775A-1X NOT CURATED

SITE 777 HOLE A CORE 1H CORED INTERVAL 5805.5-5815.0 mbsl; 1.0-10.5 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

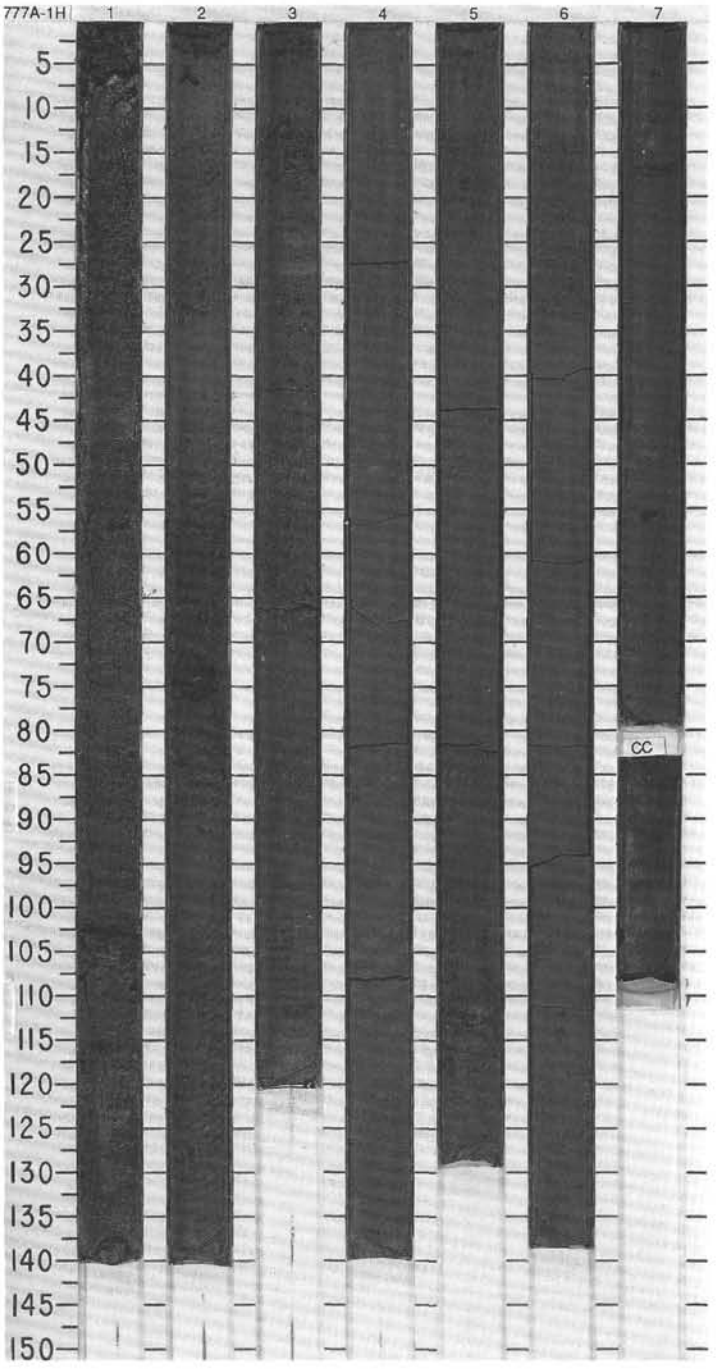
LITHOLOGIC DESCRIPTION

CLAY with MANGANESE NODULES

Major lithology: Clay, hemipelagic, dark brown to red brown (5YR 4/3 to 10YR 3/4); silty in parts, soft to very soft; predominantly structureless. Slightly to moderately disturbed; silty light to medium orange brown layers (7.5YR 5/4) occur in Section 1, 93 and 123 cm, Section 2, 85 cm, Section 4, 102 cm and Section 5, 110 cm. Isolated, rounded manganese nodules, ~3 cm in diameter, occur in Section 1, 137 cm, and Section 2, 71 cm.

SMEAR SLIDE SUMMARY (%):

	1, 4 D	1, 45 D	2, 104 D	3, 20 D	3, 70 D	5, 110 M	6, 113 D
TEXTURE:							
Silt	3	10	15	20	5	5	5
Clay	97	90	85	80	95	95	95
COMPOSITION:							
Aggregates	5	—	10	5	7	10	10
Amphibole	—	3	—	—	—	—	—
Diatoms	—	—	—	5	—	—	—
Foraminifers	—	3	—	—	—	—	—
Glass	3	15	3	10	40	7	40
Lithic fragments	—	2	—	—	—	—	—
Mica	10	—	2	Tr	1	Tr	3
Micrite	60	65	65	40	35	70	35
Nannofossils	—	3	—	—	—	—	—
Olivine	—	Tr	—	—	—	—	—
Opaques	2	—	2	1	3	1	1
Plagioclase	3	—	2	2	2	3	2
Pyroxene	—	7	—	—	—	—	—
Quartz	2	—	3	7	2	3	Tr
Radiolarians	1	—	0	25	0	0	0
Silicoflagellates	—	1	—	Tr	—	—	—
Spicules	5	1	2	3	2	3	2
Zeolite	7	—	10	1	7	2	5

