Danmarks Geologiske Undersøgelse.
II. Række. Nr. 68.

Chemical Analyses of Igneous and Metamorphic Rocks of Denmark, the Faeroes and Greenland.

(To and including 1940)

Collected and Described
by
Sole Munck and Arne Noe-Nygaard.

I Kommission hos
C. A. Reitzels Forlag
Axel Sandal
København 1942.

Pris: 4 Kr.

Danmarks Geologiske Undersøgelse.
II. Række. Nr. 68.

Chemical Analyses of Igneous and Metamorphic Rocks of Denmark, the Faeroes and Greenland.

(To and including 1940)

Collected and Described
by
Sole Munck and Arne Noe-Nygaard

I Kommission hos
C. A. Reitzels Forlag
Axel Sandal
København
1942.

NIELSEN & LYDICHE (AXEL SIMMELKIÆR), KØBENHAVN.

Contents.

Preface.

The past ten years or so have seen the publication of collections of chemical rock analyses which, as a result of their clear form of set-up, in many ways faciliate the comparative study of the chemistry of the rocks and their mutual relationships. Among these publications there are: P. NIGGLI, F. DE QUERVAIN & R. U. WINTERTHALTER: Chemismus schweizerischer Gesteine. Bern 1930, and the analyses published by the Geological Survey of Great Britain: Chemical Analyses of Igneous Rocks, Metamorphic Rocks and Minerals. London 1931. Similar publications are available from two neighbouring countries, i. e. from Sweden: W. LARSSON: Chemical Analyses of Swedish Rocks (Bull. Geol. Inst., Uppsala 1932) and from Finland: L. LOKKA: Neuere Chemische Analysen von Finnischen Gesteinen (Bull. Comm. Geol. de Finlande No. 105. Helsingfors 1934).

In now issuing a collection of analyses comprising Denmark, the Faeroes and Greenland, we do so for the purpose of supplying the need we have felt in not possessing a collection of this kind for the regions named. The framework around the present work is a file of rock analyses made during the course of some years.

We have not thought the material comprehensive enough to warrant a calculation and discussion of the analyses like that published by W. LARSSON for Sweden; for Greenland the analysis-material is somewhat sporadic, even if certain regions there are well represented, for instance the Julianehaab district (USSING), the Kangerdlugssuaq area (WAGER & DEER), and parts of the West Greenland basalt formation; in this case, however, some of the analyses are rather old.

As a consequence, this collection has been treated more in a manner reminiscent of that applied to the British analyses. In that collection the analyses were got together by E. M. GUPPY, and to each analysis is appended a brief petrographic description of the analyzed rock by H. H. THOMAS. As in that case the rock material has been microscoped by one and the same worker, its presentation is homogeneous in character. We have been unable to emulate that example, as only

a small part of the rock material has been available to us; we have therefore chosen the expedient of first listing all the chemical analyses in tabular form, and then presenting a short characteristic of the rocks, not on the basis of a microscopical examination but on that of the authors' own descriptions. It is evident that the descriptions of the rocks, which are kept as closely to those of the authors as possible, by this means will be somewhat less uniform: in some cases more explicit, in others rather summary; and as some of the descriptions quoted are rather old, their value to the reader today may be limited.

The chief importance of these analyses lies, in our opinion, in the fact that we have endeavoured to gather the available material into one place, in perspicuous form and with all necessary references to the literature and the geographical situation. The accompanying description of the rocks is intended as a primary orientation as regards their character and mineral composition. A reader requiring greater detail should have no difficulty in finding the original literature.

The analysis tables list the analyses according to the falling SiO_2 content. Igneous rocks are shown in ordinary figures, metamorphic rocks in italics, pyroclastics are marked with an asterisk behind the figure[1]). The enumeration in the table is the same as that employed in the rock descriptions. In the list of Greenland analyses there is a column more than in the lists of Danish and Faeroese analyses, marked »district«; in this column the four main parts of Greenland from which the rock came are designated by NW, SW, NE and SE (compare the maps at the end of the book)[2]). The years in which the analyses were published are given in the table, to show at a glance how old they are; as the total number of rock analyses given in the list is only little more than two hundred, no division into separate groups after completeness and accuracy was made; this means that the table contains both »superior« and »inferior« analyses in the sense of WASHINGTON.

In the table the column »Sum« indicates the value arrived at by adding up the values stated; where this sum differs from that stated by the author, the latter is given below in brackets. This is done because of the possibility that the sum may be correct, in which case an error must have crept into one of the individual values.

In the columns marked »H_2O^+« and »H_2O^-« the rule followed is that where no distinction is made in the analysis between absorbed

---

[1]) The two analyses marked 28 a and 126 a were entered in the table after it had been completed; in the first tabulation they had escaped our attention.

[2]) Division lines of the districts are: N—S line from cape Farvel to mouth of de Long Fjord, and E—W line from Scoresby Sound to south of Disko through Jakobshavn ice-fjord.

water and combined water, the water percentage is shown in the first column (H_2O+).

In the rock descriptions the name and age of the rock are given first. For some of the East-Greenland rocks the term »metamorphic complex« is employed, as in the available literature there is some divergence of opinion on the subject of pre-Cambrian/Caledonian; in those cases where the author's own opinion is clearly expressed his term is shown in brackets. Where a subsequent examination reverses a previous age determination, this is specially indicated.

The rock names used are those employed by the various authors.

After name and age follows the geographical locality where it was found, then a reference to the source, showing the page, and finally the description itself. Where the author has given the rocks special numbers — museum numbers or field labels — this is shown in brackets together with the literature reference.

In cases where old and incomplete descriptions from a region preponderate, more weight is attached to the few more modern descriptions from that area, e. g. the Faeroes. Where the nature of the rock or the character of the description was of such a kind that a summary was difficult to give, the description has been written in greater detail and kept as close to the original as possible. It being the fact that the authors' own descriptions of the rocks have been used as the basis for our account, it will be easy to find inconsistencies from rock to rock, just as it will be observed that different terms are used promiscuously for the same things, for example idiomorphic and automorphic, etc.

The spelling of the Greenland place names used in this paper may at the first look seem rather haphazard; although inconsistences no doubt occur the following rules have been used. The forms employed by USSING (50) have been preserved, since a modernization of local names already established in a given form in the literature was considered unfortunate. Other locality names in West Greenland have been modernized in accordance with the spelling used in the new maps carried out by the Geodetic Institute of Copenhagen. In East Greenland in spite of the Danish spelling of Ø, Kap, Havn etc. in the maps (also in this paper) the English forms island, cape, harbour etc. have been used, because also here a considerable number of place names were first used in this form.

Apart from the rock analyses proper, we have included as Appendix No. I the available material concerning the telluric iron from the West-Greenland basalt formation. The analyses are arranged in tabular form and are unaccompanied by any separate description. The iron is arranged according to locality, beginning with oldest. Although

the iron discussion now belongs to the past, and the problems have been clarified through the new researches of BENEDICKS and LÖFQUIST in 1940, a collection of analyses from Greenland could not, we consider, be called complete unless the iron analyses were included. Together with the iron is given an analysis, no. 256 of »pyrite nickelifère« from Igdlokunguaq (cf. lit. 47).

Again in the iron table we have included the year of analysis so that its age may be seen at a glance. We have made the collection as complete as possible, well aware that some of the analyses are scarcely of much value today and that the technique employed from time to time must have had a bearing on the results. Our reason for collecting them all in a more or less uniform manner is that these iron analyses have been published in so many different places, a great part of them in foreign journals.

Analyses made on acid-treated or heat-treated material, whereby essential components were affected or removed, are not included (for instance analyses by CL. WINKLER).

The analyses of Greenland meteoric iron are given in the short Appendix II.

As already stated, this work was begun on the material contained in a file covering a period of some years. We divided the work between us, SOLE MUNCK being mainly responsible for the analyses from Bornholm (Denmark) and West Greenland and ARNE NOE-NYGAARD for the rest of Denmark, the Faeroes and East Greenland. The collection comprises analyses up to and including 1940.

Although we believe that the collection is complete in all essentials, it would be strange if an analysis or two had not escaped our attention; and even if we have taken pains to avoid error, it is obvious that an incorrect value may have been included inadvertently in our table. We shall therefore be grateful for any correction communicated to us by colleagues making use of our collection.

As most of the petrographic literature, and especially that from Greenland, has been issued in English, we have continued in that language and translated the other descriptions from Danish, French or German. The English manuscript has been corrected by Mr. W. E. CALVERT.

Copenhagen/Charlottenlund, November the 3rd 1941.

SOLE MUNCK and ARNE NOE-NYGAARD.

Denmark. List of Chemical

No.	Rock Name	Locality	Year	SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO
1	**Alminding granite***)	Bjergbakke	1932 (1934)	74.17	0.40	12.89	0.69	1.07	tr.	0.28	1.14
2	**Hammer granite**	Hammeren	1913	73.77	0.32	11.97	1.84	0.78		0.23	1.10
3	**Hammer granite**	Hammeren	1928 (1932)	72.82	0.63	13.42	2.33		0.24	0.13	1.61
4	**Granite**	Allinge	1914	72.96		13.40[1])	3.40[2])			0.52[3])	1.32
5	**Svaneke granite***)	Ibs Kirke	1932 (1934)	69.06	0.65	14.15	1.27	2.44	tr.	0.82	2.02
6	**Vang granite**	»At pegmatite« (»Klondyke«), Vang	1913	69.01	0.97	12.16	2.07	2.40	0.06	0.93	2.28
7	**Vang granite**	Rødkløv	1913	66.99	0.71	13.00	2.98	2.23	0.11	0.65	2.64
8	**Rønne granite**	Klippegaard	1890 (1909)	66.11		16.12	4.93	4.87		1.92	0.39
9	**Paradisbakke granite**	Paradisbakkerne	1913	65.40	1.01	14.73	1.14	2.92	0.06	1.02	2.78
10	**Rønne granite**	Klippegaard	1932 (1934)	65.39	0.28	14.32	7.85			1.12	3.53
11	**Rønne granite**	Rønne area	1913	64.49	1.22	13.67	1.63	4.42	0.14	1.38	3.12
12	**Rønne granite**	»At pegmatite« Rønne area	1913	64.13	0.99	13.57	2.40	4.11	0.06	1.45	2.91
13*	**Ash-layer + 19**	Ejerslev, Mors	1918	63.60 67.27	1.33 1.41	13.06 13.81	1.83 1.94	2.83 2.99	tr. tr.	0.37 0.39	1.56 1.65
14*	**Ash-layer + 19**	Fur	1940	63.56 70.18	1.11 1.23	12.30 13.58	2.46 2.72	2.48 2.74	0.10 0.11	0.70 0.77	1.58 1.18
15	**Rønne granite**	800 m. east of St. Almegaard	1932 (1934)	63.54	1.15	14.23	3.56	3.40	0.24	0.91	3.27
16*	**Ash-layer — 17**	Limfjord area	1918	52.28 63.6	2.07 2.6	15.50 18.8	3.63 4.4	0.50 0.6	tr. tr.	tr. tr.	2.74 3.3
17*	**Ash-layer — 12**	Hanklit	1918	50.42 52.12	6.26 6.47	14.09 14.57	2.72 2.81	6.40 6.61	tr. tr.	2.80 2.90	7.62 7.88
18*	**Ash-layer + 19**	Helgenæs, Djursland	1940	50.34 70.63	1.18 1.65	10.56 14.81	11.25 2.39	0.54 0.76	0.03 0.04	4.31 6.05	0.62 0.15

*) In D. G. U. V Række no. 4 two analyses, one of Alminding, one of Svaneke granite were published on p. 18; they have later been deleted by the author (cf. 8 p. 21).

Analyses of Rocks.

Denmark.

Na_2O	K_2O	P_2O_5	H_2O+	H_2O-	CO_2	Inclusive	Sum	Sp. gr.	Analyst	Published by	Notes	No.
3.18	5.72	0.04	0.08		0.19		99.85	2.641	Chr. Detlefsen	K. Callisen		1
2.75	5.61		0.49	0.65			99.51		M. Dittrich	G. Kalb		2
3.25	5.47					Loss on ignition: 0.21	100.11	2.653	Chr. Detlefsen	K. Callisen		3
2.47	5.32	0.15	0.34	0.03			99.91		K. Rørdam	K. Rørdam	[1]) Including TiO_2. [2]) State of oxydation not determined. [3]) Trace of MnO.	4
3.69	5.12	0.12	0.12		0.15		99.61	2.706	Chr. Detlefsen	K. Callisen		5
3.65	4.81	0.11	0.42	0.44	0.42		99.73		M. Dittrich	G. Kalb		6
3.28	4.39	0.57	0.70	0.78			99.03	2.705	M. Dittrich	G. Kalb		7
4.17	1.26	0.27				F: tr. L. o. ign.: 0.55	100.59		K. Rørdam	K. Rørdam		8
3.54	4.31	0.19	1.58	0.55	0.68		99.91	2.765	M. Dittrich	G. Kalb		9
3.64	4.40					L. o. ign.: 0.13	100.66	2.758	Chr. Detlefsen	K. Callisen		10
3.57	4.40	0.58	1.11	0.46			100.19		M. Dittrich	G. Kalb		11
4.31	3.46	0.56	1.45	0.37	0.59		100.36		M. Dittrich	G. Kalb		12
3.89 7.29	2.80 2.96	0.27 0.29	5.24 —	1.61 —			101.39 100.00		Chr. Winther	O. B. Bøggild	 reduced values Rolf Norin	13*
3.21 3.54	3.50 3.86	0.08 0.09	6.81 —	0.65 —	0.40 —		98.94 100.00		Rolf Norin	Rolf Norin	 r. v. R. N.	14*
5.12	6.09	0.23				L. o. ign.: 0.27	100.01	2.744	Chr. Detlefsen	K. Callisen		15
5.79 1.6	1.68 2.1		9.04 —	9.66 —			100.89 100.00		Chr. Winther	O. B. Bøggild	 r. v. O. B. Bøggild	16*
4.01 1.18	1.10 1.14	0.31 0.32	3.57 —	1.52 —			101.82 100.00		Chr. Winther	O. B. Bøggild	 r. v. R. N.	17*
1.24 1.74	0.88 1.24	tr.	10.39 —	8.54 —	0.39 —		100.27 100.01		Rolf Norin	Rolf Norin	 r. v. R. N.	18*

No.	Rock Name	Locality	Year	SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO
19*	**Ash-layer — 12**	Fur	1940	49.93	4.46	11.45	6.29	6.50	0.97	3.14	7.1
				53.55	4.77	12.23	6.72	6.95	1.04	3.36	7.0
20*	**Ash-layer + 19**	Ølst	1940	48.37	1.18	10.18	13.34	0.39	0.05	4.00	1.9
				70.23	1.72	14.77	2.37	0.58	0.07	5.81	2.0
21*	**Ash-layer — 12**	Ølst	1940	46.33	4.00	11.66	9.10	2.59	0.58	2.59	3.8
				55.43	4.79	13.95	10.89	3.10	0.69	3.10	4.1
22*	**Ash-layer + 101**	Hanklit	1940	29.57	3.00	8.34	2.89	6.12	0.30	3.16	24.6
				48.19	4.89	13.59	4.71	7.24	0.49	3.83	11.2
23*	**Ash-layer + 101**	Fur	1940	26.16	3.38	7.13	2.44	9.11	0.42	4.03	24.0
				46,57	6.02	12.69	4.34	7.90	0.76	4.18	11.5
24*	**Ash-layer + 101**	Helgenæs, Djursland	1940	26.01	3.28	11.34	4.18	4.45	2.25	2.33	23.0
				41.15	5.19	17.94	6.60	7.04	3.56	3.69	8.3

The Faeroes.

No.	Rock Name	Locality	Year	SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO
25	**"Trapp anhydré"**	Strømø	1841	53.20		13.26	2.23	15.83	0.50	9.16	5.1
26	**Augite-andesite**	Kolter	1884	52.30		18.22		11.50		7.24	10.2
27	**Non-porphyritic basalt**	Vaag Fjord, Suðerø	1918	49.70	4.83	10.98	3.02	11.19	0.22	5.34	9.7
28	**Trapp**	Height west of Torshavn, Strømø	1853	49.40		14.42		16.27		5.86	10.3
28a	**Big-felspar basalt**	Velbestad, Strømø	1936	48.10	2.50	16.01	3.47	7.16	0.15	6.00	10.5
29	**Olivine-dolerite**	Froðbiarkambur, Tværaa, Suðerø	1936	48.02	2.20	14.17	3.62	8.34	0.16	7.08	11.0
30	**Basalt with porphyritic felspars**	Torshavn, Strømø	1922	47.58	2.72	17.12	3.03	8.73	0.14	5.18	10.1
31	**Zeolitic, amygdaloidal rock**	Height west of Torshavn, Strømø	1853	47.46		12.72		14.49		5.63	8.5
32	**"Trapp hydraté"**	Strømø	1841	46.80		14.40	2.30	9.90	2.80	9.53	10.1
33	**Zeolitic, amygdaloidal rock (altered)**	Height west of Torshavn, Strømø	1853	46.65		14.66		14.61		6.88	8.8

Na_2O	K_2O	P_2O_5	H_2O+	H_2O-	CO_2	Inclusive	Sum	Sp.gr.	Analyst	Published by	Notes	No.
2.29	1.55	0.39	3.54	1.28	0.42	Bit: 0.22	99.58		Rolf Norin	Rolf Norin		19*
2.45	1.65	0.41	—	—	—		100.00				r. v. R. N.	
0.43	1.15	0.10	8.76	9.72	0.41		99.99		Rolf Norin	Rolf Norin		20*
0.63	1.67	0.13	—	—	—		100.10				r. v. R. N.	
1.77	1.10	0.42	6.26	4.73	0.31	Bit: 3.99	99.27		Rolf Norin	Rolf Norin		21*
2.12	1.32	0.50	—	—	—		100.02				r. v. R. N.	
2.00	0.78	0.78	1.75	0.55	15.87		99.74		Sven Palmquist	Rolf Norin		22*
3.26	1.27	1.27	—	—	—		100.00				r. v. R. N.	
1.71	0.62	1.04	1.40	0.59	18.45		100.50		Sven Palmquist	Rolf Norin		23*
3.04	1.10	1.85	—	—	—		100.00				r. v. R. N.	
2.52	0.58	3.71	2.73	2.77	11.44		100.59		Sven Palmquist	Rolf Norin		24*
3.99	0.92	1.58	—	—	—		100.00				r. v. R. N.	

The Faeroes.

Na_2O	K_2O	P_2O_5	H_2O+	H_2O-	CO_2	Inclusive	Sum	Sp.gr.	Analyst	Published by	Notes	No.
1.13							100.41	2.87	M. J. Durocher	M. J. Durocher		25
2.65							102.14		A. Osann	A. Osann		26
2.22	0.63	0.35	0.96	0.92	nil	NiO : nil SrO : nil BaO : 0.01 Cr_2O_3 : tr V_2O_3 : 0.03 Cl : 0.02 S : 0.05	100.18 —0.02 100.16	2.89	H. F. Harwood	A. Holmes		27
2.28	0.34		2.41				101.32		A. Streng	A. Streng		28
2.50	0.30	0.10	2.30	1.00	nil	CuO : nil	100.14		W.H.Herdsmann	Walker & Davidson		28a
1.73	0.27	0.08	1.00	2.40	nil		100.12		W.H.Herdsmann	Walker & Davidson		29
3.89	0.86	0.41	0.13	0.06			99.97		H.S.Washington	H.S.Washington		30
1.98	1.00		9.04				100.90		A. Streng	A. Streng		31
1.16			3.00				100.05	3.045	M. J. Durocher	M. J. Durocher		32
1.44	1.57		6.76				101.42		A. Streng	A. Streng		33

No.	Rock Name	Locality	Year	SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO
34	**Basalt with porphyritic felspars**	Höyvik, Strømø	1928	46.40	3.05	16.30	3.60	7.17	0.23	6.00	11.0
35	**Olivine-basalt**	Trangisvaag, Suderø	1928	45.40	3.20	14.54	1.96	10.45	0.25	6.25	11.7
36	**Ultramafic olivine-basalt**	Southeast of church, Ejde, Østerø	1936	44.40	0.75	12.25	1.50	8.92	0.18	17.66	10.0
37*	**Altered palagonite-tuff**	Height west of Torshavn, Strømø	1853	40.69		15.31		13.44		6.31	3.3

Greenland.

No.	Rock Name	Locality	District	Year	SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO
38	**Sanidine-rhyolite**	Cape Franklin	NE	1935	87.96	0.10	5.35	1.09	0.45	tr.	0.44	1.24
39	**Sanidine-rhyolite**	Cape Franklin	NE	1935	79.24	0.15	9.74	1.85	0.35	0.04	0.15	0.32
40	**Gneiss, psammitic**	Hurry Inlet side of Liverpool Land	NE	1935	78.63	0.60	8.91	2.12	1.03	0.04	0.62	2.12
41	**Alkali-rhyolite**	Cape Graah, Ymer Island.	NE	1940	77.02	0.24	11.24	0.23	0.73	0.01	0.24	0.88
42	**Alkali-rhyolite**	Musk Ox Fjord	NE	1940	76.92	0.22	12.12	0.73	0.59	0.02	0.04	0.64
43	**"Quartz-keratophyre"**	Mt. Ramsay, Gauss Peninsula	NE	1932	76.51	0.08	11.59	0.99	0.56	0.02	0.25	0.48
44	**Granophyre-granite**	Mt. Högbom, Gauss Peninsula	NE	1932	76.04	0.12	12.03	1.37	0.22	0.01	0.05	0.52
45	**Granite**	Umanak Island	NW	1904	76.03	0.28	12.02	0.69	0.68		0.18	1.61
46	**Acid orthoclase-bearing porphyry**	Cape Fletcher, Canning Land	NE	1907	75.14	0.16	12.50	1.20	0.87	tr.	0.43	0.83
47	**Acid granophyre**	Tinden, Kangerdlugssuaq	SE	1939	75.03	0.31	13.17	1.56	0.58	0.01	0.15	0.69
48	**Quartz-rhyolite**	Cape Franklin	NE	1932 (1935)	74.97	0.11	12.90	1.21	0.29	0.01	0.11	0.68
49	**Alkali-granite**	Ivigtut Peninsula	SW		74.80	tr.	12.37	2.06	1.24	tr.	0.16	0.25
50	**Porphyry granite**	Cape Oswald, Ella Island	NE	1932	74.79	0.16	12.09	0.93	1.13	0.02	0.54	0.62

Na_2O	K_2O	P_2O_5	H_2O+	H_2O-	CO_2	Inclusive	Sum	Sp.gr.	Analyst	Published by	Notes	No.
2.14	0.29	0.23	1.10	2.40	nil	S : tr	99.95		W.H.Herdsmann	I. B. Simpson		34
2.08	0.49	0.24	1.50	2.00	nil	S : tr	100.08		W.H.Herdsmann	I. B. Simpson		35
0.95	0.25	0.04	1.60	1.60	nil	CuO : nil	100.10		W.H.Herdsmann	Walker & Davidson		36
0.60	0.74		20.00				100.48		A. Streng	A. Streng		37*

Greenland.

Na_2O	K_2O	P_2O_5	H_2O+	H_2O-	CO_2	Inclusive	Sum	Sp.gr.	Analyst	Published by	Notes	No.
0.52	1.52	tr.	1.28	0.35			100.30	2.638	N. Sahlbom	H. Backlund & D. Malmquist		38
2.35	4.64	tr.	0.90	0.20			99.93	2.520	N. Sahlbom	H. Backlund & D. Malmquist		39
1.33	3.83	0.05	0.46	0.10		ZrO_2 : 0.05	99.89		N. Sahlbom	E. H. Kranck		*40*
2.22	6.42	0.14	0.48	0.07			99.92		N. Sahlbom	A. Rittmann		41
2.92	4.93	tr.	0.76	0.18			100.07		N. Sahlbom	A. Rittmann		42
1.71	6.87	tr.	0.49	0.26	0.09		99.90 (99.89)		N. Sahlbom	H. G. Backlund		43
2.66	6.54	0.30	0.60	0.17			100.63 (100.53)		N. Sahlbom	H. G. Backlund		44
2.97	5.72		0.20				100.38		W. C. Phalen	W. C. Phalen		45
3.00	3.50					Loss on ignition : 2.55	100.18		N. Sahlbom	O. Nordenskjöld		46
4.24	3.85	0.02	0.28	0.13			100.02	2.54	W. A. Deer	L. R. Wager & W. A. Deer		47
0.16	7.66	tr.	1.60	0.29		BaO : nil	99.99	2.556	N. Sahlbom	(H. G. Backlund) H. Backlund & D. Malmquist		48
4.08	3.64	tr.	0.93	0.15	tr.	F : 0.38	100.06 —0.17 99.89		W.H.Herdsmann	(R. Bøgvad)	Unpublished (sml. no. 105 & no. 112)	49
2.99	5.59	0.10	0.81	0.15			99.92 (99.87)		N. Sahlbom	H. G. Backlund		50

No.	Rock Name	Locality	District	Year	SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO
51	**Sanidine-rhyolite**	Cape Franklin	NE	1935	73.95	0.13	12.44	1.68	0.41	0.02	0.05	1.38
52	**Quartz-porphyry**	Ilimausak	SW	1911	73.68	0.57	11.05	3.93	1.45	tr.	nil	0.48
53	**Rhyolite, spherulitic**	Cape Franklin	NE	1935	73.36	0.15	11.99	2.76	0.83	0.02	0.24	1.78
54	**Porphyry (with phenocrystic quartz)**	Mt. Nordenskjöld, Nathorst Fjord	NE	(1936) 1937	73.12	0.32	13.64	1.30	0.90	0.06	0.40	0.86
55	**Granite**	Mt. la Cour, Gauss Peninsula	NE	1932	73.11	tr.	14.01	0.09	0.21	0.01	0.29	1.36
56	**Rhyolite, spherulite**	Cape Franklin	NE	(1932) 1935	72.35	0.14	14.03	1.54	0.48	0.01	0.33	0.86
57	**Two-mica-granite**	Kempe Fjord	NE	1932	72.29	0.24	15.09	0.41	1.01	tr.	0.34	0.74
58	**Two-mica-granite**	Forsblad Fjord	NE	1932	72.17	0.33	14.03	0.73	1.31	0.01	0.61	0.72
59	**Two-mica-granite**	Clavering Island	NE	1932	71.95	0.11	14.59	1.01	0.72	0.01	0.33	1.05
60	**Two-mica-granite**	Forsblad Fjord	NE	1932	71.90	0.30	14.69	0.67	0.80	0.01	0.33	1.04
61	**Soda-granite**	Iviangussat, Kangerdluarssuk	SW	1911	71.24	0.68	13.78	1.30	2.83	0.15	tr.	0.38
62	**Granite, fine-grained**	Liverpool Land	NE	1935	70.83	0.18	14.63	2.28	1.18	0.02	0.51	1.80
63	**Spherulite (from spherulitic rhyolite)**	Cape Franklin	NE	1935	70.80	0.08	9.42	3.45	3.01	0.40	0.85	1.47
64	**Chlorite-oligoclase-microcline gneiss**	Musk Ox Fjord	NE	1931	70.75	0.28	13.58	0.70	1.88	nil	0.72	2.10
65	**Granite, coarse porphyric**	Liverpool Land	NE	1935	70.73	0.36	15.36	0.81	1.17	0.02	0.88	2.40
66	**Arfvedsonite-granite**	Ilimausak	SW	1911	70.59	0.44	12.38	1.61	3.33	0.08	nil	0.93
67	**Biotite-granite**	Cape Wardlaw, Canning Land	NE	(1936) 1937	69.78	0.50	14.11	0.36	2.36	0.03	1.35	1.60
68	**Granite**	Ättestupan, Franz Joseph Fjord	NE	1932	69.66	0.31	14.42	0.98	1.30	0.02	1.15	1.40
69	**Gneiss**	Umanak Island	NW	1904	69.07	0.78	14.09	1.49	2.37	tr.	0.98	3.14
70	**Gneiss, grey**	Siusasigsak, north of Jakobshavn	NW	1905	69.06	0.74	15.26	0.68	2.53		0.34	2.83
71	**Microcline-granite**	Store Fjord, Liverpool Land	NE	1935	68.80	0.38	15.98	1.63	1.47	0.04	1.02	2.52

