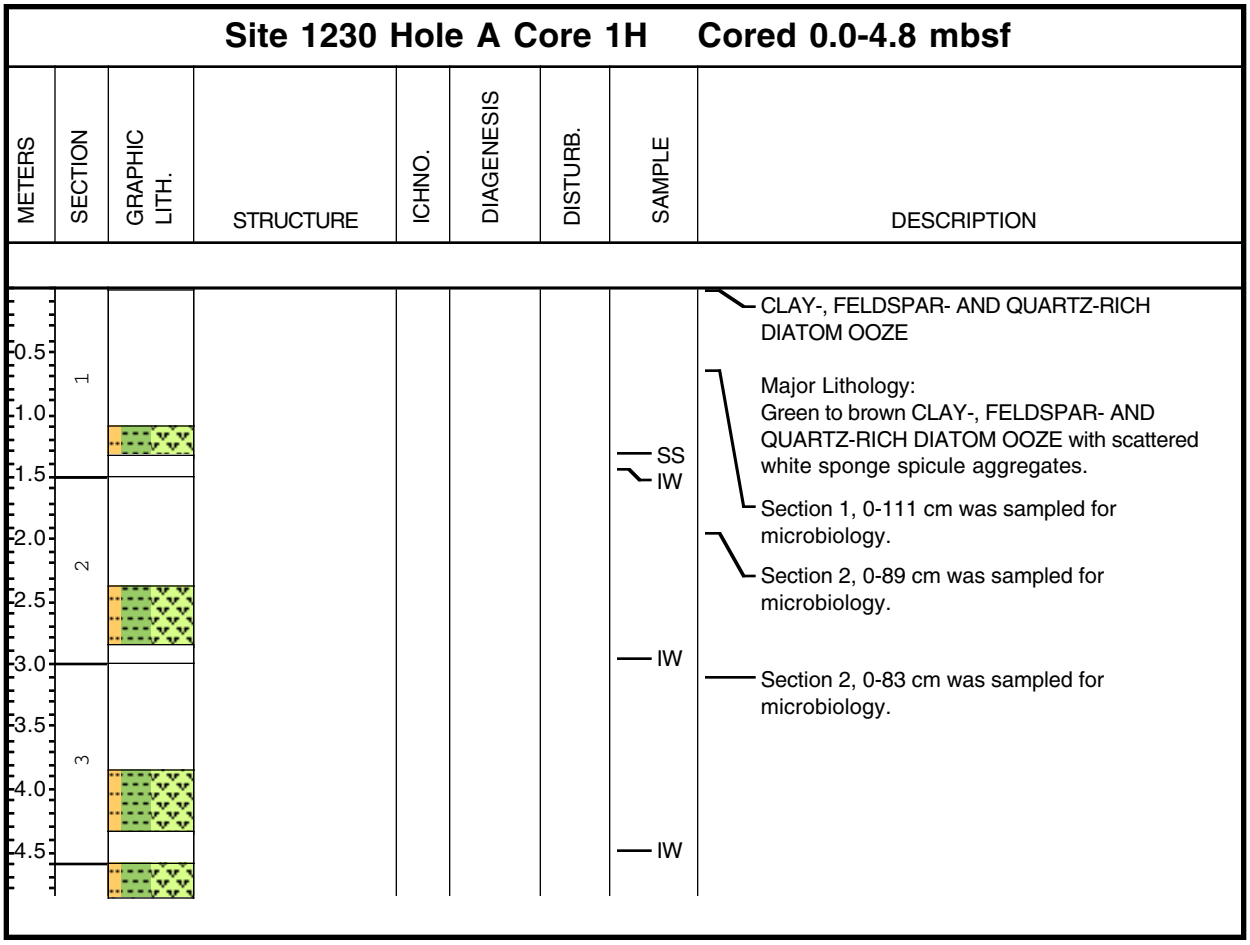
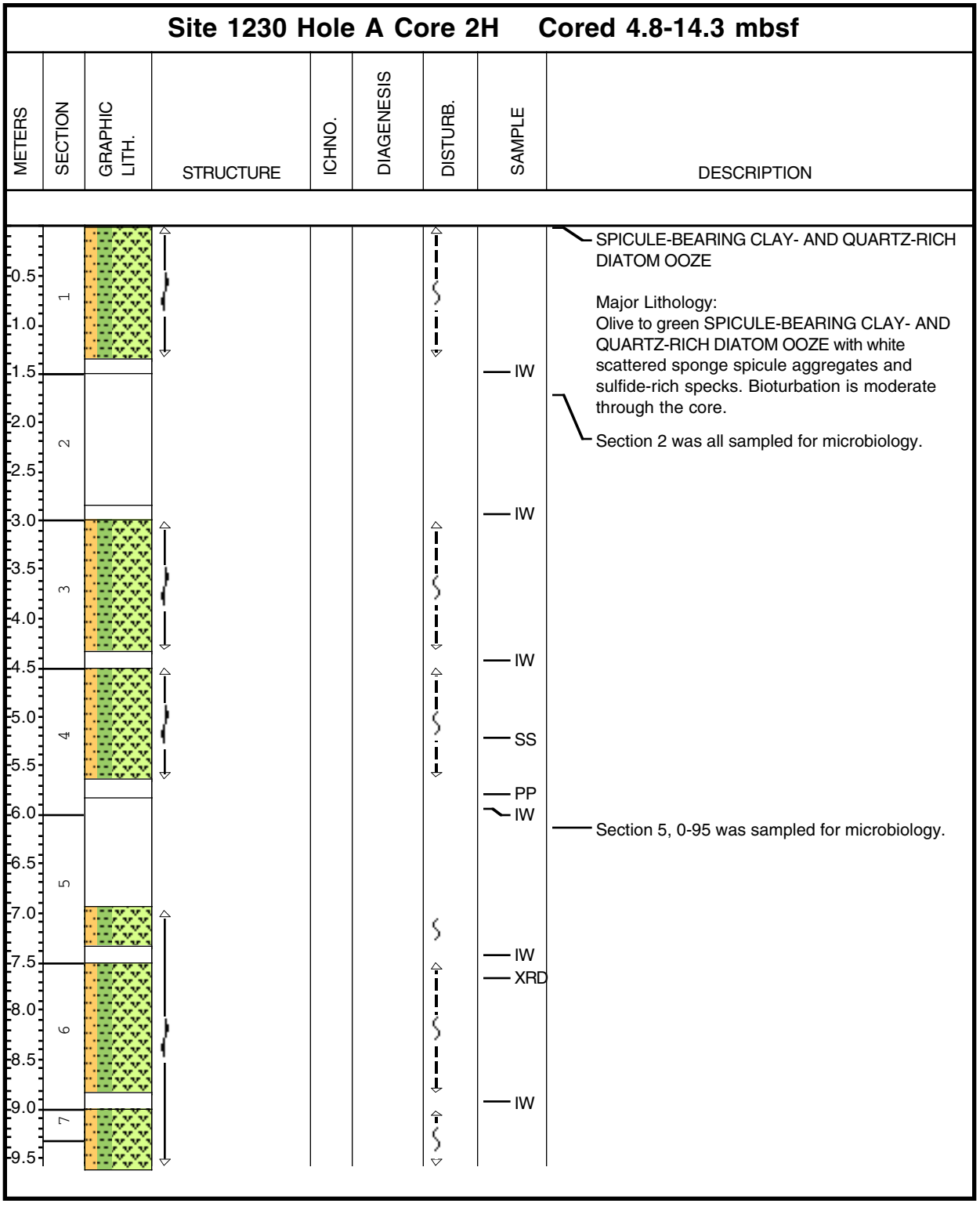
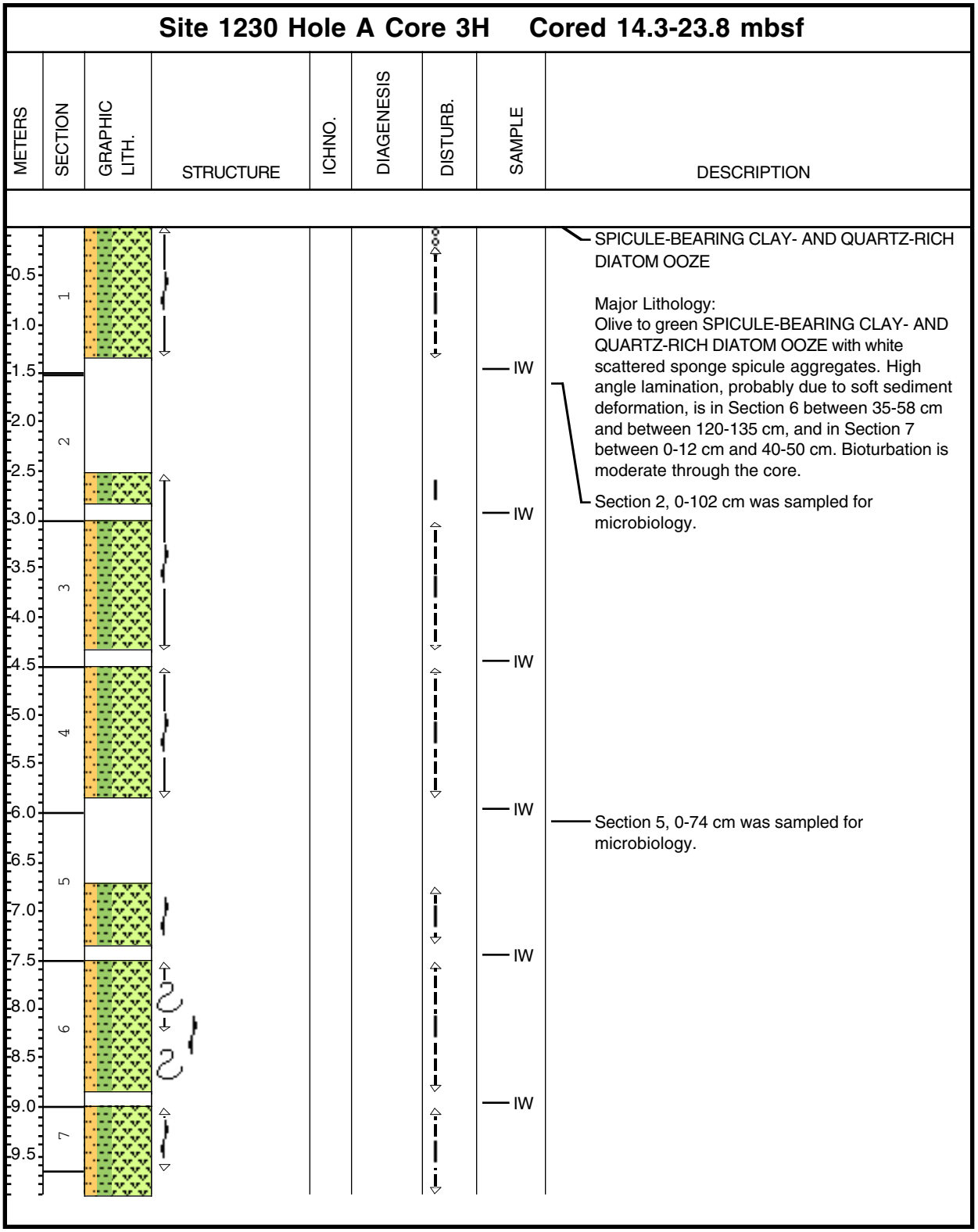
## Core Photo


Site 1230 Hole A Core 1H Cored 0.0-4.8 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
1
2
3
SS
IW
IW
IW
CLAY-, FELDSPAR- AND QUARTZ-RICH DIATOM OOZE
Major Lithology:
Green to brown CLAY-, FELDSPAR- AND QUARTZ-RICH DIATOM OOZE with scattered white sponge spicule aggregates.
Section 1, 0-111 cm was sampled for microbiology.
Section 2, 0-89 cm was sampled for microbiology.
Section 2, 0-83 cm was sampled for microbiology.

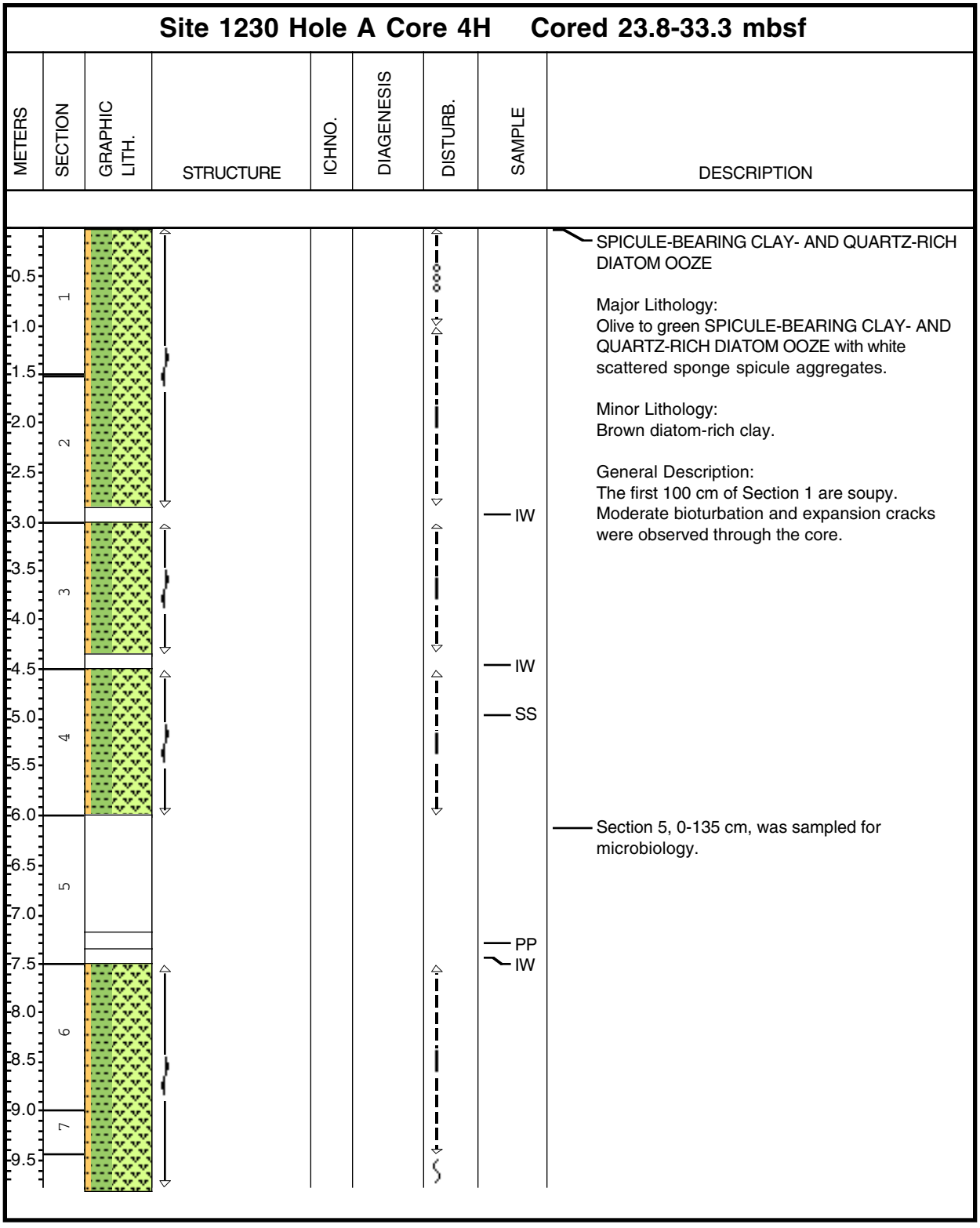
## Core Photo


Site 1230 Hole A Core 2H Cored 4.8-14.3 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
SPICULE-BEARING CLAY- AND QUARTZ-RICH DIATOM OOZE
Major Lithology:
Olive to green SPICULE-BEARING CLAY- AND QUARTZ-RICH DIATOM OOZE with white scattered sponge spicule aggregates and sulfide-rich specks. Bioturbation is moderate through the core.
Section 2 was all sampled for microbiology.
Section 5, 0-95 was sampled for microbiology.
IW
SS
PP
XRD

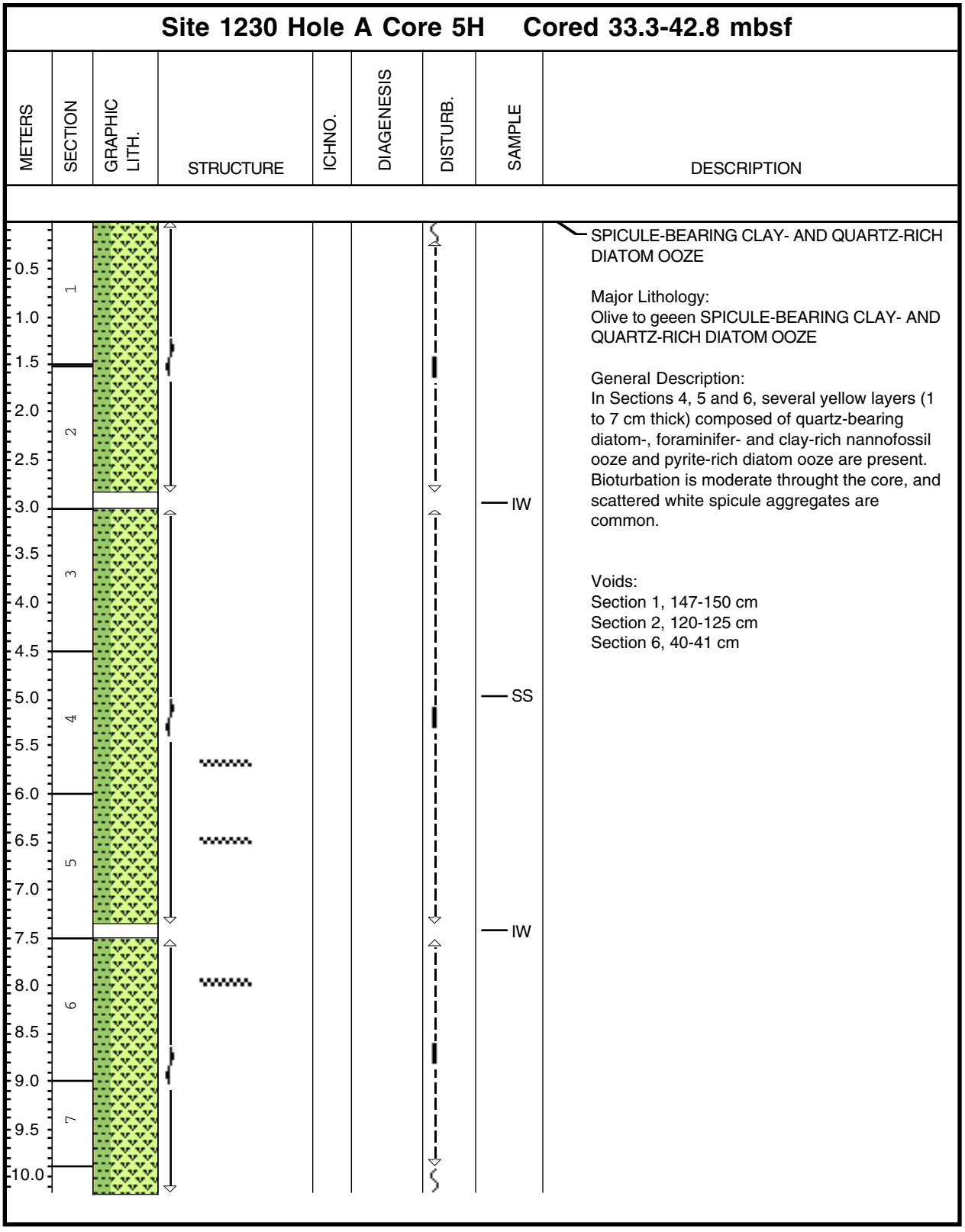
## Core Photo


Site 1230 Hole A Core 3H Cored 14.3-23.8 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
1
2
3
4
5
6
7
IW
IW
IW
IW
IW
IW
SPICULE-BEARING CLAY- AND QUARTZ-RICH DIATOM OOZE
Major Lithology:
Olive to green SPICULE-BEARING CLAY- AND QUARTZ-RICH DIATOM OOZE with white scattered sponge spicule aggregates. High angle lamination, probably due to soft sediment deformation, is in Section 6 between 35-58 cm and between 120-135 cm, and in Section 7 between 0-12 cm and 40-50 cm. Bioturbation is moderate through the core.
Section 2, 0-102 cm was sampled for microbiology.
Section 5, 0-74 cm was sampled for microbiology.

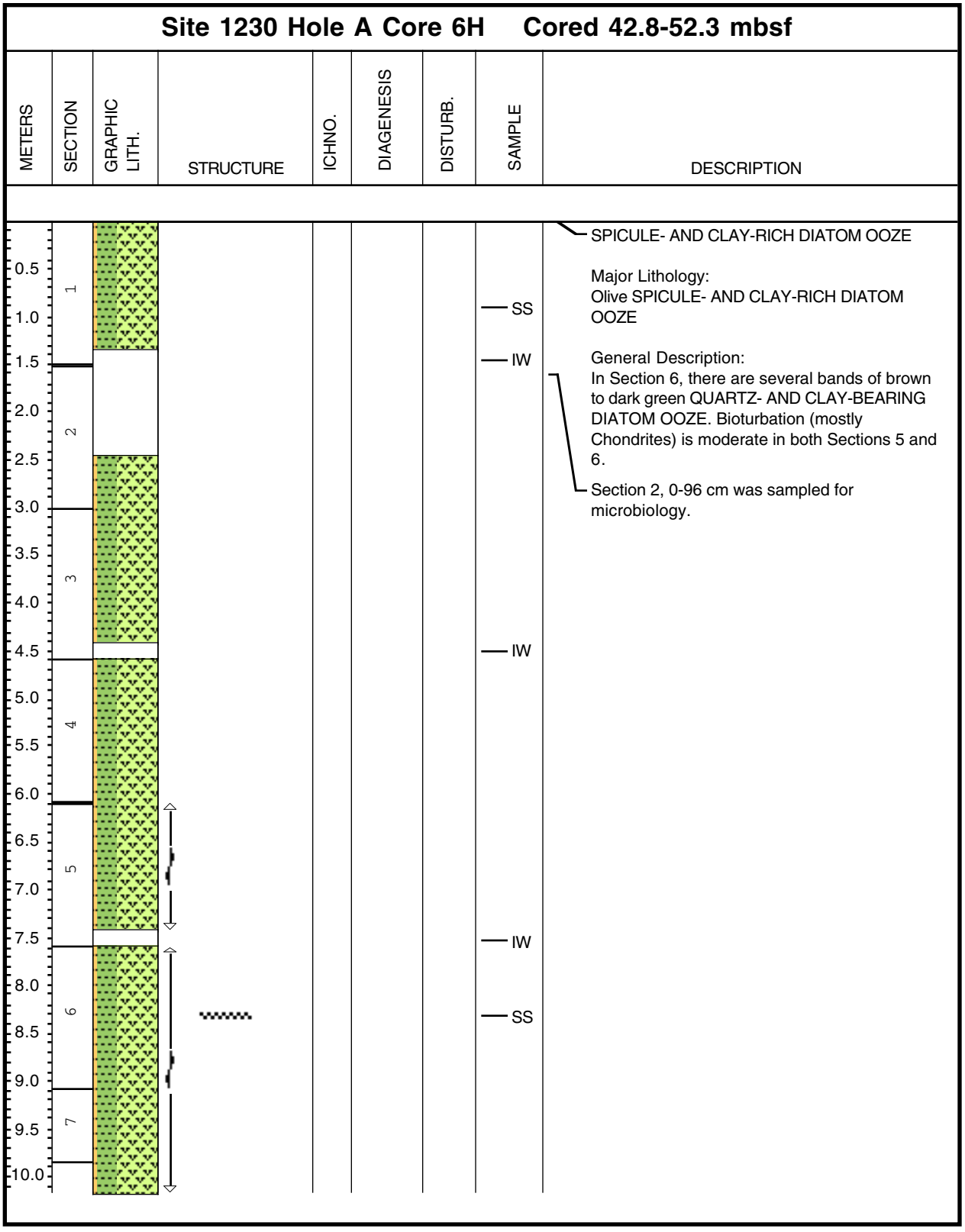
## Core Photo


Site 1230 Hole A Core 4H Cored 23.8-33.3 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
1
2
3
4
5
6
7
IW
IW
SS
PP
IW
SPICULE-BEARING CLAY- AND QUARTZ-RICH DIATOM OOZE
Major Lithology:
Olive to green SPICULE-BEARING CLAY- AND QUARTZ-RICH DIATOM OOZE with white scattered sponge spicule aggregates.
Minor Lithology:
Brown diatom-rich clay.
General Description:
The first 100 cm of Section 1 are soupy. Moderate bioturbation and expansion cracks were observed through the core.
Section 5, 0-135 cm, was sampled for microbiology.

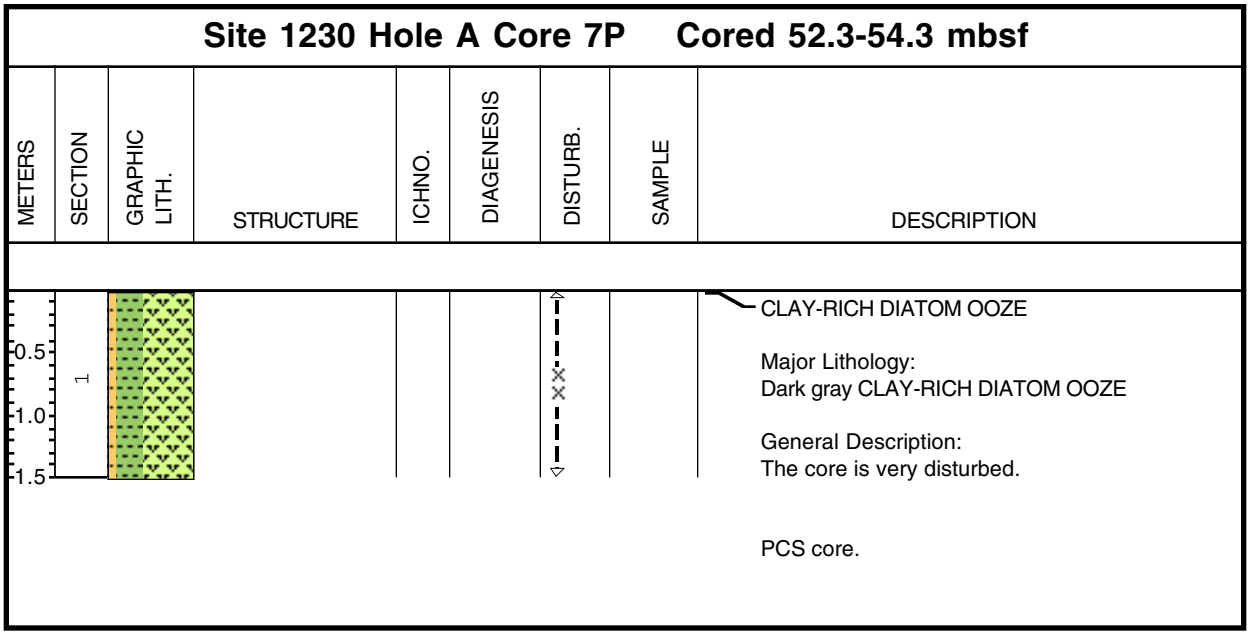
## Core Photo


Site 1230 Hole A Core 5H Cored 33.3-42.8 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
1
2
3
4
5
6
7
IW
SS
IW
SPICULE-BEARING CLAY- AND QUARTZ-RICH DIATOM OOZE
Major Lithology:
Olive to geeen SPICULE-BEARING CLAY- AND QUARTZ-RICH DIATOM OOZE
General Description:
In Sections 4, 5 and 6, several yellow layers (1 to 7 cm thick) composed of quartz-bearing diatom-, foraminifer- and clay-rich nannofossil ooze and pyrite-rich diatom ooze are present. Bioturbation is moderate throught the core, and scattered white spicule aggregates are common.
Voids:
Section 1, 147-150 cm
Section 2, 120-125 cm
Section 6, 40-41 cm

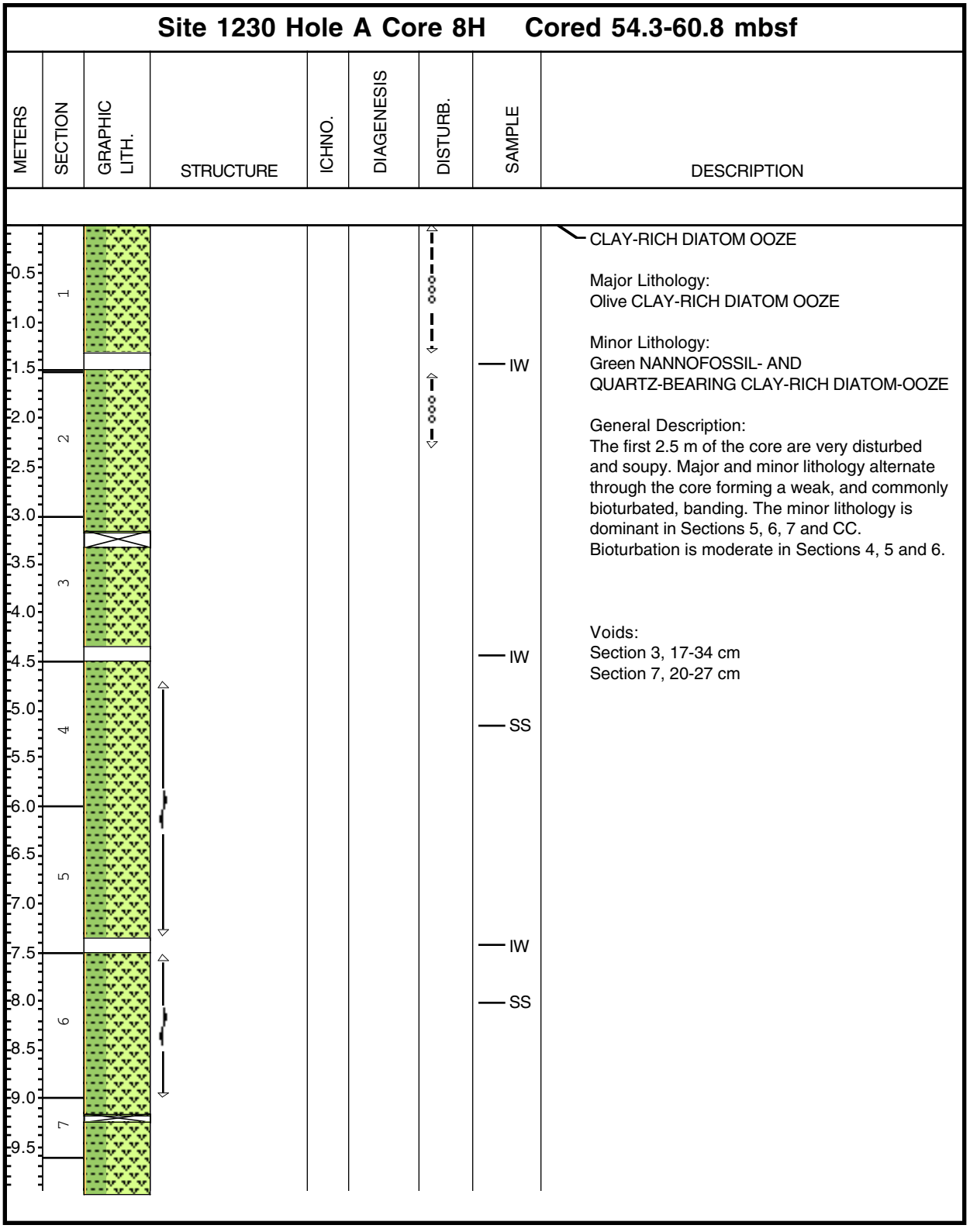
## Core Photo


Site 1230 Hole A Core 6H Cored 42.8-52.3 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
1
2
3
4
5
6
7
SS
IW
IW
IW
SS
SPICULE- AND CLAY-RICH DIATOM OOZE
Major Lithology:
Olive SPICULE- AND CLAY-RICH DIATOM OOZE
General Description:
In Section 6, there are several bands of brown to dark green QUARTZ- AND CLAY-BEARING DIATOM OOZE. Bioturbation (mostly Chondrites) is moderate in both Sections 5 and 6.
Section 2, 0-96 cm was sampled for microbiology.

