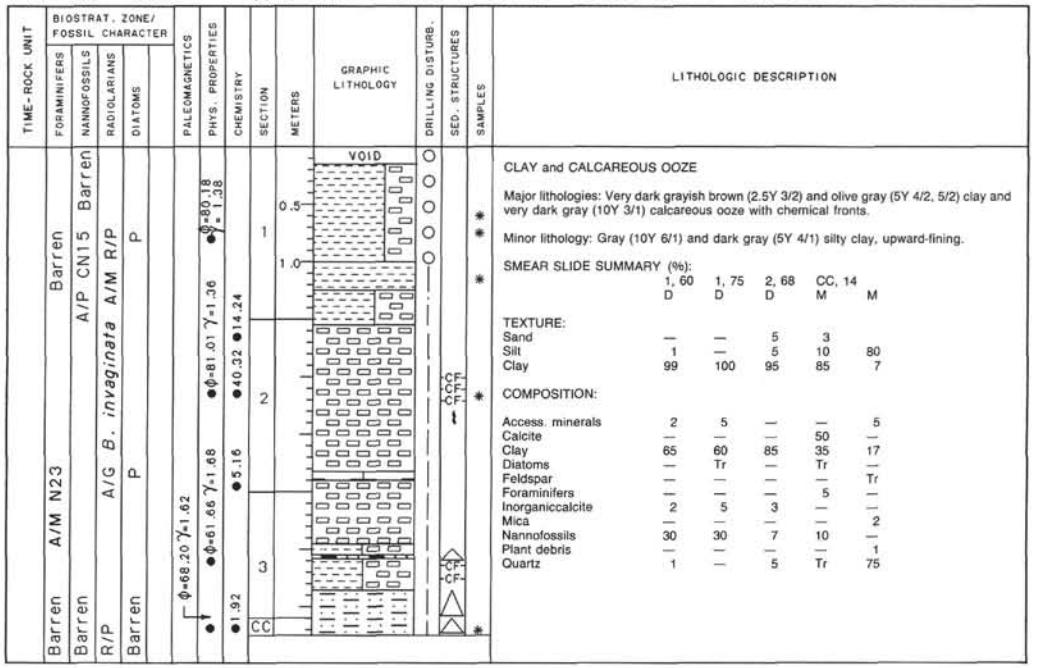
SITE 719 HOLE A CORE 1H CORED INTERVAL 4736.2-4740.4 mbsl; 0.0-4.2 mbsf



CLAY and CALCAREOUS OOZE

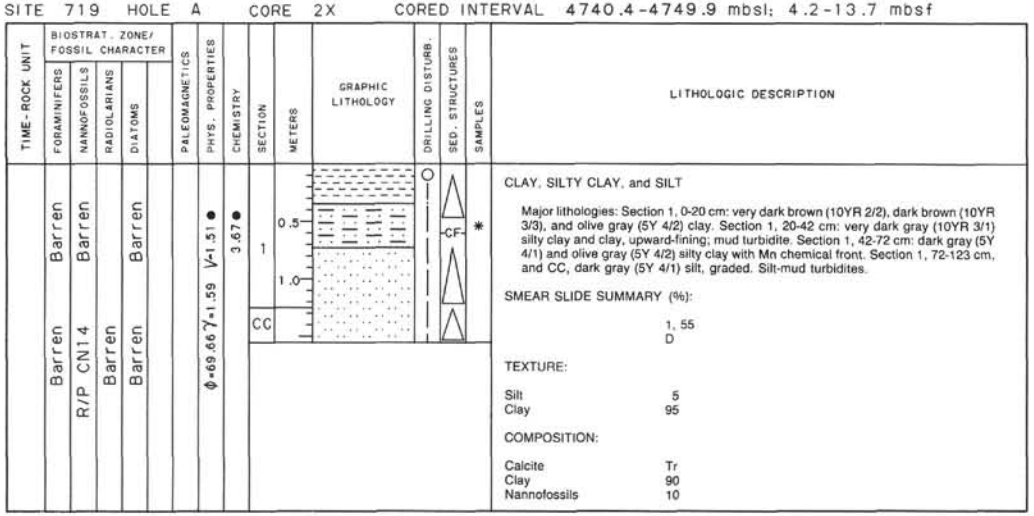
Major lithologies: Very dark grayish brown (2.5Y 3/2) and olive gray (5Y 4/2, 5/2) clay and very dark gray (10Y 3/1) calcareous ooze with chemical fronts.

Minor lithology: Gray (10Y 6/1) and dark gray (5Y 4/1) silty clay, upward-fining.

SMEAR SLIDE SUMMARY (%):

	1, 60 D	1, 75 D	2, 68 D	CC, 14 M	M
TEXTURE:					
Sand	—	—	5	3	
Silt	1	—	5	10	80
Clay	99	100	95	85	7
COMPOSITION:					
Access. minerals	2	5	—	—	5
Calcite	—	—	—	50	—
Clay	65	60	85	35	17
Diatoms	—	Tr	—	Tr	—
Feldspar	—	—	—	—	Tr
Foraminifers	—	—	—	5	—
Inorganiccalcite	2	5	3	—	—
Mica	—	—	—	—	2
Nannofossils	30	30	7	10	—
Plant debris	—	—	—	—	1
Quartz	1	—	5	Tr	75

SITE 719 HOLE A CORE 2X CORED INTERVAL 4740.4-4749.9 mbsl; 4.2-13.7 mbsf

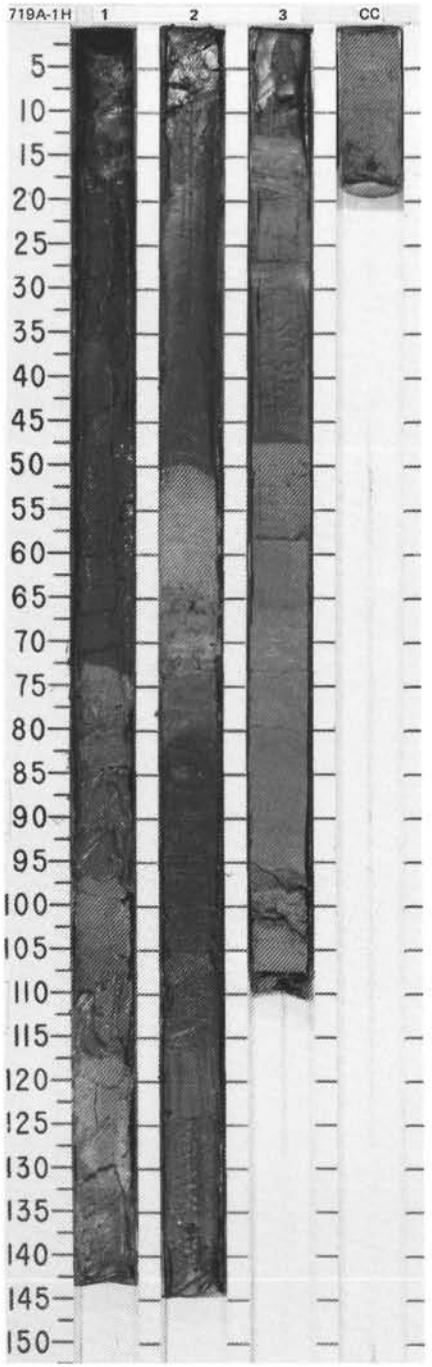


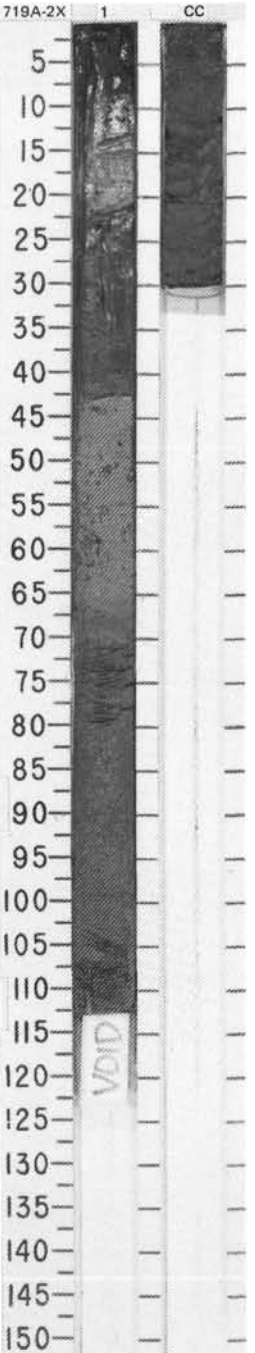
CLAY, SILTY CLAY, and SILT

Major lithologies: Section 1, 0-20 cm: very dark brown (10YR 2/2), dark brown (10YR 3/3), and olive gray (5Y 4/2) clay. Section 1, 20-42 cm: very dark gray (10YR 3/1) silty clay and clay, upward-fining; mud turbidite. Section 1, 42-72 cm: dark gray (5Y 4/1) and olive gray (5Y 4/2) silty clay with Mn chemical front. Section 1, 72-123 cm, and CC, dark gray (5Y 4/1) silt, graded. Silt-mud turbidites.

SMEAR SLIDE SUMMARY (%):

	1, 55 D
TEXTURE:	
Silt	5
Clay	95
COMPOSITION:	
Calcite	Tr
Clay	90
Nannofossils	10





SITE 719 HOLE A CORE 3X CORED INTERVAL 4749.9-4759.4 mbsl; 13.7-23.2 mbsf

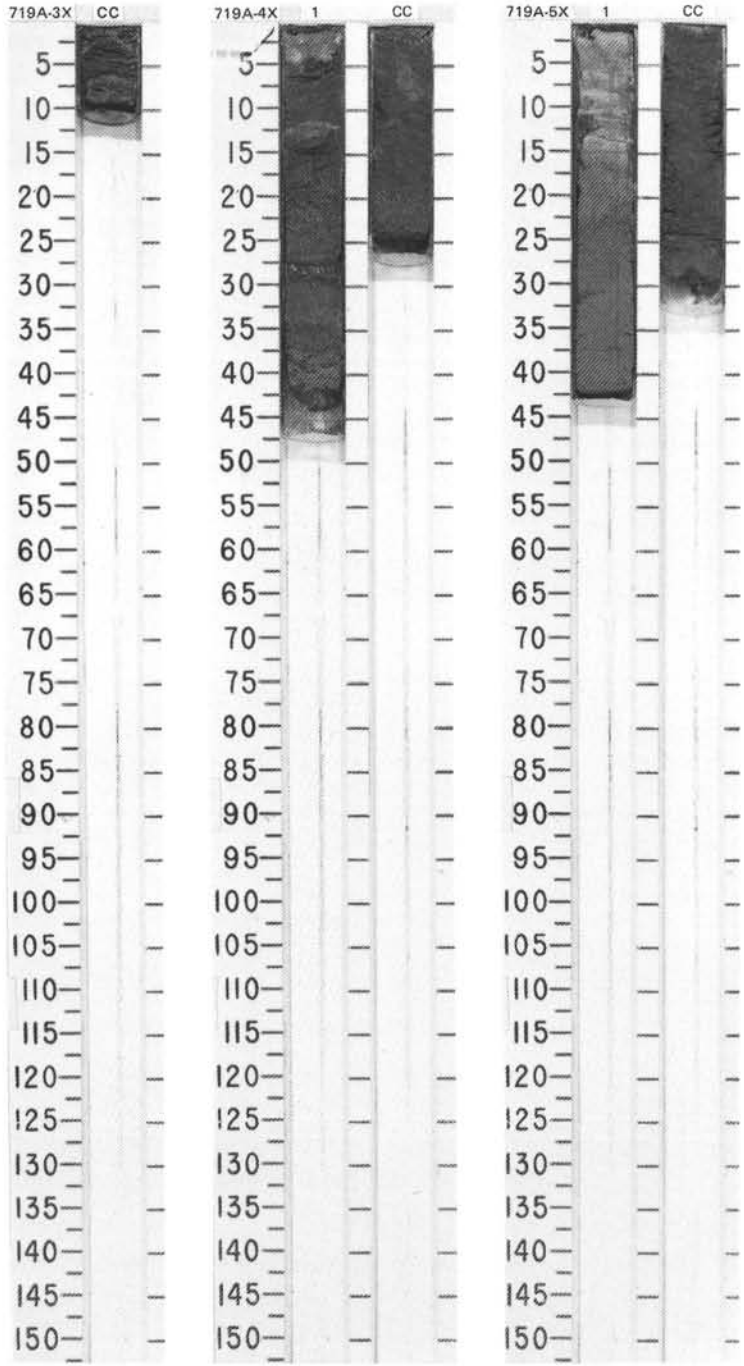
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	R/G	Barren	Barren	Barren				CC						SILT Major lithology: Dark gray (5Y 4/1) silt.

SITE 719 HOLE A CORE 4X CORED INTERVAL 4759.4-4768.9 mbsl; 23.2-32.7 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	R/P	R/P CN14a	Barren	Barren				1 CC	0.5					SILT Major lithology: Dark gray (5Y 4/1) silt layers, normally graded. One layer partly reverse graded with pyrite band (5 mm thick). Minor lithology: Dark gray (5Y 4/1) silty clay.

SITE 719 HOLE A CORE 5X CORED INTERVAL 4768.9-4778.4 mbsl; 32.7-42.2 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	C/P	R/P CN14a	Barren	Barren		Φ=57.02 γ=1.84 γ=1.50 ●	6.25 ● 6.91 ●	1 CC				CF	IW	SILTY CLAY and SILT Major lithologies: Dark gray (5Y 4/1) silty clay, upward-fining. Chemical front at Section 1, 23 cm. Gray (5Y 5/1) silt, normally graded.



SITE 719 HOLE A CORE 6X CORED INTERVAL 4778.4-4787.9 mbsl; 42.2-51.7 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	Barren R/G	R/P CN14a R/P	Barren Barren	Barren Barren		φ=52.59 γ=1.88 ●	7.50 ●	1 CC					*	CLAYEY SILT and SILTY CLAY

Major lithologies: Dark gray (5GY 4/1) clayey silt and silty clay. 5-10% plant debris.

SMEAR SLIDE SUMMARY (%):

	1, 22 D	1, 52 D
TEXTURE:		
Sand	5	—
Silt	80	35
Clay	15	65
COMPOSITION:		
Access. minerals	5	10
Bioclasts	—	1
Clay	6	40
Feldspar	5	5
Mica	3	15
Plant debris	5	10
Quartz	75	20

SITE 719 HOLE A CORE 7X CORED INTERVAL 4787.9-4797.4 mbsl; 51.7-61.2 mbsf

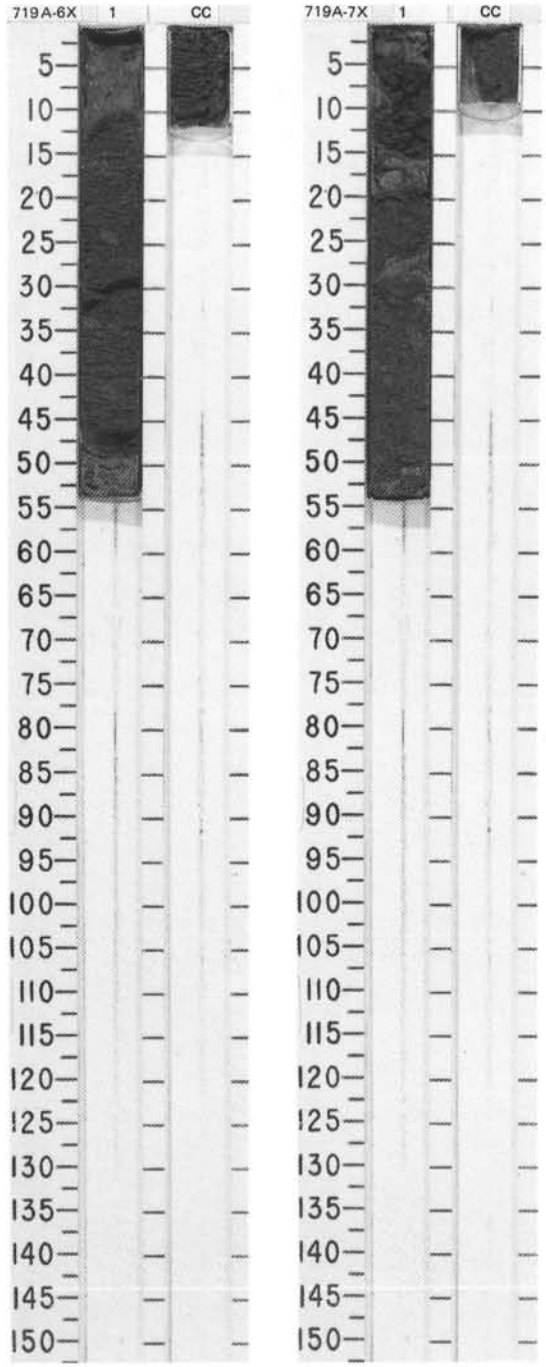
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	Barren R/P	R/P CN14 R/P	Barren Barren	Barren Barren		φ=56.17 γ=1.83 ●	7.00 ● 4.66 ●	1 CC	0.5		X		*	CLAYEY SILT

Drilling disturbance severe.

Major lithology: Dark gray (5GY 4/1) micaceous clayey silt. Two clay laminas in Section 1.

SMEAR SLIDE SUMMARY (%):

	1, 46 D
TEXTURE:	
Sand	5
Silt	65
Clay	30
COMPOSITION:	
Access. minerals	10
Clay	30
Feldspar	Tr
Quartz	60

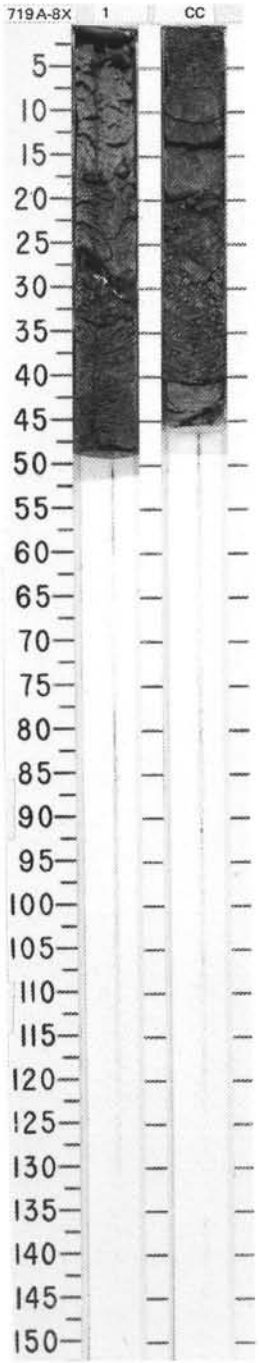


SITE 719 HOLE A CORE 8X CORED INTERVAL 4797.4-4806.9 mbsl; 61.2-70.7 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	C/P	R/P CN14a	Barren	Barren		ϕ=57.53 γ=1.79 ●		1 CC					*	SILT, CLAYEY SILT, and CLAY Major lithology: Dark gray (5GY 4/1) silt, fining up to clayey silt and massive clay. SMEAR SLIDE SUMMARY (%): CC, 16 D TEXTURE: Sand 5, Silt 90, Clay 5 COMPOSITION: Access. minerals 20, Clay 5, Feldspar 5, Mica 5, Plant debris 5, Quartz 60
	Barren	Barren	Barren	Barren										

SITE 719 HOLE A CORE 9X CORED INTERVAL 4806.9-4816.4 mbsl; 70.7-80.2 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	R/M	R/P	Barren	Barren				CC						6 cm in CC, given to paleontologists.



SITE 719 HOLE A CORE 10X CORED INTERVAL 4816.4-4825.9 mbsl; 80.2-89.7 mbsf

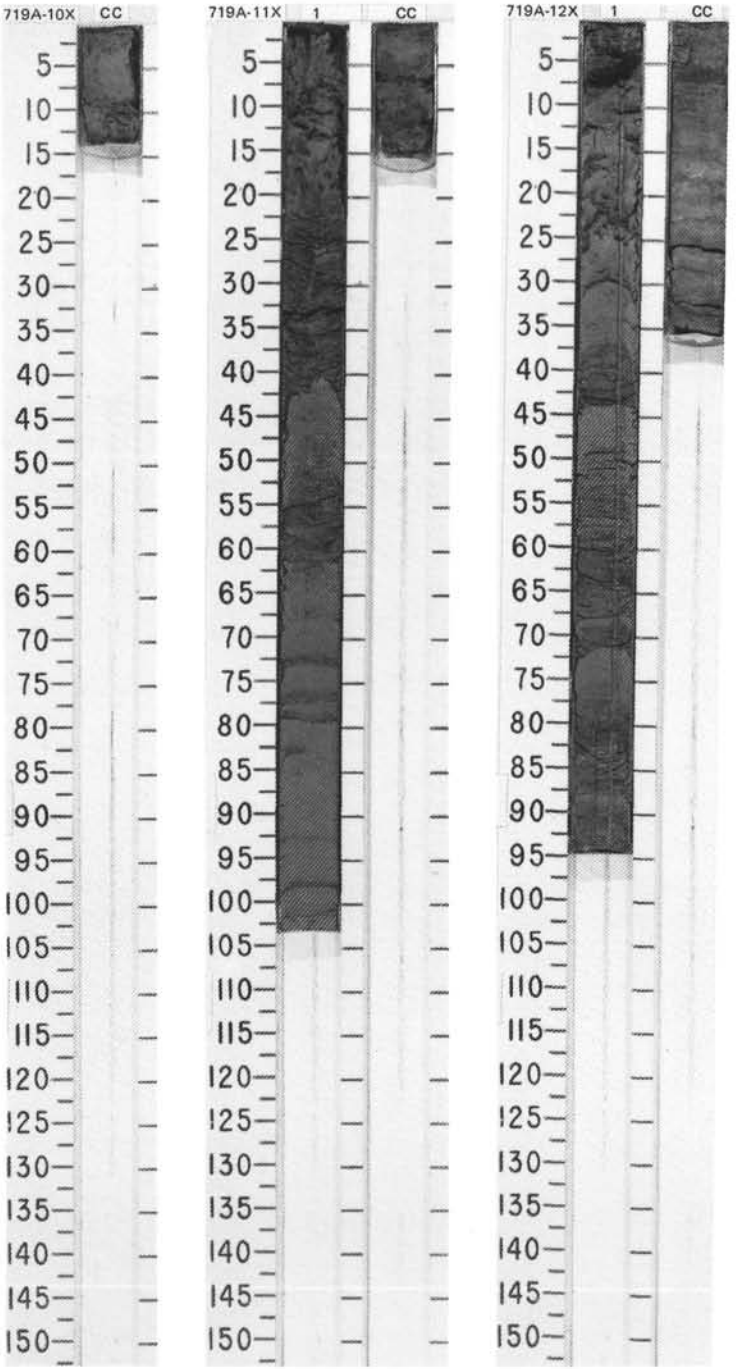
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	R/M	CAV.	Barren	Barren		ϕ=54.42 γ=1.86	4.50	CC					*	SILTY CLAY Major lithology: Dark gray (5GY 4/1) micaceous silty clay. SMEAR SLIDE SUMMARY (%): CC, 7 D TEXTURE: Silt 30; Clay 70 COMPOSITION: Access. minerals 5; Clay 65; Mica 3; Micrite 5; Quartz 22

SITE 719 HOLE A CORE 11X CORED INTERVAL 4825.9-4835.4 mbsl; 89.7-99.2 mbsf

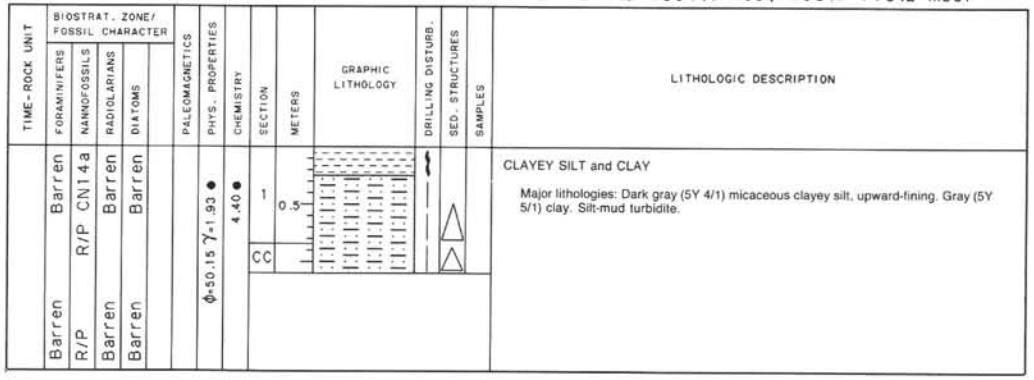
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	R/P	R/P CN14a	Barren	Barren		ϕ=52.15 γ=1.88	5.50 4.25	1 CC	0.5 1.0				IW OG	CLAYEY SILT and CLAY Major lithology: Dark gray (5GY 4/1) upward-fining cycles of clayey silt to clay. Cycles from 4-43 cm thick. Sediment slightly calcareous. Silt-mud turbidites.

