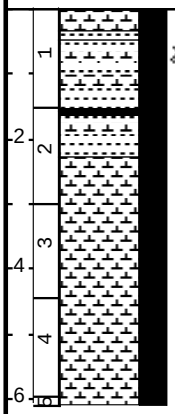
Core Photo

1123A-1H 0-6.1 mbsf

Leg 181 Site 1123 Hole A Core 1H

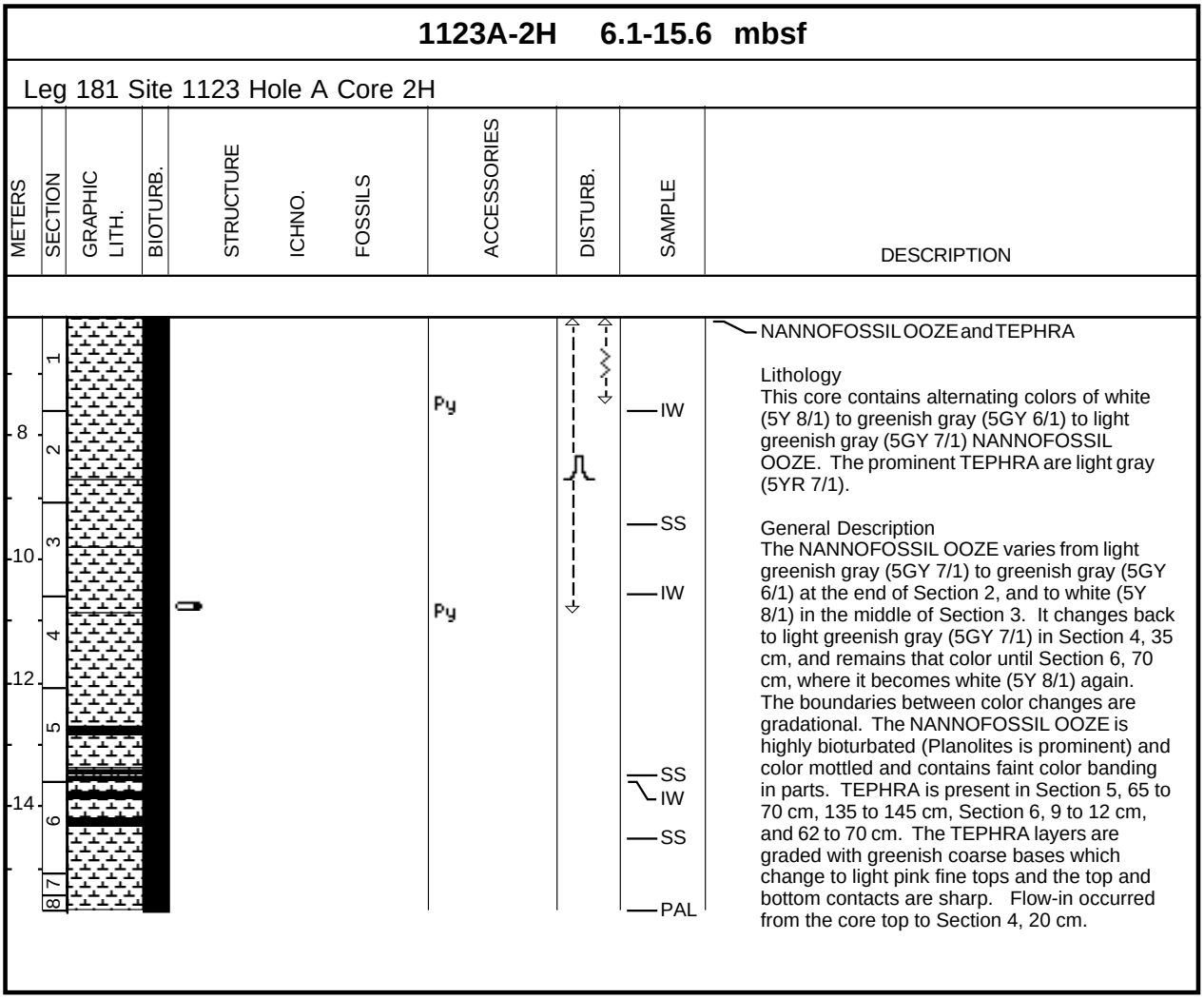


CLAYEY NANNOFOSSIL OOZE, FORAMINIFER-BEARINGNANNOFOSSIL OOZE, and TEPHRA

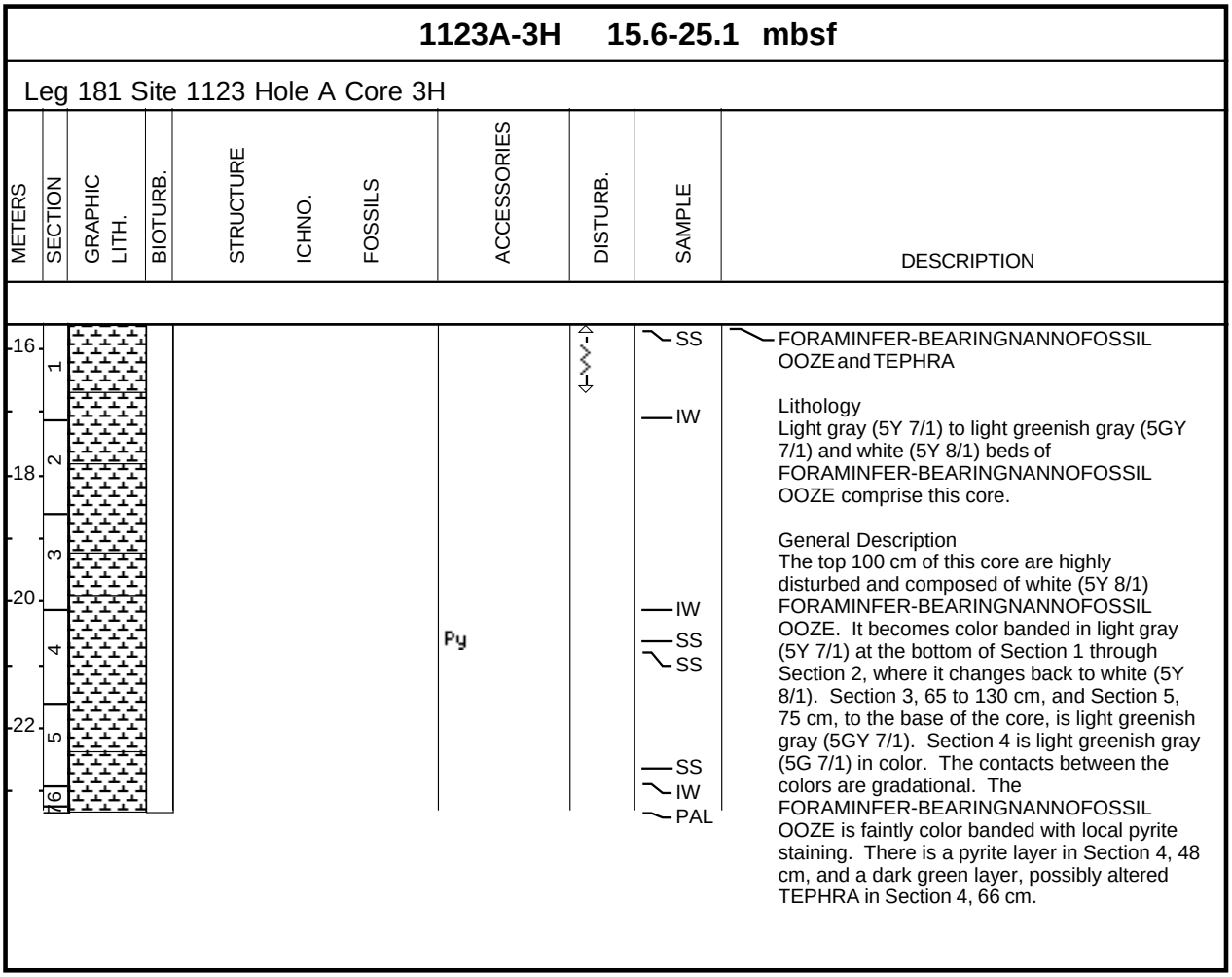
Lithology
This core contains alternations of white (5Y 8/1) and greenish gray (5GY 6/1) CLAYEY NANNOFOSSIL OOZE with light greenish gray (5GY 7/1) FORAMINIFER-BEARING NANNOFOSSIL OOZE. The top of Section 1 is light yellowish brown (10YR 6/4) NANNOFOSSIL OOZE. A white/pink- to gray-(N 8, 2.5YR 6/1) layered TEPHRA is present in Section 2, 5 to 10 cm. Another dispersed TEPHRA layer occurs in Section 2, 101 cm.

General Description
This core contains alternations of light and dark greenish gray beds of CLAYEY NANNOFOSSIL OOZE and FORAMINIFER-BEARING NANNOFOSSIL OOZE which are mottled due to extensive bioturbation. The contacts between layers are gradational. Pyrite smearing and circles, which are probably burrows, occur throughout. The dispersal of the TEPHRA in Section 2 may have resulted from bioturbation. The white/pink to gray TEPHRA layer at the top of Section 2 is possibly the Omataroa Ash.

Core Photo


1123A-2H 6.1-15.6 mbsf
Leg 181 Site 1123 Hole A Core 2H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
8
10
12
14
1
2
3
4
5
6
7
8
Py
Py
IW
SS
IW
SS
IW
SS
PAL
NANNOFOSSIL OOZE and TEPHRA
Lithology
This core contains alternating colors of white (5Y 8/1) to greenish gray (5GY 6/1) to light greenish gray (5GY 7/1) NANNOFOSSIL OOZE. The prominent TEPHRA are light gray (5YR 7/1).
General Description
The NANNOFOSSIL OOZE varies from light greenish gray (5GY 7/1) to greenish gray (5GY 6/1) at the end of Section 2, and to white (5Y 8/1) in the middle of Section 3. It changes back to light greenish gray (5GY 7/1) in Section 4, 35 cm, and remains that color until Section 6, 70 cm, where it becomes white (5Y 8/1) again. The boundaries between color changes are gradational. The NANNOFOSSIL OOZE is highly bioturbated (Planolites is prominent) and color mottled and contains faint color banding in parts. TEPHRA is present in Section 5, 65 to 70 cm, 135 to 145 cm, Section 6, 9 to 12 cm, and 62 to 70 cm. The TEPHRA layers are graded with greenish coarse bases which change to light pink fine tops and the top and bottom contacts are sharp. Flow-in occurred from the core top to Section 4, 20 cm.

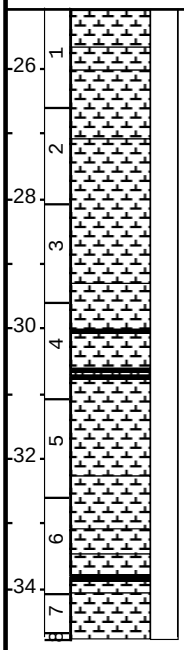
Core Photo

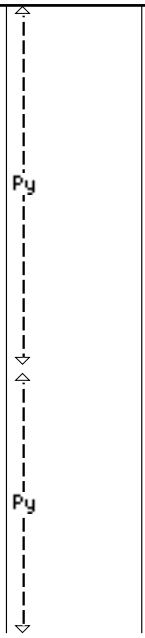

1123A-3H 15.6-25.1 mbsf
Leg 181 Site 1123 Hole A Core 3H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
16
18
20
22
1
2
3
4
5
6
Py
SS
IW
IW
SS
SS
SS
IW
PAL
FORAMINFER-BEARINGNANNOFOSSIL OOZE and TEPHRA
Lithology
Light gray (5Y 7/1) to light greenish gray (5GY 7/1) and white (5Y 8/1) beds of FORAMINFER-BEARINGNANNOFOSSIL OOZE comprise this core.
General Description
The top 100 cm of this core are highly disturbed and composed of white (5Y 8/1) FORAMINFER-BEARINGNANNOFOSSIL OOZE. It becomes color banded in light gray (5Y 7/1) at the bottom of Section 1 through Section 2, where it changes back to white (5Y 8/1). Section 3, 65 to 130 cm, and Section 5, 75 cm, to the base of the core, is light greenish gray (5GY 7/1). Section 4 is light greenish gray (5G 7/1) in color. The contacts between the colors are gradational. The FORAMINFER-BEARINGNANNOFOSSIL OOZE is faintly color banded with local pyrite staining. There is a pyrite layer in Section 4, 48 cm, and a dark green layer, possibly altered TEPHRA in Section 4, 66 cm.

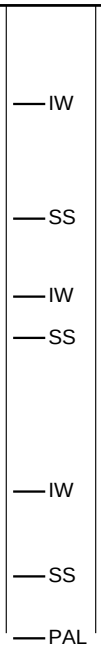
Core Photo

1123A-4H 25.1-34.6 mbsf

Leg 181 Site 1123 Hole A Core 4H







FORAMINIFER-BEARING NANNOFOSSIL OOZE and TEPHRA

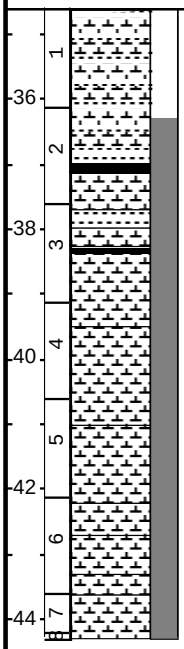
Lithology
This FORAMINIFER-BEARING NANNOFOSSIL OOZE contains color alternations of white (5Y 8/1 to 2.5Y 8/1) with light greenish gray (5GY 7/1) and greenish gray (5GY 6/1) colors. Disturbed TEPHRA layers are present in Section 4, 55 to 62 cm, and in Section 6, 123 to 130 cm.

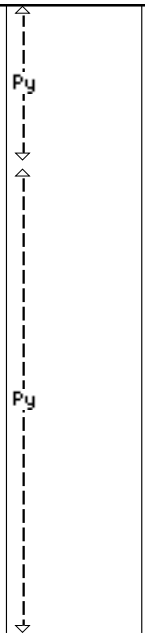
General Description
The FORAMINIFER-BEARING NANNOFOSSIL OOZE exhibits color variations downcore. It is white (2.5Y 8/1) at the top of the core and at the bottom of Section 1 to the top of Section 2. Greenish gray (5GY 6/1) is present in Section 1, 60 to 90 cm, and the bottom of Section 2 through Section 3. Light greenish gray (5GY 7/1) color pervades the bottom of Section 3 until the TEPHRA layer present in Section 4, and in the bottom of Section 5 to Section 6. A different white (5Y 8/1) color is present in Section 6, 50 to 90 cm, and at the base of the core. The contacts between color changes are gradational. This core is moderately disturbed by flow-in but the gross stratigraphy has remained intact. The FORAMINIFER-BEARING NANNOFOSSIL OOZE has faint color banding, often caused by pyrite. Grayish pink TEPHRA layers are highly disturbed. The three "TEPHRA blobs" present in Section 4, 130 to 140 cm, and in Section 5, 0 to 10 cm, and 120 to 130 cm, are probably not in-situ.

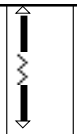
Core Photo

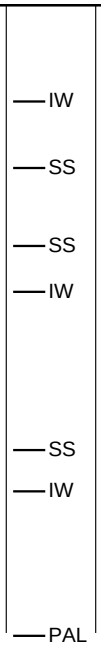
1123A-5H 34.6-44.1 mbsf

Leg 181 Site 1123 Hole A Core 5H









FORAMINIFER-BEARINGNANNOFOSSIL OOZE, CLAYEY NANNOFOSSIL OOZE, and TEPHRA

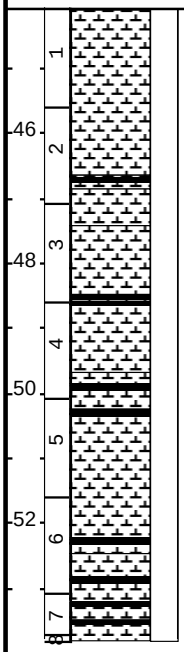
Lithology
This core is comprised of alternating beds of white (5Y 8/1) and light greenish gray (5GY 7/1) FORAMINIFER-BEARINGNANNOFOSSIL OOZE with darker beds of 5Y 8/2 CLAYEY NANNOFOSSIL OOZE. There are TEPHRA layers in Section 2, 91 to 100 cm, and in Section 3, 68 cm (0.5 cm thick).

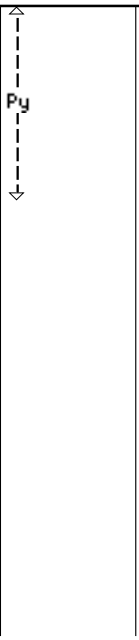
General Description
Color variations exist throughout the core. The top of the core consists of white (5Y 8/1) FORAMINIFER-BEARINGNANNOFOSSIL OOZE with layers of 5Y 8/2 CLAYEY NANNOFOSSIL OOZE which continue to the TEPHRA layer in Section 2. White (5Y 8/1) FORAMINIFER-BEARINGNANNOFOSSIL OOZE is present at the bottom of Section 2, in Section 3, 40 cm, to Section 4, 40 cm, Section 5, 40 cm, through Section 6, 10 cm, 60 to 120 cm, and at the base of the core. Light greenish gray (5GY 7/1) FORAMINIFER-BEARINGNANNOFOSSIL OOZE is present in all the remaining sections except Section 3, 10 to 40 cm, where white (5Y 8/2) CLAYEY NANNOFOSSIL OOZE is present. The contacts between different colors and lithologies are gradational, except for the TEPHRA contacts. The FORAMINIFER-BEARINGNANNOFOSSIL OOZE and the CLAYEY NANNOFOSSIL OOZE have color banding and mottling with pyrite fronts and aureoles around the burrows, which are large (1 cm), and sometimes foraminifer-filled. Light and dark beds result from varying amounts of clay and biogenic silica; both are richer in the dark beds.