Na_2O	K_2O	P_2O_5	H_2O+	H_2O-	CO_2	Inclusive	Sum	Sp.gr.	Analyst	Published by	Notes	No.
1.75	6.81	nil	1.64	0.29		BaO : 0.14	100.69	2.502	N. Salhbom	H. Backlund & D. Malmquist		51
5.20	4.05	nil	0.08	0.17	nil	ZrO_2 : 0.24 Cl : tr.	100.90	2.694	Chr. Winther	N. V. Ussing		52
3.99	2.99	0.15	2.08	0.15			100.49	2.525	N. Sahlbom	H. Backlund & D. Malmquist		53
4.25	4.96	0.15	0.32	0.10			100.38		N. Sahlbom	A. Noe-Nygaard		54
3.94	6.22	0.10	0.08	0.10	0.87		100.39		N. Sahlbom	H. G. Backlund		55
1.29	7.73	nil	1.52			BaO : nil	100.28	2.553	N. Sahlbom	(H. G. Backlund) H. Backlund & D. Malmquist		56
3.09	5.84	0.24	0.85	0.10			100.24		N. Sahlbom	H. G. Backlund		57
3.04	5.58	0.60	0.61	0.11			99.85		N. Sahlbom	H. G. Backlund		58
3.27	5.66	0.16	0.88	0.10			99.84		N. Sahlbom	H. G. Backlund		59
3.28	5.55	0.90	0.12	0.20			99.79 (99.74)		N. Sahlbom	H. G. Backlund		60
5.32	5.10		tr.				100.78	2.64	C. Detlefsen	N. V. Ussing		61
3.31	4.32	0.30	0.66	0.18		ZrO_2 : 0.02	100.22	2.65	N. Sahlbom	E. H. Kranck		62
1.31	4.27	nil	0.95	0.28	3.91	BaO : nil	100.20	2.576[1] 2.598	N. Sahlbom	H. Backlund & D. Malmquist	[1] 2 samples	63
3.60	4.73	0.04	0.67	0.20	0.63	S : tr. Ni : nil Co : nil Zn : nil	99.88		W.H.Herdsmann	I. D. Wisemann		*64*
3.31	4.36	0.29	0.50	0.13		ZrO_2 : nil	100.32	2.65	N. Sahlbom	E. H. Kranck		65
6.95	3.74	tr.	0.21	0.20		Cl : nil	100.46	2.657	Chr. Winther	N. V. Ussing		66
3.13	5.30	0.28	0.90	0.11			99.81	2.643	N. Sahlbom	A. Noe-Nygaard		67
4.26	4.32	0.30	0.94	0.25			99.31 (100.01)		N. Sahlbom	H. G. Backlund		68
5.18	2.71	tr.	0.26	0.04			100.11		W. C. Phalen	W. C. Phalen		*69*
4.88	2.87	0.14				Loss on ignition : 0.16	99.49	2.685	A. Lindner	M. Belowsky		*70*
3.03	3.80	0.44	0.66	0.20		ZrO_2 : tr. BaO : 0.06	100.03 (99.74)	2.65	N. Sahlbom	E. H. Kranck		71

No.	Rock Name	Locality	District	Year	SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO
72	**Rhyolitic eruption-breccia**	Cape Franklin	NE	1935	68.74	0.90	10.65	2.84	5.94	0.10	2.52	0.78
73	**Gneiss, grey**	Cape Weber, Andrée Land	NE	1932	68.59	0.38	14.43	1.06	2.09	0.02	1.23	2.39
74	**Gneiss, grey**	Mellemø, Kangerdlugssuaq	SE	1939	68.17	0.63	16.13	0.58	2.09	0.05	1.82	2.07
75	**Red porphyry (with phenocrystic quartz)**	Tvekegledal, Wegener Peninsula	NE	(1936) 1937	67.93	0.70	13.92	1.61	1.50	0.02	1.45	3.19
76	**Quartz-monzonite**	Nûgssuaq Peninsula	NW	1904	67.27	1.70	13.67	1.83	2.49	0.19	1.72	1.90
77	**Granite (biotite-muscovite-granite)**	Øvre Rypegletcher, Franz Joseph Fjord	NE	1930	66.57	0.78	11.42	3.30	3.68	0.10	1.38	3.14
78	**Grey porphyry (with phenocrystic quartz)**	Hesteskofjeld, Canning Land	NE	(1936) 1937	66.42	0.76	15.31	1.03	2.74	0.02	1.46	2.04
79	**Greyish-green porphyry (without phenocrystic quartz)**	Mt. Kollen, Canning Land	NE	(1936) 1937	66.41	0.80	15.38	0.74	2.34	0.05	2.23	1.98
80	**Porphyric granite**	Porfyrfjeld, Canning Land	NE	(1936) 1937	65.57	0.56	14.57	0.63	2.16	0.04	1.17	3.96
81	**Riebeckite-trachyte (spherulitic)**	Cape Parry, Traill Island	NE	1932	64.82	0.33	14.29	2.04	4.27	tr.	1.00	1.55
82	**Biotite-dacite**	Segelsällskapets Fjord	NE	1940	64.36	0.88	15.51	0.29	4.14	0.04	2.25	3.50
83	**Porphyry, red (with phenocrystic quartz)**	Porfyrfjeld, Canning Land	NE	(1936) 1937	63.90	0.72	14.57	1.11	2.86	0.03	1.11	3.46
84	**Gneiss, granulitic**	Cape Hope, Liverpool Land	NE	1935	63.86	1.60	13.45	3.28	5.33	0.10	4.16	2.04
85	**Anorthoclase-trachyte**	Arfertuarssuk Fjord Svartenhuk Peninsula	NW	1931	63.32	0.75	16.80	3.89	1.25	0.15	0.85	2.07
86	**Astochite-gneiss**	Qarajaq Glacier	NW	1905	63.26	0.20	14.84	2.39	1.54	tr.	4.22	1.61
87	**Syenite**	Antarctic Harbour, King Oscar Fjord	NE	1940	62.10	0.92	17.76	1.75	2.14	0.06	0.98	2.34
88	**Nepheline-sodalite-syenite**	Kangerdlugssuaq	SE	1934	61.70	0.80	18.35	1.63	1.62	0.32	0.61	0.95

Na_2O	K_2O	P_2O_5	H_2O+	H_2O-	CO_2	Inclusive	Sum	Sp.gr.	Analyst	Published by	Notes	No.
1.80	2.17	0.12	3.25				99.81	2.634	N. Sahlbom	H. Backlund & D. Malmquist		72
4.20	3.73	0.14	1.45	0.20	0.99		100.90		N. Sahlbom	H. G. Backlund		*73*
4.40	3.22	0.31	0.40	0.16			100.03	2.66	W. A. Deer	L. R. Wager & W. A. Deer		*74*
3.40	3.64	0.44	1.82	0.25			99.87	2.600	N. Sahlbom	A. Noe-Nygaard		75
2.79	5.80	0.16	0.45	0.08			100.05		W. C. Phalen	W. C. Phalen		76
1.87	6.32	1.02	0.25	0.20	0.20	F : 0.06 ZrO_2 : tr. V_2O_3 : tr. (Co, Ni)O : tr.	100.29 —0.03 100.26		W. C. Hancock	Wordie & Whittard		77
2.12	5.03	0.24	1.94	0.35	1.24		100.70		N. Sahlbom	A. Noe-Nygaard		78
2.73	4.16	0.35	2.64	0.30			100.11		N. Sahlbom	A. Noe-Nygaard		79
5.40	1.89	0.34	1.67	0.32	2.01		100.29	2.642	N. Sahlbom	A. Noe-Nygaard		80
5.62	5.51	0.13	0.20	0.20	nil	S : nil (Ni, Co)O : nil	99.96		W. Herdsmann	G. W. Tyrrell		81
2.90	3.73	0.90	1.18	0.10			99.78		N. Sahlbom	A. Rittmann		82
3.25	4.69	0.48	3.69	0.16			100.03	2.660	N. Sahlbom	A. Noe-Nygaard		83
1.87	2.32	0.42	1.40				99.83	2.850	N. Sahlbom	T. G. Sahama		*84*
5.75	4.64	tr.	0.44	0.35		BaO : 0.05	100.31		H. Nieland	H. Nieland		85
9.32	0.70	tr.				Cr_2O_3 : tr. Loss on ign. : 1.66	99.74	2.658	A. Lindner	M. Belowsky		*86*
5.56	5.53	0.53	0.22	0.15			100.04	2.62	N. Sahlbom	A. Noe-Nygaard		87
7.50	5.53	0.08	0.73	0.04	0.07	ZrO_2 : 0.02 BaO : tr. SrO : nil Li_2O : tr. Cl_2 : 0.04 SO_3 : 0.09	100.08	2.63	?	L. R. Wager		88

No.	Rock Name	Locality	District	Year	SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO
89	**Porphyry, reddish-brown (without phenocrystic quartz)**	Porfyrfjeld, Canning Land	NE	(1936) 1937	61.66	0.54	15.07	2.10	3.23	0.06	1.92	3.82
90	**Porphyry, greyish-green (without phenocrystic quartz)**	Cape Fletcher	NE	(1936) 1937	61.53	1.01	15.07	2.23	2.89	0.08	3.36	3.59
91	**Aplitic mass from Kaersutite-pegmatite**	Østerfjeld, Qaersut	NW	1928	59.77	0.81	18.14	1.04	1.90	0.05	1.76	1.67
92	**Iron-bearing rock**	Ivigsarkut	NW	1901	59.03	1.19	13.16	nil.	7.02		5.50	6.75
93	**Porphyry, reddish-brown (without phenocrystic quartz)**	Cape Fletcher	NE	(1936) 1937	58.98	1.20	14.09	4.76	1.96	0.10	3.98	4.40
94	**Iron-bearing rock**	Jernpynten, Disko	NW	1901	58.91	1.23	13.43	nil.	7.15		5.63	6.68
95	**Hedenbergite-granophyre**	Brødretoppen, Kangerdlugssuaq	SE	1939	58.81	1.26	12.02	5.77	9.38	0.21	0.72	5.03
96	**Granodiorite**	Cape Smith, Liverpool Land	NE	1935	58.45	1.48	17.93	3.83	1.39	0.04	2.12	5.98
97	**Nordmarkite**	Narsak	SW	1911	58.17	2.09	16.07	1.30	5.04	0.07	1.20	3.42
98	**Pulaskite**	N. Siorarsuit, Tunugdliarfik	SW	1911	57.88	1.23	14.80	5.86	3.71	0.15	nil.	2.71
99	**Granodiorite**	Raffles Island	NE	1935	57.79	1.30	16.30	2.87	3.41	0.08	3.93	6.97
100	**Acid quartz-gabbro**	Østtoppen, Kangerdlugssuaq	SE	1939	57.00	1.78	13.02	2.15	9.25	0.12	2.64	5.75
101	**Hedrumite**	Akuliarusek, Igaliko Fjord	SW	1911	56.90	1.09	16.34	3.61	5.72	tr.	0.22	2.21
102	**Arfvedsonite-lujavrite**	Nunasarnak, Tunugdliarfik	SW	1911	56.64	0.30	16.10	4.90	6.86	0.57	nil.	0.39
103	**Foyaite**	Naujakasik, Tunugdliarfik	SW	1911	56.31	2.82[1])	20.11	3.93	1.45	0.60	0.36	0.62
104	**Augite-syenite**	Nunasarnausak, Kangerdluarsuk	SW	1911	55.79	1.81	15.76	1.60	7.56	0.14	0.41	3.70
105	**cf. Leuko-syenite**	Ivigtut Peninsula	SW		55.76	nil.	21.52	3.20	2.65	0.44	0.07	1.22

Na_2O	K_2O	P_2O_5	H_2O+	H_2O-	CO_2	Inclusive	Sum	Sp.gr.	Analyst	Published by	Notes	No.
2.36	3.87	0.58	4.65	0.48			100.34	2.697	N. Sahlbom	A. Noe-Nygaard		89
3.62	4.67	0.50	1.86	0.25			100.66	2.638	N. Sahlbom	A. Noe-Nygaard		90
5.68	6.33	0.20	1.82	0.30	0.35		99.82	2.505	Schäffer	F. K. Drescher & H.K.E.Krueger		91
2.47	1.43	0.13	2.86		0.25		99.79		M. Dittrich	Th. Nicolau		92
2.95	3.68	0.48	3.22	0.30			100.10	2.683	N. Sahlbom	A. Noe-Nygaard		93
2.91	1.31	0.15	1.48		1.35		100.23		M. Dittrich	Th. Nicolau		94
3.91	2.39	0.71	0.21	0.19			100.61	2.82	W. A. Deer	L. R. Wager & W. A. Deer		95
4.03	2.94		0.88	0.10		ZrO_2 : tr. BaO : 0.04 F : nil	99.21 (99.71)	2.75	N. Sahlbom	E. H. Kranck		96
7.41	4.65	0.42	0.41	0.19	nil	Cl : nil SO_3 : nil	100.44	2.74	Chr. Winther	N. V. Ussing		97
9.12	3.06	tr.	0.90	0.23		Cl : nil SO_3 : nil ZrO_2 : nil	99.65	2.772	Chr. Winther	N. V. Ussing		98
2.71	2.98	0.67	0.62	0.13		BaO : 0.12 S : 0.09	99.97 (99.98)	2.75	N. Sahlbom	E. H. Kranck		99
4.11	0.99	2.11	0.97	0.41			100.30	3.02	W. R. Deer	L. A. Wager & W. A. Deer		100
8.10	4.96	0.17	1.10	0.08		Cl : tr.	100.50	2.783	Chr. Winther	N. V. Ussing		101
11.50	1.00	nil.	1.54	0.04		Cl : tr. SO_3 : nil Nb_2O_5 : 0.45	100.29	2.79	Chr.Christensen	N. V. Ussing		102
8.76	4.65	0.13	1.13			Cl : 0.15	101.02 —0.03 100.99	2.67	C. Detlefsen	N. V. Ussing	[1]) Incl. ZrO_2	103
7.72	4.34	0.36	0.18	0.34		Cl : nil	99.71	2.766	Chr. Winther	N. V. Ussing		104
3.87	7.52	tr.	3.15	0.30	nil	F : 0.64	100.34 —0.28 100.06		W.H.Herdsmann	(R. Bøgvad)	Unpublished	105

No.	Rock Name	Locality	District	Year	SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO
106	**Granodiorite**	Hodal, Liverpool Land	NE	1935	55.72	1.25	17.35	3.19	2.99	0.07	3.66	7.07
107	**Hedenbergite-andesinite**	Basistoppen, Kangerdlugssuaq	SE	1939	55.30	0.94	18.52	2.18	7.47	0.09	0.21	8.20
108	**Iron-bearing dolerite**	Asuk, Disko	NW	1879	54.80		13.40		14.02		5.33	7.84
109	**Nepheline-porphyry**	Akuliarusek	SW	1911	54.58	0.62[1])	20.43	2.08	3.39	tr.	tr.	1.56
110	**Aegirine-lujavrite**	Laxefjeld, Kangerdluarsuk	SW	1911	53.74	0.50	14.02	10.63	1.71	0.36	tr.	1.18
111	**Augite-syenite**	Niakornarsuk, Korok Fjord	SW	1911	53.71	3.40	15.37	3.28	5.72	0.14	1.58	5.20
112	**Normalfoyaite**	Ivigtut Peninsula	SW	1911	53.54	nil.	20.36	3.42	1.81	0.35	0.21	0.62
113	**Foyaite**	Igdlerisalik, Korok Fjord	SW	1911	53.53	0.44	19.69	5.09	2.83	0.24	nil.	1.87
114	**Aegirine-lujavrite**	Tupersuatsiak Tunugdliarfik	SW	1911	53.44	0.30	18.64	9.38	0.86	0.10	nil.	0.79
115	**Eklogite**	Hurry Inlet side of Liverpool Land	NE	1935	53.24	0.44	5.96	5.70	5.58	0.25	16.49	10.49
116	**Arfvedsonite-lujavrite**	Lille Elv, Kangerdluarsuk	SW	1911	53.01	0.33	15.33	9.14	4.44	0.13	0.10	0.67
117	**Iron-bearing dolerite**	Mellemfjord, Disko	NW	1883	53.01		15.85		11.53*)	tr.	7.51	8.72
118	**Altered nepheline-basalt**	Kangerdlugssuaq	SE	1934	53.00	0.15	22.70	2.43	1.49	0.15	0.12	1.00
119	**Tremolite-schist**	Uvkusigssat in Lille Qarajaq Fjord	NW	1905	52.74	0.29	4.35	2.35	6.58	0.12	18.29	10.86
120	**Lamprophyre (kersantitic)**	Porfyrfjeld, Canning Land	NE	(1936) 1937	52.14	1.05	12.47	0.96	6.18	0.08	6.02	7.23
121	**Basic hedenbergite-granophyre**	Basistoppen, Kangerdlugssuaq	SE	1939	52.13	1.14	15.87	5.61	11.17	0.30	1.11	5.80

*) All iron given as FeO as no separation between FeO and Fe_2O_3 was undertaken.

Na_2O	K_2O	P_2O_5	H_2O+	H_2O-	CO_2	Inclusive	Sum	Sp.gr.	Analyst	Published by	Notes	No.
4.23	2.64	0.88	0.52	0.25		BaO : 0.16 S : 0.02	100.00	2.78	N. Sahlbom	E. H. Kranck		106
6.01	0.78	0.42	0.41	0.06			100.59	2.82	W. A. Deer	L. R. Wager & W. A. Deer		107
2.18			1.50			Ni : 0.08 Co : tr.	99.15		L. Smith	L. Smith		108
10.70	5.74	tr.	1.02	0.12			100.24	2.698	Chr. Winther	N. V. Ussing	[1]) Incl. ZrO_2.	109
9.02	4.77	nil	3.40			ZrO_2 : 1.63	100.96	2.67	N. V. Ussing	N. V. Ussing		110
6.84	4.11	0.52	0.45	0.33			100.65	2.697	Chr. Winther	N. V. Ussing		111
10.52	4.50	tr.	3.85	0.20	nil	F : 0.67 S : 0.12 Cl : 0.22 Ba : nil Zr : $\frac{\text{nil}}{\text{or tr}}$ SO_3 : 0.04 Li : tr.	100.43 —0.42 100.01		W.H.Herdsmann	(R. Bøgvad)	Unpublished	112
9.61	5.23	0.31	0.34	0.25	0.40	Cl : 0.4	99.87 —0.01 99.86	2.751	Chr. Winther	N. V. Ussing		113
12.10	2.43	nil.	1.12	0.34		ZrO_2 : 1.00 Cl : 0.12	100.62 —0.03 100.59	2.834	Chr. Winther	N. V. Ussing		114
0.40	0.17	nil.	0.40	0.10		ZrO_2 : nil S : nil F : nil BaO : nil Cl : 0.14	99.36 0.03 99.33 (100.33)	3.363	N. Sahlbom	T. G. Sahama		*115*
11.86	2.60	tr.	1.88	0.20		Cl : 0.23 SO_3 : nil ZrO_2 : 0.65	100.57 —0.05 100.52	2.844	Chr. Winther	N. V. Ussing		116
4.49	tr.						101.11		J. Lorenzen	J. Lorenzen		117
10.20	2.35	nil.	5.90	0.35	nil	S : nil	99.84		W.H.Herdsmann	L. R. Wager		118
0.11	0.39	0.02	3.17	0.07		CuO : 0.07 NiO : 0.12	99.53	3.048	A. Lindner	M. Belowsky		*119*
1.79	2.55	0.70	3.48	0.30	4.79	BaO : 0.30	100.04		N. Sahlbom	A. Noe-Nygaard		120
3.63	1.38	0.70	0.86	0.25			99.95	2.97	W. A. Deer	L. R. Wager & W. A. Deer		121

No.	Rock Name	Locality	District	Year	SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO
122	**Kakortokite (white sheets)**	Kringlerne, Kangerdluarsuk	SW	1911	51.62	0.44	15.63	6.06	4.98	0.33	tr.	3.13
123	**Nepheline-porphyry**	Akuliarusek	SW	1911	51.31	1.20	21.54	3.68	3.37	0.41	1.18	1.39
124	**Hornblende-vogesite**	Bastionen, Ella Island	NE	1940	51.02	0.94	13.60	2.58	6.48	0.11	9.23	7.88
125	**Essexite-porphyrite**	Kakarsuak, Narsak	SW	1911	50.98	1.38	22.15	1.04	4.25	tr.	0.79	7.90
126	**Aegirine-lujavrite**	S. Siorarsuit, Tunugdliarfik	SW	1911	50.72	2.84[1]	15.45	11.82	0.80	0.31	0.13	0.14
126a	**Arfvedsonite-leucite-tinguaite**	Kangerdluarsuk	SW	1898?	50.70		13.72	6.07	7.64	1.42	0.04	0.68
127	**Iron-bearing dolerite**	Fiskernæs	SW	1883	50.64		15.98		14.92		5.14	9.39
128	**Olivine-gabbro**	Tinden, Kangerdlugsuaq	SE	1939	50.41	1.75	18.30	1.96	8.13	0.16	4.25	11.20
129	**Ilimausak-porphyry**	Ilimausak	SW	1911	49.64	4.25	13.74	7.10	4.97	0.03	1.58	4.88
130	**Naujaite**	Kangerdluarsuk	SW	1911	49.46	0.16	23.53	3.04	1.02	0.17	tr.	0.80
131	**Kakortokite (red sheets)**	Kringlerne, Kangerdluarsuk	SW	1911	49.39	0.49	10.39	4.31	7.72	0.97	nil.	5.11
132	**Sodalite-foyaite**	Tupersuatsiak, Tunugdliarfik	SW	1911	49.38	0.63	17.31	4.20	5.25	0.08	0.53	2.23
133	**Dolerite**	Brededal, Disko	NW	1872	49.18	0.52	13.52	5.52	10.31	0.28	6.83	11.51
134	**Quartz-gabbro**	Brødretoppen, Kangerdlugssuaq	SE	1939	49.16	3.59	15.83	4.13	8.17	0.21	4.36	10.81
135	**Dolerite**	Uivfaq, Disko	NW	1879	49.02		13.11	5.03	11.20	0.20	8.16	10.10
136	**Kakortokite (black sheets)**	Kringlerne, Kangerdluarsuk	SW	1911	48.90		7.85	11.46	13.32	1.11	0.38	1.95
137	**Tholeïtic basalt**	Cape Dalton	SE	1934	48.89	2.64	13.60	4.72	9.65	0.24	4.54	10.09

Na_2O	K_2O	P_2O_5	H_2O+	H_2O-	CO_2	Inclusive	Sum	Sp.gr.	Analyst	Published by	Notes	No.
0.09	4.19	nil.	2.12			ZrO_2 : 1.70 Cl : 0.17	100.46 —0.04 100.42	2.76	N. V. Ussing	N. V. Ussing		122
9.25	5.49	tr.	0.84		0.15	Cl : 0.17	99.98 —0.04 99.94	2.71	C. Detlefsen	N. V. Ussing		123
2.65	3.44	0.52	1.34	0.42			100.21		N. Sahlbom	A. Rittmann		124
6.84	2.71	0.38	1.22	0.12	tr.	Cl : tr.	99.76	2.82	Chr. Winther	N. V. Ussing		125
0.83	2.94	nil.	4.66				100.64	2.70	C. Detlefsen	N. V. Ussing	[1]) Incl. ZrO_2	126
2.32	1.91		4.84			ZrO_2 : 1.04	100.56		C. Detlefsen	H. Rosenbusch		126a
							96.07		J. Lorenzen	J. Lorenzen		127
2.74	0.46	0.25	0.32	0.19			100.12	2.98	W. A. Deer	L. R. Wager & W. A. Deer		128
6.33	4.42	1.57	0.81	0.14		BaO : 0.21	99.67	2.892	Chr. Winther	N. V. Ussing		129
4.71	4.34	nil.	1.38			ZrO_2 : 0.38 Cl : 2.25 SO_3 : nil	101.24 —0.51 100.73	2.53	N. V. Ussing	N. V. Ussing		130
1.45	2.62	nil.	1.24	0.22		ZrO_2 : 4.89 Cl : 0.51 F : 0.75 Nb_2O_5 : 0.30	100.36 —0.44 99.92	2.85	Chr. Christensen	N. V. Ussing		131
3.87	2.55	nil.	1.30	0.16		ZrO_2 : 0.61 Cl : 1.68 SO_3 : nil	99.78 —0.38 99.40	2.653	Chr. Winther	N. V. Ussing		132
1.84	0.06	0.13	0.34			Cl : tr. Cu : tr.	100.04	3.015 -3.017	E. Nauckhoff	E. Nauckhoff		133
2.90	0.35	0.39	0.62	0.06			100.58	2.97	W. A. Deer	L. R. Wager & W. A. Deer		134
1.33	0.35		1.80			Ni : tr. Co : tr.	100.30		L. Smith	L. Smith		135
7.40	3.23	nil.	1.80			ZrO_2 : 1.96[1]) Cl : 0.03	99.39 —0.01 99.38	3.12	C. Detlefsen	N. V. Ussing	[1]) Including TiO_2 (which is probably very low)	136
2.74	0.30	0.39	1.38	1.14	0.02	BaO : tr. SrO : tr. Li_2O : tr. Cl_2 : tr. S : 0.02	100.36	2.90	H. F. Harwood	L. R. Wager		137

No.	Rock Name	Locality	District	Year	SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO
138	**Eklogite (partly converted into amphibolite)**	Hurry Inlet side of Liverpool Land	NE	1935	48.80	1.30	13.60	5.03	5.80	0.18	8.58	11.5
139	**Pigeonite-tholeite**	Andrée Land	NE	1940	48.72	3.80	15.05	3.59	9.90	0.20	3.22	8.1
140	**Dolerite**	Jackson Island	NE	1932	48.64	2.20	12.62	4.34	7.34	0.12	7.33	11.8
141	**Kaersutite-pegmatite**	Østerfjeld, Qaersut	NW	1928	48.50	3.05	19.41	1.07	4.67	0.11	4.26	8.9
142	**Hornblende-biotite-schist**	Riddarborgen, Franz Joseph Fjord	NE	1931	48.40	1.20	12.83	2.43	9.13	0.25	11.65	10.5
143	**Fayalite-ferrogabbro**	Forbindelses-gletcher, Kangerdlugssuaq	SE	1939	48.27	2.20	8.58	4.06	22.89	0.26	1.21	7.4
144	**Iron-bearing dolerite**	Uivfaq, Disko	NW	1879	48.25		14.08	5.76	10.32		8.39	9.8
145	**Dolerite**	Kichenpauer Bay, Clavering Island	NE	1932	48.20	3.01	11.97	4.52	11.65	0.40	4.94	10.2
146	**"Middle" gabbro**	Pukugaqryggen, Kangerdlugssuaq	SE	1939	48.15	2.64	18.02	2.52	9.50	0.12	5.25	10.1
147	**Basalt, free from olivine**	Hare Island	NW	1918	48.10	5.68	11.22	6.94	8.93	0.23	3.78	8.0
148	**Basalt**	Uivfaq, Disko	NW	1872	48.04	0.39	13.13	6.89	11.14	0.11	5.17	10.8
149	**Quartz-gabbro**	Brødretoppen, Kangerdlugssuaq	SE	1939	48.02	3.88	15.40	4.35	9.30	0.25	4.06	10.0
150	**Dolerite**	Uivfaq, Disko	NW	1879	48.02	[1]	15.06	6.50	9.45	0.12	8.62	9.5

Na_2O	K_2O	P_2O_5	H_2O+	H_2O-	CO_2	Inclusive	Sum	Sp.gr.	Analyst	Published by	Notes	No.
3.01	0.83	0.38	0.50	0.12	nil	ZrO_2 : tr. BaO : tr. S : nil F : nil Cl : 0.14	99.84 —0.03 99.81	3.084	N. Sahlbom	T. G. Sahama		*138*
2.93	1.92	0.76	1.26	0.40			99.85		N. Sahlbom	A. Rittmann		139
4.85	0.31	0.18	1.05	2.25	tr.	(Ni, Co) O : tr.	100.08		W. H. Herdsmann	(G. W. Tyrrell) H. Backlund & D. Malmquist		140
4.39	2.15	0.33	2.01	0.32	0.37		99.57	2.666	Schäffer	F. Drescher & H. K. Krueger		141
4.59	0.64	tr.	1.20	0.20	nil	S : tr.	100.07		W. H. Herdsmann	I. D. Wiseman		*142*
2.65	0.34	0.65	1.13	0.37			100.03	3.18	W. A. Deer	L. R. Wager & W. A. Deer		143
1.96							98.57		L. Smith	L. Smith		144
3.39	0.79	0.92	0.62		nil	BaO : nil	99.62	3.005	N. Sahlbom	H. Backlund & D. Malmquist		145
3.46	0.14	0.05	0.20	0.02	0.03	ZrO_2 : nil SrO : 0.07 BaO : 0.01 Cr_2O_3 : nil S : 0.14 CuO : 0.006 NiO : nil	100.50	3.01	W. A. Deer	L. R. Wager & W. A. Deer		146
3.56	1.55	0.60	1.26	0.96	nil	Cl : tr. S : 0.04 Cr_2O_3 : nil V_2O_3 : 0.06 NiO : nil SrO : tr. BaO : 0.03	100.03 —0.02 100.01	2.95	H. F. Harwood	A. Holmes		147
2.83	0.06	0.07	H ? : 0.25			C : 0.79 S : 0.98 Cl : tr.	100.72 (100.79)	3.024[1])	E. G. R. Nauckhoff	E. G. R. Nauckhoff	[1]) A mean of two determ.	148
2.62	0.22	0.92	0.94	0.07	0.19	S : 0.14 ZrO_2 : 0.01 SrO : 0.12 BaO : 0.04 Cr_2O_3 : nil CuO : nil NiO : 0.01	100.59	2.97	W. A. Deer	L. R. Wager & W. A. Deer		149
4.50	0.73	0.06				Ni : tr. Co : tr.	99.58		L. Smith	L. Smith	[1]) L. S. has not tried to separate TiO_2 which is probably present in this rock.	150

