15. X-RAY MINERALOGY STUDIES—LEG 16[1]

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METHODS

Semiquantiative determinations of mineral composition in bulk samples, 2-20μ and <2μ fractions from Leg 16 have been performed according to the methods described in the reports of Legs 1 and 2 and in the *Initial Reports of the Deep Sea Drilling Project, Volume IV,* Appendix III. The mineral analyses of the 2-20μ and <2μ fractions were performed on $CaCO_3$-free residues. Drilling mud with barite was pumped between drilling Cores 15 and 16 in Hole 163. No contamination is evident. The results are presented in Tables 1 to 8 and in Figures 1 to 24. A summary of the samples submitted for X-ray diffraction analysis appears in Table 9. No samples were submitted for X-ray diffraction analysis from DSDP 156. The sediment age, lithologic units, and nomenclature of sediment types used in Figures 1 to 24 and throughout the text of this report are from the data of the Deep Sea Drilling Project hole summaries of Leg 16.

RESULTS

DSDP 155

DSDP 155 is located in a small trough on the east flank of the Coiba Ridge. Four Late and Middle Miocene sediment types were described at this site: (1) mottled nannoplankton marl, (2) waxy claystone, (3) mottled marly clay and marl, and (4) nannoplankton foraminiferal chalk. The first three types are interbedded, but each dominates a portion of the section. Each sample submitted for X-ray diffraction analysis was examined and then assigned to one of the above sediment types by matching the samples with the sediment description in the Leg 16 hole summaries. The numbers appearing in Figures 1, 2, and 3 refer to these sediment types.

Except for the calcite content (Figures 1, 2, 3), there are few mineralogical differences between the samples of sediment types 1, 2, and 3. The noncalcareous portion is generally extremely rich in montomorillonite. Mica is present only occasionally and in small amounts. A high degree of diagenetic activity is evidenced by the frequent presence of clinoptilolite, pyrite, possibly K-feldspar, and occasional occurrences of cristobalite and barite.

Sediment type 4 is uniformly high in calcite. As above, montmorillonite is the predominant clay mineral. This sediment does not contain clinoptilolite or plagioclase. Pyrite, barite, and K-feldspar, however, are present throughout.

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DSDP 157

DSDP 157 is located on the south flank of Carnegie Ridge, approximately 700 km east of the Galapagos Islands.

The section consists of diatomaceous nannofossil chalk ooze at the top which grades to a slightly siliceous chalk at the base. Consolidation increases markedly below 250 meters but is not accompanied by any detectable mineralogic changes. The age of the sediments is Holocene to Late Miocene.

The entire section is highly calcareous (Figure 4). The major noncalcareous minerals are quartz and plagioclase; mica occurs infrequently and only in small amounts. As at DSDP 155, montmorillonite is the predominant clay mineral in the <2μ fraction. A small amount of kaolinite is present in the <2μ fraction in the upper portion of the section and roughly coincides with the beginning of the Pleistocene (Figure 6). Barite and pyrite are prominent in the 2-20μ fraction and increase in concentration with depth (Figure 5). The amorphous scattering value is extremely high in the decalcified fractions due to a high content of opaline skeletal detritus.

DSDP 158

DSDP 158 is located in an equidimensional basin, approximately 25 km in diameter, on the crest of the Cocos Ridge. A complete section of nannofossil chalk and chalk ooze ranging in age from Pleistocene to Middle Miocene was recovered (Figure 7).

The top 30 meters of this section contain significant quantities of volcanic ash and terrigenous detritus. Clinoptilolite, amphibole, and talc found in the 2-20μ fraction in this interval are probably related to the volcanic materials (Figure 8). An unusual occurrence of montmorillonite is seen in the 2-20μ fraction in the top 30 meters of the section and may be the result of occlusion of the montmorillonite in 2-20μ size grade material.

A marked increase in the degree of induration of the chalk ooze occurs between 135 and 171 meters. Some mineralogic differences are associated with the transition from chalk ooze to chalk. The unindurated sediment above this horizon contains some mica and chlorite in the 2-20μ fraction, whereas the indurated sediment below is barren of these minerals. Also, kaolinite in the <2μ fraction is more abundant and occurs more frequently in the unconcolidated sediments above (Figure 9). Barite is more common in the lower part of the section. Pyrite concentration generally increases with depth.

DSDP 159

The site is located midway between the Clipperton and Clarion fracture zones and about 2000 km west of the crest of the East Pacific Rise.

The section consists of a brown noncalcareous radiolarian clay which overlies an interbedded sequence of alternating clay, calcareous clay, and marl ooze. The marl ooze is dominant at the base of the section.

There are very few mineralogical differences between the noncalcareous portions of the several sediment types. Quartz and mica are the predominant lithogenous minerals throughout the section. Montmorillonite is the most abundant mineral in the <2μ fraction. Barite, phillipsite, and clinoptilolite are common throughout. The occurrence of chlorite, however, is restricted to the Quaternary sediments and correlates with a slight increase in the mica content (Figures 10, 11, 12).

DSDP 160

DSDP 160 is located approximately 3000 km west of the crest of the East Pacific Rise, about midway between the Clipperton and Clarion fracture zones.

At DSDP 160, a sequence similar to the sequence at DSDP 159 occurs, with a brown zeolitic clay overlying nannoplankton chalk ooze. Phillipsite and clinptilolite are abundant in the brown zeolitic clay (Figure 13). Clinoptilolite is restricted to the zeolite clay unit, but phillipsite appears to be uniformly distributed throughout the section in the decalcified 2-20μ and <2μ fractions (Figures 14, 15). The concentrations of plagioclase, quartz, mica, and montmorillonite appear to be uniform in the decalcified fractions of the section. Barite occurs throughout but is more abundant in the nannoplankton chalk ooze unit. No samples from a basal ferruginous chalk were submitted for X-ray analysis.

DSDP 161

DSDP 161 lies approximately 4000 km west of the East Pacific Rise crest and about midway between the Clarion and Clipperton fracture zones.

Five sediment units were established by shipboard scientists: (1) a thin layer of ferruginous radiolarian clay, (2) a sequence in which pale orange nannoplankton chalk ooze alternates with brown ferruginous radiolarian-nannoplankton chalk ooze, (3) a massive clay-free nannoplankton chalk ooze, (4) chalk ooze as above but slightly indurated, and (5) a dark yellowish brown indurated radiolarian ooze.

Units 1 and 5 contrast markedly with the other units in their bulk mineralogy (Figure 16), inasmuch as they contain less calcite than Units 2, 3, and 4. Units 1 and 5 show detectable amounts of montmorillonite, quartz, plagioclase, mica, phillipsite, and barite, the decalcified 2-20μ and <2μ fractions, however, show a remarkably uniform content of these minerals throughout the section without regard to the lithologic units (Figures 17. 18). In contrast to DSDP 159 and 160, clinoptilolite is virtually absent at this site. The amorphous scattering value is high throughout the section in the decalcified fractions because of the high content of biogenous silica.

DSDP 162

DSDP 162 is located due north of DSDP 161, 80 km south of the Clarion Fracture Zone on one of a series of fault blocks associated with the fracture zones.

A complete section was recovered at DSDP 162, consisting of a highly ferruginous and radiolarian-rich sediment diluted with small amounts of calcite. The high amorphous scattering value of all the fractions (Table 7) is a result of the high content of amorphous, biogenous silica and hydrated iron oxide colloids. Seven sediment types were identified by shipboard sedimentologists: (1) brown ferruginous radiolarian clay, (2) nannofossil chalk ooze with common Radiolaria, (3) clayey radiolarian-nannofossil marl ooze, (4) radiolarian-nannofossil chalk ooze, (5) ferruginous clayey radiolarian ooze, (6) ferruginous porcellaneous chert (not submitted for X-ray diffraction analysis), and (7) brown ferruginous zeolitic claystone. Each of the samples submitted for X-ray mineralogical analysis was assigned to one of the sediment types after an examination of the sediment. The numbers in the lithology column refer to the sediment descriptions above. Types 2, 3, 5, and 7 are predominant in segments of the section and give their names to the lithologic units (Figures 19, 20, 21).

Dilution by amorphous materials and calcite in bulk samples makes it difficult to interpret the mineralogical variation of the crystalline components (Figure 19). Plagioclase, phillipsite, and quartz occur throughout the section in the 2-20μ fraction (Figures 20, 21). Mica, which is ubiquitous in pelagic sediments, is absent from a number of samples in the third lithologic unit, implying that the lithogenous component in this sediment is negligible in comparison to the biogenous and hydrogenous components. The occurrence of clinoptilolite is restricted to the lowermost brown zeolitic claystone unit. Despite the high content of amorphous, hydrated iron oxides in all the samples from DSDP 162, the crystalline form, goethite, occurs only in the Eocene claystone unit (Table 7). Montmorillonite predominates the <2μ fraction throughout the section and occurs practically to the exclusion of other crystalline minerals in the lowest three lithologic units. Barite was detected in small amounts in only the top two lithologic units. The lower barite content at DSDP 162 compared with DSDP 161 to the south may be due to the greater distance of DSDP 162 from the equatorial zone of high organic productivity.

DSDP 163

DSDP 163 is located in a group of abyssal hills 200 km south of the Clarion Fracture Zone and about 5000 km west of the East Pacific Rise crest.

Four lithologic units with rather different mineralogical compositions were recognized at DSDP 163 (Figures 22, 23, 24). The topmost unit, a brown zeolitic clay, is practically noncalcareous. Phillipsite forms a major constituent of the sediment but no clinoptilolite was detected. Mica is present and correlates with the quartz content in all three fractions, indicating that it has a detrital origin. No barite was detected in the decalcified fractions.

The second unit, consisting of a clayey radiolarian ooze with chert, is also noncalcareous and is distinguished by a generally higher level of amorphous scattering than adjacent units. For this reason, only a small number of minerals were detected. Barite is more prevalent in the second unit than in the first unit.

A short interval of cherty, brown zeolitic clay is characterized by a very large concentration of montmorillonite, phillipsite, and clinoptilolite, and a large variety of other minerals in minor quantities. These are quartz, mica, plagioclase, barite, palygorskite, and chlorite.

The lowermost lithologic unit is a thick, highly uniform, mottled nannofossil chalk of Cretaceous age. Chert occurs intermittently throughout the unit. The uniformity in sediment type is reflected by the uniformity of the mineralogy of this unit, which, however, is very unusual for a pelagic deposit. Quartz is prevalent, as in most marine sediments, but mica occurs in somewhat larger concentrations than in most pelagic sediments of the equatorial Pacific. Moreover, the mica content does not correlate with the quartz content, implying that the mica in this unit is not of detrital origin. Plagioclase, which in most marine sediments occurs in all size grades, is absent from the <2μ fraction and is low in the 2-20μ fraction. On the other hand, K-feldspar is prevalent in the 2-20μ fraction. Phillipsite is absent, but clinoptilolite occurs throughout the unit. Barite is absent. Mica generally predominates over montmorillonite in the <2μ fraction.

Palygorskite is reported throughout the mottled nannofossil chalk unit fractions. What is being reported as palygorskite may, in fact, be a mixed-layer clay. The difficulty of identifying palygorskite in the presence of mica and mixed-layer clays because of interferences of the diffraction patterns is discussed in the X-ray mineralogy studies report in Volume 13 (in preparation). The difficulty of resolving palygorskite, mica, and mixed-layer patterns is increased in the present case because they contain a large amount of amorphous material which dilutes the crystalline material and reduces the diffracted X-ray intensity.

The unusual mineral assemblage in the cherty, mottled nannofossil chalk unit might best be explained by assuming that intense diagenesis has occurred. Montmorillonite converting to mica, possibly by way of a mixed-layer clay phase, would account for a reduction of montmorillonite and an unusually large concentration of mica in this unit. Plagioclase may be eliminated from the <2μ fraction as a result of dissolution and may be replaced by the more stable K-feldspar phase. Also, chert and clinoptilolite are common constituents of diagenetically altered sediments.

TABLE 1
Results of X-Ray Diffraction Analyses from DSDP 155

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	Cris.	K-Fe	Plag.	Mica	Chlo.	Mont.	Clin.	Pyri.	Bari.	Hali.
Hole 155: Bulk Samples																
1	434-443	439.00	79.5	68.0	45.6	6.9	–	3.9	4.4	1.5	0.9	32.0	4.9	–	–	–
		441.53	76.2	62.9	7.2	0.4	–	15.5	4.0	2.9	–	59.1	–	9.1	–	1.8
		442.00	77.9	65.4	55.1	3.9	–	4.6	2.5	–	–	25.8	6.9	1.3	–	–
2	443-452	448.00	79.8	68.4	39.3	6.2	30.7	–	2.0	–	–	10.8	9.8	1.2	–	
		450.54	–	–	11.4	2.4	–	4.6	3.4	4.0	–	68.3	4.3	0.9	–	0.8
3	452-461	458.50	84.4	75.6	10.1	16.0	–	9.7	5.5	–	–	37.7	16.9	–	4.1	–
		459.54	84.8	76.2	16.3	20.9	–	12.5	5.0	–	–	28.4	14.8	2.1	–	–
4	461-470	466.00	85.1	76.8	5.5	23.1	–	14.7	10.7	–	–	33.0	12.9	–	–	–
		468.54	84.5	75.9	2.1	17.2	46.3	3.2	4.7	–	–	24.6	–	2.0	–	–
5	470-479	476.50	83.1	73.6	25.2	28.4	–	5.7	3.5	5.3	1.9	23.6	–	1.1	5.3	–
		477.54	79.8	68.4	29.2	31.4	–	4.0	–	2.8	0.8	27.0	–	1.1	3.7	–
		478.00	74.5	60.2	70.5	18.0	–	1.3	–	1.3	1.1	5.4	–	–	2.5	–
6	479-488	483.52	82.0	71.9	46.4	11.0	–	2.1	–	–	–	36.2	–	3.3	–	1.1
7	488-497	489.52	62.6	41.6	92.4	7.6	–	–	–	–	–	–	–	–	–	–
8	497-506	499.57	63.3	42.7	88.1	1.1	–	4.3	–	2.3	–	4.2	–	–	–	–
		506.00	62.1	40.7	95.7	1.3	–	1.7	–	–	–	1.3	–	–	–	–
9	506-515	515.00	60.1	37.6	99.2	0.8	–	–	–	–	–	–	–	–	–	–
Hole 155: 2-20μ Fraction																
1	434-443	439.00	78.5	66.4		17.0		11.0	26.2	–	1.6	12.9	26.6	4.7	–	
		441.53	79.3	67.7		0.7		22.7	12.3	–	–	54.1	–	10.3	–	
		442.00	76.4	63.1		10.8		11.8	25.5	–	–	7.4	38.4	6.2	–	
2	443-452	448.00	77.2	64.4		14.4		8.2	15.4	–	–	10.1	44.9	7.0	–	
		450.54	78.2	65.9		4.7		15.8	17.3	6.2	–	35.2	19.2	1.6	–	
3	457-461	458.50	76.3	63.0		11.8		21.5	6.3	3.0	–	9.7	41.5	1.7	4.5	
		459.54	76.6	63.4		20.8		24.2	11.9	3.2	–	9.6	22.6	2.7	6.2	
4	461-470	466.00	80.2	69.0		20.1		15.9	23.8	–	–	12.5	22.7	5.1	–	
		468.54	78.0	65.6		29.1		11.2	29.2	2.0	–	13.2	3.7	7.2	4.4	
5	470-479	476.50	80.4	69.4		50.5		8.9	3.9	7.7	2.7	10.7	–	5.3	10.3	
		477.54	75.5	61.7		49.2		14.2	5.0	6.2	1.8	7.3	–	5.2	10.9	
		478.00	77.0	64 1		52.2		10.0	4.6	6.2	2.9	8.8	–	4.8	10.4	

TABLE 1 – *Continued*

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	Cris.	K-Fe	Plag.	Mica	Chlo.	Mont.	Clin.	Pyri.	Bari.	Hali.
Hole 155: 2-20μ Fraction – *Continued*																
6	479-488	483.52	81.3	70.7		16.7		11.5	2.8	–	–	45.8	–	15.3	7.8	
7	488-497	489.52	70.5	53.9		45.0		28.0	–	–	–	–	–	5.3	21.7	
8	497-506	499.57	79.2	67.4		17.3		47.8	–	–	–	27.6	–	7.3	–	
		506.00	72.5	57.1		19.1		54.4	–	–	–	7.3	–	4.4	14.7	
9	505-515	515.00	69.5	52.3		21.9		52.0	–	–	0.9	–	–	3.5	21.6	
Hole 155: <2μ Fraction																
1	434-443	439.00	–	–		9.8	–	5.9	2.3	–	–	82.0	–	–	–	
		441.53	69.4	52.1		–	–	–	–	–	–	100.0	–	–	–	
		442.00	–	–		5.6	–	4.3	2.0	–	–	85.5	1.6	1.1	–	
2	443-452	448.00	–	–		7.6	57.1	–	–	–	–	34.2	1.1	–	–	
		450.54	75.4	61.6		1.4	–	2.8	2.3	–	–	92.3	1.2	–	–	
3	452-461	458.50	–	–		16.0	–	–	2.9	–	–	78.5	2.7	–	–	
		459.54	83.6	74.4		25.2	–	–	–	–	–	74.8	–	–	–	
4	461-470	466.00	–	–		23.3	–	3.9	2.5	–	–	67.2	2.0	1.1	–	
		468.54	82.5	72.4		18.5	48.6	–	–	–	–	31.8	–	1.1	–	
5	470-479	476.50	–	–		27.9	–	3.6	1.6	–	–	66.2	–	0.8	–	
		477.54	80.6	69.7		45.9	–	2.3	–	–	–	51.8	–	–	–	
		478.00	–	–		47.5	–	2.9	1.1	2.8	0.7	45.1	–	–	–	
6	479-488	483.52	82.9	73.3		16.3	–	5.2	–	–	–	73.4	–	3.1	2.1	
7	488-497	489.52	79.1	67.3		76.1	–	2.0	–	–	–	19.3	–	–	2.7	
8	497-506	499.57	82.4	72.6		2.6	–	3.8	–	4.0	–	88.2	–	1.4	–	
		506.00	77.5	64.9		10.8	–	3.4	–	–	–	84.5	–	–	1.3	
9	506-515	515.00	86.1	78.3		14.0	–	8.1	–	–	4.2	69.9	–	–	3.8	

[a]Meters below sea floor.

TABLE 2
Results of X-Ray Diffraction Analyses from DSDP 157

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	Plag.	Kaol.	Mica	Mont.	Clin.	Phil.	Paly.	Pyri.	Bari.	Unkn.[b]
Holes 157 and 157A: Bulk Samples																
1A	0-9	7.54	68.3	50.4	96.0	1.2	1.4		–	1.4					–	
2A	9-18	10.48	66.6	47.9	99.4	0.6	–		–	–					–	
1	6-19	11.55	64.8	44.9	99.1	0.9	–		–	–					–	
3A	18-27	24.04	69.3	52.0	99.1	0.9	–		–	–					–	
2	19-28	23.55	63.1	40.3	99.6	0.4	–		–	–					–	
3	28-37	28.05	68.0	50.0	96.5	1.0	2.5		–	–					–	
4	37-66	39.95	70.4	53.8	96.4	0.8	2.7		–	–					–	
5	46-55	49.04	66.3	47.3	99.4	0.6	–		–	–					–	
6	55-64	56.46	77.4	64.6	99.3	0.7	–		–	–					–	
7	64-73	68.54	68.8	51.3	99.5	0.5	–		–	–					–	
8	73-82	73.02	70.1	53.2	99.1	0.9	–		–	–					–	
		75.41	71.8	55.9	99.1	0.9	–		–	–					–	
9	82-91	88.91	79.5	67.9	94.6	0.8	1.5		–	–					3.2	
		89.54	80.8	69.9	97.0	1.2	–		–	–					1.7	
10	91-99	91.04	82.1	72.0	90.1	1.2	1.0		3.4	2.2					2.1	
12	108-117	114.05	69.0	51.6	99.4	0.6	–		–	–					–	
14	126-135	129.04	80.0	68.8	99.4	0.6	–		–	–					–	

TABLE 2 – *Continued*

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	Plag.	Kaol.	Mica	Mont.	Clin.	Phil.	Paly.	Pyri.	Bari.	Unkn.[b]
Holes 157 and 157A: Bulk Samples – *Continued*																
15	135-144	141.04	66.8	48.1	99.5	0.5	–		–	–					–	
16	144-153	151.54	70.7	54.3	96.6	1.0	–		2.4	–					–	
17	153-162	160.53	76.1	62.6	99.5	0.5	–		–	–					–	
18	162-171	166.53	70.1	53.3	99.7	0.3	–		–	–					–	
19	171-180	178.54	75.0	60.9	98.1	0.6	–		–	–					1.3	
21	189-198	195.02	75.8	52.3	99.4	0.6	–		–	–					–	
23	207-216	213.02	65.0	45.3	99.5	0.5	–		–	–					–	
25	225-234	230.98	64.2	44.0	97.7	0.4	–		1.9	–					–	
27	243-252	246.03	69.6	52.5	99.6	0.4	–		–	–					–	
28	252-261	258.03	64.9	45.2	99.5	0.5	–		–	–					–	
29	261-270	262.54	62.9	42.0	99.6	0.4	–		–	–					–	
30	270-279	277.53	66.8	48.1	99.6	0.4	–		–	–					–	
31	279-288	286.52	65.2	45.7	100.0	–	–		–	–					–	
32	288-297	295.53	60.0	37.5	100.0	–	–		–	–					–	
33	297-306	304.54	64.5	44.5	100.0	–	–		–	–					–	
35	315-324	316.38	61.9	40.5	100.0	–	–		–	–					–	
36	324-333	327.03	63.1	42.3	99.7	0.3	–		–	–					–	
39	345-350	346.48	59.0	35.9	100.0	–	–		–	–					–	
Holes 157 and 157A: 2-20μ Fraction																
1A	0-9	7.54	94.5	91.4		23.7	51.0		15.7		–	–		3.8	5.9	
2A	9-18	10.48	97.6	96.2		18.1	51.6		16.4		–	–		5.4	8.5	
1	10-19	11.55	94.7	91.7		36.1	50.9		–		–	–		3.4	9.5	
3A	18-27	24.04	95.7	93.3		35.4	52.5		–		–	–		6.0	6.1	
2	19-28	23.55	96.6	94.7		36.1	47.9		13.4		–	–		2.6	–	
3	28-37	28.05	94.2	90.9		27.8	40.7		10.3		–	17.4		–	3.9	
4	37-46	39.95	99.0	98.5		30.8	46.5		–		–	16.1		6.5	–	
5	46-55	49.04	96.5	94.6		30.8	41.9		14.9		–	12.4		–	–	
6	55-64	56.46	99.2	98.7		40.3	51.5		–		–	–		8.2	–	
7	64.73	68.54	96.6	94.7		25.5	40.5		9.5		–	–		9.3	15.3	
8	73-82	73.02	96.2	94.0		27.7	43.1		12.7		–	–		3.9	12.6	
		75.41	97.4	95.9		26.0	61.8		–		–	–		5.0	7.2	
9	82-91	88.91	97.2	95.6		28.5	41.9		11.6		–	–		11.9	6.0	
		89.54	97.0	95.3		24.2	38.0		–		–	–		26.4	11.4	
10	91-99	91.04	96.0	93.7		21.2	46.8		–		–	–		16.4	15.6	
12	108-117	114.05	95.9	93.6		24.2	38.0		–		–	–		26.4	11.4	
14	126-135	129.04	99.2	98.7		25.2	61.5		–		–	–		13.4	–	
15	135-144	141.04	95.8	93.5		17.1	42.6		–		–	–		33.1	7.2	
16	144-153	151.54	97.8	96.6		16.8	36.7		24.0		–	–		14.6	7.8	
17	153-162	160.53	98.6	97.8		16.5	44.8		–		–	–		21.3	17.4	
18	162-171	166.53	98.2	97.1		19.7	31.1		–		–	–		25.4	23.8	
19	171-180	178.54	97.2	95.6		14.9	25.8		24.5		–	–		14.6	20.1	
21	189-198	195.02	98.0	96.9		18.4	50.5		–		–	–		16.4	14.7	
23	207-216	213.02	96.1	93.9		30.4	38.5		–		–	–		17.6	13.6	
25	225-234	230.98	95.1	92.4		27.9	36.3		–		–	–		13.7	22.1	
27	243-252	246.03	96.3	94.3		18.4	41.7		–		–	–		18.6	21.3	
28	252-261	258.03	95.2	92.4		19.3	32.3		12.5		–	–		17.0	18.8	