Core Photo

1123A-6H 44.1-53.6 mbsf

Leg 181 Site 1123 Hole A Core 6H





DESCRIPTION

NANNOFOSSIL OOZE and TEPHRA

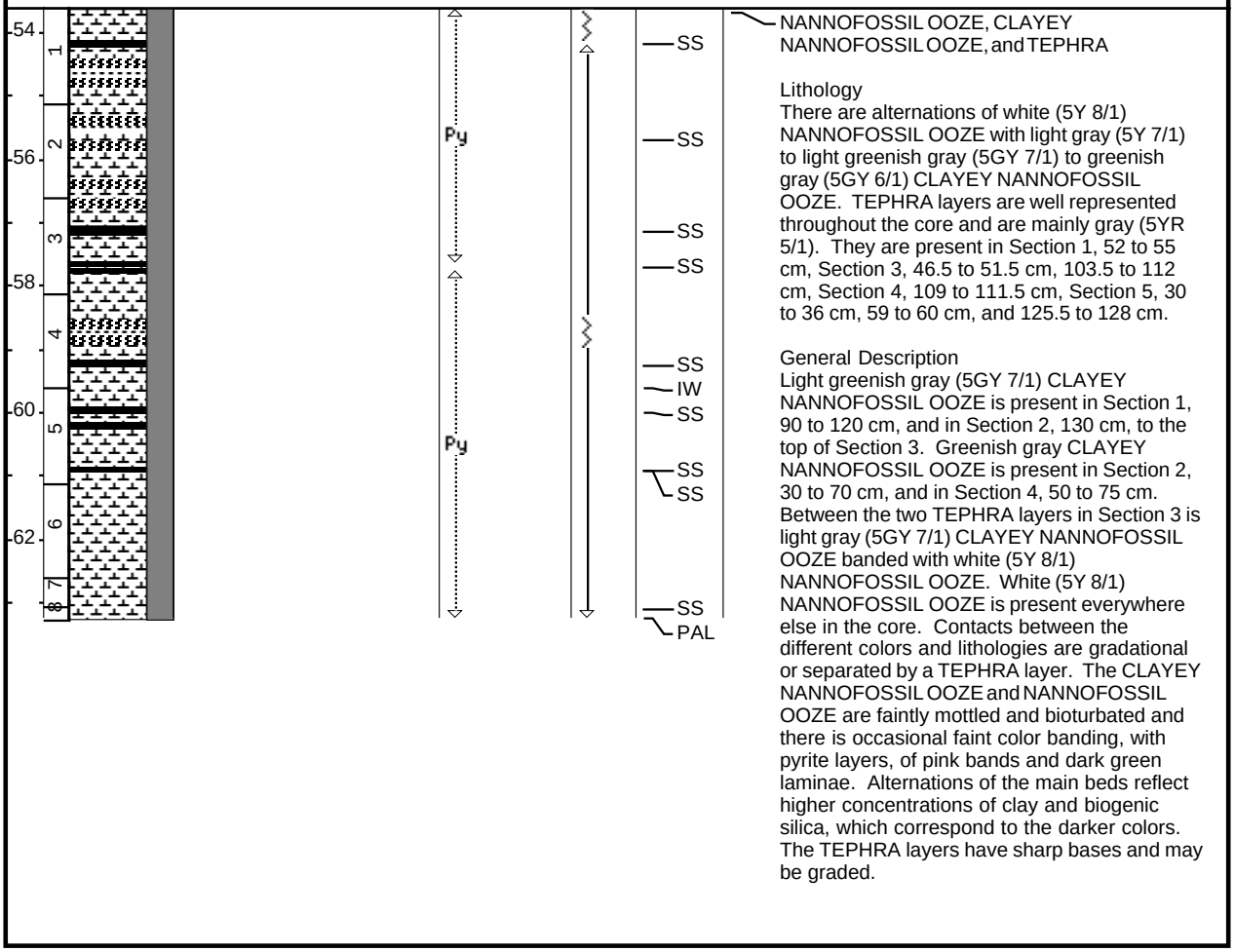
Lithology
This core is basically an alternating sequence of white (5Y 8/1) NANNOFOSSIL OOZE with light greenish gray (5GY 7/1) NANNOFOSSIL OOZE. Frequent TEPHRA layers are present (Section 2, 109 cm, 2 mm thick; Section 3, 140 cm, 1 mm thick; Section 4, 129 to 134 cm; Section 5, 18 to 21 cm; Section 6, 66 cm, 3 mm thick; 126 to 127 cm; Section 7, 16 cm, 0.5 cm; and 41.5 to 42 cm).

General Description
The top of the core is white (5Y 8/1) NANNOFOSSIL OOZE with fine greenish gray (5GY 7/1) color bands. This lithology is also present at the top of Section 6. White (5Y 8/1) NANNOFOSSIL OOZE with color banding is present at the base of Section 2 into Section 3, Section 4, 110 to 129 cm, Section 5, and the top of Section 6. Light greenish gray (5GY 7/1) OOZE is present in Section 2, 110 to 125 cm, Section 4, 135 to 150 cm, and Section 6, 90 to 125 cm. The bottom of the core is made up of banded, light greenish gray and white NANNOFOSSIL OOZE. The contacts between colors are gradational or uncertain (near section boundaries) and contacts with the TEPHRA are sharp. Sections 1 and 2 have scattered pyrite layers and smears. The TEPHRA layers are present throughout the lower half of the core and the thicker ones have light-colored sediment underneath them (bleaching?).

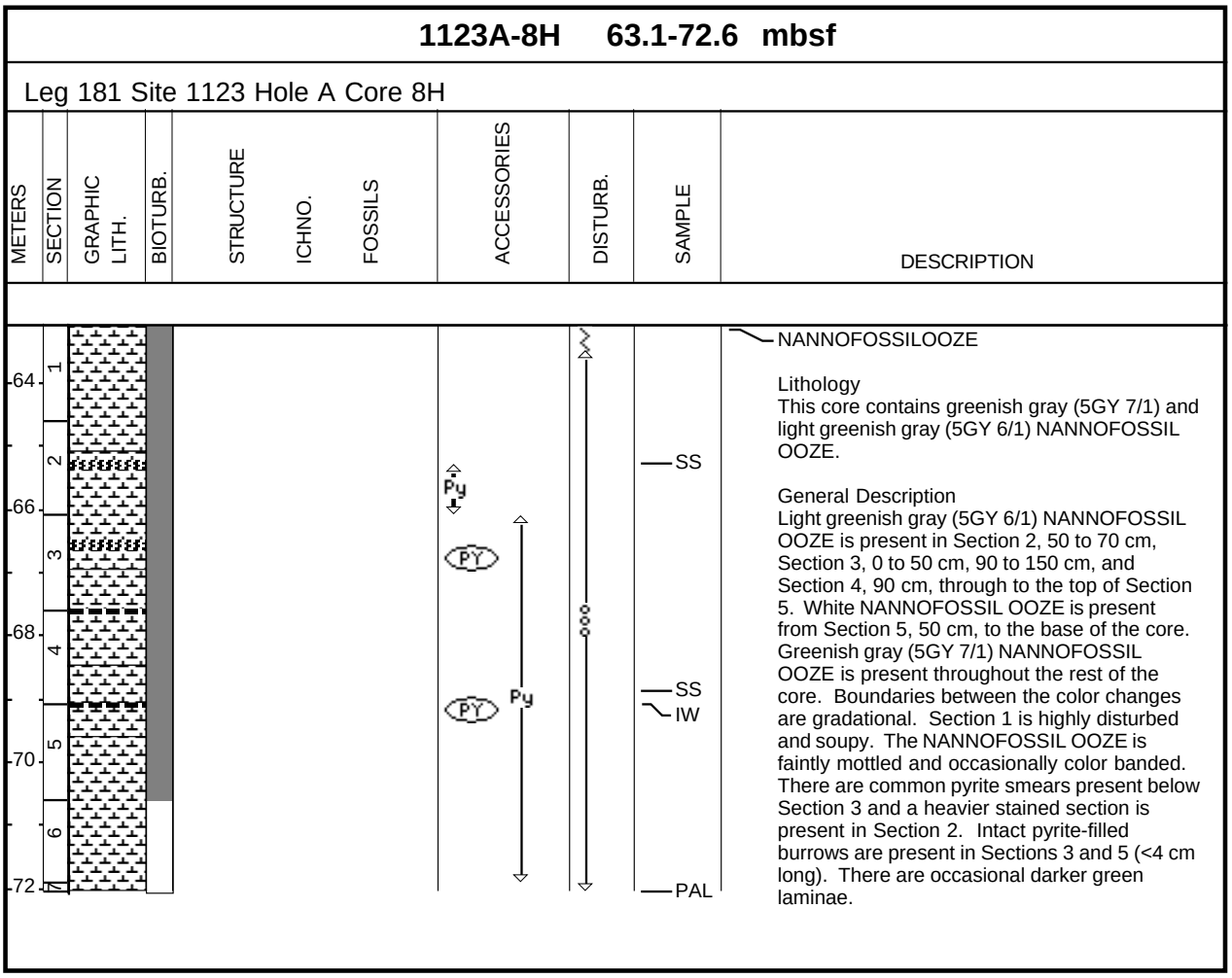
Core Photo

1123A-7H 53.6-63.1 mbsf

Leg 181 Site 1123 Hole A Core 7H



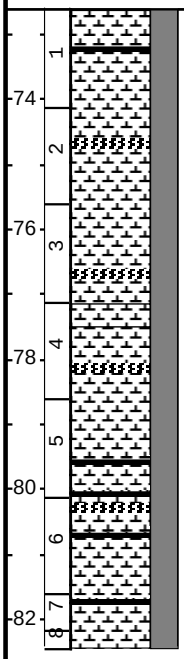
Core Photo


1123A-8H 63.1-72.6 mbsf
Leg 181 Site 1123 Hole A Core 8H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
64
66
68
70
72
1
2
3
4
5
6
Py
PY
Py
PY
SS
SS
IW
PAL
NANNOFOSSILOOZE
Lithology
This core contains greenish gray (5GY 7/1) and light greenish gray (5GY 6/1) NANNOFOSSIL OOZE.
General Description
Light greenish gray (5GY 6/1) NANNOFOSSIL OOZE is present in Section 2, 50 to 70 cm, Section 3, 0 to 50 cm, 90 to 150 cm, and Section 4, 90 cm, through to the top of Section 5. White NANNOFOSSIL OOZE is present from Section 5, 50 cm, to the base of the core. Greenish gray (5GY 7/1) NANNOFOSSIL OOZE is present throughout the rest of the core. Boundaries between the color changes are gradational. Section 1 is highly disturbed and soupy. The NANNOFOSSIL OOZE is faintly mottled and occasionally color banded. There are common pyrite smears present below Section 3 and a heavier stained section is present in Section 2. Intact pyrite-filled burrows are present in Sections 3 and 5 (<4 cm long). There are occasional darker green laminae.

Core Photo

1123A-9H 72.6-82.1 mbsf

Leg 181 Site 1123 Hole A Core 9H



STRUCTURE ICHNO. FOSSILS

ACCESSORIES: Py

DISTURB.

SAMPLE: SS, IW, IW, SS, SS, SS, SS, PAL, PAL

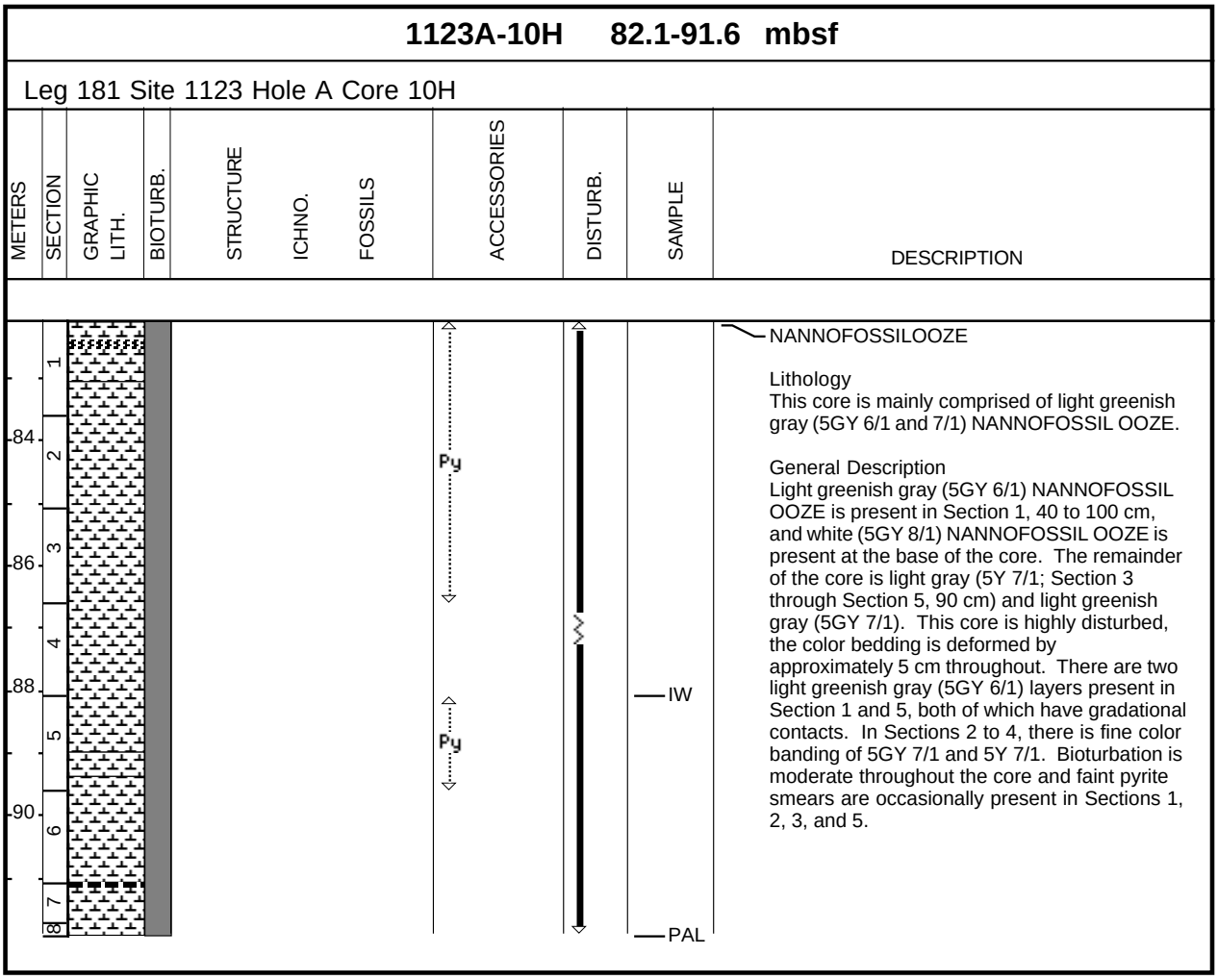
DESCRIPTION

NANNOFOSSIL OOZE, TEPHRA, and NANNOFOSSIL-BEARINGTEPHRA

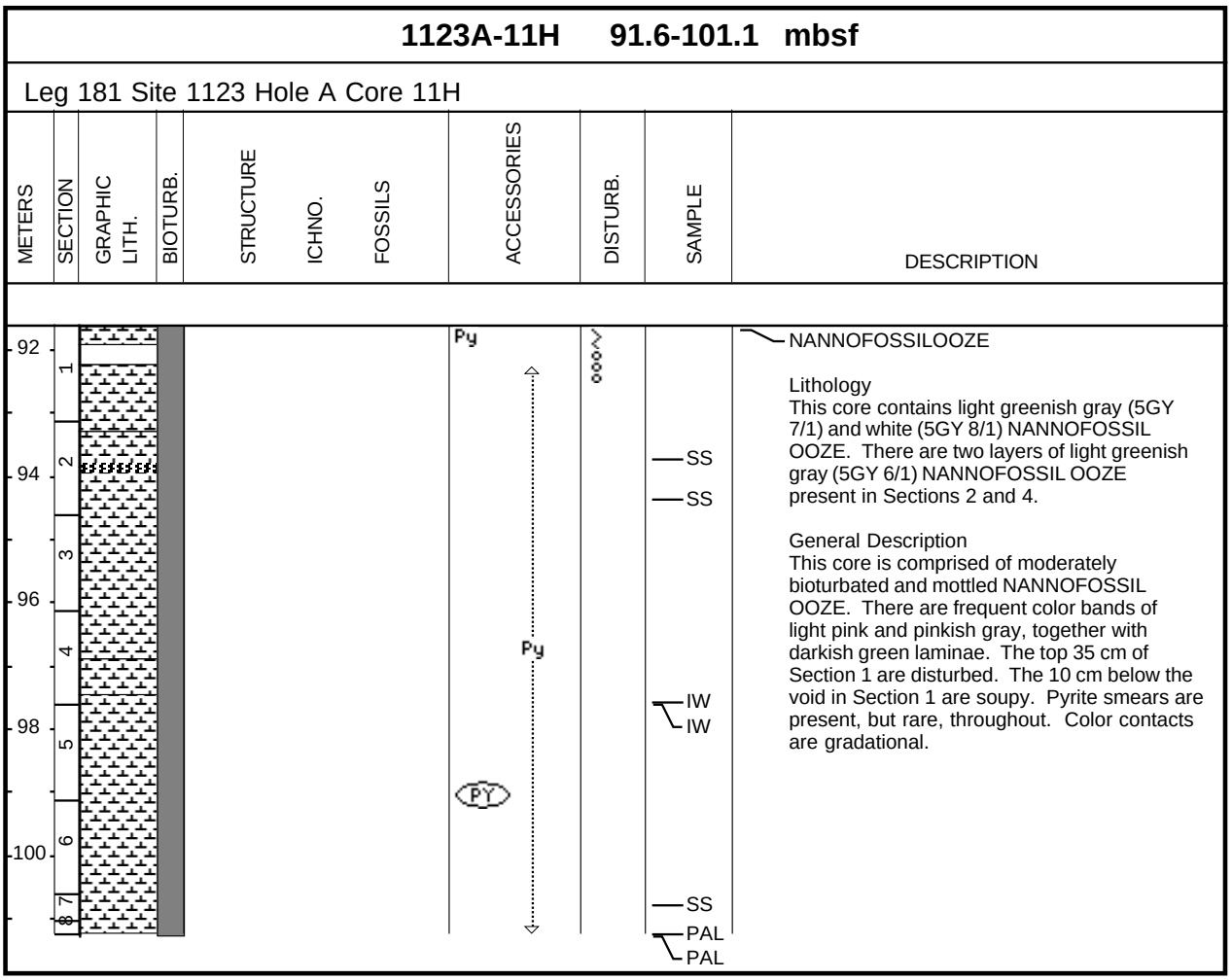
Lithology
This core contains various hues of light greenish gray (5GY 6/1 and 7/1) and white (5GY 8/1) NANNOFOSSIL OOZE. TEPHRA layers are also present in this core and are light gray (5Y 7/1). They are in Section 5, 92 to 102 cm, 139 to 143 cm, Section 6, 56 to 60 cm, and in Section 7, 5 to 10 cm. The TEPHRA in Section 5, 92 cm, and the one in Seciton 6 are NANNOFOSSIL-BEARINGTEPHRA.