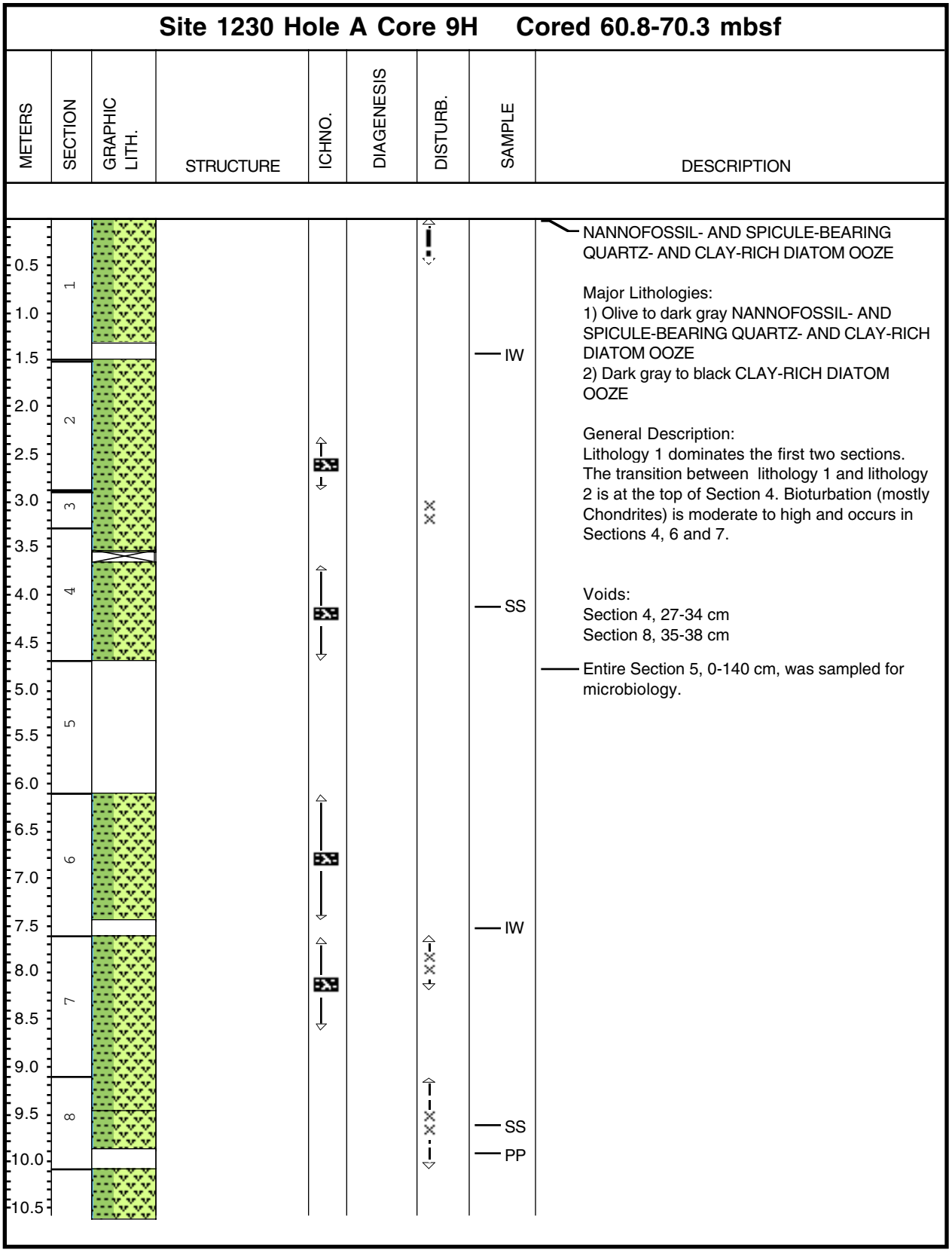
## Core Photo


Site 1230 Hole A Core 7P Cored 52.3-54.3 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
1
CLAY-RICH DIATOM OOZE
Major Lithology:
Dark gray CLAY-RICH DIATOM OOZE
General Description:
The core is very disturbed.
PCS core.

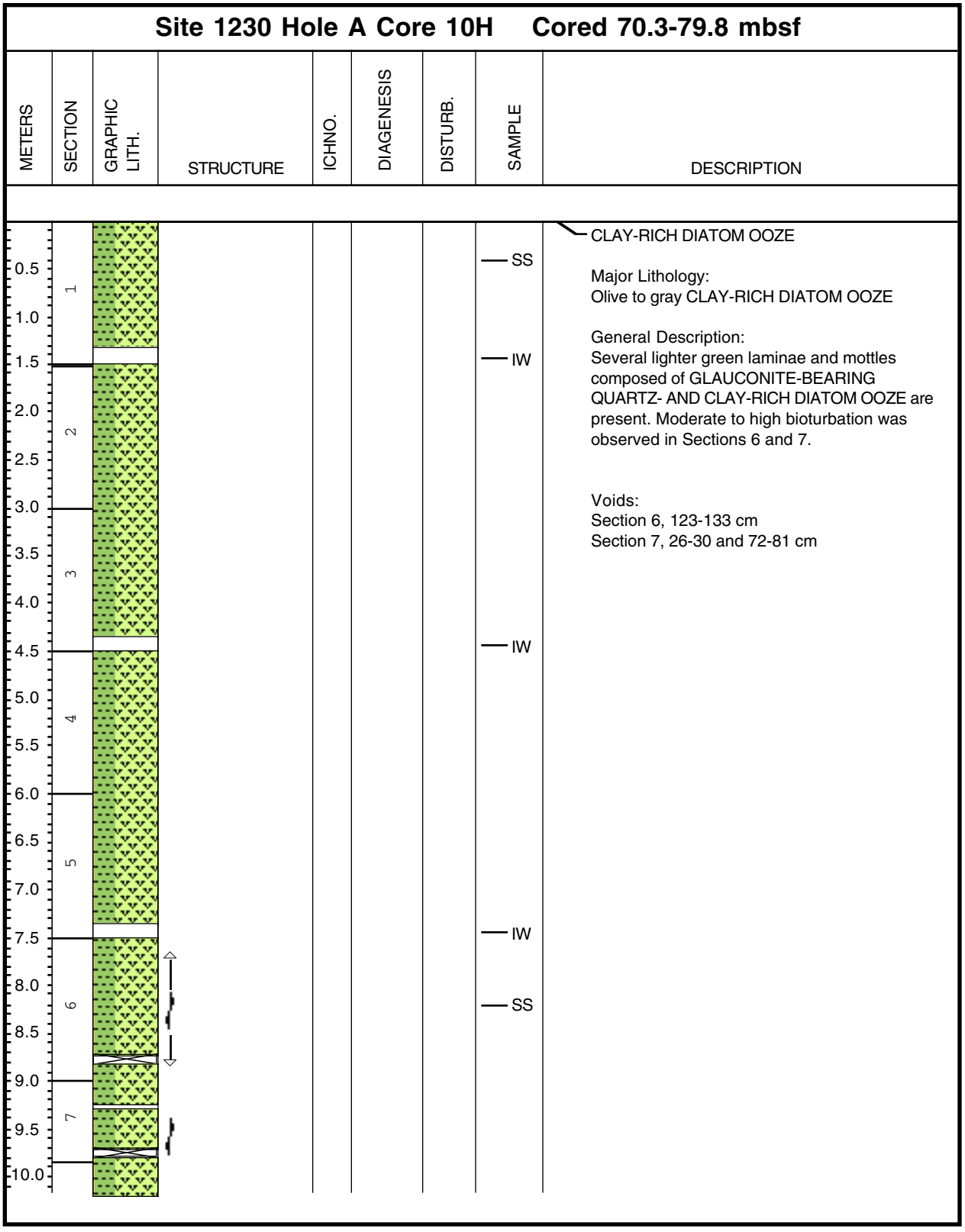
## Core Photo


Site 1230 Hole A Core 8H Cored 54.3-60.8 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
1
2
3
4
5
6
7
IW
IW
SS
IW
SS
CLAY-RICH DIATOM OOZE
Major Lithology:
Olive CLAY-RICH DIATOM OOZE
Minor Lithology:
Green NANNOFOSSIL- AND
QUARTZ-BEARING CLAY-RICH DIATOM-OOZE
General Description:
The first 2.5 m of the core are very disturbed and soupy. Major and minor lithology alternate through the core forming a weak, and commonly bioturbated, banding. The minor lithology is dominant in Sections 5, 6, 7 and CC.
Bioturbation is moderate in Sections 4, 5 and 6.
Voids:
Section 3, 17-34 cm
Section 7, 20-27 cm

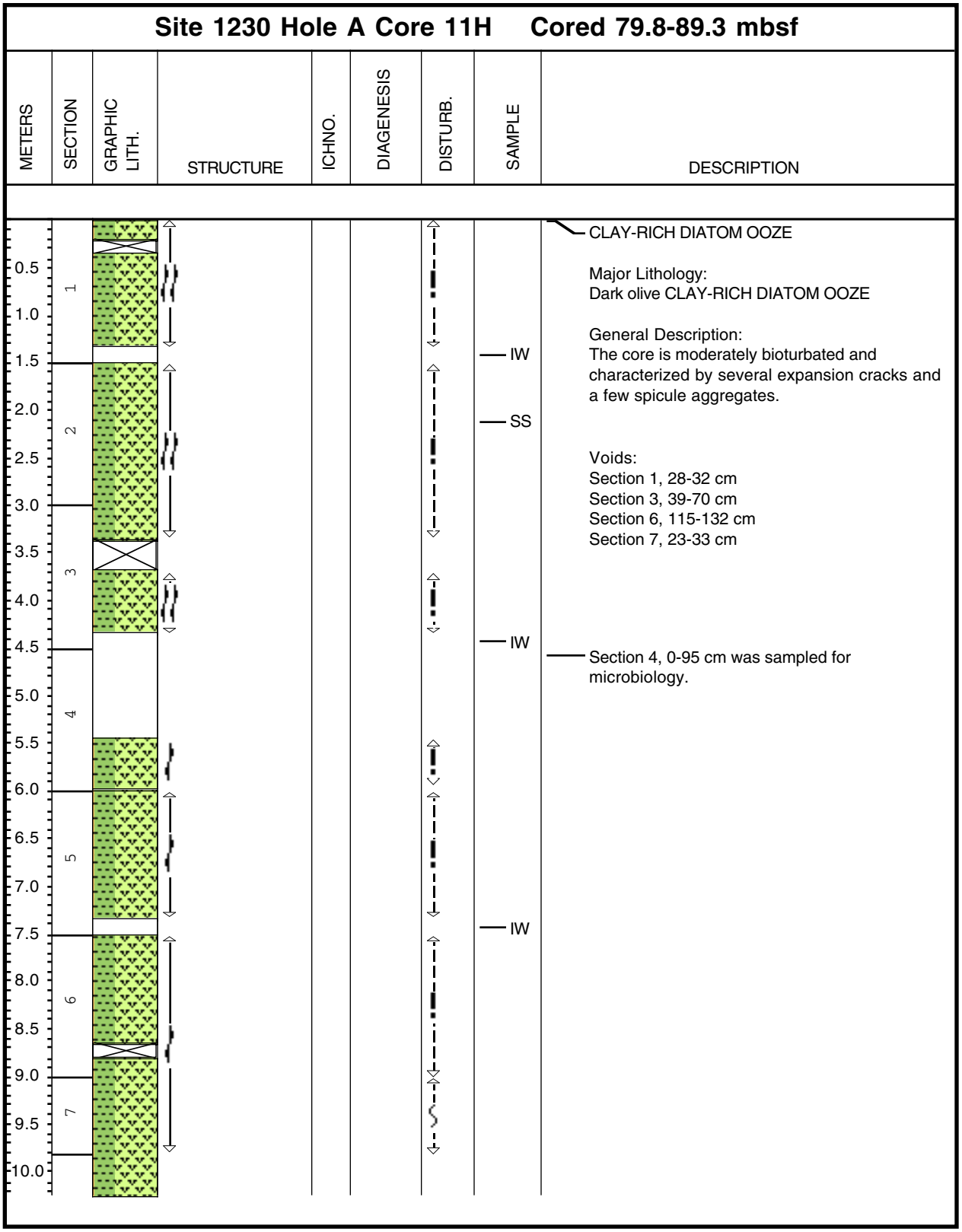
## Core Photo


Site 1230 Hole A Core 9H Cored 60.8-70.3 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
10.5
1
2
3
4
5
6
7
8
IW
SS
IW
SS
PP
NANNOFOSSIL- AND SPICULE-BEARING QUARTZ- AND CLAY-RICH DIATOM OOZE
Major Lithologies:
1) Olive to dark gray NANNOFOSSIL- AND SPICULE-BEARING QUARTZ- AND CLAY-RICH DIATOM OOZE
2) Dark gray to black CLAY-RICH DIATOM OOZE
General Description:
Lithology 1 dominates the first two sections. The transition between lithology 1 and lithology 2 is at the top of Section 4. Bioturbation (mostly Chondrites) is moderate to high and occurs in Sections 4, 6 and 7.
Voids:
Section 4, 27-34 cm
Section 8, 35-38 cm
Entire Section 5, 0-140 cm, was sampled for microbiology.

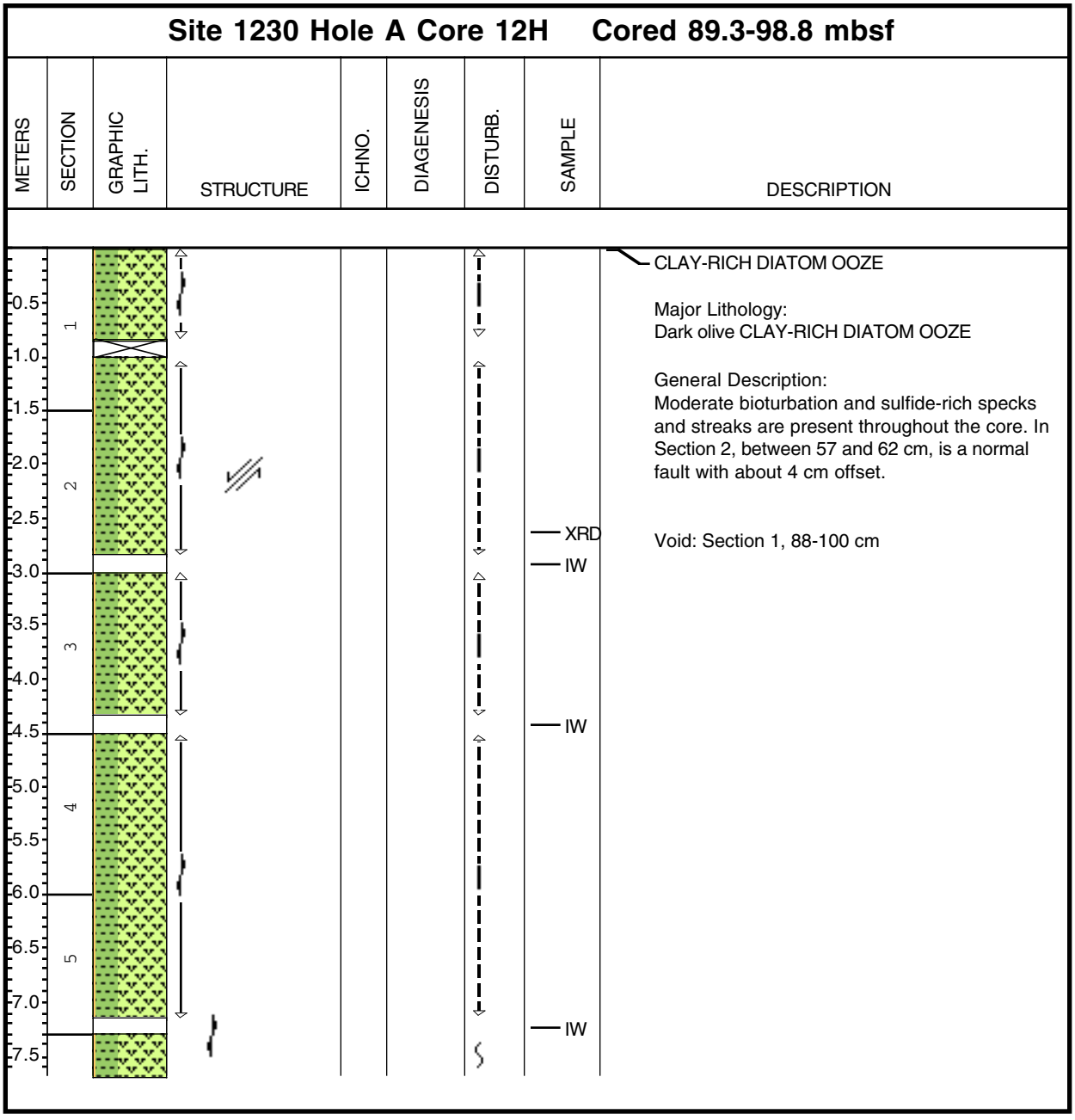
## Core Photo


Site 1230 Hole A Core 10H Cored 70.3-79.8 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
1
2
3
4
5
6
7
SS
IW
IW
IW
SS
CLAY-RICH DIATOM OOZE
Major Lithology:
Olive to gray CLAY-RICH DIATOM OOZE
General Description:
Several lighter green laminae and mottles composed of GLAUCONITE-BEARING QUARTZ- AND CLAY-RICH DIATOM OOZE are present. Moderate to high bioturbation was observed in Sections 6 and 7.
Voids:
Section 6, 123-133 cm
Section 7, 26-30 and 72-81 cm

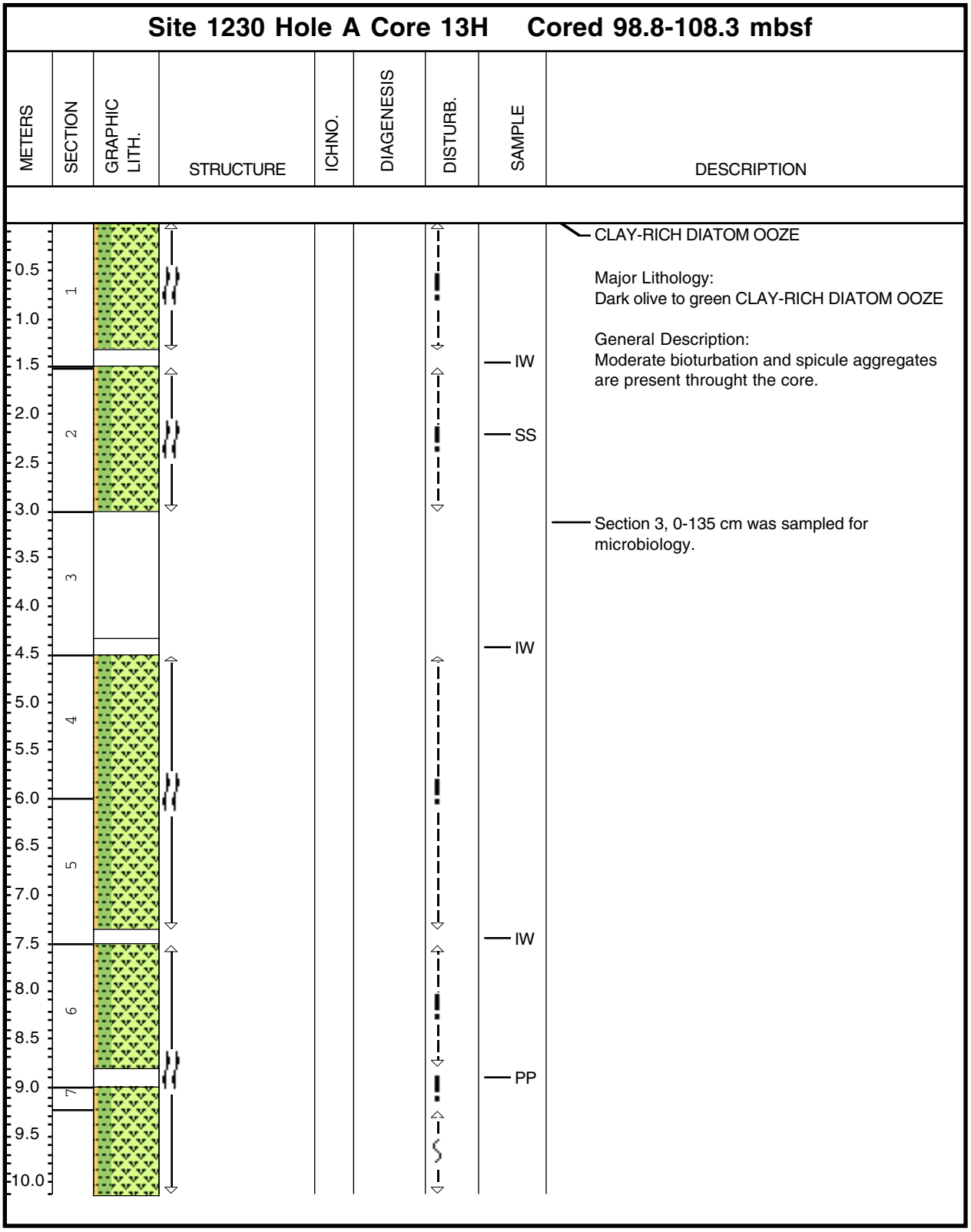
## Core Photo


Site 1230 Hole A Core 11H Cored 79.8-89.3 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
1
2
3
4
5
6
7
IW
SS
IW
IW
CLAY-RICH DIATOM OOZE
Major Lithology:
Dark olive CLAY-RICH DIATOM OOZE
General Description:
The core is moderately bioturbated and characterized by several expansion cracks and a few spicule aggregates.
Voids:
Section 1, 28-32 cm
Section 3, 39-70 cm
Section 6, 115-132 cm
Section 7, 23-33 cm
Section 4, 0-95 cm was sampled for microbiology.

