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DEPARTMENT OF THE INTERIOR
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A DESCRIPTION OF DREDGE SAMPLES COLLECTED IN 1982 FROM THE BERING SEA CONTINENTAL MARGIN WEST OF NAVARIN BASIN

BY

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This report is preliminary and has not been reviewed for conformity with Geological Survey editorial standards and stratigraphic nomenclature.

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We collected dredge samples from 14 sites along the Bering Sea continental margin west of Navarin basin during 1982 (Fig. 1). Stations 2 thru 28 are sites that were dredged in 1978 and are described in Jones and others (1981). The locations, dredge depths, preliminary lithologic descriptions, and ages of the samples are listed in Table 1.

The sampling was done with a chain-bag dredge, and dredge depth was determined by a time-depth recorder placed 100 meters above the dredge. The time-depth recorder was not used at stations 31, 39, 40, 43, 44 and 45 but dredge depths were estimated by the amount of wire deployed. Location of the dredge sites was controlled by satellite and Loran C navigation fixes.

Ages were assigned by examination of microfossils, mainly diatoms. Preliminary lithologies were determined from thin sections.

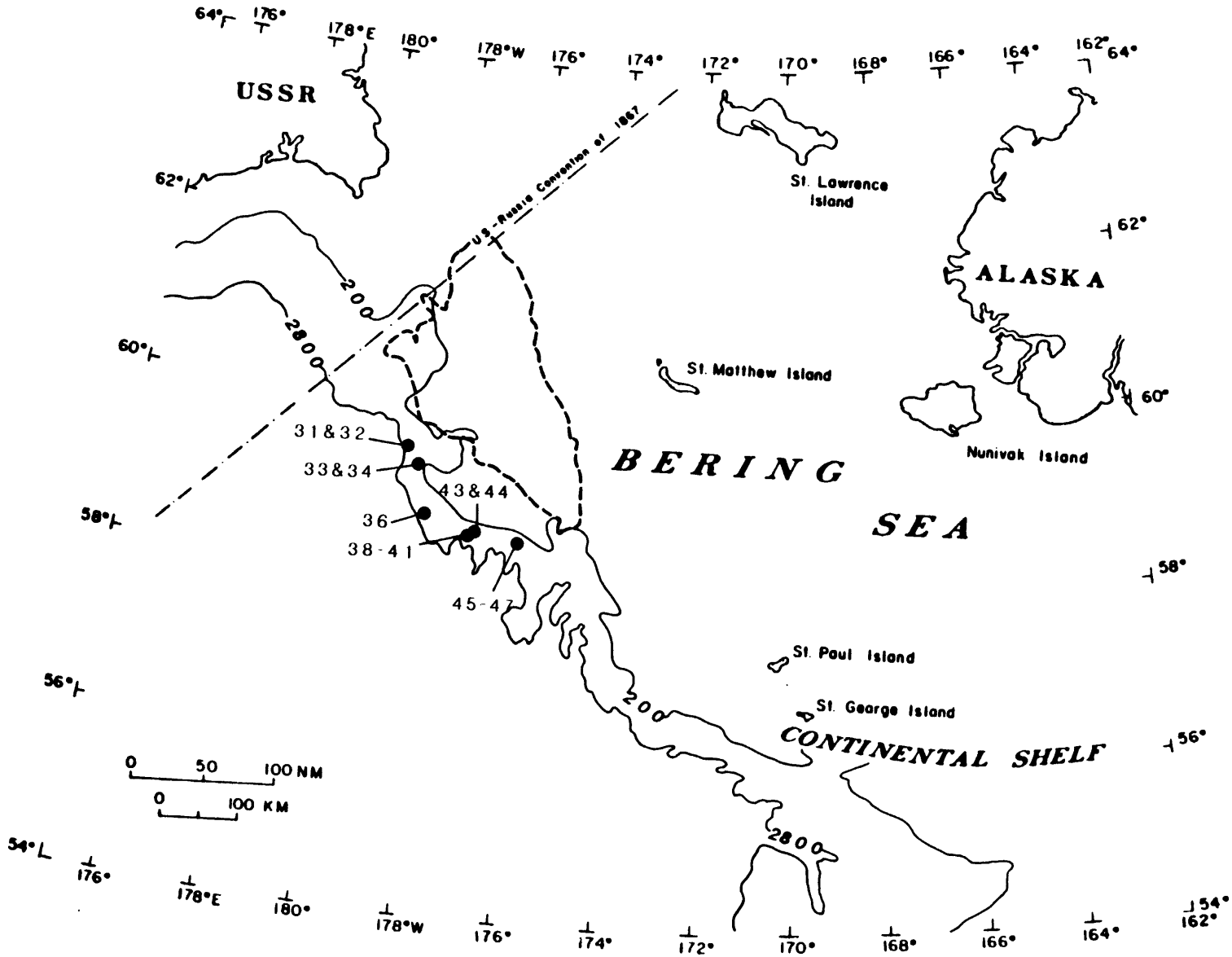
Reference

Jones, D. M., Kingston, M. J., Marlow, M. S., Cooper, A. K., Barron, J. A., Wingate, F. H., and Arnal, R. E., 1981, Age mineralogy, physical properties, and geochemistry of dredge samples from the Bering Sea continental margin: U. S. Geological Survey Open File Report 81-1297, 68 p.

Station	Sample	Latitude	Longitude	Deptn (m)	Lithology	Fossil Control	Age
31	31-1	59°33.5'N	178°47.9'W	1800-2250	Ash-rich limestone	Df	Cenozoic (?)