No.	Rock Name	Locality	District	Year	SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	Ca
151	**Olivine-gabbro (marginal)**	Udløberen, Kangerdlugssuaq	SE	1939	48.01	1.51	19.11	1.20	8.44	0.12	7.72	10.
152	**Dolerite, iron-bearing**	Uivfaq, Disko	NW	1879	48.00	tr.	12.20	3.20	15.31		8.63	9.
153	**Variolitic basalt, altered**	Hængefjeld, Kangerdlugssuaq	SE	1939	47.89	1.74	14.36	1.63	10.14	0.19	7.28	10.
154	**Olivine-gabbro (marginal)**	East side of Skærgaardsbugt, Kangerdlugssuaq	SE	1939	47.83	1.29	18.62	1.16	8.87	0.09	7.92	10.
155	**Olivine-basalt**	Cape Daussy	SE	1934	47.81	2.51	13.64	4.50	8.84	0.22	6.51	11.
156	**"Diorite" (Ampibolite)**	Umanak	NW	1904	47.80	1.46	18.24	0.35	9.27	0.55	8.08	11.
157	**Trachydolerite (Tasek-porphyrite)**	Tasek, Narsak	SW	1911	47.79	3.82	16.88	4.66	5.92	tr.	1.51	5.
158	**Olivine-basalt, altered**	Mikis Fjord, Kangerdlugssuaq	SE	1939	47.61	1.58	10.92	3.80	7.25	0.19	13.49	8.
159	**Olivine-basalt**	Barclay Bay, north side	SE	1934	47.26	2.69	14.17	4.68	8.32	0.19	6.65	10.
160	**Dolerite, iron-bearing**	Uivfaq, Disko	NW	1901	47.11	0.78	14.33	4.88	11.06	0.21	8.45	9.
161	**Prowersite**	Segelsällskapets Fjord	NE	1940	47.10	1.44	13.02	2.36	5.13	0.12	8.64	8.
162	**Olivine-gabbro**	Mellemø, Kangerdlugssuaq	SE	1939	47.01	1.47	19.12	0.71	9.12	0.08	8.98	10.

a_2O	K_2O	P_2O_5	H_2O+	H_2O-	CO_2	Inclusive	Sum	Sp.gr.	Analyst	Published by	Notes	No.
.34	0.17	0.07	0.55	0.05	0.11	S : 0.29 ZrO_2 : nil SrO : 0.21 BaO : 0.02 Cr_2O_3 : tr. CuO : 0.006 NiO : nil	100.26	2.98	W. A. Deer	L. R. Wager & W. A. Deer		151
1.16		tr.	2.25		tr.	S : tr.	100.45		L. Smith	L. Smith		152
.01	0.22	0.18	2.76	0.10	0.19	Cl_2 : tr. SrO : tr. BaO : tr. Li_2O : tr. NiO : tr. S : tr.	100.20	2.99	H. F. Harwood	L. R. Wager & W. A. Deer		153
.54	0.20	0.06	0.27	0.16	0.01	S : 0.25 ZrO_2 : nil SrO : 0.19 BaO : 0.02 Cr_2O_3 : nil CuO : 0.008 NiO : nil	100.08 (100.07)	2.95	W. A. Deer	L. R. Wager & W. A. Deer		154
.54	0.35	0.24	0.76	1.26	nil	BaO : nil SrO : nil Cl_2 : tr. S : 0.01 Li_2O : tr.	100.48	2.95	H. F. Harwood	L. R. Wager		155
.24	0.45	0.24	0.58				100.70		W. C. Phalen	W. C. Phalen		*156*
.76	3.26	0.76	1.17	0.14	nil	Cl : nil	99.25	2.921	Chr. Winther	N. V. Ussing		157
.74	0.10	0.17	3.62	0.58	0.02	Cl_2 : 0.02 SrO : nil BaO : nil LiO_2 : tr. NiO : 0.06 S : tr.	100.22	2.95	H. F. Harwood	L. R. Wager & W. A. Deer		158
.30	0.81	0.23	1.45	0.90	0.04	Cl_2 : 0.01 SrO : nil BaO ; nil Li_2O : tr. S : 0.01	100.35	2.97	H. F. Harwood	L. R. Wager		159
.91	0.20	0.29	1.52			Cl : 0.09 S : 0.53	100.58		Th. Nicolau	Th. Nicolau		160
.16	5.85	1.56	2.27	0.34	(0.63) [1]		100.16		N. Sahlbom	A. Rittmann	[1]) Calc.	161
.33	0.28	0.06	0.24	0.09			100.37	3.01	W. A. Deer	L. R. Wager & W. A. Deer		162

No.	Rock Name	Locality	District	Year	SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	Ca
163	**Amygdaloidal basalt (lava)**	South side, Scoresby Sund	SE	1918	46.84	3.98	17.11	4.95	5.01	0.16	5.72	10.
164	**"Sonnenbrennerbasalt"**	Godhavn, Disko	NW	1927	46.75	0.88	12.85	3.64	12.68		4.77	13.
165	**Amphibolite**	Cape Swainson, Liverpool Land	NE	1935	46.74	2.88	14.77	3.11	11.00	0.18	6.52	8.
166	**Basalt**	Lyngmarksfjeld, Disko	NW	1933	46.58	5.18	7.14	8.57	9.65		5.08	10.
167	**Plagioclase-basalt**	Cape Franklin	NE	1932	46.50	3.02	10.86	2.70	12.77	0.18	6.27	11.
168	**Basalt**	Neills Cliff, Jameson Land	NE	1931	46.44	4.63	7.31	8.52	6.59		7.15	12.
169	**Dolerite, iron-bearing**	Uivfaq, Disko	NW	1879	46.40	tr.		31.75			8.72	10.
170	**Hypersthene-olivine-gabbro**	Uttentals Plateau, Kangerdlugssuaq	SE	1939	46.37	0.79	16.82	1.52	10.44	0.09	9.61	11.
171	**Grønlandite (Hypersthene-hornblendite)**	Upernivik Island	NW	1927	46.23	0.86	8.29	3.76	8.85		19.60	8.
172	**Felspar rock**	Mellemø, Kangerdlugssuaq	SE	1939	46.15	0.55	21.34	0.79	8.21	0.15	9.97	10.
173	**Grønlandite (Hypersthene-hornblendite)**	Upernivik Island	NW	1927	46.13	0.82	8.17	4.00	8.71		19.78	8.
174	**Essexite**	Panernak Bay, NW. of Narsak	SW	1911	46.10	3.34	18.59	2.63	6.68	0.05	3.23	9.
175	**Basalt**	Lyngmarksfjeld, Disko	NW	1931	46.05	3.02	13.83	5.56	6.85		7.65	10.
176	**Basalt**	Lyngmarksfjeld, Disko	NW	1931	45.91	4.36	8.75	8.06	9.11	0.16	5.63	10.
177	**"Middle" gabbro**	Pukugaqryggen, Kangerdlugssuaq	SE	1939	45.65	2.59	15.08	3.41	14.86	0.15	6.35	9.
178	**Eklogite (Strongly amphibolitized)**	Liverpool Land	NE	1935	45.56	2.60	16.10	5.59	9.15	0.20	6.54	8.

a_2O	K_2O	P_2O_5	H_2O+	H_2O-	CO_2	Inclusive	Sum	Sp.gr.	Analyst	Published by	Notes	No.
1.61	0.69	0.19	2.53	1.63	nil	S : 0.05 (Ni, Co)O : nil Cl : tr. Cr_2O_3 : tr. V_2O_3 : 0.01 BaO : tr. SrO : nil	100.69 —0.02 100.67		H. F. Harwood	A. Holmes		163
2.42	0.83		1.13				99.34		J. V. Donnevert	H. K. E. Krueger		164
2.83	1.50	0.53	1.28	0.25		ZrO_2 : nil BaO : tr. S : 0.17 Cl : 0.17	100.38 —0.02 100.36	3.04	N. Sahlbom	E. H. Kranck		*165*
4.49	1.41	0.88	0.54				100.35		K. Holler	K. Holler		166
2.69	1.16	0.64	1.99		0.04	BaO : nil S : 0.10	99.96	2.985	N. Sahlbom	H. Backlund & D. Malmquist		167
3.97	1.43		1.30				99.62		K. Holler	F. von Wolff		168
2.12		tr.	1.89			S : tr. C : tr.	100.89		L. Smith	L. Smith		169
2.45	0.20	0.06	0.29	0.09			100.02	3.04	W. A. Deer	L. R. Wager & W. A. Deer		170
1.64	0.25	0.08	1.22				99.54		F. Machatschki	F. Machatschki		*171*
1.72	0.12	0.05	0.27	0.10	0.13	S : 0.12 ZrO_2 : nil SrO : 0.07 BaO : 0.03 Cr_2O_3 : 0.04 CuO : 0.007 NiO : nil	100.06	3.01	W. A. Deer	L. R. Wager & W. A. Deer		172
1.79	0.62	0.07	1.30			Cr_2O_3 : 0.02	100.27		F. Machatschki	F. Machatschki		*173*
5.22	0.63	1.41	0.80	0.11	nil	Cl : nil	99.65	2.895	Chr. Winther	N. V. Ussing		174
4.67	1.23		0.74				100.25		K. Holler	F. von Wolff		175
1.93	0.59	1.56	0.80				100.36		K. Holler	F. von Wolff		176
2.48	0.28	0.08	0.22	0.08			100.41	3.19	W. A. Deer	L. R. Wager & W. A. Deer		177
2.67	1.38	0.86	0.72	0.15		ZrO_2 : tr. ? BaO : 0.05 S : nil F : nil Cl : 0.34	100.51 —0.08 100.43	3.140	N. Sahlbom	Th. G. Sahama		*178*

No.	Rock Name	Locality	District	Year	SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO
179	**Olivine-free gabbro**	Ivnarmiut, Kangerdlugssuaq	SE	1939	45.51	3.96	14.36	5.04	12.65	0.20	5.38	9.9
180	**Hypersthene-olivine gabbro**	Uttentals Plateau, Kangerdlugssuaq	SE	1939	45.48	0.94	16.41	2.09	9.29	0.06	11.65	10.4
181	**Trachydolerite**	Nunasarnausak	SW	1911	45.27	4.41	15.03	4.04	9.10	tr.	6.59	6.6
182	**Fayalite-ferrogabbro**	Basistoppen, Kangerdlugssuaq	SE	1939	45.19	1.67	9.37	5.78	23.77	0.32	0.43	9.0
183	**"Anortitfels"**	Uivfaq, Disko	NW	1872	44.94		22.20		9.45		4.98	11.0
184	**Hortonolite-ferro-gabbro**	Basishusene, Kangerdlugssuaq	SE	1939	44.81	2.55	13.96	3.75	16.66	0.17	5.54	8.5
185	**Ferrohortonolite-ferro-gabbro**	Basistoppen, Kangerdlugssuaq	SE	1939	44.61	2.43	11.70	2.05	22.68	0.21	1.71	8.7
186	**Nepheline-tephritic rock**	Cape Fletcher, Canning Land	NE	1907	44.43	1.40	17.89	4.00	4.94	tr.	2.40	12.6
187	**Olivine basalt**	Umîvik Fjord, Svartenhuk	NW	1931	44.42	1.92	13.61	3.19	9.67	0.20	9.25	14.4
188	**Olivine-trachybasalt**	Mt. Nordhoek, Loch Fyne	NE	1932	44.16	2.41	15.18	3.64	9.40	0.13	9.24	10.5
189	**Fayalite-ferrogabbro**	Basistoppen, Kangerdlugssuaq	SE	1939	44.13	2.48	7.88	4.05	26.63	0.48	0.25	10.0
190	**Dolerite (sill in peridotite)**	Østerfjeld, Qaersut	NW	1928	44.10	2.76	15.24	7.34	7.85	0.15	4.54	7.3
191	**Basalt**	Uivfaq, Disko	NW	1870	44.01		14.27	14.75	3.89		8.11	10.9
192	**"Olivinestone", disintegrated**	Siorarsuit	SW	1884	43.81		3.29		10.31		38.13	tr.
193	**Albite-diabase**	Mt. Ramsay, Gauss Peninsula	NE	1932	43.69	4.01	10.43	5.32	12.69	0.18	6.04	3.9
194	**Naujaite**	Nunasarnak Tunugdliarfik,	SW	1911	43.39	0.20	23.13	3.62	3.24	tr.	nil	0.5

Na_2O	K_2O	P_2O_5	H_2O+	H_2O-	CO_2	Inclusive	Sum	Sp.gr.	Analyst	Published by	Notes	No.
2.43	0.35	0.32	0.12	0.10			100.33	3.22	W. A. Deer	L. R. Wager & W. A. Deer		179
2.06	0.27	0.05	0.77	0.26			99.79	3.00	W. A. Deer	L. R. Wager & W. A. Deer		180
5.07	1.08	0.16	1.85	0.14	0.38	Cl : tr. SO_3 : nil	99.76	2.988	Chr. Winther	N. V. Ussing		181
2.43	0.49	0.91	0.57	0.31			100.29	3.30	W. A. Deer	L. R. Wager & W. A. Deer		182
1.86	0.06		H ? : 0.31[1])			C[1]) : 3.35 Fe : 1.11 Cl : 0.20 S : tr. Cu : tr.	99.47	2.927	Nauckhoff	E. G. R. Nauckhoff	[1]) A mean of two determ.	183
3.35	0.33	0.08	0.34	0.19			100.26	3.18	W. A. Deer	L. R. Wager & W. A. Deer		184
2.95	0.35	1.85	0.22	0.20	0.04	S : 0.31 ZrO_2 : 0.01 SrO : 0.08 BaO : 0.02 Cr_2O_3 : tr. CuO : 0.016 NiO : tr.	100.15	3.22	W. A. Deer	L. R. Wager & W. A. Deer		185
2.55	3.02		5.16		1.09		99.48		N. Sahlbom	O. Nordenskjöld		186
1.01	0.65	0.26	1.14	0.33		Cr_2O_3 : 0.09 NiO : 0.03	100.26 (100.35)		H. Nieland	H. Nieland		187
2.12	1.27	0.40	1.52		nil	BaO : nil	100.05	2.926	N. Sahlbom	H. Backlund & D. Malmquist		188
2.15	0.47	1.61	0.30	0.19			100.65	3.39	W. A. Deer	L. R. Wager & W. A. Deer		189
2.69	1.17	0.50	2.54	2.71	0.57		99.51	2.760	Schäffer	F. K. Drescher & H.K.E.Krueger		190
2.61	0.97						99.52		Th. Nordström	Th. Nordström (A. E. Nordenskjöld)		191
0.13			1.41			NiO : tr. Foreign matter : 2.37	99.45		K. Rørdam	K. Rørdam		*192*
0.77	4.90	0.87	3.59	0.60	3.72		100.78 (100.77)		N. Sahlbom	H. G. Backlund		193
9.68	1.51	nil	1.36	0.21		ZrO_2 : 0.27 Cl : 3.63 SO_3 : nil	100.80 —0.82 99.98	2.545	Chr. Winther	N. V. Ussing		194

No.	Rock Name	Locality	District	Year	SiO_2	TiO_2	Al_2O_3	Fe_2O_3	FeO	MnO	MgO	CaO
195	**Ankaramite**	Ladder Mountain, head of Musk Ox Fjord	NE	1932	43.20	3.60	8.57	5.00	6.24	0.14	12.00	15.5
196	**Basalt, iron-bearing**	Uivfaq, Disko	NW	1872	42.72	tr.	16.01	1.64	14.27	tr.?	7.93	10.1
197	**Peridotite var. picrite**	Qaersut, Nûgssuaq	NW	1904	42.63		6.88	3.33	7.27	0.36	29.36	5.9
198	**Olivine-basalt**	Hare Island	NW	1918	42.57	5.07	14.40	3.54	8.39	0.10	6.78	11.7
199	**Basalt**	Lyngmarksfjeld, Disko	NW	1931	41.60	4.33	5.90	11.43	10.71	0.07	6.81	11.9
200	**Gabbro-picrite**	Uttentals plateau, Kangerdlugssuaq	SE	1939	41.27	1.54	8.71	2.69	10.52	0.16	27.09	6.5
201	**Basalt, fragments in the weathered breccia**	Uivfaq, Disko	NW	1872	41.25	0.34	13.06	16.18	10.78	0.25	6.41	7.9
202	**Basalt**	Lyngmarksfjeld, Disko	NW	1931	41.18	4.04	12.40	7.47	6.89	0.35	5.15	11.6
203	**Felspar-bearing peridotite**	Østerfjeld, Qaersut	NW	1928	41.11	0.61	8.34	2.99	7.19	tr.	29.32	4.9
204	**Dolerite, iron-bearing**	Uivfaq, Disko	NW	1879	41.06	tr.	10.20	8.32	21.01		8.76	8.1
205	**Basalt**	Lyngmarksfjeld, Disko	NW	1931	40.97	2.84	14.44	4.17	6.81	0.30	6.97	12.9
206	**Soapstone**	Unortok Fjord	SW	1874	40.91		11.41	5.37	6.04		25.92	2.3
207	**"Anortitfels"**	Uivfaq, Disko	NW	1883	39.75		26.08	12.33			4.51	12.0
208	**"Olivinestone"**	Siorarsuit	SW	1884	39.17		3.30	nil	10.56		43.46	tr.
209	**"Augitzüge", in peridotite**	Østerfjeld, Qaersut	NW	1928	38.48	1.20	4.36	4.69	10.12	tr.	29.54	5.9
210	**"Anortitfels"**	Uivfaq, Disko	NW	1872	37.92		32.36		4.02[1])	0.19	2.86	11.5

Na_2O	K_2O	P_2O_5	H_2O+	H_2O-	CO_2	Inclusive	Sum	Sp.gr.	Analyst	Published by	Notes	No.
1.30	0.78	0.36	2.40	0.80	tr.	S : nil	100.04		W. H. Herdsmann	H. G. Backlund (G. W. Tyrrell)		195
1.65	0.13	tr.	H? : 0.30			Cu : tr. Fe : 4.57 Ni : 0.44 Cl : 0.08 S : 0.32 C : 0.30 Co : tr.	100.46	3.169	Nauckhoff	E. G. R. Nauckhoff		196
1.26	0.14					NiO : 0.27 Cr_2O_3:0.05	97.45		W. C. Phalen	W. C. Phalen		197
2.70	2.34	0.12	2.05	0.21	nil	S : nil SrO : tr.	99.98	3.06	H. F. Harwood	A. Holmes		198
4.65	0.82	0.63	1.32				100.19		K. Holler	F. von Wolff		199
0.69	0.13	0.02	0.87	0.07			100.35	3.18	W. A. Deer	L. R. Wager & W. A. Deer		200
1.54	0.03		H? : 0.49			Cl : 0.25 C : 0.86 S : tr. Co : tr. Cu : tr.	99.51	3.358	Nauckhoff	E. G. R. Nauckhoff		201
6.59	0.48	0.97	2.75				99.96		K. Holler	F. von Wolff		202
0.70	0.12	0.70	3.55		1.00		100.59	3.107	Schäffer	F. K. Drescher & H.K.E.Krueger		203
1.22		tr.	3.21			S : tr. C : tr.	101.88		L. Smith	L. Smith		204
5.48	1.21		3.54				99.70		K. Holler	F. von Wolff		205
2.62	0.37		4.21				99.20	2.825	O. Wölker	Karl Vrba		*206*
						Cr_2O_3:1.23	95.91		J. Lorenzen	J. Lorenzen		207
0.55			0.91			NiO : tr. Foreign matter:1.59	99.54	3.29	K. Rørdam	K. Rørdam		*208*
0.74	0.13		4.01		0.46		99.67	3.149	J.V. Donnevert	F. K. Drescher & H.K.E.Krueger		209
1.48	tr.		H? : 0.24			Cr_2O_3:0.08 C : 6.90 S : 0.77 Cl : tr. Co : tr. Ni : tr. Cu : tr.	98.39	2.761	Nauckhoff	E. G. R. Nauckhoff	[1]) Herefrom is subtracted 1.73 % iron-oxidul, corresponding to 0.77 % S.	210

No.	Rock Name	Locality	District	Year	SiO_2	TiO_2	Al_3O_3	Fe_2O_3	FeO	MnO	MgO	CaO
211	**"Mandelsteinkern"**	Lyngmarksfjeld, Disko	NW	1933 —34	36.86	3.60	13.75	10.94	2.31	0.15	6.21	10.0
212	**"Anortitfels"**	Uivfaq, Disko	NW	1872	36.59		19.18		14.85	0.29	7.24	8.7
213	**Alnöite**	Liverpool Land	NE	1907	36.29	4.60	10.91	7.55	5.52	0.23	9.29	13.4
214	**"Anortitfels"**	Uivfaq, Disko	NW	1872	34.72		31.83	4.88	5.53[1])		9.35	10.1
215	**Magnesite-pyroxenite**	Narsak	SW	1911	31.77	12.97	nil	12.97	10.23	tr.	15.77	12.2
216	**Soapstone**	Loc. unknown. (Prof. Laube got it in Lichtenau)	SW	1873	30.32		17.90		7.71		29.88	1.2
217	**Soapstone, same specim. as 216**	» »	SW	1873	29.82		17.96		7.47		29.40	1.2
218*	**"Bauxitähnliche Hülle"**	Lyngmarksfjeld, Disko	NW	1933 —34	25.59	5.06	24.04	18.71		0.65	0.81	2.9

Na_2O	K_2O	P_2O_5	H_2O+	H_2O-	CO_2	Inclusive	Sum	Sp.gr.	Analyst	Published by	Notes	No.
5.45	0.57	0.40	9.18				99.43		K. Holler	K. Holler		211
0.79	tr.		H? : 0.31			C : 2.55 Fe : 5.01 Ni : 0.25 Cl : 0.23 S : tr. Co : tr. Cu : tr.	96.02	3.141	Nauckhoff	E. G. R. Nauckhoff		212
3.42	1.40		3.65		3.85		100.19		N. Sahlbom	O. Nordenskjöld		213
1.00	0.27		H? : 0.29			C : 0.53 Fe : 0.09 Cl : 0.12	98.80	2.942	Nauckhoff	E. G. R. Nauckhoff	[1]) From FeO found through titration is subtracted 0.09 % Fe	214
2.69	0.54	tr.	0.60	0.05			99.79	3.561	Chr. Winther	N. V. Ussing		215
		0.11	12.28			F : tr. SO_3 : tr.	99.48	2.702	J. Janovský	J. V. Janovský		*216*
						F : tr. SO_3 : tr.	85.87		J. Janovský	J. V. Janovský		*217*
4.63	0.45		17.08				99.96		K. Holler	K. Holler		218*

Description of Rocks analyzed.

Denmark.

1. **Alminding granite.** Precambrian.
Bjergbakke, Vestermarie, Bornholm.
CALLISEN, K. (1932 (1934), p. 89).

A middle-grained, streaked, light reddish-grey rock, rather rich in quartz, irregularly defined and with undulatory extinction and microcline, often with perthitic structure; myrmekite is common, the plagioclase is an oligoclase (17 % an). Of the dark minerals an olive-brown or greenish biotite is predominant, then follow sphene and ore; hornblende is sparse. Accessories are orthite and a little fluorite.

2. **Hammer granite.** Precambrian.
Hammeren, Bornholm.
KALB, G. (1913, p. 52).

A middle-grained, light grey rock with a reddish tinge. Macroscopically seen to contain felspar, quartz and violet fluorite. U. M.[1]): Main constituents: Quartz, often undulatory and micropegmatitically intergrown with potash-felspar and plagioclase. The potash-felspar is microcline and is mostly developed as microperthite. The plagioclase is oligoclase-albite. Minor constituents: Biotite, sphene and a little ore. Sphene often forms an edge round the ore, the apatite and the zircon.

3. **Hammer granite.** Precambrian.
Hammeren, Bornholm.
CALLISEN, K. (1928, p. 18, 1932 (1934), p. 97).

Compare no. 2. Main constituents: Microcline-perthite, undulatory quartz and acid oligoclase (core 25 % an, edge 10 % an). Other constituents: Olive-brown biotite common, hornblende sparse, ore, and sphene; orthite is more common in this granite than in the other granite varieties of Bornholm.

---

[1]) »U. M.« is used here and throughout this paper as abbreviation for under microscope.

4. **Granite.** Precambrian.
Allinge, Bornholm.
RØRDAM, K. (1914, p. 307).

No mineral composition given in the text; reference is made to COHEN & DEECKE, Greifswald 1899: Über das krystalline Grundgebirge der Insel Bornholm.

5. **Svaneke granite.** Precambrian.
Ibs Kirke, Bornholm.
CALLISEN, K. (1932 (1934), p. 113).

A very coarse-grained rock, rather rich in dark minerals, which are often present in heaps. The quartz is somewhat undulatory, the main constituent is microcline-perthite, the microcline of which is perfectly fresh, while the perthitic plagioclase is somewhat altered. The plagioclase is an oligoclase (25—27 % an) occurring in centimetre-large grains; myrmekite is common. An olive or greenish biotite is predominant among the dark constituents; there are also bluish-green hornblende, much sphene and apatite, epidote, fluorite and seldom chalcopyrite and hematite.

6. **Vang granite.** Precambrian.
»At pegmatite«, Vang, Bornholm.
KALB, G. (1913, p. 59).

The rock analyzed was taken from a zone with a marked parallel structure at a pegmatitic vein (comp. no. 7, and description of »Hauptgranit« on pp. 54-55). U. M.: Albite-oligoclase is most frequent, oligoclase recedes and the potash-felspar is perthitic, further quartz, green hornblende and biotite, the latter of which predominates, sphene and ore.

7. **Vang granite,** (»Klondyke«). Precambrian.
Rødkløv, south of Vang, Bornholm.
KALB, G. (1913, p. 57).

The mineral description originates from »Hauptgranit« on Ringebakken, but the granite from Rødkløv did not show any differences (according to G. KALB). Greenish hornblende and biotite often grown together form dark clumps accompanied by sphene and ore. The zoned plagioclase consists of a core of oligoclase-andesine, and myrmekite is developed where it borders on potash-felspar. The potash-felspar is micrographically intergrown with quartz, which is less abundant than the felspar.

8. **Rønne granite.** Precambrian.
Klippegaard, Bornholm.
RØRDAM, K. (1890, p. 75).

Megascopically greyish green felspar, quartz and dark green and black hornblende are observed. U. M. are further seen: Biotite, apatite, zircon and iron-oxydes. The felspars are orthoclase, microcline and plagioclase. Sphene is absent, as is fluorite.

9. **Paradisbakke granite.** Precambrian.
Paradisbakkerne, Bornholm.
KALB, G. (1913, p. 62).

A dark, streaked rock, consisting of fine-grained biotite, hornblende, sphene, potash-felspar and quartz. The large plagioclase grains are only seldom idiomorphic, but often poikiliticly intergrown by quartz. They are zonary with the core consisting of oligoclase, the edge of albite-oligoclase.

10. **Rønne granite.** Precambrian.
Klippegaard, Bornholm.
CALLISEN, K. (1932 (1934), p. 39).

The main constituents are: Quartz, microcline (microcline-perthite) seldom orthoclase, plagioclase (28—20 % an), when zonary developed with edges of albite (ab. 10 % an), but usually the plagioclase is surrounded by microcline-perthite in parallel intergrowth, green strongly pleocroic hornblende ($2\,E = 75^{0}$), brown biotite with α: light yellow γ: dark brown (lepidomelane). Accessories: Much apatite, sphene, zircon, ore.