SITE 718 HOLE A CORE 12X CORED INTERVAL 4835.4-4844.9 mbsl; 99.2-108.7 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	Barren	Barren	Barren	Barren		ϕ=70.18 γ=2.48	5.50	1 CC	0.5					CLAYEY SILT and CLAY *Major lithologies:* Dark gray (5GY 4/1) *upward-fining turbidites grading from clayey* silt to clay in Section 1. Turbidites are 5-36 cm thick. Sediments moderately calcareous. Light gray (5Y 6/1), strongly calcareous clayey silt in CC, fining upward to dark gray (5GY 4/1), moderately calcareous clayey silt.



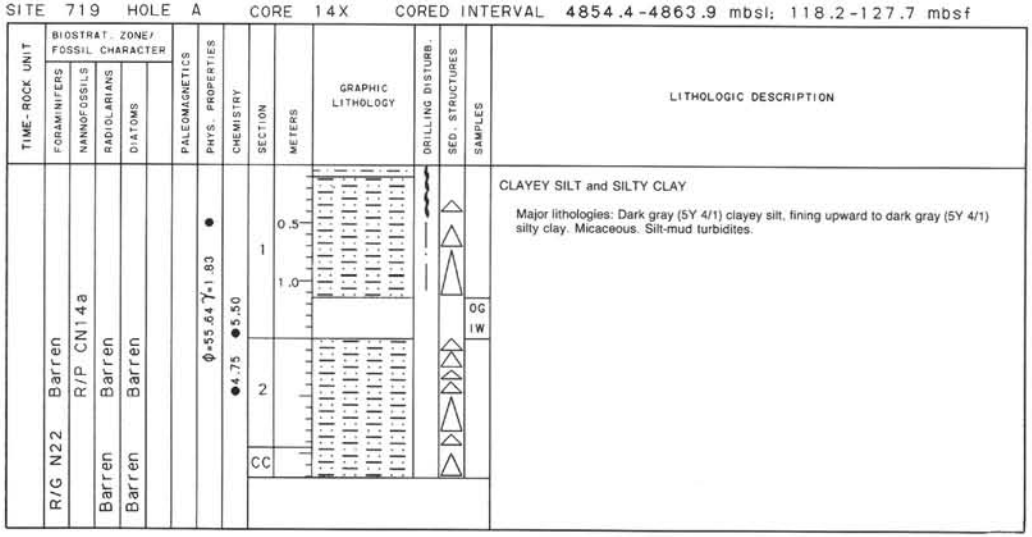
SITE 719 HOLE A CORE 13X CORED INTERVAL 4844.9-4854.4 mbsl; 108.7-118.2 mbsf



CLAYEY SILT and CLAY

Major lithologies: Dark gray (5Y 4/1) micaceous clayey silt, upward-fining. Gray (5Y 5/1) clay. Silt-mud turbidite.

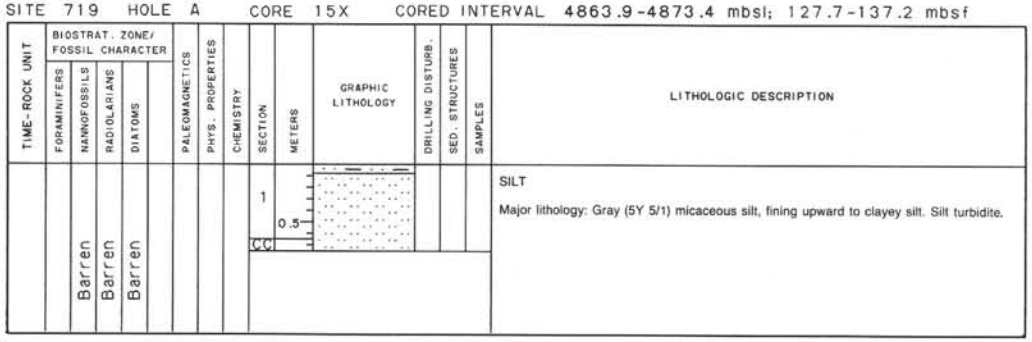
SITE 719 HOLE A CORE 14X CORED INTERVAL 4854.4-4863.9 mbsl; 118.2-127.7 mbsf



CLAYEY SILT and SILTY CLAY

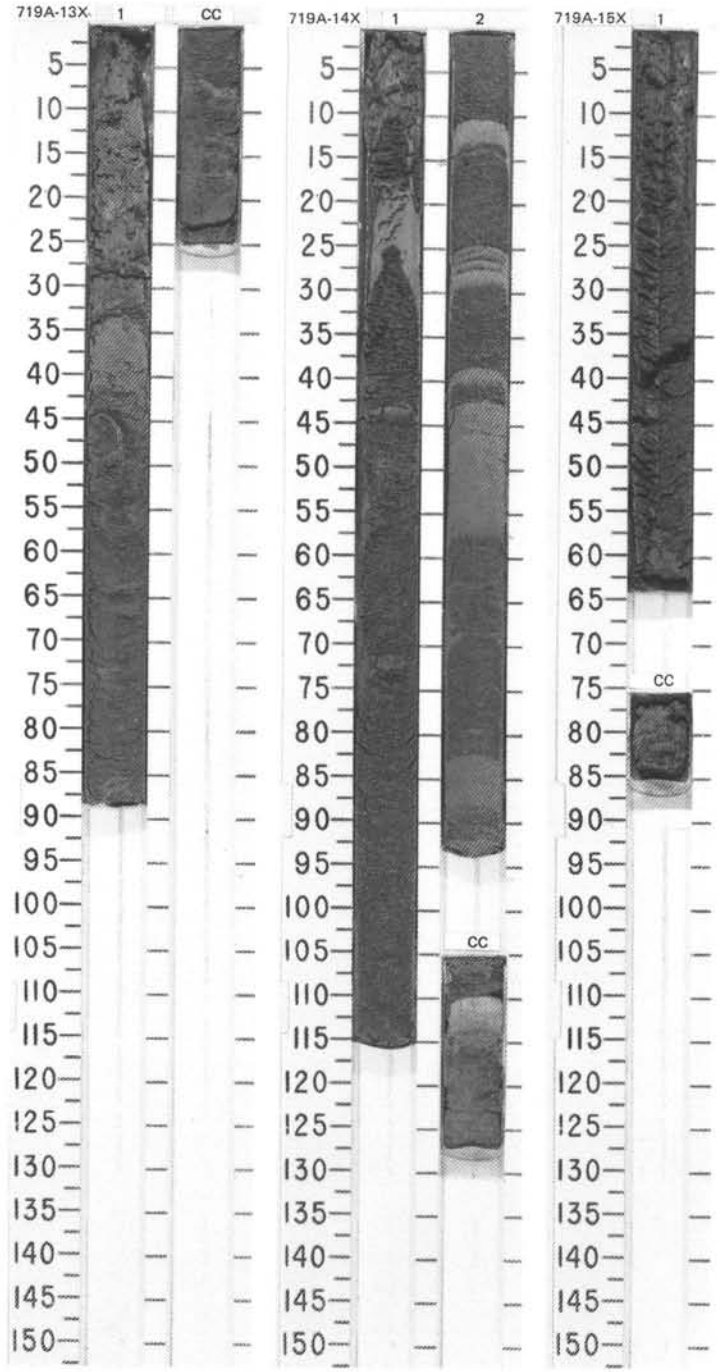
Major lithologies: Dark gray (5Y 4/1) clayey silt, fining upward to dark gray (5Y 4/1) silty clay. Micaceous. Silt-mud turbidites.

SITE 719 HOLE A CORE 15X CORED INTERVAL 4863.9-4873.4 mbsl; 127.7-137.2 mbsf

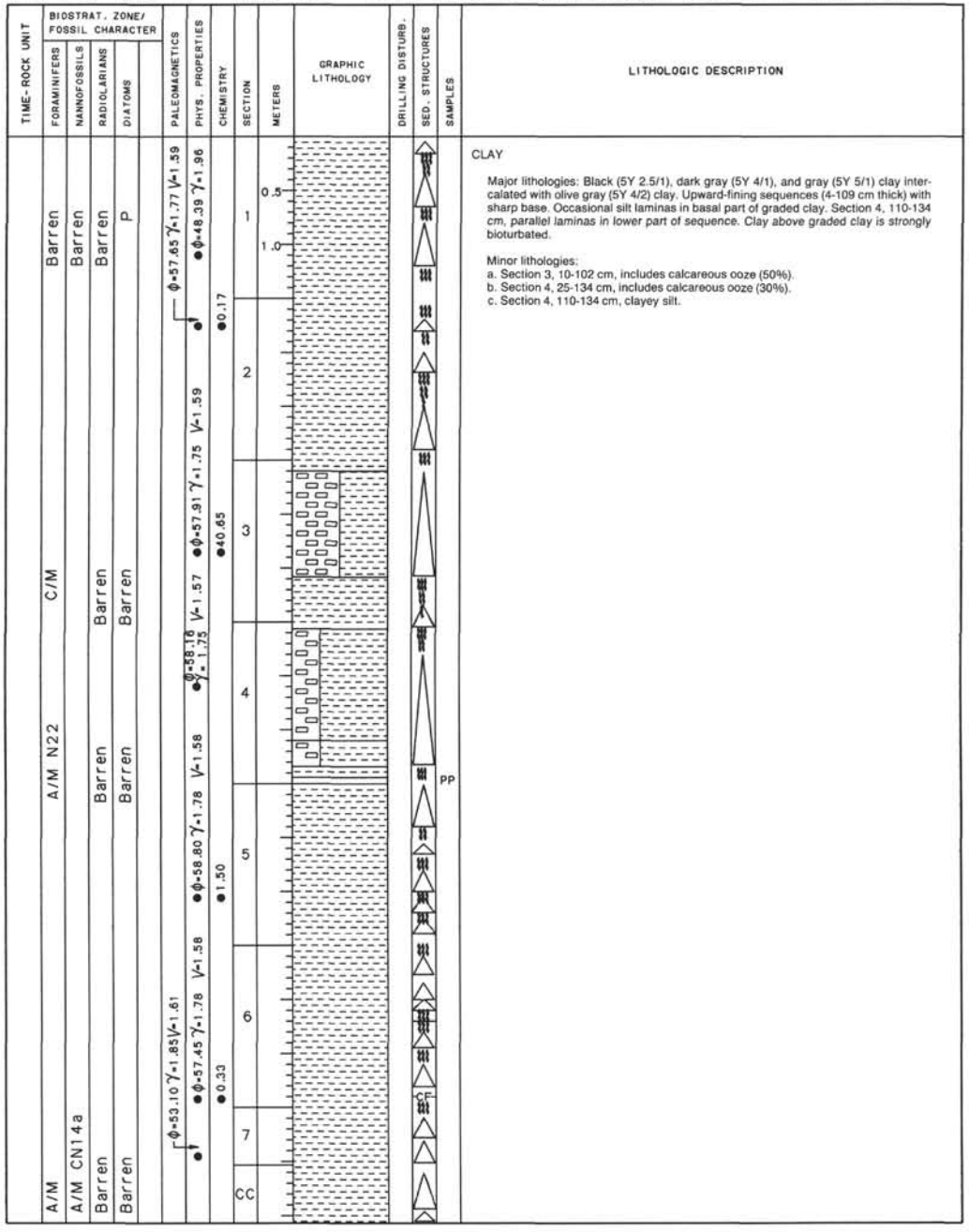


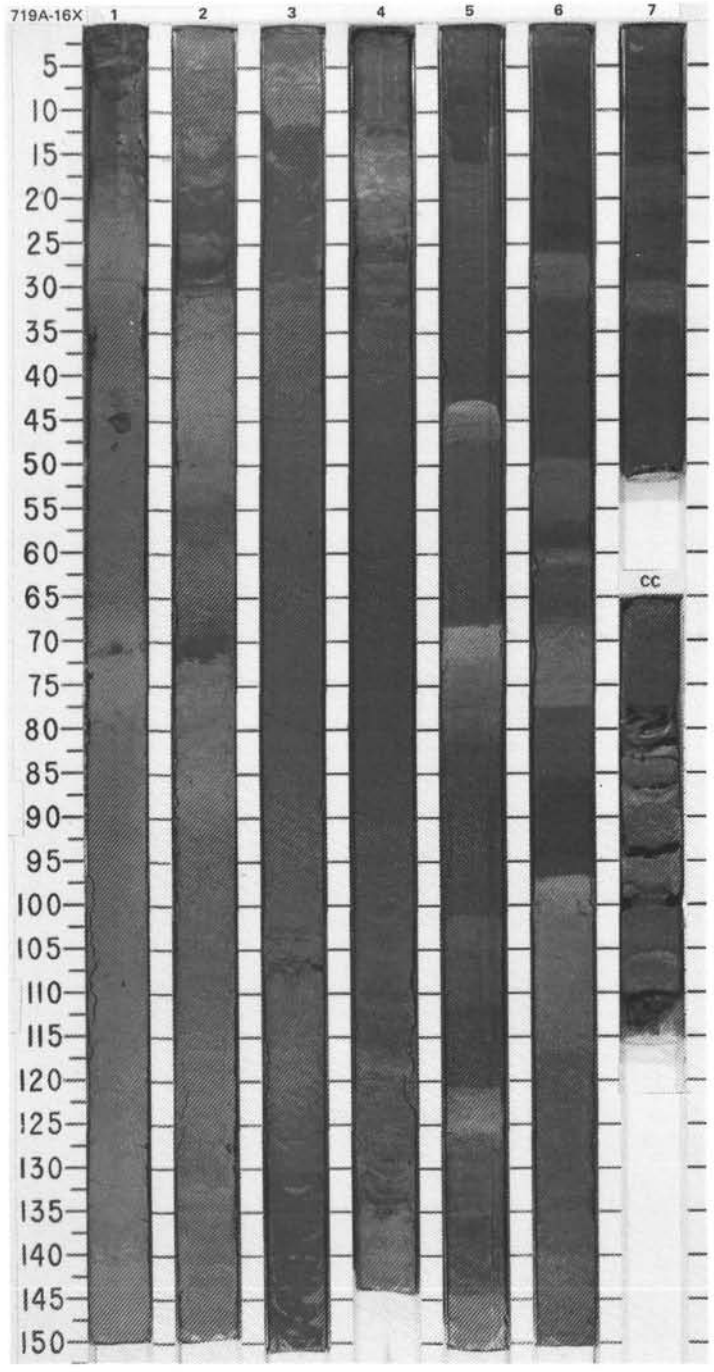
SILT

Major lithology: Gray (5Y 5/1) micaceous silt, fining upward to clayey silt. Silt turbidite.

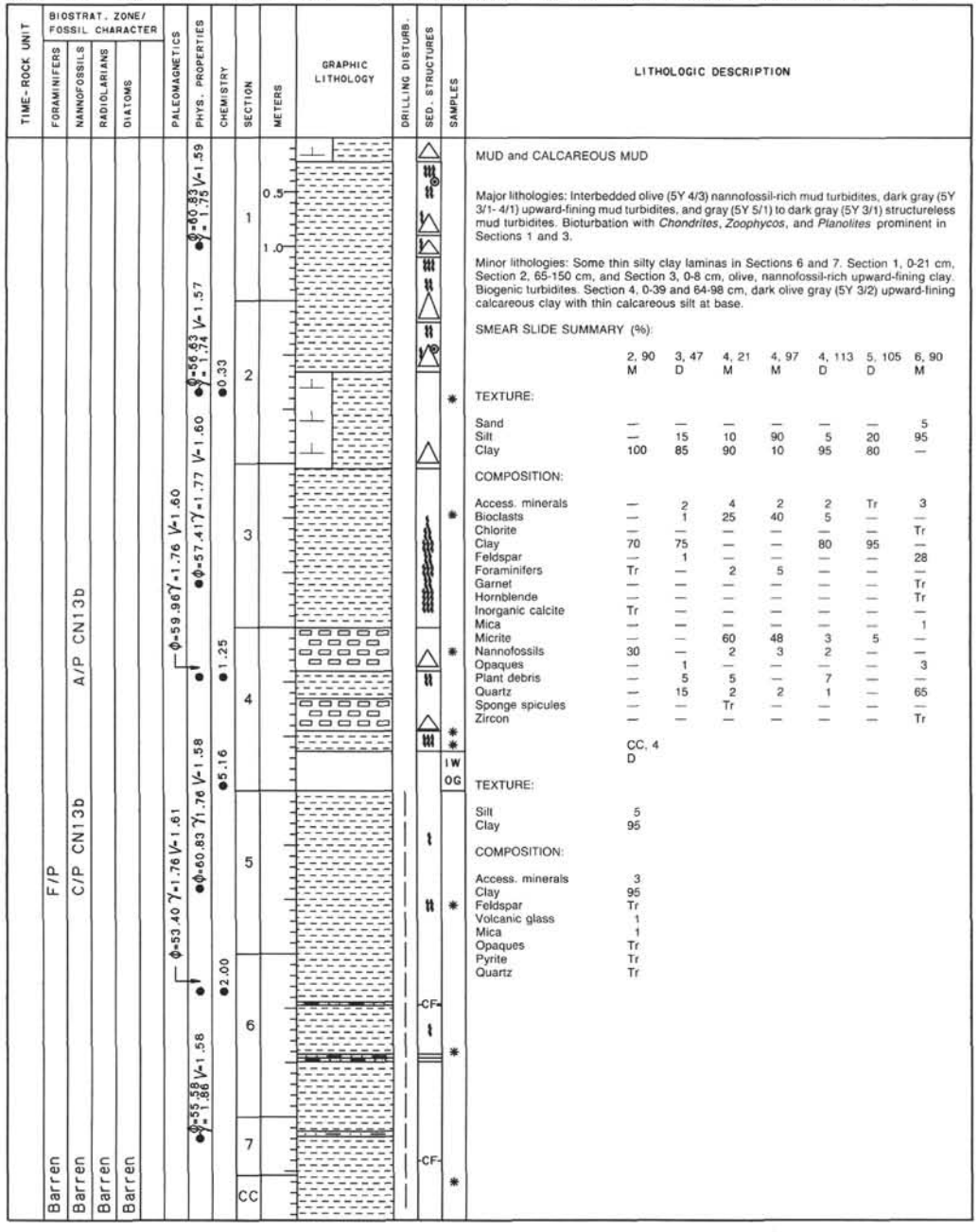


SITE 719 HOLE A CORE 16X CORED INTERVAL 4873.4-4882.9 mbsl; 137.2-146.7 mbsf





SITE 719 HOLE A CORE 17X CORED INTERVAL 4882.9-4892.4 mbsl; 146.7-156.2 mbsf



LITHOLOGIC DESCRIPTION

MUD and CALCAREOUS MUD

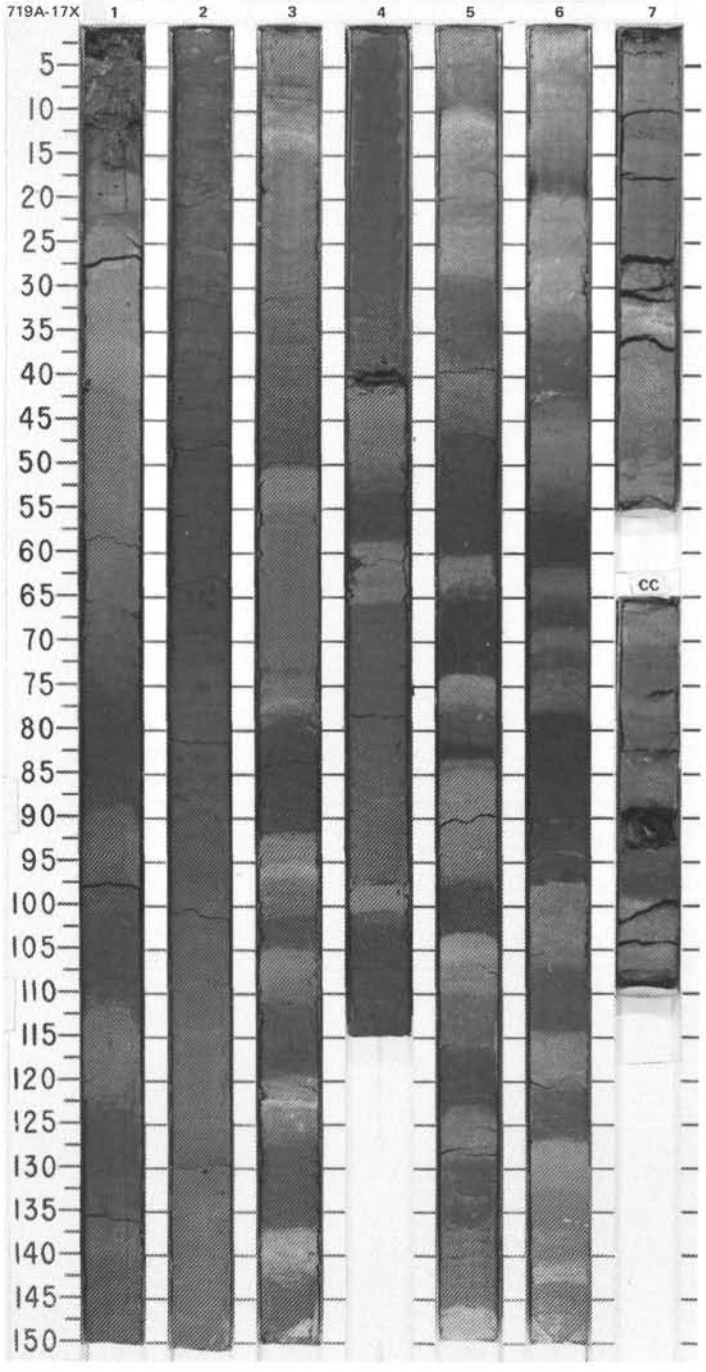
Major lithologies: Interbedded olive (5Y 4/3) nannofossil-rich mud turbidites, dark gray (5Y 3/1- 4/1) upward-fining mud turbidites, and gray (5Y 5/1) to dark gray (5Y 3/1) structureless mud turbidites. Bioturbation with *Chondrites*, *Zoophycos*, and *Planolites* prominent in Sections 1 and 3.

Minor lithologies: Some thin silty clay laminas in Sections 6 and 7. Section 1, 0-21 cm, Section 2, 65-150 cm, and Section 3, 0-8 cm, olive, nannofossil-rich upward-fining clay. Biogenic turbidites. Section 4, 0-39 and 64-98 cm, dark olive gray (5Y 3/2) upward-fining calcareous clay with thin calcareous silt at base.

