

Sample	961202	CF8548	PN 16A	PP400	CF8530	J81-212
Age, Ma		34.5		36.3		
Long W	103 43.8	103 25.5	103 32.5	103 43.5	103 31.5	104 54
Lat N	29 16.3	29 11.3	29 12.5	30 22.4	29 16.0	31 26
SiO2	50.96	51.62	52.08	51.21	52.73	51.95
TiO2	2.73	1.49	2.24	1.88	2.20	2.21
Al2O3	15.36	15.05	17.49	16.64	16.35	19.39
Fe2O3		1.86	10.25	10.16	1.87	1.61
FeO		7.67		0.24	7.68	6.81
FeO*	10.38					
MnO	0.18	0.16	0.16	0.21	0.21	0.11
MgO	4.25	7.92	3.44	3.83	4.66	2.04
CaO	7.80	7.92	5.05	4.50	5.41	5.88
Na2O	3.75	3.55	6.04	4.96	4.71	5.73
K2O	1.96	1.38	2.48	3.18	3.66	2.51
P2O5	0.52	0.35	0.75	1.36	1.35	1.01
H2O+				1.79		0.16
H2O-				0.89		
CO2						0.50
Total	97.89	99.13	99.98	100.81	100.82	99.91
SiO2'	52.06	52.07	52.09	52.19	52.30	52.34
(Na2O+K2O)'	5.83	4.97	8.52	8.30	8.30	8.30
Sc	29.2	18.72		13.8	15.07	
V	283	157			111	49
Cr	19	14.76			3.36	
Ni	4	25.5			12.8	8
Cu	1					22
Zn	105	115		114	135	96
Ga	24					
Rb	48.3	50.88		30	49	41
Sr	638	400		820	551	1700
Y	36.24	36		69	37	28
Zr	243	288		529	433	130
Nb	21.12	12.65*		66	39.03	40
Cs	1.02	2.59			1.7	
Ba	521	506		1390	905	1000
La	32.05	23.58		70	65.85	
Ce	64.24	57.19		164	138.57	
Pr	7.7					
Nd	33.38	29.88		96	59.61	
Sm	7.96	6.35		15.5	12.01	
Eu	2.46	1.8		4.49	3.21	
Gd	7.77					
Tb	1.19	1.52		2.1	2.28	
Dy	6.98					
Ho	1.34					
Er	3.48					
Tm	0.49					
Yb	2.91	3.3		4.9	3.69	
Lu	0.44	0.45		0.74	0.52	

Hf	5.93	6.16		11.8	10.54	
Ta	1.66	0.86		3.1	5.06	
Pb	7.12					
Th	3.98	3.78		4.7	7.69	
U	1.22	1.38		2	4.53	
Li						
F						740
Rb/Sr	0.08	0.13		0.04	0.09	0.02
Cen/Ybn	5.97	4.68		9.05	10.2	
Eu*	0.94	0.75		0.89	0.76	
Zr/Hf	41	46.8		44.8	41.1	
Ba/Rb	10.8	9.94		46.3	18.5	24.4
Rb/Th	12.1	13.5		6.38	6.37	
$^{87}\text{Sr}/^{86}\text{Sr}_i$						
$^{143}\text{Nd}/^{144}\text{Nd}$						
$^{206}\text{Pb}/^{204}\text{Pb}$						
$^{207}\text{Pb}/^{204}\text{Pb}$						
$^{208}\text{Pb}/^{204}\text{Pb}$						

Sample	CF8534	WT 721A	J81-216	RM178B	Tr-31	S2
Age, Ma				28.6	27.1	28.1
Long W	103 25.6	103 31.5	104 54	103 33	104 03.2	103 23
Lat N	29 13.9	29 25	31 26	29 15	29 20.2	29 23
SiO2	51.32	52.45	52.14	52.87	52.92	52.95
TiO2	2.22	1.90	2.08	2.16	2.28	2.34
Al2O3	15.48	18.82	19.63	16.53	15.64	18.29
Fe2O3	1.99	9.32	1.48	10.52		1.05
FeO	8.19		6.71			7.04
FeO*					9.97	
MnO	0.16	0.18	0.11	0.18	0.19	0.14
MgO	5.00	2.04	2.02	3.32	3.93	3.06
CaO	4.82	5.72	6.14	4.99	5.41	5.88
Na2O	4.96	6.12	5.64	5.14	3.74	5.51
K2O	2.45	2.65	2.27	3.34	4.98	2.91
P2O5	1.28	0.81	1.04	0.94	0.93	0.83
H2O+			0.26			
H2O-						
CO2			0.15			
Total	97.87	100.01	99.67	100	99.99	100
SiO2'	52.44	52.45	52.53	52.87	52.93	52.95
(Na2O+K2O)'	7.57	8.77	7.97	8.48	8.72	8.42
Sc	15.49				23.7	
V			43		57	
Cr	4.4					
Ni	14.38		7			
Cu			22			
Zn			94		148	
Ga						
Rb	59.49		34	66.6	78	52
Sr	515		1700	944	527	955
Y	38		24	41.6	52.6	
Zr	448		120	425	484	
Nb	41.27		45	96.6	53.5	
Cs	1.74				7.71	
Ba	898		1000	1522.5	1299	
La	67.74				72	
Ce	136.7			130.4	143	
Pr						
Nd	66.41			62.36	72	
Sm	12.45			11.58	13.8	
Eu	3.44			3.429	4.04	
Gd				9.028		
Tb	2.23				2.41	
Dy				7.316		
Ho						
Er				3.621		
Tm						
Yb	3.96			3.076	4.14	
Lu	0.53				0.55	

Hf	10.81				10.9	
Ta	5.28				7.87	
Pb						
Th	8.04				8.53	
U	5.76					
Li						
F			760			
Rb/Sr	0.12		0.02	0.07	0.15	0.05
Cen/Ybn	9.33			11.46	9.34	
Eu*	0.8			0.98	0.85	
Zr/Hf	41.4				44.4	
Ba/Rb	15.1		29.4	22.9	16.7	
Rb/Th	7.4				9.14	
87Sr/86Sr,l				0.70374		
143Nd/144Nd				0.51272		
206Pb/204Pb						
207Pb/204Pb						
208Pb/204Pb						