"	31-4	"	"	"	Mudstone	D	Middle Miocene
"	31-7	"	"	"	Calcareous sandstone	D	Middle Miocene to Holocene
"	31-8	"	"	"	Tuffaceous mudstone	D	Miocene to Holocene
32	32-1	59°33.3'N	178°49.5'W	2400	Sandy mudstone	D	Middle Miocene
"	32-2	"	"	"	Mudstone	P,S	Late Paleocene to early Eocene
"	32-3	"	"	"	Calcareous volcanic sandstone	D,Df	Late Quaternary
"	32-4	"	"	"	Volcanic sandstone	Df	Tertiary
"	32-5	"	"	"	Conglomerate	D	Middle Miocene to Holocene
"	32-6	"	"	"	Tuffaceous mudstone	D	Middle Miocene
"	32-8	"	"	"	Mudstone	D	Middle Miocene to Holocene
33	33-1	59°17.4'N	178°30.6'W	1300-1500	Diatomaceous mudstone	D	Early Pliocene
"	33-2	"	"	"	Sandy or silty limestone	D	Quaternary
"	33-3	"	"	"	Sandy mudstone	D	Late Quaternary
"	33-4	"	"	"	Sandy limestone	D	Early Quaternary
"	33-5	"	"	"	Diatomaceous mudstone	D	Late Miocene
34	34-1	59°17.3'N	178°32.1'W	1500-1600	Diatomaceous mudstone	D	Early Pliocene
"	34-2	"	"	"	Volcanic sandstone	D	Quaternary (?)
"	34-3	"	"	"	Glauconitic mudstone	D	Late Miocene
"	34-5	"	"	"	Diatomacous mudstone	D	Early Pliocene
"	34-6	"	"	"	Calcareous sandstone	D	Latest Miocene to Pliocene
"	34-7	"	"	"	Clayey diatom ooze	D	Early Pliocene
36	36-1	58°47.8'N	178°18.1'W	1500-2650	Diatomaceous mudstone	D	Late Pliocene
"	36-2	"	"	"	Diatomaceous mudstone	D	Early Pliocene
"	36-3	"	"	"	Diatomaceous siltstone	D	Latest Miocene
38	38-1	58°35.3'N	177°21.5'W	2400	Mudstone	D	Miocene or younger (?)
39	39-1	58°36.3'N	177°20.3'W	800-1950	Sandy limestone	D,R	Middle Miocene
"	39-2	"	"	"	Diatomaceous mudstone	D	Late Miocene
"	39-3	"	"	"	Diatomaceous sandy mudstone	D	Early Late Miocene
40	40-14	58°36.1'N	177°20.9'W	800-1950	Conglomerate	D	Miocene to Holocene
"	40-15	"	"	"	Radiolarian-rich tuffaceous sandstone	D	Late Oligocene
"	40-17	"			Calcareous lithic sandstone/breccia	D	Middle Miocene to Late Miocene

