17. DEEP SEA DRILLING PROJECT, LEG 1 FORAMINIFERA FROM SELECTED SAMPLES

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BIOSTRATIGRAPHIC SUMMARY OF AVAILABLE SAMPLES

Hole 1 (lat 25° 51.5'N., long 92° 11.0'W.)

Core	Depth Below Sea Bed		Age Determination
	Feet	Meters	
1	497 to 527	151.5 to 160.5	Zone N.22/Zone N.23; Pleistocene or younger.

Hole 2 (lat 23° 27.3'N., long 92° 35.2'W.)

Core	Depth Below Sea Bed		Age Determination
	Feet	Meters	
1	64 to 94	19.5 to 28.6	Upper Zone N.22/Zone N.23; late Pleistocene or younger.
2	189 to 219	57.6 to 66.7	Zone N.22 (?early part); early Pleistocene.
3	219 to 233	66.7 to 71.0	Zone N.20 or Zone N.21 (?latter); middle to late Pliocene.
4	333 to 359	101.5 to 109.5	Zone N.19; early Pliocene.

Hole 3 (lat 23° 01.8'N., long 92° 02.6'W.)

Core	Depth Below Sea Bed		Age Determination
	Feet	Meters	
2	117 to 147	35.7 to 44.8	Zone N.22/Zone N.23; late Pleistocene or younger.
3	657 to 687	200.3 to 209.7	Zone N.22; probably middle part of Pleistocene.
4	688 to 718	209.7 to 218.8	Zone N.22; part of Pleistocene
5	1050 to 1080	320.0 to 329.1	Section 1: ?Zone N.21; later Pliocene. Sections 2-5: Zone N.20 or lower Zone N.21; middle to late Pliocene.
6	1083 to 1113	330.0 to 339.2	Zone N.20 or lower Zone N.21; middle to late Pliocene.
7	1250 to 1280	381.0 to 390.1	Section 2: Zone N.20; approx. mid-part Pliocene. Section 3: Zone N.19 or Zone N.20; approx. mid-part Pliocene. Section 4: Zone N.19; early to middle Pliocene.

Core	Depth Below Sea Bed		Age Determination
	Feet	Meters	
8	1409 to 1439	429.5 to 438.6	Section 2: early Zone N.19; early Pliocene. Sections 3-6: No Determination.
9	1752 to 1782	534.0 to 543.2	No determination. (reported as late Miocene by Berggren ?Zone N.17/N.18.)

Hole 4 (lat 24° 28.7'N., long 73° 47.5'W.)

Core	Depth Below Sea Bed		Age Determination
	Feet	Meters	
1	0 to 30	0 to 9.1	Sections 1, 2, 3, 4, 6: No Determination.
2	342 to 372	104.2 to 113.4	Section 1: No determination.
3	439 to 469	133.8 to 143.0	Section 1: No determination.
4	626 to 656	190.8 to 199.9	Section 1: No determination.

Hole 4A (lat 24° 28.7'N., long 73° 47.5'W.)

Core	Depth Below Sea Bed		Age Determination
	Feet	Meters	
1	239 to 269	72.8 to 81.9	Section 1: early to middle Maestrichtian; Section 2: early Maestrichtian; Section 3: No determination.
2	375 to 405	114 to 123.4	Section 1: No determination.

Hole 5 (lat 24° 43.6'N., long 73° 38.5'W.)

Core	Depth Below Sea Bed		Age Determination
	Feet	Meters	
1	0 to 30	0 to 9.1	Section 1, 2, 3: Heterogeneous samples; Zone N.22/Zone N.23; late Pleistocene or younger with derived Neogene and Paleogene.
2	102 to 132	31.1 to 40.2	Section 1: No determination.

Hole 6 (lat 30° 50.4'N., long 67° 38.9'W.)

Core	Depth Below Sea Bed		Age Determination
	Feet	Meters	
2	499 to 529	152.1 to 161.2	Section 1: No determination.

Core	Depth Below Sea Bed Feet	Depth Below Sea Bed Meters	Age Determination
3	625 to 655	190.5 to 199.6	Sections 3, 4: No determination.
4	752 to 782	229 to 238.4	Section 3: Zone P.11 (= <i>Globigerapsis kugleri</i> Zone); earlier part of Lutetian (earlier Middle Eocene).
6	817 to 842	249.0 to 256.6	Section 1: Zone P.10 (= <i>Hantkenina aragonensis</i> / <i>Globorotalia pseudomayeri</i> Zone); early Middle Eocene (early Lutetian).
Hole 7 (lat 30° 08.0'N., long 68° 17.8'W.)			
Core	Depth Below Sea Bed Feet	Depth Below Sea Bed Meters	Age Determination
1 1	0 to 30	0 to 9.1	Section 1: Zone N.22/Zone N.23; Pleistocene or younger. Section 2: No determination.