Sample	CF847	BB83-13A	CF845	31	Tr4-49	J84-9
Age, Ma	34.5	34.5	34.5	32.6	27.1	
Long W	103 22.3		103 22.0	103 24	104 05.9	104 54
Lat N	29 13.5		29 13.2	29 3.1	29 24.4	31 26
SiO2	51.58	52.23	53.61	51.95	53.37	52.78
TiO2	2.42	2.36	2.38	1.86	2.28	1.97
Al2O3	15.31	14.77	14.68	18.30	16.10	18.49
Fe2O3	2.01	1.88	2.09	2.43		2.45
FeO	8.31	7.78	8.63	6.02		6.04
FeO*					8.70	
MnO	0.17	0.19	0.15	0.15	0.18	0.12
MgO	4.16	3.57	4.71	1.81	5.02	1.98
CaO	6.06	4.99	7.53	5.35	6.31	9.74
Na2O	4.11	4.62	3.22	4.98	3.33	5.43
K2O	2.78	4.86	3.22	3.60	3.55	2.77
P2O5	0.47	1.31	0.66	0.93	1.17	0.96
H2O+				2.06		0.05
H2O-				0.44		
CO2						0.29
Total	97.38	98.56	100.88	99.88	100.01	99.07
SiO2'	52.97	52.99	53.14	53.35	53.36	53.46
(Na2O+K2O)'	7.08	9.62	6.38	8.81	6.88	8.31
Sc	22.66	16.65	23.16		8.9	
V	223		281		105	33
Cr	3.59	4.21	2.59			
Ni	15.54		22.14		15.8	10
Cu						24
Zn	121		130			100
Ga						
Rb	78.99	50	65.59		95	83
Sr	491	470	493		609	1506
Y	40	40	38		44.4	18
Zr	316	511	238		325	220
Nb	15.18*	36.96	17.03*		42	61
Cs	1.35	1.75	0.67		5.66*	
Ba		1056			1186	1100
La	38.95	69.9	36.92		62	
Ce	78.25	144	78.35		123	
Pr						
Nd	47.97	65.1	28.38		57	
Sm	9.3	13.14	7.74		11.9	
Eu	2.37	3.59	2.25		3.48	
Gd						
Tb	1.56	1.93	1.37		2.12	
Dy						
Ho						
Er						
Tm						
Yb	3.37	4.29	3.32		3.25	
Lu	0.46	0.57	0.46		0.45	

Hf	6.62	10.95	6.47		9.3	
Ta	1.48	5.34	1.47		4.59	
Pb						
Th	5.31	8.35	4.72		6.72	7
U	2.95	7.14	1.44		0.58	
Li						
F						790
Rb/Sr	0.16	0.11	0.13		0.16	0.06
Cen/Ybn	6.28	9.07	6.38		10.2	
Eu*	0.75	0.83	0.84		0.84	
Zr/Hf	47.7	46.7	36.8		34.9	
Ba/Rb		21.1			12.5	13.3
Rb/Th	14.9	5.99	13.9		14.1	11.9
$^{87}\text{Sr}/^{86}\text{Sr}_i$						0.7034
$^{143}\text{Nd}/^{144}\text{Nd}$						
$^{206}\text{Pb}/^{204}\text{Pb}$						
$^{207}\text{Pb}/^{204}\text{Pb}$						
$^{208}\text{Pb}/^{204}\text{Pb}$						

Sample	RM180A	CF8501	Qbols-1	CF8546	RM57c	CF8536
Age, Ma	28.6		34.1	34.5	28.6	34.5
Long W	103 33	103 22.1	105 35.7	103 26.5	103 33	103 22.2
Lat N	29 15	29 15.2	31 11.0	29 12.5	29 15	29 13.0
SiO2	52.98	53.62	53.48	52.62	53.54	53.18
TiO2	2.30	1.96	1.96	2.31	1.82	2.38
Al2O3	16.96	16.89	15.52	13.84	16.56	14.21
Fe2O3		1.46	2.86	2.02	9.31	1.99
FeO		6.00	6.09	8.32		8.20
FeO*	8.14					
MnO	0.15	0.24	0.17	0.16	0.16	0.16
MgO	2.90	6.54	3.99	4.51	3.12	5.57
CaO	5.84	4.69	8.40	7.27	5.16	7.01
Na2O	5.74	4.24	4.10	3.11	5.96	3.29
K2O	3.15	3.93	2.67	3.45	3.33	2.39
P2O5	0.94	0.71	0.75	0.71	1.05	0.60
H2O+						
H2O-						
CO2						
Total	99.10	100.28	100	98.32	100	98.98
SiO2'	53.46	53.47	53.48	53.52	53.54	53.73
(Na2O+K2O)'	8.97	8.15	6.77	6.67	9.29	5.74
Sc		3.35	9.3			23.04
V		139	230	262		264
Cr		1.81	100			2.5
Ni		17.11	40	14		
Cu			24			
Zn		137	90	125		119
Ga						
Rb	49.8	68.7	53	73	55.6	56.06
Sr	1152	914	1043	574	994	460
Y		45	41	32	38	40
Zr	2	513	307	301	344.6	299
Nb		47.89	28	20*	84.3	14.71*
Cs		0.49	1.94			0.93
Ba	1570	1048	983		1592	695
La		61.12	51.2			36.69
Ce		131.4	116			81.16
Pr						
Nd		60.9	64.2			36.37
Sm		10.39	11.3			7.68
Eu		3.27	2.92			2.16
Gd						
Tb		2.13	1.24			1.72
Dy						
Ho						
Er						
Tm						
Yb		3.75	2.6			3.39
Lu		0.48	0.43			0.46

Hf		10.57	11.1			6.65
Ta		5.36	1.15			1.6
Pb						
Th		8.42	4.9			4.81
U		9.28	2.1			2.09
Li			12			
F			370			
Rb/Sr	0.04	0.08	0.05	0.13	0.06	0.12
Cen/Ybn		9.56	12.06			6.47
Eu*		0.87	0.83			0.76
Zr/Hf		48.5	27.7			45
Ba/Rb	31.5	15.3	18.5		28.6	12.4
Rb/Th		8.16	10.8			11.7
87Sr/86Sr,l						
143Nd/144Nd						
206Pb/204Pb						
207Pb/204Pb						
208Pb/204Pb						



Sample	A	H91-104	QB-1	CF8513	K376	CF8527
Age, Ma	37	27.1	33.3	34.5	36.3	34.5
Long W		103 48.6	105 36	103 20.6		103 24.3
Lat N		29 32.7	31 11.5	29 13.6		29 19.0
SiO2	52.87	53.79	53.00	51.57	53.47	53.48
TiO2	2.00	2.34	1.87	2.24	2.00	2.20
Al2O3	17.07	16.37	15.19	13.86	17.51	15.34
Fe2O3	2.02		5.09	1.81		1.95
FeO	8.35		4.30	7.48		8.06
FeO*		10.22			10.40	
MnO	0.10	0.14	0.14	0.21	0.08	0.19
MgO	1.26	1.74	4.73	4.37	0.98	2.48
CaO	4.56	6.19	7.23	7.39	4.70	5.59
Na2O	4.28	4.43	4.10	3.13	4.91	4.79
K2O	4.58	3.89	1.99	3.15	3.53	3.73
P2O5	1.22	0.89	0.86	0.51	1.43	1.13
H2O+			0.67			
H2O-			0.35			
CO2			0.08			
Total	98.31	97.10	99.6	95.72	99.01	98.94
SiO2'	53.78	53.79	53.81	53.88	54.00	54.05
(Na2O+K2O)'	9.01	8.32	6.18	6.56	8.52	8.61
Sc	15.77	12		22.92		
V		53		129		99
Cr	3.3			3.14		
Ni			40			12.88
Cu		10				
Zn	134	137	100	123		150
Ga		23				
Rb	38	127	22	82.43	45	75.67
Sr		572	1055	471	1071	535
Y		46	27	38	63	47
Zr	590	469	300	290	537	391
Nb		105.4	20*	15.31*	58	39.24
Cs				0.7		
Ba	1990	1180	921		1936	
La	82.8	84		37.1		
Ce	172	134		77.58		
Pr						
Nd	95.8			41.1		
Sm	16.14			7.77		
Eu	4.82			2.11		
Gd						
Tb	2.85			1.37		
Dy						
Ho						
Er						
Tm						
Yb	5.69			3.22		
Lu	0.74			0.43		