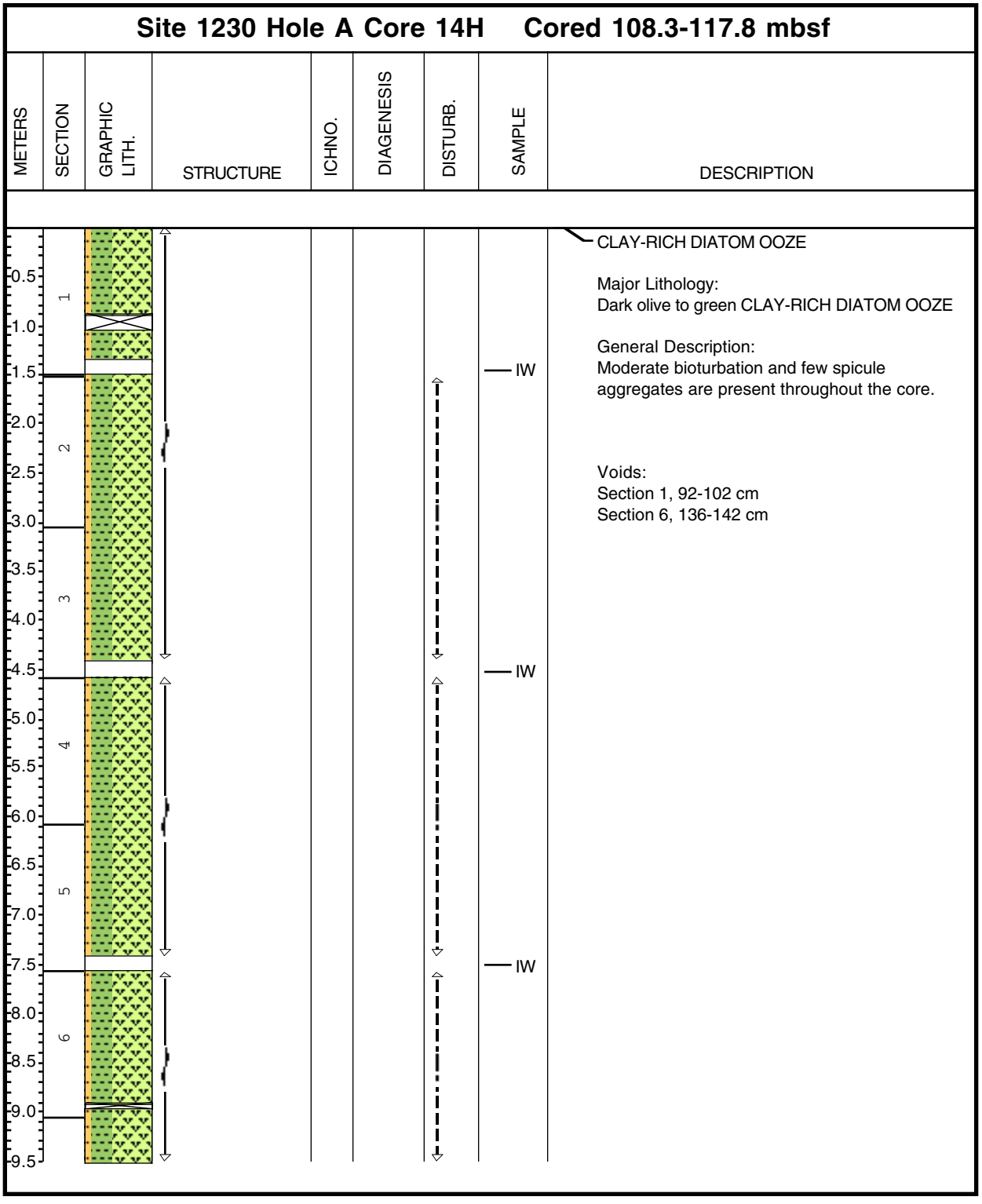
## Core Photo


Site 1230 Hole A Core 12H Cored 89.3-98.8 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
1
2
3
4
5
XRD
IW
IW
IW
CLAY-RICH DIATOM OOZE
Major Lithology:
Dark olive CLAY-RICH DIATOM OOZE
General Description:
Moderate bioturbation and sulfide-rich specks and streaks are present throughout the core. In Section 2, between 57 and 62 cm, is a normal fault with about 4 cm offset.
Void: Section 1, 88-100 cm

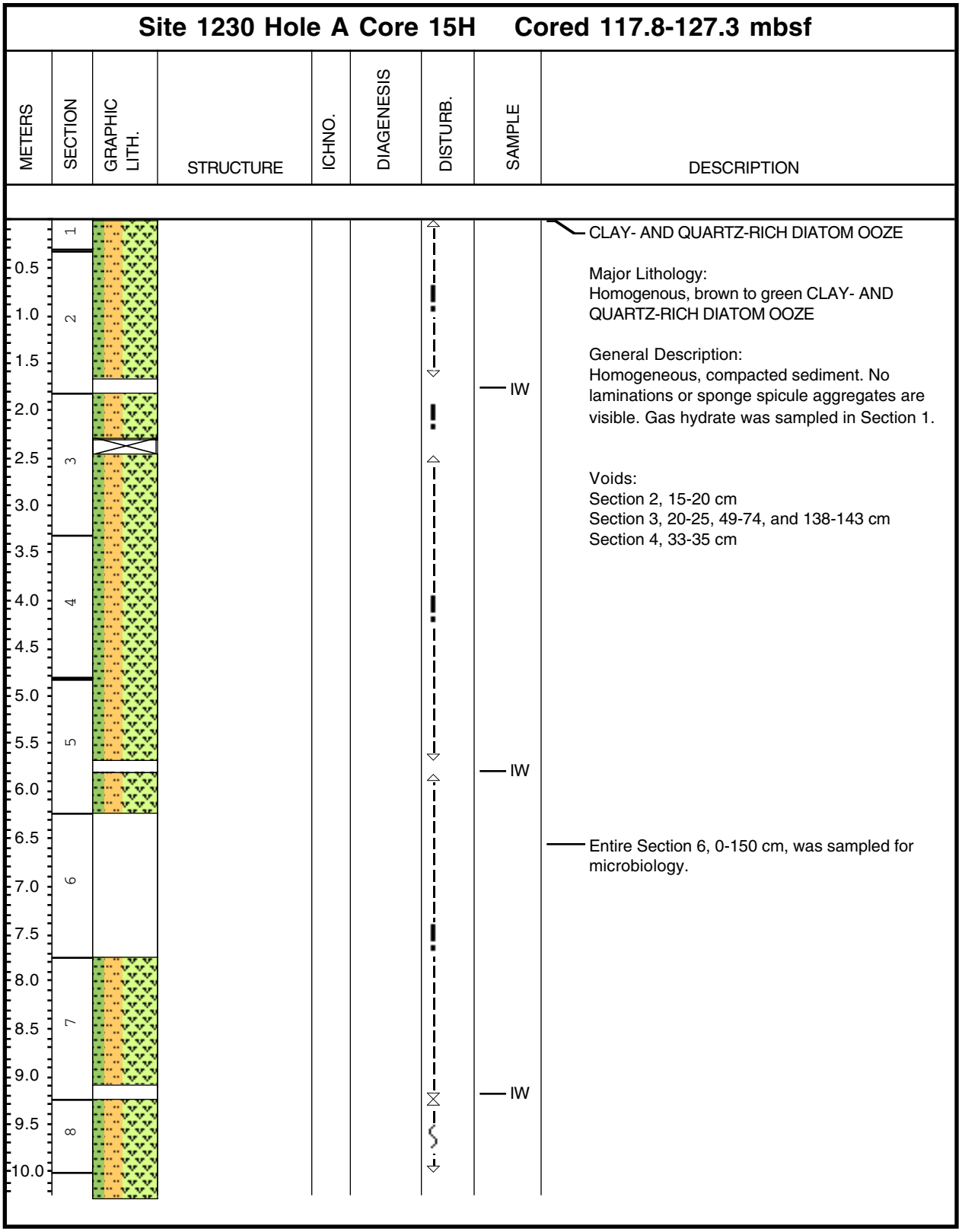
## Core Photo


Site 1230 Hole A Core 13H Cored 98.8-108.3 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
1
2
3
4
5
6
7
IW
SS
IW
IW
PP
CLAY-RICH DIATOM OOZE
Major Lithology:
Dark olive to green CLAY-RICH DIATOM OOZE
General Description:
Moderate bioturbation and spicule aggregates are present throught the core.
Section 3, 0-135 cm was sampled for microbiology.

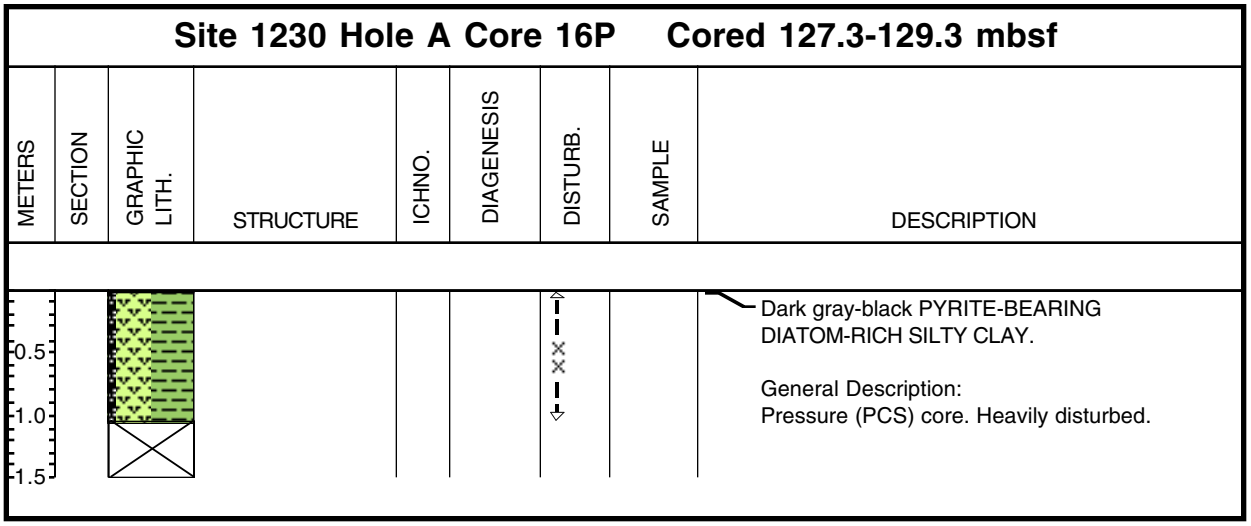
## Core Photo


Site 1230 Hole A Core 14H Cored 108.3-117.8 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
1
2
3
4
5
6
IW
IW
IW
CLAY-RICH DIATOM OOZE
Major Lithology:
Dark olive to green CLAY-RICH DIATOM OOZE
General Description:
Moderate bioturbation and few spicule aggregates are present throughout the core.
Voids:
Section 1, 92-102 cm
Section 6, 136-142 cm

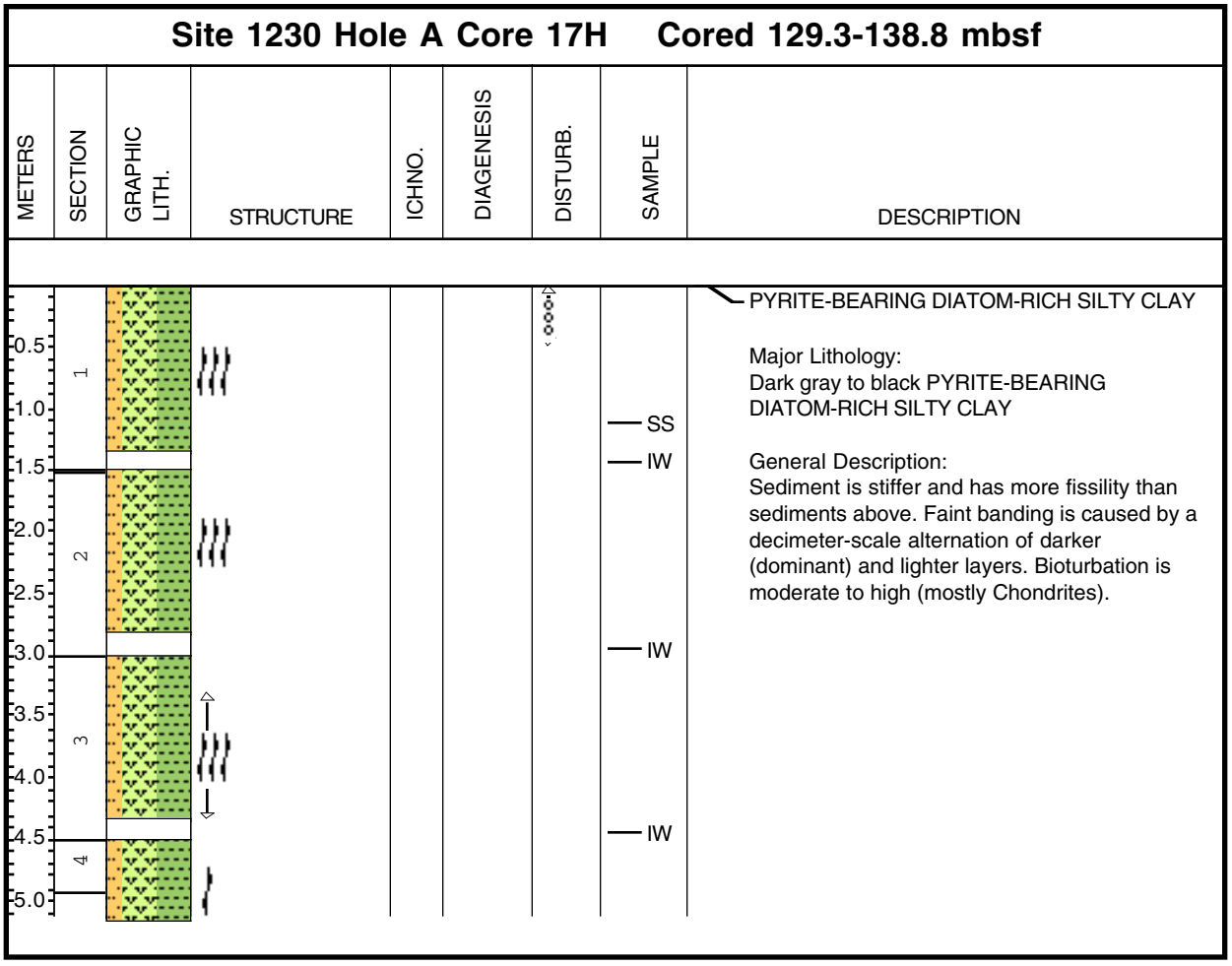
## Core Photo


Site 1230 Hole A Core 15H Cored 117.8-127.3 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
1
2
3
4
5
6
7
8
IW
IW
IW
CLAY- AND QUARTZ-RICH DIATOM OOZE
Major Lithology:
Homogenous, brown to green CLAY- AND QUARTZ-RICH DIATOM OOZE
General Description:
Homogeneous, compacted sediment. No laminations or sponge spicule aggregates are visible. Gas hydrate was sampled in Section 1.
Voids:
Section 2, 15-20 cm
Section 3, 20-25, 49-74, and 138-143 cm
Section 4, 33-35 cm
Entire Section 6, 0-150 cm, was sampled for microbiology.

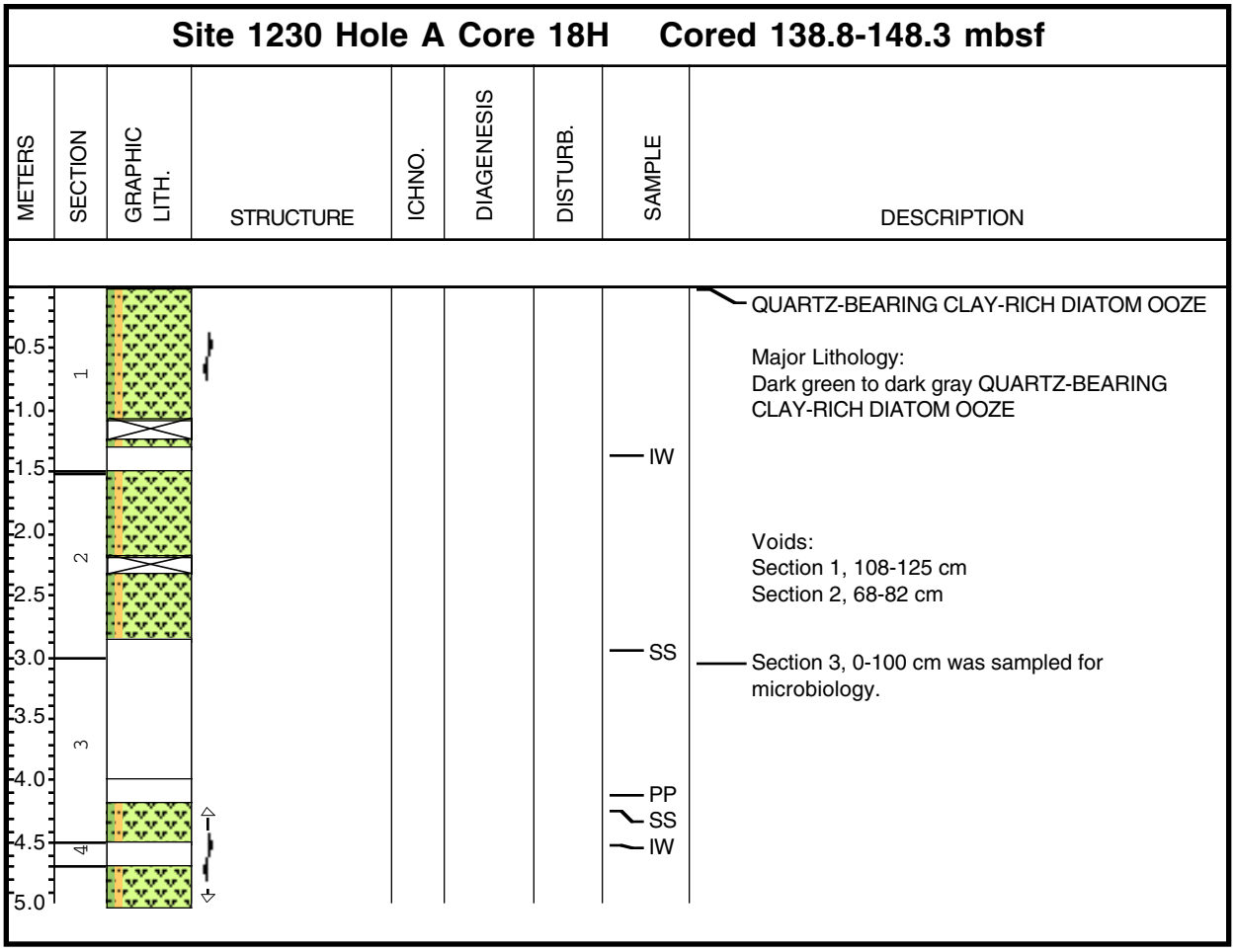
## Core Photo


Site 1230 Hole A Core 16P Cored 127.3-129.3 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
Dark gray-black PYRITE-BEARING DIATOM-RICH SILTY CLAY.
General Description:
Pressure (PCS) core. Heavily disturbed.

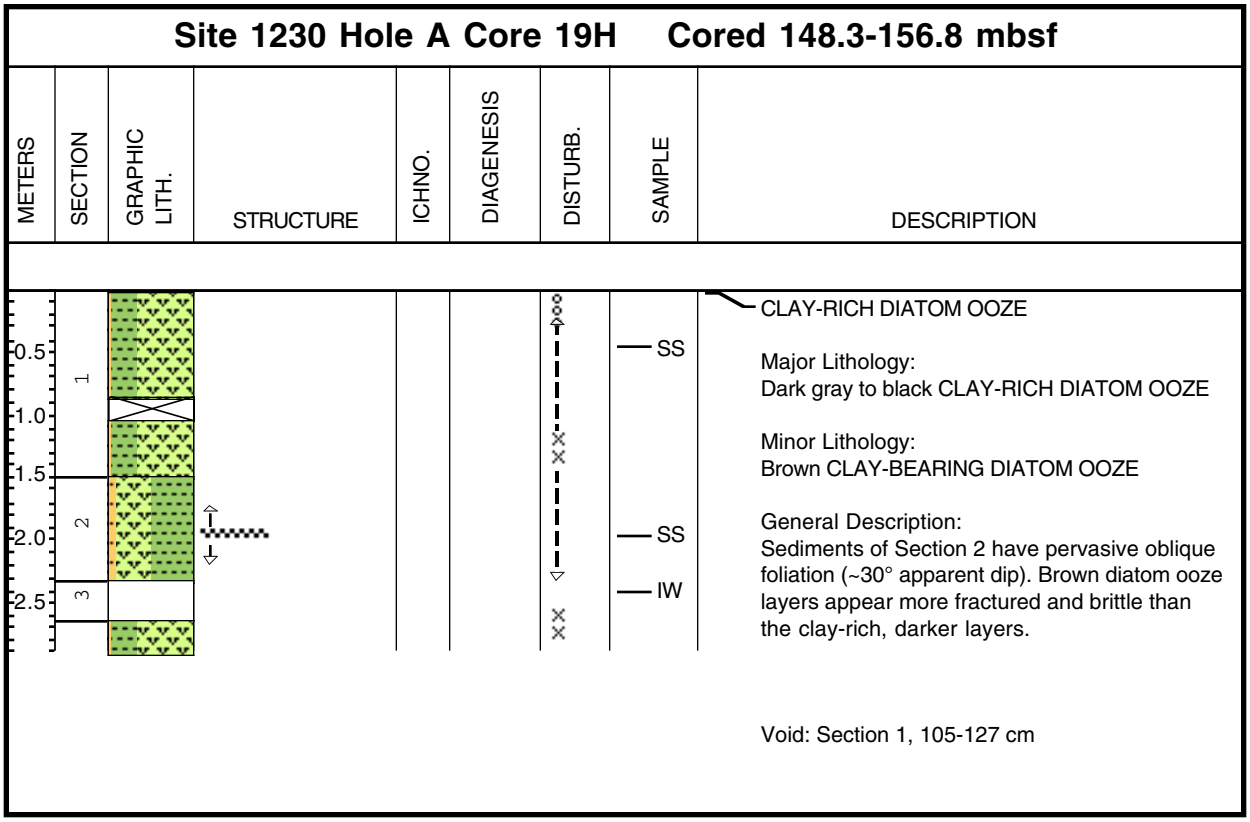
## Core Photo


Site 1230 Hole A Core 17H Cored 129.3-138.8 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
1
2
3
4
SS
IW
IW
IW
PYRITE-BEARING DIATOM-RICH SILTY CLAY
Major Lithology:
Dark gray to black PYRITE-BEARING DIATOM-RICH SILTY CLAY
General Description:
Sediment is stiffer and has more fissility than sediments above. Faint banding is caused by a decimeter-scale alternation of darker (dominant) and lighter layers. Bioturbation is moderate to high (mostly Chondrites).

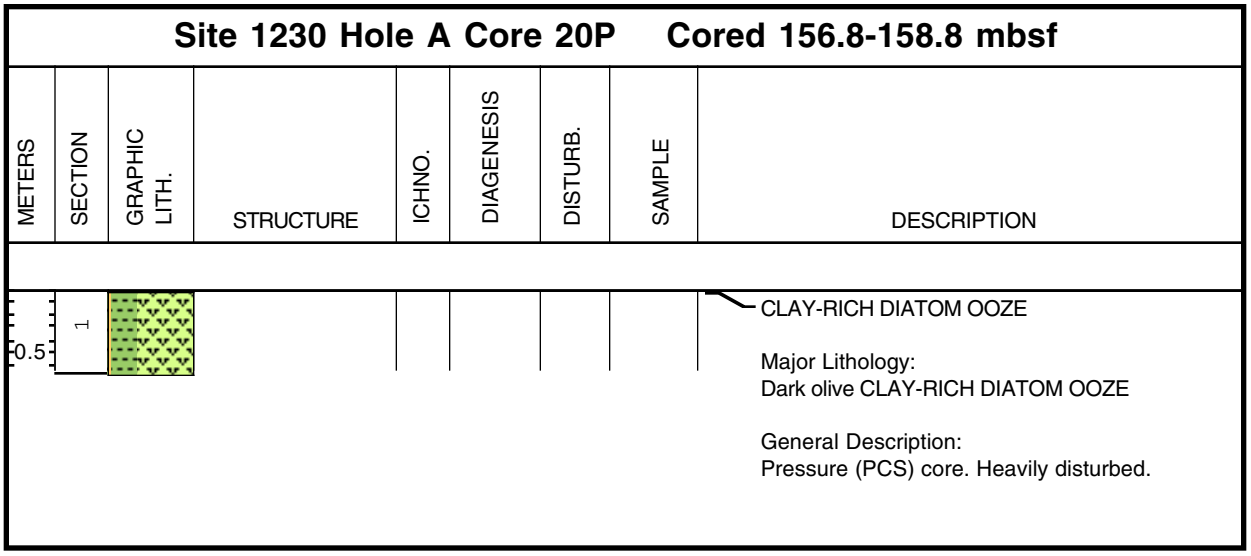
## Core Photo


Site 1230 Hole A Core 18H Cored 138.8-148.3 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
1
2
3
4
IW
SS
PP
SS
IW
QUARTZ-BEARING CLAY-RICH DIATOM OOZE
Major Lithology:
Dark green to dark gray QUARTZ-BEARING CLAY-RICH DIATOM OOZE
Voids:
Section 1, 108-125 cm
Section 2, 68-82 cm
Section 3, 0-100 cm was sampled for microbiology.

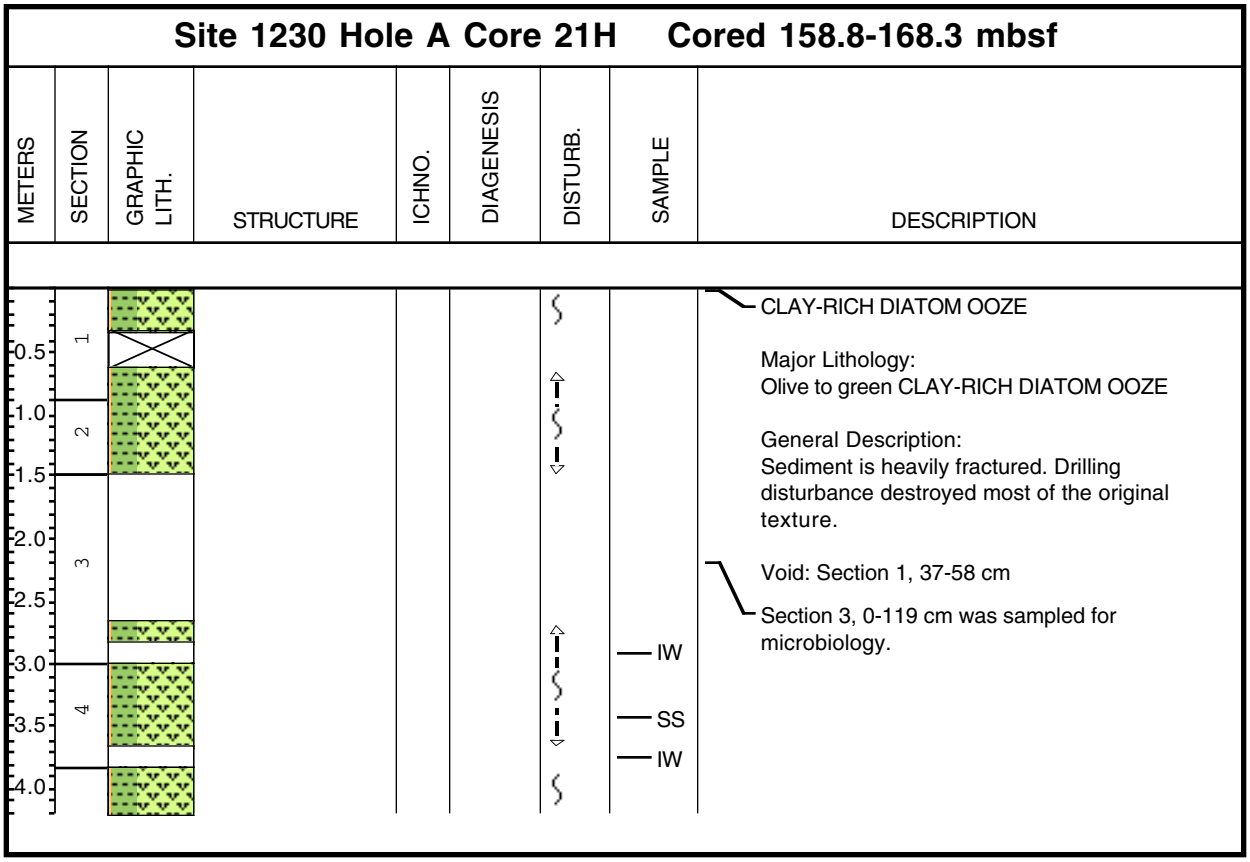
## Core Photo


Site 1230 Hole A Core 19H Cored 148.3-156.8 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
1
2
3
SS
SS
IW
CLAY-RICH DIATOM OOZE
Major Lithology:
Dark gray to black CLAY-RICH DIATOM OOZE
Minor Lithology:
Brown CLAY-BEARING DIATOM OOZE
General Description:
Sediments of Section 2 have pervasive oblique foliation (~30° apparent dip). Brown diatom ooze layers appear more fractured and brittle than the clay-rich, darker layers.
Void: Section 1, 105-127 cm

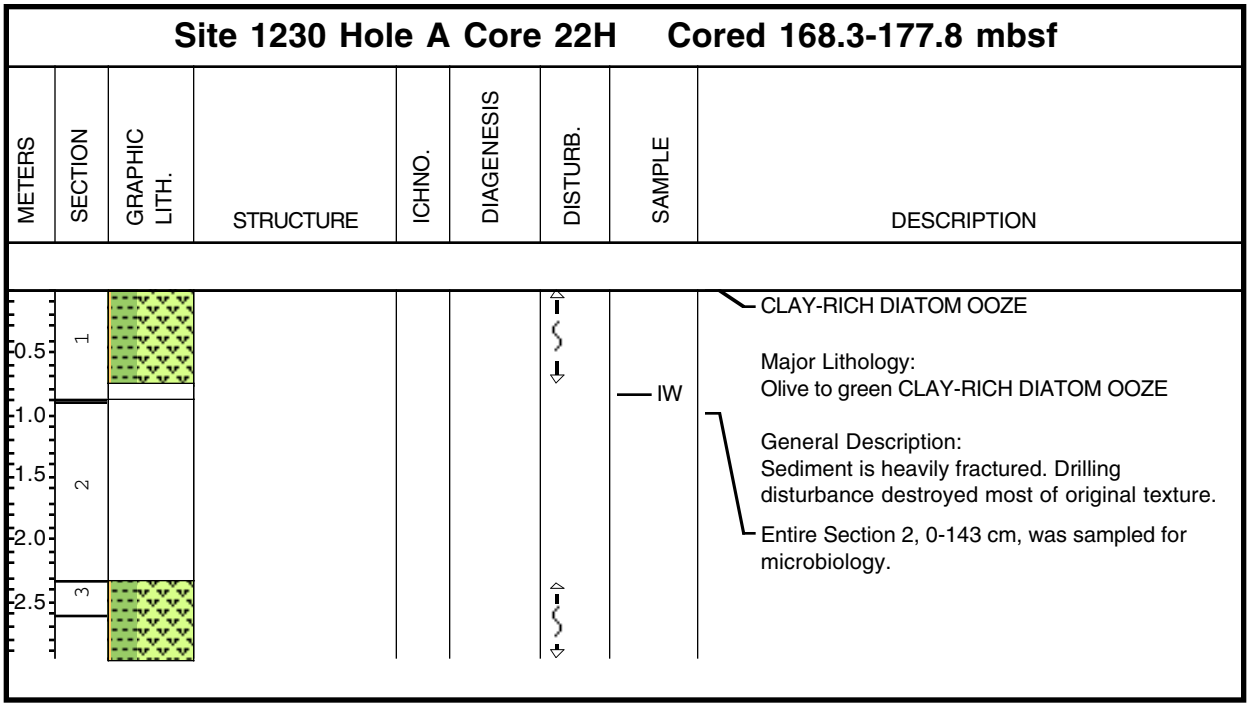
## Core Photo


Site 1230 Hole A Core 20P Cored 156.8-158.8 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1
CLAY-RICH DIATOM OOZE
Major Lithology:
Dark olive CLAY-RICH DIATOM OOZE
General Description:
Pressure (PCS) core. Heavily disturbed.

