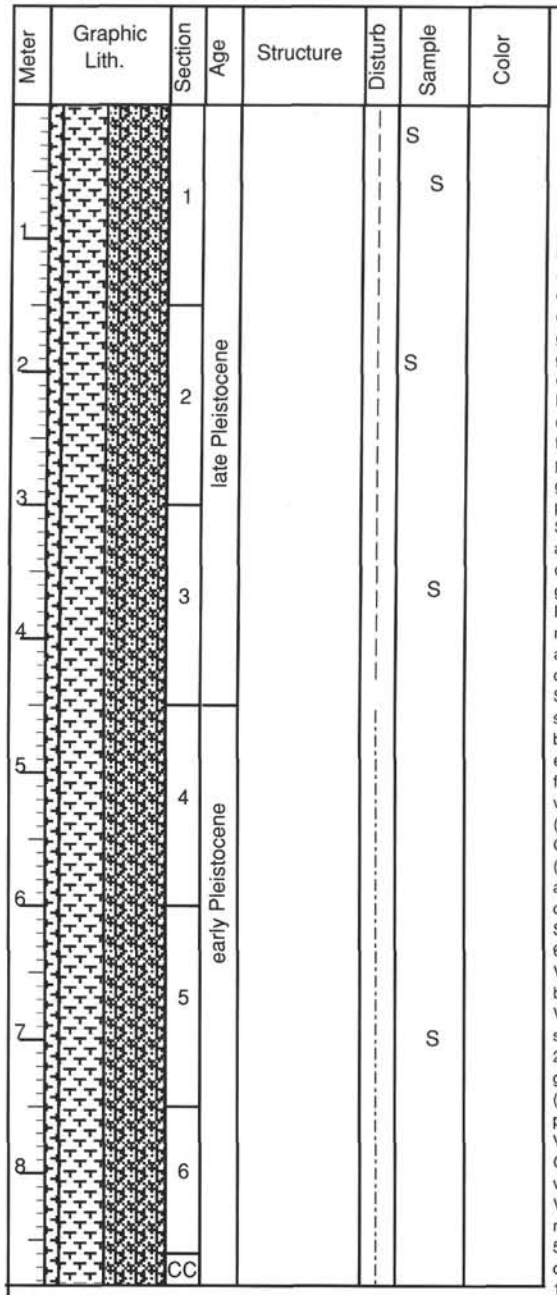
SITE 880 HOLE A CORE 1H

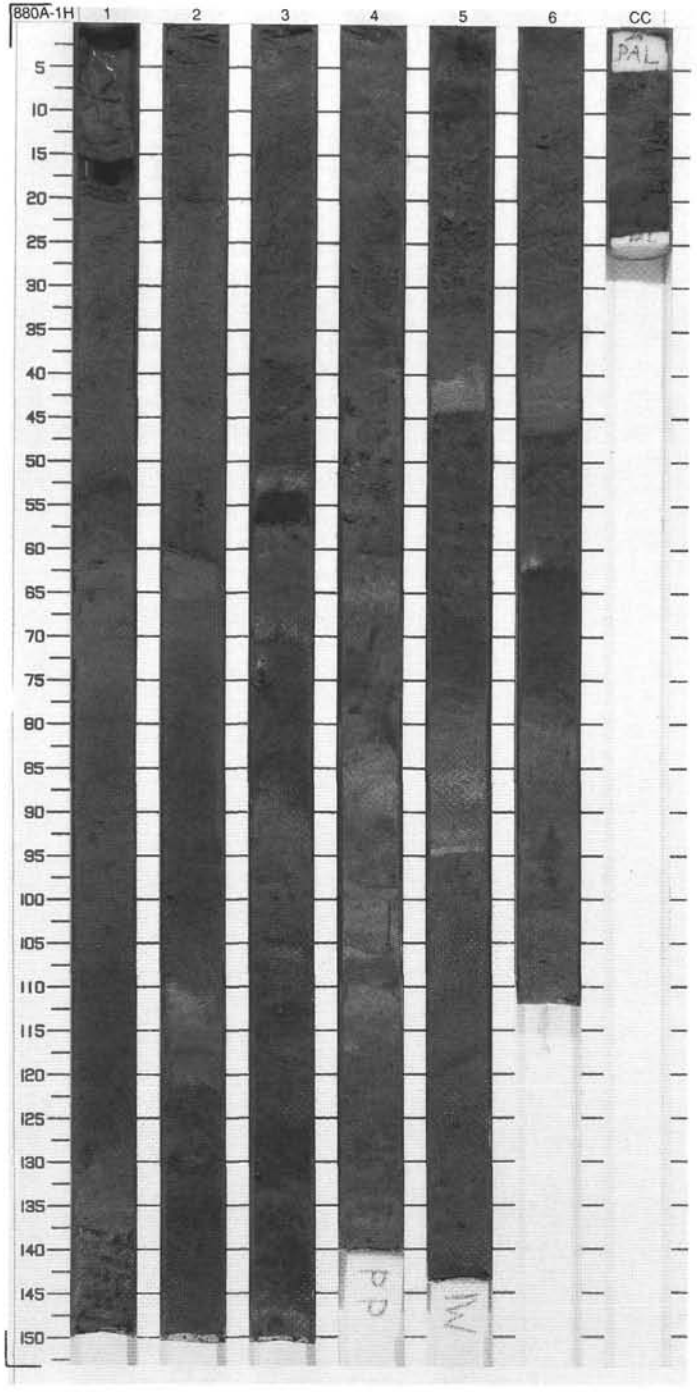
CORED 0.0 - 8.9 mbsf



DESCRIPTION

FORAMINIFER SAND, VOLCANICLASTIC SAND, and NANNOFOSSIL FORAMINIFER OOZE

Major Lithologies:
Section 1, 0–150 cm, is comprised by FORAMINIFER SAND with nannofossils and clay. The color is brown (10YR 4/3) grading down to grayish brown (10YR 5/2) at Section 1, 30 cm. Vague band of very dark gray (10YR 3/1) at Section 1, 52–54 cm. Two each broad, gradational bands of grayish brown (10YR 5/2) and gray (10YR 5/1) in Section 1, 54–130 cm. An inclined, irregular contact (40 degrees) occurs in Section 1, 126–132 cm. Color is light olive gray (5Y 6/2) with irregular, subhorizontal lenses of grayish black (N2). In Section 1, 147–152 cm, color is grayish brown (10YR 5/2). Opaque grains are a major component (about 30% in smear slides; one from a dark layer, one from a more typical interval). Many appear to be composite, black and brown aggregates or rock fragments. Some are probably single crystals. A few are pyrite, some inside foraminifer tests are filled with a silvery gray material with submetallic luster. These grains probably have varied and certainly unknown origins. Section 1, 130–147 cm includes dark gray lenses which appear to be beds disrupted by burrows. Foraminifer concentration is high in olive-gray portion; very low in grayish black lenses. Section 2, 0–54 cm, consists of FORAMINIFER SAND with 25% opaque grains. Color is mostly grayish brown (10YR 5/2) in Section 2, 0–54 cm and grades into grayish black (N2) with a sharp lower contact at Section 2, 61 cm, that is