Hf	13.41			6.44		
Ta	4.08			1.49		
Pb		2				
Th	5.47	8		4.88		
U	1.72			3.03		
Li						
F						
Rb/Sr		0.22	0.02	0.18	0.04	0.14
Cen/Ybn	8.17			6.51		
Eu*	0.86			0.79		
Zr/Hf	44			45		
Ba/Rb	52.4	9.29	41.9		43	
Rb/Th	6.45	15.9		16.9		
$^{87}\text{Sr}/^{86}\text{Sr}_i$					0.70393	
$^{143}\text{Nd}/^{144}\text{Nd}$					0.512575	
$^{206}\text{Pb}/^{204}\text{Pb}$					17.631	
$^{207}\text{Pb}/^{204}\text{Pb}$					15.479	
$^{208}\text{Pb}/^{204}\text{Pb}$					37.452	

Sample	E90-18	H92-78	MV-10	L	Tr-26	CF8524
Age, Ma	27.1	33.3	34	37	27.1	31.8
Long W	104 07	103 57.4	105 25.9		104 02.6	103 26.5
Lat N	29 31	29 24	31 52.6		29 20.5	29 05.3
SiO2	54.09	54.09	51.57	52.77	54.30	52.68
TiO2	2.17	2.15	1.01	2.97	2.37	2.32
Al2O3	18.15	18.17	16.54	16.33	15.71	14.58
Fe2O3			7.87	1.90		1.87
FeO				7.84		7.72
FeO*	8.88	9.30			9.70	
MnO	0.10	0.14	0.18	0.15	0.17	0.14
MgO	1.50	1.42	3.18	0.58	2.98	3.56
CaO	6.90	5.85	3.31	4.65	6.36	6.86
Na2O	4.54	5.16	6.24	4.31	3.62	3.66
K2O	3.04	2.94	4.60	4.78	3.94	2.98
P2O5	0.62	0.79	0.77	1.11	0.84	0.59
H2O+						
H2O-						
CO2						
Total	99.99	98.93	95.27	97.39	99.99	96.96
SiO2'	54.09	54.09	54.13	54.18	54.31	54.33
(Na2O+K2O)'	7.58	8.10	11.38	9.33	7.56	6.85
Sc	17	16	8.08	10.36	11.6	0.19
V	98	177	88		313	152
Cr		11	2	1.95	2.08	22.66
Ni		14	5		15.8	17.09
Cu	25	27				
Zn	105	86	107	100		14
Ga	25	19				
Rb	68	56	78	101.5	62	23.02
Sr	716	851	506	609	871	467
Y	38	31	12		44.9	38
Zr	359	378	459	520	469	498
Nb	79	43.9	30*		71.6	28.6*
Cs	1.22		4.72	0.25	5.39	148.6*
Ba	866	1067	1299	2461	1374	400
La	58	51	84.98	80.3	87.6	17.86
Ce	113	114	160.52	179	137	39.63
Pr	13.2					
Nd	53		71.23	84.66	65.3	28.6
Sm	11.8		12.46	15.38	13.1	4.67
Eu	3.42		3.45	5.45	4.48	1.54
Gd	9.3					
Tb	1.54		2.07	2.63	2.15	1.21
Dy	8.84					
Ho	1.66					
Er	4.28					
Tm	0.59					
Yb	3.62		3.03	5.66	4.1	2.67
Lu	0.53		0.4	0.63	0.47	0.35

Hf	9.8		9.24	13.31	10	4
Ta	3.7		4.64	3.93	3.86	0.68
Pb	6.2	6				
Th	7.2	6	6.87	3.82	8.22	2.27
U	0.7		2.51	3.6		1.58
Li						
F						
Rb/Sr	0.09	0.07	0.15	0.17	0.07	0.05
Cen/Ybn	8.44		14.32	8.55	9.03	4.01
Eu*	0.96		0.81	1.03	1.01	0.85
Zr/Hf	36.6		49.7	39.1	46.9	124.5*
Ba/Rb	12.7	19.1	16.7	24.2	22.2	17.4
Rb/Th	9.44	9.31	11.4	26.6	7.54	10.1
<sup>87</sup> Sr/ <sup>86</sup> Sr,l						
<sup>143</sup> Nd/ <sup>144</sup> Nd						
<sup>206</sup> Pb/ <sup>204</sup> Pb						
<sup>207</sup> Pb/ <sup>204</sup> Pb						
<sup>208</sup> Pb/ <sup>204</sup> Pb						

Sample	K336	BB5	CF848	E90-1a	MGF007	AS-2
Age, Ma	37	34.5	34.5		32	36.8
Long W		103 24	103 22.1	103 23.7		105 33
Lat N		29 14	29 13.3	29 15		32 03
SiO2	53.77	54.41	53.16	54.45	54.50	54.10
TiO2	2.02	2.57	2.23	1.97	1.66	1.81
Al2O3	17.67	14.96	13.47	17.72	15.76	18.60
Fe2O3		1.17	1.96	2.00	6.01	3.46
FeO		9.74	8.07	7.26	3.17	3.28
FeO*	9.67					
MnO	0.21	0.17	0.16	0.16	0.14	0.17
MgO	0.98	2.97	4.44	2.32	4.94	2.56
CaO	4.46	7.14	6.88	5.40	6.70	5.46
Na2O	5.10	3.78	4.20	4.99	3.88	5.33
K2O	3.66	2.61	2.63	3.18	2.54	3.67
P2O5	1.36	0.47	0.47	0.75	0.71	0.81
H2O+						1.14
H2O-						0.08
CO2						0.26
Total	98.90	100	97.67	100	100	100.73
SiO2'	54.37	54.41	54.43	54.45	54.50	54.51
(Na2O+K2O)'	8.86	6.39	6.99	8.17	6.42	9.07
Sc			22.52	13		
V		293	250	122		
Cr		6.7	2.64	1		
Ni		7	18.2			
Cu				2		
Zn			113	92		
Ga				21		
Rb	50	62	67.54	56		
Sr	776	505	446	910		
Y	62	43	37	32		
Zr	677	312	213	336		
Nb	60	25*	14.06*	81		
Cs			0.72			
Ba	2061	638		1029		
La		36	38.73	46		
Ce		80	77.56	104		
Pr						
Nd	83	42	39.96			
Sm	16		9.12			
Eu			2.13			
Gd						
Tb			1.6			
Dy						
Ho						
Er						
Tm						
Yb			3.3			
Lu			0.46			

Hf			6.5		
Ta			1.51		
Pb	9.5			7	
Th	6.3		5.13	4	
U	1.74		2.42		
Li					
F					
Rb/Sr	0.06	0.12	0.12	0.06	
Cen/Ybn			6.35		
Eu*			0.68		
Zr/Hf			32.8		
Ba/Rb	41.2	10.3		18.4	
Rb/Th	7.94		13.2	14	
$^{87}\text{Sr}/^{86}\text{Sr}_i$	0.70401				
$^{143}\text{Nd}/^{144}\text{Nd}$	0.512564				
$^{206}\text{Pb}/^{204}\text{Pb}$	17.644				
$^{207}\text{Pb}/^{204}\text{Pb}$	15.469				
$^{208}\text{Pb}/^{204}\text{Pb}$	37.412				

