UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Quantitative Microfossil, Sedimentologic, and Geochemical Data on Cores V1-80-P3, V1-80-G1, and V1-80-P8 from the continental slope off northern California.

by

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Introduction

Quantitative microfossil, sedimentologic, and geochemical data have been collected from a sequence of cores from the continental slope off northern California. These data were collected as part of an ongoing project initially is attempting to correlate the pollen stratigraphy from Clear Lake, Calif. (Adam, et al., 1981) with the marine stratigraphic record from the continental slope adjacent to the mouth of the Russian River (Fig. 1). The premise is that the pollen assemblage that was deposited in Clear Lake also would have fallen into the nearby Russian River and would have been transported, with only minor and recognizable pollen dilution, to the ocean. Studies of other areas of the northeastern Pacific margin have shown that pollen is transported to the ocean in quantities amenable for palynological analyses (Florer, 1973; Heusser and Balsam, 1977; Heusser, 1981 among others).

USGS Cruise V1-80 collected a suite of piston and gravity cores from the continental slope off northern California. Three cores were chosen from this suite for detailed analyses. The locations and water depths of the 3 cores are shown in Figure 1 and listed in Table 1.

Table 1. Locations and water depths of the 3 cores analysed in detail. P indicates piston core, G indicates gravity core.

Core ID	Latitude	Longitude	Water depth (m)	Core Length (m)
V1-80-P3	38° 25.51'N	123°47'42'W	1600	4.34
V1-80-G1	38° 26,70'N	123°47'42'W	2045	3.44
V1-80-P8	38° 27,79'N	123°47'69'W	1520	3.00

Methods

The cores were sampled in the laboratory by taking samples of approximately 2 cm (vertically) by 1.5 cm (horizontally) of a half core at 20-cm sampling interval. Care was taken not to collect material within about 0.5 mm from the core liner to eliminate contamination.

I. Biostratigraphy

Biostratigraphic data were obtained for the following fossil groups: (1) planktonic foraminifers, (2) benthic foraminifers, (3) diatoms, (4) nannofossils, and (5) pollen. Planktonic and benthic foraminifers were processed by alternating cycles of soaking and agitating samples in distilled water for about 1 hour. A small amount of calgon was added to the sample just prior to washing. The disaggregated sample was washed through a 63 μm mesh sieve. If necessary, the 149 μm fraction was split with a microsplitter until approximately 300 individuals remained. All specimens in the split were identified to species or counted as "unidentified". Fourteen species of planktic foraminifers were identified and over fifty species of benthic foraminifers were identified. Thirty additional species are present but were only identified to genera.

Diatom samples were first acidified in 6N HCl to eliminate all carbonate material and to concentrate diatoms. Smear slides were made of the residue. Traverse counts were made, identifying all diatom species, until a total of 300 individuals were counted. The number of diatoms per traverse, the total number of marine, planktic, benthic, freshwater, and reworked diatoms, and number of individuals of each species were recorded.

Nannofossils were counted on a smear slide of a small subsample from the foraminifer sample. Nannofossils are rare in these sediments and no attempt was made to ensure a total count of 300 specimen. Nannofossils present on the smear slides were identified by light microscope and counted. The "other" catagory in the nannofossil data is quite large because many species of Gephyrocapsa are too small to identify by light microscope.

Pollen were analysed from a 10 cm^3 sample. The sample was suspended in water then sonified. The pollen were concentrated by filtration through 150 µm and 7 µm sieves. The trapped material was treated with HCl, HF, and acetolysis solution and mounted in Safranin-stained glycerin gelatin. At least 300 pollen grains were identified from each sample.

Samples for grain size analysis were first washed with demineralized water, then treated with a solution of 30% H_2O_2 to oxidize organic matter. The sample was then washed in a dilute calgon solution to disperse the clay-sized material. This solution was passed through 200 µm and 63 µm mesh sieves. The materials in the size range between 200 and 63 µm were analysed by a 2m-long Rapid Sediment Analyser (RSA). Materials smaller than 63 µm were analysed by hydrophotometer. Analytical precision from replicate runs on the RSA is ± 5% and on the hydrophotometer is ± 10%.

Samples collected for carbon analyses were split, dried, and ground. One aliquot was analysed for inorganic carbon (C_I; assumed here to be all $CaCO_3$) using a modified LECO WR-12 unit that detects the amount of CO_2 liberated upon acidification. $CaCO_3$ was calculated from C_I by the equation:

$CaCO_3 = \frac{C_I}{0.12}$; the constant 0.12 is the mole fraction of carbon in $CaCO_3$.

A second aliquot was burned at 1600°C in the LECO WR-12 and the CO_2 liberated was calibrated to give total carbon (C_T). Organic carbon (C_O) was then calculated by the equation:

$$C_O = C_T - C_I.$$

The analytical precision on replicate runs was ±1%, the stated accuracy of the LECO WR-12 is ± 0.1% for C_T and ± 1% for C_I.

Clay mineralogy was determined using standard x-ray diffraction techniques (Hein et al., 1976) but with the addition of an internal talc standard. Peak heights and areas were calibrated to those of the known amount of talc and the clay mineral abundances were calculated similar to the technique described by Heath and Pisias (1980). These clay mineral abundances are only semiquantitative, but because they have been calibrated to an internal talc standard, they can be compared to other clay mineralogy data treated in a similar manner.

Samples collected for inorganic geochemistry were submitted to the USGS Analytical Laboratories for analyses of Al, Fe, Mg, Ca, Na, Ti, Ba, Mn, B, Co, Cr, Cu, La, Li, Ni, Sc, Sr, V, Y, Zr, Yb, Zn, Ce, and Nd by induction-coupled plasma spectroscopy (ICP). Species splits of benthic and planktonic foraminifers were sent to Brown University on contract for oxygen and carbon stable isotope analyses. The values of $\delta^{18}O$ and $\delta^{13}C$ were measured on the benthic foraminifer Uvigerina peregrina and the planktonic foraminifer Neogloboquadrina pachyderma (left-coiling). Each specimen was cleaned in an ultrasonic bath to remove fine-fraction contamination. The samples were split into four size fractions (>180 to <212 µm; >212 to <250 µm; >250 to <300 µm; and >300 µm) to investigate if there are any differences in isotopic composition of various sizes of N. pachyderma (left-coiling). All samples were roasted under vacuum at 370°C for one hour. H_2O and CO_2 were extracted from the carbonate reaction with orthophosphoric acid at 50° C, and then separated by a series of three freezing transfer steps. The CO_2 was analysed on an on-line VG Micromass 602 D mass spectrometer. All data are referred to

PDB by the standard δ notation of Craig (1957). Instrumental precision on replicate standards was ± 0.15‰ for oxygen and ± 0.07‰ for carbon.

Data

The data are presented in tabular (Tables 7 thru 35) form as: (1) raw counts and percentages for foraminifers; (2) percentages of the total assemblage of diatoms, nannofossils, and pollen; (3) percentages of grain size and carbon distributions by weight; (4) percentages of clay minerals in the <2 µm fraction standardized to an internal talc standard; (5) percentages or parts per million (ppm) by weight of elemental concentrations; and (6) the difference in oxygen and carbon isotope ratios ($\delta^{18}O/^{16}O$ and $^{14}C/^{13}C$) from the PDB standard.

Explanations of the abbreviated column headings are in Tables 2 thru 6.

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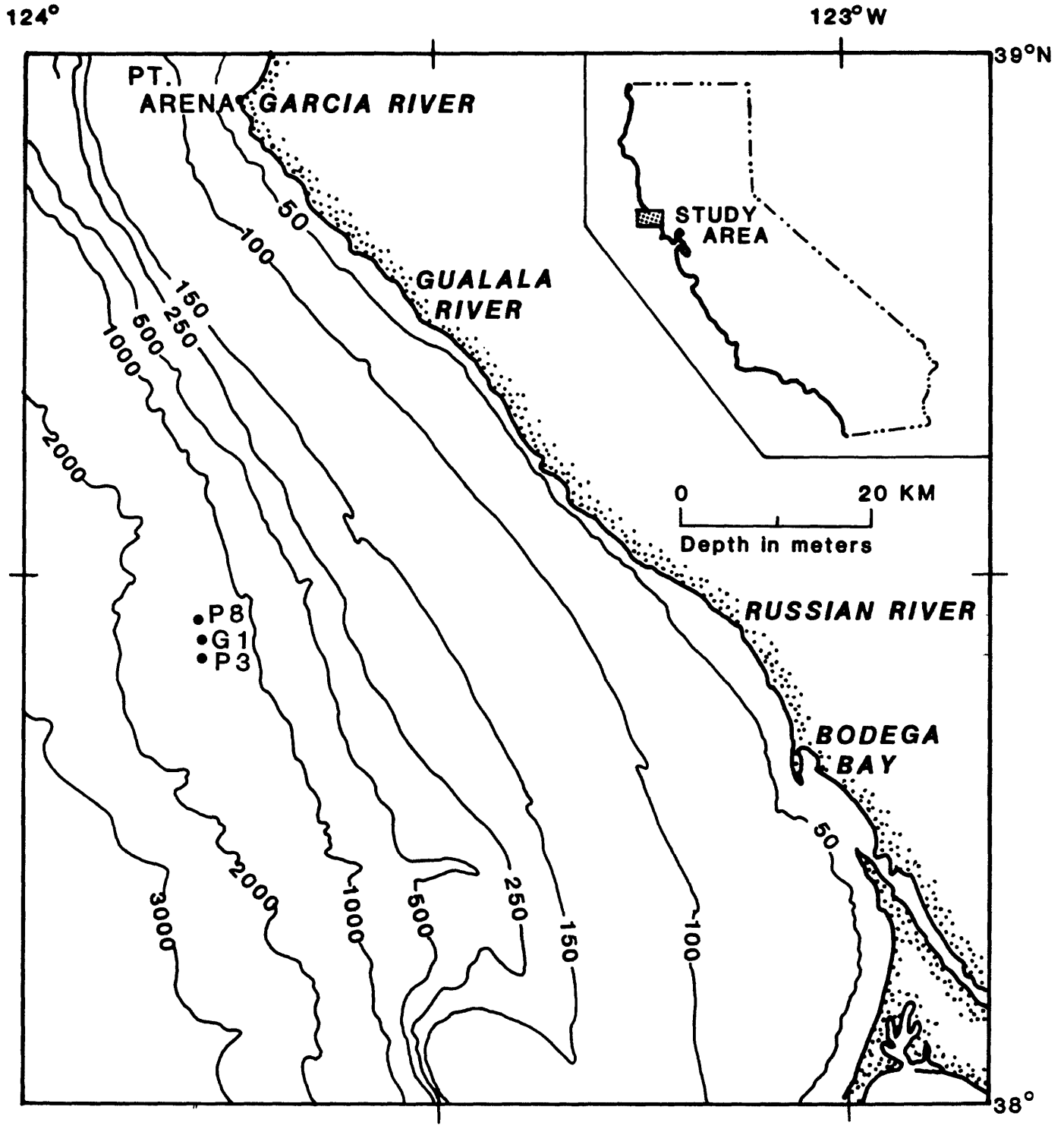

Figure 1. Locations of the 3 cores analyzed in detail.

Table 2 Abbreviations for benthic foraminiferal species found in Tables 7 thru 12

AGGSP1 = Agglutinated species (lumped)
BOLARG = Bolivina argentea
BOLLAE = Bolivina laevigata or subglobosa
BOLPSE = Bolivina pseudobeyrichi
BOLPUS = Bolivina pusilla
BOLSEM = Bolivina seminuda and B. seminuda var. foraminata
BOLSPI = Bolivina spissa
BOLSUB = Bolivina subadvena
BOLSPP = Bolivina spp.
BULFOS = Bulimina fossa
BULPAG = Bulimina pagoda
BULPYS = [Globo] Bulimina pyrula var. spinescens
BULSPC = Bulimina spicata
BULSTM = Bulimina striata var. mexicana
BULTEN = Buliminella tenuata
CASBRA = Cassidulina braziliensis
CASCAL = Cassidulina californica
CASCOR = Cassidulina corbyi
CASDEL = Cassidulina delicata
CASNEO = Cassidulina neocarinata
CASPAT = Cassidulina patula or C. rarilocula
CASSBG = Cassidulina subglobosa & C. subglobosa var. quadrata
CASTRN = Cassidulina translucens var.
CASSPP = Cassidulina spp.
CSDSPP = Cassidulinoides spp.
CHISPP = Chilostomella spp.
CHNFIM = Chilostomellina fimbriata
CIBFLT = Cibicides fletcheri
CIBLOB = Cibicides lobatulus
CIBMCK = Cibicides mckannai
CIBSPP = Cibicides spp.
DENSPP = Dentalina spp.
ELSMOR = Ellipsopolymorphina spp.
ELPSPP = Elphidium spp.
EPIPAC = Epistominella pacifica
EPISMI = Epistominella smithi
EPISPP = Epistominella spp.
EPOCAL = Eponides calcar
EPOSTN = Eponides subtenera
EPOTEN = Eponides tener
EPOSPP = Eponides spp.
EPOUMB = Eponides umbonatus
FISSPP = Fissurina spp.
FLOLAB = Florilus labradoricus
FURROT = Fursenkoina rotundata
FURSPP = Fursenkoina spp.
GBLAFF = Globobulimina affinis
GBLAUR = Globobulimina auriculata
GBLBAR = Globobulimina barbata

Table 2 (continued)

GBLHOE = *Globobulimina hoeglundi*
GBLPAC = *Globobulimina pacifica*
GBLSPP = *Globobulimina spp.*
GYRSLT = *Gyroidina soldanii var. altiformis*
GYRSPP = *Gyroidina spp.*
HOEBRA = *Hoeglundina spp.*
HOPKSA = *Hopkinsina spp.*
KARSPP = *Karreriella spp.*
LAGGRA = *Lagena gracilis*
LAGWIL = *Lagena williamsoni*
LAGSPP = *Lagena spp.*
LENSPP = *Lenticulina spp.*
MRGOBS = *Marginulina obesa*
MARSPP = *Martinottiella spp.*
MELPOM = *Melonis pompiliodes*
NONSPP = *Nonionella spp.*
PLASPP = *Planulina spp.*
PSENON = *Pseudononion*
PULBUL = *Pullenia bulloides*
PULQNQ = *Pullenia quinqueloba*
PYRSPP = *Pyrgo spp.*
QNQSPP = *Quinqueloculina spp.*
REOSPP = *Reophax spp.*
SPHAER = *Sphaerodina spp.*
SPRNTA = *Spiroloculina antillarum var. aequa*
SPRLOC = *Spiroloculina spp.*
TRISPP = *Trifarina spp.*
TRITRI = *Triloculina tricarinata*
UVGPRG = *Uvigerina peregrina*
UVGPRO = *Uvigerina proboscidea*
UVGSNT = *Uvigerina senticosa*
UVGSP1 = *Uvigerina sp. 1*
UVGSPP = *Uvigerina spp.*
VALSPP = *Valvulineria spp.*
VIRBRA = *Virgulina bramlettei*
VIRSPP = *Virgulina spp.*
OTHCAL = other calcareous species

Table 3. Abbreviations for planktonic foraminifer species found in Tables 13 thru 18.