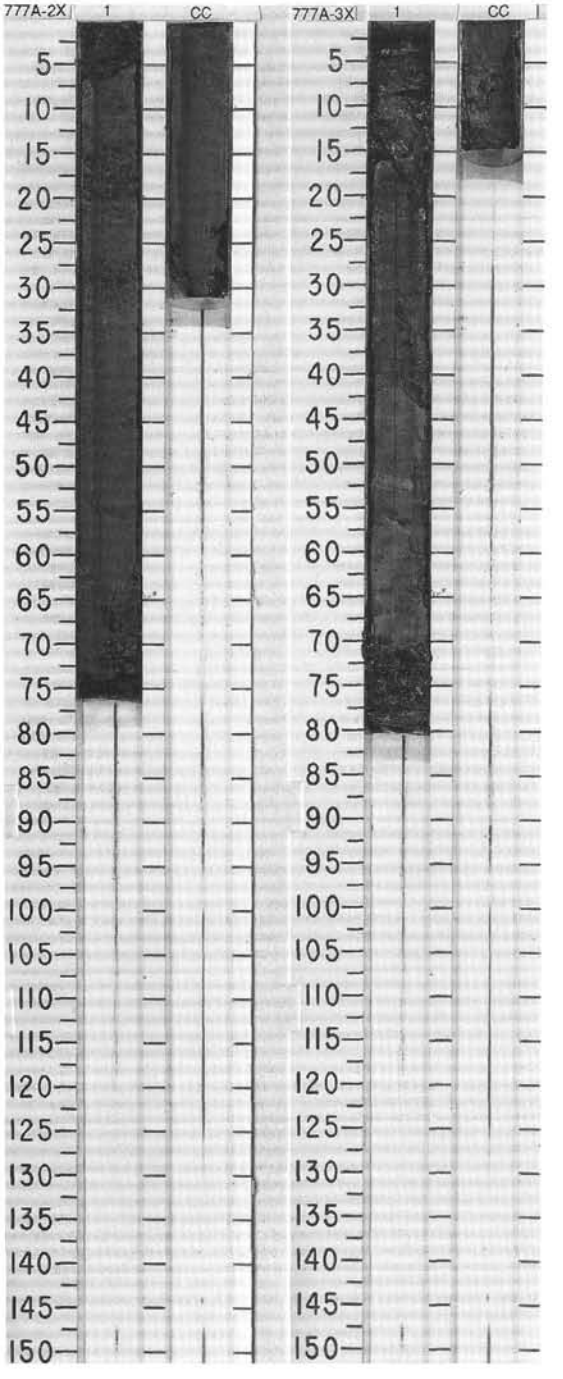


SITE 777 HOLE A CORE 2X CORED INTERVAL 5815.0-5823.0 mbsl; 10.5-18.5 mbsf

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
								1	0.5				*	CLAY Major lithology: Clay, dark brown, massive, soft to soupy at bottom (70 to 74 cm). Hole-in-fill from 0-7 cm. Moderately disturbed by drilling. Clay is hemipelagic. SMEAR SLIDE SUMMARY (%): 1, 3 D TEXTURE: Silt 5 Clay 95 COMPOSITION: Aggregates 10 Glass 10 Mica 3 Micrite 45 Opaques 1 Plagioclase 2 Quartz 3 Spicules 2 Zeolite 20
								CC						

SITE 777 HOLE A CORE 3X CORED INTERVAL 5823.0-5832.6 mbsl; 18.5-28.1 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
								1	0.5				*	CLAY Major lithology: Clay, dark brown (7.5YR 3/2), soft to very soft, sticky, moderately disturbed, soupy at top and bottom of core; interlayered by orange brown clay (7.5YR 5/6) from 1-41 cm to 70 cm; light brown/buff layer at 50 and 52 cm. Clay is hemipelagic. SMEAR SLIDE SUMMARY (%): 1, 51 M TEXTURE: Silt 3 Clay 97 COMPOSITION: Aggregates 3 Glass 15 Mica Tr Micrite 10 Opaques 1 Plagioclase 1 Quartz Tr Spicules 5 Zeolite 65
								CC						



SITE 777 HOLE A CORE 4X CORED INTERVAL 5832.6-5842.0 mbsl; 28.1-37.5 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
								1	0.5 1.0				*	CLAY
								2						
								CC						

Major lithology: Clay, red brown, soft, heavily disturbed, mottled with light brown clay (5YR 8/4); no visible structures, hemipelagic.

Minor lithology: Reddish brown (5YR 5/3) clayey material occurs asdrilling breccia in Section 2, 55 cm, and in core catcher.

SMEAR SLIDE SUMMARY (%):

	1, 134 M
TEXTURE:	
Silt	25
Clay	75
COMPOSITION:	
Aggregates	10
Glass	5
Mica	Tr
Micrite	20
Opaques	Tr
Plagioclase	Tr
Quartz	Tr
Radiolarians	15
Spicules	30
Unknown	15
Zeolite	2

SITE 777 HOLE A CORE 5X CORED INTERVAL 5842.0-5849.0 mbsl; 37.5-44.5 mbsf

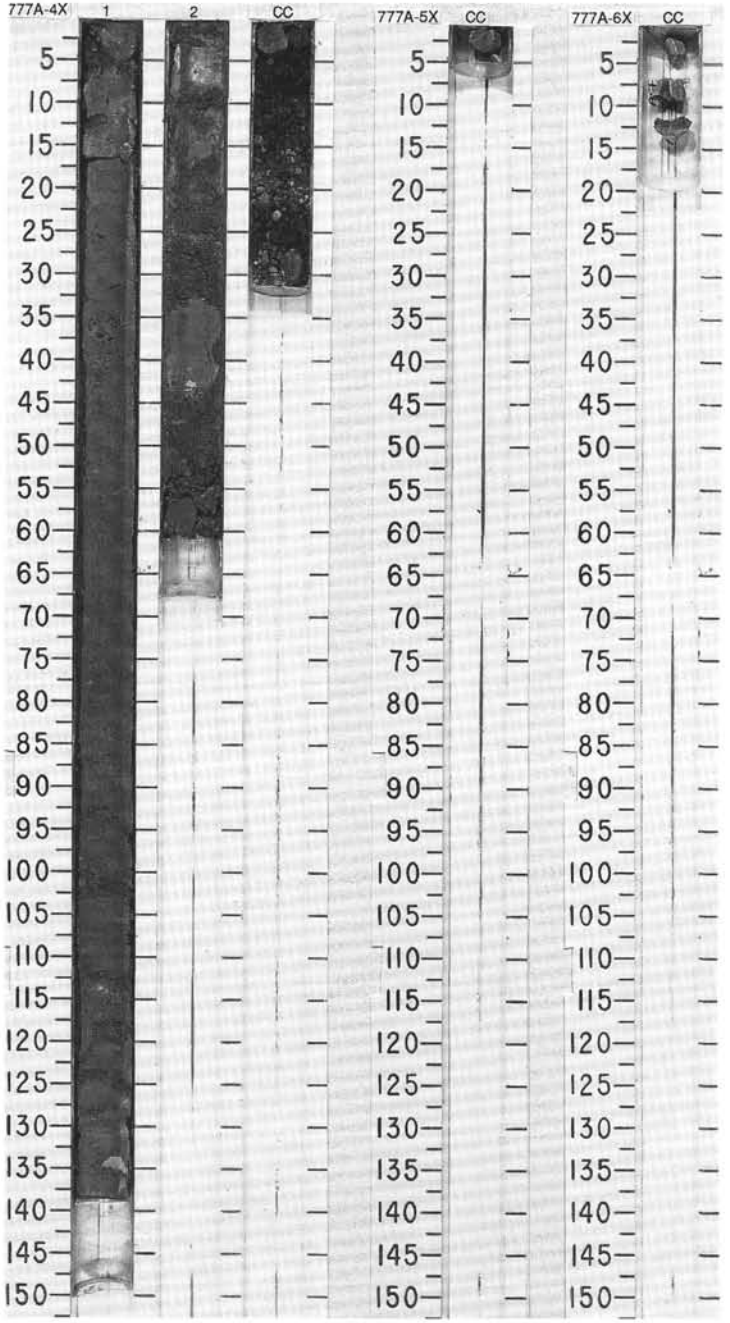
TIME-ROCK UNIT	BIOSTRAT. ZONE/ FOSSIL CHARACTER: FORAMINIFERS	NANNOFOSSILS	RADIOLARIANS	DIATOMS	PALEOMAGNETICS	PHYS. PROPERTIES	CHEMISTRY	SECTION	METERS	GRAPHIC LITHOLOGY	DRILLING DISTURB.	SED. STRUCTURES	SAMPLES	LITHOLOGIC DESCRIPTION
								CC						CHERTY CLAYSTONE

