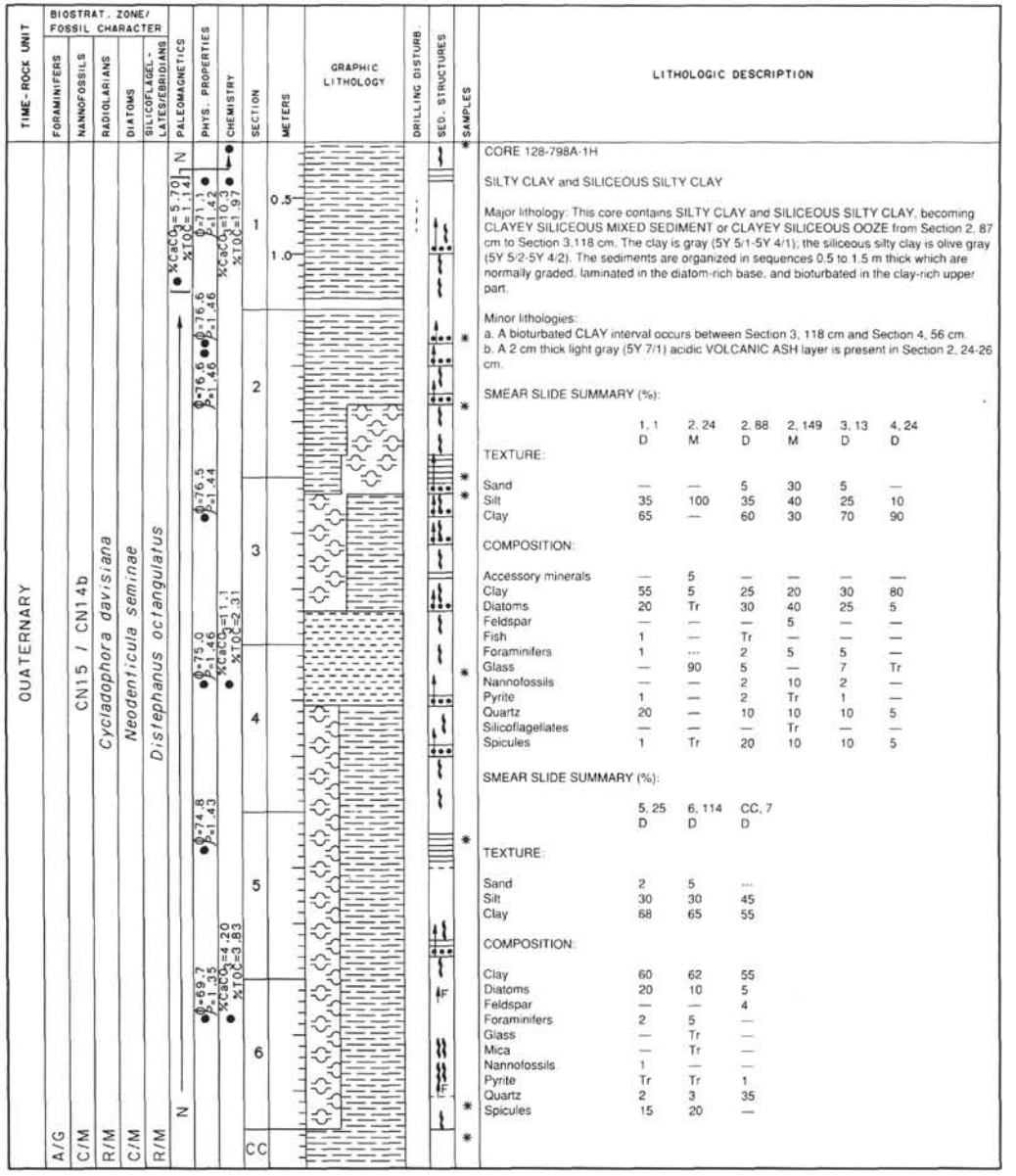
SITE 798 HOLE A CORE 1H CORED INTERVAL 903.1-912.4 mbsl; 0.0-9.3 mbsf



LITHOLOGIC DESCRIPTION

CORE 128-798A-1H

SILTY CLAY and SILICEOUS SILTY CLAY

Major lithology: This core contains SILTY CLAY and SILICEOUS SILTY CLAY, becoming CLAYEY SILICEOUS MIXED SEDIMENT or CLAYEY SILICEOUS OOZE from Section 2, 87 cm to Section 3,118 cm. The clay is gray (5Y 5/1-5Y 4/1); the siliceous silty clay is olive gray (5Y 5/2-5Y 4/2). The sediments are organized in sequences 0.5 to 1.5 m thick which are normally graded, laminated in the diatom-rich base, and bioturbated in the clay-rich upper part.

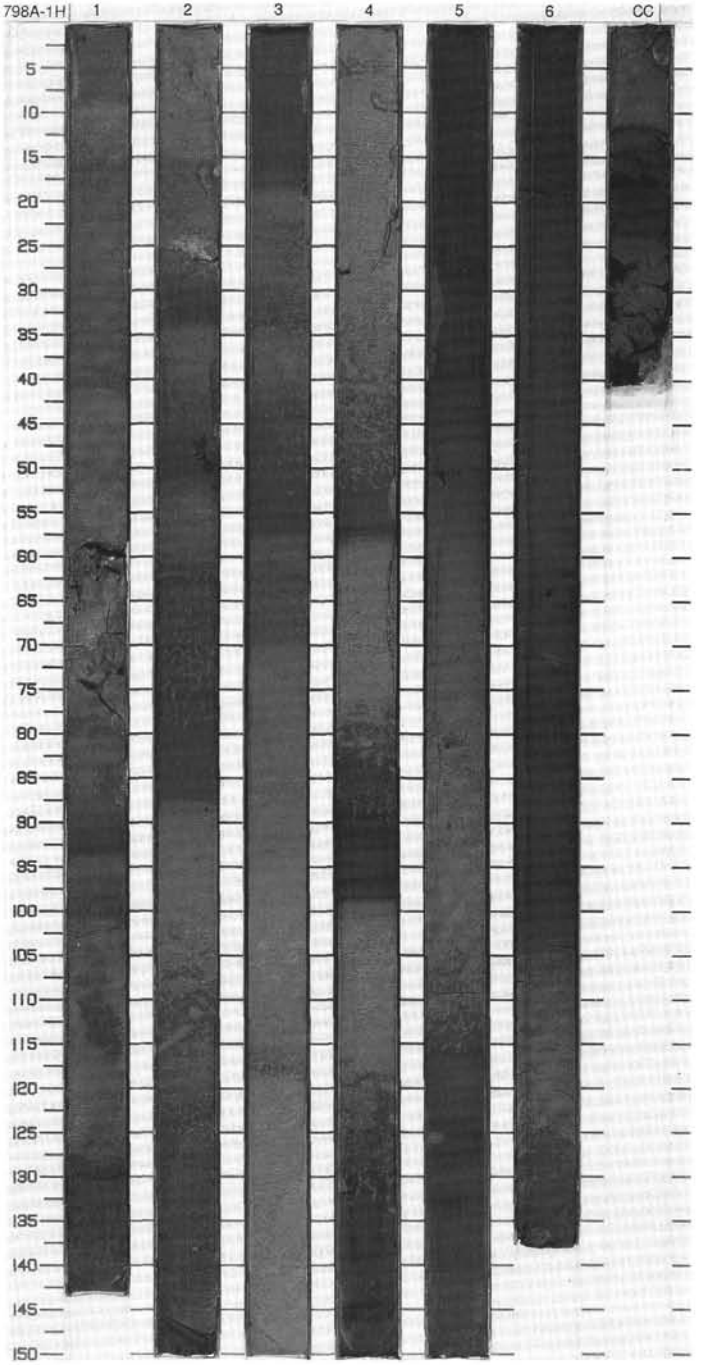
Minor lithologies:
a. A bioturbated CLAY interval occurs between Section 3, 118 cm and Section 4, 56 cm.
b. A 2 cm thick light gray (5Y 7/1) acidic VOLCANIC ASH layer is present in Section 2, 24-26 cm.

SMEAR SLIDE SUMMARY (%):

	1, 1 D	2, 24 M	2, 88 D	2, 149 M	3, 13 D	4, 24 D
TEXTURE:						
Sand	—	—	5	30	5	—
Silt	35	100	35	40	25	10
Clay	65	—	60	30	70	90
COMPOSITION:						
Accessory minerals	—	5	—	—	—	—
Clay	55	5	25	20	30	80
Diatoms	20	Tr	30	40	25	5
Feldspar	—	—	—	5	—	—
Fish	1	—	Tr	—	—	—
Foraminifers	1	—	2	5	5	—
Glass	—	90	5	—	7	Tr
Nannofossils	—	—	2	10	2	—
Pyrite	1	—	2	Tr	1	—
Quartz	20	—	10	10	10	5
Silicoflagellates	—	—	—	Tr	—	—
Spicules	1	Tr	20	10	10	5

SMEAR SLIDE SUMMARY (%):

	5, 25 D	6, 114 D	CC, 7 D
TEXTURE:			
Sand	2	5	—
Silt	30	30	45
Clay	68	65	55
COMPOSITION:			
Clay	60	62	55
Diatoms	20	10	5
Feldspar	—	—	4
Foraminifers	2	5	—
Glass	—	Tr	—
Mica	—	Tr	—
Nannofossils	1	—	—
Pyrite	Tr	Tr	1
Quartz	2	3	35
Spicules	15	20	—



SITE 798 HOLE A CORE 2H CORED INTERVAL 912.4-921.4 mbsl; 9.3-18.3 mbsf

TIME-ROCK UNIT: QUARTERNARY

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS; NANNOFOSSILS: *Cyclladophora davisiana*; RADIOLARIANS: *Neodenticula seminae*; DIATOMS; SILICOFLAGELLATES/EBRIDIANS

PALEOMAGNETICS: N / N

PHYS. PROPERTIES: ρ=70.1, ρs=1.93; ρ=66.7, ρs=1.51; ρ=66.3, ρs=1.42; ρ=67.2, ρs=1.33

CHEMISTRY: %CaCO3=9.4, %TOC=1.32; %CaCO3=3.6, %TOC=2.45; %CaCO3=3.3, %TOC=1.27

SECTION: 1, 2, 3, 4, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

LITHOLOGIC DESCRIPTION

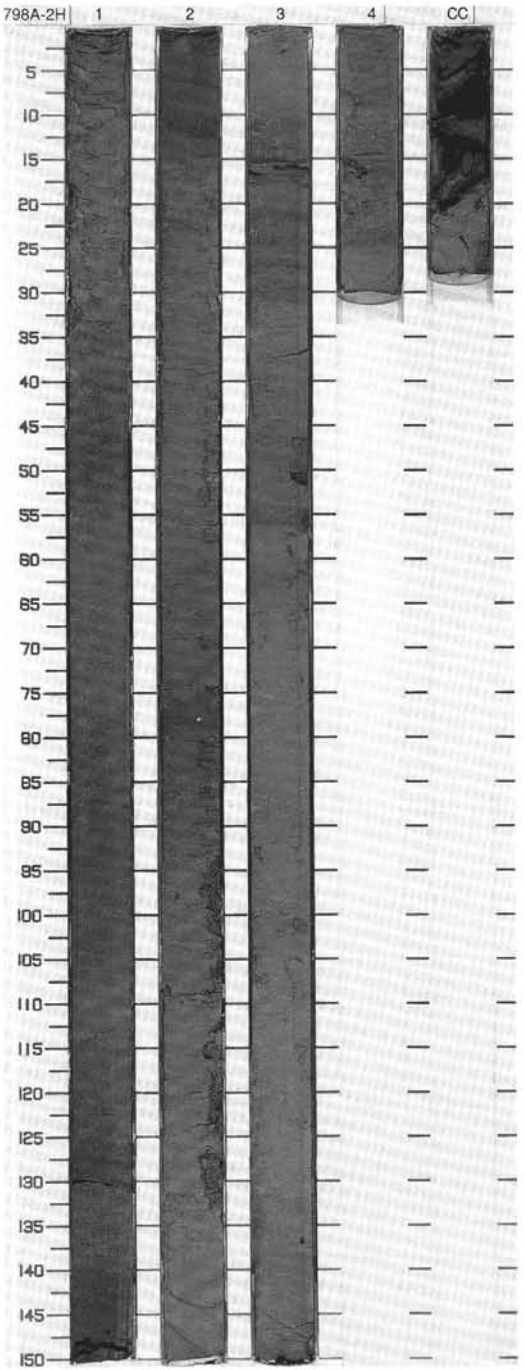
SILICEOUS OOZE and CLAY

Major lithology: This core contains mainly SILICEOUS OOZE, rich in diatoms and sponge spicules. CLAY and CLAY with DIATOMS occur in Section 3, 10-31 cm and 61-135 cm. The ooze is olive gray (5Y 4/2 to 5Y 4/3), the clay-rich parts are more gray (5Y 5/1). The sediments have intervals of bioturbation and intervals of planar lamination. A normally graded sequence occurs in Section 3, 31-55 cm. The sediments represent background pelagic sedimentation.

Minor lithology: A very dark gray (5Y 2.5/1) 0.5 cm thick vitric VOLCANIC ASH layer, either andesitic or basaltic, is present in the core catcher, 7 cm.

SMEAR SLIDE SUMMARY (%):

	1, 126 D	2, 50 D	3, 24 M	3, 112 D	CC, 7 M
TEXTURE:					
Sand	10	10	2	---	40
Silt	60	80	10	40	55
Clay	30	10	88	60	5
COMPOSITION:					
Amphibole	—	—	—	Tr	—
Calcite	5	—	3	—	—
Clay	10	—	72	82	—
Diatoms	35	47	10	3	Tr
Feldspar	—	—	Tr	—	—
Fish	—	—	Tr	—	—
Foraminifers	—	—	Tr	—	—
Glass	Tr	—	—	—	60
Mica	—	—	—	—	Tr
Nannofossils	20	10	—	—	—
Opaques	—	—	10	—	—
Pyrite	Tr	1	—	Tr	Tr
Pyroxene	—	—	—	—	3
Quartz	Tr	2	5	10	37
Radiolarians	—	—	Tr	—	—
Silicoflagellates	5	25	Tr	2	Tr
Spicules	20	15	Tr	2	Tr



SITE 798 HOLE A CORE 3H CORED INTERVAL 921.4-930.4 mbsl; 18.3-27.3 mbsf

TIME-ROCK UNIT: QUATERNARY

BIOSTRAT. ZONE/FOSSIL CHARACTER:
- FORAMINIFERS: F/M
- NANNOFOSSILS: F/P — CM15 / CN14b
- RADIOLARIANS: R/M — *Cycladophora davisiana*
- DIATOMS: F/M — *Neodenticula seminae*
- SILICOFLAGELLATES/EBRIDIANS: R/M — *Distephanus octangulatus*
- PALEOMAGNETICS: N

PHYS. PROPERTIES: ϕ=80.6, ρ=1.35; ϕ=72.0, ρ=1.53; ϕ=73.5, ρ=1.46; ϕ=71.0, ρ=1.54; ϕ=75.7, ρ=1.41; ϕ=71.8, ρ=1.52

CHEMISTRY: %CaCO3=6.60, %TOC=1.47; %CaCO3=3.20, %TOC=1.08; %CaCO3=2.30, %TOC=2.03

SECTION: 1, 2, 3, 4, 5, 6, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: OG, IW

LITHOLOGIC DESCRIPTION

DIATOMACEOUS OOZE

Major lithology: This core contains DIATOMACEOUS OOZE and DIATOMACEOUS OOZE with CLAY. The ooze is olive gray to dark olive gray (5Y 4/2-5Y 3/2) and becomes lighter (gray to greenish gray-greenish gray - 5Y 5/1-5GY 5/1) with greater amounts of clay. It is highly bioturbated in several intervals and shows normal grading in Sections 1 and 2.

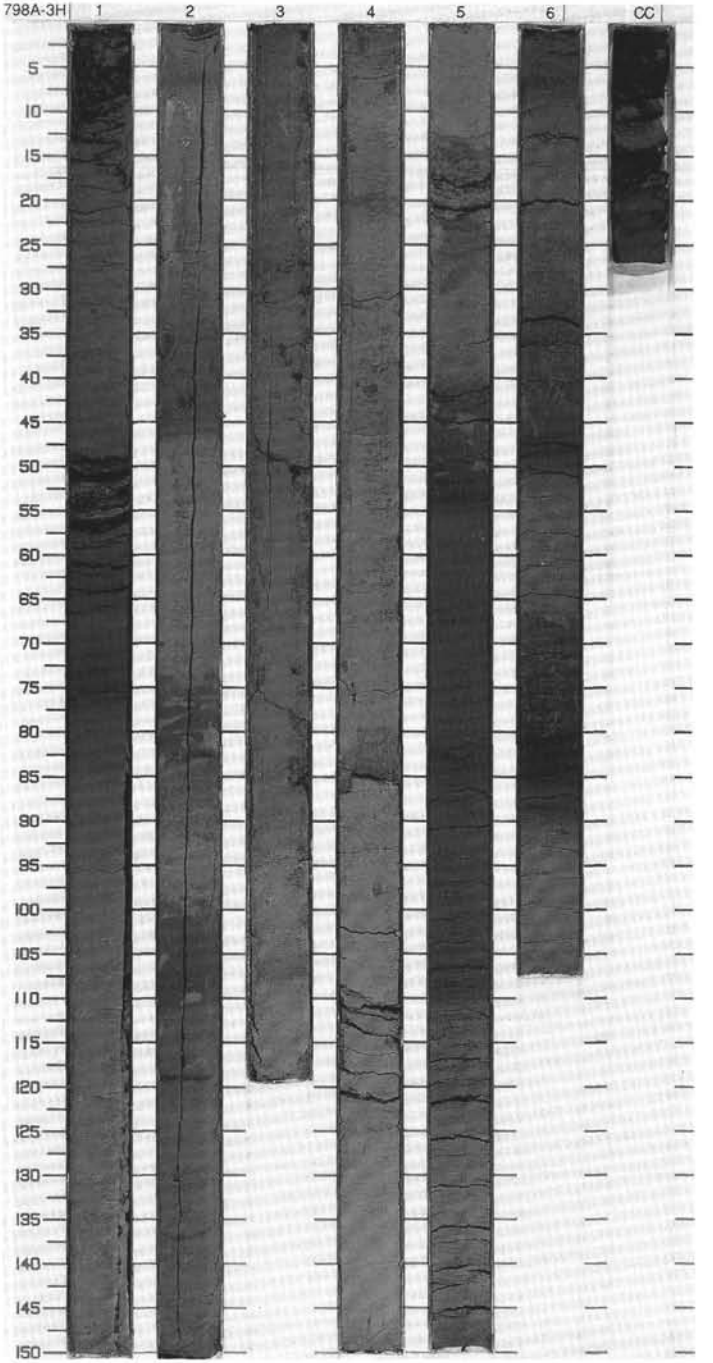
Minor lithologies:
a. Intervals of CLAY with DIATOMS occur between Section 4, 45 cm and Section 5, 40 cm.
b. In addition to an ash pod in Section 2, 82 cm, a dark gray (5Y 4/1) VOLCANIC ASH layer occurs in Section 4, 82-84 cm.

SMEAR SLIDE SUMMARY (%):

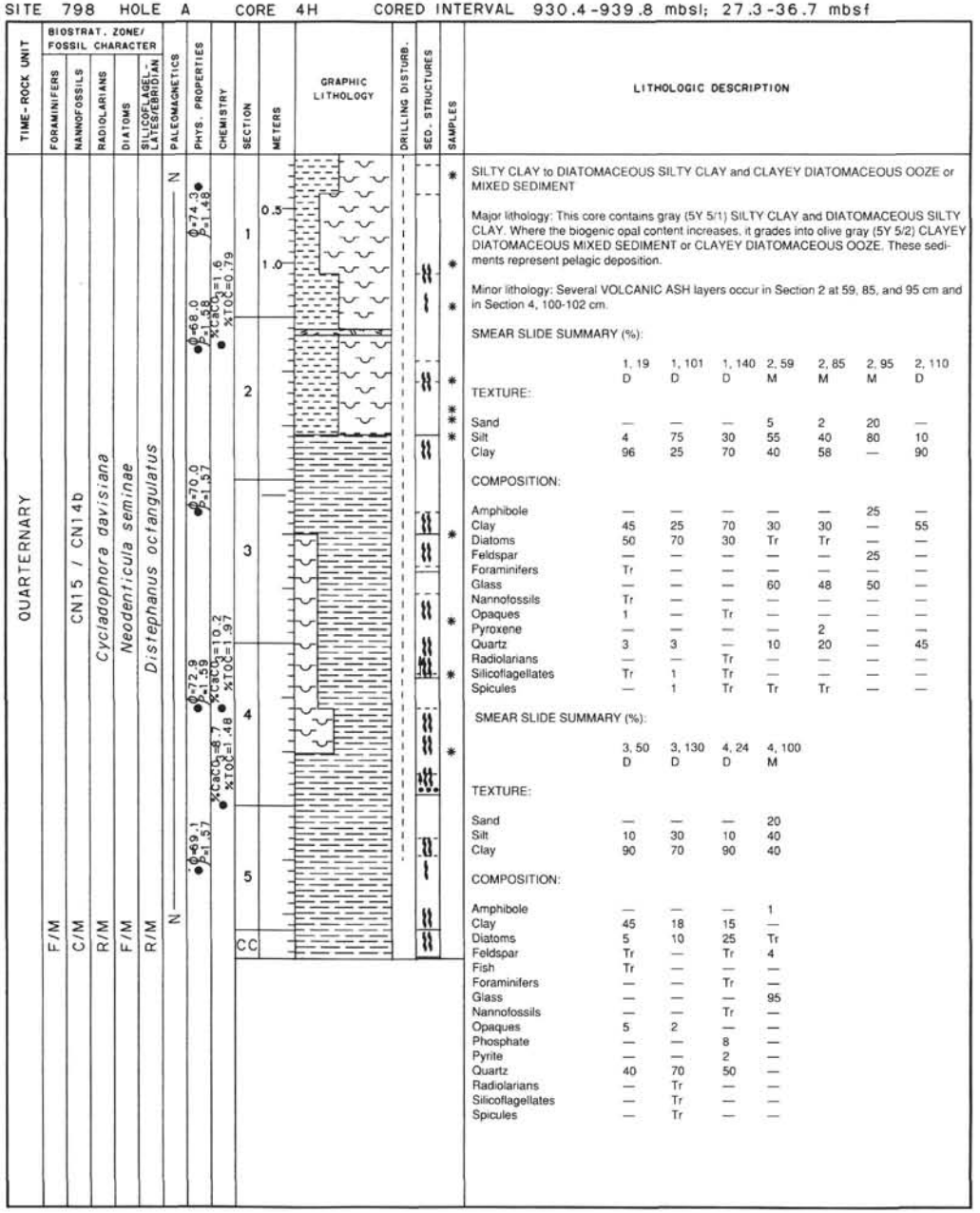
	1, 35 D	1, 147 D	2, 63 D	2, 81 M	2, 106 D	3, 66 D
TEXTURE:						
Sand	—	3	2	30	2	5
Silt	85	17	48	70	30	60
Clay	15	80	50	---	68	35
COMPOSITION:						
Accessory minerals	1	—	—	—	Tr	—
Clay	10	20	40	—	25	15
Diatoms	80	70	45	Tr	60	75
Fish	Tr	—	—	—	—	—
Foraminifers	—	5	3	—	—	1
Glass	—	Tr	Tr	60	Tr	Tr
Mica	---	---	---	Tr	—	—
Opaques	1	Tr	Tr	—	1	2
Quartz	3	5	5	40	4	5
Radiolarians	---	---	Tr	Tr	Tr	Tr
Rock fragment	—	—	—	—	Tr	—
Silicoflagellates	Tr	—	Tr	—	Tr	Tr
Spicules	2	—	3	Tr	8	Tr

SMEAR SLIDE SUMMARY (%):

	4, 63 D	4, 82 M
TEXTURE:		
Sand	2	50
Silt	10	50
Clay	87	—
COMPOSITION:		
Amphibole	—	1
Calcite	3	—
Clay	80	—
Diatoms	10	Tr
Feldspar	—	15
Glass	2	82
Mica	Tr	—
Opaques	Tr	—
Quartz	2	2
Radiolarians	Tr	—
Spicules	Tr	—
Zircon	—	Tr



SITE 798 HOLE A CORE 4H CORED INTERVAL 930.4-939.8 mbsl; 27.3-36.7 mbsf



LITHOLOGIC DESCRIPTION

SILTY CLAY to DIATOMACEOUS SILTY CLAY and CLAYEY DIATOMACEOUS OOZE or MIXED SEDIMENT

Major lithology: This core contains gray (5Y 5/1) SILTY CLAY and DIATOMACEOUS SILTY CLAY. Where the biogenic opal content increases, it grades into olive gray (5Y 5/2) CLAYEY DIATOMACEOUS MIXED SEDIMENT or CLAYEY DIATOMACEOUS OOZE. These sediments represent pelagic deposition.

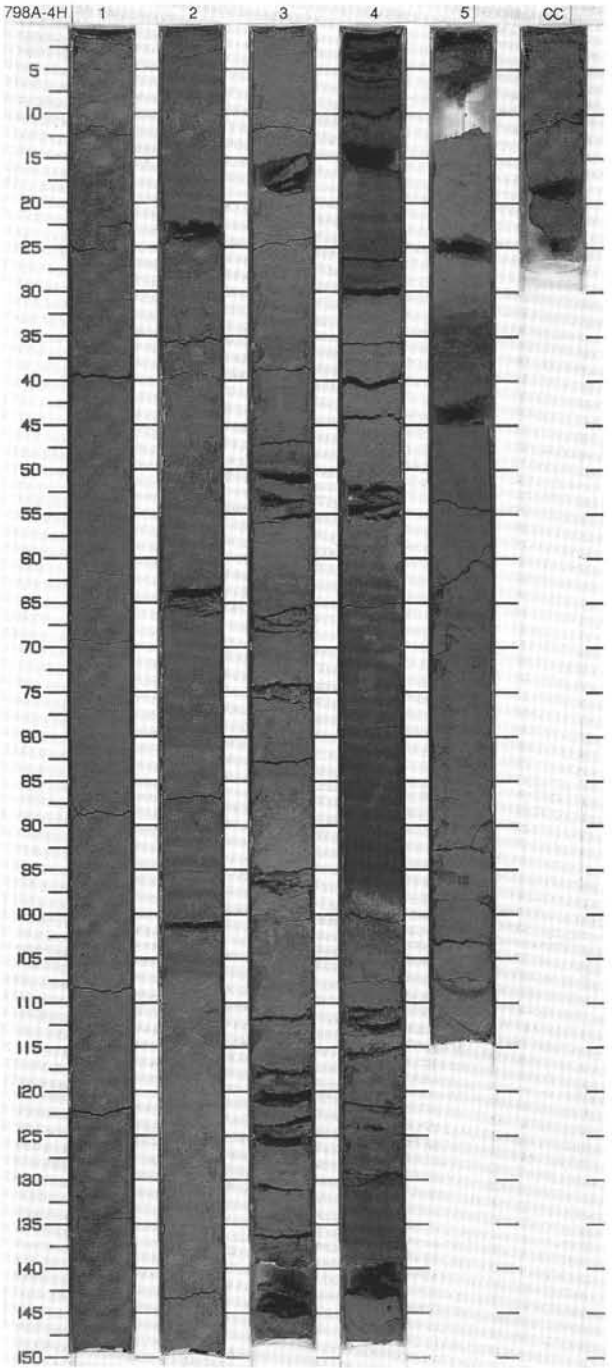
Minor lithology: Several VOLCANIC ASH layers occur in Section 2 at 59, 85, and 95 cm and in Section 4, 100-102 cm.

SMEAR SLIDE SUMMARY (%):

	1, 19 D	1, 101 D	1, 140 D	2, 59 M	2, 85 M	2, 95 M	2, 110 D
TEXTURE:							
Sand	—	—	—	5	2	20	—
Silt	4	75	30	55	40	80	10
Clay	96	25	70	40	58	—	90
COMPOSITION:							
Amphibole	—	—	—	—	—	25	—
Clay	45	25	70	30	30	—	55
Diatoms	50	70	30	Tr	Tr	—	—
Feldspar	—	—	—	—	—	25	—
Foraminifers	Tr	—	—	—	—	—	—
Glass	—	—	—	60	48	50	—
Nannofossils	Tr	—	—	—	—	—	—
Opaques	1	—	Tr	—	—	—	—
Pyroxene	—	—	—	—	2	—	—
Quartz	3	3	—	10	20	—	45
Radiolarians	—	—	Tr	—	—	—	—
Silicoflagellates	Tr	1	Tr	—	—	—	—
Spicules	—	1	Tr	Tr	Tr	—	—

SMEAR SLIDE SUMMARY (%):

	3, 50 D	3, 130 D	4, 24 D	4, 100 M
TEXTURE:				
Sand	—	—	—	20
Silt	10	30	10	40
Clay	90	70	90	40
COMPOSITION:				
Amphibole	—	—	—	1
Clay	45	18	15	—
Diatoms	5	10	25	Tr
Feldspar	Tr	—	Tr	4
Fish	Tr	—	—	—
Foraminifers	—	—	Tr	—
Glass	—	—	—	95
Nannofossils	—	—	Tr	—
Opaques	5	2	—	—
Phosphate	—	—	8	—
Pyrite	—	—	2	—
Quartz	40	70	50	—
Radiolarians	—	Tr	—	—
Silicoflagellates	—	Tr	—	—
Spicules	—	Tr	—	—



SITE 798 HOLE A CORE 5H CORED INTERVAL 939.8-949.3 mbsl; 36.7-46.2 mbsf

TIME-ROCK UNIT: QUARTERNARY

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS: A/G; NANNOFOSSILS: B; CN15 / CN14b; RADIOLARIANS: R/M; *Cycladophora davisiana*; *N. seminae*; DIATOMS: C/M; *Rhizosolenia curvirostris*; SILICOFLAGELLATES/EBRIDIANS: R/M; *Distephanus octangulatus*

PALEOMAGNETICS: N

PHYS. PROPERTIES: ϕ=70.4, ρ=1.51; ϕ=71.1, ρ=1.57; ϕ=71.3, ρ=1.47; ϕ=72.8, ρ=1.49; ϕ=68.5, ρ=1.58; ϕ=72.6, ρ=1.50

CHEMISTRY: %CaCO3=24.7, %TOC=2.37; %CaCO3=6.7, %TOC=2.56; %CaCO3=26.8, %TOC=1.75

SECTION: CC, 7, 6, 5, 4, 3, 2, 1

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY: VOID

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

LITHOLOGIC DESCRIPTION

DIATOMACEOUS CLAYEY MIXED SEDIMENT, DIATOMACEOUS CLAY, and CLAY

Major lithology: This core contains DIATOMACEOUS CLAYEY MIXED SEDIMENT to DIATOMACEOUS CLAY in Sections 1 through 6 and CLAY in Section 7. These sediments are light olive gray (5Y 6/2) to olive gray (5Y 5/2-5Y 4/2) with some darker intervals of gray (5Y 5/1) to dark gray(5Y 4/1-5Y 3/1). Sedimentary structures include planar laminated units underlying bioturbated intervals.

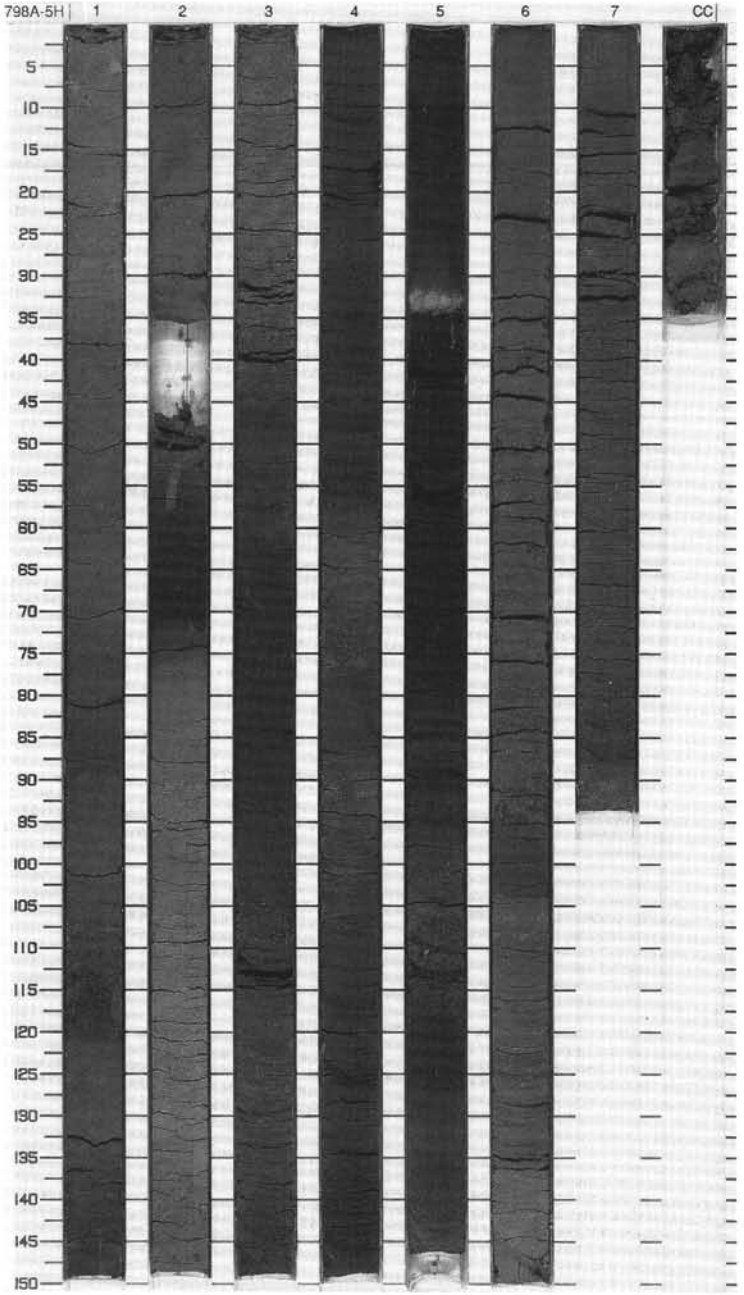
Minor lithology: Thin (<1 cm)VOLCANIC ASH layers occur in Section 1, 75 cm; Section 4, 116 cm; Section 5, 32-35 cm; and Section 6, 115-126 cm, together with scattered ash pods. Ash layers are either white or light gray where acidic or dark gray where basic.

SMEAR SLIDE SUMMARY (%):

	1, 38 D	2, 4 D	2, 69 D	3, 8 D	3, 110 M	3, 149 D	4, 131 D
TEXTURE:							
Sand	—	2	—	—	10	—	—
Silt	5	45	10	10	70	40	10
Clay	95	53	90	90	20	60	90
COMPOSITION:							
Clay	64	40	90	74	—	15	20
Diatoms	25	30	—	15	Tr	70	40
Feldspar	—	—	—	—	10	Tr	—
Fish	—	—	—	—	—	Tr	—
Foraminifers	5	—	—	1	Tr	Tr	—
Glass	—	—	10	—	90	Tr	—
Inorganic calcite	—	10	—	—	—	1	—
Nannofossils	1	—	—	Tr	—	Tr	—
Opaques	—	1	—	—	—	—	—
Phosphate	—	—	—	—	—	Tr	—
Pyrite	—	—	—	—	—	Tr	—
Quartz	5	3	—	10	Tr	13	40
Radiolarians	—	—	—	Tr	—	Tr	—
Silicoflagellates	—	—	—	Tr	—	Tr	—
Spicules	—	15	Tr	Tr	Tr	1	—

SMEAR SLIDE SUMMARY (%):

	5, 32 M	6, 40 D	6, 122 M	7, 86 D
TEXTURE:				
Sand	5	2	5	—
Silt	85	30	40	10
Clay	10	68	55	90
COMPOSITION:				
Amphibole	—	Tr	Tr	—
Clay	—	66	—	90
Diatoms	—	15	—	5
Feldspar	5	—	5	—
Foraminifers	—	1	Tr	2
Glass	95	—	95	Tr
Nannofossils	—	Tr	Tr	Tr
Opaques	—	1	—	—
Quartz	—	5	—	Tr
Silicoflagellates	—	2	—	—
Spicules	—	5	—	Tr



SITE 798 HOLE A CORE 6H CORED INTERVAL 949.3-958.8 mbsl; 46.2-55.7 mbsf

TIME-ROCK UNIT: QUATERNARY

BIOSTRAT. ZONE/FOSSIL CHARACTER: A/M; F/P; F/M; C/M; B

FORAMINIFERS: CN15 / CN14b

NANNOFOSSILS

RADIOLARIANS: *Cycladophora davisiana*

DIATOMS: *Rhizosolenia curvirostris*

SILICOFLAGELLATES/EBRIDIANS

PALEOMAGNETICS: N — N

PHYS. PROPERTIES: ϕ=71.1, ρ=1.53; ϕ=69.2, ρ=1.55; ϕ=70.6, ρ=1.56; ϕ=73.2, ρ=1.53; ϕ=70.4, ρ=1.56; ϕ=69.9, ρ=1.56; ϕ=69.9, ρ=1.54

CHEMISTRY: %CaCO3=1.20, %TOC=1.40; %CaCO3=21.2, %TOC=2.44; %CaCO3=23.7, %TOC=1.56

SECTION: 1, 2, 3, 4, 5, 6, 7, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: OG, IW

LITHOLOGIC DESCRIPTION

CLAYEY CALCAREOUS SILICEOUS MIXED SEDIMENT, CLAYEY SILICEOUS CALCAREOUS OOZE and SILICEOUS SILTY CLAY

Major lithology: This core contains mainly CLAYEY SILICEOUS CALCAREOUS OOZE to CLAYEY CALCAREOUS SILICEOUS MIXED SEDIMENT in the upper part (Sections 1 and 2) and SILICEOUS SILTY CLAY in the lower part. These sediments are olive gray (5Y 5/3-5Y4/2) to gray (5Y5/1) or dark gray (5Y 4/1-5Y 3/2). Planar laminated sequences are present in Section 2 and in Sections 5 to 7. Normally graded beds are present in Sections 2 and 3. Bioturbated sediments commonly occur above the laminated segments, especially in Sections 1, 3, and 5.

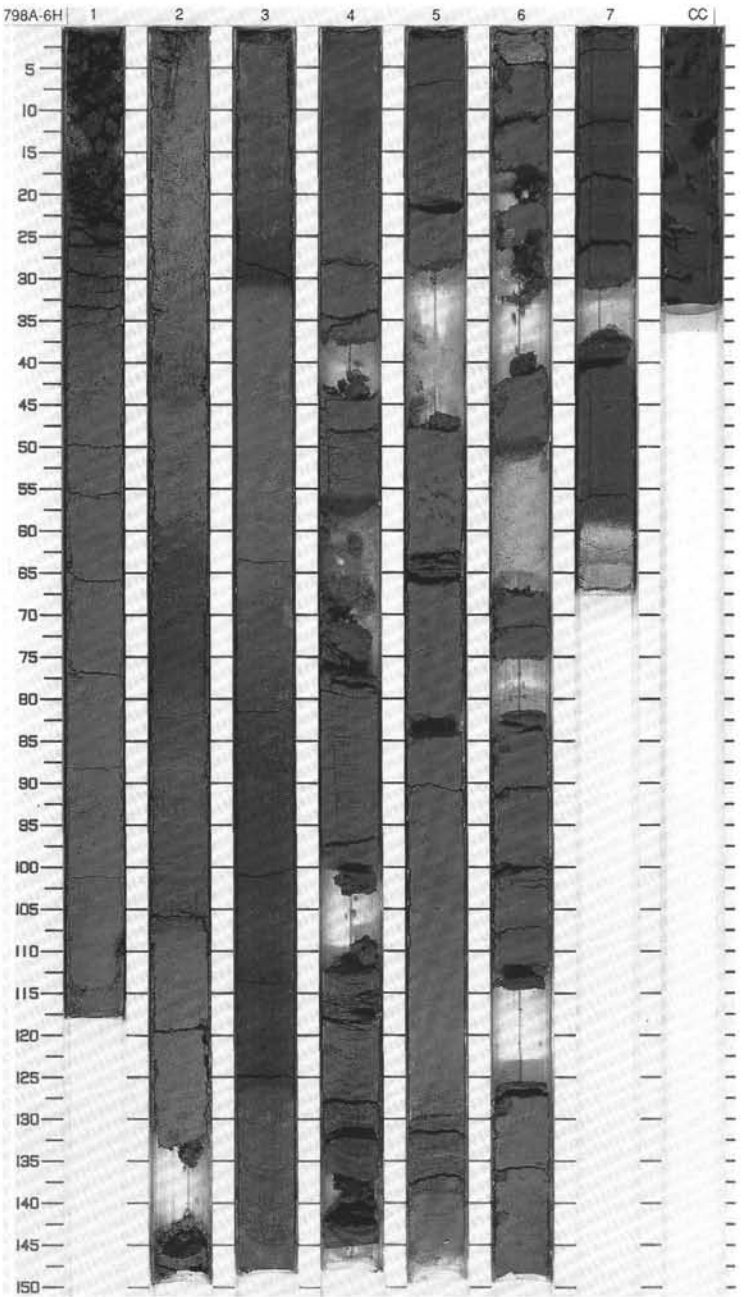
Minor lithology: Several VOLCANIC ASH layers occur in this core. Dark (5Y 4/1-5Y 3/1) basic ashes are present in Section 2, 106 cm; Section 5, 130 cm; and Section 6, 70 cm. Light gray (5Y 7/1-5Y 6/2) acidic ashes occur in Section 5, 145-148 cm; Section 6, 0-4 cm, 25 cm; and Section 7, 40 cm, 60-67 cm.

SMEAR SLIDE SUMMARY (%):

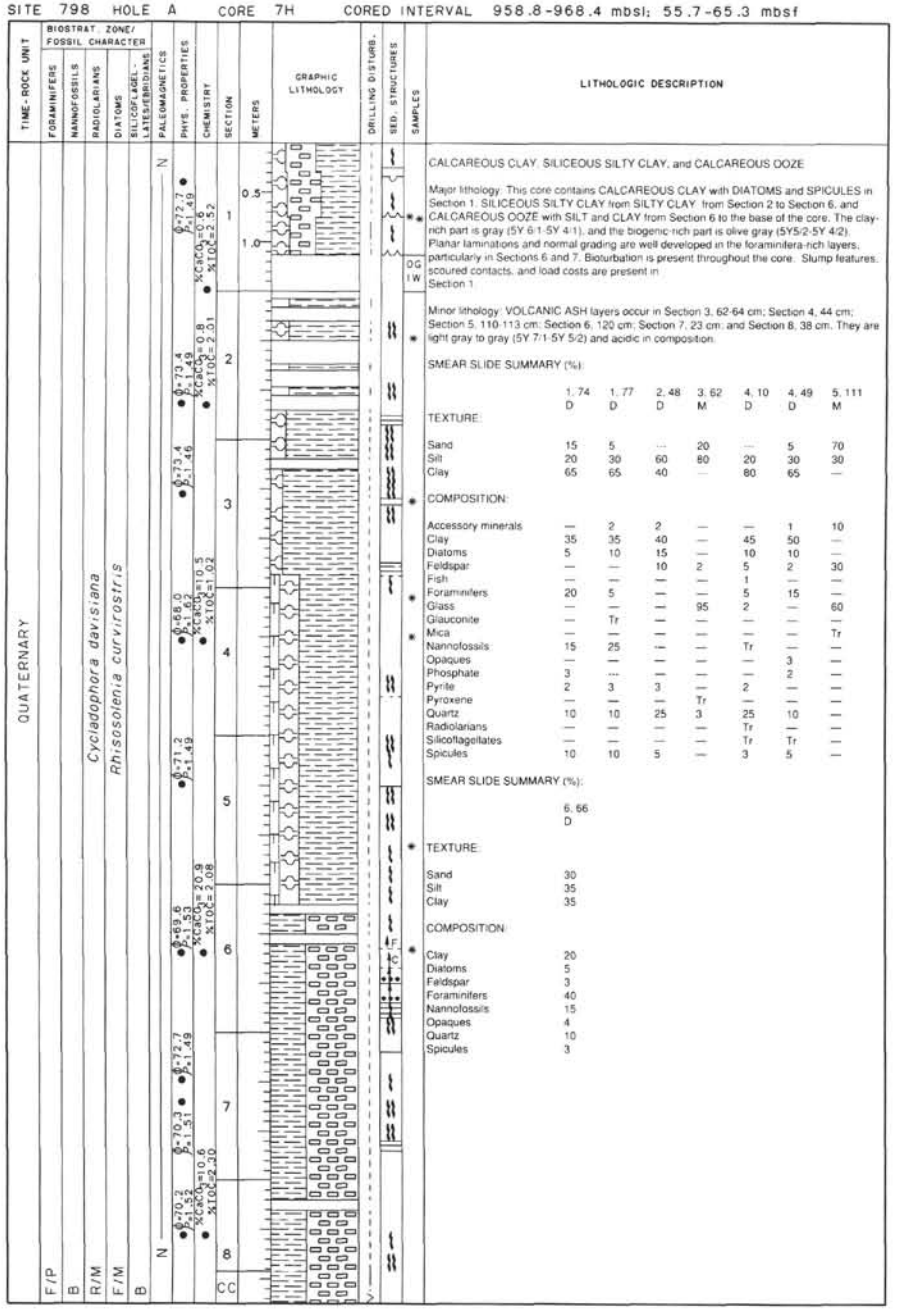
	1, 28 D	1, 97 D	2, 102 D	3, 35 D	3, 122 D	5, 105 D	5, 128 M
TEXTURE:							
Sand	10	5	10	5	---	2	20
Silt	40	15	50	20	40	45	60
Clay	50	80	40	75	60	53	20
COMPOSITION:							
Amphibole	—	—	—	—	—	—	5
Biotite	—	—	—	—	—	—	1
Clay	10	20	40	35	40	25	—
Diatoms	20	20	15	15	15	25	20
Feldspar	10	5	—	—	—	—	—
Fish	—	—	—	—	—	1	—
Foraminifers	15	5	10	15	5	—	2
Glass	—	—	—	—	—	—	55
Halite	—	—	—	—	—	13	—
Inorganic calcite	—	—	—	—	—	1	—
Nannofossils	20	25	10	20	10	—	—
Opaques	3	5	Tr	5	Tr	5	—
Plagioclase	—	—	—	—	—	—	7
Quartz	15	10	10	5	25	25	—
Silicoflagellates	2	—	—	—	Tr	—	Tr
Spicules	5	10	15	5	5	5	10

SMEAR SLIDE SUMMARY (%):

	6, 4 M	7, 45 D
TEXTURE:		
Sand	40	---
Silt	60	40
Clay	—	60
COMPOSITION:		
Accessory minerals	---	2
Calcite	—	10
Clay	---	30
Diatoms	—	25
Feldspar	—	5
Foraminifers	—	Tr
Glass	80	—
Plagioclas	17	—
Pyrite	—	5
Pyroxene	3	—
Quartz	—	10
Silicoflagellates	—	Tr
Spicules	Tr	10



SITE 798 HOLE A CORE 7H CORED INTERVAL 958.8-968.4 mbsl: 55.7-65.3 mbsf



LITHOLOGIC DESCRIPTION

CALCAREOUS CLAY, SILICEOUS SILTY CLAY, and CALCAREOUS OOZE

Major lithology. This core contains CALCAREOUS CLAY with DIATOMS and SPICULES in Section 1, SILICEOUS SILTY CLAY from SILTY CLAY. from Section 2 to Section 6, and CALCAREOUS OOZE with SILT and CLAY from Section 6 to the base of the core. The clay-rich part is gray (5Y 6/1-5Y 4/1), and the biogenic-rich part is olive gray (5Y5/2-5Y 4/2). Planar laminations and normal grading are well developed in the foraminifera-rich layers, particularly in Sections 6 and 7. Bioturbation is present throughout the core. Slump features, scoured contacts, and load costs are present in Section 1.

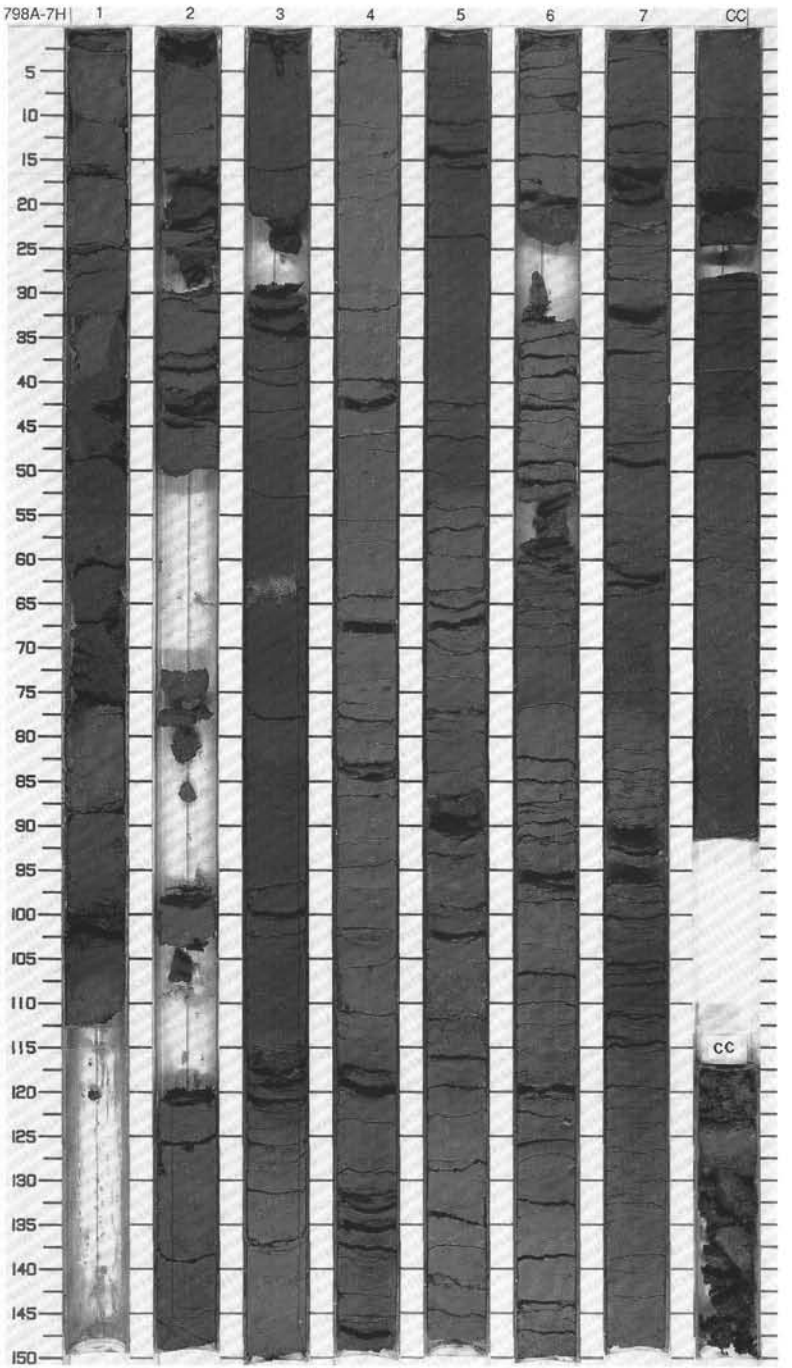
Minor lithology. VOLCANIC ASH layers occur in Section 3, 62-64 cm; Section 4, 44 cm; Section 5, 110-113 cm; Section 6, 120 cm; Section 7, 23 cm; and Section 8, 38 cm. They are light gray to gray (5Y 7/1-5Y 5/2) and acidic in composition.

SMEAR SLIDE SUMMARY (%):

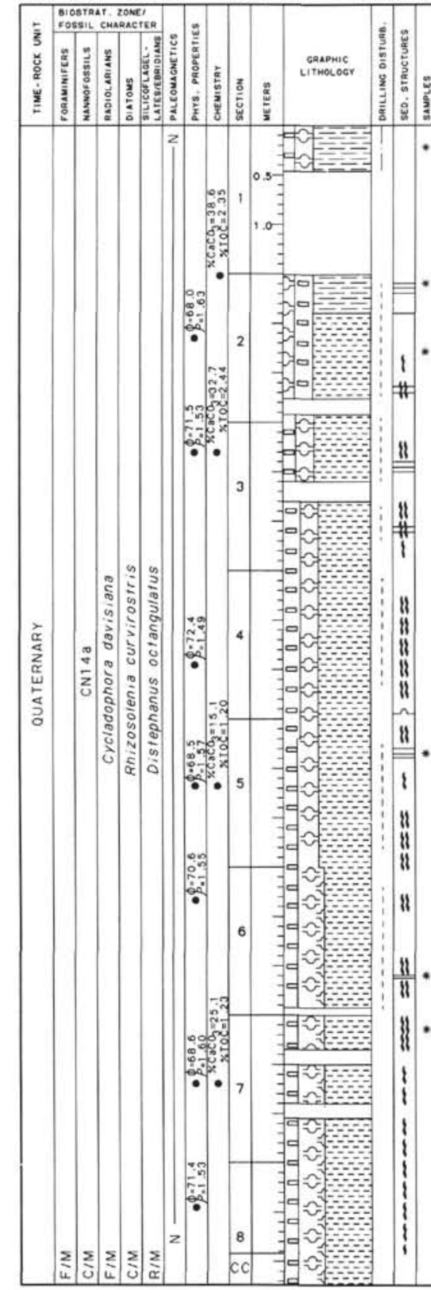
	1, 74 D	1, 77 D	2, 48 D	3, 62 M	4, 10 D	4, 49 D	5, 111 M
TEXTURE:							
Sand	15	5	---	20	---	5	70
Silt	20	30	60	80	20	30	30
Clay	65	65	40	---	80	65	---
COMPOSITION:							
Accessory minerals	---	2	2	---	---	1	10
Clay	35	35	40	---	45	50	---
Diatoms	5	10	15	---	10	10	---
Feldspar	---	---	10	2	5	2	30
Fish	---	---	---	---	1	---	---
Foraminifers	20	5	---	---	5	15	---
Glass	---	---	---	95	2	---	60
Glauconite	---	Tr	---	---	---	---	---
Mica	---	---	---	---	---	---	Tr
Nannofossils	15	25	---	---	Tr	---	---
Opaques	---	---	---	---	---	3	---
Phosphate	3	---	---	---	---	2	---
Pyrite	2	3	3	---	2	---	---
Pyroxene	---	---	---	Tr	---	---	---
Quartz	10	10	25	3	25	10	---
Radiolarians	---	---	---	---	Tr	---	---
Silicoflagellates	---	---	---	---	Tr	Tr	---
Spicules	10	10	5	---	3	5	---

SMEAR SLIDE SUMMARY (%):

	6, 66 D
TEXTURE:	
Sand	30
Silt	35
Clay	35
COMPOSITION:	
Clay	20
Diatoms	5
Feldspar	3
Foraminifers	40
Nannofossils	15
Opaques	4
Quartz	10
Spicules	3



SITE 798 HOLE A CORE 8H CORED INTERVAL 968.4-977.9 mbsl; 65.3-74.8 mbsf



LITHOLOGIC DESCRIPTION

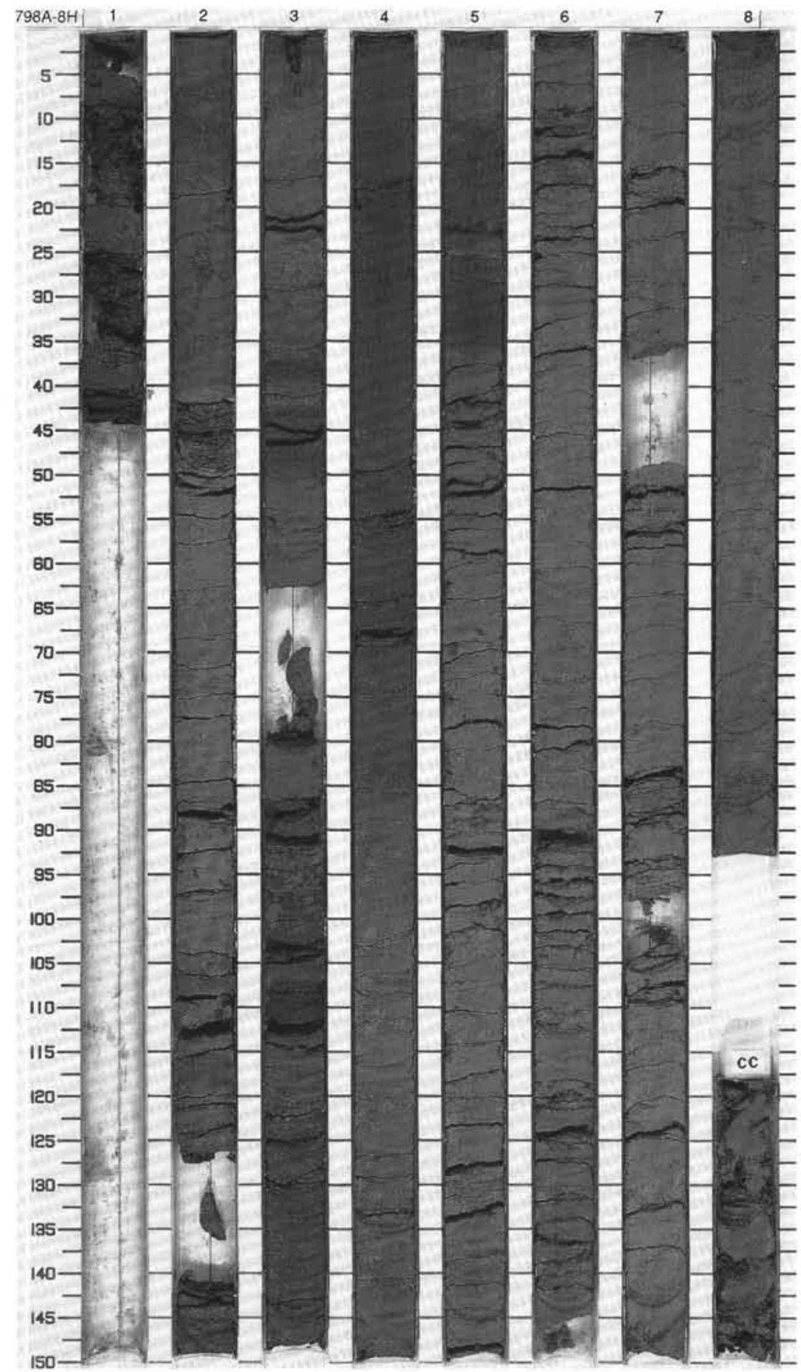
SILTY CLAY, CLAY to SILICEOUS CLAY, and SILICEOUS CLAYEY MIXED SEDIMENT

Major lithology: This core contains SILTY CLAY with DIATOMS and/or FORAMINIFERS from the top of the core to Section 2, 40 cm, CLAY with FORAMINIFERS and DIATOMS to SILICEOUS CLAY with FORAMINIFERS from Section 2, 40 cm through Section 5, and SILICEOUS CLAYEY MIXED SEDIMENT with NANNOFOSSILS or FORAMINIFERS and NANNOFOSSILS from Section 6 to the base. The clay is gray to olive gray (5Y 6/1, 5Y 5/1-5Y 5/2). The siliceous mixed sediment is olive gray (5Y 5/2- 5Y 4/2) to gray (5Y 5/1) or dark gray (5Y 4/1) where silty. The sediments are planar laminated in some places and highly bioturbated in others.

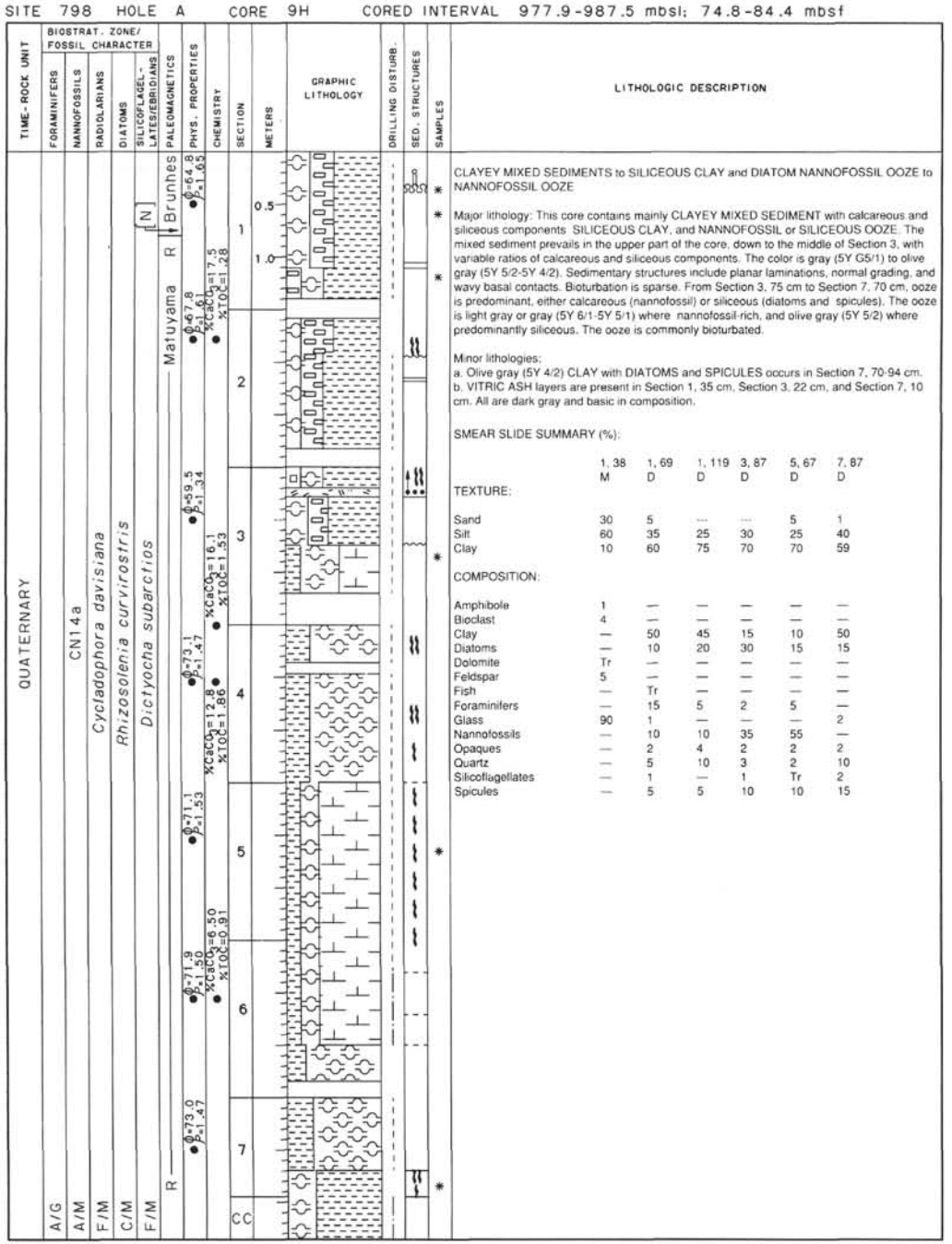
Minor lithology: A few thin VOLCANIC ASH layers occur in Section 3, 105 cm and Section 5, 21 and 25 cm.