General Description
This core is comprised of various hues of NANNOFOSSIL OOZE. Light greenish gray (5GY 6/1) is present in Section 1 to the top of Section 2, in the bottom interval of Section 3, in Section 4, 40 to 110 cm, in Section 6, 0 to 56 cm, and at the base of the core. White (5GY 8/1) NANNOFOSSIL OOZE is present in Section 2, 60 cm, to Section 3, 110 cm, and in Section 6, 60 to 150 cm, while light gray (5GY 7/1) is present in the remainingNANNOFOSSIL OOZE intervals. The beds of NANNOFOSSIL OOZE are mottled and bioturbated and pyrite is seen infrequently throughout. There are also frequent faint pink bands and green tinged laminae present. Color boundaries are either bioturbational or gradational. Thalassinoides is present below the TEPHRA layer in Section 5. The bottom three TEPHRA layers have dark pyrite bases. All TEPHRA layers have sharp bases and possibly gradational tops.

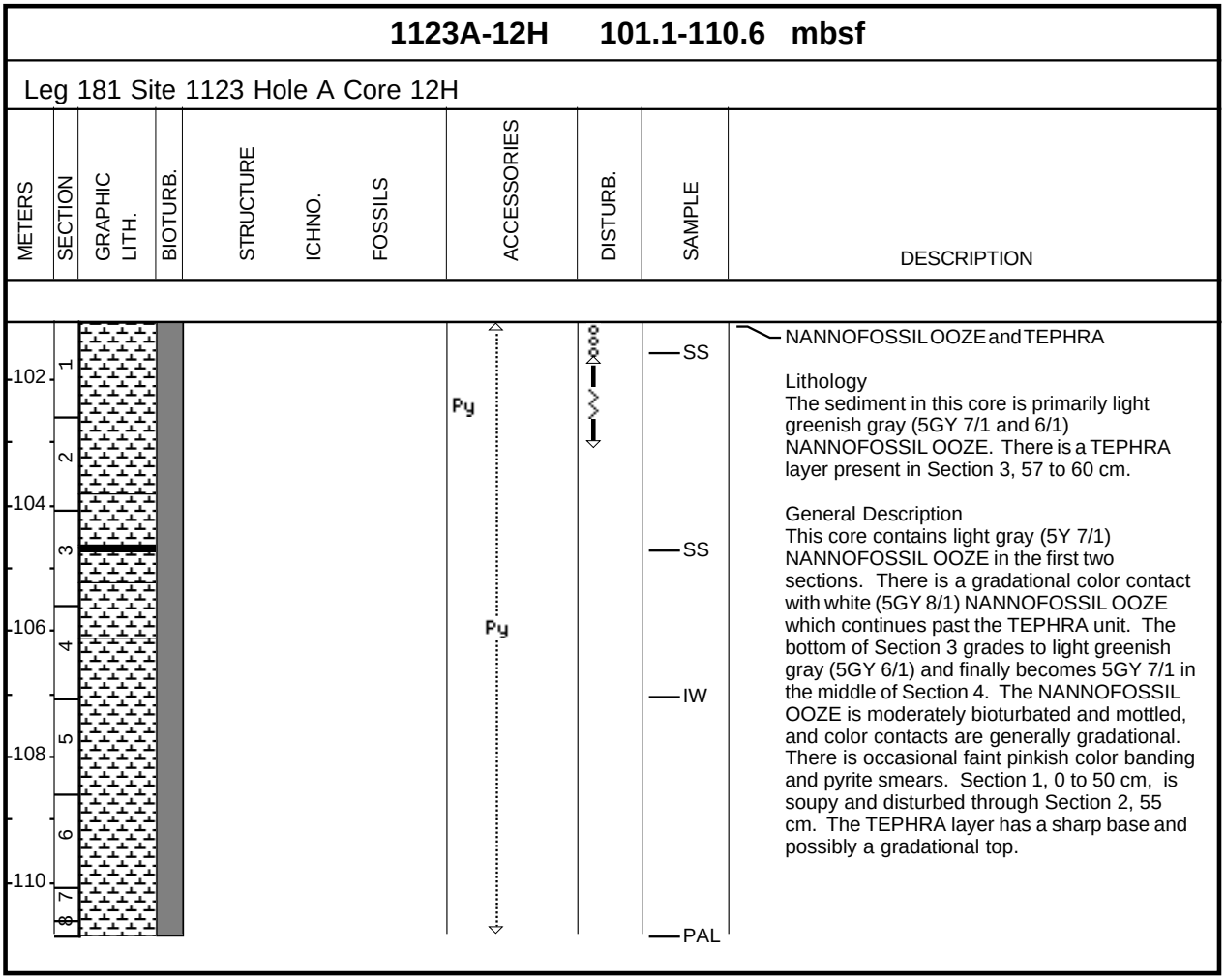
Core Photo


1123A-10H 82.1-91.6 mbsf
Leg 181 Site 1123 Hole A Core 10H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
84
86
88
90
1
2
3
4
5
6
7
8
Py
Py
IW
PAL
NANNOFOSSILOOZE
Lithology
This core is mainly comprised of light greenish gray (5GY 6/1 and 7/1) NANNOFOSSIL OOZE.
General Description
Light greenish gray (5GY 6/1) NANNOFOSSIL OOZE is present in Section 1, 40 to 100 cm, and white (5GY 8/1) NANNOFOSSIL OOZE is present at the base of the core. The remainder of the core is light gray (5Y 7/1; Section 3 through Section 5, 90 cm) and light greenish gray (5GY 7/1). This core is highly disturbed, the color bedding is deformed by approximately 5 cm throughout. There are two light greenish gray (5GY 6/1) layers present in Section 1 and 5, both of which have gradational contacts. In Sections 2 to 4, there is fine color banding of 5GY 7/1 and 5Y 7/1. Bioturbation is moderate throughout the core and faint pyrite smears are occasionally present in Sections 1, 2, 3, and 5.

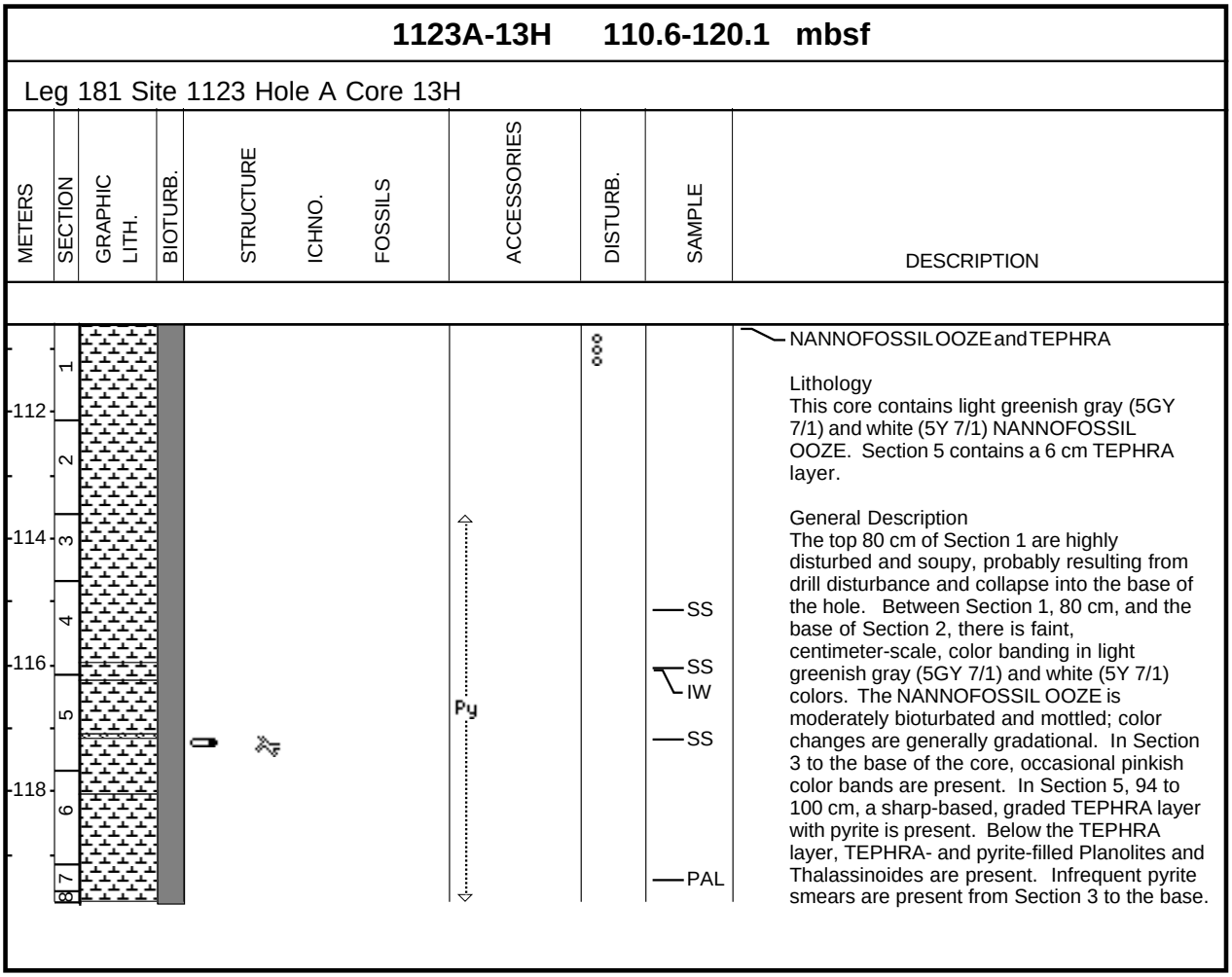
Core Photo


1123A-11H 91.6-101.1 mbsf
Leg 181 Site 1123 Hole A Core 11H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
92
94
96
98
100
1
2
3
4
5
6
7
Py
Py
PY
SS
SS
IW
IW
SS
PAL
PAL
NANNOFOSSILOOZE
Lithology
This core contains light greenish gray (5GY 7/1) and white (5GY 8/1) NANNOFOSSIL OOZE. There are two layers of light greenish gray (5GY 6/1) NANNOFOSSIL OOZE present in Sections 2 and 4.
General Description
This core is comprised of moderately bioturbated and mottled NANNOFOSSIL OOZE. There are frequent color bands of light pink and pinkish gray, together with darkish green laminae. The top 35 cm of Section 1 are disturbed. The 10 cm below the void in Section 1 are soupy. Pyrite smears are present, but rare, throughout. Color contacts are gradational.

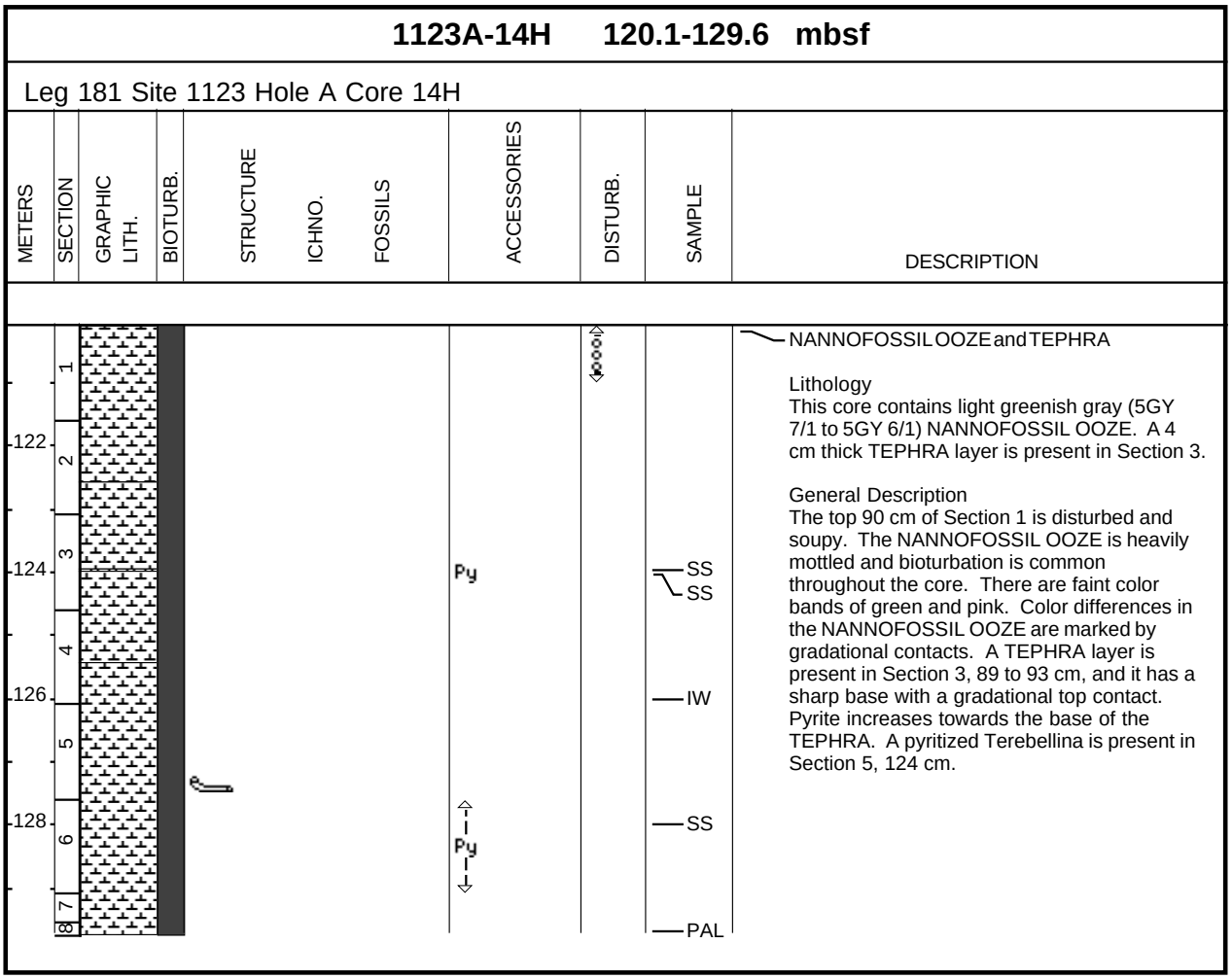
Core Photo


1123A-12H 101.1-110.6 mbsf
Leg 181 Site 1123 Hole A Core 12H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
102
104
106
108
110
1
2
3
4
5
6
7
Py
Py
SS
SS
IW
PAL
NANNOFOSSIL OOZE and TEPHRA
Lithology
The sediment in this core is primarily light greenish gray (5GY 7/1 and 6/1) NANNOFOSSIL OOZE. There is a TEPHRA layer present in Section 3, 57 to 60 cm.
General Description
This core contains light gray (5Y 7/1) NANNOFOSSIL OOZE in the first two sections. There is a gradational color contact with white (5GY 8/1) NANNOFOSSIL OOZE which continues past the TEPHRA unit. The bottom of Section 3 grades to light greenish gray (5GY 6/1) and finally becomes 5GY 7/1 in the middle of Section 4. The NANNOFOSSIL OOZE is moderately bioturbated and mottled, and color contacts are generally gradational. There is occasional faint pinkish color banding and pyrite smears. Section 1, 0 to 50 cm, is soupy and disturbed through Section 2, 55 cm. The TEPHRA layer has a sharp base and possibly a gradational top.

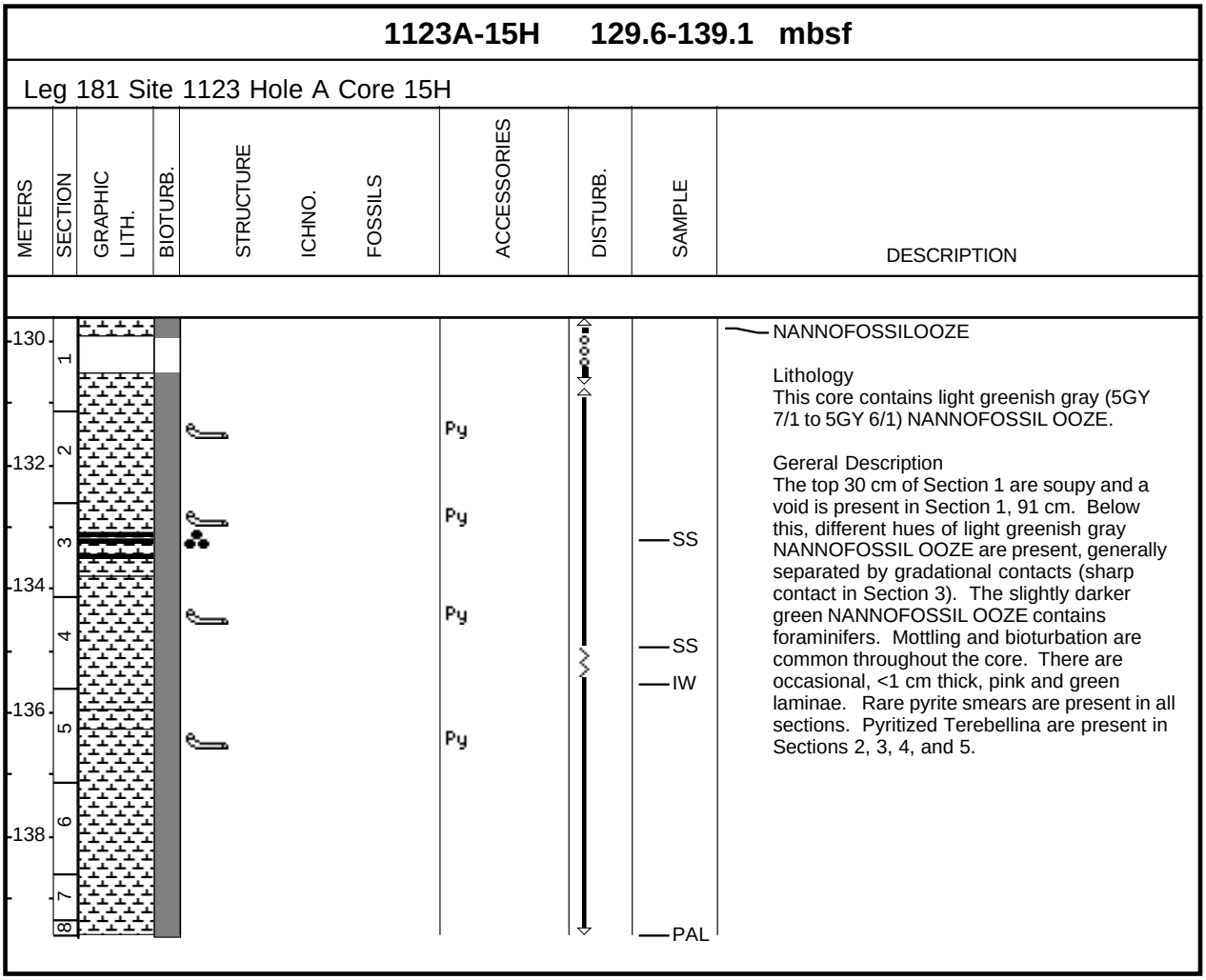
Core Photo


1123A-13H 110.6-120.1 mbsf
Leg 181 Site 1123 Hole A Core 13H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
112
114
116
118
1
2
3
4
5
6
7
Py
SS
SS
IW
SS
PAL
NANNOFOSSIL OOZE and TEPHRA
Lithology
This core contains light greenish gray (5GY 7/1) and white (5Y 7/1) NANNOFOSSIL OOZE. Section 5 contains a 6 cm TEPHRA layer.
General Description
The top 80 cm of Section 1 are highly disturbed and soupy, probably resulting from drill disturbance and collapse into the base of the hole. Between Section 1, 80 cm, and the base of Section 2, there is faint, centimeter-scale, color banding in light greenish gray (5GY 7/1) and white (5Y 7/1) colors. The NANNOFOSSIL OOZE is moderately bioturbated and mottled; color changes are generally gradational. In Section 3 to the base of the core, occasional pinkish color bands are present. In Section 5, 94 to 100 cm, a sharp-based, graded TEPHRA layer with pyrite is present. Below the TEPHRA layer, TEPHRA- and pyrite-filled Planolites and Thalassinoides are present. Infrequent pyrite smears are present from Section 3 to the base.