Recovered 3 pieces of pebble-size cherty claystone, dark brown (7.5YR 3/2), banded with light tan (10YR 7/4) to cream (7.5YR 8/6) layers, hard, slight conchoidal fracture, possible microfossils.

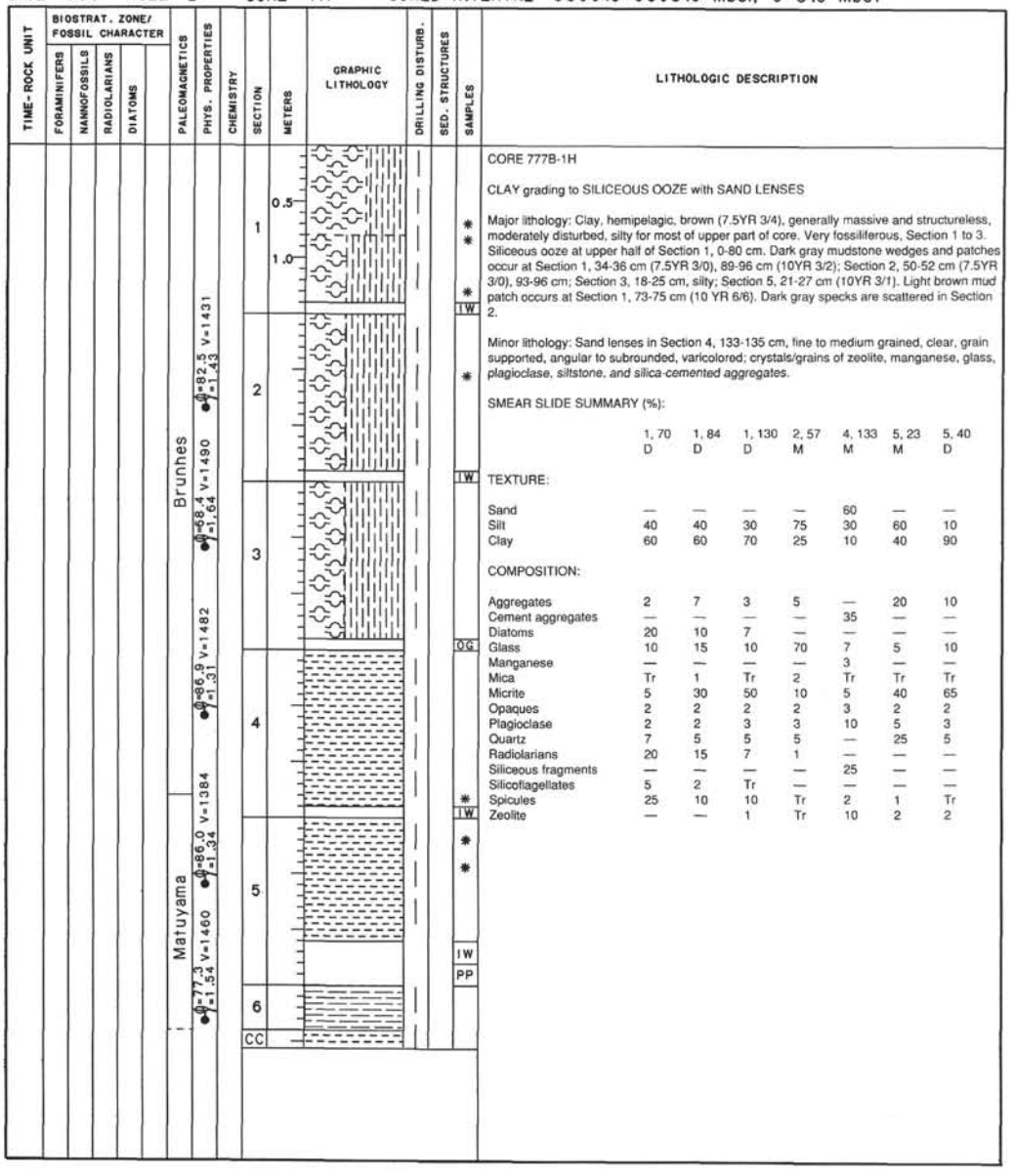
SITE 777 HOLE A CORE 6X CORED INTERVAL 5849.0-5854.0 mbsl; 44.5-49.5 mbsf

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
								CC						CHERT with CLAYSTONE

Recovered 3 large pebbles, 2 pieces chert, 1 piece claystone. Chert, banded, light brown to brown (7.5YR 4/2 to 5YR 7/3, and 7.5YR 6/4) layers, very hard conchoidal fracture; wavy laminae/bedding structures. Claystone, hemipelagic, brown to orange brown (10YR 4/4 to 7.5YR 8/6), silty, hard to firm, grades to porcellanite, wedge/planar laminae.