PAC L = *Neogloboquadrina pachyderma* (left coiling)
PAC R = *Neogloboquadrina pachyderma right coiling*
PD INT = *Neogloboquadrina pachyderma/dutertrei intergrade*
DUTER = *Neogloboquadrina dutertrei*
BULL = *Globigerina bulloides*
QUINQ = *Turborotalita quinqueloba*
GLUT = *Globigerinita glutinata*
SCIT = *Globorotalia scitula*
HEX = *Globorotaloides hexagona*
O UNIV = *Orbulina universa*
INFL = *Globorotalia inflata*
TRUNC = *Globorotalia truncatulinoides*
FALCON = *Globigerina falconensis*
OTHER = Non-identifiable specimens

Table 4 Abbreviations for diatom species found in Tables 19 thru 21.

ACTDIV = *Actinocyclus divisus*
DENSEM = *Denticulopsis seminae*
PSUDOL = *Pseudoeunotia doliolus*
RHIZSP = *Rhizosolenia ssp.*
THANIT = *Thalassionema nitzschioides*
THASPP = *Thalassiosira spp.*
THALON = *Thalassiothrix longissima*
TYCHSP = *Tychopelagic spp.*
BENDIA = Benthic marine diatoms
FWDIAT = Freshwater diatoms
RWDIAT = Reworked diatoms
MISDOI = Miscellaneous diatoms
NO/TRAV= Number diatoms per traverse
PLKMAR = Other planktonic marine

Table 5 Abbreviations for calcareous nannofossil species found in Tables 22 thru 24.

BG = large *Gephyrocapsa sp.*
SG = small *Gephyrocapsa sp.*
EH = ? *Emiliana huxleyi*
CL = *Calcidiscus leptoporus*
CP = *Coccolothus pelagicus*
OT = Other taxa

Table 6. Abbreviations for pollen species found in tables 25 thru 27.

PINUS	=	*Pinus*
PICEA	=	*Picea*
THETERO	=	*Tsuga heterophylla* (Hemlock)
TMERTEN	=	*tsuga mertensianna* (Mountain Hemlock)
PSEUDO	=	*Pseudotsuga menziesii* (Douglas Fir)
ABIES	=	*Abies*
SEQUOIA	=	*Sequoia sempervirens*
QUERCUS	=	*Quercus* (Oak)
RRA	=	Chapparrel
TCT	=	the families Taxodiacrae, cupressaceae, and taxaceae
ALNUS	=	*Alnus* (Alder)
GRAM	=	*Gramineae*
CYPER	=	*Cyperaceae*
COMPOS	=	Compositae (*Artemesia, Baccharis,* and similar genera)
CHENO	=	*Chenopodiaceae*

TABLE 7. Raw counts of benthic foraminifers for Core V1-80-G1

Depth(cm)	AGGSPI	BOLANG	BOLPSE	BULSPI	BULFOS	BULSPC	BULSTM	BULTEN	CASDEL	CASNEO	CASTRN	CASSPP	CSDSPP
0-5	1	0	0	0	1	0	2	6	0	0	2	0	0
22-24	0	0	0	0	1	0	9	3	0	0	0	0	0
42-44	1	0	0	0	1	0	0	0	0	0	0	0	0
45-50	1	0	0	0	1	0	0	0	0	0	0	0	0
62-64	0	0	0	0	0	0	3	1	0	0	0	0	0
82-84	0	0	0	0	0	0	27	2	0	0	0	1	0
95-100	2	0	1	7	1	0	15	0	0	0	2	1	0
122-124	0	12	0	19	0	0	31	12	0	0	4	1	0
145-150	0	1	3	0	0	15	0	4	1	5	6	0	1
162-164	0	0	5	6	0	11	1	4	0	16	7	3	7
182-184	0	0	0	0	0	0	0	1	0	1	3	0	0
195-200	0	0	0	0	0	0	2	1	0	1	1	0	0
222-224	0	0	0	0	0	0	1	0	0	0	20	0	0
245-250	0	0	0	0	0	0	1	0	0	0	5	0	0
262-264	0	0	0	0	0	0	7	2	0	1	20	0	0
282-284	0	0	0	0	0	0	13	3	1	22	6	0	0
295-300	0	0	0	0	0	0	4	1	0	6	12	0	0
320-322	0	0	0	0	2	0	5	1	0	19	12	1	1

Depth(cm)	CHISPP	CHNFIN	HOLSEM	HULPAG	CIBFLT	CIBLOB	CIBNCK	CIBSPP	DENSPP	ELSMOR	ELPSPP	EPIPAC	EPISMI
0-5	0	0	0	0	0	0	0	0	0	0	0	0	0
22-24	2	0	0	0	0	0	6	0	0	0	0	0	0
42-44	1	1	0	0	1	0	1	0	0	0	0	0	0
45-50	0	0	0	0	0	0	3	0	0	0	0	0	0
62-64	1	0	0	0	0	0	2	0	0	1	0	0	0
82-84	1	0	0	0	0	0	27	0	0	0	0	0	0
95-100	0	0	0	0	2	0	106	0	0	0	0	0	0
122-124	2	0	12	3	0	0	31	1	0	0	1	4	4
145-150	1	1	0	0	0	0	2	0	0	0	1	14	5
162-164	0	0	0	0	0	6	7	0	0	0	1	14	3
182-184	1	2	0	0	0	0	6	0	0	0	0	0	0
195-200	0	0	0	0	2	0	3	0	0	0	0	0	0
222-224	1	0	0	0	0	0	1	0	0	0	0	0	0
245-250	1	0	0	0	0	0	2	0	0	1	0	0	0
262-264	0	0	0	0	0	0	1	0	0	0	0	1	0
282-284	1	0	0	0	5	0	6	0	0	0	0	0	0
295-300	1	0	0	0	0	0	0	0	1	0	0	5	0
320-322	0	1	0	0	0	0	7	0	0	0	1	0	0

(See TABLE 2 for explanation of abbreviations)

TABLE 7 (continued). Raw counts of benthic foraminifers for Core V1-80-G1

Depth(cm)	EPOSTN	EPOTEN	EPOSPP	FISSPP	FLOLAB	GBLAUR	GBLBAR	GBLHOE	GBLPAC	BULPYS	GBLSPP	GYRSLT	GYRSPP
0-5	0	2	2	0	0	0	0	1	0	0	0	0	0
22-24	0	2	3	1	0	1	5	2	1	0	1	0	11
42-44	0	3	0	2	0	0	5	0	0	0	0	0	5
45-50	0	2	0	1	0	0	0	0	1	3	1	0	1
62-64	0	2	0	1	0	0	4	3	0	0	2	0	2
82-84	0	11	0	3	0	0	5	4	2	0	1	0	7
95-100	24	10	0	3	0	0	79	11	0	0	0	6	26
122-124	4	7	0	0	1	0	7	4	7	0	0	0	9
145-150	0	0	2	1	0	0	3	6	0	1	0	0	6
162-164	0	0	2	1	0	0	5	7	0	0	3	36	0
182-184	0	3	0	0	0	0	3	2	0	0	0	1	1
195-200	0	3	0	1	0	1	0	3	0	0	0	4	0
222-224	1	2	1	1	0	0	4	0	2	0	0	1	5
245-250	0	6	0	0	0	0	1	2	0	0	0	0	0
262-264	0	0	0	1	0	0	2	2	6	0	0	2	1
282-284	0	7	0	1	0	0	1	3	0	5	1	0	2
295-300	0	5	0	0	0	0	9	6	0	0	0	2	1
320-322	0	13	0	5	0	0	2	5	0	0	2	0	12

Depth(cm)	HOEBRA	KARSPP	LAGSPP	LENSPP	MRGORS	MARSPP	MELPOM	NONSPP	PLASPP	PSENON	PULBUL	PULOMO	PYRSPP
0-5	0	7	0	0	0	2	0	0	0	0	0	0	0
22-24	0	17	0	0	0	4	0	0	1	0	1	2	0
42-44	0	3	1	1	0	0	0	0	0	0	2	0	0
45-50	0	3	0	0	0	0	0	0	0	0	1	0	1
62-64	0	0	0	0	0	0	0	0	0	0	2	0	1
82-84	2	5	0	0	0	0	0	0	0	0	0	4	1
95-100	3	10	1	0	0	0	0	0	0	0	1	2	1
122-124	5	0	0	0	0	0	0	0	2	0	1	3	1
145-150	0	10	0	0	0	0	0	0	0	0	1	6	0
162-164	0	9	1	0	0	0	0	0	0	0	4	0	0
182-184	0	2	1	0	1	0	3	0	0	0	1	0	0
195-200	0	1	2	0	0	0	0	0	0	0	2	2	0
222-224	0	9	0	0	0	0	4	0	0	0	4	0	0
245-250	0	0	0	0	0	0	6	0	1	0	3	1	0
262-264	1	5	0	0	1	0	1	4	0	0	2	0	0
282-284	0	12	2	0	0	0	1	0	0	0	1	7	0
295-300	2	0	2	0	0	0	3	0	2	1	2	2	2
320-322	1	0	4	0	0	0	10	0	1	0	4	5	0

TABLE 7 (continued). Raw counts of benthic foraminifers on Core V1-80-G1

Depth(cm)	REOSPP	SPHAER	SPPLOC	TRISPP	TRITRI	UVGPRG	UVGPRO	UVGSNT	UVGSP1	UVGSPP	VALSPP
0-5	1	0	0	0	0	2	18	0	1	0	0
22-24	0	0	0	0	0	7	31	0	1	0	0
42-44	0	0	0	0	0	4	54	0	3	0	0
45-50	0	0	0	0	0	2	44	0	1	0	1
62-64	0	0	0	0	0	1	18	0	0	0	2
82-84	0	0	0	0	1	14	5	0	2	0	0
95-100	0	0	0	0	0	4	0	0	4	0	2
122-124	0	0	0	0	0	88	0	0	7	0	0
145-150	0	0	0	0	1	24	10	13	1	0	0
162-164	0	3	0	0	0	11	3	20	0	0	4
182-184	0	0	0	0	0	5	7	27	0	0	1
195-200	0	0	0	0	0	3	1	2	0	0	1
222-224	0	0	0	0	0	2	0	51	0	0	0
245-250	0	0	0	0	0	1	0	5	0	0	0
262-264	0	0	0	0	0	3	0	23	0	0	0
282-284	0	0	2	1	2	5	26	1	5	1	0
295-300	0	0	0	0	0	10	4	39	0	0	0
320-322	0	0	0	0	0	9	4	52	0	0	0

TABLE 6. Raw counts of benthic foraminifers for Core V1-80-P3

Depth(cm)	BOLARG	BOLLAE	BOLPSE	BOLPUS	BOLSEM	BOLSPI	BOLSUB	BOLSPP	BULPAG	BULPYS	BULSPC	BULSTM	BULTEN
0-5	0	0	0	0	0	0	0	0	0	0	0	17	6
20-25	0	0	0	0	0	1	0	0	0	1	0	5	10
40-45	0	0	0	0	0	14	0	0	0	1	0	22	11
60-65	0	0	4	0	0	68	0	0	0	0	3	18	0
80-85	0	0	0	0	0	90	0	0	0	0	11	23	8
100-105	0	0	0	0	0	83	0	0	0	6	43	7	12
120-125	0	0	0	0	0	18	0	0	0	2	33	5	12
140-145	0	0	0	0	0	3	0	0	0	0	2	2	0
160-165	0	1	0	0	0	1	0	0	0	0	3	6	0
180-185	0	0	0	0	2	0	0	0	0	1	45	10	4
200-205	13	0	0	0	1	5	0	4	0	2	5	1	7
220-225	25	0	3	1	5	2	11	0	6	1	0	1	41
240-245	0	0	0	0	0	50	0	0	0	0	0	15	2
260-265	0	0	0	0	0	61	0	0	0	0	18	25	0
280-285	0	0	0	0	0	12	0	1	0	0	15	34	0
300-305	0	0	0	0	0	19	0	0	0	0	39	51	0
320-325	0	1	0	0	0	22	0	0	0	0	60	73	3
340-345	4	0	3	0	1	9	0	0	0	0	30	23	7
360-365	0	0	0	0	0	2	0	0	0	2	3	3	0
380-385	0	0	1	0	0	1	0	0	0	0	3	1	1

Depth(cm)	CASBRA	CASCAL	CASCOR	CASDEL	CASNEO	CASPAT	CASSRG	CASTRN	CASSPP	CSDSPP	CHISPP	CHNFIN	CIBNCK
0-5	0	0	0	0	0	0	0	0	1	0	0	1	11
20-25	0	0	0	1	0	0	0	0	0	0	0	4	5
40-45	0	0	0	0	0	0	0	0	0	0	3	16	17
60-65	0	3	0	0	0	0	0	0	0	0	1	2	53
80-85	0	7	0	0	0	0	0	0	2	0	7	5	14
100-105	0	0	0	0	0	0	0	0	0	0	0	18	3
120-125	1	0	0	1	0	1	0	0	0	0	11	3	0
140-145	0	0	0	0	0	2	0	0	0	0	3	0	0
160-165	0	0	0	0	0	0	0	0	4	0	12	0	0
180-185	4	0	0	0	15	0	0	0	1	0	15	3	0
200-205	2	0	0	5	0	0	0	0	4	0	26	26	0
220-225	2	0	3	0	12	0	9	0	0	0	4	15	0
240-245	0	1	0	2	0	0	0	9	0	0	5	2	0
260-265	0	0	0	0	0	0	0	36	2	12	1	0	0
280-285	0	0	0	0	0	0	0	104	6	17	0	2	0
300-305	0	0	1	1	0	2	0	65	1	9	1	5	0
320-325	0	0	0	1	0	0	0	104	0	9	5	3	0
340-345	0	0	0	5	0	0	1	106	0	7	7	1	0
360-365	0	0	0	3	0	0	0	86	0	0	3	0	0
380-385	0	0	0	2	0	0	0	45	0	5	2	0	0

(See TABLE 2 for explanation of abbreviations)

TABLE 8 (continued). Raw counts of benthic foraminifers for Core V1-88-P3

Depth(cm)	CIBSPP	DENSPP	ELPSPP	EPIPAC	EPISMI	EPISPP	EPOCAL	EPOSTN	EPOTEN	EPOSPP	EPOUMB	FISSPP	FLOLAB
0-5	0	0	0	14	0	0	0	6	0	0	0	2	0
20-25	0	1	0	0	0	0	0	0	7	7	0	0	0
40-45	0	0	0	6	0	0	0	10	7	0	0	0	0
60-65	0	0	1	4	0	0	0	38	3	0	0	0	0
80-85	1	0	0	0	0	0	0	27	0	0	0	0	0
100-105	0	0	0	0	16	0	0	7	0	0	0	0	0
120-125	2	0	0	0	47	0	0	4	0	0	0	0	0
140-145	0	0	0	0	0	0	0	0	0	0	2	0	0
160-165	4	0	1	0	0	0	0	1	0	0	0	0	0
180-185	0	0	0	72	47	0	1	2	0	0	0	0	0
200-205	0	0	0	23	44	0	0	2	1	0	0	0	0
220-225	0	0	0	15	66	0	0	1	0	0	0	0	0
240-245	1	0	0	42	101	0	0	7	0	0	0	0	0
260-265	0	0	0	38	18	0	0	0	0	1	0	0	0
280-285	0	0	1	5	14	0	0	0	0	3	0	0	0
300-305	0	0	5	14	17	0	0	0	0	5	0	0	0
320-325	1	0	11	15	25	0	0	0	10	0	0	0	1
340-345	0	0	0	6	4	0	0	0	3	0	0	0	0
360-365	2	0	0	0	4	0	0	0	0	0	0	2	0
380-385	0	0	0	1	0	1	0	0	4	0	0	0	0

