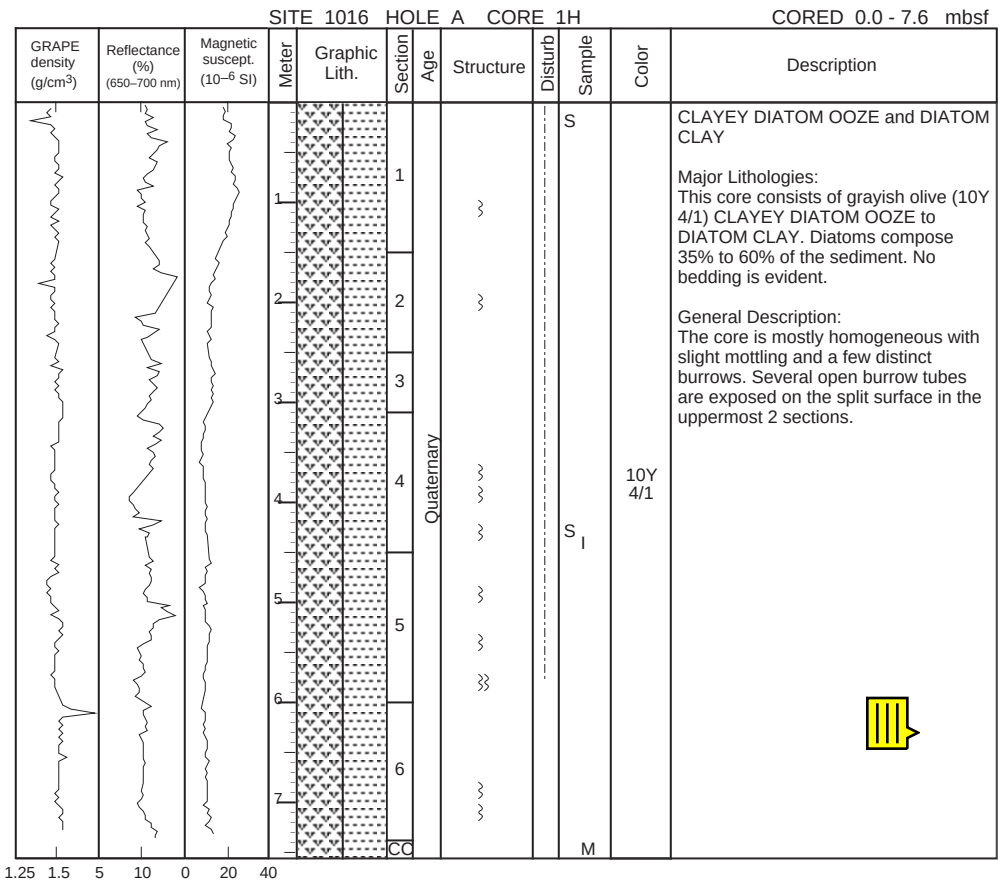
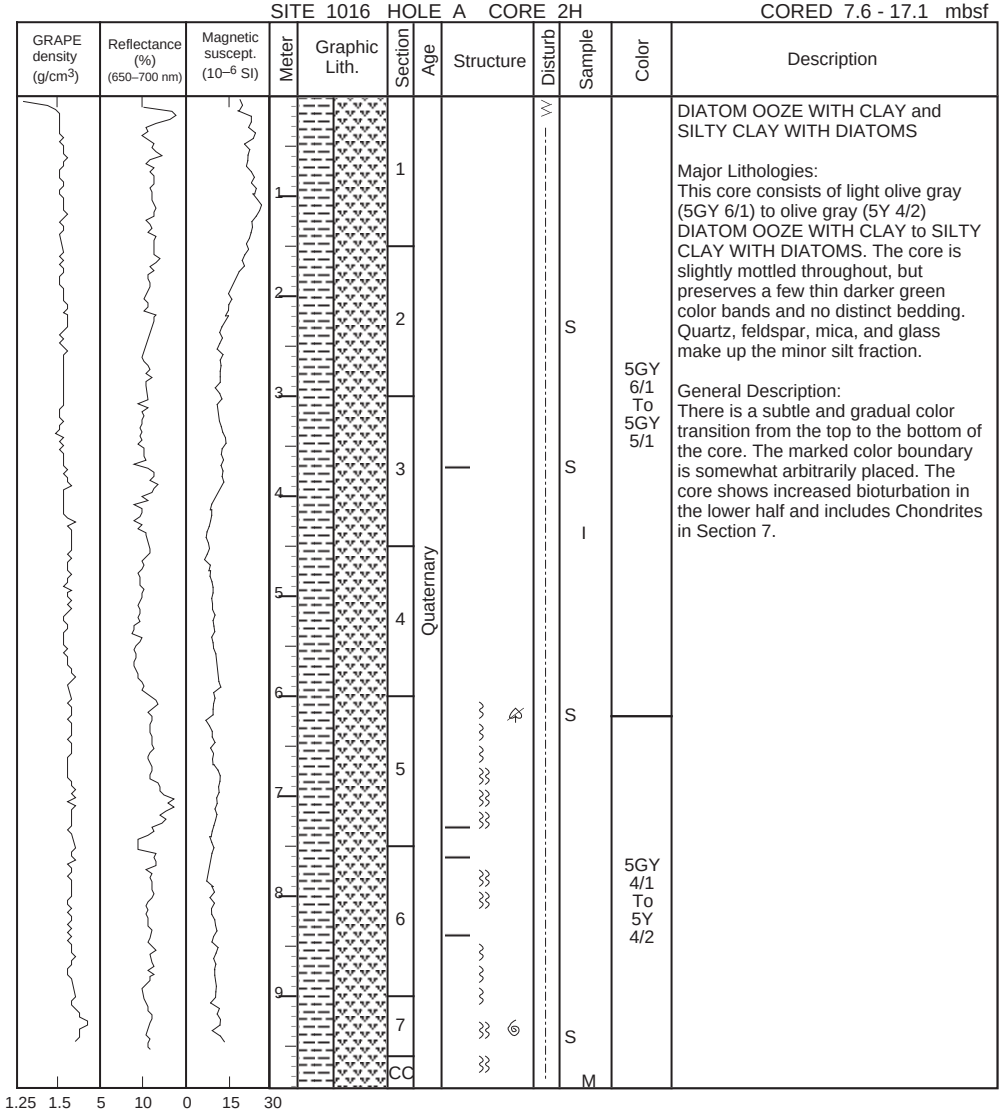


CLAYEY DIATOM OOZE and DIATOM CLAY

Major Lithologies:
This core consists of grayish olive (10Y 4/1) CLAYEY DIATOM OOZE to DIATOM CLAY. Diatoms compose 35% to 60% of the sediment. No bedding is evident.

General Description:
The core is mostly homogeneous with slight mottling and a few distinct burrows. Several open burrow tubes are exposed on the split surface in the uppermost 2 sections.

SITE 1016 HOLE A CORE 2H CORED 7.6 - 17.1 mbsf

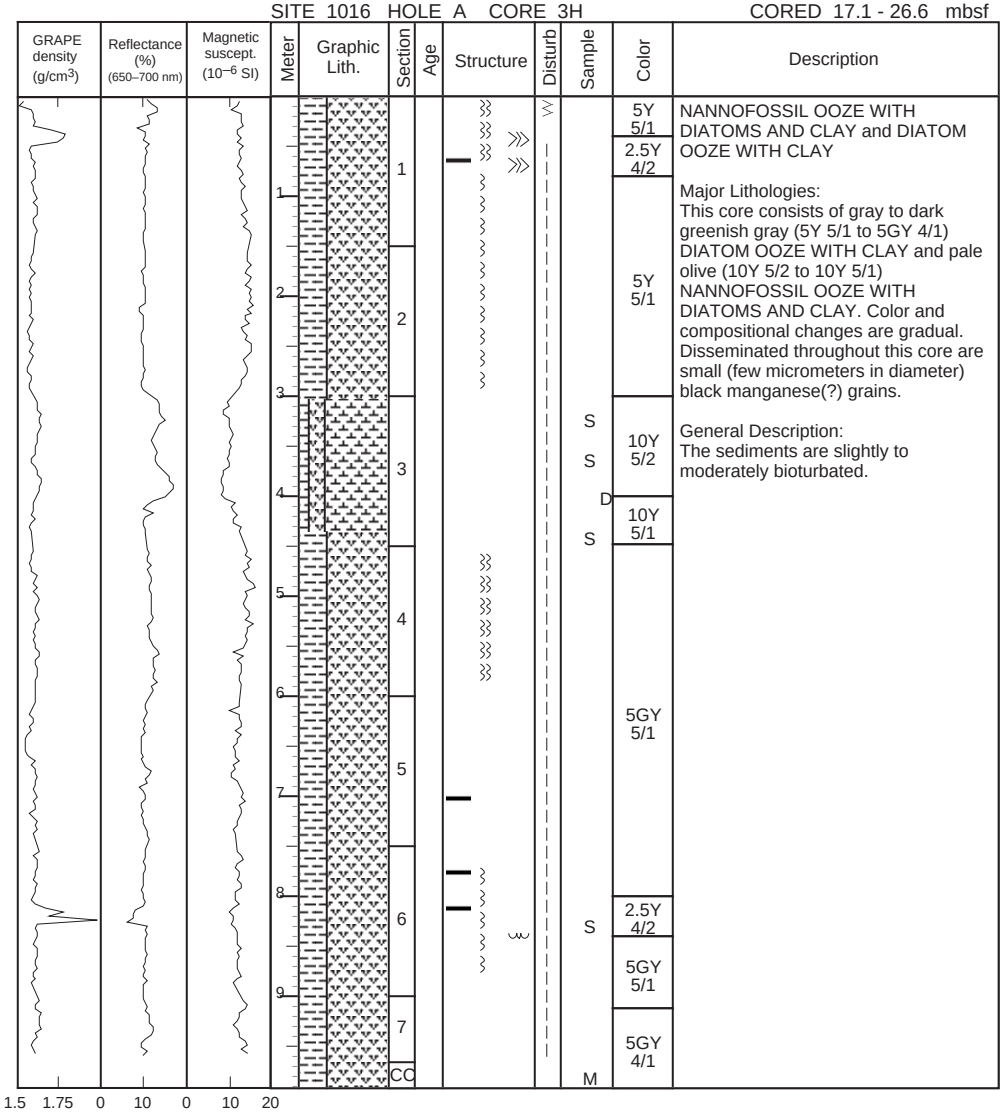


DIATOM OOZE WITH CLAY and SILTY CLAY WITH DIATOMS

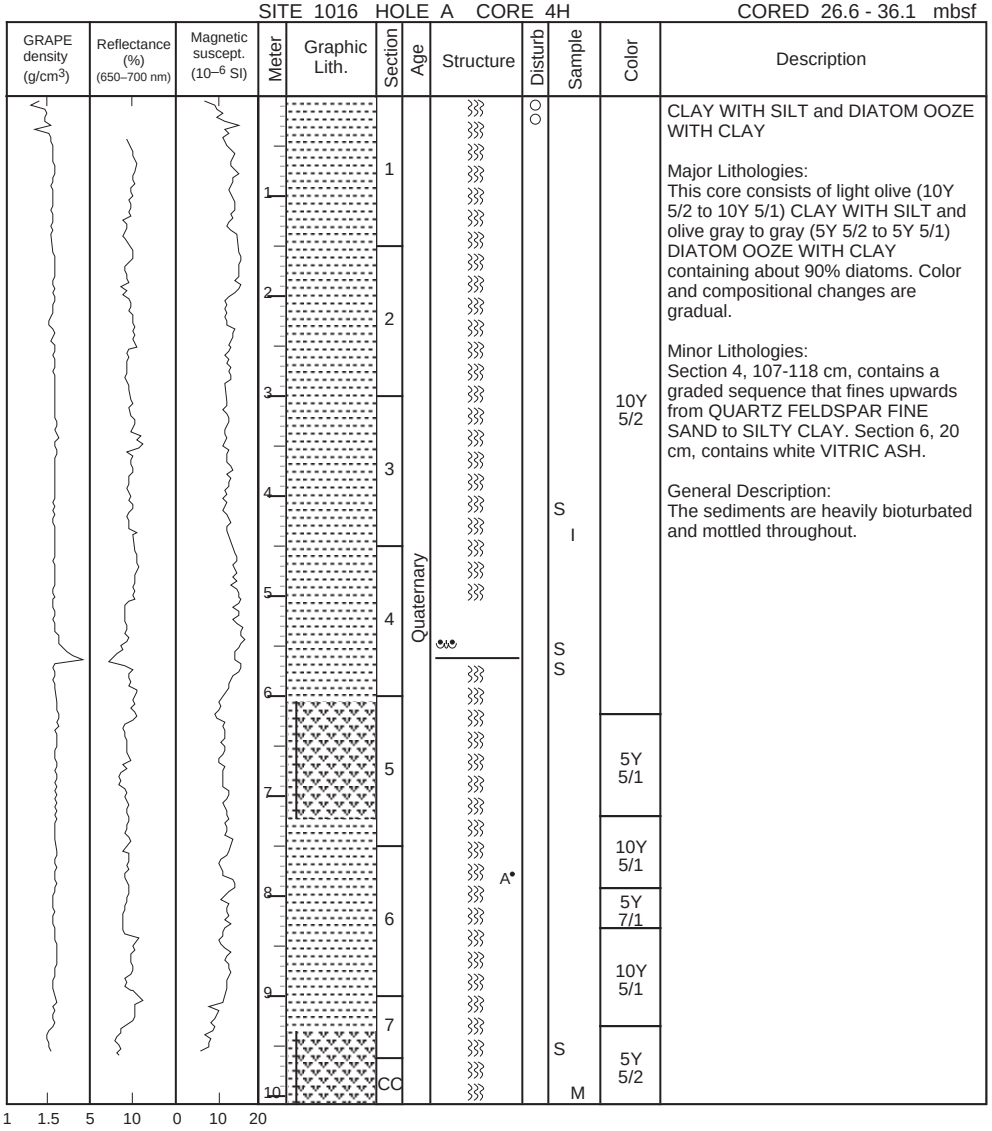
Major Lithologies:
This core consists of light olive gray (5GY 6/1) to olive gray (5Y 4/2) DIATOM OOZE WITH CLAY to SILTY CLAY WITH DIATOMS. The core is slightly mottled throughout, but preserves a few thin darker green color bands and no distinct bedding. Quartz, feldspar, mica, and glass make up the minor silt fraction.

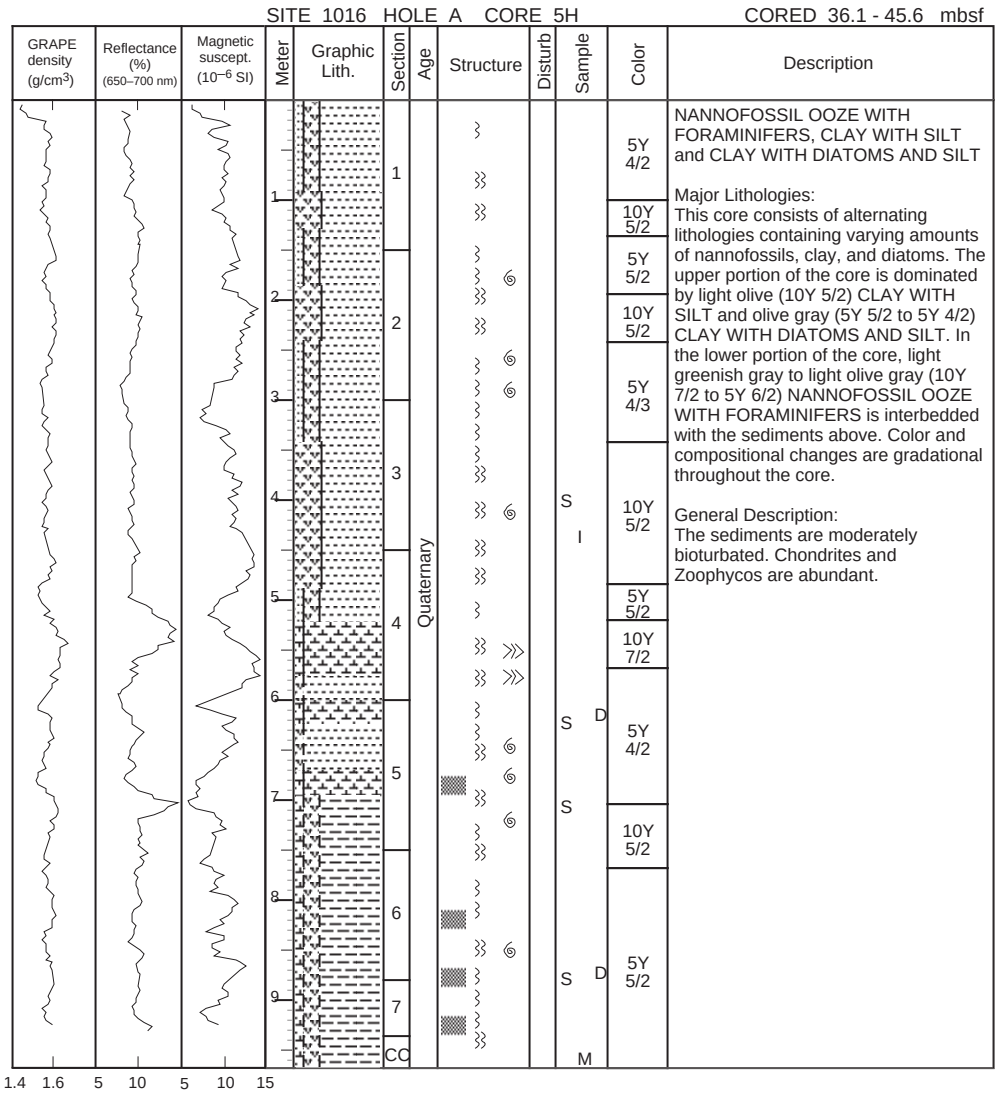
General Description:
There is a subtle and gradual color transition from the top to the bottom of the core. The marked color boundary is somewhat arbitrarily placed. The core shows increased bioturbation in the lower half and includes Chondrites in Section 7.

SITE 1016 HOLE A CORE 3H CORED 17.1 - 26.6 mbsf

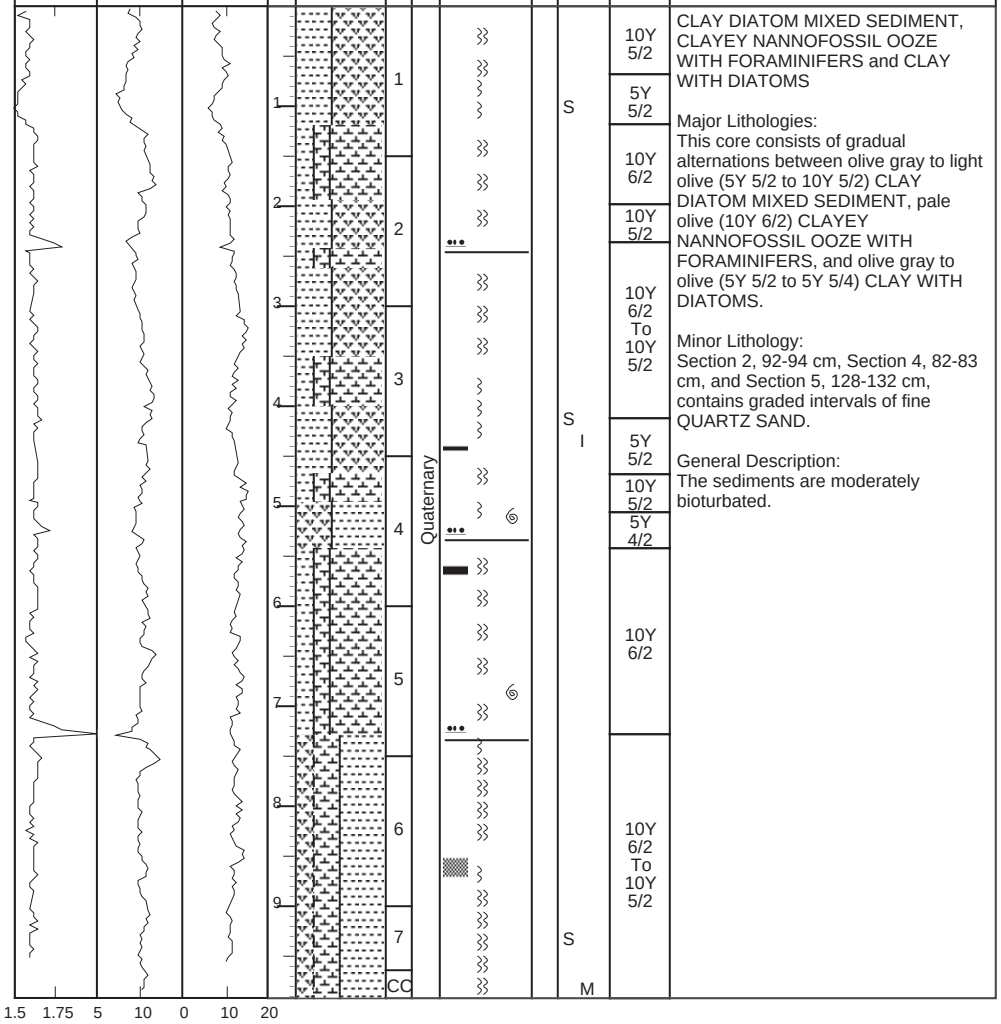


SITE 1016 HOLE A CORE 4H CORED 26.6 - 36.1 mbsf




SITE 1016 HOLE A CORE 5H
CORED 36.1 - 45.6 mbsf
GRAPE density (g/cm3)
Reflectance (%) (650–700 nm)
Magnetic suscept. (10−6 SI)
Meter
Graphic Lith.
Section
Age
Structure
Disturb
Sample
Color
Description
1.4 1.6
5 10
5 10 15
1 2 3 4 5 6 7 8 9
1 2 3 4 5 6 7 CC
Quaternary
S I
S D
S
S D
M
5Y 4/2
10Y 5/2
5Y 5/2
10Y 5/2
5Y 4/3
10Y 5/2
5Y 5/2
10Y 7/2
5Y 4/2
10Y 5/2
5Y 5/2
NANNOFOSSIL OOZE WITH FORAMINIFERS, CLAY WITH SILT and CLAY WITH DIATOMS AND SILT
Major Lithologies:
This core consists of alternating lithologies containing varying amounts of nannofossils, clay, and diatoms. The upper portion of the core is dominated by light olive (10Y 5/2) CLAY WITH SILT and olive gray (5Y 5/2 to 5Y 4/2) CLAY WITH DIATOMS AND SILT. In the lower portion of the core, light greenish gray to light olive gray (10Y 7/2 to 5Y 6/2) NANNOFOSSIL OOZE WITH FORAMINIFERS is interbedded with the sediments above. Color and compositional changes are gradational throughout the core.
General Description:
The sediments are moderately bioturbated. Chondrites and Zoophycos are abundant.

SITE 1016 HOLE A CORE 6H CORED 45.6 - 55.1 mbsf

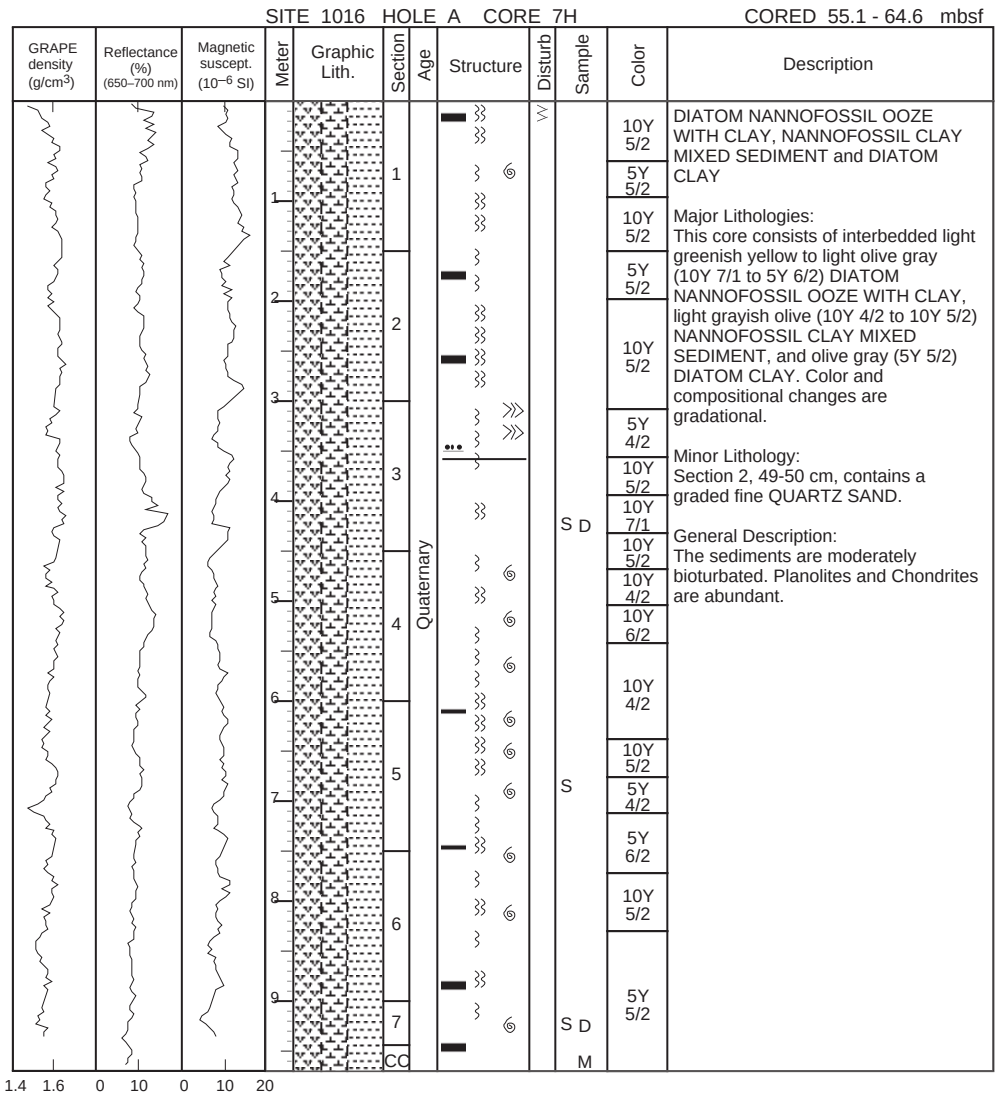


CLAY DIATOM MIXED SEDIMENT, CLAYEY NANNOFOSSIL OOZE WITH FORAMINIFERS and CLAY WITH DIATOMS

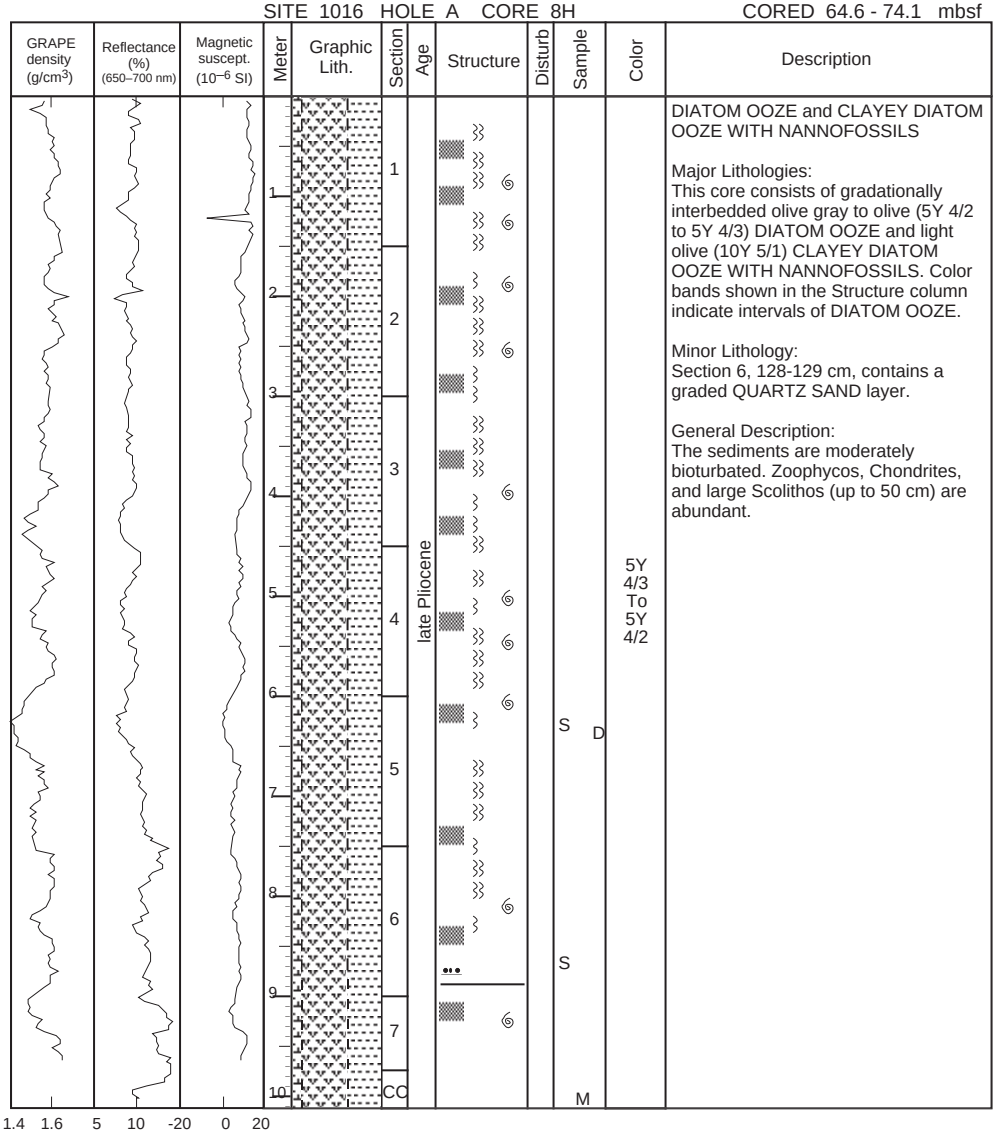
Major Lithologies:
This core consists of gradual alternations between olive gray to light olive (5Y 5/2 to 10Y 5/2) CLAY DIATOM MIXED SEDIMENT, pale olive (10Y 6/2) CLAYEY NANNOFOSSIL OOZE WITH FORAMINIFERS, and olive gray to olive (5Y 5/2 to 5Y 5/4) CLAY WITH DIATOMS.

Minor Lithology:
Section 2, 92-94 cm, Section 4, 82-83 cm, and Section 5, 128-132 cm, contains graded intervals of fine QUARTZ SAND.

General Description:
The sediments are moderately bioturbated.


SITE 1016 HOLE A CORE 7H
CORED 55.1 - 64.6 mbsf
GRAPE density (g/cm3)
Reflectance (%) (650–700 nm)
Magnetic suscept. (10−6 SI)
Meter
Graphic Lith.
Section
Age
Structure
Disturb
Sample
Color
Description
1.4 1.6
0 10
0 10 20
CC
Quaternary
S D
S
S D
M
10Y 5/2
5Y 5/2
10Y 5/2
5Y 5/2
10Y 5/2
5Y 4/2
10Y 5/2
10Y 7/1
10Y 5/2
10Y 4/2
10Y 6/2
10Y 4/2
10Y 5/2
5Y 4/2
5Y 6/2
10Y 5/2
5Y 5/2
DIATOM NANNOFOSSIL OOZE WITH CLAY, NANNOFOSSIL CLAY MIXED SEDIMENT and DIATOM CLAY
Major Lithologies:
This core consists of interbedded light greenish yellow to light olive gray (10Y 7/1 to 5Y 6/2) DIATOM NANNOFOSSIL OOZE WITH CLAY, light grayish olive (10Y 4/2 to 10Y 5/2) NANNOFOSSIL CLAY MIXED SEDIMENT, and olive gray (5Y 5/2) DIATOM CLAY. Color and compositional changes are gradational.
Minor Lithology:
Section 2, 49-50 cm, contains a graded fine QUARTZ SAND.
General Description:
The sediments are moderately bioturbated. Planolites and Chondrites are abundant.

SITE 1016 HOLE A CORE 8H CORED 64.6 - 74.1 mbsf



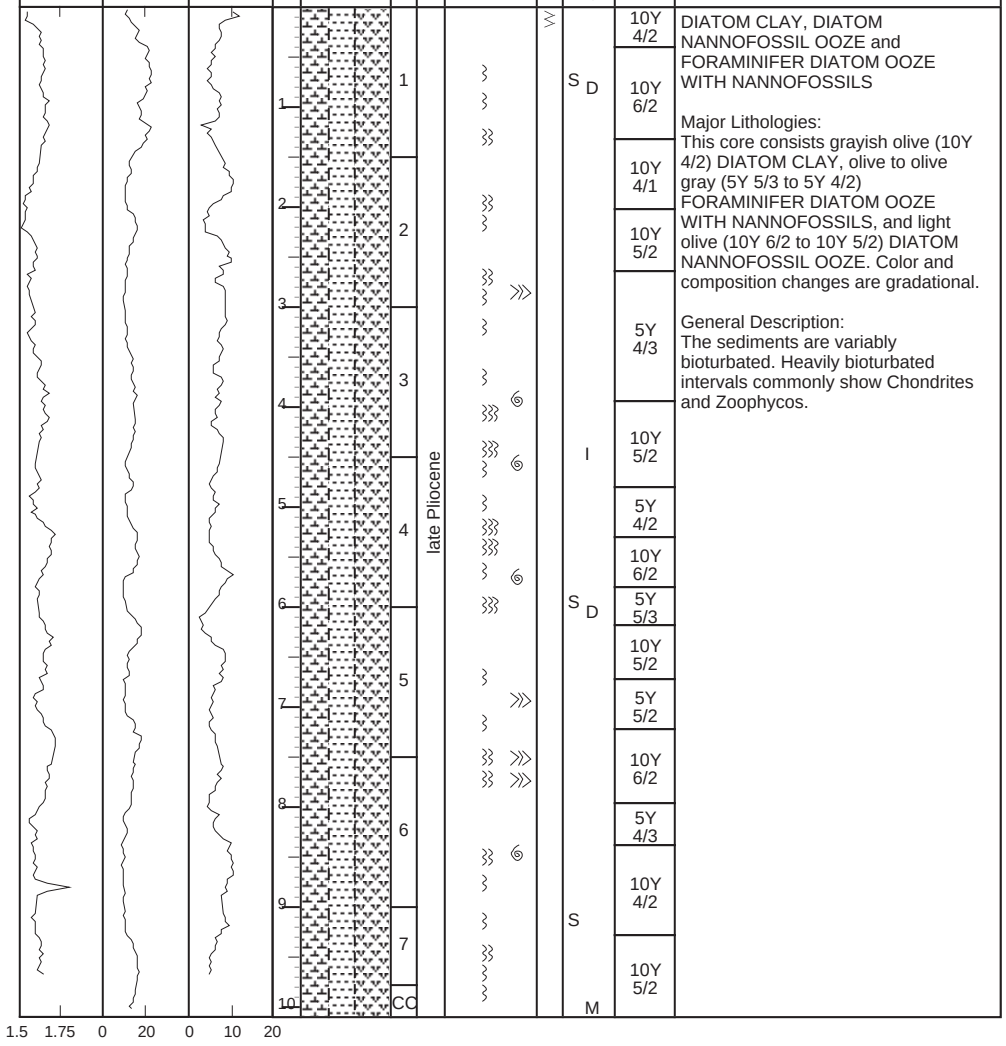
DIATOM OOZE and CLAYEY DIATOM OOZE WITH NANNOFOSSILS

Major Lithologies:
This core consists of gradationally interbedded olive gray to olive (5Y 4/2 to 5Y 4/3) DIATOM OOZE and light olive (10Y 5/1) CLAYEY DIATOM OOZE WITH NANNOFOSSILS. Color bands shown in the Structure column indicate intervals of DIATOM OOZE.

