# 10. SITE 624[1]

Shipboard Scientific Party[2]

## HOLE 624

**Date occupied:** 3 November 1983, 0339 LCT

**Date departed:** 4 November 1983, 1525 LCT

**Time on hole:** 1 day, 12 hr.

**Position:** 25°45.24′N, 86°16.63′W

**Water depth (sea level; corrected m, echo-sounding):** 3183

**Water depth (rig floor; corrected m, echo-sounding):** 3193

**Bottom felt (m, drill pipe):** 3198.2

**Penetration (m):** 199.9

**Number of cores:** 23

**Total length of cored section (m):** 109.8

**Total core recovered (m):** 75.32

**Core recovery (%):** 69

**Oldest sediment cored:**
Depth sub-bottom (m): 199.9
Nature: Clay and mud
Age: Pleistocene (Ericson Zone Y)
Measured velocity (km/s): N/A

**Basement:** N/A

## HOLE 624A

**Date occupied:** 5 November 1983, 0210 LCT

**Date departed:** 6 November 1983, 2100 LCT

**Time on hole:** 1 day, 19 hr.

**Position:** 25°45.24′N, 86°16.63′W

**Water depth (sea level; corrected m, echo-sounding):** 3183

**Water depth (rig floor; corrected m, echo-sounding):** 3193

**Bottom felt (m, drill pipe):** 3198

**Penetration (m):** 207.6

**Number of cores:** 22

**Total length of cored section (m):** 103.7

**Total core recovered (m):** 86.76

**Core recovery (%):** 84

**Oldest sediment cored:**
Depth sub-bottom (m): 197.1
Nature: Sand and clay
Age: Pleistocene Ericson Zone Y
Measured velocity (km/s): N/A

**Basement:** N/A

## BACKGROUND AND OBJECTIVES

Site 624 is located about 4.8 km southwest of Site 623. Background information for this site is given in the Site 623 chapter (this volume).

A 200-m hydraulic piston corer program was designed to satisfy the following objectives:

1. To determine the sedimentological, paleontological, geochemical, and geotechnical characteristics of a vertical series that should consist of levee and overbank deposits primarily but may be interlaced with thin channel deposits.

2. To compare this site with Site 623 to obtain better insight into the behavior of the shallow channels on the lower fan that may be short lived and frequently jump position laterally.

3. To run one or two sets of wireline logs to typify these types of deposits and to compare the wireline logs from this site with those collected at other sites.

4. To recover cores from Hole 624A for the Geotechnical Consortium.

## OPERATIONS

### Hole 624

The final drill site of the Deep Sea Drilling Project was located 4.8 km southwest of Site 623, and the rig was moved in just 27 min. This was about half the time required for the beacon to fall to the seafloor and to achieve stable positioning.

The precision depth record (PDR) depth was found to be even further in error than at Site 623, and a "water core" was again taken before the seafloor was found at 3198.2 m, 15 m below PDR (Table 1).

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[1] Bouma, A. H., Coleman, J. M., Meyer, A. W., et al., *Init. Repts. DSDP*, 96: Washington (U.S. Govt. Printing Office).

[2] Addresses: Arnold H. Bouma (Co-Chief Scientist), Gulf Research and Development Company, P.O. Box 37048, Houston, TX 77236, (present address: Chevron Oil Field Research Company, P.O. Box 36506, Houston, TX 77236); James M. Coleman (Co-Chief Scientist), Coastal Studies Institute, Louisiana State University, Baton Rouge, LA 70803; Audrey W. Meyer (Shipboard Science Representative), Deep Sea Drilling Project, Scripps Institution of Oceanography, La Jolla, CA 92093, (present address: Ocean Drilling Program, 500 University Drive West, Texas A&M University, College Station, TX 77843); James Brooks, Department of Oceanography, Texas A&M University, College Station, TX 77843; William R. Bryant, Department of Oceanography, Texas A&M University, College Station, TX 77843; Richard Constans, Paleontology Section, Chevron U.S.A. Inc., 935 Gravier Street, New Orleans, LA 70112; Michel Cremer, Département de Géologie et Océanographie, Université de Bordeaux I, Avenue des Facultés, 33405 Talence Cedex, France; Laurence I. Droz, Laboratoire de Géodynamique Sous-Marine, 06230 Villefranche-sur-Mer, France; Toshio Ishizuka, Ocean Research Institute, University of Tokyo, Tokyo 164, Japan; Mahlon C. Kennicutt II, Department of Oceanography, Texas A&M University, College Station, TX 77843; Barry Kohl, Chevron U.S.A. Inc., 935 Gravier Street, New Orleans, LA 70112; William R. Normark, Pacific Branch of Marine Geology, U.S. Geological Survey (MS-999), 345 Middlefield Road, Menlo Park, CA 94025; Suzanne O'Connell, Lamont-Doherty Geological Observatory of Columbia University, Palisades, NY 10964, (present address: Ocean Drilling Program, 500 University Drive West, Texas A&M University, College Station, TX 77843); Mary Parker, Department of Geology, Florida State University, Tallahassee, FL 32306, (present address: AMOCO Production Company, P.O. Box 50879, New Orleans, LA 70150); Kevin T. Pickering, Department of Earth Sciences, University of London, Goldsmith's College, London SE 14 6NW, United Kingdom; (present address: Department of Geology, University of Leicester, Leicester LE1 7RH, United Kingdom); Claudia Schroeder, Department of Geology, Dalhousie University, Halifax, Nova Scotia B3H 3J5, Canada; Charles E. Stelting, Gulf Research and Development Company, P.O. Box 37048, Houston, TX 77236, (present address: Chevron Oil Field Research Company, P.O. Box 36506, Houston, TX 77236); Dorrik A. V. Stow, University of Edinburgh, Edinburgh EH9 3JW, Scotland, United Kingdom, (present address: Geology Department, University of Nottingham, Nottingham NG7 2RD, United Kingdom); William E. Sweet, Mineral Management Service, P.O. Box 7944, Metairie, LA 77010; Andreas Wetzel, Geologisches Palaeontologisches Institut der Universität, Sigwartstrasse 10, D7400 Tübingen, Federal Republic of Germany; and Jean K. Whelan, Chemistry Department, Woods Hole Oceanographic Institution, Woods Hole, MA 02543.

Table 1. Site 624 coring summary.

| Core[a] | Date (Nov. 1983) | Time | Depth from drill floor (m) | Depth below seafloor (m) | Length cored (m) | Length recovered (m) | Amount recovered (%) |
|---|---|---|---|---|---|---|---|
| Hole 624 | | | | | | | |
| 1H | 3 | 1315 | 3198.2-3205.1 | 0.0-6.9 | 6.9 | 6.85 | 99 |
| 2H | 3 | 1412 | 3205.1-3214.7 | 6.9-16.5 | 9.6 | 7.65 | 80 |
| 3H | 3 | 1515 | 3214.7-3224.3 | 16.5-26.1 | 9.6 | 7.87 | 82 |
| 4H | 3 | 1615 | 3224.3-3233.9 | 26.1-35.7 | 9.6 | 7.05 | 73 |
| 5H | 3 | 1715 | 3233.9-3243.5 | 35.7-45.3 | 9.6 | 8.04 | 84 |
| 6H | 3 | 1815 | 3243.5-3253.1 | 45.3-54.9 | 9.6 | 5.90 | 61 |
| 7H | 3 | 1925 | 3253.1-3258.0 | 54.9-59.8 | 4.9 | 4.89 | 99 |
| Wash | 3 | | 3258.0-3262.7 | 59.8-64.5 | — | — | — |
| 8H | 3 | 2025 | 3262.7-3272.3 | 64.5-74.1 | 9.6 | 2.89 | 30 |
| 9H | 3 | 2130 | 3272.3-3277.8 | 74.1-79.6 | 5.5 | 5.54 | 100 |
| Wash | 3 | | 3277.8-3281.9 | 79.6-83.7 | — | — | — |
| 10H | 3 | 2225 | 3281.9-3283.4 | 83.7-85.2 | 1.5 | 1.42 | 95 |
| Wash | 3 | | 3283.4-3291.5 | 85.2-93.3 | — | — | — |
| 11H | 3 | 2335 | 3291.5-3293.6 | 93.3-95.4 | 2.1 | 2.09 | 99 |
| Wash | 3 | | 3293.6-3300.9 | 95.4-102.7 | — | — | — |
| 12H | 4 | 0038 | 3300.9-3304.9 | 102.7-106.7 | 4.0 | 3.84 | 96 |
| Wash | 4 | | 3304.9-3310.3 | 106.7-112.1 | — | — | — |
| 13H | 4 | 0130 | 3310.3-3311.0 | 112.1-112.8 | 0.7 | 0.00 | 0 |
| Wash | 4 | | 3311.0-3316.0 | 112.8-117.8 | — | — | — |
| 14H | 4 | 0245 | 3316.0-3317.0 | 117.8-118.8 | 1.0 | 0.86 | 86 |
| Wash | 4 | | 3317.0-3325.3 | 118.8-127.1 | — | — | — |
| 15H | 4 | 0348 | 3325.3-3329.1 | 127.1-130.9 | 3.8 | 3.70 | 97 |
| Wash | 4 | | 3329.1-3334.6 | 130.9-136.4 | — | — | — |
| 16H | 4 | 0450 | 3334.6-3338.0 | 136.4-139.8 | 3.4 | 3.37 | 99 |
| Wash | 4 | | 3338.0-3343.9 | 139.8-145.7 | — | — | — |
| 17H | 4 | 0558 | 3343.9-3344.9 | 145.7-146.7 | 1.0 | 0.96 | 96 |
| Wash | 4 | | 3344.9-3353.3 | 146.7-155.1 | — | — | — |
| 18H | 4 | 0654 | 3353.3-3353.8 | 155.1-155.6 | 0.5 | 0.48 | 96 |
| Wash | 4 | | 3353.8-3362.7 | 155.6-164.5 | — | — | — |
| 19H | 4 | 0750 | 3362.7-3366.7 | 164.5-168.5 | 4.0 | 0.00 | 0 |
| 20H | 4 | 0854 | 3366.7-3368.2 | 168.5-170.0 | 1.5 | 1.33 | 89 |
| 21H | 4 | 1007 | 3368.2-3368.7 | 170.0-170.5 | 0.5 | 0.49 | 98 |
| Wash | 4 | | 3368.7-3377.7 | 170.5-179.5 | — | — | — |
| 22H | 4 | 1123 | 3377.7-3379.1 | 179.5-180.9 | 1.4 | 0.01 | 0 |
| Wash | 4 | | 3379.1-3388.6 | 180.9-190.4 | — | — | — |
| 23X | 4 | 1400 | 3388.6-3398.1 | 190.4-199.9 | 9.5 | 0.09 | 9 |
| | | | | | 109.8 | 75.32 | 69 |
| Hole 624A | | | | | | | |
| 1H | 5 | 0230 | 3198.0-3205.5 | 0.0-7.5 | 7.5 | 7.46 | 99 |
| 2H | 5 | 0330 | 3205.5-3215.1 | 7.5-17.1 | 9.6 | 7.85 | 82 |
| 3H | 5 | 0430 | 3215.1-3224.7 | 17.1-26.7 | 9.6 | 7.33 | 76 |
| 4H | 5 | 0533 | 3224.7-3234.3 | 26.7-36.3 | 9.6 | 6.44 | 67 |
| 5H | 5 | 0632 | 3234.3-3243.9 | 36.3-45.9 | 9.6 | 6.73 | 70 |
| 6H | 5 | 0730 | 3243.9-3253.5 | 45.9-55.5 | 9.6 | 6.70 | 70 |
| 7H | 5 | 0827 | 3253.5-3257.9 | 55.5-59.9 | 4.4 | 4.31 | 98 |
| Wash | 5 | | 3257.9-3263.1 | 59.9-65.1 | — | — | — |
| 8H | 5 | 0925 | 3263.1-3272.7 | 65.1-74.7 | 9.6 | 7.18 | 75 |
| 9H | 5 | 1026 | 3272.7-3277.9 | 74.7-79.9 | 5.2 | 5.16 | 99 |
| Wash | 5 | | 3277.9-3282.3 | 79.9-84.3 | — | — | — |
| 10H | 5 | 1122 | 3282.3-3286.6 | 84.3-88.6 | 4.3 | 4.23 | 98 |
| Wash | 5 | | 3286.6-3291.7 | 88.6-93.7 | — | — | — |
| 11H | 5 | 1225 | 3291.7-3295.7 | 93.7-97.7 | 4.0 | 4.09 | 100 |
| Wash | 5 | | 3295.7-3301.1 | 97.7-103.1 | — | — | — |
| 12H | 5 | 1335 | 3301.1-3303.0 | 103.1-105.0 | 1.9 | 1.89 | 99 |
| Wash | 5 | | 3303.0-3310.5 | 105.0-112.5 | — | — | — |
| 13H | 5 | 1445 | 3310.5-3314.2 | 112.5-116.2 | 3.7 | 3.71 | 100 |
| Wash | 5 | | 3314.2-3319.8 | 116.2-121.8 | — | — | — |
| 14H | 5 | 1640 | 3319.8-3322.8 | 121.8-124.8 | 3.0 | 2.44 | 81 |
| Wash | 5 | | 3322.8-3329.1 | 124.8-131.1 | — | — | — |
| 15H | 5 | 1740 | 3329.1-3331.1 | 131.1-133.1 | 2.0 | 2.06 | 100 |
| Wash | 5 | | 3331.1-3338.4 | 133.1-140.4 | — | — | — |
| 16H | 5 | 1845 | 3338.4-3341.0 | 140.4-143.0 | 2.6 | 2.60 | 100 |
| Wash | 5 | | 3341.0-3347.8 | 143.0-149.8 | — | — | — |
| 17H | 5 | 2000 | 3347.8-3349.8 | 149.8-151.8 | 2.0 | 1.74 | 87 |
| Wash | 5 | | 3349.8-3357.2 | 151.8-159.2 | — | — | — |
| 18H | 5 | 2100 | 3357.2-3359.7 | 159.2-161.7 | 2.5 | 2.28 | 91 |
| Wash | 5 | | 3359.7-3366.6 | 161.7-168.6 | — | — | — |
| 19H | 5 | 2215 | 3366.6-3368.4 | 168.6-170.4 | 1.8 | 1.68 | 93 |
| Wash | 5 | | 3368.4-3376.0 | 170.4-178.0 | — | — | — |
| 20H | 5 | 2350 | 3376.0-3377.0 | 178.0-179.0 | 1.0 | 0.82 | 82 |
| Wash | 5 | | 3377.0-3385.5 | 179.0-187.5 | — | — | — |
| 21H | 6 | 0118 | 3385.5-3385.6 | 187.5-187.6 | 0.1 | 0.01 | 10 |
| Wash | 6 | | 3385.6-3395.0 | 187.6-197.0 | — | — | — |
| 22H | 6 | 0221 | 3395.0-3395.1 | 197.0-197.1 | 0.1 | 0.05 | 50 |
| Wash | 6 | | 3395.1-3405.6 | 197.1-207.6 | — | — | — |
| | | | | | 103.7 | 86.76 | 84 |

[a]H following core number indicates hydraulic piston core, X indicates extended core barrel.

An incomplete variable length hydraulic piston core (VLHPC) stroke occurred at about 65 m below seafloor. Clay and mud with silt laminae were cored, with sand beds beginning at about 45 m and becoming thicker and more numerous with depth. Core recovery was very low below 110 m sub-bottom because of incomplete VLHPC penetration and loss of core from the barrel resulting from vessel motion in choppy seas and the sticky nature of the sediment which tended to hold the core catchers open. Recovery was almost nonexistent below 170 m, and at 190 m it was decided that the extended core barrel (XCB) system was the only hope for recovering the incompressible but uncemented sands. The XCB was reassembled and deployed, and one core was cut. When the sand line was run to retrieve the XCB, however, it was found to be stuck in place in the outer core barrel. Two retrieval attempts resulted only in failed overshot shear pins, and it became apparent that a pipe trip would be necessary to recover the corer. This precluded the planned logging operations for the hole.

On recovery of the bottom-hole assembly (BHA), it was found that the XCB could not be recovered because the latch dogs had become slightly deformed at the top and could no longer be retracted sufficiently to clear the latch sleeve. The outer core barrel was dismantled, and the inner core barrel was recovered containing only a handful of sand.

## Hole 624A

The BHA was immediately reassembled and run back to the seafloor to spud Hole 624A at 0210 hr., 5 November (Table 1). The second hole at the site was cored for geotechnical purposes. Core recovery and VLHPC penetration were significantly better than in Hole 624. This was attributed primarily to calmer sea state weather conditions. Satisfactory representative cores were recovered to about 170 m below the seafloor. Cores attempted below this depth did not penetrate well and recovered only traces of sand. Following recovery of the final core from 197 m below the seafloor, the hole was drilled to 207.6 m sub-bottom to provide a "rathole" for logging.

The pipe was pulled to logging depth, and two runs were made for a full suite of well logs. The first run (sonic/induction/caliper/gamma ray) found bridges in the hole at 174 m, but the tool was "worked" to 193 m and logged the lower sand unit. The second log run, with the formation density/compensated neutron log/gamma ray (FDC/CNP/GR) tool, was stopped 10 m shallower. This again indicated a high rate of progressive hole fill, but good logs were recorded and operations ended on a successful note.

This being the final site of the Deep Sea Drilling Project, the logging equipment was rigged down and the ship's inventory of explosives (primacord severing charges and fuses) was dropped and circulated down the pipe for disposal in the borehole. The drill string was then recovered for the final time. As the BHA was being broken down, it was discovered that the severing charges had somehow become lodged in the lowest joint of 5½-in. drill pipe. All but one of the charges were removed and jettisoned; the final charge remained firmly stuck in the pipe. To avoid the hazards involved in further removal efforts, the pipe joint was released through the mousehole.

