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Record 1981/14

CHEMICAL ANALYSES OF ROCKS FROM
EAST ANTARCTICA

by

J.W. SHERATON

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INTRODUCTION

Chemical analyses of rock samples from Antarctica are listed. They comprise medium to high-grade metamorphics and a variety of felsic and mafic igneous rocks, mostly of Precambrian age but including some Phanerozoic intrusives and extrusives. The vast majority were collected between 1972 and 1977 by BMR geologists taking part in regional geological investigations in the western part of Australian Antarctic Territory (45° - 70° E). Further details of these studies are given in some of the cited references.

Analytical methods

SiO_2 , TiO_2 , Al_2O_3 , Fe_2O_3 (total), MnO , MgO , CaO , Na_2O , K_2O , P_2O_5 , Ba, Rb, Sr, Pb, Th, U, Zr, Nb, Y, La, Ce, Sn, V, and Ga were determined in the BMR laboratories, using Philips PW-1210 or PW-1450 automatic X-ray spectrometers. Major elements (excluding Na_2O) were measured on fusion discs using the technique of Norrish & Hutton (1969); Na_2O analyses were carried out on pressed powder pellets. Analyses of trace elements were also made using powder pellets, with direct measurement of the mass absorption coefficients of each sample (Norrish & Chappell, 1967). Empirical interfering element corrections were made where necessary. Detection limits (Table 1) were calculated at the 95 percent confidence level for detection of peak above background, using the relation given by Jenkins & de Vries (1967), although in practice detection limits will be slightly higher than this, particularly in cases where there are significant inter-element interferences.

Table 1. Detection limits (in percent for major oxides
and ppm for trace elements)

SiO ₂	0.02
TiO ₂	0.004
Al ₂ O ₃	0.03
Fe ₂ O ₃	0.01
MnO	0.005
MgO	0.11
CaO	0.006
Na ₂ O	0.11
K ₂ O	0.002
P ₂ O ₅	0.006
Ba	3
Rb	1
Sr	1
Pb	1
Th	1
U	0.5
Zr	1
Nb	1
Y	1
La	2
Ce	3
Sn	1
V	1
Cr	3
Ni	2
Cu	2
Zn	2
Ga	1

3.

$$\text{Detection limit} = \frac{3c}{(R_p - R_b)} \frac{R_b}{t},$$

where R_p = Peak count rate (counts/sec),

R_b = Background count rate (counts/sec),

t = Background counting time (secs),

c = Concentration of element.

Cr, Ni, Cu, Zn, and some Na_2O determinations were made by atomic absorption spectrophotometry in the BMR laboratories. H_2O^+ , H_2O^- , CO_2 (gravimetric), and ferrous iron (volumetric) were determined either by the Australian Mineral Development Laboratories, Adelaide, or at BMR.

Precision and accuracy

Precision of the X-ray fluorescence technique is generally good. The effects of all but very short-term drift in machine conditions were practically eliminated by ratioing each measurement to a reference standard. Each determination was carried out in duplicate (using the same sample), and, in cases where significant differences occurred between duplicates, the determination was repeated. Replicate sample precision was checked by running duplicate samples, and was found to be within acceptable limits ($\pm 1\%$ for fusion discs, and generally better for powder pellets).

Accuracy was assessed by analysing international rock standards. Comparisons of XRF and AA results with recommended values for two U.S.G.S. standard rocks (G2 and AGVI) are given in Table 2. Data for the U.S.G.S. standards are from Flanagan (1973). For most major elements, agreement between recommended and XRF results is good (i.e., within ± 3 percent). For Na_2O and most trace elements (except near the detection limit), accuracy is of the order of ± 5 -10 percent.

Table 2. Comparison of standard rock analyses

	G2		AGV1	
	Recommended	BMR	Recommended	BMR
SiO ₂	69.11	69.16	59.00	59.27
TiO ₂	0.50	0.50	1.04	1.09
Al ₂ O ₃	15.40	15.30	17.25	17.15
+ Fe ₂ O ₃	2.65	2.68	6.76	6.86
MnO	0.034	0.03	0.10	0.10
MgO	0.76	0.80	1.53	1.61
CaO	1.94	1.93	4.90	4.98
Na ₂ O	4.07	4.18	4.26	4.10
K ₂ O	4.51	4.43	2.89	2.91
P ₂ O ₅	0.14	0.13	0.49	0.50
TOTAL	99.11	99.14	98.22	98.57
Ba	1870	1836	1208	1232
Rb	168	168	67	67
Sr	479	492	657	656
Pb	31	29	35	34
Th	24	31	6.4	8
U	2.0	1.5	1.9	1.7
Zr	300	333	225	237
Nb	13.5	-	15	14
Y	12	13	21	19
La	96	95	35	43
Ce	150	168	63	71
Sn	1.5	-	4.2	4
V	35	-	125	121
Cr	7	-	12	13
Ni	5	-	18.5	13
Cu	12	-	60	56
Zn	85	-	84	81
Ga	23	22	20.5	19

+ Total Fe as Fe₂O₃

Notes on analytical data

Analyses are listed firstly on the basis of the major area of East Antarctica from which the rocks were collected, and then by rock type. Each analysis has a number of headings, as follows:

1. BMR registered sample number.
2. Area: Enderby and Kemp Lands
 Mawson Coast (MacRobertson Land)
 NPCM - Northern Prince Charles Mountains (MacRobertson Land)
 SPCM - Southern Prince Charles Mountains (MacRobertson Land)
 Vestfold Hills (Princess Elizabeth Land)
 Wilhelm II Land
 Bunger Hills
3. Locality.
4. Rock type. For each area, analyses are listed in the following order:
 felsic gneisses
 mafic rocks (granulites and amphibolites)
 anorthosites
 metasediments (quartzites, pelites, etc.)
 granitic intrusives
 mafic intrusives and extrusives.

For each of these rock types, analyses are grouped in order of decreasing age.

Owing to limitations of space, the following abbreviations are used:

6.

alk.,	alkali	granod,	granodiorite
amphibol.,	amphibolised	tonal,	tonalite
gran,	granite	trond,	trondhjemite
bi,	biotite	ol,	olivine
cd,	cordierite	op,	orthopyroxene
ch,	chlorite	os,	osumilite
cp,	clinopyroxene	phl,	phlogopite
ctd,	chloritoid	pl,	plagioclase
gt,	garnet	px,	pyroxene
hb,	hornblende	qz,	quartz
kf,	alkali feldspar	sa,	sapphirine
ky,	kyanite	si,	sillimanite
mp,	mesoperthite	sp,	spinel
mus,	muscovite	st,	staurolite

I and II refer to the two main groups of Proterozoic tholeiite dykes (Amundsen dykes) from Enderby Land, as defined by Sheraton & Black (ref. 9).

5. Age. Only generalised ages are given, e.g. Archaean, Proterozoic, etc.

6. Bibliographic references are given below.

7. Analytical data for major oxides are given in weight percent; those for trace elements in parts per million.

ACKNOWLEDGEMENTS

Many of the chemical analyses were carried out by B.I. Cruikshank, K.H. Ellingsen, G.R. Ewers, J. Fitzsimmons, C. Madden, J.G. Pyke, and T.I. Slezak. I thank M. Owen and L. Wyborn for assistance with the computer programs used for storage and sorting of the analytical data, and N.J. Davies for storing some of the data.

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10.

ANALYTICAL DATA

ENDERBY LAND AND KEMP LAND

Sample Number	76283001	76283006	76283018	76283022	76283023	76283033	76283057	76283069	76283074	76283075
Area	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land
Locality	Mount King	Seavers Ridge	Seavers Ridge	Mount Douglas	Mount Douglas	Mount Douglas	Mount Pardoe	Mount Hurley	Mount Codrington	Mount Codrington
Rock type	Op-qz-mp gneiss	Op-qz-mp gneiss	Cp-op-qz- mp gneiss	Bi-op-qz- pl gneiss	Op-qz-kf- pl gneiss	Op-qz-pl gneiss	Op-qz-mp gneiss	Op-qz-mp gneiss	Op-qz-pl gneiss	Op-qz-kf gneiss
Age	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean
Bibliog. ref.	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6
SiO ₂	71.70	66.40	65.70	64.30	68.40	63.50	72.70	66.20	63.70	74.40
TiO ₂	0.26	1.28	1.30	0.49	0.33	0.65	0.27	0.51	1.05	0.32
Al ₂ O ₃	14.48	12.92	12.88	12.62	15.79	14.29	14.19	15.02	12.78	10.70
Fe ₂ O ₃	0.73	2.70	2.63	1.18	1.41	2.19	1.05	0.66	2.90	0.90
FeO	1.30	4.18	4.29	6.30	2.07	5.84	1.21	4.65	8.01	3.20
MnO	0.03	0.13	0.15	0.12	0.07	0.10	0.03	0.06	0.16	0.03
MgO	0.91	1.16	1.08	6.66	1.38	4.11	0.42	2.39	2.46	1.45
CaO	2.67	3.35	3.39	4.18	2.95	2.97	2.30	2.58	4.52	0.19
Na ₂ O	3.04	3.07	2.98	2.60	4.31	4.26	4.34	4.22	2.23	1.71
K ₂ O	4.24	4.26	4.18	0.80	2.84	1.35	3.12	2.37	1.32	6.10
P ₂ O ₅	0.02	0.39	0.42	0.16	0.13	0.03	0.03	0.06	0.14	0.02
H ₂ O ⁺										
H ₂ O ⁻										
CO ₂										
Rest	0.24	0.44	0.47	0.30	0.33	0.23	0.19	0.23	0.30	0.52
TOTAL	99.62	100.28	99.47	99.71	100.01	99.52	99.85	98.95	99.57	99.54
Ba	1170	2480	2730	836	1610	494	1060	905	1240	2960
Rb	67	74	73	52	47	38	60	51	33	175
Sr	274	174	178	317	727	370	177	338	128	68
Pb	24	19	19	10	25	17	23	26	14	42
Th	18	<1	<1	12	9	25	20	10	21	60
U	<1	<1	<1	2	<1	1	1	1	1	4
Zr	107	529	507	122	145	187	122	139	337	745
Nb	3	22	22	6	3	8	8	8	17	28
Y	4	41	44	19	9	14	10	11	39	20
La	138	88	102	26	33	45	42	45	74	97
Ce	165	144	161	47	52	75	63	74	119	153
Sn	<1	<1	<1	<1	<1	<1	<1	<1	2	1
V	9	51	52	101	36	98	11	76	195	2
Cr	42	9	10	604	33	231	5	106	8	15
Ni	28	7	9	99	15	93	3	38	16	<2
Cu	8	18	20	15	5	27	3	26	9	5
Zn	25	57	71	68	47	82	39	59	150	87
Ga	15	16	17	15	18	18	16	18	19	16

Sample Number	76283084	76283085	76283094	76283099	76283203	76283215	76283222	76283227	76283228	76283246
Area	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby
Locality	Land	Land	Land	Land	Land	Land	Land	Land	Land	Land
Rock type	Proclamation Is.	Proclamation Is.	Mount King	Mount Selwood	Mount Ryder	Mount Denham	Mount Smethurst	Mount Paish	Mount Paish	Mount McGhee
Age	Op-qz-pl-kf gneiss	Op-qz-pl-kf gneiss	Op-qz-mp gneiss	Op-qz-mp gneiss	Op-kf-qz-pl gneiss	Bi-qz-kf gneiss	Op-qz-mp gneiss	Op-qz-mp gneiss	Op-qz-mp gneiss	Bi-qz-mp gneiss
Bibliog. ref.	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean
	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6
SiO ₂	68.00	68.00	69.10	71.80	70.80	75.40	70.40	76.60	75.30	72.40
TiO ₂	0.96	0.78	0.97	0.32	0.43	0.06	0.35	0.47	0.44	0.10
Al ₂ O ₃	12.46	13.59	12.93	14.13	14.76	13.28	14.70	10.63	10.55	14.31
Fe ₂ O ₃	2.21	1.79	1.67	0.91	1.18	0.29	0.96	1.15	1.61	0.39
FeO	4.32	4.19	3.26	2.23	1.67	0.47	2.10	2.29	2.55	1.12
MnO	0.09	0.08	0.10	0.05	0.03	0.02	0.06	0.04	0.04	0.03
MgO	1.00	1.17	0.64	1.36	0.84	0.12	0.92	1.25	0.77	0.38
CaO	2.51	3.08	2.40	2.68	3.72	1.25	3.02	1.29	1.19	2.27
Na ₂ O	2.91	3.29	2.95	3.67	4.53	2.37	4.28	4.47	3.03	5.23
K ₂ O	5.25	3.74	5.25	2.60	1.52	6.55	2.66	1.75	3.50	2.42
P ₂ O ₅	0.20	0.17	0.25	0.05	0.07	0.01	0.06	0.02	0.02	0.03
H ₂ O+										
H ₂ O-										
CO ₂										
Rest	0.35	0.32	0.41	0.26	0.17	0.34	0.14	0.25	0.25	0.15
TOTAL	100.26	100.20	99.93	100.06	99.72	100.16	99.65	100.21	99.25	98.83
Ba	1810	1690	2410	1250	713	2470	557	970	984	898
Rb	112	82	101	54	15	273	41	15	40	43
Sr	130	84	128	426	292	130	223	106	77	289
Pb	8	9	20	22	9	33	11	7	10	10
Th	1	1	<1	7	4	2	6	22	17	<1
U	<1	<1	<1	<1	<1	<1	<1	2	2	<1
Zr	420	403	537	134	196	29	105	560	619	21
Nb	30	23	16	3	7	1	7	27	16	<1
Y	76	54	25	12	2	5	8	54	21	2
La	52	41	41	35	59	36	26	94	73	11
Ce	103	83	62	61	80	36	40	151	113	14
Sn	1	1	<1	<1	1	<1	<1	1	1	<1
V	35	38	24	42	12	4	18	<1	<1	6
Cr	44	56	19	60	13	13	32	9	6	8
Ni	18	24	6	32	5	5	9	6	<2	6
Cu	12	19	10	24	6	4	6	4	6	3
Zn	44	62	47	33	33	7	39	21	73	20
Ga	17	21	15	15	15	12	17	15	16	15

Sample Number	76283248	76283253	76283273	76283274	76283029	76283064	76283070	76283088	76283096	76283202
Area	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land
Locality	Burch Peaks	Mount Cordwell	Mount Jewell	Mount Jewell	Mount Douglas	Mount Pardoe	Mount Hurley	Proclam- ation Is.	Mount Selwood	Mount Ryder
Rock type	Op-qz-mp gneiss	Op-qz-mp gneiss	Cp-op-qz- pl gneiss	Op-qz-mp gneiss	Gt-qz-pl- kf gneiss	Gt-qz-mp gneiss	Gt-qz-mp gneiss	Gt-qz-pl- kf gneiss	Op-gt-qz- mp gneiss	Gt-qz-mp gneiss
Age	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean
Bibliog. ref.	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6
SiO ₂	73.00	71.40	59.20	71.90	66.90	74.30	73.70	72.70	70.00	74.50
TiO ₂	0.33	0.81	1.22	0.61	0.55	0.09	0.05	0.30	0.43	0.07
Al ₂ O ₃	13.72	11.02	12.39	11.14	15.15	13.30	13.87	13.04	14.03	13.57
Fe ₂ O ₃	0.88	2.20	1.23	1.10	1.70	1.16	1.08	1.11	2.21	0.97
FeO	1.09	4.80	10.37	4.43	3.38	0.67	0.40	2.37	2.52	0.91
MnO	0.04	0.10	0.13	0.04	0.09	0.04	0.05	0.05	0.08	0.07
MgO	0.36	1.25	3.25	1.69	1.74	0.17	0.42	1.47	1.81	0.65
CaO	1.53	2.37	5.93	2.37	2.84	1.33	1.02	1.48	2.93	1.36
Na ₂ O	3.25	3.19	4.58	4.09	3.75	3.71	3.33	2.30	3.50	3.40
K ₂ O	5.42	2.66	0.87	2.06	2.32	4.56	5.71	4.41	1.93	4.62
P ₂ O ₅	0.02	0.08	0.20	0.08	0.04	<0.01	0.08	0.03	0.05	0.03
H ₂ O+										
H ₂ O-										
CO ₂										
Rest	0.44	0.23	0.16	0.23	0.26	0.23	0.27	0.26	0.21	0.22
TOTAL	100.08	100.11	99.53	99.74	98.72	99.55	99.98	99.52	99.70	100.37
Ba	2840	1060	418	1060	927	1410	1840	1220	769	1220
Rb	109	28	4	9	45	120	129	145	30	156
Sr	204	142	145	134	529	101	265	78	371	147
Pb	38	9	2	9	20	36	39	47	17	43
Th	43	<1	2	16	6	46	<1	54	3	33
U	1	1	<1	<1	<1	4	<1	3	<1	2
Zr	126	371	215	386	214	82	18	292	141	85
Nb	6	13	11	14	7	2	<1	12	4	3
Y	7	18	36	25	42	42	24	68	17	37
La	167	41	54	64	24	39	38	82	37	42
Ce	210	56	87	98	36	56	43	143	64	77
Sn	1	<1	1	<1	<1	<1	<1	1	<1	3
V	12	29	123	11	57	2	3	14	64	4
Cr	7	7	5	13	94	3	10	20	114	17
Ni	3	64	9	26	42	<2	2	10	34	12
Cu	7	14	19	8	20	3	3	10	23	32
Zn	22	88	72	33	34	25	3	21	42	10
Ga	17	15	19	17	15	14	11	16	15	12

Sample Number	76283211	76283229	76283234	76283272	76283283	77283424	77283428	77283439	77283914	77283959
Area	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land
Locality	Mount Denham	Mount Paish	Mount Torckler	Mount Stadler	Mount Jewell	Mt Riiser- Larsen	Mt Riiser- Larsen	Graham Peak	Tonagh Island	Debenham Peak
Rock type	Gt-qz-mp gneiss	Gt-qz-mp gneiss	Gt-qz-mp gneiss	Gt-qz-kf gneiss	Gt-qz-mp gneiss	Op-qz-mp gneiss	Op-qz-pl gneiss	Op-qz-mp gneiss	Op-qz-pl gneiss	Op-qz-pl gneiss
Age	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean
Bibliog. ref.	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6
SiO ₂	74.50	74.20	73.90	76.20	75.20	70.50	73.30	74.80	63.50	71.10
TiO ₂	0.10	0.04	0.17	0.44	0.02	0.27	0.35	0.11	0.62	0.39
Al ₂ O ₃	13.40	13.87	13.57	10.98	13.13	15.17	13.94	13.72	16.64	15.26
Fe ₂ O ₃	0.87	0.27	0.46	2.23	0.27	0.85	0.90	0.76	0.99	0.71
FeO	0.67	0.79	1.38	2.80	0.95	1.56	1.88	0.51	4.67	1.73
MnO	0.04	0.02	0.03	0.09	0.07	0.04	0.04	0.01	0.07	0.04
MgO	0.22	0.12	0.32	0.18	0.19	1.01	1.04	0.49	2.63	1.11
CaO	1.05	0.88	1.12	1.71	1.09	3.28	3.82	2.37	5.67	4.32
Na ₂ O	3.77	3.99	3.94	2.15	3.42	3.85	4.08	4.09	3.61	4.08
K ₂ O	5.27	5.68	4.84	3.23	5.14	2.80	0.98	3.02	1.05	0.76
P ₂ O ₅	0.02	0.03	0.04	0.01	0.03	0.10	0.08	0.02	0.32	0.08
H ₂ O+						0.36	0.25	0.21	0.17	0.16
H ₂ O-						0.04	0.09	0.08	0.11	0.11
CO ₂										
Rest	0.13	0.12	0.16	0.25	0.11	0.20	0.16	0.26	0.23	0.16
TOTAL	100.04	100.01	99.93	100.27	99.62	100.03	100.91	100.45	100.28	100.01
Ba	613	496	624	1360	540	1190	674	1840	864	641
Rb	191	205	263	65	167	26	4	25	3	1
Sr	61	65	54	76	60	283	295	264	549	458
Pb	45	39	35	27	44	15	9	13	11	8
Th	6	4	31	3	2	<1	<1	2	<1	<1
U	<1	<1	3	1	<1	<1	<1	<1	<1	<1
Zr	65	55	118	334	27	45	144	21	95	105
Nb	1	<1	11	4	<1	<1	2	<1	3	2
Y	19	11	24	63	22	3	3	<1	13	6
La	48	46	56	55	17	27	18	19	32	21
Ce	74	71	103	68	28	31	21	16	56	26
Sn	1	2	2	1	<1	<1	<1	<1	1	1
V	2	<1	4	<1	<1	30	46	15	86	34
Cr	9	6	8	<3	13	24	20	9	60	9
Ni	9	3	2	4	<2	14	19	13	25	13
Cu	3	2	2	6	4	6	6	4	14	5
Zn	5	8	13	56	4	30	32	15	71	32
Ga	14	15	17	17	9	15	14	12	19	18

Sample Number	77283974	77283980	77283981	77283985	77284114	77284304	77284305	77284313	77284323	77284324
Area	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby
Locality	Land	Land	Land	Land	Land	Land	Land	Land	Land	Land
	Mount	Mount	Mount	Grimsley	Mount	Wordie	Mount	Mount	Mount	Mount
	Bennett	Bennett	Bennett	Peaks	Arthur	Ntk	Biscoe	Oldfield	Brockelsby	Brockelsby
Rock type	Op-qz-pl	Op-qz-mp	Op-qz-kf	Op-qz-pl	Op-qz-pl	Op-qz-pl-	Op-qz-mp	Op-qz-mp	Op-qz-pl	Op-qz-kf
	gneiss	gneiss	gneiss	gneiss	gneiss	kf gneiss	gneiss	gneiss	gneiss	gneiss
Age	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean
Bibliog. ref.	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6
SiO ₂	67.50	75.10	78.50	64.70	64.20	69.10	69.10	76.20	66.60	74.00
TiO ₂	0.29	0.56	0.20	0.74	0.60	0.74	0.35	0.15	0.71	0.17
Al ₂ O ₃	16.24	11.35	10.37	15.14	15.28	14.09	15.85	12.40	15.55	14.07
Fe ₂ O ₃	1.44	2.44	0.96	2.28	1.94	1.26	1.42	0.64	3.10	1.05
FeO	2.17	2.28	1.03	4.73	3.37	3.03	1.81	0.94	2.24	0.55
MnO	0.05	0.06	0.02	0.11	0.07	0.04	0.04	0.03	0.08	0.03
MgO	2.13	0.56	0.90	2.37	2.63	0.90	0.89	0.62	1.01	0.41
CaO	3.08	2.27	0.78	4.87	5.05	2.24	3.06	1.82	4.06	1.93
Na ₂ O	6.16	3.64	2.78	3.70	4.30	2.46	4.69	3.22	4.31	4.01
K ₂ O	0.55	1.99	4.27	0.81	1.30	5.62	2.95	3.57	1.24	4.07
P ₂ O ₅	0.02	0.15	0.01	0.28	0.17	0.22	0.16	0.03	0.18	0.04
H ₂ O ⁺	0.38	0.23	0.48	0.22	0.26	0.33	0.23	0.29	0.16	0.21
H ₂ O ⁻	0.07	0.01	0.09	0.07	0.14	0.07	0.13	0.07	0.07	0.10
CO ₂										
Rest	0.32	0.18	0.15	0.19	0.21	0.47	0.16	0.20	0.10	0.15
TOTAL	100.40	100.82	100.54	100.21	99.52	100.57	100.84	100.18	99.41	100.79
Ba	1860	740	559	530	741	2290	639	1150	386	644
Rb	1	46	110	8	14	149	49	59	6	148
Sr	435	176	73	134	386	160	171	181	147	119
Pb	18	17	41	19	10	31	27	19	11	31
Th	1	18	23	39	1	67	7	<1	11	29
U	<1	2	7	4	<1	<1	<1	<1	1	4
Zr	217	234	108	253	153	575	192	153	88	100
Nb	1	9	5	18	4	11	3	1	5	4
Y	2	46	8	57	15	8	9	1	24	5
La	22	44	23	43	25	244	28	34	19	33
Ce	30	72	28	84	38	359	38	41	37	49
Sn	<1	1	1	2	3	<1	1	<1	<1	<1
V	41	4	28	96	72	28	31	19	20	10
Cr	7	4	156	66	100	17	11	7	5	17
Ni	23	10	47	20	25	9	14	9	12	6
Cu	5	7	2	9	9	10	7	28	14	3
Zn	76	58	34	85	68	38	45	21	57	24
Ga	19	17	12	20	19	18	19	12	17	15