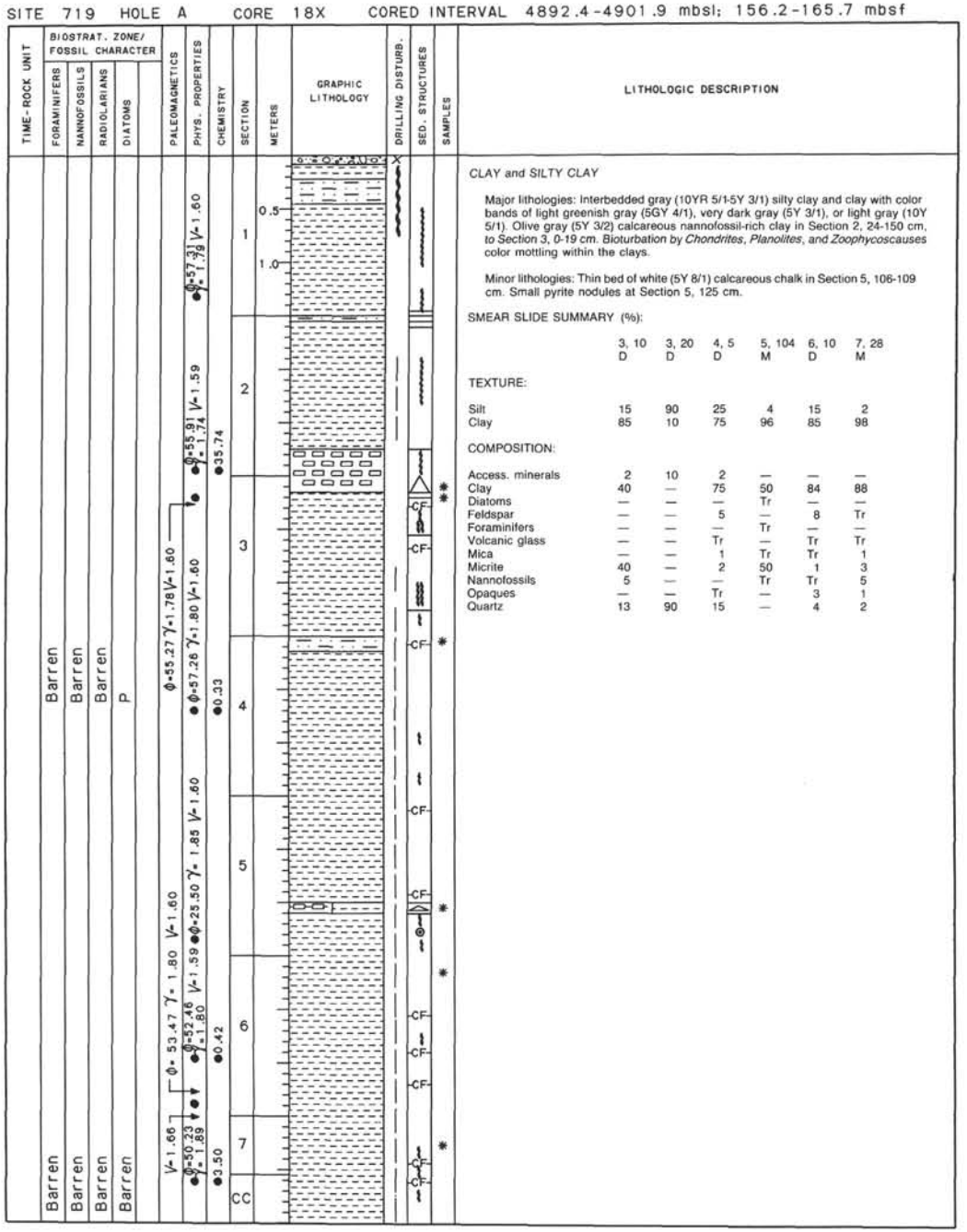
SMEAR SLIDE SUMMARY (%):

	2, 90 M	3, 47 D	4, 21 M	4, 97 M	4, 113 D	5, 105 D	6, 90 M
TEXTURE:							
Sand	—	—	—	—	—	—	5
Silt	—	15	10	90	5	20	95
Clay	100	85	90	10	95	80	—
COMPOSITION:							
Access. minerals	—	2	4	2	2	Tr	3
Bioclasts	—	1	25	40	5	—	—
Chlorite	—	—	—	—	—	—	Tr
Clay	70	75	—	—	80	95	—
Feldspar	—	1	—	—	—	—	28
Foraminifers	Tr	—	2	5	—	—	—
Garnet	—	—	—	—	—	—	Tr
Hornblende	—	—	—	—	—	—	Tr
Inorganic calcite	Tr	—	—	—	—	—	—
Mica	—	—	—	—	—	—	1
Micrite	—	—	60	48	3	5	—
Nannofossils	30	—	2	3	2	—	—
Opaques	—	1	—	—	—	—	3
Plant debris	—	5	5	—	7	—	—
Quartz	—	15	2	2	1	—	65
Sponge spicules	—	—	Tr	—	—	—	—
Zircon	—	—	—	—	—	—	Tr

	CC, 4 D
TEXTURE:	
Silt	5
Clay	95
COMPOSITION:	
Access. minerals	3
Clay	95
Feldspar	Tr
Volcanic glass	1
Mica	1
Opaques	Tr
Pyrite	Tr
Quartz	Tr



SITE 719 HOLE A CORE 18X CORED INTERVAL 4892.4-4901.9 mbsl; 156.2-165.7 mbsf



LITHOLOGIC DESCRIPTION

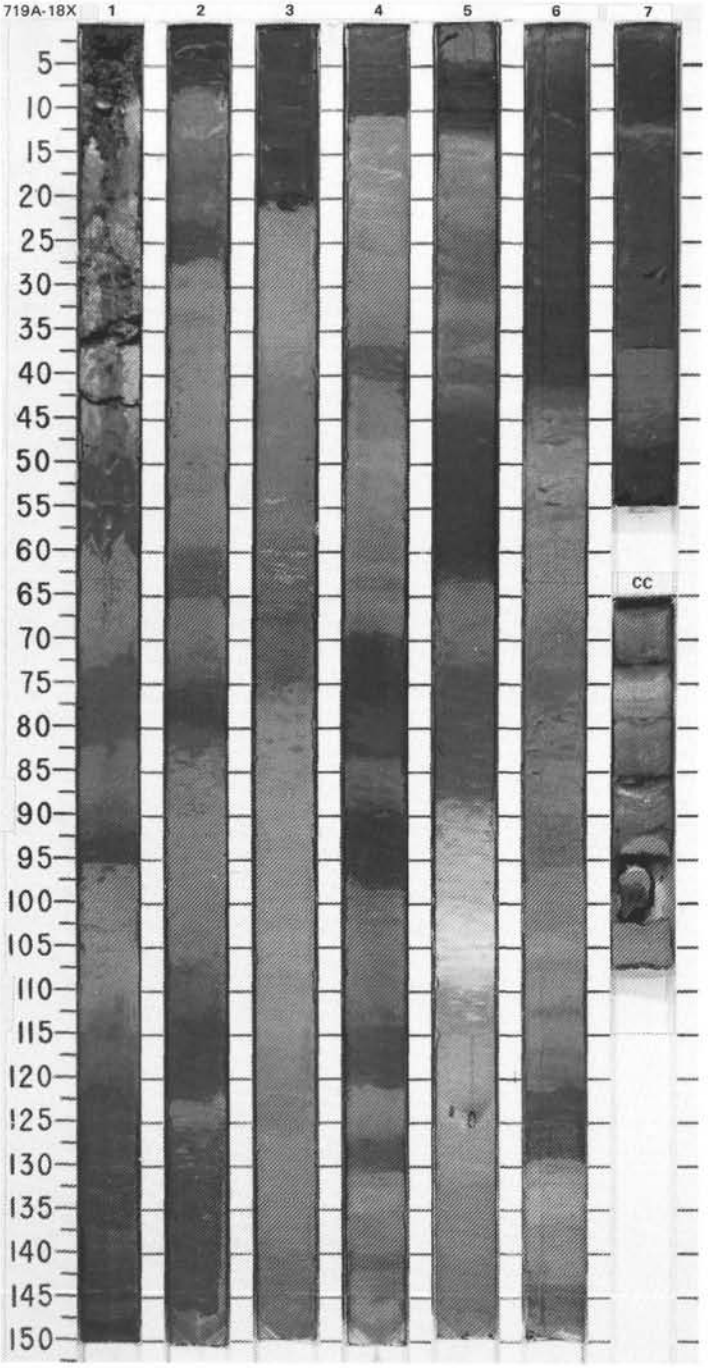
CLAY and SILTY CLAY

Major lithologies: Interbedded gray (10YR 5/1-5Y 3/1) silty clay and clay with color bands of light greenish gray (5GY 4/1), very dark gray (5Y 3/1), or light gray (10Y 5/1). Olive gray (5Y 3/2) calcareous nannofossil-rich clay in Section 2, 24-150 cm, to Section 3, 0-19 cm. Bioturbation by *Chondrites*, *Planolites*, and *Zoophycos* causes color mottling within the clays.

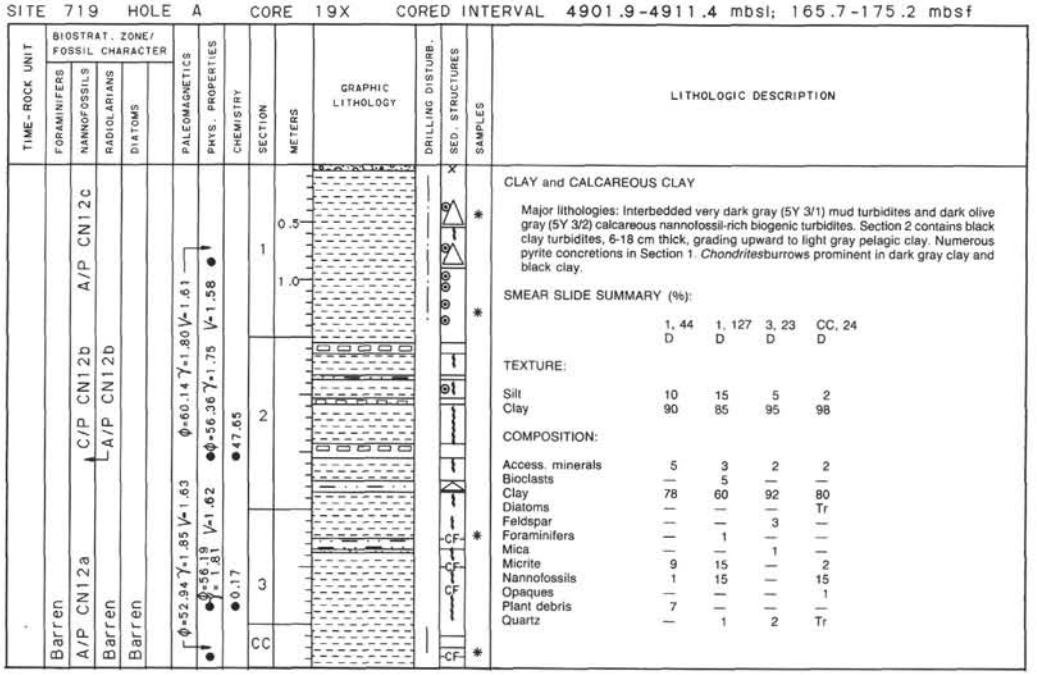
Minor lithologies: Thin bed of white (5Y 8/1) calcareous chalk in Section 5, 106-109 cm. Small pyrite nodules at Section 5, 125 cm.

SMEAR SLIDE SUMMARY (%):

	3, 10 D	3, 20 D	4, 5 D	5, 104 M	6, 10 D	7, 28 M
TEXTURE:						
Silt	15	90	25	4	15	2
Clay	85	10	75	96	85	98
COMPOSITION:						
Access. minerals	2	10	2	—	—	—
Clay	40	—	75	50	84	88
Diatoms	—	—	—	Tr	—	—
Feldspar	—	—	5	—	8	Tr
Foraminifers	—	—	—	Tr	—	—
Volcanic glass	—	—	Tr	—	Tr	Tr
Mica	—	—	1	Tr	Tr	1
Micrite	40	—	2	50	1	3
Nannofossils	5	—	—	Tr	Tr	5
Opaques	—	—	Tr	—	3	1
Quartz	13	90	15	—	4	2



SITE 719 HOLE A CORE 19X CORED INTERVAL 4901.9-4911.4 mbsl; 165.7-175.2 mbsf



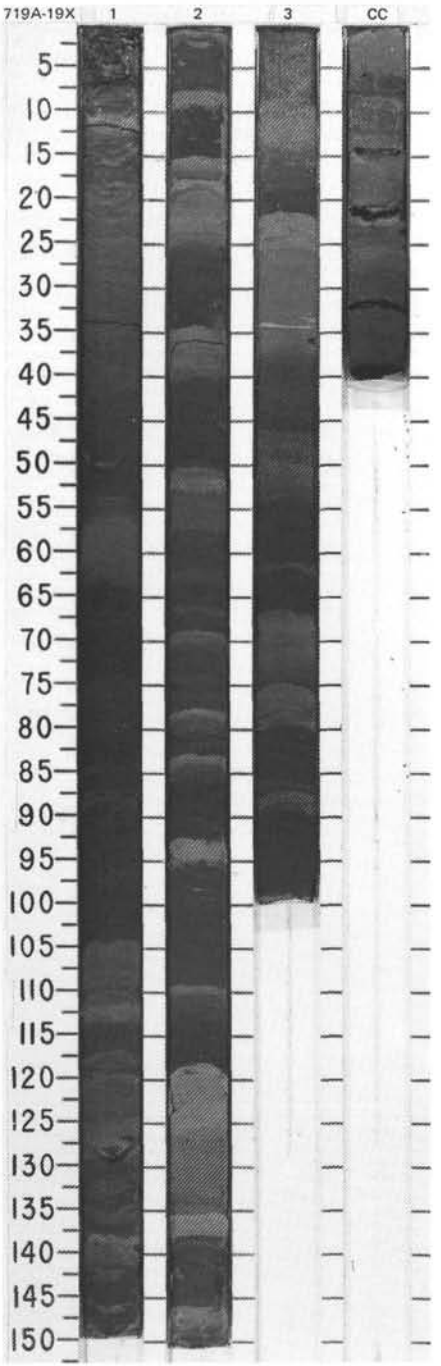
LITHOLOGIC DESCRIPTION

CLAY and CALCAREOUS CLAY

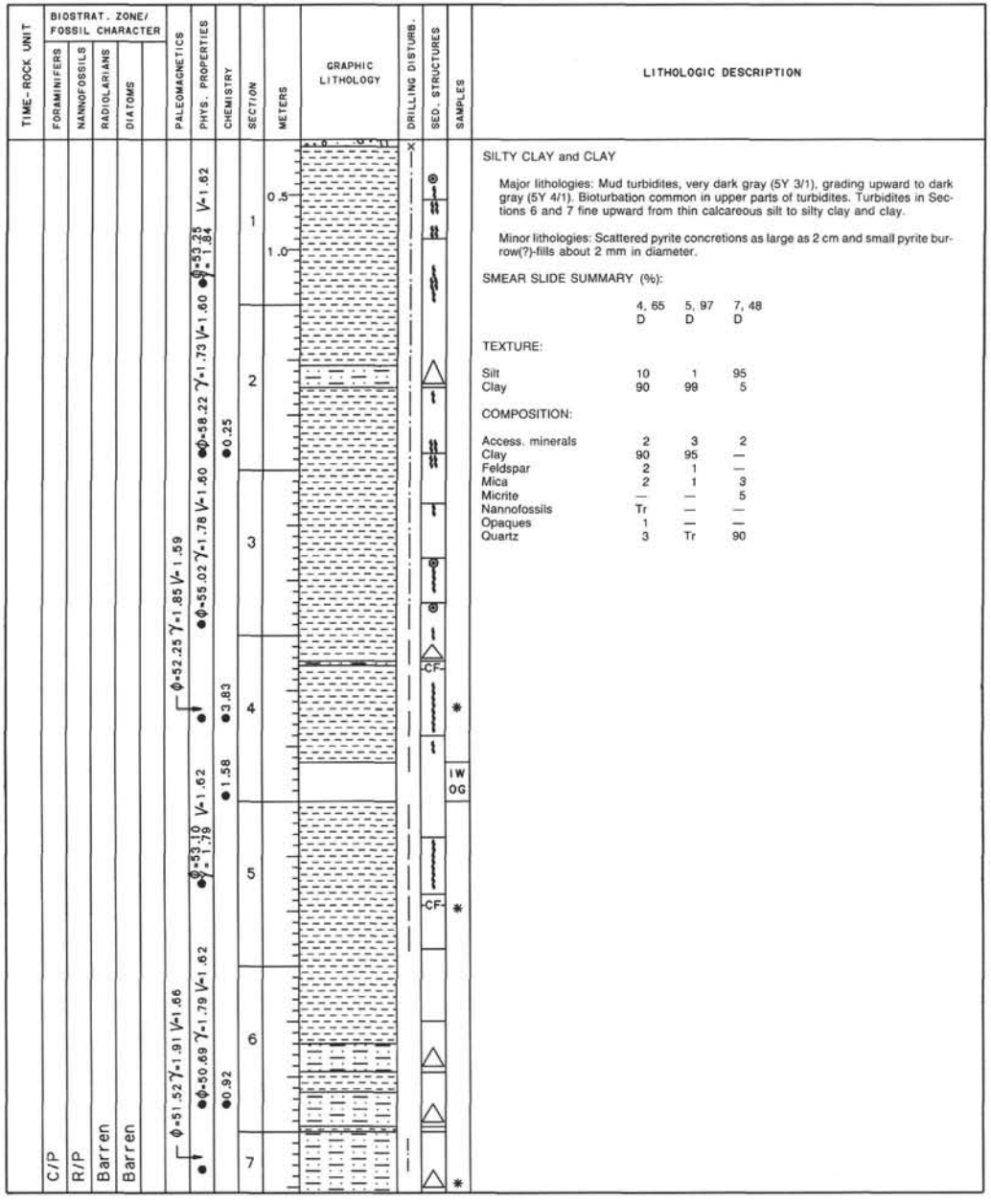
Major lithologies: Interbedded very dark gray (5Y 3/1) mud turbidites and dark olive gray (5Y 3/2) calcareous nannofossil-rich biogenic turbidites. Section 2 contains black clay turbidites, 6-18 cm thick, grading upward to light gray pelagic clay. Numerous pyrite concretions in Section 1. *Chondrites* burrows prominent in dark gray clay and black clay.

SMEAR SLIDE SUMMARY (%):

	1, 44 D	1, 127 D	3, 23 D	CC, 24 D
TEXTURE:				
Silt	10	15	5	2
Clay	90	85	95	98
COMPOSITION:				
Access. minerals	5	3	2	2
Bioclasts	—	5	—	—
Clay	78	60	92	80
Diatoms	—	—	—	Tr
Feldspar	—	—	3	—
Foraminifers	—	1	—	—
Mica	—	—	1	—
Micrite	9	15	—	2
Nannofossils	1	15	—	15
Opaques	—	—	—	1
Plant debris	7	—	—	—
Quartz	—	1	2	Tr



SITE 719 HOLE A CORE 20X CORED INTERVAL 4911.4-4920.9 mbsl; 175.2-184.7 mbsf



LITHOLOGIC DESCRIPTION

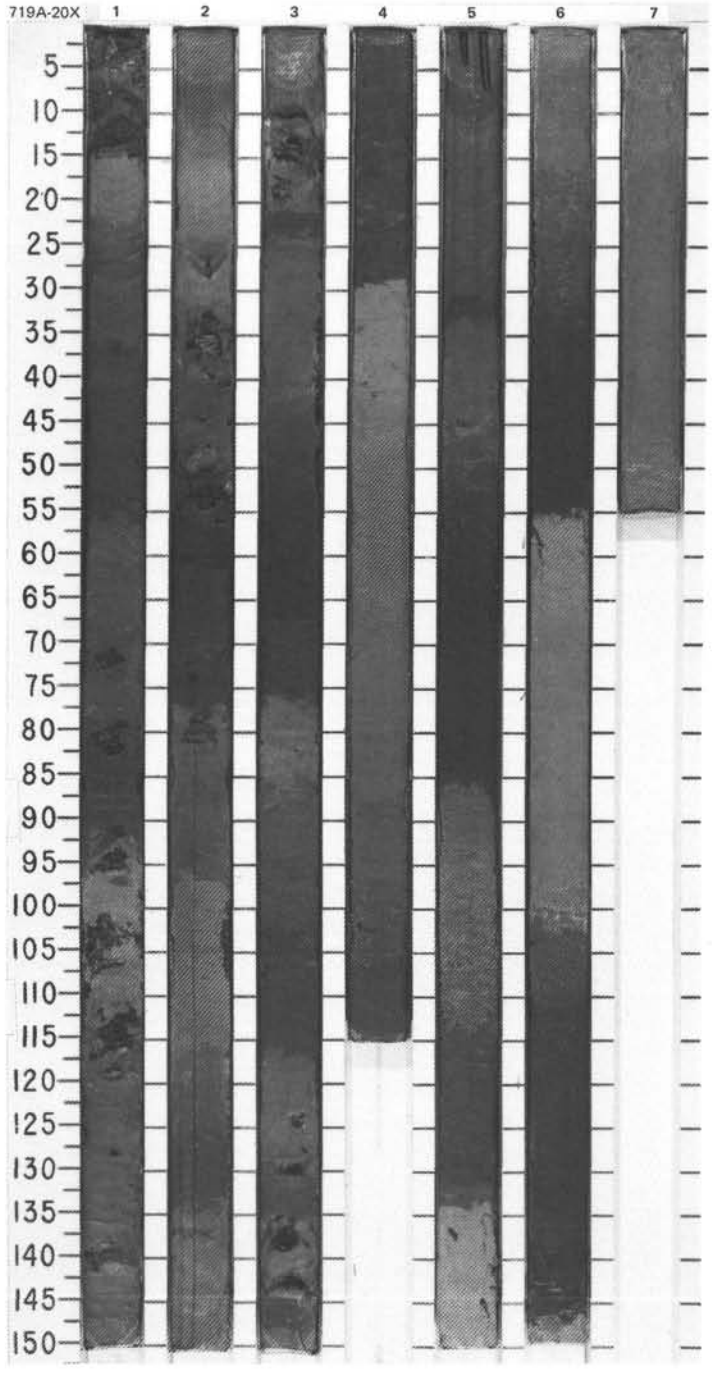
SILTY CLAY and CLAY

Major lithologies: Mud turbidites, very dark gray (5Y 3/1), grading upward to dark gray (5Y 4/1). Bioturbation common in upper parts of turbidites. Turbidites in Sections 6 and 7 fine upward from thin calcareous silt to silty clay and clay.

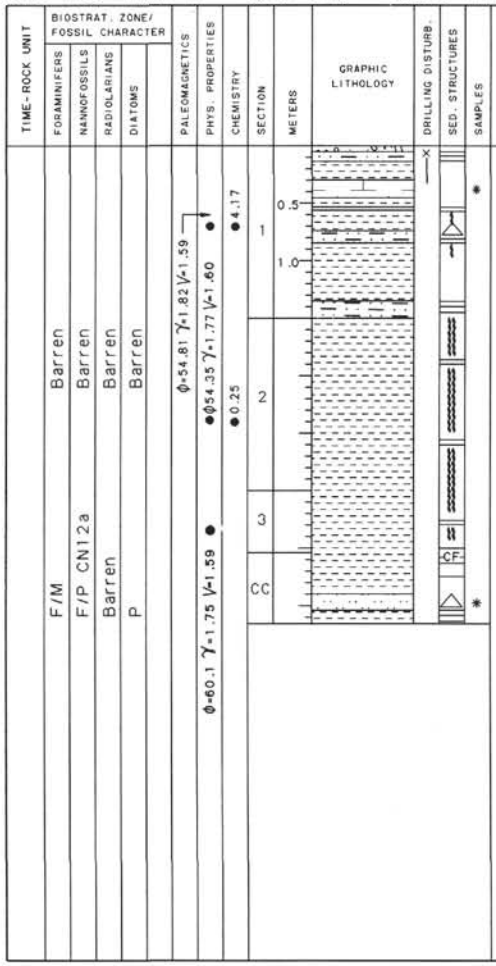
Minor lithologies: Scattered pyrite concretions as large as 2 cm and small pyrite burrow(?)-fills about 2 mm in diameter.

SMEAR SLIDE SUMMARY (%):

	4, 65 D	5, 97 D	7, 48 D
TEXTURE:			
Silt	10	1	95
Clay	90	99	5
COMPOSITION:			
Access. minerals	2	3	2
Clay	90	95	—
Feldspar	2	1	—
Mica	2	1	3
Micrite	—	—	5
Nannofossils	Tr	—	—
Opaques	1	—	—
Quartz	3	Tr	90



SITE 719 HOLE A CORE 21X CORED INTERVAL 4920.9-4930.4 mbsl; 184.7-194.2 mbsf



LITHOLOGIC DESCRIPTION

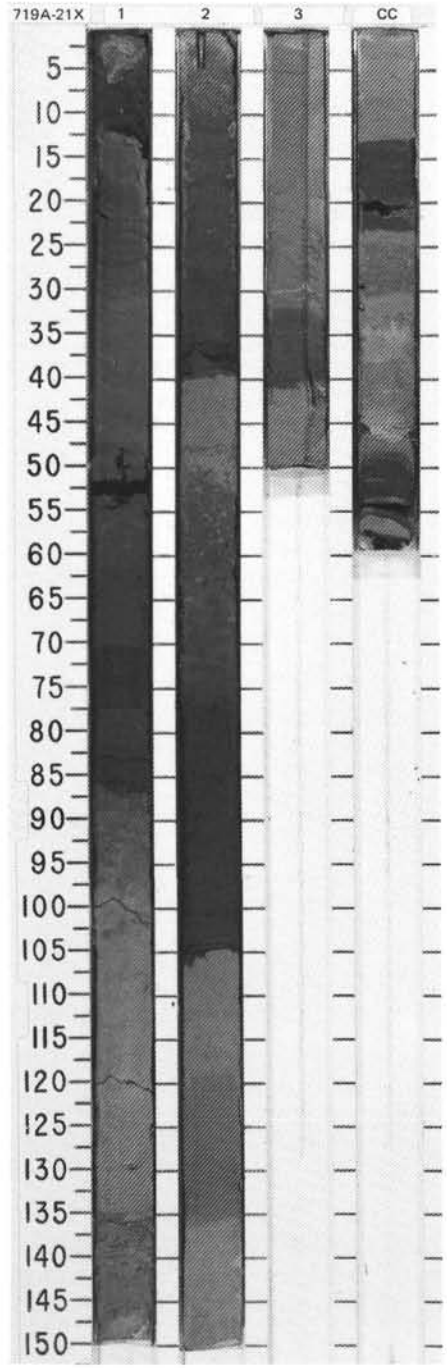
CLAY and SILTY CLAY

Major lithologies: Mud turbidites consisting of black (5Y 2.5/1) clay grading upward to dark olive gray (5Y 3/2) or greenish gray (5GY 4/1) clay. Silt laminas often present at base of turbidites. *Chondrites* bioturbation prominent, particularly in Sections 2 and 3.