Station	Sample	Latitude	Longitude	Depth (m)	Lithology	Fossil Control	Age
41	41-4	58°36.6'N	177°20.7'W	750	Mylonitic sandstone	D	Late Pliocene to Holocene
"	41-5	"	"	"	Volcanic sandstone	D	Late Miocene to Holocene
"	41-7	"	"	"	Volcanic sandstone	D	Early Pliocene
"	41-8	"	"	"	Diatomaceous mudstone	D	Early Pliocene
"	41-9	"	"	"	Diatomaceous mudstone	D	Latest Miocene
45	45-1	58°31.7'N	176°11.4'W	840-1400	Limestone	D,Sf	Late Miocene
"	45-2	"	"	"	Limestone	D	Late Miocene
"	45-3	"	"	"	Limestone	D	Late Miocene
"	45-5	"	"	"	Limestone	D	Early Late Miocene
"	45-8	"	"	"	Clayey diatomite	D	Early Miocene
"	45-9	"	"	"	Muddy sandstone	D	Late Oligocene (?)
"	45-10	"	"	"	Calcareous diatomite	D	Early Miocene
"	45-11	"	"	"	Diatomaceous mudstone	D	Early Miocene
"	45-12	"	"	"	Calcareous diatomite	D	Early Miocene
"	45-13	"	"	"	Silty limestone	D	Early Late Miocene
"	45-14	"	"	"	Tuffaceous mudstone	D	Early Miocene
46	46-1	58°31.1'N	176°09.1'W	1000-1600	Limestone	D	Late Quaternary
"	46-3	"	"	"	Muddy limestone	D,Sf	Late Miocene
"	46-4	"	"	"	Diatomaceous calcareous sandstone	D	Early Miocene
"	46-5	"	"	"	Clayey sandstone	D	Late Oligocene (?)
"	46-6	"	"	"	Sandy mudstone	D	Late Oligocene
"	46-7	"	"	"	Clayey (tuffaceous ?) sandstone	D	Early Miocene
"	46-8	"	"	"	Sandy mudstone	D	Middle Miocene
47	47-1	58°31.6'N	176°04.9'W	900-1400	Diatomacous mudstone	D	Late Miocene
"	47-2	"	"	"	Calcareous diatomite	D	Late Miocene
"	47-4	"	"	"	Diatomaceous limestone	D	Late Miocene
"	47-6	"	"	"	Conglomerate	D	Middle Miocene to Holocene
"	47-9	"	"	"	Diatomaceous sandstone	D	Middle Miocene
"	47-10	"	"	"	Sandy mudstone	D	Middle Miocene
"	47-11	"	"	"	Diatomaceous ash	D	Late Miocene
"	47-12	"	"	"	Clayey diatomite	D	Late Miocene
"	47-13	"	"	"	Clayey sandstone	D	Middle Miocene

* D = Diatoms, Df = Dinoflagellates, Sf = Silicoflagellates


64°
176°
178°E
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176°
174°
172°
170°
168°
166°
164°
162°
64°
USSR
62°
U.S.-Russia Convention of 1867
St. Lawrence Island
62°
ALASKA
200
2800
60°
St. Matthew Island
60°
31&32
33&34
43&44
36
38-41
45-47
Nunivak Island
BERING
SEA
58°
58°
St. Paul Island
56°
St. George Island
200
CONTINENTAL SHELF
56°
0 50 100 NM
0 100 KM
2800
54°
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