Sample	H89-156	DM112	J84-2	H	BB84-4a	J-7
Age, Ma	35.6-35.3	36.8			34.5	27.1
Long W	104 00.9	103 46.9	104 54			104 05.7
Lat N	30 33.9	30 41.8	31 26			29 22
SiO2	54.65	53.52	54.4	53.54	54.52	55.24
TiO2	2.39	2.00	2.10	1.84	2.47	1.82
Al2O3	15.97	15.37	16.76	14.82	13.56	19.09
Fe2O3	9.94	1.61	1.85	1.76	2.13	
FeO		6.63	6.91	7.25	8.80	
FeO*						7.34
MnO	0.15	0.18	0.12	0.18	0.19	0.17
MgO	2.73	4.66	1.69	2.73	3.78	1.38
CaO	4.96	5.34	3.84	5.78	6.95	5.52
Na2O	4.59	3.56	6.17	4.21	3.30	4.78
K2O	3.56	3.63	4.29	3.87	2.73	4.01
P2O5	1.06	1.10	0.90	1.39	0.43	0.65
H2O+	1.27					
H2O-						
CO2			0.14			
Total	100.64	97.60	99.17	97.37	98.86	100
SiO2'	54.65	54.84	54.93	54.99	55.15	55.24
(Na2O+K2O)'	8.15	7.37	10.56	8.30	6.10	8.79
Sc		18.3		12.59	24.82	10.6
V		191	20		240	60
Cr		3.27		2.28	10.24	3.87
Ni		15.2	8		19.9	13.3
Cu			31			
Zn		129	110	153	106	127
Ga						
Rb		60	73	67.52	67	79
Sr	700	696	654	703	654	652
Y		51.2	22		30	48.5
Zr	410	427	140	459	600	453
Nb		25.6*	42		14.68*	48.7
Cs		0.6		1	0.6	0.85
Ba	1140	1799	1600	1546	710	1294
La		60.5		83.04	34.44	62
Ce		126		142	75.12	131
Pr						
Nd		65.61		82.14	35.52	53
Sm		13.38		13.57	8	10.7
Eu		3.96		4.06	2.42	3.64
Gd						
Tb				3.1	1.23	1.7
Dy						
Ho						
Er						
Tm						
Yb		4.79		5.35	3.12	3.91
Lu		0.68		0.7	0.41	0.51

Hf		9.05		10.04	3.37	11.1
Ta		3.35		2.73	1.52	5.15
Pb						
Th		5.33		5	4.74	9
U		1.3		1.22	1.06	2.7
Li						
F			930			
Rb/Sr		0.09	0.11	0.10	0.10	0.12
Cen/Ybn		7.11		7.18	6.51	9.06
Eu*		0.92		0.8	0.91	1.01
Zr/Hf		47.2		45.7	178*	40.8
Ba/Rb		30	21.9	22.9	10.6	16.4
Rb/Th		11.3		13.5	14.1	8.78
87Sr/86Sr,l						
143Nd/144Nd						
206Pb/204Pb						
207Pb/204Pb						
208Pb/204Pb						



Sample	BB84-4b	CF8538	84113	CF8504	CF8514	H88-62
Age, Ma	34.5	34.5			34.5	
Long W		103 30.0	103 47.1	103 24.8	103 20.6	103 35.8
Lat N		29 08.8	30 42.6	29 13.2	29 13.5	30 05.8
SiO2	55.96	54.46	54.10	54.65	55.14	55.40
TiO2	2.43	2.28	1.98	2.06	2.16	1.81
Al2O3	13.82	14.39	16.1	16.57	14.92	16.51
Fe2O3	11.38	1.98	3.19	1.56	1.83	5.26
FeO		8.17	5.05	6.43	7.56	3.76
FeO*			7.92			
MnO	0.16	0.18	0.18	0.18	0.14	0.24
MgO	3.65	2.37	2.86	4.09	4.78	2.74
CaO	6.93	4.77	4.97	4.10	6.86	5.34
Na2O	3.70	3.12	4.86	4.29	3.22	4.41
K2O	2.67	5.19	3.57	3.72	2.27	3.26
P2O5	0.42	1.50	1.21	0.98	0.70	1.27
H2O+						0.94
H2O-						
CO2						0.15
Total	101.12	98.41	97.75	98.73	99.58	99.47
SiO2'	55.34	55.34	55.35	55.35	55.37	55.4
(Na2O+K2O)'	6.30	8.44	8.62	8.11	5.51	7.67
Sc	24.42	12.87		3.46	23.62	
V		113		94	233	
Cr	3.23	4.14		1.67	3.39	
Ni				13.03		
Cu						
Zn	102	141		129	122	
Ga						
Rb	62	185.94	62	65.63	62.81	
Sr	358	369	775	777	438	690
Y	34.54	50		50	36	
Zr	600	603	439	505	274	200
Nb	15.17*	39.07	6*	52.44	14.53*	
Cs	0.48	13.32*		1.49	0.74	
Ba	833	912	1056	957		1890
La	37.1	81.93		65.84	36.44	
Ce	75.1	176.42		133.03	82.18	
Pr						
Nd	43.8	69.54		65.42	40.91	
Sm	8.32	14.69		10.6	7.68	
Eu	2.48	3.22		3.33	2.22	
Gd						
Tb	1.28	2.78		2.11	1.68	
Dy						
Ho						
Er						
Tm						
Yb	3.26	5.15		3.91	3.3	
Lu	0.43	0.68		0.51	0.43	

Hf	6.18	14.11		10.74	6.83
Ta	1.45	5.46		5.48	1.6
Pb					
Th	4.83	15.04		8.19	4.85
U	1.64	7.06		6.44	2.19
Li					
F					
Rb/Sr	0.17	0.5	0.08	0.08	0.14
Cen/Ybn	6.23	9.26		9.2	6.73
Eu*	0.89	0.62		0.88	0.79
Zr/Hf	97.1*	42.7		47	40.1
Ba/Rb	13.4	4.9	17	14.6	
Rb/Th	12.8	12.4		8.01	13
$^{87}\text{Sr}/^{86}\text{Sr}_i$					
$^{143}\text{Nd}/^{144}\text{Nd}$					
$^{206}\text{Pb}/^{204}\text{Pb}$					
$^{207}\text{Pb}/^{204}\text{Pb}$					
$^{208}\text{Pb}/^{204}\text{Pb}$					

