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16. NEOGENE TRENDS IN PLANKTONIC FORAMINIFER $\delta^{18}O$ FROM SITE 807: IMPLICATIONS FOR GLOBAL ICE VOLUME AND WESTERN EQUATORIAL PACIFIC SEA-SURFACE TEMPERATURES[1]

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ABSTRACT

We produced a preliminary record for shallow-dwelling planktonic foraminifer $\delta^{18}O$ at Site 807 for the late Pleistocene, early Pliocene, and early Miocene. Site 807 $\delta^{18}O$ values between 4 and 5 Ma average 0.75‰ more than Holocene values and show an average variation of 0.5‰. For the early Pliocene, peak maximum $\delta^{18}O$ at Site 807 attain values equivalent with the last glacial maximum whereas peak minimum $\delta^{18}O$ were never less than Holocene $\delta^{18}O$. Shallow-dwelling planktonic $\delta^{18}O$ at Site 807 between 16 and 24 Ma average more than 1.0‰ more positive than Holocene $\delta^{18}O$ and exhibit 0.5‰ average amplitude. Assuming that the global ice budget for the early Pliocene and early Miocene was restricted to Antarctica, it is difficult to attribute the very positive Site 807 $\delta^{18}O$ for these intervals to ice on Antarctica. Site 807 $\delta^{18}O$ for these intervals more likely reflect sea-surface temperatures cooler than at present, sea-surface salinity greater than at present, increased dissolution, or some combination of these changes.

INTRODUCTION

Two first-order problems of Neogene climate history are the extent of variations in the global ice budget and the possible variability of tropical sea-surface temperatures (SSTs). Two Neogene intervals for which hypotheses as to ice budget and tropical SSTs are particularly divergent are the early Pliocene and the early Miocene. For both intervals, the global ice budget was essentially restricted to Antarctica (Shackleton et al., 1984; Prentice and Denton, 1988). For the early Pliocene, seismic stratigraphic and micropaleontological evidence from Antarctica has been interpreted as reflecting the near-complete deglaciation of Antarctica (Haq et al., 1988; Webb and Harwood, 1991). On the other hand, deep-ocean planktonic foraminifer $\delta^{18}O$ data representing the tropics have been interpreted as indicating that Antarctic ice volumes were larger during much of the early Pliocene than at present (Prentice and Matthews, 1988, 1991). For the early Miocene, tropical planktonic foraminifer $\delta^{18}O$ have also been interpreted in terms of extremely large Antarctic ice volumes (Prentice and Matthews, 1988, 1991). On the other hand, deep-ocean benthic foraminifer $\delta^{18}O$ have been inferred to reflect a small and shrinking ice budget throughout the early Miocene (Savin and Douglas, 1985). Aside from these data, early Miocene seismic stratigraphic evidence has also been interpreted in terms of a small ice budget with one major expansion about 21 Ma (Haq et al., 1988).

Inferences for tropical SST variations during early Pliocene and early Miocene intervals are similarly contentious. A principal basis for interpreting tropical SSTs is shallow-dwelling planktonic foraminifer $\delta^{18}O$. On the one hand, tropical planktonic $\delta^{18}O$ have been used to infer SSTs significantly cooler than today (Savin and Douglas, 1985). These interpretations invariably rely on inferences for reduced Antarctic ice volumes based on benthic foraminifer $\delta^{18}O$. If the ice budget was reduced from that of today, these arguments go, the positive tropical planktonic $\delta^{18}O$ can only be explained by colder-than-present SSTs. On the other hand, tropical SSTs away from upwelling regions can be regarded as stable on the basis of climate-modeling experiments and scattered tropical $\delta^{18}O$ values explainable by ice-volume changes (Matthews and Poore, 1980; Prentice and Matthews, 1991).

A primary hindrance to solving the ice volume and tropical SST questions for the early Pliocene and early Miocene has been the shortage of high-quality $\delta^{18}O$ records for shallow-dwelling planktonic foraminifers from tropical regions. Ocean Drilling Program (ODP) Leg 130 to the Ontong Java Plateau in the western equatorial Pacific has produced a number of high-quality carbonate sections from which such records can be generated. The western equatorial Pacific is one of the best areas in the global ocean in which to study ice volume and tropical SST questions. This is because the extensive and thick pool of warm surface water there is thermally stable. The causes of this stability include low seasonality, the buffering effect of evaporative heat losses from tropical waters (Newell and Dopplick, 1979), and negative cloud feedback (e.g., Roeckner et al., 1987). These considerations are supported by inferences from paleontology that paleo-SSTs have been at modern levels (Prell, 1985; Anderson et al., 1989; Adams et al., 1990). Further evidence is that, for the last two glacial cycles, tropical planktonic $\delta^{18}O$ from the equatorial western Pacific, converted to glacio-eustasy, match sea-level change, as indicated by coral-reef records, more closely than records from any other open-ocean location (e.g., Shackleton, 1987). If the warm pool is thermally stable, global ice-volume history can be read directly from western equatorial Pacific planktonic $\delta^{18}O$ records. If not, the implied SST or salinity variations imply significant temperature and hydrological variations throughout the tropics. In this paper, we present an $\delta^{18}O$ record for shallow-dwelling planktonic foraminifers from ODP Site 807 and discuss its implications for global ice-volume and tropical climate history.

Site 807 is located on the northern rim of the huge Ontong Java Plateau at 3°36.4′N and 156°37.49′E. At a water depth of 2805 m, well above the present lysocline depth of 3300 m, the sedimentary section at Site 807 is well preserved. During the Neogene, the plateau moved coherently with the Pacific Plate northwestward across the equator from about 3°S, but it probably did not experience much vertical motion (Kroenke, 1972, 1984). The Neogene section was recovered in Holes 807A and 807B.

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METHODS

Stable Isotope Analyses

The samples were disaggregated in deionized water, wet-sieved, dried at 50°C, and then further dry-sieved. For the late Pleistocene and early Pliocene, the isotope record is based on the shallow-dwelling planktonic foraminifer, *Globigerinoides triloba.* For the early Miocene, the record is based on *Dentoglobigerina altispira* and *Globorotalia kugleri.* Our taxonomy is consistent with that of Kennett and Srinivasan (1983). All tests analyzed were between 300 and 355 μm except for those of *G. kugleri,* which were between 150 and 212 μm. Foraminifers were ultrasonically cleaned in ethanol, loaded and crushed in boats, and then roasted in a vacuum at 370°C for 1 hr. Samples were reacted on-line in 100% orthophosphoric acid at 90°C and analyzed in a VG Sira-24 mass spectrometer at the Benedum Stable Isotope Laboratory at Brown University. Analytical precision for carbonate standards bracketing each sample batch is 0.08‰ for both oxygen and carbon. Precision for replicated samples is 0.09‰ for oxygen and 0.07‰ for carbon. All data are reported in standard notation relative to Peedee belemnite (PDB). The Benedum Laboratory is calibrated to PDB on the basis of NBS 18, 19, and 20. We report results for 604 samples, of which 17% have been replicated.

G. triloba has consistently recorded mixed-layer $\delta^{18}O$ and temperature since the middle Miocene (e.g., Fairbanks et al., 1982; Savin et al., 1985; Hemleben et al., 1989). In the early Miocene, *D. altispira* and *G. kugleri* are demonstrated to be sampling the mixed layer (Savin et al., 1985). We regard these species as isotopically identical.

We produced a preliminary composite depth scale for Site 807 down to 136 mbsf. Correlations between holes are based primarily on magnetic susceptibility and gamma-ray attenuation porosity evaluation (GRAPE) density data. In addition, the splicing of a section from Hole 807B into the gap between Cores 1H and 2H from Hole 807A was based on overlapping $\delta^{18}O$ from both holes.

RESULTS

Age Model

Table 1 presents the age model that we used for the Pleistocene and Neogene section of Site 807. The ages for the late Pleistocene $\delta^{18}O$ events are from Imbrie et al. (1984). Nannofossil biostratigraphy is from Takayama and Backman (this volume), as well as Backman et al. (this volume). We use the ages for magnetic reversal boundaries estimated by Berggren et al. (1985).

Grain Size

Coarse fraction (percent >63 μm and percent >150 μm) data for all samples analyzed for isotopic composition are presented in Table 2 and illustrated in Figures 1 and 2. In the western equatorial Pacific, such data can reflect changes in productivity, dissolution, winnowing, and climate change (Berger and Johnson, 1976). It is beyond the scope of this paper to determine the cause of these variations. Our principal interest in the coarse fraction data here is to help distinguish changes in $\delta^{18}O$ that may not be directly related to changes in ice volume. Significant changes in any of these factors could result in a foraminifer $\delta^{18}O$ shift. For instance, an increase in dissolution intensity would decrease the coarse fraction and increase $\delta^{18}O$ (Prentice, 1988).

Over the last 0.7 m.y., the coarse fraction exhibits two regimes of variability, with the transition between at about 0.3 Ma (Fig. 2B). From 0.7 to 0.3 Ma, the coarse fraction means holds steady and the dominant variance has a periodicity near 100 k.y. Since 0.3 Ma, the mean coarse fraction increases in an undulating fashion, with variations of 20-k.y. duration dominating. The coarse fraction variability between 4.9 and 4.05 Ma is much reduced relative to the latest Pleistocene and is dominated by higher frequencies. The coarse fraction between 24 and 16.5 Ma is low but does reveal a complex structure, such as the 20% decrease centered at 23.5 Ma. Overall, it is apparent that a significant decrease has occurred in coarse fraction percents from the present back to 24 Ma (Fig. 2A).

Oxygen Isotope Record

Figures 3 and 4 show the $\delta^{18}O$ data for shallow-dwelling planktonic foraminifers from the late Pleistocene, early Pliocene, and early Miocene sections at Site 807 vs. depth and age, respectively. Tables 3 and 4 present the isotopic data and replicate values for *G. triloba,* Tables 5 and 6 give the $\delta^{18}O$ data and replicate $\delta^{18}O$ for *D. altispira,* and Tables 7 and 8 show the isotopic data for *G. kugleri* and replicate data.

The $\delta^{18}O$ record for the last 0.7 m.y. shows the complete global $\delta^{18}O$ stratigraphy for this interval. The average $\delta^{18}O$ for the late Holocene is –1.85‰, and for the last glacial maximum it is –0.65‰. Hence, the latest Pleistocene glacial-interglacial amplitude is 1.2‰. The temporal resolution of the record averages 5 k.y.

The $\delta^{18}O$ record between 4.9 and 4.05 Ma exhibits an average amplitude of 0.5‰ about a mean $\delta^{18}O$ of –1.1‰ (Fig. 4C). The temporal resolution of this record averages 5 k.y. A dramatic 0.8‰ fluctuation that reached Holocene values took place between 4.88 and 4.83 Ma. After this, mean $\delta^{18}O$ remain constant until 4.5 Ma, show a broad maximum between 4.4 and 4.35 Ma, and then decrease in steps to 4 Ma. The primary $\delta^{18}O$ maxima in this interval achieve values close to that of the last glacial maximum.

Between 24 and 16.5 Ma, Site 807, $\delta^{18}O$ exhibit a mean that changes from –0.8‰ at 23–21 Ma to –0.4‰ from 20–19 Ma, and back to –0.8‰ by 17 Ma (Fig. 4D). Maximum values in the enriched 20–19 Ma interval are more positive than $\delta^{18}O$ for the last glacial maximum. The amplitude of fluctuations in this interval averages 0.5‰. The temporal resolution of this record is 50 k.y., which precludes recognition of fine structure. By late Pleistocene standards, the negative excursion between 22 and 21.6 Ma might be a fortuitous joining of parts of successive glacial cycles.

To identify local influences on the Site 807 record, we compared the Site 807 record to the tropical $\delta^{18}O$ composite of Prentice and Matthews (1991) (Fig. 5) and the coarse fraction data (Fig. 6). The tropical composite was designed to represent average tropical shallow-dwelling planktonic $\delta^{18}O$ in the western equatorial Pacific.

For the last 0.7 m.y., Site 807 $\delta^{18}O$ matched tropical composite $\delta^{18}O$ within the uncertainty of the two curves. This is interesting given the strong negative covariation between coarse fraction and Site 807 $\delta^{18}O$ in the interval. This is apparent in the individual time series, which display a high percentage of coarse fraction during deglaciations and a low percentage during glaciations (Fig. 6). Because coarse fraction variability might be explained by varying dissolution intensity and the latter can strongly influence $\delta^{18}O$, the negative covariation might suggest a strong local signal. However, given the close match with the global $\delta^{18}O$ curve, such dissolution variations as there are do not seem to affect Site 807 $\delta^{18}O$.

Between 4.7 and 4.05 Ma, Site 807 $\delta^{18}O$ average 0.5‰ more than tropical composite $\delta^{18}O$ (Fig. 5) and 0.75‰ more positive than late Holocene $\delta^{18}O$. Presently, we do not attribute the positive $\delta^{18}O$ to the impact of increased dissolution at Site 807. The fauna seem well preserved in this interval of Site 807. The average coarse fraction, which might reflect dissolution, is no lower than it is between 0.4 and 0.25 Ma. For the latter interval, we noted no adverse impact on $\delta^{18}O$. Nor do we think that the $\delta^{18}O$ variability from 4.9 to 4.05 Ma dominantly reflects variations in dissolution, although the coarse fraction and $\delta^{18}O$ again show negative correlation. This relationship is less consistent than between 0.7 Ma and the present. The 0.8‰ $\delta^{18}O$ excursion at 4.85 Ma partially correlates with coarse fraction variation and so may, in part, reflect local influences. However, we do not think this is the case because comparable coarse fraction excursions from 4.8 to 4.6 Ma positively and negatively covary with the $\delta^{18}O$ record.

Table 1. Site 807 age model.

Depth (cmbsf)	Age (Ma)	Datum	Hole 807A (mbsf)	Hole 807B (mbsf)
0.00	0.00	Top	0.00	
0.51	0.02	$\delta^{18}O$ event 2.2	0.51	
0.61	0.03	$\delta^{18}O$ event 3.1	0.61	
0.91	0.05	$\delta^{18}O$ event 3.3	0.91	
1.01	0.07	$\delta^{18}O$ event 4.2	1.01	
1.41	0.08	$\delta^{18}O$ event 5.1	1.41	
2.11	0.12	$\delta^{18}O$ event 5.5	2.11	
2.51	0.15	$\delta^{18}O$ event 6.4	2.51	
2.81	0.17	$\delta^{18}O$ event 6.5	2.81	
3.21	0.19	$\delta^{18}O$ event 7.1	3.21	
3.51	0.22	$\delta^{18}O$ event 7.3	3.51	
3.91	0.24	$\delta^{18}O$ event 7.5	3.91	
4.21	0.25	$\delta^{18}O$ event 8.2	4.21	
4.51	0.27	$\delta^{18}O$ event 8.4	4.51	
4.63	0.28	FAD *Emiliania huxleyi* (N)	4.63	
4.71	0.29	$\delta^{18}O$ event 8.5	4.71	
5.21	0.31	$\delta^{18}O$ event 9.1	5.21	
5.71	0.33	$\delta^{18}O$ event 9.3	5.71	
6.21	0.34	$\delta^{18}O$ event 10.2	6.21	
6.71	0.37	$\delta^{18}O$ event 11.1	6.71	
7.01	0.41	$\delta^{18}O$ event 11.3	7.01	
7.21	0.43	$\delta^{18}O$ event 12.2	7.21	
7.33	0.46	LAD *Pseudoemiliania lacunosa* (N)	7.33	
8.21	0.49	$\delta^{18}O$ event 13.1		6.71
8.41	0.52	$\delta^{18}O$ event 13.3		6.91
9.01	0.56	$\delta^{18}O$ event 14.4	8.41	
9.41	0.57	$\delta^{18}O$ event 15.1	8.81	
9.91	0.60	$\delta^{18}O$ event 15.3	9.31	
10.11	0.62	$\delta^{18}O$ event 15.5	9.51	
10.41	0.63	$\delta^{18}O$ event 16.2	9.81	
12.80	0.73	Brunhes/Matuyama	12.20	
14.64	0.83	LAD *Reticulofenestra asanoi* (N)	14.04	
16.40	0.91	Jaramillo top	15.80	
19.46	1.06	FAD *Reticulofenestra asanoi* (N)	18.29	
20.21	1.10	LAD large *Gephyrocapsa* (N)	19.04	
24.71	1.19	LAD *Helicosphaera selli* (N)	23.54	
26.21	1.36	FAD large *Gephyrocapsa* (N)	25.04	
27.44	1.51	LAD *C. macintyrei* (N), *G. oceanica*	26.27	
29.71	1.66	Olduvai top	27.75	
33.06	1.88	Olduvai base	31.10	
43.65	2.35	LAD *Discoaster pentaradiatus* (N)	40.69	
45.15	2.41	LAD *Discoaster surculus* (N)	42.19	
64.56	2.90	LO *G. altispira* (F)	59.65	
79.20	3.45	LAD *Sphenolithus* spp. (N)	72.89	
84.65	3.56	LAD *R. pseudoumbilica* (N)	78.29	
126.15	4.60	LAD *C. acutus*, FAD *C. rugosus* (N)	112.02	
135.65	4.90	FAD *C. acutus* (N)	121.52	
144.01	5.00	LAD *D. quinqueramus* (N)	129.88	
149.78	5.10	FO *S. dehiscens* s.l. (F)	135.65	
164.15	5.80	FO *P. primalis* (F)	164.15	
237.89	7.50	FAD *D. quinqueramus* (N)	237.89	
277.79	8.70	LAD *D. hamatus* (N)	277.79	
280.79	8.80	LAD *Catinaster* spp (N)	280.79	
295.19	10.00	FAD *Catinaster calyculus* (N)	295.19	
301.63	10.50	FAD *D. hamatus* (N)	301.63	
306.29	11.10	FAD *Catinaster coalitus* (N)	306.29	
316.60	11.30	FO *G. nepenthes* (F)	316.60	
326.05	11.50	LO *G. fohsi lobata* (F)	326.05	
334.89	12.80	LAD *C. nitescens* (N)	334.89	
372.19	13.10	LAD *C. floridanus* (N)	372.19	
379.13	13.60	LAD *S. heteromorphus* (N)	379.13	
393.05	13.90	FO *G. praefohsi* (F)	393.05	
403.75	14.90	FO *G. peripheroacuta* (F)	403.75	
432.65	16.10	TA *D. deflandrei* (N)	432.65	
462.29	18.60	FAD *S. heteromorphus* (N)	462.29	
463.89	18.80	LAD *S. belemnos* (N)	463.89	
474.89	19.50	LAD *Triquetrorhabdulus carinatus* (N)	474.89	
476.10	20.00	FAD *S. belemnos* (N)	476.10	
509.95	21.80	LO *G. kugleri* (F)	509.95	
580.59	23.60	FAD *D. druggii* (N)	580.59	
596.05	24.70	FO *S. delphix* (N) (D. Rio)	596.05	
619.50	25.20	LCO *S. ciperoensis* (N) (D. Rio)	619.50	
644.75	26.30	FO *G. pseudokugleri* (F)	644.75	
683.00	27.50	LO *S. distentus* (N)	683.00	
702.35	30.00	LO *Chiloguembelina* spp. (F)	702.35	
760.05	31.60	FO *G. angulisuturalis* (F)	760.05	
789.05	32.70	FO *G. opima* (F)	789.05	
798.75	32.80	LO *G. ampliapertura* s.s. (F)	798.75	

Notes: cmbsf = composite meters below seafloor, mbsf = meters below seafloor, FAD = first appearance datum, LAD = last appearance datum, FO = first occurrence, LO = last occurrence, and TA = terminal acme.

As with previous sections, we again think that the $\delta^{18}O$ record for 24 to 16.5 Ma has not been significantly compromised by varying dissolution. Site 807 $\delta^{18}O$ compare favorably with tropical composite $\delta^{18}O$ (Fig. 5). The tropical composite is commonly more positive, especially around 20 Ma. A weak relationship between the coarse fraction and $\delta^{18}O$ exists in this interval (Fig. 6). The mean coarse fraction is constant throughout, yet mean $\delta^{18}O$ increase from 23 to 19.5 Ma and subsequently decrease. The decrease in the coarse fraction from 23.7 to 23.4 Ma does not correlate with the isotopic variation. Aside from these observations, we also note excellent preservation of foraminifer faunas between 24 and 16.5 Ma.

DISCUSSION

We consider the positive nature of Site 807 $\delta^{18}O$ for the early Miocene and early Pliocene to represent a significant puzzle. Assuming that the majority of the ice budget during these intervals resided in Antarctica, it is unlikely that glacier ice can account for the enriched Neogene $\delta^{18}O$. Ice modeling studies sugest that the Antarctic Ice Sheet is unlikely to enrich ocean $\delta^{18}O$ by 0.3‰ more than it presently does (Prentice et al., in press). Two other possible explanations are either colder and/or more evaporated water or significant dissolution/diagenesis.

Observations of interannual variability in the distribution of the different equatorial currents as well as their temperatures and salinities suggest that long-term changes in these quantities could account for much of the Neogene $\delta^{18}O$ enrichment. Over the last 15 yr, near-surface temperatures within the local South Equatorial Current, North Equatorial Counter-Current, and Equatorial Undercurrent have exhibited composite variation of 3°C. In a composite sense, salinity has varied by up to 2‰, commonly in opposition to temperature change. Given little information relating salinity and water $\delta^{18}O$ in this region, the associated water $\delta^{18}O$ changes are difficult to estimate. However, this magnitude of temperature variability coupled with water $\delta^{18}O$ changes consistent with the salinity variations could generate foraminifer $\delta^{18}O$ variability of up to 1‰. This magnitude of variation caused by tropical Pacific ocean-atmosphere interaction is conceivable on the million-year time scale.

Whereas dissolution/diagenesis might not contribute significantly to early Pliocene and early Miocene $\delta^{18}O$ variability as suggested above, these processes might explain much of the average $\delta^{18}O$ enrichment of the Neogene data relative to the late Pleistocene. The evidence is the apparent monotonic decrease in coarse-fraction percentage going back in time from the late Pleistocene (Fig. 2A). Data are obviously needed to support an interpretation of the coarse-fraction percentage changes in terms of dissolution/diagenesis.

CONCLUSIONS

We constructed a $\delta^{18}O$ record for shallow-dwelling planktonic foraminifers at Site 807 for the time intervals 0–0.7 Ma, 4.05–4.9 Ma, and 16–24 Ma. The record for the last 0.7 m.y. shows all the details

Table 2. Holes 807A and 807B percent >63 µm and percent >150 µm.