Sample Number	77284327	77284335	77284360	77284374	77284378	77284397	77284617	77284620	77284622	77284658
Area	Enderby	Enderby	Enderby	Enderby	Enderby	Kemp	Enderby	Enderby	Enderby	Enderby
Locality	Land	Land	Land	Land	Land	Land	Land	Land	Land	Land
	Francis Peaks	Mount Letten	Ward Rocks	Zubchatyy Ice Shelf	Zubchatyy Ice Shelf	Aker Peaks	Dick Peaks	Mount Dyke	Mount Dyke	Geoffrey Hills
Rock type	Op-qz-pl gneiss	Op-qz-mp gneiss	Op-qz-mp gneiss	Op-qz-pl gneiss	Op-qz-mp gneiss	Op-qz-pl gneiss	Px-kf-qz-pl gneiss	Op-qz-pl gneiss	Op-qz-pl gneiss	Cp-op-qz-pl gneiss
Age	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean
Bibliog. ref.	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6
SiO ₂	69.80	69.90	70.90	67.20	67.40	77.80	70.70	69.60	64.20	65.80
TiO ₂	0.39	0.31	0.92	0.47	0.44	0.13	0.44	0.37	0.91	0.40
Al ₂ O ₃	15.33	13.50	11.51	15.06	15.29	11.96	13.72	15.40	15.30	14.88
Fe ₂ O ₃	2.18	2.00	1.95	1.88	1.28	0.58	2.49	0.96	3.83	1.45
FeO	0.95	1.82	3.58	3.35	2.72	0.87	1.76	1.74	2.80	2.68
MnO	0.03	0.05	0.06	0.08	0.04	0.01	0.04	0.04	0.07	0.06
MgO	1.14	2.39	2.13	1.99	1.77	1.00	1.10	1.02	1.67	2.89
CaO	3.52	2.56	2.54	4.14	2.97	1.76	3.63	3.59	4.44	5.48
Na ₂ O	4.35	3.67	3.64	4.31	3.61	4.96	3.47	4.75	4.26	4.02
K ₂ O	1.81	3.00	1.78	0.76	3.17	1.05	1.63	1.31	0.88	0.86
P ₂ O ₅	0.17	0.03	0.16	0.08	0.02	0.01	0.10	0.09	0.27	0.14
H ₂ O ⁺	0.30	0.17	0.24	0.25	0.45	0.24	0.34	0.30	0.31	0.29
H ₂ O ⁻	0.08	0.03	0.06	0.06	0.08	0.12	0.06	0.03	0.08	0.09
CO ₂										
Rest	0.17	0.23	0.19	0.14	0.38	0.13	0.21	0.17	0.20	0.20
TOTAL	100.22	99.66	99.66	99.77	99.62	100.62	99.69	99.37	99.22	99.24
Ba	656	1120	718	456	1900	204	1020	748	628	680
Rb	40	67	31	2	55	6	27	9	8	6
Sr	252	258	104	349	474	128	358	376	258	412
Pb	16	26	11	5	34	6	12	7	7	8
Th	13	19	21	<1	6	9	3	<1	11	12
U	<1	1	3	<1	2	1	<1	<1	<1	<1
Zr	182	102	304	64	346	419	147	100	270	97
Nb	5	3	15	3	5	4	2	2	10	3
Y	11	2	62	9	7	45	11	3	40	13
La	43	39	54	12	47	65	37	18	56	37
Ce	70	49	88	18	65	115	51	23	95	56
Sn	<1	<1	2	<1	<1	<1	<1	<1	<1	<1
V	29	34	60	64	73	<1	48	32	71	72
Cr	14	87	10	47	83	4	14	15	21	91
Ni	8	26	14	18	64	20	8	14	20	54
Cu	3	14	5	24	15	2	6	7	23	21
Zn	42	47	45	66	41	8	40	45	78	42
Ga	17	17	15	18	16	22	14	18	19	16

Sample Number	77284667	77284669	77284670	77284675	77284696	77284700	77284803	77284826	77284858	77283417
Area	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Kemp	Enderby	Kemp	Enderby
Locality	Land	Land	Land	Land	Land	Land	Land	Land	Land	Land
	Proclam-	Proclam-	Proclam-	Proclam-	Mount	Gromov	Seaton	Mount	Wallis	Mt Riiser-
	ation Is.	ation Is.	ation Is.	ation Is.	Henry	Ntk	Glacier	Pardoe	Ntk	Larsen
Rock type	Hb-op-qz-	Op-qz-kf	Op-qz-pl-	Op-qz-pl-	Op-qz-pl-	Op-qz-pl-	Op-qz-pl-	Cp-op-qz-	Op-qz-pl-	Gt-qz-mp
	kf gneiss	gneiss	kf gneiss	kf gneiss	gneiss	gneiss	gneiss	pl gneiss	gneiss	gneiss
Age	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean
Bibliog. ref.	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6
SiO ₂	74.30	74.70	71.60	66.60	70.80	68.10	72.50	60.20	71.40	74.90
TiO ₂	0.35	0.37	0.90	1.11	0.44	0.69	0.35	0.79	0.36	0.04
Al ₂ O ₃	12.06	11.89	11.46	13.08	15.11	14.37	15.18	16.23	15.22	13.09
Fe ₂ O ₃	1.24	1.38	2.49	2.03	1.79	1.78	0.86	3.68	0.89	1.59
FeO	1.46	1.26	3.39	5.24	1.03	3.64	1.10	3.67	1.17	1.02
MnO	0.02	0.02	0.07	0.09	0.03	0.07	0.02	0.09	0.02	0.05
MgO	0.35	0.41	0.96	1.22	0.86	1.88	0.51	3.45	1.01	0.64
CaO	1.42	1.44	2.14	3.28	2.70	4.32	3.82	6.71	4.47	1.42
Na ₂ O	2.79	3.01	2.71	2.87	5.12	3.87	4.42	3.75	4.25	2.20
K ₂ O	5.03	5.03	4.29	3.89	2.14	0.49	1.10	0.79	0.62	5.09
P ₂ O ₅	0.06	0.06	0.17	0.26	0.16	0.14	0.03	0.31	0.10	0.03
H ₂ O ⁺	0.38	0.26	0.26	0.39	0.33	0.17	0.31	0.25	0.42	0.43
H ₂ O-	0.10	0.12	0.13	0.11	0.01	0.03	0.05	0.08	0.08	0.12
CO ₂										
Rest	0.15	0.15	0.22	0.31	0.20	0.15	0.15	0.20	0.15	0.18
TOTAL	99.71	100.10	100.79	100.48	100.72	99.70	100.40	100.20	100.16	100.80
Ba	511	525	782	1470	784	425	429	696	243	1040
Rb	167	149	104	86	36	<1	7	5	3	145
Sr	60	44	54	86	501	310	364	418	509	109
Pb	13	14	10	8	15	3	6	9	3	49
Th	5	5	1	<1	1	<1	1	<1	<1	3
U	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Zr	191	257	439	439	137	171	257	153	328	106
Nb	10	11	28	29	3	5	4	5	3	<1
Y	51	45	64	77	6	12	3	21	4	46
La	49	43	40	60	28	26	19	35	16	28
Ce	83	73	82	113	48	37	26	61	24	41
Sn	<1	1	1	1	<1	<1	1	1	<1	<1
V	16	16	38	50	29	60	14	27	11	3
Cr	16	14	32	47	18	48	12	80	5	6
Ni	8	8	13	21	13	26	5	60	13	2
Cu	24	14	15	17	5	10	5	30	11	3
Zn	28	21	58	78	45	62	30	62	28	8
Ga	17	16	16	19	18	17	18	19	17	12

Sample Number	77283435	77283913	77283944	77283965	77284306	77284832	77284842	77283963	77284320	77284337
Area	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land
Locality	Mount Soucek	Tonagh Island	Mount Pardoe	Mount Charles	Mount Biscoe	Mount Trail	McIntyre Island	Debenham Peak	Mount Brockelsby	Gage Ridge
Rock type	Gt-qz-mp gneiss	Gt-qz-mp gneiss	Gt-qz-mp gneiss	Bi-gt-qz- mp gneiss	Gt-qz-mp gneiss	Gt-qz-kf gneiss	Gt-qz-mp gneiss	Op-gt-qz- mp gneiss	Gt-qz-pl- kf gneiss	Op-gt-qz- mp gneiss
Age	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean
Bibliog. ref.	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6
SiO ₂	73.80	74.50	74.90	73.30	76.10	75.00	75.10	73.90	72.80	70.50
TiO ₂	0.06	0.13	0.15	0.31	0.02	0.11	0.06	0.84	0.48	0.49
Al ₂ O ₃	13.58	13.49	13.61	12.05	13.70	13.39	13.58	11.20	11.41	13.45
Fe ₂ O ₃	0.66	0.97	1.27	3.10	0.17	1.18	0.27	1.59	0.87	2.74
FeO	1.02	0.38	1.28	2.01	0.40	0.86	0.67	3.07	4.42	2.00
MnO	0.01	0.05	0.04	0.05	0.01	0.03	0.03	0.04	0.09	0.09
MgO	0.60	0.41	0.65	2.20	0.09	0.16	0.24	0.95	0.71	1.86
CaO	1.63	1.48	2.05	1.20	1.77	1.05	1.27	1.79	1.65	2.32
Na ₂ O	3.72	3.42	3.46	2.27	3.49	3.05	2.99	2.88	2.24	2.63
K ₂ O	3.53	4.49	2.87	2.75	4.29	5.55	5.66	3.16	4.79	3.38
P ₂ O ₅	0.04	0.01	0.03	0.04	0.06	0.02	0.03	0.27	0.07	0.02
H ₂ O ⁺	0.17	0.11	0.10	0.25	0.18	0.20	0.21	0.19	0.56	0.24
H ₂ O ⁻	0.06	0.09	0.01	0.10	0.01	0.03	0.02	0.11	0.07	0.13
CO ₂										
Rest	0.15	0.28	0.13	0.20	0.19	0.13	0.15	0.25	0.24	0.19
TOTAL	99.03	99.81	100.55	99.83	100.48	100.76	100.28	100.24	100.40	100.04
Ba	736	1850	361	428	1140	539	818	987	1280	539
Rb	77	111	89	87	82	165	153	51	119	120
Sr	177	196	80	62	204	73	96	69	76	85
Pb	59	66	31	41	50	45	45	9	27	31
Th	15	15	36	45	3	16	18	13	16	16
U	7	<1	2	5	3	1	<1	<1	2	1
Zr	77	64	204	266	85	113	64	527	268	214
Nb	1	2	1	22	<1	<1	<1	23	10	13
Y	13	22	35	114	19	4	13	88	34	40
La	32	45	68	84	17	61	32	68	55	69
Ce	52	72	112	134	24	85	49	114	80	114
Sn	<1	1	1	<1	<1	<1	<1	1	<1	<1
V	15	10	8	50	2	1	4	20	4	42
Cr	24	9	6	177	5	4	6	9	6	136
Ni	5	5	3	11	2	2	5	6	11	43
Cu	10	3	3	6	2	3	3	4	3	13
Zn	12	13	15	27	2	12	7	25	80	33
Ga	13	13	15	17	14	12	13	17	15	16

Sample Number	77284627	77284850	77284064	77284498	77284580	77284583	77284708	77284710	80285046B	77283406
Area	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby
Locality	Land	Land	Land	Land	Land	Land	Land	Land	Land	Land
	Mount	Latham	Johnston	McLeod	Francis	Francis	Budd	McLeod	Cape	Mount
	Hardy	Peak	Peak	Ntks	Peaks	Peaks	Peak	Ntks	Batterbee	Marsland
Rock type	Op-gt-qz- mp gneiss	Op-gt-qz- kf gneiss	Bi-op-qz- pl gneiss	Op-qz-pl gneiss	Op-qz-pl gneiss	Op-qz-pl gneiss	Op-qz-mp gneiss	Op-qz-kf gneiss	Bi-qz-mp gneiss	Op-qz-mp gneiss
Age	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean
Bibliog. ref.	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5
SiO ₂	71.40	74.50	64.40	65.30	75.60	72.40	74.00	75.50	73.30	76.00
TiO ₂	0.46	0.10	0.53	1.39	0.24	0.41	0.18	0.20	0.29	0.53
Al ₂ O ₃	13.41	12.93	16.77	14.45	13.40	14.46	14.06	13.09	13.74	10.92
Fe ₂ O ₃	1.32	0.86	0.46	2.02	1.18	1.39	0.85	0.96	0.69	0.41
FeO	3.40	0.75	3.17	4.72	1.24	1.80	0.85	0.60	0.84	1.22
MnO	0.06	0.02	0.06	0.04	0.03	0.04	0.02	0.03	0.02	0.02
MgO	1.89	0.39	3.22	2.02	0.47	0.83	0.33	0.41	0.43	3.39
CaO	2.60	1.03	5.67	4.07	3.61	3.36	2.00	1.62	1.40	1.21
Na ₂ O	3.11	2.70	3.09	3.56	4.04	4.37	3.91	2.70	3.76	5.05
K ₂ O	1.85	6.02	2.44	2.01	0.56	1.40	4.03	5.55	4.78	1.01
P ₂ O ₅	0.05	0.03	0.13	0.23	0.03	0.10	0.03	0.04	0.05	0.02
H ₂ O ⁺	0.37	0.22	0.25	0.23	0.13	0.19	0.17	0.18		0.28
H ₂ O- CO ₂	0.02	0.02	0.04	0.11	0.06	0.06	0.09	0.07		0.02
Rest	0.17	0.14	0.26	0.65	0.09	0.18	0.16	0.32	0.18	0.12
TOTAL	100.11	99.71	100.49	100.80	100.68	100.99	100.68	101.27	99.48	100.20
Ba	500	615	991	4230	256	937	780	2190	736	171
Rb	39	206	76	16	2	11	52	100	82	12
Sr	248	68	333	233	270	199	183	125	247	82
Pb	19	58	7	9	4	10	18	22	26	2
Th	5	8	2	10	1	1	8	20	22	5
U	<1	1	2	1	<1	<1	<1	<1	1	<1
Zr	123	66	135	533	89	166	120	126	174	412
Nb	4	1	3	21	4	3	4	1	12	24
Y	18	23	6	12	8	10	<1	2	1	34
La	32	56	13	148	24	39	46	49	77	20
Ce	53	83	22	179	44	56	58	63	114	35
Sn	<1	1	<1	<1	<1	<1	<1	<1	<1	<1
V	82	5	77	59	15	33	6	23	2	27
Cr	92	7	240	10	8	9	7	7	<3	32
Ni	44	4	102	42	2	5	10	8	15	36
Cu	23	3	3	10	3	14	3	7	7	3
Zn	55	14	65	60	27	36	22	15	30	13
Ga	16	13	17	15	13	14	15	11	19	11

Sample Number	77283407	77284117	77284610	77284615	77283999	77284301	77284074	77284538	76283038	76283043
Area	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby
Locality	Land	Land	Land	Land	Land	Land	Land	Land	Land	Land
	Mount	Mount	Mount	Mount	Mount	Mount	Mount	Mount	Molodez-	Molodez-
	Marsland	George	Humble	Humble	Codrington	Codrington	Giddings	Bergin	hnaya	hnaya
Rock type	Op-qz-pl	Op-qz-pl	Cp-op-qz-	Cp-op-qz-	Bi-qz-kf-	Bi-qz-mp-	Bi-qz-mp-	Bi-qz-pl	Cp-op-qz-	Bi-hb-qz-
	gneiss	gneiss	pl gneiss	mp gneiss	pl gneiss	gneiss	gneiss	gneiss	pl gneiss	pl gneiss
Age	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Protero	Protero
Bibliog. ref.	5	5	5	5	5	5	5	5	5,6	5,6
SiO ₂	74.30	54.50	58.50	58.40	71.70	76.40	74.20	70.20	63.80	57.40
TiO ₂	0.73	0.97	0.57	0.66	0.51	0.22	0.16	0.42	0.64	0.76
Al ₂ O ₃	9.90	18.82	18.05	14.49	13.45	12.43	13.83	15.40	15.49	16.31
Fe ₂ O ₃	0.69	3.24	2.33	2.98	0.89	0.71	0.68	1.34	2.28	3.85
FeO	1.48	4.91	3.40	3.93	2.53	0.98	0.93	1.97	3.28	4.95
MnO	0.02	0.10	0.10	0.10	0.04	0.02	0.03	0.04	0.12	0.20
MgO	5.48	3.37	3.58	4.00	0.83	0.25	0.36	1.11	3.14	4.19
CaO	1.78	6.83	5.22	5.57	2.96	1.31	1.70	3.63	5.65	6.90
Na ₂ O	3.90	4.72	5.27	4.03	3.58	3.15	3.72	4.90	3.31	3.33
K ₂ O	0.79	0.82	2.59	3.43	2.49	4.68	4.19	0.97	1.89	1.51
P ₂ O ₅	0.02	0.28	0.43	0.52	0.13	0.02	0.04	0.13	0.11	0.17
H ₂ O ⁺	0.33	0.26	0.34	0.48	0.17	0.18	0.30	0.44		
H ₂ O ⁻	0.02	0.09	0.11	0.06	0.07	0.03	0.02	0.06		
CO ₂										
Rest	0.15	0.18	0.49	0.56	0.16	0.19	0.15	0.14	0.23	0.19
TOTAL	99.59	99.09	100.98	99.21	99.51	100.57	100.31	100.75	99.94	99.76
Ba	240	374	1970	2430	648	942	788	504	1060	531
Rb	12	3	17	52	67	141	97	9	39	131
Sr	70	557	1560	1480	103	59	115	320	418	353
Pb	9	6	29	30	18	26	25	8	19	16
Th	2	<1	<1	1	18	54	20	3	<1	3
U	<1	<1	<1	<1	2	4	2	<1	<1	<1
Zr	568	37	191	156	196	139	111	157	76	51
Nb	24	5	2	3	8	7	1	4	4	19
Y	38	14	12	21	20	25	2	3	12	24
La	47	24	43	55	42	69	34	23	10	17
Ce	72	41	67	94	68	105	48	37	20	36
Sn	<1	1	<1	1	<1	1	<1	<1	1	7
V	18	126	65	102	37	9	14	37	98	150
Cr	7	80	102	134	10	5	7	11	84	58
Ni	19	36	39	45	8	2	<2	6	24	14
Cu	5	17	7	10	36	26	3	5	15	12
Zn	29	90	69	82	46	27	26	50	49	83
Ga	12	24	20	18	15	12	15	17	17	21

Sample Number	76283044	76283050	77283476	77283493	77283498	77283499	77283500	77284192	77284691	77284811
Area	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Kemp Land	Enderby Land	Enderby Land	Kemp Land
Locality	Molodez- hnaya	Molodez- hnaya	Mount Robinson	Papanin Ntk	Ward Ntk	Ward Ntk	Dismal Mts	Kitchen- side Gl.	Forefinger Point	Georges Island
Rock type	Bi-qz-pl- kf gneiss	Bi-qz-pl- kf gneiss	Op-qz-pl gneiss	Op-qz-pl gneiss	Hb-op-qz- pl gneiss	Hb-op-qz- pl gneiss	Op-qz-pl- kf gneiss	Op-qz-pl- kf gneiss	Bi-qz-kf- pl gneiss	Op-qz-pl- kf gneiss
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6
SiO ₂	71.20	66.60	66.30	66.40	63.70	57.00	67.30	68.10	65.70	74.40
TiO ₂	0.19	0.58	0.56	0.38	0.51	0.66	0.77	0.77	1.20	0.24
Al ₂ O ₃	14.81	16.12	15.28	17.38	16.24	18.35	14.57	14.36	14.45	13.77
Fe ₂ O ₃	1.70	1.68	1.65	1.99	2.68	3.17	1.81	2.63	3.35	1.21
FeO	1.07	1.74	3.53	1.71	2.25	3.52	2.91	2.53	2.52	0.88
MnO	0.04	0.04	0.18	0.04	0.10	0.12	0.07	0.04	0.06	0.02
MgO	0.45	1.31	1.91	0.96	2.85	3.76	0.80	1.07	1.58	0.43
CaO	1.35	2.84	4.59	5.05	6.07	8.01	3.33	3.37	3.02	2.23
Na ₂ O	3.13	3.50	3.76	3.77	3.72	4.02	2.81	2.73	3.77	3.03
K ₂ O	5.97	5.12	1.34	1.36	0.74	0.51	4.52	4.01	2.32	4.62
P ₂ O ₅	0.11	0.50	0.14	0.02	0.13	0.20	0.31	0.18	0.33	0.06
H ₂ O ⁺			0.25	0.20	0.34	0.31	0.31	0.34	0.49	0.14
H ₂ O ⁻			0.10	0.13	0.10	0.09	0.08	0.02	0.07	0.06
CO ₂										
Rest	0.20	0.52	0.19	0.19	0.21	0.22	0.24	0.24	0.31	0.23
TOTAL	100.22	100.55	99.78	99.58	99.64	99.94	99.83	100.39	99.17	101.32
Ba	584	2690	769	458	643	478	1020	1130	1260	1420
Rb	266	148	9	17	5	1	141	104	149	101
Sr	156	1196	344	580	695	918	181	156	296	121
Pb	36	31	4	10	4	1	28	13	31	27
Th	93	4	<1	<1	<1	1	2	5	6	9
U	2	<1	<1	<1	<1	<1	<1	<1	1	<1
Zr	276	64	141	245	91	45	356	249	384	142
Nb	5	5	1	1	6	2	14	7	13	<1
Y	10	17	14	2	17	10	28	13	19	3
La	82	77	11	37	9	7	48	76	55	45
Ce	142	132	18	55	18	13	87	99	94	57
Sn	2	1	<1	<1	1	1	<1	1	1	<1
V	8	40	79	32	87	126	32	52	98	17
Cr	<3	4	33	6	41	56	7	17	28	6
Ni	2	7	12	12	25	27	3	8	15	8
Cu	5	8	27	7	15	10	12	12	46	3
Zn	37	52	67	40	65	68	66	59	70	34
Ga	22	16	16	22	18	19	21	19	18	14

Sample Number	77283491	77283494	77283495	77284372	77284636	77284692	77284806	77283475	77283492	77284371
Area	Enderby	Enderby	Enderby	Enderby	Kemp	Enderby	Kemp	Enderby	Enderby	Enderby
Locality	Land	Land	Land	Land	Land	Land	Land	Land	Land	Land
	Krasnaya	Ward	Ward	Sandercock	Maruff	Forefinger	Georges	Mount	Papanin	Sandercock
	Ntk	Ntk	Ntk	Ntk	Peaks	Point	Island	Robinson	Ntk	Ntk
Rock type	Gt-pl-qz- kf gneiss	Gt-qz-kf- pl gneiss	Gt-qz-kf- pl gneiss	Gt-qz-pl- kf gneiss	Gt-qz-pl- kf gneiss	Gt-qz-mp- gneiss	Gt-bi-qz- pl gneiss	Op-qz-pl- kf gneiss	Op-gt-qz- pl gneiss	Gt-qz-pl- kf gneiss
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6
SiO ₂	73.60	71.90	70.60	76.50	59.60	74.00	70.40	68.50	65.40	68.90
TiO ₂	0.22	0.56	0.54	0.24	0.49	0.01	0.21	0.60	0.70	0.62
Al ₂ O ₃	14.01	13.98	13.79	11.84	19.16	14.28	16.65	14.11	16.63	14.17
Fe ₂ O ₃	0.79	1.37	0.97	0.84	1.97	0.54	0.55	1.60	3.06	1.60
FeO	0.80	2.15	2.51	0.83	2.74	0.22	1.04	3.10	2.35	2.30
MnO	0.03	0.13	0.11	0.03	0.09	0.05	0.02	0.18	0.09	0.06
MgO	0.55	1.64	1.71	0.24	1.28	0.13	0.54	1.19	1.38	0.67
CaO	1.25	4.16	4.06	0.89	3.44	1.14	4.34	2.49	4.65	2.14
Na ₂ O	2.88	1.11	2.90	2.67	3.05	4.43	4.47	2.65	3.76	2.65
K ₂ O	5.88	2.70	2.61	5.26	5.85	4.75	1.08	4.87	1.63	5.28
P ₂ O ₅	0.09	0.07	0.07	0.05	0.08	0.02	0.03	0.18	0.19	0.17
H ₂ O ⁺	0.28	0.66	0.49	0.22	0.60	0.20	0.36	0.32	0.35	0.43
H ₂ O- CO ₂	0.07	0.12	0.14	0.06	0.09	0.02	0.05	0.07	0.11	0.01
Rest	0.20	0.18	0.19	0.12	0.24	0.07	0.08	0.25	0.18	0.19
TOTAL	100.65	100.73	100.69	99.79	98.68	99.86	99.82	100.11	100.48	99.19
Ba	708	835	697	204	1020	164	206	1400	489	623
Rb	216	56	50	384	222	201	25	58	41	212
Sr	310	213	166	45	228	50	196	260	336	115
Pb	52	6	13	37	44	66	18	10	9	36
Th	37	1	3	30	18	1	<1	1	1	21
U	4	<1	<1	2	<1	1	<1	<1	<1	<1
Zr	105	125	323	127	157	47	25	153	249	255
Nb	7	4	18	8	6	<1	3	4	7	9
Y	6	37	21	27	23	20	1	22	42	32
La	50	15	23	26	44	10	26	12	48	42
Ce	80	27	41	54	72	16	36	23	81	77
Sn	1	<1	1	4	<1	<1	1	<1	<1	1
V	16	33	41	9	51	1	21	44	49	40
Cr	14	62	34	8	30	3	6	13	7	23
Ni	5	30	9	5	9	2	9	10	11	9
Cu	30	28	41	3	5	2	10	36	26	10
Zn	19	53	54	28	57	4	24	97	39	28
Ga	16	13	16	16	22	21	19	17	19	19