inclined 20 degrees. Section 2, 61–66 cm is olive gray (5Y 5/2) with a fairly sharp transition to grayish brown (10YR 5/2). Grayish brown passes gradually to very dark gray (10YR 3/1) that extends from Section 2, 92 cm to Section 2, 110 cm. A fairly sharp, inclined contact marks the top of an interval of vaguely banded pale yellow green (10GY 7/2) and gray (5Y 6/2). There is a sharp boundary at Section 2, 122 cm. Gradual transitions separate intervals of medium dark gray (N4) at Section 2, 122–131 cm, grayish brown (10YR 5/2) at Section 2, 131–143 cm and gray (5Y 5/1) at 143–150 cm. Section 2, 54–61 cm, is comprised by OPAQUE SAND; the composition of opaques is unknown. Section 2, 61–66 cm, consists of olive gray (5Y 5/2) VOLCANICLASTIC SAND with 90% of glass and 10% of brown grains. Section 2, 66–110 cm, includes mixed VOLCANICLASTIC OPAQUE SAND. Its appearance is similar in color and texture to foraminifer sand in Section 2, 0–54 cm, but foraminifers are virtually absent. Color is grayish brown (10YR 5/2) grading down to very dark gray (10YR 3/1); fine silt and clay content is appreciable, perhaps 40%. Section 2, 110–122 cm, consists of VOLCANICLASTIC SAND. Glass is the main component. Color is pale yellow green (10GY 7/2) and gray (5Y 6/2), vaguely banded. Section 2, 122–143 cm, consists of VOLCANICLASTIC SAND with opaque grains. Color is medium dark gray (N4) at the top, grayish brown (10YR 5/2) at the base. Opaque grains are about 25%, mostly clear glass; probably considerable feldspars. Section 2, 143–150 cm, is comprised by VOLCANICLASTIC SILT with opaque grains (about 10%). Color is gray (10Y 5/1).