TABLE 2 – *Continued*

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	Plag.	Kaol.	Mica	Mont.	Clin.	Phil.	Paly.	Pyri.	Bari.	Unkn.[b]
Holes 157 and 157A: 2-20μ Fraction – ***Continued***																
29	261-270	262.54	95.0	92.2		22.6	41.8		–		–	–		16.0	19.6	
30	270-279	277.53	98.2	97.3		12.7	28.5		22.5		–	–		17.2	19.0	
31	279-288	286.52	98.6	97.8		26.5	26.4		–		–	–		17.8	29.2	
32	288-297	295.53	98.2	97.1		14.6	24.3		–		–	–		15.1	46.1	
33	297-306	304.54	98.3	97.4		15.3	41.0		–		–	–		10.8	33.0	
35	315-324	316.38	97.4	96.0		17.5	35.5		–		–	–		8.9	38.1	
36	324-333	327.03	96.3	94.3		14.5	35.2		–		–	–		14.9	35.4	
39	345-350	346.48	84.1	75.2		11.4	31.8		6.1		19.2	–		14.1	17.5	
Holes 157 and 157A: <2μ Fraction																
1A	0-9	7.54	96.4	94.4		11.0	–	4.7	13.8	66.8			–	3.7	–	–
2A	9-18	10.48	85.0	76.6		8.8	4.2	3.4	–	83.6			–	–	–	–
1	10-19	11.55	94.8	91.8		9.5	6.6	5.9	8.8	44.9			19.4	–	5.0	–
3A	18-27	24.04	96.1	94.0		6.9	4.3	5.0	8.6	56.0			14.2	1.9	3.1	–
2	19-28	23.55	96.9	95.2		14.9	13.8	7.5	–	31.2			32.6	–	–	–
3	28-37	28.05	94.1	90.8		8.1	3.8	4.9	5.3	60.6			17.2	–	–	–
4	37-46	39.95	99.0	98.4		19.9	14.8	15.5	24.3	25.5			–	–	–	–
5	46-55	49.04	95.4	92.8		9.8	7.0	6.5	13.	62.9			–	–	–	–
6	55-64	56.46	99.5	99.1		36.1	–	–	–	63.9			–	–	–	–
7	64-73	68.54	98.6	97.9		14.9	–	9.5	–	75.6			–	–	–	–
8	73-82	73.02	99.2	98.7		21.2	19.2	11.6	–	48.0			–	–	–	–
		75.41	97.5	96.1		16.5	11.5	9.8	–	62.2			–	–	–	–
9	82-91	88.91	98.1	97.1		17.7	20.9	–	–	38.7			–	9.2	13.6	–
		89.54	98.4	97.4		18.9	18.2	9.2	–	14.6			–	13.9	25.2	–
10	91-99	91.04	98.0	96.9		18.6	9.1	–	23.8	17.8			–	8.1	22.5	–
12	108-117	114.05	97.5	96.1		15.3	20.0	8.6	–	31.3			–	7.5	17.2	Abund
14	126-135	129.04	99.1	98.6		23.6	50.3	–	–	–			–	26.1	–	Major
15	135-144	141.04	99.3	98.9		31.6	27.1	–	–	–			–	14.4	27.0	–
16	144-153	151.54	98.7	98.0		–	–	–	–	–			–	–	100.0	Major
17	153-162	160.53	99.4	99.0		–	–	–	–	–			–	100.0	–	Major
18	162-171	166.53	98.9	98.3		17.1	–	16.1	–	47.1			–	19.7	–	Abund
19	171-180	178.54	97.9	96.7		14.1	17.5	12.5	–	39.4			–	16.5	–	Abund
21	189-198	195.02	99.9	99.8		42.9	–	–	–	–			–	57.1	–	–
23	207-216	213.02	97.8	96.5		13.7	9.7	–	–	61.4			–	7.7	7.6	–
25	225-234	230.98	95.2	92.6		8.8	5.4	–	9.1	74.5			–	2.2	–	–
27	243-252	246.03	96.7	94.8		31.1	–	–	–	68.9			–	–	–	Major
28	252-261	258.03	95.2	92.5		10.3	6.4	–	–	80.2			–	3.1	–	–
29	261-270	262.54	94.8	91.9		15.1	10.2	–	–	71.1			–	3.6	–	–
30	270-279	277.53	97.8	96.6		12.6	12.1	–	–	75.4			–	–	–	–
31	279-288	286.52	99.8	99.6		–	–	–	–	–			–	–	–	–
32	288-297	295.53	98.4	97.5		10.9	13.5	–	–	69.5			–	6.0	–	–
33	297-306	304.54	99.9	99.8		–	–	–	–	–			–	–	–	–
35	315-324	316.38	98.1	97.0		11.4	17.6	–	–	71.3			–	–	–	Abund
39	345-350	346.48	93.0	89.1		7.2	7.3	5.0	10.0	70.5			–	–	–	–

[a]Meters below sea floor.

[b]Relative intensities of peaks are quite variable – 3.80A (broad), 4.41A, and 4.59A.

TABLE 3
Results of X-Ray Diffraction Analyses from DSDP 158

Hole 158: Bulk Samples

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	Plag.	Kaol.	Mica	Chlo.	Mont.	Paly.	Clin.	Phil.	Pyri.	Bari.	Amph.	Unkn.[b]	Unkn.[c]	Talc.
1	0-9	3.04	80.2	69.1	77.4	5.1	6.5	1.4		–	8.6		0.9		–	–				
2	9-18	9.91	79.1	67.3	88.2	4.7	2.7	–		1.3	3.0		–		–	–				
		11.41	79.5	67.9	84.3	4.6	3.7	–		–	7.2		–		–	–				
		15.04	76.2	62.8	85.3	2.9	6.4	–		–	5.4		–		–	–				
3	18-27	15.54	74.2	59.7	90.3	2.8	1.7	–		–	5.3		–		–	–				
4	27-36	31.53	68.3	50.5	94.4	1.7	1.7	–		–	2.2		–		–	–				
5	36-45	39.04	65.0	45.3	98.8	1.2	–	–		–	–		–		–	–				
6	45-54	49.53	62.6	41.6	99.3	0.7	–	–		–	–		–		–	–				
7	54-63	60.03	59.3	36.4	99.6	0.4	–	–		–	–		–		–	–				
8	63-72	69.04	59.8	37.2	99.5	0.5	–	–		–	–		–		–	–				
9	72-81	74.41	61.6	40.0	99.3	0.7	–	–		–	–		–		–	–				
		79.53	60.7	38.6	99.1	0.9	–	–		–	–		–		–	–				
10	81-90	88.53	60.4	38.2	99.5	0.5	–	–		–	–		–		–	–				
11	90-99	96.02	62.5	41.4	99.6	0.4	–	–		–	–		–		–	–				
12	99-108	105.03	61.2	39.4	99.6	0.4	–	–		–	–		–		–	–				
13	108-117	114.02	57.9	34.2	99.6	0.4	–	–		–	–		–		–	–				
14	117-126	132.03	63.6	43.1	99.3	0.7	–	–		–	–		–		–	–				
15	126-135	130.54	65.2	45.6	99.4	0.6	–	–		–	–		–		–	–				
16	135-144	142.53	61.2	39.3	100.0	–	–	–		–	–		–		–	–				
17	144-153	151.54	64.3	44.5	100.0	–	–	–		–	–		–		–	–				
18	153-162	160.52	66.7	48.0	100.0	–	–	–		–	–		–		–	–				
19	162-171	169.52	58.4	35.0	100.0	–	–	–		–	–		–		–	–				
20	171-180	178.52	59.4	36.5	100.0	–	–	–		–	–		–		–	–				
21	180-189	186.03	62.9	42.0	100.0	–	–	–		–	–		–		–	–				
22	189-198	196.52	64.0	43.8	100.0	–	–	–		–	–		–		–	–				
23	198-207	204.02	66.2	47.2	100.0	–	–	–		–	–		–		–	–				
24	207-216	209.41	83.4	74.1	96.1	–	–	–		–	–		–		1.2	2.7				
		210.02	82.2	72.2	97.0	–	–	–		–	–		–		–	3.0				
25	216-225	223.52	75.8	62.1	98.5	–	–	–		–	–		–		–	1.5				
26	225-234	225.00	74.3	59.8	100.0	–	–	–		–	–		–		–	–				
27	234-243	241.53	71.9	56.0	100.0	–	–	–		–	–		–		–	–				
28	243-252	249.02	75.0	60.9	96.0	0.5	2.0	–		–	–		–		–	1.5				
29	252-261	255.02	79.9	68.7	100.0	–	–	–		–	–		–		–	–				
30	261-270	268.54	65.2	45.6	100.0	–	–	–		–	–		–		–	–				
32	279-287	283.53	65.9	46.7	100.0	–	–	–		–	–		–		–	–				
33	287-296	288.52	66.9	48.3	98.5	–	1.5	–		–	–		–		–	–				

Hole 158: 2-20μ Fraction

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	Plag.	Kaol.	Mica	Chlo.	Mont.	Paly.	Clin.	Phil.	Pyri.	Bari.	Amph.	Unkn.[b]	Unkn.[c]	Talc.
1	0-9	3.04	87.7	80.7		30.0	39.5		–	2.5	16.3		6.2	–	–	2.9	1.8	–	–	0.8
2	9-18	9.91	87.2	80.0		30.0	36.7		7.4	3.1	11.5		7.6	–	–	–	2.4	–	–	1.3
		11.41	86.7	79.2		35.5	33.7		5.0	2.1	14.8		4.2	–	1.2	–	2.5	–	–	1.0
		15.04	88.5	82.0		29.8	41.2		3.9	2.7	12.4		4.2	–	2.4	–	2.9	–	–	0.5

TABLE 3 – *Continued*

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	Plag.	Kaol.	Mica	Chlo.	Mont.	Paly.	Clin.	Phil.	Pyri.	Barj.	Amph.	Unkn.[b]	Unkn.[c]	Talc.
Hole 158: 2-20μ Fraction – *Continued*																				
3	18-27	25.54	84.3	75.5		30.6	35.9		3.5	2.7	16.2		4.2	–	1.3	2.7	1.9	–	–	0.8
4	27-36	31.53	85.0	76.5		34.4	33.7		4.3	4.5	8.6		3.5	–	1.3	7.3	1.9	–	–	0.5
5	36-45	39.04	88.9	82.6		38.7	34.9		5.1	5.2	–		3.7	–	2.0	7.6	2.3	–	–	0.5
6	45-54	49.53	91.1	86.0		32.5	43.4		6.0	3.9	–		–	–	3.8	7.0	2.7	–	–	0.7
7	54-63	60.03	92.6	88.4		32.8	31.4		10.8	7.8	–		–	–	5.2	11.9	–	–	Pres	–
8	63-72	69.04	93.3	89.5		38.0	33.6		11.6	6.5	–		–	–	2.6	7.7	–	–	Pres	–
9	72-81	74.41	91.1	86.1		38.6	34.0		8.9	5.2	–		–	–	6.1	7.3	–	–	–	–
		79.53	87.6	80.7		27.1	23.5		11.1	6.9	–		–	13.0	4.6	13.8	–	–	–	–
10	81-90	88.53	91.8	87.2		26.1	44.7		–	7.5	–		–	–	7.1	14.5	–	–	–	–
11	90-99	96.02	93.6	90.0		22.2	38.5		9.3	6.1	–		–	–	5.0	18.9	–	–	–	–
12	99-108	105.03	89.5	83.6		28.5	28.7		9.3	5.9	–		–	–	3.5	24.1	–	–	–	–
13	108-117	114.02	89.6	83.7		22.5	36.1		8.7	5.3	–		–	–	5.0	22.4	–	–	–	–
14	117-126	123.03	91.4	86.5		23.4	29.0		10.8	8.1	–		–	–	5.8	22.8	–	–	–	–
15	126-135	130.54	96.8	95.0		30.6	28.6		9.7	13.3	–		–	–	5.2	12.7	–	–	–	–
16	135-144	142.53	94.6	91.5		10.8	38.4		–	10.6	–		–	–	7.6	32.6	–	Abund	–	–
17	144-153	151.54	95.7	93.3		12.5	50.5		–	11.5	–		–	–	3.7	21.8	–	Abund	–	–
18	153-162	160.52	96.6	94.7		15.5	25.7		–	–	–		–	–	7.2	51.6	–	–	–	–
19	162-171	169.52	95.7	93.3		10.4	38.5		–	–	–		–	–	6.7	44.3	–	–	Trace	–
20	171-180	178.52	92.0	87.5		7.2	40.8		–	6.4	–		–	–	6.3	39.4	–	Abund	Trace	–
21	180-189	186.03	94.1	90.8		4.5	42.3		–	–	–		–	–	10.6	42.6	–	–	–	–
22	189-198	196.52	96.0	93.8		14.9	–		–	–	–		–	–	16.5	68.6	–	Abund	–	–
23	198-207	204.02	95.8	93.4		7.8	45.2		–	–	–		–	–	8.5	38.4	–	–	–	–
24	207-216	209.41	98.5	97.7		6.2	45.5		–	–	–		–	–	21.8	26.5	–	–	–	–
		210.02	96.7	94.8		2.2	40.2		–	–	–		–	–	14.9	42.7	–	–	–	–
25	216-225	223.52	96.8	95.0		6.8	40.6		–	–	–		–	–	12.2	40.4	–	–	–	–
26	225-234	225.00	96.4	94.4		7.3	27.7		–	–	–		–	–	11.0	54.1	–	–	–	–
27	234-243	241.53	98.2	97.2		4.4	16.9		–	–	–		–	–	18.3	60.4	–	–	–	–
28	243-252	249.02	90.9	85.7		4.3	40.4		–	–	–		–	–	20.6	34.7	–	–	–	–
29	252-261	255.02	97.7	96.4		2.1	26.0		–	–	–		–	–	34.7	37.3	–	–	–	–
30	261-270	268.54	92.9	89.0		1.4	28.1		–	–	–		–	–	18.7	51.8	–	–	–	–
32	279-287	283.53	95.9	93.7		–	27.2		–	–	–		–	–	45.4	27.4	–	–	–	–
33	287-296	288.52	96.1	93.8		–	25.1		–	–	–		–	–	42.9	32.0	–	–	–	–
Hole 158: <2μ Fraction																				
1	0-9	3.04	86.5	79.0		11.9	8.1	6.3	–	–	73.8	–	–		–	–				
2	9-18	9.91	87.5	80.5		10.9	7.3	6.9	–	–	72.7	–	2.2		–	–				
		11.41	89.6	83.7		11.0	6.2	6.4	6.5	–	69.9	–	–		–	–				
		15.04	87.3	80.2		11.3	6.6	5.9	–	–	74.6	–	1.7		–	–				
3	18-27	25.54	89.5	83.7		12.1	6.9	6.6	7.1	–	67.3	–	–		–	–				
4	27-36	31.53	87.5	80.5		11.9	6.6	8.1	6.4	–	67.1	–	–		–	–				
5	36-45	39.04	88.9	82.6		18.1	14.4	7.4	6.5	–	49.3	–	–		–	4.2				
6	45-54	49.53	89.0	82.8		11.3	5.7	11.2	7.0	–	63.0	–	–		1.8	–				
7	54-63	60.03	91.1	86.0		13.9	7.0	12.1	–	–	67.1	–	–		–	–				
8	63-72	69.04	88.3	81.7		11.7	4.9	11.3	8.4	–	61.0	–	–		–	2.8				
9	72-81	74.41	89.6	83.7		12.9	6.3	1.6	12.1	4.6	62.5	–	–		–	–				
		79.53	90.1	84.5		17.7	12.4	12.1	9.8	–	39.0	–	–		–	9.1				
10	81-90	88.53	93.9	90.4		9.0	5.1	8.5	6.9	–	67.0	–	–		–	2.8				

TABLE 3 – *Continued*

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	Plag.	Kaol.	Mica	Chlo.	Mont.	Paly.	Clin.	Phil.	Pyri.	Bari.	Amph.	Unkn.[b]	Unkn.[c]	Talc
Hole 158: <2µ Fraction – *Continued*																				
11	90-99	96.02	91.9	87.3		15.9	10.2	12.9	9.9	–	47.2	–	–		–	3.9				
12	99-108	105.03	89.3	83.2		10.4	6.9	9.6	–	–	68.8	–	–		–	4.3				
13	108-117	114.02	92.9	88.9		14.3	7.7	10.1	7.8	–	57.1	–	–		3.0	–				
14	117-126	123.03	99.8	99.7		36.6	–	–	–	–	63.4	–	–		–	–				
15	126-135	130.54	96.2	94.0		6.4	8.7	–	–	7.3	69.6	–	–		–	8.1				
16	135-144	142.53	94.1	90.8		8.2	2.7	7.4	7.5	–	53.2	15.8	–		–	5.3				
17	144-153	151.54	96.7	94.9		10.9	8.6	6.2	–	–	61.6	–	–		4.1	8.6				
18	153-162	160.52	94.4	91.2		6.4	4.9	7.4	–	–	71.8	–	–		–	9.6				
19	162-171	169.52	92.6	88.4		7.8	7.6	5.3	–	–	67.7	–	–		3.8	7.8				
20	171-180	178.52	94.6	91.6		3.1	7.1	–	–	–	79.7	–	–		10.1	–				
21	180-189	186.03	93.9	90.5		3.0	4.1	–	–	–	85.0	–	–		2.7	5.2				
22	189-198	196.52	91.9	87.3		2.6	5.4	–	–	–	86.3	–	–		1.7	4.0				
23	198-207	204.02	99.7	99.6		–	–	–	–	–	–	–	–		–	–				
24	207-216	209.41	98.9	98.2		–	9.9	8.4	–	–	52.6	–	–		10.4	18.7				
		210.02	98.5	97.7		11.3	–	–	–	–	88.7	–	–		–	–				
25	216-225	223.52	99.4	99.0		–	–	–	–	–	100.0	–	–		–	–				
26	225-234	225.00	99.9	99.8		100.0	–	–	–	–	–	–	–		–	–				
27	234-243	241.53	94.0	90.6		3.6	7.6	–	–	–	80.3	–	–		–	8.8				
28	243-252	249.02	99.9	99.9		–	–	–	–	–	–	–	–		–	–				
29	252-261	255.02	96.6	94.7		4.1	4.1	–	11.4	–	67.0	–	–		4.5	8.8				
30	261-270	268.54	98.0	96.9		–	13.6	–	–	–	48.7	–	–		37.7	–				
32	279-287	283.53	96.6	94.8		1.8	–	–	13.5	–	73.0	–	–		7.6	4.2				
33	287-296	288.52	89.8	84.0		16.1	6.6	6.8	26.3	2.6	20.1	21.4	–		–	–				

[a]Meters below sea floor.

[b]Relative intensities of peaks are quite variable – 3.80A (broad), 4.41A, and 4.59A.

[c]Only one peak observed – 14.4A.

TABLE 4
Results of X-Ray Diffraction Analyses from DSDp 159

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	Plag.	Mica	Chlo.	Mont.	Paly.	Clin.	Phil.	Gyps.	Bari.	Hali.
Hole 159: Bulk Samples																
1	0-9	4.36	89.3	83.2	–	30.9	15.8	30.9	3.2	5.4		–	9.0		4.9	
		6.03	91.0	85.9	–	22.6	4.7	37.9	5.6	11.6		–	15.2		2.4	
2	9-18	10.01	90.1	84.6	–	20.8	22.4	16.9	–	18.1		1.9	15.3		4.6	
		16.54	89.5	83.6	–	16.4	13.2	10.2	–	17.4		6.5	29.0		7.4	
3	18-27	24.04	90.0	84.4	5.5	14.2	25.6	10.8	–	4.4		4.0	30.6		4.8	
		24.13	90.8	85.6	2.3	13.9	29.3	10.5	–	6.8		4.8	27.3		5.2	
4	27-36	29.51	86.9	79.6	69.3	3.6	9.5	4.4	–	4.1		–	5.4		3.7	
		34.52	92.0	87.5	48.4	6.3	15.0	10.6	–	7.6		–	9.2		2.9	
5	36-45	43.53	84.3	75.4	70.0	2.5	8.4	4.0	–	4.7		–	8.0		2.3	
6	45-54	48.04	77.2	64.3	86.6	1.6	3.2	3.4	–	–		2.1	3.2		–	
		49.01	83.5	74.2	77.9	2.4	2.7	2.9	–	3.5		1.5	6.8		2.3	
7	54-63	58.01	81.6	71.3	78.6	1.5	4.8	2.8	–	3.9		–	5.3		3.1	
		60.03	75.4	61.5	88.9	0.9	1.4	2.9	–	–		1.4	3.0		1.4	