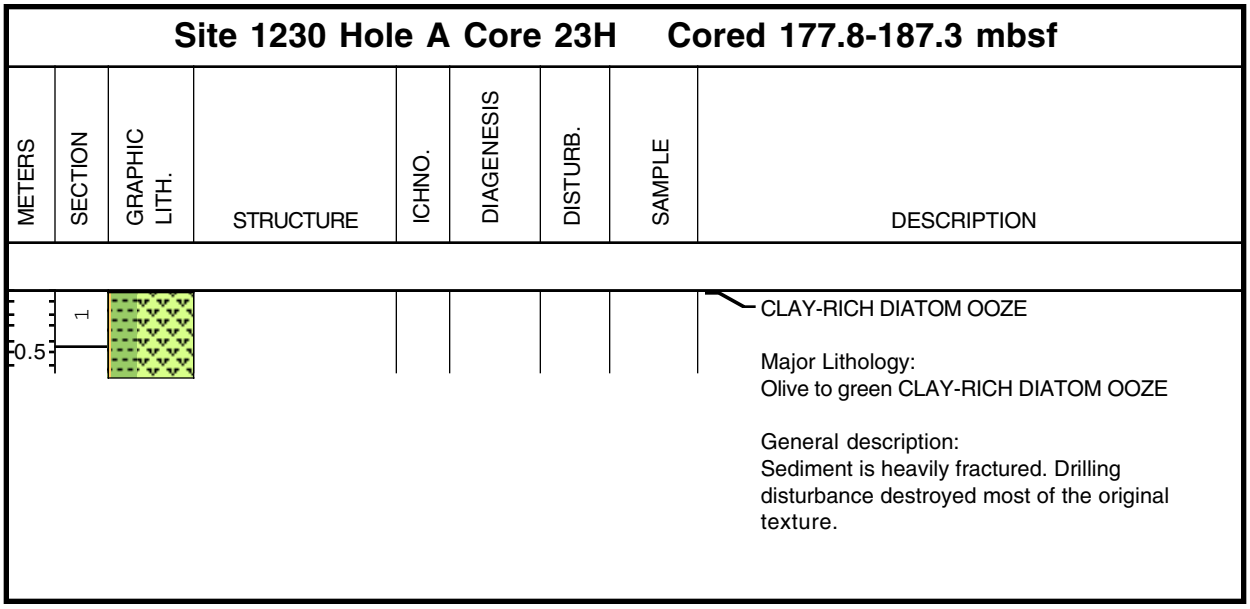
## Core Photo


Site 1230 Hole A Core 21H Cored 158.8-168.3 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
4
IW
SS
IW
CLAY-RICH DIATOM OOZE
Major Lithology:
Olive to green CLAY-RICH DIATOM OOZE
General Description:
Sediment is heavily fractured. Drilling disturbance destroyed most of the original texture.
Void: Section 1, 37-58 cm
Section 3, 0-119 cm was sampled for microbiology.

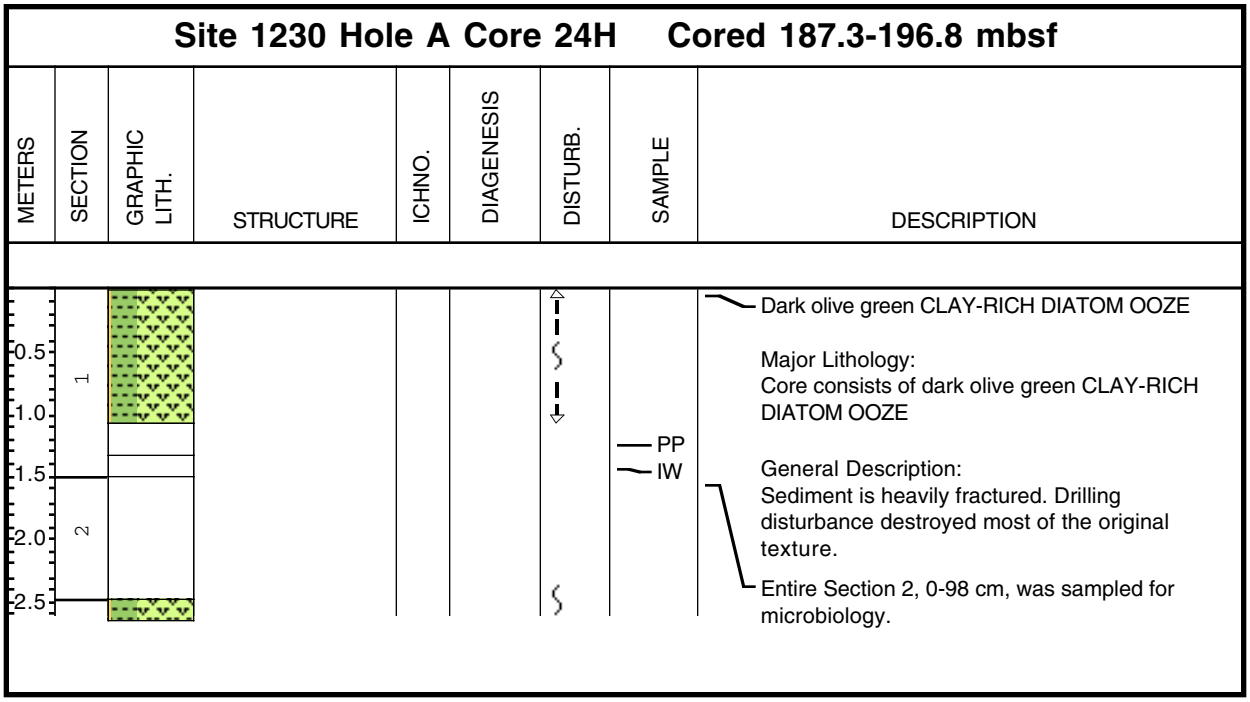
## Core Photo


Site 1230 Hole A Core 22H Cored 168.3-177.8 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
1
2
3
IW
CLAY-RICH DIATOM OOZE
Major Lithology:
Olive to green CLAY-RICH DIATOM OOZE
General Description:
Sediment is heavily fractured. Drilling disturbance destroyed most of original texture.
Entire Section 2, 0-143 cm, was sampled for microbiology.

## Core Photo


Site 1230 Hole A Core 23H Cored 177.8-187.3 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1
CLAY-RICH DIATOM OOZE
Major Lithology:
Olive to green CLAY-RICH DIATOM OOZE
General description:
Sediment is heavily fractured. Drilling disturbance destroyed most of the original texture.

## Core Photo

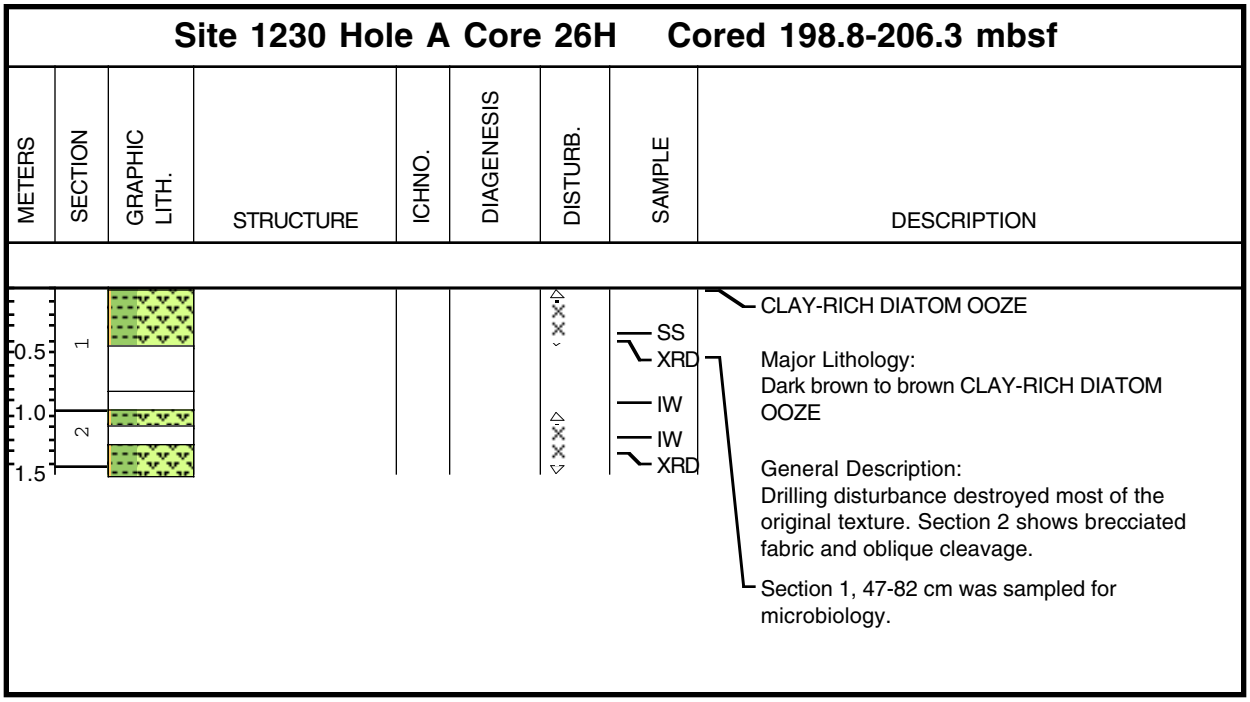

Site 1230 Hole A Core 24H Cored 187.3-196.8 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
1
2
PP
IW
Dark olive green CLAY-RICH DIATOM OOZE
Major Lithology:
Core consists of dark olive green CLAY-RICH DIATOM OOZE
General Description:
Sediment is heavily fractured. Drilling disturbance destroyed most of the original texture.
Entire Section 2, 0-98 cm, was sampled for microbiology.

## Core Photo

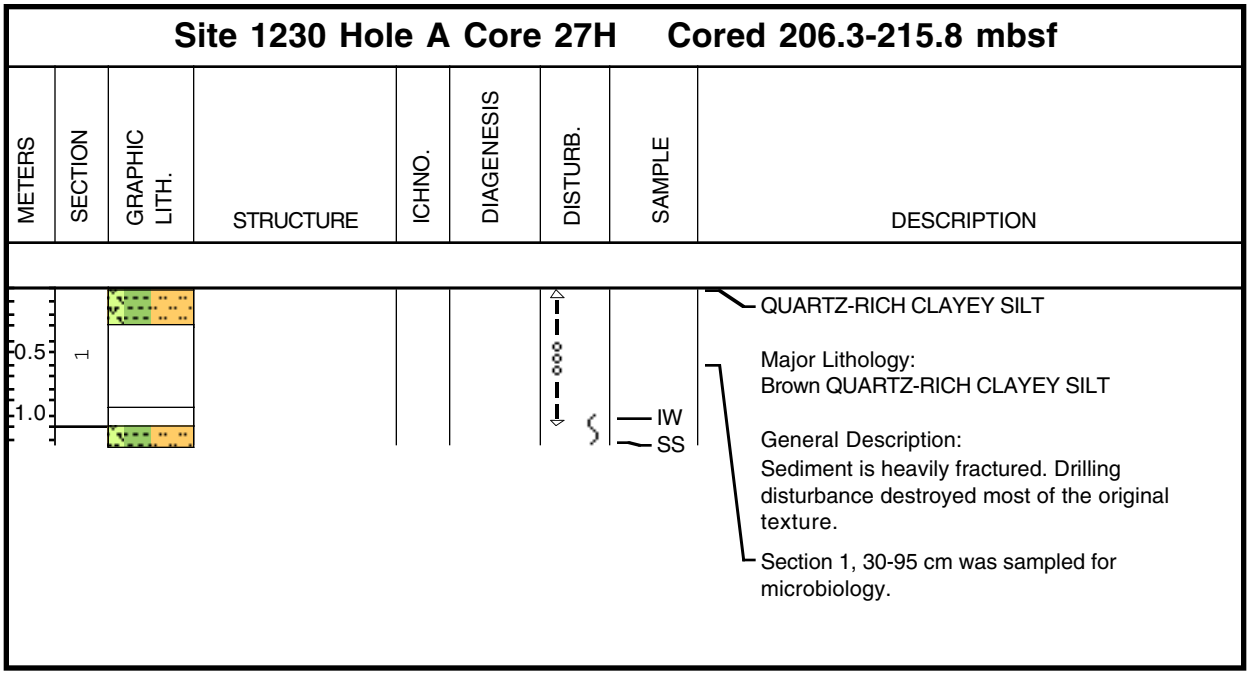
**Site 1230 Hole A Core 25P Cored 196.8-198.8 mbsf**

| METERS | SECTION | GRAPHIC LITH. | STRUCTURE | ICHNO. | DIAGENESIS | DISTURB. | SAMPLE | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| 0.5<br>1.0 | 1 | | | | | | | CLAY-RICH DIATOM OOZE<br><br>Major Lithology:<br>Dark brown to brown CLAY-RICH DIATOM OOZE<br><br>General Description:<br>Pressure (PCS) core. Heavily disturbed. |

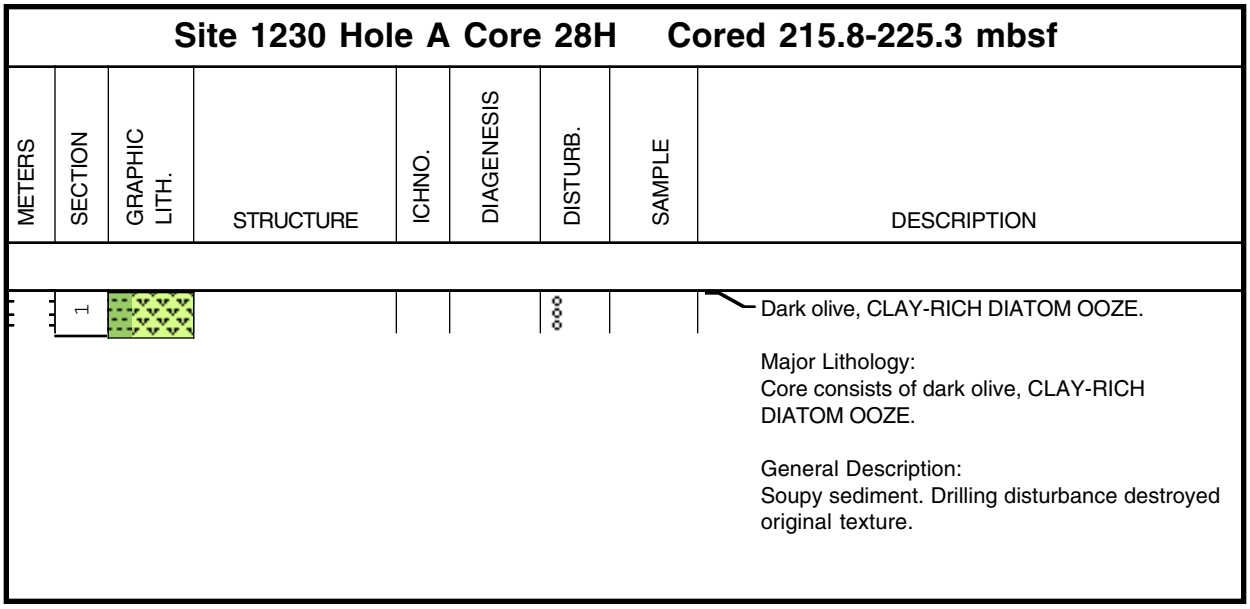
## Core Photo


Site 1230 Hole A Core 26H Cored 198.8-206.3 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
1
2
SS
XRD
IW
IW
XRD
CLAY-RICH DIATOM OOZE
Major Lithology:
Dark brown to brown CLAY-RICH DIATOM OOZE
General Description:
Drilling disturbance destroyed most of the original texture. Section 2 shows brecciated fabric and oblique cleavage.
Section 1, 47-82 cm was sampled for microbiology.

## Core Photo


Site 1230 Hole A Core 27H Cored 206.3-215.8 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1
IW
SS
QUARTZ-RICH CLAYEY SILT
Major Lithology:
Brown QUARTZ-RICH CLAYEY SILT
General Description:
Sediment is heavily fractured. Drilling disturbance destroyed most of the original texture.
Section 1, 30-95 cm was sampled for microbiology.

## Core Photo

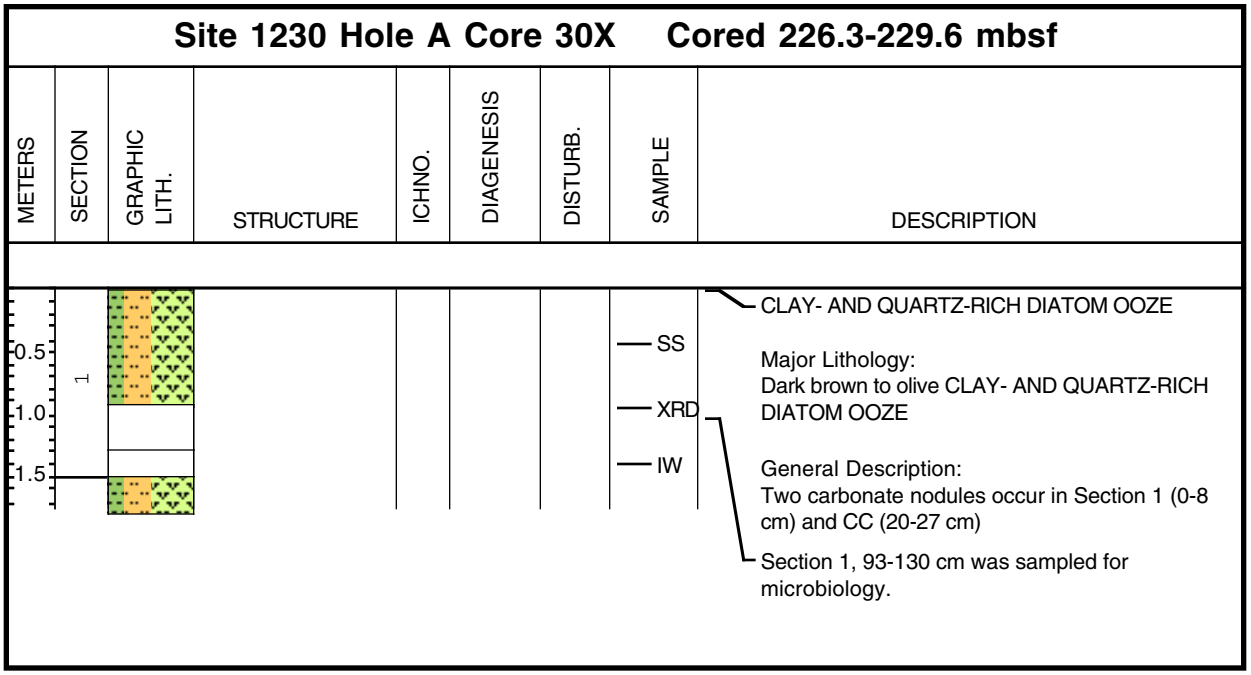

Site 1230 Hole A Core 28H Cored 215.8-225.3 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
1
Dark olive, CLAY-RICH DIATOM OOZE.
Major Lithology:
Core consists of dark olive, CLAY-RICH DIATOM OOZE.
General Description:
Soupy sediment. Drilling disturbance destroyed original texture.

## Core Photo

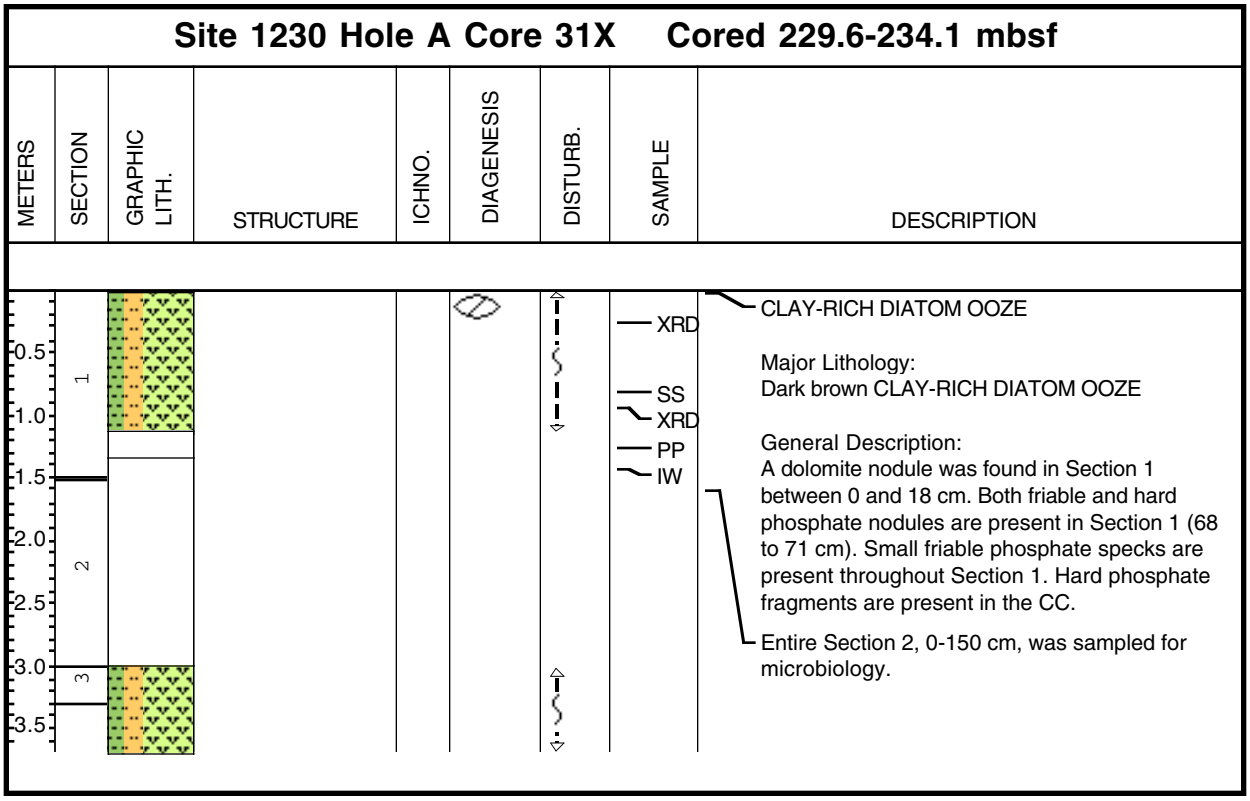
**Site 1230 Hole A Core 29H Cored 225.3-226.3 mbsf**

| METERS | SECTION | GRAPHIC LITH. | STRUCTURE | ICHNO. | DIAGENESIS | DISTURB. | SAMPLE | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| 0.5 | 1 | | | | | | | CLAY-RICH DIATOM OOZE<br><br>Major Lithology:<br>Core consists of dark olive CLAY-RICH DIATOM OOZE.<br><br>General Description:<br>Soupy sediment. Drilling disturbance destroyed original texture. |

## Core Photo


Site 1230 Hole A Core 30X Cored 226.3-229.6 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
1
SS
XRD
IW
CLAY- AND QUARTZ-RICH DIATOM OOZE
Major Lithology:
Dark brown to olive CLAY- AND QUARTZ-RICH DIATOM OOZE
General Description:
Two carbonate nodules occur in Section 1 (0-8 cm) and CC (20-27 cm)
Section 1, 93-130 cm was sampled for microbiology.

## Core Photo


Site 1230 Hole A Core 31X Cored 229.6-234.1 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
1
2
3
XRD
SS
XRD
PP
IW
CLAY-RICH DIATOM OOZE
Major Lithology:
Dark brown CLAY-RICH DIATOM OOZE
General Description:
A dolomite nodule was found in Section 1 between 0 and 18 cm. Both friable and hard phosphate nodules are present in Section 1 (68 to 71 cm). Small friable phosphate specks are present throughout Section 1. Hard phosphate fragments are present in the CC.
Entire Section 2, 0-150 cm, was sampled for microbiology.

## Core Photo

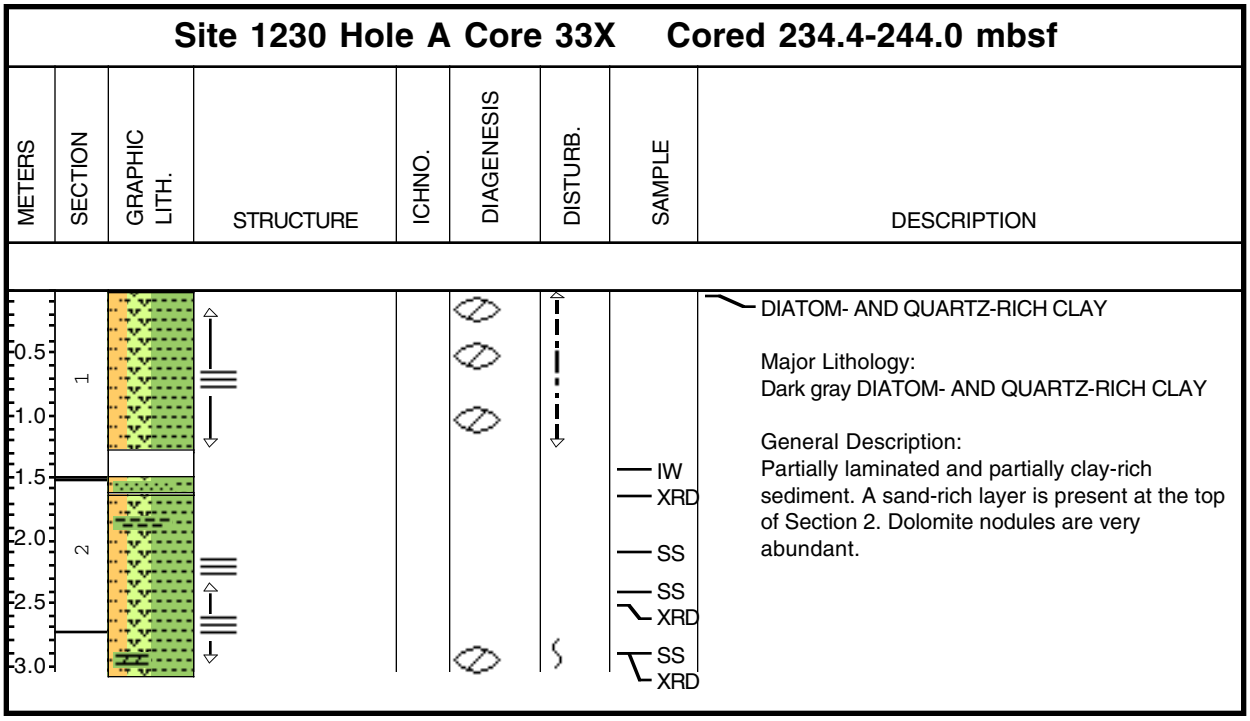
**Site 1230 Hole A Core 32H Cored 234.1-234.4 mbsf**

| METERS | SECTION | GRAPHIC LITH. | STRUCTURE | ICHNO. | DIAGENESIS | DISTURB. | SAMPLE | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| | 1 | | | | | | | CLAY-RICH DIATOM OOZE |

Major Lithology:
Very dark gray CLAY-RICH DIATOM OOZE

General Description:
Sediment is heavily fragmented. Drilling disturbance destroyed most of the original fabric.

## Core Photo

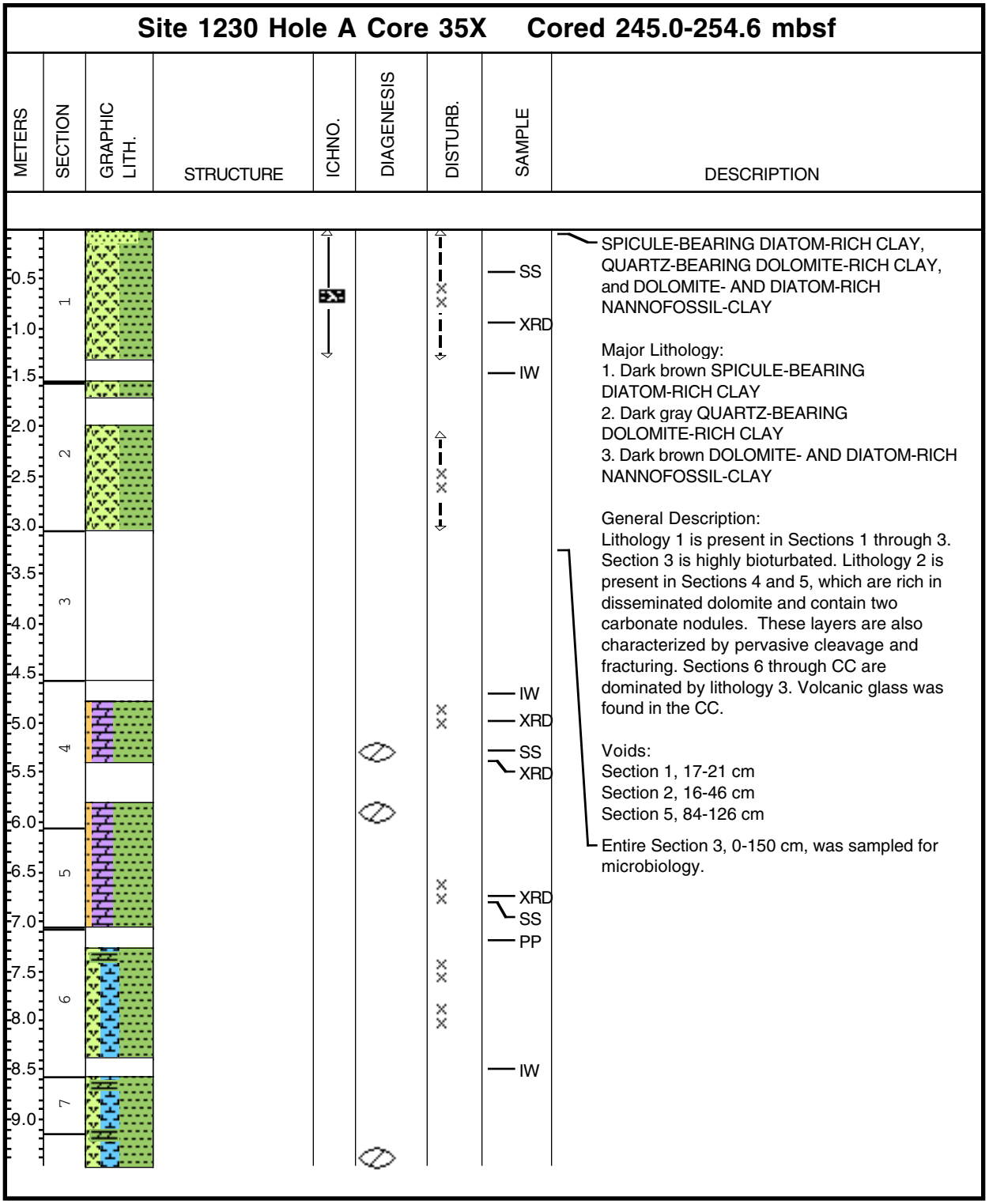

Site 1230 Hole A Core 33X Cored 234.4-244.0 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
1
2
IW
XRD
SS
SS
XRD
SS
XRD
DIATOM- AND QUARTZ-RICH CLAY
Major Lithology:
Dark gray DIATOM- AND QUARTZ-RICH CLAY
General Description:
Partially laminated and partially clay-rich sediment. A sand-rich layer is present at the top of Section 2. Dolomite nodules are very abundant.