FAUNAS OF SAMPLES EXAMINED

(Determinations by W. H. Blow)

Hole 1

Sample 1-1-1-2, 75 cm:

Fairly rich planktonic foraminiferal fauna with *Globorotalia* (*G.*) *truncatulinoides truncatulinoides*; *G.* (*G.*) *truncatulinoides pachytheca*; *G.* (*G.*) *tumida tumida*; *G.* (*G.*) *cultrata cultrata*; *G.* (*G.*) *cultrata menardii*; *G.* (*G.*) *ungulata*; *Globorotalia* (*Turborotalia*) *pseudopima*; *Pulleniatina obliquiloculata finalis*; *P. obliquiloculata obliquiloculata*; *Globigerinoides conglobatus conglobatus*; *G. quadrilobatus quadrilobatus*; *G. quadrilobatus sacculifer* (f. typica); *G. elongatus*; *G. ruber* (red carotene colour present). *Globigerina falconensis*; *G. quadrilata*; *G. eggeri eggeri*; *G. glutinata*; *G. calida calida*; *Hastigerina siphonifera siphonifera*; *H. pelagica*; *Turborotalita* spp.; *Globigerinita* spp.

Age: Zone N.23; late Pleistocene/Holocene.

Sample 1-1-1-3, 63-65 cm:

Fairly rich planktonic fauna as above.

Age: Zone N.23; late Pleistocene/Holocene.

Sample 1-1-1-4, 74-76 cm:

Poor planktonic foraminiferal fauna with *Orbulina univera*; *Globigerinoides ruber* (red carotene colouration); *Globigerinoides quadrilobatus immaturus*;

Globigerina eggeri eggeri.

Age: Zone N.22/Zone N.23; Pleistocene or younger.

Sample 1-1-1-5, 74-76 cm:

Poor planktonic foraminiferal fauna with *Globorotalia* (*G.*) *truncatulinoides truncatulinoides*; *Hastigerina siphonifera siphonifera*; *Globigerina falconensis*; *Globigerinoides elongatus*; *G. ruber* (red carotene colouration), *G. quadrilobatus immaturus*; *Globorotalia* (*Turborotalia*) cf. *minutissima*, *G. (T.) scitula scitula*; *Globigerinita* spp., *Turborotalita* spp.

Age: Zone N.22/Zone N.23; Pleistocene or younger.

Sample 1-1-1-6, 72-74 cm:

Fairly rich planktonic fauna with *Globorotalia* (*G.*) *crassula* (s.l.); *Globorotalia* (*G.*) *truncatulinoides truncatulinoides*; *G. (G.) truncatulinoides pachytheca*; *G. (G.) cultrata cultrata*; *G. (Turborotalia) crassaformis crassaformis*; *G. (T.) inflata*, *Globigerina* (*Biella*) *digitata digitata*; *Globigerina eggeri eggeri*; *G. glutinata*; *Globigerinoides conglobatus conglobatus*; *G. ruber* (red carotene colouration); *Globigerinoides quadrilobatus sacculifer* (f. typica); *G. elongatus*; *Hastigerina siphonifera siphonifera*; *H. pelagica*; *Orbulina* spp., *Pulleniatina obliquiloculata obliquiloculata*.

Age: Zone N.23; late Pleistocene or younger.

Hole 2

Sample 1-2-1-2, 50-51 cm:

Rich planktonic foraminiferal fauna with *Globorotalia*

(*G.*) *truncatulinoides truncatulinoides*; *G.* (*G.*) *truncatulinoides pachythea*; *G.* (*G.*) *cultrata menardii*; *G.* (*Turborotalia*) *inflata*; *G.* (*T.*) *acostaensis pseudopima*; *G.* (*T.*) *obesa*; *G.* (*T.*) *crassaformis crassaformis*; *Globigerina rubescens* (red carotene colouration); *G. falconensis*; *G. glutinata*; *Candeina nitida nitida*; *Pulleniatina obliquiloculata finalis*; *Orbulina* spp.; *Globigerinoides conglobatus conglobatus*; *G. ruber* (red carotene colouration); *G. quadrilobatus sacculifer* (*f. typica*); *Hastigerina siphonifera siphonifera*; *H. pelagica*; *Globigerinita* spp.; *Turborotalita* spp.