SITE 777 HOLE B CORE 1H CORED INTERVAL 5800.0-5808.0 mbsl; 0-8.0 mbsf



LITHOLOGIC DESCRIPTION

CORE 777B-1H

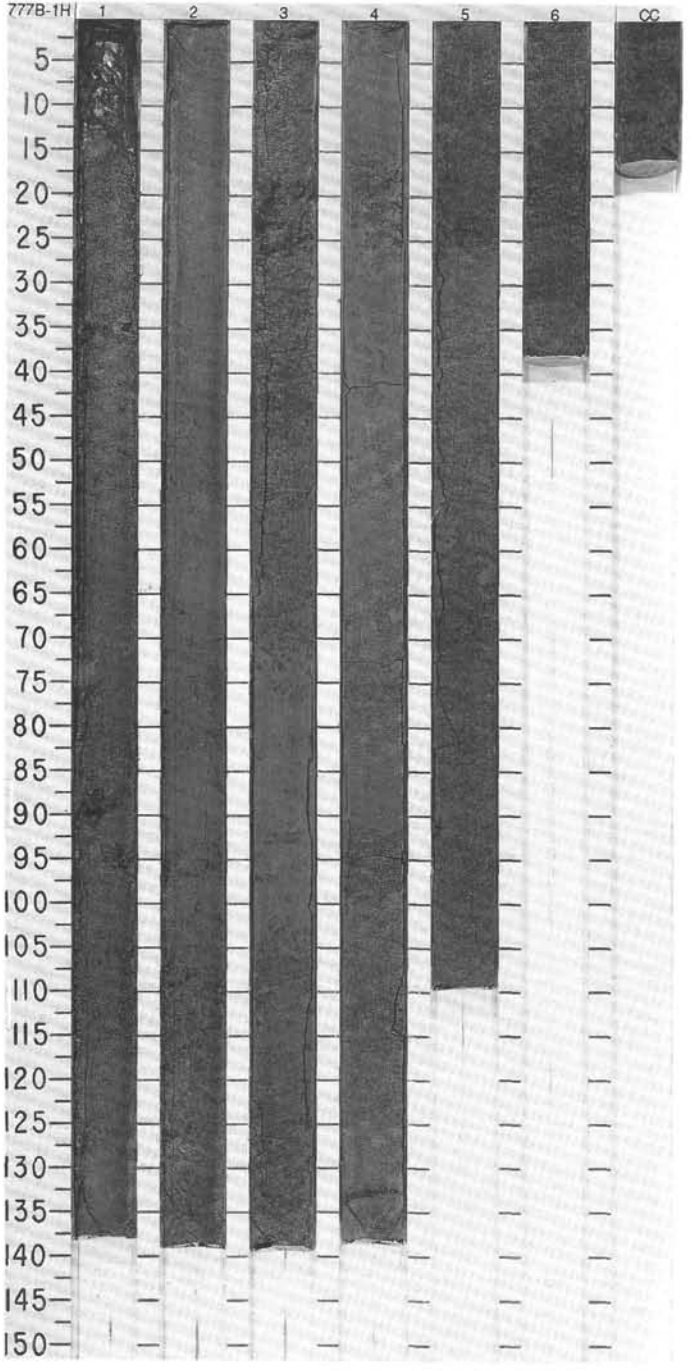
CLAY grading to SILICEOUS OOZE with SAND LENSES

Major lithology: Clay, hemipelagic, brown (7.5YR 3/4), generally massive and structureless, moderately disturbed, silty for most of upper part of core. Very fossiliferous, Section 1 to 3. Siliceous ooze at upper half of Section 1, 0-80 cm. Dark gray mudstone wedges and patches occur at Section 1, 34-36 cm (7.5YR 3/0), 89-96 cm (10YR 3/2); Section 2, 50-52 cm (7.5YR 3/0), 93-96 cm; Section 3, 18-25 cm, silty; Section 5, 21-27 cm (10YR 3/1). Light brown mud patch occurs at Section 1, 73-75 cm (10 YR 6/6). Dark gray specks are scattered in Section 2.

Minor lithology: Sand lenses in Section 4, 133-135 cm, fine to medium grained, clear, grain supported, angular to subrounded, varicolored; crystals/grains of zeolite, manganese, glass, *plagioclase, siltstone, and silica-cemented aggregates.*

SMEAR SLIDE SUMMARY (%):

	1, 70 D	1, 84 D	1, 130 D	2, 57 M	4, 133 M	5, 23 M	5, 40 D
TEXTURE:							
Sand	—	—	—	—	60	—	—
Silt	40	40	30	75	30	60	10
Clay	60	60	70	25	10	40	90
COMPOSITION:							
Aggregates	2	7	3	5	—	20	10
Cement aggregates	—	—	—	—	35	—	—
Diatoms	20	10	7	—	—	—	—
Glass	10	15	10	70	7	5	10
Manganese	—	—	—	—	3	—	—
Mica	Tr	1	Tr	2	Tr	Tr	Tr
Micrite	5	30	50	10	5	40	65
Opaques	2	2	2	2	3	2	2
Plagioclase	2	2	3	3	10	5	3
Quartz	7	5	5	5	—	25	5
Radiolarians	20	15	7	1	—	—	—
Siliceous fragments	—	—	—	—	25	—	—
Silicoflagellates	5	2	Tr	—	—	—	—
Spicules	25	10	10	Tr	2	1	Tr
Zeolite	—	—	1	Tr	10	2	2



SITE 777 HOLE B CORE 2H CORED INTERVAL 5808.0-5817.5 mbsl; 8.0-17.5 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
						Φ=85.3 ρ=1.35 V=1484		1	0.5 1.0				
						Φ=86.5 ρ=1.36 V=1491		2				*	
						Φ=86.3 ρ=1.39 V=1487		3					
						Φ=86.4 ρ=1.32 V=1489		4					
						Φ=86.1 ρ=1.38 V=1483		5					TW
						Φ=86.3 ρ=1.33 V=1498		6					GC
						Φ=83.7 ρ=1.33 V=1503		7					
								CC					