Sample	RM190	J81-211	H90-43	H92-65	AS-5	D
Age, Ma	28.6		27.2	27	36.8	
Long W	103 33	104 54	104 02.8	104 02.9	105 33	
Lat N	29 15	31 26	29 21.7	29 23.6	32 03	
SiO2	55.01	54.16	55.87	55.91	55.15	54.70
TiO2	1.84	1.73	1.93	2.08	1.51	1.66
Al2O3	17.73	17.83	16.46	16.04	18.41	16.41
Fe2O3		3.23			2.63	1.63
FeO		4.50			3.28	6.73
FeO*	6.62		8.89	9.30		
MnO	0.13	0.12	0.19	0.19	0.16	0.21
MgO	2.10	1.48	1.72	1.51	1.96	3.63
CaO	4.93	4.47	4.22	4.32	4.24	4.57
Na2O	6.75	5.39	5.16	5.43	6.01	4.31
K2O	3.42	3.24	4.86	4.50	4.44	3.56
P2O5	0.74	0.81	0.70	0.73	0.72	0.21
H2O+		0.45			0.76	
H2O-					0.09	
CO2		1.10			0.22	
Total	99.27	98.51	98.09	99.87	99.58	97.62
SiO2'	55.41	55.86	55.87	55.91	55.98	56.03
(Na2O+K2O)'	10.24	8.90	10.02	9.93	10.61	8.06
Sc			14	16	4.45	25.21
V		26	41	42	180	
Cr					16.7	2.74
Ni		6	4		60	
Cu		16	21	30	9	
Zn		110	135	145	73	112
Ga			25	26		
Rb	53.5	94	148	108	92	60.57
Sr	1148	1200	341	400	1008	735
Y		45	68	58	31	
Zr		380	835	580	524	550
Nb		81	183.6	114	98	
Cs					1.7	0.18
Ba	1551	1000	1029	1054	1218	2136
La			100	91	72.66	65.56
Ce			219	192	148.97	127
Pr						
Nd					66	77.5
Sm					10.1	13.59
Eu					2.62	4.6
Gd						
Tb					1.87	2.69
Dy						
Ho						
Er						
Tm						
Yb					2.89	4.76
Lu					0.37	0.53

Hf					13.06	8.5
Ta					6.4	2.99
Pb			11	7		
Th		7	21	11	16.48	4.8
U					6.2	
Li					26	
F		1200			860	
Rb/Sr	0.05	0.08	0.43	0.27	0.09	0.08
Cen/Ybn					13.93	2.21
Eu*					0.74	0.95
Zr/Hf					40.1	64.7
Ba/Rb	29	10.6	6.95	9.76	13.2	35.3
Rb/Th		13.4	7.05	9.82	5.58	12.6
87Sr/86Sr,l					0.703	
143Nd/144Nd					0.512801	
206Pb/204Pb						
207Pb/204Pb						
208Pb/204Pb						

Sample	CF8505	WT 725	CF8418	BB-4	RM185a	H91-179
Age, Ma					28.6	27.2
Long W	103 24.4	103 50	103 21.3	103 22.5	103 33	103 53.2
Lat N	29 13.1	29 16	29 15.1	29 15	29 15	29 28.2
SiO2	54.37	56.05	55.06	56.08	56.14	56.15
TiO2	1.84	1.59	1.73	1.99	2.19	1.93
Al2O3	17.06	16.78	15.84	17.99	17.45	16.23
Fe2O3	1.47	8.07	1.30	0.80	6.88	
FeO	6.07		5.36	6.65		
FeO*						8.95
MnO	0.21	0.19	0.18	0.23	0.13	0.20
MgO	2.02	2.72	4.08	2.48	1.79	1.63
CaO	4.62	4.24	5.79	4.78	3.78	4.45
Na2O	4.97	6.81	4.46	4.57	6.32	4.81
K2O	3.62	3.40	3.45	3.73	4.88	4.97
P2O5	0.77	0.16	0.94	0.71	0.44	0.70
H2O+						
H2O-						
CO2						
Total	97.02	100.01	98.19	100	100	99.04
SiO2'	56.04	56.05	56.07	56.08	56.14	56.15
(Na2O+K2O)'	8.85	10.21	8.06	8.30	11.20	9.78
Sc	3.33		3.41			3
V	107		97	36		27
Cr	1.96		2.36	1.3		
Ni	16.8		12.24	4		1
Cu						24
Zn	132		136			154
Ga						24
Rb	66.76		79.54	62	103.8	146
Sr	702		773	931	540.1	861
Y	48		44	49	49.5	66
Zr	516		480	552	610.3	729
Nb	48.54		52.08	84	121.2	177
Cs	1.76					
Ba	870		1011	751	1330	1103
La	64.85		67.7	58		109
Ce	129.49		138.84	122	152	202
Pr						
Nd	58.37		62.07	62	67.43	
Sm	10.01		10.56		12.57	
Eu	3.08		3.37		3.039	
Gd					10.25	
Tb	1.65		2.16			
Dy					8.832	
Ho						
Er					4.718	
Tm						
Yb	3.74		3.88		4.258	
Lu	0.5		0.5			

Hf	10.33		10.3			
Ta	5.39		5.61			
Pb						10
Th	8.12		8.45			17
U	6.06		5.97			
Li						
F						
Rb/Sr	0.1		0.1	0.07	0.19	0.17
Cen/Ybn	9.36		9.67		9.65	
Eu*	0.91		0.89		0.79	
Zr/Hf	50		46.6			
Ba/Rb	13		12.7	12.1	12.8	7.55
Rb/Th	8.22		9.41			11.2
87Sr/86Sr,l						
143Nd/144Nd						
206Pb/204Pb						
207Pb/204Pb						
208Pb/204Pb						

Sample	E90-21	E90-30	H91-115	H90-45	CF8547	Tr8-5
Age, Ma	27.1	27.8-27.3	27	27.2		27.2
Long W	104 02.6	104 05.9	103 49.3	104 03.1	103 25.6	104 06.2
Lat N	29 20 3	29 24.2	29 26.8	29 20.8	29 12.3	29 24.6
SiO2	56.26	56.32	56.51	56.54	57.18	56.66
TiO2	1.66	1.57	1.59	1.91	1.87	1.55
Al2O3	16.6	16.91	17.58	16.41	16.42	18.19
Fe2O3					1.30	
FeO					5.38	
FeO*	9.15	8.46	6.98	8.68		6.47
MnO	0.19	0.15	0.18	0.15	0.19	0.11
MgO	2.01	1.94	2.19	1.27	3.62	1.13
CaO	4.06	4.22	3.91	4.19	3.74	5.10
Na2O	4.92	5.45	6.13	4.79	6.31	6.12
K2O	4.62	4.02	4.00	5.34	4.30	4.11
P2O5	0.52	0.94	0.93	0.71	0.68	0.55
H2O+						
H2O-						
CO2						
Total	98.51	98.47	99.20	97.49	100.99	99.99
SiO2'	56.26	56.32	56.51	56.54	56.62	56.67
(Na2O+K2O)'	9.54	9.47	10.13	10.13	10.51	10.23
Sc	9	11	14	15	3.49	7.37
V	5	31	21	33	58	136
Cr	2	1			9.3	1.98
Ni	1		2	4		18
Cu			1	24		
Zn	142	145	111	138		
Ga	29	22	20	24		
Rb	92	76	61	150	86.14	94
Sr	464	572	765	393	515	788
Y	57	52	48	70	51	60
Zr	541	497	631	791	551	486
Nb	120	66	74	182.6	57	138
Cs	4.01		0.82	1.69	2.22	1.12
Ba	1461	2044	2024	1041	980	1281
La	77	69	73	94	74.75	74
Ce	149	142	144	198	133.41	137
Pr	16.9		17.1	20.9		
Nd	69		69.3	83.1	71.2	63
Sm	15.2		14.6	17.9	13.17	10.3
Eu	4.78		5.07	3.92	3.7	3.42
Gd	12.1		12	14		
Tb	2.02		1.74	2.47	2.7	1.84
Dy	11.15		9.32	14.3		
Ho	2.09		1.75	2.81		
Er	5.48		4.7	7.57		
Tm	0.73		0.61	1.09		
Yb	4.45		3.68	6.75	4.25	4.4
Lu	0.69		0.57	1.04	0.56	0.53