Sample Number	77283554	77283558	77283564	77283576	77283582	77283586	77284577	65280131	77283438	77283454
Area	Enderby	Enderby	Enderby	Kemp	Kemp	Kemp	Enderby	Kemp Land	Enderby	Enderby
Locality	Land	Land	Land	Land	Land	Land	Land		Land	Land
	Mount	Mount	Mount	Mount	Turbulence	Turbulence	Wattle	Abrupt	Peacock	Ntk ENE
	Underwood	Flett	Denholm	Channon	Bluffs	Bluffs	Island	Point	Ridge	of 945
Rock type	Op-qz-pl- kf gneiss	Hb-qz-pl- kf gneiss	Bi-op-qz- pl gneiss	Bi-op-qz- pl gneiss	Gt-op-qz- pl gneiss	Hb-op-qz- pl gneiss	Op-qz-kf gneiss	Gt-cp-qz- pl gneiss	Op-cp-pl granulite	Op-cp-pl granulite
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Archaean	Archaean
Bibliog. ref.	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5	5	5
SiO ₂	66.40	61.70	59.10	59.70	66.70	69.70	75.20	57.40	52.30	59.40
TiO ₂	0.54	1.24	0.84	1.12	0.59	0.42	0.18	1.40	0.51	1.39
Al ₂ O ₃	16.11	14.87	16.40	13.73	16.24	15.93	14.13	13.85	15.04	13.61
Fe ₂ O ₃	0.72	2.89	1.62	1.12	1.47	1.81	1.11	5.85	2.35	1.01
FeO	2.54	4.05	6.34	9.32	2.55	2.08	0.52	7.90	7.93	6.10
MnO	0.17	0.08	0.14	0.20	0.06	0.04	0.02	0.24	0.22	0.10
MgO	1.66	2.31	4.40	5.80	1.44	1.08	0.25	0.97	9.19	5.17
CaO	3.40	4.42	5.81	5.55	5.17	4.71	1.43	5.22	9.23	10.27
Na ₂ O	3.52	2.40	3.54	1.70	4.64	4.77	3.82	3.94	2.70	2.46
K ₂ O	4.58	4.82	0.84	0.71	0.40	0.21	5.50	2.35	0.30	0.33
P ₂ O ₅	0.12	0.42	0.24	0.20	0.18	0.12	0.04	0.40	0.05	0.21
H ₂ O ⁺	0.30	0.41	0.54	0.27	0.39	0.32	0.17	0.26	0.22	0.22
H ₂ O ⁻	0.06	0.05	0.07	0.05	0.08	0.11	0.12	0.09	0.07	0.03
CO ₂										
Rest	0.19	0.37	0.24	0.18	0.14	0.15	0.18	0.31	0.16	0.16
TOTAL	100.31	100.03	100.12	99.65	100.05	101.45	102.67	100.18	100.27	100.46
Ba	915	1280	374	378	219	176	910	1681	59	130
Rb	92	159	5	17	4	1	110	41	8	1
Sr	247	220	834	149	526	651	108	158	82	151
Pb	9	19	4	7	5	3	32	14	5	5
Th	1	10	2	2	2	1	30	4	<1	<1
U	<1	2	<1	<1	<1	<1	<1	2	<1	<1
Zr	131	622	96	104	177	176	156	226	23	63
Nb	8	26	5	6	5	2	4	20	5	7
Y	13	66	24	11	5	4	4	67	18	56
La	23	106	16	15	19	11	57	50	5	25
Ce	46	235	31	25	31	19	85	84	3	58
Sn	<1	<1	<1	<1	<1	<1	<1	<1	1	3
V	19	99	191	221	39	43	5	20	215	327
Cr	8	36	119	197	17	14	5	16	445	97
Ni	3	14	28	74	9	5	<2	7	110	95
Cu	4	26	32	14	16	8	5	21	9	7
Zn	71	67	78	109	48	45	31	205	99	84
Ga	14	15	15	16	16	16	15	22	16	20

Sample Number	77283456	77283921	77283922	77283975	77283987	77284308	77284309	77284697	76283019	76283060
Area	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land
Locality	Ntk ENE of 945	Tonagh Island	Tonagh Island	Mount Bennett	Grimsley Peaks	Mount Biscoe	Mount Biscoe	Mount Henry	Seavers Ridge	Mount Pardoe
Rock type	Op-pl granulite	Cp-op-pl granulite	Gt-op-pl granulite	Cp-op-pl granulite	Cp-op-pl granulite	Hb-px-pl granulite	Hb-px-pl granulite	Cp-op-pl granulite	Cp-op-pl granulite	Cp-op-pl granulite
Age	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean
Bibliog. ref.	5	5	5	5	5	5	5	5	5	5
SiO ₂	51.30	51.60	52.50	50.00	52.20	53.20	51.10	51.30	51.10	48.00
TiO ₂	0.89	0.97	1.69	0.97	0.86	0.49	1.11	0.63	1.83	1.29
Al ₂ O ₃	13.94	13.34	14.46	14.60	14.82	16.06	18.13	14.04	13.42	14.97
Fe ₂ O ₃	1.95	2.18	3.23	2.90	1.33	1.15	1.91	2.54	3.89	3.91
FeO	13.67	10.56	12.50	11.34	10.16	6.82	7.81	7.91	10.89	9.23
MnO	0.18	0.19	0.24	0.23	0.20	0.14	0.14	0.18	0.23	0.22
MgO	9.37	8.64	7.46	8.64	7.28	7.61	4.99	7.98	3.96	7.88
CaO	5.89	9.37	4.42	9.03	9.66	10.22	9.65	11.96	8.31	10.75
Na ₂ O	1.82	2.25	2.93	1.79	3.13	3.09	3.17	2.66	3.75	2.59
K ₂ O	0.21	0.41	0.36	0.09	0.31	0.31	0.45	0.21	1.08	0.27
P ₂ O ₅	0.08	0.12	0.14	0.09	0.09	0.10	0.32	0.07	0.26	0.10
H ₂ O ⁺	0.62	0.30	0.24	0.28	0.10	0.27	0.37	0.20		
H ₂ O ⁻	0.13	0.12	0.12	0.04	0.05	0.05	0.02	0.03		
CO ₂										
Rest	0.19	0.23	0.21	0.24	0.16	0.14	0.16	0.13	0.19	0.14
TOTAL	100.24	100.28	100.50	100.24	100.35	99.65	99.33	99.84	98.91	99.35
Ba	71	71	71	374	190	72	141	63	182	66
Rb	2	4	4	1	2	3	7	<1	7	2
Sr	66	97	69	213	207	230	302	107	151	215
Pb	4	3	5	16	5	5	3	1	6	2
Th	2	2	2	2	1	1	1	<1	<1	<1
U	<1	<1	2	1	1	<1	<1	<1	1	<1
Zr	47	45	81	64	55	15	89	39	242	75
Nb	4	4	4	2	3	13	8	3	20	4
Y	18	24	30	22	25	51	24	19	55	19
La	19	11	9	5	12	10	15	9	84	5
Ce	26	11	15	8	15	18	26	14	147	14
Sn	<1	1	<1	2	2	1	4	1	1	3
V	296	312	614	252	211	118	197	200	110	271
Cr	375	620	162	241	203	187	74	241	71	76
Ni	179	224	192	101	82	145	63	108	152	86
Cu	109	37	10	10	17	92	132	38	55	15
Zn	84	101	107	441	124	72	88	70	134	89
Ga	22	18	19	22	17	18	21	14	20	20

Sample Number	76283076	76283206	76283224	76283239	76283261	76283275	77284280	77284353	77284816	77284817
Area	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby
Locality	Land	Land	Land	Land	Land	Land	Land	Land	Land	Land
	Mount	Mount	Mount	Mount	Ntk 945	Mount	Hydrogra-	Wyers Ice	Gromov	Gromov
	Codrington	Ryder	Smethurst	Torckler		Jewell	pher Is.	Shelf	Ntk	Ntk
Rock type	Cp-op-pl	Cp-op-pl	Cp-op-pl	Op-cp-pl	Op-cp-pl	Cp-op-pl	Gt-cp-pl	Gt-cp	Op-gt-cp	Hb-gt-px
	granulite	granulite	granulite	granulite	granulite	granulite	granulite	granulite	granulite	granulite
Age	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean
Bibliog. ref.	5	5	5	5	5	5	5	5	5	5
SiO ₂	49.80	50.70	49.70	48.20	49.40	50.30	43.10	44.00	44.00	41.30
TiO ₂	1.03	1.09	1.47	0.64	0.66	0.77	0.27	0.52	1.26	1.54
Al ₂ O ₃	14.43	12.07	14.56	15.64	11.56	14.62	14.54	12.80	13.60	13.47
Fe ₂ O ₃	1.84	4.95	1.58	4.60	3.20	1.58	1.68	3.04	2.56	5.89
FeO	9.85	10.75	10.76	7.17	8.84	10.01	19.50	9.80	14.40	13.60
MnO	0.18	0.29	0.24	0.19	0.31	0.20	0.34	0.57	0.30	0.24
MgO	7.43	10.28	7.75	9.05	9.08	7.57	7.45	11.83	9.37	9.84
CaO	10.12	6.18	9.67	12.01	14.12	11.17	10.63	15.76	12.82	12.20
Na ₂ O	2.46	1.86	2.88	1.77	1.96	2.63	0.97	0.45	0.65	1.33
K ₂ O	0.62	0.69	0.29	0.05	0.30	0.32	0.09	0.03	0.04	0.40
P ₂ O ₅	0.18	0.17	0.17	0.06	0.02	0.06	0.24	0.03	0.32	0.17
H ₂ O ⁺							0.17	0.25	0.25	0.51
H ₂ O ⁻							0.06	0.05	0.08	0.03
CO ₂										
Rest	0.17	0.26	0.18	0.16	0.30	0.14	0.14	0.09	0.12	0.16
TOTAL	98.11	99.29	99.25	99.54	99.75	99.37	99.18	99.22	99.77	100.68
Ba	164	330	100	35	56	78	56	48	23	46
Rb	18	21	3	<1	<1	4	2	1	<1	<1
Sr	129	285	134	115	109	95	23	14	46	32
Pb	9	4	3	1	1	3	1	1	<1	<1
Th	1	2	1	<1	<1	1	4	4	<1	1
U	1	<1	<1	<1	<1	1	2	1	<1	<1
Zr	86	127	116	68	46	53	92	117	108	164
Nb	6	10	10	2	1	2	1	5	6	9
Y	33	21	30	17	14	19	160	56	37	42
La	19	19	17	7	7	5	29	24	12	18
Ce	42	40	38	20	14	14	67	52	18	41
Sn	7	3	2	1	2	1	2	15	3	1
V	236	182	224	169	140	199	314	41	267	423
Cr	173	531	395	375	1240	262	88	180	56	68
Ni	133	186	77	191	307	133	35	35	74	76
Cu	59	34	41	30	140	40	15	3	29	17
Zn	72	123	99	61	65	76	95	64	134	129
Ga	16	18	19	17	11	17	15	14	19	20

Sample Number	77284510	77283413	77283701	77283920	77284322	77283471	77283484	65280209	65280213	65280220
Area	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Kemp Land	Kemp Land	Kemp Land
Locality	Fyfe Hills	Mount Marstrand	Howard Hills	Tonagh Island	Mount Brockelsby	Mount Robinson	Mount Robinson	Robert Glacier	Rayner Peak	Else Ntks
Rock type	Gt-px-pl granulite	Cp-ol-op granulite	Cp-op granulite	Cp-ol-op granulite	Cp-ol-op granulite	Gt-cp-pl granulite	Hb-px-pl granulite	Gt-cp-pl granulite	Gt-px-pl granulite	Gt-px-pl granulite
Age	Archaean	Archaean	Archaean	Archaean	Archaean	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	5	5	5	5	5	5	5	5	5	5
SiO ₂	47.90	47.30	52.40	46.90	44.10	48.10	51.30	46.00	50.90	53.10
TiO ₂	1.12	0.19	0.25	0.12	0.51	2.19	1.08	1.73	0.90	0.60
Al ₂ O ₃	14.10	3.58	3.66	4.76	5.14	13.48	16.36	13.53	13.40	14.91
Fe ₂ O ₃	2.94	3.16	3.42	2.04	4.01	3.50	2.70	2.57	1.91	1.61
FeO	11.63	6.13	11.22	6.68	10.81	11.06	6.06	13.10	10.90	8.20
MnO	0.29	0.16	0.18	0.16	0.23	0.21	0.13	0.30	0.21	0.21
MgO	7.66	34.50	26.90	31.90	29.00	6.45	7.61	6.95	6.94	7.21
CaO	11.23	3.95	0.70	5.28	4.44	10.70	9.81	11.27	10.62	10.53
Na ₂ O	2.31	0.16	0.04	0.32	0.16	2.90	3.50	2.25	2.64	2.90
K ₂ O	0.05	0.02	0.02	0.20	0.11	0.28	0.57	1.00	0.38	0.19
P ₂ O ₅	0.16	0.01		0.01	0.05	0.22	0.17	0.21	0.07	0.08
H ₂ O ⁺	0.37	0.54	0.16	0.48	0.75	0.13	0.67	0.75	0.28	0.19
H ₂ O ⁻	0.07	0.04	0.09	0.08	0.10	0.03	0.10	0.06	0.08	0.05
CO ₂										
Rest	0.13	0.66	0.66	0.69	0.96	0.18	0.19	0.17	0.14	0.15
TOTAL	99.96	100.40	99.70	99.62	100.37	99.43	100.25	99.89	99.37	99.93
Ba	22	16	26	42	59	80	250	161	102	143
Rb	1	<1	1	5	3	1	1	14	3	<1
Sr	112	16	2	23	58	329	355	157	141	159
Pb	<1	<1	<1	<1	<1	1	2	6	7	4
Th	1	<1	<1	<1	4	<1	1	1	1	1
U	<1	<1	<1	<1	1	<1	<1	2	<1	<1
Zr	77	10	28	12	52	108	85	84	38	54
Nb	3	<1	<1	2	3	7	27	16	2	3
Y	31	6	28	5	11	23	20	31	23	19
La	6	<2	2	3	9	9	11	14	11	9
Ce	11	<3	<3	<3	<3	24	22	25	15	10
Sn	<1	<1	<1	<1	12	1	<1	1	<1	1
V	239	96	115	87	128	356	199	408	285	176
Cr	158	2900	3670	3230	4590	95	286	72	157	215
Ni	91	1670	576	1470	1730	65	73	33	64	119
Cu	58	22	8	2	128	61	11	58	42	63
Zn	111	24	133	17	34	124	89	113	86	112
Ga	17	4	13	4	7	23	17	18	16	15

Sample Number Area	65280221 Kemp Land	65280224 Kemp Land	75830004 Kemp Land	75830008 Kemp Land	75830012 Kemp Land	75830019 Kemp Land	77283581 Kemp Land	77284647 Enderby Land	77283692 Enderby Land	77284628 Enderby Land
Locality	Else Ntks	Turbulence Bluffs	Rayner Peak	Rayner Peak	Rayner Peak	Rayner Peak	Turbulence Bluffs	Forefinger Point	Bunt Is.	Mount Hardy
Rock type	Gt-cp-pl granulite	Hb-px-pl granulite	Gt-px-pl granulite	Gt-cp granulite	Gt-cp-pl granulite	Gt-cp-pl granulite	Gt-px-pl granulite	Op-hb-cp granulite	Anortho- site	Anortho- site
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Archaean	Archaean
Bibliog. ref.	5	5	5	5	5	5	5	5	5	5
SiO ₂	48.00	50.20	49.40	34.70	49.30	44.80	49.20	47.00	47.40	50.80
TiO ₂	0.56	0.90	0.77	6.18	1.97	2.23	1.00	1.44	0.04	0.43
Al ₂ O ₃	13.58	10.94	13.74	12.43	13.08	12.27	13.25	7.32	26.85	25.10
Fe ₂ O ₃	2.59	3.18	1.42	2.40	2.83	2.45	2.05	6.04	0.72	2.62
FeO	10.20	10.00	9.40	20.60	14.20	15.90	9.78	10.74	3.00	2.68
MnO	0.23	0.26	0.22	0.33	0.25	0.28	0.22	0.21	0.10	0.06
MgO	9.69	8.39	9.19	7.34	6.00	6.82	7.73	14.17	6.51	2.54
CaO	13.15	11.41	12.12	11.95	10.65	11.40	12.35	11.24	13.74	11.81
Na ₂ O	1.26	2.58	2.39	0.39	1.27	1.40	2.82	1.11	1.19	3.15
K ₂ O	0.08	0.27	0.44	0.10	0.15	0.36	0.23	1.08	0.12	0.58
P ₂ O ₅	0.03	0.09	0.07	2.99	0.23	0.23	0.08	0.27	0.01	0.02
H ₂ O ⁺	0.26	0.71	0.46	0.27	0.20	0.43	0.58	0.64	0.15	0.26
H ₂ O ⁻	0.07	0.07	0.07	0.07	0.08	0.06	0.05	0.14	0.03	0.06
CO ₂										
Rest	0.11	0.21	0.15	0.20	0.15	0.16	0.13	0.46	0.04	0.25
TOTAL	99.81	99.21	99.84	99.95	100.36	98.79	99.47	101.86	99.90	100.36
Ba	37	110	55	183	58	45	31	491	68	186
Rb	2	1	5	8	2	3	6	50	4	8
Sr	52	132	80	58	52	110	100	198	52	215
Pb	<1	1	2	2	<1	2	<1	<1	3	11
Th	<1	<1	1	1	6	<1	2	<1	1	<1
U	<1	<1	1	2	2	<1	<1	<1	<1	<1
Zr	38	56	41	210	143	129	49	111	6	26
Nb	1	5	5	43	10	6	1	8	1	1
Y	20	31	21	80	48	49	23	20	3	14
La	2	14	5	85	25	10	4	24	7	7
Ce	<1	27	1	158	38	15	9	42	10	10
Sn	1	2	1	1	<1	1	<1	3	1	1
V	247	257	263	368	308	403	322	260	38	166
Cr	97	551	344	89	91	104	142	1435	28	969
Ni	78	136	129	22	55	76	56	452	53	63
Cu	89	51	5	15	91	15	48	109	3	16
Zn	85	131	71	117	114	127	79	136	24	36
Ga	12	13	15	13	16	19	14	14	13	22

Sample Number	77284629	77283755	77284158A	77284158B	77283997	77284215	77284493	76283265	76283350A	76283350B
Area	Enderby	Enderby	Kemp	Kemp	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby
Locality	Land	Land	Land	Land	Land	Land	Land	Land	Land	Land
	Mount	Amphith.	Wallis	Wallis	Mount	Mount	Thorp	Ntk 945	Ntk 945	Ntk 945
	Hardy	Lakes	Ntks	Ntks	Maines	Codrington	Ridges			
Rock type	Anortho- site	Anortho- site	Si-cd-gt pelite	Cd-gt-si pelite	Op-cd pelite	Op-cd pelite	Bi-gt-cd pelite	Sp-gt pelite	Sa-gt-os pelite	Gt-os pelite
Age	Archaean	Protero	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean
Bibliog. ref.	5	5	3,5	3,5	3,5	3,5	3,5	3,4,5	3,4,5	3,4,5
SiO ₂	50.00	51.40	55.10	69.30	76.10	71.10	73.00	32.00	47.50	68.80
TiO ₂	1.03	0.03	1.64	0.82	1.19	0.97	0.15	0.88	1.26	0.68
Al ₂ O ₃	19.55	30.00	23.44	18.52	11.17	10.65	12.39	38.70	31.70	17.22
Fe ₂ O ₃	3.62	0.17	1.53	1.11	0.39	0.59	0.65	6.44	2.21	0.80
FeO	5.59	0.34	6.20	2.70	2.75	5.60	2.30	9.90	5.95	4.48
MnO	0.13	0.01	0.10	0.04	0.05	0.02	0.03	0.19	0.06	0.06
MgO	5.74	0.37	5.42	2.00	5.97	4.79	2.24	6.93	9.21	5.77
CaO	11.37	14.34	1.75	2.00	0.37	0.73	0.58	0.46	0.02	0.02
Na ₂ O	2.79	2.59	1.15	1.30	0.31	2.49	1.80	0.39	0.12	0.11
K ₂ O	0.15	0.46	0.74	0.94	0.98	1.63	4.96	2.16	1.10	1.04
P ₂ O ₅	0.19	0.01	0.01	0.01	0.20	0.05	0.01	<0.01	0.01	0.01
H ₂ O ⁺	0.18	0.17	0.59	0.49	0.68	0.46	0.37	0.87	0.65	0.77
H ₂ O ⁻	0.08	0.03	0.19	0.21	0.06	0.04	0.14	0.03	0.03	0.07
CO ₂								0.06	0.05	0.04
Rest	0.14	0.04	0.21	0.14	0.15	0.21	0.11	0.53	0.32	0.17
TOTAL	100.56	99.96	98.07	99.58	100.37	99.33	98.73	99.53	100.19	100.04
Ba	56	87	206	205	276	782	417	426	84	80
Rb	<1	5	41	29	33	23	141	25	52	60
Sr	206	153	68	89	3	57	33	94	10	12
Pb	4	6	13	17	2	9	26	8	<1	<1
Th	<1	<1	14	8	20	28	22	1	2	1
U	<1	<1	3	2	3	4	2	<1	<1	<1
Zr	124	1	210	188	471	418	97	77	435	327
Nb	5	1	22	14	20	17	8	8	85	35
Y	29	3	49	36	77	71	17	63	52	34
La	9	11	47	48	36	79	39	5	4	2
Ce	17	15	80	82	65	124	65	<3	7	<3
Sn	3	<1	<1	<1	3	1	<1	<1	<1	<1
V	202	3	284	140	95	53	7	438	243	114
Cr	123	3	236	87	<3	3	4	1620	1020	463
Ni	84	4	45	31	5	3	7	706	183	70
Cu	44	9	42	35	3	3	3	88	6	4
Zn	66	10	132	33	36	9	20	146	25	19
Ga	22	15	28	24	20	16	18	67	47	21

Sample Number	76283355	76283362	76283364	76283368A	77283450	77284249	77284347	77284348	77284633	77283971
Area	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby
Locality	Land	Land	Land	Land	Land	Land	Land	Land	Land	Land
Rock type	Ntk 945	Ntk 945	Ntk 945	Ntk 945	Ntk ENE of 945	Mount Dungey	Gage Ridge	Gage Ridge	Mount Hardy	Mount Charles
Age	Bi-gt-op- os pelite	Si-gt-sa- os pelite	Gt-op pelite	Sa-gt-os pelite	Sp-gt pelite	Sa-bi-op- os pelite	Sa-gt-os pelite	Gt-os-si pelite	Op-sa-cd pelite	Gt-si-op pelite
Bibliog. ref.	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean
	3,4,5	3,4,5	3,4,5	3,4,5	3,4,5	3,4,5	3,4,5	3,4,5	3,4,5	3,5
SiO ₂	49.90	67.10	45.40	50.60	56.20	73.40	88.00	71.40	68.20	73.20
TiO ₂	0.62	0.74	1.23	1.24	1.01	0.72	0.46	0.35	0.94	0.55
Al ₂ O ₃	14.97	20.80	23.30	28.00	23.30	11.42	7.19	15.10	13.09	13.41
Fe ₂ O ₃	1.67	1.06	1.44	2.40	1.22	0.12	0.39	0.46	1.08	0.61
FeO	12.50	2.26	9.80	5.95	3.33	1.75	1.50	5.45	5.55	2.97
MnO	0.29	0.04	0.25	0.07	0.05	0.01	0.02	0.08	0.03	0.01
MgO	17.40	5.84	9.56	8.63	2.18	4.55	2.45	3.86	10.57	5.42
CaO	0.23	<1.00	5.30	0.05	2.77	0.70	0.04	0.11	0.06	0.39
Na ₂ O	0.03	0.12	2.09	0.10	4.80	2.34	0.05	0.22	0.07	0.78
K ₂ O	0.72	1.02	0.53	0.90	4.74	2.20	0.30	1.68	0.01	2.76
P ₂ O ₅	0.01	<0.01	0.13	<0.01	0.06	0.02	0.07	0.04	0.02	0.03
H ₂ O ⁺	0.52	0.54	0.67		0.25	0.62	0.34	0.26	0.63	0.42
H ₂ O ⁻	0.10	0.09	0.03		0.07	0.13	0.12	0.14	0.12	0.05
CO ₂	0.06	0.06	0.06		0.02	0.03	0.01	0.02	0.03	0.01
Rest	0.45	0.19	0.28	0.29	0.24	0.28	0.14	0.14	0.04	0.11
TOTAL	99.47	98.85	100.07	98.22	100.24	98.29	101.08	99.31	100.44	100.72
Ba	38	76	98	57	1170	1880	62	291	8	344
Rb	53	42	13	39	82	51	14	43	<1	89
Sr	5	11	111	10	123	37	3	19	1	14
Pb	1	2	11	1	48	1	1	3	<1	7
Th	2	4	22	2	9	<1	12	<1	13	38
U	<1	1	3	<1	2	<1	2	1	1	2
Zr	99	340	267	512	230	355	671	299	171	201
Nb	8	17	17	40	17	7	11	6	19	7
Y	18	18	60	50	30	1	29	35	21	41
La	5	10	71	<2	59	4	29	6	23	46
Ce	<3	18	122	4	95	4	52	7	38	72
Sn	<1	<1	<1	<1	3	4	<1	1	<1	4
V	211	98	198	177						
Cr	2020	495	862	908	112	10	134	171	4	6
Ni	466	151	57	168	19	36	38	81	3	17
Cu	4	8	5	4	3	2	3	27	3	<2
Zn	189	18	45	21	13	22	7	24	14	39
Ga	24	26	23	44						

Sample Number	77283469	77283946	77284125	79285058	77284338	77284340	77284343A	77284343B	77284648	77284651
Area	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land
Locality	Mount Sones	Priestley Peak	Brusilov Ntks	Mount Bartlett	Gage Ridge	Gage Ridge	Gage Ridge	Gage Ridge	Forefinger Point	Forefinger Point
Rock type	Gt-si pelite	Gt-si pelite	Os pelite	Sa-op-os pelite	Sa-op granulite	Sa-phl granulite	Cd-sa-op granulite	Cd-sa-op granulite	Si-op-bi- cd pelite	Si-op-bi- cd pelite
Age	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Protero	Protero
Bibliog. ref.	3,5	3,5	3,4,5	3,4,5	3,5	3,5	3,5	3,5	5	5
SiO ₂	62.80	62.60	77.00	58.40	37.00	36.20	39.40	36.40	62.80	65.40
TiO ₂	0.80	1.05	0.05	0.65	0.73	0.12	0.27	0.46	0.34	1.14
Al ₂ O ₃	21.81	23.66	13.38	20.50	32.20	26.70	31.20	31.70	19.18	14.91
Fe ₂ O ₃	0.44	0.74	0.39	1.22	0.34	1.25	0.31	4.17	0.78	1.68
FeO	6.02	5.73	1.24	3.35	0.24	0.60	0.36	2.80	2.95	2.70
MnO	0.05	0.05	0.01	0.08	0.01	0.03	0.02	0.12	0.09	0.04
MgO	4.21	2.89	3.53	11.09	27.90	24.60	25.50	20.20	7.32	9.15
CaO	0.40	0.33	0.24	0.22	0.13	0.06	0.07	0.78	0.09	0.39
Na ₂ O	0.82	0.44	0.91	1.79	0.09	0.27	0.15	0.92	1.38	1.26
K ₂ O	2.53	1.74	2.61	3.01	0.68	6.80	0.64	0.16	3.08	0.83
P ₂ O ₅	0.02	0.02	0.03	0.05	0.04	0.03	0.02	0.03	0.02	0.06
H ₂ O ⁺	0.31	0.34	0.40	0.23	0.60	1.20	0.68	0.50	0.76	0.53
H ₂ O ⁻	0.06	0.13	0.09	0.05	0.02	0.09	0.07	0.09	0.10	0.08
CO ₂										
Rest	0.30	0.27	0.09	0.29	0.17	0.16	0.09	0.13	0.14	0.15
TOTAL	100.57	99.99	99.97	100.93	100.15	98.11	98.78	98.46	99.03	98.32
Ba	721	490	434	1160	27	507	10	133	272	108
Rb	72	49	88	89	35	530	49	5	173	38
Sr	51	110	21	60	5	13	2	29	36	19
Pb	7	11	10	9	26	7	9	15	15	5
Th	4	4	7	20	240	23	84	101	51	73
U	<1	2	<1	<1	8	1	3	3	2	12
Zr	221	244	82	563	732	103	250	281	270	405
Nb	19	16	1	15	44	10	11	26	22	36
Y	45	20	6	5	10	38	5	14	7	33
La	36	41	15	134	38	22	47	73	51	118
Ce	40	59	23	208	73	37	82	127	74	196
Sn	<1	<1	1	2	1	4	1	1	<1	1
V	152	188	2	22	50	32	32	61	42	63
Cr	706	596	5	12	7	4	6	14	12	20
Ni	122	64	<2	8	22	45	21	31	10	19
Cu	43	67	3	5	7	4	41	12	3	3
Zn	29	36	23	108	3	13	5	49	52	20
Ga	26	31	18	23	9	11	8	19	34	16