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	>150 µm (%)	>63 µm (%)
130-807A-				
1H-1, 1.0	0.010	0.010	42	57
1H-1, 5.5	0.055	0.055	41	54
1H-1, 11.0	0.110	0.110	44	58
1H-1, 14.5	0.145	0.145	39	55
1H-1, 21.0	0.210	0.210	31	48
1H-1, 25.5	0.255	0.255	26	42
1H-1, 31.0	0.310	0.310	29	43
1H-1, 35.5	0.355	0.355	19	31
1H-1, 41.0	0.410	0.410	23	37
1H-1, 45.5	0.455	0.455	23	36
1H-1, 51.0	0.510	0.510	27	40
1H-1, 54.5	0.545	0.545	24	36
1H-1, 61.0	0.610	0.610	29	45
1H-1, 65.5	0.655	0.655	26	39
1H-1, 71.0	0.710	0.710	33	47
1H-1, 75.5	0.755	0.755	28	41
1H-1, 83.0	0.830	0.830	25	40
1H-1, 85.5	0.855	0.855	22	35
1H-1, 91.0	0.910	0.910	30	45
1H-1, 93.5	0.935	0.935	31	46
1H-1, 101.0	1.010	1.010	28	42
1H-1, 105.5	1.055	1.055	28	40
1H-1, 111.0	1.110	1.110	18	33
1H-1, 115.5	1.155	1.155	14	23
1H-1, 121.0	1.210	1.210	20	33
1H-1, 123.5	1.235	1.235	19	29
1H-1, 131.0	1.310	1.310	25	38
1H-1, 135.5	1.355	1.355	26	41
1H-1, 141.0	1.410	1.410	32	46
1H-1, 145.5	1.455	1.455	29	42
1H-2, 1.0	1.510	1.510	23	35
1H-2, 5.5	1.555	1.555	20	33
1H-2, 11.0	1.610	1.610	27	40
1H-2, 12.5	1.625	1.625	25	37
1H-2, 21.0	1.710	1.710	32	46
1H-2, 25.5	1.755	1.755	29	43
1H-2, 31.0	1.810	1.810	32	46
1H-2, 35.5	1.855	1.855	28	41
1H-2, 41.0	1.910	1.910	26	39
1H-2, 51.0	2.010	2.010	35	49
1H-2, 55.0	2.045	2.045	33	50
1H-2, 61.0	2.110	2.110	36	55
1H-2, 65.5	2.155	2.155	29	45
1H-2, 71.0	2.210	2.210	49	63
1H-2, 73.5	2.235	2.235	34	50
1H-2, 81.0	2.310	2.310	29	45
1H-2, 85.5	2.355	2.355	27	43
1H-2, 91.0	2.410	2.410	32	46
1H-2, 93.5	2.425	2.425	28	46
1H-2, 94.0	2.450	2.450	29	47
1H-2, 101.0	2.510	2.510	24	38
1H-2, 105.5	2.555	2.555	25	38
1H-2, 111.0	2.610	2.610	42	57
1H-2, 115.5	2.655	2.655	26	37
1H-2, 121.0	2.710	2.710	29	42
1H-2, 125.5	2.755	2.755	35	46
1H-2, 131.0	2.810	2.810	45	58
1H-2, 135.5	2.855	2.855	28	40
1H-2, 141.0	2.910	2.910	30	43
1H-2, 145.5	2.955	2.955	24	35
1H-3, 1.0	3.010	3.010	19	30
1H-3, 5.5	3.055	3.055	15	25
1H-3, 11.0	3.110	3.110	20	30
1H-3, 14.5	3.145	3.145	20	31
1H-3, 21.0	3.210	3.210	25	38
1H-3, 25.5	3.255	3.255	26	40
1H-3, 31.0	3.310	3.310	21	34
1H-3, 35.5	3.355	3.355	21	32
1H-3, 41.0	3.410	3.410	28	41
1H-3, 45.5	3.455	3.455	34	51
1H-3, 51.0	3.510	3.510	40	56
1H-3, 54.5	3.545	3.545	30	48
1H-3, 61.0	3.610	3.610	38	52
1H-3, 65.5	3.655	3.655	27	40
1H-3, 71.0	3.710	3.710	21	32
130-807A-				
1H-3, 75.5	3.755	3.755	17	27
1H-3, 81.0	3.810	3.810	19	30
1H-3, 85.5	3.855	3.855	23	35
1H-3, 91.0	3.910	3.910	32	48
1H-3, 101.0	4.010	4.010	32	49
1H-3, 105.5	4.055	4.055	33	46
1H-3, 111.0	4.110	4.110	33	46
1H-3, 115.5	4.155	4.155	19	34
1H-3, 121.0	4.210	4.210	26	37
1H-3, 131.0	4.310	4.310	32	44
1H-3, 135.5	4.355	4.355	30	40
1H-3, 141.0	4.410	4.410	31	43
1H-3, 142.5	4.425	4.425	28	39
1H-4, 1.0	4.510	4.510	16	27
1H-4, 5.5	4.555	4.555	11	19
1H-4, 11.0	4.610	4.610	15	23
1H-4, 12.5	4.625	4.625	12	19
1H-4, 21.0	4.710	4.710	26	36
1H-4, 25.5	4.755	4.755	25	37
1H-4, 31.0	4.810	4.810	30	42
1H-4, 35.5	4.855	4.855	28	39
1H-4, 41.0	4.910	4.910	25	36
1H-4, 43.5	4.935	4.935	17	26
1H-4, 51.0	5.010	5.010	17	26
1H-4, 54.5	5.045	5.045	11	19
1H-4, 61.0	5.110	5.110	15	23
1H-4, 65.5	5.155	5.155	12	20
1H-4, 71.0	5.210	5.210	16	26
1H-4, 75.5	5.255	5.255	15	23
1H-4, 81.0	5.310	5.310	22	31
1H-4, 85.5	5.355	5.355	18	26
1H-4, 91.0	5.410	5.410	21	28
1H-4, 94.5	5.445	5.445	18	29
1H-4, 101.0	5.510	5.510	14	23
1H-4, 102.5	5.525	5.525	13	20
1H-4, 111.0	5.610	5.610	20	32
1H-4, 115.5	5.655	5.655	22	34
1H-4, 121.0	5.710	5.710	26	40
1H-4, 131.0	5.810	5.810	26	40
1H-4, 135.5	5.855	5.855	30	44
1H-4, 141.0	5.910	5.910	22	33
1H-4, 144.5	5.945	5.945	24	34
1H-5, 1.0	6.010	6.010	29	41
1H-5, 5.5	6.055	6.055	23	34
1H-5, 11.0	6.110	6.110	27	38
1H-5, 15.5	6.155	6.155	18	28
1H-5, 21.0	6.210	6.210	15	25
1H-5, 25.5	6.255	6.255	14	23
1H-5, 31.0	6.310	6.310	19	29
1H-5, 35.5	6.355	6.355	14	22
1H-5, 41.0	6.410	6.410	20	29
1H-5, 45.5	6.455	6.455	23	31
1H-5, 51.0	6.510	6.510	19	30
1H-5, 54.5	6.545	6.545	10	18
1H-5, 61.0	6.610	6.610	23	34
1H-5, 65.5	6.655	6.655	16	26
1H-5, 71.0	6.710	6.710	19	31
1H-5, 75.5	6.755	6.755	14	14
1H-5, 81.0	6.810	6.810	16	27
1H-5, 85.5	6.855	6.855	21	32
1H-5, 91.0	6.910	6.910	31	44
1H-5, 93.5	6.935	6.935	20	33
1H-5, 101.0	7.010	7.010	32	46
1H-5, 105.5	7.055	7.055	24	37
1H-5, 111.0	7.110	7.110	28	41
1H-CC, 1.0	7.210	7.210	27	40
1H-CC, 4.5	7.245	7.245	19	30
1H-CC, 11.0	7.310	7.310	20	29
2H-1, 1.0	7.410	8.010	21	29
2H-1, 5.5	7.455	8.055	20	28
2H-1, 11.0	7.510	8.110	18	23
2H-1, 14.5	7.545	8.145	19	26
2H-1, 21.0	7.610	8.210	16	23
2H-1, 24.5	7.645	8.245	22	30
2H-1, 31.0	7.710	8.310	21	29

Table 2 (continued).

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	>150 µm (%)	>63 µm (%)
130-807A-				
2H-1, 35.5	7.755	8.355	22	33
2H-1, 41.0	7.810	8.410	23	34
2H-1, 51.0	7.910	8.510	25	38
2H-1, 55.5	7.955	8.555	29	40
2H-1, 61.0	8.010	8.610	30	45
2H-1, 65.5	8.055	8.655	29	40
2H-1, 71.0	8.110	8.710	35	48
2H-1, 75.5	8.155	8.755	29	43
2H-1, 81.0	8.210	8.810	30	43
2H-1, 85.5	8.255	8.855	26	37
2H-1, 91.0	8.310	8.910	24	34
2H-1, 93.5	8.335	8.935	26	36
2H-1, 101.0	8.410	9.010	17	26
2H-1, 105.5	8.455	9.055	23	32
2H-1, 111.0	8.510	9.110	19	27
2H-1, 115.5	8.555	9.155	21	31
2H-1, 121.0	8.610	9.210	25	34
2H-1, 131.0	8.710	9.310	21	29
2H-1, 135.5	8.755	9.355	13	20
2H-1, 141.0	8.810	9.410	20	33
2H-1, 145.5	8.855	9.455	20	29
2H-2, 1.0	8.910	9.510	25	34
2H-2, 5.5	8.955	9.555	23	35
2H-2, 11.0	9.010	9.610	17	27
2H-2, 13.5	9.035	9.635	20	30
2H-2, 21.0	9.110	9.710	23	32
2H-2, 24.5	9.145	9.745	21	29
2H-2, 31.0	9.210	9.810	25	35
2H-2, 35.5	9.255	9.855	22	34
2H-2, 41.0	9.310	9.910	23	31
2H-2, 43.5	9.335	9.935	22	31
2H-2, 51.0	9.410	10.010	24	31
2H-2, 55.5	9.455	10.055	24	32
2H-2, 61.0	9.510	10.110	26	37
2H-2, 65.5	9.555	10.155	31	44
2H-2, 71.0	9.610	10.210	29	40
2H-2, 73.5	9.635	10.235	35	50
2H-2, 81.0	9.710	10.310	31	41
2H-2, 85.5	9.755	10.355	39	53
2H-2, 91.0	9.810	10.410	29	41
2H-2, 101.0	9.910	10.510	29	39
2H-2, 105.5	9.955	10.555	28	38
2H-2, 111.0	10.010	10.610	27	34
2H-2, 115.5	10.055	10.655	28	41
2H-2, 121.0	10.110	10.710	28	37
2H-2, 131.0	10.210	10.810	23	29
2H-2, 135.5	10.255	10.855	24	33
2H-2, 141.0	10.310	10.910	16	23
2H-2, 145.5	10.355	10.955	18	26
2H-3, 1.0	10.410	11.010	19	30
2H-3, 11.0	10.510	11.110	20	32
2H-3, 21.0	10.610	11.210	19	35
2H-3, 31.0	10.710	11.310	20	32
2H-3, 41.0	10.810	11.410	28	41
2H-3, 51.0	10.910	11.510	30	42
2H-3, 61.0	11.010	11.610	34	44
2H-3, 71.0	11.110	11.710	24	31
2H-3, 81.0	11.210	11.810	23	34
2H-3, 91.0	11.310	11.910	28	40
2H-3, 101.0	11.410	12.010	31	44
2H-3, 111.0	11.510	12.110	31	37
2H-3, 121.0	11.610	12.210	30	39
2H-3, 131.0	11.710	12.310	18	25
2H-3, 141.0	11.810	12.410	22	25
2H-4, 1.0	11.910	12.510	18	26
2H-4, 11.0	12.010	12.610	20	28
2H-4, 21.0	12.110	12.710	22	32
2H-4, 31.0	12.210	12.810	31	44
2H-4, 41.0	12.310	12.910	35	46
2H-4, 51.0	12.410	13.010	25	35
2H-4, 61.0	12.510	13.110	23	34
2H-4, 71.0	12.610	13.210	28	38
2H-4, 81.0	12.710	13.310	24	34
2H-4, 91.0	12.810	13.410	22	31
2H-4, 101.0	12.910	13.510	23	33
2H-4, 111.0	13.010	13.610	20	29
130-807A-				
2H-4, 121.0	13.110	13.710	15	24
2H-4, 131.0	13.210	13.810	22	32
2H-4, 141.0	13.310	13.910	17	26
2H-5, 1.0	13.410	14.010	23	34
2H-5, 11.0	13.510	14.110	34	46
2H-5, 21.0	13.610	14.210	32	44
2H-5, 31.0	13.710	14.310	30	45
2H-5, 41.0	13.810	14.410	29	41
2H-5, 51.0	13.910	14.510	26	36
2H-5, 61.0	14.010	14.610	21	33
2H-5, 71.0	14.110	14.710	31	43
2H-5, 81.0	14.210	14.810	29	43
2H-5, 91.0	14.310	14.910	29	39
2H-5, 101.0	14.410	15.010	29	36
2H-5, 111.0	14.510	15.110	21	29
2H-5, 121.0	14.610	15.210	12	17
2H-5, 131.0	14.710	15.310	9	15
2H-6, 1.0	14.910	15.510	12	22
2H-6, 11.0	15.010	15.610	20	30
2H-6, 21.0	15.110	15.710	17	25
2H-6, 31.0	15.210	15.810	8	12
2H-6, 41.0	15.310	15.910	10	15
2H-6, 51.0	15.410	16.010	11	17
2H-6, 61.0	15.510	16.110	17	25
2H-6, 71.0	15.610	16.210	9	14
2H-6, 81.0	15.710	16.310	5	11
2H-6, 91.0	15.810	16.410	18	27
2H-6, 101.0	15.910	16.510	28	36
2H-6, 111.0	16.010	16.610	19	29
2H-6, 121.0	16.110	16.710	15	27
2H-6, 131.0	16.210	16.810	17	31
2H-6, 141.0	16.310	16.910	29	40
2H-7, 1.0	16.410	17.010	27	42
2H-7, 11.0	16.510	17.110	24	35
2H-7, 21.0	16.610	17.210	28	36
2H-7, 31.0	16.710	17.310	27	36
2H-7, 41.0	16.810	17.410	19	26
2H-7, 51.0	16.910	18.080	16	22
2H-7, 61.0	17.010	18.180	19	28
2H-7, 71.0	17.110	18.280	31	41
2H-CC, 1.0	17.120	18.290	32	38
2H-CC, 11.0	17.220	18.390	31	40
3H-1, 41.0	17.310	18.480	33	42
3H-1, 51.0	17.410	18.580	38	49
3H-1, 61.0	17.510	18.680	27	39
3H-1, 71.0	17.610	18.780	23	36
3H-1, 81.0	17.710	18.880	23	32
3H-1, 91.0	17.810	18.980	23	35
3H-1, 101.0	17.910	19.080	27	39
3H-1, 111.0	18.010	19.180	34	45
3H-1, 121.0	18.110	19.280	32	44
3H-1, 131.0	18.210	19.380	36	51
3H-1, 141.0	18.310	19.480	33	47
3H-2, 1.0	18.410	19.580	31	48
3H-2, 11.0	18.510	19.680	23	39
3H-2, 21.0	18.610	19.780	19	35
3H-2, 31.0	18.710	19.880	28	44
3H-2, 41.0	18.810	19.980	24	40
3H-2, 51.0	18.910	20.080	22	37
3H-2, 61.0	19.010	20.180	31	44
3H-2, 71.0	19.110	20.280	32	46
3H-2, 81.0	19.210	20.380	51	66
3H-2, 88.0	19.260	20.430	36	46
3H-2, 101.0	19.410	20.580	26	41
3H-2, 111.0	19.510	20.680	20	34
3H-2, 114.0	19.540	20.710	22	38
3H-2, 121.0	19.610	20.780	17	33
3H-2, 131.0	19.710	20.880	22	37
3H-2, 141.0	19.810	20.980	31	46
3H-3, 1.0	19.910	21.080	26	43
3H-3, 11.0	20.010	21.180	29	49
3H-3, 21.0	20.110	21.280	29	43
3H-3, 31.0	20.210	21.380	22	38
3H-3, 41.0	20.310	21.480	15	29
3H-3, 51.0	20.410	21.580	28	41
3H-3, 61.0	20.510	21.680	33	45

Table 2 (continued).

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	>150 µm (%)	>63 µm (%)
130-807A-				
3H-3, 71.0	20.610	21.780	31	48
3H-3, 81.0	20.710	21.880	25	41
3H-3, 91.0	20.810	21.980	23	36
3H-3, 101.0	20.910	22.080	17	28
3H-3, 111.0	21.010	22.180	17	31
3H-3, 121.0	21.110	22.280	16	28
3H-3, 131.0	21.210	22.380	31	46
3H-3, 141.0	21.310	22.480	28	44
3H-4, 1.0	21.410	22.580	34	49
3H-4, 11.0	21.510	22.680	26	42
3H-4, 21.0	21.610	22.780	21	36
3H-4, 31.0	21.710	22.880	17	31
3H-4, 41.0	21.810	22.980	15	31
3H-4, 51.0	21.910	23.080	24	40
3H-4, 61.0	22.010	23.180	29	45
3H-4, 71.0	22.110	23.280	23	41
3H-4, 81.0	22.210	23.380	27	42
3H-4, 91.0	22.310	23.480	22	39
3H-4, 101.0	22.410	23.580	15	29
3H-4, 111.0	22.510	23.680	25	39
3H-5, 1.0	22.910	24.080	31	45
3H-5, 11.0	23.010	24.180	21	34
3H-5, 21.0	23.110	24.280	18	34
3H-5, 31.0	23.210	24.380	20	33
3H-5, 41.0	23.310	24.480	25	37
3H-5, 51.0	23.410	24.580	25	40
3H-5, 61.0	23.510	24.680	35	48
3H-5, 71.0	23.610	24.780	29	43
3H-5, 81.0	23.710	24.880	35	50
3H-5, 91.0	23.810	24.980	24	37
3H-5, 101.0	23.910	25.080	19	31
3H-5, 111.0	24.010	25.180	34	48
3H-5, 121.0	24.110	25.280	34	51
3H-5, 131.0	24.210	25.380	29	49
3H-5, 141.0	24.310	25.480	31	46
3H-6, 1.0	24.410	25.580	17	34
3H-6, 11.0	24.510	25.680	18	34
3H-6, 21.0	24.610	25.780	18	36
3H-6, 31.0	24.710	25.880	20	36
3H-6, 41.0	24.810	25.980	25	40
3H-6, 51.0	24.910	26.080	23	37
3H-6, 61.0	25.010	26.180	23	37
3H-6, 71.0	25.110	26.280	24	37
3H-6, 81.0	25.210	26.380	17	33
3H-6, 91.0	25.310	26.480	20	36
3H-6, 101.0	25.410	26.580	34	47
3H-6, 111.0	25.510	26.680	32	47
3H-6, 121.0	25.610	26.780	27	42
3H-6, 131.0	25.710	26.880	26	40
3H-6, 141.0	25.810	26.980	20	36
3H-7, 1.0	25.910	27.080	31	46
3H-7, 11.0	26.010	27.180	32	46
3H-7, 21.0	26.110	27.280	38	53
3H-7, 31.0	26.210	27.380	29	42
3H-7, 41.0	26.310	27.480	25	42
3H-7, 51.0	26.410	28.370	24	38
3H-7, 61.0	26.510	28.470	27	45
3H-CC, 1.0	26.570	28.530	30	42
3H-CC, 11.0	26.670	28.630	27	38
4H-1, 31.0	26.710	28.670	21	30
3H-CC, 21.0	26.770	28.730	33	46
4H-1, 41.0	26.810	28.770	26	37
4H-1, 51.0	26.910	28.870	30	42
4H-1, 61.0	27.010	28.970	27	38
4H-1, 71.0	27.110	29.070	23	33
4H-1, 81.0	27.210	29.170	17	31
4H-1, 91.0	27.310	29.270	20	32
4H-1, 101.0	27.410	29.370	28	40
4H-1, 111.0	27.510	29.470	24	38
4H-1, 121.0	27.610	29.570	26	39
4H-1, 131.0	27.710	29.670	26	40
4H-1, 141.0	27.810	29.770	27	36
4H-2, 1.0	27.910	29.870	34	43
4H-2, 11.0	28.010	29.970	21	31
4H-2, 21.0	28.110	30.070	17	26
4H-2, 31.0	28.210	30.170	26	35
130-807A-				
4H-2, 41.0	28.310	30.270	19	27
4H-2, 51.0	28.410	30.370	18	27
4H-2, 61.0	28.510	30.470	19	32
4H-2, 71.0	28.610	30.570	37	48
4H-2, 81.0	28.710	30.670	20	31
4H-2, 91.0	28.810	30.770	15	23
4H-2, 101.0	28.910	30.870	20	29
4H-2, 111.0	29.010	30.970	24	34
4H-2, 121.0	29.110	31.070	26	37
4H-2, 131.0	29.210	31.170	25	34
4H-2, 141.0	29.310	31.270	22	32
4H-3, 1.0	29.410	31.370	28	41
4H-3, 11.0	29.510	31.470	36	48
4H-3, 21.0	29.610	31.570	31	45
4H-3, 31.0	29.710	31.670	32	43
4H-3, 41.0	29.810	31.770	25	39
4H-3, 51.0	29.910	31.870	35	48
4H-3, 61.0	30.010	31.970	37	50
4H-3, 71.0	30.110	32.070	35	46
4H-3, 81.0	30.210	32.170	28	38
4H-3, 91.0	30.310	32.270	31	40
4H-3, 101.0	30.410	32.370	24	40
4H-3, 111.0	30.510	32.470	20	34
4H-3, 121.0	30.610	32.570	26	35
4H-3, 131.0	30.710	32.670	31	43
4H-3, 141.0	30.810	32.770	27	37
4H-4, 1.0	30.910	32.870	32	43
4H-4, 11.0	31.010	32.970	33	45
4H-4, 21.0	31.110	33.070	31	43
4H-4, 31.0	31.210	33.170	28	40
4H-4, 41.0	31.310	33.270	25	34
4H-4, 51.0	31.410	33.370	15	22
4H-4, 61.0	31.510	33.470	18	27
4H-4, 71.0	31.610	33.570	24	35
4H-4, 81.0	31.710	33.670	26	36
4H-4, 91.0	31.810	33.770	30	42
4H-4, 101.0	31.910	33.870	27	41
4H-4, 111.0	32.010	33.970	27	35
4H-4, 121.0	32.110	34.070	26	34
4H-4, 131.0	32.210	34.170	28	36
4H-4, 141.0	32.310	34.270	25	34
4H-5, 1.0	32.410	34.370	23	33
4H-5, 11.0	32.510	34.470	24	34
4H-5, 21.0	32.610	34.570	28	39
4H-5, 31.0	32.710	34.670	29	40
4H-5, 41.0	32.810	34.770	25	37
4H-5, 51.0	32.910	34.870	27	38
4H-5, 61.0	33.010	34.970	24	36
4H-5, 71.0	33.110	35.070	30	39
4H-5, 81.0	33.210	35.170	30	40
4H-5, 91.0	33.310	35.270	30	41
4H-5, 101.0	33.410	35.370	29	39
4H-5, 111.0	33.510	35.470	33	41
4H-5, 121.0	33.610	35.570	34	44
4H-5, 131.0	33.710	35.670	37	46
4H-5, 141.0	33.810	35.770	27	37
4H-6, 1.0	33.910	35.870	27	35
4H-6, 11.0	34.010	35.970	24	33
4H-6, 21.0	34.110	36.070	22	33
4H-6, 31.0	34.210	36.170	23	31
4H-6, 41.0	34.310	36.270	17	25
4H-6, 51.0	34.410	36.370	28	38
4H-6, 61.0	34.510	36.470	26	38
4H-6, 71.0	34.610	36.570	27	38
4H-6, 81.0	34.710	36.670	24	32
4H-6, 91.0	34.810	36.770	21	30
4H-6, 101.0	34.910	36.870	28	38
4H-6, 111.0	35.010	36.970	36	49
4H-6, 121.0	35.110	37.070	22	33
4H-6, 131.0	35.210	37.170	18	29
4H-6, 141.0	35.310	37.270	21	31
4H-7, 1.0	35.410	37.370	29	37
4H-7, 11.0	35.510	37.470	32	42
4H-7, 21.0	35.610	37.570	25	35
4H-7, 28.0	35.680	37.640	28	36
4H-7, 41.0	35.810	37.770	19	26

Table 2 (continued).