SMEAR SLIDE SUMMARY (%):

	1, 21 D	2, 10 D	2, 79 D	5, 34 D	6, 109 D	7, 113 D
TEXTURE:						
Sand	1	5	15	10	—	10
Silt	45	35	15	40	40	40
Clay	54	60	70	50	60	50
COMPOSITION:						
Accessory minerals	1	—	Tr	—	—	—
Clay	50	40	60	50	40	40
Diatoms	15	10	5	15	15	20
Feldspar	2	—	—	—	3	—
Fish	—	—	Tr	—	—	—
Foraminifers	5	5	15	10	5	10
Glass	—	10	2	—	—	—
Nannofossils	5	10	5	5	10	10
Opaques	2	3	1	3	2	3
Phosphate	—	—	—	5	—	—
Quartz	15	15	5	2	10	2
Silicoflagellates	1	—	—	—	Tr	2
Spicules	2	5	5	10	15	10



SITE 798 HOLE A CORE 9H CORED INTERVAL 977.9-987.5 mbsl; 74.8-84.4 mbsf



LITHOLOGIC DESCRIPTION

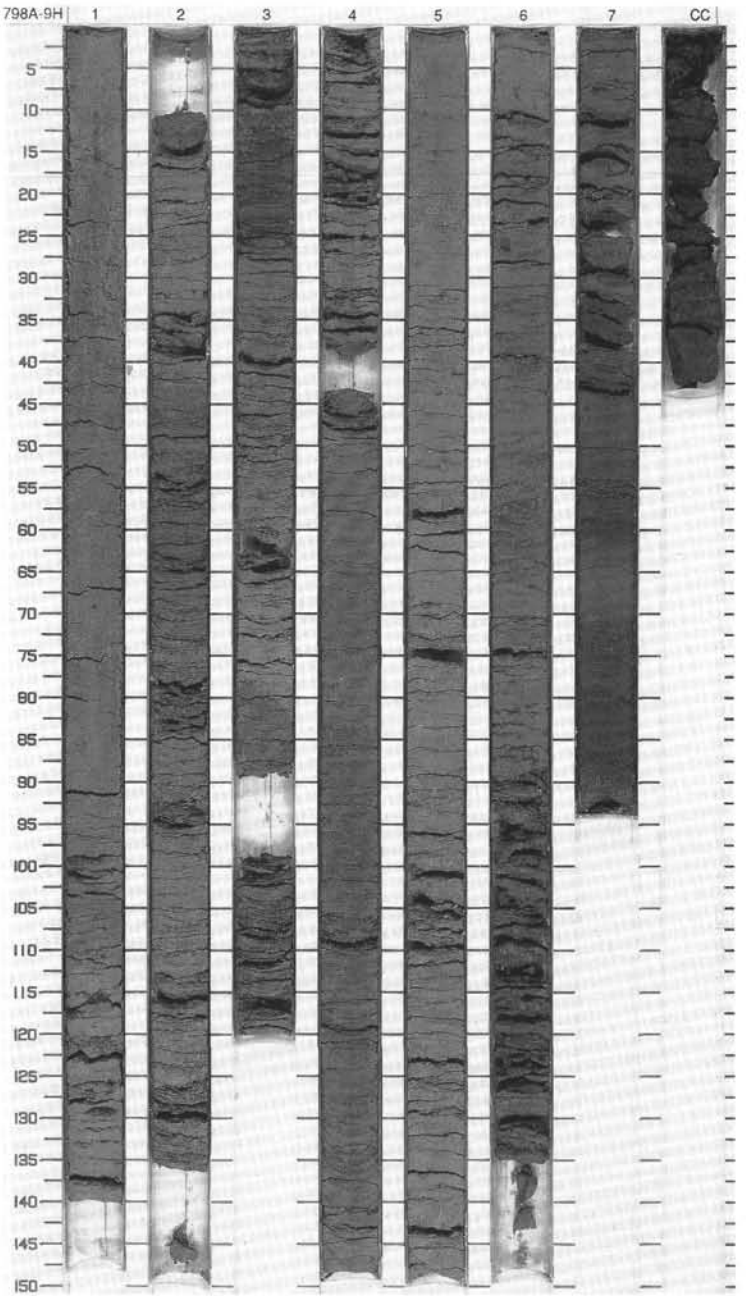
CLAYEY MIXED SEDIMENTS to SILICEOUS CLAY and DIATOM NANNOFOSSIL OOZE to NANNOFOSSIL OOZE

Major lithology: This core contains mainly CLAYEY MIXED SEDIMENT with calcareous and siliceous components SILICEOUS CLAY, and NANNOFOSSIL or SILICEOUS OOZE. The mixed sediment prevails in the upper part of the core, down to the middle of Section 3, with variable ratios of calcareous and siliceous components. The color is gray (5Y G5/1) to olive gray (5Y 5/2-5Y 4/2). Sedimentary structures include planar laminations, normal grading, and wavy basal contacts. Bioturbation is sparse. From Section 3, 75 cm to Section 7, 70 cm, ooze is predominant, either calcareous (nannofossil) or siliceous (diatoms and spicules). The ooze is light gray or gray (5Y 6/1-5Y 5/1) where nannofossil-rich, and olive gray (5Y 5/2) where predominantly siliceous. The ooze is commonly bioturbated.

Minor lithologies:
a. Olive gray (5Y 4/2) CLAY with DIATOMS and SPICULES occurs in Section 7, 70-94 cm.
b. VITRIC ASH layers are present in Section 1, 35 cm, Section 3, 22 cm, and Section 7, 10 cm. All are dark gray and basic in composition.

SMEAR SLIDE SUMMARY (%):

	1, 38 M	1, 69 D	1, 119 D	3, 87 D	5, 67 D	7, 87 D
TEXTURE:						
Sand	30	5	---	---	5	1
Silt	60	35	25	30	25	40
Clay	10	60	75	70	70	59
COMPOSITION:						
Amphibole	1	—	—	—	—	—
Bioclast	4	—	—	—	—	—
Clay	—	50	45	15	10	50
Diatoms	—	10	20	30	15	15
Dolomite	Tr	—	—	—	—	—
Feldspar	5	—	—	—	—	—
Fish	—	Tr	—	—	—	—
Foraminifers	—	15	5	2	5	—
Glass	90	1	—	—	—	2
Nannofossils	—	10	10	35	55	—
Opaques	—	2	4	2	2	2
Quartz	—	5	10	3	2	10
Silicoflagellates	—	1	—	1	Tr	2
Spicules	—	5	5	10	10	15



SITE 798 HOLE A CORE 10H CORED INTERVAL 987.5-997.2 mbsl; 84.4-94.1 mbsf

TIME-ROCK UNIT: QUATERNARY

BIOSTRAT. ZONE/FOSSIL CHARACTER: C/M; C/P; R/M; F/M; R/M

FORAMINIFERS: CN14a

NANNOFOSSILS: *Cyclococcolithina davisiana*

RADIOLARIANS: *Rhizosolenia curvirostris*

DIATOMS: *Dictyocha subarctios*

SILICOFLAGELLATES/EBRIDIANS

PALEOMAGNETICS: N — Jaramillo — R

PHYS. PROPERTIES: ϕ=68.3, P=1.60; ϕ=70.4, P=1.60; ϕ=72.7, P=1.47; ϕ=74.8, P=1.45; ϕ=69.1, P=1.55; ϕ=73.4, P=1.44; ϕ=76.1, P=1.46; ϕ=72.6, P=1.49

CHEMISTRY: %CaCO3=1.92, %TOC=2.35; %CaCO3=2.20, %TOC=1.82; %CaCO3=0.9, %TOC=3.06; %CaCO3=2.90, %TOC=3.81; %CaCO3=2.30, %TOC=4.22

SECTION: 1 2 3 4 5 6 7 8 CC

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

LITHOLOGIC DESCRIPTION

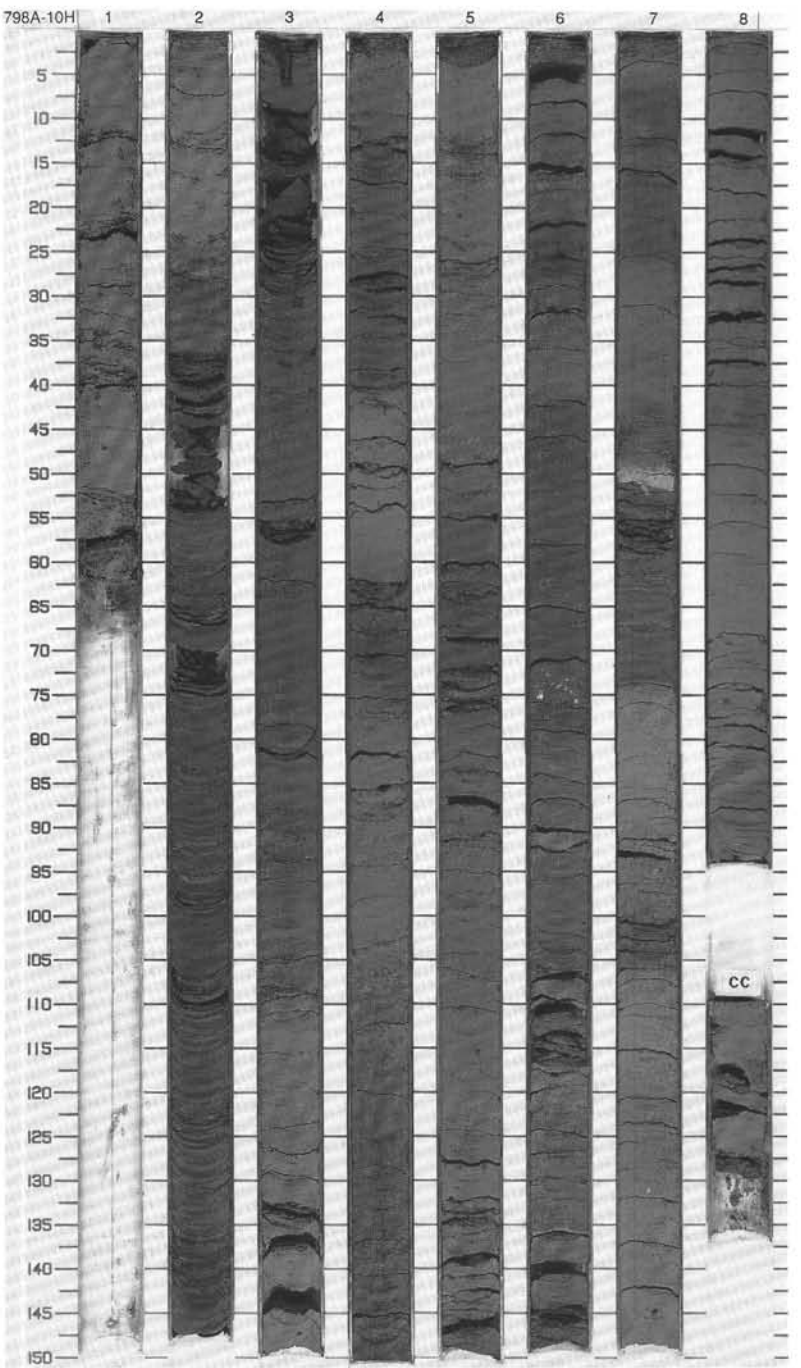
CLAYEY MIXED SEDIMENT, SILICEOUS CLAY, and NANNOFOSSIL OOZE with FORAMINIFERS, DIATOMS, and CLAY

Major lithology: This core contains mainly CLAYEY MIXED SEDIMENT with diatoms, nannofossils, sponge spicules, and foraminifers in variable ratios grading into SILICEOUS CLAY. From the top of Section 2 to Section 7, 74 cm, the sediments are olive gray (5Y 5/2-5Y 4/2) to dark gray (5Y 4/1). At the boundary between Sections 3 and 4, the mixed sediment is richer in calcareous components. Planar laminations are present in the silica-rich parts. Sediments in Section 1 and in Section 7, 74 cm through the core catcher are gray to olive gray (5Y 6/1-5Y 5/2) NANNOFOSSIL OOZE with FORAMINIFERS, DIATOMS, and CLAY. Some calcareous layers show normal grading. All sediments are bioturbated in places.

Minor lithology: Two vitric VOLCANIC ASH layers occur in the lower part of this core. An acidic light gray ash is present in Section 7, 49-51 cm, and a basic dark gray ash is present in Section 7, 66 cm.

SMEAR SLIDE SUMMARY (%):

	1, 47 D	3, 19 D	3, 130 D	3, 148 D	5, 114 D	7, 145 D
TEXTURE						
Sand	5	5	—	2	1	1
Silt	45	35	25	60	50	25
Clay	50	60	75	38	49	74
COMPOSITION:						
Clay	20	60	63	30	45	10
Diatoms	20	25	—	10	30	10
Fish	Tr	Tr	—	Tr	—	Tr
Foraminifers	5	Tr	1	20	—	10
Glass	—	—	—	2	—	—
Glauconite	—	—	—	—	Tr	—
Nannofossils	30	—	5	10	2	55
Opaques	—	—	—	1	—	—
Pyrite	1	1	1	—	1	3
Quartz	3	3	25	10	5	5
Radiolarians	—	—	Tr	—	—	—
Silicoflagellates	2	1	Tr	1	1	1
Spicules	15	10	5	15	15	5



TIME-ROCK UNIT: QUATERNARY

BIOSTRAT. ZONE/FOSSIL CHARACTER:
- FORAMINIFERS: A/M; F/P; B; C/M; R/M
- NANNOFOSSILS: CN13b; CN14b
- RADIOLARIANS: *Actinocyclus oculatus*; *Dictyocha subarctios*
- DIATOMS
- SILICOFLAGELLATES/EBRIDIANS
- PALEOMAGNETICS: N; N; R; N
- PHYS. PROPERTIES: ϕ= 68.6, ρs= 1.61; ϕ= 66.6, ρs= 1.65; ϕ= 70.6, ρs= 1.51; ϕ= 74.0, ρs= 1.47; ϕ= 69.2, ρs= 1.58; ϕ= 72.9, ρs= 1.43; ϕ= 77.6, ρs= 1.37
- CHEMISTRY: %CaCO3= 15.6, %TOC= 1.13; %CaCO3= 7.0, %TOC= 3.45; %CaCO3= 10.7, %TOC= 4.75; %CaCO3= 0.7, %TOC= 5.44
- SECTION: 1, 2, 3, 4, 5, 6, 7, CC
- METERS: 0.5, 1.0
- GRAPHIC LITHOLOGY
- DRILLING DISTURB.
- SED. STRUCTURES
- SAMPLES: *

LITHOLOGIC DESCRIPTION

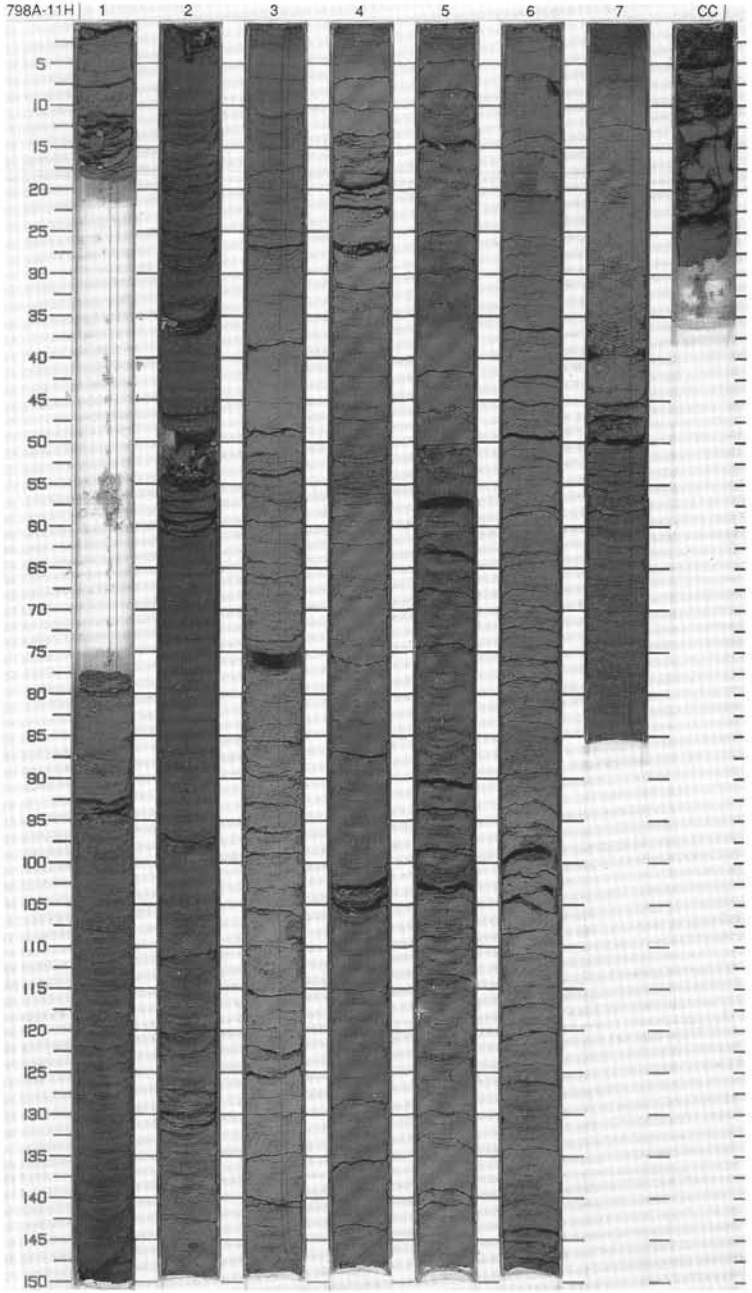
CLAY and NANNOFOSSIL CLAY

Major lithology: Sections 1 to 5 of this core contain mainly CLAY with NANNOFOSSILS and/or DIATOMS, ranging in color from light gray (5Y 6/1) to olive gray (5Y 5/2-5Y 4/2), darker where diatom-rich, lighter where nannofossil-rich. Section 6, 90-150 cm contains gray (5Y6/1) NANNOFOSSIL CLAY with DIATOMS, whereas in Sections 1-2 the calcareous component is negligible. Sedimentary structures include planar laminations and bioturbation.

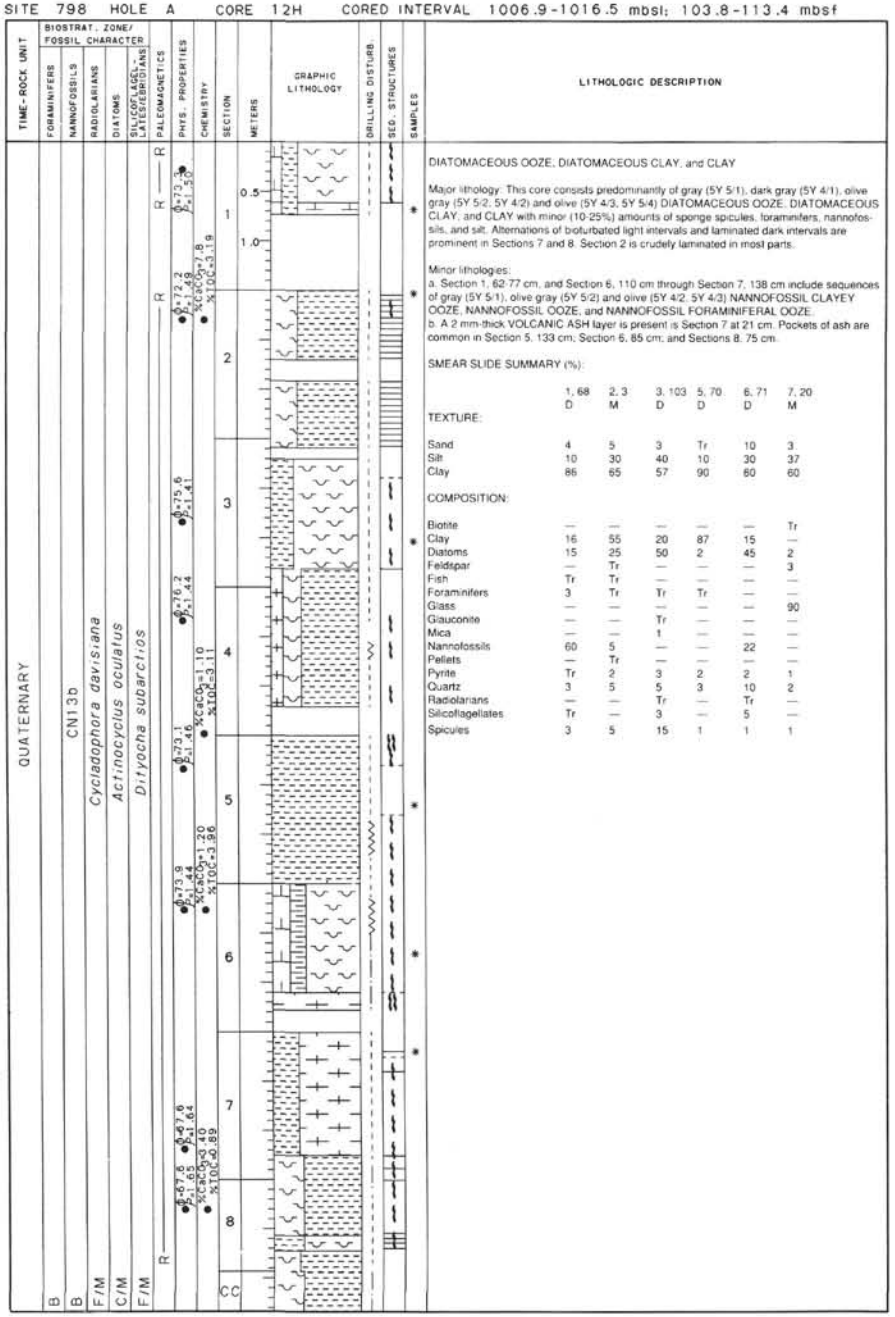
Minor lithologies:
a. In Section 3, 10-36 cm, there is an interval of olive gray (5Y 5/2-5Y 4/2) CLAYEY NANNOFOSSIL OOZE with DIATOMS and FORAMINIFERS. From Section 7, 46 cm, through the core catcher, an olive (5Y 4/4) DIATOM OOZE with CLAY and NANNOFOSSILS is present. These sediments are extensively planar laminated.
b. In addition to some ash pods, a thin VITRIC ASH layer occurs in Section 6, 30 cm.

SMEAR SLIDE SUMMARY (%):

	2, 90 D	3, 26 D	3, 90 D	6, 103 D	7, 72 D
TEXTURE:					
Sand	1	10	2	1	10
Silt	24	40	33	35	45
Clay	75	50	65	64	45
COMPOSITION:					
Clay	75	35	60	55	15
Diatoms	15	10	10	10	70
Fish	Tr	Tr	Tr	Tr	—
Foraminifers	—	10	1	1	2
Glass	—	—	Tr	—	—
Glauconite	Tr	—	—	—	—
Nannofossils	—	40	20	25	10
Pyrite	2	2	3	3	2
Quartz	3	1	3	5	1
Radiolarians	—	Tr	—	—	—
Silicoflagellates	Tr	Tr	—	—	—
Spicules	5	2	2	1	—



SITE 798 HOLE A CORE 12H CORED INTERVAL 1006.9-1016.5 mbsl; 103.8-113.4 mbsf



LITHOLOGIC DESCRIPTION

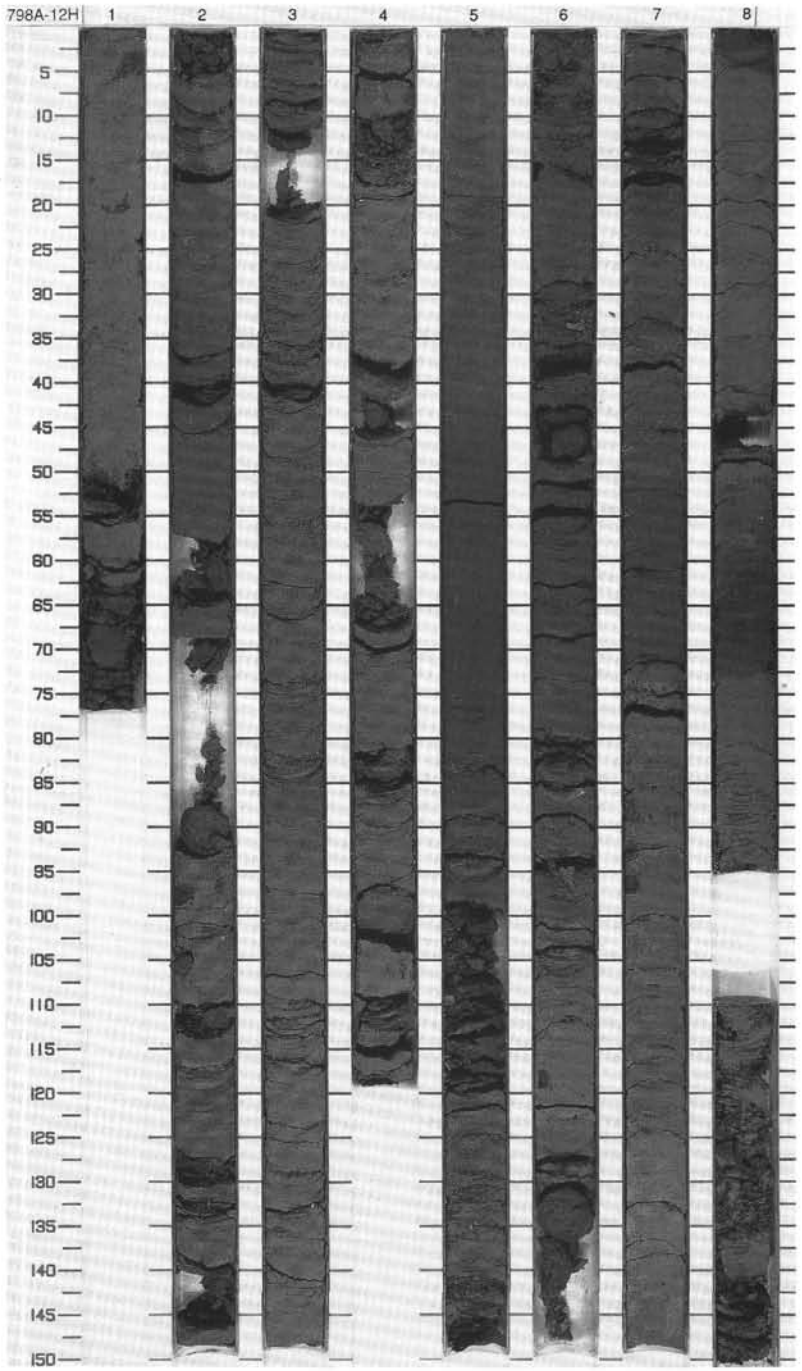
DIATOMACEOUS OOZE, DIATOMACEOUS CLAY, and CLAY

Major lithology: This core consists predominantly of gray (5Y 5/1), dark gray (5Y 4/1), olive gray (5Y 5/2, 5Y 4/2) and olive (5Y 4/3, 5Y 5/4) DIATOMACEOUS OOZE, DIATOMACEOUS CLAY, and CLAY with minor (10-25%) amounts of sponge spicules, foraminifers, nannofossils, and silt. Alternations of bioturbated light intervals and laminated dark intervals are prominent in Sections 7 and 8. Section 2 is crudely laminated in most parts.

Minor lithologies:
a. Section 1, 62-77 cm, and Section 6, 110 cm through Section 7, 138 cm include sequences of gray (5Y 5/1), olive gray (5Y 5/2) and olive (5Y 4/2, 5Y 4/3) NANNOFOSSIL CLAYEY OOZE, NANNOFOSSIL OOZE, and NANNOFOSSIL FORAMINIFERAL OOZE.
b. A 2 mm-thick VOLCANIC ASH layer is present is Section 7 at 21 cm. Pockets of ash are common in Section 5, 133 cm; Section 6, 85 cm; and Sections 8, 75 cm.

SMEAR SLIDE SUMMARY (%):

	1, 68 D	2, 3 M	3, 103 D	5, 70 D	6, 71 D	7, 20 M
TEXTURE:						
Sand	4	5	3	Tr	10	3
Silt	10	30	40	10	30	37
Clay	86	65	57	90	60	60
COMPOSITION:						
Biotite	—	—	—	—	—	Tr
Clay	16	55	20	87	15	—
Diatoms	15	25	50	2	45	2
Feldspar	—	Tr	—	—	—	3
Fish	Tr	Tr	—	—	—	—
Foraminifers	3	Tr	Tr	Tr	—	—
Glass	—	—	—	—	—	90
Glauconite	—	—	Tr	—	—	—
Mica	—	—	1	—	—	—
Nannofossils	60	5	—	—	22	—
Pellets	—	Tr	—	—	—	—
Pyrite	Tr	2	3	2	2	1
Quartz	3	5	5	3	10	2
Radiolarians	—	—	Tr	—	Tr	—
Silicoflagellates	Tr	—	3	—	5	—
Spicules	3	5	15	1	1	1



SITE 798 HOLE A CORE 13H CORED INTERVAL 1016.5-1026.2 mbsl; 113.4-123.1 mbsf

TIME-ROCK UNIT: QUATERNARY

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS A/M; NANNOFOSSILS A/M; CN13b; RADIOLARIANS R/M; *Cycladophora davisiana*; DIATOMS C/M; *Actinocyclus oculatus*; SILICOFLAGELLATES/EBRIDIANS F/M; *Dictyocha subarctios*

PALEOMAGNETICS: R

PHYS. PROPERTIES: ●ϕ=69.1 ρ=1.61; ●ϕ=73.0 ρ=1.50; ●ϕ=72.7 ρ=1.47; ●ϕ=72.1 ρ=1.56; ●ϕ=66.5 ρ=1.64; ●ϕ=60.7 ρ=1.74; ●ϕ=73.6 ρ=1.47

CHEMISTRY: ●%$CaCO_3$=4.80 %TOC=2.31; ●%$CaCO_3$=11.6 %TOC=2.56; ●%$CaCO_3$=12.7 %TOC=1.89; ●%$CaCO_3$=3.80 %TOC=0.96

SECTION: 1 2 3 4 5 6 7 CC

METERS: 0.5; 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

LITHOLOGIC DESCRIPTION

SILTY CLAY with DIATOMS, SILICEOUS CLAY, DIATOM MIXED SEDIMENT with CLAY, CLAYEY DIATOM OOZE, and DIATOM OOZE with NANNOFOSSILS

Major lithology: This core contains SILTY CLAY with DIATOMS, SILICEOUS CLAY, DIATOM MIXED SEDIMENT with CLAY, CLAYEY DIATOM OOZE, and DIATOM OOZE with NANNOFOSSILS. The color varies from gray (5Y 5/1) to dark gray (5Y 4/1) and olive gray (5Y 5/2-5Y 4/2). Sedimentary structures include planar laminations and bioturbated intervals. Water escape structures occur in Sections 6 and 7.

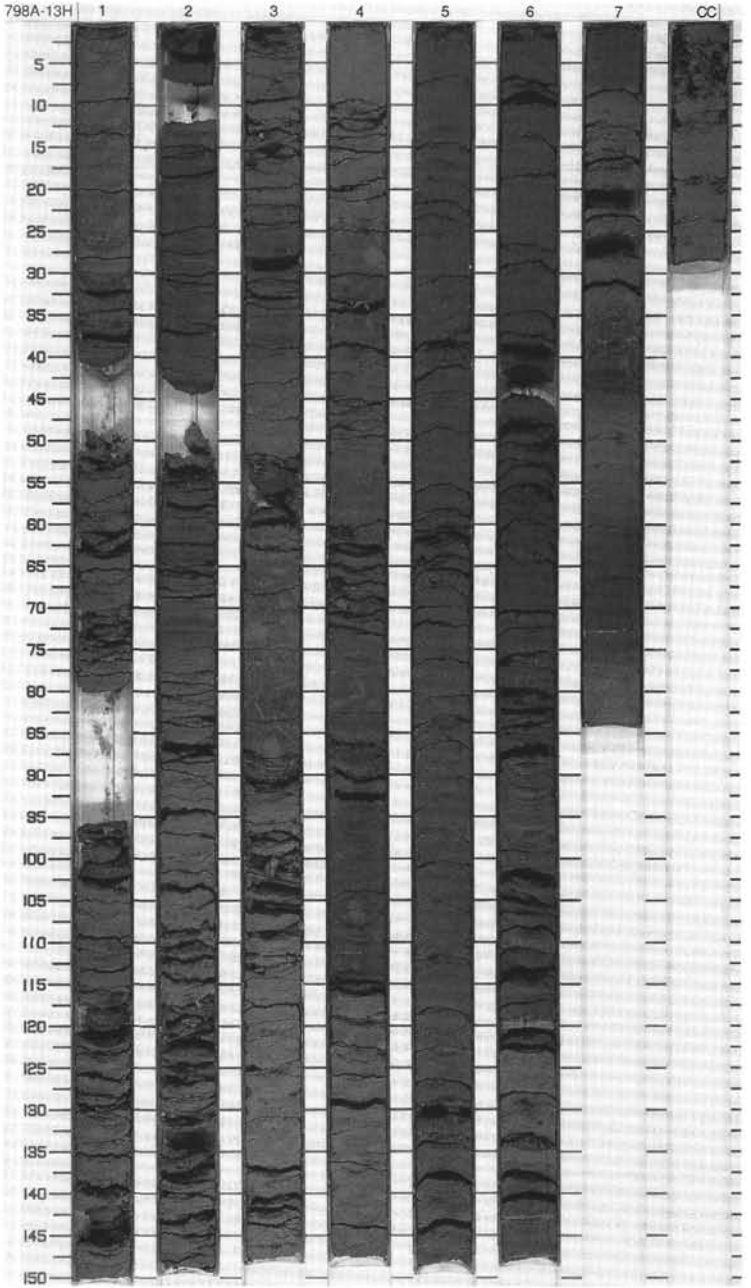
Minor lithologies:
a. A layer of gray (5Y 4/2) CLAYEY NANNOFOSSIL OOZE with DIATOMS and SPICULES, exhibiting normal grading, occurs in Section 4, 96-117 cm.
b. Vitric VOLCANIC ASH layers occur in Section 4, 112 cm; Section 6, 120-121, 143, and 148 cm; and Section 7, 38, and 72 cm.

SMEAR SLIDE SUMMARY (%):

	1, 102 D	2, 28 M	2, 61 D	2, 127 M	2, 135 M	2, 136 D	3, 84 D
TEXTURE:							
Sand	2	1	—	3	5	---	10
Silt	15	10	15	25	15	5	90
Clay	83	89	85	72	80	95	—
COMPOSITION:							
Clay	15	—	21	—	30	13	15
Diatoms	50	1	30	1	35	40	50
Feldspar	—	3	—	8	—	—	—
Fish	Tr	—	3	—	—	—	—
Foraminifers	3	—	5	Tr	—	—	5
Glass	1	96	10	90	5	5	—
Mica	—	Tr	—	—	—	—	—
Nannofossils	15	—	—	—	5	10	20
Opaques	—	—	—	—	—	15	—
Phosphate	—	—	1	—	—	—	—
Pyrite	1	—	15	Tr	—	—	—
Pyroxene	—	Tr	—	—	—	—	—
Quartz	10	—	15	—	15	15	5
Radiolarians	Tr	—	—	Tr	Tr	Tr	—
Silicoflagellates	Tr	Tr	—	Tr	Tr	Tr	Tr
Spicules	5	Tr	Tr	1	5	Tr	3

SMEAR SLIDE SUMMARY (%):

	4, 110 M	6, 119 M	6, 130 D	6, 142 M	6, 148 M
TEXTURE:					
Sand	5	3	—	3	5
Silt	75	77	60	82	85
Clay	20	20	40	15	10
COMPOSITION:					
Accessory minerals	—	—	—	Tr	—
Amphibole	Tr	—	—	—	—
Clay	—	—	35	—	—
Diatoms	1	—	8	—	Tr
Feldspar	15	2	10	3	8
Foraminifers	Tr	—	—	—	—
Glass	83	97	10	95	90
Mica	—	—	—	—	Tr
Pyrite	1	—	4	—	2
Quartz	—	1	30	2	—
Silicoflagellates	—	—	1	—	—
Spicules	Tr	—	2	—	—



SITE 798 HOLE A CORE 14H CORED INTERVAL 1026.2-1035.9 mbsl; 123.1-132.8 mbsf

TIME-ROCK UNIT: QUATERNARY

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS R/G; NANNOFOSSILS B; RADIOLARIANS R/M; DIATOMS *Cycladophora davisiana* F/P; SILICOFLAGELLATES/EBRIDIANS *Actinocyclus oculatus* R/M; PALEOMAGNETICS *Dictyocha subarctios* R

PHYS. PROPERTIES: ϕ=75.7, ρ=1.48, %CaCO3=4.20, %TOC=1.84; ϕ=71.5, ρ=1.51; ϕ=67.2, ρ=1.61, %CaCO3=14.9, %TOC=1.28; ϕ=66.7, ρ=1.64; ϕ=69.0, ρ=1.58, %CaCO3=9.00, %TOC=2.11; ϕ=73.2, ρ=1.51; ϕ=71.3, ρ=1.61, %CaCO3=11.2, %TOC=2.42; ϕ=67.2, ρ=1.44

CHEMISTRY

SECTION: 1, 2, 3, 4, 5, 6, 7, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

LITHOLOGIC DESCRIPTION

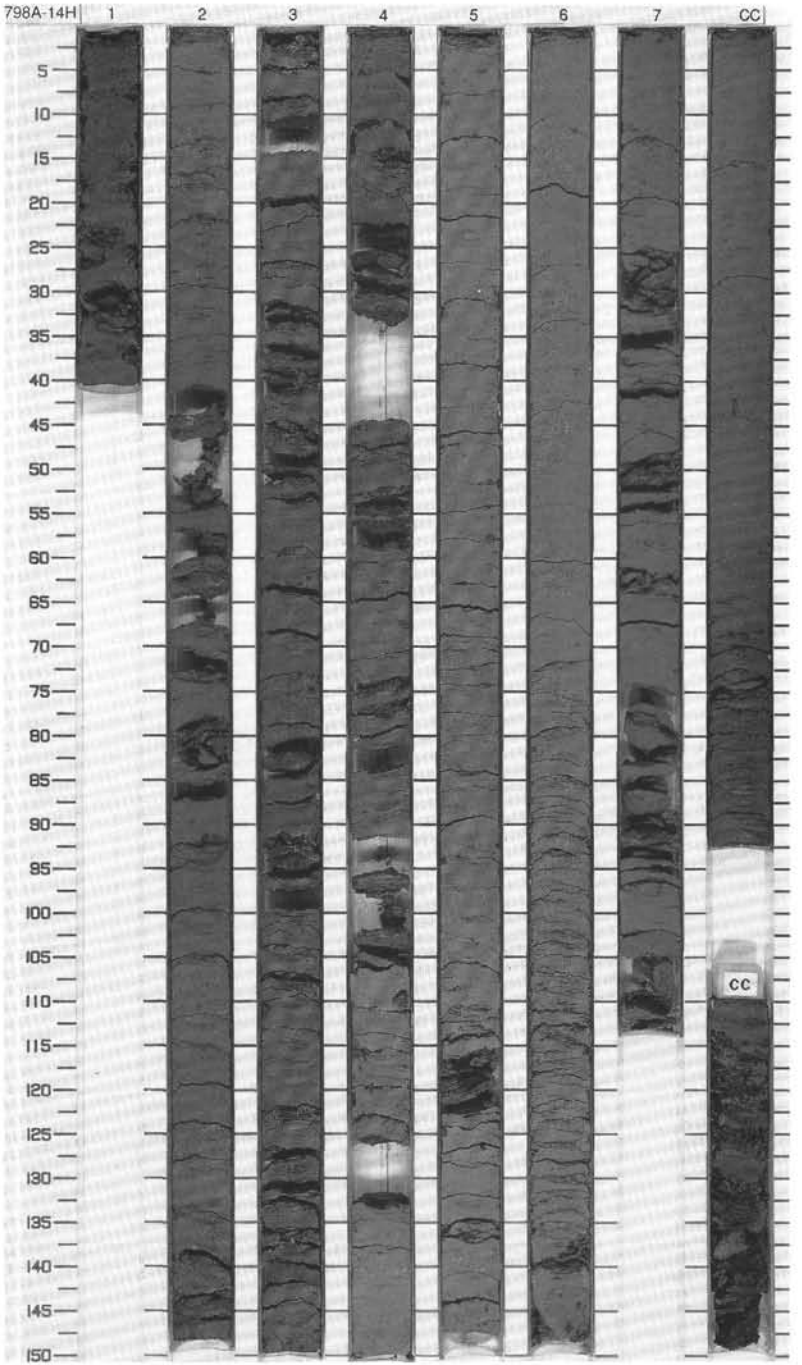
SILICEOUS OOZE, DIATOM OOZE, DIATOM NANNOFOSSIL OOZE, and NANNOFOSSIL CLAYEY MIXED SEDIMENT

Major lithology: This core contains oozes enriched in biosiliceous or biocalcareous components, SILICEOUS OOZE, DIATOM OOZE, DIATOM NANNOFOSSIL OOZE with CLAY, FORAMINIFERS, and SPICULES, and NANNOFOSSIL CLAYEY MIXED SEDIMENT with FORAMINIFERS and DIATOMS. The upper part of the core from Sections 1 through 5 is predominantly biosiliceous, commonly bioturbated, and is gray (5Y 5/1) and olive gray (5Y 5/2-5Y 4/2) to dark gray (5Y 4/1). Sections 6 through 8 are enriched in biocalcareous components and the terrigenous fraction is more silty. The color is gray to olive gray (5Y 5/1-5Y 5/2).

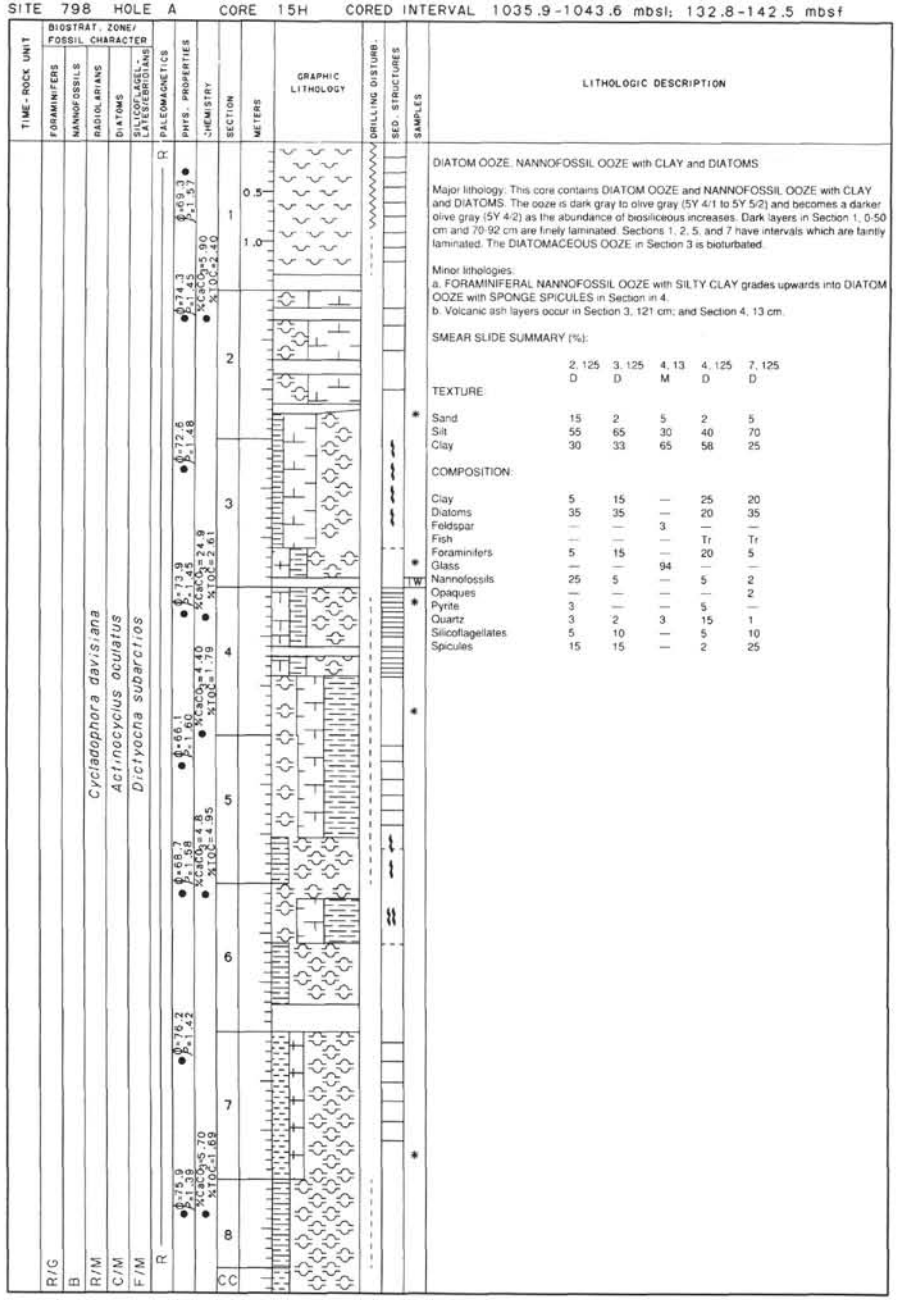
Minor lithology: VOLCANIC ASH pockets occur in Section 2.

SMEAR SLIDE SUMMARY (%):

	2, 110 D	2, 135 M	2, 138 M	4, 110 D	6, 110 D	8, 25 D
TEXTURE:						
Sand	10	10	50	—	—	5
Silt	65	15	50	65	40	40
Clay	25	75	—	35	60	55
COMPOSITION:						
Amphibole	—	5	25	—	—	—
Clay	—	—	—	20	30	10
Diatoms	40	Tr	3	35	15	25
Feldspar	—	14	—	—	—	—
Fish	Tr	—	—	—	Tr	Tr
Foraminifers	5	Tr	—	5	10	10
Glass	Tr	80	40	2	1	—
Glauconite	—	—	—	Tr	—	—
Nannofossils	20	—	—	2	25	40
Opaques	3	—	—	—	2	1
Pyrite	—	1	—	—	—	—
Quartz	5	—	30	10	10	3
Silicoflagellates	5	—	Tr	2	—	—
Spicules	20	—	2	20	5	10
Zircon	—	Tr	—	—	—	—



SITE 798 HOLE A CORE 15H CORED INTERVAL 1035.9-1043.6 mbsl; 132.8-142.5 mbsf



LITHOLOGIC DESCRIPTION

DIATOM OOZE, NANNOFOSSIL OOZE with CLAY and DIATOMS

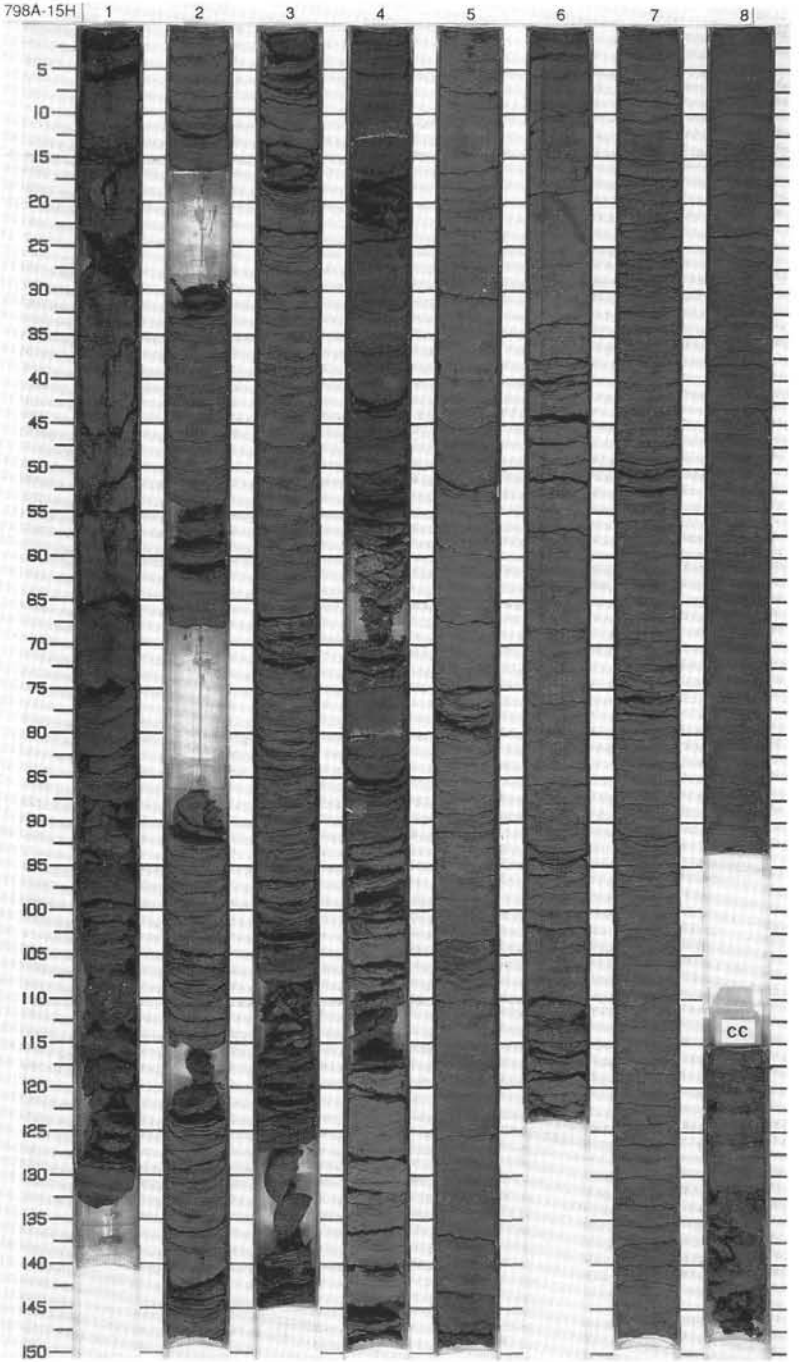
Major lithology: This core contains DIATOM OOZE and NANNOFOSSIL OOZE with CLAY and DIATOMS. The ooze is dark gray to olive gray (5Y 4/1 to 5Y 5/2) and becomes a darker olive gray (5Y 4/2) as the abundance of biosiliceous increases. Dark layers in Section 1, 0-50 cm and 70-92 cm are finely laminated. Sections 1, 2, 5, and 7 have intervals which are faintly laminated. The DIATOMACEOUS OOZE in Section 3 is bioturbated.

Minor lithologies:
a. FORAMINIFERAL NANNOFOSSIL OOZE with SILTY CLAY grades upwards into DIATOM OOZE with SPONGE SPICULES in Section in 4.
b. Volcanic ash layers occur in Section 3, 121 cm; and Section 4, 13 cm.

SMEAR SLIDE SUMMARY (%):

	2, 125 D	3, 125 D	4, 13 M	4, 125 D	7, 125 D
TEXTURE:					
Sand	15	2	5	2	5
Silt	55	65	30	40	70
Clay	30	33	65	58	25
COMPOSITION:					
Clay	5	15	—	25	20
Diatoms	35	35	—	20	35
Feldspar	—	—	3	—	—
Fish	—	—	—	Tr	Tr
Foraminifers	5	15	—	20	5
Glass	—	—	94	—	—
Nannofossils	25	5	—	5	2
Opaques	—	—	—	—	2
Pyrite	3	—	—	5	—
Quartz	3	2	3	15	1
Silicoflagellates	5	10	—	5	10
Spicules	15	15	—	2	25

798A 16X NO RECOVERY



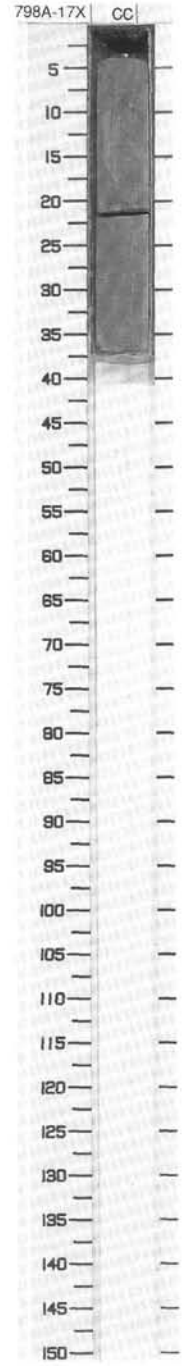
SITE 798 HOLE A CORE 17X CORED INTERVAL 1043.6-1046.4 mbsl; 143.0-143.3 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
		B				R			CC					#	DOLOMITE cemented SILICEOUS OOZE

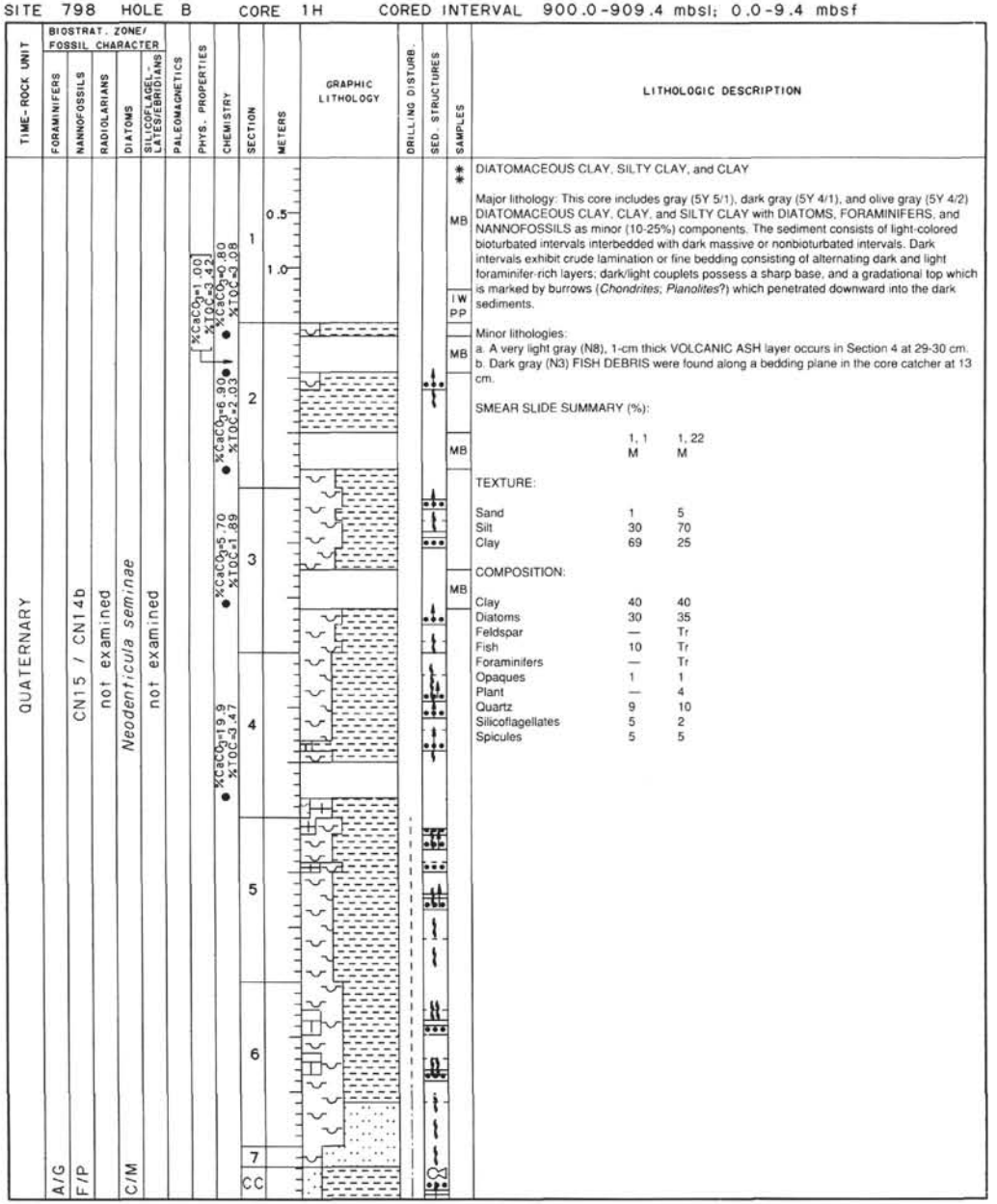
Major lithology: This core contains only 35 cm of DOLOMITE cemented SILICEOUS OOZE. Bioturbation features are extensive and include 0.5 cm to 1.5 cm long burrows. The DOLOMITE is light gray (5Y 7/3) to pale yellow (5Y 7/2), and olive gray (5Y 5/2) in the burrows.

SMEAR SLIDE SUMMARY (%):

	CC, 15 M
TEXTURE:	
Sand	5
Silt	15
Clay	80
COMPOSITION:	
Calcite/Dolomite	70
Clay	Tr
Diatoms	15
Foraminifers	3
Opaques	5
Quartz	Tr
Spicules	5



SITE 798 HOLE B CORE 1H CORED INTERVAL 900.0-909.4 mbsl; 0.0-9.4 mbsf



LITHOLOGIC DESCRIPTION

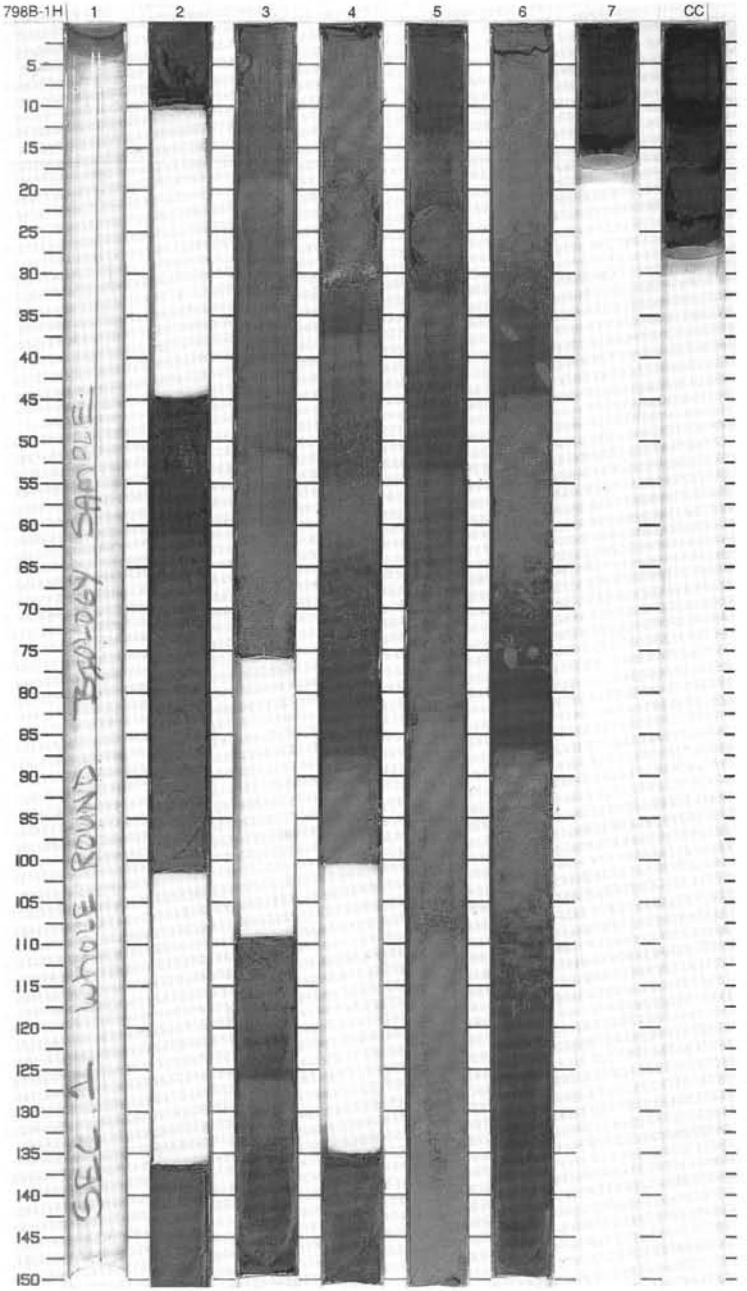
DIATOMACEOUS CLAY, SILTY CLAY, and CLAY

Major lithology: This core includes gray (5Y 5/1), dark gray (5Y 4/1), and olive gray (5Y 4/2) DIATOMACEOUS CLAY, CLAY, and SILTY CLAY with DIATOMS, FORAMINIFERS, and NANNOFOSSILS as minor (10-25%) components. The sediment consists of light-colored bioturbated intervals interbedded with dark massive or nonbioturbated intervals. Dark intervals exhibit crude lamination or fine bedding consisting of alternating dark and light foraminifer-rich layers; dark/light couplets possess a sharp base, and a gradational top which is marked by burrows (*Chondrites*; *Planolites*?) which penetrated downward into the dark sediments.

Minor lithologies:
a. A very light gray (N8), 1-cm thick VOLCANIC ASH layer occurs in Section 4 at 29-30 cm.
b. Dark gray (N3) FISH DEBRIS were found along a bedding plane in the core catcher at 13 cm.

SMEAR SLIDE SUMMARY (%):

	1, 1 M	1, 22 M
TEXTURE:		
Sand	1	5
Silt	30	70
Clay	69	25
COMPOSITION:		
Clay	40	40
Diatoms	30	35
Feldspar	—	Tr
Fish	10	Tr
Foraminifers	—	Tr
Opaques	1	1
Plant	—	4
Quartz	9	10
Silicoflagellates	5	2
Spicules	5	5



SITE 798 HOLE B CORE 2H CORED INTERVAL 909.4-918.4 mbsl; 9.4-18.4 mbsf

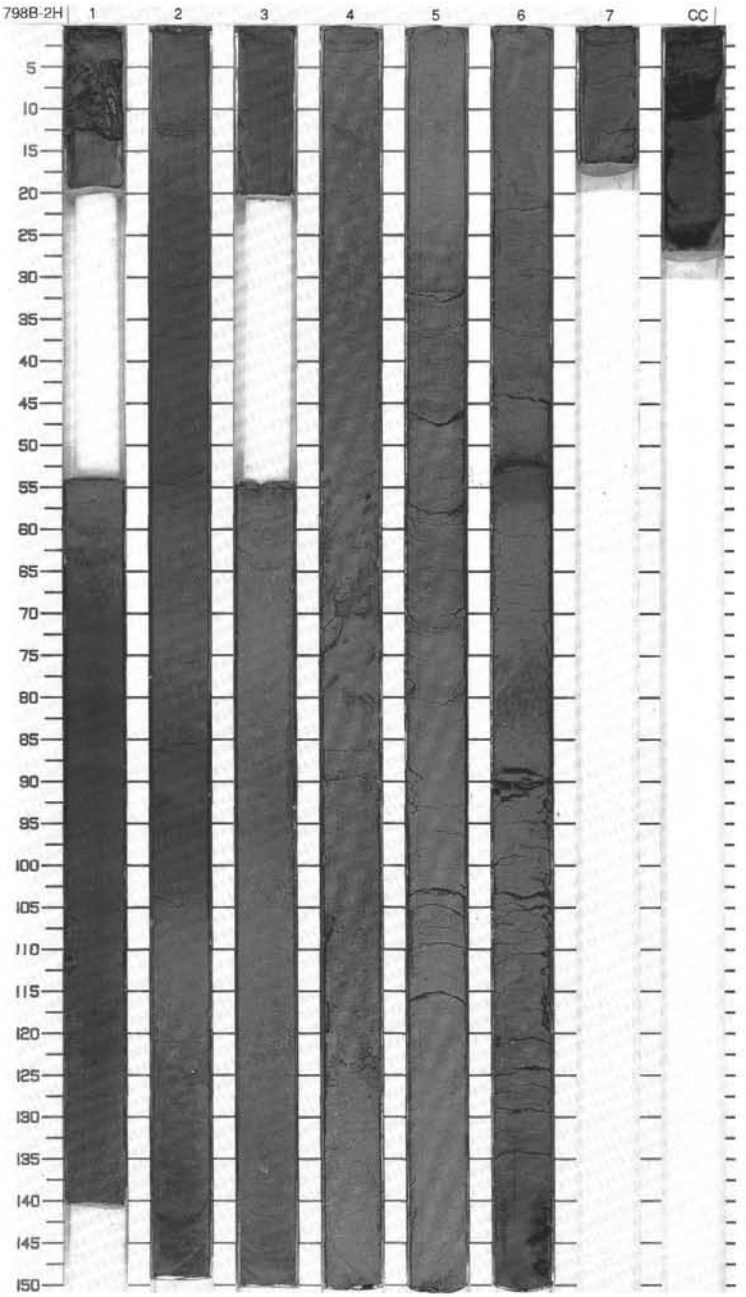
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
QUATERNARY	C/M	CN15 / CN14b	not examined	*Neodenticula seminae*	not examined			●%CaCO3=20.6 %TOC=1.86 ●%CaCO3=13.7 %TOC=2.01	1 2 3 4 5 6 7 CC	0.5 1.0				MB MB

LITHOLOGIC DESCRIPTION

SILTY CLAY, DIATOMACEOUS CLAY, and CLAY

Major lithology: This core contains greenish gray (5GY 4/1), grayish green (5G 4/1), olive gray (10Y 3/1, 10Y 3/2, 10Y 4/3) and olive (5Y 4/4) SILTY CLAY, DIATOMACEOUS CLAY, and CLAY with FORAMINIFERS and DIATOMS as minor components. These lithologies appear in dark laminated and/or massive intervals alternating with light bioturbated intervals, as described under Core 128-798B-1H. Clay contents tend to be higher in the dark intervals. Bioturbation is identified as *Chondrites* and probably *Planolites*.