TABLE 4 – *Continued*

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	Plag.	Mica	Chlo.	Mont.	Paly.	Clin.	Phil.	Gyps.	Bari.	Hali.
8	63-72	68.51	68.4	50.6	93.4	–	1.6	1.3	–	–		1.0	0.9		1.7	
		70.52	73.6	58.8	89.3	0.5	1.7	2.2	–	1.8		1.0	1.7		1.7	
9	72-81	79.53	64.3	44.2	99.5	0.5	–	–	–	–		–	–		–	
10	81-90	88.52	65.0	45.4	99.6	0.4	–	–	–	–		–	–		–	
		89.81	75.2	61.3	89.7	0.9	1.5	2.9	–	–		1.4	2.2		1.4	
12	99-107	105.03	71.3	55.2	100.0	–	–	–	–	–		–	–		–	
		106.01	72.9	57.6	98.4	0.4	–	–	–	–		1.2	–		–	
Hole 159: 2-20μ Fraction																
1	0-9	4.36	81.8	71.5		39.2	20.9	29.2	3.1	–		–	7.6		–	
		6.03	81.8	71.6		37.0	17.7	29.5	4.4	–		1.1	8.6		1.8	
2	9-18	10.01	82.7	72.9		28.5	29.3	17.6	2.9	–		1.8	17.1		2.9	
		16.54	83.3	73.9		23.3	36.3	15.0	–	–		9.8	14.5		1.1	
3	18-27	24.04	80.2	69.1		16.1	22.4	15.1	–	–		6.6	39.7		–	
		24.13	82.7	72.9		17.9	27.2	10.5	–	–		5.3	39.1		–	
4	27-36	29.51	92.3	87.9		15.6	53.1	9.4	–	–		–	14.1		7.7	
		34.52	92.3	87.9		16.7	45.5	11.3	–	5.4		–	12.9		8.2	
5	36-45	43.53	90.5	85.1		8.9	37.2	13.1	–	7.8		5.7	22.0		5.4	
6	45-54	48.04	87.8	81.0		8.0	24.6	8.4	–	7.5		24.6	23.9		2.8	
		49.01	89.7	83.9		11.5	26.8	13.4	–	14.5		8.2	21.0		4.6	
7	54-63	58.01	92.3	87.9		8.5	29.3	10.6	–	20.8		2.0	21.8		7.0	
		60.03	88.3	81.8		7.2	21.9	7.6	–	12.1		15.5	22.8		13.0	
8	63-72	68.51	92.1	87.7		8.6	22.1	11.6	–	20.9		6.9	23.2		7.1	
		70.52	90.8	85.7		7.0	24.2	10.9	–	12.7		14.9	19.1		11.2	
9	72-81	79.53	86.7	79.3	–	8.1	20.6	14.7	–	7.2	–	17.2	24.9	–	7.4	
10	81-90	88.52	90.4	85.1	–	9.2	25.6	15.4	–	–	–	26.3	21.1	–	2.6	
		89.81	93.8	90.3	–	12.6	7.5	16.1	–	16.7	–	20.4	26.7	–	–	
12	99-107	105.03	94.2	91.0	–	6.6	30.5	9.2	–	5.5	–	36.0	12.2	–	–	
		106.01	96.4	94.4	–	17.8	43.6	–	–	–	–	38.6	–	–	–	
Hole 159: <2μ Fraction																
1	0-9	4.36	89.8	84.1	–	24.4	12.1	33.7	6.0	23.7	–	–	Pres	–	–	–
		6.03	90.3	84.8	–	8.7	–	5.8	–	47.4	15.8	2.2	20.1	–	–	–
2	9-18	10.01	89.7	84.0	–	11.2	–	13.7	3.3	47.5	11.0	–	13.3	–	–	–
		16.54	92.2	87.8	–	13.2	9.0	–	–	41.5	–	1.8	34.5	–	–	–
3	18-27	24.04	93.3	89.5	–	4.5	6.9	6.9	–	62.2	–	–	14.6	–	4.9	–
		24.13	92.0	87.5	–	10.9	1.8	9.5	–	55.6	–	2.0	20.2	–	–	–
4	27-36	29.51	94.1	90.8	–	8.6	12.4	13.9	–	54.3	–	–	6.2	4.6	–	–
		34.52	92.2	87.7	–	5.3	11.8	–	–	71.1	–	–	8.3	–	3.5	–
5	36-45	43.53	93.8	90.3	–	4.6	9.1	9.2	–	71.2	–	–	5.8	–	–	–
6	45-54	48.04	94.6	91.6	–	6.2	16.2	–	–	66.0	–	–	7.5	–	4.1	–
		49.01	93.6	90.1	–	6.2	9.4	10.1	–	62.4	–	–	11.9	–	–	–
7	54-63	58.01	90.7	85.5	–	2.9	5.5	7.4	–	78.3	–	–	6.0	–	–	–
		60.03	93.4	89.7	–	4.5	20.2	–	–	56.0	–	3.3	9.0	1.0	6.0	–
8	63-72	68.51	91.1	86.0	–	3.0	4.3	–	–	82.1	–	1.4	6.9	–	2.2	–
		70.52	93.4	89.7	–	5.7	18.3	14.8	–	51.7	–	–	–	5.1	4.5	–
9	72-81	79.53	93.9	90.5	–	4.3	14.0	–	–	60.6	–	–	8.5	2.8	4.6	5.3
10	81-90	88.52	93.8	90.3	–	7.2	14.3	–	–	45.3	–	4.8	13.1	9.0	6.3	–
		89.81	90.9	85.8	–	4.1	3.2	9.1	–	81.8	–	1.7	–	–	–	–
12	99-107	105.03	93.6	90.0	–	7.3	18.5	–	–	43.8	–	8.7	–	21.8	–	–
		106.01	93.7	90.2	–	3.9	6.4	–	–	86.9	–	2.8	–	–	–	–

[a]Meters below sea floor.

TABLE 5
Results of X-Ray Diffraction Analyses from DSDP 160

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	Plag.	Kaol.	Mica	Mont.	Clin.	Phil.	Pyri.	Bari.	Hali.
Hole 160: Bulk Samples															
1	0-9	0.40	91.1	86.1	–	14.6	26.6		13.7	11.7	7.1	21.6		4.7	
		1.54	88.5	82.1	–	8.3	29.9		12.4	24.6	8.8	12.7		3.4	
2	9-18	9.61	89.6	83.8	–	17.4	–		10.3	13.8	3.1	55.3		–	
		13.54	88.4	81.9	–	11.6	21.9		12.4	24.5	8.3	17.6		3.6	
3	18-27	18.61	91.6	86.9	–	9.4	26.5		16.7	21.7	5.8	10.4		9.4	
		25.54	91.4	86.6	1.1	11.2	27.1		8.9	18.9	13.7	8.3		10.7	
		16.11	90.3	84.9	8.2	14.1	2.2		15.3	24.4	14.1	21.7		–	
4	27-36	33.04	65.7	46.3	97.9	0.5	–		1.6	–	–	–		–	
5	36-45	43.54	67.1	48.6	94.7	0.8	1.7		2.1	–	–	–		0.7	
6	45-54	51.04	61.8	40.3	99.6	0.4	–		–	–	–	–		–	
7	54-63	61.53	57.3	33.2	100.0	–	–		–	–	–	–		–	
8	63-72	64.54	58.2	34.7	98.5	–	–		1.5	–	–	–		–	
9	72-81	76.53	56.5	32.1	100.0	–	–		–	–	–	–		–	
10	81-90	88.52	55.5	30.5	100.0	–	–		–	–	–	–		–	
11	90-99	97.53	54.8	29.3	100.0	–	–		–	–	–	–		–	
		98.11	55.3	30.2	100.0	–	–		–	–	–	–		–	
12	99-108	106.53	58.5	35.2	100.0	–	–		–	–	–	–		–	
Hole 160: 2-20µ Fraction															
1	0-9	0.40	82.7	73.0		17.1	34.5		12.9	10.9	8.4	16.3	–	–	
		1.54	78.9	67.0		13.1	33.2		14.5	5.8	17.2	12.3	–	3.9	
2	9-18	9.61	81.4	70.9		12.2	26.6		9.9	5.5	2.4	43.4	–	–	
		13.54	80.3	69.2		14.1	47.3		13.1	5.2	10.4	6.7	–	3.2	
3	18-27	18.61	87.2	80.0		13.5	27.2		10.5	25.1	7.2	16.6	–	–	
		25.54	87.8	80.9		13.7	36.5		15.1	8.1	9.2	11.5	–	6.0	
		26.11	86.1	78.3		11.9	23.9		10.8	23.8	15.1	10.5	–	4.0	
4	27-36	33.04	93.8	90.3		18.5	36.7		18.3	–	–	6.9	–	19.5	
5	36-45	43.54	91.6	86.9		16.4	37.4		18.0	–	–	8.1	–	20.1	
6	45-54	51.04	94.2	90.9		18.8	45.9		18.0	–	–	6.8	–	10.5	
7	54-63	61.53	92.3	88.0		18.2	39.6		15.3	–	1.8	9.8	0.8	14.5	
8	63-72	64.54	93.0	89.1		23.8	41.9		16.2	–	–	7.7	–	10.3	
9	72-81	76.53	93.9	90.5		19.6	35.2		18.5	–	–	9.7	–	17.0	
10	81-90	88.52	93.3	89.5		16.5	34.4		16.9	–	–	9.6	–	22.7	
11	90-99	97.53	95.3	92.6		20.7	41.3		19.9	–	–	5.8	–	12.4	
12	99-108	106.53	96.0	93.7		18.4	43.0		9.8	–	–	10.7	–	18.0	
Hole 160: <2µ Fraction															
1	0-9	0.40	89.3	83.3		5.7	8.9	–	7.1	65.7	2.6	10.1		–	–
		1.54	90.0	84.3		9.9	22.2	–	10.5	45.4	2.6	9.3		–	–
2	9-18	9.61	91.9	87.4		9.4	9.7	–	14.0	50.5	3.8	12.6		–	–
		13.54	90.8	85.6		6.8	13.5	–	8.5	62.2	2.1	6.9		–	–
3	18-27	18.61	89.7	84.0		3.7	5.7	–	6.7	72.5	2.0	9.4		–	–
		25.54	91.6	86.9		6.7	14.0	–	4.0	67.9	–	3.7		3.7	–
		26.11	88.8	82.5		3.8	8.8	–	4.8	74.5	1.3	6.8		–	–
4	27-36	33.04	94.7	91.7		8.2	12.8	–	11.5	51.0	–	13.0		3.6	–
5	36-45	43.54	94.6	91.5		11.3	20.2	–	10.5	34.5	–	13.2		10.3	–
6	45-54	51.04	93.6	90.0		7.6	9.4	–	15.0	55.7	–	9.4		3.0	–

TABLE 5 – *Continued*

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	Plag.	Kaol.	Mica	Mont.	Clin.	Phil.	Pyri.	Bari.	Hali.
Hole 160 <2μ Fraction – *Continued*															
7	54-63	61.53	92.1	87.7		9.7	13.8	7.1	11.0	48.0	–	6.7		3.7	–
8	63-72	64.54	93.5	89.8		8.3	10.9	4.9	14.0	51.9	–	7.0		3.0	–
9	72-81	76.53	93.0	89.0		10.5	6.3	–	11.9	48.0	–	18.1		5.2	–
10	81-90	88.52	93.8	90.2		7.6	14.5	4.6	13.1	48.2	–	7.4		4.5	–
11	90-99	97.53	93.4	89.6		8.6	1.7	–	17.8	51.5	–	15.1		–	5.3
		98.11	93.3	89.6		7.4	10.3	–	10.5	63.5	–	6.4		1.9	–
12	99-108	106.53	92.0	87.5		6.9	4.7	–	11.1	60.8	–	13.1		3.4	–

[a]Meters below sea floor.

TABLE 6
Results of X-Ray Diffraction Analyses from DSDP 161

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	K-Fe	Plag.	Kaol.	Mica	Mont.	Clin.	Phil.	Bari.	Hali.	Unkn.[b]
Holes 161 and 161A: Bulk Samples																
1	0-9	0.61	93.1	89.3	–	12.4	–	15.3	–	16.8	17.9	–	21.0	16.7	–	–
		0.91	95.9	93.6	–	10.9	–	17.3	–	18.1	19.4	–	14.7	19.6	–	–
		1.53	69.8	52.9	96.9	0.9	–	–	–	2.2	–	–	–	–	–	–
		7.53	63.6	43.2	99.7	0.3	–	–	–	–	–	–	–	–	–	–
2	9-18	15.04	69.7	52.7	97.2	0.7	–	1.1	–	–	–	–	–	1.1	–	–
3	18-27	21.03	63.6	43.1	99.7	0.3	–	–	–	–	–	–	–	–	–	–
4	27-36	34.54	62.5	41.4	99.6	0.4	–	–	–	–	–	–	–	–	–	–
5	36-45	40.04	73.0	57.8	96.7	0.7	–	–	–	2.5	–	–	–	–	–	–
6	45-54	46.46	66.0	46.9	100.0	–	–	–	–	–	–	–	–	–	–	–
7	54-63	57.04	62.9	42.1	100.0	–	–	–	–	–	–	–	–	–	–	–
1A	63-72	70.21	56.7	32.3	100.0	–	–	–	–	–	–	–	–	–	–	–
		70.54	68.1	50.1	99.5	0.5	–	–	–	–	–	–	–	–	–	–
9	72-81	76.54	59.1	36.2	100.0	–	–	–	–	–	–	–	–	–	–	–
10	81-90	84.04	60.2	37.8	100.0	–	–	–	–	–	–	–	–	–	–	–
11	90-99	97.54	57.7	33.9	100.0	–	–	–	–	–	–	–	–	–	–	–
12	99-108	106.54	59.1	36.0	100.0	–	–	–	–	–	–	–	–	–	–	–
13	108-117	112.54	56.9	32.6	100.0	–	–	–	–	–	–	–	–	–	–	–
2A	128-137	135.54	59.4	36.5	100.0	–	–	–	–	–	–	–	–	–	–	–
3A	137-146	140.04	61.3	39.5	100.0	–	–	–	–	–	–	–	–	–	–	–
4A	146-155	153.54	63.0	42.2	100.0	–	–	–	–	–	–	–	–	–	–	–
5A	155-164	162.54	58.6	35.3	100.0	–	–	–	–	–	–	–	–	–	–	–
6A	164-173	171.54	60.2	37.9	100.0	–	–	–	–	–	–	–	–	–	–	–
7A	173-182	180.54	62.5	41.4	100.0	–	–	–	–	–	–	–	–	–	–	–
8A	182-191	185.04	67.9	49.8	99.7	0.3	–	–	–	–	–	–	–	–	–	–
		185.91	63.8	43.5	100.0	–	–	–	–	–	–	–	–	–	–	–
9A	191-200	194.04	65.3	45.9	100.0	–	–	–	–	–	–	–	–	–	–	–
10	200-209	207.54	89.9	84.2	90.1	2.5	–	5.0	–	–	–	–	–	2.5	–	–
		208.31	85.3	77.1	92.3	1.3	–	4.1	–	–	–	–	–	2.2	–	–
11	209-218	213.54	87.7	80.8	90.7	0.7	–	1.8	–	–	3.2	–	–	3.5	–	–
12	218-227	219.34	96.3	94.1	27.8	4.5	–	10.3	–	9.6	26.0	–	8.2	13.4	–	–
14	235-244	237.27	75.0	61.0	96.2	–	–	–	–	–	3.6	–	–	–	–	–

TABLE 6 – *Continued*

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	K-Fe	Plag.	Kaol.	Mica	Mont.	Clin.	Phil.	Bari.	Hali.	Unkn.[b]
Holes 161 and 161A: 2-20μ Fraction																
1	0-9	0.61	90.6	85.3	–	14.0	–	19.6	–	11.1	23.8	–	15.8	15.7	–	–
		0.91	94.7	91.7	–	15.1	–	17.1	–	12.1	18.5	–	19.1	18.1	–	–
		1.53	93.9	90.5	–	17.9	–	33.5	–	13.2	–	–	16.2	19.2	–	–
		7.53	96.1	93.9	–	16.2	–	38.2	–	16.3	–	–	12.0	17.2	–	–
2	9-18	15.04	96.4	94.3	–	15.0	–	39.9	–	17.4	–	–	6.7	20.9	–	–
3	18-27	21.03	95.8	93.5	–	17.0	–	39.8	–	16.3	–	–	8.8	18.1	–	–
4	27-36	34.54	95.7	93.3	–	17.9	–	43.0	–	14.5	–	–	9.1	15.4	–	–
5	36-45	40.04	98.2	97.2	–	25.1	–	32.4	–	23.2	–	–	12.5	6.8	–	–
6	45-54	46.46	97.6	96.3	–	20.0	–	49.7	–	12.6	–	–	7.6	10.2	–	–
7	54-63	57.04	98.1	97.0	–	21.1	–	35.0	–	15.0	–	–	15.5	13.4	–	–
1A	63-72	70.21	97.2	95.6	–	23.2	–	38.2	–	18.9	–	–	11.6	8.1	–	–
		70.54	90.1	84.5	–	17.2	–	29.5	–	17.3	–	1.8	19.1	15.2	–	Abund
9	72-81	76.54	97.3	95.8	–	23.6	–	45.1	–	15.5	–	–	7.0	8.9	–	–
10	81-90	84.04	97.1	95.5	–	18.3	–	34.4	–	14.5	–	–	10.3	22.5	–	–
11	90-99	97.54	97.1	95.5	–	16.8	–	36.9	–	19.7	–	–	8.8	17.7	–	–
12	99-108	106.54	98.1	97.0	–	19.6	–	32.1	–	22.0	–	–	10.4	15.8	–	–
13	108-117	112.54	98.6	97.8	–	17.7	18.3	38.4	–	11.6	–	–	9.0	4.9	–	–
2A	128-137	135.54	96.5	94.6	–	13.2	–	36.1	–	19.0	–	–	11.2	20.5	–	–
3A	137-146	140.04	98.7	97.9	–	14.5	–	34.8	–	20.7	–	–	13.6	16.5	–	–
4A	146-155	153.54	98.9	98.2	–	9.8	–	28.8	–	18.2	–	–	25.7	17.6	–	–
5A	155-164	162.54	97.6	96.3	–	19.4	–	31.0	–	17.6	–	–	9.3	22.7	–	–
6A	164-174	171.54	97.1	95.5	–	16.6	–	40.0	–	20.8	–	–	13.4	9.3	–	–
7A	173-182	180.54	98.5	97.6	–	16.5	–	26.6	–	21.3	–	–	18.6	17.0	–	–
8A	182-191	185.04	98.7	97.9	–	7.2	–	25.0	–	12.2	–	–	23.0	32.6	–	Pres
		185.91	99.2	98.7	–	22.5	–	34.8	–	–	–	–	27.6	15.1	–	–
9A	191-200	194.04	98.0	96.9	–	18.3	–	41.3	–	16.6	–	–	6.7	17.1	–	–
10	200-209	207.54	97.2	95.6	–	19.0	–	43.0	–	12.4	–	–	12.8	12.8	–	–
		208.31	97.2	95.7	–	19.8	–	45.4	–	–	–	–	20.6	14.2	–	–
11	209-218	213.54	98.0	96.8	–	12.8	–	23.2	–	17.7	–	–	16.7	29.6	–	–
12	218-227	219.34	96.0	93.7	–	12.0	–	35.1	–	–	21.0	–	10.8	21.1	–	–
14	235-244	237.27	96.9	95.2	–	7.5	–	31.9	–	–	29.0	–	17.6	13.9	–	Major
Holes 161 and 161A: $<2\mu$ Fraction																
1	0-9	0.61	92.1	87.7	–	7.9	–	11.7	–	15.6	54.8	–	7.4	2.7	–	–
		0.91	93.6	90.1	–	8.9	–	14.0	–	11.5	51.8	–	7.0	6.8	–	–
		1.53	93.0	89.1	–	9.1	–	17.3	–	6.1	55.1	–	8.7	3.7	–	–
		7.53	94.8	91.9	–	7.2	–	13.3	–	8.9	60.2	–	7.6	2.8	–	–
2	9-18	15.04	95.1	92.4	–	10.1	–	17.7	–	9.7	43.7	–	13.8	5.0	–	–
3	18-27	21.03	94.4	91.3	–	6.8	–	12.8	–	14.5	52.2	–	8.8	4.8	–	–
4	27-36	34.54	94.4	91.2	–	8.6	–	15.5	–	9.9	47.3	–	12.5	6.3	–	–
5	36-45	40.04	96.4	94.3	–	9.1	–	11.8	–	13.4	43.9	–	12.6	4.6	4.5	–
6	45-54	46.46	96.3	94.3	–	8.7	–	19.2	2.1	11.1	47.7	–	9.4	–	1.8	–
7	54-63	57.04	95.6	93.1	–	6.8	–	10.8	–	11.6	58.0	–	9.0	3.8	–	–
1A	63-72	70.21	94.3	91.0	–	12.6	–	13.4	–	20.2	39.1	–	11.4	3.3	–	–
		70.54	92.8	88.8	–	7.7	–	13.9	–	7.0	52.7	–	13.3	5.4	–	–

TABLE 6 – *Continued*

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	K-Fe	Plag.	Kaol.	Mica	Mont.	Clin.	Phil.	Bari.	Hali.	Unkn.[b]
Holes 161 and 161A: <2μ Fraction – *Continued*																
9	72-81	76.54	94.3	91.0	–	11.9	–	14.8	7.5	20.9	42.9	–	–	–	2.0	–
10	81-90	84.04	95.6	93.2	–	8.2	–	12.3	–	18.0	44.6	–	12.8	4.1	–	–
11	90-99	97.54	95.1	92.3	–	7.0	–	12.5	–	7.7	58.9	–	9.4	4.6	–	–
12	99-108	106.54	96.1	93.8	–	7.3	–	10.4	6.4	12.9	40.8	–	12.2	5.0	5.1	–
13	108-117	112.54	95.2	92.5	–	7.1	5.9	6.5	6.6	22.2	43.7	–	–	–	8.0	–
2A	128-137	135.54	94.8	91.8	–	8.7	–	7.9	–	14.0	52.2	–	12.2	5.0	–	–
3A	137-146	140.04	96.6	94.7	–	12.7	–	20.0	–	19.3	40.3	–	–	7.7	–	–
4A	146-155	153.54	96.6	94.7	–	6.7	–	9.0	–	16.7	67.5	–	–	–	–	–
5A	155-164	162.54	96.1	93.9	–	7.8	–	10.1	3.3	15.5	46.5	–	9.4	4.6	2.7	–
6A	164-173	171.54	94.1	90.9	–	6.1	–	10.2	–	9.1	59.8	–	12.9	1.9	–	–
7A	173-182	180.54	93.3	94.2	–	9.8	–	13.5	–	13.5	56.9	–	6.4	–	–	–
8A	182-191	185.04	96.1	93.9	–	7.3	–	11.4	–	–	71.6	–	–	9.6	–	–
		185.91	96.1	94.0	–	8.2	–	9.8	–	13.0	68.9	–	–	–	–	–
9A	191-200	194.04	95.0	92.3	–	6.6	–	9.4	–	7.2	65.9	–	7.7	3.3	–	–
10	200-209	207.54	93.5	89.8	–	5.5	–	7.8	–	6.3	73.6	–	6.7	–	–	–
		208-31	93.9	90.5	–	10.2	–	14.8	–	13.0	62.0	–	–	–	–	–
11	209-218	213-54	93.0	89.1	–	2.3	–	8.8	–	13.5	59.9	–	11.4	4.2	–	–
12	218-227	219-34	92.4	88.1	–	2.1	–	3.9	–	7.8	78.7	–	5.5	2.0	–	–
14	235-244	237.27	90.9	85.8	–	–	–	–	7.8	–	92.2	–	–	–	–	–

[a]Meters below sea floor.
[b]Relative intensities of peaks are quite variable – 3.80A (broad), 4.41A, and 4.59A.

