

TABLE 3. Mineralogic composition of point-counted samples from the Beaufort Sea. Data only for 40 grain-sizes (0.125-0.062 mm) not treated with hydrochloric acid. Data for 30 sizes (0.25-0.125 mm) are not significantly different. Sample depths from Barnes, Reimnitz, Gustafson and Larsen, 1973.

SAMPLE	DEPTH m	STAINING RATIO		OPAQUES	UNSTAINED AGGREGATES	IRON-STAINED AGGREGATES	GARNET	CHROME SPINEL	CLINOPIROXENE	ORTHOPIROXENE	HORNBLende	EPIDOTE GROUP	APATITE	TOURMALINE	SPHENE	ZIRCON	CHLORITOID	RUTILE	LAMPROBOLITE	GLAUCOPHANE	OTHER	UNKNOWN	TOTAL POINTS COUNTED	
		Aggreg.	Opaq.																					
1	22	0.54	0.20	14.0	19.0	10.3	7.3	5.7	16.3	*	*	*	*	*	*	*	*	-	-	*	27.3 1)	-	300	
2	78	0.58	0.13	24.8	16.0	9.3	11.0	2.2	13.2	3.8	6.7	7.2	0.7	0.7	0.2	2.0	0.3	*	0.5	-	*	2)	1.5	600
3	31	0.88	0.30	11.7	19.3	17.0	3.0	5.7	19.7	*	*	*	*	*	*	*	*	*	-	-	-	23.7 1)	-	300
4	48	0.56	0.74	11.0	20.3	11.3	5.0	2.3	24.3	*	*	*	*	*	*	*	*	*	-	-	-	25.7 1)	-	300
5	28	0.53	0.86	13.0	24.0	12.7	4.0	2.3	24.3	*	*	*	*	*	*	-	*	*	-	-	-	19.7 1)	-	300
6	100	1.21	0.20	20.0	8.0	9.7	8.0	4.3	19.3	5.0	14.7	6.3	1.3	0.3	0.3	2.0	*	*	*	-	-	-	0.7	300
7	21	0.71	0.32	13.7	22.7	16.0	5.3	2.0	21.7	*	*	*	*	*	*	*	*	*	-	-	-	18.7 1)	-	300
8	48	1.00	0.21	32.3	6.7	6.7	5.0	4.7	21.7	4.0	10.7	5.3	0.7	-	1.0	1.0	-	-	0.3	-	-	-	-	300
9	21	1.51	0.78	12.2	18.7	28.2	2.0	4.7	20.3	*	3.8	*	*	*	*	*	*	*	-	-	-	10.2 1) 3), 4)	-	600
10	7.2	2.35	1.25	21.0	8.7	20.3	1.0	16.7	16.0	1.3	10.7	3.3	1.0	*	*	-	-	-	-	-	-	-	-	300
11	4.5	4.68	7.50	13.1	10.5	49.2	0.8	7.9	8.7	0.5	5.6	2.1	0.5	0.3	-	0.5	-	-	-	0.3	-	-	-	390
12	140	0.92	0.28	10.7	12.0	11.0	8.3	1.7	34.7	*	7.7	*	*	*	*	*	*	*	-	-	-	14.0 1) 3)	*	300
13	20	1.20	4.00	6.7	23.0	27.7	1.7	4.3	19.3	*	*	*	*	*	-	-	*	*	-	-	-	17.3 1)	-	300
14	2.0	4.26	1.71	6.3	13.0	55.3	-	3.3	12.7	1.7	4.0	1.7	1.7	-	-	-	*	-	-	0.3	-	-	-	300
15	1.7	2.92	4.80	9.7	15.7	45.7	1.0	6.3	7.3	2.0	4.7	2.7	1.0	0.3	0.3	0.7	*	*	*	*	-	-	2.7	300
16	17	1.14	1.64	29.0	12.3	14.0	3.3	7.0	19.7	1.0	8.0	3.7	0.3	0.3	*	*	1.0	0.3	-	-	-	-	-	300
17	18	1.72	3.19	29.3	10.0	17.7	1.7	2.3	21.3	2.7	6.3	5.0	0.7	1.0	-	0.7	0.3	0.3	-	-	-	-	0.7	300
18	63	0.83	0.33	6.7	23.3	19.3	2.7	2.3	22.3	*	*	*	*	*	*	-	*	*	-	-	-	23.3 1)	-	300
19	48	1.28	0.17	16.3	16.3	21.0	2.0	2.7	16.7	6.3	7.0	6.3	0.7	0.7	-	1.3	-	-	0.3	-	*	2)	2.3	300