Site 880 Hole A Core 1H Description continued...

There are sharp glass shards. Section 3, 0–50 cm, consists of FORAMINIFER SAND with opaque grains and rock fragments. The color is grayish brown (10YR 5/2). Section 3, 50–54 cm, is composed of VOLCANIC ASH. The color is pale yellow green (10GY 7/6). The base is sharp and the top is gradational. Possible burrows. Section 3, 54–57 cm, consists of LITHOCLAST SAND including 40% rock fragments. These rock fragments are brown or black, a few appear to be lava with elongated vesicles. This lithoclast sand also includes 25% opaque grains; most of these grains are black, nonmetallic, equant with sharp corners and may correspond to manganese oxides. 15% nannofossils and 10% of clay. Section 3, 57–68 cm, is comprised by VOLCANICLASTIC SAND with foraminifers. The color is grayish brown (10YR 5/2). Section 3, 68–70 cm, consists of pale yellow green (10GY 7/2) VOLCANICLASTIC SAND. Section 3, 70–88 cm, is comprised by VOLCANICLASTIC-LITHOCLAST SAND. Glass is 40%; lithoclasts and opaque grains also occur. Few sponge spicules. Section 3, 88–105 cm, NANNOFOSSIL FORAMINIFER OOZE with 10% lithoclasts. The color is olive gray (5Y 5/2). Section 3, 105–146 cm, consists of VOLCANICLASTIC-LITHOCLAST SAND. Glass is 40%; lithoclasts and opaque grains also occur. Many foraminifers occur in Section 3, 105–114 cm.
Section 3, 146–150 cm, is comprised by VOLCANICLASTIC SAND. The color is light olive gray (5Y 6/2). Section 4, 0–62 cm, consists of NANNOFOSSIL FORAMINIFER OOZE. The color is dark grayish brown (2.5Y 4/2) with darker splotches. Admixture of sand sized lithoclasts and opaque grains. A scoriaceous basalt clast is reported in Section 4, 43 cm. Rounded, 0.5 to 1 cm, light gray pebbles with sparse dark phenocrysts are observed in Section 4, 49–57 cm. Section 4, 62–140 cm, is comprised by FORAMINIFER NANNOFOSSIL OOZE. The color is olive gray (5Y 5/2) and dark grayish brown (10YR 4/2); the distribution of colors is patchy. Section 5, 0–40 cm, consists of VOLCANICLASTIC SAND. The color is dark grayish brown (10YR 4/2). This sand includes glass and lithoclasts; foraminifers are 10% in sand fraction. Rounded pebbles, 2–15 mm in diameter, occur in Section 5, 20–27 cm. Section 5, 40–44 cm, is comprised by VOLCANIC ASH. The color is light brownish gray (10YR 6/2). Section 5, 44–79 cm, consists of VOLCANICLASTIC SAND. The color is olive gray (5Y 4/2) and very dark grayish brown (10YR 3/2). Round pebbles, 5 mm in average diameter, are scattered in this volcaniclastic sand. Section 5, 79–85 cm, olive gray (5Y 5/2) NANNOFOSSIL FORAMINIFER OOZE. Section 5, 85–94 cm, VOLCANIC ASH. Section 5, 94–144 cm, consists of NANNOFOSSIL FORAMINIFER SAND. The color is olive gray (5Y 4/2). Section 6, 0–36 cm, consists of VOLCANICLASTIC SAND rich in foraminifers. Grain size is fine sand. Color is dark grayish brown (2.5Y 4/2). Section 6, 36–46 cm, is comprised by pinkish gray (5YR 6/2) soft ash. Section 6, 46–112 cm, consists of VOLCANICLASTIC SAND. The color is olive gray (5Y 4/2) with dark yellowish green (10G 5/2) in Section 6, 46–62 cm, very dark gray (10YR 3/1) in Section 6, 62–80 cm, olive gray (5Y 5/2) in Section 6, 80–100 cm, gray (5Y 5/1) in Section 6, 100–112 cm. Section CC, 0–24 cm, consists of homogeneous and soft VOLCANICLASTIC SAND AND SILT comprised predominantly by glass shards and minor foraminifers. The color is dark grayish brown (2.5Y 4/2) in Section CC, 0–18 cm and grayish green in Section CC,18–24 cm.