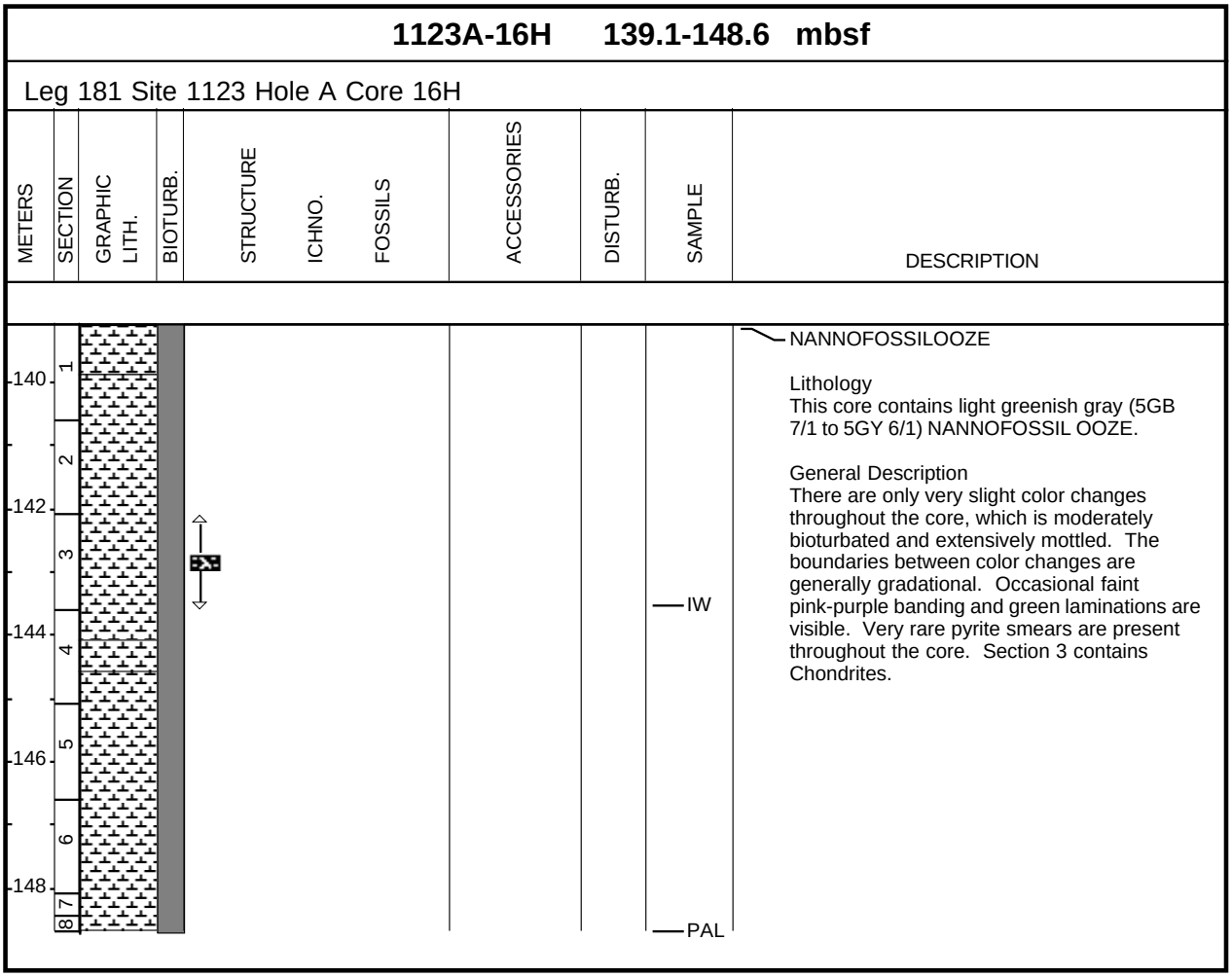
Core Photo


1123A-14H 120.1-129.6 mbsf
Leg 181 Site 1123 Hole A Core 14H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
122
124
126
128
1
2
3
4
5
6
7
8
Py
Py
SS
SS
IW
SS
PAL
NANNOFOSSIL OOZE and TEPHRA
Lithology
This core contains light greenish gray (5GY 7/1 to 5GY 6/1) NANNOFOSSIL OOZE. A 4 cm thick TEPHRA layer is present in Section 3.
General Description
The top 90 cm of Section 1 is disturbed and soupy. The NANNOFOSSIL OOZE is heavily mottled and bioturbation is common throughout the core. There are faint color bands of green and pink. Color differences in the NANNOFOSSIL OOZE are marked by gradational contacts. A TEPHRA layer is present in Section 3, 89 to 93 cm, and it has a sharp base with a gradational top contact. Pyrite increases towards the base of the TEPHRA. A pyritized Terebellina is present in Section 5, 124 cm.

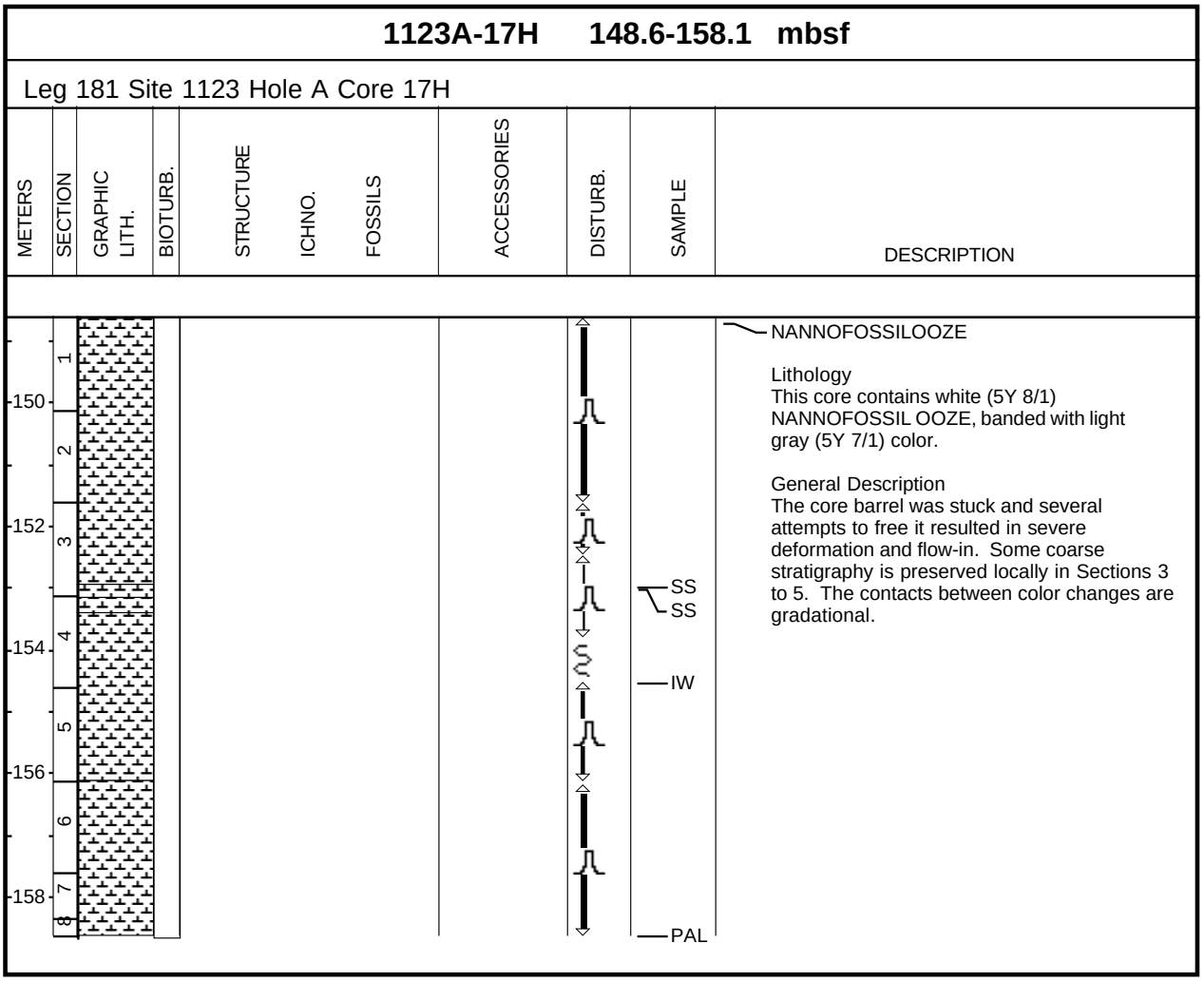
Core Photo


1123A-15H 129.6-139.1 mbsf
Leg 181 Site 1123 Hole A Core 15H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
130
132
134
136
138
1
2
3
4
5
6
7
8
Py
Py
Py
Py
SS
SS
IW
PAL
NANNOFOSSILOOZE
Lithology
This core contains light greenish gray (5GY 7/1 to 5GY 6/1) NANNOFOSSIL OOZE.
Gereral Description
The top 30 cm of Section 1 are soupy and a void is present in Section 1, 91 cm. Below this, different hues of light greenish gray NANNOFOSSIL OOZE are present, generally separated by gradational contacts (sharp contact in Section 3). The slightly darker green NANNOFOSSIL OOZE contains foraminifers. Mottling and bioturbation are common throughout the core. There are occasional, <1 cm thick, pink and green laminae. Rare pyrite smears are present in all sections. Pyritized Terebellina are present in Sections 2, 3, 4, and 5.

Core Photo


1123A-16H 139.1-148.6 mbsf
Leg 181 Site 1123 Hole A Core 16H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
140
142
144
146
148
1
2
3
4
5
6
7
8
IW
PAL
NANNOFOSSILOOZE
Lithology
This core contains light greenish gray (5GB 7/1 to 5GY 6/1) NANNOFOSSIL OOZE.
General Description
There are only very slight color changes throughout the core, which is moderately bioturbated and extensively mottled. The boundaries between color changes are generally gradational. Occasional faint pink-purple banding and green laminations are visible. Very rare pyrite smears are present throughout the core. Section 3 contains Chondrites.

Core Photo


1123A-17H 148.6-158.1 mbsf
Leg 181 Site 1123 Hole A Core 17H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
150
152
154
156
158
1
2
3
4
5
6
7
SS
SS
IW
PAL
NANNOFOSSILOOZE
Lithology
This core contains white (5Y 8/1) NANNOFOSSIL OOZE, banded with light gray (5Y 7/1) color.
General Description
The core barrel was stuck and several attempts to free it resulted in severe deformation and flow-in. Some coarse stratigraphy is preserved locally in Sections 3 to 5. The contacts between color changes are gradational.

Core Photo

1123B-1H 0-3.4 mbsf

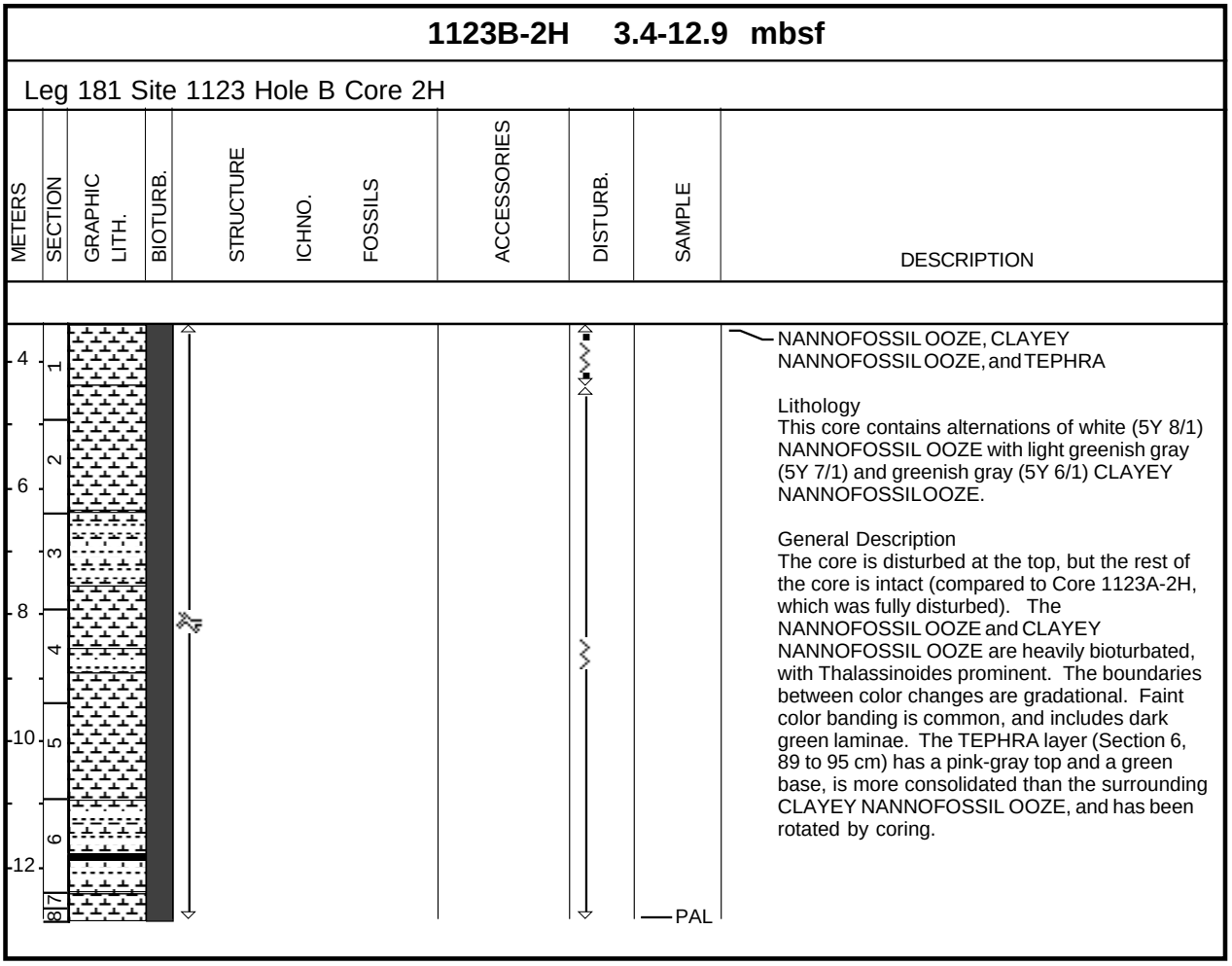
Leg 181 Site 1123 Hole B Core 1H

METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ICHNO.	FOSSILS	ACCESSORIES	DISTURB.	SAMPLE	DESCRIPTION
1	1								SS	FORAMINIFER-BEARINGNANNOFOSSIL OOZE and TEPHRA
2	2								PAL	
	CC									

