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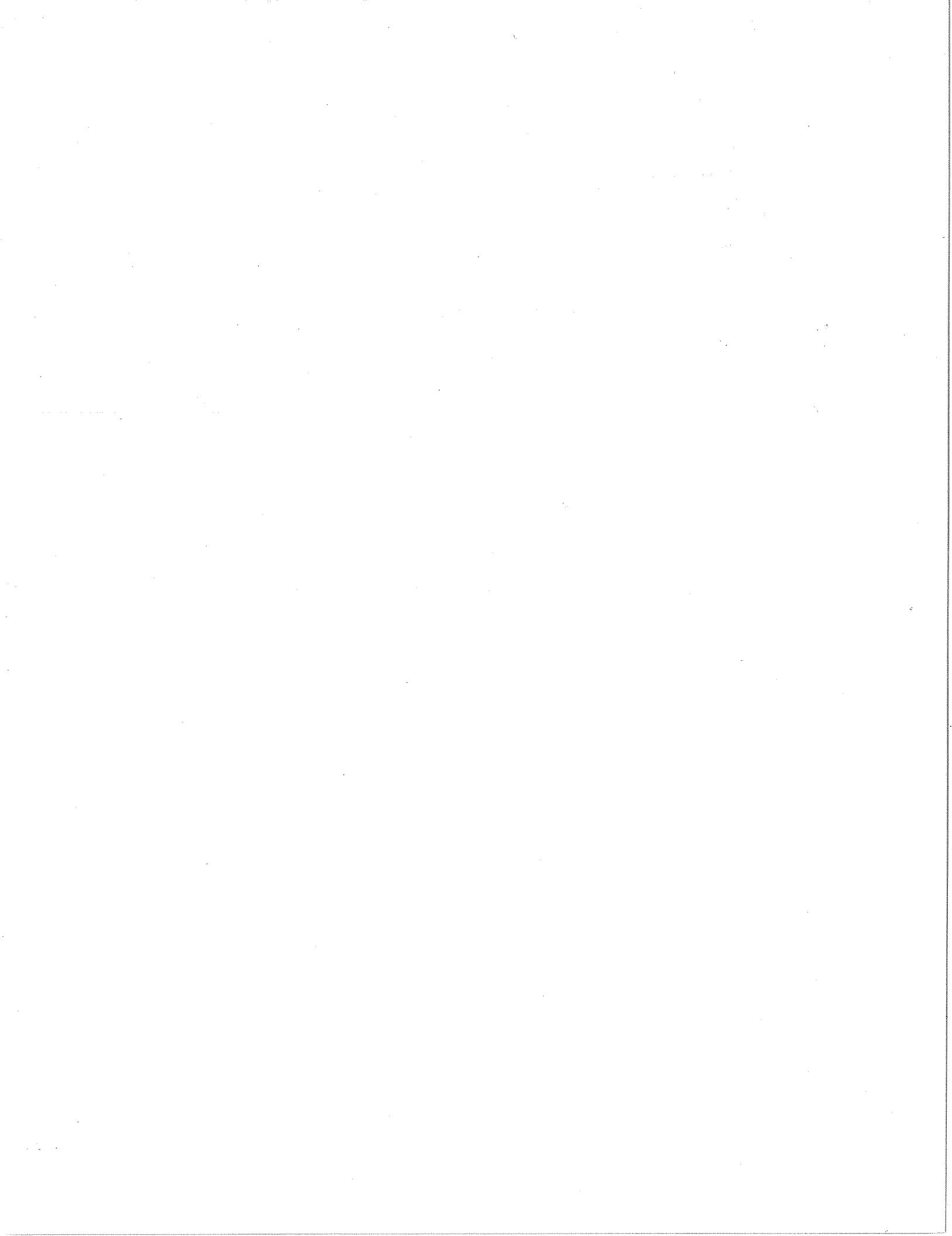
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from cores collected in Halifax Inlet,
F.R.V. Navicula Cruise 89-009**

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1991



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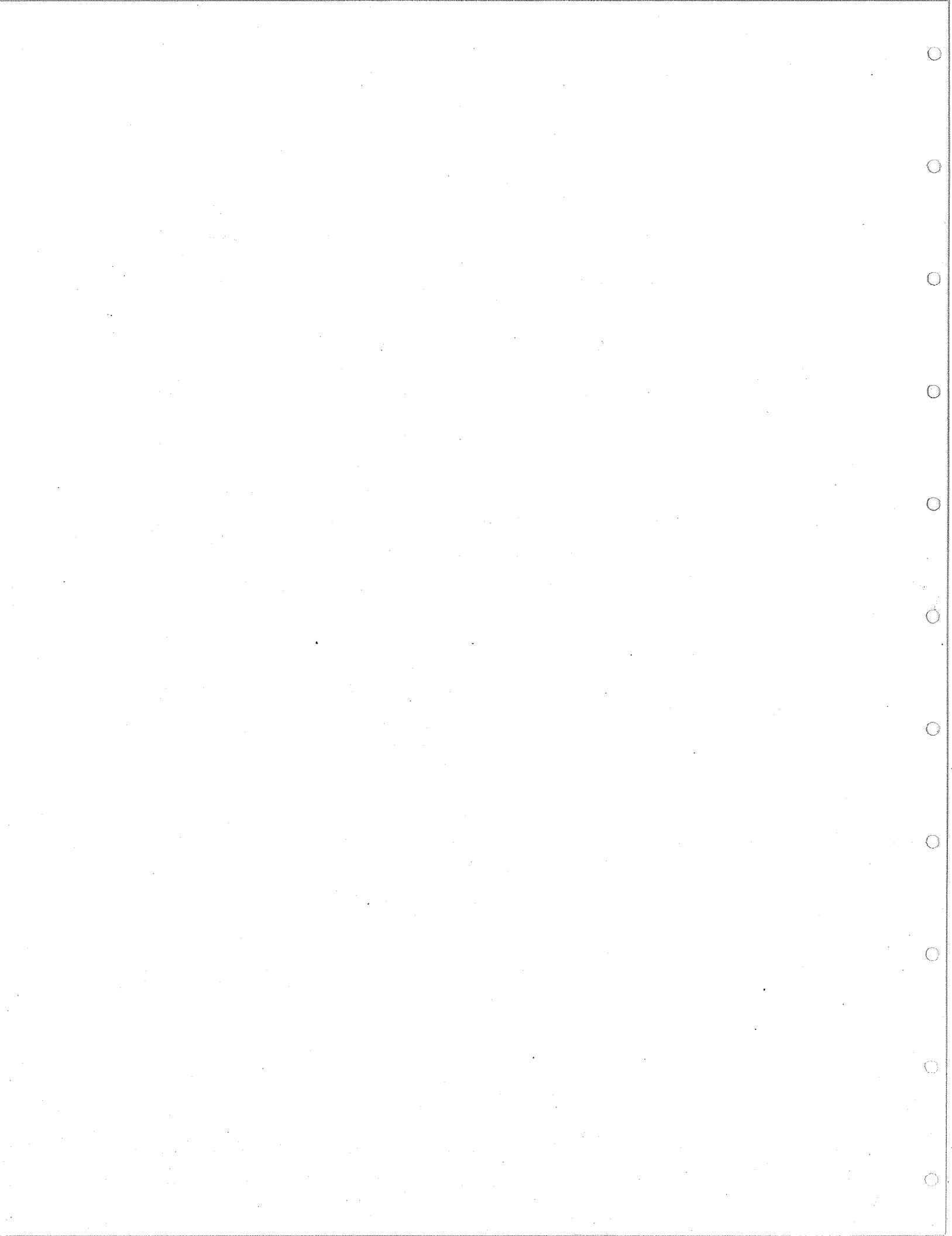
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ABSTRACT

Geochemical data are compiled for sediment and pore water analyses of 13 cores collected from the seabed of Halifax inlet, Nova Scotia, during June 1989 (F.R.V. Navicula expedition 89-009). Core station locations were chosen to be representative of different sedimentary and depositional environments, and to obtain a series of cores that would provide high resolution of the upper 100 cm of sediment.

Sediment analyses included sediment texture, water content, organic carbon, CaCO_3 and total metals (Si, Al, Mg, K, Ti, Li, Fe, Mn, Ca, Cu, Zn, Ni, Cr, Pb, Cd and Hg). Chemical leach techniques were used to determine the potential labile metal partitioning (Fe, Mn, Ca, Cu, Zn, Ni, Cr and Pb) in these sediments and included sequential leach analyses for: (1) weak acid leachable metal, (2) easily reducible metals, (3) moderately reducible metals, and (4) residual metals. In addition, a separate analyses for organically bound metal was performed using H_2O_2 as an oxidant. Metals analyzed after this treatment included Fe, Mn, Cu, Zn, Ni, Cr and Pb.

Pore water analyses included ammonium, phosphate, silica, sulphate, total alkalinity, Fe, Mn, pH and free electrons (pe).

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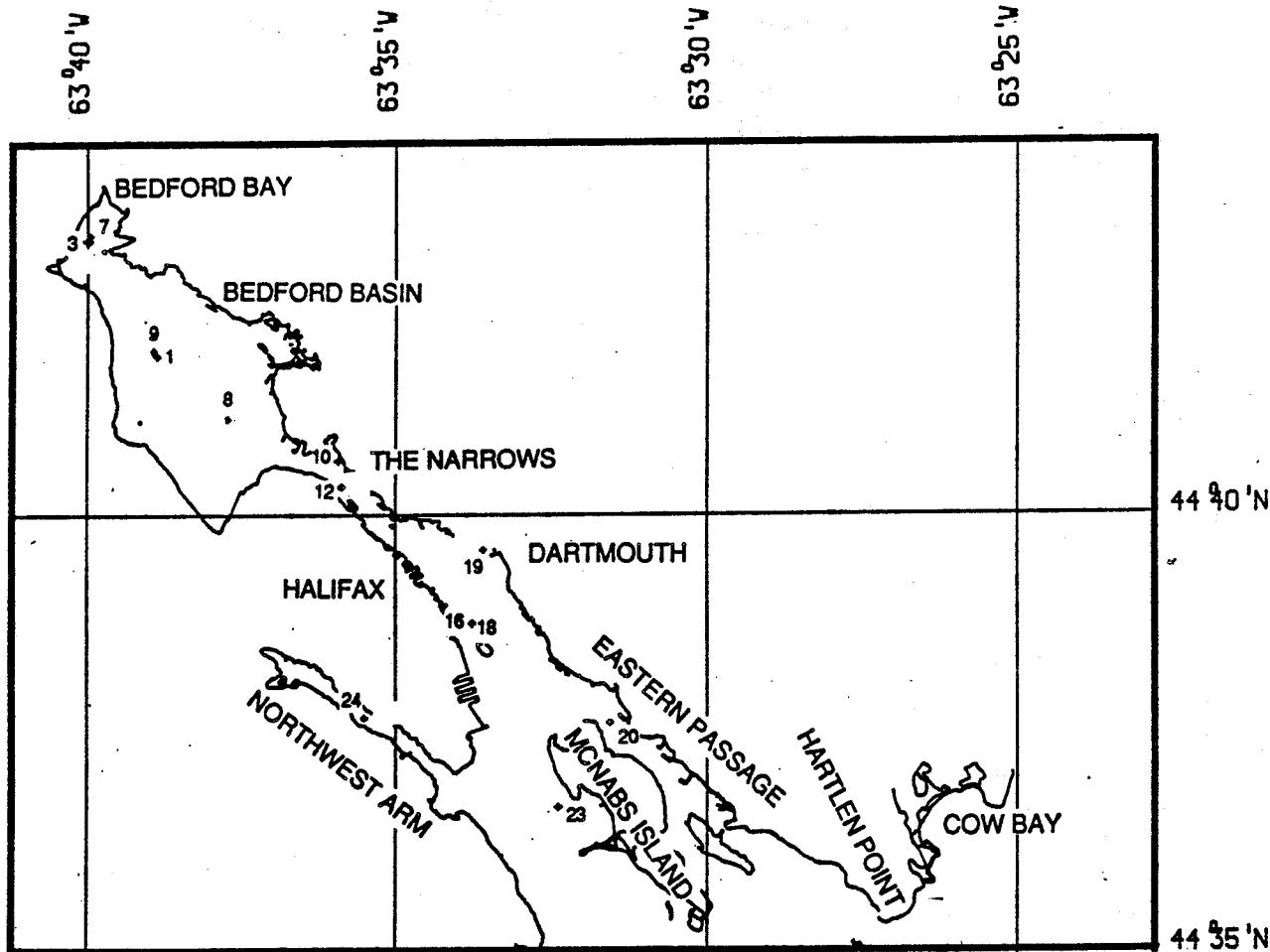


Figure 1. Station locations in Halifax inlet for core samples (cores 1, 3, 16, 19, and 24 were Lehigh gravity cores and cores 7, 8, 9, 10, 12, 18, 20 and 23 were Eckman-style cores).

Core	Latitude	Longitude	Core	Latitude	Longitude	
1	44°41.87'N	63°39.00'W	3	44°43.19'N	63°40.04'W	
7	44°43.17'N	63°40.01'W	8	44°41.11'N	63°37.75'W	
9	44°41.89'N	63°38.96'W	10	44°40.63'N	63°35.98'W	
12	44°40.32'N	63°36.93'W	16	44°38.77'N	63°33.78'W	
18	44°38.77'N	63°33.78'W	19	44°39.64'N	63°33.63'W	
20	44°37.66'N	63°31.57'W	23	44°36.67'N	63°32.43'W	
24	44°37.70'N	63°35.52'W				

INTRODUCTION

Five gravity and 8 box cores from Halifax Inlet, Nova Scotia, (Fig. 1) have been analyzed for a number of geological and geochemical parameters. Core samples were collected from the Bedford Institute of Oceanography coastal vessel F.R.V. Navicula. This report contains analytical results for both sediment and pore water subsamples. Other data relating to this scientific cruise are given in Miller et al (1989).

METHODS

Sampling

The AGC Lehigh gravity coring system was used routinely for coring. It had a capacity of obtaining up to 1.5 m long, 10 cm diameter cores from fine-grained sediment. Box coring was done using a specially designed and modified 30 cm cubic Eckman-style corer. Push cores (10 cm diameter) were subsampled from these box cores for geochemical testing. All core samples (gravity and push cores) were vertically extruded and sampled at selected 1 cm intervals.

Sediment pH and $\text{p}\epsilon$ analyses were conducted on the freshly exposed surfaces of the extruded core prior to subsampling. Sediment pH was determined using a combination pH electrode that was standardized with Palitsch buffer at pH 8.2 (Whitfield, 1969). A precision of ± 0.05 pH units was achieved routinely within a 2 minute time period. A combination platinum electrode, standardized in Zobell solution, was used to determine the redox potential as $\text{p}\epsilon$ (Whitfield, 1969). Voltage was recorded for 90 s to account for electrode drift. Redox potential was calculated from the potential difference relative to the standard hydrogen electrode. Precision was estimated to be $\pm 0.2 \text{ p}\epsilon$ units.

Subsamples from the cores were taken immediately after redox measurements had been completed. Approximately 50 cm³ of mud was obtained by inserting a modified plastic syringe piston-sampler into the sediment. This subsampling was performed in an open atmosphere. It was assumed that oxygen effects were minimal for short exposure times. Intervals for subsampling were 1 cm for all box cores and the top 15 to 30 cm of most gravity cores. The deeper portions of the gravity cores were subsampled at 5 cm intervals. Sediment subsamples were placed in 50 mL plastic centrifuge tubes, sealed and refrigerated at 4 to 10 °C until the pore water could be extracted.

Pore water was extracted from the sediment subsamples by centrifugation at 3000 rpm for 30 minutes in a Sorvall® RT600B refrigerated centrifuge. Between 5 and 20 mL of pore water were obtained from most samples. After centrifugation, pore water was decanted from the centrifuge tubes and filtered through 0.4 µm Nuclepore filters. Pore water subsamples were immediately analyzed for pH, total alkalinity, ammonium, phosphate and silica. The remaining pore water was

acidified (pH 2) with HCl and stored for later metal analyses (Fe and Mn) and for silica (SiO_2). The sediment remaining in the centrifuge tube was sealed and placed in refrigerated storage for later analyses for total and extractable metals, grain size, total carbon and organic carbon.

Pore Water Analyses

Dissolved ammonia (NH_4^+) in pore water was determined by colorimetric absorbance of the oxidized nitrogen complex in a ferrocyanide solution, as described by Solorzano (1969). Absorbance was measured at 640 nm.

Dissolved phosphate (PO_4^{3-}) in pore water was determined using the Technicon industrial method no. 155-71W (Technicon Industrial Systems, Tarrytown, N.Y.).

Dissolved silica (SiO_2) in pore water was determined by colorimetric analysis of the reduced silicomolybdate complex. This method was adapted from Strickland and Parsons (1968), as described by Mann and Gieskes (1975). A Varian model 634 colour spectrometer was used to measure absorbance of this complex at a wavelength of 812nm.

Dissolved sulphate (SO_4^{2-}) in pore water was determined by an indirect atomic absorption spectrophotometry method. A 0.1 mL aliquot of 0.3 M barium chloride was added to a 1 mL sample of pore water. This provided an excess of barium for the precipitation of sulphate as barium sulphate. This precipitate was removed from solution by centrifuging. The excess barium concentration left in solution was determined by flame atomic absorption spectrophotometry and was used to calculate the initial concentration of sulphate in the sample. The precision for dissolved sulphate concentrations was $\pm 1\text{ mM}$.

Total alkalinity (ALK_{pw}) was determined on a 1 mL pore water sample. A potentiometric titration was completed for each sample with an automatic titrator. A microelectrode was used to measure the pore water pH during titration with 0.008 N HCl in 0.6 N NaCl. Alkalinity precision was $\pm 0.04\text{ mN}$ (Edmond, 1970).

Total Fe_{pw} and Mn_{pw} in pore water were determined by direct flameless atomic absorption spectrophotometry. Aqueous samples (pH = 1.5-2.0) were injected directly into the atomization chamber of a Varian 975 with a GTA 95 graphite furnace. Standards were prepared in seawater containing negligible amounts of these metals compared to the concentrations in the samples. All instrumental parameters followed the manufacturers recommendations.

Sediment Analyses

Water content (WATER, as % of total wet weight) was determined by measuring weight loss of samples after drying at 60 °C for 48 hours.

Sediment grain size analyses were conducted on wet samples for % sand, % silt and % clay using a 0.063 mm sieve and a model TA II Coulter Counter using

30 and 200 μm apertures. The sediment mass $> 0.063 \text{ mm}$ was classed as sand. Sediment $< 0.063 \text{ mm}$ was classed as silt and clay (mud). A Coulter Counter Model TA11^R was used to determine the silt and clay % fraction in the mud component. Subsamples for Coulter Counter analyses were disaggregated in a 5 % solution of sodium metaphosphate in an ultrasonic bath. Sediment $< 0.063 \text{ mm}$ and $> 0.004 \text{ mm}$ was classed as silt and sediment $< 0.004 \text{ mm}$ was classed as clay. Gravel size particles were not included in the analyses. The mean grain size for the mud fraction (silt and clay) are reported along with the standard deviation, kurtosis, and skewness.

The sediment, that was freeze dried and lightly disaggregated in an agate mortar and pestle, was then used for analyses of total carbon, organic carbon, leachable and total metal.

Total carbon (C_T in % of dry weight) was determined from washed and dried samples using a Leco carbon analyzer.

Organic carbon (C_{org} in % of dry weight) was determined in a similar manner to total carbon except, that the inorganic carbon was removed by 1 N HCl treatment prior to determining the carbon content. The precision was $\pm 0.2\%$ for both the C_T and C_{org} .

CaCO_3 was computed from the difference between C_T and C_{org} .

Metal concentrations which are leached by hydrogen peroxide are considered to be organically bound (MacIntosh et al, 1976) and are reported here as $\text{Fe}_{\text{H}2\text{O}2}$, $\text{Mn}_{\text{H}2\text{O}2}$, $\text{Cu}_{\text{H}2\text{O}2}$, $\text{Zn}_{\text{H}2\text{O}2}$, $\text{Ni}_{\text{H}2\text{O}2}$, $\text{Pb}_{\text{H}2\text{O}2}$ and $\text{Cr}_{\text{H}2\text{O}2}$. Disaggregated dry sediment (1 g) was leached with 10 % hydrogen peroxide (20 mL) for 24 h. Finally the leachate was decanted and acidified with 5 mL of glacial acetic acid.

The sequential leach analyses (Fitzgerald et al, 1987) include:

- (1) weak acid leachable metal (Fe_{WA} , Mn_{WA} , Ca_{WA} , Cu_{WA} , Zn_{WA} , Ni_{WA} , Cr_{WA} and Pb_{WA}) in 25 % acetic acid, pH 2, as described in Chester and Hughes (1967).
- (2) hydroxylamine leachable metal (Fe_{HA} , Mn_{HA} , Ca_{HA} , Cu_{HA} , Zn_{HA} , Ni_{HA} , Cr_{HA} and Pb_{HA}) in 1 M $\text{NH}_2\text{OH}-\text{HCl}$, as described in Chester and Hughes (1967).
- (3) heated hydroxylamine leachable metal (Fe_{HHA} , Mn_{HHA} , Ca_{HHA} , Cu_{HHA} , Zn_{HHA} , Ni_{HHA} , Cr_{HHA} and Pb_{HHA}) in 0.04 M $\text{NH}_2\text{OH}-\text{HCl}$, pH 2, at 80 °C for 16 h, as described in Tessier et al (1979).
- (4) leach residue metals with concentrations computed relative to the original mass (Si_R , Al_R , Mg_R , K_R , Fe_R , Mn_R , Ca_R , Cu_R , Zn_R , Ni_R , Cr_R and Pb_R) were determined using the Buckley and Cranston (1971) $\text{HF}-\text{H}_3\text{BO}_3$ total decomposition method.

The leach residue dry weight is reported as "Residue" in mg remaining of the initial 1000 mg of sample. The "weight loss" due to the sequential leaching can be computed as:

$$\text{Weight Loss(\%)} = 100 (1 - \text{Residue} / 1000).$$

The sequential sum (Fe_{SUM} , Mn_{SUM} , Ca_{SUM} , Cu_{SUM} , Zn_{SUM} , Ni_{SUM} , Cr_{SUM} and Pb_{SUM}) was computed as the summation of the sequential leach analyses components (ie, $\text{Fe}_{\text{SUM}} = \text{Fe}_{\text{WA}} + \text{Fe}_{\text{HA}} + \text{Fe}_{\text{HHA}} + \text{Fe}_R$).

Total metal concentration (Si_T , Al_T , Mg_T , K_T , Ti_T , Li_T , Fe_T , Mn_T , Ca_T , Cu_T , Zn_T , Ni_T , Cr_T , Pb_T and Cd_T) was determined using the Buckley and Cranston (1971) HF-H₃BO₃ total decomposition method.

An indication of the degree of accuracy and precision that this total elemental analysis method can provide is demonstrated by results of tests of the replication of analyses of standards. Results for the standard samples BCSS1 and MESS1 (NRC Canada) and MAG1 (USGS) are compared in Table 1. With the exception of the analyses for Ni, and one standard result for Cu, all of the replicate analyses for the 12 elements have a coefficient of variation (CV = standard deviation / mean \times 100) of less than 10 %. The reason for the high CV for Ni has not been determined, so analytical results for this metal should be used with considerable caution. The CV of 11.1 % for Cu in the BCSS1 standard is almost certainly due to the low level of Cu in this standard, therefore analytical results below 20 ppm should be used with caution.

TABLE 1.

Results for replicate analyses of standard samples.

Standard Sample	Si_T	Al_T	Ca_T	Mg_T	K_T	Ti_T	Fe_T	Mn_T	Cu_T	Zn_T	Ni_T	Li_T
	%	%	%	%	%	%	%	%	μgg^{-1}	μgg^{-1}	μgg^{-1}	μgg^{-1}
BCSS1												
N	9	9	6	8	8	5	9	8	8	8	8	6
Mean	29.6	5.59	0.54	1.36	1.53	0.407	3.18	246	18	103	39	60
StdDev	0.4	0.29	0.01	0.02	0.09	0.024	0.08	15	2	3	9	5
% CV	1.4	5.2	1.9	1.5	5.9	5.9	2.5	6.1	11.1	2.9	23.1	8.3
Present ¹	30.9	6.26	0.54	1.47	1.80	0.440	3.29	230	18.5	120	55	(20)
% Error	-4.2	-10.7	0	-7.5	-15.0	-7.5	-3.3	7.0	-2.7	-14.2	-29	200
MESS1												
N	9	9	6	8	8	5	9	8	8	8	8	6
Mean	29.6	5.01	0.44	0.73	1.55	0.483	2.86	533	24	172	19	55
StdDev	0.5	0.31	0.02	0.03	0.10	0.036	0.06	20	2	6	10	5
% CV	1.7	6.2	4.5	4.1	6.4	7.5	2.1	3.8	8.3	3.5	52.6	9.1
Present ¹	31.6	5.84	0.48	0.87	1.86	0.543	3.05	510	25	190	30	(60)
% Error	-6.3	-14.2	-8.3	-16.1	-16.7	-11.0	-6.2	4.5	-4.0	-9.5	-37	-8.3
MAG1												
N	9	9	6	8	8	5	9	8	8	8	8	6
Mean	23.2	7.73	0.91	1.73	2.92	0.401	4.71	795	27	130	40	103
StdDev	0.4	0.53	0.02	0.14	0.12	0.030	0.10	19	2	2	11	5
% CV	1.7	6.9	2.2	8.1	4.1	7.5	2.1	2.4	7.4	1.5	27.8	4.9
Present ²	23.9	8.7	0.99	1.89	3.09	0.450	4.88	770	27	135	54	(78)
% Error	-2.9	-11.1	-8.1	-8.5	-5.5	-10.9	-3.5	3.2	0	-3.7	-26	32

¹ Values from Berman (1981).² Values from Manheim et al. (1976).

Estimates of the relative accuracy error were obtained by comparing our analytically determined mean value with the preferred value published for the standard. Generally only those results which show relative accuracy error greater than 10 % require some comment. Our analytical method appears to produce Al results that are 10.7 to 14.2 % relatively lower than the results published

for the three standards. Our results for Mg content in the MESS1 standard are relatively 16 % lower than the published value. This appears to be caused by the moderately low Mg content and possibly to an unusual matrix effect in this standard. Our results for K in BCSS1 and MESS1 are 15 and 16.1 % relatively low respectively. The reason for these results is not readily apparent, although it is suspected to be a matrix effect. Similarly, the relative accuracy error of 11 and 10.9 % low for Ti in the MESS1 and MAG1 standards is unexplained. It should be carefully noted that all of these relative accuracy errors in the analyses of the major elements produces an analytical result which has an absolute error of less than 1 %.

Table 2
Error for instrumental analyses.

Metal	Detection Limit $\mu\text{g}\cdot\text{mL}^{-1}$	Concentration Range $\mu\text{g}\cdot\text{mL}^{-1}$	Precision $\mu\text{g}\cdot\text{mL}^{-1}$	Relative Error %
Fe	10	10 - 1400	± 5	
		4000 - 17000	± 140	2
		29000 - 47000	± 800	2
Mn	0.6	0.6 - 11	± 0.3	
		9 - 100	± 1	2
		250 - 800	± 18	4
Ca	16	16 - 450	± 8	
		500 - 900	± 20	3
		4000 - 9000	± 150	3
Cu	1.2	2 - 180	± 0.6	
		30 - 180	± 0.6	2
Zn	0.4	0.4 - 35	± 0.2	
		6 - 35	± 0.4	3
		50 - 300	± 6	5
Ni	1	1 - 25	± 0.5	
		6 - 30	± 0.5	2
Pb	0.6	0.6 - 8	± 0.3	
		3 - 20	± 0.4	5
		70 - 130	± 1	2
Cr	0.8	1 - 25	± 0.4	
		7 - 40	± 0.4	1
Li		55 - 100	± 5	7
Si		23 - 30 %	$\pm 0.5 \%$	2
Al		5 - 8 %	$\pm 0.4 \%$	6
Mg		0.7 - 1.7 %	$\pm 0.05 \%$	5
K		1.5 - 2.9 %	$\pm 0.1 \%$	5
Ti		0.4 - 0.5 %	$\pm 0.03 \%$	7

The relative accuracy error of -14.2 % for analyses of Zn in the BCSS1 standard is of unknown source. The large negative errors for results of Ni analyses (-29 %) in all standards reinforces the caution in use of these results. Two large positive errors are recorded for the analysis of Li in the BCSS1 and MAG1 standards. In these cases little significance can be given to this accuracy indication because the published values for Li are uncertified. No evaluation of the accuracy or precision of Pb analyses could be obtained because the published concentrations of Pb in the standards were all below the analytical detection limit (20 ppm) of our method.

Average precision values, for the instrumental analyses for specific metals, were determined from duplicate analyses of solutions which were prepared for the total metal and leachable metal analyses. The precision values are reported in Table 2. In the low concentration ranges the precision can be used to evaluate the analytical detection limits. Under these conditions the analytical detection limit is approximately twice the value for precision. In the higher concentration ranges the average relative error determinations for these metals were used to evaluate the analytical results. As the detection limit is approached the relative error approaches 100 %. The relative error for a specific metal and sample was determined as the percent mean deviation relative to the sample mean. These results were then used to determine the average relative error for a specific metal and are reported in Table 2. Average precision values for the metals Si, Al, Mg, K, Ti, and Li were determined for narrow concentration ranges and we have not determined the detection limits.

In an earlier study (Buckley et al 1989) results were reported for analyses of replicate samples and subsamples. The concentrations were in the higher concentration ranges and the % coefficients of variation included variation due to repetitive sampling and sampling inhomogeneity. In the present study we report relative error which includes only the error resulting from duplicate instrumental analyses of sample solutions.

Total mercury (Hg_T) was determined using a flameless cold-vapour atomic absorption spectrometry method adapted from Brandenberg and Bader (1967) and MacIntosh et al (1976). The average precision varied significantly with concentration range: ± 0.005 ppm for range 0.01 to 0.1 ppm, ± 0.04 ppm for range 0.1 to 1 ppm, ± 0.1 ppm for range 1 to 5 ppm, and ± 0.7 ppm for range 5 to 11 ppm. In all concentration ranges the relative error varied from 6 % to 11 %.

Core	Depth	Fe _{WA}	Fe _{HA}	Fe _{HHA}	Fe _R	Fe _{SUM}	Fe _T	Fe _{H202}	Mn _{WA}	Mn _{HA}	Mn _{HHA}	Mn _R	Mn _{SUM}	Mn _T	Mn _{H202}	ID
	cm	µgg ⁻¹	µgg ⁻¹	µgg ⁻¹	µgg ⁻¹	µgg ⁻¹	µgg ⁻¹	µgg ⁻¹	µgg ⁻¹							
1	0	9250	1541	4110	29049	43950	62900	4900	125	21.0	51	283	480	694	222	59101
	1	9870	1566	4420	18050	33906	67900	2770	88	27.1	50	193	358	847	217	59102
	2	5360	627	3480	15274	24741	50000	820	63	12.1	40	140	255	594	147	59103
	3	2480	326	2990	10869	16665	50100	60	28	5.2	34	62	129	603	56	59104
	4	1000	167	2360	11079	14606	39900	420	20	3.0	43	81	147	524	65	59105
	5	1220	264	2550	18443	22477	41600	2120	23	6.5	50	147	226	503	77	59106
	6	1260	468	3280	26777	31785	44900	6540	26	10.6	64	306	406	543	79	59107
	7	900	424	2580	24623	28527	40000	2940	14	4.7	55	236	310	454	56	59108
	8	930	386	2740	24675	28731	38400	2200	14	4.0	61	263	342	454	51	59109
	9	1370	542	3620	25705	31237	42800	5510	21	4.8	63	272	361	412	63	59110
	10	1550	465	4140	25744	31899	46300	5590	19	4.6	61	245	330	506	63	59111
	11	1320	629	4370	25792	32111	45700	3190	18	3.9	56	225	303	505	47	59112
	12	1920	595	4420	41645	48580	50200	7680	20	5.7	62	380	468	534	76	59113
	13	1990	524	4530	39376	46420	48200	10340	21	4.9	70	399	495	535	87	59114
	14	1450	628	4770	36872	43720	44200	5610	19	5.0	66	375	465	506	80	59115
	15	2390	570	4380	34017	41357	47000	9080	19	5.4	68	379	471	554	99	59116
	16	2050	941	4140	21408	28539	45300	9790	19	9.0	64	261	353	573	101	59117
	17	1260	795	4180	29455	35690	48000	8500	23	4.2	61	351	439	590	87	59118
	18	1420	872	4660	27863	34815	47000	8960	17	4.1	66	329	417	568	107	59119
	19	1480	560	3830	28499	34369	47300	11690	34	7.4	66	321	429	666	126	59120
	20	890	821	3700	31120	36531	27000	10330	26	5.7	63	352	447	327	135	59121
	21	1190	564	3580	34758	40092	46800	13340	42	11.4	70	369	492	631	167	59122
	22	960	304	3440	39514	44218	43500	14630	20	5.9	68	443	537	566	148	59123
	23	460	518	3340	23838	28156	45700	12610	25	6.1	65	317	413	625	136	59124
	24	580	297	3690	25453	30020	43700	14430	19	5.9	71	351	447	578	174	59125
	25	380	503	3750	25824	30457	44800	11480	20	7.0	68	353	448	582	155	59126
	26	400	486	3000	22478	26364	44500	10300	22	5.6	62	304	393	568	130	59127
	27	410	445	3170	38210	42235	45900	11010	23	5.3	64	469	562	585	135	59128
	28	420	414	3090	30451	34375	45300	13600	27	6.5	69	377	479	604	154	59129
	29	400	518	3550	23668	28136	48000	13080	31	5.3	69	314	420	627	156	59130
	40	270	382	3220	25305	29177	44500	10120	23	7.6	69	385	485	661	190	59131
	50	350	326	3720	47590	51986	41400	12430	21	9.3	78	633	741	603	189	59132
	60	340	360	3150	47996	51846	43600	9630	22	8.1	66	548	644	634	169	59133
	70	530	257	3330	32138	36255	44700	11660	19	8.2	77	345	449	589	147	59134
3	0	2220	397	2950	41678	47245	50600	6470	8	3.9	75	546	633	680	121	59135
	1	2080	324	2760	41087	46251	51000	6690	9	3.7	74	538	625	709	130	59136
	2	2310	410	3220	36009	41949	50700	7610	17	3.7	74	497	592	696	158	59137
	3	2450	372	3170	52284	58276	49600	7690	9	3.6	74	693	779	673	168	59138
	4	2400	342	3020	52702	58464	48500	8860	10	3.1	72	741	826	670	159	59139
	5	2390	384	3010	50419	56203	45900	11120	11	3.5	71	666	751	657	172	59140
	6	2160	378	2400	52998	57936	45000	13860	9	3.0	66	701	779	599	171	59141
	7	2010	300	3060	27961	33331	41900	14920	10	2.3	61	425	498	591	171	59142
	8	1790	359	3120	27530	32799	42700	18250	14	2.6	63	404	483	592	160	59143
	9	1570	254	2630	27516	31970	39600	19190	10	2.1	59	404	476	546	140	59144
	10	1500	319	2690	22188	26697	41700	17550	7	2.3	61	319	389	574	141	59145
	11	1430	286	3080	22520	27316	43500	19800	7	2.5	63	354	427	586	149	59146
	12	1120	243	3110	29018	33491	40200	21350	7	2.1	62	398	469	568	153	59147
	13	930	232	3040	25730	29932	39800	19370	7	2.2	60	365	434	586	163	59148
	14	1150	340	3400	22196	27086	41800	17040	8	3.1	63	360	434	597	159	59149
	15	600	224	3220	19381	23425	38600	16050	7	2.7	60	338	408	580	145	59150
	16	500	219	3050	37941	41710	35100	16560	8	3.0	64	532	607	482	135	59151
	17	480	199	3190	36671	40540	36300	15130	8	3.1	65	477	553	489	128	59152
	18	390	192	3080	29525	33187	36800	13780	9	3.6	64	414	490	501	101	59153

Core Depth		Fe _{WA}	Fe _{HA}	Fe _{HHA}	Fe _R	Fe _{SUM}	Fe _T	Fe _{H202}	Mn _{WA}	Mn _{HA}	Mn _{HHA}	Mn _R	Mn _{SUM}	Mn _T	Mn _{H202}	ID
	cm	µgg ⁻¹	µgg ⁻¹	µgg ⁻¹	µgg ⁻¹	µgg ⁻¹	µgg ⁻¹	µgg ⁻¹	µgg ⁻¹							
3	19	430	194	2940	18788	22352	37900	13640	9	3.4	64	293	369	521	90	59154
	20	390	184	2720	35238	38532	36400	12200	8	3.8	64	442	518	494	91	59155
	25	450	137	2730	37158	40475	32300	12540	73	2.5	58	431	564	460	81	59156
	30	240	138	2790	45181	48349	32600	12650	6	2.7	61	434	504	452	76	59157
	35	320	176	2550	37464	40510	36200	14770	7	2.7	63	381	454	476	105	59158
	40	200	156	2650	33005	36011	33100	13360	7	2.8	63	353	425	460	90	59159
	45	280	150	2340	40199	42969	37100	15660	5	2.6	60	407	475	470	115	59160
	50	300	109	2310	41120	43839	32100	11150	5	2.7	54	457	519	454	87	59161
	55	170	235	2720	37545	40670	34200	13800	4	2.6	55	395	456	457	93	59162
	60	180	118	2750	43163	46211	34000	14910	4	2.4	55	447	508	463	124	59163
	65	170	125	2790	42237	45322	37100	15600	4	2.8	55	473	535	509	121	59164
7	0	1710	364	3150	44210	49434	42200	3890	10	2.8	64	563	640	605	60	59165
	1	2380	336	2940	52110	57766	49000	6180	11	3.5	65	657	737	698	82	59166
	2	2510	389	2820	29516	35235	49000	5830	12	4.0	66	441	523	695	89	59167
	3	2320	317	2970	58229	63836	49500	4490	12	3.7	67	696	778	738	94	59168
	4	2560	295	3140	53872	59867	51100	5500	13	3.7	70	629	716	730	108	59169
	5	2870	260	3380	49755	56265	51800	7400	13	3.3	74	620	711	733	149	59170
	6	2370	277	3610	62160	68417	52400	6920	12	2.8	75	755	845	761	155	59171
	7	2620	374	3400	67243	73637	51700	8090	12	3.6	70	752	838	762	186	59172
	8	2630	587	3160	60219	66596	53500	11770	7	13.1	59	661	740	765	222	59173
	9	2740	601	3090	51527	57958	49200	14480	6	11.9	56	639	713	677	239	59174
	10	2390	657	2900	53438	59385	48300	15510	6	10.2	50	737	803	715	239	59175
	11	2600	673	2860	45518	51651	50900	13880	7	11.1	50	646	715	728	223	59176
	12	3670	631	2760	53869	60930	49400	14310	7	9.7	48	662	726	680	213	59177
	13	2860	601	3000	56005	62466	51900	13040	7	10.9	55	681	754	741	181	59178
8	0	6250	2086	3330	34242	45908	58300	5410	21	12.6	57	522	612	689	76	59179
	1	8120	2360	3440	59097	73017	58400	7500	19	14.6	61	639	733	628	89	59180
	2	5890	2480	3320	46530	58220	60600	7550	15	14.5	56	563	648	658	78	59181
	3	5980	2630	3500	57438	69548	60200	7500	16	13.3	54	635	718	626	76	59182
	4	6590	2360	3360	53273	65583	57800	7720	16	14.5	57	630	717	636	80	59183
9	0	14680	3990	7510	46910	73090	86600	2770	213	95.3	69	448	825	1172	521	59184
	1	12500	3470	5290	52572	73832	70800	4240	104	40.0	48	519	711	806	273	59185
	2	11720	4640	4280	46737	67377	71900	5110	57	30.4	50	501	639	755	170	59186
	3	14280	2700	3360	39503	59843	66500	3860	62	19.2	49	415	545	677	131	59187
	4	12390	4750	4590	45577	67307	69400	5200	69	23.6	48	482	623	686	158	59188
	5	10420	4450	4390	46308	65568	51800	4840	78	28.2	47	503	656	559	203	59189
	6	10470	2670	6370	36577	56087	80500	3760	100	33.0	135	312	580	923	275	59190
10	0	3100	744	2500	47041	53385	41900	9860	5	8.8	39	636	689	532	72	59195
	1	2740	596	2200	38070	43606	49200	11480	6	7.3	36	554	604	553	69	59196
	2	2260	579	2410	46672	51921	42600	11150	7	8.3	35	628	678	528	74	59197
	3	1840	566	2350	55955	60711	42000	15310	6	8.1	37	688	739	515	77	59198
	4	1620	532	2500	44451	49103	47200	14210	6	7.9	38	598	650	542	76	59199
	5	1290	422	2280	48780	52772	48100	11470	5	6.3	37	714	762	660	61	59200
	6	1340	404	2220	45403	49367	56000	14940	5	6.7	41	599	652	551	68	59201
12	0	2040	456	1960	45238	49694	44000	6650	7	6.7	40	653	706	545	52	59202
	1	1910	324	1760	37338	41332	43300	7080	7	6.1	35	598	646	555	55	59203
	2	2080	354	1760	44500	48694	44900	7190	7	6.2	35	662	710	563	60	59204
	3	2840	612	2060	29079	34591	51700	13660	7	8.7	43	489	548	630	83	59205
	4	3730	757	2680	31130	38297	50500	15610	6	10.0	50	501	567	627	94	59206

Core Depth cm	Fe _{WA} μgg^{-1}	Fe _{HA} μgg^{-1}	Fe _{HHA} μgg^{-1}	Fe _R μgg^{-1}	Fe _{SUM} μgg^{-1}	Fe _T μgg^{-1}	Fe _{H202} μgg^{-1}	Mn _{WA} μgg^{-1}	Mn _{HA} μgg^{-1}	Mn _{HHA} μgg^{-1}	Mn _R μgg^{-1}	Mn _{SUM} μgg^{-1}	Mn _T μgg^{-1}	Mn _{H202} μgg^{-1}	ID	
12	5	4310	1084	2780	51334	59508	56500	19260	8	10.8	48	469	535	609	112	59207
	6	4600	1325	2910	44979	53814	49300	20740	9	11.1	49	561	630	578	107	59208
	7	4470	956	2940	45372	53738	49300	19100	8	9.5	51	461	529	603	102	59209
	8	4460	947	2820	42638	50865	44200	16790	9	8.8	47	467	531	524	95	59210
	9	4580	1350	2840	35572	44342	43300	17560	8	10.4	49	451	518	472	95	59211
	10	4250	1007	2920	53189	61366	49600	18090	8	10.4	48	604	671	561	92	59212
16	0	3580	713	3250	31169	38712	48400	9540	16	15.1	60	439	530	639	94	59226
	1	2920	1030	3380	32039	39369	45500	9190	14	18.0	61	431	524	585	87	59227
	2	3080	670	3250	44682	51682	44900	9870	14	14.0	59	616	703	577	90	59228
	3	3140	748	2910	46752	53550	45000	9740	13	15.1	58	438	524	581	93	59229
	4	2980	758	2200	49329	55267	46900	11720	15	16.7	62	429	523	598	103	59230
	5	2370	657	2880	46129	52036	49700	11910	14	16.4	63	579	672	629	114	59231
	6	2550	636	3190	50803	57179	49400	12330	15	15.3	67	604	701	616	119	59232
	7	2600	709	2880	51847	58036	48800	13330	15	16.2	61	580	672	596	121	59233
	8	1830	641	3000	61600	67071	51700	12800	14	17.0	61	602	694	625	110	59234
	9	1720	512	2990	55831	61053	132200	13320	14	15.7	64	557	650	758	118	59235
	10	1480	418	2840	60098	64836	50200	13650	13	14.6	60	533	621	619	121	59236
	11	1660	565	3000	51010	56235	46600	13390	16	16.2	62	556	650	595	123	59237
	12	1760	926	2750	52777	58213	45800	12290	19	22.4	59	593	693	593	131	59238
	13	1840	727	3090	48738	54395	46700	12060	21	21.9	64	582	689	620	127	59239
	14	2230	602	2750	45691	51273	41800	11460	21	16.7	60	545	643	576	121	59240
	15	2340	875	3100	28086	34401	45400	11670	21	20.6	63	572	677	616	131	59241
	20	2840	923	2940	27959	34662	41500	9950	21	18.5	60	366	466	520	123	59242
	25	2710	699	3020	42281	48710	45500	9810	19	16.3	61	409	506	519	122	59243
	30	2310	834	2950	54912	61006	44700	7480	20	20.4	61	672	773	602	108	59244
	35	1740	745	2960	31965	37410	37600	8140	19	21.4	62	429	532	566	101	59245
	40	970	692	3400	36251	41313	37500	6860	20	20.0	64	465	569	568	97	59246
	45	490	648	3270	37526	41934	37400	7220	19	19.3	61	502	601	579	103	59247
18	0	3040	792	3200	26073	33105	41300	9310	17	16.0	57	446	536	615	106	59213
	1	3920	1037	3210	33264	41431	46000	8500	22	15.9	57	481	576	613	114	59214
	2	3670	1178	3260	31892	40000	47300	7670	22	17.1	61	444	544	649	126	59215
	3	4020	1189	3300	47338	55847	46200	7290	25	17.1	62	578	682	625	132	59216
	4	3810	1175	3260	31003	39248	44300	8070	23	17.5	61	435	536	591	133	59217
	5	3940	1306	3320	37714	46280	45500	7370	22	17.2	60	424	523	620	128	59218
	6	5320	1099	3200	49488	59107	47600	8860	18	16.3	61	589	684	626	107	59219
	7	4070	1218	3360	51216	59864	49200	9260	17	16.2	63	548	644	605	107	59220
	8	3310	972	3100	44872	52254	47700	9610	16	16.3	59	528	619	591	100	59221
	9	2440	605	3150	28456	34651	47900	9430	16	16.1	59	415	506	646	104	59222
	10	3970	847	3390	49472	57679	47500	7830	20	17.0	62	568	667	582	112	59223
	11	3200	794	3340	36319	43653	48200	9720	18	16.0	59	559	652	589	108	59224
	12	3030	772	3200	51780	58782	48400	11750	16	15.4	59	615	706	586	106	59225
19	0	450	562	2810	40388	44210	47200	1130	11	3.1	49	415	478	595	65	59248
	1	1340	353	2500	33126	37319	41300	19890	9	3.3	53	387	452	472	95	59249
	2	1210	225	2370	52244	56049	47200	17940	11	3.5	53	526	593	391	93	59250
	3	1070	208	2020	36550	39848	38700	20530	9	3.2	52	395	459	382	126	59251
	4	1340	295	2400	30852	34887	43600	14840	10	3.7	46	415	475	280	91	59252
	5	1010	244	2290	32837	36381	42600	18370	10	4.0	52	399	465	449	120	59253
	6	930	267	2180	33220	36597	41600	21370	10	3.9	54	411	479	380	118	59254
	7	780	205	2030	22221	25236	46600	16720	9	3.2	52	361	425	401	119	59255
	8	810	227	2360	25842	29239	42600	15710	9	3.7	53	421	487	463	115	59256
	9	800	253	2420	23902	27375	41600	20680	10	4.1	54	398	466	372	124	59257

Core Depth cm	Fe _{WA} μgg^{-1}	Fe _{HHA} μgg^{-1}	Fe _R μgg^{-1}	Fe _{SUM} μgg^{-1}	Fe _T μgg^{-1}	Fe _{H2O2} μgg^{-1}	Mn _{WA} μgg^{-1}	Mn _{HHA} μgg^{-1}	Mn _R μgg^{-1}	Mn _{SUM} μgg^{-1}	Mn _T μgg^{-1}	Mn _{H2O2} μgg^{-1}	ID		
19	10	420	187	2620	26344	29571	42500	20210	10	4.1	56	417	487	434	147 59258
	11	570	174	2270	26150	29164	41000	16030	10	3.8	54	439	507	367	117 59259
	12	380	153	2390	39959	42882	41200	16130	10	3.9	54	555	623	390	112 59260
	13	220	163	2050	26244	28677	50700	19690	8	4.6	58	403	474	395	116 59261
	14	220	146	2250	29360	31976	44000	14450	11	4.4	61	424	501	422	117 59262
	15	250	178	2390	22415	25233	40200	14160	9	4.8	59	419	492	439	108 59263
	20	220	153	2700	27050	30123	38700	15240	10	4.4	60	392	467	256	117 59264
	25	540	188	2410	33968	37106	55400	18680	8	3.3	57	415	484	335	123 59265
	30	1340	202	2320	31630	35492	51800	22020	7	2.4	48	445	502	330	97 59266
	35	1170	205	2230	32562	36167	52400	24800	8	2.8	48	409	467	377	111 59267
	40	240	132	2490	26730	29592	40400	22790	8	3.4	59	380	450	229	137 59268
20	0	4820	639	2830	26939	35228	54000	6920	25	5.6	60	433	523	509	97 46701
	1	3710	637	2640	25258	32245	54900	7760	21	5.5	69	407	502	553	93 46702
	2	3630	621	2930	23484	30665	48100	7650	23	5.6	64	415	507	525	92 46703
	3	4020	678	1240	25200	31138	53100	5110	27	6.5	37	444	515	549	97 46704
	4	3810	574	1460	26664	32508	52400	6530	25	4.5	36	449	514	568	94 46705
	5	3490	514	1390	27192	32586	50000	4040	30	5.6	39	442	516	581	102 46706
	6	3550	477	1450	25199	30676	49700	4670	30	4.7	39	395	469	601	99 46707
	7	3610	507	1300	23423	28840	50600	5320	29	5.1	37	419	490	527	98 46708
	8	3300	451	1190	25288	30229	48700	5040	30	5.2	35	446	516	503	103 46709
	9	3810	450	1450	29285	34995	49100	5670	34	6.6	42	449	532	534	110 46710
	10	3480	662	1590	27830	33562	49100	3480	37	10.8	43	462	553	514	115 46711
23	0	3260	253	2720	20736	26969	40100	100	47	6.1	69	401	523	548	64 46712
	1	4130	360	2730	20995	28215	46100	290	43	6.3	68	410	528	561	103 46713
	2	3810	353	2670	21682	28515	45900	210	43	6.3	69	389	507	556	105 46714
	3	3720	330	2720	26770	33540	46900	270	45	6.5	70	478	599	502	111 46715
	4	3380	284	2670	35346	41680	42800	130	47	5.9	69	553	675	534	108 46716
	5	3250	285	2870	22163	28568	43700	150	50	6.1	72	478	606	603	99 46717
	6	3020	281	2530	23846	29677	37200	50	51	7.1	72	490	620	565	93 46718
	7	4140	363	2730	23301	30534	38900	340	50	6.8	68	477	602	505	126 46719
	8	4170	347	2680	24063	31260	44500	310	50	6.9	66	508	630	617	133 46720
	9	4010	390	2670	24158	31228	41100	240	52	6.7	68	518	645	613	137 46721
24	0	5130	641	2600	40452	48823	53900	13770	14	3.0	49	483	549	401	89 46724
	5	3960	472	2490	36851	43773	55100	22530	9	2.7	49	506	567	449	118 46725
	10	2340	431	2560	32186	37517	53800	23820	10	2.5	50	475	538	450	131 46726
	15	1360	338	2520	33168	37386	51300	29510	10	3.4	51	506	570	370	150 46727
	20	800	250	2530	29342	32922	48000	21850	9	3.8	54	450	517	541	124 46728
	25	590	254	2890	50428	54162	39000	26490	10	3.7	60	627	701	334	122 46729
	30	500	271	2840	46984	50595	46800	23000	10	4.0	63	426	503	423	105 46730
	35	650	237	2980	31988	35855	46100	17840	10	3.7	62	454	529	422	92 46731
	40	510	218	2960	28509	32197	46500	19840	10	3.5	60	421	495	392	106 46732
	45	500	256	2900	30598	34254	44600	19800	11	4.7	60	428	504	365	104 46733
	50	450	222	2900	30528	34100	45900	18570	12	4.1	60	419	495	389	99 46734
	55	240	278	2980	28361	31859	44500	16680	8	3.1	60	392	463	388	94 46735
	60	210	272	2990	27878	31350	44900	13580	8	3.2	58	387	456	386	80 46736
	65	430	209	2910	28199	31748	44100	13940	10	3.6	58	408	480	383	77 46737
	70	450	229	2960	30293	33932	44900	23340	9	3.5	55	407	475	359	103 46738
	75	270	268	3070	29203	32811	44300	25300	8	2.9	56	396	463	360	99 46739
	80	260	308	2700	25785	29053	43100	19570	7	2.8	53	354	417	357	89 46740

Core	Depth	Ca _{WA}	Ca _{HA}	Ca _{HHA}	Ca _R	Ca _{SUM}	Ca _T	Cu _{WA}	Cu _{HA}	Cu _{HHA}	Cu _R	Cu _{SUM}	Cu _T	Cu _{H2O2}	ID
		cm	µgg ⁻¹												
1	0	2740	444	903	1566	5653	7000	0.6	0.3	2.2	70	73	81	60	59101
	1	2320	377	875	1408	4980	8000	0	0	1.9	69	71	60	54	59102
	2	2250	390	709	1421	4770	4600	0	0	1.8	54	56	74	32	59103
	3	1200	242	885	1022	3349	5800	0	0	1.2	22	23	81	17	59104
	4	1140	145	538	745	2568	5700	0.3	0	0.9	19	20	82	23	59105
	5	1270	248	760	1278	3556	6600	0.2	0	0.7	49	50	72	36	59106
	6	1860	321	705	1550	4436	8300	0.7	0	0.4	58	59	70	47	59107
	7	1320	230	569	1214	3333	8200	1.6	0	0.5	45	47	58	32	59108
	8	1390	228	925	1575	4118	7000	1.6	0	0.4	52	54	53	33	59109
	9	1520	239	713	1537	4009	6800	1.8	0.4	0.8	54	57	58	46	59110
	10	1510	240	827	1378	3955	5400	1.1	0.1	0.4	56	58	66	44	59111
	11	1290	200	887	1128	3505	7200	3.4	0.2	0.5	40	44	55	34	59112
	12	1830	269	998	1382	4479	7100	0.6	0.4	0.4	55	57	67	49	59113
	13	1980	253	882	1455	4570	8100	0.6	0	0.4	56	57	58	46	59114
	14	1730	250	639	1927	4546	7800	3.0	0.4	0.2	48	51	60	41	59115
	15	2060	264	1039	1937	5300	5500	0.3	0.1	0.3	49	50	55	42	59116
	16	1740	397	1025	1360	4522	7700	0.3	0.3	0.8	43	44	53	40	59117
	17	1350	318	989	1507	4164	8700	2.6	0.2	0.4	37	40	50	34	59118
	18	1460	259	688	1569	3976	6200	2.5	0.3	0.3	43	46	47	32	59119
	19	1460	321	807	1636	4224	5300	0.6	0.3	0.2	42	43	49	32	59120
	20	1520	277	912	1867	4576	4300	1.9	0.2	0.2	33	35	37	29	59121
	21	1880	409	887	1708	4884	7900	0.5	0.1	0.1	38	39	42	28	59122
	22	1920	447	1085	1718	5170	7700	0.2	0.2	0	34	34	34	20	59123
	23	1620	453	730	1364	4167	9400	0.7	0.2	0.2	26	27	27	18	59124
	24	2050	586	849	1628	5113	7200	0.2	0.2	0	27	28	29	14	59125
	25	1830	610	877	1614	4931	5900	0.5	0.1	0	24	25	26	15	59126
	26	1760	500	635	1485	4380	8000	0.7	0.2	0.1	20	21	22	14	59127
	27	1820	467	997	1303	4587	7900	0.7	0.1	0.3	21	22	21	14	59128
	28	1950	524	866	1664	5004	8800	0.4	0	0.1	25	25	26	16	59129
	29	1880	576	928	1379	4763	8200	0.7	0	0.2	19	20	25	12	59130
	40	2660	793	910	1880	6243	9700	0.6	0.1	0.2	20	20	21	14	59131
	50	3560	876	925	1664	7025	6900	0.2	0	0.1	24	24	24	12	59132
	60	3220	827	988	1691	6726	7800	0.4	0.1	0	21	21	23	13	59133
	70	3260	1008	1024	1457	6749	9400	0.3	0	0.1	25	25	26	13	59134
3	0	980	200	624	1911	3715	7200	0.2	0.1	0.6	67	68	70	58	59135
	1	870	178	414	3349	4811	7400	0.4	0.2	0.5	63	64	68	54	59136
	2	1230	202	840	1748	4020	4900	0.2	0.2	0.3	64	65	71	54	59137
	3	1220	195	660	1625	3700	3800	0.3	0.1	0.3	65	66	66	55	59138
	4	1450	225	489	1748	3912	3800	0.4	0.1	0.3	64	65	69	56	59139
	5	1420	217	516	1766	3919	6200	0.2	0	0.3	60	61	65	55	59140
	6	1660	270	494	1489	3913	4800	0.2	0	0.2	60	61	66	53	59141
	7	2090	307	603	1381	4381	7800	0.2	0	0.1	59	59	65	49	59142
	8	2170	346	678	1208	4402	7900	0.3	0	0.1	56	56	60	48	59143
	9	2600	323	839	1476	5238	7000	0.1	0	0.4	47	47	52	34	59144
	10	2060	324	875	1118	4377	7900	0.1	0.2	0.2	43	44	49	36	59145
	11	2100	298	714	1163	4275	7400	0.2	0.2	0.1	39	40	44	28	59146
	12	2200	297	425	1370	4292	6700	0.2	0.1	0	36	36	41	23	59147
	13	2320	307	431	1363	4421	7100	0.2	0	0	33	33	33	23	59148
	14	2250	348	631	1114	4343	8800	0.2	0	0.1	39	40	40	28	59149
	15	2420	365	873	1846	5504	8300	0.4	0	0.1	32	32	34	25	59150
	16	2440	424	498	1183	4545	4100	0.5	0	0.1	28	28	16	24	59151
	17	2440	366	533	1096	4435	4400	0.3	0	0.2	26	27	15	24	59152
	18	2670	476	657	1692	5495	4800	0.1	0.2	0.2	29	29	20	25	59153

Core Depth cm	Ca _{WA} μgg^{-1}	Ca _{HA} μgg^{-1}	Ca _{HHA} μgg^{-1}	Ca _R μgg^{-1}	Ca _{SUM} μgg^{-1}	Ca _T μgg^{-1}	Cu _{WA} μgg^{-1}	Cu _{HA} μgg^{-1}	Cu _{HHA} μgg^{-1}	Cu _R μgg^{-1}	Cu _{SUM} μgg^{-1}	Cu _T μgg^{-1}	Cu _{H2O2} μgg^{-1}	ID	
3	19	2820	450	801	1253	5324	4700	0.4	0.1	0.2	28	29	19	24	59154
	20	2560	440	706	1339	5045	4600	0.1	0.2	0.2	29	30	16	24	59155
	25	4730	1532	1093	1480	8835	4400	0.8	0.1	0	26	27	27	23	59156
	30	9260	1134	870	1161	12425	5200	0.2	0	0.1	28	28	21	20	59157
	35	3640	472	675	840	5627	6700	0.2	0	0	26	26	21	21	59158
	40	2830	472	678	950	4930	4900	0.2	0	0	29	30	20	22	59159
	45	3810	531	722	751	5814	5400	0.2	0	0.1	28	28	22	17	59160
	50	22260	1860	1232	880	26232	18700	0.6	0.1	0.6	26	27	25	13	59161
	55	2440	609	689	668	4406	5400	0.1	0	0.3	25	26	17	15	59162
	60	2380	563	633	933	4509	4300	0.1	0	0.2	26	27	25	19	59163
	65	3350	595	750	1026	5721	5500	0.1	0	0.2	27	27	21	16	59164
7	0	1250	208	336	1744	3538	5600	1.1	0.1	1.5	85	87	84	68	59165
	1	1030	163	459	1440	3092	4800	0.3	0.1	1.5	71	73	75	60	59166
	2	940	178	402	1549	3069	6300	0.2	0	1.4	72	74	76	61	59167
	3	950	163	629	1179	2921	6700	0.3	0	1.5	66	68	68	54	59168
	4	920	158	585	1274	2937	4300	0.1	0	1.2	66	67	65	53	59169
	5	1270	188	481	1264	3203	4300	0.2	0	0.7	61	62	67	51	59170
	6	1090	185	693	1110	3078	4300	0.2	0	0.4	62	63	62	49	59171
	7	1190	238	423	893	2744	4000	0.2	0	0.3	62	62	62	48	59172
	8	1380	316	3931	874	6501	4600	0	0	0	66	68	68	55	59173
	9	1570	378	267	1039	3254	6400	0	0	0.3	66	66	74	60	59174
	10	1460	501	561	1454	3976	7500	0.1	0.3	0.1	66	66	61	58	59175
	11	1730	466	401	1452	4049	4400	0.1	0	0.3	66	66	58	67	59176
	12	3020	535	380	932	4867	5700	0.1	0	0.2	59	60	45	59	59177
	13	2000	459	612	1132	4203	5200	0	0	0.1	65	65	65	58	59178
8	0	2350	453	582	1405	4790	6900	0.3	0	3.4	106	110	126	93	59179
	1	3110	575	536	1196	5417	4700	0.4	0	3.6	136	140	143	113	59180
	2	1510	539	546	1354	3949	6900	0.4	0	3.5	135	139	144	120	59181
	3	1470	452	841	1198	3961	5400	0.4	0	3.3	134	137	131	104	59182
	4	1410	454	534	1872	4270	4700	0.5	0	3.8	140	145	140	105	59183
9	0	4130	720	1051	1452	7353	9600	0.2	0	2.3	106	109	102	56	59184
	1	4450	924	809	1326	7509	7200	0.3	0	2.0	108	110	111	70	59185
	2	2890	755	668	1863	6176	8700	0.3	0	1.8	110	112	114	74	59186
	3	20490	1094	552	1621	23757	6200	0.9	0	2.0	94	96	129	65	59187
	4	3560	792	767	1922	7041	6000	0.3	0.1	2.4	111	113	121	91	59188
	5	2700	860	869	1784	6213	115300	0.4	0.1	2.3	106	109	89	88	59189
	6	2110	516	687	1339	4652	8000	0.3	0	2.4	76	79	110	78	59190
10	0	1400	452	274	2102	4228	4200	0.4	0.1	1.5	161	163	179	132	59195
	1	1240	439	869	2250	4798	4800	0.4	0.2	1.8	143	146	148	142	59196
	2	1540	262	518	1352	3672	7400	0.8	0.5	1.1	131	133	152	142	59197
	3	1540	299	644	1871	4354	5100	0.8	0.5	1.5	148	151	152	131	59198
	4	1580	292	643	1796	4311	6100	0.7	0.5	1.5	144	146	158	125	59199
	5	1160	219	603	2082	4064	5800	1.1	1.1	2.1	104	108	127	113	59200
	6	1230	258	603	1873	3964	7800	0.6	0.9	1.2	115	118	119	140	59201
12	0	910	191	548	2013	3662	5900	0.6	0.6	2.7	163	167	185	158	59202
	1	960	199	470	1867	3496	7900	0.6	0.5	1.8	168	171	158	151	59203
	2	1050	198	431	1958	3637	6900	0.6	0.5	1.9	172	175	181	140	59204
	3	1030	256	593	2052	3931	5700	0.6	0.8	3.2	181	186	179	163	59205
	4	1200	309	697	1744	3950	4300	0.4	0.6	2.5	206	209	200	168	59206