After a final check to insure that the BHA was clear of obstructions, the rig lights were turned off and *Glomar Challenger* departed for Mobile, Alabama.

## SEISMIC STRATIGRAPHY AND ACOUSTIC FACIES

Site 624 is located about 7.3 km west of the most recent channel on the lower Mississippi Fan and about 4.8 km southwest of Site 623. The location of seismic lines at this site is shown in Figure 1. No detailed site survey was conducted for this site.

Three reflectors (A–C) were identified as marking major changes in seismic facies (Fig. 2). These reflectors bound four distinctive seismic units (Table 2).

Correlation with lithologic and gamma-ray logs suggests that the transparent and semitransparent facies of Units 1, 2, and 3 corresponds to relatively muddy sediments, whereas the strong continuous reflectors of seismic Unit 4 corresponds to sediments with an increased silt (or sand) content. For a more detailed evaluation of the seismic stratigraphy on this area of the lower fan, see Stelting et al. (this volume).

## BIOSTRATIGRAPHY AND SEDIMENTATION RATES

### Biostratigraphy

The section penetrated in Holes 624 and 624A is Quaternary, correlating with the planktonic foraminifer Zone N23 and the calcareous nannofossil Zone NN21. The interval includes the Holocene (Ericson Zone Z; Ericson and Wollin, 1968) and the late Wisconsin glacial (Ericson Zone Y) (Fig. 3). The warm interstadial of the Wisconsin glacial (Ericson Zone X or *Globorotalia flexuosa* Zone) was not encountered to a total depth of 199.9 m.

The late Wisconsin glacial (Ericson Zone Y) contains a very poorly developed foraminiferal fauna with rare shallow-water (neritic) benthic species. Reworked Cretaceous calcareous nannofossils and rare Cretaceous foraminifers also occur throughout the interval.

#### Foraminifers

Foraminifers from Holes 624 and 624A are Quaternary, Zone N23 (Blow, 1969). A warm-water high-diversity planktonic foraminiferal ooze occurs in the upper portion of Section 624-1-1. This Holocene (Ericson Zone Z) fauna contains abundant *Globorotalia menardii* and common *G. tumida* along with the associated bathyal foraminifers *Cibicides wuellerstorfi* and *C. kullenbergi*.

Zone Y (late Wisconsin glacial) extends from Section 624-1-1 through Core 624-23 (total depth) and consists of muds with interbedded sands and silts. There is a very poorly developed foraminiferal fauna with the cool-water planktonic foraminifer *G. inflata* occurring only in Core 624-18. Rare sporadic occurrences of shallow-water (neritic) benthic foraminifers, low frequencies of bathyal benthic foraminifers, and rare planktonic foraminifers suggest very rapid deposition of displaced sediment at this site. Rare reworked Cretaceous foraminifers occur throughout this zone.

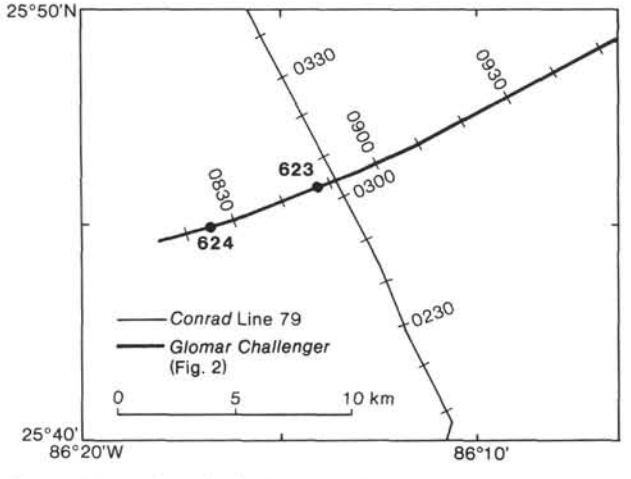


Figure 1. Location of seismic survey lines near Sites 623 and 624.

#### Calcareous Nannofossils

All cores recovered from this site are interpreted to be in the *Emiliania huxleyi* Zone (NN21) of Martini (1971). The Holocene foraminiferal ooze contains abundant, well-preserved Quaternary calcareous nannofossils. Very small coccoliths, tentatively identified as *Emiliania huxleyi*, dominate the nannofossil assemblage. Below this ooze, the sediment contains few nannofossils and the assemblage is dominated by reworked Cretaceous species. Pleistocene species, when present, are rare. Except for *E. huxleyi*, which is difficult to identify with a light microscope, *Gephyrocapsa oceanica* is the most frequently occurring Pleistocene nannofossil.

### Sedimentation Rates

The sedimentation rates are based on two datums. An age of 0.012 Ma is used for the Holocene/Pleistocene boundary (Z/Y zonal boundary) and 0.085 Ma for the Y/X zonal boundary (see Explanatory Notes, this volume).

A sedimentation rate of 2.1 cm/1000 yr. is calculated for the Holocene. This is a minimum rate assuming complete Holocene recovery (Fig. 4).

The Y/X zonal boundary was not encountered. By using a seismic projection to the top of the X Zone (521 m for seismic Horizon "30"; see introductory chapter, this volume), a projected minimum sedimentation rate of 713.4 cm/1000 yr. is computed for the Y Zone.

These calculations are based on nondecompacted sediment thicknesses.

## LITHOSTRATIGRAPHY

Two lithologic units are recognized at Site 624 (Table 3; Fig. 3). In common with Site 623, actual sediment recovery to 80 m sub-bottom was relatively good (70.85%; Section 624-1-1 through Sample 624-9,CC). Below 80 m sub-bottom to a depth of 200 m sub-bottom, actual sediment recovery was poor (15.54%; Section 624-10-1 through Sample 624-23,CC).

### Lithologic Unit I: Muddy Ooze

A 10-cm-thick laminated brown to dark brown marly foraminiferal ooze occurs at the top of the section (Sample 624-1-1, 0–6 cm; Sample 624A-1-1, 0–10 cm). Texturally, the ooze is composed of about 15% sand, 50%

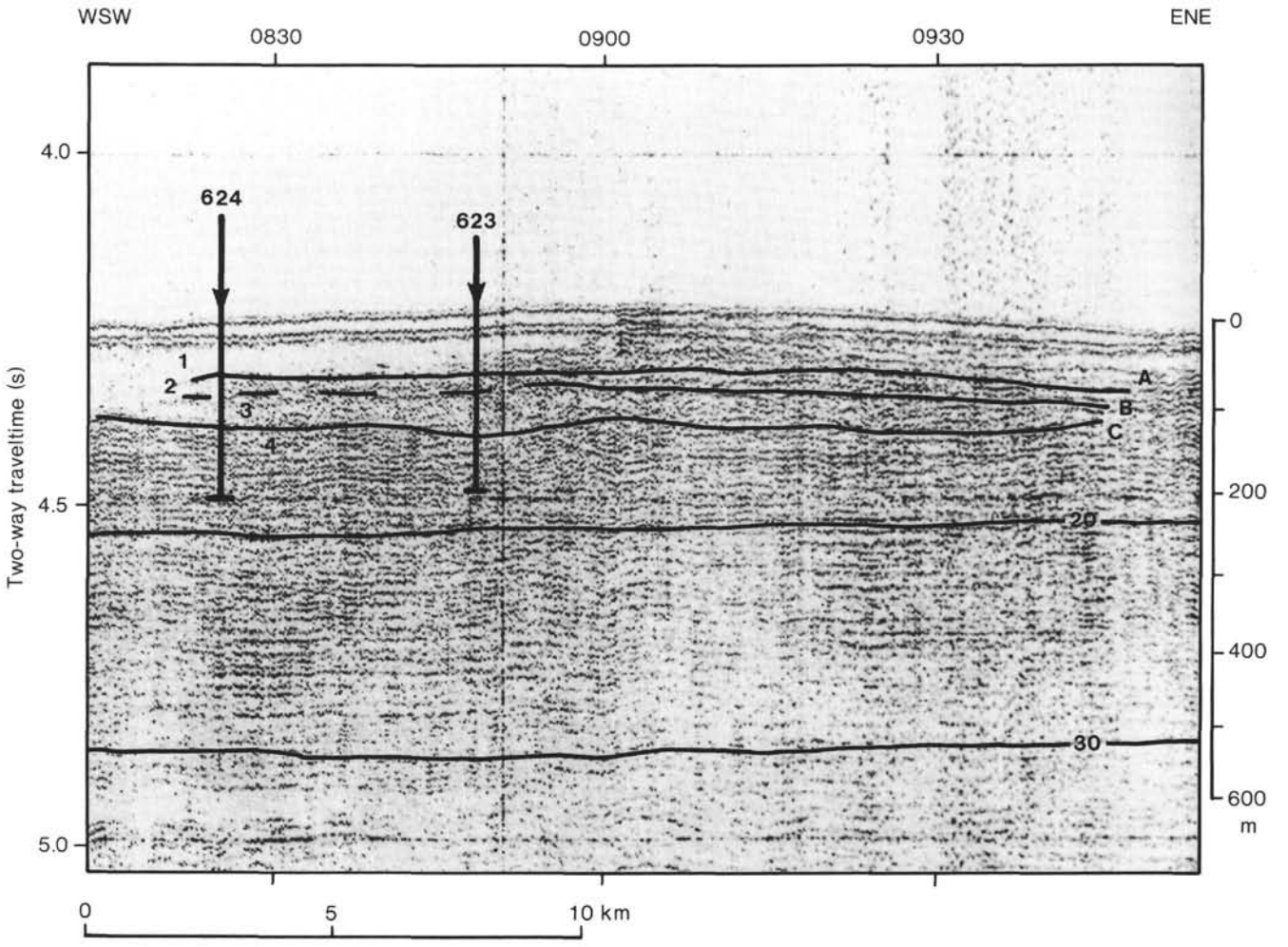


Figure 2. *Glomar Challenger* air-gun (40-in.$^3$) seismic profile across Sites 623 and 624 showing major reflectors (A–C) and seismic units (1–4) in the cored interval and locations of seismic Horizons "20" and "30" (see introductory chapter, this volume). Location of profile shown in Fig. 1.

Table 2. Site 624 seismic reflectors and units.

| Reflectors | Sub-bottom depth (m) | Sub-bottom depth (ms) | Seismic units | Seismic facies |
|---|---|---|---|---|
| Seafloor | 0 | 0 | | |
| | | | 1 | Transparent |
| A | 59 | 76 | | |
| | | | 2 | Semitransparent |
| B | 81 | 104 | | |
| | | | 3 | Semitransparent |
| C | 117 | 150 | | |
| | | | 4 | Strong (semi-) continuous reflectors |
| 20[a] | 200 | 250 | | |

[a] Seismic Horizon "20" is defined in the introductory chapter (this volume).

silt, and 35% clay. Foraminifers form about 20% of this unit, constituting the entire sand fraction and part of the silt fraction. The rest of the silt fraction is composed of quartz and secondary carbonate.

### Lithologic Unit II: Muds, Silts, and Sands

Lithologic Unit II occurs between 0.10 cm and 200 m sub-bottom (Samples 624-1-1, 6 cm through 624-23,CC; Samples 624A-1-1, 10 cm through 624A-22,CC). Three facies are present: (1) clay and mud facies; (2) silt-laminated mud facies; and (3) sand and silt facies.

#### Clay and Mud Facies

This facies accounts for about 20% of the retrieved core. It is typified by essentially structureless color-banded clays and muds. The colors range from olive green brown, red brown, light gray, to black and occur in bands less than 1 mm to a few centimeters thick. Contacts between bands vary from gradational to sharp, without any definable color trends. Bioturbation is most evident in the black bands. Rare, thin silt laminae occur within the facies.

Silt content typically ranges from 25 to 40%, with clay content from 60 to 75%. The coarse-grained fraction consists mainly of subrounded to subangular quartz, with minor amounts of secondary carbonate, feldspar, and mica, and accessory minerals generally form less than 2%. Microfauna is scarce although up to 2% calcareous nannofossils were recorded.

#### Silt-Laminated Mud Facies

This facies constitutes about 76% of the retrieved core at Site 624 (Fig. 5). Silty muds and silts occur as laminae

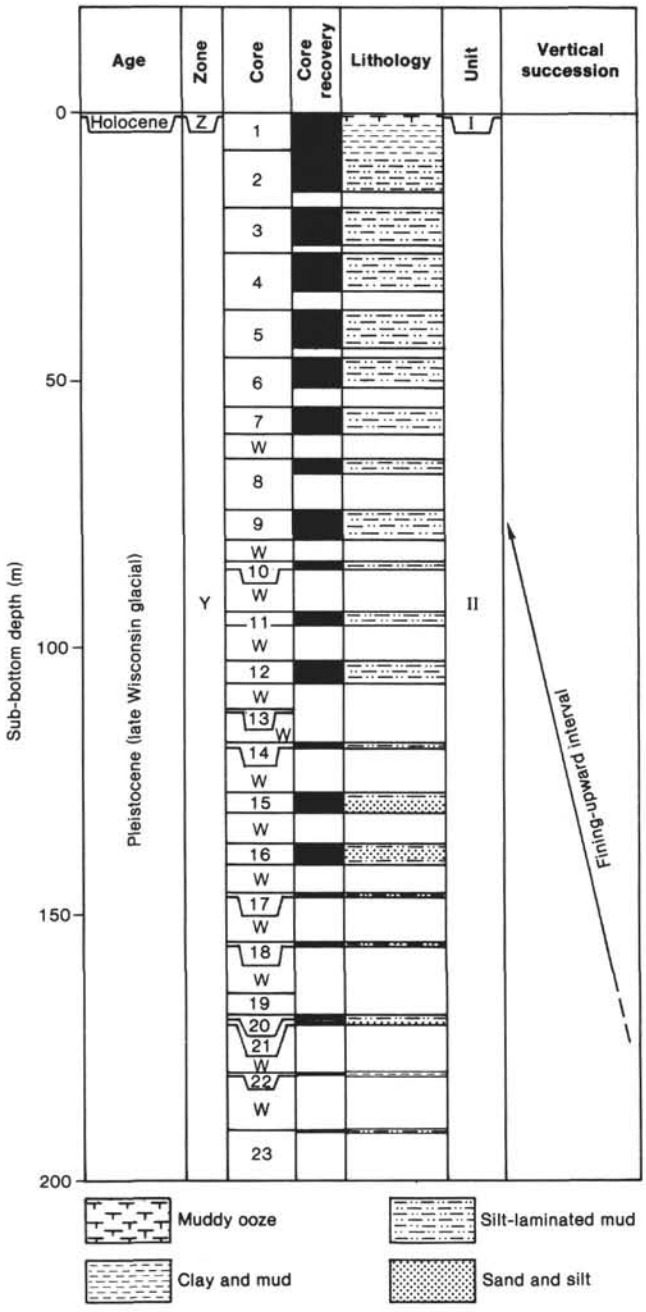


Figure 3. Lithostratigraphy for Hole 624, showing age, zones, core recovery, graphic lithology, and lithologic units and interval. W = washed interval.

and beds as much as 5 cm thick. They show normal grading, and parallel, subparallel, and low-angle cross-lamination above a sharp scoured or microloaded base. Individual silt laminae are generally less than 1 mm thick.

The silt-laminated muds typically contain 40 to 90% silt and 10 to 60% clay, although up to 20% very fine sand-grade sediment may be present. Quartz is the main constituent. In some silt laminae, heavy minerals are more abundant (up to 8%). Microfauna is rare, and when present it is predominantly calcareous nannofossils.

### Sand and Silt Facies

The silty sands and sands of this facies account for less than 5% of the recovered sediments at Site 624. Beds range from 1 to 70 cm thick. The relatively thin beds show normal grading and parallel, subparallel, and low-angle cross-lamination above a sharp base. The thicker beds appear structureless, although a poorly developed normal grading is visible locally in the uppermost few centimeters.

Sand content ranges from 30 to 75%, silt from 30 to 50%, and clay from 5 to 20%. Quartz is the dominant sand-sized component, with minor amounts of feldspar, mica, and accessory minerals. Typically, the silty sands and sands contain sediment in the fine- to medium-grained range. Microfauna are extremely rare.

### Vertical Succession

One fining-upward interval, with several minor interruptions, has been defined from the lithologic and gamma-ray log data. The interval extends from 175 to 74 m sub-bottom. The base consists of interlayered sands, silts, and silty sands and grades upward to interlayered clays and muds with silt-laminated mud. Above this is a 74-m interval of silt-laminated mud and muds and clays.

## GEOCHEMISTRY

There is no geochemistry report for this site because no samples were taken for either organic or inorganic analyses.

## PHYSICAL PROPERTIES

The physical properties data determined for Site 624 sediments are similar to those from Site 623, as expected because of the short distance between these two sites.

Wet-bulk density increases from a low of 1.42 g/cm$^3$ at the seafloor to a high of 1.91 g/cm$^3$ at 170-m depth (Fig. 6A). From the seafloor to 30-m depth, wet-bulk density increases at an average rate of 0.008 g/cm$^3$ · m. Below 30 m, the average rate of increase drops to a value of 0.002 g/cm$^3$ · m. The scattering of the data results from the changes in the amount of silt and sand present.

Wet water content decreases drastically at an average rate of 0.580%/m below the seafloor, from 54.7 to 37.3% at 30-m depth (Fig. 6B). Below that depth, the average rate of decrease is 0.101%/m. Sediments at the bottom of the hole have wet water contents of 23.3%.