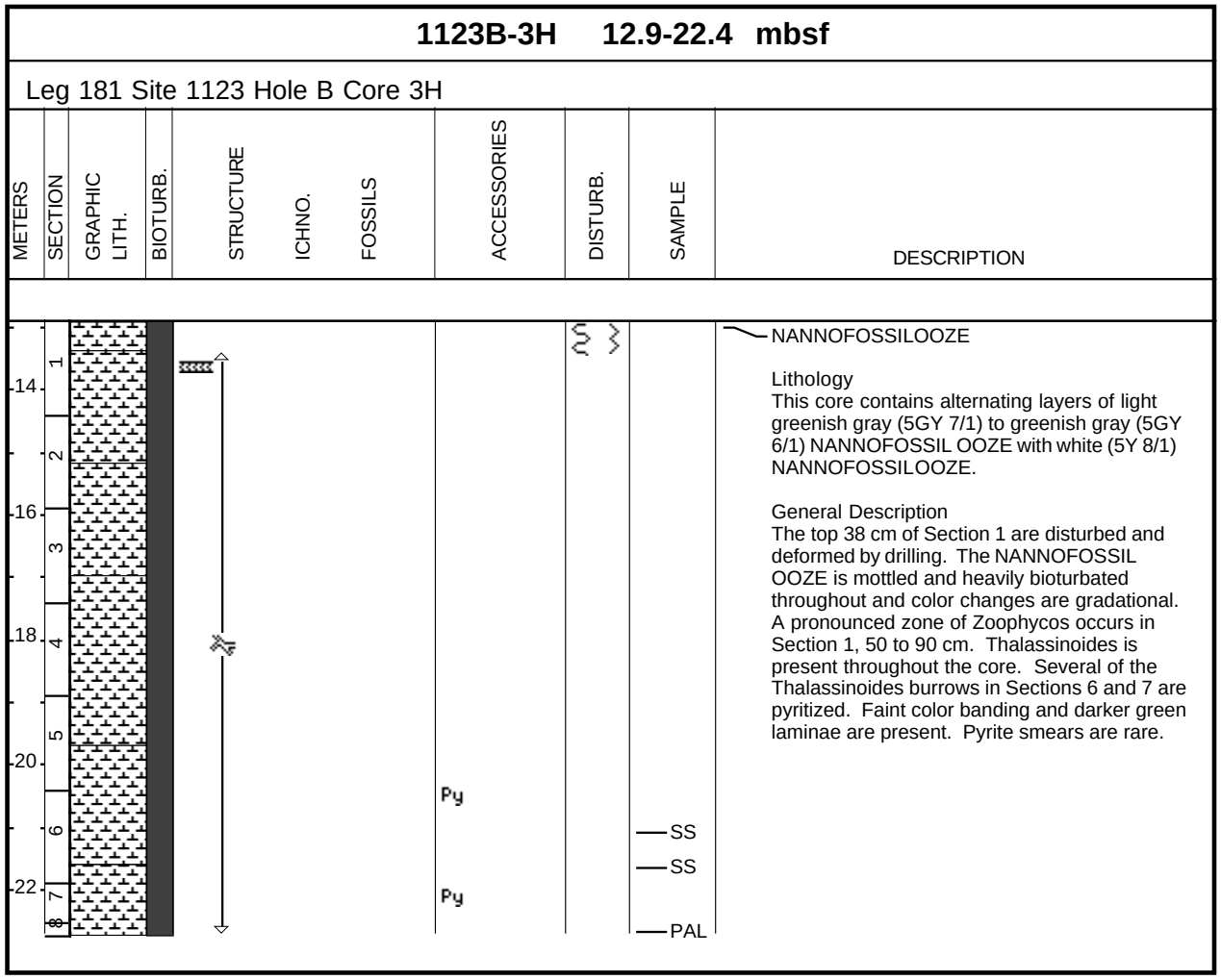
Lithology
This core contains light greenish gray (5GY 7/1) and greenish gray (5GY 6/1) FORAMINIFER-BEARINGNANNOFOSSIL OOZE with oxidized grayish brown (10YR 5/2) FORAMINIFER-BEARINGNANNOFOSSIL OOZE at the top. A 4 cm thick TEPHRA layer occurs in Section 2, 9 cm.

General Description
In the FORAMINIFER-BEARING NANNOFOSSIL OOZE, boundaries between color changes are gradational. The sediment is mottled, moderately pyrite stained, and heavily bioturbated, primarily by Thalassinoides (throughout the core) and Planolites (in Section 3). The pink (coarse) and white (fine) TEPHRA may be the Omotaroa Ash (~28 ka).

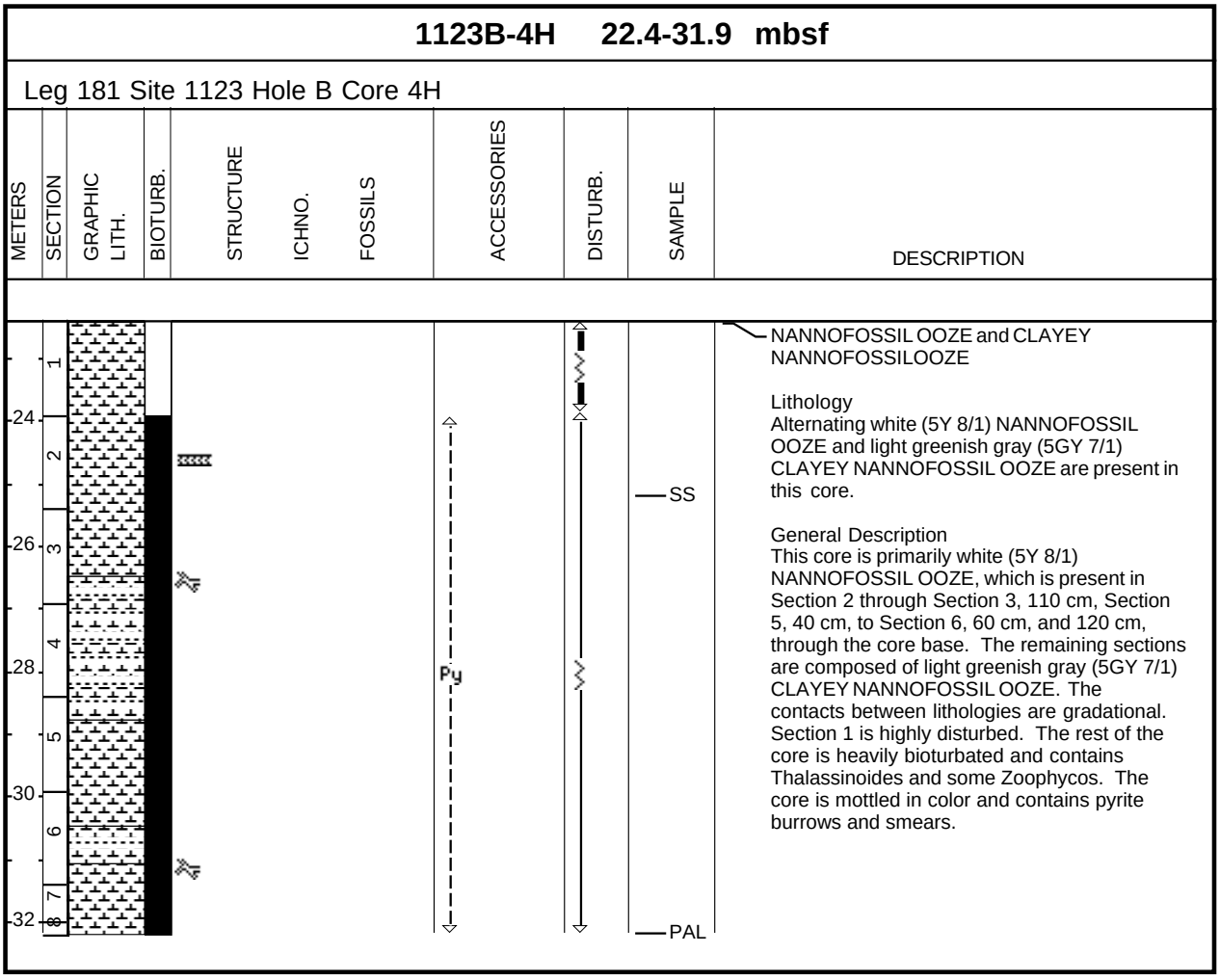
Core Photo


1123B-2H 3.4-12.9 mbsf
Leg 181 Site 1123 Hole B Core 2H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
4
6
8
10
12
1
2
3
4
5
6
7
PAL
NANNOFOSSIL OOZE, CLAYEY NANNOFOSSIL OOZE, and TEPHRA
Lithology
This core contains alternations of white (5Y 8/1) NANNOFOSSIL OOZE with light greenish gray (5Y 7/1) and greenish gray (5Y 6/1) CLAYEY NANNOFOSSIL OOZE.
General Description
The core is disturbed at the top, but the rest of the core is intact (compared to Core 1123A-2H, which was fully disturbed). The NANNOFOSSIL OOZE and CLAYEY NANNOFOSSIL OOZE are heavily bioturbated, with Thalassinoides prominent. The boundaries between color changes are gradational. Faint color banding is common, and includes dark green laminae. The TEPHRA layer (Section 6, 89 to 95 cm) has a pink-gray top and a green base, is more consolidated than the surrounding CLAYEY NANNOFOSSIL OOZE, and has been rotated by coring.

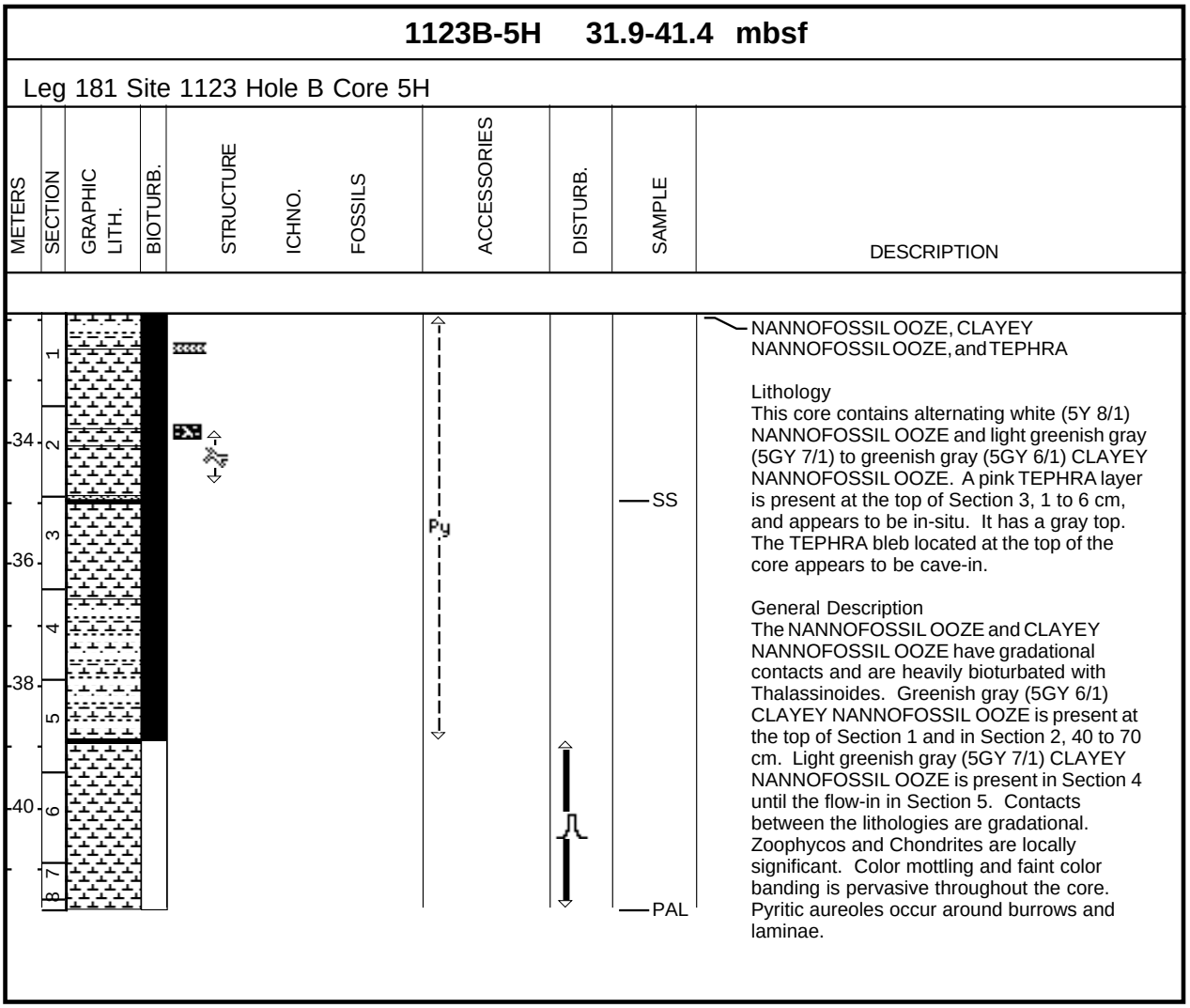
Core Photo


1123B-3H 12.9-22.4 mbsf
Leg 181 Site 1123 Hole B Core 3H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
14
16
18
20
22
1
2
3
4
5
6
7
Py
Py
SS
SS
PAL
NANNOFOSSILOOZE
Lithology
This core contains alternating layers of light greenish gray (5GY 7/1) to greenish gray (5GY 6/1) NANNOFOSSIL OOZE with white (5Y 8/1) NANNOFOSSILOOZE.
General Description
The top 38 cm of Section 1 are disturbed and deformed by drilling. The NANNOFOSSIL OOZE is mottled and heavily bioturbated throughout and color changes are gradational. A pronounced zone of Zoophycos occurs in Section 1, 50 to 90 cm. Thalassinoides is present throughout the core. Several of the Thalassinoides burrows in Sections 6 and 7 are pyritized. Faint color banding and darker green laminae are present. Pyrite smears are rare.

Core Photo


1123B-4H 22.4-31.9 mbsf
Leg 181 Site 1123 Hole B Core 4H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
24
26
28
30
32
1
2
3
4
5
6
7
Py
SS
PAL
NANNOFOSSIL OOZE and CLAYEY NANNOFOSSILOOZE
Lithology
Alternating white (5Y 8/1) NANNOFOSSIL OOZE and light greenish gray (5GY 7/1) CLAYEY NANNOFOSSIL OOZE are present in this core.
General Description
This core is primarily white (5Y 8/1) NANNOFOSSIL OOZE, which is present in Section 2 through Section 3, 110 cm, Section 5, 40 cm, to Section 6, 60 cm, and 120 cm, through the core base. The remaining sections are composed of light greenish gray (5GY 7/1) CLAYEY NANNOFOSSIL OOZE. The contacts between lithologies are gradational. Section 1 is highly disturbed. The rest of the core is heavily bioturbated and contains Thalassinoides and some Zoophycos. The core is mottled in color and contains pyrite burrows and smears.

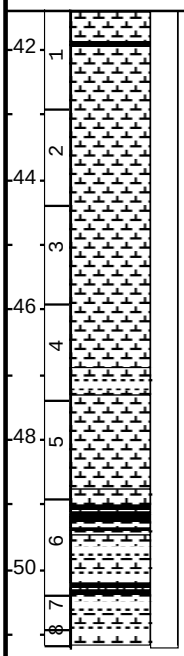
Core Photo


1123B-5H 31.9-41.4 mbsf
Leg 181 Site 1123 Hole B Core 5H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
34
36
38
40
1
2
3
4
5
6
7
CC
Py
SS
PAL
NANNOFOSSIL OOZE, CLAYEY NANNOFOSSIL OOZE, and TEPHRA
Lithology
This core contains alternating white (5Y 8/1) NANNOFOSSIL OOZE and light greenish gray (5GY 7/1) to greenish gray (5GY 6/1) CLAYEY NANNOFOSSIL OOZE. A pink TEPHRA layer is present at the top of Section 3, 1 to 6 cm, and appears to be in-situ. It has a gray top. The TEPHRA bleb located at the top of the core appears to be cave-in.
General Description
The NANNOFOSSIL OOZE and CLAYEY NANNOFOSSIL OOZE have gradational contacts and are heavily bioturbated with Thalassinoides. Greenish gray (5GY 6/1) CLAYEY NANNOFOSSIL OOZE is present at the top of Section 1 and in Section 2, 40 to 70 cm. Light greenish gray (5GY 7/1) CLAYEY NANNOFOSSIL OOZE is present in Section 4 until the flow-in in Section 5. Contacts between the lithologies are gradational. Zoophycos and Chondrites are locally significant. Color mottling and faint color banding is pervasive throughout the core. Pyritic aureoles occur around burrows and laminae.

Core Photo

1123B-6H 41.4-50.9 mbsf

Leg 181 Site 1123 Hole B Core 6H



NANNOFOSSIL OOZE, CLAYEY NANNOFOSSIL OOZE, and TEPHRA

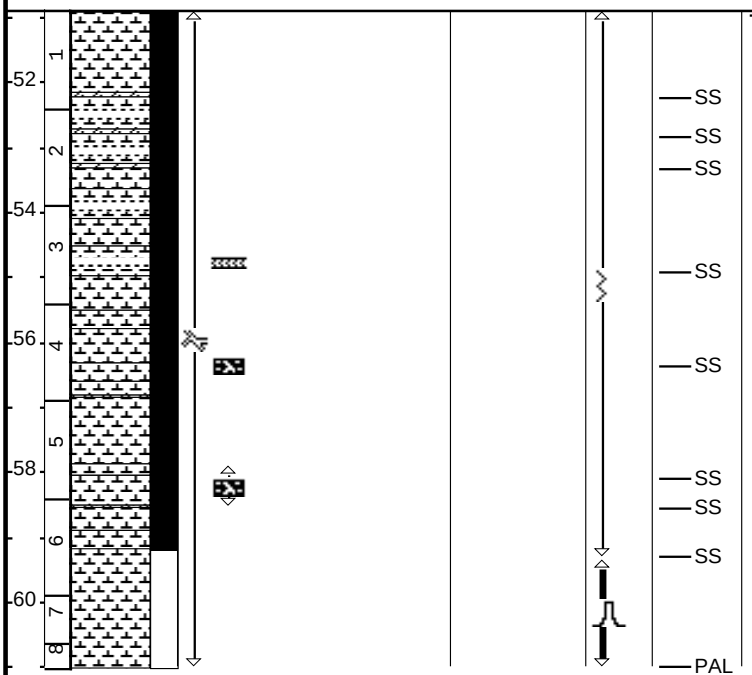
Lithology
The dominant lithology of this core is white (5Y 8/1) NANNOFOSSIL OOZE which contains interbeds of light greenish gray (5GY 7/1) to greenish gray (5GY 6/1) CLAYEY NANNOFOSSIL OOZE. TEPHRA layers and burrow-fills are present in Section 6 at 10 to 11 cm (dark gray), 22.5 to 24.5 cm (dark pink gray), 33 cm (3 mm; black), 46 to 47 cm (pink gray), 50 and 59 cm (burrows), and 133 to 143 cm.

General Description
The white (5Y 8/1) NANNOFOSSIL OOZE present in Section 1 through Section 4, 100 cm, is markedly color banded. White NANNOFOSSIL OOZE is also present in Section 5. Light greenish gray CLAYEY NANNOFOSSIL OOZE is present at the bottom of Section 4, while it is a greenish gray color in Section 6. The contacts between different colors and lithologies are gradational. The fourth and fifth TEPHRA layers represent TEPHRA-filled burrows. The TEPHRA in Section 6, 133 to 143 cm, is disturbed. Most of the TEPHRA layers have deformed bases, but appear to be in-situ.