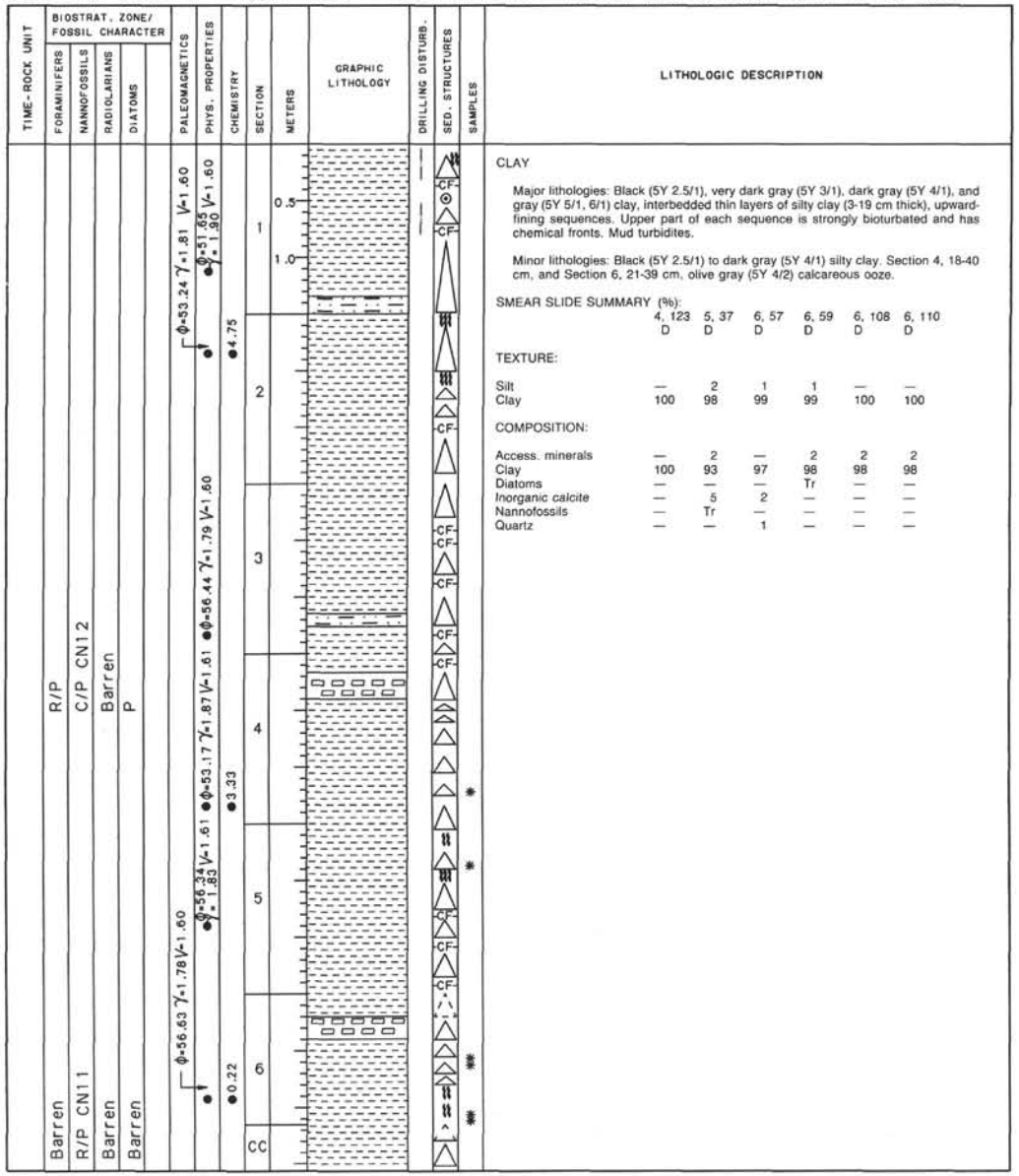
Minor lithologies: Dark olive gray (5Y 3/2) nannofossil-rich clay (biogenic turbidite) in Section 1, 30-45 cm.

SMEAR SLIDE SUMMARY (%):

	1, 39 D	CC, 40 M
TEXTURE:		
Sand	—	15
Silt	10	85
Clay	90	—
COMPOSITION:		
Access. minerals	5	5
Bioclasts	—	1
Clay	37	—
Foraminifers	1	—
Mica	—	5
Micrite	15	Tr
Nannofossils	40	—
Plant debris	1	—
Quartz	—	90
Sponge spicules	—	Tr



SITE 719 HOLE A CORE 22X CORED INTERVAL 4930.4-4939.9 mbsl; 194.2-203.7 mbsf



LITHOLOGIC DESCRIPTION

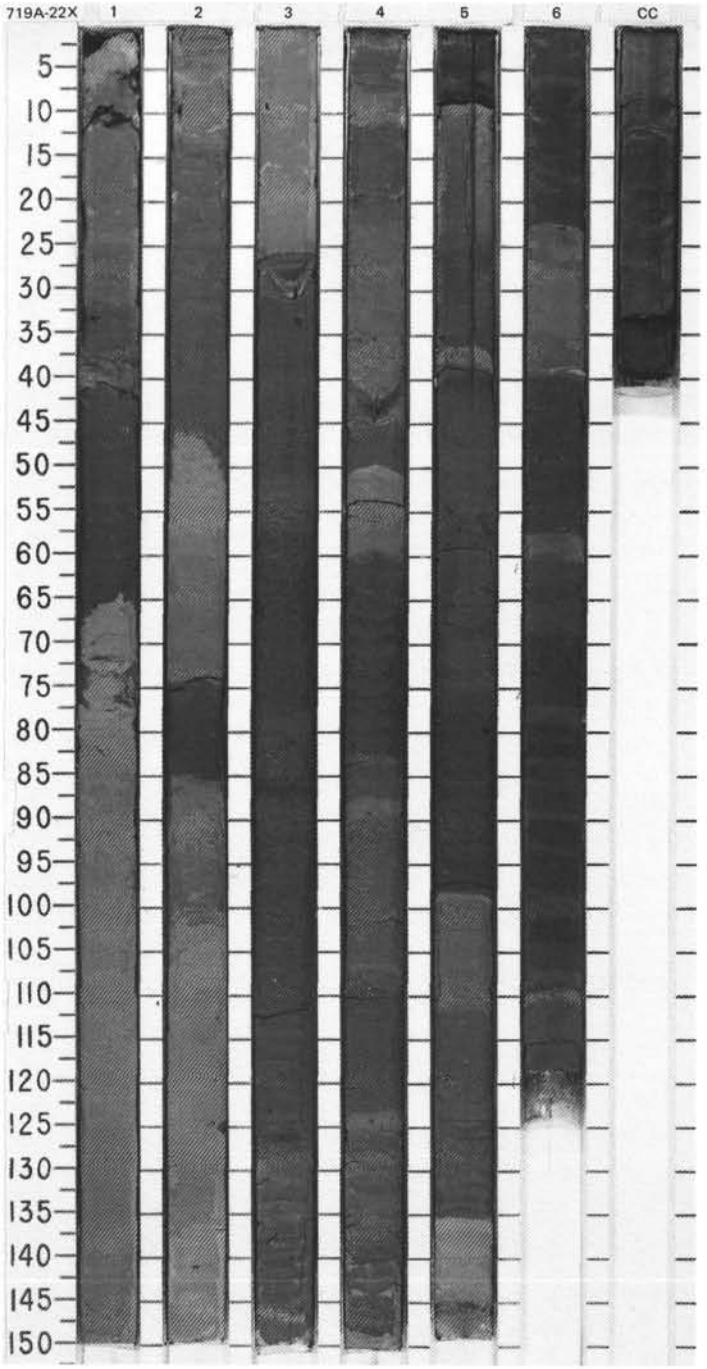
CLAY

Major lithologies: Black (5Y 2.5/1), very dark gray (5Y 3/1), dark gray (5Y 4/1), and gray (5Y 5/1, 6/1) clay, interbedded thin layers of silty clay (3-19 cm thick), upward-fining sequences. Upper part of each sequence is strongly bioturbated and has chemical fronts. Mud turbidites.

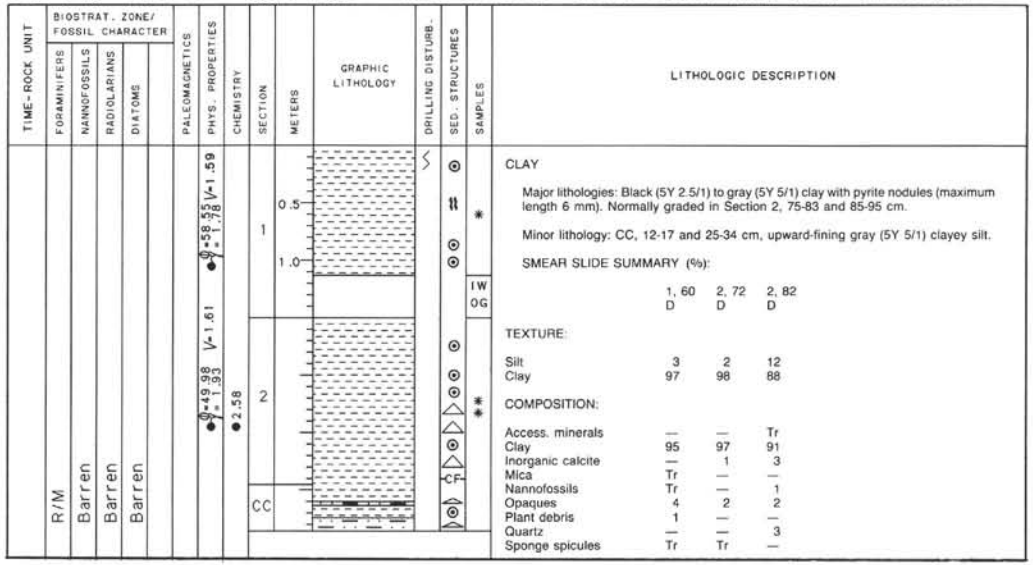
Minor lithologies: Black (5Y 2.5/1) to dark gray (5Y 4/1) silty clay. Section 4, 18-40 cm, and Section 6, 21-39 cm, olive gray (5Y 4/2) calcareous ooze.

SMEAR SLIDE SUMMARY (%):

	4, 123 D	5, 37 D	6, 57 D	6, 59 D	6, 108 D	6, 110 D
TEXTURE:						
Silt	—	2	1	1	—	—
Clay	100	98	99	99	100	100
COMPOSITION:						
Access. minerals	—	2	—	2	2	2
Clay	100	93	97	98	98	98
Diatoms	—	—	—	Tr	—	—
Inorganic calcite	—	5	2	—	—	—
Nannofossils	—	Tr	—	—	—	—
Quartz	—	—	1	—	—	—



SITE 719 HOLE A CORE 23X CORED INTERVAL 4939.9-4949.4 mbsl; 203.7-213.2 mbsf



CLAY

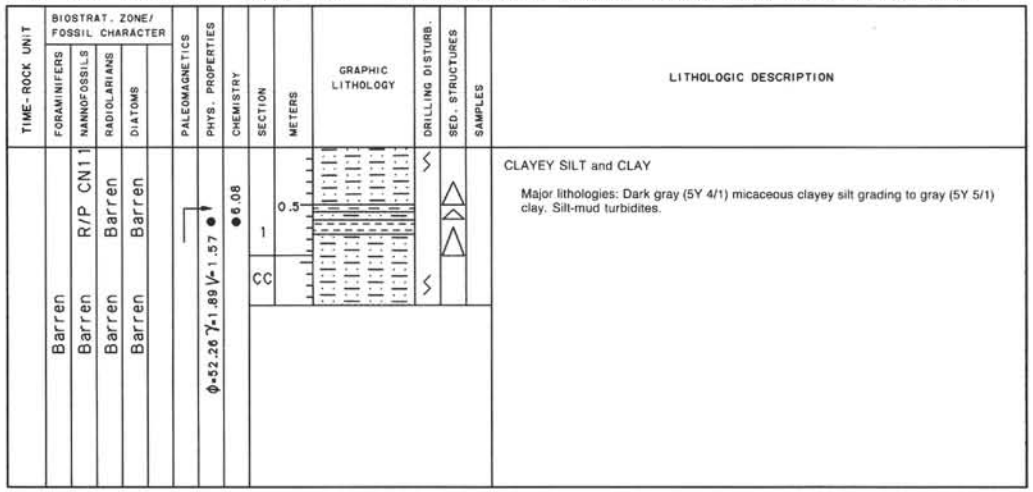
Major lithologies: Black (5Y 2.5/1) to gray (5Y 5/1) clay with pyrite nodules (maximum length 6 mm). Normally graded in Section 2, 75-83 and 85-95 cm.

Minor lithology: CC, 12-17 and 25-34 cm, upward-fining gray (5Y 5/1) clayey silt.

SMEAR SLIDE SUMMARY (%):

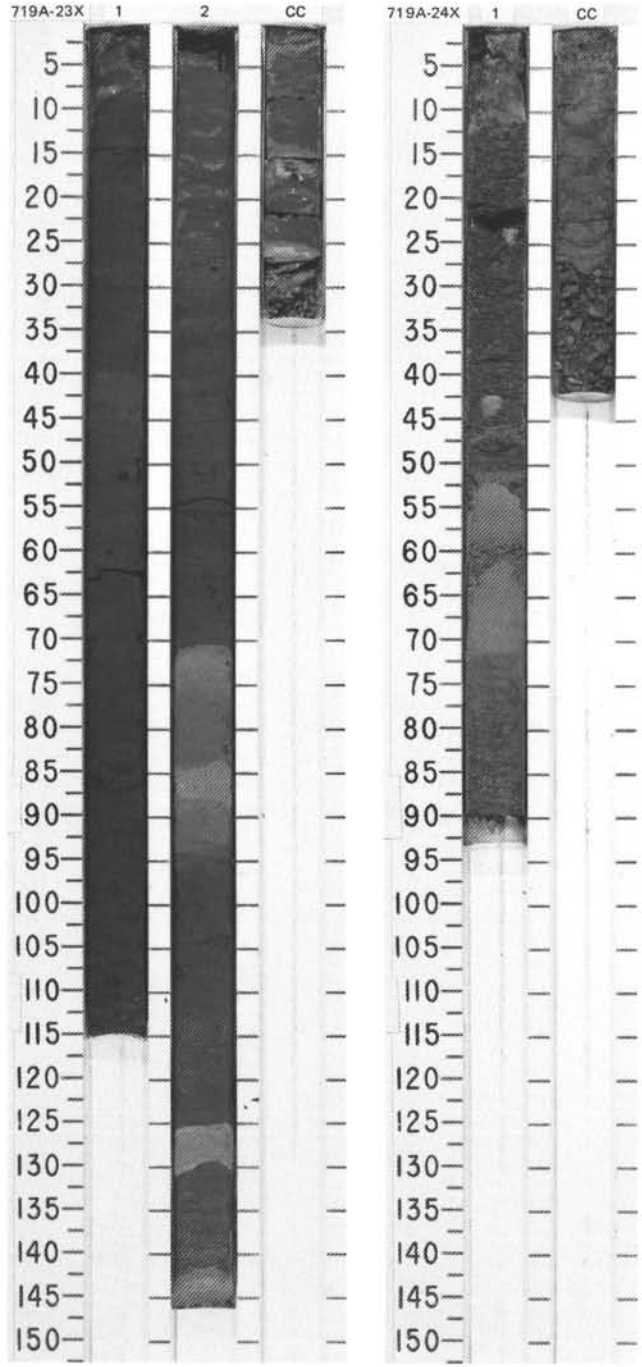
	1, 60 D	2, 72 D	2, 82 D
TEXTURE:			
Silt	3	2	12
Clay	97	98	88
COMPOSITION:			
Access. minerals	—	—	Tr
Clay	95	97	91
Inorganic calcite	—	1	3
Mica	Tr	—	—
Nannofossils	Tr	—	1
Opaques	4	2	2
Plant debris	1	—	—
Quartz	—	—	3
Sponge spicules	Tr	Tr	—

SITE 719 HOLE A CORE 24X CORED INTERVAL 4949.4-4958.9 mbsl; 213.2-222.7 mbsf

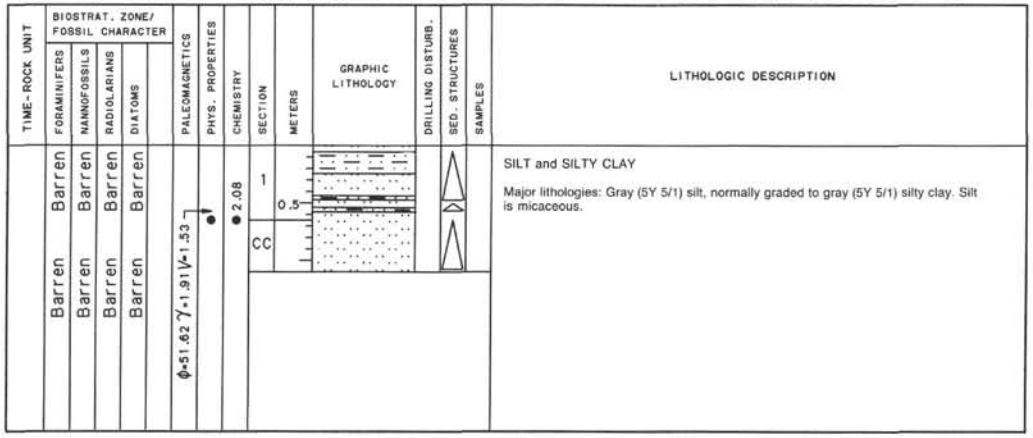


CLAYEY SILT and CLAY

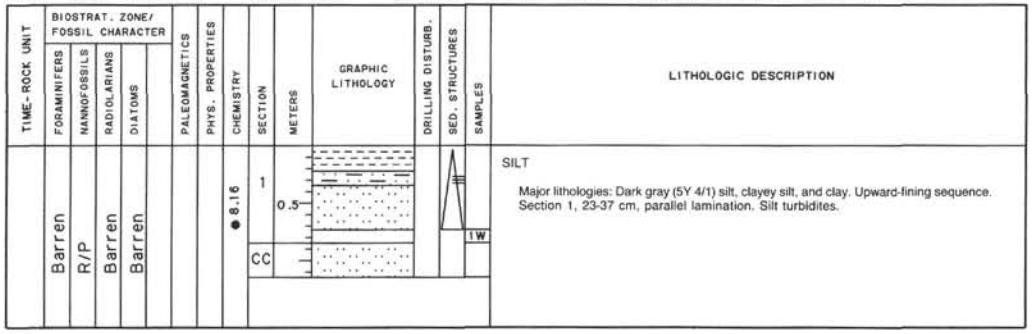
Major lithologies: Dark gray (5Y 4/1) micaceous clayey silt grading to gray (5Y 5/1) clay. Silt-mud turbidites.

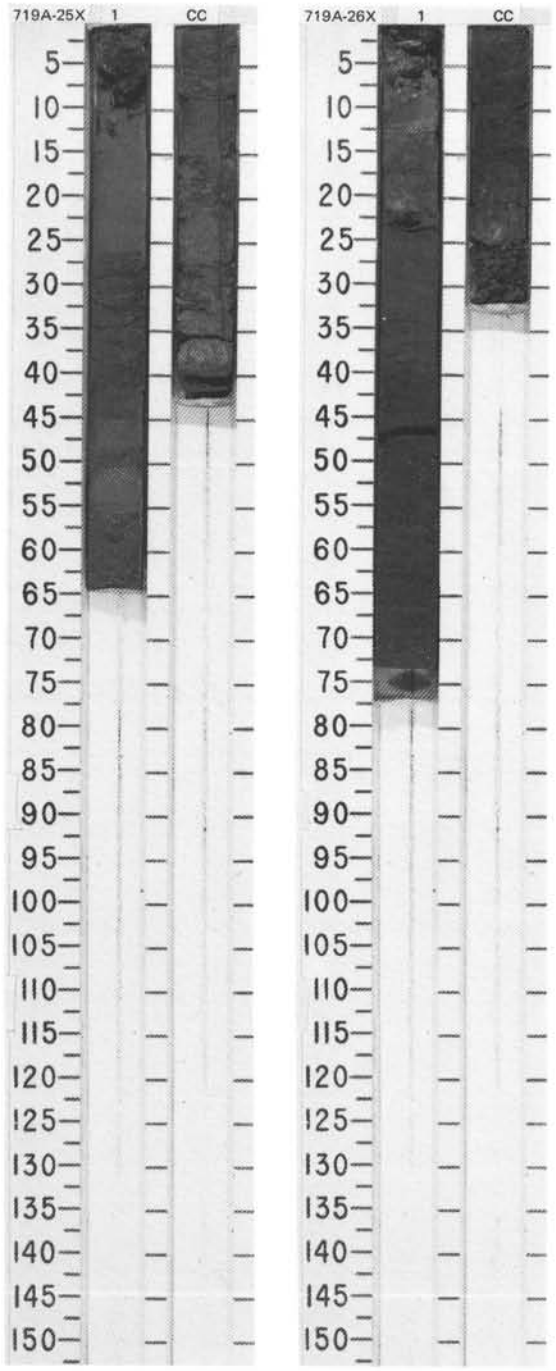


SITE 719 HOLE A CORE 25X CORED INTERVAL 4958.9-4968.4 mbsl; 222.7-232.2 mbsf

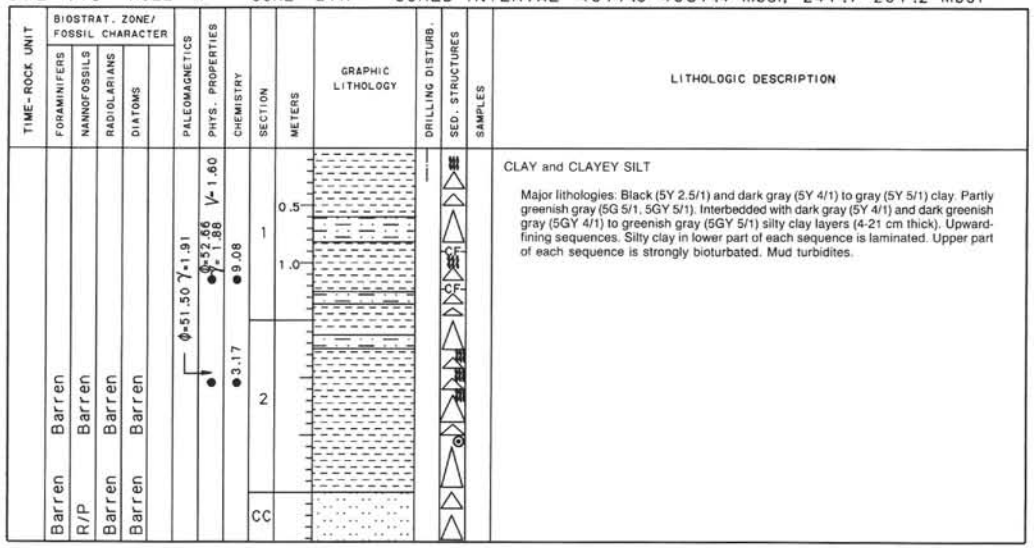


SITE 719 HOLE A CORE 26X CORED INTERVAL 4968.4-4977.9 mbsl; 232.2-241.7 mbsf



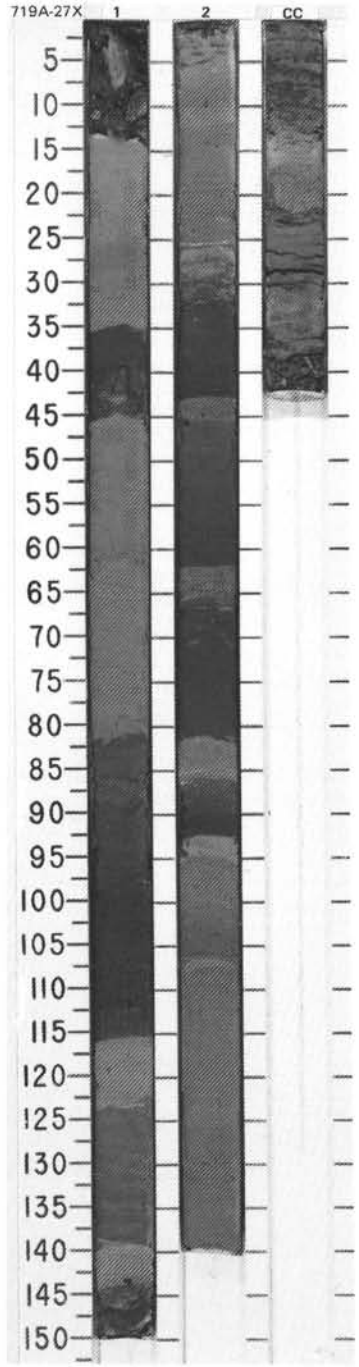


SITE 719 HOLE A CORE 27X CORED INTERVAL 4977.9-4987.4 mbsl; 241.7-251.2 mbsf

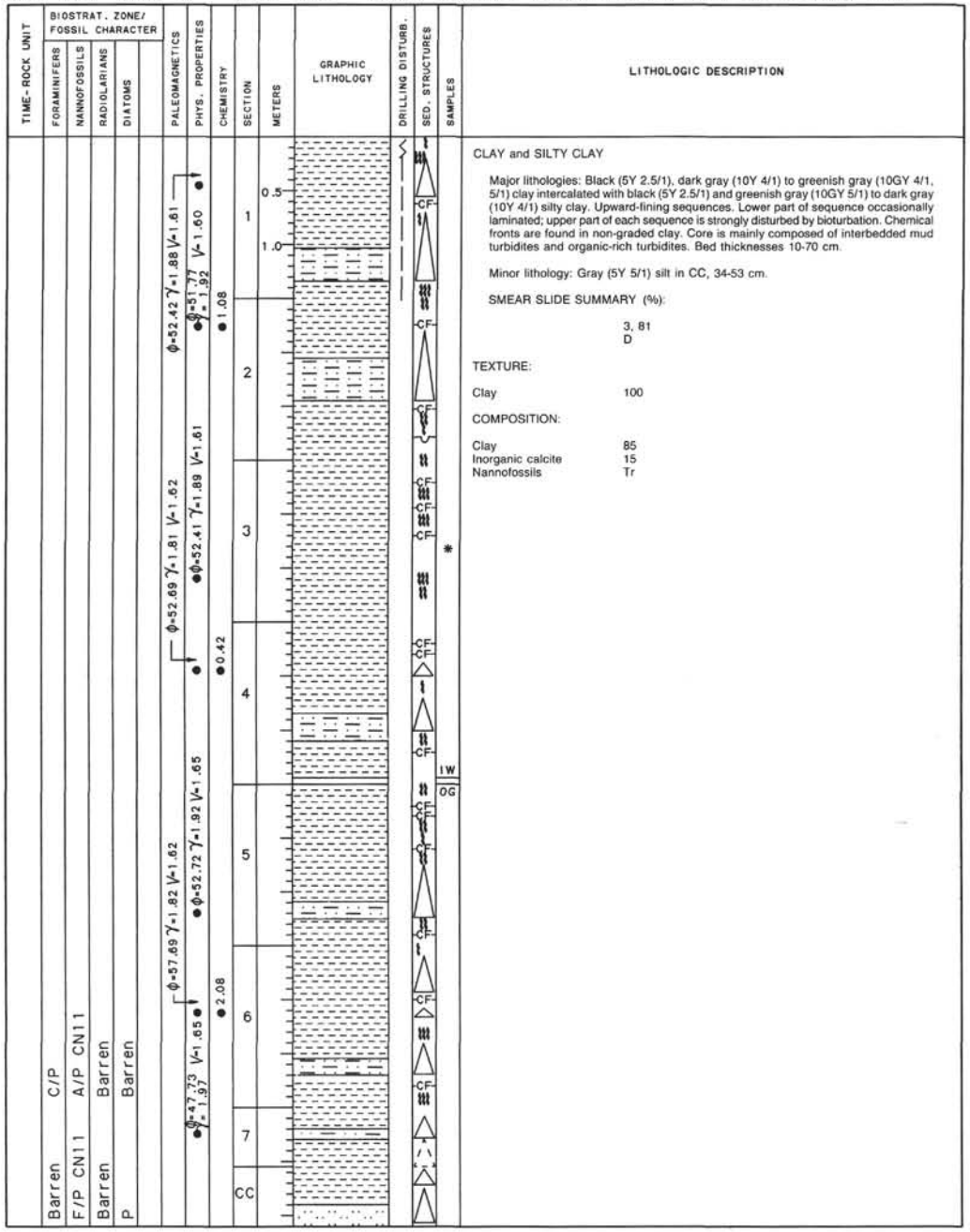


CLAY and CLAYEY SILT

Major lithologies: Black (5Y 2.5/1) and dark gray (5Y 4/1) to gray (5Y 5/1) clay. Partly greenish gray (5G 5/1, 5GY 5/1). Interbedded with dark gray (5Y 4/1) and dark greenish gray (5GY 4/1) to greenish gray (5GY 5/1) silty clay layers (4-21 cm thick). Upward-fining sequences. Silty clay in lower part of each sequence is laminated. Upper part of each sequence is strongly bioturbated. Mud turbidites.