## Core Photo

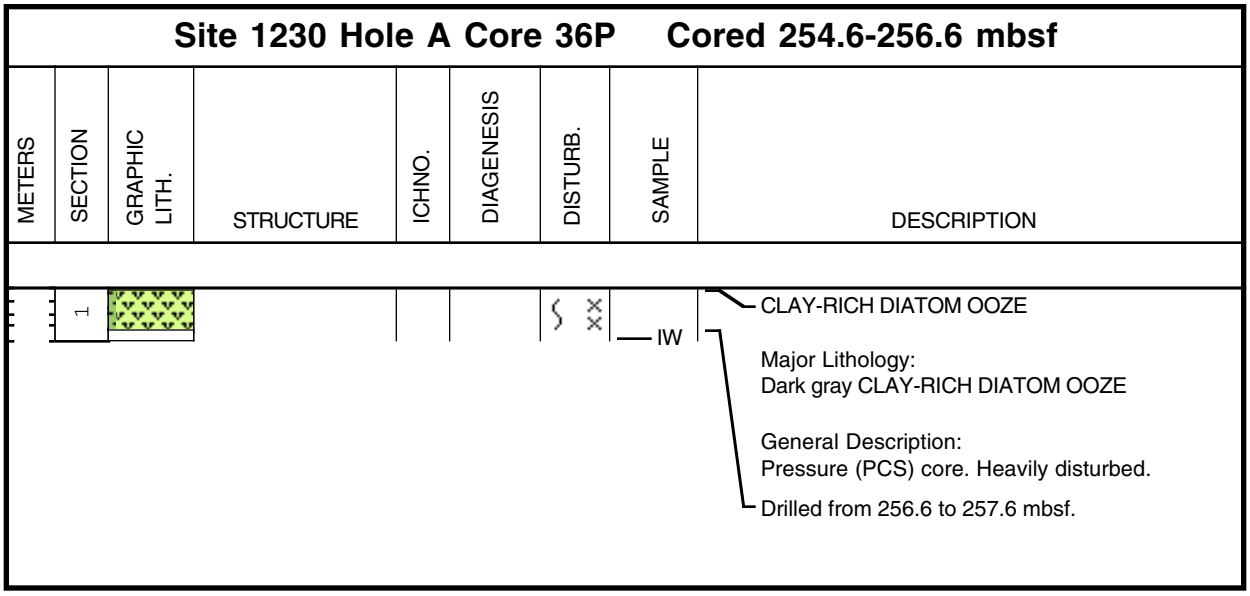
**Site 1230 Hole A Core 34H Cored 244.0-245.0 mbsf**

| METERS | SECTION | GRAPHIC LITH. | STRUCTURE | ICHNO. | DIAGENESIS | DISTURB. | SAMPLE | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| 0.5 | 1 | | | | | | IW | DIATOM-RICH CLAY<br><br>Major Lithology:<br>Very dark gray and dry DIATOM-RICH CLAY<br><br>General Description:<br>Few hard (presumably dolomite) pebbles are present in Section 1, which is was heavily disturbed by drilling. A dolomite nodule in Section CC contains mm-scale round yellow clasts in a dark gray matrix. |

## Core Photo


Site 1230 Hole A Core 35X Cored 245.0-254.6 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
1
2
3
4
5
6
7
SS
XRD
IW
IW
XRD
SS
XRD
XRD
SS
PP
IW
SPICULE-BEARING DIATOM-RICH CLAY, QUARTZ-BEARING DOLOMITE-RICH CLAY, and DOLOMITE- AND DIATOM-RICH NANNOFOSSIL-CLAY
Major Lithology:
1. Dark brown SPICULE-BEARING DIATOM-RICH CLAY
2. Dark gray QUARTZ-BEARING DOLOMITE-RICH CLAY
3. Dark brown DOLOMITE- AND DIATOM-RICH NANNOFOSSIL-CLAY
General Description:
Lithology 1 is present in Sections 1 through 3. Section 3 is highly bioturbated. Lithology 2 is present in Sections 4 and 5, which are rich in disseminated dolomite and contain two carbonate nodules. These layers are also characterized by pervasive cleavage and fracturing. Sections 6 through CC are dominated by lithology 3. Volcanic glass was found in the CC.
Voids:
Section 1, 17-21 cm
Section 2, 16-46 cm
Section 5, 84-126 cm
Entire Section 3, 0-150 cm, was sampled for microbiology.

## Core Photo


Site 1230 Hole A Core 36P Cored 254.6-256.6 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
1
IW
CLAY-RICH DIATOM OOZE
Major Lithology:
Dark gray CLAY-RICH DIATOM OOZE
General Description:
Pressure (PCS) core. Heavily disturbed.
Drilled from 256.6 to 257.6 mbsf.

## Core Photo

**Site 1230 Hole A Core 37X Cored 257.6-267.2 mbsf**

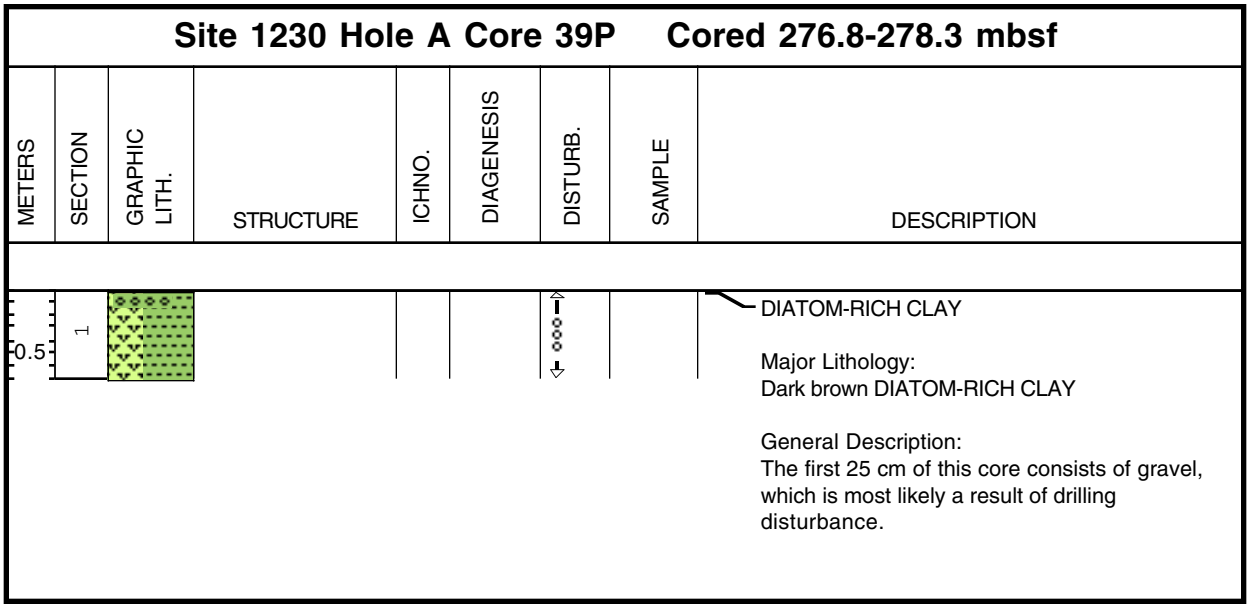
| METERS | SECTION | GRAPHIC LITH. | STRUCTURE | ICHNO. | DIAGENESIS | DISTURB. | SAMPLE | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| 0.5<br>1.0 | 1 | | | | | | IW | QUARTZ- AND FELDSPAR-RICH DIATOM OOZE<br><br>Major Lithology:<br>Dark brown QUARTZ- AND FELDSPAR-RICH DIATOM OOZE<br><br>General Description:<br>The top 20 cm of the core are soupy. The remainder of the sediment is heavily fractured.<br><br>Section 1, 45-115 cm was sampled for microbiology. |

## Core Photo

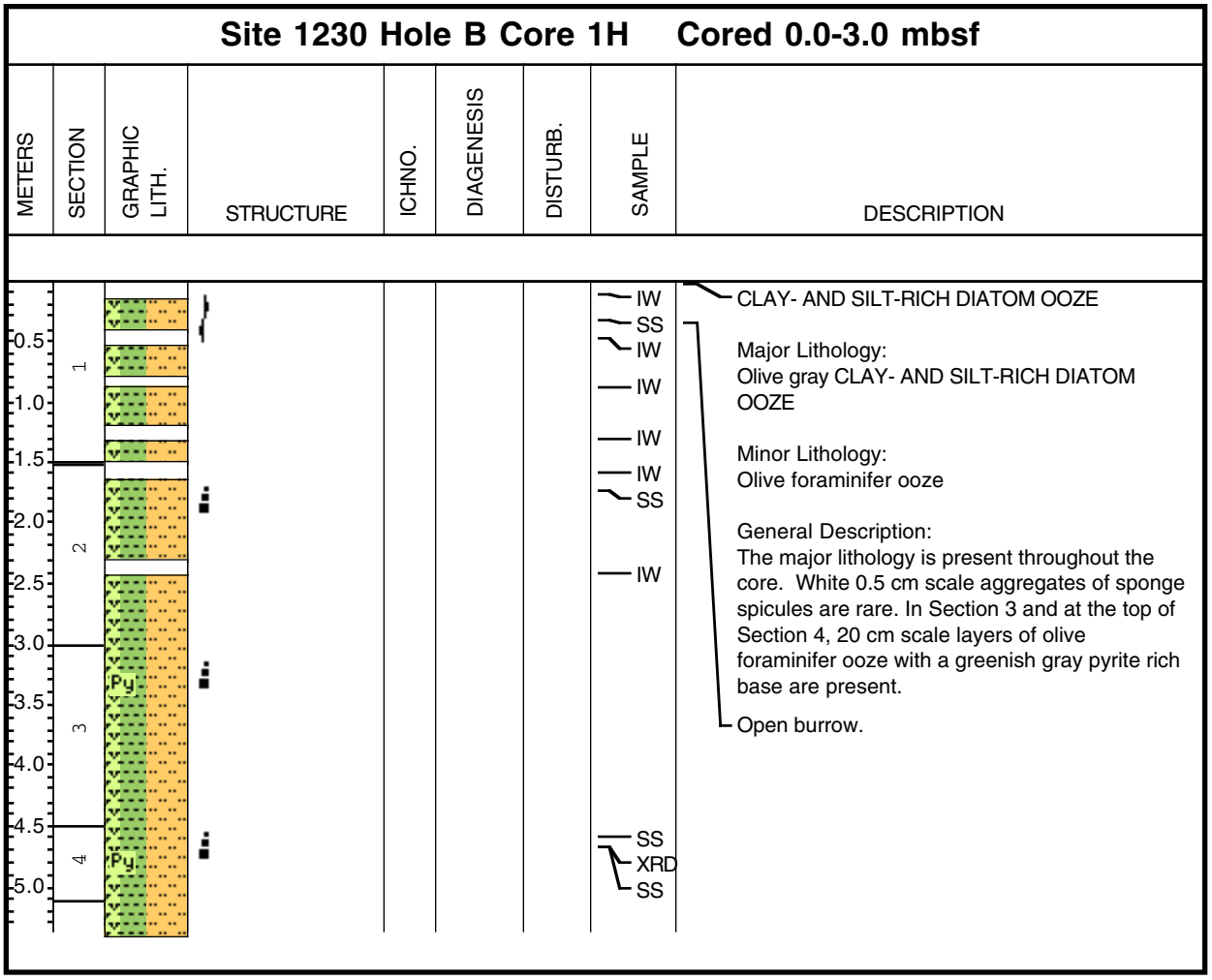
**Site 1230 Hole A Core 38X Cored 267.2-276.8 mbsf**

| METERS | SECTION | GRAPHIC LITH. | STRUCTURE | ICHNO. | DIAGENESIS | DISTURB. | SAMPLE | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| 0.5<br>1.0<br>1.5 | 1<br>2 | | | | | | IW | QUARTZ- AND CLAY-RICH DIATOM OOZE<br><br>Major Lithology:<br>Dark olive QUARTZ- AND CLAY-RICH DIATOM OOZE<br><br>General Description:<br>The top 10 cm of Section 1 contains rounded carbonate clasts, 1-2 cm in a soupy matrix.<br><br>Section 1, 53-150 was sampled for microbiology. |

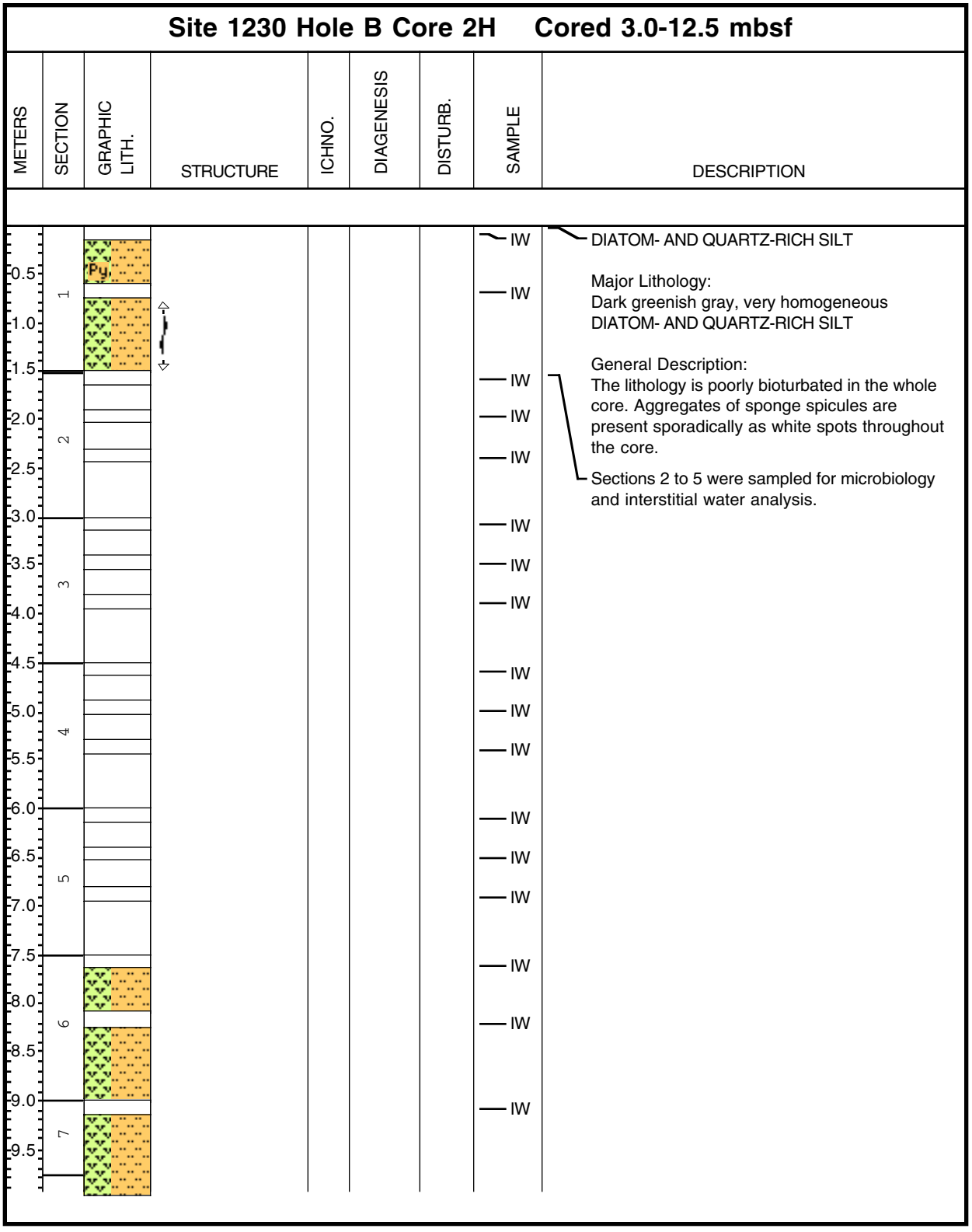
## Core Photo


Site 1230 Hole A Core 39P Cored 276.8-278.3 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1
DIATOM-RICH CLAY
Major Lithology:
Dark brown DIATOM-RICH CLAY
General Description:
The first 25 cm of this core consists of gravel, which is most likely a result of drilling disturbance.

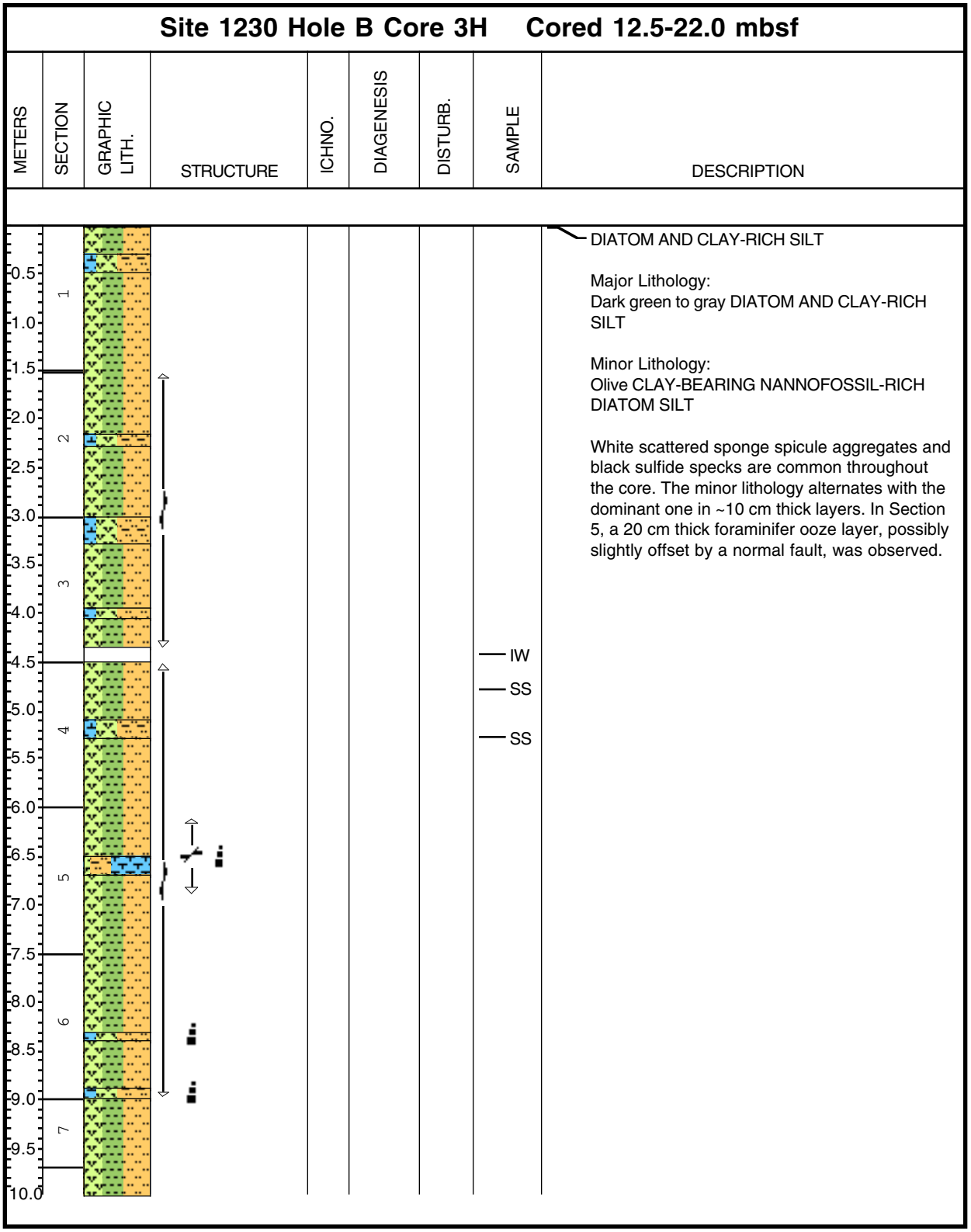
## Core Photo


Site 1230 Hole B Core 1H Cored 0.0-3.0 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
1
2
3
4
Py
Py
IW
SS
IW
IW
IW
IW
SS
IW
SS
XRD
SS
CLAY- AND SILT-RICH DIATOM OOZE
Major Lithology:
Olive gray CLAY- AND SILT-RICH DIATOM OOZE
Minor Lithology:
Olive foraminifer ooze
General Description:
The major lithology is present throughout the core. White 0.5 cm scale aggregates of sponge spicules are rare. In Section 3 and at the top of Section 4, 20 cm scale layers of olive foraminifer ooze with a greenish gray pyrite rich base are present.
Open burrow.

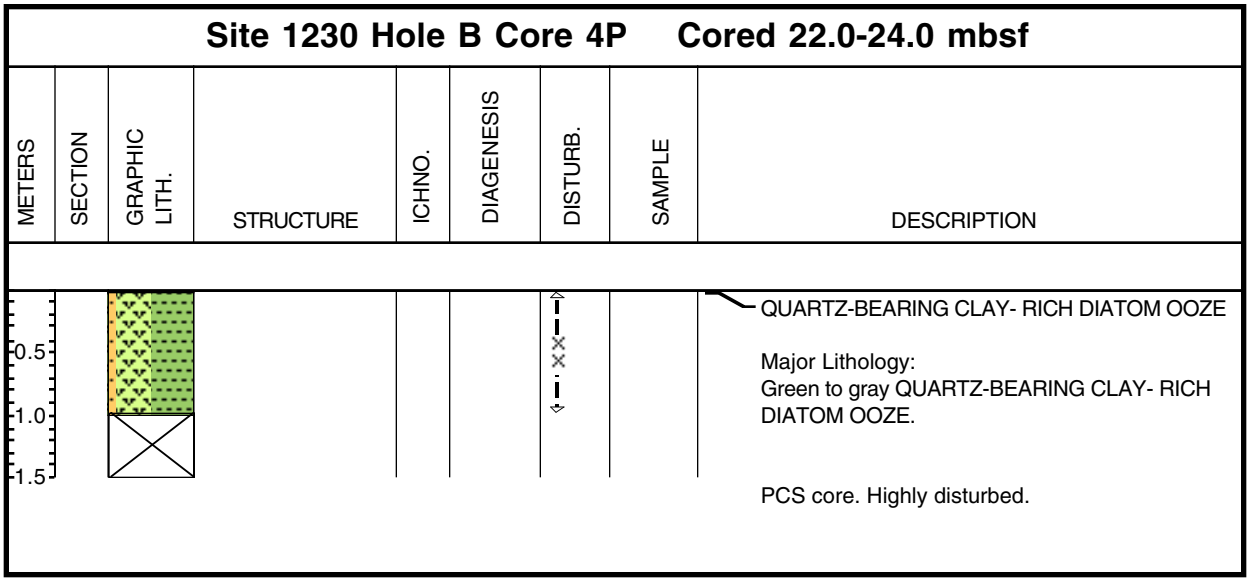
## Core Photo


Site 1230 Hole B Core 2H Cored 3.0-12.5 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
Py
IW
DIATOM- AND QUARTZ-RICH SILT
Major Lithology:
Dark greenish gray, very homogeneous DIATOM- AND QUARTZ-RICH SILT
General Description:
The lithology is poorly bioturbated in the whole core. Aggregates of sponge spicules are present sporadically as white spots throughout the core.
Sections 2 to 5 were sampled for microbiology and interstitial water analysis.

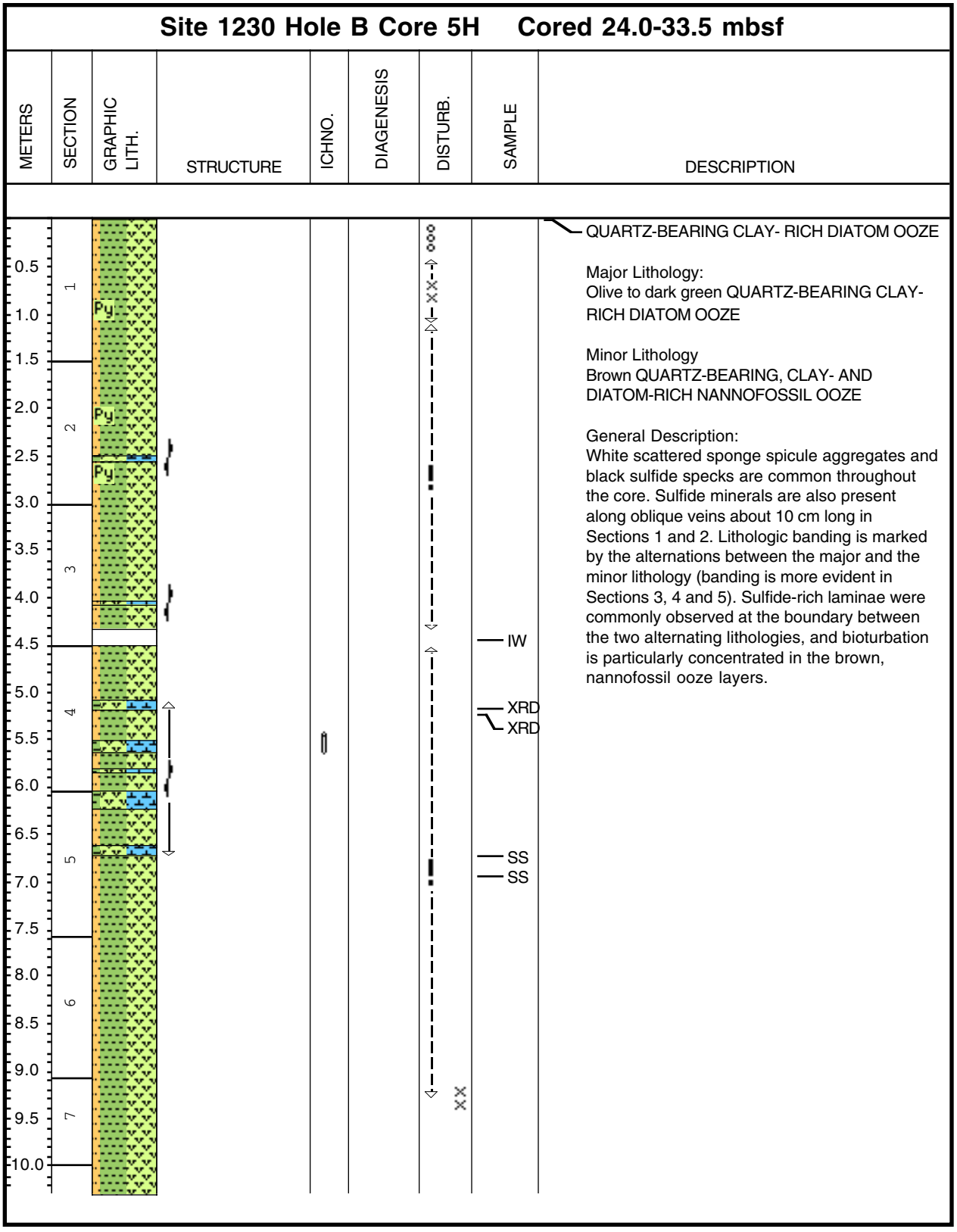
## Core Photo


Site 1230 Hole B Core 3H Cored 12.5-22.0 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
1
2
3
4
5
6
7
IW
SS
SS
DIATOM AND CLAY-RICH SILT
Major Lithology:
Dark green to gray DIATOM AND CLAY-RICH SILT
Minor Lithology:
Olive CLAY-BEARING NANNOFOSSIL-RICH DIATOM SILT
White scattered sponge spicule aggregates and black sulfide specks are common throughout the core. The minor lithology alternates with the dominant one in ~10 cm thick layers. In Section 5, a 20 cm thick foraminifer ooze layer, possibly slightly offset by a normal fault, was observed.