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	>150 µm (%)	>63 µm (%)
130-807A-				
4H-7, 51.0	35.910	38.870	17	24
4H-7, 61.0	36.010	38.970	20	32
4H-7, 71.0	36.110	39.070	12	18
4H-CC, 1.0	36.140	39.100	14	20
4H-CC, 11.0	36.240	39.200	15	22
6H-1, 111.0	46.510	51.070	9	13
6H-6, 108.0	53.980	58.540	25	34
8H-1, 1.0	64.410	70.720	20	30
8H-1, 11.0	64.510	70.820	17	26
8H-1, 21.0	64.610	70.920	18	28
8H-1, 31.0	64.710	71.020	15	24
8H-1, 41.0	64.810	71.120	18	27
8H-1, 51.0	64.910	71.220	19	29
8H-1, 61.0	65.010	71.320	18	27
8H-1, 71.0	65.110	71.420	19	30
8H-1, 81.0	65.210	71.520	16	25
8H-1, 91.0	65.310	71.620	13	21
8H-1, 101.0	65.410	71.720	18	27
8H-1, 113.0	65.530	71.840	25	36
8H-1, 121.0	65.610	71.920	24	35
8H-1, 131.0	65.710	72.020	22	34
8H-1, 141.0	65.810	72.120	20	31
8H-2, 1.0	65.910	72.220	16	25
8H-2, 11.0	66.010	72.320	14	22
8H-2, 21.0	66.110	72.420	22	33
8H-2, 31.0	66.210	72.520	22	33
8H-2, 41.0	66.310	72.620	27	38
8H-2, 49.0	66.390	72.700	25	38
8H-2, 61.0	66.510	72.820	20	30
8H-2, 71.0	66.610	72.920	15	24
8H-2, 81.0	66.710	73.020	11	19
8H-2, 91.0	66.810	73.120	20	30
8H-2, 101.0	66.910	73.220	23	33
8H-2, 113.0	67.030	73.340	25	36
8H-2, 121.0	67.110	73.420	20	31
8H-2, 131.0	67.210	73.520	18	27
8H-2, 141.0	67.310	73.620	18	27
8H-3, 1.0	67.410	73.720	22	33
8H-3, 11.0	67.510	73.820	23	34
8H-3, 21.0	67.610	73.920	21	31
8H-3, 31.0	67.710	74.020	16	25
8H-3, 41.0	67.810	74.120	15	23
8H-3, 51.0	67.910	74.220	7	13
8H-3, 61.0	68.010	74.320	13	21
8H-3, 71.0	68.110	74.420	19	31
8H-3, 81.0	68.210	74.520	21	31
8H-3, 91.0	68.310	74.620	21	32
8H-3, 101.0	68.410	74.720	23	34
8H-3, 113.0	68.530	74.840	19	30
8H-3, 121.0	68.610	74.920	20	31
8H-3, 131.0	68.710	75.020	18	28
8H-3, 141.0	68.810	75.120	17	26
8H-4, 1.0	68.910	75.220	14	23
8H-4, 11.0	69.010	75.320	18	26
8H-4, 21.0	69.110	75.420	18	28
8H-4, 31.0	69.210	75.520	21	32
8H-4, 41.0	69.310	75.620	21	31
8H-4, 51.0	69.410	75.720	20	30
8H-4, 61.0	69.510	75.820	17	27
8H-4, 71.0	69.610	75.920	27	37
8H-4, 81.0	69.710	76.020	20	30
8H-4, 91.0	69.810	76.120	17	28
8H-4, 101.0	69.910	76.220	17	27
8H-4, 113.0	70.030	76.340	17	27
8H-4, 121.0	70.110	76.420	10	19
8H-4, 131.0	70.210	76.520	14	22
8H-4, 141.0	70.310	76.620	17	28
8H-5, 1.0	70.410	76.720	14	23
8H-5, 11.0	70.510	76.820	15	26
8H-5, 21.0	70.610	76.920	12	21
8H-5, 31.0	70.710	77.020	18	30
8H-5, 43.0	70.830	77.140	18	28
8H-5, 51.0	70.910	77.220	15	25
8H-5, 61.0	71.010	77.320	12	22
8H-5, 71.0	71.110	77.420	14	24
8H-5, 81.0	71.210	77.520	16	26
130-807A-				
8H-5, 91.0	71.310	77.620	16	25
8H-5, 101.0	71.410	77.720	19	29
8H-5, 113.0	71.530	77.840	17	28
8H-5, 121.0	71.610	77.920	22	34
8H-5, 131.0	71.710	78.020	24	36
8H-5, 141.0	71.810	78.120	23	35
8H-6, 1.0	71.910	78.220	17	26
8H-6, 11.0	72.010	78.320	19	28
8H-6, 21.0	72.110	78.420	15	25
8H-6, 31.0	72.210	78.520	15	24
8H-6, 43.0	72.330	78.640	16	26
8H-6, 51.0	72.410	78.720	13	24
8H-6, 61.0	72.510	78.820	10	19
8H-6, 71.0	72.610	78.920	13	21
8H-6, 81.0	72.710	79.020	23	35
8H-6, 91.0	72.810	79.120	28	41
8H-6, 104.0	72.940	79.250	24	39
8H-6, 113.0	73.030	79.340	22	36
8H-6, 121.0	73.110	79.420	18	28
8H-6, 131.0	73.210	79.520	18	28
8H-6, 141.0	73.310	79.620	8	15
8H-7, 1.0	73.410	79.720	7	14
8H-7, 11.0	73.510	79.820	8	14
8H-7, 21.0	73.610	79.920	23	35
8H-7, 31.0	73.710	80.020	26	40
8H-7, 41.0	73.810	80.120	21	34
8H-7, 51.0	73.910	80.720	23	36
8H-7, 61.0	74.010	80.757	26	40
8H-7, 71.0	74.110	80.793	24	37
8H-CC, 1.0	74.160	80.812	23	36
8H-CC, 11.0	74.260	80.848	21	33
9H-1, 1.0	73.910	80.720	12	20
9H-1, 11.0	74.010	80.757	19	27
9H-1, 21.0	74.110	80.793	19	30
9H-1, 31.0	74.210	80.830	18	34
9H-1, 41.0	74.310	80.867	10	22
9H-1, 51.0	74.410	80.904	34	45
9H-1, 61.0	74.510	80.940	20	32
9H-1, 71.0	74.610	80.977	22	34
9H-1, 81.0	74.710	81.020	20	34
9H-1, 91.0	74.810	81.120	17	30
9H-1, 101.0	74.910	81.220	11	24
9H-1, 111.0	75.010	81.320	16	25
9H-1, 121.0	75.110	81.420	24	33
9H-1, 131.0	75.210	81.520	22	34
9H-1, 141.0	75.310	81.620	10	27
9H-2, 1.0	75.410	81.720	18	28
9H-2, 11.0	75.510	81.820	24	34
9H-2, 21.0	75.610	81.920	19	28
9H-2, 31.0	75.710	82.020	15	23
9H-2, 41.0	75.810	82.120	15	23
9H-2, 51.0	75.910	82.220	23	35
9H-2, 61.0	76.010	82.320	21	34
9H-2, 71.0	76.110	82.420	24	35
9H-2, 81.0	76.210	82.520	12	22
9H-2, 91.0	76.310	82.620	14	24
9H-2, 101.0	76.410	82.720	12	21
9H-2, 111.0	76.510	82.820	14	25
9H-2, 121.0	76.610	82.920	12	21
9H-2, 131.0	76.710	83.020	18	30
9H-2, 141.0	76.810	83.120	8	14
9H-3, 1.0	76.910	83.220	18	29
9H-3, 11.0	77.010	83.320	28	41
9H-3, 21.0	77.110	83.420	33	46
9H-3, 31.0	77.210	83.520	25	36
9H-3, 41.0	77.310	83.620	22	32
9H-3, 51.0	77.410	83.720	20	30
9H-3, 61.0	77.510	83.820	23	36
9H-3, 71.0	77.610	83.920	19	30
9H-3, 81.0	77.710	84.020	21	34
9H-3, 91.0	77.810	84.120	17	26
9H-3, 101.0	77.910	84.220	12	20
9H-3, 111.0	78.010	84.320	12	20
9H-3, 121.0	78.110	84.420	24	38
9H-3, 131.0	78.210	84.520	15	26
9H-3, 141.0	78.310	84.620	19	31

Table 2 (continued).

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	>150 µm (%)	>63 µm (%)
130-807A-				
9H-4, 1.0	78.410	84.720	22	35
9H-4, 11.0	78.510	84.820	22	35
9H-4, 21.0	78.610	84.920	22	37
9H-4, 31.0	78.710	85.020	23	37
9H-4, 41.0	78.810	85.120	24	39
9H-4, 51.0	78.910	85.220	26	41
9H-4, 61.0	79.010	85.320	29	45
9H-4, 71.0	79.110	85.420	23	35
9H-4, 81.0	79.210	85.520	12	22
9H-4, 91.0	79.310	85.620	12	26
9H-4, 101.0	79.410	85.720	27	42
9H-4, 111.0	79.510	85.820	24	40
9H-5, 1.0	79.910	86.220	15	31
9H-5, 11.0	80.010	86.320	21	36
9H-5, 21.0	80.110	86.420	22	36
9H-5, 31.0	80.210	86.520	17	31
9H-5, 41.0	80.310	86.620	15	28
9H-5, 51.0	80.410	86.720	17	29
9H-5, 61.0	80.510	86.820	19	34
9H-5, 71.0	80.610	86.920	17	33
9H-5, 81.0	80.710	87.020	16	30
9H-5, 91.0	80.810	87.120	12	27
9H-5, 101.0	80.910	87.220	13	30
9H-5, 111.0	81.010	87.320	10	24
9H-5, 121.0	81.110	87.420	11	35
9H-5, 131.0	81.210	87.520	14	29
9H-5, 141.0	81.310	87.620	15	29
9H-6, 1.0	81.410	87.720	17	32
9H-6, 11.0	81.510	87.820	16	29
9H-6, 21.0	81.610	87.920	17	29
9H-6, 31.0	81.710	88.020	19	33
9H-6, 41.0	81.810	88.120	22	37
9H-6, 51.0	81.910	88.220	22	39
9H-6, 61.0	82.010	88.320	18	32
9H-6, 71.0	82.110	88.420	15	28
9H-6, 81.0	82.210	88.520	11	30
9H-6, 91.0	82.310	88.620	9	23
9H-6, 101.0	82.410	88.720	17	30
9H-6, 111.0	82.510	88.820	17	35
9H-6, 121.0	82.610	88.920	17	33
9H-6, 131.0	82.710	89.020	17	30
9H-6, 141.0	82.810	89.120	13	24
9H-7, 1.0	82.910	89.220	13	27
9H-7, 11.0	83.010	89.320	17	37
9H-7, 21.0	83.110	89.420	12	24
9H-7, 31.0	83.210	89.520	15	25
9H-7, 41.0	83.310	89.620	22	35
9H-7, 51.0	83.410	91.770	19	34
9H-CC, 1.0	83.500	91.860	17	26
10H-1, 19.0	83.590	91.950	14	28
10H-1, 31.0	83.710	92.070	15	31
10H-1, 39.0	83.790	92.150	21	38
10H-1, 51.0	83.910	92.270	19	34
10H-1, 61.0	83.010	89.320	18	33
10H-1, 71.0	84.110	92.470	16	30
10H-1, 81.0	84.210	92.570	15	30
10H-1, 91.0	84.310	92.670	15	28
10H-1, 101.0	84.410	92.770	20	36
10H-1, 111.0	84.510	92.870	19	35
10H-1, 121.0	84.610	92.970	24	42
10H-1, 131.0	84.710	93.070	20	36
10H-1, 141.0	84.810	93.170	19	35
10H-2, 1.0	84.910	93.270	22	36
10H-2, 11.0	85.010	93.370	19	35
10H-2, 21.0	85.110	93.470	22	35
10H-2, 31.0	85.210	93.570	28	46
10H-2, 41.0	85.310	93.670	24	39
10H-2, 51.0	85.410	93.770	19	32
10H-2, 61.0	85.510	93.870	17	29
10H-2, 71.0	85.610	93.970	13	26
10H-2, 81.0	85.710	94.070	18	
10H-2, 91.0	85.810	94.170	26	40
10H-2, 101.0	85.910	94.270	25	38
10H-2, 111.0	86.010	94.370	28	41
10H-2, 121.0	86.110	94.470	24	37
10H-2, 131.0	86.210	94.570	18	32
130-807A-				
10H-2, 141.0	86.310	94.670	17	30
10H-3, 1.0	86.410	94.770	18	31
10H-3, 11.0	86.510	94.870	24	37
10H-3, 21.0	86.610	94.970	25	39
10H-3, 31.0	86.710	95.070	22	34
10H-3, 41.0	86.810	95.170	18	31
10H-3, 51.0	86.910	95.270	11	19
10H-3, 61.0	87.010	95.370	12	22
10H-3, 71.0	87.110	95.470	19	
10H-3, 80.0	87.200	95.560	21	
10H-3, 91.0	87.310	95.670	23	35
10H-3, 101.0	87.410	95.770	15	27
10H-3, 111.0	87.510	95.870	17	30
10H-3, 121.0	87.610	95.970	15	27
10H-3, 131.0	87.710	96.070	13	23
10H-3, 141.0	87.810	96.170	16	29
10H-4, 1.0	87.910	96.270	17	29
10H-4, 11.0	88.010	96.370	20	32
10H-4, 21.0	88.110	96.470	17	29
10H-4, 31.0	88.210	96.570	22	34
10H-4, 41.0	88.310	96.670	16	27
10H-4, 51.0	88.410	96.770	11	21
10H-4, 59.0	88.500	96.860	18	28
10H-4, 71.0	88.610	96.970	26	39
10H-4, 84.0	88.740	97.100	24	36
10H-4, 91.0	88.810	97.170	23	35
10H-4, 101.0	88.910	97.270	19	31
10H-4, 111.0	89.010	97.370	20	31
10H-4, 121.0	89.110	97.470	10	21
10H-4, 131.0	89.210	97.570	10	19
10H-4, 141.0	89.310	97.670	16	35
10H-5, 1.0	89.410	97.770	11	27
10H-5, 11.0	89.510	97.870	10	21
10H-5, 21.0	89.610	97.970	10	22
10H-5, 31.0	89.710	98.070	15	27
10H-5, 41.0	89.810	98.170	18	33
10H-5, 51.0	89.910	98.270	18	30
10H-5, 60.0	90.000	98.360	19	33
10H-5, 71.0	90.110	98.470	15	32
10H-5, 81.0	90.210	98.570	8	21
10H-5, 91.0	90.310	98.670	10	20
10H-5, 99.0	90.400	98.760	14	24
10H-5, 111.0	90.510	98.870	15	32
10H-5, 121.0	90.610	98.970	18	32
10H-5, 131.0	90.710	99.070	19	32
10H-5, 141.0	90.810	99.170	17	30
10H-6, 1.0	90.910	99.270	21	33
10H-6, 11.0	91.010	99.370	19	33
10H-6, 21.0	91.110	99.470	22	35
10H-6, 31.0	91.210	99.570	28	41
10H-6, 41.0	91.310	99.670	21	32
10H-6, 51.0	91.410	99.770	24	36
10H-6, 61.0	91.510	99.870	20	31
10H-6, 71.0	91.610	99.970	15	27
10H-6, 80.0	91.700	100.060	13	23
10H-6, 91.0	91.810	100.170	17	26
10H-6, 101.0	91.910	100.270	21	30
10H-6, 111.0	92.010	100.370	24	35
10H-6, 121.0	92.110	100.470	24	35
10H-6, 131.0	92.210	100.570	23	35
10H-6, 141.0	92.310	100.670	23	34
10H-7, 1.0	92.410	100.770	24	37
10H-7, 11.0	92.510	100.870	24	37
10H-7, 20.0	92.600	100.960	22	34
10H-7, 31.0	92.710	101.070	18	30
10H-7, 40.0	92.800	101.160	19	29
10H-7, 51.0	92.910	103.570	12	20
10H-7, 61.0	93.010	103.670	13	22
10H-7, 71.0	93.110	103.770	14	24
10H-CC, 1.0	93.120	103.780		
10H-CC, 11.0	93.220	103.880	16	28
11H-1, 1.0	92.910	103.570	13	22
11H-1, 41.0	93.310	103.970	19	33
11H-1, 51.0	93.410	104.070	16	29
11H-1, 61.0	93.510	104.170	16	28
11H-1, 72.0	93.620	104.280	16	27

Table 2 (continued).

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	>150 μm (%)	>63 μm (%)
130-807A-				
11H-1, 81.0	93.710	104.370	14	28
11H-1, 91.0	93.810	104.470	12	24
11H-1, 101.0	93.910	104.570	15	32
11H-1, 111.0	94.010	104.670	11	22
11H-1, 121.0	94.110	104.770	15	25
11H-1, 131.0	94.210	104.870	18	30
11H-1, 141.0	94.310	104.970	24	37
11H-2, 1.0	94.410	105.070	17	30
11H-2, 11.0	94.510	105.170	17	30
11H-2, 21.0	94.610	105.270	19	34
11H-2, 32.0	94.720	105.380	15	27
11H-2, 41.0	94.810	105.470	14	26
11H-2, 51.0	94.910	105.570	15	28
11H-2, 61.0	95.010	105.670	14	25
11H-2, 72.0	95.120	105.780	15	27
11H-2, 81.0	95.210	105.870	14	25
11H-2, 91.0	95.310	105.970	16	26
11H-2, 101.0	95.410	106.070	16	26
11H-2, 111.0	95.510	106.170	19	34
11H-2, 121.0	95.610	106.270	19	32
11H-2, 131.0	95.710	106.370	19	32
11H-2, 141.0	95.810	106.470	18	31
11H-3, 1.0	95.910	106.570	17	30
11H-3, 11.0	96.010	106.670	14	24
11H-3, 21.0	96.110	106.770	11	20
11H-3, 32.0	96.220	106.880	13	21
11H-3, 41.0	96.310	106.970	14	23
11H-3, 49.0	96.390	107.050	17	28
11H-3, 51.0	96.410	107.070	17	28
11H-3, 61.0	96.510	107.170	19	30
11H-3, 72.0	96.620	107.280	18	30
11H-3, 81.0	96.710	107.370	15	25
11H-3, 91.0	96.810	107.470	21	31
11H-3, 101.0	96.910	107.570	23	35
11H-3, 111.0	97.010	107.670	22	35
11H-3, 121.0	97.110	107.770	23	36
11H-3, 131.0	97.210	107.870	22	35
11H-3, 141.0	97.310	107.970	23	36
11H-4, 1.0	97.410	108.070	23	37
11H-4, 11.0	97.510	108.170	14	26
11H-4, 21.0	97.610	108.270	13	24
11H-4, 32.0	97.720	108.380	11	19
11H-4, 41.0	97.810	108.470	20	31
11H-4, 51.0	97.910	108.570	27	38
11H-4, 61.0	98.010	108.670	22	33
11H-4, 72.0	98.120	108.780	25	36
11H-4, 81.0	98.210	108.870	20	30
11H-4, 91.0	98.310	108.970	20	31
11H-4, 101.0	98.410	109.070	22	34
11H-4, 111.0	98.510	109.170	23	33
11H-4, 121.0	98.610	109.270	24	35
11H-4, 131.0	98.710	109.370	23	32
11H-4, 141.0	98.810	109.470	23	35
11H-5, 1.0	98.910	109.570	22	33
11H-5, 11.0	99.010	109.670	21	31
11H-5, 21.0	99.110	109.770	17	26
11H-5, 32.0	99.220	109.880	12	20
11H-5, 41.0	99.310	109.970	11	21
11H-5, 51.0	99.410	110.070	15	26
11H-5, 61.0	99.510	110.170	17	29
11H-5, 72.0	99.620	110.280	25	37
11H-5, 81.0	99.710	110.370	25	38
11H-5, 91.0	99.810	110.470	26	40
11H-5, 101.0	99.910	110.570	23	35
11H-5, 111.0	100.010	110.670	18	30
11H-5, 121.0	100.110	110.770	16	29
11H-5, 131.0	100.210	110.870	17	29
11H-6, 1.0	100.410	111.070	18	31
11H-6, 11.0	100.510	111.170	19	30
11H-6, 21.0	100.610	111.270	16	27
11H-6, 32.0	100.710	111.370	17	27
11H-6, 41.0	100.810	111.470	15	26
11H-6, 51.0	100.910	111.570	15	26
11H-6, 61.0	101.010	111.670	17	28
11H-6, 72.0	101.110	111.770	19	29
11H-6, 81.0	101.210	111.870	24	35