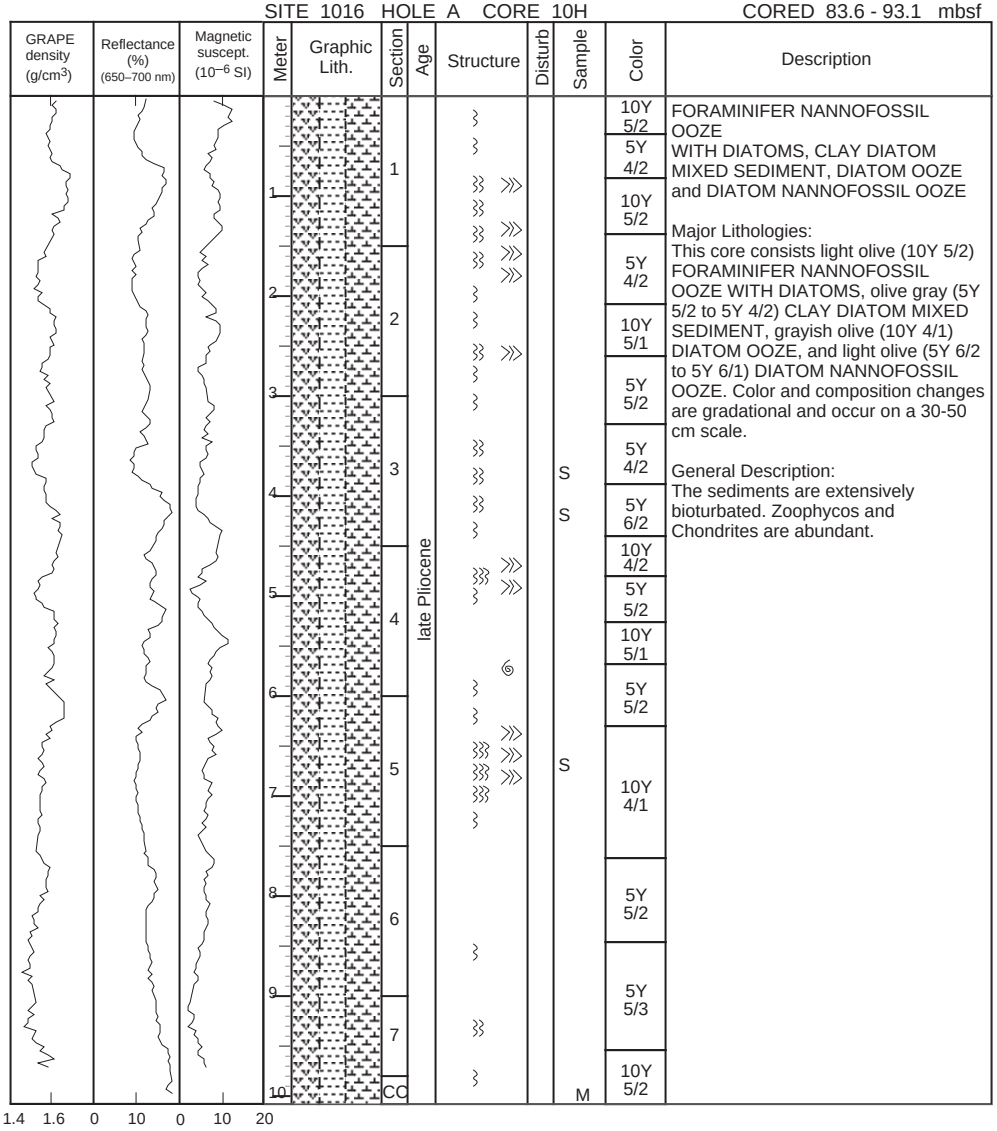
Minor Lithology:
Section 6, 128-129 cm, contains a graded QUARTZ SAND layer.

General Description:
The sediments are moderately bioturbated. Zoophycos, Chondrites, and large Scolithos (up to 50 cm) are abundant.

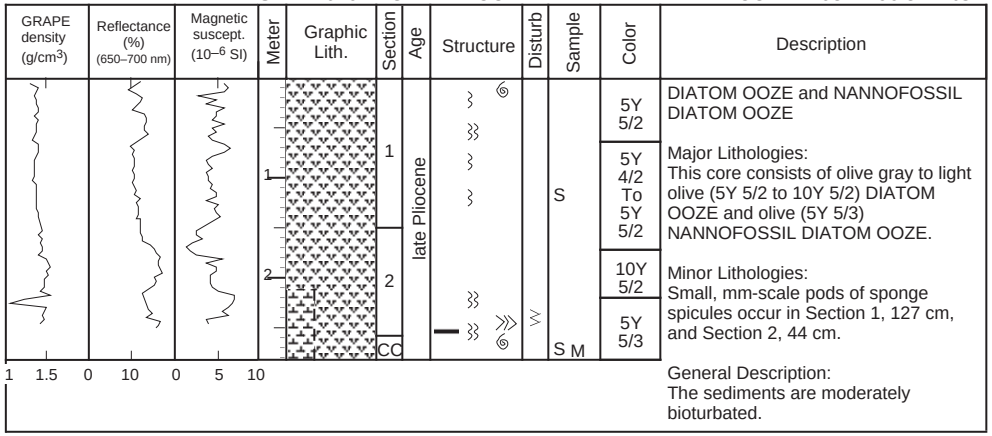
SITE 1016 HOLE A CORE 9H CORED 74.1 - 83.6 mbsf



SITE 1016 HOLE A CORE 10H CORED 83.6 - 93.1 mbsf



SITE 1016 HOLE A CORE 11X CORED 93.1 - 96.3 mbsf



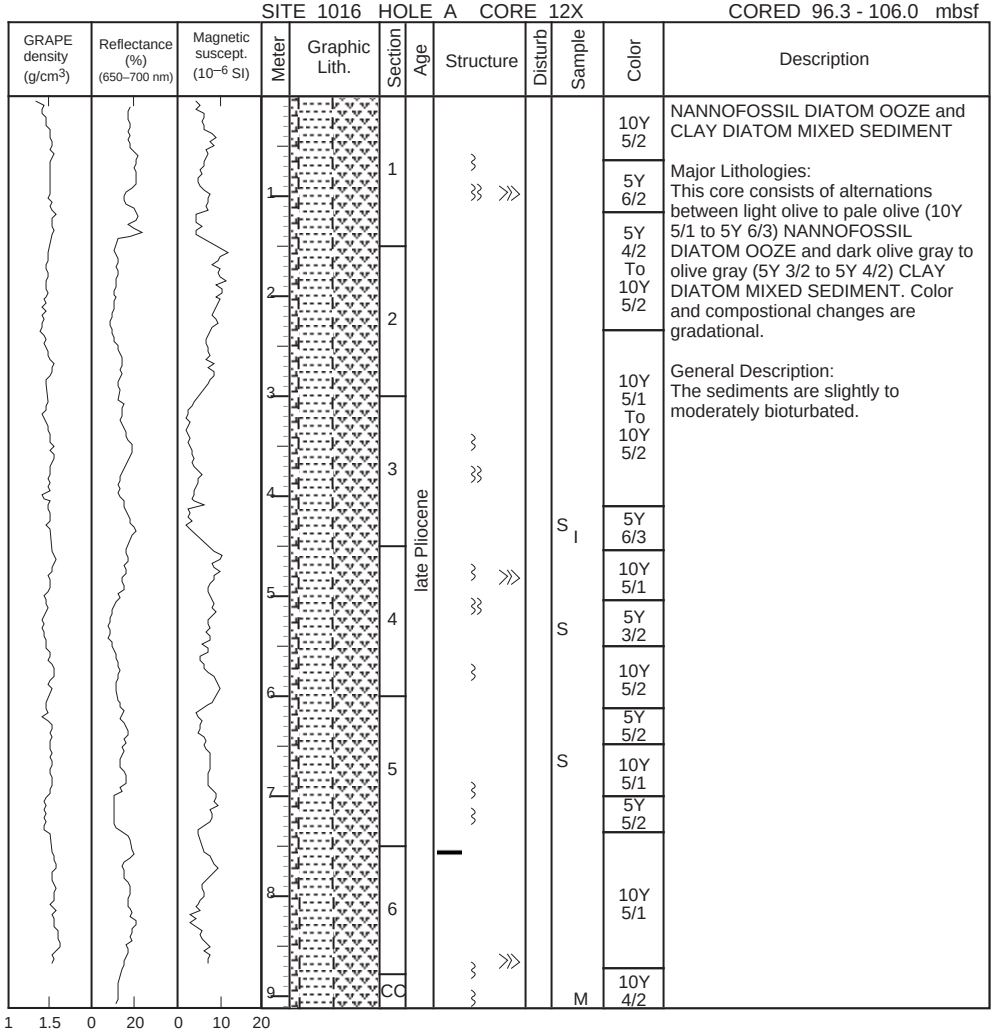
DIATOM OOZE and NANNOFOSSIL DIATOM OOZE

Major Lithologies:
This core consists of olive gray to light olive (5Y 5/2 to 10Y 5/2) DIATOM OOZE and olive (5Y 5/3) NANNOFOSSIL DIATOM OOZE.

Minor Lithologies:
Small, mm-scale pods of sponge spicules occur in Section 1, 127 cm, and Section 2, 44 cm.

General Description:
The sediments are moderately bioturbated.

SITE 1016 HOLE A CORE 12X CORED 96.3 - 106.0 mbsf



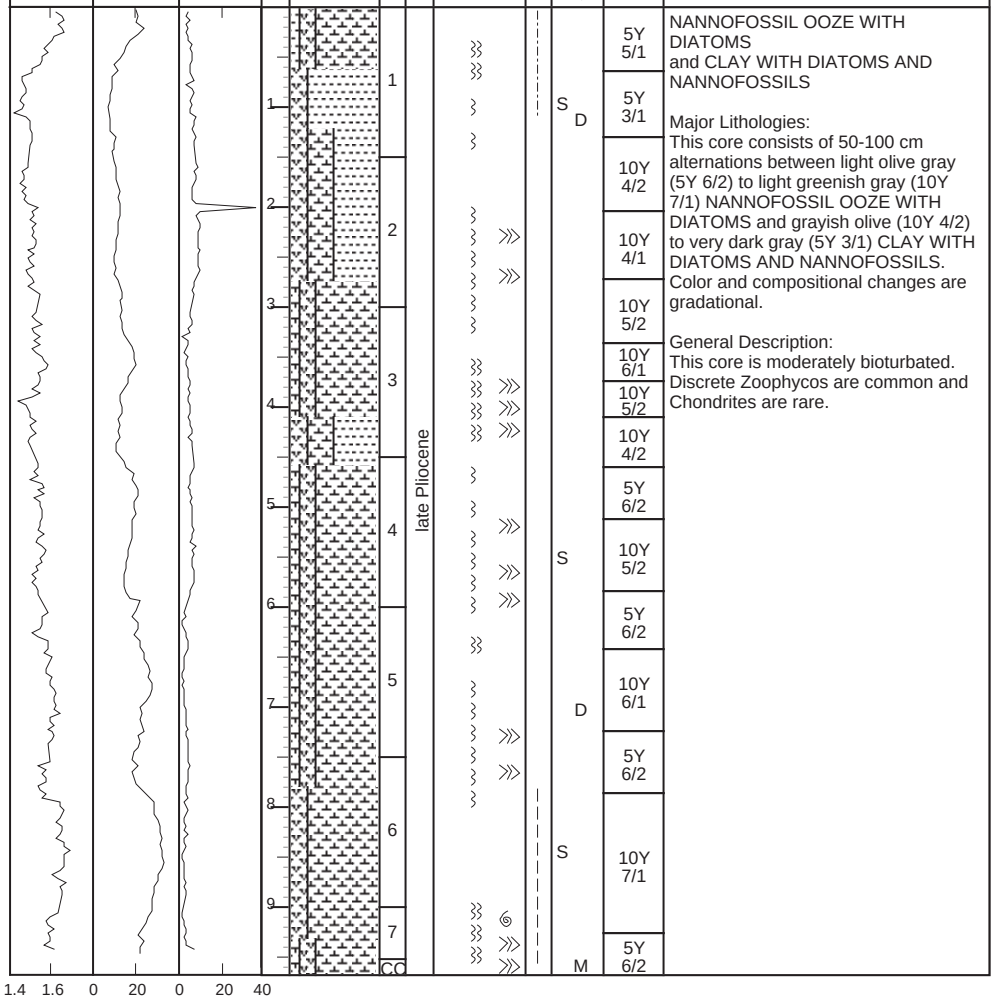
Description

NANNOFOSSIL DIATOM OOZE and CLAY DIATOM MIXED SEDIMENT

Major Lithologies:
This core consists of alternations between light olive to pale olive (10Y 5/1 to 5Y 6/3) NANNOFOSSIL DIATOM OOZE and dark olive gray to olive gray (5Y 3/2 to 5Y 4/2) CLAY DIATOM MIXED SEDIMENT. Color and compostional changes are gradational.

General Description:
The sediments are slightly to moderately bioturbated.

SITE 1016 HOLE A CORE 13X CORED 106.0 - 115.6 mbsf

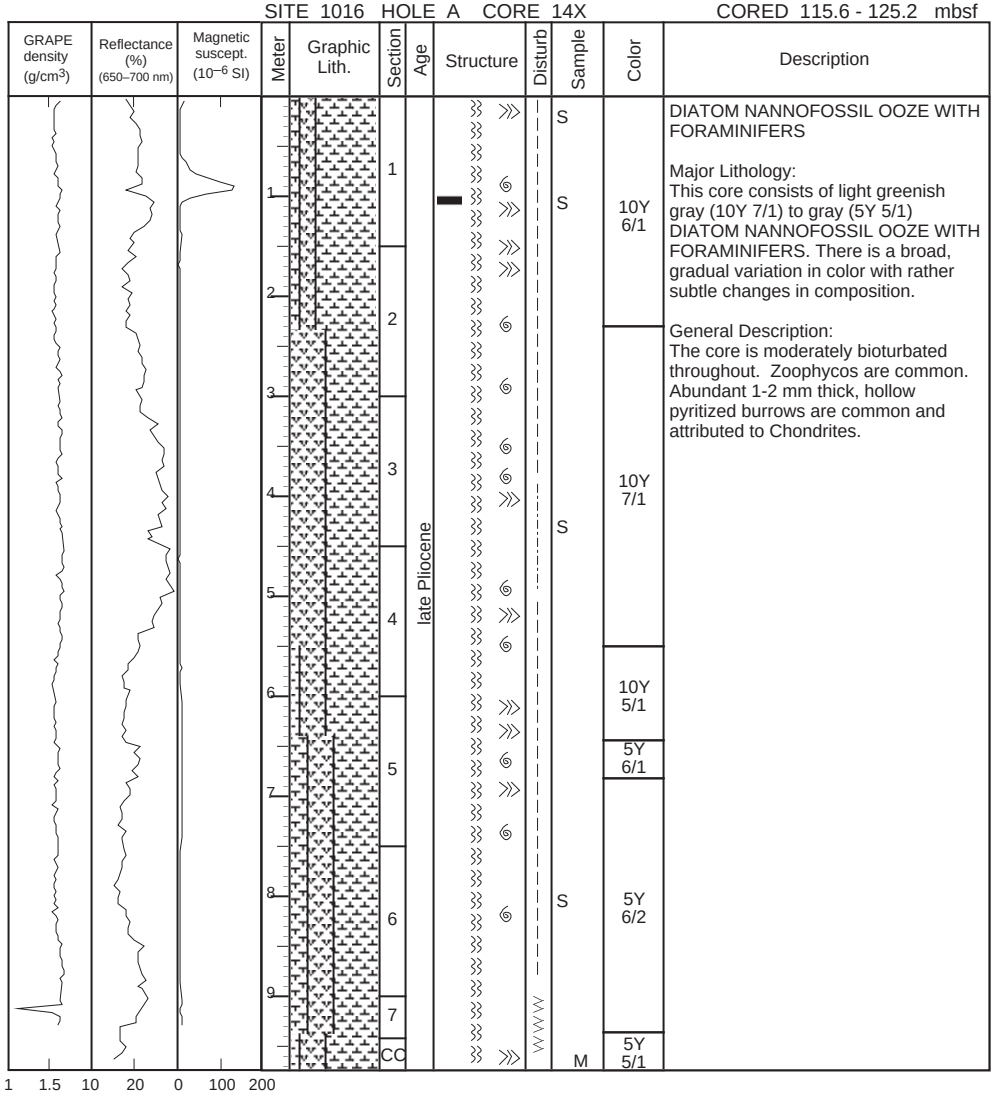


NANNOFOSSIL OOZE WITH DIATOMS
and CLAY WITH DIATOMS AND NANNOFOSSILS

Major Lithologies:
This core consists of 50-100 cm alternations between light olive gray (5Y 6/2) to light greenish gray (10Y 7/1) NANNOFOSSIL OOZE WITH DIATOMS and grayish olive (10Y 4/2) to very dark gray (5Y 3/1) CLAY WITH DIATOMS AND NANNOFOSSILS. Color and compositional changes are gradational.

General Description:
This core is moderately bioturbated. Discrete Zoophycos are common and Chondrites are rare.

SITE 1016 HOLE A CORE 14X CORED 115.6 - 125.2 mbsf



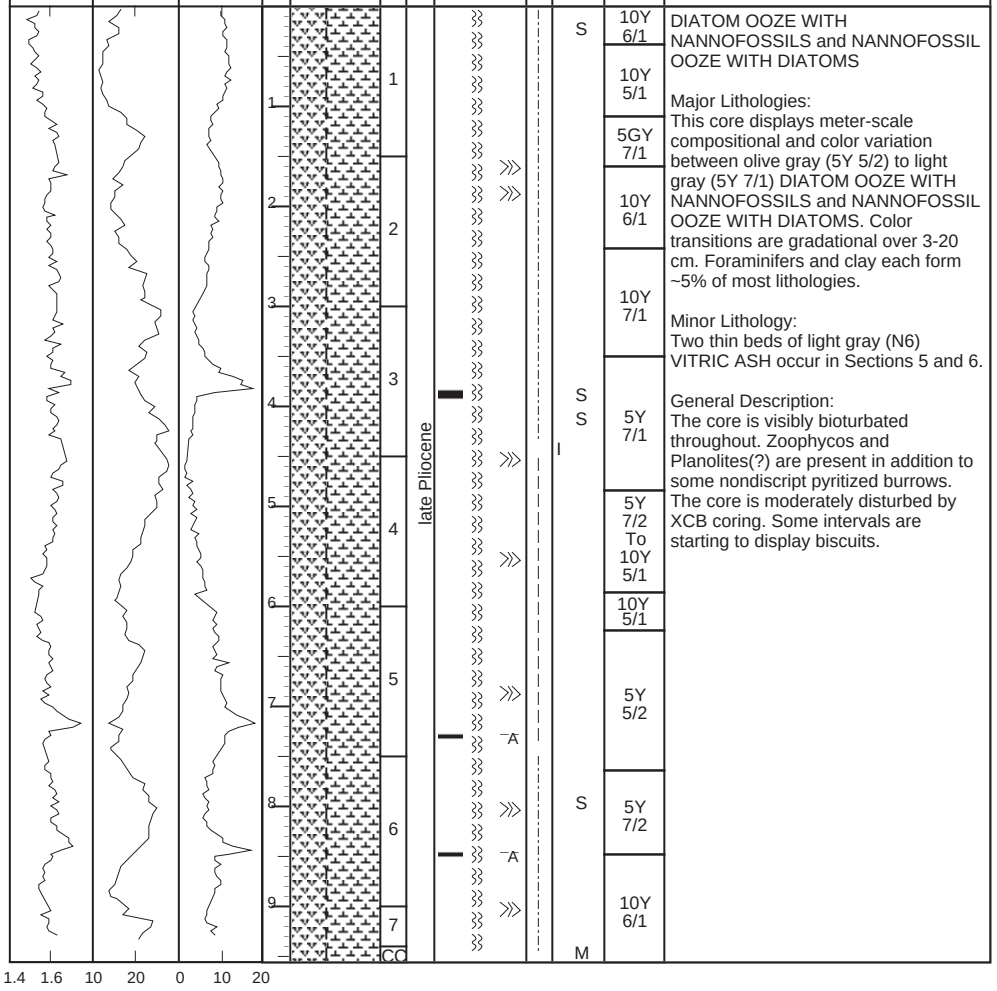
Description

DIATOM NANNOFOSSIL OOZE WITH FORAMINIFERS

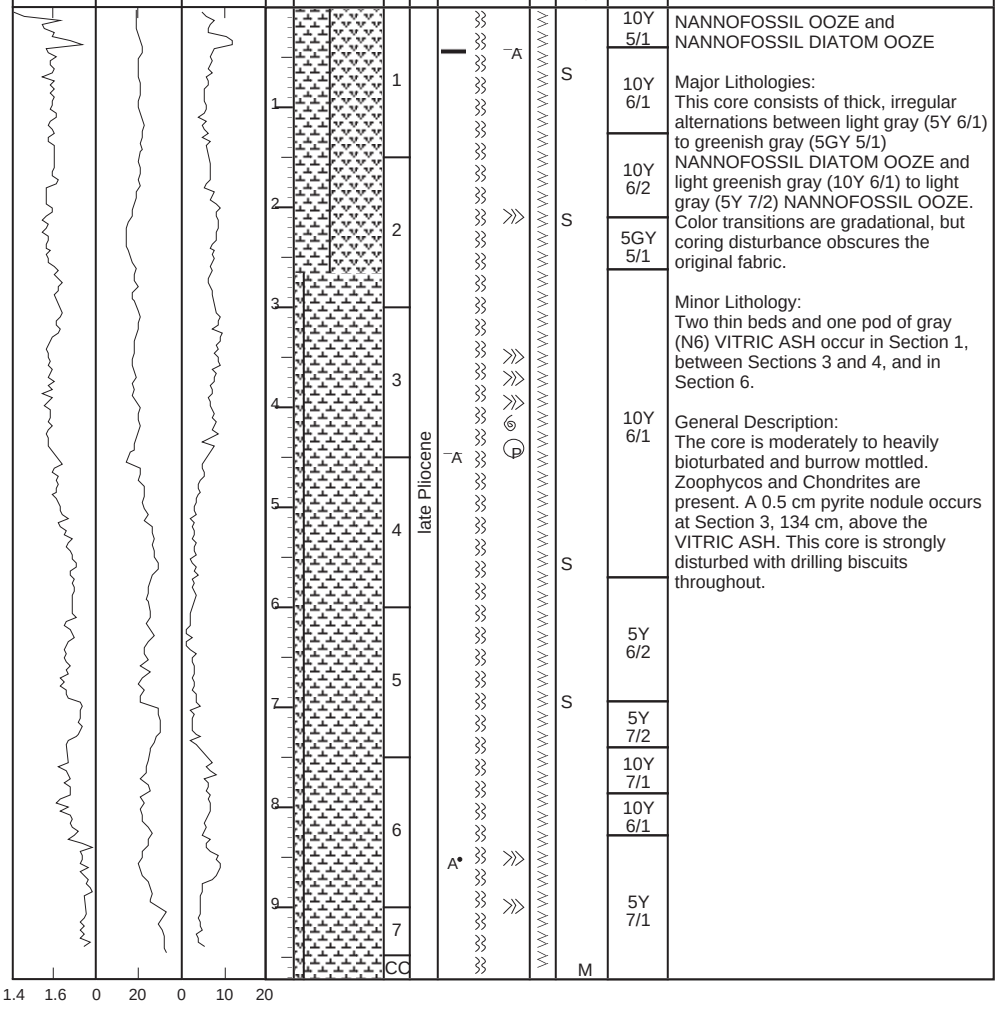
Major Lithology:
This core consists of light greenish gray (10Y 7/1) to gray (5Y 5/1) DIATOM NANNOFOSSIL OOZE WITH FORAMINIFERS. There is a broad, gradual variation in color with rather subtle changes in composition.

General Description:
The core is moderately bioturbated throughout. Zoophycos are common. Abundant 1-2 mm thick, hollow pyritized burrows are common and attributed to Chondrites.

SITE 1016 HOLE A CORE 15X CORED 125.2 - 134.8 mbsf



SITE 1016 HOLE A CORE 16X CORED 134.8 - 144.4 mbsf



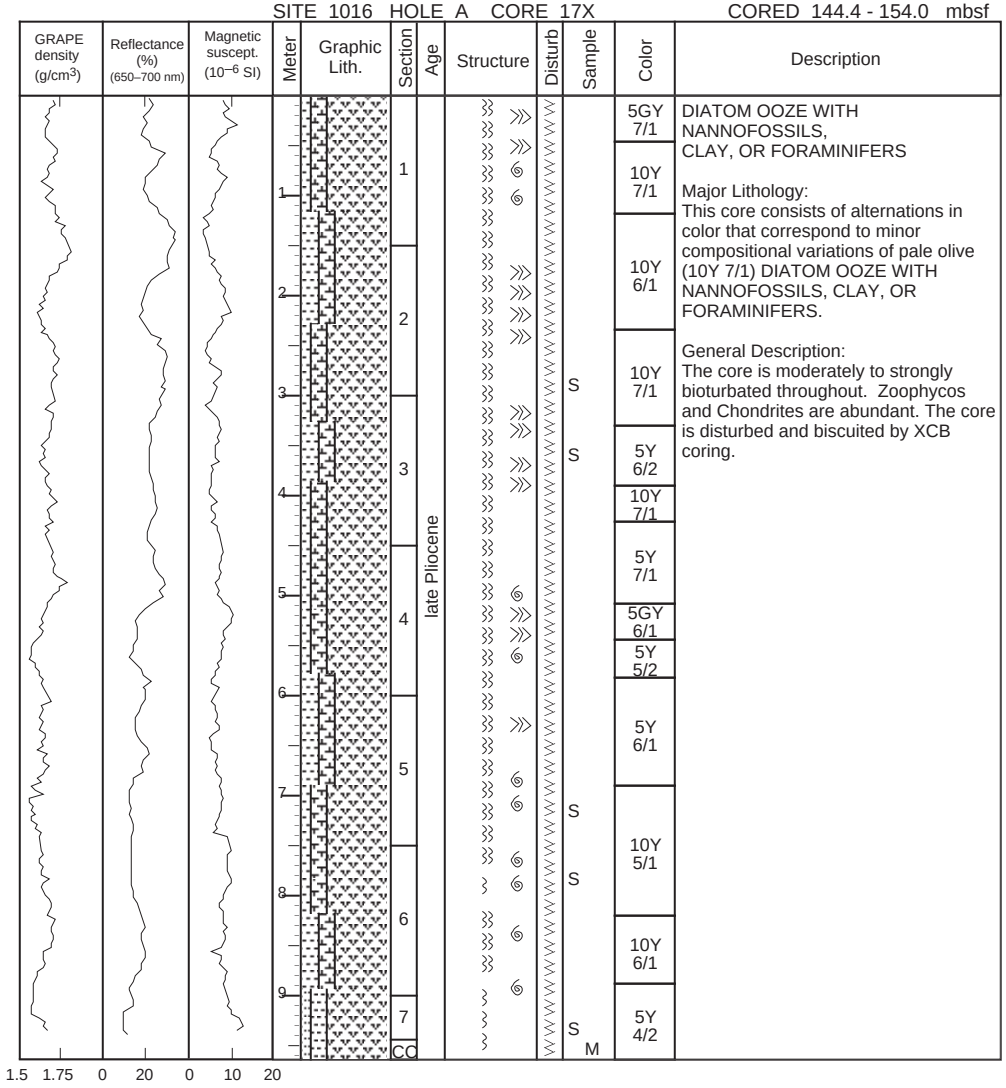
NANNOFOSSIL OOZE and NANNOFOSSIL DIATOM OOZE

Major Lithologies:
This core consists of thick, irregular alternations between light gray (5Y 6/1) to greenish gray (5GY 5/1) NANNOFOSSIL DIATOM OOZE and light greenish gray (10Y 6/1) to light gray (5Y 7/2) NANNOFOSSIL OOZE. Color transitions are gradational, but coring disturbance obscures the original fabric.

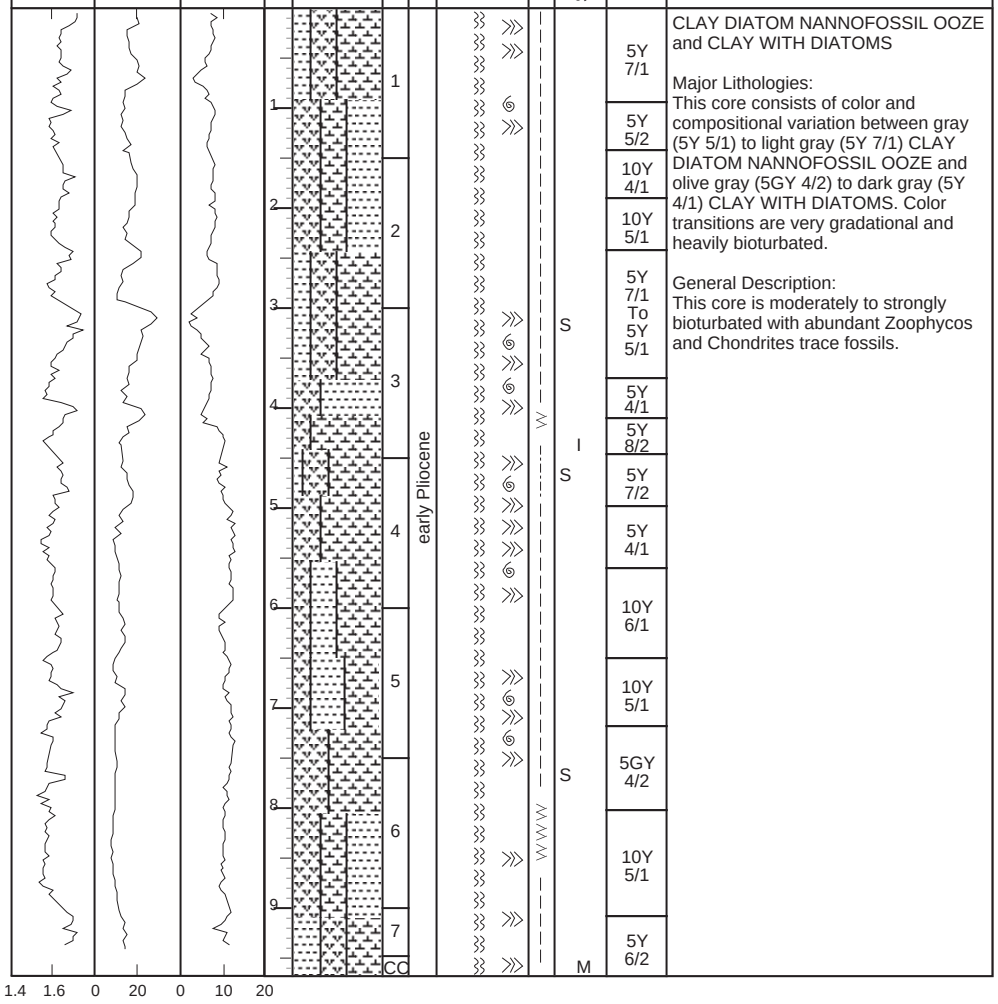
Minor Lithology:
Two thin beds and one pod of gray (N6) VITRIC ASH occur in Section 1, between Sections 3 and 4, and in Section 6.

General Description:
The core is moderately to heavily bioturbated and burrow mottled. Zoophycos and Chondrites are present. A 0.5 cm pyrite nodule occurs at Section 3, 134 cm, above the VITRIC ASH. This core is strongly disturbed with drilling biscuits throughout.

SITE 1016 HOLE A CORE 17X CORED 144.4 - 154.0 mbsf



SITE 1016 HOLE A CORE 18X CORED 154.0 - 163.6 mbsf



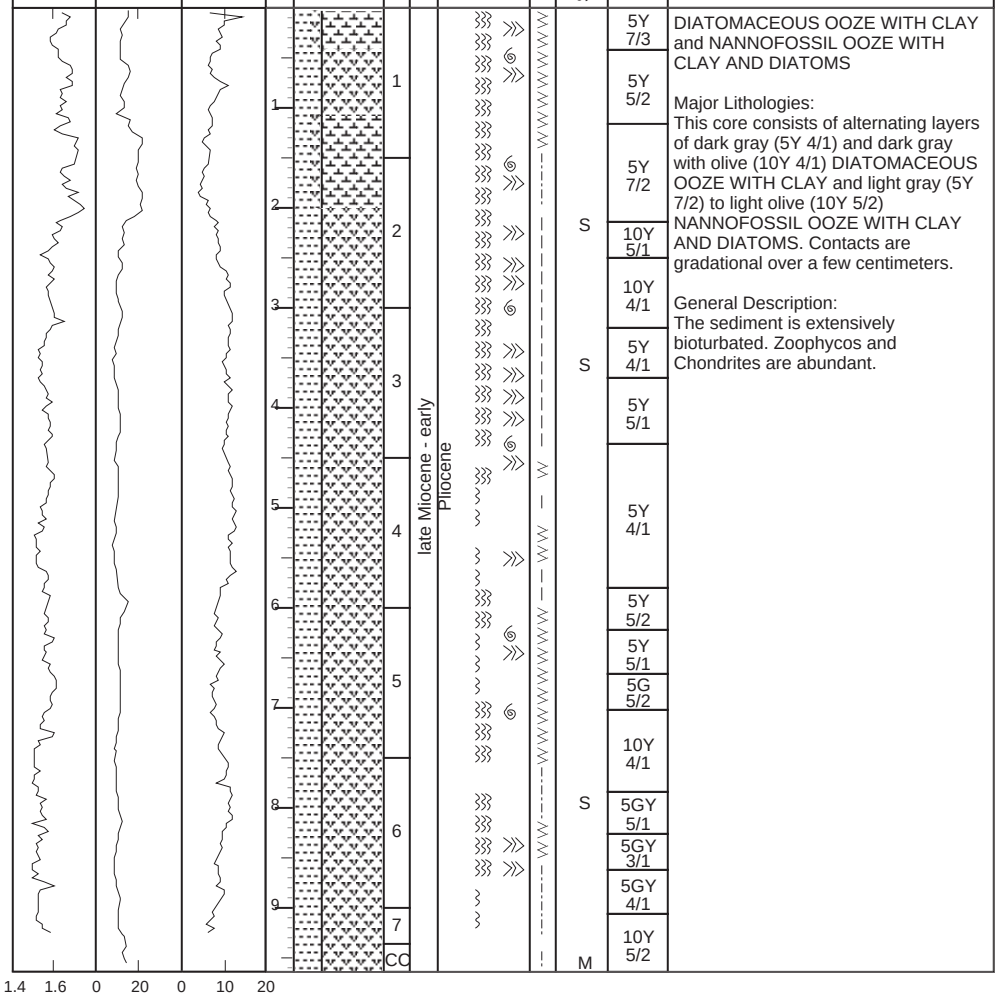
Description

CLAY DIATOM NANNOFOSSIL OOZE and CLAY WITH DIATOMS

Major Lithologies:
This core consists of color and compositional variation between gray (5Y 5/1) to light gray (5Y 7/1) CLAY DIATOM NANNOFOSSIL OOZE and olive gray (5GY 4/2) to dark gray (5Y 4/1) CLAY WITH DIATOMS. Color transitions are very gradational and heavily bioturbated.

General Description:
This core is moderately to strongly bioturbated with abundant Zoophycos and Chondrites trace fossils.