Age: Upper Zone N.22/Zone N.23; late Pleistocene or younger.

Sample 1-2-2-2, 75-76 cm:
As above.

Sample 1-2-2-1, 74-75 cm:

Fairly rich planktonic foraminiferal fauna with *Globorotalia* (*G.*) *truncatulinoides truncatulinoides* (primitive); *Sphaeroidinella dehiscens dehiscens*; *Globorotalia* (*G.*) *crassula crassula*; *G.* (*G.*) *cultrata menardii*; *G.* (*T.*) *acostaensis humerosa*; *G.* (*T.*) *acostaensis acostaensis*; *Globigerina falconensis*; *G. quadrilobatus*; *Globigerinoides elongatus*; *G. cf. bollii*; *G. quadrilobatus immaturus*; *Orbulina* spp.

Age: Zone N.22 probably early part; early Pleistocene.

Sample 1-2-3-2, 73 cm:

Rich planktonic foraminiferal fauna with *Globorotalia* (*G.*) *miocenica*; *G.* (*G.*) *cultrata exilis*; *G.* (*G.*) *crassula conomiozea*; *G.* (*T.*) *crassaformis crassaformis*; *G.* (*T.*) *acostaensis pseudopima*; *G.* (*T.*) *acostaensis humerosa*; *G.* (*T.*) *acostaensis acostaensis*; *G.* (*T.*) *minutissima*; *G.* (*T.*) *scitula scitula*; *G.* (*T.*) *obesa*; *Globigerinoides conglobatus conglobatus*; *G. ruber* (white); *G. elongatus*; *G. bollii*; *G. quadrilobatus immaturus*; *G. quadrilobatus sacculifer*; *Orbulina* spp.; *Hastigerina siphonifera siphonifera*; *Sphaeroidinella dehiscens dehiscens*.

Age: Zone N.20 or Zone N.21 (Probably Zone N.21); middle to late Pliocene.

Sample 1-2-3-3, 74-75 cm:

Fairly rich planktonic foraminiferal fauna with *Globorotalia* (*G.*) *miocenica*; *G.* (*G.*) *cultrata exilis*; *G.* (*G.*) *crassula conomiozea*; *G.* (*T.*) *crassaformis crassaformis*; *G.* (*T.*) *puncticulata*; *G.* (*T.*) *inflata*; *G.* (*T.*) *minutissima*; *G.* (*T.*) *scitula scitula*; *G.* (*T.*) *acostaensis humerosa*; *G.* (*T.*) *acostaensis acostaensis*; *G.* (*T.*) *acostaensis pseudopima*; *Globigerina glutinata*; *G. falconensis*; *G. rubescens*; *Globigerinoides conglobatus conglobatus*; *G. elongatus*; *G. ruber* (white); *G. bollii*; *G. quadrilobatus immaturus*; *Orbulina* spp.; *Hastigerina siphonifera siphonifera*; *Sphaeroidinella dehiscens dehiscens*.

Age: Zone N.20 or Zone N.21; middle to late Pliocene.

Sample 1-2-4-1, 75 cm:

Rather poor planktonic foraminiferal fauna with

Globoquadrina altispira globosa; *G. altispira* cf. *altispira*; *Globigerina decoraperta*; *Globigerinoides elongatus*; *Globorotalia* (*G.*) *tumida tumida*; *Sphaeroidinella dehiscens dehiscens* (*f. immaturus*); *Sphaeroidinellopsis* spp.

Age: Zone N.19; early Pliocene.

Sample 1-3-4-2, 73-74 cm:

As above.

Age: Zone N.19; early Pliocene.

Hole 3

Sample 1-3-2-3, 75 cm:

Mainly sand but with sparse planktonic foraminiferal fauna including *Globorotalia* (*G.*) *truncatulinoides* (*s.l.*); *Globigerinoides ruber* (red); *G. conglobatus conglobatus*; *Globigerina eggeri eggeri*; *Globorotalia* (*T.*) *acostaensis humerosa*.

Age: Zone N.22/Zone N.23; late Pleistocene or younger.