Sample Number	77284653	77284654	77284655	77284527	77284286	77284376	77283978	77284284	77284574	77284575
Area	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land
Locality	Forefinger Point	Forefinger Point	Forefinger Point	Wilkinson Peaks	Wilkinson Peaks	Zubchatyy Ice Shelf	Mount Bennett	Wilkinson Peaks	Armstrong Peak	Armstrong Peak
Rock type	Sa-op-bi- cd pelite	Bi-si-cd- op pelite	Gt-op-bi- cd pelite	Op tonal gneiss	Gt-op tonalite	Op granite	Gt granite	Op-pl xenolith	Bi-op granite	Bi granite
Age	Protero	Protero	Protero	Archaean	Archaean	Archaean	Archaean	Archaean	Protero	Protero
Bibliog. ref.	5	5	5	5,6	5,6	5,6	5,6	5,6	5,6	5,6
SiO ₂	45.00	48.70	41.20	57.40	63.70	73.20	76.20	50.00	66.20	71.20
TiO ₂	1.38	1.99	2.31	0.26	0.71	0.14	0.01	0.84	0.74	0.63
Al ₂ O ₃	23.04	20.81	21.91	18.34	12.97	14.16	13.20	18.77	15.86	13.68
Fe ₂ O ₃	1.88	0.87	3.07	1.02	5.24	0.79	0.18	3.35	1.33	0.81
FeO	5.15	6.40	7.65	6.36	5.90	0.60	0.35	7.52	3.33	2.65
MnO	0.05	0.06	0.15	0.08	0.16	0.01	0.03	0.10	0.05	0.02
MgO	17.20	15.43	15.32	5.62	4.94	0.28	0.10	6.75	1.06	0.60
CaO	0.47	0.62	0.67	7.68	3.73	1.40	0.54	7.88	2.05	1.48
Na ₂ O	0.52	1.56	0.50	2.33	1.48	3.55	4.36	2.36	3.12	2.76
K ₂ O	3.24	1.97	4.62	0.45	0.61	5.35	4.65	0.59	6.28	6.00
P ₂ O ₅	0.21	0.12	0.20	0.42	0.03	0.03	0.03	0.61	0.12	0.20
H ₂ O ⁺	1.44	0.81	1.75	0.40	0.76	0.29	0.12	0.83	0.36	0.52
H ₂ O ⁻	0.06	0.08	0.06	0.05	0.09	0.07	0.07	0.02	0.06	0.05
CO ₂										
Rest	0.26	0.26	0.37	0.14	0.21	0.19	0.08	0.18	0.43	0.29
TOTAL	99.90	99.68	99.78	100.55	100.50	100.06	99.92	99.80	100.99	100.89
Ba	193	150	741	209	359	960	250	275	1470	764
Rb	241	131	358	3	12	156	188	7	141	218
Sr	32	28	41	256	109	151	39	260	162	83
Pb	7	8	8	11	5	64	63	13	56	50
Th	89	113	93	4	<1	46	7	<1	228	120
U	16	23	9	<1	1	4	4	<1	5	6
Zr	635	677	806	4	101	115	36	8	538	512
Nb	29	55	64	4	8	1	<1	9	22	21
Y	40	50	30	42	43	<1	29	27	25	28
La	191	177	128	34	11	40	12	35	302	181
Ce	321	301	216	61	6	56	21	61	536	329
Sn	3	2	4	<1	1	<1	1	1	<1	<1
V	98	166	210	110	180	8	1	220	25	19
Cr	35	30	38	140	382	4	4	222	9	6
Ni	34	32	52	44	162	2	12	66	3	2
Cu	3	4	3	24	102	2	2	21	7	8
Zn	44	34	83	96	61	22	5	116	53	48
Ga	26	28	26	22	13	16	15	26	21	17

Sample Number	77284106	77284108	77284366	77284367	77284368	77284601	77284602	77284603	77284678	77284679
Area	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land
Locality	Simmers Peaks	Simmers Peaks	Sandercock Ntks	Sandercock Ntks	Sandercock Ntks	Mount Sibiryakov	Mount Sibiryakov	Mount Sibiryakov	Vechernyy Hill	Vechernyy Hill
Rock type	Bi granite	Bi granite	Op-hb granite	Hb-op granod	Hb-op-op granite	Bi gran gneiss	Bi-gt granite	Hb-bi granod	Gt-hb, gran gneiss	Hb-bi, gran gneiss
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6
SiO ₂	68.60	69.70	62.80	55.60	55.70	71.60	73.20	54.00	64.60	64.30
TiO ₂	0.77	0.65	1.10	0.89	1.62	0.22	0.29	2.19	1.34	1.44
Al ₂ O ₃	13.52	14.01	15.51	21.19	16.82	15.13	13.81	15.60	13.57	13.65
Fe ₂ O ₃	1.47	1.13	2.50	2.05	4.38	1.07	0.81	4.54	2.86	2.70
FeO	3.23	2.76	3.74	3.96	4.74	0.92	1.06	5.31	3.95	4.50
MnO	0.04	0.04	0.11	0.11	0.15	0.02	0.03	0.13	0.11	0.13
MgO	0.70	0.70	1.93	1.69	2.31	0.37	0.42	3.95	1.22	1.43
CaO	1.81	1.70	4.20	6.40	5.27	1.27	1.31	6.55	3.79	3.66
Na ₂ O	2.58	2.67	3.05	4.06	3.17	3.63	2.49	2.63	1.82	2.21
K ₂ O	5.45	5.67	4.32	2.44	3.92	5.41	6.05	2.55	4.83	4.52
P ₂ O ₅	0.32	0.29	0.32	0.36	0.53	0.07	0.09	1.24	0.34	0.40
H ₂ O ⁺	0.66	0.74	0.67	0.73	0.46	0.49	0.28	0.74	0.41	0.53
H ₂ O ⁻	0.04	0.10	0.05	0.06	0.07	0.04	0.07	0.08	0.09	0.12
CO ₂										
Rest	0.33	0.33	0.30	0.31	0.41	0.23	0.22	0.46	0.33	0.31
TOTAL	99.52	100.49	100.60	99.85	99.55	100.47	100.13	99.97	99.26	99.90
Ba	912	960	1160	1310	1810	881	924	1500	1320	1180
Rb	259	239	159	51	92	200	212	84	214	212
Sr	124	122	361	603	451	1142	189	1060	260	218
Pb	48	43	29	21	22	59	50	19	22	23
Th	110	138	3	<1	2	77	47	8	15	30
U	3	2	<1	<1	1	3	3	1	<1	<1
Zr	566	504	324	266	543	230	208	207	350	330
Nb	43	38	14	9	18	11	7	27	19	24
Y	43	38	37	22	41	6	8	24	52	56
La	168	202	48	37	69	91	44	125	96	104
Ce	295	358	130	65	128	137	77	230	196	193
Sn	<1	2	2	<1	<1	3	1	3	3	4
V	28	25	74	47	92	11	18	173	76	83
Cr	11	11	37	39	27	8	8	83	10	12
Ni	7	6	13	11	11	4	6	36	6	7
Cu	15	11	14	9	16	4	6	57	16	17
Zn	60	51	79	81	104	37	18	118	86	98
Ga	19	19	21	29	24	21	14	21	18	20

Sample Number	77284680	77284684	77284685	77284686	77283796	77284756	77284687	77284754	80285032	76283040
Area	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land
Locality	Vechernyy Hill	Felton Head	Felton Head	Felton Head	Mount Bride	Waratah Island	Felton Head	Waratah Island	Simmers Peaks	Molodetz- hnaya
Rock type	Hb-bi gra- nod gneiss	Gt-op granod	Gt-hb-op granod	Gt-hb-bi granod	Bi granite	Cp-hb-op granod	Bi granite	Bi granite	Bi granite	Bi granite
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Cambrian
Bibliog. ref.	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6	5,6
SiO ₂	53.50	56.50	55.40	57.20	72.60	60.00	77.50	70.00	69.30	72.80
TiO ₂	1.90	1.92	2.04	1.88	0.27	1.89	0.63	0.16	0.67	0.21
Al ₂ O ₃	15.55	14.78	14.26	14.04	13.70	13.58	11.30	13.95	13.49	13.52
Fe ₂ O ₃	4.01	2.95	3.09	3.92	0.32	3.09	0.60	0.51	1.14	1.40
FeO	6.98	7.76	8.09	6.56	1.33	6.87	0.87	1.10	2.86	0.94
MnO	0.17	0.13	0.15	0.12	0.01	0.12	0.02	0.02	0.03	0.03
MgO	4.30	1.75	1.88	1.75	0.74	1.77	0.17	1.80	0.77	0.38
CaO	7.29	6.28	6.52	5.54	1.56	5.39	0.64	0.87	1.68	0.99
Na ₂ O	2.12	2.82	2.73	2.30	2.21	3.16	1.91	1.87	2.59	2.68
K ₂ O	1.91	2.89	2.66	3.15	5.96	2.67	6.15	7.96	5.50	6.01
P ₂ O ₅	0.46	1.18	1.30	1.18	0.11	0.80	0.07	0.04	0.27	0.05
H ₂ O ⁺	0.82	0.35	0.34	0.90	0.84	0.50	0.28	1.18		
H ₂ O ⁻	0.11	0.01	0.09	0.11	0.08	0.05	0.07	0.02		
CO ₂										
Rest	0.44	0.46	0.47	0.44	0.23	0.46	0.43	0.15	0.30	0.49
TOTAL	99.56	99.78	99.02	99.09	99.96	100.35	100.64	99.63	98.60	99.50
Ba	972	1880	1820	1660	988	1340	3040	423	828	3530
Rb	61	67	61	70	130	60	138	216	233	223
Sr	384	418	409	361	150	327	332	212	116	382
Pb	1300	20	18	19	65	19	24	26	43	38
Th	1	2	5	4	72	9	<1	16	111	6
U	<1	<1	1	1	4	2	1	3	3	<1
Zr	183	666	748	692	246	998	136	159	535	80
Nb	12	41	51	46	6	65	16	13	35	2
Y	36	68	78	73	24	70	1	11	36	7
La	47	142	158	145	96	200	16	48	168	18
Ce	99	263	289	260	164	374	17	71	292	24
Sn	123	2	<1	1	<1	<1	<1	1	<1	<1
V	182	69	71	77	21	74	16	6	19	18
Cr	72	13	14	14	11	15	5	6	12	<3
Ni	50	9	11	9	8	7	2	5	5	3
Cu	43	19	32	19	4	19	4	2	10	5
Zn	109	129	135	136	16	126	21	25	55	24
Ga	24	21	21	20		20	11	16	22	14

Sample Number	76283052	77284099	76283244	73283250	76283259	76283276	77283415	77283430	77283713	77283845
Area	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land
Locality	Molodez- hnaya	Mount Stansfield	Mount McGhee	Burch Peaks	Ntk 945	Mount Jewell	Mount Marsland	Mt Riiser- Larsen	Howard Hills	Mount Charles
Rock type	Bi granite	Meta- tholeiite	Pyroxenite dyke	Pyroxenite dyke	Pyroxenite dyke	Pyroxenite dyke	Olivine tholeiite	Quartz tholeiite	I quartz tholeiite	I quartz tholeiite
Age	Cambrian	?Archaean	Archaean	Archaean	Archaean	Archaean	Protero	Protero	Protero	Protero
Bibliog. ref.	5,6	5	5	5	5	5	5,9	5,9	5,9	5,9
SiO ₂	72.30	49.60	48.40	51.70	48.90	50.90	47.20	49.40	50.00	50.20
TiO ₂	0.18	1.60	1.12	0.50	1.05	0.54	2.19	2.16	2.53	2.48
Al ₂ O ₃	14.30	9.13	4.78	4.37	5.97	2.94	14.65	12.57	13.68	13.72
Fe ₂ O ₃	1.73	3.43	5.19	2.05	3.31	4.41	2.77	5.61	4.64	4.32
FeO	0.83	10.60	11.80	11.53	14.14	11.33	11.83	10.43	8.99	9.33
MnO	0.02	0.21	0.25	0.25	0.32	0.28	0.20	0.24	0.19	0.19
MgO	0.31	13.59	16.74	16.09	16.01	20.13	6.42	5.27	5.81	5.79
CaO	1.20	8.40	7.84	10.05	8.08	7.58	9.44	9.65	9.83	9.88
Na ₂ O	3.24	1.83	0.51	0.96	0.48	0.61	2.66	2.74	2.31	2.40
K ₂ O	5.79	1.19	1.46	0.71	0.12	0.39	0.98	0.80	0.80	0.82
P ₂ O ₅	0.05	0.18	0.05	0.02	0.11	0.01	0.33	0.72	0.32	0.30
H ₂ O ⁺		0.34					0.38	0.31	0.87	0.66
H ₂ O ⁻		0.04					0.09	0.07	0.10	0.06
CO ₂										
Rest	0.22	0.42	0.53	0.49	0.52	0.44	0.23	0.21	0.23	0.24
TOTAL	100.17	100.56	98.67	98.72	99.01	99.56	99.37	100.18	100.30	100.39
Ba	535	460	556	342	183	165	571	321	310	320
Rb	274	40	43	18	4	15	25	30	23	24
Sr	128	223	607	225	146	113	240	147	409	408
Pb	37	4	3	7	2	1	7	3	4	2
Th	145	7	<1	3	<1	<1	7	1	3	2
U	4	1	1	1	<1	<1	<1	1	<1	<1
Zr	255	155	74	78	74	62	162	200	173	178
Nb	6	9	8	2	13	5	12	8	15	16
Y	11	24	15	13	62	27	34	55	27	27
La	144	24	22	25	17	17	30	20	22	27
Ce	252	40	53	48	39	52	54	40	42	52
Sn	3	<1	3	2	2	2	<1	1	3	<1
V	6	230	134	120	123	80	203	332	337	341
Cr	3	1220	1300	1850	2120	1510	130	88	74	75
Ni	2	418	989	741	816	1025	118	60	65	74
Cu	11	100	97	4	11	83	46	117	99	98
Zn	16	89	118	91	121	96	118	137	101	112
Ga	22	13	6	7	12	6	21	18	20	19

Sample Number	77283917	77283924	77283927	77283940	77283941	77283947	77283957B	77283961	77283977	77284104
Area	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land
Locality	Tonagh Island	Tonagh Island	Tonagh Island	Mount Pardoe	Mount Pardoe	Priestley Peak	Priestley Peak	Debenham Peak	Mount Bennett	Mount Bride
Rock type	Quartz tholeiite	Meta- tholeiite	Meta- tholeiite	I quartz tholeiite	I quartz tholeiite	II quartz tholeiite	II quartz tholeiite	II tholeiite	Quartz tholeiite	II quartz tholeiite
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9
SiO ₂	50.10	52.00	52.00	49.40	49.70	49.90	49.90	48.50	52.80	47.80
TiO ₂	1.67	1.35	1.26	2.60	2.68	1.39	1.61	1.44	1.52	2.17
Al ₂ O ₃	14.02	13.07	13.31	13.61	13.71	13.70	13.50	13.98	12.92	12.30
Fe ₂ O ₃	3.57	4.42	4.68	4.60	4.24	3.23	6.02	2.82	5.45	2.99
FeO	9.15	9.74	9.04	9.29	9.85	9.68	8.00	10.31	9.75	13.22
MnO	0.18	0.22	0.21	0.18	0.19	0.21	0.23	0.21	0.21	0.24
MgO	6.28	5.23	5.96	5.66	5.06	6.97	6.35	6.98	4.55	5.80
CaO	10.37	9.40	10.05	9.91	9.57	11.30	10.90	11.46	8.59	10.29
Na ₂ O	2.12	2.80	2.58	2.20	2.48	2.46	2.41	2.33	2.55	2.13
K ₂ O	0.65	0.67	0.68	0.81	0.91	0.41	0.59	0.18	1.17	0.42
P ₂ O ₅	0.20	0.25	0.21	0.31	0.35	0.13	0.16	0.11	0.24	0.23
H ₂ O ⁺	0.40	0.67	0.34	0.82	0.75	0.45	0.42	0.58	0.39	1.04
H ₂ O ⁻	0.08	0.03	0.03	0.06	0.02	0.12	0.03	0.09	0.13	0.06
CO ₂										
Rest	0.21	0.26	0.17	0.23	0.24	0.16	0.18	0.17	0.23	0.19
TOTAL	99.00	100.11	100.52	99.68	99.75	100.11	100.30	99.16	100.50	98.88
Ba	286	318	277	324	350	107	158	74	478	106
Rb	18	13	14	24	26	16	18	4	33	13
Sr	360	237	233	416	417	134	125	167	250	136
Pb	3	673	3	3	4	1	3	1	6	6
Th	1	1	<1	2	3	1	1	1	4	2
U	<1	<1	<1	<1	<1	<1	<1	<1	<1	1
Zr	107	113	96	160	186	92	110	72	124	135
Nb	7	5	5	14	17	2	4	3	5	5
Y	22	34	28	27	29	31	36	22	33	45
La	20	19	16	20	31	8	9	7	19	10
Ce	36	35	28	46	55	16	19	13	36	22
Sn	<1	70	<1	2	1	1	1	1	2	1
V	294	294	292	383	372	366	395	329	412	340
Cr	78	20	25	69	38	78	58	120	41	217
Ni	76	27	28	51	59	59	60	100	61	66
Cu	134	58	81	65	109	139	186	182	69	80
Zn	94	102	104	100	113	82	104	91	116	153
Ga	18	19	18	19	20	17	17	18	18	19

Sample Number	77284113	77284134	77284155	77284162	77284310	77284317	77284318	77284362	77284363	77284373
Area	Enderby Land	Enderby Land	Kemp Land	Kemp Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land
Locality	Mount Arthur	Brusilov Ntks	Bird Ridge	Wallis Ntks	Mount Biscoe	Mount Oldfield	Mount Charles	Mount McGhee	Mount Renouard	Zubchatyy Ice Shelf
Rock type	II quartz tholeiite	High-Mg qz tholeiite	High-Mg tholeiite	High-Mg qz tholeiite	II quartz tholeiite	Olivine basalt	Meta- tholeiite	I quartz tholeiite	Meta- tholeiite	II tholeiite
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9
SiO ₂	49.70	55.00	53.80	56.40	49.10	44.80	55.60	50.30	50.40	48.20
TiO ₂	1.19	0.55	1.02	1.40	1.69	3.31	1.29	2.19	1.32	1.78
Al ₂ O ₃	14.19	11.91	9.69	12.72	13.34	15.13	10.52	15.06	13.46	13.35
Fe ₂ O ₃	4.45	1.60	2.06	1.11	3.32	4.79	3.19	4.51	3.19	3.53
FeO	7.89	8.19	10.28	11.10	9.68	10.13	9.20	7.90	10.05	9.89
MnO	0.21	0.17	0.18	0.17	0.21	0.22	0.17	0.17	0.22	0.22
MgO	6.74	10.64	8.82	6.06	6.53	5.93	7.59	5.40	6.17	6.93
CaO	11.90	7.78	9.43	9.37	10.65	8.78	8.67	10.35	10.46	11.28
Na ₂ O	2.32	1.57	3.03	0.46	2.39	2.84	0.71	2.24	2.41	2.43
K ₂ O	0.33	1.01	1.25	1.21	0.43	1.66	1.38	0.76	0.60	0.24
P ₂ O ₅	0.09	0.09	0.17	0.16	0.19	1.01	0.17	0.28	0.12	0.18
H ₂ O ⁺	0.49	0.55	0.39	0.20	0.97	0.59	0.37	0.63	0.31	0.37
H ₂ O ⁻	0.15	0.11	0.02	0.11	0.08	0.11	0.06	0.08	0.08	0.04
CO ₂										
Rest	0.16	0.27	0.33	0.22	0.19	0.33	0.27	0.22	0.17	0.17
TOTAL	99.81	99.44	100.47	100.69	98.77	99.63	99.19	100.09	98.96	98.61
Ba	70	249	483	299	202	1330	379	313	219	88
Rb	14	47	46	55	12	39	54	21	17	5
Sr	120	100	401	207	230	480	236	450	228	186
Pb	<1	9	6	10	3	2	9	3	2	1
Th	2	7	4	10	1	4	7	3	1	2
U	<1	1	2	3	1	1	2	<1	<1	<1
Zr	75	88	94	164	101	130	158	149	85	108
Nb	1	4	5	8	5	27	8	13	3	7
Y	28	18	15	24	30	28	24	23	25	28
La	7	19	17	23	12	40	27	19	16	9
Ce	11	26	32	45	19	69	46	40	26	20
Sn	<1	<1	1	2	<1	<1	<1	<1	<1	1
V	313	183	226	233	286	247	192	284	312	294
Cr	152	876	747	301	184	90	552	79	57	166
Ni	72	189	178	134	73	52	178	58	54	79
Cu	158	62	132	21	102	36	13	55	109	124
Zn	81	68	84	86	99	110	93	94	94	98
Ga	16	14	15	20	18	19	16	20	19	18

Sample Number	77284387	77284619	77284624	77284625	77284659	77284695	77284699	77284757	77284758	77284813
Area	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Kemp
Locality	Land	Land	Land	Land	Land	Land	Land	Land	Land	Land
	Zubchatyy	Dick	Mount	Mount	Geoffrey	Mount	Mount	Waratah	Rayner	Georges
	Ice Shelf	Peaks	Dyke	Hardy	Hills	Henry	Henry	Island	Glacier	Island
Rock type	I quartz	Quartz	II quartz	High-Mg qz	II quartz	I quartz	Norite	II quartz	High-Mg qz	Meta-
	tholeiite	tholeiite	tholeiite	tholeiite	tholeiite	tholeiite		tholeiite	tholeiite	tholeiite
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9
SiO ₂	49.60	53.70	49.80	55.20	51.90	50.20	51.40	51.30	55.00	48.70
TiO ₂	2.49	0.82	1.30	0.55	1.18	2.49	0.52	0.75	0.62	1.35
Al ₂ O ₃	13.56	14.00	13.81	12.26	13.64	13.44	8.86	12.89	14.09	13.45
Fe ₂ O ₃	3.49	1.74	4.15	2.27	2.85	5.42	2.15	2.77	1.74	3.41
FeO	10.50	9.26	9.16	7.53	10.66	8.29	8.27	11.69	7.90	10.30
MnO	0.19	0.18	0.22	0.17	0.21	0.19	0.18	0.23	0.17	0.23
MgO	5.84	6.07	6.70	10.58	6.06	5.71	17.93	6.40	7.60	7.10
CaO	9.90	10.19	11.45	7.92	10.28	9.74	7.25	10.54	8.68	11.77
Na ₂ O	2.18	1.82	2.48	1.61	2.52	2.45	1.34	2.47	1.69	2.02
K ₂ O	0.74	0.96	0.35	1.01	0.56	0.85	0.54	0.36	1.14	0.24
P ₂ O ₅	0.29	0.11	0.13	0.08	0.12	0.32	0.07	0.08	0.09	0.10
H ₂ O ⁺	0.86	0.22	0.32	0.50	0.57	0.66	0.37	0.45	0.46	1.31
H ₂ O ⁻	0.16	0.03	0.01	0.08	0.04	0.06	0.08	0.06	0.08	0.05
CO ₂										
Rest	0.24	0.17	0.16	0.27	0.17	0.24	0.51	0.15	0.20	0.17
TOTAL	100.04	99.27	100.04	100.03	100.76	100.06	99.47	100.14	99.46	100.20
Ba	291	272	82	258	231	347	234	139	237	48
Rb	21	44	14	47	15	25	20	11	57	8
Sr	377	117	119	106	143	416	162	79	109	119
Pb	4	8	2	9	5	3	2	4	13	1
Th	2	7	1	7	2	4	2	3	8	1
U	1	2	<1	2	<1	<1	<1	1	3	<1
Zr	173	101	85	87	88	172	55	55	93	67
Nb	14	6	2	5	5	15	2	1	5	2
Y	28	24	31	16	29	28	11	29	17	29
La	24	26	7	18	15	25	9	11	18	3
Ce	48	38	14	31	21	52	15	15	30	6
Sn	<1	1	1	2	1	<1	<1	<1	2	<1
V	363	255	338	187	264	328	181	278	197	414
Cr	82	43	113	818	59	69	2220	101	462	85
Ni	85	98	58	190	71	68	628	69	139	71
Cu	126	110	171	62	150	100	42	136	20	224
Zn	112	78	82	68	98	111	60	109	70	93
Ga	19	16	17	14	17	20	10	16	15	17