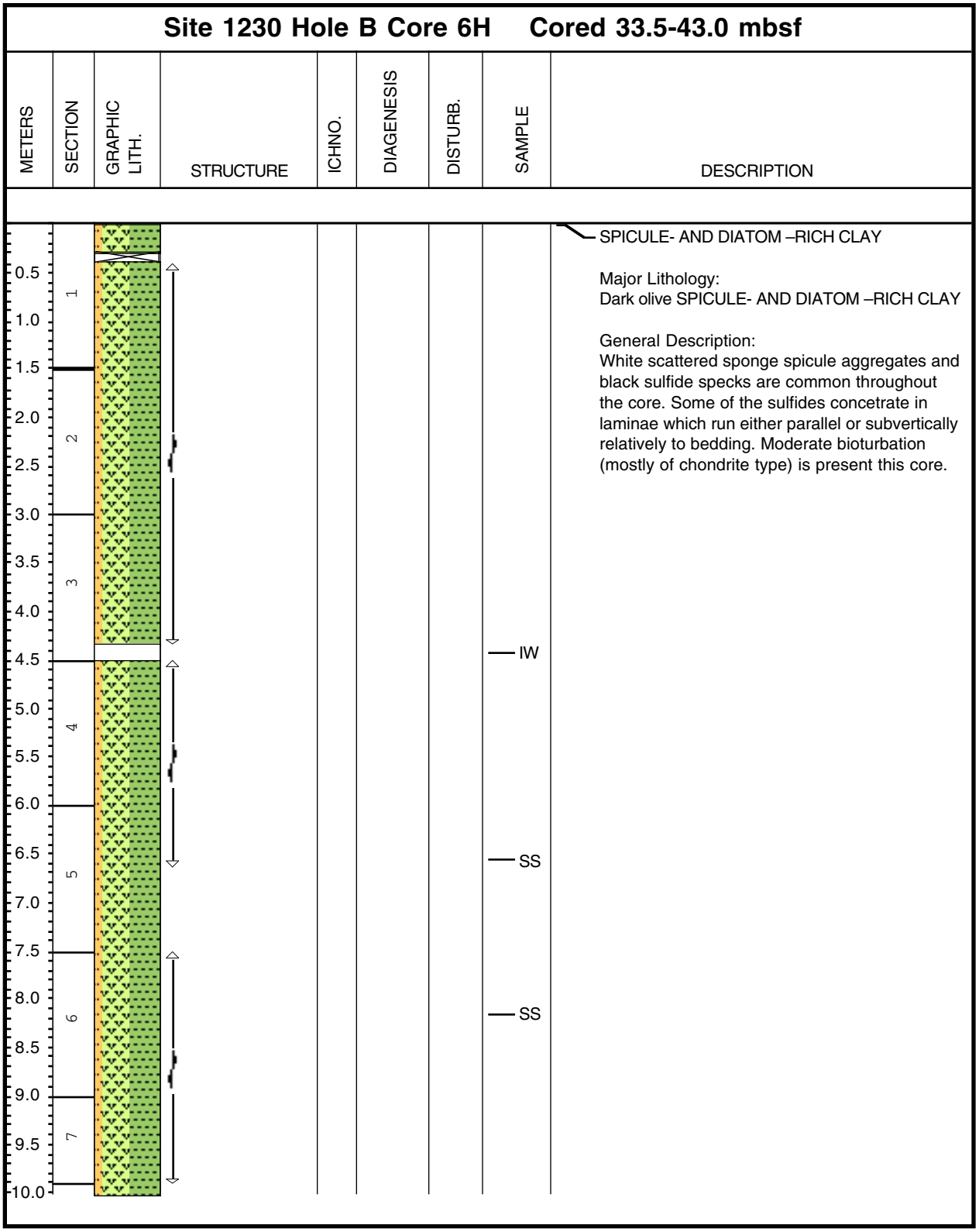
## Core Photo


Site 1230 Hole B Core 4P Cored 22.0-24.0 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
QUARTZ-BEARING CLAY- RICH DIATOM OOZE
Major Lithology:
Green to gray QUARTZ-BEARING CLAY- RICH DIATOM OOZE.
PCS core. Highly disturbed.

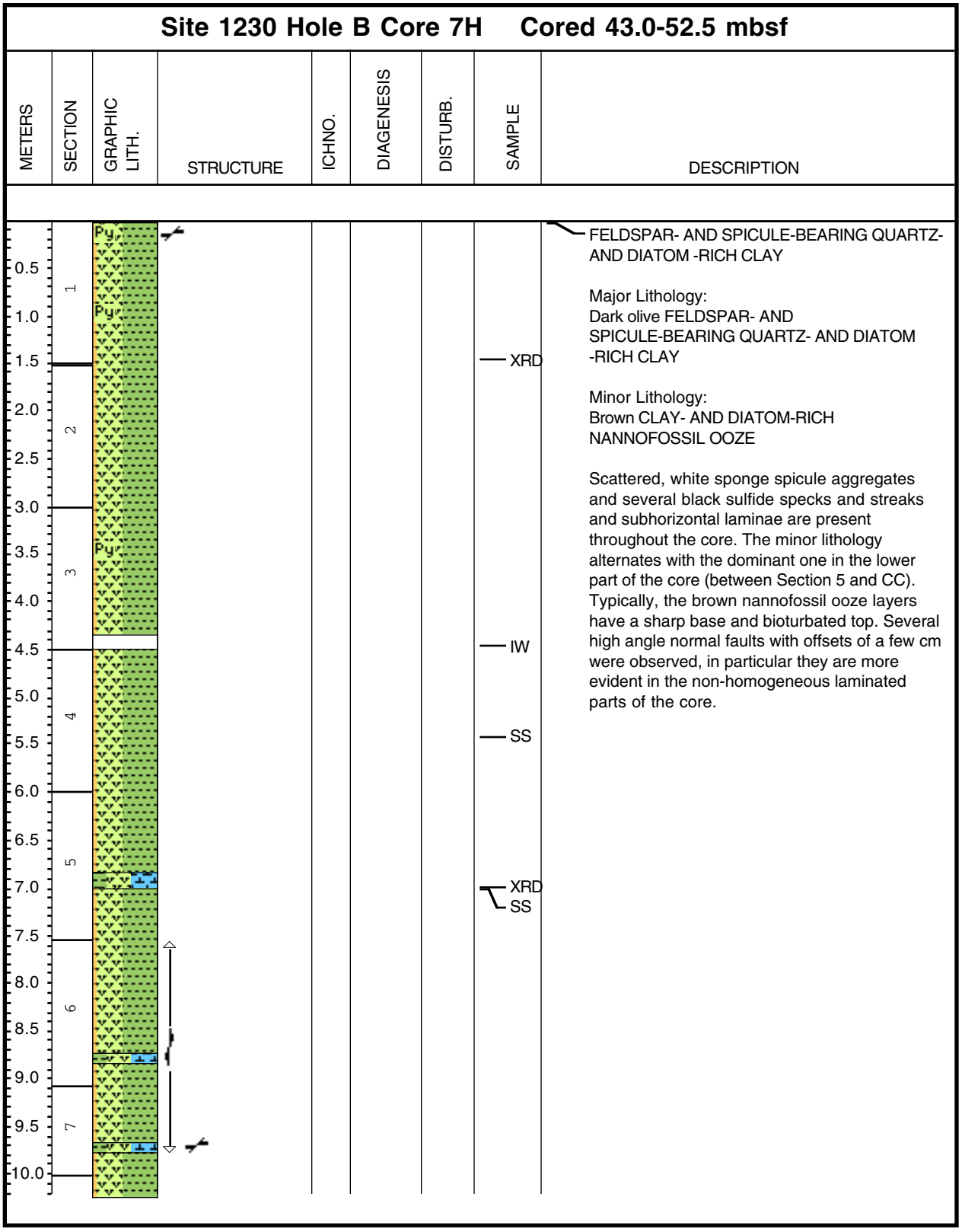
## Core Photo


Site 1230 Hole B Core 5H Cored 24.0-33.5 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
1
2
3
4
5
6
7
Py
Py
Py
IW
XRD
XRD
SS
SS
QUARTZ-BEARING CLAY- RICH DIATOM OOZE
Major Lithology:
Olive to dark green QUARTZ-BEARING CLAY-RICH DIATOM OOZE
Minor Lithology
Brown QUARTZ-BEARING, CLAY- AND DIATOM-RICH NANNOFOSSIL OOZE
General Description:
White scattered sponge spicule aggregates and black sulfide specks are common throughout the core. Sulfide minerals are also present along oblique veins about 10 cm long in Sections 1 and 2. Lithologic banding is marked by the alternations between the major and the minor lithology (banding is more evident in Sections 3, 4 and 5). Sulfide-rich laminae were commonly observed at the boundary between the two alternating lithologies, and bioturbation is particularly concentrated in the brown, nannofossil ooze layers.

## Core Photo

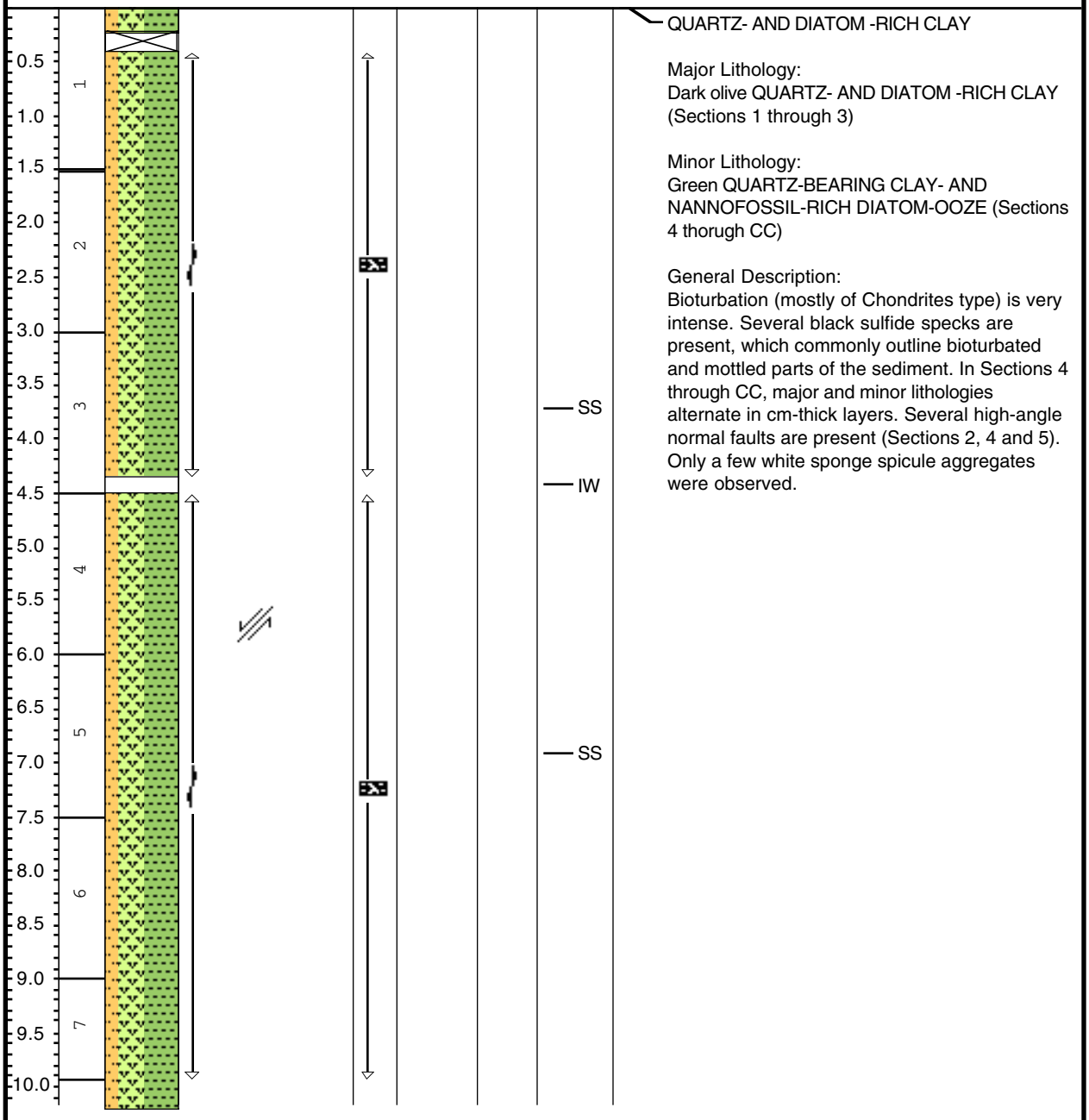

Site 1230 Hole B Core 6H Cored 33.5-43.0 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
1
2
3
4
5
6
7
IW
SS
SS
SPICULE- AND DIATOM –RICH CLAY
Major Lithology:
Dark olive SPICULE- AND DIATOM –RICH CLAY
General Description:
White scattered sponge spicule aggregates and black sulfide specks are common throughout the core. Some of the sulfides concetrate in laminae which run either parallel or subvertically relatively to bedding. Moderate bioturbation (mostly of chondrite type) is present this core.

## Core Photo

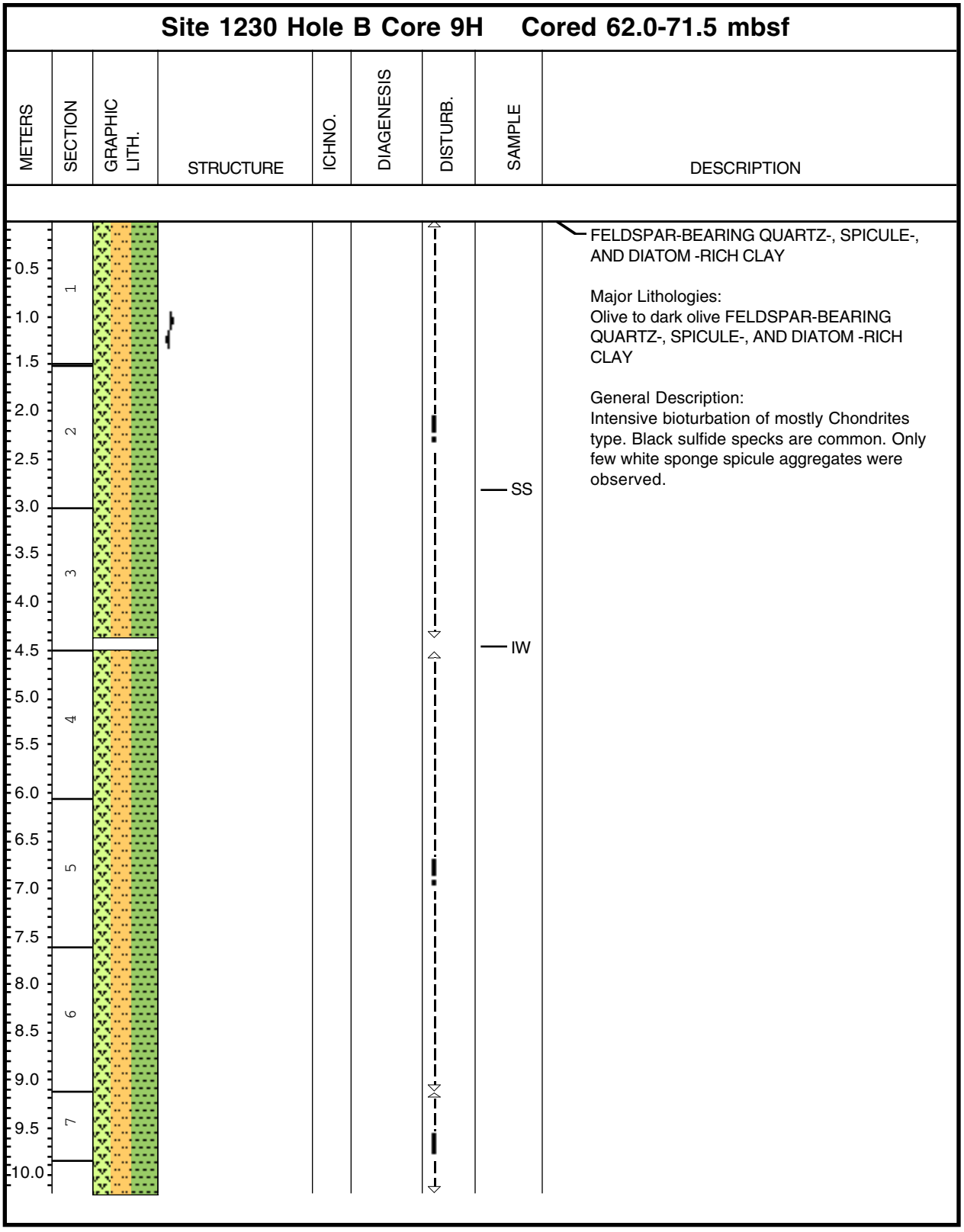

Site 1230 Hole B Core 7H Cored 43.0-52.5 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
1
2
3
4
5
6
7
Py
XRD
IW
SS
XRD
SS
FELDSPAR- AND SPICULE-BEARING QUARTZ- AND DIATOM -RICH CLAY
Major Lithology:
Dark olive FELDSPAR- AND SPICULE-BEARING QUARTZ- AND DIATOM -RICH CLAY
Minor Lithology:
Brown CLAY- AND DIATOM-RICH NANNOFOSSIL OOZE
Scattered, white sponge spicule aggregates and several black sulfide specks and streaks and subhorizontal laminae are present throughout the core. The minor lithology alternates with the dominant one in the lower part of the core (between Section 5 and CC). Typically, the brown nannofossil ooze layers have a sharp base and bioturbated top. Several high angle normal faults with offsets of a few cm were observed, in particular they are more evident in the non-homogeneous laminated parts of the core.

## Core Photo

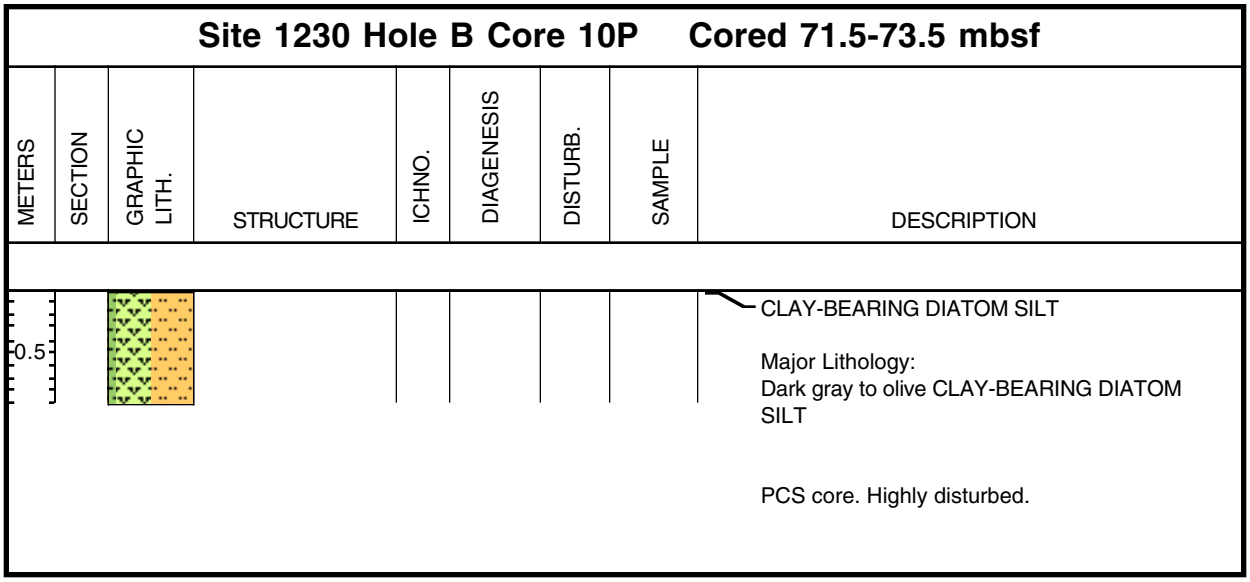
**Site 1230 Hole B Core 8H Cored 52.5-62.0 mbsf**



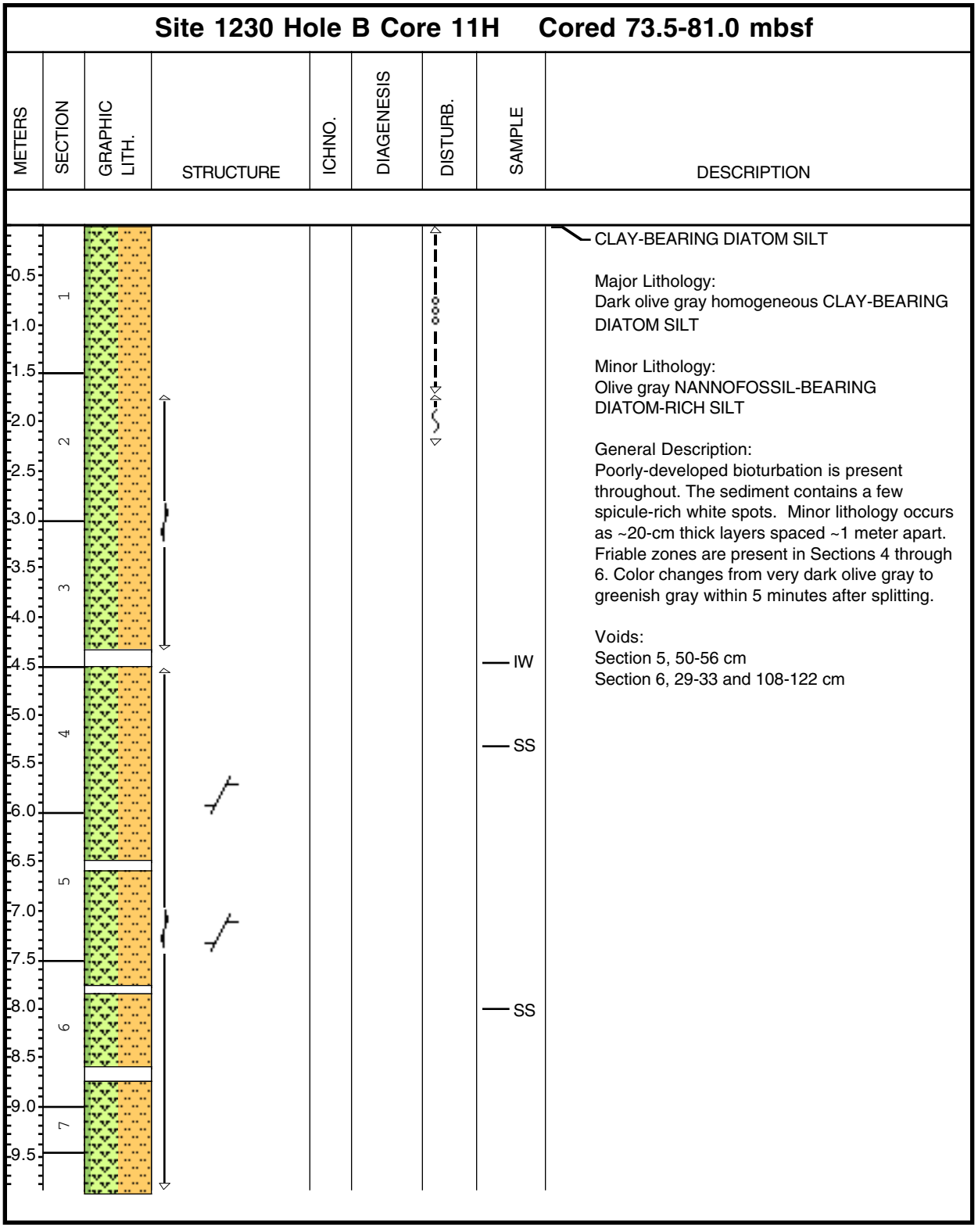
## Core Photo


Site 1230 Hole B Core 9H Cored 62.0-71.5 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
1
2
3
4
5
6
7
SS
IW
FELDSPAR-BEARING QUARTZ-, SPICULE-, AND DIATOM -RICH CLAY
Major Lithologies:
Olive to dark olive FELDSPAR-BEARING QUARTZ-, SPICULE-, AND DIATOM -RICH CLAY
General Description:
Intensive bioturbation of mostly Chondrites type. Black sulfide specks are common. Only few white sponge spicule aggregates were observed.

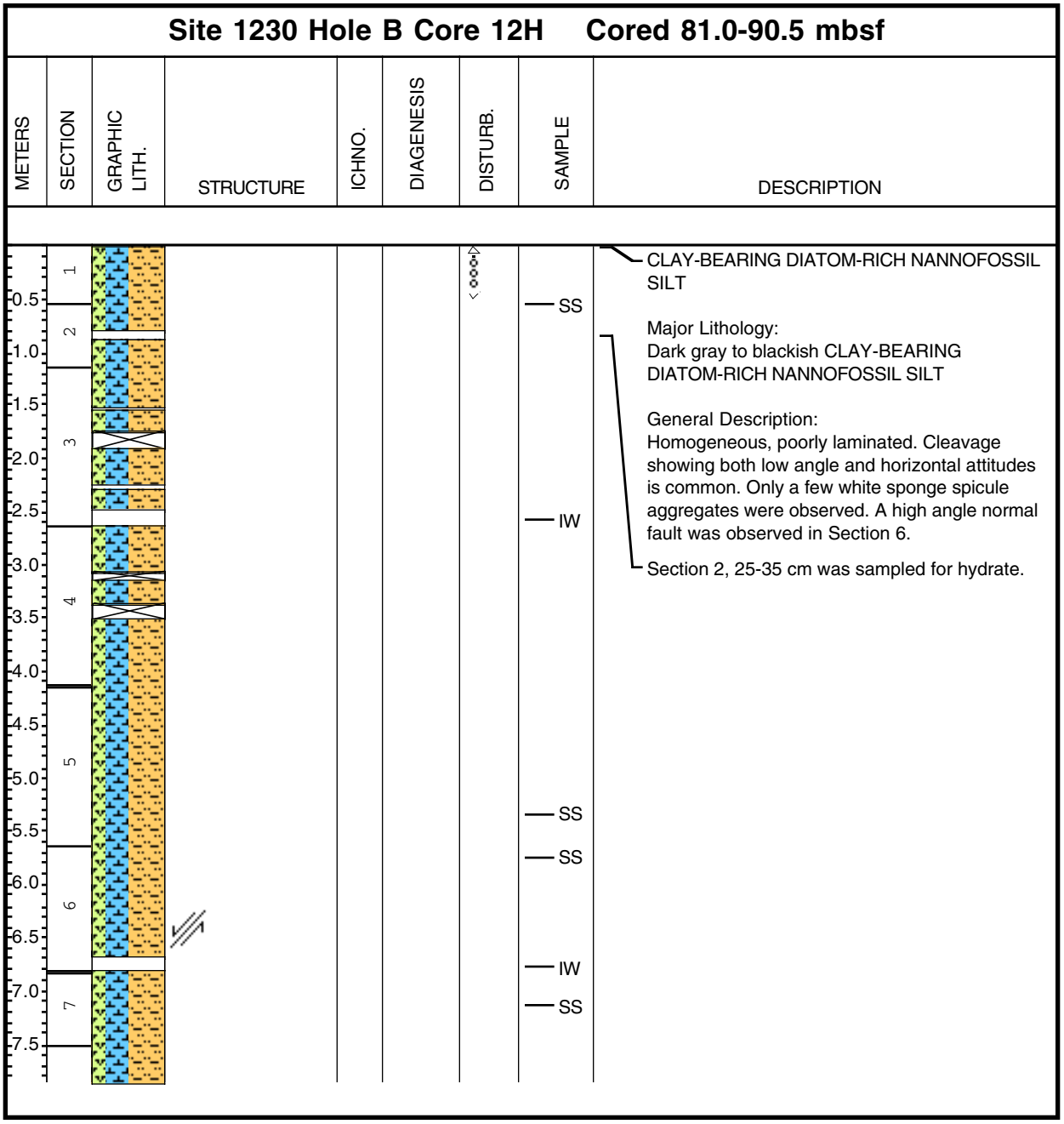
## Core Photo


Site 1230 Hole B Core 10P Cored 71.5-73.5 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
CLAY-BEARING DIATOM SILT
Major Lithology:
Dark gray to olive CLAY-BEARING DIATOM SILT
PCS core. Highly disturbed.