Sample 1-3-3-2, 89.5-90.7 cm:

Rich planktonic foraminiferal fauna with *Globorotalia* (*G.*) *truncatulinoides* (*s.l.*); *G.* (*G.*) *tumida tumida*; *G.* (*G.*) *cultrata menardii*; *G.* (*Turborotalia*) *inflata*; *G.* (*T.*) *scitula scitula*; *G.* (*T.*) *trigonula*; *Globigerina oscitans*; *G. eggeri eggeri*; *G. glutinata*; *G. calida praecalida*; *Globigerinoides ruber* (red and white forms); *G. elongatus*; *G. conglobatus conglobatus*; *G. quadrilobatus* (*s.l.*); *Globigerinita* spp.; *Turborotalita* spp.

Age: Zone N.22; probably middle part of Pleistocene.

Sample 1-3-4-1, 75 cm:

Rich planktonic foraminiferal fauna with *Globorotalia* (*G.*) *truncatulinoides truncatulinoides*; *G.* (*G.*) *truncatulinoides pachythea*; *G.* (*G.*) *crassula crassula*; *G.* (*G.*) *crassula conomiozea*; *G.* (*T.*) *crassaformis crassaformis*; *G.* (*T.*) *scitula scitula*; *G.* (*T.*) *acostaensis humerosa*; *G.* (*T.*) *acostaensis pseudopima*; *Globigerina calida praecalida*; *G. eggeri eggeri*; *G. quadrilobatus*; *G. glutinata*; *G. falconensis*; *Globigerinoides conglobatus conglobatus*; *G. ruber* (red); *G. elongatus*; *G. cf. bollii*; *G. quadrilobatus* (*s.l.*); *Orbulina* spp.; *Hastigerina siphonifera siphonifera*; *Sphaeroidinella dehiscens dehiscens*.

Age: Zone N.22; Pleistocene (part).

Sample 1-3-5-1, 75 cm:

Rather poor planktonic foraminiferal fauna with *Globorotalia* (*G.*) *cultrata menardii*; *G.* (*G.*) *cultrata exilis*; *G.* (*T.*) *crassaformis crassaformis*; *G.* (*T.*) *acostaensis* cf. *acostaensis*; *Globigerina decoraperta*; *G. cf. rubescens* (white); *Globigerina quadrilobatus*; *Globigerinoides ruber* (white); *G. elongatus*; *G. cf. bollii*; *G. conglobatus conglobatus*; *Orbulina* spp.; *Turborotalita* spp.

Age: Probably Zone N.21; late Pliocene.

Sample 1-3-5-2, 75 cm:

Fairly rich planktonic foraminiferal fauna with

Globorotalia (G.) *miocenica*; G. (G.) *cultrata exilis*; G. (G.) *crassula viola*; G. (T.) *acostaensis pseudopima*; G. (T.) *acostaensis humerosa*; G. (T.) *scitula scitula*; G. (T.) *ventriosa*; G. (T.) *crassaformis crassaformis*; *Globigerina bulloides apertura*; G. *quadrilatera*; G. *decoraperta*; G. *pseudofoliata*; *Globigerinoides conglobatus conglobatus*; G. *ruber* (white); G. *elongatus*; G. cf. *gomitulus*; G. cf. *bollii*; G. *obliquus extremus*; *Orbulina* spp.; *Turborotalita* spp.

Age: Probably Zone N.20 or lower Zone N.21; later Pliocene.

Sample 1-3-5-3, 75 cm:

As above.

Age: Zone N.20 or lower Zone N.21; later Pliocene.

Sample 1-3-5-4, 75 cm:

As above.

Age: Zone N.20 or lower Zone N.21; later Pliocene.

Sample 1-3-5-5, 75-76 cm:

As above.

Age: Zone N.20 or lower Zone N.21; later Pliocene.

Sample 1-3-5-1, 75 cm:

As above.

Age: Zone N.20 or lower Zone N.21; later Pliocene.

Sample 1-3-6-2, 71.5-72.5 cm:

As above.

Age: Zone N.20 or lower Zone N.21; later Pliocene.