Minor lithology: A 1 cm-thick dark gray VOLCANIC ASH layer is present in Section 6, 52-53 cm.



SITE 798 HOLE B CORE 3H CORED INTERVAL 918.4-927.4 mbsl; 18.4-27.4 mbsf

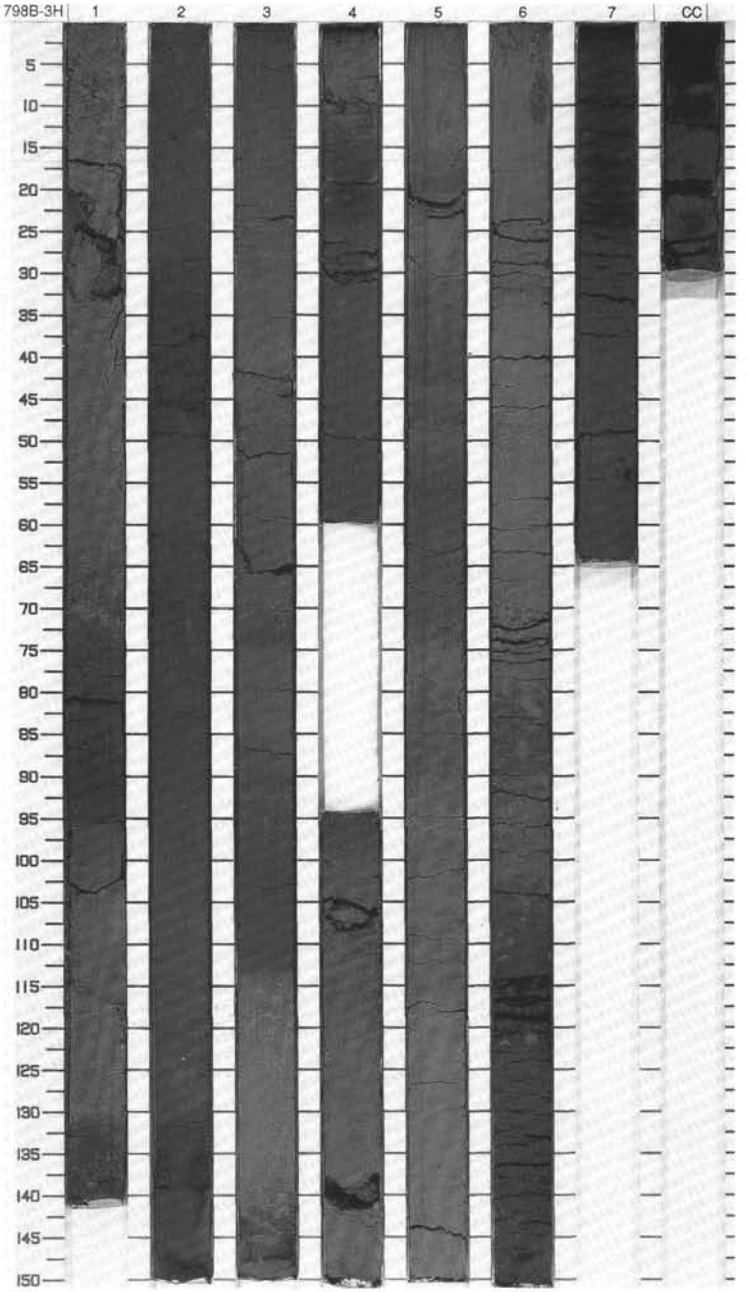
TIME-ROCK UNIT	BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
QUATERNARY	C/G	C/M	CN15 / CN14b	not examined	*Neodenticula seminae*	C/M	not examined		● %CaCO3=0.60 × %TOC=2.56	1 2 3 4 5 6 7 CC	0.5 1.0			MB

LITHOLOGIC DESCRIPTION

CLAYEY DIATOM OOZE, DIATOM CLAY, CLAY, AND CLAY DIATOM MIXED SEDIMENT

Major lithology: This core includes gray (5Y 5/1), greenish gray (5G 5/1, 5GY 5/1), dark greenish gray (5GY 4/1), dark gray (5Y 4/1), very dark gray (5Y 3/1), dark olive gray (5Y 3/2), and olive gray (5Y 5/2, 5Y 4/2) CLAYEY DIATOMACEOUS OOZE, CLAYEY DIATOMACEOUS MIXED SEDIMENT, DIATOMACEOUS CLAY, and CLAY with diatoms, spicules, and silt as minor (10-25%) components. Sediments appear in dark, mostly massive intervals alternating with light bioturbated intervals as described under Core 1. Bases of light intervals are marked by burrowing (*Chondrites* and larger burrows). Bases of dark intervals are either sharp or gradational.

Minor lithology: A 3 mm-thick VOLCANIC ASH layer is present in Section 3, at 148 cm; a 1 mm-thick volcanic ash layer occurs in Section 4, at 111 cm.



SITE 798 HOLE B CORE 4H CORED INTERVAL 927.4-936.8 mbsl; 27.4-36.8 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
QUATERNARY	F/M	CN15 / CN14b	not examined	*Neodenticula seminae*	not examined			● %CaCO3=12.2 %TOC=1.84	1 2 3 4 5 6 7 CC	0.5 1.0				MB

LITHOLOGIC DESCRIPTION

CLAY and CLAYEY MIXED SEDIMENT

Major lithology: This core contains dark gray (5Y 4/1) to very dark gray (5Y 3/1), partly laminated CLAYEY MIXED SEDIMENT with DIATOMS, NANNOFOSSILS, and FORAMINIFERS interbedded with gray (5Y 5/1) to greenish gray (5G 5/1), more homogeneous CLAY with FORAMINIFERS, DIATOMS, and NANNOFOSSILS. Rhythmic dark/light interbedded sediments are prominent in this core; the transitional zone from dark to light sediment types is strongly bioturbated, whereas the base of dark colored units is commonly abrupt.

Minor lithology: In Section 4, 25.5 cm, and in Section 6, 18-24 cm, layers of VOLCANIC ASH occur.

SITE 798 HOLE B CORE 5H CORED INTERVAL 936.8-946.3 mbsl; 36.8-46.3 mbsf

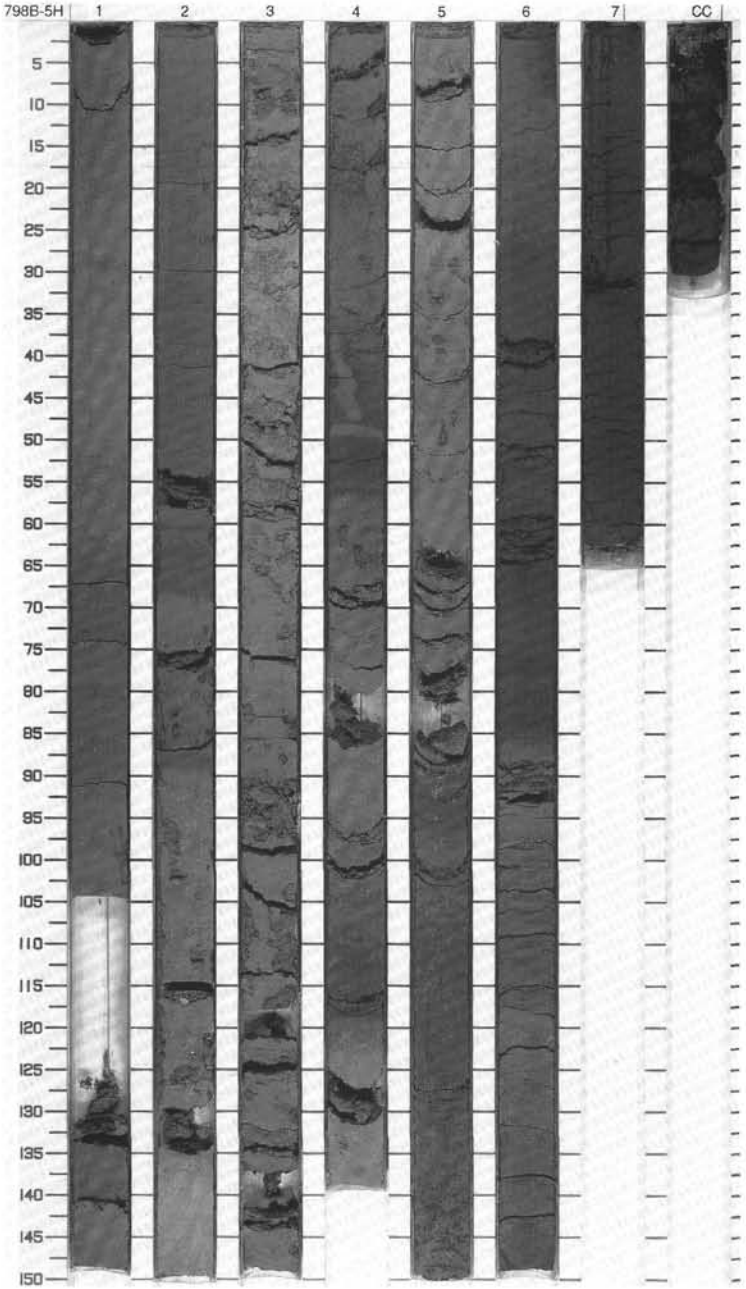
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
QUATERNARY	F/M	B	not examined	*Neodenticula seminae*	not examined			• %CaCO3=35.9 %TOC=1.77	1 2 3 4 5 6 7 CC	0.5 1.0				TW

LITHOLOGIC DESCRIPTION

CLAY, DIATOMACEOUS CLAY, DIATOMACEOUS OOZE, NANNOFOSSIL DIATOMACEOUS CLAY, and NANNOFOSSIL DIATOMACEOUS OOZE

Major lithology: This core contains mainly dark gray (5Y 4/1), olive gray (5Y 4/2, 5Y 5/2), dark olive gray (5Y 3/2), olive (5Y 5/3), very dark gray (5Y 3/1), light greenish gray (5BG 7/1), greenish gray (5G 5/1, 5BG 6/1), dark greenish gray (5G 4/1), light gray (5Y 7/2), light olive gray (5Y 6/2), and pale olive (5Y 6/3) CLAY, DIATOMACEOUS CLAY, DIATOMACEOUS OOZE, NANNOFOSSIL DIATOMACEOUS CLAY, and NANNOFOSSIL DIATOMACEOUS OOZE. Prominent dark intervals, which are thickly laminated to finely bedded at 0.3-3 cm scale, alternate with light bioturbated intervals. Bases of dark intervals are mostly sharp; in some cases, as in Section 4, 120 cm, transitions are gradational. Bases of light intervals are associated with burrows: *Chondrites* (3-5 mm diameters); and unidentified larger burrows in Sections 4, 37-50 cm (2 cm diameters). Burrows have maximum penetration depths of about 20 cm.

Minor lithologies:
a. Light gray (N 7/1) VOLCANIC ASH layers are observed in Section 2, 115 cm and in the core catcher, 0-2 cm. An ash pod occurs in Section 5, 145 cm.
b. A large WOOD fragment (5x1x0.3 cm) is present in Section 7, 31 cm.



SITE 798 HOLE B CORE 6H CORED INTERVAL 946.3-955.8 mbsl; 46.3-55.8 mbsf

TIME-ROCK UNIT: QUATERNARY

BIOSTRAT. ZONE/FOSSIL CHARACTER
- FORAMINIFERS: R/M; F/M; A/G
- NANNOFOSSILS: CN14a; CN15 / CN14b
- RADIOLARIANS
- DIATOMS: *Rhizosolenia curvirostris*
- SILICOFLAGELLATES/ EBRIDIANS

PALEOMAGNETICS

PHYS. PROPERTIES

CHEMISTRY: %CaCO3=21.2; %TOC=1.81

SECTION: 1, 2, 3, 4, 5, 6, 7, 8, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: MB

LITHOLOGIC DESCRIPTION

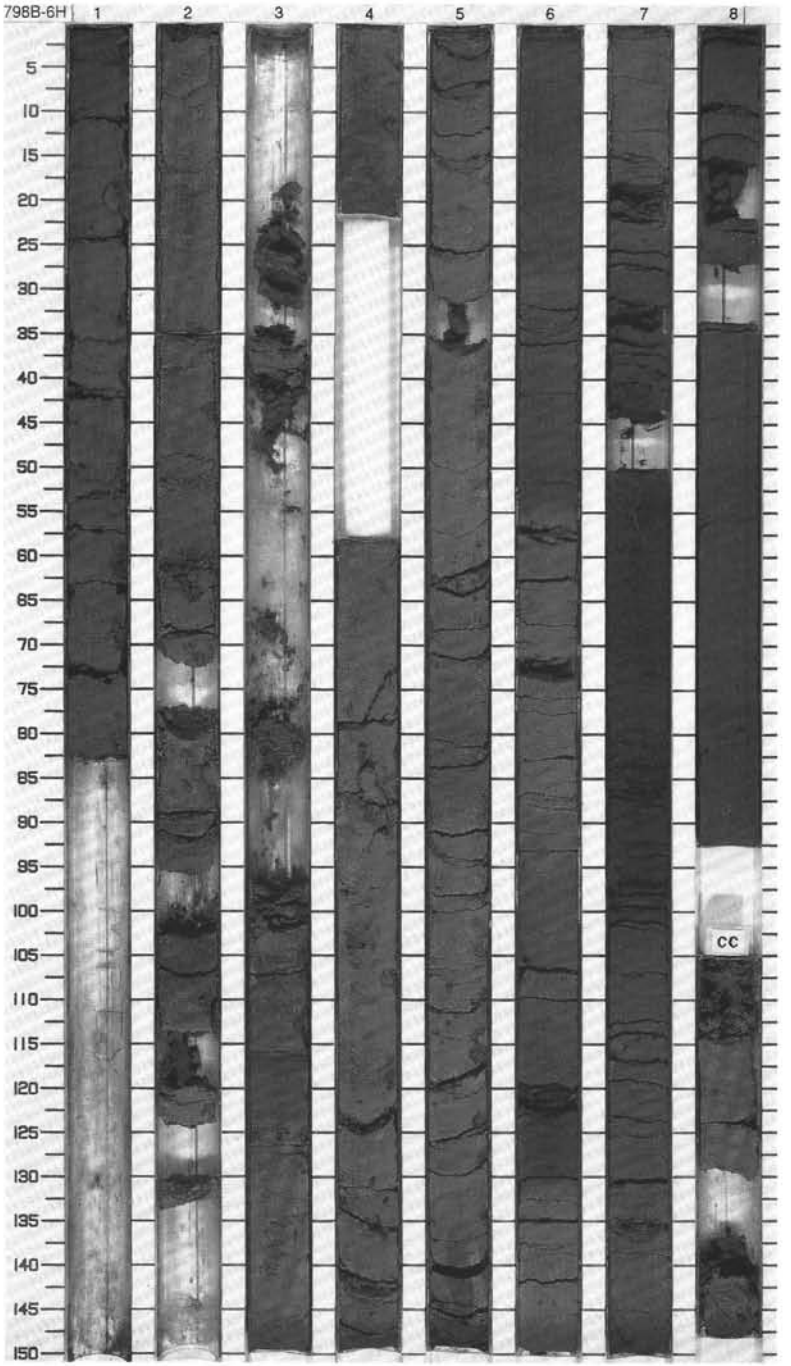
CLAY, DIATOMACEOUS CLAY, SILTY DIATOMACEOUS CLAY, DIATOMACEOUS FORAMINIFERAL CLAY, and FORAMINIFERAL DIATOMACEOUS OOZE

Major lithology: This core contains mainly gray (5Y 5/1), olive gray (5Y 5/2, 5Y 4/2), dark olive gray (5Y 3/2), and greenish gray (10Y 5/1, 10Y 5/2, 10Y 4/2, 10Y 4/1) CLAY, DIATOMACEOUS CLAY, SILTY DIATOMACEOUS CLAY, DIATOMACEOUS FORAMINIFERAL CLAY, and FORAMINIFERAL DIATOMACEOUS OOZE. Minor (10-25%) components include clay, foraminifers, silt, nannofossils, and diatoms. Light bioturbated intervals alternate with dark, crudely laminated to finely bedded intervals. The bases of light intervals are marked by *Chondrites* burrows with 2-5 mm diameters. Some intervals reflect 2 or more generations of burrows. In Section 7, 50-63 cm, *Chondrites* filled with pumice and foraminifers are cut by *Chondrites* filled with clay. *Chondrites* burrows are locally cut by large subvertical burrows with 1-1.5 cm diameters.

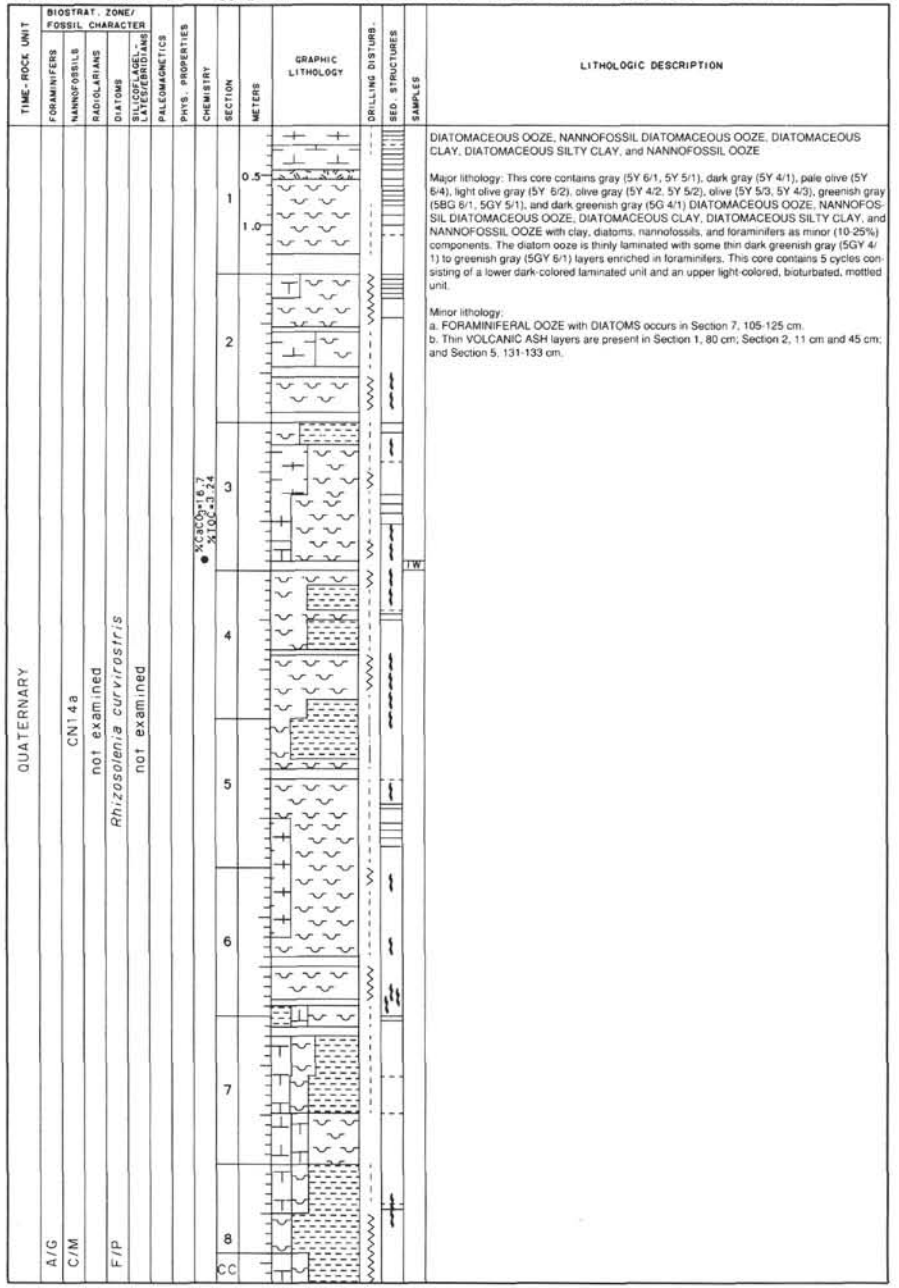
Minor lithology: 2-3 mm thick gray PUMICE layers occur in Section 3, 126 cm and in Section 5, 54-60 cm.

SMEAR SLIDE SUMMARY (%):

	7, 46
	D
TEXTURE:	
Silt	40
Clay	60
COMPOSITION:	
Accessory minerals	2
Clay	30
Diatoms	25
Feldspar	5
Fish	Tr
Foraminifers	Tr
Inorganic calcite	10
Pyrite	5
Quartz	10
Silicoflagellates	Tr
Spicules	10



SITE 798 HOLE B CORE 7H CORED INTERVAL 955.8-965.4 mbsl; 55.8-65.4 mbsf

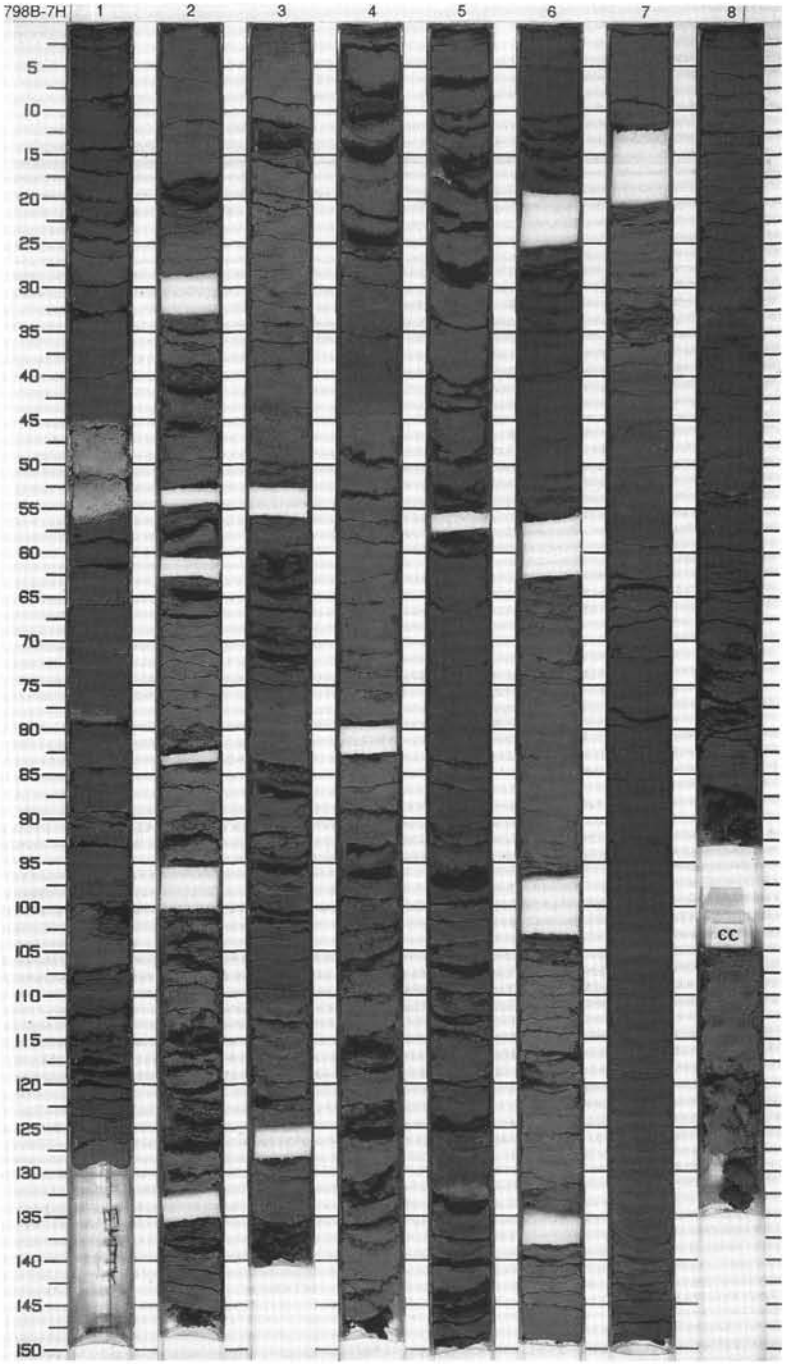


LITHOLOGIC DESCRIPTION

DIATOMACEOUS OOZE, NANNOFOSSIL DIATOMACEOUS OOZE, DIATOMACEOUS CLAY, DIATOMACEOUS SILTY CLAY, and NANNOFOSSIL OOZE

Major lithology: This core contains gray (5Y 6/1, 5Y 5/1), dark gray (5Y 4/1), pale olive (5Y 6/4), light olive gray (5Y 6/2), olive gray (5Y 4/2, 5Y 5/2), olive (5Y 5/3, 5Y 4/3), greenish gray (5BG 6/1, 5GY 5/1), and dark greenish gray (5G 4/1) DIATOMACEOUS OOZE, NANNOFOSSIL DIATOMACEOUS OOZE, DIATOMACEOUS CLAY, DIATOMACEOUS SILTY CLAY, and NANNOFOSSIL OOZE with clay, diatoms, nannofossils, and foraminifers as minor (10-25%) components. The diatom ooze is thinly laminated with some thin dark greenish gray (5GY 4/1) to greenish gray (5GY 6/1) layers enriched in foraminifers. This core contains 5 cycles consisting of a lower dark-colored laminated unit and an upper light-colored, bioturbated, mottled unit.

Minor lithology:
a. FORAMINIFERAL OOZE with DIATOMS occurs in Section 7, 105-125 cm.
b. Thin VOLCANIC ASH layers are present in Section 1, 80 cm; Section 2, 11 cm and 45 cm; and Section 5, 131-133 cm.



SITE 798 HOLE B CORE 8H CORED INTERVAL 965.4-974.9 mbsl; 65.4-74.9 mbsf

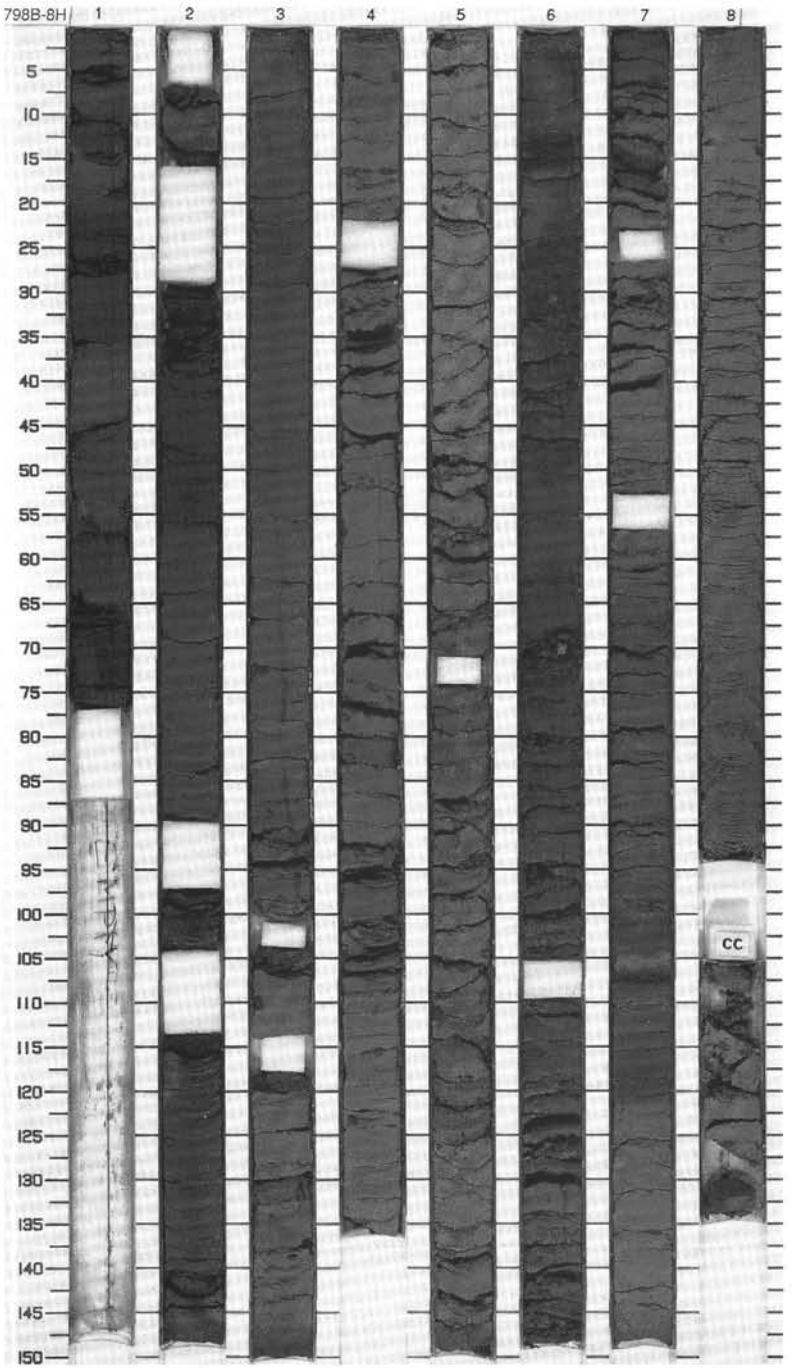
TIME-ROCK UNIT	BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
QUATERNARY	A/G	CN14a	not examined	*Rhizosolenia curvirostris*	not examined	N		• x_{CaCO_3} 24.0 %TOC 1.27	1 2 3 4 5 6 7 CC	0.5 1.0				IW

LITHOLOGIC DESCRIPTION

CLAYEY DIATOMACEOUS OOZE, DIATOMACEOUS CLAY, and CLAY

Major lithology: This core contains gray (5Y 5/1), olive gray (5Y 4/2, 5Y 5/2), olive (5Y 4/3), dark olive gray (5Y 3/2), greenish gray (5GY 5/1) and dark greenish gray (5GY 4/1) CLAYEY DIATOMACEOUS OOZE, DIATOMACEOUS CLAY, and CLAY. Foraminifers represent minor (10-25%) constituents. Alternating light and dark intervals are prominent throughout Section 1 and in Section 7, 85-120 cm. Distinct *Chondrites* burrows occur in Section 7, 90-112 cm. Larger subvertical burrows are present in Section 1, 69-76 cm, and in Section 2, 114-122 cm and 143-150 cm.

Minor lithology: Gray to black VOLCANIC ASH layers are present in Section 2, 51 cm; Section 4, 113 cm and 119 cm; Section 6, 10 cm; and Section 7, 105-107 cm and 110 cm. Pumice fragments 1 cm thick occur in Section 6, 68-70 cm. A 0.5 cm piece of pumice is present in Section 6, 119 cm.



SITE 798 HOLE B CORE 9H CORED INTERVAL 974.9-984.5 mbsl; 74.9-84.5 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
QUATERNARY	A/G	CN14a	not examined	*Rhizosolenia curvirostris*	not examined	R N Matuyama — N Brunhes		• %CaCO3=2.89 X-10e-1.87	1 2 3 4 5 6 7 8 CC	0.5 1.0				MB

LITHOLOGIC DESCRIPTION

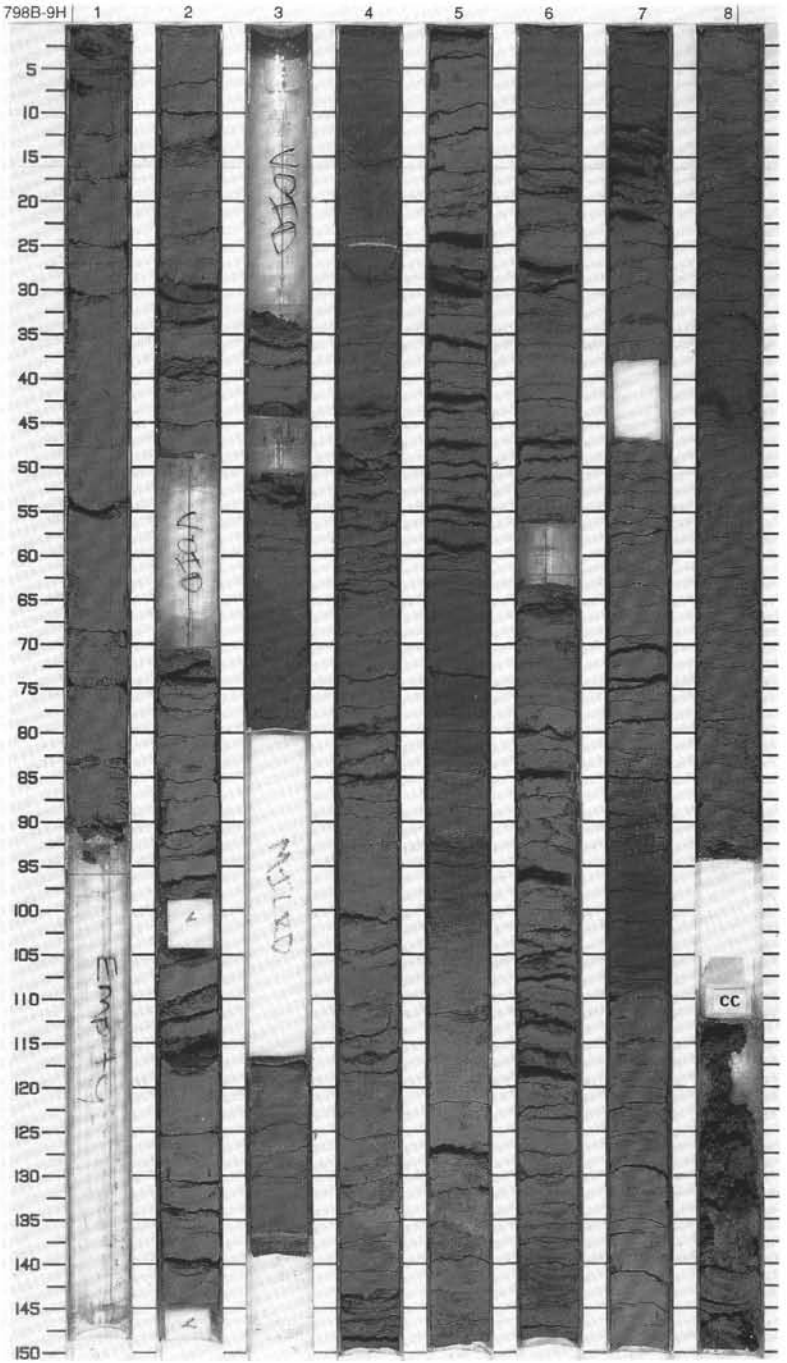
SILTY DIATOMACEOUS MIXED SEDIMENT, SILTY CLAY, DIATOMACEOUS CLAY, CLAY, DIATOMACEOUS OOZE, and NANNOFOSSIL DIATOMACEOUS OOZE

Major lithology: This core consists of gray (5Y 5/1, 5Y 6/1), dark gray (5Y 4/1), dark greenish gray (5G 4/1, 10Y 5/2, 10Y 5/1) SILTY DIATOMACEOUS MIXED SEDIMENT, SILTY CLAY, DIATOMACEOUS CLAY, CLAY, DIATOMACEOUS OOZE, and NANNOFOSSIL DIATOMACEOUS OOZE. Diatoms, nannofossils, clay, and foraminifers are minor (10-25%) constituents in large intervals of the core. Dark intervals are mainly laminated or finely bedded whereas light intervals are bioturbated, especially in their basal portions.

Minor lithology: A 3 mm thick gray VOLCANIC ASH layer is present in Section 3, 136 cm. Three light gray vitric ash layers are in Section 4, at 26 cm, 42-44 cm, and 49-51 cm. A vitric ash layer is present in Section 5, 135-137 cm, and a 3 mm thick dark gray ash layer is present in Section 7, 105 cm.

SMEAR SLIDE SUMMARY (%):

	1, 59 D
TEXTURE:	
Sand	1
Silt	50
Clay	49
COMPOSITION:	
Clay	16
Diatoms	40
Foraminifers	3
Nannofossils	10
Pyrite	1
Quartz	30



SITE 798 HOLE B CORE 10H CORED INTERVAL 984.5-994.2 mbsl; 84.5-94.2 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
QUATERNARY	F/G	CN13b	not examined	*Actinocyclus aculatus*	not examined	N — Jaramillo — N R — Matuyama — R		• • •	1	0.5				
	P/F								1	1.0				
									2					
									3					
									4					
									5					
									6					
									7					
	A/G								8					
									CC					

LITHOLOGIC DESCRIPTION

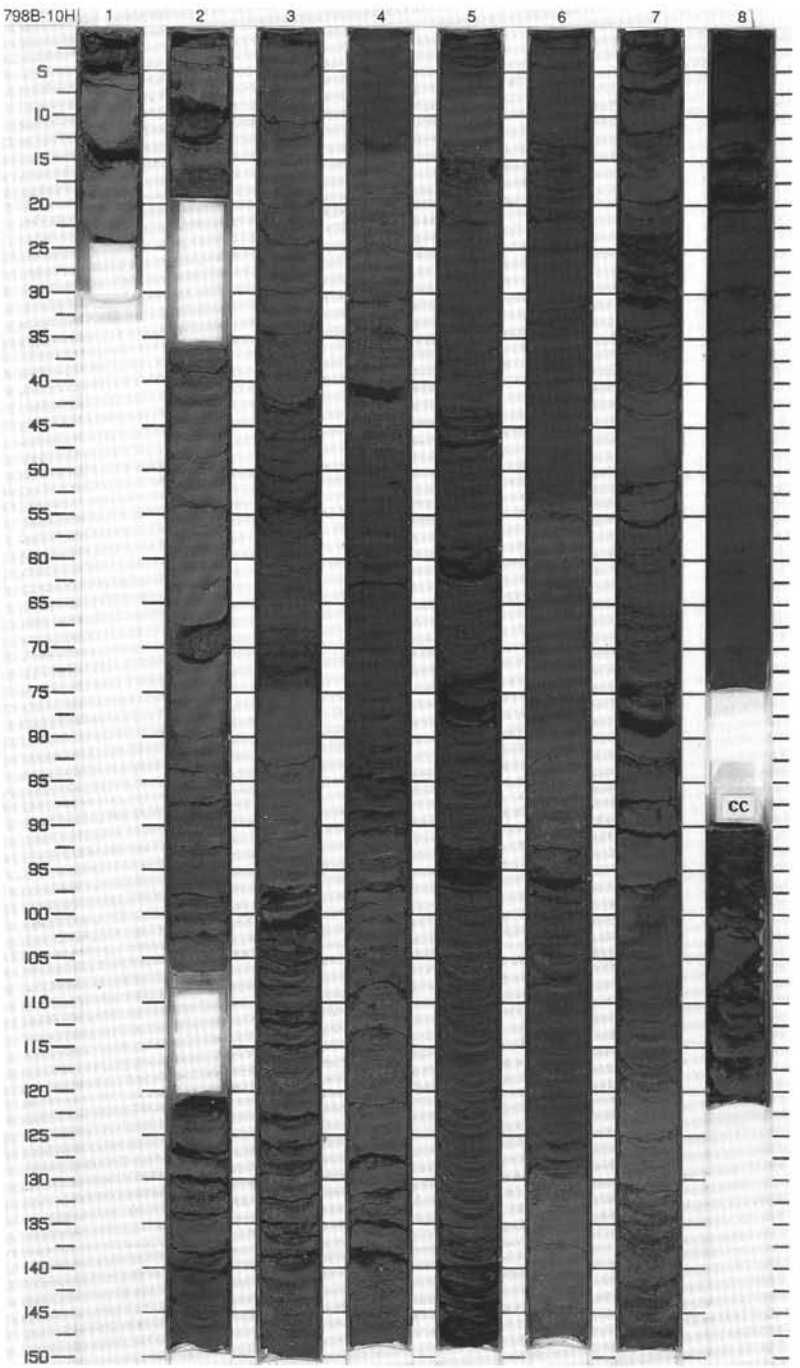
SILTY CLAY, DIATOMACEOUS CLAY, DIATOMACEOUS SILTY CLAY, DIATOMACEOUS OOZE, and CLAY

Major lithology: This core contains gray (5Y 5/1), olive gray (5Y 5/2, 5Y 4/2), olive (5Y 4/3), and dark olive gray (5Y 3/2) SILTY CLAY, DIATOMACEOUS CLAY, DIATOMACEOUS SILTY CLAY, DIATOMACEOUS OOZE, and CLAY. Minor (10-25%) local constituents include foraminifers, diatoms, and silt. Dark, crudely laminated or massive intervals alternate with light, commonly bioturbated intervals. In the laminated intervals, foraminifers are concentrated in light laminae. Tops of dark intervals are characterized by intruding burrows, (e.g.: *Chondrites* in Section 7, 30-49 cm). Larger subvertical burrows with 2-3 cm diameters occur in Section 4, 97-105 cm.

Minor lithology: One thin VOLCANIC ASH layer is present in Section 2, 50 cm.

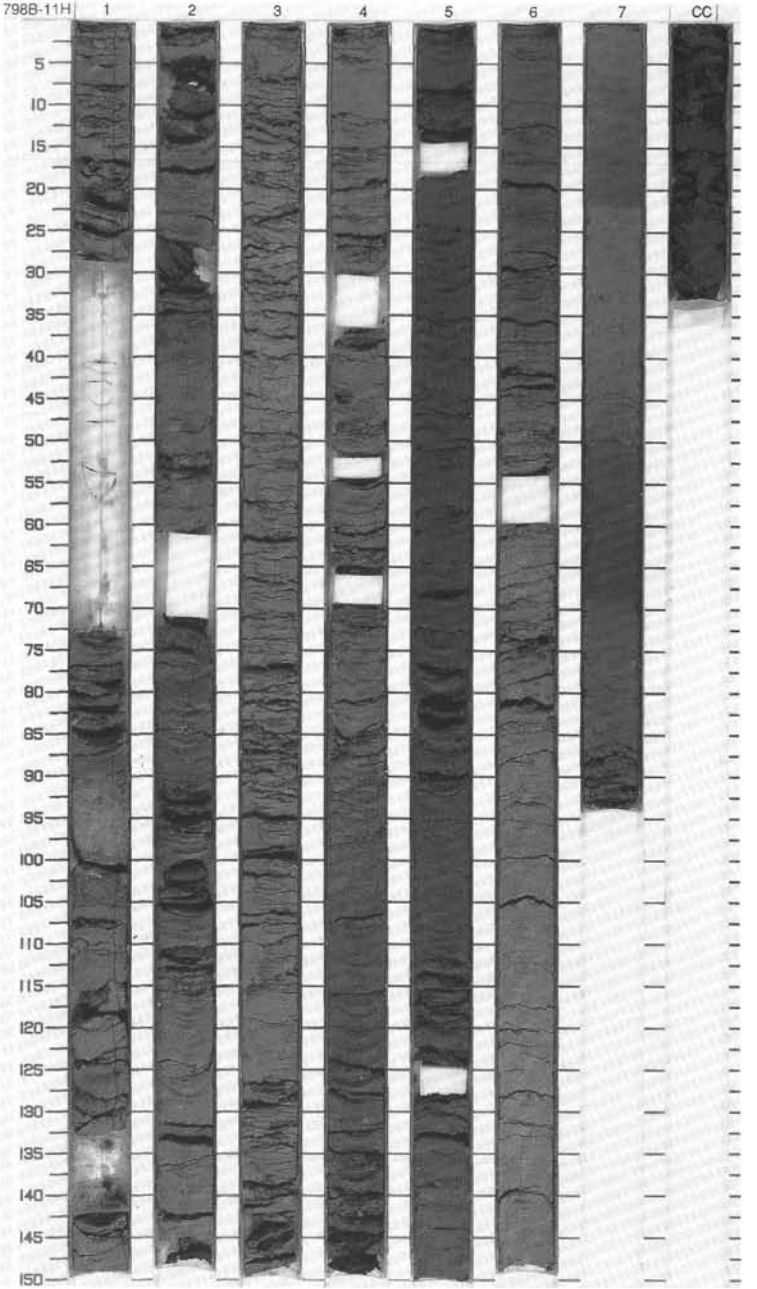
Organic Carbon and Carbonate (%)

Sample	TOC	$CaCO_3$
4, 25	2.32	4.2
4, 54	4.67	0.7
4, 74	4.61	8.1
4, 75	4.08	12.7
4, 85	4.82	2.7
4, 91	2.94	2.7



SITE 798 HOLE B CORE 11H CORED INTERVAL 994.2-1003.9 mbsl; 94.2-103.9 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
QUATERNARY	F/G	CN13b	not examined	*Actinocyclus oculatus*	not examined	R — Matuyama — N — Jaramillo — N			1 2 3 4 5 6 7 CC	0.5 1.0					DIATOMACEOUS OOZE, DIATOMACEOUS CLAY, CLAYEY DIATOMACEOUS OOZE, and NANNOFOSSIL DIATOMACEOUS OOZE Major lithology: This core consists of gray (5Y 5/1), olive gray (5Y 4/2), dark olive gray (5Y 3/2), and olive (5Y 4/3, 5Y 5/3, 5Y 4/4) DIATOMACEOUS OOZE, DIATOMACEOUS CLAY, CLAYEY DIATOMACEOUS OOZE, and NANNOFOSSIL DIATOMACEOUS OOZE. Foraminifers, diatoms, and nannofossils are locally minor (10-25%) constituents. Alternating dark and light intervals are prominent in Section 7. Tops of dark, crudely laminated intervals are mottled by burrows of *Chondrites*. Minor lithology: A distinctive, normally graded VITRIC ASH layer is observed in Section 1, 93-102 cm.



SITE 798 HOLE B CORE 12H CORED INTERVAL 1003.9-1013.5 mbsl; 103.9-113.5 mbsf

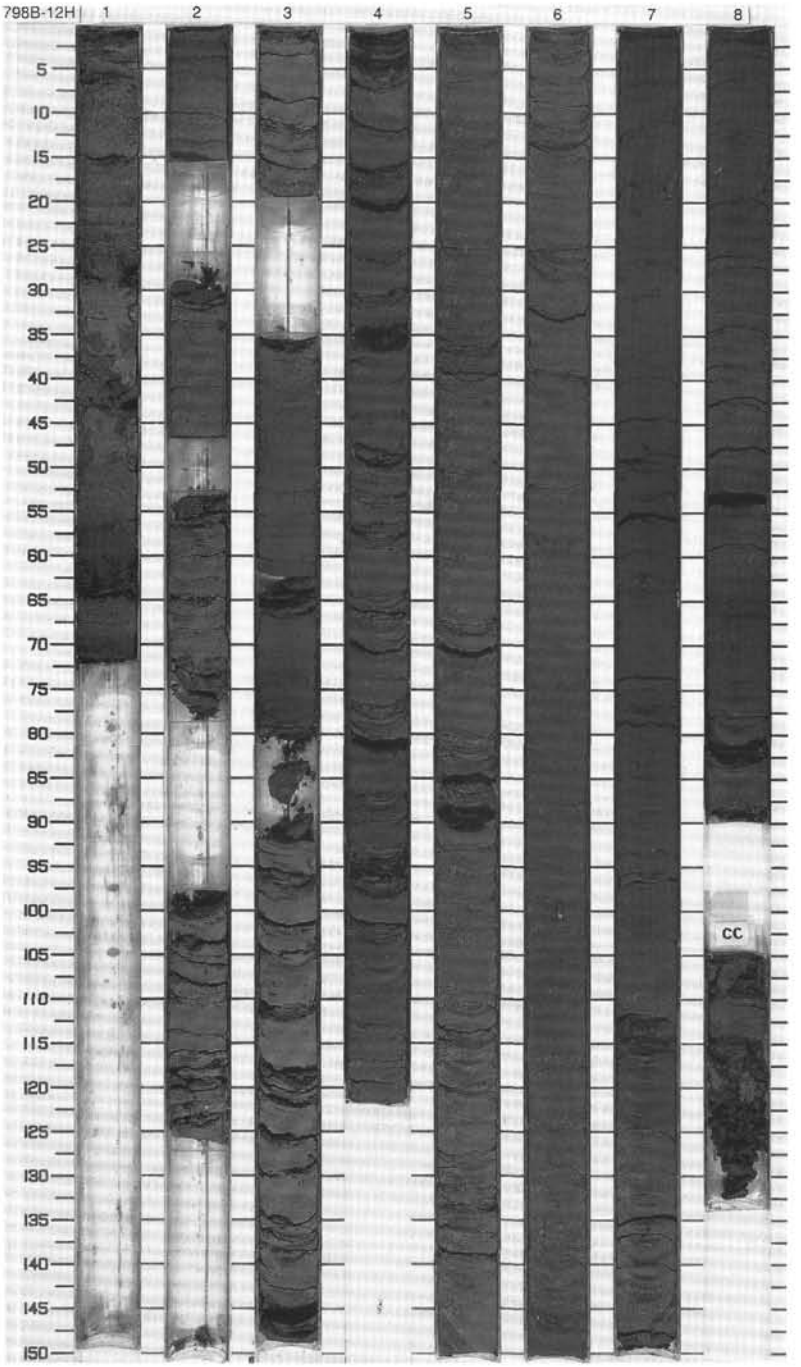
TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
QUATERNARY	C/G	CN13b	not examined	*Actinocyclus oculatus*	not examined	R — Matuyama			1	0.5				
	R/P									1.0				
									2					
									3					
	A/G								4					
						R			5					
									6					
									7					
									8					CC
									CC					

LITHOLOGIC DESCRIPTION

DIATOMACEOUS OOZE, DIATOMACEOUS CLAY, CLAY

Major lithology: This core contains gray (5Y 5/1), olive gray (5Y 5/2), olive (5Y 4/3), and dark olive gray (5Y 3/2) DIATOMACEOUS OOZE, DIATOMACEOUS CLAY, and CLAY. Foraminifers, nannofossils, diatoms, and clay locally form minor constituents (<25%). The lithology in this core is surprisingly uniform; darker and lighter intervals are separated by long transitional intervals. Burrows are not common except for a large subvertical burrow in Section 4, 5-10 cm.

Minor lithology: Scattered pumice fragments occur in Section 5, 100, 136-137, and 146 cm. A gray, 1 mm thick VITRIC ASH layer is present in Section 8, 79 cm.



SITE 798 HOLE B CORE 13H CORED INTERVAL 1013.5-1023.2 mbsl; 113.5-123.2 mbsf

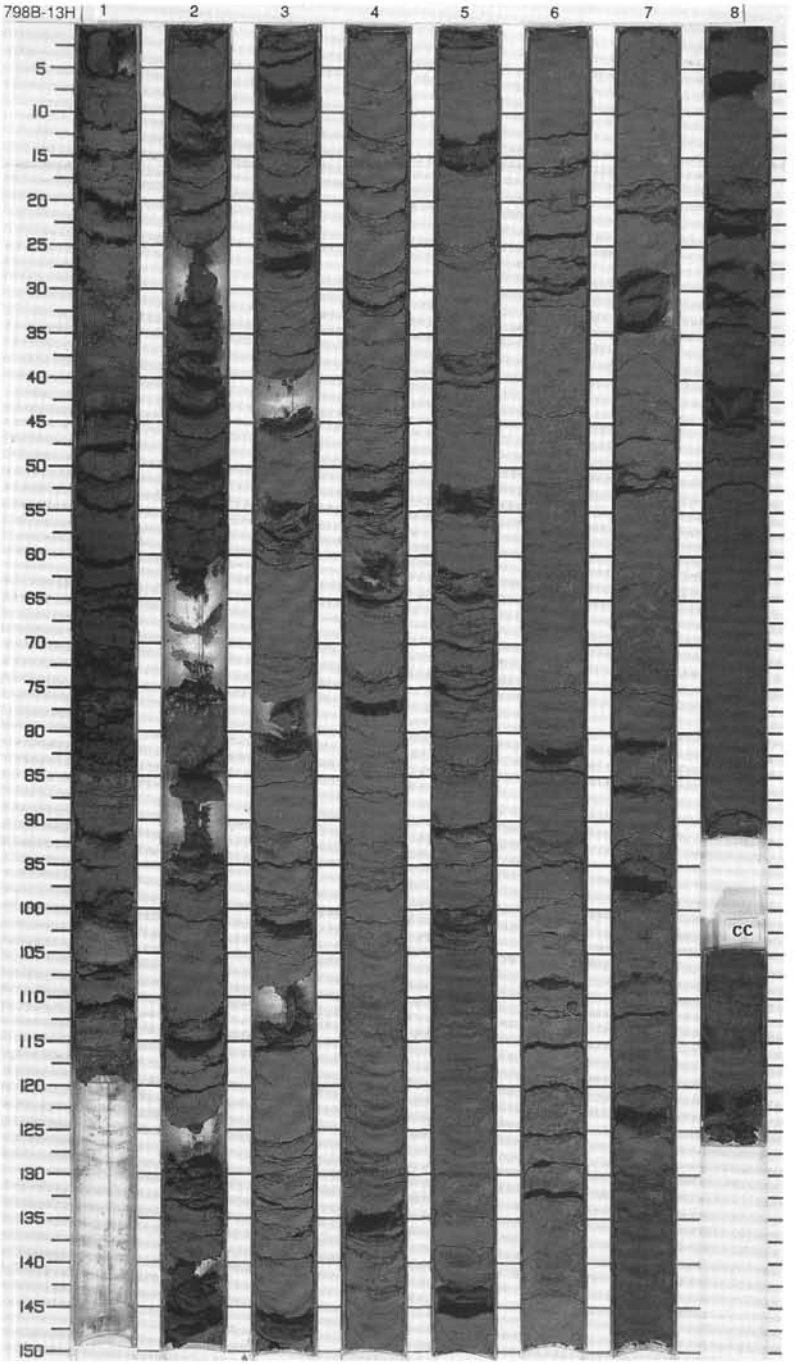
TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
QUARTERNARY	R/G	B	*Actinocyclus oculatus*	A/G		R	Matuyama	R	1	0.5, 1.0				
		not examined		not examined					2				oA	
									3					
									4					
									5					
									6					
									7					
									8					
									CC				oA	

LITHOLOGIC DESCRIPTION

DIATOMACEOUS SILTY CLAY and DIATOMACEOUS OOZE

Major lithology: This core contains dark gray to olive gray (5Y 5/1 to 5Y 4/2) DIATOMACEOUS SILTY CLAY from Section 1 to Section 3, 30 cm, and olive gray to gray (5Y 4/2 to 5Y 4/1) bioturbated or laminated DIATOMACEOUS OOZE with rare foraminifers from Section 3, 30 cm through Section 8.

Minor lithology: Light gray ash pods occur at Section 2, 75 cm, Section 7, 145 cm, and in the core catcher.



SITE 798 HOLE B CORE 14H CORED INTERVAL 1023.2-1032.9 mbsl; 123.2-132.9 mbsf

TIME-ROCK UNIT: QUATERNARY

BIOSTRAT. ZONE/FOSSIL CHARACTER: F/G; F/P; CM:3b; R/M; *Cyclladophora davisiana*; F/P; *Actinocyclus oculatus*; R/M; *Dictyocha subarctios*; R; Matuyama; R

FORAMINIFERS | NANNOFOSSILS | RADIOLARIANS | DIATOMS | SILICOFLAGELLATES | PALEOMAGNETICS | PHYS. PROPERTIES | CHEMISTRY | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURB. | SED. STRUCTURES | SAMPLES

LITHOLOGIC DESCRIPTION

DIATOMACEOUS OOZE, CALCAREOUS DIATOMACEOUS OOZE, DIATOMACEOUS CLAY, and SILTY CLAY

Major lithology: This core consists of dark gray (5Y 4/1) to olive gray (5Y 5/2-5Y 4/2) diatomaceous sediment: DIATOMACEOUS OOZE in Section 1, 0-70 cm, and at the base of Section 4; DIATOMACEOUS CLAY in Section 1, 70 cm, through Section 2, 57 cm, and Section 3 through Section 4, 60 cm; CALCAREOUS DIATOMACEOUS OOZE throughout Section 5 and Section 6, to 30 cm; and DIATOMACEOUS SILTY CLAY and SILTY CLAY in the lower part of the core (Section 6 through the core catcher). This core is commonly bioturbated, with minor laminated intervals in Section 3 and the core catcher.

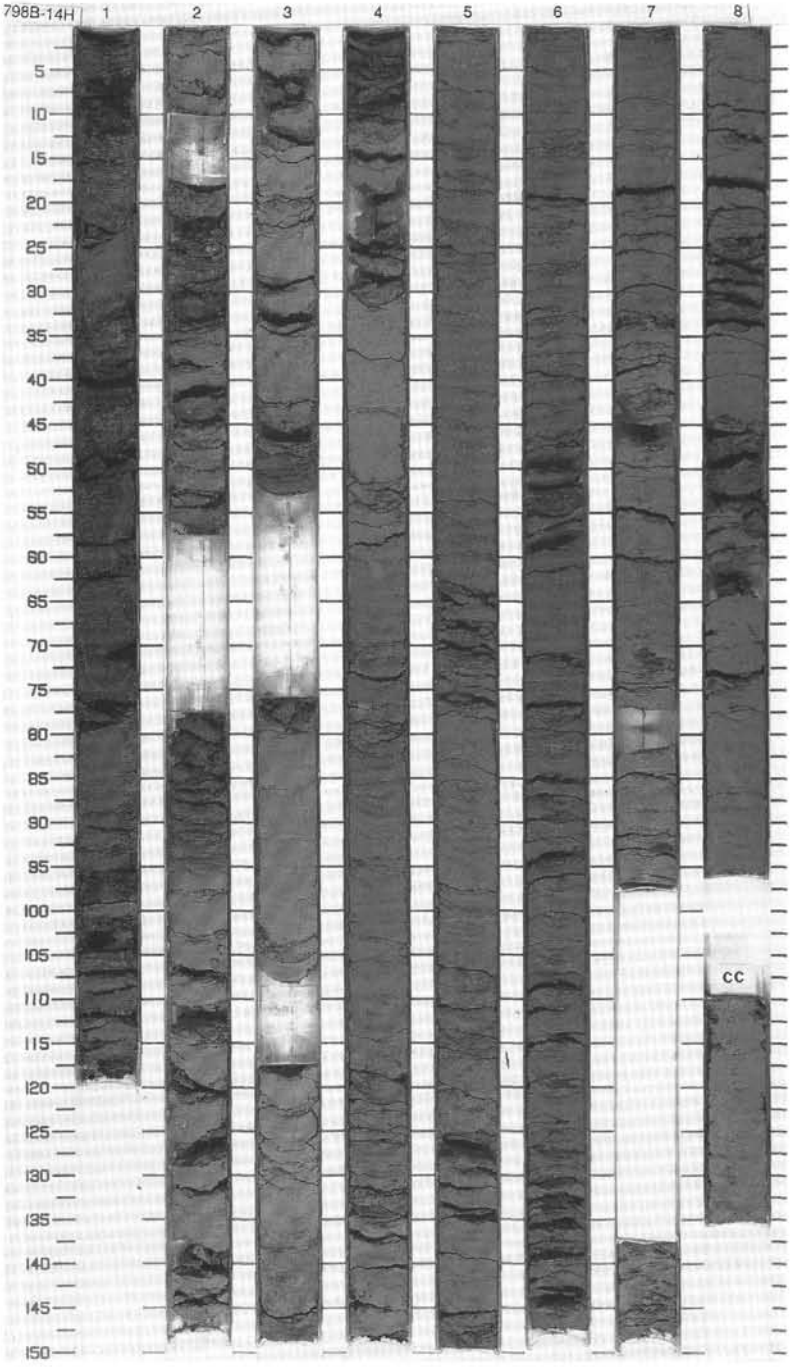
Minor lithology: Layers of VOLCANIC ASH are in Section 2, 91 cm and Section 3, 46 cm. Ash pods occur at 100 cm and 120 cm in Section 5.