Depth(cm)	FURROT	FURSPP	GBLAFF	GBLAUR	GBLBAR	GBLHOE	GBLPAC	GBLSPP	GYRSLT	GYRSPP	HOEBRA	HOPKSA	KARSPP
0-5	0	0	0	0	0	3	0	1	0	0	0	0	0
20-25	0	0	0	2	0	0	0	0	0	1	0	0	2
40-45	0	0	0	2	2	3	4	0	0	1	1	3	0
60-65	0	0	0	0	2	0	3	1	34	0	1	0	0
80-85	1	0	0	0	0	0	2	0	0	0	0	0	0
100-105	0	0	4	0	0	0	0	6	0	0	1	0	0
120-125	7	0	0	0	0	3	0	0	0	7	0	0	0
140-145	0	0	0	0	0	0	0	1	0	0	1	0	0
160-165	0	0	0	0	0	0	0	0	1	0	6	0	0
180-185	5	1	0	0	1	0	0	12	18	0	0	0	0
200-205	1	0	0	0	0	0	0	13	0	0	0	0	0
220-225	45	0	0	4	0	2	3	0	2	0	0	0	0
240-245	18	0	0	0	0	0	2	9	0	0	0	0	0
260-265	0	1	0	0	0	0	0	7	0	0	0	0	0
280-285	0	0	0	0	0	0	4	8	0	0	0	0	0
300-305	0	0	0	0	0	0	0	9	0	0	0	0	0
320-325	0	0	0	0	2	0	0	10	0	0	0	0	0
340-345	0	0	0	0	0	0	0	8	0	0	0	0	0
360-365	0	0	0	12	0	2	0	1	0	0	1	0	0
380-385	0	0	0	0	0	0	0	9	0	0	0	0	0

TABLE 8 (continued). Raw counts of benthic foraminifers for Core V1-80-P3

Depth(cm)	LAGGRA	LAGWIL	LAGSPP	MARSPP	NONSPP	PLASPP	PULONQ	PYRSPP	QNQSPP	RFOSPP	SPRNTA	TRITRI	UVGPRG
0-5	0	0	0	0	0	0	1	0	0	1	0	0	12
20-25	0	0	0	0	0	0	0	0	0	1	0	1	5
40-45	0	0	0	1	0	0	2	0	0	0	0	0	7
60-65	0	0	0	0	0	0	0	0	0	0	3	0	31
80-85	0	0	0	0	0	0	0	0	0	0	3	1	76
100-105	0	0	1	0	0	0	1	0	0	0	3	0	82
120-125	0	0	0	0	0	0	1	0	0	0	1	4	32
140-145	0	0	0	0	0	0	0	0	0	0	1	0	4
160-165	0	0	0	0	1	1	0	0	0	0	0	0	8
180-185	0	0	0	0	0	1	1	4	0	0	0	0	61
200-205	0	1	0	0	1	5	0	1	0	0	0	1	75
220-225	0	0	0	0	0	0	2	1	0	0	0	0	68
240-245	0	0	0	0	0	0	0	0	0	0	0	0	54
260-265	0	0	0	0	0	1	1	1	0	0	0	0	74
280-285	0	0	0	0	1	1	0	0	0	0	0	0	43
300-305	0	0	0	0	0	0	2	0	0	0	0	0	50
320-325	0	0	0	0	0	0	0	0	0	0	0	0	93
340-345	0	0	1	0	0	0	1	0	0	0	0	2	68
360-365	1	0	1	0	0	1	0	1	1	0	0	1	10
380-385	0	0	1	0	0	0	0	0	0	0	0	1	2

Depth(cm)	UVGPRO	UVGSP1	UVGSPP	VALSPP	VIRBRA	OTHCAL
0-5	40	19	2	0	0	0
20-25	58	4	0	0	0	3
40-45	26	2	0	0	0	0
60-65	0	84	0	0	0	0
80-85	0	138	0	0	0	0
100-105	0	17	0	0	0	0
120-125	0	18	0	0	0	1
140-145	0	3	0	0	0	0
160-165	0	19	0	0	0	2
180-185	0	14	0	0	3	0
200-205	0	13	0	0	0	1
220-225	0	5	1	0	0	0
240-245	0	1	0	0	0	0
260-265	0	0	0	0	0	0
280-285	0	0	0	2	0	1
300-305	0	15	0	1	0	0
320-325	2	12	0	2	0	0
340-345	12	0	0	1	0	1
360-365	1	0	0	1	0	0
380-385	5	0	0	1	0	2

TABLE 9. Raw counts of benthic foraminifers for Core V1-80-P8

Depth(cm)	FLOLAB	FURROT	FURSPP	GBLAUR	GBLBAR	GBLHOE	GBLPAC	BULPYS	GRLSPP	GYRSLT	HOEBRA	KARSPP	LAGSPP
0-5	0	0	0	0	0	3	1	0	4	0	0	4	0
20-25	0	0	0	4	0	0	0	0	20	6	3	0	0
40-45	0	35	0	0	0	37	7	0	36	0	0	0	0
60-65	0	0	0	0	0	4	0	3	7	0	0	0	0
80-85	0	0	0	0	0	0	0	0	1	0	0	0	0
100-105	0	0	1	0	0	3	6	1	0	0	0	0	2
120-125	0	0	0	0	0	7	7	2	0	0	0	0	1
140-145	0	0	0	0	1	0	0	0	33	0	0	0	2
160-165	1	0	0	0	0	4	6	1	4	0	0	0	1
180-185	0	0	0	0	0	5	1	2	0	0	0	0	0
200-205	0	2	0	0	0	8	0	0	4	0	1	0	0
220-225	0	0	0	0	0	0	1	1	0	0	0	0	1
240-245	0	0	0	0	0	4	0	5	10	0	0	0	1
260-265	0	0	0	0	0	8	0	1	3	0	0	0	3
277-292	0	0	0	5	0	5	4	6	3	0	0	0	1

Depth(cm)	LENSPP	MARSPP	PLASPP	PULONQ	PYRSPP	TRISPP	TRITHI	UVGPRG	UVGPRO	UVGSP1	UVGSPP	VALSPP	VIRSPP
0-5	0	2	0	0	0	0	0	9	23	26	5	0	0
20-25	3	0	0	0	0	0	0	59	3	1	0	0	0
40-45	0	0	0	2	2	0	0	179	0	0	0	0	3
60-65	0	0	0	0	0	0	0	84	0	0	0	0	1
80-85	0	0	0	0	0	0	0	110	1	1	0	1	0
100-105	0	0	0	0	0	0	0	58	2	0	0	0	0
120-125	0	0	0	0	1	0	0	49	1	0	0	0	0
140-145	0	0	0	0	2	0	1	21	0	0	0	2	0
160-165	0	0	2	0	1	0	4	30	1	0	0	3	0
180-185	1	0	1	0	1	0	3	34	5	0	0	0	0
200-205	0	0	3	0	3	0	3	42	2	0	1	1	0
220-225	0	0	11	1	4	0	0	50	0	1	0	0	0
240-245	0	0	0	0	2	0	14	72	6	1	0	1	0
260-265	0	0	0	0	1	0	0	38	3	1	0	2	1
277-292	0	0	4	1	2	1	4	35	2	11	0	3	0

(See TABLE 2 for explanation of abbreviations)

TABLE 9 (continued). Raw counts of benthic foraminifers for Core V1-80-P8

Depth(cm)	BOLANG	BOLPSE	BOLSEM	BOLSPI	BULPAG	BULSPC	BULSTM	BULTEN	CASCAL	CASDEL	CASNEO	CASTRN	CASSPP
0-5	0	0	0	1	0	0	4	3	0	0	0	1	1
20-25	9	0	10	11	1	7	8	24	9	2	0	0	2
40-45	0	0	0	120	0	16	14	7	0	0	0	69	3
60-65	0	0	0	59	0	11	10	1	0	0	0	76	4
80-85	0	0	0	48	0	69	36	5	0	0	0	40	1
100-105	0	0	0	23	0	46	20	2	0	0	0	72	0
120-125	0	0	0	5	0	7	2	0	0	2	0	206	0
140-145	0	0	0	2	0	7	2	2	0	2	0	192	0
160-165	0	2	0	5	0	7	3	2	0	0	0	197	5
180-185	0	5	0	3	0	26	13	12	0	1	0	155	0
200-205	0	1	0	4	0	0	7	3	0	2	0	209	0
220-225	0	2	0	3	0	10	5	10	0	2	0	180	1
240-245	0	0	0	1	0	47	6	9	0	6	0	20	0
260-265	0	0	0	0	0	15	2	0	0	4	6	59	0
277-292	0	0	0	0	0	16	4	4	0	2	5	51	0

Depth(cm)	CSDSPP	CHISPP	CHNFIM	CIBFLT	CIBMCK	CIBSPP	ELPSPP	EPIPAC	EPISMI	EPOSTN	EPOTEN	EPUSPP	FISSPP
0-5	0	2	0	0	4	0	0	0	0	0	0	0	0
20-25	1	6	2	1	3	0	0	15	17	9	0	1	0
40-45	6	26	37	0	0	0	1	90	50	0	10	0	0
60-65	20	12	4	0	0	0	1	74	8	0	4	0	0
80-85	11	4	2	0	0	0	3	60	26	0	5	0	0
100-105	11	1	0	0	0	0	2	23	27	0	7	0	0
120-125	10	1	4	0	0	1	3	9	1	0	6	0	0
140-145	5	7	2	0	0	2	9	5	0	0	7	0	0
160-165	8	11	5	0	0	0	3	6	1	0	2	0	0
180-185	6	6	4	0	0	2	7	7	1	0	4	0	0
200-205	3	2	0	0	0	2	3	1	1	0	0	0	0
220-225	6	1	0	0	0	0	3	5	0	0	0	0	1
240-245	5	6	5	0	0	1	6	4	2	0	0	0	2
260-265	1	3	1	0	0	0	2	2	0	0	0	0	2
277-292	6	9	1	0	0	0	1	2	1	0	0	1	0

TABLE 10. Percent benthic foraminifers for Core V1-80-G1

Depth(cm)	AGGSP1	BOLARG	BOLPSE	BOLSPI	BULFOS	BULSEC	BULSTN	BULTEN	CASDEL	CASNEO	CASTRN	CASSPP	CSDSPP	CHISPP	CHNFIN
0-5	2.1	0.0	0.0	0.0	2.1	0.0	4.2	12.5	0.0	0.0	4.2	0.0	0.0	0.0	0.0
22-24	0.0	0.0	0.0	0.0	0.9	0.0	8.0	2.7	0.0	0.0	0.0	0.0	0.0	1.8	0.0
42-44	1.1	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
45-50	1.5	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62-64	0.0	0.0	0.0	0.0	0.0	0.0	5.6	1.9	0.0	0.0	0.0	0.0	0.0	1.9	0.0
82-84	0.0	0.0	0.0	0.0	0.0	0.0	21.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95-100	0.6	0.0	0.3	2.2	0.3	0.0	4.6	0.0	0.0	0.0	0.6	0.3	0.0	0.0	0.0
122-124	0.0	4.2	0.0	6.7	0.0	0.0	11.0	4.2	0.0	0.0	1.4	0.4	0.0	0.7	0.0
145-150	0.0	0.7	2.0	5.2	0.0	0.0	0.0	2.6	0.7	3.3	3.9	0.0	0.7	0.7	0.7
162-164	0.0	0.0	2.2	2.6	0.0	4.7	0.4	1.7	0.0	6.9	3.0	1.3	3.0	3.4	0.0
182-184	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	1.4	4.2	0.0	0.0	1.4	2.0
195-200	0.0	0.0	0.0	0.0	0.0	0.0	4.5	2.3	0.0	2.3	2.3	0.0	0.0	0.0	0.0
222-224	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	18.2	0.0	0.0	0.9	0.0
245-250	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	11.4	0.0	0.0	2.3	0.0
262-264	0.0	0.0	0.0	0.0	0.0	0.0	6.9	2.0	0.0	1.0	27.5	0.0	0.0	0.0	0.0
282-284	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2.0	0.7	14.6	4.0	0.0	0.0	0.7	0.0
295-300	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.8	0.0	4.9	9.8	0.0	0.0	0.8	0.0
320-322	0.0	0.0	0.0	0.0	1.0	0.0	2.6	0.5	0.0	9.7	6.2	0.5	0.5	0.0	0.5

Depth(cm)	BOLSEM	BULPAG	CIBFLT	CIBLOB	CIBMCK	CIBSPP	DENSPP	ELSMOR	ELPSPP	EPIPAC	EPISMI	EPOSTN	EPOTEN	EPOSPP	FISSPP
0-5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	4.2	0.0
22-24	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	2.7	0.9
42-44	0.0	0.0	1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	2.2
45-50	0.0	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	1.5
62-64	0.0	0.0	0.0	0.0	3.7	0.0	0.0	1.9	0.0	0.0	0.0	0.0	3.7	0.0	1.9
82-84	0.0	0.0	0.0	0.0	21.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
95-100	0.0	0.0	0.6	0.0	32.7	0.0	0.0	0.0	0.0	0.0	0.0	7.4	3.1	0.0	0.9
122-124	4.2	1.1	0.0	0.0	11.0	0.4	0.0	0.0	0.4	1.4	1.4	1.4	2.5	0.0	0.0
145-150	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.7	9.2	3.3	0.0	0.0	1.3	0.7
162-164	0.0	0.0	0.0	2.6	3.0	0.0	0.0	0.0	0.4	6.0	1.3	0.0	3.4	0.9	0.4
182-184	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	0.0
195-200	0.0	0.0	4.5	0.0	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8	0.0	2.3
222-224	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8	0.9	0.9
245-250	0.0	0.0	0.0	0.0	4.5	0.0	0.0	2.3	0.0	0.0	0.0	0.0	13.6	0.0	0.0
262-264	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	7.8	0.0	1.0
282-284	0.0	0.0	3.3	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0.7
295-300	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.0
320-322	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.5	0.0	0.0	0.0	6.7	0.0	2.6

(See TABLE 2 for explanation of abbreviations)