SITE 719 HOLE A CORE 28X CORED INTERVAL 4987.4-4996.9 mbsl; 251.2-260.7 mbsf



LITHOLOGIC DESCRIPTION

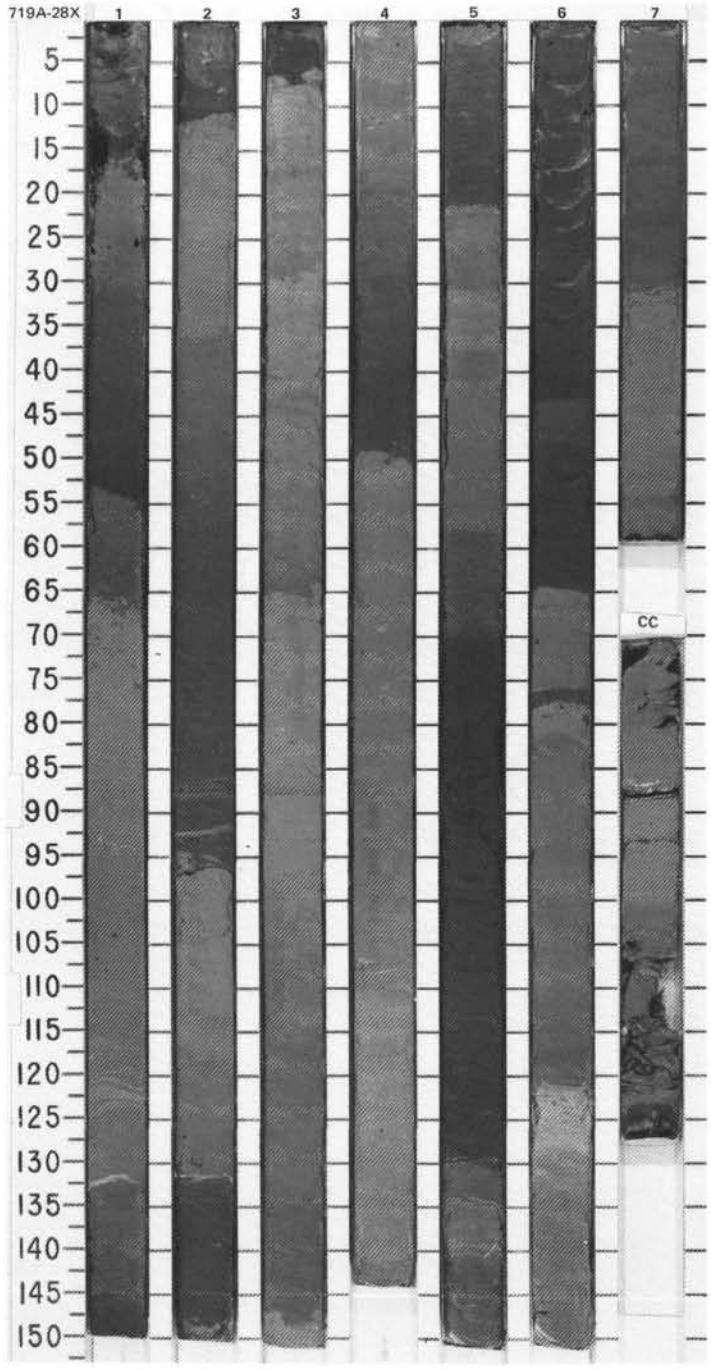
CLAY and SILTY CLAY

Major lithologies: Black (5Y 2.5/1), dark gray (10Y 4/1) to greenish gray (10GY 4/1, 5/1) clay intercalated with black (5Y 2.5/1) and greenish gray (10GY 5/1) to dark gray (10Y 4/1) silty clay. Upward-fining sequences. Lower part of sequence occasionally laminated; upper part of each sequence is strongly disturbed by bioturbation. Chemical fronts are found in non-graded clay. Core is mainly composed of interbedded mud turbidites and organic-rich turbidites. Bed thicknesses 10-70 cm.

Minor lithology: Gray (5Y 5/1) silt in CC, 34-53 cm.

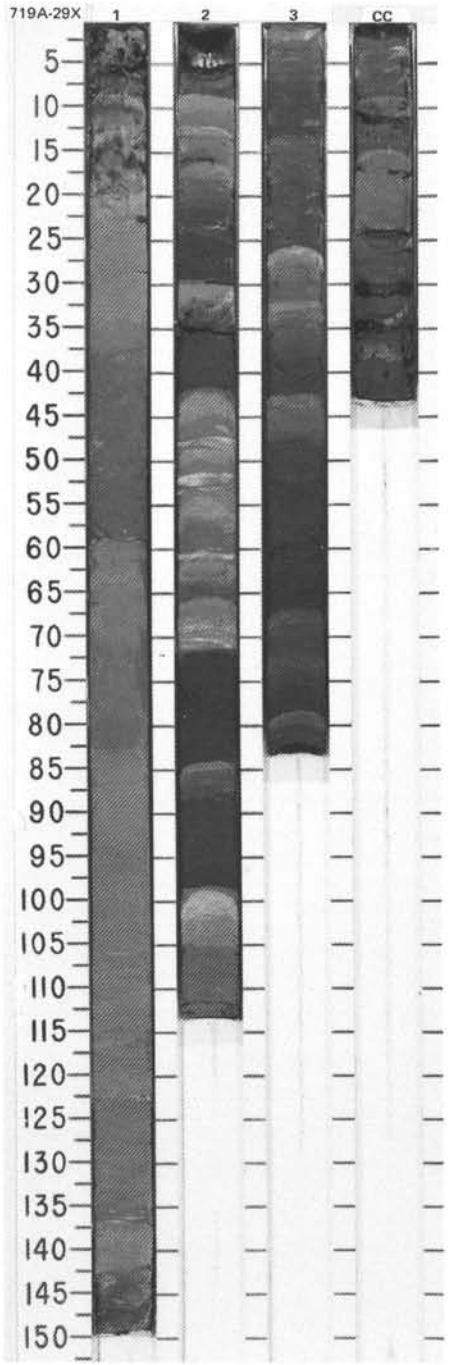
SMEAR SLIDE SUMMARY (%):

	3, 81
	D
TEXTURE:	
Clay	100
COMPOSITION:	
Clay	85
Inorganic calcite	15
Nannofossils	Tr

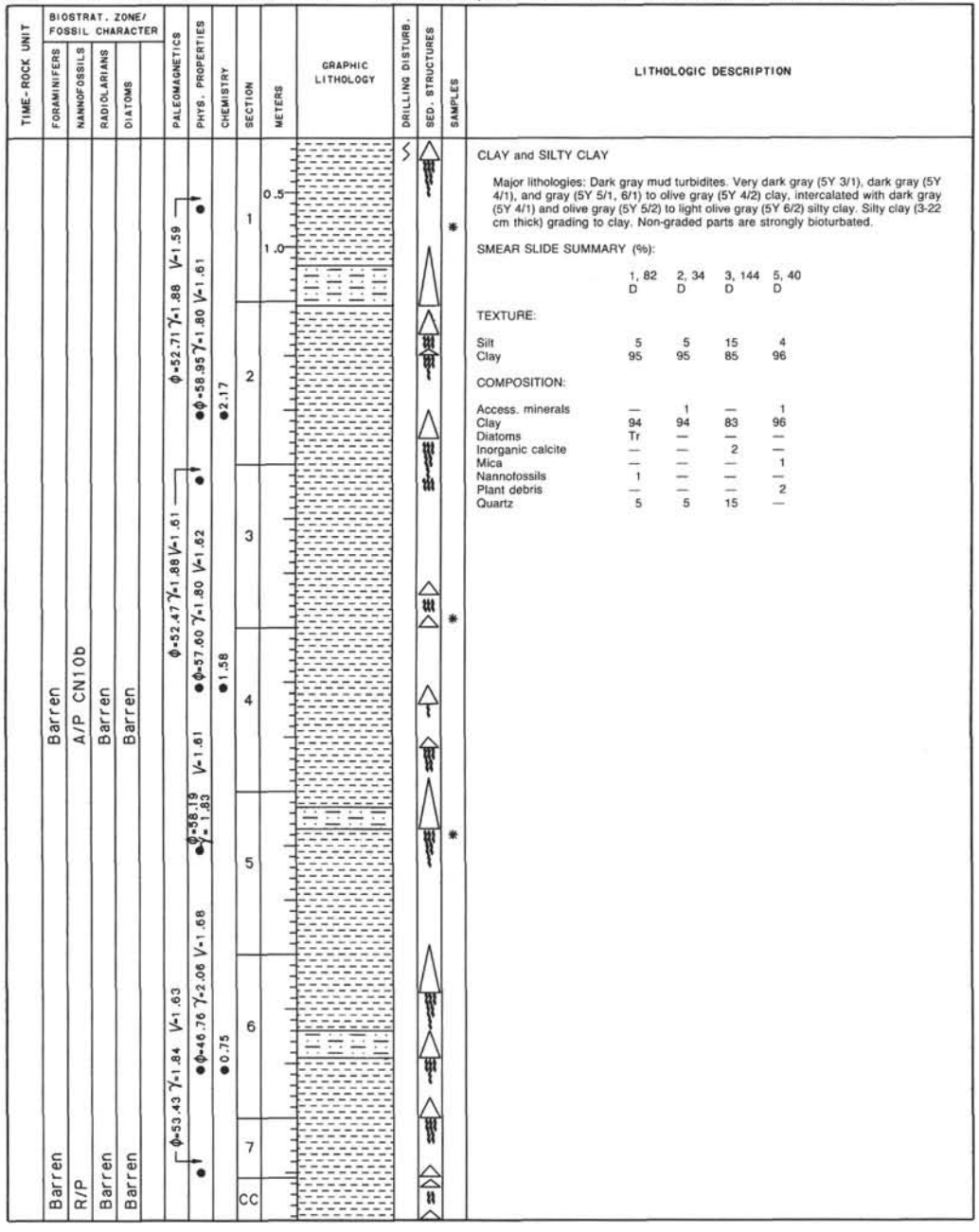


SITE 719 HOLE A CORE 29X CORED INTERVAL 4996.9-5006.4 mbsl; 260.7-270.2 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	C/P Barren	A/P CN10b F/P	Barren Barren	P P		●0=20.13 γ=1.61 γ=1.88 ●0=54.73 γ=1.88 ●0=65.05 γ=1.63 γ=1.99 γ=1.63	●3.08 ●8.25	1 2 3 CC	0.5 1.0				OG IW	CLAY and SILTY CLAY Major lithologies: Black (5Y 2.5/1) to greenish gray (5GY 4/1) clay intercalated with black (5Y 2.5/1) to dark greenish gray (5GY 4/1) silty clay, 2-22 cm thick. Thin parallel laminas and wispy silt laminas in layers of silty clay. Silty clay, fining upward to clay. Non-graded parts of clay are strongly bioturbated. Minor lithologies: a. Section 2, 12-13 and 46-49 cm, gray (5Y 5/1) silt with parallel laminas. b. Section 2, 100-102 cm, and Section 3, 32-34 cm, calcareous nannofossil-rich clay.



SITE 719 HOLE A CORE 30X CORED INTERVAL 5006.4-5015.9 mbsl; 270.2-279.7 mbsf



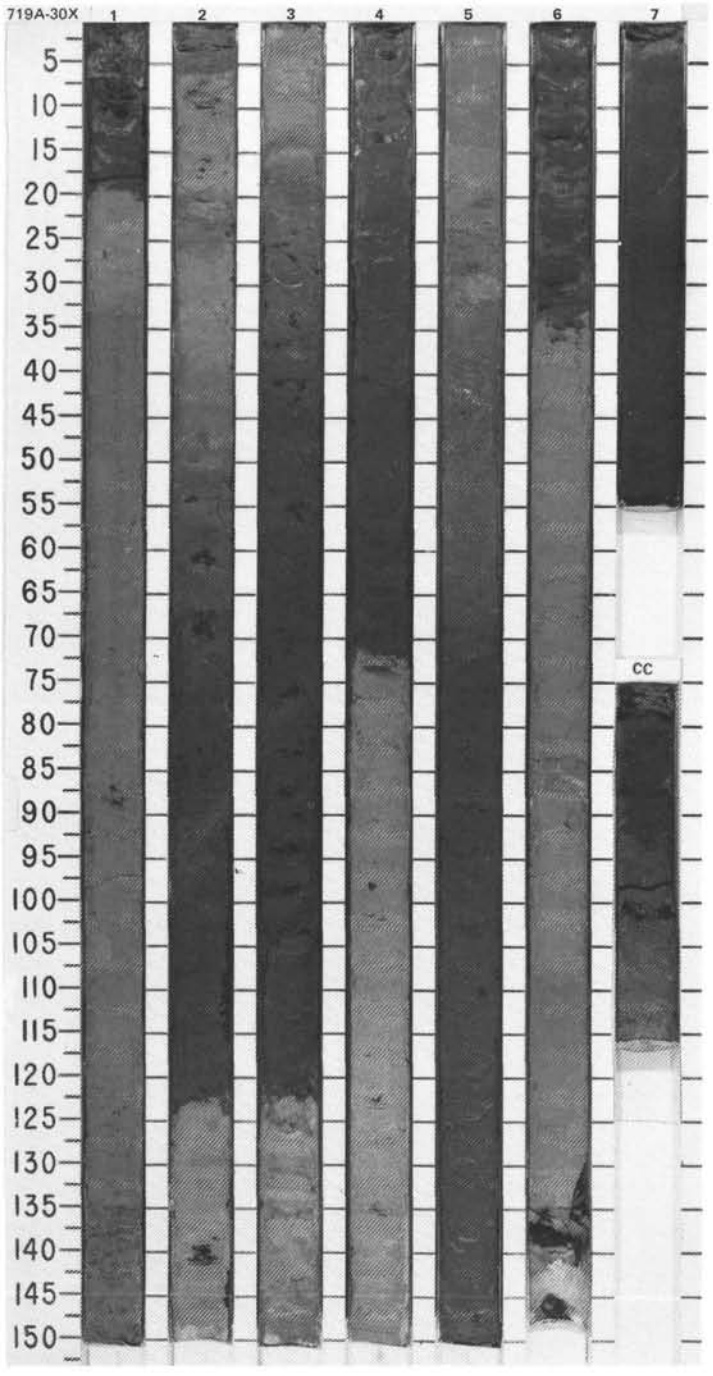
LITHOLOGIC DESCRIPTION

CLAY and SILTY CLAY

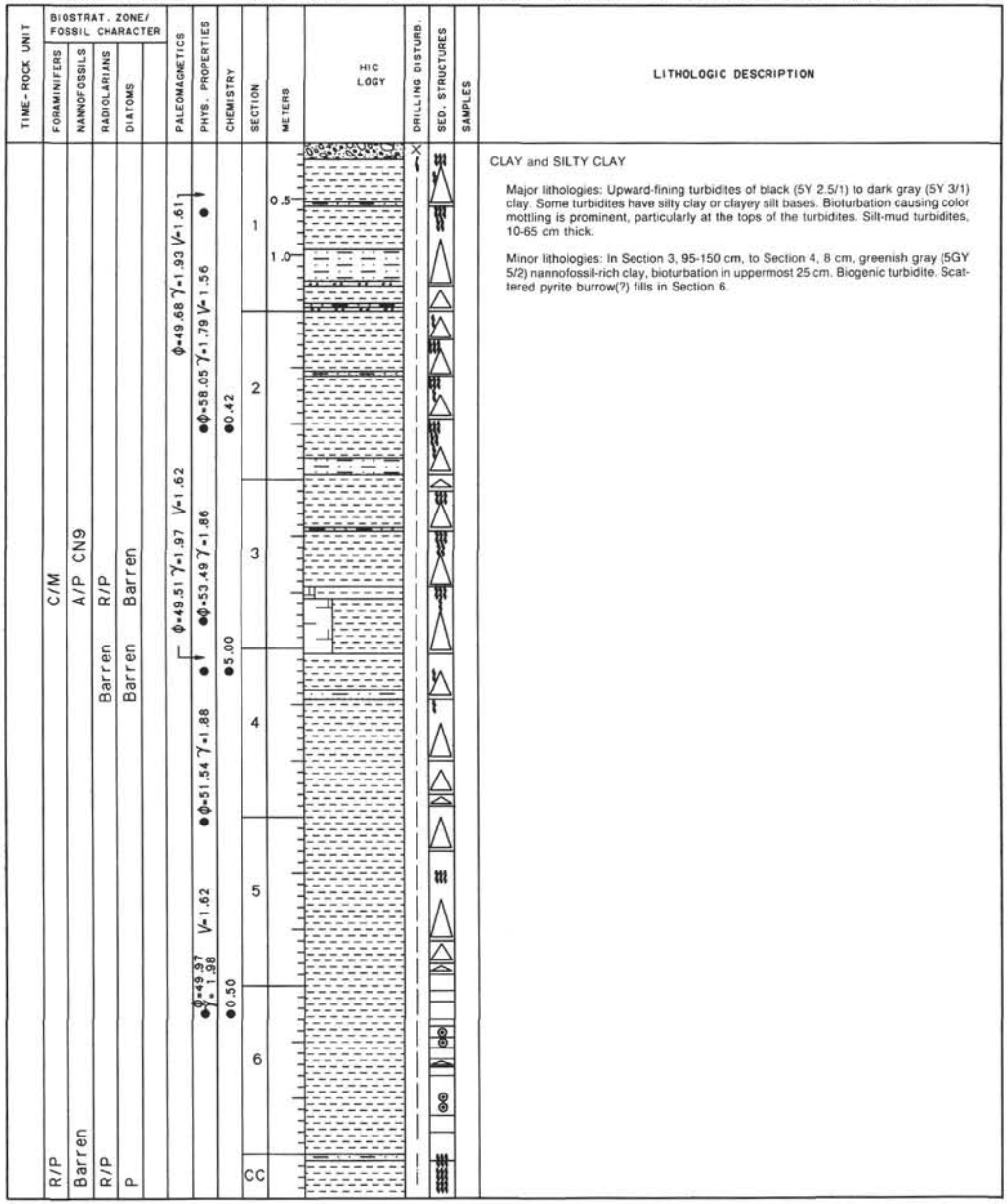
Major lithologies: Dark gray mud turbidites. Very dark gray (5Y 3/1), dark gray (5Y 4/1), and gray (5Y 5/1, 6/1) to olive gray (5Y 4/2) clay, intercalated with dark gray (5Y 4/1) and olive gray (5Y 5/2) to light olive gray (5Y 6/2) silty clay. Silty clay (3-22 cm thick) grading to clay. Non-graded parts are strongly bioturbated.

SMEAR SLIDE SUMMARY (%):

	1, 82 D	2, 34 D	3, 144 D	5, 40 D
TEXTURE:				
Silt	5	5	15	4
Clay	95	95	85	96
COMPOSITION:				
Access. minerals	—	1	—	1
Clay	94	94	83	96
Diatoms	Tr	—	—	—
Inorganic calcite	—	—	2	—
Mica	—	—	—	1
Nannofossils	1	—	—	—
Plant debris	—	—	—	2
Quartz	5	5	15	—



SITE 719 HOLE A CORE 31X CORED INTERVAL 5015.9-5025.4 mbsl; 279.7-289.2 mbsf

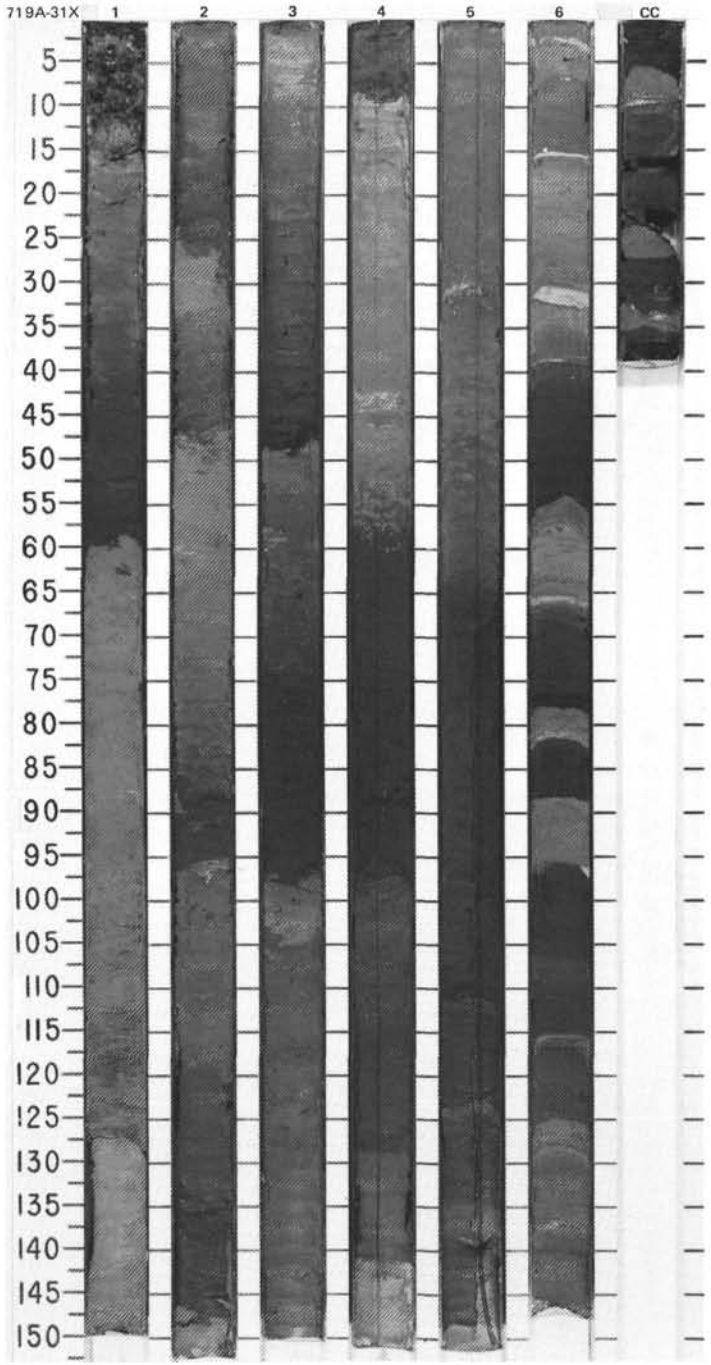


LITHOLOGIC DESCRIPTION

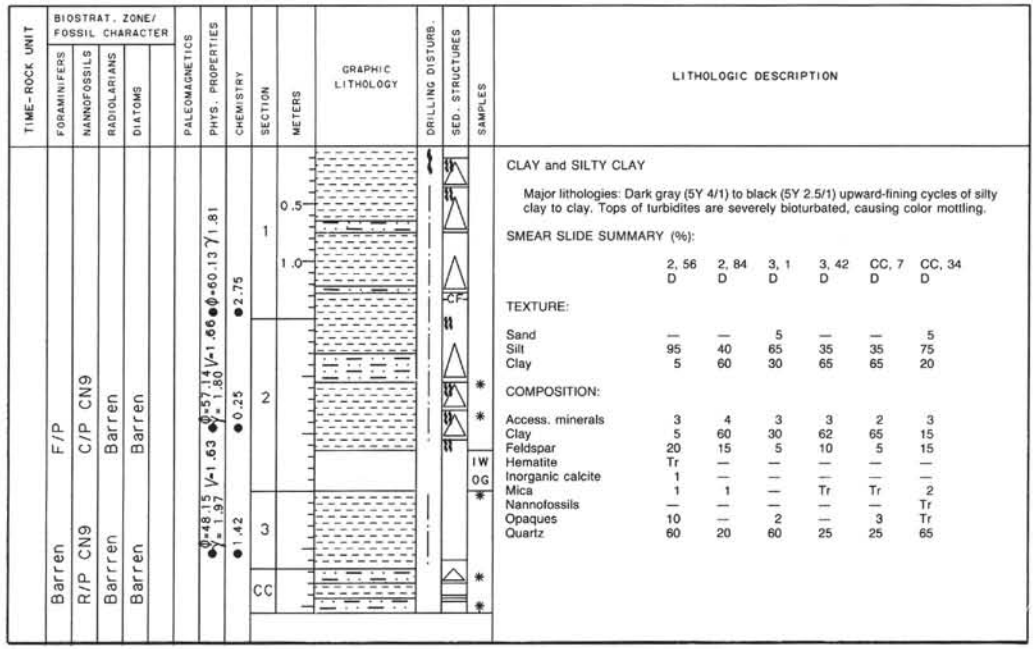
CLAY and SILTY CLAY

Major lithologies: Upward-fining turbidites of black (5Y 2.5/1) to dark gray (5Y 3/1) clay. Some turbidites have silty clay or clayey silt bases. Bioturbation causing color mottling is prominent, particularly at the tops of the turbidites. Silt-mud turbidites, 10-65 cm thick.