Porosity decreases from a high of 76% at the seafloor to a low of 43.3% at the 169-m level (Fig. 6D). The average rate of decrease is 0.533%/m down to the depth of 30 m. Below that level, it decreases at a rate of 0.121%/m. The porosity/depth trend at this site is similar to a typical, rapidly deposited, silty-clay sediment of the Gulf Coast.

The highest void ratio is 3.17 and the lowest 0.76.

Average grain density for the sediments is 2.70 g/cm$^3$.

Undrained shear strength measurements are plotted versus depth in Figure 6E. There is a steady increase in shear strength with depth at a rate of 1.61 kPa/m.

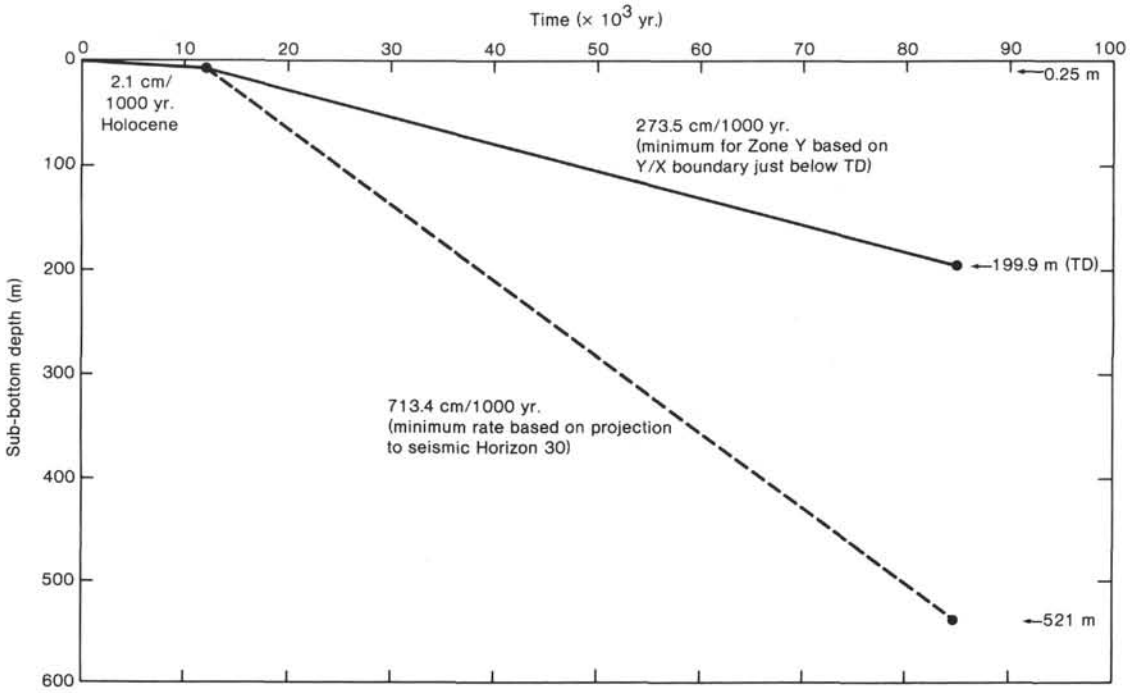


Figure 4. Site 624 sedimentation rates.

Table 3. Lithologic units of Site 624.

| Lithologic unit | Sediment | Cored interval | Sub-bottom depth (m) |
|---|---|---|---|
| I | Muddy ooze | 624-1-1. 0-6 cm; 624A-1-1, 0-10 cm | 0-0.1 |
| II | Muds, silts, and sands | 624-1-1, 6 cm through 624-23,CC; 624A-1-1, 10 cm through 624A-22,CC | 0.01-199.9 |

Sonic velocity measurements versus depth are shown in Figure 6F. The velocity of the sediments in upper sections is unusually high; values of 1.6 km/s or more are encountered above 20 m sub-bottom. Sonic velocity increases at a steady rate downhole. In general, the velocities measured parallel to bedding are higher than those measured perpendicular to bedding.

## SUMMARY AND CONCLUSIONS

Site 624 is located on the lower fan, about 4.8 km southwest of Site 623. This area of the lower fan seems to be characterized by one active channel at any given time that is short lived and shifts position frequently during the construction of one fan lobe. This interpretation is based on the side-scan sonar records that show linear images approximately parallel to the youngest channel, which are interpreted as abandoned channels. If channels have a short life span, numerous shallow channel fills should be present on seismic records, and the reflector patterns should be slightly irregular rather than distinct and parallel.

Site 623 confirmed the concept of channel shifting and it was expected, based on seismic records, that Site 624 would be similar to Site 623, only with less coarser-grained sediment.

Core recovery mirrored Site 623 in that it was excellent to a depth of about 55 m sub-bottom, below which it decreased. Below Core 624-12 (102.7–106.7 m sub-bottom) recovery varied from moderate to poor, while below Core 624-16 (136.4–139.8 m sub-bottom) recovery was very poor. All coring was done with the hydraulic piston corer, except the last one for which the extended core barrel was used. However, recovery during the last lowering (190.4–199.9 m sub-bottom) consisted of only a few centimeters of sand.

The wireline logs, supported by the lithologic descriptions in the recovered cores, show that in general the entire cored section is finer-grained than the section at Site 623. In addition, these logs show that the drilled section can be categorized as one overall fining-upward sequence with many small perturbations that are too small to be defined as individual sequences.

The major scientific conclusions were

1. The cored section basically is one indistinct fining-upward sequence with many small perturbations.
2. We can tentatively interpret parts of the section as possible channel fills and others as overbank deposits.
3. In comparing Sites 623 and 624, the conclusion reached at the previous site, that the channel seems to occupy different sites for short periods of time rather than being in a stable position or migratory, is still valid.
4. Sedimentation rates are comparable to Site 623. The thin Holocene sediments (Ericson Zone Z) have a sedimentation rate of 2.1 cm/1000 yr.; a rate of 713.4 cm/1000 yr. is computed for the underlying section (Ericson Zone Y: late Wisconsin glacial) using seismic correlations to establish the base of this zone.

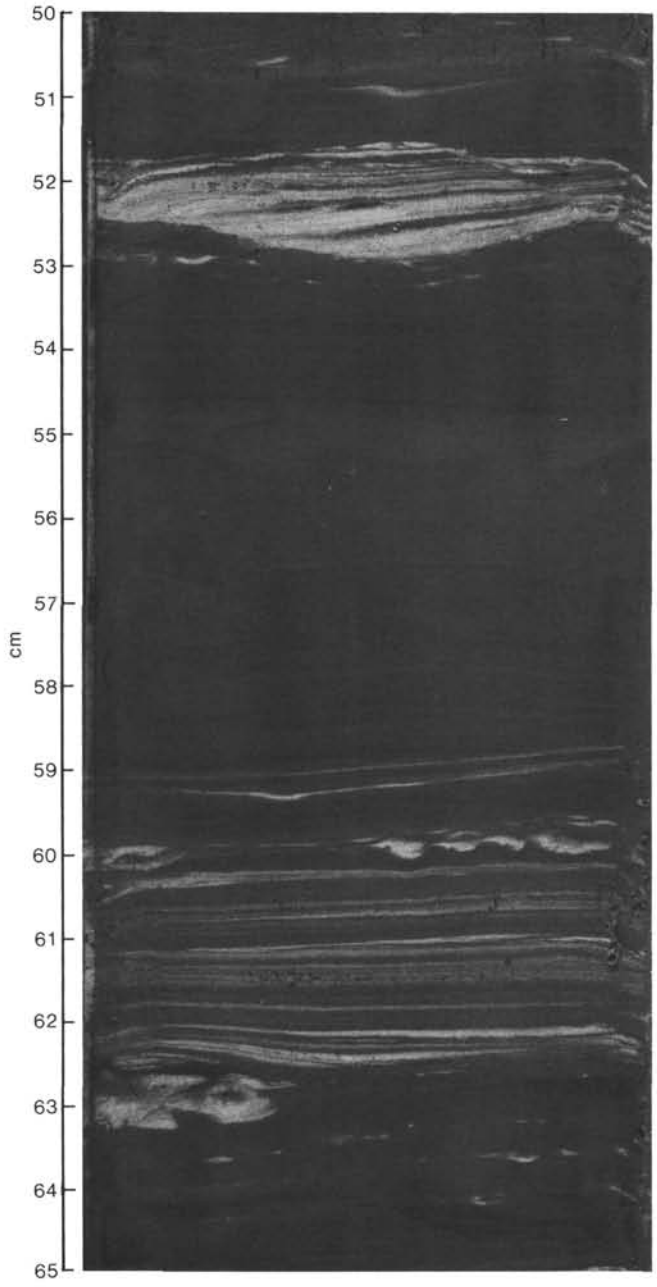


Figure 5. Photograph of characteristic facies from lithologic Unit II: silt-laminated mud facies (Sample 624-8-2, 50–65 cm).

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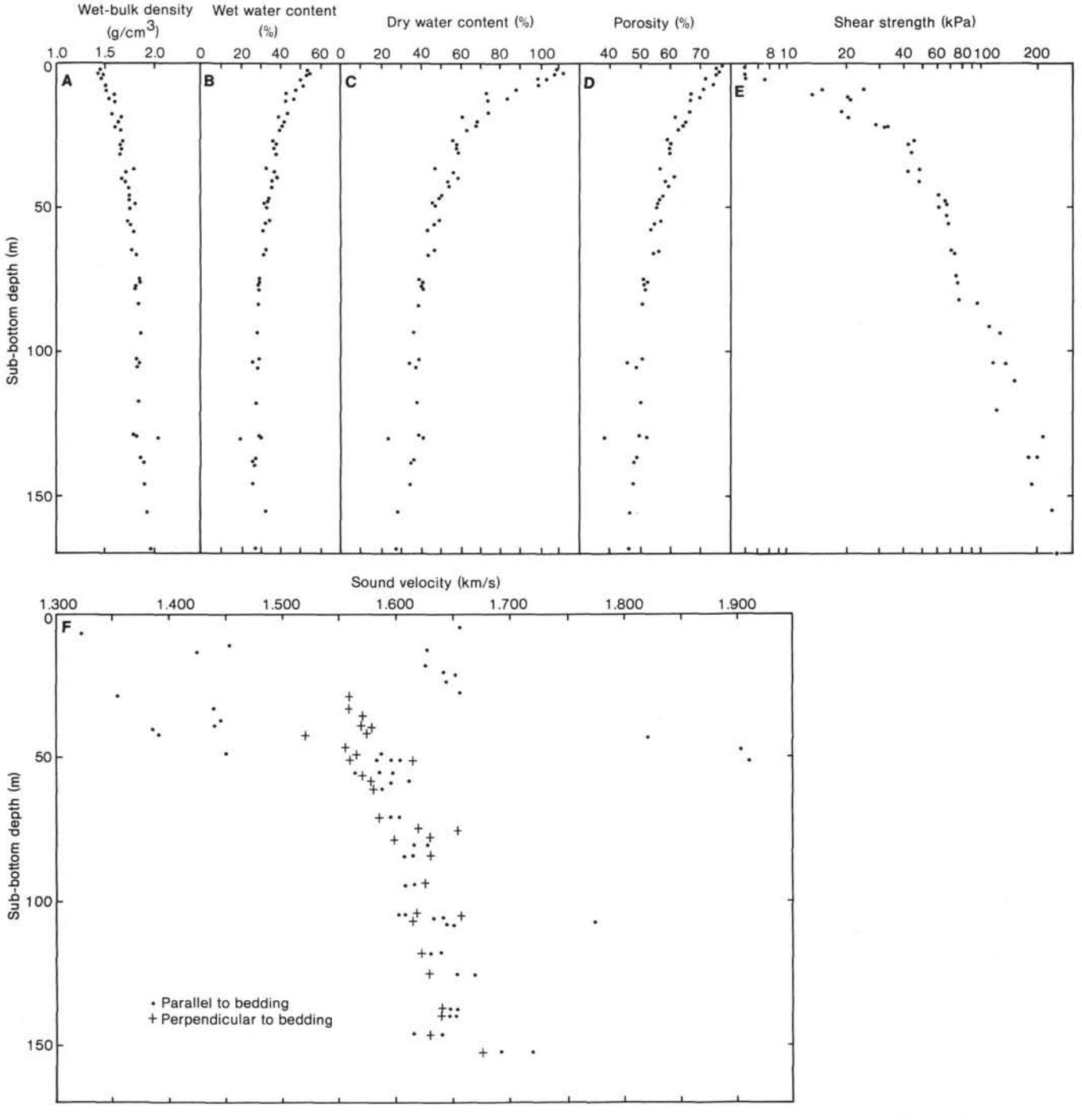
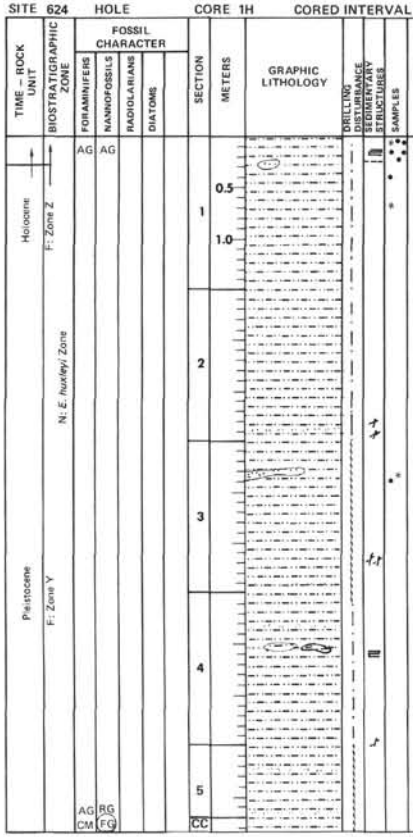



Figure 6. Mass physical properties of Site 624 sediments. A. Wet-bulk density. B. Water content related to weight of wet sediment. C. Water content related to weight of dry sediment. D. Porosity. E. Undrained shear strength (two alternatives are included). F. Sound velocity.

SITE 624 HOLE CORE 1H CORED INTERVAL 3198.2–3205.1 mbsl; 0.0–6.9 mbsf




LITHOLOGIC DESCRIPTION

Entire core consists of color-banded MUD with rare SILT laminae. Section 1, 0–22 cm is brown (10YR 4/3), grading in color to the underlying section. Section 1, 22–150 cm is dark grayish brown (10YR 4/2) with minor dark reddish gray (5YR 4/2) and brown (7.5YR 4/2) color bands. Section 2 is dark brown (10YR 3/3) with dark reddish brown-reddish brown (5YR 4/2–5YR 5/2) color bands. Rest of core (Section 3, 4, 5, and Core Catcher) is dark gray (5Y 4/1) changing downcore to dark olive gray (5Y 3/2), with abundant dark reddish gray (5YR 4/2) color bands throughout. MUD is dominantly structureless; color bands range from finely laminated on scale of mm or less to thin bedded. Color band contacts range from sharp to gradational. Locations of thin SILT laminae are shown in "Graphic Lithology" column.

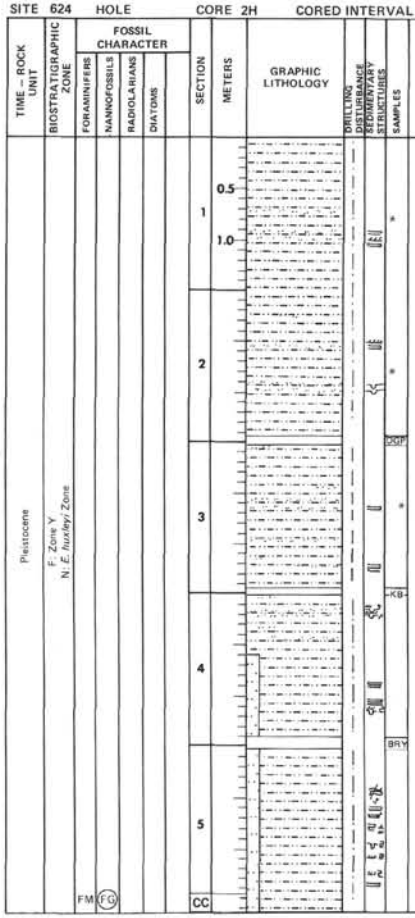
SMEAR SLIDE SUMMARY (%):

| | 1, 6 M | 1, 16 M | 1, 70 D | 3, 38 M |
|---|---|---|---|---|
| Texture: | | | | |
| Sand | 0 | 0 | 0 | T |
| Silt | 45 | 30 | 35 | 95 |
| Clay | 55 | 70 | 65 | 5 |
| Composition: | | | | |
| Quartz | 30 | 22 | 19 | 81 |
| Feldspar | 2 | 1 | 4 | 1 |
| Mica | 3 | 1 | 3 | 5 |
| Heavy minerals | 3 | 3 | 3 | 5 |
| Clay | 54 | 70 | 64 | – |
| Volcanic glass | T | T | – | – |
| Glauconite | – | – | T | – |
| Pyrite and opaques | – | T | 1 | 1 |
| Micronodules | 1 | T | T | T |
| Carbonate unspec. | 4 | 3 | 5 | 7 |
| Foraminifers | 2 | – | – | – |
| Calc. nannofossils | 1 | – | 1 | – |
| Radiolarians | T | – | – | – |
| Sponge spicules | – | T | T | – |
| Plant debris | – | – | T | – |

CARBONATE BOMB DATA:

- 1, 2–3 cm = 11%
- 1, 5–6 cm = 8%
- 1, 10–11 cm = 15%
- 1, 17–18 cm = 2%
- 1, 19–20 cm = 1%
- 1, 25–26 cm = 1%
- 1, 41–42 cm = 3%
- 3, 41–42 cm = 5%

SITE 624 HOLE CORE 2H CORED INTERVAL 3205.1–3214.7 mbsf




LITHOLOGIC DESCRIPTION

MUD with SILT laminae.

