	0.89878	0.22984	0.50278	0.33249	0.93430	0.00554	0.75139	0.78896	0.71382	0.22024	-0.07842	-0.41500
Ga	0.0	0.0001	0.0001	0.0001	0.4293	0.0669	0.2454	0.0001	0.9850	0.0019	0.0008	0.0041	0.4493	0.7899	0.1401
V23	0.85715	1.00000	0.94267	0.82484	0.32379	0.58870	0.16924	0.86461	-0.14365	0.70264	0.75991	0.73128	0.19935	-0.22350	-0.57974
Nb	0.0001	0.0	0.0001	0.0003	0.2588	0.0268	0.5630	0.0001	0.6242	0.0051	0.0016	0.0030	0.4944	0.4424	0.0298
V24	0.94138	0.94267	1.00000	0.88816	0.36964	0.63678	0.23171	0.91687	-0.15894	0.71947	0.79868	0.82508	0.18682	-0.19031	-0.57687
Zr	0.0001	0.0001	0.0	0.0001	0.1933	0.0143	0.4254	0.0001	0.5873	0.0037	0.0006	0.0003	0.5225	0.5146	0.0308
V25	0.89878	0.82484	0.88816	1.00000	0.19469	0.43430	0.21041	0.79822	0.00555	0.62170	0.63497	0.63276	0.11249	-0.21836	-0.55320
Y	0.0001	0.0003	0.0001	0.0	0.5048	0.1207	0.4703	0.0006	0.9850	0.0176	0.0147	0.0152	0.7018	0.4533	0.0402
V26	0.22984	0.32379	0.36964	0.19469	1.00000	0.86506	0.21729	0.19048	-0.37266	0.09011	0.44176	0.69231	-0.01564	-0.25347	-0.64743
Sr	0.4293	0.2588	0.1933	0.5048	0.0	0.0001	0.4555	0.5142	0.1894	0.7593	0.1138	0.0061	0.9577	0.3819	0.0123
V27	0.50278	0.58870	0.63678	0.43430	0.86506	1.00000	0.12363	0.46488	-0.52830	0.31859	0.64161	0.87391	0.10012	-0.15702	-0.71110
Rb	0.0669	0.0268	0.0143	0.1207	0.0001	0.0	0.6737	0.0940	0.0521	0.2669	0.0134	0.0001	0.7335	0.5919	0.0044
V28	0.33249	0.16924	0.23171	0.21041	0.21729	0.12363	1.00000	0.43320	0.06517	0.49834	0.57392	0.02834	-0.47194	0.25274	-0.28571
U	0.2454	0.5630	0.4254	0.4703	0.4555	0.6737	0.0	0.1218	0.8248	0.0697	0.0319	0.9234	0.0884	0.3833	0.3221
V29	0.93430	0.86461	0.91687	0.79822	0.19048	0.46488	0.43320	1.00000	-0.09222	0.79072	0.80401	0.62682	0.06532	-0.08474	-0.40247
Th	0.0001	0.0001	0.0001	0.0006	0.5142	0.0940	0.1218	0.0	0.7539	0.0008	0.0005	0.0164	0.8244	0.7733	0.1537
V30	0.00554	-0.14365	-0.15894	0.00555	-0.37266	-0.52830	0.06517	-0.09222	1.00000	0.07938	-0.14995	-0.33738	0.37784	0.02812	0.34042
Pb	0.9850	0.6242	0.5873	0.9850	0.1894	0.0521	0.8248	0.7539	0.0	0.7873	0.6089	0.2381	0.1829	0.9240	0.2337
V31	0.75139	0.70264	0.71947	0.62170	0.09011	0.31859	0.49834	0.79072	0.07938	1.00000	0.89011	0.51209	0.17433	-0.09018	-0.42495
Cr	0.0019	0.0051	0.0037	0.0176	0.7593	0.2669	0.0697	0.0008	0.7873	0.0	0.0001	0.0612	0.5511	0.7592	0.1299
V32	0.78896	0.75991	0.79868	0.63497	0.44176	0.64161	0.57392	0.80401	-0.14995	0.89011	1.00000	0.70110	0.13410	-0.11211	-0.64521
V	0.0008	0.0016	0.0006	0.0147	0.1138	0.0134	0.0319	0.0005	0.6089	0.0001	0.0	0.0052	0.6476	0.7028	0.0127
V33	0.71382	0.73128	0.82508	0.63276	0.69231	0.87391	0.02834	0.62682	-0.33738	0.51209	0.70110	1.00000	0.25702	-0.20960	-0.60294
Ba	0.0041	0.0030	0.0003	0.0152	0.0061	0.0001	0.9234	0.0164	0.2381	0.0612	0.0052	0.0	0.3750	0.4720	0.0225
V34	0.22024	0.19935	0.18682	0.11249	-0.01564	0.10012	-0.47194	0.06532	0.37784	0.17433	0.13410	0.25702	1.00000	-0.40770	0.04412
Sc	0.4493	0.4944	0.5225	0.7018	0.9577	0.7335	0.0884	0.8244	0.1829	0.5511	0.6476	0.3750	0.0	0.1479	0.8810
V35	-0.07842	-0.22350	-0.19031	-0.21836	-0.25347	-0.15702	0.25274	-0.08474	0.02812	-0.09018	-0.11211	-0.20960	-0.40770	1.00000	0.37625
As	0.7899	0.4424	0.5146	0.4533	0.3819	0.5919	0.3833	0.7733	0.9240	0.7592	0.7028	0.4720	0.1479	0.0	0.1849
V36	-0.41500	-0.57974	-0.57687	-0.55320	-0.64743	-0.71110	-0.28571	-0.40247	0.34042	-0.42495	-0.64521	-0.60294	0.04412	0.37625	1.00000
S	0.1401	0.0298	0.0308	0.0402	0.0123	0.0044	0.3221	0.1537	0.2337	0.1299	0.0127	0.0225	0.8810	0.1849	0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 57

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V6	1.00000	0.05765	-0.25850	-0.71239	-0.20718	0.11007	0.01728	0.24070	0.31227	-0.23322	0.05278	-0.13195	0.03011	-0.37837	-0.16335	0.09554
SiO2	0.0	0.6702	0.0522	0.0001	0.1220	0.4150	0.8985	0.0713	0.0180	0.0808	0.6966	0.3279	0.8240	0.0037	0.2247	0.4796
V7	0.05765	1.00000	0.80648	-0.28473	0.18953	-0.08963	-0.47404	-0.40208	-0.17880	-0.39508	-0.45558	-0.29698	0.08078	0.26661	0.14253	0.30968
TiO2	0.6702	0.0	0.0001	0.0318	0.1579	0.5073	0.0002	0.0019	0.1833	0.0024	0.0004	0.0249	0.5503	0.0450	0.2902	0.0191
V8	-0.25850	0.80648	1.00000	-0.13356	0.08758	-0.23543	-0.47740	-0.34201	-0.11167	-0.31117	-0.34990	-0.06946	-0.09135	0.32260	0.06539	0.17647
Al2O3	0.0522	0.0001	0.0	0.3219	0.5171	0.0779	0.0002	0.0092	0.4082	0.0185	0.0076	0.6077	0.4992	0.0144	0.6289	0.1891
V9	-0.71239	-0.28473	-0.13356	1.00000	0.40473	0.06027	0.05281	-0.36894	-0.56187	0.41171	-0.09304	-0.15328	0.12877	0.31234	0.28204	0.11785
Fe2O3	0.0001	0.0318	0.3219	0.0	0.0018	0.6561	0.6964	0.0047	0.0001	0.0015	0.4912	0.2550	0.3398	0.0180	0.0335	0.3826
V10	-0.20718	0.18953	0.08758	0.40473	1.00000	0.48953	-0.08773	-0.52123	-0.47287	0.04909	-0.29399	-0.44613	0.55922	0.42832	0.56052	0.64716
MnO	0.1220	0.1579	0.5171	0.0018	0.0	0.0001	0.5164	0.0001	0.0002	0.7169	0.0264	0.0005	0.0001	0.0009	0.0001	0.0001
V11	0.11007	-0.08963	-0.23543	0.06027	0.48953	1.00000	0.19708	-0.09195	0.11619	0.09410	0.11254	-0.08414	0.75136	0.18457	0.54267	0.49400
MgO	0.4150	0.5073	0.0779	0.6561	0.0001	0.0	0.1417	0.4963	0.3894	0.4863	0.4046	0.5338	0.0001	0.1693	0.0001	0.0001
V12	0.01728	-0.47404	-0.47740	0.05281	-0.08773	0.19708	1.00000	0.38636	0.15841	0.43016	0.38679	0.30626	0.23373	-0.15912	0.12231	-0.09134
CaO	0.8985	0.0002	0.0002	0.6964	0.5164	0.1417	0.0	0.0030	0.2392	0.0008	0.0030	0.0205	0.0801	0.2371	0.3648	0.4992
V13	0.24070	-0.40208	-0.34201	-0.36894	-0.52123	-0.09195	0.38636	1.00000	0.65337	-0.13445	0.35412	0.59914	-0.21719	-0.40454	-0.16618	-0.39453
Na2O	0.0713	0.0019	0.0092	0.0047	0.0001	0.4963	0.0030	0.0	0.0001	0.3187	0.0069	0.0001	0.1046	0.0018	0.2167	0.0024
V14	0.31227	-0.17880	-0.11167	-0.56187	-0.47287	0.11619	0.15841	0.65337	1.00000	-0.19202	0.31504	0.53210	-0.05300	-0.36900	-0.15044	-0.31055
K2O	0.0180	0.1833	0.4082	0.0001	0.0002	0.3894	0.2392	0.0001	0.0	0.1525	0.0170	0.0001	0.6954	0.0047	0.2640	0.0187
V15	-0.23322	-0.39508	-0.31117	0.41171	0.04909	0.09410	0.43016	-0.13445	-0.19202	1.00000	0.37079	0.14260	0.10518	0.12003	0.01064	-0.03548
P2O5	0.0808	0.0024	0.0185	0.0015	0.7169	0.4863	0.0008	0.3187	0.1525	0.0	0.0045	0.2900	0.4362	0.3738	0.9374	0.7933
V16	0.05278	-0.45558	-0.34990	-0.09304	-0.29399	0.11254	0.38679	0.35412	0.31504	0.37079	1.00000	0.58917	0.11989	-0.08916	-0.00477	-0.14589
H2O-	0.6966	0.0004	0.0076	0.4912	0.0264	0.4046	0.0030	0.0069	0.0170	0.0045	0.0	0.0001	0.3744	0.5096	0.9719	0.2789
V17	-0.13195	-0.29698	-0.06946	-0.15328	-0.44613	-0.08414	0.30626	0.59914	0.53210	0.14260	0.58917	1.00000	-0.00755	-0.15461	-0.15098	-0.46508
LOI	0.3279	0.0249	0.6077	0.2550	0.0005	0.5338	0.0205	0.0001	0.0001	0.2900	0.0001	0.0	0.9555	0.2508	0.2623	0.0003
V18	0.03011	0.08078	-0.09135	0.12877	0.55922	0.75136	0.23373	-0.21719	-0.05300	0.10518	0.11989	-0.00755	1.00000	0.30880	0.72075	0.49878
Zn	0.8240	0.5503	0.4992	0.3398	0.0001	0.0001	0.0801	0.1046	0.6954	0.4362	0.3744	0.9555	0.0	0.0194	0.0001	0.0001
V19	-0.37837	0.26661	0.32260	0.31234	0.42832	0.18457	-0.15912	-0.40454	-0.36900	0.12003	-0.08916	-0.15461	0.30880	1.00000	0.37021	0.36956
Cu	0.0037	0.0450	0.0144	0.0180	0.0009	0.1693	0.2371	0.0018	0.0047	0.3738	0.5096	0.2508	0.0194	0.0	0.0046	0.0047
V20	-0.16335	0.14253	0.06539	0.28204	0.56052	0.54267	0.12231	-0.16618	-0.15044	0.01064	-0.00477	-0.15098	0.72075	0.37021	1.00000	0.45967
Ni	0.2247	0.2902	0.6289	0.0335	0.0001	0.0001	0.3648	0.2167	0.2640	0.9374	0.9719	0.2623	0.0001	0.0046	0.0	0.0003
V21	0.09554	0.30968	0.17647	0.11785	0.64716	0.49400	-0.09134	-0.39453	-0.31055	-0.03548	-0.14589	-0.46508	0.49878	0.36956	0.45967	1.00000
Co	0.4796	0.0191	0.1891	0.3826	0.0001	0.0001	0.4992	0.0024	0.0187	0.7933	0.2789	0.0003	0.0001	0.0047	0.0003	0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 57