Core Photo

1123B-7H 50.9-60.4 mbsf

Leg 181 Site 1123 Hole B Core 7H



NANNOFOSSIL OOZE, CLAYEY NANNOFOSSIL OOZE, and TEPHRA

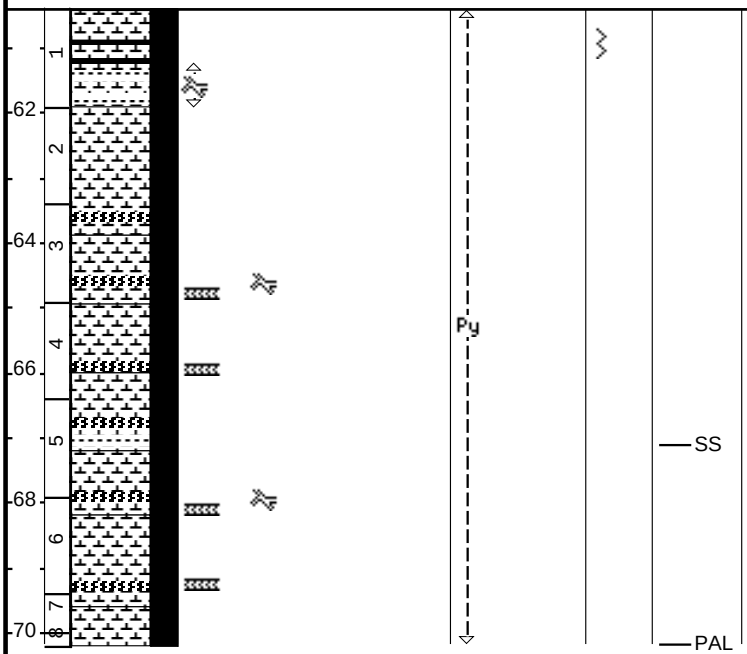
Lithology
This core contains alternating thin beds of white (5Y 8/1) NANNOFOSSIL OOZE with greenish gray (5GY 6/1) and light greenish gray (5GY 7/1) CLAYEY NANNOFOSSIL OOZE. There are frequent TEPHRA laminae and thin beds.

General Description
Light greenish gray (5GY 7/1) CLAYEY NANNOFOSSIL OOZE is present at the end of Section 1 into Section 2, 85 cm, the end of Section 2 until Section 3, 15 cm, the top of Section 4 and in Section 6, 50 to 80 cm. Greenish gray (5GY 6/1) color is present in Section 3, 60 to 110 cm, and in Section 5, 80 cm to 115 cm. White (5Y 8/1) NANNOFOSSIL OOZE is present throughout the remainder of the core, except for the TEPHRA layers. The contacts between changes in color and lithology are gradational. Color mottling and occasional pyrite banding in dark green, pink, and dark gray, as well as pyritic aureoles around the burrows, are present in this core. TEPHRA are present in Section 1, 128.5 to 132.5 cm, Section 2, 34 to 40 cm, 86 to 92 cm, Section 4, 93.5 to 94 cm, 143 to 148 cm, Section 5, 75 to 75.5 cm, 115.5 to 117 cm, Section 6, 11.5 to 15.5 cm. Flow-in is present below Section 6, 80 cm. There is a TEPHRA block present in Section 6 at the top of the flow-in, but it probably came from layers further downcore.

Core Photo

1123B-8H 60.4-69.9 mbsf

Leg 181 Site 1123 Hole B Core 8H

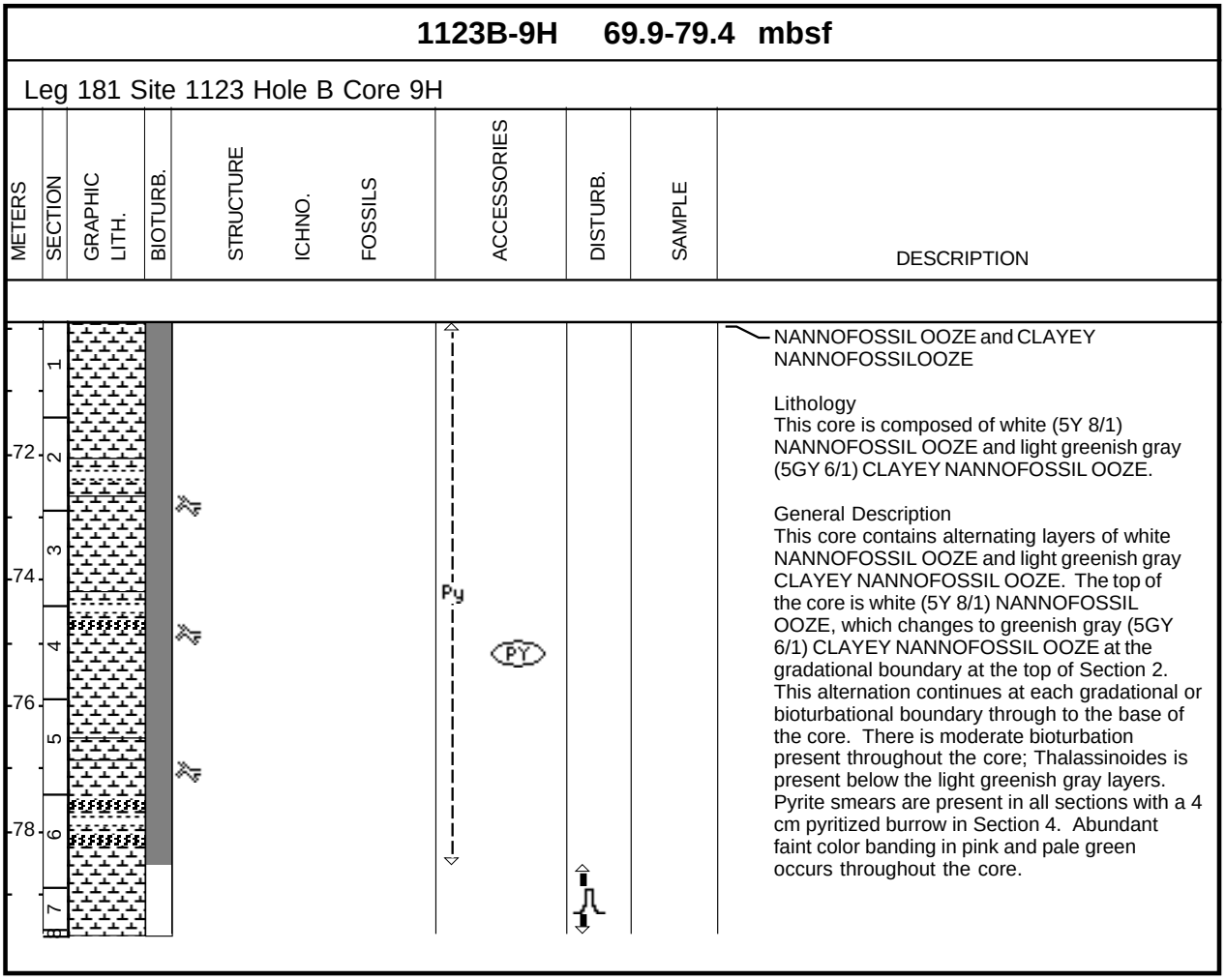


NANNOFOSSIL OOZE and CLAYEY NANNOFOSSILOOZE

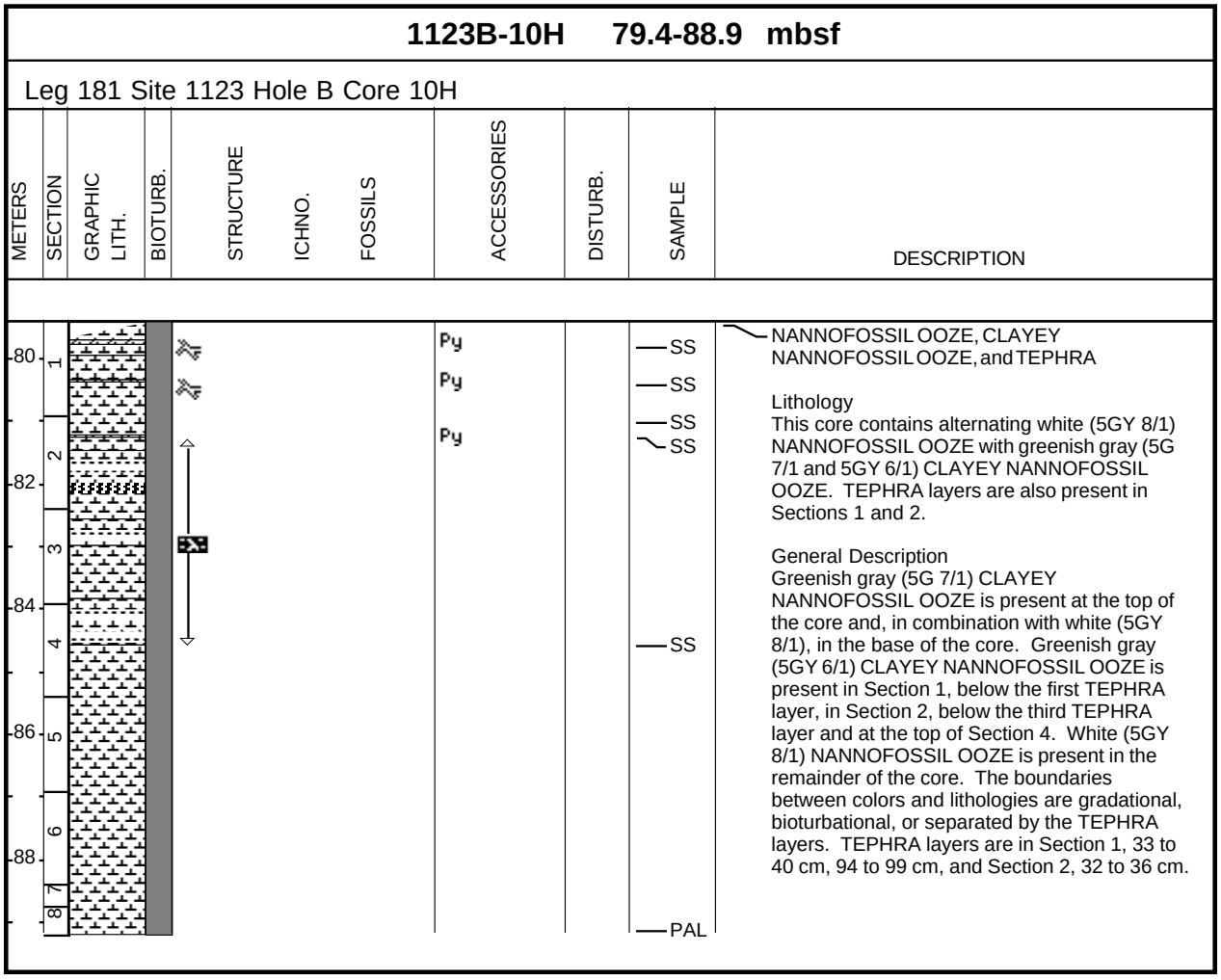
Lithology
This core contains alternations of white (5Y 8/1) NANNOFOSSIL OOZE with greenish gray (5GY 6/1) and light greenish gray (5GY 7/1) CLAYEY NANNOFOSSIL OOZE.

General Description
Light greenish gray (5GY 7/1) CLAYEY NANNOFOSSIL OOZE is present at the bottom of Section 1, and near the top of Sections 3, 6, and 7. Greenish gray (5GY 6/1) color is present at the bottom of Section 3 and in Section 5, 40 to 80 cm. White (5Y 8/1) NANNOFOSSIL OOZE is present for the remainder of the core. Contacts between lithology and color variations are either gradational or bioturbational. Bioturbation is abundant throughout the core; Thalassinoides and Chondrites are common. Mottling and color banding is present and burrows are outlined in pyrite or filled with nannofossils/foraminifers.

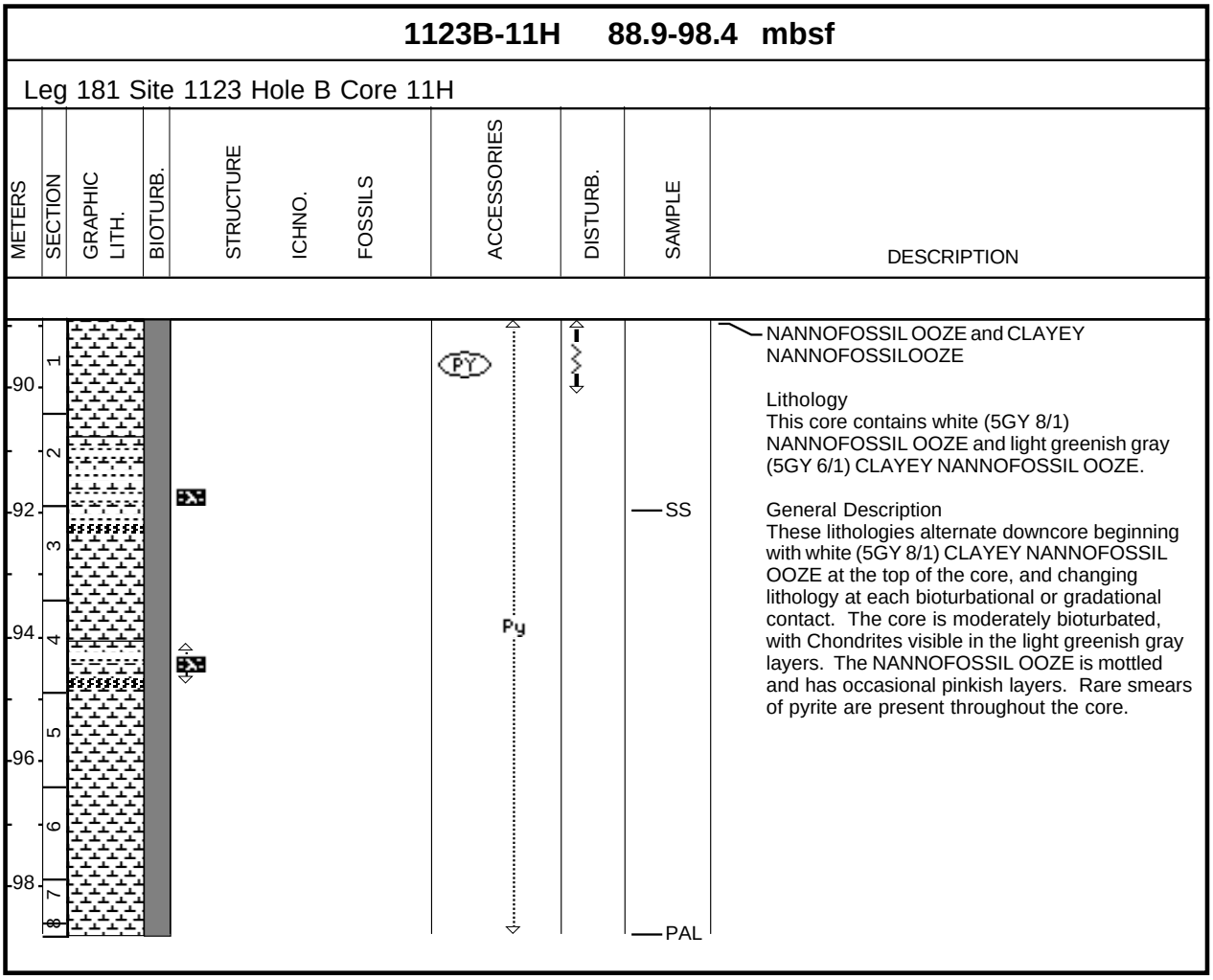
Core Photo


1123B-9H 69.9-79.4 mbsf
Leg 181 Site 1123 Hole B Core 9H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
72
74
76
78
1
2
3
4
5
6
7
Py
PY
NANNOFOSSIL OOZE and CLAYEY NANNOFOSSILOOZE
Lithology
This core is composed of white (5Y 8/1) NANNOFOSSIL OOZE and light greenish gray (5GY 6/1) CLAYEY NANNOFOSSIL OOZE.
General Description
This core contains alternating layers of white NANNOFOSSIL OOZE and light greenish gray CLAYEY NANNOFOSSIL OOZE. The top of the core is white (5Y 8/1) NANNOFOSSIL OOZE, which changes to greenish gray (5GY 6/1) CLAYEY NANNOFOSSIL OOZE at the gradational boundary at the top of Section 2. This alternation continues at each gradational or bioturbational boundary through to the base of the core. There is moderate bioturbation present throughout the core; Thalassinoides is present below the light greenish gray layers. Pyrite smears are present in all sections with a 4 cm pyritized burrow in Section 4. Abundant faint color banding in pink and pale green occurs throughout the core.