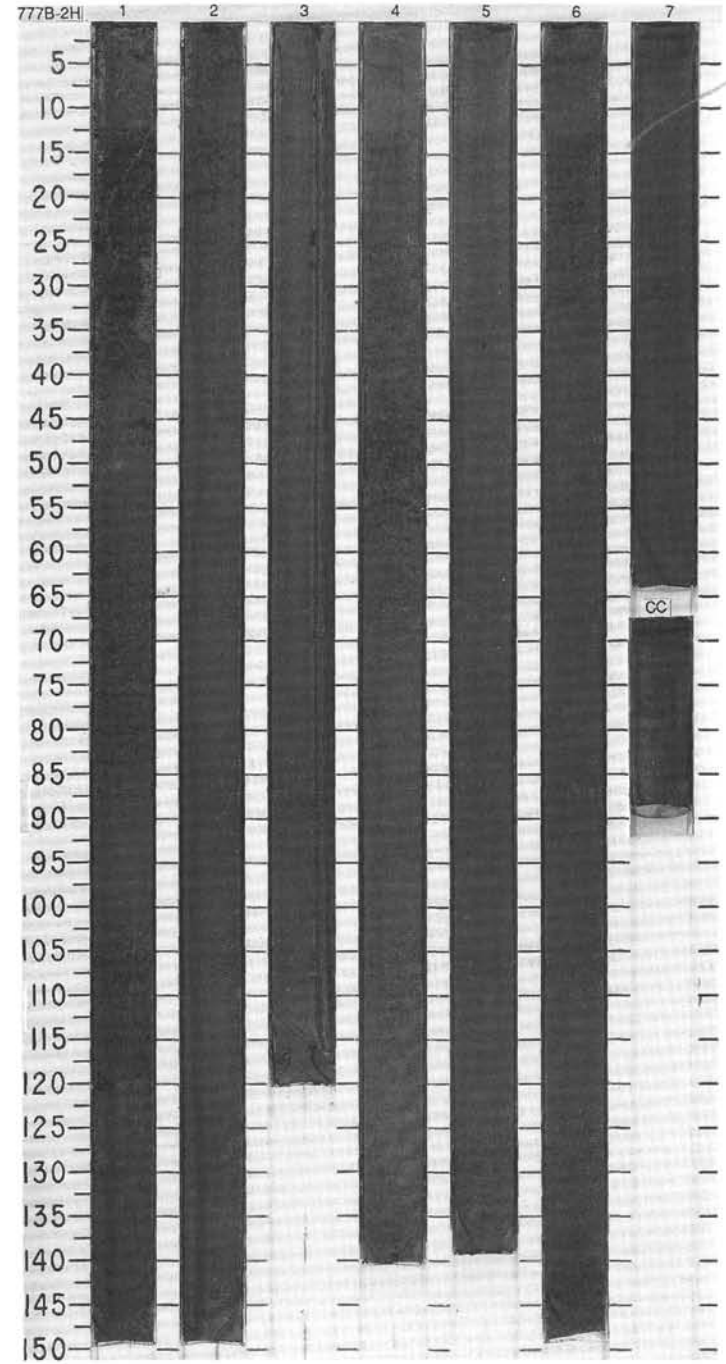
LITHOLOGIC DESCRIPTION

CLAY

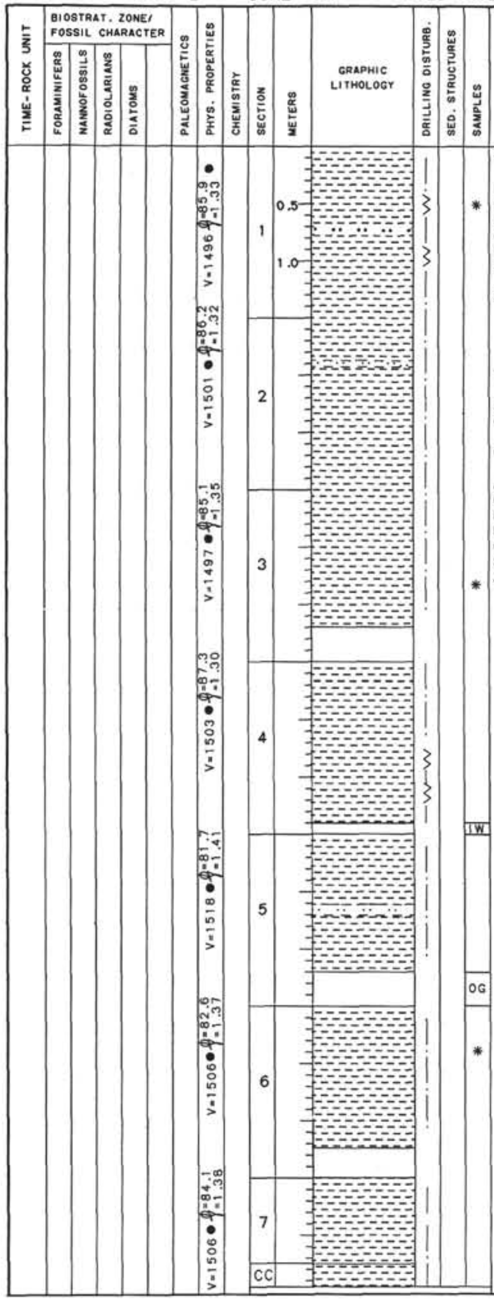
Major lithology: Clay, brown (7.5YR 3/4), firm to soft, massive/structureless, slightly silty, *moderately disturbed scattered mottled appearance. Micronodules of manganese scattered in* Sections 2, 3, 5. Light brown to orange brown clay/mud/ash patches occur sporadically and discontinuously in Sections 1, 3, and 4. Overall hemipelagic, Section 1, 30-40 cm (5YR 5/6), and patches of gray (10YR 4/1) firm mudstone, 50-52 cm (10YR 6/4), 118-120 cm (5 YR 5/6), mudstone nodules, very firm; Section 3, 8-10 cm (10YR 6/4), Section 4, 49-52 cm (7.5YR 5/6). Silty portions occur in Section 6, 13-33 cm, 87 cm (7.5YR 7/6).