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V22	-0.33109	0.58505	0.72120	0.06579	0.13049	-0.09822	-0.34153	-0.32143	-0.04294	-0.19653	-0.32883	-0.17229	-0.06379	0.27866	0.24341	0.16165
Ga	0.0119	0.0001	0.0001	0.6268	0.3333	0.4673	0.0093	0.0148	0.7512	0.1429	0.0125	0.2000	0.6374	0.0358	0.0681	0.2296
V23	0.09368	0.32884	0.19124	-0.11280	0.10732	0.38464	-0.00872	-0.07075	0.00819	-0.02920	0.05751	0.16405	0.43336	0.00197	0.17443	0.02755
Nb	0.4882	0.0125	0.1542	0.4035	0.4268	0.0031	0.9487	0.6010	0.9518	0.8293	0.6709	0.2227	0.0008	0.9884	0.1944	0.8388
V24	0.36700	0.44176	0.23855	-0.30616	-0.09441	-0.07354	-0.30702	-0.10418	-0.14663	-0.25083	-0.21842	-0.26376	-0.08333	-0.02273	-0.08554	0.10632
Zr	0.0050	0.0006	0.0739	0.0205	0.4848	0.5867	0.0202	0.4406	0.2764	0.0598	0.1026	0.0474	0.5377	0.8667	0.5270	0.4312
V25	-0.10812	0.10876	-0.01171	0.27169	0.11855	0.08654	-0.05963	-0.21006	-0.19212	0.39790	0.01236	-0.18838	0.00950	0.12675	0.13875	0.13015
Y	0.4234	0.4206	0.9311	0.0409	0.3798	0.5221	0.6595	0.1168	0.1522	0.0022	0.9273	0.1605	0.9441	0.3475	0.3033	0.3346
V26	-0.15190	-0.42120	-0.23448	0.00141	-0.33806	-0.10220	0.51713	0.53129	0.37469	0.37660	0.37006	0.52220	-0.13120	-0.40582	-0.14362	-0.32004
Sr	0.2593	0.0011	0.0792	0.9917	0.0101	0.4494	0.0001	0.0001	0.0041	0.0039	0.0046	0.0001	0.3307	0.0017	0.2865	0.0152
V27	0.26872	-0.17207	-0.09509	-0.49985	-0.40954	0.17920	0.13796	0.58453	0.96862	-0.21312	0.30346	0.50162	0.02204	-0.33410	-0.08280	-0.27063
Rb	0.0433	0.2006	0.4817	0.0001	0.0016	0.1823	0.3061	0.0001	0.0001	0.1114	0.0218	0.0001	0.8707	0.0111	0.5403	0.0417
V28	0.23981	-0.14712	-0.32422	-0.15435	-0.18946	-0.04502	0.07410	0.13464	0.03557	0.14411	0.10072	-0.04119	-0.12528	-0.03895	-0.10387	-0.16104
U	0.0724	0.2748	0.0139	0.2516	0.1581	0.7395	0.5838	0.3180	0.7928	0.2849	0.4560	0.7610	0.3531	0.7736	0.4420	0.2314
V29	-0.17791	-0.23965	-0.18809	0.11152	0.10733	0.32103	0.09162	0.03546	0.06360	0.13438	0.23712	0.19376	0.22662	-0.04951	0.08730	-0.11654
Th	0.1855	0.0726	0.1612	0.4089	0.4268	0.0149	0.4979	0.7934	0.6384	0.3190	0.0757	0.1487	0.0900	0.7146	0.5184	0.3879
V30	-0.20067	-0.28093	-0.22778	0.17913	0.13714	0.25605	0.20891	0.15325	0.26668	0.06721	0.08286	0.19255	0.12880	-0.10620	0.03624	-0.00781
Pb	0.1345	0.0343	0.0884	0.1825	0.3090	0.0545	0.1189	0.2551	0.0449	0.6194	0.5400	0.1513	0.3397	0.4317	0.7890	0.9540
V31	-0.55901	0.20811	0.22054	0.43715	0.25770	-0.08567	-0.00247	-0.26684	-0.43921	0.06265	-0.42985	-0.28704	-0.01582	0.45950	0.29994	0.06627
Cr	0.0001	0.1203	0.0993	0.0007	0.0529	0.5263	0.9855	0.0448	0.0006	0.6434	0.0008	0.0304	0.9070	0.0003	0.0234	0.6243
V32	-0.79605	0.13379	0.35834	0.58079	0.36952	-0.22993	-0.19740	-0.44197	-0.49344	0.09668	-0.33562	-0.22640	-0.11431	0.42878	0.18821	0.03840
V	0.0001	0.3211	0.0062	0.0001	0.0047	0.0853	0.1411	0.0006	0.0001	0.4743	0.0107	0.0904	0.3972	0.0009	0.1609	0.7767
V33	0.14711	-0.35981	-0.28330	-0.30385	-0.34110	-0.01180	0.22719	0.64192	0.68932	-0.02816	0.29974	0.47696	-0.16097	-0.34727	-0.12847	-0.37672
Ba	0.2748	0.0060	0.0327	0.0216	0.0094	0.9306	0.0892	0.0001	0.0001	0.8353	0.0235	0.0002	0.2316	0.0081	0.3409	0.0039
V34	-0.49121	0.45172	0.55004	0.19447	0.07828	-0.42359	-0.38171	-0.35011	-0.36392	-0.12110	-0.43159	-0.31936	-0.36716	0.39996	-0.08577	-0.05228
Sc	0.0001	0.0004	0.0001	0.1472	0.5627	0.0010	0.0034	0.0076	0.0054	0.3695	0.0008	0.0155	0.0050	0.0021	0.5259	0.6993
V35	-0.03477	0.20303	0.17387	0.08693	0.17597	0.03479	-0.18398	-0.24074	-0.22024	-0.11603	-0.27247	-0.17968	0.11303	0.13913	0.11014	0.16260
As	0.7973	0.1298	0.1959	0.5202	0.1904	0.7973	0.1707	0.0712	0.0997	0.3901	0.0403	0.1811	0.4025	0.3020	0.4147	0.2269
V36	-0.08803	-0.43890	-0.37738	0.06829	-0.26669	-0.05493	0.35495	0.19619	0.13007	0.45035	0.61178	0.51937	-0.01955	-0.16082	-0.21363	-0.42931
S	0.5149	0.0006	0.0038	0.6137	0.0449	0.6849	0.0067	0.1436	0.3348	0.0004	0.0001	0.0001	0.8852	0.2321	0.1106	0.0009

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 57

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V6	-0.33109	0.09368	0.36700	-0.10812	-0.15190	0.26872	0.23981	-0.17791	-0.20067	-0.55901	-0.79605	0.14711	-0.49121	-0.03477	-0.08803
SiO2	0.0119	0.4882	0.0050	0.4234	0.2593	0.0433	0.0724	0.1855	0.1345	0.0001	0.0001	0.2748	0.0001	0.7973	0.5149
V7	0.58505	0.32884	0.44176	0.10876	-0.42120	-0.17207	-0.14712	-0.23965	-0.28093	0.20811	0.13379	-0.35981	0.45172	0.20303	-0.43890
TiO2	0.0001	0.0125	0.0006	0.4206	0.0011	0.2006	0.2748	0.0726	0.0343	0.1203	0.3211	0.0060	0.0004	0.1298	0.0006
V8	0.72120	0.19124	0.23855	-0.01171	-0.23448	-0.09509	-0.32422	-0.18809	-0.22778	0.22054	0.35834	-0.28330	0.55004	0.17387	-0.37738
Al2O3	0.0001	0.1542	0.0739	0.9311	0.0792	0.4817	0.0139	0.1612	0.0884	0.0993	0.0062	0.0327	0.0001	0.1959	0.0038
V9	0.06579	-0.11280	-0.30616	0.27169	0.00141	-0.49985	-0.15435	0.11152	0.17913	0.43715	0.58079	-0.30385	0.19447	0.08693	0.06829
Fe2O3	0.6268	0.4035	0.0205	0.0409	0.9917	0.0001	0.2516	0.4089	0.1825	0.0007	0.0001	0.0216	0.1472	0.5202	0.6137
V10	0.13049	0.10732	-0.09441	0.11855	-0.33806	-0.40954	-0.18946	0.10733	0.13714	0.25770	0.36952	-0.34110	0.07828	0.17597	-0.26669
MnO	0.3333	0.4268	0.4848	0.3798	0.0101	0.0016	0.1581	0.4268	0.3090	0.0529	0.0047	0.0094	0.5627	0.1904	0.0449
V11	-0.09822	0.38464	-0.07354	0.08654	-0.10220	0.17920	-0.04502	0.32103	0.25605	-0.08567	-0.22993	-0.01180	-0.42359	0.03479	-0.05493
MgO	0.4673	0.0031	0.5867	0.5221	0.4494	0.1823	0.7395	0.0149	0.0545	0.5263	0.0853	0.9306	0.0010	0.7973	0.6849
V12	-0.34153	-0.00872	-0.30702	-0.05963	0.51713	0.13796	0.07410	0.09162	0.20891	-0.00247	-0.19740	0.22719	-0.38171	-0.18398	0.35495
CaO	0.0093	0.9487	0.0202	0.6595	0.0001	0.3061	0.5838	0.4979	0.1189	0.9855	0.1411	0.0892	0.0034	0.1707	0.0067
V13	-0.32143	-0.07075	-0.10418	-0.21006	0.53129	0.58453	0.13464	0.03546	0.15325	-0.26684	-0.44197	0.64192	-0.35011	-0.24074	0.19619
Na2O	0.0148	0.6010	0.4406	0.1168	0.0001	0.0001	0.3180	0.7934	0.2551	0.0448	0.0006	0.0001	0.0076	0.0712	0.1436
V14	-0.04294	0.00819	-0.14663	-0.19212	0.37469	0.96862	0.03557	0.06360	0.26668	-0.43921	-0.49344	0.68932	-0.36392	-0.22024	0.13007
K2O	0.7512	0.9518	0.2764	0.1522	0.0041	0.0001	0.7928	0.6384	0.0449	0.0006	0.0001	0.0001	0.0054	0.0997	0.3348
V15	-0.19653	-0.02920	-0.25083	0.39790	0.37660	-0.21312	0.14411	0.13438	0.06721	0.06265	0.09668	-0.02816	-0.12110	-0.11603	0.45035
P2O5	0.1429	0.8293	0.0598	0.0022	0.0039	0.1114	0.2849	0.3190	0.6194	0.6434	0.4743	0.8353	0.3695	0.3901	0.0004
V16	-0.32883	0.05751	-0.21842	0.01236	0.37006	0.30346	0.10072	0.23712	0.08286	-0.42985	-0.33562	0.29974	-0.43159	-0.27247	0.61178
H2O-	0.0125	0.6709	0.1026	0.9273	0.0046	0.0218	0.4560	0.0757	0.5400	0.0008	0.0107	0.0235	0.0008	0.0403	0.0001
V17	-0.17229	0.16405	-0.26376	-0.18838	0.52220	0.50162	-0.04119	0.19376	0.19255	-0.28704	-0.22640	0.47696	-0.31936	-0.17968	0.51937
LOI	0.2000	0.2227	0.0474	0.1605	0.0001	0.0001	0.7610	0.1487	0.1513	0.0304	0.0904	0.0002	0.0155	0.1811	0.0001
V18	-0.06379	0.43336	-0.08333	0.00950	-0.13120	0.02204	-0.12528	0.22662	0.12880	-0.01582	-0.11431	-0.16097	-0.36716	0.11303	-0.01955
Zn	0.6374	0.0008	0.5377	0.9441	0.3307	0.8707	0.3531	0.0900	0.3397	0.9070	0.3972	0.2316	0.0050	0.4025	0.8852
V19	0.27866	0.00197	-0.02273	0.12675	-0.40582	-0.33410	-0.03895	-0.04951	-0.10620	0.45950	0.42878	-0.34727	0.39996	0.13913	-0.16082
Cu	0.0358	0.9884	0.8667	0.3475	0.0017	0.0111	0.7736	0.7146	0.4317	0.0003	0.0009	0.0081	0.0021	0.3020	0.2321
V20	0.24341	0.17443	-0.08554	0.13875	-0.14362	-0.08280	-0.10387	0.08730	0.03624	0.29994	0.18821	-0.12847	-0.08577	0.11014	-0.21363
Ni	0.0681	0.1944	0.5270	0.3033	0.2865	0.5403	0.4420	0.5184	0.7890	0.0234	0.1609	0.3409	0.5259	0.4147	0.1106
V21	0.16165	0.02755	0.10632	0.13015	-0.32004	-0.27063	-0.16104	-0.11654	-0.00781	0.06627	0.03840	-0.37672	-0.05228	0.16260	-0.42931
Co	0.2296	0.8388	0.4312	0.3346	0.0152	0.0417	0.2314	0.3879	0.9540	0.6243	0.7767	0.0039	0.6993	0.2269	0.0009

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 57

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V22	1.00000	0.09894	0.17750	0.26125	-0.25712	0.00939	-0.13502	-0.20121	-0.19779	0.38870	0.47274	-0.31034	0.50809	0.10167	-0.39766
Ga	0.0	0.4640	0.1865	0.0497	0.0535	0.9447	0.3166	0.1334	0.1403	0.0028	0.0002	0.0188	0.0001	0.4517	0.0022
V23	0.09894	1.00000	0.24760	0.17775	-0.01908	0.04435	0.02098	0.29305	-0.03622	-0.09858	-0.18359	-0.10844	-0.17140	0.04107	0.12334
Nb	0.4640	0.0	0.0633	0.1859	0.8879	0.7432	0.8769	0.0269	0.7891	0.4657	0.1716	0.4220	0.2024	0.7616	0.3607
V24	0.17750	0.24760	1.00000	0.30589	-0.31146	-0.16270	0.05167	-0.19026	-0.32668	-0.05234	-0.24119	-0.31081	0.05336	-0.04638	-0.13779
Zr	0.1865	0.0633	0.0	0.0207	0.0184	0.2266	0.7027	0.1563	0.0131	0.6990	0.0707	0.0186	0.6934	0.7319	0.3067
V25	0.26125	0.17775	0.30589	1.00000	-0.02852	-0.19935	0.30637	0.03191	-0.13035	0.09970	0.08479	-0.12982	0.08167	-0.01742	0.02032
Y	0.0497	0.1859	0.0207	0.0	0.8332	0.1371	0.0205	0.8137	0.3338	0.4606	0.5306	0.3358	0.5459	0.8976	0.8808
V26	-0.25712	-0.01908	-0.31146	-0.02852	1.00000	0.30554	0.17286	0.21257	0.46972	-0.01306	-0.11170	0.38116	-0.12082	-0.27534	0.43678
Sr	0.0535	0.8879	0.0184	0.8332	0.0	0.0208	0.1985	0.1124	0.0002	0.9232	0.4081	0.0034	0.3706	0.0382	0.0007
V27	0.00939	0.04435	-0.16270	-0.19935	0.30554	1.00000	-0.02409	0.10925	0.28495	-0.43584	-0.44617	0.65364	-0.35688	-0.23183	0.12214
Rb	0.9447	0.7432	0.2266	0.1371	0.0208	0.0	0.8588	0.4185	0.0317	0.0007	0.0005	0.0001	0.0064	0.0827	0.3654
V28	-0.13502	0.02098	0.05167	0.30637	0.17286	-0.02409	1.00000	0.03750	0.04684	0.04908	-0.09793	0.02296	-0.06341	0.02347	0.19952
U	0.3166	0.8769	0.7027	0.0205	0.1985	0.8588	0.0	0.7818	0.7293	0.7169	0.4686	0.8654	0.6394	0.8624	0.1368
V29	-0.20121	0.29305	-0.19026	0.03191	0.21257	0.10925	0.03750	1.00000	0.23937	-0.07359	0.00536	0.20236	-0.21026	0.00871	0.34759
Th	0.1334	0.0269	0.1563	0.8137	0.1124	0.4185	0.7818	0.0	0.0729	0.5864	0.9684	0.1311	0.1165	0.9487	0.0081
V30	-0.19779	-0.03622	-0.32668	-0.13035	0.46972	0.28495	0.04684	0.23937	1.00000	0.07060	0.09701	0.18488	-0.00447	-0.06096	0.23543
Pb	0.1403	0.7891	0.0131	0.3338	0.0002	0.0317	0.7293	0.0729	0.0	0.6018	0.4728	0.1686	0.9737	0.6524	0.0779
V31	0.38870	-0.09858	-0.05234	0.09970	-0.01306	-0.43584	0.04908	-0.07359	0.07060	1.00000	0.66266	-0.37654	0.66724	0.20286	-0.25021
Cr	0.0028	0.4657	0.6990	0.4606	0.9232	0.0007	0.7169	0.5864	0.6018	0.0	0.0001	0.0039	0.0001	0.1302	0.0605
V32	0.47274	-0.18359	-0.24119	0.08479	-0.11170	-0.44617	-0.09793	0.00536	0.09701	0.66266	1.00000	-0.31606	0.65871	0.12171	-0.14460
V	0.0002	0.1716	0.0707	0.5306	0.4081	0.0005	0.4686	0.9684	0.4728	0.0001	0.0	0.0166	0.0001	0.3671	0.2832
V33	-0.31034	-0.10844	-0.31081	-0.12982	0.38116	0.65364	0.02296	0.20236	0.18488	-0.37654	-0.31606	1.00000	-0.34939	-0.15069	0.23996
Sa	0.0188	0.4220	0.0186	0.3358	0.0034	0.0001	0.8654	0.1311	0.1686	0.0039	0.0166	0.0	0.0077	0.2632	0.0722
V34	0.50809	-0.17140	0.05336	0.08167	-0.12082	-0.35688	-0.06341	-0.21026	-0.00447	0.66724	0.65871	-0.34939	1.00000	0.11898	-0.25032
Sc	0.0001	0.2024	0.6934	0.5459	0.3706	0.0064	0.6394	0.1165	0.9737	0.0001	0.0001	0.0077	0.0	0.3781	0.0604
V35	0.10167	0.04107	-0.04638	-0.01742	-0.27534	-0.23183	0.02347	0.00871	-0.06096	0.20286	0.12171	-0.15069	0.11898	1.00000	-0.16519
As	0.4517	0.7616	0.7319	0.8976	0.0382	0.0827	0.8624	0.9487	0.6524	0.1302	0.3671	0.2632	0.3781	0.0	0.2195
V36	-0.39766	0.12334	-0.13779	0.02032	0.43678	0.12214	0.19952	0.34759	0.23543	-0.25021	-0.14460	0.23996	-0.25032	-0.16519	1.00000
S	0.0022	0.3607	0.3067	0.8808	0.0007	0.3654	0.1368	0.0081	0.0779	0.0605	0.2832	0.0722	0.0604	0.2195	0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 120