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	>150 μm (%)	>63 μm (%)
130-807A-				
11H-6, 91.0	101.310	111.970	26	39
11H-6, 101.0	101.410	112.070	22	34
11H-6, 111.0	101.510	112.170	19	32
11H-6, 121.0	101.610	112.270	15	30
11H-6, 131.0	101.710	112.370	13	26
11H-6, 141.0	101.810	112.470	15	28
11H-7, 1.0	101.910	112.570	11	20
11H-7, 11.0	102.010	112.670	15	25
11H-7, 21.0	102.110	112.770	18	29
11H-7, 32.0	102.210	112.870	17	30
11H-7, 41.0	102.310	112.970	18	29
11H-7, 51.0	102.410	114.070	18	29
11H-7, 61.0	102.510	114.170	18	29
11H-CC, 1.0	102.610	114.270	20	31
11H-CC, 11.0	102.710	114.370	23	35
12H-1, 1.0	102.410	114.070	16	25
12H-1, 11.0	102.510	114.170	13	21
12H-1, 21.0	102.610	114.270	16	27
12H-1, 31.0	102.710	114.370	17	27
12H-1, 46.0	102.860	114.520	16	27
12H-1, 51.0	102.910	114.570	15	24
12H-1, 61.0	103.010	114.670	14	24
12H-1, 71.0	103.110	114.770	11	18
12H-1, 81.0	103.210	114.870	13	22
12H-1, 91.0	103.310	114.970	9	15
12H-1, 101.0	103.410	115.070	11	19
12H-1, 112.0	103.520	115.180	9	16
12H-1, 121.0	103.610	115.270	11	
12H-1, 131.0	103.710	115.370	12	21
12H-1, 141.0	103.810	115.470	14	24
12H-1, 147.0	103.870	115.530	13	22
12H-2, 1.0	103.910	115.570	16	27
12H-2, 11.0	104.010	115.670	14	24
12H-2, 21.0	104.110	115.770	17	29
12H-2, 31.0	104.210	115.870	15	24
12H-2, 41.0	104.310	115.970	16	26
12H-2, 51.0	104.410	116.070	15	24
12H-2, 61.0	104.510	116.170	14	23
12H-2, 71.0	104.610	116.270	8	14
12H-2, 81.0	104.710	116.370	9	17
12H-2, 91.0	104.810	116.470	5	10
12H-2, 101.0	104.910	116.570	11	21
12H-2, 111.0	105.010	116.670	9	17
12H-2, 121.0	105.110	116.770	12	22
12H-2, 131.0	105.210	116.870	11	20
12H-2, 141.0	105.310	116.970	14	25
12H-2, 147.0	105.370	117.030	10	20
12H-3, 1.0	105.410	117.070	12	24
12H-3, 11.0	105.510	117.170	11	22
12H-3, 21.0	105.610	117.270	12	23
12H-3, 31.0	105.710	117.370	13	22
12H-3, 41.0	105.810	117.470	18	31
12H-3, 51.0	105.910	117.570	12	22
12H-3, 61.0	106.010	117.670	14	25
12H-3, 71.0	106.110	117.770	12	21
12H-3, 81.0	106.210	117.870	13	23
12H-3, 91.0	106.310	117.970	11	19
12H-3, 101.0	106.410	118.070	11	20
12H-3, 112.0	106.520	118.180	5	10
12H-3, 121.0	106.610	118.270	7	14
12H-3, 131.0	106.710	118.370	5	10
12H-3, 141.0	106.810	118.470	12	22
12H-3, 146.0	106.860	118.520	12	21
12H-4, 1.0	106.910	118.570	12	23
12H-4, 11.0	107.010	118.670	13	22
12H-4, 21.0	107.110	118.770	15	25
12H-4, 31.0	107.210	118.870	14	22
12H-4, 41.0	107.310	118.970	16	26
12H-4, 51.0	107.410	119.070	14	24
12H-4, 61.0	107.510	119.170	16	28
12H-4, 71.0	107.610	119.270	22	33
12H-4, 81.0	107.710	119.370	16	28
12H-4, 91.0	107.810	119.470	12	22
12H-4, 101.0	107.910	119.570	13	22
12H-4, 110.0	108.000	119.660	12	19
12H-5, 1.0	108.410	120.070	20	31

Table 2 (continued).

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	>150 µm (%)	>63 µm (%)
130-807A-				
12H-5, 11.0	108.510	120.170	18	28
12H-5, 21.0	108.610	120.270	21	32
12H-5, 31.0	108.710	120.370	20	32
12H-5, 41.0	108.810	120.470	22	34
12H-5, 51.0	108.910	120.570	17	27
12H-5, 61.0	109.010	120.670	14	24
12H-5, 71.0	109.110	120.770	12	21
12H-5, 81.0	109.210	120.870	14	22
12H-5, 91.0	109.310	120.970	19	27
12H-5, 101.0	109.410	121.070	23	34
12H-5, 111.0	109.510	121.170	19	29
12H-5, 121.0	109.610	121.270	18	31
12H-5, 131.0	109.710	121.370	18	27
12H-5, 141.0	109.810	121.470	18	30
12H-5, 146.0	109.860	121.520	14	22
12H-6, 1.0	109.910	121.570	17	27
12H-6, 11.0	110.010	121.670	13	22
12H-6, 21.0	110.110	121.770	19	32
12H-6, 31.0	110.210	121.870	19	30
12H-6, 41.0	110.310	121.970	21	34
12H-6, 51.0	110.410	122.070	19	31
12H-6, 61.0	110.510	122.170	22	36
12H-6, 71.0	110.610	122.270	19	30
12H-6, 81.0	110.710	122.370	21	32
12H-6, 91.0	110.810	122.470	10	17
12H-6, 101.0	110.910	122.570	13	22
12H-6, 110.0	111.000	122.660	9	16
12H-6, 121.0	111.110	122.770	16	26
12H-6, 131.0	111.210	122.870	15	25
12H-6, 141.0	111.310	122.970	20	32
12H-6, 148.0	111.380	123.040	16	28
12H-7, 1.0	111.410	123.070		
12H-7, 11.0	111.510	123.170	18	29
12H-7, 21.0	111.610	123.270	17	28
12H-7, 31.0	111.710	123.370	15	24
12H-7, 41.0	111.810	123.470	17	29
12H-7, 51.0	111.910	125.950	16	27
12H-7, 61.0	112.010	126.050	19	32
13H-1, 21.0	112.110	126.150	20	31
13H-1, 31.0	112.210	126.250	18	29
13H-1, 41.0	112.310	126.350	20	31
13H-1, 51.0	112.410	126.450	20	31
13H-1, 61.0	112.510	126.550	17	28
13H-1, 71.0	112.610	126.650	17	27
13H-1, 81.0	112.710	126.750	20	30
13H-1, 91.0	112.810	126.850	17	29
13H-1, 101.0	112.910	126.950	19	31
13H-1, 111.0	113.010	127.050	19	30
13H-1, 121.0	113.110	127.150	21	33
13H-1, 131.0	113.210	127.250	19	31
13H-1, 141.0	113.310	127.345	19	30
13H-2, 11.0	113.510	127.537	21	31
13H-2, 21.0	113.610	127.632	13	21
13H-2, 31.0	113.710	127.728	15	25
13H-2, 41.0	113.810	127.824	18	26
13H-2, 51.0	113.910	127.919	19	29
13H-2, 61.0	114.010	128.015	21	30
13H-2, 71.0	114.110	128.111	24	35
13H-2, 91.0	114.310	128.302	23	34
13H-2, 101.0	114.410	128.398	22	33
13H-2, 121.0	114.610	128.589	21	30
13H-2, 131.0	114.710	128.685	19	29
13H-2, 141.0	114.810	128.780	19	29
13H-3, 1.0	114.910	128.876	19	29
13H-3, 13.0	114.030	128.034	19	30
13H-3, 21.0	115.110	129.067	21	30
13H-3, 31.0	115.210	129.163	21	30
13H-3, 41.0	115.310	129.259	21	30
13H-3, 51.0	115.410	129.355	20	28
13H-3, 61.0	115.510	129.450	19	26
13H-3, 71.0	115.610	129.546	21	30
13H-3, 81.0	115.710	129.642	20	29
13H-3, 91.0	115.810	129.737	23	33
13H-3, 101.0	115.910	129.833	26	37
13H-3, 121.0	116.110	130.024	24	34
13H-3, 131.0	116.210	130.120	25	35

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	>150 µm (%)	>63 µm (%)
130-807A-				
13H-3, 141.0	116.310	130.216	21	29
13H-4, 1.0	116.410	130.311	18	26
13H-4, 11.0	116.510	130.407	12	19
13H-4, 21.0	116.610	130.503	10	17
13H-4, 31.0	116.710	130.598	16	25
13H-4, 41.0	116.810	130.694	18	28
13H-4, 51.0	116.910	130.790	21	33
13H-4, 61.0	117.010	130.885	17	28
13H-4, 71.0	117.110	130.981	20	31
13H-4, 81.0	117.210	131.077	20	31
13H-4, 91.0	117.310	131.172	20	30
13H-4, 101.0	117.410	131.268	19	29
13H-4, 121.0	117.610	131.459	25	36
13H-4, 131.0	117.710	131.555	25	37
13H-4, 141.0	117.810	131.651	23	36
13H-5, 1.0	117.910	131.747	23	35
13H-5, 11.0	118.010	131.842	22	33
13H-5, 21.0	118.110	131.938	21	32
13H-5, 31.0	118.210	132.034	17	26
13H-5, 41.0	118.310	132.129	15	25
13H-5, 51.0	118.410	132.225	16	25
13H-5, 61.0	118.510	132.321	15	25
13H-5, 71.0	118.610	132.416	20	31
13H-5, 81.0	118.710	132.512	20	33
13H-5, 91.0	118.810	132.608	20	33
13H-5, 101.0	118.910	132.703	15	28
13H-5, 111.0	119.010	132.799	22	35
13H-5, 121.0	119.110	132.895	23	37
13H-5, 131.0	119.210	132.990	23	
13H-5, 141.0	119.310	133.086	24	37
13H-6, 1.0	119.410	133.182	21	30
13H-6, 11.0	119.510	133.277	22	32
13H-6, 21.0	119.610	133.373	25	35
13H-6, 31.0	119.710	133.469	19	27
13H-6, 41.0	119.810	133.564	20	
13H-6, 51.0	119.910	133.660	17	24
13H-6, 61.0	120.010	133.756	20	28
13H-6, 71.0	120.110	133.851	23	
13H-6, 81.0	120.210	133.947	23	
13H-6, 91.0	120.310	134.043	23	34
13H-6, 101.0	120.410	134.139	25	37
13H-6, 111.0	120.510	134.234	25	38
13H-6, 121.0	120.610	134.330	23	35
13H-6, 131.0	120.710	134.426	26	38
13H-6, 141.0	120.810	134.521	25	36
13H-7, 1.0	120.910	134.617	27	38
13H-7, 11.0	121.010	134.713	26	37
13H-7, 21.0	121.110	134.808	23	34
13H-7, 31.0	121.210	134.904	18	27
13H-7, 41.0	121.310	135.000	15	26
13H-7, 51.0	121.410	135.095	22	33
13H-CC, 1.0	121.470	135.153	19	31
47H-1, 71.0	438.210	438.210	7	26
47H-1, 141.0	438.910	438.910	9	28
47H-2, 71.0	439.710	439.710	13	31
47H-2, 141.0	440.410	440.410	5	8
47H-3, 71.0	441.210	441.210	18	35
47H-3, 141.0	441.910	441.910	9	10
47H-4, 71.0	442.710	442.710	3	22
47H-4, 141.0	443.410	443.410	12	24
47H-5, 71.0	444.210	444.210	14	29
47H-5, 141.0	444.910	444.910	17	30
47H-6, 71.0	445.710	445.710	16	33
48H-1, 71.0	447.810	447.810	7	23
48H-1, 141.0	448.510	448.510	3	9
48H-2, 71.0	449.310	449.310	10	23
48H-2, 141.0	450.010	450.010	5	15
48H-3, 71.0	450.810	450.810	2	14
48H-4, 71.0	452.310	452.310	9	23
48H-4, 141.0	453.010	453.010	7	16
48H-5, 71.0	453.810	453.810	3	17
48H-5, 141.0	454.510	454.510	4	15
48H-6, 71.0	455.310	455.310	5	24
48H-6, 141.0	456.010	456.010	2	5
49H-1, 71.0	457.510	457.510	10	33
49H-1, 141.0	458.210	458.210	6	28

Table 2 (continued).

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	>150 µm (%)	>63 µm (%)
130-807A-				
49H-2, 71.0	459.010	459.010	9	28
49H-2, 141.0	459.710	459.710	3	11
49H-3, 71.0	460.510	460.510	13	33
49H-3, 141.0	461.210	461.210	3	23
49H-4, 67.0	461.970	461.970	5	29
49H-4, 141.0	462.710	462.710	5	28
49H-5, 67.0	463.470	463.470	1	23
49H-5, 139.0	464.190	464.190	3	22
50H-1, 71.0	467.110	467.110	2	8
50H-1, 141.0	467.810	467.810	6	27
50H-2, 71.0	468.610	468.610	4	28
50H-2, 141.0	469.310	469.310	6	24
50H-3, 71.0	470.110	470.110	4	14
50H-3, 141.0	470.810	470.810	2	12
50H-4, 71.0	471.610	471.610	5	20
50H-4, 141.0	472.310	472.310	5	15
50H-5, 71.0	473.110	473.110	4	21
50H-5, 141.0	473.810	473.810	3	13
50H-6, 71.0	474.610	474.610	3	14
50H-6, 141.0	475.310	475.310	4	18
51H-1, 71.0	476.810	476.810	5	25
51H-1, 141.0	477.510	477.510	4	16
51H-2, 71.0	478.310	478.310	5	25
51H-2, 144.0	479.040	479.040	12	27
51H-3, 71.0	479.810	479.810	3	18
51H-4, 71.0	481.310	481.310	5	22
51H-4, 141.0	482.010	482.010	4	15
51H-5, 74.0	482.840	482.840	6	14
51H-5, 141.0	483.510	483.510	4	23
51H-6, 75.5	484.355	484.355	6	16
52H-3, 67.0	489.510	489.510	7	22
52H-3, 139.0	490.210	490.210	4	18
52H-4, 71.0	491.010	491.010	5	19
52H-4, 137.0	491.710	491.710	7	21
52H-5, 71.0	492.510	492.510	5	23
52H-5, 141.0	493.210	493.210	8	27
52H-6, 73.0	494.010	494.010	5	21
53H-1, 73.5	496.115	496.115	5	20
53H-1, 144.5	496.815	496.815	5	20
53H-2, 71.5	497.615	497.615	5	19
53H-2, 140.5	498.315	498.315	6	22
53H-3, 71.5	499.115	499.115	1	15
53H-3, 145.5	499.815	499.815	3	18
53H-4, 71.5	500.615	500.615	4	20
53H-4, 145.5	501.315	501.315	4	21
53H-5, 71.5	502.115	502.115	3	18
53H-5, 141.5	502.815	502.815	8	26
53H-6, 71.5	503.615	503.615	6	25
54H-1, 70.0	505.800	505.800	6	17
54H-1, 141.5	506.515	506.515	7	27
54H-2, 71.5	507.315	507.315	6	12
54H-2, 141.5	508.015	508.015	3	22
54H-3, 71.5	508.815	508.815	3	16
54H-4, 71.0	510.310	510.310	6	25
54H-4, 140.5	511.005	511.005	4	15
54H-5, 71.5	511.815	511.815	4	20
54H-5, 141.5	512.515	512.515	6	26
54H-6, 46.5	513.065	513.065	4	24
54H-6, 89.5	513.490	513.490	10	25
55H-1, 71.5	515.515	515.515	2	15
55H-1, 142.5	516.215	516.215	2	16
55H-2, 72.5	517.015	517.015	3	20
55H-2, 142.5	517.725	517.725	4	26
55H-3, 71.5	518.515	518.515	2	17
55H-3, 133.5	519.115	519.115	4	24
55H-4, 71.5	520.015	520.015	5	24
55H-4, 139.5	520.715	520.715	2	19
55H-5, 71.5	521.515	521.515	4	26
55H-5, 140.5	522.215	522.215	5	26
55H-6, 71.5	523.015	523.015	3	18
55H-6, 140.5	523.715	523.715	3	17
56H-1, 70.5	524.715	524.715	3	19
56H-1, 142.5	525.415	525.415	4	25
56H-2, 76.5	526.315	526.315	2	20
56H-2, 142.5	526.915	526.915	3	18
56H-3, 68.5	527.715	527.715	2	17
130-807A-				
56H-3, 140.5	528.415	528.415	3	19
56H-4, 73.5	529.215	529.215	2	14
56H-4, 140.5	529.915	529.915	4	14
56H-5, 67.5	530.715	530.715	3	19
56H-5, 140.5	531.415	531.415	3	18
56H-6, 70.5	532.215	532.215	2	16
57H-1, 70.5	534.415	534.415	5	27
57H-1, 140.0	535.120	535.120	4	22
57H-2, 70.5	535.915	535.915	3	23
57H-2, 140.0	536.620	536.620	3	22
57H-3, 70.5	537.415	537.415	4	25
57H-3, 140.0	538.120	538.120	2	20
57H-4, 70.5	538.915	538.915	2	17
57H-5, 70.5	540.415	540.415	2	19
57H-5, 140.0	541.120	541.120	3	21
57H-6, 67.0	541.920	541.920	2	14
58H-1, 73.0	544.110	544.110	3	22
58H-1, 147.0	544.910	544.910	4	22
58H-2, 73.0	545.610	545.610	3	19
58H-2, 139.0	546.310	546.310	2	19
58H-3, 71.0	547.110	547.110	4	22
58H-3, 141.0	547.810	547.810	5	25
58H-4, 71.0	548.610	548.610	4	24
58H-4, 141.0	549.310	549.310	5	18
58H-5, 71.0	550.110	550.110	4	22
58H-5, 145.0	550.810	550.810	3	19
59H-1, 41.5	553.415	553.415	3	14
59H-1, 141.5	554.415	554.415	2	10
59H-2, 41.5	554.915	554.915	4	20
59H-2, 141.5	555.915	555.915	5	32
59H-3, 41.5	556.415	556.415	5	28
59H-3, 141.5	557.415	557.415	5	26
59H-4, 41.5	557.915	557.915	2	18
59H-4, 141.5	558.915	558.915	3	22
59H-5, 41.5	559.415	559.415	5	23
60H-1, 71.5	563.315	563.315	3	19
60H-1, 141.5	564.015	564.015	2	15
60H-2, 71.5	564.815	564.815	3	21
60H-2, 141.5	565.515	565.515	2	16
60H-3, 71.5	566.315	566.315	1	12
60H-3, 141.5	567.015	567.015	16	46
60H-4, 71.5	567.815	567.815	3	18
60H-5, 71.5	569.315	569.315	4	21
61H-1, 71.5	573.015	573.015	3	10
61H-1, 141.5	573.715	573.715	4	25
61H-2, 71.5	574.515	574.515	4	22
61H-2, 142.5	575.215	575.215	2	19
61H-3, 71.5	576.015	576.015	2	17
61H-3, 145.5	576.715	576.715	3	18
61H-4, 65.5	577.415	577.415	2	23
61H-4, 141.5	578.215	578.215	4	19
61H-5, 72.5	579.015	579.015	5	28
61H-5, 139.5	579.715	579.715	13	35
61H-6, 71.5	580.515	580.515	6	29
62H-1, 71.0	582.610	582.610	11	36
62H-1, 141.0	583.310	583.310	6	31
62H-2, 71.0	584.110	584.110	5	25
62H-2, 141.0	584.810	584.810	6	27
62H-3, 71.0	585.610	585.610	7	30
62H-3, 141.0	586.310	586.310	3	25
62H-4, 74.0	587.110	587.110	6	30
62H-4, 141.0	587.810	587.810	8	23
62H-5, 72.0	588.610	588.610	6	27
62H-5, 141.0	589.310	589.310	4	24
63H-1, 56.5	592.215	592.215	4	21
63H-1, 141.5	593.015	593.015	4	22
63H-2, 60.5	593.715	593.715	1	19
63H-2, 149.5	594.610	594.610	2	20
63H-3, 71.5	595.315	595.315	5	22
63H-4, 74.5	596.815	596.815	2	23
63H-4, 141.5	597.515	597.515	2	24
63H-5, 65.5	598.215	598.215	4	29
64H-1, 70.5	602.015	602.015	4	25
64H-1, 141.5	602.715	602.715	2	9
64H-2, 74.5	603.515	603.515	7	28
64H-2, 141.5	604.215	604.215	6	28

Table 2 (continued).