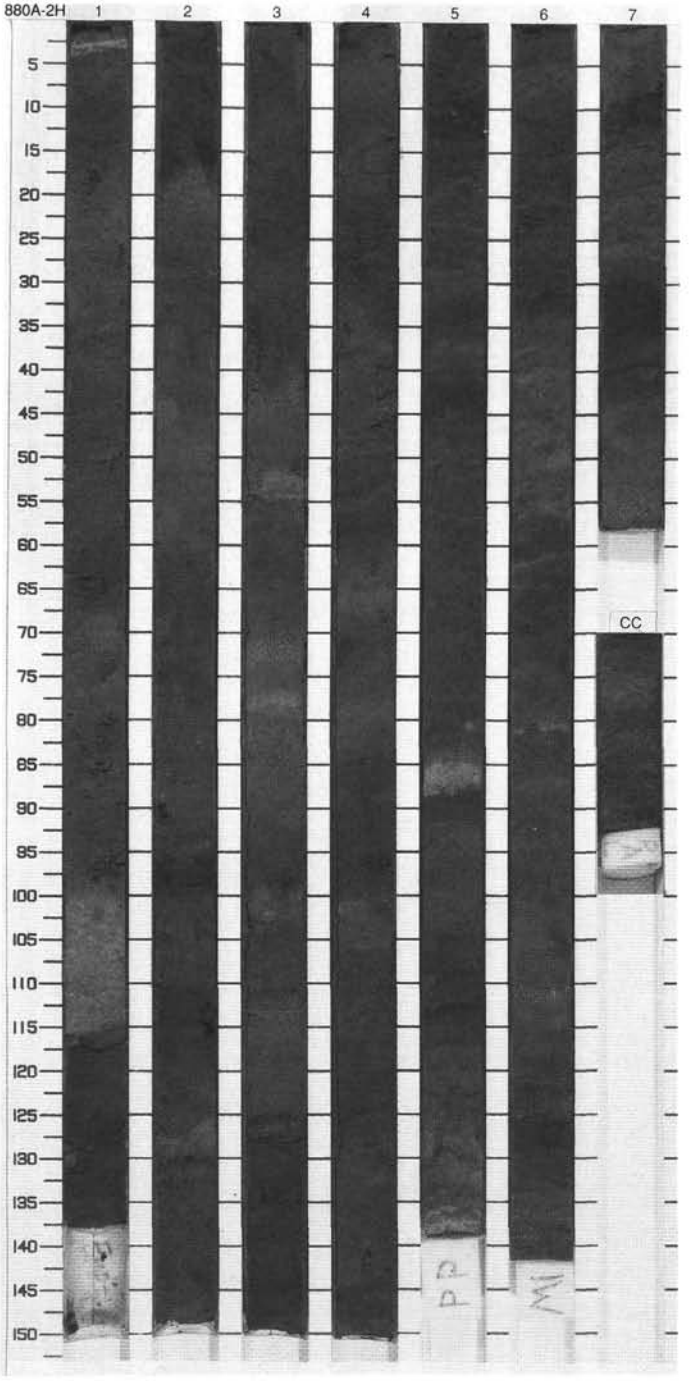
SITE 880 HOLE A CORE 2H CORED 8.9 - 18.4 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color
1–9		1, 2, 3, 4, 5, 6, 7, CC	early Pleistocene; late Pliocene				