TABLE 7
Results of X-Ray Diffraction Analyses from Hole 162

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	Plag.	Kaol.	Mica	Chlo.	Mont.	Clin.	Phil.	Gyps.	Bari.	Hali.	Goet.	Unkn.[b]
Hole 162: Bulk Samples																		
1	0-9	0.81	77.6	65.0	86.8	2.0	–	–	2.3	–	2.4	–	6.4	–	–	–	–	–
		5.41	93.6	90.1	–	26.3	1.5	–	26.9	–	8.6	–	26.0	–	10.6	–	–	–
		7.54	80.1	69.0	82.6	2.0	5.5	–	2.8	–	1.7	–	5.5	–	–	–	–	–
2	9-18	16.54	76.7	63.7	87.9	2.2	0.8	–	3.2	–	1.5	–	4.5	–	–	–	–	–
3	18-27	25.54	91.2	86.2	71.4	3.8	6.8	–	–	–	9.4	–	8.6	–	–	–	–	–
4	27-36	31.53	96.1	93.9	46.0	9.8	23.5	–	–	–	10.1	–	10.7	–	–	–	–	–
5	36-45	38.41	97.1	95.4	10.8	10.8	33.7	–	18.6	–	26.1	–	–	–	–	–	–	–
		43.54	97.8	96.5	11.4	10.9	31.3	–	17.2	–	14.6	–	14.6	–	–	–	–	–
6	45-54	49.54	98.3	97.3	–	13.4	21.1	–	25.2	–	18.9	–	21.4	–	–	–	–	–
7	54-63	57.91	99.1	98.5	–	18.7	35.2	–	–	–	32.8	–	–	–	–	13.3	–	–
		61.54	99.2	98.8	–	10.0	40.1	–	–	–	39.3	–	10.6	–	–	–	–	–
8	63-72	70.54	79.0	67.1	97.6	0.4	2.0	–	–	–	–	–	–	–	–	–	–	–
9	72-81	79.54	94.3	91.1	77.4	3.3	8.4	–	–	–	10.9	–	–	–	–	–	–	–
10	81-90	85.54	97.1	95.4	84.8	3.6	11.6	–	–	–	–	–	–	–	–	–	–	–
11	90-99	96.03	98.6	97.8	46.9	5.2	16.9	–	–	–	31.0	–	–	–	–	–	–	–
12	99-108	105.04	87.7	80.7	99.3	0.7	–	–	–	–	–	–	–	–	–	–	–	–
13	108-117	115.54	83.1	73.5	100.0	–	–	–	–	–	–	–	–	–	–	–	–	–

TABLE 7 – *Continued*

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	Plag.	Kaol.	Mica	Chlo.	Mont.	Clin.	Phil.	Gyps.	Bari.	Hali.	Goet.	Unkn.[b]
Hole 162: Bulk Samples – *Continued*																		
14	117-126	124.54	89.7	83.9	92.4	–	2.2	–	–	–	5.4	–	–	–	–	–	–	–
		125.41	89.0	82.9	87.3	1.1	3.0	–	–	–	8.7	–	–	–	–	–	–	–
15	126-135	131.41	92.1	87.7	85.8	1.3	3.9	–	–	–	9.0	–	–	–	–	–	–	–
		133.54	80.5	69.6	99.4	0.6	–	–	–	–	–	–	–	–	–	–	–	–
16	135-144	136.53	97.4	96.0	25.4	–	–	–	–	–	74.6	–	–	–	–	–	–	–
17	144-153	144.54	73.0	57.7	97.1	–	–	–	–	–	–	2.9	–	–	–	–	Trace	–
		147.03	81.0	70.4	86.0	–	–	–	–	–	12.1	1.9	–	–	–	–	–	–
		149.90	70.3	53.6	100.0	–	–	–	–	–	–	–	–	–	–	–	–	–
Hole 162: 2-20μ Fraction																		
1	0-9	0.81	93.0	89.1		18.8	36.9	–	12.8	–	13.9	2.1	15.5	–	–	–	–	–
		5.41	90.3	84.9		23.4	22.8	–	20.0	3.3	–	1.8	28.8	–	–	–	–	–
		7.54	91.6	86.9		14.4	30.5	–	14.5	–	10.6	–	29.9	–	–	–	–	–
2	9-18	16.54	91.5	86.7		21.1	31.0	–	16.1	–	–	1.6	30.1	–	–	–	–	–
3	18-27	25.54	96.3	94.3		12.9	51.7	–	13.8	–	6.9	–	9.8	–	4.9	–	–	–
4	27-36	31.53	95.9	93.6		13.0	54.1	–	10.1	–	8.6	–	11.0	–	3.2	–	–	–
5	36-45	38.41	95.7	93.3		12.7	44.1	–	10.5	–	14.2	–	16.0	–	2.5	–	–	–
		43.54	96.5	94.6		16.9	58.3	–	7.7	–	7.3	–	9.8	–	–	–	–	–
6	45-54	49.54	98.3	97.3	–	19.5	52.6	–	15.7	–	–	–	12.1	–	–	–	–	–
7	54-63	57.91	98.9	98.2	–	7.6	39.8	–	10.6	–	20.5	–	21.5	–	–	–	–	–
		61.54	98.9	98.3	–	16.5	47.3	–	15.0	–	–	–	21.2	–	–	–	–	–
8	63-72	70.54	97.7	96.4	–	19.8	68.0	–	–	–	–	–	12.2	–	–	–	–	–
9	72-81	79.54	98.3	97.4	–	18.7	45.1	–	14.2	–	–	–	21.9	–	–	–	–	–
10	81-90	85.54	99.0	98.5	–	12.6	49.5	–	19.5	–	–	–	18.4	–	–	–	–	–
11	90-99	96.03	99.0	98.5	–	17.3	46.3	–	–	–	17.6	–	18.8	–	–	–	–	–
12	99-108	105.04	99.2	98.8	–	12.6	87.4	–	–	–	–	–	–	–	–	–	–	Abund
13	108-117	115.54	99.6	99.3	–	14.3	54.0	–	–	–	–	–	31.7	–	–	–	–	–
14	117-126	124.54	99.2	98.8	–	20.2	50.6	–	–	–	–	–	29.2	–	–	–	–	–
		125.41	97.6	96.3	–	12.0	29.3	–	–	–	29.1	–	29.6	–	–	–	–	–
15	126-135	131.41	96.9	95.2	–	10.0	41.6	–	–	–	24.9	–	23.5	–	–	–	–	Abund
		133.54	99.3	98.9	–	10.8	33.5	–	33.7	–	–	–	22.0	–	–	–	–	–
16	135-144	136.53	99.9	99.8	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17	144-153	144.54	87.7	80.8	–	1.4	5.9	–	4.5	–	6.1	72.8	9.3	–	–	–	Pres	Pres
		147.03	95.5	93.0	–	2.6	23.1	–	11.2	–	–	46.3	16.9	–	–	–	–	–
		149.90	93.5	89.8	–	2.9	7.5	–	–	–	51.9	25.6	12.1	–	–	–	Trace	–
Hole 162: <2μ Fraction																		
1	0-9	0.81	93.8	90.3		13.0	–	–	12.3		46.3	–	28.4	–		–	–	–
		5.41	93.3	89.5		15.2	–	–	16.5		37.7	–	30.5	–		–	–	–
		7.54	92.5	88.2		5.9	11.1	–	–		70.0	–	13.0	–		–	–	–
2	9-18	16.54	92.2	87.8		12.1	8.4	4.7	18.5		39.5	–	16.8	–		–	–	–
3	18-27	25.54	91.9	87.4		4.5	10.4	–	–		74.0	–	11.0	–		–	–	–
4	27-36	31.53	93.8	90.4		6.0	14.7	–	–		79.2	–	–	–		–	–	–
5	36-45	38.41	94.2	90.9		5.9	13.3	–	–		80.8	–	–	–		–	–	–
		43.54	92.4	88.1		3.7	9.9	–	11.7		74.6	–	–	–		–	–	–
6	45-54	49.54	91.9	87.3		2.7	6.6	–	–		89.6	–	–	1.1		–	–	–
7	54-63	57.91	94.0	90.6		3.2	7.2	–	–		89.4	–	–	–		–	–	–
		61.54	95.1	92.3		6.4	9.6	–	–		84.0	–	–	–		–	–	–
8	63-72	70.54	96.0	93.8		11.5	28.3	–	–		50.3	–	9.9	–		–	–	–
9	72-81	79.54	91.1	86.2		1.4	5.2	–	–		93.4	–	–	–		–	–	–
10	81-90	85.54	93.3	89.5		–	–	–	–		97.5	–	–	2.6		–	–	–

TABLE 7 – *Continued*

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	Plag.	Kaol.	Mica	Chlo.	Mont.	Clin.	Phil.	Gyps.	Bari.	Hali.	Goet.	Unkn.[b]
Hole 162: <2μ Fraction – *Continued*																		
11	90-99	96.03	93.2	89.3		2.6	6.6	–	–		90.8	–	–	–		–	–	–
12	99-108	105.04	92.7	88.7		3.5	7.2	6.3	–		82.9	–	–	–		–	–	–
13	108-117	115.54	94.0	90.7		2.5	5.1	–	–		92.3	–	–	–		–	–	
14	117-126	124.54	97.6	96.3		–	–	–	–		52.4	–	–	–		47.6	–	
		125.41	92.8	88.8		1.5	3.5	–	–		91.8	–	–	–		3.2	–	
15	126-135	131.41	92.9	88.9		2.1	3.7	3.8	–		90.4	–	–	–		–	–	
		133.54	91.8	87.1		2.1	–	6.7	–		91.2	–	–	–		–	–	
16	135-144	136.53	93.7	90.2		–	–	–	–		91.6	–	–	1.4		7.0	–	
17	144-153	144.54	95.7	93.2		3.1	–	–	–		87.9	9.0	–	–		–	Abund	
		147.03	89.3	83.3		–	–	–	–		96.0	–	–	4.0		–	–	
		149.90	91.8	87.2		–	–	–	–		100.0	–	–	–		–	Pres	

[a]Meters below sea floor.
[b]Relative intensities of peaks are quite variable – 3.80A (broad), 4.41A, and 4.59A.

TABLE 8
Results of X-Ray Diffraction Analyses from Holes 163 and 163A

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	K-Fe	Plag.	Mica	Chlo.	Mont.	Paly.	Clin.	Phil.	Pyri.	Bari.
Holes 163 and 163A: Bulk Samples																
2	1-10	5.01	92.7	88.5	–	10.3	–	23.4	12.8	–	16.1	–	–	37.4	–	–
		5.54	93.8	90.4	13.2	8.0	–	12.8	11.0	–	18.4	–	–	36.7	–	–
3	10-19	10.59	96.0	93.7	–	16.5	–	9.7	21.2	–	10.2	–	–	35.1	–	7.3
		14.54	96.4	94.4	–	15.3	–	15.5	15.5	–	13.5	–	–	40.2	–	–
4	19-28	25.04	96.1	93.9	–	12.7	–	26.5	20.0	–	29.4	–	–	11.4	–	–
6	37-46	44.54	90.8	85.6	–	9.4	–	14.7	13.5	–	46.7	–	15.8	–	–	–
7	46-55	47.54	99.4	99.0	–	11.4	–	32.2	–	–	–	–	–	–	–	56.4
10	73-82	77.46	99.5	99.2	–	18.8	–	–	–	–	–	–	–	–	–	81.2
11	82-91	89.01	99.6	99.4	–	–	–	–	–	–	–	–	–	–	–	–
		89.54	99.5	99.2	54.1	45.9	–	–	–	–	–	–	–	–	–	–
1A	140-146	142.95	86.1	78.2	–	8.3	–	4.8	10.0	3.2	18.6	–	40.6	10.0	–	4.5
		144.01	84.2	75.4	–	5.5	–	–	4.5	–	23.5	4.3	29.5	28.6	–	4.1
		144.54	85.3	77.1	–	5.7	–	–	–	–	23.5	–	37.3	33.6	–	–
		145.51	85.7	77.7	–	5.4	–	14.3	5.6	5.0	23.4	–	27.2	12.7	–	6.3
15	162-171	162.36	81.3	70.7	77.5	6.3	–	–	6.7	–	–	5.4	4.1	–	–	–
		170.98	65.4	45.9	95.1	1.7	–	–	1.8	–	–	–	1.4	–	–	–
16	171-180	173.51	61.3	39.5	98.8	1.2	–	–	–	–	–	–	–	–	–	–
		177.04	69.1	51.8	90.8	1.7	–	–	–	–	–	6.6	0.9	–	–	–
		179.61	78.1	65.8	71.8	6.0	–	–	5.3	–	–	13.9	3.0	–	–	–
17	180-189	184.01	63.8	43.4	91.0	1.7	–	–	2.5	–	–	3.6	1.2	–	–	–
		187.01	65.3	45.7	94.3	1.8	–	–	2.6	–	–	–	1.3	–	–	–
		187.54	68.6	50.9	96.2	0.9	–	–	1.9	–	–	–	1.0	–	–	–
18	189-198	190.01	66.2	47.1	87.6	2.1	–	–	4.2	–	–	4.8	1.2	–	–	–
		193.01	71.4	55.3	80.2	3.7	–	–	6.9	–	–	7.7	1.5	–	–	–
		196.52	70.4	53.7	87.9	1.3	–	–	3.9	–	–	5.3	1.6	–	–	–
19	198-207	199.01	60.7	38.5	96.2	1.4	–	–	2.4	–	–	–	–	–	–	–
		202.01	60.1	37.7	93.6	1.2	–	–	2.3	–	–	2.9	–	–	–	–
		204.04	67.8	49.7	85.0	1.8	–	–	4.2	–	–	8.2	0.8	–	–	–

TABLE 8 – *Continued*

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	K-Fe	Plag.	Mica	Chlo.	Mont.	Paly.	Clin.	Phil.	Pyri.	Bari.
Holes 163 and 163A: Bulk Samples – *Continued*																
20	207-216	209.51	62.6	41.6	90.6	1.4	–	–	3.2	–	–	4.8	–	–	–	–
		211.54	63.1	42.4	95.2	0.8	–	–	1.4	–	–	2.6	–	–	–	–
		215.51	60.7	38.7	95.7	1.2	–	–	1.2	–	–	1.9	–	–	–	–
21	216-225	218.51	60.6	38.5	84.6	15.4	–	–	–	–	–	–	–	–	–	–
		220.54	62.0	40.6	99.5	0.5	–	–	–	–	–	–	–	–	–	–
		224.51	61.4	39.7	94.1	1.4	–	–	2.0	–	–	2.5	–	–	–	–
22	225-234	227.61	63.0	42.2	97.3	1.1	–	–	1.6	–	–	–	–	–	–	–
		231.03	58.4	34.9	94.6	0.7	–	–	2.0	–	–	1.6	1.1	–	–	–
		232.89	57.7	33.9	99.5	0.5	–	–	–	–	–	–	–	–	–	–
23	234-243	236.51	57.5	33.6	95.2	1.7		–	2.1	–	–	–	1.1	–		–
		239.51	60.7	38.6	95.3	1.4		–	1.6	–	–	–	1.8	–		–
		241.54	73.2	58.1	75.0	2.7		–	6.5	–	–	12.9	2.9	–		–
26	261-270	263.51	54.0	28.1	99.5	0.5		–	–	–	–	–	–	–		–
27	270-276	271.19	58.2	34.6	98.1	0.9		–	–	–	–	–	1.0	–		–
Holes 163 and 163A: 2-20μ Fraction																
2	1-10	5.01	89.4	83.4	–	11.3	–	24.3	6.7	–	5.7	–	–	52.0	–	–
		5.54	92.2	87.8	–	10.8	–	26.4	9.1	–	8.1	–	–	45.7	–	–
3	10-19	10.59	95.1	92.3	–	14.9	–	19.1	11.5	–	8.8	–	–	45.6	–	–
		14.54	95.7	93.2	–	16.8	–	24.1	12.4	–	–	–	–	46.8	–	–
4	19-28	25.04	96.5	94.5	–	15.8	–	34.1	10.3	–	19.5	–	–	20.4	–	–
6	37-46	44.54	82.9	73.2	–	11.4	–	39.4	15.4	–	–	–	30.2	–	–	3.6
7	46-55	47.54	99.7	99.6	–	21.3	–	51.5	–	–	–	–	–	–	–	26.2
10	73-82	77.46	99.7	99.6	–	40.9	–	–	–	–	–	–	–	–	–	59.1
11	82-91	89.01	99.7	99.6	–	100.0	–	–	–	–	–	–	–	–	–	–
		89.54	99.8	99.7	–	–	–	–	–	–	–	–	–	–	–	–
1A	140-146	142.95	72.9	57.6	–	9.6	–	5.8	–	–	–	–	52.7	31.9	–	–
		144.01	72.8	57.5	–	6.1	–	–	3.6	–	–	–	31.4	59.0	–	–
		144.54	76.3	62.9	–	7.0	–	–	–	–	–	–	40.8	52.2	–	–
		145.51	73.8	59.0	–	5.6	–	10.1	–	–	6.3	–	31.2	46.7	–	–
15	162-171	162.36	73.9	59.2	–	29.5	12.0	10.2	12.2	–	–	6.3	29.8	–	–	–
16	171-180	173.51	76.2	62.8	–	32.6	11.5	7.0	15.8	–	–	7.5	25.6	–	–	–
		177.04	77.9	65.5	–	34.7	13.0	8.7	11.1	–	–	7.9	24.7	–	–	–
		179.61	77.3	64.6	–	31.0	6.6	9.1	24.6	–	–	11.2	17.5	–	–	–
17	180-189	184.01	79.4	67.8	–	31.2	8.9	9.1	24.3	–	–	7.0	19.5	–	–	–
		187.01	80.3	69.2	–	31.3	11.4	7.5	24.5	–	–	7.5	17.9	–	–	–
		187.54	81.8	71.6	–	27.9	9.5	7.6	21.8	–	–	13.9	19.3	–	–	–
18	189-198	190.01	77.2	64.4	–	31.7	8.4	8.2	22.0	–	–	7.9	21.8	–	–	–
		193.01	80.1	68.9	–	32.5	6.3	8.5	25.4	–	–	9.2	18.1	–	–	–
		196.52	83.0	73.5	–	26.9	7.4	7.3	25.5	–	–	13.2	19.8	–	–	–
19	198-207	199.01	80.2	69.1	–	31.9	5.7	8.9	23.4	–	–	7.1	23.1	–	–	–
		202.01	78.1	65.8	–	30.0	6.2	9.3	22.5	–	–	6.9	25.0	–	–	–
		204.04	76.6	63.5	–	33.2	11.6	9.8	19.6	–	–	7.6	18.2	–	–	–
20	207-216	209.51	76.1	62.7	–	35.5	5.8	9.2	14.7	–	–	6.8	28.0	–	–	–
		211.54	75.6	61.8	–	33.9	8.9	9.1	16.1	–	–	8.7	23.3	–	–	–
		215.51	74.1	59.6	–	35.3	6.3	9.9	17.9	–	–	6.6	24.0	–	–	–
21	216-225	220.54	80.0	68.8		28.6	8.4	7.0	18.3		–	14.7	23.0	–		–
		224.51	73.6	58.7		36.2	6.3	9.8	16.4		–	4.9	26.2	–		–
22	225-234	227.61	78.1	65.8		30.4	2.9	9.0	18.9		–	6.9	31.9	–		–
		231.03	78.8	66.9		30.0	8.0	7.0	17.2		–	9.9	27.9	–		–
23	234-243	236.51	78.1	65.8		28.3	4.9	8.5	17.9		–	6.7	33.8	–		–
		239.51	75.6	61.8		29.8	3.0	9.0	15.9		–	6.5	35.8	–		–
		241.54	79.7	68.2		32.0	7.3	8.0	17.6		–	9.9	25.3	–		–
27	270-276	271.19	75.4	61.6		23.9	7.1	5.7	25.7		–	–	37.6	–		–

TABLE 8 – *Continued*

Core	Cored Interval Below Sea Floor (m)	Sample Depth[a] Below Sea Floor (m)	Diff.	Amor.	Calc.	Quar.	K-Fe	Plag.	Mica	Chlo.	Mont.	Paly.	Clin.	Phil.	Pyri.	Bari.
Holes 163 and 163A: <2μ Fraction																
2	1-10	5.01	90.4	85.0		5.9	–	–	6.6	–	67.4	–	–	20.1	–	–
		5.54	89.9	84.2		6.3	–	–	9.5	–	60.8	–	–	23.4	–	–
3	10-19	10.59	94.3	91.1		13.5	–	–	14.2	–	50.9	–	–	21.4	–	–
		14.54	94.2	91.0		7.5	–	2.3	8.2	–	61.3	–	–	20.8	–	–
4	19-28	25.04	91.8	87.2		5.5	–	4.5	5.4	–	72.5	–	–	12.1	–	–
6	37-46	44.54	89.0	82.9		7.0	–	8.1	9.5	–	61.2	–	3.8	10.4	–	–
7	46-55	47.54	95.2	92.6		6.0	–	6.3	22.9	–	61.6	–	–	–	3.3	–
10	73-82	77.46	94.9	92.0		3.2	–	9.0	–	–	87.8	–	–	–	–	–
11	82-91	89.01	97.7	96.4		20.1	–	–	–	–	79.9	–	–	–	–	–
		89.54	96.6	94.7		4.8	–	–	20.4	–	74.8	–	–	–	–	–
1A	140-146	144.01	86.1	78.4		4.1	–	–	–	–	66.2	14.7	5.1	8.7	–	1.1
		144.54	89.7	83.9		8.6	–	–	13.2	–	58.5	–	7.8	11.8	–	–
15	162-171	162.36	93.8	90.3		6.2	–	–	18.0	–	42.0	30.8	3.0	–	–	–
16	171-180	173.51	90.8	85.7		7.7	–	–	21.6	–	19.8	48.3	2.7	–	–	–
		177.04	90.2	84.7		16.0	–	–	22.3	–	14.7	41.8	5.1	–	–	–
		179.61	92.3	87.9		9.3	–	–	12.9	–	31.5	46.3	–	–	–	–
17	180-189	184.01	93.4	89.7		9.3	–	–	16.9	–	45.6	28.2	–	–	–	–
		187.01	93.1	89.2		11.2	–	–	–	–	45.3	43.5	–	–	–	–
		187.54	93.0	89.0		14.9	–	–	16.5	–	33.2	31.8	3.5	–	–	–
18	189-198	190.01	91.8	87.2		9.4	–	–	17.3	–	25.2	48.1	–	–	–	–
		193.01	91.5	86.7		10.8	–	–	11.0	–	26.4	50.7	1.2	–	–	–
		196.52	92.2	87.9		9.6	–	–	35.4	–	14.1	39.7	1.2	–	–	–
19	198-207	199.01	92.2	87.8		8.1	–	–	17.3	–	15.3	58.0	1.2	–	–	–
		202.01	89.8	84.1		8.1	–	–	15.4	–	21.1	53.9	1.5	–	–	–
		204.04	89.8	84.0		7.9	–	–	27.4	–	9.6	53.9	1.2	–	–	–
20	207-216	209.51	89.1	83.0		10.5	–	–	23.9	–	19.6	45.0	0.9	–	–	–
		211.54	93.2	89.4		6.1	–	–	18.1	–	14.3	60.9	–	–	–	–
		215.51	89.9	84.2		10.8	–	–	28.5	–	20.0	39.1	1.7	–	–	–
21	216-225	220.54	91.1	86.0		7.6	–	–	19.6	–	45.2	27.6	–	–	–	–
		224.51	89.2	83.1		8.7	–	–	22.2	–	17.0	50.8	1.3	–	–	–
22	225-234	227.61	91.4	86.6		9.0	–	–	13.0	–	49.0	25.1	4.0	–	–	–
		231.03	92.5	88.3		8.3	–	–	21.3	–	38.0	30.3	2.1	–	–	–
23	234-243	236.51	93.8	90.3		14.3	2.1	–	22.6	–	23.3	30.3	7.3	–	–	–
		239.51	91.4	86.5		11.9	–	–	10.8	–	52.6	24.8	–	–	–	–
		241.54	91.4	86.5		8.3	–	–	26.9	–	8.2	54.7	1.9	–	–	–
26	261-270	263.51	91.7	87.0		11.3	–	–	10.0	1.8	30.0	41.3	5.6	–	–	–
27	270-276	271.19	92.7	88.6		12.1	–	–	11.8	–	21.4	49.3	5.4	–	–	–

[a]Meters below sea floor.