Minor lithologies: In Section 3, 95-150 cm, to Section 4, 8 cm, greenish gray (5GY 5/2) nannofossil-rich clay, bioturbation in uppermost 25 cm. Biogenic turbidite. Scattered pyrite burrow(?) fills in Section 6.



SITE 719 HOLE A CORE 32X CORED INTERVAL 5025.4-5034.9 mbsl; 289.2-298.7 mbsf



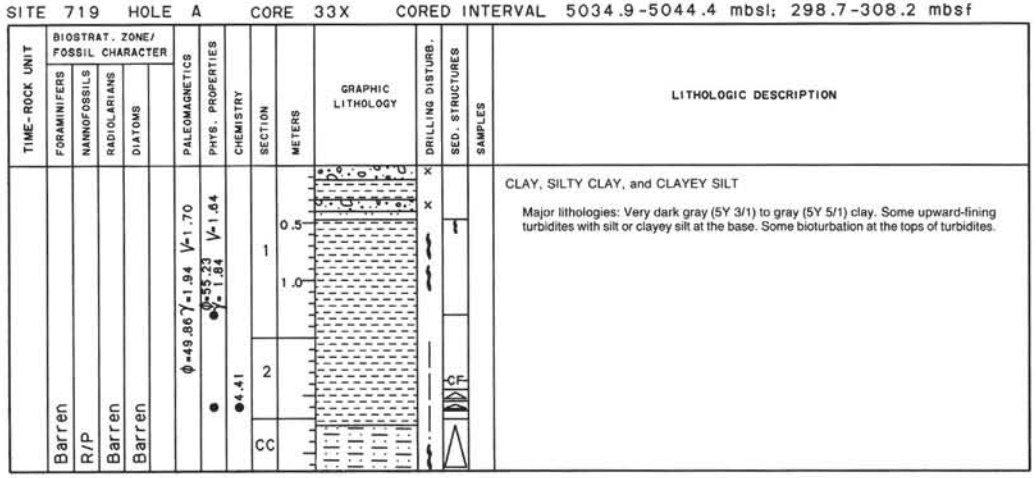
CLAY and SILTY CLAY

Major lithologies: Dark gray (5Y 4/1) to black (5Y 2.5/1) upward-fining cycles of silty clay to clay. Tops of turbidites are severely bioturbated, causing color mottling.

SMEAR SLIDE SUMMARY (%):

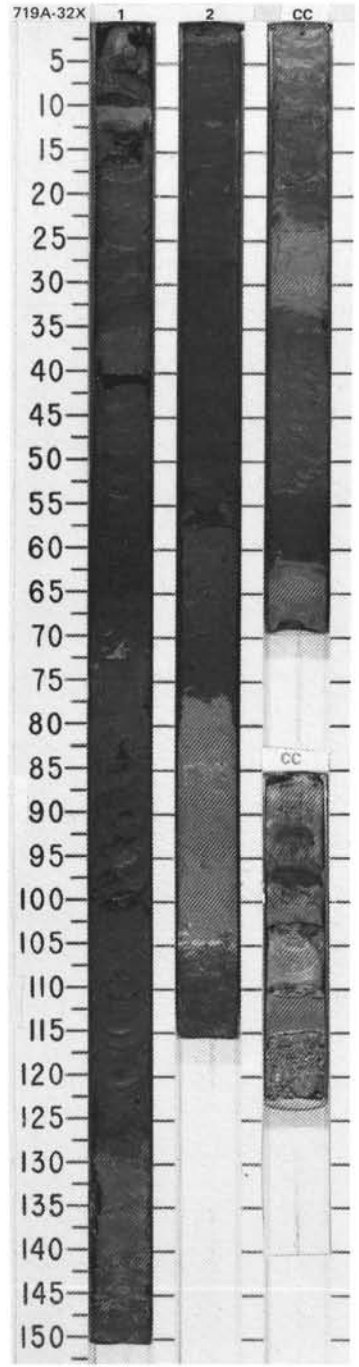
	2, 56 D	2, 84 D	3, 1 D	3, 42 D	CC, 7 D	CC, 34 D
TEXTURE:						
Sand	—	—	5	—	—	5
Silt	95	40	65	35	35	75
Clay	5	60	30	65	65	20
COMPOSITION:						
Access. minerals	3	4	3	3	2	3
Clay	5	60	30	62	65	15
Feldspar	20	15	5	10	5	15
Hematite	Tr	—	—	—	—	—
Inorganic calcite	1	—	—	—	—	—
Mica	1	1	—	Tr	Tr	2
Nannofossils	—	—	—	—	—	Tr
Opaques	10	—	2	—	3	Tr
Quartz	60	20	60	25	25	65

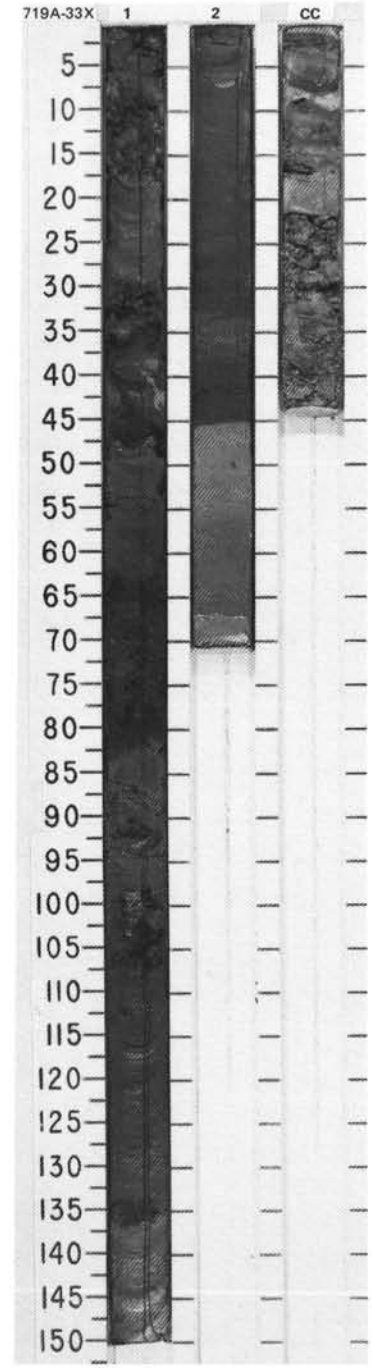
SITE 719 HOLE A CORE 33X CORED INTERVAL 5034.9-5044.4 mbsl; 298.7-308.2 mbsf



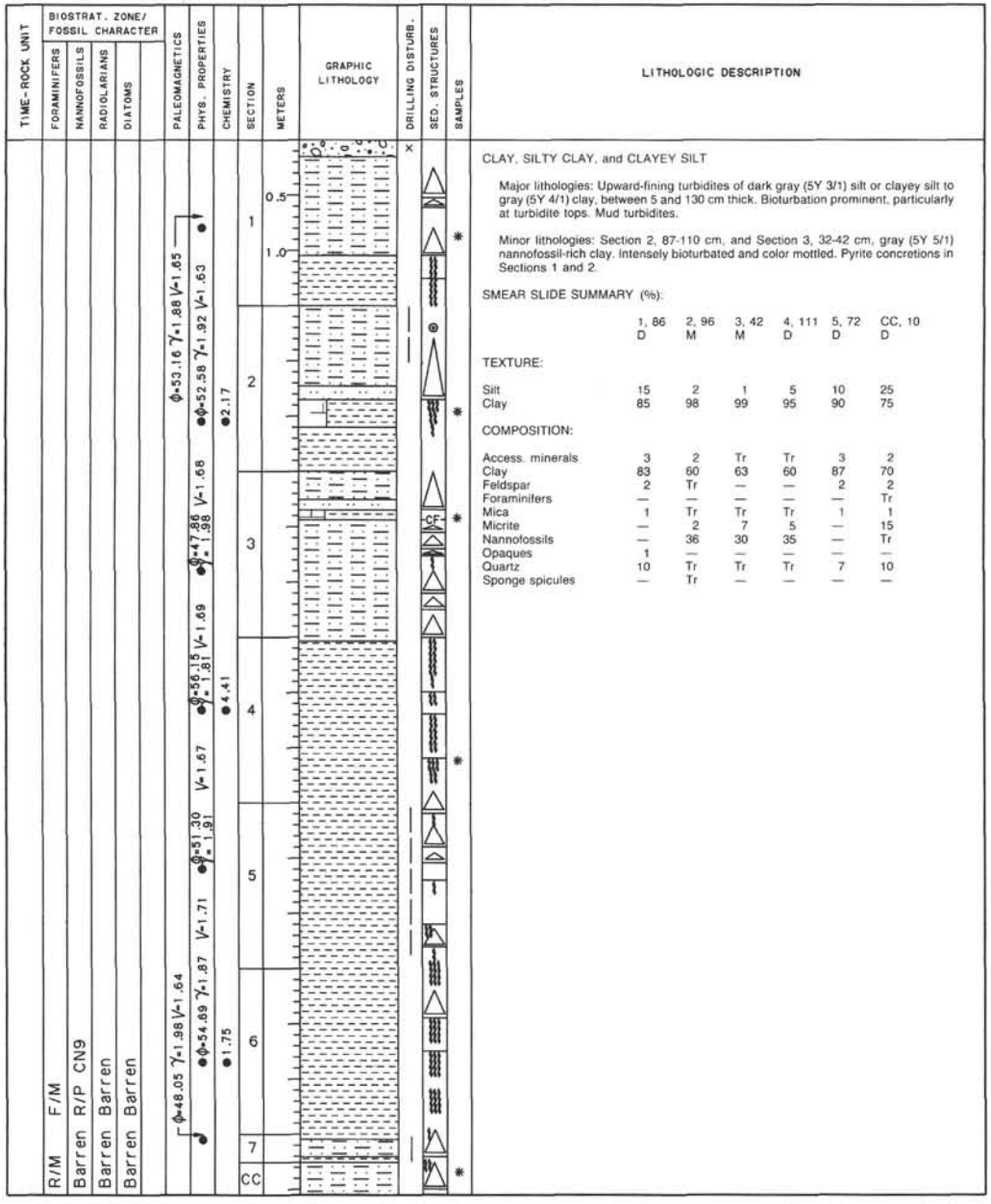
CLAY, SILTY CLAY, and CLAYEY SILT

Major lithologies: Very dark gray (5Y 3/1) to gray (5Y 5/1) clay. Some upward-fining turbidites with silt or clayey silt at the base. Some bioturbation at the tops of turbidites.





SITE 719 HOLE A CORE 34X CORED INTERVAL 5044.4-5053.9 mbsl; 308.2-317.7 mbsf



LITHOLOGIC DESCRIPTION

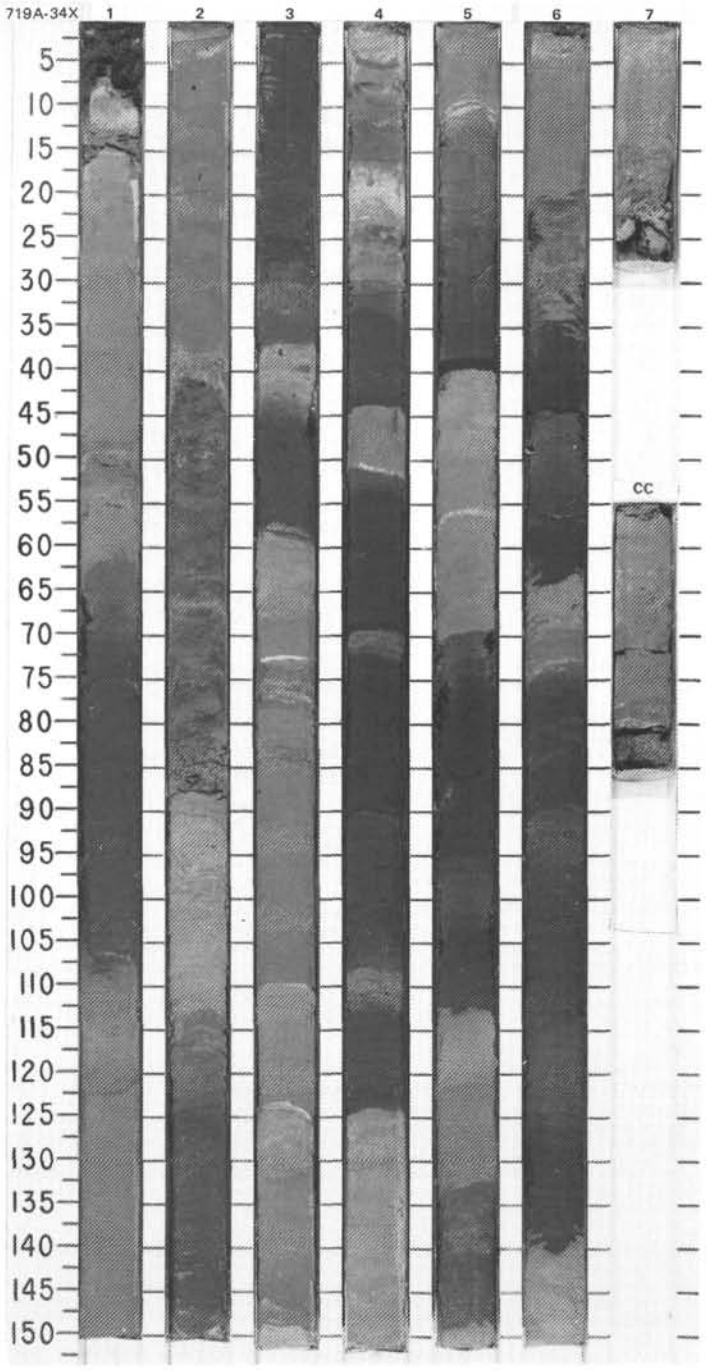
CLAY, SILTY CLAY, and CLAYEY SILT

Major lithologies: Upward-fining turbidites of dark gray (5Y 3/1) silt or clayey silt to gray (5Y 4/1) clay, between 5 and 130 cm thick. Bioturbation prominent, particularly at turbidite tops. Mud turbidites.

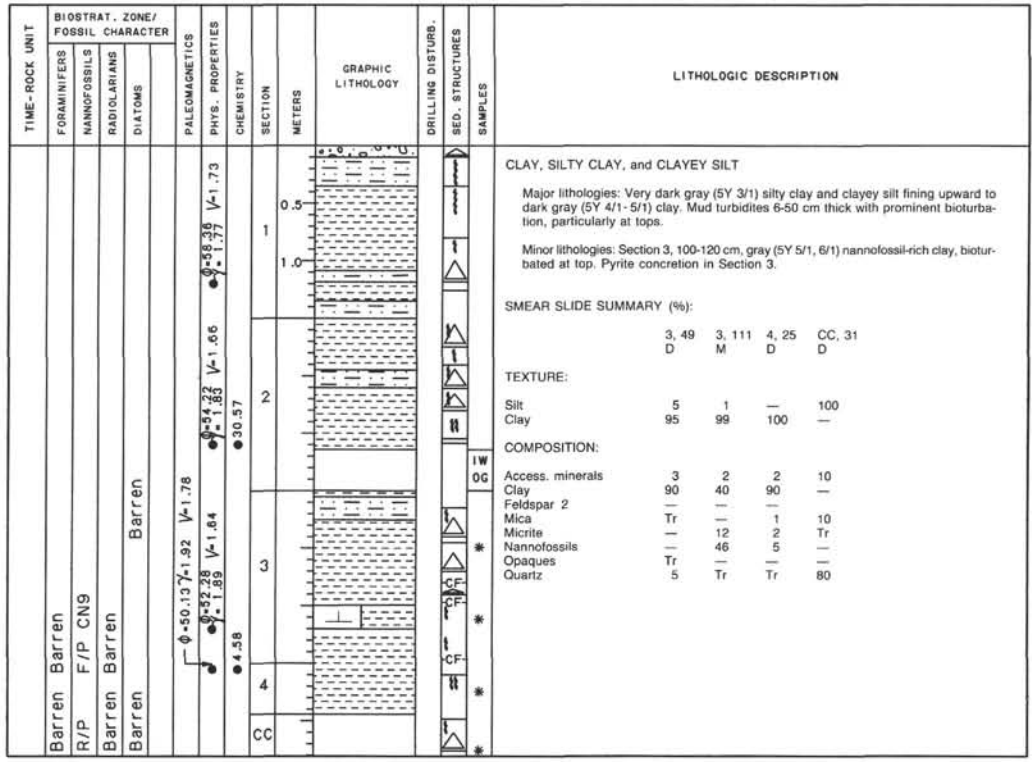
Minor lithologies: Section 2, 87-110 cm, and Section 3, 32-42 cm, gray (5Y 5/1) nannofossil-rich clay. Intensely bioturbated and color mottled. Pyrite concretions in Sections 1 and 2.

SMEAR SLIDE SUMMARY (%):

	1, 86 D	2, 96 M	3, 42 M	4, 111 D	5, 72 D	CC, 10 D
TEXTURE:						
Silt	15	2	1	5	10	25
Clay	85	98	99	95	90	75
COMPOSITION:						
Access. minerals	3	2	Tr	Tr	3	2
Clay	83	60	63	60	87	70
Feldspar	2	Tr	—	—	2	2
Foraminifers	—	—	—	—	—	Tr
Mica	1	Tr	Tr	Tr	1	1
Micrite	—	2	7	5	—	15
Nannofossils	—	36	30	35	—	Tr
Opaques	1	—	—	—	—	—
Quartz	10	Tr	Tr	Tr	7	10
Sponge spicules	—	Tr	—	—	—	—



SITE 719 HOLE A CORE 35X CORED INTERVAL 5053.9-5063.4 mbsl; 317.7-327.2 mbsf



LITHOLOGIC DESCRIPTION

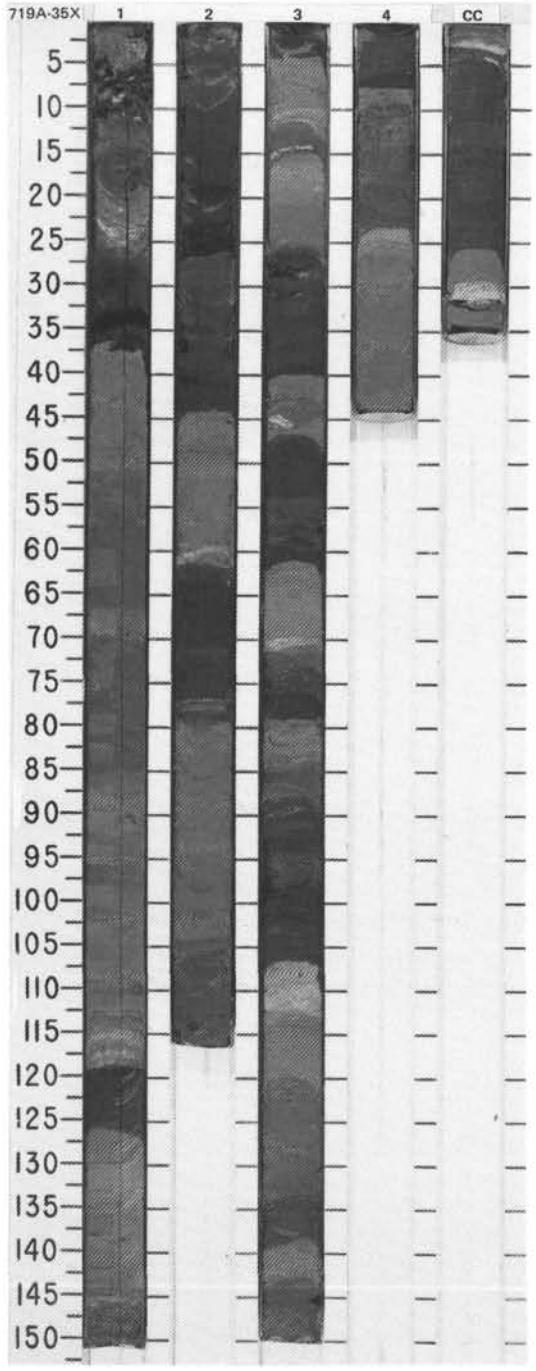
CLAY, SILTY CLAY, and CLAYEY SILT

Major lithologies: Very dark gray (5Y 3/1) silty clay and clayey silt fining upward to dark gray (5Y 4/1-5/1) clay. Mud turbidites 6-50 cm thick with prominent bioturbation, particularly at tops.

