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DINOFLAGELLATE CYST OCCURRENCES OF THE JURASSIC-LOWER CRETACEOUS SEQUENCE IN THE SVERDRUP BASIN, ARCTIC CANADA

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CONTENTS

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INTRODUCTION

This Open File Report presents the dinoflagellate cyst occurrences that form the basis for the dinoflagellate Oppel-zonation, proposed by Davies (1983) in the Geological Survey Bulletin 359, for the Sverdrup Basin located in the Queen Elizabeth Islands, District of Franklin, Arctic Canada.

The establishment of the dinoflagellate Oppel-zonation for the Jurassic to Lower Cretaceous (Toarcian or older to Valanginian) of the Sverdrup Basin was based on the palynological examination of 672 samples. These were obtained from Mobil Oil Canada Ltd., Elf Oil Canada Ltd., the Geological Survey of Canada, and sampling by the author during a one month field excursion with the Geological Survey of Canada.

A total of 298 (289 cutting and 9 conventional core) samples were obtained from three subsurface sections in the southwestern portion of the basin and 374 samples were collected from 12 surface sections distributed across the central and northeastern portions of the basin. Figure 1 gives the approximate location of each section.

One hundred and thirty species of dinoflagellate cysts and ten green algal cyst species have been identified from Jurassic to Lower Cretaceous strata of the Sverdrup Basin. A species list with authors may be found in Davies (1983, p. 37-39). The occurrences are presented in a series of distribution charts according to locality.

Preservation and recovery were generally excellent. In areas of high thermal maturation, however, such as the thermally altered shales in the west and south of Axel Heiberg Island near South Strend Fjord and Glacier Fjord respectively, palynomorphs were not observed or were rare and usually poorly preserved.

Support for this report was received through grants to G. Norris from the Ministry of Energy, Mines and Resources Research Agreements (22339-4-72/77) and (22339-4-208/78), and the Natural Sciences and Engineering Research Council of Canada. Logistic support for fieldwork was provided by the Institute of Sedimentary and Petroleum Geology, Geological Survey of Canada. Drafting was, in part, aptly performed by G. Cook, Eastern Petroleum Geology Subdivision, Geological Survey of Canada. Gratitude is extended to M.S. Barss, Eastern Petroleum Geology Subdivision, for critically reading the manuscript and offering constructive advise.

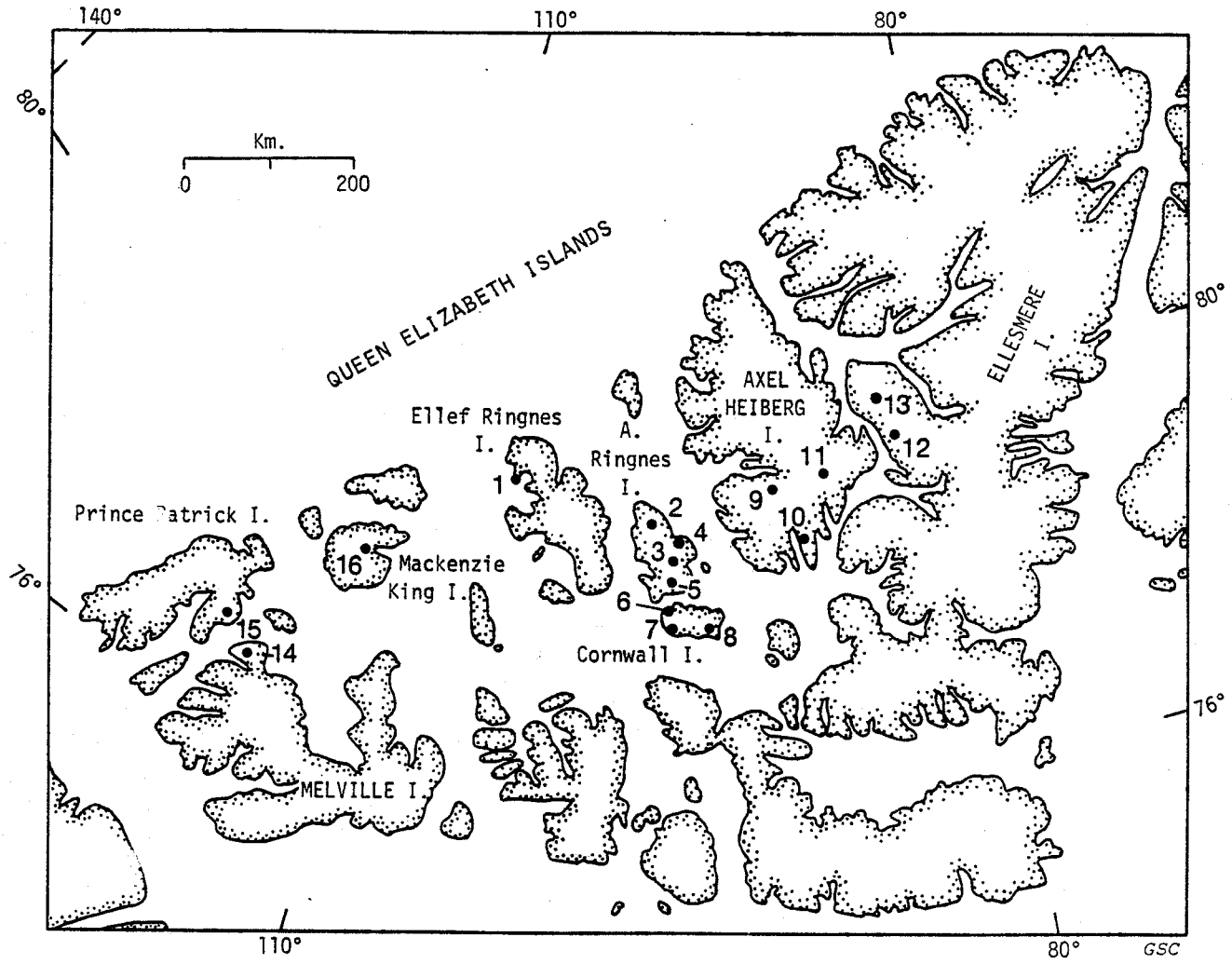

Figure 1. Generalized section locations

1. Reindeer Peninsula
2. North Amund Ringnes Dome
3. Central Amund Ringnes Dome
4. East Central Amund Ringnes Dome
5. Cape Ludwig
6. Northwest Cornwall Island
7. Southwest Cornwall Island
8. Jaeger River
9. South Strand Fjord
10. East Glacier Fjord
11. Skaare Anticline
12. Blueman Cape
13. Fosheim Anticline
14. Panarctic Sandy Point L-46
15. Elf Jameson Bay C-31
16. Elf Wilkins E-60

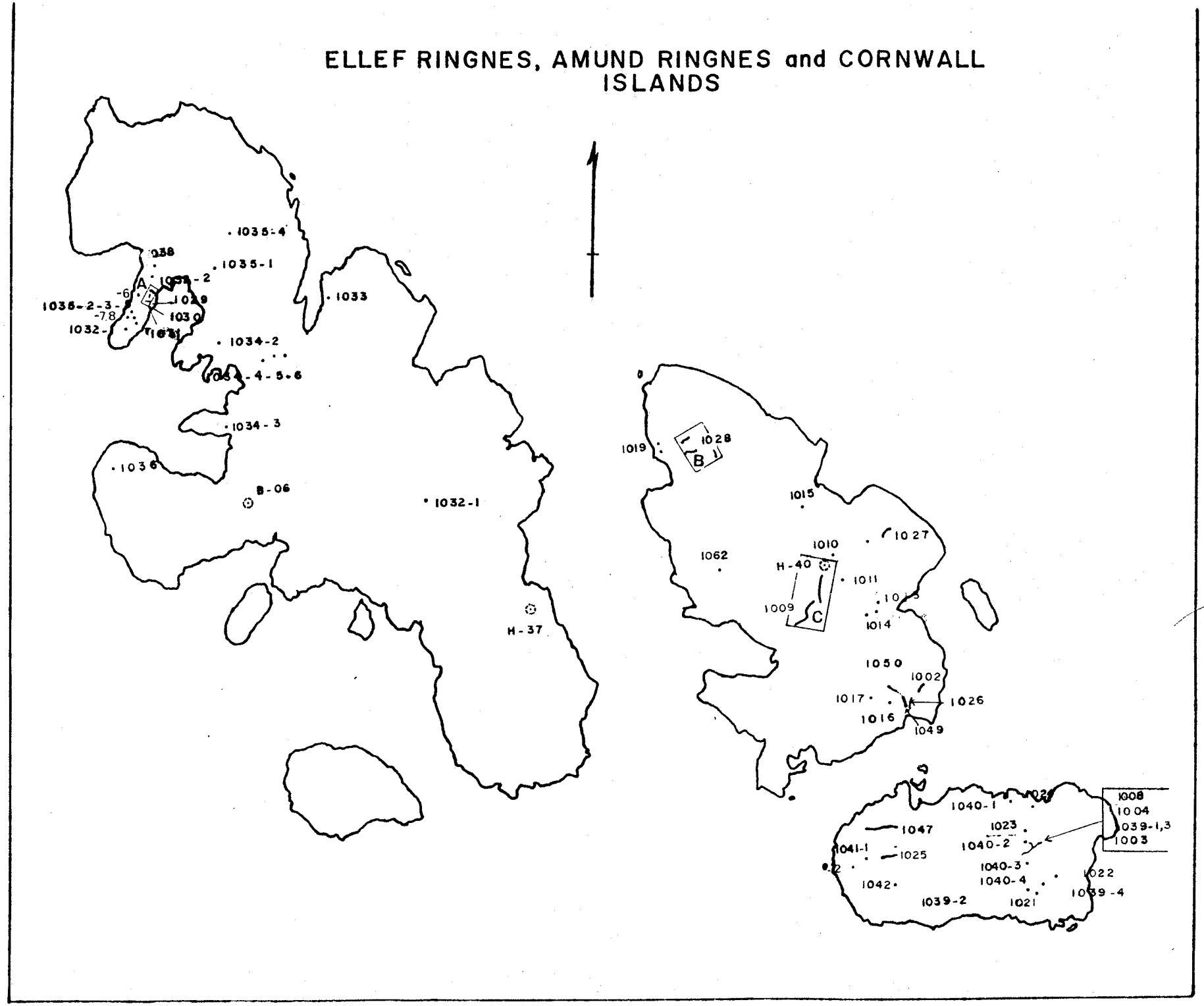

Figure 2. Surface localities from Ellef Ringnes, Amund Ringnes and Cornwall Islands. Scale – 1:1,200,000.