Core Depth	cm	Ca _{WA}	Ca _{HA}	Ca _{HHA}	Ca _R	Ca _{SUM}	Ca _T	Cu _{WA}	Cu _{HA}	Cu _{HHA}	Cu _R	Cu _{SUM}	Cu _T	Cu _{H2O2}	ID
		μgg ⁻¹													
12	5	1400	348	669	1670	4087	5100	0.4	0.2	2.1	214	216	199	205	59207
	6	1600	355	650	1914	4519	5300	0.4	0.1	2.3	220	223	208	228	59208
	7	1270	259	488	1850	3867	5400	0.6	0.1	2.8	226	230	211	187	59209
	8	1300	245	705	2052	4302	3900	0.4	0.1	2.5	220	223	202	202	59210
	9	1470	326	531	2010	4337	4100	0.6	0.1	2.0	192	195	188	171	59211
	10	1340	299	665	1947	4251	4000	0.6	0	2.2	227	229	169	181	59212
16	0	2920	492	618	2019	6049	6900	0.3	0.3	1.2	102	104	97	83	59226
	1	1620	616	848	2095	5179	6200	0.1	0.6	1.3	110	112	95	80	59227
	2	1940	447	861	2613	5861	7200	0.2	0.4	1.2	102	104	99	82	59228
	3	1770	468	607	1894	4739	6100	0.2	0.5	1.5	101	103	110	84	59229
	4	1930	491	633	1827	4881	5100	0.2	0.7	1.8	99	102	95	92	59230
	5	1850	469	584	2029	4932	6200	0.2	0.7	1.7	103	106	106	94	59231
	6	1870	426	765	1987	5048	5300	0.5	0.7	2.3	105	109	108	103	59232
	7	1840	459	732	2341	5372	5000	0.4	0.7	1.8	113	116	116	107	59233
	8	1680	528	734	2275	5217	4800	0.6	1.8	1.9	125	129	113	108	59234
	9	1650	418	1035	2029	5132	12600	0.4	1.2	1.5	103	106	97	96	59235
	10	1600	426	1057	1894	4977	4900	0.4	1.1	1.4	104	107	96	93	59236
	11	2020	516	779	2203	5518	4800	0.4	0.3	0.5	84	85	85	70	59237
	12	3600	1487	1059	2492	8638	7300	0.3	0.2	0.3	73	74	73	59	59238
	13	3170	979	703	2275	7127	7500	0.3	0.1	0.4	67	67	67	53	59239
	14	3030	554	676	2254	6514	6100	0.4	0	0.4	64	65	67	57	59240
	15	2890	862	1087	2215	7054	6600	0.2	0	0.6	78	79	74	61	59241
	20	3040	776	855	2117	6788	4900	0.4	0	0.7	78	80	49	63	59242
	25	3230	686	834	2141	6891	4400	0.2	0	0.4	70	71	75	62	59243
	30	8060	1953	917	2746	13676	9800	0.4	0	0.3	49	50	51	45	59244
	35	2680	1242	622	2384	6928	5800	0.2	0	0.3	41	41	46	31	59245
	40	3780	1219	861	2485	8345	8700	0.4	0	0.3	37	38	40	25	59246
	45	4140	1431	681	2038	8290	7300	0.7	0	0.3	29	30	30	21	59247
18	0	2330	420	451	2180	5381	6900	0.3	0.2	1.5	88	90	92	69	59213
	1	3550	501	496	2160	6707	7400	0.4	0.1	1.4	90	92	84	67	59214
	2	3880	641	724	2203	7448	6500	0.1	0.3	1.5	93	94	85	72	59215
	3	4820	727	491	1994	8032	7200	0.2	0.2	1.5	92	94	91	74	59216
	4	4390	657	563	2078	7688	6900	0.2	0.1	1.4	94	95	96	73	59217
	5	3930	647	728	2008	7313	6300	0.2	0.1	1.5	98	100	86	74	59218
	6	3900	548	435	2198	7081	5600	0	0.1	1.8	97	99	97	80	59219
	7	2270	492	517	2010	5289	4600	0	0.2	2.1	101	103	100	83	59220
	8	2190	497	499	1921	5107	5500	0.4	0.4	1.8	102	105	99	85	59221
	9	2110	457	581	2114	5262	6000	0.3	0.7	1.4	97	99	96	85	59222
	10	4490	728	551	2390	8159	5700	0.2	0.3	1.3	100	102	101	82	59223
	11	3670	594	473	2575	7312	6200	0.2	0.2	1.6	104	106	106	87	59224
	12	2490	496	577	2071	5634	5700	0.3	0.5	1.5	106	108	112	91	59225
19	0	2560	428	626	1703	5317	5500	4.1	0.5	0.3	493	498	66	49	59248
	1	4530	464	558	1674	7226	5100	0.4	0	0.2	93	93	99	211	59249
	2	2370	423	461	1774	5028	3000	0.2	0	0.1	71	71	73	65	59250
	3	7610	810	1098	2322	11840	4200	0.3	0	0.1	65	65	71	63	59251
	4	1760	418	661	2797	5636	3900	0.3	0	0.2	81	82	69	73	59252
	5	2210	464	596	1668	4938	5000	0.2	0	0	76	76	46	65	59253
	6	1950	466	669	2322	5407	5200	0.3	0	0	63	64	47	40	59254
	7	1960	422	888	1523	4793	4900	0.3	0	0.1	54	54	53	56	59255
	8	2520	380	493	1947	5340	11100	0.2	0	1.8	62	64	34	36	59256
	9	2830	425	560	1764	5579	5200	0.1	0.1	0.3	53	53	50	47	59257

Core Depth cm		ID												
		Ca _{WA} μgg^{-1}	Ca _{HA} μgg^{-1}	Ca _{HHA} μgg^{-1}	Ca _R μgg^{-1}	Ca _{SUM} μgg^{-1}	Ca _T μgg^{-1}	Cu _{WA} μgg^{-1}	Cu _{HA} μgg^{-1}	Cu _{HHA} μgg^{-1}	Cu _R μgg^{-1}	Cu _{SUM} μgg^{-1}	Cu _T μgg^{-1}	
19	10	2120	457	840	1607	5024	5700	0	0.1	0.2	55	56	9	15 59258
	11	2470	543	882	1816	5711	14500	0	0	0.1	48	48	39	29 59259
	12	3150	610	868	2215	6843	5800	0	0	0.1	263	263	26	18 59260
	13	2860	630	812	1912	6214	4900	0	0	0	17	17	14	20 59261
	14	4850	799	957	1808	8414	5500	0.2	0	0.1	16	17	26	14 59262
	15	4860	746	722	2022	8350	6300	0.1	0	0.1	16	16	9	18 59263
	20	2770	669	954	1768	6161	5100	0.1	0	0.8	16	17	27	16 59264
	25	2080	411	865	1848	5204	5200	0.3	0	0.2	66	67	67	60 59265
	30	1470	208	711	2038	4427	4900	0.7	0.3	1.2	139	141	116	124 59266
	35	1640	241	731	1804	4416	5000	0.4	0.2	0.6	132	133	66	98 59267
	40	1670	432	664	1960	4726	5000	0.2	0	0.2	19	19	25	24 59268
20	0	3500	413	516	2173	6602	6100	0	0.2	0.8	60	61	65	53 46701
	1	2880	420	722	2017	6039	5700	0	0	0.5	55	56	72	52 46702
	2	2830	425	609	1921	5785	5300	0	0	0.4	64	64	70	54 46703
	3	3820	564	337	2071	6792	6300	0	0	0.8	65	66	67	55 46704
	4	3110	442	337	2112	6001	6200	0	0	0.9	60	61	64	51 46705
	5	3950	458	472	2338	7218	7000	0	0	0.7	55	56	61	46 46706
	6	3920	436	326	1932	6614	6000	0	0	0.5	56	57	62	46 46707
	7	3520	461	253	1835	6069	6500	0	0	0.4	56	56	71	48 46708
	8	3730	464	282	2188	6664	6800	0	0	0.7	56	57	71	46 46709
	9	3860	499	419	1912	6690	7700	0.5	0.3	1.3	59	61	63	51 46710
	10	4260	706	434	1962	7362	6000	0.3	0.1	0.7	50	51	54	40 46711
23	0	11170	716	710	2246	14842	13100	0.4	0.1	0.5	41	42	50	1 46712
	1	11600	633	940	1814	14987	11200	0.3	0.1	0.7	46	47	53	6 46713
	2	9560	657	1055	1800	13072	11400	0.3	0.1	0.6	44	45	46	9 46714
	3	9650	645	929	1802	13026	11600	0.4	0	0.6	43	44	50	10 46715
	4	9250	562	821	2150	12783	10300	0.4	0.1	1.0	39	40	48	4 46716
	5	10610	631	1007	2190	14438	11000	0.3	0.2	0.7	40	41	50	1 46717
	6	11100	709	739	1987	14535	11500	0.3	0.2	0.6	35	37	42	1 46718
	7	10890	671	782	2330	14673	8500	0.3	0.2	0.6	37	38	47	2 46719
	8	11650	623	754	2013	15040	14200	0.3	0.1	0.7	40	41	41	19 46720
	9	8500	674	616	2259	12049	13700	0.3	0	0.5	40	41	44	6 46721
24	0	2180	307	485	1766	4738	6400	0.3	0.1	1.4	64	66	104	89 46724
	5	2180	299	642	1800	4921	5900	0.3	0	0.6	103	104	109	81 46725
	10	1930	419	851	1754	4954	5000	0.2	0.1	0.2	115	115	76	55 46726
	15	2380	511	402	1732	5025	4500	0.2	0	0.2	36	37	32	23 46727
	20	3180	548	429	1381	5538	5400	0.4	0.1	0.3	30	31	31	6 46728
	25	2580	568	819	1579	5546	4700	0.1	0	2.8	26	29	27	7 46729
	30	3200	722	701	1600	6223	7300	0.3	0	0.3	25	26	28	11 46730
	35	3780	759	783	1661	6983	6300	0.3	0	0.2	27	28	28	7 46731
	40	3860	792	672	1532	6856	6200	0.4	0	0.3	28	29	29	17 46732
	45	4100	799	980	1505	7384	6400	0.4	0	0.2	27	27	20	12 46733
	50	4740	955	794	1442	7931	6700	0.4	0	0.1	27	28	28	11 46734
	55	2540	685	835	1580	5640	6400	0.4	0	0	24	25	28	18 46735
	60	2740	587	607	1505	5439	6300	0.2	0	0.2	25	25	31	17 46736
	65	8070	1110	1125	1471	11776	6800	0.5	0.2	0.4	24	25	27	13 46737
	70	3280	820	741	1476	6317	6400	0.4	0.2	0.6	27	28	30	19 46738
	75	2700	675	689	1554	5618	6400	0.4	0.2	0.6	24	25	37	17 46739
	80		678	742	1402		6400	0.3	0.1	0.4	23	23	29	18 46740

Core Depth cm	Elemental Concentrations (μgg^{-1})														ID
	Zn _{WA}	Zn _{HA}	Zn _{HHA}	Zn _R	Zn _{SUM}	Zn _T	Zn _{H202}	Ni _{WA}	Ni _{HA}	Ni _{HHA}	Ni _R	Ni _{SUM}	Ni _T	Ni _{H202}	
1	0	25.7	18.0	94.8	72	211	266	177	2.7	1.2	7.6	16	28	41	10.2 59101
	1	23.3	15.1	100.3	73	212	210	157	2.9	0.6	6.3	17	26	30	8.1 59102
2	16.5	11.8	66.2	52	147	228	92	2.0	0.6	5.5	13	21	35	6.9 59103	
3	17.1	10.0	46.3	34	108	235	40	1.4	0	4.6	3	9	34	4.0 59104	
4	22.6	6.7	34.6	28	92	286	109	1.1	0.8	5.6	10	18	39	6.4 59105	
5	18.9	6.5	32.2	45	102	208	91	1.7	0	6.7	16	24	35	8.9 59106	
6	30.8	11.0	38.8	84	165	191	127	2.1	0.7	8.1	9	20	38	11.6 59107	
7	34.0	13.7	35.4	67	150	163	91	1.7	1.0	7.2	7	17	33	8.7 59108	
8	32.1	7.4	32.2	76	148	140	91	1.2	0.6	7.9	4	13	36	9.2 59109	
9	38.3	9.4	36.8	81	166	166	128	2.4	0.7	7.3	6	16	31	10.3 59110	
10	32.0	8.8	38.9	89	168	200	121	2.1	0.6	7.2	6	16	34	10.7 59111	
11	40.3	6.6	25.3	63	135	168	95	2.3	0	6.9	3	12	30	8.5 59112	
12	31.9	10.2	39.6	86	167	204	138	2.3	0	8.0	16	27	34	11.3 59113	
13	27.9	8.4	44.6	93	174	195	112	2.3	0.2	7.7	17	27	28	11.4 59114	
14	34.2	8.3	30.0	70	143	178	105	3.1	0.1	6.9	14	24	36	9.4 59115	
15	24.4	8.5	35.3	72	140	161	105	2.0	0.3	8.4	15	26	39	11.9 59116	
16	25.6	13.5	31.8	59	130	151	103	2.0	0.8	6.6	19	29	45	12.2 59117	
17	29.1	5.7	20.3	66	121	137	71	1.8	0.7	6.9	10	20	43	9.4 59118	
18	24.5	3.3	23.3	59	110	130	67	1.9	1.1	6.9	17	27	39	9.4 59119	
19	16.5	2.8	23.9	63	106	133	69	1.7	0.9	7.2	24	34	44	12.1 59120	
20	17.3	1.3	19.7	55	94	100	52	1.8	0.9	8.0	18	29	40	10.6 59121	
21	10.7	2.4	21.0	62	96	108	52	1.5	0.6	8.7	18	29	44	12.7 59122	
22	7.6	1.0	19.9	64	93	93	40	1.3	1.1	9.2	23	35	44	13.9 59123	
23	6.9	0	14.3	55	76	82	33	1.9	0.8	8.7	20	32	34	11.0 59124	
24	4.7	0	16.9	66	88	88	33	1.2	0.6	7.8	23	33	35	13.3 59125	
25	6.7	0	15.9	63	86	85	31	1.1	1.5	7.4	16	26	33	11.6 59126	
26	8.1	0	15.2	51	75	73	30	2.5	0.7	7.4	21	32	26	11.0 59127	
27	5.6	1.5	17.8	54	78	72	26	1.4	0.8	6.8	16	25	22	10.4 59128	
28	6.3	1.1	19.5	66	93	86	33	1.1	0.7	6.3	22	31	32	12.1 59129	
29	5.6	0.9	18.9	52	78	77	27	1.6	0.7	6.4	23	31	28	10.5 59130	
40	3.4	1.2	18.6	46	69	71	22	0.7	0.6	6.3	22	29	31	10.5 59131	
50	3.7	0.6	20.5	55	80	84	24	0.5	0.9	7.0	23	32	31	12.1 59132	
60	3.2	0.1	18.1	54	75	74	21	0	0.9	5.7	18	24	22	10.5 59133	
70	3.2	0.3	22.0	61	86	90	25	0.6	0.3	6.7	20	27	32	11.4 59134	
3	0	38.1	11.9	78.6	77	206	251	175	1.4	0.5	7.8	26	36	41	12.0 59135
	1	38.0	10.7	71.8	82	203	241	162	1.6	0.8	9.0	31	42	40	12.4 59136
2	41.6	13.6	68.8	78	202	240	271	1.3	0.6	8.3	29	39	40	13.9 59137	
3	25.3	12.1	88.6	85	211	231	175	1.1	0.9	9.4	27	38	35	14.5 59138	
4	23.0	13.3	90.7	82	209	241	177	1.1	1.2	8.9	28	39	36	13.5 59139	
5	23.2	13.6	82.0	78	197	234	179	1.5	0.4	9.0	29	40	35	14.2 59140	
6	16.8	12.8	87.0	80	196	226	175	0.7	1.0	8.1	31	40	36	14.3 59141	
7	15.6	12.3	90.4	76	194	234	169	0.4	1.4	7.7	20	29	36	14.3 59142	
8	15.2	12.7	91.0	73	192	222	167	0.9	1.2	6.7	21	30	36	14.2 59143	
9	14.4	9.0	72.9	69	166	183	138	0.4	0.6	5.7	16	22	33	13.3 59144	
10	13.5	9.2	66.2	65	153	173	125	0.5	0.6	6.7	14	22	35	14.0 59145	
11	13.1	6.8	60.9	57	137	144	112	1.4	0.1	6.5	17	25	35	14.5 59146	
12	10.7	4.7	41.7	59	116	120	81	1.3	0.3	6.1	17	25	33	14.6 59147	
13	8.7	3.7	33.6	56	102	104	62	1.4	0.2	6.3	19	27	31	15.3 59148	
14	13.4	7.2	45.8	63	129	120	94	1.3	0.2	6.5	18	26	34	15.1 59149	
15	7.2	3.4	30.0	55	95	98	54	0.6	0	6.7	17	24	35	15.4 59150	
16	5.4	2.6	27.5	63	99	85	46	0.9	0.5	6.8	17	25	28	16.8 59151	
17	5.4	2.3	26.5	62	96	82	45	1.4	0.3	6.1	17	25	31	16.2 59152	
18	5.0	2.6	26.7	66	100	84	45	1.5	0.5	7.1	17	26	31	17.2 59153	

Core Depth	Zn _{WA}	Zn _{HA}	Zn _{HHA}	Zn _R	Zn _{SUM}	Zn _T	Zn _{H2O2}	Ni _{WA}	Ni _{HA}	Ni _{HHA}	Ni _R	Ni _{SUM}	Ni _T	Ni _{H2O2}	ID
cm	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹						
3	19	4.7	2.5	26.6	65	99	84	43	0.8	0.9	7.6	20	29	31	16.7 59154
	20	4.0	2.3	24.3	66	97	79	41	0.9	0.6	7.1	17	25	30	17.0 59155
	25	4.3	1.4	23.1	55	83	81	39	0.9	0.3	6.0	16	24	31	17.6 59156
	30	4.1	1.1	24.1	59	88	82	31	0.9	0.8	6.8	19	28	26	16.1 59157
	35	4.1	1.4	22.5	57	85	80	38	0.8	1.5	6.3	18	27	29	18.1 59158
	40	4.3	2.4	24.7	60	92	78	40	0.7	0.7	6.3	19	27	29	18.2 59159
	45	4.1	1.6	21.8	58	86	77	37	1.0	0.7	6.5	19	27	27	18.0 59160
	50	4.1	1.9	20.8	55	82	78	25	1.2	0.2	6.3	14	22	27	14.6 59161
	55	7.7	2.4	17.8	51	79	74	31	1.2	0.3	5.6	15	22	25	14.7 59162
	60	4.2	1.9	22.0	59	87	79	38	1.2	0	5.7	19	26	28	16.0 59163
	65	3.5	2.1	21.5	59	86	81	36	0.8	0.2	6.9	15	23	26	16.3 59164
7	0	87.4	19.5	79.0	79	265	300	242	2.5	0.5	9.6	23	35	38	10.7 59165
	1	40.0	16.2	95.9	77	230	250	199	2.3	0.2	9.3	25	37	30	10.5 59166
	2	39.1	16.8	94.1	81	231	250	198	2.2	0.1	8.6	22	33	33	11.1 59167
	3	47.8	12.8	74.6	74	210	209	171	2.1	0	9.2	23	34	35	11.1 59168
	4	31.8	11.7	100.6	79	223	228	165	2.1	0.7	9.9	28	41	32	11.3 59169
	5	33.8	10.9	87.7	80	213	231	159	1.7	0.3	9.2	33	44	33	12.7 59170
	6	30.3	9.9	87.2	85	213	212	153	1.2	0.3	9.9	30	41	33	12.6 59171
	7	23.8	12.1	94.2	80	210	197	147	1.8	0.1	9.5	26	37	37	13.5 59172
	8	16.9	75.7	61.8	80	234	227	172	0.7	0.8	8.1	31	41	33	14.6 59173
	9	12.4	78.5	66.8	84	242	239	182	1.1	0.7	8.1	22	32	34	15.1 59174
	10	8.9	74.7	63.9	84	231	229	177	1.0	0.9	7.5	26	35	29	14.1 59175
	11	9.2	82.7	69.4	81	242	217	193	1.1	1.3	6.6	24	33	29	14.0 59176
	12	8.8	67.7	71.2	84	232	224	178	0.6	1.0	6.3	17	25	30	12.7 59177
	13	8.1	75.2	72.6	86	242	228	177	0.8	0.6	7.4	20	29	24	11.4 59178
8	0	7.3	29.6	125.6	96	258	362	271	1.4	1.2	11.3	11	25	33	12.6 59179
	1	8.5	54.2	124.5	120	307	369	271	1.9	2.4	14.0	23	41	39	15.4 59180
	2	7.6	60.6	130.5	108	307	386	271	1.5	2.3	13.0	25	41	40	15.9 59181
	3	5.1	35.9	128.7	112	282	377	271	1.6	2.1	13.4	21	38	45	16.6 59182
	4	9.4	60.2	136.1	111	316	390	260	1.8	2.3	12.6	24	41	40	17.5 59183
9	0	10.6	14.5	123.4	100	249	383	234	1.6	0.8	9.1	25	37	28	11.2 59184
	1	7.9	22.0	124.3	105	260	335	235	1.4	0.8	9.8	23	35	37	14.1 59185
	2	4.5	27.4	128.5	111	271	349	240	2.1	1.6	10.2	26	40	40	14.9 59186
	3	6.3	32.9	114.5	96	250	316	200	1.9	1.7	9.7	22	35	51	13.6 59187
	4	6.7	24.2	122.2	115	268	372	233	2.0	1.9	11.0	20	35	42	14.7 59188
	5	5.7	23.8	118.1	111	259	257	248	1.5	1.5	11.1	19	34	55	14.0 59189
	6	4.3	17.1	110.2	78	209	333	217	1.6	1.3	8.8	36	48	38	13.1 59190
10	0	73.1	487.3	125.4	155	841	668	1293	3.4	4.1	19.4	40	67	75	35.2 59195
	1	60.4	333.4	115.1	118	627	657	998	6.5	6.5	26.6	61	101	97	56.7 59196
	2	71.5	305.2	122.9	107	607	612	833	4.8	5.5	23.2	50	84	91	47.7 59197
	3	54.4	235.9	118.8	118	527	605	670	3.4	5.0	16.3	44	68	76	36.8 59198
	4	42.1	206.6	117.9	117	483	602	649	2.3	3.0	12.4	38	55	52	25.0 59199
	5	54.0	141.1	108.0	91	394	440	367	3.2	5.0	20.5	41	69	78	38.8 59200
	6	36.5	135.0	110.2	120	401	430	345	2.8	4.0	16.2	33	56	63	30.7 59201
12	0	26.0	131.8	117.6	169	444	480	377	2.3	1.7	9.2	22	35	35	15.2 59202
	1	37.9	133.8	117.0	178	467	476	446	1.8	2.1	8.8	18	30	35	14.7 59203
	2	27.4	140.6	113.4	186	467	514	410	1.8	1.4	8.6	21	33	37	14.0 59204
	3	26.2	146.2	117.3	178	467	490	435	1.8	1.9	9.1	22	35	42	16.2 59205
	4	22.2	150.5	120.6	137	430	503	403	1.9	2.2	10.1	35	49	41	19.3 59206

Core Depth	cm	Zn _{WA}	Zn _{HA}	Zn _{HHA}	Zn _R	Zn _{SUM}	Zn _T	Zn _{H202}	Ni _{WA}	Ni _{HA}	Ni _{HHA}	Ni _R	Ni _{SUM}	Ni _T	Ni _{H202}	ID
		μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹							
12	5	11.8	119.7	115.6	129	376	440	386	1.1	2.6	10.7	40	54	43	19.0	59207
	6	9.0	105.9	129.5	128	372	446	401	1.5	2.4	11.2	36	51	44	19.6	59208
	7	11.1	101.5	122.8	106	341	453	384	1.1	2.0	10.9	31	45	42	18.0	59209
	8	9.3	93.9	130.8	168	402	449	365	1.2	2.4	11.4	38	53	44	17.5	59210
	9	11.3	106.8	119.8	137	375	437	354	1.5	2.3	9.8	33	47	40	18.8	59211
	10	11.3	117.0	119.7	137	385	426	365	1.1	1.7	10.2	30	43	44	17.4	59212
16	0	10.4	61.3	63.3	83	218	245	162	2.4	1.5	9.1	32	45	35	12.5	59226
	1	12.9	76.0	54.3	79	223	220	162	1.6	1.5	8.6	27	39	30	12.3	59227
	2	11.6	59.7	65.8	76	213	227	160	2.0	2.0	7.8	31	43	34	12.9	59228
	3	10.9	73.4	76.0	82	242	231	183	2.1	1.8	8.9	28	41	36	14.2	59229
	4	10.5	64.2	66.8	79	221	224	177	2.1	2.4	10.7	30	46	37	15.9	59230
	5	11.2	66.9	69.8	78	226	227	184	1.9	2.2	10.6	33	47	39	17.1	59231
	6	12.1	62.4	79.0	76	230	247	190	1.4	1.9	10.8	37	51	38	17.2	59232
	7	11.8	67.1	75.4	90	244	243	192	2.4	2.6	11.0	32	48	53	17.7	59233
	8	18.4	59.6	60.4	99	237	248	196	2.0	2.3	9.9	39	53	49	16.1	59234
	9	18.6	59.9	60.9	101	241	237	196	1.3	2.1	9.5	32	45	43	14.6	59235
	10	18.8	49.0	56.9	96	220	242	182	1.6	2.1	8.2	32	44	38	14.4	59236
	11	11.3	51.6	66.6	87	217	222	155	1.2	1.5	7.2	33	43	38	12.7	59237
	12	5.7	52.0	42.9	85	185	190	126	1.8	1.7	7.8	34	45	31	12.2	59238
	13	8.1	48.3	37.4	83	177	193	122	1.5	2.0	7.6	23	34	35	11.8	59239
	14	5.2	37.6	48.7	75	166	182	120	1.2	1.3	7.5	24	34	30	11.1	59240
	15	6.1	62.6	50.0	124	243	198	137	1.4	1.4	7.5	32	42	35	12.1	59241
	20	6.0	57.1	60.0	98	221	155	177	0.6	1.6	7.6	25	34	24	10.6	59242
	25	4.4	46.0	65.9	96	213	272	138	0.7	1.4	7.1	27	36	28	11.7	59243
	30	4.7	28.5	26.4	67	127	121	72	1.4	1.7	6.9	16	26	26	10.3	59244
	35	3.4	28.3	27.7	68	127	99	57	1.0	1.4	6.5	2	11	26	10.2	59245
	40	9.6	10.1	15.6	63	99	92	41	1.7	1.6	7.0	8	18	24	9.4	59246
	45	7.4	5.5	14.6	58	85	75	32	1.1	1.6	7.4	3	13	28	10.4	59247
18	0	9.8	54.6	67.2	79	211	222	161	1.2	1.7	9.9	31	43	38	11.4	59213
	1	7.1	52.7	82.9	86	229	218	161	1.1	1.6	9.9	33	45	40	12.0	59214
	2	5.8	47.8	85.8	87	227	231	155	1.0	1.8	8.8	18	29	35	12.2	59215
	3	5.3	49.7	83.7	89	228	227	156	0.8	1.9	8.8	16	28	34	11.7	59216
	4	5.3	52.8	87.3	83	229	247	161	1.3	2.2	9.3	20	33	32	11.7	59217
	5	4.8	49.1	88.9	87	230	220	163	0.9	2.0	8.2	15	26	34	12.0	59218
	6	6.2	52.1	92.6	82	233	237	161	1.6	2.5	10.1	21	35	37	13.0	59219
	7	5.5	49.2	90.5	84	229	243	160	0.8	2.4	10.8	25	39	39	14.0	59220
	8	7.8	59.2	78.2	76	221	238	171	3.1	2.6	10.5	24	40	44	14.7	59221
	9	11.6	67.6	68.7	80	228	240	176	3.0	2.2	11.2	25	41	42	15.3	59222
	10	7.3	56.3	73.2	76	213	241	160	2.6	2.4	10.4	27	42	39	15.8	59223
	11	6.9	60.1	79.2	88	234	243	168	2.6	1.9	11.2	36	51	43	15.0	59224
	12	8.4	72.4	76.3	86	243	242	171	2.4	2.3	9.7	29	44	39	13.9	59225
19	0	58.4	11.2	28.4	88	186	209	116	2.9	1.1	6.2	3	13	19	9.6	59248
	1	15.1	16.8	115.6	121	268	247	319	0.5	0.2	6.8	5	13	20	13.5	59249
	2	35.6	17.1	110.6	109	272	273	203	1.0	0.8	7.0	4	12	24	13.2	59250
	3	22.2	16.1	111.7	83	233	193	180	0.5	0.2	6.0	15	21	26	15.2	59251
	4	15.4	13.8	101.3	80	211	209	158	0.3	0.2	5.8	17	24	17	12.8	59252
	5	18.2	12.4	80.0	70	181	200	160	0.2	0.8	5.7	15	22	18	16.0	59253
	6	19.1	11.7	66.8	74	172	255	161	0.9	0	5.2	12	18	17	14.6	59254
	7	18.0	11.5	68.6	67	165	231	203	0.7	0.2	5.1	11	17	15	14.3	59255
	8	32.4	18.6	103.6	98	253	262	199	0.3	0.4	6.4	17	24	16	13.4	59256
	9	25.0	11.8	62.9	59	159	222	211	1.4	0.1	6.3	17	25	27	14.6	59257

Core Depth cm	Zn _{WA} μgg^{-1}	Zn _{HA} μgg^{-1}	Zn _{HHA} μgg^{-1}	Zn _R μgg^{-1}	Zn _{SUM} μgg^{-1}	Zn _T μgg^{-1}	Zn _{H2O2} μgg^{-1}	Ni _{WA} μgg^{-1}	Ni _{HA} μgg^{-1}	Ni _{HHA} μgg^{-1}	Ni _R μgg^{-1}	Ni _{SUM} μgg^{-1}	Ni _T μgg^{-1}	Ni _{H2O2} μgg^{-1}	ID	
19	10	14.2	6.0	30.8	60	111	119	116	0.2	0.3	6.4	18	25	27	16.9	59258
	11	13.0	7.7	52.7	67	141	171	112	0.2	0	6.2	17	24	22	14.0	59259
	12	12.3	5.0	28.8	62	108	120	34	0.3	0	5.8	21	27	27	14.2	59260
	13	3.4	2.3	17.8	54	77	79	35	0.9	0	6.5	16	23	23	14.6	59261
	14	3.7	1.8	17.1	57	79	86	36	0.7	0	6.8	17	25	29	14.3	59262
	15	5.5	3.8	24.7	66	100	90	39	0.6	0.2	6.0	12	19	21	13.2	59263
20	3.0	1.5	16.6	57	79	131	45	0	0.4	6.9	18	25	29	14.5	59264	
	25	23.6	11.1	72.1	79	186	215	131	0.9	0.1	6.9	22	30	28	16.3	59265
	30	37.4	17.4	112.9	125	293	385	256	0.9	0.7	7.0	24	33	32	16.1	59266
	35	27.7	13.0	89.9	93	224	287	192	1.1	0.7	8.0	21	31	34	15.3	59267
	40	5.0	1.8	20.1	65	92	151	47	0.9	0.3	7.5	22	31	27	18.3	59268
20	0	10.8	12.5	62.7	70	156	186	119	2.4	0.4	7.1	17	27	19	9.2	46701
	1	13.7	11.6	61.8	65	152	180	112	2.4	0	6.6	19	28	23	9.2	46702
	2	17.4	11.7	58.1	73	161	151	109	2.3	0	6.7	21	30	19	9.7	46703
	3	15.7	13.9	38.8	94	162	150	112	2.4	0	3.4	24	30	25	10.7	46704
	4	15.5	10.7	38.2	90	154	134	107	2.2	0	3.6	27	33	23	9.6	46705
	5	15.0	11.7	36.0	88	151	126	95	2.2	0	3.3	23	29	25	9.4	46706
	6	15.9	9.3	36.4	85	147	120	100	2.0	0	3.8	24	30	24	8.3	46707
	7	15.8	10.1	33.5	87	146	177	98	2.4	0	3.8	20	26	23	9.0	46708
	8	14.1	10.3	32.4	88	145	188	93	2.6	0	2.9	24	29	23	9.1	46709
	9	18.8	11.0	36.1	90	155	173	101	1.4	0.6	4.8	22	29	21	10.4	46710
	10	16.3	11.0	32.2	79	139	150	82	1.7	0.8	4.0	21	27	17	9.0	46711
23	0	15.1	6.7	35.6	54	111	143	7	2.1	0.7	6.0	15	23	18	2.2	46712
	1	11.4	7.8	43.8	51	114	137	41	2.4	0.7	7.0	15	25	18	5.6	46713
	2	12.5	7.1	42.2	57	118	128	31	2.6	0.7	6.8	15	25	23	4.8	46714
	3	9.4	7.0	43.5	59	119	138	36	2.1	0.8	6.5	11	21	25	5.7	46715
	4	7.7	6.5	40.6	54	109	133	24	2.0	0.7	7.0	16	26	15	4.3	46716
	5	7.3	6.5	40.9	56	111	127	12	1.8	0.3	7.5	18	28	19	2.7	46717
	6	8.4	6.1	32.7	54	102	105	8	2.0	0.6	6.8	19	28	16	2.4	46718
	7	7.9	7.1	43.7	51	110	122	29	2.1	0	6.9	16	25	24	5.1	46719
	8	7.3	7.7	44.1	59	118	119	38	2.1	0.3	7.6	18	28	18	6.1	46720
	9	6.6	6.5	44.1	59	116	119	32	2.0	0.5	7.3	13	23	23	4.9	46721
24	0	19.3	16.3	112.4	88	236	240	190	1.9	0.3	7.7	24	34	24	11.9	46724
	5	15.0	17.3	122.7	102	257	274	216	1.3	0.2	7.0	23	32	27	13.0	46725
	10	14.2	9.9	74.7	94	193	218	163	0.6	0	6.7	25	32	21	11.9	46726
	15	6.6	3.5	26.2	68	104	123	62	0.9	0	5.7	16	23	13	11.6	46727
	20	3.7	1.8	16.2	63	85	93	37	0.9	0.5	5.1	22	28	16	12.9	46728
	25	2.8	1.5	15.6	63	83	91	31	0.7	0.2	5.2	19	25	20	14.0	46729
	30	2.9	1.5	14.4	63	82	85	30	0.8	0.1	5.7	21	28	19	13.9	46730
	35	2.7	1.6	14.9	62	81	91	18	1.2	0	6.2	22	29	20	13.0	46731
	40	2.5	1.4	14.7	60	79	93	31	0.4	0.3	5.3	24	30	25	15.8	46732
	45	2.6	1.7	14.8	58	77	89	32	0.5	0	5.8	23	29	22	15.8	46733
	50	2.6	1.7	15.4	63	82	88	32	0.6	0.5	6.5	25	32	22	15.1	46734
	55	3.2	1.4	13.7	58	77	75	28	0.9	0	6.4	20	27	24	13.8	46735
	60	3.2	1.6	13.2	55	73	82	25	1.1	0.2	5.6	20	27	27	11.7	46736
	65	2.5	1.4	14.8	57	76	76	21	0.6	0.4	4.6	22	27	26	12.6	46737
	70	2.3	1.4	14.1	61	79	79	28	0.6	0.1	5.9	20	27	27	14.7	46738
	75	2.5	1.2	13.2	57	74	82	29	0.3	0.3	4.9	19	24	26	15.4	46739
	80	3.1	1.3	13.1	53	70	71	26	0.3	0.3	5.0	18	24	26	14.3	46740

Core Depth		Cr _{WA}	Cr _{HA}	Cr _{HHA}	Cr _R	Cr _{SUM}	Cr _T	Cr _{H202}	Pb _{WA}	Pb _{HA}	Pb _{HHA}	Pb _R	Pb _{SUM}	Pb _T	Pb _{H202}	ID
	cm	μgg^{-1}														
1	0	3.7	2.1	7.1	64	77	89	21.1	0	2.5	82.8	71	157	176	3.6	59101
	1	3.4	1.7	5.5	55	66	62	17.3	0.5	0	71.6	85	157	148	2.2	59102
2	2.4	0	5.4	59	66	76	11.9	2.9	0.1	61.3	33	97	153	0	59103	
3	2.4	0.7	4.4	32	39	82	7.6	4.8	0	41.2	7	53	174	1.9	59104	
4	2.6	0.5	4.8	27	35	105	9.7	12.9	1.5	30.8	0	45	202	4.5	59105	
5	2.7	0.2	4.7	65	72	106	12.8	15.8	1.7	36.9	0	54	177	5.6	59106	
6	3.5	0	6.8	80	90	97	18.5	40.7	12.7	65.0	18	136	212	13.4	59107	
7	3.8	1.1	5.4	72	82	67	12.8	50.5	26.7	143.2	36	256	144	5.0	59108	
8	4.0	0	5.4	77	86	68	12.3	45.1	14.6	60.2	14	134	127	3.9	59109	
9	3.6	0.6	5.8	78	88	80	16.6	52.8	15.5	82.7	20	171	184	16.3	59110	
10	2.6	0.3	6.9	77	87	74	19.2	48.0	15.3	70.9	14	148	232	11.1	59111	
11	3.7	0	5.6	57	67	67	13.4	50.4	10.5	65.9	10	136	207	3.4	59112	
12	3.2	0.1	5.8	82	91	81	19.7	51.5	13.6	78.0	22	166	254	4.4	59113	
13	3.2	0	5.4	80	88	70	20.8	47.2	9.7	84.9	25	167	213	59.9	59114	
14	2.0	0	6.5	91	100	109	18.2	53.9	11.4	68.6	10	144	208	4.4	59115	
15	3.6	0.2	5.6	91	100	111	19.5	42.6	10.9	74.8	8	136	179	60.1	59116	
16	2.6	0	4.6	82	90	106	19.7	42.0	14.6	61.5	12	130	156	59.8	59117	
17	1.4	0	4.7	75	81	110	14.5	36.5	7.5	56.2	3	104	141	49.8	59118	
18	3.0	0	6.6	87	96	107	16.7	33.5	12.6	56.7	2	105	144	31.4	59119	
19	3.1	0	6.1	95	104	115	18.2	26.3	9.9	47.5	3	87	122	45.0	59120	
20	2.7	0	6.4	80	89	103	15.8	21.1	7.7	39.9	0	69	66	3.0	59121	
21	3.5	0	6.8	98	109	112	17.1	17.0	7.1	36.4	0	61	69	27.6	59122	
22	2.5	0	6.4	93	102	113	18.6	9.1	3.5	21.2	0	34	25	18.2	59123	
23	3.0	0	6.7	73	83	87	14.9	4.8	2.2	13.3	0	20	14	16.5	59124	
24	1.9	0	7.3	81	91	98	17.8	3.5	2.8	11.7	0	18	0	10.2	59125	
25	2.6	0	6.6	74	83	93	22.3	3.2	2.1	10.8	0	16	0	0	59126	
26	2.4	0	6.4	65	74	76	19.3	3.4	2.2	9.1	0	15	0	4.1	59127	
27	3.1	0.7	6.7	59	69	69	16.2	3.8	1.2	7.9	0	13	2	0.2	59128	
28	3.3	1.0	6.7	66	77	89	20.6	3.6	1.2	9.1	0	14	4	1.3	59129	
29	2.8	0.3	6.8	57	67	79	17.0	2.8	1.5	7.6	0	12	8	4.2	59130	
40	1.7	0.3	5.7	59	67	75	15.7	2.3	1.6	3.7	0	8	0	0	59131	
50	2.6	1.1	6.2	71	81	90	18.1	1.0	0	2.7	0	4	0	3.3	59132	
60	2.3	0.3	5.6	64	72	97	15.1	1.7	0.1	3.0	0	5	0	1.4	59133	
70	2.0	0	6.3	70	79	106	17.7	0.7	0.1	3.7	0	5	0	3.4	59134	
3	0	3.6	0.1	6.0	83	93	120	13.4	23.8	12.1	48.1	5	89	101	0.6	59135
1	4.1	0	5.3	81	91	112	13.0	24.8	12.5	44.7	2	84	106	3.4	59136	
2	2.1	0.5	6.1	75	84	111	15.4	28.7	13.4	49.8	5	97	123	0	59137	
3	2.9	0	5.5	80	89	107	14.7	18.3	9.5	59.9	7	95	107	0	59138	
4	2.5	0	6.1	74	83	111	15.2	15.7	7.9	75.4	13	112	129	0	59139	
5	2.1	0.2	5.3	70	77	109	15.0	17.2	9.0	71.1	9	106	136	0	59140	
6	0.9	0.4	8.5	73	83	98	17.4	11.8	7.1	85.8	19	124	152	42.6	59141	
7	1.8	0.6	9.0	66	77	91	19.5	11.4	6.7	102.7	22	143	168	66.6	59142	
8	1.9	0.1	8.0	66	76	94	19.5	11.2	6.3	95.3	15	127	167	68.1	59143	
9	1.3	0	7.1	65	74	76	17.2	12.4	5.7	88.1	17	124	155	67.4	59144	
10	1.0	0	7.2	66	74	78	18.6	10.8	5.7	74.6	20	111	152	65.0	59145	
11	1.4	0.5	6.2	58	66	69	20.4	8.8	5.3	62.4	7	84	117	61.6	59146	
12	1.3	0	5.6	63	70	69	20.6	6.7	2.4	41.9	0	51	87	44.8	59147	
13	0.1	0.3	5.1	71	76	75	21.8	4.3	2.7	30.4	0	37	74	33.5	59148	
14	1.0	0	6.9	75	83	76	20.2	7.6	3.5	42.0	0	53	77	45.0	59149	
15	1.1	0.3	6.5	68	76	69	24.3	1.5	1.4	21.2	0	24	56	27.9	59150	
16	0.7	0.2	7.4	76	84	75	28.6	0.5	1.3	9.8	0	12	0	15.9	59151	
17	0.3	0	6.9	78	86	68	26.4	0.6	0.7	10.3	0	12	0	14.5	59152	
18	1.1	0.1	5.9	74	82	76	28.1	0.3	0	7.8	0	8	0	12.3	59153	

Core Depth cm	ID															
	Cr _{WA} μgg^{-1}	Cr _{HA} μgg^{-1}	Cr _{HHA} μgg^{-1}	Cr _R μgg^{-1}	Cr _{SUM} μgg^{-1}	Cr _T μgg^{-1}	Cr _{H202} μgg^{-1}	Pb _{WA} μgg^{-1}	Pb _{HA} μgg^{-1}	Pb _{HHA} μgg^{-1}	Pb _R μgg^{-1}	Pb _{SUM} μgg^{-1}	Pb _T μgg^{-1}	Pb _{H202} μgg^{-1}		
3	19	0.8	0.8	6.6	71	79	68	29.3	0	0.4	7.7	0	8	0	10.4	59154
	20	1.7	1.6	6.6	76	86	73	30.2	0	1.8	7.2	0	9	0	10.0	59155
	25	2.0	0.8	5.7	72	80	89	31.9	0	1.0	3.4	0	4	0	4.7	59156
	30	1.6	0.8	5.9	75	84	85	28.5	0	0.7	3.4	0	4	0	1.1	59157
	35	1.4	0.3	6.3	79	87	79	29.9	0	1.4	4.6	0	6	0	5.9	59158
	40	1.7	0.4	6.4	84	92	80	29.1	0	2.0	5.2	0	7	0	6.3	59159
	45	1.0	0.8	5.7	78	86	65	26.1	0	0.7	2.9	0	4	0	5.9	59160
	50	2.5	1.1	6.6	73	83	69	23.0	0.8	0.2	1.5	0	3	0	1.5	59161
	55	1.8	0.1	6.2	70	78	68	22.4	0.2	0.7	2.4	0	3	0	5.0	59162
	60	1.2	0	5.4	70	77	74	22.5	0	0.4	2.1	0	3	0	5.8	59163
	65	2.0	0.9	5.6	77	85	71	23.4	0	0.3	1.6	0	2	0	5.3	59164
7	0	4.2	0.8	6.4	95	106	91	16.0	25.0	7.9	45.8	10	88	94	28.1	59165
	1	3.0	0.6	5.8	95	104	93	15.4	19.1	8.7	56.9	13	97	104	17.7	59166
	2	2.7	1.9	5.6	98	109	95	15.6	18.5	8.7	58.8	11	97	108	27.5	59167
	3	3.2	0	5.8	91	100	72	13.4	25.3	10.8	44.4	7	88	84	30.9	59168
	4	3.9	0.9	5.8	96	107	89	11.8	15.1	8.9	52.5	14	90	86	14.8	59169
	5	3.1	0.8	7.2	96	107	90	14.9	18.8	8.9	50.6	8	86	98	2.5	59170
	6	3.4	1.2	9.0	99	113	78	14.9	17.7	9.0	52.8	11	91	92	2.0	59171
	7	3.0	0.9	9.8	89	103	66	16.4	14.6	8.3	65.5	11	99	96	2.6	59172
	8	2.3	0.3	9.6	93	105	70	18.8	16.4	21.1	70.5	19	127	119	4.7	59173
	9	2.4	1.5	10.6	94	108	117	21.6	10.3	23.2	84.2	19	137	132	2.1	59174
	10	4.0	0	10.2	83	97	111	22.7	7.3	21.5	88.9	25	142	146	35.9	59175
	11	2.7	0	9.8	98	111	106	24.5	6.6	21.8	88.7	22	139	136	48.3	59176
	12	2.7	1.5	9.8	96	110	109	20.7	5.0	20.1	101.6	27	154	149	47.2	59177
	13	1.9	0.4	9.8	103	115	109	21.3	4.5	20.8	93.5	24	142	143	37.7	59178
8	0	3.8	0.6	8.4	92	105	117	22.0	0	10.1	143.0	25	179	223	32.3	59179
	1	5.0	0	10.4	110	126	121	26.9	0.2	20.0	207.8	58	286	271	39.2	59180
	2	3.8	0	9.4	111	124	125	25.7	1.1	19.2	185.6	51	257	277	37.7	59181
	3	5.0	0.4	9.0	110	125	120	23.3	0	12.2	189.6	43	245	267	35.5	59182
	4	4.5	0	9.8	92	106	118	23.5	0	22.0	185.3	51	258	272	46.0	59183
9	0	5.5	0.1	4.8	85	95	104	18.2	0	0	35.1	182	217	188	0	59184
	1	3.6	0	7.4	98	109	100	20.0	0	1.1	117.3	117	235	237	17.8	59185
	2	3.9	0	8.0	92	103	113	21.3	0	5.8	156.3	92	254	258	40.9	59186
	3	5.6	0	7.4	85	98	104	19.5	0	9.9	154.3	57	222	253	37.6	59187
	4	3.3	1.5	8.4	95	108	98	24.4	0	6.0	187.2	74	268	261	39.6	59188
	5	3.0	1.4	8.0	96	108	92	24.7	0	3.3	167.9	83	254	174	29.4	59189
	6	2.5	0.1	6.8	136	145	108	22.7	0	0.6	104.3	38	143	251	12.6	59190
10	0	1.8	2.0	11.0	79	94	101	28.6	5.0	23.2	170.6	45	243	233	39.4	59195
	1	1.5	0.7	11.0	81	94	103	31.5	7.6	22.8	154.9	40	225	252	41.2	59196
	2	4.9	0.4	11.8	75	92	90	31.0	9.4	23.9	133.8	31	198	243	33.4	59197
	3	5.0	0	8.8	77	90	86	26.1	9.0	38.4	192.3	96	336	264	33.5	59198
	4	4.2	0	9.2	67	81	85	24.7	11.6	34.9	135.8	43	225	259	40.5	59199
	5	5.1	0	9.6	66	81	87	24.0	20.6	35.9	99.1	17	173	234	29.0	59200
	6	4.3	0.4	8.2	67	80	76	21.2	22.3	40.7	118.9	56	238	270	35.9	59201
12	0	6.1	0	11.4	81	98	89	23.5	11.8	31.1	125.0	93	261	230	34.0	59202
	1	5.3	0	11.6	76	93	90	20.7	20.2	31.9	125.1	98	275	234	36.5	59203
	2	5.9	0	11.2	69	86	100	21.5	13.3	33.9	149.1	132	328	270	30.8	59204
	3	6.9	0	11.8	77	95	101	23.5	13.7	43.9	176.7	101	335	375	26.2	59205
	4	2.7	1.9	13.0	86	104	108	27.3	12.0	50.5	218.0	88	369	337	41.0	59206

Core Depth	cm	25														ID
		Cr _{WA}	Cr _{HA}	Cr _{HHA}	Cr _R	Cr _{SUM}	Cr _T	Cr _{H202}	Pb _{WA}	Pb _{HA}	Pb _{HHA}	Pb _R	Pb _{SUM}	Pb _T	Pb _{H202}	
		μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹						
12	5	1.0	1.8	12.4	88	103	111	31.5	4.2	44.1	218.7	77	344	360	25.7	59207
	6	1.0	1.8	10.8	77	90	114	30.4	2.1	41.3	226.3	84	353	340	33.3	59208
	7	2.1	0.8	11.2	71	85	109	30.7	3.7	39.0	240.6	85	368	336	34.9	59209
	8	2.3	0.5	13.4	84	100	105	26.5	2.5	38.8	228.8	159	429	314	24.1	59210
	9	2.2	1.2	10.0	68	82	104	26.1	2.4	40.2	217.1	94	353	333	31.3	59211
	10	3.7	2.2	9.4	74	90	85	34.5	3.7	46.9	232.9	100	384	365	30.7	59212
16	0	3.0	1.3	6.5	78	89	102	22.6	4.9	24.3	86.4	9	124	144	36.4	59226
	1	2.9	2.5	7.8	91	104	106	22.4	7.5	29.2	79.7	15	131	139	39.7	59227
	2	3.4	0.6	8.8	86	99	105	23.1	6.1	24.1	91.5	21	143	149	39.7	59228
	3	3.5	0.9	8.6	88	101	90	23.1	6.0	29.5	91.8	30	157	158	40.8	59229
	4	2.7	0.3	8.0	84	95	108	22.5	8.8	31.4	98.2	12	151	164	40.1	59230
	5	2.3	0.7	8.3	85	96	105	24.1	9.7	29.8	104.3	18	161	192	36.5	59231
	6	2.1	0	9.7	92	104	117	23.8	10.9	30.0	111.8	16	169	203	42.1	59232
	7	2.0	0.5	10.5	88	101	107	25.1	9.8	33.4	116.9	26	186	202	39.3	59233
	8	2.6	0.2	10.4	82	95	104	24.1	21.8	41.9	108.0	25	196	226	40.7	59234
	9	1.8	0.5	9.6	85	97	101	21.2	22.4	41.1	116.0	27	207	192	37.0	59235
	10	1.1	0	7.3	87	95	102	20.8	24.2	34.6	121.0	40	219	202	39.4	59236
	11	1.4	0	8.0	80	90	83	17.0	11.7	30.3	107.6	23	173	190	31.1	59237
	12	0.8	0.2	6.7	72	80	80	15.1	3.8	32.4	86.1	28	151	141	24.1	59238
	13	0.7	1.5	7.3	78	87	87	16.5	6.9	28.3	84.3	20	140	170	25.4	59239
	14	1.4	0.5	6.9	73	82	83	14.6	3.7	20.9	92.8	23	140	157	18.2	59240
	15	1.6	2.3	6.5	78	88	83	15.4	3.4	35.4	113.9	24	177	185	32.6	59241
	20	1.4	1.6	6.3	68	77	74	15.1	3.4	33.9	127.3	38	203	159	30.1	59242
	25	0.5	2.8	6.7	67	77	88	15.0	2.4	24.4	115.5	29	172	280	28.7	59243
	30	0.6	2.1	5.8	69	78	89	14.0	5.2	19.1	65.2	3	93	100	27.1	59244
	35	0	2.9	6.2	74	83	81	14.1	1.0	13.9	54.8	0	70	53	39.3	59245
	40	0.4	2.8	6.1	82	92	78	13.4	13.1	7.0	30.5	0	51	45	31.5	59246
	45	0	2.5	5.8	67	75	82	13.8	6.2	1.7	15.6	0	24	10	14.4	59247
18	0	1.5	0.8	7.6	74	84	92	28.7	4.1	23.4	92.2	13	133	126	27.1	59213
	1	1.6	1.2	7.4	72	82	89	29.0	0	21.9	100.7	13	136	139	24.2	59214
	2	2.0	0	8.8	84	94	94	20.9	0.5	19.3	103.7	13	137	118	29.2	59215
	3	1.0	0	9.2	82	93	90	21.3	0	20.3	101.1	11	133	124	30.0	59216
	4	1.0	0	9.6	81	91	100	22.6	0.8	20.9	111.6	25	158	151	29.4	59217
	5	1.3	0	9.4	81	92	91	23.3	0.3	19.5	101.8	20	142	132	31.2	59218
	6	1.8	0	10.6	86	99	81	23.5	0.4	21.8	105.2	16	143	147	30.3	59219
	7	1.5	0	9.4	82	93	82	23.9	0.1	21.7	111.0	15	148	150	35.7	59220
	8	3.6	1.9	10.2	81	97	87	23.0	3.5	27.4	101.0	12	144	160	36.9	59221
	9	2.9	0.9	9.1	84	97	81	22.5	10.1	27.3	94.4	11	142	160	35.4	59222
	10	2.8	0.2	7.4	80	90	119	23.3	3.8	25.1	99.8	18	146	167	30.5	59223
	11	2.4	1.6	7.7	88	100	102	24.2	3.1	26.2	107.2	14	151	152	27.8	59224
	12	3.9	1.1	9.4	82	96	97	24.7	4.8	31.1	106.9	11	154	171	30.1	59225
19	0	2.0	0.8	5.6	71	80	72	16.0	22.5	7.1	65.1	3	98	75	41.6	59248
	1	1.3	0	6.0	77	84	70	31.6	6.5	3.0	86.6	48	145	123	65.4	59249
	2	1.4	0.8	6.1	83	92	83	25.9	8.9	4.4	77.4	27	118	120	47.9	59250
	3	1.2	0.3	5.6	58	66	70	26.0	10.3	4.2	74.3	50	139	130	39.4	59251
	4	1.5	0.6	4.6	62	69	68	22.4	7.9	4.9	99.1	78	190	134	30.2	59252
	5	1.7	0	5.4	53	60	76	24.2	7.6	4.0	60.3	37	109	109	25.0	59253
	6	0.7	0.7	5.8	57	64	69	22.8	7.6	3.9	57.8	15	84	89	16.7	59254
	7	1.2	0.4	5.4	65	72	69	24.7	6.8	5.1	80.3	26	118	102	32.5	59255
	8	1.2	0.6	5.0	56	63	76	22.1	68.7	42.8	488.2	709	1309	664	3.3	59256
	9	1.6	0.1	5.5	57	65	79	22.5	124.2	78.8	665.3	999	1868	832	28.9	59257

Core Depth cm	Cr _{WA} μgg^{-1}	Cr _{HA} μgg^{-1}	Cr _{HHA} μgg^{-1}	Cr _R μgg^{-1}	Cr _{SUM} μgg^{-1}	Cr _T μgg^{-1}	Cr _{H202} μgg^{-1}	Pb _{WA} μgg^{-1}	Pb _{HA} μgg^{-1}	Pb _{HHA} μgg^{-1}	Pb _R μgg^{-1}	Pb _{SUM} μgg^{-1}	Pb _T μgg^{-1}	Pb _{H202} μgg^{-1}	ID	
19	10	0.9	0	6.0	55	62	73	25.5	15.4	8.8	110.7	64	199	126	55.0	59258
	11	1.4	0	4.8	62	68	73	22.7	2.0	1.5	36.5	7	47	53	32.1	59259
	12	1.5	0	5.5	73	80	80	22.8	6.4	3.2	38.7	19	67	18	8.1	59260
	13	1.0	0	5.1	66	72	80	22.5	0	0.5	5.4	0	6	0	8.4	59261
	14	0.8	0	4.5	68	73	83	20.9	0	0.3	4.7	0	5	0	6.0	59262
	15	1.3	0	5.3	72	79	81	20.4	0	0.6	7.7	0	8	0	7.1	59263
	20	1.2	0	5.8	69	76	83	21.8	0	0	1.2	0	1	0	4.2	59264
	25	2.7	0	9.0	77	88	87	27.0	9.9	6.1	60.8	27	104	68	37.3	59265
	30	2.1	0.5	7.6	76	86	102	31.6	28.5	14.3	155.7	97	295	271	33.7	59266
	35	1.4	1.1	6.1	63	72	77	24.6	28.1	13.2	130.7	51	223	200	40.4	59267
	40	0.7	0.4	5.9	70	77	97	24.0	1.6	1.9	10.8	0	14	6	16.0	59268
20	0	2.7	0.6	7.2	72	83	83	18.6	2.9	2.2	47.5	3	55	59	0	46701
	1	2.4	0.5	7.0	74	84	91	18.8	5.1	3.1	47.1	2	57	69	0	46702
	2	2.6	1.7	7.2	74	86	85	21.5	9.5	3.6	45.8	3	62	62	0	46703
	3	3.5	1.1	4.1	77	86	85	19.8	7.6	3.5	28.4	29	69	64	0	46704
	4	4.0	0	2.9	74	81	82	20.4	7.1	3.4	29.5	29	69	55	0	46705
	5	3.3	0.4	3.7	68	76	82	16.2	5.9	4.1	28.1	23	61	49	0	46706
	6	2.7	0.6	4.4	72	80	80	17.0	7.1	3.8	27.7	23	61	54	0	46707
	7	2.7	0	4.4	66	74	71	13.8	7.4	3.9	27.1	25	64	49	0	46708
	8	2.8	0.7	4.2	68	76	80	13.5	5.4	3.0	25.3	24	57	56	0	46709
	9	2.6	1.2	3.8	63	70	77	19.4	11.3	4.7	27.5	24	68	58	0	46710
	10	2.3	1.4	1.9	61	66	73	14.0	9.1	5.2	26.7	10	51	42	0	46711
23	0	1.2	0.8	4.3	55	62	73	0	6.8	2.3	27.3	0	36	30	0	46712
	1	1.4	2.4	2.8	52	58	68	3.2	3.0	1.9	35.4	0	40	30	0	46713
	2	2.5	1.5	1.4	55	60	69	1.6	6.8	2.9	33.8	0	44	31	0	46714
	3	1.5	1.5	2.9	55	61	67	4.3	3.4	2.4	36.0	0	42	39	0	46715
	4	0.5	0	4.1	58	63	68	1.9	2.2	2.0	34.8	0	39	30	0	46716
	5	1.5	0.5	5.8	63	71	79	1.0	2.5	1.8	36.2	0	41	34	0	46717
	6	1.2	0.9	4.9	59	66	73	0	4.8	2.3	29.4	0	37	18	0	46718
	7	3.0	0.1	4.3	56	63	79	3.5	2.5	0.9	37.7	0	41	34	0	46719
	8	2.1	0	4.8	61	68	76	6.1	2.0	2.1	37.3	0	41	28	0	46720
	9	3.3	0	4.4	61	69	78	3.8	0.9	1.6	39.7	0	42	22	0	46721
24	0	2.8	0	6.7	75	84	94	31.9	13.0	7.5	137.1	64	222	175	1.9	46724
	5	3.4	0.1	6.6	79	89	97	31.2	15.0	10.4	163.4	66	255	231	3.7	46725
	10	2.2	0.6	4.2	76	83	78	26.4	15.5	9.2	108.2	63	196	203	0	46726
	15	2.1	0.3	3.3	61	67	74	25.2	6.9	2.4	33.1	23	66	68	21.8	46727
	20	1.1	0	4.6	66	71	75	20.5	2.4	0.9	11.3	1	15	10	17.4	46728
	25	0.5	0.1	4.4	72	77	72	18.1	1.1	0.5	4.1	0	6	0	6.4	46729
	30	0.7	0	4.1	61	66	85	21.4	1.6	0	1.9	0	4	0	3.8	46730
	35	0.6	0	5.1	63	69	81	20.0	1.5	0.4	1.7	0	4	0	2.6	46731
	40	0.6	0	4.4	67	72	87	21.6	1.5	0	1.9	0	3	0	3.7	46732
	45	0.6	0	4.7	63	68	80	24.2	1.6	0	1.1	0	3	0	3.0	46733
	50	0.9	0	5.0	67	73	72	25.4	1.1	0.2	1.0	0	2	0	3.1	46734
	55	1.7	0	3.5	60	65	70	23.1	1.7	0.4	2.0	0	4	0	2.9	46735
	60	1.0	0	4.4	59	65	74	17.8	0.4	0.5	1.5	0	2	0	2.8	46736
	65	1.0	0	4.9	55	61	70	20.9	1.0	0	2.1	0	3	0	1.0	46737
	70	0.8	0	5.4	64	70	76	22.2	1.6	0	1.7	0	3	0	1.5	46738
	75	0.4	0	4.6	49	54	63	19.7	1.9	0	1.3	0	3	0	1.7	46739
	80	0.8	0	4.6	55	60	66	17.8	1.8	0	1.6	0	3	0	2.5	46740