MUD is very dark grayish brown (2.5Y 3/2) in Section 1 and dark olive gray (5Y 3/2) in the rest of the core.

SILT laminae are dark olive gray (5Y 3/2) and subtle variations on that color.

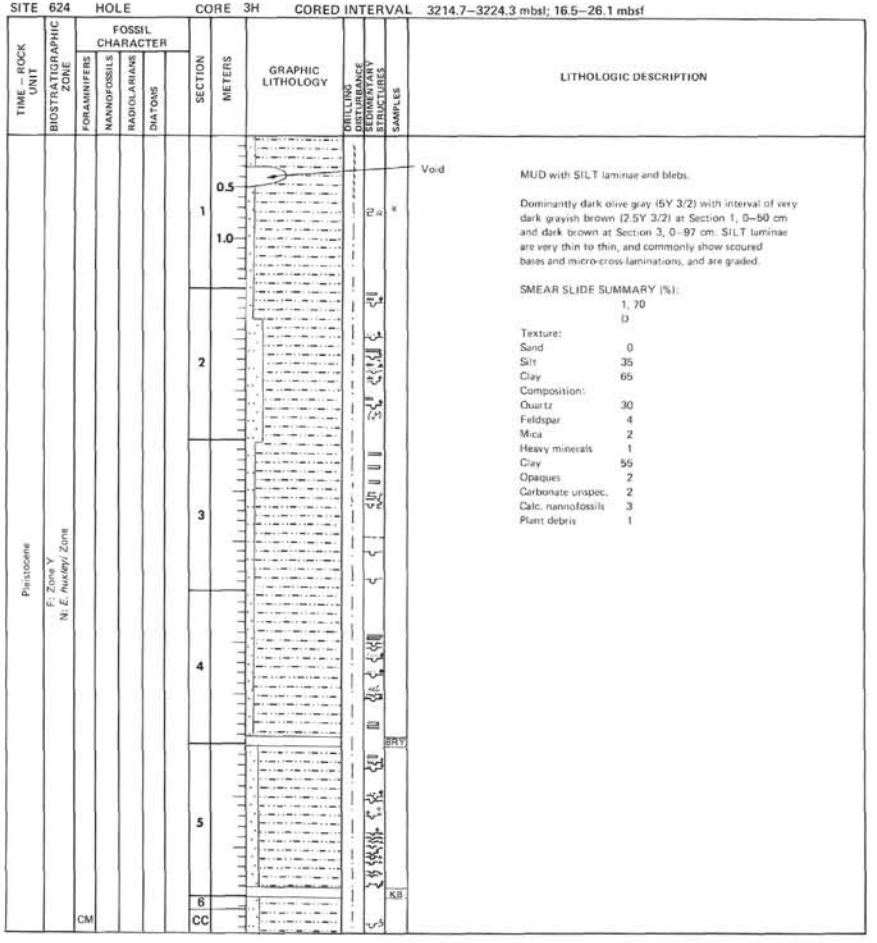
MUD is somewhat color banded, but color variations are subtle and decrease in abundance downcore.

SILT laminae are very thin to thick, are often micro-laminated and crossbedded, and commonly have scoured bases. No grading was observed. Abundance of SILT laminae increases downcore; those in Section 4, 60–142 cm and Section 5 and Core Catcher are too numerous to draw in individually on "Graphic Lithology" column.

SMEAR SLIDE SUMMARY (%):

| | 2, 80 D | 3, 63 M |
|---|---|---|
| Texture: | | |
| Sand | 0 | 0 |
| Silt | 40 | 75 |
| Clay | 60 | 25 |
| Composition: | | |
| Quartz | 35 | 59 |
| Feldspar | 5 | 10 |
| Mica | 4 | 4 |
| Heavy minerals | T | 1 |
| Clay | 48 | 15 |
| Opaques | 1 | 2 |
| Carbonate unspec. | 6 | 7 |
| Calc. nannofossils | 1 | 1 |
| Plant debris | T | 1 |

SITE 624 HOLE CORE 3H CORED INTERVAL 3214.7–3224.3 mbsl; 16.5–26.1 mbsf




LITHOLOGIC DESCRIPTION

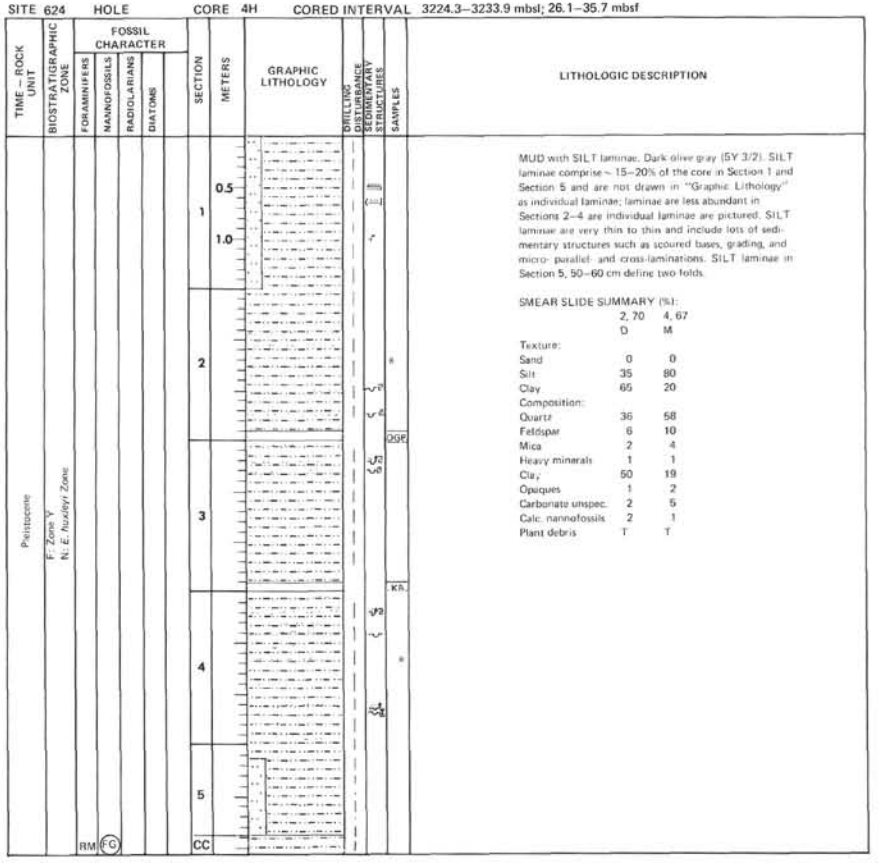
MUD with SILT laminae and blebs.

Dominantly dark olive gray (5Y 3/2) with interval of very dark grayish brown (2.5Y 3/2) at Section 1, 0–50 cm and dark brown at Section 3, 0–97 cm. SILT laminae are very thin to thin, and commonly show scoured bases and micro-cross-laminations, and are graded.

SMEAR SLIDE SUMMARY (%):

| | 1, 70 D |
|---|---|
| Texture: | |
| Sand | 0 |
| Silt | 35 |
| Clay | 65 |
| Composition: | |
| Quartz | 30 |
| Feldspar | 4 |
| Mica | 2 |
| Heavy minerals | 1 |
| Clay | 55 |
| Opaques | 2 |
| Carbonate unspec. | 2 |
| Calc. nannofossils | 3 |
| Plant debris | 1 |

SITE 624 HOLE CORE 4H CORED INTERVAL 3224.3–3233.9 mbsf



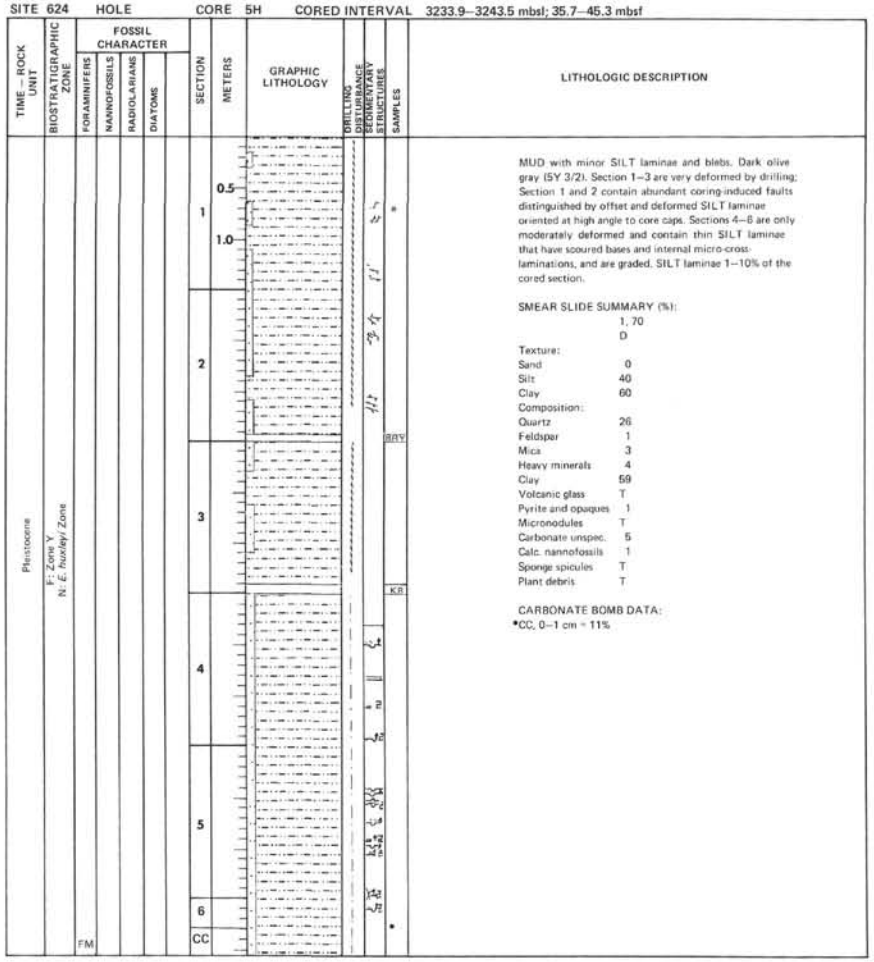

LITHOLOGIC DESCRIPTION

MUD with SILT laminae. Dark olive gray (5Y 3/2). SILT laminae comprise ~ 15–20% of the core in Section 1 and Section 5 and are not drawn in "Graphic Lithology" as individual laminae; laminae are less abundant in Sections 2–4 are individual laminae are pictured. SILT laminae are very thin to thin and include lots of sedimentary structures such as scoured bases, grading, and micro- parallel- and cross-laminations. SILT laminae in Section 5, 50–60 cm define two folds.

SMEAR SLIDE SUMMARY (%):

| | 2, 70 D | 4, 67 M |
|---|---|---|
| Texture: | | |
| Sand | 0 | 0 |
| Silt | 35 | 80 |
| Clay | 65 | 20 |
| Composition: | | |
| Quartz | 36 | 58 |
| Feldspar | 6 | 10 |
| Mica | 2 | 4 |
| Heavy minerals | 1 | 1 |
| Clay | 50 | 19 |
| Opaques | 1 | 2 |
| Carbonate unspec. | 2 | 5 |
| Calc. nannofossils | 2 | 1 |
| Plant debris | T | T |

SITE 624 HOLE CORE 5H CORED INTERVAL 3233.9–3243.5 mbsl; 35.7–45.3 mbsf




LITHOLOGIC DESCRIPTION

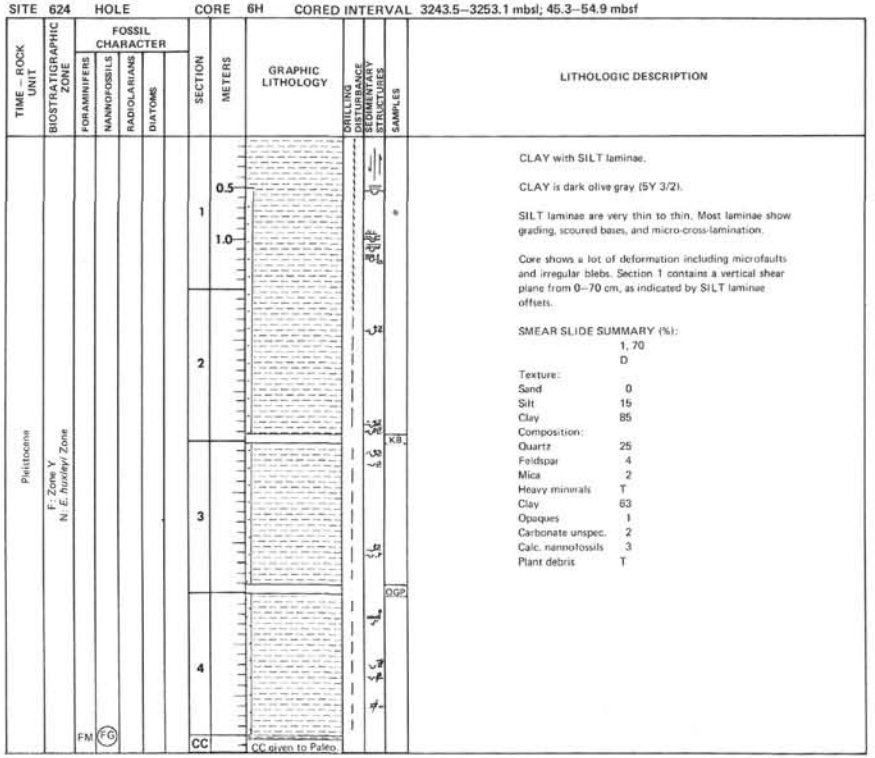
MUD with minor SILT laminae and blebs. Dark olive gray (5Y 3/2). Section 1–3 are very deformed by drilling; Section 1 and 2 contain abundant coring-induced faults distinguished by offset and deformed SILT laminae oriented at high angle to core caps. Sections 4–6 are only moderately deformed and contain thin SILT laminae that have scoured bases and internal micro-cross-laminations, and are graded. SILT laminae 1–10% of the cored section.

SMEAR SLIDE SUMMARY (%):

| | 1, 70 D |
|---|---|
| Texture: | |
| Sand | 0 |
| Silt | 40 |
| Clay | 60 |
| Composition: | |
| Quartz | 26 |
| Feldspar | 1 |
| Mica | 3 |
| Heavy minerals | 4 |
| Clay | 59 |
| Volcanic glass | T |
| Pyrite and opaques | 1 |
| Micronodules | T |
| Carbonate unspec. | 5 |
| Calc. nannofossils | 1 |
| Sponge spicules | T |
| Plant debris | T |

CARBONATE BOMB DATA:
•CC, 0–1 cm = 11%

SITE 624 HOLE CORE 6H CORED INTERVAL 3243.5–3253.1 mbsl; 45.3–54.9 mbsf




LITHOLOGIC DESCRIPTION

CLAY with SILT laminae.

CLAY is dark olive gray (5Y 3/2).

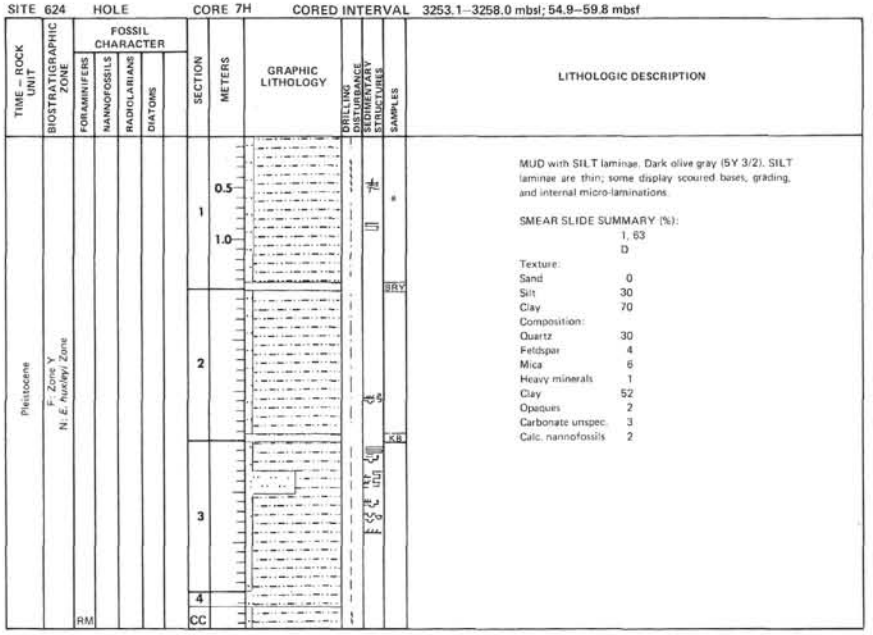
SILT laminae are very thin to thin. Most laminae show grading, scoured bases, and micro-cross-lamination.

Core shows a lot of deformation including microfaults and irregular blebs. Section 1 contains a vertical shear plane from 0–70 cm, as indicated by SILT laminae offsets.