SUMMARY OF SAMPLING PROCEDURES

Surface Sections

Twelve outcrop sections were studied. Most sections are composites of smaller sections found in a local area. Some sections are supplemented by scattered outcrop grab samples (figure 2). There are three sources for outcrop material:

a. The Geological Survey of Canada field parties led by Dr. H. Balkwill during the summers of 1972 to 1975.
b. Collections made by the author during 1973.
c. Mobil Oil Canada Ltd. field parties of 1966, 1967 and 1975.

1. Reindeer Peninsula, Northwest Ellef Ringnes Island (CHART 1):

   Thirty-six outcrop samples were obtained through personal sampling and from the Geological Survey of Canada. Figure 3 illustrates the section locations. Fifteen samples from the Lower Savik and Jaeger Formations came from a measured composite section on Reindeer Peninsula. Samples from the Upper Savik, Awingak and Deer Bay formations consist of scattered grab samples from the surrounding area, collected by Dr. H. Balkwill. Thickness of these higher formations had to be estimated because of extensive local faulting. This section is critically located along the centre of the northwest margin of the basin. It is the most westerly surface section and the type section of the Deer Bay Formation.

2. North Amund Ringnes Dome, Amund Ringnes Island (CHART 2):

   Twenty-nine samples were obtained from the northern side of a piercement dome on north Amund Ringnes Island. Twenty-one of these were sampled along a helicopter traverse from the Savik, Awingak and Deer Bay formations. Thicknesses were calculated by using measured dips, areal photographs and geological maps (Balkwill, 1973). Other material was obtained from Geological Survey of Canada collections. Detailed sample locations are illustrated on figure 4.

3. Central Amund Ringnes Dome, Amund Ringnes Island (CHART 3):

   Thirty-six samples were obtained from the central Amund Ringnes piercement dome and the central area of Amund Ringnes Island. Twenty of these were collected during a helicopter traverse covering the Upper Savik, Awingak and Deer Bay formations. Thicknesses and stratigraphic location of samples were calculated from G.S.C. Open file map No. 159. The remaining 10 samples were collected by Dr. H. Balkwill as scattered grab samples. This section is important because it represents the thickest, and presumably the most continuous, section sampled. Detailed sample locations are located on figure 5.

4. East Central Amund Ringnes Dome, Amund Ringnes Island (CHART 4):

   A section (6 samples) covering the uppermost Deer Bay Formation northeast from the centre of the dome was sampled by Dr. W.S. Hopkins and processed by the Geological Survey of Canada. Their locations are approximate and are illustrated in Figure 2.

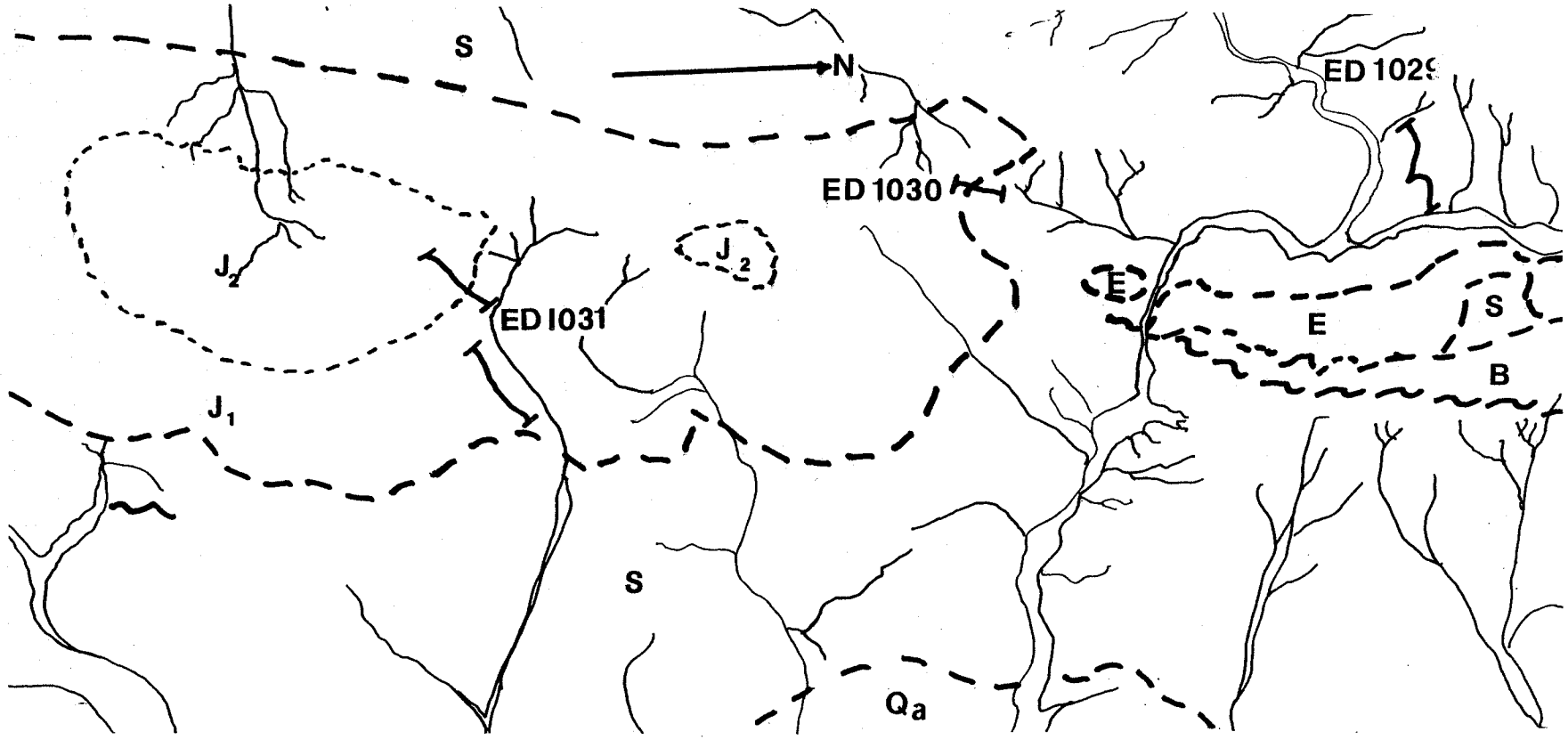

Figure 3. Detailed section locations from Reindeer Peninsula, E.R.I.; collected by K.Roy and author, 1973 (See Figure 2 for insert A); B = Borden Island Formation, S = lower Savik Formations, J = Jaeger Formation, E = Eureka Sound Formation, Qu = quaternary alluvium. Scale – 1:750 000.

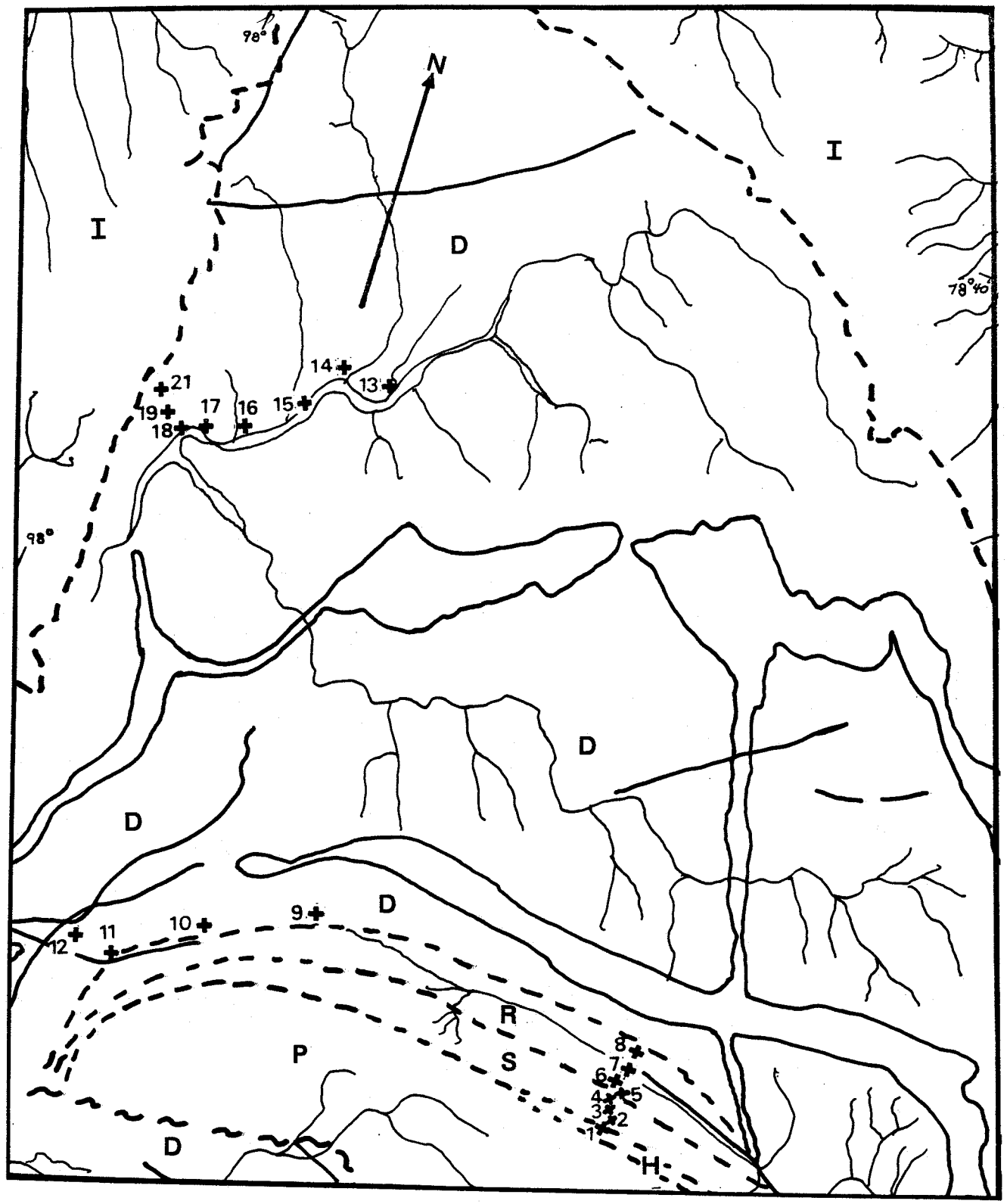

Figure 4. Detailed sample locations (ED 1028-1 to 21). Northern Amund Ringnes Island collected by H. Balkwill and the author, 1973. P = Pennsylvanian, H = Heiberg Formation, S = Savik Formation, R = Ringnes Formation, D = Deer Bay Formation, I = Isachsen Formation. See Figure 2 for insert B. Scale – 1:750 000.