Core	Depth	Si _R	Si _T	Al _R	Al _T	Mg _R	Mg _T	K _R	K _T	Ti _T	Li _T	Cd _T	Hg _T	Residue	CaCO ₃	Corg	Water	ID
	cm	%	%	%	%	%	%	%	%	%	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	mg	%	%	%	%
1	0	19.70	21.83	5.07	8.71	0.52	1.27	1.64	1.16	0.375	67	0.99	0.88	783	1.33	4.80	75.1	59101
	1	20.20	21.45	3.81	9.57	0.41	1.26	0.97	1.36	0.436	57	0.60	0.73	828	5.17	4.10	68.5	59102
	2	25.77	24.38	3.69	6.80	0.33	0.85	0.86	0.98	0.296	63	0.75	0.83	888	0	4.15	57.9	59103
	3	31.16	23.72	1.82	8.56	0.12	1.02	0.42	1.26	0.398	60	0.82	0.89	929	3.67	4.32	65.3	59104
	4	33.43	24.58	1.78	8.47	0.9	1.06	0.36	1.23	0.424	78	1.04	0.77	931	2.42	3.70	66.4	59105
	5	24.45	25.52	3.87	9.84	0.23	1.05	0.66	1.28	0.383	89	0.90	0.75	913	3.08	2.72	42.5	59106
	6	20.88	24.76	6.48	11.70	0.64	1.17	1.46	1.60	0.429	96	0.82	0.83	861	4.50	4.70	62.6	59107
	7	23.57	24.04	5.14	9.50	0.39	1.00	1.25	1.40	0.381	71	0.63	0.65	867	1.25	4.69	69.1	59108
	8	23.65	23.03	5.93	8.32	0.53	0.87	1.31	1.30	0.333	70	0.48	0.77	875	2.25	4.47	68.7	59109
	9	23.41	25.71	6.06	14.50	0.56	0.99	1.43	1.52	0.479	85	0.59	1.03	854	6.42	3.83	67.9	59110
	10	23.52	23.69	5.73	9.98	0.56	0.97	1.30	1.49	0.376	75	0.57	2.06	861	2.58	4.95	71.7	59111
	11	21.46	25.32	5.61	10.60	0.48	1.00	1.36	1.44	0.392	73	0.46	1.48	806	0	4.79	64.8	59112
	12	25.09	23.50	7.48	12.60	0.69	1.03	2.21	1.72	0.430	86	0.49	1.63	864	0.17	5.28	71.3	59113
	13	24.27	23.53	8.59	11.70	0.78	1.01	2.34	1.52	0.455	82	0.52	1.62	856	4.67	4.04	69.0	59114
	14	24.23	28.71	7.30	10.10	0.67	0.86	2.09	1.30	0.382	82	0.53	1.44	838	1.58	5.12	70.7	59115
	15	21.73	25.87	6.99	11.20	0.72	0.93	1.96	1.56	0.428	84	0.47	1.45	842	0.83	4.93	69.9	59116
	16	17.28	26.26	4.56	12.40	0.50	0.94	1.20	1.45	0.468	84	0.43	1.25	716	3.17	4.40	69.5	59117
	17	18.19	26.35	6.15	11.80	0.63	0.97	1.69	1.65	0.439	82	0.42	1.25	685	2.25	4.69	69.9	59118
	18	18.76	25.90	5.99	12.10	0.63	1.06	1.69	1.64	0.461	80	0.30	1.09	747	2.33	4.71	68.3	59119
	19	18.49	25.21	5.68	12.00	0.59	1.09	1.57	1.58	0.454	84	0.37	0.90	861	0.67	4.75	69.1	59120
	20	19.71	33.65	6.40	6.36	0.67	0.46	1.94	0.94	0.202	74	0.47	0.60	778	2.08	4.40	70.1	59121
	21	20.31	24.55	6.52	11.80	0.67	1.10	1.82	1.66	0.482	81	0.35	0.54	854	0.67	4.50	68.9	59122
	22	21.80	24.12	7.16	11.20	0.78	1.17	2.29	1.66	0.432	79	0.38	0.13	859	2.17	4.29	70.2	59123
	23	16.94	25.83	5.42	10.60	0.59	1.09	1.68	1.74	0.439	68	0.34	0.07	718	0.92	4.22	70.7	59124
	24	19.59	24.46	6.08	10.50	0.60	0.96	1.69	1.61	0.430	76	0.39	0.03	857	2.50	4.13	70.3	59125
	25	19.24	24.96	5.82	9.99	0.60	1.00	1.73	1.43	0.445	75	0.36	0.09	807	1.08	4.29	69.8	59126
	26	16.99	24.24	5.08	10.60	0.52	1.06	1.59	1.62	0.417	63	0.31	0.03	675	1.42	4.24	69.9	59127
	27	21.34	23.90	6.67	9.64	0.58	1.04	2.65	1.73	0.426	65	0.34	0	686	2.08	4.14	69.7	59128
	28	21.27	23.54	6.07	10.10	0.57	1.00	2.02	1.52	0.406	71	0.38	0	832	0.83	4.28	69.9	59129
	29	18.01	23.08	5.34	10.00	0.46	1.13	1.74	1.57	0.408	66	0.27	0.07	726	0.67	4.22	68.8	59130
	40	19.69	26.79	5.77	10.00	0.69	1.22	1.85	1.52	0.396	66	0.30	0	723	2.83	3.88	68.9	59131
	50	25.63	26.15	8.61	9.50	0.69	0.96	3.44	1.25	0.406	72	0.55	0	832	2.67	3.87	69.2	59132
	60	24.08	25.17	7.44	10.40	0.65	0.96	2.93	2.11	0.319	60	0.31	0	735	2.83	3.93	70.2	59133
	70	20.79	26.61	6.01	9.70	0.69	1.11	1.77	2.00	0.338	66	0.42	0.02	857	2.50	3.85	68.7	59134
3	0	25.17	27.33	8.26	11.50	0.93	0.97	2.71	2.35	0.415	87	1.02	0.51	910	5.42	2.72	66.9	59135
	1	25.92	26.77	7.72	12.70	0.87	0.84	2.60	2.67	0.400	91	0.96	0.55	905	5.85	2.91	67.0	59136
	2	22.91	26.41	6.98	10.40	0.73	0.87	2.28	2.42	0.392	87	0.99	0.68	874	7.39	4.02	71.5	59137
	3	28.86	26.43	8.85	11.00	0.79	0.85	3.32	2.22	0.358	80	0.88	0.61	903	5.91	2.77	62.8	59138
	4	27.80	26.37	8.46	10.30	0.76	0.74	3.43	2.60	0.339	79	1.09	0.81	874	6.55	5.15	73.1	59139
	5	26.00	25.64	7.74	10.10	0.74	0.87	3.08	1.93	0.309	65	1.17	0.91	883	5.38	6.79	76.5	59140
	6	19.26	25.94	7.58	9.85	0.49	0.85	3.17	1.78	0.335	70	1.17	0.81	876	6.23	6.58	75.7	59141
	7	21.16	25.48	6.10	9.63	0.39	0.94	1.60	1.63	0.311	74	1.28	1.14	863	9.26	5.55	74.0	59142
	8	20.67	25.33	5.87	9.53	0.40	0.84	1.60	1.69	0.313	74	1.25	1.18	863	6.90	6.56	75.3	59143
	9	22.25	25.10	5.98	8.56	0.35	0.85	1.61	1.24	0.319	70	1.18	0.98	868	10.02	6.50	74.2	59144
	10	19.70	24.80	4.89	9.43	0.28	0.98	1.26	1.53	0.301	70	1.18	0.94	860	5.16	6.66	75.2	59145
	11	19.89	24.89	5.43	9.35	0.33	0.95	1.46	1.47	0.307	67	1.17	0.69	831	9.76	6.12	74.9	59146
	12	22.36	24.31	5.75	8.95	0.41	0.96	1.75	1.55	0.288	66	1.19	0.46	856	7.90	6.27	76.9	59147
	13	18.34	23.56	5.16	8.81	0.37	0.90	1.41	1.46	0.276	66	1.27	0.21	852	7.87	5.33	74.3	59148
	14	17.77	23.56	5.05	9.34	0.42	0.88	1.35	1.43	0.307	68	1.54	0.55	857	4.97	6.09	76.0	59149
	15	19.52	26.66	5.42	8.74	0.47	0.81	1.30	1.54	0.292	39	1.35	0.14	839	6.17	6.43	77.5	59150
	16	26.96	26.48	7.61	5.79	0.74	0.76	2.37	0.98	0.371	65	0.91	0.09	845	6.69	6.67	77.6	59151
	17	25.91	26.24	6.40	5.23	0.60	0.75	2.38	1.07	0.387	60	0.99	0.07	843	7.26	6.42	77.5	59152
	18	25.43	26.58	7.14	6.32	0.74	0.80	1.82	1.21	0.374	70	1.10	0.14	846	7.32	6.63	76.6	59153

Core Depth	Si _R	Si _T	Al _R	Al _T	Mg _R	Mg _T	K _R	K _T	Ti _T	Li _T	Cd _T	Hg _T	Residue	CaCO ₃	C _{org}	Water ID		
cm	%	%	%	%	%	%	%	%	%	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	mg	%	%	%		
3	19	18.93	26.57	4.58	5.59	0.48	0.83	1.18	1.30	0.406	61	1.17	0.16	835	6.26	6.83	77.5	59154
	20	26.68	26.27	7.07	6.17	0.74	0.83	2.08	1.19	0.435	63	1.06	0.18	837	8.00	6.90	77.2	59155
	25	25.62	26.28	7.77	6.12	0.70	0.65	2.05	1.19	0.401	65	1.18	0.09	779	7.76	7.17	77.0	59156
	30	25.96	26.66	6.32	6.76	0.57	0.95	2.25	0.98	0.421	67	1.29	0.09	829	5.21	7.21	76.0	59157
	35	24.46	26.25	6.24	6.98	0.48	1.05	1.92	1.23	0.415	63	1.20	0.12	840	5.52	7.04	75.8	59158
	40	20.30	25.83	5.09	6.90	0.49	1.08	1.81	1.15	0.369	66	1.36	0.05	864	7.54	6.81	72.8	59159
	45	24.35	26.25	5.94	6.39	0.49	1.05	1.88	1.18	0.383	63	1.80	0.09	834	6.30	6.85	75.7	59160
	50	26.48	25.39	6.41	5.93	0.54	0.91	2.07	1.04	0.352	60	1.83	0.09	800	6.85	6.36	73.7	59161
	55	19.08	26.07	5.70	6.01	0.37	0.77	1.86	1.15	0.389	55	1.85	0.09	742	3.49	6.80	73.3	59162
	60	24.96	30.23	6.35	6.37	0.55	0.85	2.01	0.89	0.329	60	2.52	0.06	848	0.04	6.73	73.8	59163
	65	27.71	32.34	6.64	6.27	0.64	1.02	2.14	1.09	0.401	59	2.38	0.04	855	7.07	6.66	72.4	59164
7	0	29.77	28.47	9.26	7.68	1.04	0.94	2.82	1.59	0.486	78	1.42	0.54	872	6.35	4.23	76.0	59165
	1	27.15	31.07	10.00	8.83	0.68	0.90	3.11	2.20	0.584	96	1.45	0.48	900	6.67	3.26	63.0	59166
	2	22.62	30.29	7.76	9.68	0.80	1.03	2.07	2.38	0.562	91	1.52	0.45	911	6.08	3.27	61.2	59167
	3	31.26	30.31	11.60	9.67	1.15	0.94	3.62	2.44	0.554	89	1.07	0.45	907	5.65	2.62	59.6	59168
	4	30.28	30.52	13.30	9.78	1.01	0.96	3.07	2.79	0.551	99	1.15	0.44	910	5.36	2.51	59.8	59169
	5	29.74	29.40	10.70	8.72	0.98	0.95	2.91	2.38	0.561	109	1.02	0.54	903	4.11	2.95	64.6	59170
	6	30.36	29.73	10.60	9.16	0.91	0.90	3.62	2.38	0.538	98	1.06	0.35	925	0	3.25	67.9	59171
	7	29.97	30.27	10.40	8.32	1.00	0.79	3.48	2.34	0.525	95	0.97	0.58	893	4.15	3.49	67.5	59172
	8	25.91	29.74	7.54	8.87	0.72	0.93	3.09	2.49	0.491	93	1.05	0.77	874	0	4.41	72.2	59173
	9	22.71	27.50	6.73	7.23	0.59	0.85	2.47	1.89	0.371	95	1.16	0.91	866	2.49	5.08	74.6	59174
	10	28.98	28.15	7.96	7.62	0.74	0.82	2.45	1.68	0.401	73	0.67	0.94	855	0	5.25	74.0	59175
	11	27.72	28.94	7.23	7.90	0.75	0.73	2.36	1.79	0.429	76	0.82	1.12	854	10.68	6.07	74.6	59176
	12	25.23	28.22	7.22	7.30	0.56	1.00	2.54	1.88	0.403	85	0.55	1.03	847	9.97	6.07	73.3	59177
	13	27.41	28.46	8.07	8.87	0.63	0.88	2.60	2.04	0.413	87	0.89	0.88	871	9.21	5.23	71.1	59178
8	0	28.99	29.52	7.03	7.66	0.65	0.98	1.84	2.37	0.425	76	1.64	1.56	878	6.34	4.28	67.1	59179
	1	28.40	28.12	7.58	7.87	0.75	0.83	2.80	2.15	0.410	70	1.82	1.57	854	7.71	4.49	63.3	59180
	2	28.08	26.87	7.33	7.94	0.76	0.85	2.41	2.14	0.395	73	1.52	1.46	846	7.15	4.86	69.8	59181
	3	26.99	26.98	7.58	7.82	0.68	0.90	2.87	1.98	0.399	70	1.54	1.63	856	4.93	5.03	70.4	59182
	4	28.53	29.31	7.72	8.53	0.78	0.68	2.62	1.77	0.437	74	1.58	1.53	851	7.79	4.71	70.5	59183
9	0	22.81	23.99	7.08	6.52	0.72	1.11	1.92	1.29	0.346	62	1.42	0.95	764	7.70	4.60	78.7	59184
	1	22.97	26.43	7.50	8.17	0.74	1.18	2.71	1.65	0.370	68	1.10	1.37	780	8.13	4.67	77.6	59185
	2	24.02	26.23	7.31	7.79	0.78	1.05	2.33	1.80	0.381	87	1.10	1.61	810	7.79	5.17	76.1	59186
	3	23.44	26.45	6.89	8.46	0.74	1.18	2.09	1.56	0.386	81	0.90	1.44	737	8.41	5.12	75.2	59187
	4	25.82	26.13	8.23	7.25	0.95	1.12	2.49	1.63	0.370	78	1.12	1.56	801	7.92	5.07	75.5	59188
	5	24.43	18.20	7.83	4.79	0.84	0.59	2.58	1.05	0.228	56	1.01	1.45	811	9.16	5.26	75.7	59189
10	0	30.83	28.63	7.39	5.97	0.79	0.53	2.15	1.16	0.368	58	1.13	1.57	876	7.03	7.73	71.7	59195
	1	29.04	31.31	5.93	6.73	0.60	0.67	1.57	1.42	0.423	58	1.33	1.60	900	1.78	8.30	71.0	59196
	2	31.11	26.44	6.50	6.63	0.62	0.56	1.85	0.94	0.353	60	1.32	1.60	901	5.97	7.01	63.5	59197
	3	28.24	29.39	6.64	6.06	0.64	0.70	1.91	0.69	0.345	62	1.33	2.07	891	7.07	6.66	64.6	59198
	4	30.18	29.02	6.74	7.16	0.71	0.55	1.68	1.00	0.405	59	0.92	2.70	898	0	7.50	58.1	59199
	5	32.38	30.88	8.23	6.69	0.85	0.60	1.85	1.38	0.394	59	1.33	2.28	905	13.18	8.19	62.9	59200
12	0	30.73	24.27	5.47	5.71	0.71	0.80	2.13	1.77	0.610	64	0.82	2.12	892	1.94	7.53	62.6	59201
	1	28.63	28.39	5.40	6.01	0.54	0.84	1.90	1.45	0.648	51	1.35	2.27	889	0.67	7.22	58.8	59202
	2	30.94	28.66	6.19	5.63	0.67	0.93	2.14	1.75	0.606	71	2.42	2.25	890	4.42	6.41	60.2	59204
	3	21.99	28.30	5.27	5.39	0.57	1.07	1.67	1.79	0.512	67	1.69	3.24	892	3.33	7.23	62.3	59205
	4	22.86	38.17	5.72	6.71	0.60	0.95	1.75	1.81	0.578	71	1.61	3.20	872	2.25	6.56	67.1	59206

Core Depth	Si _R	Si _T	Al _R	Al _T	Mg _R	Mg _T	K _R	K _T	Ti _T	Li _T	Cd _T	Hg _T	Residue	CaCO ₃	Corg	Water ID	
cm	%	%	%	%	%	%	%	%	%	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	mg	%	%	%	
12	5 23.50	37.65	6.43	6.97	0.56	1.00	1.59	1.97	0.544	80	1.47	3.00	879	2.08	6.74	68.6	59207
	6 27.75	36.30	6.98	6.89	0.70	1.01	2.17	1.63	0.514	76	1.31	2.62	870	1.58	7.14	68.5	59208
	7 25.40	36.19	5.62	7.17	0.57	1.05	1.65	1.76	0.578	69	1.32	3.14	881	2.67	7.30	68.3	59209
	8 26.05	34.97	5.81	6.20	0.52	0.86	1.68	1.62	0.467	66	3.32	2.90	892	0	7.15	65.6	59210
	9 24.81	30.52	5.50	5.78	0.52	0.77	1.70	1.47	0.459	68	1.34	2.50	874	2.33	7.30	64.8	59211
	10 29.90	33.27	6.91	6.17	0.58	0.82	2.06	1.53	0.451	69	1.22	3.33	885	6.50	7.01	62.1	59212
16	0 21.34	28.53	6.59	8.89	0.73	1.17	2.08	2.26	0.621	67	0.55	0.79	878	7.05	4.63	71.5	59226
	1 24.02	27.82	6.30	8.26	0.72	1.02	2.06	2.54	0.627	64	0.63	0.82	873	4.35	4.24	70.3	59227
	2 33.86	40.90	8.94	8.17	1.07	0.99	3.44	2.40	0.582	72	0.55	0.91	871	7.33	4.04	78.0	59228
	3 24.76	40.83	6.23	7.96	0.70	0.95	1.96	2.37	0.511	65	0.87	0.89	861	4.55	4.24	70.8	59229
	4 23.67	40.50	6.35	9.32	0.64	0.97	1.93	2.68	0.454	71	0.55	0.85	870	4.21	4.33	70.5	59230
	5 29.93	40.79	7.88	9.18	0.87	1.02	2.40	2.64	0.484	63	0.69	0.93	882	6.54	4.34	69.0	59231
	6 29.33	39.35	8.14	8.68	0.85	1.07	2.85	2.51	0.455	64	0.73	0.96	864	4.93	4.63	69.3	59232
	7 28.62	29.52	9.02	9.51	0.82	0.88	2.92	2.48	0.531	78	1.02	1.12	867	2.70	4.68	69.0	59233
	8 29.78	28.72	8.89	10.20	0.83	1.05	2.61	2.20	0.492	83	0.74	1.21	875	3.57	4.89	66.6	59234
	9 25.68	26.81	9.10	11.50	0.60	1.26	2.11	1.40	1.004	62	0.84	1.21	882	7.71	5.18	68.0	59235
	10 24.68	27.71	9.40	10.30	0.61	0.99	2.45	2.18	0.496	80	0.70	1.17	861	6.37	4.59	64.5	59236
	11 28.73	27.86	10.5	9.45	0.73	0.80	2.41	2.12	0.479	83	0.69	1.15	881	4.57	5.00	62.7	59237
	12 29.85	26.77	10.30	9.67	0.69	1.03	2.33	1.86	0.504	68	0.50	1.02	890	16.27	5.75	64.9	59238
	13 28.88	27.65	10.00	10.50	0.66	0.96	2.53	2.25	0.493	68	0.46	0.90	875	6.80	4.49	63.1	59239
	14 28.65	32.89	10.40	9.06	0.69	0.95	2.19	1.99	0.440	66	0.44	0.94	867	9.23	4.09	62.3	59240
	15 28.53	34.31	9.87	12.00	0.55	1.01	2.28	2.09	0.439	66	0.76	1.89	886	6.89	4.54	63.2	59241
	20 20.81	26.35	5.05	6.88	0.56	0.87	1.82	2.11	0.446	59	0.47	1.10	882	8.56	5.15	63.0	59242
	25 23.90	25.90	5.66	7.90	0.60	0.87	2.05	2.50	0.399	69	0.81	1.17	892	6.35	4.69	60.2	59243
	30 35.98	29.57	8.94	7.33	0.96	0.87	3.67	2.62	0.568	66	0.37	0.77	858	7.68	3.55	59.4	59244
	35 25.53	29.11	6.11	7.28	0.64	0.85	2.11	2.67	0.513	68	0.29	0.59	883	7.57	3.14	56.5	59245
	40 26.78	27.61	6.46	6.93	0.73	0.97	2.13	2.14	0.511	65	0.31	0.44	857	4.95	3.43	56.9	59246
	45 27.42	28.20	6.66	6.73	0.70	0.87	2.45	2.63	0.485	64	0.30	0.21	849	4.19	3.40	55.6	59247
18	0 26.89	32.87	6.47	6.94	0.65	1.07	1.87	2.08	0.542	73	0.63	1.18	872	6.21	4.15	72.7	59213
	1 27.59	32.34	6.45	7.60	0.68	1.14	2.03	2.22	0.583	76	0.55	1.26	864	4.72	4.28	72.0	59214
	2 25.95	29.44	5.76	8.55	0.71	1.12	2.10	2.15	0.594	71	0.78	1.07	881	5.37	4.59	70.4	59215
	3 27.97	30.44	7.50	8.48	0.74	1.09	2.82	2.10	0.632	64	0.65	0.93	867	5.62	3.93	71.6	59216
	4 24.04	29.88	5.87	8.82	0.68	1.01	2.17	2.05	0.569	70	0.66	0.86	866	6.61	3.80	70.0	59217
	5 23.13	32.67	5.92	8.32	0.67	1.23	1.92	2.13	0.593	66	0.51	0.90	873	7.16	4.29	71.7	59218
	6 29.14	33.83	6.94	8.45	0.84	1.22	2.82	2.16	0.623	65	0.62	0.80	879	6.70	4.14	70.2	59219
	7 22.81	34.62	5.80	8.31	0.63	1.16	2.81	2.12	0.629	72	0.66	0.83	874	5.40	4.09	70.5	59220
	8 25.50	35.12	7.12	8.73	0.67	1.25	2.65	2.10	0.558	68	0.61	0.82	873	5.35	4.06	70.3	59221
	9 24.38	35.49	5.69	8.51	0.71	1.22	1.93	2.17	0.611	71	0.69	0.80	881	3.10	4.16	67.9	59222
	10 30.04	34.87	6.97	8.05	0.84	1.23	2.75	2.23	0.554	71	0.89	0.89	885	5.51	4.67	69.3	59223
	11 26.35	28.91	6.81	8.88	0.73	0.96	2.18	2.25	0.685	77	0.88	1.08	888	3.98	4.26	67.7	59224
	12 29.71	28.25	8.72	8.18	0.61	0.99	2.58	2.33	0.600	66	0.84	1.14	863	8.15	4.51	67.1	59225
19	0 23.10	26.32	6.07	6.84	0.44	0.80	2.24	1.80	0.605	54	0.73	0.94	811	16.46	6.03	57.8	59248
	1 23.41	31.68	5.13	7.00	0.47	0.76	1.81	1.79	0.444	52	0.83	0.94	881	8.69	5.51	59.1	59249
	2 28.70	34.39	8.79	8.23	0.75	0.83	3.20	2.22	0.543	61	0.89	1.11	887	8.65	4.62	59.7	59250
	3 23.85	29.77	5.71	6.25	0.51	0.62	1.66	1.60	0.358	54	0.67	0.74	860	10.52	5.23	57.6	59251
	4 24.70	27.78	6.19	5.90	0.49	0.56	1.46	1.56	0.323	52	0.79	0.80	874	0	5.96	59.9	59252
	5 25.15	26.61	5.72	6.38	0.47	0.69	1.60	1.73	0.312	38	0.46	0.77	878	9.89	5.79	58.4	59253
	6 26.58	32.52	5.76	6.23	0.54	0.77	1.48	1.78	0.412	37	0.54	0.58	893	6.53	4.62	58.9	59254
	7 27.19	33.96	6.11	6.23	0.60	0.80	1.91	1.90	0.331	36	0.59	0.61	896	2.16	4.43	60.4	59255
	8 27.33	32.66	5.76	6.15	0.55	0.79	1.75	1.87	0.372	37	0.40	0.62	885	3.07	4.26	56.8	59256
	9 26.03	30.93	5.82	6.86	0.52	0.77	1.65	2.04	0.336	44	0.98	0.64	882	6.48	4.59	58.5	59257

Core Depth		Si _R	Si _T	Al _R	Al _T	Mg _R	Mg _T	K _R	K _T	Ti _T	Li _T	Cd _T	Hg _T	Residue	CaCO ₃	Corg	Water ID	
	cm	%	%	%	%	%	%	%	%	%	μgg ⁻¹	μgg ⁻¹	μgg ⁻¹	mg	%	%	%	
19	10	26.22	29.49	6.29	6.72	0.58	0.87	1.74	2.05	0.336	32	0.71	0.29	893	2.34	4.13	55.8	59258
	11	27.75	28.39	6.67	6.15	0.62	0.82	1.71	2.04	0.359	41	0.87	0.34	908	4.28	4.14	58.1	59259
	12	28.85	28.24	6.57	8.39	0.53	0.98	2.08	2.23	0.462	85	0.77	0.20	886	4.81	4.27	57.9	59260
	13	26.26	27.08	5.61	9.61	0.58	1.30	1.71	2.50	0.521	45	0.68	0.06	869	6.85	3.88	54.2	59261
	14	25.87	27.55	6.40	7.80	0.62	0.89	2.07	2.47	0.344	64	0.79	0.11	861	4.75	4.12	59.9	59262
	15	28.09	27.00	6.11	7.35	0.62	0.88	1.79	2.12	0.375	42	0.64	0.15	879	5.14	3.77	61.3	59263
	20	26.57	25.94	5.78	8.98	0.66	0.99	1.83	2.48	0.363	61	0.91	0.08	884	5.74	4.17	65.2	59264
	25	26.06	24.95	5.33	9.22	0.66	0.90	2.00	2.45	0.336	61	1.22	0.73	880	4.95	4.18	66.1	59265
	30	28.73	24.70	5.70	7.45	0.62	0.81	1.97	1.89	0.329	51	1.11	2.42	886	9.25	5.89	56.5	59266
	35	26.60	24.53	5.76	7.45	0.57	0.77	1.74	2.09	0.332	45	0.86	2.12	902	3.60	5.77	61.1	59267
	40	25.40	25.06	6.68	8.87	0.71	0.90	1.95	2.61	0.368	42	0.91	0.13	891	5.21	5.19	64.7	59268
20	0	27.70	28.41	6.34	8.05	0.74	0.97	2.09	2.49	0.469	37	0.69	0.46	869	3.92	3.00	71.2	46701
	1	26.11	31.21	6.18	8.27	0.70	0.91	2.12	2.58	0.534	43	0.53	0.43	877	3.92	3.35	71.9	46702
	2	25.39	31.49	6.33	8.19	0.75	0.84	1.84	2.72	0.577	40	0.74	0.43	873	3.67	3.45	71.7	46703
	3	24.94	29.14	5.75	8.27	0.83	0.98	2.10	2.50	0.479	46	0.60	0.47	863	3.83	3.25	69.6	46704
	4	22.46	29.44	5.89	8.44	0.82	1.02	1.78	2.71	0.521	44	0.79	0.42	880	3.67	3.47	72.3	46705
	5	25.51	29.68	6.38	8.27	0.77	0.97	1.93	2.39	0.517	51	0.42	0.43	866	3.58	3.19	70.6	46706
	6	23.23	30.07	5.70	7.96	0.68	0.90	1.74	2.45	0.534	42	0.71	0.41	878	3.83	3.26	70.5	46707
	7	25.33	33.33	5.44	8.47	0.71	0.93	1.49	2.60	0.386	74	0.43	0.46	874	3.08	2.99	65.4	46708
	8	26.93	32.28	5.69	8.52	0.77	0.95	1.64	2.42	0.481	58	0	0.40	875	3.42	3.06	69.3	46709
	9	26.69	32.84	6.83	8.63	0.78	0.96	1.75	2.59	0.480	50	0.48	0.35	869	5.58	3.29	67.1	46710
	10	28.68	32.44	6.57	7.66	0.73	0.78	1.68	2.24	0.509	51	0.61	0.32	892	3.50	3.06	67.1	46711
23	0	28.11	32.62	5.78	7.13	0.58	0.77	1.38	2.14	0.518	46	0.29	0.28	864	5.17	2.87	68.0	46712
	1	27.58	32.91	5.92	7.65	0.60	0.75	1.34	2.47	0.381	45	0.35	0.26	864	4.92	2.88	69.0	46713
	2	25.74	30.92	5.74	7.76	0.59	0.86	1.38	2.38	0.336	42	0.37	0.26	857	3.92	2.78	65.8	46714
	3	27.21	27.54	7.40	7.82	0.60	0.92	1.75	2.26	0.313	46	0.39	0.32	858	4.83	2.72	66.6	46715
	4	34.58	29.84	7.55	7.60	0.74	0.82	1.96	1.95	0.320	40	0.40	0.27	860	5.08	2.43	62.7	46716
	5	28.29	27.77	5.08	7.36	0.66	0.78	1.66	2.05	0.475	88	0.46	0.24	876	4.33	2.57	62.4	46717
	6	29.04	27.99	4.92	6.46	0.65	0.64	1.41	1.83	0.449	49	0.46	0.21	864	4.08	2.56	63.4	46718
	7	26.35	25.88	4.63	6.37	0.66	0.57	1.36	1.78	0.369	48	0.37	0.26	863	5.00	2.51	62.8	46719
	8	28.92	26.33	4.66	7.78	0.69	0.89	1.51	1.97	0.355	38	0.45	0.28	875	4.17	2.55	65.6	46720
	9	28.71	26.23	4.81	6.86	0.72	0.81	1.57	1.78	0.330	48	0.31	0.21	869	4.58	2.53	63.1	46721
24	0	22.49	21.85	5.28	8.00	0.69	0.88	1.66	2.08	0.303	56	0.97	1.18	841	4.67	6.08	77.1	46724
	5	22.99	22.26	5.89	8.41	0.73	0.91	1.71	2.20	0.338	48	1.14	1.25	857	4.42	5.51	76.9	46725
	10	23.68	26.83	6.04	8.67	0.76	0.91	1.87	2.51	0.346	147	1.05	1.04	877	6.75	4.40	70.8	46726
	15	23.75	25.83	5.79	7.13	0.70	0.78	1.92	2.41	0.268	99	0.69	0.40	866	4.33	4.01	71.4	46727
	20	22.69	28.15	5.15	7.76	0.64	0.88	1.77	2.65	0.410	91	0.74	0.14	863	2.75	3.97	71.6	46728
	25	24.52	24.79	6.83	6.54	0.73	0.79	2.60	2.43	0.387	95	0.95	0.05	877	2.25	4.05	70.8	46729
	30	23.40	27.11	5.41	7.28	0.72	1.21	1.93	2.50	0.445	88	0.95	0.06	842	2.75	4.56	71.1	46730
	35	25.63	26.67	5.76	7.23	0.80	1.04	2.02	2.60	0.321	74	1.11	0.05	874	2.67	4.60	74.0	46731
	40	24.01	26.15	5.66	7.09	0.72	1.07	1.85	2.60	0.341	76	1.07	0.06	851	2.75	4.71	71.0	46732
	45	24.05	24.77	6.31	6.92	0.75	0.99	1.76	2.62	0.328	55	1.36	0.06	836	3.00	4.96	70.3	46733
	50	23.84	24.88	7.21	7.08	0.76	1.11	1.98	2.41	0.336	83	1.16	0.03	848	3.75	4.90	70.1	46734
	55	22.24	27.56	5.60	7.70	0.72	1.14	1.62	2.81	0.354	106	0.98	0.02	790	3.83	4.53	67.7	46735
	60	22.22	28.19	5.56	7.91	0.72	1.14	1.62	3.07	0.409	83	0.92	0	792	7.42	4.33	65.3	46736
	65	23.66	27.63	5.90	7.65	0.73	1.10	1.52	2.83	0.406	89	0.98	0.01	865	4.17	4.52	67.4	46737
	70	22.52	27.19	5.95	7.60	0.77	1.08	1.61	2.77	0.453	50	0.98	0	868	3.83	4.75	67.8	46738
	75	23.30	27.39	5.76	7.28	0.70	1.16	1.64	3.08	0.466	83	1.00	0.01	818	4.08	4.72	68.7	46739
	80	21.61	27.11	5.27	7.78	0.62	1.17	1.57	3.14	0.407	74	1.03	0	779	3.25	4.72	69.0	46740

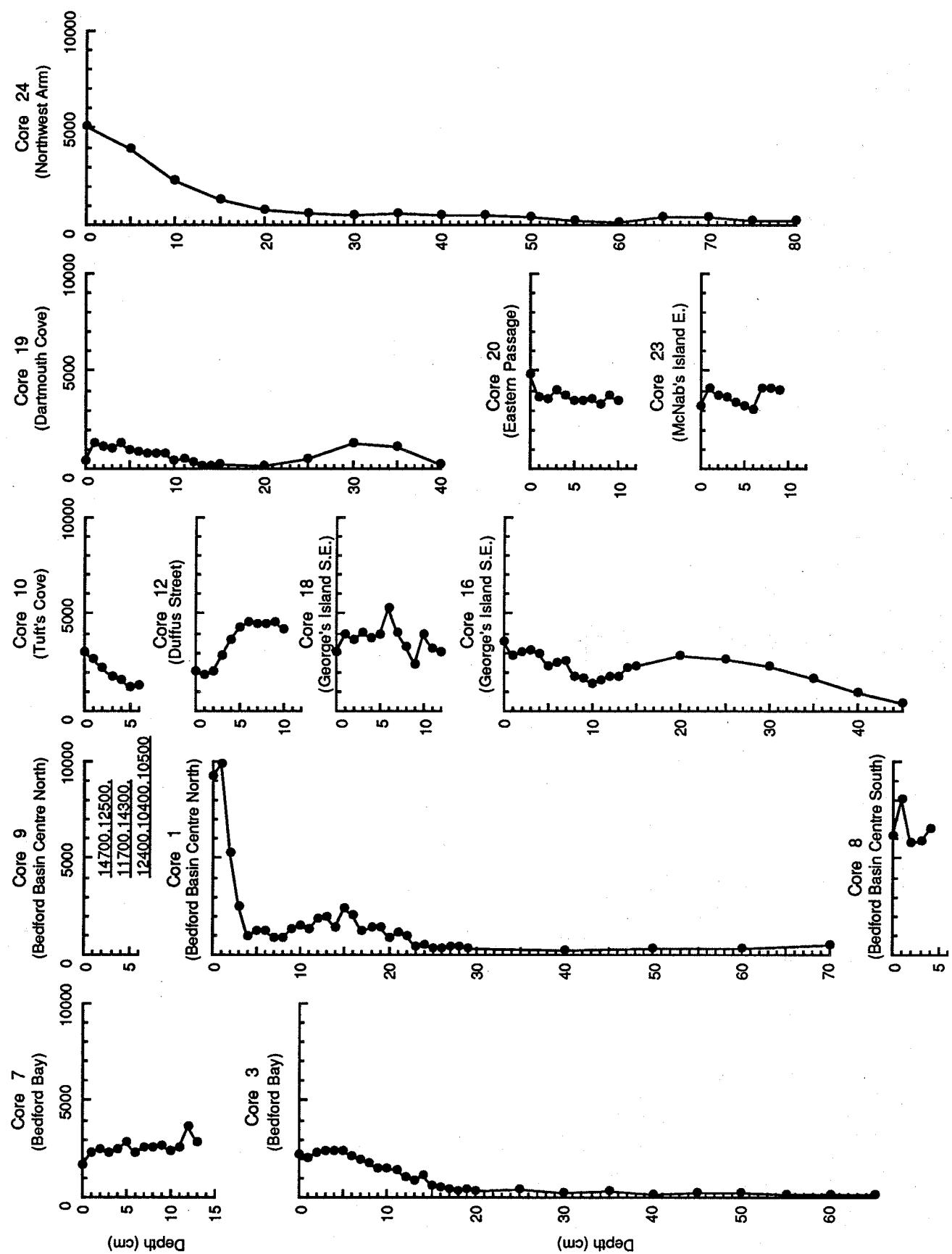
Core Depth	Sand	Silt	Clay	Mean-grain-size	Kurt -osis	Skew -ness	pH _{PW}	pH _{sed}	p _{PW}	NH ₄ ⁺	PO ₄ ³⁻	SiO ₂ _{PW}	SO ₄ ²⁻	Alk _{PW}	Fe _{PW}	Mn _{PW}	ID	
							-lg N	-lg N	-lg M	mm	μM	μM	mm	mm	μM	μM	μM	
cm	%	%	%	μm	phi													
1	0	1.25	46.42	52.33	3.88	8.01 ±1.57	2.87	-0.49	6.89	5.92	3.6	0.13	59	307	26.5	2.7	204	17.5 59101
	1	2.30	45.83	51.87	4.02	7.96 ±1.68	2.77	-0.53	7.00	6.21	1.8	0.13	63	310	26.8	2.7	201	19.5 59102
	2	1.85	52.82	45.33	4.61	7.76 ±1.72	2.38	-0.29	7.00	6.33	1.9	0.13	75	309	27.2	3.0	298	19.7 59103
	3	1.46	53.62	44.91	4.94	7.66 ±1.70	2.34	-0.28	7.28	6.42	0.6	0.13	68	285	27.3	2.8	227	16.2 59104
	4	1.92	51.26	46.83	4.81	7.70 ±1.79	2.27	-0.36	7.28	6.51	1.4	0.10	29	218	27.4	2.7	96	9.8 59105
	5	2.09	48.10	49.82	4.36	7.84 ±1.65	2.70	-0.48	7.39	6.47	0.9	0.05	24	196	27.3	2.7	48	9.1 59106
	6	4.37	50.89	44.74	5.30	7.56 ±1.84	2.33	-0.41	7.23	6.55	1.1	0.07	15	195	27.4	2.6	37	8.4 59107
	7	3.47	55.86	40.67	5.72	7.45 ±1.75	2.40	-0.29	7.28	6.62	1.3	0.06	13	203	27.6	2.6	30	8.6 59108
	8	1.40	51.31	47.29	4.49	7.80 ±1.63	2.55	-0.37	7.39	6.64	2.7	0.05	15	215	27.5	2.6	26	7.9 59109
	9	1.61	52.80	45.59	4.68	7.74 ±1.65	2.48	-0.30	7.23	6.70	2.4	0.05	21	229	27.2	2.5	49	9.8 59110
	10	1.78	62.42	35.80	5.92	7.40 ±1.57	2.62	-0.16	7.28	6.74	2.7	0.04	16	232	26.9	2.6	34	10.7 59111
	11	1.39	54.84	43.76	4.74	7.72 ±1.51	2.82	-0.31	7.23	6.73	2.2	0.05	19	242	27.1	2.6	57	8.5 59112
	12	1.43	59.77	38.81	5.34	7.55 ±1.49	2.76	-0.20	7.17	6.73	2.6	0.04	26	261	27.1	2.5	72	9.2 59113
	13	1.43	52.86	45.71	4.46	7.81 ±1.47	3.16	-0.45	7.17	6.74	2.1	0.05	19	258	27.2	2.6	69	9.1 59114
	14	1.65	59.91	38.44	5.52	7.50 ±1.53	2.74	-0.23	7.23	6.72	2.4	0.05	19	251	26.9	2.4	79	9.0 59115
	15	0.82	56.67	42.50	4.81	7.70 ±1.42	2.83	-0.20	7.11	6.77	2.5	0.03	18	263	27.4	2.5	83	6.8 59116
	16	1.31	59.39	39.30	5.26	7.57 ±1.51	2.69	-0.16	7.11	6.74	2.1	0.04	8	241	27.6	2.4	64	8.1 59117
	17	1.77	68.24	29.99	6.75	7.21 ±1.51	2.69	-0.03	7.23	6.78	2.6	0.03	7	233	27.7	2.4	65	6.0 59118
	18	0.84	55.40	43.76	4.71	7.73 ±1.47	2.76	-0.27	7.23	6.73	2.2	0.02	2	220	27.3	2.2	40	6.4 59119
	19	0.99	63.74	35.26	5.92	7.40 ±1.49	2.63	-0.07	7.23	6.75	2.3	0.02	7	248	27.5	2.4	48	4.8 59120
	20	0.33	59.74	39.93	5.08	7.62 ±1.43	2.65	-0.12	7.23	6.89	2.8	0.02	3	236	27.5	2.4	31	5.0 59121
	21	0.71	61.40	37.89	5.34	7.55 ±1.42	2.78	-0.09	7.45	6.78	2.3	0.04	1	210	27.7	2.5	14	5.2 59122
	22	0.76	46.23	53.01	3.59	8.12 ±1.36	3.29	-0.37	7.39	6.75	2.5	0.04	2	297	27.9	2.6	8	4.8 59123
	23	1.63	61.14	37.24	5.68	7.46 ±1.54	2.63	-0.08	7.45	6.74	2.8	0.08	5	344	25.8	2.9	3	6.0 59124
	24	0.77	62.42	36.81	5.41	7.53 ±1.43	2.75	-0.02	7.34	6.77	2.8	0.07	7	388	26.7	2.8	3	5.8 59125
	25	1.46	62.64	35.90	5.68	7.46 ±1.47	2.84	-0.12	7.45	6.83	3.0	0.07	8	370	26.7	2.9	3	6.2 59126
	26	0.47	55.54	43.99	4.49	7.80 ±1.39	2.96	-0.22	7.34	6.78	3.0	0.10	16	394	26.9	2.9	6	7.3 59127
	27	1.32	64.87	33.81	5.92	7.40 ±1.45	2.87	-0.08	7.34	6.82	3.7	0.10	19	374	26.2	3.1	8	5.7 59128
	28	0.25	62.70	37.04	5.26	7.57 ±1.40	2.80	0	7.51	6.85	5.3	0.10	15	330	26.2	2.8	9	6.3 59129
	29	1.25	59.29	39.45	5.26	7.57 ±1.52	2.70	-0.15	7.51	6.92	5.9	0.20	42	424	26.0	3.8	3	5.7 59130
	40	1.63	63.22	35.15	5.64	7.47 ±1.43	3.01	-0.10	7.90	7.06	-0.5	1.13			21.6	15.0	0	0 59131
	50	0.76	60.12	39.12	5.19	7.59 ±1.47	2.67	-0.04	8.01	7.22	0.5	1.75			18.4	23.8	0	0 59132
	60	1.24	57.98	40.78	4.98	7.65 ±1.44	3.00	-0.19	8.01	7.27	-1.0	2.15			11.8	28.4	0	0 59133
	70	0.87	65.63	33.51	5.80	7.43 ±1.45	2.77	0.12	8.18	7.32	-0.5	3.20			10.8	35.2	0	0 59134
3	0	1.18	50.83	47.98	4.30	7.86 ±1.62	2.46	-0.23	7.68	6.50	2.3	0.19	28	242	26.2	3.9	0	0.6 59135
	1	1.77	61.07	37.16	5.76	7.44 ±1.66	2.34	0	7.28	6.70	-0.9	0.14	28	231	26.7	3.0	0	1.0 59136
	2	1.73	65.04	33.23	6.43	7.28 ±1.67	2.39	0.08	7.39	6.79	1.3	0.12	20	212	26.7	2.8	3	1.0 59137
	3	1.32	63.76	34.91	6.13	7.35 ±1.62	2.33	0.10	7.39	6.93	0.1	0.13	22	218	26.6	3.0	2	0.7 59138
	4	1.29	64.83	33.89	6.00	7.38 ±1.55	2.57	0.08	7.28	6.94	0.8	0.12	15	206	27.0	2.7	0	1.0 59139
	5	0.82	59.38	39.81	5.19	7.59 ±1.60	2.31	0.01	7.34	6.95	1.0	0.09	10	194	27.1	2.7	0	1.1 59140
	6	1.52	72.56	25.92	7.76	7.01 ±1.57	2.57	0.29	7.34	6.96	1.7	0.08	6	181	27.0	2.6	0	1.1 59141
	7	1.30	69.68	29.03	7.14	7.13 ±1.59	2.47	0.26	7.28	6.93	1.8	0.07	4	176	27.0	2.5	0	1.2 59142
	8	2.10	71.96	25.94	7.60	7.04 ±1.54	2.71	0.25	7.39	6.99	0.5	0.07	4	170	26.6	2.5	0	1.0 59143
	9	1.04	65.85	33.11	6.39	7.29 ±1.59	2.37	0.13	7.39	6.97	0.3	0.07	14	158	26.1	2.5	0	1.4 59144
	10	0.13	51.12	48.74	4.27	7.87 ±1.59	2.15	-0.18	7.34	6.98	2.5	0.08	28	160	26.1	2.8	0	1.6 59145
	11	0.96	64.26	34.77	6.22	7.33 ±1.66	2.22	0.10	7.28	7.01	2.0	0.07	4	151	26.0	2.5	19	1.6 59146
	12	1.05	71.95	27.00	7.55	7.05 ±1.54	2.55	0.30	7.28	6.98	1.5	0.07	8	107	26.2	2.6	0	1.3 59147
	13	1.91	72.20	25.89	7.92	6.98 ±1.57	2.54	0.25	7.34	6.98	2.5	0.08	8	84	26.6	2.5	7	1.5 59148
	14	1.39	71.95	26.66	7.49	7.06 ±1.53	2.63	0.24	7.28	6.97	2.7	0.07	6	106	26.6	2.6	0	1.7 59149
	15	1.27	62.35	36.38	5.88	7.41 ±1.66	2.28	0.10	7.34	6.98	2.7	0.07	8	107	27.0	2.5	0	1.7 59150
	16	3.12	76.38	20.50	9.82	6.67 ±1.57	2.80	0.44	7.28	6.96	3.3	0.08	3	90	26.8	2.5	0	1.9 59151
	17	2.01	74.04	23.95	8.67	6.85 ±1.56	2.64	0.36	7.34	6.98	3.3	0.09	4	106	26.9	2.4	0	1.9 59152
	18	1.46	53.65	44.89	4.88	7.68 ±1.64	2.34	-0.21	7.34	6.98	3.4	0.08	3	99	26.0	2.5	0	1.8 59153

Core Depth	cm	Sand	Silt	Clay	Mean-grain-size -osis	Kurt -ness	phi	pH _{PW}	pH _{Sed}	p _{PW}	NH ₄ ⁺	PO ₄ ³⁻	SiO ₂ _{PW}	SO ₄ ²⁻	Alk _{PW}	Fe _{PW}	Mn _{PW}	ID	
		%	%	%	μm	-lg N	-lg N	-lg M	mm	μM	μM	mm	μM	μM	μM	μM	μM		
3	19	1.74	73.81	24.44	8.97	6.80 ±1.63	2.49	0.43	7.28	6.94	3.3	0.12	32	191	26.2	2.7	0	1.2	59154
	20	2.20	76.70	21.10	9.55	6.71 ±1.55	2.76	0.47	7.23	6.97	3.2	0.14	8	218	26.3	2.8	0	1.2	59155
	25	1.58	63.48	34.94	6.62	7.24 ±1.69	2.17	0.08	7.39	6.97	2.3	0.46	139	569	25.4	7.0	0	0	59156
	30	1.24	71.17	27.59	7.87	6.99 ±1.57	2.46	0.31	7.56	6.99	-1.6	0.59	188	619	22.0	10.8	0	0	59157
	35	3.02	68.21	28.77	7.98	6.97 ±1.67	2.36	0.21	7.73	7.05	-1.0	1.03	240	671	21.0	16.2	0	0	59158
	40	5.41	72.88	21.70	10.45	6.58 ±1.69	2.49	0.35	7.73	7.07	-1.4	1.15	242	684	20.7	17.0	0	0	59159
	45	1.65	65.30	33.05	6.75	7.21 ±1.61	2.36	0.15	7.79	7.09	-0.5	1.08	253	700	21.2	18.4	0	0	59160
	50	1.72	67.35	30.93	7.24	7.11 ±1.62	2.34	0.19	7.90	7.09	-0.9	1.28	252	704	21.2	19.5	0	0	59161
	55	2.53	73.20	24.27	9.04	6.79 ±1.63	2.50	0.35	7.90	7.11	-0.8	1.27	251	706	18.7	20.0	0	0	59162
	60	1.10	72.64	26.26	8.14	6.94 ±1.55	2.51	0.39	7.90	7.11	-1.1	1.23	261	742	19.4	20.7	0	0	59163
	65	1.11	66.94	31.96	6.80	7.20 ±1.57	2.36	0.21	7.90	7.14	-1.9	1.35			19.4	20.9	0	0	59164
7	0	1.21	65.49	33.30	6.30	7.31 ±1.54	2.56	0.02	7.11	6.07	0.6	0.12	39	169	24.3	2.4	32	2.3	59165
	1	0.83	71.41	27.76	6.94	7.17 ±1.45	2.73	0.24	7.17	6.18	1.5	0.12	42	248	25.1	2.5	2	1.3	59166
	2	0.71	72.01	27.28	6.99	7.16 ±1.50	2.65	0.28	7.34	6.33	1.1	0.12	25	176	25.1	2.3	2	1.3	59167
	3	0.67	69.89	29.44	6.66	7.23 ±1.48	2.62	0.23	7.34	6.41	2.0	0.11	28	211	24.4	2.6	0	1.0	59168
	4	1.20	72.49	26.31	7.19	7.12 ±1.46	2.77	0.27	7.34	6.51	1.5	0.11	22	189	24.3	2.5	0	1.0	59169
	5	0.64	62.98	36.38	5.26	7.57 ±1.43	2.64	0.12	7.39	6.62	1.1	0.11	20	202	23.2	2.7	0	0.6	59170
	6	0.78	62.01	37.21	5.34	7.55 ±1.49	2.48	0.10	7.39	6.64	1.3	0.10	16	200	25.7	2.6	0	0.5	59171
	7	0.61	63.23	36.16	5.72	7.45 ±1.51	2.44	0.09	7.45	6.69	1.4	0.12	14	196	25.5	2.6	0	0.5	59172
	8	0.84	69.80	29.36	6.48	7.27 ±1.45	2.76	0.23	7.51	6.72	1.5	0.10	12	197	25.9	2.7	0	0.5	59173
	9	1.35	68.00	30.65	6.80	7.20 ±1.54	2.52	0.15	7.45	6.79	0.7	0.12	10	189	24.8	2.5	0	0.6	59174
	10	0.69	71.57	27.74	7.09	7.14 ±1.45	2.63	0.28	7.45	6.83	0.5	0.09	9	181	26.3	2.6	0	0.4	59175
	11	0.76	69.23	30.01	6.75	7.21 ±1.55	2.47	0.30	7.45	6.79	0.5	0.09	8	162	26.4	2.7	0	0.6	59176
	12	1.01	74.47	24.53	7.81	7.00 ±1.50	2.71	0.42	7.56	6.84	0.6	0.09	9	175	26.3	2.5	0	0.8	59177
	13	0.78	67.30	31.92	6.39	7.29 ±1.53	2.46	0.19	7.51	6.85	0.6	0.09	12	181	26.5	2.5	0	0.7	59178
8	0	1.45	56.47	42.09	5.34	7.55 ±1.70	2.23	-0.17	7.17	6.46	0.8	0.12	111	265	26.3	3.4	54	7.2	59179
	1	1.04	56.04	42.91	5.15	7.60 ±1.65	2.27	-0.15	7.17	6.50	1.3	0.09	38	216	25.5	3.0	69	6.2	59180
	2	1.02	57.18	41.81	5.01	7.64 ±1.59	2.37	-0.11	7.06	6.58	1.5	0.09	30	200	25.4	2.7	78	6.2	59181
	3	1.67	62.61	35.72	6.26	7.32 ±1.63	2.35	-0.04	7.11	6.59	0.7	0.07	24	181	25.1	2.8	73	5.2	59182
	4	0.90	60.83	38.27	5.68	7.46 ±1.59	2.34	-0.03	7.11	6.61	-0.5	0.08	27	183	25.2	2.5	87	5.7	59183
9	0	1.46	58.26	40.28	5.37	7.54 ±1.60	2.44	-0.14	7.39	6.82	-0.2	0.07	98	211	25.4	2.8	67	6.3	59184
	1	0.99	60.03	38.98	5.49	7.51 ±1.58	2.41	-0.08	7.56	6.85	-1.9	0.12	124	254	25.2	2.9	40	7.9	59185
	2	1.02	63.55	35.43	6.09	7.36 ±1.59	2.39	0.02	7.56	6.92	-2.1	0.13	145	284	23.9	3.4	31	8.2	59186
	3	0.20	57.56	42.24	5.08	7.62 ±1.56	2.26	-0.07	7.51	6.99	-1.6	0.16	180	307	24.2	3.5	19	9.0	59187
	4	2.11	60.92	36.97	5.96	7.39 ±1.64	2.43	-0.13	7.62	7.01	-1.4	0.21	206	317	24.2	4.0	14	8.9	59188
	5	1.03	55.70	43.27	4.88	7.68 ±1.57	2.54	-0.23	7.68	7.09	0.3	0.24	231	315	26.0	4.5	8	8.7	59189
	6	1.31	59.54	39.16	5.49	7.51 ±1.60	2.43	-0.11	7.73	7.09	-1.3	0.28	231	317	25.8	4.7	5	8.5	59190
10	0	3.48	53.22	43.30	5.49	7.51 ±1.84	2.18	-0.29	7.51	6.67	-1.0	0.34	134	190	22.5	14.1	0	1.5	59195
	1	1.09	61.90	37.01	6.00	7.38 ±1.70	2.12	0.11	7.56	6.86	-1.4	0.46	163	248	22.5	17.2	0	0.8	59196
	2	0.83	45.55	53.62	3.88	8.01 ±1.62	2.41	-0.40	7.79	6.88	-1.5	0.61	206	299	21.3	22.2	0	1.5	59197
	3	3.60	55.97	40.43	6.13	7.35 ±1.88	2.01	-0.14	7.62	6.89	-1.7	0.50	206	309	22.0	21.7	0	1.3	59198
	4	1.30	52.81	45.89	4.74	7.72 ±1.63	2.39	-0.26	7.73	6.97	-1.6	0.55	206	309	22.4	36.0	0	1.0	59199
	5	2.01	62.76	35.23	6.66	7.23 ±1.76	2.11	0.03	8.01	7.05	-1.5	0.45	175	278	23.0	26.1	0	1.2	59200
	6	1.32	55.17	43.51	5.05	7.63 ±1.70	2.24	-0.20	7.90	7.10	-2.0	0.51	190	295	22.8	27.6	0	0.6	59201
12	0	1.20	58.14	40.65	5.52	7.50 ±1.69	2.17	-0.09	7.23	6.98	3.9	0.12	12	196	26.1	6.1	20	1.4	59202
	1	1.54	60.42	38.04	5.60	7.48 ±1.64	2.29	0	7.45	6.92	2.4	0.15	11	176	26.4	5.8	13	1.1	59203
	2	1.25	66.19	32.56	6.99	7.16 ±1.71	2.14	0.13	7.34	6.67	2.1	0.14	13	161	24.8	5.7	6	0.3	59204
	3	1.22	61.69	37.09	6.05	7.37 ±1.65	2.20	-0.01	7.45	6.78	-2.3	0.16	15	152	26.0	6.0	2	0	59205
	4	1.70	64.00	34.30	6.57	7.25 ±1.70	2.18	0.08	7.51	6.88	0.6	0.17	19	153	25.2	6.3	3	0.3	59206

Core Depth	Sand	Silt	Clay	Mean-grain-size -osis	Kurt -ness	phi	pH _{PW}	pH _{sed}	pE _{PW}	NH ₄ ⁺	PO ₄ ³⁻	SiO ₂ _{PW}	SO ₄ ²⁻	Alk _{PW}	Fe _{PW}	Mn _{PW}	ID	
							-lg N	-lg N	-lg M	mM	μM	μM	mM	mN	μM	μM		
cm	%	%	%	μm														
12	5	1.25	57.31	41.44	5.34	7.55 ±1.69	2.18	-0.12	7.51	7.00	0.5	0.20	19	168	24.7	6.8	3	0 59207
	6	0.81	62.33	36.87	5.76	7.44 ±1.53	2.42	0	7.34	6.91	-0.3	0.19	22	171	25.1	7.3	0	0 59208
	7	1.84	64.60	33.55	6.75	7.21 ±1.66	2.27	0.04	7.56	6.91	0.7	0.22	19	173	24.4	7.7	2	0 59209
	8	1.09	67.96	30.95	6.94	7.17 ±1.60	2.35	0.14	7.51	7.01	0.3	0.22	26	182	24.6	8.2	0	0 59210
	9	1.36	58.55	40.09	5.56	7.49 ±1.71	2.14	-0.08	7.51	7.06	0.6	0.24	31	185	25.3	8.0	0	0 59211
	10	4.16	60.82	35.02	6.94	7.17 ±1.82	2.13	-0.07	7.62	7.07	-0.8	0.23	31	186	24.9	8.3	2	0 59212
16	0	0.84	69.76	29.40	6.57	7.25 ±1.53	2.77	0.26	7.45	7.13	2.8	0.15	24	251	26.1	3.1	13	1.1 59226
	1	0.89	69.16	29.95	6.48	7.27 ±1.51	2.78	0.21	7.45	7.01	3.1	0.14	21	240	25.4	3.0	11	1.1 59227
	2	0.71	64.24	35.05	5.76	7.44 ±1.55	2.56	0.15	7.39	7.04	2.6	0.14	20	237	25.7	3.1	5	0.8 59228
	3	0.55	71.86	27.58	6.90	7.18 ±1.49	2.78	0.34	7.56	6.91	2.5	0.14	18	233	25.4	3.0	2	0.7 59229
	4	0.23	57.64	42.13	4.74	7.72 ±1.62	2.25	0.08	7.56	7.12	1.7	0.14	17	214	25.7	3.2	7	1.0 59230
	5	0.58	62.33	37.10	5.37	7.54 ±1.55	2.56	0.12	7.62	7.04	0.6	0.13	11	218	25.3	3.0	2	0.4 59231
	6	0.26	64.84	34.90	5.68	7.46 ±1.56	2.49	0.20	7.51	7.02	0.3	0.12	24	207	25.1	3.1	4	0.4 59232
	7	0.57	61.40	38.04	5.30	7.56 ±1.60	2.42	0.10	7.62	7.07	0.3	0.11	9	186	25.6	3.1	2	0.2 59233
	8	1.12	68.14	30.74	6.52	7.26 ±1.59	2.62	0.18	7.56	7.16	0.7	0.10	9	190	25.6	2.9	0	0 59234
	9	0.57	65.74	33.69	5.80	7.43 ±1.54	2.68	0.15	7.56	7.15	0.9	0.11	12	209	26.5	3.1	0	0 59235
	10	0.57	66.38	33.05	5.92	7.40 ±1.50	2.71	0.20	7.56	7.17	1.2	0.11	12	205	26.2	2.9	0	0 59236
	11	1.47	64.97	33.56	6.48	7.27 ±1.72	2.37	0.06	7.68	7.26	-0.6	0.12	11	227	25.8	3.0	0	0 59237
	12	0.54	63.11	36.35	5.30	7.56 ±1.52	2.63	0.18	7.56	7.25	1.8	0.11	6	171	24.8	3.0	3	0.2 59238
	13	0.53	60.05	39.42	5.12	7.61 ±1.67	2.24	0.13	7.56	7.18	1.9	0.10	4	150	25.9	2.9	0	0.7 59239
	14	0.49	66.58	32.93	6.39	7.29 ±1.64	2.35	0.26	7.62	7.26	1.4	0.14	39	159	25.9	3.2	0	0.5 59240
	15	0.27	66.57	33.17	5.76	7.44 ±1.58	2.47	0.35	7.68	7.25	2.0	0.19	19	233	25.7	3.8	0	0.3 59241
	20	0.57	67.76	31.68	6.48	7.27 ±1.57	2.47	0.30	7.73	7.38	0.4	0.43	98	369	24.6	6.8	0	0 59242
	25	0.60	63.45	35.95	5.88	7.41 ±1.60	2.45	0.18	7.79	7.50	-0.4	0.69	128	475	22.4	10.6	0	0 59243
	30	0.34	74.07	25.60	7.65	7.03 ±1.54	2.73	0.55	7.84	7.53	-0.7	0.97	194	638	22.6	15.3	0	0 59244
	35	0.33	72.32	27.36	7.55	7.05 ±1.59	2.62	0.48	7.84	7.48	-0.9	1.26	206	581	20.2	18.6	0	0 59245
	40	1.00	77.34	21.66	9.16	6.77 ±1.57	2.80	0.53	7.90	7.54	-1.3	1.32	269	650	18.0	21.9	0	0 59246
	45	0.57	69.52	29.92	7.24	7.11 ±1.66	2.37	0.38	8.01	7.57	-1.9	1.62	216	644	17.0	24.0	0	0 59247
18	0	0.54	58.94	40.52	4.88	7.68 ±1.66	2.23	0.12	7.56	6.82	2.4	0.22	57	276	24.6	6.9	49	3.3 59213
	1	0.56	47.50	51.94	3.99	7.97 ±1.73	2.12	-0.21	7.39	7.01	1.1	0.23	52	293	25.0	7.0	18	3.2 59214
	2	0.18	50.53	49.29	4.16	7.91 ±1.73	2.00	-0.08	7.45	7.00	1.7	0.23	56	382	26.1	7.2	17	3.0 59215
	3	0.43	56.53	43.04	4.94	7.66 ±1.67	2.17	0.01	7.45	7.00	1.4	0.24	57	318	25.5	4.6	11	3.6 59216
	4	1.44	64.17	34.39	6.71	7.22 ±1.69	2.17	0.10	7.51	7.07	0.8	0.23	56	312	25.7	4.7	9	3.0 59217
	5	0.80	60.87	38.33	5.88	7.41 ±1.65	2.15	0.01	7.56	7.10	0.7	0.28	49	328	25.5	4.8	0	1.9 59218
	6	1.86	61.29	36.85	6.09	7.36 ±1.67	2.25	0	7.56	7.11	1.1	0.30	47	366	25.5	4.8	0	1.3 59219
	7	0.61	67.09	32.30	6.62	7.24 ±1.65	2.22	0.24	7.56	7.12	0.5	0.27	36	322	25.5	4.6	0	1.3 59220
	8	0.57	62.42	37.01	5.92	7.40 ±1.66	2.12	0.10	7.68	7.17	0.9	0.28	34	328	25.6	4.6	0	0.6 59221
	9	0.72	63.66	35.62	6.35	7.30 ±1.69	2.11	0.08	7.79	7.21	0.5	0.28	34	309	25.2	4.6	0	0 59222
	10	1.31	68.77	29.92	7.04	7.15 ±1.59	2.41	0.17	7.62	7.20	0.5	0.23	18	216	25.7	4.0	0	0.2 59223
	11	1.56	63.68	34.77	6.43	7.28 ±1.70	2.16	0.11	7.68	7.26	1.5	0.25	22	230	25.4	4.0	0	0.3 59224
	12	2.34	69.02	28.64	7.55	7.05 ±1.63	2.41	0.16	7.73	7.17	0.3	0.31	33	276	26.0	4.7	0	0 59225
19	0	0.47	67.09	32.44	6.62	7.24 ±1.67	2.31	0.30	7.45	7.27	1.1	0.12	27	342	26.0	3.8	8	0.7 59248
	1	0.25	67.14	32.61	7.34	7.09 ±1.85	2.02	0.35	7.39	7.12	-0.8	0.10	20	229	26.7	3.7	9	0.7 59249
	2	0.57	69.14	30.29	6.80	7.20 ±1.63	2.46	0.32	7.39	7.10	2.6	0.13	32	236	26.5	4.0	0	0.3 59250
	3	1.08	55.53	43.40	4.52	7.79 ±1.63	2.43	-0.03	7.39	7.10	2.3	0.13	33	219	22.9	4.0	0	0 59251
	4	0.26	59.04	40.69	4.78	7.71 ±1.53	2.40	0.16	7.39	7.00	3.1	0.15	36	232	26.4	4.4	2	0.5 59252
	5	0.27	57.91	41.82	4.55	7.78 ±1.59	2.30	0.13	7.56	7.08	0.5	0.17	44	261	25.8	4.8	0	0.4 59253
	6	0.70	52.82	46.48	4.13	7.92 ±1.62	2.27	-0.01	7.51	7.13	1.5	0.18	51	278	26.3	4.9	0	0.2 59254
	7	0.02	56.97	43.01	4.30	7.86 ±1.54	2.23	0.22	7.51	7.09	1.5	0.20	36	266	26.9	4.6	0	0.5 59255
	8	0.28	59.24	40.47	4.71	7.73 ±1.50	2.56	0.14	7.51	7.13	1.6	0.24	60	352	26.6	5.3	0	0 59256
	9	0.25	56.78	42.97	4.46	7.81 ±1.52	2.36	0.15	7.62	7.11	2.9	0.26	59	373	24.9	5.5	8	0.2 59257