Secondary minerals: Muscovite (a little), calcite, epidote and chlorite.

11. **Rønne granite** (Knudsbakke granite). Precambrian.
Rønne area, Bornholm.
KALB, G. (1913, p. 67).

A dark grey xenomorphic-granular rock, the dark colour due to large quantities of hornblende and biotite. Sphene is rare, ore and apatite common. Plagioclases vary from oligoclase-andesine to albite-oligoclase; they are seldom idiomorphic and always surrounded by parallel-grown potash-felspar. The potash-felspar is almost always, the plagioclase not so often intergrown with quartz.

12. **Rønne granite** (Knudsbakke granite). Precambrian.
»At pegmatite«, Rønne area, Bornholm.
KALB, G. (1913, p. 68).
Compare no. 15.

The rock is a strongly banded variety of the Rønne granite, taken near a pegmatite vein.

13. **Volcanic ash-layer no. + 19.** Eocene.
Ejerslev, Island of Mors, Nord-Jylland.
BØGGILD, O. B. (1918, p. 25).

Colour of ash grey. The glassy particles have a greyish or brownish colour, pores are common, elongated in one direction; refringence 1.510. Among the minerals in the ash felspars predominate, single augite grains are also met with. The felspars are dominatingly oligoclase-albite (plagioclases with higher refringence are not common) or orthoclase.

14. **Volcanic ash-layer no. + 19.** Eocene.
Island of Fur, Nord-Jylland.
NORIN, ROLF (1940, p. 42).
Compare description of no. 13.

15. **Rønne granite.** Precambrian.
800 m east of Store Almegaard, Bornholm.
CALLISEN, K. (1932, (1934), p. 57)[1]).
The rock originates from the belt of transition at St. Almegaard. The structure is porphyric and somewhat banded. There is less biotite and hornblende than in the Rønne granite proper (cf. no. 10), and more sphene and ore. The phenocrysts consist of plagioclase and in single cases of microcline.

16. **Volcanic ash-layer no. — 17.** Eocene.
Limfjord area, Nord-Jylland.
BØGGILD, O. B. (1918, p. 21).
Colour of ash varies from yellowish-white (Hanklit, Stolleklint), to light grey (Fur) and light brown (Ejerslev). The glass grains possess a characteristic greenish-grey colour in their centre, the borders being colourless; the refringence decreases from the centre outwards as determined by the values of 1.538 and 1.500 respectively. Of minerals the felspars, acid plagioclase (albite) and orthoclase are present; there also occur numerous grains of a brownish hornblende, pleochroic with α olive-brown and γ reddish-brown and a few grains of augite (brownish from Fur and Ejerslev, green from Fur and Hanklit).

17. **Volcanic ash-layer no. — 12.** Eocene.
Hanklit, Thy, Nord-Jylland.
BØGGILD, O. B. (1918, p. 23).
Colour of ash greyish to black. Composition basaltic, although some oligoclase-albite is found. No augite occurs. The refringence of the glassy grains varies, the maximum value being 1.607.

[1]) The same analysis was published in an incorrect form in 1928 (26 p. 18. no. 9).

18. **Volcanic ash-layer no. + 19.** Eocene.
Helgenæs, Djursland, Øst-Jylland.
NORIN, ROLF (1940, p. 42).
Compare description of no. 13.

19. **Volcanic ash-layer no. — 12.** Eocene.
Fur, Nord-Jylland.
NORIN, ROLF (1940, p. 40).
Compare description of no. 17.

20. **Volcanic ash-layer no. + 19.** Eocene.
Ølst, Øst-Jylland.
NORIN, ROLF (1940, p. 43).
Compare description of no. 13.

21. **Volcanic ash-layer no. — 12.** Eocene.
Ølst, Øst-Jylland.
NORIN, ROLF (1940, p. 39).
Compare description of no. 17.

22. **Volcanic ash-layer no. + 101.** Eocene.
Hanklit, Thy, Nord-Jylland.
NORIN, ROLF (1940, p. 38).
No mineral description given by NORIN; the following data are found on p. 27 in BØGGILD (1918): »Colour of ash dark, composition basaltic«.

23. **Volcanic ash-layer no. + 101.** Eocene.
Fur, Nord-Jylland.
NORIN, ROLF (1940, p. 39).
Compare description of no. 22.

24. **Volcanic ash-layer no. + 101.** Eocene.
Helgenæs, Djursland, Øst-Jylland.
NORIN ROLF (1940, p. 38).
Compare description of no. 22.

The Faeroes.

25. **»Trapp anhydré«.** Tertiary.
Strømø.
DUROCHER, M. J. (1841, p. 563).
Rock description not of much use to day, being a hundred years old.

26. **Augite-andesite.** Tertiary.
Kolter.
OSANN, A. (1884, p. 49).

The fresh, greyish-brown, fine-grained rock is filled with cavities containing opal and heulandite. The rock contains no phenocrysts, and no olivine was found. The pyroxene is diallag-like[1]). Some brown, globulite-filled glass is recorded.

27. **Non-porphyritic basalt.** Tertiary.
Vaag Fjord, Suðerø.
HOLMES, A. (1918, p. 201).

A dark, compact, grey-green rock. U. M. micro-phenocrysts of labradorite in glomerophyritic aggregation, in a sub-ophitic groundmass consisting of labradorite-laths and granular plates of pale-green, slightly pleochroic enstatite-augite. Well-shaped and skeletal crystals of ilmenite are very abundant. There is a small amount of residual glass, sometimes brown and carrying globulites, sometimes green and showing incipient crystallization. The composition in vol-% is the following: Labradorite (+ inclusions) 45 %, pyroxene 39 %, magnetite and ilmenite 12 %, glass 4 %.

28. **Trapp.** Tertiary.
Height west of Torshavn, Strømø.
STRENG, A. (1853, p. 110).

Unaltered trapp with small pores and of a greenish-grey colour. But for felspar the mineral constituents are not clearly distinguishable. The pores may be empty or filled with a greenish clayey substance.

28a. **Big-felspar basalt.** Tertiary.
Velbestad, western side of Strømø.
WALKER, F. & C. F. DAVIDSON (1936, p. 887).

The felspar phenocrysts extend up to 1½ inches in length and form about 28 % of the total volume of the rock. Composition of phenocrysts bytownitic, occasionally with a thin border of andesine. The matrix contains elongated laths, 0.2 mm × 0.4 mm of plagioclase in sub-ophitic relationship with pale brown augite in grains up to 0.4 mm. Further occur a considerable amount of chlorophaeite and serpentine. The mineralogical composition by volume is: Plagioclase 45.1 %, augite 27.8 %, chlorophaeite and serpentine 22.6 % and iron-ores 4.5 %.

29. **Olivine-dolerite.** Tertiary.
Summit of Froðbiarkambur above Tværaa, Suðerø.
WALKER, F. & C. F. DAVIDSON (1936, p. 886, no. D.).

[1]) The augite was separately analyzed (cf. 38. p. 48).

A non-porphyritic fine-grained olivine-dolerite. Laths of plagioclase ($ab_1 an_2$), 0,2 mm × 0,05 mm, are in marked ophitic relationship with fawn-coloured pyroxene which forms clumps up to 1 mm in diameter. Olivine is fairly abundant in grains up to 1 mm in length which are sometimes idiomorphic, but more often penetrated sub-ophitically by plagioclase. Much of the olivine is altered to chlorophaeite. Irregular crystals of iron ore, interstitial zeolites (including analcite and doubly-refracting varieties) and brown glass are the most abundant accessories. The mineral composition by volume is: Plagioclase 45,8 %, olivine 16,9 %, pyroxene 30,7 %, iron ores 5,6 %, zeolites 1,0 %.

30. **Basalt with porphyritic felspars.** Tertiary.
Torshavn, Strømø.
WASHINGTON, H. S. (1922, p. 786, no. 1).

A slightly vesicular basalt, showing rather numerous thick, tabular phenocrysts of labradorite in a densely aphanitic, dark grey groundmass. The texture is porphyritic, sub-ophitic. There are no phenocrysts of either pyroxene or olivine. The groundmass is made up in great part of small tables of labradorite, which are multiply twinned and have a composition not quite as calcic as $ab_1 an_2$. Between these, in less amount, are small anhedral grains, rather than true ophitic areas, of a colourless augite, with very few and small grains of olivine, very rare grains of ore, and some small prismoids of apatite. There is a considerable interstitial, somewhat cloudy, glass, but the rock appears to be very fresh.

31. **Zeolitic amygdaloidal rock.** Tertiary.
Height west of Torshavn. Strømø.
STRENG, A. (1853, p. 110).

The groundmass is fine-grained. The colour of the rock is greenish-brown. Among the zeolites chabasite is recorded.

32. **»Trapp hydraté«.** Tertiary.
Height west of Torshavn. Strømø.
DUROCHER, M. J. (1841, p. 559).

Rock-description not of much use to day, being a hundred years old.

33. **Zeolitic amygdaloidal rock.** Tertiary.
Height west of Torshavn. Strømø.
STRENG, A. (1853, p. 111).

A greatly altered reddish-brown, zeolite-filled amygdaloidal rock with chabasite and desmine in veins.

34. **Basalt with porphyritic felspars.** Tertiary.
Höyvík, Strømø.
SIMPSON, J. B. (1928, p. 516, no. 3).

The felspar phenocrysts or glomero-porphyritic aggregates attain an average greatest length of from 5 to 7 mm. Chlorophaeite in large lumps is common. The composition of the plagioclase-phenocrysts is basic labradorite-bytownite, the groundmass-plagioclase is slightly less basic. The laths have here an average lenght of 0,5 mm, and the granular aggregates of pale or fawn-coloured augite are correspondingly large. A little olivine is present, and a marked quantity of isotropic substance, dark-brown or olive-green in colour (probably chlorophaeite). Iron-ore is not conspicuous. There is no real ophitic texture in the rock.

35. **Olivine-basalt (non-porphyritic).** Tertiary.
Trangisvaag, Suðerø.
SIMPSON, J. B. (1928, p. 516, no. 1).

A fine to medium-grained olivine-basalt. Serpentinized olivine is present as small (0,2 mm) crystals in a matrix of granular augite and labradorite. The augite shows a slight tendency to crystallize in two generations; the larger individuals are sub-idiomorphic and display a very faint purplish tint, which is absent, or cannot be detected in the smaller anhedral granules; these are colourless or fawn. The felspar laths average less than 0,5 mm in greatest length and there is an occasional larger crystal or glomeroporphyritic aggregate. Analcite in notable amount is apparent, as is also glass with a dark brown border and lighter yellow interior. Iron-ore is present.

36. **Ultramafic olivine-basalt.** Tertiary.
Southeast of church, Ejde, Østerø.
WALKER, F. & C. F. DAVIDSON (1936, p. 889, no. H.).

A zeolite-bearing, olivine-rich, ophitic dolerite. The olivine occurs as elongated, idiomorphic crystals, usually about 3 mm × 0,5 mm in size, and as small grains of irregular outline 0,5 mm in diameter, which may have floated off from larger crystals. The axial angle is near to 90°. Twinning on the long axis is not infrequently seen, and minute inclusions of black spinellides are very common. A remarkable feature is the freshness of the olivines, which are only rarely pseudomorphed in iddingsite or green serpentine. A pale greenish-brown monoclinic pyroxene with high axial angle occurs in marked ophitic relationship with plagioclase and forms clumps up to 2 mm in diameter. Occasionally small olivines are included poikiliticly. Plagioclase (mainly ab_2an_3) forms elongated laths (breadth/length ratio $^1/_8$) and has undergone a certain amount of zeolitisation. The zeolites themselves occur interstitially and in veins. Iron ore is scarce. The mineral composition by volume is: Plagioclase 36,9 %, olivine 29,5 %, augite 25,4 %, iron ores 1,1 % and zeolites 7,1 %.

37. **Altered palagonite-tuff.** Tertiary.
Height west of Torshavn. Strømø.
STRENG, A. (1853, p. 111).

An altered »palagonite-tuff« which graduates into a clayey substance. In the palagonite matter areas of zeolites and areas of decomposed rock occur. The total-colour is greyish-brown.

Greenland.

38. **Sanidine-rhyolite.** Tertiary.
NE. About 10 km west of Cape Franklin, Gauss Peninsula.
BACKLUND, H. G. & D. MALMQUIST (1935, p. 67 no. 1486).

Intensely silicified. In a greyish-green groundmass only few quartz-phenocrysts are to be seen; the felspar-phenocrysts are almost wiped out. The groundmass is spotted with ore, carries some sericite and is reticulated by veins of needle-like quartz-crystals.

39. **Sanidine-rhyolite.** Tertiary.
NE. About 10 km west of Cape Franklin, Gauss Peninsula. Horizontal laccolite (?).
BACKLUND, H. G. & D. MALMQUIST (1935, p. 67, no. 1480).

The rock contains automorphic phenocrysts of sanidine, a little albite and quartz. The groundmass is a rather coarse microgranite and contains some sericite. Vol-%: Quartz-phenocrysts 1,6 %, felspar-phenocrysts 13,2 % and groundmass 85,2 %.

40. **Psammitic gneiss.** Metamorphic complex.
NE. Hurry Inlet side of Liverpool Land.
KRANCK, E. H. (1935, p. 34).

Quartz, plagioclase (an_{20}), orthoclase, biotite and small quantities of a green hornblende. The accessories are: Magnetite, sphene, apatite and very little zircon.

41. **Alkali-rhyolite** with sanidine-phenocrysts. Devonian. Base of lava-flow.
NE. Northwest of Cape Graah, north coast of Ymer Island.
RITTMANN, A. (1940, p. 44, no. 463 a).

Phenocrysts of quartz partly in well-defined crystals, partly corroded, and sanidine which in places is still quite fresh. Pseudomorphs with calcedony and bluish-green hornblende with some yellowish-green chlorite may have originated from pyroxene, probably aegirine-augite. The groundmass is hyalopilitic with flow-texture; the original glassy parts have been replaced by a rather coarse aggregate of quartz with random orientation which in a poikilitic manner encloses microliths of orthoclase.

42. Phenocryst-poor **alkali-rhyolite.** Devonian.
NE. South side of Musk Ox Fjord.
RITTMANN, A. (1940, p. 47, no. 168).

Some of the quartz-phenocrysts, more or less corroded, are surrounded by a quartz border interwoven poikiliticly by orthoclase; others lie directly in the dominatingly felsitic groundmass. Sanidine, only locally perthitic, is also found as phenocrysts. The groundmass shows fluidal texture with light and dark bands; the light bands are of coarser grain than the dark ones and show transitions to poikilitic devitrification-structure; the darker bands are devitrified, the texture being felsitic. The composition by volume is: Quartz-phenocrysts 1,4 %, sanidine-phenocrysts 1,1 %, groundmass 97,5 %.

43. »**Quartz-keratophyre**«[1]). Devonian[2]).
NE. North slope of Mt. Ramsay, Gauss Peninsula.
BACKLUND, H. G. (1932, Min. descr., p. 53, anal. p. 96, no. 1236).

The microgranophyric groundmass is now and then rather coarse and shows needle-like intergrowth of quartz with faint reddish dotted felspar. When the granophyre individuals decrease in dimensions they are in areas replaced by micro-spherulites; these are also found along early cracks. The quartz-phenocrysts show all stages of resorbtion in spite of sharp outlines and are generally encircled by a granophyric halo of the same orientation as the central quartz individual. The felspar is in part a coarse orthoclase-perthite, in which the albite component sometimes replaces the orthoclase component so that only skeleton-like parts are left (the albite is multiply twinned, while the mother-mineral only rarely shows Carlsbad-twinning) in part albite occurring as a primary constituent, with only weakly developed twinning and generally intensely sericitized. Ore forms irregular lumps and grains in the groundmass; a little zircon also occurs. Ferrous lumps within well defined limits may originate from a pyribole (aegirine?).

44. Hypabyssal **granophyre-granite**[3]). Devonian[4]).
NE. Southeast foot of Mt. Högbom, Gauss Peninsula.
BACKLUND, H. G. (1932, Min. descr. p. 48—49, anal. p. 96, no. 189).

The mineral constituents are pure albite and potash-felspar, both brick-red. The albite is idiomorphic with polysynthetic twins with lamels of almost same width; albite-twins predominate, pericline-twins occur. The potash-felspar is an orthoclase-perthite with irregular occurrence of the perthite member; its outer part is intergrown by quartz-micropegmatite. Micropegmatite forms a groundmass

---

[1]) *Backlund* (1932, p. 53): »Quartz-keratophyre«, *Rittmann* (1940, p. 37—38): »Alkali-rhyolite« or »quartz-porphyry«.
[2]) By *Backlund* (1932) considered as belonging to the sub-Cambrian evolution phase, by *Bütler* (1935) and *Rittmann* (1940) shown to be of Devonian age.
[3]) By *Rittmann* (1940), classified as runitic aplite-granite.
[4]) *Rittmann* (1940, p. 61).

between the two felspars, and now and then also occurs as a core in the centre of the potash felspar. The larger, rounded quartz grains in the groundmass have generally the same orientation as neighbouring »quartz-fishes« in the micropegmatite. No mafic constituents were recorded, but for a few lumps of ore. A little accessory muscovite was observed.

45. **Granite.** Metamorphic complex (Precambrian).
NW. Umanak Island.
PHALEN, W. C. (1904, p. 187, no. 75,480).

Of medium grain and with pinkish hue; texture hypautomorphic granular. The mineral content is that of the gneiss (no. 69) even to the merest accessories and alteration products, but the proportions vary, especially that of biotite.

46. Acid **orthoclase-bearing porphyry.** Palaeozoic (Devonian?).
NE. Cape Fletcher, Canning Land. Cobble from the sea-shore.
NORDENSKJÖLD, O. (1907, p. 199).

A brick-red porphyry wih small inconspicuous porphyritic crystals, among which felspar is predominant, though in certain areas a larger quantity of quartz stands out. U. M. numerous little dihexaedra of quartz are seen; the larger individuals are composed of felspar, predominantly of plagioclase which is intensely weathered and kaolinized. The groundmass is microgranitic.

47. **Acid granophyre.** Tertiary.
SE. West ridge of Tinden, Kangerdlugssuaq. Large sill (upper part).
WAGER, L. R. & W. A. DEER (1939, p. 208, no. 3058).

Consists of small rectangular crystals of acid plagioclase which pass into a fine-grained micropegmatite, while interstitially a little quartz not intergrown wih felspar is developed. A dirty brown mineral, in small flakes and associated with a little iron-ore is probably stilpnomelane; it is widely scattered but not so abundant as the almost colourless chlorite which occurs interstitially with calcite and quartz.

48. **Quartz-rhyolite.** Tertiary.
NE. About 10 km west of Cape Franklin, Gauss Peninsula.
Semi-laccolite.
Analysis first publ. by BACKLUND (1932, p. 96, no. 1490), anal. repeated and furnished with description of rock in BACKLUND & MALMQUIST (1935, p. 32).

Groundmass micropoikilitic with some sericite-alteration; a weak calcite-alteration can also be traced, contains some accessory hematite. The vol-% of the constituents are: Quartz-phenocrysts 7,3 %, sanidine-phenocrysts 10,2 % and groundmass 82,4 %. Single grains of zircon, sphene, tourmaline and apatite occur.

49. **Alkali-granite.**
SW. Ivigtut Peninsula.
(Unpublished analysis, submitted to us by R. BØGVAD).
No rock-description.

50. Red **granite with aplitic groundmass** (Porphyry-granite). Precambrian.
NE. Cape Oswald, Ella Island. Ball from late-Precambrian tillite.
BACKLUND, H. G. (1932, p. 96, no. P. 10).
The texture is somewhat porphyric, the main constituent being automorphic orthoclase-perthite; next comes quartz, which shows signs of automorphy. The interspaces are filled by quartz and albite with aplitic texture. There are also green chlorite with ore and rutile grains, locally with muscovite and remnants of dark brownish biotite. Chlorite with some epidote and with reddish carbonate-rim may be pseudomorphs on pyroxene. Accessories are apatite, zircon and ore.

51. **Sanidine-rhyolite.** Tertiary.
NE. About 7 km west of Cape Franklin, Gauss Peninsula. Sill or sheet.
BACKLUND, H. G. & D. MALMQUIST (1935, p. 67, no. 1510).
The mineral composition in vol-%: Quartz-phenocrysts 2,0 %, felspar-phenocrysts 9,1 % and groundmass 88,9 %.
The original perthite (phenocrysts) is intensely pigmented. Small quartz-»drusen« contain sericite and now and then calcite.

52. **Quartz-porphyry** (Comendite). Age unknown, probably Precambrian.
SW. N. Siorarsuit, 830 m above sea-level east of summit of Ilimausak. 5 m wide dyke.
USSING, N. V. (1911, p. 224, no. 24).
The rock is rather altered. U. M. the felspar-phenocrysts are seen to consist of an irregular microperthitic intergrowth of potash-felspar and albite; phenocrysts of quartz and ferromagnesian minerals, now quite converted into iron oxides, also occur. The extremely fine-grained groundmass consists of orthoclase-microperthite mixed with crystals of pure albite and contains small dots of irregular patches of black iron oxide. A few grains of zircon and a little fluorite were also observed.

53. **Spherulitic rhyolite.** Tertiary.
NE. About 6 km west of Cape Franklin, Gauss Peninsula. Lava flow.
BACKLUND, H. G. & D. MALMQUIST (1935, p. 55, no. 1501).
The microgranitic groundmass makes up 81,6 vol-% and the phenocrysts 18,4 vol-% of the rock. The phenocrysts are the following: Quartz 1,8 %, sanidine 14,5 % and plagioclase 2,1 %.

54. Greyish-brown **porphyry without phenocrystic quartz.** Palaeozoic (?).
NE. Mt. Nordenskjöld, head of Nathorst Fjord. Ball from Eotriassic conglomerate.
NOE-NYGAARD, A. ((1936), 1937, p. 112, no. 60 a).

The rock is thought by N-N to be related to the palaeozoic magmatites of Canning Land. It is a hard, almost chertlike porphyry with a groundmass of a dark greyish-brown colour and with small pinkish felspar-phenocrysts.

55. Red **granite.** Post-Devonian (?)[1]).
NE. Mt. La Cour, Gauss Peninsula.
BACKLUND, H. G. (1932, Min. descr. p. 55, anal. p. 101, no. 211).

A uniform brick-red rock with big arcuated felspars and greyish-white quartz fillings which are younger than the deformation that the rock has undergone. U. M. the rock shows intense kataclastic deformation. The plagioclase is a pure albite (0—5 % an) with fine albite-twinning; pericline twins are rare. The albite is filled with quartz-microbreccia between the thin lamellae, as is also the case with the potash-felspar, an irregular perthite, but here the lamellae are broader. The mode of occurrence of quartz and felspar makes it probable that they were once in micropegmatitic intergrowth, i. e. the rock was once a granophyre. Ore is sparse, so is zircon. A little calcite belongs to a later epoch.

56. **Spherulitic rhyolite.** Tertiary.
NE. About 10 km west of Cape Franklin, Gauss Peninsula. Semi-laccolite.
Analysis first published by BACKLUND, H. G. (1932, p. 96 — by mistake numbered as 1492); published again with description of mineral content by BACKLUND, H. G. & D. MALMQUIST (1935, p. 31, no. 1508).

The volumetric analysis gives the following composition: Groundmass: Spherulitic part 33,8 %, microgranitic part 53,4 %. Phenocrysts: Quartz 2,1 %, plagioclase 1,9 %, sanidine 8,8 %.

57. **Two-mica-granite.** Metamorphic Complex (Caledonian).
NE. South side of Kempe Fjord.
BACKLUND, H. G. (1932, p. 91, no. 1328).

A light grey to white two-mica-granite, with potash affinities, which carries quartz with undulatory extinction, potash-felspar, albitic plagioclase and a dull brown biotite. Needles of sillimanite are found in the quartz. Myrmekite is well developed.

---

1) *Rittmann, A.* (1940 p. 38 and p. 67—68).

58. **Two-mica-granite.** Metamorphic Complex (Caledonian).
NE. Forsblad Fjord.
BACKLUND, H. G. (1932, p. 91, no. 1349).

A light grey to white two-mica-granite, with potash affinities, which carries quartz with undulatory extinction, potash-felspar, albitic plagioclase and reddish-brown biotite. Myrmekite is well developed.

59. **Two-mica-granite.** Metamorphic Complex (Caledonian).
NE. North coast of Clavering Island.
BACKLUND, H. G. (1932, p. 91, no. 39).

Pink-dotted two-mica-granite with potash affinities. The constituents are microcline with coarse lattice and weakly perthitic plagioclase which is idiomorphic in long prisms — often zoned — (oligoclase-albite), biotite of dull dark-brown colour, muscovite and quartz with undulatory extinction.

60. **Two-mica-granite.** Metamorphic Complex (Caledonian).
NE. Forsblad Fjord.
BACKLUND, H. G. (1932, p. 91, no. 1351).

Pink-dotted two-mica-granite with potash affinities. The constituents are microcline with coarse meshes and of weakly perthitic habit, idiomorphic oligoclase-albite, somewhat zoned, reddish-brown biotite, muscovite and undulatory quartz.

61. **Soda-granite.** Age unknown, probably Precambrian.
SW. Iviangussat, Kangerdluarsuk.
USSING, N. V. (1911, p. 114, no. 2).

The soda-granite in zones from ½—2m width surrounds fragments of sandstone in augite-syenite, due to a process of absorbtion. Both mineralogically and chemically it bears close resemblance to the arfvedsonite-granite of Ilimausak. It varies from coarse to fine-grained. U. M. the constituents are: Perthitic microcline-albite, quartz, catophorite-like hornblende and aegirine-augite (often with a little aegirine). Accessories are zircon and ore. (The sample analyzed was light grey, rather fine-grained and without aegirine-augite).

62. Fine-grained **granite.** Metamorphic Complex. (Devonian?).
NE. Hurry Inlet, Liverpool Land.
KRANCK, E. H. (1935, p. 87).

As to mineral-content, compare rock no. 65.

63. **Spherulite** from spherulitic rhyolite. Tertiary.
NE. About 6 km west of Cape Franklin, Gauss Peninsula. Lava flow.
BACKLUND, H. G. & D. MALMQUIST (1935, p. 55, no. 1504).

Component minerals are stated to form the following vol-%: Phenocrystic quartz 0,9 %, phenocrystic felspar 1,7 %, spherulite-quartz 28,3 %, spherulite-groundmass 48,2 %, calcite and sericite 20,9 %.

64. **Chlorite-oligoclase-microcline-gneiss.** Metamorphic Complex. NE. From the centre of the anticline, Musk Ox Fjord inlier.
WISEMANN, I. D. H. (1931, p. 323, no. 62).

Chlorite is the distinctive mineral; it occurs in independant plates or aggregates of two or three individual plates. Rutile in a sagenitic web, sphene, iron-ores and occasionally calcite occur as inclusions in the chlorite. White mica is sometimes intergrown with the chlorite. The felspars include acid oligoclase and microcline. Quartz is moderately abundant; orthite in fairly large crystals, apatite, zircon and a little magnetite also occur.

65. Coarse porphyric **granite.** Metamorphic Complex. (Devonian?). NE. Hurry Inlet, Liverpool Land.
KRANCK, E. H. (1935, p. 87).

The following mineral content is recorded: Perthitic orthoclase, plagioclase (core 44 % an, border 28 % an), quartz, yellowish-brown biotite and sometimes also muscovite and the accessories: apatite, zircon and ore.

66. **Arfvedsonite-granite.** Age unknown, probably Precambrian. SW. South of highest summit of Ilimausak.
USSING, N. V. (1911, p. 114, no. 1).

The fresh rock is coarse-grained and of a light greenish colour. The diameter of the felspar grains varies from 2—4 mm; the quartz grains are a little smaller, and the arfvedsonite-anhedra 10—15 mm. U. M. the following constituents are revealed: Alkali-felspar (perthitic microcline-albite), quartz, arfvedsonite, enigmatite and a little aegirine. Occasional constituents are: Zircon, pyrochlore (?) and elpidite (?). The secondary constituents, magnetite (titano-magnetite), fluorite, hematite, ferric hydrates and calcite occur in the altered varieties.

67. **Biotite-granite.** Palaeozoic (probably Devonian). NE. North side of Cape Wardlaw, Canning Land.
NOE-NYGAARD, A. ((1936), 1937, p. 39, no. 368).

A medium-grained, hypautomorphic granular granite with the following constituents: Quartz 31,7 %, biotite 6,7 %, potashfelspar 31,3 vol-%, plagioclase 30,2 vol-%[1]) and accessories 0,1 vol-%.