Hf	13.1		11.5	21	11.88	13.1
Ta	5.4		3.3	8.1	5.48	3.02
Pb	8.4	9	7.8	11.8		
Th	8.9	7	4.9	19.6	9.93	14.2
U	1.2		1.4	2	4.56	2.31
Li						
F						
Rb/Sr	0.20	0.13	0.08	0.38	0.17	0.12
Cen/Ybn	9.05		10.58	7.93	8.49	8.42
Eu*	1.04		1.13	0.73	0.78	0.96
Zr/Hf	41.3		54.9	37.7	46.7	37.1
Ba/Rb	15.9	26.9	33.2	6.94	11.4	13.6
Rb/Th	10.3	10.9	12.4	7.65	8.67	6.62
87Sr/86Sr,l						
143Nd/144Nd						
206Pb/204Pb						
207Pb/204Pb						
208Pb/204Pb						



Sample	H91-219	Tr-36B	H91-96	J81-217	Tr-30B	H86-87
Age, Ma	27.13		27		27.1	37.2
Long W	104 04.7	104 05.9	103 50.2	104 54	104 03.2	103 25.9
Lat N	29 29.3	29 24.3	29 20.3	31 26	29 20.2	29 27.6
SiO2	56.70	56.73	56.86	54.77	57.26	57.53
TiO2	2.09	1.65	1.78	1.53	1.83	1.87
Al2O3	16.35	15.90	16.38	17.65	15.62	15.50
Fe2O3				1.77		3.22
FeO				5.16		5.69
FeO*	8.30	9.00	7.84		8.46	
MnO	0.15	0.31	0.21	0.12	0.20	0.18
MgO	1.79	3.09	2.61	1.34	2.66	2.41
CaO	4.42	4.09	4.40	4.84	4.16	4.75
Na2O	5.53	4.37	5.24	5.31	3.71	4.43
K2O	4.03	3.82	3.75	3.13	5.60	3.83
P2O5	0.62	1.04	0.94	0.67	0.50	0.47
H2O+				0.10		0.60
H2O-						
CO2				1.60		0.07
Total	99.46	100	97.99	97.99	100	100.61
SiO2'	56.70	56.73	56.86	56.88	57.26	57.56
(Na2O+K2O)'	9.56	8.19	8.99	8.77	9.31	8.26
Sc	13	16.8	10		10.2	
V	78		31	27	231	
Cr					1.68	
Ni		18.2		6	15.8	
Cu	1			19		
Zn	131	157	129	120		
Ga	27		22			
Rb	78	74	70	86	149	
Sr	454	537	613	1200	377	
Y	51	62	53	36	61.2	
Zr	413	519	502	370	881	
Nb	85.9	35.5	65.5	53	132	
Cs		0.65			6.38	
Ba	1395	2195	1621	920	1292	
La	62	74	78		124	
Ce	137	144	146		202	
Pr						
Nd		85			85	
Sm		15.1			14.1	
Eu		4.69			3.6	
Gd						
Tb		2.63			2.87	
Dy						
Ho						
Er						
Tm						
Yb		4.68			6.88	
Lu		0.65			0.84	

Hf		11.4			21.6
Ta		5.83			5.54
Pb	6		13		
Th	11	6.5	6		22.9
U		3.66			
Li					
F				1100	
Rb/Sr	0.17	0.14	0.11	0.07	0.40
Cen/Ybn		8.32			7.94
Eu*		0.90			0.71
Zr/Hf		45.5			40.8
Ba/Rb	17.9	29.7	23.2	10.7	8.67
Rb/Th	7.09	11.4	11.6		6.51
<sup>87</sup> Sr/ <sup>86</sup> Sr <sub>l</sub>					
<sup>143</sup> Nd/ <sup>144</sup> Nd					
<sup>206</sup> Pb/ <sup>204</sup> Pb					
<sup>207</sup> Pb/ <sup>204</sup> Pb					
<sup>208</sup> Pb/ <sup>204</sup> Pb					

Sample	DE-12	H92-70	Chin430	J84-1	CS-3	CH-1
Age, Ma	33	33.3	32			
Long W	105 33	103 29.7	104 26	104 54	105 27	105 30
Lat N	32 02	29 23.8	29 52	31 26	31 46	32 00
SiO2	55.60	57.64	55.97	57.47	55.40	56.10
TiO2	0.30	1.82	1.87	1.45	0.08	0.19
Al2O3	17.35	16.08	15.64	17.13	18.80	19.57
Fe2O3	7.06		4.57	3.02	4.69	3.03
FeO	1.10		3.40	3.89	1.68	1.86
FeO*		7.50				
MnO	0.38	0.17	0.16	0.10	0.16	0.29
MgO	0.25	2.38	2.05	1.10	0.56	0.28
CaO	1.30	4.46	4.70	2.80	1.55	1.03
Na2O	8.95	5.33	4.02	6.25	6.62	9.56
K2O	4.20	3.68	3.68	5.77	5.65	4.70
P2O5	0.11	0.96	0.78	0.44	0.45	0.02
H2O+	2.88		1.36	0.85	3.40	2.42
H2O-	0.30		0.92		0.40	0.22
CO2	0.13		0.02	0.18	0.47	
Total	99.78	99.30	99.14	100.45	99.91	99.28
SiO2'	57.63	57.64	57.80	57.81	57.93	58.05
(Na2O+K2O)'	13.63	9.01	7.95	12.09	12.83	14.76
Sc		13				0.5
V		58		9		80
Cr		3				
Ni		5		8		
Cu	40			20		66
Zn	367	147		110		314
Ga		19				
Rb	198	81		110	102	254
Sr	651	647		370	213	62
Y	156	56		19		92
Zr	3226	482		400		2495
Nb	494	58.6		47		371
Cs	4.7			3		6
Ba		1456		860		73
La		67		58.2		188
Ce		155		130.2		321
Pr						
Nd				61.1		95
Sm				10		14
Eu				2.72		1.9
Gd				8.98		
Tb						2
Dy				6.64		
Ho						
Er				2.86		
Tm						
Yb				2.01		7.5
Lu				0.5		1.11

Hf	63			4.8		51
Ta	35			3.9		26
Pb		4				40
Th	64	7		4.7		67
U	22			1.5		20
Li						108
F				620		220
Rb/Sr	0.3	0.13		1.57	0.48	4.1
Cen/Ybn				17.51		11.57
Eu*				0.85		
Zr/Hf	51.2			83.3		48.9
Ba/Rb		18		7.82		0.29
Rb/Th	3.09	11.6		23.4		3.79
$^{87}\text{Sr}/^{86}\text{Sr}_i$					0.7095*	0.7053
$^{143}\text{Nd}/^{144}\text{Nd}$						
$^{206}\text{Pb}/^{204}\text{Pb}$						
$^{207}\text{Pb}/^{204}\text{Pb}$						
$^{208}\text{Pb}/^{204}\text{Pb}$						