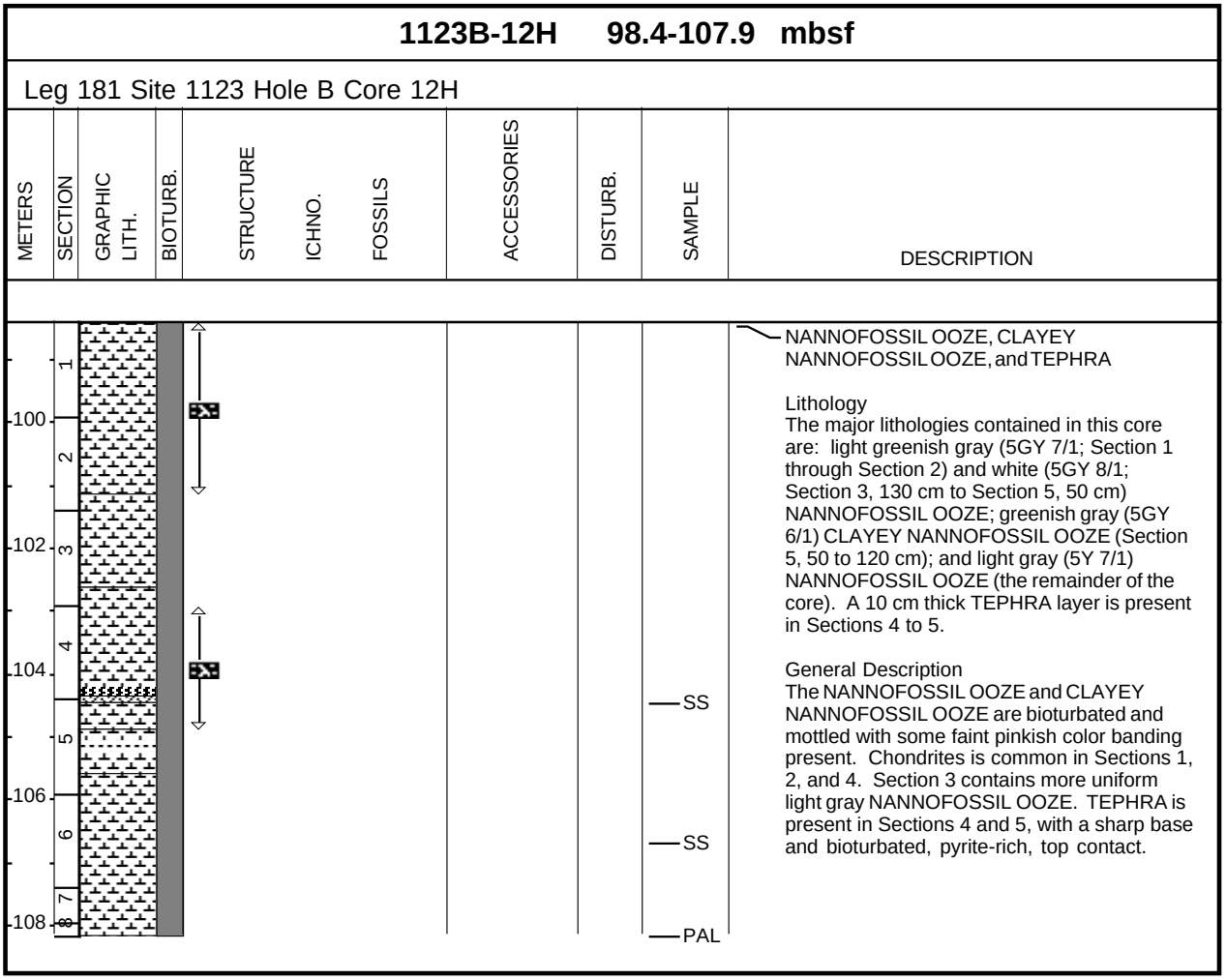
Core Photo


1123B-10H 79.4-88.9 mbsf
Leg 181 Site 1123 Hole B Core 10H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
80
82
84
86
88
1
2
3
4
5
6
7
Py
Py
Py
SS
SS
SS
SS
SS
PAL
NANNOFOSSIL OOZE, CLAYEY NANNOFOSSIL OOZE, and TEPHRA
Lithology
This core contains alternating white (5GY 8/1) NANNOFOSSIL OOZE with greenish gray (5G 7/1 and 5GY 6/1) CLAYEY NANNOFOSSIL OOZE. TEPHRA layers are also present in Sections 1 and 2.
General Description
Greenish gray (5G 7/1) CLAYEY NANNOFOSSIL OOZE is present at the top of the core and, in combination with white (5GY 8/1), in the base of the core. Greenish gray (5GY 6/1) CLAYEY NANNOFOSSIL OOZE is present in Section 1, below the first TEPHRA layer, in Section 2, below the third TEPHRA layer and at the top of Section 4. White (5GY 8/1) NANNOFOSSIL OOZE is present in the remainder of the core. The boundaries between colors and lithologies are gradational, bioturbational, or separated by the TEPHRA layers. TEPHRA layers are in Section 1, 33 to 40 cm, 94 to 99 cm, and Section 2, 32 to 36 cm.

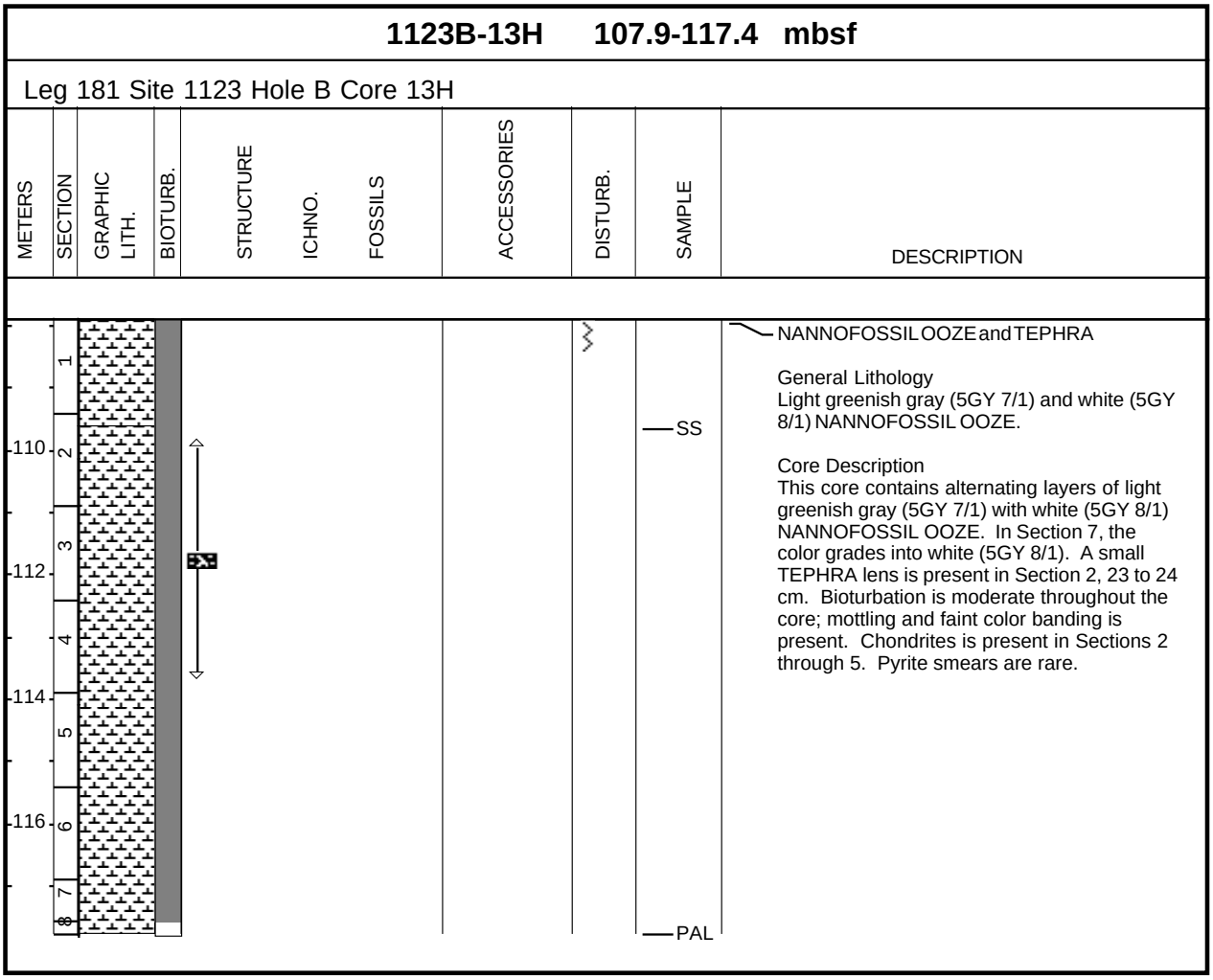
Core Photo


1123B-11H 88.9-98.4 mbsf
Leg 181 Site 1123 Hole B Core 11H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
90
92
94
96
98
1
2
3
4
5
6
7
PY
Py
SS
PAL
NANNOFOSSIL OOZE and CLAYEY NANNOFOSSILOOZE
Lithology
This core contains white (5GY 8/1) NANNOFOSSIL OOZE and light greenish gray (5GY 6/1) CLAYEY NANNOFOSSIL OOZE.
General Description
These lithologies alternate downcore beginning with white (5GY 8/1) CLAYEY NANNOFOSSIL OOZE at the top of the core, and changing lithology at each bioturbational or gradational contact. The core is moderately bioturbated, with Chondrites visible in the light greenish gray layers. The NANNOFOSSIL OOZE is mottled and has occasional pinkish layers. Rare smears of pyrite are present throughout the core.

Core Photo


1123B-12H 98.4-107.9 mbsf
Leg 181 Site 1123 Hole B Core 12H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
100
102
104
106
108
1
2
3
4
5
6
7
SS
SS
PAL
NANNOFOSSIL OOZE, CLAYEY NANNOFOSSIL OOZE, and TEPHRA
Lithology
The major lithologies contained in this core are: light greenish gray (5GY 7/1; Section 1 through Section 2) and white (5GY 8/1; Section 3, 130 cm to Section 5, 50 cm) NANNOFOSSIL OOZE; greenish gray (5GY 6/1) CLAYEY NANNOFOSSIL OOZE (Section 5, 50 to 120 cm); and light gray (5Y 7/1) NANNOFOSSIL OOZE (the remainder of the core). A 10 cm thick TEPHRA layer is present in Sections 4 to 5.
General Description
The NANNOFOSSIL OOZE and CLAYEY NANNOFOSSIL OOZE are bioturbated and mottled with some faint pinkish color banding present. Chondrites is common in Sections 1, 2, and 4. Section 3 contains more uniform light gray NANNOFOSSIL OOZE. TEPHRA is present in Sections 4 and 5, with a sharp base and bioturbated, pyrite-rich, top contact.

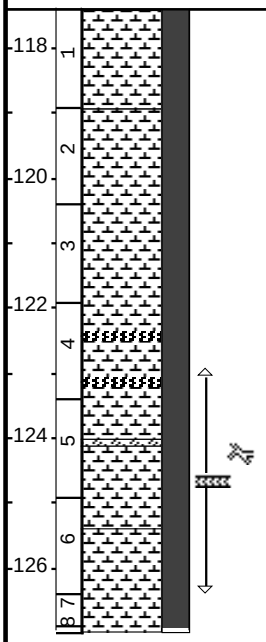
Core Photo


1123B-13H 107.9-117.4 mbsf
Leg 181 Site 1123 Hole B Core 13H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
110
112
114
116
1
2
3
4
5
6
7
SS
PAL
NANNOFOSSIL OOZE and TEPHRA
General Lithology
Light greenish gray (5GY 7/1) and white (5GY 8/1) NANNOFOSSIL OOZE.
Core Description
This core contains alternating layers of light greenish gray (5GY 7/1) with white (5GY 8/1) NANNOFOSSIL OOZE. In Section 7, the color grades into white (5GY 8/1). A small TEPHRA lens is present in Section 2, 23 to 24 cm. Bioturbation is moderate throughout the core; mottling and faint color banding is present. Chondrites is present in Sections 2 through 5. Pyrite smears are rare.

Core Photo

1123B-14H 117.4-126.9 mbsf

Leg 181 Site 1123 Hole B Core 14H



STRUCTURE ICHNO. FOSSILS | ACCESSORIES | DISTURB. | SAMPLE

SS
SS
SS
PAL

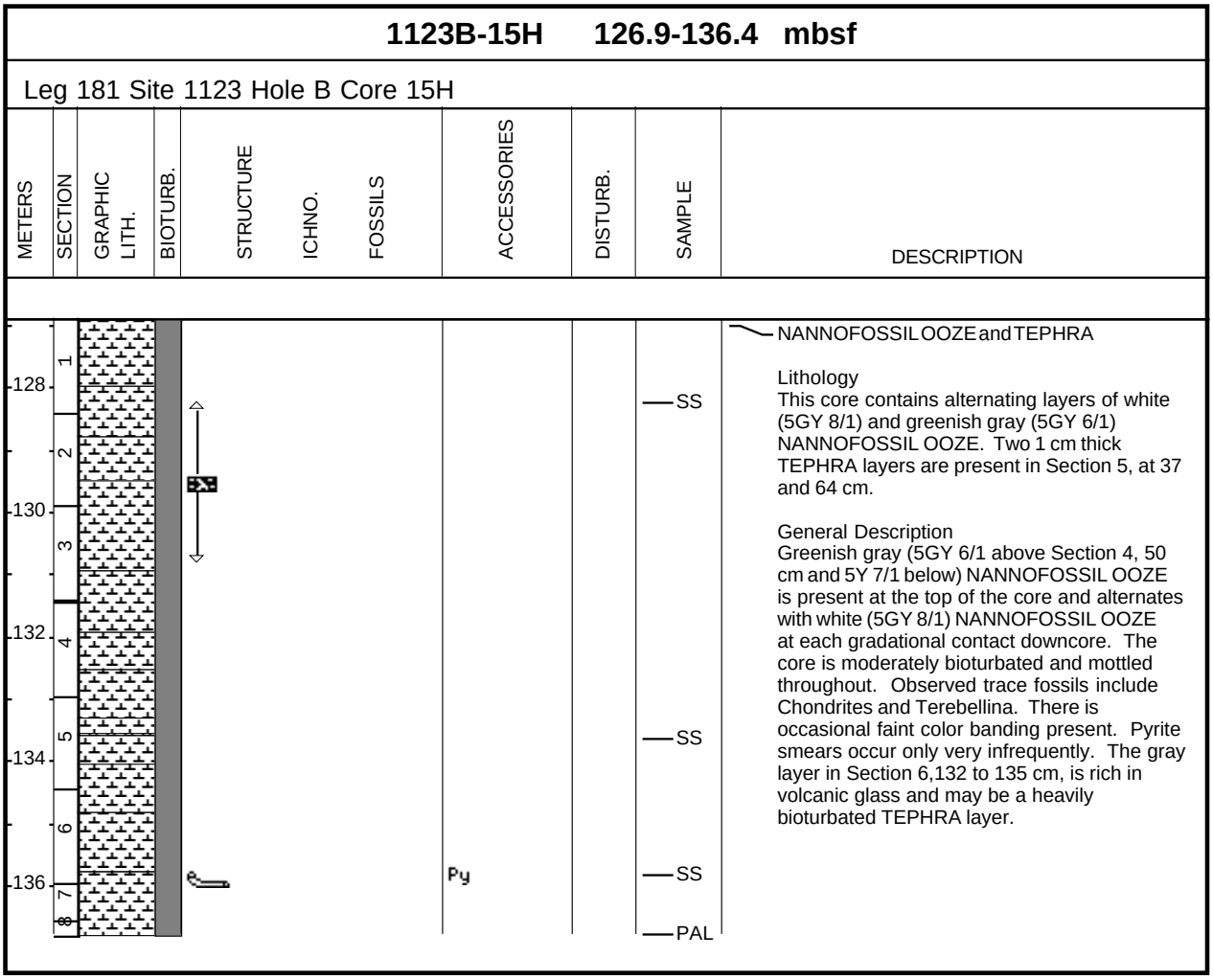
DESCRIPTION

NANNOFOSSIL OOZE, TEPHRA, and TEPHRA-BEARINGNANNOFOSSILOOZE

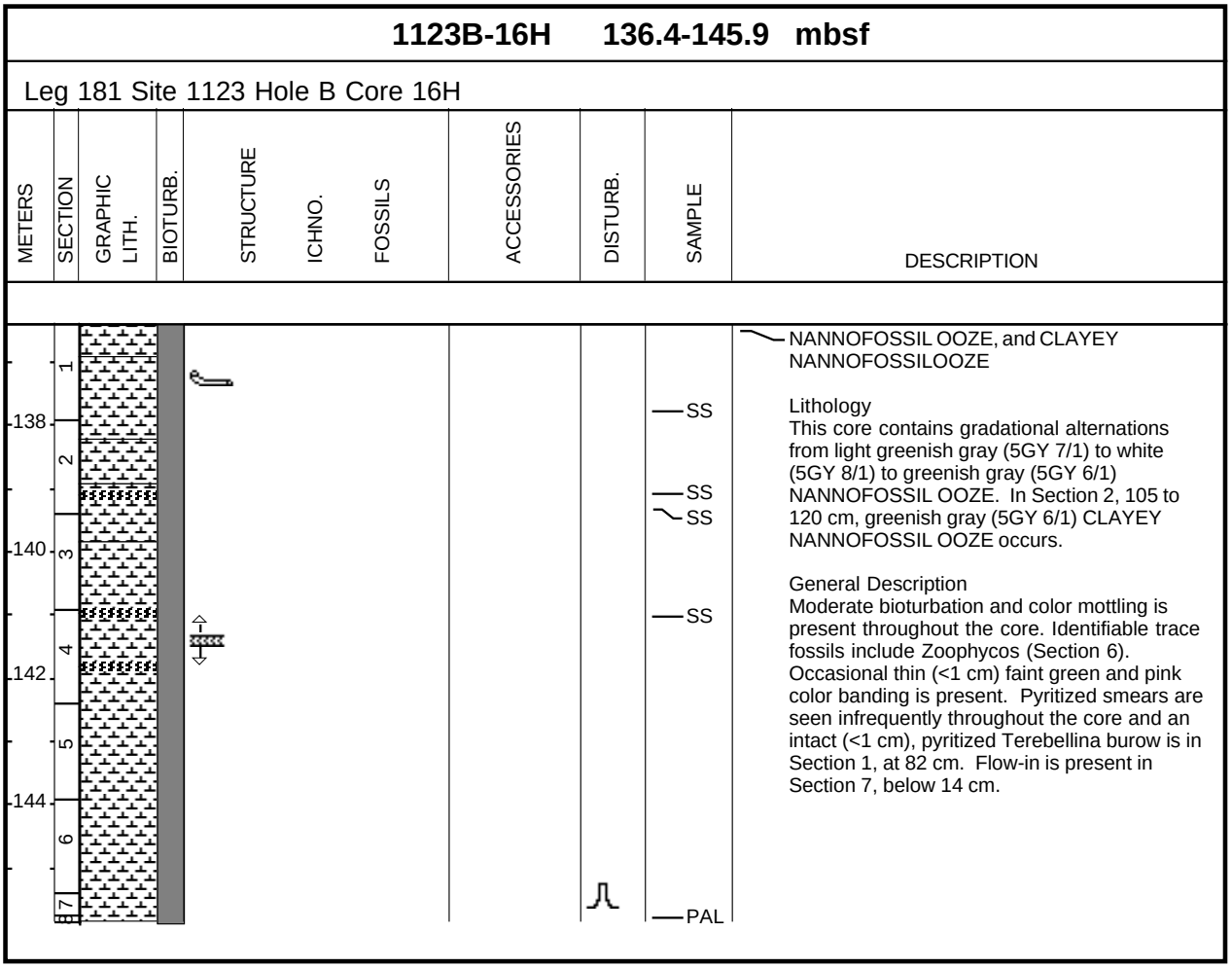
Lithology
This core contains light greenish gray (5GY 7/1) and white (5GY 8/1) NANNOFOSSIL OOZE. TEPHRA layers are present in Section 2, 4 to 6 cm, and in Section 5, 65 to 74 cm.