The accessories are: Apatite, sphene, zircon, pyrite and black ore.

---

[1]) The values given here are taken from an »errata« list not supplied with all copies of the paper (The values of table 1, lit. no. 31 are 44,6 and 16,9 vol-% respectively, these being incorrect owing to faulty tracing of some intensely sericite-filled felspars).
Instead of line 3 and 4 in table 1 on p. 28 (31) read:

Kalifeldspat	34,8 %	32,0 %	31,0 %	31,3 %	20,0 %	13,2 %
Plagioklas	21,9 %	27,7 %	26,9 %	30,2 %	25,9 %	39,9 %

68. **Granite.** Metamorphic Complex.
NE. Ättestupan, Kejser Franz Joseph Fjord.
BACKLUND, H. G. (1932, p. 91, no. 1424).

The rock consists of microcline (with Carlsbad-twinning) often without twinning-net, oligoclase-albite (13 % an), quartz (undulatory) and dark olive-brown biotite which dominates over muscovite. The rock contains veins filled with iron-rich epidote (omitted in the material analyzed).

69. **Gneiss.** Metamorphic Complex (Precambrian).
NW. Umanak Island.
PHALEN, W. C. (1904, p. 185, no. 75,478).

A typical gneissoid rock consisting of roughly alternating layers of quartz with felspar and biotite. The texture is hypautomorphic granular. The constituents are: Albite, oligoclase, orthoclase, microcline, quartz, biotite and the accessories: apatite, zircon and sphene. In the felspars the alteration-products sericite and kaolin occur.

70. Grey **gneiss.** Metamorphic Complex (Precambrian).
NW. Siusasigsak, north of Jakobshavn.
BELOWSKY, M. (1905, p. 24).

A grey, fine-grained rock of evident gneissic habit, consisting of orthoclase, plagioclase, quartz and biotite. Microcline, albite, epidote and kornerupite have been formed through recrystallisation. The accessories are: Ore, zircon, sphene, apatite, epidote and tourmaline. The rock is considered to have originated from granite.

71. **Microcline-granite.** Metamorphic Complex. (Caledonian).
NE. Storefjord, Liverpool Land.
KRANCK, E. H. (1935, p. 81).

The constituents are: Quartz 23,51 vol-%, microcline 27,02 vol-%, oligoclase 42,04 vol-%, biotite 5,82 vol-%, sphene 1,19 vol-% and magnetite 0,42 vol-%.

72. **Rhyolitic eruption-breccia.** Tertiary.
NE. About 10 km west of Cape Franklin, Gauss Peninsula. Sheet or flow.
BACKLUND, H. G. & D. MALMQUIST (1935, p. 73, no. 1476).

Parts of a subophitic mass into which enter partly fragmented quartz and intensely sericite-altered sanidine-phenocrysts, passes diffusely into a dense, microfelsitic, sericite-filled substance of rhyolitic character; this mass contains quartz and often rather big, profoundly altered, perthitic sanidine-phenocrysts. The groundmass is thought to be a rather heterogeneous mixture of basaltic and rhyolitic material.

73. Grey, fine-grained **gneiss,** Precambrian.
NE. Spiral Creek, Cape Weber, Andrée Land. Tillite-ball from late Precambrian tillite.
BACKLUND, H. G. (1932, p. 104, no. P. 9).

The main felspar is a perthitic microcline; an albitic plagioclase also occurs. Quartz is present as elongated, irregular areas with undulatory extinction. Remnants of a pale brown biotite are met with, but the greater part of this mineral is converted into chlorite of a dull greenish colour and pigmented with grains of ore and lenses of calcite. Accessories are: Apatite, orthite and ore.

74. Grey **gneiss.** Metamorphic Complex.
SE. 100 m west of contact, Mellemø, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 10, no. 1867).

A fairly fine-grained, granulitized gneiss mainly consisting of quartz and plagioclase with vague layers of green ferromagnesian minerals and pink bands rich in orthoclase. Mode: Quartz 28 %, orthoclase 15 %, plagioclase 49 % and biotite 8 %.

[An analysis of the alkalies in a similar rock from the Kangerdlugssuaq area (no. 1865) gave the following result (op. cit. p. 10): Na_2O = 3,98 % and K_2O = 2,93 %.]

75. Red **phorphyry with phenocrystic quartz.** Palaeozoic(?).
NE. Tvekegledal, Wegener Peninsula. Conglomerate-ball from Eotriassic deposits.
NOE-NYGAARD, A. ((1936), 1937, p. 112, no. 375 c).

The conglomerate-ball is thought by N-N to be related to the palaeozoic magmatites of Canning Land, NE.

The rock is a somewhat weathered, coarse-grained, red porphyry. The following vol-% are found among the phenocrystic minerals: Quartz 35,5 %, felspars 66,0 % and biotite & accessories 0,5 %.

76. **Quartz-monzonite.** Metamorphic Complex. Precambrian.
NW. Nûgssuaq Peninsula, eastern part.
PHALEN, W. C. (1904, p. 208, no. 75,491).

The texture of the rock is pan-automorphic. The constituents are: Oligoclase, which is intensely kaolinized, labradorite, less common, as well as amphibole, pyroxene, quartz and the accessories: Zircon, apatite, ilmenite, magnetite and some hydrous iron-ore.

Three amphiboles are recognized, viz. 1) common hornblende 2) chestnut-brown hornblende (in association with pyroxene) and 3) a soda-amphibole of the arfvedsonite-group.

77. Greyish-white **two-mica-granite.** Metamorphic Complex.
NE. Øvre Rypegletcher (i. e. Upper Ptarmigan glacier), Kejser Franz Joseph Fjord.
WORDIE, I. M. & W. F. WHITTARD (1930, p. 650, no. 103).

The following constituents are found: Orthoclase, often with a central sericitized region, microcline with microperthitic structure, acid oligoclase, quartz, biotite occasionally showing a little chloritization — with magnetite and rutile —, muscovite, but not in such quantities as biotite, and the accessories: Apatite, ore and zircon.

78. Grey **porphyry with phenocrystic quartz.** Palaeozoic (?).
NE. Hesteskofjeld, Canning Land. Conglomerate-ball from Devonian deposits.
NOE-NYGAARD, A. ((1936), 1937, p. 112, no. 1104 a).
The conglomerate-ball is thought by N-N to be related to the palaeozoic magmatites of Canning Land.
The rock is a greyish, rather fresh looking porphyry with phenocrysts of quartz, quite dull, whitish felspars and chlorite-altered biotite.

79. Greyish-green **porphyry without phenocrystic quartz.** Palaeozoic (?).
NE. Mt. Kollen, Canning Land. Conglomerate-ball from Lower Permian deposits.
NOE-NYGAARD, A. ((1936), 1937, p. 112, no. 342 d).
The conglomerate-ball is thought by N-N to be related to the palaeozoic magmatites of Canning Land.
The rock is a rather fresh, greyish-green porphyry with whitish felspar-phenocrysts, intensely weathered.

80. **Porphyric granite.** Palaeozoic (?).
NE. South side of Porfyrfjeld, Canning Land.
NOE-NYGAARD, A. ((1936), 1937, p. 49, no. 1114).
The rock is clearly porphyric, the phenocrysts forming 40 vol-%, the microgranitic and rather calcite-filled groundmass 60 vol-%. The phenocrystic minerals occur in the following proportions: Quartz 24,9 %, orthoclase 32,8 %, plagioclase (oligoclase/andesine) 31,5 %, biotite 9,2 %, accessories (apatite, ore and zircon) 1,6 %.

81. Spherulitic **riebeckite-trachyte** (perhaps Sølvsbergite). Tertiary.
NE. Cape Parry, northeast corner of Traill Island. Pebble from the beach.
TYRRELL, G. W. (1932, p. 522, no. 95).
A norm, but no mineral description is given in the text.

82. **Biotite-dacite.** Age unknown, probably Devonian.
NE. Erratic from moraine at the eastern glacier, south coast of Segelsällskapets Fjord.
RITTMANN, A. (1940, p. 18, no. 2).

The texture is holocrystalline, porphyric. The fine grained groundmass consists of quartz, orthoclase, plagioclase, some biotite, ore and apatite. The following vol-% were obtained on the integration table: Andesine-phenocrysts 25,4 %, quartz-phenocrysts 0,4 %, biotite-phenocrysts 14,4 %, apatite-phenocrysts 0,3 %, magnetite (lumps) 0,2 %, groundmass 58,3 %, secondary muscovite in andesine about 1,0 %.

83. Red **porphyry with phenocrystic quartz.** Devonian.
NE. North side of Porfyrfjeld, Canning Land. Dyke.
NOE-NYGAARD, A. ((1936), 1937, p. 88, no. 246).

The texture and constituents of the groundmass not determinable owing to disintegration and calcitisation. Among the phenocrysts can be distinguished: Quartz, orthoclase, plagioclase — both intensely disintegrated —, biotite and the accessories: Apatite, sphene with leucoxene, pyrite and zircon.

84. **Granulitic gneiss.** Metamorphic Complex.
NE. Cape Hope, south end of Liverpool Land.
SAHAMA (SAHLSTEIN), T. G. (1935, p. 37, no. 1110).

The mineral composition is: Quartz, plagioclase, potash-feldspar, biotite, garnet, pyroxene, amphibole, serpentine, chlorite, calcite and the accessories: Apatite, rutile, ore and zircon.

85. **Anorthoclase-trachyte.** Tertiary.
NW. Arfertuarssuk Fjord, Svartenhuk Peninsula.
NIELAND, H. (1931, p. 598).

A light-grey rock (with a reddish weathering-hue), which owing to numerous big anorthoclase-phenocrysts has a coarse-grained appearance; single small phenocrysts of pyroxene and ore are also found.

The groundmass may be coarser — orthophyric, or finer more trachytic. The main constituent is anorthoclase. Some interstitial, now partly devitrified glass occurs, as well as quartz and titaniferous iron-ore. Of sparse occurrence there are hornblende, aegirine-augite, aegirine, apatite, limonite and goethite.

86. **Astochite-gneiss.** Metamorphic Complex. (Precambian).
NW. Right side of the Qarajaq glacier.
BELOWSKY, M. (1905, p. 37).

The gneiss is a light reddish-grey rock consisting of orthoclase, albite — with curved lamellae, blue hornblende (soda-richterite) and the accessories: Magnesia-mica, apatite, sphene and zircon. Quartz is totally wanting. The structure is crystalloblastic.

87. **Syenite.** Tertiary.
NE. The cape just to the west of the entrance to Antarctic Harbour, mouth of King Oscar Fjord.
NOE-NYGAARD, A. (1940, p. 555, no. 450).

A coarse to medium-grained syenite with a little quartz. The constituents are: Perthite (78 vol-% of the total felspars), anti-perthite (20 %), plagioclase (andesine) (2 %), cores of diopsidic pyroxene encircled by two generations of amphiboles, biotite and a little quartz interstitially. The accessories are: Sphene, apatite, zircon, rutile and ore. The vol-% of the constituents are the following: Felspars 85,8 %, quartz 1,5 %, pyroxene 0,2 %, amphiboles 6,5 %, biotite 1,0 %, and accessories 5,0 %.

88. **Nepheline-sodalite-syenite.** Tertiary.
SE. West side of Kangerdlugssuaq.
WAGER, L. R. (1934, p. 39).

A norm is given on p. 39; no description of the mineral content is given in the text.

89. Reddish-brown **porphyry without phenocrystic quartz.** Devonian.
NE. North side of Porfyrfjeld, Canning Land.
NOE-NYGAARD, A. ((1936), 1937, p. 82, no. 248).

The groundmass is entirely altered and filled with calcite.

The following vol-% of the phenocrysts are recorded: Orthoclase + plagioclase 67,3 %, biotite 23,5 %, pseudomorphs on pyriboles 2,7 % and accessories 6,5 %.

90. Greyish-green **porphyry without phenocrystic quartz.** Devonian.
NE. Cape Fletcher, Canning Land.
NOE-NYGAARD, A. ((1936), 1937, p. 70, no. 363).

The groundmass is of microgranitic to microgranophyric texture, but very unfresh. The following vol-% of the phenocrysts are recorded: Orthoclase 36,0 %, biotite 9,8 %, pseudomorphs on orthorhombic pyroxene 22,1 %, plagioclase (andesine) 29,1 %, clinopyroxene & pseudomorphs on clinopyroxene 3,1 %.

91. **»Aplite«** from the **Kaersutite-pegmatite.** Tertiary.
NW. Østerfjeld, Qaersut, Nûgssuaq Peninsula.
DRESCHER, F. K. & H. K. E. KRUEGER (1928, p. 602).

The volumetric determination of the mineral content is the following: Anorthoclase 81,0 %, pyroxene and amphibole 5,0 %, biotite 3,5 % and zeolites 10,5 %.

92. **Iron-bearing rock.** Tertiary.
NW. Ivigsarkut.
NICOLAU, TH. (1901, p. 243, no. 474).

The rock is very similar to the rock of Jernpynten (no. 94), only that orthorhombic pyroxene is less common both as phenocrysts and in the groundmass.

93. Reddish-brown **porphyry without phenocrystic quartz.** Devonian.
NE. Western side of Cape Fletcher, Canning Land.
NOE-NYGAARD, A. ((1936), 1937, p. 82, no. 353).

The groundmass has a microgranitic to microfelsitic texture. The following are the vol-% of the phenocrysts. Orthoclase 23,3 %, biotite 14,3 %, pseudomorphs on orthorhombic pyroxene 30,0 %, plagioclase (andesine) 9,3 %, pseudomorphs on clinopyroxene 15,1 % and accessories 8,0 %.

94. **Iron-bearing rock.** Tertiary.
NW. Jernpynten, west side of Disko.
NICOLAU, TH. (1901, p. 243, no. 506).

The texture is clearly porphyric. The groundmass consists of labradorite-microliths (in flow-arrangement) and a mixture of clinopyroxene and enstatite-laths. Ore and isotropic hisingerite are rare. Homogeneous areas are occupied by iron. Big phenocrysts consist of bytownite, often zoned, dotted with graphite dust and enstatite and more seldom clinopyroxene.

95. **Hedenbergite-granophyre.** Tertiary.
SE. About 800 m above sea-level, west face of Brødretoppen, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 210, no. 3047).

The rock belongs to the group of »transgressive rocks« of the Skaergaard Intrusion. The following mode is given: Quartz[1]) 36 %, clinopyroxene 13 %, plagioclase 40 %, ore[2]) 11 %.

96. **Granodiorite.** Metamorphic Complex. (Caledonian).
NE. Cape Smith, Liverpool Land.
KRANCK, E. H. (1935, p. 74).

Same main-constituents in almost the same proportions as in granodiorite from Hodal, Liverpool Land (no. 106).

97. **Nordmarkite.** Age unknown, probably Precambrian.
SW. Narsak (the specimen analyzed was taken on the west side of Kakarsuak).
USSING, N. V. (1911, p. 196, no. 17).

A coarse-grained greyish-red alkali-syenite, which U. M. shows the following composition: Soda-orthoclase with some oligoclase, green and brown hornblende, colourless or greyish augite, some biotite, iron-ore, apatite and finally a little hydrous iron-oxide arisen from the decomposition of the ferro-magnesian minerals.

---

[1]) Includes micropegmatite and dusty borders of plagioclases.
[2]) Includes some chlorite.

98. **Pulaskite.** Age unknown, probably Precambrian.
SW. N. Siorarsuit, north side of Tunugdliarfik.
USSING, N. V. (1911, p. 124, no. 3).

A white coarse-grained rock, consisting of rather thick, tabular felspars and dark minerals filling out the interspaces between them. The constituents are: Felspar (microperthitic microcline-albite), arfvedsonite, aegirine, aegirine-augite and biotite, as well as small quantities of magnetite and fluorite. Zeolites and probably catapleite occur as secondary products. The original presence of scarce grains of nepheline, enigmatite and eudialyte is indicated by pseudomorphs observed in some of the samples.

99. **Granodiorite.** Metamorphic Complex. (Caledonian).
NE. Raffles Island off the coast of Liverpool Land.
KRANCK, E. H. (1935, p. 67).

The constituents are: Plagioclase (18 % an) 38,61 %, quartz 12,61 %, microcline 18,0 %, dark green hornblende with remnants of augite cores 26,50 %, biotite 2,14 %, magnetite 2,14 %, and a little epidote and small quantities of apatite and sphene.

100. Acid **quartz-gabbro.** Tertiary.
SE. North face of Østtoppen, 450 m below summit Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 170, no. 4163).

Belongs to the upper boundary group of the Skaergaard Intrusion and has the following mode:

Quartz (mainly micropegmatite but includes also dusty borders of plagioclase) 21 %, clinopyroxene with $\gamma = 1{,}732$ (about one tenth replaced by chlorite) 28 %, plagioclase (strongly zoned from andesine to albite) 42 % and ore 9 %.

101. **Hedrumite.** Age unknown, probably Precambrian.
SW. Akuliarusek, Igaliko Fjord. 3 m wide dyke.
USSING, N. V. (1911, p. 279, no. 29).

The rock is fine-grained, devoid of phenocrysts and of trachytoid texture. The main constituent is felspar (orthoclase and plagioclase in perthitic intergrowth). Between the felspars occur aggregates of muscovite, which is probably secondary and replacing nepheline, brownish-green hornblende, grey augite, aegirine and green biotite; apatite and iron-ore occur but sparingly.

102. **Arfvedsonite-lujavrite.** Age unknown, probably Precambrian.
SW. Nunasarnak, north side of Tunugdliarfik.
USSING, N. V. (1911, p. 175, no. 12).

Very much like the arfvedsonite-lujavrite from Lille Elv (no. 116) but U. M. the Nunasarnak rock proves richer in arfvedsonite and poorer in aegirine.

103. **Foyaite.** Age unknown, probably Precambrian.
SW. The mountain plateau above Naujakasik, south side of Tunugdliarfik.
USSING, N. V. (1911, p. 132, no. 4).

Uppermost sheet of nepheline-syenite complex, thickness 0—10 m. U. M. the following main constituents are seen: Felspar (microperthitic microcline and albite), nepheline, aegirine-augite and catophorite-like hornblende. Subordinate constituents, sometimes wanting, are: Sodalite, biotite, aegirine, arfvedsonite, ainigmatite, olivine and eudialyte. Apatite and iron-ore are always present. Catapleite, cancrinite, hydronepheline (»spreustein«) and analcite occur as secondary constituents.

104. **Augite-syenite.** Age unknown, probably Precambrian.
SW. Nunasarnausak, north coast of Kangerdluarsuk.
USSING, N. V. (1911, p. 190, no. 16).

A coarse to medium-grained greyish rock in which the dark minerals form conspicuous spots. No parallel arrangement of minerals perceptible; the felspars occur in irregular grains. U. M. the main constituents are: Soda-orthoclase, augite and olivine. In smaller quantities there are: Nepheline, green hornblende, barkevikite, biotite, iron-ore and apatite.

105. **Cf. Leuko-syenite.**
SW. Ivigtut Peninsula.
(Unpublished analysis, submitted to us by R. BØGVAD).
No rock-description.

106. **Granodiorite.** Metamorphic Complex. (Caledonian).
NE. Hodal north of Hurry Inlet, western side of Liverpool Land.
KRANCK, E. H. (1935, p. 73).

The following vol-% are given: Quartz 6,75 %, plagioclase (27 % an) 48,39 %, potash-felspar 7,24 %, hornblende 22,60 %, augite 4,62 % and biotite 10,40 %. The accessories are: Ore, sphene and apatite.

107. **Hedenbergite-andesinite.** Tertiary.
SE. West face of Basistoppen, 250 m above »purble band«, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 114, no. 4136).

Belongs to the unlaminated, layered series of the Skaergaard Intrusion. Following vol-% are given: Quartz[1]) 26 %, plagioclase 56 %, clinopyroxene (in composition close to hedenbergite) 15 %, ore 2 % and apatite 1 %.

---

[1]) This figure is for material which is interstitial to the early well-shaped plagioclase; it includes an outer border of felspar in graphic intergrowth with quartz and also clear quartz and some apatite and chlorite.

108. **Iron-bearing dolerite.** Tertiary.
NW. Asuk, north coast of Disko Island.
SMITH, L. (1879, p. 486).

The iron particles are more rounded than those in the Uivfaq dolerite and are encircled by crystals of plagioclase (undoubtedly labradorite, perhaps with some oligoclase). The microlithes of plagioclase have a fluidal arrangement round the big crystals of augite. NICOLAU (Medd. om Grønland Vol. 24 p. 241) feels inclined to term this rock an andesite (perhaps hypersthene-andesite) because of the high silica content.

109. **Nepheline-porphyry.** Age unknown, probably Precambrian.
SW. Akuliarusek on the peninsula south of Fox Bay, Igaliko Fjord. A 13 m wide composite dyke (central part of dyke).
USSING, N. V. (1911, p. 275, no. 28).

Phenocrysts are: Felspars (alkali-felspars), originally nepheline, (now altered into psedumorps consisting of muscovite with felspar) an unknown colourless mineral and original big crystals of greyish augite altered partly into fibrous green hornblende. The groundmass consists of microperthite, nepheline, aegirine, green biotite, grey augite and often a little analcite.

110. **Aegirine-lujavrite.** Age unknown, probably Precambrian.
SW. Laxefjeld, Kangerdluarsuk.
USSING, N. V. (1911, p. 168, no. 8).

A dark-coloured, fine-grained rock underlying naujaite; a conspicuous parallel arrangement of the minerals produces a marked schistosity. The constituents are: Felspar (microcline and albite), nepheline, eudialyte, aegirine and arfvedsonite. Minor accessories often entirely absent: fluorite, sphalerite, biotite and astrophyllite being present only in few instances. Secondary minerals: Analcite, catapleite, hydronephelite and natrolite. (In the sample analyzed the only felspar-component is microcline, analcite is scarce and hydronephelite largely replaces the nepheline).

111. **Augite-syenite.** Age unknown, probably Precambrian.
SW. Niakornarsuk on the northwestern side of Korok Fjord.
USSING, N. V. (1911, p. 243, no. 26).

A coarse-grained dark-grey rock with the following constituents: Felspar, violet augite, some olivine and iron-ore and very small quantities of brown hornblende, biotite and apatite.[1]).

112. **Normalfoyaite.**
SW. Ivigtut Peninsula.
(Unpublished analysis, submitted to us by R. BØGVAD).
No rock-description.

---

[1]) As most of the varieties of the Igaliko syenite differ from the specimen analyzed in not containing olivine, it is probable that the general composition of the rock is a little more acid than that of the variety analyzed.

113. **Foyaite.** Age unknown, probably Precambrian.
SW. NNW. of Igdlerisalik on the south coast of Korok Fjord.
USSING, N. V. (1911, p. 235, no. 25).

A coarse-grained, reddish-grey rock with the following constituents: Felspar (perthites, the potash-felspar commonly being orthoclase, the plagioclase being an acid oligoclase), nepheline, cancrinite, iron-ore, aegirine-augite, hornblende, biotite, apatite and various alteration products (zeolites and calcite). Small amounts of zircon, fluorite (found only in one sample) and a rinkite-like mineral also occur. (In the sample analyzed aegirine-augite predominates among the dark constituents; sodalite and nepheline occur only in very small quantities).

114. **Aegirine-lujavrite.** Age unknown, probably Precambrian.
SW. Tupersuatsiak, south side af Tunugdliarfik Fjord.
USSING, N. V. (1911, p. 168, no. 9).

The rock analyzed differs from no. 110 in the proportion of felspars, albite being the dominant one; microcline is present only subordinately. Arfvedsonite is rather scarce and is partly converted into acmite. Analcite is almost absent, but the outer zone of the nepheline-crystals has been transformed into sodalite; the interior has partly changed into hydronephelite.

115. **Eklogite.** Metamorphic Complex.
NE. Hurry Inlet side of Liverpool Land.
SAHAMA, TH. G. (1935, p. 11).

The rock is fresh and not altered; the volumetric analysis of the rock shows the following composition: Pyroxene 66,2 %, garnet 24,4 %, amphibole 1,3 %, quartz 7,6 %, rutile 0,5 %. A little ore also occurs.

116. **Arfvedsonite-lujavrite.** Age unknown, probably Precambrian.
SW. Lille Elv, Kangerdluarsuk.
USSING, N. V. (1911, p. 175, no. 11).

Dark, greyish, moderately fine-grained with somewhat schistose structure. U. M. the following components are seen: Arfvedsonite, aegirine, albite, microcline, nepheline, sodalite and minor accessories. Albite is more abundant than microcline, and aegirine is common. Analcite and hydronephelite occur only in small quantities.

117. **Iron-dolerite.** Tertiary.
NW. Inner part of Mellemfjord, western side of Disko.
LORENTZEN, J. (1883, p. 146).

Dolerite of medium grain and containing only large pieces of iron. The iron was consequently easily isolated from the host-rock.

118. Altered **nepheline-basalt.** Tertiary.
SE. West side of Kangerdlugssuaq. Erratic.
WAGER, L. R. (1934, p. 32).

A norm is given on p. 32, no description of the actual mineral content in the text. (The rock considered to be a lava, not belonging to a dyke).

119. **Tremolite-schist.** Metamorphic Complex (Precambrian).
NW. Uvkusigssat in Lille Qarajaq Fjord.
BELOWSKY, M. (1905, p. 45).

The rock consists exclusively of tremolite and a light magnesia-mica. (It can be traced genetically back to peridotitic rocks).

120. **Lamprophyre** (kersantitic). Palaeozoic.
NE. Porfyrfjeld, Canning Land. Dyke.
NOE-NYGAARD, A. ((1936), 1937 p. 103, no. 1110).

The groundmass is pilotaxitic to hyalopilitic and filled with calcite. Biotite is the dominant and only unaltered phenocryst. Accessories are: Apatite, epidote, hematite, rutile, zircon and black ore. Secondary are calcite, chlorite, sericite and quartz. In amygdules barite.

121. Basic **hedenbergite-granophyre.** Tertiary.
SE. West face of Basistoppen, 220 m above "purple band", Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 114, no. 4137).

Belongs to the unlaminated, layered series of the Skaergaard Intrusion and has the mode: Quartz[1]) 39 %, clinopyroxene[2]) 22 % (close to hedenbergite in composition), plagioclase 28 % (centre an_{40} outer half an_{25}), ore 10 %, apatite 1 %.

122. **Kakortokite** (white sheets). Age unknown, probably Precambrian.
SW. Kringlerne, south side of Kangerdluarsuk Fjord.
USSING, N. V. (1911, p. 182, no. 13).

The rock is differentiated in sheets of various colours and compositions (vide no.s 131 and 136). Maximal thickness about 400 m. The kakortokite is over and underlain by lujavrite. The mineral composition is: Eudialyte, alkali-felspar, nepheline, arfvedsonite and aegirine. Occasional accessories: Sodalite, enigmatite, biotite, rinkite, fluorite and rarely epistolite. Zeolites occur as secondary products.

[1]) This figure is for material which is interstitial to early well-shaped plagioclase; it includes an outer border of felspar in graphic intergrowth with quartz, clear quartz and also some apatite and chlorite.
[2]) Includes a little chlorite.

123. **Nepheline-porphyry.** Age unknown, probably Precambrian.
SW. Akuliarusek, on the northern side af Fox Bay, Igaliko Fjord.
USSING, N. V. (1911, p. 275, no. 27).

A porphyry with large phenocrysts of nepheline and felspar in a violet-brown, almost dense groundmass. Felspar less numerous than nepheline; the felspar is soda-orthoclase, sometimes with a little albite. Augite-phenocrysts were probably present originally. The groundmass consists of: Felspar, nepheline, sodalite, analcite, cancrinite, fluorite, green biotite, aegirine, garnet (?), and iron-ore. Apatite is rare.

124. **Hornblende-vogesite.** Post-Cambrian.
NE. Bastionen, Ella Island.
RITTMANN, A. (1940, p. 147).

The groundmass consists of albite in hypautomorphic crystals, allotriomorphic orthoclase and some quartz. Accessories are: Ore, apatite and epidote. Secondary penninite is found in pyroxene and amphibole. The vol-% are: Hornblende 48 %, alkali-felspars 37 %, diopsidic augite 6 %, quartz 3 %, magnetite 2 %, epidote 1 %, apatite 1 % and penninite (secondary) 2 %.

125. **Essexite-porphyrite.** Age unknown, probably Precambrian.
SW. Kakarsuak, upper part of the mountain, Narsak. Minor instrusive body of irregular shape.
USSING, N. V. (1911, p. 208, no. 20).