SMEAR SLIDE SUMMARY (%):

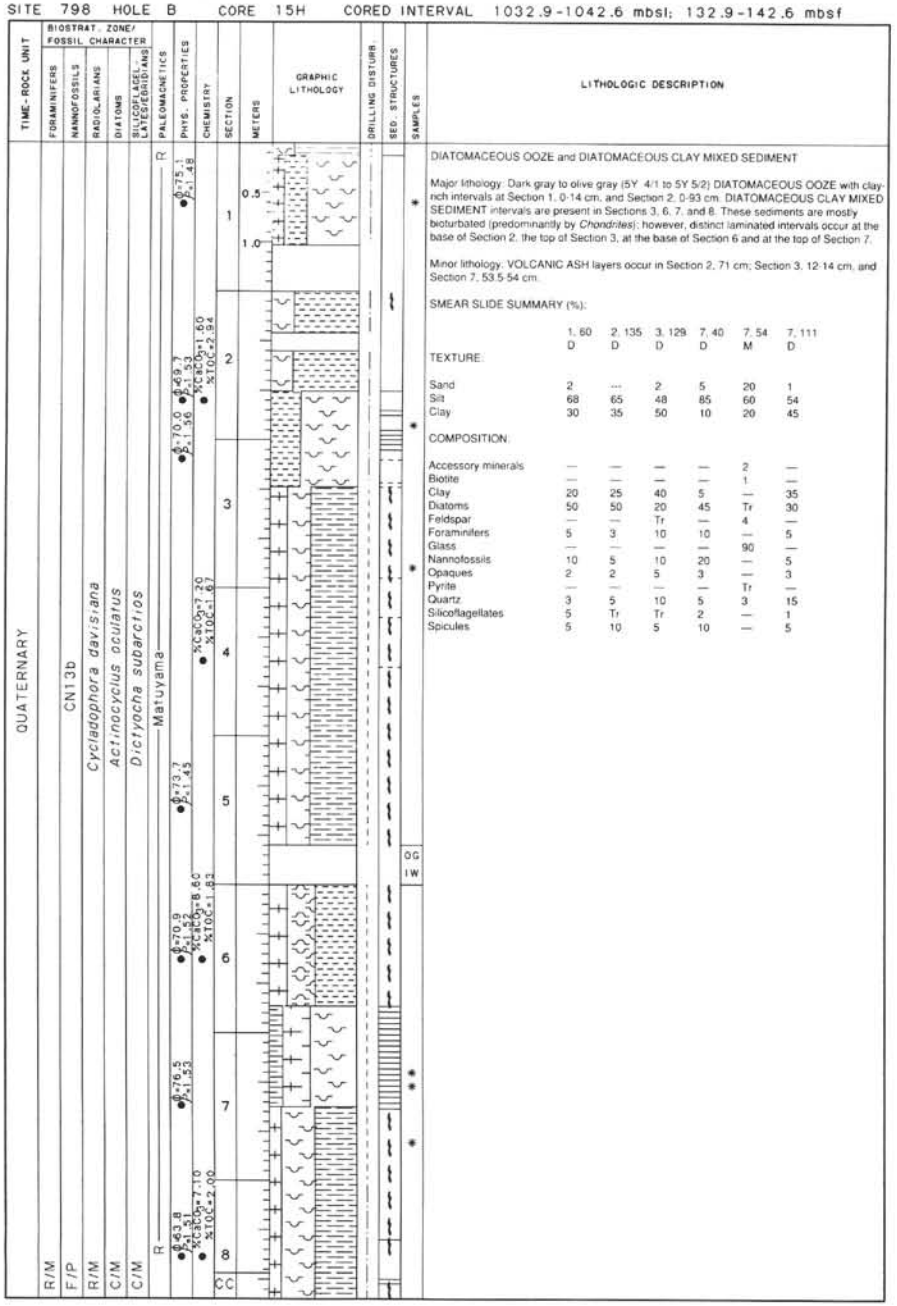
	1, 31 D	1, 92 D	2, 3 D	2, 892, 105 D	D	4, 110 D	5, 71 D
TEXTURE:							
Sand	10	---	2	---	---	---	2
Silt	70	30	38	40	40	65	70
Clay	20	70	60	60	60	35	28
COMPOSITION:							
Accessory minerals	—	—	—	1	—	—	—
Clay	20	60	45	40	45	20	—
Diatoms	60	20	25	40	20	35	30
Enstatite	—	—	Tr	—	—	—	—
Feldspar	—	Tr	5	—	—	—	—
Fish	—	—	—	—	—	—	Tr
Foraminifers	—	—	—	—	—	5	10
Glass	—	Tr	15	—	—	2	Tr
Glauconite	1	—	—	—	—	Tr	—
Nannofossil	—	—	—	—	—	2	30
Opaques	2	5	3	2	3	—	1
Phosphate	—	—	Tr	—	—	—	—
Pyroxene	—	—	Tr	—	—	—	—
Quartz	5	10	5	5	20	10	5
Silicoflagellates	Tr	—	—	1	2	2	5
Spicules	10	5	2	10	10	20	15

SMEAR SLIDE SUMMARY (%):

	6, 71 D
TEXTURE:	
Sand	2
Silt	40
Clay	58
COMPOSITION:	
Accessory minerals	Tr
Clay	55
Diatoms	20
Fish	Tr
Foraminifers	3
Glass	Tr
Opaques	2
Quartz	5
Silicoflagellates	5
Spicules	10



SITE 798 HOLE B CORE 15H CORED INTERVAL 1032.9-1042.6 mbsl; 132.9-142.6 mbsf



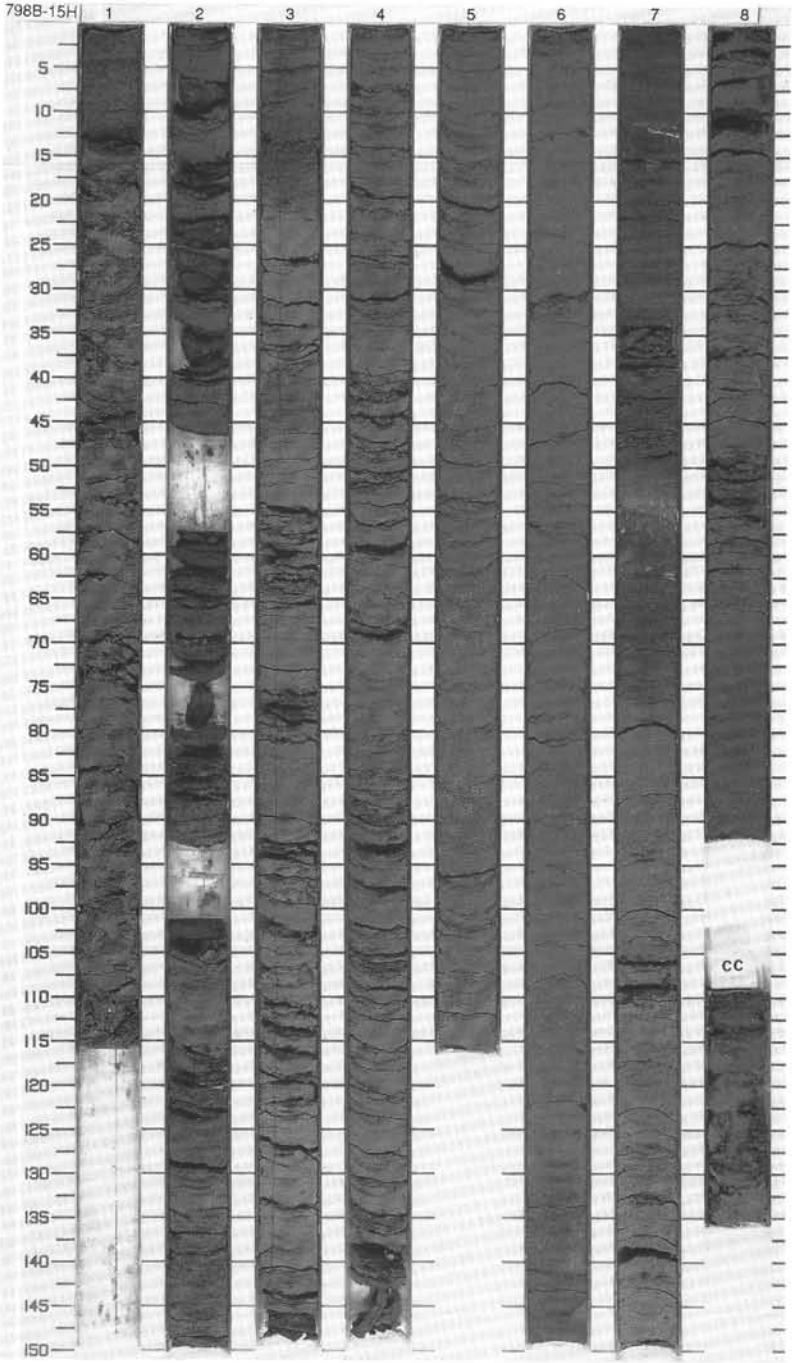
DIATOMACEOUS OOZE and DIATOMACEOUS CLAY MIXED SEDIMENT

Major lithology: Dark gray to olive gray (5Y 4/1 to 5Y 5/2) DIATOMACEOUS OOZE with clay-rich intervals at Section 1, 0-14 cm, and Section 2, 0-93 cm. DIATOMACEOUS CLAY MIXED SEDIMENT intervals are present in Sections 3, 6, 7, and 8. These sediments are mostly bioturbated (predominantly by *Chondrites*); however, distinct laminated intervals occur at the base of Section 2, the top of Section 3, at the base of Section 6 and at the top of Section 7.

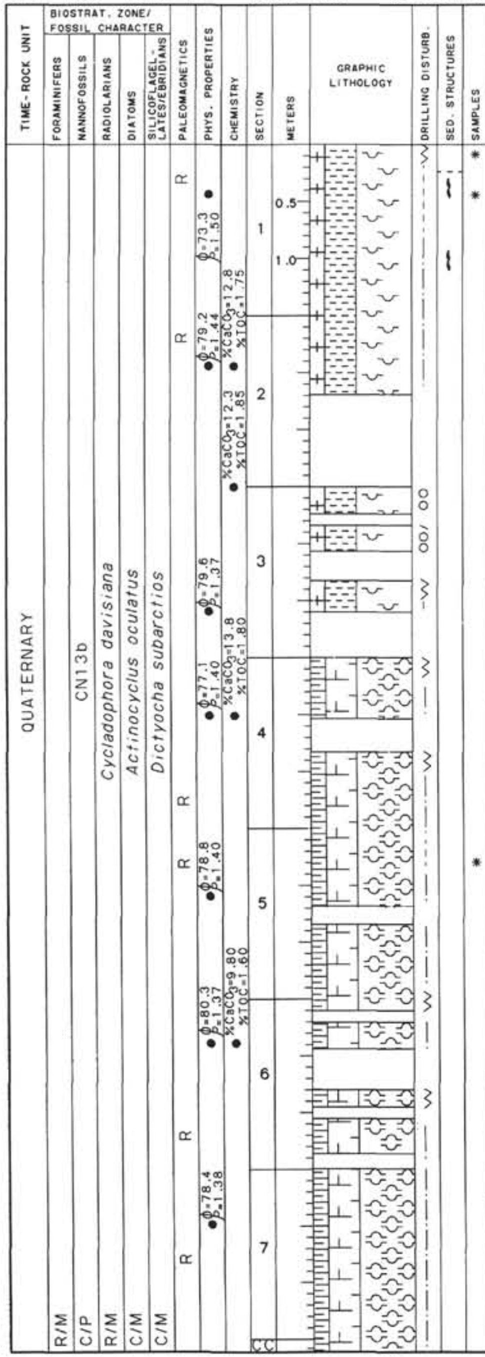
Minor lithology: VOLCANIC ASH layers occur in Section 2, 71 cm; Section 3, 12-14 cm, and Section 7, 53.5-54 cm.

SMEAR SLIDE SUMMARY (%):

	1, 60 D	2, 135 D	3, 129 D	7, 40 D	7, 54 M	7, 111 D
TEXTURE:						
Sand	2	---	2	5	20	1
Silt	68	65	48	85	60	54
Clay	30	35	50	10	20	45
COMPOSITION:						
Accessory minerals	—	—	—	—	2	—
Biotite	—	—	—	—	1	—
Clay	20	25	40	5	—	35
Diatoms	50	50	20	45	Tr	30
Feldspar	—	—	Tr	—	4	—
Foraminifers	5	3	10	10	—	5
Glass	—	—	—	—	90	—
Nannofossils	10	5	10	20	—	5
Opaques	2	2	5	3	—	3
Pyrite	—	—	—	—	Tr	—
Quartz	3	5	10	5	3	15
Silicoflagellates	5	Tr	Tr	2	—	1
Spicules	5	10	5	10	—	5



SITE 798 HOLE B CORE 16X CORED INTERVAL 1042.6-1052.3 mbsl; 142.6-152.3 mbsf



LITHOLOGIC DESCRIPTION

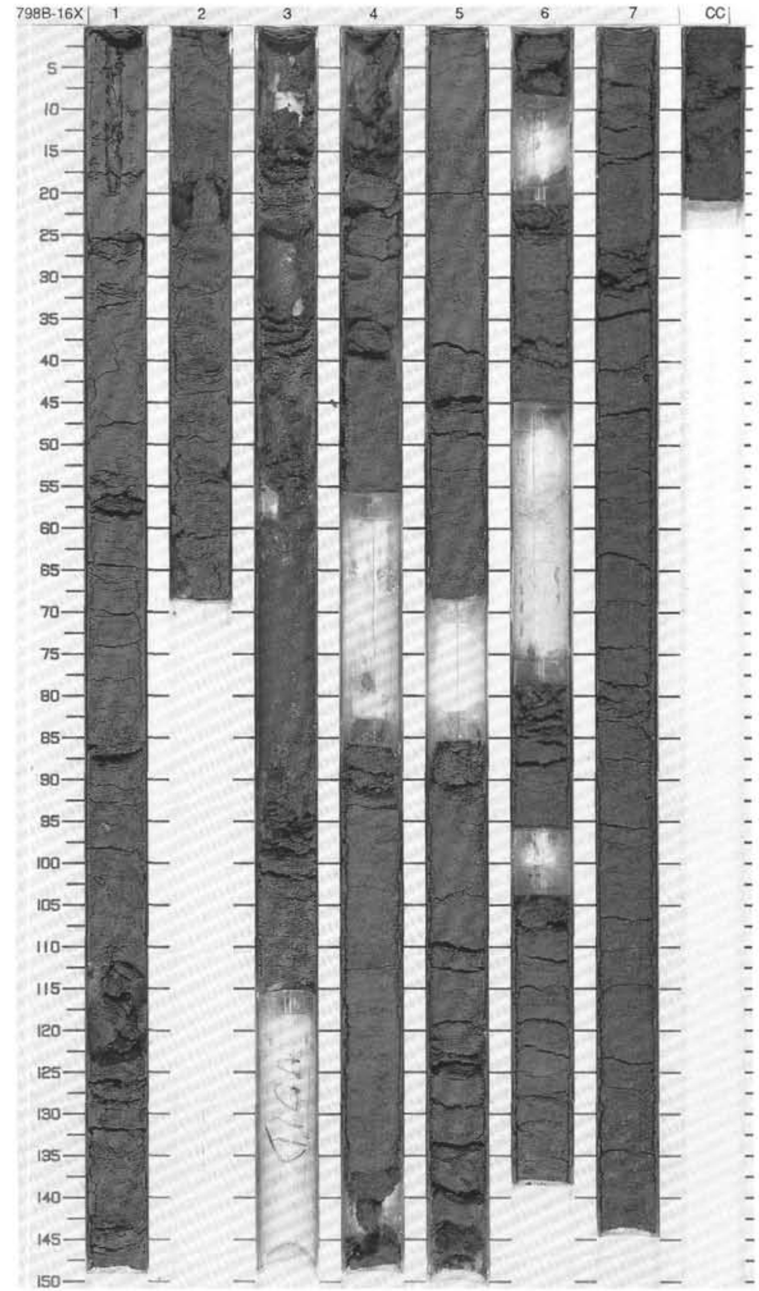
Moderate drilling disturbance.

DIATOMACEOUS OOZE with NANNOFOSSILS AND SPICULES

Major lithology: This core contains dark olive gray (5Y 3/2) DIATOMACEOUS OOZE, with NANNOFOSSILS and SPICULES. Some bioturbation is visible in Section 1.

SMEAR SLIDE SUMMARY (%):

	1, 9 D	1, 43 D	5, 29 D
TEXTURE:			
Sand	2	3	3
Silt	50	52	60
Clay	48	45	37
COMPOSITION:			
Clay	20	20	10
Diatoms	35	45	40
Foraminifers	10	5	5
Nannofossils	15	10	25
Opaques	2	5	2
Quartz	5	5	3
Silicoflagellates	2	Tr	—
Spicules	10	10	15



SITE 798 HOLE B CORE 17X CORED INTERVAL 1052.3-1061.9 mbsl; 152.3-161.9 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
QUATERNARY	B	CN13b	*Cycladophora davisiana*	*Actinocyclus oculatus*	*Dictyocha subarctios*	R	ρ=78.3 P=1.39	%CaCO3=0.80 %TOC=1.57	6	0.5				*
						R	ρ=79.2 P=1.38	%CaCO3=0.40 %TOC=1.68	5	1.0				
						R	ρ=80.6 P=1.44	%CaCO3=1.70 %TOC=1.78	4					
						R	ρ=79.7 P=1.37	%CaCO3=0.40 %TOC=1.68	3					
						R	ρ=80.7 P=1.36	%CaCO3=9.30 %TOC=1.74	2					
						R	ρ=79.0 P=1.35		1					*
	F/P					R	ρ=69.0 P=1.61		7					*
	F/M								8 CC					*

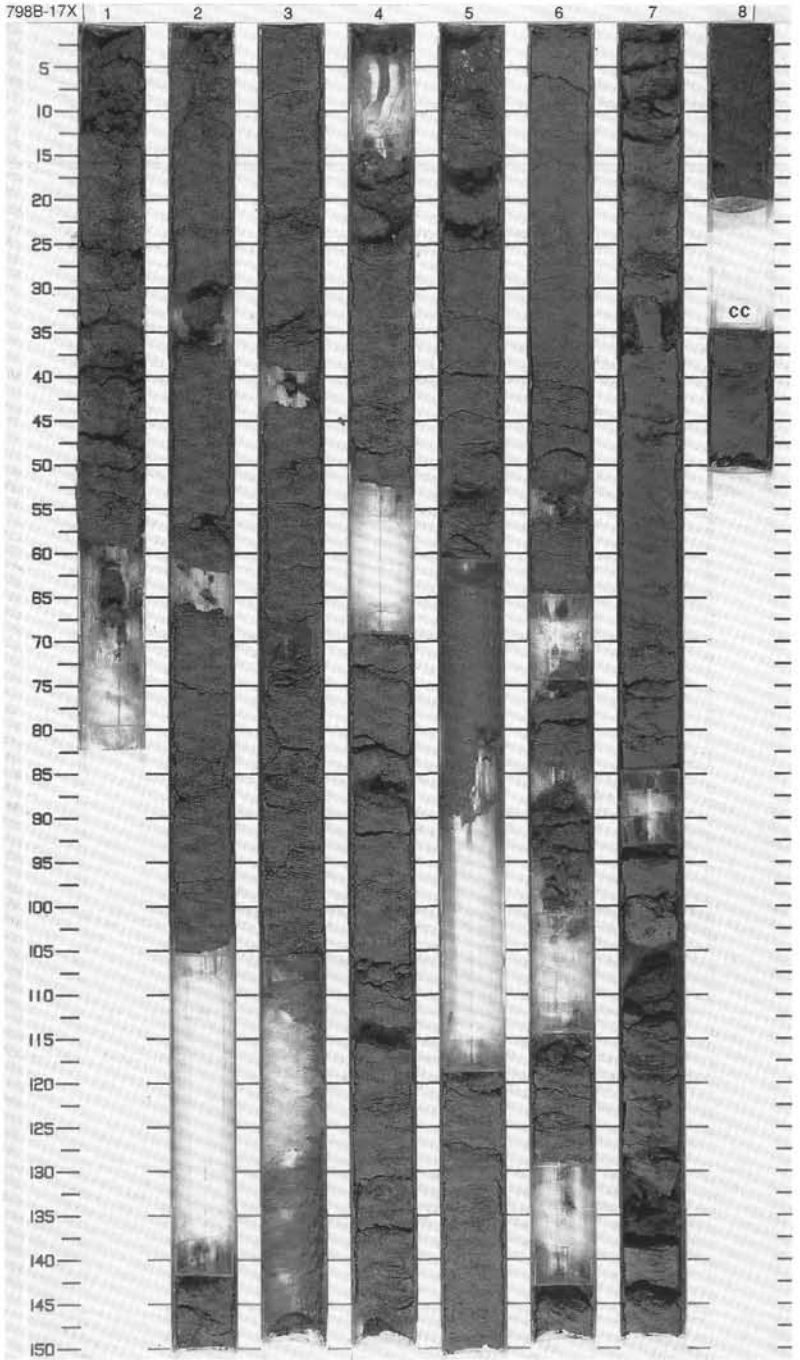
Moderate to severe drilling disturbance.

NANNOFOSSIL DIATOM OOZE with SPICULES and DIATOMACEOUS SILTY CLAY with FORAMINIFERS

Major lithology: Dark greenish gray (10Y 4/2) NANNOFOSSIL DIATOM OOZE with SPICULES from Section 1 through Section 6. Greenish gray (5G 4/1) DIATOMACEOUS SILTY CLAY with FORAMINIFERS in Section 7.

SMEAR SLIDE SUMMARY (%):

	2, 45 D	7, 39 D	7, 122 D
TEXTURE:			
Sand	2	1	2
Silt	63	34	43
Clay	35	65	55
COMPOSITION:			
Clay	15	55	45
Diatoms	40	15	30
Foraminifers	4	3	5
Glass	Tr	—	—
Nannofossils	25	5	Tr
Opaques	12	3	
Quartz	5	15	10
Silicoflagellates	Tr	Tr	—
Spicules	10	5	5



SITE 798 HOLE B CORE 18X CORED INTERVAL 1061.9-1071.6 mbsl; 161.9-171.6 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
QUATERNARY	R/G	CN13b	*Cyclodophora davisiana*	*Actinocyclus oculatus*	*Dictyocha subarctios*	R	ϕ=70.0 ρ=1.57		1	0.5				*
	F/P					R	ϕ=75.4 ρ=1.41		1	1.0				
						R	ϕ=72.9 ρ=1.47		2					*
	R/M					R	ϕ=71.3 ρ=1.36		3					
						R	ϕ=78.9 ρ=1.36	%CaCO3=11.6 %TOC=1.77	4					*
	C/M							%CaCO3=1.30 %TOC=0.96	5					
	F/M								6					
									7				oA	
									CC				oA	
													oA	
													oA	
													oA	

LITHOLOGIC DESCRIPTION

Moderate drilling disturbance.

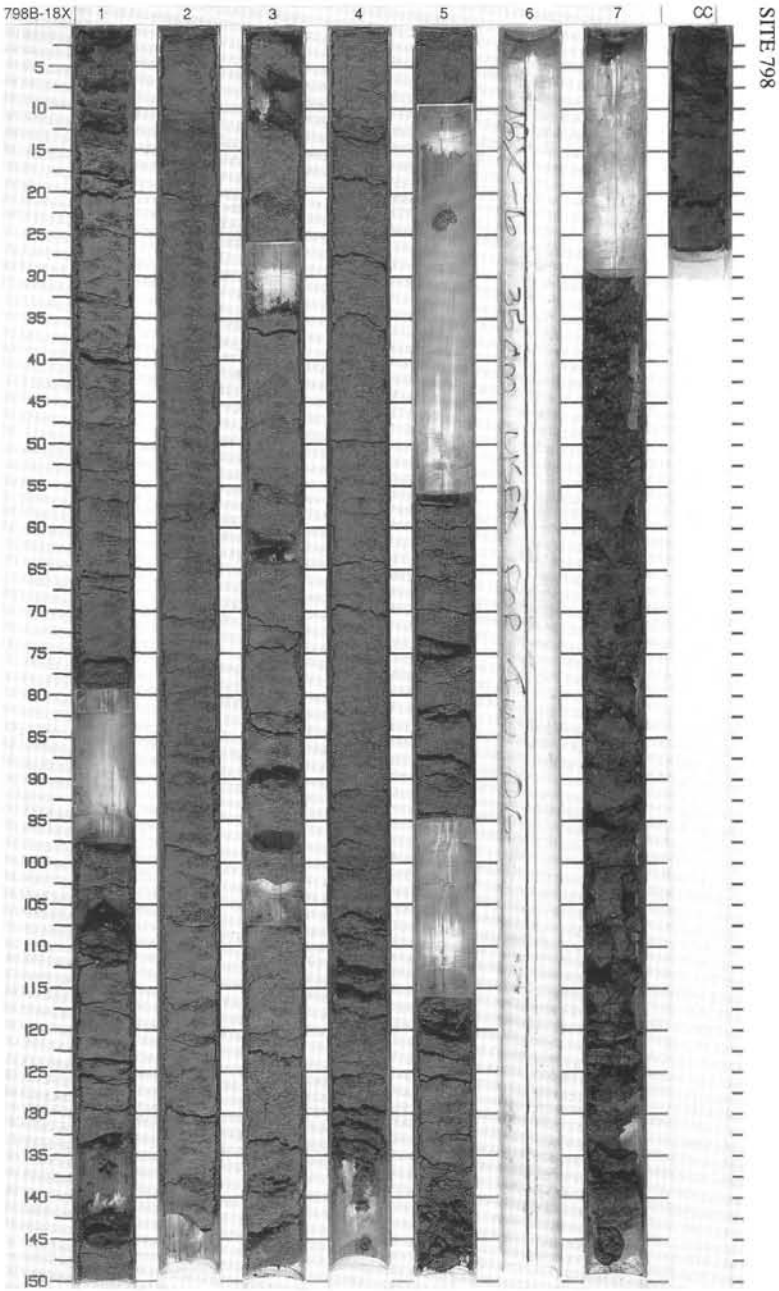
DIATOMACEOUS OOZE with NANNOFOSSILS and DIATOM NANNOFOSSIL CLAY

Major lithology: interbedded dark greenish gray (10Y 4/2) DIATOMACEOUS OOZE with NANNOFOSSILS and greenish gray (5G 4/1, 5GY 4/1) DIATOM NANNOFOSSIL CLAY.

Minor lithology: VOLCANIC ASH pods at 5 horizons in Section 7.

SMEAR SLIDE SUMMARY (%):

	1, 49 D	2, 49 D	4, 56 D
TEXTURE:			
Sand	1	2	3
Silt	59	73	75
Clay	40	25	22
COMPOSITION:			
Clay	25	10	6
Diatoms	40	60	60
Foraminifers	5	3	5
Glass	Tr	—	—
Nannofossils	15	10	15
Opaques	3	2	1
Quartz	5	5	3
Silicoflagellates	—	—	Tr
Spicules	5	10	10



SITE 798 HOLE B CORE 19X CORED INTERVAL 1071.6-1081.3 mbsl; 171.6-181.3 mbsf

TIME-ROCK UNIT: QUATERNARY

BIOSTRAT. ZONE/FOSSIL CHARACTER:
- FORAMINIFERS: C/M
- NANNOFOSSILS: F/P; CN13
- RADIOLARIANS: R/M; *Cycladophora davisiana*
- DIATOMS: F/P; ?
- SILICOFLAGELLATES/EBRIDIANS: B

PALEOMAGNETICS: R R R R

PHYS. PROPERTIES: ρ=73.6, ρs=1.52; ρ=75.5, ρs=1.72; ρ=67.5, ρs=1.54; ρ=74.2, ρs=1.41; ρ=65.2, ρs=1.56

CHEMISTRY: %CaCO3=10.3, %TOC=1.67; %CaCO3=1.70, %TOC=2.21; %CaCO3=5.70, %TOC=1.25

SECTION: 1, 2, 3, 4, 5, 6, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES: ○A; ○A; ○A

SAMPLES: * ** * *

LITHOLOGIC DESCRIPTION

Moderate drilling disturbance.

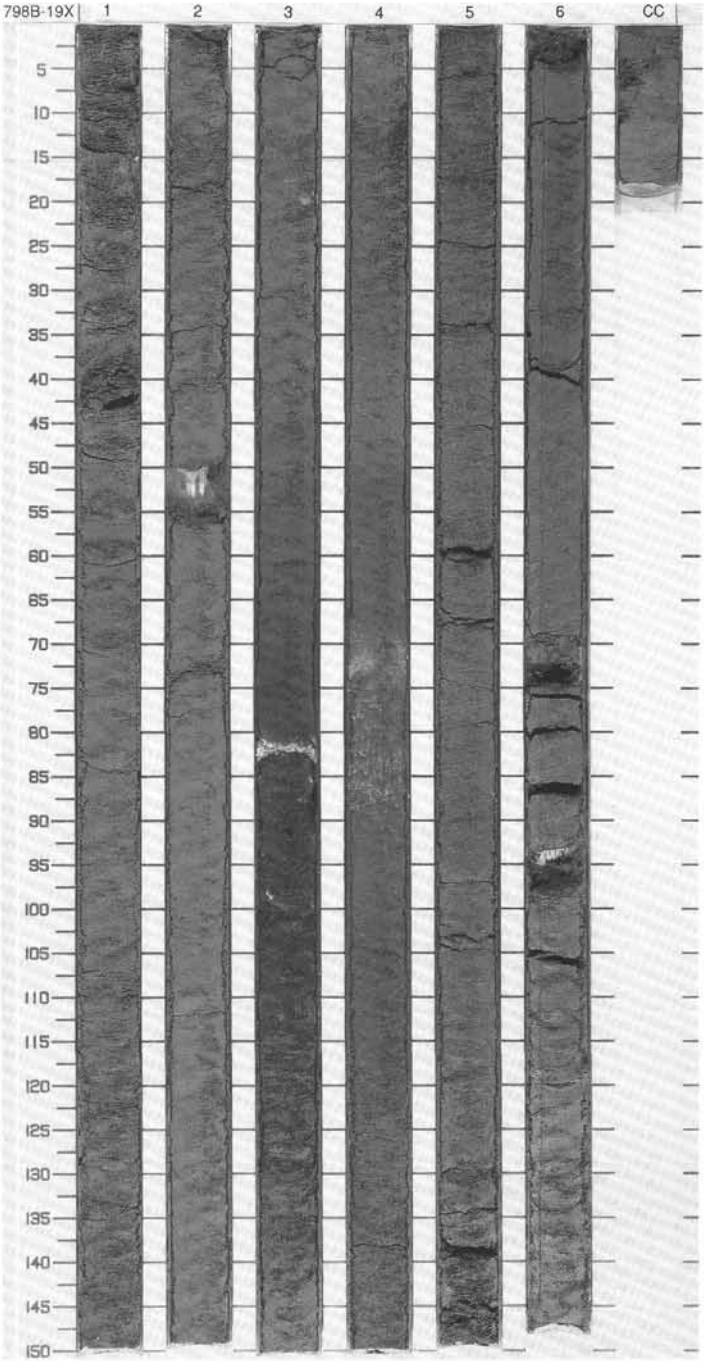
DIATOMACEOUS OOZE with NANNOFOSSILS and SILTY CLAY with DIATOMS

Major lithology: Grayish green (10Y 4/2) to greenish gray (5Y 4/2) DIATOMACEOUS OOZE with NANNOFOSSILS in Sections 1 to 5, and greenish gray (10Y 4/2) SILTY CLAY with DIATOMS in Section 6.

Minor lithology: White thin VOLCANIC ASH layers in Section 3, 80 cm, and in Section 4, 70 cm. Ash pods occur in Sections 1, 3, and 5.

SMEAR SLIDE SUMMARY (%):

	1, 63 D	3, 81 M	3, 91 D	5, 17 D	6, 59 D
TEXTURE:					
Sand	5	60	5	3	5
Silt	65	40	50	67	50
Clay	30	—	45	30	45
COMPOSITION:					
Biotite	—	1	—	—	—
Clay	5	—	45	10	40
Diatoms	50	—	20	60	10
Feldspar	—	2	—	—	—
Fish	—	—	Tr	—	Tr
Foraminifers	5	—	5	5	5
Glass	—	95	5	—	5
Nannofossils	25	—	—	10	—
Opaques	2	—	1	2	2
Pyroxene	—	1	—	—	—
Quartz	3	1	20	5	30
Silicoflagellates	—	—	Tr	—	Tr
Spicules	10	—	3	8	5



SITE 798 HOLE B CORE 20X CORED INTERVAL 1081.3-1091.0 mbsl; 181.3-191.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
QUATERNARY		CN13	*Cycladophora davisiana*	*Actinocyclus oculatus*	*Dictyocha subarctios*	R R R R R N	ϕ=71.3 ρ=1.52 ϕ=77.1 ρ=1.42 ϕ=76.4 ρ=1.42 ϕ=68.5 ρ=1.60 ϕ=67.7 ρ=1.62 ϕ=71.3 ρ=1.50	%CaCO3=7.10 %TOC=1.11 %CaCO3=6.10 %TOC=1.55 %CaCO3=4.90 %TOC=1.12	5 4 3 2 1	0.5 1.0				* * * *

Moderate drilling disturbance.

DIATOMACEOUS CLAYEY MIXED SEDIMENT, DIATOM OOZE, DIATOMACEOUS CLAY, CLAY, and CLAYEY MIXED SEDIMENT

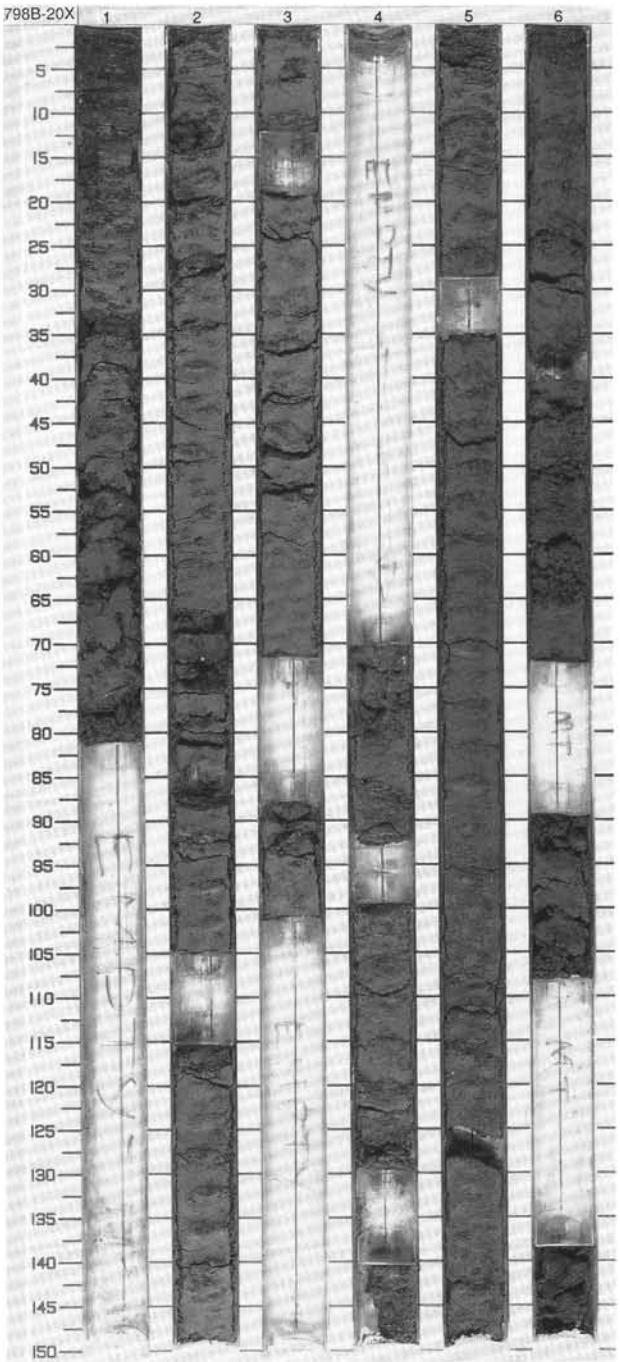
Major lithology: This core contains DIATOMACEOUS CLAYEY MIXED SEDIMENT, CLAYEY MIXED SEDIMENT with FORAMINIFERS, SPICULES, NANNOFOSSILS, and DIATOMS, and DIATOM OOZE with NANNOFOSSILS, CLAY, and SPICULES in the upper part of the core (Sections 1 through 7). These sediments are light gray to dark gray and olive gray (5Y 6/1-5Y 4/1; 5Y 4/2). The lower part of the core (Section 7 through the core catcher) contains dark gray (5Y 6/1) DIATOMACEOUS CLAY and CLAY with SPICULES and DIATOMS.

Minor lithology: Several PUMICE fragments are found in Section 6.

SMEAR SLIDE SUMMARY (%):

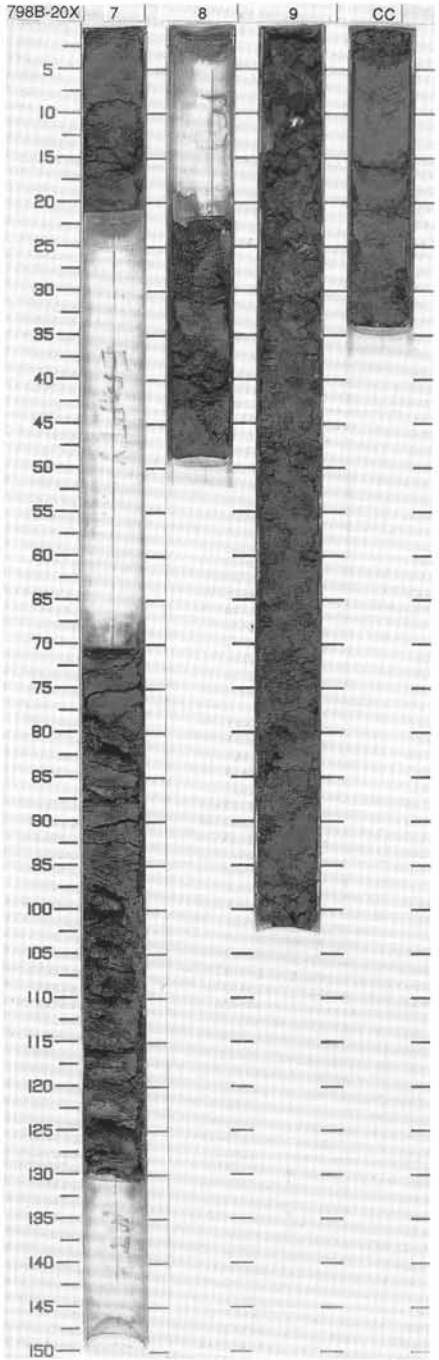
	1, 44 D	2, 60 D	3, 50 D	6, 18 D
TEXTURE:				
Sand	—	2	5	2
Silt	55	50	40	70
Clay	45	48	55	25
COMPOSITION:				
Clay	35	45	38	15
Diatoms	30	20	20	35
Feldspar	—	—	—	1
Fish	1	Tr	Tr	Tr
Foraminifers	1	5	10	5
Glass	1	1	—	Tr
Nannofossils	—	1	15	10
Opaques	—	2	1	1
Pyrite	3	—	—	—
Quartz	15	15	5	10
Silicoflagellates	Tr	Tr	1	3
Spicules	10	10	10	20

(cont.)



SITE 798 HOLE B CORE 20X CORED INTERVAL 1081.3-1090.0 mbsl; 181.3-191.0 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	F/M	F/P	R/M	C/M	C/M	N	N	N	7	0.5 1.0					(cont.)
									8						
									9						
									CC						



SITE 798 HOLE B CORE 21X CORED INTERVAL 1090.0-1100.6 mbsl; 191.0-200.6 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
QUATERNARY	R/G	CN13	*Cycladophora davisiana*	*Actinocyclus oculatus*	*Dictyocha subarctios*	N	ρ=72.4 p=1.48	%CaCO3=2.30 %TOC=1.37	1	0.5 1.0				MB
	F/P					N	ρ=66.0 p=1.46	%CaCO3=3.10 %TOC=1.43	2					
	R/M					N	ρ=73.9 p=1.49	%CaCO3=1.90 %TOC=1.22	3					*
	C/M					N	ρ=71.4 p=1.53	%CaCO3=3.90 %TOC=1.64	4					
	C/M					N	ρ=66.1 p=1.66	%CaCO3=4.30 %TOC=0.99	5					*
						N	ρ=75.6 p=1.39	%CaCO3=8.20 %TOC=1.51	6					IW
						N			7					*
									CC					

LITHOLOGIC DESCRIPTION

Moderate drilling disturbance.

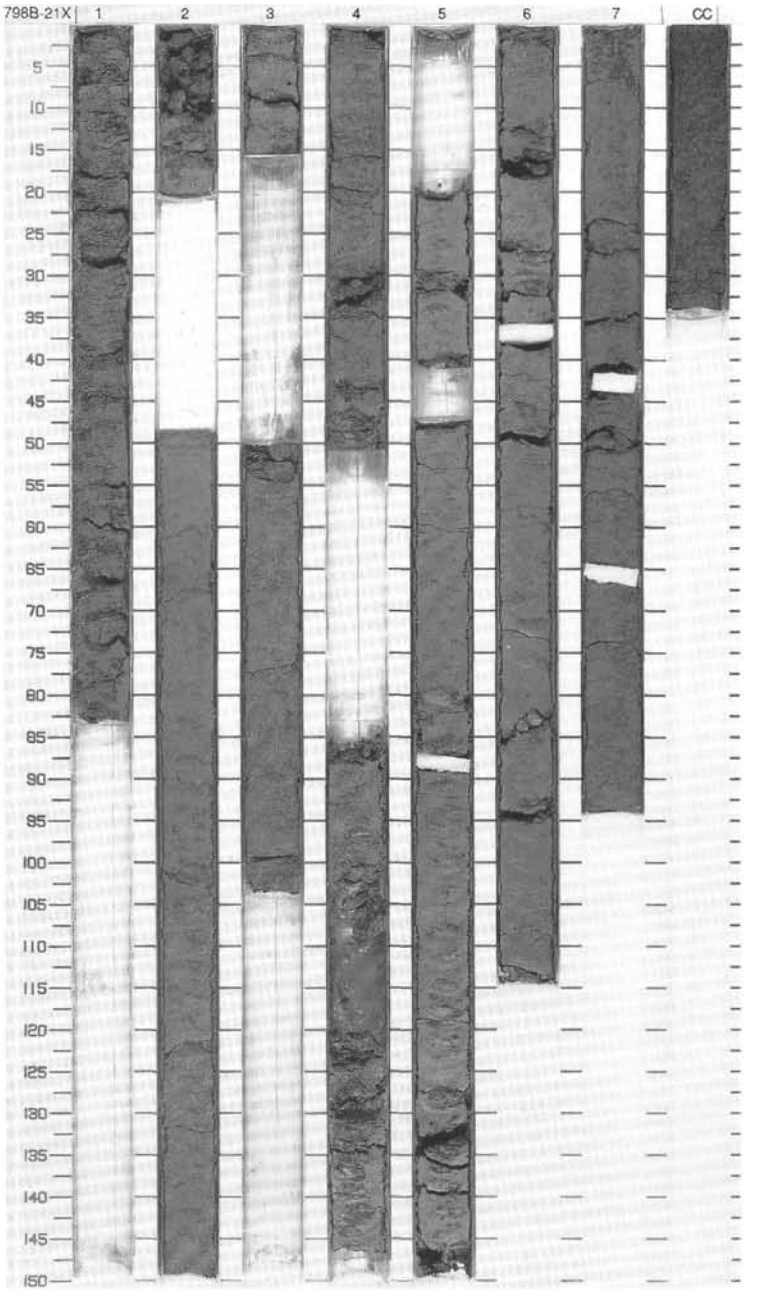
DIATOM OOZE, CLAYEY DIATOM MIXED SEDIMENT

Major lithology: This core contains olive gray (5Y 4/2) CLAYEY DIATOM MIXED SEDIMENT in Sections 1 through 6. Greenish gray to dark greenish gray (5GY 5/1-5GY 4/1) and olive gray (5Y 5/2-5Y 4/2) DIATOM OOZE with CLAY is predominant in Sections 7 through the core catcher.

Minor lithology: Several scattered PUMICE fragments in this core.

SMEAR SLIDE SUMMARY (%):

	3, 77 D	6, 64 D	CC, 16 D
TEXTURE:			
Sand	7	1	5
Silt	50	50	65
Clay	43	49	30
COMPOSITION:			
Clay	20	30	14
Diatoms	40	40	65
Foraminifers	1	1	1
Glass	5	2	—
Nannofossils	5	3	5
Pyrite	1	1	Tr
Quartz	21	20	15
Radiolarians	2	1	—
Siliçoflagellates	2	—	—
Spicules	2	2	—



SITE 798 HOLE B CORE 22X CORED INTERVAL 1100.6-1110.3 mbsl; 200.6-210.3 mbsf

TIME-ROCK UNIT: QUATERNARY

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS R/G F/P; NANNOFOSSILS CN13; RADIOLARIANS B; DIATOMS *Cyladophora davisiana* A/M; SILICOFLAGELLATES AND EBRIDIANS *Actinocyclus oculatus* B

PALEOMAGNETICS: N N N N N

PHYS. PROPERTIES: ●0.77.0 P-1.39; ●0.65.4 P-1.38; ●0.76.9 P-1.38; ●0.76.9 P-1.38; ●0.71.6 P-1.33; ●0.71.8 P-1.30; ●0.67.8 P-1.62

CHEMISTRY: %CaCO3=0.60 %TOC=2.67; %CaCO3=0.60 %TOC=3.10; %CaCO3=1.30 %TOC=2.40

SECTION: CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

LITHOLOGIC DESCRIPTION

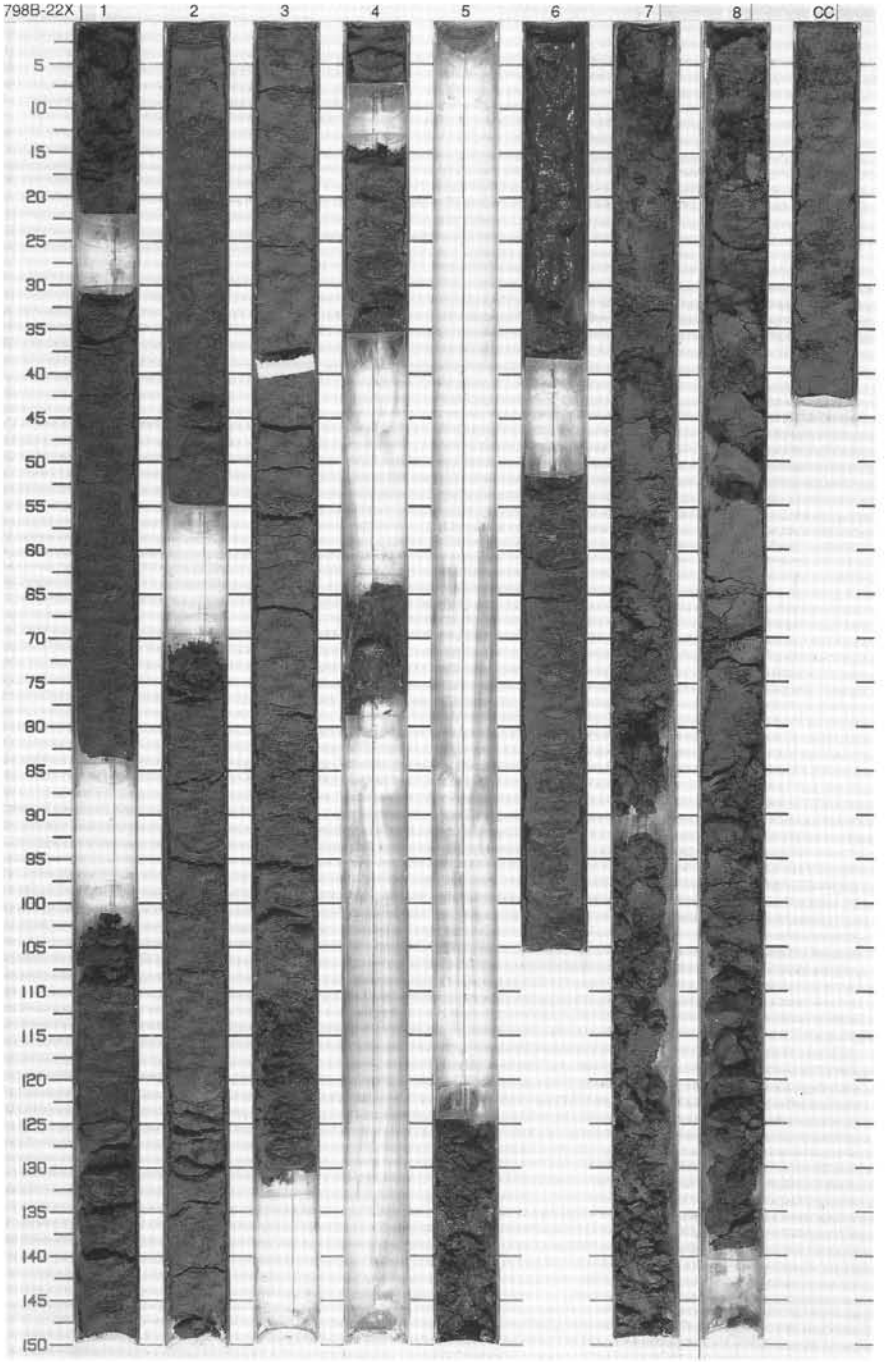
Minor drilling disturbance.

DIATOM CLAY

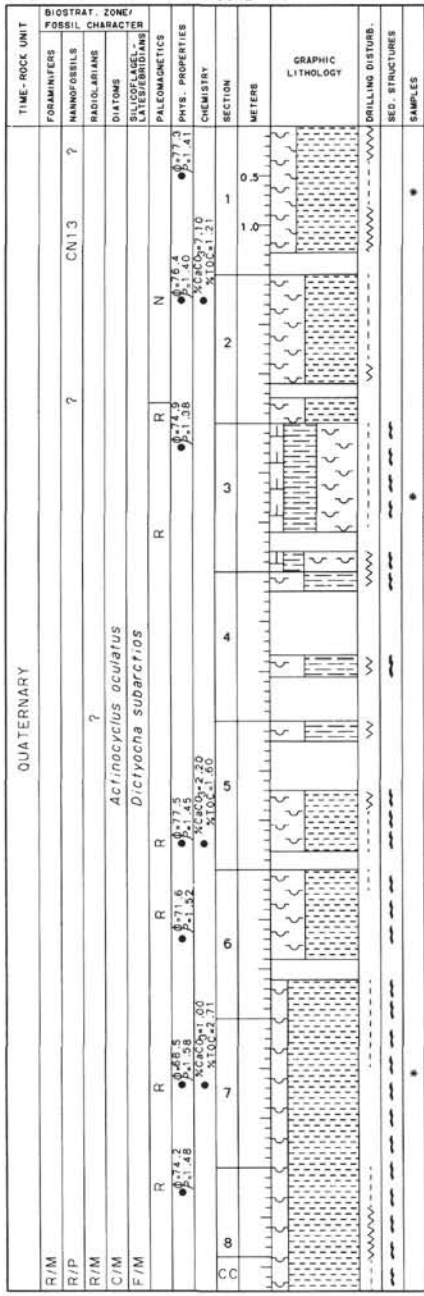
Major lithology: This core contains olive gray to dark olive gray (5Y 4/2- 5Y 3/2) DIATOM CLAY and has a homogeneous appearance from Sections 1 through 6. Section 7 is slightly mottled from bioturbation. Minor amounts of nannofossils occur in Section 7, 15-30 cm and 46-53 cm; and Section 8, 33-38 cm and 48-70 cm.

SMEAR SLIDE SUMMARY (%):

	1, 65 D	3, 66 D	8, 63 D
TEXTURE:			
Sand	1	1	---
Silt	35	35	30
Clay	64	64	70
COMPOSITION:			
Clay	55	55	45
Diatoms	35	35	30
Foraminifers	—	—	Tr
Glass	—	—	2
Nannofossils	—	—	8
Pyrite	2	2	1
Quartz	3	3	10
Radiolarians	Tr	—	Tr
Silicoflagellates	1	1	Tr
Spicules	4	4	2



SITE 798 HOLE B CORE 23X CORED INTERVAL 1100.3-1120.0 mbsl; 210.3-220.0 mbsf



LITHOLOGIC DESCRIPTION

Moderate drilling disturbance.

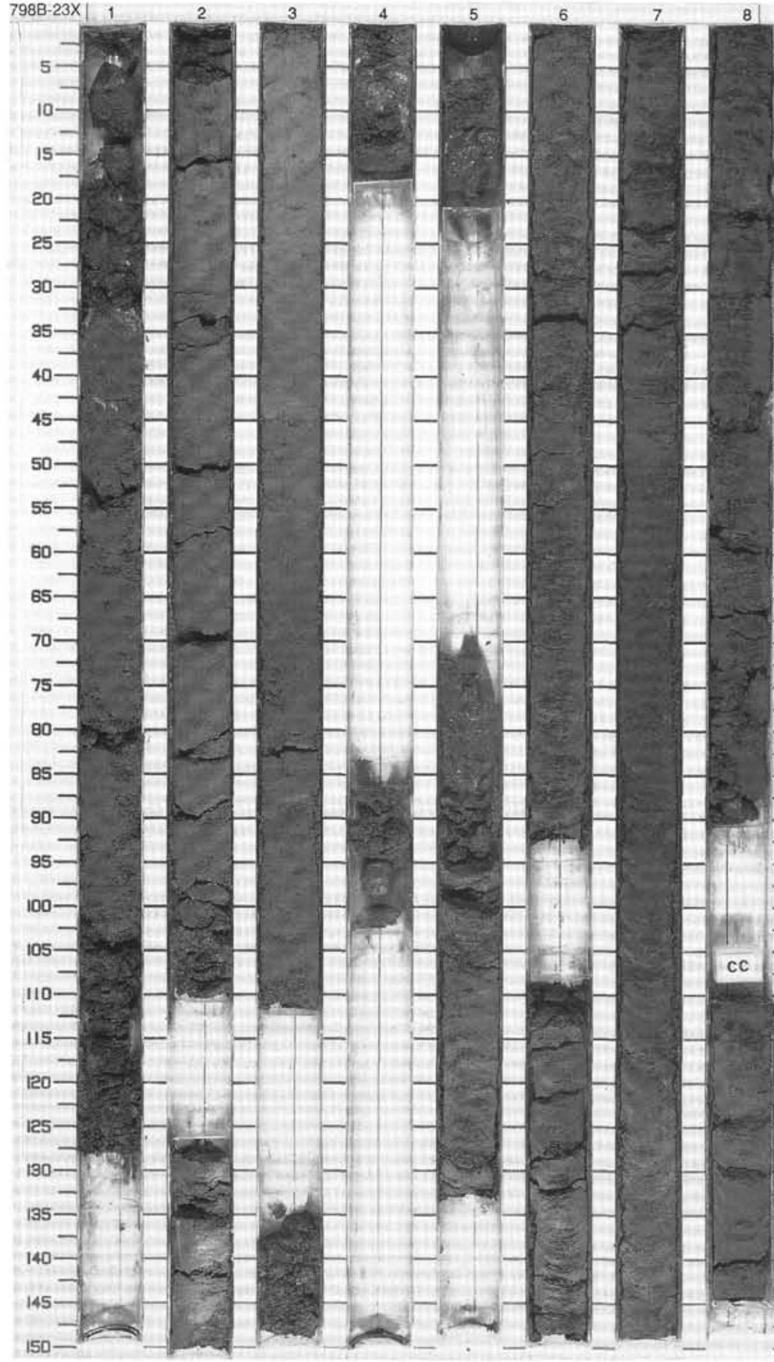
DIATOM CLAY with QUARTZ, and DIATOM CLAY with NANNOFOSSILS and QUARTZ

Major lithology: This homogeneous core is composed of olive gray to dark olive gray (5Y 4/4 - 5Y 4/1) DIATOM CLAY with QUARTZ in Sections 1, 2, and 4 through the core catcher, and DIATOM CLAY with NANNOFOSSILS and QUARTZ in Section 3. The sediments of Sections 3 through 8 are bioturbated at various intervals.

Minor lithology: Olive (5Y 4/3) DIATOM OOZE pods occur in Section 6, 40-42 cm.

SMEAR SLIDE SUMMARY (%):

	1, 66 D	3, 75 D	7, 53 D
TEXTURE:			
Sand	5	4	1
Silt	35	60	30
Clay	60	35	69
COMPOSITION:			
Clay	55	30	65
Diatoms	30	45	20
Fish	Tr	—	—
Glauconite	Tr	—	Tr
Nannofossils	—	10	—
Pyrite	1	1	2
Quartz	10	10	10
Radiolarians	—	Tr	—
Silicoflagellates	Tr	Tr	Tr
Spicules	4	3	2



SITE 798 HOLE B CORE 24X CORED INTERVAL 1120.0-1129.7 mbsl; 220.0-229.7 mbsf

TIME-ROCK UNIT: PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: R/M; B; R/M; C/M; F/M

FORAMINIFERS; NANNOFOSSILS; RADIOLARIANS; DIATOMS: *Neodenticula kozlumii* (?); SILICOFLAGELLATES/EBRIDIANS: *Ammodochium rectangulare*

PALEOMAGNETICS: R R R R R

PHYS. PROPERTIES: ρ=2.73.0 ρ=1.48; ρ=2.72.8 ρ=1.44; ρ=2.75.3 ρ=1.41; ρ=2.74.5 ρ=1.41; ρ=2.72.1 ρ=1.45; ρ=2.74.1 ρ=1.43; ρ=2.75.3 ρ=1.38

CHEMISTRY: %CaCO3=0.70 %TOC=2.81; %CaCO3=0.50 %TOC=2.27; %CaCO3=0.70 %TOC=3.03; %CaCO3=0.60 %TOC=2.94

SECTION: 1 2 3 4 5 6 7 CC

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES: oA

SAMPLES: * * *

LITHOLOGIC DESCRIPTION

Moderate drilling disturbance.

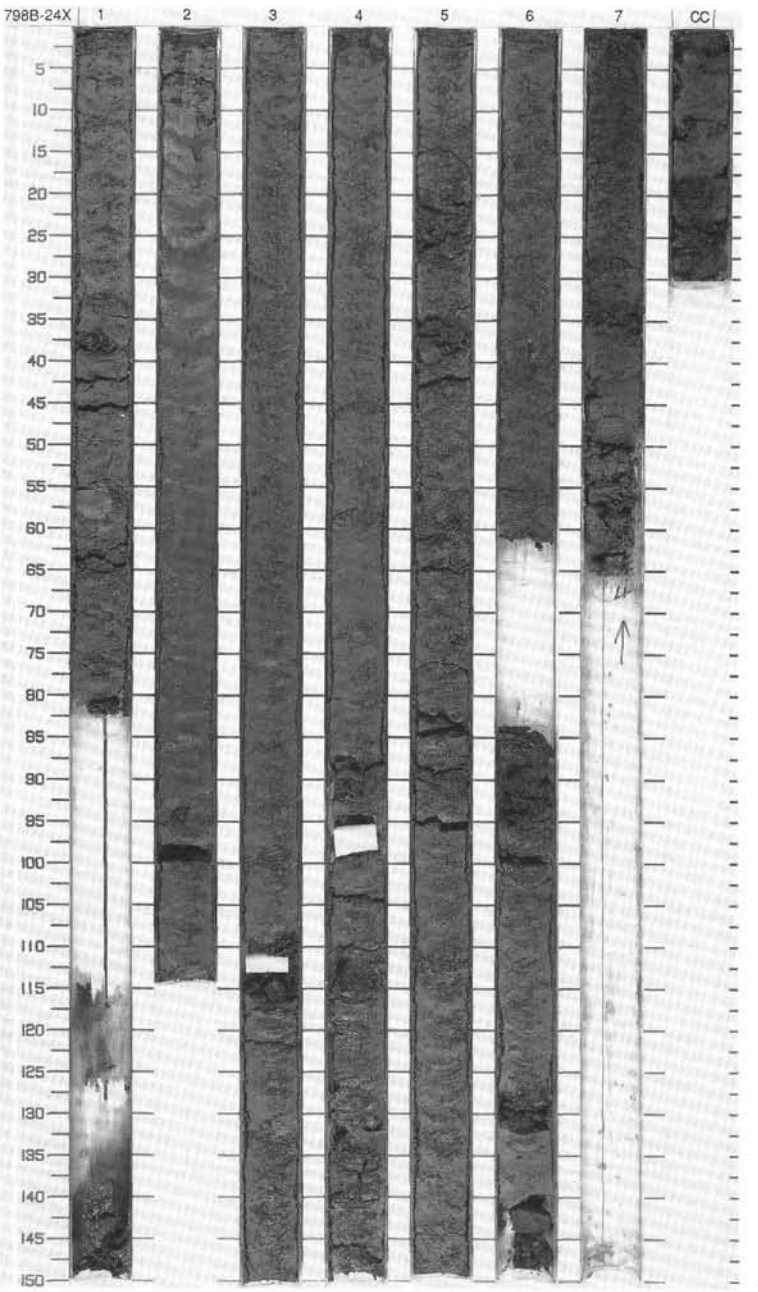
DIATOMACEOUS CLAY with SPICULES and SILTY CLAY with DIATOMS

Major lithology: This core contains dark olive gray to olive gray (5Y 3/2- 5Y 4/2) DIATOMACEOUS CLAY with SPICULES in Sections 1 through 5, and in Section 7 through the core catcher, and olive gray (5Y 4/2) SILTY CLAY with DIATOMS in Section 6. Sections 2 and 3 are moderately bioturbated; the lower sections are homogeneous.

Minor lithology: Two pieces of rounded pumice fragments (0.5 by 1 cm) occur in Section 6, 38 cm.

SMEAR SLIDE SUMMARY (%):

	1, 52 D	6, 135 D	7, 34 D
TEXTURE:			
Sand	Tr	---	Tr
Silt	20	25	20
Clay	80	75	80
COMPOSITION:			
Clay	50	55	55
Diatoms	40	10	30
Pyrite	1	—	Tr
Quartz	3	25	10
Radiolarians	Tr	—	—
Silicoflagellates	—	Tr	Tr
Spicules	3	10	5



SITE 798 HOLE B CORE 25X CORED INTERVAL 1129.7-1139.3 mbsl; 229.7-239.3 mbsf

TIME-ROCK UNIT: PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER:
- Foraminifers: R/G
- Nannofossils: F/P
- Radiolarians: ? F/M
- Diatoms: *Neodenticula koizumii* C/M
- Silicoflagellates/Ebridians: *Ammodochium rectangulare* R/M

PALEOMAGNETICS: R, R, R, R, R

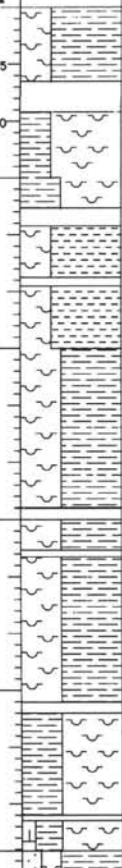
PHYS. PROPERTIES:
- Section 1: ● ϕ=63.0, ρ=1.54
- Section 2: ● ϕ=75.9, ρ=1.43
- Section 3: ● ϕ=72.9, ρ=1.43
- Section 4: ● ϕ=72.4, ρ=1.54
- Section 5: ● ϕ=74.4, ρ=1.41

CHEMISTRY:
- Section 2: ● %$CaCO_3$=1.60, %TOC=1.46
- Section 4: ● %$CaCO_3$=1.20, %TOC=1.77

SECTION: 1, 2, 3, 4, 5, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY



DRILLING DISTURB. / SED. STRUCTURES / SAMPLES: oA, *

LITHOLOGIC DESCRIPTION

Minor drilling disturbance.

DIATOM OOZE with SILTY CLAY and DIATOMACEOUS SILTY CLAY

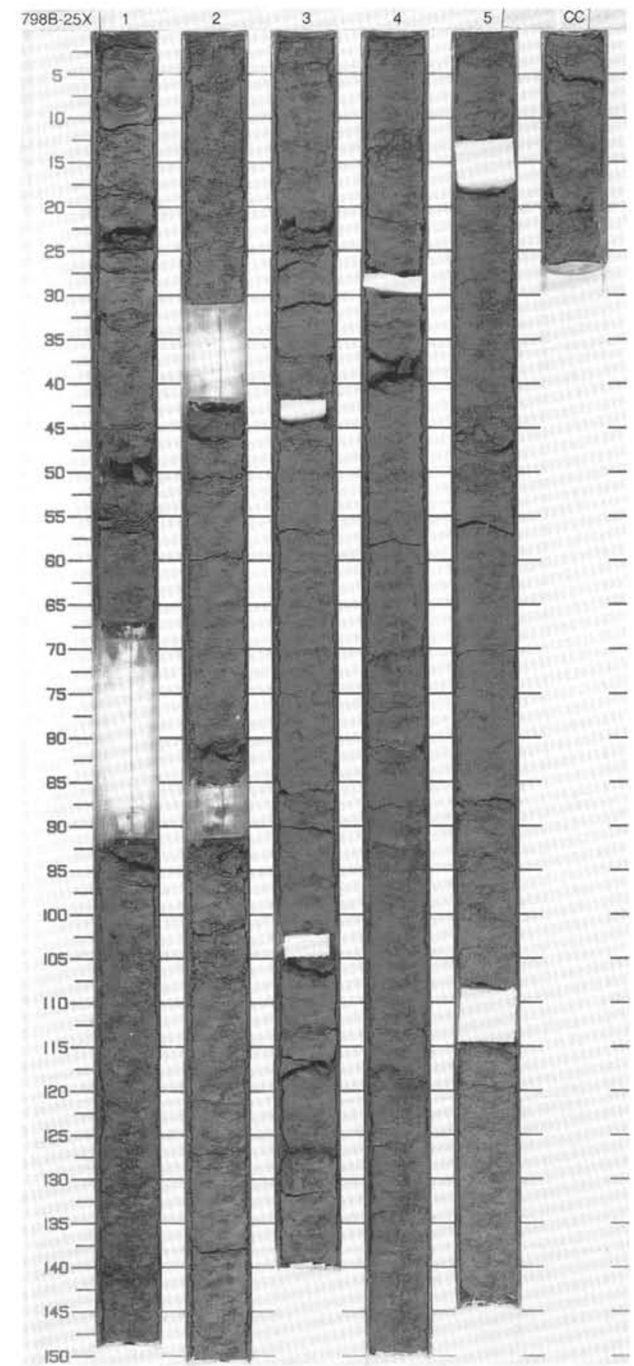
Major lithology: This core contains olive gray (5Y 4/2) DIATOM OOZE with SILTY CLAY and DIATOMACEOUS SILTY CLAY. The sediments are bioturbated in the middle of Section 5, but otherwise lack sedimentary structures.