SITE 1016 HOLE A CORE 19X CORED 163.6 - 173.2 mbsf

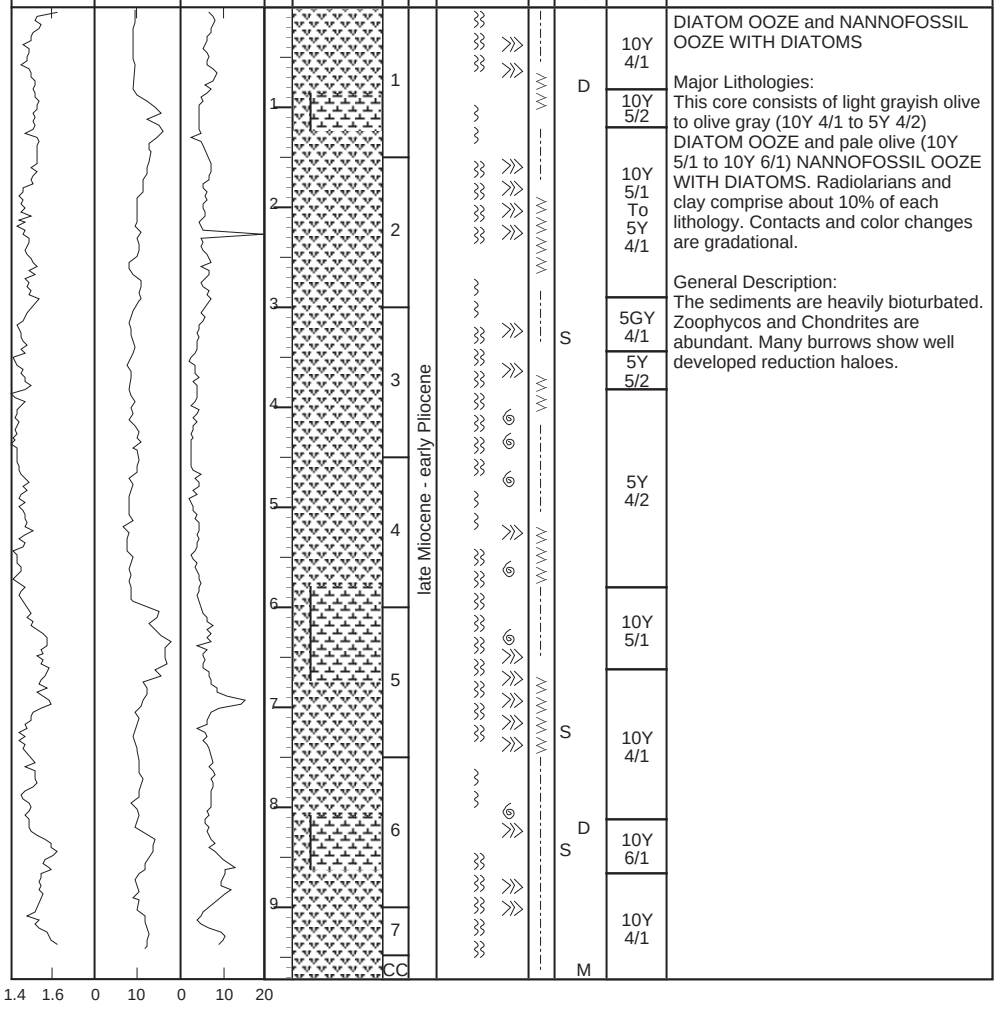


DIATOMACEOUS OOZE WITH CLAY and NANNOFOSSIL OOZE WITH CLAY AND DIATOMS

Major Lithologies:
This core consists of alternating layers of dark gray (5Y 4/1) and dark gray with olive (10Y 4/1) DIATOMACEOUS OOZE WITH CLAY and light gray (5Y 7/2) to light olive (10Y 5/2) NANNOFOSSIL OOZE WITH CLAY AND DIATOMS. Contacts are gradational over a few centimeters.

General Description:
The sediment is extensively bioturbated. Zoophycos and Chondrites are abundant.

SITE 1016 HOLE A CORE 20X CORED 173.2 - 182.8 mbsf

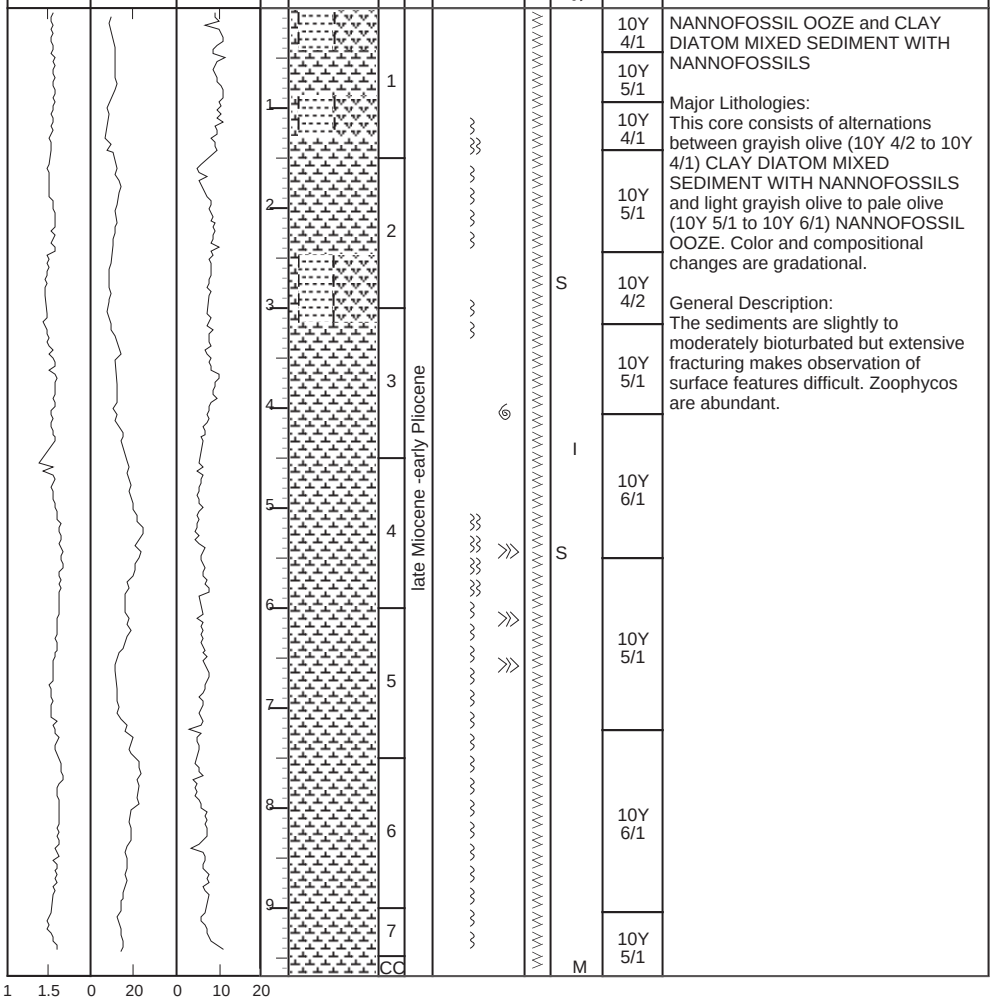


DIATOM OOZE and NANNOFOSSIL OOZE WITH DIATOMS

Major Lithologies:
This core consists of light grayish olive to olive gray (10Y 4/1 to 5Y 4/2) DIATOM OOZE and pale olive (10Y 5/1 to 10Y 6/1) NANNOFOSSIL OOZE WITH DIATOMS. Radiolarians and clay comprise about 10% of each lithology. Contacts and color changes are gradational.

General Description:
The sediments are heavily bioturbated. Zoophycos and Chondrites are abundant. Many burrows show well developed reduction haloes.

SITE 1016 HOLE A CORE 21X CORED 182.8 - 192.5 mbsf

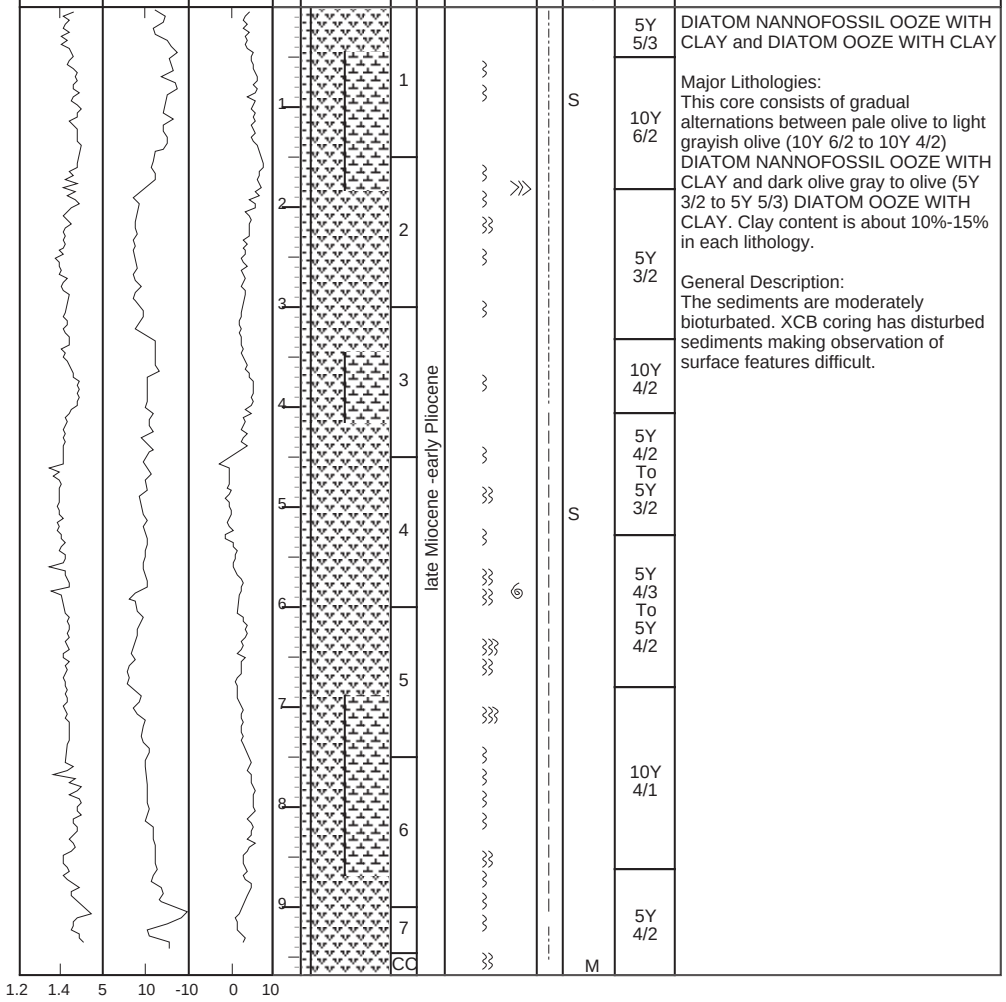


NANNOFOSSIL OOZE and CLAY
DIATOM MIXED SEDIMENT WITH NANNOFOSSILS

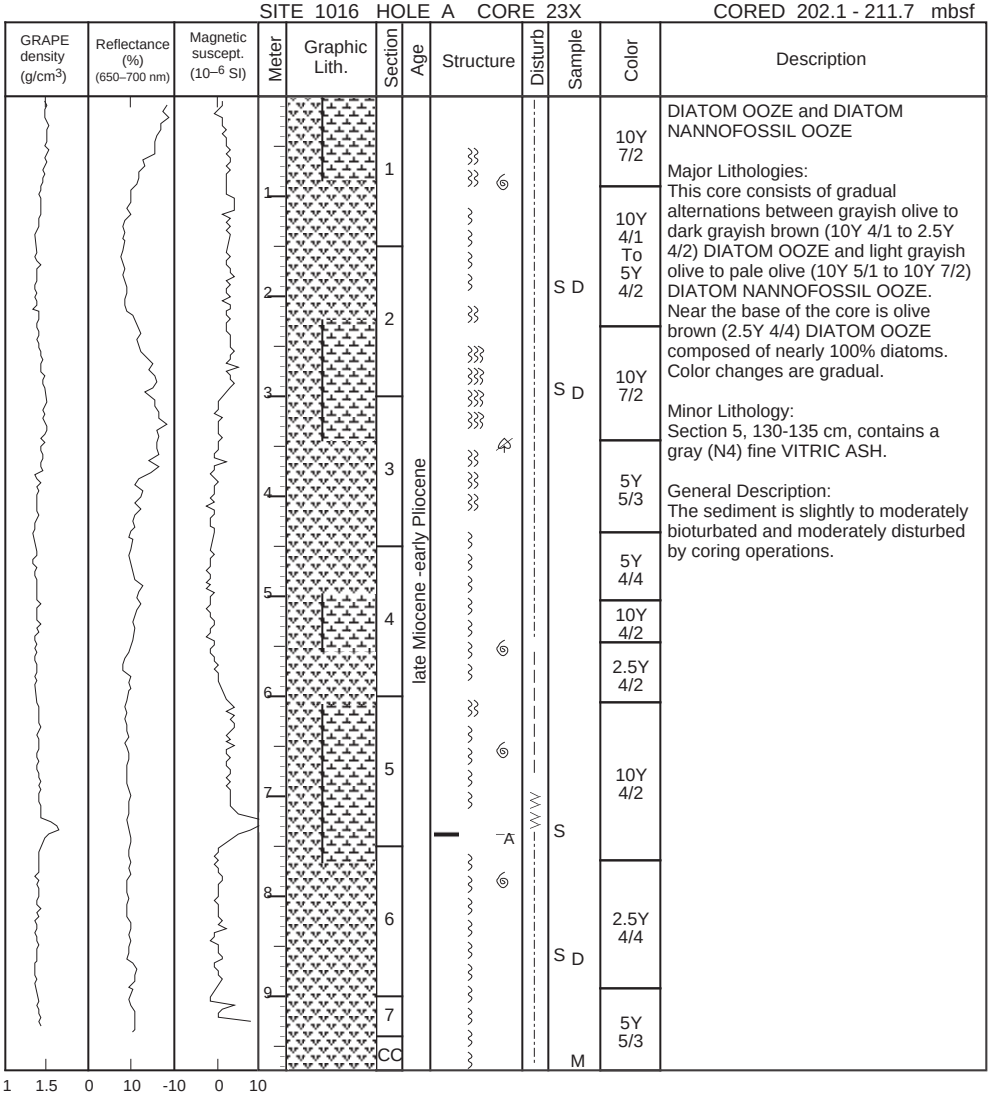
Major Lithologies:
This core consists of alternations between grayish olive (10Y 4/2 to 10Y 4/1) CLAY DIATOM MIXED SEDIMENT WITH NANNOFOSSILS and light grayish olive to pale olive (10Y 5/1 to 10Y 6/1) NANNOFOSSIL OOZE. Color and compositional changes are gradational.

General Description:
The sediments are slightly to moderately bioturbated but extensive fracturing makes observation of surface features difficult. Zoophycos are abundant.

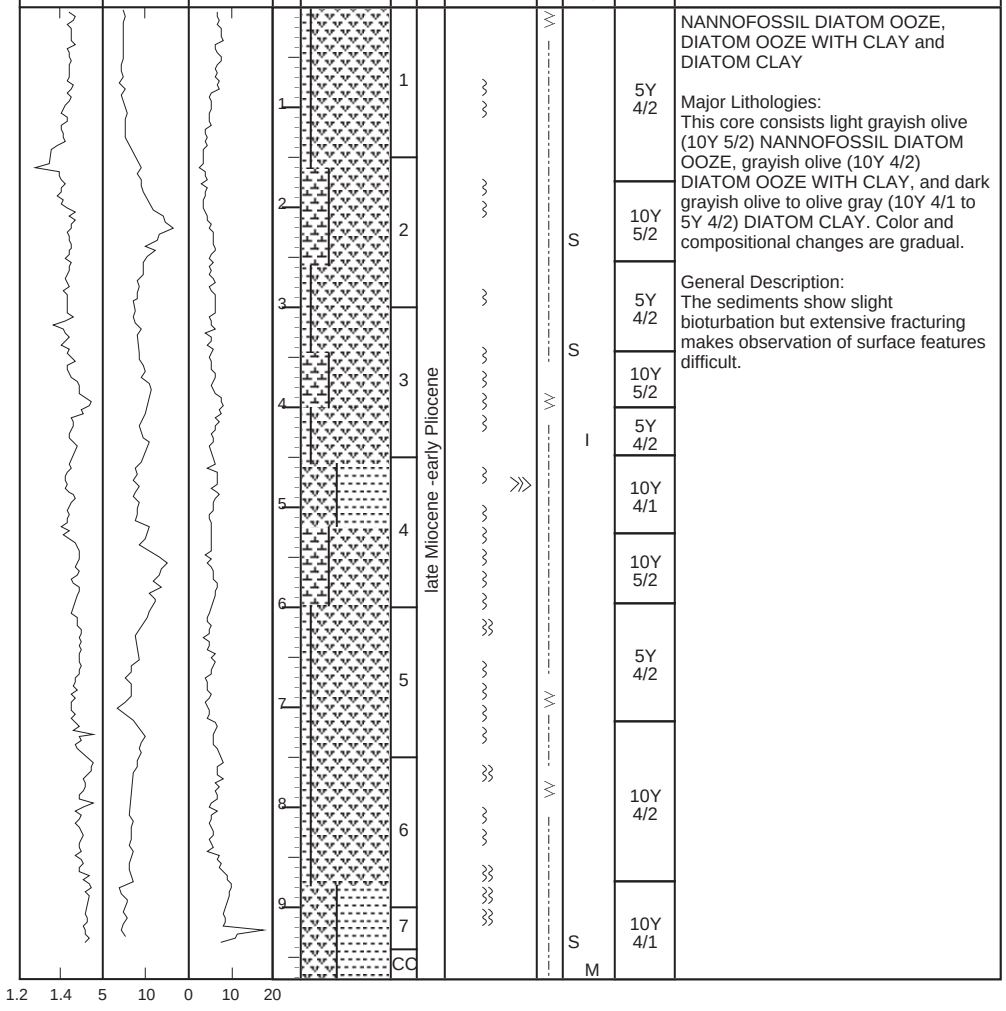
SITE 1016 HOLE A CORE 22X CORED 192.5 - 202.1 mbsf



SITE 1016 HOLE A CORE 23X CORED 202.1 - 211.7 mbsf



SITE 1016 HOLE A CORE 24X CORED 211.7 - 221.3 mbsf

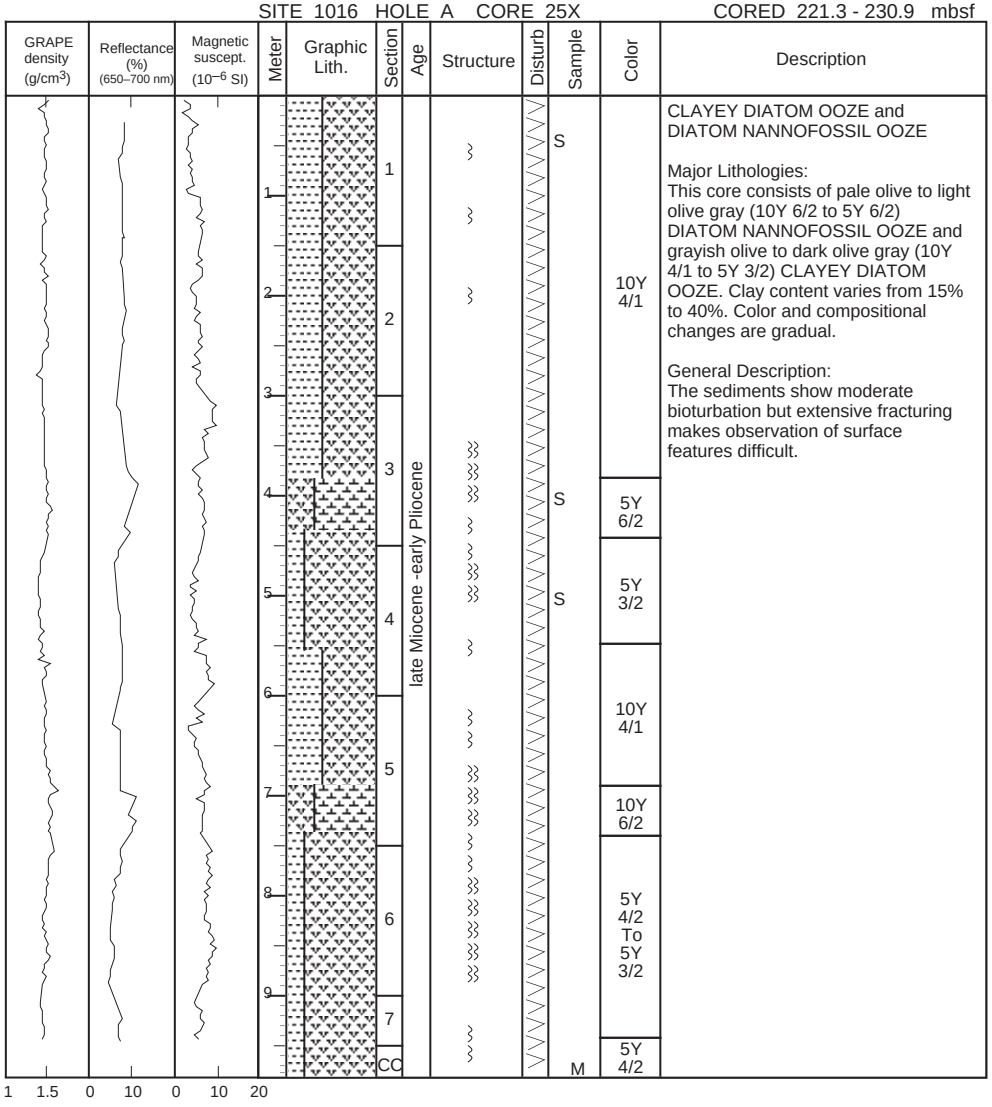


NANNOFOSSIL DIATOM OOZE, DIATOM OOZE WITH CLAY and DIATOM CLAY

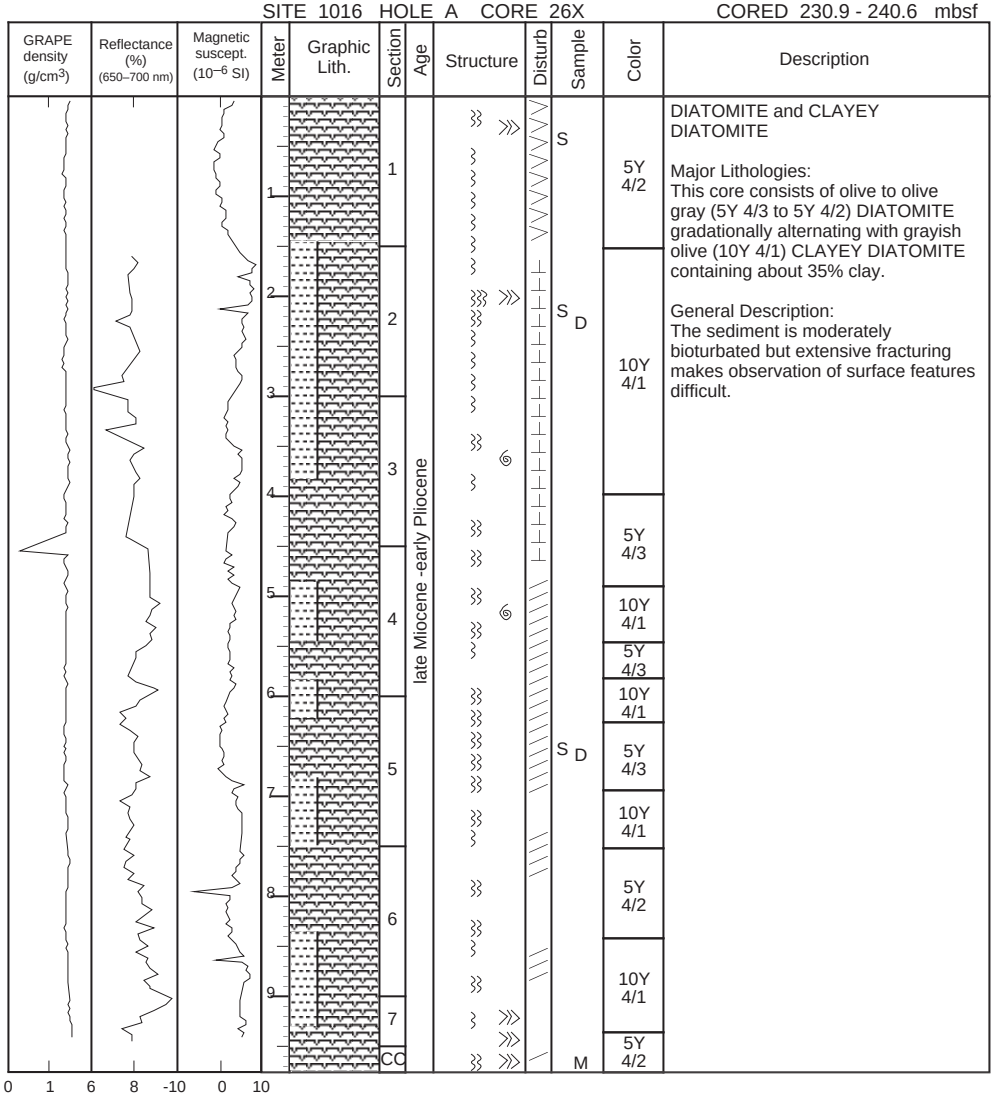
Major Lithologies:
This core consists light grayish olive (10Y 5/2) NANNOFOSSIL DIATOM OOZE, grayish olive (10Y 4/2) DIATOM OOZE WITH CLAY, and dark grayish olive to olive gray (10Y 4/1 to 5Y 4/2) DIATOM CLAY. Color and compositional changes are gradual.

General Description:
The sediments show slight bioturbation but extensive fracturing makes observation of surface features difficult.

SITE 1016 HOLE A CORE 25X CORED 221.3 - 230.9 mbsf



SITE 1016 HOLE A CORE 26X CORED 230.9 - 240.6 mbsf

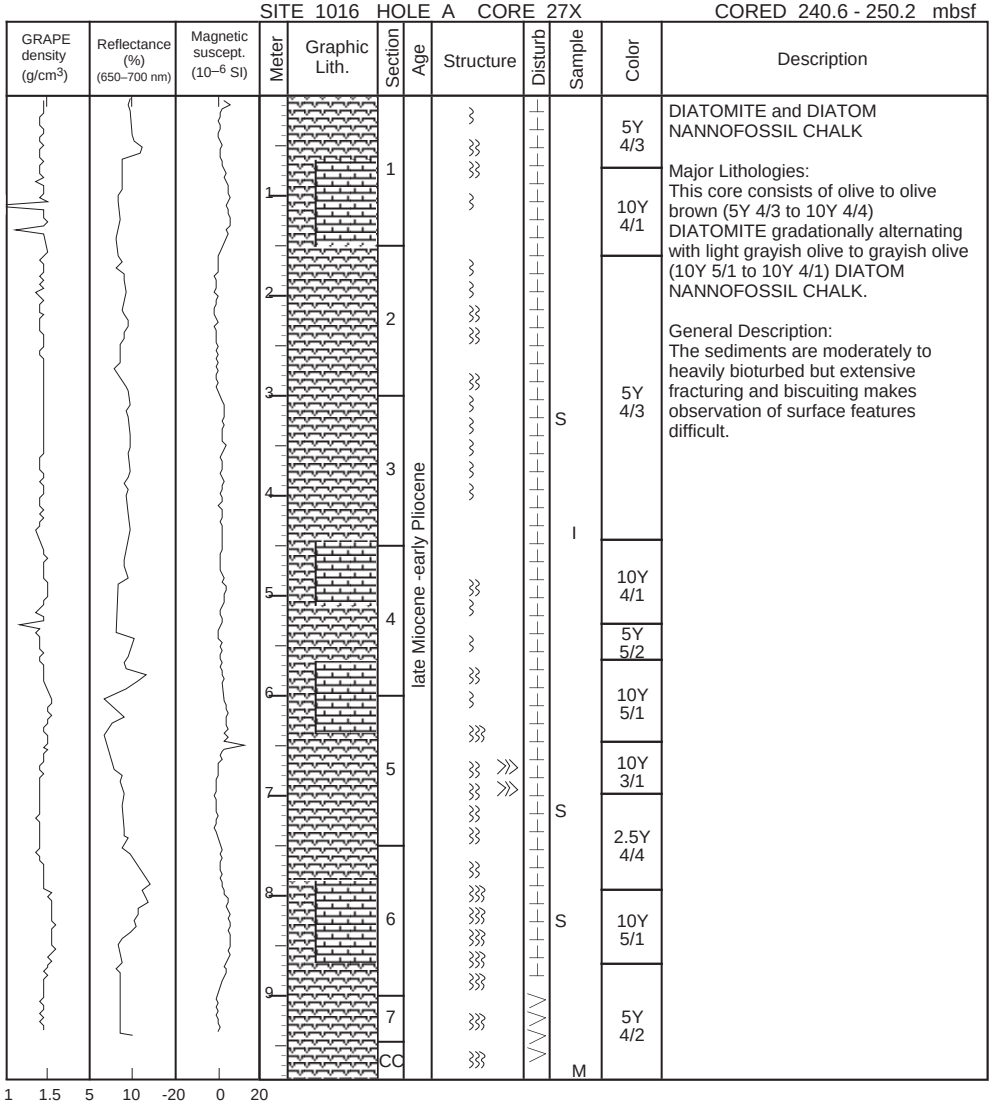


DIATOMITE and CLAYEY DIATOMITE

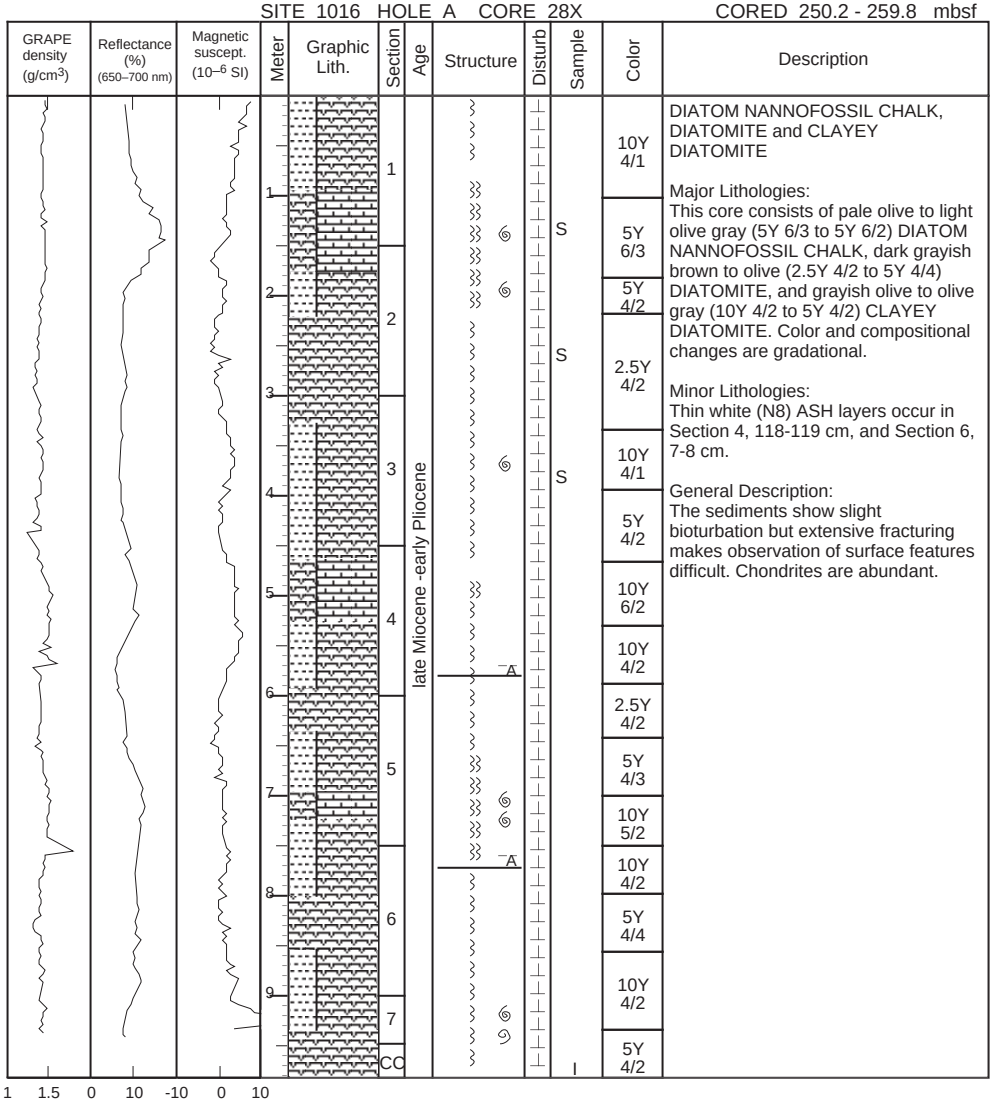
Major Lithologies:
This core consists of olive to olive gray (5Y 4/3 to 5Y 4/2) DIATOMITE gradationally alternating with grayish olive (10Y 4/1) CLAYEY DIATOMITE containing about 35% clay.

General Description:
The sediment is moderately bioturbated but extensive fracturing makes observation of surface features difficult.

SITE 1016 HOLE A CORE 27X CORED 240.6 - 250.2 mbsf



SITE 1016 HOLE A CORE 28X CORED 250.2 - 259.8 mbsf



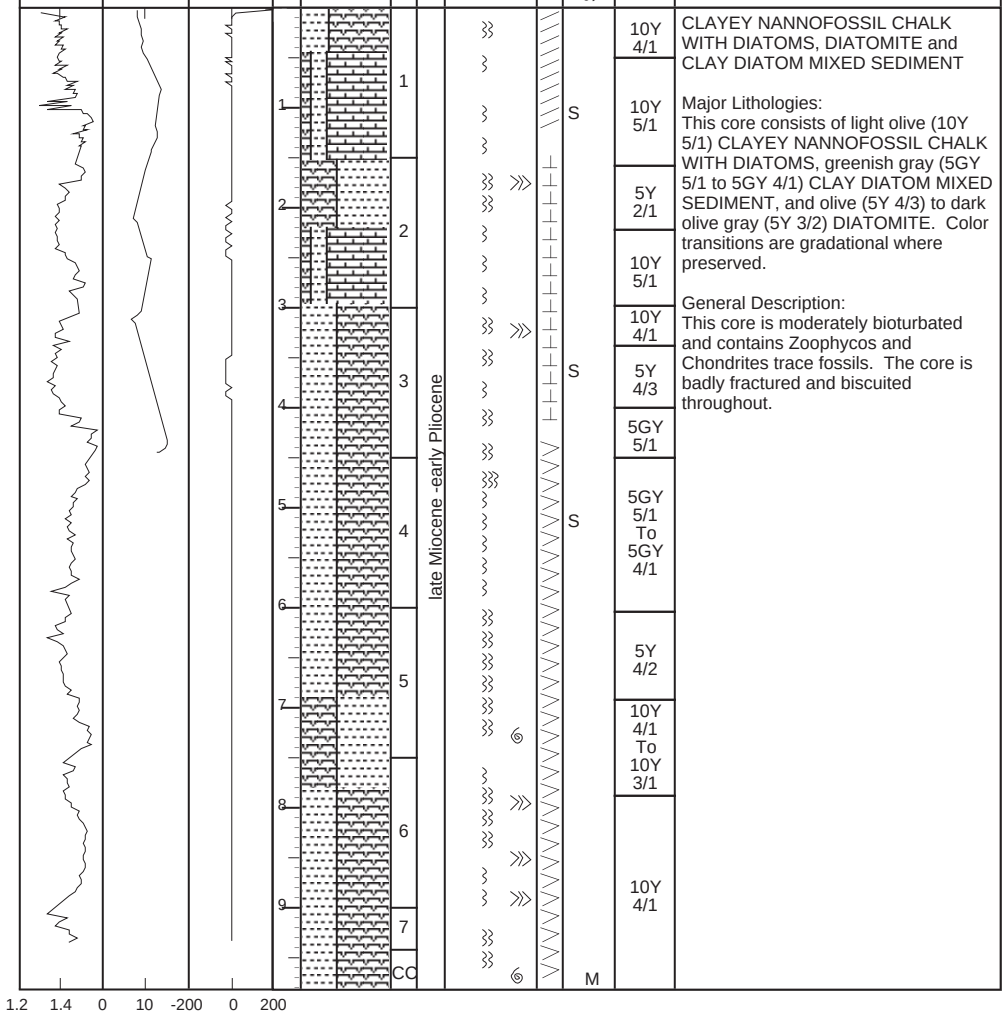
DIATOM NANNOFOSSIL CHALK, DIATOMITE and CLAYEY DIATOMITE

Major Lithologies:
This core consists of pale olive to light olive gray (5Y 6/3 to 5Y 6/2) DIATOM NANNOFOSSIL CHALK, dark grayish brown to olive (2.5Y 4/2 to 5Y 4/4) DIATOMITE, and grayish olive to olive gray (10Y 4/2 to 5Y 4/2) CLAYEY DIATOMITE. Color and compositional changes are gradational.