Sample Number	77284827	77284028	77284835	77284859	76283105	77283504	77284009	77284065	77284079	77284541
Area	Enderby Land	Enderby Land	Enderby Land	Kemp Land	Kemp Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land	Enderby Land
Locality	Mount Pardoe	Mount Pardoe	Mount Trail	Wallis Ntks	Rippon Depot	Mount McLennan	Bunt Island	Johnston Peak	Pythagoras Peak	Mount Bergin
Rock type	Meta- tholeiite	Meta- tholeiite	Olivine tholeiite	II quartz tholeiite	Meta- tholeiite	Meta- tholeiite	I quartz tholeiite	I quartz tholeiite	I quartz tholeiite	I quartz tholeiite
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9
SiO ₂	50.10	50.80	47.50	48.70	54.50	51.70	49.80	49.50	50.00	50.30
TiO ₂	2.02	0.93	2.28	1.42	1.33	1.14	2.43	2.41	2.19	2.52
Al ₂ O ₃	12.82	13.53	14.66	13.51	12.27	14.08	13.47	13.67	14.47	13.98
Fe ₂ O ₃	8.67	2.67	4.57	5.31	3.21	3.30	3.80	3.13	2.82	6.56
FeO	7.92	9.21	10.41	8.42	8.91	9.87	9.78	9.68	10.96	7.70
MnO	0.25	0.20	0.19	0.23	0.14	0.20	0.20	0.20	0.20	0.20
MgO	5.10	7.54	6.30	6.23	5.94	6.08	5.82	6.13	5.91	5.97
CaO	9.65	11.83	9.43	11.19	9.14	10.11	9.76	9.79	9.82	9.85
Na ₂ O	2.65	2.24	2.61	2.97	2.93	2.49	2.34	2.27	2.79	2.27
K ₂ O	0.75	0.40	1.05	0.29	1.13	0.67	0.86	0.75	0.81	0.79
P ₂ O ₅	0.23	0.11	0.34	0.12	0.15	0.13	0.31	0.28	0.26	0.30
H ₂ O ⁺	0.18	0.30	0.18	0.39	0.16	0.19	0.62	1.06	0.44	0.41
H ₂ O ⁻	0.04	0.05	0.09	0.02	0.12	0.07	0.02	0.07	0.04	0.08
CO ₂										
Rest	0.19	0.15	0.24	0.16	0.18	0.18	0.23	0.22	0.21	0.24
TOTAL	100.57	99.96	99.85	98.96	100.11	100.21	99.44	99.16	100.92	101.17
Ba	292	165	615	82	319	164	318	240	290	337
Rb	21	11	27	11	52	23	22	20	20	20
Sr	207	186	240	142	205	105	398	354	330	379
Pb	4	1	7	2	11	5	2	3	3	2
Th	2	1	6	1	8	5	3	3	4	3
U	<1	<1	1	<1	2	2	<1	2	<1	<1
Zr	139	60	177	84	159	100	160	154	141	164
Nb	5	1	13	2	10	5	15	14	12	14
Y	37	21	36	30	29	29	28	28	27	29
La	16	9	30	5	26	15	25	20	22	25
Ce	32	16	49	9	44	26	48	42	43	51
Sn	<1	<1	<1	1	4	<1	1	<1	<1	<1
V	303	250	229	386		308	346	342	289	390
Cr	69	84	118	72	329	137	66	83	109	69
Ni	41	51	116	53	111	95	56	84	59	73
Cu	64	111	46	81	15	132	96	122	77	119
Zn	115	81	115	92	87	97	105	129	112	101
Ga	19	16	20	16		17	18	16	17	17

Sample Number	77284589	77284590	77284591	77284707	78285051	80285046A	76283010	76283012	76283030	76283242
Area	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby
Locality	Land	Land	Land	Land	Land	Land	Land	Land	Land	Land
	Ward	Ward	Howard	Mount	Beaver	Cape	Seavers	Seavers	Mount	Mount
Rock type	Rocks	Rocks	Hills	Berrigan	Island	Batterbee	Ridge	Ridge	Douglas	McGhee
	Meta-	II quartz	Olivine	Quartz	Olivine	II quartz	I quartz	Olivine	Quartz	I quartz
Age	tholeiite	tholeiite	basalt	tholeiite	tholeiite	tholeiite	tholeiite	tholeiite	tholeiite	tholeiite
Bibliog. ref.	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9	5,9
SiO ₂	53.00	50.10	45.60	49.30	46.20	51.30	51.50	46.40	52.50	49.70
TiO ₂	1.07	1.63	3.29	2.66	2.94	1.01	2.66	3.10	1.21	2.81
Al ₂ O ₃	14.19	13.30	15.20	13.17	14.19	12.16	13.55	14.31	13.95	13.95
Fe ₂ O ₃	2.81	2.96	3.97	2.66	5.07	3.30	6.12	4.68	3.42	4.95
FeO	10.28	11.15	11.12	11.61	11.94	13.90	8.45	12.70	9.34	9.65
MnO	0.23	0.22	0.22	0.22	0.26	0.22	0.24	0.28	0.21	0.22
MgO	6.36	6.93	5.61	6.37	5.31	4.88	3.85	4.85	5.63	4.58
CaO	10.14	10.54	8.70	10.30	8.36	9.72	8.16	8.28	9.49	9.09
Na ₂ O	2.83	2.27	2.70	2.40	2.46	2.51	2.48	2.75	2.83	2.47
K ₂ O	0.70	0.43	1.83	0.56	1.48	0.34	1.28	1.53	0.84	0.99
P ₂ O ₅	0.17	0.16	1.04	0.27	0.36	0.11	0.61	0.35	0.13	0.35
H ₂ O ⁺	0.40	0.39	0.64	1.00	0.63					
H ₂ O ⁻	0.04	0.07	0.02	0.05	0.04					
CO ₂										
Rest	0.15	0.19	0.32	0.23	0.25	0.14	0.26	0.27	0.17	0.25
TOTAL	102.37	100.34	100.26	100.80	99.49	99.59	99.16	99.50	99.72	99.01
Ba	232	154	1330	139	661	140	530	845	376	413
Rb	14	9	39	12	43	10	35	48	18	28
Sr	231	209	430	277	237	59	459	245	187	424
Pb	4	2	4	<1	7	3	5	7	5	4
Th	3	2	6	2	8	4	4	7	4	4
U	<1	<1	<1	1	1	1	1	1	<1	1
Zr	73	101	139	170	202	65	287	212	121	204
Nb	4	7	31	13	24	2	28	27	5	19
Y	25	26	29	32	49	32	41	47	25	29
La	13	12	39	17	43	13	43	41	18	29
Ce	23	23	73	41	68	13	91	78	37	68
Sn	<1	<1	<1	1	<1		2	3	1	2
V	245	321	252	375	285	277	241	279	232	339
Cr	20	154	65	180	41	76	23	30	39	43
Ni	19	81	31	75	51	60	24	31	48	48
Cu	74	157	37	201	57	111	50	43	63	80
Zn	94	104	100	110	139	136	126	120	87	116
Ga	17	17	17	20	20	17	21	22	18	22

Sample Number	76283258	76283277	77283949C	77283949D	77283950	77283951A
Area	Enderby	Enderby	Enderby	Enderby	Enderby	Enderby
Locality	Land	Land	Land	Land	Land	Land
	Mount	Mount	Priestley	Priestley	Priestley	Priestley
	Stadler	Jewell	Peak	Peak	Peak	Peak
Rock type	High-Mg qz tholeiite	High-Mg qz tholeiite	Alk. mela- syenite	Alk. mela- syenite	Alk. mela- syenite	Alk. mela- syenite
Age	Protero	Protero	Ordovician	Ordovician	Ordovician	Ordovician
Bibliog. ref.	5,9	5,9	5,8,9	5,8,9	5,8,9	5,8,9
SiO ₂	55.70	54.40	52.60	49.60	50.40	52.00
TiO ₂	0.75	1.34	3.40	3.27	3.52	2.85
Al ₂ O ₃	13.08	12.48	8.67	9.10	8.95	8.74
Fe ₂ O ₃	1.20	1.69	2.03	2.45	1.97	3.19
FeO	9.32	10.69	4.12	4.06	4.63	3.39
MnO	0.17	0.20	0.09	0.08	0.10	0.11
MgO	7.36	5.89	7.43	8.77	8.55	7.29
CaO	8.06	9.00	4.97	5.32	5.47	4.54
Na ₂ O	1.94	2.45	0.73	0.89	0.85	1.90
K ₂ O	1.39	1.27	8.32	9.83	8.49	8.34
P ₂ O ₅	0.10	0.14	3.05	3.28	3.32	2.76
H ₂ O+			0.77	0.84	0.86	0.88
H ₂ O-			0.05	0.06	0.02	0.04
CO ₂			0.16	0.02	0.02	0.06
Rest	0.22	0.24	2.48	1.87	1.96	2.24
TOTAL	99.29	99.79	98.87	99.44	99.11	98.33
Ba	311	310	15100	9700	10100	13600
Rb	66	55	252	314	284	186
Sr	116	206	2910	2950	2950	2350
Pb	13	12	24	58	28	83
Th	10	9	7	48	21	10
U	2	3	7	6	10	8
Zr	115	159	1770	1420	1780	1690
Nb	7	9	59	43	63	49
Y	20	24	32	36	39	29
La	14	21	172	138	173	153
Ce	37	49	294	268	335	273
Sn	2	3	<1	1	1	<1
V	189	220	168	143	152	170
Cr	446	308	274	348	362	249
Ni	142	127	243	298	300	220
Cu	30	158	7	80	27	94
Zn	75	81	82	86	85	78
Ga	18	20	13	15	15	12

MAWSON COAST

Sample Number	72280953A	73281995	73282019	73282022	73282188	73281805	73281957	73281961	73281964	73282000B
Area	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast
Locality	Scullin	Mount Twintop	Murray	Scullin	Forbes	Patterson Island	Mount Henderson	Mount Henderson	Painted Peak	Murray
Rock type	Op-qz-pl-kf gneiss	Op-qz-pl gneiss	Op-qz-kf-pl gneiss	Op-qz-kf-pl gneiss	Op-cp-qz-pl gneiss	Op-qz-pl-kf gneiss	Gt-qz-pl-kf gneiss	Gt-qz-kf-pl gneiss	Op-gt-qz-pl gneiss	Op-qz-pl-kf gneiss
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	6	6	6	6	6	6	6	6	6	6
SiO ₂	73.10	73.90	66.70	64.30	56.00	64.50	66.10	71.70	67.70	67.70
TiO ₂	0.48	0.68	0.88	1.59	0.68	1.01	0.58	0.90	0.75	0.69
Al ₂ O ₃	12.71	12.34	15.02	14.57	19.44	14.96	15.80	13.39	12.73	14.59
Fe ₂ O ₃	0.85	1.55	1.09	1.77	1.96	1.40	1.57	1.02	2.51	1.18
FeO	2.15	1.50	4.45	6.35	3.60	5.25	3.05	3.55	4.50	3.65
MnO	0.04	0.05	0.10	0.10	0.50	0.09	0.08	0.15	0.64	0.11
MgO	0.40	2.00	2.20	1.77	2.97	2.90	1.43	1.28	4.53	1.89
CaO	1.35	1.80	4.81	4.38	13.62	3.94	0.77	4.04	3.99	2.96
Na ₂ O	2.35	4.05	2.45	3.30	0.35	1.50	1.45	1.95	0.52	2.20
K ₂ O	5.93	1.65	2.77	2.02	<0.01	3.82	8.50	1.18	1.89	4.29
P ₂ O ₅	0.08	0.09	0.19	0.35	0.16	0.24	0.06	0.12	0.58	0.23
H ₂ O+	0.38	0.18	0.26	0.30	0.44	0.34	0.30	0.42	0.48	0.20
H ₂ O-CO ₂										
Rest	0.25	0.13	0.15	0.21	0.15	0.36	0.31	0.19	0.20	0.26
TOTAL	100.07	99.92	101.07	101.01	99.86	100.31	100.00	99.89	101.02	99.95
Ba	377	274	350	341	33	1399	1516	329	660	913
Rb	438	21	202	188	1	149	341	51	75	247
Sr	61	113	105	83	222	249	227	160	168	218
Pb	57	12	17	27	8	32	54	11	9	49
Th	154	31	3	38	17	47	5	4	3	36
U	8	2	<1	2	3	1	<1	2	<1	2
Zr	454	295	130	310	124	371	123	496	165	244
Nb	8	11	7	28	15	15	8	15	9	15
Y	32	33	24	62	35	34	34	54	35	30
La	162	55	15	89	35	84	40	39	37	46
Ce	267	100	34	171	72	161	56	70	88	93
Sn										
V	8	34	80	106	87	105	76	93	84	60
Cr	3	16	74	19	76	137	57	33	88	101
Ni	3	11	19	10	52	38	23	19	77	24
Cu	<2	5	15	16	225	23	7	15	4	18
Zn	35	16	63	113	81	82	41	37	111	64
Ga	19	13	23	29	25	19	21	18	17	19

Sample Number	73282004	73282033	73282037	73282039	73282040	73282049	73282094	73282190	73282199	72280919
Area	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast
Locality	Murray	Scullin	Campbell	Campbell	Campbell	Taylor	Mount	Forbes	Ntk W of	Cape
Rock type	Monolith	Monolith	Head	Head	Head	Rookery	Rivett	Glacier	Mt Coates	Bruce
	Op-qz-pl-kf gneiss	Gt-qz-pl-kf gneiss	Gt-qz-kf gneiss	Gt-qz-pl gneiss	Gt-qz-pl gneiss	Gt-qz-kf-pl gneiss	Op-gt-qz-pl gneiss	Gt-qz-pl gneiss	Gt-qz-pl-kf gneiss	Gt-qz-kf-pl gneiss
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	6	6	6	6	6	6	6	6	6	6
SiO ₂	67.70	73.70	73.80	64.90	67.20	67.20	70.70	79.40	75.50	63.00
TiO ₂	0.70	0.03	0.06	0.82	0.99	0.78	1.06	0.58	0.23	1.36
Al ₂ O ₃	14.75	13.95	13.30	16.60	13.39	16.10	11.32	9.32	12.42	16.91
Fe ₂ O ₃	1.80	0.05	0.45	1.14	2.93	1.21	1.91	1.81	0.30	0.99
FeO	2.45	0.50	1.60	4.20	5.50	3.80	5.65	2.60	1.65	4.25
MnO	0.08	0.04	0.05	0.09	0.19	0.07	0.22	0.30	0.04	0.04
MgO	1.76	0.13	0.41	2.54	3.08	1.62	3.78	1.41	0.46	2.04
CaO	2.80	0.81	0.86	4.82	2.36	3.67	2.90	2.95	0.70	3.93
Na ₂ O	2.15	2.10	1.60	2.20	1.95	3.30	0.75	0.65	1.85	3.05
K ₂ O	4.82	7.75	6.41	1.59	1.57	1.53	0.42	0.62	5.85	2.83
P ₂ O ₅	0.23	0.06	0.05	0.16	0.10	0.06	0.12	0.14	0.06	0.50
H ₂ O ⁺	0.34	0.04	0.48	0.68	0.44	0.58	0.38	0.36	0.28	0.60
H ₂ O ⁻										
CO ₂										
Rest	0.27	0.10	0.24	0.23	0.17	0.20	0.15	0.18	0.12	0.50
TOTAL	99.85	99.26	99.31	99.97	99.87	100.12	99.36	100.32	99.46	100.00
Ba	1040	192	1323	725	277	294	154	672	358	1649
Rb	270	405	216	128	110	86	56	38	263	155
Sr	235	43	234	393	71	377	59	192	49	877
Pb	53	79	69	20	14	31	4	10	26	31
Th	29	23	19	15	14	44	9	14	27	65
U	2	3	2	3	2	2	2	2	1	3
Zr	221	29	112	142	168	192	193	220	121	505
Nb	12	<1	<1	10	11	12	8	8	8	20
Y	20	40	16	17	30	25	23	29	39	17
La	39	19	25	27	22	60	18	25	33	153
Ce	80	34	48	56	49	119	39	55	66	270
Sn										
V	68	<1	8	132	180	97	164	59	9	113
Cr	101	<3	10	39	147	30	164	76	4	62
Ni	22	<2	7	29	63	16	82	14	2	21
Cu	13	2	7	13	<2	89	56	15	11	65
Zn	57	<2	14	88	103	90	90	50	22	120
Ga	19	15	10	23	19	22	12	10	18	25

Sample Number	72280922	72280923	72280945A	72280945B	72280957	72280971	73281996	73282016	73282025	73282044
Area	Mawson	Mawson	Mawson	Mawson	Mawson	Mawson	Mawson	Mawson	Mawson	Mawson
Locality	Coast	Coast	Coast	Coast	Coast	Coast	Coast	Coast	Coast	Coast
Rock type	Scullin	Cape	Forbes	Forbes	Scullin	Mawson	Mount	Murray	Scullin	Campbell
Age	Monolith	Bruce	Glacier	Glacier	Monolith	Rock	Twintop	Monolith	Monolith	Head
Bibliog. ref.	Gt-qz-pl- kf gneiss	Gt-qz-kf- pl gneiss	Gt-qz-kf- pl gneiss	Gt-qz-kf- pl gneiss	Gt-qz-kf- gneiss	Op-qz-pl- kf gneiss	Hb-px-pl granulite	Cp-op-pl granulite	Hb-op-pl granulite	Cp-op-pl granulite
	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
	6	6	6	6	6	6				
SiO ₂	76.40	80.30	67.40	67.70	71.00	66.60	47.30	51.50	48.30	45.30
TiO ₂	0.25	0.03	0.83	0.82	0.58	0.66	0.99	1.22	1.26	2.83
Al ₂ O ₃	12.13	11.20	15.97	15.91	12.65	14.65	14.49	15.95	17.38	14.03
Fe ₂ O ₃	0.44	0.07	1.80	4.09	1.94	0.95	5.44	2.17	1.95	1.12
FeO	1.30	0.95	2.50	0.50	2.50	4.70	8.25	8.65	7.80	16.70
MnO	0.02	0.03	0.06	0.05	0.05	0.08	0.23	0.18	0.15	0.25
MgO	0.34	0.21	1.66	1.70	0.74	2.69	8.55	7.57	9.88	7.29
CaO	1.06	2.41	3.57	3.57	1.15	2.71	10.37	8.95	9.45	11.88
Na ₂ O	2.10	3.05	3.75	2.70	1.90	2.55	2.40	2.35	1.95	0.67
K ₂ O	5.52	0.83	1.88	1.92	6.75	4.69	0.64	1.09	0.66	
P ₂ O ₅	0.07	0.05	0.14	0.12	0.63	0.06	0.09	0.13	0.20	0.05
H ₂ O+	0.38	0.30	0.58	0.34	0.18	0.36	0.28	0.30	0.54	0.30
H ₂ O- CO ₂										
Rest	0.12	0.15	0.21	0.24	0.21	0.26	0.17	0.18	0.16	0.24
TOTAL	100.13	99.58	100.35	99.66	100.28	100.96	99.20	100.24	99.68	100.66
Ba	306	96	412	1443	258	445	40	268	175	<3
Rb	308	14	118	215	717	330	6	64	44	<1
Sr	56	216	244	295	31	81	64	176	241	116
Pb	55	23	23	41	46	44	4	11	6	3
Th	22	25	52	<1	40	113	1	8	9	<1
U	2	2	4	<1	7	6	<1	2	2	<1
Zr	131	582	272	50	246	387	50	86	131	34
Nb	6	<1	14	<1	23	11	1	4	5	3
Y	24	11	17	8	107	29	22	28	30	17
La	26	51	90	9	37	166	3	17	13	<2
Ce	52	98	165	16	88	264	12	35	39	11
Sn										
V	11	4	100	4	21	57	291	168	152	1012
Cr	6	9	37	<3	11	64	365	202	63	14
Ni	5	6	25	2	8	28	207	112	179	63
Cu	<2	5	44	7	11	<2	<2	43	53	56
Zn	33	8	63	3	107	84	106	99	75	124
Ga	16	12	21	13	19	24	16	21	19	22

Sample Number	73282074	73282160	73282165	73282204	72280955	72280967	72280898	72280924	72280947	72280963
Area	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast
Locality	Neil Peak	Mawson Rock	Mawson Rock	Ntk W of Mt. Coates	Forbes Glacier	Mawson Rock	Low Tongue	Taylor Glacier	Forbes Glacier	Mawson Rock
Rock type	Cp-op-pl granulite	Mafic xenolith	Mafic xenolith	Hb-px-pl granulite	Hb-px-pl granulite	Qz-op-gt-pl gneiss	Gt-bi-si-cd pelite	Gt-bi-si-cd pelite	Gt-bi-si pelite	Gt-bi-op-cd pelite
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.		10	10				3	3	3	3
SiO ₂	53.20	45.80	51.70	47.10	48.50	47.70	66.40	79.40	72.60	45.70
TiO ₂	1.29	1.40	1.26	1.58	3.10	1.20	1.25	0.83	0.10	0.88
Al ₂ O ₃	13.13	15.85	15.51	14.34	13.95	18.27	19.18	10.49	15.11	22.29
Fe ₂ O ₃	0.75	2.02	1.84	1.27	1.10	4.28	1.72	1.91	0.37	2.55
FeO	8.90	13.50	12.70	9.80	13.40	11.20	6.05	3.50	0.90	8.80
MnO	0.19	0.28	0.27	0.21	0.23	0.21	0.07	0.05	0.03	0.15
MgO	9.34	9.36	7.57	10.53	5.29	9.87	1.89	1.45	0.36	9.82
CaO	9.62	9.51	6.62	9.98	8.78	2.46	0.17	0.16	1.18	1.51
Na ₂ O	0.29	1.00	1.70	1.80	3.20	1.55	0.22	0.29	3.40	1.30
K ₂ O	1.73	0.48	0.67	1.97	1.37	2.03	2.60	1.90	5.01	4.27
P ₂ O ₅	0.40	0.13	0.11	0.56	0.36	0.03	0.05	0.03	0.22	0.28
H ₂ O ⁺	0.56	0.32	0.36	0.48	0.30	0.34	0.62	0.60	0.46	0.80
H ₂ O-										
CO ₂										
Rest	0.59	0.26	0.21	0.50	0.23	0.28	0.21	0.17	0.12	0.32
TOTAL	99.99	99.91	100.52	100.12	99.81	99.42	100.43	100.78	99.86	98.67
Ba	2500	477	249	1839	462	733	479	388	486	914
Rb	264	53	13	176	85	154	128	106	198	381
Sr	266	98	85	263	182	77	42	67	109	77
Pb	9	4	8	3	13	13	19	13	30	16
Th	60	2	2	8	8	2	17	14	10	47
U	8	2	1	1	2	<1	2	1	3	10
Zr	314	100	110	319	254	138	327	271	69	348
Nb	16	3	6	15	11	11	18	10	7	17
Y	28	35	35	37	63	16	38	19	31	66
La	60	16	29	44	30	66	22	20	17	85
Ce	128	38	59	111	66	106	50	42	35	170
Sn										
V	283	364	309	309	266	195	182	101	7	117
Cr	608	376	356	565	131	226	129	150	3	36
Ni	87	155	57	97	51	139	12	51	3	59
Cu	50	18	26	77	49	<2	<2	2	2	<2
Zn	120	154	132	120	61	264	106	78	17	280
Ga	18	22	21	20	25	34	30	15	14	32

Sample Number	72280965	72280969	72280973	73281973	73281979	73282065	73282178	73282183	73282196	73282051
Area	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast
Locality	Mawson Rock	Mawson Rock	Mawson Rock	Lucas Ntk	Lucas Ntk	Mount Twintop	Forbes Glacier	Forbes Glacier	Low Tongue	Mawson Rock
Rock type	Gt-bi-op-cd pelite	Gt-bi-cd pelite	Gt-bi-si-cd pelite	Gt-bi-si pelite	Gt-bi-si-cd pelite	Gt-bi-si-cd pelite	Bi-si-cd pelite	Gt-bi-si-cd pelite	Gt-bi-si-cd pelite	Sp-sa-op granulite
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	3	3	3	3	3	3	3	3	3	3,12
SiO ₂	45.00	49.70	44.30	63.40	62.50	58.00	54.10	52.50	65.90	40.40
TiO ₂	1.38	0.90	0.87	1.10	1.22	1.07	1.48	1.42	1.10	0.12
Al ₂ O ₃	19.17	20.66	26.83	17.78	17.67	19.07	21.23	21.37	18.81	24.40
Fe ₂ O ₃	5.22	4.59	2.03	4.16	4.10	4.35	5.54	4.60	1.89	0.54
FeO	12.60	10.50	6.75	4.45	5.90	6.60	6.40	7.50	5.15	0.65
MnO	0.20	0.16	0.17	0.13	0.13	0.16	0.16	0.28	0.06	0.04
MgO	11.20	9.02	10.60	2.39	3.00	3.99	3.84	3.42	1.71	33.50
CaO	0.72	0.31	0.36	0.92	0.80	0.61	1.73	0.42	0.15	0.04
Na ₂ O	0.23	0.19	0.50	0.66	0.54	1.25	0.94	0.66	0.28	0.10
K ₂ O	2.22	2.23	4.93	3.73	3.03	4.53	2.97	5.89	3.47	0.58
P ₂ O ₅	0.02	0.01	0.23	0.08	0.07	0.09	0.09	0.15	0.07	<0.01
H ₂ O+	0.38	0.58	0.80	0.44	0.62	0.40	1.20	0.62	0.70	0.22
H ₂ O-										
CO ₂										
Rest	0.29	0.24	0.25	0.26	0.24	0.31	0.28	0.43	0.23	0.04
TOTAL	98.63	99.09	98.62	99.50	99.82	100.43	99.96	99.26	99.52	100.62
Ba	739	586	543	885	650	1340	758	2011	718	16
Pb	179	180	321	158	132	138	146	230	161	61
Sr	16	12	17	123	82	111	109	131	57	1
Pb	4	6	9	23	17	24	20	35	27	1
Th	1	2	45	22	27	2	29	31	26	6
U	1	<1	9	1	<1	<1	2	2	2	2
Zr	189	105	388	202	220	207	279	258	259	132
Nb	12	9	24	9	10	12	15	13	15	13
Y	43	13	56	34	28	79	19	43	27	7
La	9	2	86	31	36	23	47	46	32	<2
Ce	21	5	184	64	75	36	94	90	66	4
Sn										
V	238	237	88	140	167	135	196	221	159	13
Cr	280	265	26	134	157	137	199	201	126	5
Ni	164	119	25	69	85	63	79	79	40	6
Cu	<2	<2	<2	43	36	3	3	10	<2	<2
Zn	312	232	203	104	159	153	180	134	98	36
Ga	40	45	31	25	29	35	32	31	28	5