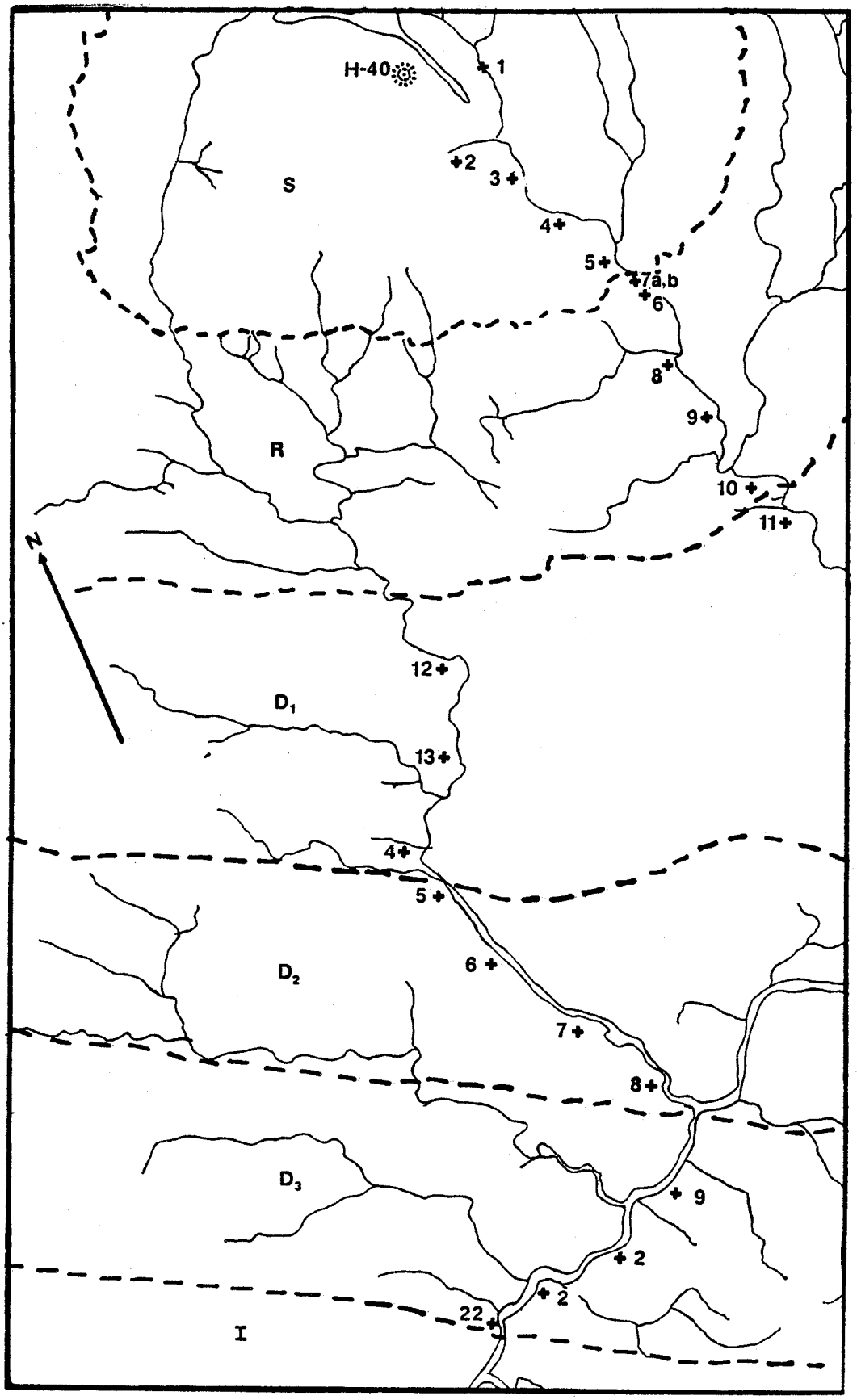

Figure 5. Detailed sample locations (ED 1009-1 to 22) for Central Amund Ringnes Island collected by H. Balkwill and the author, 1973. See Figure 2 for insert C. S = Savik Formation, R = Ringnes Formation, D_{1-3} = Deer Bay Formation, I = Isachsen Formation.

5. Cape Ludwig, Amund Ringnes Island (CHART 5):

   Twenty-three samples were obtained from the piercement domed and faulted area in the southeast corner of Amund Ringnes Island. Collections, thicknesses and stratigraphic placement of samples have been made partially by Mobil Oil Canada (P.J. Bennet; 10 samples) and partially from Geological Survey of Canada collections (Dr. H. Balkwill, Dr. W.K. Hopkins and Dr. W. Sliter; 13 samples). Samples were collected from the upper Savik to uppermost Deer Bay Formations. Unfortunately, no samples were obtained from the Awingak Formation. Sample localities are illustrated on Figure 2.

6. Northwest Cornwall Island (CHART 6):

   Twenty-five samples were obtained from Mobil Oil Canada (collector: P.J. Bennett) from the Jaejer, Savik, Awingak, Deer Bay, and Isachsen Formations. Samples were collected every 50 to 100 ft. Those from the Deer Bay and Isachsen Formations (8 samples) were collected by helicopter traverse and their stratigraphic positions were said to be approximately equally spaced. Section locations are illustrated on Figure 2.

7. Southwest Cornwall Island (CHART 7):

   Sixteen samples were obtained from Geological Survey Collections (Dr. H. Balkwill). Thirteen samples came from a measured section of the Upper Savik Formation. Two others were grab samples from the Deer Bay Formation and the last sample was a grab sample from the Upper Savik Formation. No samples were obtained from either the Jaeger or Awingak formations. Section and sample locations are illustrated in Figure 2.

8. Jaeger River, Eastern Cornwall Island (CHART 8):

   Forty-two samples were obtained from the Geological Survey of Canada (collectors: Dr. W. Sliter and Dr. H. Balkwill, 32 samples) and Mobile Oil Canada (10 samples). Samples were derived from the Heiberg to Isachsen formations. Many of these were scattered grab samples (25). The Awingak Formation was sampled and measured by Mobil Oil Canada along the Jaeger River. Vertical placements for the remaining samples were calculated by Dr. H. Balkwill. Section and sample locations are illustrated in Figure 2.

9. South Strand Fiord, Axel Heiberg Island:

   Thirteen samples were obtained from Mobil Oil Canada, from the Savik to Isachsen formations. Palynomorphs from these samples were badly preserved and of little use for biostratigraphy; therefore no distribution chart is included. Section location is illustrated in Figure 1.

10. East Glacier Fiord, Axel Heiberg Island (CHART 10):

    Twenty-seven samples were obtained from Mobil Oil Canada (collector: P.J. Bennett). They were derived from the Savik, Awingak and Deer Bay formations. Sample intervals range from 50 to 100 ft. Preservation in this section was also poor. Section location is illustrated in Figure 1.

11. Skaare Anticline, Axel Heiberg Island (CHART 11):

    Sixty samples were obtained from Mobil Oil Canada (collector unknown). These were derived from a measured section ranging from the Heiberg to uppermost Deer Bay formations with a sample interval of 50 ft. Section location is illustrated in Figure 1.

12. Blueman Cape, Ellesmere Island (CHART 12):

    Twenty-six samples were obtained from Mobil Oil Canada (collector unknown) and were derived from the upper-most Savik, Awingak and Deer Bay formations. The sample inverval was from 30 to 50 ft. Section location is illustrated in Figure 1.

13. Fosheim Peninsula Anticline, Ellesmere Island (CHART 13):

    Thirty samples were obtained from Mobil Oil Canada (collector unknown) and were derived from the Heiberg to Isachsen Formations at a sample interval of 30 ft. A large interval in the middle and lower Deer Bay formation (1050 ft.; 319 m) was not sampled. Section location is illustrated in Figure 1.

Subsurface Sections

14. Panarctic Sandy Point 1-46, Northwest Melville Island (CHART 14):

    A total of 112 samples was obtained from the Institute of Sedimentary and Petroleum Geology, Geological Survey of Canada, Calgary, Alberta. Of these, 9 were conventional core samples which had been processed by the institute. The intervals cored were at depths of 1935-1965 ft. (590-600 m), 2250-2256 ft. (686-670 m), and 2525-2549 ft. (770-777 m) and samples every 5 or 10 ft. The interval sampled as cuttings was from 80-2630 ft. (23-803 m). Generally samples were collected every 10 ft. and composited over 30 ft. intervals. Near formational boundaries, however, samples were not composited. Formations range from Schei Point to Isachsen. Well location is illustrated in Figure 1.

15. Elf Jameson Bay C-31, northeast Prince Patrick Island (CHART 15):

    A total of 104 cutting samples from a depth of 90 ft. (27.5 m) to 3300 ft. (1005 m) at 30 ft. intervals were obtained from Elf Oil Canada Ltd. formations range from Heiberg to Mould Bay. Well location is illustrated in Figure 1.

