Table T4. Calcareous nannofossil range-distribution chart and nannofossil zonation for Holes 1041A, 1041B, and 1041C. (See table notes. Continued on next four pages.)

Calcareous nannofossil zone(s)	Core, section, interval (cm)	Depth (mbsf)	Abundance	Preservation	small reticulofenestrids	*Emiliania huxleyi*	*Gephyrocapsa oceanica*	*Pontosphaera discopora*	*Pseudoemiliania lacunosa*	*Discoaster brouweri*	*Calcidiscus leptoporus*	*Helicosphaera carteri*	*Heicosphera wallichi*	*Pontosphaera* spp.	*Coccolithus pelagicus*	*Helicosphaera sellii*	*Ceratolithus cristatus*	*Discoaster pentaradiatus*	*Discoaster surculus*	*Reticulofenestra pseudoumbilicus*	*Sphenolithus abies*	*Sphenolithus verensis*	*Ceratolithus rugosus*	*Ceratolithus armatus*	*Discoaster asymmetricus*	*Discoaster quinqueramus*	*Discoaster berggrenii*	*Coccolithus miopelagicus*	*Cyclicargolithus floridanus*	*Discoaster deflandrei*	*Discoaster neorectus*	*Hayaster perplexus*	*Calcidiscus macintyrei*	*Discoaster intercalaris*	*Discoaster variabilis*	*Discoaster kugleri*	*Sphenolithus heteromorphus*	*Helicosphaera ampliaperta*	*Discoaster challengeri*	*Coronocyclus nitescens*	Unidentifiable placoliths	Unidentifiable 6-ray discoasters
	170-1041A-																																									
NN21–NN19	1H-1, 50-52	0.5	B																																							
	1H-2, 50-52	2	C	M		C	A				C	C																									r					
	1H-4, 50-53	5	B																																							
	1H-4, 125-127	5.75	B																																							
	1H-CC	7.35	B																																							
	2H-1, 49-52	7.89	B																																							
NN21–NN17	2H-1, 125-127	8.65	B																																							
	2H-2, 50-52	9.4	B																																							
	2H-2, 125-127	10.15	B																																							
	2H-3, 125-127	11.65	B																																							
	2H-5, 50-52	13.9	B																																							
	2H-CC	14.03	F	P	C						F	F									r							r														
	3X-1, 50-52	14.8	B																																							
	3X-1, 125-128	15.55	B																																							
	3X-3, 50-53	17.8	B																																							
	3X-3, 125-128	18.55	B																																							
	3X-4, 126-128	20.06	B																																							
	3X-CC	21.12	F	P				F	F		F	R			R		R																									
	4X-1, 91-93	24.31	F	P			F	F																																		
	4X-CC	24.92	C	M				R		F	F	R				R																										
	5X-1, 62-65	33.02	F	M							F		F				R																									
	5X-CC	34.21	C	M	C				R	F	R	F				F																										
	6X-1, 68-70	36.08	C	M						C							F										c															
	6X-3, 121-123	39.61	R	P						R																	r															
NN18–NN17	6X-CC	41.23	A	M	C			R		F	F	R				F																										
	7X-2, 50-52	43.5	B																																							
	7X-4, 125-127	47.25	F	P						F	F	F					F										f															
	7X-CC	50.7	C	M	C					F	F	F																														
	8X-1, 54-56	51.14	C	M						F		C															f															
	8X-3, 50-52	54.1	B																																							
	8X-5, 125-127	57.4	C	M			R	R		F			F				F										c															
	8X-CC	60.46	F	P							F		R		F												c														F	
	9X-1, 125-127	60.85	B																																							
	9X-2, 50-52	61.6	B																																							
	9X-3, 125-127	63.85	B																																							
	9X-4, 49-51	64.59	B																																							
	9X-5, 125-127	66.85	B																																							
	9X-6, 50-53	67.6	B																																							

Table T4 (continued).