Minor Lithologies:
Thin white (N8) ASH layers occur in Section 4, 118-119 cm, and Section 6, 7-8 cm.

General Description:
The sediments show slight bioturbation but extensive fracturing makes observation of surface features difficult. Chondrites are abundant.

SITE 1016 HOLE A CORE 29X CORED 259.8 - 269.5 mbsf



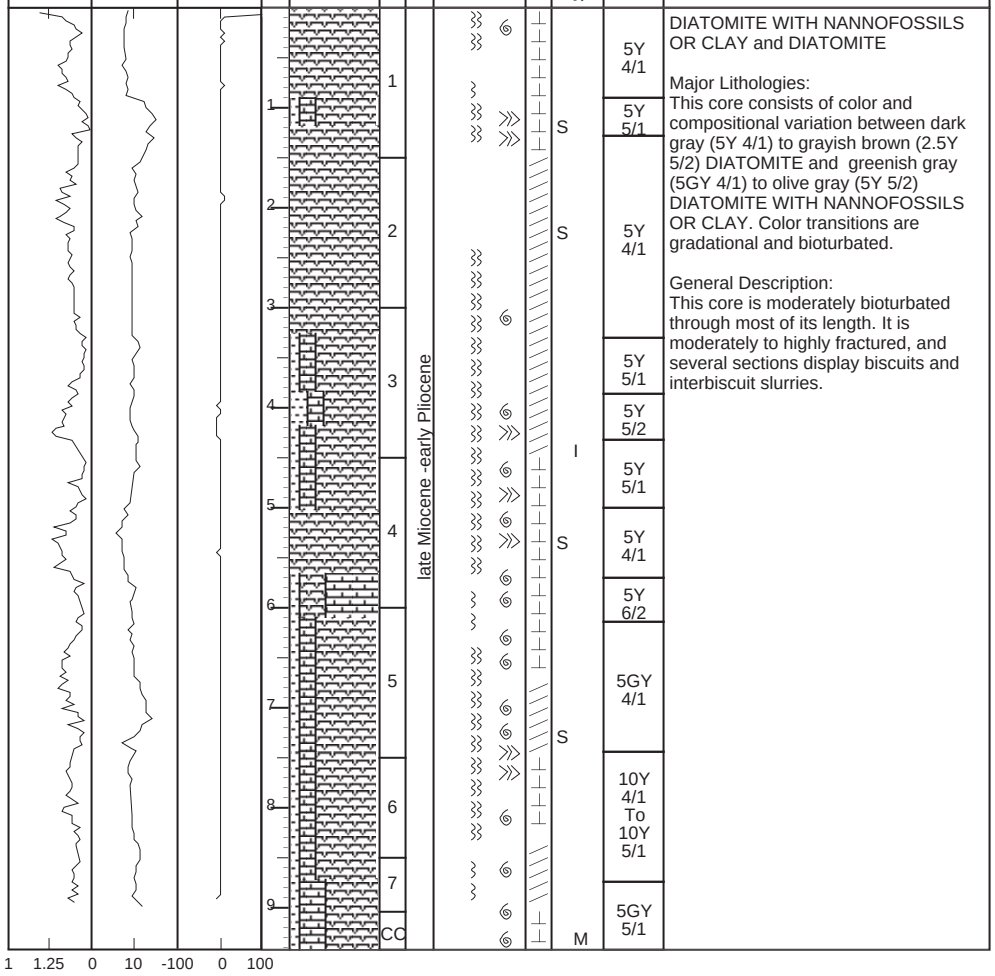
Description

CLAYEY NANNOFOSSIL CHALK WITH DIATOMS, DIATOMITE and CLAY DIATOM MIXED SEDIMENT

Major Lithologies:
This core consists of light olive (10Y 5/1) CLAYEY NANNOFOSSIL CHALK WITH DIATOMS, greenish gray (5GY 5/1 to 5GY 4/1) CLAY DIATOM MIXED SEDIMENT, and olive (5Y 4/3) to dark olive gray (5Y 3/2) DIATOMITE. Color transitions are gradational where preserved.

General Description:
This core is moderately bioturbated and contains Zoophycos and Chondrites trace fossils. The core is badly fractured and biscuited throughout.

SITE 1016 HOLE A CORE 30X CORED 269.5 - 279.2 mbsf

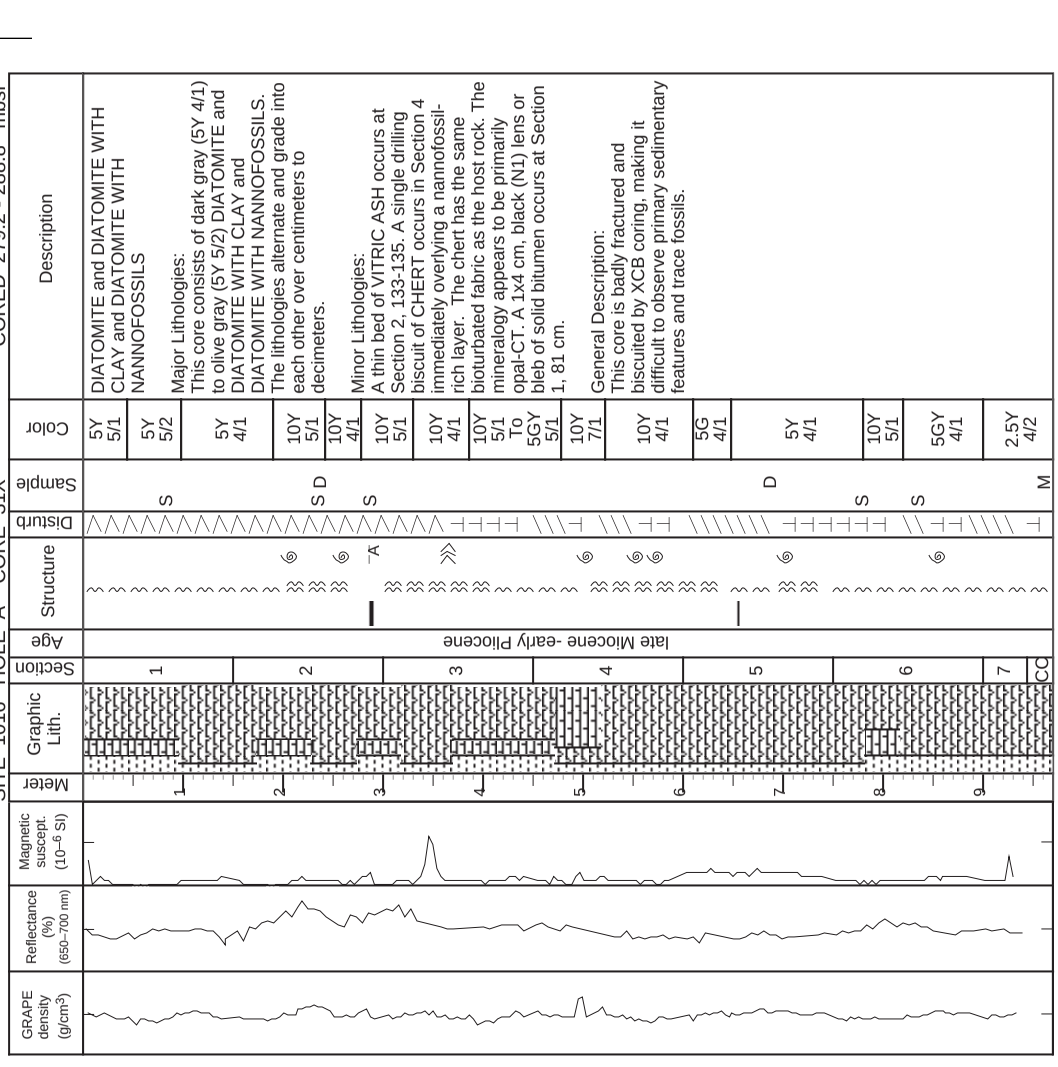


Description

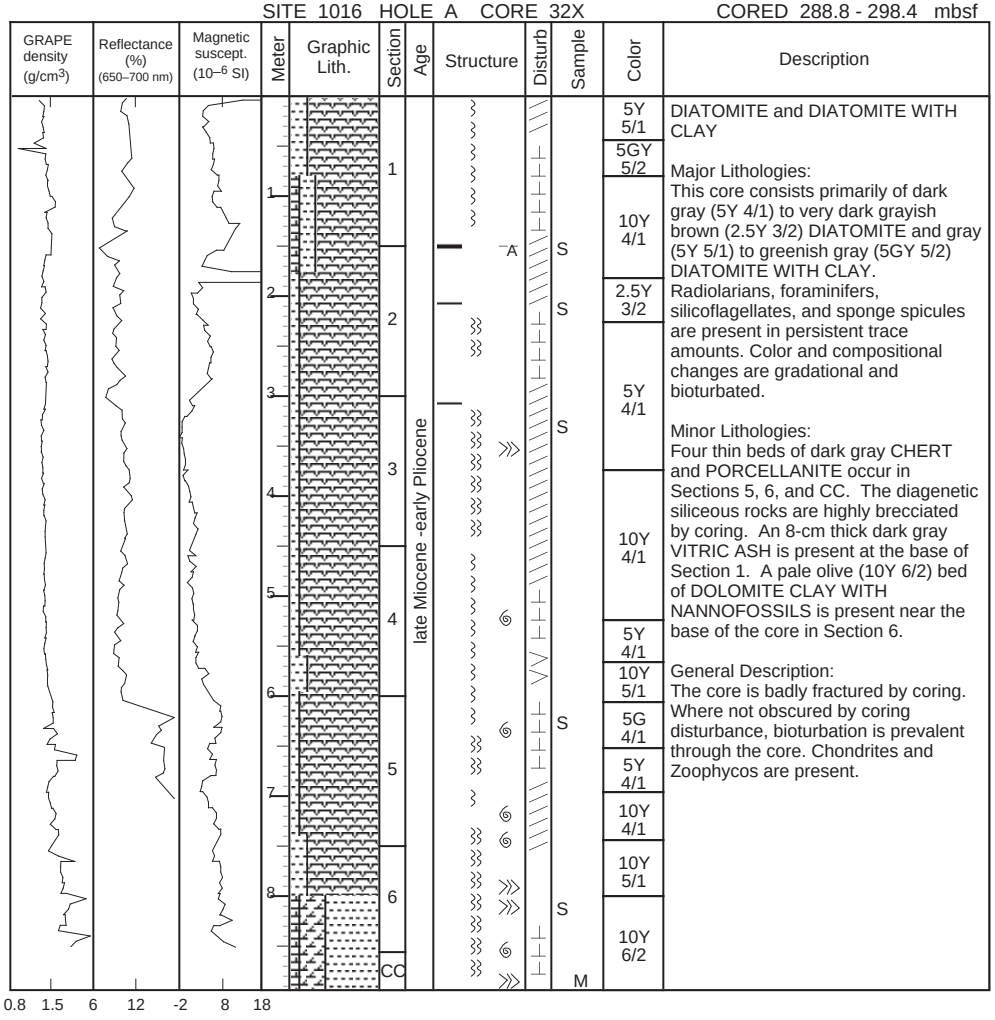
DIATOMITE WITH NANNOFOSSILS OR CLAY and DIATOMITE

Major Lithologies:
This core consists of color and compositional variation between dark gray (5Y 4/1) to grayish brown (2.5Y 5/2) DIATOMITE and greenish gray (5GY 4/1) to olive gray (5Y 5/2) DIATOMITE WITH NANNOFOSSILS OR CLAY. Color transitions are gradational and bioturbated.

General Description:
This core is moderately bioturbated through most of its length. It is moderately to highly fractured, and several sections display biscuits and interbiscuit slurries.


SITE 1016 HOLE A CORE 31X CORED 279.2 - 288.8 mbsf
GRAPE density (g/cm3)
Reflectance (%) (650–700 nm)
Magnetic suscept. (10–6 SI)
Meter
Graphic Lith.
Section
Age
Structure
Disturb
Sample
Color
Description
late Miocene -early Pliocene
DIATOMITE and DIATOMITE WITH CLAY and DIATOMITE WITH NANNOFOSSILS
Major Lithologies:
This core consists of dark gray (5Y 4/1) to olive gray (5Y 5/2) DIATOMITE and DIATOMITE WITH CLAY and DIATOMITE WITH NANNOFOSSILS. The lithologies alternate and grade into each other over centimeters to decimeters.
Minor Lithologies:
A thin bed of VITRIC ASH occurs at Section 2, 133-135. A single drilling biscuit of CHERT occurs in Section 4 immediately overlying a nannofossil-rich layer. The chert has the same bioturbated fabric as the host rock. The mineralogy appears to be primarily opal-CT. A 1x4 cm, black (N1) lens or bleb of solid bitumen occurs at Section 1, 81 cm.
General Description:
This core is badly fractured and biscuited by XCB coring, making it difficult to observe primary sedimentary features and trace fossils.

SITE 1016 HOLE A CORE 32X CORED 288.8 - 298.4 mbsf



DIATOMITE and DIATOMITE WITH CLAY

Major Lithologies:
This core consists primarily of dark gray (5Y 4/1) to very dark grayish brown (2.5Y 3/2) DIATOMITE and gray (5Y 5/1) to greenish gray (5GY 5/2) DIATOMITE WITH CLAY. Radiolarians, foraminifers, silicoflagellates, and sponge spicules are present in persistent trace amounts. Color and compositional changes are gradational and bioturbated.

Minor Lithologies:
Four thin beds of dark gray CHERT and PORCELLANITE occur in Sections 5, 6, and CC. The diagenetic siliceous rocks are highly brecciated by coring. An 8-cm thick dark gray VITRIC ASH is present at the base of Section 1. A pale olive (10Y 6/2) bed of DOLOMITE CLAY WITH NANNOFOSSILS is present near the base of the core in Section 6.

General Description:
The core is badly fractured by coring. Where not obscured by coring disturbance, bioturbation is prevalent through the core. Chondrites and Zoophycos are present.

SITE 1016 HOLE A CORE 33X CORED 298.4 - 308.0 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		CC	late Miocene -early Pliocene			S M		CLAYEY DOLOSTONE, PORCELLANITE and CHERT Major Lithologies: This core consists of highly fractured pieces of light greenish gray (10Y 6/1) CLAYEY DOLOSTONE, light brownish gray (2.5Y 6/2) PORCELLANITE, and black (2.5Y 2/0) CHERT. No original stratigraphic contacts are revealed. General Description: This core recovered only ~3% of the advance. Less indurated lithologies that likely existed between the hard chert, porcellanite, and dolostone were probably disintegrated during coring.

1016A-34X NO RECOVERY

SITE 1016 HOLE A CORE 35X CORED 311.0 - 315.5 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		1 CC	late Miocene -early Pliocene			M	2.5Y 3/1	PORCELLANITE and CHERT Major Lithologies: This core consists of small (<2-3 cm), loose, brecciated fragments of very dark grayish brown (2.5Y 3/1) PORCELLANITE and black (2.5Y 2/0) CHERT. No original stratigraphic relationships are preserved. The silica phase is apparently opal-CT.

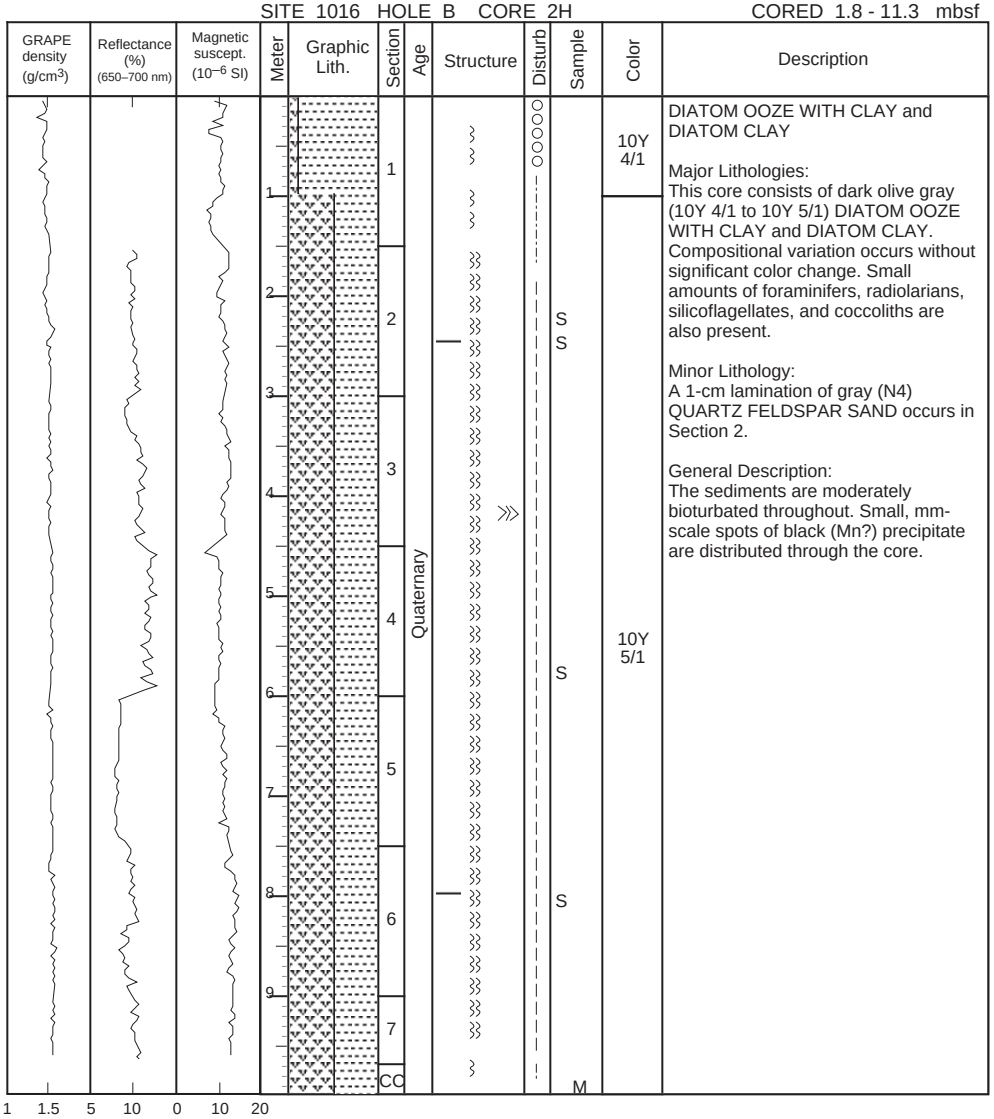
SITE 1016 HOLE A CORE 36N CORED 315.5 - 316.5 mbsf

Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
		CC				D		PORCELLANITE and CHERT Major Lithologies: This core consists entirely of light gray (2.5Y 7/2) to very dark gray (2.5Y 3/0) PORCELLANITE and CHERT. The recovery is highly fragmented. Compacted bioturbation produces a wispy discontinuous type of lamination fabric in some fragments. The silica phase is apparently opal-CT. General Description: Age of this core is late Miocene-early Pliocene.

SITE 1016 HOLE B CORE 1H CORED 0.0 - 1.8 mbsf

GRAPE density (g/cm^3)	Reflectance (%) (650–700 nm)	Magnetic suscept. (10^{-6} SI)	Meter	Graphic Lith.	Section	Age	Structure	Disturb	Sample	Color	Description
1 1.5	5 10	-50 0 50	1		1 2 CC	Quaternary			S M	10Y 4/1	CLAY WITH DIATOMS Major Lithology: This core consists of homogeneous olive gray (10Y 4/1) CLAY WITH DIATOMS. Large (1.5 cm diameter), open burrows with slightly pelleted walls occur down to Section 2, 43 cm.

SITE 1016 HOLE B CORE 2H CORED 1.8 - 11.3 mbsf



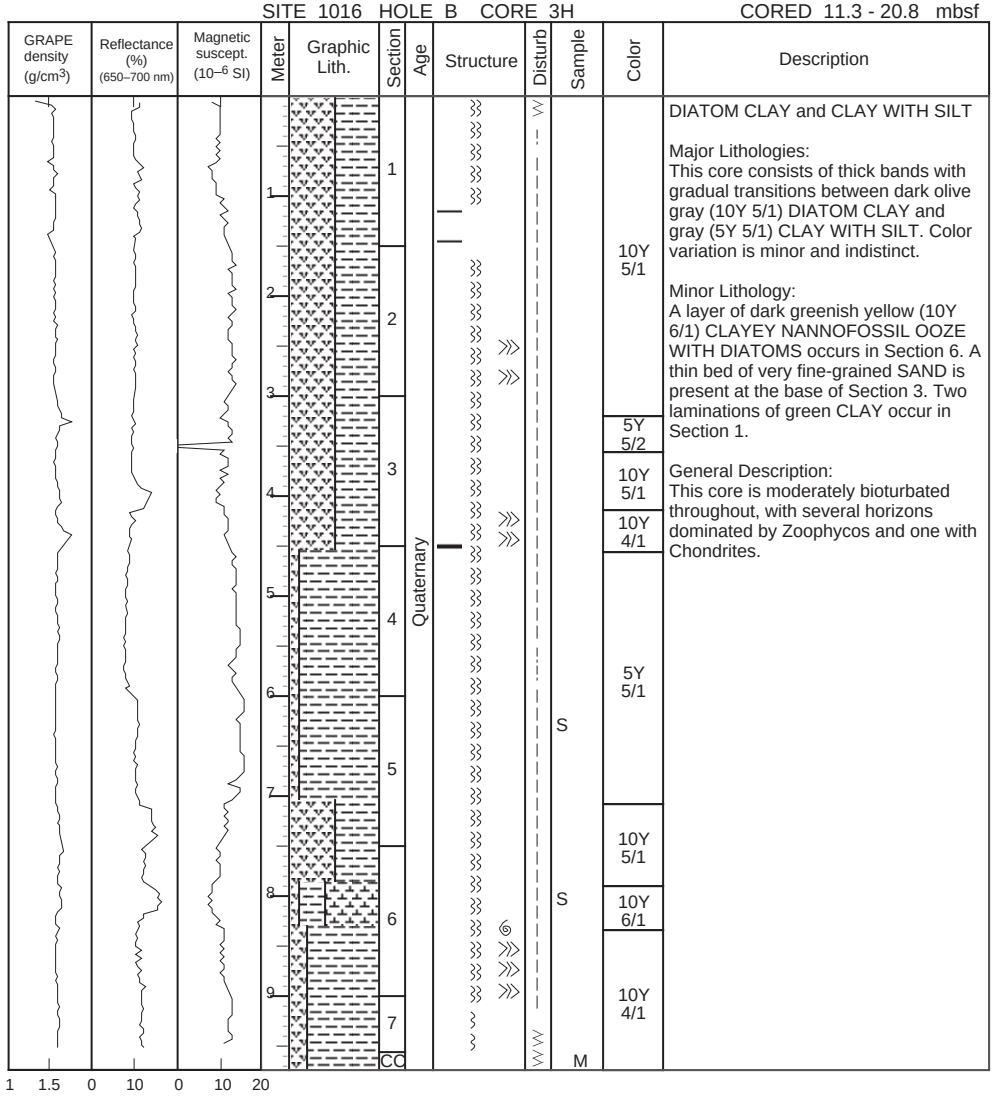
DIATOM OOZE WITH CLAY and DIATOM CLAY

Major Lithologies:
This core consists of dark olive gray (10Y 4/1 to 10Y 5/1) DIATOM OOZE WITH CLAY and DIATOM CLAY. Compositional variation occurs without significant color change. Small amounts of foraminifers, radiolarians, silicoflagellates, and coccoliths are also present.

Minor Lithology:
A 1-cm lamination of gray (N4) QUARTZ FELDSPAR SAND occurs in Section 2.

General Description:
The sediments are moderately bioturbated throughout. Small, mm-scale spots of black (Mn?) precipitate are distributed through the core.

SITE 1016 HOLE B CORE 3H CORED 11.3 - 20.8 mbsf

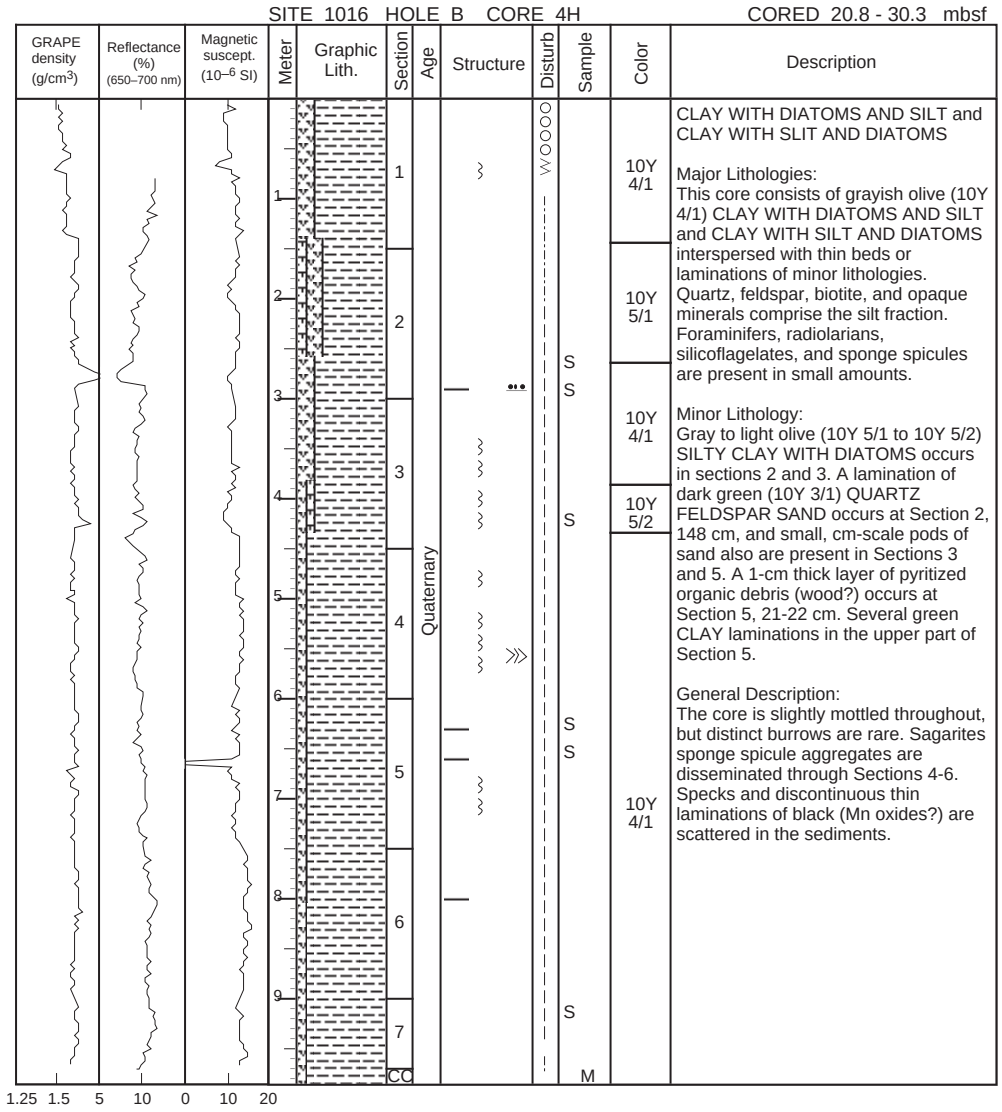


DIATOM CLAY and CLAY WITH SILT

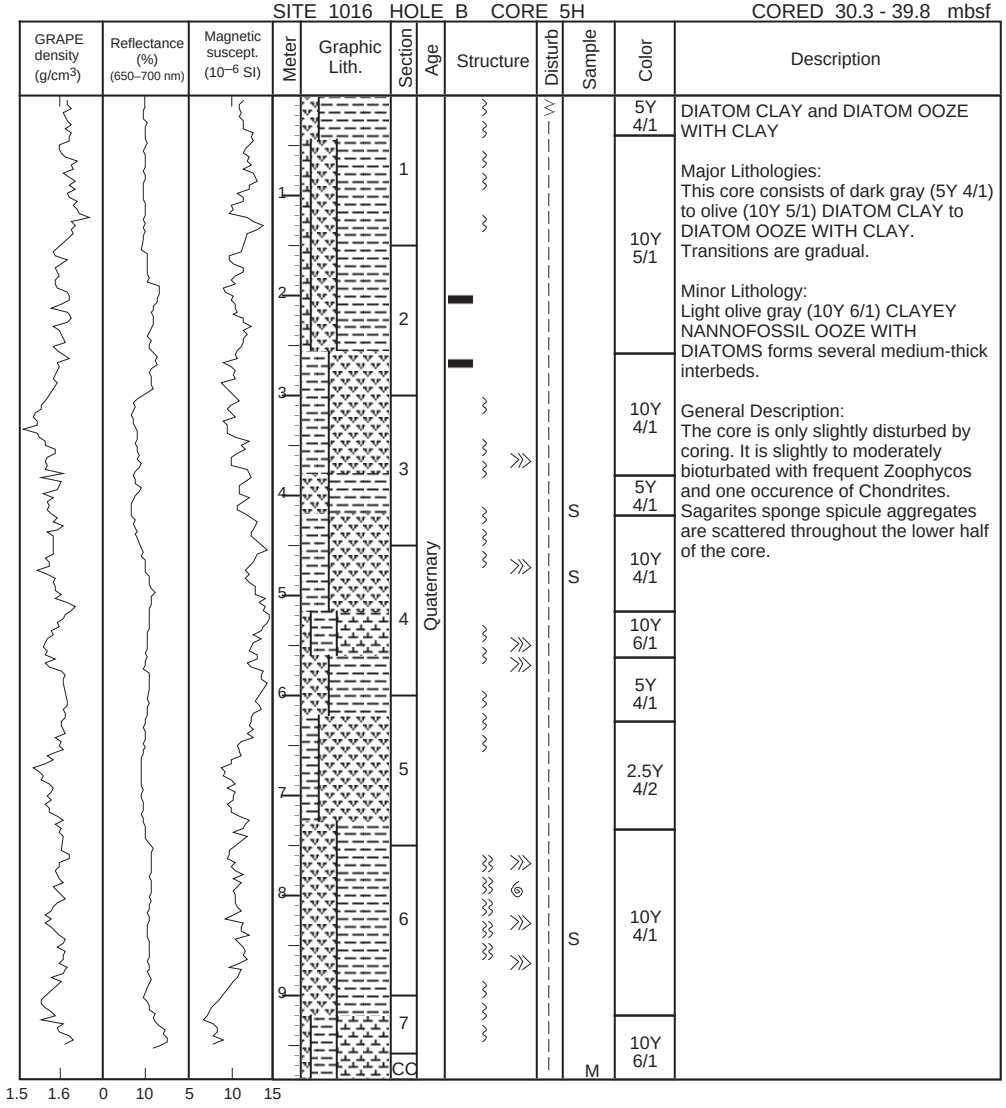
Major Lithologies:
This core consists of thick bands with gradual transitions between dark olive gray (10Y 5/1) DIATOM CLAY and gray (5Y 5/1) CLAY WITH SILT. Color variation is minor and indistinct.

Minor Lithology:
A layer of dark greenish yellow (10Y 6/1) CLAYEY NANNOFOSSIL OOZE WITH DIATOMS occurs in Section 6. A thin bed of very fine-grained SAND is present at the base of Section 3. Two laminations of green CLAY occur in Section 1.

General Description:
This core is moderately bioturbated throughout, with several horizons dominated by Zoophycos and one with Chondrites.


SITE 1016 HOLE B CORE 4H
CORED 20.8 - 30.3 mbsf
GRAPE density (g/cm3)
Reflectance (%) (650–700 nm)
Magnetic suscept. (10–6 SI)
Meter
Graphic Lith.
Section
Age
Structure
Disturb
Sample
Color
Description
1.25 1.5
5
10
0
10
20
1
2
3
4
5
6
7
CC
Quaternary
S
M
10Y 4/1
10Y 5/1
10Y 4/1
10Y 5/2
10Y 4/1
CLAY WITH DIATOMS AND SILT and CLAY WITH SLIT AND DIATOMS
Major Lithologies:
This core consists of grayish olive (10Y 4/1) CLAY WITH DIATOMS AND SILT and CLAY WITH SILT AND DIATOMS interspersed with thin beds or laminations of minor lithologies. Quartz, feldspar, biotite, and opaque minerals comprise the silt fraction. Foraminifers, radiolarians, silicoflagelates, and sponge spicules are present in small amounts.
Minor Lithology:
Gray to light olive (10Y 5/1 to 10Y 5/2) SILTY CLAY WITH DIATOMS occurs in sections 2 and 3. A lamination of dark green (10Y 3/1) QUARTZ FELDSPAR SAND occurs at Section 2, 148 cm, and small, cm-scale pods of sand also are present in Sections 3 and 5. A 1-cm thick layer of pyritized organic debris (wood?) occurs at Section 5, 21-22 cm. Several green CLAY laminations in the upper part of Section 5.
General Description:
The core is slightly mottled throughout, but distinct burrows are rare. Sagarites sponge spicule aggregates are disseminated through Sections 4-6. Specks and discontinuous thin laminations of black (Mn oxides?) are scattered in the sediments.