TABLE 10 (continued). Percent benthic foraminifers for Core V1-88-G1

Depth(cm)	GLOLAB	GBLAUR	GBLBAR	GBLHOE	GBLPAC	BULPYS	GBLSPP	GYRSLT	GYRSPP	HOEBRA	KARSPP	LAGSPP	LENSPP	MRGOBS	MARSPP
0-5	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	14.6	0.0	0.0	0.0	4.2
22-24	0.0	0.9	4.5	1.8	0.9	0.0	0.9	0.0	9.8	0.0	15.2	0.0	0.0	0.0	3.6
42-44	0.0	0.0	5.6	0.0	0.0	0.0	0.0	0.0	5.6	0.0	3.4	1.1	1.1	0.0	0.0
45-50	0.0	0.0	0.0	0.0	1.5	4.5	1.5	0.0	1.5	0.0	4.5	0.0	0.0	0.0	0.0
62-64	0.0	0.0	7.4	5.6	0.0	0.0	3.7	0.0	3.7	0.0	14.8	0.0	0.0	0.0	0.0
82-84	0.0	0.0	4.0	3.2	1.6	0.0	0.8	0.0	5.6	1.6	4.0	0.0	0.0	0.0	0.0
95-100	0.0	0.0	24.4	3.4	0.0	0.0	0.0	1.9	0.0	0.9	3.1	0.3	0.0	0.0	0.0
122-124	0.4	0.0	2.5	1.4	2.5	0.0	0.0	0.0	3.2	1.8	0.0	0.0	0.0	0.0	0.0
145-150	0.0	0.0	2.0	3.9	0.0	0.7	0.0	0.0	3.9	0.0	6.5	0.0	0.0	0.0	0.0
162-164	0.0	0.0	2.2	3.0	0.0	0.0	1.3	15.5	0.0	0.0	3.9	0.4	0.0	0.0	0.0
182-184	0.0	0.0	4.2	2.8	0.0	0.0	0.0	1.4	1.4	0.0	2.8	1.4	0.0	1.4	0.0
195-200	0.0	2.3	18.2	6.8	0.0	0.0	0.0	9.1	0.0	0.0	2.3	4.5	0.0	0.0	0.0
222-224	0.0	0.0	3.6	0.0	1.8	0.0	0.0	0.9	4.5	0.0	8.2	0.0	0.0	0.0	0.0
245-250	0.0	0.0	2.3	4.5	0.0	0.0	0.0	0.0	0.0	0.0	18.2	0.0	0.0	0.0	0.0
262-264	0.0	0.0	2.0	2.0	5.9	0.0	0.0	2.0	1.0	1.0	4.9	0.0	0.0	1.0	0.0
282-284	0.0	0.0	0.7	2.0	0.0	3.3	0.7	5.3	1.3	0.0	7.9	1.3	0.0	0.0	0.0
295-300	0.0	0.0	7.4	4.9	0.0	0.0	0.0	1.6	0.0	1.6	0.0	1.6	0.0	0.0	0.0
320-322	0.0	0.0	1.0	2.6	0.0	0.0	1.0	0.0	6.2	0.5	4.1	2.1	0.0	0.0	0.0

Depth(cm)	MELPOM	MONSPP	PLASPP	PSENON	PULRUL	PULONQ	PYRSPP	REOSPP	SPHAER	SPRLOC	TRISPP	TRITRI	UVGPRG	UVGPRO	UVGSNT
0-5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0	0.0	4.2	37.5	0.0
22-24	0.0	0.0	0.9	0.0	0.9	1.8	0.0	0.0	0.0	0.0	0.0	0.0	6.3	27.7	0.0
42-44	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	60.7	0.0
45-50	0.0	0.0	0.0	0.0	1.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	3.0	65.7	0.0
62-64	0.0	0.0	0.0	0.0	3.7	0.0	1.9	0.0	0.0	0.0	0.0	0.0	1.9	33.3	0.0
82-84	0.0	0.0	0.0	0.0	0.0	3.2	0.8	0.0	0.0	0.0	0.0	0.0	11.2	4.0	0.0
95-100	0.0	0.0	0.0	0.0	0.3	0.6	0.3	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0
122-124	0.0	0.0	0.7	0.0	0.4	1.1	0.4	0.0	0.0	0.0	0.0	0.0	31.1	0.0	0.0
145-150	0.0	0.0	0.0	0.0	0.7	3.9	0.0	0.0	0.0	0.0	0.0	0.7	15.7	6.5	0.5
162-164	0.0	0.0	0.0	0.0	1.7	3.4	0.0	0.0	1.3	0.0	0.0	3.4	4.7	1.3	0.6
182-184	4.2	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9	9.7	37.5
195-200	0.0	0.0	0.0	0.0	4.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	6.8	2.3	4.5
222-224	3.6	0.0	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	46.4
245-250	13.6	0.0	2.3	0.0	6.8	2.3	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	11.4
262-264	1.0	3.9	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	22.5
282-284	0.7	0.0	0.0	0.0	0.7	4.6	0.0	0.0	0.0	1.3	0.7	1.3	3.3	17.2	0.7
295-300	2.5	0.0	1.6	0.8	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	8.2	3.3	32.0
320-322	9.2	0.0	0.5	0.0	2.1	2.6	0.0	0.0	0.0	0.0	0.0	0.0	4.6	2.1	26.7

TABLE 10 (continued). Percent benthic foraminifers for Core V1-80-G1

Depth(cm)	UVGSP1	UVGSPP	VALSPP
0-5	2.1	0.0	0.0
22-24	0.9	0.0	0.0
42-44	3.4	0.0	0.0
45-50	1.5	0.0	1.5
62-64	0.0	0.0	3.7
82-84	1.6	0.0	0.0
95-100	1.2	0.0	0.6
122-124	2.5	0.0	0.0
145-150	0.7	0.0	0.0
162-164	0.0	0.0	1.7
182-184	0.0	0.0	1.4
195-200	0.0	0.0	2.3
222-224	0.0	0.0	0.0
245-250	0.0	0.0	0.0
262-264	0.0	0.0	0.0
282-284	3.3	0.7	0.0
295-300	0.0	0.0	0.0
320-322	0.0	0.0	0.0

TABLE 11. Percent benthic foraminifers for Core VI-80-P3

Depth(cm)	BOLARG	BOLLAE	BOLPSE	BOLPUS	BOLSEM	BOLSPI	BOLSUB	BOLSPP	BULPAG	BULPYS	BULSPC	BULSTM	BULTEN	CASBRA	CASCAL
0-5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7	4.1	0.0	0.0
20-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2	8.4	0.0	0.0
40-45	0.0	0.0	0.0	0.0	0.0	8.7	0.0	0.0	0.0	0.6	0.0	13.7	6.8	0.0	0.0
60-65	0.0	0.0	1.1	0.0	0.0	19.0	0.0	0.0	0.0	0.0	0.8	5.0	0.0	0.0	0.8
80-85	0.0	0.0	0.0	0.0	0.0	21.7	0.0	0.0	0.0	0.0	2.6	5.4	1.9	0.0	1.7
100-105	0.0	0.0	0.0	0.0	0.0	25.5	0.0	0.0	0.0	1.8	13.2	2.1	3.7	0.0	0.0
120-125	0.0	0.0	0.0	0.0	0.0	8.4	0.0	0.0	0.0	0.9	15.4	2.3	5.6	0.5	0.0
140-145	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0	0.0	0.0	8.3	8.3	0.0	0.0	0.0
160-165	0.0	1.3	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	3.8	7.6	0.0	0.0	0.0
180-185	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.3	13.1	2.9	1.2	1.2	0.0
200-205	4.6	0.0	0.0	0.0	0.4	1.8	0.0	1.4	0.0	0.7	1.8	0.4	2.5	0.7	0.0
220-225	6.9	0.0	0.8	0.3	1.4	0.5	3.0	0.0	1.6	0.3	2.2	0.3	11.3	0.5	0.0
240-245	0.0	0.0	0.0	0.0	0.0	15.6	0.0	0.0	0.0	0.0	0.0	4.7	0.6	0.0	0.3
260-265	0.0	0.0	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0	6.1	8.4	0.0	0.0	0.0
280-285	0.0	0.0	0.0	0.0	0.0	4.1	0.0	0.3	0.0	0.0	5.2	11.7	0.0	0.0	0.0
300-305	0.0	0.0	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0	12.2	15.9	0.0	0.0	0.0
320-325	0.0	0.2	0.0	0.0	0.0	4.7	0.0	0.0	0.0	0.0	12.9	15.7	0.6	0.0	0.0
340-345	1.3	0.0	0.9	0.0	0.3	2.8	0.0	0.0	0.0	0.0	9.4	7.2	2.2	0.0	0.0
360-365	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	1.4	2.1	2.1	0.0	0.0	0.0
380-385	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	3.1	1.0	1.0	0.0	0.0

Depth(cm)	CASCOR	CASDEL	CASNEO	CASPAT	CASSBG	CASTRN	CASSPP	CSDSPP	CHISPP	CHNFIM	CIBNCK	CIBSPP	DENSPP	ELPSPP	EPIPAC
0-5	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.7	7.6	0.0	0.0	0.0	9.7
20-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	4.2	0.0	0.0	0.0	0.0
40-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	9.9	10.6	0.0	0.0	0.0	3.7
60-65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6	14.8	0.0	0.0	0.3	1.1
80-85	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	1.7	1.2	3.3	0.2	0.0	0.0	0.0
100-105	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	5.5	0.9	0.0	0.0	0.0	0.0
120-125	0.0	0.5	0.0	0.5	0.0	0.0	0.0	0.0	5.1	1.4	0.0	0.9	0.0	0.0	0.0
140-145	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0
160-165	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.0	15.2	0.0	0.0	5.1	0.0	1.3	0.0
180-185	0.0	0.0	4.4	0.0	0.0	0.0	0.3	0.0	4.4	0.9	0.0	0.0	0.0	0.0	21.0
200-205	0.0	1.8	0.0	0.0	0.0	0.0	1.4	0.0	9.2	9.2	0.0	0.0	0.0	0.0	0.1
220-225	0.8	0.0	3.3	0.0	2.5	0.0	0.0	0.0	1.1	4.1	0.0	0.0	0.0	0.0	4.1
240-245	0.0	0.6	0.0	0.0	0.0	2.8	0.0	0.0	1.6	0.6	0.0	0.3	0.0	0.0	13.1
260-265	0.0	0.0	0.0	0.0	0.0	12.1	0.7	4.0	0.3	0.0	0.0	0.0	0.0	0.0	12.8
280-285	0.0	0.0	0.0	0.0	0.0	35.9	2.1	5.9	2.8	0.7	0.0	0.0	0.0	0.3	1.7
300-305	0.3	0.3	0.0	0.6	0.0	20.3	0.3	2.8	0.3	1.6	0.0	0.0	0.0	1.6	4.4
320-325	0.0	0.2	0.0	0.0	0.0	22.4	0.0	1.9	1.1	0.6	0.0	0.2	0.0	2.4	3.2
340-345	0.0	1.6	0.0	0.0	0.3	33.2	0.0	2.2	2.2	0.3	0.0	0.0	0.0	2.5	1.9
360-365	0.0	2.1	0.0	0.0	0.0	59.7	0.0	0.0	2.1	0.0	0.0	1.4	0.0	0.0	0.0
380-385	0.0	2.1	0.0	0.0	0.0	46.9	0.0	5.2	2.1	0.0	0.0	8.3	0.0	0.0	1.0

(See TABLE 2 for explanation of abbreviations)

TABLE 11 (continued). Percent benthic foraminifers for Core V1-80-P3

Depth(cm)	EPISMI	EPISPP	EPOCAL	EPOSTN	EPOTEN	EPOSPP	EPOUMB	FISSPP	FLOLAB	FURROT	FURSPP	GBLAFF	GBLAUR	GBLBAR	GBLHOE
0-5	0.0	0.0	0.0	4.1	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	2.1
20-25	0.0	0.0	0.0	0.0	5.9	5.9	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0
40-45	0.0	0.0	0.0	6.2	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.9
60-65	0.0	0.0	0.0	10.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
80-85	1.9	0.0	0.0	6.4	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
100-105	4.9	0.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	2.5	0.0	1.2	0.0	0.0	0.0
120-125	22.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	1.4
140-145	0.0	0.0	0.0	0.0	0.0	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160-165	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.1
180-185	13.7	0.0	0.3	0.6	0.0	0.0	0.0	0.0	0.0	1.5	0.3	0.0	0.0	0.3	0.0
200-205	15.5	0.0	0.0	0.7	0.4	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
220-225	18.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	12.4	0.0	0.0	1.1	0.0	0.5
240-245	31.5	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	5.6	0.0	0.0	0.0	0.0	0.0
260-265	6.1	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
280-285	4.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
300-305	5.3	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-325	5.4	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.4	0.0
340-345	1.3	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
360-365	2.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.3	0.0	1.4
380-385	0.0	1.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Depth(cm)	GBLPAC	GBLSPP	GYRSLT	GYRSPP	HOEBRA	HOPKSA	KARSPP	LAGGRA	LAGWIL	LAGSPP	MARSPP	NONSPP	PLASPP	PULONO	PYRSPP
0-5	0.0	0.7	0.0	0.0	0.0	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0
20-25	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40-45	2.5	0.0	0.0	0.6	0.6	1.9	0.0	0.0	0.0	0.0	0.6	0.0	0.0	1.2	0.0
60-65	0.0	0.3	9.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80-85	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100-105	0.0	1.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0
120-125	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0
140-145	0.0	4.2	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160-165	0.0	0.0	1.3	0.0	7.6	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	0.0	0.0
180-185	0.0	3.5	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	1.2
200-205	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	1.0	0.0	0.4
220-225	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3
240-245	0.6	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
260-265	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3
280-285	1.4	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0
300-305	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0
320-325	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
340-345	0.0	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0
360-365	0.0	0.7	0.0	0.0	0.7	0.0	0.0	0.7	0.0	0.7	0.0	0.0	0.7	0.0	0.7
380-385	0.0	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0