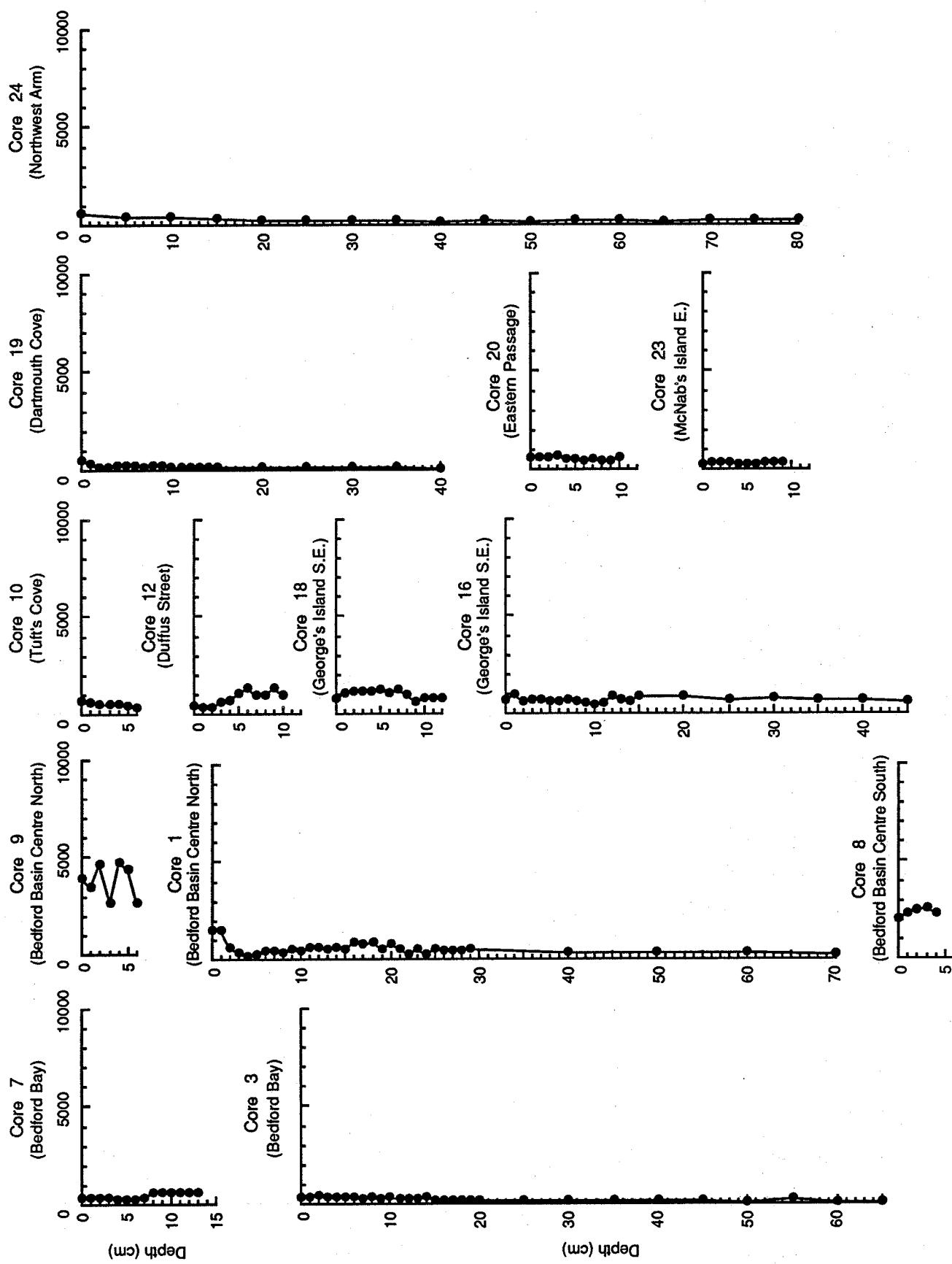
Core Depth	Sand	Silt	Clay	Mean-grain-size -osis	Kurt -ness	phi	pH _{PW}	pH _{sed}	p _{PW}	NH ₄ ⁺	PO ₄ ³⁻	SiO ₂ PW	SO ₄ ²⁻	Alk _{PW}	Fe _{PW}	Mn _{PW}	ID		
							-lg N	-lg N	-lg M	mm	μM	μM	mm	μM	μM	μM	μM		
cm	%	%	%	μm															
19	10	0.36	53.49	46.15	3.96	7.98 ±1.41	2.81	0.05	7.84	7.07	1.4	0.31		20.6	5.8	0	0	59258	
	11	0.28	59.64	40.08	4.71	7.73 ±1.53	2.46	0.18	7.56	7.17	1.8	0.30	82	448	25.6	6.0	0	0	59259
	12	0.27	59.78	39.95	4.81	7.70 ±1.54	2.32	0.25	7.68	7.14	1.8	0.32	85	466	25.4	6.4	0	0	59260
	13	0.30	65.64	34.06	5.49	7.51 ±1.46	2.77	0.27	7.62	7.15	0.4	0.36	110	469	24.8	6.5	0	0	59261
	14	0.08	66.96	32.95	5.52	7.50 ±1.44	2.73	0.42	7.68	7.17	0.4	0.38	119	488	25.2	7.0	0	0	59262
	15	0.30	63.81	35.89	5.19	7.59 ±1.47	2.67	0.26	7.56	7.18	3.2	0.38	108	469	25.0	6.8	0	0	59263
	20	0.26	61.65	38.09	4.98	7.65 ±1.53	2.46	0.25	7.56	7.18	-0.4	0.51	163	569	24.5	9.6	0	0	59264
	25	0.28	73.54	26.19	7.04	7.15 ±1.49	2.86	0.50	7.73	7.17	0.1	0.51	175	506	24.7	9.6	14	0	59265
	30	0.99	56.47	42.54	4.52	7.79 ±1.60	2.52	0.01	7.68	7.08	0.3	0.26	116	244	25.6	6.5	2	0.6	59266
	35	0.25	60.44	39.30	4.98	7.65 ±1.61	2.35	0.20	7.73	7.17	-0.2	0.45	165	394	24.2	9.4	0	0	59267
	40	0.67	56.32	43.01	4.25	7.88 ±1.47	2.76	0.09	7.73	7.19	-0.6	0.61	209	538	22.7	12.3	11	0	59268
20	0	0.48	64.89	34.63	6.39	7.29 ±1.74	2.14	0.23	7.56	6.70	0.9	0.42	394	376	25.3	7.0	4	1.8	46701
	1	0.27	58.32	41.41	5.19	7.59 ±1.74	2.05	0.09	7.45	7.00	1.0	0.51	300	356	25.0	7.8	2	1.3	46702
	2	0.25	59.12	40.63	5.30	7.56 ±1.74	2.04	0.12	7.51	7.08	2.2	0.53	250	344	24.6	8.4	0	0.6	46703
	3	0.83	77.81	21.36	9.04	6.79 ±1.59	2.78	0.50	7.45	7.10	0.9	0.57	256	353	25.1	8.5	0	0.5	46704
	4	1.52	78.76	19.71	9.55	6.71 ±1.55	2.90	0.51	7.45	7.14	1.5	0.52	233	338	24.8	8.5	0	0.6	46705
	5	0.30	78.76	20.93	8.49	6.88 ±1.47	3.02	0.53	7.51	7.24	0.5	0.63	218	319	25.0	9.9	0	0	46706
	6	0.96	74.04	25.01	8.03	6.96 ±1.59	2.66	0.40	7.51	7.22	0.8	0.60	196	325	25.3	9.3	0	0	46707
	7	0.30	74.19	25.51	7.92	6.98 ±1.59	2.59	0.42	7.51	7.42	1.0	0.63	191	320	24.4	9.5	0	0	46708
	8	0.96	78.10	20.93	8.55	6.87 ±1.47	3.05	0.51	7.56	7.58	0.9	0.71	204	324	24.3	10.5	0	0	46709
	9	0.28	79.77	19.94	9.10	6.78 ±1.49	2.98	0.62	7.51	7.37	1.1	0.67	204	324	25.0	10.2	2	0	46710
	10	0	77.88	22.12	7.92	6.98 ±1.43	3.02	0.59	7.68	7.47	-0.6	0.74	180	329	25.1	10.3	2	0.5	46711
23	0	0.75	59.83	39.42	5.76	7.44 ±1.76	2.07	0.10	7.28	7.87	2.6	0.22	47	305	27.0	3.9	35	2.1	46712
	1	0.23	63.83	35.93	6.26	7.32 ±1.76	2.09	0.22	7.28	7.30	2.8	0.28	49	394	26.2	4.4	13	1.6	46713
	2	0.25	55.51	44.25	4.46	7.81 ±1.55	2.33	0.07	7.34	7.23	1.4	0.27	47	382	26.5	4.2	6	1.1	46714
	3	0.23	53.92	45.84	4.10	7.93 ±1.55	2.40	0.02	7.45	7.33	1.4	0.33	45	425	26.5	4.6	2	0.5	46715
	4	0.22	55.29	44.48	4.36	7.84 ±1.61	2.18	0.09	7.51	7.33	1.1	0.35	46	445	25.9	4.6	0	0.4	46716
	5	0.24	57.50	42.26	4.58	7.77 ±1.53	2.35	0.15	7.45	7.36	0.7	0.39	46	479	25.6	5.1	0	0.2	46717
	6	0.27	69.48	30.25	6.35	7.30 ±1.49	2.69	0.36	7.56	7.38	1.3	0.40	38	474	25.3	4.9	0	0	46718
	7	0.57	69.68	29.76	6.52	7.26 ±1.51	2.66	0.39	7.56	7.49	1.0	0.41	49	546	25.8	5.1	0	0	46719
	8	0.30	65.79	33.91	5.76	7.44 ±1.51	2.59	0.28	7.51	7.49	1.0	0.43	45	519	25.4	5.0	0	0	46720
	9	0.23	48.54	51.22	3.62	8.11 ±1.48	2.59	-0.12	7.62	7.52	-0.6	0.46	44	514	25.7	5.2	0	0	46721
24	0	0.69	77.17	22.14	8.32	6.91 ±1.51	2.91	0.53	7.11	7.22	2.6	0.31	110	189	25.7	5.1	83	2.3	46724
	5	0.40	81.70	17.90	8.73	6.84 ±1.36	3.51	0.70	7.39	7.11	1.4	0.43	105	263	25.4	6.9	3	0.5	46725
	10	0.36	57.66	41.98	4.58	7.77 ±1.55	2.41	0.11	7.51	7.17	0.6	0.66	159	378	25.0	10.5	0	0	46726
	15	0.43	80.49	19.08	8.37	6.90 ±1.37	3.44	0.63	7.62	7.27	-0.1	1.19	241	612	21.4	18.8	0	0	46727
	20	0.36	57.07	42.58	4.39	7.83 ±1.54	2.40	0.12	7.79	7.28	-0.2	1.42	281	689	20.3	23.0	0	0	46728
	25	0.73	49.74	49.52	3.99	7.97 ±1.58	2.48	-0.15	7.79	7.29	-0.3	1.61	325	732	17.7	27.5	0	0	46729
	30	0.37	61.13	38.50	5.19	7.59 ±1.56	2.41	0.17	7.79	7.30	-0.9	1.61	363	772	15.6	32.5	0	0	46730
	35	0.37	77.33	22.29	8.26	6.92 ±1.46	3.03	0.62	7.84	7.13	-1.6	2.06	388	814	16.4	34.7	0	0	46731
	40	0.40	78.68	20.92	7.92	6.98 ±1.38	3.36	0.67	7.90	7.22	-1.5	2.00	425	829	11.4	37.4	0	0	46732
	45	0.39	82.18	17.42	8.67	6.85 ±1.31	3.73	0.79	7.96	7.21	-1.8	2.16	369	873	8.4	40.4	0	0	46733
	50	0.65	79.40	19.95	8.61	6.86 ±1.44	3.12	0.59	7.96	7.35	-1.4	2.20	456	914	5.1	41.8	0	0	46734
	55	0.78	77.01	22.22	7.55	7.05 ±1.42	3.34	0.63	8.07	7.26	-1.3	2.42	475	1023	2.1	43.2	0	0	46735
	60	0.40	79.46	20.13	7.98	6.97 ±1.37	3.48	0.70	8.07	7.21	-1.6	2.08	369	838	0	45.9	0	0	46736
	65	0.41	76.53	23.06	7.55	7.05 ±1.43	3.14	0.54	8.13	7.24	-1.9	2.37			0	47.2	0	0	46737
	70	0.41	72.41	27.18	6.90	7.18 ±1.49	2.84	0.46	8.01	7.30	-1.5	2.35	425	880	2.4	47.9	0	0	46738
	75	1.01	80.42	18.57	8.97	6.80 ±1.44	3.36	0.61	8.01	7.32	-1.5	2.36	444	883	0.8	47.4	0	0	46739
	80	0.31	62.15	37.54	5.30	7.56 ±1.56	2.39	0.24	8.01	7.32	-2.0	2.27	438	864	1.4	47.8	0	0	46740

Cruise 89-009

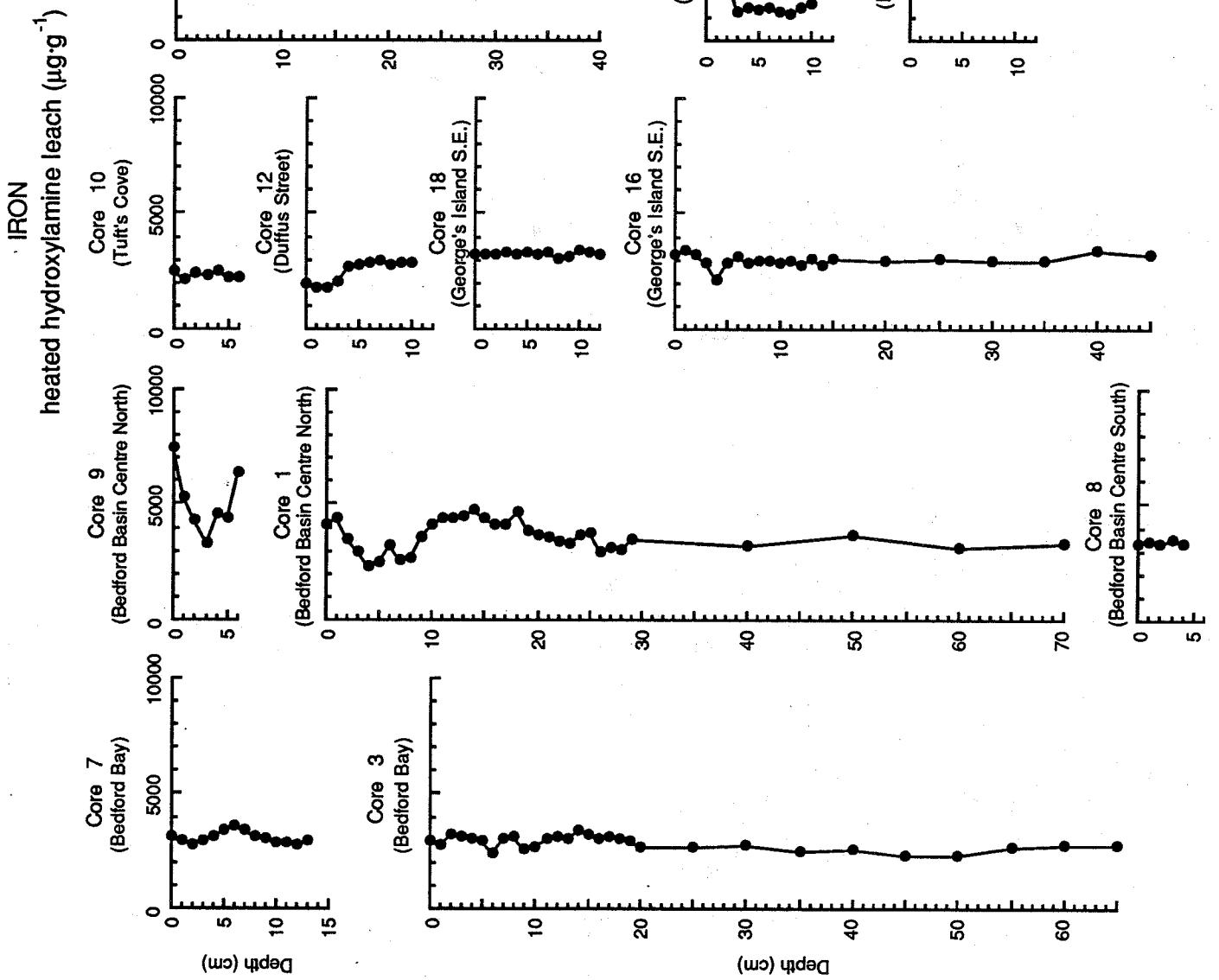
IRON
weak acid leach ($\mu\text{g}\cdot\text{g}^{-1}$)

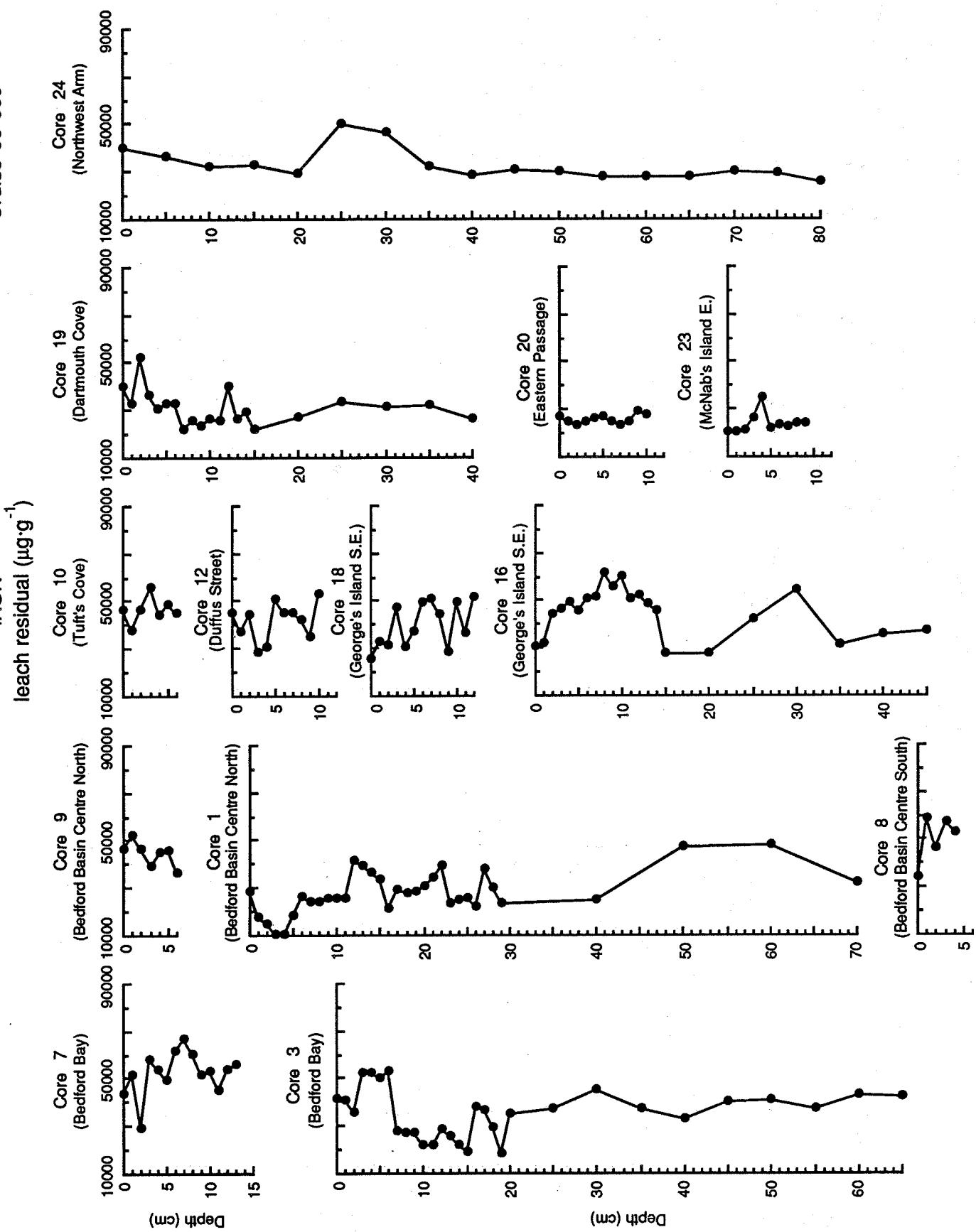
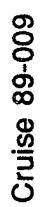
Cruise 89-009

IRON
hydroxylamine leach ($\mu\text{g}\cdot\text{g}^{-1}$)



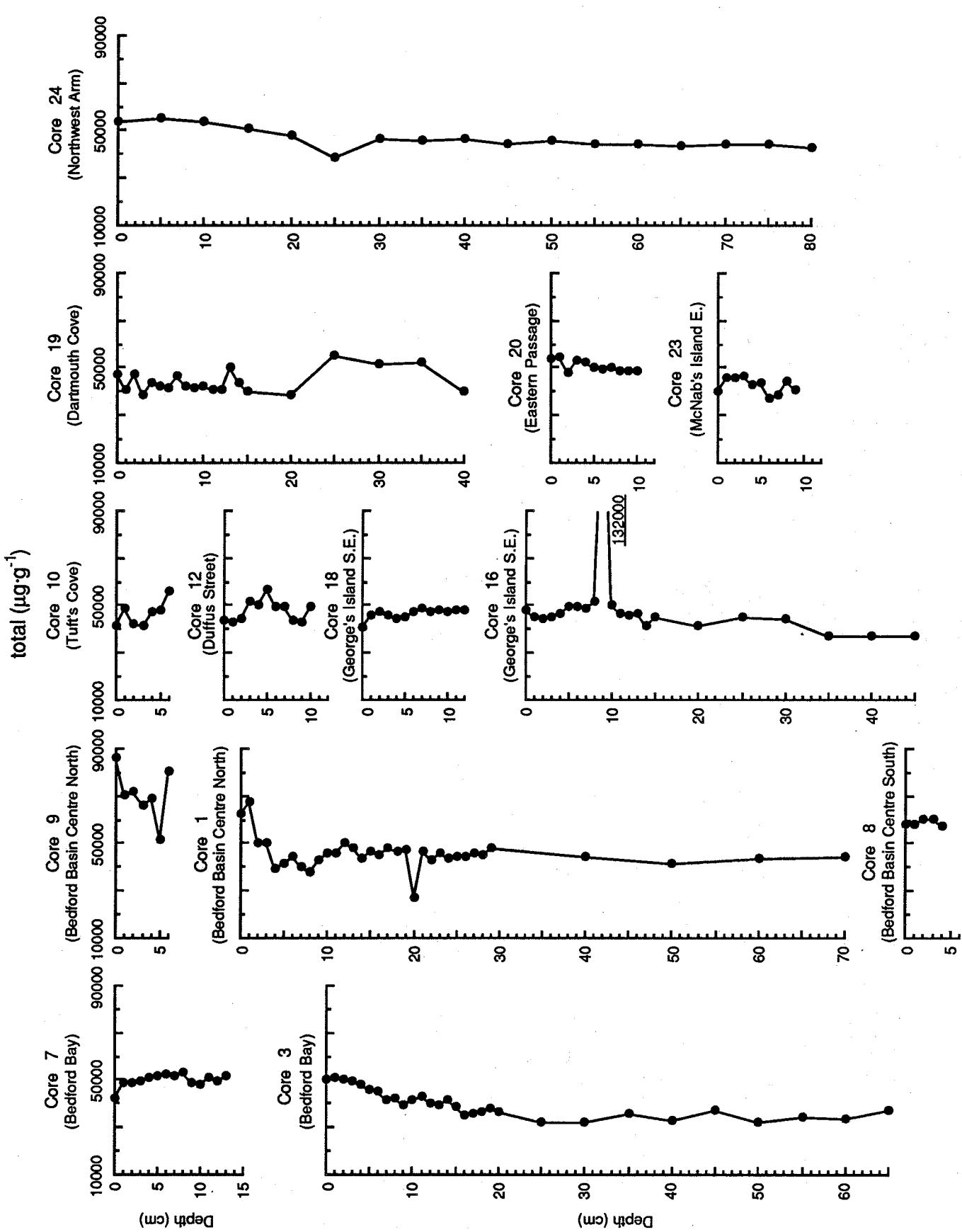
Cruise 89-009



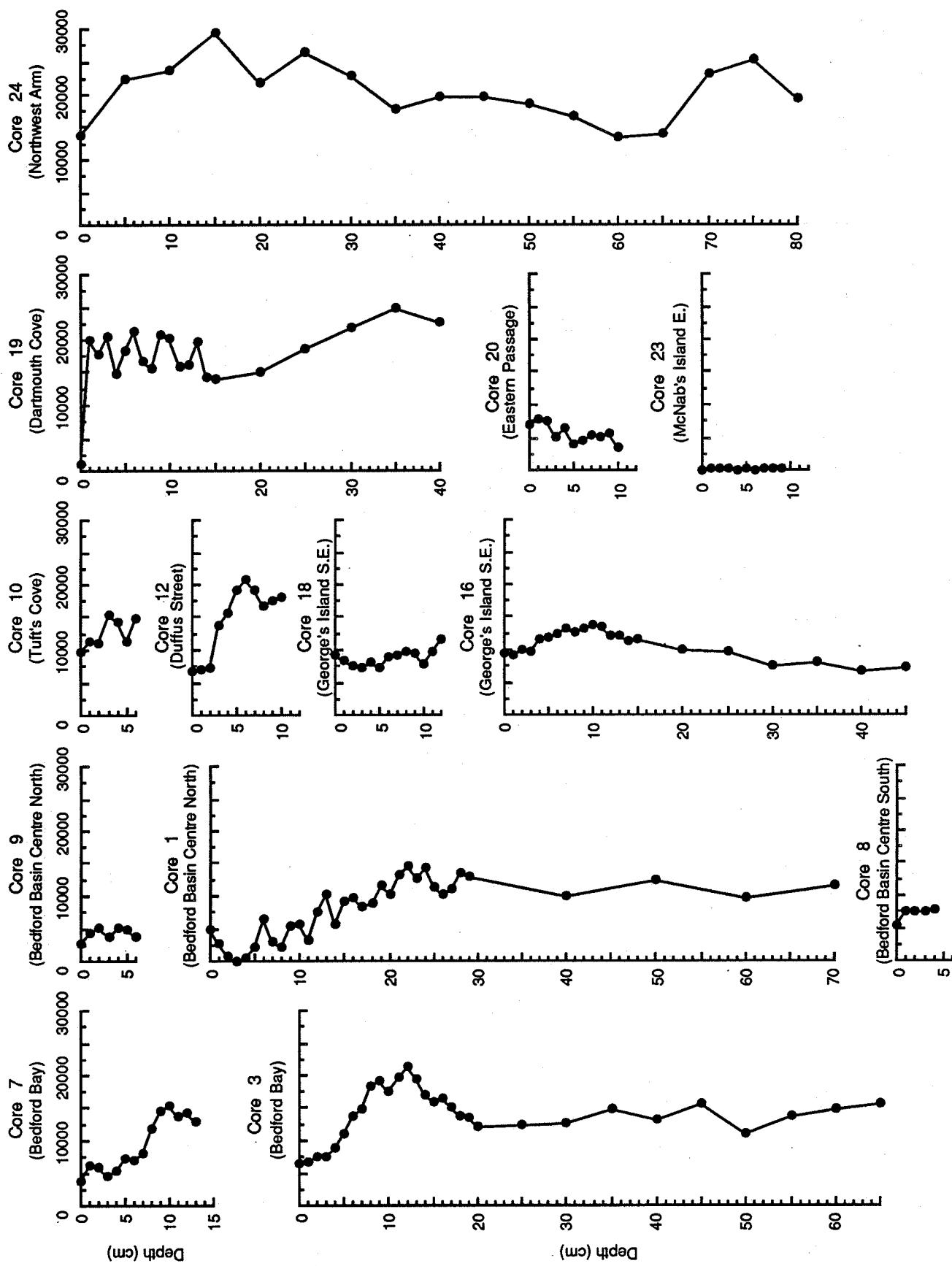


Cruise 89-009

IRON



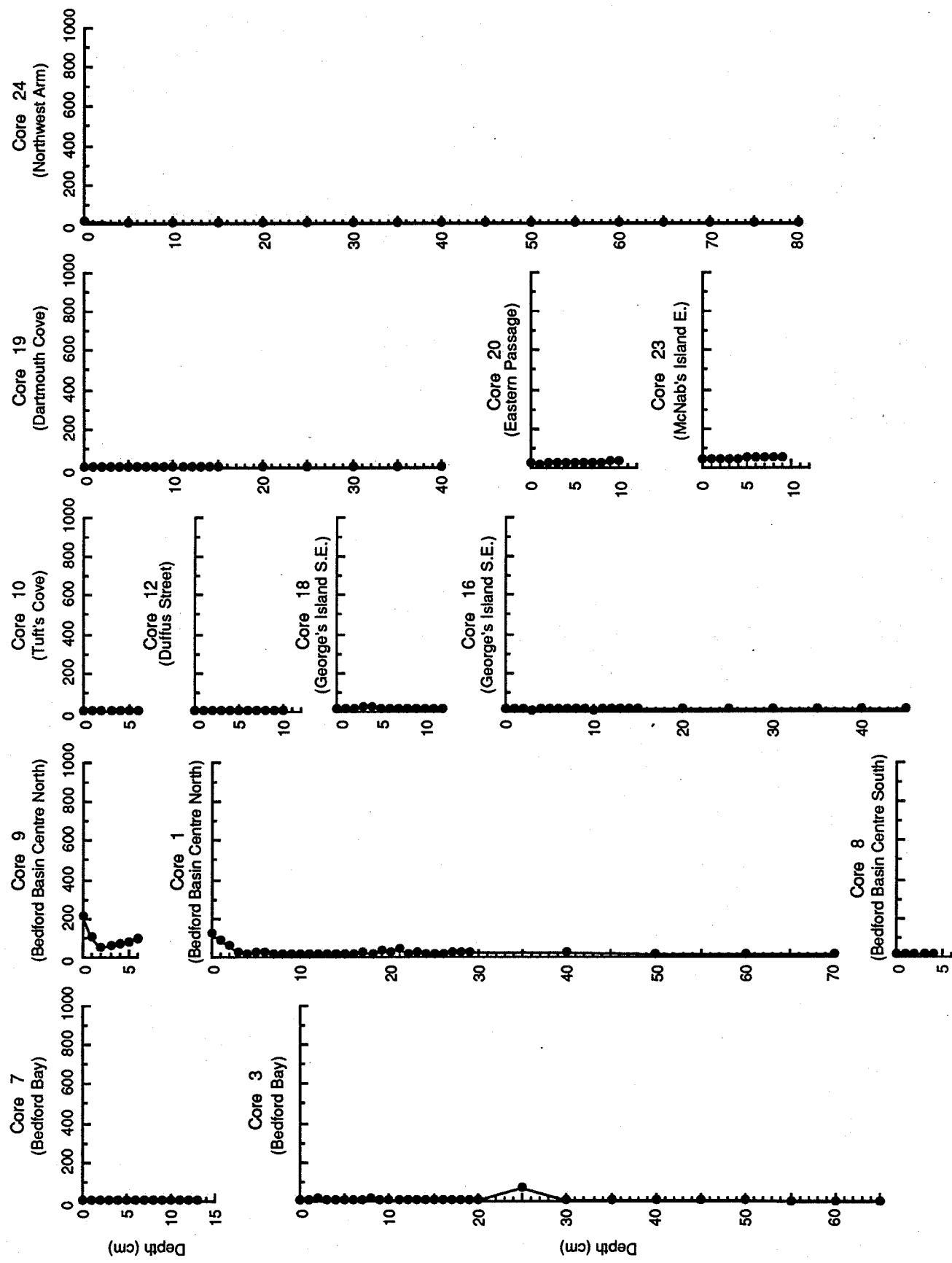
Cruise 89-009

IRON
peroxide leach ($\mu\text{g}\cdot\text{g}^{-1}$)

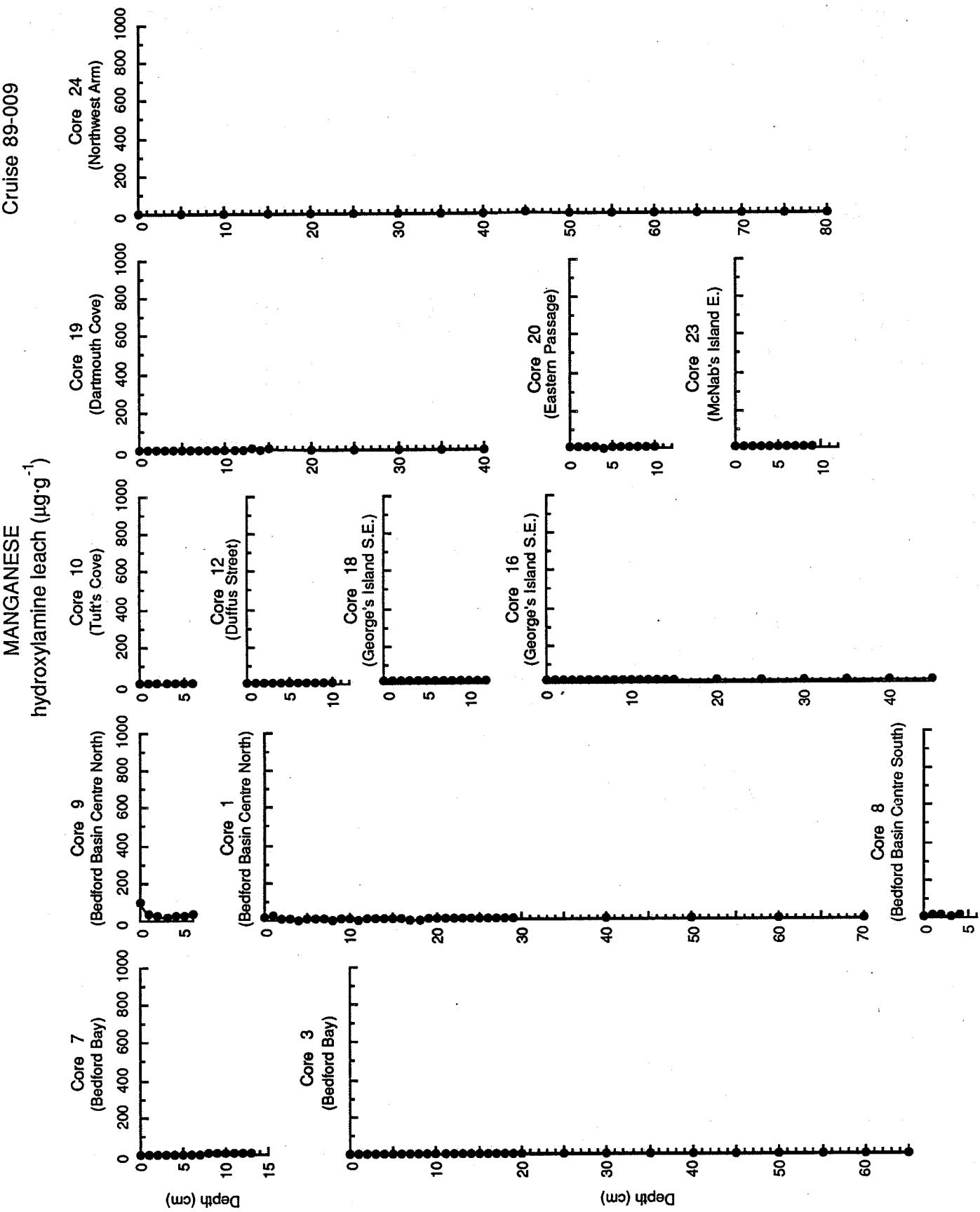
MANGANESE

Cruise 89-009

weak acid leach ($\mu\text{g}\cdot\text{g}^{-1}$)

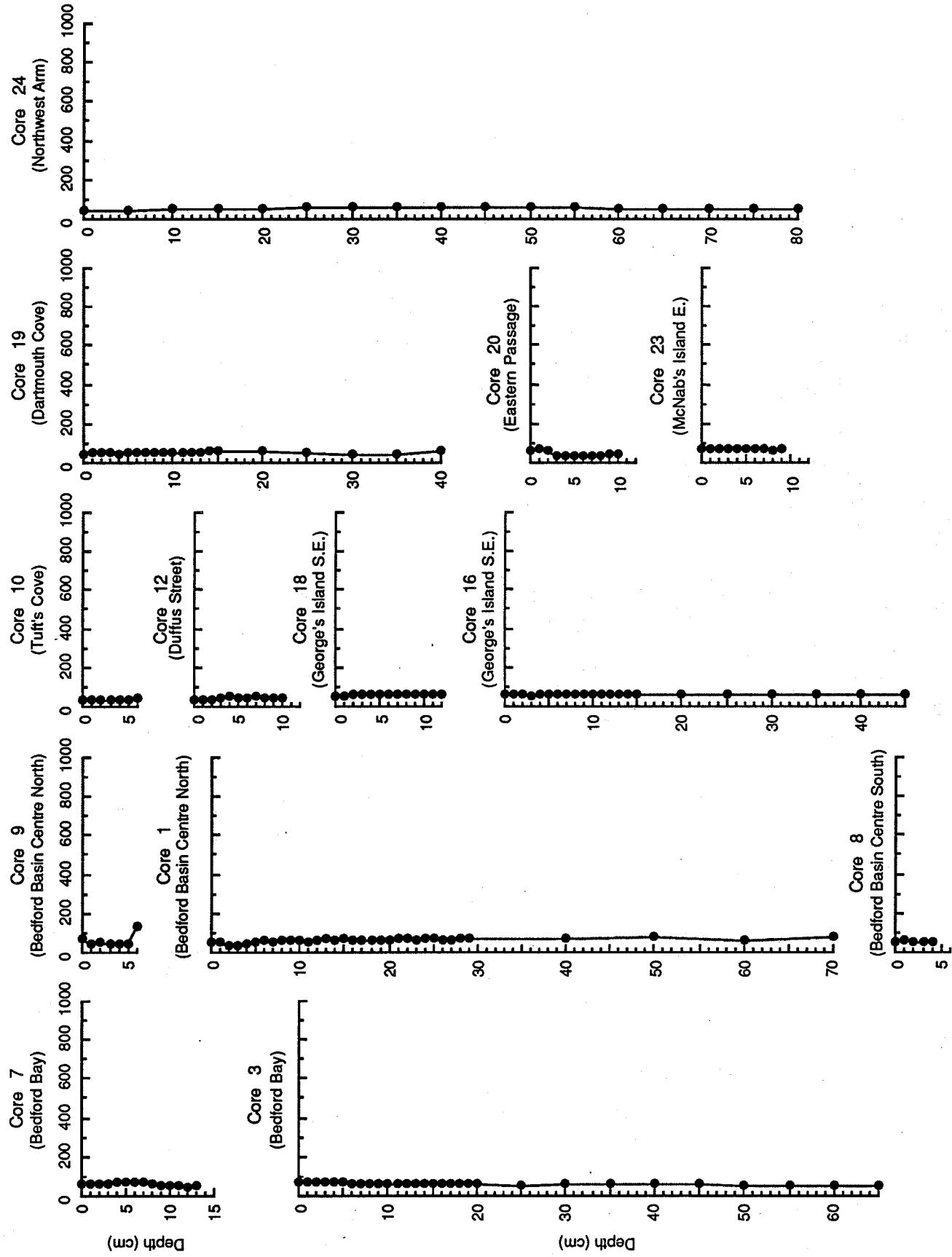


Cruise 89-009



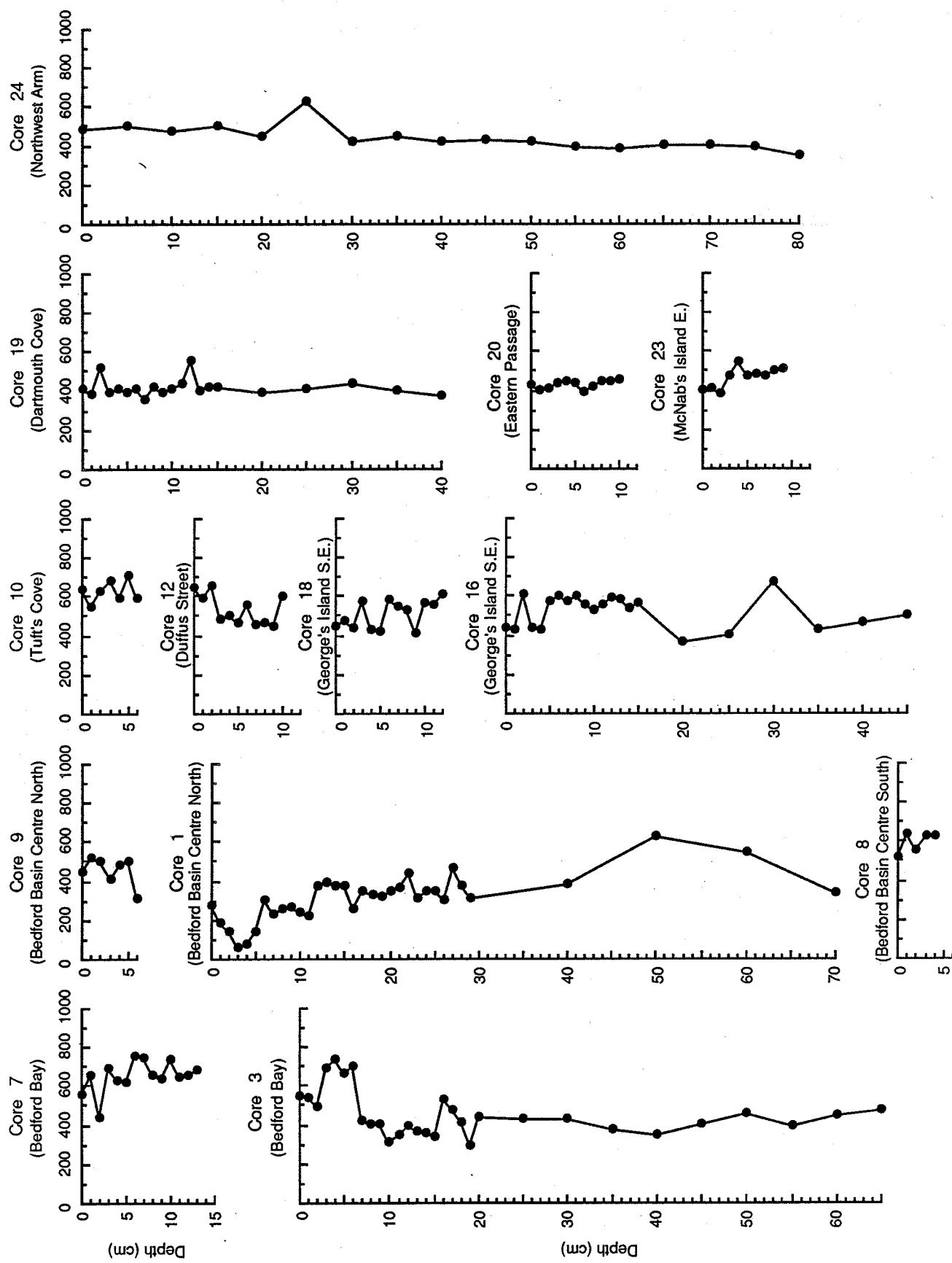
MANGANESE

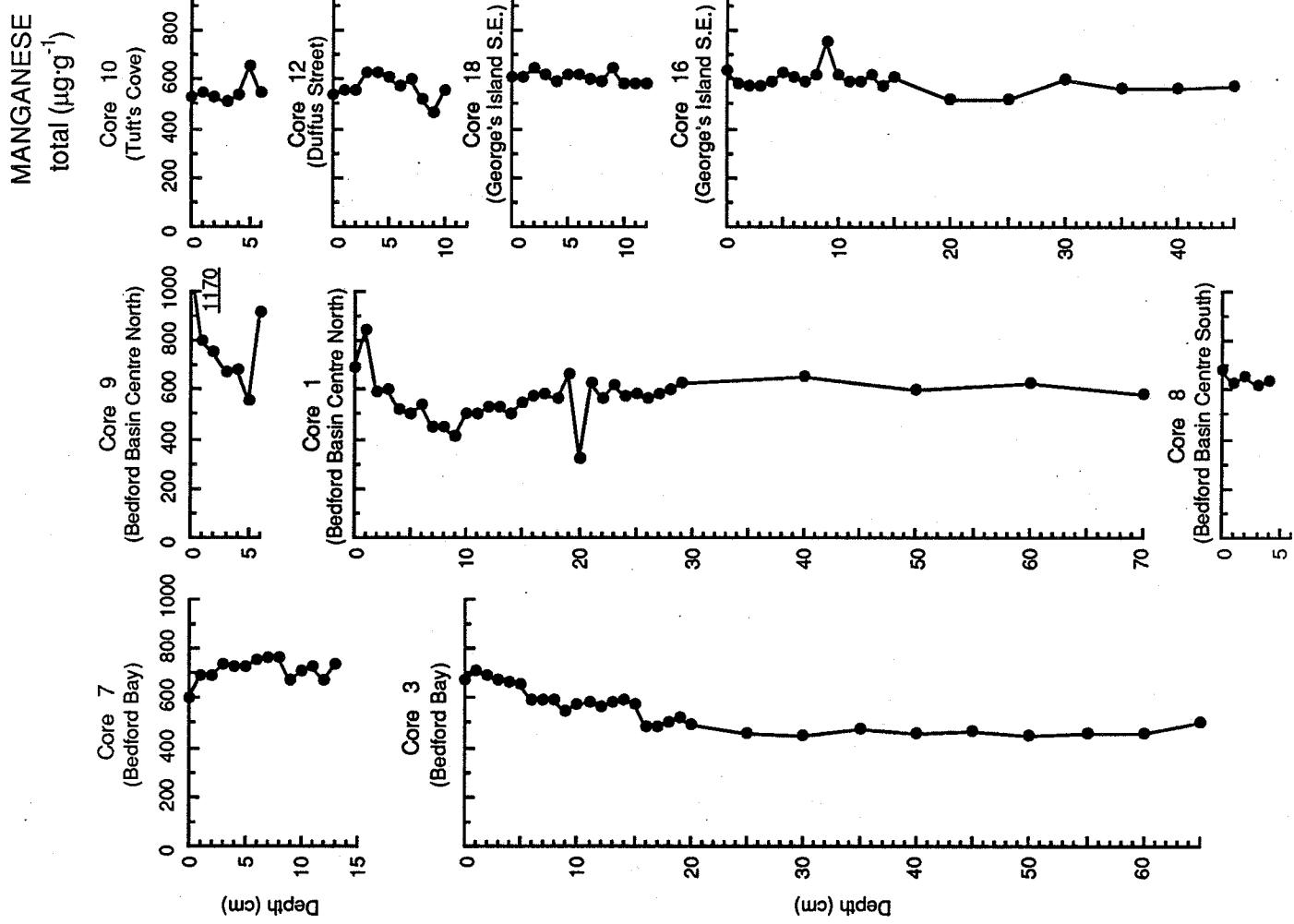
Cruise 89-009

heated hydroxylamine leach ($\mu\text{g}\cdot\text{g}^{-1}$)

Cruise 89-009

MANGANESE
leach residual ($\mu\text{g}\cdot\text{g}^{-1}$)

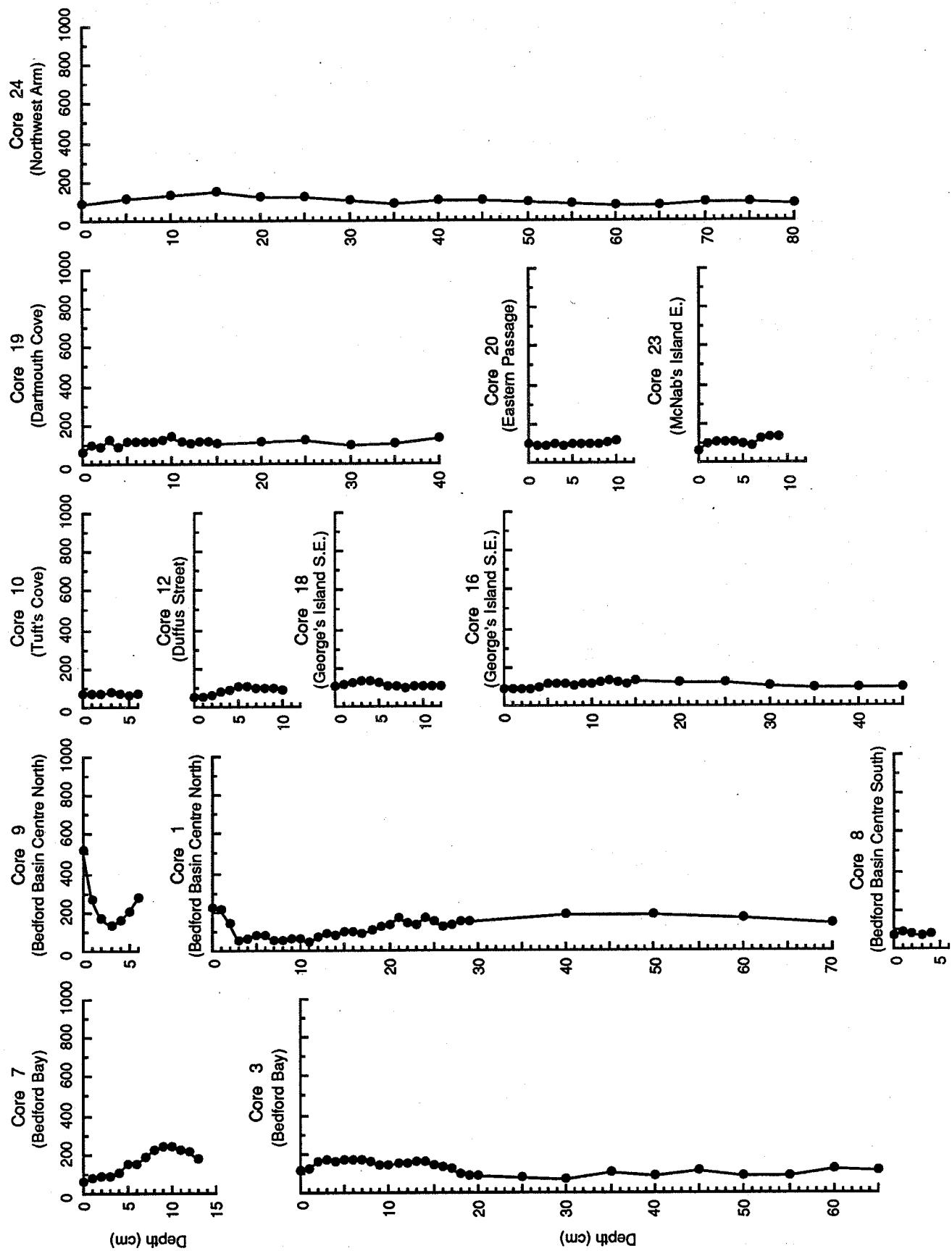




Cruise 89-009

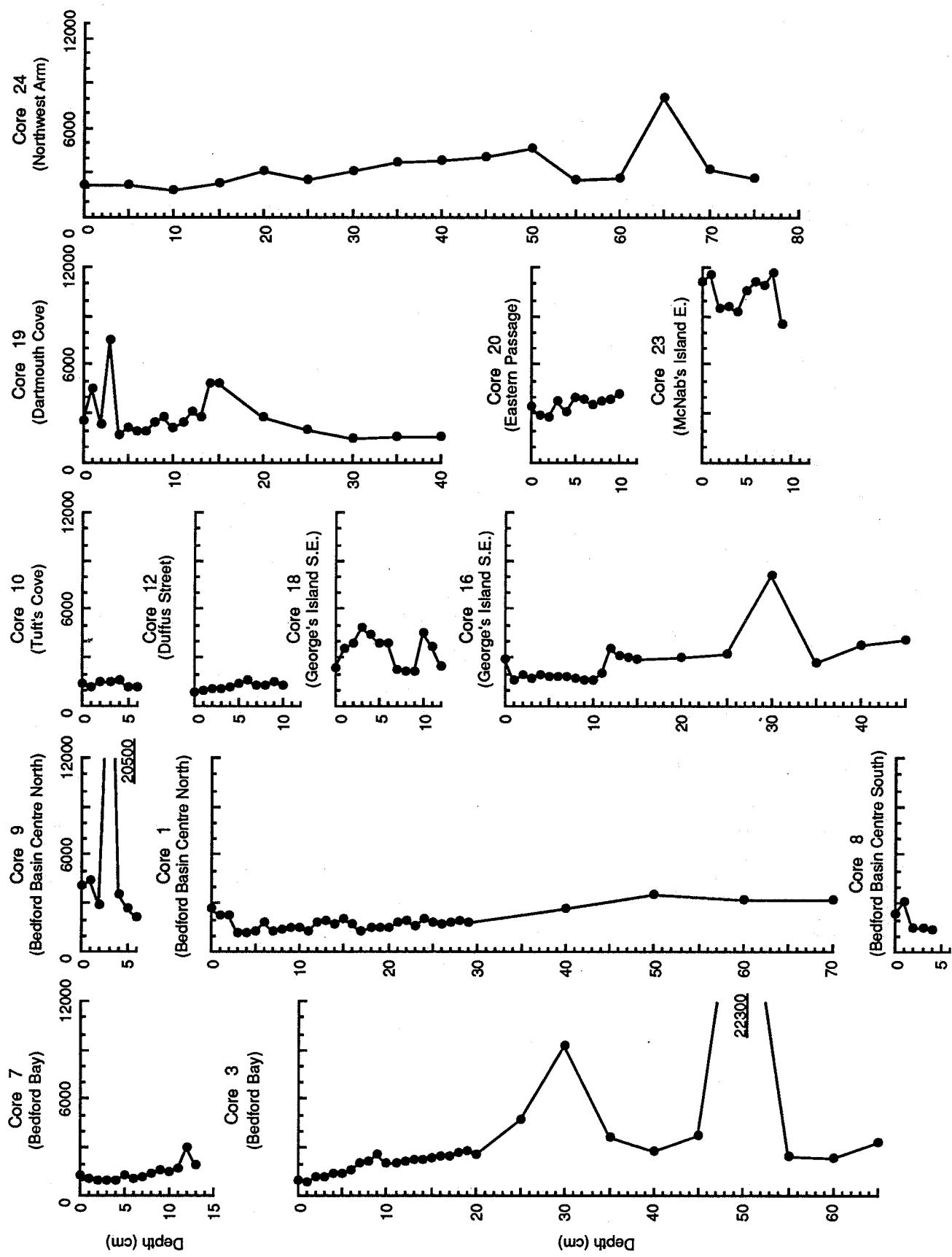
Cruise 89-009

MANGANESE
peroxide leach ($\mu\text{g}\cdot\text{g}^{-1}$)



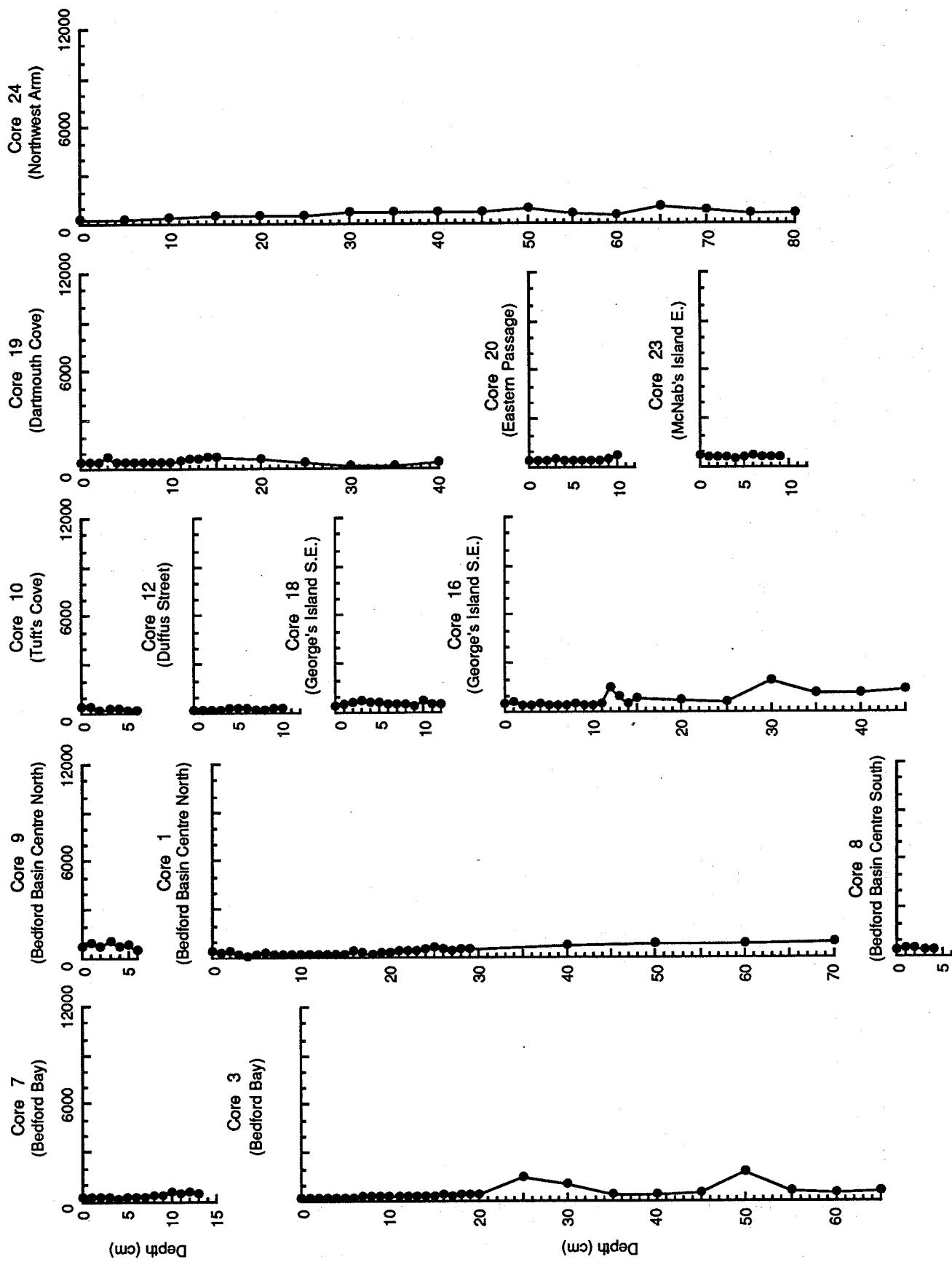
Cruise 89-009

CALCIUM
weak acid leach ($\mu\text{g g}^{-1}$)

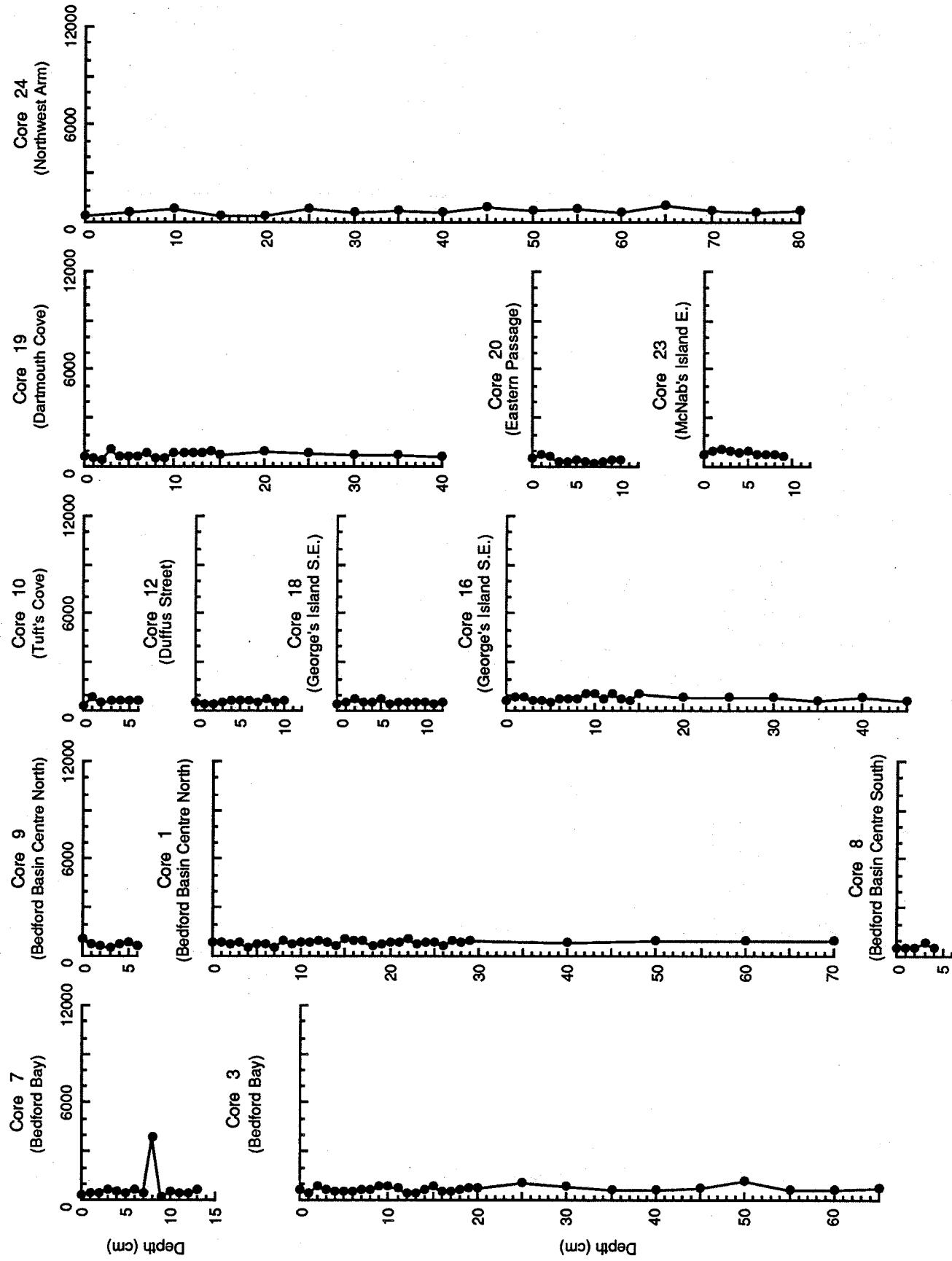


Cruise 89-009

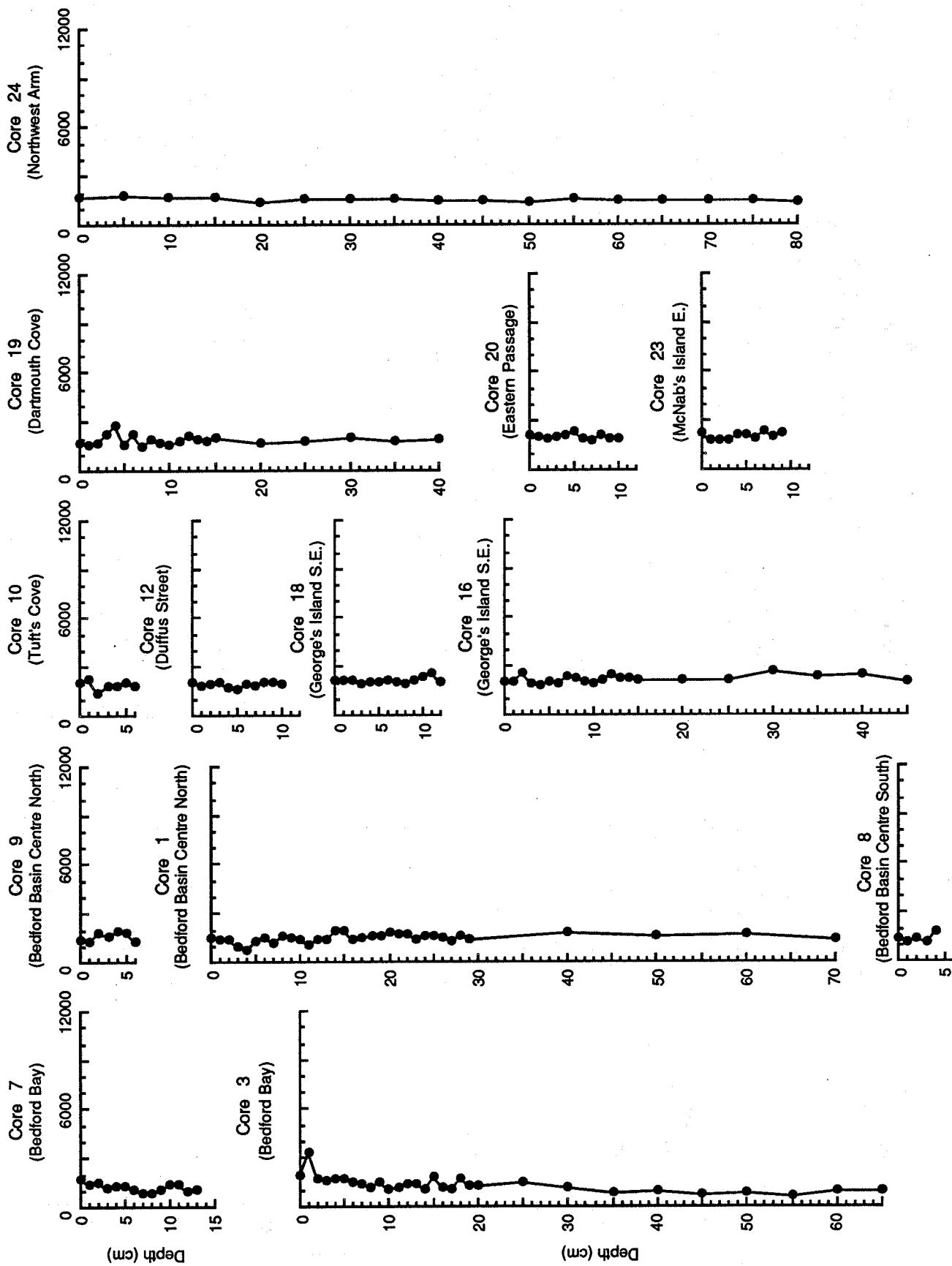
**CALCIUM
hydroxylamine leach ($\mu\text{g}\cdot\text{g}^{-1}$)**