Calcareous nannofossil zone(s)	Core, section, interval (cm)	Depth (mbsf)	Abundance	Preservation	small reticulofenestrids	*Emiliania huxleyi*	*Gephyrocapsa oceanica*	*Pontosphaera discopora*	*Pseudoemiliania lacunosa*	*Discoaster brouweri*	*Calcidiscus leptoporus*	*Helicosphaera carteri*	*Heicosphera wallichi*	*Pontosphaera* spp.	*Coccolithus pelagicus*	*Helicosphaera sellii*	*Ceratolithus cristatus*	*Discoaster pentaradiatus*	*Discoaster surculus*	*Reticulofenestra pseudoumbilicus*	*Sphenolithus abies*	*Sphenolithus verensis*	*Ceratolithus rugosus*	*Ceratolithus armatus*	*Discoaster asymmetricus*	*Discoaster quinqueramus*	*Discoaster berggrenii*	*Coccolithus miopelagicus*	*Cyclicargolithus floridanus*	*Discoaster deflandrei*	*Discoaster neorectus*	*Hayaster perplexus*	*Calcidiscus macintyrei*	*Discoaster intercalaris*	*Discoaster variabilis*	*Discoaster kugleri*	*Sphenolithus heteromorphus*	*Helicosphaera ampliaperta*	*Discoaster challengeri*	*Coronocyclus nitescens*	Unidentifiable placoliths	Unidentifiable 6-ray discoasters
	9X-CC	69.22	B																																							
	10X-2, 50-52	70.6	B																																							
	10X-4, 119-121	74.29	B																																							
	10X-CC	76.23	A	M	A					F	F	F				R																R										
	11-1, 50-52	78.7	B																																							
	11X-1, 122-124	79.42	B																																							
	11X-3, 50-53	81.17	R	M						R		R																														
	11X-5, 50-53	84.17	C	M				R		C	R	C																														
	11X-CC	84.99	F	M	F					R																																
	12X-1, 50-52	88.4	C	M						C	R				R																											
	12X-3, 119-121	92.09	B																																							
	12X-4, 53-55	92.93	B																																							
	12X-6, 32-34	95.72	B																																							
NN18–NN17	12X-CC	96.19	F	M	F					R																																
	13X-1, 38-40	97.88	B																																							
	13X-2, 36-38	99.18	F	M	F					F																																R
	13X-CC	100.78	F	M	F					F																						R										
	14X-1, 1-4	107.11	C	M	F			R		C		C			F																											
	14X-4, 32-34	111.77	F	M	F					F	F																															
	14X-CC	112.18	A	M	A					R		C							R													F										
	15X-1, 50-52	117.2	B																																							
	15X-3, 125-127	120.34	B																																							
	15X-7, 45-47	123.75	B																																							
	15X-CC	125.09	R	M	R																																					
	16X-1, 50-52	126.9	B																																							
	16X-3, 50-52	129.9	B																																							
	16X-7, 50-52	133.35	B																																							
	16X-CC	134.25	B																																							
	17X-2, 39-41	137.17	B																	F	C						F															
	17X-CC	137.48	F	M	F					R	F	F								F	R																					
	18X-1, 50-52	146	F	M						R										F	F						C															
	18X-5, 50-52	150.84	B																																							
	18X-CC	151.48	F	M	F					R	F	R									R	R										R					R					
NN16–NN11	170-1041B-																																									
	1R-1, 50-52	155.5	C	M	C																C						C															
	1R-3, 50-53	158.28	C	M						C																					R											
	1R-4, 125-128	160.53	C	M	F					F	C	C				F	R	C		F	C																					
	1R-CC	161.05	A	M	A					R	C	C								C	F																					
	2R-1, 52-54	165.12	F	M							F									F																						
	2R-2, 127-129	167.37	C	M						C	F	F						F	F	C	C	F					F															

Table T4 (continued).