16. Elf Wilkins E-60, north central Mackenzie King Island (CHART 16):

    Eighty-two cutting samples from depths of 60 ft. (18 m) to 2500 ft. (764 m) collected every 30 ft. were obtained from Elf Oil Canada Ltd. and range from Borden Island Formation to Mould Bay Formation. Well location is illustrated in Figure 1.

SAMPLE PREPARATION

The samples were processed using the hydrofluoric acid-oxidation-alkali method as described by Barss and Williams (1973). The basic procedures are as follows:

1. Well cutting samples were first washed in distilled water to remove drilling mud. Outcrop samples were broken, if necessary, into small pieces, approximately 5 mm in diameter.
2. The samples were then digested in 48% hydrofluoric acid, either at room temperature for 48 hours or on an oscillating hot plate at 70°C for two hours.
3. The by-products from this reaction were removed either by several washes (3-10) with 25% hydrochloric acid left 5 minutes per wash in a boiling water bath, or by one wash in concentrated hydrochloric acid left standing at room temperature.
4. The fine organic particles were dispersed and suspended by short centrifugation (150 RPM's for 45 seconds) using Darvan No. 4. This was repeated until the residue became clear of most organic fines.
5. The residue was then oxidized for five to ten minutes in concentrated nitric acid. If necessary, the residue was further oxidized and bleached by sodium hypochlorite (5% solution).
6. The oxidized humic matter was dissolved in a 5% potassium carbonate or potassium hydroxide solution.
7. The undigested silicates and heavy minerals were separated from the organic residue using a solution of zinc bromide with a specific gravity adjusted to 2.0, using the following procedure (Figure 6):
   a) The residue was placed in a conical 15 ml centrifuge tube. The water was decanted.
   b) The residue was acidified with one drop of 25% HCl to prevent precipitation of basic zinc salts and to allow easy mixing.
   c) 5 ml of zinc bromide solution (S.G.2) were mixed well with the residue.
   d) Approximately .5 ml of distilled water was carefully floated on the surface of the mixture. This avoided caking of the organic material on the surface of the heavy liquid.
   e) The test tube was then centrifuged at 1500 RPM's for 10 minutes allowing the organics and heavy minerals to separate.
   f) The organic residue, the floating water and the heavy liquid were carefully stirred so as not to disturb the mineral deposits and then decanted into a 50 ml centrifuge tube.
   g) The centrifuge tube was then filled with dilute hydrochloric acid (10%). The suspension was mixed thoroughly and centrifuged again for 10 minutes.
   h) The dilute zinc bromide solution was decanted and saved for recycling, which was executed by precipitation through evaporation and then by filtration through a finely sintered glass funnel.
8. Some samples were stained with 1% safranine-0 solution.
9. Most residues were sieved using 20 or 30 u m finely meshed nylon cloth (nytex sieve screen: B. & S.H. Thompson & Co. Ltd. Montreal, Toronto) supported by a base screen (Figure 7).
10. The residue was strew mounted in 1% cellosize or in Clearcol mounting medium on a glass coverslip and then inverted on to a glass slide and adhered with elvacite.

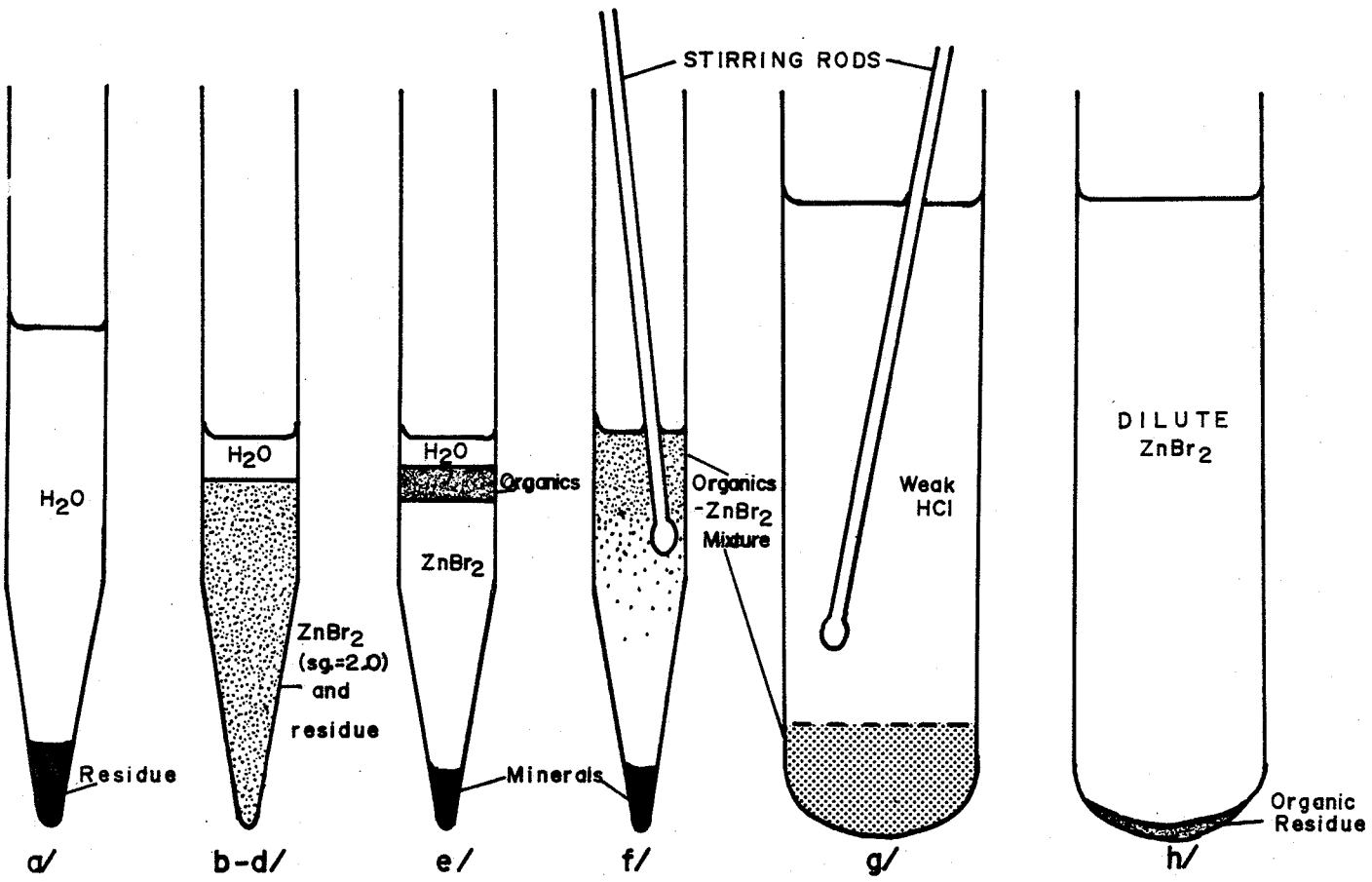

Figure 6. Zinc Bromide heavy liquid separation procedure. See text for description.

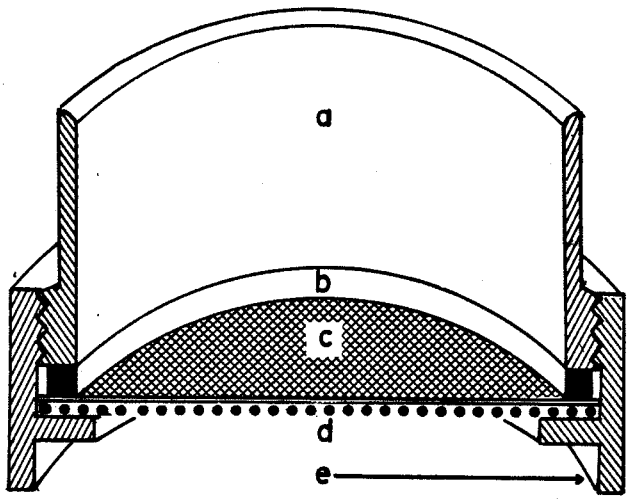

Figure 7. Nytex cloth sieve support system.
a/ inner brass barrel
b/ nylon washer
c/ nytex cloth sieve
d/ copper screen
e/ outer brass barrel

Q	FROMEA ATLANTICA	?HAUTERIVIAN- LATE LATE VALANGINIAN
P	MUDERONGIA SIMPLEX	MIDDLE-LATE LATE VALANGINIAN
O	TANYOSPHAERIDIUM MAGNETICUM	EARLY LATE- EARLY VALANGINIAN
N	SENTUSIDINIUM CUCULLIFORMIS-PARAGONYAULACYSTA BOREALIS	BERRIASIAN
M	TRICHODINIUM ERINACEOIDES-HOROLOGINELLA SPINOSIGIBBEROSA	BERRIASIAN- LATE LATE TITHONIAN
L	PROLIXOSPHAERIDIUM SPISSUM-PARAGONYAULACYSTA CAPILLOSA	EARLY BERRIASIAN- LATE LATE TITHONIAN
K	MILLIOUDODINIUM JUBARIS	EARLY-LATE TITHONIAN
J	LANTERNA SATURNALIS-ESCHARISPHAERIDIA POCOCKII	EARLY LATE TITHONIAN- MIDDLE KIMMERIDGIAN
I	MILLIOUDODINIUM EHRENBERGII-GONYAULACYSTA DUALIS	EARLY-MIDDLE KIMMERIDGIAN
H	STEPHANELYTRON REDCLIFFENSE	OXFORDIAN- MIDDLE CALLOVIAN
G	PARAGONYAULACYSTA CALLOVIENSE	EARLY CALLOVIAN- LATE BATHONIAN
F	HYSTRYCHOGONYAULAX CLADOPHORA-NANNOCERATOPSIS SENEX VAR. A	LATE BATHONIAN
E	GLOMODINIUM TRIPARTITUM-COMPARODINIUM AQUILONIUM	MIDDLE BATHONIAN- LATE BAJOCIAN
D	WALLODINIUM ELONGATUM	EARLY BAJOCIAN
C	PHALLOCYSTA EUMEKES-DAPCODINIUM COALITUM	EARLY BAJOCIAN- TOARCIAN
B	SUSADINIUM SCROFOIDES-NANNOCERATOPSIS SENEX VAR. C	TOARCIAN
A	LITHODINIA SERRULATA	TOARCIAN OR ?PLIENSBACHIAN

GSC

Figure 8. DINOFLAGELLATE OPPEL-ZONATION.