Cruise 89-009

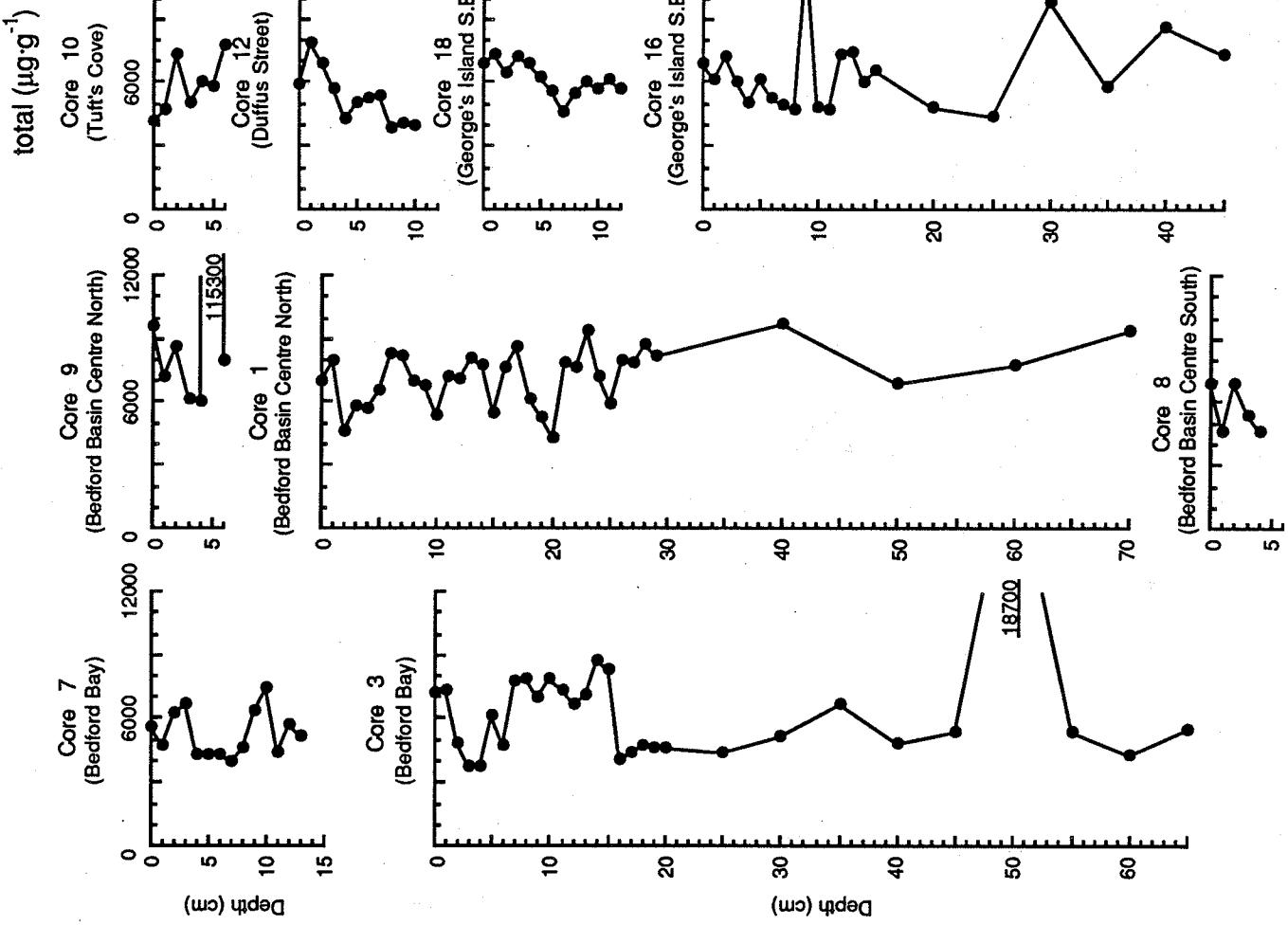
CALCIUM
heated hydroxylamine leach ($\mu\text{g}\cdot\text{g}^{-1}$)

Cruise 89-009

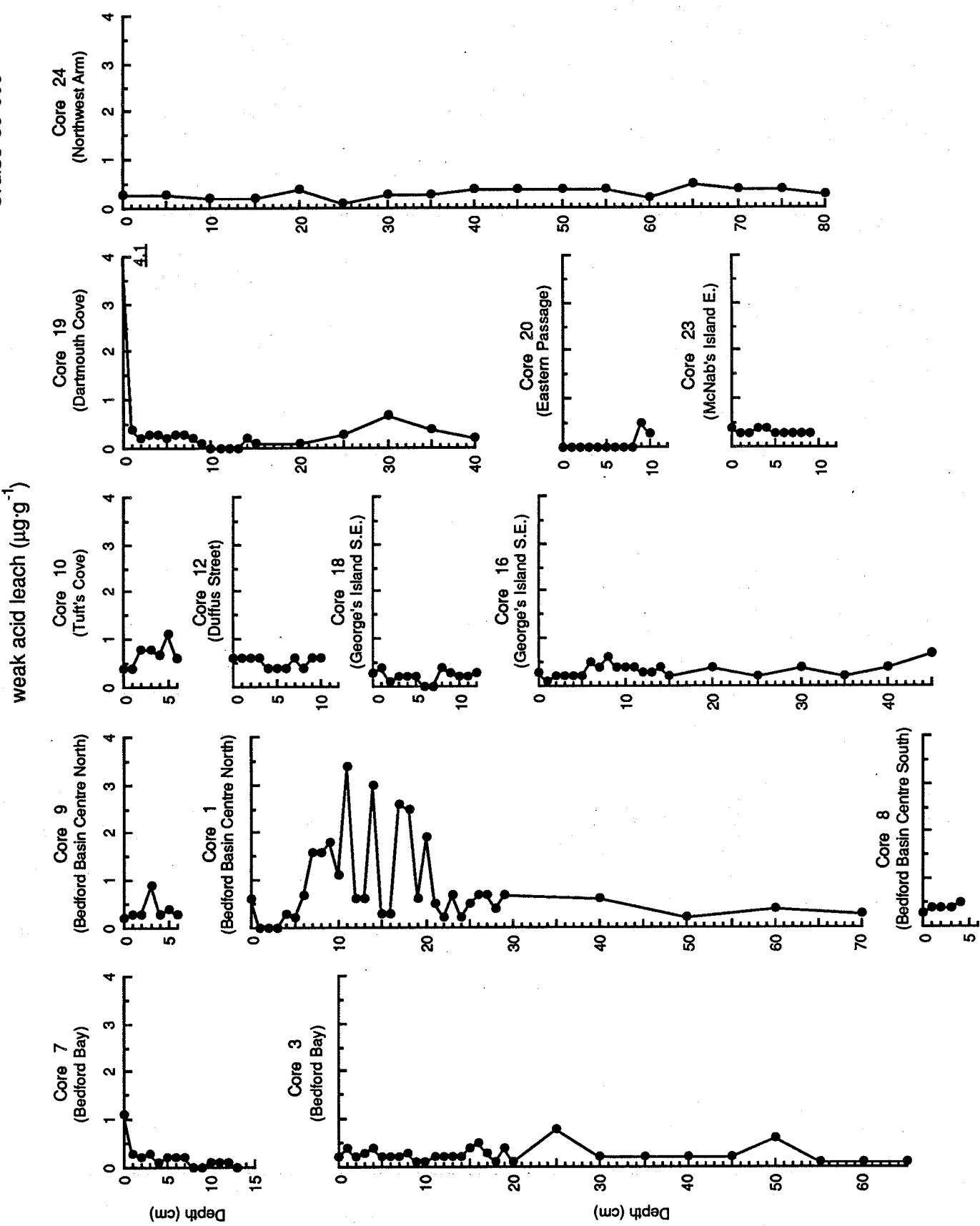
CALCIUM
leach residual ($\mu\text{g g}^{-1}$)

Cruise 89-009

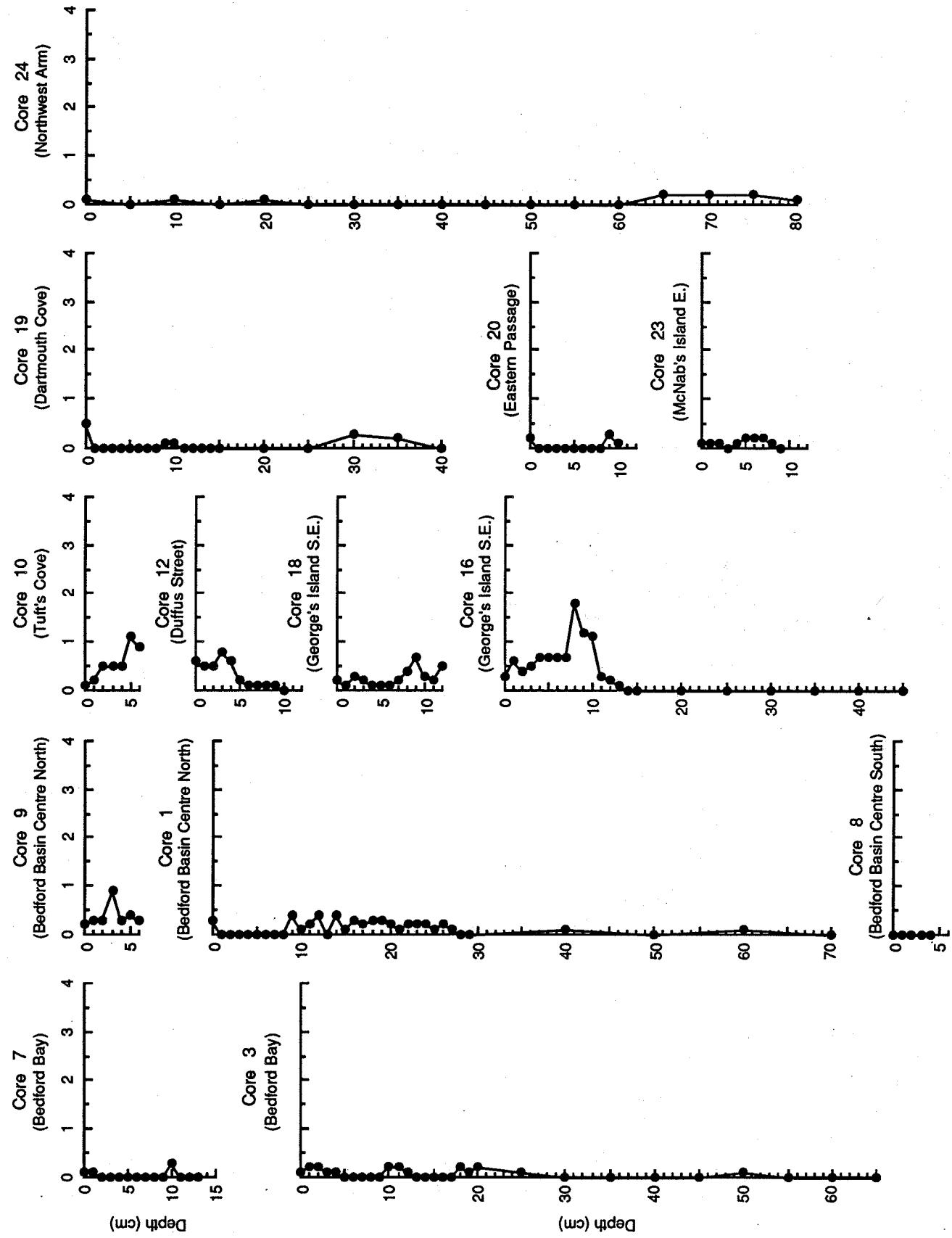
CALCIUM



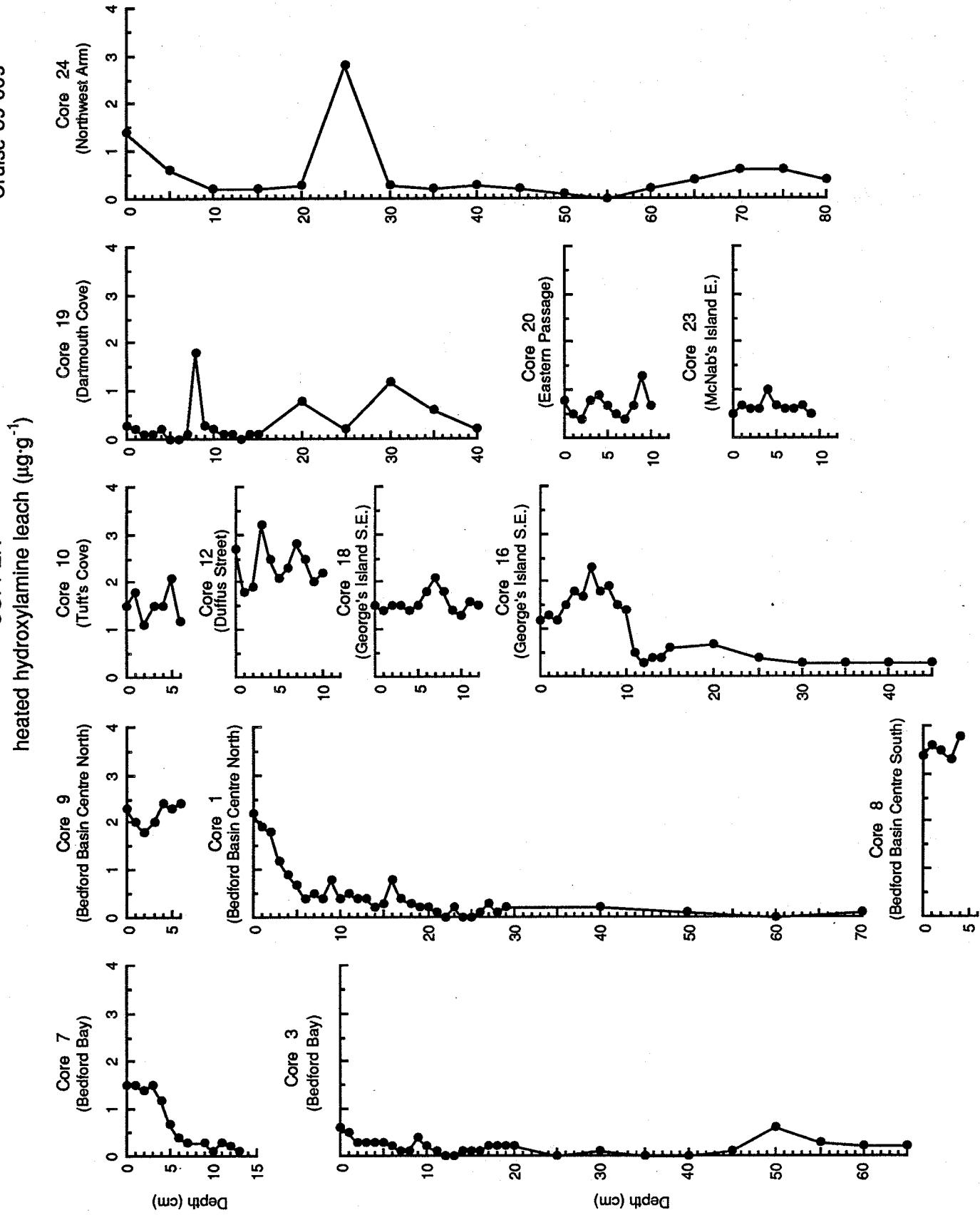
Cruise 89-009



Cruise 89-009

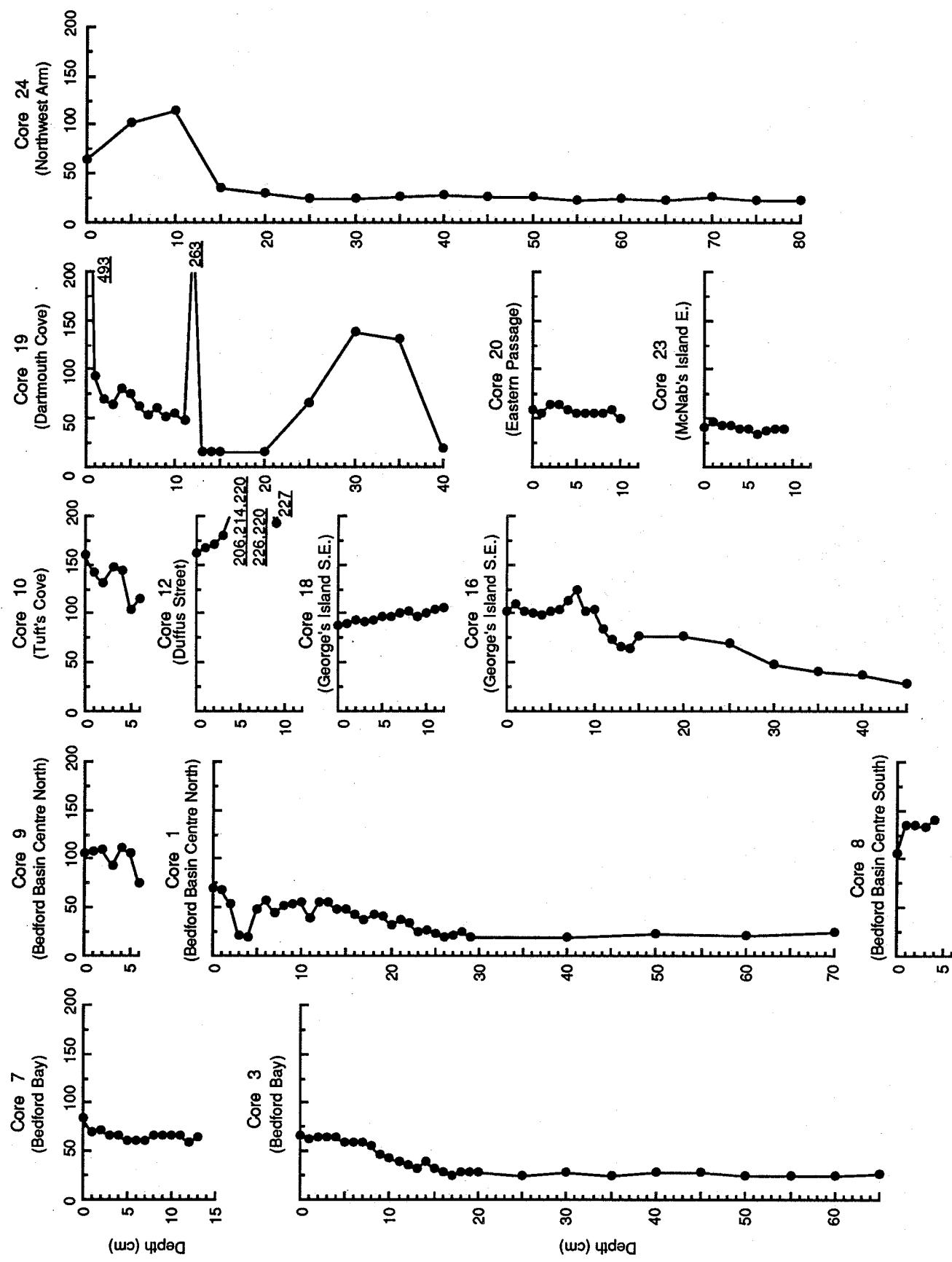
COPPER hydroxylamine leach ($\mu\text{g g}^{-1}$)

Cruise 89-009



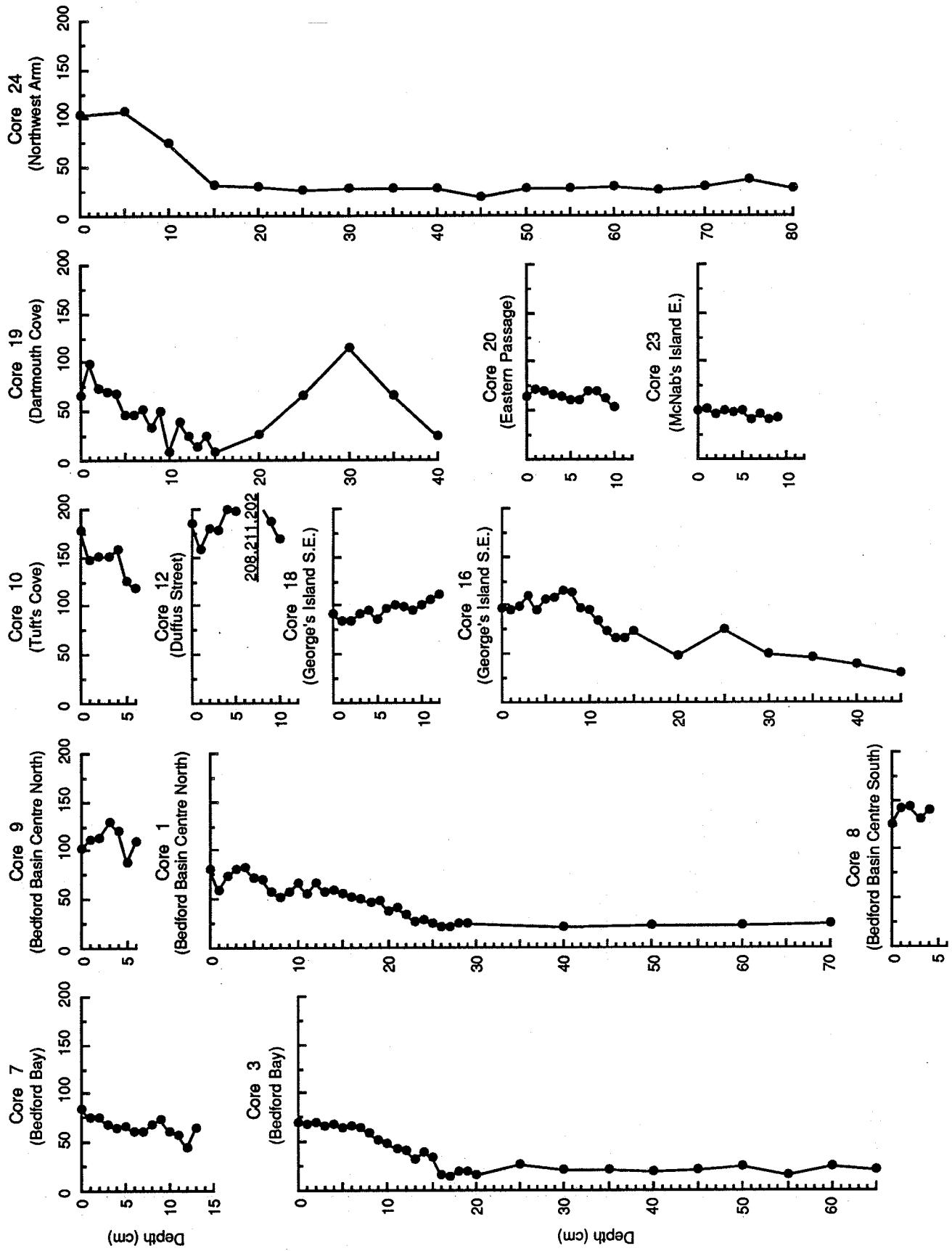
Cruise 89-009

COPPER
leach residual ($\mu\text{g}\cdot\text{g}^{-1}$)

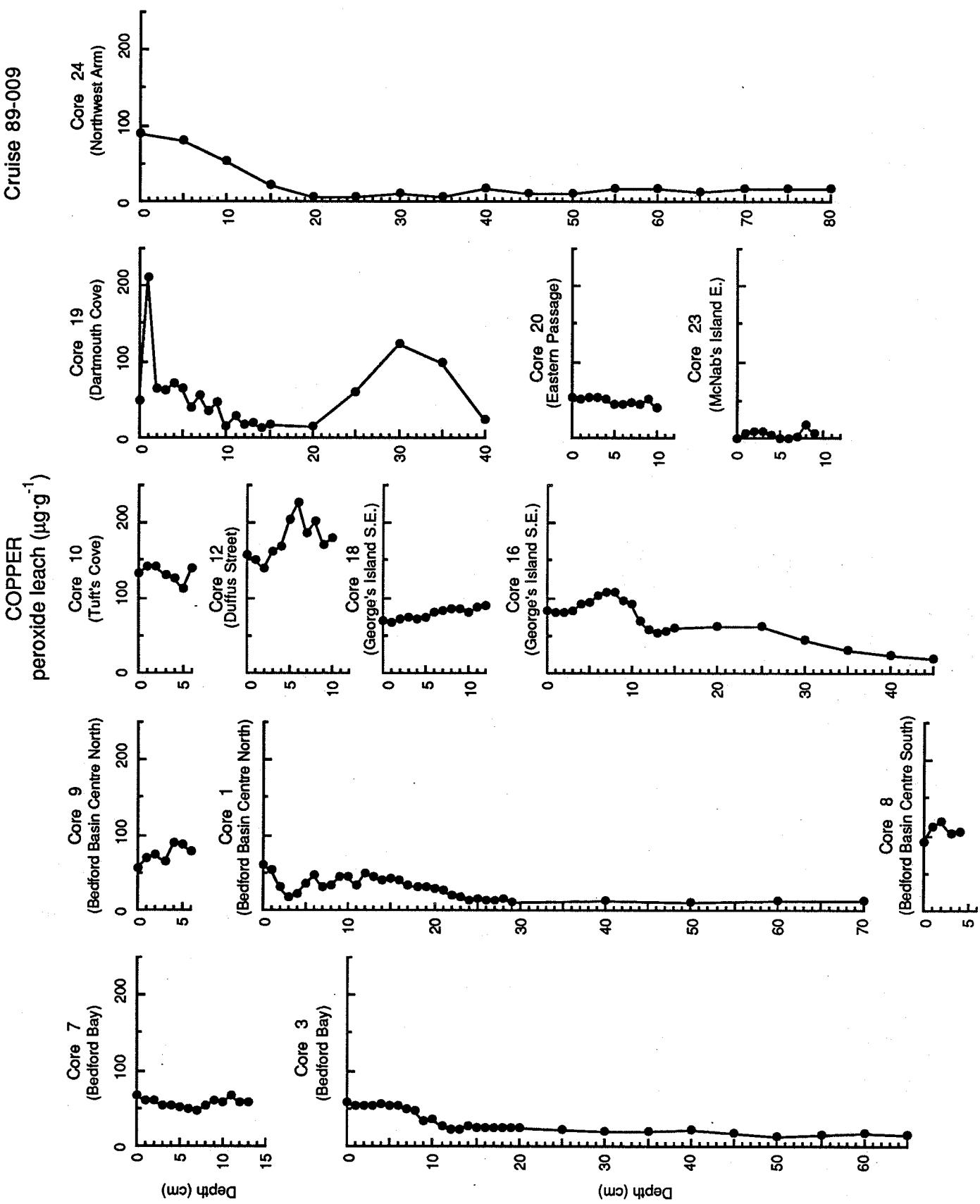


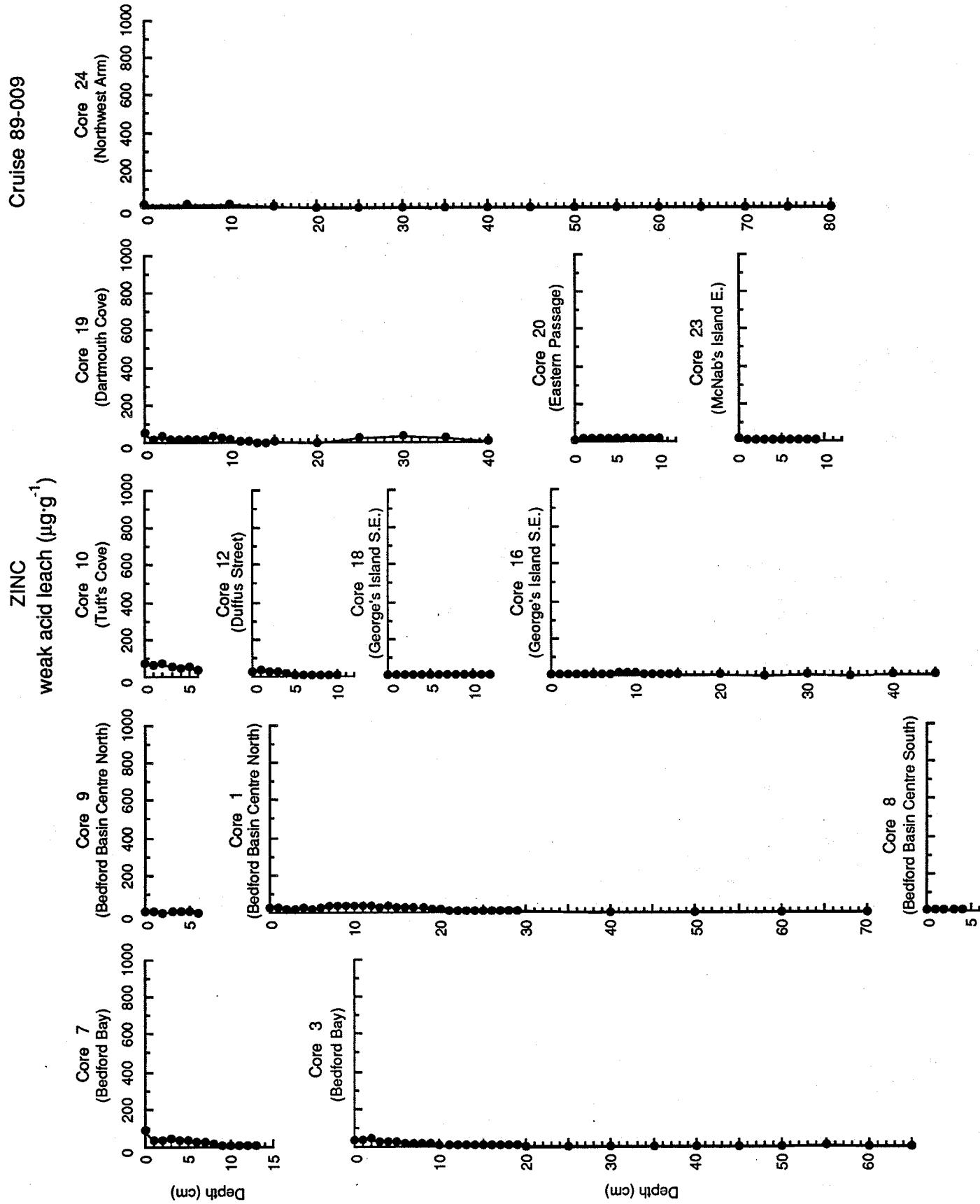
Cruise 89-009

COPPER

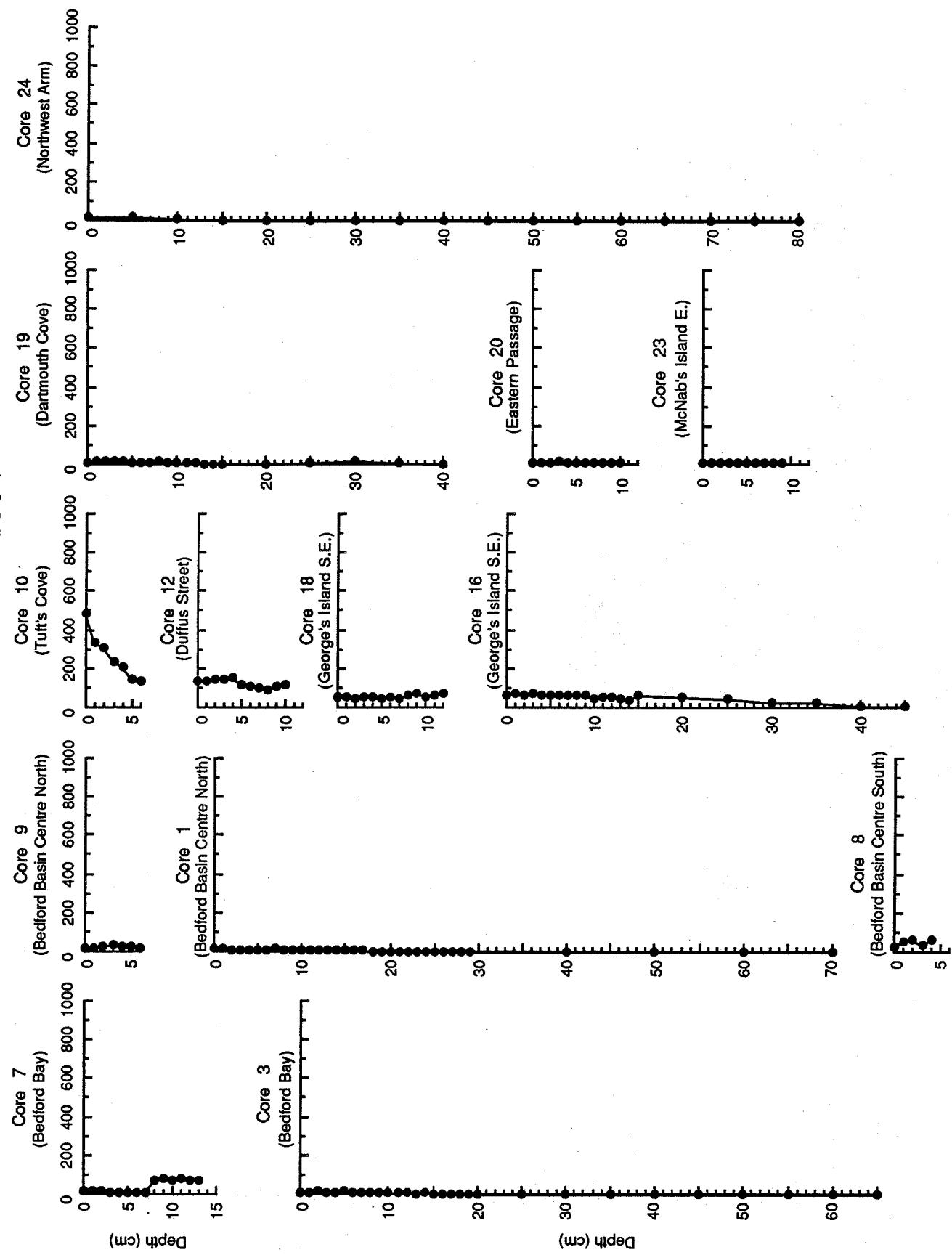
total ($\mu\text{g g}^{-1}$)

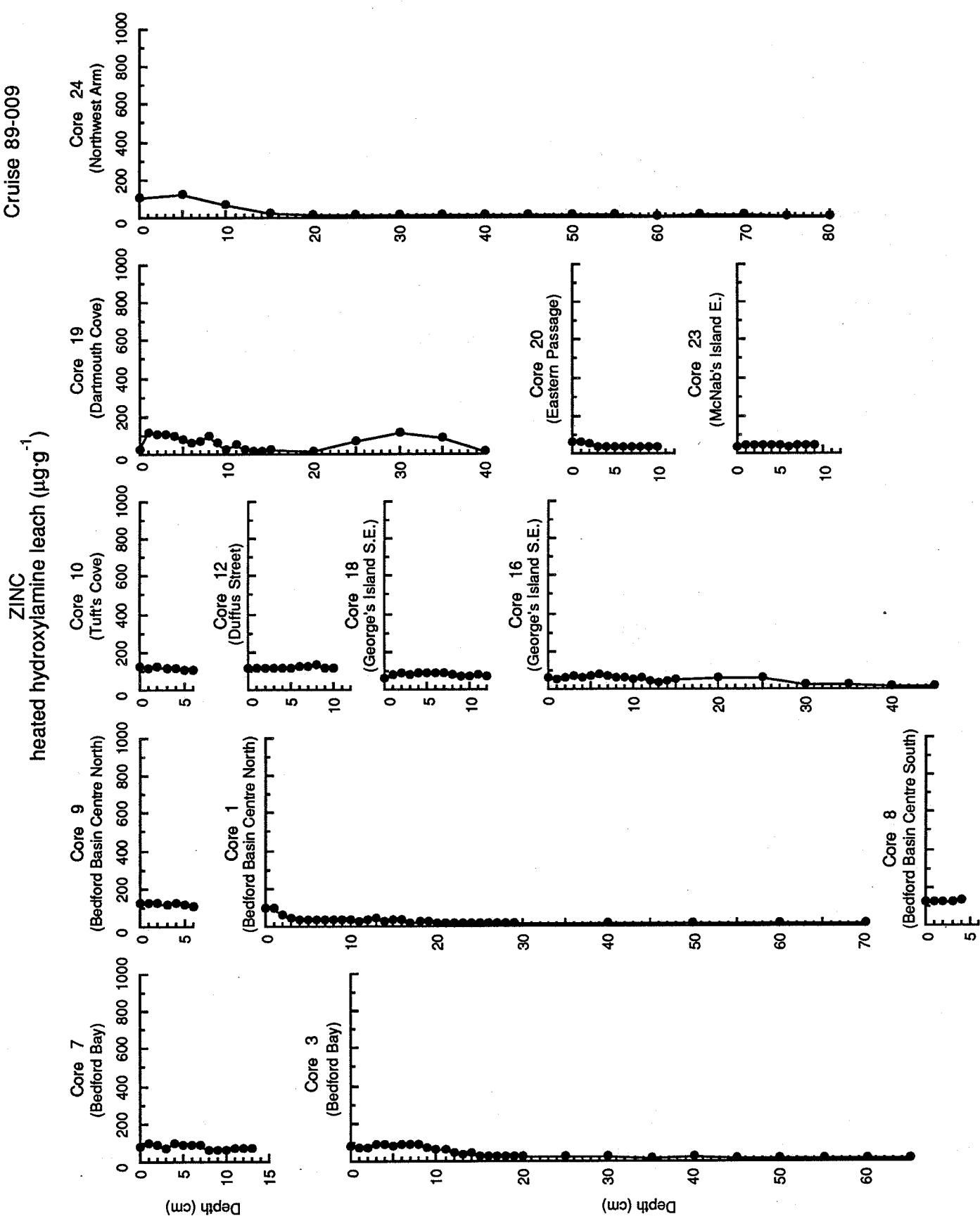
Cruise 89-009





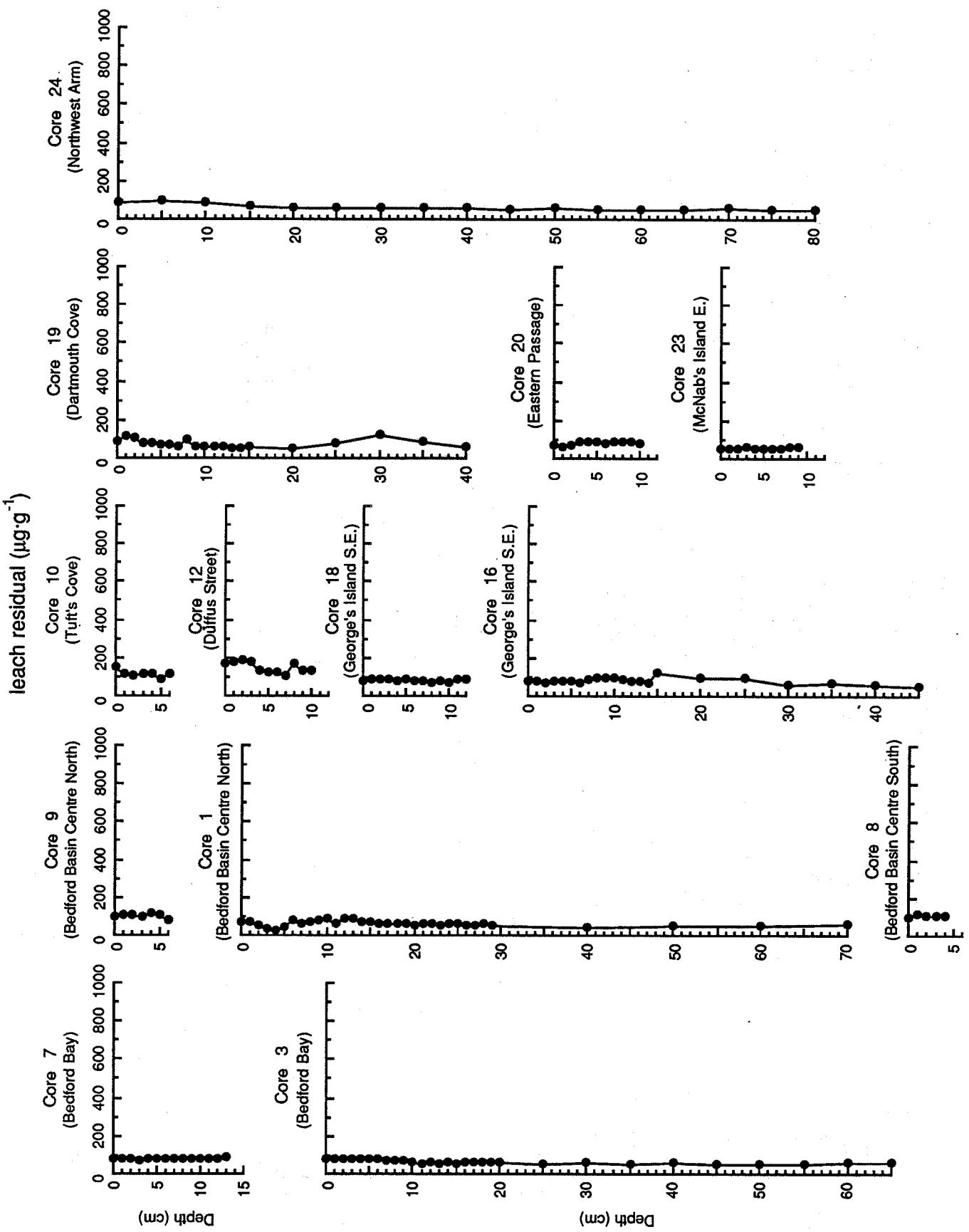
Cruise 89-009

ZINC hydroxylamine leach ($\mu\text{g.g}^{-1}$)

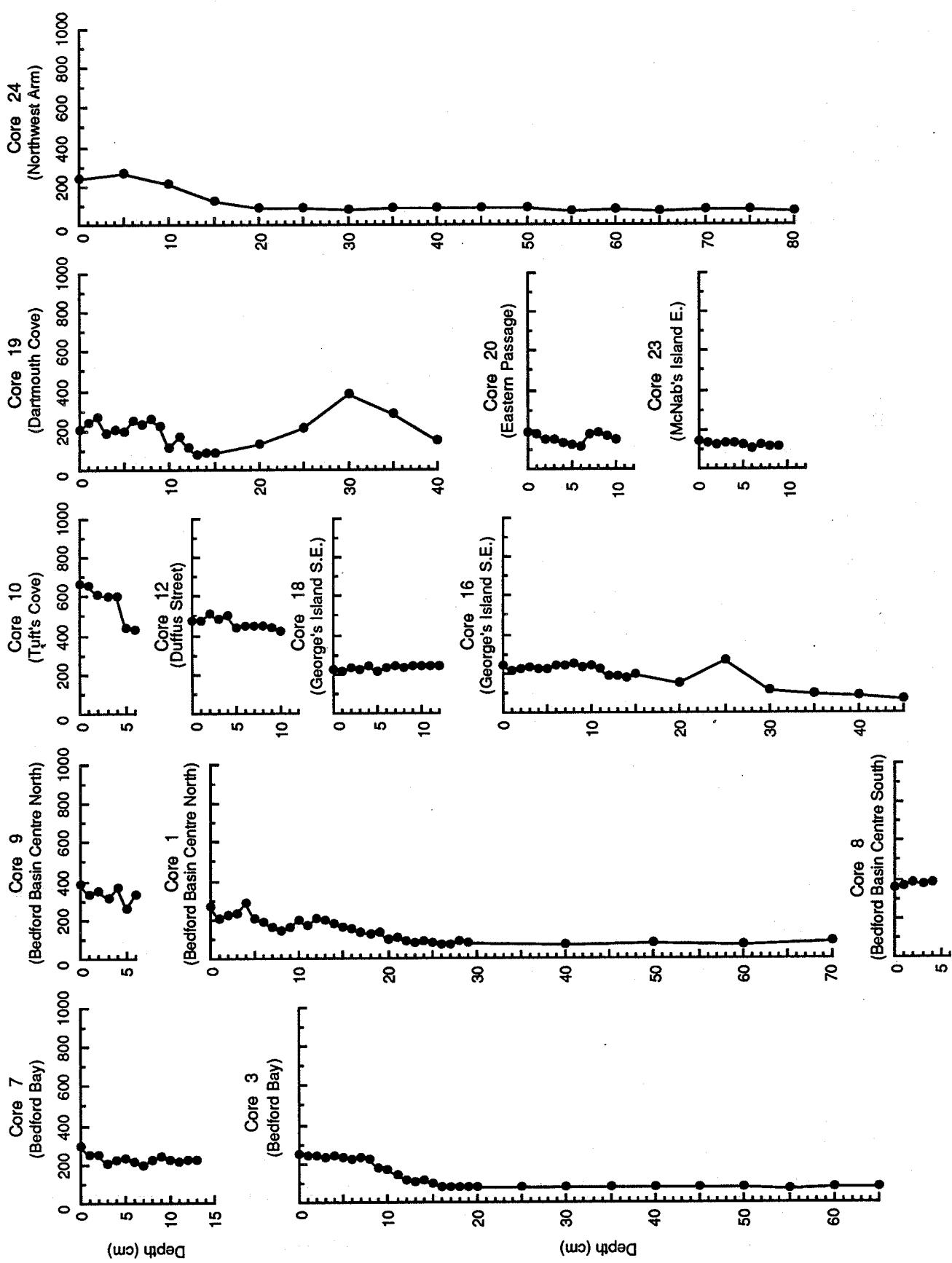


Cruise 89-009

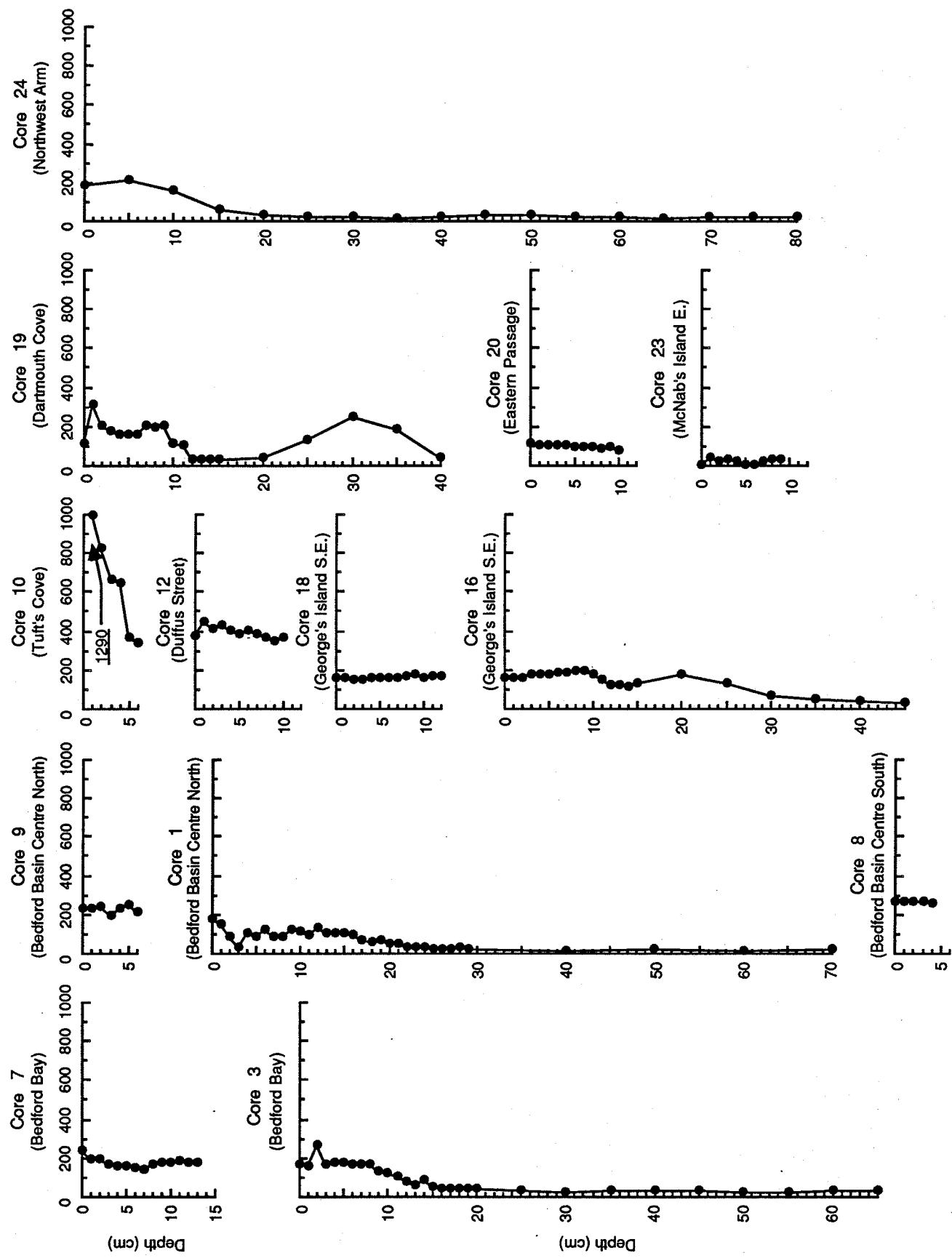
ZINC



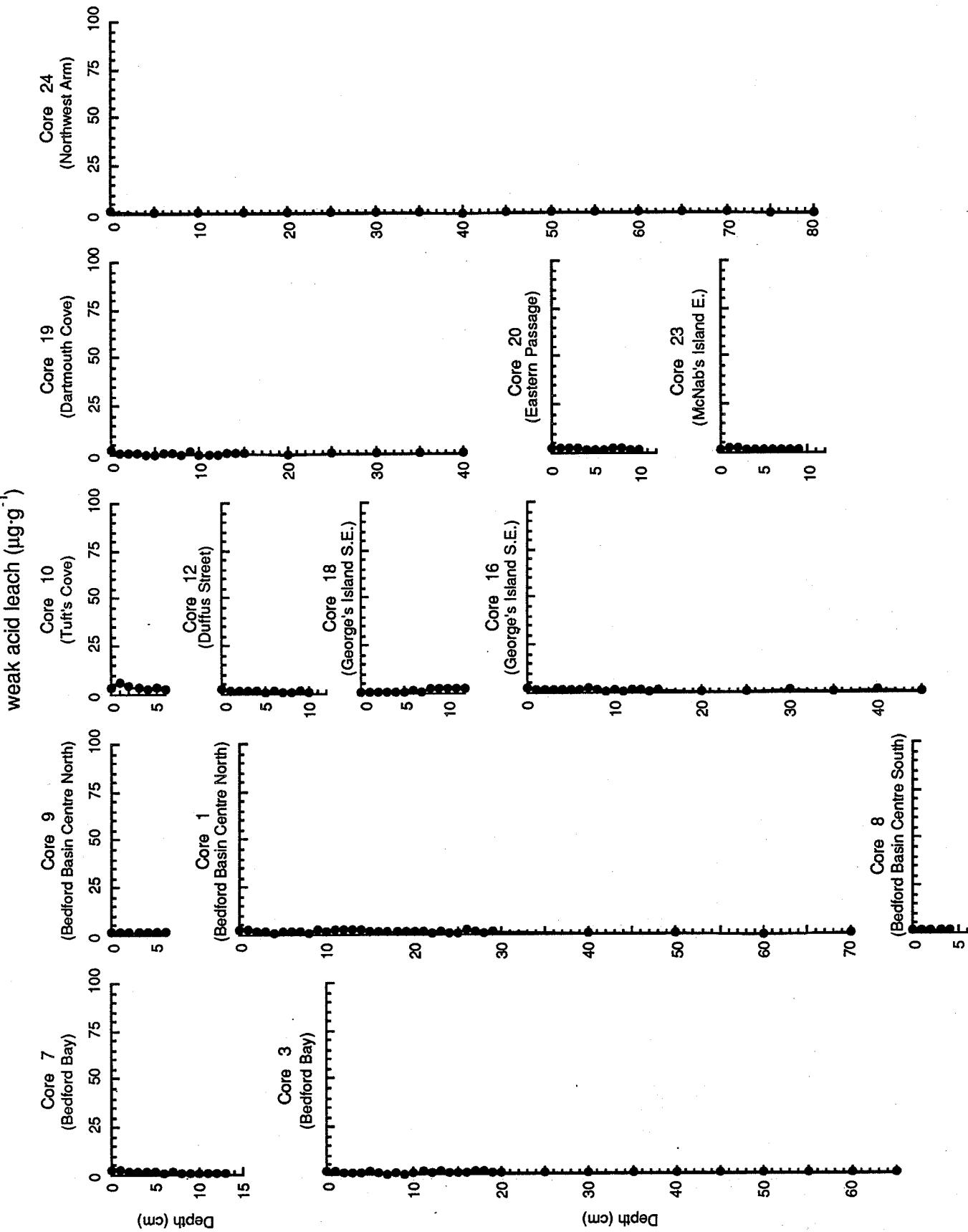
ZINC
total ($\mu\text{g}\cdot\text{g}^{-1}$)

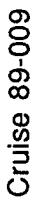


Cruise 89-009

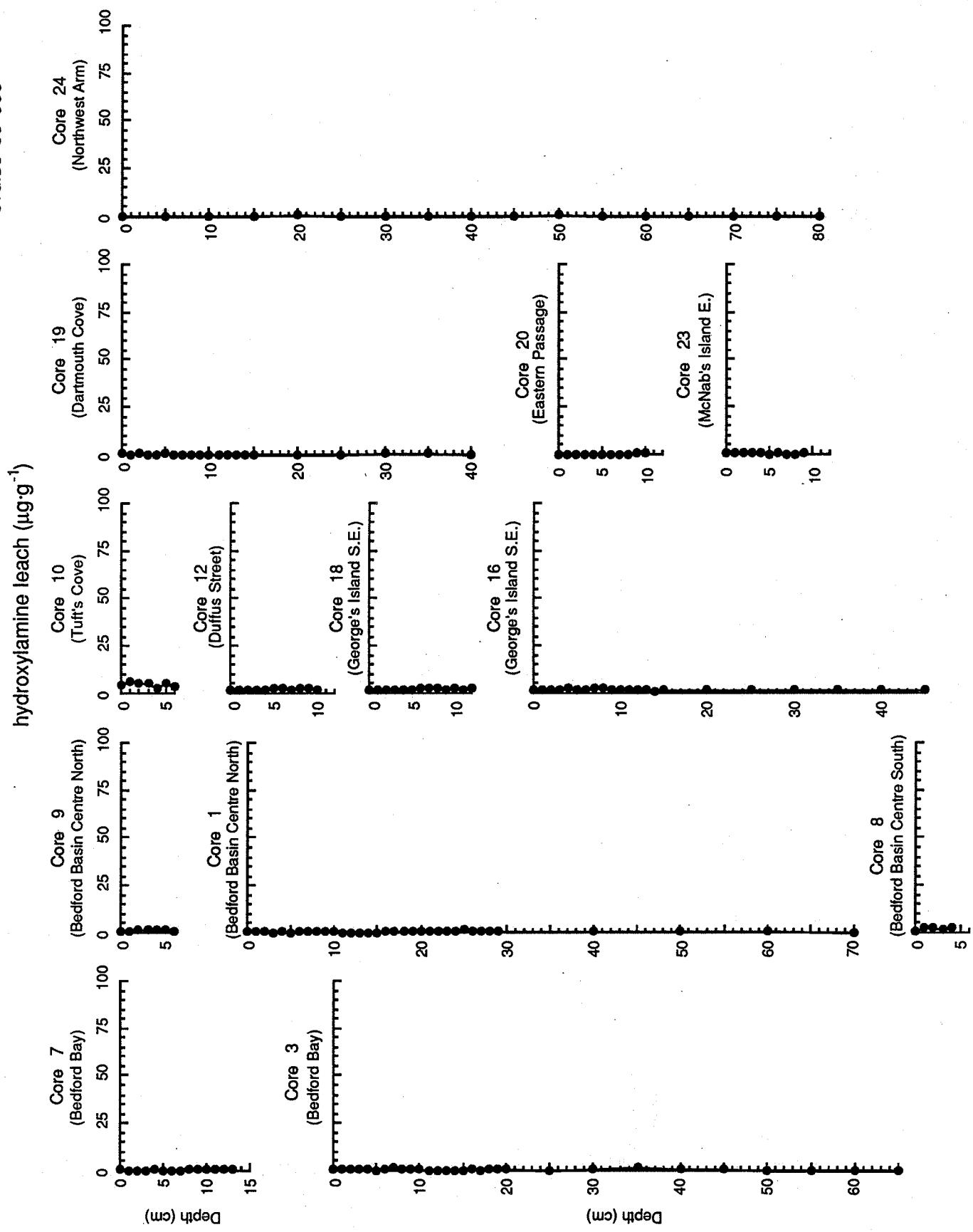
ZINC
peroxide leach ($\mu\text{g}\cdot\text{g}^{-1}$)