Minor lithology: A pocket of VITRIC ASH occurs in Section 1, 112 cm.

SMEAR SLIDE SUMMARY (%):

	1, 112
	M
TEXTURE:	
Sand	5
Silt	85
Clay	10
COMPOSITION:	
Diatoms	4
Feldspar	10
Foraminifers	10
Glass	64
Silicoflagellates	2
Spicules	10

798B 26X NO RECOVERY



SITE 798 HOLE B CORE 27X CORED INTERVAL 1149.0-1158.7 mbsl; 249.0-258.7 mbsf

TIME-ROCK UNIT: PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER:
- FORAMINIFERS: B
- NANNOFOSSILS: B
- RADIOLARIANS: R/M
- DIATOMS: A/G — *Neodenticula kozumii*
- SILICOFLAGELLATES/LATEBRIDIANS: F/M — *Ammodochium rectangulare*

PALEOMAGNETICS: R R R R R N

PHYS. PROPERTIES: ϕ=78.0, ρ=1.37; ϕ=68.1, ρ=1.64; ϕ=69.7, ρ=1.52; ϕ=76.4, ρ=1.41; ϕ=71.9, ρ=1.49; ϕ=65.2, ρ=1.63; ϕ=44.8, ρ=1.66

CHEMISTRY: %CaCO3=1.50, %TOC=1.46; %CaCO3=0.90, %TOC=1.76; %CaCO3=0.60, %TOC=2.37; %CaCO3=0.7, %TOC=1.81; %CaCO3=1.50, %TOC=1.70

SECTION: 1, 2, 3, 4, 5, 6, 7, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: IW, MB

LITHOLOGIC DESCRIPTION

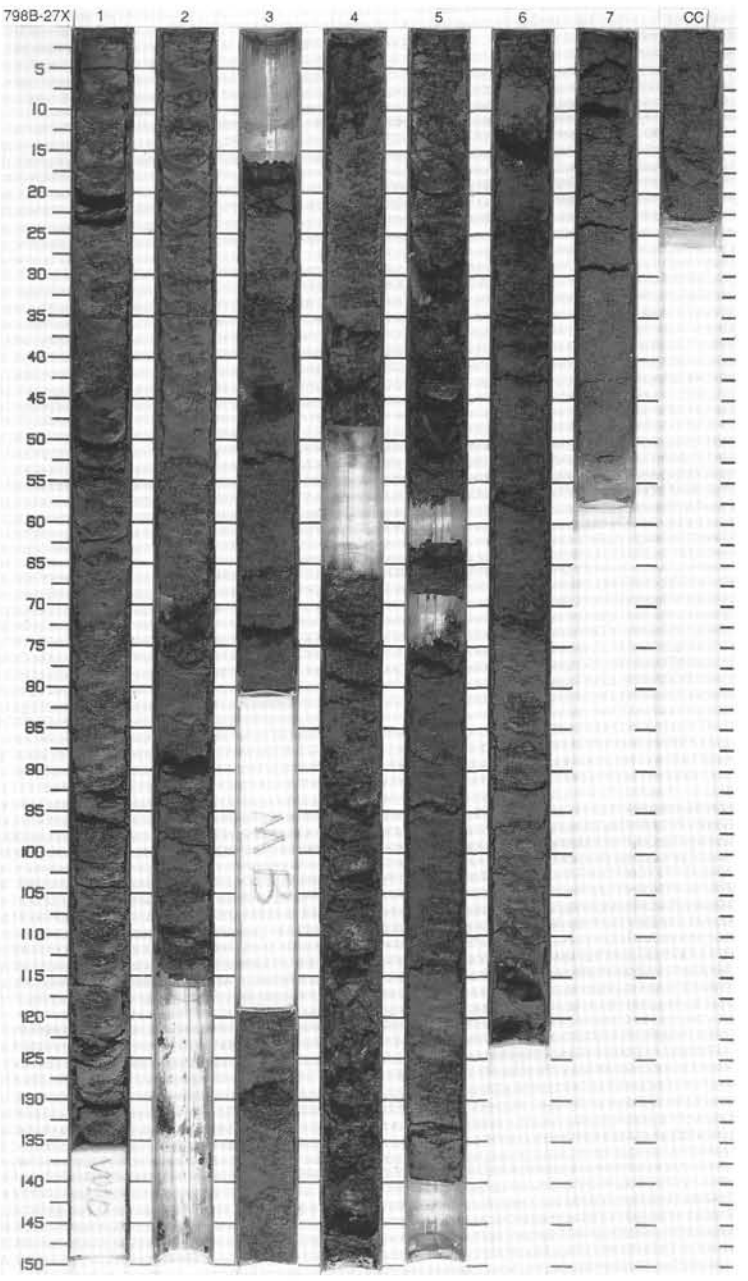
Extensive to moderate disturbance.

CLAY, SILTY CLAY, DIATOMACEOUS CLAYEY MIXED SEDIMENT AND DIATOMACEOUS OOZE

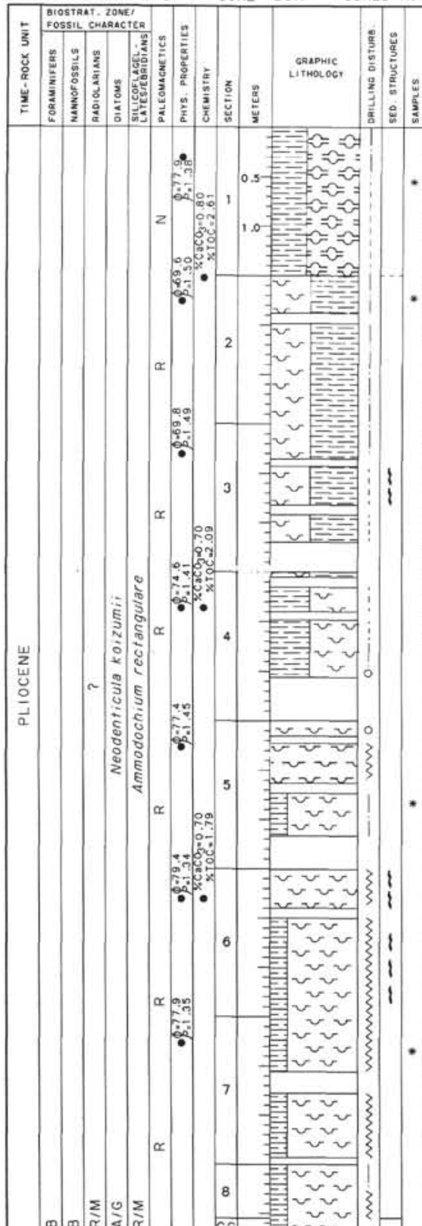
Major lithology: This core contains mostly CLAY, DIATOMACEOUS OOZE and DIATOMACEOUS CLAYEY MIXED SEDIMENT below Section 3. Sections 1 and 2 contain SILTY CLAY. The sediments are dark gray, olive gray to olive (5Y 4/1-5Y 5-4/2 5Y 5/4). Sparse bioturbation features and a few planar laminations are evident in Section 5.

SMEAR SLIDE SUMMARY (%):

	1, 69 D	3, 60 D	5, 86 D	7, 33 D
TEXTURE:				
Sand	---	---	Tr	3
Silt	20	65	20	40
Clay	80	35	80	57
COMPOSITION:				
Clay	60	30	44	15
Diatoms	10	50	40	70
Dolomite	Tr	---	---	---
Foraminifers	Tr	---	---	---
Glass	Tr	---	5	---
Nannofossils	Tr	---	---	---
Pyrite	---	1	---	1
Quartz	25	5	5	5
Radiolarians	---	---	---	Tr
Silicoflagellates	---	Tr	1	---
Spicules	5	10	5	5



SITE 798 HOLE B CORE 28X CORED INTERVAL 1158.7-1168.3 mbsl; 258.7-268.3 mbsf



LITHOLOGIC DESCRIPTION

Drilling disturbance moderate to severe.

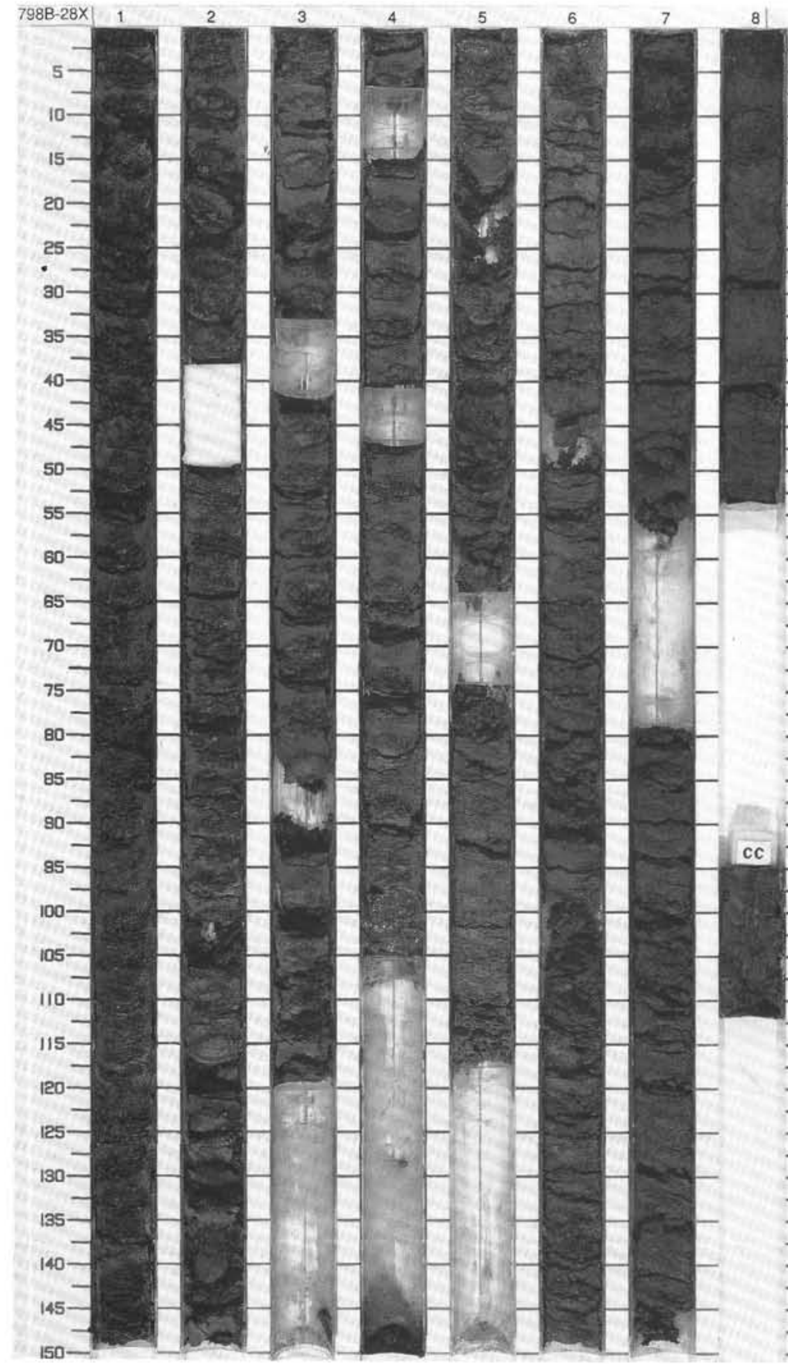
DIATOM OOZE, CLAYEY DIATOM OOZE AND DIATOMACEOUS CLAYEY MIXED SEDIMENT

Major lithology: This core contains DIATOM OOZE, CLAYEY DIATOM OOZE and DIATOMACEOUS CLAYEY MIXED SEDIMENTS with minor amounts of SPONGE SPICULES and SILICOFLAGELLATES. The percentage of biosiliceous components increases downcore from 40% in Section 2 to 70% in Section 7. The abundance of detrital material constitutes about 40 to 50% of the sediments in Sections 1 and 2.

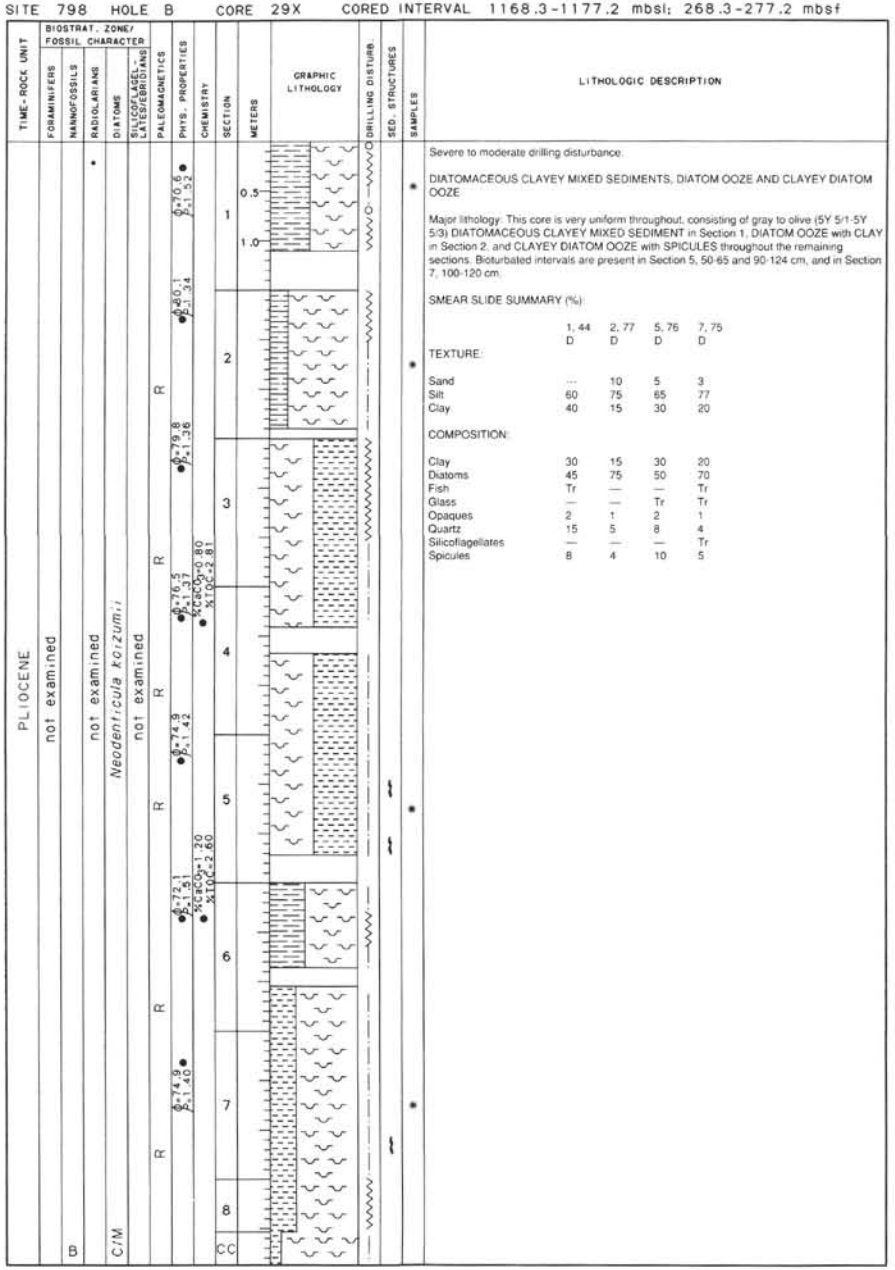
Minor lithologies:
a. OPAQUE MINERALS (<1% by volume) are scattered throughout.
b. A trace of GLAUCONITE PELLETS is present in Section 2.

SMEAR SLIDE SUMMARY (%):

	1, 54	2, 12	5, 83	7, 35
	D	D	D	D
TEXTURE:				
Sand	5	---	---	2
Silt	15	55	80	83
Clay	20	45	20	15
COMPOSITION:				
Clay	20	40	15	14
Diatoms	45	34	65	70
Feldspar	4	—	—	—
Fish	Tr	Tr	—	—
Glass	—	—	Tr	Tr
Glauconite	—	Tr	—	—
Opaques	1	1	1	1
Quartz	15	15	10	5
Silicoflagellates	—	—	Tr	—
Spicules	15	10	9	10



SITE 798 HOLE B CORE 29X CORED INTERVAL 1168.3-1177.2 mbsl; 268.3-277.2 mbsf



LITHOLOGIC DESCRIPTION

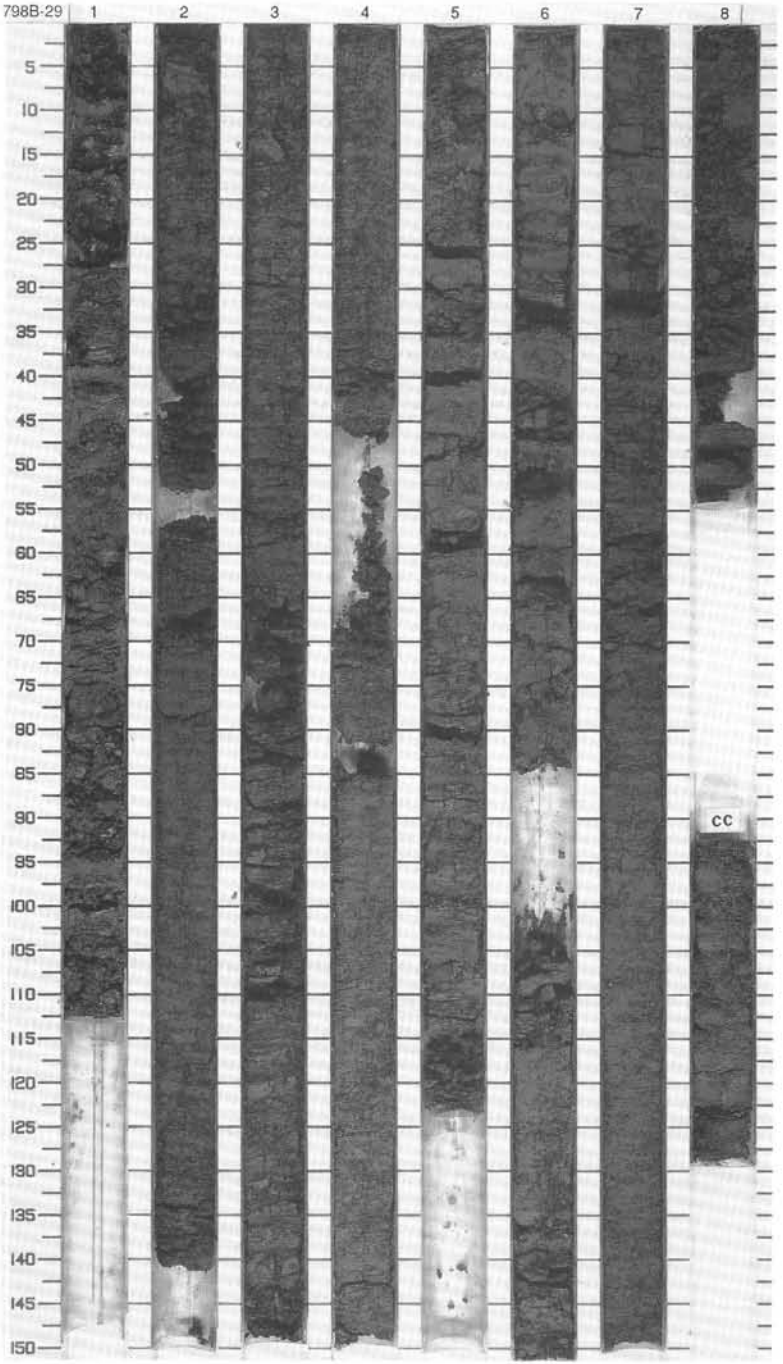
Severe to moderate drilling disturbance.

DIATOMACEOUS CLAYEY MIXED SEDIMENTS, DIATOM OOZE AND CLAYEY DIATOM OOZE

Major lithology: This core is very uniform throughout, consisting of gray to olive (5Y 5/1-5Y 5/3) DIATOMACEOUS CLAYEY MIXED SEDIMENT in Section 1, DIATOM OOZE with CLAY in Section 2, and CLAYEY DIATOM OOZE with SPICULES throughout the remaining sections. Bioturbated intervals are present in Section 5, 50-65 and 90-124 cm, and in Section 7, 100-120 cm.

SMEAR SLIDE SUMMARY (%):

	1, 44 D	2, 77 D	5, 76 D	7, 75 D
TEXTURE:				
Sand	...	10	5	3
Silt	60	75	65	77
Clay	40	15	30	20
COMPOSITION:				
Clay	30	15	30	20
Diatoms	45	75	50	70
Fish	Tr	—	—	Tr
Glass	—	—	Tr	Tr
Opaques	2	1	2	1
Quartz	15	5	8	4
Silicoflagellates	—	—	—	Tr
Spicules	8	4	10	5



SITE 798 HOLE B CORE 30X CORED INTERVAL 1177.2-1186.4 mbsl; 277.2-286.4 mbsf

TIME-ROCK UNIT: PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER:
- FORAMINIFERS: B
- NANNOFOSSILS: B
- RADIOLARIANS: R/M
- DIATOMS: C/M
- SILICOFLAGELLATES/EBRIDIANS: R/M

Neodenticula kozumii

Ammodochium rectangulare

PALEOMAGNETICS: R R R R

PHYS. PROPERTIES: ϕ=82.8 ρ=1.48; ϕ=59.0 ρ=1.79; ϕ=70.2 ρ=1.52; ϕ=65.4 ρ=1.63; ϕ=66.9 ρ=1.65; ϕ=75.4 ρ=1.45

CHEMISTRY: %CaCO3=1.30; %TOC=1.39

SECTION: CC, 6, 5, 4, 3, 2, 1

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES: ~

SAMPLES: OG, IW

LITHOLOGIC DESCRIPTION

Moderate to severe drilling disturbance.

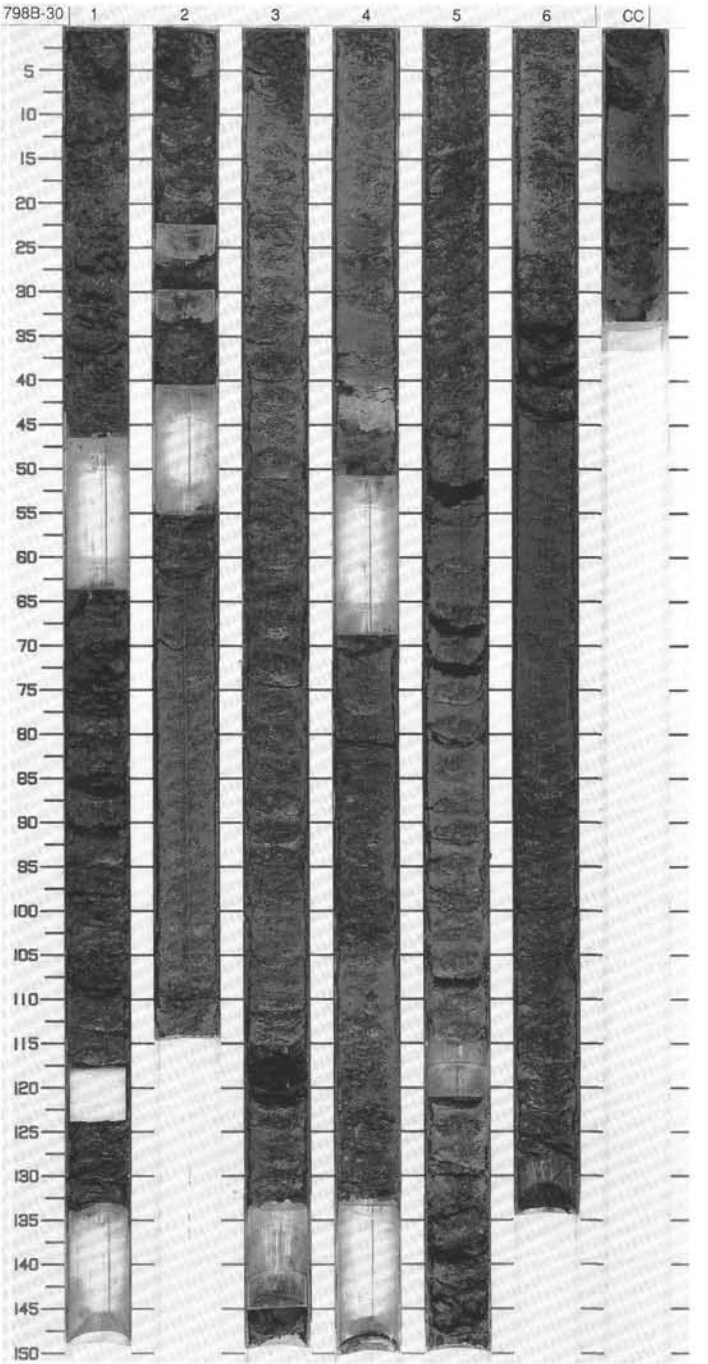
SILTY CLAY, DIATOM OOZE with CLAY, DIATOMACEOUS CLAY, and DIATOM CLAYEY MIXED SEDIMENT

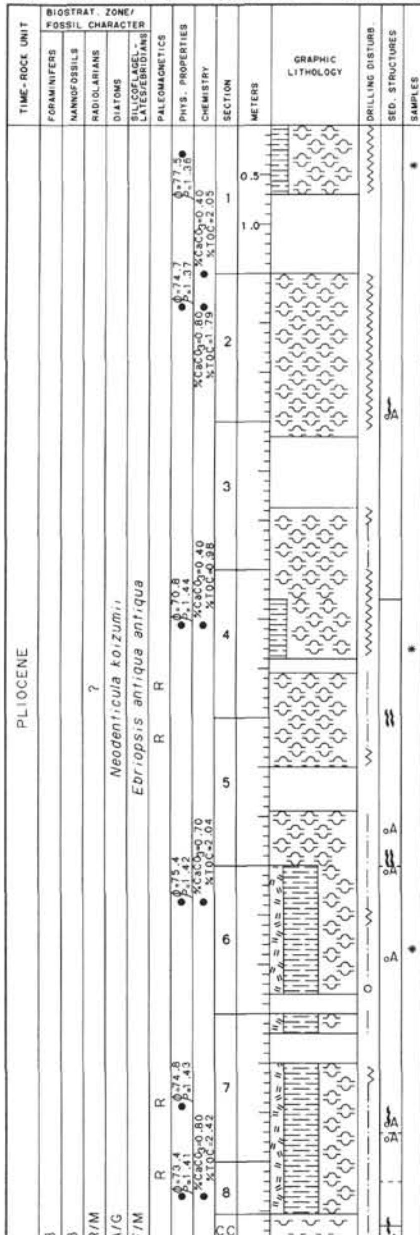
Major lithology: In this rather uniform core, dark greenish gray (5Y 3/3- 10Y 4/2) DIATOM OOZE with CLAY grades downward into DIATOM CLAY and SILTY CLAY with DIATOMS, with a maximum in terrigenous detritus in Section 3. Below Section 5, 130 cm, DIATOM CLAYEY MIXED SEDIMENT prevails. Uniformity is probably an artifact of XCB-associated drilling disturbance.

Minor lithology: Prominent ASH layer in Section 4, 40-44 cm.

SMEAR SLIDE SUMMARY (%):

	1, 67 D	3, 30 D	4, 43 M	6, 75 D
TEXTURE:				
Sand	10	---	45	---
Silt	65	50	55	55
Clay	25	50	—	45
COMPOSITION:				
Biotite	—	—	Tr	—
Clay	23	45	—	40
Diatoms	60	12	—	35
Feldspar	—	—	1	—
Glass	Tr	5	98	Tr
Hornblende	—	—	Tr	—
Opaques	2	5	—	3
Pyroxene	—	—	Tr	—
Quartz	5	30	1	10
Silicoflagellates	Tr	—	—	—
Spicules	10	3	—	10





LITHOLOGIC DESCRIPTION

Severe drilling disturbance.

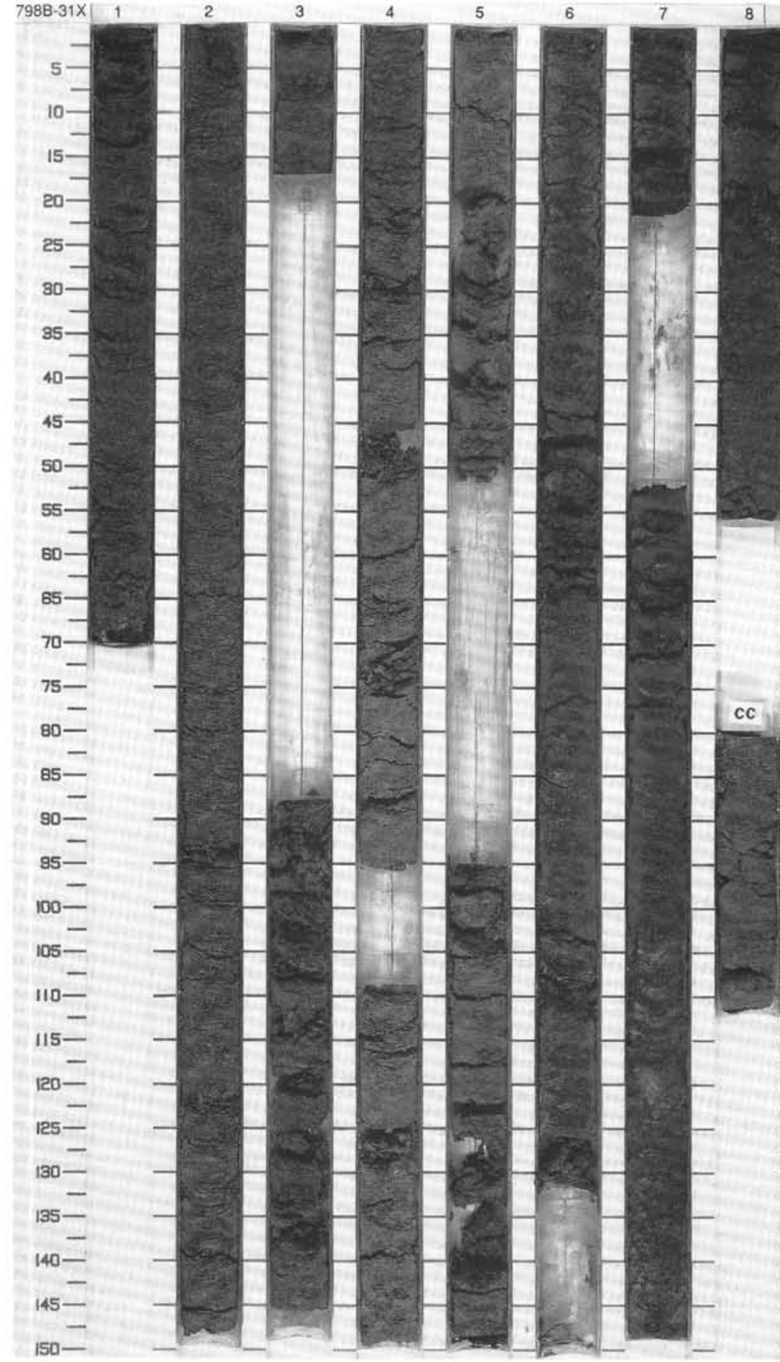
DIATOMACEOUS OOZE, CLAY, and CLAYEY DIATOMACEOUS MIXED SEDIMENT

Major lithology: Due to XCB drilling and extreme disturbance, this core exhibits an overall uniform appearance. Sediments consist of olive gray (5Y 5/2-5Y 4/2) CLAY and DIATOMACEOUS OOZE with SPICULES in Sections 1 to 5 and in the core catcher. Clay content increases in Sections 6 and 7, where CLAYEY DIATOMACEOUS MIXED SEDIMENT with SPICULES and GLASS prevail.

Minor lithology: VOLCANIC ASH pods are present in Sections 2, 5, 6, 7, and in the core catcher. There is a 1 mm thick ash layer in the core catcher.

SMEAR SLIDE SUMMARY (%):

	1, 40 D	4, 80 D	6, 85 D
TEXTURE:			
Sand	5	5	5
Silt	80	70	70
Clay	15	25	25
COMPOSITION:			
Clay	13	20	25
Diatoms	70	60	40
Glass	—	Tr	15
Opaques	2	1	2
Quartz	5	9	8
Spicules	10	10	10



SITE 798 HOLE B CORE 32X CORED INTERVAL 1196.0-1205.7 mbsl; 296.0-305.7 mbsf

TIME-ROCK UNIT: PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: B / B / R/M / A/G / F/M

FORAMINIFERS: ?

NANNOFOSSILS: *Neodenticula kozlumii*

RADIOLARIANS: *Ebriopsis antiqua*

DIATOMS: *Ebriopsis antiqua*

SILICOFLAGELLATES/EBRIDIANS

PALEOMAGNETICS: N / N / N

PHYS. PROPERTIES: ● 0.74-0.75.7 ρ 1.43-1.40; ● 0.75.3 ρ 1.38; ● 0.77.4 ρ 1.38; ● 0.76.6 ρ 1.39

CHEMISTRY: %CaCO3=0.50 %TOC=1.58; %CaCO3=0.9 %TOC=1.27; %CaCO3=2.70 %TOC=1.33

SECTION: 1 2 3 4 5 6 7 CC

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES: oA

SAMPLES: * * * *

LITHOLOGIC DESCRIPTION

Moderate to severe drilling disturbance.

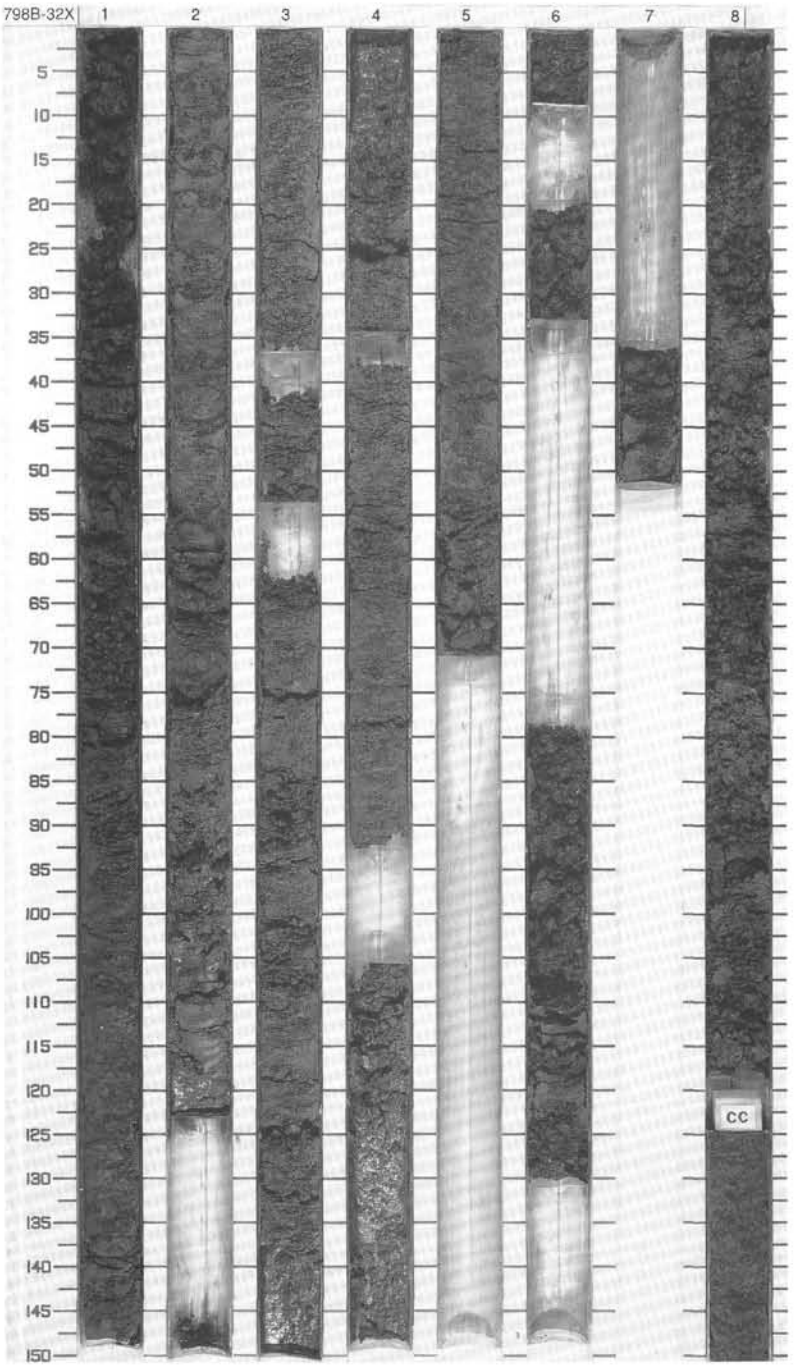
DIATOMACEOUS OOZE, DIATOMACEOUS MIXED SEDIMENT AND SILTY CLAY

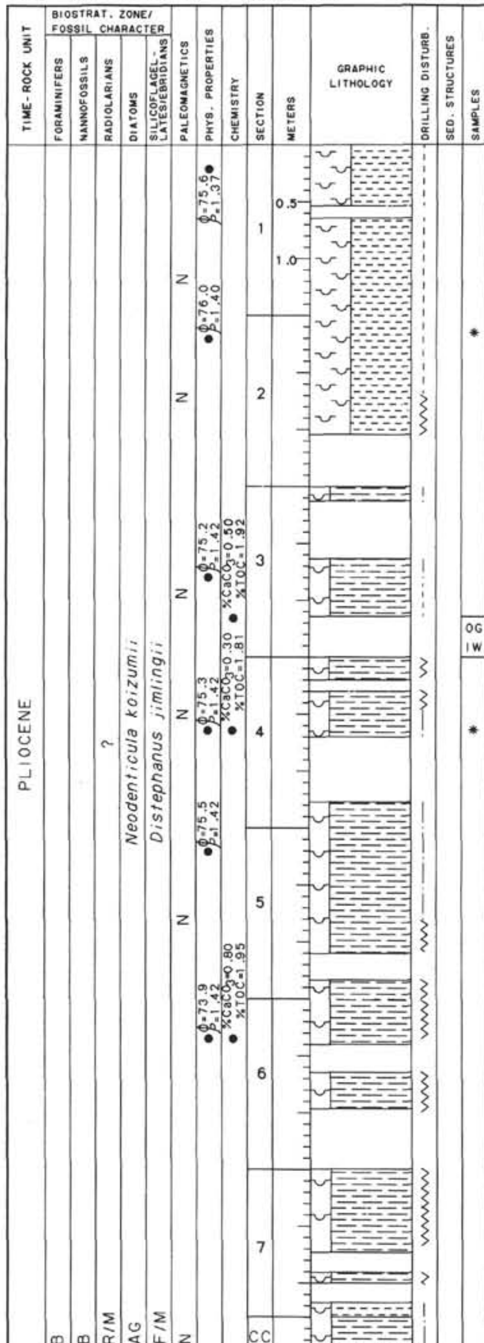
Major lithology: This core consists of olive gray (5Y 4/2) diatomaceous sediments: DIATOMACEOUS OOZE occurs in most of the core, with DIATOMACEOUS MIXED SEDIMENT in Sections 3, 5, 6, and 7. In Section 8, DIATOMACEOUS SILTY CLAY is distinctly interlayered with DIATOMACEOUS OOZE.

Minor lithologies:
a. A thin ASH layer in Section 2, 70 cm; several small ash pods in the upper 10 cm of Section 6.
b. Small crystals of authigenic calcite and dolomite are present in Section 8, 60 cm.

SMEAR SLIDE SUMMARY (%):

	2, 52 D	3, 80 D	8, 60 M
TEXTURE:			
Sand	10	10	10
Silt	60	25	30
Clay	30	65	60
COMPOSITION:			
Calcite	—	—	2
Clay	30	50	50
Diatoms	50	30	17
Dolomite	—	Tr	2
Feldspar	—	—	6
Fish	Tr	—	—
Glass	—	Tr	2
Nannofossils	—	Tr	—
Opaques	1	—	—
Pyrite	—	2	3
Quartz	5	10	12
Silicoflagellates	2	—	1
Spicules	12	8	5





LITHOLOGIC DESCRIPTION

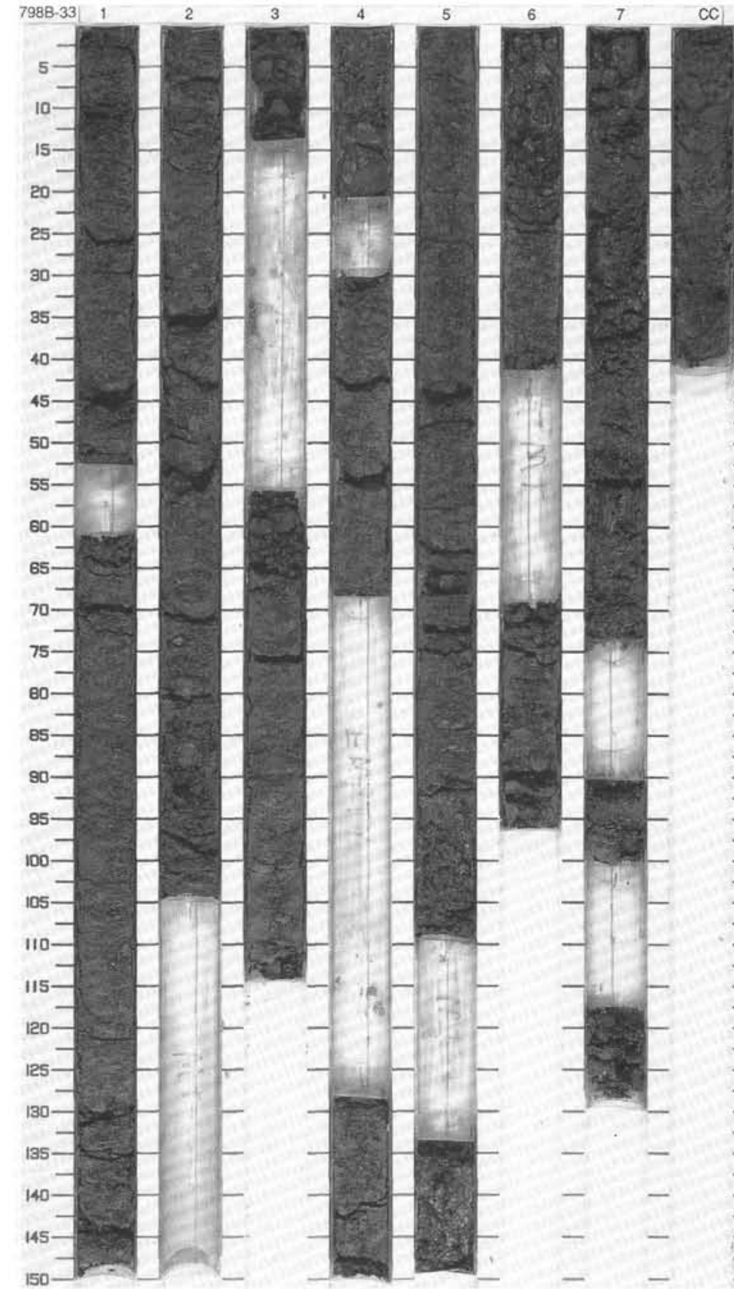
Severe drilling disturbance.

DIATOMACEOUS SILTY CLAY

Major lithology: Olive to dark olive gray (5Y 4/3-5Y 4/2-5Y 3/2) DIATOMACEOUS SILTY CLAY, structureless with substantial drilling disturbance. Rare euhedral dolomite rhombs occur in Section 4, 62 cm; pyrite is ubiquitous. Unidentified stellate microcrystals (thin needle-shaped opaque crystals in a spherically-radiating arrangement) are present in Section 2, 17 cm.

SMEAR SLIDE SUMMARY (%):

	2, 17 M	4, 62 M
TEXTURE:		
Silt	30	30
Clay	70	70
COMPOSITION:		
Clay	49	35
Diatoms	30	40
Glass	3	—
Pyrite	15	25
Quartz	15	25
Radiolarians	—	Tr
Silicoflagellates	1	—
Spicules	1	Tr



SITE 798 HOLE B CORE 34X CORED INTERVAL 1215.3-1225.0 mbsl; 315.3-325.0 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	SED. STRUCTURES	SAMPLES
PLIOCENE	B	R/P	B	C/M	B							
	Biostrat. zone: *Neodenticula kamtschatica* - *Neodenticula koizumii*											
						N	● Φ=72.9, ρ=1.45		1	0.5, 1.0		
						N	● Φ=73.7, ρ=1.43	● %$CaCO_3$=0.70, %TOC=1.65	2			*
						R	● Φ=75.9, ρ=1.41		3			
						N	● Φ=74.7, ρ=1.44	● %$CaCO_3$=0.70, %TOC=1.70				
									4			
						R	● Φ=70.1, ρ=1.53; ● Φ=64.8, ρ=1.65	● %$CaCO_3$=1.10, %TOC=1.56	5			
									CC			*

GRAPHIC LITHOLOGY

LITHOLOGIC DESCRIPTION

Moderate to severe drilling disturbance.

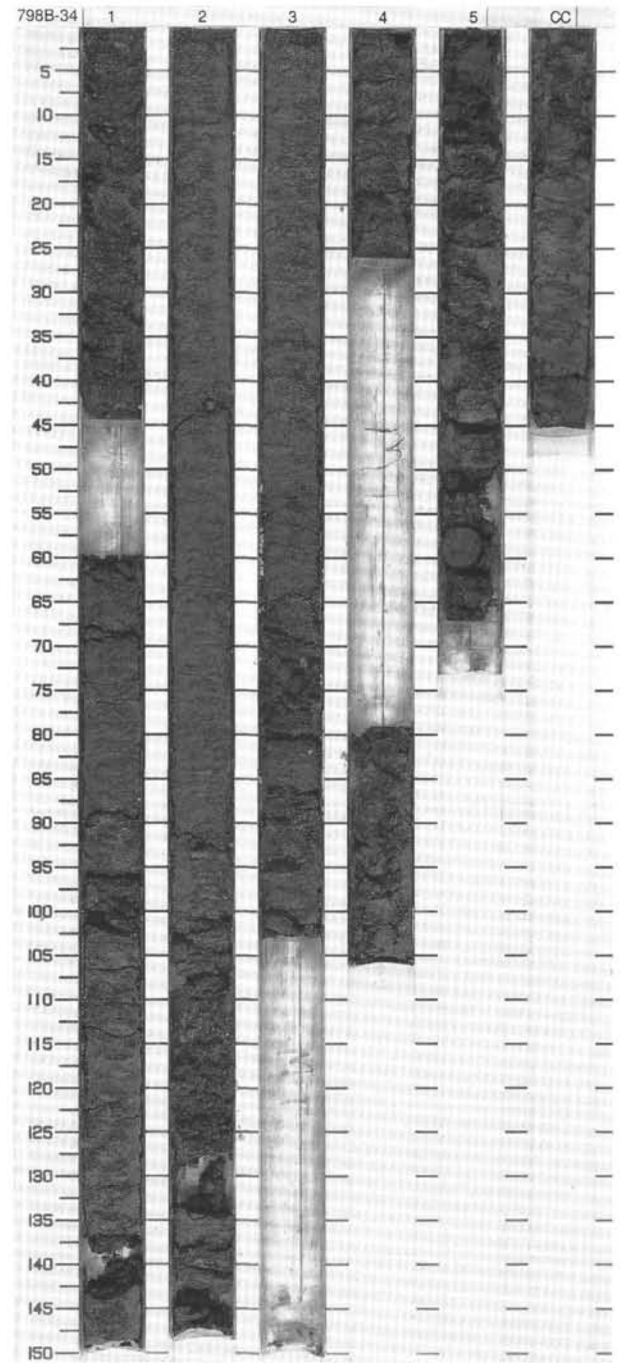
DIATOMACEOUS CLAY

Major lithology: This core consists of olive gray to dark olive gray (5Y 4/2-5Y 3/2) DIATOMACEOUS CLAY; mottled/bioturbated sediments are evident in Section 1, 86-98 and 112-118 cm and in Section 2, 13-17, 33-38, and 65-72 cm.

Minor lithologies:
a. A 1 cm diameter piece of PUMICE in Section 2, 42 cm.
b. Dark gray (5Y 4/1) SILTY CLAY is present in Section 5, 28-50 cm, and in the core catcher, 0-43 cm.

SMEAR SLIDE SUMMARY (%):

	2, 85 M	CC, 17 M
TEXTURE:		
Sand	2	20
Silt	43	80
Clay	55	—
COMPOSITION:		
Clay	50	80
Diatoms	40	5
Feldspar	Tr	—
Glass	Tr	—
Pyrite	2	3
Quartz	5	10
Radiolarians	Tr	—
Silicoflagellates	Tr	—
Spicules	3	—



SITE 798 HOLE B CORE 35X CORED INTERVAL 1225.0-1234.6 mbsl; 325.0-334.6 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLIOCENE	R/M	C/P	R/M	F/P	F/M	R	ϕ=66.7, ρ=1.63	%CaCO3=1.30, %TOC=1.19	1	0.5, 1.0				
			?			R	ϕ=68.9, ρ=1.60		2					
			Neodenticula kamtschatica - Neodenticula koizumii			R	ϕ=66.1, ρ=1.62	%CaCO3=5.00, %TOC=1.91	3					
				Distephanus jimilingii		R	ϕ=65.0, ρ=1.63		4					
						R	ϕ=70.9, ρ=1.54	%CaCO3=0.70, %TOC=1.54	5					
								%CaCO3=4.40, %TOC=1.94	6					
									7					
									CC				⊙D	

LITHOLOGIC DESCRIPTION

Extensive drilling disturbance.

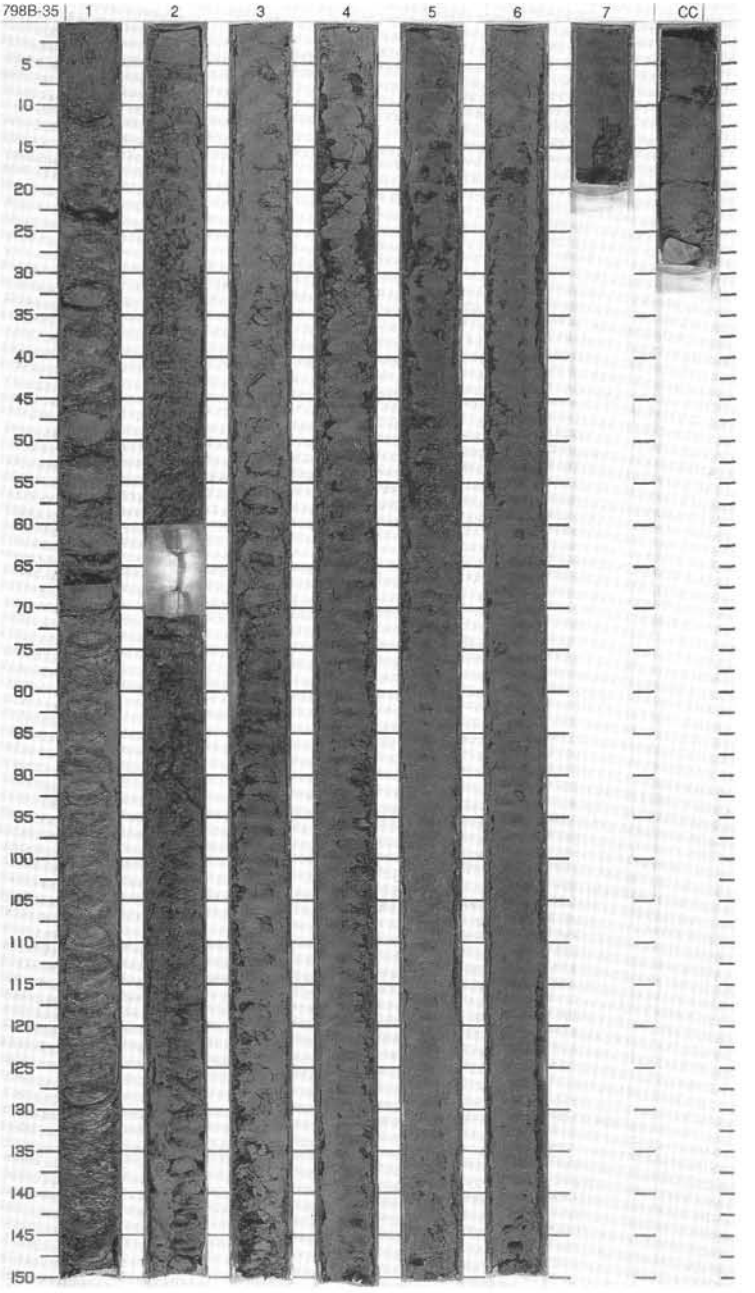
CLAY with DIATOMS and SILTY CLAY

Major lithology: This core consists mostly of olive gray (5Y 5/2-5Y 4/2) and partly bioturbated (*Planolites*) CLAY with DIATOMS. Section 1, 50-150 cm, contains a homogeneous gray (5Y 5/1) SILTY CLAY.

Minor lithologies:
a. Olive Gray (5Y 4/3) DOLOMITE NODULE in the core catcher, 26-30 cm.
b. Minor ECHINODERM FRAGMENTS in Section 4, 47 cm.

SMEAR SLIDE SUMMARY (%):

	4, 47 D
TEXTURE:	
Sand	3
Silt	15
Clay	82
COMPOSITION:	
Calcite	5
Clay	70
Diatoms	15
Foraminifers	Tr
Glass	Tr
Glauconite	Tr
Pyrite	3
Quartz	6



SITE 798 HOLE B CORE 36X CORED INTERVAL 1234.6-1244.3 mbsl; 334.6-344.3 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/LATEX BEADS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLIOCENE	B	B	R/M	F/M *Neodenticula kamtschatica* - *Neodenticula koizumii*	F/M *Distephanus jimlingii*	R	ϕ-63.8 ρ-1.73 ϕ-67.7 ρ-1.63 ϕ-63.3 ρ-1.69	%CaCO3=2.10 %TOC=1.49 %CaCO3=2.10 %TOC=1.56 %CaCO3=2.20 %TOC=1.25 %CaCO3=2.30 %TOC=1.38	1 2 3 CC	0.5 1.0			⊙D	# # *

LITHOLOGIC DESCRIPTION

Extensive drilling disturbance.

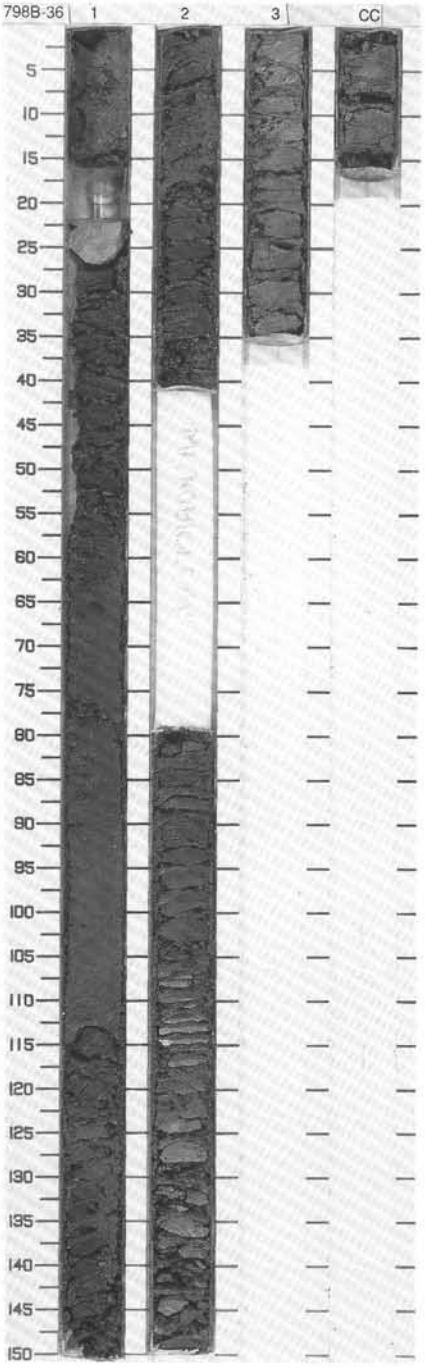
CLAY with DIATOMS

Major lithology: This structurally and compositionally homogenous core consists of olive gray (5Y 4/2) CLAY with DIATOMS.

Minor lithology: A large DOLOMITE CONCRETION with *Planolites* burrows is present in Section 1, 23-26 cm.

SMEAR SLIDE SUMMARY (%):

	1, 22 M	1, 23 M	2, 34 D
TEXTURE:			
Sand	3	5	1
Silt	12	15	20
Clay	85	80	79
COMPOSITION:			
Calcite/Dolomite	80	77	—
Clay	10	5	80
Diatoms	Tr	5	10
Foraminifers	3	3	—
Opaques	5	8	—
Pyrite	—	—	Tr
Quartz	Tr	Tr	10
Silicoflagellates	—	—	Tr
Spicules	2	2	Tr



SITE 798 HOLE B CORE 37X CORED INTERVAL 1244.3-1253.9 mbsl; 344.3-353.9 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLIOCENE	B	B	B	A/M Neodenticula kamtschtica - Neodenticula koizumii	R/M Distephanus jimlingii	N N N	ϕ=66.9 ρ=1.62 ϕ=63.9 ρ=1.65 ϕ=63.3 ρ=1.68 %CaCO3=2.70 %TOC=1.30		1 2 3 CC	0.5 1.0				* * *

LITHOLOGIC DESCRIPTION

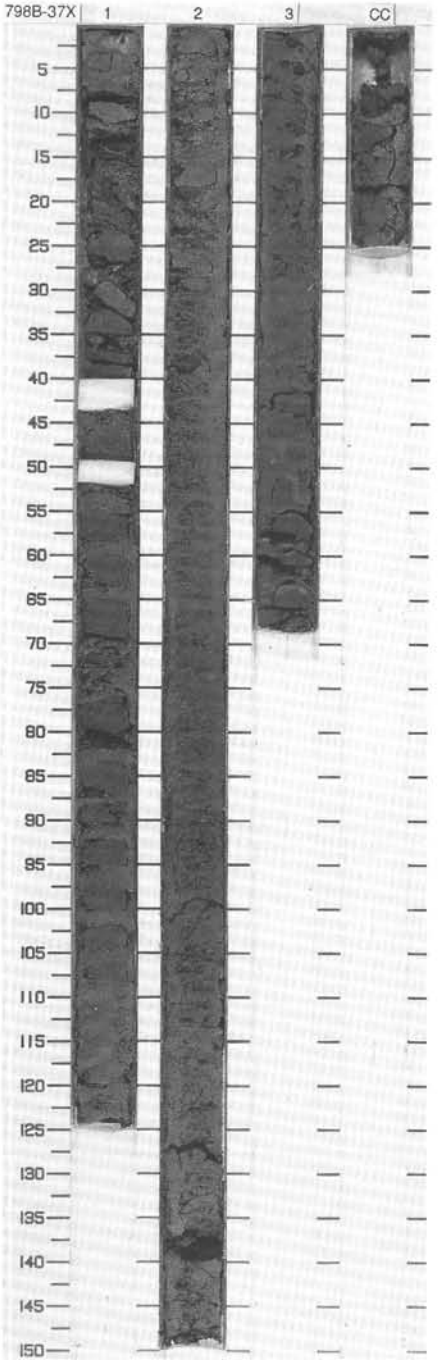
Severe drilling disturbance.

DIATOMACEOUS CLAY, DIATOMACEOUS CLAYEY MIXED SEDIMENT, and CLAY

Major lithology: This highly disturbed core contains olive gray (5Y 5/2- 5Y 4/2) to dark gray (5Y 4/1) DIATOMACEOUS CLAY, DIATOMACEOUS CLAYEY MIXED SEDIMENT, and CLAY with SILT and VOLCANIC GLASS. Bioturbation is clearly evident in Section 3, 50-70 cm; elsewhere sediments appear to be faintly mottled.

SMEAR SLIDE SUMMARY (%):

	1, 37 D	2, 44 D	3, 62 D
TEXTURE:			
Sand	2	Tr	1
Silt	20	40	25
Clay	78	60	74
COMPOSITION:			
Clay	70	50	40
Diatoms	5	30	35
Foraminifers	Tr	Tr	—
Glass	10	—	—
Quartz	10	10	20
Radiolarians	Tr	—	—
Silicoflagellates	1	—	Tr
Spicules	2	5	5



SITE 798 HOLE B CORE 38X CORED INTERVAL 1253.9-1263.6 mbsl; 353.9-363.6 mbsf

TIME-ROCK UNIT: PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER

FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS
B	B	R/M	A/M	F/M

Neodenticula kamtschatica - *Neodenticula koizumii*

Distephanus jimingii

PALEOMAGNETICS: N N N N N

PHYS. PROPERTIES: ϕ=69.9, ρ=1.56 (1); ϕ=71.5, ρ=1.58 (2); ϕ=72.3, ρ=1.48 (3); ϕ=71.6, ρ=1.49 (4); ϕ=70.7, ρ=1.59 (5); ϕ=70.4, ρ=1.55 (6)

CHEMISTRY: %CaCO3=2.00, %TOC=1.65 (6); %CaCO3=0.60, %TOC=1.40 (4); %CaCO3=0.80, %TOC=1.92 (3); %CaCO3=1.30, %TOC=1.42 (2)

SECTION: 1 2 3 4 5 6 CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

LITHOLOGIC DESCRIPTION

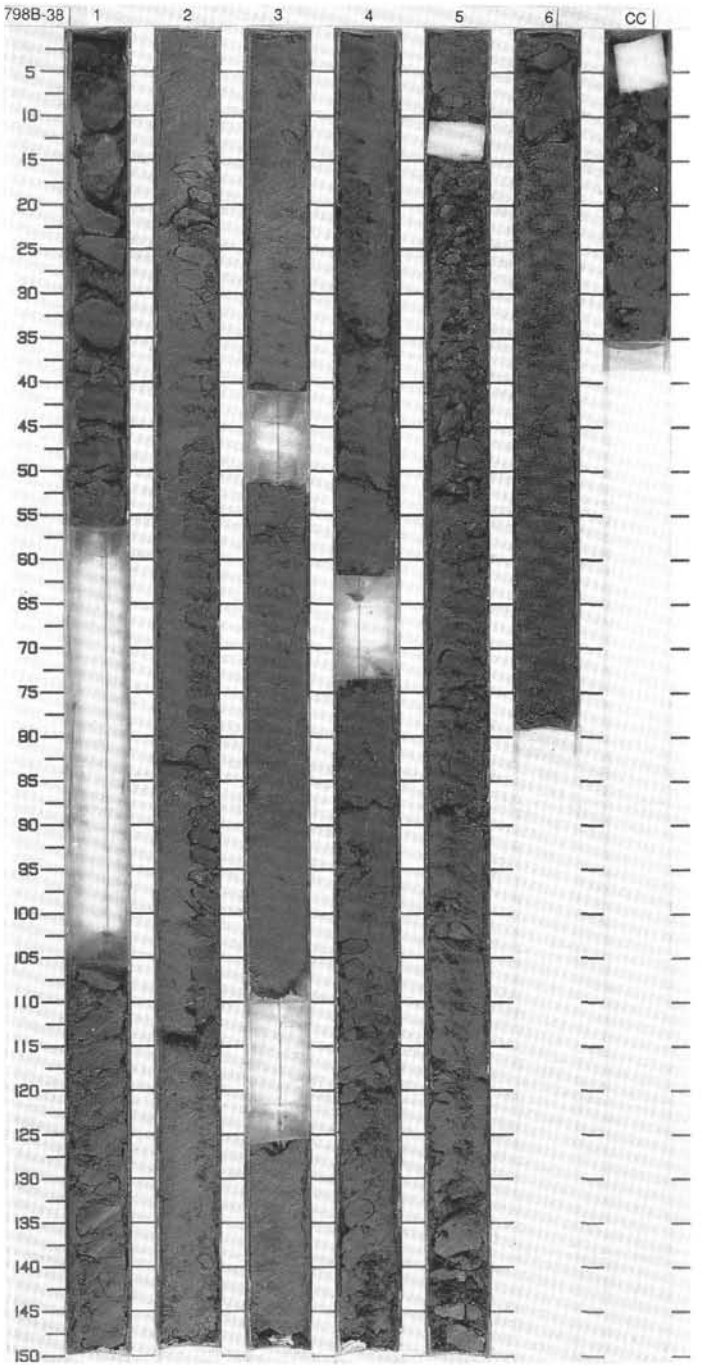
Severe drilling disturbance.