DESCRIPTION

FORAMINIFER VOLCANICLASTIC SAND

Major Lithology:
Section 1, 3–98 cm, consists of olive gray (5Y 3/2) and light olive gray (5Y 5/2) VOLCANICLASTIC FORAMINIFER SAND. This sand includes opaque minerals. Volcanic lapilli at Section 1, 60 cm and 95 cm. Section 1, 98–118 cm, is comprised of pale olive (10Y 6/2) volcanic ash. Section 1, 118–138 cm, consists of VOLCANICLASTIC FORAMINIFER SAND similar to Section 1, 3–98 cm. Section 2, 0–127 cm, consists of olive gray (5Y 5/2) and light olive gray (5Y 3/2) VOLCANICLASTIC SAND. Few to many foraminifers occur in this sand. Opaque grains are many to common. Volcanic lapilli occur in Section 2, 90 cm and 110 cm. Section 2, 127–130 cm, is pale olive VOLCANIC ASH bed with foraminifers. Section 2, 130–150 cm, consists of olive gray (5Y 5/2) and light olive gray (5Y 3/2) VOLCANICLASTIC SAND similar to Section 2, 0–127 cm. Section 3, 0–150 cm, is comprised by VOLCANICLASTIC FORAMINIFER SAND. Colors range from olive gray (5Y 5/2) to light olive gray (5Y 3/2). Opaque grains are common. Foraminifers are few to many; nannofossils also occur. In general, but not absolute, lighter colors correspond to increasing percentages of carbonate grains. Lenticular, partially lithified nodules to 2 cm in diameter. Section 4, is similar to section 3, with few pumice fragments up to1.5 cm and light ash bed at 100–106 cm. Section 6, 79–81 cm, and 123–125 cm: gray ash bed. Section 7, 0–8 cm, consists of mixed VOLCANICLASTIC-FORAMINIFER SAND. The color is olive gray (5Y 5/2). Section 7, 8–58 cm, is comprised by VOLCANICLASTIC SAND with calcareous nannofossils. Foraminifers are very few. Carbonate content is slightly higher in lighter portions. Color is olive gray (5Y 5/2 to 4/2). Section CC, 0–23 cm, consists of mixed FORAMINIFER-VOLCANICLASTIC SAND. The color is light brownish gray (2.5Y 6/2) with a grayish brown (2.5Y 5/2) mottling.



880A-1H
CORED 0.0 –8.9 mbsf
Meter
Graphic Lith.
Section
Age
Calc. nanno.
Plank. foram.
Larger foram.
Structure
Disturb.
Sample
Color
1
2
3
4
5
6
7
8
CC
early Pleistocene
late Pleistocene
P. lacunosa
E. huxleyi
E. huxleyi Acme
late Pliocene to Recent
A,G
C,P
S
880A-2H
CORED 8.9 –18.4 mbsf
9
late Pliocene
early Pleistocene
CN12d
C. macintyrei
H. sellii
small gephryocapsid
late Pliocene to Recent
F,P
B