TABLE 9
Sediment Samples Submitted for X-Ray Diffraction Analyses

Hole	Core	Section	Depth in Section (cm)	Depth Below Sea Floor (m)
155	1	4	49-51	439.00
		6	0-6	441.53
		6	49-51	442.00
	2	4	49-51	448.00
		6	0-8	450.54
	3	5	49-51	458.50
		6	0-7	459.54
	4	4	49-51	466.00
		6	0-7	468.54
	5	5	49-51	476.50
		6	0-8	477.54
		6	49-51	478.00
	6	4	0-5	483.52
	7	2	0-5	489.52

TABLE 9 – *Continued*

Hole	Core	Section	Depth in Section (cm)	Depth Below Sea Floor (m)
	8	2	106-108	499.57
		CC	–	506.00
	9	CC	–	515.00
157	1	2	0-10	11.55
	2	4	0-10	23.55
	3	1	0-10	28.05
	4	2	140-150	39.95
	5	3	0-9	49.04
	6	1	142-150	56.46
	7	4	0-9	68.54
	8	1	0-3	73.02
		2	90-92	75.41
	9	5	90-92	88.91
		6	0-8	89.54
	10	1	0-9	91.04
	12	5	0-10	114.05
	14	3	0-8	129.04
	15	5	0-9	141.04
	16	6	0-9	151.54
	17	6	0-6	160.53
	18	4	0-6	166.53
	19	6	0-8	178.54
	21	5	0-5	195.02
	23	5	0-5	213.02
	25	4	145-150	230.98
	27	3	0-6	246.03
	28	5	0-6	258.03
	29	2	0-7	262.54
	30	6	0-6	277.53
	31	6	0-5	286.52
	32	6	0-6	295.53
	33	6	0-8	304.54
	35	1	135-140	316.38
	36	3	0-6	327.03
	39	1	145-150	346.48
157A	1	6	0-8	7.54
	2	1	145-150	10.48
	3	5	0-9	24.04
158	1	3	0-9	3.04
	2	1	90-92	9.91
		2	90-92	11.41
		5	0-8	15.04
	3	6	0-8	25.54
	4	4	0-6	31.53
	5	3	0-7	39.04
	6	4	0-6	49.53
	7	5	0-9	60.03
	8	5	0-8	69.04
	9	2	90-92	74.41
		6	0-6	79.53
	10	6	0-6	88.53
	11	5	0-5	96.02
	12	5	0-5	105.03
	13	5	0-5	114.02
	14	5	0-6	123.03
	15	4	0-8	130.54
	16	6	0-6	142.53
	17	6	0-8	151.54
	18	6	0-5	160.52
	19	6	0-5	169.52
	20	6	0-5	178.52
	21	5	0-6	186.03
	22	6	0-5	196.52
	23	5	0-3	204.02
	24	2	90-92	209.41
		3	0-5	210.02

TABLE 9 – *Continued*

Hole	Core	Section	Depth in Section (cm)	Depth Below Sea Floor (m)
	25	6	0-5	223.52
	26	0	20-25	225.00
	27	6	0-6	241.53
	28	5	0-3	249.02
	29	3	0-4	255.02
	30	6	0-7	268.54
	32	4	0-6	283.53
	33	2	0-5	288.52
159	1	3	135-137	4.36
		5	0-4	6.03
	2	1	100-102	10.01
		6	0-9	16.54
	3	5	0-8	24.04
		5	12-14	24.13
	4	2	100-102	29.51
		6	0-5	34.52
	5	6	0-6	43.53
	6	3	0-9	48.04
		3	100-102	49.01
	7	3	100-102	58.01
		5	0-6	60.03
	8	4	100-102	68.51
		6	0-5	70.52
	9	6	0-6	79.53
	10	6	130-132	88.52
		6	0-6	89.81
	12	5	0-6	105.03
		5	100-102	106.01
160	1	1	39-41	0.40
		2	0-9	1.54
	2	1	60-62	9.61
		4	0-9	13.54
	3	1	60-62	18.61
		6	0-9	25.54
		6	60-62	26.11
	4	5	0-9	33.04
	5	6	0-8	43.54
	6	5	0-9	51.04
	7	6	0-6	61.53
	8	2	0-7	64.54
	9	4	0-6	76.54
	10	6	0-5	88.52
	11	6	0-6	97.56
		6	60-62	98.11
	12	6	0-6	106.53
161	1	1	60-62	0.61
		1	90-92	0.91
		2	0-6	1.53
		6	0-6	7.53
	2	5	0-9	15.04
	3	3	0-6	21.03
	4	6	0-8	34.54
161	5	3	0-7	40.04
	6	1	143-150	46.46
	7	3	0-8	57.04
	9	4	0-8	76.54
	10	3	0-8	84.04
	11	6	0-8	97.54
	12	6	0-8	106.54
	13	4	0-8	112.54
161A	1	5	120-122	70.21
		6	0-8	70.54
	2	6	0-8	135.54
	3	3	0-9	140.04
	4	6	0-8	153.54
	5	6	0-8	162.54

TABLE 6 – *Continued*

Hole	Core	Section	Depth in Section (cm)	Depth Below Sea Floor (m)
	6	6	0-8	171.54
	7	6	0-8	180.54
	8	3	90-92	185.04
		3	0-8	185.91
	9	3	0-8	194.04
	10	6	0-8	207.54
		6	80-82	208.31
	11	4	0-7	213.54
	12	1	133-135	219.34
	14	2	76-78	237.27
162	1	1	80-82	0.81
		4	50-52	5.41
		6	0-8	7.54
	2	6	0-9	16.54
	3	6	0-9	25.54
	4	4	0-6	31.53
	5	2	90-92	38.41
		6	0-8	43.54
	6	4	0-8	49.54
	7	3	0-8	57.91
		6	90-92	61.54
	8	6	0-8	70.54
	9	6	0-8	79.54
	10	4	0-8	85.54
	11	5	0-6	96.03
	12	5	0-8	105.04
	13	6	0-8	115.54
	14	6	0-8	124.54
		6	90-92	125.41
	15	4	90-92	131.41
		6	0-8	133.54
	16	2	0-6	136.53
	17	1	53-55	144.54
		3	0-6	147.03
		4	139-141	149.90
163	2	3	100-102	5.01
		4	0-9	5.54
	3	1	58-60	10.59
		4	0-9	14.54

TABLE 6 – *Continued*

Hole	Core	Section	Depth in Section (cm)	Depth Below Sea Floor (m)
	4	5	0-9	25.04
	6	6	0-7	44.54
	7	2	0-9	47.54
	10	3	141-150	77.46
	11	5	100-102	89.01
		6	0-9	89.54
	15	1	35-36	162.36
		6	147-148	170.98
	16	2	0-9	173.51
		5	100-102	177.04
		6	110-112	179.61
	17	3	100-102	184.01
		5	100-102	187.01
		6	0-8	187.54
	18	1	100-102	190.01
		3	100-102	193.01
		6	0-5	196.52
	19	1	100-102	199.01
		3	100-102	202.01
		5	0-8	204.04
	20	2	100-102	209.51
		4	0-9	211.54
		6	100-102	215.51
	21	2	100-102	218.51
		4	0-8	220.54
		6	100-102	224.51
	22	2	110-112	227.61
		5	0-6	231.03
		6	38-40	232.89
	23	2	100-102	236.51
		4	100-102	239.51
		6	0-7	241.54
	26	2	110-112	263.51
	27	1	118-120	271.19
163A	1	2	144-146	142.95
		3	100-102	144.01
		4	0-8	144.54
		4	100-102	145.51

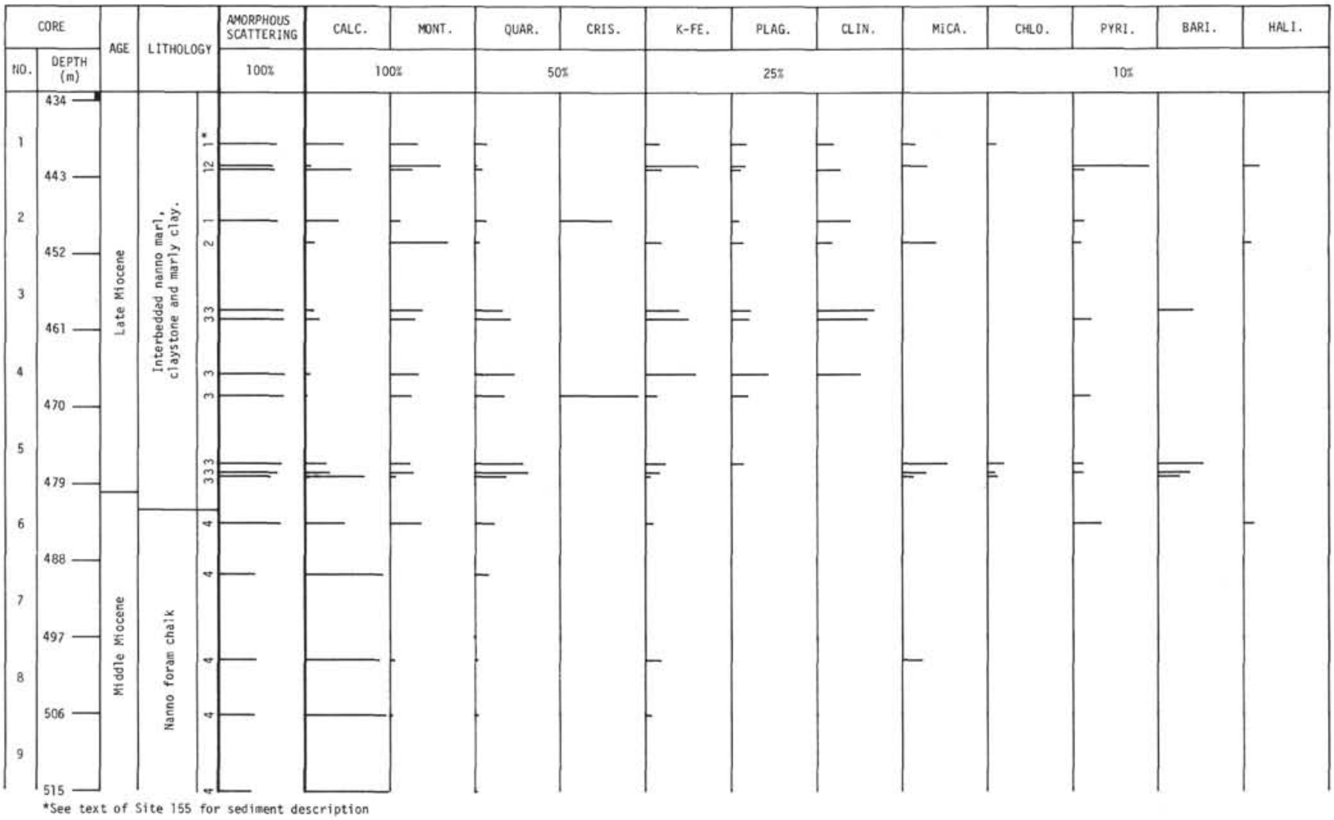
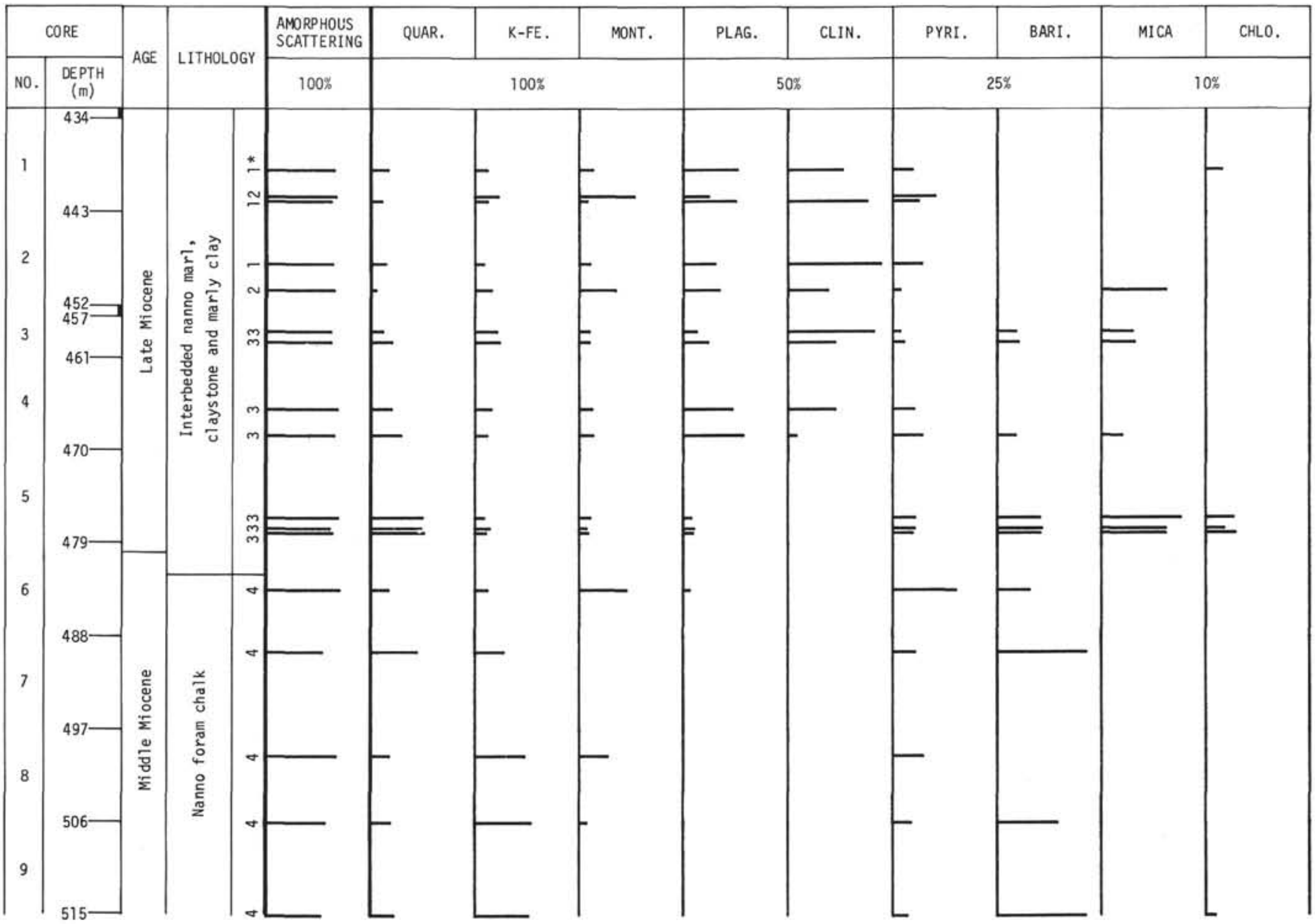