SMEAR SLIDE SUMMARY (%):

| | 1, 70 D |
|---|---|
| Texture: | |
| Sand | 0 |
| Silt | 15 |
| Clay | 85 |
| Composition: | |
| Quartz | 25 |
| Feldspar | 4 |
| Mica | 2 |
| Heavy minerals | T |
| Clay | 63 |
| Opaques | 1 |
| Carbonate unspec. | 2 |
| Calc. nannofossils | 3 |
| Plant debris | T |

SITE 624 HOLE CORE 7H CORED INTERVAL 3253.1–3258.0 mbsl; 54.9–59.8 mbsf



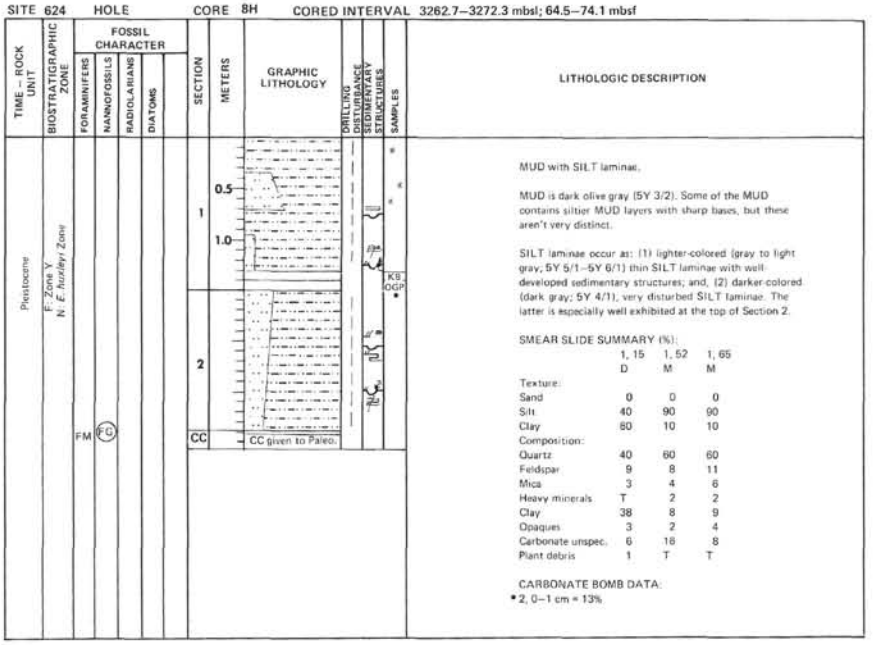

LITHOLOGIC DESCRIPTION

MUD with SILT laminae. Dark olive gray (5Y 3/2). SILT laminae are thin; some display scoured bases, grading, and internal micro-laminations.

SMEAR SLIDE SUMMARY (%):

| | 1, 63 D |
|---|---|
| Texture: | |
| Sand | 0 |
| Silt | 30 |
| Clay | 70 |
| Composition: | |
| Quartz | 30 |
| Feldspar | 4 |
| Mica | 6 |
| Heavy minerals | 1 |
| Clay | 52 |
| Opaques | 2 |
| Carbonate unspec. | 3 |
| Calc. nannofossils | 2 |

SITE 624 HOLE CORE 8H CORED INTERVAL 3262.7–3272.3 mbsl; 64.5–74.1 mbsf




LITHOLOGIC DESCRIPTION

MUD with SILT laminae.

MUD is dark olive gray (5Y 3/2). Some of the MUD contains siltier MUD layers with sharp bases, but these aren't very distinct.

SILT laminae occur as: (1) lighter-colored (gray to light gray; 5Y 5/1–5Y 6/1) thin SILT laminae with well-developed sedimentary structures; and, (2) darker-colored (dark gray; 5Y 4/1), very disturbed SILT laminae. The latter is especially well exhibited at the top of Section 2.

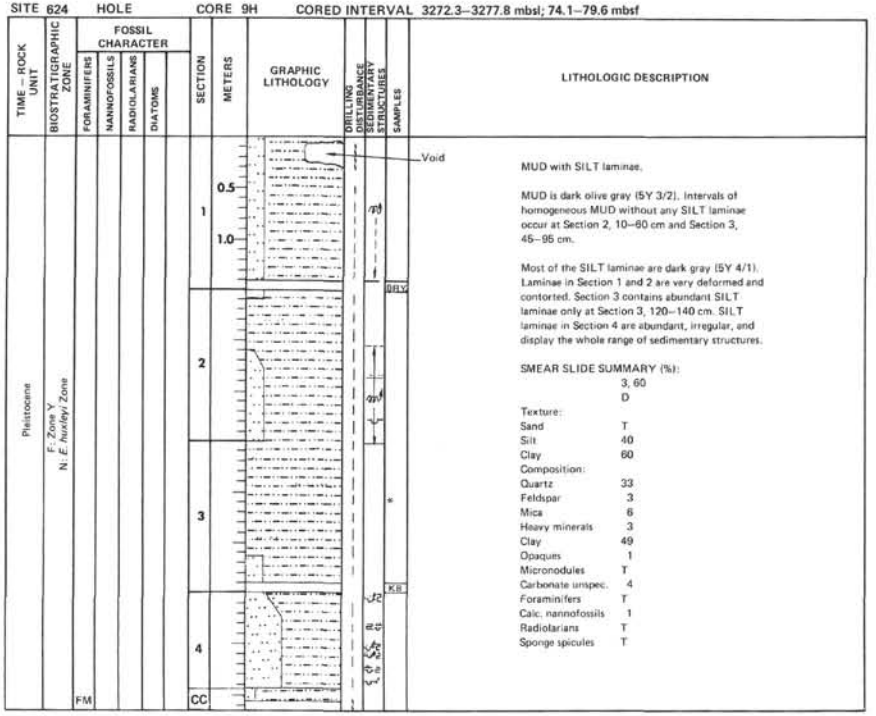
SMEAR SLIDE SUMMARY (%):

| | 1, 15 D | 1, 52 M | 1, 65 M |
|---|---|---|---|
| Texture: | | | |
| Sand | 0 | 0 | 0 |
| Silt | 40 | 90 | 90 |
| Clay | 60 | 10 | 10 |
| Composition: | | | |
| Quartz | 40 | 60 | 60 |
| Feldspar | 9 | 8 | 11 |
| Mica | 3 | 4 | 6 |
| Heavy minerals | T | 2 | 2 |
| Clay | 38 | 8 | 9 |
| Opaques | 3 | 2 | 4 |
| Carbonate unspec. | 6 | 18 | 8 |
| Plant debris | 1 | T | T |

CARBONATE BOMB DATA:

• 2, 0–1 cm = 13%

SITE 624 HOLE CORE 9H CORED INTERVAL 3272.3–3277.8 mbsl; 74.1–79.6 mbsf




MUD with SILT laminae.

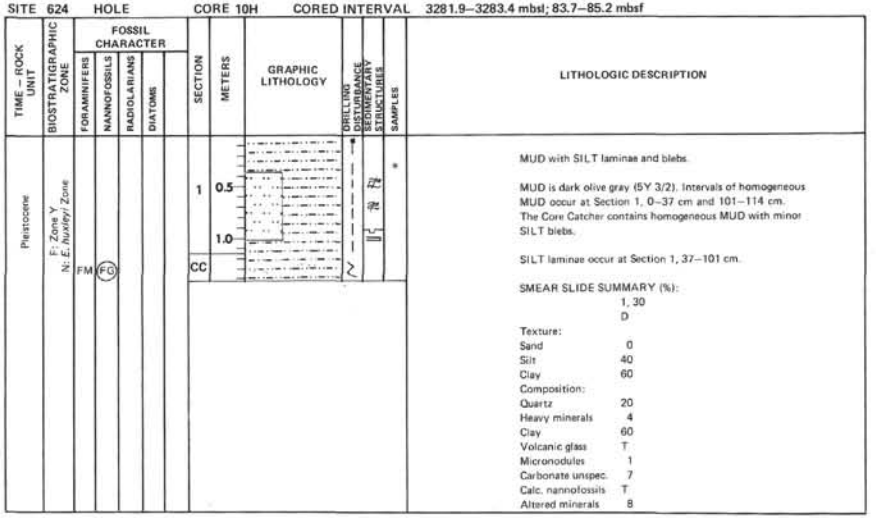
MUD is dark olive gray (5Y 3/2). Intervals of homogeneous MUD without any SILT laminae occur at Section 2, 10–60 cm and Section 3, 45–95 cm.

Most of the SILT laminae are dark gray (5Y 4/1). Laminae in Section 1 and 2 are very deformed and contorted. Section 3 contains abundant SILT laminae only at Section 3, 120–140 cm. SILT laminae in Section 4 are abundant, irregular, and display the whole range of sedimentary structures.

SMEAR SLIDE SUMMARY (%):

| | 3, 60 D |
|---|---|
| Texture: | |
| Sand | T |
| Silt | 40 |
| Clay | 60 |
| Composition: | |
| Quartz | 33 |
| Feldspar | 3 |
| Mica | 6 |
| Heavy minerals | 3 |
| Clay | 49 |
| Opaques | 1 |
| Micronodules | T |
| Carbonate unspec. | 4 |
| Foraminifers | T |
| Calc. nannofossils | 1 |
| Radiolarians | T |
| Sponge spicules | T |

SITE 624 HOLE CORE 10H CORED INTERVAL 3281.9–3283.4 mbsl; 83.7–85.2 mbsf




MUD with SILT laminae and blebs.

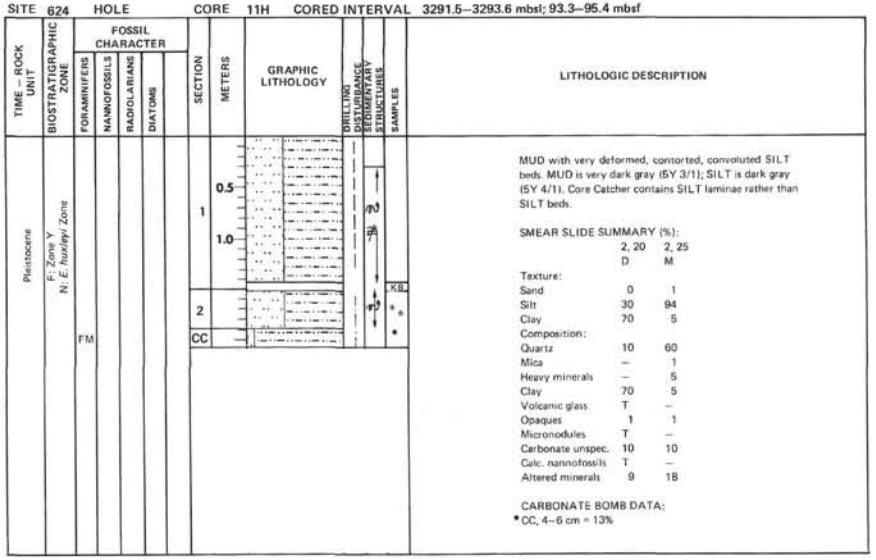
MUD is dark olive gray (5Y 3/2). Intervals of homogeneous MUD occur at Section 1, 0–37 cm and 101–114 cm. The Core Catcher contains homogeneous MUD with minor SILT blebs.

SILT laminae occur at Section 1, 37–101 cm.

SMEAR SLIDE SUMMARY (%):

| | 1, 30 D |
|---|---|
| Texture: | |
| Sand | 0 |
| Silt | 40 |
| Clay | 60 |
| Composition: | |
| Quartz | 20 |
| Heavy minerals | 4 |
| Clay | 60 |
| Volcanic glass | T |
| Micronodules | 1 |
| Carbonate unspec. | 7 |
| Calc. nannofossils | T |
| Altered minerals | 8 |

SITE 624 HOLE CORE 11H CORED INTERVAL 3291.5–3293.6 mbsl; 93.3–95.4 mbsf



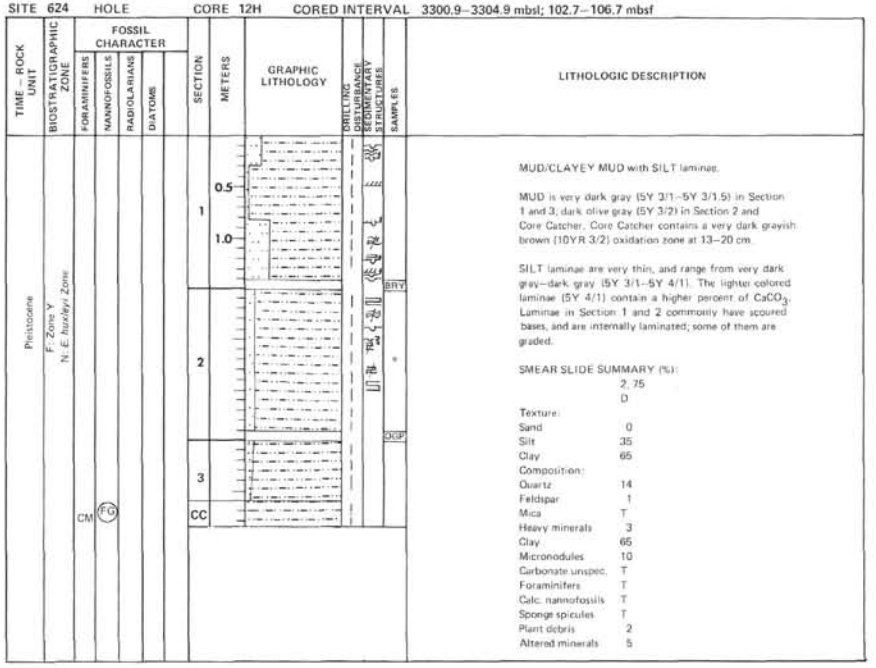

MUD with very deformed, contorted, convoluted SILT beds. MUD is very dark gray (5Y 3/1); SILT is dark gray (5Y 4/1). Core Catcher contains SILT laminae rather than SILT beds.

SMEAR SLIDE SUMMARY (%):

| | 2, 20 D | 2, 25 M |
|---|---|---|
| Texture: | | |
| Sand | 0 | 1 |
| Silt | 30 | 94 |
| Clay | 70 | 5 |
| Composition: | | |
| Quartz | 10 | 60 |
| Mica | – | 1 |
| Heavy minerals | – | 5 |
| Clay | 70 | 5 |
| Volcanic glass | T | – |
| Opaques | 1 | 1 |
| Micronodules | T | – |
| Carbonate unspec. | 10 | 10 |
| Calc. nannofossils | T | – |
| Altered minerals | 9 | 18 |

CARBONATE BOMB DATA:
*CC, 4–6 cm = 13%

SITE 624 HOLE CORE 12H CORED INTERVAL 3300.9–3304.9 mbsl; 102.7–106.7 mbsf




MUD/CLAYEY MUD with SILT laminae.

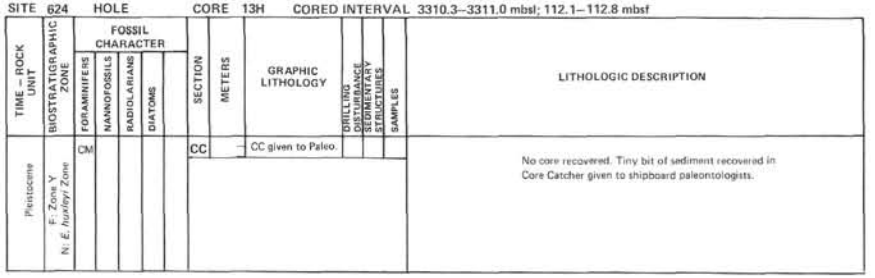
MUD is very dark gray (5Y 3/1–5Y 3/1.5) in Section 1 and 3; dark olive gray (5Y 3/2) in Section 2 and Core Catcher. Core Catcher contains a very dark grayish brown (10YR 3/2) oxidation zone at 13–20 cm.

SILT laminae are very thin, and range from very dark gray–dark gray (5Y 3/1–5Y 4/1). The lighter colored laminae (5Y 4/1) contain a higher percent of $CaCO_3$. Laminae in Section 1 and 2 commonly have scoured bases, and are internally laminated; some of them are graded.

SMEAR SLIDE SUMMARY (%):

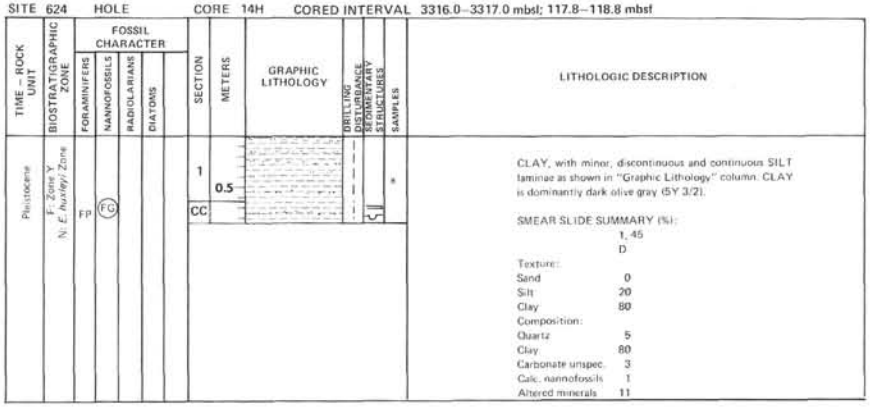
| | 2, 75 D |
|---|---|
| Texture: | |
| Sand | 0 |
| Silt | 35 |
| Clay | 65 |
| Composition: | |
| Quartz | 14 |
| Feldspar | 1 |
| Mica | T |
| Heavy minerals | 3 |
| Clay | 65 |
| Micronodules | 10 |
| Carbonate unspec. | T |
| Foraminifers | T |
| Calc. nannofossils | T |
| Sponge spicules | T |
| Plant debris | 2 |
| Altered minerals | 5 |

SITE 624 HOLE CORE 13H CORED INTERVAL 3310.3–3311.0 mbsl; 112.1–112.8 mbsf




No core recovered. Tiny bit of sediment recovered in Core Catcher given to shipboard paleontologists.