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	>150 µm (%)	>63 µm (%)
130-807A-				
64H-3, 69.5	605.015	605.015	6	27
64H-3, 136.5	605.665	605.665	14	32
64H-4, 70.5	606.515	606.515	4	24
64H-4, 131.0	607.115	607.115	6	25
64H-5, 72.0	608.015	608.015	8	33
65H-1, 72.5	611.715	611.715	10	32
65H-1, 141.5	612.415	612.415	11	32
65H-2, 71.5	613.215	613.215	7	30
65H-2, 141.5	613.915	613.915	7	24
65H-3, 70.5	614.715	614.715	8	23
65H-3, 141.5	615.415	615.415	7	27
65H-4, 71.5	616.215	616.215	6	21
65H-4, 141.5	616.915	616.915	7	27
65H-5, 71.5	617.715	617.715	5	23
66H-1, 71.5	621.315	621.315	8	26
66H-1, 141.5	622.015	622.015	5	23
66H-2, 72.5	622.815	622.815	8	25
66H-3, 73.5	624.315	624.315	11	26
66H-3, 141.5	625.015	625.015	10	25
66H-4, 73.5	625.815	625.815	5	25
66H-4, 141.0	626.515	626.515	2	14
67H-1, 60.5	630.910	630.910	8	27
67H-2, 142.0	633.210	633.210	7	25
67H-3, 53.5	633.815	633.815	7	26
67H-3, 126.5	634.615	634.615	6	24
68H-1, 121.5	641.115	641.115	9	28
68H-2, 69.5	642.115	642.115	7	22
68H-2, 132.5	642.715	642.715	5	30
68H-3, 67.5	643.615	643.615	4	25
68H-3, 138.5	644.315	644.315	7	25
68H-4, 61.5	645.015	645.015	9	28
68H-4, 133.5	645.715	645.715	14	31
68H-5, 30.5	646.215	646.215	11	27
130-807B-				
2H-2, 111	5.710	7.210	24	37
2H-2, 121	5.810	7.310	17	26
2H-2, 131	5.910	7.410	19	28
2H-2, 141	6.010	7.510	26	37
2H-3, 1	6.110	7.610	22	31
2H-3, 11	6.210	7.710	17	25
2H-3, 21	6.310	7.810	21	30
2H-3, 31	6.410	7.910	18	26
2H-3, 41	6.510	8.010	17	25
2H-3, 51	6.610	8.110	12	21
2H-3, 61	6.710	8.210	15	22
2H-3, 71	6.810	8.310	19	30
2H-3, 81	6.910	8.410	22	31
2H-3, 91	7.010	8.510	25	36
2H-4, 92	8.510	9.833	21	29
2H-4, 95	8.540	9.852	22	30
2H-4, 98	8.570	9.872	18	25
2H-5, 31	9.400	10.562	24	34
2H-5, 37	9.460	10.616	27	37
2H-5, 43	9.520	10.669	28	38
2H-5, 120	10.290	11.355	24	33
2H-5, 123	10.320	11.380	24	33
2H-5, 125	10.340	11.397	24	39
2H-5, 129	10.380	11.430	26	36
2H-6, 56	11.150	12.198	26	36
2H-6, 60	11.190	12.236	16	24
2H-6, 63	11.220	12.265	16	23
4H-6, 28	29.870	33.545	27	39
4H-6, 31	29.900	33.582	25	38
4H-6, 34	29.930	33.618	25	35
4H-6, 41	30.000	33.703	27	37
4H-6, 116	30.750	34.310	29	39
4H-6, 120	30.790	34.350	33	45
4H-6, 123	30.820	34.380	27	39
4H-6, 132	30.910	34.470	26	36
5H-1, 93	32.520	36.571	19	26
130-807B-				
5H-1, 96	32.550	36.598	16	28
5H-1, 99	32.580	36.626	16	22
5H-5, 6	37.650	41.408	17	23
5H-5, 8.5	37.680	41.436	16	24
5H-5, 11.5	37.710	41.463	16	23
5H-5, 14.5	37.740	41.490	17	24
12H-3, 2	101.120	112.780	15	24
12H-3, 11	101.210	112.870	15	24
12H-3, 21	101.310	112.970	15	25
12H-3, 31	101.410	113.070	17	27
12H-3, 41	101.510	113.170	14	23
12H-3, 51	101.610	113.270	15	24
12H-3, 61	101.710	113.370	15	24
12H-3, 71	101.810	113.470	11	19
12H-3, 81	101.910	113.570	8	14
12H-3, 91	102.010	113.670	7	12
12H-3, 101	102.110	113.770	6	13
12H-3, 107	102.170	113.830	7	14
12H-3, 118	102.280	113.940	8	16
12H-3, 131	102.410	114.070	11	
12H-3, 141	102.510	114.170	9	19
12H-4, 2	102.620	114.280	11	23
12H-4, 11	102.710	114.370	11	17
12H-4, 21	102.810	114.470	12	23
12H-4, 31	102.910	114.570	11	20
12H-4, 41	103.010	114.670	16	26
13H-2, 2	109.120	121.980	18	
13H-2, 11	109.210	122.070	19	33
13H-2, 21	109.310	122.170	20	34
13H-2, 31	109.410	122.270	19	32
13H-2, 41	109.510	122.370	16	27
13H-2, 51	109.610	122.470	13	22
13H-2, 61	109.710	122.577	9	15
13H-2, 71	109.810	122.685	9	15
13H-2, 81	109.910	122.792	14	22
13H-2, 91	110.010	122.899	18	27
13H-2, 101	110.110	123.006	21	27
13H-2, 111	110.210	123.114	21	32
13H-2, 120.5	110.310	123.221	17	25
13H-2, 130.5	110.410	123.328	20	31
13H-2, 141	110.510	123.435	18	30
13H-3, 3	110.630	123.564	18	26
13H-3, 11	110.710	123.650	17	27
13H-3, 21	110.810	123.750	15	26
13H-3, 31	110.910	123.850	17	28
13H-3, 41	111.010	123.950	20	34
13H-3, 51	111.110	124.050	18	31
13H-3, 61	111.210	124.150	20	33
13H-3, 71	111.310	124.250	16	27
13H-3, 81	111.410	124.350	14	25
13H-3, 91	111.500	124.440	11	20
13H-3, 101	111.610	124.550	10	18
13H-3, 112	111.720	124.660	15	23
13H-3, 121	111.810	124.750	18	31
13H-3, 131	111.910	124.850	15	25
13H-3, 141	112.010	124.950	22	35
13H-4, 2	112.120	125.060	22	34
13H-4, 11	112.210	125.150	24	37
13H-4, 21	112.310	125.250	24	36
13H-4, 31	112.410	125.350	21	32
13H-4, 41	112.510	125.450	19	30
13H-4, 51	112.610	125.550	18	29
13H-4, 61	112.710	125.650	16	27
13H-4, 71	112.810	125.750	18	29
13H-4, 81	112.910	125.850	18	29
13H-4, 91	113.010	125.950	19	30
13H-4, 101	113.110	126.050	20	31
13H-4, 112	113.220	126.160	20	31
13H-4, 121	113.310	126.250	19	30
13H-4, 131	113.410	126.350	19	29
13H-4, 141	113.510	126.397	16	26

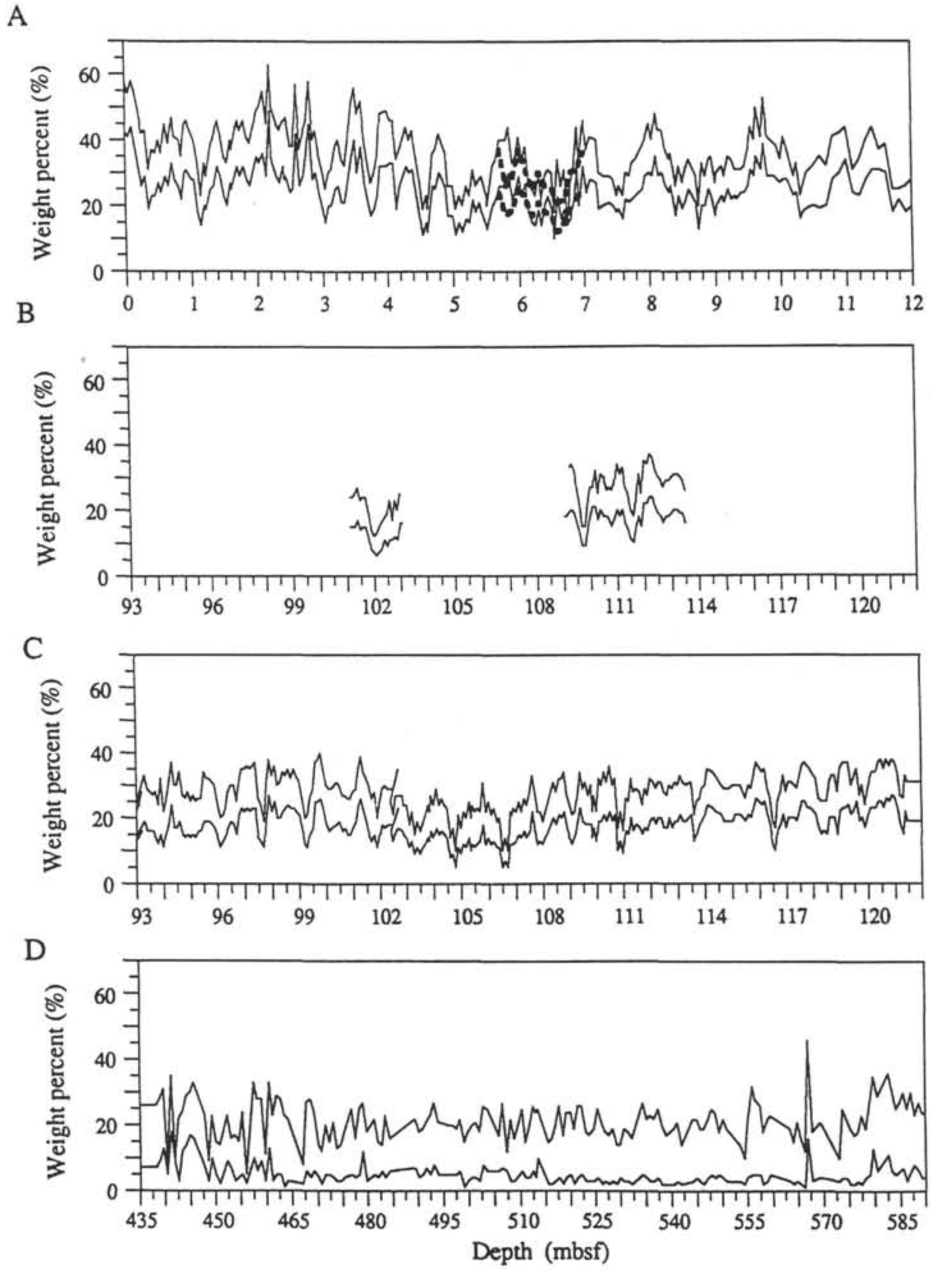

Figure 1. Coarse fraction percent vs. depth at Site 807. Upper line is percent >63 μm, and lower line is percent >150 μm. **A.** Hole 807A, 0–12 mbsf (thick dashes are from Hole 807B). **B.** Hole 807B, 93–122 mbsf. **C.** Hole 807A, 93–122 mbsf. **D.** Hole 807A, 435–590 mbsf.

of the global $\delta^{18}O$ stratigraphy with amplitudes that closely match the coral-reef terrace sea-level record. Hence, Site 807 should provide an excellent record of Neogene glacio-eustasy. The record for 4.05–4.9 Ma exhibits an average amplitude of 0.5‰ about a mean $\delta^{18}O$ of 1.1‰, 0.75‰ more positive than Holocene values. The record shows a 0.8‰, 40-k.y.-duration excursion to Holocene values centered at 4.85 Ma, a 125-k.y.-duration increase to the most positive $\delta^{18}O$ of the interval consistent with the last glacial maximum between 4.45 and 4.325 Ma, and a 0.5‰ drift to more negative $\delta^{18}O$ from 4.325 to 4.05 Ma. At 4.1 Ma, a sharp negative peak reaches Holocene values. From 24 to 16.5 Ma, fluctuations of 0.5‰ track a sine-wave in mean $\delta^{18}O$ with broad minimum peaking at –0.8‰ centered on 22–23 and 17 Ma, and a broad maximum peaking at –0.4‰ centered on 19–20 Ma.

It is unlikely that Antarctic ice volume could be the primary contributor to the enriched $\delta^{18}O$ record of the early Pliocene and early Miocene. On the other hand, it is conceivable that tropical ocean-atmosphere variability could be a principal contributor. An example of this would be if the South Equatorial Current dominated the Site 807 region in the Neogene as opposed to the North Equatorial Counter-Current in the late Pleistocene. If the paleocurrents resembled their modern counterparts, the South Equatorial Current could have brought cooler, more saline water over Site 807. Dissolution/diagenesis could also be an important contributor to the enriched Neogene $\delta^{18}O$ as suggested by the decreased Neogene coarse-fraction percentages.

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* Abbreviations for names of organizations and publication titles in ODP reference lists follow the style given in *Chemical Abstracts Service Source Index* (published by American Chemical Society).

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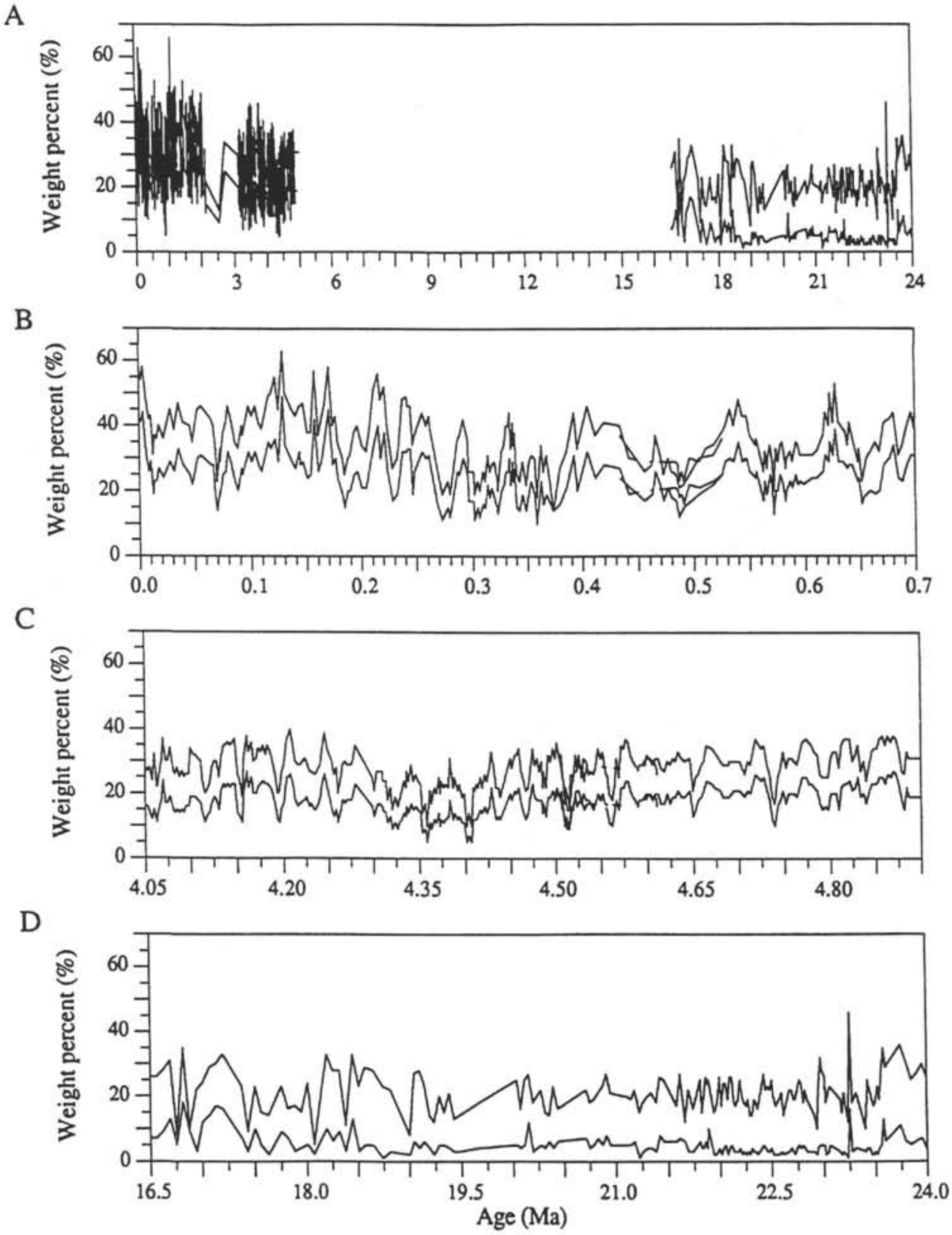

Figure 2. Coarse fraction percent vs. age at Site 807. Upper line is percent >63 µm. Lower line is percent >150 µm. **A.** 0–24 Ma. **B.** 0–0.7 Ma. **C.** 4.05–4.9 Ma. **D.** 16.5–24 Ma.

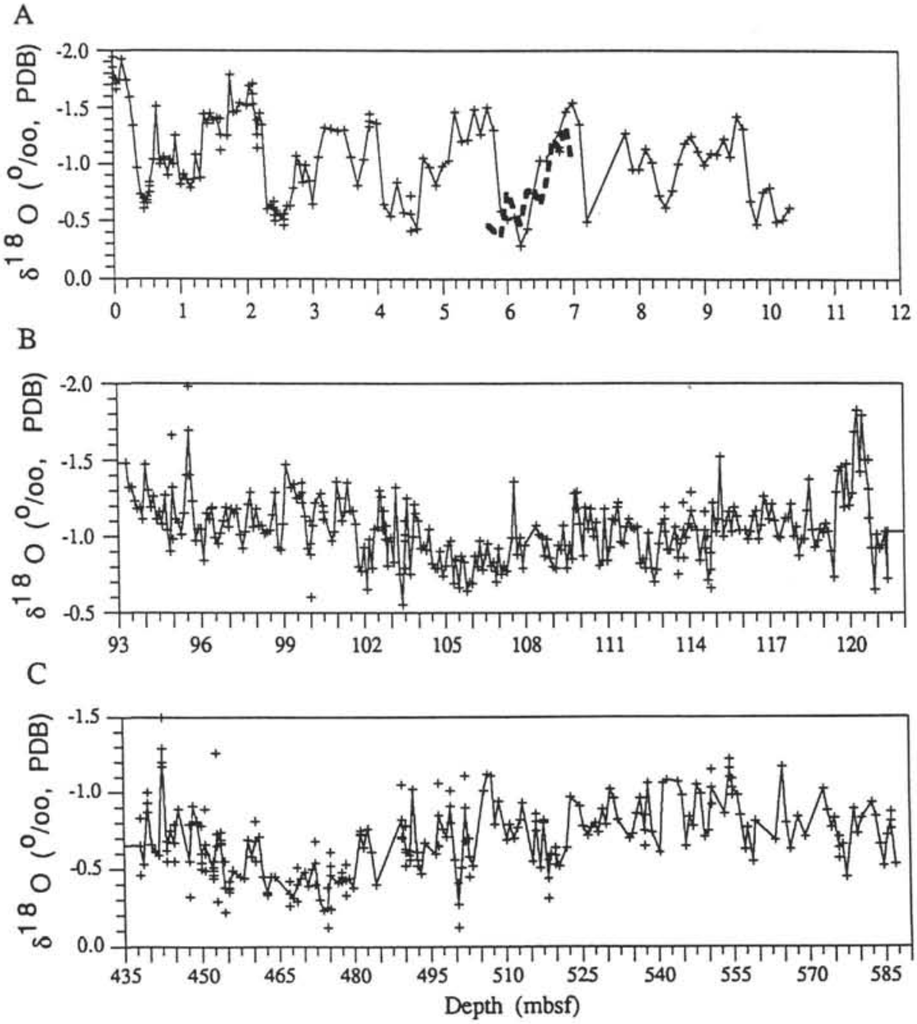

Figure 3. Oxygen isotope data for shallow-dwelling planktonic foraminifers vs. depth at Site 807. **A.** 0–12 mbsf (thick dashes are from Hole 807B). **B.** 93–122 mbsf. **C.** 435–590 mbsf.

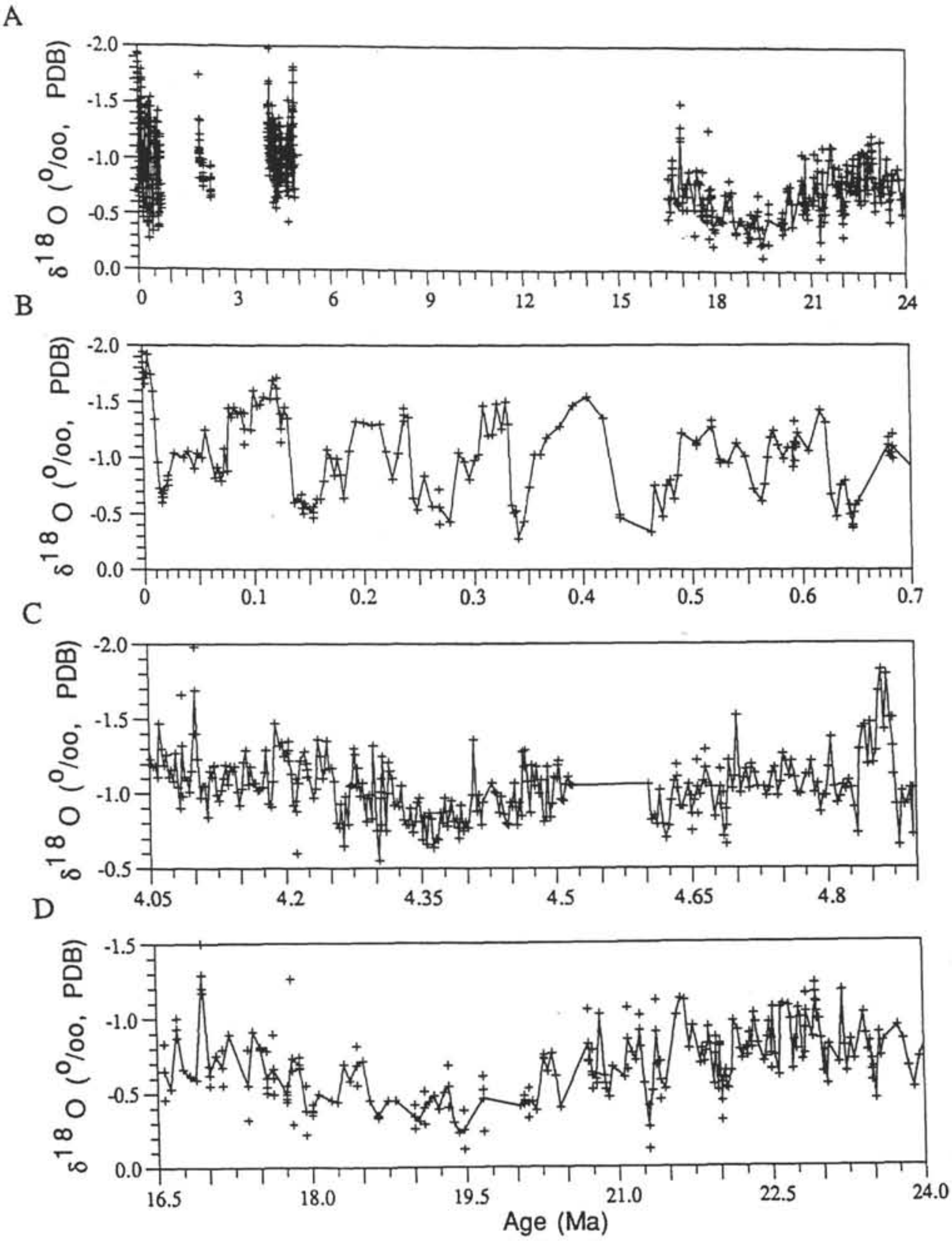

Figure 4. Oxygen isotope data for shallow-dwelling planktonic foraminifers vs. age at Site 807. **A.** 0–24 Ma. **B.** 0–0.7 Ma. **C.** 4.05–4.9 Ma. **D.** 16.5–24 Ma.