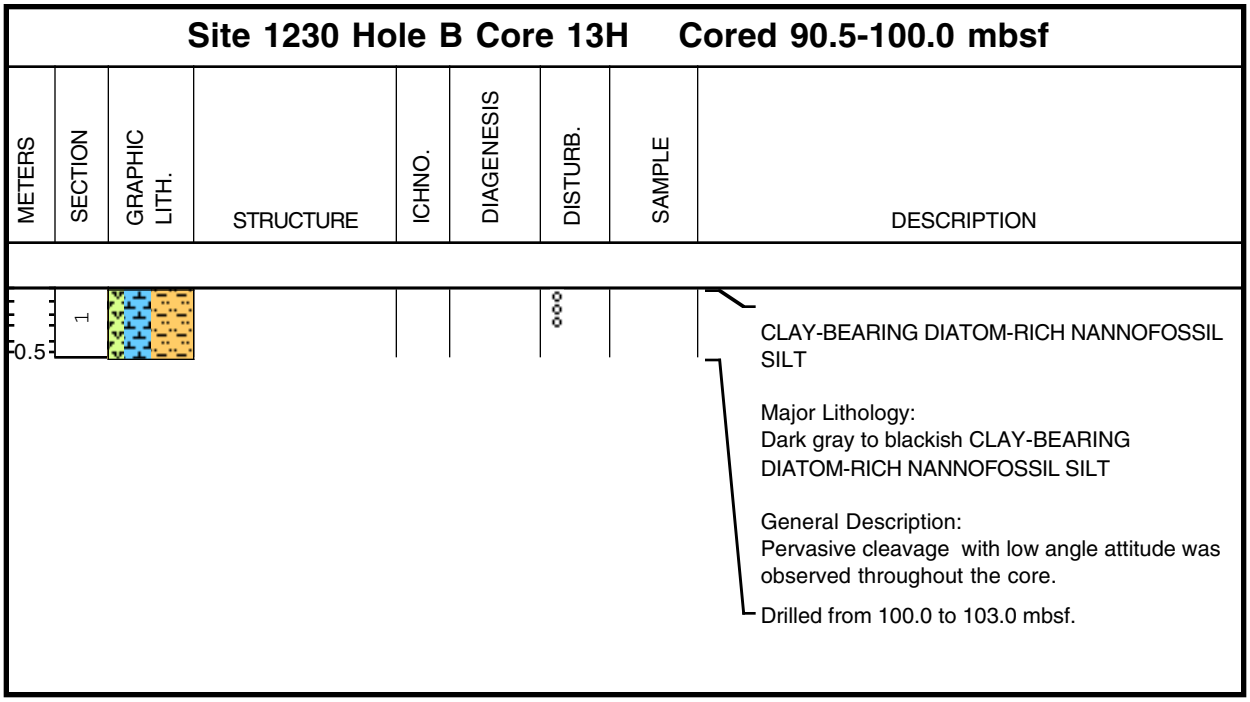
## Core Photo


Site 1230 Hole B Core 11H Cored 73.5-81.0 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
1
2
3
4
5
6
7
IW
SS
SS
CLAY-BEARING DIATOM SILT
Major Lithology:
Dark olive gray homogeneous CLAY-BEARING DIATOM SILT
Minor Lithology:
Olive gray NANNOFOSSIL-BEARING DIATOM-RICH SILT
General Description:
Poorly-developed bioturbation is present throughout. The sediment contains a few spicule-rich white spots. Minor lithology occurs as ~20-cm thick layers spaced ~1 meter apart. Friable zones are present in Sections 4 through 6. Color changes from very dark olive gray to greenish gray within 5 minutes after splitting.
Voids:
Section 5, 50-56 cm
Section 6, 29-33 and 108-122 cm

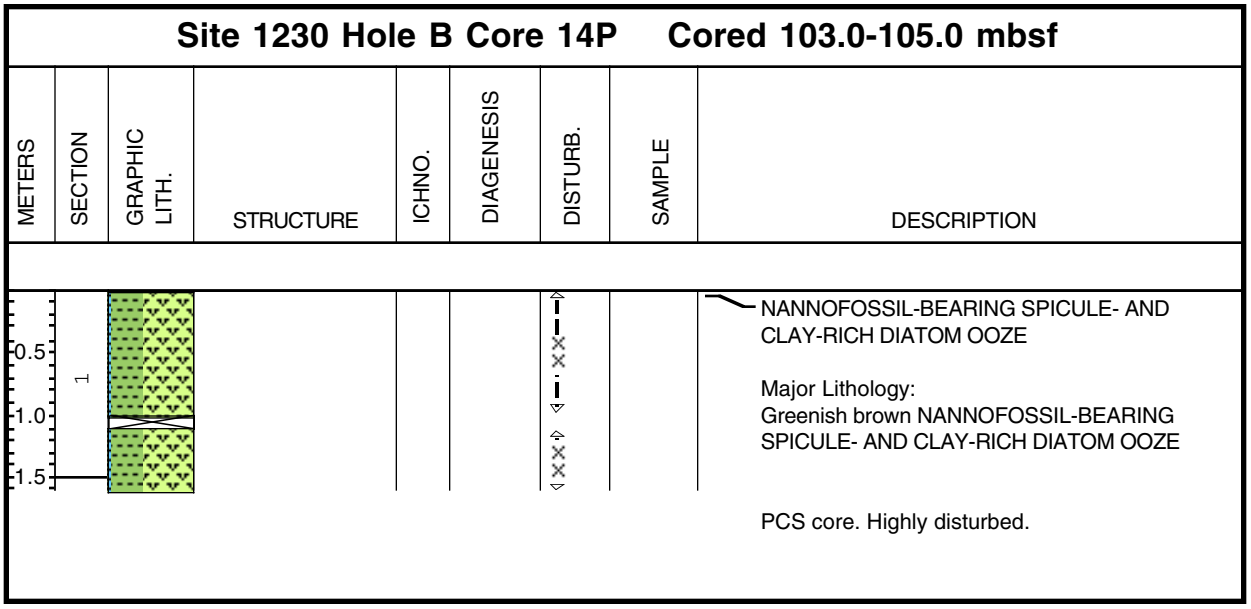
## Core Photo


Site 1230 Hole B Core 12H Cored 81.0-90.5 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
1
2
3
4
5
6
7
SS
IW
SS
SS
IW
SS
CLAY-BEARING DIATOM-RICH NANNOFOSSIL SILT
Major Lithology:
Dark gray to blackish CLAY-BEARING DIATOM-RICH NANNOFOSSIL SILT
General Description:
Homogeneous, poorly laminated. Cleavage showing both low angle and horizontal attitudes is common. Only a few white sponge spicule aggregates were observed. A high angle normal fault was observed in Section 6.
Section 2, 25-35 cm was sampled for hydrate.

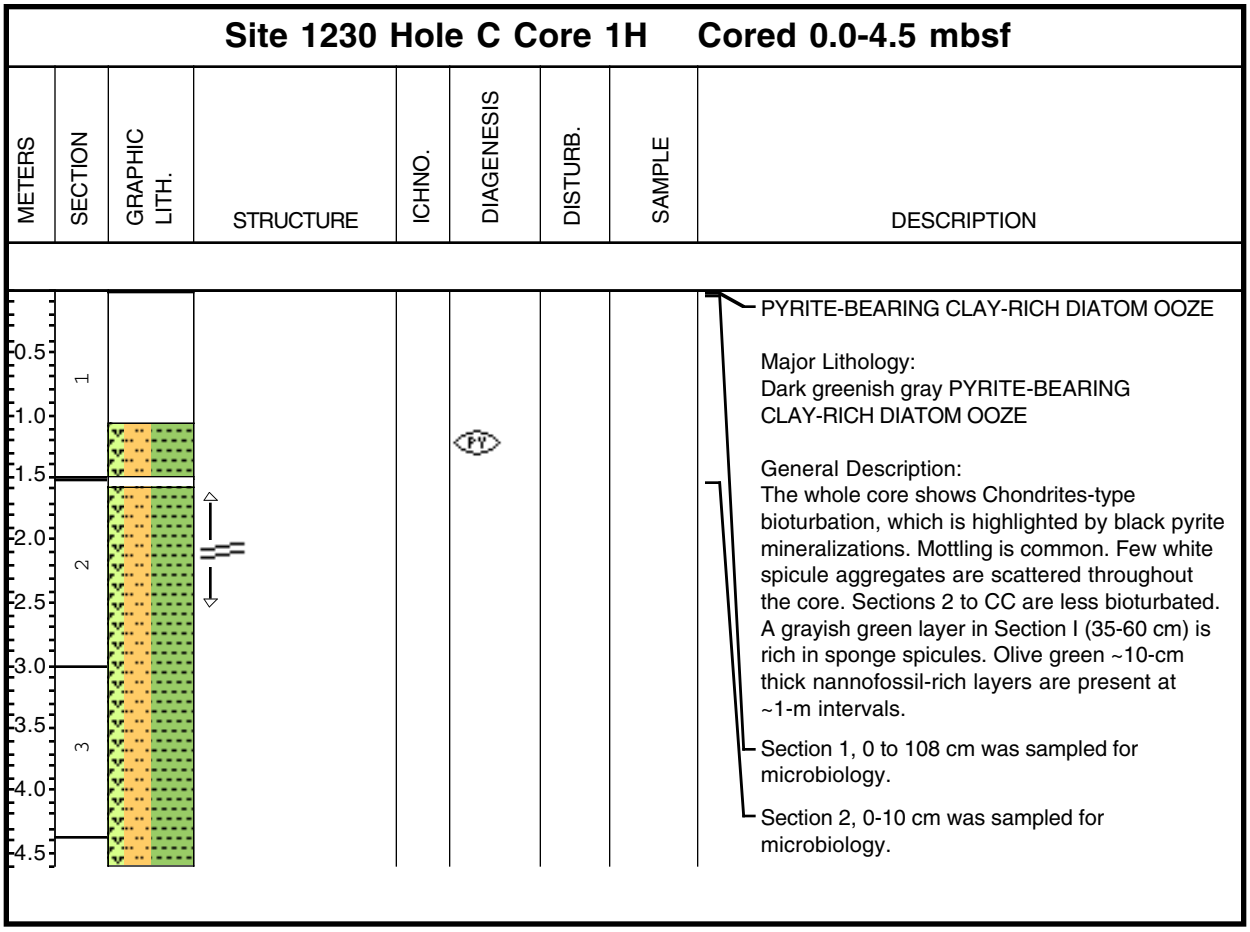
## Core Photo


Site 1230 Hole B Core 13H Cored 90.5-100.0 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1
CLAY-BEARING DIATOM-RICH NANNOFOSSIL SILT
Major Lithology:
Dark gray to blackish CLAY-BEARING DIATOM-RICH NANNOFOSSIL SILT
General Description:
Pervasive cleavage with low angle attitude was observed throughout the core.
Drilled from 100.0 to 103.0 mbsf.

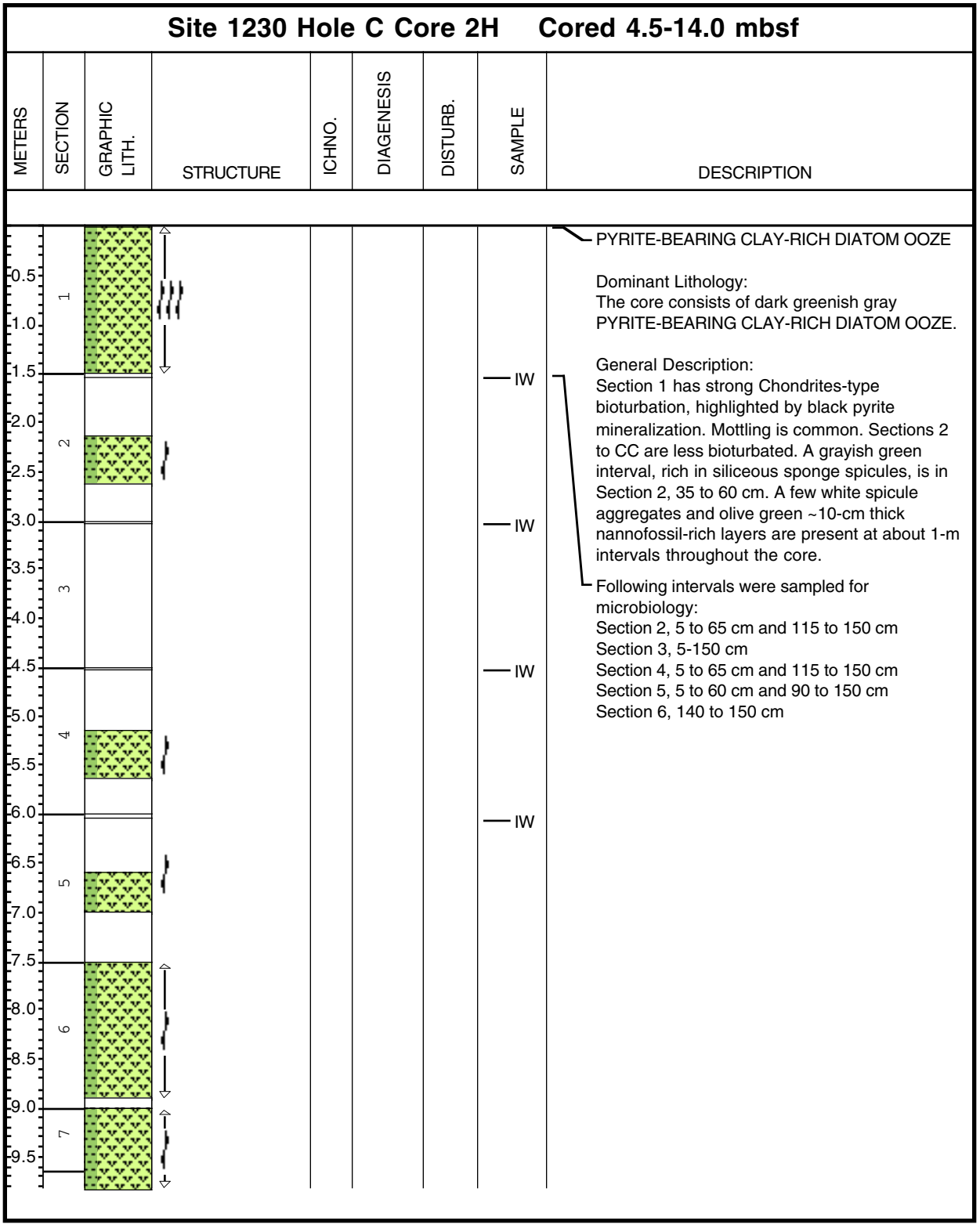
## Core Photo


Site 1230 Hole B Core 14P Cored 103.0-105.0 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
1
NANNOFOSSIL-BEARING SPICULE- AND CLAY-RICH DIATOM OOZE
Major Lithology:
Greenish brown NANNOFOSSIL-BEARING SPICULE- AND CLAY-RICH DIATOM OOZE
PCS core. Highly disturbed.

## Core Photo

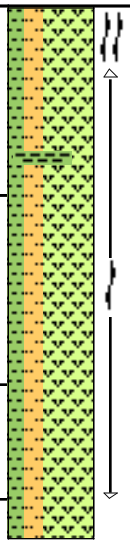

Site 1230 Hole C Core 1H Cored 0.0-4.5 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
1
2
3
PY
PYRITE-BEARING CLAY-RICH DIATOM OOZE
Major Lithology:
Dark greenish gray PYRITE-BEARING CLAY-RICH DIATOM OOZE
General Description:
The whole core shows Chondrites-type bioturbation, which is highlighted by black pyrite mineralizations. Mottling is common. Few white spicule aggregates are scattered throughout the core. Sections 2 to CC are less bioturbated. A grayish green layer in Section I (35-60 cm) is rich in sponge spicules. Olive green ~10-cm thick nannofossil-rich layers are present at ~1-m intervals.
Section 1, 0 to 108 cm was sampled for microbiology.
Section 2, 0-10 cm was sampled for microbiology.

## Core Photo

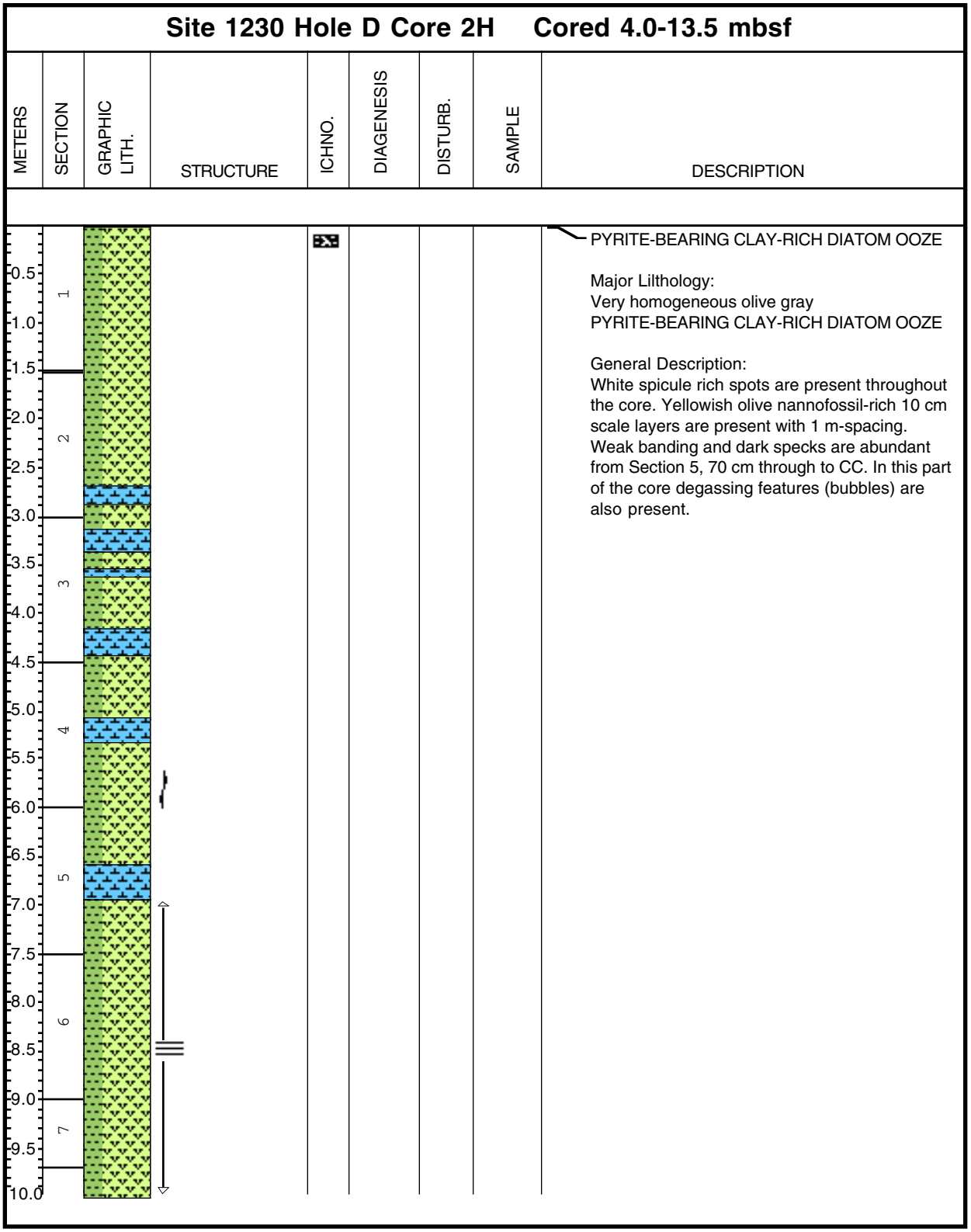

Site 1230 Hole C Core 2H Cored 4.5-14.0 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
1
2
3
4
5
6
7
IW
IW
IW
IW
PYRITE-BEARING CLAY-RICH DIATOM OOZE
Dominant Lithology:
The core consists of dark greenish gray PYRITE-BEARING CLAY-RICH DIATOM OOZE.
General Description:
Section 1 has strong Chondrites-type bioturbation, highlighted by black pyrite mineralization. Mottling is common. Sections 2 to CC are less bioturbated. A grayish green interval, rich in siliceous sponge spicules, is in Section 2, 35 to 60 cm. A few white spicule aggregates and olive green ~10-cm thick nannofossil-rich layers are present at about 1-m intervals throughout the core.
Following intervals were sampled for microbiology:
Section 2, 5 to 65 cm and 115 to 150 cm
Section 3, 5-150 cm
Section 4, 5 to 65 cm and 115 to 150 cm
Section 5, 5 to 60 cm and 90 to 150 cm
Section 6, 140 to 150 cm

## Core Photo

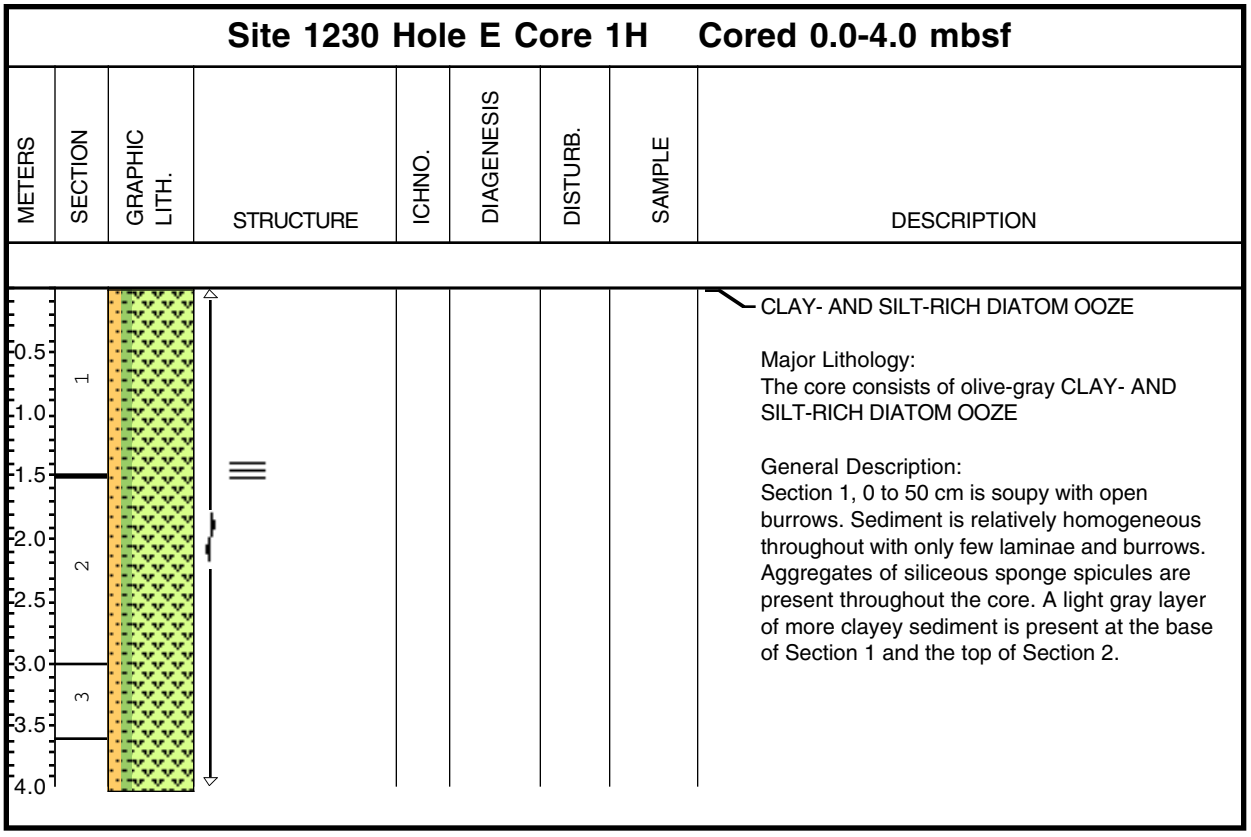
**Site 1230 Hole D Core 1H Cored 0.0-4.0 mbsf**

| METERS | SECTION | GRAPHIC LITH. | STRUCTURE | ICHNO. | DIAGENESIS | DISTURB. | SAMPLE | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| 0.5<br>1.0<br>1.5<br>2.0<br>2.5<br>3.0<br>3.5<br>4.0 | 1<br>2<br>3 |  | | | | | | CLAY- AND SILT-RICH DIATOM OOZE<br><br>Major Lithology:<br>Olive gray CLAY- AND SILT-RICH DIATOM OOZE<br><br>General Description><br>White spots with aggregates of sponge spicules are present throughout the core. Open burrows are in the soupy, water rich sediment in the top 50 cm of Section 1. |

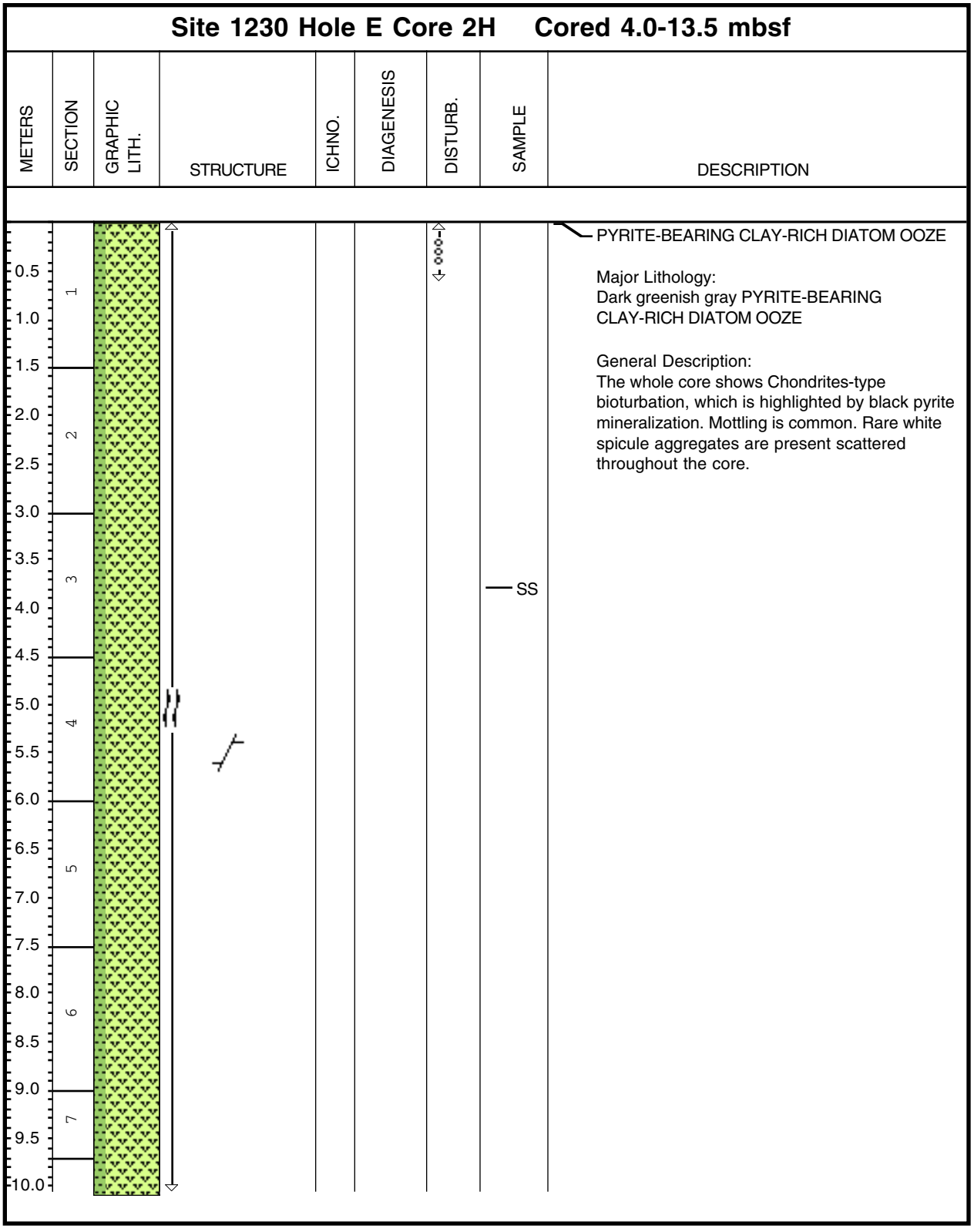
## Core Photo


Site 1230 Hole D Core 2H Cored 4.0-13.5 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
PYRITE-BEARING CLAY-RICH DIATOM OOZE
Major Lilthology:
Very homogeneous olive gray
PYRITE-BEARING CLAY-RICH DIATOM OOZE
General Description:
White spicule rich spots are present throughout the core. Yellowish olive nannofossil-rich 10 cm scale layers are present with 1 m-spacing. Weak banding and dark specks are abundant from Section 5, 70 cm through to CC. In this part of the core degassing features (bubbles) are also present.
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
1
2
3
4
5
6
7

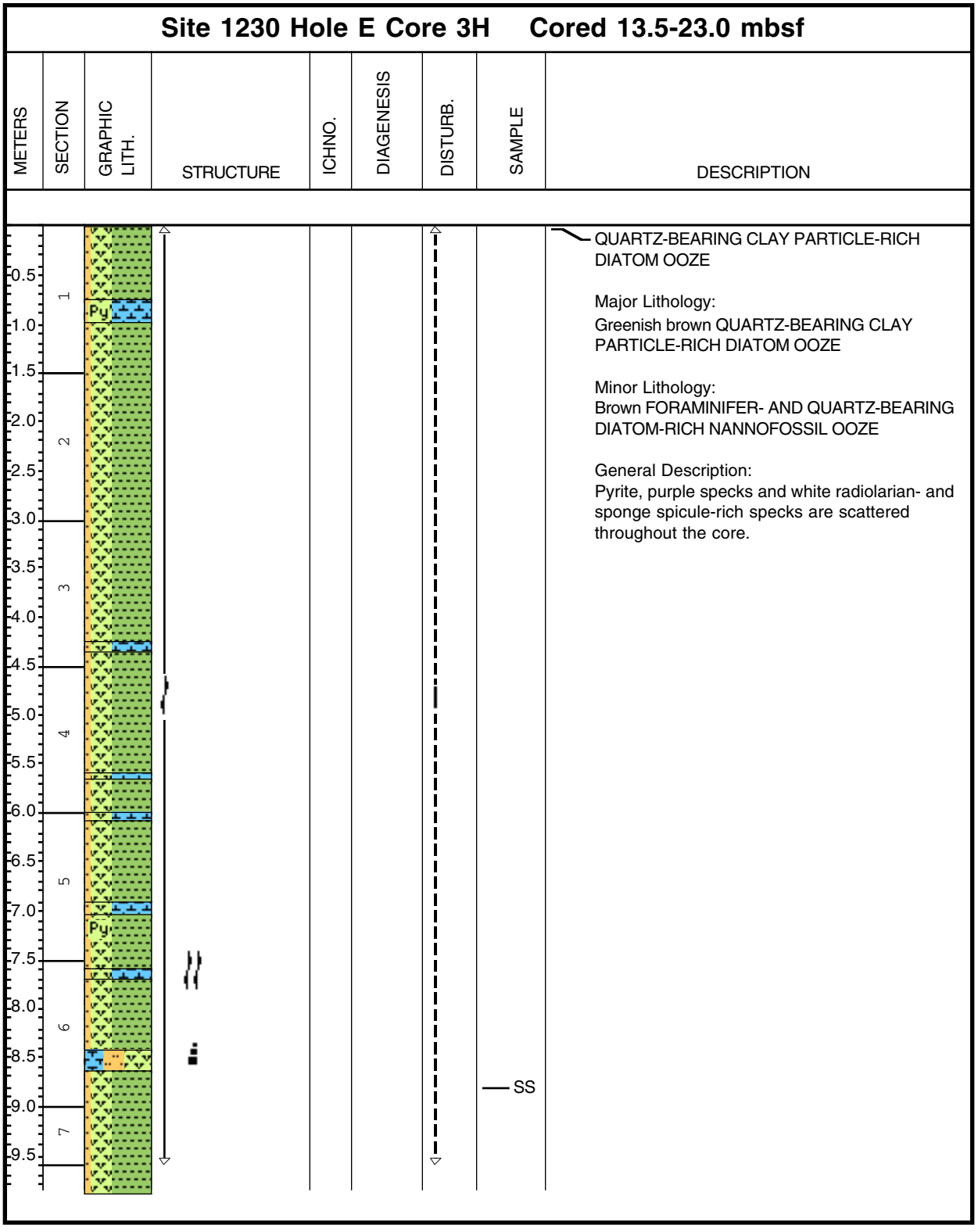
## Core Photo


Site 1230 Hole E Core 1H Cored 0.0-4.0 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
1
2
3
CLAY- AND SILT-RICH DIATOM OOZE
Major Lithology:
The core consists of olive-gray CLAY- AND SILT-RICH DIATOM OOZE
General Description:
Section 1, 0 to 50 cm is soupy with open burrows. Sediment is relatively homogeneous throughout with only few laminae and burrows. Aggregates of siliceous sponge spicules are present throughout the core. A light gray layer of more clayey sediment is present at the base of Section 1 and the top of Section 2.