TABLE 11 (continued). Percent benthic foraminifers for Core V1-80-P3

Depth(cm)	ONOSPP	REOSPP	SPRNTA	TRITRI	UVGPRG	UVGPRO	UVGSP1	UVGSPP	VALSPP	VIRRRA	OTHCAL
0-5	0.0	0.7	0.0	0.0	0.3	27.6	13.1	1.4	0.0	0.0	0.0
20-25	0.0	0.0	0.0	0.0	4.2	48.7	3.4	0.0	0.0	0.0	2.5
40-45	0.0	0.0	0.0	0.0	4.3	16.1	1.2	0.0	0.0	0.0	0.0
60-65	0.0	0.0	0.0	0.0	0.7	0.0	23.5	0.0	0.0	0.0	0.0
80-85	0.0	0.0	0.7	0.2	17.9	0.0	32.5	0.0	0.0	0.0	0.0
100-105	0.0	0.0	0.9	0.0	25.2	0.0	5.2	0.0	0.0	0.0	0.0
120-125	0.0	0.0	0.5	1.9	15.0	0.0	8.4	0.0	0.0	0.0	0.5
140-145	0.0	0.0	4.2	0.0	16.7	0.0	12.5	0.0	0.0	0.0	0.0
160-165	0.0	0.0	0.0	0.0	10.1	0.0	24.1	0.0	0.0	0.0	2.5
180-185	0.0	0.0	0.0	0.0	17.8	0.0	4.1	0.0	0.0	0.9	0.0
200-205	0.0	0.0	0.0	0.4	26.5	0.0	4.6	0.0	0.0	0.0	0.4
220-225	0.0	0.0	0.0	0.0	18.7	0.0	1.4	0.3	0.0	0.0	0.0
240-245	0.0	0.0	0.0	0.0	16.8	0.0	0.3	0.0	0.0	0.0	0.0
260-265	0.0	0.0	0.0	0.0	24.9	0.0	0.0	0.0	0.0	0.0	0.0
280-285	0.0	0.0	0.0	0.0	14.8	0.0	2.8	0.0	0.7	0.0	0.3
300-305	0.0	0.0	0.0	0.0	18.1	0.0	4.7	0.0	0.3	0.0	0.0
320-325	0.0	0.0	0.0	0.0	20.0	0.4	2.6	0.0	0.4	0.0	0.0
340-345	0.0	0.0	0.0	0.6	21.3	3.8	0.0	0.0	0.3	0.0	0.3
360-365	0.7	0.0	0.0	0.7	6.9	0.7	0.0	0.0	0.7	0.0	0.0
380-385	0.0	0.0	0.0	1.0	2.1	5.2	0.0	0.0	1.0	0.0	2.1

TABLE 12. Percent benthic foraminifers for Core V1-80-PR

Depth(cm)	BOLARG	BOLPSE	BOLSEM	BOLSPI	BULPAC	BULSPC	BULSTM	BULTEN	CASCAL	CASDEL	CASNEO	CASTRN	CASSPP	CSDSPP	CHISPP
0-5	0.0	0.0	0.0	1.1	0.0	0.0	4.3	3.2	0.0	0.0	0.0	1.1	1.1	0.0	2.2
20-25	3.7	0.0	4.1	4.5	0.4	2.9	3.3	0.0	3.7	0.8	0.0	0.0	0.0	0.4	2.4
40-45	0.0	0.0	0.0	16.0	0.0	2.1	1.9	0.9	0.0	0.0	0.0	9.2	0.4	0.0	3.5
60-65	0.0	0.0	0.0	15.4	0.0	2.9	2.6	0.3	0.0	0.0	0.0	19.0	1.0	5.2	3.1
80-85	0.0	0.0	0.0	11.3	0.0	16.3	8.5	1.2	0.0	0.0	0.0	9.4	0.2	2.6	0.9
100-105	0.0	0.0	0.0	7.5	0.0	15.0	6.5	0.7	0.0	0.0	0.0	23.5	0.0	3.6	0.3
120-125	0.0	0.0	0.0	1.5	0.0	2.2	0.6	0.0	0.0	0.6	0.0	63.4	0.0	3.1	0.3
140-145	0.0	0.0	0.0	0.7	0.0	2.3	0.7	0.7	0.0	0.7	0.0	62.7	0.0	1.6	2.3
160-165	0.0	0.6	0.0	1.6	0.0	2.2	1.0	0.6	0.0	0.0	0.0	62.5	1.6	2.5	3.5
180-185	0.0	1.6	0.0	1.0	0.0	8.5	4.3	3.9	0.0	0.3	0.0	50.0	0.0	2.0	2.0
200-205	0.0	0.3	0.0	1.3	0.0	0.0	2.3	1.0	0.0	0.6	0.0	67.9	0.0	1.0	0.6
220-225	0.0	0.7	0.0	1.0	0.0	3.3	1.7	3.3	0.0	0.7	0.0	60.2	0.3	2.0	0.3
240-245	0.0	0.0	0.0	0.4	0.0	19.9	2.5	3.8	0.0	2.5	0.0	8.5	0.0	2.1	2.5
260-265	0.0	0.0	0.0	0.0	0.0	9.5	1.3	0.0	0.0	2.5	3.8	37.3	0.0	0.6	1.9
277-292	0.0	0.0	0.0	0.0	0.0	8.4	2.1	2.1	0.0	1.1	2.6	26.0	0.0	3.2	4.7

Depth(cm)	CHNFIM	CIBFLT	CIBNCK	CIBSPP	ELPSPP	EPIPAC	EPISMI	EPOSTN	EPOTEN	EPOSPP	FISSPP	FLOLAB	FURROT	FURSPP	GBLAUR
0-5	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20-25	0.8	0.4	1.2	0.0	0.0	6.1	6.9	3.7	0.0	0.4	0.0	0.0	0.0	3.3	1.6
40-45	4.9	0.0	0.0	0.0	0.1	12.0	6.7	0.0	1.3	0.0	0.0	0.0	4.7	0.0	0.0
60-65	1.0	0.0	0.0	0.0	0.3	19.3	2.1	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
80-85	0.5	0.0	0.0	0.0	0.7	14.2	6.1	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
100-105	0.0	0.0	0.0	0.0	0.7	7.5	8.8	0.0	2.3	0.0	0.0	0.0	0.0	0.3	0.0
120-125	1.2	0.0	0.0	0.3	0.9	2.8	9.3	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0
140-145	0.7	0.0	0.0	0.7	2.9	1.6	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0
160-165	1.6	0.0	0.0	0.0	1.0	1.9	0.3	0.0	0.6	0.0	0.0	0.3	0.0	0.0	0.0
180-185	1.3	0.0	0.0	0.7	2.3	2.3	0.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0
200-205	0.0	0.0	0.0	0.6	1.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
220-225	0.0	0.0	0.0	0.0	1.0	1.7	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
240-245	2.1	0.0	0.0	0.4	2.5	1.7	0.8	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0
260-265	0.6	0.0	0.0	0.0	1.3	1.3	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0
277-292	0.5	0.0	0.0	0.0	0.5	1.1	0.5	0.0	0.0	0.5	0.0	0.0	0.0	0.0	2.6

(See TABLE 2 for explanation of abbreviations)

TABLE 12 (continued). Percent benthic foraminifers for Core V1-88-P8

Depth(cm)	GBLBAR	GBLHOE	GBLPAC	BULPYS	GALSPP	GYRSLT	HUEBRA	KARSPP	LAGSPP	LENSPP	MARSPP	PLASPP	PULONO	PYRSPP	TRISPP
0-5	0.0	3.2	1.1	0.0	4.3	0.0	0.0	4.3	0.0	0.0	2.2	0.0	0.0	0.0	0.0
20-25	0.0	0.0	0.0	0.0	0.2	2.4	1.2	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0
40-45	0.0	4.9	0.9	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0
60-65	0.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80-85	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100-105	0.0	1.0	2.0	0.3	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
120-125	0.0	2.2	2.2	0.6	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.0
140-145	0.3	0.0	0.0	0.0	10.8	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.7	0.0
160-165	0.0	1.3	1.9	0.3	1.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.6	0.0	0.3	0.0
180-185	0.0	1.6	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.3	0.0
200-205	0.0	2.6	0.0	0.0	1.3	0.0	0.3	0.0	0.0	0.0	0.0	1.0	0.0	1.0	0.0
220-225	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	3.7	0.3	1.3	0.0
240-245	0.0	1.7	0.0	2.1	4.2	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
260-265	0.0	5.1	0.0	0.6	1.9	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.6	0.0
277-292	0.0	2.6	2.1	3.2	1.6	0.0	0.0	0.0	0.5	0.0	0.0	2.1	0.5	1.1	0.5

Depth(cm)	TRITRI	UVGPHG	UVGPRO	UVGSP1	UVGSPP	VALSPP	VIRSPP
0-5	0.0	9.7	24.7	20.0	5.4	0.0	0.0
20-25	0.0	24.1	1.2	0.4	0.0	0.0	0.0
40-45	0.0	23.9	0.0	0.0	0.0	0.0	0.4
60-65	0.0	21.9	0.0	0.0	0.0	0.0	0.3
80-85	0.0	25.9	0.2	0.2	0.0	0.2	0.0
100-105	0.0	10.9	0.7	0.0	0.0	0.0	0.0
120-125	0.0	15.1	0.3	0.0	0.0	0.0	0.0
140-145	0.3	6.9	0.0	0.0	0.0	0.7	0.0
160-165	1.3	9.5	0.3	0.0	0.0	1.0	0.0
180-185	1.0	11.1	1.6	0.0	0.0	0.0	0.0
200-205	1.0	13.6	0.6	0.0	0.3	0.3	0.0
220-225	0.0	16.7	0.0	0.3	0.0	0.0	0.0
240-245	5.9	30.5	2.5	0.4	0.0	0.4	0.0
260-265	0.0	24.1	1.9	0.6	0.0	1.3	0.6
277-292	2.1	10.4	1.1	5.0	0.0	1.6	0.0

TABLE 13. Raw counts of planktonic foraminifers for Core V1-80-G1

Depth(cm)	PAC L	PAC R	PD INT	DUTER	BULL	QUING	GLUT	SCIT	HEX	O UNIV	INFL	TRUNC	FALCON	OTHER
0-5	3	0	0	0	0	0	0	0	0	0	0	0	0	0
22-24	5	2	0	0	0	0	0	0	0	0	0	0	0	0
42-44	5	7	4	0	0	0	1	0	0	0	0	0	0	0
45-50	3	0	1	0	0	0	0	0	0	0	0	0	0	0
62-64	11	1	1	0	0	0	0	0	0	0	0	0	0	0
82-84	12	10	0	0	0	0	0	0	1	0	0	0	0	0
95-100	76	16	8	0	4	0	3	1	1	0	1	0	0	0
122-124	59	206	32	0	22	5	8	1	0	0	1	0	0	3
145-150	85	10	2	0	133	4	26	5	1	0	0	0	0	0
162-164	124	3	0	0	153	4	9	1	0	0	0	0	0	0
182-184	43	4	0	0	62	0	2	0	0	0	0	0	0	0
195-200	100	3	0	0	22	0	2	0	0	0	0	0	0	2
222-224	61	0	1	0	26	2	4	1	0	0	0	0	0	1
245-250	9	3	0	0	15	0	0	0	0	0	0	0	0	0
262-264	112	38	27	28	106	0	0	0	0	2	0	0	0	6
282-284	191	34	2	0	59	5	16	2	0	0	0	0	0	0
295-300	117	6	0	0	53	2	4	0	0	0	0	0	0	0
320-322	196	4	0	0	57	0	0	0	0	0	0	0	0	1

(See TABLE 3 for explanation of abbreviations)

TABLE 14. Raw counts of planktonic foraminifers for Core V1-80-P3

Depth(cm)	PAC L	PAC R	PD INT	DUTER	BULL	QUINQ	GLUT	SCIT	HEX	O UNIV	INFL	TRUNC	FALCON	OTHER
0-5	0	0	0	0	1	1	0	0	0	0	0	0	0	0
20-25	25	4	2	0	0	0	1	0	0	0	0	0	0	0
40-45	5	1	1	0	0	0	0	0	1	0	0	0	0	0
60-65	73	45	6	0	4	2	0	1	0	0	0	0	0	0
80-85	36	145	84	12	16	10	3	0	0	1	1	0	0	2
100-105	30	130	58	1	19	14	13	1	2	2	0	0	1	0
120-125	22	158	34	1	10	53	2	1	5	0	1	1	0	4
140-145	23	15	3	0	1	3	3	0	0	0	0	0	0	0
160-165	138	82	10	0	5	13	42	1	2	0	1	0	0	2
180-185	104	85	47	4	18	16	18	2	1	0	1	0	0	0
200-205	45	130	82	10	13	8	6	0	0	0	0	0	0	5
220-225	67	75	35	0	58	35	15	8	3	0	1	0	1	3
240-245	74	69	21	3	88	56	3	18	1	6	1	0	0	6
260-265	139	17	5	1	48	21	63	2	1	0	0	0	0	2
280-285	178	28	7	1	45	13	40	0	0	1	0	0	0	2
300-305	166	12	0	1	127	12	20	1	0	1	0	0	0	4
320-325	122	4	3	1	84	9	12	4	0	1	0	0	0	1
340-345	142	2	0	0	110	12	24	7	0	0	0	0	0	4
360-365	151	9	3	0	114	10	22	2	0	0	0	0	0	2
380-385	128	13	0	0	84	7	63	2	0	0	0	0	0	0

(See TABLE 3 for explanation of abbreviations)

TABLE 15. Raw counts of planktonic foraminifers for Core V1-88-P8

Depth(cm)	PAC L	PAC R	PD INT	DUTER	BULL	QUINQ	GLUT	SCIT	HEX	O UNIV	INFLA	TRUNC	FALCON	UMBIL	Other
0-5	4.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20-25	82.0	133.0	27.0	2.0	42.0	18.0	3.0	3.0	0.0	2.0	0.0	0.0	0.0	0.0	7.0
40-45	111.0	109.0	25.0	0.0	50.0	11.0	24.0	2.0	2.0	5.0	1.0	0.0	2.0	0.0	11.0
60-65	61.0	12.0	9.0	0.0	71.0	2.0	52.0	1.0	0.0	2.0	0.0	0.0	0.0	0.0	5.0
80-85	129.0	10.0	0.0	0.0	122.0	17.0	31.0	3.0	0.0	1.0	0.0	0.0	0.0	0.0	5.0
100-105	112.0	5.0	1.0	0.0	122.0	10.0	27.0	6.0	0.0	0.0	0.0	0.0	0.0	1.0	4.0
120-125	151.0	5.0	0.0	0.0	106.0	4.0	29.0	1.0	0.0	0.0	0.0	0.0	1.0	4.0	0.0
140-145	189.0	20.0	3.0	0.0	69.0	4.0	34.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	1.0
160-165	155.0	17.0	1.0	0.0	68.0	13.0	27.0	3.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
180-185	194.0	21.0	5.0	0.0	57.0	6.0	17.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
200-205	136.0	10.0	2.0	0.0	140.0	8.0	16.0	5.0	2.0	1.0	0.0	0.0	0.0	1.0	9.0
220-225	108.0	4.0	0.0	0.0	198.0	8.0	21.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	24.0
240-245	136.0	1.0	0.0	0.0	126.0	4.0	17.0	6.0	0.0	1.0	0.0	0.0	0.0	1.0	10.0
260-265	233.0	5.0	0.0	0.0	25.0	4.0	12.0	4.0	1.0	0.0	0.0	0.0	0.0	0.0	7.0
277-292	100.0	4.0	0.0	0.0	160.0	1.0	5.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	11.0

(See TABLE 3 for explanation of abbreviations)