SITE 1016 HOLE B CORE 5H CORED 30.3 - 39.8 mbsf



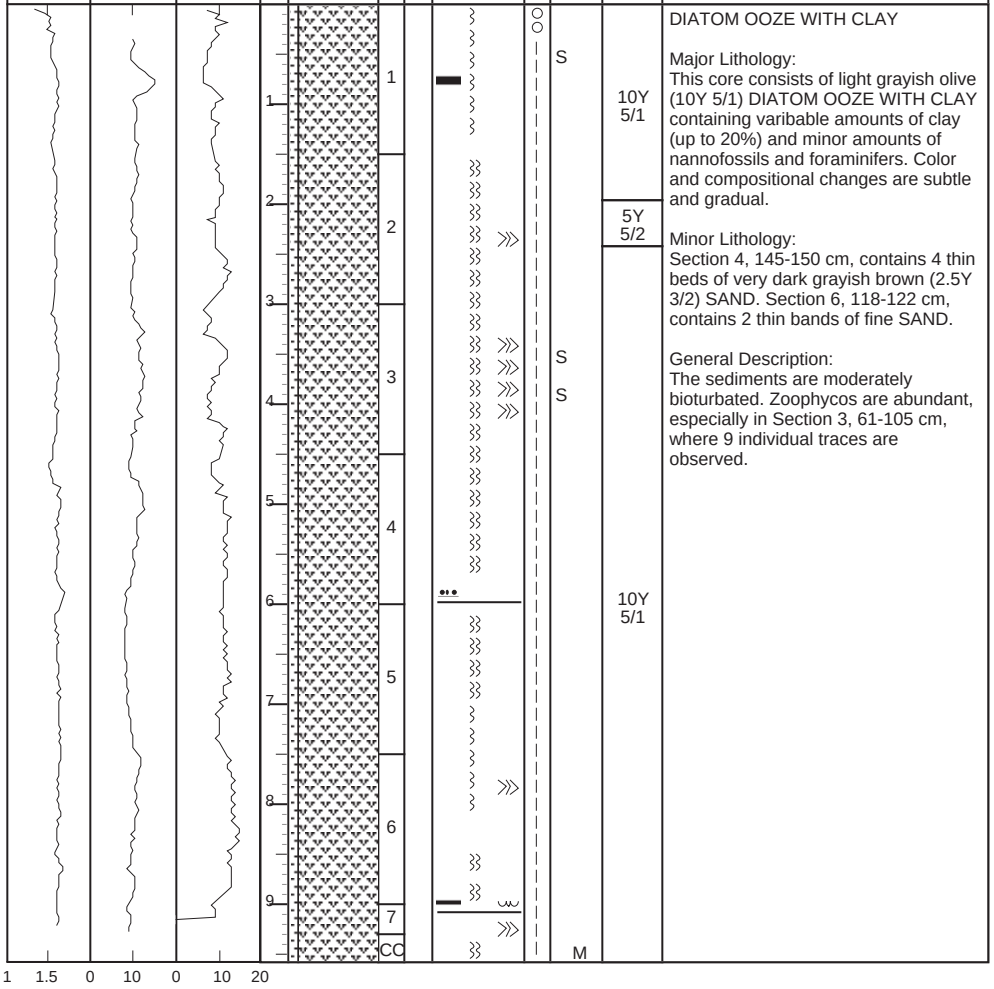
DIATOM CLAY and DIATOM OOZE WITH CLAY

Major Lithologies:
This core consists of dark gray (5Y 4/1) to olive (10Y 5/1) DIATOM CLAY to DIATOM OOZE WITH CLAY. Transitions are gradual.

Minor Lithology:
Light olive gray (10Y 6/1) CLAYEY NANNOFOSSIL OOZE WITH DIATOMS forms several medium-thick interbeds.

General Description:
The core is only slightly disturbed by coring. It is slightly to moderately bioturbated with frequent Zoophycos and one occurence of Chondrites. Sagarites sponge spicule aggregates are scattered throughout the lower half of the core.

SITE 1016 HOLE B CORE 6H CORED 39.8 - 49.3 mbsf



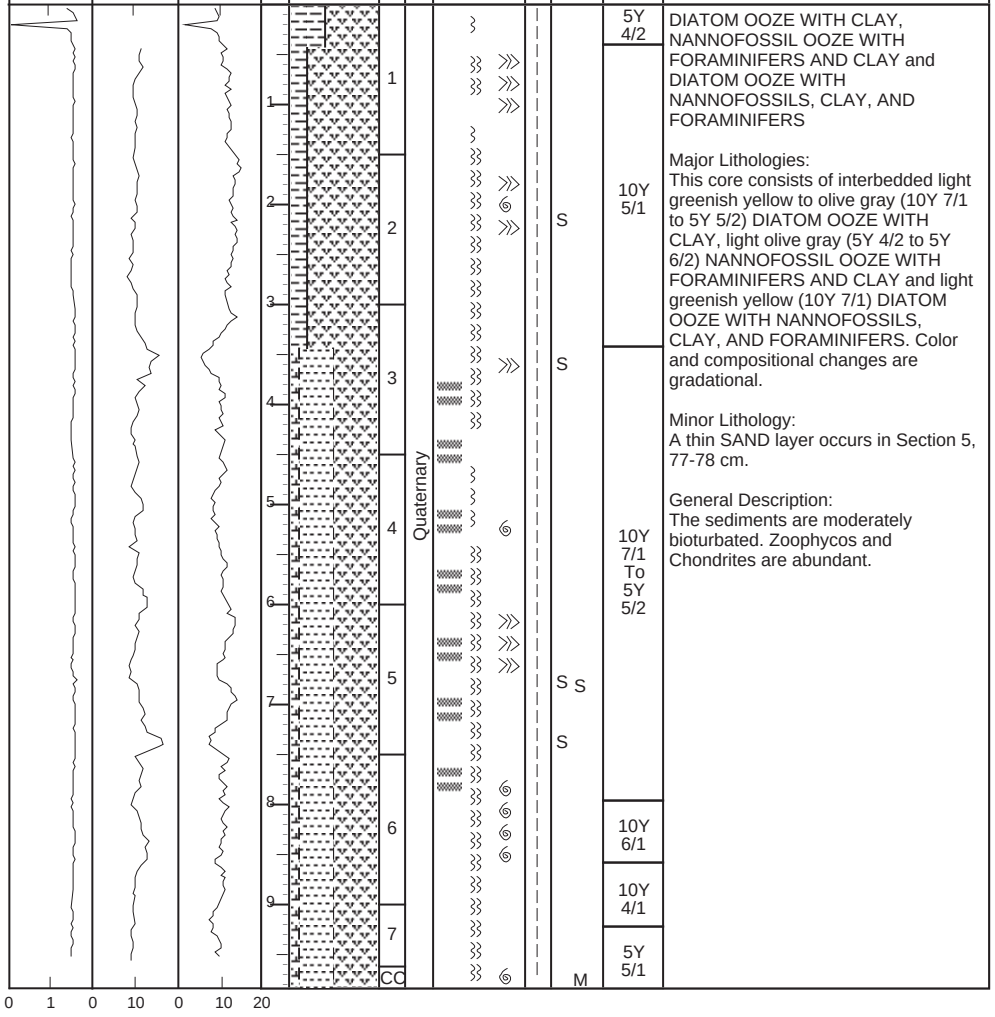
DIATOM OOZE WITH CLAY

Major Lithology:
This core consists of light grayish olive (10Y 5/1) DIATOM OOZE WITH CLAY containing varibable amounts of clay (up to 20%) and minor amounts of nannofossils and foraminifers. Color and compositional changes are subtle and gradual.

Minor Lithology:
Section 4, 145-150 cm, contains 4 thin beds of very dark grayish brown (2.5Y 3/2) SAND. Section 6, 118-122 cm, contains 2 thin bands of fine SAND.

General Description:
The sediments are moderately bioturbated. Zoophycos are abundant, especially in Section 3, 61-105 cm, where 9 individual traces are observed.

SITE 1016 HOLE B CORE 7H CORED 49.3 - 58.8 mbsf

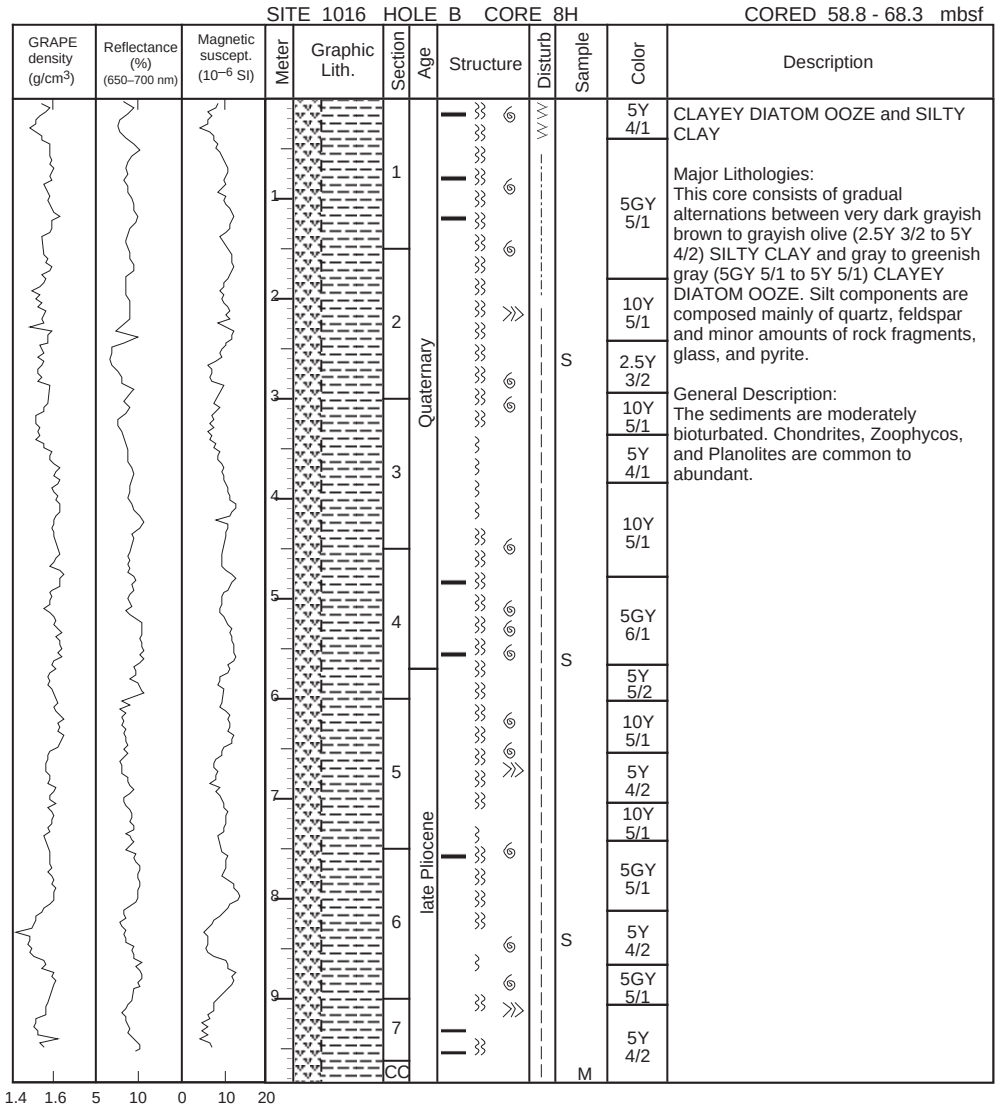


DIATOM OOZE WITH CLAY, NANNOFOSSIL OOZE WITH FORAMINIFERS AND CLAY and DIATOM OOZE WITH NANNOFOSSILS, CLAY, AND FORAMINIFERS

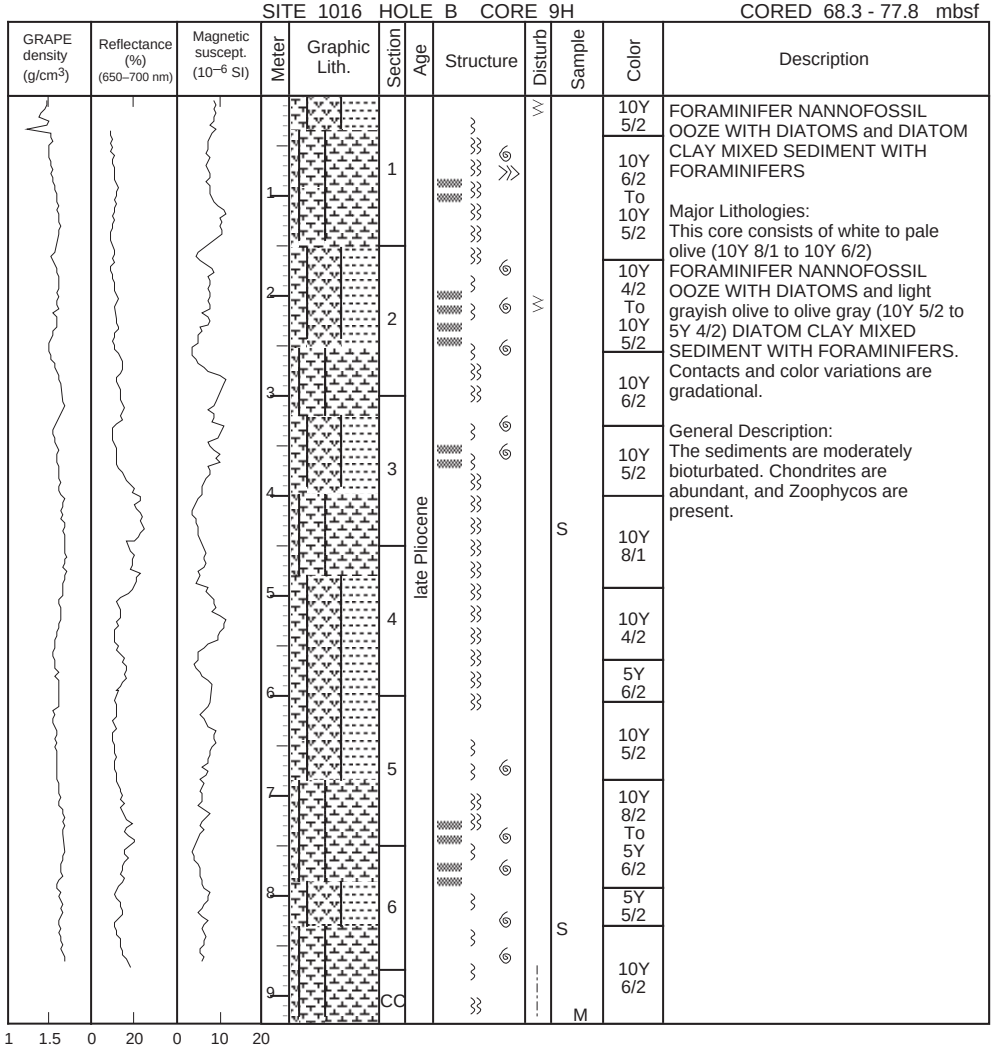
Major Lithologies:
This core consists of interbedded light greenish yellow to olive gray (10Y 7/1 to 5Y 5/2) DIATOM OOZE WITH CLAY, light olive gray (5Y 4/2 to 5Y 6/2) NANNOFOSSIL OOZE WITH FORAMINIFERS AND CLAY and light greenish yellow (10Y 7/1) DIATOM OOZE WITH NANNOFOSSILS, CLAY, AND FORAMINIFERS. Color and compositional changes are gradational.

Minor Lithology:
A thin SAND layer occurs in Section 5, 77-78 cm.

General Description:
The sediments are moderately bioturbated. Zoophycos and Chondrites are abundant.


SITE 1016 HOLE B CORE 8H
CORED 58.8 - 68.3 mbsf
GRAPE density (g/cm3)
Reflectance (%) (650–700 nm)
Magnetic suscept. (10−6 SI)
Meter
Graphic Lith.
Section
Age
Structure
Disturb
Sample
Color
Description
1.4 1.6
5 10
0 10 20
1 2 3 4 5 6 7 CC
Quaternary
late Pliocene
S S S M
5Y 4/1
5GY 5/1
10Y 5/1
2.5Y 3/2
10Y 5/1
5Y 4/1
10Y 5/1
5GY 6/1
5Y 5/2
10Y 5/1
5Y 4/2
10Y 5/1
5GY 5/1
5Y 4/2
5GY 5/1
5Y 4/2
CLAYEY DIATOM OOZE and SILTY CLAY
Major Lithologies:
This core consists of gradual alternations between very dark grayish brown to grayish olive (2.5Y 3/2 to 5Y 4/2) SILTY CLAY and gray to greenish gray (5GY 5/1 to 5Y 5/1) CLAYEY DIATOM OOZE. Silt components are composed mainly of quartz, feldspar and minor amounts of rock fragments, glass, and pyrite.
General Description:
The sediments are moderately bioturbated. Chondrites, Zoophycos, and Planolites are common to abundant.

SITE 1016 HOLE B CORE 9H CORED 68.3 - 77.8 mbsf

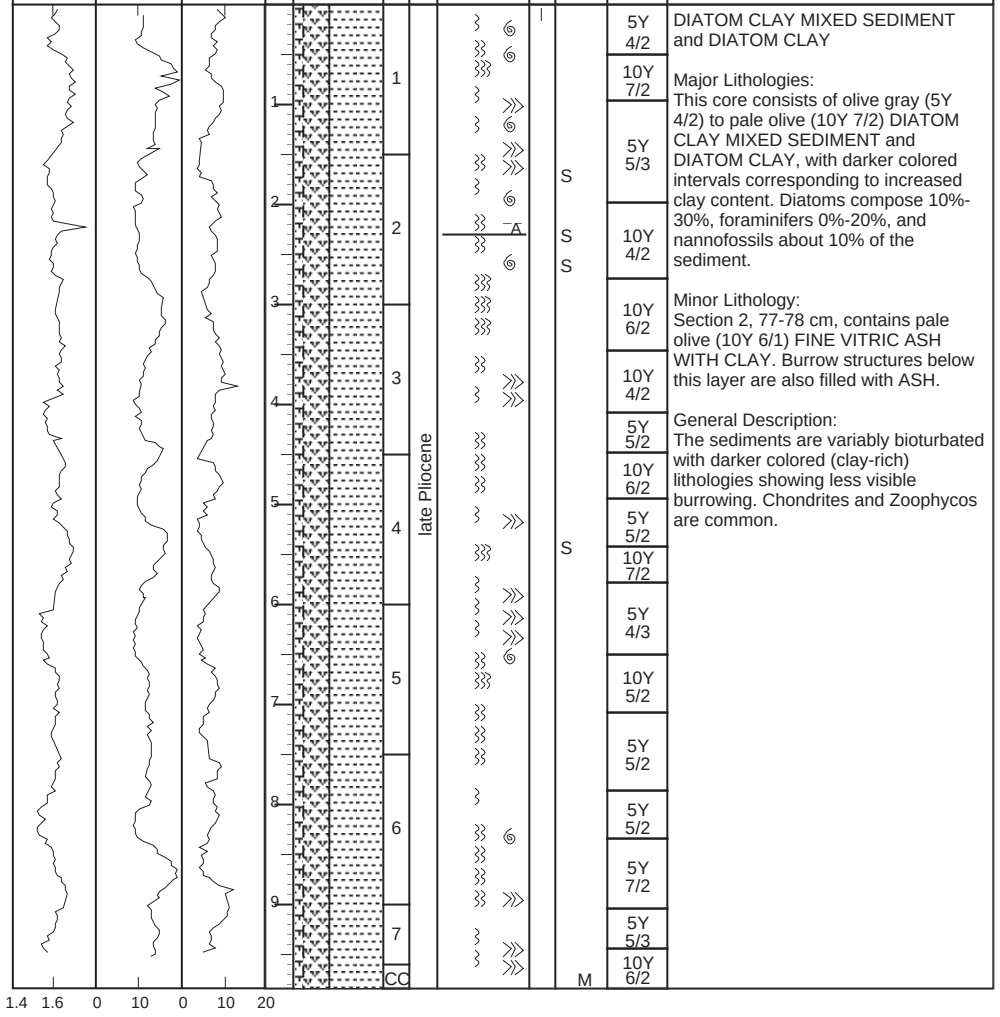


FORAMINIFER NANNOFOSSIL OOZE WITH DIATOMS and DIATOM CLAY MIXED SEDIMENT WITH FORAMINIFERS

Major Lithologies:
This core consists of white to pale olive (10Y 8/1 to 10Y 6/2) FORAMINIFER NANNOFOSSIL OOZE WITH DIATOMS and light grayish olive to olive gray (10Y 5/2 to 5Y 4/2) DIATOM CLAY MIXED SEDIMENT WITH FORAMINIFERS. Contacts and color variations are gradational.

General Description:
The sediments are moderately bioturbated. Chondrites are abundant, and Zoophycos are present.

SITE 1016 HOLE B CORE 10H CORED 77.8 - 87.3 mbsf



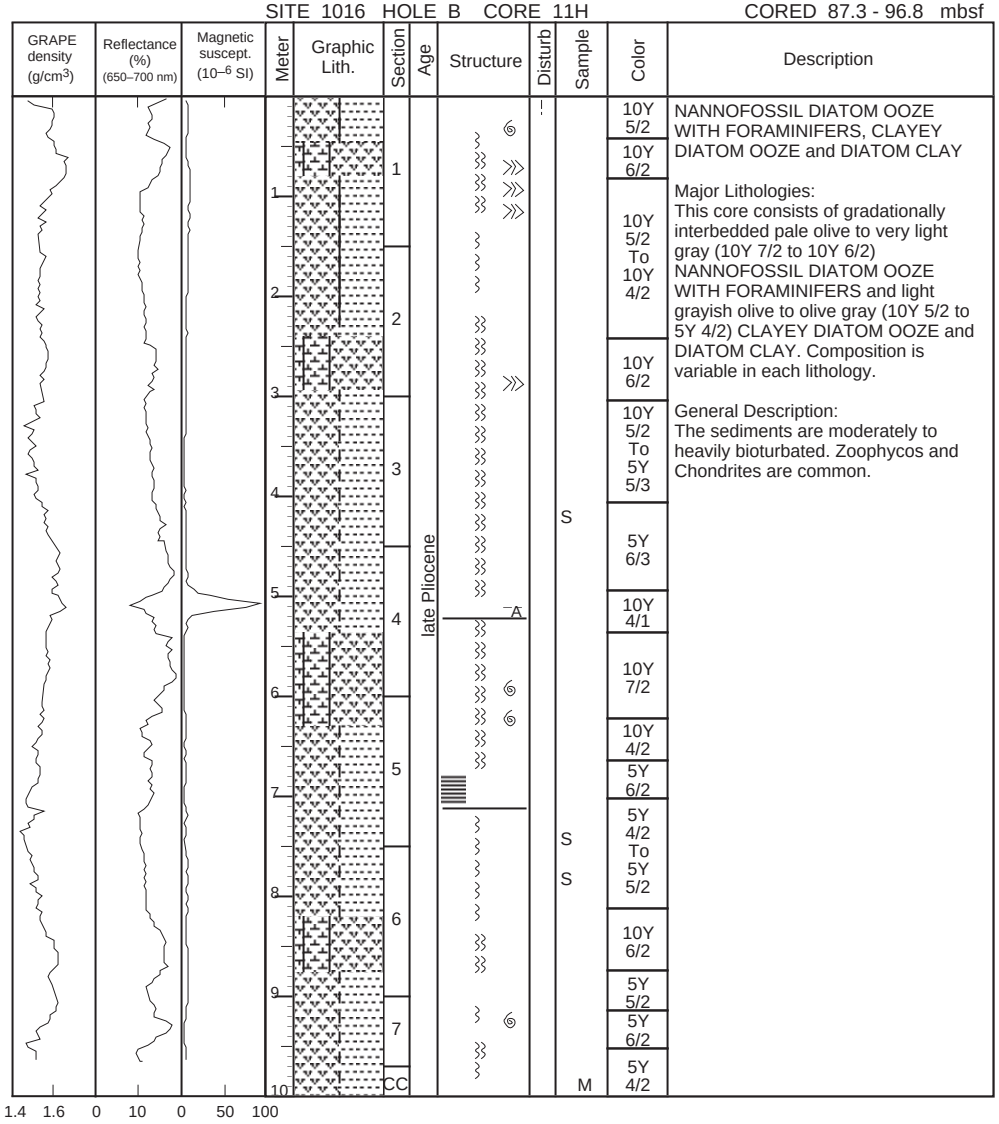
DIATOM CLAY MIXED SEDIMENT and DIATOM CLAY

Major Lithologies:
This core consists of olive gray (5Y 4/2) to pale olive (10Y 7/2) DIATOM CLAY MIXED SEDIMENT and DIATOM CLAY, with darker colored intervals corresponding to increased clay content. Diatoms compose 10%-30%, foraminifers 0%-20%, and nannofossils about 10% of the sediment.

Minor Lithology:
Section 2, 77-78 cm, contains pale olive (10Y 6/1) FINE VITRIC ASH WITH CLAY. Burrow structures below this layer are also filled with ASH.

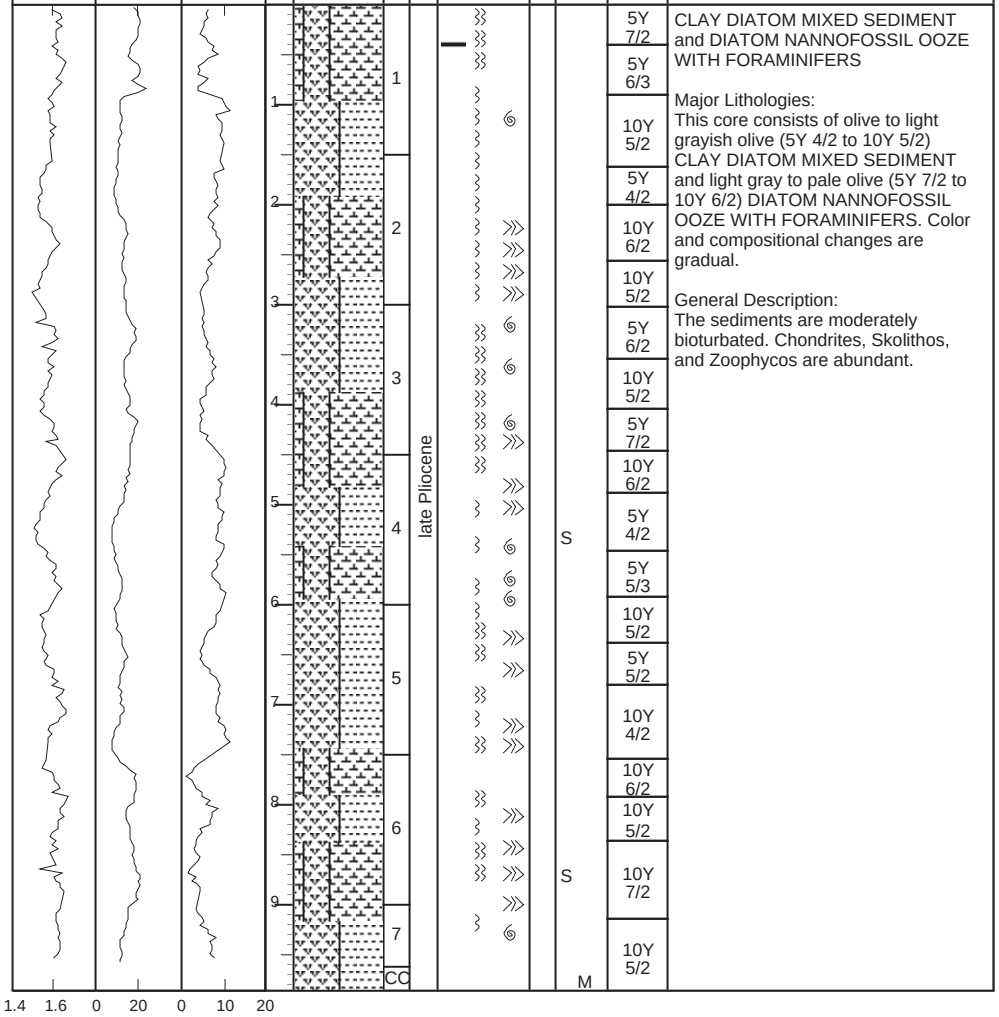
General Description:
The sediments are variably bioturbated with darker colored (clay-rich) lithologies showing less visible burrowing. Chondrites and Zoophycos are common.

SITE 1016 HOLE B CORE 11H CORED 87.3 - 96.8 mbsf



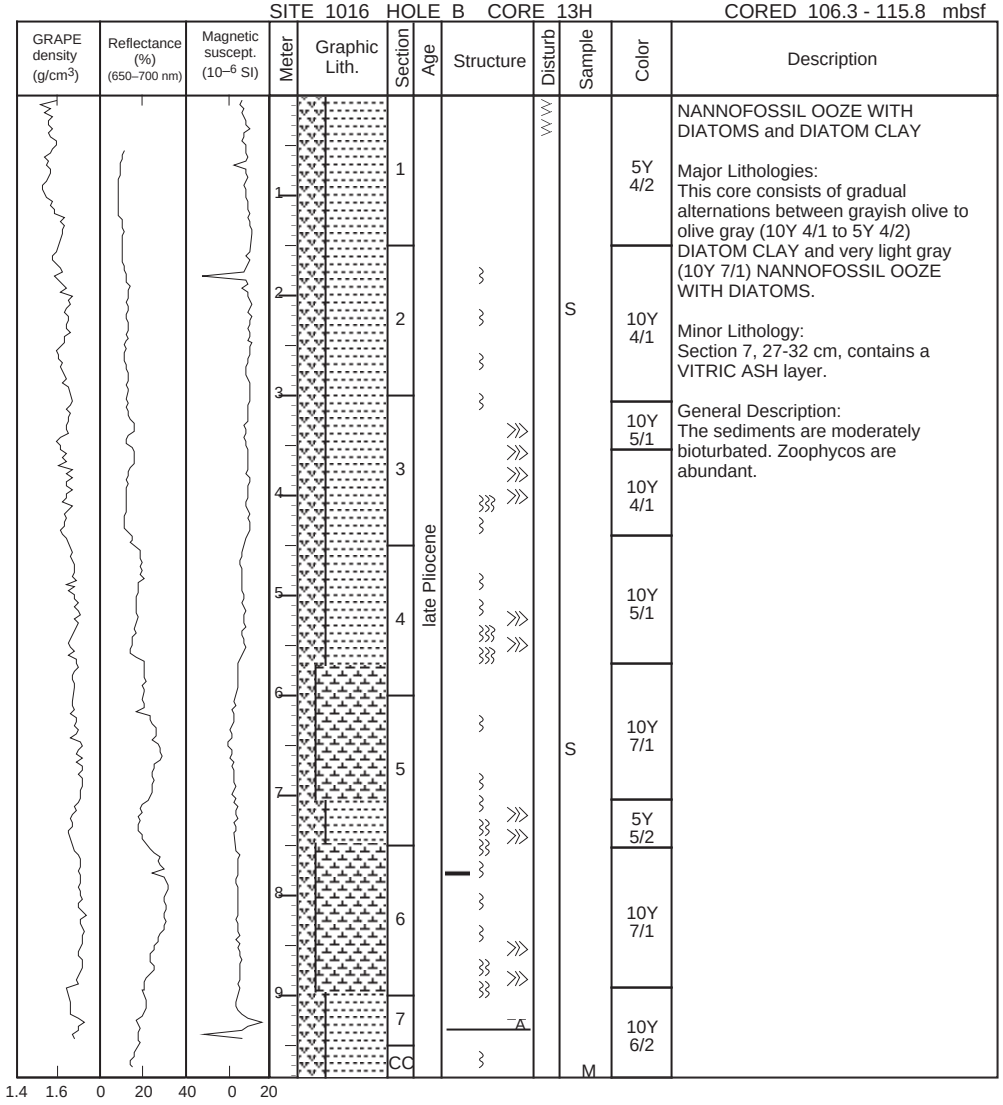
Color	Description
10Y 5/2	NANNOFOSSIL DIATOM OOZE WITH FORAMINIFERS, CLAYEY DIATOM OOZE and DIATOM CLAY
10Y 6/2	
10Y 5/2 To 10Y 4/2	Major Lithologies: This core consists of gradationally interbedded pale olive to very light gray (10Y 7/2 to 10Y 6/2) NANNOFOSSIL DIATOM OOZE WITH FORAMINIFERS and light grayish olive to olive gray (10Y 5/2 to 5Y 4/2) CLAYEY DIATOM OOZE and DIATOM CLAY. Composition is variable in each lithology.
10Y 6/2	
10Y 5/2 To 5Y 5/3	General Description: The sediments are moderately to heavily bioturbated. Zoophycos and Chondrites are common.
5Y 6/3	
10Y 4/1	
10Y 7/2	
10Y 4/2	
5Y 6/2	
5Y 4/2 To 5Y 5/2	
10Y 6/2	
5Y 5/2	
5Y 6/2	
5Y 4/2	

SITE 1016 HOLE B CORE 12H CORED 96.8 - 106.3 mbsf

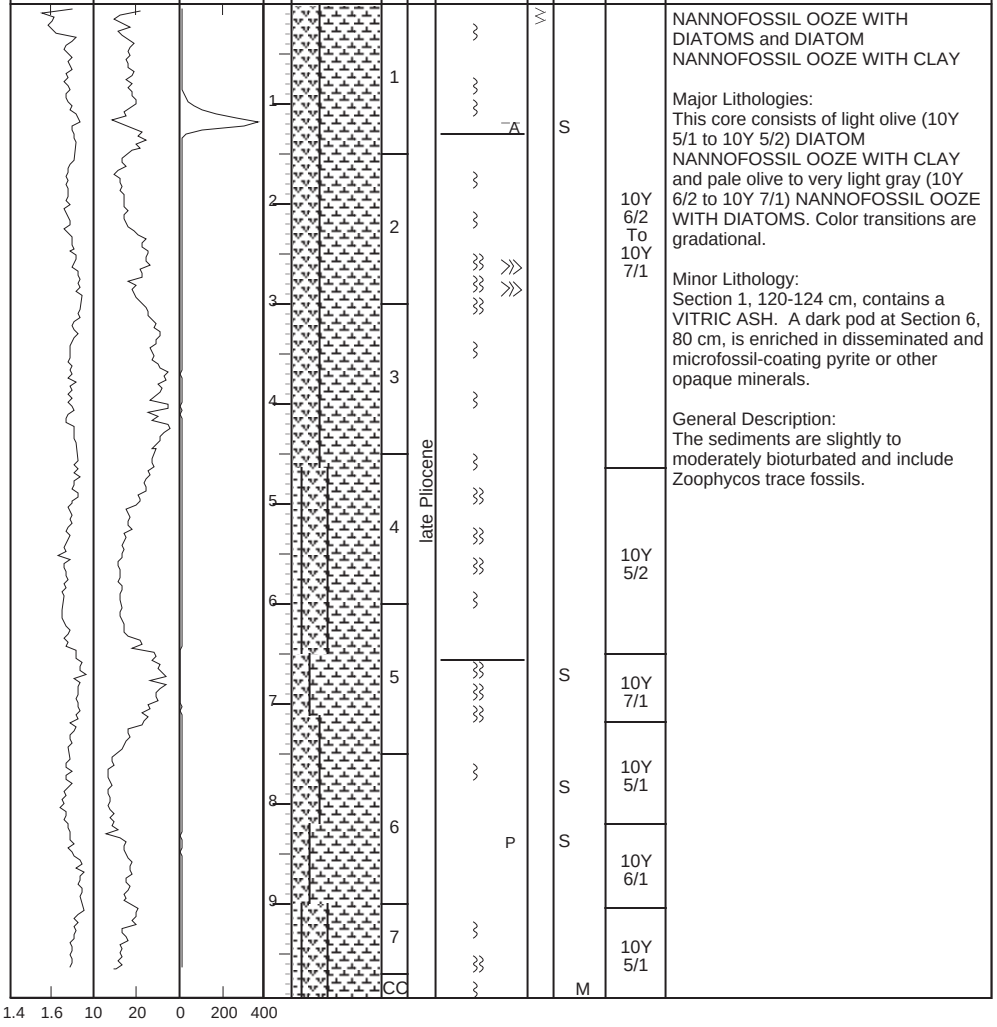


Color	Description
5Y 7/2	CLAY DIATOM MIXED SEDIMENT and DIATOM NANNOFOSSIL OOZE WITH FORAMINIFERS
5Y 6/3	
10Y 5/2	Major Lithologies:
5Y 4/2	This core consists of olive to light grayish olive (5Y 4/2 to 10Y 5/2) CLAY DIATOM MIXED SEDIMENT and light gray to pale olive (5Y 7/2 to 10Y 6/2) DIATOM NANNOFOSSIL OOZE WITH FORAMINIFERS. Color and compositional changes are gradual.
10Y 6/2	
10Y 5/2	
5Y 6/2	General Description:
10Y 5/2	The sediments are moderately bioturbated. Chondrites, Skolithos, and Zoophycos are abundant.
5Y 7/2	
10Y 6/2	
5Y 4/2	
5Y 5/3	
10Y 5/2	
5Y 5/2	
10Y 4/2	
10Y 6/2	
10Y 5/2	
10Y 7/2	
10Y 5/2	

SITE 1016 HOLE B CORE 13H CORED 106.3 - 115.8 mbsf



SITE 1016 HOLE B CORE 14H CORED 115.8 - 125.3 mbsf



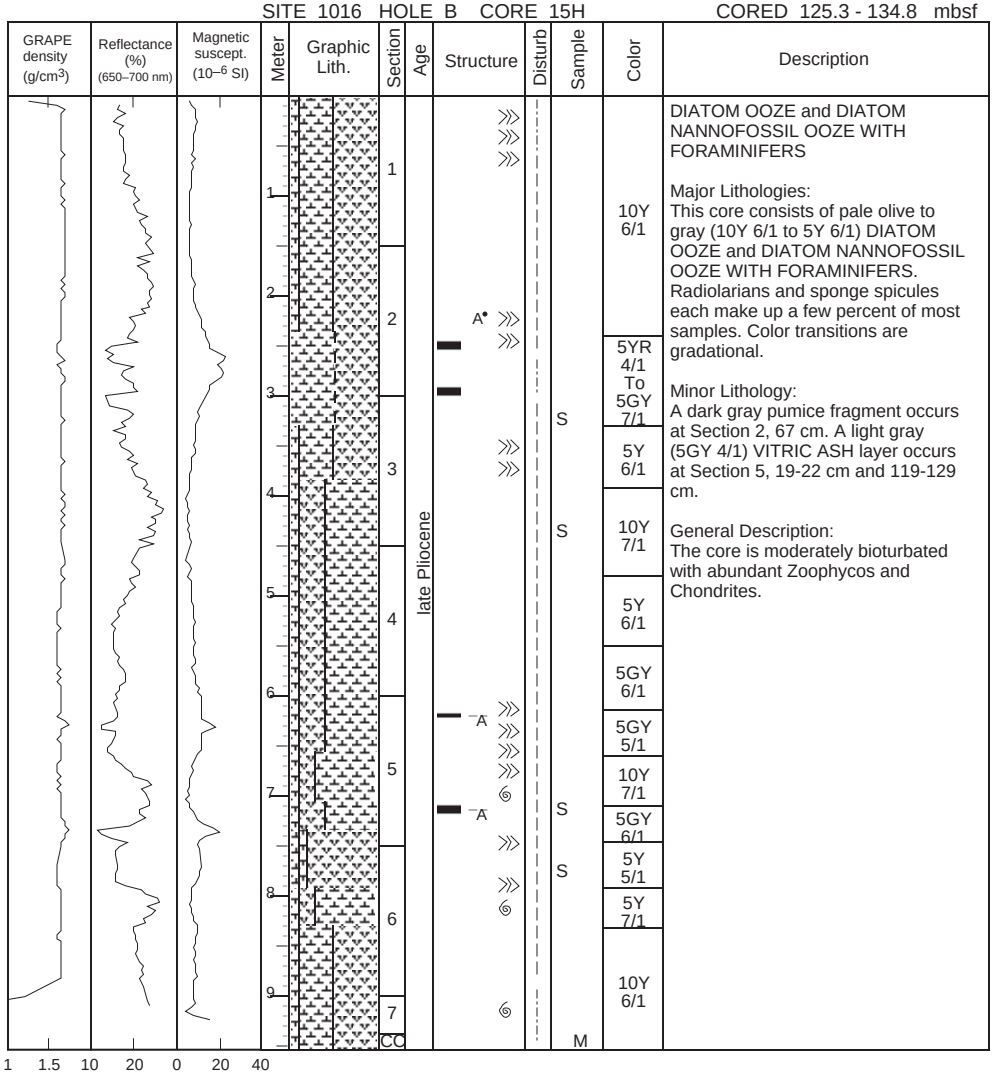
NANNOFOSSIL OOZE WITH DIATOMS and DIATOM NANNOFOSSIL OOZE WITH CLAY

Major Lithologies:
This core consists of light olive (10Y 5/1 to 10Y 5/2) DIATOM NANNOFOSSIL OOZE WITH CLAY and pale olive to very light gray (10Y 6/2 to 10Y 7/1) NANNOFOSSIL OOZE WITH DIATOMS. Color transitions are gradational.