CLAY with DIATOMS, DIATOMACEOUS CLAY, and DIATOMACEOUS CLAYEY MIXED SEDIMENT

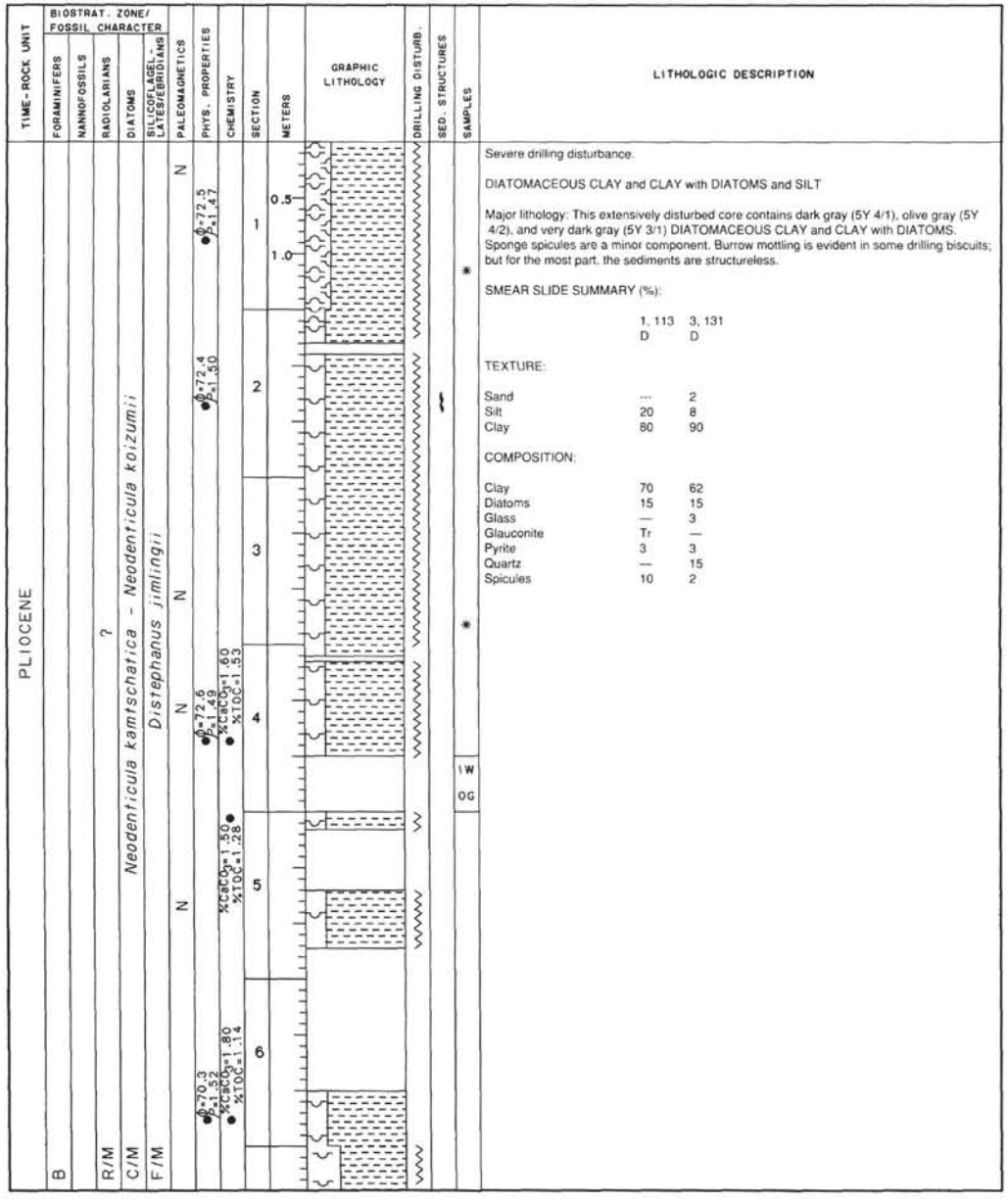
Major lithology: This core contains olive gray (10Y 4/1-10Y 3.5/1) CLAY with DIATOMS, DIATOMACEOUS CLAY, and DIATOMACEOUS CLAYEY MIXED SEDIMENT. Trace amounts of phosphatic grains, silicoflagellates, and volcanic glass are also present in the core. Discrete burrows and extensive burrow mottling is evident in drilling biscuits.

SMEAR SLIDE SUMMARY (%):

	3, 96	5, 71
	D	D
TEXTURE:		
Silt	10	20
Clay	90	80
COMPOSITION:		
Clay	65	45
Diatoms	20	35
Glass	2	3
Phosphate	3	Tr
Pyrite	—	Tr
Quartz	10	10
Silicoflagellates	Tr	2
Spicules	Tr	4



SITE 798 HOLE B CORE 39X CORED INTERVAL 1263.3-1273.2 mbsl; 363.6-373.2 mbsf



LITHOLOGIC DESCRIPTION

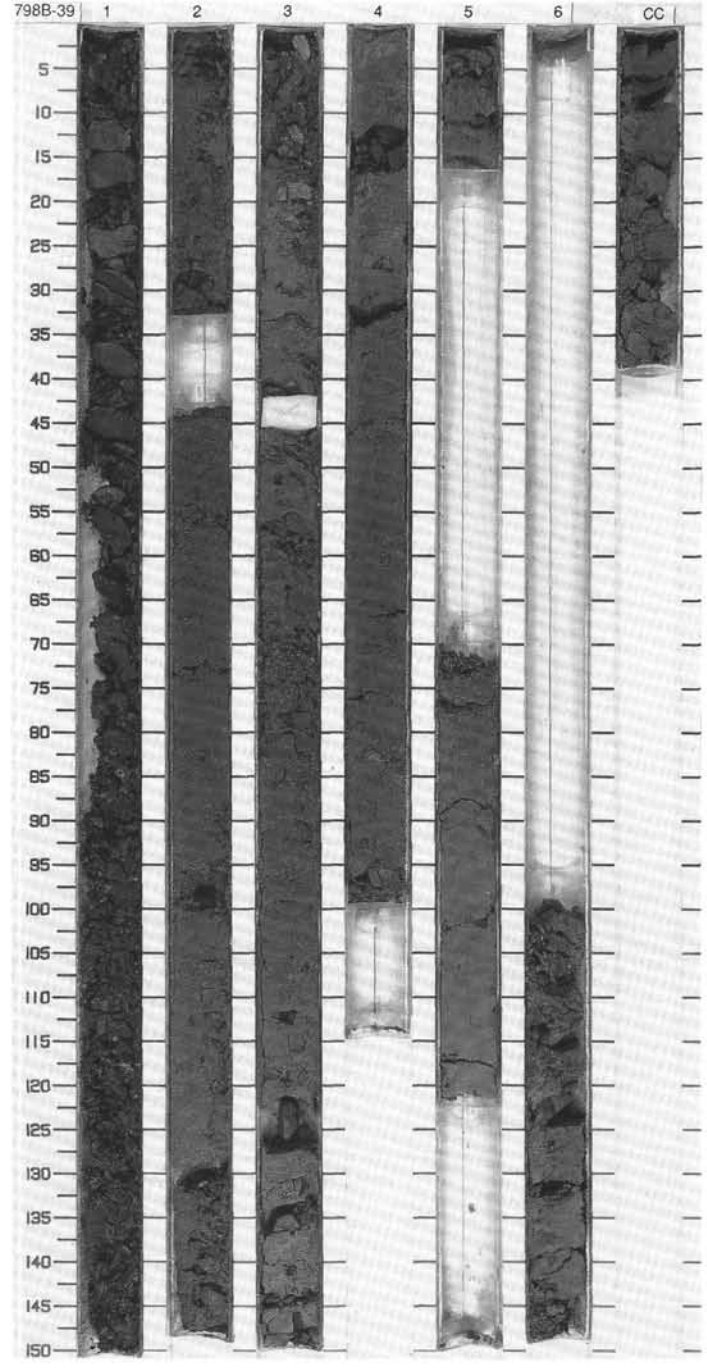
Severe drilling disturbance.

DIATOMACEOUS CLAY and CLAY with DIATOMS and SILT

Major lithology: This extensively disturbed core contains dark gray (5Y 4/1), olive gray (5Y 4/2), and very dark gray (5Y 3/1) DIATOMACEOUS CLAY and CLAY with DIATOMS. Sponge spicules are a minor component. Burrow mottling is evident in some drilling biscuits; but for the most part, the sediments are structureless.

SMEAR SLIDE SUMMARY (%):

	1, 113 D	3, 131 D
TEXTURE:		
Sand	---	2
Silt	20	8
Clay	80	90
COMPOSITION:		
Clay	70	62
Diatoms	15	15
Glass	—	3
Glauconite	Tr	—
Pyrite	3	3
Quartz	—	15
Spicules	10	2



SITE 798 HOLE B CORE 40X CORED INTERVAL 1273.2-1282.9 mbsl; 373.2-382.9 mbsf

TIME-ROCK UNIT: PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER:
- FORAMINIFERS: B
- NANNOFOSSILS: B
- RADIOLARIANS: R/M
- DIATOMS: A/M — *Neodenticula kamtschatica* - *Neodenticula koizumii*
- SILICOFLAGELLATES/EBRIDIANS: R/M — *Distephanus jimlingii*

PALEOMAGNETICS: N N

PHYS. PROPERTIES: ϕ=70.7 ρ=1.51; ϕ=69.3 ρ=1.51; ϕ=71.3 ρ=1.52; ϕ=70.7 ρ=1.47

CHEMISTRY: %CaCO3=0.80 %TOC=1.80; %CaCO3=0.70 %TOC=1.91; %CaCO3=0.30 %TOC=2.05; %CaCO3=0.80 %TOC=2.25

SECTION: 1, 2, 3, 4, 5, 6, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: MB

LITHOLOGIC DESCRIPTION

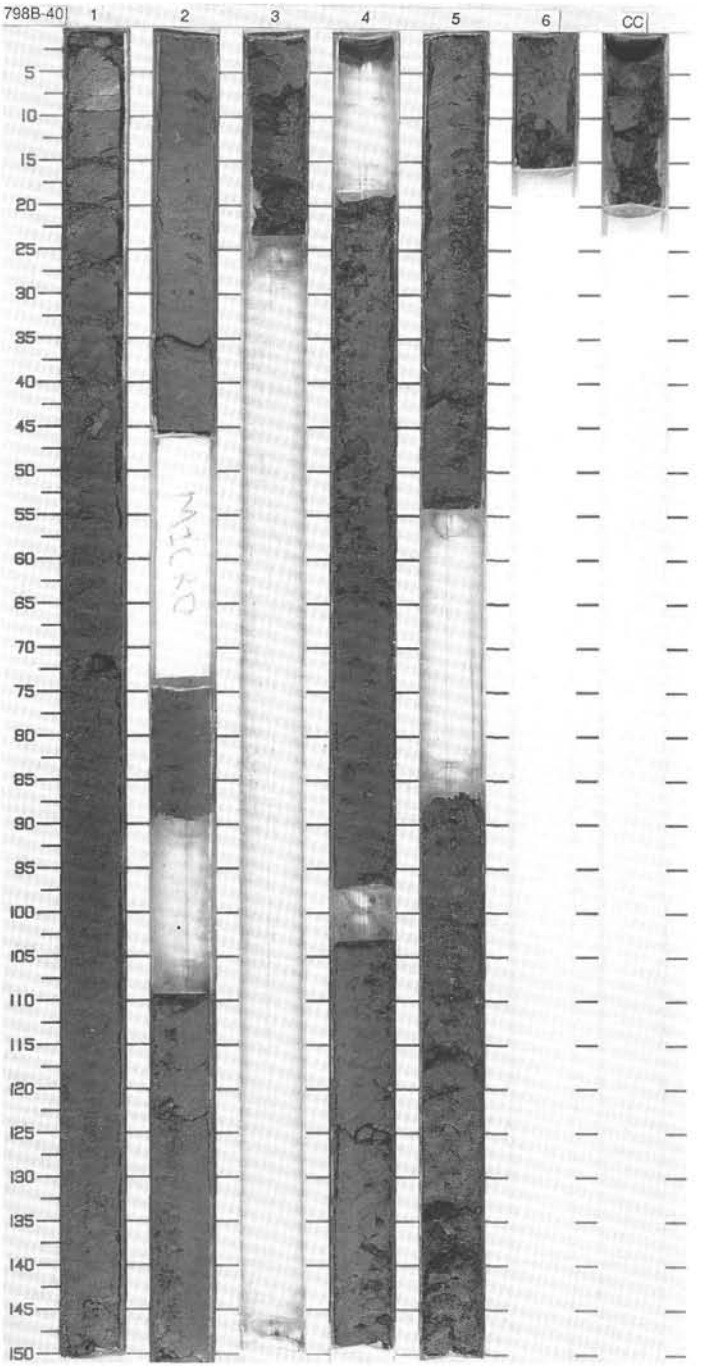
Severe drilling disturbance, formation of biscuits.

CLAYEY SILICEOUS MIXED SEDIMENT

Major lithology: This core contains dark gray (5Y 4/1) CLAYEY SILICEOUS MIXED SEDIMENT, extensively disturbed by drilling. The sediment fabric in drilling biscuits is predominantly structureless, with minor occurrences of vague mottling and two distinct burrows in Section 1, 35-40 cm. This core is the shallowest in which poor diatom preservation was noted in smear slides. Spicules are more abundant (15-30%) and represent a higher proportion of total biosiliceous debris (diatoms + spicules, 40-50%) than in overlying sediment, also suggesting silica dissolution.

SMEAR SLIDE SUMMARY (%):

	1, 44 D	2, 17 D	4, 77 D
TEXTURE:			
Sand	Tr	Tr	—
Silt	45	35	40
Clay	55	60	60
COMPOSITION:			
Clay	40	35	40
Diatoms	25	35	20
Foraminifers	1	Tr	2
Glass	5	5	5
Pyrite	1	—	1
Quartz	3	5	2
Radiolarians	—	—	Tr
Silicoflagellates	Tr	Tr	Tr
Spicules	25	15	30



SITE 798 HOLE B CORE 41X CORED INTERVAL 1282.9-1292.5 mbsl; 382.9-392.5 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGEL.-LATESI/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLIOCENE	B	B	? R/M	*Neodenticula kamtschatica* – *Neodenticula koizumii* C/M	*Distephanus jimlingii* R/M	N	ϕ=66.8 ρ=1.63		1	0.5		X	~~	*
						R	ϕ=71.3 ρ=1.50	%CaCO₃=0.70 %TOC=1.83	2	1.0		X		
						R	ϕ=69.1 ρ=1.55	%CaCO₃=1.50 %TOC=1.60	3			X		*
						R	ϕ=67.8 ρ=1.63	%CaCO₃=0.80 %TOC=0.69	4			X	~~	*
						R	ϕ=68.7 ρ=1.56	%CaCO₃=4.00 %TOC=2.42	5			X		
									6			X		*
									7			X		
									CC			X		

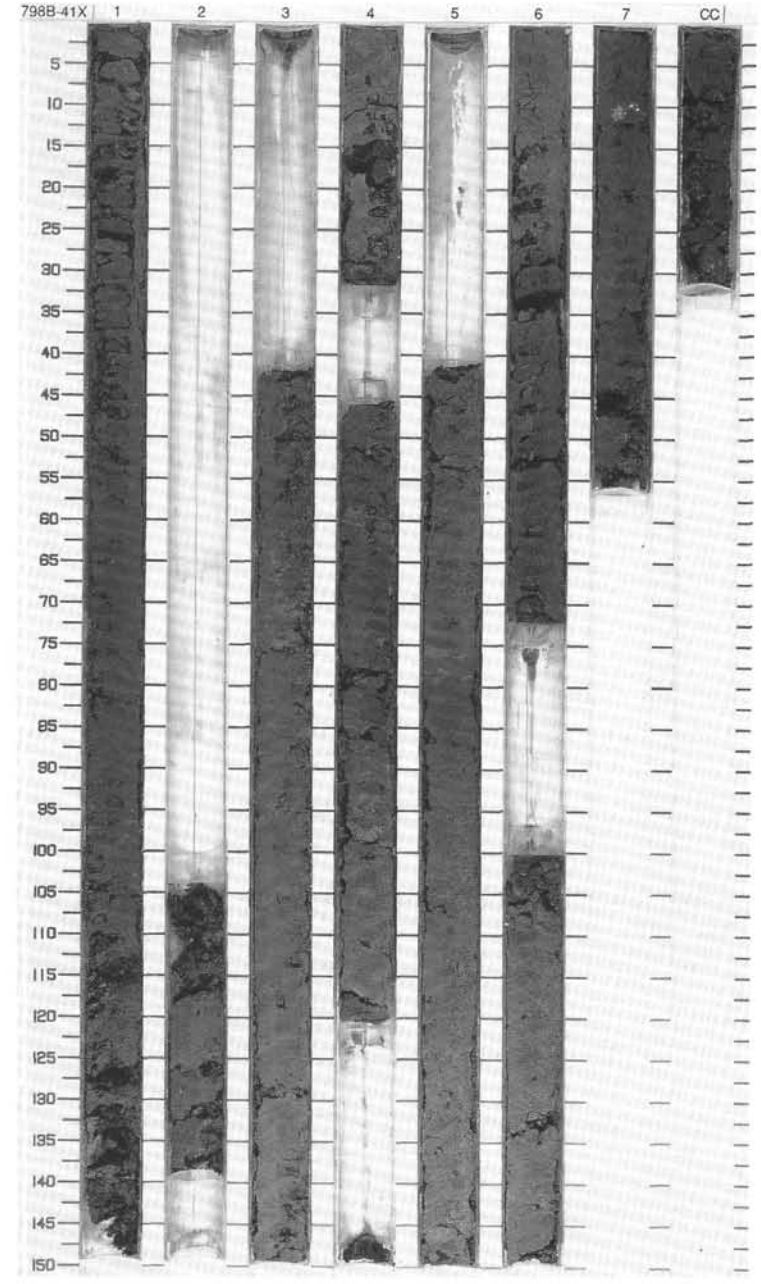
Severe drilling disturbance, formation of biscuits.

CLAYEY SILICEOUS MIXED SEDIMENT and SILICEOUS CLAYEY MIXED SEDIMENT

Major lithology: This core consists of extensively disturbed dark gray (5Y 4/1) and olive gray (5Y 4/2) CLAYEY SILICEOUS MIXED SEDIMENT and SILICEOUS CLAYEY MIXED SEDIMENT, generally homogeneous in composition throughout the core. Drilling biscuits are generally structureless, but some intervals of bioturbation are recognizable, such as Section 1, 45-50 cm. Distinct biosiliceous debris averages 40-50% but, as in Core 128-798B-40X, spicules are comparatively abundant (20-25%), and diatoms and rare silicoflagellates show partial dissolution.

SMEAR SLIDE SUMMARY (%):

	1, 27 D	3, 75 D	3, 105 D	6, 45 D
TEXTURE:				
Sand	5	2	5	2
Silt	45	50	50	63
Clay	50	48	45	35
COMPOSITION:				
Clay	45	45	45	35
Diatoms	25	15	20	30
Dolomite	Tr	Tr	1	Tr
Glass	2	1	Tr	Tr
Glauconite	—	—	Tr	Tr
Opeques	3	2	2	4
Quartz	5	10	5	10
Silicoflagellates	—	—	Tr	—
Spicules	20	25	25	20



SITE 798 HOLE B CORE 42X CORED INTERVAL 1292.5-1302.2 mbsl; 392.5-402.2 mbsf

TIME-ROCK UNIT: PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS R/M; NANNOFOSSILS B; RADIOLARIANS R/M ?; DIATOMS B; SILICOFLAGELLATES/EBRIDIANS B; PALEOMAGNETICS N N N N N; PHYS. PROPERTIES ρ=64.0 P=1.67; ρ=59.6 P=1.74; ρ=61.8 P=1.76; CHEMISTRY %CaCO3=1.50 %TOC=1.32; %CaCO3=3.40 %TOC=1.21; %CaCO3=1.90 %TOC=1.00; %CaCO3=1.40 %TOC=1.04; %CaCO3=2.20 %TOC=1.16; ρ=1.79 P=1.70

SECTION: 1 2 3 4 5 6 7

METERS: 0.5 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: OG IW

LITHOLOGIC DESCRIPTION

Severe drilling disturbance, formation of biscuits.

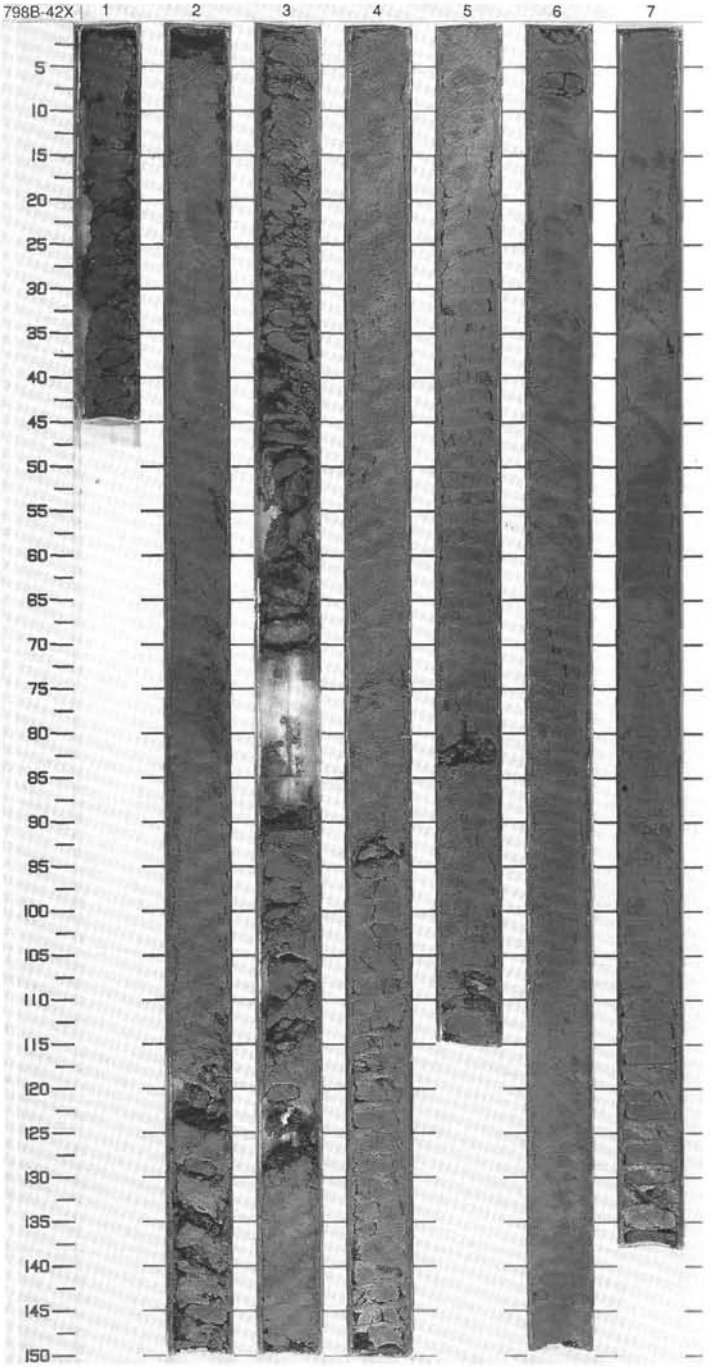
DIATOMACEOUS CLAY, CLAY with DIATOMS, and DIATOMACEOUS CLAYEY MIXED SEDIMENT

Major lithology: This core is a highly disturbed sequence of diatomaceous sediments. Dark gray to olive gray (5Y 4/1-5Y 4/2) DIATOMACEOUS CLAYEY MIXED SEDIMENT is in Section 1, 0-45 cm. Throughout Sections 2 to 4 it is dark gray to olive gray (5Y 4/1-5Y 4/2) DIATOMACEOUS CLAY. Throughout Sections 5 to 7 it is gray (5Y 5/1) CLAY and CLAY with DIATOMS. Bioturbated intervals are prominent in Sections 1, 4, and 6. Diatoms in this core are poorly preserved and show extensive dissolution and fragmentation.

Minor lithology: A distinct interval of very dark gray (5Y 3/1) CLAYEY SILT occurs in Section 2, 75-79 cm.

SMEAR SLIDE SUMMARY (%):

	2, 50 D	2, 75 M	6, 75 D
TEXTURE:			
Sand	1	2	—
Silt	29	73	15
Clay	70	25	85
COMPOSITION:			
Biotite	—	Tr	—
Clay	55	25	85
Diatoms	25	3	5
Dolomite	1	—	—
Feldspar	—	Tr	—
Fish	Tr	—	—
Foraminifers	Tr	Tr	—
Glass	2	2	Tr
Glauconite	Tr	—	—
Opaques	2	—	2
Pyrite	—	10	—
Quartz	5	60	5
Spicules	10	Tr	3



SITE 798 HOLE B CORE 43X CORED INTERVAL 1302.2-1311.8 mbsl; 402.2-411.8 mbsf

TIME-ROCK UNIT: PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER:
- FORAMINIFERS: B
- NANNOFOSSILS: B
- RADIOLARIANS: R/M
- DIATOMS: F/P
- SILICOFLAGELLATES/EBRIDIANS: R/M
- PALEOMAGNETICS: R R N
- PHYS. PROPERTIES
- CHEMISTRY
- SECTION
- METERS
- GRAPHIC LITHOLOGY
- DRILLING DISTURB.
- SED. STRUCTURES
- SAMPLES

? *Neodenticula kamtschatica - Neodenticula koizumii*

Distephanus jimlingii

Sections: 1, 2, 3, 4, 5, 6, CC

Meters: 0.5, 1.0

PHYS. PROPERTIES: ϕ=69.7 ρ=1.54; ϕ=61.4 ρ=1.77; ϕ=62.7 ρ=1.75; ϕ=60.6 ρ=1.79; ϕ=59.2 ρ=1.84; ϕ=66.8 ρ=1.77

CHEMISTRY: %CaCO3=3.40 %TOC=1.05; %CaCO3=0.80 %TOC=0.76; %CaCO3=2.00 %TOC=1.37

LITHOLOGIC DESCRIPTION

Moderate to severe drilling disturbance, formation of biscuits with moderate fracturing.

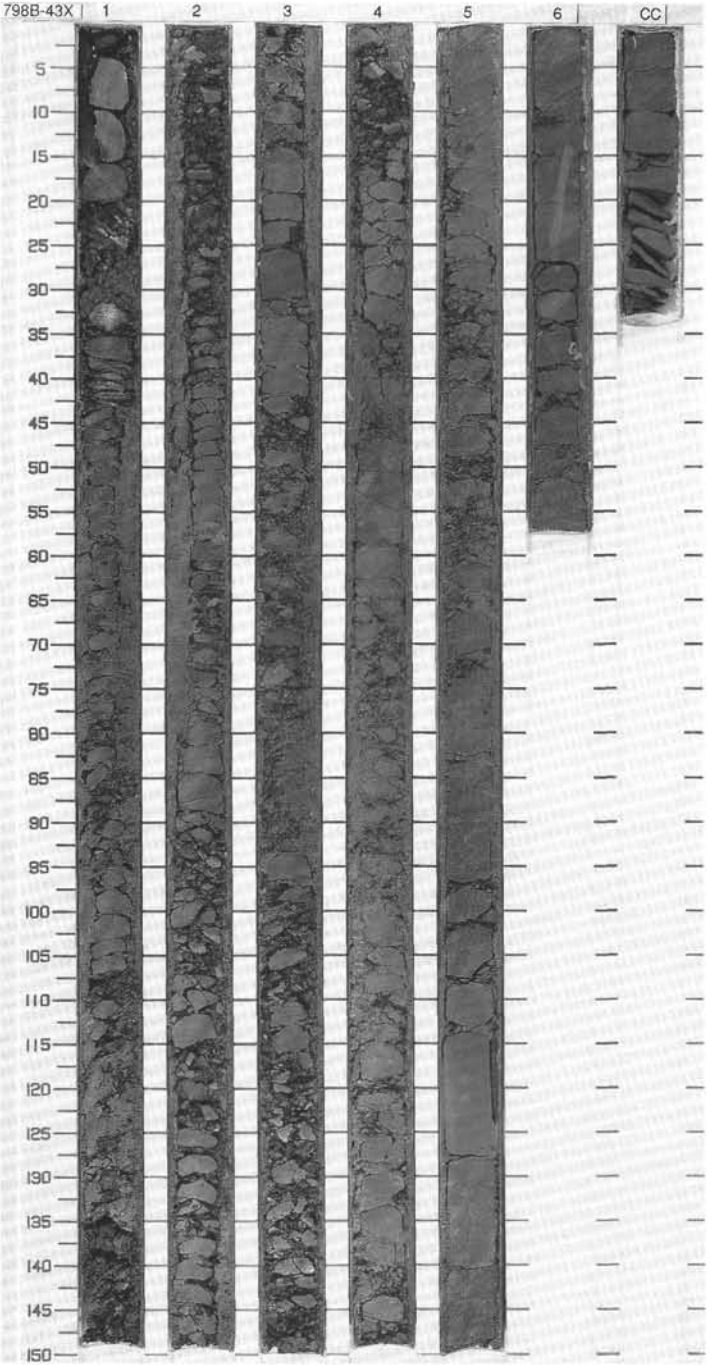
CLAY and CLAY with DIATOMS

Major lithology: This core contains dark gray (5Y 4/1) CLAY and CLAY with DIATOMS. The sediment is rather homogeneous in most of this core but is slightly bioturbated in Section 4. It may contain up to about 5% neoformed dolomite crystals. Diatoms in this core are poorly preserved and show distinct dissolution features; some diagenetic silica may have formed in the sediment.

Minor lithology: A thin layer of olive gray (5Y 5/2) SILTY CLAY with VOLCANIC GLASS is present in Section 2, 58 cm.

SMEAR SLIDE SUMMARY (%):

	2, 56 M	3, 133 D	4, 94 D
TEXTURE:			
Sand	—	—	2
Silt	30	20	18
Clay	70	80	80
COMPOSITION:			
Accessory minerals	—	—	1
Biotite	Tr	—	—
Calcite	—	—	2
Clay	68	80	75
Diatoms	Tr	10	3
Dolomite	—	—	5
Feldspar	5	—	1
Glass	15	—	1
Pyrite	2	2	2
Quartz	10	5	6
Spicules	—	3	2



SITE 798 HOLE B CORE 44X CORED INTERVAL 1311.8-1321.5 mbsl; 411.8-421.5 mbsf

TIME-ROCK UNIT: PLIOCENE

BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS B; NANNOFOSSILS B; RADIOLARIANS R/M; DIATOMS R/P; SILICOFLAGELLATES/EBRIDIANS R/M; *Distephanus jimlingii*

PALEOMAGNETICS: N; N

PHYS. PROPERTIES: ϕ=57.9, ρ=1.78; ϕ=64.50, ρ=1.69

CHEMISTRY: %CaCO3=1.20, %TOC=0.90; %CaCO3=0.40, %TOC=0.22; %CaCO3=1.10, %TOC=0.51; ϕ=61.4, ρ=1.71; ϕ=41.3, ρ=1.34

SECTION: 1, 2, 3, 4, 5, 6, 7, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

LITHOLOGIC DESCRIPTION

Severe drilling disturbance.

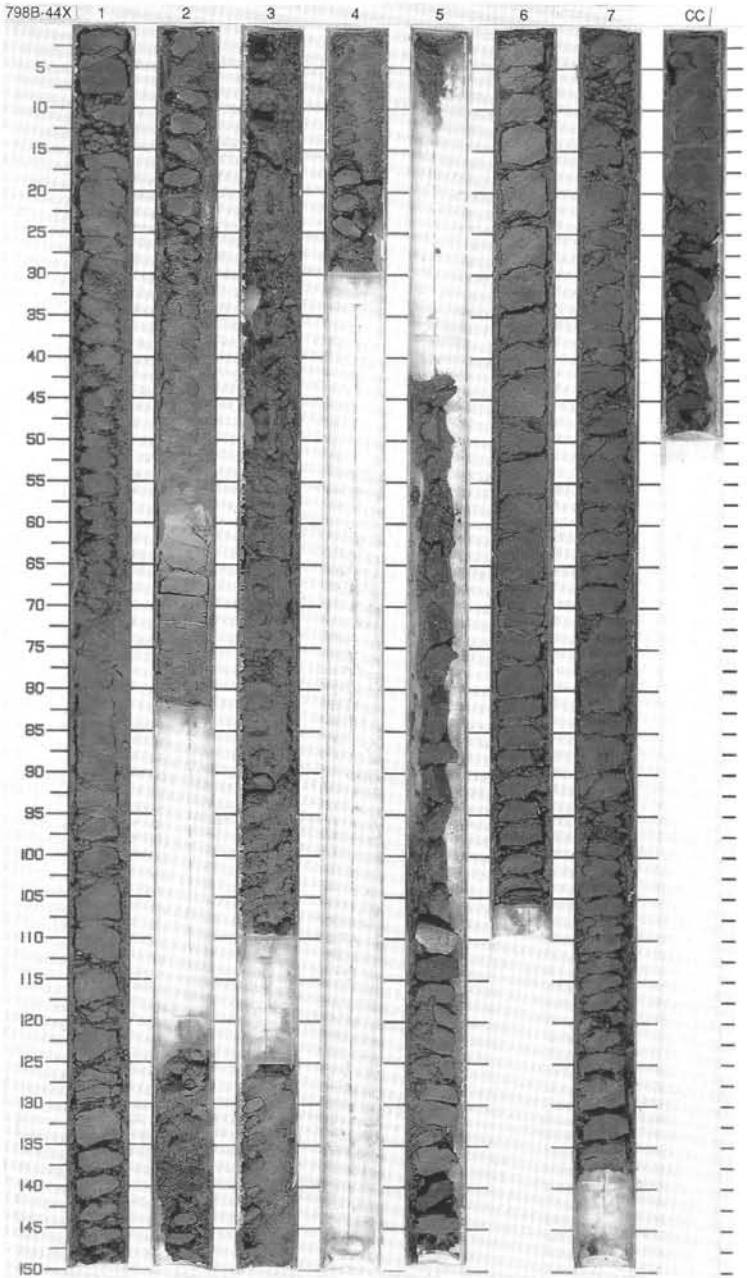
CLAY with DIATOMS to DIATOMACEOUS CLAY

Major lithology: This core mainly consists of highly disturbed diatomaceous sediment. In Section 1 through Section 2, 50 cm, is mainly dark greenish gray (5GY 4/1) DIATOMACEOUS CLAYEY MIXED SEDIMENT with irregular areas of greenish gray (5BG 5/1) CLAY with DIATOMS and SPICULES. The rest of the core is mainly dark greenish gray (5GY 4/1) DIATOMACEOUS CLAY and CLAY with DIATOMS. Sediments are bioturbated throughout the core, and intervals in Section 1 through Section 2, 50 cm include well-defined large burrows (*Planolites*?). Diatoms and silicoflagellates are partly dissolved throughout the core, and some diagenetic silica may have formed.

Minor lithology: A prominant graded VOLCANIC ASH layer is present in Section 2, 50-136 cm (with void 80-123 cm). The base consists of brownish gray coarse, sandsized volcanic glass, the middle part is silt-sized and laminated, whereas the upper part is very fine-graded and light gray (5Y 7/1). The uppermost interval (50-58 cm) is bioturbated and mixed with the overlying diatomaceous clays. Small burrows extend into the bioturbated ash layer as far down as 70 cm. The lowermost burrows exhibita dark grayish rim (oxidation?).

SMEAR SLIDE SUMMARY (%):

	1, 6 D	1, 93 D	2, 62 M	2, 80 M	6, 64 D
TEXTURE:					
Sand	—	—	40	40	—
Silt	45	20	55	40	30
Clay	55	80	5	20	70
COMPOSITION:					
Biotite	—	—	—	Tr	—
Clay	50	65	—	15	65
Diatoms	30	15	Tr	3	15
Dolomite	—	—	—	—	1
Feldspar	—	—	3	2	—
Fish	Tr	—	—	—	Tr
Glass	2	3	95	77	—
Opaques	1	1	—	—	2
Quartz	5	5	2	2	10
Spicules	10	10	Tr	1	5



SITE 798 HOLE B CORE 45X CORED INTERVAL 1321.5-1331.1 mbsl; 421.5-431.1 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
PLIOCENE	B	B	R/M	C/M	R/M	N	ϕ=61.6 ρ=1.73	%CaCO3=0.70 %TOC=0.92	1	0.5				
			?	*Neodenticula kamtschatica - Neodenticula koizumii*	*Distephanus jimlinggii*				1	1.0				
									2					*
									3					MB IW
								%CaCO3=1.70 %TOC=1.60	4					*
									5					*
									6					OG

LITHOLOGIC DESCRIPTION

Extensive drilling disturbance.

CLAY and CLAY with DIATOMS

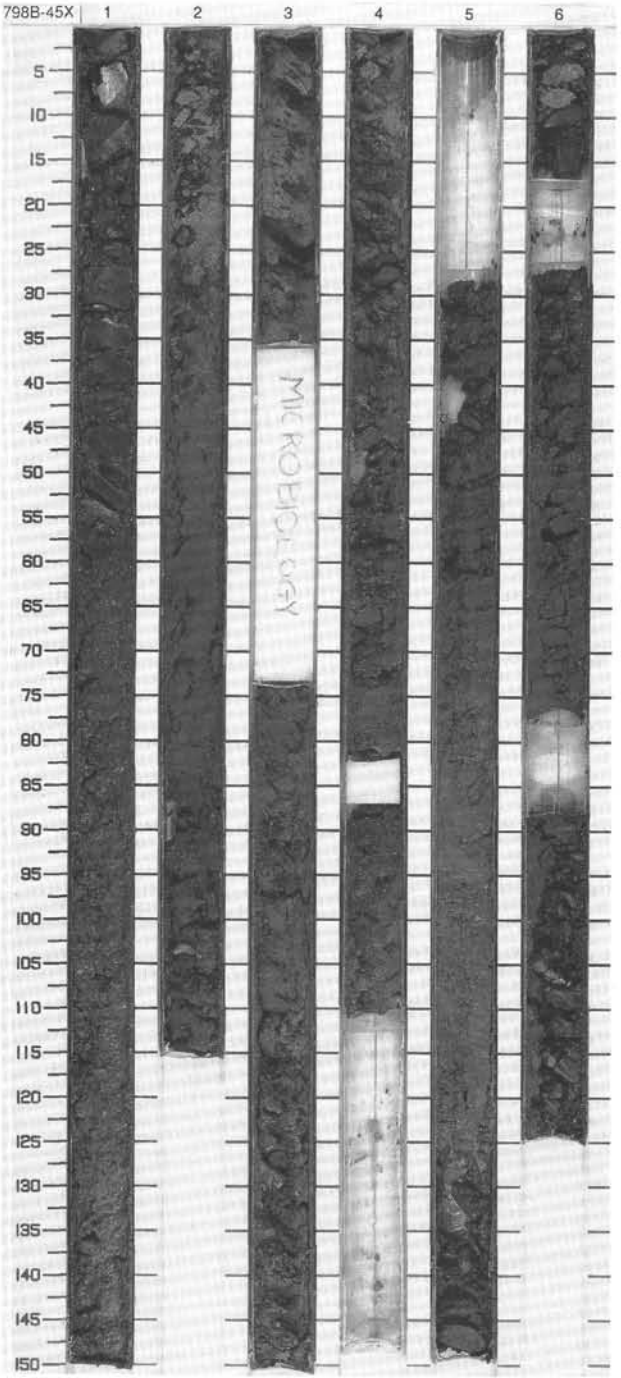
Major lithology: Dark gray (5Y 4/1) and gray (5Y 5/1) CLAY is present in this core from Section 3, 73 cm through the core catcher. Dark gray (5Y 4/1) CLAY with DIATOMS occurs from Section 1 through Section 3, 35 cm. Siliceous microfossils are poorly preserved in the core, and the biosiliceous component is probably underestimated. Opal-CT was identified by X-ray diffraction in Core 128-798B-48X, and some of the material identified as clay in smear slides may actually be diagenetic silica.

Minor lithology: Several VOLCANIC ASH layers occur in this core. One prominent layer in Section 5, 91-127 cm is light gray (5Y 6/1), coarse sand size, and rhyolitic to dacitic in composition. Another thinner layer in Section 8, 96-100 cm, is dark gray (5Y 4/1).

SMEAR SLIDE SUMMARY (%):

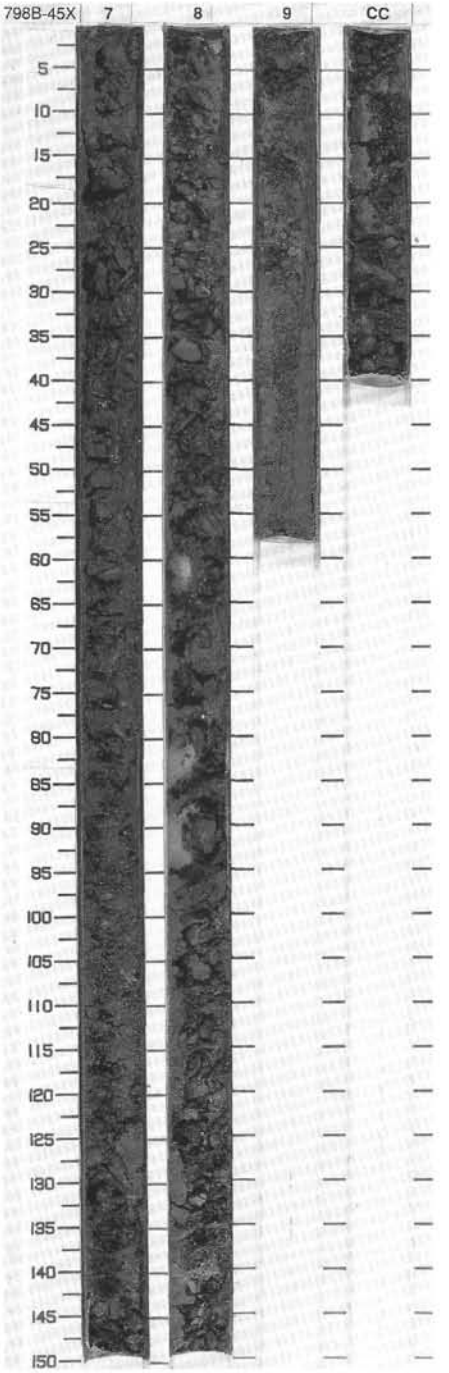
	2, 80 D	4, 65 D	5, 122 M
TEXTURE:			
Sand	5	2	65
Silt	20	8	35
Clay	75	90	—
COMPOSITION:			
Clay	75	87	Tr
Diatoms	10	5	—
Dolomite	—	Tr	—
Feldspar	—	—	2
Glass	3	2	96
Pyrite	2	2	—
Quartz	2	2	2
Silicoflagellates	1	Tr	—
Spicules	5	2	Tr

(cont.)

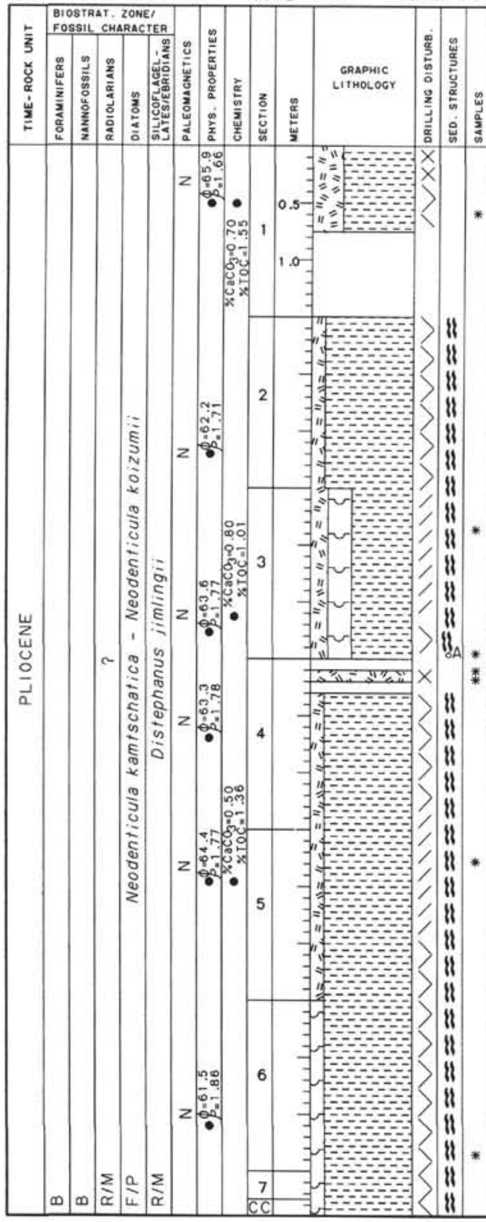


SITE 798 HOLE B CORE 45X CORED INTERVAL 1321.5-1331.1 mbsl; 421.5-431.1 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	B	B	R/M	C/M	R/M		ϕ 65.2 ϕ 41.6	%CaCO3 1.10 %TOC 1.32	7	0.5 1.0					(cont.)
									8						
									9						
									CC						



SITE 798 HOLE B CORE 46X CORED INTERVAL 1331.1-1340.8 mbsl; 431.1-440.8 mbsf



LITHOLOGIC DESCRIPTION

Severe drilling disturbance.

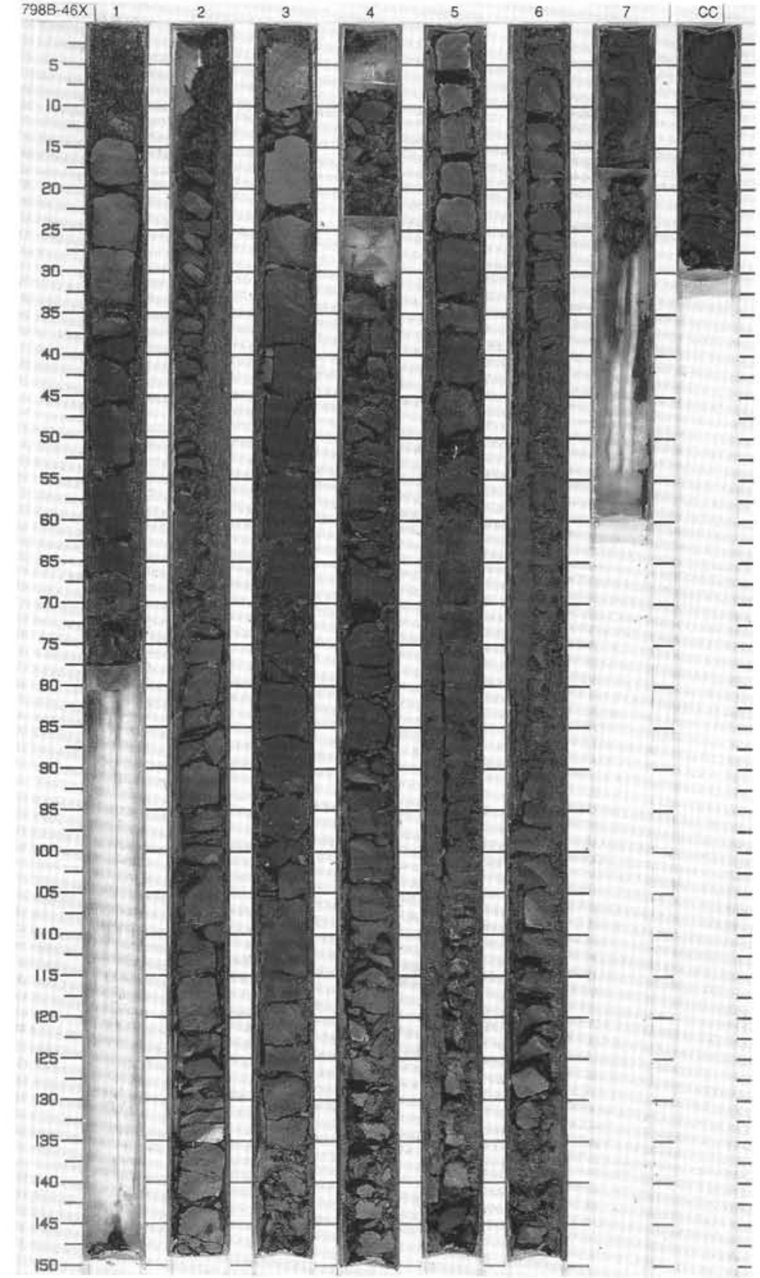
CLAY and CLAY with DIATOMS

Major lithology: This core contains dark greenish gray (10Y 3/1- 10Y 4/1) CLAY, CLAY with VOLCANIC GLASS, and in Section 3 and from Section 6 through the core catcher CLAY with DIATOMS. The sediment is highly bioturbated, with *Chondrites* burrows. Diatoms are highly dissolved and fragmented, and the biosiliceous component is probably underestimated in the core. Opal-CT was identified by X-ray diffraction in Core128-798B- 48X, and some of the material identified as clay in smear slides may actually be diagenetic silica.

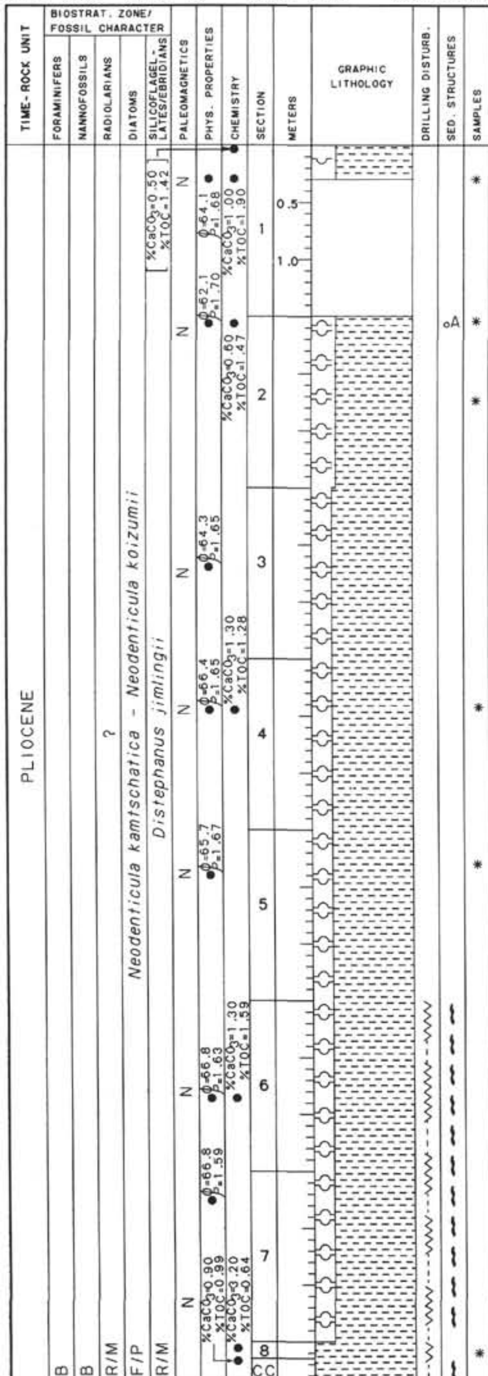
Minor lithology: Some PUMICE fragments are scattered in Section 3 and VOLCANIC ASH layers are present in Section 4, 9-20 cm and Section 5, 136 cm.

SMEAR SLIDE SUMMARY (%):

	1, 59 D	3, 38 D	3, 145 M	4, 10 M	4, 18 M	5, 29 D	6, 136 M
TEXTURE:							
Sand	Tr	Tr	10	10	50	Tr	20
Silt	40	30	60	60	45	15	40
Clay	60	70	30	30	5	85	40
COMPOSITION:							
Biotite	—	—	—	Tr	—	—	Tr
Clay	60	60	5	15	14	80	10
Diatoms	2	10	—	—	—	2	—
Feldspar	—	—	1	2	1	—	4
Foraminifers	Tr	—	—	—	—	Tr	—
Glass	30	15	90	75	80	10	75
Inorganic calcite	—	—	—	—	—	—	Tr
Opaques	—	—	1	5	—	—	—
Pyrite	Tr	—	—	—	—	—	5
Quartz	3	2	3	3	5	2	6
Radiolarians	—	Tr	—	—	—	—	Tr
Spicules	2	10	Tr	Tr	Tr	2	Tr



SITE 798 HOLE B CORE 47X CORED INTERVAL 1340.8-1350.4 mbsl; 440.8-450.4 mbsf



LITHOLOGIC DESCRIPTION

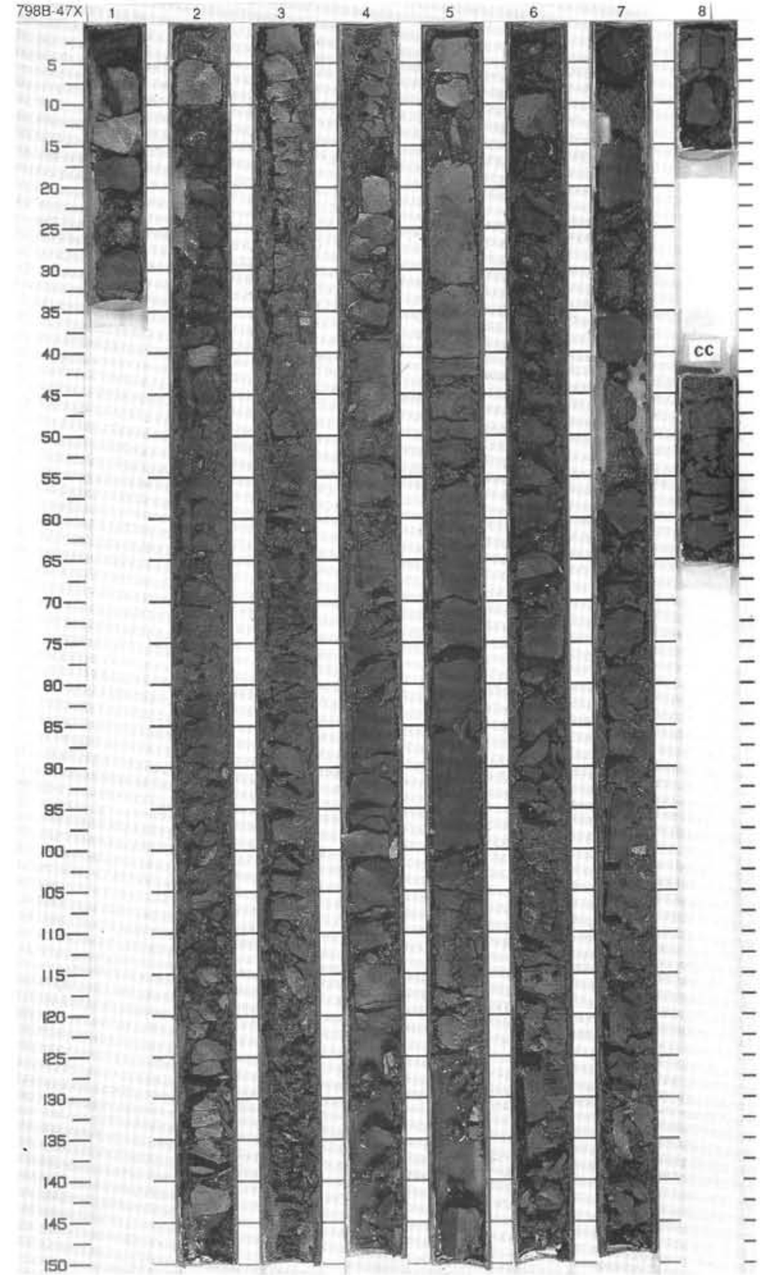
CLAY and SILICEOUS CLAY

Major lithology: Olive gray (5Y 4/2) to dark gray (5Y 4/1) and dark olive gray (5Y 3/2) CLAY with SPICULES and CLAY with DIATOMS. The recognizable biogenic siliceous component is more abundant in Sections 2 and 5, where the sediment becomes a SILICEOUS CLAY. However, diatoms in this core are highly dissolved and fragmented, and the biosilica component is probably generally underestimated in the core. Opal-CT was identified by X-ray diffraction in Core 128-798B-48X, and some of the material, identified as clay in smear slides may actually be diagenetic silica. Bioturbation is observed throughout Sections 6 to 8 and in the core catcher. *Sagarites* are noticeable in Section 1, 15, 30, and 100 cm; Section 2, 25, 35, and 100 cm; Section 3, 35, 75, 120, 140 cm; and Section 7, 60, 72, 120, and 125 cm.

Minor lithology: A vitric VOLCANIC ASH layer occurs in Section 1, 30 cm and several ash pods are present in Sections 4 and 5.

SMEAR SLIDE SUMMARY (%):

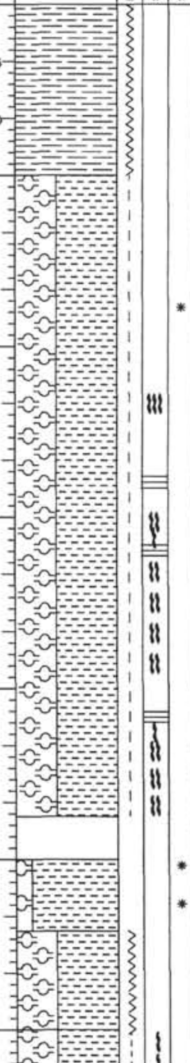
	1, 30 M	2, 3 M	2, 72 D	4, 40 D	5, 30 M	8, 10 D
TEXTURE:						
Sand	5	2	---	---	—	—
Silt	50	78	25	40	20	20
Clay	45	20	75	60	80	80
COMPOSITION:						
Calcite	—	—	1	—	—	—
Clay	50	2	65	55	65	75
Diatoms	Tr	—	5	5	5	5
Feldspar	—	2	—	—	—	—
Foraminifers	—	—	2	5	—	—
Glass	40	90	—	8	5	5
Nannofossils	—	—	—	Tr	—	—
Pyrite	3	2	3	5	—	2
Quartz	5	4	5	8	5	10
Radiolarians	—	Tr	2	Tr	3	Tr
Silicoflagellates	—	—	3	Tr	2	Tr
Spicules	Tr	Tr	10	10	15	3



SITE 798 HOLE B CORE 48X CORED INTERVAL 1350.4-1360.1 mbsl; 450.4-460.1 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	SAMPLES
							ϕ=57.4 ρ=1.80; ϕ=61.6 ρ=1.77	%$CaCO_3$=0.80 %TOC=1.59	1	0.5, 1.0	
						N		%$CaCO_3$=0.80 %TOC=1.42	2		*
						N	ϕ=60.0 ρ=1.78	%$CaCO_3$=1.20 %TOC=1.56	3		
						R			4		
				?		R	ϕ=55.7 ρ=1.85	%$CaCO_3$=2.10 %TOC=1.31	5		
								%$CaCO_3$=1.30 %TOC=1.29	6		* *
	B	B		R/P	B	N?			CC		

GRAPHIC LITHOLOGY



DRILLING DISTURB. / SED. STRUCTURES

LITHOLOGIC DESCRIPTION

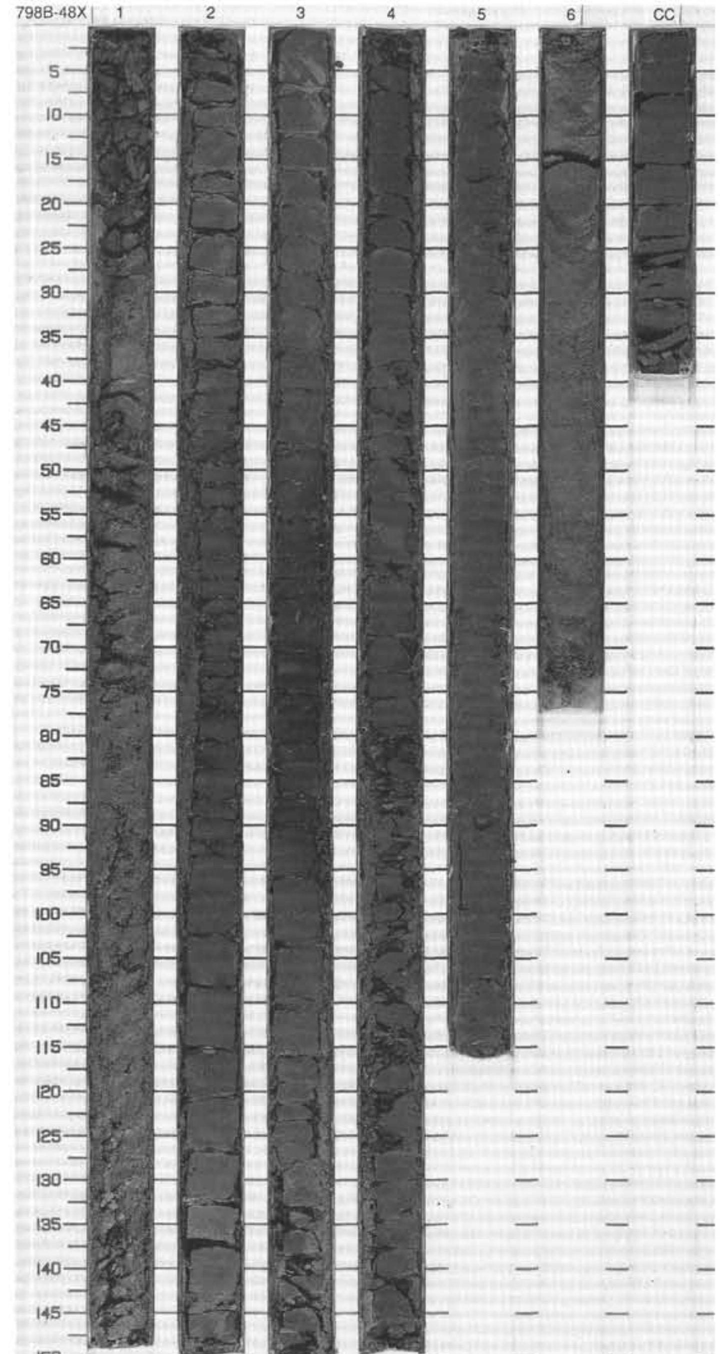
Moderate to severe drilling disturbance, formation of drilling biscuits.