Sample Number	73282052	73282053	73282055B	73282059	73282060	73282061	72280701A	72280701B	72280977	73281808
Area	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast
Locality	Mawson Rock	Mawson Rock	Mawson Rock	Mawson Rock	Mawson Rock	Mawson Rock	Mawson Rock	Mawson Rock	Mawson Rock	Mawson Macey Island
Rock type	Sp-sa-op granulite	Cd-sa-phl granulite	Sa-phl granulite	Op-sa-phl granulite	Sa-phl-op granulite	Sp-sa-phl granulite	Op granite	Op granod	Op granod	Op granod
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	3,12	3,12	3,12	3,12	3,12	3,12	6,10	6,10	6,10	6,10
SiO ₂	37.30	46.80	37.70	38.40	38.70	37.20	63.40	61.20	61.60	66.90
TiO ₂	0.14	0.97	0.33	0.16	0.29	0.15	1.59	1.68	1.89	0.56
Al ₂ O ₃	27.62	18.15	23.47	22.52	21.75	21.00	14.65	14.92	14.68	15.15
Fe ₂ O ₃	0.90	0.10	0.71	1.41	2.41	1.71	1.17	1.30	1.06	0.65
FeO	0.55	0.70	1.00	1.90	4.90	2.00	6.15	7.95	7.35	4.20
MnO	0.05	0.03	0.03	0.06	0.14	0.07	0.16	0.23	0.19	0.10
MgO	32.00	25.50	25.10	25.70	21.50	24.60	2.16	2.78	2.55	2.08
CaO	0.12	0.12	0.04	0.07	0.90	0.02	4.51	5.61	5.20	4.84
Na ₂ O	0.11	0.59	0.69	0.55	0.62	0.55	2.10	2.20	2.10	2.45
K ₂ O	0.68	4.70	7.45	6.57	5.73	8.26	3.51	1.78	2.62	2.56
P ₂ O ₅	<0.01	0.01	0.04	0.02	0.02	0.03	0.39	0.32	0.41	0.16
H ₂ O ⁺	0.34						0.14	0.24	0.24	0.20
H ₂ O ⁻										
CO ₂										
Rest	0.05	0.18	0.12	0.08	0.10	0.09	0.28	0.25	0.23	0.19
TOTAL	99.85	97.85	96.68	97.44	97.06	95.68	100.21	100.46	100.12	100.04
Ba	15	43	36	34	35	7	1100	927	804	753
Rb	64	375	530	373	297	350	127	47	75	90
Sr	3	7	6	11	20	6	161	175	166	228
Pb	1	7	6	7	8	10	21	15	16	14
Th	17	5	2	14	30	51	3	2	4	6
U	2	4	2	<1	1	3	1	1	<1	<1
Zr	129	765	297	127	119	136	376	336	295	157
Nb	13	147	31	27	24	23	26	19	29	8
Y	21	21	13	11	14	13	39	41	38	15
La	2	<2	<2	<2	4	<2	67	64	65	31
Ce	11	9	3	<3	10	<3	133	128	132	62
Sn							<1	<1		
V	20	22	19	19	29	11	76	96	89	64
Cr	4	8	5	6	8	6	30	34	28	47
Ni	6	5	7	16	18	11	8	10	10	10
Cu	<2	<2	<2	<2	<2	<2	17	23	23	8
Zn	62	8	40	50	199	92	81	97	92	53
Ga	8	2	9	7	11	4	21	22	22	19

Sample Number	73281809	73281969	73281971	73281988	73281992	73282151	73282153	73282157	73282161	73282210
Area	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast
Locality	Macey Island	N. David Range	N. David Range	Filson Ntk	Poulton Peak	Mawson Rock	Mawson Rock	Mawson Rock	Mawson Rock	Evans Island
Rock type	Op granod	Op granite	Op granite	Op granite	Op granite	Op granite	Op granod	Op granite	Op granite	Op granite
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	6,10	6,10	6,10	6,10	6,10	6,10	6,10	6,10	6,10	6,10
SiO ₂	63.20	60.90	60.30	70.80	63.30	63.70	61.70	59.70	65.30	66.00
TiO ₂	0.74	1.98	2.07	0.63	1.03	1.47	1.63	1.92	1.48	0.91
Al ₂ O ₃	15.45	14.22	13.82	14.11	15.85	14.82	14.73	15.24	14.44	14.97
Fe ₂ O ₃	1.01	1.65	1.66	1.19	1.19	0.71	0.91	0.99	0.79	0.98
FeO	6.35	7.10	7.65	1.70	4.60	5.90	8.05	7.85	5.80	2.95
MnO	0.16	0.20	0.22	0.04	0.09	0.15	0.22	0.19	0.14	0.05
MgO	3.69	2.44	2.50	0.93	2.23	1.95	2.63	3.70	1.91	1.10
CaO	5.96	4.94	4.96	2.76	4.52	4.40	5.46	4.95	4.32	2.63
Na ₂ O	2.25	1.85	1.80	2.05	2.30	2.10	2.20	2.05	2.00	1.85
K ₂ O	1.05	3.60	3.58	5.31	3.56	3.98	1.88	3.13	3.84	6.82
P ₂ O ₅	0.16	0.48	0.52	0.14	0.27	0.39	0.34	0.51	0.39	0.36
H ₂ O ⁺	0.24	0.68	0.44	0.36	0.58	0.42	0.42	0.40	0.30	0.40
H ₂ O ⁻										
CO ₂										
Rest	0.18	0.30	0.30	0.23	0.27	0.28	0.25	0.28	0.27	0.37
TOTAL	100.44	100.34	99.82	100.25	99.79	100.27	100.42	100.91	100.98	99.39
Ba	405	1124	1140	879	1100	1225	908	947	1121	1181
Rb	64	112	114	190	139	131	49	96	123	240
Sr	195	171	169	184	185	171	171	159	164	225
Pb	10	16	17	19	19	21	16	16	22	47
Th	10	3	4	41	4	3	3	5	1	133
U	1	1	1	2	2	<1	<1	1	<1	3
Zr	170	473	460	293	250	317	344	458	375	502
Nb	12	29	28	10	15	22	19	28	22	14
Y	35	46	46	12	17	34	40	38	34	23
La	32	59	65	62	69	61	62	66	58	213
Ce	76	129	135	119	129	117	119	136	111	416
Sn										
V	124	92	93	43	93	71	95	98	75	52
Cr	142	31	26	25	49	28	34	41	27	15
Ni	18	10	9	8	20	8	10	9	9	10
Cu	<2	17	17	5	23	15	27	22	16	13
Zn	83	99	95	30	66	72	97	102	73	41
Ga	19	21	21	16	21	21	22	22	21	17

Sample Number	73282212	73282214	77284860	77284863	77284864	77284865	77284867	77284868	73282164
Area	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast	Mawson Coast
Locality	Evans Island	Evans Island	Evans Island	Evans Island	Stinear Island	Evans Island	Stinear Island	Lee Island	Mawson Rock
Rock type	Op granite dyke	Op granite	Op granite	Gt-op granite	Op granite	Op granite	Op granite	Op granite	Op-qz-pl xenolith
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	6,10	6,10	6,10	6,10	6,10	6,10	6,10	6,10	10
SiO ₂	66.30	63.40	64.50	70.80	66.30	66.40	60.60	63.20	57.60
TiO ₂	1.05	0.86	1.12	0.78	0.83	0.96	2.00	1.49	2.37
Al ₂ O ₃	13.57	16.05	14.89	13.58	14.44	15.03	14.71	14.10	15.54
Fe ₂ O ₃	1.08	1.06	1.46	1.06	0.71	1.20	2.03	1.31	0.81
FeO	4.95	4.25	4.00	1.88	3.26	3.24	6.70	5.81	10.10
MnO	0.11	0.09	0.08	0.05	0.07	0.06	0.21	0.16	0.23
MgO	2.59	2.52	2.21	0.86	1.46	1.61	2.55	2.37	2.99
CaO	3.71	3.52	3.75	2.15	2.95	3.36	5.52	4.58	6.73
Na ₂ O	2.05	2.10	2.08	1.61	2.28	2.09	1.84	1.88	2.20
K ₂ O	3.40	5.59	4.38	6.36	5.40	5.19	3.28	3.97	1.03
P ₂ O ₅	0.37	0.32	0.31	0.24	0.28	0.29	0.48	0.37	0.54
H ₂ O ⁺	0.40	0.36	0.29	0.51	0.33	0.38	0.21	0.21	0.34
H ₂ O ⁻			0.07	0.12	0.10	0.13	0.09	0.11	
CO ₂									
Rest	0.27	0.35	0.22	0.25	0.24	0.27	0.29	0.27	0.31
TOTAL	99.85	100.47	99.36	100.25	98.65	100.21	100.51	99.83	100.79
Ba	685	1518	728	823	815	946	1280	1190	1286
Rb	131	246	161	265	260	220	101	132	22
Sr	146	231	179	120	163	172	198	176	208
Pb	27	27	30	41	32	31	15	20	15
Th	68	28	5	73	35	41	3	2	9
U	1	2	<1	<1	1	<1	<1	<1	1
Zr	383	239	260	319	289	325	326	287	394
Nb	15	12	17	14	18	16	21	17	24
Y	31	24	15	30	14	15	33	28	49
La	114	89	39	101	75	91	61	54	74
Ce	223	167	69	183	139	164	120	101	156
Sn			1	<1	<1	<1	<1	<1	
V	98	95	91	32	55	65	86	76	127
Cr	101	97	52	17	32	37	45	57	25
Ni	29	24	23	9	11	12	10	16	10
Cu	35	20	15	11	6	12	22	17	40
Zn	91	62	65	32	51	59	98	81	111
Ga	21	20	19	16	19	19	21	20	23

NORTHERN PRINCE CHARLES MOUNTAINS

Sample Number Area	73281752 NPCM	73281787 NPCM	73281790 NPCM	73281792 NPCM	73281802 NPCM	73281768 NPCM	73281769 NPCM	73281881 NPCM	73281887 NPCM	73281889 NPCM
Locality	Mount Gardner	Mount Wishart	Mount Wishart	Mount Wishart	Mount Willing	Mt Becher- vaise	Mount Stalker	Corry Massif	Carter Peak	Mt Becher- vaise
Rock type	Op-qz-pl- kf gneiss	Op-qz-pl gneiss	Op-qz-pl- kf gneiss	Op-qz-kf- pl gneiss	Op-qz-pl gneiss	Gt-qz-kf- pl gneiss	Gt-qz-kf- pl gneiss	Gt-qz-kf- pl gneiss	Gt-qz-kf- pl gneiss	Gt-qz-pl gneiss
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	2,6	2,6	2,6	2,6	2,6	2,6	2,6	2,6	2,6	2,6
SiO ₂	72.80	70.30	73.90	69.70	69.00	77.10	63.30	75.20	74.90	68.50
TiO ₂	0.20	0.23	0.32	0.39	0.50	0.73	0.78	0.02	0.88	1.22
Al ₂ O ₃	14.28	13.57	11.81	13.01	15.53	10.20	17.23	14.87	11.04	12.95
Fe ₂ O ₃	0.68	0.40	0.80	0.58	1.77	0.90	1.43	<0.05	1.70	3.12
FeO	0.95	4.65	2.60	4.90	1.80	3.75	3.75	0.20	5.15	5.05
MnO	0.03	0.09	0.20	0.49	0.09	0.12	0.08	0.02	0.11	0.10
MgO	0.61	1.30	1.26	1.92	1.01	1.39	2.60	0.07	2.40	2.73
CaO	2.09	3.76	1.61	3.85	4.50	1.53	3.79	2.18	1.51	1.52
Na ₂ O	3.40	3.65	2.20	3.10	4.05	1.70	2.80	4.15	1.45	1.80
K ₂ O	4.30	1.11	4.77	1.13	0.58	1.54	3.40	2.13	0.71	1.94
P ₂ O ₅	0.10	0.06	0.06	0.14	0.10	0.11	0.25	0.04	0.08	0.10
H ₂ O+	0.36	0.26	0.44	0.46	0.36	0.28	0.26	0.60	0.20	0.64
H ₂ O- CO ₂										
Rest	0.23	0.10	0.27	0.16	0.19	0.20	0.25	0.05	0.18	0.23
TOTAL	100.03	99.48	100.24	99.83	99.48	99.55	99.92	99.48	100.31	99.90
Ba	1329	269	1603	548	723	569	936	187	376	422
Rb	113	11	198	36	8	92	191	47	26	155
Sr	250	131	137	184	517	144	270	104	165	106
Pb	35	14	41	23	12	23	26	48	1	16
Th	24	3	19	3	2	29	<1	<1	15	18
U	1	1	1	1	<1	3	<1	<1	2	3
Zr	120	85	47	85	154	273	111	12	210	231
Nb	1	3	4	5	3	10	11	<1	6	16
Y	4	15	13	19	7	34	15	5	28	29
La	27	23	29	20	24	39	18	15	28	29
Ce	45	40	51	44	41	74	37	27	54	61
Sn										
V	19	63	24	52	26	79	104	<1	134	233
Cr	9	26	66	90	5	117	91	<3	178	172
Ni	4	4	20	39	4	41	46	<2	39	90
Cu	5	7	11	32	6	6	41	7	15	11
Zn	17	51	56	74	45	59	100	3	79	140
Ga	13	16	12	13	16	12	25	16	12	22

Sample Number Area	73281755 NPCM	73281763 NPCM	73281786 NPCM	73281801 NPCM	73281875 NPCM	73281882 NPCM	73281776 NPCM	73281892 NPCM	73281597 NPCM	73281647 NPCM
Locality	Mount Gardner	Crohn Massif	Mount Wishart	Mount Willing	Mount Gardner	Corry Massif	Moore Pyramid	Mt. Becher- vaise	Fisher Massif	Fisher Massif
Rock type	Cp-op-pl granulite	Hb-px-pl granulite	Hb-px-pl granulite	Op-pl granulite	Hb-px-pl granulite	Hb-px-pl granulite	Gt-bi-si- cd pelite	Gt-bi-si- cd pelite	Bi granite	Bi granod
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero		
Bibliog. ref.	2	2	2	2	2	2	2,3	2,3	2	2
SiO ₂	63.70	51.60	50.00	45.30	47.80	47.20	69.40	68.70	69.20	65.30
TiO ₂	0.40	0.26	0.59	2.85	0.55	2.31	0.98	0.89	0.49	0.40
Al ₂ O ₃	11.15	8.77	15.34	16.22	16.27	13.27	13.73	14.65	14.56	16.41
Fe ₂ O ₃	1.93	3.16	1.14	6.72	5.59	2.97	2.42	1.65	1.12	1.93
FeO	6.50	10.50	8.40	11.70	6.40	13.20	4.60	4.25	2.00	2.30
MnO	0.19	0.29	0.19	0.34	0.20	0.27	0.15	0.07	0.08	0.09
MgO	7.23	12.72	8.84	3.48	8.40	7.51	2.95	1.74	0.93	1.68
CaO	5.56	9.11	11.07	7.72	11.13	10.26	1.03	0.68	2.71	4.61
Na ₂ O	2.70	1.70	2.40	3.25	2.25	1.85	1.05	1.65	3.60	3.65
K ₂ O	0.40	0.34	1.86	0.41	0.27	0.10	3.06	4.19	3.89	2.04
P ₂ O ₅	0.13	0.15	0.18	1.35	0.17	0.24	0.10	0.10	0.15	0.16
H ₂ O ⁺	0.42	0.52	0.42	0.34	0.22	0.30	0.36	0.78	0.76	1.05
H ₂ O ⁻										
CO ₂										
Rest	0.19	0.28	0.30	0.16	0.17	0.20	0.25	0.25	0.25	0.21
TOTAL	100.50	99.40	100.73	99.84	99.42	99.68	100.08	99.60	99.74	99.83
Ba	199	143	1190	288	311	20	861	657	1120	641
Rb	4	2	58	4	4	1	140	259	179	83
Sr	261	167	237	566	338	233	149	115	331	630
Pb	6	6	19	5	9	1	25	36	10	13
Th	<1	<1	4	2	1	<1	14	28	16	6
U	<1	<1	2	<1	<1	<1	2	5	2	2
Zr	39	25	21	33	17	122	177	276	186	105
Nb	1	2	2	7	1	9	9	17	10	4
Y	11	8	13	39	17	29	26	40	25	12
La	7	15	4	27	6	7	22	35	23	7
Ce	15	36	17	69	20	25	43	71	51	25
Sn									2	<1
V	165	246	263	59	286	437	170	118	45	85
Cr	506	968	357	15	33	129	142	158	8	17
Ni	98	182	79	5	68	140	59	81	4	9
Cu	31	49	<2	25	50	100	3	8	73	36
Zn	76	113	71	160	86	139	117	104	41	57
Ga	11	11	15	21	14	19	19	23	15	16

Sample Number Area	73281650 NPCM	69280225 NPCM	71280007 NPCM	71280126 NPCM	69280152 NPCM	69280334 NPCM	71280140 NPCM	73281594 NPCM
Locality	Mount Willing	Fox Ridge	Mount Kirkby	Taylor Platform	Radok Lake	Radok Lake	Manning Massif	Manning Massif
Rock type	Amphibol. gabbro	Alkali ol basalt	Alkali ol basalt	Quartz tholeiite	Alnoite	Alnoite	Olivine phonolite	Ol-lc phonolite
Age	Protero	Cambrian	?Cambrian	Permian	Cretaceous	Cretaceous	Eocene	Eocene
Bibliog. ref.	2	2,9	2,9	2,9	2,11	2,11	2,9	2,9
SiO ₂	56.40	44.90	48.80	53.10	36.00	36.20	51.40	51.10
TiO ₂	0.68	2.32	1.64	1.64	2.20	2.20	1.21	1.17
Al ₂ O ₃	15.74	14.09	14.84	15.15	9.45	9.50	16.74	16.86
Fe ₂ O ₃	1.98	3.45	2.07	2.04	2.95	2.20	2.48	2.70
FeO	5.65	6.35	6.55	6.70	7.65	8.35	3.25	3.25
MnO	0.14	0.16	0.14	0.12	0.18	0.20	0.10	0.09
MgO	5.12	7.40	7.21	4.57	14.50	14.70	3.88	4.00
CaO	8.23	9.64	7.31	7.43	16.10	15.60	4.26	4.11
Na ₂ O	2.90	2.99	3.22	3.50	1.95	1.78	4.67	5.75
K ₂ O	1.44	3.56	3.88	1.62	2.85	2.75	6.75	5.59
P ₂ O ₅	0.29	0.78	0.51	0.43	0.84	0.69	1.61	1.42
H ₂ O ⁺	1.00	2.80	2.35	0.51	3.35	4.10	2.06	2.79
H ₂ O ⁻		0.29	0.24	0.26	0.32	0.51	1.04	1.01
CO ₂		1.98	1.98	3.22	1.40	1.20	0.08	<0.05
Rest	0.23	0.44	0.36	0.28	0.53	0.61	0.59	0.60
TOTAL	99.80	101.15	101.10	100.57	100.27	100.59	100.12	100.39
Ba	522	1232	1144	907	2150	2400	1394	1420
Rb	47	126	131	44	125	118	132	130
Sr	522	1022	660	535	924	1030	1153	1208
Pb	8	4	6	5			38	36
Th	5	8	8	4	12	15	37	36
U	1	2	1	1	<1	<1	5	4
Zr	79	238	228	158	<1	<1	1161	1118
Nb	4	87	57	27	102	145	155	162
Y	18	26	23	20	16	22	27	26
La	14	60	48	31	34	47	151	156
Ce	36	114	83	59	82	105	242	243
Sn		1	1	<1			4	3
V	218	153	124	113	183	221	45	48
Cr	112	218	179	116	308	444	60	68
Ni	33	149	132	86	286	292	61	66
Cu	57	45	31	20	61	66	27	30
Zn	78	81	92	119	80	89	83	90
Ga	16	15	17	20			26	23

SOUTHERN PRINCE CHARLES MOUNTAINS

Sample Number Area	73281297 SPCM	73281709 SPCM	73281710 SPCM	73281917 SPCM	73281918 SPCM	73281924 SPCM	73282110 SPCM	72280758 SPCM	72280796 SPCM	73281015 SPCM
Locality	Blake Ntks	Keyser Ridge	Keyser Ridge	Mount Twigg	Mount Twigg	Mount Twigg	Mawson Esc. A	Mount Stinear	Mount Stinear	Mount Bloomfield
Rock type	Mus-bi-qz- pl gneiss	Bi-qz-kf- pl gneiss	Bi-qz-pl- kf gneiss	Bi-qz-kf- pl gneiss	Bi-qz-pl- kf gneiss	Bi-qz-pl- kf gneiss	Bi-qz-pl- kf gneiss	Bi-hb gran gneiss	Hb gran gneiss	Bi-hb gran gneiss
Age	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean
Bibliog. ref.	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6
SiO ₂	75.50	73.20	71.60	73.70	72.00	63.80	78.10	71.10	76.60	72.10
TiO ₂	0.05	0.11	0.60	0.22	0.17	0.22	0.06	0.82	0.34	0.76
Al ₂ O ₃	14.57	14.44	13.34	14.61	15.16	14.45	12.06	12.22	11.23	12.22
Fe ₂ O ₃	<0.05	0.14	1.33	0.31	0.20	0.96	0.31	1.06	0.88	1.09
FeO	0.50	0.80	2.35	1.15	1.30	4.60	0.55	3.60	1.45	3.50
MnO	<0.01	0.04	0.06	0.03	0.01	0.09	0.01	0.07	0.07	0.07
MgO	0.09	0.32	0.71	0.44	0.30	0.83	<0.10	0.58	0.33	0.57
CaO	2.23	1.40	1.89	1.43	1.22	3.76	0.25	2.52	1.14	2.31
Na ₂ O	5.10	5.85	3.65	4.20	3.95	3.20	4.35	3.10	2.10	2.75
K ₂ O	1.39	2.60	4.17	3.98	5.23	6.27	4.21	4.12	6.11	4.47
P ₂ O ₅	0.03	0.07	0.19	0.09	0.06	0.39	0.01	0.22	0.04	0.21
H ₂ O ⁺	0.28	0.18	0.50	0.18	0.46	0.40	0.20	0.62	0.24	0.56
H ₂ O- CO ₂										
Rest	0.12	0.10	0.25	0.15	0.18	0.52	0.06	0.26	0.21	0.25
TOTAL	99.80	99.25	100.64	100.49	100.24	99.49	100.07	100.29	100.74	100.86
Ba	523	256	680	415	739	3120	99	705	682	766
Rb	54	112	174	118	196	159	114	151	168	144
Sr	246	222	210	278	200	768	18	84	40	103
Pb	27	25	25	20	58	15	12	13	16	18
Th	13	8	32	16	49	9	19	25	16	25
U	4	1	7	<1	7	2	2	2	3	3
Zr	68	71	340	159	91	12	82	570	482	516
Nb	5	12	24	11	7	3	3	60	26	60
Y	3	8	50	18	7	30	34	85	100	81
La	3	15	154	37	32	85	26	112	25	73
Ce	47	29	269	70	64	190	54	192	109	151
Sn								5	8	
V	3	5	39	12	9	47	<1	28	2	28
Cr	<3	5	12	11	7	11	<3	10	<3	11
Ni	7	2	9	5	3	5	<2	7	14	6
Cu	16	7	8	3	3	1	3	8	<2	20
Zn	6	30	60	28	25	57	11	53	68	53
Ga	17	20	19	17	19	20	18	16	16	16

Sample Number Area	73281048A SPCM	73281076 SPCM	73281238 SPCM	73281378 SPCM	73281383 SPCM	73281413 SPCM	73281421 SPCM	73281633 SPCM	73281933 SPCM	73281934 SPCM
Locality	Mount McCauley	Mount Rymill	Cumpston Massif	Mount Stinear	Mount Stinear	Mawson Esc. B	Mawson Esc. C	Mount Stinear	Cumpston Massif	Cumpston Massif
Rock type	Bi-hb gran gneiss	Bi-hb gran gneiss	Hb-qz-kf- pl gneiss	Bi-hb gran gneiss	Bi-hb gran gneiss	Bi-qz-pl- kf gneiss	Bi-hb gran gneiss	Bi-hb gran gneiss	Hb-qz-pl- kf gneiss	Hb-qz-kf- pl gneiss
Age	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean
Bibliog. ref.	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6
SiO ₂	71.00	71.60	68.50	70.90	70.70	78.50	71.80	69.30	77.60	75.00
TiO ₂	0.78	0.79	0.30	0.70	0.78	0.15	0.73	0.94	0.28	0.47
Al ₂ O ₃	12.34	12.29	15.93	12.02	12.16	11.68	11.93	12.39	11.21	11.35
Fe ₂ O ₃	1.41	1.30	0.97	1.68	1.25	0.39	1.34	1.64	0.69	0.94
FeO	3.70	3.45	1.75	2.95	3.40	1.05	2.95	3.90	2.05	3.20
MnO	0.07	0.07	0.04	0.07	0.07	0.02	0.07	0.11	0.06	0.06
MgO	0.72	0.56	0.71	0.62	0.62	0.06	0.57	0.92	0.08	0.20
CaO	2.29	2.10	3.17	2.06	2.16	0.63	2.07	2.73	0.70	1.50
Na ₂ O	2.40	2.70	5.85	2.65	2.90	3.15	2.95	2.95	4.45	4.55
K ₂ O	4.62	4.71	1.39	4.56	4.43	4.89	4.44	4.09	2.98	2.38
P ₂ O ₅	0.22	0.19	0.09	0.20	0.22	0.03	0.21	0.28	0.06	0.07
H ₂ O ⁺	0.46	0.70	0.46	0.46	0.76	0.26	0.40	0.50	0.20	0.30
H ₂ O- CO ₂										
Rest	0.27	0.30	0.20	0.27	0.27	0.13	0.31	0.37	0.24	0.26
TOTAL	100.28	100.76	99.36	99.14	99.72	100.94	99.77	100.12	100.60	100.28
Ba	720	833	547	688	771	285	837	994	1242	1197
Rb	220	187	28	162	160	218	174	168	47	42
Sr	68	72	835	67	80	37	70	98	39	103
Pb	27	27	4	27	26	21	25	21	3	7
Th	35	29	4	35	33	20	31	31	6	10
U	5	3	1	6	3	4	6	5	2	3
Zr	535	680	131	626	526	182	745	946	464	440
Nb	61	69	4	66	58	13	68	68	11	20
Y	89	91	9	100	82	67	102	116	49	66
La	112	86	10	101	130	53	109	131	27	50
Ce	213	215	25	209	232	104	207	243	55	96
Sn										
V	27	22	20	19	28	2	18	26	2	11
Cr	12	11	<3	6	8	4	8	10	<3	4
Ni	6	6	3	6	6	2	4	6	2	2
Cu	9	12	<2	9	8	4	16	43	3	<2
Zn	71	73	42	68	69	67	69	66	54	70
Ga	16	16	20	17	16	21	17	18	18	19