Table 3. Oxygen isotope data for *Globigerinoides triloba* (300–355 μm), Holes 807A and 807B.

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	Trans.	^{13}C (PDB)	^{18}O (PDB)
130-807A-					
1H-1, 1	0.01	0.01	5.4	1.95	−1.85
1H-1, 6	0.06	0.06	6.3	2.05	−1.71
1H-1, 11	0.11	0.11	5.6	1.95	−1.74
1H-1, 15	0.15	0.15	5.9	1.87	−1.92
1H-1, 21	0.21	0.21	5.9	1.95	−1.74
1H-1, 26	0.26	0.26	4.4	2.01	−1.59
1H-1, 31	0.31	0.31	5.2	1.85	−1.34
1H-1, 36	0.36	0.36	2.6	1.92	−0.96
1H-1, 41	0.41	0.41	4.4	1.92	−0.73
1H-1, 46	0.46	0.46	4.8	1.97	−0.65
1H-1, 51	0.51	0.51	3.0	2.06	−0.68
1H-1, 55	0.55	0.55	4.6	2.17	−0.80
1H-1, 61	0.61	0.61	4.4	2.00	−1.04
1H-1, 66	0.66	0.66	4.4	2.05	−1.51
1H-1, 71	0.71	0.71	4.1	1.91	−1.00
1H-1, 76	0.76	0.76	4.4	1.79	−1.06
1H-1, 83	0.83	0.83	4.8	2.06	−0.90
1H-1, 86	0.86	0.86	3.0	1.93	−1.04
1H-1, 91	0.91	0.91	4.4	1.86	−1.00
1H-1, 94	0.94	0.94	4.4	1.92	−1.25
1H-1, 101	1.01	1.01	4.4	1.96	−0.82
1H-1, 106	1.06	1.06	4.1	1.86	−0.91
1H-1, 111	1.11	1.11	3.3	1.64	−0.86
1H-1, 116	1.16	1.16	4.1	1.70	−0.79
1H-1, 121	1.21	1.21	4.1	1.79	−0.87
1H-1, 124	1.24	1.24	4.4	1.93	−1.08
1H-1, 131	1.31	1.31	3.3	2.07	−0.88
1H-1, 136	1.36	1.36	5.2	2.01	−1.44
1H-1, 141	1.41	1.41	3.3	1.76	−1.36
1H-1, 146	1.46	1.46	4.1	2.12	−1.45
1H-2, 1	1.51	1.51	4.1	1.83	−1.39
1H-2, 6	1.56	1.56	3.7	2.26	−1.41
1H-2, 11	1.61	1.61	3.9	1.85	−1.26
1H-2, 21	1.71	1.71	3.7	1.83	−1.25
1H-2, 26	1.76	1.76	4.4	1.85	−1.79
1H-2, 31	1.81	1.81	3.7	1.86	−1.46
1H-2, 36	1.86	1.86	3.0	1.94	−1.47
1H-2, 41	1.91	1.91	4.1	1.86	−1.54
1H-2, 51	2.01	2.01	2.6	1.57	−1.52
1H-2, 55	2.05	2.05	4.8	1.75	−1.69
1H-2, 61	2.11	2.11	5.4	1.64	−1.62
1H-2, 66	2.16	2.16	4.4	1.76	−1.26
1H-2, 71	2.21	2.21	5.6	1.48	−1.45
1H-2, 74	2.24	2.24	5.6	1.44	−1.35
1H-2, 81	2.31	2.31	6.3	1.74	−0.60
1H-2, 86	2.36	2.36	5.2	1.46	−0.64
1H-2, 91	2.41	2.41	6.2	1.72	−0.61
1H-2, 93	2.43	2.43	4.8	1.61	−0.50
1H-2, 94	2.44	2.44	4.8	1.71	−0.59
1H-2, 101	2.51	2.51	5.2	1.59	−0.54
1H-2, 106	2.56	2.56	4.8	1.47	−0.51
1H-2, 111	2.61	2.61	4.4	1.36	−0.63
1H-2, 116	2.66	2.66	4.4	1.78	−0.63
1H-2, 121	2.71	2.71	5.2	1.72	−0.79
1H-2, 126	2.76	2.76	4.4	1.65	−1.07
1H-2, 131	2.81	2.81	5.6	1.58	−1.00
1H-2, 136	2.86	2.86	4.4	1.54	−0.84
1H-2, 141	2.91	2.91	4.1	1.29	−0.99
1H-2, 146	2.96	2.96	5.6	1.45	−0.85
1H-3, 1	3.01	3.01	4.8	1.59	−0.64
1H-3, 11	3.11	3.11	5.2	1.94	−1.06
1H-3, 21	3.21	3.21	4.8	1.92	−1.32
1H-3, 31	3.31	3.31	5.2	1.81	−1.31
1H-3, 41	3.41	3.41	5.2	1.62	−1.29
1H-3, 51	3.51	3.51	4.8	1.56	−1.30
1H-3, 61	3.61	3.61	4.8	1.66	−1.06
1H-3, 71	3.71	3.71	4.8	1.63	−0.81
1H-3, 81	3.81	3.81	4.4	1.66	−1.04
1H-3, 91	3.91	3.91	4.8	1.82	−1.38
1H-3, 101	4.01	4.01	5.6	1.64	−1.36
1H-3, 111	4.11	4.11	5.2	1.55	−0.64
1H-3, 121	4.21	4.21	4.8	1.72	−0.54
1H-3, 131	4.31	4.31	4.1	1.67	−0.84
1H-3, 141	4.41	4.41	4.8	1.47	−0.57
1H-4, 1	4.51	4.51	3.9	1.75	−0.56
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1H-4, 11	4.61	4.61	3.7	1.81	−0.43
1H-4, 21	4.71	4.71	3.3	1.87	−1.05
1H-4, 31	4.81	4.81	3.7	1.92	−0.97
1H-4, 41	4.91	4.91	3.0	1.83	−0.81
1H-4, 51	5.01	5.01	3.3	1.78	−0.98
1H-4, 61	5.11	5.11	3.0	1.92	−1.03
1H-4, 71	5.21	5.21	3.0	1.77	−1.46
1H-4, 81	5.31	5.31	3.7	2.02	−1.20
1H-4, 91	5.44	5.41	4.1	1.70	−1.21
1H-4, 101	5.51	5.51	3.3	1.47	−1.48
1H-4, 111	5.61	5.61	3.0	1.72	−1.26
1H-4, 121	5.71	5.71	4.8	1.57	−1.50
1H-4, 131	5.81	5.81	4.8	1.55	−1.30
1H-4, 141	5.91	5.91	4.4	1.60	−0.58
1H-5, 1	6.01	6.01	3.3	1.80	−0.51
1H-5, 11	6.11	6.11	3.7	1.87	−0.53
1H-5, 21	6.21	6.21	3.7	1.89	−0.28
1H-5, 31	6.31	6.31	3.3	1.74	−0.43
1H-5, 41	6.41	6.41	3.3	1.59	−0.74
1H-5, 51	6.51	6.51	3.7	1.75	−1.03
1H-5, 61	6.61	6.61	3.3	1.72	−1.03
1H-5, 71	6.71	6.71	4.4	1.96	−1.18
1H-5, 81	6.81	6.81	4.8	1.59	−1.28
1H-5, 91	6.91	6.91	3.0	1.68	−1.46
1H-5, 101	7.01	7.01	3.3	1.72	−1.54
1H-5, 111	7.11	7.11	4.4	1.81	−1.35
1H-CC, 1	7.51	7.21	4.8	1.66	−0.49
2H-1, 41	7.81	8.41	4.4	2.05	−1.27
2H-1, 51	7.91	8.51	3.7	1.90	−0.95
2H-1, 61	8.01	8.61	4.4	1.78	−0.95
2H-1, 71	8.11	8.71	5.6	1.87	−1.13
2H-1, 81	8.21	8.81	4.8	1.67	−1.01
2H-1, 91	8.31	8.91	5.6	1.81	−0.72
2H-1, 101	8.41	9.01	3.0	1.74	−0.61
2H-1, 111	8.51	9.11	4.1	1.69	−0.76
2H-1, 121	8.61	9.21	5.2	1.75	−1.00
2H-1, 131	8.71	9.31	4.4	1.80	−1.18
2H-1, 141	8.81	9.41	3.0	1.84	−1.24
2H-2, 1	8.91	9.51	4.1	1.79	−1.11
2H-2, 11	9.01	9.61	3.3	1.77	−0.99
2H-2, 21	9.11	9.71	4.1	1.63	−1.09
2H-2, 31	9.21	9.81	4.8	1.54	−1.08
2H-2, 41	9.31	9.91	4.1	1.70	−1.22
2H-2, 51	9.41	10.01	5.6	1.63	−1.06
2H-2, 61	9.51	10.11	4.8	1.70	−1.42
2H-2, 71	9.61	10.21	5.6	1.43	−1.31
2H-2, 81	9.71	10.31	5.6	1.31	−0.67
2H-2, 91	9.81	10.41	6.3	1.56	−0.47
2H-2, 101	9.91	10.51	5.9	1.71	−0.75
2H-2, 111	10.01	10.61	5.9	1.44	−0.79
2H-2, 121	10.11	10.71	5.2	1.41	−0.49
2H-2, 131	10.21	10.81	5.2	1.49	−0.51
2H-2, 141	10.31	10.91	4.4	1.28	−0.61
11H-1, 41	93.31	103.97	5.9	2.00	−1.48
11H-1, 51	93.41	104.07	5.9	2.03	−1.32
11H-1, 61	93.51	104.17	4.8	2.04	−1.32
11H-1, 72	93.62	104.28	4.8	2.12	−1.23
11H-1, 81	93.71	104.37	5.2	2.15	−1.18
11H-1, 91	93.81	104.47	4.8	2.26	−1.19
11H-1, 101	93.91	104.57	4.4	1.97	−1.11
11H-1, 111	94.01	104.67	5.9	2.01	−1.47
11H-1, 121	94.11	104.77	4.8	2.20	−1.30
11H-1, 131	94.21	104.87	5.6	2.10	−1.19
11H-1, 141	94.31	104.97	4.4	2.16	−1.26
11H-2, 1	94.41	105.07	5.2	2.26	−1.11
11H-2, 11	94.51	105.17	4.8	2.35	−1.16
11H-2, 21	94.61	105.27	5.2	2.08	−1.08
11H-2, 32	94.72	105.38	5.9	2.16	−1.27
11H-2, 41	94.81	105.47	5.6	1.94	−1.04
11H-2, 51	94.91	105.57	4.4	1.70	−0.90
11H-2, 61	95.01	105.67	6.5	1.68	−1.32
11H-2, 72	95.12	105.78	4.8	1.97	−1.11
11H-2, 81	95.21	105.87	4.8	2.04	−1.09
11H-2, 91	95.31	105.97	4.4	1.89	−1.01
11H-2, 101	95.41	106.07	5.2	2.07	−1.15

Table 3 (continued).

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	Trans.	13C (PDB)	18O (PDB)	Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	Trans.	13C (PDB)	18O (PDB)
130-807A-						130-807A-					
11H-2, 111	95.51	106.17	5.9	1.89	−1.40	11H-CC, 1	103.41	114.07	5.6	2.22	−1.30
11H-2, 121	95.61	106.27	5.2	1.62	−1.69	12H-1, 81	103.21	114.12	5.2	2.05	−1.32
11H-2, 131	95.71	106.37	5.9	1.94	−1.23	11H-CC, 11	103.51	114.17	7.0	2.33	−1.04
11H-2, 141	95.81	106.47	4.8	1.94	−0.97	12H-1, 91	103.31	114.22	4.1	2.33	−0.75
11H-3, 1	95.91	106.57	4.8	1.88	−1.05	12H-1, 101	103.41	114.32	3.3	2.07	−0.55
11H-3, 11	96.01	106.67	4.4	1.69	−1.05	12H-1, 112	103.52	114.43	3.8	2.05	−0.97
11H-3, 21	96.11	106.77	3.7	1.60	−0.84	12H-1, 121	103.61	114.52	5.2	2.05	−1.25
11H-3, 32	96.22	106.88	4.1	1.58	−1.15	12H-1, 131	103.71	114.62	4.4	2.03	−0.75
11H-3, 41	96.31	106.97	4.4	1.70	−1.11	12H-1, 141	103.81	114.72	6.3	2.15	−1.00
11H-3, 49	96.39	107.05	4.4	1.74	−1.18	12H-1, 147	103.87	114.78	5.2	2.07	−1.21
11H-3, 51	96.41	107.07	3.7	1.82	−1.19	12H-2, 1	103.91	114.82	5.6	1.91	−1.15
11H-3, 61	96.51	107.17	4.4	1.70	−0.99	12H-2, 11	104.01	114.92	5.2	1.85	−1.10
11H-3, 72	96.62	107.28	4.8	1.61	−0.95	12H-2, 21	104.11	115.02	4.8	1.79	−0.92
11H-3, 81	96.71	107.37	4.4	1.79	−1.02	12H-2, 31	104.21	115.12	5.2	1.87	−0.94
11H-3, 91	96.81	107.47	4.4	1.54	−1.10	12H-2, 41	104.31	115.22	6.3	1.82	−0.91
11H-3, 101	96.91	107.57	5.2	1.82	−1.19	12H-2, 51	104.41	115.32	3.7	2.06	−1.05
11H-3, 111	97.01	107.67	7.4	2.01	−1.06	12H-2, 61	104.51	115.42	4.1	1.92	−0.82
11H-3, 121	97.11	107.77	5.9	1.86	−1.18	12H-2, 71	104.61	115.52	4.1	1.97	−0.79
11H-3, 131	97.21	107.87	6.7	2.06	−1.15	12H-2, 81	104.71	115.62	3.3	2.06	−0.79
11H-3, 141	97.31	107.97	5.9	1.91	−1.18	12H-2, 91	104.81	115.72	5.2	2.03	−0.90
11H-4, 1	97.41	108.07	5.2	1.68	−1.01	12H-2, 101	104.91	115.82	3.3	2.00	−0.74
11H-4, 11	97.51	108.17	6.7	1.91	−0.92	12H-2, 111	105.01	115.92	4.4	2.21	−0.81
11H-4, 21	97.61	108.27	4.4	1.66	−1.03	12H-2, 121	105.11	116.02	4.4	2.15	−0.94
11H-4, 32	97.72	108.38	6.7	2.06	−1.21	12H-2, 131	105.21	116.12	4.4	2.06	−0.97
11H-4, 41	97.81	108.47	5.6	1.94	−1.29	12H-2, 141	105.31	116.22	4.1	2.10	−0.69
11H-4, 51	97.91	108.57	4.4	2.10	−1.06	12H-2, 146	105.37	116.28	4.8	2.09	−0.85
11H-4, 61	98.01	108.67	5.9	2.14	−1.18	12H-3, 1	105.41	116.32	5.9	2.24	−0.84
11H-4, 72	98.12	108.78	5.2	2.11	−1.07	12H-3, 11	105.51	116.42	3.7	1.98	−0.66
11H-4, 81	98.21	108.87	5.2	2.01	−1.07	12H-3, 21	105.61	116.52	4.8	1.84	−0.87
11H-4, 91	98.31	108.97	4.4	1.99	−1.02	12H-3, 31	105.71	116.62	5.2	2.00	−0.83
11H-4, 101	98.41	109.07	4.4	1.66	−1.03	12H-3, 41	105.81	116.72	4.1	1.87	−0.64
11H-4, 111	98.51	109.17	2.6	2.04	−1.04	12H-3, 51	105.91	116.82	4.4	1.92	−0.70
11H-4, 121	98.61	109.27	5.2	1.51	−1.14	12H-3, 61	106.01	116.92	4.8	1.60	−0.69
11H-4, 131	98.71	109.37	4.1	1.92	−1.29	12H-3, 71	106.11	117.02	5.9	1.88	−0.87
11H-4, 141	98.81	109.47	6.3	1.85	−0.93	12H-3, 81	106.21	117.12	4.4	1.85	−0.80
11H-5, 1	98.91	109.57	4.8	1.73	−0.91	12H-3, 91	106.31	117.22	5.2	1.72	−0.97
11H-5, 11	99.01	109.67	6.7	1.71	−1.08	12H-3, 101	106.41	117.32	5.2	1.79	−0.78
11H-5, 21	99.11	109.77	10.7	1.68	−1.47	12H-3, 112	106.52	117.43	4.1	1.94	−0.88
11H-5, 41	99.31	109.97	4.4	1.95	−1.32	12H-3, 121	106.61	117.52	4.8	2.05	−0.95
11H-5, 51	99.41	110.07	4.1	1.86	−1.34	12H-3, 131	106.71	117.62	3.3	1.98	−0.81
11H-5, 61	99.51	110.17	5.9	1.93	−1.25	12H-3, 141	106.81	117.72	3.7	2.12	−0.83
11H-5, 72	99.62	110.28	5.6	2.23	−1.27	12H-3, 146	106.86	117.77	4.1	2.08	−0.77
11H-5, 81	99.71	110.37	5.0	2.05	−1.29	12H-4, 1	106.91	117.82	3.7	2.07	−0.70
11H-5, 91	99.81	110.47	4.4	1.88	−1.13	12H-4, 11	107.01	117.92	4.8	2.10	−0.92
11H-5, 101	99.91	110.57	4.8	1.91	−0.92	12H-4, 21	107.11	118.02	5.9	2.07	−0.75
11H-5, 111	100.01	110.67	3.7	1.78	−0.88	12H-4, 31	107.21	118.12	4.4	1.91	−0.81
11H-5, 121	100.11	110.77	4.8	1.95	−1.07	12H-4, 41	107.31	118.22	6.7	2.22	−0.77
11H-5, 131	100.21	110.87	5.2	1.98	−1.22	12H-4, 61	107.51	118.42	5.9	1.80	−0.99
11H-6, 1	100.41	111.07	4.1	1.62	−1.28	12H-4, 71	107.61	118.52	5.9	1.95	−1.36
11H-6, 11	100.51	111.17	4.8	1.87	−1.16	12H-4, 81	107.71	118.62	6.3	1.94	−0.88
11H-6, 41	100.81	111.47	5.2	2.03	−0.97	12H-4, 91	107.81	118.72	5.6	1.71	−0.99
11H-6, 51	100.91	111.57	4.1	1.90	−1.03	12H-4, 101	107.91	118.82	5.2	1.85	−0.79
11H-6, 61	101.01	111.67	5.9	2.44	−1.36	12H-4, 110	108.00	118.91	5.6	1.86	−0.94
11H-6, 71	101.11	111.77	5.6	2.10	−1.25	12H-5, 1	108.41	119.32	5.6	2.08	−1.07
11H-6, 81	101.21	111.87	5.9	2.13	−1.10	12H-5, 11	108.51	119.42	6.3	1.87	−1.01
11H-6, 91	101.31	111.97	5.6	2.23	−1.16	12H-5, 21	108.61	119.52	5.9	1.89	−1.00
11H-6, 101	101.41	112.07	6.7	2.17	−1.35	12H-5, 31	108.71	119.62	4.8	1.63	−0.87
11H-6, 111	101.51	112.17	6.3	1.99	−1.17	12H-5, 41	108.81	119.72	5.6	1.85	−0.98
11H-6, 121	101.61	112.27	6.7	2.03	−1.17	12H-5, 51	108.91	119.82	5.6	1.79	−0.86
11H-6, 131	101.71	112.37	5.6	2.14	−1.08	12H-5, 61	109.01	119.92	5.6	1.82	−0.80
11H-6, 141	101.81	112.47	4.8	2.20	−0.80	12H-5, 71	109.11	120.02	3.7	1.76	−0.79
11H-7, 1	101.91	112.57	4.8	1.92	−0.77	12H-5, 81	109.21	120.12	4.8	1.87	−0.94
11H-7, 11	102.01	112.67	4.1	1.96	−0.93	12H-5, 91	109.31	120.22	4.4	2.04	−0.91
11H-7, 21	102.11	112.77	4.1	2.03	−0.65	12H-5, 101	109.41	120.32	5.2	2.05	−1.07
11H-7, 31	102.21	112.87	4.8	2.28	−0.98	12H-5, 111	109.51	120.42	3.3	1.69	−0.79
11H-7, 41	102.31	112.97	5.2	2.41	−0.79	12H-5, 121	109.61	120.52	5.2	1.86	−0.94
11H-7, 51	102.41	113.07	5.2	2.56	−1.05	12H-5, 131	109.71	120.62	4.8	1.95	−0.85
11H-7, 61	102.51	113.17	5.6	2.23	−1.06	12H-5, 141	109.81	120.72	5.9	1.84	−1.28
12H-1, 1	102.41	113.32	5.9	2.16	−1.26	12H-5, 146	109.86	120.77	7.0	1.93	−1.18
12H-1, 11	102.51	113.42	5.6	1.80	−1.17	12H-6, 1	109.91	120.82	5.2	1.79	−1.29
12H-1, 21	102.61	113.52	4.8	1.73	−0.98	12H-6, 11	110.01	120.92	4.8	2.01	−1.08
12H-1, 31	102.71	113.62	5.2	1.98	−1.07	12H-6, 21	110.11	121.02	7.4	2.11	−0.87
12H-1, 46	102.86	113.77	5.2	1.81	−0.81	12H-6, 31	110.21	121.12	6.7	2.01	−1.19
12H-1, 51	102.91	113.82	4.4	1.84	−0.97	12H-6, 41	110.31	121.22	6.7	1.96	−1.05
12H-1, 61	103.01	113.92	5.9	1.99	−0.99	12H-6, 51	110.41	121.32	6.7	1.86	−1.18
12H-1, 71	103.11	114.02	4.4	2.14	−0.83	12H-6, 61	110.51	121.42	6.3	1.86	−1.00

Table 3 (continued).