NICKEL

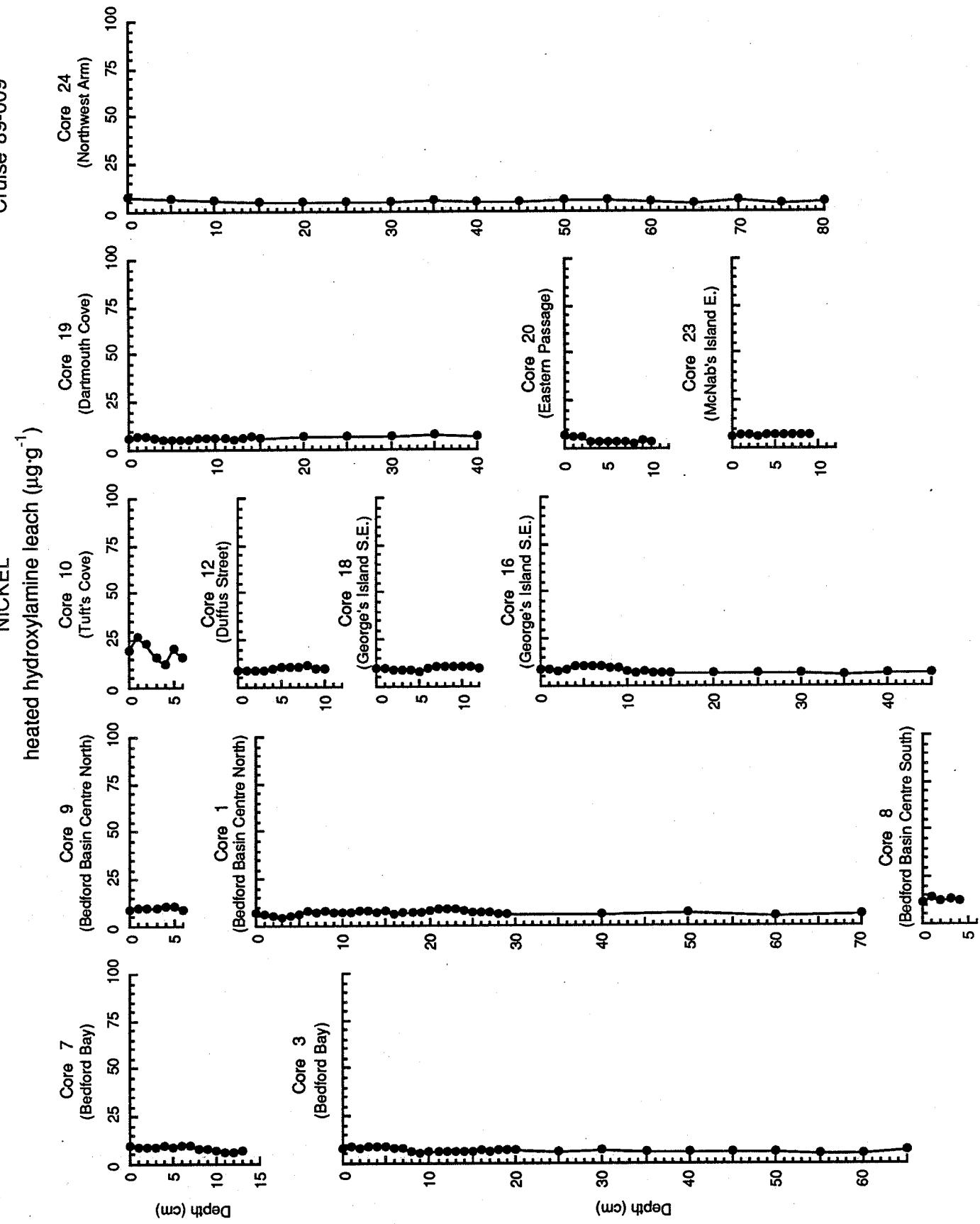


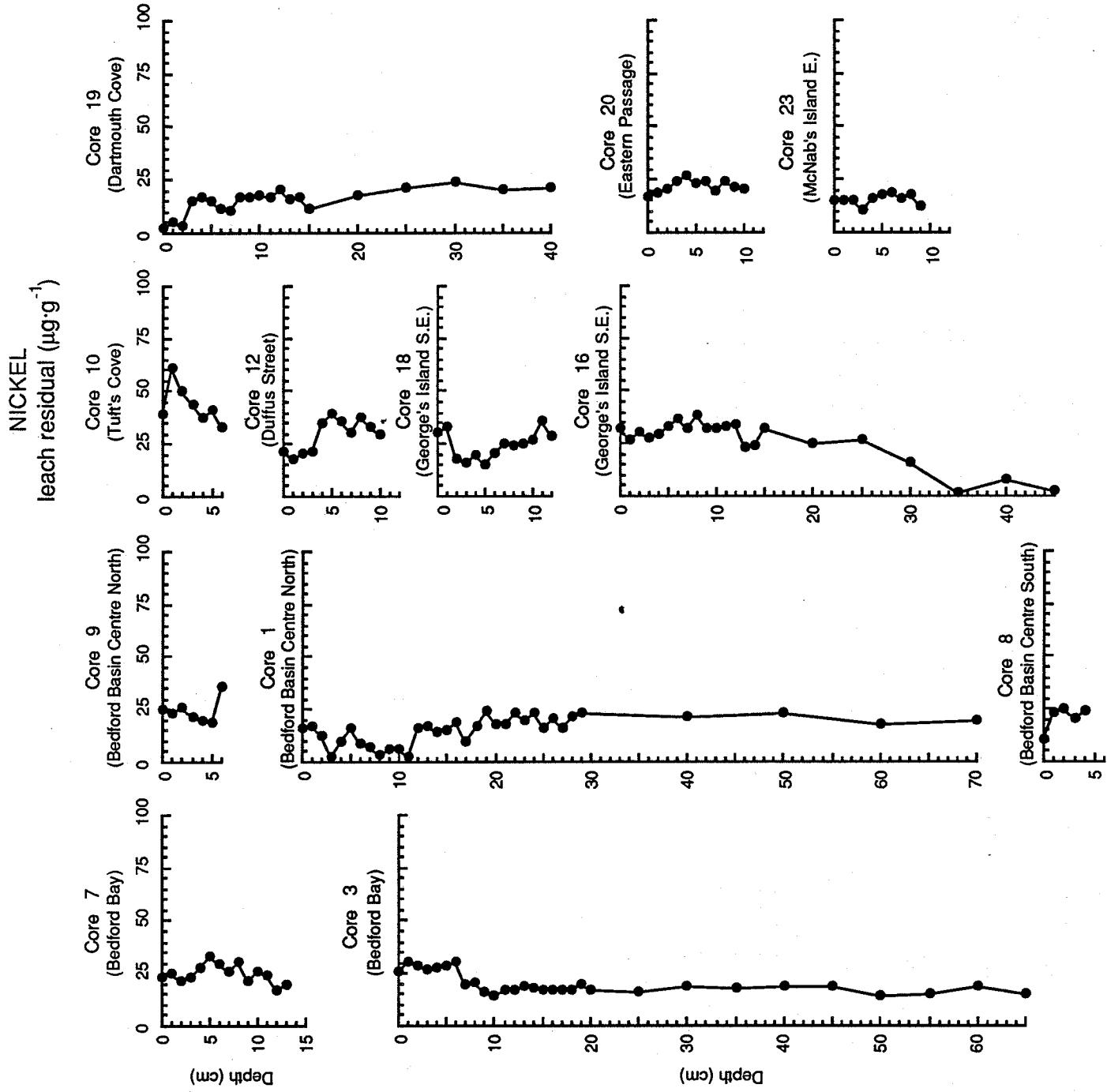


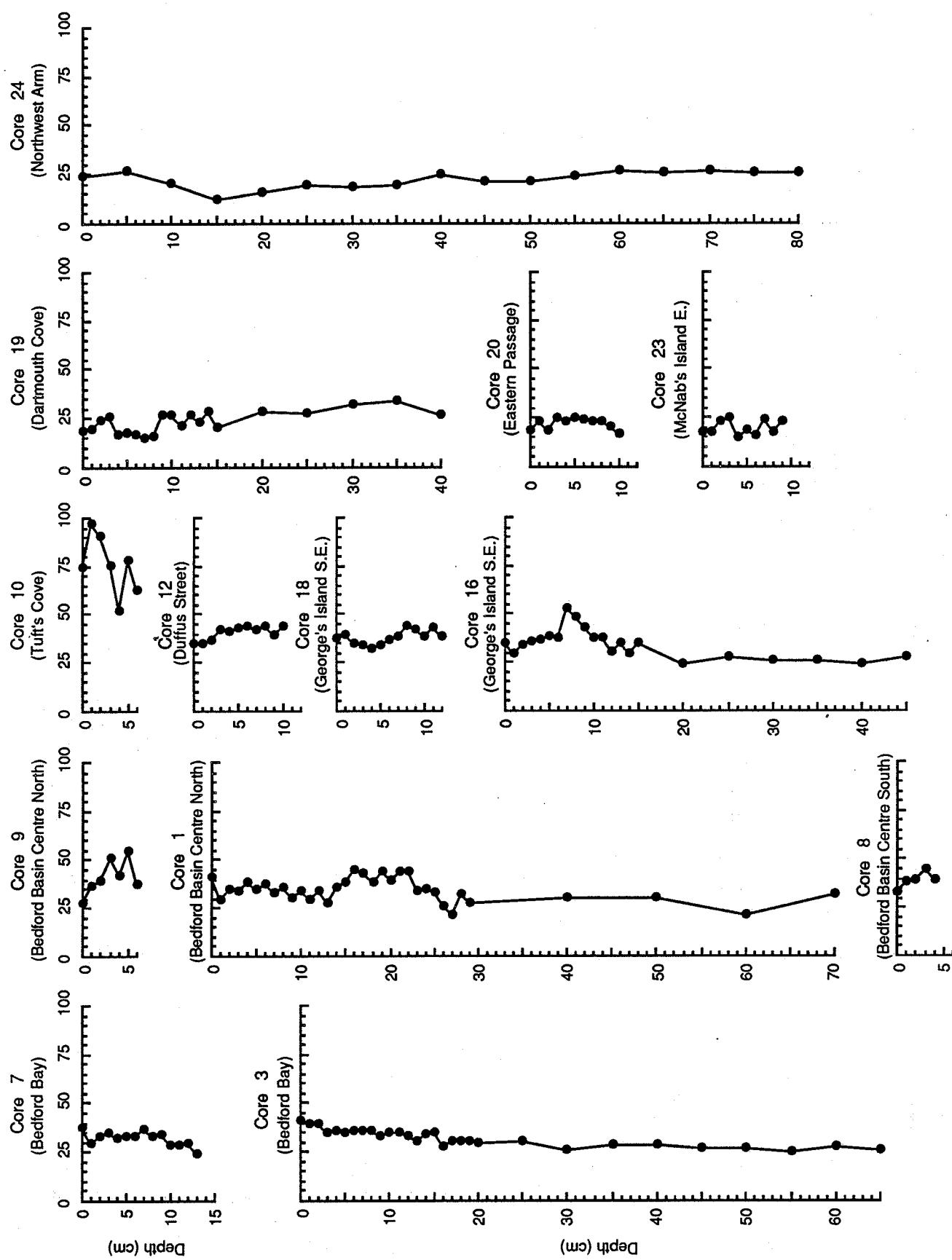
NICKEL

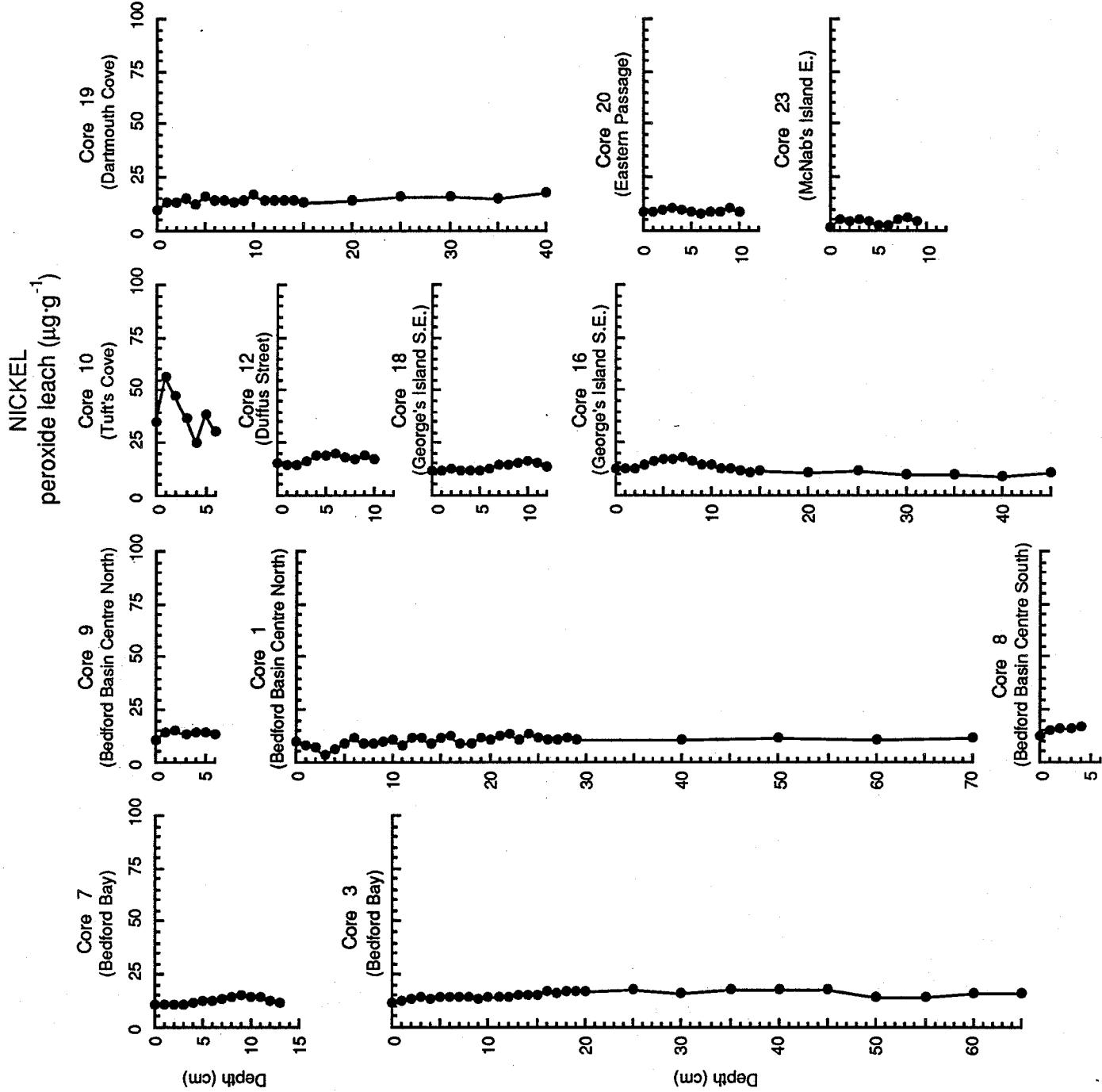


Cruise 89-009



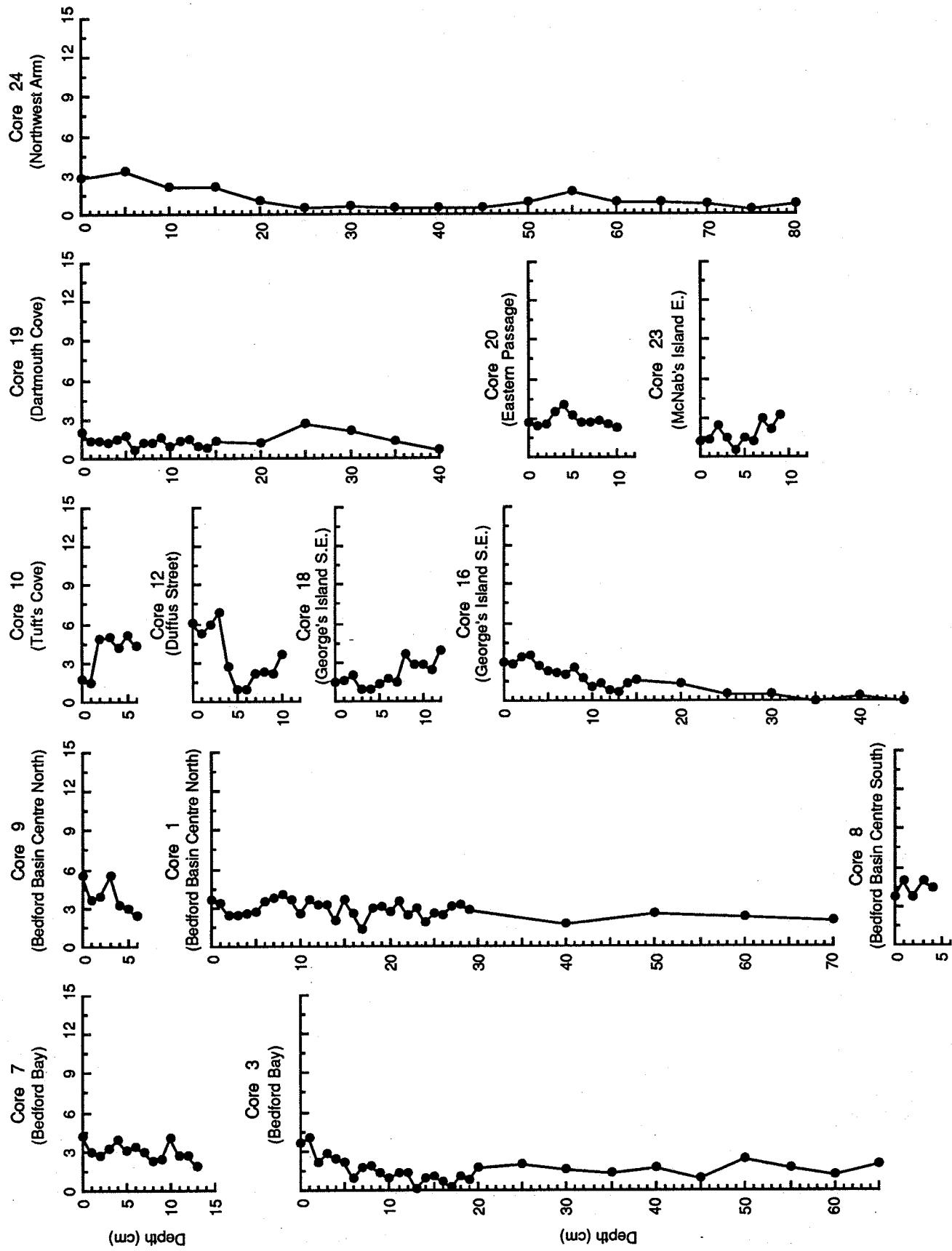






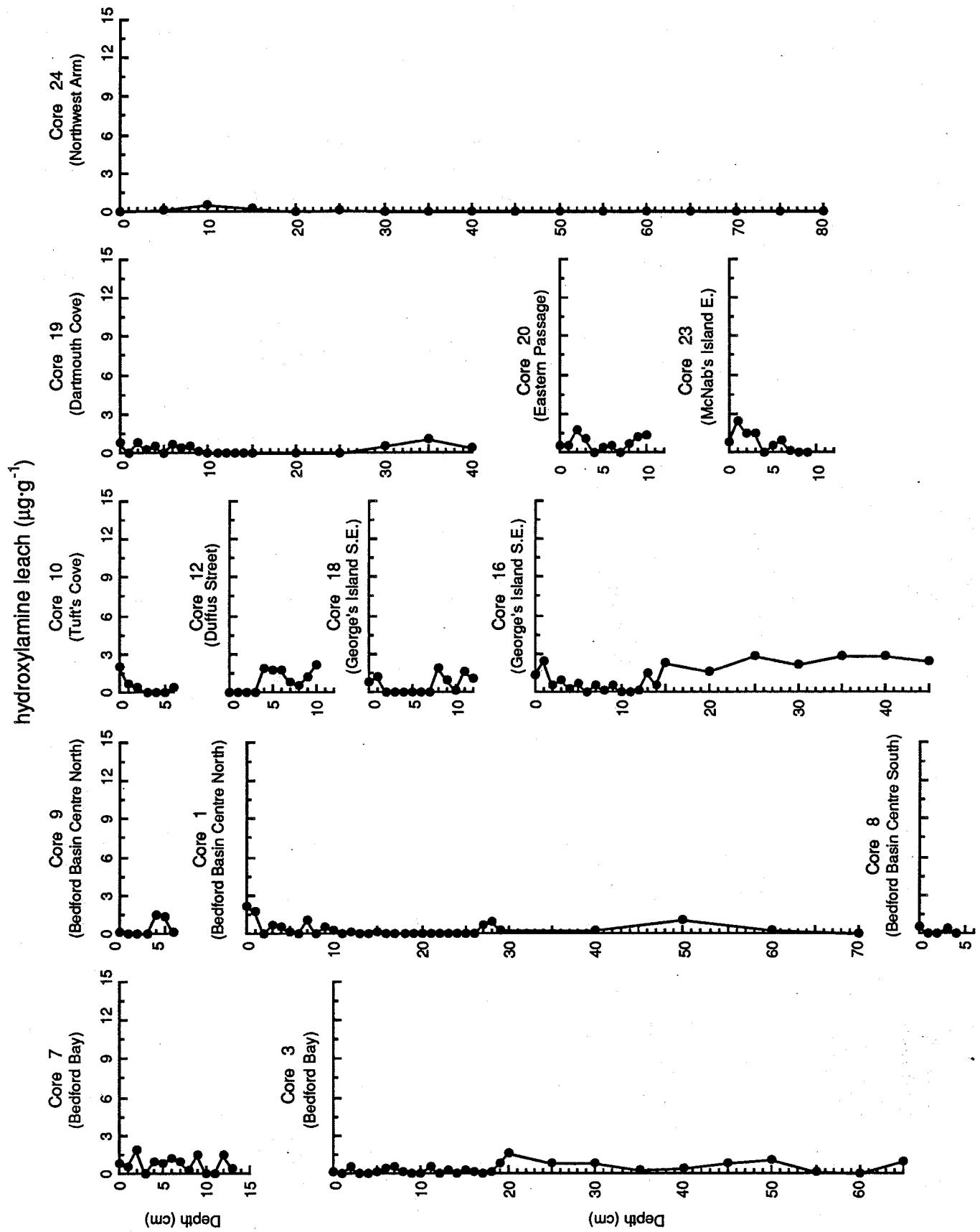
Cruise 89-009

CHROMIUM
weak acid leach ($\mu\text{g}\cdot\text{g}^{-1}$)

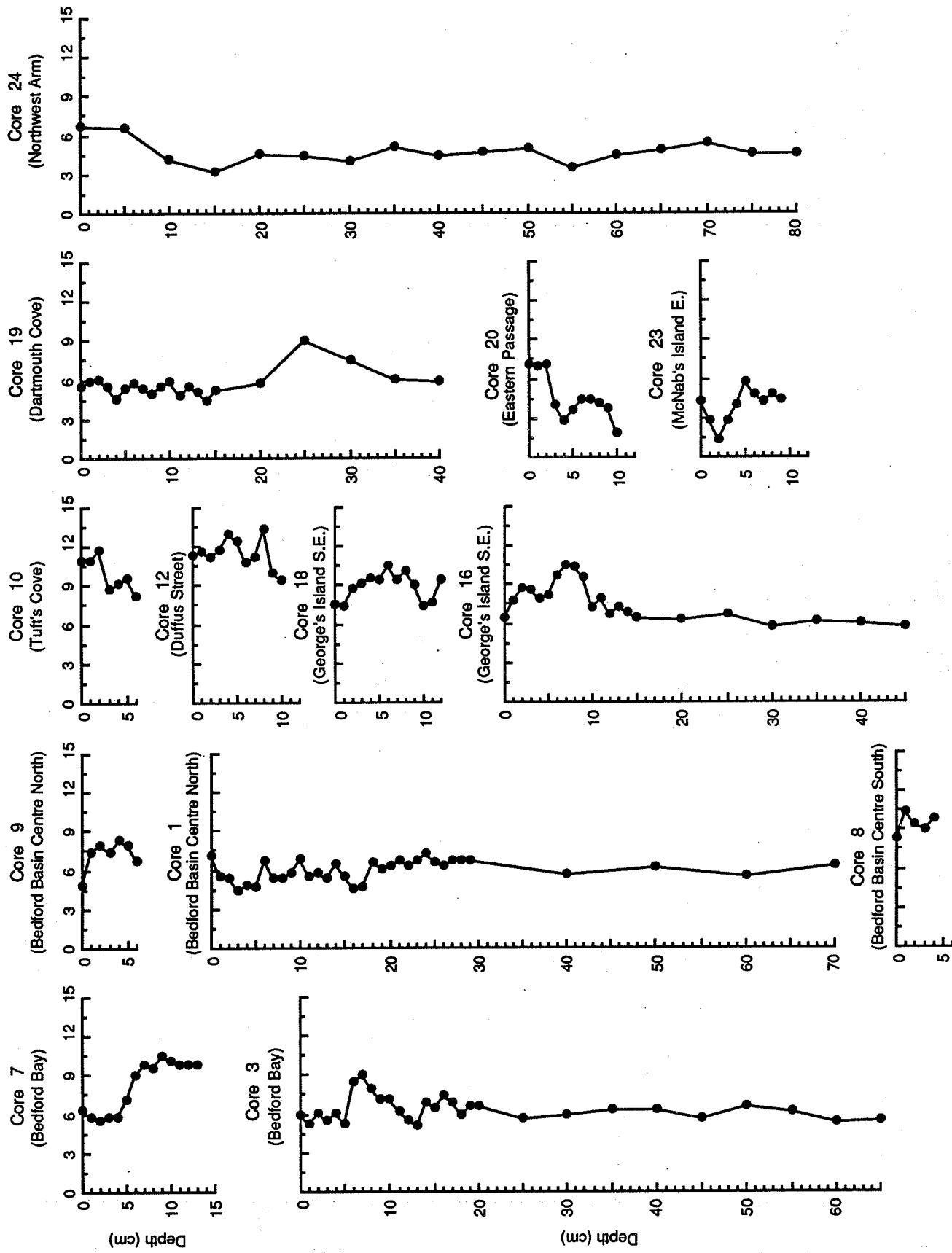


Cruise 89-009

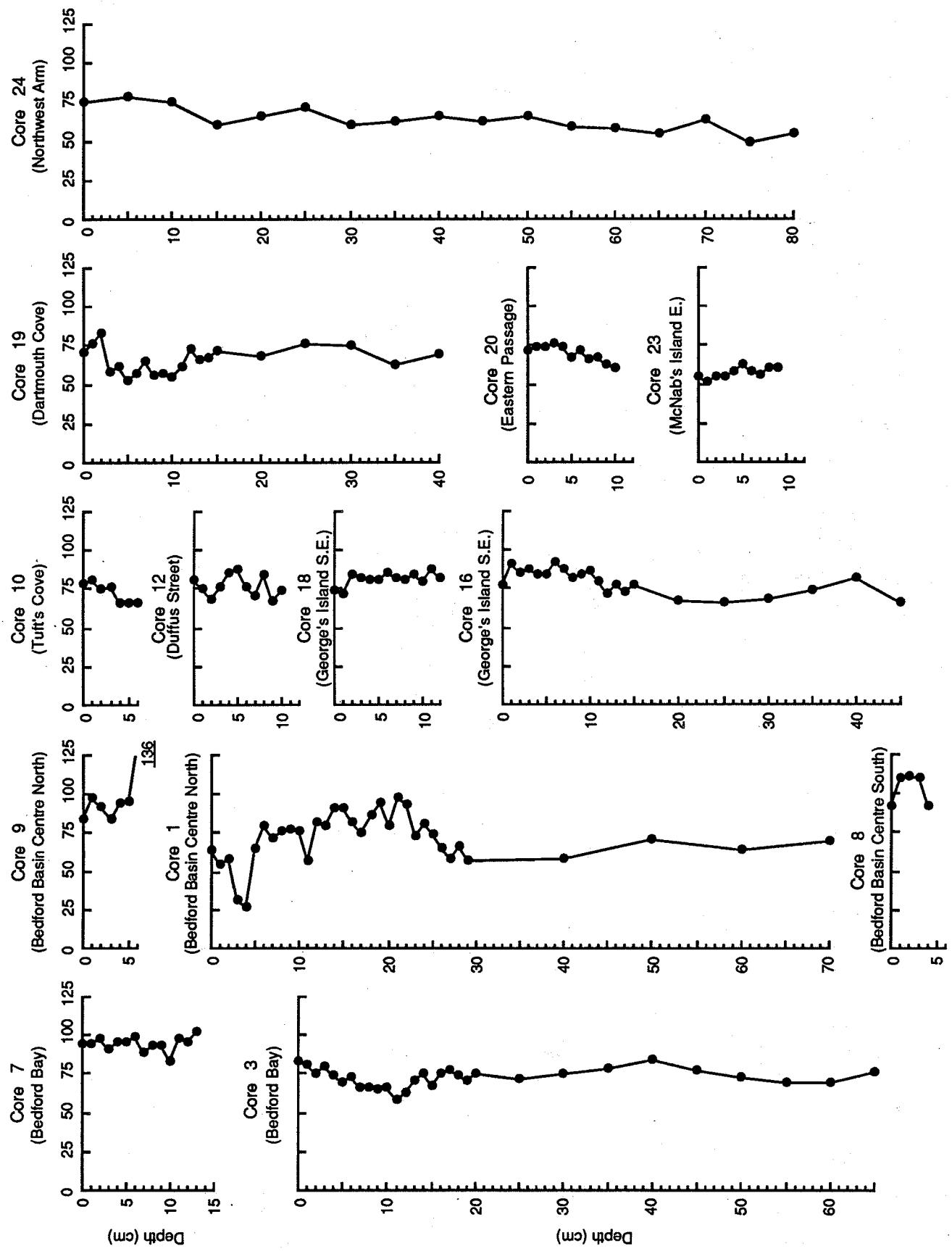
CHROMIUM



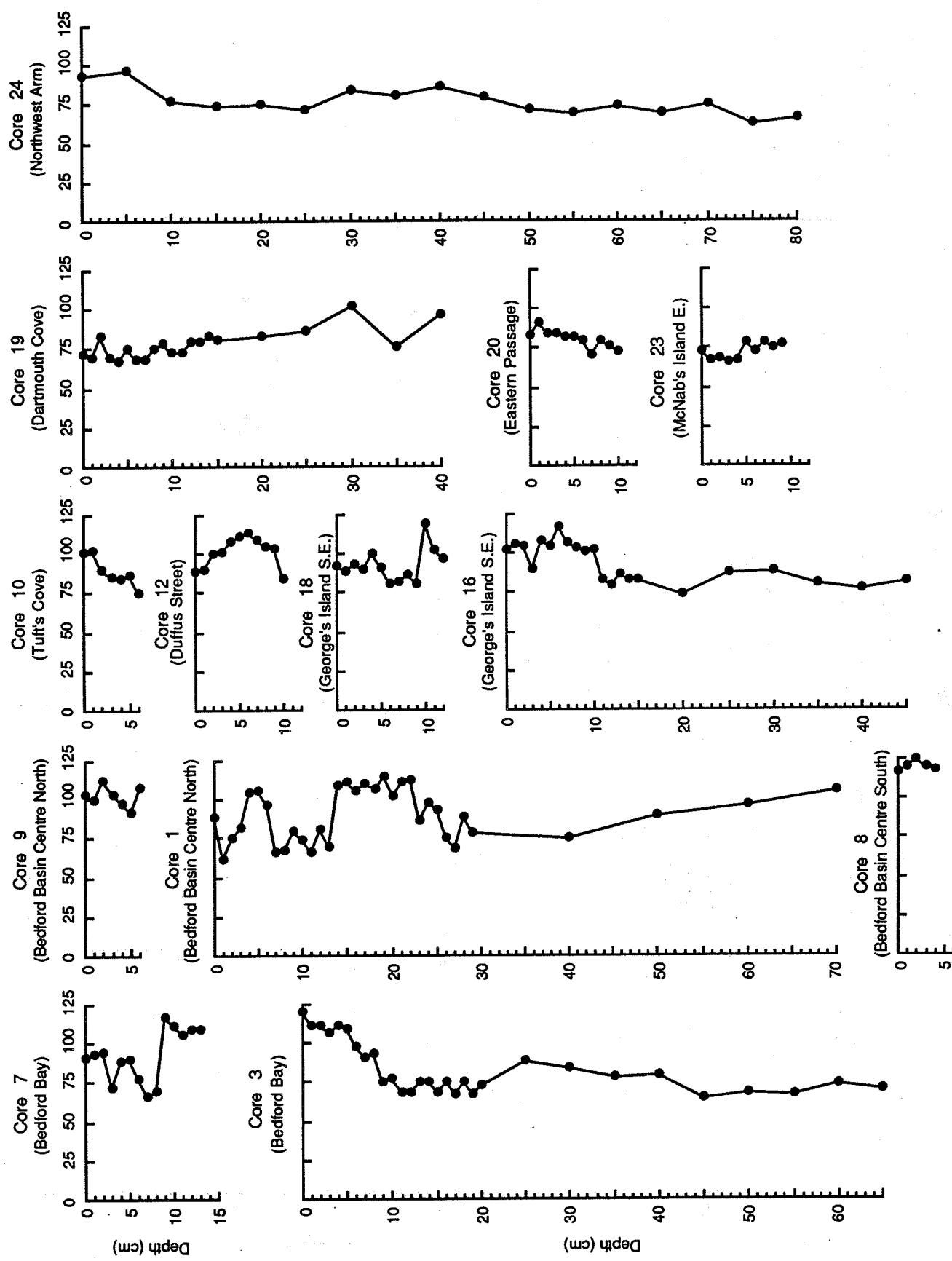
Cruise 89-009

CHROMIUM
heated hydroxylamine leach ($\mu\text{g g}^{-1}$)

Cruise 89-009

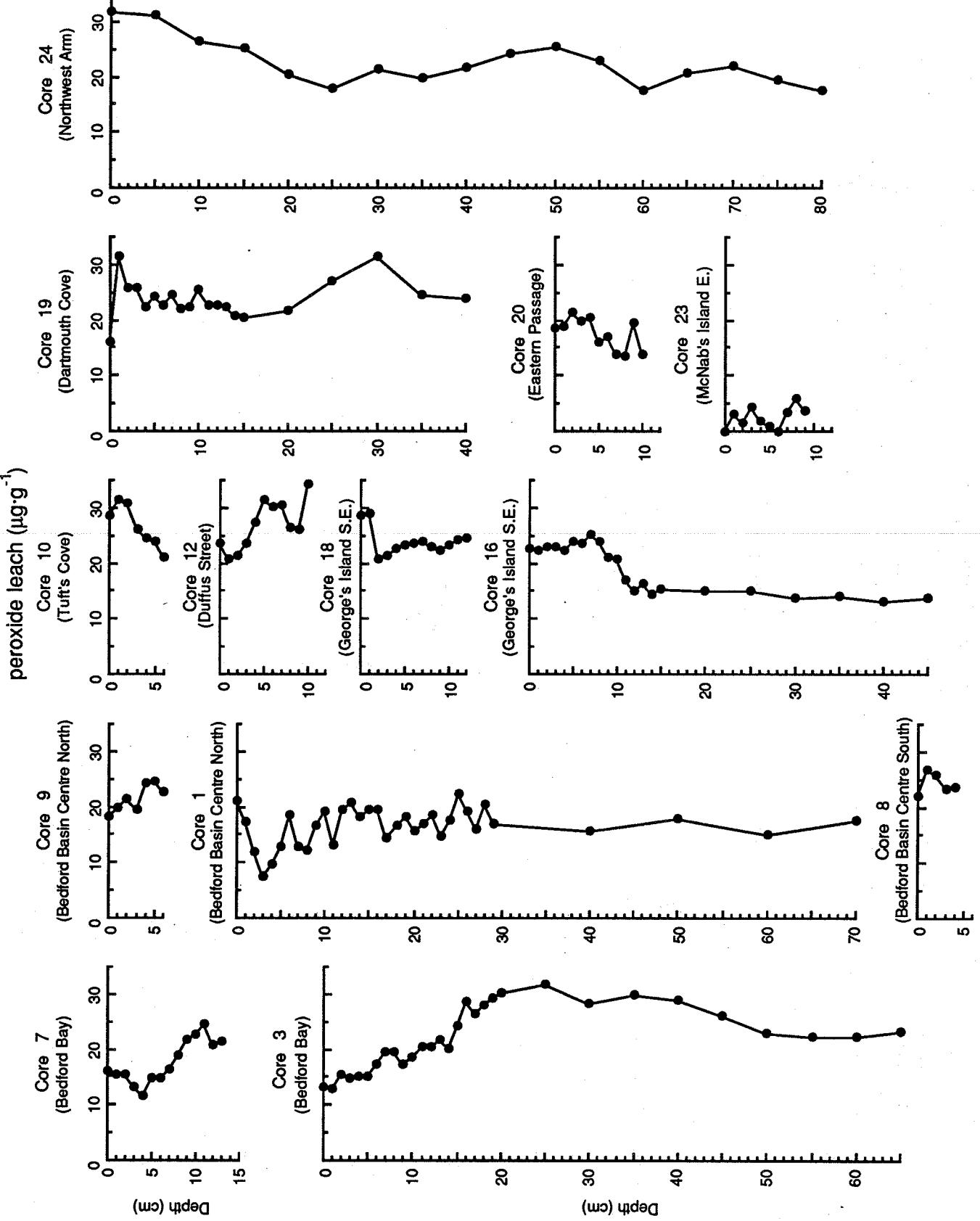
CHROMIUM
leach residual ($\mu\text{g}\cdot\text{g}^{-1}$)

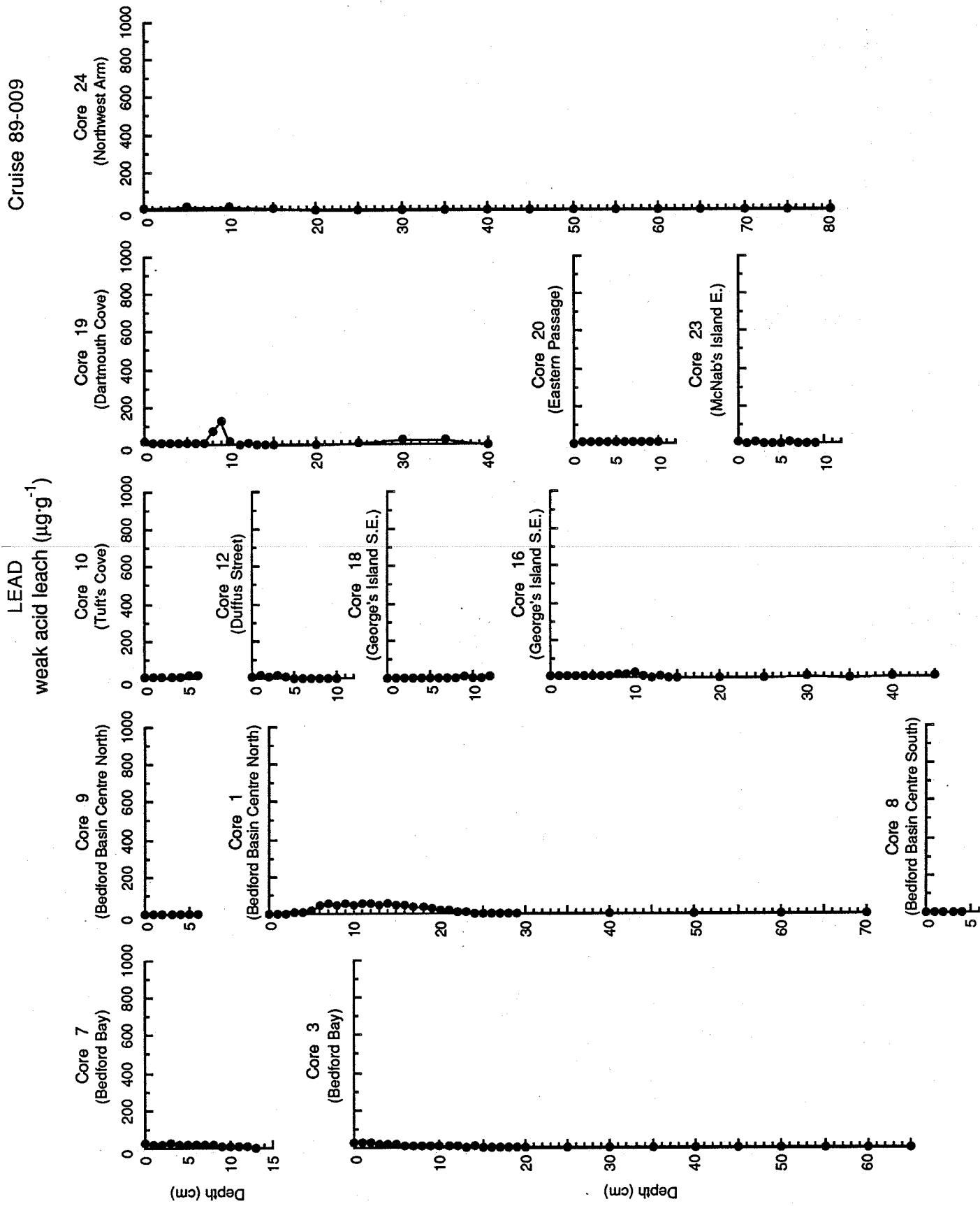
Cruise 89-009

CHROMIUM
total ($\mu\text{g}\cdot\text{g}^{-1}$)

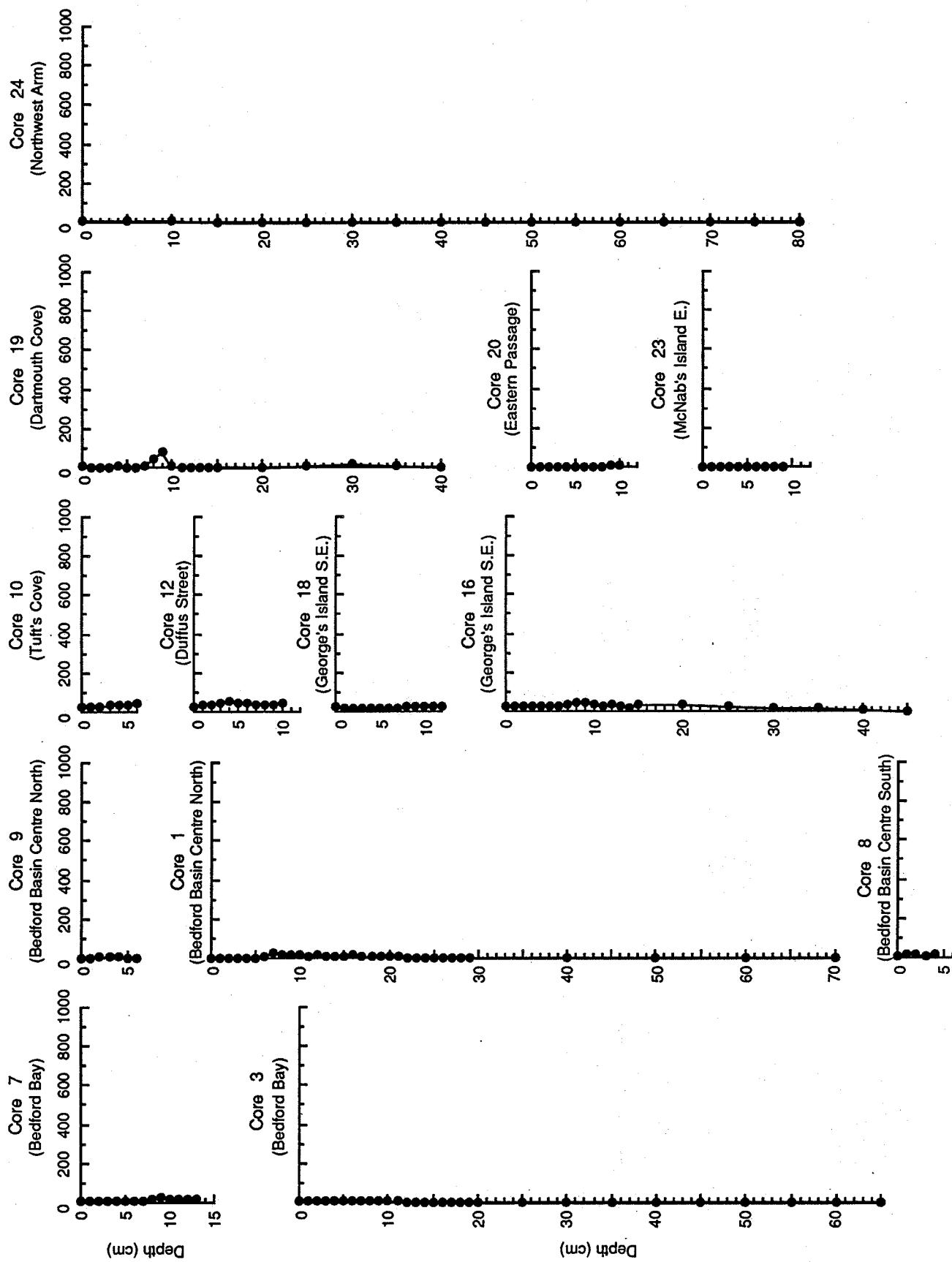
Cruise 89-009

CHROMIUM

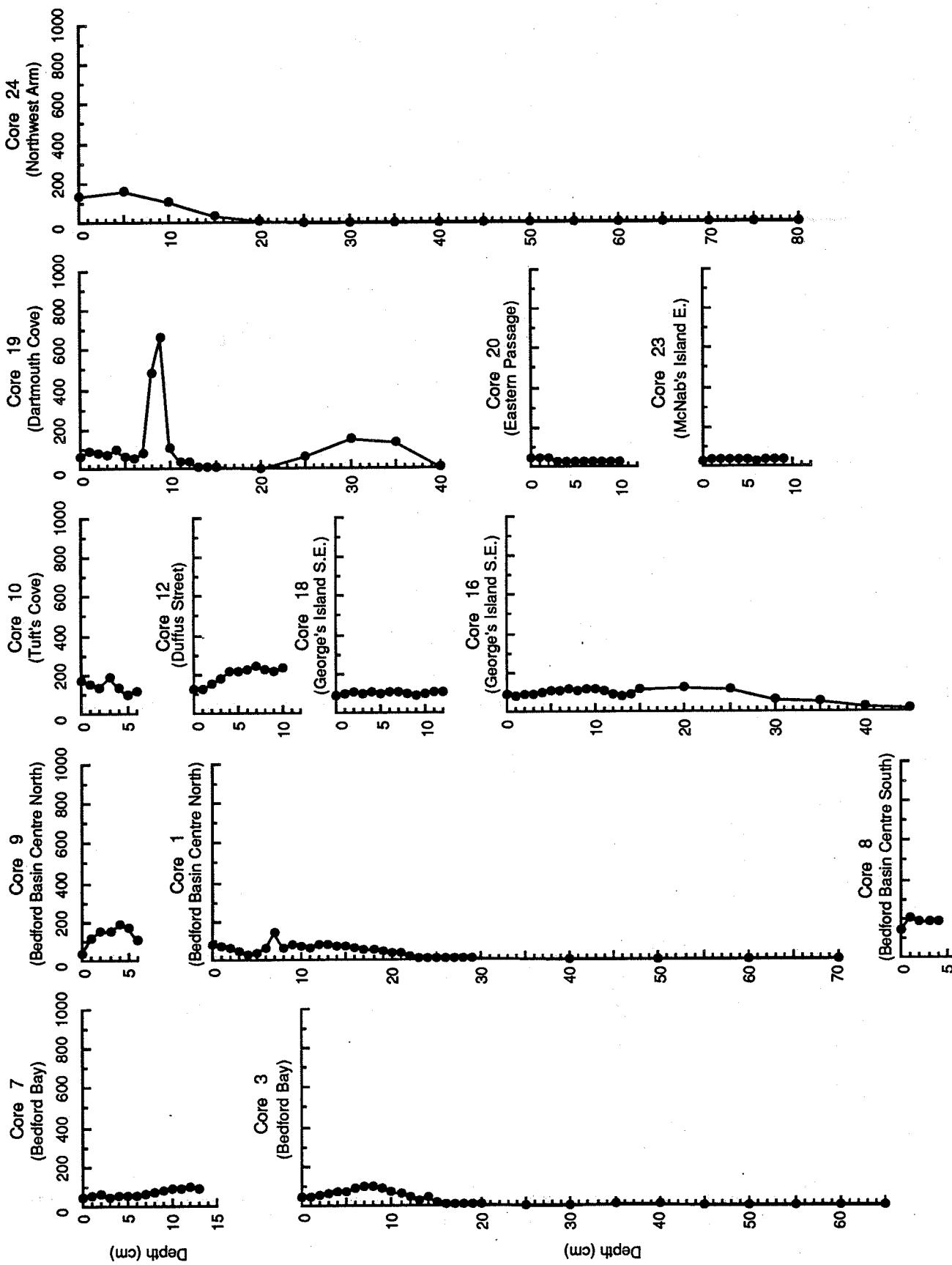


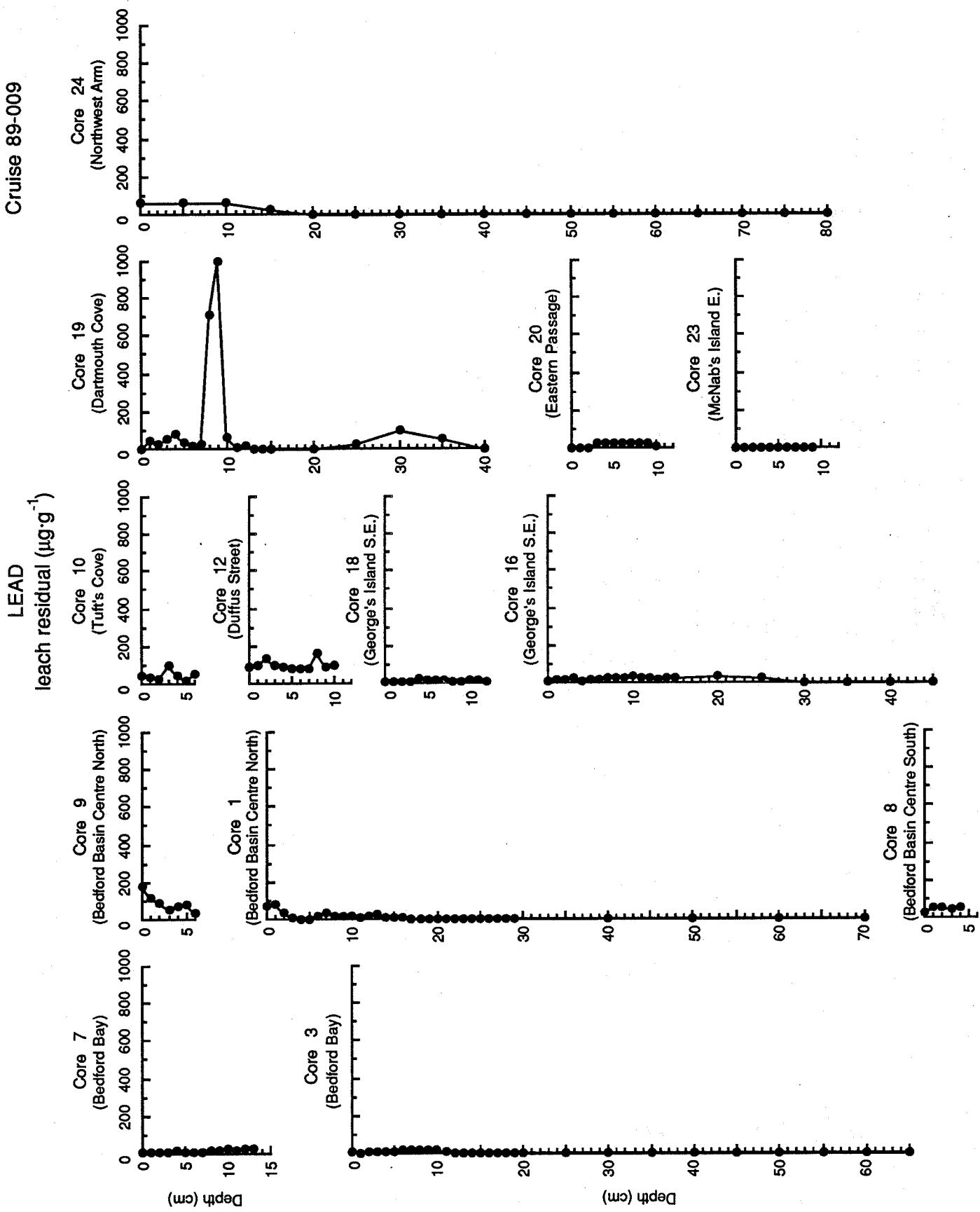


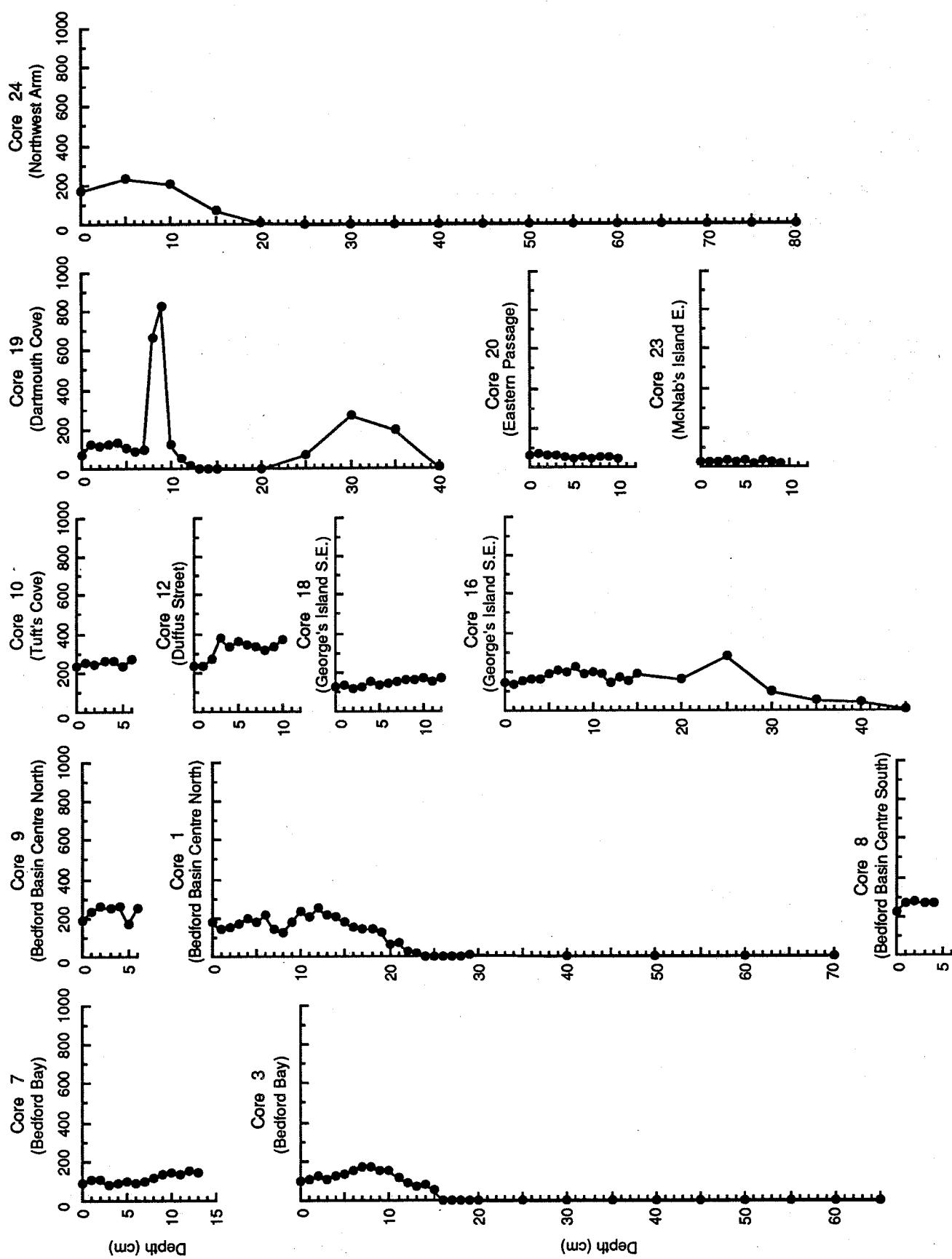
Cruise 89-009

LEAD
hydroxylamine leach ($\mu\text{g.g}^{-1}$)

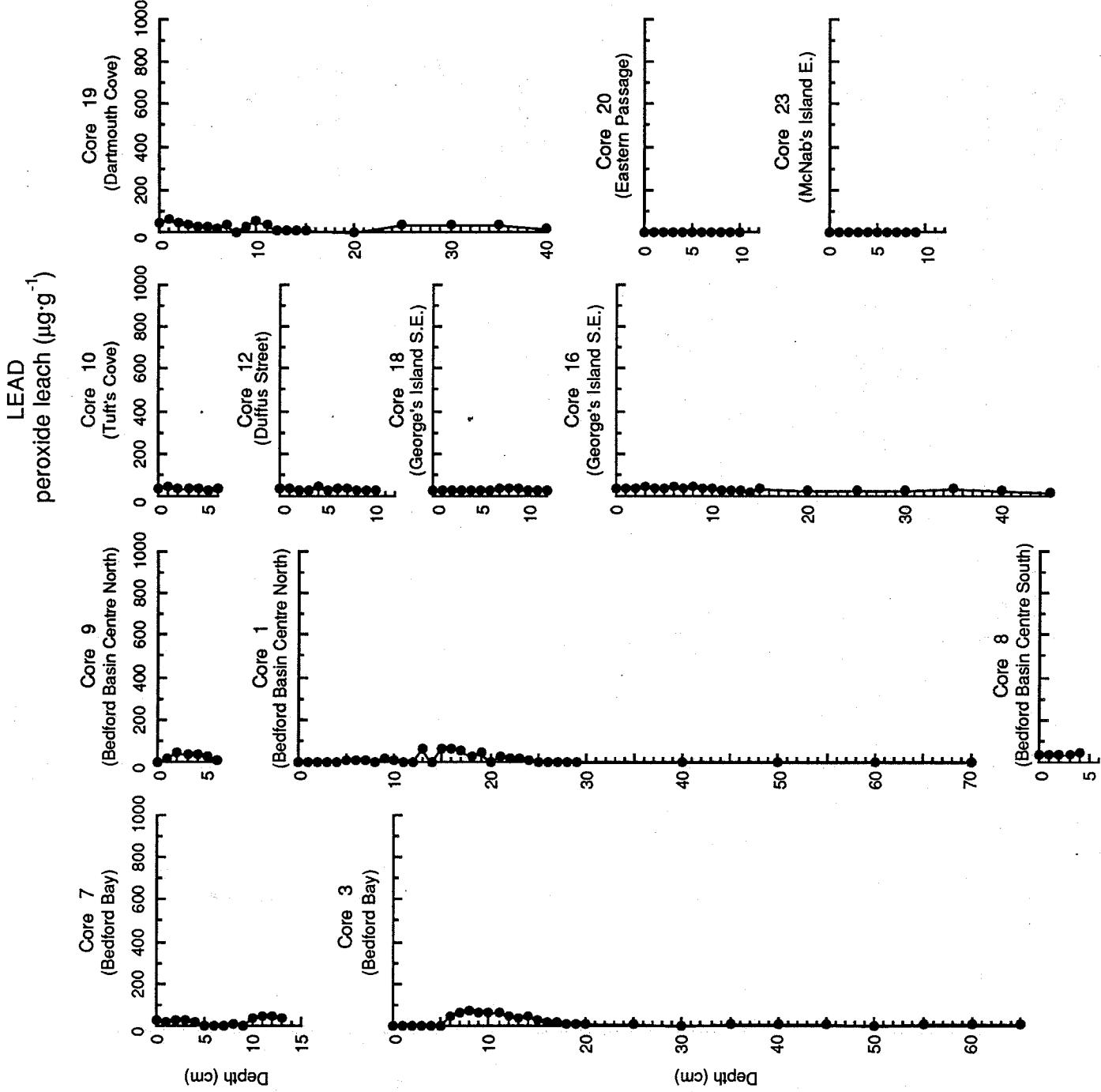
**LEAD
heated hydroxylamine leach ($\mu\text{g}\cdot\text{g}^{-1}$)**



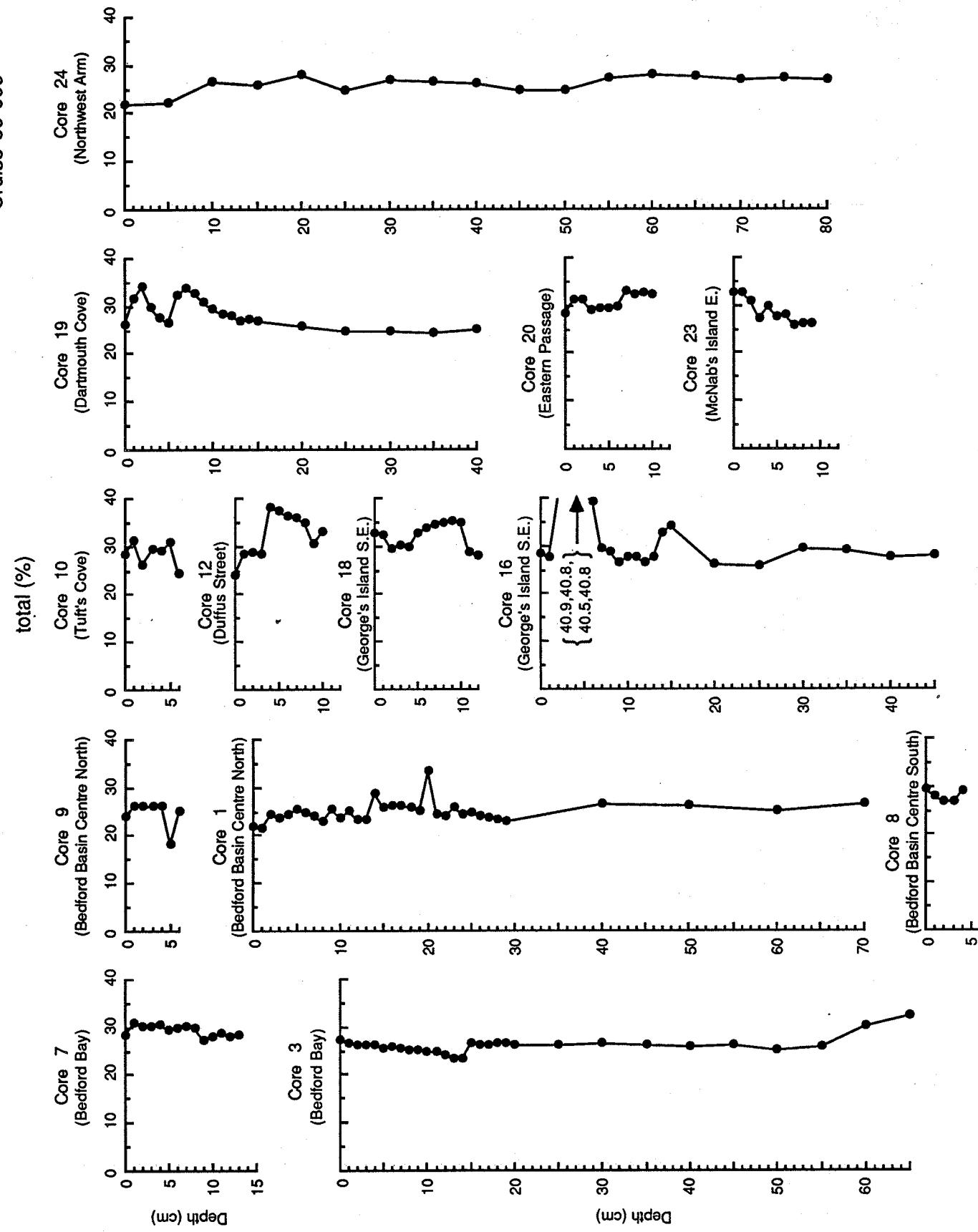


LEAD
total ($\mu\text{g}\cdot\text{g}^{-1}$)