11. The unused portion of the residue was stored in water with 2 drops of 5% phenol solution to inhibit fungal growth.
12. Between most procedures the residue was washed 2-3 times with distilled water.

CURATION OF MATERIALS

Storage and Deposition

Four to seven slides were prepared for each sample. One set of slides from the Panarctic Sandy Point L-49 well was sent to the Institute of Sedimentary and Petroleum Geology, 3303-33rd Street, N.W., Calgary, Alberta, T2L 2A7.

All holotypes and illustrated specimens plus one slide of each sample are stored in the Royal Ontario Museum, Toronto, Ontario. One slide of each sample is deposited in the Palynology Laboratory, University of Toronto. The remaining portions of the rock samples are also stored there. All other slides and the unused portions of the residues have been retained by the author.

Slide Labelling

Each slide is labelled in either of two systems: one for subsurface samples and the other for surface samples. Subsurface samples begin with two letters referring to the well name, i.e.:

JB = Elf Jameson Bay C-31
SP = Panarctic Sandy Point L-46
WI = Elf Wilkins E-60

This is followed by a number referring to the depth (in feet) from the surface. Lastly a letter from A to G specifies each slide from a sample.

Slides from surface samples are labelled beginning with two letters 'ED' referring to the author's cataloguing system. Next a four digit number specifying the locality. Following a dash is a one or two digit number indicating the sample. Lastly, a letter from A to G specifies each slide from a sample.

One set of slides is labelled with a Royal Ontario Museum catalogue number on the left-hand side i.e. ROM 37201.

Sample Numbers Cross-references and Stratigraphic Locations

The following section lists the samples studied, the cross-references and the stratigraphic locations. Two types of listing are presented.

Surface sections (1-14)

Sample Number	Royal Ontario Museum Catalogue Number	Collection Number	Stratigraphic Location

Subsurface sections (15-16)

Sample number (depth in feet)	Depth in metres	Royal Ontario Museum Catalogue Number	Stratigraphic Location

1. Reindeer Peninsula, Ellef Ringnes Island:

ED	1029-1	36619	RV73-43-43	Savik, lower, 60 m from top
ED	1029-2	36620	RV73-43-45	Savik, lower, 50 m from top
ED	1029-3	36621	RV73-43-46	Savik, lower, 40 m from top
ED	1029-4	36622	RV73-43-49	Savik, lower, 30 m from top
ED	1029-5	36623	RV73-43-50	Savik, lower, 20 m from top
ED	1029-6	36624	RV73-43-54	Savik, lower, 10 m from top
ED	1030-1	36625	RV73-45-55	Savik, lower, 20 m from top
ED	1030-2	36627	RV73-45-56	Savik, lower, 5 m from top
ED	1030-3	36628	RV73-45-57	Savik, lower, 2 m from top
ED	1030-4	36629	RV73-45-58	Savik, lower, at top
ED	1031-1	36629	RV73-48-62	Jaeger, 1 m above base
ED	1031-2	36630	RV73-48-63	Jaeger, 10 m above base
ED	1031-4	36631	RV73-48-65	Jaeger, 12 m above base
ED	1031-5	36632	RV73-48-67	Jaeger, 13 m above base
ED	1031-6	36633	RV73-48-71	Jaeger, 23 m above base
ED	1031-7	36634	RV73-48-72	Jaeger, 33 m above base
ED	1032-1	36615	BAA73-292	Deer Bay, upper
ED	1032-2	36616	BAA73-295	Savik, upper
ED	1032-3	36617	BAA73-265	Deer Bay, 2 m from top
ED	1033-1	36618	BAA73-304	Deer Bay, 30 m from top
ED	1034-1	36599	BAA73-277	Deer Bay, 300 m from top
ED	1034-2	36600	BAA73-306	Deer Bay, middle
ED	1034-3	36601	BAA73-240	Deer Bay, 60 m from top
ED	1034-4	36602	BAA73-273	Deer Bay, upper ?
ED	1034-5	36603	BAA73-274	Deer Bay, 30 m from top
ED	1035-1	36605	BAA73-244	Savik, upper, at base
ED	1035-2	36606	BAA73-296	Savik, upper, 12 m above base
ED	1035-3	36607	BAA73-297	Ringnes, at base
ED	1035-4	36608	BAA73-308	Ringnes, at base, barren
ED	1035-5	36609	BAA73-246	Ringnes
ED	1035-6	36610	BAA76-076	Savik, 6 m above base
ED	1035-7	36611	BAA76-077A	Savik, 13 m above base
ED	1035-8	36612	BAA76-077B	Savik, 3 m below top
ED	1036-1	36604	BAA73-239	Deer Bay, 50-60 m below top
ED	1037-1	36613	BAA73-233	Deer Bay, 30 m below top
ED	1038-1	36597	BAA73-242	Borden Island
ED	1038-2	36598	RV73-52-81	Shale below (?) Borden Island

2. North Amund Ringnes Dome:

ED	1001-1	36780	S-72-37	Deer Bay middle
ED	1001-2	36781	S-72-38	Deer Bay
ED	1001-3	36782	S-72-39	Deer Bay to
ED	1001-4	36783	S-72-40	Deer Bay
ED	1001-5	36784	S-72-41	Deer Bay upper
ED	1019-1	36778	BAA72-168	Deer Bay, upper
ED	1019-2	36779	BAA72-187	Deer Bay, upper

ED	1020-1	36785	BAA72-130	Savik, near base
ED	1028-1	36757	E73-J34	Savik
ED	1028-2	36758	E73-J35	Savik
ED	1028-3	36759	E73-J36	Savik
ED	1028-4	36769	E73-J37	Savik
ED	1028-5	36761	E73-J38	Ringnes
ED	1028-6	36762	E73-J39	Ringnes
ED	1028-7	36763	E73-J40	Ringnes
ED	1028-8	36764	E73-J41	Ringnes
ED	1028-9	36765	E73-J42	Deer Bay
ED	1028-10	36766	E73-J43	Deer Bay
ED	1028-11	36767	E73-J44	Deer Bay
ED	1028-12	36768	E73-J45	Deer Bay
ED	1028-13	36769	E73-J46	Deer Bay
ED	1028-14	36770	E73-J47	Deer Bay
ED	1028-15	36771	E73-J48	Deer Bay
ED	1028-16	36772	E73-J49	Deer Bay
ED	1028-17	36773	E73-J50	Deer Bay
ED	1028-18	36774	E73-J51	Deer Bay
ED	1028-19	36775	E73-J52	Deer Bay
ED	1028-21	36776, 77	E73-J53	Deer Bay (also ROM 36804)

3. Central Amund Ringnes Dome:

ED	1009-1	36635	E73-J1	Savik, upper
ED	1009-2	36636	BAA72-041	Savik, upper
ED	1009-3	36637	E73-J2	Savik, upper
ED	1009-4	36638	E73-H3	Savik, upper
ED	1009-5	36639	E73-J4	Savik, upper
ED	1009-6	36640	E73-J5	Ringnes
ED	1009-7a	36641	BAA72-040A	Savik, upper
ED	1009-7b	36642	BAA72-040B	Ringnes
ED	1009-8	36643	E73-J6	Ringnes
ED	1009-9	36644	E73-J7	Ringnes
ED	1009-10	36645	E73-J8	Ringnes
ED	1009-11	36646	E73-J9	Deer Bay, lower
ED	1009-12	36647	E73-J10	Deer Bay, lower
ED	1009-13	36648	E73-J11	Deer Bay, lower
ED	1009-14	36649	E73-J12	Deer Bay, lower
ED	1009-15	36650	E73-J13	Deer Bay, middle
ED	1009-16	36651	E73-J14	Deer Bay, middle
ED	1009-17	36652	E73-J15	Deer Bay, middle
ED	1009-18	36653	E73-J16	Deer Bay, middle
ED	1009-19	36654	E73-J17	Deer Bay, upper
ED	1009-20	36655	E73-J18	Deer Bay, upper
ED	1009-21	36656	E73-J19	Deer Bay, upper
ED	1009-22	36657	E73-J20	Deer Bay, upper
ED	1010-1	36658	BAA72-063	Ringnes, app. 300' above base
ED	1011-1	36659	BAA72-039A	Ringnes, at top
ED	1011-2	36660	BAA72-039B	Deer Bay, lower, at base
ED	1012-1	36661	BAA72-060	Deer Bay, lower, at top

ED	1013-1	36662	BAA72-046	Deer Bay, lower/upper contact
ED	1014-1	36663	BAA72-216	Deer Bay, upper, near base
ED	1018-1	36665	BAA72-162	Deer Bay, upper, 200' below top

4. East Central Amund Ringnes Dome:

ED	1015-1	36664	BAA72-015	Deer Bay, upper, 200' below top
ED	1027-1	36666	RV72-1-63	Deer Bay, upper, 582' below top
ED	1027-2	36667	RV72-1-67	Deer Bay, upper, 433' below top
ED	1027-3	36668	RV72-1-69	Deer Bay, upper, 305-285' below top
ED	1027-5	36670	RV72-1-77	Deer Bay, upper, 75' below top
ED	1027-6	36671	RV72-1-79	Deer Bay, upper, 10' below top