Sample 1-3-7-1, 75 cm:

Fairly rich planktonic foraminiferal fauna with *Globorotalia* (G.) *miocenica*; G. (G.) *cultrata exilis*; G. (G.) *crassula viola*; G. (T.) *acostaensis acostaensis*, G. (T.) *acostaensis pseudopima* (rare); G. (T.) *acostaensis humerosa*; *Sphaeroidinella dehiscent dehiscent*; *Sphaeroidinellopsis seminulina seminulina*; *Globigerina bulbosa*; G. *quadrilatera*; G. cf. *eggeri eggeri*; G. *praebulloides occulsa*; *Globoquadrina larmei obesa*; G. *altispira* cf. *globosa*; *Globigerinoides conglobatus conglobatus*; G. *ruber* (white); G. *quadrilobatus* (s.l.); G. *elongatus*; *Orbulina* spp.; *Hastigerina siphonifera siphonifera*; *Turborotalita* spp.

Age: Zone N.20; middle Pliocene.

Sample 1-3-7-2, 85 cm:

As above.

Age: Zone N.20; middle Pliocene.

Sample 1-3-7-3, 75 cm:

Rather poor planktonic foraminiferal fauna with *Sphaeroidinella dehiscent dehiscent* (including *forma immatura*); *Globorotalia* (G.) *miocenica*; G. (G.) *tumida tumida*; G. (G.) *cultrata exilis*; G. (T.) *acostaensis acostaensis*; G. (T.) *crassaformis crassaformis*; *Globigerina eggeri eggeri*; *Globigerinoides quadrilobatus* (s.l.); G.

ruber (white); G. *elongatus*. *Orbulina* spp.; *Turborotalita* spp.

Age: Zone N.19 or Zone N.20; Pliocene (approx. middle part).

Sample 1-3-7-4, 73-74 cm:

Fairly rich planktonic foraminiferal fauna with *Globorotalia* (G.) *tumida tumida*; G. (G.) *miocenica*; G. (G.) *cultrata menardii*; G. (G.) *crassula viola*; G. (G.) *crassula conomiozea*; G. (T.) *crassaformis crassaformis*; G. (T.) *crassaformis ronda*; G. (T.) *scitula scitula*; G. (T.) *acostaensis acostaensis*; G. (T.) *acostaensis humerosa*; *Sphaeroidinella dehiscent dehiscent* f. *immatura*; *Sphaeroidinellopsis aubdehiscent paenedehiscent*, *S. seminulina*; *Globigerina nepenthes* (v. rare); G. *eggeri* cf. *eggeri*; *Globigerinoides conglobatus conglobatus*; G. *ruber*; G. *quadrilobatus* (s.l.); G. *elongatus*; *Orbulina* spp.; *Turborotalita* spp.

Age: Zone N.19; early to middle Pliocene.

Sample 1-3-8-1, 90-91 cm:

No planktonic foraminifera.

Sample 1-3-8-2, 75-76 cm:

Rather poor planktonic foraminiferal fauna with *Sphaeroidinella dehiscent dehiscent forma immatura* (v. rare); *Sphaeroidinellopsis subdehiscent paenedehiscent*; *Globorotalia* (G.) *miocenica*; G. (G.) *margaritae*; G. (G.) cf. *hirsuta praehirsuta*; *Globigerina nepenthes*; G. cf. *eggeri multiloba*; *Orbulina* sp., *Turborotalita* sp.

Age: early Zone N.19; early Pliocene.

Sample 1-3-8-3, 75 cm:

No planktonic foraminifera

Sample 1-3-8-4, 71-72 cm:

No planktonic foraminifera.

Sample 1-3-8-5, 75-76 cm:

No significant planktonic foraminifera.

Sample 1-3-8-6, 75 cm:

No significant planktonic foraminifera.

Sample 1-3-9-4, 77 cm:

No planktonic foraminifera.

Sample 1-3-9-7, 74-75 cm:

No planktonic foraminifera.

Hole 4

Sample 1-4-1-1, 75 cm:

No planktonic foraminifera.

Sample 1-4-1-2, 75 cm:

No planktonic foraminifera.

Sample 1-4-1-3, 75 cm:
No planktonic foraminifera.

Sample 1-4-1-4, 75 cm:
No planktonic foraminifera.

Sample 1-4-1-6, 75 cm:
No planktonic foraminifera.

Sample 1-4-2-1, 94-96 cm:
No planktonic foraminifera.

Sample 1-4-3-1, 69-71 cm:
No planktonic foraminifera.

Sample 1-4-4-1, 77-80 cm:
No planktonic foraminifera.