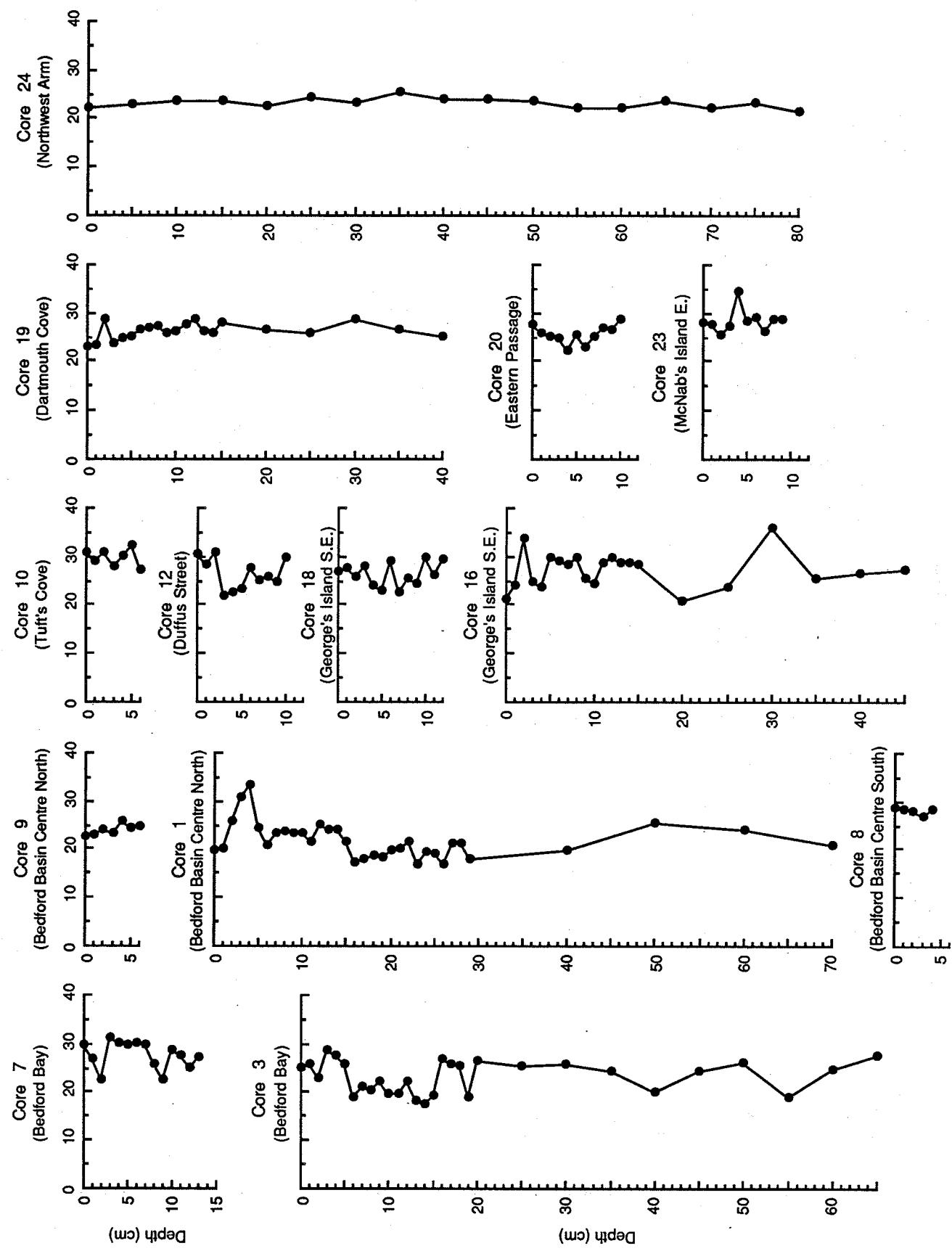
Cruise 89-009



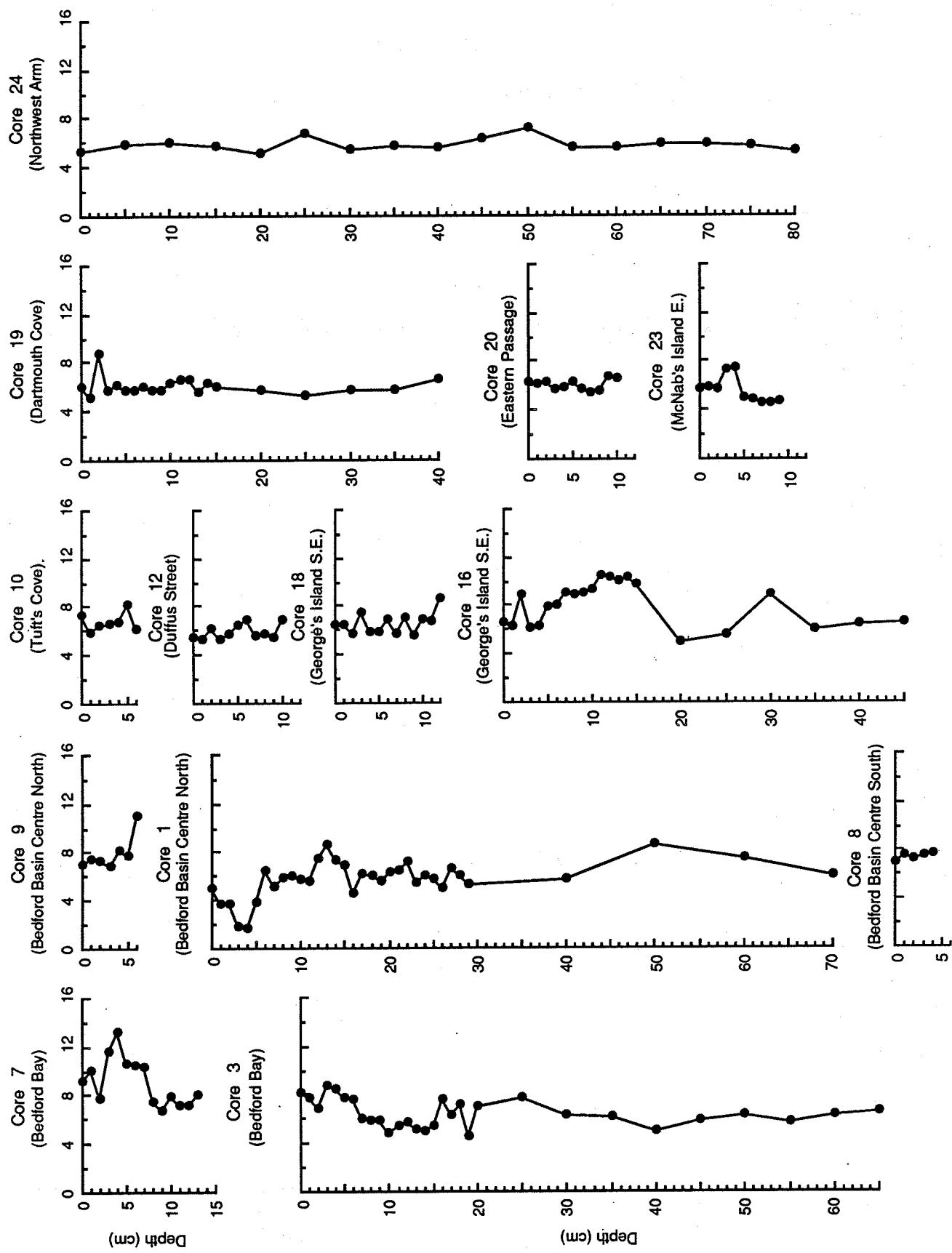
Cruise 89-009



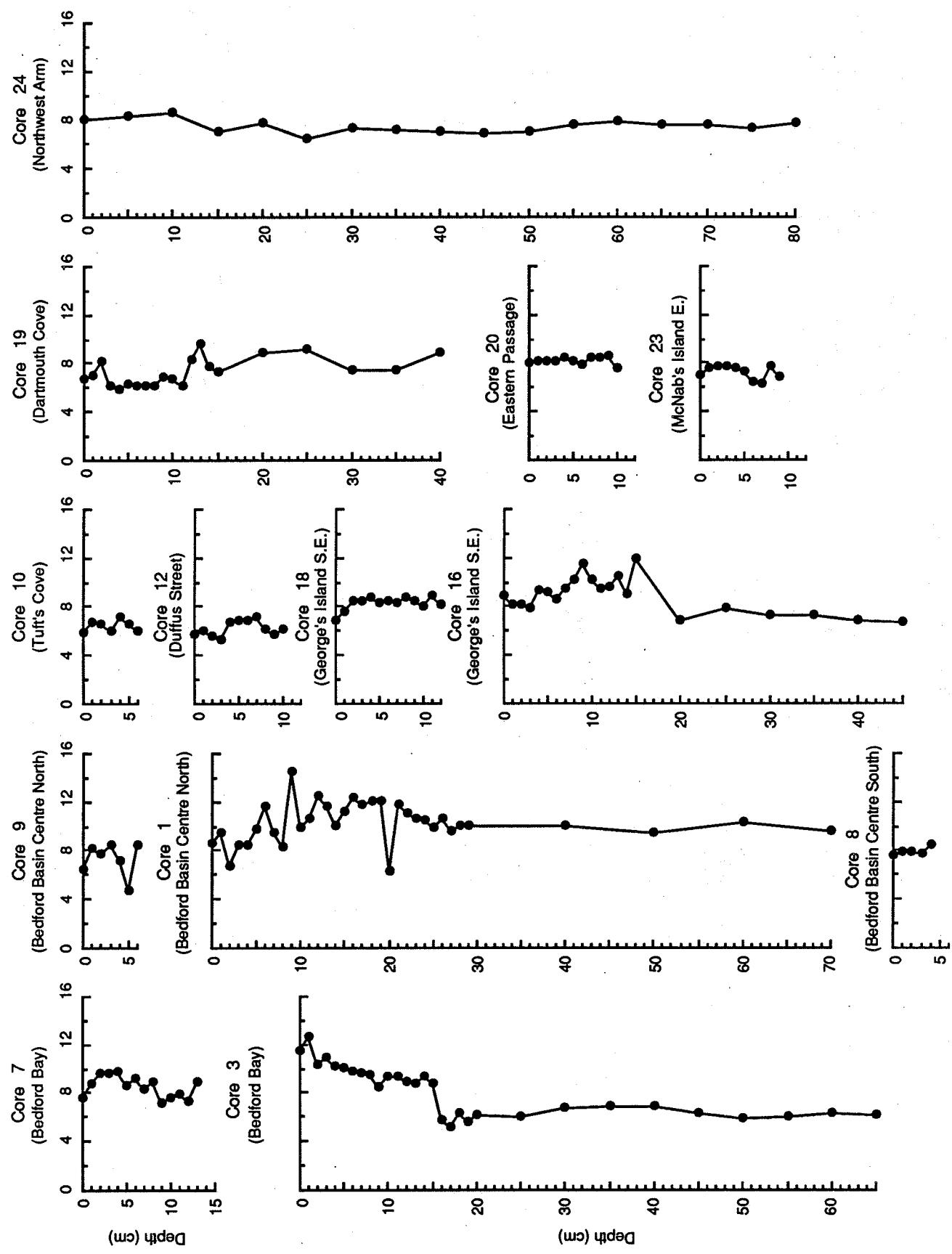
Cruise 89-009

SILICON
leach residual (%)

Cruise 89-009

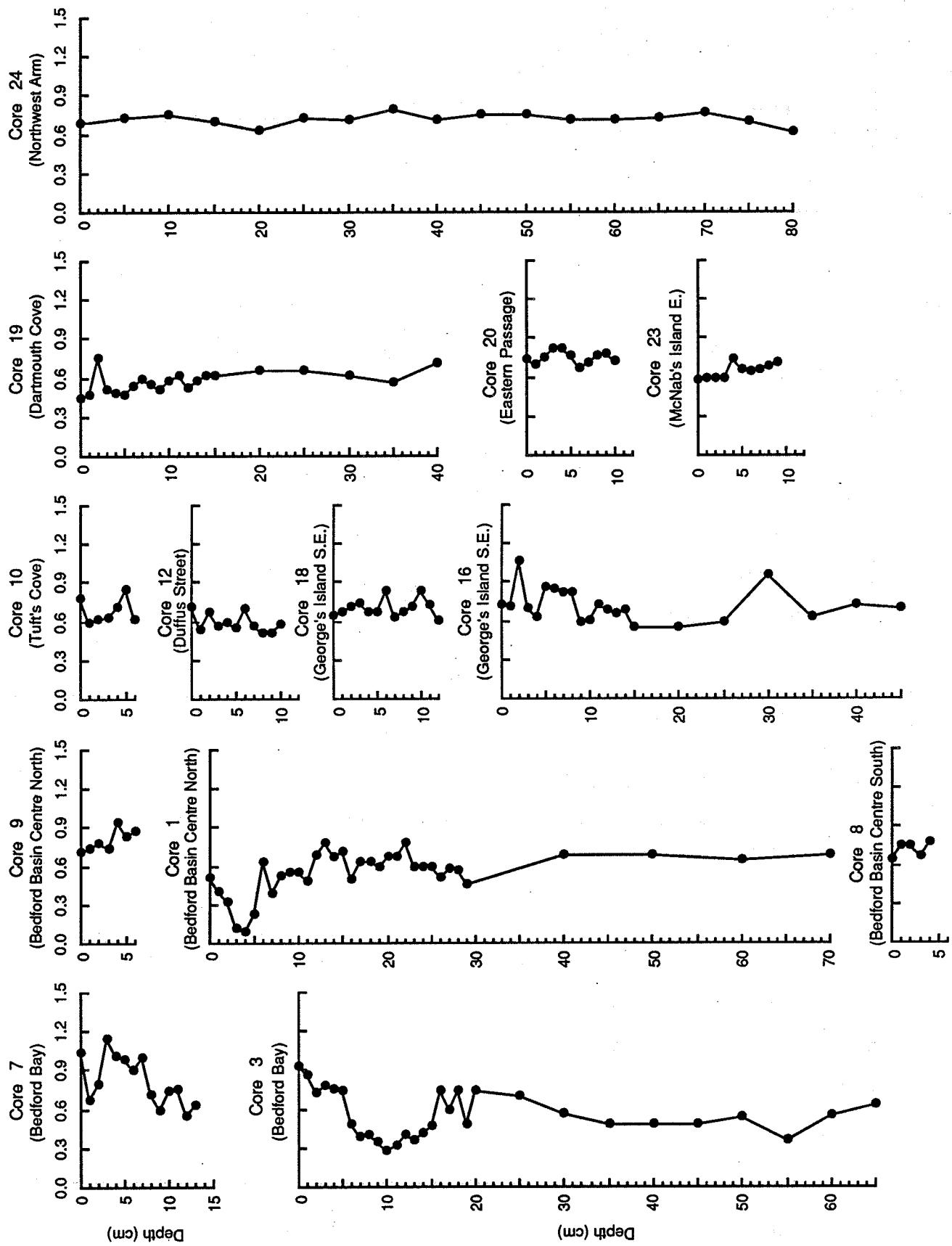
ALUMINUM
leach residual (%)

Cruise 89-009

ALUMINUM
total (%)

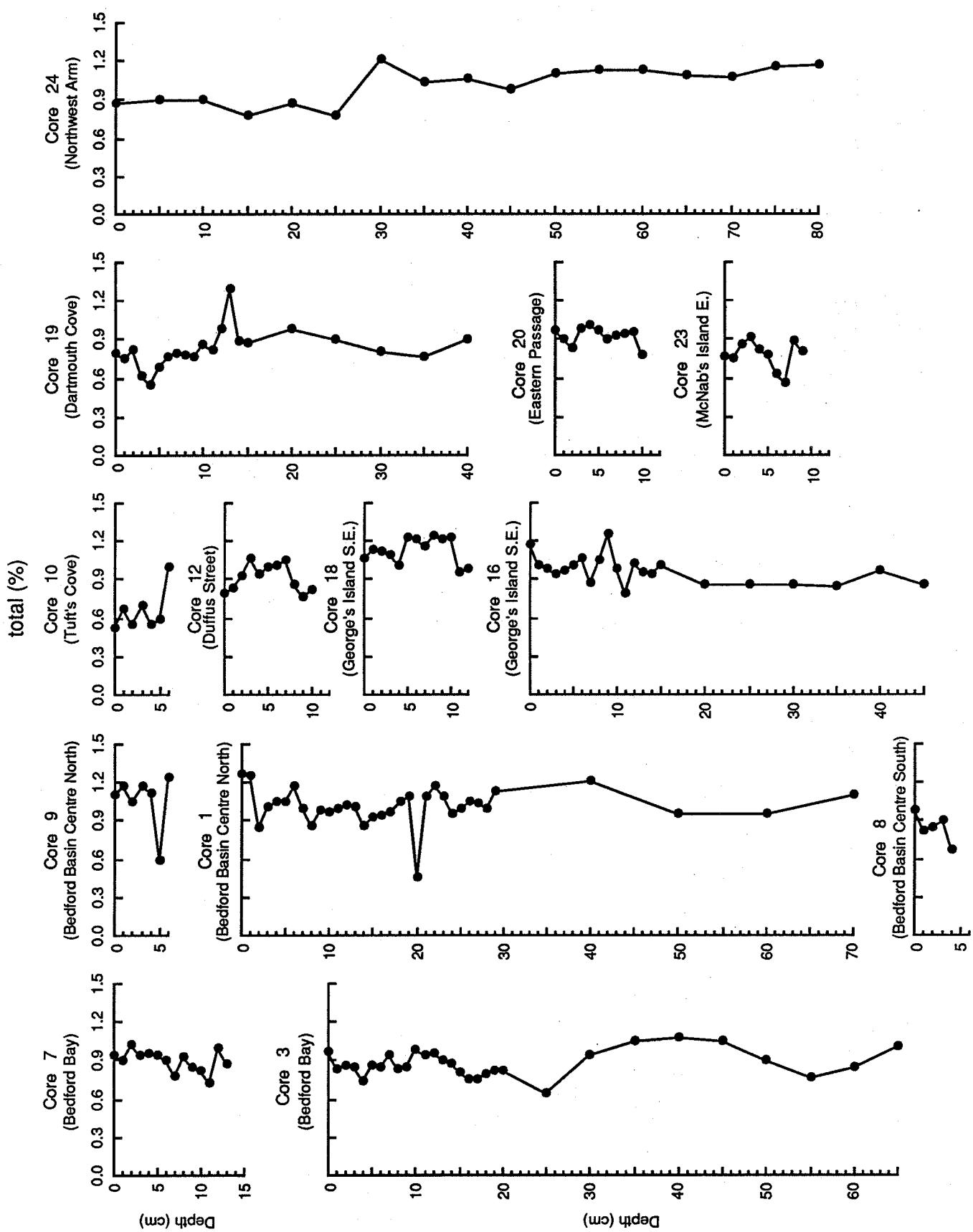
Cruise 89-009

MAGNESIUM
leach residual (%)

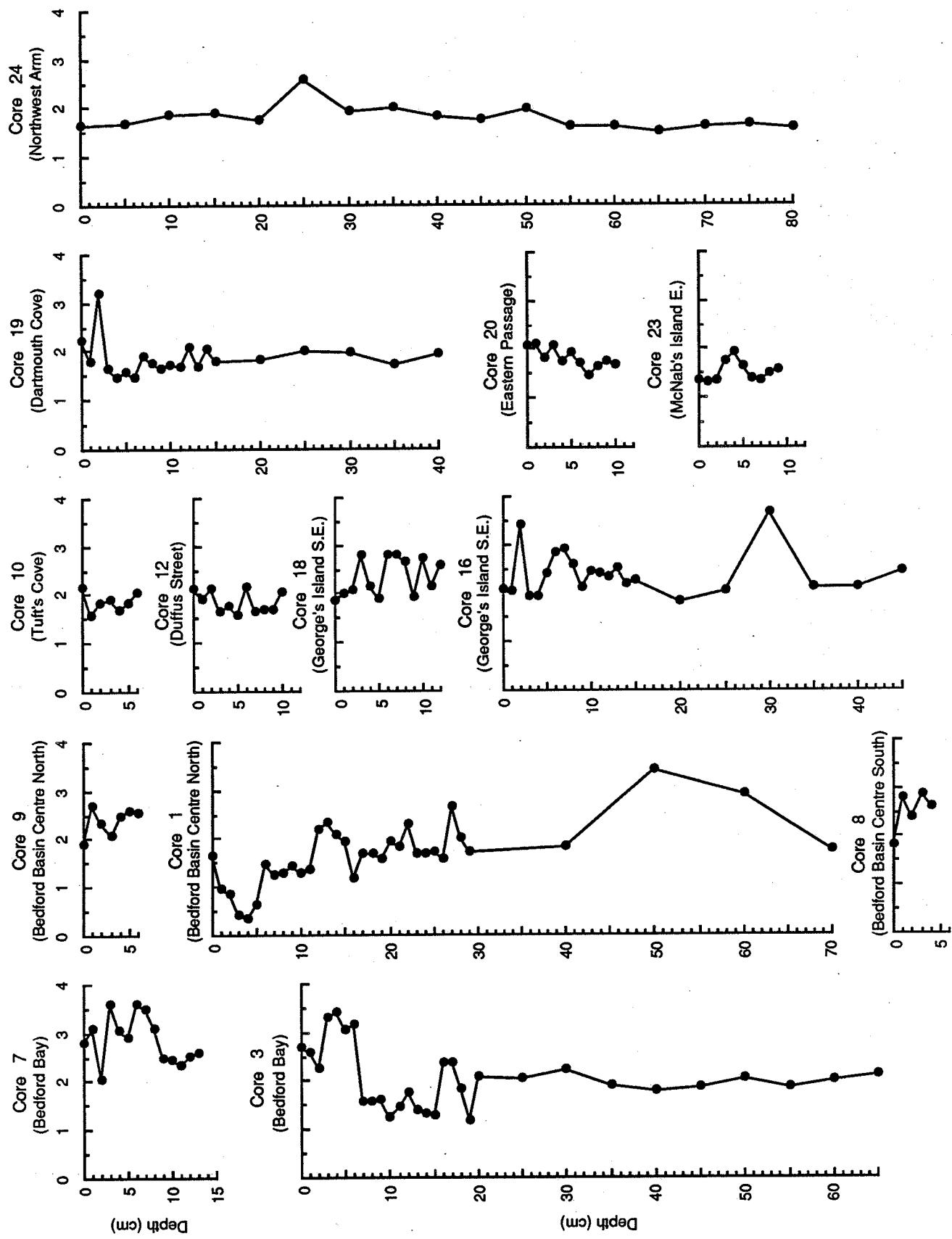


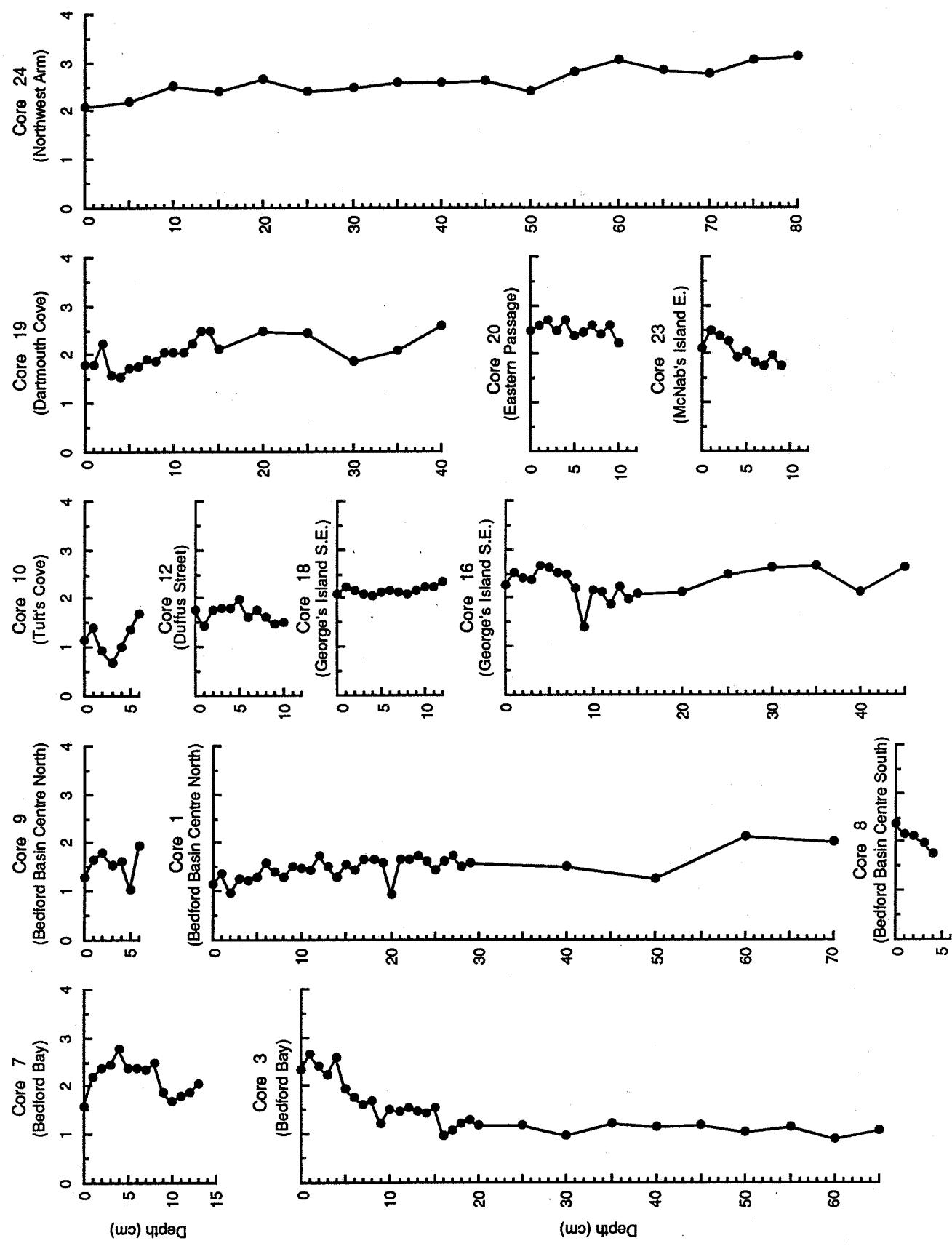
Cruise 89-009

MAGNESIUM



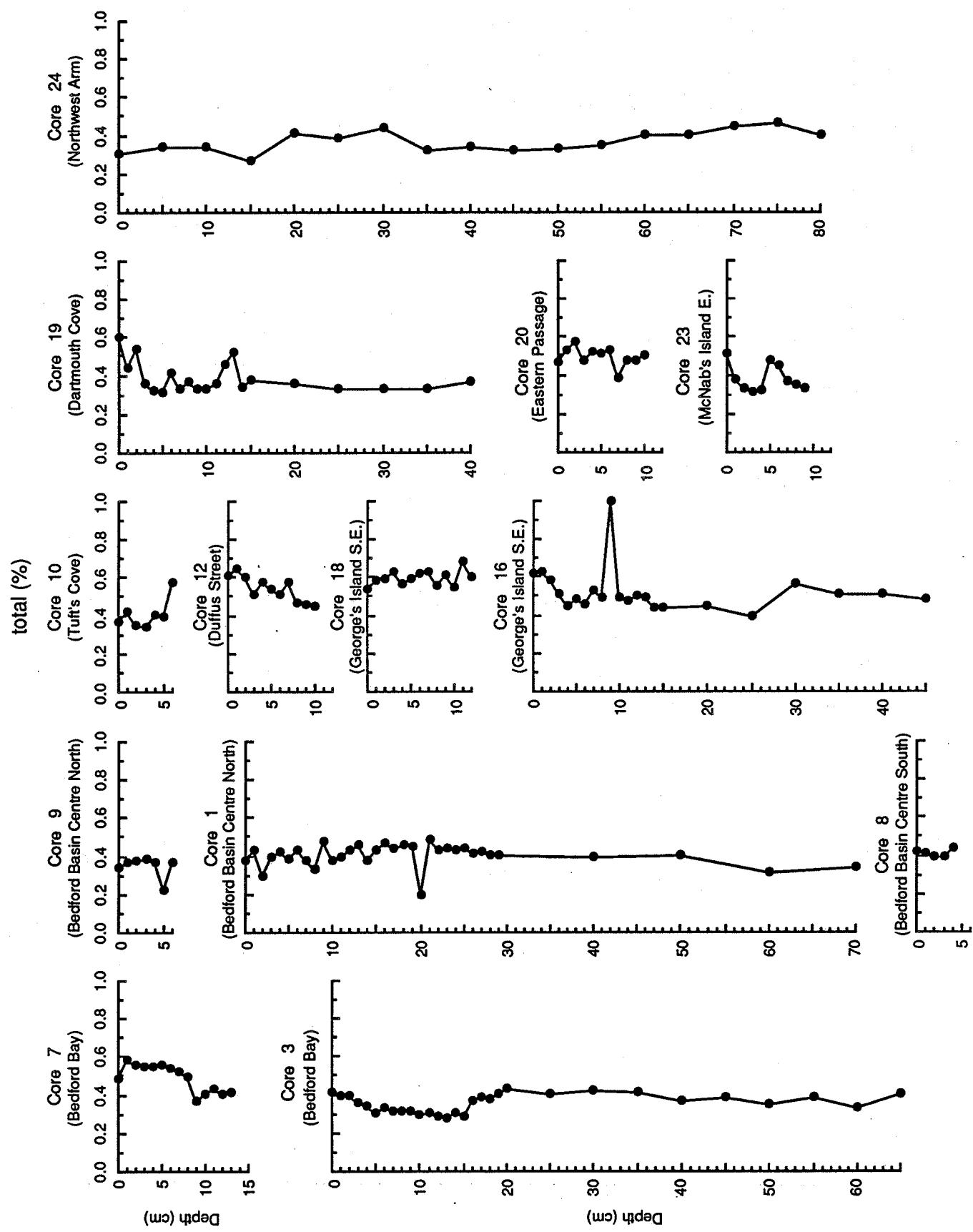
Cruise 89-009

POTASSIUM
leach residual (%)

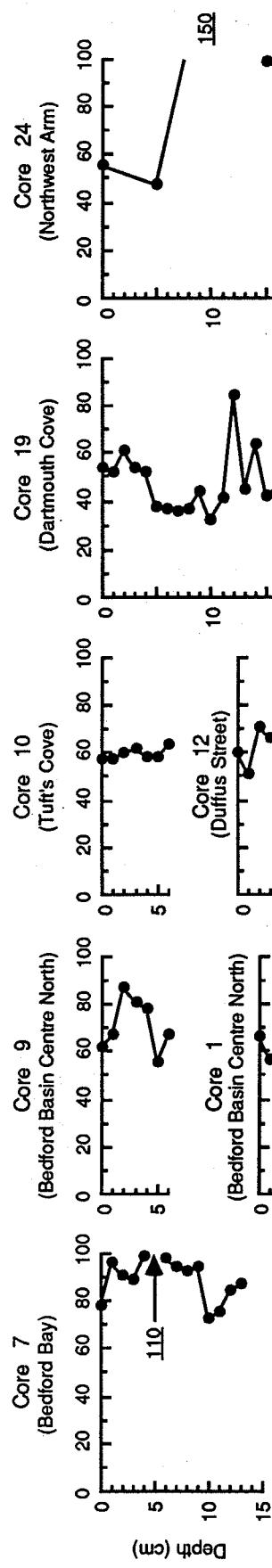
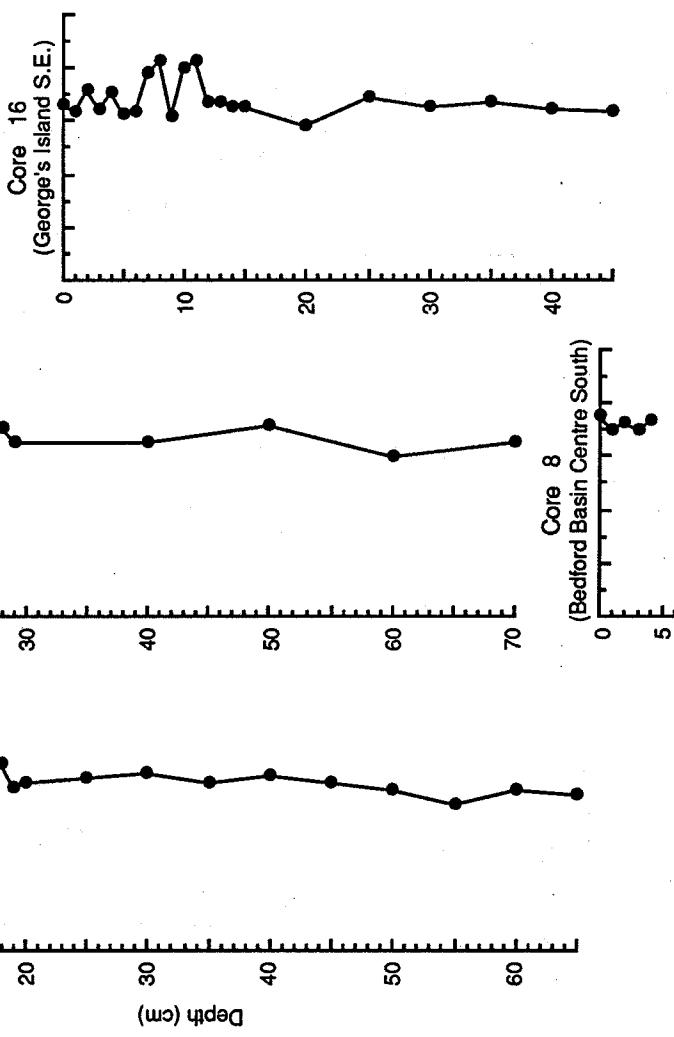
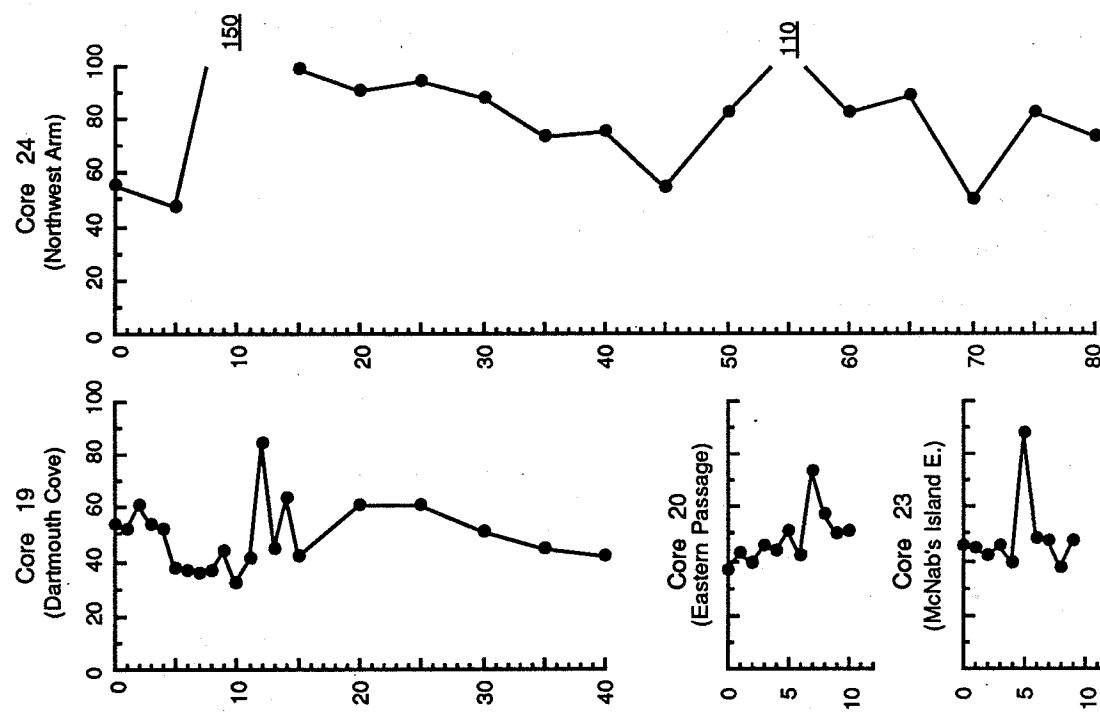
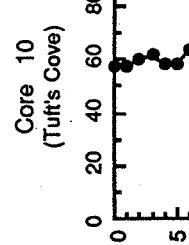
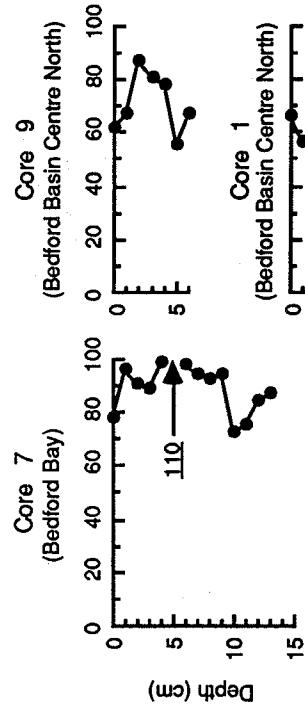
POTASSIUM
total (%)

Cruise 89-009

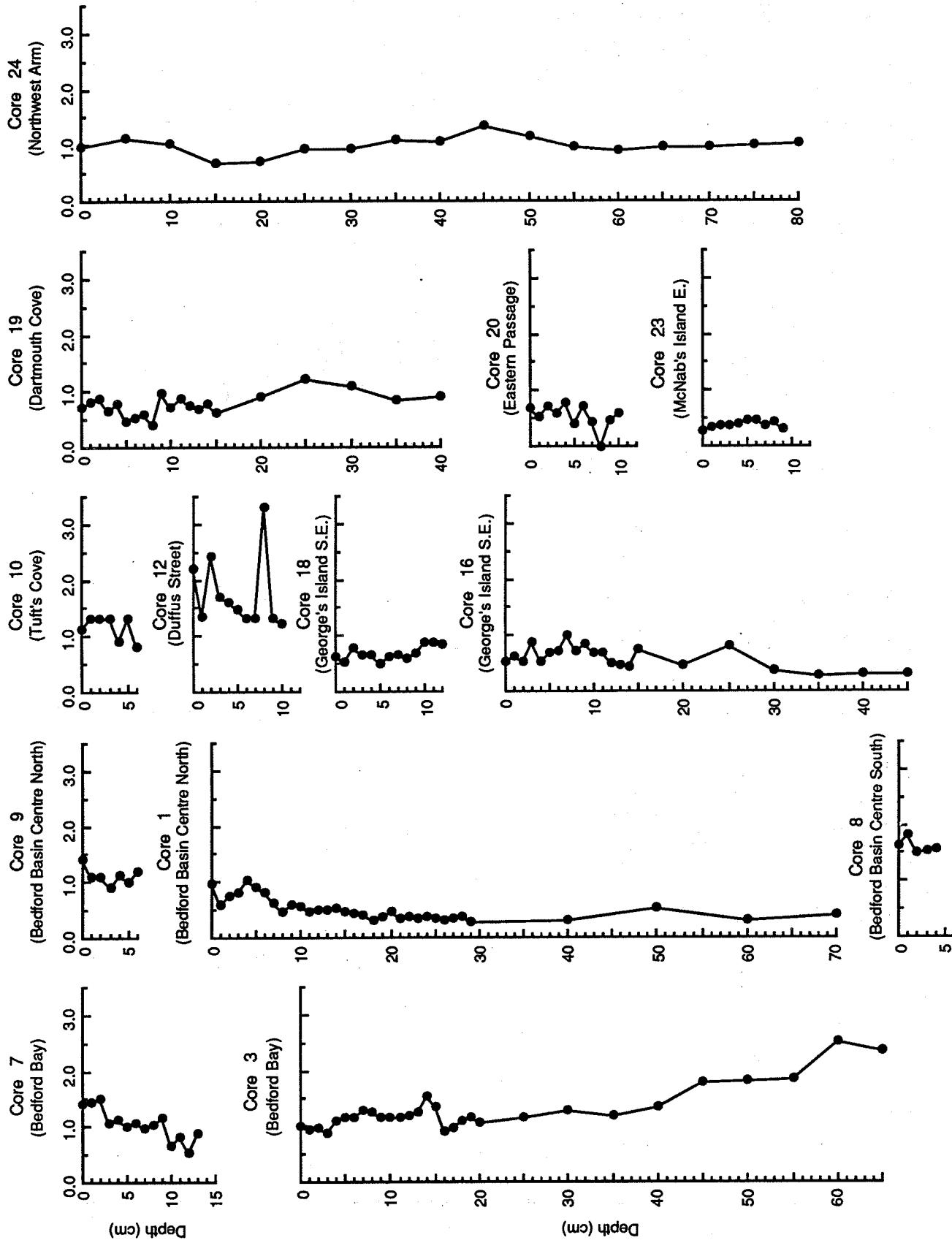
TITANIUM



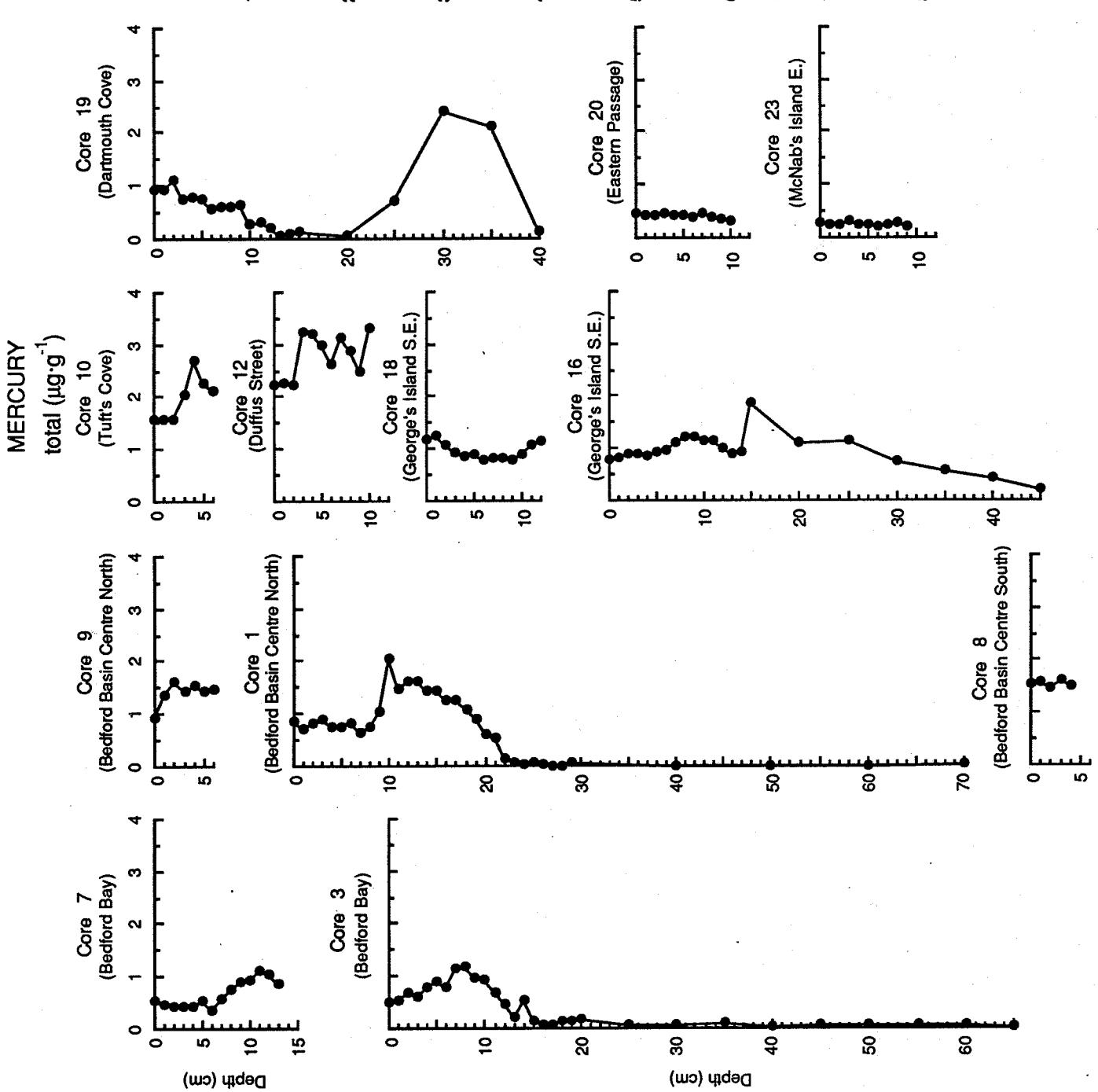
Cruise 89-009

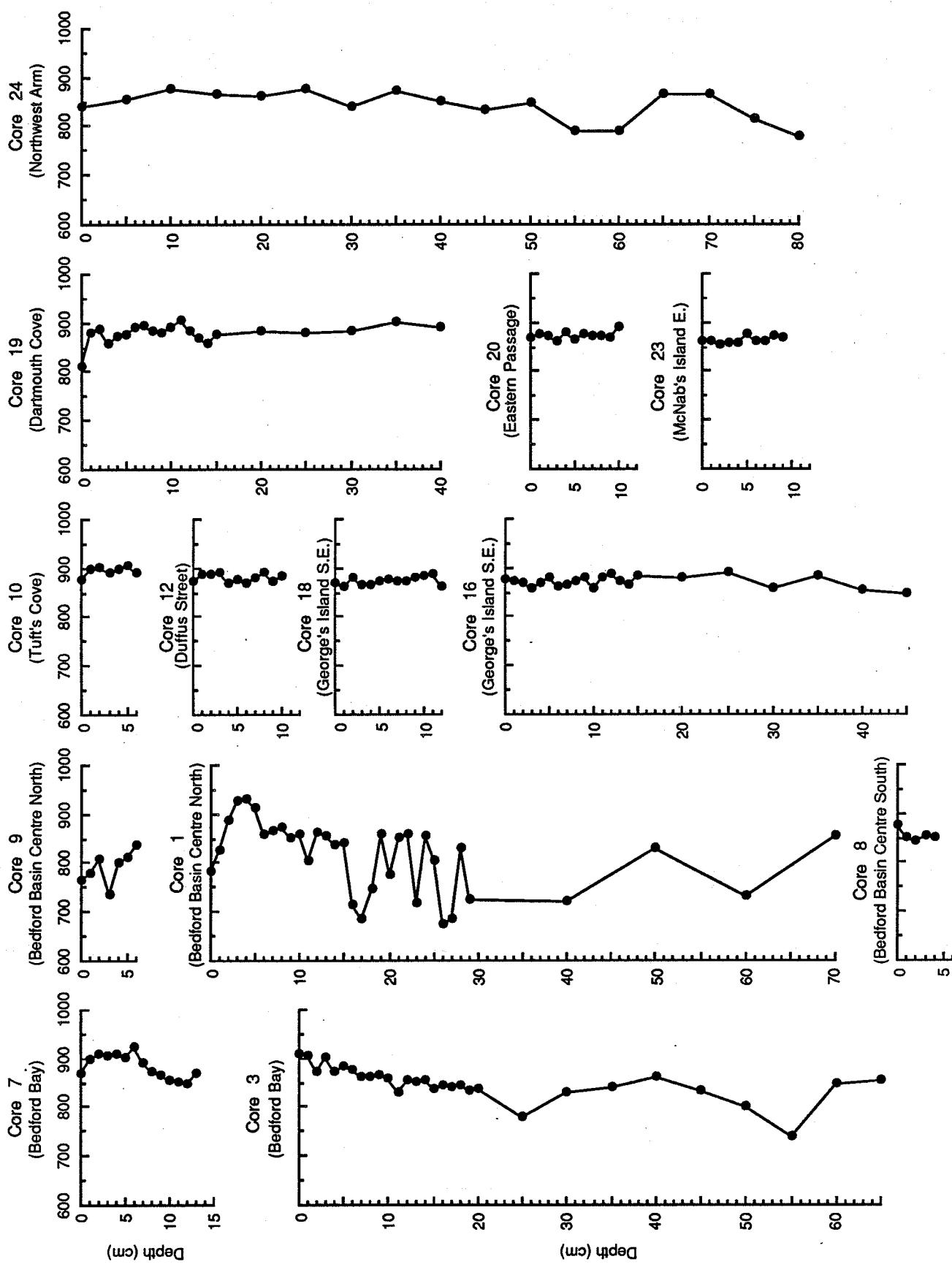
LITHIUM
total ($\mu\text{g}\cdot\text{g}^{-1}$)

Cruise 89-009

CADMIUM
total ($\mu\text{g g}^{-1}$)

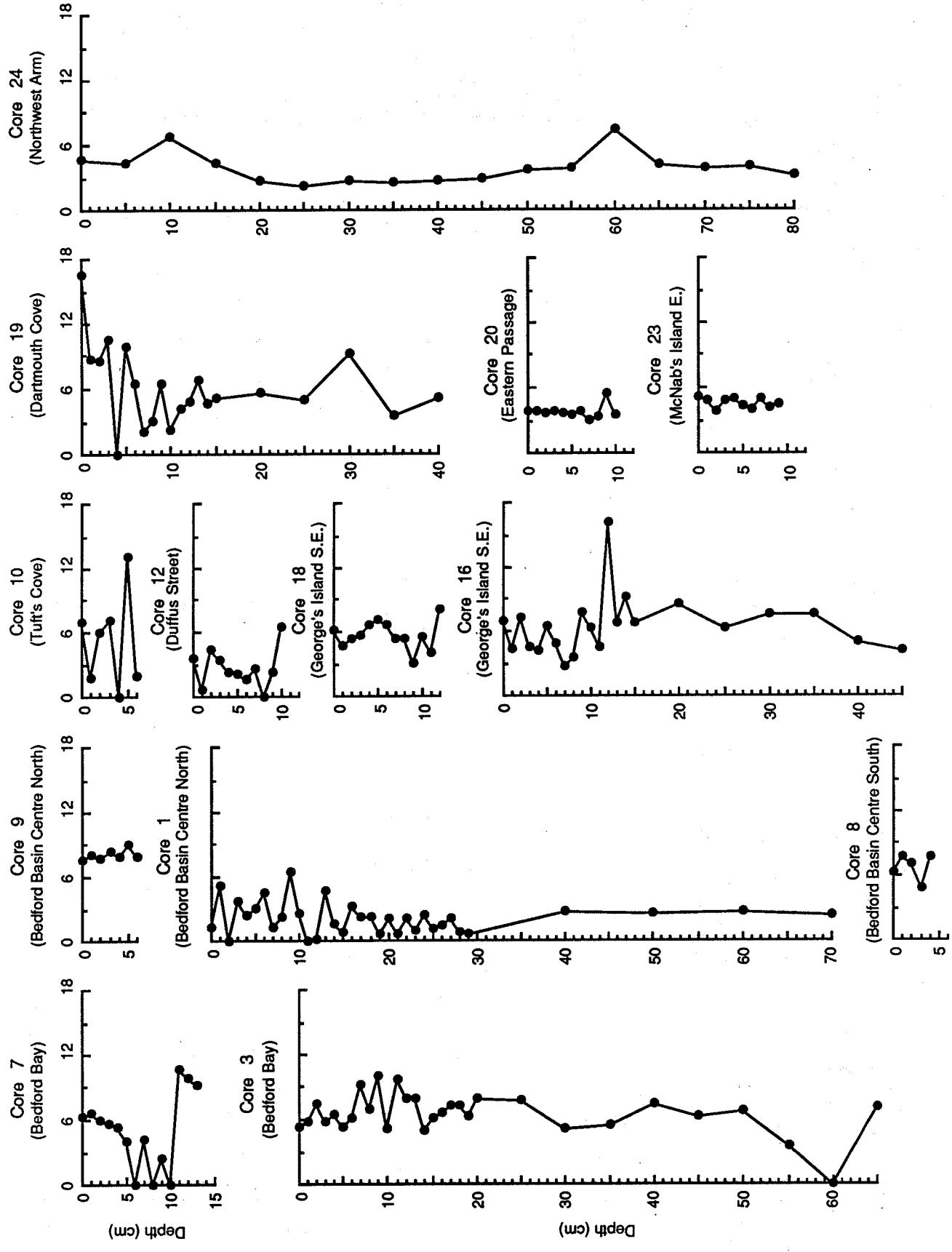
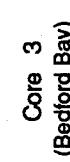
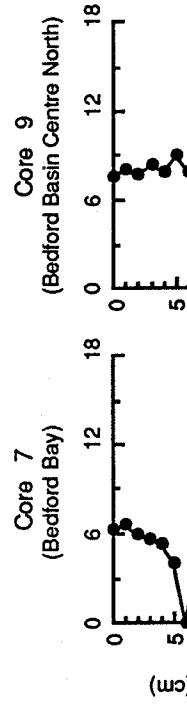
Cruise 89-009





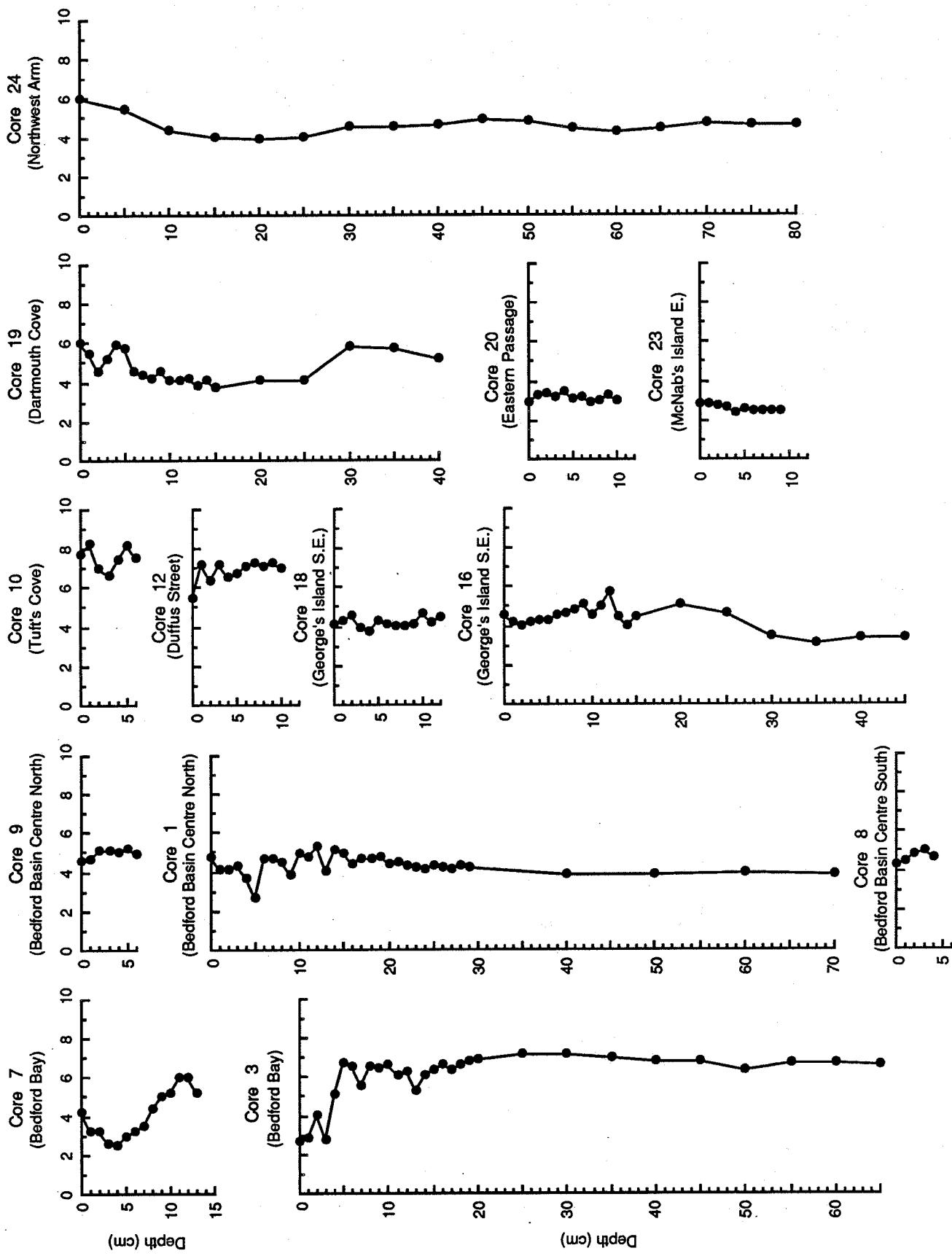
Cruise 89-009

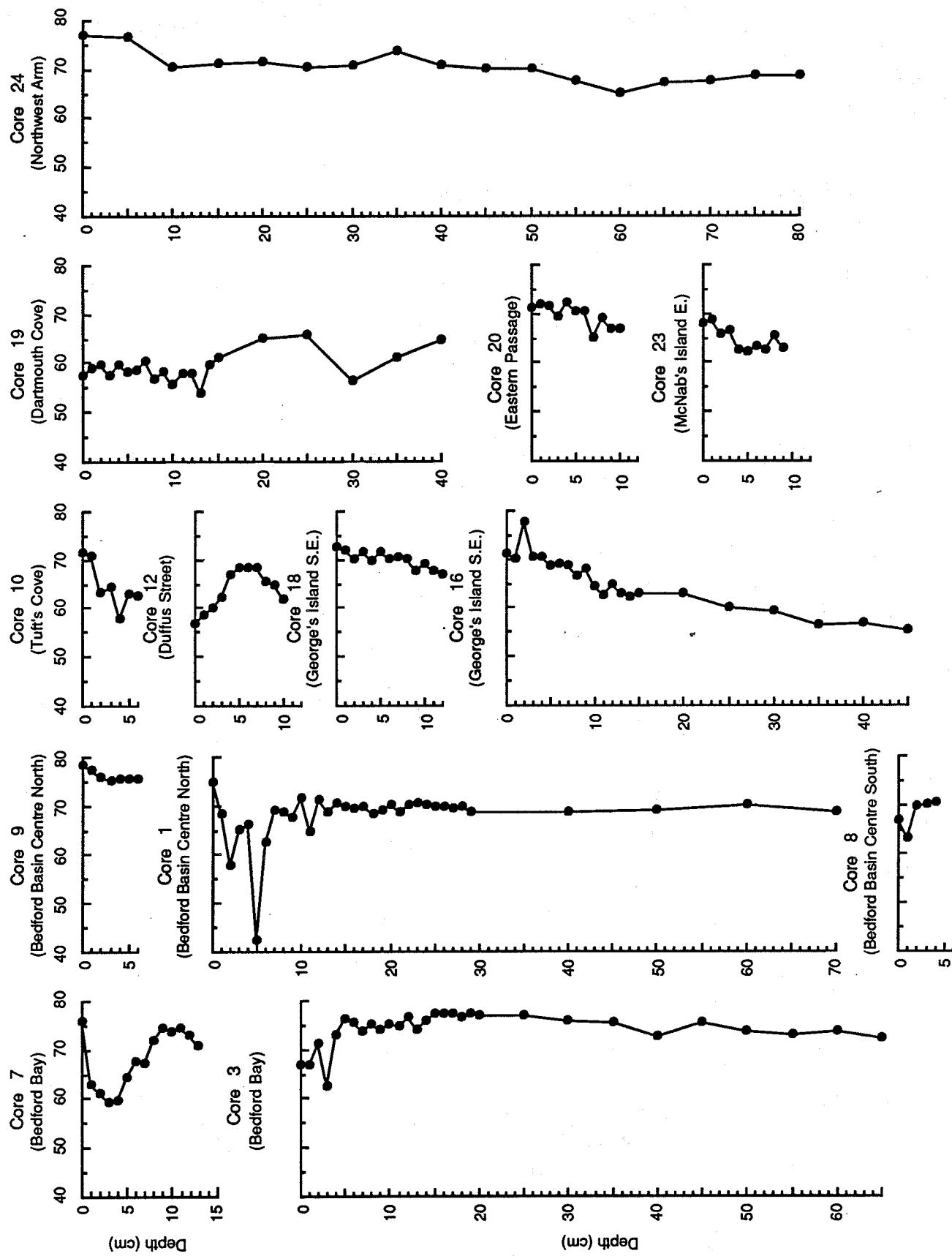
CALCIUM CARBONATE (%)

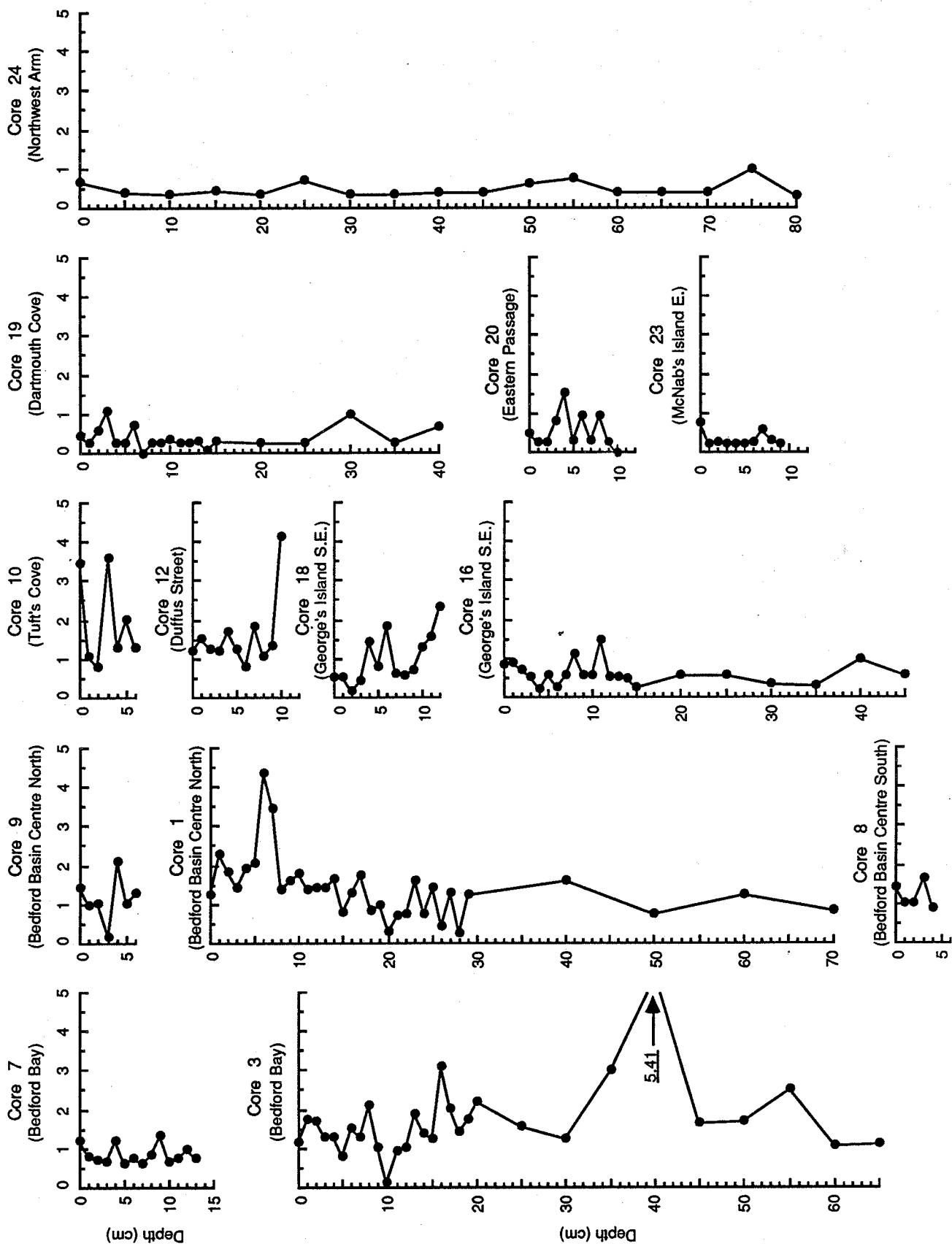


Cruise 89-009

ORGANIC CARBON (%)