Minor Lithology:
Section 1, 120-124 cm, contains a VITRIC ASH. A dark pod at Section 6, 80 cm, is enriched in disseminated and microfossil-coating pyrite or other opaque minerals.

General Description:
The sediments are slightly to moderately bioturbated and include Zoophycos trace fossils.

SITE 1016 HOLE B CORE 15H CORED 125.3 - 134.8 mbsf

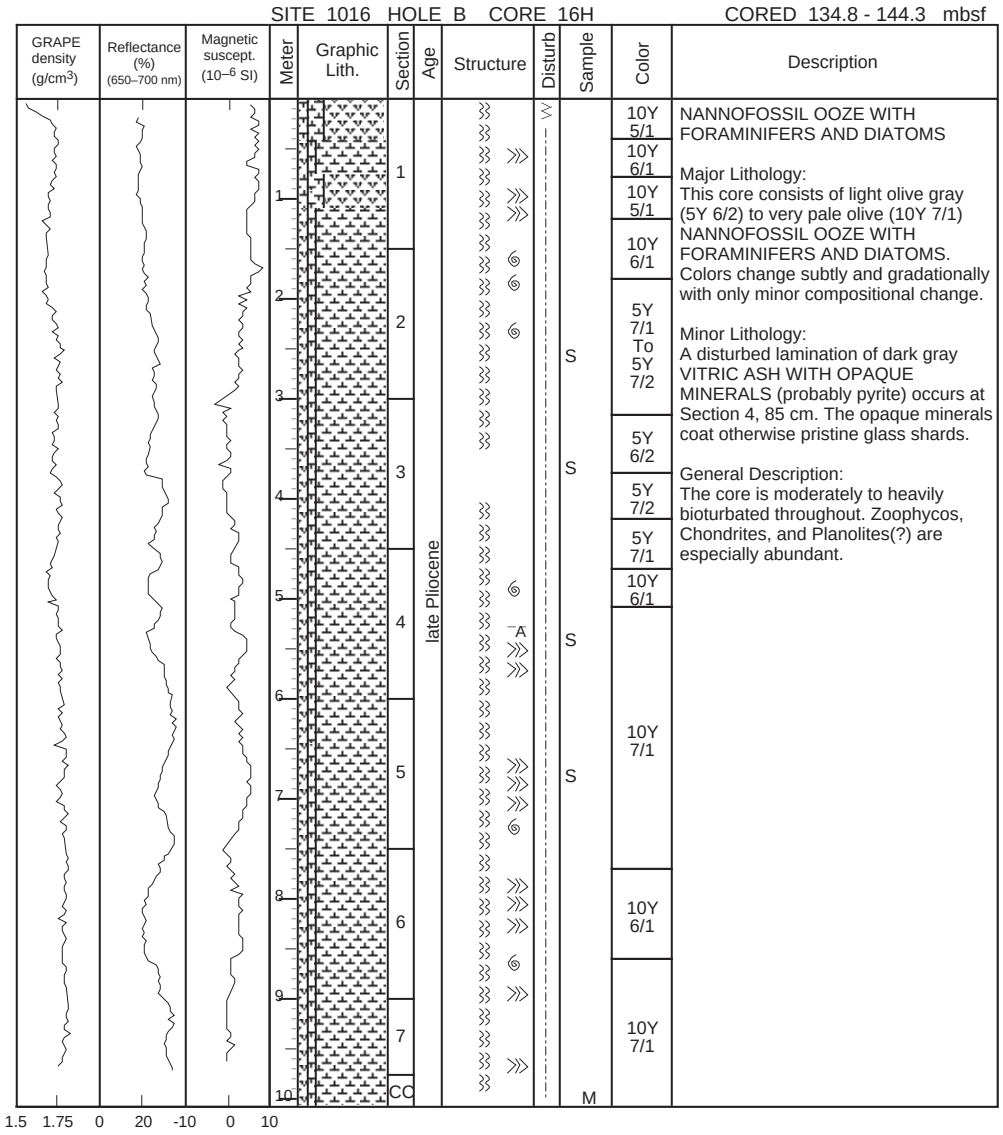


DIATOM OOZE and DIATOM NANNOFOSSIL OOZE WITH FORAMINIFERS

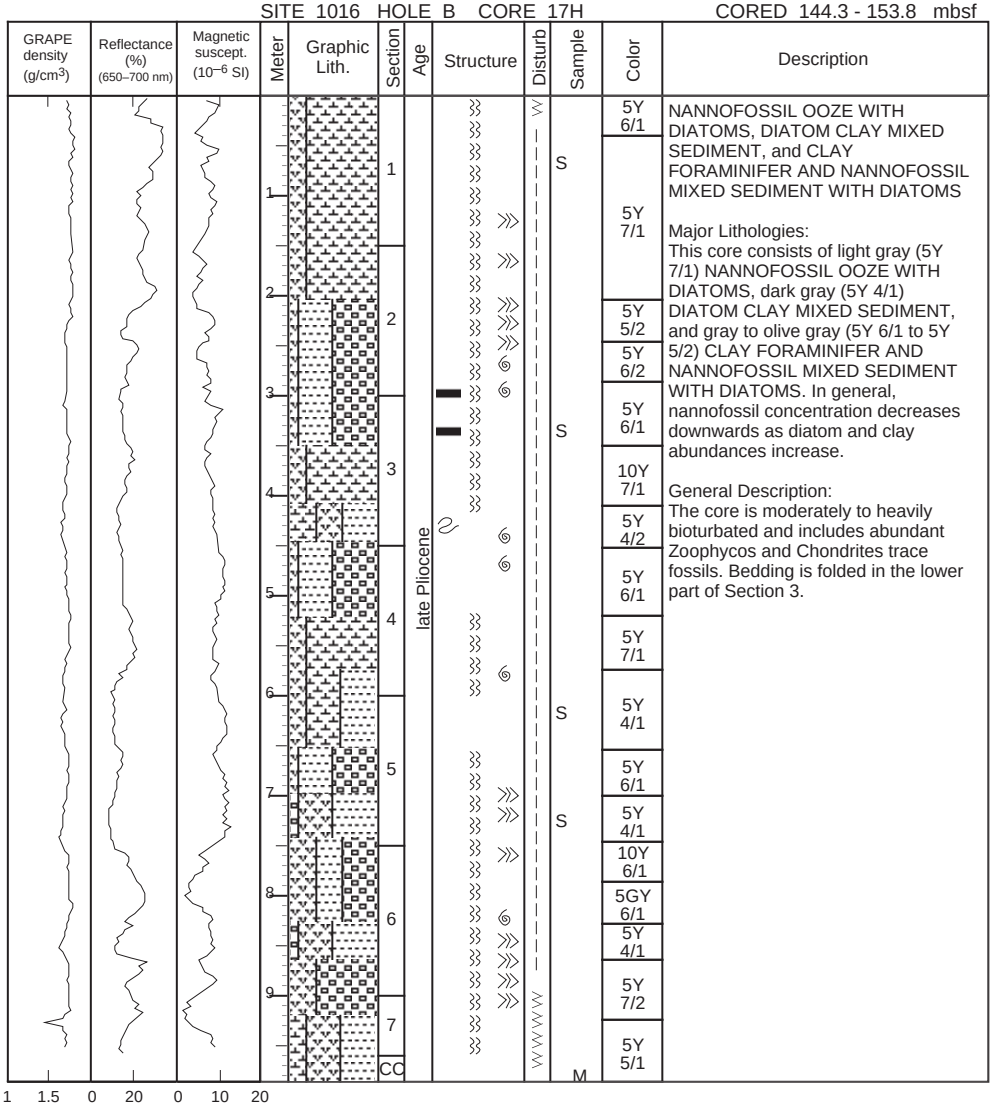
Major Lithologies:
This core consists of pale olive to gray (10Y 6/1 to 5Y 6/1) DIATOM OOZE and DIATOM NANNOFOSSIL OOZE WITH FORAMINIFERS. Radiolarians and sponge spicules each make up a few percent of most samples. Color transitions are gradational.

Minor Lithology:
A dark gray pumice fragment occurs at Section 2, 67 cm. A light gray (5GY 4/1) VITRIC ASH layer occurs at Section 5, 19-22 cm and 119-129 cm.

General Description:
The core is moderately bioturbated with abundant Zoophycos and Chondrites.


SITE 1016 HOLE B CORE 16H
CORED 134.8 - 144.3 mbsf
GRAPE density (g/cm3)
Reflectance (%) (650–700 nm)
Magnetic suscept. (10–6 SI)
Meter
Graphic Lith.
Section
Age
Structure
Disturb
Sample
Color
Description
late Pliocene
A
S
M
10Y 5/1
10Y 6/1
10Y 5/1
10Y 6/1
5Y 7/1 To 5Y 7/2
5Y 6/2
5Y 7/2
5Y 7/1
10Y 6/1
10Y 7/1
10Y 6/1
10Y 7/1
NANNOFOSSIL OOZE WITH FORAMINIFERS AND DIATOMS
Major Lithology:
This core consists of light olive gray (5Y 6/2) to very pale olive (10Y 7/1) NANNOFOSSIL OOZE WITH FORAMINIFERS AND DIATOMS. Colors change subtly and gradationally with only minor compositional change.
Minor Lithology:
A disturbed lamination of dark gray VITRIC ASH WITH OPAQUE MINERALS (probably pyrite) occurs at Section 4, 85 cm. The opaque minerals coat otherwise pristine glass shards.
General Description:
The core is moderately to heavily bioturbated throughout. Zoophycos, Chondrites, and Planolites(?) are especially abundant.
1.5 1.75 0 20 -10 0 10

SITE 1016 HOLE B CORE 17H CORED 144.3 - 153.8 mbsf

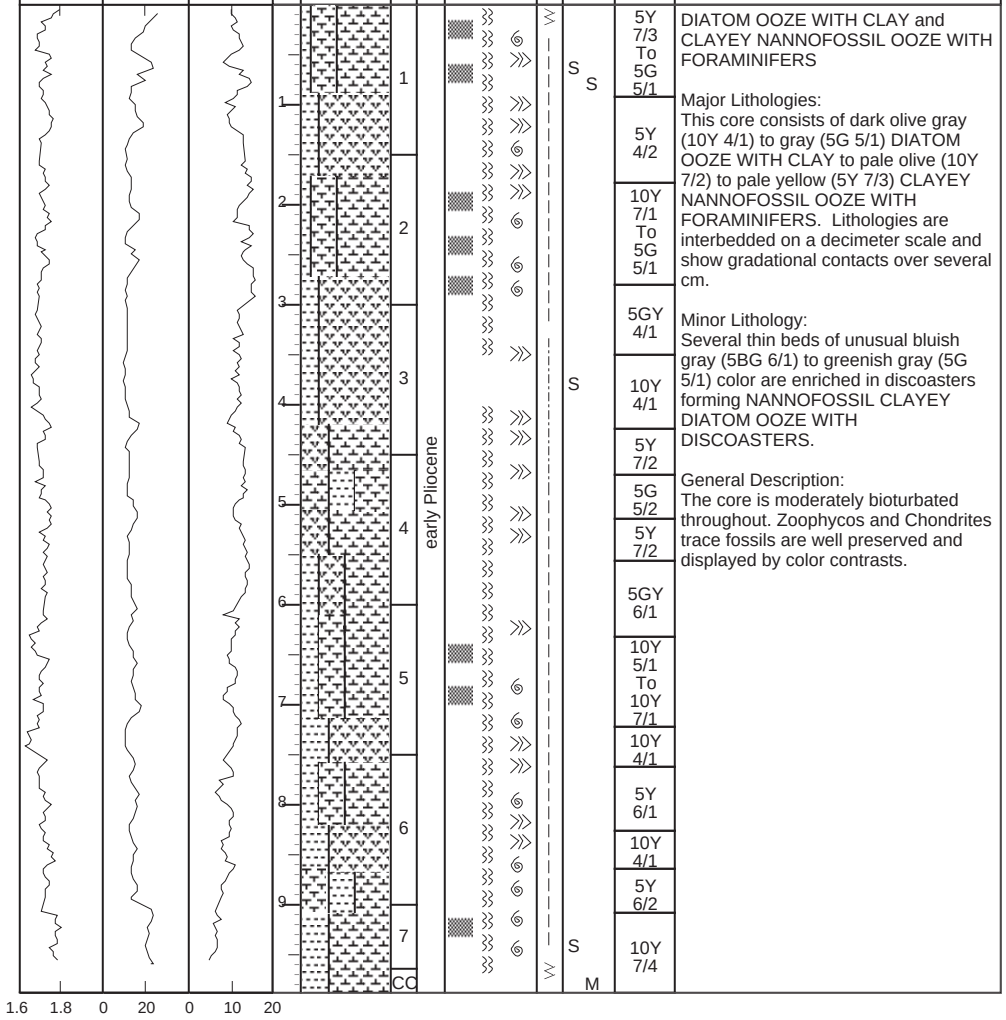


NANNOFOSSIL OOZE WITH DIATOMS, DIATOM CLAY MIXED SEDIMENT, and CLAY FORAMINIFER AND NANNOFOSSIL MIXED SEDIMENT WITH DIATOMS

Major Lithologies:
This core consists of light gray (5Y 7/1) NANNOFOSSIL OOZE WITH DIATOMS, dark gray (5Y 4/1) DIATOM CLAY MIXED SEDIMENT, and gray to olive gray (5Y 6/1 to 5Y 5/2) CLAY FORAMINIFER AND NANNOFOSSIL MIXED SEDIMENT WITH DIATOMS. In general, nannofossil concentration decreases downwards as diatom and clay abundances increase.

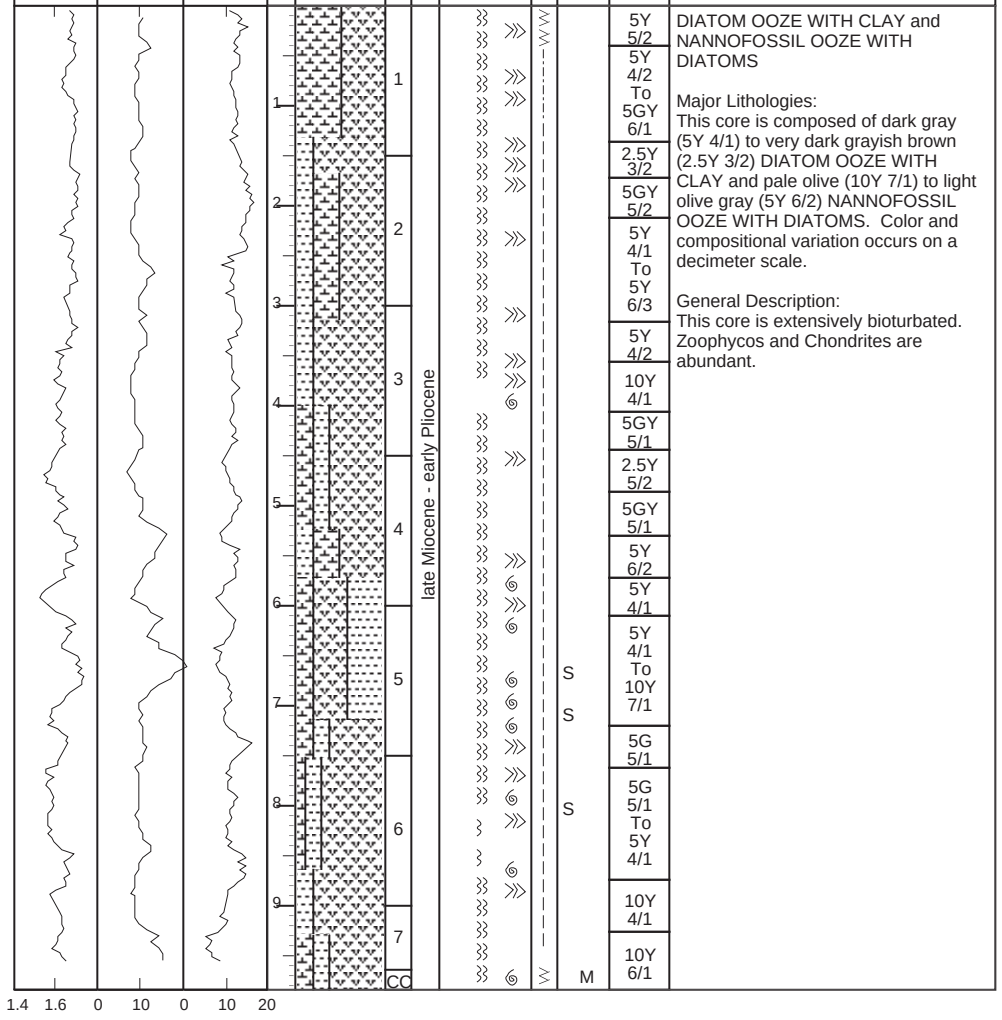
General Description:
The core is moderately to heavily bioturbated and includes abundant Zoophycos and Chondrites trace fossils. Bedding is folded in the lower part of Section 3.

SITE 1016 HOLE B CORE 18H CORED 153.8 - 163.3 mbsf



Color	Description
5Y 7/3 To 5G 5/1	DIATOM OOZE WITH CLAY and CLAYEY NANNOFOSSIL OOZE WITH FORAMINIFERS
5Y 4/2	
10Y 7/1 To 5G 5/1	Major Lithologies: This core consists of dark olive gray (10Y 4/1) to gray (5G 5/1) DIATOM OOZE WITH CLAY to pale olive (10Y 7/2) to pale yellow (5Y 7/3) CLAYEY NANNOFOSSIL OOZE WITH FORAMINIFERS. Lithologies are interbedded on a decimeter scale and show gradational contacts over several cm.
5GY 4/1	
10Y 4/1	Minor Lithology: Several thin beds of unusual bluish gray (5BG 6/1) to greenish gray (5G 5/1) color are enriched in discoasters forming NANNOFOSSIL CLAYEY DIATOM OOZE WITH DISCOASTERS.
5Y 7/2	
5G 5/2	General Description: The core is moderately bioturbated throughout. Zoophycos and Chondrites trace fossils are well preserved and displayed by color contrasts.
5Y 7/2	
5GY 6/1	
10Y 5/1 To 10Y 7/1	
10Y 4/1	
5Y 6/1	
10Y 4/1	
5Y 6/2	
10Y 7/4	

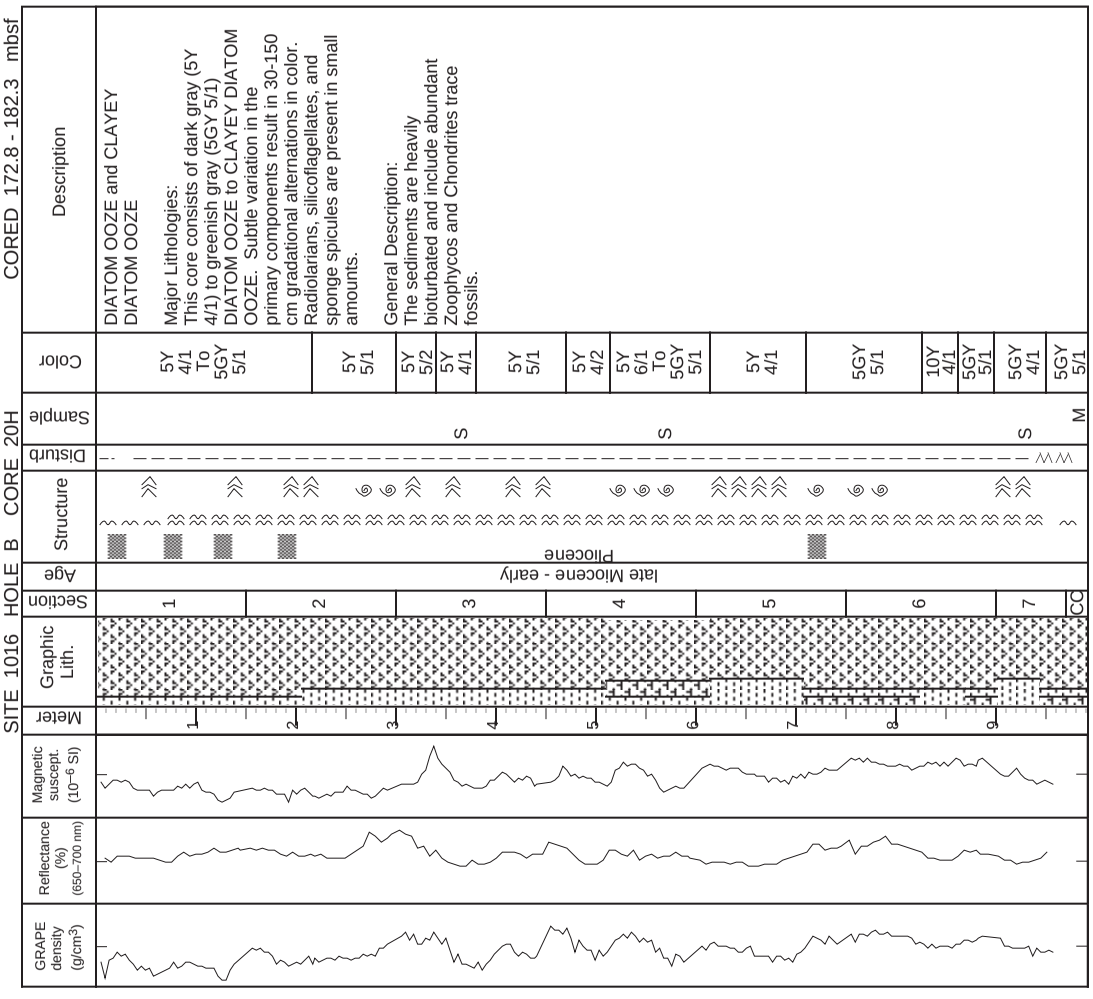
SITE 1016 HOLE B CORE 19H CORED 163.3 - 172.8 mbsf



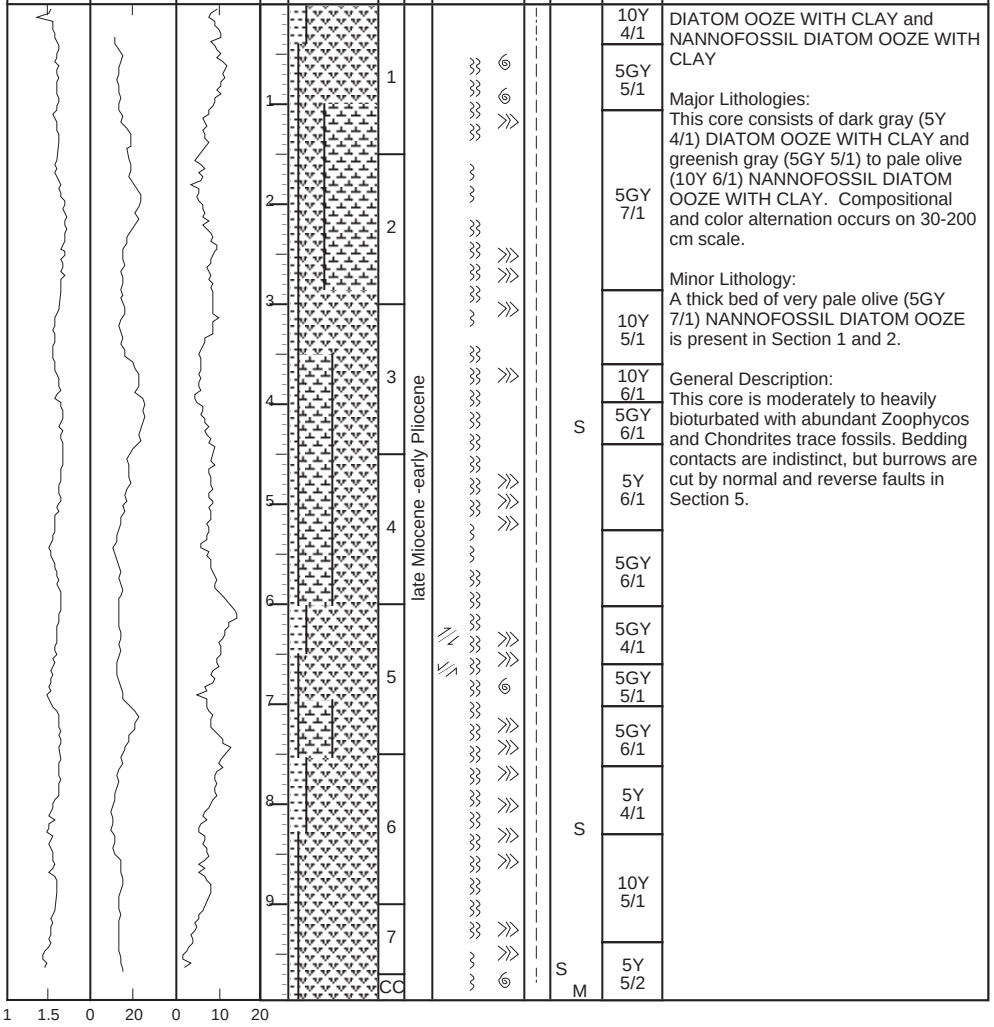
DIATOM OOZE WITH CLAY and NANNOFOSSIL OOZE WITH DIATOMS

Major Lithologies:
This core is composed of dark gray (5Y 4/1) to very dark grayish brown (2.5Y 3/2) DIATOM OOZE WITH CLAY and pale olive (10Y 7/1) to light olive gray (5Y 6/2) NANNOFOSSIL OOZE WITH DIATOMS. Color and compositional variation occurs on a decimeter scale.

General Description:
This core is extensively bioturbated. Zoophycos and Chondrites are abundant.


SITE 1016 HOLE B CORE 20H CORED 172.8 - 182.3 mbsf
GRAPE density (g/cm3)
Reflectance (%) (650–700 nm)
Magnetic suscept. (10–6 SI)
Meter
Graphic Lith.
Section
Age
Structure
Disturb
Sample
Color
Description
late Miocene - early Pliocene
DIATOM OOZE and CLAYEY DIATOM OOZE
Major Lithologies: This core consists of dark gray (5Y 4/1) to greenish gray (5GY 5/1) DIATOM OOZE to CLAYEY DIATOM OOZE. Subtle variation in the primary components result in 30-150 cm gradational alternations in color. Radiolarians, silicoflagellates, and sponge spicules are present in small amounts.
General Description: The sediments are heavily bioturbated and include abundant Zoophycos and Chondrites trace fossils.
5Y 4/1 To 5GY 5/1
5Y 5/1
5Y 5/2
5Y 4/1
5Y 5/1
5Y 4/2
5Y 6/1 To 5GY 5/1
5Y 4/1
5GY 5/1
10Y 4/1
5GY 5/1
5GY 4/1
5GY 5/1
1.4 1.6 0 10 0 10 20
1 2 3 4 5 6 7 8 9
1 2 3 4 5 6 7 CC
S S S M

SITE 1016 HOLE B CORE 21H CORED 182.3 - 191.8 mbsf



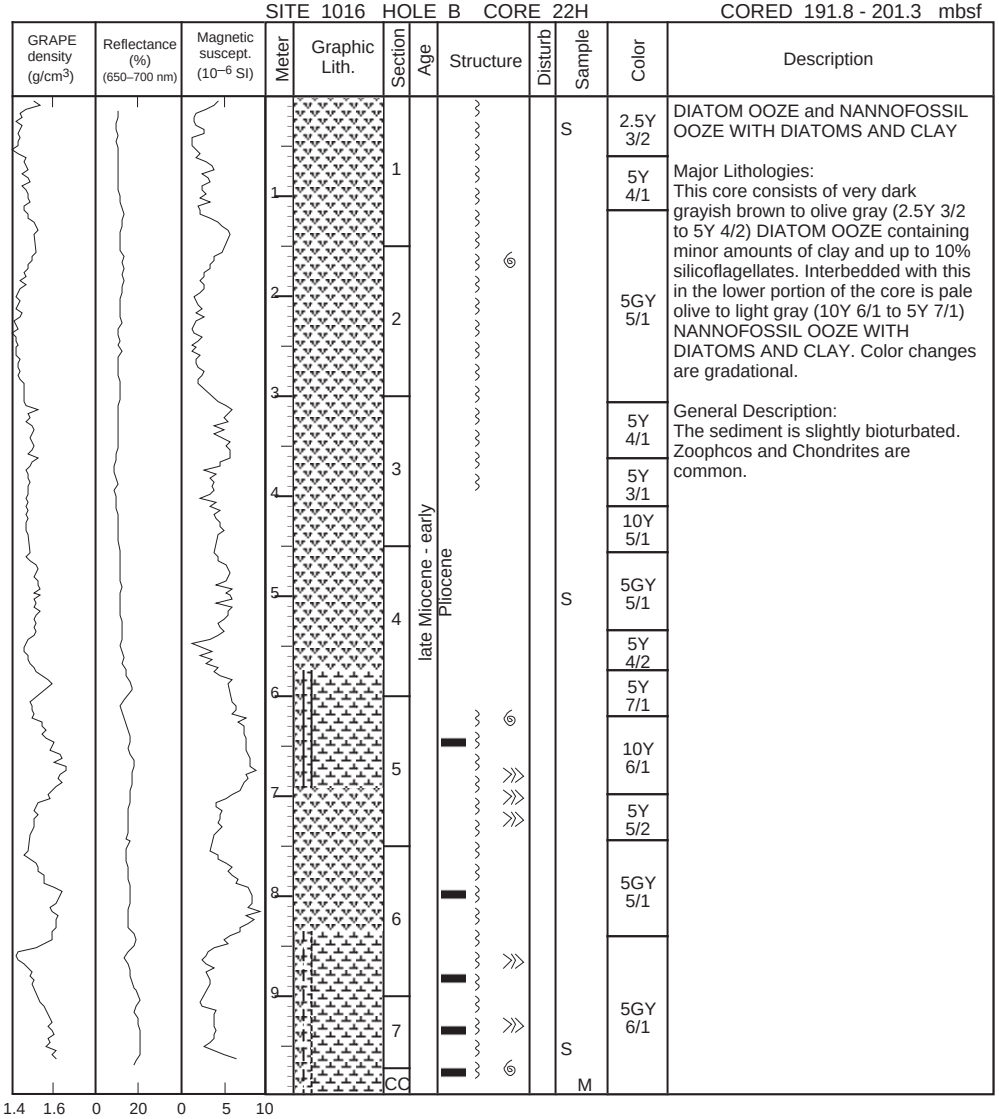
DIATOM OOZE WITH CLAY and NANNOFOSSIL DIATOM OOZE WITH CLAY

Major Lithologies:
This core consists of dark gray (5Y 4/1) DIATOM OOZE WITH CLAY and greenish gray (5GY 5/1) to pale olive (10Y 6/1) NANNOFOSSIL DIATOM OOZE WITH CLAY. Compositional and color alternation occurs on 30-200 cm scale.