Hole 4A

Sample 1-4A-1-1, 75-76 cm:
Rich planktonic foraminiferal fauna with *Globotruncana arca*; *G. cf. calciformis*; *G. fornicata*; *G. elevata stuartiformis*, *G. cf. aegyptica*; *G. linneiana*; *G. ackermannii* (group); *Pseudotextularia* spp.
Age: Early to middle Maestrichtian.

Sample 1-4A-1-2, 75 cm:
Globotruncana cf. arca; *G. fornicata*; *G. elevata stuartiformis*; *G. stuarti*; *G. linneiana*. (Note also larger foraminifera *Vaughanina cubensis*, det. W. J. Clarke).
Age: Early Maestrichtian.

Sample 1-4A-1-3, 74-75 cm:
No significant planktonic foraminifera.

Sample 1-4A-2-1, 74-76 cm:
No recognizable planktonic foraminifera.

Hole 5

Sample 1-5-1-1, 74-76 cm:
Rather poor planktonic foraminiferal fauna with *Globorotalia (G.) truncatulinoides pachytheca*; *Globigerinoides conglobatus conglobatus*; *G. ruber* (red); *Globigerina rubescens*; *Truncorotaloides* sp.
Age: Zone N.22/Zone N.23; derived Eocene (Pleistocene or younger, with reworked Paleogene).

Sample 1-5-1-2, 100 cm:
Rather poor planktonic foraminiferal fauna, specimens rolled and abraded, with *Globigerina angiporoides*, *Globigerinita martini scandretti*; *Truncorotaloides rohri* (group); *Globigerinoides ruber*; *Globigerinoides quadrilobatus (s.l.)*.
Age: Heterogeneous sample, Eocene & early Oligocene reworked into younger (?late Pliocene/Pleistocene)

Sample 1-5-1-3, 74 cm:
Rather poor planktonic foraminiferal fauna with larger

foraminifera including *Miogyopsina*; *Lepidocyclina*, *Palaeonummulites*; ?*Dictyoconus*. P.F. includes specimens referable to *Globigerinoides ruber*; *G. quadrilobatus*; *G. elongatus*; *Truncorotaloides* sp.; *Globigerina ampliapertura*; *G. prasaepis*; *Globoquadrina altispira cf. globosa*.

Age: Heterogeneous sample. ?late Pliocene/Pleistocene with derived Miocene, Oligocene and Eocene.

Sample 1-5-2-1, 58-60 cm:
No determinable fauna.

Hole 6

Sample 1-6-2-1, 74-76 cm:
No foraminifera.

Sample 1-6-3-3, 77-79 cm:
No foraminifera.

Sample 1-6-3-4, 88-91 cm:
Rich assemblage of sponge spicules and Radiolaria.
No foraminifera.
Age: None

Sample 1-6-4-3, 66-68 cm:
Rich planktonic foraminifera fauna with *Globigerina boweri*; *G. frontosa*; *Acarinina densa*; *Globigerina (?) linaperta*; *Truncorotaloides rohri* (group); *Globigerina (?) senni*; *Globigerapsis index*; *Globotruncana* spp.
Age: Zone P.11, (*Globigerapsis kyglerei* Zone, of Bolli, 1957) with Upper Cretaceous (=earlier part of Lutetian, Middle Eocene with derived Upper Cretaceous).

Sample 1-6-6-1, 72-75 cm:
Rich planktonic foraminiferal fauna with *Globorotalia broedermanni*; *Acarinina densa*; *Globigerina (?) linaperta*; *Globigerina boweri*; *G. cf. frontosa*; *Globigerina (?) senni*; *Globorotalia pseudomayeri*; *Globigerinoides (?) higginsii*.
Age: Zone P.10 (=Hantkenina aragonensis/*Globorotalia pseudomayeri* Zone); early Middle Eocene (i.e. early Lutetian).

Hole 7

Sample 1-7-1-1, 74-76 cm:
Rich planktonic fauna with *Globorotalia (G.) truncatulinoides (s.l.)*; *G. (G.) hirsuta hirsuta*; *G. (G.) cultrata menardii*; *Hastigerina pelagica*; *Globigerinoides conglobatus conglobatus*; *Globigerinoides ruber*; *Globorotalia (T.) inflata*; *G. (T.) acostaensis pseudopima*; *G. (T.) acostaensis humerosa*; *Globigerina eggeri eggeri*; *G. falconensis*; *Orbulina* spp.
Age: Zone N.22/Zone N.23; Pleistocene or younger.

Sample 1-7-1-2, 91-93 cm:
No significant planktonic foraminiferal species.