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	Trans.	^{13}C (PDB)	^{18}O (PDB)
130-807A-					
12H-6, 71	110.61	121.52	5.9	1.76	−1.09
12H-6, 81	110.71	121.62	4.8	1.81	−0.81
12H-6, 91	110.81	121.72	5.2	1.64	−0.84
12H-6, 101	110.91	121.82	4.8	1.79	−1.18
12H-6, 110	111.00	121.91	4.4	1.88	−0.84
12H-6, 121	111.11	122.02	5.6	1.81	−0.93
12H-6, 131	111.21	122.12	5.2	1.88	−1.11
12H-6, 141	111.31	122.22	5.9	2.21	−1.10
12H-6, 148	111.38	122.29	5.6	1.84	−1.19
12H-7, 1	111.41	122.32	5.6	1.64	−1.22
12H-7, 11	111.51	122.42	6.3	2.12	−0.96
12H-7, 21	111.61	122.52	6.7	2.15	−0.95
12H-7, 31	111.71	122.62	5.6	2.07	−1.06
12H-7, 41	111.81	122.72	6.7	2.12	−1.11
12H-7, 51	111.91	122.82	6.3	2.00	−1.06
12H-7, 59	112.01	122.92	7.0	2.08	−1.05
13H-1, 21	112.11	126.24	5.6	1.87	−1.06
13H-1, 31	112.21	126.34	6.7	2.03	−0.82
13H-1, 41	112.31	126.44	7.0	2.21	−0.85
13H-1, 51	112.41	126.54	6.7	2.15	−0.79
13H-1, 61	112.51	126.64	5.9	2.15	−1.02
13H-1, 71	112.61	126.74	5.9	2.07	−0.79
13H-1, 81	112.71	126.84	5.9	2.07	−0.70
13H-1, 91	112.81	126.94	5.9	2.03	−0.78
13H-1, 101	112.91	127.04	7.8	2.14	−0.95
13H-1, 111	113.01	127.14	7.8	1.78	−1.08
13H-1, 121	113.11	127.24	6.5	1.95	−1.11
13H-1, 131	113.21	127.34	5.9	1.64	−0.91
13H-1, 141	113.31	127.44	8.1	1.84	−0.91
13H-2, 11	113.51	127.64	7.0	1.97	−1.06
13H-2, 21	113.61	127.74	4.6	1.57	−0.86
13H-2, 31	113.71	127.84	5.2	1.76	−0.95
13H-2, 41	113.81	127.94	6.1	1.96	−1.04
13H-2, 51	113.91	128.04	7.4	2.10	−0.99
13H-2, 61	114.01	128.14	13.3	1.78	−1.08
13H-2, 71	114.11	128.24	2.3	1.80	−1.17
13H-2, 91	114.31	128.44	8.9	1.98	−1.04
13H-2, 101	114.41	128.54	6.7	1.90	−0.84
13H-2, 121	114.61	128.74	7.4	1.96	−1.04
13H-2, 131	114.71	128.84	5.2	1.88	−0.71
13H-2, 141	114.81	128.94	6.1	1.81	−0.78
13H-3, 1	114.91	129.04	6.3	1.75	−1.22
13H-3, 13	115.03	129.16	12.6	2.16	−1.03
13H-3, 21	115.11	129.24	5.9	2.01	−1.11
13H-3, 31	115.21	129.34	5.2	1.75	−1.52
13H-3, 41	115.31	129.44	5.6	1.99	−1.00
13H-3, 51	115.41	129.54	7.8	2.21	−1.10
13H-3, 61	115.51	129.64	5.2	2.10	−1.16
13H-3, 71	115.61	129.74	4.8	1.88	−1.03
13H-3, 81	115.71	129.84	5.9	2.03	−1.19
13H-3, 91	115.81	129.94	5.6	1.85	−1.13
13H-3, 101	115.91	130.04	5.2	1.85	−1.04
13H-3, 121	116.11	130.24	5.2	1.75	−1.04
13H-3, 131	116.21	130.34	5.6	1.74	−0.98
13H-3, 141	116.31	130.44	6.3	1.68	−1.03
13H-4, 1	116.41	130.54	4.8	1.60	−1.13
13H-4, 11	116.51	130.64	3.7	1.71	−1.17
13H-4, 21	116.61	130.74	4.4	1.79	−0.98
13H-4, 31	116.71	130.84	4.4	1.76	−1.07
13H-4, 41	116.81	130.94	5.6	2.19	−1.26
13H-4, 51	116.91	131.04	5.9	2.31	−1.21
13H-4, 61	117.01	131.14	4.1	1.92	−1.11
13H-4, 71	117.11	131.24	5.2	1.94	−1.21
13H-4, 81	117.21	131.34	5.6	2.07	−1.10
13H-4, 91	117.31	131.44	5.9	2.06	−1.00
13H-4, 101	117.41	131.54	4.4	1.91	−0.99
13H-4, 121	117.61	131.74	5.2	2.14	−1.12
13H-4, 131	117.71	131.84	4.4	1.87	−1.12
13H-4, 141	117.81	131.94	7.0	1.89	−1.21
13H-5, 1	117.91	132.04	6.3	1.90	−1.00
13H-5, 11	118.01	132.14	6.7	1.96	−1.06
13H-5, 21	118.11	132.24	6.3	1.99	−0.87
13H-5, 31	118.21	132.34	5.2	1.87	−0.98
13H-5, 41	118.31	132.44	5.2	1.79	−0.98
130-807A-					
13H-5, 51	118.41	132.54	4.4	1.90	−1.17
13H-5, 61	118.51	132.64	6.7	1.60	−1.37
13H-5, 71	118.61	132.74	5.6	2.00	−1.04
13H-5, 81	118.71	132.84	4.8	2.10	−0.93
13H-5, 91	118.81	132.94	7.4	2.06	−0.97
13H-5, 101	118.91	133.04	6.7	1.90	−1.05
13H-5, 111	119.01	133.14	7.0	1.96	−1.02
13H-5, 121	119.11	133.24	7.0	1.72	−1.08
13H-5, 131	119.21	133.34	7.0	1.98	−1.03
13H-5, 141	119.31	133.44	8.5	2.41	−0.90
13H-6, 1	119.41	133.54	8.5	2.15	−0.73
13H-6, 11	119.51	133.64	7.0	1.79	−1.29
13H-6, 21	119.61	133.74	5.2	1.65	−1.43
13H-6, 31	119.71	133.84	4.8	1.67	−1.45
13H-6, 41	119.81	133.94	6.7	1.76	−1.19
13H-6, 51	119.91	134.04	4.1	1.60	−1.47
13H-6, 61	120.01	134.14	4.8	1.93	−1.20
13H-6, 71	120.11	134.24	6.3	2.22	−1.28
13H-6, 81	120.21	134.34	7.0	1.86	−1.68
13H-6, 91	120.31	134.44	7.8	1.81	−1.82
13H-6, 101	120.41	134.54	5.6	1.67	−1.42
13H-6, 111	120.51	134.64	8.1	2.01	−1.79
13H-6, 121	120.61	134.74	6.7	2.02	−1.50
13H-6, 131	120.71	134.84	6.5	2.20	−1.31
13H-6, 141	120.81	134.94	7.4	1.85	−0.92
13H-7, 1	120.91	135.04	7.8	2.02	−0.65
13H-7, 11	121.01	135.14	8.1	2.25	−1.01
13H-7, 21	121.11	135.24	7.8	2.06	−0.92
13H-7, 31	121.21	135.34	11.9	2.03	−0.94
13H-7, 41	121.31	135.44	8.1	1.92	−1.03
13H-7, 51	121.41	135.54	7.4	1.64	−0.72
13H-CC, 1	122.41	136.54	8.5	2.17	−1.03
130-807B-					
2H-2, 131	5.91	7.41	5.6	1.88	−0.34
2H-2, 141	6.01	7.51	4.4	1.92	−0.75
2H-3, 11	6.21	7.71	3.3	1.68	−0.47
2H-3, 21	6.31	7.81	4.1	1.92	−0.75
2H-3, 31	6.41	7.91	5.2	1.96	−0.80
2H-3, 41	6.51	8.01	3.0	1.79	−0.63
2H-3, 51	6.61	8.11	3.7	2.20	−0.84
2H-3, 61	6.71	8.21	3.7	2.03	−1.22
2H-3, 71	6.81	8.31	3.9	1.87	−1.13
2H-3, 81	6.91	8.41	4.1	2.12	−1.33
2H-3, 91	7.01	8.51	5.6	2.00	−0.98
2H-4, 92	8.52	9.83	4.1	1.64	−0.91
2H-4, 95	8.55	9.86	5.0	1.64	−1.14
2H-4, 98	8.58	9.89	5.6	1.51	−1.11
2H-5, 31	9.41	10.72	5.9	1.30	−0.58
2H-5, 37	9.47	10.78	5.2	1.61	−0.38
2H-5, 43	9.53	10.84	6.3	1.74	−0.57
2H-5, 120	10.30	11.61	5.0	1.81	−1.11
2H-5, 123	10.33	11.64	5.6	1.83	−1.01
2H-5, 125	10.35	11.66	5.6	1.79	−1.04
2H-5, 129	10.39	11.70	6.1	1.84	−1.10
2H-6, 56	11.16	12.47	6.7	1.78	−0.76
2H-6, 60	11.20	12.51	6.1	1.53	−0.58
2H-6, 63	11.23	12.54	5.9	1.26	−0.65
4H-6, 28	29.88	33.46	5.6	2.16	−1.00
4H-6, 31	29.91	33.49	4.8	2.12	−1.04
4H-6, 34	29.94	33.52	4.3	1.92	−1.03
4H-6, 41	30.01	33.59	4.6	1.89	−1.34
4H-6, 116	30.76	34.34	5.2	2.18	−1.07
4H-6, 120	30.80	34.38	5.4	1.72	−1.15
4H-6, 123	30.83	34.41	3.0	2.24	−0.98
4H-6, 132	30.92	34.50	5.0	1.77	−0.97
5H-1, 93	32.53	36.41	5.6	1.68	−0.95
5H-1, 96	32.56	36.44	5.6	1.87	−0.83
5H-1, 99	32.59	36.47	5.8	1.80	−0.78
5H-5, 6	37.66	41.54	5.4	1.71	−0.80
5H-5, 9	37.69	41.57	5.6	1.72	−0.66
5H-5, 12	37.72	41.60	6.2	1.73	−0.81
5H-5, 15	37.75	41.63	5.2	1.79	−0.82

Table 4. Replicate oxygen isotope data for *Globigerinoides triloba* (300–355 µm), Holes 807A and 807B.

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	Trans.	^{13}C (PDB)	^{18}O (PDB)
130-807A-					
1H-1, 1	0.01	0.01	6.3	1.92	−1.94
1H-1, 1	0.01	0.01	4.4	1.97	−1.76
1H-1, 6	0.06	0.06	4.8	1.85	−1.75
1H-1, 6	0.06	0.06	6.3	2.26	−1.66
1H-1, 46	0.46	0.46	4.8	2.03	−0.60
1H-1, 46	0.46	0.46	3.0	1.90	−0.69
1H-1, 51	0.51	0.51	3.3	2.06	−0.65
1H-1, 51	0.51	0.51	2.6	2.06	−0.71
1H-1, 55	0.55	0.55	4.4	2.02	−0.84
1H-1, 55	0.55	0.55	4.8	2.32	−0.75
1H-2, 11	1.61	1.61	3.7	1.79	−1.40
1H-2, 11	1.61	1.61	3.0	1.92	−1.12
1H-2, 55	2.05	2.05	4.4	1.78	−1.69
1H-2, 55	2.05	2.05	4.8	1.72	−1.69
1H-2, 61	2.11	2.11	4.8	1.62	−1.53
1H-2, 61	2.11	2.11	5.9	1.66	−1.71
1H-2, 66	2.16	2.16	4.4	1.80	−1.14
1H-2, 66	2.16	2.16	4.4	1.72	−1.39
1H-2, 91	2.41	2.41	6.7	1.72	−0.55
1H-2, 91	2.41	2.41	5.6	1.72	−0.67
1H-2, 106	2.56	2.56	5.2	1.47	−0.46
1H-2, 106	2.56	2.56	4.4	1.47	−0.56
1H-3, 91	3.91	3.91	4.8	1.76	−1.44
1H-3, 91	3.91	3.91	4.8	1.89	−1.33
1H-4, 1	4.51	4.51	4.1	1.79	−0.41
1H-4, 1	4.51	4.51	3.7	1.72	−0.72
11H-2, 61	95.01	105.67	10.0	1.44	−1.66
11H-2, 61	95.01	105.67	3.0	1.92	−0.98
11H-2, 121	95.61	106.27	5.6	1.68	−1.40
11H-2, 121	95.61	106.27	4.8	1.55	−1.98
11H-5, 81	99.71	110.37	5.2	2.01	−1.22
11H-5, 81	99.71	110.37	4.8	2.10	−1.35
11H-5, 111	100.01	110.67	3.7	1.76	−0.60
11H-5, 111	100.01	110.67	3.7	1.85	−0.95
11H-5, 111	100.01	110.67	3.7	1.73	−1.10
11H-6, 11	100.51	111.17	5.2	1.89	−1.11
11H-6, 11	100.51	111.17	4.4	1.85	−1.20
12H-1, 112	103.52	114.43	3.3	2.16	−0.79
12H-1, 112	103.52	114.43	4.4	2.05	−1.10
12H-1, 112	103.52	114.43	3.7	1.95	−1.01
13H-1, 121	113.11	127.24	7.0	1.79	−1.19
13H-1, 121	113.11	127.24	5.9	2.12	−1.03
13H-2, 21	113.61	127.74	4.8	1.42	−0.75
13H-2, 21	113.61	127.74	4.4	1.72	−0.98
13H-2, 41	113.81	127.94	7.4	2.18	−1.22
13H-2, 41	113.81	127.94	4.8	1.74	−0.86
13H-2, 71	114.11	128.24	0.4	1.78	−1.29
13H-2, 71	114.11	128.24	4.1	1.81	−1.06
13H-2, 121	114.61	128.74	8.1	1.80	−1.16
13H-2, 121	114.61	128.74	6.7	2.11	−0.92
13H-2, 131	114.71	128.84	5.6	1.83	−0.43
13H-2, 131	114.71	128.84	4.8	1.92	−1.00
13H-2, 141	114.81	128.94	5.9	1.65	−0.66
13H-2, 141	114.81	128.94	6.3	1.98	−0.89
13H-6, 131	120.71	134.84	5.9	2.00	−1.50
13H-6, 131	120.71	134.84	7.0	2.39	−1.12
130-807B-					
2H-3, 71	6.81	8.31	4.4	1.81	−1.11
2H-3, 71	6.81	8.31	3.3	1.94	−1.15
2H-4, 95	8.55	9.86	5.9	1.54	−1.32
2H-4, 95	8.55	9.86	4.1	1.74	−0.97
2H-4, 98	8.58	9.89	5.2	1.60	−1.09
2H-4, 98	8.58	9.89	5.9	1.43	−1.13
2H-5, 37	9.47	10.78	4.8	1.71	−0.40
2H-5, 37	9.47	10.78	5.6	1.51	−0.37
2H-5, 120	10.30	11.61	4.4	1.73	−1.18
2H-5, 120	10.30	11.61	5.6	1.89	−1.05
2H-5, 129	10.39	11.70	5.9	1.94	−1.21
2H-5, 129	10.39	11.70	6.3	1.74	−0.99
2H-6, 60	11.20	12.51	6.3	1.58	−0.62
2H-6, 60	11.20	12.51	5.9	1.48	−0.54
4H-6, 28	29.88	33.46	5.2	2.20	−1.05
4H-6, 28	29.88	33.46	5.9	2.12	−0.95
4H-6, 31	29.91	33.49	4.8	2.40	−1.03
4H-6, 31	29.91	33.49	4.8	1.84	−1.06
4H-6, 34	29.94	33.52	4.4	2.11	−0.97
4H-6, 34	29.94	33.52	4.1	1.73	−1.09
4H-6, 41	30.01	33.59	4.4	1.93	−1.74
4H-6, 41	30.01	33.59	4.8	1.85	−0.95
4H-6, 116	30.76	34.34	5.2	2.09	−1.21
4H-6, 116	30.76	34.34	6.3	2.33	−0.95
4H-6, 116	30.76	34.34	4.1	2.11	−1.03
4H-6, 120	30.80	34.38	5.6	1.43	−1.33
4H-6, 120	30.80	34.38	5.2	2.01	−0.96
4H-6, 123	30.83	34.41	1.5	2.39	−0.81
4H-6, 123	30.83	34.41	4.4	2.10	−1.15
4H-6, 132	30.91	34.49	5.2	1.78	−0.95
4H-6, 132	30.92	34.50	4.8	1.76	−0.99
5H-1, 93	32.53	36.41	5.6	1.61	−0.93
5H-1, 93	32.53	36.41	5.6	1.74	−0.98
5H-1, 96	32.56	36.44	5.6	1.85	−0.80
5H-1, 96	32.56	36.44	5.6	1.89	−0.86
5H-1, 99	32.59	36.47	5.9	1.80	−0.74
5H-1, 99	32.59	36.47	5.6	1.80	−0.82
5H-5, 6	37.66	41.54	5.6	1.69	−0.91
5H-5, 6	37.66	41.54	5.2	1.74	−0.69
5H-5, 9	37.69	41.57	5.6	1.59	−0.69
5H-5, 9	37.69	41.57	5.6	1.85	−0.64
5H-5, 12	37.72	41.60	5.6	1.60	−0.92
5H-5, 12	37.72	41.60	6.7	1.86	−0.71
5H-5, 15	37.72	41.60	5.2	1.65	−0.70
5H-5, 15	37.72	41.60	5.2	1.93	−0.93

Table 5. Oxygen isotope data for *Dentoglobigerina altispira* (300–355 μm), Hole 807A.

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	Trans.	^{13}C (PDB)	^{18}O (PDB)
130-807A-					
47X-1, 71	438.21	438.21	2.8	2.81	–0.65
47X-1, 141	438.91	438.91	3.0	2.69	–0.53
47X-2, 71	439.71	439.71	2.2	3.07	–0.93
47X-2, 141	440.41	440.41	4.1	2.65	–0.66
47X-3, 71	441.21	441.21	3.0	2.72	–0.61
47X-3, 141	441.91	441.91	3.3	2.74	–0.59
47X-4, 71	442.71	442.71	5.7	2.73	–1.29
47X-4, 141	443.41	443.41	2.2	3.06	–0.62
47X-5, 71	444.21	444.21	1.5	3.32	–0.75
47X-5, 141	444.91	444.91	2.1	2.82	–0.67
47X-6, 71	445.71	445.71	3.0	2.55	–0.89
48X-1, 71	447.81	447.81	2.8	2.79	–0.55
48X-1, 141	448.51	448.51	4.4	3.15	–0.91
48X-2, 71	449.31	449.31	1.9	2.99	–0.80
48X-2, 141	450.01	450.01	3.2	2.78	–0.60
48X-3, 71	450.81	450.81	3.3	2.86	–0.66
48X-4, 71	452.31	452.31	2.7	2.91	–0.49
48X-4, 141	453.01	453.01	1.9	2.72	–0.73
48X-5, 71	453.81	453.81	2.8	3.13	–0.69
48X-5, 141	454.51	454.51	2.8	2.80	–0.38
48X-6, 71	455.31	455.31	2.6	2.80	–0.38
48X-6, 141	456.01	456.01	1.9	2.56	–0.49
49X-1, 71	457.51	457.51	3.0	2.69	–0.45
49X-1, 141	458.21	458.21	1.5	3.06	–0.44
49X-2, 71	459.01	459.01	1.5	2.96	–0.69
49X-2, 141	459.71	459.71	1.5	2.73	–0.58
49X-3, 71	460.51	460.51	3.2	2.66	–0.68
49X-3, 141	461.21	461.21	2.6	2.84	–0.71
49X-4, 67	461.97	461.97	2.6	2.64	–0.45
49X-4, 141	462.71	462.71	1.5	2.76	–0.34
49X-5, 67	463.47	463.47	1.1	2.88	–0.45
49X-5, 139	464.19	464.19	2.6	2.81	–0.45
50X-1, 71	467.11	467.11	1.5	2.84	–0.34
50X-1, 141	467.81	467.81	1.5	2.66	–0.31
50X-2, 71	468.61	468.61	2.4	2.60	–0.40
50X-2, 141	469.31	469.31	2.2	2.34	–0.44
50X-3, 71	470.11	470.11	1.1	2.66	–0.48
50X-3, 141	470.81	470.81	1.9	2.65	–0.39
50X-4, 71	471.61	471.61	1.1	2.69	–0.50
50X-4, 141	472.31	472.31	5.4	2.40	–0.54
50X-5, 71	473.11	473.11	1.1	2.46	–0.30
50X-5, 141	473.81	473.81	1.1	2.40	–0.23
50X-6, 71	474.61	474.61	1.7	2.67	–0.25
50X-6, 141	475.31	475.31	2.2	1.99	–0.46
51X-1, 71	476.81	476.81	2.6	2.65	–0.41
51X-1, 141	477.51	477.51	1.7	2.63	–0.45
51X-2, 71	478.31	478.31	2.5	2.25	–0.43
51X-2, 144	479.04	479.04	3.3	2.41	–0.44
51X-3, 71	479.81	479.81	2.6	2.62	–0.38
51X-4, 71	481.31	481.31	3.5	2.69	–0.73
51X-4, 141	482.01	482.01	4.1	2.62	–0.64
51X-5, 74	482.84	482.84	5.9	2.45	–0.76
51X-5, 141	483.51	483.51	2.6	2.55	–0.61
51X-6, 76	484.36	484.36	2.6	2.45	–0.40
52X-3, 67	489.47	489.47	2.2	2.86	–0.82
52X-3, 139	490.19	490.19	2.1	2.65	–0.63
52X-4, 71	491.01	491.01	2.8	2.78	–0.59
52X-4, 137	491.67	491.67	6.3	2.62	–1.02
52X-5, 71	492.51	492.51	2.1	2.69	–0.56
52X-5, 141	493.21	493.21	1.1	2.78	–0.47
52X-6, 73	494.03	494.03	1.1	2.68	–0.67
53X-1, 73	496.13	496.13	2.6	2.54	–0.60
53X-1, 145	496.85	496.85	2.6	2.48	–0.85
53X-2, 72	497.62	497.62	3.3	2.49	–0.76
53X-2, 141	498.31	498.31	3.3	2.56	–0.71
53X-3, 72	499.12	499.12	1.9	2.14	–0.91
53X-3, 146	499.86	499.86	3.7	2.63	–0.56
53X-4, 72	500.62	500.62	2.3	2.25	–0.27
53X 4, 146	501.36	501.36	1.9	2.54	–0.51
53X-5, 72	502.12	502.12	2.1	2.43	–0.90
53X-5, 142	502.82	502.82	2.4	2.38	–0.58
53X-6, 72	503.62	503.62	1.1	1.98	–0.52

Table 6. Replicate oxygen isotope data for *Dentoglobigerina altispira* (300-355 μm), Hole 807A.