Sample Number Area	73282113 SPCM	73282120 SPCM	74282541 SPCM	74282542 SPCM	74282549 SPCM	73281411 SPCM	73281484 SPCM	73281485 SPCM	74282551 SPCM	73281020 SPCM
Locality	Mawson Esc. A	Mawson Esc. A	Mawson Esc. A	Mawson Esc. A	Mawson Esc. A	Mawson Esc. B	Mawson Esc. D	Mawson Esc. D	Mawson Esc. A	Clemence Massif
Rock type	Hb-qz-kf- pl gneiss	Hb-qz-pl- kf gneiss	Hb-qz-kf- pl gneiss	Bi-qz-kf- pl gneiss	Bi-qz-pl- kf gneiss	Bi-qz-kf- pl gneiss	Bi-hb-kf- pl gneiss	Qz-hb-kf- pl gneiss	Bi-hb-kf- pl gneiss	Bi-gt-qz- pl gneiss
Age	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Protero
Bibliog. ref.	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6
SiO ₂	69.80	74.90	70.10	77.20	76.30	71.60	62.00	53.20	64.00	67.00
TiO ₂	0.61	0.35	0.45	0.27	0.26	0.32	0.68	1.38	0.16	0.75
Al ₂ O ₃	11.56	11.23	13.15	11.43	10.80	14.99	17.64	14.38	18.47	15.50
Fe ₂ O ₃	2.00	1.58	1.60	<0.05	1.43	1.15	2.05	3.14	0.96	1.41
FeO	5.50	2.30	4.45	1.74	1.70	1.20	2.35	8.20	2.00	4.95
MnO	0.11	0.05	0.09	0.02	0.02	0.02	0.10	0.22	0.05	0.19
MgO	1.13	0.26	0.79	0.64	0.12	0.92	0.67	3.80	0.28	1.29
CaO	1.94	1.18	2.09	0.50	0.26	2.66	2.31	6.78	0.99	3.83
Na ₂ O	3.35	3.75	4.20	4.35	3.10	4.85	7.60	4.75	8.00	2.65
K ₂ O	2.26	3.58	2.57	2.82	4.73	1.83	3.63	2.04	4.06	1.71
P ₂ O ₅	0.12	0.11	0.13	0.05	0.02	0.10	0.16	0.20	0.01	0.20
H ₂ O ⁺	0.68	0.42	0.60	0.26	0.30	0.50	0.62	1.50	0.38	0.44
H ₂ O- CO ₂										
Rest	0.17	0.19	0.16	0.17	0.19	0.13	0.32	0.32	0.19	0.18
TOTAL	99.23	99.90	100.38	99.40	99.23	100.27	100.13	99.91	99.55	100.10
Ba	535	589	613	557	481	308	1149	579	456	394
Rb	90	75	96	53	134	52	111	64	76	120
Sr	124	59	138	62	20	318	124	110	62	206
Pb	13	12	16	7	9	19	18	19	8	22
Th	11	9	8	11	17	6	18	21	14	9
U	2	2	2	1	4	<1	3	4	2	3
Zr	288	432	210	405	522	145	583	523	488	324
Nb	15	20	15	14	23	4	59	52	9	14
Y	67	73	46	55	104	4	96	91	90	68
La	39	51	27	66	76	23	162	59	74	23
Ce	80	106	60	131	125	40	252	149	177	52
Sn						6				
V	<1	12	<1	9	<1	26	24	169	6	31
Cr	3	4	5	5	<3	20	8	101	5	10
Ni	2	4	2	5	2	15	5	52	4	9
Cu	19	6	11	8	8	3	<2	<2	19	31
Zn	64	64	85	24	43	59	61	515	51	104
Ga	18	19	19	16	20	17	15	18	31	21

Sample Number Area	73281022 SPCM	73281071 SPCM	73281086 SPCM	73281112 SPCM	73281137 SPCM	73281142 SPCM	73281145 SPCM	73281146 SPCM	73281324 SPCM	73281328 SPCM
Locality	Clemence Massif	Mount Izabelle	Mount Johns	Mount Cresswell	Shaw Massif	Shaw Massif	Shaw Massif	Shaw Massif	Clemence Massif	Clemence Massif
Rock type	Bi-qz-pl- kf gneiss	Hb-op-qz- pl gneiss	Bi-gt-qz- pl gneiss	Bi-gt-qz- pl gneiss	Bi-qz-pl- kf gneiss	Gt-qz-kf- pl gneiss	Gt-qz-pl- kf gneiss	Gt-qz-kf- pl gneiss	Bi-qz-kf- pl gneiss	Gt-qz-pl- kf gneiss
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6
SiO ₂	70.30	65.40	71.50	76.90	71.30	69.40	74.50	74.50	69.10	71.10
TiO ₂	0.50	0.61	0.53	0.42	0.40	0.46	0.23	0.57	0.42	0.23
Al ₂ O ₃	14.64	15.72	13.84	11.08	13.78	14.92	13.52	12.96	15.24	13.09
Fe ₂ O ₃	1.19	1.44	1.26	0.69	0.50	0.52	0.18	1.07	1.22	0.92
FeO	1.80	3.75	3.05	3.05	2.15	2.60	1.60	3.05	1.80	5.00
MnO	0.05	0.10	0.17	0.05	0.05	0.06	0.02	0.05	0.07	0.09
MgO	0.78	1.55	1.04	0.98	0.56	1.20	0.26	1.18	1.25	0.73
CaO	2.18	4.45	2.55	2.61	1.78	2.51	0.96	1.18	3.63	0.52
Na ₂ O	3.80	3.00	3.25	2.40	3.00	3.65	2.95	1.70	3.90	1.55
K ₂ O	3.76	2.98	2.51	0.91	4.44	2.92	5.52	1.83	2.00	5.49
P ₂ O ₅	0.19	0.11	0.11	0.10	0.11	0.11	0.14	0.04	0.12	0.06
H ₂ O ⁺	0.36	0.36	0.66	0.52	0.58	0.64	0.44	1.15	0.76	0.54
H ₂ O ⁻										
CO ₂										
Rest	0.30	0.23	0.25	0.12	0.22	0.19	0.18	0.19	0.20	0.44
TOTAL	99.85	99.70	100.72	99.83	98.87	99.18	100.50	99.47	99.71	99.76
Ba	1341	959	1142	207	820	713	520	528	690	2374
Rb	203	96	80	45	190	119	334	99	53	167
Sr	355	334	260	180	210	244	137	173	473	138
Pb	37	18	22	19	29	24	47	21	14	49
Th	27	6	19	11	45	17	54	17	6	32
U	5	1	2	3	3	2	7	3	<1	2
Zr	244	171	256	137	240	179	127	194	135	568
Nb	17	6	7	7	10	12	16	8	4	3
Y	27	26	27	15	26	20	38	25	12	80
La	74	22	31	16	14	26	37	26	22	88
Ce	113	49	75	34	148	54	82	52	44	157
Sn										
V	31	62	37	60	23	43	8	82	48	17
Cr	12	45	13	100	9	41	7	116	9	3
Ni	5	8	9	25	3	16	2	39	5	4
Cu	7	<2	13	9	5	<2	<2	18	19	3
Zn	54	91	68	34	62	62	59	72	114	36
Ga	20	17	18	14	18	18	20	15	16	11

Sample Number Area	73281331 SPCM	73281333 SPCM	73281334 SPCM	73281365 SPCM	73281372 SPCM	73281376 SPCM	73281557 SPCM	73281584 SPCM	73281675 SPCM	73282137 SPCM
Locality	Clemence Massif	Dalton Hills	Dalton Hills	Mawson Esc. K	Mount Johns	Mount Johns	Mawson Esc. K	Barkell Platform	Mawson Esc. M	Mawson Esc. G
Rock type	Gt-qz-pl- kf gneiss	Bi-qz-pl- kf gneiss	Bi-qz-pl- kf gneiss	Gt-qz-pl- kf gneiss	Gt-bi-qz- kf gneiss	Bi-qz-pl- kf gneiss	Bi-qz-kf- pl gneiss	Bi-qz-pl- kf gneiss	Gt-qz-kf- pl gneiss	Bi-gt-qz- pl gneiss
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6
SiO ₂	67.10	71.10	75.40	66.20	61.90	73.20	68.50	70.70	60.80	63.40
TiO ₂	1.07	0.37	0.14	0.82	0.93	0.38	0.57	0.37	0.75	1.01
Al ₂ O ₃	14.33	14.74	13.40	15.01	16.69	13.29	14.70	15.26	15.78	15.06
Fe ₂ O ₃	1.08	0.65	0.32	0.93	0.96	1.05	0.87	0.39	5.41	1.30
FeO	4.80	2.05	0.80	4.00	4.95	1.15	3.40	1.50	8.35	6.75
MnO	0.09	0.06	0.02	0.04	0.03	0.04	0.04	0.01	0.16	0.09
MgO	0.98	0.54	0.21	2.22	1.89	0.54	1.10	0.66	2.90	1.82
CaO	2.86	1.77	1.14	0.92	0.14	1.40	2.71	2.40	2.69	3.47
Na ₂ O	2.70	3.60	3.10	1.90	2.10	3.00	3.40	3.60	1.95	2.75
K ₂ O	3.74	4.50	5.23	6.92	9.58	5.17	3.49	4.06	0.70	2.26
P ₂ O ₅	0.44	0.12	0.04	0.22	0.04	0.12	0.21	0.10	0.10	0.35
H ₂ O+	0.80	0.64	0.46	0.70	0.82	0.20	0.58	0.36	0.48	0.86
H ₂ O- CO ₂										
Rest	0.34	0.23	0.18	0.33	0.22	0.23	0.19	0.28	0.17	0.29
TOTAL	100.33	100.37	100.44	100.21	100.25	99.77	99.76	99.69	100.24	99.41
Ba	1397	840	721	1470	558	906	642	1394	58	1140
Rb	163	249	243	167	356	166	141	104	54	118
Sr	302	194	143	258	38	211	193	283	230	295
Pb	22	39	52	55	42	35	20	25	9	19
Th	37	24	28	60	18	24	38	64	14	12
U	3	7	22	4	27	2	2	3	3	2
Zr	388	242	133	307	234	240	253	255	191	263
Nb	20	17	8	22	14	12	14	3	17	16
Y	55	34	16	61	16	22	14	3	68	27
La	92	45	32	74	30	73	49	63	46	56
Ce	183	82	73	142	61	131	91	103	88	103
Sn										
V	46	21	6	50	92	17	32	18	135	77
Cr	15	7	2	27	141	7	18	5	143	66
Ni	4	2	<2	22	40	3	9	3	71	34
Cu	4	9	2	<2	<2	4	11	2	44	22
Zn	108	72	33	76	78	46	54	29	105	97
Ga	20	22	18	22	22	18	17	19	17	19

Sample Number Area	73282138 SPCM	73281222A SPCM	73281300E SPCM	73281914 SPCM	73281921 SPCM	73281904 SPCM	73281034 SPCM	73281046 SPCM	73281105 SPCM	73281110 SPCM
Locality	Mawson Esc. G	Mount Borland	Blake Ntks	Mount Twigg	Mount Twigg	Mount Newton	Mount Mather	Mount Menzies	Mount Cresswell	Mount Cresswell
Rock type	Gt-bi-qz- pl gneiss	Amphib- olite	Amphib- olite	Gt amphib- olite	Amphib- olite	Hb-px-pl granulite	Amphib- olite	Amphib- olite	Amphib- olite	Gt amphib- olite
Age	Protero	?Archaean	?Archaean	?Archaean	?Archaean	?Archaean	?Protero	?Protero	Protero	Protero
Bibliog. ref.	1,2,6	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2
SiO ₂	65.10	50.20	47.70	50.00	49.60	55.40	55.00	52.90	51.60	50.30
TiO ₂	0.85	1.89	3.67	2.58	3.03	0.74	0.49	0.26	1.62	0.98
Al ₂ O ₃	14.63	13.45	13.55	13.39	12.13	12.01	14.81	14.82	13.08	14.49
Fe ₂ O ₃	1.12	2.88	2.37	4.30	2.62	1.59	2.17	1.82	2.50	1.40
FeO	6.15	10.60	12.30	11.10	13.40	9.55	7.30	6.15	9.00	10.40
MnO	0.07	0.22	0.19	0.22	0.23	0.21	0.11	0.16	0.18	0.20
MgO	1.46	6.42	6.45	5.07	5.48	6.07	5.47	8.84	7.28	7.53
CaO	3.08	10.29	9.74	9.43	9.70	11.45	9.88	12.06	10.28	11.44
Na ₂ O	3.20	2.45	2.35	1.05	2.05	1.20	2.30	1.65	2.25	0.92
K ₂ O	2.51	0.62	0.54	0.56	0.62	0.93	0.62	0.28	0.62	0.30
P ₂ O ₅	0.30	0.18	0.44	0.25	0.29	0.16	0.08	0.07	0.16	0.10
H ₂ O+	0.72	0.92	0.56	0.80	0.74	0.72	3.60	2.70	1.40	1.10
H ₂ O-										
CO ₂										
Rest	0.22	0.20	0.23	0.20	0.23	0.13	0.14	0.17	0.20	0.16
TOTAL	99.41	100.32	100.09	98.95	100.12	100.16	101.97	101.88	100.17	99.32
Ba	766	63	117	23	77	176	151	53	121	9
Rb	118	16	13	9	14	39	21	5	19	3
Sr	247	221	484	99	226	57	181	132	251	151
Pb	19	2	6	3	3	8	5	5	3	4
Th	15	<1	2	2	2	3	2	1	1	1
U	2	1	5	2	6	1	<1	<1	2	1
Zr	239	123	162	157	181	110	68	33	106	56
Nb	17	11	11	7	9	6	3	1	6	2
Y	22	28	26	38	37	26	17	10	23	21
La	59	12	9	13	10	21	6	3	9	<2
Ce	105	30	21	35	35	51	19	8	20	11
Sn										
V	56	321	365	416	438	227	182	164	354	291
Cr	47	177	166	94	115	60	112	510	255	318
Ni	20	96	102	62	77	70	115	177	127	122
Cu	20	228	51	279	189	8	25	34	21	6
Zn	78	120	137	150	152	97	91	60	93	98
Ga	18	18	20	22	24	15	14	12	18	17

Sample Number Area	73281252 SPCM	73281264 SPCM	73281303 SPCM	73281310 SPCM	73281475 SPCM	73281501 SPCM	73281685 SPCM	73281867 SPCM	73282147 SPCM	73281564 SPCM
Locality	Mount Menzies	Mount McCauley	Shaw Massif	Mount Rymill	Cumpston Massif	Mount McCauley	Mount Johns	Mawson Esc.L	Mawson Esc.I	Mawson Esc.K
Rock type	Amphib- olite	Amphib- olite	Cp amphib- olite	Amphib- olite	Bi amphib- olite	Gt amphib- olite	Amphib- olite	Cp amphib- olite	Amphib- olite	Hb-op-pl granulite
Age	?Protero	Protero	Protero	?Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2
SiO ₂	54.70	48.50	47.80	50.70	45.20	51.10	50.50	50.70	50.30	45.20
TiO ₂	0.11	1.81	0.23	3.31	4.36	3.26	1.26	0.93	1.85	2.67
Al ₂ O ₃	15.59	13.68	15.49	12.52	14.96	12.63	17.25	13.57	14.52	13.80
Fe ₂ O ₃	0.98	3.01	2.21	3.20	2.02	2.18	2.88	3.55	1.80	2.67
FeO	5.75	12.10	6.95	13.10	12.20	12.50	8.20	10.60	13.10	13.90
MnO	0.15	0.22	0.18	0.29	0.20	0.23	0.23	0.24	0.22	0.25
MgO	7.46	5.45	10.44	4.59	5.53	5.38	4.68	6.92	5.13	7.65
CaO	11.32	9.48	14.72	9.43	7.86	8.86	8.80	10.35	8.04	10.27
Na ₂ O	1.90	2.40	0.96	1.15	2.95	1.35	4.30	2.30	3.85	2.30
K ₂ O	0.29	1.51	0.35	0.27	1.13	0.21	1.35	0.57	0.56	0.80
P ₂ O ₅	0.03	0.21	0.03	0.57	1.11	0.69	0.29	0.09	0.14	0.21
H ₂ O ⁺	1.40	1.05	0.92	1.10	2.75	0.90	0.76	0.66	0.92	0.56
H ₂ O- CO ₂										
Rest	0.11	0.21	0.09	0.20	0.25	0.18	0.19	0.15	0.17	0.23
TOTAL	99.79	99.63	100.37	100.43	100.52	99.47	100.69	100.63	100.60	100.51
Ba	42	198	40	<3	475	<3	280	30	81	51
Rb	8	69	4	1	59	2	29	7	3	5
Sr	126	114	105	111	363	116	514	61	121	144
Pb	2	9	5	7	14	5	22	1	5	4
Th	1	<1	<1	10	2	4	2	1	<1	<1
U	<1	1	<1	3	1	2	3	3	<1	<1
Zr	31	70	4	414	353	327	90	55	132	126
Nb	1	5	<1	21	15	16	4	3	8	14
Y	18	32	6	86	53	59	26	22	49	41
La	7	4	<2	35	32	<2	17	7	11	10
Ce	19	15	5	81	80	22	34	18	36	36
Sn										
V	115	322	204	292	125	334	232	264	268	452
Cr	205	147	79	85	123	137	46	233	178	177
Ni	164	78	81	59	52	48	18	114	106	113
Cu	2	283	<2	13	20	12	31	96	28	270
Zn	55	143	82	161	168	145	127	81	138	160
Ga	14	18	12	20	22	22	21	18	20	26

Sample Number Area	73281570 SPCM	73281580 SPCM	73281661 SPCM	73281662 SPCM	73281667 SPCM	73281671 SPCM	73281682 SPCM	73281861 SPCM	73282141 SPCM	72280713B SPCM
Locality	Mawson Esc.K	Mawson Esc.K	Mawson Esc.M	Mawson Esc.M	Mawson Esc.M	Mawson Esc.M	Mawson Esc.M	Mawson Esc.M	Mawson Esc.G	Mount Menzies
Rock type	Hb-px-pl granulite	Hb-px-pl granulite	Hb-px-pl granulite	Hb-px-pl granulite	Hb-px-pl granulite	Hb-px-pl granulite	Hb-px-pl granulite	Hb-px-pl granulite	Hb-px-pl granulite	Ctd-ch-mus quartzite
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Archaean
Bibliog. ref.	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2	1,2,3
SiO ₂	50.20	46.80	46.70	47.30	47.20	48.10	52.10	57.80	51.20	80.80
TiO ₂	1.56	2.00	1.55	1.59	2.09	3.09	0.72	0.49	1.66	0.40
Al ₂ O ₃	14.65	13.47	13.48	13.74	14.35	12.88	14.24	11.61	16.62	10.43
Fe ₂ O ₃	1.31	1.29	3.94	4.29	3.02	2.76	1.33	1.76	2.79	0.60
FeO	12.40	12.70	10.50	10.40	12.40	18.10	8.95	8.15	10.50	3.25
MnO	0.22	0.22	0.24	0.24	0.23	0.29	0.19	0.40	0.16	0.07
MgO	6.72	7.62	7.05	6.78	7.13	5.69	7.23	9.19	3.71	0.84
CaO	9.80	12.02	11.55	11.28	9.39	6.35	9.91	8.59	5.94	<0.01
Na ₂ O	2.45	0.70	2.80	2.85	2.55	2.30	3.20	0.80	3.05	0.10
K ₂ O	0.42	0.41	1.13	1.10	0.68	0.26	0.61	1.08	1.88	1.04
P ₂ O ₅	0.15	0.20	0.17	0.16	0.19	0.19	0.09	0.11	0.40	0.02
H ₂ O+	0.48	1.05	0.94	0.68	0.58	0.58	0.68	0.50	1.20	1.75
H ₂ O-										
CO ₂										
Rest	0.17	0.19	0.17	0.16	0.20	0.13	0.16	0.42	0.21	0.15
TOTAL	100.53	98.67	100.22	100.57	100.01	100.72	99.41	100.90	99.32	99.44
Ba	57	59	92	66	37	50	69	69	174	138
Rb	8	27	8	6	3	1	9	77	92	41
Sr	127	245	157	149	152	241	82	34	237	36
Pb	9	3	6	8	5	2	9	5	17	24
Th	<1	1	<1	<1	<1	3	1	2	1	11
U	<1	<1	<1	1	<1	1	2	1	2	4
Zr	46	107	82	80	104	152	74	48	249	168
Nb	8	5	4	4	8	6	4	3	18	9
Y	24	33	31	31	32	23	25	16	18	20
La	8	5	3	3	5	2	8	4	31	28
Ce	24	27	16	17	27	8	23	13	64	51
Sn										2
V	353	381	384	374	368	162	263	214	205	63
Cr	108	172	102	95	230	13	234	1146	132	369
Ni	78	130	84	82	125	6	134	375	63	32
Cu	189	<2	76	73	134	<2	47	<2	79	4
Zn	129	134	123	113	137	263	109	1092	209	141
Ga	22	21	18	18	24	26	16	18	24	13

Sample Number Area	72280713F SPCM	72280750A SPCM	72280754 SPCM	72280756 SPCM	73281257 SPCM	73281309 SPCM	73281312B SPCM	73281513 SPCM	73281515 SPCM	73281603 SPCM
Locality	Mount Menzies	Mount Stinear	Mount Stinear	Mount Stinear	Mount Menzies	Mount Rymill	Mount Rymill	Mount Mather	Mount Mather	Mount Stinear
Rock type	Ky quartzite	Mus quartzite	Ky quartzite	Quartzite	Ky-ch quartzite	Quartzite	Quartzite	Ky-st-mus quartzite	Ky-st quartzite	Ky-mus quartzite
Age	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean	Archaean
Bibliog. ref.	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3
SiO ₂	94.20	89.10	96.80	98.30	98.00	99.50	96.80	92.20	97.30	94.90
TiO ₂	0.17	0.30	0.11	0.02	0.04	0.01	0.06	0.24	0.11	0.05
Al ₂ O ₃	4.62	7.68	3.15	0.86	0.99	0.14	2.60	6.58	3.00	3.68
Fe ₂ O ₃	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
FeO	0.16	0.20	0.16	0.05	0.36	0.11	0.06	0.04	0.02	0.03
MnO	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
MgO	<0.10	<0.10	<0.10	<0.10	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
CaO	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Na ₂ O	0.04	0.30	0.05	0.09	0.10	0.03	0.13	0.05	0.07	0.22
K ₂ O	0.10	1.92	0.15	0.14	<0.01	<0.01	0.64	<0.01	<0.01	0.57
P ₂ O ₅	0.01	0.01	0.02	<0.01	0.02	0.01	0.01	0.03	0.01	0.01
H ₂ O ⁺	0.18	1.00	0.28	0.14	0.34	0.14	0.54	0.24	0.14	0.46
H ₂ O ⁻										
CO ₂										
Rest	0.07	0.10	0.04	0.03	0.03	0.01	0.07	0.09	0.04	0.03
TOTAL	99.38	100.44	100.59	99.45	99.92	99.77	100.74	99.29	100.51	99.78
Ba	34	205	33	20	21	19	86	14	13	41
Rb	5	52	10	7	3	1	30	1	1	35
Sr	9	59	12	9	9	1	14	4	2	17
Pb	17	9	2	1	1	1	4	1	<1	1
Th	10	8	5	<1	3	1	<1	11	2	1
U	2	1	1	<1	1	<1	1	3	<1	<1
Zr	137	171	55	57	54	16	111	337	144	72
Nb	5	8	3	<1	1	1	2	7	2	1
Y	9	14	6	4	5	1	4	13	6	6
La	22	19	15	5	6	<2	<2	23	4	13
Ce	40	41	27	12	19	6	14	45	13	28
Sn	1	1	<1	<1						
V	11	41	11	1	2	<1	5	12	8	1
Cr	203	167	97	88	83	20	220	155	109	11
Ni	25	7	<2	2	3	5	3	1	<2	<2
Cu	10	<2	2	<2	7	2	4	7	6	5
Zn	8	<2	3	11	3	<2	<2	4	<2	<2
Ga	6	10	4	1	1	1	3	8	4	4