5. Cape Ludwig, Amund Ringnes Dome:

ED	1002-1	36712	S-72-74	Deer Bay upper bottom
ED	1002-2	36713	S-72-43A	Deer Bay upper bottom
ED	1002-3	36714	S-72-43B	Deer Bay upper bottom
ED	1002-4	36715	S-72-44	Deer Bay upper bottom
ED	1002-5	36716	S-72-45	Deer Bay upper top
ED	1002-6	36717	BAA72-049	Deer Bay upper at top
ED	1016-1	36724	BAA73-045	Deer Bay, middle
ED	1017-1	36723	BAA72-043	Deer Bay, upper at top
ED	1026-1	36718	RV72-1-23	Savik, upper, 69' below top
ED	1026-2	26719	RV72-1-27	Savik, upper, 40' below top
ED	1026-3	36720	RV72-1-47	Awingak, 126' above base
ED	1026-4	36721	RV72-1-49	Awingak, 186' above base
ED	1026-5	36722	RV72-1-53	Awingak, 256' above base
ED	1049-1	36725	PB8B-0-100	Savik
ED	1049-2	36726	PB8B-100-200	Savik
ED	1049-3	36727	PB8B-200-300	Savik
ED	1049-4	36728	PB8B-300-400	Awingak, A_1
ED	1049-5	36729	PB8B-400-500	Awingak, A_1
ED	1049-6	36730	PB8B-500-565	Awingak, A_2
ED	1049-7	36731	PB8B-600	Awingak, A_2
ED	1050-1	36732	PB8A-0-100	Deer Bay
ED	1050-2	36733	PB8A-100-200	Deer Bay
ED	1050-3	36734	PB8A-200-300	Deer Bay, sandstone

6. North West Cornwall Island:

ED	1047-1	36735	PB-6B-200	Jaeger, lower shale
ED	1047-2	36736	PB-6B-230	Jaeger, lower shale
ED	1047-3	36737	PB-6B-440	Jaeger, lower shale
ED	1047-4	36738	PB-6B-545-590	Jaeger, upper sandstone
ED	1047-5	36739	PB-6B-696-700	Savik, upper
ED	1047-6	36740	PB-6B-700-800	Savik, upper
ED	1047-7	36741	PB-6B-800-900	Savik, upper
ED	1047-8	36742	PB-6B-900-1000	Savik, upper
ED	1047-9	36743	PB-6B-1000-1100	Savik, upper
ED	1047-10	36744	PB-6B-1100-1200	Savik, upper
ED	1047-11	36745	PB-6B-1200-1260	Savik, upper
ED	1047-12	36746	PB-6C-0-10	Awingak
ED	1047-13	36747	PB-6C-90-100	Awingak
ED	1047-14	36748	PB-6C-190-200	Awingak
ED	1047-15	36749	PB-6C-220-230	Awingak
ED	1047-16	36750	PB-6D-#1	Deer Bay
ED	1047-17	36751	PB-6D-#2	Deer Bay
ED	1047-18	36752	PB-6D-#3	Deer Bay
ED	1047-19	36753	PB-6D-#4	Deer Bay
ED	1047-20	36754	PB-6D-#5	Deer Bay
ED	1047-21	36755	PB-6D-#6	Deer Bay
ED	1047-22	36756	PB-6D-#7	Deer Bay

7. Southwest Cornwall Island:

ED	1025-1	36786	E73-J21	Savik, lower
ED	1025-2	36787	E73-J22	Savik, lower
ED	1025-3	36789	E73J23	Savik, lower
ED	1025-4	36790	E73-J24	Savik, lower
ED	1025-5	36791	E73-J25	Jaeger, upper
ED	1025-6	36792	E73-J26	Jaeger, upper
ED	1025-7	36793	E73-J27	Jaeger, upper
ED	1025-8	36794	E73-J28	Jaeger, upper
ED	1025-9	39795	E73-J29	Jaeger, upper
ED	1025-10	36796	E73-J30	Jaeger, upper
ED	1025-11	36798	E73-J31	Savik, upper
ED	1025-12	36799	E73-J32	Savik, upper
ED	1025-13	36800	E73-J33	Savik, upper
ED	1041-1	36801	BAA73-328	Deer Bay
ED	1041-2	36802	BAA73-327	Deer Bay, 15 m from top
ED	1041-3	36803	BAA73-344	Deer Bay
ED	1042-1	36797	BAA73-338	Savik, lower

8. Jaeger River, East Cornwall Island:

ED	1003-1	36672	S-72-27	Heiberg
ED	1003-2	36673	S-72-28	Heiberg
ED	1003-3	36674	BAA72-124	Savik, at base
ED	1003-4	36675	BAA72-123	Savik, at base
ED	1004-1	36676	S-72-29	Deer Bay bottom
ED	1004-2	36677	S-72-30	Deer Bay
ED	1004-3	36678	S-72-31	Deer Bay
ED	1004-4	36679	S-72-32	Deer Bay to
ED	1004-5	36680	S-72-33	Deer Bay
ED	1004-6	36681	S-72-34	Deer Bay top

ED	1004-7	36682	BAA72-089	Upper Cretaceous ?
ED	1005-1	36683	S-72-18	Savik, lower, at top
ED	1005-2	36684	S-72-22	Savik, lower, at base
ED	1006-1	36685	S-72-23	Savik, upper
ED	1006-2	36686	S-72-24	Savik, upper
ED	1006-3	36687	BAA72-124	Savik, upper, 15 m above base
ED	1007-1	36688	S-72-19	Jaeger, upper
ED	1007-2	36689	S-72-20	Jaeger, upper
ED	1007-3	36690	S-72-21	Jaeger, upper
ED	1008-1	36691	S-72-25	Awingak
ED	1008-2	36692	S-72-26	Awingak
ED	1008-3	36693	AG-6C-50	Awingak
ED	1008-4	36694	AG-6C-50	Awingak
ED	1008-5	36695	AG-6C-100	Awingak
ED	1008-6	36696	Ag-6C-155	Awingak
ED	1008-7	36697	AG-6C-225	Awingak
ED	1008-8	36698	AG-6C-294	Awingak
ED	1008-9	36699	AG-6C-335	Awingak
ED	1008-10	-	AG-6C-525	Awingak, barren
ED	1008-11	-	AG-6C-585	Awingak, barren
ED	1008-12	-	AG-6C-670	Awingak, barren
ED	1021-1	36701	BAA72-152	Deer Bay
ED	1022-1	36700	BAA72-151	Isachsen, 500-1000' above base
ED	1023-1	36702	BAA72-112	Savik, upper, at base
ED	1024-1	36703	BAA72-115	Isachsen, lower part
ED	1039-1	36704	BAA73-346-1	Deer Bay
ED	1039-2	36705	BAA73-344	Deer Bay
ED	1039-3	36706	BAA73-364-2	Deer Bay
ED	1038-4	36707	BAA73-34[illegible]	Deer Bay
ED	1040-1	36708	BAA73-318	Savik, lower
ED	1040-2	36709	BAA73-319	Jaeger, 50' below top
ED	1040-3	36710	BAA73-320	Savik, upper
ED	1040-4	36711	BAA73-301	? Savik, upper (Upper Cretaceous)

9. South Strand Fiord:

ED	1043-1	36948	AJ1-30	Isachsen
ED	1043-2	36949	AJ1-60	Isachsen
ED	1043-3	36950	AJ1-110	Deer Bay
ED	1043-4	36951	AJ1-2595	Deer Bay
ED	1043-5	36952	AJ1-4030	Awingak
ED	1043-6	36953	AJ1-4100	Savik
ED	1043-7	36954	AJ1-4150	Savik
ED	1043-8	36955	AJ1-4200	Savik
ED	1043-9	36956	AJ1-4250	Savik
ED	1043-10	36957	AJ1-4310	Savik
ED	1043-11	36958	AJ1-4350	Savik
ED	1043-12	36959	AJ1-4400	Savik
ED	1043-13	36960	AJ1-4440	Savik

10. Glacier Fiord, Axel Hieberg Island:

ED	1048-1	36922	PB2-1780-1800	Savik
ED	1048-2	36923	PB2-1800-1900	Savik
ED	1048-3	36924	PB2-1900-200	Savik
ED	1048-4	36925	PB2-2025-2035	Awingak
ED	1048-5	36926	PB2-2040-2060	Awingak
ED	1048-6	36927	PB2-2170-2280	Ringnes
ED	1048-7	36928	PB2-2310-2320	Awingak
ED	1048-8	36929	PB2-2400-2410	Awingak
ED	1048-9	36930	PB2-2500	Awingak
ED	1048-10	36931	PB2-2605-2615	Awingak
ED	1048-11	36932	PB2-2725-2770	Awingak
ED	1048-12	36933	PB2-2800-2860	Awingak
ED	1048-13	36934	PB2-2895-2920	Awingak
ED	1048-14	36935	PB2-3010-3020	Awingak
ED	1048-15	36936	PB2-3030-3100	Awingak
ED	1048-16	36937	PB2-3235	Awingak
ED	1048-17	36938	PB2-3280-3380	Deer Bay
ED	1048-18	36939	PB2-3380-3480	Deer Bay
ED	1048-19	36940	PB2-3480-3580	Deer Bay
ED	1048-20	36941	PB2-3580-3680	Deer Bay
ED	1048-21	36942	PB2-3680-3780	Deer Bay
ED	1048-22	36943	PB2-3780-3885	Deer Bay
ED	1048-23	36944	PB2-3900	Deer Bay
ED	1048-24	36945	PB2-3955-3965	Deer Bay
ED	1048-25	36946	PB2-4025-4125	Deer Bay
ED	1048-26	36947	PB2-4125-4225	Deer Bay

11. Skaare Fi rd North, Axel Heiberg Island:

ED	1046-1	36805	AH2-10	Isachsen
ED	1046-2	36806	AH2-50	Isachsen
ED	1046-3	36807	AH2-100	Isachsen
ED	1046-4	36808	AH2-150	Deer Bay
ED	1046-5	36809	AH2-200	Deer Bay
ED	1046-5	36809	AH2-200	Deer Bay
ED	1046-7	36811	AH2-300	Deer Bay
ED	1046-8	36812	AH2-350	Deer Bay
ED	1046-9	36813	AH2-400	Deer Bay
ED	1046-10	36814	AH2-450	Deer Bay
ED	1046-11	36815	AH2-500	Deer Bay
ED	1046-12	36816	AH2-550	Deer Bay
ED	1046-13	36816	AH2-600	Deer Bay
ED	1046-14	36818	AH2-650	Deer Bay
ED	1046-15	36819	AH2-700	Deer Bay
ED	1046-16	36820	AH2-750	Deer Bay
ED	1046-17	36821	AH2-800	Deer Bay
ED	1046-18	36822	AH2-850	Deer Bay
ED	1046-19	36823	AH2-900	Deer Bay
ED	1046-20	36824	AH2-950	Deer Bay
ED	1046-21	36825	AH2-1000	Deer Bay
ED	1046-22	36826	AH2-1050	Deer Bay