SMEAR SLIDE SUMMARY (%):

	2, 70
	D
TEXTURE:	
Silt	5
Clay	95
COMPOSITION:	
Aggregates	7
lass	60
Mica	Tr
Micrite	10
Opaques	2
Plagioclase	5
Quartz	5
Spicules	3
Zeolite	7



SITE 777 HOLE B CORE 3H CORED INTERVAL 5817.5-5827.0 mbsl; 17.5-27.0 mbsf



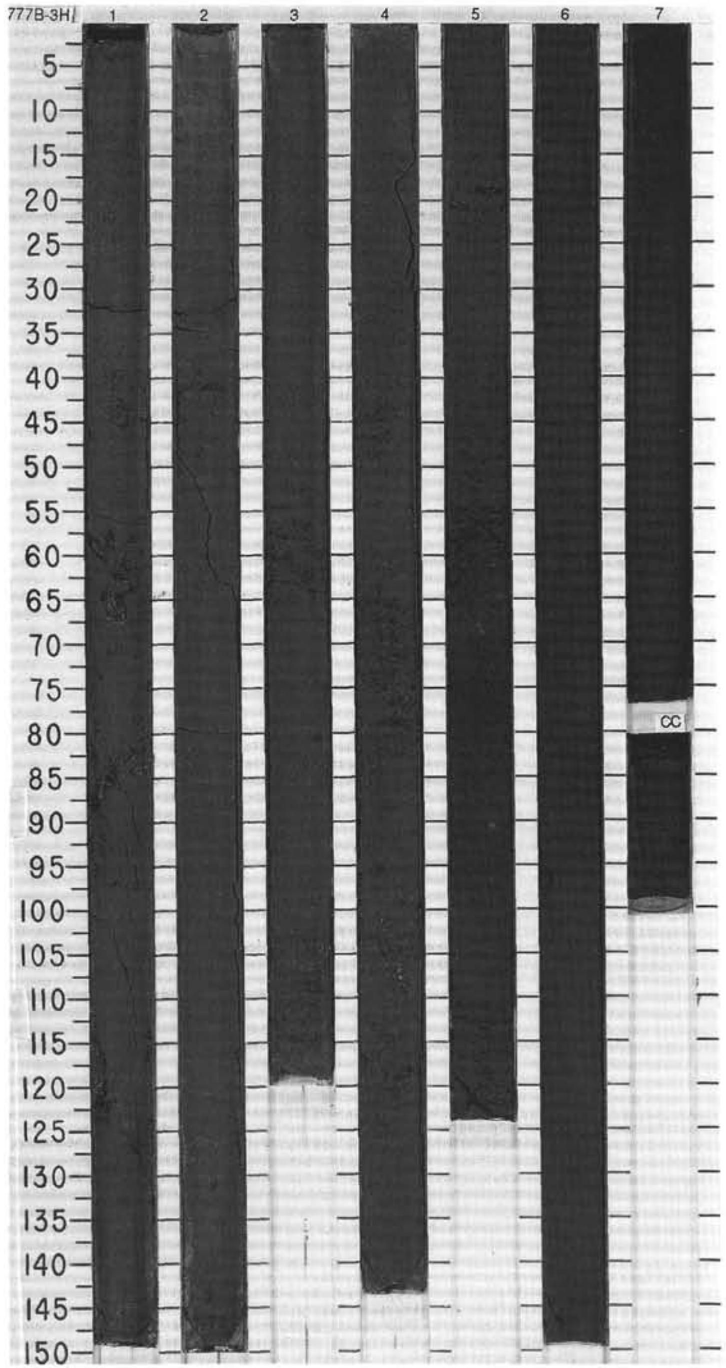
LITHOLOGIC DESCRIPTION

CLAY

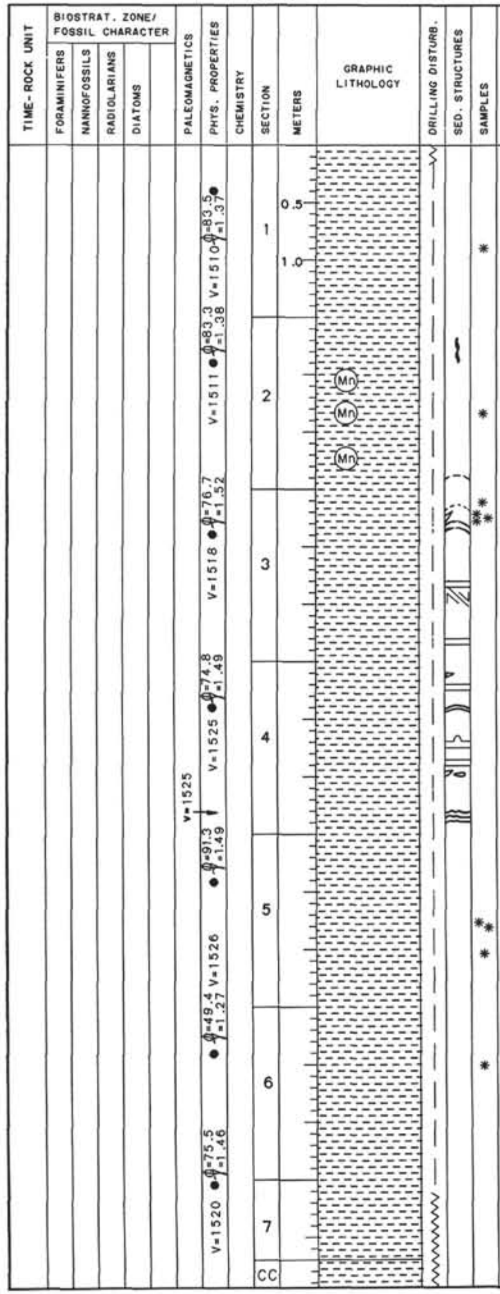
Major lithology: Clay with minor silty lenses, hemipelagic, brown (7.5YR 3/4), soft to firm, predominantly structureless, except for some faint layering and slight mottled appearance. Moderately to heavily disturbed. Scattered occurrence of micronodules of manganese in the core. Brown color grades to dark red brown (5YR 3/2) at Section 5, 60 cm. Discontinuous lenses of light brown silty ash(?) occur in Section 1, 12-126 cm (5YR 5/6), Section 2, 68 cm, 38-41 cm, 79 cm; Section 5, 65-70 cm, 88 cm.