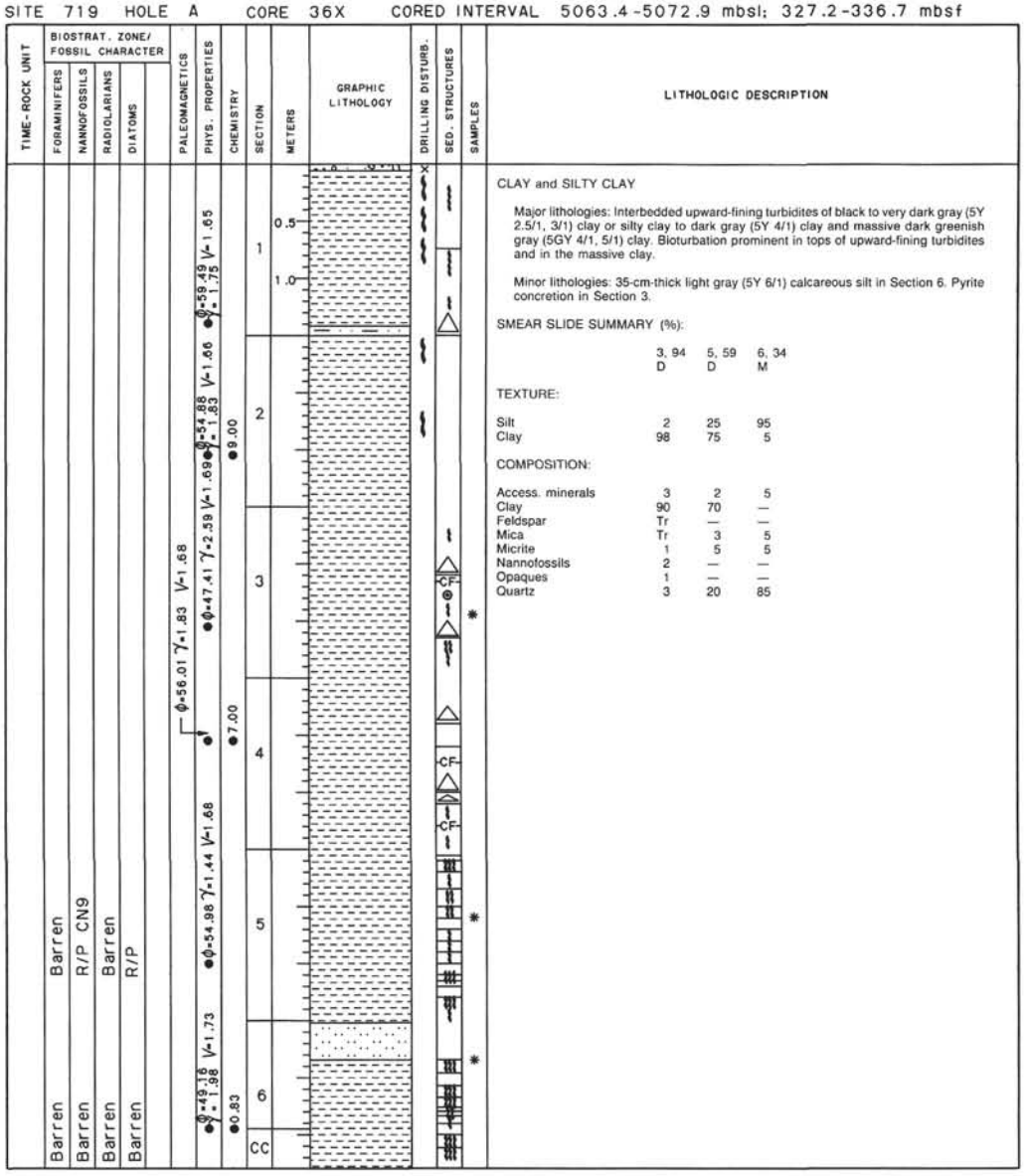
Minor lithologies: Section 3, 100-120 cm, gray (5Y 5/1, 6/1) nannofossil-rich clay, bioturbated at top. Pyrite concretion in Section 3.

SMEAR SLIDE SUMMARY (%):

	3, 49 D	3, 111 M	4, 25 D	CC, 31 D
TEXTURE:				
Silt	5	1	—	100
Clay	95	99	100	—
COMPOSITION:				
Access. minerals	3	2	2	10
Clay	90	40	90	—
Feldspar 2	—	—	—	
Mica	Tr	—	1	10
Micrite	—	12	2	Tr
Nannofossils	—	46	5	—
Opaques	Tr	—	—	—
Quartz	5	Tr	Tr	80



SITE 719 HOLE A CORE 36X CORED INTERVAL 5063.4-5072.9 mbsl; 327.2-336.7 mbsf



LITHOLOGIC DESCRIPTION

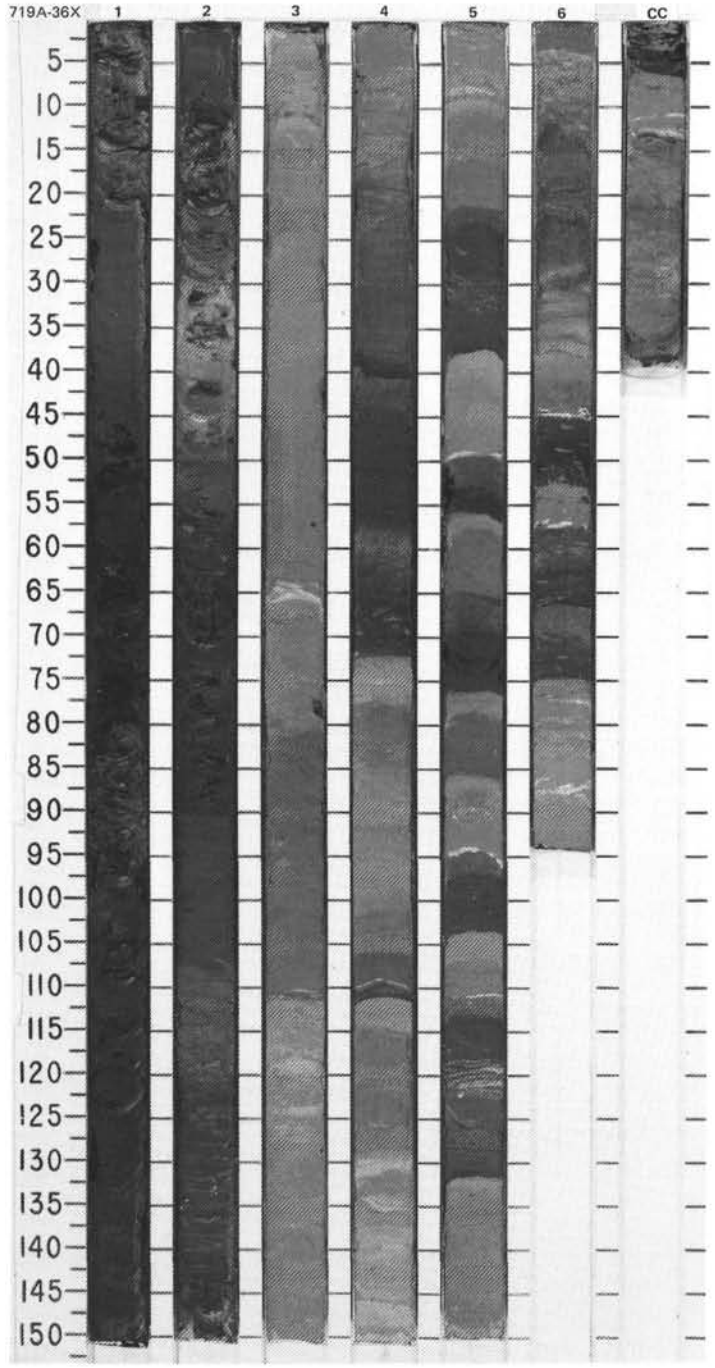
CLAY and SILTY CLAY

Major lithologies: Interbedded upward-fining turbidites of black to very dark gray (5Y 2.5/1, 3/1) clay or silty clay to dark gray (5Y 4/1) clay and massive dark greenish gray (5GY 4/1, 5/1) clay. Bioturbation prominent in tops of upward-fining turbidites and in the massive clay.

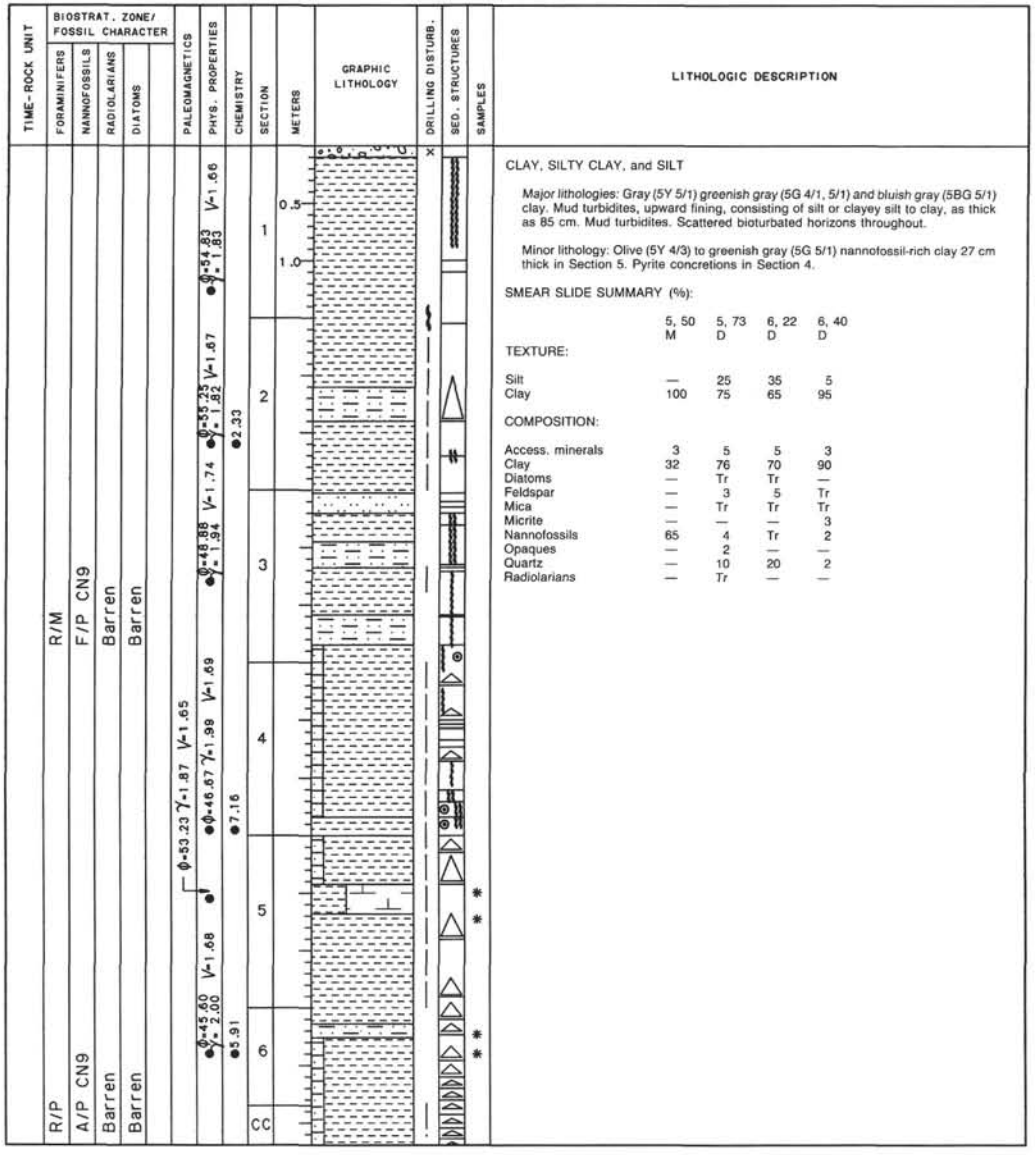
Minor lithologies: 35-cm-thick light gray (5Y 6/1) calcareous silt in Section 6. Pyrite concretion in Section 3.

SMEAR SLIDE SUMMARY (%):

	3, 94 D	5, 59 D	6, 34 M
TEXTURE:			
Silt	2	25	95
Clay	98	75	5
COMPOSITION:			
Access. minerals	3	2	5
Clay	90	70	—
Feldspar	Tr	—	—
Mica	Tr	3	5
Micrite	1	5	5
Nannofossils	2	—	—
Opaques	1	—	—
Quartz	3	20	85



SITE 719 HOLE A CORE 37X CORED INTERVAL 5072.9-5082.4 mbsl; 336.7-346.2 mbsf



LITHOLOGIC DESCRIPTION

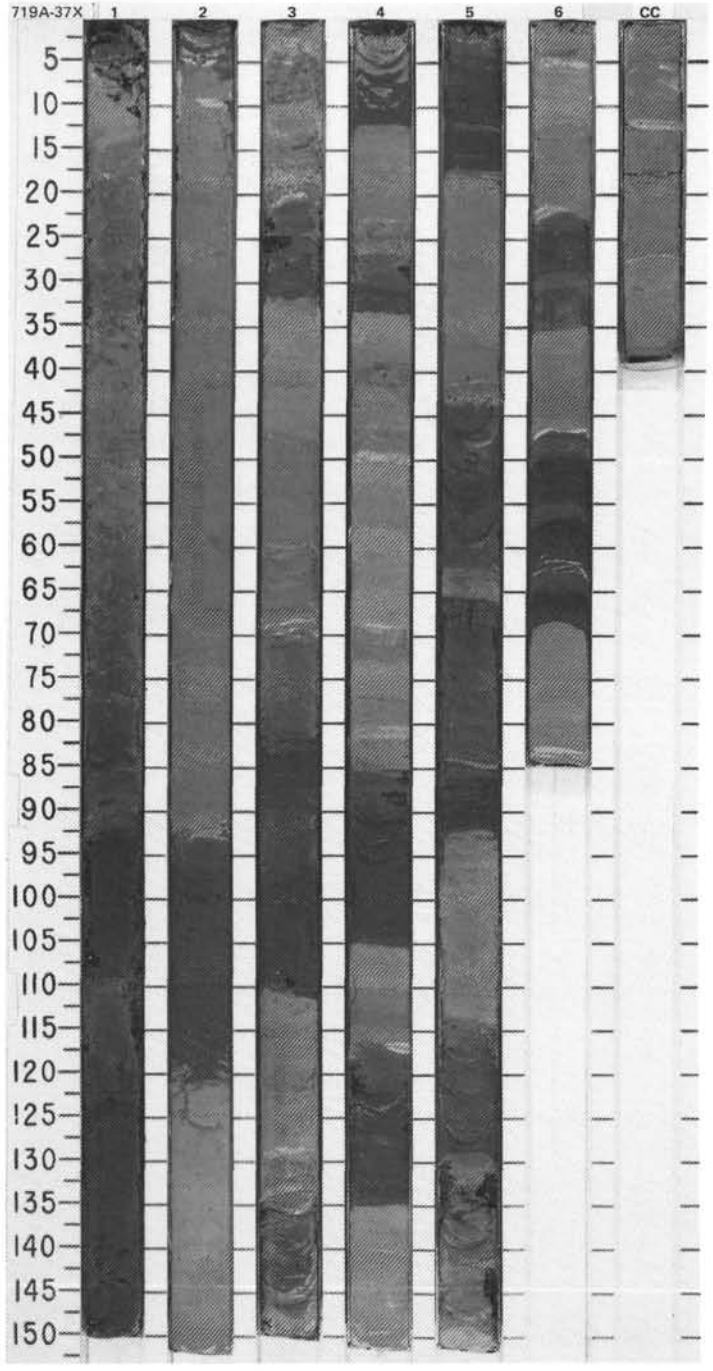
CLAY, SILTY CLAY, and SILT

Major lithologies: Gray (5Y 5/1) greenish gray (5G 4/1, 5/1) and bluish gray (5BG 5/1) clay. Mud turbidites, upward fining, consisting of silt or clayey silt to clay, as thick as 85 cm. Mud turbidites. Scattered bioturbated horizons throughout.

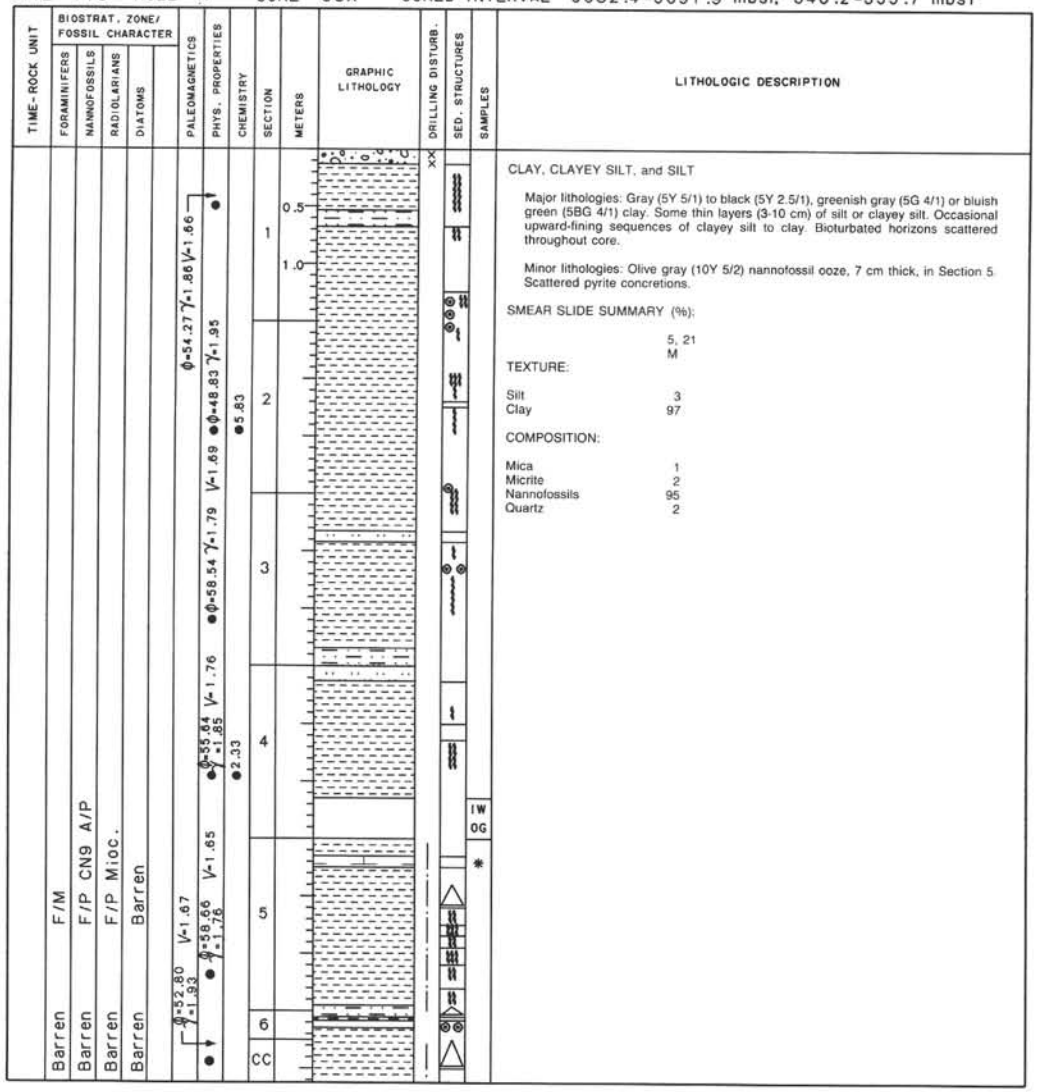
Minor lithology: Olive (5Y 4/3) to greenish gray (5G 5/1) nannofossil-rich clay 27 cm thick in Section 5. Pyrite concretions in Section 4.

SMEAR SLIDE SUMMARY (%):

	5, 50 M	5, 73 D	6, 22 D	6, 40 D
TEXTURE:				
Silt	—	25	35	5
Clay	100	75	65	95
COMPOSITION:				
Access. minerals	3	5	5	3
Clay	32	76	70	90
Diatoms	—	Tr	Tr	—
Feldspar	—	3	5	Tr
Mica	—	Tr	Tr	Tr
Micrite	—	—	—	3
Nannofossils	65	4	Tr	2
Opaques	—	2	—	—
Quartz	—	10	20	2
Radiolarians	—	Tr	—	—



SITE 719 HOLE A CORE 38X CORED INTERVAL 5082.4-5091.9 mbsl; 346.2-355.7 mbsf



LITHOLOGIC DESCRIPTION

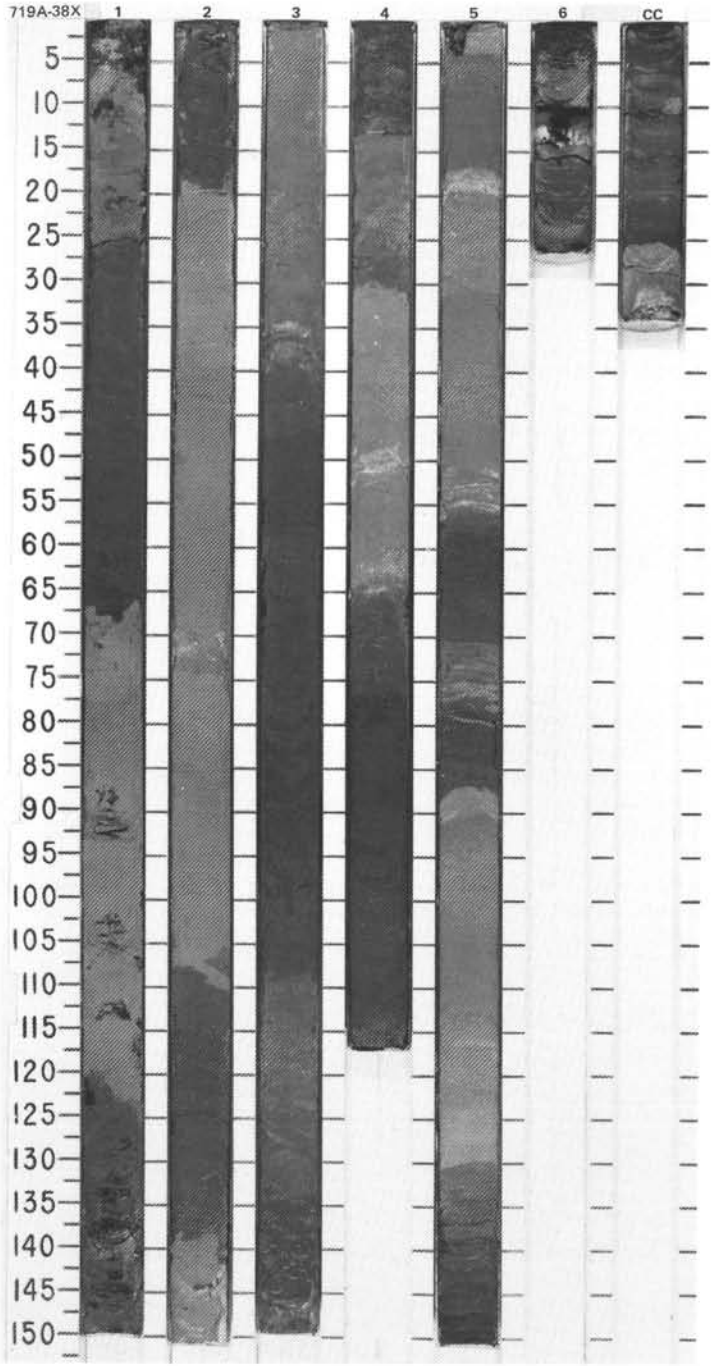
CLAY, CLAYEY SILT, and SILT

Major lithologies: Gray (5Y 5/1) to black (5Y 2.5/1), greenish gray (5G 4/1) or bluish green (5BG 4/1) clay. Some thin layers (3-10 cm) of silt or clayey silt. Occasional upward-fining sequences of clayey silt to clay. Bioturbated horizons scattered throughout core.

Minor lithologies: Olive gray (10Y 5/2) nannofossil ooze, 7 cm thick, in Section 5. Scattered pyrite concretions.

SMEAR SLIDE SUMMARY (%):

	5, 21
	M
TEXTURE:	
Silt	3
Clay	97
COMPOSITION:	
Mica	1
Micrite	2
Nannofossils	95
Quartz	2



SITE 719 HOLE A CORE 39X CORED INTERVAL 5091.9-5101.4 mbsl; 355.7-365.2 mbsf

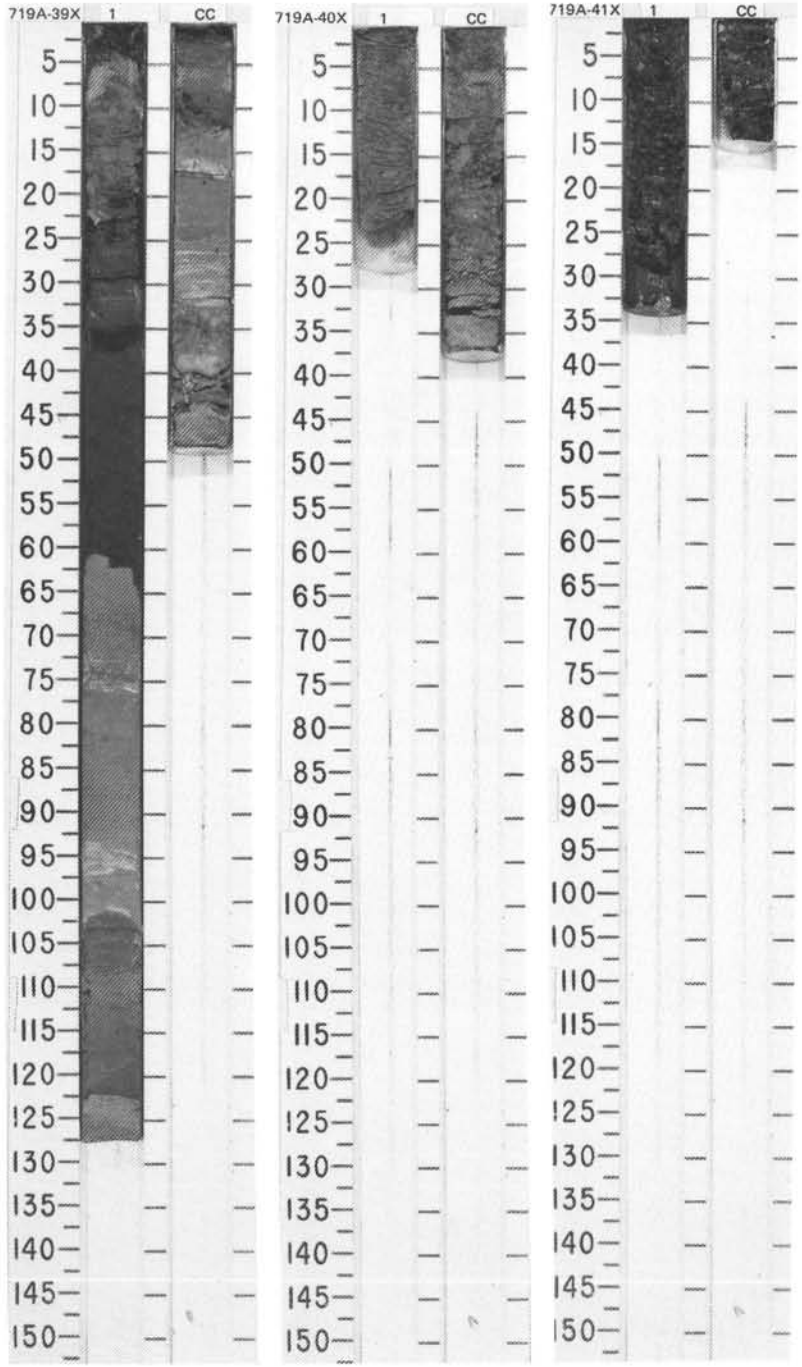
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	Barren	Barren	Barren	Barren		●φ=43.77 γ=2.09 V=1.80	●2.42	1, 2, CC	0.5, 1.0		×			CLAY, SILT, and SAND Major lithologies: Interbedded gray (5Y 4/1) to black (5Y 2.5/1) clay and gray (5Y 4/1) silt. Clay frequently bioturbated. Minor lithology: 10-cm-thick gray (5Y 4/1) sand at base of CC.