Sample	J81-191	DC-1b	Tr-60	DE-1	H84-23	DE-4
Age, Ma	32		27.2	31.5	37.2	31.5
Long W	104 28.5	105 10	104 06.5	105 33	103 23.1	105 33
Lat N	29 53.5	31 56	29 24.6	32 02	29 25.3	32 02
SiO2	58.12	56.50	58.15	56.90	56.92	55.60
TiO2	1.89	0.49	1.37	0.49	1.13	0.43
Al2O3	16.39	17.50	17.35	19.80	17.48	17.95
Fe2O3	2.33	4.96		2.26	5.28	2.76
FeO	4.31	2.85		4.06	1.82	3.80
FeO*			6.36			
MnO	0.25	0.17	0.19	0.14	0.17	0.23
MgO	1.42	0.63	1.52	0.49	1.94	0.38
CaO	5.29	2.04	2.71	1.80	4.02	1.50
Na2O	3.19	5.92	6.05	6.59	5.12	7.16
K2O	6.00	5.14	5.94	5.59	3.40	5.57
P2O5	0.80	0.45	0.37	0.17	0.46	0.19
H2O+		2.52		1.85		4.90
H2O-		0.56				0.52
CO2		0.30		0.44	0.27	0.05
Total	100	100.58	100.01	100.14	98.07	100.99
SiO2'	58.12	58.13	58.14	58.15	58.20	58.21
(Na2O+K2O)'	9.19	11.38	11.99	12.45	8.70	13.33
Sc			10.5	1.9		
V			96	37		
Cr						
Ni			22.3			
Cu				23		
Zn			143	85		222
Ga						
Rb		79	187	91		106
Sr		202	259	320		83
Y			97	38		67
Zr			1196	793		921
Nb			177	136		214
Cs			2.8	1.8		
Ba			1156	611		
La			109			
Ce			214			
Pr						
Nd			81			
Sm			14.6			
Eu			2.63			
Gd						
Tb			2.98			
Dy						
Ho						
Er						
Tm						
Yb			7.8			
Lu			1.08			

Hf			30.6	18		
Ta			8.35	7		
Pb						
Th			24.9	14		
U			5.9	3.8		
Li				45		
F						
Rb/Sr		3.96	0.72	0.28		1.28
Cen/Ybn			7.42			
Eu*			0.50			
Zr/Hf			39.1	44.1		
Ba/Rb			6.18	6.71		
Rb/Th			7.51	6.5		
$^{87}\text{Sr}/^{86}\text{Sr}_i$				0.7044		
$^{143}\text{Nd}/^{144}\text{Nd}$						
$^{206}\text{Pb}/^{204}\text{Pb}$						
$^{207}\text{Pb}/^{204}\text{Pb}$						
$^{208}\text{Pb}/^{204}\text{Pb}$						

Sample	J82-100	WS-1	H91-202	Tr-56	DE-5	SA-1
Age, Ma			27.1	27.2	31.5	
Long W	104 54	105 31	103 56.2	104 05.8	105 33	105 33
Lat N	31 26	31 59.5	29 31.2	29 24.8	32 02	32 00
SiO2	57.80	55.90	58.33	58.33	57.05	56.40
TiO2	0.98	0.21	1.75	1.30	0.44	0.21
Al2O3	17.52	18.10	16.64	16.81	20.17	18.10
Fe2O3	2.04	4.24			2.00	4.52
FeO	5.10	2.32			2.38	2.03
FeO*			7.57	6.28		
MnO	0.11	0.21	0.17	0.15	0.14	0.24
MgO	0.87	0.45	1.22	1.81	0.45	0.37
CaO	2.61	2.78	3.15	2.81	1.63	1.90
Na2O	6.17	6.22	5.70	6.13	7.58	6.96
K2O	5.98	5.31	4.94	6.07	6.12	5.27
P2O5	0.22	0.14	0.55	0.30	0.19	0.16
H2O+	0.94	3.10			1.64	2.37
H2O-		0.33			0.15	0.30
CO2	0.20				0.48	0.60
Total	100.35	99.31	99.48	99.99	99.94	99.83
SiO2'	58.26	58.30	58.33	58.34	58.41	58.41
(Na2O+K2O)'	12.25	12.03	10.64	12.20	14.03	12.67
Sc	5.7		11	8.52		
V	3		50	136		
Cr				1.7		
Ni	5		2	18.1		
Cu	27		5			13
Zn	120		135		88	138
Ga			26			
Rb	160	99	135	174	98	111
Sr	110	293	343	267	321	175
Y	38		60	94	40	60
Zr	854		809	1123	806	990
Nb	77		152.4	264	133	198
Cs	3.3			2.25	1.8	
Ba	98		1108	1144		
La			73	146		
Ce			187	225		
Pr						
Nd				90		
Sm				14.4		
Eu				3.14		
Gd						
Tb				2.86		
Dy						
Ho						
Er						
Tm						
Yb				8.38		
Lu				1.01		

Hf	13			30.3	17	
Ta	6.7			6.94	7.1	
Pb			11			
Th	13		20	26.8	16	
U	4.7			3.92	4.2	
Li						
F	890					
Rb/Sr	1.45	0.34	0.39	0.65	0.31	0.63
Cen/Ybn				7.26		
Eu*				0.61		
Zr/Hf	65.7			37.1	47.4	
Ba/Rb	0.61		8.21	6.58		
Rb/Th	12.3		6.75	6.49	6.13	
$^{87}\text{Sr}/^{86}\text{Sr}_i$	0.70357				0.7041	0.7085*
$^{143}\text{Nd}/^{144}\text{Nd}$	0.512829					
$^{206}\text{Pb}/^{204}\text{Pb}$	18.24					
$^{207}\text{Pb}/^{204}\text{Pb}$	15.502					
$^{208}\text{Pb}/^{204}\text{Pb}$	37.944					



Sample	S56	DM901	J84-6	SA-12	EM19	H91-129
Age, Ma	37.2					33.3
Long W	103 25.5	102 51.4	104 54	105 33	105 25.1	103 53.6
Lat N	29 27.9	29 45.0	31 26	32 00	31 50.9	29 21.3
SiO2	55.50	56.04	58.06	55.20	57.99	58.73
TiO2	1.14	0.40	1.12	0.44	0.12	1.79
Al2O3	17.30	17.44	18.24	17.56	17.40	16.55
Fe2O3	6.10	5.84	1.98	2.01	5.64	
FeO	0.64	1.88	4.19	4.73		
FeO*						7.91
MnO	0.15	0.21	0.11	0.27		0.16
MgO	1.80	0.48	1.02	0.54	0.40	0.95
CaO	2.80	2.34	4.50	1.75	1.24	3.63
Na2O	5.60	5.86	5.88	7.92	10.8	5.56
K2O	3.40	5.31	3.44	3.50	5.03	3.81
P2O5	0.45	0.37	0.47	0.21	0.14	0.90
H2O+	2.00	1.30	0.21	4.96		
H2O-		0.31		0.42		
CO2		0.53		0.03		
Total	96.88	97.78	99.22	99.51	98.76	98.59
SiO2'	58.49	58.59	58.65	58.66	58.72	58.73
(Na2O+K2O)'	9.49	11.68	9.42	12.14	16.03	9.37
Sc		16.2			2.04	17
V		28	16			60
Cr					2	2
Ni			7		16	3
Cu		14	19			
Zn		140	120	179	233	102
Ga						24
Rb		117	130	101	177	75
Sr		61	1087	400	109	664
Y		53	53	60	48	54
Zr		653	437	785	1455	515
Nb		132	68	185		65
Cs		1.7			2.61	0.94
Ba		966	1600		253	1684
La					151	79
Ce					268	158
Pr						18.8
Nd					84.51	76.7
Sm					13.8	16.5
Eu					1.35	5
Gd						13.1
Tb					2.59	1.95
Dy						10.86
Ho						2.03
Er						5.57
Tm						0.74
Yb					7.83	4.46
Lu					1.02	0.71