TABLE 16. Percent planktonic foraminifers for Core V1-80-G1

Depth(cm)	PAC L	PAC R	PD INT	DUTER	BULL	QUINQ	GLUT	SCIT	HEX	O UNIV	INFL	TRUNC	FALCON	Other
0-5	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22-24	71.4	28.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42-44	29.4	41.2	23.5	0.0	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45-50	75.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62-64	84.6	7.7	7.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82-84	52.2	43.5	0.0	0.0	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0
95-100	69.1	14.5	7.3	0.0	3.6	0.0	2.7	0.9	0.9	0.0	0.9	0.0	0.0	0.0
122-124	17.5	61.1	9.5	0.0	6.5	1.5	2.4	0.3	0.0	0.0	0.3	0.0	0.0	0.9
145-150	31.0	6.6	0.7	0.0	48.5	1.5	9.5	1.8	0.4	0.0	0.0	0.0	0.0	0.0
162-164	42.2	1.0	0.0	0.0	52.0	1.4	3.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0
182-184	38.7	3.6	0.0	0.0	55.9	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
195-200	77.5	2.3	0.0	0.0	17.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.5
222-224	63.5	0.0	1.0	0.0	27.1	2.1	4.2	1.0	0.0	0.0	0.0	0.0	0.0	1.0
245-250	30.8	11.5	0.0	0.0	57.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
262-264	35.1	11.9	8.5	0.0	33.2	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	1.9
282-284	61.8	11.0	0.6	0.0	19.1	1.6	5.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
295-300	64.3	3.3	0.0	0.0	29.1	1.1	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
320-322	76.0	1.5	0.0	0.0	22.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

(See TABLE 3 for explanation of abbreviations)

TABLE 17. Percent planktonic foraminifers for Core V1-80-P3

Depth(cm)	PAC L	PAC R	PD INT	DUTER	BULL	QUINQ	GLUT	SCIT	HEX	O UNIV	INFL	TRUNC	FALCON	Other
0-5	0.0	0.0	0.0	0.0	50.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20-25	78.1	12.5	6.3	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40-45	62.5	12.5	12.5	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0	0.0	0.0	0.0
60-65	55.7	34.4	4.6	0.0	3.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80-85	11.6	46.8	27.1	3.9	5.2	3.2	1.0	0.0	0.0	0.3	0.3	0.0	0.0	0.6
100-105	11.1	48.0	21.4	0.4	7.0	5.2	4.0	0.4	0.7	0.7	0.0	0.0	0.4	0.0
120-125	7.5	54.1	11.6	0.3	3.4	18.2	0.7	0.3	1.7	0.0	0.3	0.3	0.0	1.4
140-145	47.9	31.3	6.3	0.0	2.1	6.3	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160-165	45.4	27.0	5.9	0.0	1.6	4.3	13.0	0.3	0.7	0.0	0.3	0.0	0.0	0.7
180-185	35.1	28.7	15.9	1.4	6.1	5.4	6.1	0.7	0.3	0.0	0.3	0.0	0.0	0.0
200-205	15.1	43.5	27.4	3.3	4.3	2.7	2.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
220-225	22.3	24.9	11.6	0.0	19.3	11.6	5.0	2.7	1.0	0.0	0.3	0.0	0.3	1.0
240-245	21.4	19.9	6.1	0.9	25.4	16.2	0.9	5.2	0.3	1.7	0.3	0.0	0.0	1.7
260-265	46.5	5.7	1.7	0.3	16.1	7.0	21.1	0.7	0.3	0.0	0.0	0.0	0.0	0.7
280-285	56.5	8.9	2.2	0.3	14.3	4.1	12.7	0.0	0.0	0.3	0.0	0.0	0.0	0.6
300-305	40.3	3.5	0.0	0.3	36.9	3.5	5.0	0.3	0.0	0.3	0.0	0.0	0.0	1.2
320-325	50.6	1.7	1.2	0.4	34.9	3.7	5.0	1.7	0.0	0.4	0.0	0.0	0.0	0.4
340-345	47.2	0.7	0.0	0.0	36.5	4.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	1.3
360-365	48.2	2.9	1.0	0.0	36.4	3.2	7.0	0.6	0.0	0.0	0.0	0.0	0.0	0.6
380-385	42.0	4.3	0.0	0.0	27.5	2.3	20.7	0.7	0.0	0.0	0.0	0.0	0.0	2.6

(See TABLE 3 for explanation of abbreviations)

TABLE 18. Percent planktonic foraminifers for Core V1-80-P8

Depth(cm)	PAC L	PAC R	PD INT	OUTER	BULL	QUINQ	GLUT	SCIT	HEX	OUNIV	INFL	TRUNC	FALCON	UMBIL	Other
0-5	66.7	16.7	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20-25	25.7	41.7	8.5	0.0	13.2	5.6	0.9	0.9	0.0	0.6	0.0	0.0	0.0	0.0	2.2
40-45	31.4	30.9	7.1	0.0	14.2	3.1	6.8	0.6	0.6	1.4	0.3	0.0	0.6	0.0	3.1
60-65	28.4	5.6	4.2	0.0	33.0	0.9	24.2	0.5	0.0	0.9	0.0	0.0	0.0	0.0	2.3
80-85	40.6	3.1	0.0	0.0	38.4	5.4	9.8	0.9	0.0	0.3	0.0	0.0	0.0	0.0	1.6
100-105	38.9	1.7	0.4	0.0	42.4	3.5	9.4	2.1	0.0	0.0	0.0	0.0	0.0	0.4	1.4
120-125	48.9	1.6	0.0	0.0	34.3	1.3	9.4	0.3	0.0	0.0	0.0	0.0	0.3	1.3	2.6
140-145	58.3	6.2	0.9	0.0	21.3	1.2	10.5	0.0	0.0	0.6	0.0	0.0	0.0	0.6	0.3
160-165	54.2	5.9	0.4	0.0	23.8	4.6	9.4	1.0	0.4	0.4	0.0	0.0	0.0	0.0	0.0
180-185	62.4	6.8	1.6	0.0	18.3	1.9	5.5	1.6	0.0	0.0	0.0	0.0	0.0	0.0	1.9
200-205	41.2	3.0	0.6	0.0	42.4	2.4	4.9	1.5	0.6	0.3	0.0	0.0	0.0	0.3	2.7
220-225	29.7	1.1	0.0	0.0	54.4	2.2	5.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	6.6
240-245	45.0	0.3	0.0	0.0	41.7	1.3	5.6	2.0	0.0	0.3	0.0	0.0	0.0	0.3	3.3
260-265	80.1	1.7	0.0	0.0	8.6	1.4	4.1	1.4	0.3	0.0	0.0	0.0	0.0	0.0	2.4
277-292	37.2	1.4	0.0	0.0	55.2	0.3	1.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	3.8

(See TABLE 3 for explanation of abbreviations)

TABLE 19. Percentages of diatoms for Core V1-80-G1 (rounded off to the nearest percent)

Depth(cm)	ACTDIV	DENSEM	PSUDOL	RHIZSP	THANIT	THALON	PLKMAR	THASPP	TYCHDI	BENDIA	FWDIAT	RWDIAT	MISCDI	NO/THAV
0- 5	3	2	11	3	45	3	16	5	4	4	0	1	3	11
22- 24	1	0	11	7	70	3	0	5	1	1	1	0	0	109
42- 44	1	2	21	3	51	2	8	3	5	2	0	1	1	67
62- 64	0	1	2	1	61	6	2	7	4	5	1	2	2	18
82- 84	1	1	0	2	69	2	6	5	3	1	0	1	1	27
95-100	1	3	15	1	42	4	17	9	3	3	0	0	2	9
122-124	0	0	12	7	40	2	14	13	2	4	2	2	2	32
145-150	1	1	1	0	20	1	17	7	26	14	11	0	1	9
162-164	1	3	0	1	26	0	17	10	16	14	0	2	2	21
182-184	6	0	0	2	15	0	8	7	54	5	2	1	0	31
195-200	6	0	0	0	11	0	10	6	57	4	5	0	1	16
222-224	2	0	0	1	12	1	16	12	47	5	4	0	0	10
245-250	21	0	0	0	14	1	24	3	32	3	2	0	0	65
262-264	10	0	0	0	15	0	15	6	48	2	3	1	0	110
282-284	5	0	0	2	25	1	15	7	33	6	5	0	1	53
295-300	1	0	0	0	9	0	3	3	77	5	2	0	0	16
320-322	0	0	0	0	8	0	1	2	55	23	11	0	0	3
343	7	0	0	0	7	0	14	2	65	0	3	1	0	40

(See TABLE 4 for explanation of abbreviations)

TABLE 20. Percentages of diatoms for Core V1-80-P3 (rounded off to the nearest percent)

Depth(cm)	ACTDIV	DENSEM	PSUDOL	RHIZSP	THANIT	THALON	PLKMAR	THASPP	TYCHDI	BENDIA	FWDIAT	RWDIAT	MISCDI	NO/TRAV
0- 5	2	1	8	4	49	2	14	12	3	2	2	1	0	73
20- 25	1	1	19	4	36	3	15	14	3	1	2	1	0	105
40- 45	0	1	4	2	52	0	13	10	3	4	3	3	0	24
60- 65	0	4	17	5	42	2	12	0	4	2	2	2	0	14
80- 85	1	1	19	7	30	5	11	13	2	5	5	1	0	23
100-105	0	0	2	3	44	6	13	15	4	6	6	1	0	10
120-125	0	0	0	1	24	3	16	22	2	10	13	1	0	15
140-145	0	0	0	0	24	2	21	10	4	22	16	1	0	9
160-165	1	1	1	0	18	3	26	8	14	10	16	2	0	8
180-185	2	0	0	1	29	1	25	20	2	9	11	0	0	11
200-205	0	0	0	1	34	4	20	9	5	11	16	0	0	10
220-225	0	1	1	1	30	5	15	15	6	0	10	0	0	34
240-245	0	0	0	0	29	4	21	17	1	0	20	0	0	13
260-265	0	0	0	0	19	3	30	9	8	11	20	0	0	9
280-285	0	1	0	2	17	1	27	7	10	17	12	6	0	6
300-305	0	0	0	1	21	0	24	13	7	15	12	7	0	8
320-325	0	2	0	0	16	0	21	12	6	10	20	5	0	12
340-345	0	1	0	1	14	1	16	3	6	14	31	11	0	4
360-365	0	1	0	0	19	0	15	5	16	26	17	1	0	4
380-385	0	0	0	0	13	1	16	4	21	20	19	6	0	4
392	2	0	0	0	11	1	14	7	15	20	26	4	0	4

(See TABLE 4 for explanation of abbreviations)

TABLE 21. Percentages of diatoms for Core V1-80-P8 (rounded off to nearest percent)

Depth(cm)	ACTDIV	DENSEM	PSUDOL	RHIZSP	THANIT	THALON	PLKMAR	THASPP	TYCHDI	RENDIA	FWDIAT	RWDIAT	MISCDI	NO/TRAV
0- 5	0	0	12	3	48	2	14	9	4	4	0	1	3	13
20- 25	0	1	1	5	60	5	7	4	4	9	4	0	0	4
40- 45	1	0	1	0	35	4	19	11	5	9	13	0	2	6
60- 65	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80- 85	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100-105	0	1	0	0	20	2	0	29	8	16	24	0	0	0
120-125	0	4	0	4	16	2	11	5	26	18	10	4	0	2
140-145	0	0	0	0	0	0	0	0	0	0	0	0	0	0
160-165	0	0	0	0	16	2	2	4	26	20	26	2	2	2
180-185	0	0	0	0	0	0	0	0	0	0	0	0	0	0
200-205	0	0	0	0	0	0	0	0	0	0	0	0	0	0
220-225	0	0	0	0	18	0	12	2	18	24	22	2	2	3
240-245	0	4	0	0	16	0	4	8	32	12	20	0	4	1
260-265	0	2	0	0	18	2	10	14	8	12	32	2	0	3

(See TABLE 4 for explanation of abbreviations)

TABLE 22. Percentages of calcareous nannofossils for Core V1-80-P3 (rounded off to nearest percent).

Depth (cm)	Taxon					
	BG	SG	EH	CL	CP	OT
0 - 5		B	A	R	R	E N
22 - 24		B	A	R	R	E N
42 - 44		B	A	R	R	E N
45 - 50		B	A	R	R	E N
62 - 64		B	A	R	R	E N
82 - 84		B	A	R	R	E N
95 - 100	6	41	37	6	1	9
122 - 124	2	47	30	6	5	10
145 - 150	1	56	35	0	5	3
162 - 164	0	52	32	0	9	7
182 - 184	0	24	28	0	48	0
195 - 200		B	A	R	R	E N
222 - 224	0	4	17	0	67	12
245 - 250		B	A	R	R	E N
262 - 264	2	12	18	0	22	46
282 - 284	8	20	16	4	25	22
295 - 300	1	18	9	0	56	16
320 - 322	0	24	26	0	19	31
343 - bottom	0	43	20	0	18	19

(See TABLE 5 for explanation of abbreviations)

TABLE 23. Percentages of calcareous nannofossils for Core VI-80-P3 (rounded off to nearest percent).

	Taxon					
Depth (cm)	BG	SG	EH	CL	CP	OT
0-5 cm				Barren		
20-25 cm				Barren		
40-45 cm				Barren		
60-65 cm	5	44	25	4	1	21
80-85 cm	5	56	17	3	1	18
100-105 cm	3	51	20	4	5	17
120-125 cm	8	35	36	3	1	17
160-165 cm	5	37	30	0	5	23
180-185 cm	4	46	24	1	1	24
200-105 cm	0	29	38	5	0	28
220-225 cm	3	44	36	0	2	15
240-245 cm	7	49	28	2	1	13
260-265 cm	2	41	36	2	4	15
280-285 cm	0	48	35	0	1	16
300-305 cm	0	49	31	0	9	11
320-325 cm	0	49	38	0	9	4
340-345 cm	0	55	21	0	9	15
360-365 cm	0	60	25	0	2	13
380-385 cm	0	53	16	0	13	18
392 cm	1	56	19	0	12	12

(See TABLE 5 for explanation of abbreviations)

TABLE 24. Percentages of calcareous nannofossils for Core VI-80-P8 (rounded off to nearest percent).