Figure 1. *DSDP 155 bulk samples.*



*See text of Site 155 for sediment description

Figure 2. *DSDP 155-2-20μ fractions.*

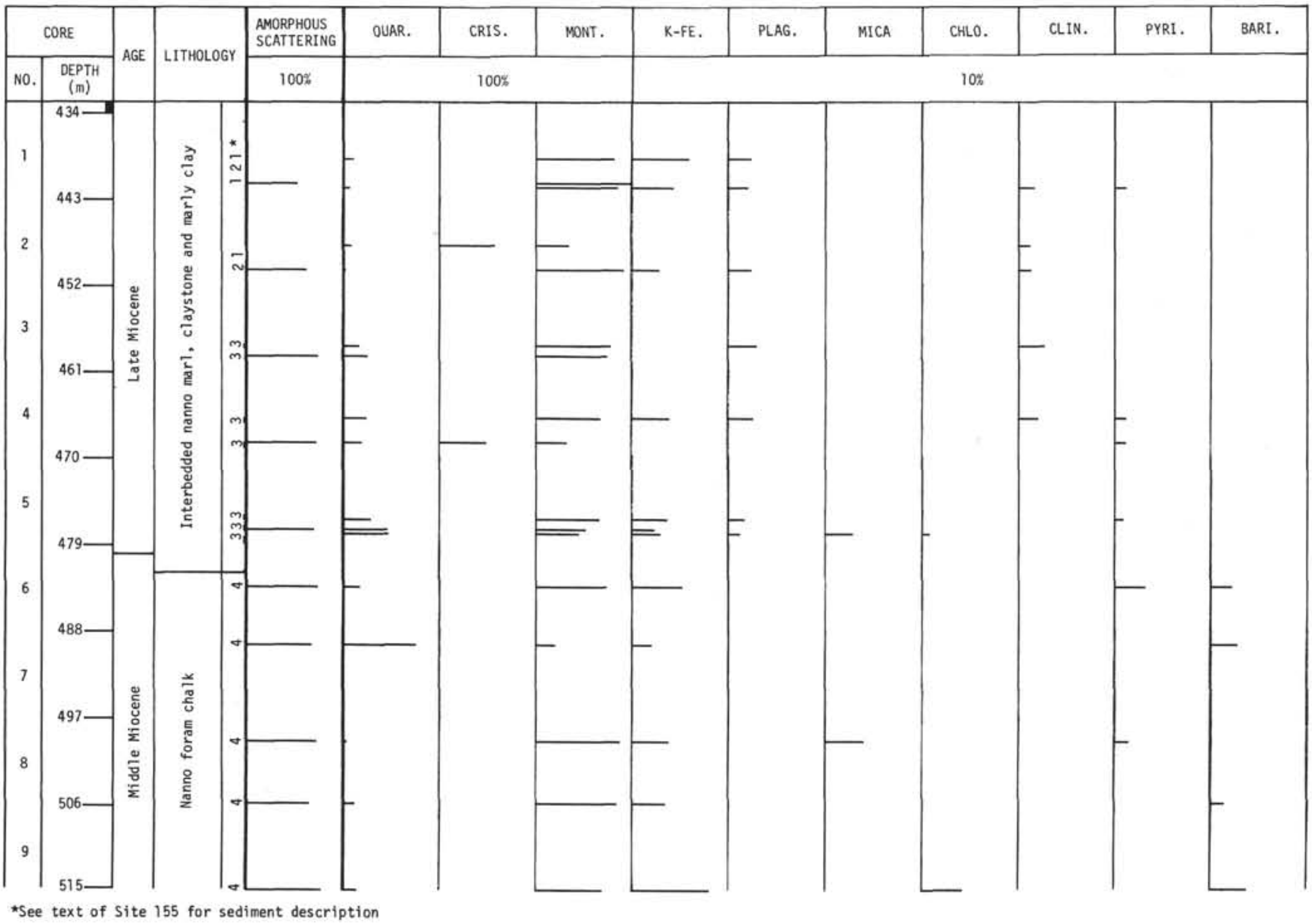


Figure 3. *DSDP 155 <2μ fractions.*

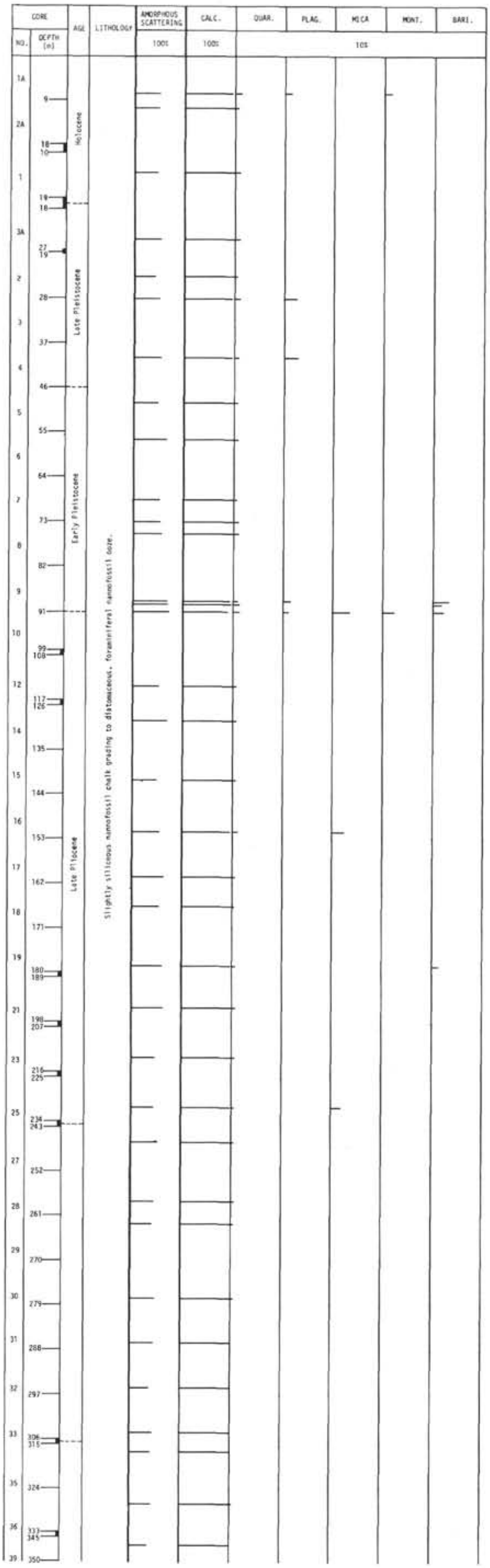


Figure 4. *DSDP 157 bulk samples.*

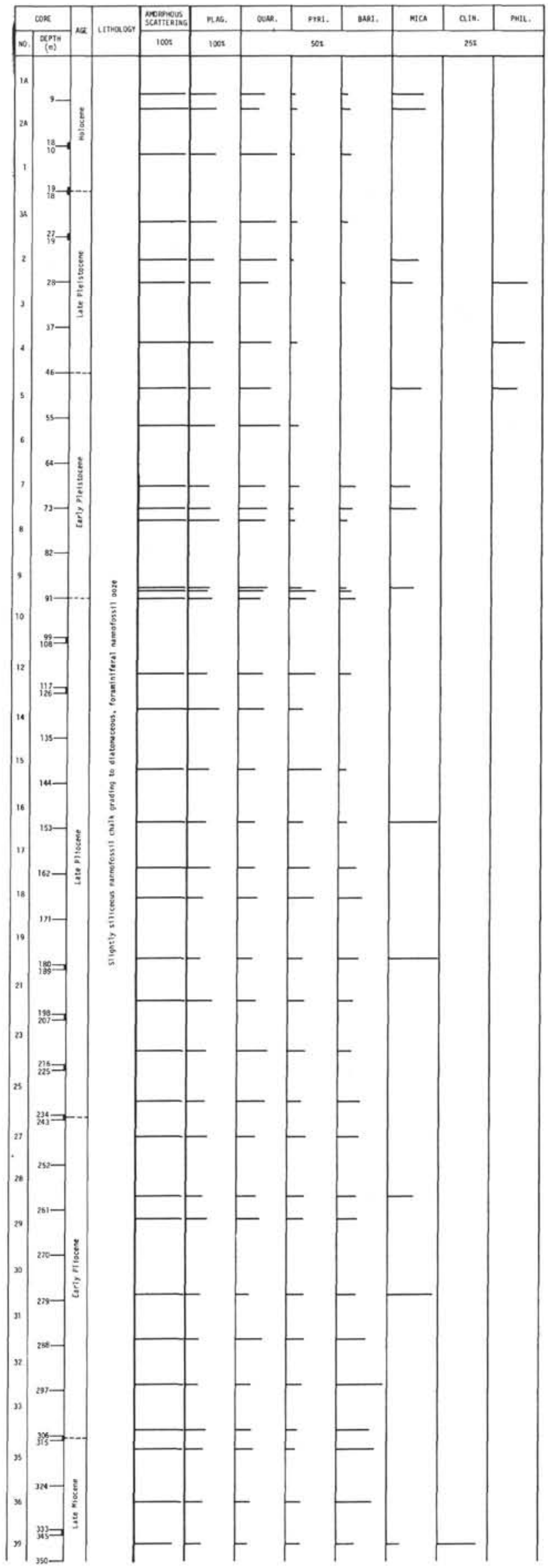


Figure 5. *DSDP 157 2-20μ fractions.*

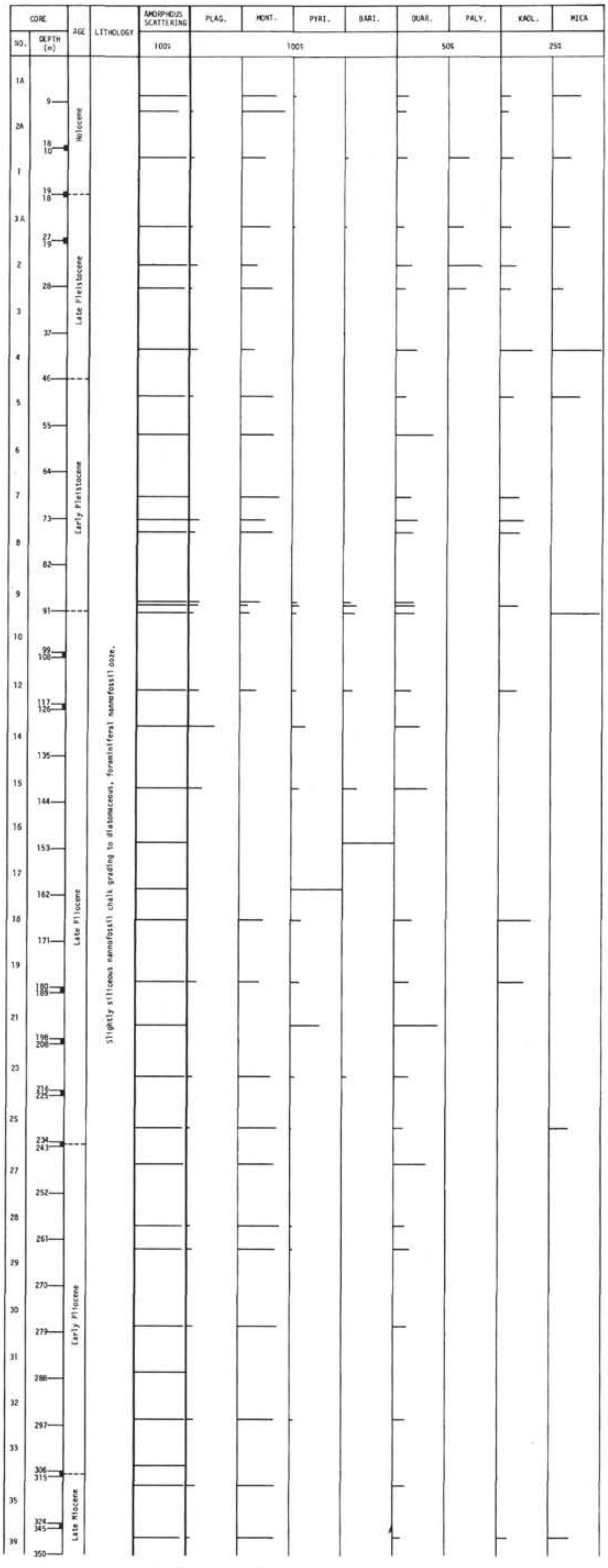


Figure 6. *DSDP 157 <2μ fractions.*

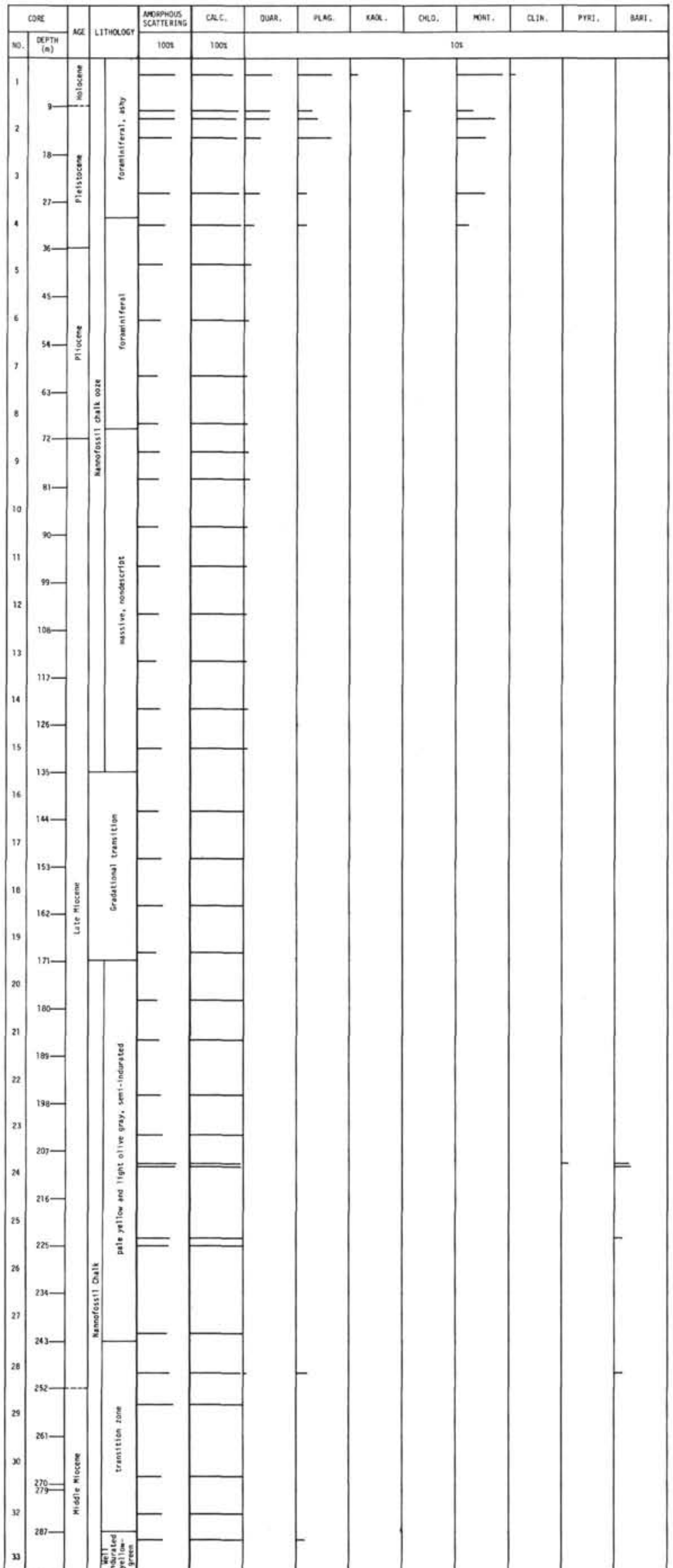


Figure 7. *DSDP 158 bulk samples.*

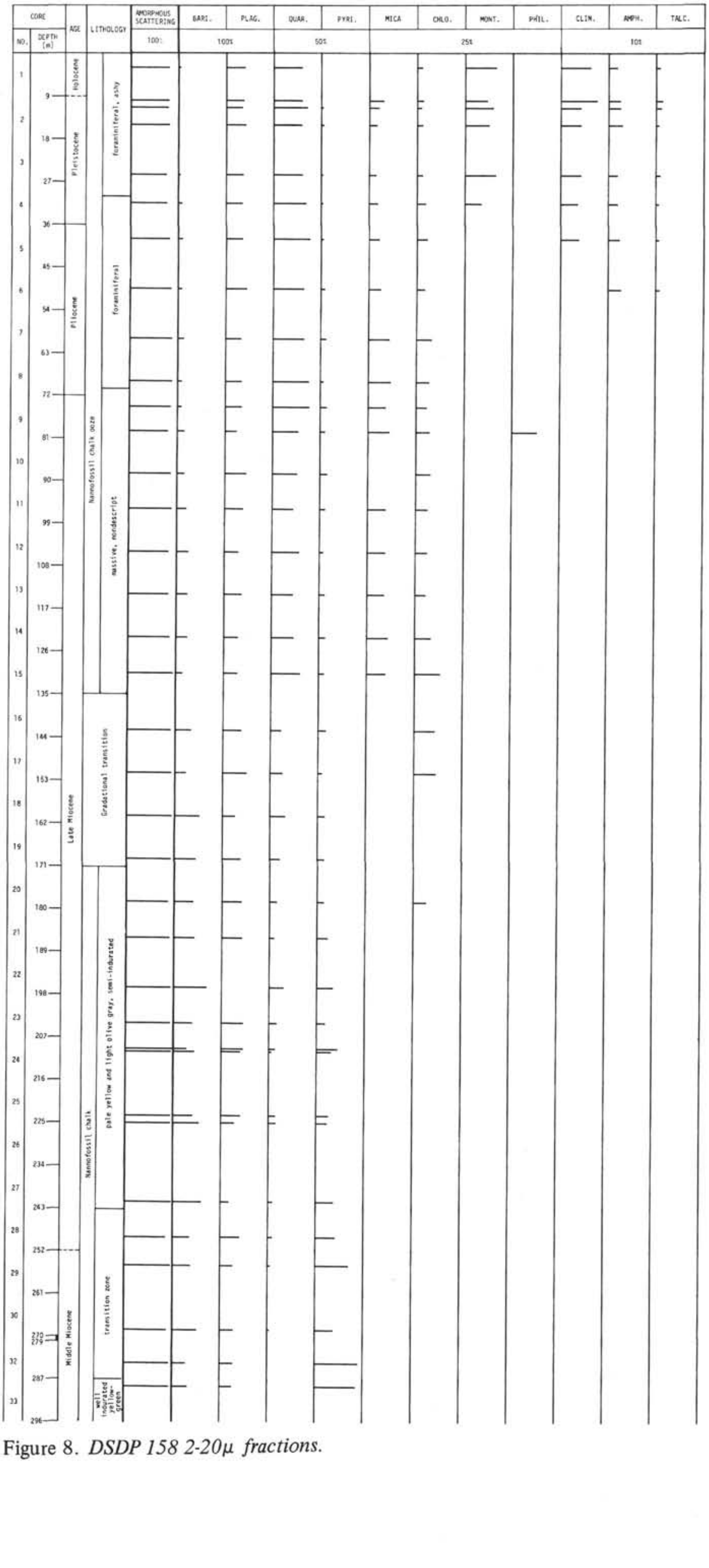


Figure 8. *DSDP 158 2-20μ fractions.*

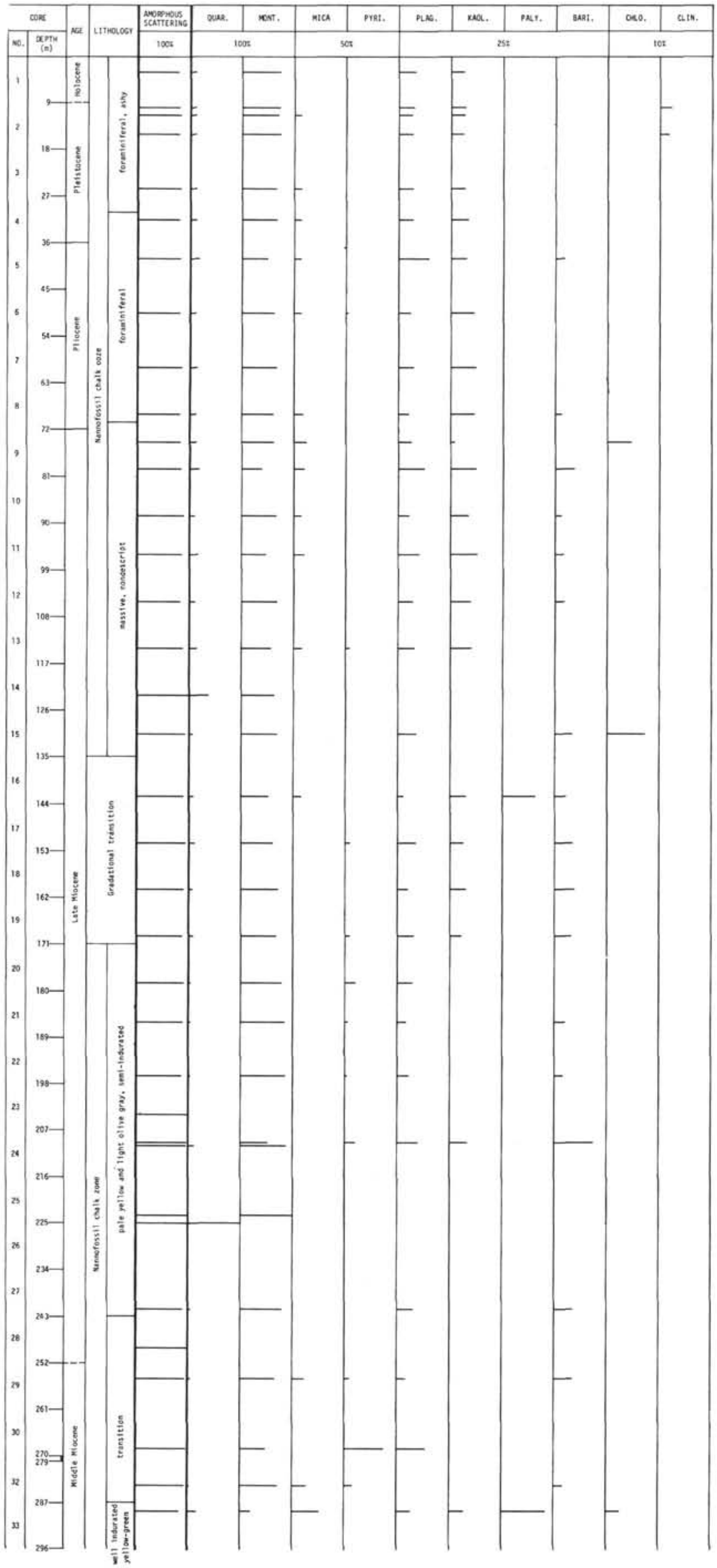