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V6	1.00000	-0.51881	-0.79723	-0.56141	0.07582	0.03367	-0.20873	-0.28945	-0.04429	-0.45574	-0.38361	-0.56670	0.08503	-0.05734	-0.28695	-0.15379
SiO2	0.0	0.0001	0.0001	0.0001	0.4105	0.7151	0.0221	0.0013	0.6310	0.0001	0.0001	0.0001	0.3558	0.5339	0.0015	0.0935
V7	-0.51881	1.00000	0.44525	0.29435	0.09883	0.08246	0.25368	0.37619	-0.02473	0.23320	0.10627	0.19913	-0.05959	-0.04528	0.26104	0.27336
TiO2	0.0001	0.0	0.0001	0.0011	0.2828	0.3706	0.0052	0.0001	0.7886	0.0104	0.2480	0.0292	0.5179	0.6234	0.0040	0.0025
V8	-0.79723	0.44525	1.00000	0.19354	-0.27804	-0.21338	0.15077	0.45053	0.14092	0.27192	0.28794	0.41065	-0.28957	-0.06460	-0.00067	0.07612
Al2O3	0.0001	0.0001	0.0	0.0342	0.0021	0.0193	0.1002	0.0001	0.1247	0.0027	0.0014	0.0001	0.0013	0.4833	0.9942	0.4086
V9	-0.56141	0.29435	0.19354	1.00000	0.24732	0.07204	0.12695	-0.02272	-0.30396	0.56256	0.19460	0.27060	0.04576	0.14878	0.42619	0.16153
Fe2O3	0.0001	0.0011	0.0342	0.0	0.0065	0.4343	0.1671	0.8055	0.0007	0.0001	0.0332	0.0028	0.6197	0.1049	0.0001	0.0780
V10	0.07582	0.09883	-0.27804	0.24732	1.00000	0.67882	0.23895	-0.08279	-0.00675	0.14735	-0.35313	-0.31119	0.31776	-0.06541	0.34079	0.58883
MnO	0.4105	0.2828	0.0021	0.0065	0.0	0.0001	0.0086	0.3687	0.9417	0.1083	0.0001	0.0005	0.0004	0.4778	0.0001	0.0001
V11	0.03367	0.08246	-0.21338	0.07204	0.67882	1.00000	0.42634	0.05949	0.07077	0.07234	-0.36370	-0.32259	0.42162	-0.17061	0.48805	0.50381
MgO	0.7151	0.3706	0.0193	0.4343	0.0001	0.0	0.0001	0.5186	0.4425	0.4324	0.0001	0.0003	0.0001	0.0625	0.0001	0.0001
V12	-0.20873	0.25368	0.15077	0.12695	0.23895	0.42634	1.00000	0.59627	-0.07069	0.32545	-0.10603	-0.00700	0.22229	-0.26233	0.32952	0.30806
CaO	0.0221	0.0052	0.1002	0.1671	0.0086	0.0001	0.0	0.0001	0.4430	0.0003	0.2491	0.9395	0.0147	0.0038	0.0002	0.0006
V13	-0.28945	0.37619	0.45053	-0.02272	-0.08279	0.05949	0.59627	1.00000	0.05645	0.21249	0.03638	0.00497	-0.04384	-0.28330	0.08038	0.13970
Na2O	0.0013	0.0001	0.0001	0.8055	0.3687	0.5186	0.0001	0.0	0.5402	0.0198	0.6932	0.9570	0.6344	0.0017	0.3828	0.1281
V14	-0.04429	-0.02473	0.14092	-0.30396	-0.00675	0.07077	-0.07069	0.05645	1.00000	-0.19578	-0.08216	0.04360	-0.08424	-0.07401	-0.14827	-0.08066
K2O	0.6310	0.7886	0.1247	0.0007	0.9417	0.4425	0.4430	0.5402	0.0	0.0321	0.3723	0.6363	0.3603	0.4218	0.1061	0.3812
V15	-0.45574	0.23320	0.27192	0.56256	0.14735	0.07234	0.32545	0.21249	-0.19578	1.00000	0.21305	0.17783	0.14311	0.03260	0.26742	0.25009
P2O5	0.0001	0.0104	0.0027	0.0001	0.1083	0.4324	0.0003	0.0198	0.0321	0.0	0.0195	0.0520	0.1189	0.7237	0.0031	0.0059
V16	-0.38361	0.10627	0.28794	0.19460	-0.35313	-0.36370	-0.10603	0.03638	-0.08216	0.21305	1.00000	0.62872	0.16383	0.25160	0.10439	-0.24180
H2O-	0.0001	0.2480	0.0014	0.0332	0.0001	0.0001	0.2491	0.6932	0.3723	0.0195	0.0	0.0001	0.0738	0.0056	0.2565	0.0078
V17	-0.56670	0.19913	0.41065	0.27060	-0.31119	-0.32259	-0.00700	0.00497	0.04360	0.17783	0.62872	1.00000	-0.04179	0.31903	0.05551	-0.18067
LOI	0.0001	0.0292	0.0001	0.0028	0.0005	0.0003	0.9395	0.9570	0.6363	0.0520	0.0001	0.0	0.6504	0.0004	0.5470	0.0483
V18	0.08503	-0.05959	-0.28957	0.04576	0.31776	0.42162	0.22229	-0.04384	-0.08424	0.14311	0.16383	-0.04179	1.00000	0.28382	0.64523	0.22421
Zn	0.3558	0.5179	0.0013	0.6197	0.0004	0.0001	0.0147	0.6344	0.3603	0.1189	0.0738	0.6504	0.0	0.0017	0.0001	0.0138
V19	-0.05734	-0.04528	-0.06460	0.14878	-0.06541	-0.17061	-0.26233	-0.28330	-0.07401	0.03260	0.25160	0.31903	0.28382	1.00000	0.18650	-0.12336
Cu	0.5339	0.6234	0.4833	0.1049	0.4778	0.0625	0.0038	0.0017	0.4218	0.7237	0.0056	0.0004	0.0017	0.0	0.0414	0.1795
V20	-0.28695	0.26104	-0.00067	0.42619	0.34079	0.48805	0.32952	0.08038	-0.14827	0.26742	0.10439	0.05551	0.64523	0.18650	1.00000	0.38859
Ni	0.0015	0.0040	0.9942	0.0001	0.0001	0.0001	0.0002	0.3828	0.1061	0.0031	0.2565	0.5470	0.0001	0.0414	0.0	0.0001
V21	-0.15379	0.27336	0.07612	0.16153	0.58883	0.50381	0.30806	0.13970	-0.08066	0.25009	-0.24180	-0.18067	0.22421	-0.12336	0.38859	1.00000
Co	0.0935	0.0025	0.4086	0.0780	0.0001	0.0001	0.0006	0.1281	0.3812	0.0059	0.0078	0.0483	0.0138	0.1795	0.0001	0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 120

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V22	-0.68742	0.42519	0.88601	0.16865	-0.27108	-0.16157	0.21110	0.48261	0.06561	0.23149	0.30863	0.35690	-0.17886	-0.05421	0.06593	0.08791
Ga	0.0001	0.0001	0.0001	0.0656	0.0027	0.0779	0.0206	0.0001	0.4765	0.0110	0.0006	0.0001	0.0506	0.5565	0.4744	0.3397
V23	-0.57887	0.56638	0.51157	0.19615	-0.09683	-0.06127	0.19763	0.39784	0.06443	0.27661	0.34305	0.35055	0.04590	-0.04228	0.18571	0.01694
Nb	0.0001	0.0001	0.0001	0.0318	0.2928	0.5062	0.0305	0.0001	0.4845	0.0022	0.0001	0.0001	0.6186	0.6466	0.0423	0.8543
V24	0.38151	0.18829	-0.42996	-0.12404	0.03352	-0.14719	0.00166	-0.03275	-0.20402	-0.17416	-0.09165	-0.09011	-0.00936	-0.07093	-0.13596	-0.10071
Zr	0.0001	0.0395	0.0001	0.1771	0.7163	0.1086	0.9856	0.7225	0.0254	0.0571	0.3195	0.3277	0.9192	0.4414	0.1387	0.2738
V25	-0.09039	0.21819	0.03466	0.11985	0.18095	0.24134	0.11227	0.07784	-0.00661	0.37939	0.14218	-0.08156	0.38213	0.11811	0.23629	0.15245
Y	0.3262	0.0167	0.7070	0.1923	0.0479	0.0079	0.2221	0.3981	0.9429	0.0001	0.1214	0.3758	0.0001	0.1989	0.0094	0.0965
V26	-0.32056	0.14414	0.43329	0.07511	-0.41024	-0.34308	0.20258	0.52139	-0.07785	0.38549	0.40786	0.30891	0.02348	0.06497	-0.04229	-0.25226
Sr	0.0004	0.1163	0.0001	0.4149	0.0001	0.0001	0.0265	0.0001	0.3980	0.0001	0.0001	0.0006	0.7991	0.4808	0.6465	0.0054
V27	-0.11535	0.06126	0.22152	-0.22478	-0.06800	0.01394	0.02302	0.15431	0.81303	-0.02090	0.09405	0.17373	-0.08490	-0.08187	-0.05843	-0.06673
Rb	0.2097	0.5063	0.0150	0.0136	0.4606	0.8799	0.8029	0.0924	0.0001	0.8207	0.3069	0.0577	0.3566	0.3740	0.5261	0.4690
V28	-0.30031	0.24614	0.30837	0.14292	0.02668	0.01935	0.19070	0.28055	-0.03442	0.31798	0.20325	0.16934	0.06065	0.05310	0.06483	0.12280
U	0.0009	0.0067	0.0006	0.1194	0.7724	0.8338	0.0369	0.0019	0.7090	0.0004	0.0260	0.0645	0.5105	0.5646	0.4817	0.1815
V29	-0.66142	0.39832	0.67845	0.18254	-0.26453	-0.21168	0.04703	0.28763	0.16674	0.22761	0.23551	0.31854	-0.22051	-0.04691	-0.02758	-0.03657
Th	0.0001	0.0001	0.0001	0.0460	0.0035	0.0203	0.6100	0.0014	0.0687	0.0124	0.0096	0.0004	0.0155	0.6109	0.7649	0.6917
V30	0.04610	-0.21006	-0.05600	0.08252	-0.07093	-0.19961	-0.02406	-0.01348	0.04724	0.07570	0.14890	0.04900	0.24729	0.25899	0.01389	-0.33715
Pb	0.6171	0.0213	0.5435	0.3703	0.4414	0.0288	0.7942	0.8838	0.6084	0.4112	0.1046	0.5951	0.0065	0.0043	0.8803	0.0002
V31	-0.63801	0.64878	0.54276	0.31778	0.04724	0.09765	0.16874	0.20780	0.01927	0.24252	0.11577	0.23700	-0.15343	-0.06274	0.17761	0.28373
Cr	0.0001	0.0001	0.0001	0.0004	0.6084	0.2887	0.0654	0.0228	0.8345	0.0076	0.2080	0.0092	0.0943	0.4960	0.0523	0.0017
V32	-0.64766	0.50907	0.60398	0.43304	-0.08295	-0.13102	0.04866	0.18310	-0.04357	0.28093	0.29669	0.35606	-0.32419	-0.07246	0.03502	-0.00872
V	0.0001	0.0001	0.0001	0.0001	0.3678	0.1537	0.5976	0.0453	0.6365	0.0019	0.0010	0.0001	0.0003	0.4316	0.7041	0.9247
V33	-0.07605	-0.00575	0.00918	-0.16345	0.02695	0.15814	0.08783	0.01323	0.55397	-0.02034	0.13489	0.17626	0.27949	0.05933	0.06704	-0.01308
Ba	0.4090	0.9503	0.9207	0.0745	0.7702	0.0845	0.3401	0.8859	0.0001	0.8255	0.1419	0.0541	0.0020	0.5198	0.4669	0.8872
V34	-0.39810	0.43381	0.24133	0.29800	0.10057	0.14121	0.28195	0.32579	-0.02965	0.15100	0.05795	0.15059	0.05435	-0.00358	0.26070	0.14007
Sc	0.0001	0.0001	0.0079	0.0009	0.2744	0.1239	0.0018	0.0003	0.7479	0.0997	0.5296	0.1007	0.5555	0.9690	0.0040	0.1271
V35	-0.03541	-0.12099	0.12836	-0.07092	-0.05505	-0.28217	-0.30389	-0.16780	-0.06506	-0.04098	-0.00745	0.09184	-0.19802	0.25318	-0.10923	0.02974
As	0.7010	0.1881	0.1624	0.4414	0.5504	0.0018	0.0007	0.0670	0.4802	0.6567	0.9356	0.3185	0.0302	0.0053	0.2350	0.7471
V36	-0.05574	-0.01046	-0.14792	0.13714	-0.11158	-0.19265	0.05488	-0.08970	0.01870	0.09603	0.22827	0.41357	0.05837	0.18828	0.00642	-0.16589
S	0.5454	0.9098	0.1069	0.1353	0.2250	0.0350	0.5516	0.3299	0.8393	0.2968	0.0122	0.0001	0.5266	0.0395	0.9445	0.0702