	Taxon					
Depth (cm)	BG	SG	EH	CL	CP	OT
0-5 cm	0	20	44	12	0	24
20-25	8	37	38	3	0	16
40-45	6	43	26	4	2	20
60-65	0	45	38	1	3	14
80-85	0	60	32	0	2	8
100-105	0	44	29	1	11	18
120-125	0	59	29	0	7	6
140-145	0	49	30	0	8	13
160-165	0	68	25	0	2	5
180-185	0	58	28	0	7	8
200-205	0	62	30	1	4	4
220-225	0	66	25	0	4	5
240-245	0	57	29	0	10	5
260-265	0	33	39	0	12	17
292 (bottom)	0	40	26	1	17	18

(see TABLE 5 for explanation of abbreviations)

TABLE 25. Percentages of pollen in Core V1-80-G1

Depth(cm)	PINUS	PICEA	TSUGA	TSUGA	PSEUDO	ABIES	SEQUOIA	QUERCUS	RPA	TCT	ALNUS	GRAM	CYPER	COMPOS	CHENO
0-5	24.5	.0	.7	.0	.3	.7	26.0	9.5	4.6	11.4	3.6	3.3	1.3	9.2	4.2
20-25	22.9	.0	.3	.0	.3	1.0	32.8	13.7	4.4	4.1	3.8	.3	.7	9.9	5.8
40-45	30.9	.0	.0	.0	.0	.1	1.5	16.5	12.4	12.9	4.6	2.6	1.5	11.3	5.7
70-75	34.1	.0	.0	.0	1.0	1.0	26.9	14.5	1.4	3.4	2.1	1.4	.7	10.3	3.1
95-100	23.0	.0	.0	.3	.0	.3	30.1	14.9	4.1	4.4	3.7	1.4	1.7	14.5	1.7
120-125	32.0	.0	.3	.0	1.0	.7	24.1	12.7	1.7	5.2	4.8	1.4	1.4	13.7	1.0
130-132	26.0	.0	.7	.3	.3	.7	18.7	13.0	1.0	3.1	12.5	1.7	3.5	15.2	2.4
145-150	14.1	.0	.5	.5	1.0	2.6	4.7	7.9	5.2	17.0	2.1	8.4	3.7	29.3	2.1
170-175	18.0	.0	.5	.5	.5	2.1	8.3	7.0	.5	12.5	1.6	4.2	5.7	31.0	5.2
195-200	43.0	.0	3.0	.5	1.0	1.5	2.0	14.0	2.5	11.4	2.0	3.5	4.0	7.4	3.5
220-225	27.6	.0	1.0	.0	2.0	2.0	5.4	8.4	1.5	11.3	.0	3.9	2.0	31.0	3.9
245-250	28.5	.0	.0	.0	.3	2.1	3.1	13.1	1.4	10.2	1.7	5.2	4.1	21.0	1.4
270-275	14.1	.0	.5	.0	1.0	.0	9.9	13.6	2.1	12.0	1.0	2.6	3.1	37.2	2.6
295-300	15.3	.0	1.0	1.0	.5	2.0	1.5	8.9	4.0	21.0	1.0	5.9	1.5	31.7	4.0

(See TABLE 6 for explanation of abbreviations)

TABLE 26 Percentages of pollen in Core V1-80-P3

Depth(cm)	PINUS	PICEA	TSUTERO	TSUERTEN	PSEUDO	ABIES	SEQUOIA	QUERCUS	RRA	TCT	ALNUS	GRAM	CYPER	COMPOS	CHENO
0-5	19.9	.0	.4	.0	.0	.4	23.1	15.7	4.3	12.1	3.9	5.0	2.1	7.1	6.0
20-25	28.4	.0	1.0	.0	.7	.7	20.3	10.8	4.4	9.8	6.4	2.7	.0	12.5	2.4
40-45	30.0	.0	.3	.3	1.0	.7	19.1	16.7	4.1	10.6	3.4	2.4	.3	8.2	2.7
60-65	22.2	.0	1.4	.0	.7	.7	24.9	13.3	6.5	5.1	5.1	2.4	1.0	14.0	2.7
80-85	27.5	.0	.4	.0	.4	.7	15.1	10.9	2.8	7.7	12.0	2.8	2.8	14.1	2.0
100-105	33.8	.7	.7	.0	.7	.0	14.8	12.7	3.9	8.1	11.6	1.1	.7	10.2	1.1
120-125	26.1	.7	.3	.0	.7	.3	13.4	10.0	2.0	8.7	14.0	4.0	3.0	15.4	1.3
140-145	47.1	.3	.7	.3	.7	.7	12.5	6.9	1.0	3.8	7.3	2.4	2.4	12.5	1.4
160-165	42.7	.7	.7	.0	2.6	1.0	11.3	11.3	1.1	5.0	6.6	1.1	1.0	10.9	1.5
170-172	47.5	.0	.4	.0	1.4	1.0	4.3	9.4	2.5	2.9	5.1	2.2	1.0	18.5	2.2
180-185	27.0	.7	.3	.3	1.4	2.1	10.7	12.5	2.4	13.0	3.5	3.0	1.7	15.6	4.2
200-205	26.0	.5	.5	.0	.5	.0	5.3	0.9	2.6	10.4	7.6	5.0	.5	10.4	3.2
220-225	24.6	.3	.7	.0	1.0	.7	4.0	15.0	2.7	16.3	11.3	3.3	.0	17.6	2.3
240-245	19.5	.3	.0	.0	1.0	.7	4.7	12.5	3.0	21.5	7.1	4.0	1.7	21.5	2.4
260-265	9.1	.6	1.7	.0	.6	.6	3.4	7.4	3.4	14.2	6.3	6.0	6.0	36.9	2.3
280-285	48.5	.0	2.3	.0	.7	1.0	2.3	2.6	3.0	6.9	1.0	4.6	2.6	22.4	2.0
300-305	54.9	.3	2.7	1.3	.3	2.4	4.0	2.0	1.0	7.4	1.3	2.7	2.4	14.5	2.7
320-325	37.6	.3	3.0	.0	.7	1.0	4.7	6.4	3.0	9.7	1.3	4.0	3.7	21.5	3.0
340-345	43.5	.7	.7	.3	.3	1.7	4.0	2.7	2.3	5.4	2.3	4.3	1.3	27.4	3.0
360-365	63.1	.3	2.7	.3	1.0	2.3	2.7	2.3	.3	7.4	.7	1.3	2.3	12.1	1.0
380-385	40.0	.3	1.0	.0	1.0	.3	3.7	4.3	3.0	7.7	1.0	6.7	3.7	23.1	3.3

(See TABLE 6 for explanation of abbreviations)

TABLE 27. Percentages of pollen in Core V1-80-P8

Depth(cm)	PINUS	PICEA	TSUHET	TSUMER	PSEUDO	ABIES	SEQUOIA	QUERCUS	RHA	TCT	ALNUS	GRAM	CYPER	COMPOS	CHENO
0-5	24.4	.3	.3	.3	1.7	2.0	19.5	10.2	5.0	10.2	4.6	1.7	2.0	10.2	2.6
20-25	36.0	1.0	1.0	.0	2.0	1.0	6.0	9.0	3.0	11.0	10.0	3.0	.0	17.0	2.0
40-45	39.5	1.0	.7	.0	1.4	2.0	.0	9.2	2.4	11.6	8.8	3.4	1.0	16.3	2.7
60-65	42.1	.0	2.0	1.7	.7	2.4	.3	6.9	1.4	7.6	1.0	5.2	2.0	20.7	4.5
80-85	54.1	.3	1.4	1.0	1.0	1.4	1.0	3.4	2.4	3.7	1.4	3.7	.7	20.7	3.7
100-105	48.5	.0	1.3	.3	.7	1.0	.7	4.7	.3	4.7	2.3	4.3	1.7	27.6	2.0
120-125	39.4	.3	.9	.9	.6	2.2	.6	5.0	1.3	11.4	3.5	3.2	1.6	26.8	2.2
140-145	46.8	.4	.0	.4	.7	.7	.7	6.4	3.0	3.4	1.1	2.2	.7	29.6	3.7
160-165	41.3	.7	.3	.3	.7	1.7	3.1	5.9	2.8	9.4	1.7	5.9	1.0	22.0	2.8
180-185	48.8	.0	2.0	1.0	.3	1.0	1.0	4.3	2.0	7.0	.7	4.7	3.3	22.3	1.7
200-205	36.8	.0	.7	.3	.0	.3	1.4	3.5	.7	10.8	3.1	6.3	1.7	30.6	3.0
220-225	38.2	.0	.4	.0	.7	1.1	1.8	3.6	1.1	8.6	.7	7.1	1.1	32.9	2.9
240-245	42.1	.3	1.0	.0	.0	1.0	3.7	5.1	2.4	7.1	2.4	2.7	2.7	26.6	3.0
260-265	41.0	.0	.7	.3	.3	.7	1.7	4.8	.7	7.6	1.4	7.2	3.4	27.9	2.1
275-277	40.3	.0	.3	.0	.3	2.0	3.1	4.7	.7	7.5	1.0	4.7	4.1	28.5	2.7

(See TABLE 6 for explanation of abbreviations)

TABLE 28. Grain-size statistics for Core V1-80-G1

Depth(cm)	Mean (Ø)	Standard Deviation	Skewness	Kurtosis	% Sand	% Silt	% Clay
0- 5	6.4	2.0	0.0	1.0	2.4	81.5	16.1
5- 10	6.6	1.8	0.2	1.5	1.3	82.1	16.6
15- 20	6.6	1.7	0.2	1.5	0.9	83.3	15.8
25- 30	6.6	1.8	0.2	1.5	2.0	81.7	16.3
35- 40	6.5	1.8	0.1	1.5	1.6	83.3	15.1
45- 50	6.8	2.0	0.2	1.7	0.3	80.4	19.3
55- 60	6.6	1.8	0.2	1.5	0.5	83.6	15.9
65- 70	6.6	1.8	0.1	1.5	1.3	82.8	16.0
75- 80	6.6	1.9	0.2	1.3	1.2	82.1	16.7
85- 90	6.6	1.8	0.2	1.4	1.3	82.5	16.2
95-100	6.5	2.0	0.1	1.4	6.8	77.0	16.2
105-110	6.5	1.7	0.1	1.4	2.3	83.8	14.0
115-120	6.7	1.9	0.1	1.4	3.6	79.1	17.3
125-130	6.3	1.7	0.0	1.5	7.4	80.9	11.6
135-140	6.4	1.8	0.1	1.5	7.1	81.3	11.5
145-150	6.4	1.7	0.1	1.4	4.4	82.9	12.7
155-160	6.3	1.8	0.1	1.5	7.5	81.5	11.0
165-170	6.3	1.7	0.1	1.5	5.9	81.4	12.7
175-180	6.3	1.6	0.1	1.4	3.5	84.4	12.1
185-190	6.5	1.5	0.1	1.6	1.0	86.6	12.4
195-200	6.5	1.6	0.2	1.3	1.2	87.6	11.2
205-210	6.5	1.6	0.2	1.5	2.0	86.1	11.2
215-220	6.5	1.6	0.1	1.6	0.6	85.9	13.5
225-230	6.6	1.6	0.1	1.6	0.0	85.3	14.0
235-240	6.6	1.8	0.1	1.6	0.4	84.3	15.3
245-250	6.7	1.7	0.1	1.7	0.0	84.9	15.0
255-260	6.6	1.7	0.0	1.5	0.6	85.3	14.1
265-270	6.6	1.6	0.0	1.7	0.4	86.0	13.7
275-280	6.9	1.8	0.1	2.0	0.9	81.9	17.2
285-290	7.0	1.7	0.1	2.1	1.2	81.4	17.4
295-300	6.6	1.7	0.1	1.5	0.6	84.6	14.7
305-310	6.6	1.7	0.0	1.5	1.3	83.5	15.2
315-320	6.5	1.7	0.0	1.5	2.0	84.5	13.5
325-330	6.5	1.6	0.1	1.6	3.5	83.2	13.3

TABLE 29. Grain-size statistics for Core V1-80-P3

Depth(cm)	Mean (Φ)	Standard Deviation	Skewness	Kurtosis	% Sand	% Silt	% Clay
0- 5	6.0	1.7	0.2	1.0	5.6	83.6	10.8
10- 15	6.3	1.5	0.1	1.4	2.2	86.3	11.5
20- 25	5.7	1.5	0.4	1.1	2.4	90.1	7.4
30- 35	5.7	1.5	0.3	1.1	2.4	90.3	7.3
40- 45	5.6	1.5	0.4	1.0	3.7	89.3	7.1
50- 55	5.6	1.4	0.4	1.1	4.1	89.4	6.5
60- 65	5.9	1.6	0.4	1.1	2.8	88.3	9.0
70- 75	6.0	1.6	0.3	1.1	2.6	87.7	9.7
80- 85	6.4	1.5	0.2	1.5	1.0	87.5	11.5
90- 95	6.3	1.6	0.3	1.3	2.3	86.7	11.0
100-105	6.4	1.7	0.1	1.5	1.2	85.5	13.3
110-115	6.6	1.7	0.1	1.5	1.5	84.2	14.3
120-125	6.6	1.6	-0.0	1.7	0.8	85.7	13.5
130-135	6.5	1.7	0.1	1.4	1.4	84.9	13.8
140-145	6.4	1.5	0.2	1.5	1.6	86.8	11.6
150-155	6.4	1.5	0.2	1.4	1.9	86.3	11.8
160-165	6.2	1.5	0.2	1.2	1.5	89.2	9.3
170-175	6.4	1.5	0.2	1.3	2.3	88.0	9.7
180-185	6.7	1.6	0.0	1.6	1.9	84.1	14.1
190-195	6.5	1.6	0.0	1.4	2.4	85.3	12.3
200-205	6.5	1.7	0.0	1.6	1.9	84.4	13.1
210-215	6.6	1.6	0.1	1.6	1.1	85.6	13.3
220-225	6.7	1.8	0.1	1.5	1.5	82.6	15.8
230-235	6.6	1.6	0.1	1.7	2.4	83.9	13.7
240-245	6.7	1.8	0.0	1.7	2.1	82.1	15.9
250-255	6.5	1.5	0.1	1.6	2.8	85.3	11.9
260-265	6.3	1.7	0.1	1.4	4.5	83.6	12.0
270-275	6.3	1.7	0.2	1.5	5.3	83.5	11.1
280-285	6.0	1.7	0.1	1.1	8.5	83.3	8.2
290-295	6.0	1.8	0.1	1.4	7.7	82.9	9.4
300-305	6.2	1.6	0.2	1.6	7.9	82.7	9.4
310-315	5.9	1.7	0.1	1.2	8.7	83.0	8.3
320-325	6.2	1.7	0.1	1.5	9.7	81.7	8.5
330-335	6.0	1.8	0.1	1.2	8.2	82.9	9.0
340-345	6.1	1.8	0.1	1.4	11.4	79.4	9.2
350-355	6.4	1.7	0.1	1.5	6.7	82.9	10.4
360-365	6.2	1.7	0.2	1.3	4.9	85.0	10.1
370-375	6.4	1.7	-0.0	1.4	5.3	82.0	12.7

TABLE 30. Grain-size statistics for Core V1-80-P8

Depth(cm)	Mean (Φ)	Standard Deviation	Skewness	Kurtosis	% Sand	% Silt	% Clay
0- 5	5.8	2.0	0.3	1.2	7.4	80.5	12.1
20- 25	6.4	2.0	-0.0	1.6	8.1	77.4	14.5
40- 45	6.4	1.7	-0.0	1.4	5.3	82.8	12.0
60- 65	6.3	1.8	-0.0	1.5	6.7	80.9	12.4
80- 85	5.8	1.7	0.2	1.1	12.3	79.8	7.9
100-105	5.9	1.7	0.1	1.0	12.1	81.1	6.8
120-125	6.2	1.8	0.1	1.4	9.3	80.7	10.0
140-145	5.9	1.8	0.2	1.2	8.3	82.9	8.8
160-165	6.1	1.8	0.1	1.3	7.0	83.4	9.7
180-185	6.2	1.8	0.1	1.4	6.3	81.6	12.0
200-205	6.3	1.8	0.2	1.5	6.7	82.1	11.2
220-225	6.3	1.8	0.1	1.5	5.7	81.2	13.1
240-245	6.3	1.6	0.2	1.3	1.9	87.6	10.5
260-265	6.3	1.7	0.2	1.5	4.8	82.5	12.7
277-280	6.3	1.5	0.2	1.4	3.7	85.2	11.1

TABLE 31. Weight percent of total carbon, inorganic carbon, organic carbon, and calcium carbonate data for Cores V1-80-G1, V1-80-P3, and V1-80-P8.