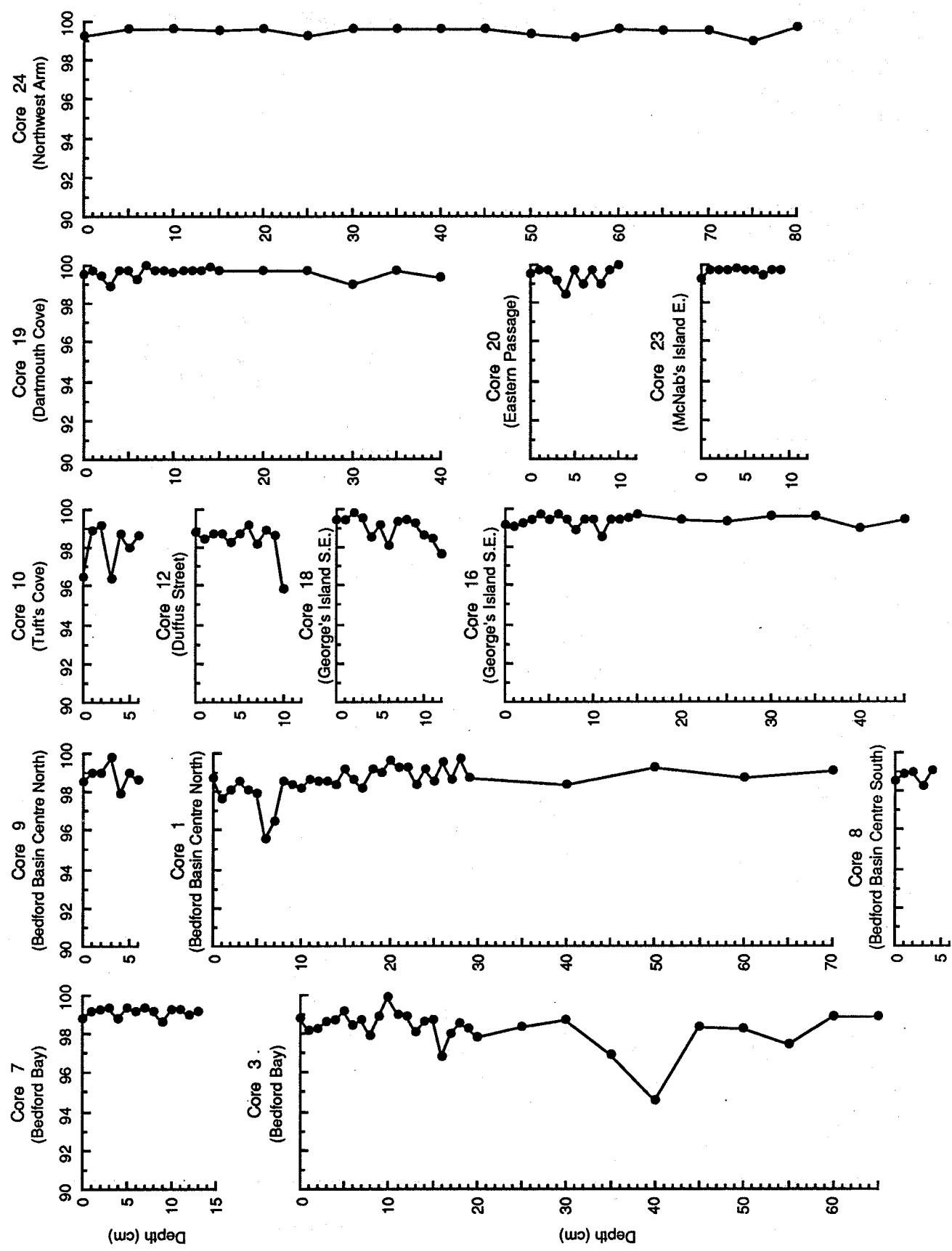






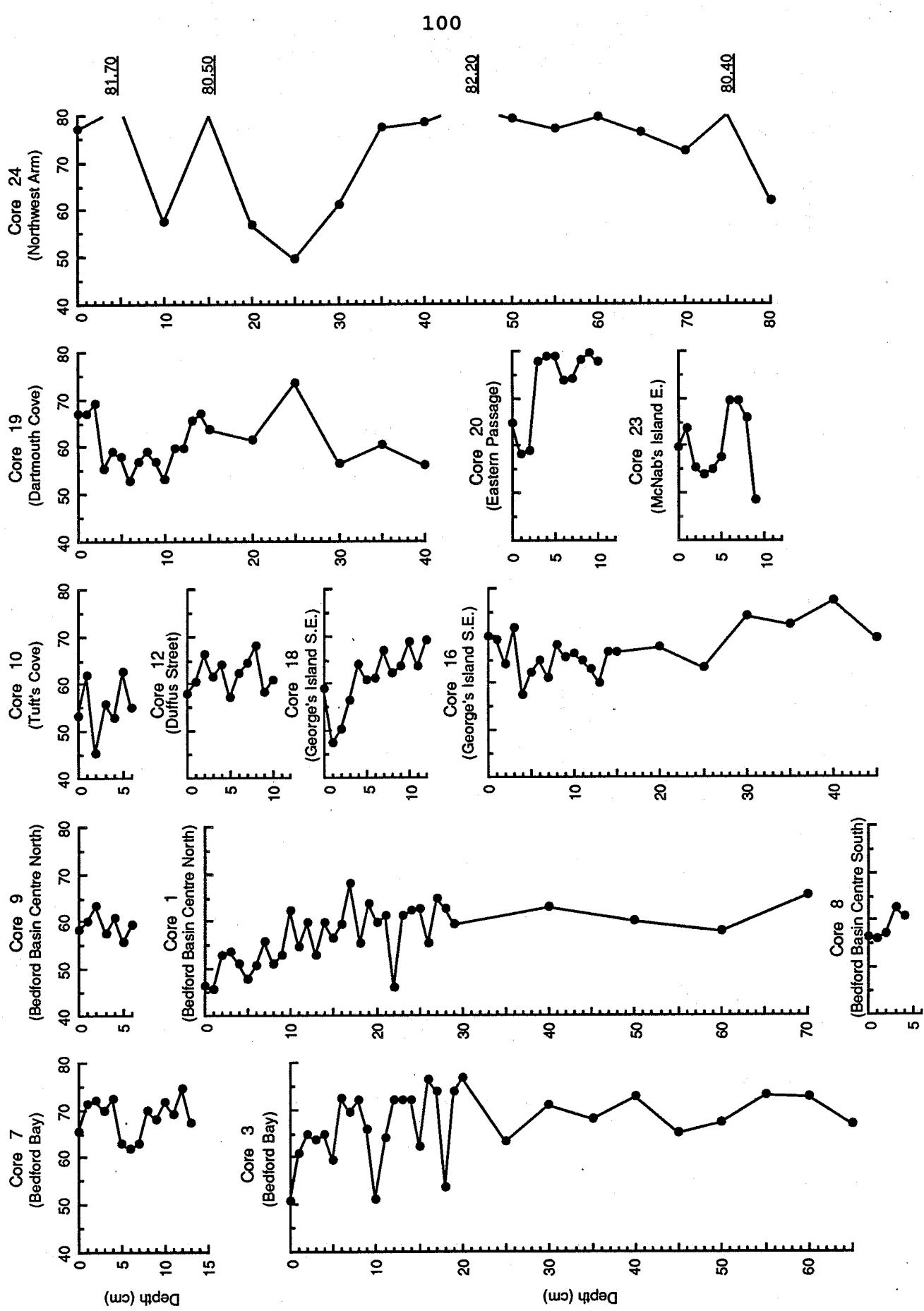
Cruise 89-009

MUD (%)



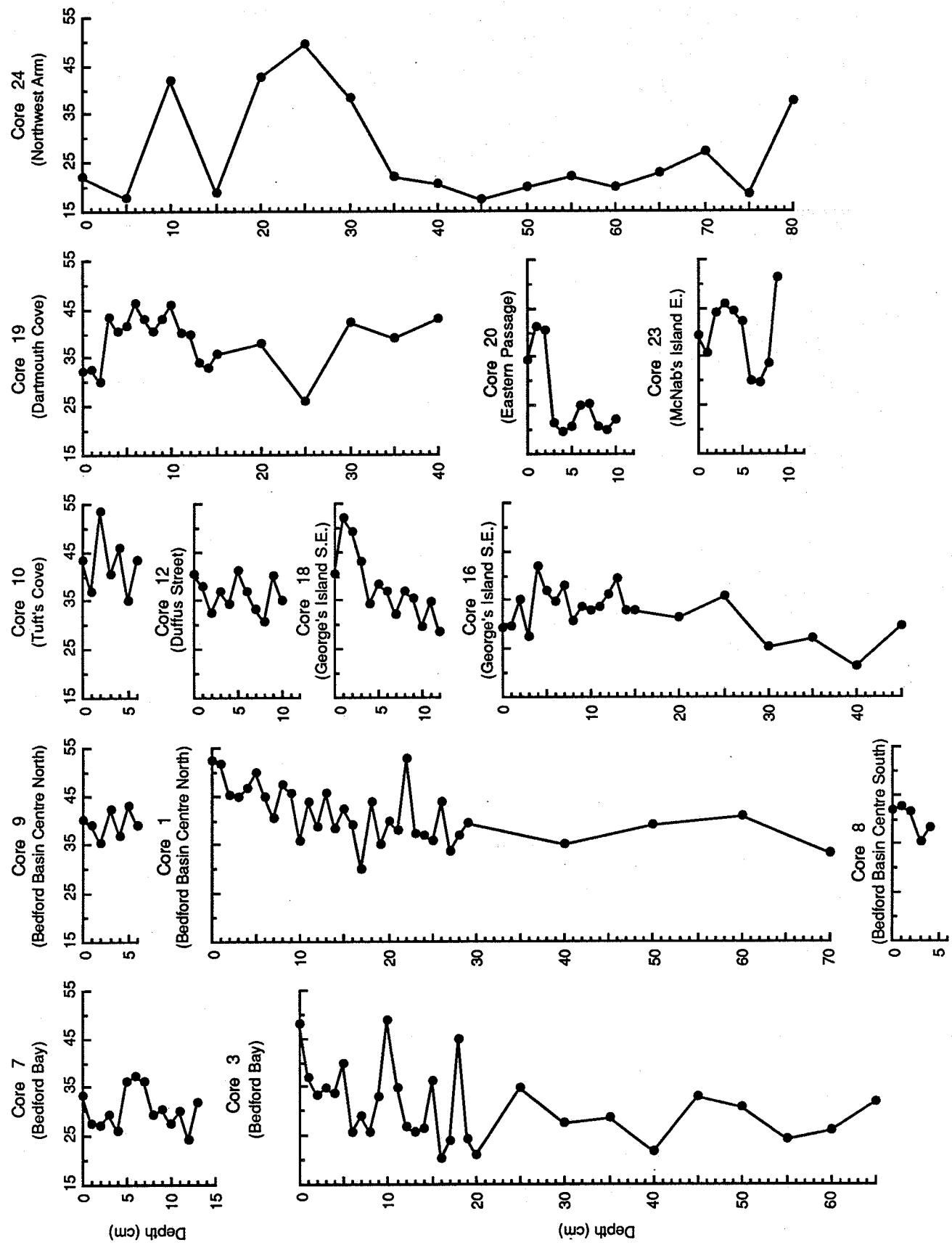
Cruise 89-009

SILT (%)

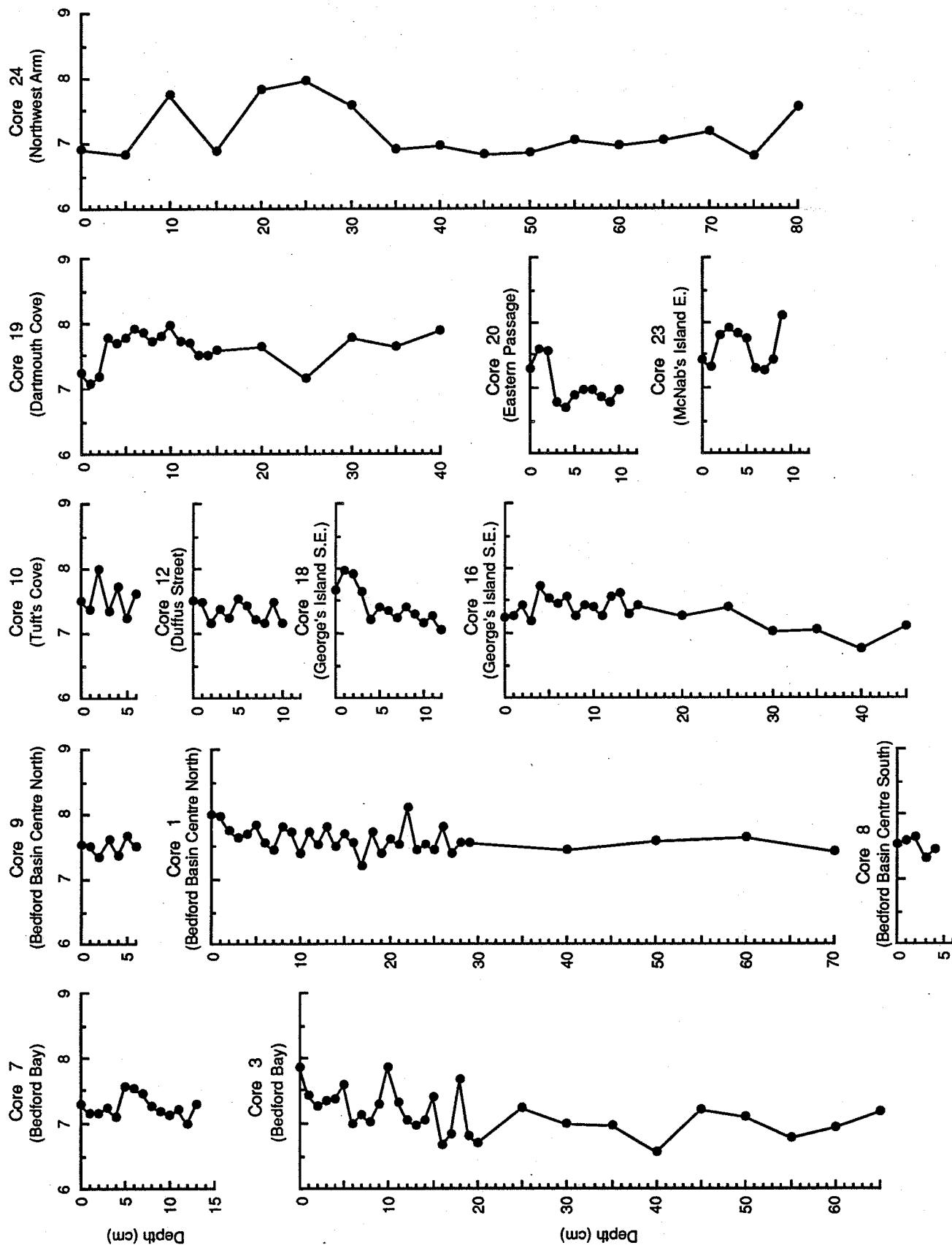


Cruise 89-009

CLAY (%)

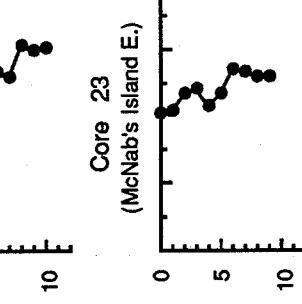
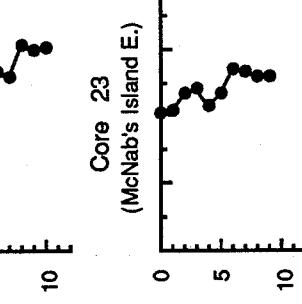
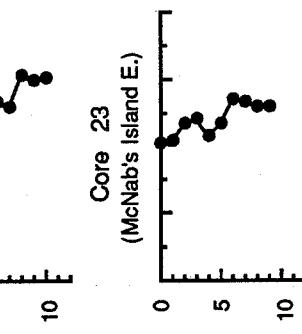
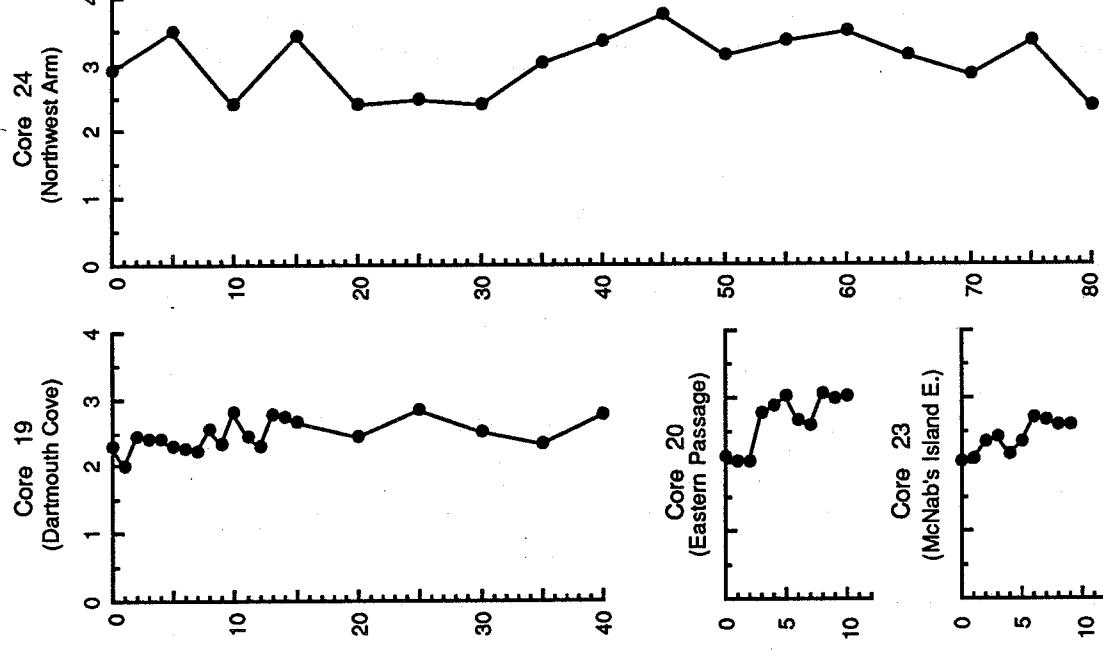
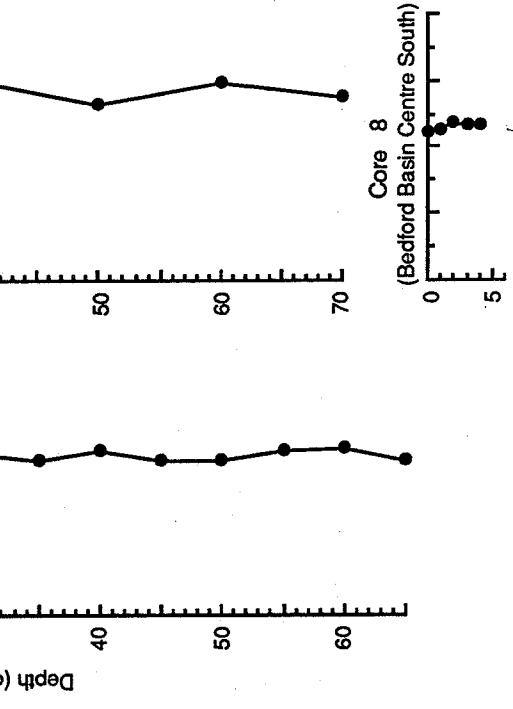
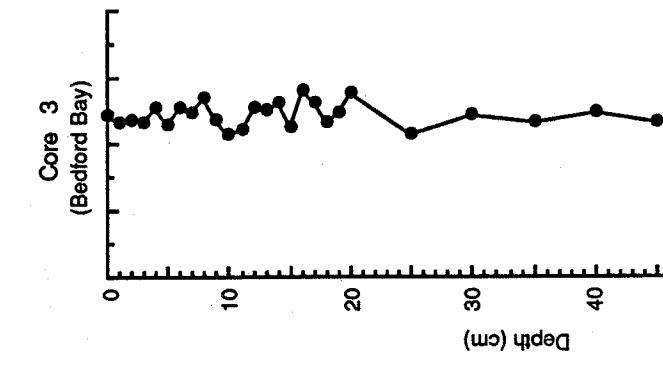
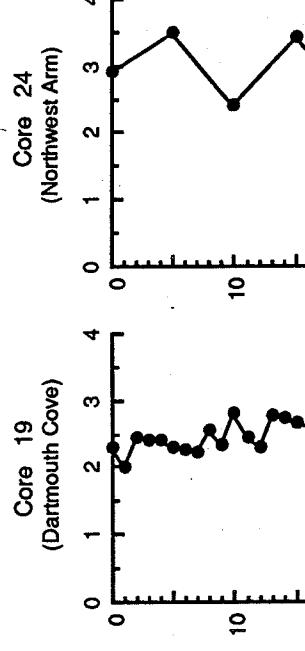
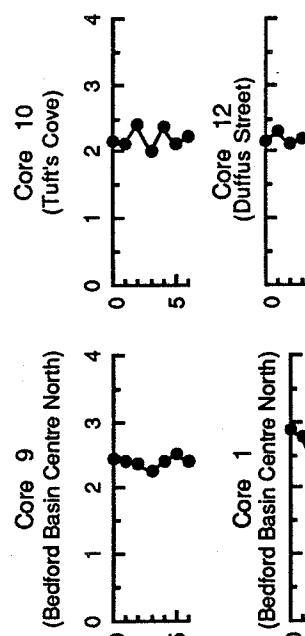
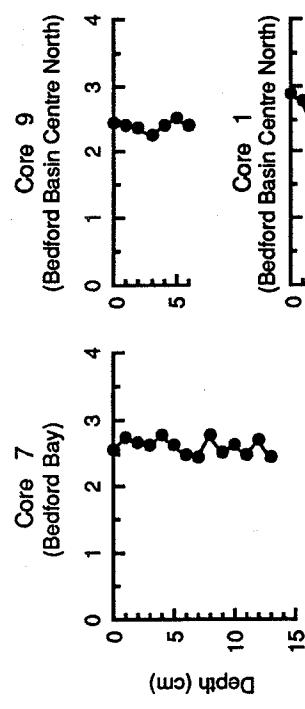


Cruise 89-009

GRAIN SIZE
phi units (\varnothing)

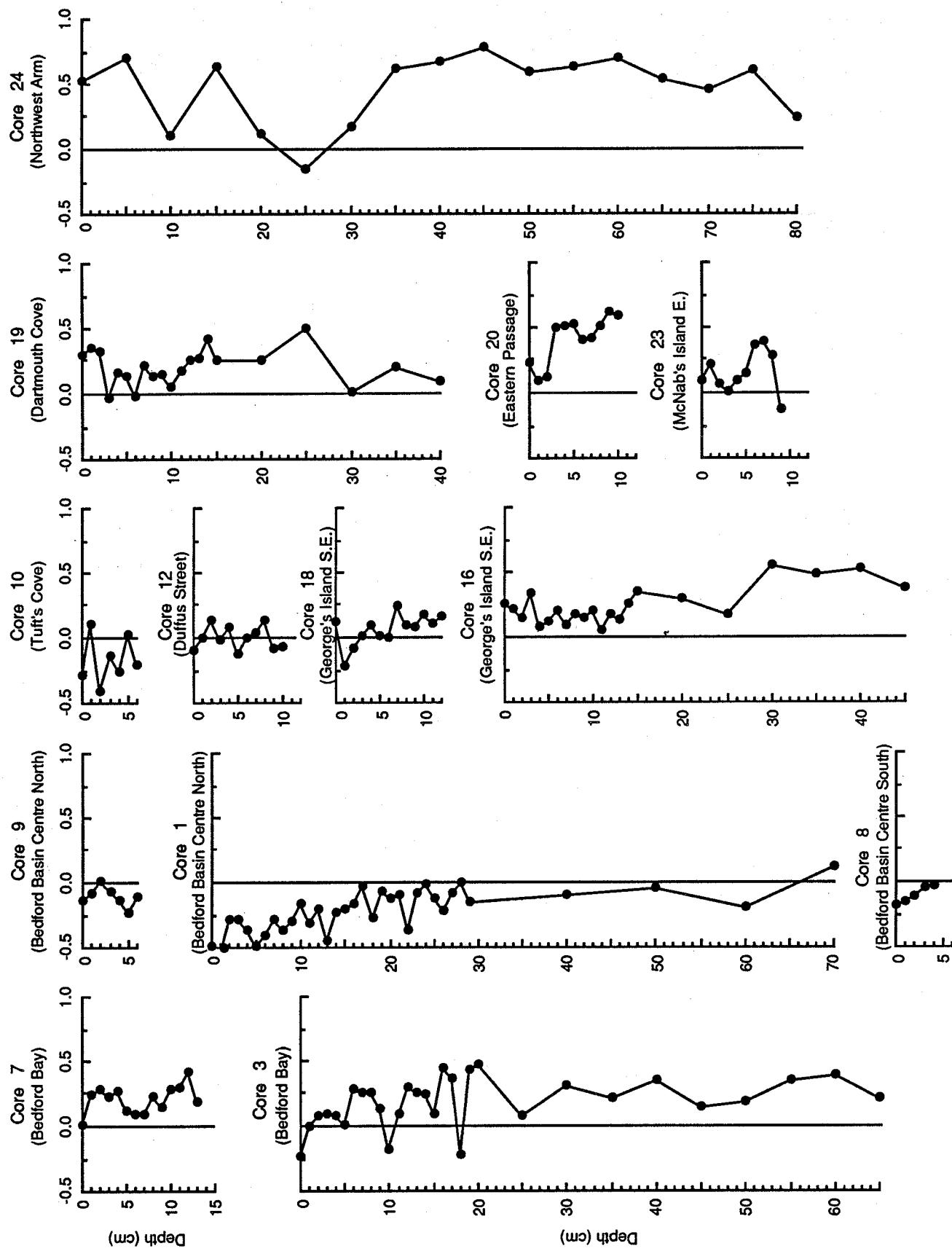
Cruise 89-009

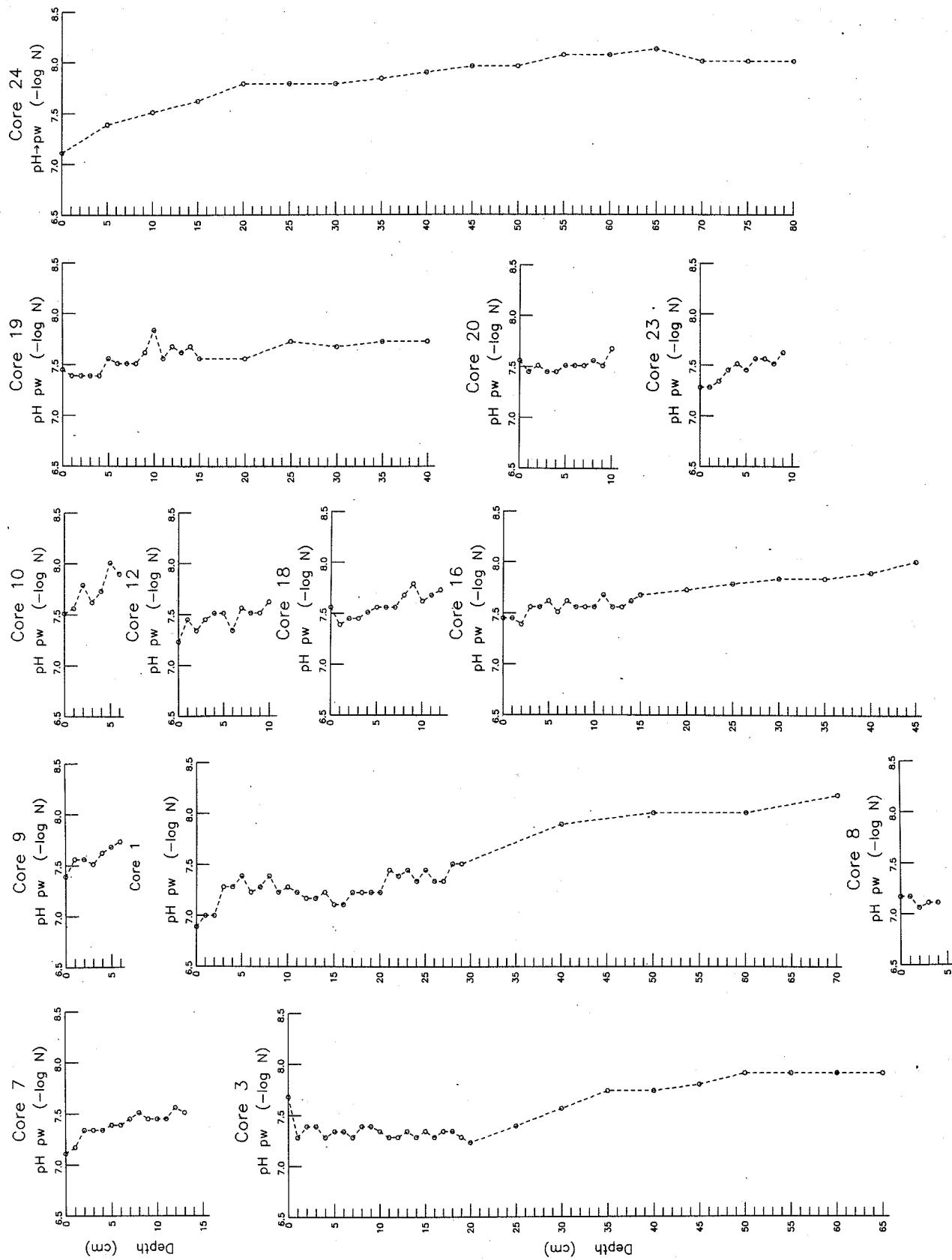
KURTOSIS

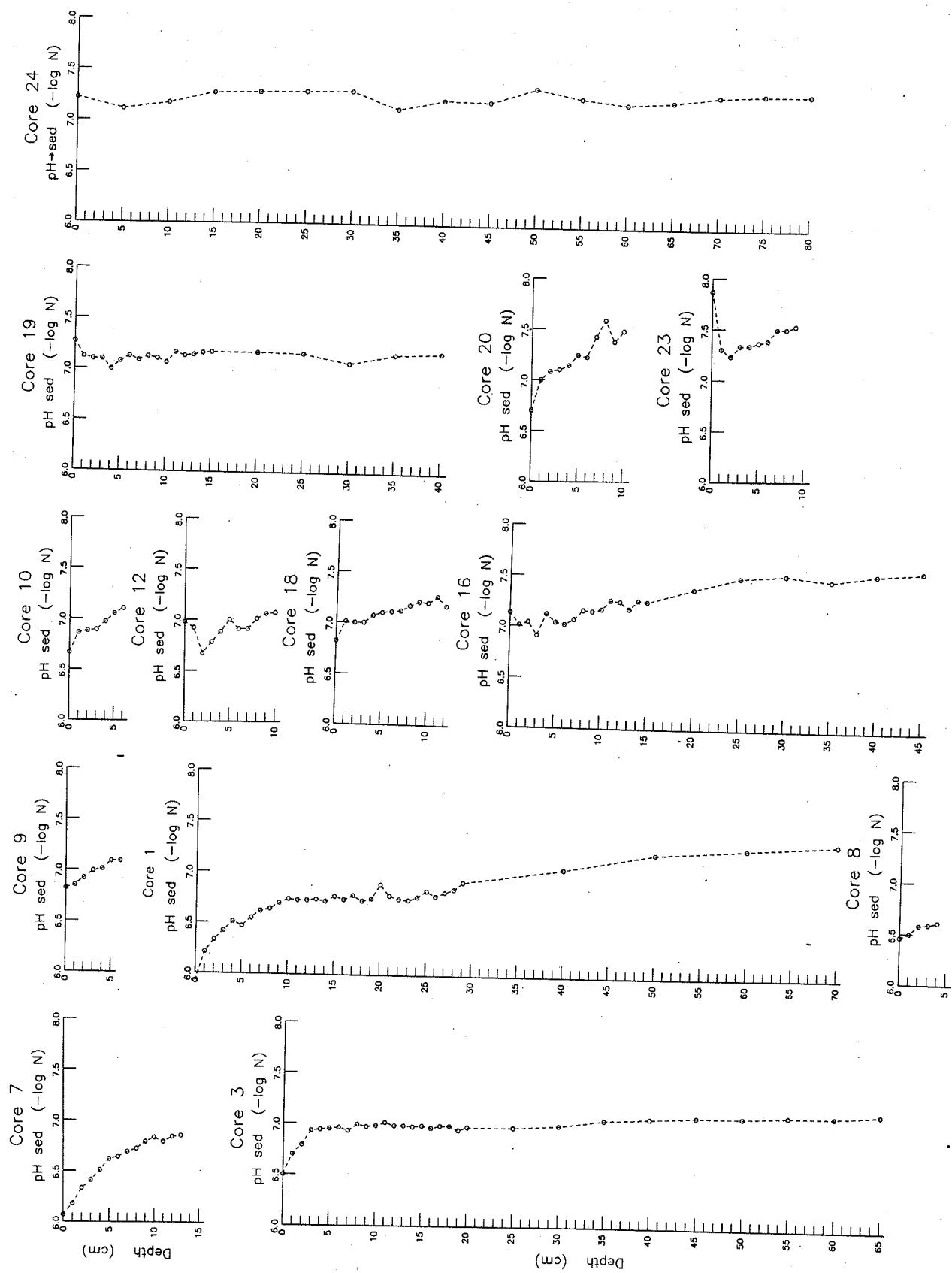


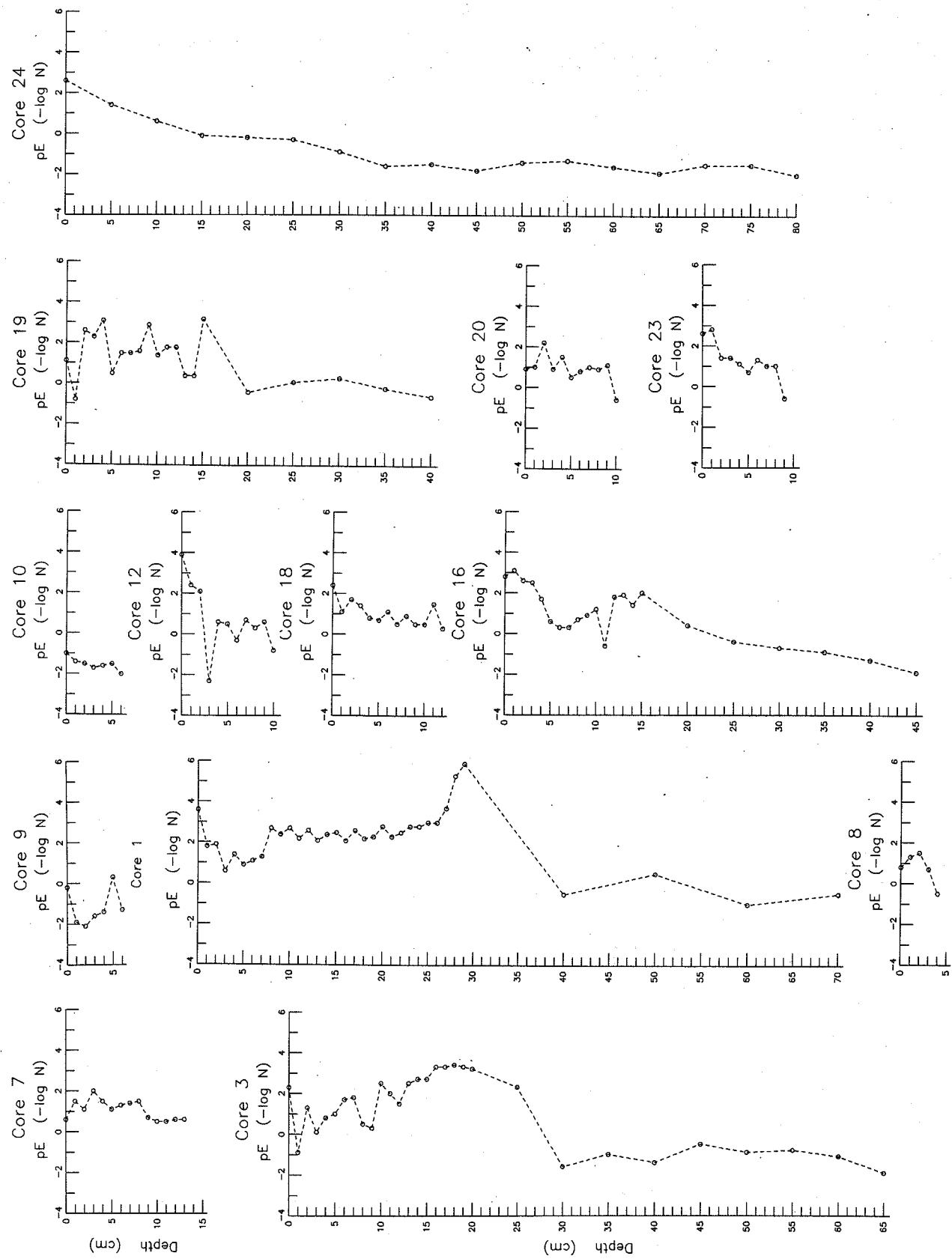
Cruise 89-009

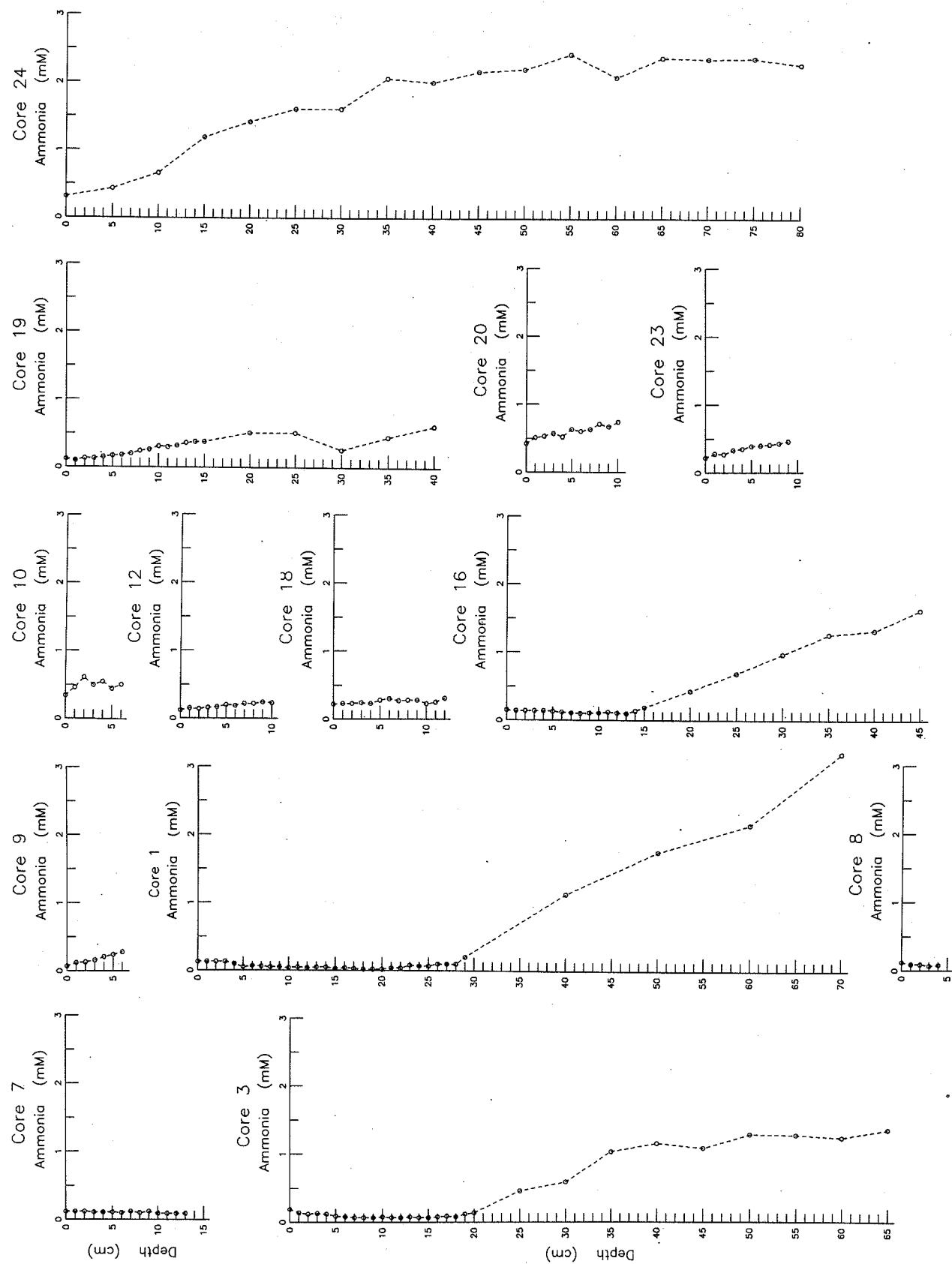
SKEWNESS

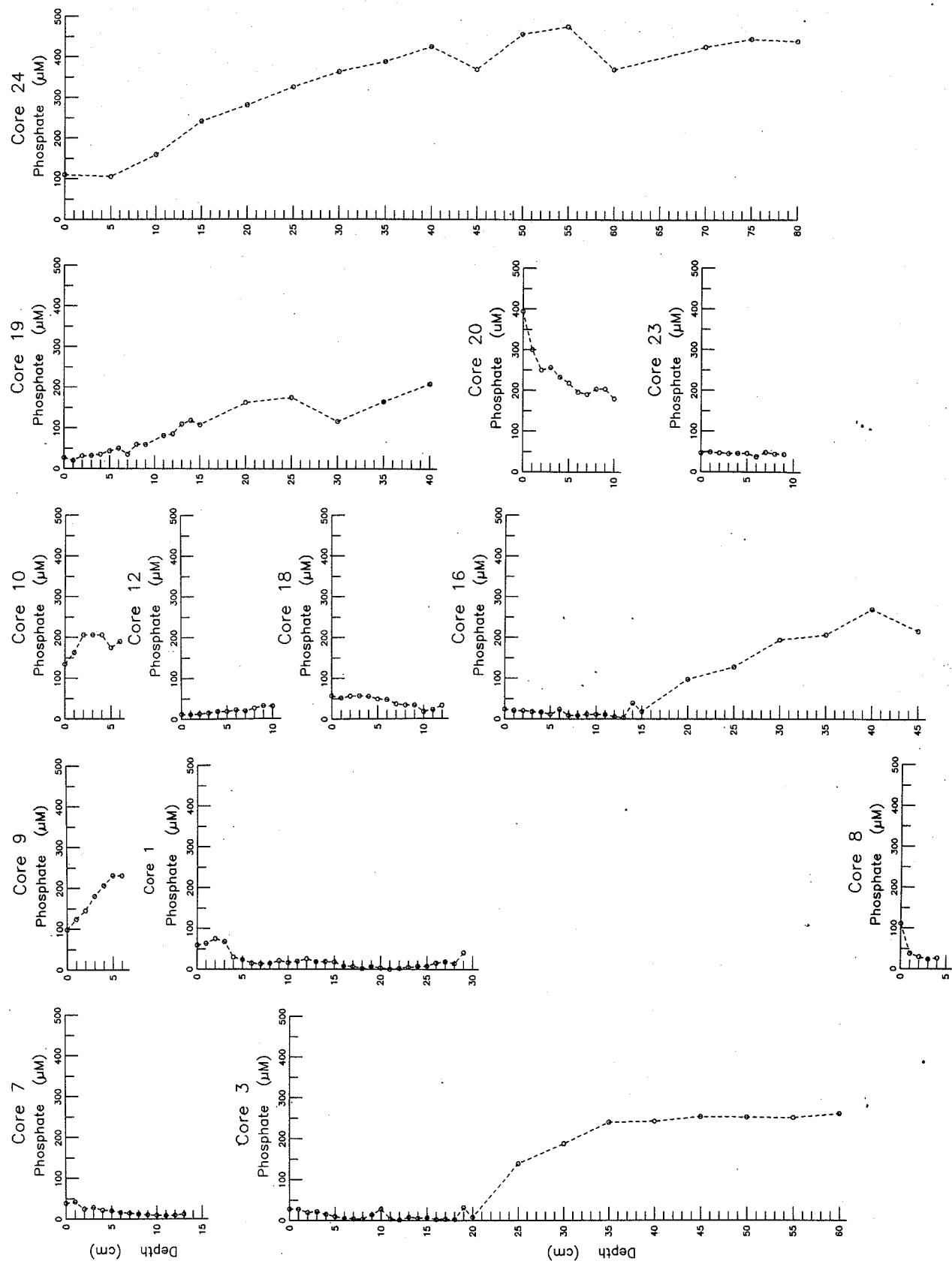


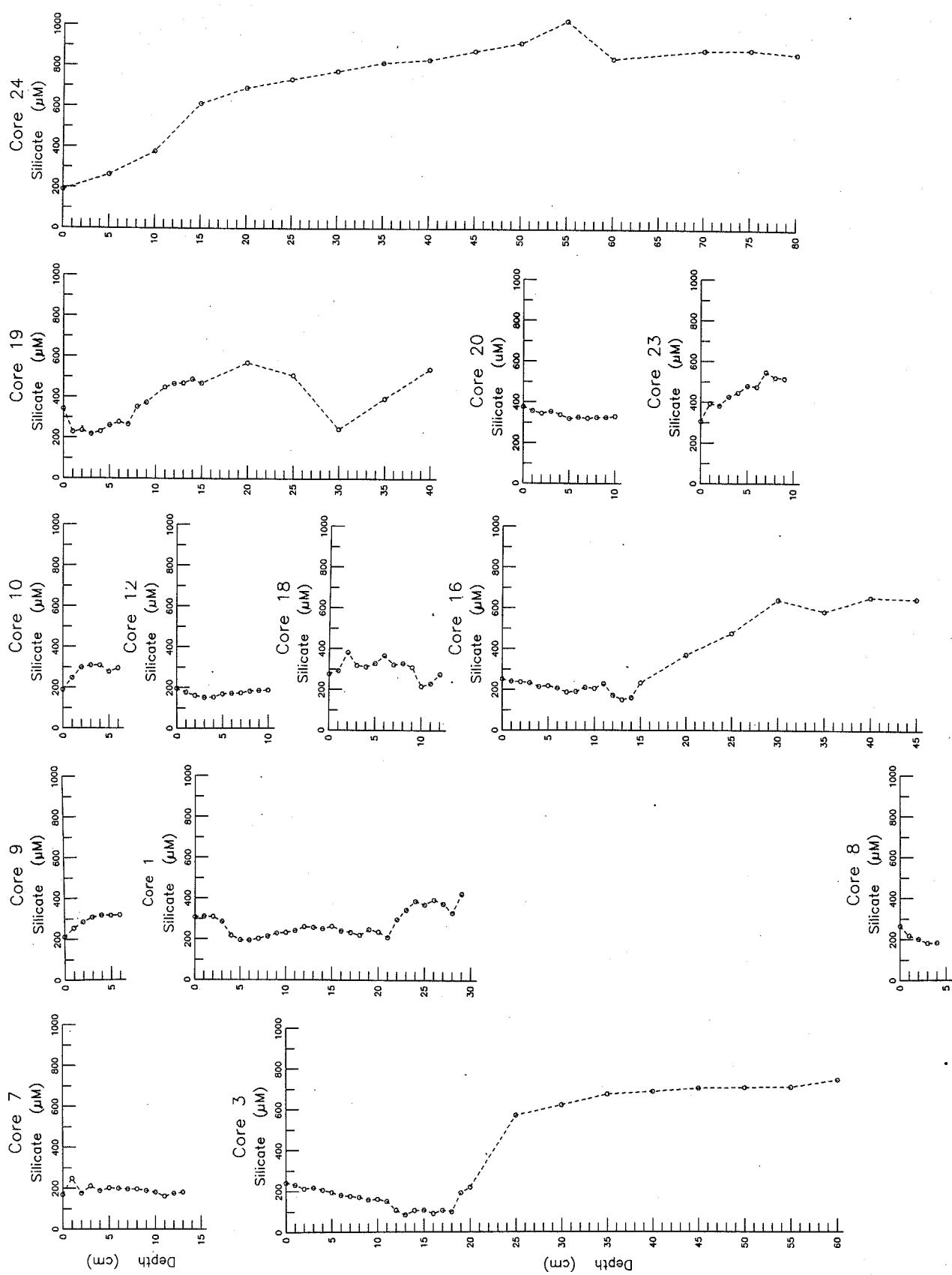


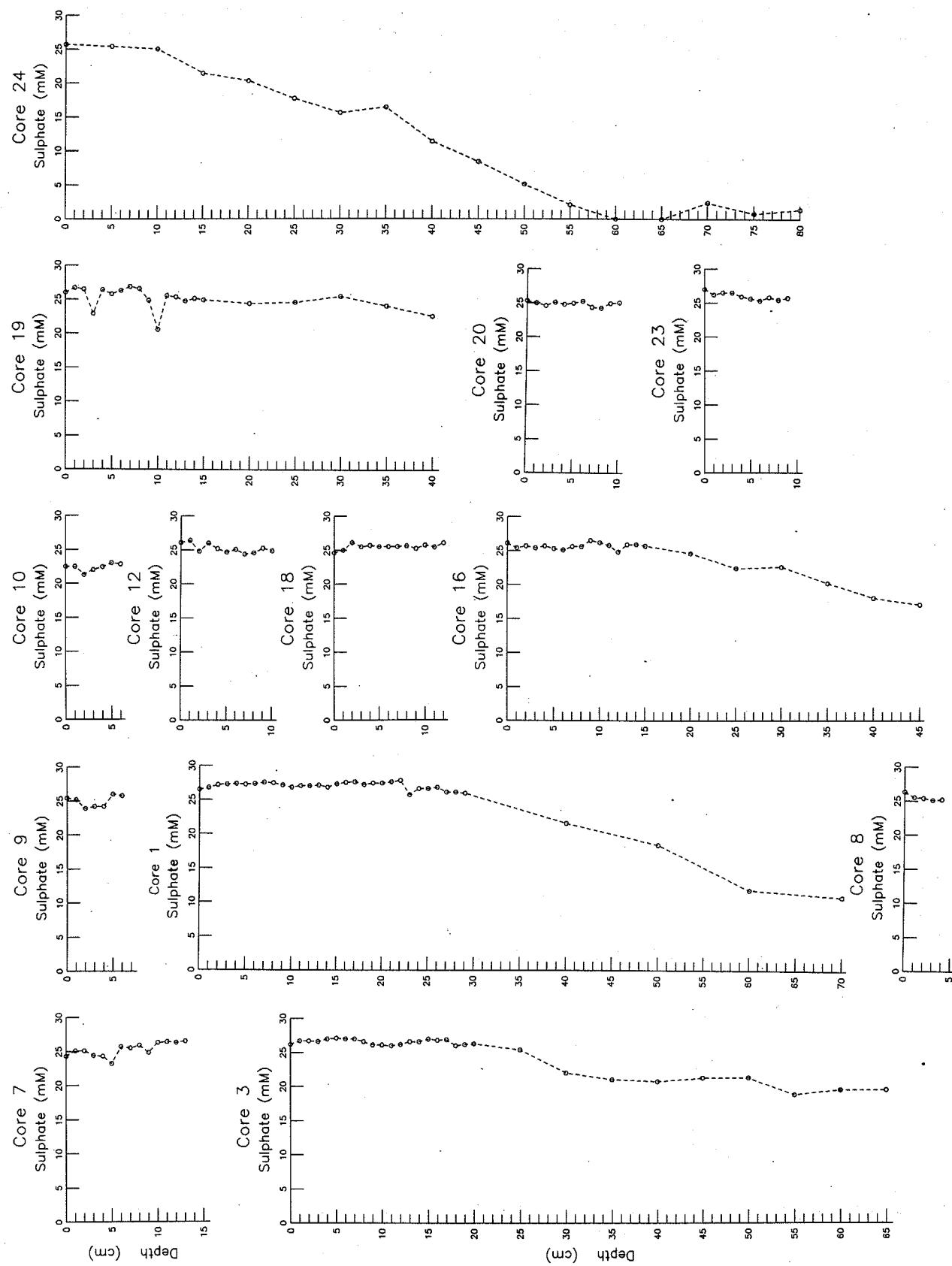


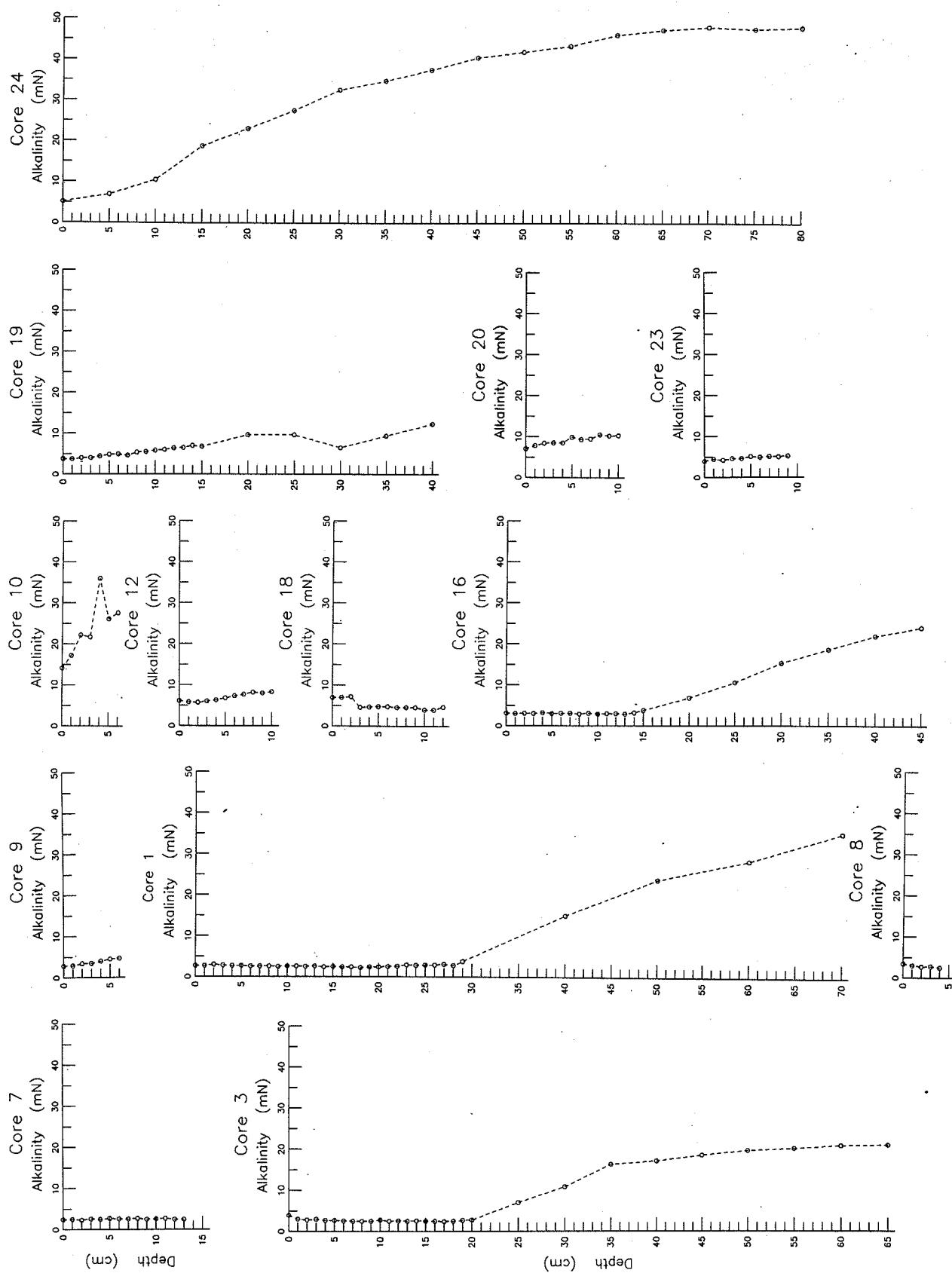




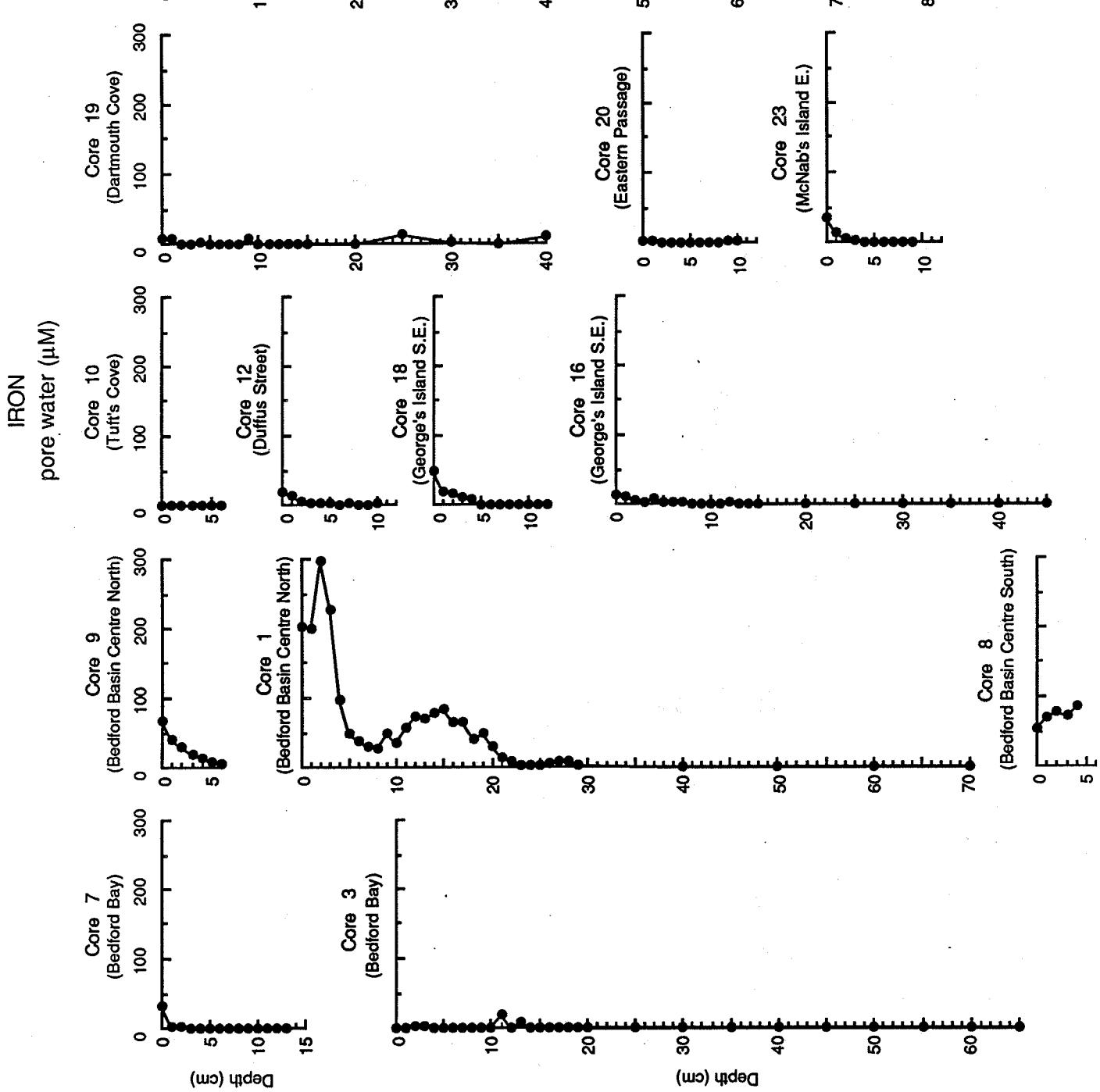




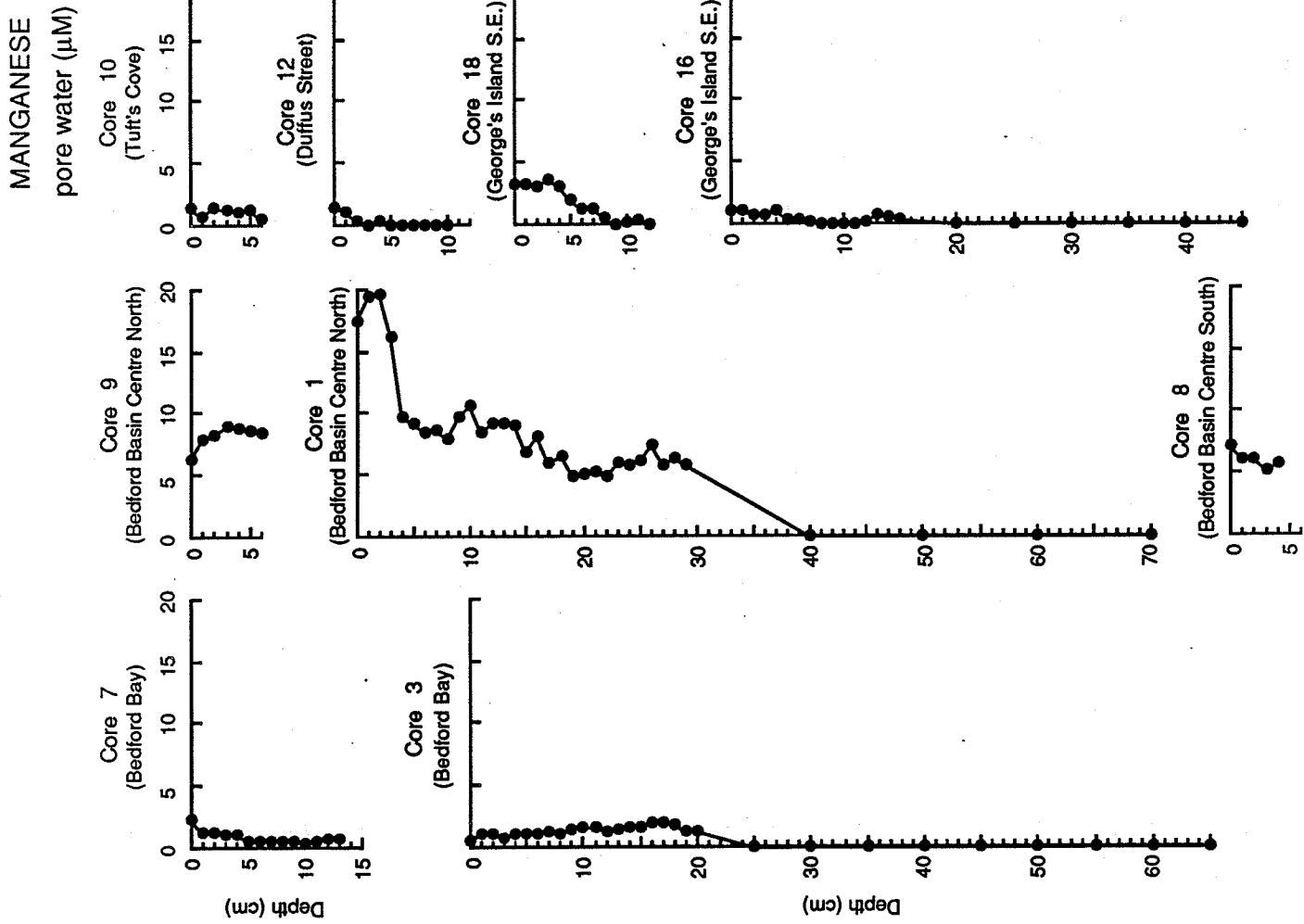




Cruise 89-009



Cruise 89-009



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The collection of the samples and analytical results published here required the cooperation and dedication of many of our colleagues at the Bedford Institute of Oceanography. We are very grateful for the efforts of R. Miller, G. Fader, A. Atkinson, D. Beaver, R. Murphy, M. Gorveatt and Captain J. Bray and the crew of the F.R.V. Navicula. We thank K. Asprey and G. Fader for their critical review of this manuscript.

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