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 120

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V6	-0.68742	-0.57887	0.38151	-0.09039	-0.32056	-0.11535	-0.30031	-0.66142	0.04610	-0.63801	-0.64766	-0.07605	-0.39810	-0.03541	-0.05574
SiO2	0.0001	0.0001	0.0001	0.3262	0.0004	0.2097	0.0009	0.0001	0.6171	0.0001	0.0001	0.4090	0.0001	0.7010	0.5454
V7	0.42519	0.56638	0.18829	0.21819	0.14414	0.06126	0.24614	0.39832	-0.21006	0.64878	0.50907	-0.00575	0.43381	-0.12099	-0.01046
TiO2	0.0001	0.0001	0.0395	0.0167	0.1163	0.5063	0.0067	0.0001	0.0213	0.0001	0.0001	0.9503	0.0001	0.1881	0.9098
V8	0.88601	0.51157	-0.42996	0.03466	0.43329	0.22152	0.30837	0.67845	-0.05600	0.54276	0.60398	0.00918	0.24133	0.12836	-0.14792
Al2O3	0.0001	0.0001	0.0001	0.7070	0.0001	0.0150	0.0006	0.0001	0.5435	0.0001	0.0001	0.9207	0.0079	0.1624	0.1069
V9	0.16865	0.19615	-0.12404	0.11985	0.07511	-0.22478	0.14292	0.18254	0.08252	0.31778	0.43304	-0.16345	0.29800	-0.07092	0.13714
Fe2O3	0.0656	0.0318	0.1771	0.1923	0.4149	0.0136	0.1194	0.0460	0.3703	0.0004	0.0001	0.0745	0.0009	0.4414	0.1353
V10	-0.27108	-0.09683	0.03352	0.18095	-0.41024	-0.06800	0.02668	-0.26453	-0.07093	0.04724	-0.08295	0.02695	0.10057	-0.05505	-0.11158
MnO	0.0027	0.2928	0.7163	0.0479	0.0001	0.4606	0.7724	0.0035	0.4414	0.6084	0.3678	0.7702	0.2744	0.5504	0.2250
V11	-0.16157	-0.06127	-0.14719	0.24134	-0.34308	0.01394	0.01935	-0.21168	-0.19961	0.09765	-0.13102	0.15814	0.14121	-0.28217	-0.19265
MgO	0.0779	0.5062	0.1086	0.0079	0.0001	0.8799	0.8338	0.0203	0.0288	0.2887	0.1537	0.0845	0.1239	0.0018	0.0350
V12	0.21110	0.19763	0.00166	0.11227	0.20258	0.02302	0.19070	0.04703	-0.02406	0.16874	0.04866	0.08783	0.28195	-0.30389	0.05488
CaO	0.0206	0.0305	0.9856	0.2221	0.0265	0.8029	0.0369	0.6100	0.7942	0.0654	0.5976	0.3401	0.0018	0.0007	0.5516
V13	0.48261	0.39784	-0.03275	0.07784	0.52139	0.15431	0.28055	0.28763	-0.01348	0.20780	0.18310	0.01323	0.32579	-0.16780	-0.08970
Na2O	0.0001	0.0001	0.7225	0.3981	0.0001	0.0924	0.0019	0.0014	0.8838	0.0228	0.0453	0.8859	0.0003	0.0670	0.3299
V14	0.06561	0.06443	-0.20402	-0.00661	-0.07785	0.81303	-0.03442	0.16674	0.04724	0.01927	-0.04357	0.55397	-0.02965	-0.06506	0.01870
K2O	0.4765	0.4845	0.0254	0.9429	0.3980	0.0001	0.7090	0.0687	0.6084	0.8345	0.6365	0.0001	0.7479	0.4802	0.8393
V15	0.23149	0.27661	-0.17416	0.37939	0.38549	-0.02090	0.31798	0.22761	0.07570	0.24252	0.28093	-0.02034	0.15100	-0.04098	0.09603
P2O5	0.0110	0.0022	0.0571	0.0001	0.0001	0.8207	0.0004	0.0124	0.4112	0.0076	0.0019	0.8255	0.0997	0.6567	0.2968
V16	0.30863	0.34305	-0.09165	0.14218	0.40786	0.09405	0.20325	0.23551	0.14890	0.11577	0.29669	0.13489	0.05795	-0.00745	0.22827
H2O-	0.0006	0.0001	0.3195	0.1214	0.0001	0.3069	0.0260	0.0096	0.1046	0.2080	0.0010	0.1419	0.5296	0.9356	0.0122
V17	0.35690	0.35055	-0.09011	-0.08156	0.30891	0.17373	0.16934	0.31854	0.04900	0.23700	0.35606	0.17626	0.15059	0.09184	0.41357
LOI	0.0001	0.0001	0.3277	0.3758	0.0006	0.0577	0.0645	0.0004	0.5951	0.0092	0.0001	0.0541	0.1007	0.3185	0.0001
V18	-0.17886	0.04590	-0.00936	0.38213	0.02348	-0.08490	0.06065	-0.22051	0.24729	-0.15343	-0.32419	0.27949	0.05435	-0.19802	0.05837
Zn	0.0506	0.6186	0.9192	0.0001	0.7991	0.3566	0.5105	0.0155	0.0065	0.0943	0.0003	0.0020	0.5555	0.0302	0.5266
V19	-0.05421	-0.04228	-0.07093	0.11811	0.06497	-0.08187	0.05310	-0.04691	0.25899	-0.06274	-0.07246	0.05933	-0.00358	0.25318	0.18828
Cu	0.5565	0.6466	0.4414	0.1989	0.4808	0.3740	0.5646	0.6109	0.0043	0.4960	0.4316	0.5198	0.9690	0.0053	0.0395
V20	0.06593	0.18571	-0.13596	0.23629	-0.04229	-0.05843	0.06483	-0.02758	0.01389	0.17761	0.03502	0.06704	0.26070	-0.10923	0.00642
Ni	0.4744	0.0423	0.1387	0.0094	0.6465	0.5261	0.4817	0.7649	0.8803	0.0523	0.7041	0.4669	0.0040	0.2350	0.9445
V21	0.08791	0.01694	-0.10071	0.15245	-0.25226	-0.06673	0.12280	-0.03657	-0.33715	0.28373	-0.00872	-0.01308	0.14007	0.02974	-0.16589
Co	0.3397	0.8543	0.2738	0.0965	0.0054	0.4690	0.1815	0.6917	0.0002	0.0017	0.9247	0.8872	0.1271	0.7471	0.0702

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 120

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V22	1.00000	0.43543	-0.34980	0.10607	0.44219	0.11956	0.30471	0.54645	-0.06093	0.45687	0.59675	0.00489	0.27024	0.03838	-0.21401
Ga	0.0	0.0001	0.0001	0.2489	0.0001	0.1934	0.0007	0.0001	0.5086	0.0001	0.0001	0.9577	0.0028	0.6773	0.0189
V23	0.43543	1.00000	0.01163	0.27381	0.30200	0.10637	0.28440	0.64718	-0.05385	0.56658	0.25851	0.11404	0.28896	-0.23972	0.03249
Nb	0.0001	0.0	0.8997	0.0025	0.0008	0.2475	0.0016	0.0001	0.5592	0.0001	0.0044	0.2149	0.0014	0.0084	0.7246
V24	-0.34980	0.01163	1.00000	0.00580	-0.12015	-0.15526	-0.07778	-0.27875	-0.09182	-0.18243	-0.16109	-0.16316	0.08722	-0.11324	0.06467
Zr	0.0001	0.8997	0.0	0.9499	0.1912	0.0904	0.3985	0.0020	0.3186	0.0461	0.0788	0.0750	0.3435	0.2182	0.4828
V25	0.10607	0.27381	0.00580	1.00000	0.23258	-0.00391	0.24580	0.16921	0.05657	0.02175	0.03735	0.14456	-0.02865	-0.14603	-0.18159
Y	0.2489	0.0025	0.9499	0.0	0.0106	0.9662	0.0068	0.0647	0.5394	0.8136	0.6854	0.1152	0.7561	0.1115	0.0472
V26	0.44219	0.30200	-0.12015	0.23258	1.00000	0.11395	0.26356	0.21822	0.24975	-0.02270	0.20853	0.12274	0.06730	-0.00983	0.07120
Sr	0.0001	0.0008	0.1912	0.0106	0.0	0.2152	0.0036	0.0167	0.0059	0.8056	0.0223	0.1817	0.4652	0.9152	0.4397
V27	0.11956	0.10637	-0.15526	-0.00391	0.11395	1.00000	-0.00009	0.17704	0.04661	-0.00680	0.06382	0.49300	0.00691	0.01752	0.08216
Rb	0.1934	0.2475	0.0904	0.9662	0.2152	0.0	0.9992	0.0531	0.6132	0.9413	0.4886	0.0001	0.9403	0.8494	0.3723
V28	0.30471	0.28440	-0.07778	0.24580	0.26356	-0.00009	1.00000	0.13934	0.08342	0.25231	0.16350	0.15991	0.14835	-0.12498	-0.06092
U	0.0007	0.0016	0.3985	0.0068	0.0036	0.9992	0.0	0.1291	0.3650	0.0054	0.0744	0.0811	0.1059	0.1738	0.5086
V29	0.54645	0.64718	-0.27875	0.16921	0.21822	0.17704	0.13934	1.00000	0.09127	0.53122	0.48214	-0.00880	0.23701	-0.02997	-0.01075
Th	0.0001	0.0001	0.0020	0.0647	0.0167	0.0531	0.1291	0.0	0.3215	0.0001	0.0001	0.9240	0.0091	0.7452	0.9072
V30	-0.06093	-0.05385	-0.09182	0.05657	0.24975	0.04661	0.08342	0.09127	1.00000	-0.06052	-0.02754	0.21833	0.13730	0.00781	0.13977
Pb	0.5086	0.5592	0.3186	0.5394	0.0059	0.6132	0.3650	0.3215	0.0	0.5114	0.7652	0.0166	0.1348	0.9325	0.1279
V31	0.45687	0.56658	-0.18243	0.02175	-0.02270	-0.00680	0.25231	0.53122	-0.06052	1.00000	0.53887	0.11589	0.45641	-0.07304	0.03090
Cr	0.0001	0.0001	0.0461	0.8136	0.8056	0.9413	0.0054	0.0001	0.5114	0.0	0.0001	0.2075	0.0001	0.4279	0.7376
V32	0.59675	0.25851	-0.16109	0.03735	0.20853	0.06382	0.16350	0.48214	-0.02754	0.53887	1.00000	-0.12196	0.32011	0.11530	-0.00461
V	0.0001	0.0044	0.0788	0.6854	0.0223	0.4886	0.0744	0.0001	0.7652	0.0001	0.0	0.1845	0.0004	0.2098	0.9602
V33	0.00489	0.11404	-0.16316	0.14456	0.12274	0.49300	0.15991	-0.00880	0.21833	0.11589	-0.12196	1.00000	0.09250	-0.24511	0.16986
Ba	0.9577	0.2149	0.0750	0.1152	0.1817	0.0001	0.0811	0.9240	0.0166	0.2075	0.1845	0.0	0.3150	0.0070	0.0636
V34	0.27024	0.28896	0.08722	-0.02865	0.06730	0.00691	0.14835	0.23701	0.13730	0.45641	0.32011	0.09250	1.00000	-0.17926	0.07026
Sc	0.0028	0.0014	0.3435	0.7561	0.4652	0.9403	0.1059	0.0091	0.1348	0.0001	0.0004	0.3150	0.0	0.0501	0.4457
V35	0.03838	-0.23972	-0.11324	-0.14603	-0.00983	0.01752	-0.12498	-0.02997	0.00781	-0.07304	0.11530	-0.24511	-0.17926	1.00000	0.06938
As	0.6773	0.0084	0.2182	0.1115	0.9152	0.8494	0.1738	0.7452	0.9325	0.4279	0.2098	0.0070	0.0501	0.0	0.4515
V36	-0.21401	0.03249	0.06467	-0.18159	0.07120	0.08216	-0.06092	-0.01075	0.13977	0.03090	-0.00461	0.16986	0.07026	0.06938	1.00000
S	0.0189	0.7246	0.4828	0.0472	0.4397	0.3723	0.5086	0.9072	0.1279	0.7376	0.9602	0.0636	0.4457	0.4515	0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 204