Calcareous nannofossil zone(s)	Core, section, interval (cm)	Depth (mbsf)	Abundance	Preservation	small reticulofenestrids	*Emiliania huxleyi*	*Gephyrocapsa oceanica*	*Pontosphaera discopora*	*Pseudoemiliania lacunosa*	*Discoaster brouweri*	*Calcidiscus leptoporus*	*Helicosphaera carteri*	*Heliosphera wallichi*	*Pontosphaera* spp.	*Coccolithus pelagicus*	*Helicosphaera sellii*	*Ceratolithus cristatus*	*Discoaster pentaradiatus*	*Discoaster surculus*	*Reticulofenestra pseudoumbilicus*	*Sphenolithus abies*	*Sphenolithus verensis*	*Ceratolithus rugosus*	*Ceratolithus armatus*	*Discoaster asymmetricus*	*Discoaster quinqueramus*	*Discoaster berggrenii*	*Coccolithus miopelagicus*	*Cyclicargolithus floridanus*	*Discoaster deflandrei*	*Discoaster neorectus*	*Hayaster perplexus*	*Calcidiscus macintyrei*	*Discoaster intercalaris*	*Discoaster variabilis*	*Discoaster kugleri*	*Sphenolithus heteromorphus*	*Helicosphaera ampliaperta*	*Discoaster challengeri*	*Coronocyclus nitescens*	Unidentifiable placoliths	Unidentifiable 6-ray discoasters
	2R-5, 125-127	170.51	F	M						F	F	F						F		F	F	F					F								R							
	2R-CC	170.76	R	P	R					R										R	R					R																	
	3R-1, 50-52	174.7	F	M						F	F	F						F		F							F								R							
	3R-5, 50-53	178.52	C	M						F	F							C		F	F	F	F				F															
	3R-7, 48-50	181.5	C	M						C		C						C		C	C																		R			
	3R-CC	181.59	R	P	R					R	R	R									R	R																				
	4R-1, 125-128	185.05	C	M						C		C						F		C	C		R												F							
	4R-3, 125-128	188.05	C	M						C		C						C		C	F																					
	4R-7, 50-52	192.11	C	M	C					F	F	C					R			F	R														F							
	4R-CC	193.38	A	M	A					F	C	C								C	C	F	R																			
	5R-2, 50-52	195.5	C	M	A					C	C	C						F		C	C		C																			
	5R-4, 125-127	198.95	B																																							
	5R-CC	200.44	A	M	C					C	R	R				R			R	C	C	F			R																	
	6R-1, 50-52	203.6	B																																							
	6R-2, 125-127	205.65	A	M	A					C	C	C	F		F			C		C	C	C	F																			
	6R-5, 108-110	208.48	A	M	A					C	C	C			C			C		C		C													C				F			
	6R-CC	208.67	A	M	C					F		R					R	F	R	F	F	F																				
	7R-1, 29-31	212.99	A	M	A							F						F	F	C	C	C																				C
	7R-7, 36-38	219.64	B																																							
NN16–NN11	7R-CC	219.91	C	M	C					F	F							R	R	F	F		R	R		R	R									r						
	8R-1, 50-52	222.8	B																																							
	8R-4, 50-52	226.37	B																																							
	8R-CC	226.59	F	M	R					R								R	R																R	r						
	9R-1, 49-51	232.39	C	M							C							F	R		C	C													C							
	9R-3, 125-127	236.14	B																																							
	9R-CC	236.61	R	M	R						R								R	R							R															
	10R-1, 50-52	242.1	C	M																							C			F												
	10R-3, 125-127	245.04	B																																							
	10R-6, 49-50	247.43	B																																							
	10R-CC	247.56	F	P	R					R									R								R							R								R
	11R-1, 50-52	251.7	B																																							
	11R-3, 50-52	254.4	B																																							
	11R-5, 125-127	257.4	F	M	R																						F								R							
	11R-CC	258.03	C	M	C							R							R								C								R							
	12R-1, 50-52	261.4	C									F						F		F		F					C															
	12R-4, 50-53	264.93	F	M														R									F															
	12R-5, 125-128	267.18	F	M																							F															
	12R-CC	268.08	F	M	F							R								R							F															
	13R-1, 50-52	271	F	M																							F															
	13R-3, 50-53	274	C	M	C					F					F					F	C	C																				

Table T4 (continued).