Hf		15			39.19	9.7
Ta		6.6			9.65	2.7
Pb						10.7
Th		12	10		34.44	5.8
U		3.3			12.63	2
Li		23				
F			1400			
Rb/Sr		1.92	0.12	0.25	1.62	0.11
Cen/Ybn					9.25	9.58
Eu*					0.28	1
Zr/Hf		43.5			37.1	53.1
Ba/Rb		8.26	12.3		1.43	22.5
Rb/Th		9.75	13		5.14	12.9
87Sr/86Sr,l			0.7039			
143Nd/144Nd						
206Pb/204Pb						
207Pb/204Pb						
208Pb/204Pb						

Sample	J82-103	H90-60	EM8	89209	MV4	Z-2
Age, Ma		31.8				34
Long W	104 54	103 51.2	105 25.9	104 22	105 25.4	105 33
Lat N	31 26	29 22.2	31 50.2	30 41	31 52.5	32 03
SiO2	58.50	58.81	58.07	58.19	57.35	57.35
TiO2	1.13	1.77	1.30	0.31	0.30	0.23
Al2O3	17.20	15.56	17.47	18.43	16.41	18.64
Fe2O3	4.13		5.54	3.71	2.38	2.43
FeO	2.40			1.47		3.44
FeO*		7.83				
MnO	0.09	0.12		0.37	0.06	0.35
MgO	0.96	2.27	0.49	0.56	3.32	0.24
CaO	2.50	5.54	1.75	1.28	3.52	1.30
Na2O	5.16	4.10	8.76	8.53	5.64	8.54
K2O	7.58	3.51	5.09	5.24	8.20	4.95
P2O5	0.22	0.49	0.15	0.79	0.19	0.07
H2O+	0.46			0.92		1.82
H2O-				0.15		0.12
CO2	0.30			0.04		0.12
Total	100.63	98.28	98.62	99.94	97.37	99.48
SiO2'	58.75	58.81	58.88	58.88	58.90	58.91
(Na2O+K2O)'	12.80	7.61	14.04	13.93	14.21	13.86
Sc		22	1.84	6.2	3.12	
V	8	131		50	73	
Cr		13	1		1	
Ni	4	6	9		60	
Cu	21	8		29		37
Zn	110	88	227	186	106	275
Ga		21				
Rb	142	123	170	190	166	226
Sr	288	431	140	153	160	82
Y	38	41	47	80	34	110
Zr	860	336	1441	1193	599	2260
Nb	76	35.2		264	40	426*
Cs	2.8		3.93	1.3	9.42	4.1
Ba	310	773	292	36	597	98
La	66	47	156		90.58	
Ce	130	114	290		159.64	
Pr						
Nd			90.43		65.54	
Sm			14.46		10.82	
Eu			1		1.96	
Gd						
Tb			2.54		2.06	
Dy						
Ho						
Er						
Tm						
Yb			8.06		4.22	
Lu			1.01		0.56	

Hf	8.4		38.05	14	14.47	51
Ta	5.9		15.06	9.9	10.51	30
Pb	12	14				
Th	8.7	9	35.05	17	11.03	60
U	2		11.85	2.3	5.28	17
Li				34		73
F	620					
Rb/Sr	0.49	0.29	1.21	1.24	1.04	2.76
Cen/Ybn			9.73		10.23	
Eu*			0.2		0.51	
Zr/Hf	102.4		37.9	85.2*	41.4	44.3
Ba/Rb	2.18	6.28	1.72	0.19	3.6	0.43
Rb/Th	16.3	13.7	4.85	11.2	15.1	3.77
$^{87}\text{Sr}/^{86}\text{Sr}_i$						0.7053
$^{143}\text{Nd}/^{144}\text{Nd}$						
$^{206}\text{Pb}/^{204}\text{Pb}$						
$^{207}\text{Pb}/^{204}\text{Pb}$						
$^{208}\text{Pb}/^{204}\text{Pb}$						

Sample	Tr-61	Chin67	F-2	DM902
Age, Ma	27.2		27.2	
Long W	104 06.4		104 05.6	102 51.4
Lat N	29 24.6		29 24.8	29 45
SiO2	58.94	58.00	58.96	57.40
TiO2	1.47	1.24	1.31	0.32
Al2O3	16.66	17.94	16.32	17.88
Fe2O3		2.42		5.16
FeO		3.60		2.14
FeO*	6.96		6.14	
MnO	0.19	0.10	0.15	0.21
MgO	1.59	1.24	1.51	0.34
CaO	3.04	4.81	3.62	1.92
Na2O	4.50	4.72	5.25	6.50
K2O	6.21	3.71	6.33	5.43
P2O5	0.44	0.61	0.4	0.29
H2O+		0.51		0.97
H2O-		0.21		0.25
CO2		0.02		0.27
Total	100	99.13	99.99	98.82
SiO2'	58.94	58.95	58.97	58.97
(Na2O+K2O)'	10.71	8.57	11.58	12.26
Sc	7.14		10.6	17.8
V				30
Cr			2.23	
Ni	16.4			
Cu				21
Zn	139		139	158
Ga				
Rb	188		194	119
Sr	297		202	30
Y	56		92	46
Zr	1151		1324	675
Nb	122		485*	140
Cs	2.23		3.5	1.3
Ba	1183		1236	688
La	111		100	84
Ce	219		216	169
Pr				
Nd	78		84	69
Sm	14.9		16.7	11
Eu	2.73		2.69	2.4
Gd				
Tb	3.04		2.9	1.6
Dy				
Ho				
Er				
Tm				
Yb	7.71		7.83	4.7
Lu	1.08		1.1	0.76

Hf	31.7		31.4	15
Ta	9.59		11.5	6
Pb				7
Th	25.6		24.1	12
U	5.65		6.14	1
Li				30
F				1200
Rb/Sr	0.63		0.96	3.97
Cen/Ybn	7.68		7.46	9.72
Eu*	0.51		0.47	0.66
Zr/Hf	36.3		42.2	45
Ba/Rb	6.29		6.37	5.78
Rb/Th	7.34		8.05	9.92
$^{87}\text{Sr}/^{86}\text{Sr}_i$				
$^{143}\text{Nd}/^{144}\text{Nd}$				
$^{206}\text{Pb}/^{204}\text{Pb}$				
$^{207}\text{Pb}/^{204}\text{Pb}$				
$^{208}\text{Pb}/^{204}\text{Pb}$				