A porphyritic rock with numerous and large plagioclase-phenocrysts in a fine-grained, greenish-black groundmass. The felspar-phenocrysts consist of labradorite, the smaller ones often having a coating of orthoclase. The groundmass consists of: Plagioclase, orthoclase, augite, iron-ore and apatite. The rock is greatly altered by contact-metamorphism, and the original texture of the groundmass is quite effaced.

126. **Aegirine-lujavrite.** Age unknown, probably Precambrian.
SW. S. Siorarsuit, south side af Tunugdliarfik Fjord.
USSING, N. V. (1911, p. 168, no. 10).

This rock is in an advanced state of zeolitization. The aegirine is intact, but the great majority of the light coloured minerals have been replaced by analcite.

126 a. **Arfvedsonite-leucite-tinguaite.** Age unknown, probably Precambrian.
SW. Kangerdluarsuk.
ROSENBUSCH, H. (1898, p. 215).

Leucite inverted to analcite. Considerable content of eudialyte.

127. **Iron-dolerite.** Tertiary.
SW. Fiskernæsset, Godthaab district. Erratic.
LORENTZEN, J. (1883, p. 155).

The microscopical examination by K. I. V. STEENSTRUP. The fine-grained groundmass consists of small crystals of a triclinic felspar surrounded by rounded grains of augite, olivine and branchy patches of magnetite or ilmenite. The average size is 0,3 mm. Larger crystals of triclinic felspar up to 1,5 mm long are met with scattered in the groundmass. The minerals are fresh.

128. **Olivine-gabbro.** Tertiary.
SE. 200 m from outer contact, foot of west ridge of Tinden, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 167, no. 2275).

The rock belongs to the marginal border group of the Skaergaard Intrusion and has the following modal composition: Quartz 6 %, olivine 4 % (γ = 1,775), plagioclase 53 % (deeply zoned, an_{75}), clinopyroxene[1]) 27 % (γ = 1,718), ore 10 %.

129. Ilimausak-**porphyry.** Age unknown, probably Precambrian.
SW. Ilimausak at a height of about 800 m, at North Siorarsuit in the talus at the foot of Mt. Hatten and comes from the upper part of this mountain(?). Probably effusive sheets.
USSING, N. V. (1911, p. 220, no. 23).

The rock is intensely altered by contact-metamorphism. Phenocrysts of felspar are anorthoclases with a composition ranging from that of an almost pure potash-felspar to that of albite; apatite and iron-ore also occur as phenocrysts. The fine-grained groundmass shows a marked flow-structure and consists mainly of small felspar-laths (alkali-felspar, probably anorthoclase), a great quantity of colourless needles, grains of titanite, scales of muscovite and minute grains of iron-ore.

130. **Naujaite.** Age unknown, probably Precambrian.
SW. Kangerdluarsuk.
USSING, N. V. (1911, p. 154, no. 6).

The extremely coarse-grained rock of naujaite rests on lujavrite and is overlain by sodalite-foyaite. The main constituents are sodalite, nepheline, alkali-felspar (microcline-microperthite), aegirine, arfvedsonite, eudialyte and the minor accessories: Enigmatite, rinkite, rosenbuschite, molybdenite, sphalerite, biotite, polylithionite and apatite. Secondary products are: Analcite and natrolite.

---

[1]) Includes some chlorite.

131. **Kakortokite** (red sheets). Age unknown, probably Precambrian.
SW. Kringlerne, south of Kangerdluarsuk Fjord.
USSING, N. V. (1911, p. 182, no. 14).

The same qualitative mineral composition as in the white kakortokite, (no. 122) but eudialyte forms about one third of the rock.

132. **Sodalite-foyaite.** Age unknown, probably Precambrian.
SW. Tupersuatsiak, south side of Tunugdliarfik Fjord.
USSING, N. V. (1911, p. 141, no. 5).

The coarse-grained rock occurs as a heavy sheet resting upon the naujaite and covered by foyaite. The components are: Alkali-felspar (microcline-microperthite), nepheline, sodalite, arfvedsonite, aegirine, enigmatite and locally also eudialyte. Minor accessories are: Magnetite, biotite, aegirine-augite, astrophyllite, rinkite, steenstrupine, polylithionite (?) and fluorite. Secondary products are: Catapleite, analcite and hydronephelite.

133. **Dolerite.** Tertiary.
NW. Inner part of Brededal, eastern slope of Skarvefjeld, Disko.
NAUCKHOFF, E. G. R. (1872, p. 16, no. 1).

A dense, greenish-grey groundmass with cryptocrystalline texture in which U. M. the single individuals of felspar, augite and iron-ore can be seen. The felspars may attain a size of 0,5—1,0 mm in length. Olivine is wanting.

134. **Quartz-gabbro.** Tertiary.
SE. 200 m below summit of Brødretoppen, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 170, no. 3050).

The rock belongs to the upper border group of the Skaergaard Intrusion, and has the following mode: Plagioclase 57,0 % (an_{56}), clinopyroxene 37,0 % ($\gamma = 1{,}719$), quartz 3,0 % and ore 3,0 %.

135. **Dolerite.** Tertiary.
NW. Uivfaq, Disko.
SMITH, L. (1879, p. 474 II).

Dolerite, not iron-bearing.

136. **Kakortokite** (black sheets). Age unknown, probably Precambrian.
SW. Kringlerne, south side of Kangerdluarsuk Fjord.
USSING, N. V. (1911, p. 182, no. 15).

Same qualitative mineral composition as no. 122. In spite of its extremely melanocratic character the rock is entirely devoid of iron-ore.

137. **Tholeitic basalt.** Tertiary.
SE. Cape Dalton, Blosseville Coast.
WAGER, L. R. (1934, p. 32).
No mineral description in text.

138. **Eklogite** (partly converted into amphibolite). Metamorphic Complex.
NE. Hurry Inlet side of Liverpool Land.
SAHAMA, TH. G. (1935, p. 13).
Cf. no. 178. The rock has been partly amphibolitized.

139. **Pigeonite-tholeite.** Piercing Devonian strata.
NE. North coast of the outer Geolog Fjord Andrée Land. Dyke.
RITTMANN, A. (1940, p. 109, no. 34).
Texture doleritic with intersertal granophyre and chlorite. Idiomorphic to hypidiomorphic pyroxene, ilmenite and magnetite crystals are found between the larger plagioclase laths and cause their allotriomorphic outlines. The vol-% are the following: Plagioclase (50 % an) 45,4 %, pigeonite 18,5 %, ilmenite and hematite 8,2 % and filling-mass 27,9 %. The filling-mass consists of about two thirds of alkali-felspars and quartz and about one third chlorite and a little apatite and magnetite.

140. **Dolerite.** Tertiary.
NE. Jackson Island, Gael Hamke Bay.
Made for Dr. TYRRELL, G. W., published by BACKLUND, H. G., & D. MALMQUIST (1932, p. 46).
No mineral description in text, but by authors compared with no. 145.

141. **Kaersutite pegmatite.** Tertiary.
NW. Østerfjeld, Qaersut, Nûgssuaq Peninsula.
DRESCHER, F. K. & H. K. E. KRUEGER (1928, p. 598).
Main constituents are: Kaersutite-hornblende, plagioclase (55—58 % an), potash-felspars and zeolites. Subordinate constituents are: Biotite, augite and ilmenite. The only accessory mineral is apatite. Secondary products are kaolinite, nontronite (locally) and calcite.

142. **Hornblende-biotite-schist.** Metamorphic Complex.
NE. Opposite to Riddarborgen. Franz Joseph Fjord.
WISEMAN, I. D. H. (1931, p. 320, no. 128).
Prior to metamorphism this schist was of a basic igneous type. — In the field an even-grained, dark-green amphibolite. U. M. largely idioblastic hornblende crystals, quartz and rutile found as inclusions, biotite in small amounts. A little quartz is met with interstitially between the hornblende crystals.

143. **Fayalite-ferrogabbro.** Tertiary.
SE. 10 m from top of more easterly nunatak to the south of Forbindelsesgletcher, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 106, no. 1881).

The rock belongs to the layered series of the Skaergaard Intrusion, and has the following mode: Quartz 11 %,[1]), clinopyroxene 34 %, plagioclase 29 %, ore 8 %, olivine (Fa_{96}) 17 % and apatite 1 %.

144. **Iron-bearing dolerite.** Tertiary.
NW. Uivfaq, Disko.
SMITH, L. (1879, p. 475, no. 15).

The rock contains augite, plagioclase and a considerable amount of olivine in big crystals of irregular and often corroded forms, as well as black iron-ore. Interstitially a vitreous residue is found impregnated with iron-ore and filled with alteration material. The metallic iron occurs as angular grains.

145. **Dolerite.** Tertiary.
NE. Kirchenpauer Bay, Clavering Island.
BACKLUND, H. G. & D. MALMQUIST (1932, p. 24).

The vol-% of the constituents are the following: Plagioclase (55 % an) 39,3 %, anorthoclase and microcline 8,6 %, pyroxene 32,3 %, iddingsite 0,8 %, ore 10,5 %, quartz 1,3 %, apatite 0,7 % and porosity 6,5 %.

146. Middle **gabbro.** Tertiary.
NE. 25 m above sea-level, west foot of Pukugaqryggen. Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 96, no. 3662).

The rock belongs to the layered series of the Skaergaard Intrusion, and has the following mode: Plagioclase 60 % (an_{35}), clinopyroxene[2]) 33 %, orthopyroxene 2 %, ore 5 % and apatite tr.

147. **Basalt,** free from olivine. Tertiary.
NW. Hare Island.
HOLMES, A. (1918, p. 183, no. 1554).

An almost black basalt with rusty amygdules (with chlorite, chalcedony and calcite). The texture is intergranular. The main mass of the rock consists of laths of labradorite between which occur granular aggregates of pale green augite together with a few slightly larger individuals of hypersthene. Scattered profusely among the other constituents are ragged patches of hematite and minute globules and irregular masses of magnetite and ilmenite. There is also a mineral with mottled extinction and a refringence lower than that of Canada balsam; it is certainly an alkali-felspar, probably anorthoclase.

---

[1]) Includes marginal felspar, probably perthitic.
[2]) Analyzed separately (Wo 32,3, En 32,1, Fs 35,6 weight-%) op. cit. p. 77.

148. **Iron-bearing basalt.** Tertiary.
NW. The eastern part of the iron-bearing dyke at Uivfaq, Disko.
NAUCKHOFF, E. G. R. (1872, p. 17, no. 2).

A dark-brown rock of fine grained texture, consisting of labradorite, greenish-brown augite and magnetic iron-ore. From the margin of the dyke there is also mention of a greenish hisingerite-like mineral and yellowish-brown sulphuric iron. No metallic iron present. The rock melts rather easily to the blowpipe.

149. **Quartz-gabbro.** Tertiary.
SE. Summit of Brødretoppen, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 170—71, no. 3052).

The rock belongs to the upper border group of the Skaergaard Intrusion (cf. no.: 134). Mode: Quartz[1]) 21,9 %, plagioclase 55,5 %, clinopyroxene[2]) 20,6 %, ore 2 %.

150. **Dolerite.** Tertiary.
NW. A little distance from the iron locality at Uivfaq, Disko.
SMITH, L. (1879, p. 474, no. I).

No metallic iron in this rock. No mineral description in the text.

151. **Olivine-gabbro,** marginal. Tertiary.
SE. 3 m from contact, head of Udløberen, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 140, no. 1825).

The rock belongs to the chilled marginal gabbro group of the Skaergaard Intrusion. (cf. no. 154). Mode: Plagioclase 65,5 %, clinopyroxene 21,2 %, orthopyroxene[3]) 1,7 %, olivine 11,1 % and ore 0,5 %.

152. **Iron-bearing dolerite.** Tertiary.
NW. Rolled boulder on the shore, Uivfaq, Disko.
SMITH, L. (1879, p. 471, no. III).

Its appearance is very much like common basalt; but small particles of metallic iron, pyrite, graphite and a black, vitreous mineral, hisingerite, is to be seen megascopically. U. M. corundum and spinel are also seen in association with the graphite.

153. Altered variolitic **basalt.** Tertiary.
SE. Middle of 18 ft. flow, south point of Hængefjeld, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 16, no. 383).

---

[1]) Micropegmatite with chlorite, apatite and quartz.
[2]) About $^1/_{10}$ replaced by chlorite.
[3]) Perhaps a little low, as doubtful material was assumed to be clinopyroxene.

The rock is about »a mean between the average composition of plateau basalt and the non-porphyritic central basalt of the authors of the Mull Memoir. The felspar of the rock is, however, between oligoclase and albite, more exact determinations from refractive indices being hindered by the presence of inclusions of chlorite.«

154. Marginal **Olivine-gabbro.** Tertiary.
SE. 25 m from contact, east side of Skærgaardsbugt, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 140, no. 1724).
The rock belongs to the chilled marginal gabbro group of the Skaergaard Intrusion (cf. no. 151) Mode: Plagioclase 57,2 %, clinopyroxene[1]) 25,5 %, olivine[2]) 16,3 % and ore 1,0 %.

155. **Olivine-basalt.** Tertiary.
SE. Cape Daussy.
WAGER, L. R. (1934, p. 32).
Related to olivine-basalt from the north side of Barclay Bay (no. 159). No description of mineral contents in the text.

156. **"Diorite" (Amphibolite).** Metamorphic complex (Precambrian).
NW. Lower, dark band in Umanak mountain.
PHALEN, W. C. (1904, p. 190, no. 75,481).
It has a decidedly laminated structure, produced by similar orientation of its two essential components: Amphibole and felspar.
Main constituents: Hornblende and labradorite.
Accessories: Magnetite, pyrite, hematite, zircon, apatite, garnet (in order of abundance). The amphibole is perfectly fresh and occurs in elongated, lath-shaped forms with glistening cleavage planes.

157. **Trachydolerite** (Tasek-porphyrite). Age unknown, probably Precambrian.
SW. Tasek, southwest end of the lake, about 4 km northeast of Narsak; a 750 m high mountain.
USSING, N. V. (1911, p. 216, no. 22).
Probably effusive, and highly affected by contact metamorphism. The felspar lies in composition between an acid andesine and an almost pure albite. The dense, trachytoid groundmass is composed of: Felspar laths, green biotite, apatite and iron-ore.

158. Altered **olivine-basalt.** Tertiary.
SE. Extreme end of Mikis Fjord on the south side, near Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 16, no. 1519).

---

[1]) Includes some uralite.
[2]) Includes some serpentine.

The rock corresponds to an olivine-rich basalt, but the minerals present are augite, oligoclase or albite, chlorite and zeolites. Some of the chlorite replaces former olivine crystals, but much has an interstitial arrangement.

159. **Olivine-basalt.** Tertiary.
SE. North side of Barclay Bay.
WAGER, L. R. (1934, p. 32).
No description of mineral contents in the text.

160. **Iron-bearing dolerite.** Tertiary.
NW. Uivfaq, Disko.
NICOLAU, TH. (1901, p. 232).
Main constituents: Idiomorphic plagioclase(an_{70}), allotriomorphic pyroxene (basaltic augite). Accessories: Ilmenite, pyrrhotite. Irregularly distributed: Hisingerite with its fibrous alteration-products, graphite, metallic iron and a groundmass. The texture is ophitic.

161. **Prowersite.** Age unknown, probably Palaeozoic.
NE. South coast of Segelsällskapets Fjord.
RITTMANN, A. (1940, p. 151, no. 63).
A fine-grained, dark grey rock with a rusty-yellow weathering colour. The groundmass is hypidiomorphic, consisting of orthoclase and albite, and in it are small crystals of reddish-brown biotite, colourless augite and some magnetite and apatite. Secondary calcite is present in small quantities.
Mode: Alkali-felspar 48 %, biotite 24 %, augite 22 % and apatite, ore (+ calcite) 6 %.

162. **Olivine-gabbro.** Tertiary.
SE. 30 m from contact, Mellemø, Skærgaarden, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 156, no. 1837).
The rock belongs to the marginal border group of the Skaergaard Intrusion.
Mode: Plagioclase 64 %, clinopyroxene[1]) 8 %, orthopyroxene 2 %, olivine[2]) 25 % and ore 1 %.

163. **Amygdaloidal basalt** (lava). Tertiary.
SE. South side af Scoresby Sund.
HOLMES, A. (1918, p. 189).
U. M. the rock consists of: Glomeroporphyritic bytownite (an_{80}) in an insertal groundmass of small felspar laths, grains of green augite and colourless enstatite, and very numerous small crystals of magnetite and ilmenite. Here and there are flakes of bright red hematite. The felspars of the groundmass are much more sodic than the phenocrysts, being labradorite near to andesine.

[1]) Includes a little chlorite.
[2]) Includes a little talc.

164. **"Sonnenbrennerbasalt".** Tertiary.
NW. The basal layer of the basalt formation, Godhavn, Disko.
KRUEGER, H. K. E. (1927, p. 275).

Columnar, fissured basalt with light spots on a dark ground. U. M.: In a fine-grained groundmass are 8—10 % plagioclase-phenocrysts (an_{68}). The groundmass consists of numerous small augite grains, elongated felspar-laths, much ore (probably titaniferous magnetite), and in small quantities: A dark glass and chloritic masses.

165. **Amphibolite.** Metamorphic Complex.
NE. Cape Swainson, Liverpool Land.
KRANCK, E. H. (1935, p. 27).

Dark green hornblende, plagioclase (an_{36}), dark-brown biotite, muscovite, sphene and apatite. In the undeformed sections the rock contains rounded, fairly big grains of garnet.

166. **Basalt.** Tertiary.
NW. Lyngmarksfjeld at Godhavn, Disko.
HOLLER, K. (1933, p. 48).

No mineral description in the text.

167. **Plagioclase-basalt.** Tertiary.
NE. West of Cape Franklin. Sheet.
BACKLUND, H. G. & D. MALMQUIST (1932, p. 32).

Glomeroporphyritic parts are seen in a dense, sub-ophitic groundmass, mainly consisting of radiating plagioclase-needles and allotriomorphic pyroxene. The rock consists of: Plagioclase, ore, pyroxene, completely altered olivine and a residual mass.

168. **Basalt.** Tertiary.
NE. Neills Cliff, Jameson Land.
WOLFF, F. VON (1931, p. 933, no. 19).

No mineral description.

169. **Iron-bearing dolerite.** Tertiary.
NW. Uivfaq, Disko.
SMITH, L. (1879, p. 471, no. II).

The rock contained metallic iron, hisingerite and sulphides, but dolerite fragments lacking these minerals could easily have been obtained.

170. **Hypersthene-olivine gabbro.** Tertiary
SE. Junction of Uttentals Plateau and WNW ridge of peak 1300 metres of Gabbrofjeld, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 92, no. 4077).

The rock belongs to the layered series of the Skaergaard Intrusion.

Mode: Plagioclase 55,0 %, clinopyroxene 21,0 %, olivine 17,5 %, orthopyroxene 5,0 %, ore 1,5 % and apatite trace.

171. **Grønlandite** (Hyperstene[1])-hornblendite). Metamorphic Complex (Precambrian?).
NW. Upernivik Island.
MACHATSCHKI, F. (1927, p. 173).
Vide: Grønlandite no. 173.

172. "Perpendicular" **felspar rock.** Tertiary.
SE. West side of Mellemø, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 146, no. 1851).
The rock belongs to the marginal border group of the Skaergaard Intrusion.
Mode: Plagioclase 54,2 %, clinopyroxene 22,7 %, olivine 22,8 % and ore 0,3 %.

173. **Grønlandite** (Hypersthene-hornblendite). Metamorphic Complex (Precambrian?).
NW. Upernivik Island.
MACHATSCHKI, F. (1927, p. 173) Compare no. 171.
The rock consists mainly of dark hornblende, 20 % hypersthene and small quantities of olivine and ore.

174. **Essexite.** Age unknown, probably Precambrian.
SW. Panernak Bay, northwest of Narsak.
USSING, N. V. (1911, p. 203, no. 18).
A coarse-grained, dark-grey rock with large tabular crystals of plagioclase. U. M.: Apatite, iron-ore, olivine, augite, hornblende, biotite, labradorite, orthoclase and secondary products. Nepheline has not been observed.

175. **Basalt.** Tertiary.
NW. Lyngmarksfjeld at Godhavn, Disko.
WOLFF, F. von (1931, p. 932, no. 6).
No mineral description.

176. **Basalt.** Tertiary.
NW. Lyngmarksfjeld at Godhavn, Disko.
WOLFF, F. von (1931, p. 932, no. 5).
No mineral description.

---

[1]) By mistake the grønlandite is characterized as an enstatite-hornblendite in the heading of the treatise. The mistake has been corrected by MACHATSCHKI himself in Zeitschr. für Kristallographie Bd. 71, 1929 (p. 219).

177. Middle **gabbro.** Tertiary.
SE. 75 m above sea-level, west foot of Pugugaqryggen, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 96, no. 3661).
The rock belongs to the layered series of the Skaergaard Intrusion.
Mode: Plagioclase 37 %, pyroxene 51 %, ore 12 % and apatite trace.

178. **Eklogite** (strongly amphibolitized). Metamorphic Complex.
NE. Liverpool Land.
SAHAMA, TH. G. (1935, p. 14).
(cf. no. 138 and no. 115).

179. **Olivine-free gabbro.** Tertiary.
SE. 6 m from inner contact with the layered series. Southeast corner of Ivnarmiut, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 156, no. 4298).
The rock belongs to the marginal border group of the Skaergaard Intrusion.
Mode: Plagioclase 56 %, pyroxenes[1]) 35 %, ore 9 %.

180. **Hypersthene-olivine gabbro.** Tertiary.
SE. 150 m from the northern margin. Uttentals Plateau, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER. (1939, p. 92, no. 4087).
Transitional to the layered series of the Skaergaard Intrusion.
Mode: Plagioclase 56 %, clinopyroxene 29 %, olivine 11 %, orthopyroxene 3 %, ore 0,7 % and apatite trace.

181. **Trachydolerite.** Age unknown, probably Precambrian.
SW. 560 m above sea-level on the north side of Nunasarnausak, near the lower boundary of the sheet, which is intrusive in the sandstone.
USSING, N. V. (1911, p. 212, no. 21).
A dark, fine-grained rock with ophitic texture. U.M. the rock proves greatly altered. Apatite, iron-ore, olivine, augite, labradorite are original rock components. »Orthoclase, perhaps nepheline, hornblende and mica have probably also been originally present, but the microscopical examination gives no downright proofs of this.«

182. **Fayalite-ferrogabbro.** Tertiary.
SE. 100 m above the "purple band" west face of Basistoppen, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 114—115, no. 4139).

---

[1]) Includes a little chlorite.

The rock belongs to the unlaminated layered series of the Skaergaard Intrusion.

Mode: Quartz[1]) 9 %, plagioclase 26 %, clinopyroxene 33 %, olivine 18 %, ore 12 % and apatite 2 %.

183. **"Anortitfels".** Tertiary.

NW. Uivfaq, Disko.

NAUCKHOFF, E. G. R. (1872, p. 27, no. 9).

The groundmass consists of felspar and of a green and brown mineral resembling augite. In some places red spinel is seen. Magnetic iron-ore and metallic iron are not observed.

184. **Hortonolite-ferrogabbro.** Tertiary.

SE. Basishusene, Kangerdlugssuaq.

WAGER, L. R. & W. A. DEER (1939, p. 102, no. 1907).

The rock belongs to the layered series of the Skaergaard Intrusion.

Mode: Plagioclase 56 %, clinopyroxene 20 %, olivine 16 %, ore 8 % and apatite trace.

185. **Ferrohortonolite-ferrogabbro.** Tertiary.

SE. West ridge of Basistoppen, 250 above Basishusene, Kangerdlugssuaq.

WAGER, R. L. & W. A. DEER (1939, p. 106—107, no. 4145).

The rock belongs to the layered series of the Skaergaard Intrusion.

Mode: Quartz 1 %, plagioclase 45 %, clinopyroxene 28 %, olivine 17 %, ore 6,5 % and apatite 2,5 %.

186. Dyke of **nepheline-tephritic** type (?). Age unknown, probably Palaeozoic.

NE. Cape Fletcher, Canning Land.

NORDENSKJÖLD, O. (1907, p. 207).

A grey, compact, hornstone-like rock with numerous porphyritic crystalline agglomerations of a light mica. U.M. biotite, yellowish-green, fresh hornblende can be distinguished, and furthermore one or two light, much transformed minerals, the nature of which was difficult to determine. Nepheline was not observed with certainty.

187. **Olivine basalt.** Tertiary.

NW. Dyke about one day's journey from the head of Umivik Fjord, Svartenhuk.

NIELAND, H. (1931, p. 601).

A dark grey basalt. The mineral contents: Lath-shaped bytownite (an_{84}), light brown augite with brown-violet edges of titaniferous augite, ore and as a sparse groundmass brown glass. The bytownite often has a cover of labradorite (an_{55}). The olivine crystals (15—16 % fayalite) are larger than the other mineral components.

Mode: Bytownite 26,0 %, augite 47,0 %, olivine 10,5 %, ore 8 %, apatite 0,5 % and glass 8,0 %.

[1]) Includes some ore.

188. **Olivine-trachybasalt.** Tertiary.
NE. Mt. Nordhoek south side, Loch Fyne.
BACKLUND, H. & D. MALMQUIST (1932, p. 38).
Mode: Plagioclase 54,5 %, pyroxene 20,6 %, ore 6,5 %, olivine 17,0 % and apatite 0,6 %, residue 0,8 %.

189. **Fayalite-ferrogabbro** (purple band). Tertiary.
SE. At 550 m west face of Basistoppen, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 106—107, no. 4142).
The rock belongs to the layered series of the Skaergaard Intrusion.
Mode: Quartz[1]) 6 %, plagioclase 24 %, clinopyroxene 37 %, olivine 21 %, ore 9 % and apatite 3 %.

190. **Dolerite** (sill in peridotite). Tertiary.
NW. Østerfjeld, Qaersut, Nûgssuaq.
DRESCHER, F. K. & H. K. E. KRUEGER (1928, p. 589).
Ophitic texture. The mineral contents are as follows: Main constituents: Plagioclase, titaniferous augite, nontronitic masses with biotite. Minor constituents: Ilmenite, chlorite. Accessories: Apatite. Secondary: Calcite, zeolites.

191. **Iron-bearing basalt.** Tertiary.
NW. "Piece from surface of the largest meteorite", Uivfaq, Disko.
NORDENSKJÖLD, A. E. (1870, p. 1066).
NORDSTRÖM, TH. (1871, p. 460).
No mineral description in the text.

192. Disintegrated **"olivinestone".** Metamorphic Complex. (Precambrian?).
SW. Siorarsuit at Kangamiut.
RØRDAM, K. (1884, p. 129).
Vide no. 208.

193. **Albite-diabase.** Precambrian[2]).
NE. Mt. Ramsay north foot, Gauss Peninsula.
BACKLUND, H. G. (1932, p. 96, no. 1226).
An albite-diabase rich in potash and with intersertal structure. The mineral constituents are: Plagioclase (albite) and potash felspar, bluish-green chlorite, a little green hornblende, quartz, light green chlorite, calcite, apatite needles of considerable length and much ore.

---

[1]) Including some intergrowth of quartz and felspar.
[2]) According to BACKLUND.

194. **Naujaite.** Age unknown, probably Precambrian.
SW. Nunasarnak, at the north side of Tunugdliarfik.
USSING, N. V. (1911, p. 154, no. 7).
Vide Naujaite, Kangerdluarsuk no. 130.

195. **Ankaramite.** Tertiary.
NE. Ladder Mountain, head of Musk Ox Fjord.
BACKLUND, H. G. (TYRREL, G. W.) (1932, p. 46).
No mineral description in the text.

196. **Iron-bearing basalt.** Tertiary.
NW. Uivfaq, Disko.
NAUCKHOFF, E. G. R. (1872, p. 21, no. 5).
The rock has a 20—25 mm thick cover of a green, lamellated rock. (cf. no. 214). U. M.: A fine-grained mixture of felspar, sparse green augite (?), magnetic iron-ore, sparse olivine, sulphuric iron and metallic iron, often of a globular form 6—7 mm in diameter. The iron is usually surrounded by magnetite.

197. **Peridotite var. Picrite.** Tertiary.
NW. Qaersut, Nûgssuaq.
PHALEN, W. C. (1904, p. 211, no. 75,488).
U. M. the following minerals were observed: Olivine, augite, chlorite, felspar, biotite, magnetite, limonite, hematite and apatite. Olivine is by far the most abundant constituent. It occurs in perfectly automorphic forms, excepting when corroded by the surrounding magma. The groundmass of the rock is formed by a violet-tinted augite, but faintly green in spots.