ED	1046-23	36827	AH2-1090	Deer Bay
ED	1046-24	36828	AH2-1150	Deer Bay
ED	1046-25	36829	AH2-1200	Awingak
ED	1046-26	36830	AH2-1250	Awingak
ED	1046-27	36831	AH2-1300	Awingak
ED	1046-28	36832	AH2-1350	Awingak
ED	1046-29	36833	AH2-1400	Awingak
ED	1046-30	36834	AH2-1450	Awingak
ED	1046-31	35835	AH2-1500	Awingak
ED	1046-32	36836	AH2-1550	Awingak
ED	1046-33	36837	AH2-1590	Awingak
ED	1046-34	36838	AH2-1650	Awingak
ED	1046-35	36839	AH2-1700	Awingak
ED	1046-36	36840	AH2-1900	Awingak
ED	1046-37	36841	AH2-1950	Awingak
ED	1046-38	36842	AH2-2000	Awingak
ED	1046-39	36843	AH2-2110	Awingak
ED	1046-40	36844	AH2-2150	Awingak
ED	1046-41	36845	AH2-2200	Awingak
ED	1046-42	36846	AH2-2250	Awingak
ED	1046-43	36847	AH2-2300	Awingak
ED	1046-44	36848	AH2-2350	Awingak
ED	1046-45	36849	AH2-2400	Awingak
ED	1046-46	36850	AH2-2450	Savik
ED	1046-47	36851	AH2-2510	Savik
ED	1046-48	36852	AH2-2540	Savik
ED	1046-49	36853	AH2-2650	Savik
ED	1046-50	36854	AH2-2700	Savik
ED	1046-51	36855	AH2-2720	Savik
ED	1046-52	36856	AH2-2830	Heiberg
ED	1046-53	36857	AH2-5560	Heiberg
ED	1046-54	36858	AH2-5800	Heiberg
ED	1046-55	36859	AH2-5830	Heiberg
ED	1046-56	36860	AH2-5860	Heiberg
ED	1046-57	36861	AH2-5900	Heiberg
ED	1046-58	36862	AH2-5920	Heiberg
ED	1046-59	36863	AH2-5950	Heiberg
ED	1046-60	36864	AH2-6580	Heiberg

12. Blueman Cape, Ellesmere Island:

ED	1045-1	36896	AA1-4528	Deer Bay
ED	1045-2	36897	AA1-4570	Deer Bay
ED	1045-3	36898	AA1-4580	Deer Bay
ED	1045-4	36899	AA1-4650	Deer Bay
ED	1045-5	36900	AA1-4680	Deer Bay
ED	1045-6	36901	AA1-4710	Deer Bay
ED	1045-7	36902	AA1-4740	Deer Bay
ED	1045-8	36903	AA1-4770	Deer Bay
ED	1045-9	36904	AA1-4800	Deer Bay
ED	1045-10	36905	AA1-4830	Deer Bay
ED	1045-11	36906	AA1-4870	Deer Bay

ED	1045-12	36907	AA1-4900	Deer Bay
ED	1045-13	36908	AA1-4930	Deer Bay
ED	1045-14	36909	AA1-4960	Deer Bay
ED	1045-15	36910	AA1-4990	Deer Bay
ED	1045-16	36911	AA1-5020	Deer Bay
ED	1045-17	36912	AA1-5040	Deer Bay
ED	1045-18	36913	AA1-5200	Deer Bay
ED	1045-19	36914	AA1-5330	Awingak
ED	1045-20	36915	AA1-5360	Awingak
ED	1045-21	36916	AA1-5390	Awingak
ED	1045-22	36917	AA1-5440	Awingak
ED	1045-23	36918	AA1-550	Awingak
ED	1045-24	36919	AA1-5530	Awingak
ED	1045-25	36920	AA1-5970	Awingak
ED	1045-26	36921	AA1-6030	Savik, upper

13. Fosheim Anticline, Ellesmere Island:

ED	1044-1	36865	AD2-2500	Isachsen
ED	1044-2	36866	AD2-2520	Isachsen
ED	1044-3	36867	AD2-2570	Isachsen
ED	1044-4	36868	AD2-2590	Isachsen
ED	1044-5	36869	AD2-2600	Isachsen
ED	1044-6	36870	AD2-2650	Isachsen
ED	1044-7	36871	AD2-2680	Isachsen
ED	1044-8	36872	AD2-2710	Isachsen
ED	1044-9	36873	AD2-2730	Deer Bay
ED	1044-10	36874	AD2-2760	Deer Bay
ED	1044-11	36875	AD2-2790	Deer Bay
ED	1044-12	36876	AD2-2880	Deer Bay
ED	1044-13	36878	AD2-2900	Deer Bay
ED	1044-14	36879	AD2-3950	Awingak
ED	1044-15	36880	AD2-4020	Awingak
ED	1044-16	36881	AD2-4060	Awingak
ED	1044-17	36882	AD2-4090	Awingak
ED	1044-18	36883	AD2-4120	Awingak
ED	1044-19	36884	AD2-4150	Awingak
ED	1044-20	36885	AD2-4180	Awingak
ED	1044-21	36886	AD2-4250	Awingak
ED	1044-22	36887	AD2-4280	Awingak
ED	1044-23	36888	AD2-4300	Awingak
ED	1044-24	36889	AD2-4330	Awingak
ED	1044-25	36890	AD2-4360	Jaeger/Savik
ED	1044-26	36891	AD2-4390	Jaeger/Savik
ED	1044-27	36892	AD2-4430	Jaeger/Savik
ED	1044-28	36893	AD2-4460	Heiberg
ED	1044-29	36894	AD2-4520	Heiberg
ED	1044-30	36895	AD2-4750	Heiberg

14. Panarctic Sandy Point Well L. 46, Melville Island:

material on loan from ISPG; ROM catalogue numbers not applicable

SP	80	24	Isachsen
SP	90	27.5	Isachsen
SP	110	33.5	Isachsen
SP	120	36.5	Isachsen
SP	130	40	Isachsen
SP	140	43	Isachsen
SP	150	46	Isachsen
SP	160	49	Isachsen
SP	170	52	Isachsen
SP	180	55	Isachsen
SP	190	58	Isachsen
SP	200-230	61-70	Isachsen
SP	240-270	73-82	Isachsen
SP	280	85	Isachsen
SP	2[illegible]0	88	Upper Mould Bay
SP	30[illegible]	91	Upper Mould Bay
SP	310-340	94.5-104	Upper Mould Bay
SP	350-380	107-116	Upper Mould Bay
SP	390-420	119-128	Upper Mould Bay
SP	430-460	131-140	Upper Mould Bay
SP	470-500	143-152	Upper Mould Bay
SP	510-540	155-165	Upper Mould Bay
SP	550-580	168-177	Upper Mould Bay
SP	590-620	180-189	Middle Mould Bay
SP	630-660	192-201	Middle Mould Bay
SP	6[illegible]0-700	201-213	Middle Mould Bay
SP	7[illegible]0-740	216-225	Middle Mould Bay
SP	750-780	228-238	Middle Mould Bay
SP	800-820	244-250	Middle Mould Bay
SP	830-860	253-262	Middle Mould Bay
SP	870-900	265-274	Middle Mould Bay
SP	910-940		Middle Mould Bay
SP	950-980	290-299	Middle Mould Bay
SP	1000	305	Middle Mould Bay
SP	1020-1050	311-320	Middle Mould Bay
SP	1060-1090	323-332	Lower Mould Bay
SP	1100-1130	335-345	Lower Mould Bay
SP	1140-1170	348-357	Lower Mould Bay
SP	1180-1210	360-369	Lower Mould Bay
SP	1220-1250	372-381	Lower Mould Bay
SP	1260-1290	384-393	Lower Mould Bay
SP	1300-1330	396-406	Lower Mould Bay
SP	1340-1370	409-418	Lower Mould Bay
SP	1380-1410	421-430	Lower Mould Bay
SP	1410-1440	433-439	Lower Mould Bay
SP	1450	442	Lower Mould Bay
SP	1460	445	Lower Mould Bay
SP	1470	448	Lower Mould Bay
SP	1480	451	Upper Wilkie Point
SP	1490	454	Upper Wilkie Point
SP	1500	457.5	Upper Wilkie Point

SP 1510	461	Upper Wilkie Point
SP 1520	464	Upper Wilkie Point
SP 1530-1550	466-473	Upper Wilkie Point
SP 1560-1570	476-479	Upper Wilkie Point
SP 1580-1590	482-485	Upper Wilkie Point
SP 1600-1610	488-491	Lower Wilkie Point
SP 1620-1630	494-497	Lower Wilkie Point
SP 1640-1670	500-509	Lower Wilkie Point
SP 1680-1710	513-522	Lower Wilkie Point
SP 1720-1750	525-534	Lower Wilkie Point
SP 1760-1790	536-546	Lower Wilkie Point
SP 1800-1830	549-558	Lower Wilkie Point
SP 1840-1850	561-564	Lower Wilkie Point
SP 1860	567	Lower Wilkie Point
SP 1870	570	Lower Wilkie Point
SP 1880	574	Savik
SP 1890	577	Savik
SP 1900-1930	580-589	Savik
SP 1935-1940	590-592	Savik, Conventional Core
SP 1940-1945	592-594	Savik, Conventional Core
SP 1950-1955	595-597	Savik, Conventional Core
SP 1960-1965	598-600	Savik, Conventional Core
SP 1980-2010	604-613	Savik
SP 2020-2050	616-625	Savik
SP 2060-2090	628-637	Savik
SP 2100-2130	640-649	Savik
SP 2150-2180	655-664	Savik
SP 2190-2220	667-676	Savik
SP 2230	680	Savik
SP 2240	683	Savik
SP 2250	686	Borden Island
SP 2250-2256	686-688	Borden Island, Conventional Core
SP 2260	689	Borden Island
SP 2270-2280	692-695	Borden Island
SP 2290-2320	699-708	Borden Island
SP 2330-2360	711-720	Borden Island
SP 2370	723	Borden Island
SP 2380	726	Borden Island
SP 2390	729	Borden Island
SP 2400	732	Schei Point
SP 2410	735	Schei Point
SP 2420	738	Schei Point
SP 2430-2440	741745	Schei Point
SP 2450-2460	748-751	Schei Point
SP 2470-2500	754-763	Schei Point
SP 2510-2525	766-771	Schei Point
SP 2525-2529	771-772	Schei Point, Conventional Core
SP 2533-2537	773-774	Schei Point, Conventional Core
SP 2541-2545	776-777	Schei Point, Conventional Core
SP 2545-2549	777-778	Schei Point, Conventional Core