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V6	1.00000	-0.06791	-0.05335	-0.37451	-0.20821	-0.42324	-0.14422	-0.03885	0.22958	-0.06989	-0.12865	-0.42361	-0.14160	-0.24096	-0.41692	-0.26227
SiO2	0.0	0.3345	0.4486	0.0001	0.0028	0.0001	0.0396	0.5812	0.0010	0.3206	0.0667	0.0001	0.0434	0.0005	0.0001	0.0002
V7	-0.06791	1.00000	0.64052	0.37589	-0.09150	-0.32203	-0.35607	0.04056	0.33517	0.06404	-0.02873	-0.26535	0.12529	0.21864	0.14689	0.24048
TiO2	0.3345	0.0	0.0001	0.0001	0.1931	0.0001	0.0001	0.5646	0.0001	0.3628	0.6833	0.0001	0.0742	0.0017	0.0360	0.0005
V8	-0.05335	0.64052	1.00000	0.23234	-0.21139	-0.44138	-0.62155	-0.23609	0.65468	-0.06273	0.15001	-0.11007	0.18281	0.05852	0.12676	0.12672
Al2O3	0.4486	0.0001	0.0	0.0008	0.0024	0.0001	0.0001	0.0007	0.0001	0.3727	0.0322	0.1171	0.0089	0.4057	0.0708	0.0709
V9	-0.37451	0.37589	0.23234	1.00000	0.36397	0.20198	0.02424	-0.00062	-0.14083	0.14597	-0.04189	-0.37585	0.48573	0.12907	0.49878	0.61227
Fe2O3	0.0001	0.0001	0.0008	0.0	0.0001	0.0038	0.7308	0.9930	0.0445	0.0372	0.5520	0.0001	0.0001	0.0658	0.0001	0.0001
V10	-0.20821	-0.09150	-0.21139	0.36397	1.00000	0.54707	0.56082	0.33151	-0.26274	0.19017	-0.17975	-0.33342	0.34807	-0.03559	0.28979	0.47656
MnO	0.0028	0.1931	0.0024	0.0001	0.0	0.0001	0.0001	0.0001	0.0001	0.0064	0.0101	0.0001	0.0001	0.6133	0.0001	0.0001
V11	-0.42324	-0.32203	-0.44138	0.20198	0.54707	1.00000	0.60761	0.14718	-0.43802	0.20423	-0.25281	0.03034	0.24205	-0.07804	0.31852	0.33677
MgO	0.0001	0.0001	0.0001	0.0038	0.0001	0.0	0.0001	0.0357	0.0001	0.0034	0.0003	0.6667	0.0005	0.2672	0.0001	0.0001
V12	-0.14422	-0.35607	-0.62155	0.02424	0.56082	0.60761	1.00000	0.48058	-0.54748	0.20995	-0.20615	-0.14512	0.10256	-0.09412	0.02993	0.22465
CaO	0.0396	0.0001	0.0001	0.7308	0.0001	0.0001	0.0	0.0001	0.0001	0.0026	0.0031	0.0384	0.1444	0.1806	0.6709	0.0012
V13	-0.03885	0.04056	-0.23609	-0.00062	0.33151	0.14718	0.48058	1.00000	-0.40558	0.20848	-0.23928	-0.29208	-0.03587	0.16102	0.05694	0.13666
Na2O	0.5812	0.5646	0.0007	0.9930	0.0001	0.0357	0.0001	0.0	0.0001	0.0028	0.0006	0.0001	0.6106	0.0214	0.4185	0.0513
V14	0.22958	0.33517	0.65468	-0.14083	-0.26274	-0.43802	-0.54748	-0.40558	1.00000	-0.06707	0.10301	0.00781	0.01701	-0.17826	-0.09722	-0.10221
K2O	0.0010	0.0001	0.0001	0.0445	0.0001	0.0001	0.0001	0.0001	0.0	0.3405	0.1426	0.9117	0.8092	0.0107	0.1665	0.1458
V15	-0.06989	0.06404	-0.06273	0.14597	0.19017	0.20423	0.20995	0.20848	-0.06707	1.00000	-0.26419	-0.05320	0.07390	-0.02713	0.06917	0.16109
P2O5	0.3206	0.3628	0.3727	0.0372	0.0064	0.0034	0.0026	0.0028	0.3405	0.0	0.0001	0.4498	0.2935	0.7001	0.3255	0.0213
V16	-0.12865	-0.02873	0.15001	-0.04189	-0.17975	-0.25281	-0.20615	-0.23928	0.10301	-0.26419	1.00000	0.35754	0.11144	0.25222	0.27124	-0.01959
H2O-	0.0667	0.6833	0.0322	0.5520	0.0101	0.0003	0.0031	0.0006	0.1426	0.0001	0.0	0.0001	0.1125	0.0003	0.0001	0.7810
V17	-0.42361	-0.26535	-0.11007	-0.37585	-0.33342	0.03034	-0.14512	-0.29208	0.00781	-0.05320	0.35754	1.00000	-0.26579	0.05465	-0.07698	-0.37793
LOI	0.0001	0.0001	0.1171	0.0001	0.0001	0.6667	0.0384	0.0001	0.9117	0.4498	0.0001	0.0	0.0001	0.4376	0.2738	0.0001
V18	-0.14160	0.12529	0.18281	0.48573	0.34807	0.24205	0.10256	-0.03587	0.01701	0.07390	0.11144	-0.26579	1.00000	-0.00114	0.41810	0.41768
Zn	0.0434	0.0742	0.0089	0.0001	0.0001	0.0005	0.1444	0.6106	0.8092	0.2935	0.1125	0.0001	0.0	0.9871	0.0001	0.0001
V19	-0.24096	0.21864	0.05852	0.12907	-0.03559	-0.07804	-0.09412	0.16102	-0.17826	-0.02713	0.25222	0.05465	-0.00114	1.00000	0.27161	0.07034
Cu	0.0005	0.0017	0.4057	0.0658	0.6133	0.2672	0.1806	0.0214	0.0107	0.7001	0.0003	0.4376	0.9871	0.0	0.0001	0.3174
V20	-0.41692	0.14689	0.12676	0.49878	0.28979	0.31852	0.02993	0.05694	-0.09722	0.06917	0.27124	-0.07698	0.41810	0.27161	1.00000	0.64730
Ni	0.0001	0.0360	0.0708	0.0001	0.0001	0.0001	0.6709	0.4185	0.1665	0.3255	0.0001	0.2738	0.0001	0.0001	0.0	0.0001
V21	-0.26227	0.24048	0.12672	0.61227	0.47656	0.33677	0.22465	0.13666	-0.10221	0.16109	-0.01959	-0.37793	0.41768	0.07034	0.64730	1.00000
Co	0.0002	0.0005	0.0709	0.0001	0.0001	0.0001	0.0012	0.0513	0.1458	0.0213	0.7810	0.0001	0.0001	0.3174	0.0001	0.0

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 204

	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	V17	V18	V19	V20	V21
V22	-0.04124	0.60934	0.85432	0.20557	-0.15514	-0.43868	-0.57028	-0.21497	0.61179	-0.06488	0.13151	-0.11703	0.15753	0.02730	0.10072	0.10848
Ga	0.5581	0.0001	0.0001	0.0032	0.0267	0.0001	0.0001	0.0020	0.0001	0.3565	0.0608	0.0955	0.0244	0.6983	0.1517	0.1225
V23	0.16959	0.51571	0.65070	-0.00359	-0.29599	-0.45613	-0.50177	-0.23825	0.58536	0.07238	0.04748	-0.02825	-0.00514	-0.12255	-0.14525	-0.09734
Nb	0.0153	0.0001	0.0001	0.9593	0.0001	0.0001	0.0001	0.0006	0.0001	0.3036	0.5000	0.6884	0.9419	0.0808	0.0382	0.1660
V24	0.38426	0.41539	0.22646	-0.20415	-0.26561	-0.43450	-0.32146	0.06847	0.33600	0.22674	-0.07844	-0.10369	-0.24702	0.07913	-0.28133	-0.27215
Zr	0.0001	0.0001	0.0011	0.0034	0.0001	0.0001	0.0001	0.3305	0.0001	0.0011	0.2648	0.1400	0.0004	0.2606	0.0001	0.0001
V25	-0.15493	0.53686	0.42028	0.35197	0.02399	-0.07341	-0.20992	-0.05466	0.12583	0.14164	-0.04203	-0.17745	0.21685	0.07445	0.19408	0.20684
Y	0.0269	0.0001	0.0001	0.0001	0.7335	0.2967	0.0026	0.4375	0.0729	0.0433	0.5505	0.0111	0.0018	0.2899	0.0054	0.0030
V26	0.11199	0.13921	0.06190	0.00659	0.22000	-0.08207	0.29371	0.68792	-0.05392	0.25790	-0.18025	-0.38538	-0.01668	0.11126	-0.06214	0.03213
Sr	0.1108	0.0471	0.3791	0.9255	0.0016	0.2432	0.0001	0.0001	0.4437	0.0002	0.0099	0.0001	0.8128	0.1131	0.3772	0.6482
V27	0.16854	0.29233	0.63926	0.01358	-0.14496	-0.35687	-0.45407	-0.34514	0.88110	0.00807	0.15113	-0.05898	0.15385	-0.22400	-0.04454	-0.00819
Rb	0.0160	0.0001	0.0001	0.8471	0.0386	0.0001	0.0001	0.0001	0.0001	0.9088	0.0310	0.4021	0.0280	0.0013	0.5270	0.9074
V28	0.06753	-0.02159	0.04856	-0.28118	-0.14719	-0.10952	-0.21813	-0.05925	0.20091	0.12018	0.04020	0.24879	-0.17324	0.02878	-0.05510	-0.26142
U	0.3372	0.7593	0.4903	0.0001	0.0357	0.1189	0.0017	0.3999	0.0040	0.0869	0.5680	0.0003	0.0132	0.6828	0.4338	0.0002
V29	0.24995	0.25251	0.49052	-0.22670	-0.31399	-0.49661	-0.39934	-0.07297	0.49771	0.02905	0.11799	0.04857	-0.14217	-0.03736	-0.23848	-0.29865
Th	0.0003	0.0003	0.0001	0.0011	0.0001	0.0001	0.0001	0.2997	0.0001	0.6800	0.0928	0.4903	0.0425	0.5958	0.0006	0.0001
V30	0.21504	0.06817	0.14364	-0.29398	-0.13072	-0.33876	-0.10873	0.18909	0.18702	0.19825	-0.01079	0.04512	-0.02055	0.12772	-0.27697	-0.28446
Pb	0.0020	0.3326	0.0404	0.0001	0.0624	0.0001	0.1216	0.0068	0.0074	0.0045	0.8782	0.5216	0.7705	0.0687	0.0001	0.0001
V31	-0.00803	0.38989	0.44954	0.36339	-0.01293	-0.19401	-0.25026	0.00108	0.21516	-0.04972	0.15267	-0.27684	0.12510	0.22772	0.29244	0.33529
Cr	0.9092	0.0001	0.0001	0.0001	0.8543	0.0054	0.0003	0.9877	0.0020	0.4801	0.0293	0.0001	0.0746	0.0011	0.0001	0.0001
V32	-0.39037	0.52057	0.28760	0.40447	0.05293	0.03748	-0.10794	0.07841	0.02882	-0.05369	0.20206	-0.08371	0.12438	0.39320	0.59303	0.45897
V	0.0001	0.0001	0.0001	0.0001	0.4521	0.5946	0.1244	0.2649	0.6824	0.4457	0.0038	0.2339	0.0763	0.0001	0.0001	0.0001
V33	0.30827	0.04060	0.28987	-0.45521	-0.26760	-0.45695	-0.40180	-0.07449	0.52008	-0.10076	0.18386	0.13496	-0.19697	0.03487	-0.21675	-0.37776
Ba	0.0001	0.5642	0.0001	0.0001	0.0001	0.0001	0.0001	0.2897	0.0001	0.1516	0.0085	0.0543	0.0047	0.6205	0.0018	0.0001
V34	-0.40299	0.31431	0.25608	0.36443	0.15817	0.19841	0.10039	0.18711	-0.09604	-0.19983	0.02637	-0.17350	0.21003	0.16480	0.29872	0.30113
Sc	0.0001	0.0001	0.0002	0.0001	0.0239	0.0044	0.1531	0.0074	0.1718	0.0042	0.7082	0.0131	0.0026	0.0185	0.0001	0.0001
V35	-0.07852	-0.08043	-0.04385	-0.20932	-0.19226	-0.09633	-0.12695	0.05494	0.06739	0.22782	0.02529	0.18814	-0.07861	0.17909	-0.01696	-0.08275
As	0.2643	0.2528	0.5334	0.0027	0.0059	0.1705	0.0704	0.4351	0.3382	0.0010	0.7196	0.0070	0.2638	0.0104	0.8097	0.2394
V36	-0.17322	-0.31228	-0.33010	-0.31395	-0.09762	0.20877	0.16083	0.08775	-0.16203	0.06157	0.07996	0.57265	-0.23406	0.10708	0.01296	-0.17681
S	0.0132	0.0001	0.0001	0.0001	0.1648	0.0027	0.0216	0.2120	0.0206	0.3817	0.2556	0.0001	0.0008	0.1274	0.8540	0.0114

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 204

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V6	-0.04124	0.16959	0.38426	-0.15493	0.11199	0.16854	0.06753	0.24995	0.21504	-0.00803	-0.39037	0.30827	-0.40299	-0.07852	-0.17322
SiO2	0.5581	0.0153	0.0001	0.0269	0.1108	0.0160	0.3372	0.0003	0.0020	0.9092	0.0001	0.0001	0.0001	0.2643	0.0132
V7	0.60934	0.51571	0.41539	0.53686	0.13921	0.29233	-0.02159	0.25251	0.06817	0.38989	0.52057	0.04060	0.31431	-0.08043	-0.31228
TiO2	0.0001	0.0001	0.0001	0.0001	0.0471	0.0001	0.7593	0.0003	0.3326	0.0001	0.0001	0.5642	0.0001	0.2528	0.0001
V8	0.85432	0.65070	0.22646	0.42028	0.06190	0.63926	0.04856	0.49052	0.14364	0.44954	0.28760	0.28987	0.25608	-0.04385	-0.33010
Al2O3	0.0001	0.0001	0.0011	0.0001	0.3791	0.0001	0.4903	0.0001	0.0404	0.0001	0.0001	0.0001	0.0002	0.5334	0.0001
V9	0.20557	-0.00359	-0.20415	0.35197	0.00659	0.01358	-0.28118	-0.22670	-0.29398	0.36339	0.40447	-0.45521	0.36443	-0.20932	-0.31395
Fe2O3	0.0032	0.9593	0.0034	0.0001	0.9255	0.8471	0.0001	0.0011	0.0001	0.0001	0.0001	0.0001	0.0001	0.0027	0.0001
V10	-0.15514	-0.29599	-0.26561	0.02399	0.22000	-0.14496	-0.14719	-0.31399	-0.13072	-0.01293	0.05293	-0.26760	0.15817	-0.19226	-0.09762
MnO	0.0267	0.0001	0.0001	0.7335	0.0016	0.0386	0.0357	0.0001	0.0624	0.8543	0.4521	0.0001	0.0239	0.0059	0.1648
V11	-0.43868	-0.45613	-0.43450	-0.07341	-0.08207	-0.35687	-0.10952	-0.49661	-0.33876	-0.19401	0.03748	-0.45695	0.19841	-0.09633	0.20877
MgO	0.0001	0.0001	0.0001	0.2967	0.2432	0.0001	0.1189	0.0001	0.0001	0.0054	0.5946	0.0001	0.0044	0.1705	0.0027
V12	-0.57028	-0.50177	-0.32146	-0.20992	0.29371	-0.45407	-0.21813	-0.39934	-0.10873	-0.25026	-0.10794	-0.40180	0.10039	-0.12695	0.16083
CaO	0.0001	0.0001	0.0001	0.0026	0.0001	0.0001	0.0017	0.0001	0.1216	0.0003	0.1244	0.0001	0.1531	0.0704	0.0216
V13	-0.21497	-0.23825	0.06847	-0.05466	0.68792	-0.34514	-0.05925	-0.07297	0.18909	0.00108	0.07841	-0.07449	0.18711	0.05494	0.08775
Na2O	0.0020	0.0006	0.3305	0.4375	0.0001	0.0001	0.3999	0.2997	0.0068	0.9877	0.2649	0.2897	0.0074	0.4351	0.2120
V14	0.61179	0.58536	0.33600	0.12583	-0.05392	0.88110	0.20091	0.49771	0.18702	0.21516	0.02882	0.52008	-0.09604	0.06739	-0.16203
K2O	0.0001	0.0001	0.0001	0.0729	0.4437	0.0001	0.0040	0.0001	0.0074	0.0020	0.6824	0.0001	0.1718	0.3382	0.0206
V15	-0.06488	0.07238	0.22674	0.14164	0.25790	0.00807	0.12018	0.02905	0.19825	-0.04972	-0.05369	-0.10076	-0.19983	0.22782	0.06157
P2O5	0.3565	0.3036	0.0011	0.0433	0.0002	0.9088	0.0869	0.6800	0.0045	0.4801	0.4457	0.1516	0.0042	0.0010	0.3817
V16	0.13151	0.04748	-0.07844	-0.04203	-0.18025	0.15113	0.04020	0.11799	-0.01079	0.15267	0.20206	0.18386	0.02637	0.02529	0.07996
H2O-	0.0608	0.5000	0.2648	0.5505	0.0099	0.0310	0.5680	0.0928	0.8782	0.0293	0.0038	0.0085	0.7082	0.7196	0.2556
V17	-0.11703	-0.02825	-0.10369	-0.17745	-0.38538	-0.05898	0.24879	0.04857	0.04512	-0.27684	-0.08371	0.13496	-0.17350	0.18814	0.57265
LOI	0.0955	0.6884	0.1400	0.0111	0.0001	0.4021	0.0003	0.4903	0.5216	0.0001	0.2339	0.0543	0.0131	0.0070	0.0001
V18	0.15753	-0.00514	-0.24702	0.21685	-0.01668	0.15385	-0.17324	-0.14217	-0.02055	0.12510	0.12438	-0.19697	0.21003	-0.07861	-0.23406
Zn	0.0244	0.9419	0.0004	0.0018	0.8128	0.0280	0.0132	0.0425	0.7705	0.0746	0.0763	0.0047	0.0026	0.2638	0.0008
V19	0.02730	-0.12255	0.07913	0.07445	0.11126	-0.22400	0.02878	-0.03736	0.12772	0.22772	0.39320	0.03487	0.16480	0.17909	0.10708
Cu	0.6983	0.0808	0.2606	0.2899	0.1131	0.0013	0.6828	0.5958	0.0687	0.0011	0.0001	0.6205	0.0185	0.0104	0.1274
V20	0.10072	-0.14525	-0.28133	0.19408	-0.06214	-0.04454	-0.05510	-0.23848	-0.27697	0.29244	0.59303	-0.21675	0.29872	-0.01696	0.01296
Ni	0.1517	0.0382	0.0001	0.0054	0.3772	0.5270	0.4338	0.0006	0.0001	0.0001	0.0001	0.0018	0.0001	0.8097	0.8540
V21	0.10848	-0.09734	-0.27215	0.20684	0.03213	-0.00819	-0.26142	-0.29865	-0.28446	0.33529	0.45897	-0.37776	0.30113	-0.08275	-0.17681
Co	0.1225	0.1660	0.0001	0.0030	0.6482	0.9074	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.2394	0.0114