SMEAR SLIDE SUMMARY (%):

	1, 51	3, 83	6, 40
	D	D	D
TEXTURE:			
Silt	10	10	40
Clay	90	90	60
COMPOSITION:			
Aggregates	10	5	3
Glass	45	60	25
Mica	2	Tr	Tr
Plagioclase	3	2	2
Quartz	5	2	5
Spicules	3	3	3
Zeolite	15	15	55



SITE 777 HOLE B CORE 4H CORED INTERVAL 5827.0-5836.5 mbsl; 27.0-36.5 mbsf



LITHOLOGIC DESCRIPTION

CLAY

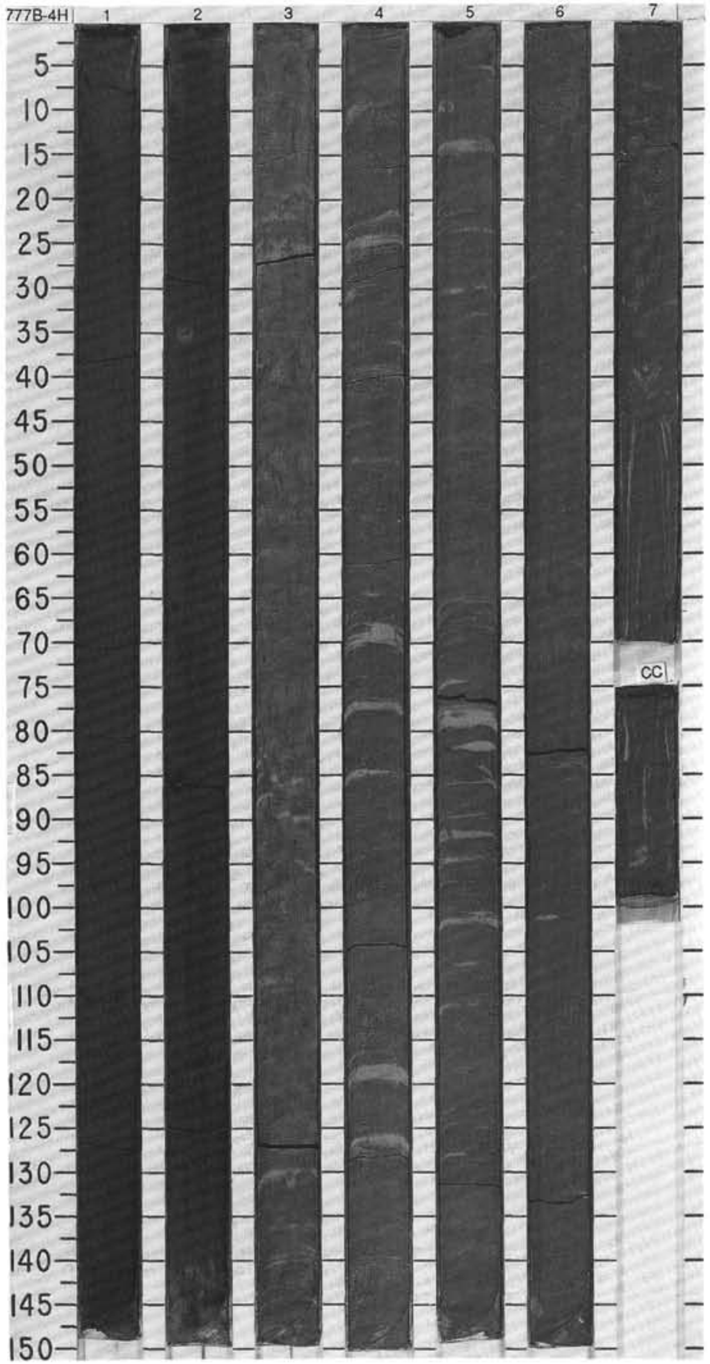
Major lithology: Clay, red brown (5YR 3/3) from Section 1 to Section 2, 140 cm, soft, hemipelagic, mildly bioturbated, rare occurrences of manganese nodules; grades to mottled, light brown (7.5YR 6/6) clay with interlayers of dark brown (7.5YR 3/2) clay and pinkish brown clay (7.5YR 7/6 and 5YR 6/4). Complex bedding structures range from planar laminae to wedge planar/lenticular structures, wavy surfaces. Microfault in Section 3, 77-100 cm. Micronodules of Mn are abundantly to commonly scattered. Silty lenses occur in Section 1, 82-90 cm (7.5YR 5/8), 148 cm (7.5YR 5/6); Section 2, 80 cm; Section 7, 14-70 cm, highly disturbed by suction of core barrel, manmade artifacts.

SMEAR SLIDE SUMMARY (%):

	1, 90 D	2, 84 M	3, 11 D	3, 22 M	3, 25 M	3, 26 D	5, 78 M
TEXTURE:							
Silt	15	60	—	3	—	—	—
Clay	85	40	100	97	100	100	100
COMPOSITION:							
Aggregates	3	5	2	1	3	Tr	Tr
Glass	35	20	40	55	40	20	55
Manganese	—	40	—	—	—	—	—
Mica	3	1	Tr	2	Tr	1	Tr
Micrite	5	5	3	Tr	5	Tr	Tr
Opaques	2	5	1	2	5	3	Tr
Plagioclase	2	2	Tr	Tr	Tr	Tr	1
Quartz	3	2	2	Tr	Tr	Tr	Tr
Spicules	Tr	Tr	Tr	Tr	0	0	0
Zeolite	45	15	50	40	45	75	40

SMEAR SLIDE SUMMARY (%):

	5, 81 M	5, 116 D	6, 51 D
TEXTURE:			
Silt	5	5	—
Clay	95	95	100
COMPOSITION:			
Aggregates	5	5	2
Glass	35	45	35
Manganese	20	5	2
Mica	Tr	Tr	1
Micrite	7	5	Tr
Opaques	5	3	Tr
Plagioclase	Tr	Tr	2
Quartz	Tr	Tr	2
Spicules	Tr	Tr	Tr
Zeolite	25	35	55



SITE 777 HOLE B CORE 5N CORED INTERVAL 5838.4-5839.1 mbsl; 38.4-39.1 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
								1	0.5					CHERTY CLAYSTONE with PORCELLANITE Major lithology: Cherty claystone; color ranges from gray brown (7.5 YR 5/2) to red brown (5YR 8/2), hard, banded, dull, interbedded with porcellanite. Porcellanite, light brown (10YR 5/4), possibly ash with wedges of pinkish brown lenses (5YR 7/4). Sharp contacts along bedding planes, thin to very thin bedded, complex bedding structure ranging from planar to wedge planar and wavy. Light brown layers tend to be planar-bedded, and pinkish brown lenses are usually wedge-like. Moderately to heavily disturbed.