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	Trans.	^{13}C (PDB)	^{18}O (PDB)
130-807A-					
47X-1, 71	438.21	438.21	1.9	2.59	–0.83
47X-1, 71	438.21	438.21	3.7	3.03	–0.46
47X-2, 71	439.71	439.71	2.2	2.84	–1.00
47X-2, 71	439.71	439.71	2.2	3.30	–0.87
47X-3, 71	441.21	441.21	1.9	2.68	–0.61
47X-3, 71	441.21	441.21	4.1	2.76	–0.62
47X-4, 71	442.71	442.71	5.6	2.53	–1.20
47X-4, 71	442.71	442.71	6.3	2.84	–1.17
47X-4, 71	442.71	442.71	5.2	2.83	–1.50
47X-4, 141	443.41	443.41	1.1	3.13	–0.55
47X-4, 141	443.41	443.41	3.3	2.99	–0.68
47X-5, 141	444.91	444.91	1.9	2.90	–0.79
47X-5, 141	444.91	444.91	2.2	2.74	–0.55
48X-1, 71	447.81	447.81	1.9	2.74	–0.32
48X-1, 71	447.81	447.81	3.7	2.84	–0.79
48X-2, 71	449.31	449.31	1.1	2.97	–0.81
48X-2, 71	449.31	449.31	2.6	3.01	–0.79
48X-2, 141	450.01	450.01	2.2	2.75	–0.54
48X-2, 141	450.01	450.01	3.3	2.75	–0.78
48X-2, 141	450.01	450.01	4.1	2.83	–0.50
48X-3, 71	450.81	450.81	2.6	3.07	–0.89
48X-3, 71	450.81	450.81	3.0	2.72	–0.49
48X-3, 71	450.81	450.81	4.4	2.79	–0.60
48X-4, 71	452.31	452.31	1.9	2.80	–0.46
48X-4, 71	452.31	452.31	3.0	3.06	–0.55
48X-4, 71	452.31	452.31	1.9	2.84	–0.44
48X-4, 71	452.31	452.31	4.1	2.95	–0.51
48X-4, 141	453.01	453.01	1.9	2.74	–1.26
48X-4, 141	453.01	453.01	3.0	2.79	–0.65
48X-4, 141	453.01	453.01	0.7	2.64	–0.29
48X-5, 71	453.81	453.81	2.6	3.07	–0.66
48X-5, 71	453.81	453.81	3.3	3.20	–0.67
48X-5, 71	453.81	453.81	2.6	3.12	–0.74
48X-5, 141	454.51	454.51	1.9	2.77	–0.22
48X-5, 141	454.51	454.51	3.7	2.83	–0.55
48X-6, 71	455.31	455.31	3.0	2.70	–0.37
48X-6, 71	455.31	455.31	2.2	3.08	–0.35
48X-6, 71	455.31	455.31	2.6	2.62	–0.42
49X-3, 71	460.51	460.51	2.6	2.75	–0.81
49X-3, 71	460.51	460.51	3.7	2.56	–0.55
49X-4, 141	462.71	462.71	1.1	2.80	–0.35
49X-4, 141	462.71	462.71	1.9	2.71	–0.33
50X-1, 71	467.11	467.11	0.7	2.94	–0.26
50X-1, 71	467.11	467.11	2.2	2.74	–0.42
50X-2, 71	468.61	468.61	1.5	2.60	–0.29
50X-2, 71	468.61	468.61	3.3	2.61	–0.51
50X-4, 141	472.31	472.31	5.2	2.32	–0.68
50X-4, 141	472.31	472.31	5.6	2.47	–0.40
50X-6, 71	474.61	474.61	1.5	2.78	–0.12
50X-6, 71	474.61	474.61	1.9	2.57	–0.38
50X-6, 141	475.31	475.31	3.3	1.74	–0.61
50X-6, 141	475.31	475.31	2.2	2.06	–0.24
50X-6, 141	475.31	475.31	1.1	2.16	–0.52
51X-1, 141	477.51	477.51	1.5	2.38	–0.42
51X-1, 141	477.51	477.51	1.9	2.89	–0.48
51X-2, 71	478.31	478.31	1.9	2.35	–0.33
51X-2, 71	478.31	478.31	3.0	2.14	–0.53
51X-4, 71	481.31	481.31	3.7	2.67	–0.72
51X-4, 71	481.31	481.31	3.3	2.70	–0.75
51X-5, 74	482.84	482.84	7.4	2.64	–0.76
51X-5, 74	482.84	482.84	4.4	2.25	–0.76
52X-3, 67	489.47	489.47	2.6	3.01	–1.05
52X-3, 67	489.47	489.47	3.3	2.80	–0.71
52X-3, 67	489.47	489.47	0.7	2.78	–0.70
52X-3, 139	490.19	490.19	2.6	2.70	–0.78
52X-3, 139	490.19	490.19	3.0	2.65	–0.52
52X-3, 139	490.19	490.19	0.7	2.60	–0.61
52X-4, 71	491.01	491.01	2.6	2.75	–0.62
52X-4, 71	491.01	491.01	3.0	2.81	–0.56
52X-5, 71	492.51	492.51	2.6	2.68	–0.61
52X-5, 71	492.51	492.51	1.5	2.70	–0.52
53X-1, 145	496.85	496.85	2.6	2.35	–1.06
53X-1, 145	496.85	496.85	2.6	2.60	–0.65
53X-3, 72	499.12	499.12	2.6	2.10	–0.80
53X-3, 72	499.12	499.12	1.1	2.18	–1.01
53X-4, 72	500.62	500.62	2.6	2.33	–0.41
53X-4, 72	500.62	500.62	1.9	2.17	–0.12
53X-5, 72	502.12	502.12	2.6	2.58	–0.68
53X-5, 72	502.12	502.12	1.5	2.29	–1.11
53X-5, 142	502.82	502.82	3.3	2.32	–0.45
53X-5, 142	502.82	502.82	1.5	2.43	–0.70

Table 7. Oxygen isotope data for *Globorotalia kugleri* (150-212 µm), Hole 807A.

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	Trans.	^{13}C (PDB)	^{18}O (PDB)
130-807A-					
54X-2, 72	507.32	507.32	2.6	1.97	−1.11
54X-2, 142	508.02	508.02	2.2	1.99	−0.79
54X-3, 72	508.82	508.82	1.1	2.06	−0.94
54X-4, 71	510.31	510.31	0.7	2.00	−0.69
54X-4, 141	511.01	511.01	1.5	2.12	−0.79
54X-5, 72	511.82	511.82	1.5	2.04	−0.70
54X-5, 142	512.52	512.52	1.5	2.07	−0.77
54X-6, 47	513.07	513.07	1.5	2.00	−0.82
54X-6, 90	513.50	513.50	1.5	2.01	−0.93
55X-1, 72	515.52	515.52	0.4	2.19	−0.55
55X-1, 143	516.23	516.23	0.2	1.85	−0.81
55X-2, 72	517.02	517.02	1.9	1.92	−0.51
55X-2, 143	517.73	517.73	1.3	2.13	−0.81
55X-3, 72	518.52	518.52	0.9	1.93	−0.44
55X-3, 134	519.14	519.14	1.5	2.08	−0.60
55X-4, 72	520.02	520.02	0.9	2.08	−0.59
55X-4, 140	520.70	520.70	1.1	2.09	−0.52
55X-5, 141	522.21	522.21	0.7	2.17	−0.64
55X-6, 72	523.02	523.02	2.2	2.15	−0.97
56X-1, 71	524.71	524.71	1.1	2.14	−0.91
56X-1, 143	525.43	525.43	2.2	2.01	−0.78
56X-2, 77	526.27	526.27	1.1	2.00	−0.72
56X-2, 143	526.93	526.93	0.4	2.10	−0.77
56X-3, 69	527.69	527.69	0.7	2.04	−0.80
56X-3, 141	528.41	528.41	3.7	2.12	−0.74
56X-4, 74	529.24	529.24	1.9	2.39	−0.89
56X-4, 141	529.91	529.91	0.0	2.40	−0.79
56X-5, 68	530.68	530.68	1.9	2.29	−1.02
56X-5, 141	531.41	531.41	1.1	2.39	−0.96
56X-6, 71	532.21	532.21	0.7	2.30	−0.82
57X-1, 71	534.41	534.41	3.3	2.19	−0.70
57X-1, 140	535.10	535.10	2.2	2.15	−0.73
57X-2, 71	535.91	535.91	2.2	2.23	−0.86
57X-2, 140	536.60	536.60	1.5	1.87	−0.96
57X-3, 71	537.41	537.41	1.5	2.08	−0.75
57X-3, 140	538.10	538.10	1.9	2.19	−1.06
57X-4, 71	538.91	538.91	2.2	2.30	−0.74
57X-5, 71	540.41	540.41	1.9	2.51	−0.61
57X-5, 140	541.10	541.10	2.2	2.36	−1.06
57X-6, 67	541.87	541.87	3.0	2.45	−1.08
58X-1, 73	544.13	544.13	4.4	2.55	−1.07
58X-1, 147	544.87	544.87	4.8	2.35	−0.98
58X-2, 73	545.63	545.63	3.3	2.42	−0.65
58X-2, 139	546.29	546.29	4.8	2.38	−0.84
58X-3, 72	547.12	547.12	3.7	2.34	−0.78
58X-3, 141	547.81	547.81	5.6	2.06	−1.05
58X-4, 71	548.61	548.61	4.8	2.20	−0.99
58X-4, 141	549.31	549.31	3.0	2.34	−0.71
58X-5, 71	550.11	550.11	0.7	2.38	−0.75
58X-5, 145	550.85	550.85	3.9	2.55	−1.03
59X-1, 42	553.42	553.42	7.8	2.65	−0.86
59X-1, 142	554.42	554.42	2.8	2.33	−1.16
59X-2, 42	554.92	554.92	2.1	2.61	−1.03
59X-2, 142	555.92	555.92	5.2	2.83	−0.98
59X-3, 42	556.42	556.42	3.0	2.77	−0.85
59X-3, 142	557.42	557.42	2.2	2.47	−0.63
59X 4, 42	557.92	557.92	3.7	2.74	−0.77
59X 4, 142	558.92	558.92	3.7	2.90	−0.55
59X-5, 42	559.42	559.42	4.1	2.77	−0.81
60X-1, 72	563.32	563.32	3.3	2.69	−0.69
60X-2, 72	564.82	564.82	9.3	2.40	−1.17
60X-2, 142	565.52	565.52	3.7	2.41	−0.80
60X-3, 72	566.32	566.32	3.0	2.59	−0.63
60X-4, 72	567.82	567.82	3.7	2.85	−0.84
60X-5, 72	569.32	569.32	2.2	2.86	−0.71
61X-1, 72	573.02	573.02	3.7	2.58	−1.02
61X-1, 142	573.72	573.72	3.7	2.64	−0.88
61X-2, 72	574.52	574.52	6.3	2.78	−0.77
61X-2, 142	575.22	575.22	1.9	2.54	−0.83
61X-3, 72	576.02	576.02	1.9	2.67	−0.64
61X-3, 146	576.76	576.76	2.2	2.86	−0.66
61X-4, 66	577.46	577.46	1.9	2.88	−0.45
61X-5, 73	579.03	579.03	2.6	2.51	−0.89
61X-5, 140	579.70	579.70	1.9	2.45	−0.73
61X-6, 72	580.52	580.52	1.9	2.30	−0.83
62X-1, 72	582.62	582.62	4.1	2.36	−0.93
62X-1, 141	583.31	583.31	4.8	2.47	−0.84
62X-2, 72	584.12	584.12	1.9	2.58	−0.66
62X-2, 141	584.81	584.81	3.7	2.41	−0.52
62X-3, 71	585.61	585.61	3.3	2.56	−0.72
62X-3, 141	586.31	586.31	2.4	2.70	−0.81
62X-4, 74	587.14	587.14	4.4	2.65	−0.53

Table 8. Replicate oxygen isotope data for *Globorotalia kugleri* (150–212 µm), Hole 807A.

Core, section, interval (cm)	Depth (mbsf)	Depth (cmbsf)	Trans.	^{13}C (PDB)	^{18}O (PDB)
130-807A-					
55X-1, 143	516.23	516.23	0.0	1.66	−0.75
55X-1, 143	516.23	516.23	0.4	2.04	−0.86
55X-2, 143	517.73	517.73	1.9	2.15	−0.80
55X-2, 143	517.73	517.73	0.7	2.11	−0.82
55X-3, 72	518.52	518.52	0.7	1.94	−0.31
55X-3, 72	518.52	518.52	1.1	1.91	−0.56
55X-4, 72	520.02	520.02	1.1	2.06	−0.53
55X-4, 72	520.02	520.02	0.7	2.10	−0.64
57X-3, 71	537.41	537.41	2.2	2.07	−0.85
57X-3, 71	537.41	537.41	0.7	2.08	−0.65
58X-5, 145	550.85	550.85	3.7	2.58	−0.92
58X-5, 145	550.85	550.85	4.1	2.51	−1.15
59X-1, 142	554.42	554.42	3.0	2.34	−1.10
59X-1, 142	554.42	554.42	2.6	2.32	−1.22
59X-2, 42	554.92	554.92	1.9	2.65	−1.09
59X-2, 42	554.92	554.92	2.2	2.57	−0.98
61X-3, 72	576.02	576.02	0.4	2.68	−0.71
61X-3, 72	576.02	576.02	3.3	2.66	−0.57
62X-3, 141	586.31	586.31	2.2	2.76	−0.76
62X-3, 141	586.31	586.31	2.6	2.64	−0.87

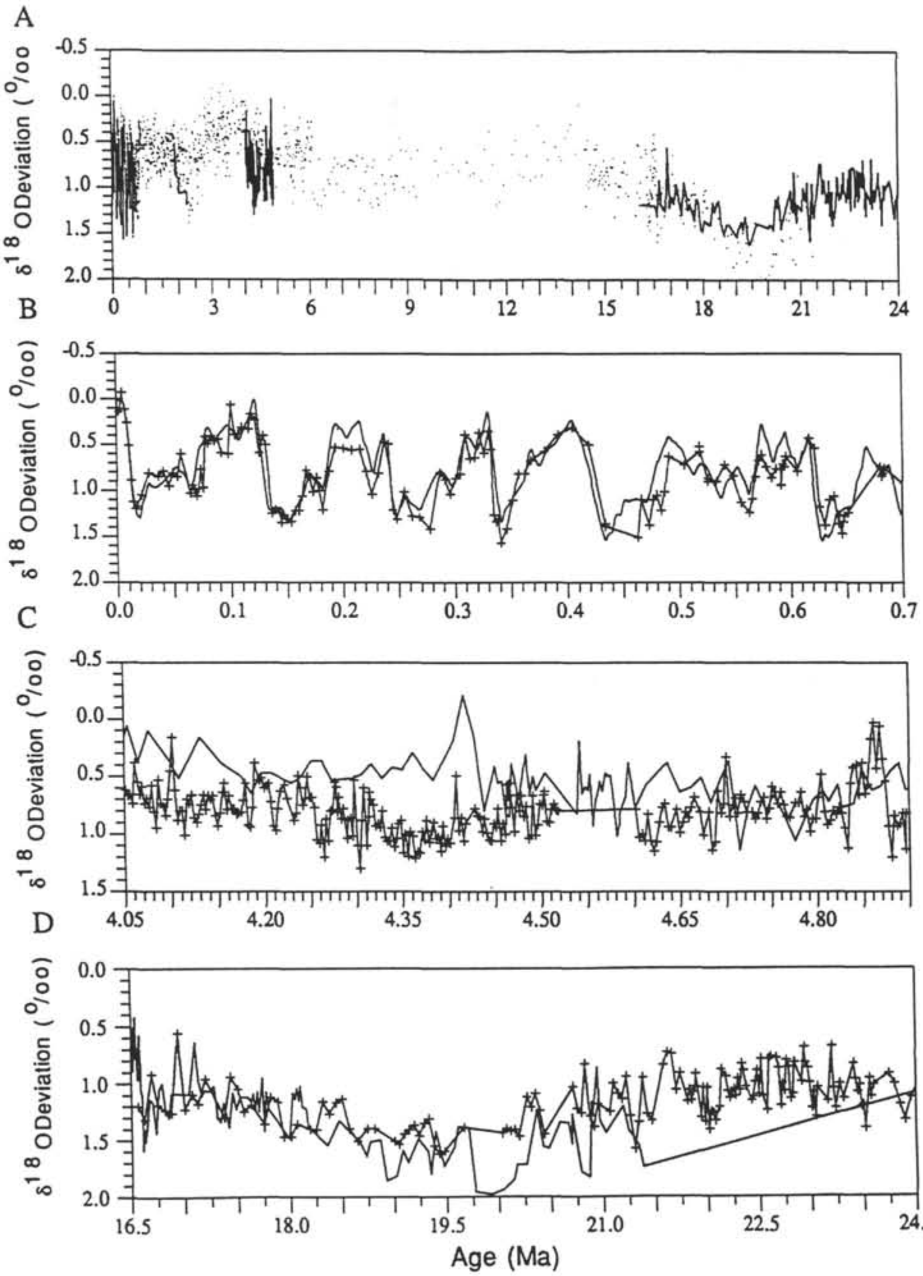

Figure 5. Comparison of the Site 807 δ^{18}O record with the tropical δ^{18}O composite of Prentice and Matthews (1991). Values shown are deviation from the present. **A.** 0–24 Ma. **B.** 0–0.7 Ma. **C.** 4.05–4.9 Ma. **D.** 16.5–24 Ma. Composite values are shown as dots in Figure 5A and as lines in Figures 5B–5D.

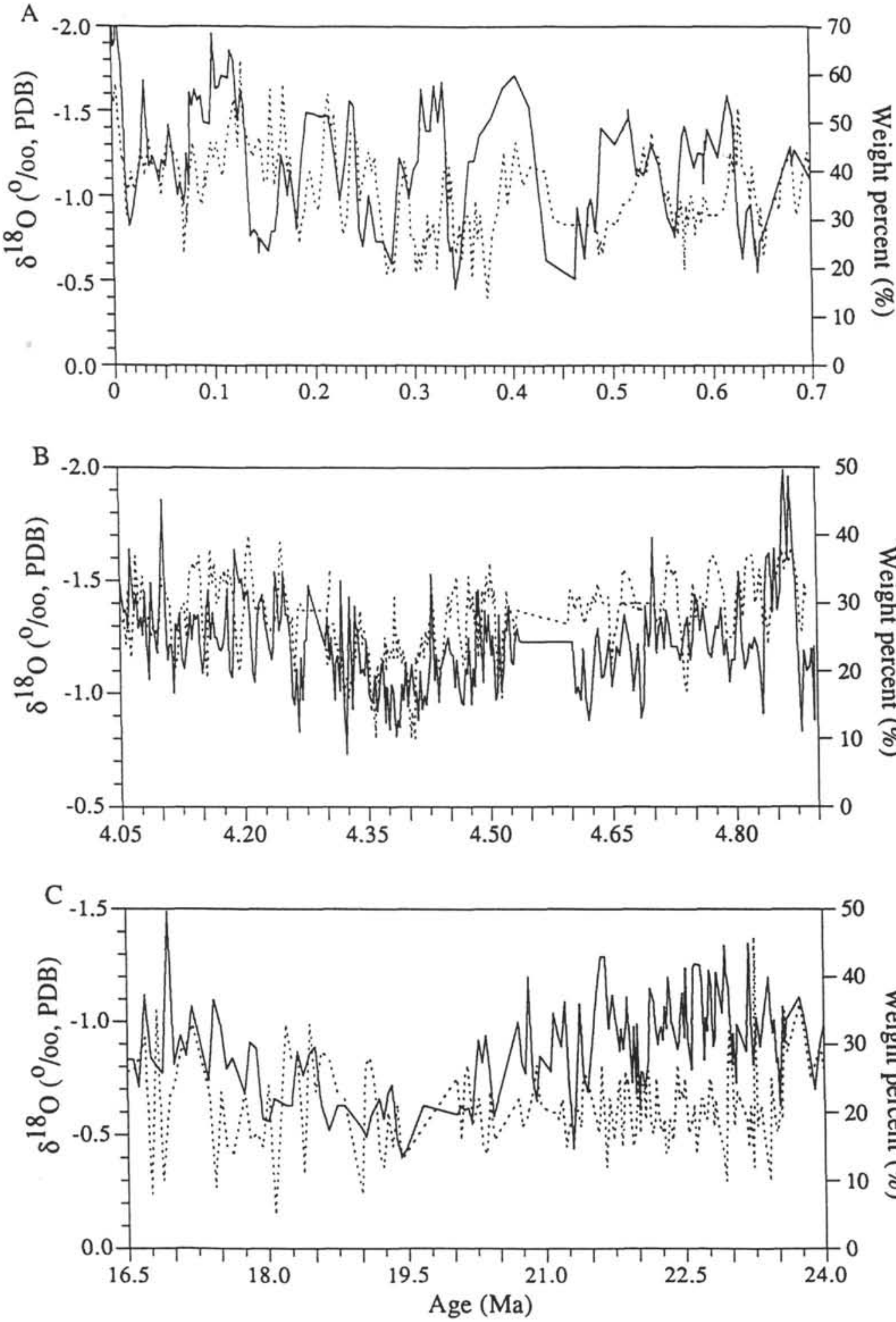

Figure 6. Comparison of $\delta^{18}O$ for shallow-dwelling planktonic foraminifers and coarse fraction percent (>63 µm) at Site 807 vs. age. Lines depict $\delta^{18}O$. Dashed lines represent percent >63 µm. **A.** 0–0.7 Ma. **B.** 4.05–4.9 Ma. **C.** 16.5–24 Ma.