Figure 9. *DSDP 158 <2μ fractions.*

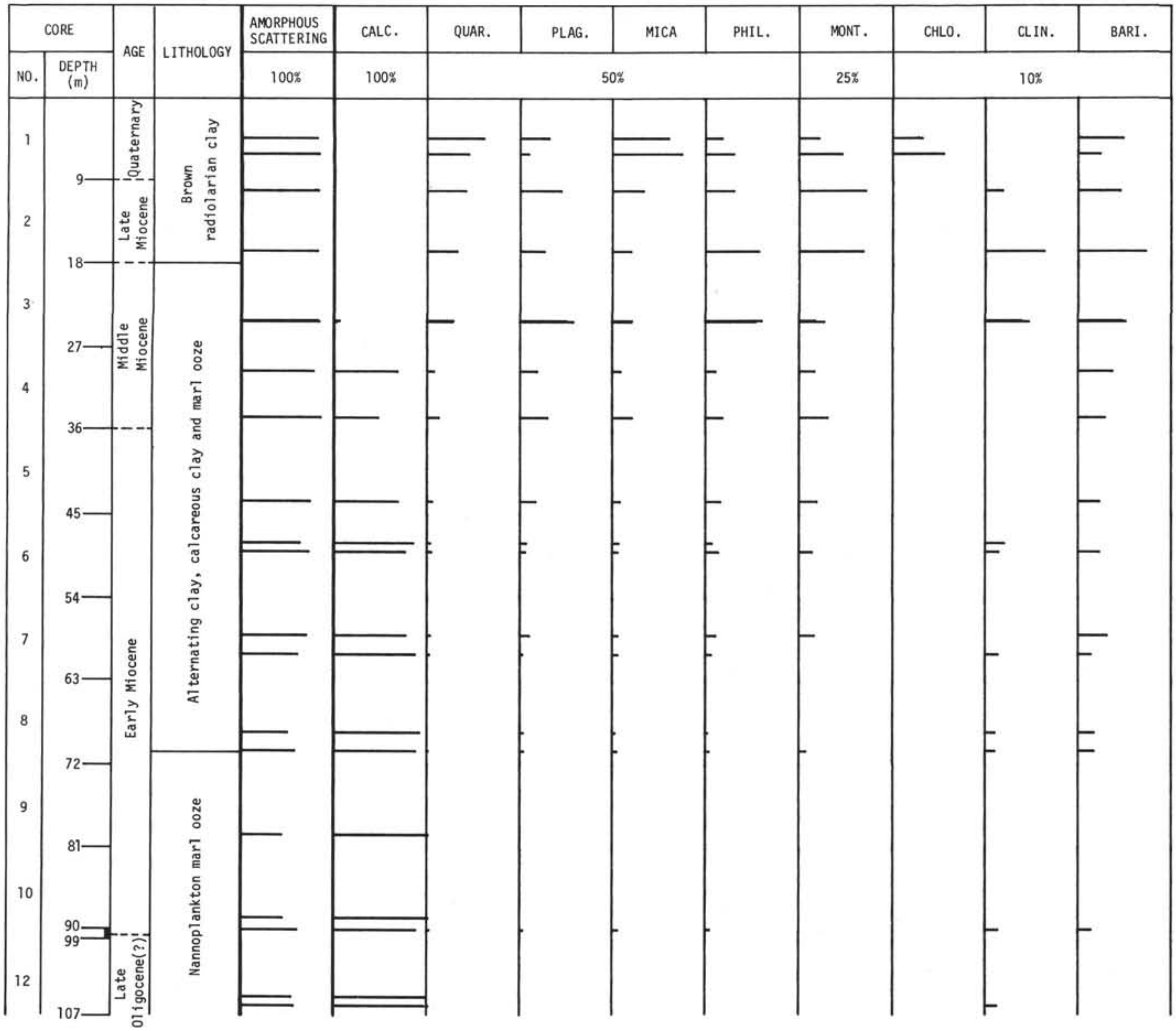


Figure 10. *DSDP 159 bulk samples.*

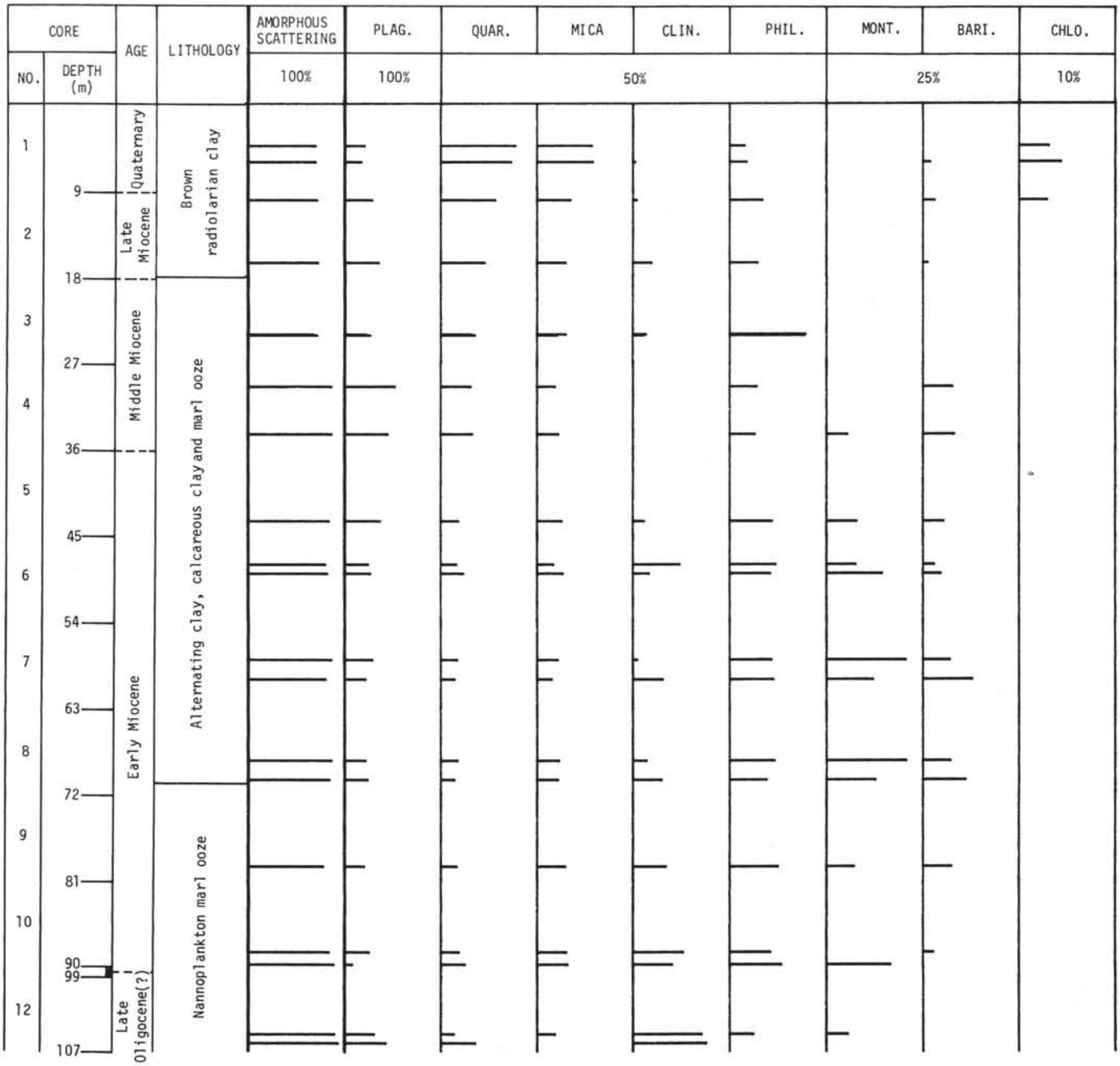


Figure 11. *DSDP 159 2-20μ fractions.*

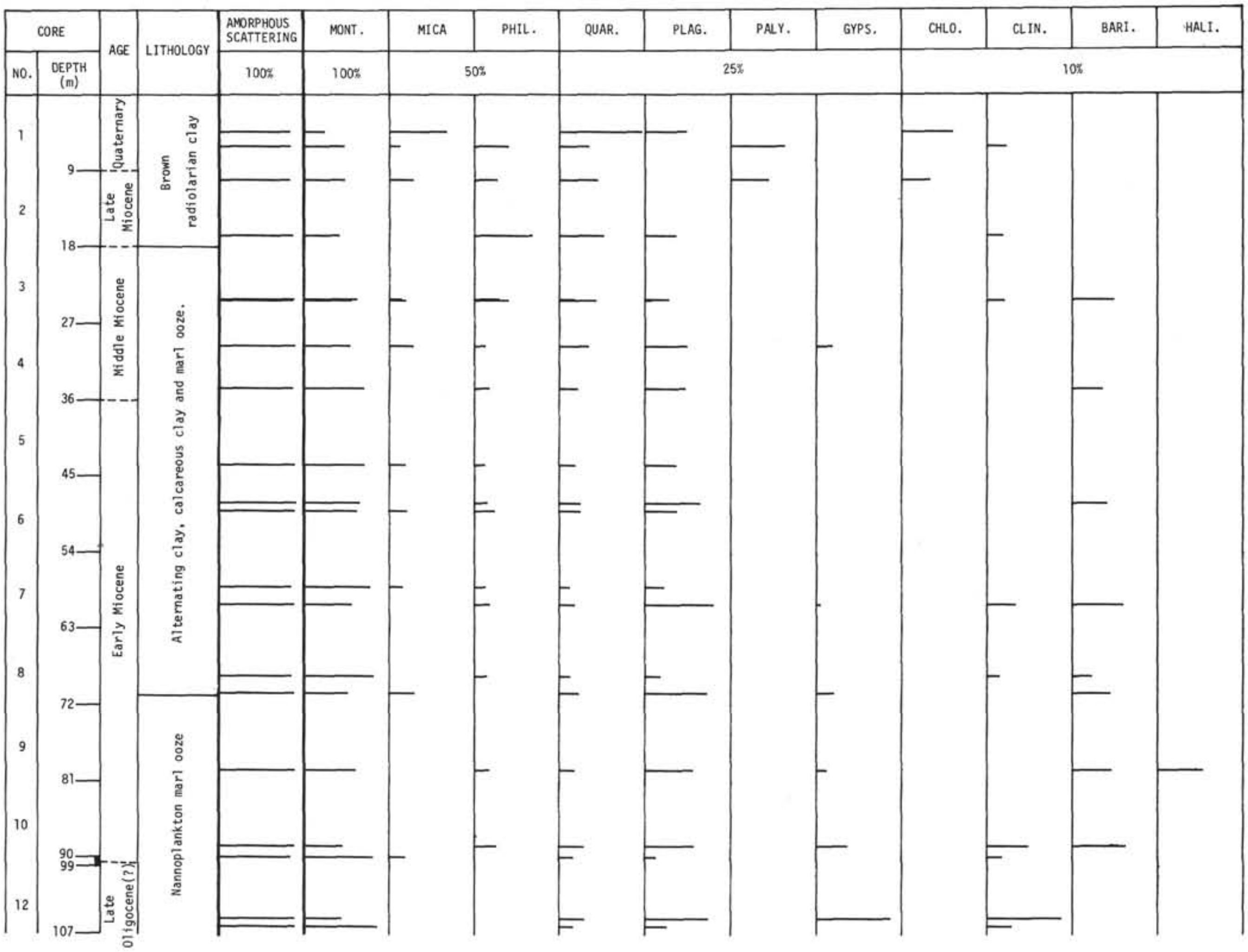


Figure 12. *DSDP 159 <2μ fractions.*

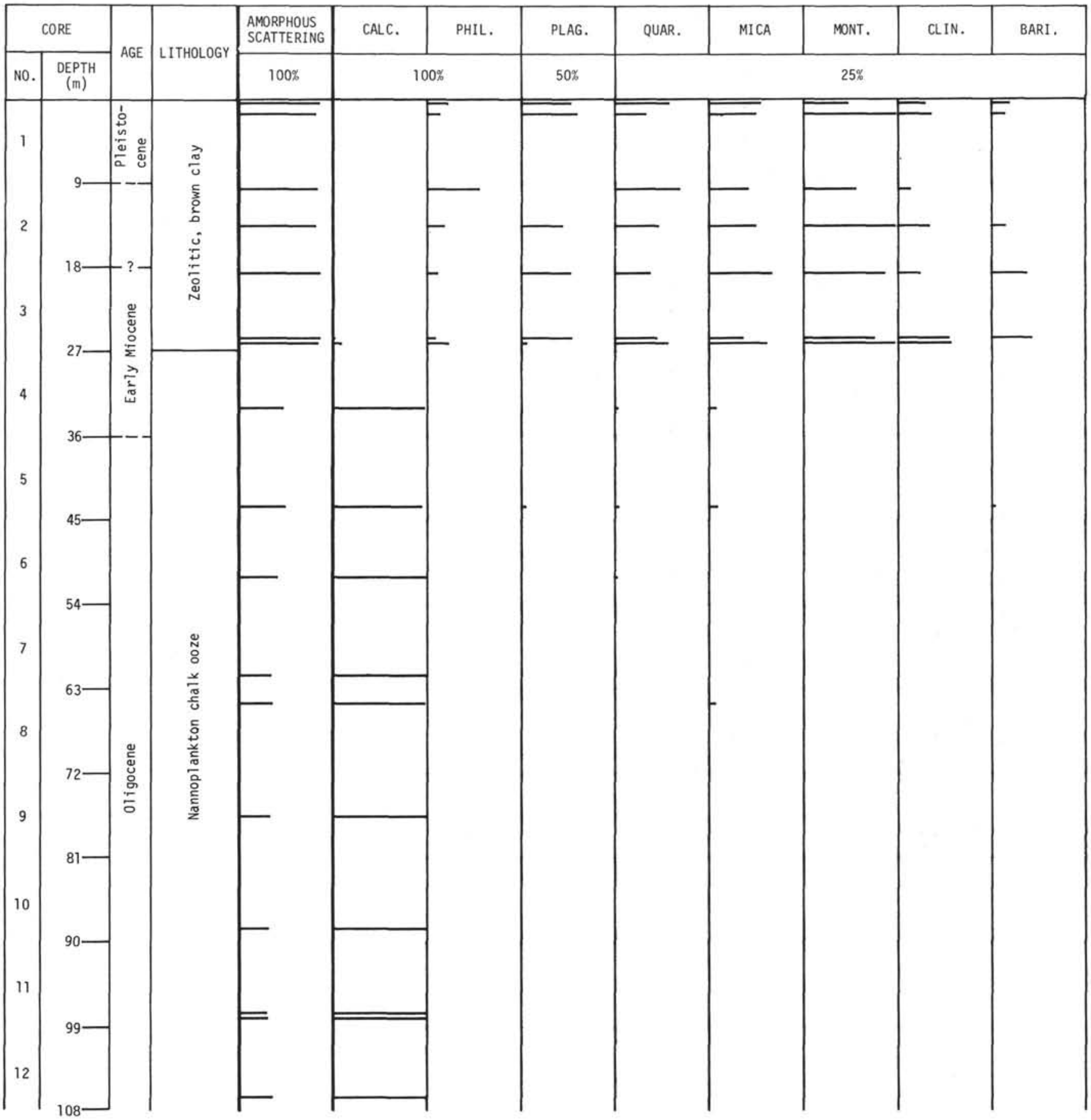


Figure 13. *DSDP 160 bulk samples.*

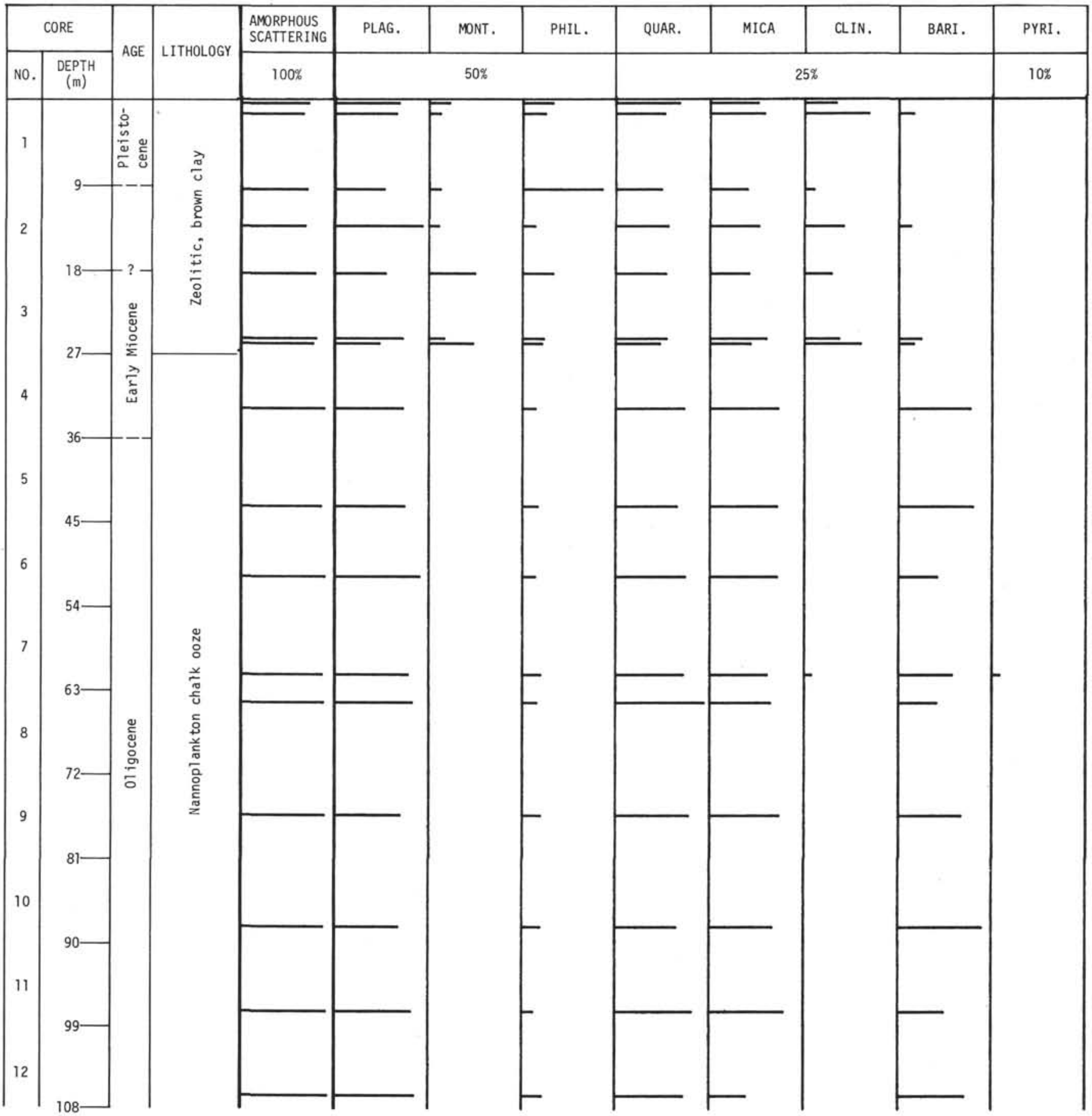


Figure 14. *DSDP 160 2-20μ fractions.*

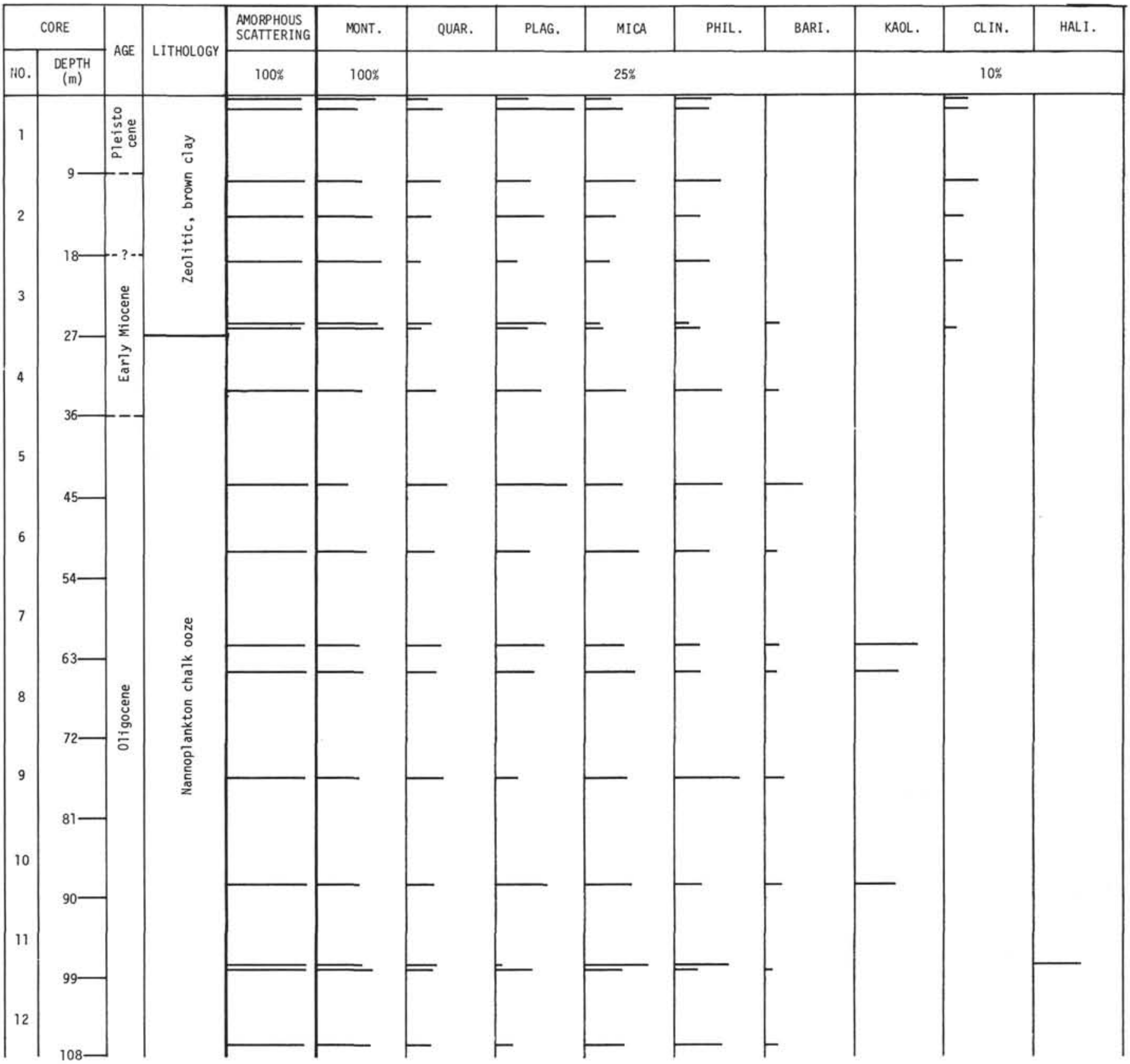


Figure 15. *DSDP 160 <2μ fractions.*

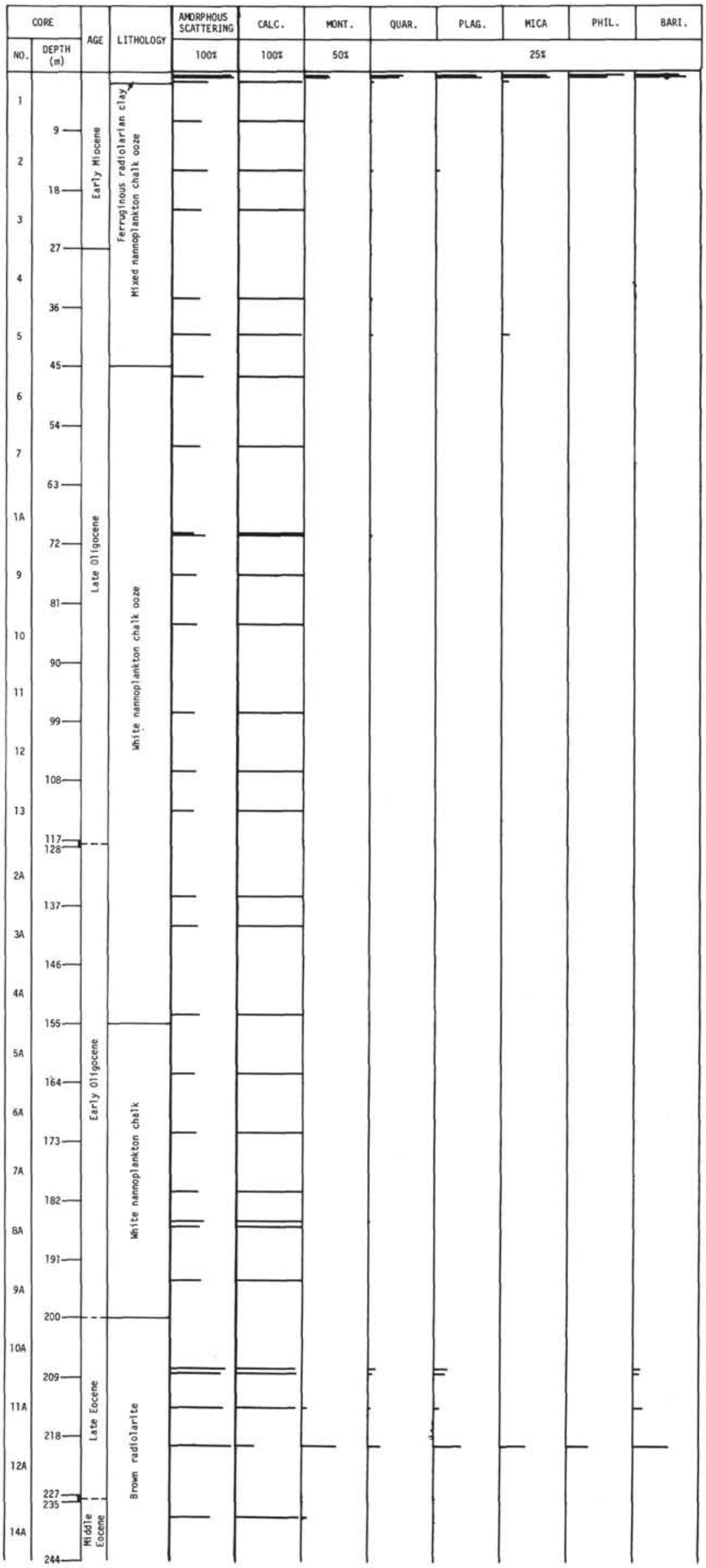


Figure 16. *DSDP 161 bulk samples.*

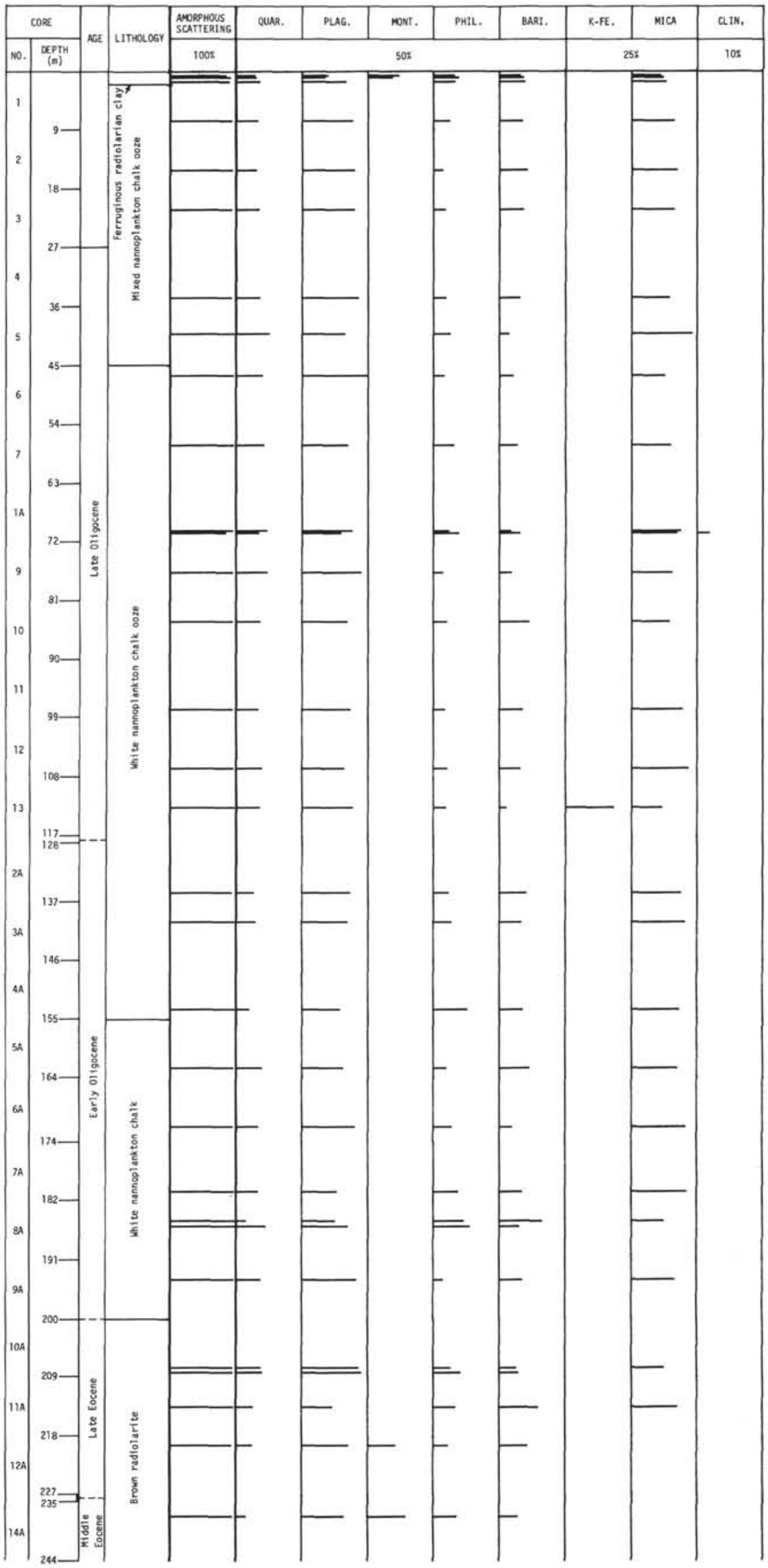


Figure 17. *DSDP 161 2-20μ fractions.*