777C-1W NO RECOVERY

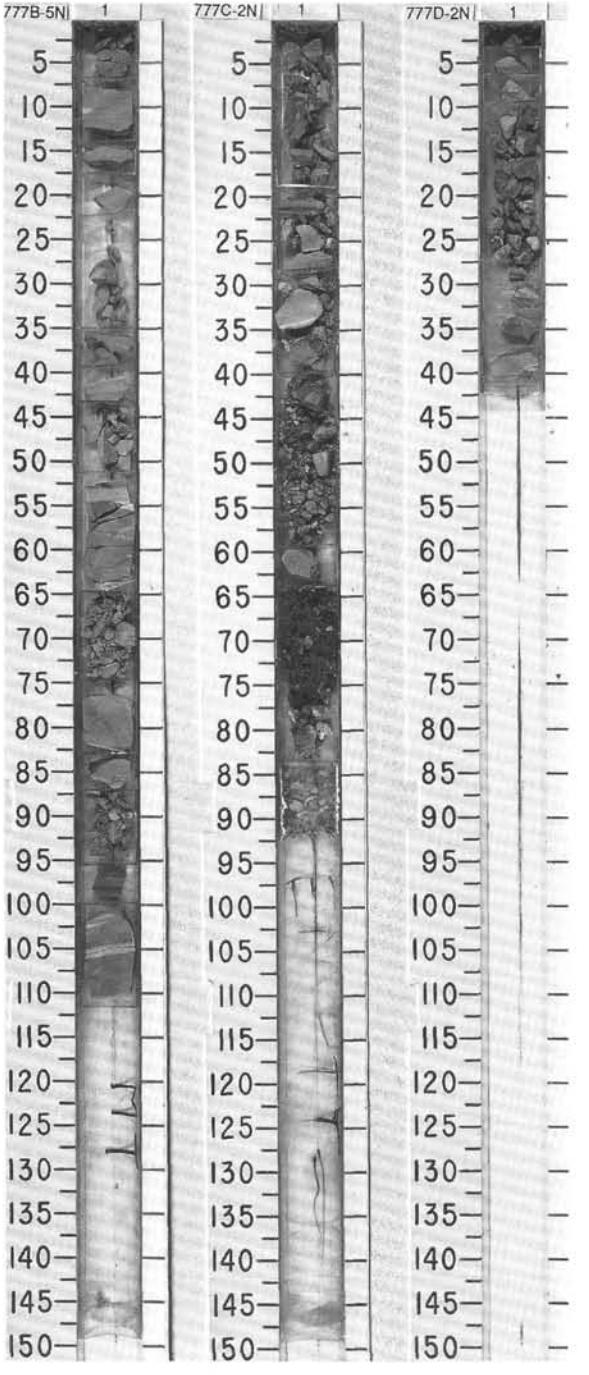
SITE 777 HOLE C CORE 2N CORED INTERVAL 5843.4-5847.4 mbsl; 43.4-47.4 mbsf

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
								1	0.5					CHERTY CLAYSTONE Gravel and pebble, cobble pieces of cherty claystone; gray brown (10YR 5/3), dull luster, slightly conchoidal fracture, thin-bedded, banded with pink (5YR 7/3), claystone and cream (10YR 8/3), claystone or porcellanite layers. Sharp contact between layers. Porcellanite layers are usually planar in structure, pinkish claystone occurs as wedges in and between cream and gray brown claystone. Heavily disturbed, grades to drilling breccia in Section 1, 65 cm, red brown (5YR 3/3) mud with pieces of claystones; breccia grades to oxidized conglomerate and welded components at bottom due to high temperatures in drilling (man-made artifact).

777D-1W NO RECOVERY

SITE 777 HOLE D CORE 2N CORED INTERVAL 5855.1-5856.2 mbsl; 50.6-51.7 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
								1						CHERT and CHERTY CLAYSTONE Gravel and pebbles to small cobble of chert and cherty claystone; predominantly brown (7.5YR 4/4) to red brown (5YR 3/2), banded with yellow brown (7.5YR 5/6) layers and buff (10YR 7/6) porcellanite for most of core. Pink brown (2.5YR 5/4) layers occur as scattered wedge laminae in upper half of core and become predominant in the bottom half. Very thin bedded, with porcellanite as very thin planar beds and pink brown layers as wedges; becoming wavy to discontinuous, convoluted beds at bottom.



SITE 777 HOLE D CORE 3N CORED INTERVAL 5856.2-5860.3 mbsl; 51.7-55.8 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
								1	0.5					CHERT and CHERTY CLAYSTONE Pebbles and cobbles of chert and cherty claystone, brown (7.5YR 4/4) to red brown (5YR 3/2), invariably grading to each other. Thin bedded, banded with light brown (10YR 8/4) and pink brown (2.5YR 6/4) layers. Thin bedded, complex structures with pink brown layers as wedges. Micronodules of manganese occurr predominantly along some bedding planes when exposed across some beds/laminae.

SITE 777 HOLE D CORE 4N CORED INTERVAL 5860.3-5864.3 mbsl; 55.8-59.8 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
								1						CHERT Pebbles and cobbles of chert, predominantly dark red brown (5 YR3/2) with lenses of orange brown (5YR 7/4) and light yellow brown (5YR 5/6) layers. Thin bedded, complex bedding structures; orange brown layers usually occur as wedges and light yellow brown layers occur as planar laminae. Drilling breccia. Section 1, 30-44 cm.

SITE 777 HOLE E CORE 1X CORED INTERVAL 5857.5-5867.0 mbsl; 51.0-60.5 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
								1						CHERTGravel, large pebbles of chert, predominantly dark brown (5YR 3/2) with scattered buff (10YR 8/6) and pinkish brown (5YR 7/6) wedges, thin bedded. Grades of drilling breccia in Section 1, 13 cm. Breccia containspieces of above chert and siltstone, dark brown (5YR 3/2 and 3/1), friable and light gray (10YR 7/1), wafer-like, silt/clay layers, friable, present as possible drilling biscuits.

SITE 777 HOLE E CORE 2N CORED INTERVAL 5867.0-5868.0 mbsl; 60.5-61.5 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
								1						CHERT and CHERTY CLAYSTONE Gravel, pebbles, granules of chert and cherty claystone, invariably grades to each other, predominantly, dark brown (5YR 3/2) with laminae banding of buff (10YR 8/6) and scattered pinkish brown (5YR 6/6) layers. Apparently thin bedded, planar, larger cobbles, range from well lithified to a softer texture similar to porcellanite.