Correlation Analysis

Spearman Correlation Coefficients / Prob > |R| under Ho: Rho=0 / N = 204

	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32	V33	V34	V35	V36
V22	1.00000	0.54854	0.26306	0.40902	0.01797	0.59807	0.08842	0.47193	0.12921	0.30540	0.27287	0.27374	0.24669	-0.03451	-0.34600
Ga	0.0	0.0001	0.0001	0.0001	0.7987	0.0001	0.2086	0.0001	0.0655	0.0001	0.0001	0.0001	0.0004	0.6241	0.0001
V23	0.54854	1.00000	0.56564	0.39116	0.07954	0.53554	0.16172	0.59186	0.23092	0.19787	0.02790	0.34961	-0.08588	0.05254	-0.18846
Nb	0.0001	0.0	0.0001	0.0001	0.2581	0.0001	0.0208	0.0001	0.0009	0.0046	0.6920	0.0001	0.2220	0.4555	0.0069
V24	0.26306	0.56564	1.00000	0.33540	0.30367	0.19949	0.34381	0.51938	0.33817	0.01436	-0.06430	0.40799	-0.21241	0.19180	-0.04463
Zr	0.0001	0.0001	0.0	0.0001	0.0001	0.0042	0.0001	0.0001	0.0001	0.8385	0.3609	0.0001	0.0023	0.0060	0.5262
V25	0.40902	0.39116	0.33540	1.00000	0.02049	0.07881	-0.03964	0.19657	-0.13149	0.06928	0.25694	-0.01354	0.29648	-0.07295	-0.22915
Y	0.0001	0.0001	0.0001	0.0	0.7711	0.2625	0.5735	0.0048	0.0608	0.3248	0.0002	0.8476	0.0001	0.2998	0.0010
V26	0.01797	0.07954	0.30367	0.02049	1.00000	0.01043	0.01619	0.23175	0.41842	0.18286	0.03688	0.12950	0.04218	0.12700	-0.06792
Sr	0.7987	0.2581	0.0001	0.7711	0.0	0.8823	0.8182	0.0009	0.0001	0.0088	0.6005	0.0649	0.5492	0.0703	0.3344
V27	0.59807	0.53554	0.19949	0.07881	0.01043	1.00000	0.13540	0.38503	0.22041	0.22522	-0.02566	0.36944	-0.09436	0.01504	-0.25750
Rb	0.0001	0.0001	0.0042	0.2625	0.8823	0.0	0.0535	0.0001	0.0015	0.0012	0.7157	0.0001	0.1794	0.8309	0.0002
V28	0.08842	0.16172	0.34381	-0.03964	0.01619	0.13540	1.00000	0.22290	0.24477	-0.13196	-0.06590	0.31134	-0.24099	0.26747	0.16693
U	0.2086	0.0208	0.0001	0.5735	0.8182	0.0535	0.0	0.0014	0.0004	0.0599	0.3490	0.0001	0.0005	0.0001	0.0170
V29	0.47193	0.59186	0.51938	0.19657	0.23175	0.38503	0.22290	1.00000	0.30874	0.08291	-0.07161	0.53014	-0.08482	0.17410	-0.07961
Th	0.0001	0.0001	0.0001	0.0048	0.0009	0.0001	0.0014	0.0	0.0001	0.2384	0.3088	0.0001	0.2278	0.0128	0.2577
V30	0.12921	0.23092	0.33817	-0.13149	0.41842	0.22041	0.24477	0.30874	1.00000	0.12480	-0.23503	0.29140	-0.20922	0.25891	-0.00527
Pb	0.0655	0.0009	0.0001	0.0608	0.0001	0.0015	0.0004	0.0001	0.0	0.0753	0.0007	0.0001	0.0027	0.0002	0.9403
V31	0.30540	0.19787	0.01436	0.06928	0.18286	0.22522	-0.13196	0.08291	0.12480	1.00000	0.41857	0.01571	0.21490	-0.05098	-0.21999
Cr	0.0001	0.0046	0.8385	0.3248	0.0088	0.0012	0.0599	0.2384	0.0753	0.0	0.0001	0.8235	0.0020	0.4690	0.0016
V32	0.27287	0.02790	-0.06430	0.25694	0.03688	-0.02566	-0.06590	-0.07161	-0.23503	0.41857	1.00000	-0.07789	0.44156	0.01644	-0.05640
V	0.0001	0.6920	0.3609	0.0002	0.6005	0.7157	0.3490	0.3088	0.0007	0.0001	0.0	0.2681	0.0001	0.8154	0.4230
V33	0.27374	0.34961	0.40799	-0.01354	0.12950	0.36944	0.31134	0.53014	0.29140	0.01571	-0.07789	1.00000	-0.19122	0.17449	-0.00173
Ba	0.0001	0.0001	0.0001	0.8476	0.0649	0.0001	0.0001	0.0001	0.0001	0.8235	0.2681	0.0	0.0061	0.0126	0.9804
V34	0.24669	-0.08588	-0.21241	0.29648	0.04218	-0.09436	-0.24099	-0.08482	-0.20922	0.21490	0.44156	-0.19122	1.00000	-0.19692	-0.20956
Sc	0.0004	0.2220	0.0023	0.0001	0.5492	0.1794	0.0005	0.2278	0.0027	0.0020	0.0001	0.0061	0.0	0.0048	0.0026
V35	-0.03451	0.05254	0.19180	-0.07295	0.12700	0.01504	0.26747	0.17410	0.25891	-0.05098	0.01644	0.17449	-0.19692	1.00000	0.17708
As	0.6241	0.4555	0.0060	0.2998	0.0703	0.8309	0.0001	0.0128	0.0002	0.4690	0.8154	0.0126	0.0048	0.0	0.0113
V36	-0.34600	-0.18846	-0.04463	-0.22915	-0.06792	-0.25750	0.16693	-0.07961	-0.00527	-0.21999	-0.05640	-0.00173	-0.20956	0.17708	1.00000
S	0.0001	0.0069	0.5262	0.0010	0.3344	0.0002	0.0170	0.2577	0.9403	0.0016	0.4230	0.9804	0.0026	0.0113	0.0

APPENDIX 2d

Analysis of Variance and LSD-test

CONTENTS OF APPENDIX 2d

Codes used for geographic areas

Code 1 = Botswana

Code 4 = Western Transvaal

Code 5 = Central Transvaal

Code 7 = Eastern Transvaal

Code 8 = Northeastern Transvaal

(Areas as defined in Fig. 1.5.1)

Codes used for stratigraphic groups

Code 2 = Rooihoogte Formation and Lower Timeball Hill Shales

Code 4 = Upper Timeball Hill Shales

Code 8 = Hekpoort, Dwaalheuwel and Strubenkop Formations

Code 10 = Silverton Formation

Code 15 = Magaliesberg and post-Magaliesberg Formations

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: A1203				
Effect	SS	df	MS	F	p
(A): AREA	.59425	4	.14856	5.34195	.00054
Within	16.68624	600	.02781		

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: A1203		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = 1.20855] level code: 1 { 1}	--	.06680	.00022
[mean = 1.24874] level code: 4 { 2}	.06680	--	.02697
[mean = 1.29735] level code: 5 { 3}	.00022	.02697	--
[mean = 1.26084] level code: 7 { 4}	.01768	.59243	.09612
[mean = 1.21962] level code: 8 { 5}	.62390	.18637	.00082

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: A1203	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 1.20855] level code: 1 { 1}	.01768	.62390
[mean = 1.24874] level code: 4 { 2}	.59243	.18637
[mean = 1.29735] level code: 5 { 3}	.09612	.00082
[mean = 1.26084] level code: 7 { 4}	--	.06010
[mean = 1.21962] level code: 8 { 5}	.06010	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Fe203				
Effect	SS	df	MS	F	p
(A): AREA	2.04407	4	.51102	7.98422	.00003
Within	38.40215	600	.06400		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Fe203		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = .88691] level code: 1 { 1}	--	.17885	.13065
[mean = .84199] level code: 4 { 2}	.17885	--	.00501
[mean = .93730] level code: 5 { 3}	.13065	.00501	--
[mean = .78681] level code: 7 { 4}	.00341	.09740	.00007
[mean = .78976] level code: 8 { 5}	.00432	.11693	.00009

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Fe203	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = .88691] level code: 1 { 1}	.00341	.00432
[mean = .84199] level code: 4 { 2}	.09740	.11693
[mean = .93730] level code: 5 { 3}	.00007	.00009
[mean = .78681] level code: 7 { 4}	--	.89076
[mean = .78976] level code: 8 { 5}	.89076	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: MgO				
Effect	SS	df	MS	F	p
(A): AREA	45.3992	4	11.34980	44.93398	.00000
Within	150.5426	596	.25259		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: MgO		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = .41389] level code: 1 { 1}	--	.00000	.00000
[mean = -.24548] level code: 4 { 2}	.00000	--	.44623
[mean = -.29725] level code: 5 { 3}	.00000	.44623	--
[mean = .11609] level code: 7 { 4}	.00008	.00001	.00000
[mean = .21250] level code: 8 { 5}	.00313	.00000	.00000

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: MgO	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = .41389] level code: 1 { 1}	.00008	.00313
[mean = -.24548] level code: 4 { 2}	.00001	.00000
[mean = -.29725] level code: 5 { 3}	.00000	.00000
[mean = .11609] level code: 7 { 4}	--	.14669
[mean = .21250] level code: 8 { 5}	.14669	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: K20				
Effect	SS	df	MS	F	p
(A): AREA	6.0006	4	1.50015	8.49659	.00002
Within	105.7591	599	.17656		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: K20		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = .39715] level code: 1 { 1}	--	.00025	.54390
[mean = .17557] level code: 4 { 2}	.00025	--	.00005
[mean = .43172] level code: 5 { 3}	.54390	.00005	--
[mean = .43420] level code: 7 { 4}	.51504	.00005	.91679
[mean = .37669] level code: 8 { 5}	.71415	.00064	.32690

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: K20	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = .39715] level code: 1 { 1}	.51504	.71415
[mean = .17557] level code: 4 { 2}	.00005	.00064
[mean = .43172] level code: 5 { 3}	.91679	.32690
[mean = .43420] level code: 7 { 4}	--	.30465
[mean = .37669] level code: 8 { 5}	.30465	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: MnO				
Effect	SS	df	MS	F	p
(A): AREA	5.66397	4	1.41599	9.46443	.00001
Within	77.64859	519	.14961		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: MnO			
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}	
[mean = -1.27712] level code: 1 { 1}	--	.00230	.00001	
[mean = -1.44818] level code: 4 { 2}	.00230	--	.02043	
[mean = -1.57431] level code: 5 { 3}	.00001	.02043	--	
[mean = -1.38931] level code: 7 { 4}	.03851	.28265	.00116	
[mean = -1.30568] level code: 8 { 5}	.60879	.00935	.00003	

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: MnO		
marginal means for indep. var.: AREA	{ 4}	{ 5}	
[mean = -1.27712] level code: 1 { 1}	.03851	.60879	
[mean = -1.44818] level code: 4 { 2}	.28265	.00935	
[mean = -1.57431] level code: 5 { 3}	.00116	.00003	
[mean = -1.38931] level code: 7 { 4}	--	.12332	
[mean = -1.30568] level code: 8 { 5}	.12332	--	

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Zn				
Effect	SS	df	MS	F	p
(A): AREA	5.93007	4	1.48252	15.60480	.00000
Within	57.00241	600	.09500		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Zn		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = 1.92772] level code: 1 { 1}	--	.00000	.00089
[mean = 1.64451] level code: 4 { 2}	.00000	--	.00099
[mean = 1.78530] level code: 5 { 3}	.00089	.00099	--
[mean = 1.73974] level code: 7 { 4}	.00005	.01933	.26585
[mean = 1.87621] level code: 8 { 5}	.20656	.00001	.02527

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Zn	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 1.92772] level code: 1 { 1}	.00005	.20656
[mean = 1.64451] level code: 4 { 2}	.01933	.00001
[mean = 1.78530] level code: 5 { 3}	.26585	.02527
[mean = 1.73974] level code: 7 { 4}	--	.00131
[mean = 1.87621] level code: 8 { 5}	.00131	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Cu				
Effect	SS	df	MS	F	p
(A): AREA	6.4659	4	1.61648	9.40037	.00001
Within	103.1755	600	.17196		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Cu		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = 1.45041] level code: 1 { 1}	--	.36837	.20867
[mean = 1.50040] level code: 4 { 2}	.36837	--	.72833
[mean = 1.51941] level code: 5 { 3}	.20867	.72833	--
[mean = 1.39513] level code: 7 { 4}	.31761	.05353	.02309
[mean = 1.17714] level code: 8 { 5}	.00002	.00000	.00000

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Cu	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 1.45041] level code: 1 { 1}	.31761	.00002
[mean = 1.50040] level code: 4 { 2}	.05353	.00000
[mean = 1.51941] level code: 5 { 3}	.02309	.00000
[mean = 1.39513] level code: 7 { 4}	--	.00026
[mean = 1.17714] level code: 8 { 5}	.00026	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Co				
Effect	SS	df	MS	F	p
(A): AREA	8.32158	4	2.08039	14.27403	.00000
Within	87.44810	600	.14575		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Co		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = 1.17099] level code: 1 { 1}	--	.00030	.00010
[mean = .97354] level code: 4 { 2}	.00030	--	.67503
[mean = .95202] level code: 5 { 3}	.00010	.67503	--
[mean = .85339] level code: 7 { 4}	.00000	.01728	.04944
[mean = 1.12346] level code: 8 { 5}	.35211	.00362	.00115