SITE 624 HOLE CORE 14H CORED INTERVAL 3316.0–3317.0 mbsl; 117.8–118.8 mbsf

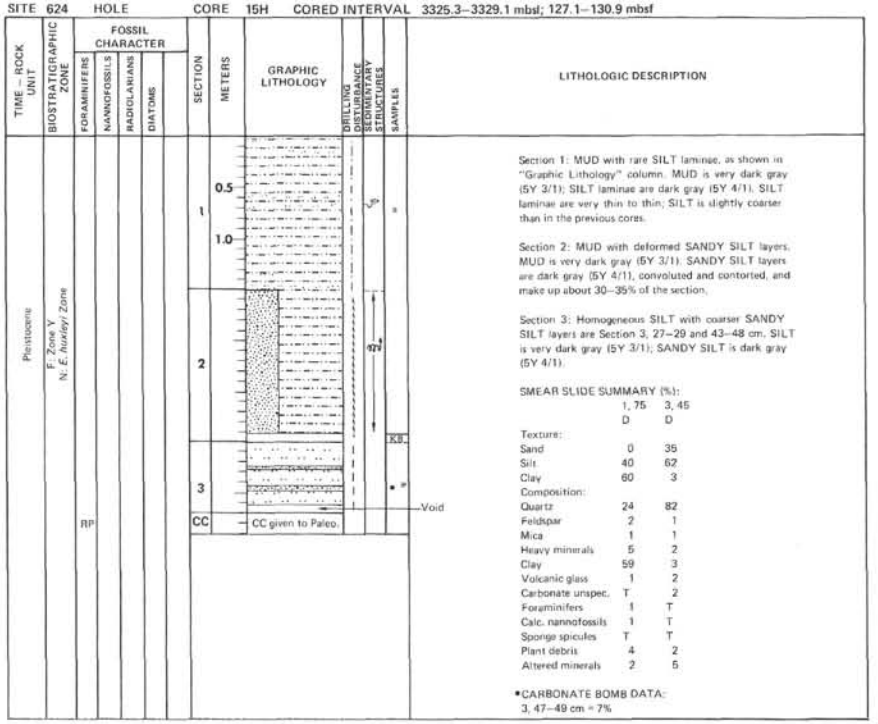



CLAY, with minor, discontinuous and continuous SILT laminae as shown in "Graphic Lithology" column. CLAY is dominantly dark olive gray (5Y 3/2).

SMEAR SLIDE SUMMARY (%):

| | 1, 45 D |
|---|---|
| Texture: | |
| Sand | 0 |
| Silt | 20 |
| Clay | 80 |
| Composition: | |
| Quartz | 5 |
| Clay | 80 |
| Carbonate unspec. | 3 |
| Calc. nannofossils | 1 |
| Altered minerals | 11 |

SITE 624 HOLE CORE 15H CORED INTERVAL 3325.3–3329.1 mbsl; 127.1–130.9 mbsf




Section 1: MUD with rare SILT laminae, as shown in "Graphic Lithology" column. MUD is very dark gray (5Y 3/1); SILT laminae are dark gray (5Y 4/1). SILT laminae are very thin to thin; SILT is slightly coarser than in the previous cores.

Section 2: MUD with deformed SANDY SILT layers. MUD is very dark gray (5Y 3/1). SANDY SILT layers are dark gray (5Y 4/1), convoluted and contorted, and make up about 30–35% of the section.

Section 3: Homogeneous SILT with coarser SANDY SILT layers are Section 3, 27–29 and 43–48 cm. SILT is very dark gray (5Y 3/1); SANDY SILT is dark gray (5Y 4/1).

SMEAR SLIDE SUMMARY (%):

| | 1, 75 D | 3, 45 D |
|---|---|---|
| Texture: | | |
| Sand | 0 | 35 |
| Silt | 40 | 62 |
| Clay | 60 | 3 |
| Composition: | | |
| Quartz | 24 | 82 |
| Feldspar | 2 | 1 |
| Mica | 1 | 1 |
| Heavy minerals | 5 | 2 |
| Clay | 59 | 3 |
| Volcanic glass | 1 | 2 |
| Carbonate unspec. | T | 2 |
| Foraminifers | 1 | T |
| Calc. nannofossils | 1 | T |
| Sponge spicules | T | T |
| Plant debris | 4 | 2 |
| Altered minerals | 2 | 5 |

•CARBONATE BOMB DATA:
3, 47–49 cm = 7%

SITE 624 HOLE CORE 16H CORED INTERVAL 3334.6–3338.0 mbsl; 136.4–139.8 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | NANNOFOSSILS | RADIOLARIANS | DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pleistocene | F. Zone Y; N. *E. huxleyi* Zone | RP | FG | | | 1<br>2<br>3<br>CC | 0.5<br>1.0 | | | BRY<br>OGP | * | MUD with thin, irregular SILT laminae and thick SANDY SILT laminae and massive beds. MUD is very dark gray (5Y 3/1); SILT laminae are light gray (5Y 5/1–5Y 7/1); SANDY SILT laminae and beds are dark gray (5Y 4/1). SANDY SILTS in Section 2 are very deformed, likely the result of coring.<br><br>SMEAR SLIDE SUMMARY (%):<br>2, 85<br>D<br>Texture:<br>Sand 0<br>Silt 35<br>Clay 65<br>Composition:<br>Quartz 20<br>Clay 65<br>Opaques 2<br>Micronodules 1<br>Carbonate unspec. 4<br>Calc. nannofossils 1<br>Altered minerals 8 |

SITE 624 HOLE CORE 17H CORED INTERVAL 3343.9–3344.9 mbsl; 145.7–146.7 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | NANNOFOSSILS | RADIOLARIANS | DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pleistocene | F. Zone Y; N. *E. huxleyi* Zone | RP | | | | 1<br>CC | 0.5<br>1.0 | CC given to Paleo. | | | | MUD with a few SILT laminae. MUD is very dark gray (5Y 3/1). SILT laminae are gray (5Y 5/1) and very thin to thin. |

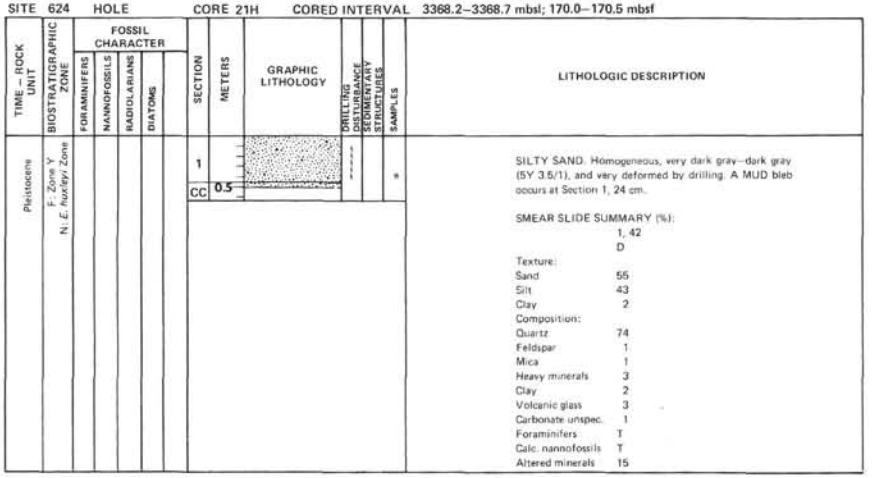
SITE 624 HOLE CORE 18H CORED INTERVAL 3353.3–3353.8 mbsl; 155.1–155.6 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | NANNOFOSSILS | RADIOLARIANS | DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pleistocene | F. Zone Y; N. *E. huxleyi* Zone | FM | FG | | | 1<br>CC | | | | | * | MUD with rare SILT laminae. MUD is very dark gray (5Y 3/1) and homogeneous. SILT laminae are also very dark gray (5Y 3/1), and very thin to thin.<br><br>SMEAR SLIDE SUMMARY (%):<br>1, 10<br>D<br>Texture:<br>Sand 0<br>Silt 30<br>Clay 70<br>Composition:<br>Quartz 10<br>Clay 70<br>Volcanic glass 1<br>Opaques 5<br>Micronodules 5<br>Carbonate unspec. 3<br>Calc. nannofossils 1<br>Altered minerals 5<br><br>CARBONATE BOMB DATA:<br>*CC, 0–1 cm = 6%<br><br>Note: Core 19H, 3362.7–3366.7 mbsl; 164.5–168.5 mbsf: no recovery. |

SITE 624 HOLE CORE 20H CORED INTERVAL 3366.7–3368.2 mbsl; 168.5–170.0 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | NANNOFOSSILS | RADIOLARIANS | DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pleistocene | F. Zone Y; N. *E. huxleyi* Zone | | FG | | | 1<br>CC | 0.5<br>1.0 | CC given to Paleo. | | | * | Interbedded MUD, SILT-LAMINATED MUD, SILTY MUD, SILT, and SANDY SILT. All MUD is dark gray (5Y 4/1); SILT LAMINAE and SANDY SILT is olive gray (5Y 5/2). Many of the SILT laminae have scoured bases, and are graded; SILT and SANDY SILT beds typically are internally-laminated.<br><br>SMEAR SLIDE SUMMARY (%):<br>1, 15 D<br>1, 85 M<br>Texture:<br>Sand 0 5<br>Silt 35 90<br>Clay 65 5<br>Composition:<br>Quartz 20 60<br>Feldspar T 2<br>Mica 2 –<br>Heavy minerals 2 –<br>Clay 65 5<br>Volcanic glass 2 –<br>Opaques – 5<br>Micronodules 5 4<br>Carbonate unspec. 1 5<br>Foraminifers T T<br>Calc. nannofossils T –<br>Plant debris 2 –<br>Altered minerals 1 19 |

SITE 624 HOLE CORE 21H CORED INTERVAL 3368.2–3368.7 mbsl; 170.0–170.5 mbsf

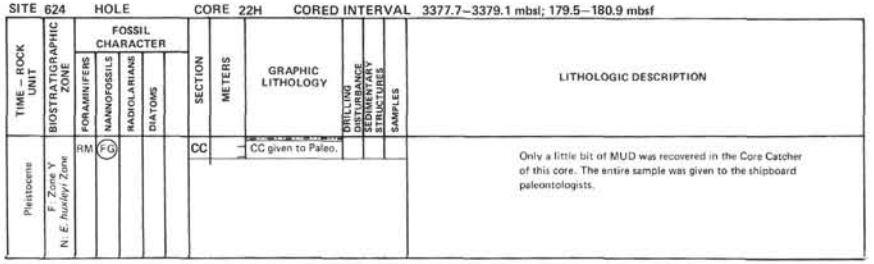



SILTY SAND. Homogeneous, very dark gray–dark gray (5Y 3.5/1), and very deformed by drilling. A MUD bleb occurs at Section 1, 24 cm.

SMEAR SLIDE SUMMARY (%):

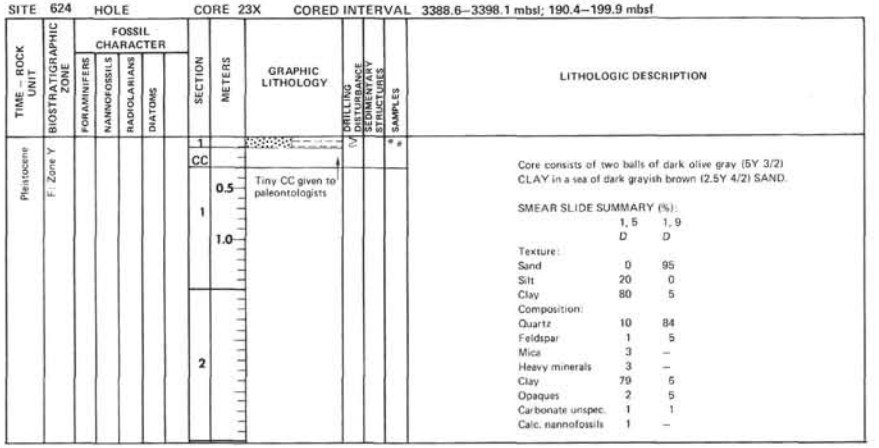
| | 1, 42 D |
|---|---|
| Texture: | |
| Sand | 55 |
| Silt | 43 |
| Clay | 2 |
| Composition: | |
| Quartz | 74 |
| Feldspar | 1 |
| Mica | 1 |
| Heavy minerals | 3 |
| Clay | 2 |
| Volcanic glass | 3 |
| Carbonate unspec. | 1 |
| Foraminifers | T |
| Calc. nannofossils | T |
| Altered minerals | 15 |

SITE 624 HOLE CORE 22H CORED INTERVAL 3377.7–3379.1 mbsl; 179.5–180.9 mbsf




Only a little bit of MUD was recovered in the Core Catcher of this core. The entire sample was given to the shipboard paleontologists.

SITE 624 HOLE CORE 23X CORED INTERVAL 3388.6–3398.1 mbsl; 190.4–199.9 mbsf

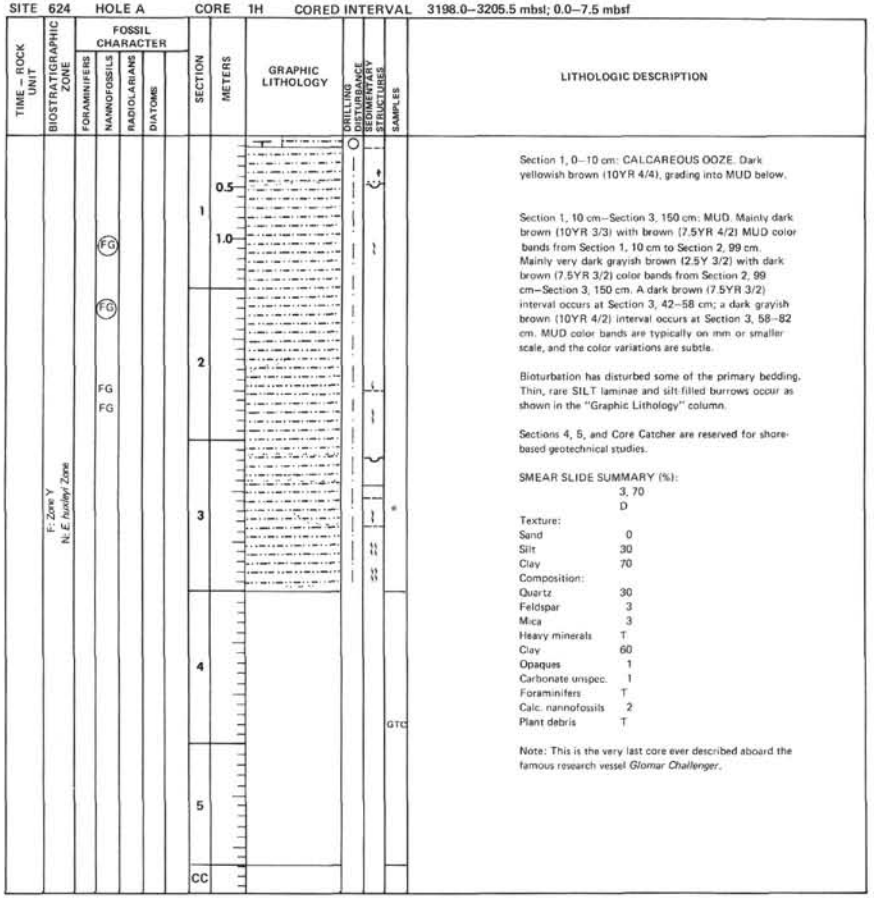



Core consists of two balls of dark olive gray (5Y 3/2) CLAY in a sea of dark grayish brown (2.5Y 4/2) SAND.

SMEAR SLIDE SUMMARY (%):

| | 1, 5 D | 1, 9 D |
|---|---|---|
| Texture: | | |
| Sand | 0 | 95 |
| Silt | 20 | 0 |
| Clay | 80 | 5 |
| Composition: | | |
| Quartz | 10 | 84 |
| Feldspar | 1 | 5 |
| Mica | 3 | – |
| Heavy minerals | 3 | – |
| Clay | 79 | 5 |
| Opaques | 2 | 5 |
| Carbonate unspec. | 1 | 1 |
| Calc. nannofossils | 1 | – |

SITE 624 HOLE A CORE 1H CORED INTERVAL 3198.0–3205.5 mbsl; 0.0–7.5 mbsf




Section 1, 0–10 cm: CALCAREOUS OOZE. Dark yellowish brown (10YR 4/4), grading into MUD below.

Section 1, 10 cm–Section 3, 150 cm: MUD. Mainly dark brown (10YR 3/3) with brown (7.5YR 4/2) MUD color bands from Section 1, 10 cm to Section 2, 99 cm. Mainly very dark grayish brown (2.5Y 3/2) with dark brown (7.5YR 3/2) color bands from Section 2, 99 cm–Section 3, 150 cm. A dark brown (7.5YR 3/2) interval occurs at Section 3, 42–58 cm; a dark grayish brown (10YR 4/2) interval occurs at Section 3, 58–82 cm. MUD color bands are typically on mm or smaller scale, and the color variations are subtle.

Bioturbation has disturbed some of the primary bedding. Thin, rare SILT laminae and silt-filled burrows occur as shown in the "Graphic Lithology" column.