SITE 719 HOLE A CORE 40X CORED INTERVAL 5101.4-5110.9 mbsl; 365.2-374.7 mbsf

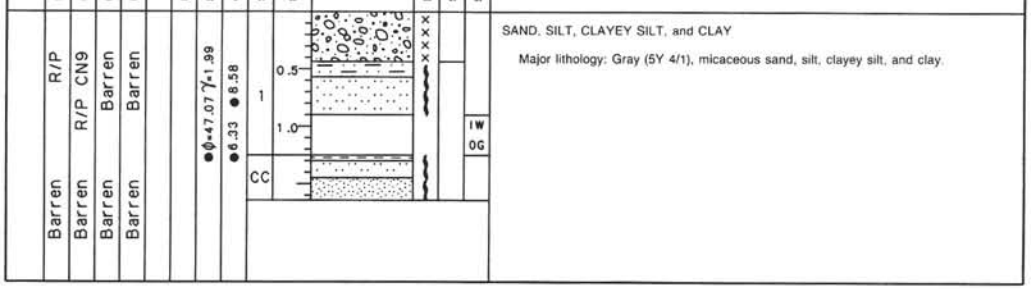
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	Barren	R/P CN9	Barren	Barren				1, CC						SILTY CLAY, SILT, and SANDY SILT Major lithologies: Gray (5Y 4/1-5Y 5/1) calcareous silty clay. Gray (5Y 5/1) calcareous mica-rich silt, coarsening upward to sandy silt in CC.

SITE 719 HOLE A CORE 41X CORED INTERVAL 5110.9-5120.4 mbsl; 374.7-384.2 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	Barren	F/P CN9 CAV.	Barren	Barren				1, CC			× × ×			SILTY CLAY Major lithology: Greenish gray (10Y 4/1) micaceous silty clay.



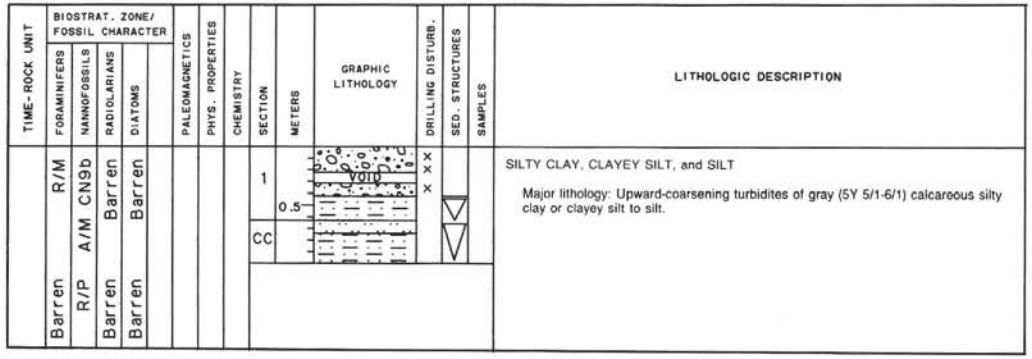
SITE 719 HOLE A CORE 42X CORED INTERVAL 5120.4-5129.9 mbsl; 384.2-393.7 mbsf



SAND, SILT, CLAYEY SILT, and CLAY

Major lithology: Gray (5Y 4/1), micaceous sand, silt, clayey silt, and clay.

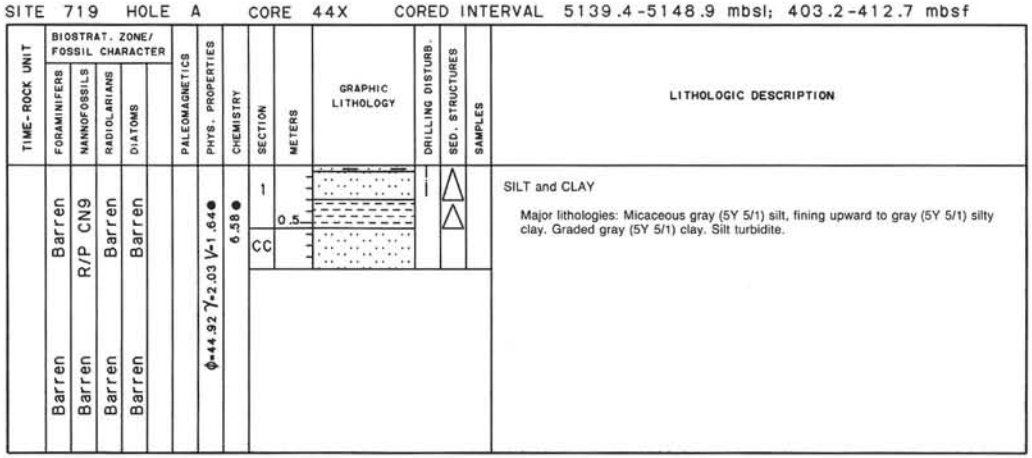
SITE 719 HOLE A CORE 43X CORED INTERVAL 5129.9-5139.4 mbsl; 393.7-403.2 mbsf



SILTY CLAY, CLAYEY SILT, and SILT

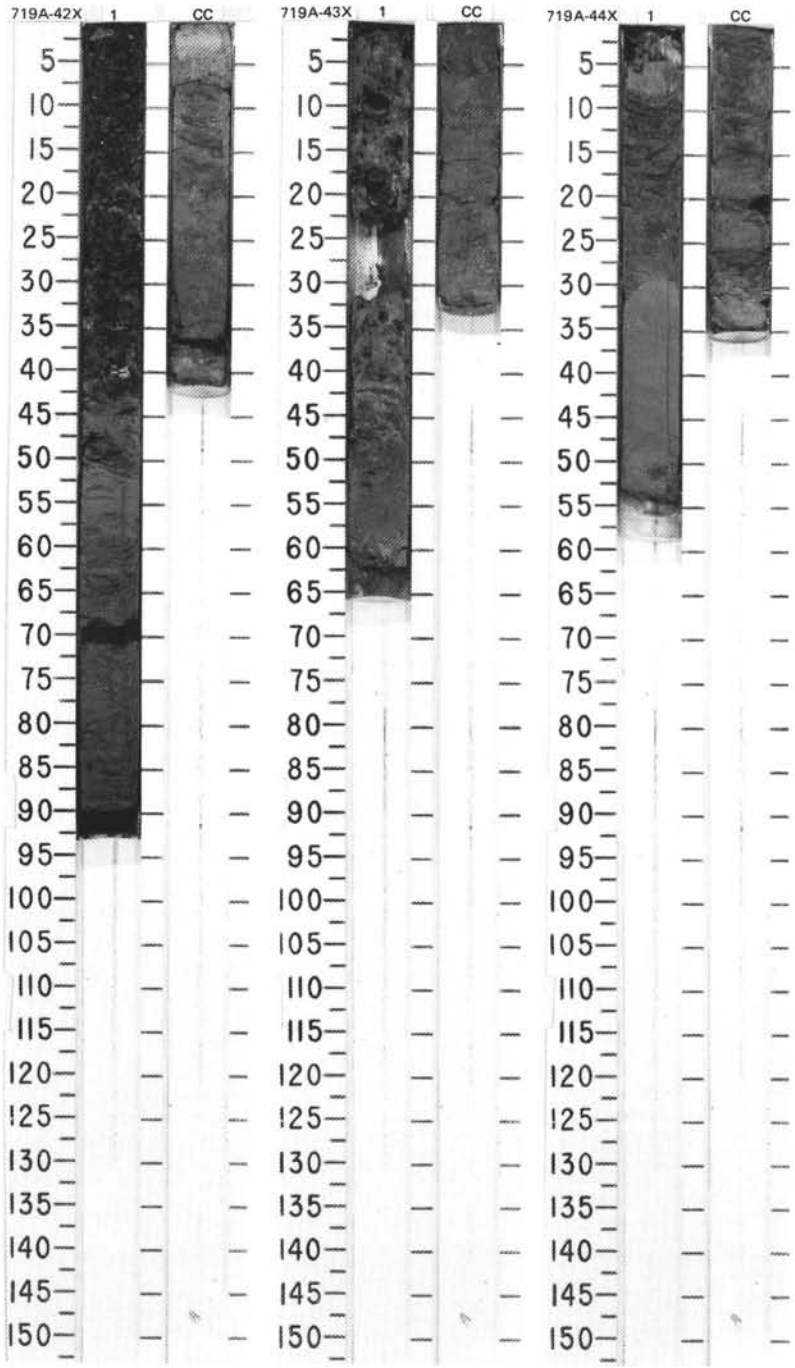
Major lithology: Upward-coarsening turbidites of gray (5Y 5/1-6/1) calcareous silty clay or clayey silt to silt.

SITE 719 HOLE A CORE 44X CORED INTERVAL 5139.4-5148.9 mbsl; 403.2-412.7 mbsf



SILT and CLAY

Major lithologies: Micaceous gray (5Y 5/1) silt, fining upward to gray (5Y 5/1) silty clay. Graded gray (5Y 5/1) clay. Silt turbidite.



SITE 719 HOLE A CORE 45X CORED INTERVAL 5148.9-5158.4 mbsl; 412.7-422.2 mbsf

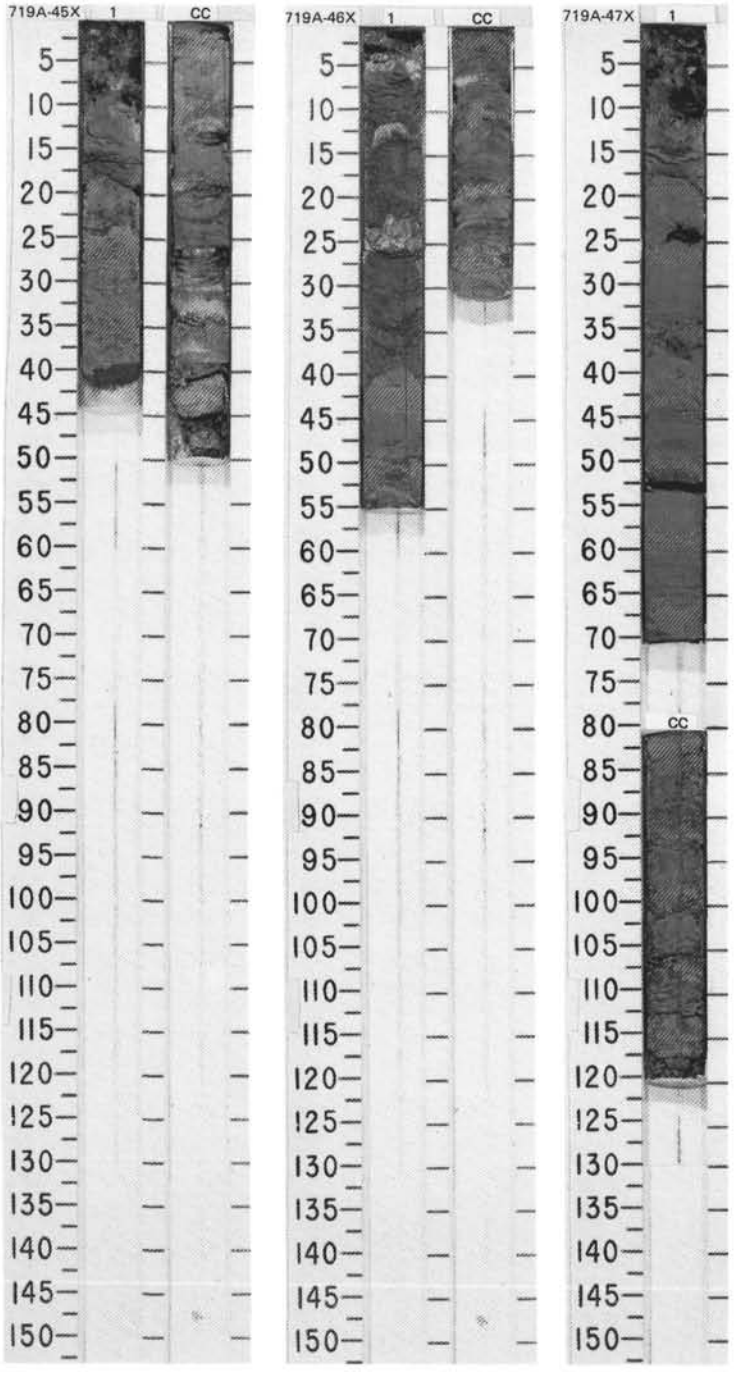
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	Barren	R/P	Barren	Barren				1 CC						CLAYEY SILT and SILTY CLAY Major lithologies: Dark gray (5Y 4/1) clayey silt, fining upward to dark gray (5Y 4/1) silty clay. Silt-mud turbidites.

SITE 719 HOLE A CORE 46X CORED INTERVAL 5158.4-5167.9 mbsl; 422.2-431.7 mbsf

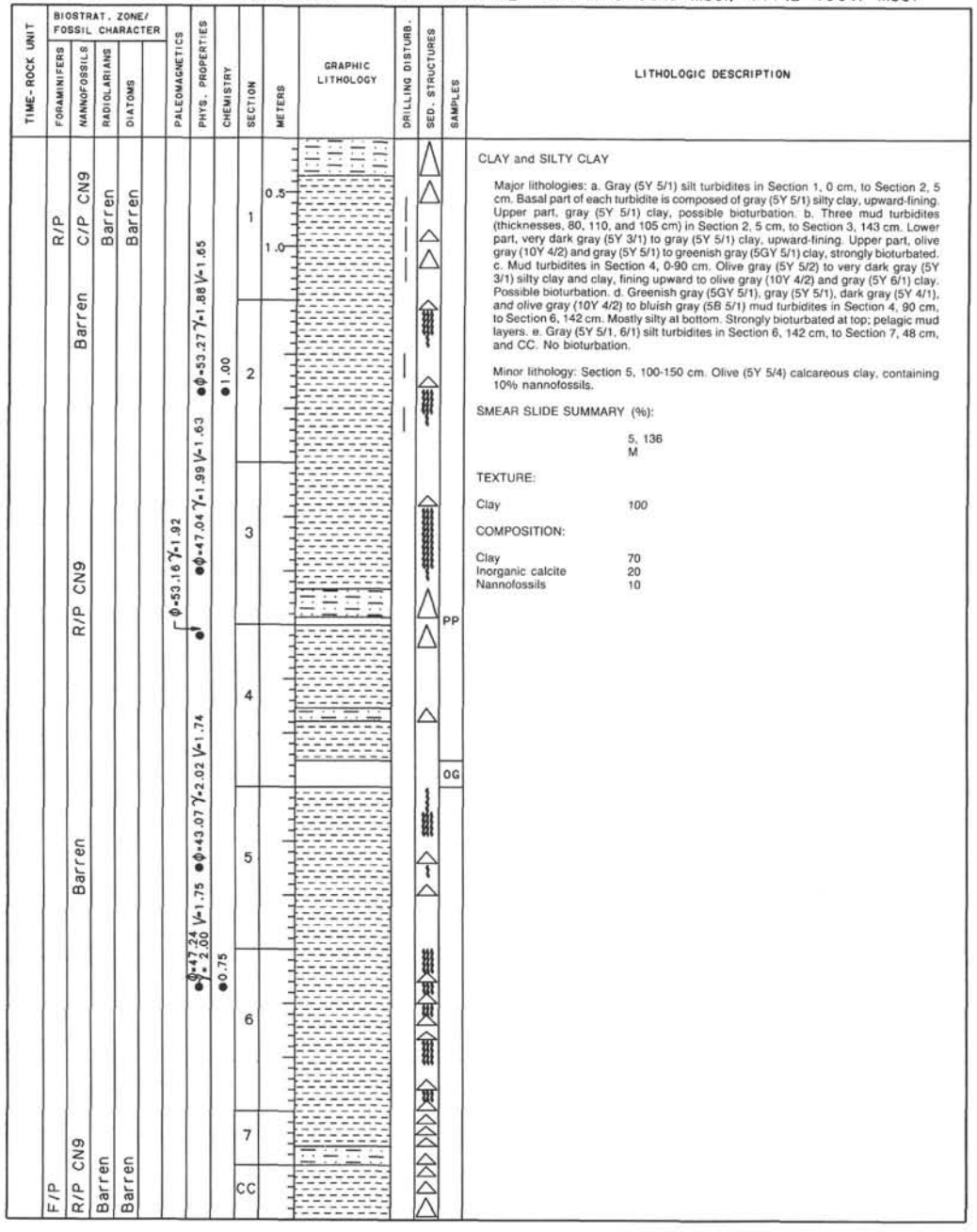
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	Barren	Barren A/P CN9	Barren	Barren				1 CC	0.5					CLAYEY SILT Major lithologies: Dark gray (5Y 4/1) clayey silt and silty clay. Section 1, 20-25 cm, dark gray (5Y 4/1) calcareous ooze with nannofossils (40%).

SITE 719 HOLE A CORE 47X CORED INTERVAL 5167.9-5177.4 mbsl; 431.7-441.2 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	Barren Barren	R/P R/P	Barren Barren	Barren Barren			8.91 11.58	1 CC	0.5				IW	CLAY, SILTY CLAY, and SILT Major lithologies: a. Gray (5Y 5/1) silty clay, fining upward to gray (5Y 5/1) clay, in Section 1. b. Gray (5Y 6/1) silt, grading to clayey silt and silty clay, in CC.



SITE 719 HOLE A CORE 48X CORED INTERVAL 5177.4-5186.9 mbsl; 441.2-450.7 mbsf



LITHOLOGIC DESCRIPTION

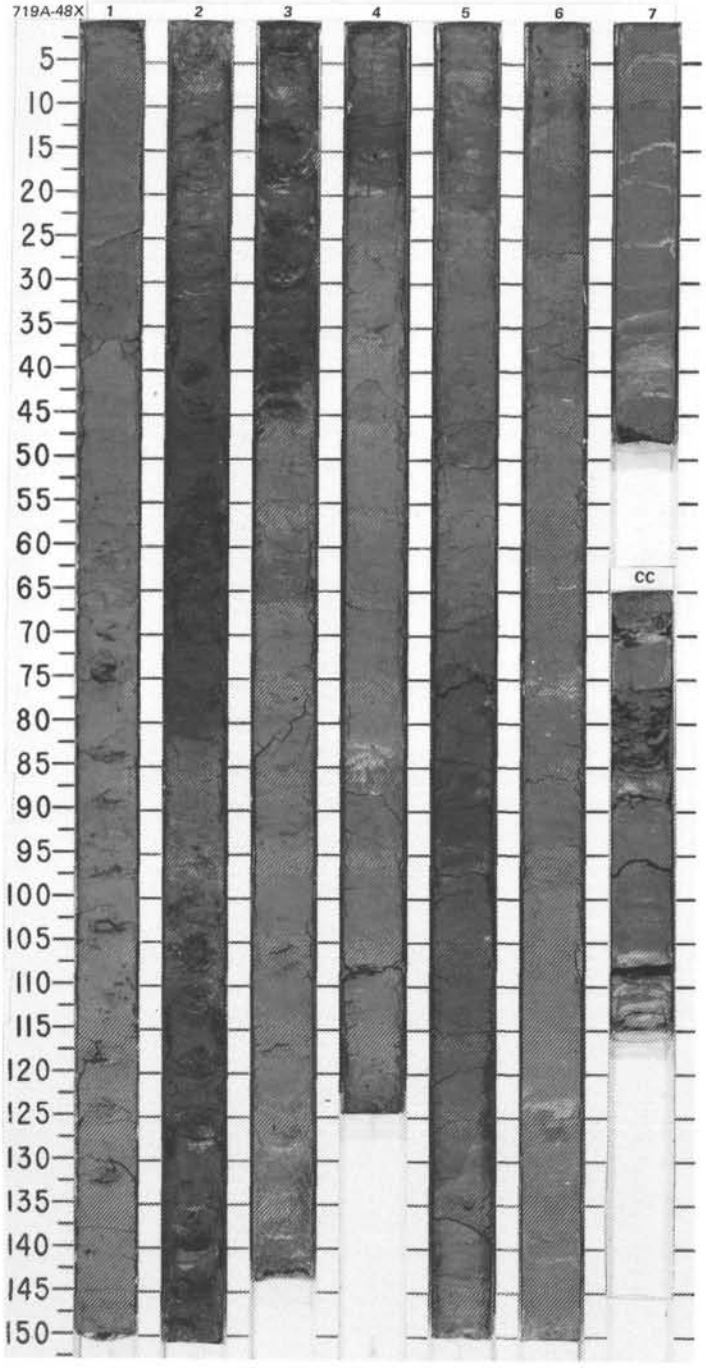
CLAY and SILTY CLAY

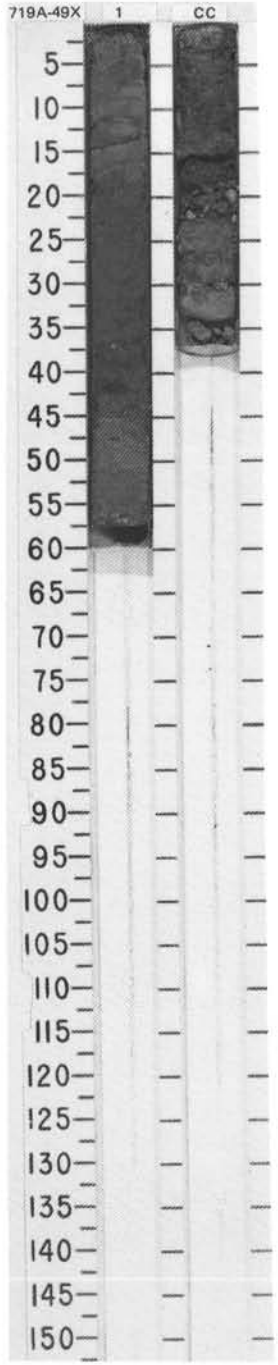
Major lithologies: a. Gray (5Y 5/1) silt turbidites in Section 1, 0 cm, to Section 2, 5 cm. Basal part of each turbidite is composed of gray (5Y 5/1) silty clay, upward-fining. Upper part, gray (5Y 5/1) clay, possible bioturbation. b. Three mud turbidites (thicknesses, 80, 110, and 105 cm) in Section 2, 5 cm, to Section 3, 143 cm. Lower part, very dark gray (5Y 3/1) to gray (5Y 5/1) clay, upward-fining. Upper part, olive gray (10Y 4/2) and gray (5Y 5/1) to greenish gray (5GY 5/1) clay, strongly bioturbated. c. Mud turbidites in Section 4, 0-90 cm. Olive gray (5Y 5/2) to very dark gray (5Y 3/1) silty clay and clay, fining upward to olive gray (10Y 4/2) and gray (5Y 6/1) clay. Possible bioturbation. d. Greenish gray (5GY 5/1), gray (5Y 5/1), dark gray (5Y 4/1), and olive gray (10Y 4/2) to bluish gray (5B 5/1) mud turbidites in Section 4, 90 cm, to Section 6, 142 cm. Mostly silty at bottom. Strongly bioturbated at top; pelagic mud layers. e. Gray (5Y 5/1, 6/1) silt turbidites in Section 6, 142 cm, to Section 7, 48 cm, and CC. No bioturbation.

Minor lithology: Section 5, 100-150 cm. Olive (5Y 5/4) calcareous clay, containing 10% nannofossils.

SMEAR SLIDE SUMMARY (%):

	5, 136 M
TEXTURE:	
Clay	100
COMPOSITION:	
Clay	70
Inorganic calcite	20
Nannofossils	10



SITE 719 HOLE A CORE 49X CORED INTERVAL 5186.9-5196.4 mbsl; 450.7-460.2 mbsf

TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
	Barren	R/P CN9	Barren	Barren			●12.74	1	0.5				IW	SANDY SILT and CLAY Major lithology: Dark gray (5Y 4/1) sandy silt, fining upward to gray (5Y 5/1) clay in Section 1. Silty turbidite.
	Barren	Barren	Barren	Barren				CC