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Co	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 1.17099] level code: 1 { 1}	.00000	.35211
[mean = .97354] level code: 4 { 2}	.01728	.00362
[mean = .95202] level code: 5 { 3}	.04944	.00115
[mean = .85339] level code: 7 { 4}	--	.00001
[mean = 1.12346] level code: 8 { 5}	.00001	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Zr				
Effect	SS	df	MS	F	p
(A): AREA	.76987	4	.19247	6.63964	.00011
Within	17.39264	600	.02899		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Zr		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = 2.14853] level code: 1 { 1}	--	.00320	.00037
[mean = 2.21641] level code: 4 { 2}	.00320	--	.42382
[mean = 2.23475] level code: 5 { 3}	.00037	.42382	--
[mean = 2.23150] level code: 7 { 4}	.00054	.51253	.85725
[mean = 2.16129] level code: 8 { 5}	.58027	.01448	.00165

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Zr	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 2.14853] level code: 1 { 1}	.00054	.58027
[mean = 2.21641] level code: 4 { 2}	.51253	.01448
[mean = 2.23475] level code: 5 { 3}	.85725	.00165
[mean = 2.23150] level code: 7 { 4}	--	.00242
[mean = 2.16129] level code: 8 { 5}	.00242	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Sr				
Effect	SS	df	MS	F	p
(A): AREA	7.79556	4	1.94889	17.56788	.00000
Within	66.56088	600	.11093		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Sr			
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}	
[mean = 1.65667] level code: 1 { 1}	--	.00006	.00000	
[mean = 1.85923] level code: 4 { 2}	.00006	--	.00555	
[mean = 1.98302] level code: 5 { 3}	.00000	.00555	--	
[mean = 1.91515] level code: 7 { 4}	.00000	.20438	.12186	
[mean = 1.91536] level code: 8 { 5}	.00000	.20265	.12303	

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Sr	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 1.65667] level code: 1 { 1}	.00000	.00000
[mean = 1.85923] level code: 4 { 2}	.20438	.20265
[mean = 1.98302] level code: 5 { 3}	.12186	.12303
[mean = 1.91515] level code: 7 { 4}	--	.94426
[mean = 1.91536] level code: 8 { 5}	.94426	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Th				
Effect	SS	df	MS	F	p
(A): AREA	1.65604	4	.41401	8.68388	.00001
Within	28.60537	600	.04768		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Th		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = 1.16527] level code: 1 { 1}	--	.18169	.00143
[mean = 1.12674] level code: 4 { 2}	.18169	--	.00005
[mean = 1.26102] level code: 5 { 3}	.00143	.00005	--
[mean = 1.23782] level code: 7 { 4}	.01225	.00035	.43034
[mean = 1.15746] level code: 8 { 5}	.77822	.29050	.00070

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Th	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 1.16527] level code: 1 { 1}	.01225	.77822
[mean = 1.12674] level code: 4 { 2}	.00035	.29050
[mean = 1.26102] level code: 5 { 3}	.43034	.00070
[mean = 1.23782] level code: 7 { 4}	--	.00597
[mean = 1.15746] level code: 8 { 5}	.00597	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Pb				
Effect	SS	df	MS	F	p
(A): AREA	1.11560	4	.27890	2.49941	.04088
Within	66.95198	600	.11159		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Pb		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = 1.28132] level code: 1 { 1}	--	.02094	.50306
[mean = 1.17950] level code: 4 { 2}	.02094	--	.10366
[mean = 1.25105] level code: 5 { 3}	.50306	.10366	--
[mean = 1.29854] level code: 7 { 4}	.69959	.00757	.28528
[mean = 1.23669] level code: 8 { 5}	.31652	.19540	.74265

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Pb	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 1.28132] level code: 1 { 1}	.69959	.31652
[mean = 1.17950] level code: 4 { 2}	.00757	.19540
[mean = 1.25105] level code: 5 { 3}	.28528	.74265
[mean = 1.29854] level code: 7 { 4}	--	.16064
[mean = 1.23669] level code: 8 { 5}	.16064	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Cr				
Effect	SS	df	MS	F	p
(A): AREA	2.91937	4	.72984	11.88579	.00000
Within	36.84280	600	.06140		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Cr		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = 2.14622] level code: 1 { 1}	--	.13346	.00006
[mean = 2.09721] level code: 4 { 2}	.13346	--	.00000
[mean = 2.29664] level code: 5 { 3}	.00006	.00000	--
[mean = 2.15649] level code: 7 { 4}	.75020	.06886	.00012
[mean = 2.15345] level code: 8 { 5}	.80989	.08443	.00010

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Cr	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 2.14622] level code: 1 { 1}	.75020	.80989
[mean = 2.09721] level code: 4 { 2}	.06886	.08443
[mean = 2.29664] level code: 5 { 3}	.00012	.00010
[mean = 2.15649] level code: 7 { 4}	--	.88805
[mean = 2.15345] level code: 8 { 5}	.88805	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: V				
Effect	SS	df	MS	F	p
(A): AREA	1.99410	4	.49853	14.35108	.00000
Within	20.84272	600	.03474		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: V		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = 2.12494] level code: 1 { 1}	--	.00014	.01058
[mean = 2.22893] level code: 4 { 2}	.00014	--	.09706
[mean = 2.18824] level code: 5 { 3}	.01058	.09706	--
[mean = 2.07341] level code: 7 { 4}	.03566	.00000	.00005
[mean = 2.12243] level code: 8 { 5}	.88259	.00011	.00808

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: V	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 2.12494] level code: 1 { 1}	.03566	.88259
[mean = 2.22893] level code: 4 { 2}	.00000	.00011
[mean = 2.18824] level code: 5 { 3}	.00005	.00808
[mean = 2.07341] level code: 7 { 4}	--	.04552
[mean = 2.12243] level code: 8 { 5}	.04552	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Ba				
Effect	SS	df	MS	F	p
(A): AREA	3.36964	4	.84241	6.61844	.00012
Within	76.36949	600	.12728		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Ba		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = 2.79561] level code: 1 { 1}	--	.01610	.43456
[mean = 2.68204] level code: 4 { 2}	.01610	--	.00193
[mean = 2.83319] level code: 5 { 3}	.43456	.00193	--
[mean = 2.87672] level code: 7 { 4}	.08388	.00017	.36218
[mean = 2.89619] level code: 8 { 5}	.03227	.00006	.18138

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Ba	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 2.79561] level code: 1 { 1}	.08388	.03227
[mean = 2.68204] level code: 4 { 2}	.00017	.00006
[mean = 2.83319] level code: 5 { 3}	.36218	.18138
[mean = 2.87672] level code: 7 { 4}	--	.68429
[mean = 2.89619] level code: 8 { 5}	.68429	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Sc				
Effect	SS	df	MS	F	p
(A): AREA	1.09683	4	.27421	6.92456	.00008
Within	23.75966	600	.03960		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Sc		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = 1.21657] level code: 1 { 1}	--	.05442	.05314
[mean = 1.26689] level code: 4 { 2}	.05442	--	.00036
[mean = 1.16597] level code: 5 { 3}	.05314	.00036	--
[mean = 1.24014] level code: 7 { 4}	.37703	.31333	.00543
[mean = 1.29944] level code: 8 { 5}	.00223	.21663	.00002

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Sc	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 1.21657] level code: 1 { 1}	.37703	.00223
[mean = 1.26689] level code: 4 { 2}	.31333	.21663
[mean = 1.16597] level code: 5 { 3}	.00543	.00002
[mean = 1.24014] level code: 7 { 4}	--	.02383
[mean = 1.29944] level code: 8 { 5}	.02383	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: As				
Effect	SS	df	MS	F	p
(A): AREA	1.06939	4	.26735	4.22339	.00319
Within	9.87506	156	.06330		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: As		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = 1.44531] level code: 1 { 1}	--	.23002	.02069
[mean = 1.35037] level code: 4 { 2}	.23002	--	.26588
[mean = 1.26217] level code: 5 { 3}	.02069	.26588	--
[mean = 1.27482] level code: 7 { 4}	.03073	.34345	.84721
[mean = 1.13542] level code: 8 { 5}	.00033	.00736	.10723

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: As	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 1.44531] level code: 1 { 1}	.03073	.00033
[mean = 1.35037] level code: 4 { 2}	.34345	.00736
[mean = 1.26217] level code: 5 { 3}	.84721	.10723
[mean = 1.27482] level code: 7 { 4}	--	.07635
[mean = 1.13542] level code: 8 { 5}	.07635	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: S				
Effect	SS	df	MS	F	p
(A): AREA	42.5324	4	10.63311	45.54547	.00000
Within	140.0768	600	.23346		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: S		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = 2.84355] level code: 1 { 1}	--	.00000	.00000
[mean = 2.32942] level code: 4 { 2}	.00000	--	.18457
[mean = 2.24470] level code: 5 { 3}	.00000	.18457	--
[mean = 2.08421] level code: 7 { 4}	.00000	.00036	.01227
[mean = 2.29656] level code: 8 { 5}	.00000	.61560	.42552

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: S	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 2.84355] level code: 1 { 1}	.00000	.00000
[mean = 2.32942] level code: 4 { 2}	.00036	.61560
[mean = 2.24470] level code: 5 { 3}	.01227	.42552
[mean = 2.08421] level code: 7 { 4}	--	.00140
[mean = 2.29656] level code: 8 { 5}	.00140	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Sb				
Effect	SS	df	MS	F	p
(A): AREA	.15873	4	.03968	1.85551	.12600
Within	1.62540	76	.02139		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Sb		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = 1.00314] level code: 1 { 1}	--	.32407	.13036
[mean = 1.07280] level code: 4 { 2}	.32407	--	.61193
[mean = 1.10907] level code: 5 { 3}	.13036	.61193	--
[mean = 1.10610] level code: 7 { 4}	.14158	.64070	.91801
[mean = .94919] level code: 8 { 5}	.44935	.07767	.02364

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Sb	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 1.00314] level code: 1 { 1}	.14158	.44935
[mean = 1.07280] level code: 4 { 2}	.64070	.07767
[mean = 1.10907] level code: 5 { 3}	.91801	.02364
[mean = 1.10610] level code: 7 { 4}	--	.02620
[mean = .94919] level code: 8 { 5}	.02620	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: CIA				
Effect	SS	df	MS	F	p
(A): AREA	.44509	4	.11127	7.41708	.00005
Within	9.00125	600	.01500		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: CIA		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = 1.86833] level code: 1 { 1}	--	.93077	.00415
[mean = 1.86870] level code: 4 { 2}	.93077	--	.00441
[mean = 1.91560] level code: 5 { 3}	.00415	.00441	--
[mean = 1.84907] level code: 7 { 4}	.23566	.22660	.00018
[mean = 1.83204] level code: 8 { 5}	.02465	.02329	.00002

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: CIA	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 1.86833] level code: 1 { 1}	.23566	.02465
[mean = 1.86870] level code: 4 { 2}	.22660	.02329
[mean = 1.91560] level code: 5 { 3}	.00018	.00002
[mean = 1.84907] level code: 7 { 4}	--	.29642
[mean = 1.83204] level code: 8 { 5}	.29642	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: K2O\Na2O				
Effect	SS	df	MS	F	p
(A): AREA	34.8497	4	8.71242	18.29132	.00000
Within	276.7387	581	.47631		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: K2O\Na2O		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = 1.15975] level code: 1 { 1}	--	.00000	.00607
[mean = .58745] level code: 4 { 2}	.00000	--	.00112
[mean = .90274] level code: 5 { 3}	.00607	.00112	--
[mean = .78305] level code: 7 { 4}	.00020	.03375	.19585
[mean = .37866] level code: 8 { 5}	.00000	.02370	.00001

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: K2O\Na2O	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 1.15975] level code: 1 { 1}	.00020	.00000
[mean = .58745] level code: 4 { 2}	.03375	.02370
[mean = .90274] level code: 5 { 3}	.19585	.00001
[mean = .78305] level code: 7 { 4}	--	.00010
[mean = .37866] level code: 8 { 5}	.00010	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Cr¦Th				
Effect	SS	df	MS	F	p
(A): AREA	1.07004	4	.26751	4.18541	.00275
Within	38.22105	598	.06391		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Cr¦Th		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = .96642] level code: 1 { 1}	--	.74322	.03774
[mean = .95557] level code: 4 { 2}	.74322	--	.01678
[mean = 1.03562] level code: 5 { 3}	.03774	.01678	--
[mean = .91781] level code: 7 { 4}	.14530	.26133	.00083
[mean = 1.00023] level code: 8 { 5}	.31669	.18178	.29355

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Cr¦Th	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = .96642] level code: 1 { 1}	.14530	.31669
[mean = .95557] level code: 4 { 2}	.26133	.18178
[mean = 1.03562] level code: 5 { 3}	.00083	.29355
[mean = .91781] level code: 7 { 4}	--	.01397
[mean = 1.00023] level code: 8 { 5}	.01397	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Th¦Sc				
Effect	SS	df	MS	F	p
(A): AREA	3.73486	4	.93371	15.09519	.00000
Within	36.92748	597	.06186		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Th¦Sc		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = -.04162] level code: 1 { 1}	--	.00550	.00097
[mean = -.13434] level code: 4 { 2}	.00550	--	.00000
[mean = .07246] level code: 5 { 3}	.00097	.00000	--
[mean = -.00299] level code: 7 { 4}	.24247	.00025	.02177
[mean = -.14198] level code: 8 { 5}	.00295	.80286	.00000

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Th¦Sc	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = -.04162] level code: 1 { 1}	.24247	.00295
[mean = -.13434] level code: 4 { 2}	.00025	.80286
[mean = .07246] level code: 5 { 3}	.02177	.00000
[mean = -.00299] level code: 7 { 4}	--	.00014
[mean = -.14198] level code: 8 { 5}	.00014	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Cr¦Zr				
Effect	SS	df	MS	F	p
(A): AREA	2.40025	4	.60006	8.74353	.00001
Within	41.17755	600	.06863		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Cr¦Zr		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = -.00231] level code: 1 { 1}	--	.00176	.06231
[mean = -.11446] level code: 4 { 2}	.00176	--	.00002
[mean = .06189] level code: 5 { 3}	.06231	.00002	--
[mean = -.06900] level code: 7 { 4}	.05286	.18921	.00042
[mean = -.00360] level code: 8 { 5}	.92135	.00195	.05724

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Cr¦Zr	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = -.00231] level code: 1 { 1}	.05286	.92135
[mean = -.11446] level code: 4 { 2}	.18921	.00195
[mean = .06189] level code: 5 { 3}	.00042	.05724
[mean = -.06900] level code: 7 { 4}	--	.05760
[mean = -.00360] level code: 8 { 5}	.05760	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Ni\Co				
Effect	SS	df	MS	F	p
(A): AREA	2.57297	4	.64324	6.38644	.00015
Within	60.43214	600	.10072		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Ni\Co		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = .67020] level code: 1 { 1}	--	.30453	.00691
[mean = .71362] level code: 4 { 2}	.30453	--	.08852
[mean = .78473] level code: 5 { 3}	.00691	.08852	--
[mean = .73617] level code: 7 { 4}	.11441	.60007	.24886
[mean = .56314] level code: 8 { 5}	.01107	.00070	.00001