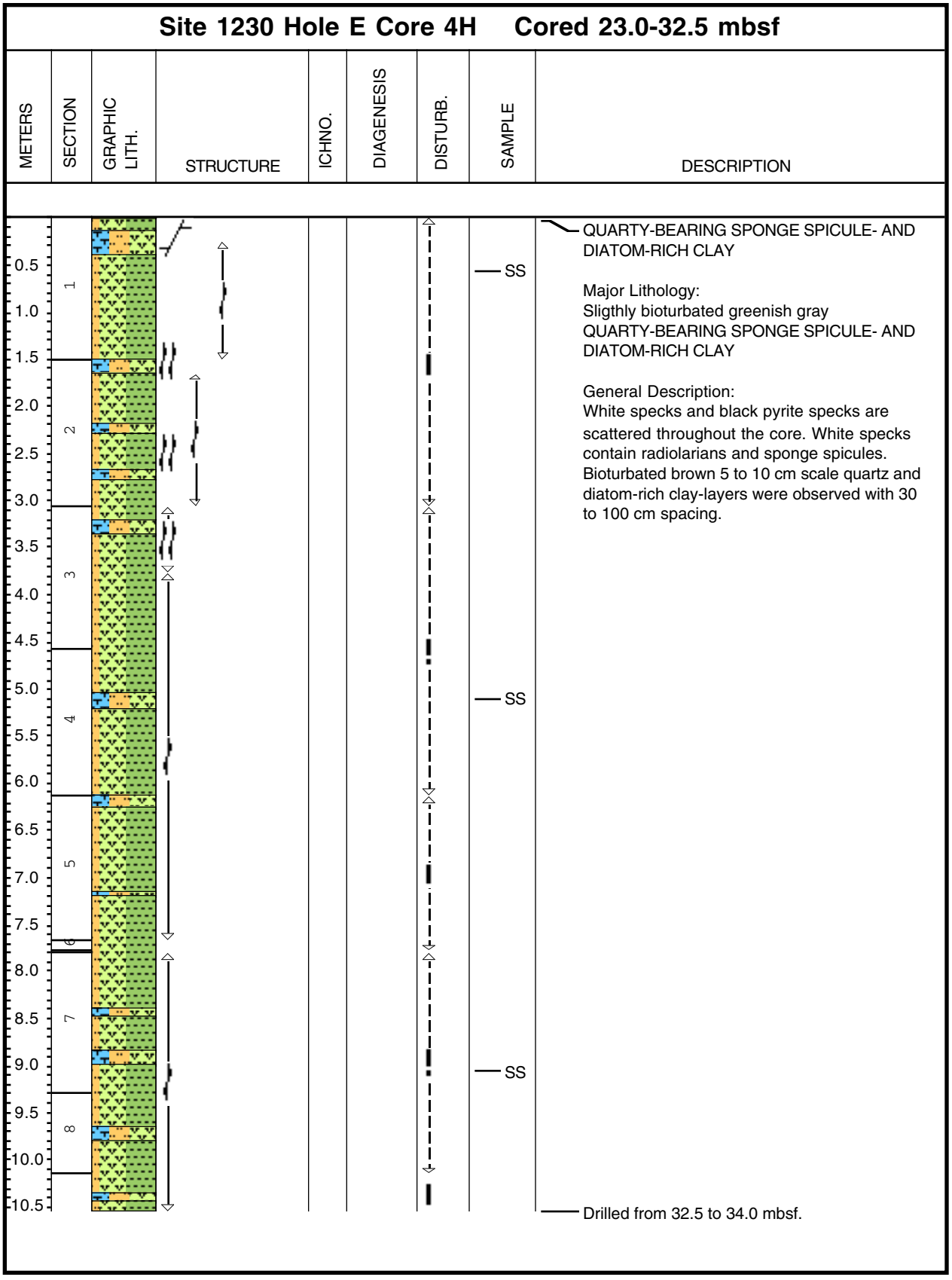
## Core Photo


Site 1230 Hole E Core 2H Cored 4.0-13.5 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
1
2
3
4
5
6
7
SS
PYRITE-BEARING CLAY-RICH DIATOM OOZE
Major Lithology:
Dark greenish gray PYRITE-BEARING CLAY-RICH DIATOM OOZE
General Description:
The whole core shows Chondrites-type bioturbation, which is highlighted by black pyrite mineralization. Mottling is common. Rare white spicule aggregates are present scattered throughout the core.

## Core Photo


Site 1230 Hole E Core 3H Cored 13.5-23.0 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
1
2
3
4
5
6
7
Py
Py
SS
QUARTZ-BEARING CLAY PARTICLE-RICH DIATOM OOZE
Major Lithology:
Greenish brown QUARTZ-BEARING CLAY PARTICLE-RICH DIATOM OOZE
Minor Lithology:
Brown FORAMINIFER- AND QUARTZ-BEARING DIATOM-RICH NANNOFOSSIL OOZE
General Description:
Pyrite, purple specks and white radiolarian- and sponge spicule-rich specks are scattered throughout the core.

## Core Photo


Site 1230 Hole E Core 4H Cored 23.0-32.5 mbsf
METERS
SECTION
GRAPHIC LITH.
STRUCTURE
ICHNO.
DIAGENESIS
DISTURB.
SAMPLE
DESCRIPTION
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
8.5
9.0
9.5
10.0
10.5
1
2
3
4
5
6
7
8
SS
SS
SS
QUARTY-BEARING SPONGE SPICULE- AND DIATOM-RICH CLAY
Major Lithology:
Sligthly bioturbated greenish gray QUARTY-BEARING SPONGE SPICULE- AND DIATOM-RICH CLAY
General Description:
White specks and black pyrite specks are scattered throughout the core. White specks contain radiolarians and sponge spicules. Bioturbated brown 5 to 10 cm scale quartz and diatom-rich clay-layers were observed with 30 to 100 cm spacing.
Drilled from 32.5 to 34.0 mbsf.

## Core Photo

**Site 1230 Hole E Core 5P Cored 34.0-34.5 mbsf**

| METERS | SECTION | GRAPHIC LITH. | STRUCTURE | ICHNO. | DIAGENESIS | DISTURB. | SAMPLE | DESCRIPTION |
|---|---|---|---|---|---|---|---|---|
| 0.5<br>1.0<br>1.5 | | | | | | | | QUARTZ- BEARING DIATOM-RICH CLAY<br><br>Major Lithology:<br>Homogeneous dark green gray QUARTZ-BEARING DIATOM-RICH CLAY<br><br>General Description:<br>White specks are aggregates of sponge spicules.<br><br>PCS core. Highly disturbed. |

| Sample | | | | | | Texture | | | Mineral | | | | | | | | | | | | Biogenic | | | | | | Rock | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Core | CT | Sct | Top (cm) | Depth (mbsf) | Lithology | Sand | Silt | Clay | Biotite (22) | Calcite (30) | Carbonate (35) | Clay Mineral (47) | Dolomite (62) | Feldspar (71) | Glauconite (82) | Hornblende (91) | Opaques (140) | Plagioclase (159) | Pyrite (169) | Quartz (172) | Diatoms (58) | Foraminifers (78) | Nannofossils (132) | Radiolarians (173) | Silicoflagellates (189) | Sponge Spicules (199) | Clay Size Particles (255) | Silt (191) | Volcanic Glass Shard (246) | Comments |
| **Hole A** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | H | 1 | 130 | 1.30 | D | | 30 | 70 | | | | | 1 | 10 | | | | | 5 | 15 | 50 | | | | | | 19 | | | Pyrite-bearing Feldspar-rich Diatom Ooze |
| 1 | H | 2 | 109 | 2.59 | M | | 90 | 10 | | | | | | | | | | | 20 | 39 | 4 | | 2 | | | 35 | | | | Pyrite- and Spicule-rich Quartz Silt |
| 2 | H | 4 | 70 | 10.00 | D | | | | | | | 15 | | | | | | | 3 | 15 | 60 | | 2 | | | 5 | | | | Sponge-bearing Clay- and Quartz-rich Diatom Ooze |
| 4 | H | 4 | 45 | 28.75 | M | | | | | | | 60 | | 2 | * | | | | | 8 | 30 | | | | | | | | | Diatom-rich Clay |
| 5 | H | 3 | 65 | 36.95 | D | | | | * | | | | | | * | | | | | 20 | 60 | | | | | * | 20 | | | Quartz- and Clay-rich Diatom Ooze |
| 5 | H | 4 | 45 | 38.25 | M | | | | | | | 30 | | | * | | | | * | 10 | 15 | 15 | 30 | | | | | | | Quartz-bearing Diatom- and Foraminifer-rich Nannofossil Ooze |
| 5 | H | 4 | 117 | 38.97 | M | | | | | | | | | | | | * | | | | 15 | 5 | 60 | | | | 20 | | | Clay- and Diatom-rich Nannofossil Ooze |
| 5 | H | 5 | 49 | 39.79 | M | | 70 | 30 | | | | | | | * | | | | * | 10 | 15 | 15 | 30 | | | | 30 | | | Quartz-bearing Diatom- Foraminifer- and Clay-rich Nannofossil Ooze |
| 6 | H | 1 | 90 | 43.70 | D | | | | | | * | | 3 | 4 | | | 3 | | | 5 | 49 | | | | 1 | 10 | 20 | 5 | | Quartz-bearing Sponge- and Clay-rich Diatom Ooze |
| 6 | H | 6 | 73 | 51.11 | D | | | | | * | | | * | 4 | 1 | | 3 | | | 8 | 60 | | | 2 | 3 | 4 | 5 | 10 | | Clay- and Quartz-bearing Diatom Ooze |
| 8 | H | 4 | 65 | 59.45 | D | | 30 | 70 | | | 4 | | * | * | * | | * | | | 5 | 76 | * | 5 | | | | 10 | | | Nannofossil- and Quartz-bearing Clay-rich Diatom Ooze |
| 8 | H | 6 | 50 | 62.30 | D | | 5 | 95 | | | | | * | | * | | | | | 4 | 59 | | | 2 | 1 | 4 | 30 | | | Clay-rich Diatom Ooze |
| 9 | H | 4 | 80 | 64.90 | D | | 30 | 70 | | | | | 3 | * | 4 | | * | | | 10 | 50 | | 5 | * | * | 5 | 23 | | | Nannofossil and Spicule-bearing Quartz- and Clay-rich Diatom Ooze |
| 9 | H | 8 | 51 | 70.41 | M | | | | | 4 | | 20 | 4 | * | 4 | | * | | | 2 | 60 | * | 1 | * | * | | 5 | | | Clay-rich Diatom Ooze |
| 10 | H | 2 | 40 | 72.20 | M | | | | | | * | 5 | | | | | 2 | | * | 3 | 57 | | 1 | * | 2 | | 30 | | | Clay-rich Diatom Ooze |
| 10 | H | 6 | 70 | 78.50 | D | | | | | | | | * | 4 | 5 | | * | | | 10 | 48 | | 3 | | | | 30 | | | Glauconite-bearing Quartz- and Clay-rich Diatom Ooze |
| 11 | H | 1 | 24 | 80.04 | D | | | | | 5 | | | | | | | * | | | 5 | 50 | | 15 | | | | 25 | | | Nannofossil- and Clay-rich Diatom Ooze |
| 11 | H | 1 | 52 | 80.32 | D | | | | | 5 | | | | | | | * | | | 5 | 70 | * | | * | | 5 | 15 | | | Clay-rich Diatom Ooze |
| 11 | H | 2 | 60 | 81.90 | D | | | | | | | 30 | | | * | | | | 1 | 5 | 63 | 1 | | | | | | | | Clay-rich Diatom Ooze |
| 13 | H | 2 | 70 | 101.00 | D | | | | | | | 35 | | | * | | | | * | 5 | 60 | | | * | | * | | | | Clay-rich Diatom Ooze |
| 15 | H | 6 | 50 | 124.54 | D | | | | | | | 20 | | | * | | | | * | 30 | 50 | | | * | | | | | | Clay- and Quartz-rich Diatom Ooze |
| 17 | H | 1 | 110 | 130.40 | D | | | | | | | | * | | 3 | | | | 5 | 4 | 38 | | | | | | 40 | 10 | | Pyrite-bearing Diatom-rich Silty Clay |
| 18 | H | 3 | 3 | 141.83 | D | | | | | 3 | | | | | | | * | | | 30 | 37 | | | * | | 10 | 20 | | | Spicule-bearing Diatom-rich Clayey Silt |
| 18 | H | 3 | 123 | 143.03 | D | | | | | | | | 3 | 4 | | | 2 | | | 5 | 76 | | | | | | 10 | | | Quartz-bearing Clay-rich Diatom Ooze |
| 19 | H | 1 | 45 | 148.75 | D | | 5 | 95 | | | | | * | * | * | | | | | 5 | 65 | | * | * | | | 30 | | | Quartz-bearing Clay-rich Diatom Ooze |
| 19 | H | 2 | 45 | 150.25 | D | 2 | 5 | 93 | | | | | * | * | | | 2 | | | 4 | 40 | | * | 2 | | | 52 | | | Clay-rich Diatom Ooze |
| 21 | H | 4 | 40 | 162.18 | D | | | | | | | | 3 | | | | 3 | | | 5 | 56 | | | | | 3 | 30 | | | Clay-rich Diatom Ooze |
| 26 | H | 1 | 33 | 199.13 | D | | | | | * | | | 1 | 3 | | | 2 | | | 5 | 54 | | | | | | 30 | 5 | | Clay-rich Diatom Ooze |
| 27 | H | CC | 10 | 207.51 | D | | | | | | | | | 10 | | | 4 | | | 25 | 20 | | | | * | 4 | 7 | 30 | | Feldspar-, Diatom-, Quartz-rich, Clay bearing Silt |
| 30 | X | 1 | 40 | 226.70 | D | | | | | | | 20 | | | * | | | | * | 30 | 50 | | | | | | | | | Clay- and Quartz-rich Diatom Ooze |
| 31 | X | 1 | 80 | 230.40 | D | | | | | | | 20 | | | | | | | 2 | 20 | 58 | * | | | | | | | | Quartz- and Clay-rich Diatom Ooze |
| 33 | X | 2 | 59 | 236.49 | D | | | | | | | | 3 | 7 | | | 8 | | | 30 | 20 | | * | | | * | 32 | | | Diatom- and Quartz-rich Clay |
| 33 | X | 2 | 88 | 236.78 | D | | | | | | 10 | * | | * | | | 5 | | | 15 | 40 | | 1 | * | | | 29 | | | Carbonate, Quartz- and Clay-rich Diatom Ooze |
| 33 | X | CC | 15 | 237.29 | M | | | | | | 10 | | 5 | | | | 5 | 1 | | 10 | 10 | | | | | | 59 | | | Carbonate, Quartz-rich Clay Spicule |
| 35 | X | 1 | 40 | 245.40 | D | | | | | | | 10 | 5 | 3 | 1 | | 5 | | | 5 | 15 | 1 | 3 | 1 | | 5 | 46 | | | Spicule-bearing Diatom-rich Clay |
| 35 | X | 4 | 66 | 250.22 | M | | | | | | 84 | 10 | | | | | 2 | | | 4 | | | * | | | | | | | Carbonate |
| 35 | X | 4 | 70 | 250.26 | D | | | | | * | | | 10 | | | | 3 | | | 5 | 3 | | 1 | | | | 78 | | | Quartz-bearing Dolomite-rich Clay |
| 35 | X | 5 | 70 | 251.76 | D | | | | | 4 | | 10 | 10 | | | | 4 | | | | 20 | | 25 | 4 | | | 23 | | | Dolomite |
| 35 | X | CC | 28 | 254.43 | M | | | | | | | | | | * | | | 5 | | 10 | 8 | | | | | | 17 | | 60 | Plagioclase- and Diatom-bearing Quartz- and Clay-rich Volcanic glass |
| 37 | X | 1 | 40 | 258.00 | D | | 40 | 60 | | | | | | | | | 5 | | | 10 | 20 | | | * | | 5 | 60 | | | Quartz- bearing Diatom-rich Clay |
| 39 | P | 1 | 48 | 277.28 | D | | | | | | | 5 | 1 | 4 | 1 | | | | | 2 | 30 | | | | | | 57 | | | Diatom-rich Clay |
| **Hole B** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | H | 1 | 30 | 0.30 | D | | | | | | | | | | | | | | | 15 | 20 | | | | | | 30 | 35 | | Quartz- and Diatom-rich Clayey Silt |
| 1 | H | 2 | 21 | 1.71 | D | | | | | | | | | | | | | | | | 97 | | 1 | | | | | 2 | | Diatom Ooze |
| 1 | H | 4 | 9 | 4.59 | M | | | | | | | | | | | | * | | | 1 | 1 | 88 | 3 | | | | | 7 | | Foraminifer Ooze |
| 1 | H | 4 | 16 | 4.66 | M | | | | | | | | | | | | | 4 | 10 | 5 | 10 | | 1 | | | | 20 | 50 | | Pyrite- and Diatom-rich Clayey Silt |

| Sample | | | | | | Texture | | | Mineral | | | | | | | | | | | | | Biogenic | | | | | | Rock | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Core | CT | Sct | Top (cm) | Depth (mbsf) | Lithology | Sand | Silt | Clay | Biotite (22) | Calcite (30) | Carbonate (35) | Clay Mineral (47) | Dolomite (62) | Feldspar (71) | Glauconite (82) | Hornblende (91) | Opaques (140) | Plagioclase (159) | Pyrite (169) | Quartz (172) | Diatoms (58) | Foraminifers (78) | Nannofossils (132) | Radiolarians (173) | Silicoflagellates (189) | Sponge Spicules (199) | Clay Size Particles (255) | Silt (191) | Volcanic Glass Shard (246) | Comments |
| **Hole B (continued)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | H | 1 | 90 | 3.90 | D | | | | | | | | | | 1 | | * | | | 20 | 35 | | | | 2 | | | 41 | 1 | Quartz- and Diatom-rich Silt |
| 3 | H | 4 | 26 | 17.26 | D | | | | | | | | | 1 | | | | | | 2 | 30 | | | 2 | | | 25 | 40 | | Diatom- and Clay-rich Silt |
| 3 | H | 4 | 76 | 17.76 | M | | | | | | 3 | | | | * | | | 1 | | 1 | 30 | | 20 | | | | 7 | 38 | | Clay-bearing Nannofossil-rich Diatom Ooze |
| 5 | H | 5 | 67 | 30.71 | M | | | | | * | | | * | * | 2 | | * | | | 5 | 35 | 4 | 40 | 3 | 1 | | 10 | | | Quartz-bearing Clay- and Diatom-rich Nannofossil Ooze |
| 5 | H | 5 | 90 | 30.94 | D | | | | | | | | | 4 | 1 | | | | | 8 | 45 | | 2 | | * | | 40 | | | Quartz-bearing Clay-rich Diatom Ooze |
| 6 | H | 5 | 54 | 40.04 | M | | | | | | 4 | | 3 | | | 2 | | 5 | | 8 | 25 | | 4 | | | | 16 | 30 | 3 | Quartz- and Feldspar-bearing Diatom-rich Silty Clay |
| 6 | H | 6 | 63 | 41.63 | D | | | | | | | | 3 | 3 | | | 4 | | | 4 | 30 | | | 3 | | 10 | 43 | | | Spicule- and Diatom-rich Clay |
| 7 | H | 4 | 90 | 48.40 | D | | | | | * | | | | 5 | | | | | | 10 | 25 | | * | 4 | | 8 | 48 | | | Feldspar- and Spicule-bearing Quartz- and Diatom-rich Clay |
| 7 | H | 5 | 98 | 49.98 | M | | | | | | | 10 | 3 | * | | | * | | | 2 | 30 | | 35 | 4 | 1 | 4 | 11 | | | Clay- and Diatom-rich Nannofossil Ooze |
| 8 | H | 3 | 70 | 56.20 | D | | | | | | * | | * | 4 | | | * | | | 15 | 30 | | * | 4 | * | 5 | 42 | | | Quartz- and Diatom-rich Clay |
| 8 | H | 5 | 88 | 59.38 | M | | | | | | | | | | 1 | | | | | 5 | 35 | 4 | 30 | | 3 | | 22 | | | Quartz-bearing Clay- and Nannofossil-rich Diatom Ooze |
| 9 | H | 2 | 130 | 64.80 | D | | | | | | * | | * | 5 | * | | | | | 10 | 30 | | | | | 15 | 40 | | | Feldspar- and Quartz- Spicule- and Diatom-rich Clay |
| 11 | H | 4 | 80 | 78.80 | D | | | | | | | | | | | | | | * | | 40 | | 2 | | | | 5 | 53 | | Clay-bearing Diatom-rich Silt |
| 11 | H | 6 | 50 | 81.50 | D | | | | | | 3 | | | | | | | | 1 | 2 | 31 | | 2 | | | 1 | 10 | 50 | | Clay-rich Diatom Silt |
| 11 | H | 6 | 77 | 81.77 | M | | | | | | 2 | | | | | | | | | 7 | 30 | | 7 | 1 | | | 3 | 50 | | Nannofossil- and Quartz-bearing Diatom-rich Silt |
| 12 | H | 1 | 53 | 81.53 | D | | | | | | 3 | | | | | | | | 1 | 2 | 32 | | 27 | | | | 10 | 25 | | Clay- Silt- and Diatom-rich Nannofossil Ooze |
| 12 | H | 5 | 119 | 86.33 | D | | | | | | 4 | | | | | | 1 | | | 2 | 18 | | 30 | | | | 5 | 40 | | Clay-bearing Diatom-rich Nannofossil Silt |
| 12 | H | 6 | 9 | 86.73 | M | | | | | | | | | | | | | | | | 20 | | 50 | | | | 20 | 10 | | Clay- Silt- and Diatom-rich Nannofossil Ooze |
| 12 | H | 7 | 30 | 88.12 | D | | | | | | | | | | | | 3 | | | 4 | 20 | | 20 | 2 | | | 5 | 46 | | Clay-bearing Diatom- and Nannofossil-rich Silt |
| 14 | P | 1 | 70 | 103.70 | D | | | | | * | | | | | | | | | | * | 60 | * | 5 | | * | 10 | 25 | | | Nannofossil-bearing Spicule- and Clay-rich Diatom Ooze |
| **Hole C** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | H | 1 | 116 | 1.16 | M | 5 | 10 | 85 | | | 4 | | | | 5 | | | | 8 | 4 | 20 | * | 4 | 3 | | | 40 | 12 | | Glauconite Pyrite-bearing Diatom-rich Silty Clay |
| 1 | H | 3 | 36 | 3.36 | M | | 81 | 19 | | | 3 | 10 | | | * | | | | | 1 | 30 | 5 | 35 | 3 | | 4 | 9 | | | Foraminifer-bearing Clay- and Diatom-r. Nannofossil Ooze |
| 2 | H | 1 | 80 | 5.30 | D | | 52 | 48 | | | | | | 4 | 3 | | | | * | 5 | 30 | | | * | * | 10 | 48 | | | Quartz-bearing Spicule- and Diatom-rich Clay |
| 2 | H | 1 | 105 | 5.55 | D | | 81 | 19 | | | * | 10 | 3 | | 1 | | 5 | | | 4 | 60 | | 1 | 2 | 1 | 4 | 9 | | | Pyrite-bearing Clay-rich Diatom Ooze |
| 2 | H | 7 | 30 | 13.80 | D | | 80 | 20 | | | | 10 | | | | | | | | 4 | 60 | * | 1 | * | * | 15 | 10 | | | Spicule- and Clay-rich Diatom Ooze |
| **Hole E** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | H | 3 | 77 | 7.77 | M | | | | | | | | | 4 | | | | | | 5 | 30 | 5 | 56 | | | | | | | Foraminifer- and Quartz-bearing Diatom-rich Nannofossil Ooze |
| 2 | H | 5 | 100 | 11.00 | D | | | | | | * | 5 | * | 3 | | | | | | 3 | 35 | | 1 | * | | | 53 | | | Clay mineral-bearing Diatom-rich Clay |
| 3 | H | 6 | 130 | 22.30 | D | | | | | | | | | 4 | * | | 3 | | | 5 | 60 | | 1 | 4 | * | | 23 | | | Quartz-bearing Clay particle-rich Diatom Ooze |
| 4 | H | 1 | 55 | 23.55 | M | | | | | | | | | 5 | | | 4 | | | 10 | 10 | | | 30 | | 41 | | | * | Quartz- Radiolarian- and Diatom-rich Spicule Ooze |
| 4 | H | 4 | 50 | 28.08 | D | | | | | | | | * | | | | | | | 5 | 40 | | * | 2 | 1 | 10 | 42 | | | Quartz-bearing Spicule- and Diatom-rich Clay |
| 4 | H | 7 | 125 | 32.04 | M | | | | | | | | | | 2 | | | 4 | | 15 | 30 | 5 | 1 | 3 | * | | 40 | | | Foraminifer-bearing Quartz- and Diatom-rich Clay |