198. **Olivine basalt.** (Melanocratic olivine-trachydolerite or felspathic augitite). Tertiary.
NW. Hare Island.
HOLMES, A. (1918, p. 187, no. 1553).
A dense, black rock free from vesicles. U. M.: Idiomorphic pyroxene, often in glomeroporphyritic groups. The augites frequently enclose a core of olivine, which in turn includes grains of iron-ore. Olivine is seen in small, corroded crystals, ilmenite is abundant, felspar (bytownite) is sparse. These minerals lie in a dense groundmass speckled with minute black grains and globulites.

199. **Basalt.** Tertiary.
NW. Lyngmarksfjeld at Godhavn, Disko.
WOLFF, F. von (1931, p. 932, no. 8).
No mineral description in the text.

200. **Gabbro-picrite.** Tertiary.
SE. Uttentals Plateau, 1 km north of Uttentals Sund, Kangerdlugssuaq.
WAGER, L. R. & W. A. DEER (1939, p. 162, no. 1682).
The rock belongs to the marginal border group of the Skaergaard Intrusion.
Mode: Plagioclase 15,8 %, clinopyroxene 13,8 %, hypersthene 4,7 %, olivine 65,0 % and ore[1]) 0,7 %.

201. **Basalt** (fragments in the decomposed breccia). Tertiary.
NW. The basalt dyke at Uivfaq, Disko.
NAUCKHOFF, E. G. R. (1872, p. 33, no. 13).
The rock has the same aspect as the basalt forming the dyke (no. 148). Even the sulphuric iron has been identified. (The high sp. gr. and the considerable amounts of Fe_2O_3 indicate that all the particles of iron oxydes have not been removed).

202. **Basalt.** Tertiary.
NW. Lyngmarksfjeld at Godhavn, Disko.
WOLFF, F. von (1931, p. 932, no. 9).
No mineral description in the text.

203. **Felspar-bearing peridotite.** Tertiary.
NW. Østerfjeld, Qaersut, Nûgssuaq.
DRESCHER, F. K. & H. K. E. KRUEGER (1928, p. 582).
(Compare no. 209).
Major constituents: Olivine, pyroxene, chlorite, serpentine. Minor constituents: Titaniferous hornblende, labradorite (an_{50}), biotite, analcite. Accessories: Magnetite, apatite. Secondary constituents: Calcite, chalcedony, limonite.

204. **Iron-bearing dolerite.** Tertiary.
NW. Uivfaq, Disko.
SMITH, L. (1879, p. 471, no. I).
The rock contains a considerable number of iron grains, which could not be completely separated, the result being a higher content of FeO than ought to be found in the rock.

205. **Basalt.** Tertiary.
NW. Lyngmarksfjeld at Godhavn, Disko. (Upper part of the series).
WOLFF, F. VON (1931, p. 932, no. 10).
No mineral description in the text.

[1]) Excluding ore formed by decomposition of olivine.

206. **Soapstone.** Metamorphic Complex (Precambrian?).
SW. Unortoq Fjord.
VRBA, K. (1874, p. 120).

The rock has a green yellowish-grey colour. U. M.: A fibrous, almost colourless mass with few apatite needles, much magnetite, and rectangular cavities, doubtless originating from outweathered felspar. The soapstone shows a gradual transition into the diorite porphyry on which it borders and is doubtless a transformation of the latter.

207. **"Anortitfels".** Tertiary.
NW. Uivfaq, Disko.
LORENZEN, J. (1883, p. 165).

Spinel, anorthite and graphite observed. The graphite content was burned away before the above analysis was undertaken and formed 6,78 % of the rock. The rest (93,22 %), was analyzed and gave the above composition.

208. **"Olivinestone".** Metamorphic Complex (Precambrian?).
SW. Siorarsuit at Kangamiut.
RØRDAM, K. (1884, p. 129).

A fragile, yellowish-green rock with olivine, serpentine, a bottle-green hornblende (»Grammatite«), magnesia-mica and chromite (comp. no. 192).

209. **"Augitzüge",** in peridotite. Tertiary.
NW. Østerfjeld, Qaersut, Nûgssuaq.
DRESCHER, F. K. & H. K. E. KRUEGER (1928, p. 582).

The actual mineral composition is not given; the calculated minerals are (comp. no. 203) olivine 44,5 %, pyroxene 19,65 %, titaniferous hornblende 5,00 %, biotite 1,00 %, magnetite 2,80 %, labradorite 3,00 %, serpentine 7,00 %, analcite 1,63 %, calcite 0,90 %, chlorite (limonite) 13,10 % = 99,00 %.

210. **"Anortitfels".** Tertiary.
NW. Uivfaq, Disko.
NAUCKHOFF, E. G. R. (1872, p. 28, no. 10).

The groundmass is a mixture of felspar and a grey, scaly mineral, shining like graphite. Small, black spots occur sparsely in the felspar. Red spinel is of common occurrence. Sulphuric iron and metallic iron could not be identified.

211. **"Mandelsteinkern".** Tertiary.
NW. Lyngmarksfjeld at Godhavn, Disko.
HOLLER, K. (1933/34, p. 32).

An extremely weathered basalt, mainly consisting of more or less opaque iron oxydes, remains of augite, of pseudomorphosed plagioclase and much ore. In the felspar as well as in the cavities there are secondary products: Zeolites, calcite, chalcedony, opal and a little fibrous zeolite (mainly natrolite).

212. **"Anortitfels".** Tertiary.
NW. The dyke at Uivfaq, Disko.
NAUCKHOFF, E. G. R. (1872, p. 26, no. 8).

A grey rock containing metallic iron. U. M. the rock consists of felspar with numerous grey, shining scales, and a black magnetite or graphite-like mineral, sparse green augite and in some places much red spinel.

213. **Alnøite (Ouachitite).** Age unknown, probably Palaeozoic.
NE. Liverpool Land, right opposite Fame Islands, a few km from the coast in a little valley. Dyke.
NORDENSKIÖLD, O. (1907, p. 212).

The groundmass is dark, basaltic with large phenocrysts (up to an inch) of augite and brown mica.

U. M. the groundmass consists of pyroxene, ore, apatite, calcite and a brownish almost isotropic mass (rich in nepheline?) »A few almost opaque crystals may possibly be perowskite«.

214. **"Anortitfels"** (cover round no. 196). Tertiary.
NW. Uivfaq, Disko.
NAUCKHOFF, E. G. R. (1872, p. 24, no. 7).

The groundmass consists of felspar, presumably anorthite, often in large crystals, in which red spinel(?) occurs. Further, a green augite-like mineral is observed and scales of pure iron. No magnetite.

215. **Magnesite-pyroxenite.** Age unknown, probably Precambrian.
SW. 2 km northwest of Narsak.
USSING, N. V. (1911, p. 205, no. 19).

A fine-grained, black rock, which is strongly magnetic and sometimes possesses polarity. U. M.: Pyroxene, iron-ore (must be highly titaniferous), olivine and biotite.

216. **Soapstone.** Metamorphic Complex (Precambrian?).
SW. Locality unknown. Professor LAUBE acquired it in Lichtenau.
JANOVSKÝ, J. V. (1873, p. 1230) published the analysis.
VRBA, K., republished the analysis accompained by a mineral description (1874, p. 122).

A compact, lamellated aggregate of a dark green colour. U. M. a colourless, fibrous-granular, perfectly homogeneous mass, in which solitary crystals of magnetite or apatite are very occasionally observed.

217. **Soapstone.** Metamorphic Complex (Precambrian?).
SW. Locality unknown. Professor LAUBE acquired it in Lichtenau.
JANOVSKÝ, J. V. (1873, p. 1230).
Same specimen as no. 216.

218. **"Bauxitähnliche Hülle".** Tertiary.
NW. Lyngmarksfjeld at Godhavn, Disko.
HOLLER, K. (1933/34, p. 32).
Consists almost exclusively of more or less opaque masses. Colour dark reddish-brown; light-brown transparent remnants of augite and ore crystals are occasionally recognized, and only pseudomorphs of plagioclase are contained in it. The rock is completely hydrothermally altered.

Analyses of Telluric Iron.

No.	Rock Name	Locality	District	Year	Fe	Ni	Co	Cu	S	P	C	SiO
219	**Iron (one of the big blocks).**	Uivfaq (shore), Disko	NW	1870	84.49	2.48	0.07	0.27	1.52	0.20	10.16[1])	tr.
220	**Iron (one of the smaller blocks).**	Uivfaq, Disko	NW	1870	86.34[1])	1.64	0.35	0.19	0.22[2])	0.07	3.71[3])	0.66
221	**Iron**	The dyke at Uivfaq, Disko	NW	1870	93.24	1.24	0.56	0.19	1.21	0.03	2.30	
222	**Iron**	Uivfaq, Disko	NW	1872	88.67[1])	2.16	0.30	0.13	0.16	tr.	1.64[2])	0.26
223	**Breccia**	The dyke at Uivfaq, Disko	NW	1872	80.27[1])	1.22	0.30	0.08	0.34	0.12	3.52	1.04
224	**Breccia (weathered)**	The dyke at Uivfaq, Disko	NW	1872	85.12[1])	1.81	0.33	0.30[2])	tr.	0.12	2.33[3])	0.81
225	**Iron**	Uivfaq, Disko	NW	1872	80.64	1.19	0.47	tr.	2.82	0.15	3.69	[1])
226	**Iron (Type I**	Uivfaq, Disko	NW	1872	71.09[1])	2.65	0.91	1.01[2])	2.70	0.21	4.64[3])	0.07
227	**Iron (Type II)**	Uivfaq, Disko	NW	1872	82.40[1])						2.9 [2])	0.29
228	**Iron (Type III)**	Uivfaq, Disko	NW	1872	70.10[1])						4.7 [2])	

No. 1. Analyses of Telluric Iron.

ndis-oluble HCl.	Inclusive		Sum	Sp. gr.	Analyst	Published by	Notes	No.
0.05	Cl : 0.72 Al_2O_3 : tr. MgO : 0.04	CaO : tr. Na_2O : tr. K_2O : tr.	100.00	6.36 5.86	A. E. Nordenskiöld	A. E. Nordenskiöld	[1]) incl.: O, H_2O & organic ingredients.	219
4.37	Cl : 1.16 Al_2O_3 : 0.24 MgO : 0.29	CaO : 0.48 Na_2O : 0.14 K_2O : 0.07	99.93 (100.00)	7.05 7.06	Th. Nordström	A. E. Nordenskiöld	[1]) acc. to weight. acc. to titration: 86.30 %. [2]) Nordström: the second determ. gave 0.21 %. [3]) Nordström: 2.77 %.	220
0.59[1])	Cl : 0.16 MgO : tr. Na_2O : 0.12	K_2O : 0.08 H : 0.07	99.79	6.24	G. Lindström	A. E. Nordenskiöld	[1]) incl.: SiO_2.	221
6.07	Cl : 0.16 Al_2O_3 : 1.45 MgO : 0.33 CaO : 0.50	Na_2O : 0.09 K_2O : tr. H : 0.28[2]) NiO, CoO : 0.44	102.64	not determ. too little material.	Nauckhoff	E. G. R. Nauckhoff	[1]) incl.: 30.42 % FeO & Fe_2O_3. [2]) Average of two determ.	222
9.64	Cl : tr. Al_2O_3 : 2.31 MgO : 0.02 CaO : 0.30 Na_2O : 0.08	K_2O : tr. H : 0.38 NiO : 0.94 CoO : 0.23	101.39	4.56[2])	Nauckhoff	E. G. R. Nauckhoff	[1]) incl.: 52.51 % FeO & Fe_2O_3. [2]) Certainly too low, as the determ. was undertaken on porous fragments.	223
3.71	Cl : 0.14 Al_2O_3 : 2.92 MgO : tr. CaO : 0.20 Na_2O : 0.11	K_2O : tr. H : 0.51[3]) NiO, CoO : 0.82	99.23	6.57	Nauckhoff	E. G. R. Nauckhoff	[1]) incl.: 77.39 % FeO & Fe_2O_3. [2]) uncertain. [3]) Average of two determ.	224
	Cr : tr.	O : 11.09	100.05	5.82	Jannasch	F. Wöhler	[1]) In 1879 (lit. 61) F. Wöhler republishes the anal., but this time with 0.08 % (SiO_2, Cr, Cu) the total summa accordingly being: 100.13 %. Wöhler writes: »small quantities of a white silica, cont. Al, Ca Mg.« A mean of several anal.	225
	As : 0.41 H_2O : 2.86 $CaSO_4$: 1.288 $CaCl_2$: 0.039 $FeCl_2$: 0.027	O : 12.10	100.004		Daubrée	Daubrée	[1]) incl.: 30.15 % Fe comb. with S, P, O. [2]) incl.: Cu, Cr & Loss [3]) 1.64 % C free, 3.00 % C comb.	226
	H_2O : 0.7		86.291		Daubrée	Daubrée	[1]) incl.: 1.6 % Fe comb. [2]) comb. & free.	227
			74.80		Daubrée (?)	Daubrée	[1]) incl.: 8.11 % Fe comb. [2]) comb. & free.	228

No.	Rock Name	Locality	District	Year	Fe	Ni	Co	Cu	S	P	C	SiO
229	**Iron (Type I)**	Uivfaq, Disko	NW	1879	92.77[1]	1.08	0.48	0.08	1.12	0.14	1.36	
230	**Iron (Type II)**	Uivfaq, Disko	NW	1879	93.16	2.01	0.80	0.12	0.41	0.32	2.34[1]	
231	**Iron (Type II)**	Uivfaq, Disko	NW	1879	90.17	6.50	0.79	0.13	[1]	[1]	[1]	1.5
232	**Iron (Type III)**	Uivfaq, Disko	NW	1879	88.13	2.13	1.07	0.48	0.36	0.25	2.33[1]	4.2
233	**Iron**	Uivfaq, Disko	NW	1883	91.71	1.74	0.53	0.16	0.10	nil	1.37[1]	0.3
234	**Iron**	Uivfaq, Disko	NW	1883	91.17	1.82	0.51	0.16[1]	0.78	nil	1.70[2]	0.4
235	**Iron (weathered part)**	Uivfaq, Disko	NW	1883	82.02	1.39	0.76	0.19	0.08	nil	1.27[1]	0.5
236	**Iron (the fresh, outer part)**	Uivfaq, Disko	NW	1883	59.77	1.60	0.39	0.23			1.20	0.3
237	**a. Iron**	Uivfaq, Disko	NW	1940	91.61	1.87			1.07		3.48	
238	**b. Iron**	Uivfaq, Disko	NW	1940	91.63	1.78			1.14		3.59[1]	
239	**c. Iron**	Uivfaq, Disko	NW	1940	91.50	1.76			1.04		3.56[1]	
240	**d. Iron**	Uivfaq, Disko	NW	1940	91.58	1.82			1.09		3.57[1]	
241	**e. Iron**	Uivfaq, Disko	NW	1940	91.72	1.84			1.09		3.92	
242	**Iron**	Asuk, Disko	NW	1883	95.15	0.34	0.06	0.14	[1]		0.96	0.6
243	**Iron**	Jernpynten, Mellemfjord, Disko	NW	1883	92.41	0.45	0.18	0.48	tr.		0.87[1]	0.9
244	**Iron**	The head of Mellemfjord, Disko	NW	1883	93.89	2.55	0.54	0.33	0.20	nil	0.28	0.4
245	**Iron (Pebble)**	Fortunebay, Disko	NW	1883	92.68	2.54	0.58	0.20	0.01	nil	2.40[1]	0.3

ndis- oluble n HCl	Inclusive		Sum	Sp. gr.	Analyst	Published by	Notes	No.
	Cl : tr. MgO : tr.	CaO : tr. H_2O : 4.50	101.53	5.00	L. Smith	L. Smith	[1]) incl.: 76.21 % FeO & Fe_2O_3.	229
	Cl : 0.02		99.18	6.42	L. Smith	L. Smith	[1]) combined.	230
	MgO : tr.	CaO : tr.	99.13	7.46	L. Smith	L. Smith	[1]) not determ.; too little material.	231
	Cl : 0.08	Mg : tr.	99.03	6.80	L. Smith	L. Smith	[1]) combined.	232
2.39	Al_2O_3 : 1.21		99.52	6.87	J. Lorenzen	J. Lorenzen	[1]) mean of two determ. giving 1.35 % and 1.38 % resp.	233
0.77	Al_2O_3 : 2.12		99.49		J. Lorenzen	J. Lorenzen	[1]) 0.10 % in ZDGG. 1883. [2]) mean of two determ., giving 1,62 % & 1.78 % resp.	234
8.03	Al_2O_3 : 1.08		95.41[2])		J. Lorenzen	J. Lorenzen	[1]) mean of two determ., giving 1.24 % & 1.31 % resp. [2]) the deficit is due to the partial oxydation of iron.	235
22.23	Al_2O_3 : 3.79		89.60[1])		J. Lorenzen	J. Lorenzen	[1]) the deficit is due to the partial oxydation of iron.	236
	O : 1.83 N : 0.00	H : 0.038 (H_2O : 0.342)[2])	99.90		R. Blix R. Treje K. Hellbom	H. Löfquist C. Benedicks	a.	237
	O : 0.93 N : 0.05	H : 0.015 (H_2O : 0.135)[2])	99.14		»	»	b.	238
	O : 1.02 N : 0.05	H : 0.017 (H_2O : 0.153)[2])	98.95		»	»	[1]) mean of 3 different determinations. [2]) Calculated from H. c.	239
	O : 0.96 N : 0.04	H : 0.012 (H_2O : 0.108)[2])	99.07		»	»	d.	240
	O : 1.99 N : 0.20	H : 0.183 (H_2O : 1.650)[2])	100.94		»	»	e.	241
1.90	Al_2O_3 : 0.51		99.74	7.26	J. Lorenzen	J. Lorenzen	[1]) not determ., too little material.	242
4.57	Al_2O_3 : 0.60		100.46	6.90[2]) 7.57[2]) 7.55[2])	J. Lorenzen	J. Lorenzen	[1]) mean of 2 determ. giving 1.03 & 0.72 resp. [2]) various pieces.	243
1.48			99.73	7.92[1]) 7.80[1]) 7.48[1])	J. Lorenzen	J. Lorenzen	[1]) various pieces.	244
0.08			98.80	7.19	J. Lorenzen	J. Lorenzen	[1]) mean of 2 determ. giving 2.38 & 2.41 resp.	245

No.	Rock Name	Locality	District	Year	Fe	Ni	Co	Cu	S	P	C	SiO_2
246	**Iron (Pebble)**	Niaqornaq, Jakobshavn district	NW	1854	93.39	1.56	0.25	0.45	0.67	0.18	1.69	0.38
247	**Iron (Pebble)**	Jakobshavn, on a plain at the river Anoretok at Niaqornaq	NW	1879	92.45	2.88	0.43	0.18	1.25	0.24	1.74[1])	1.31
248	**Iron (Pebble)**	Niaqornaq Anoretok river	NW	1883	92.46	1.92[1])	0.93[1])	0.16	0.59	0.07	3.11[2])	0.24
249	**Iron (Pebble)**	Niaqornaq Anoretok river	NW	1897	93.64	2.00	0.48	0.07	1.13	0.19	3.72	
250	**Iron (Pebble)**	Niaqornaq Anoretok river	NW	1897	91.60	1.25	0.37			0.07	6.44	
251	**Iron (Pebble)**	Ekaluit, Nûgssuaq, in an old greenland tomb	NW	1883	94.11	2.85	1.07	0.23	[1])	[1])	[1])	
252	**Iron (Knife)**	Sermermiut, Jakobshavn	NW	1883		7.76	0.56	tr.				
253	**Iron (Knife)**	Hunde Ejland	NW	1883		0.23		0.18				
254	**Iron (Pebble)**	Arveprinsens Ejland, in a moor	NW	1883	95.67		tr.?	0.06	0.09		1.94	1.40
255	**Iron (Pebble)**	Fiskernæs	SW	1883	92.23	2.73	0.84	0.36	[1])	nil.	0.20	0.64
256	**"Pyrite nickelifère"**	Igdlokunguaq	NW	1879	53.01	3.11	0.78	2.43	36.85	0.42		

Analyses of Meteoric Iron.

Appendix

No.	Name of Meteorite	Locality	District	Year	Fe	Ni	Co	Cu	S	P	C	SiO_2
257	**"Ahnighto" (Tent)**	Savigsivik	NW	1898	91.476	7.785	0.533	0.014	nil	0.202	0.014	
258	**"Woman"**	Ironstone Mt.	NW	1898	91.468	7.775	0.533	0.018	nil	0.188	0.026	
259	**"Dog"**	Ironstone Mt.	NW	1898	90.993	8.265	0.533	0.016	0.019	0.172	0.014	
260	**"Savik"**	Savik	NW	1927	n. d.	7.25	0.00	0.00	0.022	0.166	0.00	

Indis-soluble in HCl.	Inclusive	Sum	Sp. gr.	Analyst	Published by	Notes	No.
		98.57	7.073		G. Forchhammer		246
	MgO : tr. CaO : tr.	100.48	7.60	L. Smith	L. Smith	[1]) Combined.	247
1.09		100.57	7.29	J. Lorenzen	J. Lorenzen	[1]) The Ni & Co. values are 0.92 & 1.93 in Z. D. G. G. Bd. 85, 1883. [2]) mean of 2 anal., giving 3.02 & 3.20 resp.	248
		101.23	7.2704	O. Sjöström	E. Cohen		249
tr.		99.73	7.5124	O. Sjöström	E. Cohen		250
0.61		98.87		J. Lorenzen	J. Lorenzen	[1]) Not determined; too little material.	251
				J. Lorenzen	J. Lorenzen		252
				J. Lorenzen	J. Lorenzen		253
1.09		100.25		J. Lorenzen	J. Lorenzen		254
1.99	Al_2O_3 : 0.64	99.63	7.06	J. Lorenzen	J. Lorenzen	[1]) Not determined; too little material.	255
3.20	Al_2O_3 : tr. MgO : tr. CaO : tr.	99.38	4.391	L. Smith	L. Smith		256

No. 2. Analyses of Meteoric Iron.

Indis-soluble in HCl.	Inclusive	Sum	Sp. gr.	Analyst	Published by	Notes	No.
	Cr : n. d.			Whitfield	R. Peary	All belong to the same meteorite fall	257
	Cr : n. d.			Whitfield	R. Peary		258
	Cr : n. d.			Whitfield	R. Peary		259
	Cr : tr.		7.91	F. Kristensen	O. B. Bøggild		260

List of Localities.

Denmark.

The Faeroes.

NW. Greenland.

SW.-Greenland.

NE. Greenland.

SE. Greenland.

Index of Rock Names.

(Names used by the authors.)

Literature.

1. Backlund, H. G. Das Alter des »Metamorphen Komplex« von Franz Joseph Fjord in Ost-Grönland. Medd. om Grønl. Bd. 87, no. 4, Købh. 1932.
2. — & Malmquist, D. Zur Geologie und Petrographie der nordostgrönländischen Basaltformation. Teil 1. Basische Reihe. Medd. om Grønl. Bd. 87, no. 5. Købh. 1932.
3. — — Zur Geologie und Petrographie der nordostgrönländischen Basaltformation. Teil 2. Die sauren Ergussgesteine von Kap Franklin. Medd. om Grønl. Bd. 95, no. 3 .Købh. 1935.
4. Belowsky, M. Beiträge zur Petrographie des westlichen Nord-Grönlands. Zeitschr. d. Deut. Geol. Gesellsch. Bd. 58. Berlin 1905.

Benedicks, C. (1940). Vide Löfquist & Benedicks.

5. Bütler, H. Some new Investigations of the Devonian Stratigraphy and Tectonics of East Greenland. Medd. om Grønl. Bd. 103, no. 2. Købh. 1935.
6. Bøggild, O. B. Den vulkanske Aske i Moleret samt en Oversigt over Danmarks ældre Tertiærbjergarter. D. G. U. 2. Række, Nr. 33. Købh. 1918.

Callisen, K. (1928). Vide Madsen, Nordmann and others.

7. Callisen, K. Beiträge zur Kenntnis des Granitgrundgebirges von Bornholm. Købh. 1932.
8. — Das Grundgebirge von Bornholm. D. G. U. 2. Række, Nr. 50. Købh. 1934. (Also embracing the preceeding paper).
9. Cohen, E. Über das Vorkommen von Eisencarbid (Cohenit) im terrestrischen Nickeleisen von Niakornak bei Jakobshavn in Nord-Grönland. 1897. Medd. om Grønl. Bd. 15. Købh. 1898.
10. Daubrée. Examen des roches avec fer natif, découvertes en 1870 par M. Nordenskiöld au Groënland. Compt. Rend. des Séances de l'Acad. des sciences. Tom. 74. Paris 1872.
11. — Examen des météorites d'Ovifak (Groënland) au point de vue du carbone et des sels solubles qu'ils renferment. Compt. rend. d. Séances de l'Acad. des Sciences. Tom. 75, Paris 1872.

Davidson, Ch. (1936). Vide Walker & Davidson.

Deer, W. A. (1939). Vide Wager & Deer.

12. Drescher, F. K. & Krueger, H. K. E.: Der Peridotit von Kaersut (Grönland) und sein Ganggefolge als Beispiel einer Sekretionsdifferentiation. Neues Jahrb. f. Min., Geol. u. Pal. Beil.-Band 57 A. Stuttgart 1928.
13. Durocher, M. J. Sur les roches et les minéraux des iles Féroë. Annales des Mines. Tom. 19. Paris 1841.

14. Forchhammer, G. Meteorjærn fra det nordlige Grønland. Oversigt over d. Kgl. danske Vidensk. Selsk. Forh. No. 1. Købh. 1854.
15. Hintze, C. Handbuch der Mineralogie, 1 Band, 1. Abt. Leipzig 1904.
16. Holler, K. Rote Zersetzungszonen in grönländischen Basalten. Fortschr. d. Min., Krist. u. Petr. Bd. 17, Berlin 1933.
17. Holler, K. Hydrothermale Zersetzungserscheinungen an grönländischen Basalten. Chemie der Erde, Bd. 8. Jena 1933-34.
18. Holmes, A. The Basaltic Rocks of the Arctic Region. The Min. Mag. Vol. 18. London 1919.
19. Janovský, J. Analyse zweier Grönländischer Mineralien. Berichte d. Deut. Chem. Gesellschaft zu Berlin. 1873.
20. Kalb, G. Petrographische Untersuchungen am Granit von Bornholm. Mitt. aus d. Naturwissensch. Verein f. Neuvorpommern u. Rügen in Greifswald. Jahrg. 45, 1913. Berlin 1914.
21. Kranck, E. H. On the Crystalline Complex of Liverpool Land. Medd. om Grønl. Bd. 95, no. 7. Købh. 1935.
22. Krueger, H. K. E. Über eine sogenannte Basaltbreccie in der Kreide-Tertiär-Formation von Westgrönland. Notizbl. d. Hessischen Geol. Landesanst. zu Darmstadt. 5 Folge, 10 Heft. 1927.
— (1928). Vide Drescher & Kreuger.
23. Lorenzen, Joh. Kemisk Undersøgelse af det metalliske Jern fra Grønland samt nogle af de dermed følgende Bjergarter. 1882. Medd. om Grønl. Bd. 4. Købh. 1883.
24. Löfquist, H. & Benedicks, C. Det stora Nordenskiöldska jernblocket från Ovifak, dess mikrografi och metallurgi. Jernkontorets Annaler, Årg. 124, H. 12, Stockholm 1940.
25. Machatschki, F. Enstatit-Hornblendit von Grönland. Centralblatt f. Min., Geol. u. Pal. Jahrg. 1927. Abt.-A. Stuttgart 1927.
26. Madsen, V., Nordmann, V. and others: Oversigt over Danmarks Geologi. D. G. U. 5. Række Nr. 4. Købh. 1928.
Malmquist, D. (1932, 1935). Vide Backlund & Malmquist.
27. Nauckoff, E. G. R. Om förekomsten af gediget jern i en basaltgång vid Ovifak i Grönland. Bih. t. K. Vet.-Akad. Handlingar. Bd. 1, no. 6. Stockholm 1872.
28. Nicolau, Th. Untersuchungen an den eisenführenden Gesteinen der Insel Disko. Medd. om Grønl. Bd. 24. Købh. 1901.
29. Nieland, H. Beitrag zur Kenntnis der Deckenbasalte von Westgrönland. Chemie der Erde, Bd. 6. Jena 1931.
30. Noe-Nygaard, A. A Preliminary Report on the Palaeozoic Igneous Rocks of Canning Land. Medd. Dansk Geol. Foren. Bd. 9, H. 1. Købh. 1936.
31. — — Die Palaeozoischen Eruptivgesteine von Canning-Land. Medd. om Grønl. Bd. 118, no. 6. Købh. 1937.
32. — — Syenitforekomsten ved Antarctic Havn. Østgrønland. Medd. Dansk Geol. Foren. Bd. 9, H. 5. Købh. 1940.
33. Nordenskiöld, A. E. Redogörelse för en expedition till Grönland år 1870. Öfv. af K. Vet.-Akad. Förh. no. 10. Stockholm 1870.
34. Nordenskiöld, O. On the Geology and the Physical Geography of East Greenland. Medd. om Grønl. Bd. 28. Købh. 1908.
Nordmann, V. (1928). Vide Madsen, Nordmann & others.
35. Nordström, Th. Kemisk undersökning af meteorjern från Ovifak på Grönland. Öfv. af K. Vet.-Akad. Förh. no. 4, Stockholm 1871.