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Ni\Co	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = .67020] level code: 1 { 1}	.11441	.01107
[mean = .71362] level code: 4 { 2}	.60007	.00070
[mean = .78473] level code: 5 { 3}	.24886	.00001
[mean = .73617] level code: 7 { 4}	--	.00018
[mean = .56314] level code: 8 { 5}	.00018	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Ba\Th				
Effect	SS	df	MS	F	p
(A): AREA	2.30325	4	.57581	5.52751	.00043
Within	62.39904	599	.10417		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Ba\Th		
marginal means for indep. var.: AREA	{ 1}	{ 2}	{ 3}
[mean = 1.61582] level code: 1 { 1}	--	.05406	.31061
[mean = 1.53403] level code: 4 { 2}	.05406	--	.37850
[mean = 1.57217] level code: 5 { 3}	.31061	.37850	--
[mean = 1.63845] level code: 7 { 4}	.60488	.01459	.11907
[mean = 1.74296] level code: 8 { 5}	.00354	.00003	.00024

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Ba\Th	
marginal means for indep. var.: AREA	{ 4}	{ 5}
[mean = 1.61582] level code: 1 { 1}	.60488	.00354
[mean = 1.53403] level code: 4 { 2}	.01459	.00003
[mean = 1.57217] level code: 5 { 3}	.11907	.00024
[mean = 1.63845] level code: 7 { 4}	--	.01452
[mean = 1.74296] level code: 8 { 5}	.01452	--

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: A1203				
Effect	SS	df	MS	F	p
(A): ANOV_F	3.02555	4	.75639	35.51769	.00000
Within	13.09708	615	.02130		

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: A1203			
marginal means for indep. var.: ANOV_F	{ 1}	{ 2}	{ 3}	
[mean = 1.29161] level code: 2 { 1}	--	.61967	.00059	
[mean = 1.30211] level code: 4 { 2}	.61967	--	.00230	
[mean = 1.36692] level code: 8 { 3}	.00059	.00230	--	
[mean = 1.17492] level code: 10 { 4}	.00001	.00000	.00000	
[mean = 1.18231] level code: 15 { 5}	.00001	.00000	.00000	

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: A1203	
marginal means for indep. var.: ANOV_F	{ 4}	{ 5}
[mean = 1.29161] level code: 2 { 1}	.00001	.00001
[mean = 1.30211] level code: 4 { 2}	.00000	.00000
[mean = 1.36692] level code: 8 { 3}	.00000	.00000
[mean = 1.17492] level code: 10 { 4}	--	.72100
[mean = 1.18231] level code: 15 { 5}	.72100	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Fe203				
Effect	SS	df	MS	F	p
(A): ANOV_F	5.17538	4	1.29385	22.99946	.00000
Within	34.59713	615	.05626		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Fe203		
marginal means for indep. var.: ANOV_F	{ 1}	{ 2}	{ 3}
[mean = .91694] level code: 2 { 1}	--	.74704	.05558
[mean = .90625] level code: 4 { 2}	.74704	--	.02583
[mean = .98083] level code: 8 { 3}	.05558	.02583	--
[mean = .77338] level code: 10 { 4}	.00012	.00027	.00000
[mean = .67999] level code: 15 { 5}	.00000	.00000	.00000

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Fe203	
marginal means for indep. var.: ANOV_F	{ 4}	{ 5}
[mean = .91694] level code: 2 { 1}	.00012	.00000
[mean = .90625] level code: 4 { 2}	.00027	.00000
[mean = .98083] level code: 8 { 3}	.00000	.00000
[mean = .77338] level code: 10 { 4}	--	.00599
[mean = .67999] level code: 15 { 5}	.00599	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: SiO2				
Effect	SS	df	MS	F	p
(A): ANOV_F	.19301	4	.04825	12.02634	.00000
Within	2.46747	615	.00401		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: SiO2		
marginal means for indep. var.: ANOV_F	{ 1}	{ 2}	{ 3}
[mean = 1.76291] level code: 2 { 1}	--	.47221	.00004
[mean = 1.76950] level code: 4 { 2}	.47221	--	.00001
[mean = 1.72010] level code: 8 { 3}	.00004	.00001	--
[mean = 1.77842] level code: 10 { 4}	.08194	.32408	.00000
[mean = 1.75745] level code: 15 { 5}	.55165	.17824	.00016

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: SiO2	
marginal means for indep. var.: ANOV_F	{ 4}	{ 5}
[mean = 1.76291] level code: 2 { 1}	.08194	.55165
[mean = 1.76950] level code: 4 { 2}	.32408	.17824
[mean = 1.72010] level code: 8 { 3}	.00000	.00016
[mean = 1.77842] level code: 10 { 4}	--	.01915
[mean = 1.75745] level code: 15 { 5}	.01915	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Cr¦Th				
Effect	SS	df	MS	F	p
(A): ANOV_F	2.81074	4	.70268	10.71376	.00000
Within	40.13928	612	.06559		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Cr¦Th		
marginal means for indep. var.: ANOV_F	{ 1}	{ 2}	{ 3}
[mean = .92985] level code: 2 { 1}	--	.17369	.00015
[mean = .88041] level code: 4 { 2}	.17369	--	.00001
[mean = 1.08212] level code: 8 { 3}	.00015	.00001	--
[mean = 1.02528] level code: 10 { 4}	.00916	.00025	.11669
[mean = .97823] level code: 15 { 5}	.18327	.00770	.00492

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Cr¦Th	
marginal means for indep. var.: ANOV_F	{ 4}	{ 5}
[mean = .92985] level code: 2 { 1}	.00916	.18327
[mean = .88041] level code: 4 { 2}	.00025	.00770
[mean = 1.08212] level code: 8 { 3}	.11669	.00492
[mean = 1.02528] level code: 10 { 4}	--	.19602
[mean = .97823] level code: 15 { 5}	.19602	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Th¦Sc				
Effect	SS	df	MS	F	p
(A): ANOV_F	9.37032	4	2.34258	42.97458	.00000
Within	33.36063	612	.05451		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Th¦Sc		
marginal means for indep. var.: ANOV_F	{ 1}	{ 2}	{ 3}
[mean = .10229] level code: 2 { 1}	--	.42634	.00000
[mean = .07549] level code: 4 { 2}	.42634	--	.00000
[mean = -.13250] level code: 8 { 3}	.00000	.00000	--
[mean = -.17687] level code: 10 { 4}	.00000	.00000	.17926
[mean = -.00512] level code: 15 { 5}	.00171	.01489	.00035

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Th¦Sc	
marginal means for indep. var.: ANOV_F	{ 4}	{ 5}
[mean = .10229] level code: 2 { 1}	.00000	.00171
[mean = .07549] level code: 4 { 2}	.00000	.01489
[mean = -.13250] level code: 8 { 3}	.17926	.00035
[mean = -.17687] level code: 10 { 4}	--	.00001
[mean = -.00512] level code: 15 { 5}	.00001	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Nb				
Effect	SS	df	MS	F	p
(A): ANOV_F	3.33348	4	.83337	56.50655	.00000
Within	9.07015	615	.01475		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Nb		
marginal means for indep. var.: ANOV_F	{ 1}	{ 2}	{ 3}
[mean = 1.21477] level code: 2 { 1}	--	.39967	.08552
[mean = 1.20006] level code: 4 { 2}	.39967	--	.40046
[mean = 1.18538] level code: 8 { 3}	.08552	.40046	--
[mean = 1.04946] level code: 10 { 4}	.00000	.00000	.00000
[mean = 1.08588] level code: 15 { 5}	.00000	.00000	.00000

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Nb	
marginal means for indep. var.: ANOV_F	{ 4}	{ 5}
[mean = 1.21477] level code: 2 { 1}	.00000	.00000
[mean = 1.20006] level code: 4 { 2}	.00000	.00000
[mean = 1.18538] level code: 8 { 3}	.00000	.00000
[mean = 1.04946] level code: 10 { 4}	--	.03331
[mean = 1.08588] level code: 15 { 5}	.03331	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Th				
Effect	SS	df	MS	F	p
(A): ANOV_F	7.39170	4	1.84792	48.13359	.00000
Within	23.61082	615	.03839		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Th		
marginal means for indep. var.: ANOV_F	{ 1}	{ 2}	{ 3}
[mean = 1.30642] level code: 2 { 1}	--	.18173	.17411
[mean = 1.26942] level code: 4 { 2}	.18173	--	.93045
[mean = 1.26878] level code: 8 { 3}	.17411	.93045	--
[mean = 1.05078] level code: 10 { 4}	.00000	.00000	.00000
[mean = 1.16296] level code: 15 { 5}	.00002	.00036	.00038

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Th	
marginal means for indep. var.: ANOV_F	{ 4}	{ 5}
[mean = 1.30642] level code: 2 { 1}	.00000	.00002
[mean = 1.26942] level code: 4 { 2}	.00000	.00036
[mean = 1.26878] level code: 8 { 3}	.00000	.00038
[mean = 1.05078] level code: 10 { 4}	--	.00021
[mean = 1.16296] level code: 15 { 5}	.00021	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Cr				
Effect	SS	df	MS	F	p
(A): ANOV_F	4.64423	4	1.16106	19.61276	.00000
Within	36.40740	615	.05920		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Cr			
marginal means for indep. var.: ANOV_F	{ 1}	{ 2}	{ 3}	
[mean = 2.24048] level code: 2 { 1}	--	.01075	.00191	
[mean = 2.15225] level code: 4 { 2}	.01075	--	.00000	
[mean = 2.35090] level code: 8 { 3}	.00191	.00000	--	
[mean = 2.08947] level code: 10 { 4}	.00009	.06669	.00000	
[mean = 2.13698] level code: 15 { 5}	.00328	.66354	.00000	

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Cr	
marginal means for indep. var.: ANOV_F	{ 4}	{ 5}
[mean = 2.24048] level code: 2 { 1}	.00009	.00328
[mean = 2.15225] level code: 4 { 2}	.06669	.66354
[mean = 2.35090] level code: 8 { 3}	.00000	.00000
[mean = 2.08947] level code: 10 { 4}	--	.16687
[mean = 2.13698] level code: 15 { 5}	.16687	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Sc				
Effect	SS	df	MS	F	p
(A): ANOV_F	3.01071	4	.75268	20.29499	.00000
Within	22.80843	615	.03709		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Sc		
marginal means for indep. var.: ANOV_F	{ 1}	{ 2}	{ 3}
[mean = 1.19328] level code: 2 { 1}	--	.67860	.00000
[mean = 1.18180] level code: 4 { 2}	.67860	--	.00000
[mean = 1.40128] level code: 8 { 3}	.00000	.00000	--
[mean = 1.23826] level code: 10 { 4}	.09716	.03737	.00000
[mean = 1.15713] level code: 15 { 5}	.18449	.37188	.00000

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Sc	
marginal means for indep. var.: ANOV_F	{ 4}	{ 5}
[mean = 1.19328] level code: 2 { 1}	.09716	.18449
[mean = 1.18180] level code: 4 { 2}	.03737	.37188
[mean = 1.40128] level code: 8 { 3}	.00000	.00000
[mean = 1.23826] level code: 10 { 4}	--	.00355
[mean = 1.15713] level code: 15 { 5}	.00355	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: CIA				
Effect	SS	df	MS	F	p
(A): ANOV_F	1.90472	4	.47618	38.79833	.00000
Within	7.53574	614	.01227		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: CIA		
marginal means for indep. var.: ANOV_F	{ 1}	{ 2}	{ 3}
[mean = 1.91432] level code: 2 { 1}	--	.58281	.31825
[mean = 1.90549] level code: 4 { 2}	.58281	--	.11488
[mean = 1.93011] level code: 8 { 3}	.31825	.11488	--
[mean = 1.81888] level code: 10 { 4}	.00000	.00001	.00000
[mean = 1.76308] level code: 15 { 5}	.00000	.00000	.00000

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: CIA	
marginal means for indep. var.: ANOV_F	{ 4}	{ 5}
[mean = 1.91432] level code: 2 { 1}	.00000	.00000
[mean = 1.90549] level code: 4 { 2}	.00001	.00000
[mean = 1.93011] level code: 8 { 3}	.00000	.00000
[mean = 1.81888] level code: 10 { 4}	--	.00075
[mean = 1.76308] level code: 15 { 5}	.00075	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Si¦Al_ox				
Effect	SS	df	MS	F	p
(A): ANOV_F	4.31322	4	1.07830	40.08057	.00000
Within	16.51870	614	.02690		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Si¦Al_ox		
marginal means for indep. var.: ANOV_F	{ 1}	{ 2}	{ 3}
[mean = .47182] level code: 2 { 1}	--	.82883	.00002
[mean = .46739] level code: 4 { 2}	.82883	--	.00003
[mean = .35318] level code: 8 { 3}	.00002	.00003	--
[mean = .60350] level code: 10 { 4}	.00001	.00000	.00000
[mean = .57514] level code: 15 { 5}	.00008	.00005	.00000

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Si¦Al_ox	
marginal means for indep. var.: ANOV_F	{ 4}	{ 5}
[mean = .47182] level code: 2 { 1}	.00001	.00008
[mean = .46739] level code: 4 { 2}	.00000	.00005
[mean = .35318] level code: 8 { 3}	.00000	.00000
[mean = .60350] level code: 10 { 4}	--	.22266
[mean = .57514] level code: 15 { 5}	.22266	--

css/pc: quick anova/ancova	ANALYSIS OF VARIANCE dependent variable: Ni\Co				
Effect	SS	df	MS	F	p
(A): ANOV_F	5.04336	4	1.26084	13.19280	.00000
Within	58.68012	614	.09557		

CSS/PC: QUICK ANOVA/ANCOVA

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Ni\Co		
marginal means for indep. var.: ANOV_F	{ 1}	{ 2}	{ 3}
[mean = .71632] level code: 2 { 1}	--	.63781	.00011
[mean = .73738] level code: 4 { 2}	.63781	--	.00037
[mean = .90510] level code: 8 { 3}	.00011	.00037	--
[mean = .63804] level code: 10 { 4}	.07206	.02288	.00000
[mean = .57156] level code: 15 { 5}	.00146	.00041	.00000

css/pc: quick anova/ancova	post hoc COMPARISONS LSD test: p-levels dependent variable: Ni\Co	
marginal means for indep. var.: ANOV_F	{ 4}	{ 5}
[mean = .71632] level code: 2 { 1}	.07206	.00146
[mean = .73738] level code: 4 { 2}	.02288	.00041
[mean = .90510] level code: 8 { 3}	.00000	.00000
[mean = .63804] level code: 10 { 4}	--	.12736
[mean = .57156] level code: 15 { 5}	.12736	--