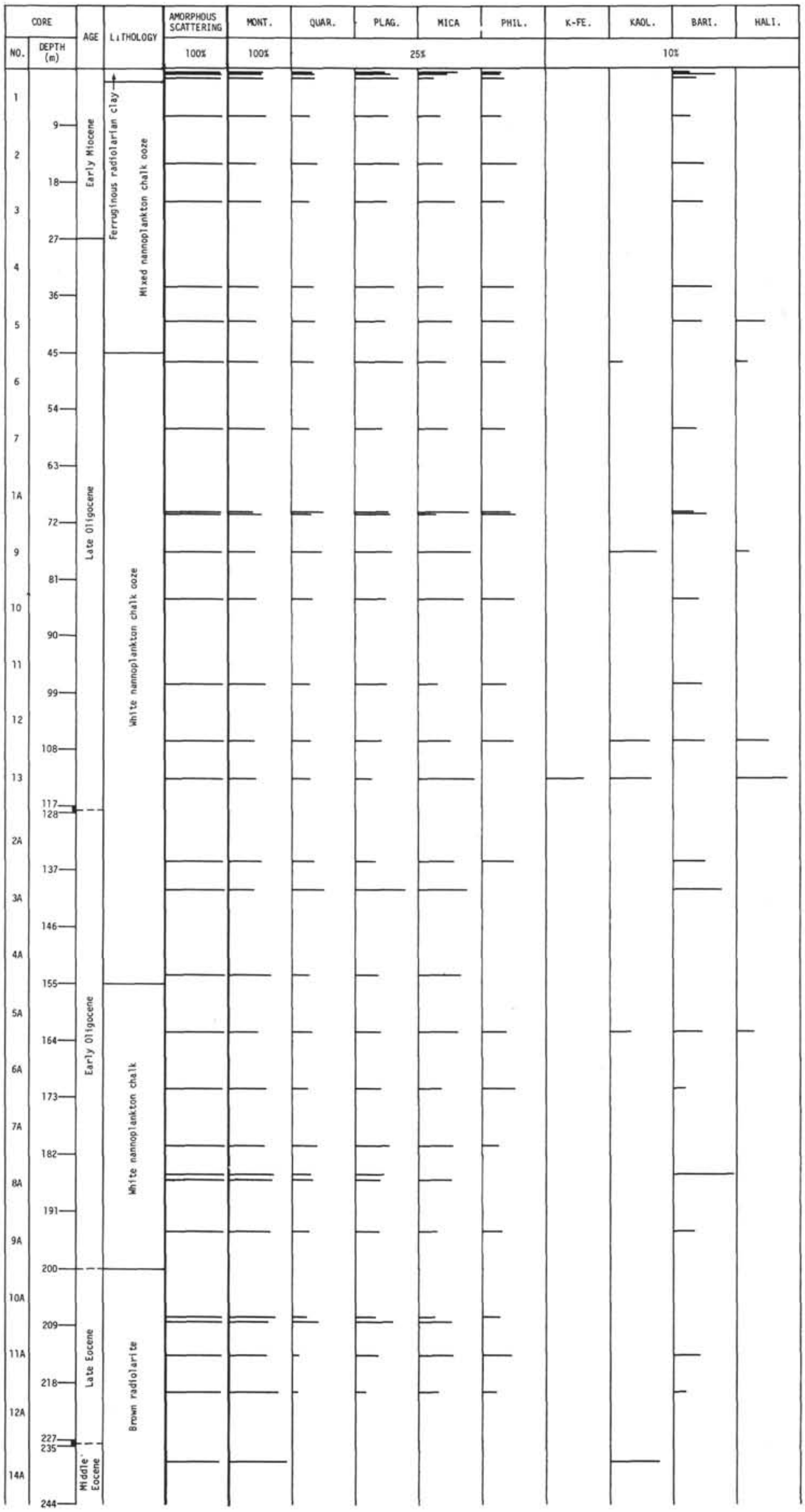


Figure 18. *DSDP 161 <2μ fractions.*

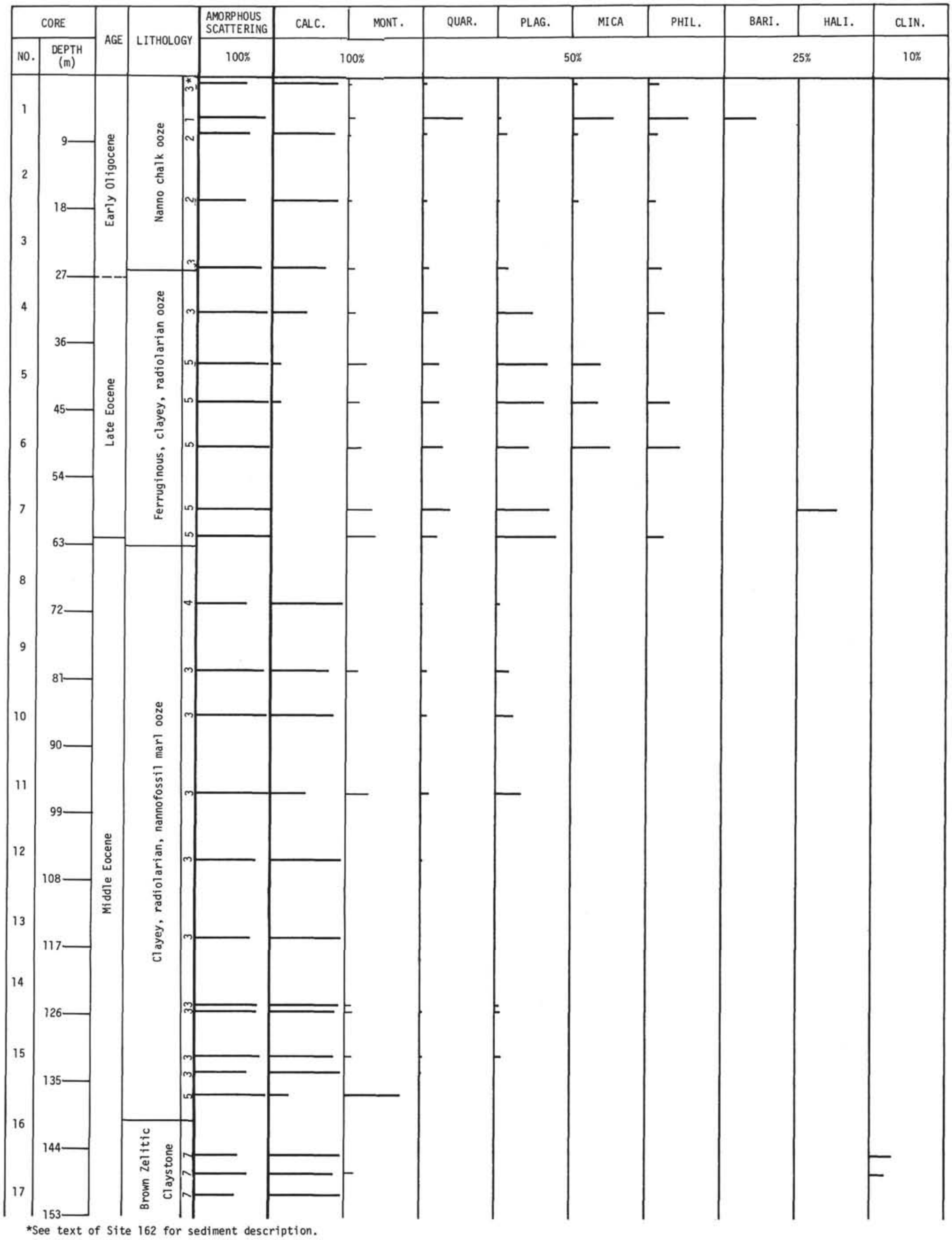
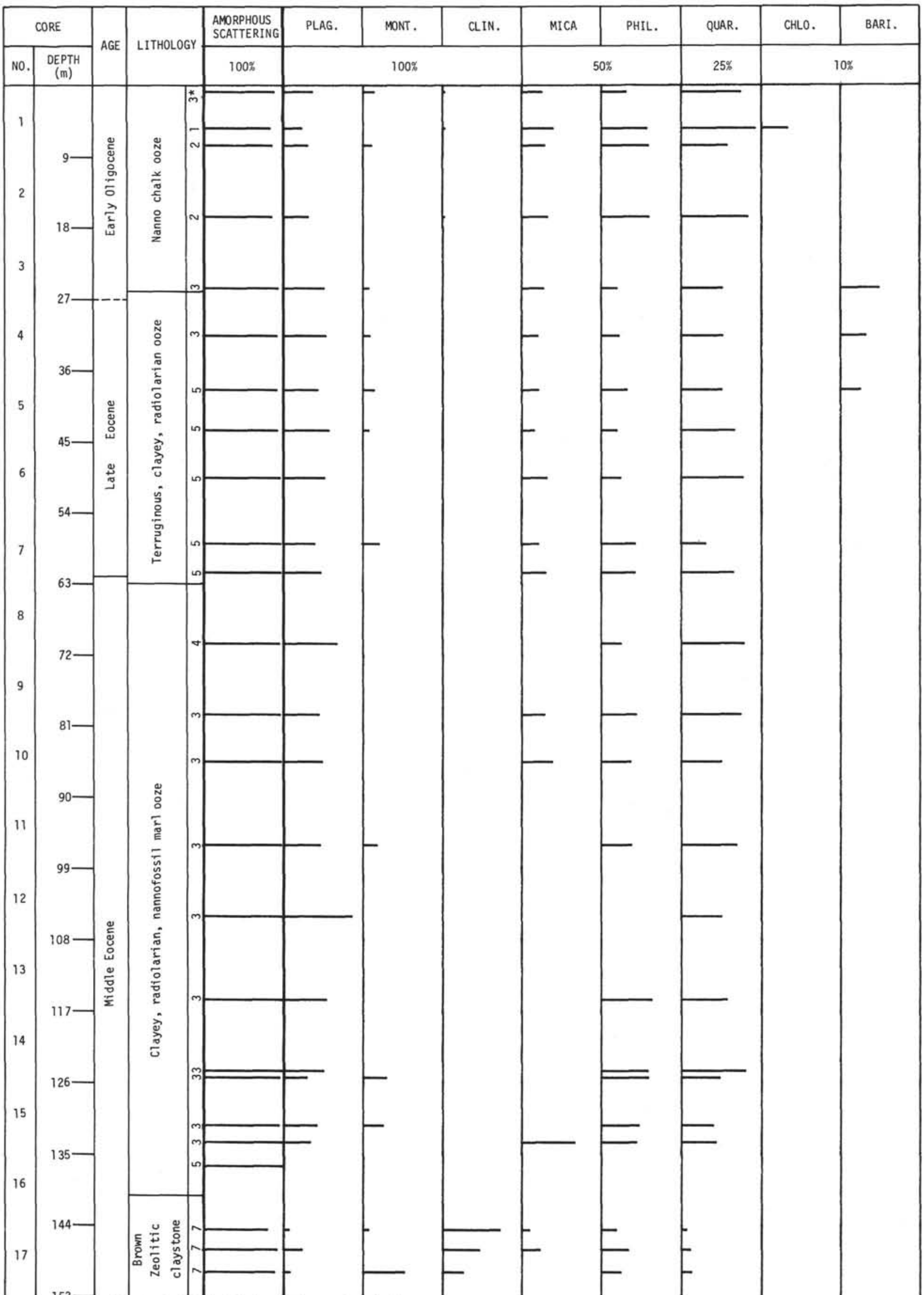
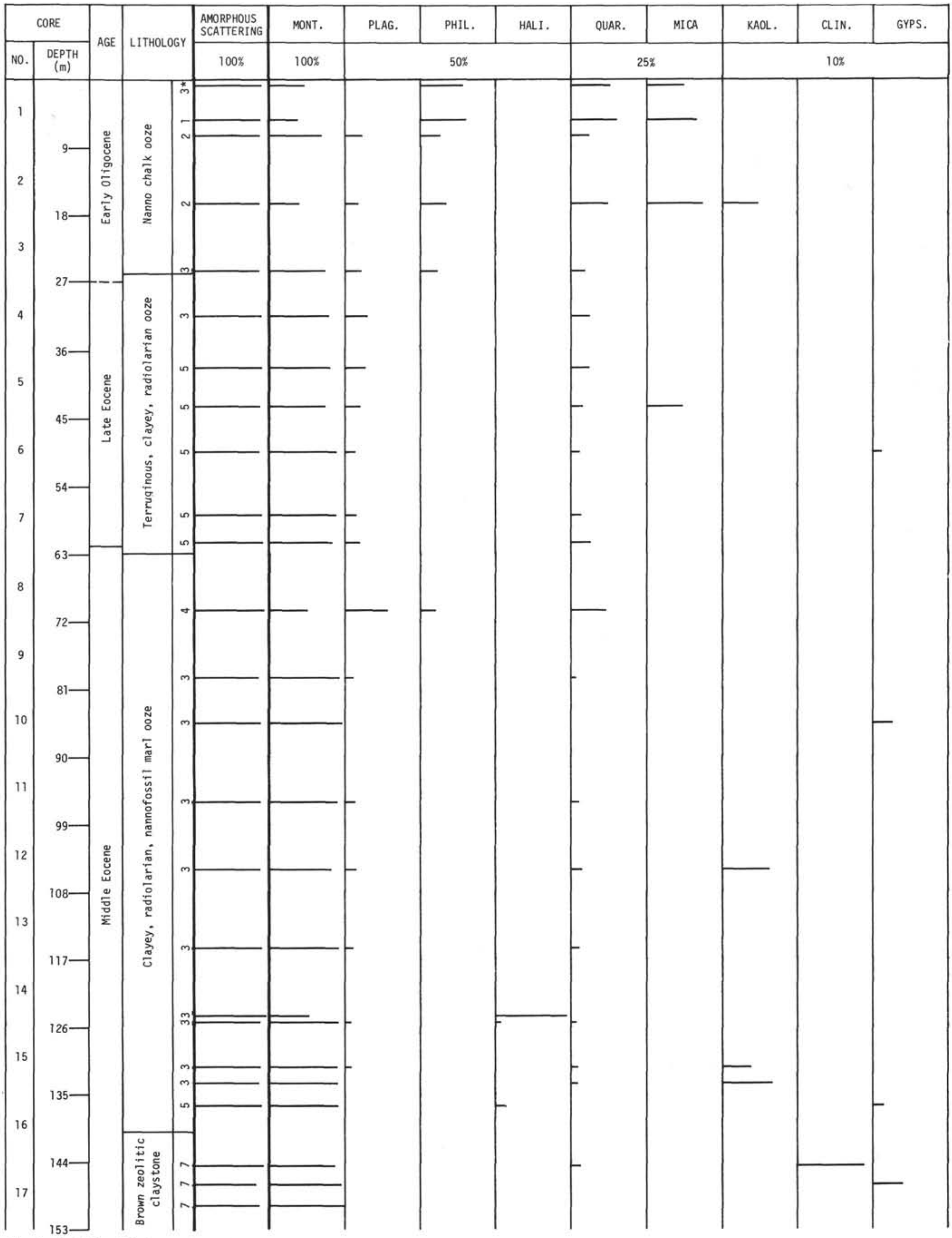


Figure 19. *DSDP 162 bulk samples.*



*See text of Site 162 for sediment description

Figure 20. *DSDP 162 2-20μ fractions.*



*See text of Site 162 for sediment description

Figure 21. *DSDP 162 <2μ fractions.*

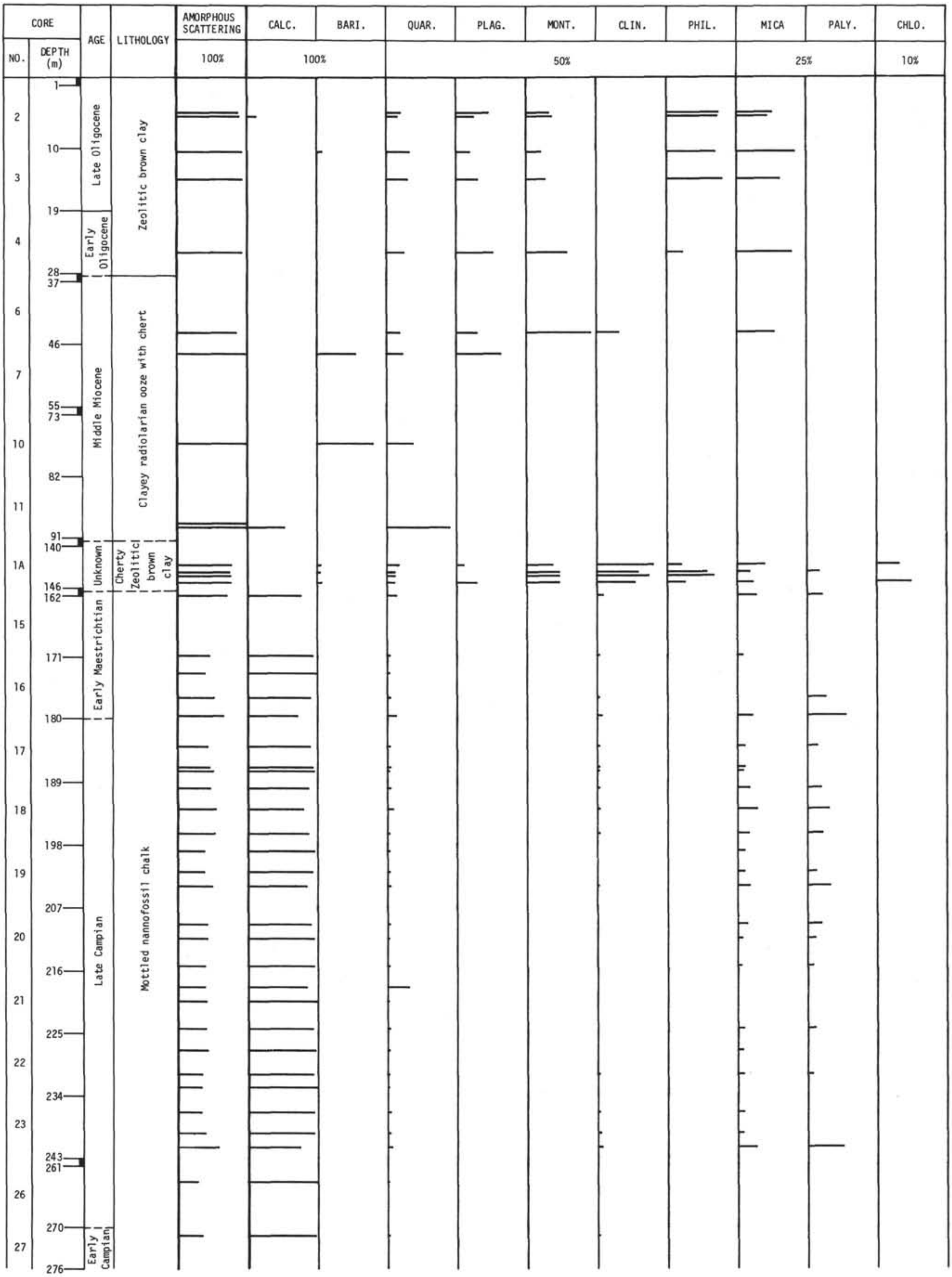


Figure 22. *DSDP 163 bulk samples.*

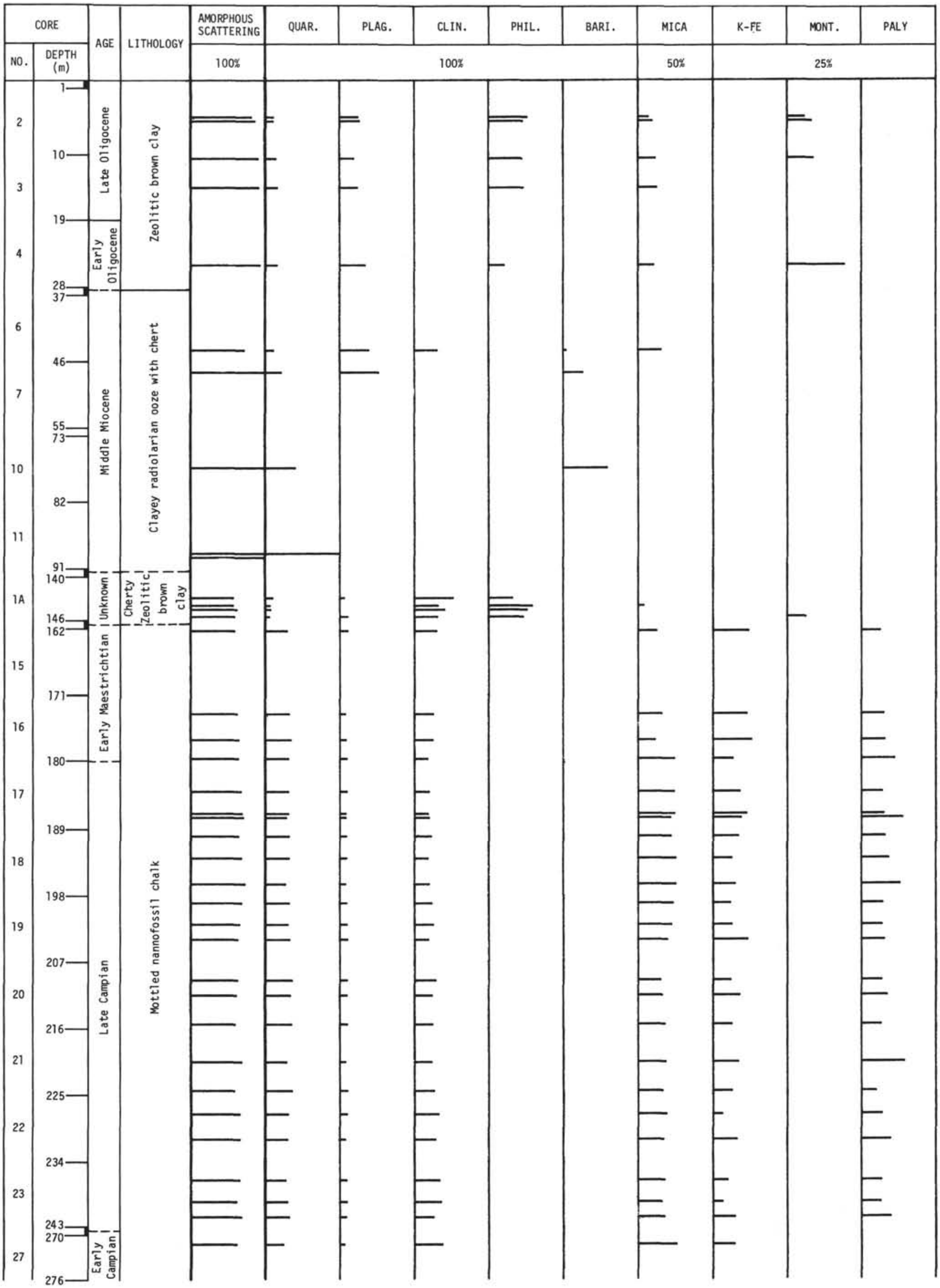


Figure 23. *DSDP 163 2-20μ fractions.*

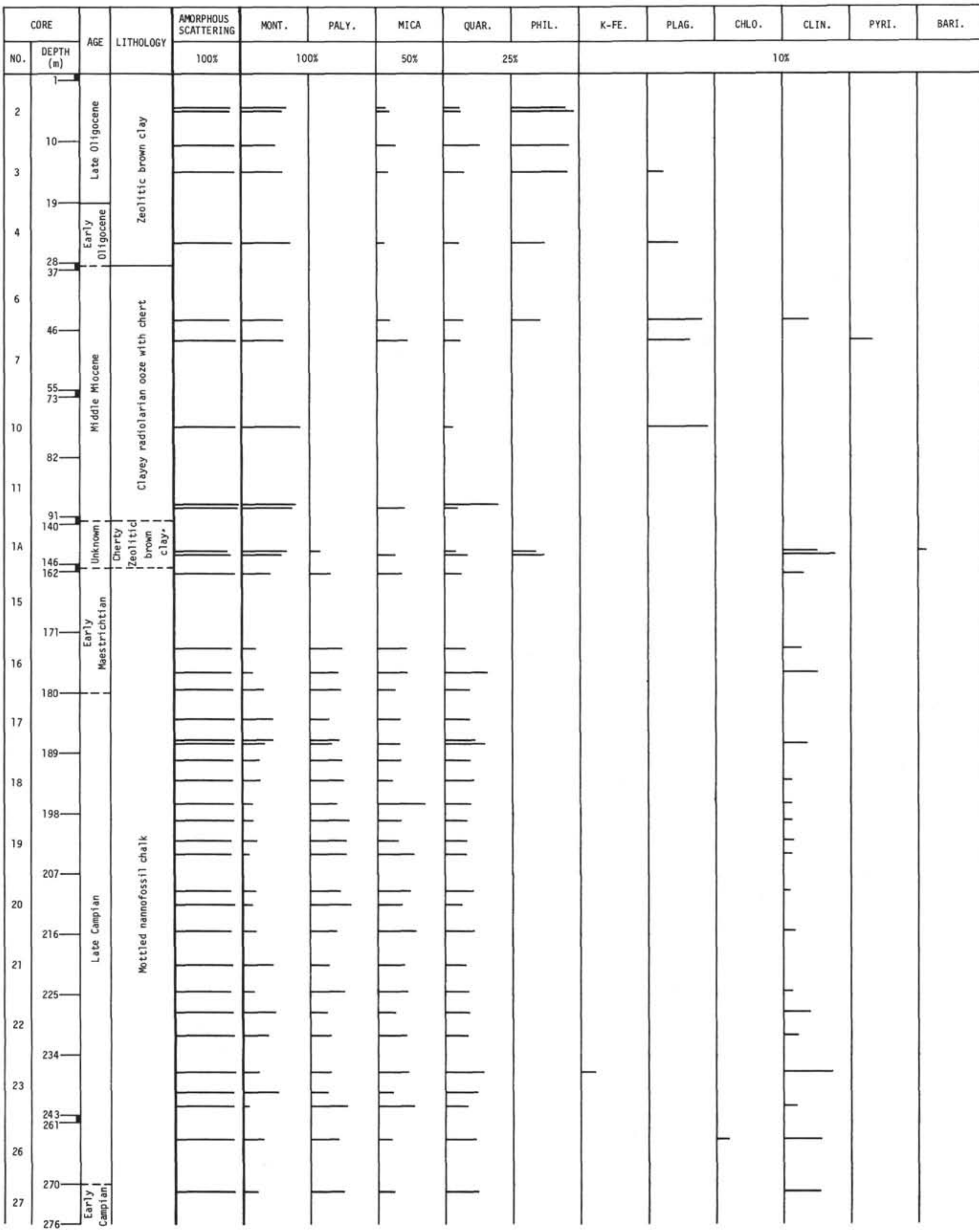


Figure 24. *Site 163 <2μ fractions.*