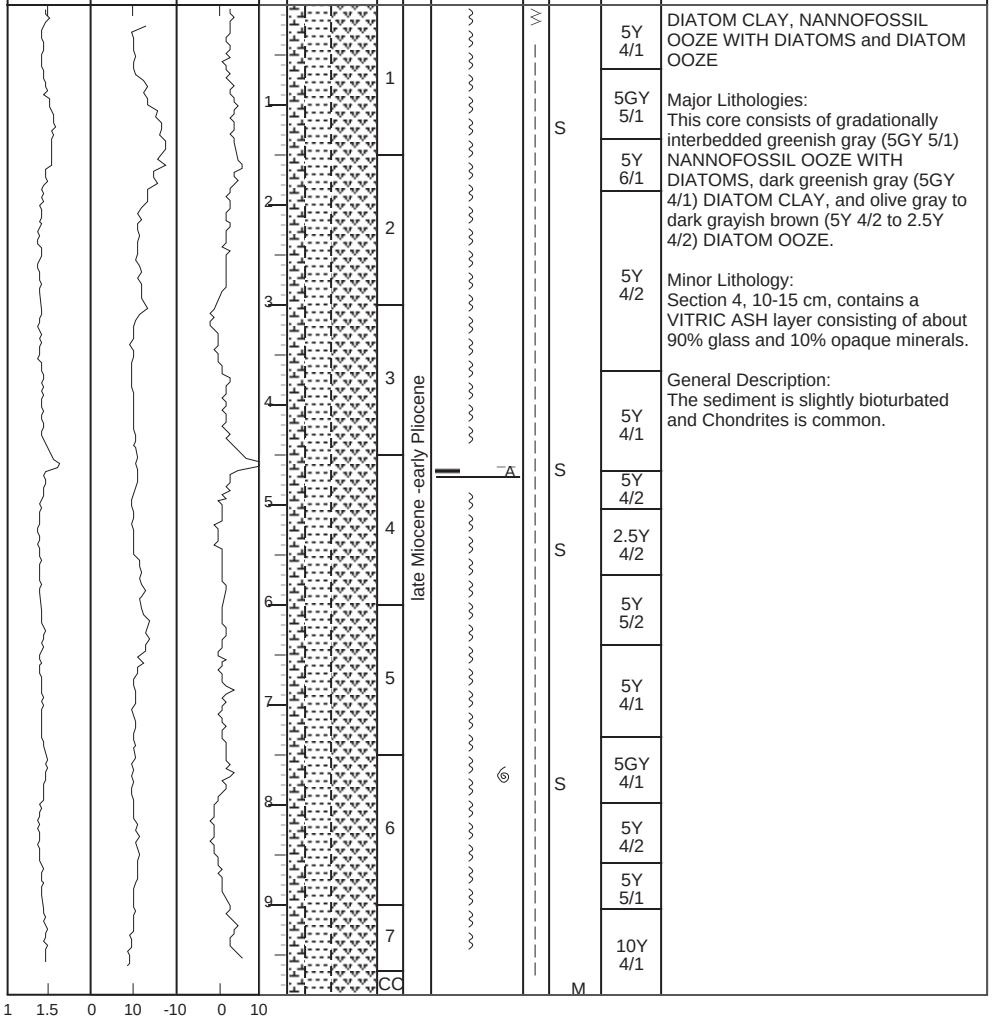
Minor Lithology:
A thick bed of very pale olive (5GY 7/1) NANNOFOSSIL DIATOM OOZE is present in Section 1 and 2.

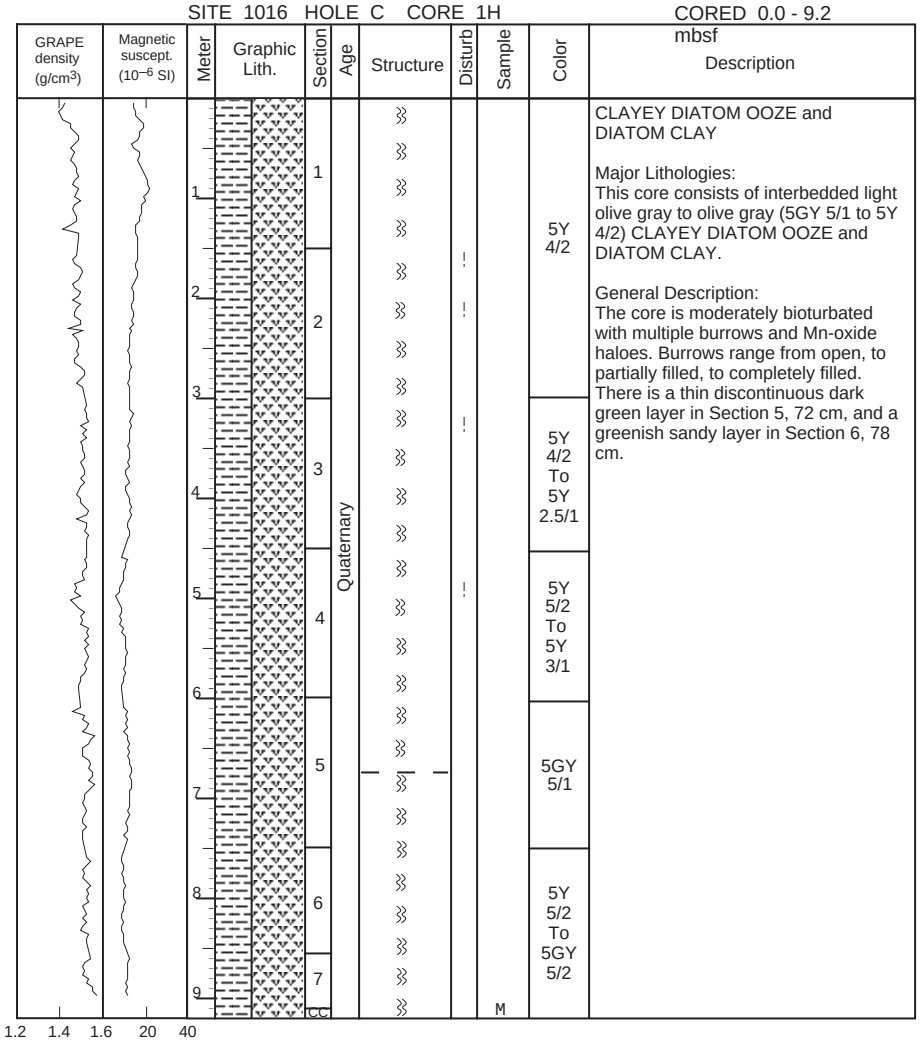
General Description:
This core is moderately to heavily bioturbated with abundant Zoophycos and Chondrites trace fossils. Bedding contacts are indistinct, but burrows are cut by normal and reverse faults in Section 5.

SITE 1016 HOLE B CORE 22H CORED 191.8 - 201.3 mbsf

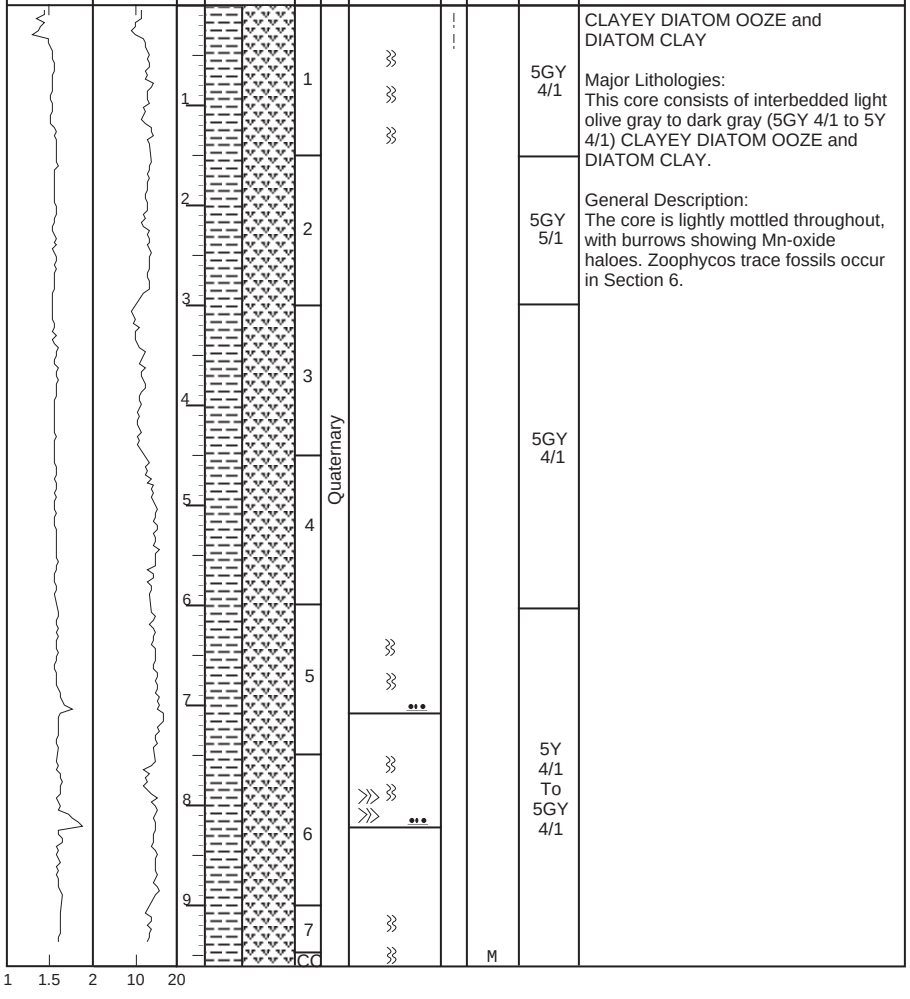


SITE 1016 HOLE B CORE 23H CORED 201.3 - 210.8 mbsf




SITE 1016 HOLE C CORE 1H
CORED 0.0 - 9.2 mbsf
GRAPE density (g/cm3)
Magnetic suscept. (10−6 SI)
Meter
Graphic Lith.
Section
Age
Structure
Disturb
Sample
Color
Description
1.2
1.4
1.6
20
40
1
2
3
4
5
6
7
8
9
1
2
3
4
5
6
7
CC
Quaternary
M
5Y 4/2
5Y 4/2 To 5Y 2.5/1
5Y 5/2 To 5Y 3/1
5GY 5/1
5Y 5/2 To 5GY 5/2
CLAYEY DIATOM OOZE and DIATOM CLAY
Major Lithologies:
This core consists of interbedded light olive gray to olive gray (5GY 5/1 to 5Y 4/2) CLAYEY DIATOM OOZE and DIATOM CLAY.
General Description:
The core is moderately bioturbated with multiple burrows and Mn-oxide haloes. Burrows range from open, to partially filled, to completely filled. There is a thin discontinuous dark green layer in Section 5, 72 cm, and a greenish sandy layer in Section 6, 78 cm.

SITE 1016 HOLE C CORE 2H CORED 9.2 - 18.7 mbsf

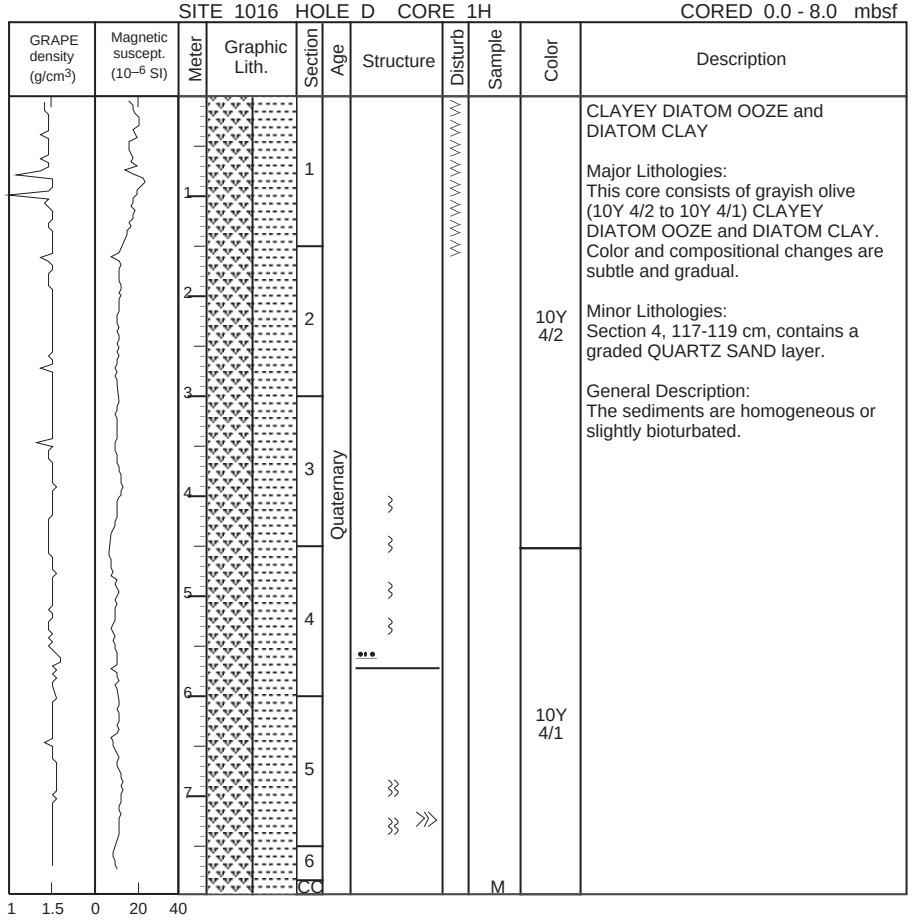


CLAYEY DIATOM OOZE and DIATOM CLAY

Major Lithologies:
This core consists of interbedded light olive gray to dark gray (5GY 4/1 to 5Y 4/1) CLAYEY DIATOM OOZE and DIATOM CLAY.

General Description:
The core is lightly mottled throughout, with burrows showing Mn-oxide haloes. Zoophycos trace fossils occur in Section 6.

SITE 1016 HOLE D CORE 1H CORED 0.0 - 8.0 mbsf



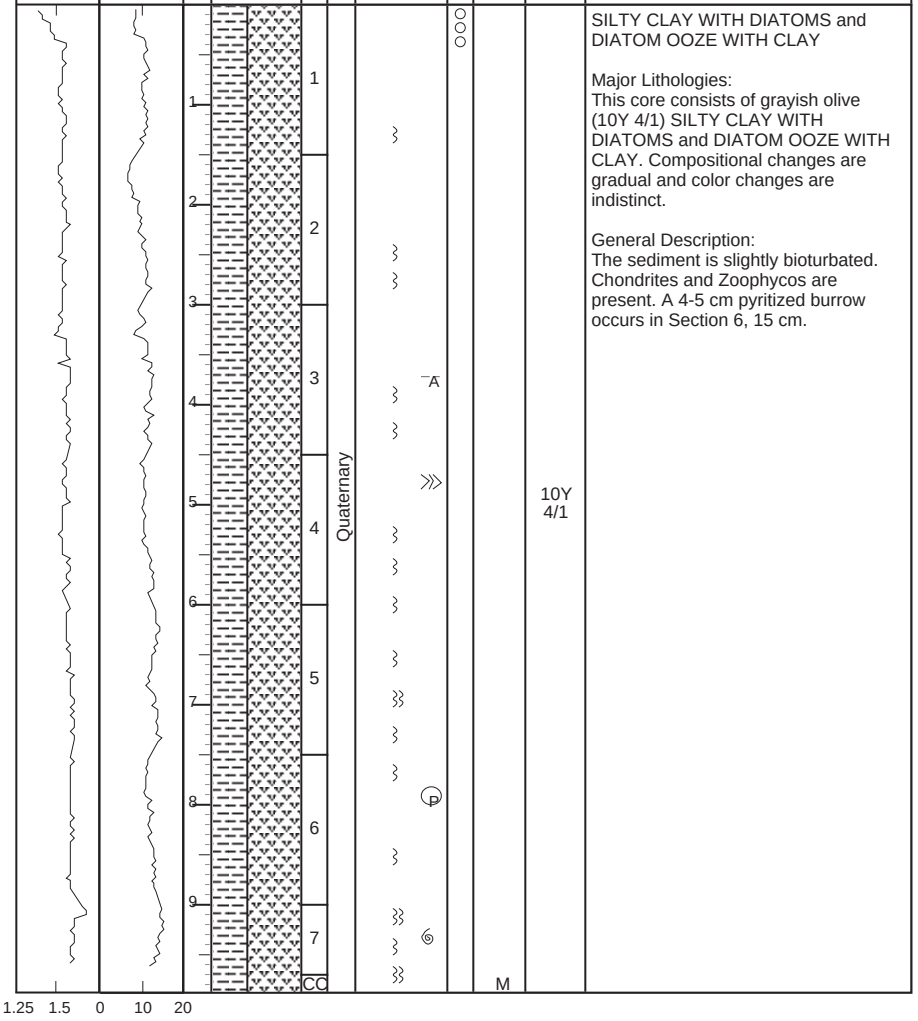
CLAYEY DIATOM OOZE and DIATOM CLAY

Major Lithologies:
This core consists of grayish olive (10Y 4/2 to 10Y 4/1) CLAYEY DIATOM OOZE and DIATOM CLAY. Color and compositional changes are subtle and gradual.

Minor Lithologies:
Section 4, 117-119 cm, contains a graded QUARTZ SAND layer.

General Description:
The sediments are homogeneous or slightly bioturbated.

SITE 1016 HOLE D CORE 2H CORED 8.0 - 17.5 mbsf

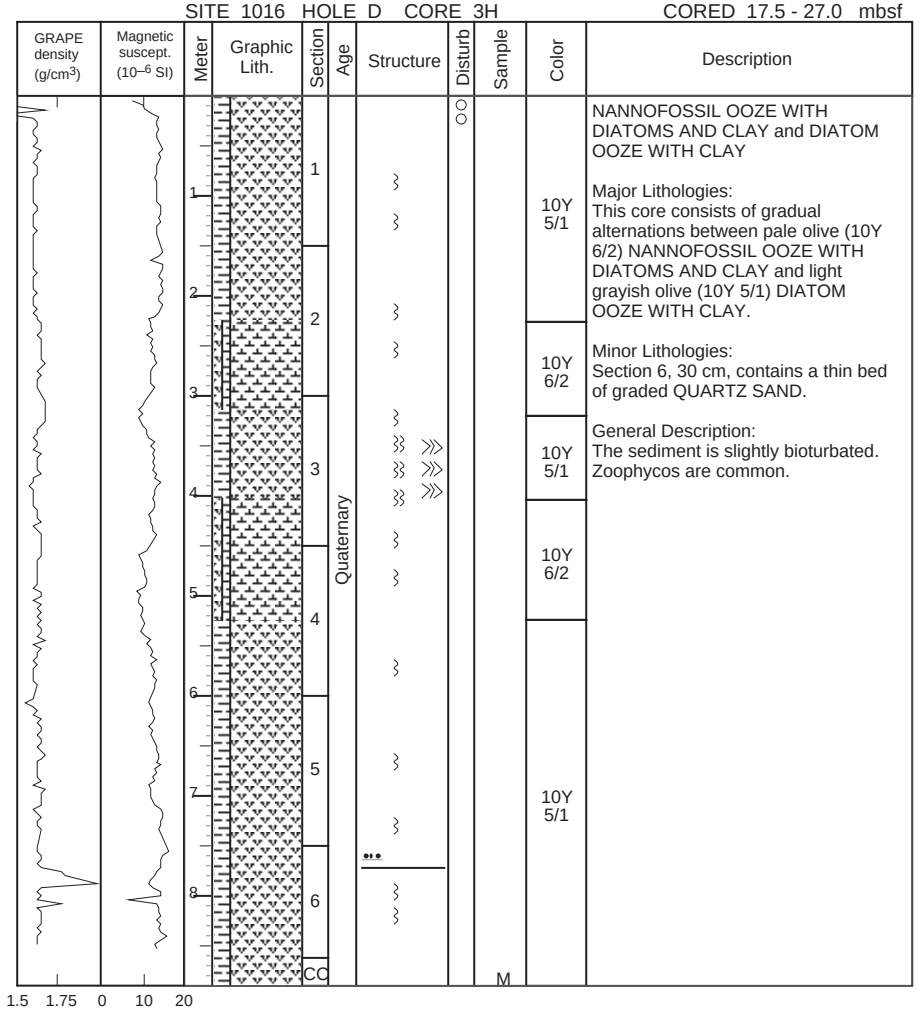


SILTY CLAY WITH DIATOMS and DIATOM OOZE WITH CLAY

Major Lithologies:
This core consists of grayish olive (10Y 4/1) SILTY CLAY WITH DIATOMS and DIATOM OOZE WITH CLAY. Compositional changes are gradual and color changes are indistinct.

General Description:
The sediment is slightly bioturbated. Chondrites and Zoophycos are present. A 4-5 cm pyritized burrow occurs in Section 6, 15 cm.

SITE 1016 HOLE D CORE 3H CORED 17.5 - 27.0 mbsf



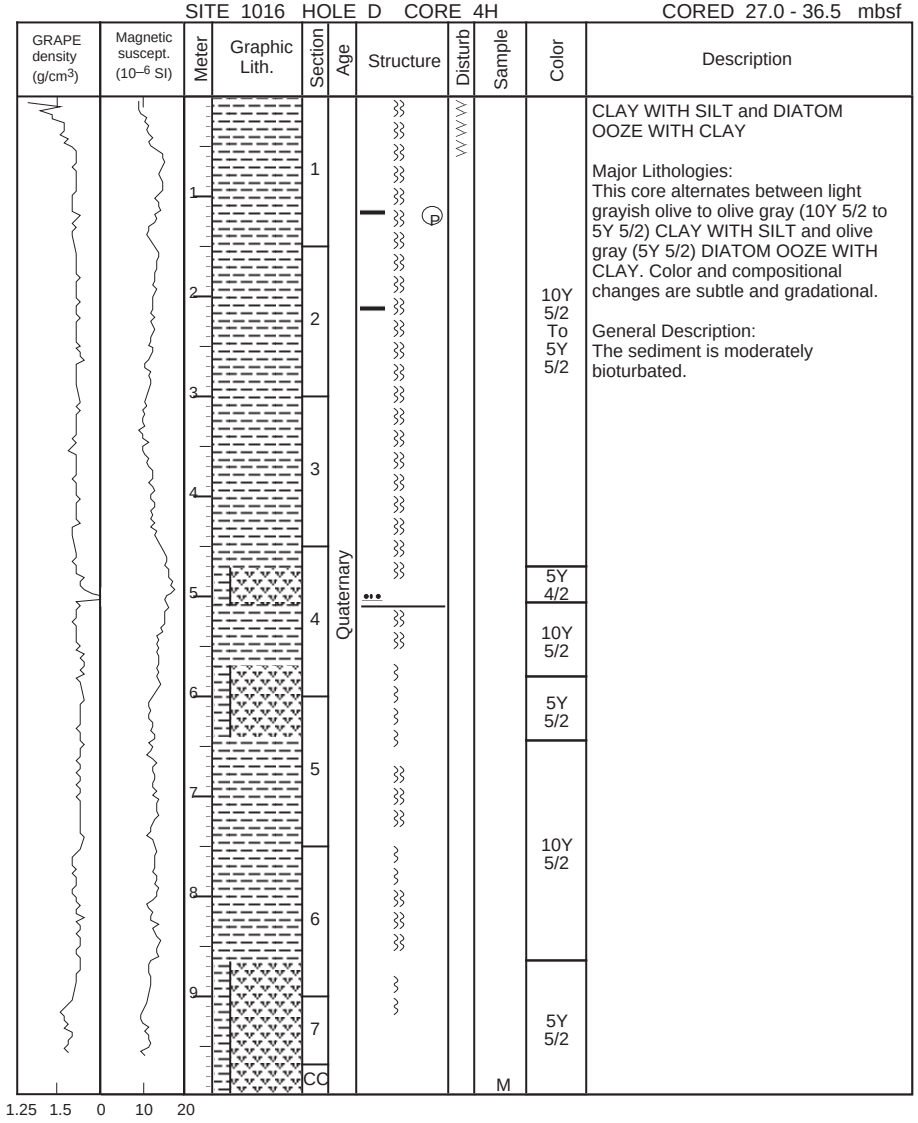
NANNOFOSSIL OOZE WITH DIATOMS AND CLAY and DIATOM OOZE WITH CLAY

Major Lithologies:
This core consists of gradual alternations between pale olive (10Y 6/2) NANNOFOSSIL OOZE WITH DIATOMS AND CLAY and light grayish olive (10Y 5/1) DIATOM OOZE WITH CLAY.

Minor Lithologies:
Section 6, 30 cm, contains a thin bed of graded QUARTZ SAND.

General Description:
The sediment is slightly bioturbated. Zoophycos are common.

SITE 1016 HOLE D CORE 4H CORED 27.0 - 36.5 mbsf

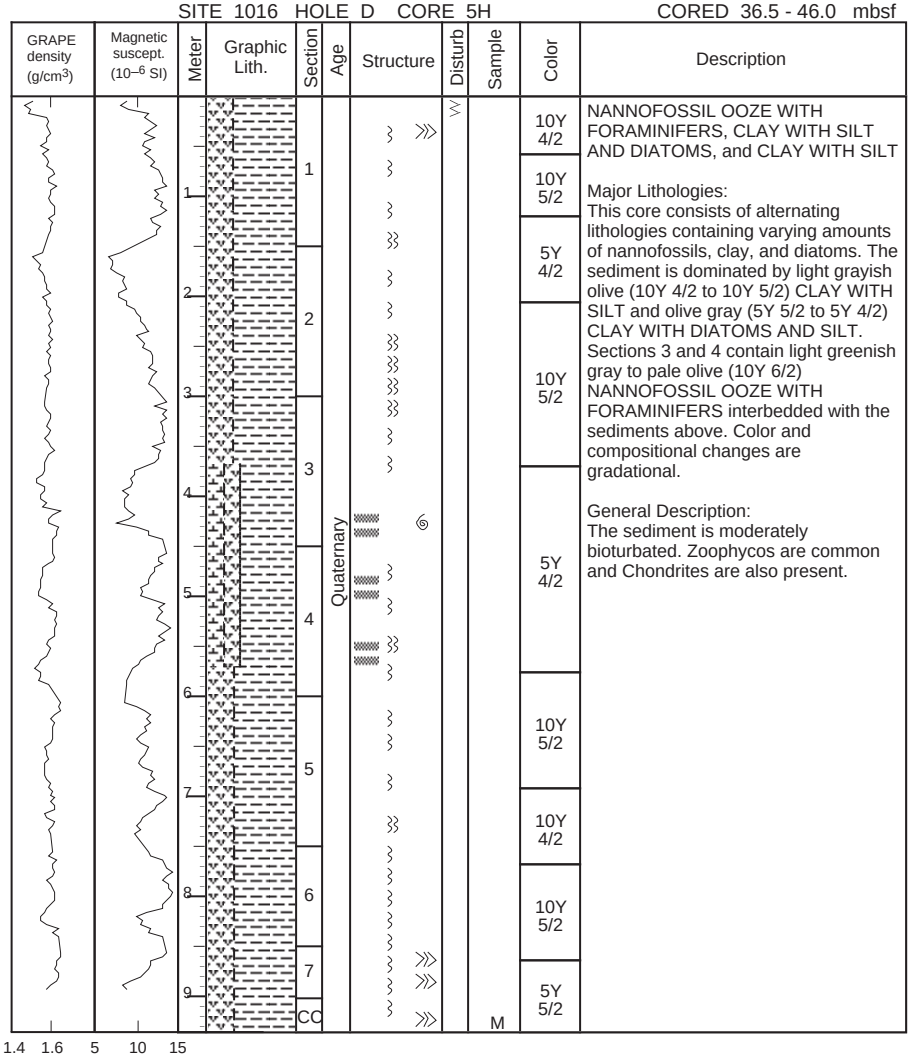


CLAY WITH SILT and DIATOM OOZE WITH CLAY

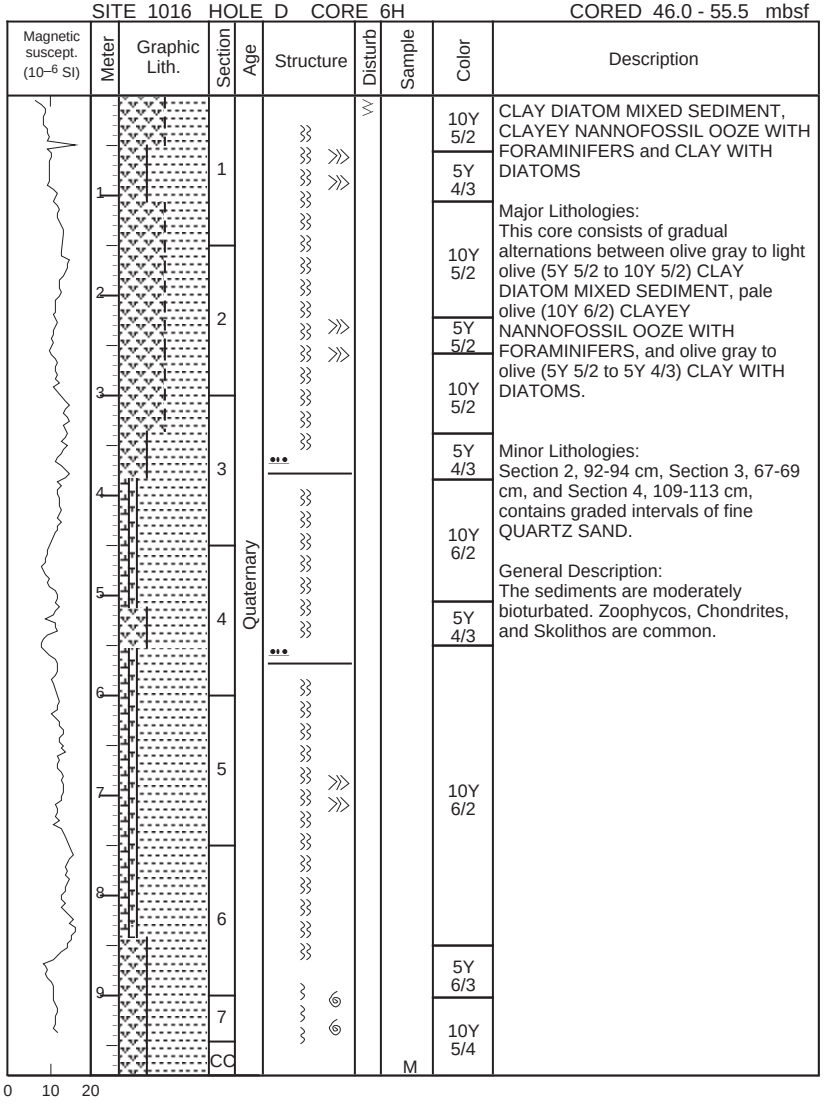
Major Lithologies:
This core alternates between light grayish olive to olive gray (10Y 5/2 to 5Y 5/2) CLAY WITH SILT and olive gray (5Y 5/2) DIATOM OOZE WITH CLAY. Color and compositional changes are subtle and gradational.

General Description:
The sediment is moderately bioturbated.

SITE 1016 HOLE D CORE 5H CORED 36.5 - 46.0 mbsf



SITE 1016 HOLE D CORE 6H CORED 46.0 - 55.5 mbsf



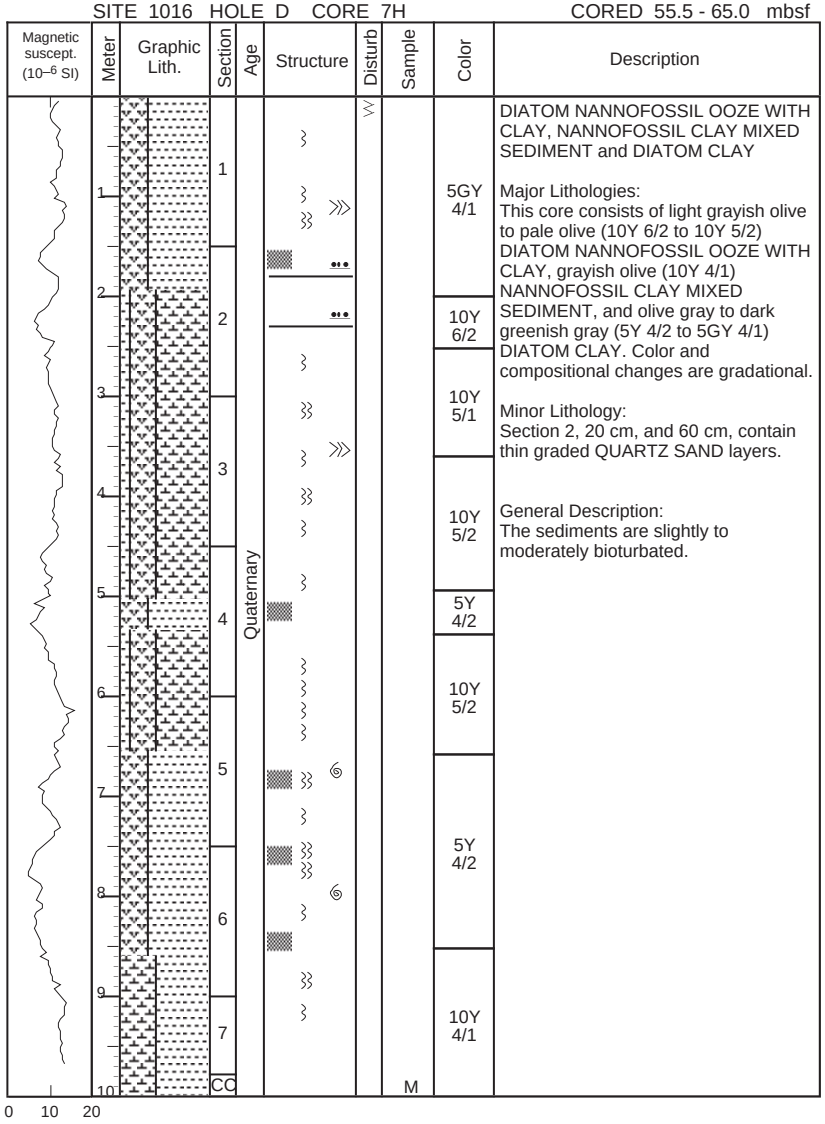
CLAY DIATOM MIXED SEDIMENT, CLAYEY NANNOFOSSIL OOZE WITH FORAMINIFERS and CLAY WITH DIATOMS

Major Lithologies:
This core consists of gradual alternations between olive gray to light olive (5Y 5/2 to 10Y 5/2) CLAY DIATOM MIXED SEDIMENT, pale olive (10Y 6/2) CLAYEY NANNOFOSSIL OOZE WITH FORAMINIFERS, and olive gray to olive (5Y 5/2 to 5Y 4/3) CLAY WITH DIATOMS.

Minor Lithologies:
Section 2, 92-94 cm, Section 3, 67-69 cm, and Section 4, 109-113 cm, contains graded intervals of fine QUARTZ SAND.

General Description:
The sediments are moderately bioturbated. Zoophycos, Chondrites, and Skolithos are common.

SITE 1016 HOLE D CORE 7H CORED 55.5 - 65.0 mbsf



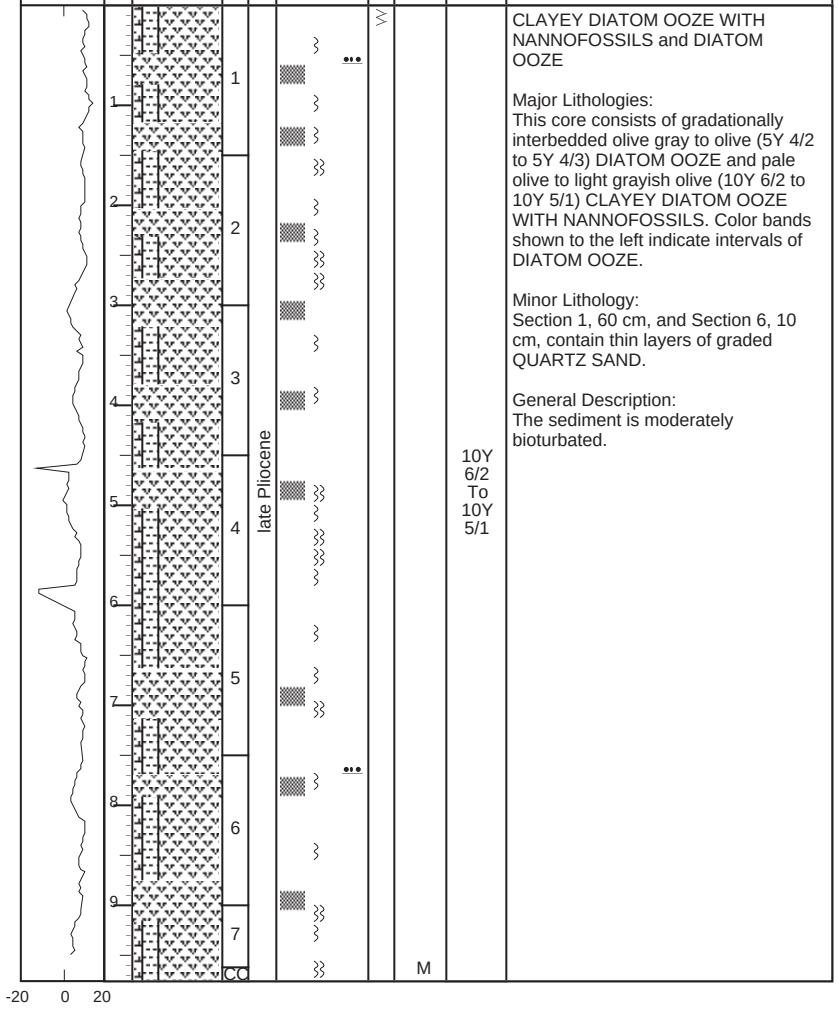
DIATOM NANNOFOSSIL OOZE WITH CLAY, NANNOFOSSIL CLAY MIXED SEDIMENT and DIATOM CLAY

Major Lithologies:
This core consists of light grayish olive to pale olive (10Y 6/2 to 10Y 5/2) DIATOM NANNOFOSSIL OOZE WITH CLAY, grayish olive (10Y 4/1) NANNOFOSSIL CLAY MIXED SEDIMENT, and olive gray to dark greenish gray (5Y 4/2 to 5GY 4/1) DIATOM CLAY. Color and compositional changes are gradational.