20	23	1.30	0.37	21.0	12.3	16.0	1.0	2.7	24.3	2.0	10.3	7.0	0.3	0.3	-	0.7	0.3	-	-	-	-	-	1.7	300
21	10.5	1.06	0.57	25.7	18.0	19.0	3.0	8.3	11.3	1.7	2.0	6.3	0.7	0.7	*	1.7	-	-	-	-	-	-	-	300
22	4.6	2.82	2.43	8.0	18.3	51.7	0.3	8.0	1.3	0.3	2.3	8.3	0.3	1.3	*	*	*	*	*	*	*	2)	-	300
23	1.7	2.05	5.33	6.3	21.7	44.3	0.7	1.0	10.3	*	2.7	*	*	*	*	*	*	*	*	-	-	13.0 1)	-	300
24	1.0	1.20	1.08	9.0	30.0	36.0	0.7	5.0	6.3	*	2.3	*	*	*	*	*	*	*	*	-	-	10.7 1)	-	300
25	93	1.12	0.36	20.0	18.3	16.3	1.3	2.7	19.3	4.3	5.0	8.3	1.3	1.0	0.7	-	-	-	0.3	*	0.3 3)	0.7	300	
26	33	0.93	0.43	22.0	15.0	14.0	3.7	5.0	14.3	3.0	9.7	6.3	1.3	1.3	1.0	1.3	-	0.3	-	-	-	0.3 2)	1.3	300
27	22	1.10	0.23	28.3	10.0	11.0	3.7	8.3	19.7	4.3	6.7	3.7	1.0	1.0	0.3	1.0	-	-	0.3	-	-	-	0.7	300
28	4.6	1.61	1.12	12.0	23.3	37.7	1.3	5.3	2.7	1.0	3.7	7.3	0.3	1.3	-	2.0	-	0.3	-	-	-	-	1.7	300
29	0.9	2.29	2.36	28.0	16.0	36.7	*	3.0	5.3	0.7	1.3	3.7	0.7	1.3	0.3	1.7	-	0.7	-	-	-	0.3 4)	0.3	300
30	6.1	0.46	0.61	23.0	31.7	14.7	2.3	6.3	1.3	1.0	1.3	8.7	2.0	1.0	2.0	3.7	*	-	*	-	*	2)	1.0	300
31	8.5	2.24	1.40	12.0	20.5	45.8	0.7	5.5	4.5	0.5	3.2	6.2	0.3	*	-	0.5	*	0.2	-	-	-	-	0.2	600
32	29	0.88	1.08	8.3	26.0	23.0	1.0	3.7	20.7	*	*	*	*	*	-	*	-	-	*	-	-	17.3 1)	-	300
33	46	0.81	0.60	10.7	23.3	19.0	2.3	1.7	25.7	*	*	*	*	*	*	-	*	-	*	-	-	17.3 2)	-	300
34	81	0.79	0.45	14.0	15.7	12.3	4.7	2.3	26.7	3.3	15.0	4.3	-	0.7	0.3	-	-	-	-	-	-	-	0.7	300
35	33	0.81	0.85	16.7	15.7	12.7	1.3	10.0	14.0	2.7	17.0	6.7	0.3	1.0	-	0.3	-	-	-	-	-	-	1.7	300
36	2.0	1.92	1.69	11.7	24.3	46.7	0.3	2.3	7.3	-	2.7	2.3	0.7	0.3	-	-	0.3	-	-	-	-	-	1.0	300
37	16	0.95	1.42	21.0	12.7	12.0	1.3	7.0	15.7	2.3	18.0	6.3	*	2.3	0.3	1.0	-	-	-	-	-	-	-	300
38	26	0.84	0.69	15.7	23.7	19.8	1.1	2.7	11.7	2.2	11.5	8.4	0.4	0.5	-	0.2	-	-	-	*	-	-	2.0	549
39	44	0.65	0.12	28.7	13.3	8.7	2.0	2.0	26.3	4.0	10.3	3.3	-	0.3	-	*	-	-	-	-	-	-	1.0	300
40	sfc	5.06	7.57	20.0	11.7	59.0	0.7	3.3	0.7	-	0.3	1.0	1.3	*	0.3	0.7	0.3	0.3	-	-	-	-	0.3	300
41	sfc	3.18	3.08	32.7	12.7	40.3	0.7	2.3	1.3	0.3	2.0	4.3	1.3	0.7	*	*	0.7	0.7	-	*	4) 5)	-	300	
42	sfc	2.38	2.00	9.0	18.3	43.7	1.3	2.3	15.7	0.7	3.7	2.3	1.3	0.3	0.3	*	0.7	-	*	0.3	-	-	-	300

* mineral seen but not counted sfc=surface sample
 1) total percent of all "species; complete species counts were not made for the sample
 2) staurolite
 3) kyanite
 4) riebeckite
 5) lawsonite