SILICEOUS CLAY or SILICEOUS CLAYSTONE, SILTY CLAY, and CLAY with DIATOMS

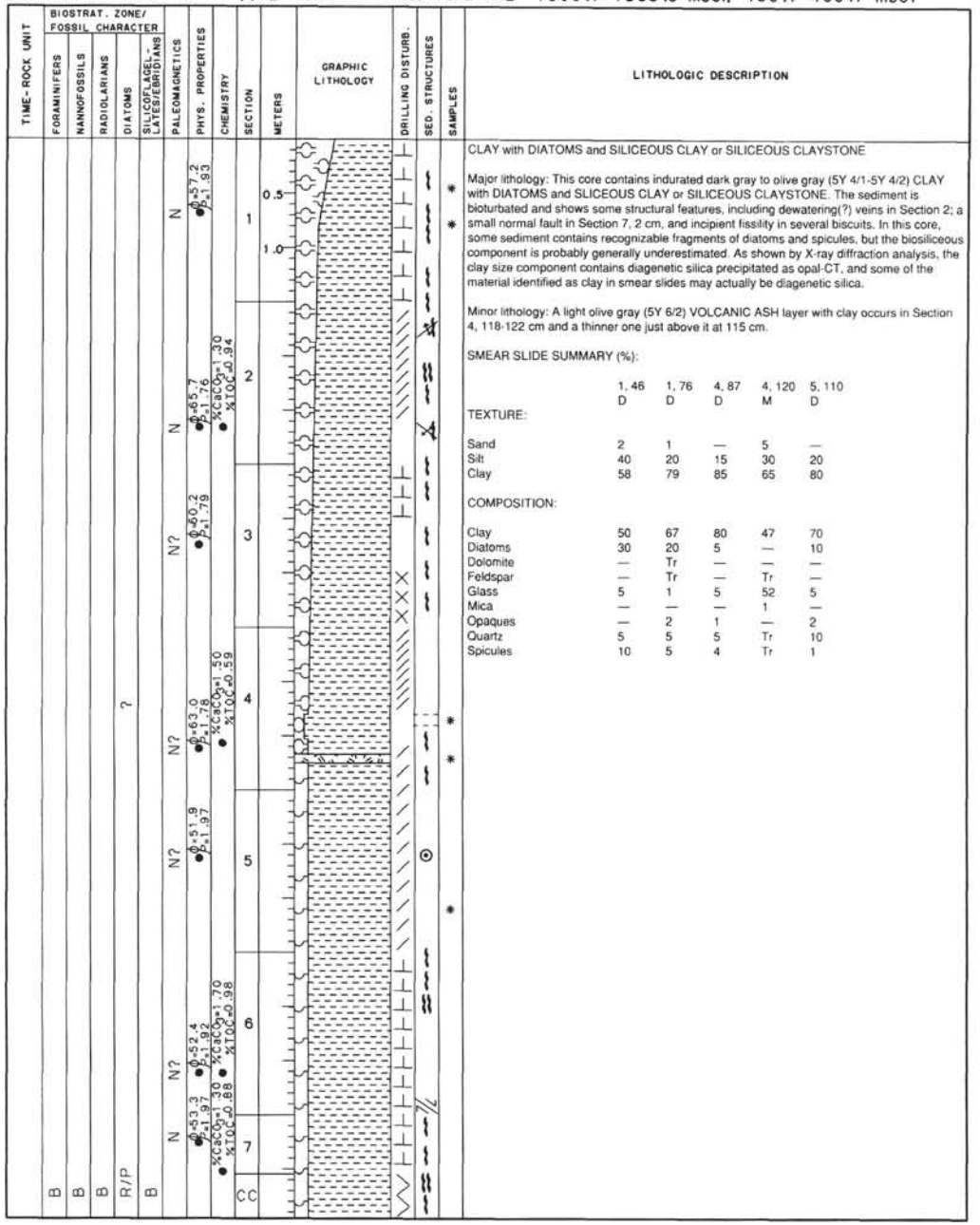
Major lithology: This core contains firm gray to olive gray (5Y 5/1-5Y 4/2) SILICEOUS CLAY or SILICEOUS CLAYSTONE throughout Sections 2 to 5 and 7. Section 1, 0-150 cm, is gray (5Y 5/1) SILTY CLAY. In Section 6, 0-77 cm, is olive gray (5Y 4.5/2) CLAY with DIATOMS. In this core, some sediment contains recognizable diatoms and spicules, but the biosiliceous component is probably generally underestimated. Opal-CT was identified by X-ray diffraction analysis in Section 6, 0 cm. Some of the material identified as clay in smear slides may actually be diagenetic silica. Sediments are laminated and bioturbated in Sections 3 to 5.

SMEAR SLIDE SUMMARY (%):

	2, 118 D	6, 5 D	6, 39 D
TEXTURE:			
Sand	2	2	—
Silt	15	10	20
Clay	83	88	80
COMPOSITION:			
Clay	57	88	75
Diatoms	15	—	15
Dolomite	Tr	3	—
Glauconite	Tr	—	—
Opaques	3	2	4
Quartz	5	5	2
Spicules	20	2	3



SITE 798 HOLE B CORE 49X CORED INTERVAL 1360.1-1369.3 mbsl; 460.1-469.7 mbsf



LITHOLOGIC DESCRIPTION

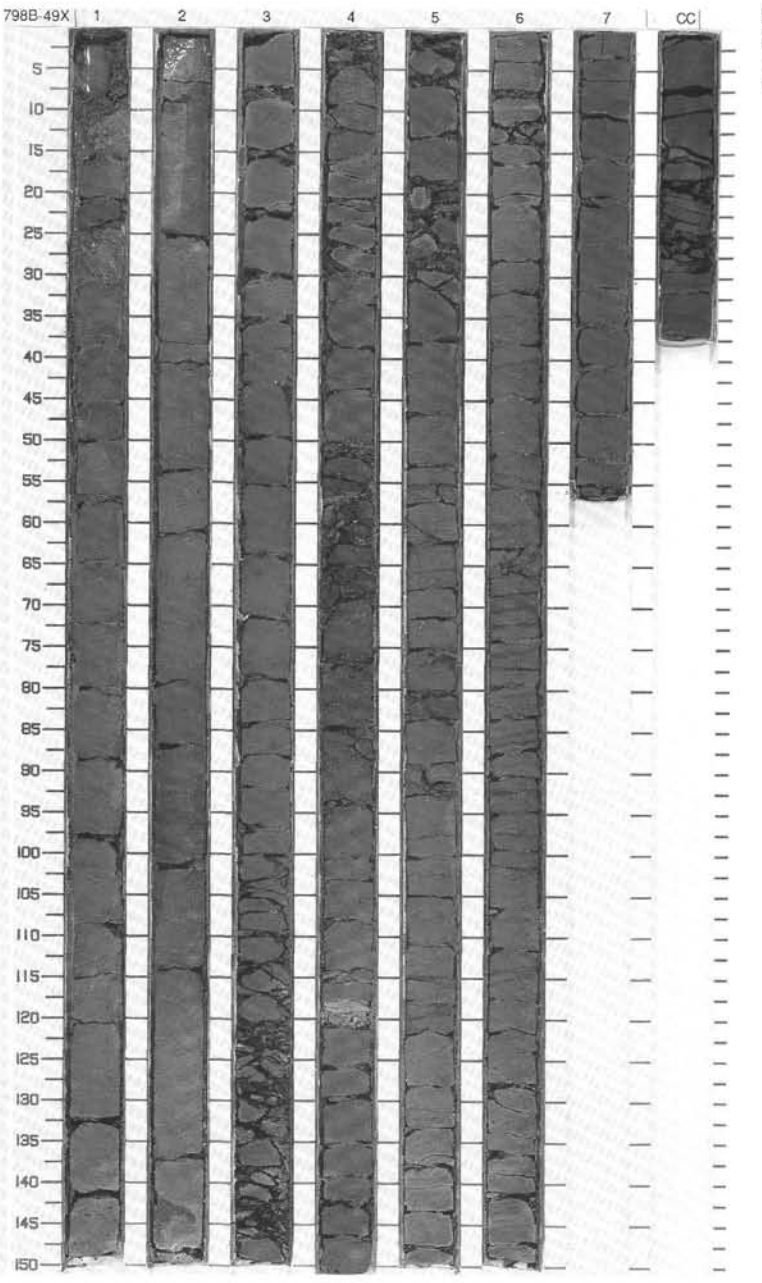
CLAY with DIATOMS and SILICEOUS CLAY or SILICEOUS CLAYSTONE

Major lithology: This core contains indurated dark gray to olive gray (5Y 4/1-5Y 4/2) CLAY with DIATOMS and SLICEOUS CLAY or SILICEOUS CLAYSTONE. The sediment is bioturbated and shows some structural features, including dewatering(?) veins in Section 2; a small normal fault in Section 7, 2 cm, and incipient fissility in several biscuits. In this core, some sediment contains recognizable fragments of diatoms and spicules, but the biosiliceous component is probably generally underestimated. As shown by X-ray diffraction analysis, the clay size component contains diagenetic silica precipitated as opal-CT, and some of the material identified as clay in smear slides may actually be diagenetic silica.

Minor lithology: A light olive gray (5Y 6/2) VOLCANIC ASH layer with clay occurs in Section 4, 118-122 cm and a thinner one just above it at 115 cm.

SMEAR SLIDE SUMMARY (%):

	1, 46 D	1, 76 D	4, 87 D	4, 120 M	5, 110 D
TEXTURE:					
Sand	2	1	—	5	—
Silt	40	20	15	30	20
Clay	58	79	85	65	80
COMPOSITION:					
Clay	50	67	80	47	70
Diatoms	30	20	5	—	10
Dolomite	—	Tr	—	—	—
Feldspar	—	Tr	—	Tr	—
Glass	5	1	5	52	5
Mica	—	—	—	1	—
Opaques	—	2	1	—	2
Quartz	5	5	5	Tr	10
Spicules	10	5	4	Tr	1



SITE 798 HOLE B CORE 50X CORED INTERVAL 1369.7-1379.0 mbsl; 469.7-479.4 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
	B	B	B	B	B	R?	N	N	1	0.5				*
							●ϕ=53.5 ρ=1.89			1.0				
							●ϕ=59.9 ρ=1.84	●%CaCO3=0.70 %TOC=1.01	2					
							●ϕ=50.8 ρ=1.88							
								●%CaCO3=1.10 %TOC=1.30	3					*
									CC					

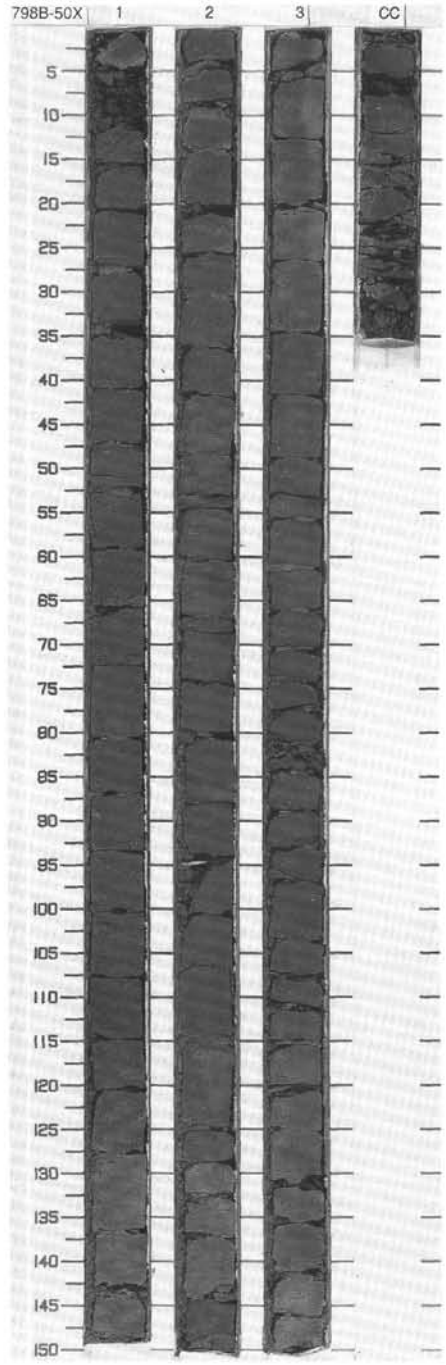
LITHOLOGIC DESCRIPTION

SILICEOUS CLAYSTONE

Major lithology: This core consists mainly of dark gray (5Y 4/1) or olive gray (5Y 4/2) indurated sediment interpreted as CLAYSTONE by smearslide analysis but shown to be SILICEOUS CLAYSTONE by X-ray diffraction analysis which indicates that opal-CT has formed in the sediment. This indurated sediment shows extensive bioturbation in Section 2, 0-20 cm, and some *Sagarites* fossil remnants in Sections 1 and 3 and core catcher. A few dark veins, likely to be water-escape structures, are present in Section 1, 41-47 cm, and Section 2, 80-88cm.

SMEAR SLIDE SUMMARY (%):

	2, 116 M	3, 39 D
TEXTURE:		
Sand	10	—
Silt	10	25
Clay	80	75
COMPOSITION:		
Calcite/Dolomite	—	5
Clay	88	70
Fish	—	Tr
Glass	—	1
Opaques	2	2
Quartz	10	20
Spicules	Tr	—



SITE 798 HOLE B CORE 51X CORED INTERVAL 1379.0-1389.4 mbsl; 479.4-489.0 mbsf

TIME-ROCK UNIT | BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS, NANNOFOSSILS, RADIOLARIANS, DIATOMS, SILICOFLAGELLATES/EBRIDIANS | PALEOMAGNETICS | PHYS. PROPERTIES | CHEMISTRY | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURB. | SED. STRUCTURES | SAMPLES

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
	B	B	B	B	B	B	N	Φ=51.2 ρ=1.90		1	0.5				
						N	Φ=50.3 ρ=1.87			1.0				
						N	Φ=54.0 ρ=1.85	%CaCO3=1.10 %TOC=1.67	2					
						N	Φ=54.2 ρ=1.89	%CaCO3=1.70 %TOC=1.55	3					
						N	Φ=54.3 ρ=1.84	%CaCO3=1.80 %TOC=1.46	4					
						N?	Φ=52.0 ρ=1.90	%CaCO3=2.30 %TOC=1.43	5					
									6					OG IW
									CC					

LITHOLOGIC DESCRIPTION

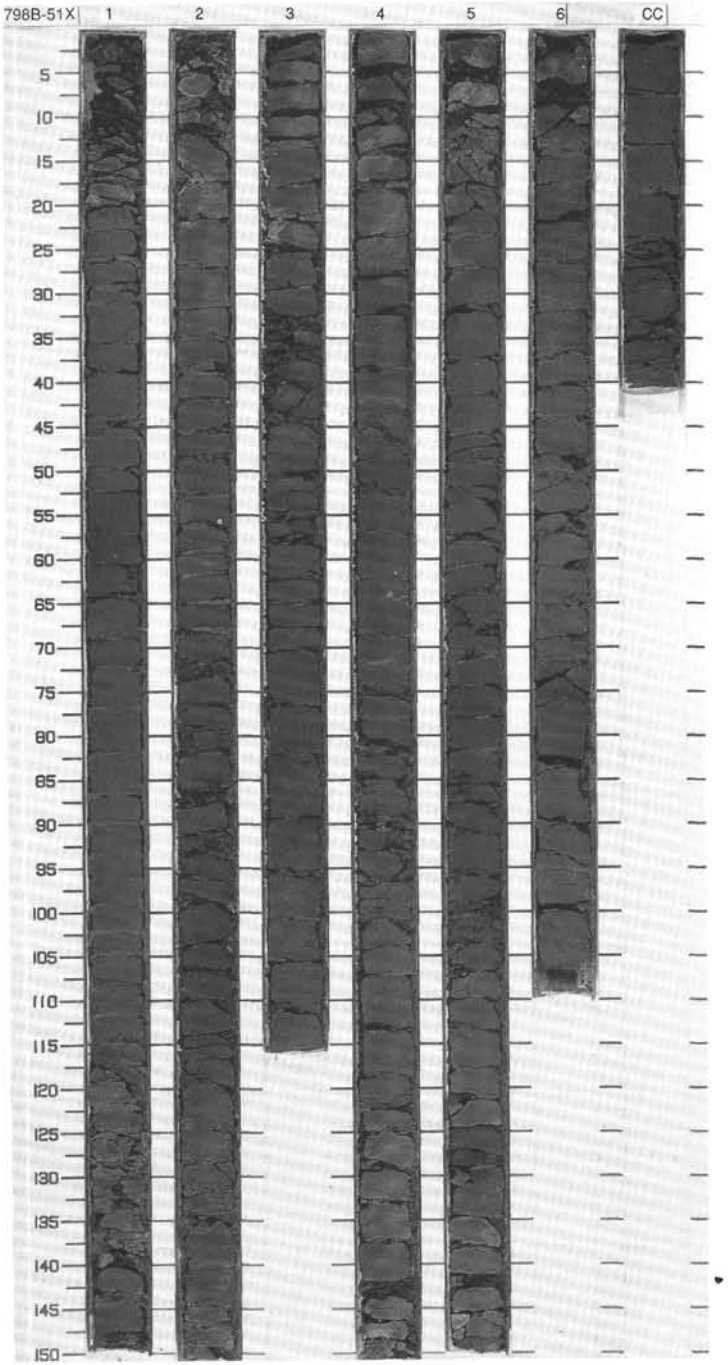
SILICEOUS CLAYSTONE

Major lithology: This core consists of olive gray to dark gray (5Y 4/2-5Y 4/1) SILICEOUS CLAYSTONE. Note that smear slides show mainly clay, but X-ray diffraction analysis confirms that opal-CT is generally present in these sediments. The core is extensively bioturbated, with burrows probably of *Teichichnus* type present in Section 4, 30 cm, Section 6, 100-105 cm, and core catcher, 5 cm.

Minor lithology: Coarse sand layers, reworked by bioturbation, occur in Section 2, 140-141 cm, and Section 4, 39-47 cm.

SMEAR SLIDE SUMMARY (%):

	4, 45 M	CC, 36 D
TEXTURE:		
Sand	40	—
Silt	40	20
Clay	20	80
COMPOSITION:		
Clay	15	78
Dolomite	Tr	5
Feldspar	7	Tr
Glass	Tr	—
Glauconite	1	2
Mica	Tr	—
Opaques	15	5
Pyrite	2	—
Quartz	60	10



SITE 798 HOLE B CORE 52X CORED INTERVAL 1389.0-1398.7 mbsl; 489.0-498.7 mbsf

TIME-ROCK UNIT | BIOSTRAT. ZONE/FOSSIL CHARACTER: FORAMINIFERS, NANNOFOSSILS, RADIOLARIANS, DIATOMS, SILICOFLAGELLATES/EBRIDIANS | PALEOMAGNETICS | PHYS. PROPERTIES | CHEMISTRY | SECTION | METERS | GRAPHIC LITHOLOGY | DRILLING DISTURB. | SED. STRUCTURES | SAMPLES

PALEOMAGNETICS: N N N N N
PHYS. PROPERTIES: Φ=50.9, ρ=1.84; Φ=49.3, ρ=1.89; Φ=52.8, ρ=1.88; Φ=53.1, ρ=1.86; Φ=55.8, ρ=1.82; Φ=53.6, ρ=1.81
CHEMISTRY: %CaCO3=1.70, %TOC=0.90; %CaCO3=2.00, %TOC=2.65; %CaCO3=1.00, %TOC=3.33
SECTION: 1, 2, 3, 4, 5, 6, 7, CC
METERS: 0.5, 1.0

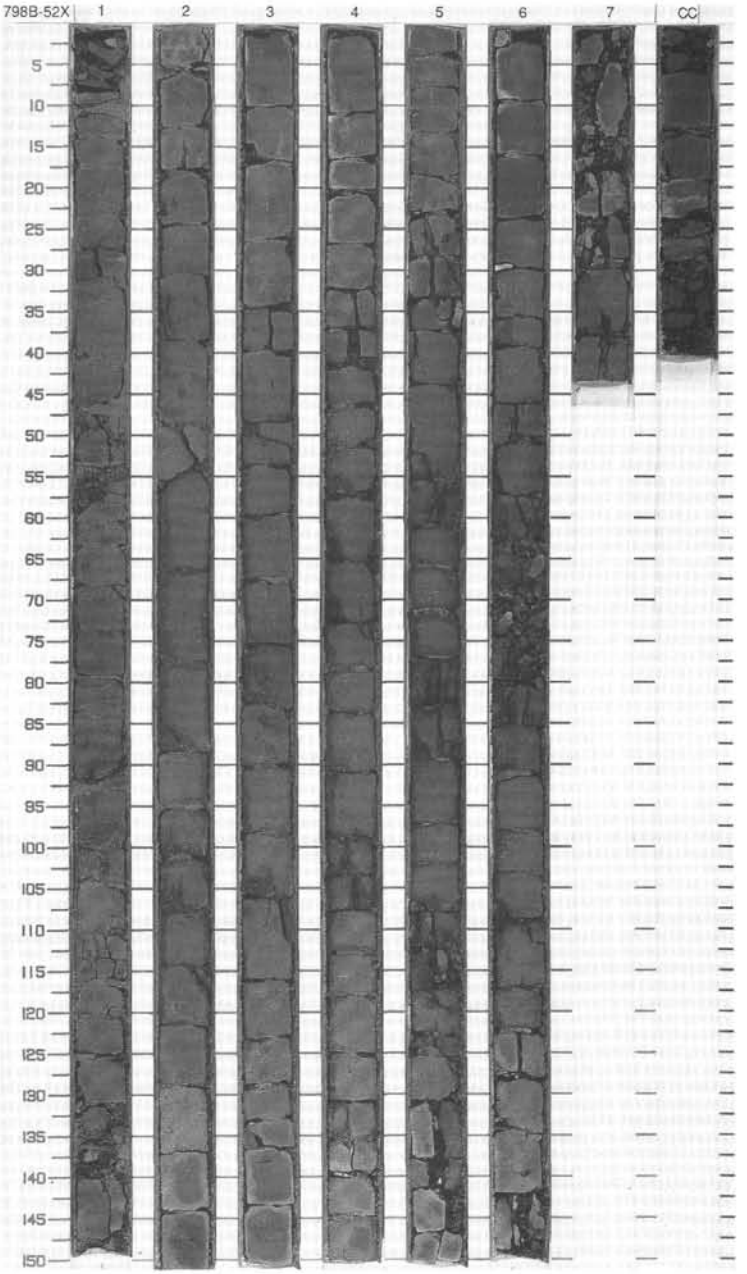
LITHOLOGIC DESCRIPTION

SILICEOUS CLAYSTONE and SILTY CLAY with GLAUCONITE

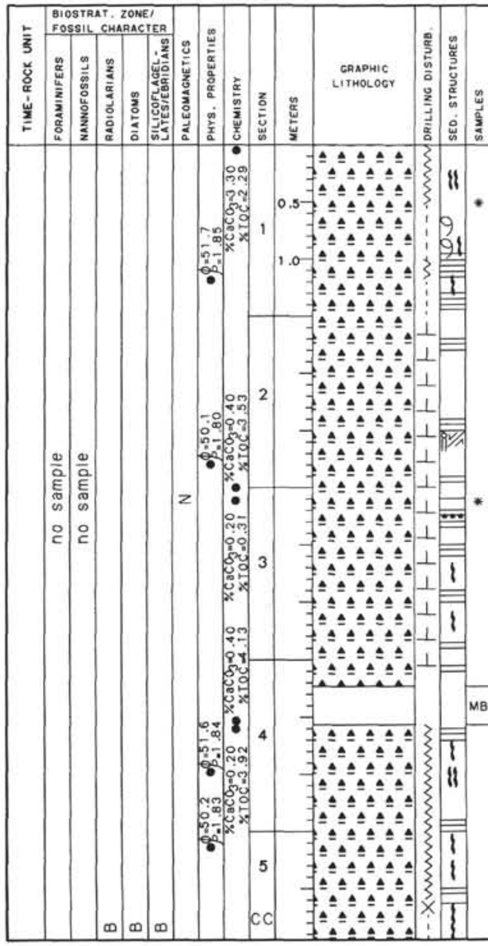
Major lithology: Sediments are dominated by dark greenish gray (5Y 3/2) to dark olive gray (5Y 3/2), structureless to slightly bioturbated SILTY CLAY and SILICEOUS CLAYSTONE. In Section 1, sediments contain GLAUCONITE-rich intervals, which are particularly conspicuous at 24-30, 44-55, 75-93, and 134-139 cm. The glauconite particles are well-rounded, sand-size, with an average 0.2-0.8 mm diameter, and are probably allochthonous. Burrowing and bioturbating organisms distributed the glauconite particles into surrounding sediments. *Sagarites* fossils (*Makiyama hitanii*) are also common throughout the core.

SMEAR SLIDE SUMMARY (%):

	1, 28 D	2, 132 D	6, 27 D
TEXTURE:			
Sand	10	—	—
Silt	50	15	10
Clay	40	85	90
COMPOSITION:			
Clay	47	75	90
Diatoms	8	5	Tr
Dolomite	5	5	2
Glass	---	5	---
Glauconite	15	—	Tr
Opaques	3	3	2
Quartz	20	5	5
Spicules	2	Tr	Tr



SITE 798 HOLE B CORE 53X CORED INTERVAL 1398.7-1403.3 mbsl; 498.7-508.3 mbsf



LITHOLOGIC DESCRIPTION

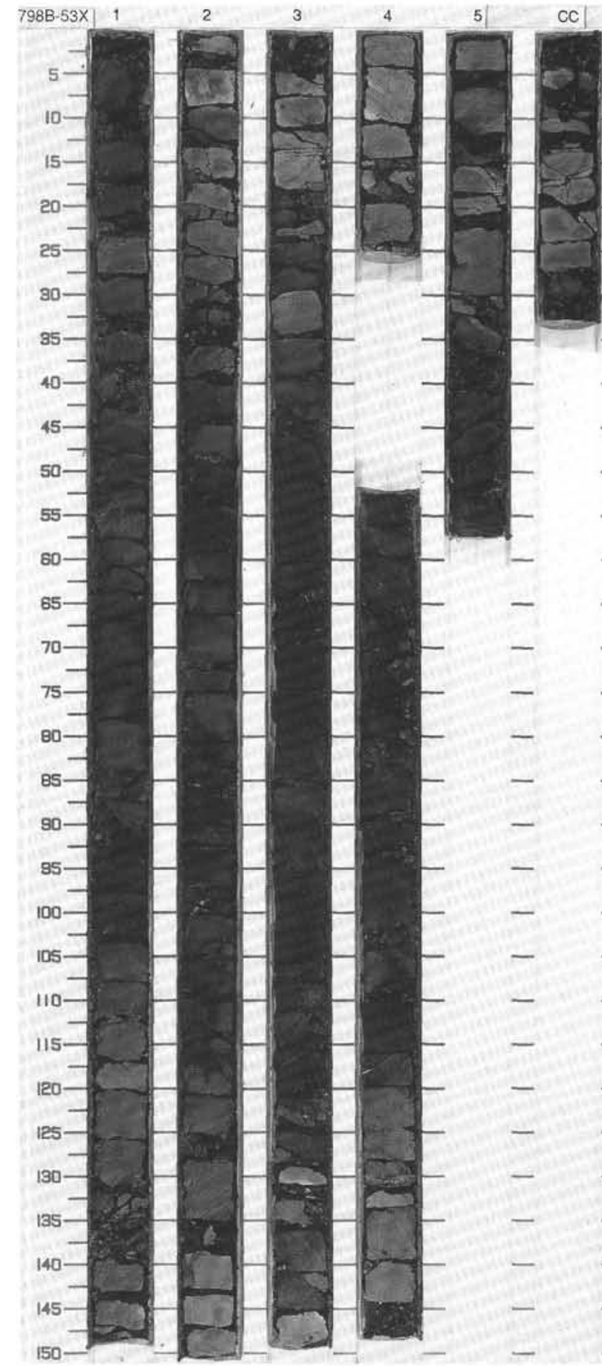
Moderate to severe drilling disturbance.

SILICEOUS CLAYSTONE AND SILTY CLAYSTONE

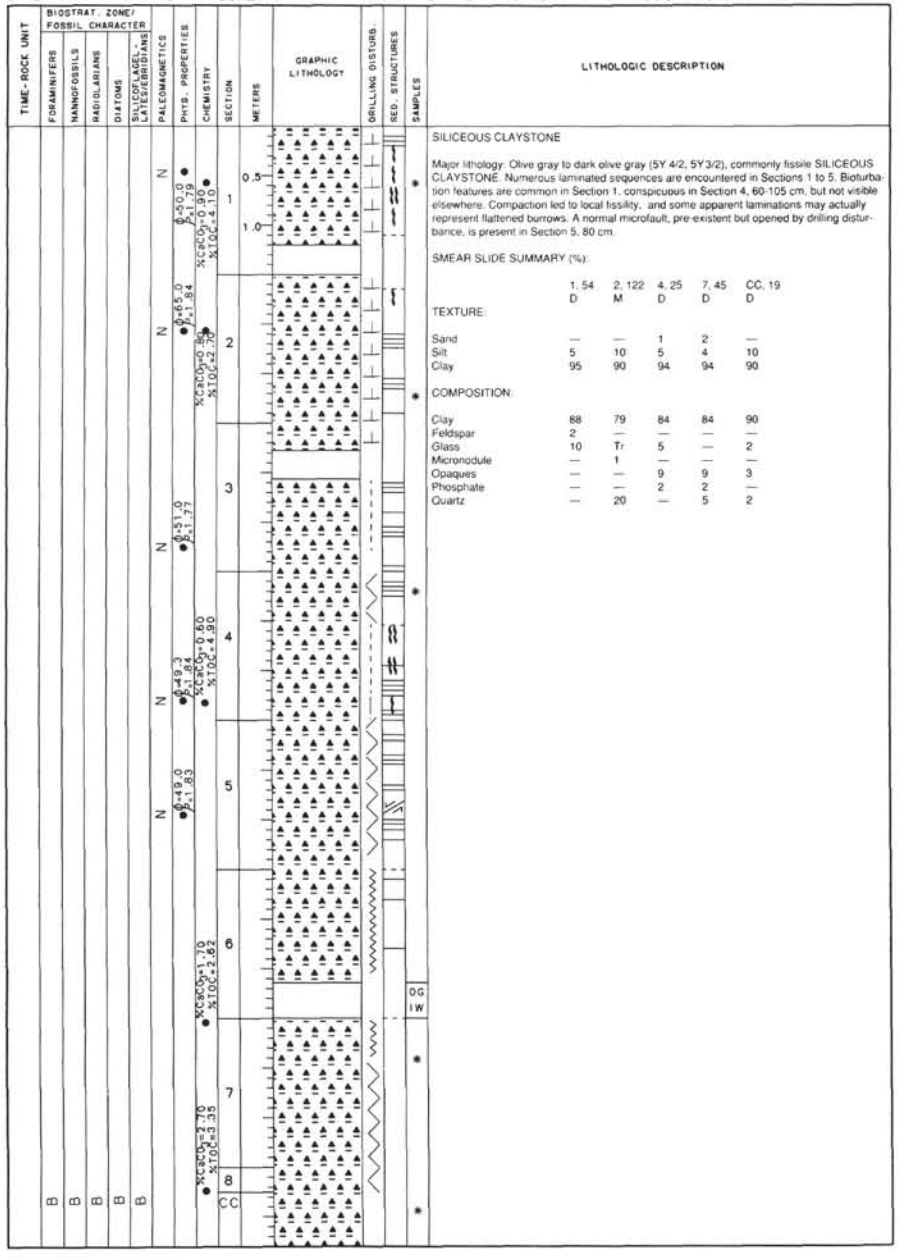
Major lithology: This core is composed mainly of SILICEOUS CLAYSTONE. The rocks are dark gray (5Y3/2) to olive gray (5Y 4/2). Characteristic structures for this core include interlayered sequences 5 to 15 cm thick of thickly to thinly laminated beds and 50 to 120 cm thick homogeneous bioturbated units. A water escape structure is present in Section 2.

SMEAR SLIDE SUMMARY (%):

	1, 50 D	3, 12 M
TEXTURE:		
Sand	1	1
Silt	29	7
Clay	70	92
COMPOSITION:		
Clay	65	90
Diatoms	8	—
Dolomite	3	Tr
Glass	5	—
Mica	—	Tr
Opaques	4	—
Quartz	15	10
Spicules	Tr	—



SITE 798 HOLE B CORE 54X CORED INTERVAL 1408.3-1417.9 mbsl; 508.3-517.9 mbsf

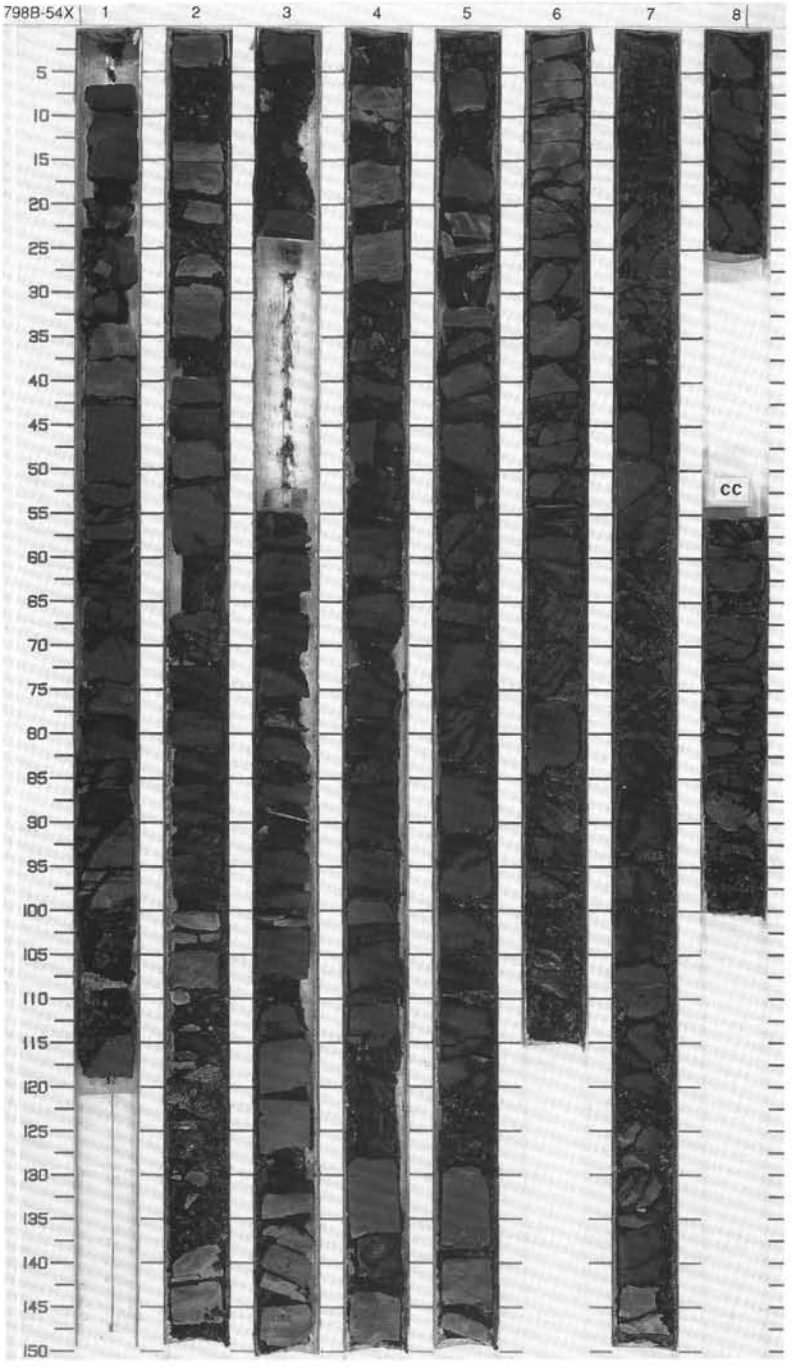


SILICEOUS CLAYSTONE

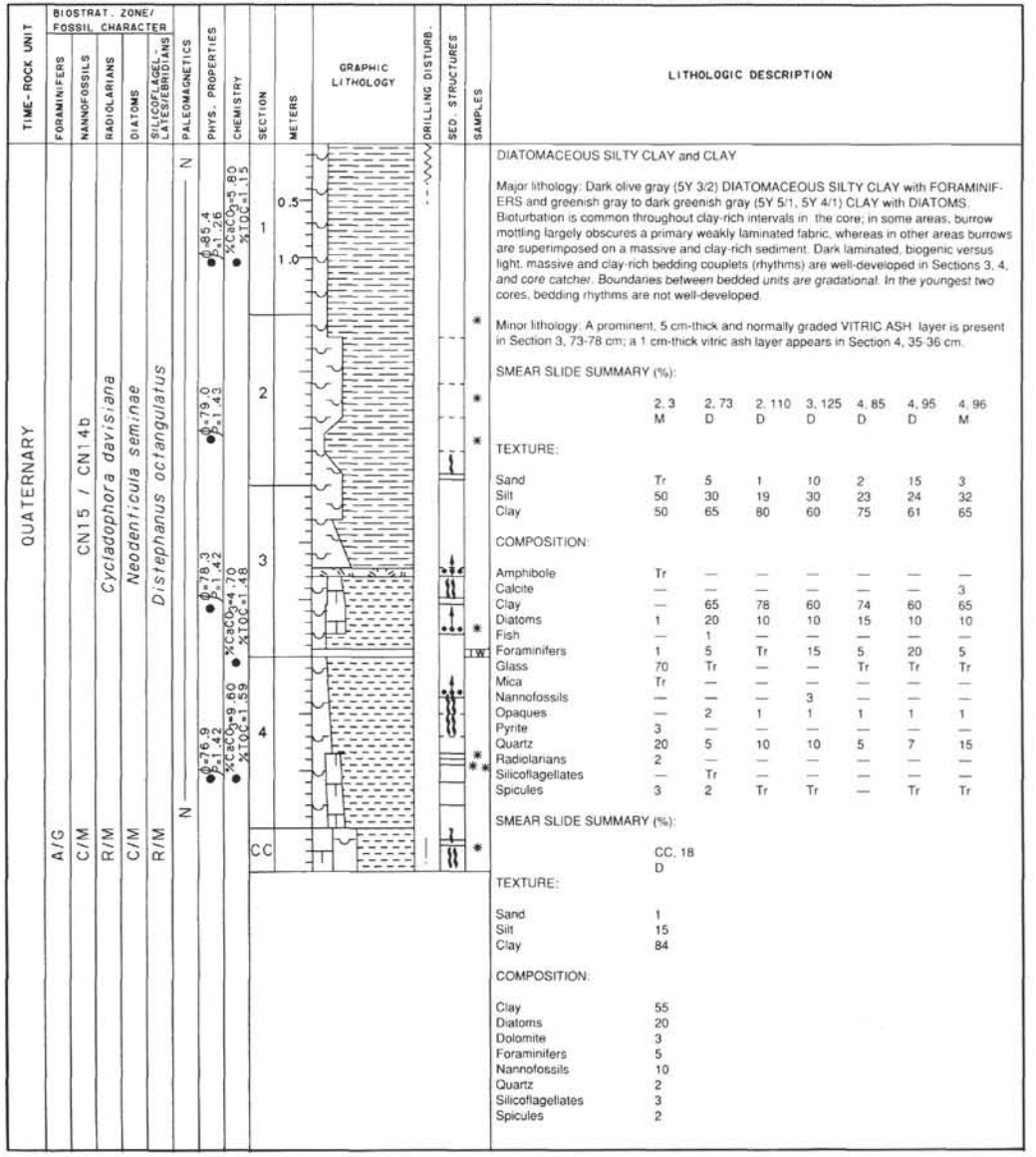
Major lithology: Olive gray to dark olive gray (5Y 4/2, 5Y 3/2), commonly fissile SILICEOUS CLAYSTONE. Numerous laminated sequences are encountered in Sections 1 to 5. Bioturbation features are common in Section 1, conspicuous in Section 4, 60-105 cm, but not visible elsewhere. Compaction led to local fissility, and some apparent laminations may actually represent flattened burrows. A normal microfault, pre-existent but opened by drilling disturbance, is present in Section 5, 80 cm.

SMEAR SLIDE SUMMARY (%):

	1, 54 D	2, 122 M	4, 25 D	7, 45 D	CC, 19 D
TEXTURE:					
Sand	—	—	1	2	—
Silt	5	10	5	4	10
Clay	95	90	94	94	90
COMPOSITION:					
Clay	88	79	84	84	90
Feldspar	2	—	—	—	—
Glass	10	Tr	5	—	2
Micronodule	—	1	—	—	—
Opaques	—	—	9	9	3
Phosphate	—	—	2	2	—
Quartz	—	20	—	5	2



SITE 798 HOLE C CORE 1H CORED INTERVAL 900.1-906.4 mbsl; 0.0-6.3 mbsf



LITHOLOGIC DESCRIPTION

DIATOMACEOUS SILTY CLAY and CLAY

Major lithology: Dark olive gray (5Y 3/2) DIATOMACEOUS SILTY CLAY with FORAMINIFERS and greenish gray to dark greenish gray (5Y 5/1, 5Y 4/1) CLAY with DIATOMS. Bioturbation is common throughout clay-rich intervals in the core; in some areas, burrow mottling largely obscures a primary weakly laminated fabric, whereas in other areas burrows are superimposed on a massive and clay-rich sediment. Dark laminated, biogenic versus light, massive and clay-rich bedding couplets (rhythms) are well-developed in Sections 3, 4, and core catcher. *Boundaries between bedded units are gradational. In the youngest two* cores, bedding rhythms are not well-developed.

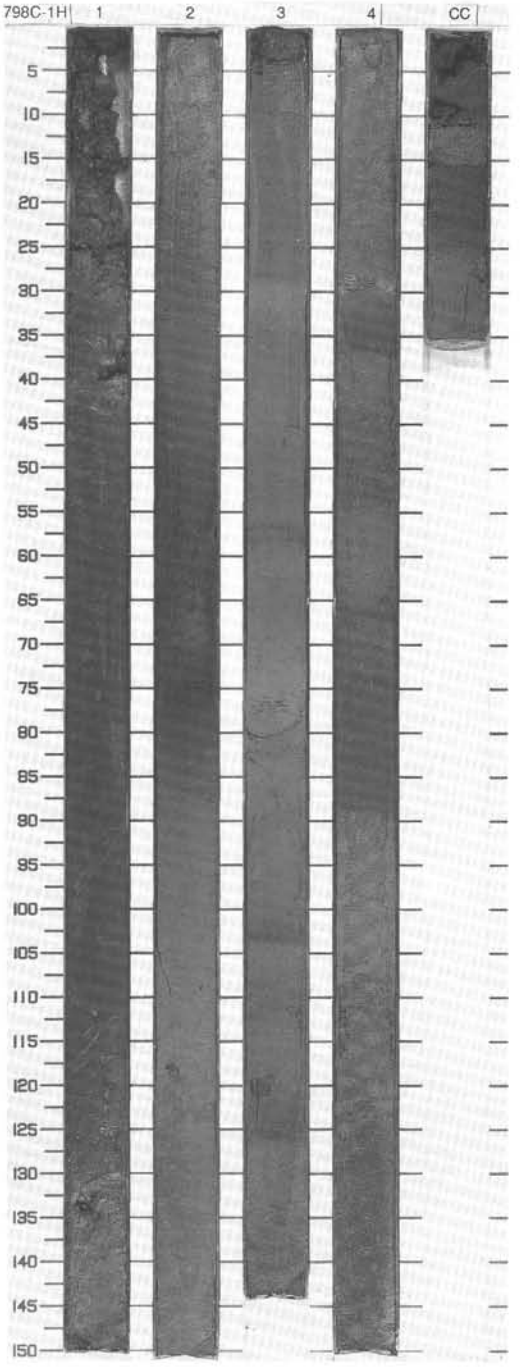
Minor lithology: A prominent, 5 cm-thick and normally graded VITRIC ASH layer is present in Section 3, 73-78 cm; a 1 cm-thick vitric ash layer appears in Section 4, 35-36 cm.

SMEAR SLIDE SUMMARY (%):

	2, 3 M	2, 73 D	2, 110 D	3, 125 D	4, 85 D	4, 95 D	4, 96 M
TEXTURE:							
Sand	Tr	5	1	10	2	15	3
Silt	50	30	19	30	23	24	32
Clay	50	65	80	60	75	61	65
COMPOSITION:							
Amphibole	Tr	—	—	—	—	—	—
Calcite	—	—	—	—	—	—	3
Clay	—	65	78	60	74	60	65
Diatoms	1	20	10	10	15	10	10
Fish	—	1	—	—	—	—	—
Foraminifers	1	5	Tr	15	5	20	5
Glass	70	Tr	—	—	Tr	Tr	Tr
Mica	Tr	—	—	—	—	—	—
Nannofossils	—	—	—	3	—	—	—
Opaques	—	2	1	1	1	1	1
Pyrite	3	—	—	—	—	—	—
Quartz	20	5	10	10	5	7	15
Radiolarians	2	—	—	—	—	—	—
Silicoflagellates	—	Tr	—	—	—	—	—
Spicules	3	2	Tr	Tr	—	Tr	Tr

SMEAR SLIDE SUMMARY (%):

	CC, 18 D
TEXTURE:	
Sand	1
Silt	15
Clay	84
COMPOSITION:	
Clay	55
Diatoms	20
Dolomite	3
Foraminifers	5
Nannofossils	10
Quartz	2
Silicoflagellates	3
Spicules	2



SITE 798 HOLE C CORE 2H CORED INTERVAL 906.4-915.4 mbsl; 6.3-15.3 mbsf

TIME-ROCK UNIT: QUATERNARY

BIOSTRAT. ZONE/FOSSIL CHARACTER: A/M (FORAMINIFERS); B (NANNOFOSSILS); R/M (RADIOLARIANS); *Cycladophora davisiana*; F/P (DIATOMS); *Neodenticula seminae*; B (SILICOFLAGELLATES/EBRIDIANS)

PALEOMAGNETICS: N

PHYS. PROPERTIES: ϕ=75.0, ρ=1.50; ϕ=74.6, ρ=1.51; ϕ=76.4, ρ=1.48; ϕ=75.6, ρ=1.50; ϕ=76.1, ρ=1.45; ϕ=78.3, ρ=1.43; ϕ=69.4, ρ=1.47

CHEMISTRY: %CaCO3=17.8, %TOC=1.70; %CaCO3=8.70, %TOC=2.06; %CaCO3=3.30, %TOC=1.44

SECTION: 1, 2, 3, 4, 5, 6, 7, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

LITHOLOGIC DESCRIPTION

CLAY and DIATOMACEOUS OOZE

Major lithology: Section 1 through Section 6 are dominated by olive gray (5Y 5/2) to dark olive gray (5Y 4/2) CLAY with DIATOMS and SILT, CLAY with DIATOMS, and CLAY with DIATOMS and FORAMINIFERS. Section 7, 13-61 cm consists of greenish gray (5BG 6/1), thinly laminated DIATOMACEOUS OOZE with FORAMINIFERS and NANNOFOSSILS. Rhythmic bedding cycles between light, clay-rich and biogenic-poor, and dark biogenic-rich and clay-poor sediments are well developed in Sections 2 and 3. In laminated calcareous and siliceous sediments of Section 2, 70-130 cm, a dark-light rhythmic lamination is evident; in addition, an upward decrease in the abundance of foraminifers occurs in this interval.

Minor lithologies:

a. Thin VITRIC ASH layers, less than 1 cm thick, are present in Section 1, 68 cm, and Section 7, 20 cm.

b. A 3 cm large wood fragment is present in Section 1, 27-30 cm.

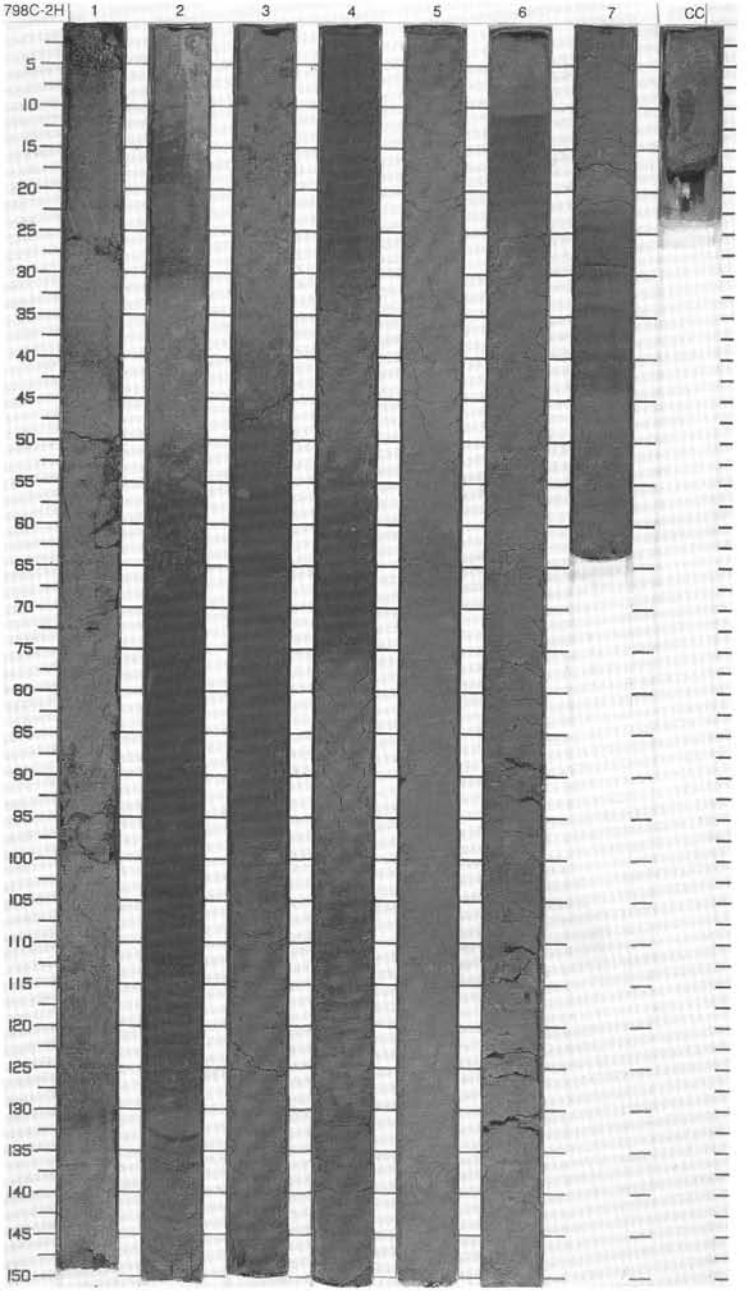
c. Small shell fragments are clustered in Section 5, 20 cm.

SMEAR SLIDE SUMMARY (%):

	1, 56 D	2, 25 D	2, 28 D	2, 63 M	2, 97 D	2, 130 D	3, 80 D
TEXTURE:							
Sand	Tr	2	1	---	---	15	3
Silt	35	30	15	5	45	45	15
Clay	65	68	84	95	55	40	82
COMPOSITION:							
Clay	49	39	53	75	45	16	75
Diatoms	15	20	25	10	30	45	15
Fish	—	Tr	—	Tr	—	Tr	—
Foraminifers	1	10	2	Tr	Tr	15	Tr
Glass	15	5	—	—	8	3	Tr
Nannofossils	Tr	5	—	—	—	Tr	—
Opaques	—	—	—	—	—	3	—
Pyrite	—	—	—	—	1	—	—
Quartz	15	20	20	15	15	15	3
Radiolarians	—	—	—	—	—	Tr	—
Silicoflagellates	Tr	—	—	—	Tr	Tr	—
Spicules	2	1	Tr	Tr	1	1	5

SMEAR SLIDE SUMMARY (%):

	4, 68 M	6, 82 D
TEXTURE:		
Sand	3	---
Silt	10	20
Clay	87	80
COMPOSITION:		
Clay	—	50
Diatoms	1	20
Fish	—	Tr
Foraminifers	Tr	—
Glass	98	—
Mica	Tr	—
Opaques	—	5
Pyrite	1	—
Quartz	Tr	15
Radiolarians	Tr	—
Silicoflagellates	—	5
Spicules	Tr	5



SITE 798 HOLE C CORE 3H CORED INTERVAL 915.4-924.4 mbsl; 15.3-24.3 mbsf

TIME-ROCK UNIT: QUATERNARY

BIOSTRAT. ZONE/FOSSIL CHARACTER

	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS
A/M					
F/P		CN15 / CN14b			
F/M			*Cycladophora davisiana*		
C/M				*Neodenticula seminae*	
R/M					*Distephanus octangulatus*

PALEOMAGNETICS: N

PHYS. PROPERTIES: ϕ=72.5, ρ=1.57; ϕ=74.8, ρ=1.44; ϕ=66.0, ρ=1.53; ϕ=75.3, ρ=1.46; ϕ=78.6, ρ=1.60; ϕ=71.5, ρ=1.54; ϕ=72.9, ρ=1.52

CHEMISTRY: %CaCO3=6.20, %TOC=3.22; %CaCO3=0.70, %TOC=3.85; %CaCO3=1.42, %TOC=2.85; %CaCO3=3.30, %TOC=1.98

SECTION: 1, 2, 3, 4, 5, 6, 7, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: OG, IW

LITHOLOGIC DESCRIPTION

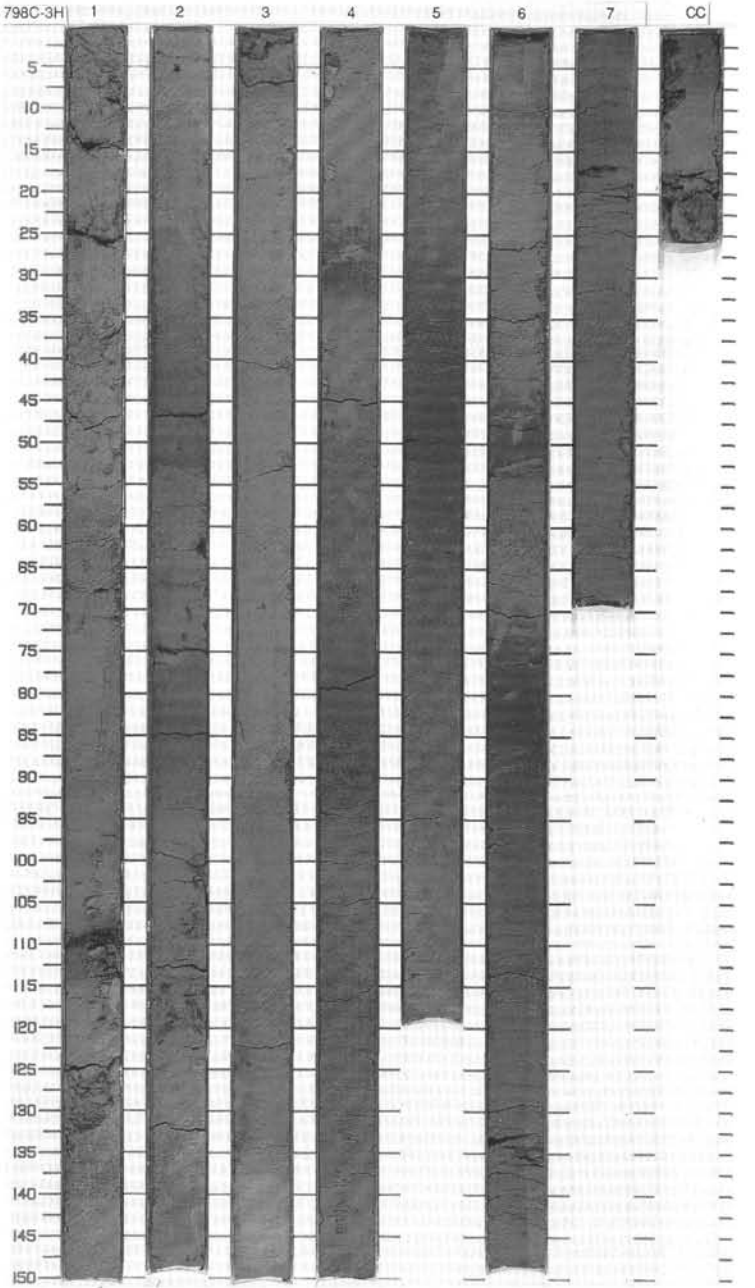
SILTY CLAY, DIATOMACEOUS MIXED SEDIMENT, CLAYEY SILICEOUS OOZE, and DIATOMACEOUS SILTY CLAY

Major lithology: This core contains olive gray (5Y 4/2) SILTY CLAY, DIATOMACEOUS MIXED SEDIMENT, dark olive gray (5Y 3/2) CLAYEY DIATOMACEOUS SILTY CLAY. Rhythmic interbeds of dark and laminated versus light and bioturbated (*Chondrites*) sediments are well developed.

Minor lithologies:
a. PYRITE (up to 5% in Section 6, 32 cm) is ubiquitous.
b. WOOD FRAGMENTS are present in Section 2, 112 cm.
c. VITRIC ASH layers are presen tin Section 1, 109-110 cm, Section 3, 110 cm, and Section 6, 53 cm.

SMEAR SLIDE SUMMARY (%):

	1, 10 D	1, 110 M	2, 40 D	3, 4 D	3, 70 D	5, 48 D	6, 32 D
TEXTURE:							
Sand	---	5	---	---	---	5	---
Silt	40	75	40	30	30	60	40
Clay	60	20	60	70	70	35	60
COMPOSITION:							
Clay	45	—	35	35	55	25	50
Diatoms	10	—	40	42	5	40	15
Feldspar	—	1	—	—	—	—	—
Foraminifers	—	—	3	—	Tr	5	Tr
Glass	7	96	5	2	5	3	5
Nannofossils	—	—	—	—	—	—	Tr
Opaques	3	—	2	1	1	2	5
Plant	—	—	—	Tr	—	—	—
Pyrite	—	1	—	—	—	—	—
Quartz	30	2	10	10	20	5	10
Radiolarians	—	—	—	Tr	—	Tr	—
Silicoflagellates	Tr	—	Tr	Tr	Tr	Tr	—
Spicules	5	—	5	10	10	20	10



SITE 798 HOLE C CORE 4H CORED INTERVAL 924.4-933.8 mbsl; 24.3-33.7 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
QUATERNARY	A/G	CN15/ CN14b	*Cycladophora davisiana*	*Neodenticula semine*	*Distephanus octangulatus*	N			1	0.5				*
	F/P									1.0				
	F/M								2					*
	F/M								3					*
	R/M					N			4					*
									5					
									6				A	*
									7					
									CC					

LITHOLOGIC DESCRIPTION

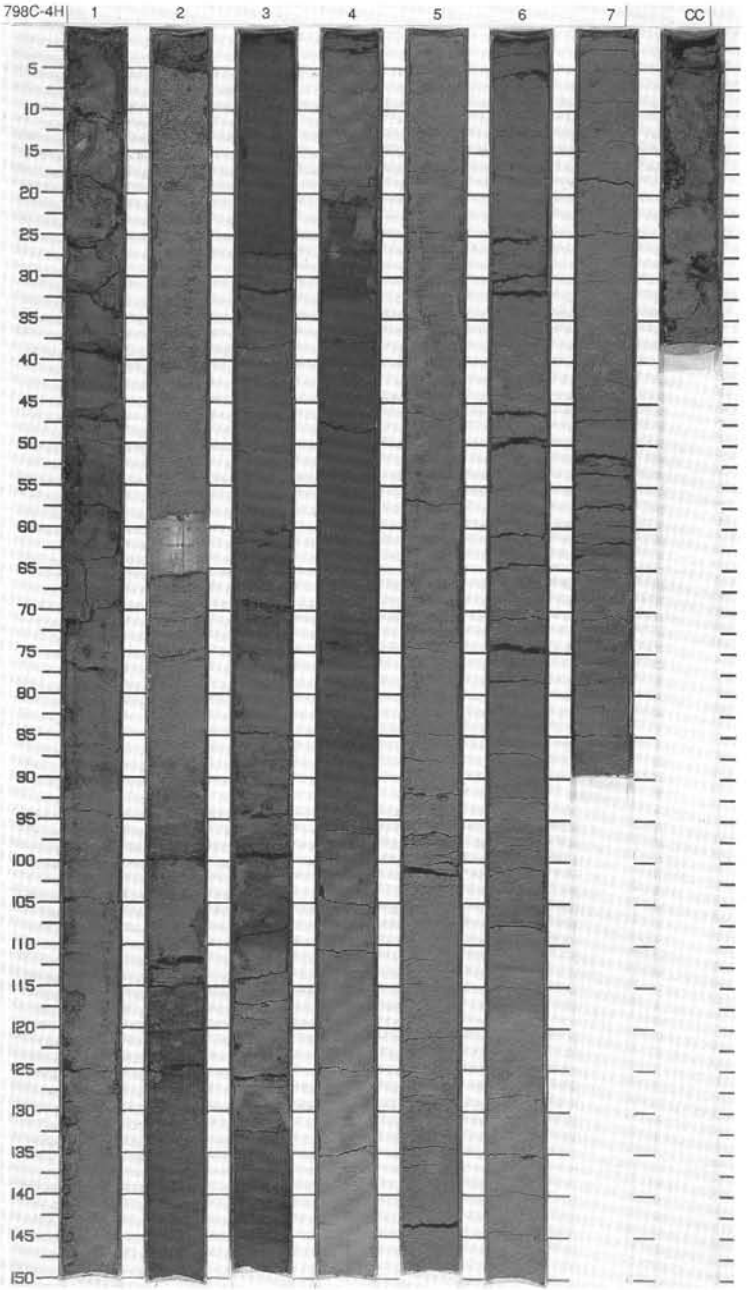
CLAYEY DIATOMACEOUS MIXED SEDIMENT, SILTY CLAY, DIATOMACEOUS CLAY, and DIATOM SILTY CLAY

Major lithology: This core contains CLAYEY DIATOMACEOUS MIXED SEDIMENT with FORAMINIFERS and DIATOMS, DIATOMACEOUS CLAY with SPICULES, and DIATOMACEOUS SILTY CLAY. Color ranges from gray (5Y 6/1-5Y 5/1) to dark gray (5Y 4/1) and to olive gray (5Y 4/2). Clay-rich intervals are characterized by a cohesive texture. Rhythmic bedding is well developed in Sections 2 to 4. Bioturbated sediments are common and include *Chondrites and Planolites*. Extensively bioturbated intervals are clay rich; burrows commonly penetrate downward into laminated sediments and are infilled with light-colored, clay-rich sediments, which closely resemble those of the overlying bioturbated layer.

Minor lithologies:
a. A normally graded VITRIC ASH layer is present in Section 2, 0-5 cm. Further vitric ash layers appear in Section 6, 97 cm and 107 cm, and vitric ash pods appear in Section 6, 44 cm.
b. Isolated GLAUCONITE and abundant PYRITE particles are observed in Section 3, 24 cm.