SP 2560-2590	782-785	Schei Point
SP 2600-2630	788-791	Schei Point
SP 2640-2660	794-796	Schei Point

15. Elf Jameson Bay C-31, Prince Patrick Island:

JB	90	27	36490	Mould Bay, middle
JB	120	37	36491	Mould Bay, middle
JB	150	46	36429	Mould Bay, middle
JB	180	55	36493	Mould Bay, middle
JB	210	64	36494	Mould Bay, middle
JB	240	73	36495	Mould Bay, middle
JB	270	82	36496	Mould Bay, lower
JB	300	91	36497	Mould Bay, lower
JB	330	101	36498	Mould Bay, lower
JB	360	110	36499	Mould Bay, lower
JB	390	119	37201	Mould Bay, lower
JB	420	128	37202	Mould Bay, lower
JB	450	137	37203	Mould Bay, lower
JB	480	146	37204	Mould Bay, lower
JB	510	156	37205	Mould Bay, lower
JB	540	165	37206	Mould Bay, lower
JB	570	174	36506	Mould Bay, lower
JB	630	192	36508	Mould Bay, lower
JB	660	202	36509	Mould Bay, lower
JB	690	211	36510	Mould Bay, lower
JB	720	220	36511	Mould Bay, lower
JB	750	229	36512	Mould Bay, lower
JB	780	238	36513	Mould Bay, lower
JB	810	247	36514	Mould Bay, lower
JB	840	256	36515	Mould Bay, lower
JB	870	265	36516	Mould Bay, lower
JB	900	275	36517	Mould Bay, lower
JB	930	284	36518	Wilkie Point, upper
JB	960	293	36519	Wilkie Point, upper
JB	990	302	36520	Wilkie Point, upper
JB	1020	311	36521	Wilkie Point, upper
JB	1050	320	36522	Wilkie Point, upper
JB	1080	330	36523	Wilkie Point, upper
JB	1110	339	36524	Wilkie Point, upper
JB	1140	348	36525	Wilkie Point, upper
JB	1170	357	36526	Wilkie Point, upper
JB	1230	375	36528	Wilkie Point, upper
JB	1260	384	36529	Wilkie Point, upper
JB	1290	394	36530	Wilkie Point, upper
JB	1320	403	36531	Wilkie Point, upper
JB	1350	412	36532	Wilkie Point, upper
JB	1380	421	36533	Wilkie Point, upper
JB	1410	430	36534	Wilkie Point, upper
JB	1440	439	36535	Wilkie Point, upper
JB	1470	448	36536	Wilkie Point, upper
JB	1500	458	36537	Wilkie Point, upper

JB	1530	467	36538	Wilkie Point, upper
JB	1560	476	36539	Wilkie Point, upper
JB	1590	485	36540	Wilkie Point, upper
JB	1620	494	36541	Wilkie Point, upper
JB	1650	503	36542	Wilkie Point, upper
JB	1680	512	36543	Wilkie Point, upper
JB	1710	521	36544	Wilkie Point, upper
JB	1740	530	36545	Wilkie Point, upper
JB	1770	539	36546	Wilkie Point, upper
JB	1800	548	36547	Savik, lower
JB	1830	557	36548	Savik, lower
JB	1860	566	36549	Savik, lower
JB	1890	576	36550	Savik, lower
JB	1920	585	36551	Savik, lower
JB	1950	594	36552	Savik, lower
JB	2010	612	36553	Savik, lower
JB	2040	621	36654	Savik, lower
JB	2070	630	36555	Savik, lower
JB	2100	640	36556	Savik, lower
JB	2130	649	36557	Savik, lower
JB	2160	658	36558	Savik, lower
JB	2190	667	36559	Savik, lower
JB	2220	676	36560	Savik, lower
JB	2250	685	36561	Savik, lower
JB	2280	695	36562	Savik, lower
JB	2310	704	36563	Savik, lower
JB	2340	713	36564	Savik, lower
JB	2370	722	36565	Savik, lower
JB	2430	740	36566	Savik, lower
JB	2460	750	36567	Savik, lower
JB	2490	759	36568	Savik, lower
JB	2520	768	36569	Savik, lower
JB	2550	777	36570	Savik, lower
JB	2580	786	36571	Savik, lower
JB	2610	795	36572	Savik, lower
JB	2640	804	36573	Savik, lower
JB	2670	814	36574	Savik, lower
JB	2700	823	36575	Savik, lower
JB	2730	832	36576	Savik, lower
JB	2760	841	36577	Savik, lower
JB	2790	850	36578	Savik, lower
JB	2820	859	36579	Borden Island
JB	2850	869	36580	Borden Island
JB	2880	878	36581	Borden Island
JB	2910	887	36582	Borden Island
JB	2140	894	36583	Borden Island
JB	2970	904	36584	Borden Island
JB	3000	915	36585	Borden Island
JB	3030	925	36586	Borden Island
JB	3060	934	36587	Borden Island
JB	3090	943	36588	Borden Island
JB	3120	952	36589	Borden Island

JB	3150	961	36590	Borden Island
JB	3180	970	36591	Borden Island
JB	3210	980	36592	Borden Island
JB	3240	989	36593	Borden Island
JB	3270	998	36594	Borden Island
JB	3300	1007	36595	Borden Island
JB	3330	1016	36596	Borden Island

16. Elf Wilkins E-60, Mackenzie King Island:

The underlined samples are those analysed for the study. The others were prepared but not analysed

WI	60	18	36407	Mould Bay
WI	90		36408	Mould Bay
WI	120		36509	Mould Bay
WI	150	457	36410	Mould Bay
WI	180		36411	Mould Bay
WI	210		36412	Mould Bay
WI	240	73.2	36413	Mould Bay
WI	270		36414	Mould Bay
WI	300		36415	Mould Bay
WI	330	100	36416	Mould Bay
WI	360		36417	Mould Bay
WI	390		36418	Mould Bay
WI	420	128	36419	Mould Bay
WI	450		36420	Mould Bay
WI	480		36421	Mould Bay
WI	510	155	36422	Mould Bay
WI	540		36423	Mould Bay
WI	570		36424	Mould Bay
WI	630		36426	Mould Bay
WI	660		36427	Mould Bay
WI	690	210	36428	Mould Bay
WI	720		36429	Mould Bay
WI	750		36430	Mould Bay
WI	780	237	36431	Mould Bay
WI	810		36432	Mould Bay
WI	840		36433	Mould Bay
WI	870	265	36434	Mould Bay
WI	900		36435	Mould Bay
WI	930		36436	Mould Bay
WI	960	292	36437	Wilkie Point
WI	990		36438	Wilkie Point
WI	1020		36439	Wilkie Point
WI	1050	320	36440	Wilkie Point
WI	1080		36441	Wilkie Point
WI	1110		36442	Wilkie Point
WI	1140	348	36443	Wilkie Point
WI	1170		36444	Wilkie Point
WI	1200		36445	Wilkie Point
WI	1230	375	36446	Wilkie Point
WI	1260		36447	Wilkie Point
WI	1290		36448	Wilkie Point
WI	1320	403	36449	Wilkie Point
WI	1350		36450	Wilkie Point

WI	1380		36451	Wilkie Point
WI	1410	430	36452	Wilkie Point
WI	1440		36453	Wilkie Point
WI	1470		36454	Wilkie Point
WI	1500	458	36455	Savik, lower
WI	1530		36456	Savik, lower
WI	1560		36457	Savik, lower
WI	1590	485	36458	Savik, lower
WI	1620		36459	Savik, lower
WI	1650		36460	Savik, lower
WI	1680		36461	Savik, lower
WI	1710		36462	Savik, lower
WI	1740		36463	Savik, lower
WI	1770	540	36464	Savik, lower
WI	1800		36465	Savik, lower
WI	1830		36466	Savik, lower
WI	1860	567	36467	Savik, lower
WI	1890		36468	Savik, lower
WI	1920		36469	Savik, lower
WI	1950	595	36470	Savik, lower
WI	1980		36471	Savik, lower
WI	2010		36472	Savik, lower
WI	2040	622	36473	Savik, lower
WI	2070	632	36474	Savik, lower
WI	2100	640	36475	Savik, lower
WI	2130		36476	Savik, lower
WI	2160	659	36477	Savik, lower
WI	2190		36476	Savik, lower
WI	2220	670	36479	Savik, lower
WI	2250		36480	Savik, lower
WI	2280	690	36481	Savik, lower
WI	2310		36482	Savik, lower
WI	2340	714	36483	Wilkie Point
WI	2370		36484	Borden Island
WI	2410	734	36485	Borden Island
WI	2440		36486	Borden Island
WI	2470	753	36487	Borden Island
WI	2500	764	36488	Borden Island

DINOFLAGELLATE CYST DISTRIBUTION CHARTS

Enclosed are fifteen dinoflagellate cyst distribution charts (CHARTS 1-8, 10-16). All samples whether barren or not are indicated by locality and sample numbers in the columns to the left. South Strand Fiord is excluded since the samples examined had no fossil recovery. The following notations are used:

X = positive occurrence
? = questionable identification
RW = probable reworked occurrence
CV = probable uphole cavings

The dinoflagellate cyst Oppel-Zone indices are illustrated in a column to the right and correspond to the zonation (figure 8) as proposed by Davies (1983).

REFERENCES

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1973: Palynology and Nannofossil processing techniques; Geological Survey of Canada Paper 73-26: 1-22, p. 1-2.

Davies, E.H.
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