Depth(cm)	TOTAL C	INORGAN	ORGANIC	CaCO3
0- 5	3.3	0.1	3.1	1.2
10- 15	3.2	0.2	3.0	1.5
20- 25	3.1	0.2	2.9	1.7
30- 35	3.1	0.2	2.9	1.6
40- 45	2.8	0.1	2.6	1.1
50- 55	2.8	0.2	2.6	1.5
60- 65	2.6	0.2	2.4	1.4
70- 75	2.5	0.2	2.4	1.4
80- 85	2.4	0.2	2.2	1.6
90- 95	2.3	0.1	2.2	1.2
100-105	2.5	0.5	2.0	4.3
110-115	2.4	0.7	1.7	5.8
120-125	2.5	0.7	1.8	5.8
130-135	1.4	0.4	0.9	3.5
140-145	1.3	0.3	1.0	2.8
150-155	1.3	0.4	0.9	2.9
160-165	1.3	0.4	0.9	3.1
170-175	1.2	0.3	0.9	2.1
180-185	1.4	0.3	1.1	2.2
190-195	1.5	0.1	1.3	1.2
200-205	1.5	0.2	1.3	1.5
210-215	1.5	0.3	1.3	2.2
220-225	1.3	0.2	1.1	1.4
230-235	1.4	0.2	1.3	1.5
240-245	1.5	0.2	1.2	1.9
250-255	1.4	0.2	1.3	1.5
260-265	1.6	0.2	1.4	1.5
270-275	1.4	0.2	1.3	1.3
280-285	1.7	0.2	1.5	1.8
290-295	1.5	0.2	1.3	1.9
300-305	1.4	0.2	1.2	1.5
310-315	1.3	0.2	1.1	1.7
320-325	1.3	0.3	1.0	2.5
330-335	1.4	0.3	1.1	2.4

Depth(cm)	TOTAL C	INORGAN	ORGANIC	CaCO3
0- 5	2.9	0.2	2.7	1.7
10- 15	2.9	0.3	2.6	2.2
20- 25	2.2	0.2	2.1	1.5
30- 35	2.2	0.2	2.0	1.6
40- 45	2.0	0.3	1.8	2.1
50- 55	2.0	0.3	1.7	2.2
60- 65	2.3	0.5	1.8	3.9
70- 75	2.2	0.6	1.6	5.1
80- 85	2.2	0.6	1.6	5.0
90- 95	2.2	0.6	1.6	4.9
100-105	2.1	0.5	1.6	4.1
110-115	2.3	0.6	1.7	4.9
120-125	1.9	0.3	1.6	2.0
130-135	1.9	0.3	1.6	2.4
140-145	1.6	0.2	1.4	1.5
150-155	1.5	0.3	1.3	2.1
160-165	1.5	0.3	1.2	2.1
170-175	1.6	0.3	1.2	2.7
180-185	1.7	0.3	1.4	2.0
190-195	1.9	0.4	1.5	3.4
200-205	1.8	0.3	1.4	2.9
210-215	1.9	0.4	1.5	3.0
220-225	1.9	0.4	1.5	3.4
230-235	2.1	0.5	1.7	4.0
240-245	1.9	0.4	1.5	3.3
250-255	1.7	0.4	1.3	3.7
260-265	1.6	0.4	1.2	3.0
270-275	1.4	0.4	1.0	3.0
280-285	1.3	0.3	1.0	2.0
290-295	1.4	0.4	1.0	3.7
300-305	1.5	0.4	1.0	3.7
310-315	1.4	0.5	0.9	3.0
320-325	1.4	0.5	0.9	3.9
330-335	1.4	0.4	0.9	3.5
340-345	1.4	0.6	0.8	4.0
350-355	1.5	0.5	1.0	4.0
360-365	1.3	0.3	1.0	2.0
370-375	1.4	0.4	1.0	3.2
380-385	1.3	0.4	1.0	2.9

Depth(cm)	TOTAL C	INORGAN	ORGANIC	CaCO3
tw0- 0	2.4	0.2	2.2	1.5
tw8- 20	2.0	0.2	1.8	1.7
0- 5	2.0	0.1	1.9	0.8
20- 25	1.7	0.3	1.4	2.4
40- 45	1.5	0.3	1.1	2.9
60- 65	1.3	0.2	1.1	2.0
80- 85	1.3	0.4	0.9	3.6
100-105	1.2	0.5	0.8	3.9
120-125	1.3	0.4	0.9	3.0
140-145	1.3	0.3	0.9	2.7
160-165	1.3	0.3	0.9	2.0
180-185	1.3	0.4	1.0	3.0
200-205	1.4	0.5	0.9	3.8
220-225	1.3	0.3	0.9	2.7
240-245	1.2	0.3	0.8	2.7
260-265	1.1	0.2	0.9	1.9
277-280	1.3	0.3	1.0	2.5

TABLE 32. Percentages of clay minerals for Core V1-80-P3

Depth(cm)	% SMECTITE	% ILLITE	% KAOLINITE + CHLORITE	% CHLORITE	% KAOLINITE
0- 5	59	23	18	14	4
19- 20	52	25	22	16	6
39- 40	55	27	18	13	5
59- 60	54	26	21	14	7
79- 80	52	22	26	19	7
99-100	53	25	21	14	8
119-120	55	21	24	17	6
139-140	52	26	22	16	6
159-160	53	24	23	17	6
179-180	52	22	25	18	8
199-200	49	23	28	19	9
219-220	51	23	25	18	8
239-240	47	25	28	22	6
259-260	52	26	22	16	5
279-280	52	28	20	14	6
299-300	48	29	23	17	6
319-320	52	28	21	15	6
339-340	53	25	22	15	7
359-360	51	27	22	16	6

TABLE 33. Inorganic geochemistry for Core V1-80-P3

Depth(cm)	Al%	Fe%	Mg%	Ca%	Na%	Ti%	Mn%	B ppm	Ba ppm	Co ppm	Cr ppm	Cu ppm	La ppm	Li ppm
20	6.6	2.9	1.6	1.5	3.0	.36	.032	90	610	<5	160	46	17	51
40	6.9	3.8	1.9	1.8	2.6	.39	.034	90	670	7	150	43	16	56
60	7.0	3.3	1.7	2.5	2.7	.39	.035	80	600	8	150	46	19	65
80	7.3	4.3	2.0	2.8	2.5	.41	.037	90	580	11	160	52	21	70
100	7.5	4.5	2.1	2.7	2.6	.42	.038	90	590	10	150	52	17	73
120	7.9	5.3	2.1	2.0	2.6	.44	.038	60	580	15	180	47	25	77
140	7.9	4.8	2.2	1.7	2.5	.45	.042	90	570	10	170	51	16	73
160	7.6	4.4	2.1	1.8	2.4	.44	.041	90	550	12	170	43	23	67
180	7.7	5.3	2.3	1.8	2.3	.42	.045	40	570	8	160	47	20	75
200	7.6	3.9	2.0	1.9	2.5	.42	.040	80	560	11	160	52	16	72
220	7.6	3.9	2.0	2.0	2.5	.42	.040	90	580	10	170	60	23	70
220	7.6	4.7	2.3	2.0	2.3	.42	.040	90	600	11	160	58	21	71
240	7.8	5.0	2.1	2.2	2.8	.43	.040	50	630	16	160	54	22	72
260	7.6	3.4	1.9	1.9	2.5	.42	.043	80	580	<5	150	41	12	65
280	7.6	4.6	1.9	2.2	2.7	.43	.041	40	590	10	160	34	23	65
300	7.6	3.3	1.8	2.5	2.6	.42	.043	70	640	7	150	42	20	65
320	7.5	3.8	2.0	2.4	2.4	.42	.042	80	640	10	150	41	24	58
340	7.5	4.3	1.8	2.6	2.7	.42	.038	40	630	9	160	33	17	60
360	7.7	3.6	1.9	2.0	2.4	.42	.043	80	680	11	160	44	28	68
380	7.8	5.1	2.0	2.1	2.9	.43	.040	50	740	15	160	40	25	70

Depth(cm)	Ni ppm	Sc ppm	Sr ppm	V ppm	Y ppm	Zn ppm	Zr ppm	Ce ppm	Yb ppm	Nd ppm
20	90	15	190	100	23	110	110	<20	3	<10
40	97	17	200	110	17	110	130	20	2	<10
60	100	17	210	110	22	100	110	20	2	20
80	100	22	220	120	18	110	120	50	3	80
100	110	20	220	130	17	110	110	40	2	40
120	140	26	180	140	24	110	110	60	<2	<10
140	120	21	180	130	19	110	120	50	3	50
160	110	21	190	120	20	100	120	50	2	<10
180	120	21	170	120	18	110	110	30	3	<10
200	130	18	170	130	22	110	100	30	<2	<10
220	130	20	180	130	26	120	100	40	3	<10
220	130	22	180	130	19	110	110	50	2	50
240	130	24	200	140	23	110	110	50	<2	<10
260	98	14	200	120	18	98	110	<20	<2	<10
280	110	18	220	120	23	90	130	60	2	30
300	94	17	240	120	20	90	120	<20	3	20
320	93	17	230	120	18	93	120	50	2	30
340	97	18	240	120	20	83	130	30	3	40
360	110	21	210	120	25	92	110	30	2	<10
380	110	22	220	130	25	93	120	70	3	50

TABLE 34. Inorganic geochemistry for Core V1-80-P8

Depth (cm)	Al%	Fe%	Mg%	Ca%	Na%	Ti%	Mn%	B ppm	Ba ppm	Co ppm	Cr ppm	Cu ppm	La ppm	Li ppm
20	7.7	4.3	2.0	2.3	2.4	.43	.043	80	620	10	150	44	22	68
40	7.5	3.7	1.9	2.3	2.7	.41	.042	80	580	11	160	53	21	71
60	7.8	4.4	2.1	1.9	2.5	.44	.043	90	580	11	160	52	23	69
80	7.4	3.2	1.7	2.4	2.7	.41	.042	70	570	9	160	40	19	59
100	7.5	3.9	1.9	2.4	2.4	.42	.041	70	580	6	150	41	18	60
120	7.5	4.0	1.9	2.2	2.4	.42	.040	80	590	9	160	41	18	58
140	7.6	3.6	1.9	2.0	2.8	.43	.043	80	580	6	160	47	23	68
140	7.7	4.4	2.0	2.0	2.5	.43	.042	80	590	9	160	47	22	66
160	7.7	4.2	2.0	2.2	2.4	.43	.044	80	600	8	160	44	21	64
180	7.7	4.4	2.0	2.2	2.4	.43	.044	80	590	8	150	45	21	66
200	7.7	4.6	1.9	2.4	2.8	.43	.043	40	620	12	150	38	21	68
220	7.8	4.2	2.0	2.2	2.5	.43	.046	80	620	8	150	43	19	62
220	7.7	3.5	1.8	2.1	2.6	.43	.047	80	610	7	150	51	23	62
240	7.8	3.6	1.8	2.2	2.6	.43	.047	70	600	10	140	51	20	64
260	8.1	4.4	2.1	1.9	2.6	.46	.048	80	620	13	160	51	24	68
277	7.8	4.3	2.0	2.3	2.4	.44	.043	90	630	10	150	43	25	66

Depth(cm)	Ni ppm	Sc ppm	Sr ppm	V ppm	Y ppm	Zn ppm	Zr ppm	Ce ppm	Yb ppm	Nd ppm
20	97	20	230	120	20	99	120	50	<2	10
40	120	16	200	130	24	100	110	40	<2	20
60	110	20	200	130	18	110	130	50	3	70
80	90	13	230	120	21	87	120	30	3	<10
100	90	18	230	120	17	92	120	30	<2	10
120	100	16	230	120	17	90	130	30	<2	<10
140	100	19	210	120	24	100	110	20	3	<10
140	99	18	220	120	18	100	130	40	3	70
160	96	19	230	120	19	99	130	40	<2	20
180	98	18	230	120	18	97	120	40	2	40
200	100	19	250	130	22	90	120	50	3	40
220	94	20	230	120	18	99	120	40	3	30
220	100	17	230	120	21	100	110	50	2	10
240	97	15	230	120	21	100	120	<20	<2	20
260	100	21	230	130	21	100	130	60	4	80
277	90	20	230	120	21	100	120	50	2	40

Table 35. Oxygen and Carbon Isotope Data for Core V1-80-P3

Neogloboguadrina pachyderma (left-coiling)

Depth (cm)	Size Fraction (μm)	$\delta^{18}O$(0/00)	$\delta^{13}C$(0/00)
22	150-212	+0.63	-0.28
62	150-212	+0.91	-0.19
82	150-250	+1.15	-0.17
102	180-212	+1.15	-0.34
162	180-212	+1.72	-0.33
182	180-212	+1.64	-0.45
202	180-212	+1.32	-0.58
222	150-212	+1.47	-0.66
242	180-212	+1.77	-0.84
242	150-180	+1.96	-0.72
262	180-212	+1.96	-0.82
262	150-180	+2.32	-1.04
282	180-212	+2.37	-0.48
282	150-180	+2.38	-0.44
302	212-250	+2.37	-1.55
302	212-250	+2.24	-1.45
302	180-212	+2.45	-1.29
302	150-180	+2.61	-0.99
322	250-300	+2.35	-1.77
322	212-250	+2.38	-1.43
322	212-250	+2.57	-1.58
322	180-212	+2.44	-1.38
322	150-180	+2.63	-1.00
342	212-250	+2.62	-1.41
342	180-212	+2.70	-1.08
342	150-180	+2.71	-0.84
362	180-212	+2.53	-0.97
362	150-180	+2.60	-0.83
382	180-212	+2.46	-1.31
382	150-180	+2.70	-0.95

Table 35 (continued)

Uvigerina perigrina

Depth (cm)	Size Fraction (μm)	$\delta^{18}O$(0/00)	$\delta^{13}C$(0/00)
82	212-250	+3.12	-1.59
102	250-300	+3.50	-1.73
122	250-300	+3.80	-1.66
182	180-300	+3.68	-1.98
182	212-250	+3.86	-1.73
202	250-300	+3.78	-2.04
202	250-300	+4.31	-1.68
222	250-300	+3.88	-1.89
242	>300	+4.44	-1.44
242	250-300	+4.41	-1.57
242	212-250	+4.26	-1.79
242	180-212	+4.28	-1.87
262	250-300	+4.25	-1.63
282	>300	+4.52	-1.55
302	>300	+4.75	-1.52
302	250-300	+4.85	-1.70
302	212-250	+4.83	-1.80
302	180-212	+4.78	-1.89
322	250-300	+4.53	-1.88
322	212-250	+4.32	-2.06
322	250-300	+4.62	-1.89
322	>300	+4.43	-1.81
342	250-300	+4.83	-1.74
342	>300	+4.57	-1.48