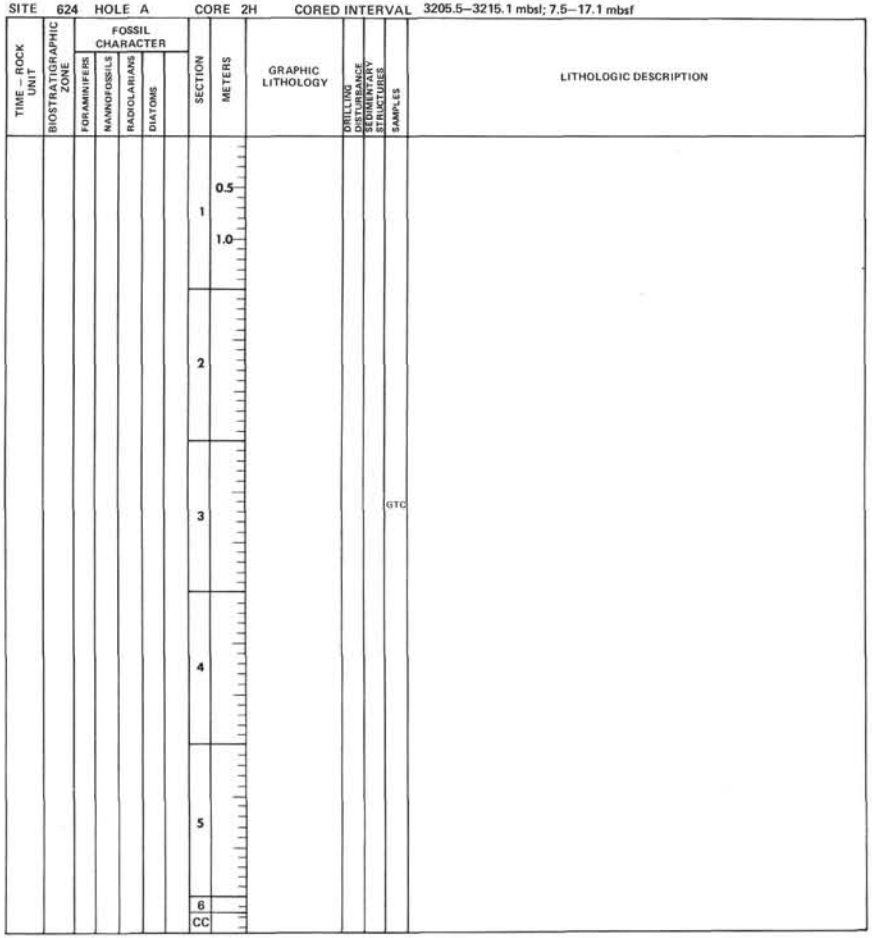
Sections 4, 5, and Core Catcher are reserved for shore-based geotechnical studies.

SMEAR SLIDE SUMMARY (%):

| | 3, 70 D |
|---|---|
| Texture: | |
| Sand | 0 |
| Silt | 30 |
| Clay | 70 |
| Composition: | |
| Quartz | 30 |
| Feldspar | 3 |
| Mica | 3 |
| Heavy minerals | T |
| Clay | 60 |
| Opaques | 1 |
| Carbonate unspec. | 1 |
| Foraminifers | T |
| Calc. nannofossils | 2 |
| Plant debris | T |

Note: This is the very last core ever described aboard the famous research vessel *Glomar Challenger*.

SITE 624 HOLE A CORE 2H CORED INTERVAL 3205.5–3215.1 mbsl; 7.5–17.1 mbsf



SITE 624 HOLE A CORE 3H CORED INTERVAL 3215.1–3224.7 mbsl; 17.1–26.7 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | FOSSIL CHARACTER: NANNOFOSSILS | FOSSIL CHARACTER: RADIOLARIANS | FOSSIL CHARACTER: DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5 | | | | | |
| | | | | | | | 1.0 | | | | | |
| | | | | | | 2 | | | | | | |
| | | | | | | 3 | | | | | GTC | |
| | | | | | | 4 | | | | | | |
| | | | | | | 5 | | | | | | |
| | | | | | | CC | | | | | GTC | |

SITE 624 HOLE A CORE 4H CORED INTERVAL 3224.7–3234.3 mbsl; 26.7–36.3 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | FOSSIL CHARACTER: NANNOFOSSILS | FOSSIL CHARACTER: RADIOLARIANS | FOSSIL CHARACTER: DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5 | | | | | |
| | | | | | | | 1.0 | | | | | |
| | | | | | | 2 | | | | | | |
| | | | | | | 3 | | | | | GTC | |
| | | | | | | 4 | | | | | | |
| | | | | | | 5 | | | | | | |
| | | | | | | CC | | | | | GTC | |

SITE 624 HOLE A CORE 5H CORED INTERVAL 3234.3–3243.9 mbsl; 36.3–45.9 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | FOSSIL CHARACTER: NANNOFOSSILS | FOSSIL CHARACTER: RADIOLARIANS | FOSSIL CHARACTER: DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5 | | | | | |
| | | | | | | | 1.0 | | | | | |
| | | | | | | 2 | | | | | | |
| | | | | | | 3 | | | | | GTC | |
| | | | | | | 4 | | | | | | |
| | | | | | | 5 | | | | | | |
| | | | | | | CC | | | | | GTC | |

SITE 624 HOLE A CORE 6H CORED INTERVAL 3243.9–3253.5 mbsf; 45.9–55.5 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | FOSSIL CHARACTER: NANNOFOSSILS | FOSSIL CHARACTER: RADIOLARIANS | FOSSIL CHARACTER: DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5 | | | | | |
| | | | | | | | 1.0 | | | | | |
| | | | | | | 2 | | | | | | |
| | | | | | | 3 | | | | | GTC | |
| | | | | | | 4 | | | | | | |
| | | | | | | 5 | | | | | | |

SITE 624 HOLE A CORE 7H CORED INTERVAL 3253.5–3257.9 mbsl; 55.5–59.9 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | FOSSIL CHARACTER: NANNOFOSSILS | FOSSIL CHARACTER: RADIOLARIANS | FOSSIL CHARACTER: DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5<br>1.0 | | | | | |
| | | | | | | 2 | | | | | GTC | |
| | | | | | | 3 | | | | | | |
| | | | | | | CC | | | | | GTC | |

SITE 624 HOLE A CORE 8H CORED INTERVAL 3263.1–3272.7 mbsl; 65.1–74.7 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | FOSSIL CHARACTER: NANNOFOSSILS | FOSSIL CHARACTER: RADIOLARIANS | FOSSIL CHARACTER: DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5<br>1.0 | | | | | |
| | | | | | | 2 | | | | | | |
| | | | | | | 3 | | | | | GTC | |
| | | | | | | 4 | | | | | | |
| | | | | | | 5 | | | | | | |
| | | | | | | CC | | | | | GTC | |

SITE 624 HOLE A CORE 9H CORED INTERVAL 3272.7–3277.9 mbsl; 74.7–79.9 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | FOSSIL CHARACTER: NANNOFOSSILS | FOSSIL CHARACTER: RADIOLARIANS | FOSSIL CHARACTER: DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5<br>1.0 | | | | | |
| | | | | | | 2 | | | | | GTC | |
| | | | | | | 3 | | | | | | |
| | | | | | | 4 | | | | | | |

SITE 624 HOLE A CORE 10H CORED INTERVAL 3282.3–3286.6 mbsl; 84.3–88.6 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | FOSSIL CHARACTER: NANNOFOSSILS | FOSSIL CHARACTER: RADIOLARIANS | FOSSIL CHARACTER: DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5<br>1.0 | | | | | |
| | | | | | | 2 | | | | | GTC | |
| | | | | | | 3 | | | | | | |
| | | | | | | CC | | | | | GTC | |

SITE 624 HOLE A CORE 11H CORED INTERVAL 3291.7–3295.7 mbsl; 93.7–97.7 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | FOSSIL CHARACTER: NANNOFOSSILS | FOSSIL CHARACTER: RADIOLARIANS | FOSSIL CHARACTER: DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5<br>1.0 | | | | | |
| | | | | | | 2 | | | | | GTC | |
| | | | | | | 3 | | | | | | |
| | | | | | | CC | | | | | GTC | |

SITE 624 HOLE A CORE 12H CORED INTERVAL 3301.1–3303.0 mbsl; 103.1–105.0 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | NANNOFOSSILS | RADIOLARIANS | DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5, 1.0 | | | | GTC | |
| | | | | | | 2 | | | | | | |
| | | | | | | CC | | | | | GTC | |

SITE 624 HOLE A CORE 13H CORED INTERVAL 3310.5–3314.2 mbsl; 112.5–116.2 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | NANNOFOSSILS | RADIOLARIANS | DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5, 1.0 | | | | | |
| | | | | | | 2 | | | | | GTC | |
| | | | | | | 3 | | | | | | |
| | | | | | | CC | | | | | GTC | |

SITE 624 HOLE A CORE 14H CORED INTERVAL 3319.8–3322.8 mbsl; 121.8–124.8 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | NANNOFOSSILS | RADIOLARIANS | DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5, 1.0 | | | | GTC | |
| | | | | | | 2 | | | | | | |

SITE 624 HOLE A CORE 15H CORED INTERVAL 3329.1–3331.1 mbsl; 131.1–133.1 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | NANNOFOSSILS | RADIOLARIANS | DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5, 1.0 | | | | GTC | |
| | | | | | | 2 | | | | | | |
| | | | | | | CC | | | | | | |

SITE 624 HOLE A CORE 16H CORED INTERVAL 3338.4–3341.0 mbsl; 140.4–143.0 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | NANNOFOSSILS | RADIOLARIANS | DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5, 1.0 | | | | | |
| | | | | | | 2 | | | | | GTC | |
| | | | | | | 3 | | | | | | |

SITE 624 HOLE A CORE 17H CORED INTERVAL 3347.8–3349.8 mbsl; 149.8–151.8 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | NANNOFOSSILS | RADIOLARIANS | DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5, 1.0 | | | | GTC | |
| | | | | | | 2 | | | | | | |

SITE 624 HOLE A CORE 18H CORED INTERVAL 3357.2–3359.7 mbsl; 159.2–161.7 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | NANNOFOSSILS | RADIOLARIANS | DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5, 1.0 | | | | GTC | |
| | | | | | | 2 | | | | | | |
| | | | | | | CC | | | | | GTC | |

SITE 624 HOLE A CORE 19H CORED INTERVAL 3366.6–3368.4 mbsl; 168.6–170.4 mbsf

| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | NANNOFOSSILS | RADIOLARIANS | DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5, 1.0 | | | | GTC | |
| | | | | | | CC | | | | | | |

SITE 624 HOLE A CORE 20H CORED INTERVAL 3376.0–3377.0 mbsl; 178.0–179.0 mbsf

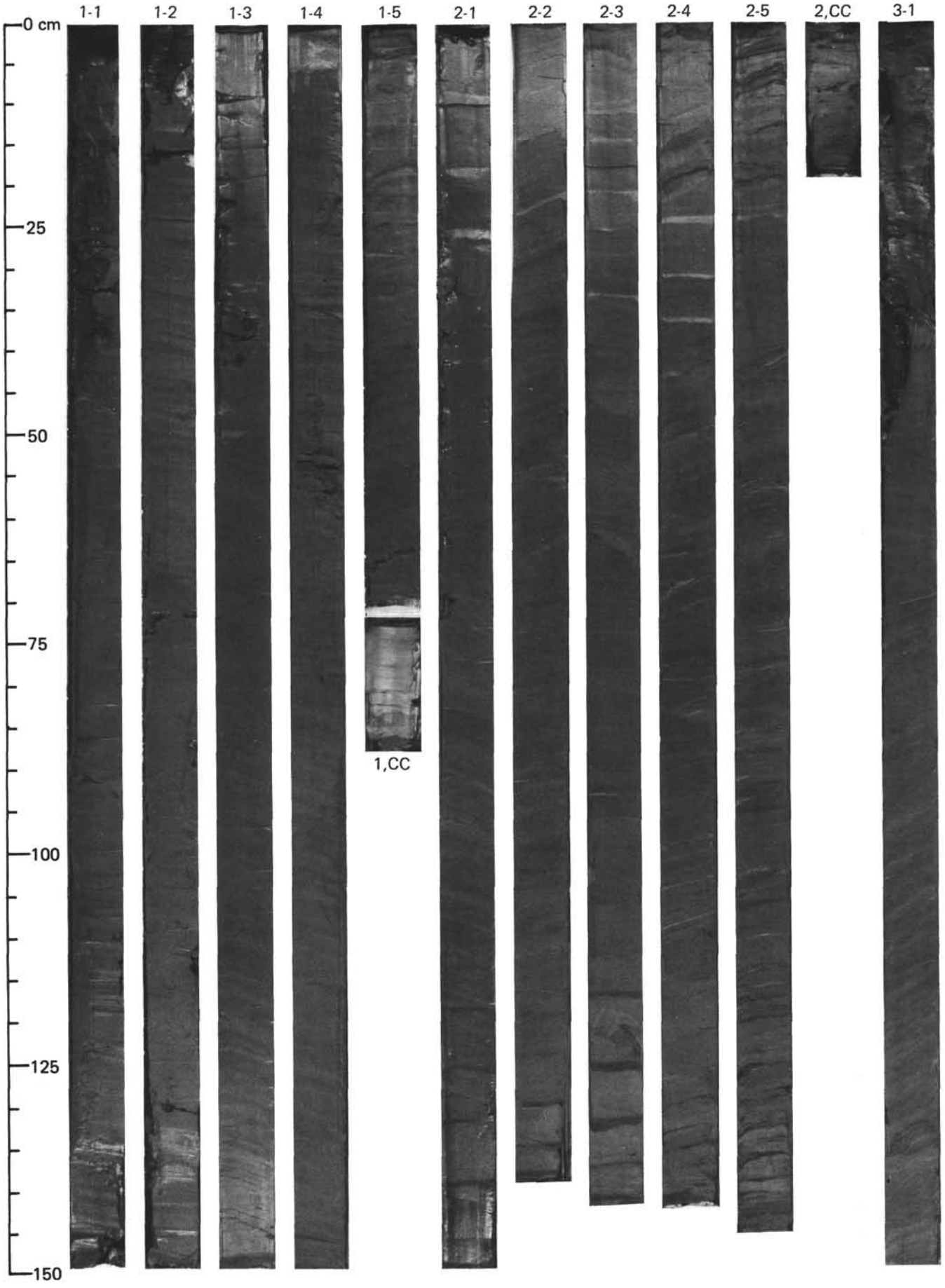
| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | NANNOFOSSILS | RADIOLARIANS | DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1 | 0.5 | | | | GTC | |
| | | | | | | CC | | | | | | |

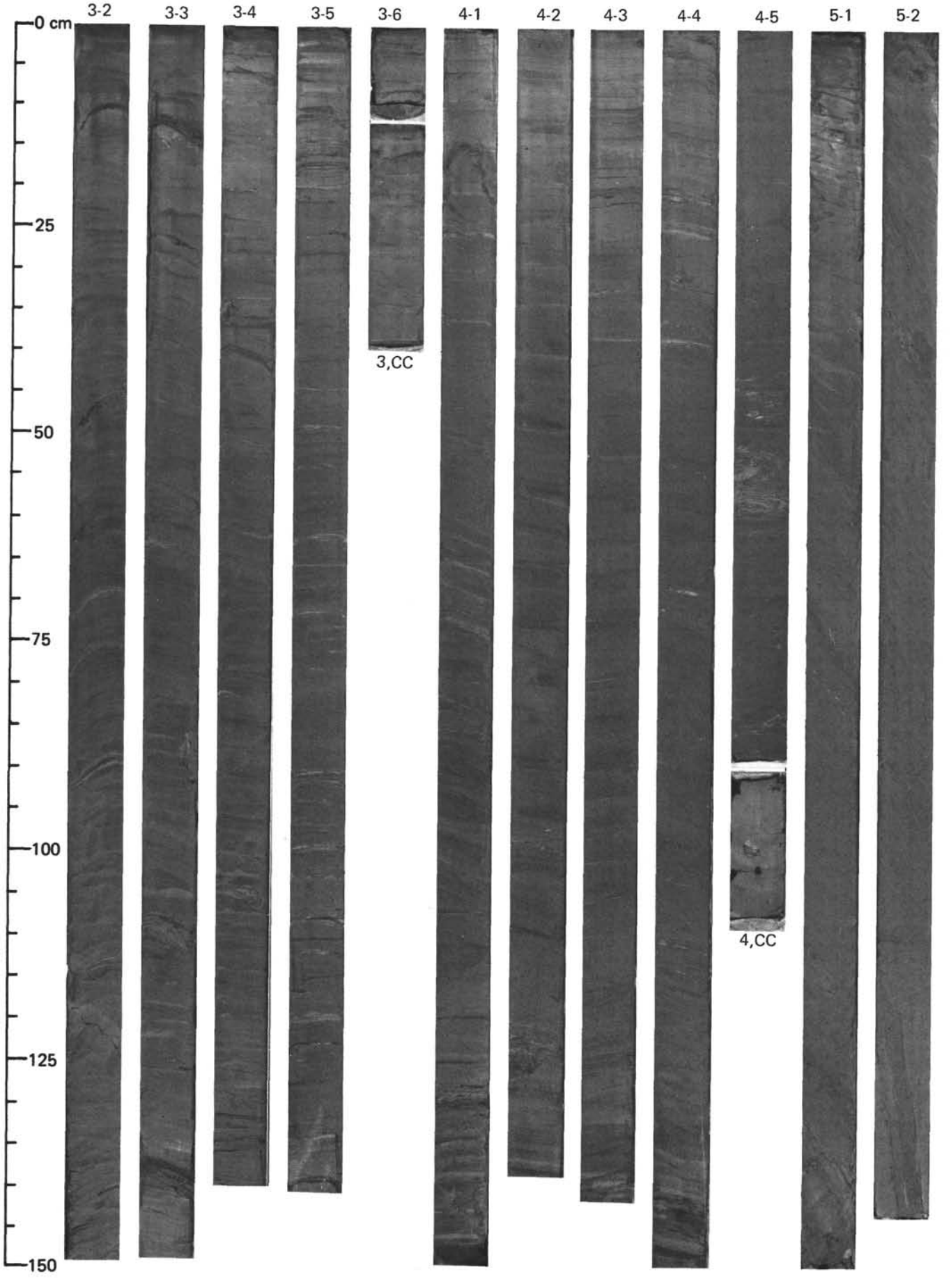
SITE 624 HOLE A CORE 21H CORED INTERVAL 3385.5–3385.6 mbsl; 187.5–187.6 mbsf