SMEAR SLIDE SUMMARY (%):

	1, 43 D	2, 50 D	3, 24 D	4, 24 D	6, 25 D
TEXTURE:					
Sand	2	3	2	10	5
Silt	40	37	43	50	60
Clay	58	60	55	40	35
COMPOSITION:					
Accessory minerals	1	1	1	2	2
Clay	38	40	50	27	34
Diatoms	15	10	25	10	25
Dolomite	—	1	—	1	1
Feldspar	2	—	—	3	2
Fish	1	—	1	Tr	1
Foraminifers	5	10	1	20	—
Glass	2	3	—	2	5
Glauconite	—	—	1	1	—
Nannofossils	20	5	—	15	1
Opaques	3	2	3	—	—
Pyrite	—	—	—	3	3
Quartz	10	20	7	10	20
Silicoflagellates	1	Tr	1	1	Tr
Spicules	2	5	10	5	5



SITE 798 HOLE C CORE 5H CORED INTERVAL 933.8-943.3 mbsl; 33.7-43.2 mbsf

TIME-ROCK UNIT: QUATERNARY

BIOSTRAT. ZONE/FOSSIL CHARACTER
- FORAMINIFERS: A/M; C/P; R/M; A/M; R/M
- NANNOFOSSILS: CN15 /CN14b
- RADIOLARIANS: *Cycladophora davisiana*
- DIATOMS: *Rhizosolenia curvirostris*
- SILICOFLAGELLATES: *Distephanus octangulatus*

PALEOMAGNETICS: N — N

PHYS. PROPERTIES

CHEMISTRY

SECTION: 1, 2, 3, 4, 5, 6, 7, 8, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES: * * * *

LITHOLOGIC DESCRIPTION

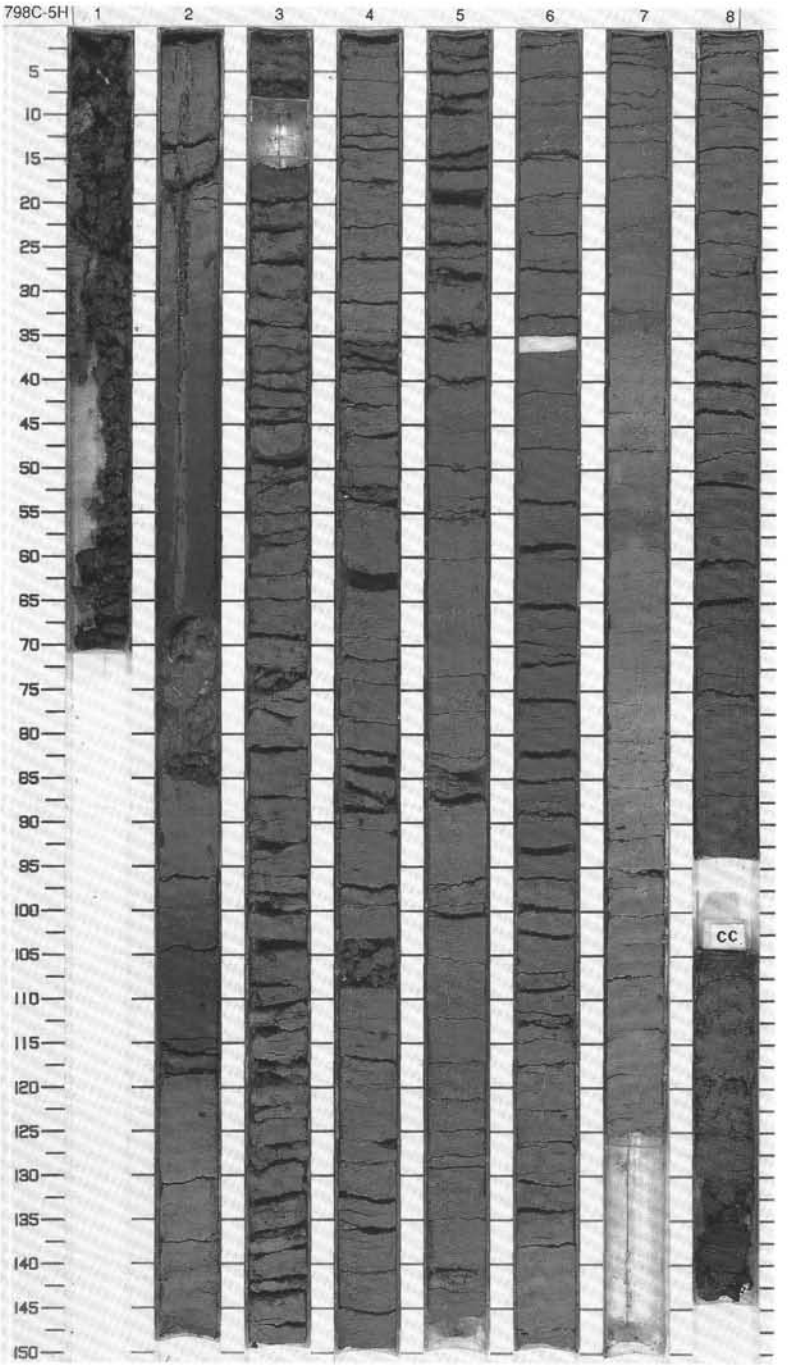
SILTY CLAY and DIATOMACEOUS MIXED SEDIMENT

Major lithology: This core contains dark gray to gray (5Y 4/1, 5Y 5/1) SILTY CLAY with DIATOMS, and DIATOMACEOUS MIXED SEDIMENT with SPICULES. Compositional bedding rhythms between clay-rich and structureless sediments and biogenic-rich and laminated sediments are common, especially in Sections 5 through 7. Burrowing (*Chondrites*) is very common and generally dense in clay-rich sediments, and penetrates downward into laminated sediments.

Minor lithologies:
a. Greenish gray (5Y 4/2) NANNOFOSSIL CLAY with FORAMINIFERS, generally laminated, is present in Sections 7, 8, and core catcher.
b. VITRIC ASH layers appear in Section 6, 97 cm and 107 cm.

SMEAR SLIDE SUMMARY (%):

	2, 63 D	4, 66 D	7, 81 M
TEXTURE:			
Sand	5	—	1
Silt	30	60	9
Clay	65	40	90
COMPOSITION:			
Accessory minerals	2	—	—
Clay	50	30	50
Diatoms	10	40	2
Dolomite	—	Tr	—
Foraminifers	—	Tr	5
Glass	10	Tr	2
Glauconite	Tr	—	—
Nannofossils	—	Tr	35
Opaques	—	4	2
Pyrite	1	—	—
Quartz	20	15	2
Silicoflagellates	1	—	—
Spicules	3	10	2



SITE 798 HOLE C CORE 6H CORED INTERVAL 943.3-952.8 mbsl; 43.2-52.7 mbsf

TIME-ROCK UNIT: QUARTERNARY

BIOSTRAT. ZONE/FOSSIL CHARACTER:
- FORAMINIFERS: A/M; F/P; B; C/M; R/M
- NANNOFOSSILS: CN15 / CN14b
- RADIOLARIANS
- DIATOMS: *Rhizosolenia curvirostris*
- SILICOFLAGELLATES/EBRIDIAN: *Distephanus octangulatus*

PALEOMAGNETICS: N

PHYS. PROPERTIES

CHEMISTRY: %CaCO3=3.5 %TOC=3.89

SECTION: 1, 2, 3, 4, 5, 6, 7, CC

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES

SAMPLES

LITHOLOGIC DESCRIPTION

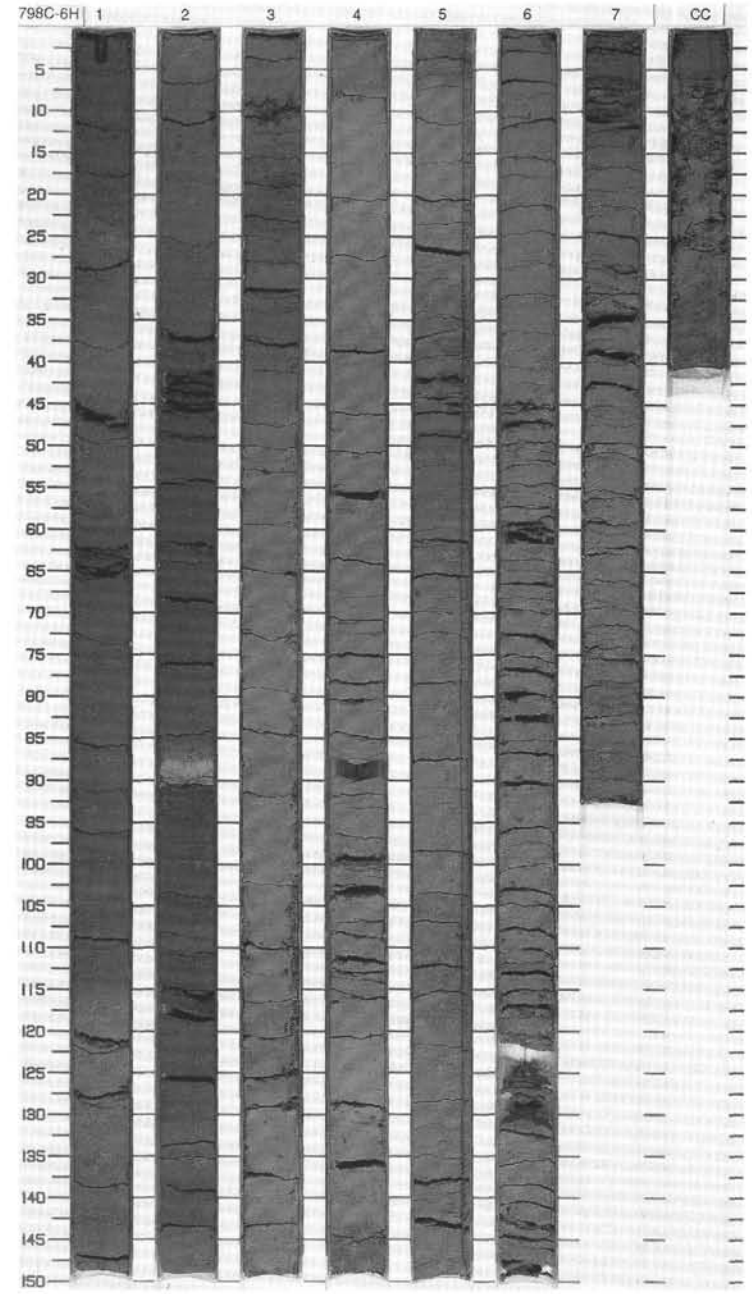
SILICEOUS OOZE, DIATOMACEOUS-CLAYEY MIXED SEDIMENT, CLAYEY-NANNOFOSSIL OOZE, and DIATOM OOZE

Major lithology: This core consists of dark olive gray (5Y 3/2) SILICEOUS OOZE with CLAY and NANNOFOSSILS, greenish gray (5GY 5/1) DIATOMACEOUS CLAYEY MIXED SEDIMENT with FORAMINIFERS and DIATOMS, olive gray (5Y 5/2) CLAYEY NANNOFOSSIL OOZE with FORAMINIFERS and DIATOMS, and dark olive gray (5Y 3/2) DIATOM OOZE WITH SPONGE SPICULES. Rhythmic interbedding of laminated and bioturbated sediment is well developed. Crosscutting relationships amongst trace fossil taxa (Planolites crosscuts Chondrites) are well preserved in Section 4, 20-30 cm, Section 5, 25-45 cm and 105-120 cm. Most laminated intervals are enriched in foraminifers; in some areas, small pebble sized pods of nearly 100% foraminifers were observed.

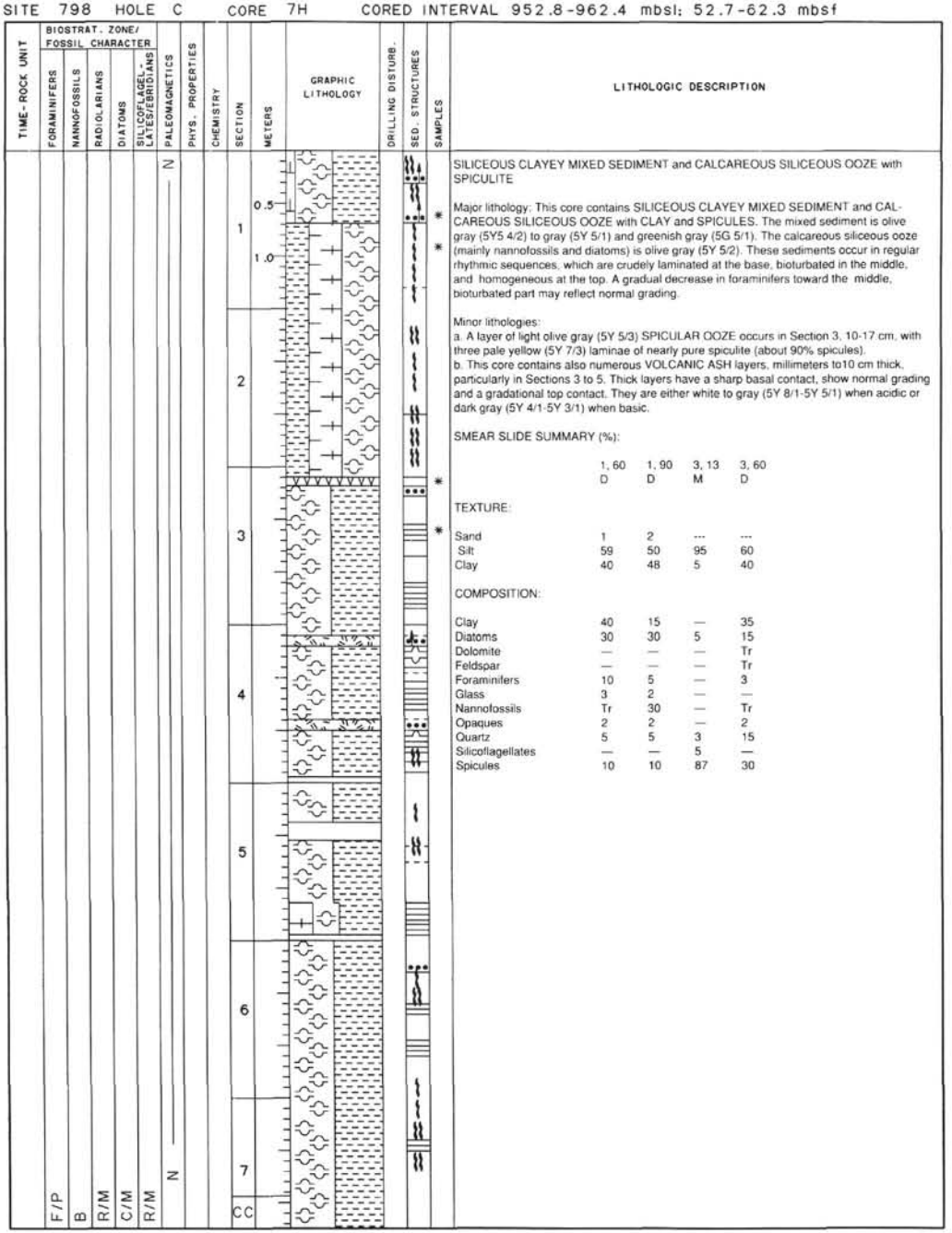
Minor lithology: VITRIC ASH LAYERS are observed in Section 1, 20 cm, Section 2, 87-90 cm, Section 3, 144 and 147 cm, Section 4, 143-149 cm, and Section 5, 0-6 cm.

SMEAR SLIDE SUMMARY (%):

	2, 80 D	3, 80 D	4, 79 D	7, 80 D
TEXTURE:				
Sand	---	---	5	3
Silt	80	60	30	37
Clay	20	40	65	60
COMPOSITION:				
Accessory minerals	—	—	1	—
Clay	20	30	30	22
Diatoms	55	30	20	25
Dolomite	Tr	—	—	—
Feldspar	Tr	—	—	—
Foraminifers	—	10	10	5
Glass	—	Tr	—	—
Nannofossils	Tr	3	30	35
Opaques	3	4	1	1
Quartz	5	10	2	2
Spicules	15	10	6	10



SITE 798 HOLE C CORE 7H CORED INTERVAL 952.8-962.4 mbsl: 52.7-62.3 mbsf



LITHOLOGIC DESCRIPTION

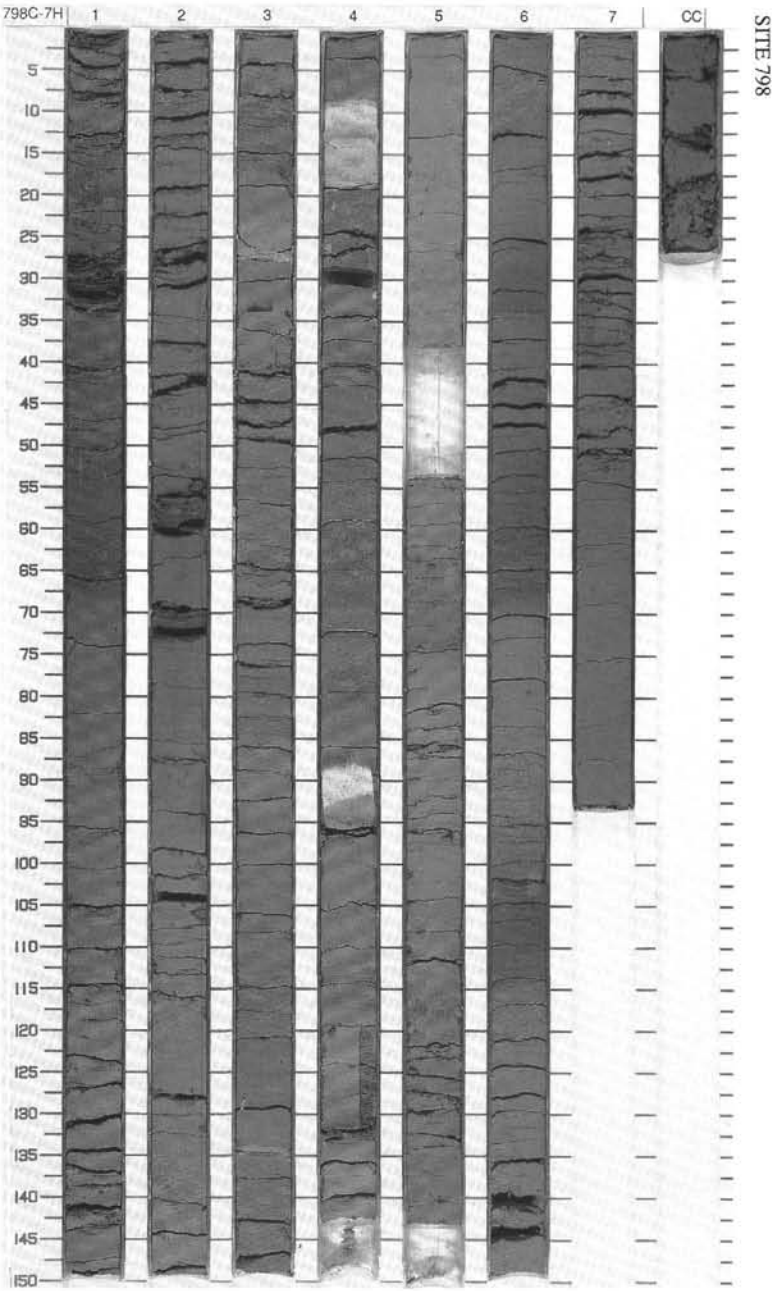
SILICEOUS CLAYEY MIXED SEDIMENT and CALCAREOUS SILICEOUS OOZE with SPICULITE

Major lithology: This core contains SILICEOUS CLAYEY MIXED SEDIMENT and CALCAREOUS SILICEOUS OOZE with CLAY and SPICULES. The mixed sediment is olive gray (5Y5 4/2) to gray (5Y 5/1) and greenish gray (5G 5/1). The calcareous siliceous ooze (mainly nannofossils and diatoms) is olive gray (5Y 5/2). These sediments occur in regular rhythmic sequences, which are crudely laminated at the base, bioturbated in the middle, and homogeneous at the top. A gradual decrease in foraminifers toward the middle, bioturbated part may reflect normal grading.

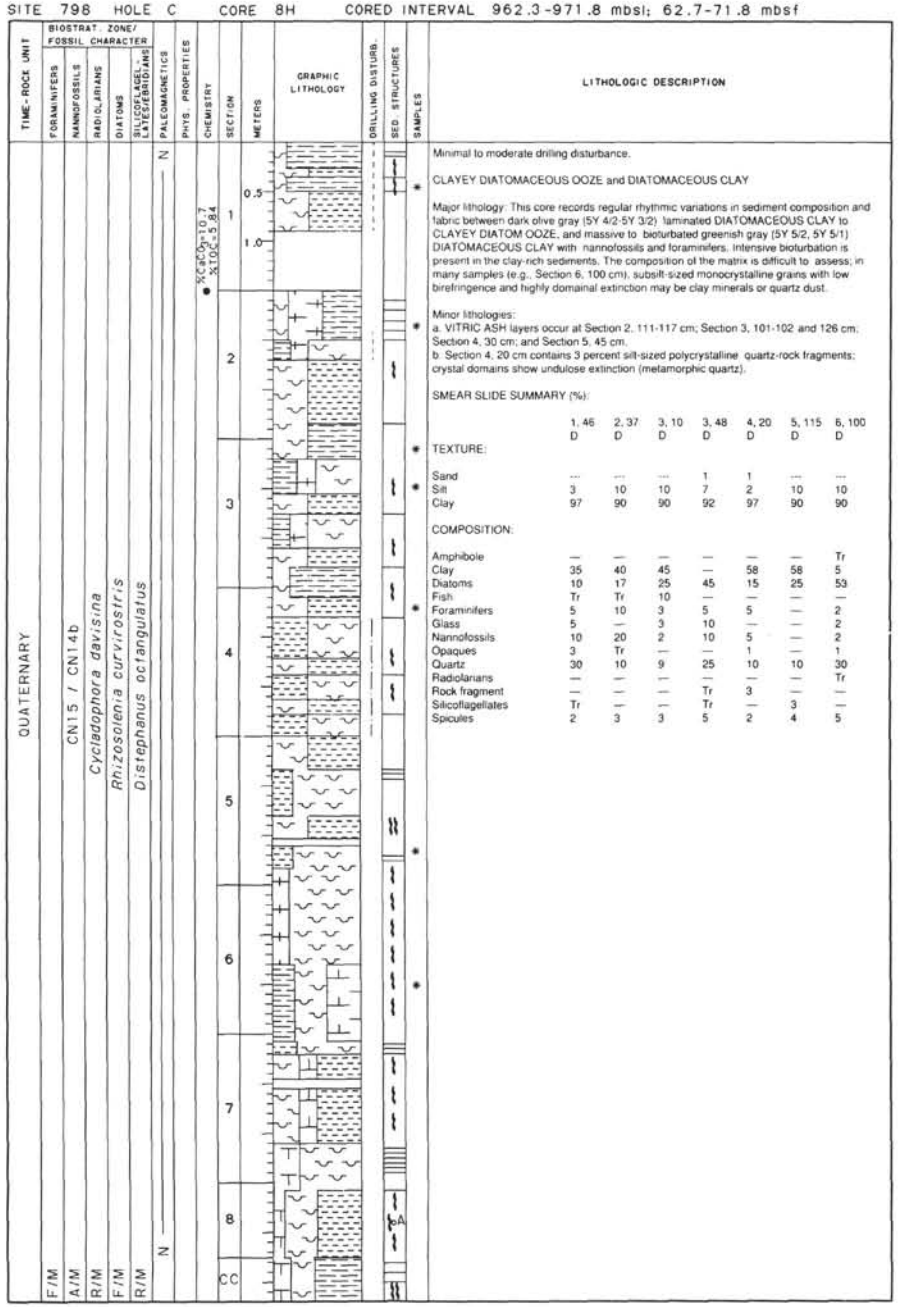
Minor lithologies:
a. A layer of light olive gray (5Y 5/3) SPICULAR OOZE occurs in Section 3, 10-17 cm, with three pale yellow (5Y 7/3) laminae of nearly pure spiculite (about 90% spicules).
b. This core contains also numerous VOLCANIC ASH layers, millimeters to10 cm thick, particularly in Sections 3 to 5. Thick layers have a sharp basal contact, show normal grading and a gradational top contact. They are either white to gray (5Y 8/1-5Y 5/1) when acidic or dark gray (5Y 4/1-5Y 3/1) when basic.

SMEAR SLIDE SUMMARY (%):

	1, 60 D	1, 90 D	3, 13 M	3, 60 D
TEXTURE:				
Sand	1	2	---	---
Silt	59	50	95	60
Clay	40	48	5	40
COMPOSITION:				
Clay	40	15	—	35
Diatoms	30	30	5	15
Dolomite	—	—	—	Tr
Feldspar	—	—	—	Tr
Foraminifers	10	5	—	3
Glass	3	2	—	—
Nannofossils	Tr	30	—	Tr
Opaques	2	2	—	2
Quartz	5	5	3	15
Silicoflagellates	—	—	5	—
Spicules	10	10	87	30



SITE 798 HOLE C CORE 8H CORED INTERVAL 962.3-971.8 mbsl; 62.7-71.8 mbsf



LITHOLOGIC DESCRIPTION

Minimal to moderate drilling disturbance.

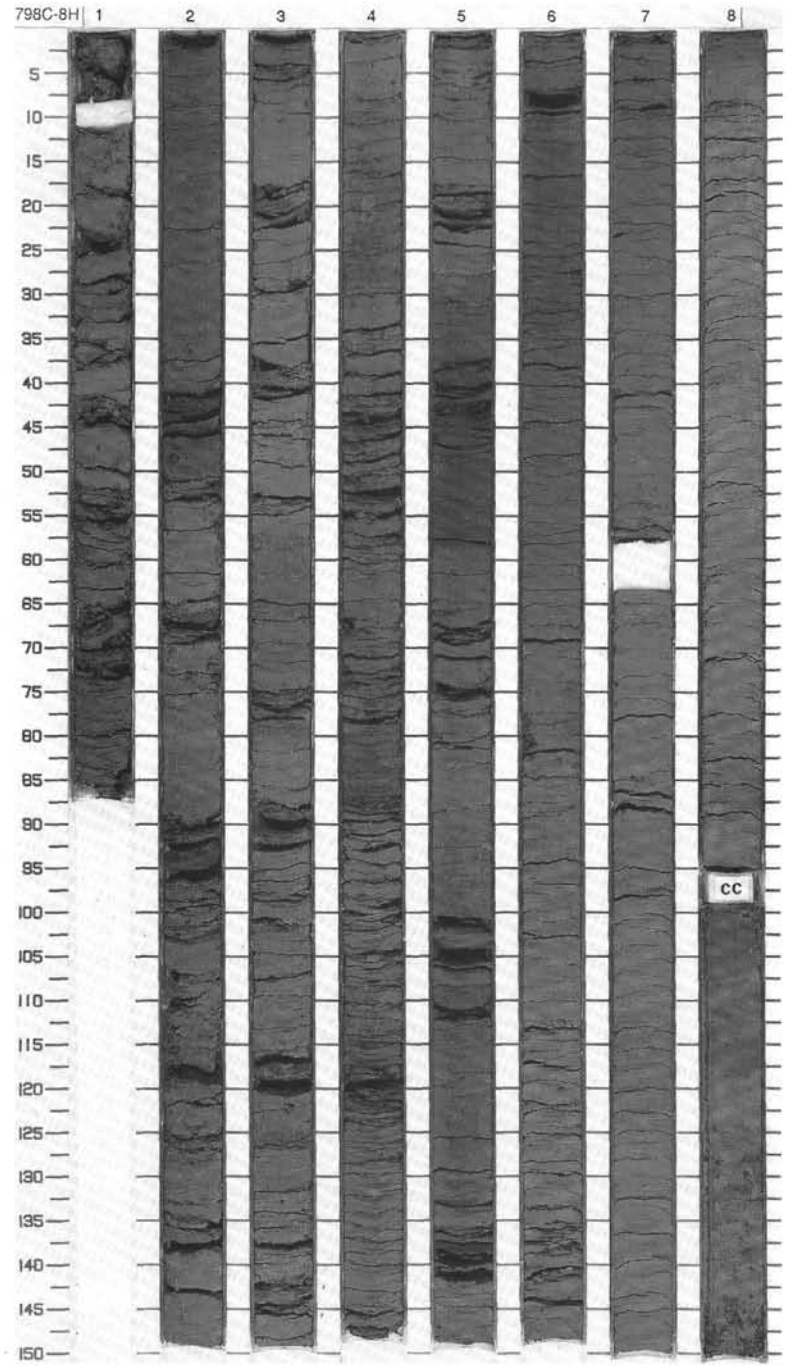
CLAYEY DIATOMACEOUS OOZE and DIATOMACEOUS CLAY

Major lithology: This core records regular rhythmic variations in sediment composition and fabric between dark olive gray (5Y 4/2-5Y 3/2) laminated DIATOMACEOUS CLAY to CLAYEY DIATOM OOZE, and massive to bioturbated greenish gray (5Y 5/2, 5Y 5/1) DIATOMACEOUS CLAY with nannofossils and foraminifers. Intensive bioturbation is present in the clay-rich sediments. The composition of the matrix is difficult to assess; in many samples (e.g., Section 6, 100 cm), subsilt-sized monocrystalline grains with low birefringence and highly domainal extinction may be clay minerals or quartz dust.

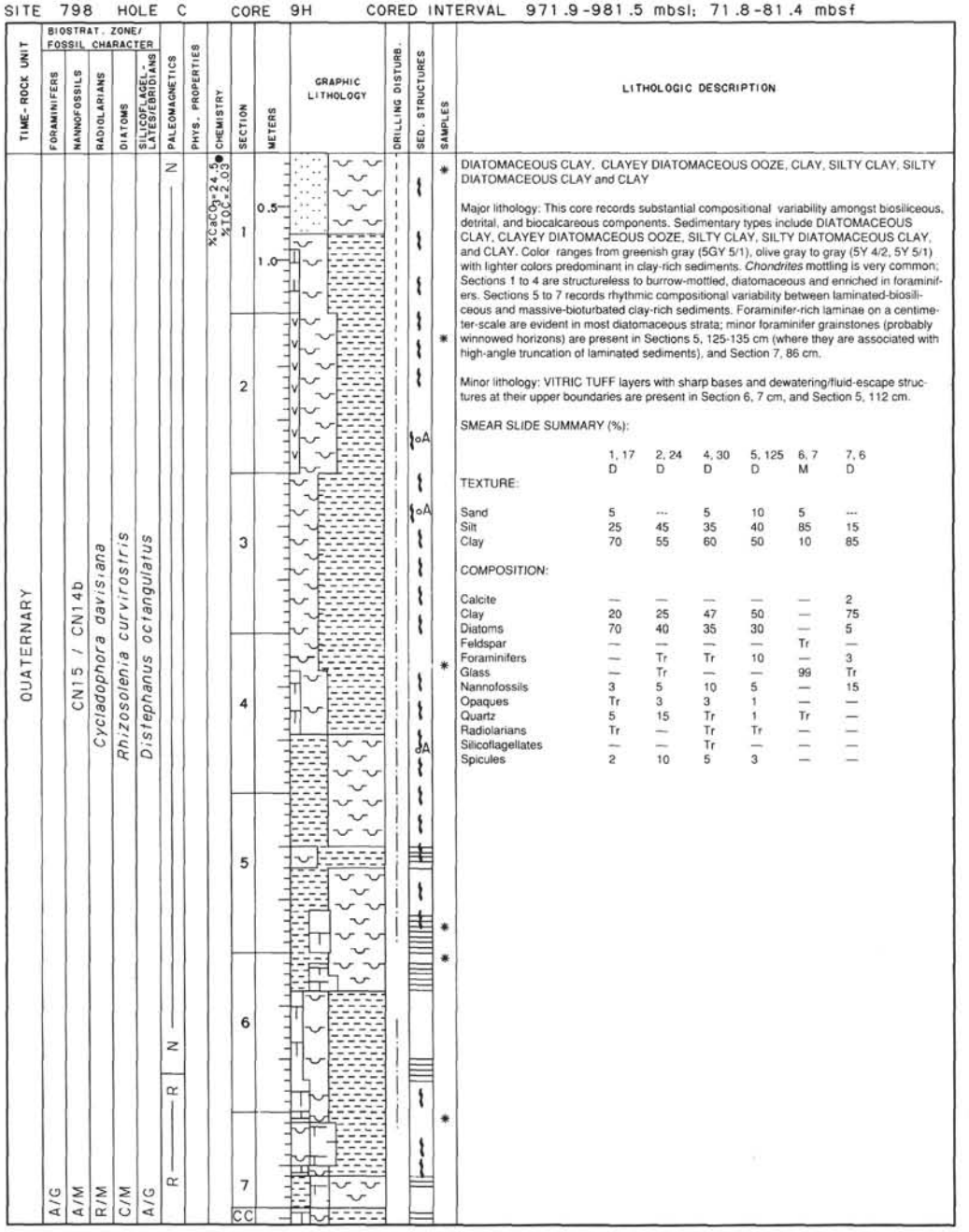
Minor lithologies:
a. VITRIC ASH layers occur at Section 2, 111-117 cm; Section 3, 101-102 and 126 cm; Section 4, 30 cm; and Section 5, 45 cm.
b. Section 4, 20 cm contains 3 percent silt-sized polycrystalline quartz-rock fragments; crystal domains show undulose extinction (metamorphic quartz).

SMEAR SLIDE SUMMARY (%):

	1, 46 D	2, 37 D	3, 10 D	3, 48 D	4, 20 D	5, 115 D	6, 100 D
TEXTURE:							
Sand	...	...	...	1	1	...	...
Silt	3	10	10	7	2	10	10
Clay	97	90	90	92	97	90	90
COMPOSITION:							
Amphibole	—	—	—	—	—	—	Tr
Clay	35	40	45	—	58	58	5
Diatoms	10	17	25	45	15	25	53
Fish	Tr	Tr	10	—	—	—	—
Foraminifers	5	10	3	5	5	—	2
Glass	5	—	3	10	—	—	2
Nannofossils	10	20	2	10	5	—	2
Opaques	3	Tr	—	—	1	—	1
Quartz	30	10	9	25	10	10	30
Radiolarians	—	—	—	—	—	—	Tr
Rock fragment	—	—	—	Tr	3	—	—
Silicoflagellates	Tr	—	—	Tr	—	3	—
Spicules	2	3	3	5	2	4	5



SITE 798 HOLE C CORE 9H CORED INTERVAL 971.9-981.5 mbsl; 71.8-81.4 mbsf



LITHOLOGIC DESCRIPTION

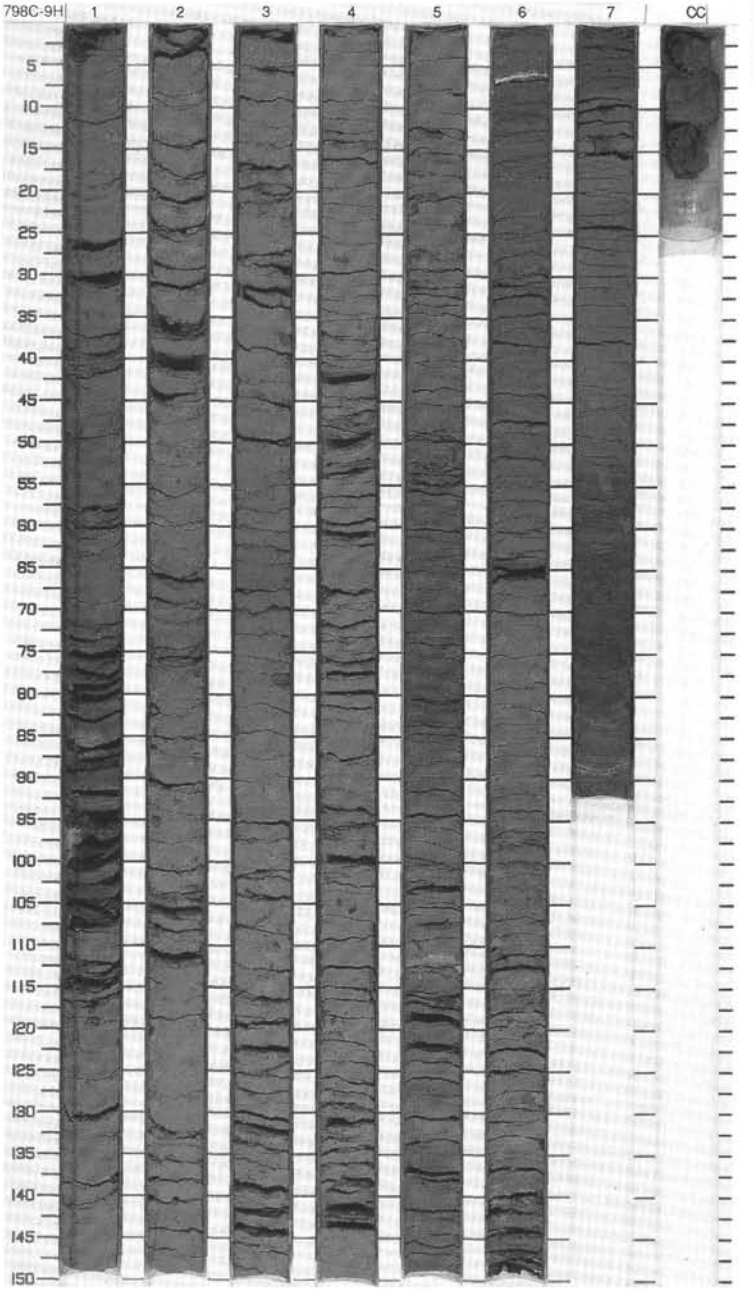
DIATOMACEOUS CLAY, CLAYEY DIATOMACEOUS OOZE, CLAY, SILTY CLAY, SILTY DIATOMACEOUS CLAY and CLAY

Major lithology: This core records substantial compositional variability amongst biosiliceous, detrital, and biocalcareous components. Sedimentary types include DIATOMACEOUS CLAY, CLAYEY DIATOMACEOUS OOZE, SILTY CLAY, SILTY DIATOMACEOUS CLAY, and CLAY. Color ranges from greenish gray (5GY 5/1), olive gray to gray (5Y 4/2, 5Y 5/1) with lighter colors predominant in clay-rich sediments. *Chondrites* mottling is very common; Sections 1 to 4 are structureless to burrow-mottled, diatomaceous and enriched in foraminifers. Sections 5 to 7 records rhythmic compositional variability between laminated-biosiliceous and massive-bioturbated clay-rich sediments. Foraminifer-rich laminae on a centimeter-scale are evident in most diatomaceous strata; minor foraminifer grainstones (probably winnowed horizons) are present in Sections 5, 125-135 cm (where they are associated with high-angle truncation of laminated sediments), and Section 7, 86 cm.

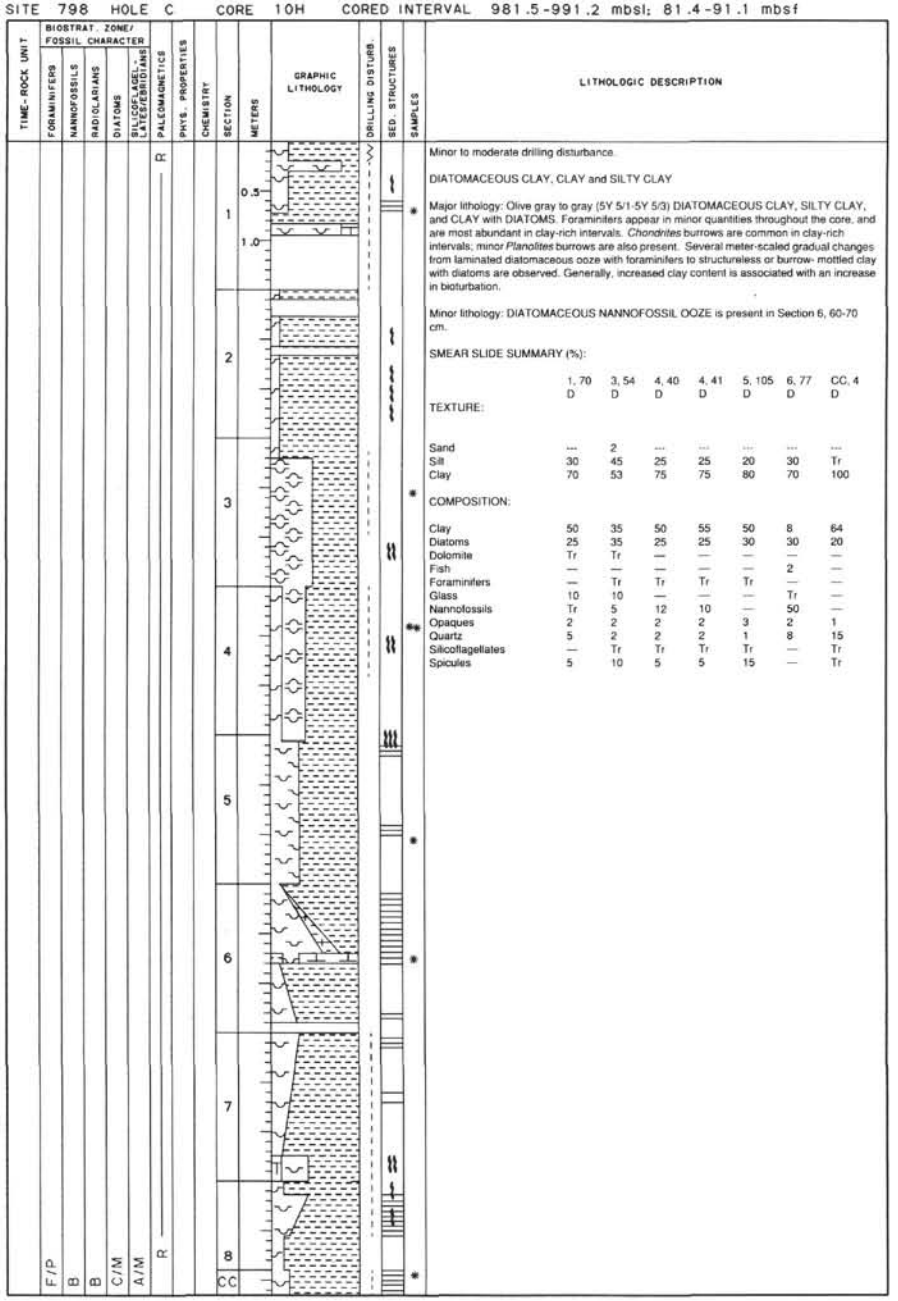
Minor lithology: VITRIC TUFF layers with sharp bases and dewatering/fluid-escape structures at their upper boundaries are present in Section 6, 7 cm, and Section 5, 112 cm.

SMEAR SLIDE SUMMARY (%):

	1, 17 D	2, 24 D	4, 30 D	5, 125 D	6, 7 M	7, 6 D
TEXTURE:						
Sand	5	---	5	10	5	---
Silt	25	45	35	40	85	15
Clay	70	55	60	50	10	85
COMPOSITION:						
Calcite	—	—	—	—	—	2
Clay	20	25	47	50	—	75
Diatoms	70	40	35	30	—	5
Feldspar	—	—	—	—	Tr	—
Foraminifers	—	Tr	Tr	10	—	3
Glass	—	Tr	—	—	99	Tr
Nannofossils	3	5	10	5	—	15
Opaques	Tr	3	3	1	—	—
Quartz	5	15	Tr	1	Tr	—
Radiolarians	Tr	—	Tr	Tr	—	—
Silicoflagellates	—	—	Tr	—	—	—
Spicules	2	10	5	3	—	—



SITE 798 HOLE C CORE 10H CORED INTERVAL 981.5-991.2 mbsl; 81.4-91.1 mbsf



LITHOLOGIC DESCRIPTION

Minor to moderate drilling disturbance.

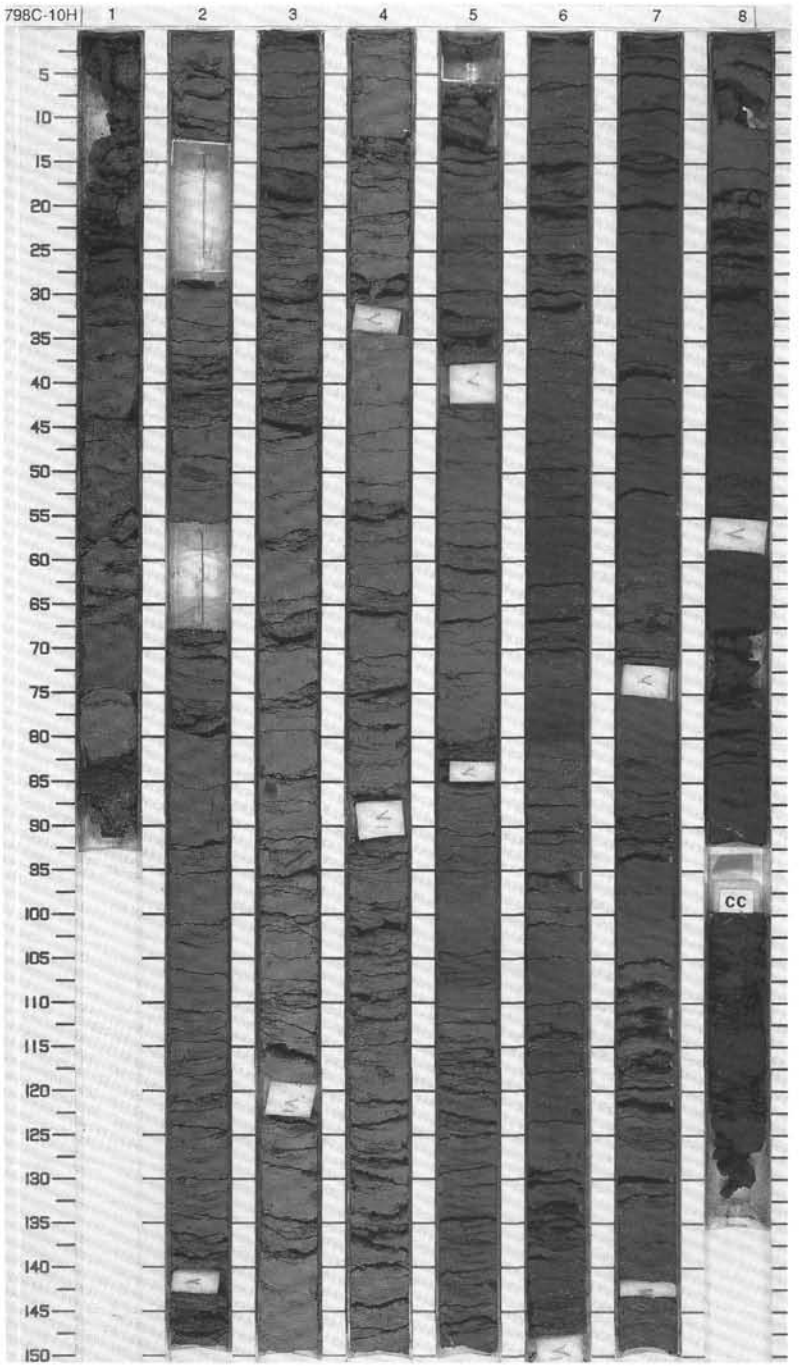
DIATOMACEOUS CLAY, CLAY and SILTY CLAY

Major lithology: Olive gray to gray (5Y 5/1-5Y 5/3) DIATOMACEOUS CLAY, SILTY CLAY, and CLAY with DIATOMS. Foraminifers appear in minor quantities throughout the core, and are most abundant in clay-rich intervals. *Chondrites* burrows are common in clay-rich intervals; minor *Planolites* burrows are also present. Several meter-scaled gradual changes from laminated diatomaceous ooze with foraminifers to structureless or burrow- mottled clay with diatoms are observed. Generally, increased clay content is associated with an increase in bioturbation.

Minor lithology: DIATOMACEOUS NANNOFOSSIL OOZE is present in Section 6, 60-70 cm.

SMEAR SLIDE SUMMARY (%):

	1, 70 D	3, 54 D	4, 40 D	4, 41 D	5, 105 D	6, 77 D	CC, 4 D
TEXTURE:							
Sand	---	2	---	---	---	---	---
Silt	30	45	25	25	20	30	Tr
Clay	70	53	75	75	80	70	100
COMPOSITION:							
Clay	50	35	50	55	50	8	64
Diatoms	25	35	25	25	30	30	20
Dolomite	Tr	Tr	—	—	—	—	—
Fish	—	—	—	—	—	2	—
Foraminifers	—	Tr	Tr	Tr	Tr	—	—
Glass	10	10	—	—	—	Tr	—
Nannofossils	Tr	5	12	10	—	50	—
Opaques	2	2	2	2	3	2	1
Quartz	5	2	2	2	1	8	15
Silicoflagellates	—	Tr	Tr	Tr	Tr	—	Tr
Spicules	5	10	5	5	15	—	Tr



SITE 798 HOLE C CORE 11H CORED INTERVAL 991.2-1000.9 mbsl; 91.1-100.8 mbsf

TIME-ROCK UNIT: QUATERNARY

BIOSTRAT. ZONE/FOSSIL CHARACTER:
- FORAMINIFERS: R/M; B; F/M; C/M; C/M
- NANNOFOSSILS
- RADIOLARIANS: *Cycladophora davisiana*
- DIATOMS: *Actinocyclus oculatus*
- SILICOFLAGELLATES/EBRIDIANS: *Dictyocha subarctios*

PALEOMAGNETICS: N; N

PHYS. PROPERTIES

CHEMISTRY

SECTION: 1, 2, 3, 4, 5, 6, 7

METERS: 0.5, 1.0

GRAPHIC LITHOLOGY

DRILLING DISTURB.

SED. STRUCTURES: φA

SAMPLES

LITHOLOGIC DESCRIPTION

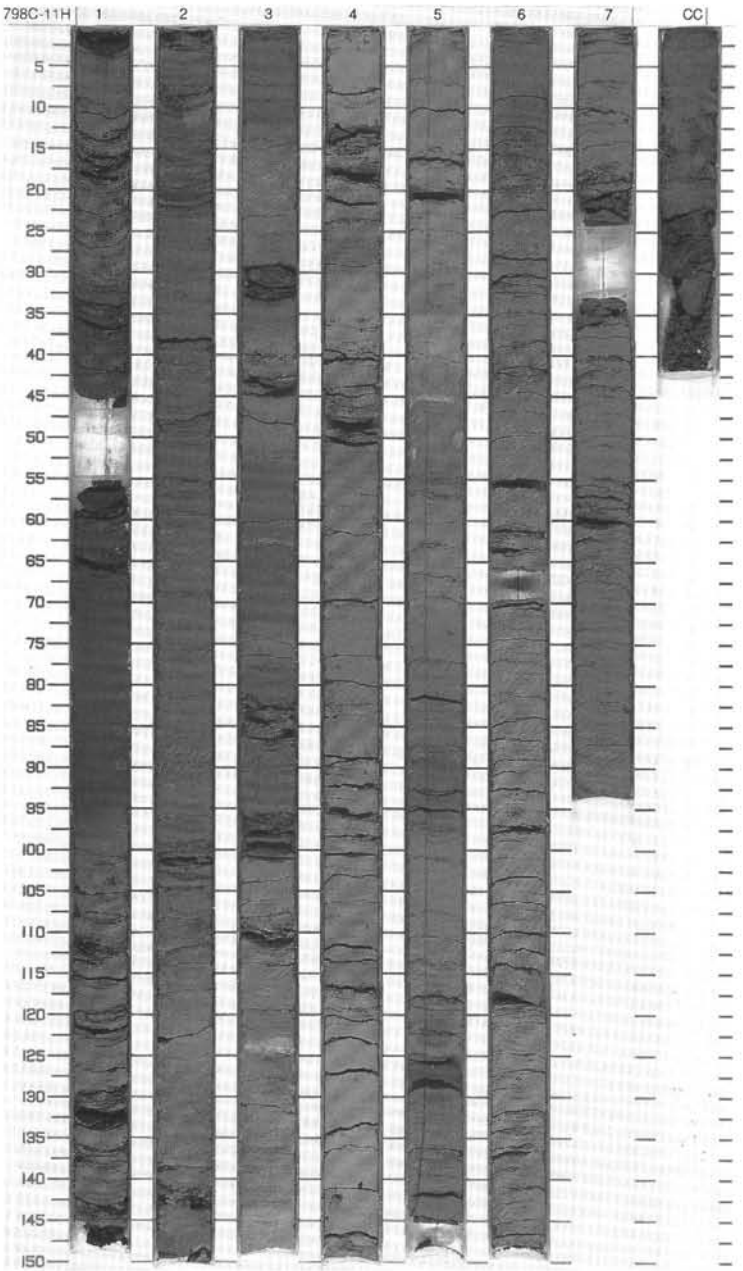
DIATOMACEOUS CLAY, DIATOMACEOUS OOZE, and CLAY

Major lithology: Rhythmic variations occur between diatomaceous, laminated, foraminifer and nannofossil-enriched sediment and clay-rich, massive or burrow-mottled and foraminifer-poor sediment are common in this core. Dominant sediment types are olive gray (5Y 4/2) DIATOMACEOUS CLAY, olive (5Y 4/3) DIATOMACEOUS OOZE with CLAY and NANNOFOSSILS, and CLAY with DIATOMS. In Section 1, 70-90 cm, laminated diatomaceous ooze with clay exhibits prominent 0.8 cm rhythmic sublayering of clay-rich strata with diatom and foraminifer-rich layers. 2% opaques are evident in most samples.

Minor lithology: VITRIC ASH in Section 5, 35-46 cm, where an upward trend of finer grain size and lighter color is well-developed. This ash bed has a sharp base.

SMEAR SLIDE SUMMARY (%):

	1, 81 D	2, 33 D	3, 139 D	4, 128 D	5, 83 M
TEXTURE:					
Silt	60	30	40	10	10
Clay	40	70	60	90	90
COMPOSITION:					
Clay	34	35	35	55	60
Diatoms	60	50	20	8	10
Foraminifers	—	—	3	Tr	—
Glass	—	5	3	5	5
Mica	—	—	—	—	Tr
Nannofossils	1	—	38	20	10
Opaques	Tr	2	Tr	2	2
Quartz	Tr	2	1	5	3
Radiolarians	Tr	—	Tr	—	—
Silicoflagellates	—	Tr	Tr	Tr	—
Spicules	5	5	Tr	5	5



SITE 798 HOLE C CORE 12H CORED INTERVAL 1000.9-1010.5 mbsl; 100.8-110.4 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/ ETHOSPHENIDS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
QUATERNARY	R/M	B	R/M *Cyclodophora davisiana*	A/M *Actinocyclus oculatus*	A/M *Dictyocha subarctios*	R		%CaCO3=18.2 %TOC=1.24	1	0.5				*
										1.0				
									2					*
									3					
									4					
									5					*
									6					
									7					*
									8					*
									CC					

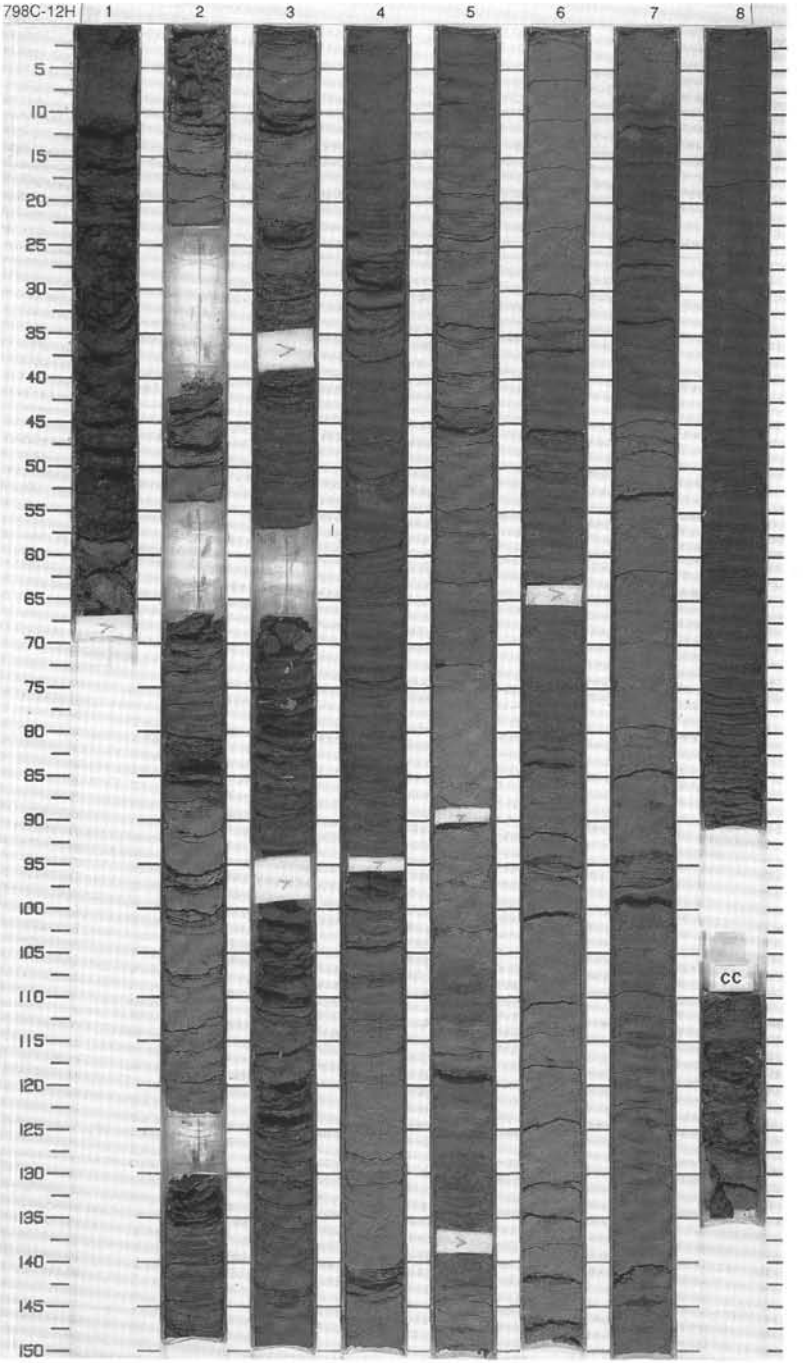
LITHOLOGIC DESCRIPTION

DIATOMACEOUS CLAY, DIATOMACEOUS CLAYEY MIXED SEDIMENT, DIATOMACEOUS OOZE, CLAY, and NANNOFOSSIL CLAY.

Major lithology: This core consists of dark gray to olive gray (5Y 4/1-2) DIATOMACEOUS CLAYEY MIXED SEDIMENT, olive gray (5Y 4/2) DIATOMACEOUS CLAY with NANNOFOSSILS and/or CLAY, dark olive gray (5Y 4/1) DIATOMACEOUS OOZE with CLAY, and gray (5Y 5/1) NANNOFOSSIL CLAY. Bedding rhythms are similar to those described in younger cores; laminated intervals with centimeter-scale dark-light cycles are well-developed in Section 4, 70-90 cm, Section 5, 123-140 cm, and Section 6, 50-76 cm.

SMEAR SLIDE SUMMARY (%):

	1, 61 D	2, 17 D	5, 80 D	7, 35 D	8, 36 D
TEXTURE:					
Sand	2	2	1	25	5
Silt	30	23	25	26	49
Clay	68	75	74	49	46
COMPOSITION:					
Accessory minerals	2	—	2	1	—
Clay	52	56	69	24	45
Diatoms	3	5	3	25	20
Feldspar	Tr	—	1	—	—
Fish	—	—	—	—	1
Foraminifers	Tr	3	3	5	2
Glass	1	2	1	Tr	2
Nannofossils	25	20	10	15	1
Opaques	—	2	—	—	—
Pyrite	—	—	—	—	3
Quartz	5	10	7	2	5
Radiolarians	Tr	—	Tr	Tr	Tr
Silicoflagellates	Tr	—	1	3	2
Spicules	10	2	3	25	15



SITE 798 HOLE C CORE 13H CORED INTERVAL 1010.5-1020.2 mbsl; 110.4-120.1 mbsf

TIME-ROCK UNIT	FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	SILICOFLAGELLATES/EBRIDIANS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES
QUATERNARY	R/M	?	*Cycladophora davisiana*	*Actinocyclus oculatus*	*Dictyocha subarctios*	R			1	0.5				*
										1.0				
									2					
									3					*
	R/P								4					
									5					*
									6					
	R/M					R			7					*
									CC					

LITHOLOGIC DESCRIPTION

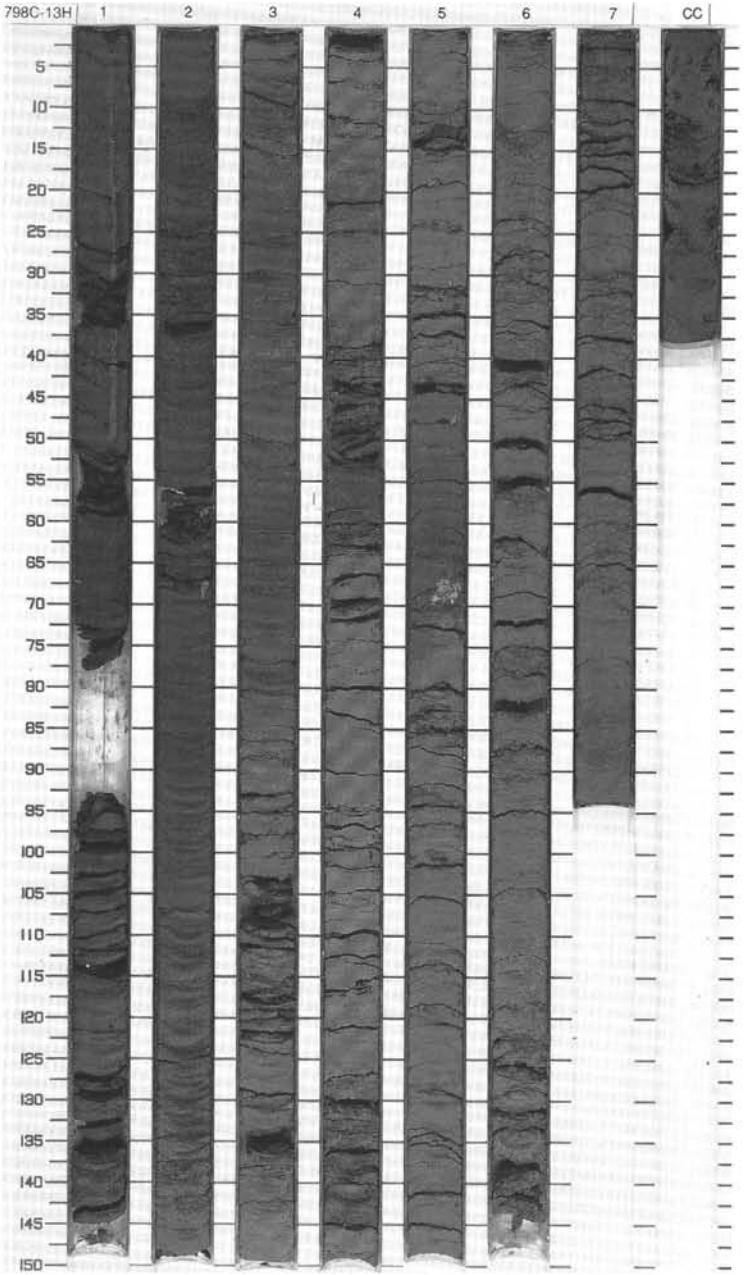
CLAY, CLAYEY MIXED SEDIMENT, CLAYEY NANNOFOSSIL MIXED SEDIMENT

Major lithology: This core contains dark olive gray (5Y 3/2), dark gray (5Y 4/1), and dark greenish gray (5GY 4/1) CLAY, CLAYEY MIXED SEDIMENT, and CLAYEY NANNOFOSSIL MIXED SEDIMENT. Minor constituents are represented by diatoms, nannofossils, and spicules. This core is rather uniform, except for the interval from Section 3 to Section 5, 73 cm, where well-developed dark-light alternating intervals occur.

Minor lithology: A very light gray to white (N8-N9) VITRIC ASH layer is present in Section 3, 32 cm. A vitric ash layer appears in Section 4, 23 cm.

SMEAR SLIDE SUMMARY (%):

	1, 66 D	3, 85 D	5, 66 D	7, 64 D
TEXTURE:				
Sand	—	2	1	2
Silt	35	45	34	38
Clay	65	53	65	60
COMPOSITION:				
Accessory minerals	1	1	1	—
Clay	64	38	60	32
Diatoms	20	15	15	10
Feldspar	Tr	Tr	—	Tr
Fish	Tr	Tr	Tr	Tr
Foraminifers	—	15	2	5
Glass	1	1	2	—
Nannofossils	Tr	20	5	30
Opaques	2	1	1	2
Quartz	5	5	2	3
Silicoflagellates	2	1	2	2
Spicules	5	3	10	15



128-798B-44X-02 (Piece 1A, 71-72 cm) OBSERVER: POU WHERE SAMPLED:

ROCK NAME: Vitric ash

GRAIN SIZE: Coarse silt to fine sand

TEXTURE: None

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
Glass	85	85	.03-0.2		Fragments	Shards and micropumices.
Quartz	10	10	.1-.2		Fragments	
Feldspar	5	5	.1-.2		Fragments	

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE
Vesicles	0				

COMMENTS: Colorless glass.

128-798B-46X-03 (Piece 1A, 53-54 cm) OBSERVER: POU WHERE SAMPLED:

ROCK NAME: Pumice

GRAIN SIZE: None

TEXTURE: Holohyaline

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm)	COMPOSITION	MORPHOLOGY	COMMENTS
Glass	100	100	?		?	

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm)	FILLING	SHAPE
Vesicles	75		.1-.5		Elongated

COMMENTS: Colorless glass.