Sample Number Area	72280774 SPCM	73281042 SPCM	73281118 SPCM	73281206 SPCM	73281274 SPCM	73281689 SPCM	73281742 SPCM	73281347 SPCM	73281511 SPCM	73281652 SPCM
Locality	Mount Stinear	Mount Menzies	Seavers Ntk	Mount Bird	Keyser Ridge	Mount Stinear	Blake Ntk	Mount McCauley	Mount McCauley	Mawson Esc.F
Rock type	Gt-bi-st- ch pelite	Gt-bi-mus- pelite	Gt-bi-ky- st-pelite	Ctd-gt-si- ch pelite	Ctd-gt-bi- st pelite	Bi-ky-st- ch pelite	Gt-bi-ky- st pelite	Bi-si-cd- st pelite	Bi-si-mus- pelite	Gt-bi-si- cd pelite
Age	Archaean	Archaean	Archaean	?Archaean	?Archaean	Archaean	?Archaean	Protero	Protero	Protero
Bibliog. ref.	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3
SiO ₂	58.40	61.00	67.80	52.20	53.40	66.90	50.60	59.10	45.40	49.90
TiO ₂	0.79	0.85	0.75	0.86	0.85	0.70	1.30	0.98	1.06	0.89
Al ₂ O ₃	18.43	18.18	17.77	26.06	26.47	17.03	19.53	24.91	27.09	23.21
Fe ₂ O ₃	5.19	2.85	1.62	2.36	5.77	1.78	7.97	0.92	1.49	2.21
FeO	8.30	5.35	3.85	9.15	6.50	3.55	10.80	4.40	7.00	9.20
MnO	0.11	0.19	0.12	0.10	0.09	0.04	0.14	0.06	0.12	0.15
MgO	3.87	2.39	2.44	1.45	1.18	4.60	2.88	3.82	5.54	2.67
CaO	0.29	0.93	0.60	0.21	0.27	0.44	2.45	0.30	0.21	0.72
Na ₂ O	0.17	0.37	0.70	0.88	0.37	1.15	0.14	0.80	1.00	2.15
K ₂ O	2.70	4.45	2.46	2.80	2.18	2.43	2.14	2.24	7.81	6.60
P ₂ O ₅	0.16	0.14	0.11	0.18	0.11	0.03	0.03	0.11	0.06	0.06
H ₂ O+	1.45	2.10	1.60	4.20	2.48	1.45	1.05	1.70	3.10	1.15
H ₂ O-										
CO ₂										
Rest	0.27	0.26	0.26	0.21	0.19	0.32	0.26	0.30	0.48	0.33
TOTAL	100.13	99.06	100.08	100.66	99.86	100.42	99.29	99.64	100.36	99.24
Ba	369	615	347	420	428	399	428	422	1038	537
Rb	114	156	105	190	134	96	136	92	499	425
Sr	22	50	153	104	57	92	17	156	44	148
Pb	3	28	7	15	10	2	6	9	15	47
Th	7	14	9	29	35	5	10	8	10	14
U	2	3	2	6	4	2	2	3	4	3
Zr	148	269	192	213	174	177	189	158	244	139
Nb	10	19	14	18	18	7	13	13	19	10
Y	33	48	44	39	25	18	12	32	39	33
La	38	20	58	18	<2	14	22	23	<2	23
Ce	58	52	61	100	86	33	52	49	60	53
Sn	2									
V	192	203	143	172	155	146	243	217	235	222
Cr	682	264	424	153	189	937	371	648	1066	374
Ni	232	111	153	61	60	346	110	185	178	365
Cu	7	40	101	3	4	29	<2	49	35	10
Zn	64	118	119	79	71	57	324	107	148	161
Ga	21	26	23	31	35	18	28	33	36	30

Sample Number Area	73281926 SPCM	73281541 SPCM	73281542 SPCM	73281543 SPCM	R11371 SPCM	73281285 SPCM	73281314 SPCM	73281551 SPCM	73281624 SPCM	73281723 SPCM
Locality	Cumpston Massif	Mount Bayliss	Mount Bayliss	Mount Bayliss	Mount Bayliss	Mount Ruker	Mount Rymill	Mount Ruker	Mount Ruker	Mount Ruker
Rock type	Bi trond gneiss	Bi gran gneiss	Hb-bi gran gneiss	Bi gran gneiss	Bi gran gneiss	Bi granite	Bi granite	Bi granite	Bi granite	Bi granite
Age	Archaean	Archaean	Archaean	Archaean	?Archaean	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	1,2,6	1,2,6	1,2,6	1,2,6	1,2	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6
SiO ₂	78.60	69.70	69.60	69.50	76.30	75.70	75.70	73.70	75.60	72.00
TiO ₂	0.21	0.68	0.68	0.55	0.21	0.14	0.11	0.21	0.05	0.16
Al ₂ O ₃	11.21	13.33	13.49	13.59	11.46	13.13	13.37	13.43	13.04	14.16
Fe ₂ O ₃	0.28	1.31	1.16	1.52	1.23	0.13	0.35	0.71	0.20	0.46
FeO	1.25	3.00	3.15	2.30	2.00	1.20	1.15	1.25	1.30	1.35
MnO	0.03	0.07	0.07	0.05	0.06	0.02	0.03	0.02	0.01	0.05
MgO	0.32	1.07	1.14	0.95	0.07	0.18	0.24	0.33	0.03	0.23
CaO	1.20	2.43	2.92	2.04	0.90	0.86	0.51	1.30	0.77	0.96
Na ₂ O	4.80	3.35	3.40	3.40	3.00	3.45	4.20	3.60	4.00	3.45
K ₂ O	1.01	3.93	3.24	4.26	4.40	4.96	4.42	4.43	4.38	5.47
P ₂ O ₅	0.05	0.23	0.20	0.17	0.04	0.04	0.02	0.06	0.02	0.06
H ₂ O+	0.20	0.76	0.60	0.70	0.38	0.44	0.22	0.50	1.30	0.58
H ₂ O-										
CO ₂										
Rest	0.18	0.25	0.26	0.23	0.18	0.14	0.15	0.15	0.11	0.18
TOTAL	99.34	100.11	99.91	99.26	100.23	100.39	100.47	99.69	100.81	99.11
Ba	388	696	749	726	249	458	312	321	341	595
Rb	34	188	176	166	240	185	304	166	234	256
Sr	196	256	229	177	47	76	49	92	67	118
Pb	12	27	43	13	21	16	44	63	23	32
Th	18	18	25	19	34	41	50	44	29	43
U	3	4	4	4	5	4	11	11	11	4
Zr	417	378	362	321	267	152	141	157	97	197
Nb	23	29	26	27	37	19	36	16	14	17
Y	86	69	67	63	127	19	93	19	13	25
La	86	62	79	70	119	48	46	46	10	75
Ce	159	134	162	135	238	93	86	88	23	137
Sn					8	1	10	2	1	2
V	3	50	52	40	2	6	2	7	<1	7
Cr	<3	27	26	21	4	<3	3	4	2	3
Ni	4	19	19	14	3	4	3	20	<2	3
Cu	10	18	19	11	<2	3	<2	134	4	2
Zn	27	68	67	42	46	22	40	21	17	26
Ga	17	18	19	18	19	17	23	18	23	19

Sample Number Area	73281730 SPCM	73281852A SPCM	73282122 SPCM	73282124 SPCM	73282126 SPCM	73282131 SPCM	72280846 SPCM	73281039A SPCM	73281039B SPCM	73281094 SPCM
Locality	Mount Ruker	Mount Ruker	Mawson Esc. G	Mawson Esc. G	Mawson Esc. G	Mawson Esc. G	Mount Dummett	Mount Mather	Mount Mather	Mount Scherger
Rock type	Bi granite	Bi granite	Bi granite	Bi-mus granite	Bi-mus granite	Bi granite	Bi-mus granite	Bi granite	Bi granite	Bi-mus granite
Age	Protero	Protero	Cambrian	Cambrian	Cambrian	Cambrian	Cambrian	Cambrian	Cambrian	Cambrian
Bibliog. ref.	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2,6	1,2	1,2	1,2	1,2
SiO ₂	75.10	71.40	74.80	73.60	76.00	75.00	75.70	72.50	73.10	76.10
TiO ₂	0.14	0.29	0.14	0.27	0.08	0.06	0.02	0.28	0.17	0.17
Al ₂ O ₃	13.41	13.99	13.56	14.25	13.17	13.56	14.23	15.62	14.80	14.92
Fe ₂ O ₃	0.45	0.74	0.14	0.11	0.15	0.17	0.03	0.24	0.16	0.82
FeO	0.90	1.65	1.45	2.10	0.95	0.60	0.25	1.15	0.75	0.50
MnO	0.03	0.03	0.05	0.03	0.03	0.01	0.01	0.01	0.02	0.02
MgO	0.20	0.36	0.12	0.37	0.09	0.02	0.09	0.49	0.28	0.05
CaO	1.01	1.84	0.98	1.27	0.49	0.84	0.67	2.47	1.46	1.49
Na ₂ O	3.35	3.60	3.25	3.25	3.55	3.40	4.90	4.75	4.65	5.15
K ₂ O	5.08	4.59	4.93	4.88	4.52	5.49	3.63	2.50	3.56	0.94
P ₂ O ₅	0.07	0.08	0.05	0.09	0.04	0.05	0.19	0.03	0.03	0.10
H ₂ O+	0.48	0.50	0.44	0.50	0.50	0.34	0.40	0.22	1.10	0.50
H ₂ O-										
CO ₂										
Rest	0.15	0.14	0.15	0.22	0.13	0.11	0.05	0.15	0.14	0.10
TOTAL	100.37	99.21	100.06	100.94	99.70	99.65	100.17	100.41	100.22	100.86
Ba	528	451	318	803	185	172	32	394	523	151
Rb	239	144	402	337	372	345	216	56	66	47
Sr	104	126	58	105	32	50	26	449	287	183
Pb	25	18	53	50	56	72	71	21	22	67
Th	36	14	45	43	36	17	3	6	9	40
U	7	2	13	10	26	23	3	1	1	8
Zr	147	180	137	226	103	91	16	176	100	167
Nb	11	9	50	41	60	21	14	6	5	9
Y	36	30	47	43	63	81	15	2	4	13
La	47	41	27	50	19	6	<2	22	26	27
Ce	89	106	55	95	44	18	7	46	48	50
Sn	1	1	12	7	10	10	1	<1	<1	6
V	6	15	4	13	2	<1	<1	15	9	6
Cr	3	5	<3	7	<3	<3	<3	3	3	<3
Ni	2	4	3	5	2	2	<2	3	3	<2
Cu	<2	<2	<2	<2	<2	<2	4	2	4	<2
Zn	10	39	42	46	22	16	27	31	20	12
Ga	17	18	22	21	25	25	21	17	17	22

Sample Number Area	73281322 SPCM	73281337 SPCM	73281340 SPCM	73281609 SPCM	73281100 SPCM	72280762 SPCM	72280766 SPCM	72280856 SPCM	73281077 SPCM	73281098 SPCM
Locality	Mount Johns	Mount McCauley	Mount McCauley	Mount Dummett	Mount Scherger	Mount Stinear	Mount Stinear	Mount Ruker	Mount Rymill	Mount Scherger
Rock type	Bi-gt granite	Bi-mus granite	Bi-gt-mus granite	Bi-mus granite	Bi-mus granite	Amphibol. tholeiite	Amphibol. tholeiite	Quartz tholeiite	Amphibol. tholeiite	Amphibol. tholeiite
Age	?Cambrian	Cambrian	Cambrian	Cambrian	Cambrian	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	1,2	1,2	1,2	1,2	1,2	1,2,9	1,2,9	1,2,9	1,2,9	1,2,9
SiO ₂	76.20	74.10	74.60	73.90	73.70	50.60	49.50	49.00	47.30	49.10
TiO ₂	0.02	0.06	0.01	0.10	0.05	2.41	3.15	1.94	0.35	1.32
Al ₂ O ₃	14.03	15.27	14.58	15.16	14.78	12.92	11.92	13.30	15.12	14.17
Fe ₂ O ₃	0.20	0.28	0.23	0.03	0.06	3.17	2.65	1.58	1.15	2.42
FeO	0.45	0.85	0.60	0.65	0.35	11.50	14.10	12.20	8.10	11.00
MnO	0.05	0.02	0.09	0.01	0.01	0.23	0.29	0.22	0.15	0.18
MgO	0.12	0.13	0.02	0.15	0.03	5.34	4.65	5.86	14.39	6.53
CaO	1.08	0.79	0.71	1.80	1.26	7.57	9.00	10.83	10.30	10.06
Na ₂ O	3.70	3.80	4.75	3.75	4.65	2.50	2.30	2.30	1.15	2.90
K ₂ O	4.74	4.38	3.83	2.90	4.36	1.51	0.68	0.36	0.16	1.59
P ₂ O ₅	0.02	0.10	0.03	0.03	0.24	0.23	0.48	0.19	0.05	0.14
H ₂ O ⁺	0.22	0.74	0.34	0.64	0.64	1.60	0.94	1.40	2.15	0.76
H ₂ O ⁻						0.07				
CO ₂						0.08				
Rest	0.13	0.07	0.06	0.37	0.14	0.22	0.22	0.19	0.23	0.19
TOTAL	100.96	100.59	99.85	99.49	100.27	99.95	99.88	99.37	100.60	100.36
Ba	720	63	16	1963	549	89	176	81	15	85
Rb	98	245	256	54	185	62	16	8	7	97
Sr	106	54	22	1005	126	122	104	182	76	93
Pb	77	65	76	43	74	11	4	2	1	3
Th	3	4	5	1	30	4	7	1	<1	2
U	1	6	3	1	6	2	3	1	<1	<1
Zr	41	22	35	67	102	169	300	111	29	82
Nb	<1	27	23	1	8	10	17	6	1	4
Y	18	24	26	3	24	35	62	29	9	29
La	5	4	<2	2	22	11	5	6	2	2
Ce	9	13	8	14	41	25	19	18	6	14
Sn	1	9	6	<1	1	2	3			
V	1	<1	<1	9	1	437	344	342	122	337
Cr	<3	<3	<3	<3	<3	111	101	97	741	276
Ni	<2	<2	<2	8	<2	96	62	68	554	102
Cu	3	<2	<2	2	<2	186	194	239	30	38
Zn	3	44	11	15	12	148	137	114	72	127
Ga	15	30	31	15	20	20	21	21	11	18

Sample Number	73281279	73281281	73281313	73281402	73281419	73281425	73281620B	73281642	73281748	73281927
Area	SPCM	SPCM	SPCM	SPCM	SPCM	SPCM	SPCM	SPCM	SPCM	SPCM
Locality	Mount Ruker	Mount Ruker	Mount Rymill	Mawson Esc. B	Machin Ntk	Mawson Esc. C	Mount Ruker	Mount Stinear	Mount Newton	Cumpston Massif
Rock type	Amphibol. tholeiite	Amphibol. tholeiite	Amphibol. tholeiite	Amphibol. tholeiite	Amphibol. tholeiite	Amphibol. tholeiite	Amphibol. tholeiite	Amphibol. tholeiite	Quartz tholeiite	Metasomat. tholeiite
Age	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero	Protero
Bibliog. ref.	1,2,9	1,2,9	1,2,9	1,2,9	1,2,9	1,2,9	1,2,9	1,2,9	1,2,9	1,2,9
SiO ₂	48.80	48.40	50.80	50.10	49.80	51.50	51.70	49.20	47.70	51.30
TiO ₂	1.09	1.02	1.10	1.10	2.00	1.72	0.73	2.32	3.20	2.37
Al ₂ O ₃	16.31	15.07	13.66	14.16	12.88	13.74	14.15	14.93	12.64	11.20
Fe ₂ O ₃	1.32	1.06	2.48	1.91	2.00	2.39	0.89	1.98	3.65	3.13
FeO	9.50	11.40	10.30	9.50	12.80	12.40	8.90	10.10	13.80	9.35
MnO	0.17	0.21	0.21	0.19	0.24	0.20	0.19	0.17	0.25	0.20
MgO	6.18	8.64	6.73	7.65	5.95	4.03	7.72	5.40	5.19	4.66
CaO	12.45	10.61	10.60	11.80	10.58	8.94	11.34	10.98	9.85	9.03
Na ₂ O	2.20	1.95	2.10	1.95	2.05	2.05	2.60	3.00	2.40	1.55
K ₂ O	0.17	0.29	0.49	0.21	0.44	0.98	0.04	0.27	0.34	5.21
P ₂ O ₅	0.06	0.09	0.10	0.10	0.19	0.22	0.08	0.26	0.28	0.41
H ₂ O ⁺	1.50	1.40	1.10	0.88	0.88	1.10	1.58	0.88	0.60	0.80
H ₂ O ⁻							0.06			
CO ₂										0.55
Rest	0.17	0.14	0.16	0.18	0.22	0.23	0.10	0.20	0.25	0.27
TOTAL	99.92	100.28	99.83	99.73	100.03	99.50	100.08	99.69	100.15	100.03
Ba	39	23	45	74	68	266	16	33	109	660
Rb	6	12	34	7	8	28	2	2	10	140
Sr	105	96	134	175	137	168	126	367	180	183
Pb	1	<1	7	6	6	2	<1	7	10	16
Th	1	1	1	<1	1	6	<1	1	1	8
U	<1	<1	<1	<1	<1	3	<1	<1	<1	4
Zr	62	49	59	65	118	166	40	150	186	271
Nb	2	2	3	3	5	8	1	9	9	18
Y	21	21	21	20	40	38	17	31	44	79
La	3	2	2	5	2	22	2	5	12	31
Ce	9	5	9	11	19	53	6	22	35	67
Sn										
V	293	264	280	307	481	338	275	380	439	242
Cr	373	155	154	217	89	73	25	64	70	99
Ni	78	202	108	110	59	77	64	88	74	65
Cu	45	44	141	139	316	224	27	158	452	<2
Zn	100	77	115	112	146	169	88	98	154	182
Ga	17	16	15	16	20	19	16	21	25	21

Sample Number Area	73281929 SPCM	73282106 SPCM	R11370 SPCM	73281545 SPCM
Locality	Cumpston Massif	Mawson Esc. A	Mount Bayliss	Mount Bayliss
Rock type	Amphibol. tholeiite	Amphibol. tholeiite	Alk. mela- syenite	Alk. mela- syenite
Age	Protero	Protero	Silurian	Silurian
Bibliog. ref.	1,2,9	1,2,9	1,2,8,9	1,2,8,9
SiO ₂	49.90	48.00	50.30	52.90
TiO ₂	1.02	1.58	5.43	4.45
Al ₂ O ₃	14.79	15.06	8.90	8.92
Fe ₂ O ₃	1.99	4.96	2.72	2.64
FeO	8.95	11.30	6.00	5.30
MnO	0.20	0.22	0.11	0.11
MgO	8.03	4.63	5.56	5.95
CaO	12.33	10.24	5.06	4.00
Na ₂ O	1.65	2.45	1.75	2.05
K ₂ O	0.38	0.46	8.90	9.35
P ₂ O ₅	0.13	0.02	1.85	1.75
H ₂ O ⁺	0.76	0.98	1.06	0.89
H ₂ O ⁻			0.29	0.31
CO ₂			1.45	0.25
Rest	0.15	0.20	0.64	0.67
TOTAL	100.28	100.00	100.02	99.54
Ba	41	65	1320	412
Rb	4	11	149	210
Sr	151	193	1259	1779
Pb	3	6	19	28
Th	<1	<1	19	14
U	<1	<1	2	2
Zr	56	38	1242	1582
Nb	3	1	102	145
Y	19	13	37	32
La	3	<2	156	162
Ce	11	10	270	276
Sn			5	7
V	294	684	133	94
Cr	172	16	180	215
Ni	116	27	128	131
Cu	69	89	34	43
Zn	90	119	116	140
Ga	15	18	22	20

OTHER AREAS

Sample Number	65280006	65280007	65280035	65280037	65280048	65280049	77284870A	77284870B	77284872	77284875
Area	Vestfold Hills	Vestfold Hills	Vestfold Hills	Vestfold Hills	Vestfold Hills	Vestfold Hills	Wilhelm II Land	Wilhelm II Land	Wilhelm II Land	Wilhelm II Land
Locality	Tryne Fjord	Tryne Fjord	Long Fjord	Broad Peninsula		Ellis Fjord	Gaussberg	Gaussberg	Gaussberg	Gaussberg
Rock type	Quartz tholeiite	High-Mg qz tholeiite	Tholeiite	Norite	Olivine tholeiite	Olivine tholeiite	Olivine leucitite	Olivine leucitite	Olivine leucitite	Olivine leucitite
Age	Protero	Protero	Protero	Protero	Protero	Protero	Quaternary	Quaternary	Quaternary	Quaternary
Bibliog. ref.	9	9	9	9	9	9	7	7	7	7
SiO ₂	49.90	55.70	48.70	51.60	47.50	48.00	50.80	50.20	50.70	50.50
TiO ₂	1.45	0.67	1.45	0.54	1.64	1.54	3.43	3.36	3.34	3.28
Al ₂ O ₃	13.28	11.07	14.31	10.59	14.27	14.56	9.95	9.79	9.95	10.04
Fe ₂ O ₃	4.00	2.15	3.23	0.86	2.11	2.14	2.47	2.40	2.32	2.77
FeO	11.20	8.37	9.17	9.21	12.22	11.67	3.76	3.85	3.84	3.39
MnO	0.25	0.16	0.21	0.18	0.23	0.22	0.09	0.09	0.09	0.09
MgO	5.62	10.67	7.03	13.11	7.45	7.56	8.09	7.92	8.34	8.19
CaO	10.27	7.05	11.89	9.45	10.99	11.01	4.78	4.72	4.76	4.84
Na ₂ O	2.39	1.48	2.27	1.72	2.40	2.37	1.78	1.64	1.70	1.53
K ₂ O	0.25	1.14	0.21	0.45	0.23	0.22	11.49	11.54	11.54	11.30
P ₂ O ₅	0.13	0.09	0.12	0.07	0.13	0.13	1.46	1.46	1.44	1.46
H ₂ O ⁺	0.75	0.53	1.03	0.55	0.45	0.20	1.24	1.03	1.09	1.13
H ₂ O ⁻	0.04	0.06	0.05	0.06	0.04	0.09	0.07	0.07	0.06	0.03
CO ₂							0.09	0.07	0.03	0.02
Rest	0.18	0.30	0.17	0.33	0.16	0.16	1.20	1.19	1.20	1.23
TOTAL	99.71	99.44	99.84	98.72	99.82	99.87	100.70	99.33	100.40	99.80
Ba	110	253	65	179	91	92	5550	5440	5620	5850
Rb	3	56	7	16	5	4	309	305	311	311
Sr	114	111	150	151	135	137	1870	1890	1830	1860
Pb	15	11	<1	2	1	2	36	37	36	35
Th	<1	9	<1	1	1	1	29	29	28	28
U	<1	3	<1	<1	<1	<1	3	3	2	2
Zr	86	106	77	47	72	67	903	915	901	890
Nb	3	6	3	2	4	3	88	89	88	87
Y	31	18	28	12	29	27	19	19	18	18
La	5	18	6	5	6	9	214	207	211	213
Ce	9	33	11	5	11	15	348	334	339	341
Sn	2	1	<1	<1	1	<1	2	4	2	2
V	355	182	294	191	275	265	112	108	110	108
Cr	108	993	264	1280	200	209	308	333	311	324
Ni	60	236	73	314	78	80	223	231	234	243
Cu	143	73	114	71	90	76	29	31	27	28
Zn	175	82	87	66	107	101	77	93	83	73
Ga	17	15	19	12	18	19	18	17	18	18

Sample Number	77284883	77284887	77284888	77284889	77284893A	77284893B	77284894	77284730
Area	Wilhelm II Land	Wilhelm II Land	Wilhelm II Land	Wilhelm II Land	Wilhelm II Land	Wilhelm II Land	Wilhelm II Land	Bunger Hills
Locality	Gaussberg	Gaussberg	Gaussberg	Gaussberg	Gaussberg	Gaussberg	Gaussberg	
Rock type	Olivine leucitite	Olivine leucitite	Olivine leucitite	Olivine leucitite	Olivine leucitite	Olivine leucitite	Olivine leucitite	Alkali ol basalt
Age	Quaternary	Quaternary	Quaternary	Quaternary	Quaternary	Quaternary	Quaternary	
Bibliog. ref.	7	7	7	7	7	7	7	
SiO ₂	50.10	51.60	51.60	51.00	51.20	51.50	51.00	50.50
TiO ₂	3.34	3.47	3.50	3.50	3.44	3.54	3.42	1.46
Al ₂ O ₃	9.92	10.00	10.05	9.98	9.42	9.49	9.89	17.67
Fe ₂ O ₃	3.12	2.33	2.12	2.48	2.54	2.31	2.15	2.59
FeO	3.14	3.84	4.00	3.83	3.86	4.12	3.94	4.79
MnO	0.09	0.08	0.08	0.09	0.09	0.09	0.08	0.13
MgO	8.21	7.53	7.50	7.81	8.19	7.95	7.76	4.04
CaO	4.91	4.48	4.50	4.81	4.35	4.38	4.37	6.14
Na ₂ O	1.17	2.19	1.85	1.55	1.53	1.65	1.53	3.06
K ₂ O	10.97	11.50	11.87	11.68	11.73	12.16	11.89	5.98
P ₂ O ₅	1.46	1.49	1.48	1.50	1.48	1.53	1.50	1.15
H ₂ O ⁺	2.72	0.84	0.65	1.14	1.17	0.92	0.96	0.39
H ₂ O ⁻	0.04	0.05	0.03	0.04	0.06	0.07	0.08	0.03
CO ₂	<0.01	0.13	0.02	0.04	0.03	0.02	0.05	
Rest	1.25	1.20	1.18	1.17	1.23	1.22	1.15	1.02
TOTAL	100.43	100.73	100.43	100.62	100.32	100.95	99.77	98.85
Ba	5970	5640	5480	5380	5450	5340	5320	4660
Rb	313	315	316	307	336	330	313	213
Sr	1940	1740	1760	1840	1710	1720	1720	2060
Pb	36	37	38	35	42	66	37	104
Th	30	29	28	29	33	35	28	96
U	3	3	2	3	3	4	3	11
Zr	893	957	972	943	1350	1360	955	468
Nb	88	87	90	93	96	97	87	25
Y	18	19	19	18	18	19	18	30
La	215	212	206	204	211	211	204	259
Ce	339	335	331	321	343	343	334	433
Sn	1	<1	2	2	2	7	2	1
V	107	107	104	107	100	101	107	127
Cr	339	303	272	315	287	284	288	82
Ni	234	231	249	226	240	223	228	47
Cu	26	32	29	28	31	31	30	58
Zn	72	89	74	75	80	78	75	83
Ga	18	18	17	17	18	18	17	18