36. Norin, R. Problems Concerning the Volcanic Ash Layers of the Lower Tertiary of Denmark. Geol. Fören. Förh. Bd. 62, Stockholm 1940.
37. Orvin, A. K. Beiträge zur Kenntnis des Oberdevons Ost-Grönlands. Norges Svalbards- og Ishavs-Undersøkelser. Nr. 30. Oslo 1930.
38. Osann, A. Ueber einige basaltische Gesteine der Färöer. Neues Jahrb. f. Min., Geol. u. Pal. Bd. 1. Stuttgart 1884.
38 a. Peary, R. Northward over the "Great Ice". II. 1898.
39. Phalen, W. C. Notes on the Rocks of Nugsuaks Peninsula and its Environs, Greenland. Smith. Inst. Misc. Coll. Vol. 45, (no. 1436). Washington, Philadelphia.
40. Rittmann, A. Studien an Eruptivgesteinen aus Ost-Grönland. Medd. om Grønl. Bd. 115, no. 1. Købh. 1940.
41. Rosenbusch, H. Elemente der Gesteinslehre. 1898.
42. Rørdam, K. Undersøgelse af Olivinsten fra Siorarsuit ved Kangamiut i Grønland. Medd. om Grønl. Bd. 8. Købh. 1889.
43. — Undersøgelse af mesozoiske Lerarter og Kaolin paa Bornholm i geologisk og teknisk Henseende. D. G. U. 2 Række Nr. 1. Købh. 1890.
44. — Studier over udvalgte Emner af den kemiske Geologi og den kemiske Agrogeologi. Det kgl. danske Vidensk. Selsk. Skr. 7. Række Afd. XI. 5. København 1914.
45. Sahama (Sahlstein), Th. G. Petrographie der Eklogiteinschlüsse in den Gneisen des südwestlichen Liverpool-Landes in Ostgrönland. Medd. om Grønl. Bd. 95 no. 5. Købh. 1935.
46. Simpson, J. B. Notes on the Geology of the Faeröe Islands. Geol. Magazine. Vol. 65. London 1928.
47. Smith, L. Memoire sur le fer natif du Groenland et sur la dolérite qui le renferme. Annales de chimie et de physique. 5. serie, Tom. 16. Paris 1879.
48. Streng, Aug. Beitrag zur Theorie der vulkanischen und plutonischen Gesteinsbildung. Ann. der Physik u. Chemie. Bd. 90. Leipzig 1853.
49. Tyrrell, G. W. The Petrography of some Kainozoic Igneous Rocks, and of the Cape Parry Alkaline Complex, East Greenland. Geol. Magazine. Vol. 69. London 1932.
50. Ussing, N. V. Geology of the Country around Julianehaab, Greenland. Medd. om Grønl. Bd. 38. Købh. 1912.
51. Wager, L. R. Geological Investigations in East Greenland. Part 1. General Geology from Angmagsalik to Kap Dalton. Medd. om Grønl. Bd. 105, no. 2. Købh. 1934.
52. — & Deer, W. A. Geological Investigations in East Greenland. Part 3. The Petrology of the Skaergaard Intrusion Kangerdlugssuaq, East Greenland. Medd. om Grønl. Bd. 105, no. 4. Købh. 1939.
53. Walker, Fr. & Davidson, Ch. A Contribution to the Geology of the Faeroes. Trans. Roy. Soc. Edinburgh. Vol. 58. 1936.
54. Washington, H. S. Deccan Traps and Other Plateau Basalts. Bull. Geol. Soc. of America. Vol. 33. Washington 1922.
Whittard, W. F. (1930). Vide Wordie & Whittard.
55. Winkler, Cl. Zur Zusammensetzung des Eisens von Ovifak in Grönland und der bituminösen Kohle (des Kolms) aus der cambrischen Formation Westergötlands. Ofv. af K. Vet.-Akad. Förh. no. 7. Stockholm 1901.

56. Wisemann, J. D. H. A Contribution to the Petrology of the Metamorphic Rocks of East Greenland. Quart. Journ. Geol. Soc. Vol. 88. London 1932.
51. Wolff, F. von. Der Vulkanismus. Bd. 2, Teil 2. 1. Stuttgart 1931.
58. Wordie, I. M. & Whittard, W. F. A Contribution to the Geology of the Country between Petermann Peak and Kjerulf Fjord, East Greenland. Geol. Magazine, Vol. 67. London 1930.
59. Vrba, K. Beiträge zur Kenntniss der Gesteine Süd-Grönlands. Sitz.ber. der K. Akad. d. Wissensch. 1 Abt. Febr.-Heft, Bd. 69. Wien 1874.
60. Wöhler, F. Analyse des Meteoreisens von Ovifak in Grönland. Nachrichten v. d. K. Gesellsch. d. Wissenschaften u. d. G.-A. Univ. zu Göttingen. 1872.
61. Wöhler, F. Bemerkungen über das grönländische Gediegen Eisen. Neues Jahrb. f. Min., Geol. u. Pal. Stuttgart 1879.

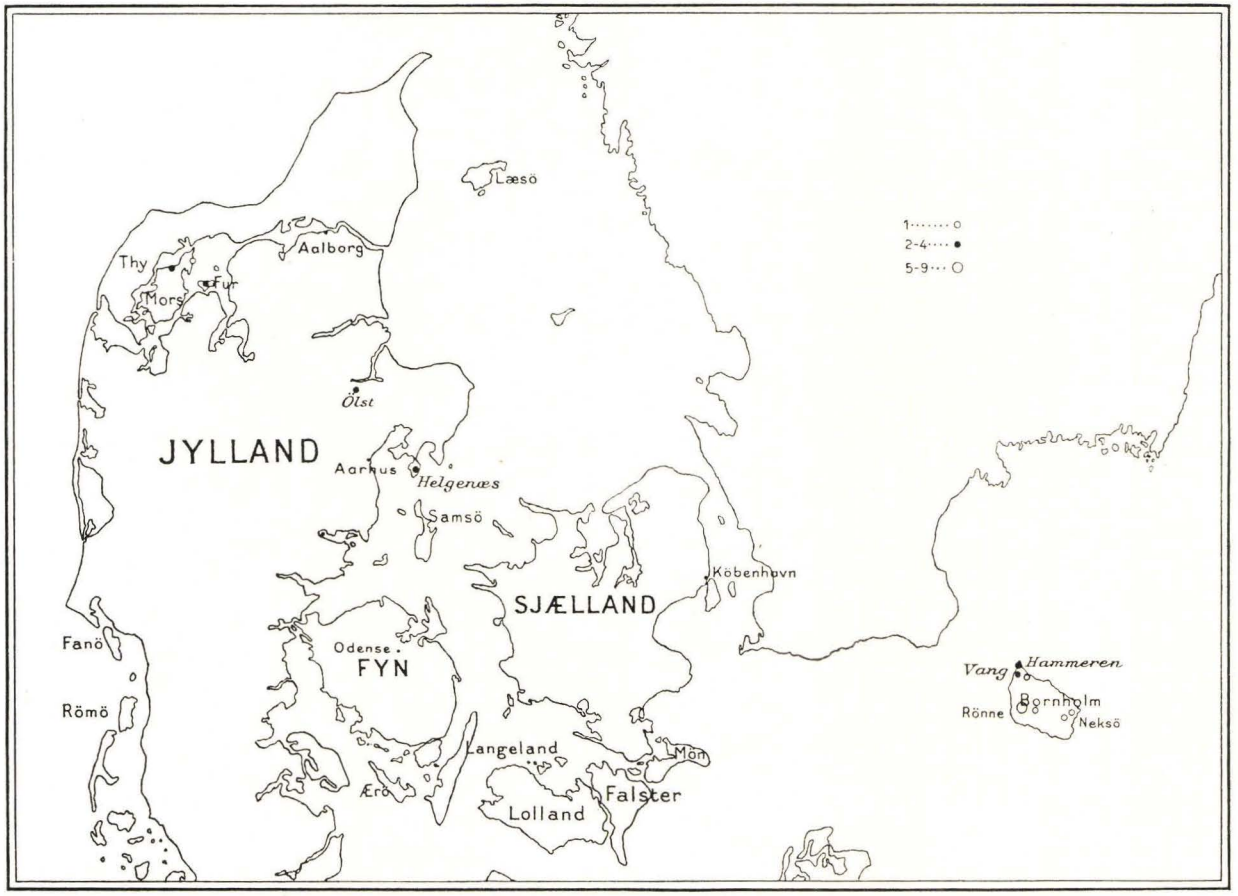

Fig. 1. Map of Denmark. Letters give the number of analyses. (Smallest dots = cities: København, Odense, Aarhus and Aalborg).

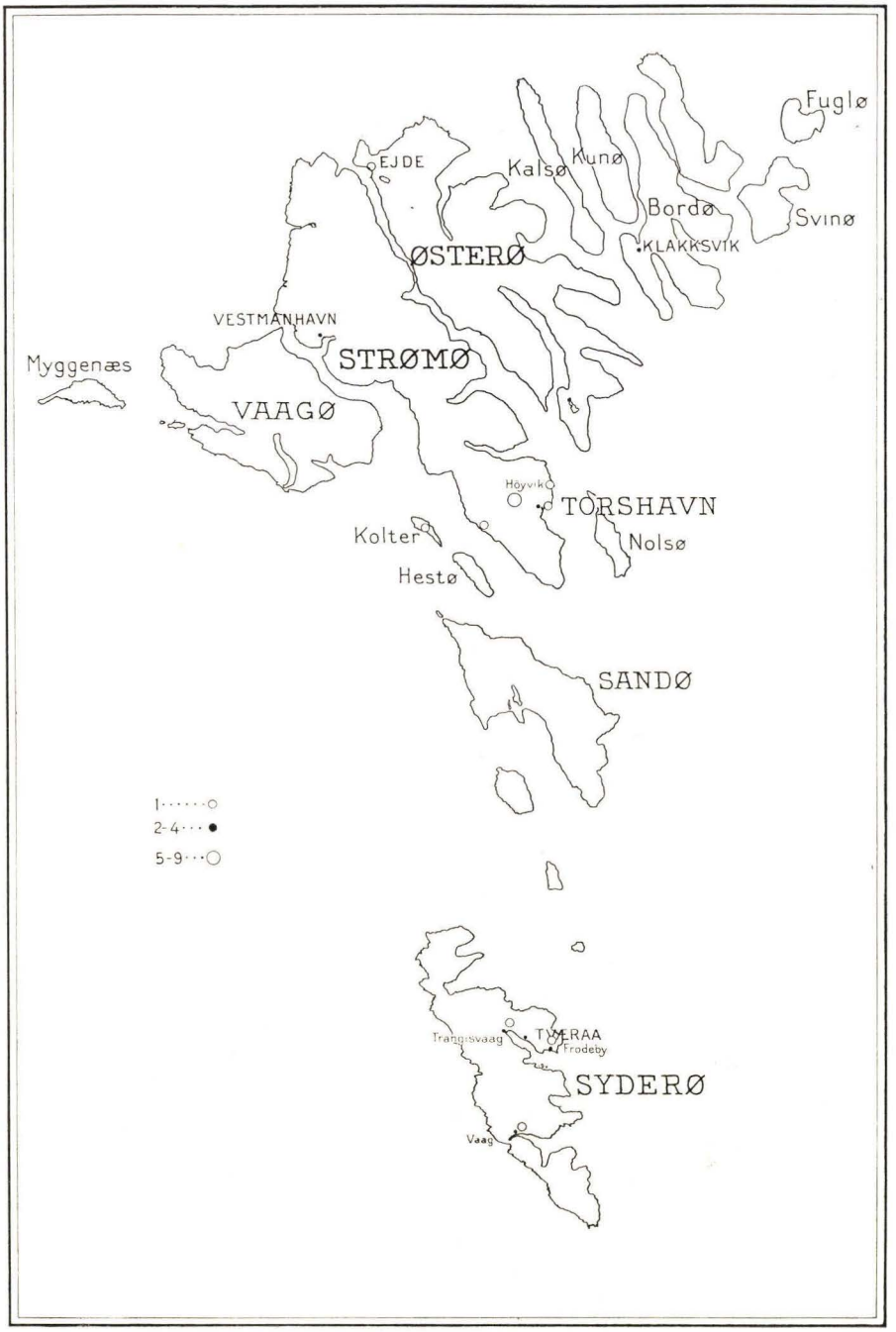

Fig. 2. Map of the Faeroes.
Letters give the number of analyses.
(Smallest dots = towns and villages, Klakksvik f. inst.).

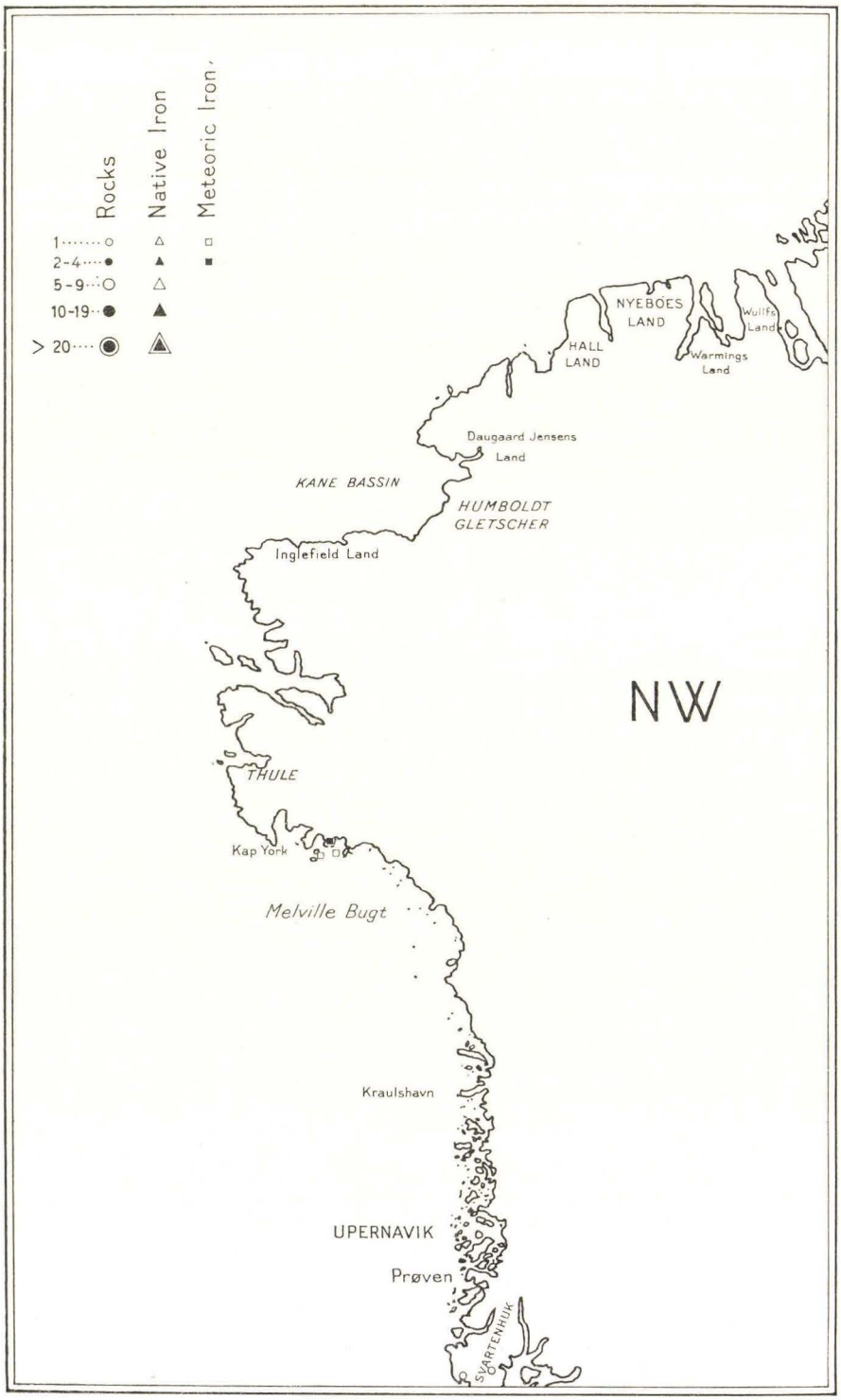

Fig. 3. Map of Greenland, northwestern part. (Continued on fig. 4).
Letters give the number of analyses.

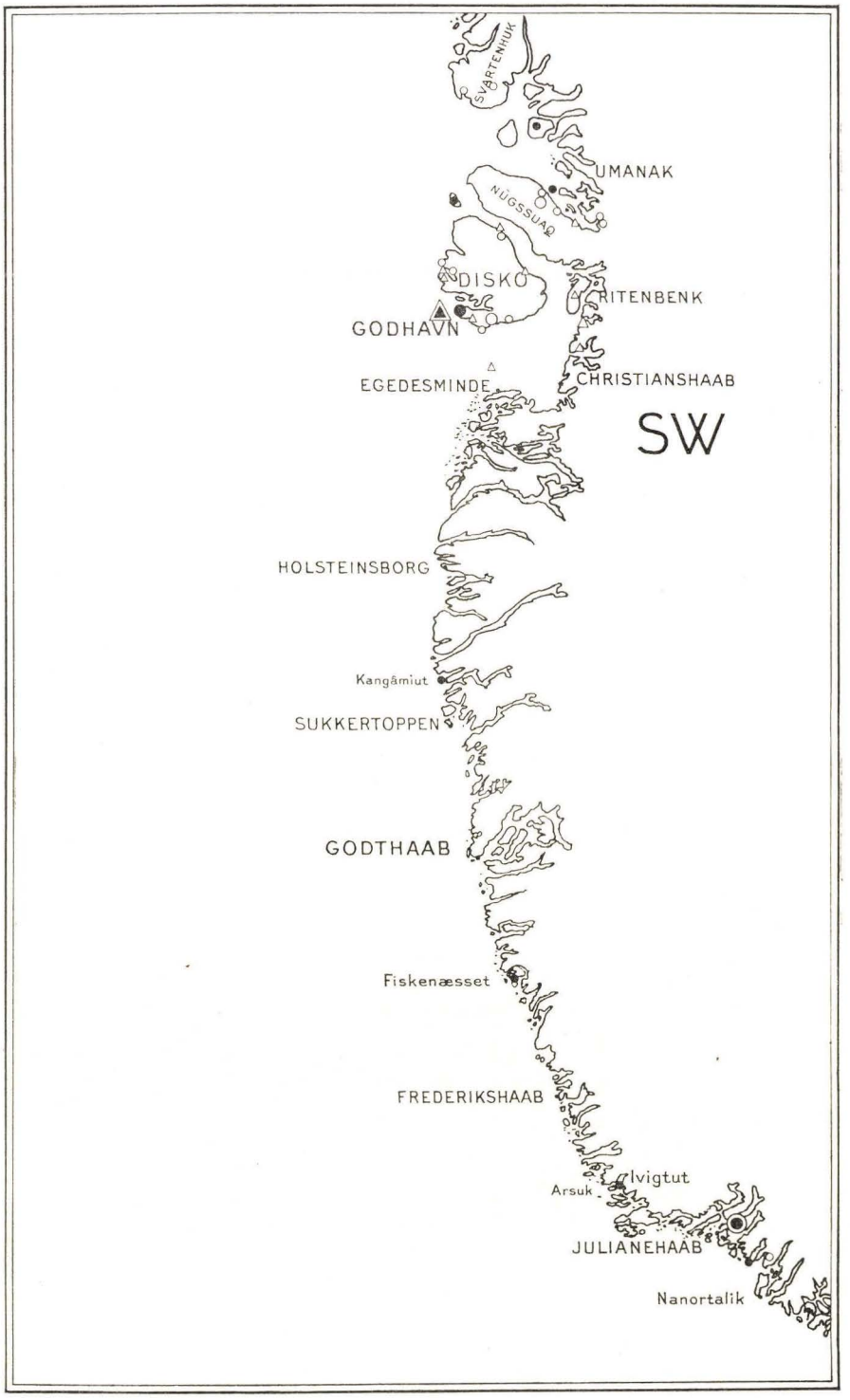

Fig. 4. Map of Greenland, southwestern part.
(Legend on fig. 3).

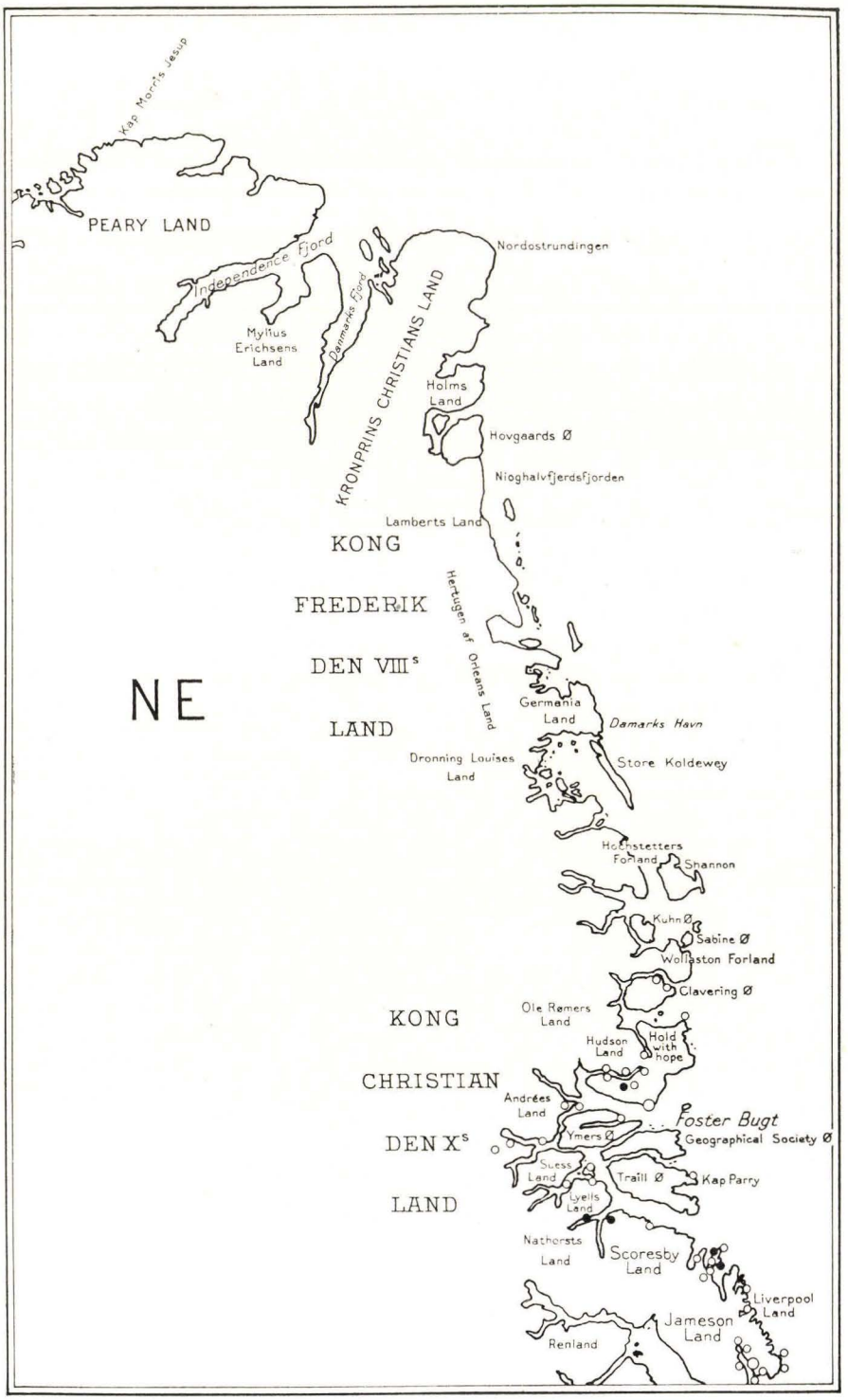

Fig. 5. Map of Greenland, northeastern part.
(Legend on fig. 3).

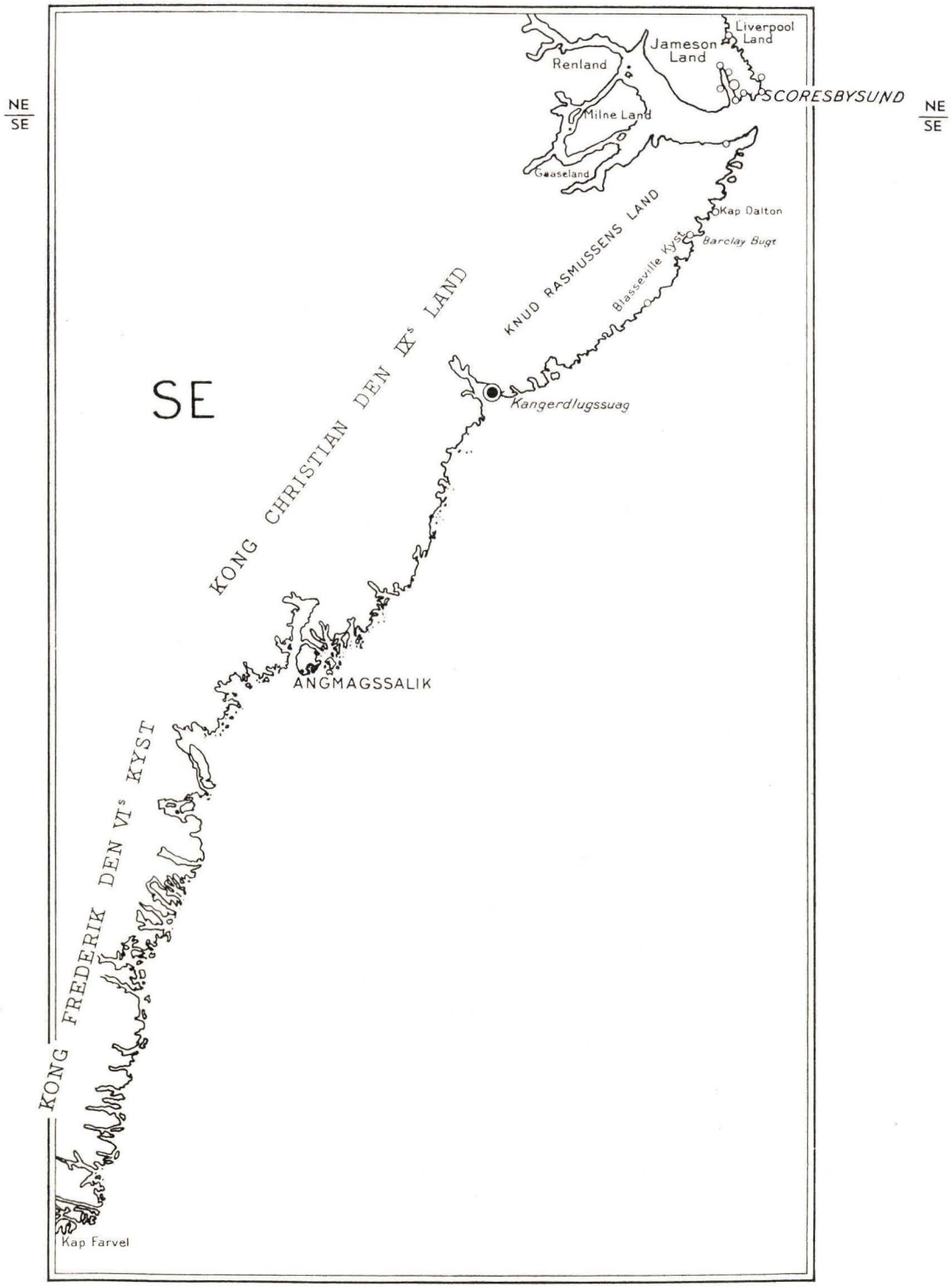

Fig. 6. Map of Greenland, southeastern part.
(Legend on fig. 3).