Minor Lithology:
Section 2, 20 cm, and 60 cm, contain thin graded QUARTZ SAND layers.

General Description:
The sediments are slightly to moderately bioturbated.

SITE 1016 HOLE D CORE 8H CORED 65.0 - 74.5 mbsf



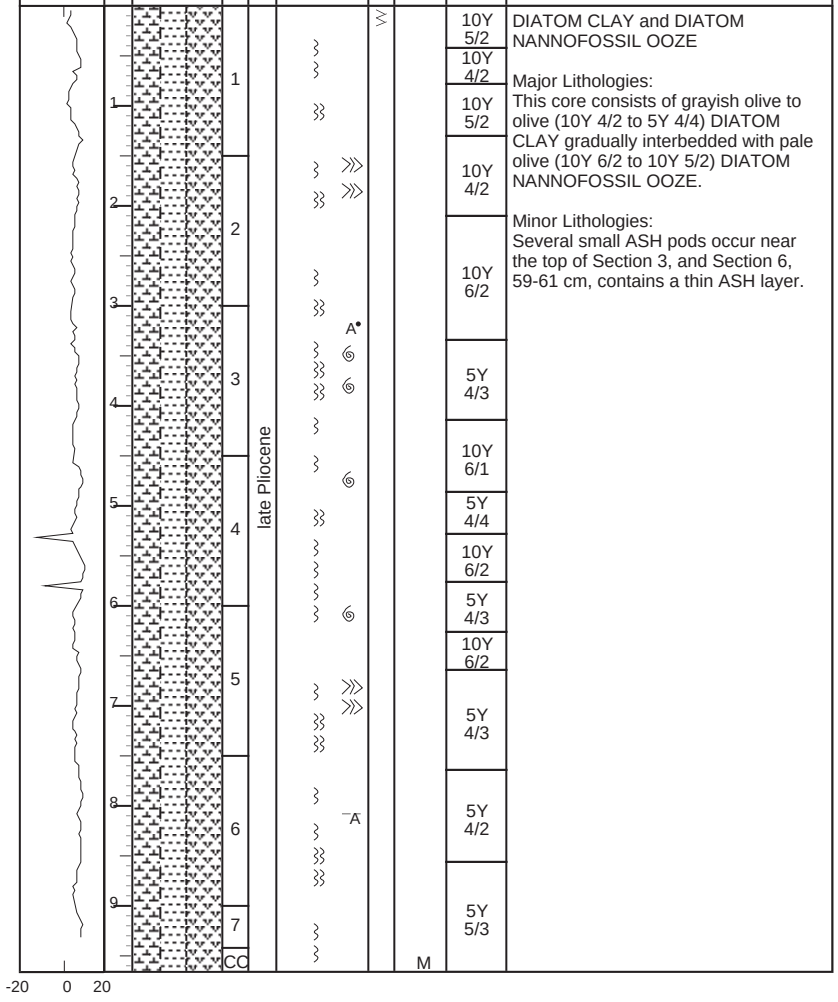
CLAYEY DIATOM OOZE WITH NANNOFOSSILS and DIATOM OOZE

Major Lithologies:
This core consists of gradationally interbedded olive gray to olive (5Y 4/2 to 5Y 4/3) DIATOM OOZE and pale olive to light grayish olive (10Y 6/2 to 10Y 5/1) CLAYEY DIATOM OOZE WITH NANNOFOSSILS. Color bands shown to the left indicate intervals of DIATOM OOZE.

Minor Lithology:
Section 1, 60 cm, and Section 6, 10 cm, contain thin layers of graded QUARTZ SAND.

General Description:
The sediment is moderately bioturbated.

SITE 1016 HOLE D CORE 9H CORED 74.5 - 84.0 mbsf

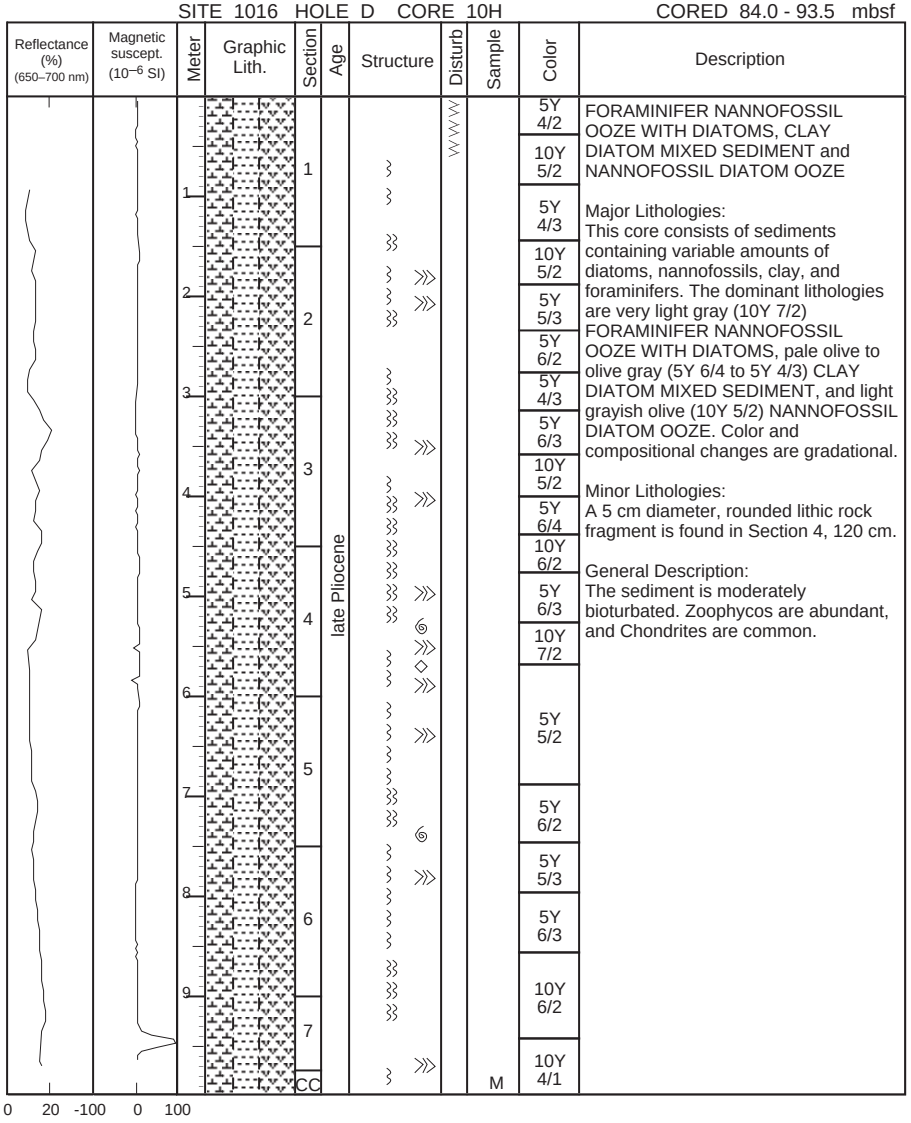


DIATOM CLAY and DIATOM NANNOFOSSIL OOZE

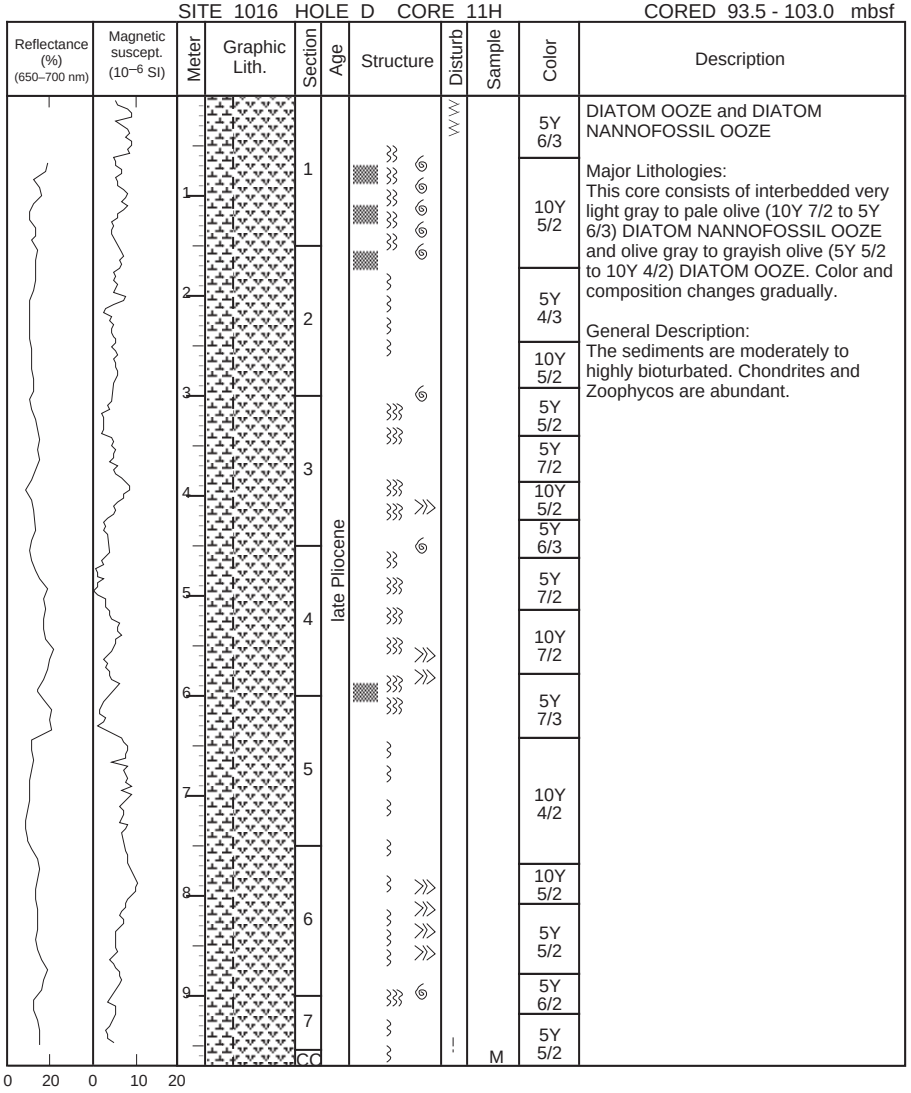
Major Lithologies:
This core consists of grayish olive to olive (10Y 4/2 to 5Y 4/4) DIATOM CLAY gradually interbedded with pale olive (10Y 6/2 to 10Y 5/2) DIATOM NANNOFOSSIL OOZE.

Minor Lithologies:
Several small ASH pods occur near the top of Section 3, and Section 6, 59-61 cm, contains a thin ASH layer.

SITE 1016 HOLE D CORE 10H CORED 84.0 - 93.5 mbsf



SITE 1016 HOLE D CORE 11H CORED 93.5 - 103.0 mbsf

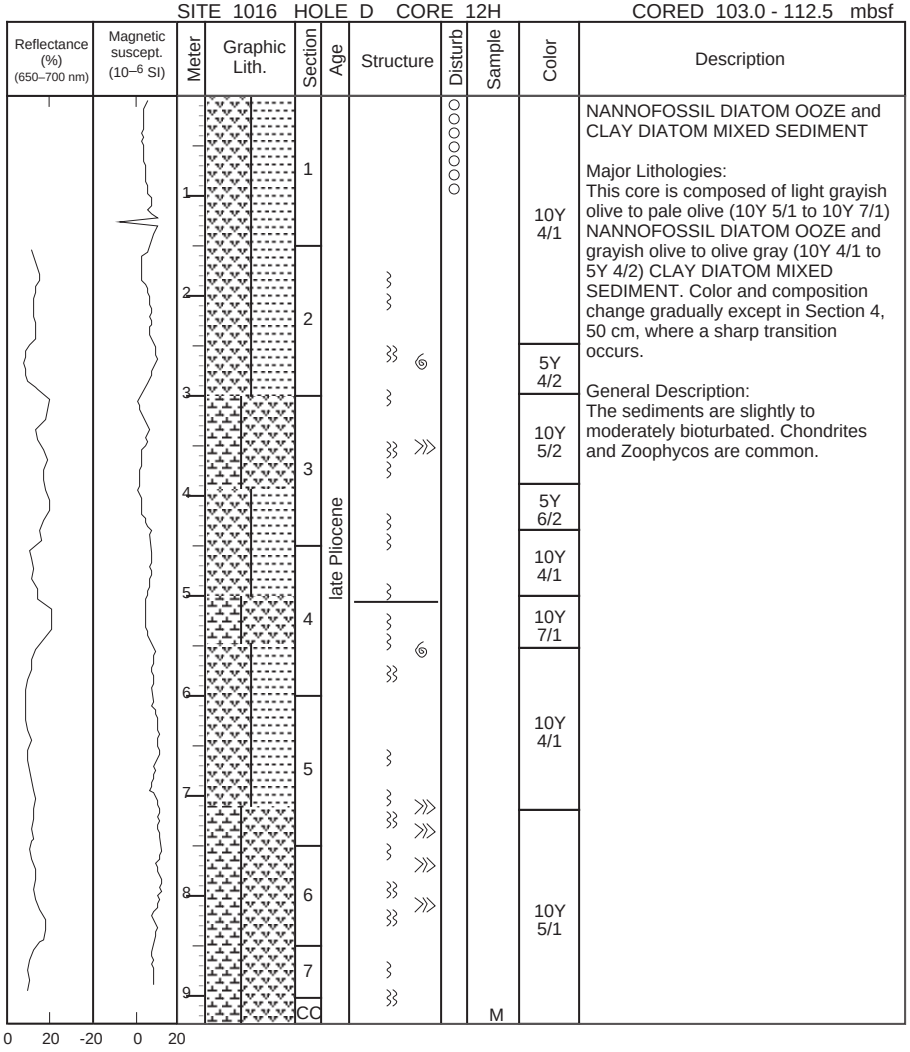


DIATOM OOZE and DIATOM NANNOFOSSIL OOZE

Major Lithologies:
This core consists of interbedded very light gray to pale olive (10Y 7/2 to 5Y 6/3) DIATOM NANNOFOSSIL OOZE and olive gray to grayish olive (5Y 5/2 to 10Y 4/2) DIATOM OOZE. Color and composition changes gradually.

General Description:
The sediments are moderately to highly bioturbated. Chondrites and Zoophycos are abundant.

SITE 1016 HOLE D CORE 12H CORED 103.0 - 112.5 mbsf

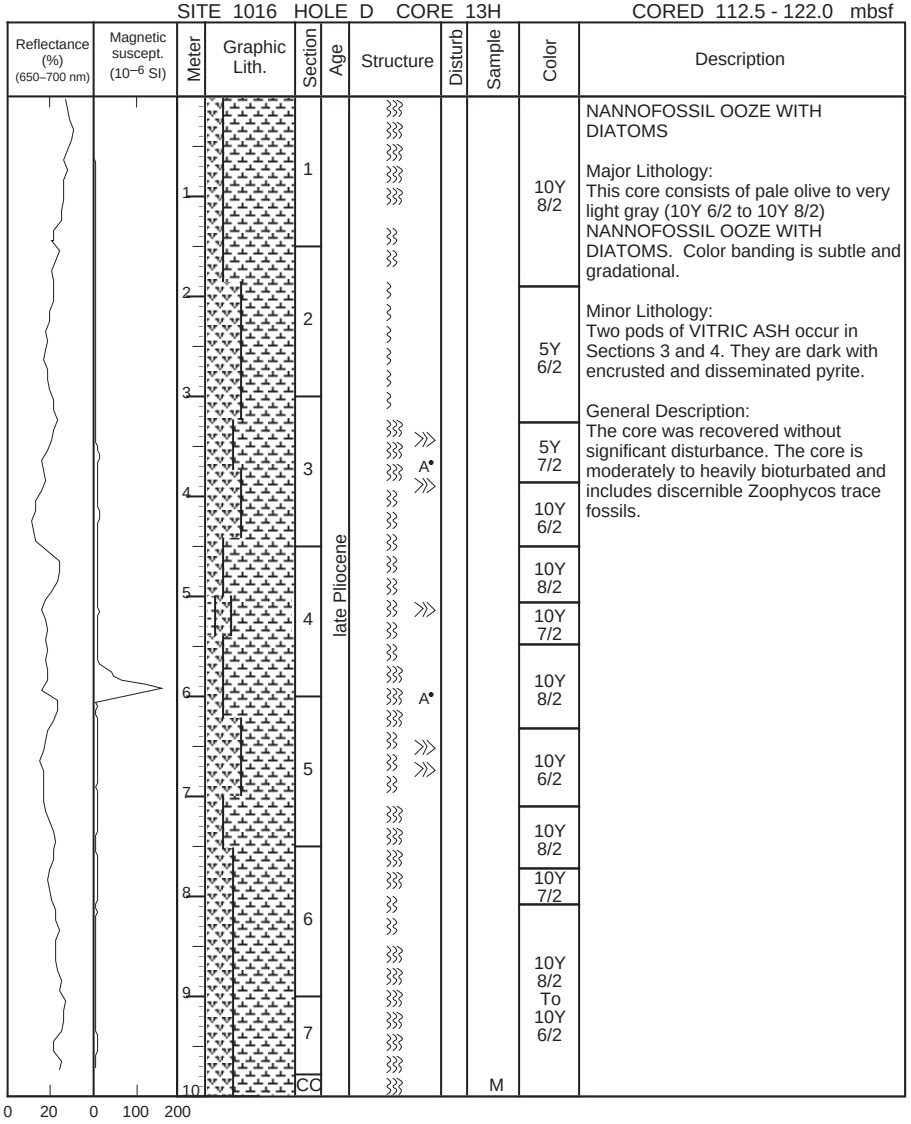


NANNOFOSSIL DIATOM OOZE and CLAY DIATOM MIXED SEDIMENT

Major Lithologies:
This core is composed of light grayish olive to pale olive (10Y 5/1 to 10Y 7/1) NANNOFOSSIL DIATOM OOZE and grayish olive to olive gray (10Y 4/1 to 5Y 4/2) CLAY DIATOM MIXED SEDIMENT. Color and composition change gradually except in Section 4, 50 cm, where a sharp transition occurs.

General Description:
The sediments are slightly to moderately bioturbated. Chondrites and Zoophycos are common.

SITE 1016 HOLE D CORE 13H CORED 112.5 - 122.0 mbsf



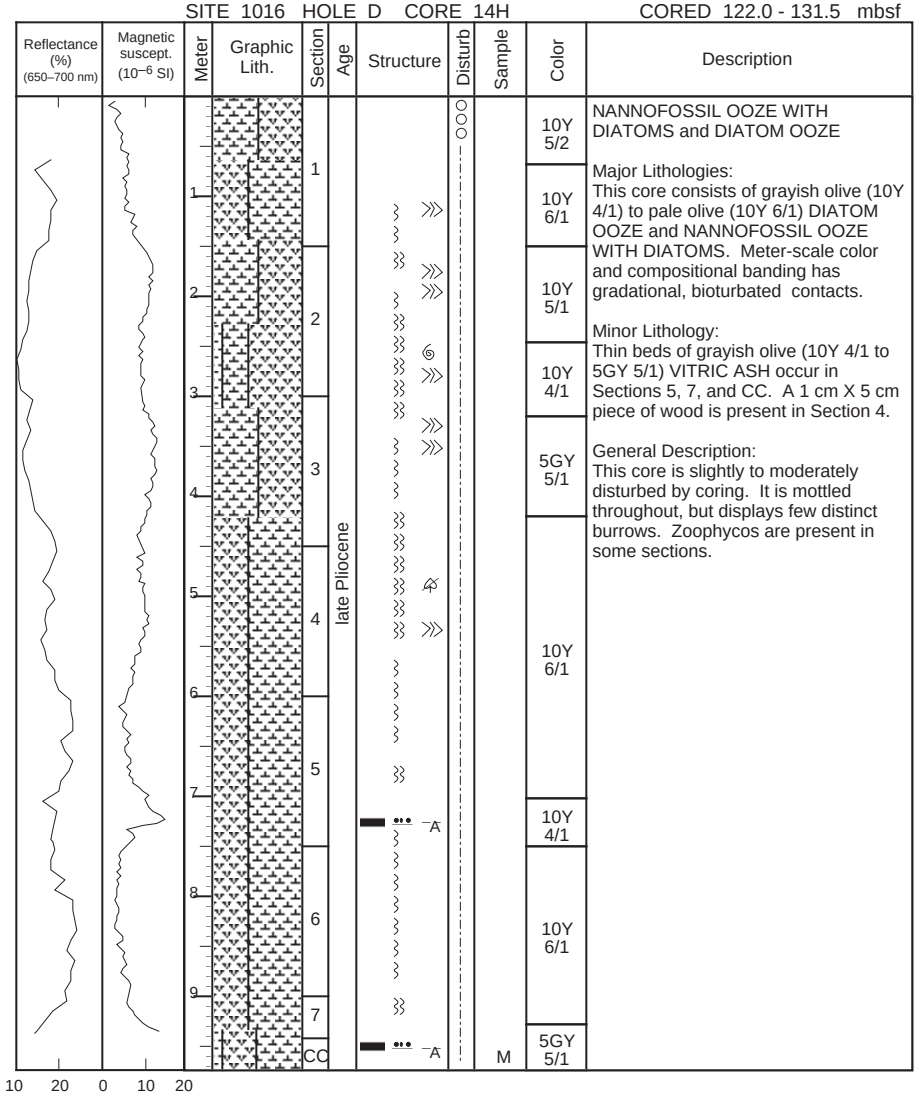
NANNOFOSSIL OOZE WITH DIATOMS

Major Lithology:
This core consists of pale olive to very light gray (10Y 6/2 to 10Y 8/2) NANNOFOSSIL OOZE WITH DIATOMS. Color banding is subtle and gradational.

Minor Lithology:
Two pods of VITRIC ASH occur in Sections 3 and 4. They are dark with encrusted and disseminated pyrite.

General Description:
The core was recovered without significant disturbance. The core is moderately to heavily bioturbated and includes discernible Zoophycos trace fossils.

SITE 1016 HOLE D CORE 14H CORED 122.0 - 131.5 mbsf



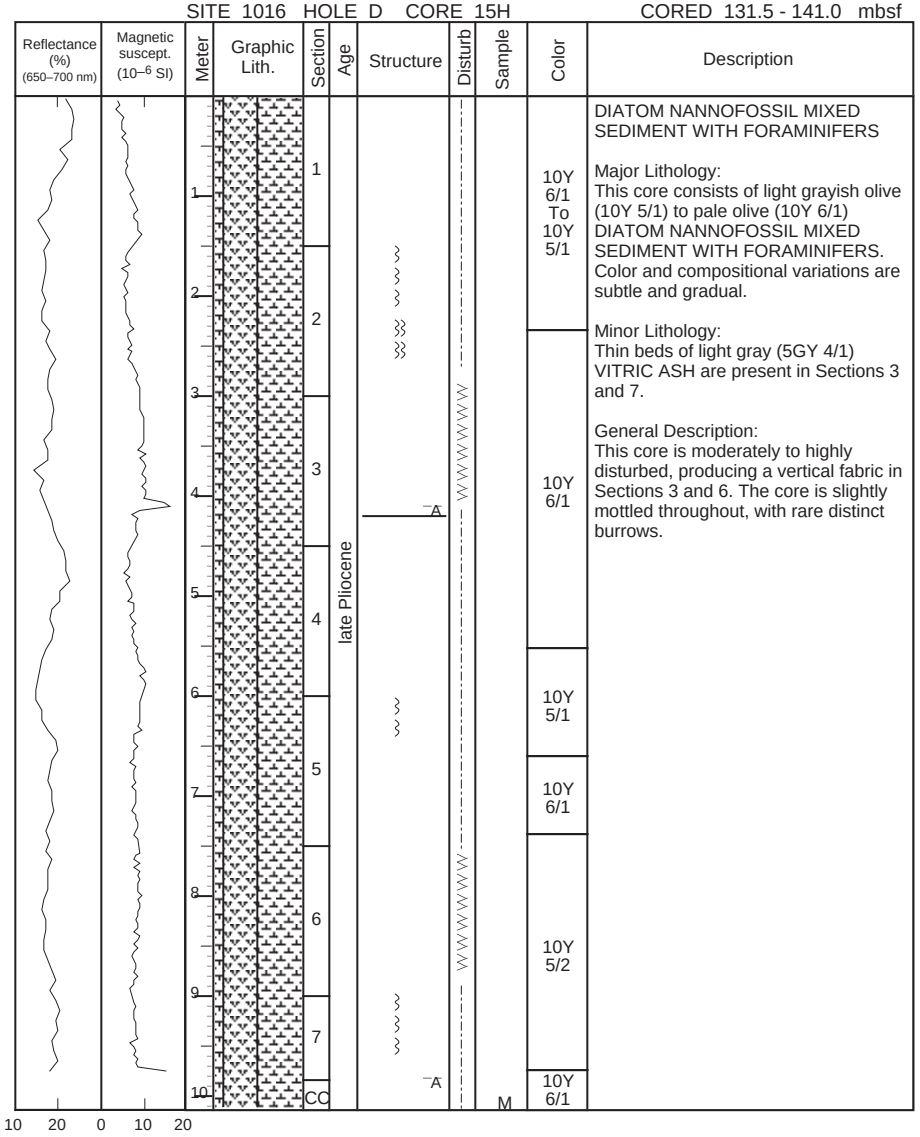
NANNOFOSSIL OOZE WITH DIATOMS and DIATOM OOZE

Major Lithologies:
This core consists of grayish olive (10Y 4/1) to pale olive (10Y 6/1) DIATOM OOZE and NANNOFOSSIL OOZE WITH DIATOMS. Meter-scale color and compositional banding has gradational, bioturbated contacts.

Minor Lithology:
Thin beds of grayish olive (10Y 4/1 to 5GY 5/1) VITRIC ASH occur in Sections 5, 7, and CC. A 1 cm X 5 cm piece of wood is present in Section 4.

General Description:
This core is slightly to moderately disturbed by coring. It is mottled throughout, but displays few distinct burrows. Zoophycos are present in some sections.

SITE 1016 HOLE D CORE 15H CORED 131.5 - 141.0 mbsf



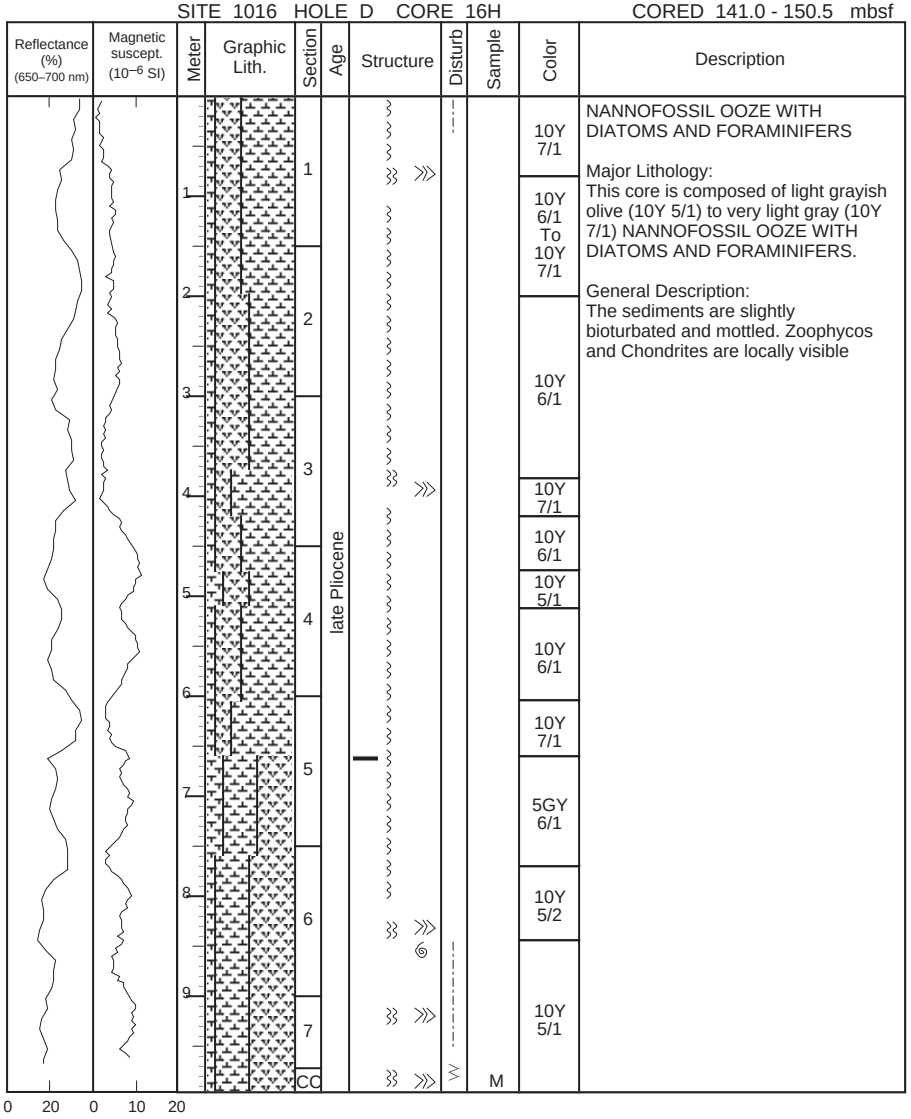
DIATOM NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS

Major Lithology:
This core consists of light grayish olive (10Y 5/1) to pale olive (10Y 6/1) DIATOM NANNOFOSSIL MIXED SEDIMENT WITH FORAMINIFERS. Color and compositional variations are subtle and gradual.

Minor Lithology:
Thin beds of light gray (5GY 4/1) VITRIC ASH are present in Sections 3 and 7.

General Description:
This core is moderately to highly disturbed, producing a vertical fabric in Sections 3 and 6. The core is slightly mottled throughout, with rare distinct burrows.

SITE 1016 HOLE D CORE 16H CORED 141.0 - 150.5 mbsf



NANNOFOSSIL OOZE WITH DIATOMS AND FORAMINIFERS

Major Lithology:
This core is composed of light grayish olive (10Y 5/1) to very light gray (10Y 7/1) NANNOFOSSIL OOZE WITH DIATOMS AND FORAMINIFERS.

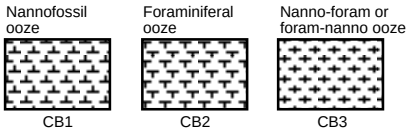
General Description:
The sediments are slightly bioturbated and mottled. Zoophycos and Chondrites are locally visible

Color: 10Y 7/1; 10Y 6/1 To 10Y 7/1; 10Y 6/1; 10Y 7/1; 10Y 6/1; 10Y 5/1; 10Y 6/1; 10Y 7/1; 5GY 6/1; 10Y 5/2; 10Y 5/1

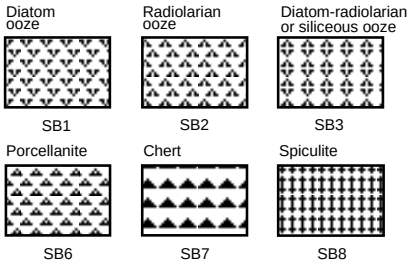
Key to symbols used in the “Graphic Lithology” column on the core description sheets.

Biogenic pelagic sediments

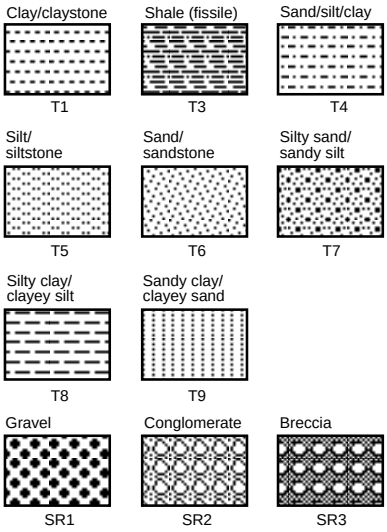
Calcareous



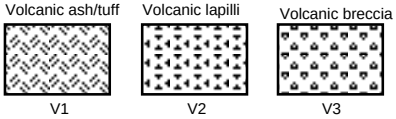
Siliceous



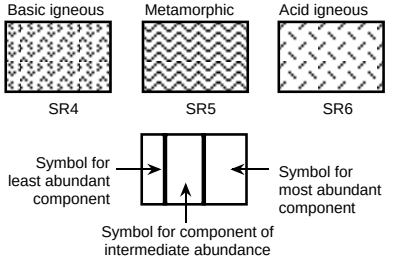
Siliciclastic sediments



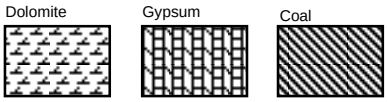
Volcaniclastic sediments



Special rock types

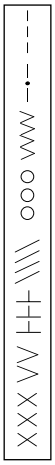


Chemical and other sediments



Key to symbols used in the "Structures" column on the core description sheets.

Drilling disturbance symbols



Soft sediments

- Slightly disturbed
- Moderately disturbed
- Highly disturbed
- Soupy

Hard sediments

- Slightly fractured
- Moderately fractured
- Highly fragmented
- Drilling breccia

Sedimentary structures

- Burrows, rare (<30% surface area)
- Burrows, common (30%–60% surface area)
- Burrows, abundant (>60% surface area)
- Discrete *Zoophycos* trace fossil
- Discrete *Chondrites* trace fossil
- *Sagarites* sponge
- Gastropods
- Other bivalves
- Shell fragments
- Wood framents
- Fish debris

Sedimentary structures cont.

- Fining-upward sequence
- Interval over which primary sedimentary structure occur
- Planar laminae
- Wedge-planar laminae/beds
- Graded bedding (normal)
- Graded bedding (reversed)
- Sharp contact
- Gradational contact
- Scoured, sharp contact
- Scoured contact with graded bed
- Thick color bands (sharp contact)
- Thick color bands (gradational contact)
- Medium color bands (sharp contact)
- Medium color bands (gradational contact)
- Thin color bands (sharp contact)
- Thin color bands (gradational contact)
- Laminations (mm scale)
- Individual thick color band
- Individual medium color band
- Individual thin color band
- Individual lamination
- Wavy lamination
- Cross laminae
- Cross stratification
- Cross bedding
- Convoluted/contorted bedding
- Flaser bedding
- Graded interval, normal
- Veins
- Water escape structure
- Scour

- Isolated pebbles/cobbles
- Isolated mud clasts
- Slump blocks or slump folds
- Contorted slump
- Probable compaction fracture
- Microfault (normal)
- Microfault (thrust)
- Macrofault
- Fracture
- Totally fractured
- Vein structures
- Color mottles
- Dolomite nodule/concretion
- Disseminated dolomite
- Pyrite nodule/concretion
- Disseminated pyrite
- Glauconite
- Concretions/nodules
- Barite nodule/concretion
- Disseminated barite
- Calcite nodule/concretion
- Carbonate nodule/concretion
- Chert nodule/concretion
- Ash/pumice pods
- Ash layer

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