Calcareous nannofossil zone(s)	Core, section, interval (cm)	Depth (mbsf)	Abundance	Preservation	small reticulofenestrids	*Emiliania huxleyi*	*Gephyrocapsa oceanica*	*Pontosphaera discopora*	*Pseudoemiliania lacunosa*	*Discoaster brouweri*	*Calcidiscus leptoporus*	*Helicosphaera carteri*	*Heicosphera wallichi*	*Pontosphaera* spp.	*Coccolithus pelagicus*	*Helicosphaera sellii*	*Ceratolithus cristatus*	*Discoaster pentaradiatus*	*Discoaster surculus*	*Reticulofenestra pseudoumbilicus*	*Sphenolithus abies*	*Sphenolithus verensis*	*Ceratolithus rugosus*	*Ceratolithus armatus*	*Discoaster asymmetricus*	*Discoaster quinqueramus*	*Discoaster berggrenii*	*Coccolithus miopelagicus*	*Cyclicargolithus floridanus*	*Discoaster deflandrei*	*Discoaster neorectus*	*Hayaster perplexus*	*Calcidiscus macintyrei*	*Discoaster intercalaris*	*Discoaster variabilis*	*Discoaster kugleri*	*Sphenolithus heteromorphus*	*Helicosphaera ampliaperta*	*Discoaster challengeri*	*Coronocyclus nitescens*	Unidentifiable placoliths	Unidentifiable 6-ray discoasters
NN16–NN11	13R-CC	275.21	C	P	R						R								R	F							R							R								
	14R-1, 50-52	280.7	F	M	F										R			R		F	F																					
	14R-4, 50-53	284.71	F	M	F					F										R	F																					
	14R-CC	285.19	R	P	R																													R								R
	15R-1, 45-47	290.35	F	M	F										F					F	F																					
	15R-CC	290.39	R	P																																					R	
	16R-CC	304.88	R	P																																					R	
	17R-1, 50-52	309.7	F	M							F				F						F	F																				
	17R-3, 125-127	313.45	F	M											F					R																						
	17R-CC	314.18	B																																							
	18R-1, 49-51	319.29	F	M											F																											
	18R-3, 30-32	320.85	B																																							
	18R-3, 36-38	320.91	R	P																								r					R								R	
	19R-1, 50-52	328.9	R	P																																				R		
	19R-4, 125-127	333.58	R	P											F																									R		
	19R-CC	333.82	F	P																R		R																				
	20R-1, 18-21	338.18	B																																							
	20R-3, 50-52	340.42	B																																							
	20R-5, 50-52	343.42	B																																							
Older than NN11	20R-CC	344.47	F	P	F										R					R	R																					
	21R-1, 50-52	348.1	R	P											R																											
	21R-4, 50-52	351.45	B																																							
	21R-CC	351.65	C	P	C																R	R					R															
	22R-2, 43-45	357.99	B																																							
	22R-4, 123-125	361.45	B																																							
	22R-CC	361.72	F	P	F							R									F	F						r													F	
	23R-1, 8-10	366.88	B																																							
	23R-3, 49-51	370.29	B																																							
	23R-CC	370.49	B																																							
	24R-1, 50-52	376.9	F	P	F										F					F	F																					
	24R-2, 50-52	378.4	B																																							
	24R-5, 39-41	381.29	R	P	R																																					R
	24R-CC	381.32	B																																							
	25R-1, 48-50	386.48	B																																							
	25R-2, 48-48	387.98	B																																							
	25R-CC	388.22	C	P	F							R								F	F							r									R	r				
	170-1041C-																																									
	1R-1, 50-52	395.5	B																																							
	1R-3, 49-51	397.24	B																																							

Table T4 (continued).

Calcareous nannofossil zone(s)	Core, section, interval (cm)	Depth (mbsf)	Abundance	Preservation	small reticulofenestrids	*Emiliania huxleyi*	*Gephyrocapsa oceanica*	*Pontosphaera discopora*	*Pseudoemiliania lacunosa*	*Discoaster brouweri*	*Calcidiscus leptoporus*	*Helicosphaera carteri*	*Heicosphera wallichi*	*Pontosphaera* spp.	*Coccolithus pelagicus*	*Helicosphaera sellii*	*Ceratolithus cristatus*	*Discoaster pentaradiatus*	*Discoaster surculus*	*Reticulofenestra pseudoumbilicus*	*Sphenolithus abies*	*Sphenolithus verensis*	*Ceratolithus rugosus*	*Ceratolithus armatus*	*Discoaster asymmetricus*	*Discoaster quinqueramus*	*Discoaster berggrenii*	*Coccolithus miopelagicus*	*Cyclicargolithus floridanus*	*Discoaster deflandrei*	*Discoaster neorectus*	*Hayaster perplexus*	*Calcidiscus macintyrei*	*Discoaster intercalaris*	*Discoaster variabilis*	*Discoaster kugleri*	*Sphenolithus heteromorphus*	*Helicosphaera ampliaperta*	*Discoaster challengeri*	*Coronocyclus nitescens*	Unidentifiable placoliths	Unidentifiable 6-ray discoasters
Older than NN11	1R-CC	397.61	R	P																R																						
	2R-1, 50-52	405.2	B																																							
	2R-2, 125-127	406.85	B																																							
	2R-CC	407.51	F	P	F															F																						
	3R-1, 12-15	414.32	B																																							
	3R-CC	415.54	A	P	C							F								C								r	r	r	R	R				r						
	Cruciplacolithus primus (early to late Paleocene) observed in Core 170-1041A-4X-CC Micula murus (Maastrichtian) observed in Core 170-1041B-19R-CC.																																									

Notes: Abundance: H = highly abundant; V = very abundant; A = abundant; C = common; F = few; R = rare; r = rare reworked; B = barren. Preservation: P = poor; M = moderate; G = good.