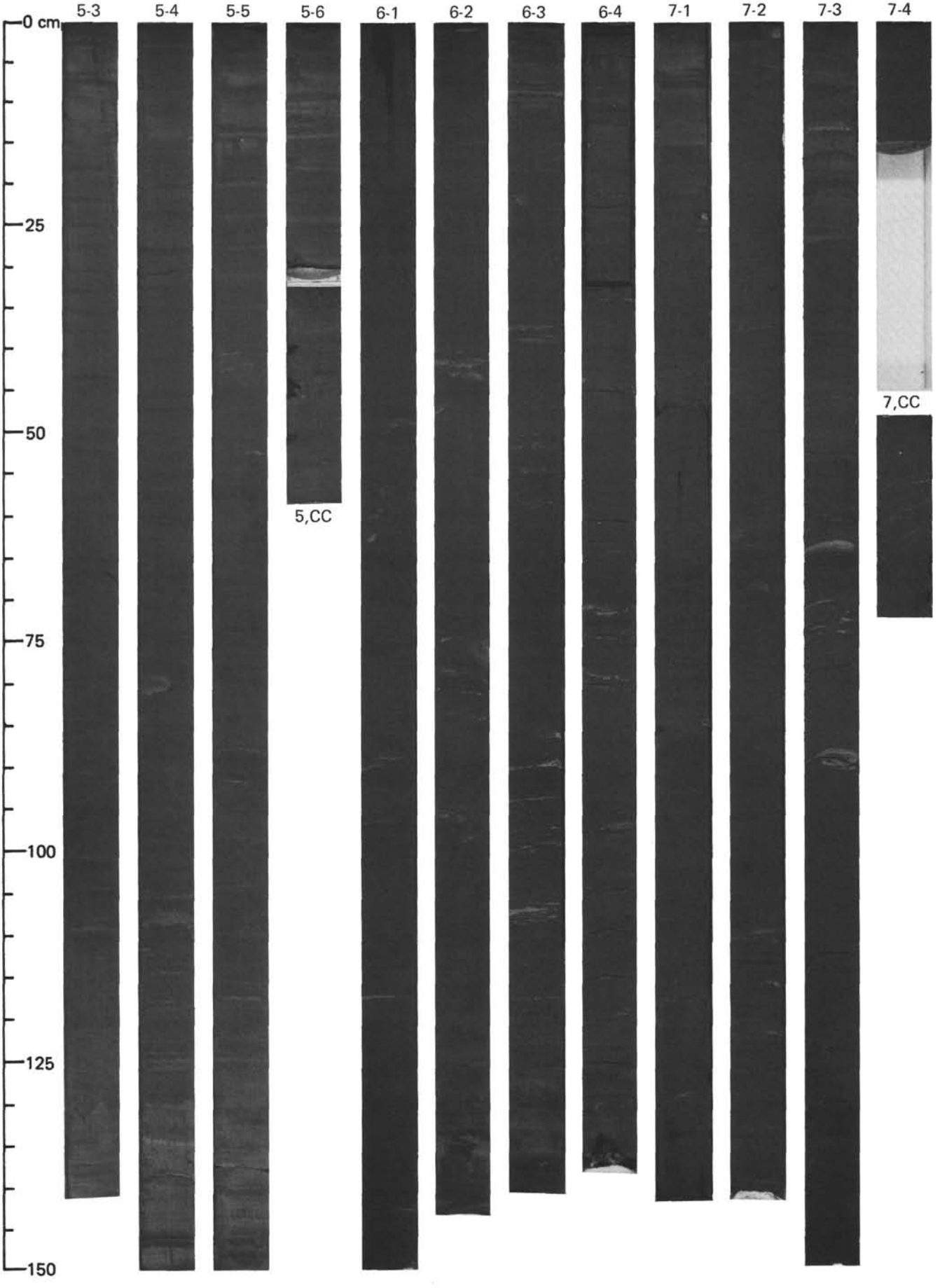
| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | NANNOFOSSILS | RADIOLARIANS | DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | CC | | | | | GTC | |

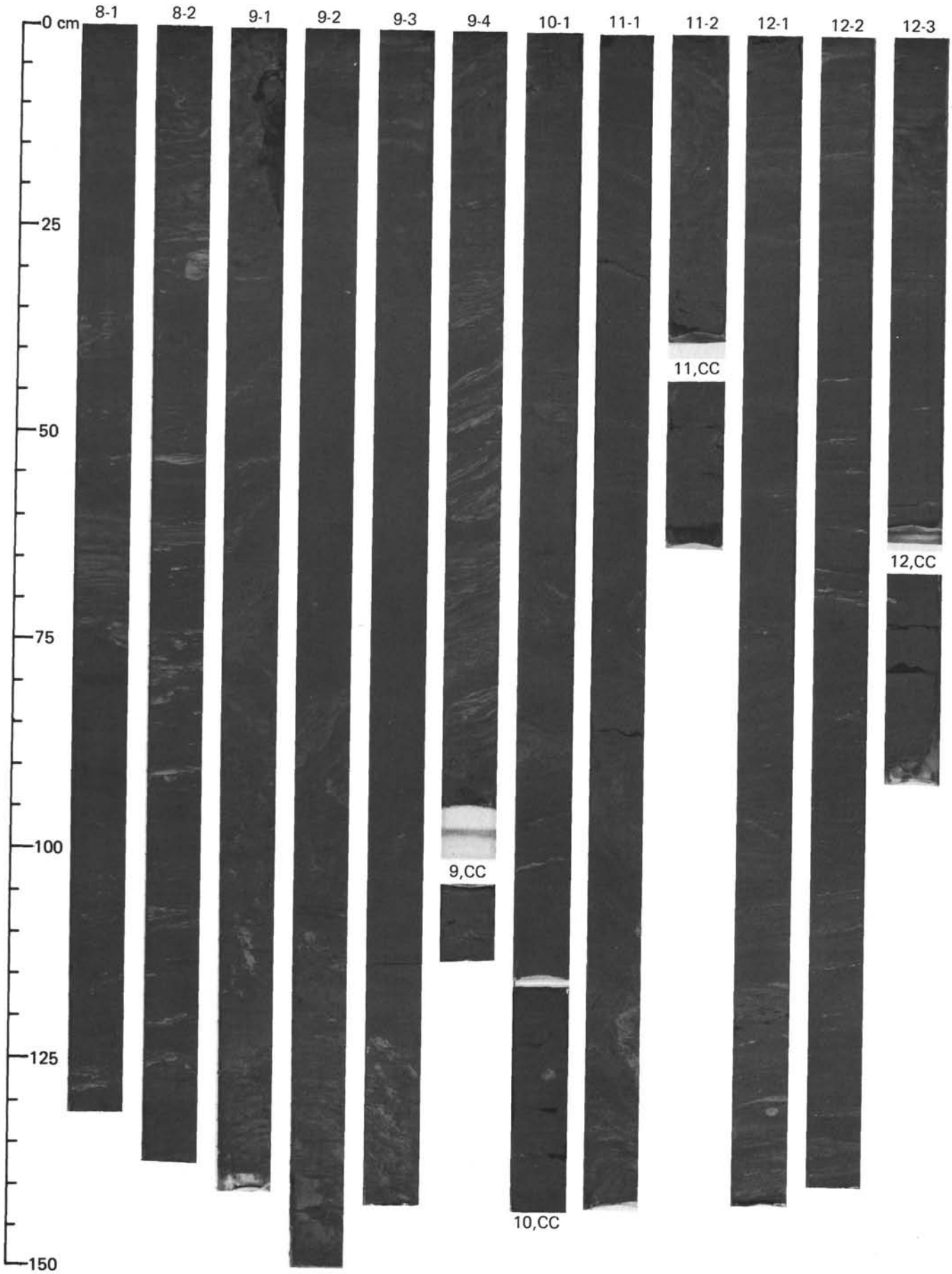
SITE 624 HOLE A CORE 22H CORED INTERVAL 3395.0–3395.1 mbsl; 197.0–197.1 mbsf

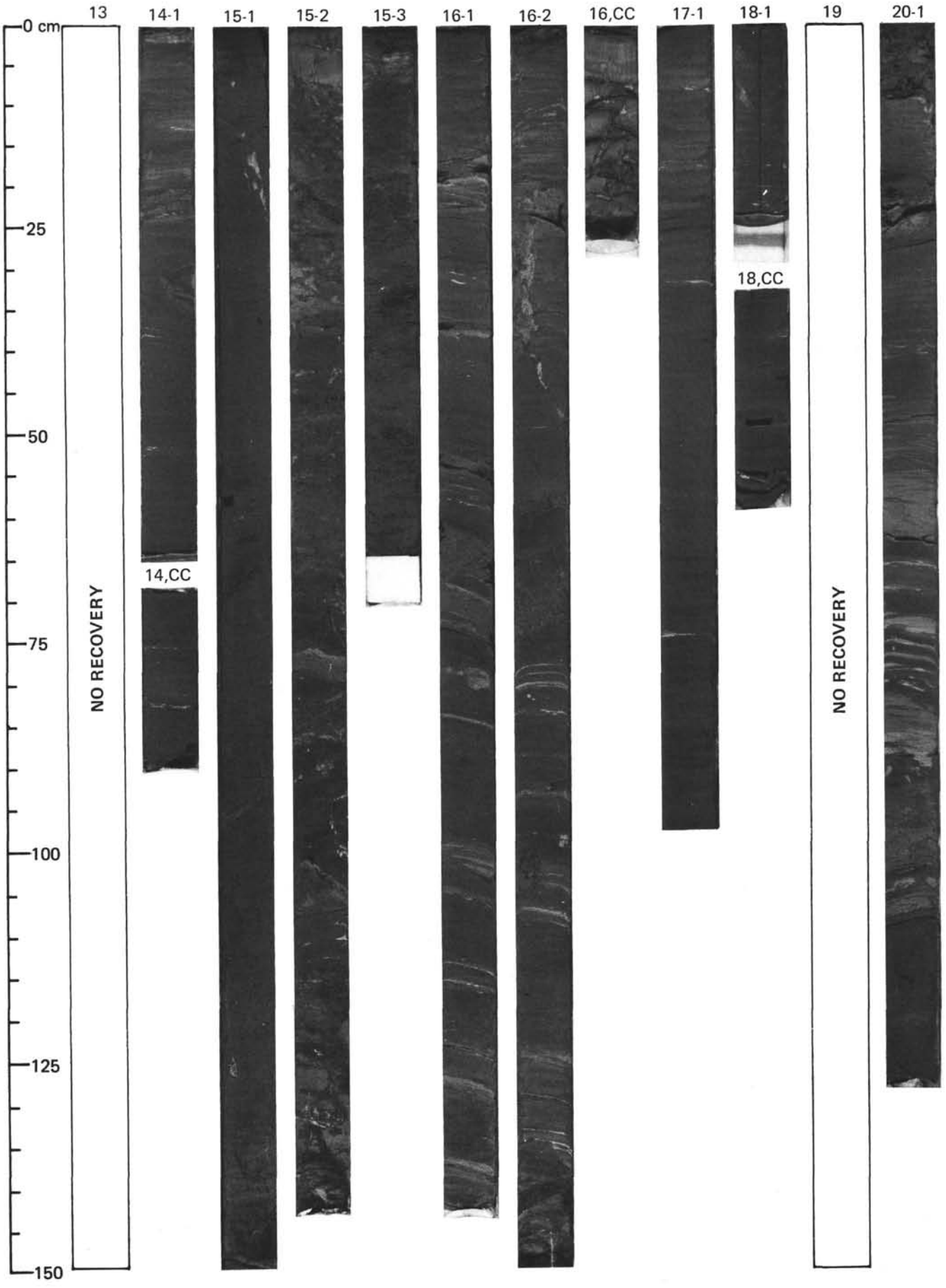
| TIME – ROCK UNIT | BIOSTRATIGRAPHIC ZONE | FOSSIL CHARACTER: FORAMINIFERS | NANNOFOSSILS | RADIOLARIANS | DIATOMS | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURBANCE | SEDIMENTARY STRUCTURES | SAMPLES | LITHOLOGIC DESCRIPTION |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | CC | | | | | GTC | |

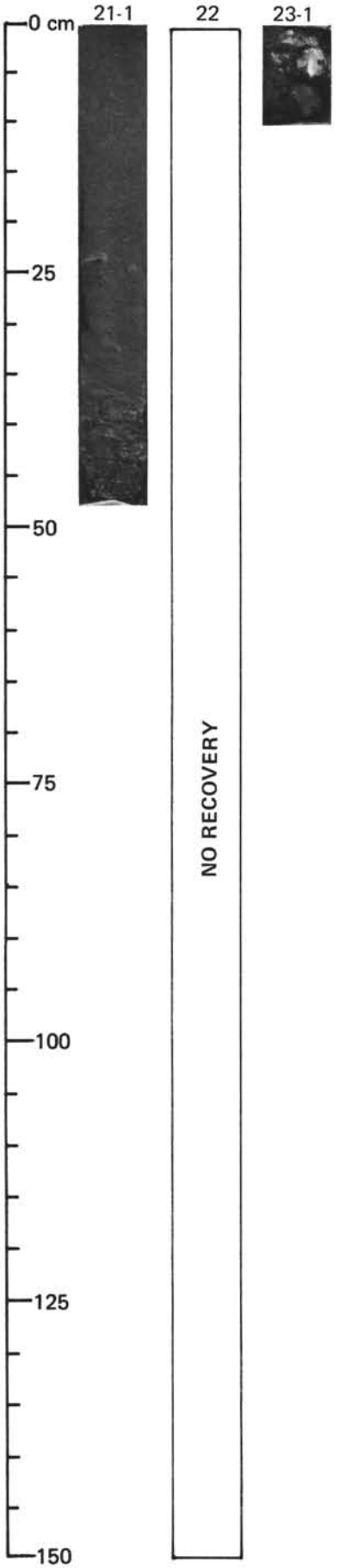

1-1
1-2
1-3
1-4
1-5
2-1
2-2
2-3
2-4
2-5
2,CC
3-1
0 cm
25
50
75
100
125
150
1,CC

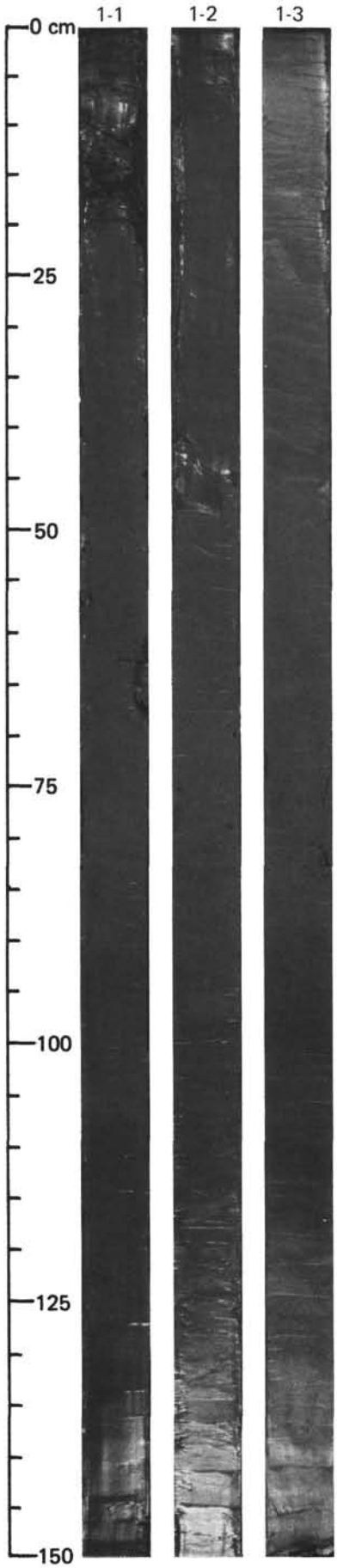

3-2
3-3
3-4
3-5
3-6
4-1
4-2
4-3
4-4
4-5
5-1
5-2
0 cm
25
50
75
100
125
150
3,CC
4,CC


5-3
5-4
5-5
5-6
6-1
6-2
6-3
6-4
7-1
7-2
7-3
7-4
0 cm
25
50
75
100
125
150
5,CC
7,CC


0 cm
25
50
75
100
125
150
8-1
8-2
9-1
9-2
9-3
9-4
9,CC
10-1
10,CC
11-1
11-2
11,CC
12-1
12-2
12-3
12,CC


13
14-1
15-1
15-2
15-3
16-1
16-2
16,CC
17-1
18-1
19
20-1
0 cm
25
50
75
100
125
150
NO RECOVERY
14,CC
18,CC
NO RECOVERY


0 cm
21-1
22
23-1
25
50
75
100
125
150
NO RECOVERY


1-1
1-2
1-3
0 cm
25
50
75
100
125
150