General Description
This core is primarily light greenish gray (5GY 7/1) NANNOFOSSIL OOZE, with beds of white (5GY 8/1) ooze present in Section 4, 60 to 130 cm, and the bottom of Section 5 to the top of Section 6. A gradational contact from white to light greenish gray occurs in Section 6, while bioturbated contacts occur in Section 4. This core is heavily bioturbated; Zoophycos is common in Sections 4 through 6. It is heavly mottled with frequent color banding in light green and pink. The TEPHRA in Section 5 has a sharp base and abundant pyrite, as well as a gradational (?) upper contact. Thalassinoides are present beneath the TEPHRA layer. The TEPHRA-BEARING NANNOFOSSIL OOZE in Section 2, 4 to 6 cm, may be the remains of a heavily bioturbated, thin TEPHRA.

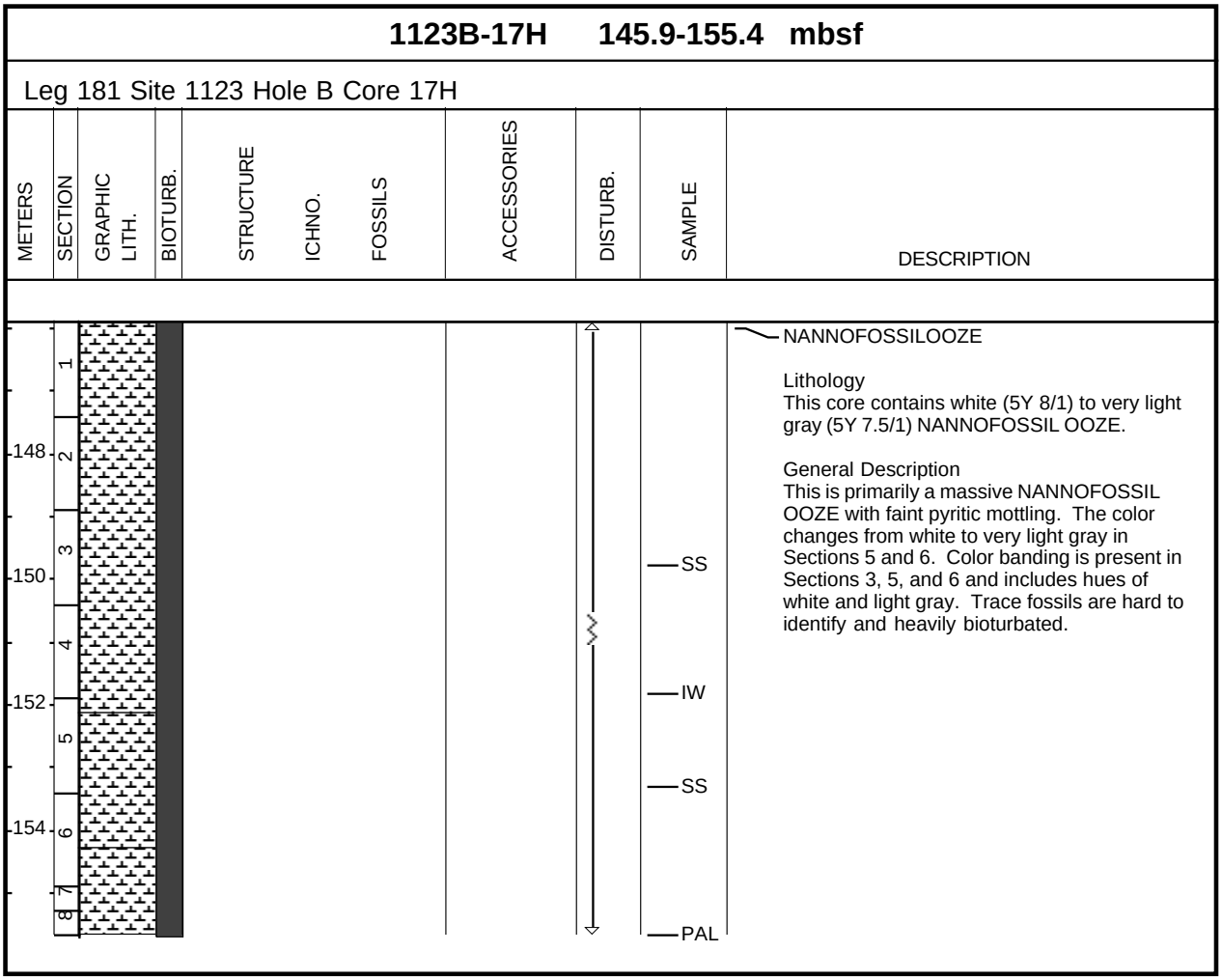
Core Photo


1123B-15H 126.9-136.4 mbsf
Leg 181 Site 1123 Hole B Core 15H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
128
130
132
134
136
1
2
3
4
5
6
7
Py
SS
SS
SS
PAL
NANNOFOSSIL OOZE and TEPHRA
Lithology
This core contains alternating layers of white (5GY 8/1) and greenish gray (5GY 6/1) NANNOFOSSIL OOZE. Two 1 cm thick TEPHRA layers are present in Section 5, at 37 and 64 cm.
General Description
Greenish gray (5GY 6/1 above Section 4, 50 cm and 5Y 7/1 below) NANNOFOSSIL OOZE is present at the top of the core and alternates with white (5GY 8/1) NANNOFOSSIL OOZE at each gradational contact downcore. The core is moderately bioturbated and mottled throughout. Observed trace fossils include Chondrites and Terebellina. There is occasional faint color banding present. Pyrite smears occur only very infrequently. The gray layer in Section 6,132 to 135 cm, is rich in volcanic glass and may be a heavily bioturbated TEPHRA layer.

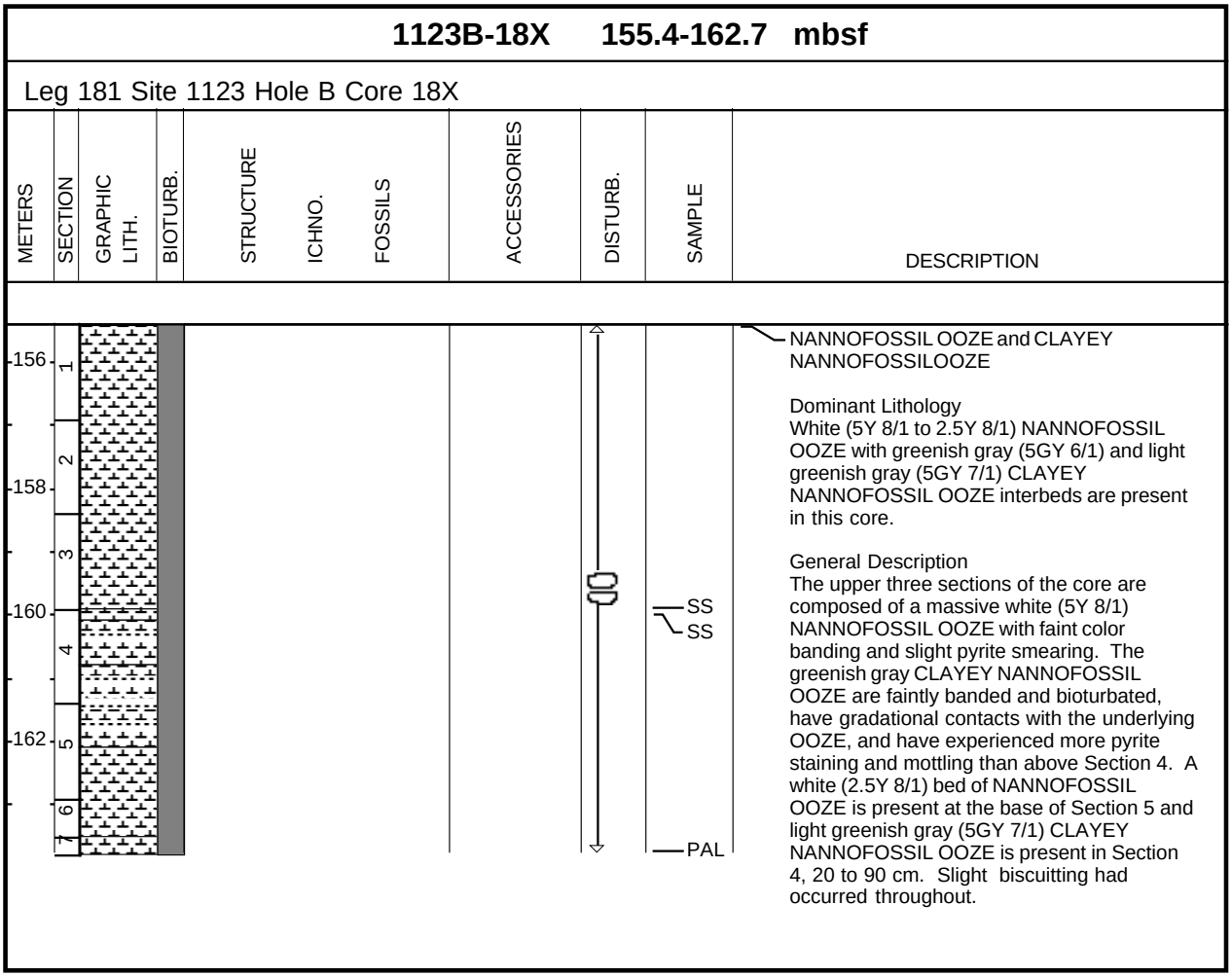
Core Photo


1123B-16H 136.4-145.9 mbsf
Leg 181 Site 1123 Hole B Core 16H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
138
140
142
144
1
2
3
4
5
6
7
SS
SS
SS
SS
PAL
NANNOFOSSIL OOZE, and CLAYEY NANNOFOSSILOOZE
Lithology
This core contains gradational alternations from light greenish gray (5GY 7/1) to white (5GY 8/1) to greenish gray (5GY 6/1) NANNOFOSSIL OOZE. In Section 2, 105 to 120 cm, greenish gray (5GY 6/1) CLAYEY NANNOFOSSIL OOZE occurs.
General Description
Moderate bioturbation and color mottling is present throughout the core. Identifiable trace fossils include Zoophycos (Section 6). Occasional thin (<1 cm) faint green and pink color banding is present. Pyritized smears are seen infrequently throughout the core and an intact (<1 cm), pyritized Terebellina burow is in Section 1, at 82 cm. Flow-in is present in Section 7, below 14 cm.

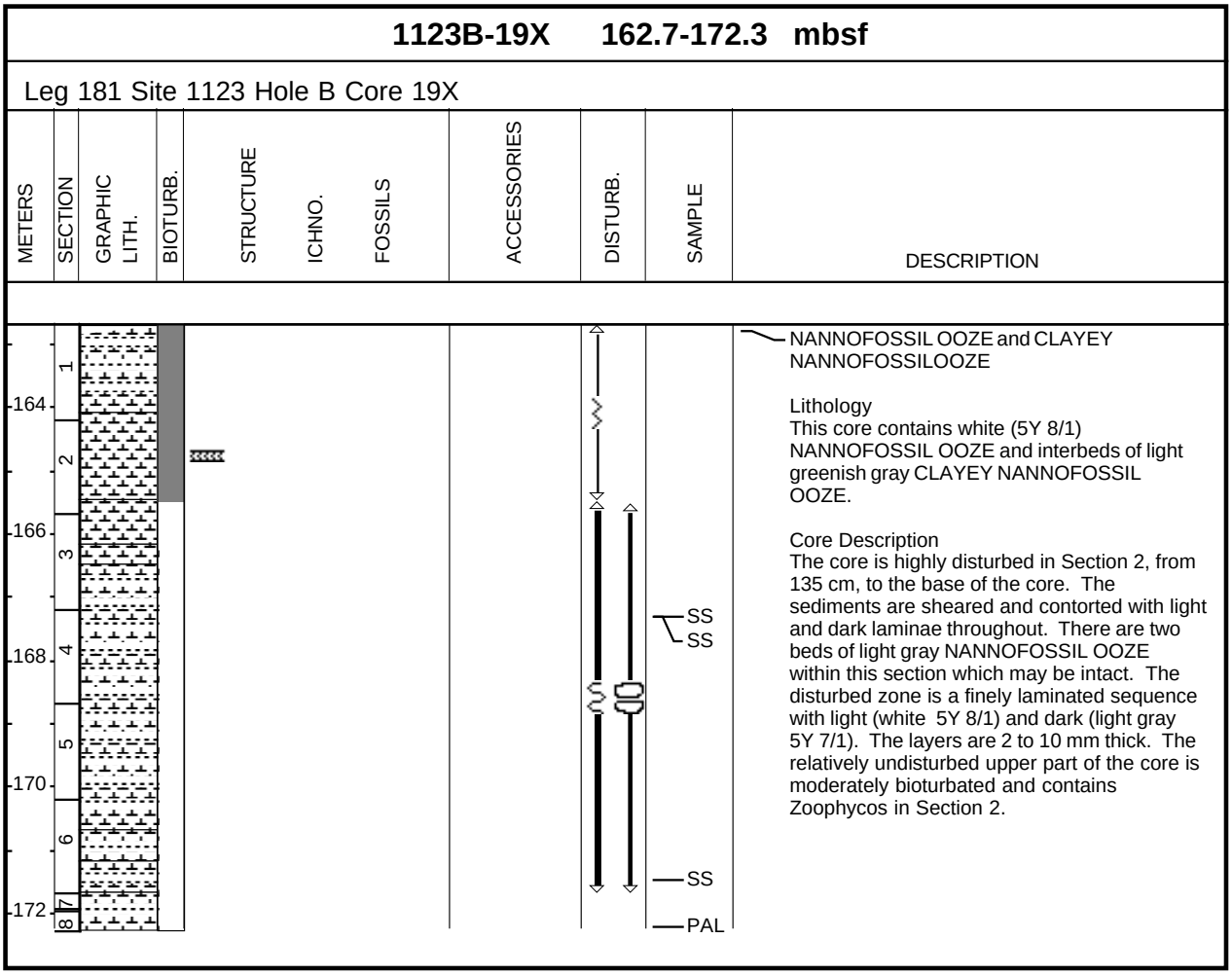
Core Photo


1123B-17H 145.9-155.4 mbsf
Leg 181 Site 1123 Hole B Core 17H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
148
150
152
154
1
2
3
4
5
6
7
SS
IW
SS
PAL
NANNOFOSSILOOZE
Lithology
This core contains white (5Y 8/1) to very light gray (5Y 7.5/1) NANNOFOSSIL OOZE.
General Description
This is primarily a massive NANNOFOSSIL OOZE with faint pyritic mottling. The color changes from white to very light gray in Sections 5 and 6. Color banding is present in Sections 3, 5, and 6 and includes hues of white and light gray. Trace fossils are hard to identify and heavily bioturbated.

Core Photo


1123B-18X 155.4-162.7 mbsf
Leg 181 Site 1123 Hole B Core 18X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
156
158
160
162
1
2
3
4
5
6
7
SS
SS
PAL
NANNOFOSSIL OOZE and CLAYEY NANNOFOSSILOOZE
Dominant Lithology
White (5Y 8/1 to 2.5Y 8/1) NANNOFOSSIL OOZE with greenish gray (5GY 6/1) and light greenish gray (5GY 7/1) CLAYEY NANNOFOSSIL OOZE interbeds are present in this core.
General Description
The upper three sections of the core are composed of a massive white (5Y 8/1) NANNOFOSSIL OOZE with faint color banding and slight pyrite smearing. The greenish gray CLAYEY NANNOFOSSIL OOZE are faintly banded and bioturbated, have gradational contacts with the underlying OOZE, and have experienced more pyrite staining and mottling than above Section 4. A white (2.5Y 8/1) bed of NANNOFOSSIL OOZE is present at the base of Section 5 and light greenish gray (5GY 7/1) CLAYEY NANNOFOSSIL OOZE is present in Section 4, 20 to 90 cm. Slight biscuitting had occurred throughout.

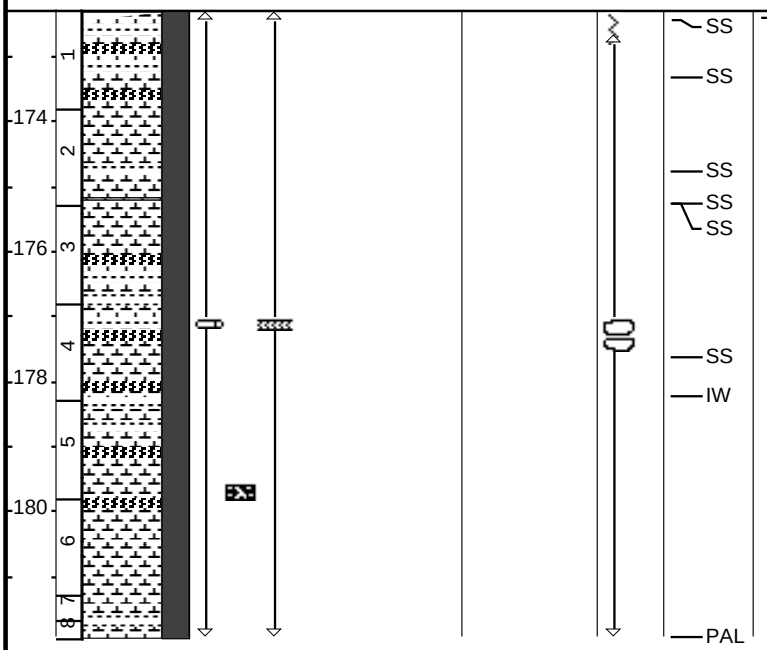
Core Photo


1123B-19X 162.7-172.3 mbsf
Leg 181 Site 1123 Hole B Core 19X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
164
166
168
170
172
1
2
3
4
5
6
7
8
SS
SS
SS
PAL
NANNOFOSSIL OOZE and CLAYEY NANNOFOSSILOOZE
Lithology
This core contains white (5Y 8/1) NANNOFOSSIL OOZE and interbeds of light greenish gray CLAYEY NANNOFOSSIL OOZE.
Core Description
The core is highly disturbed in Section 2, from 135 cm, to the base of the core. The sediments are sheared and contorted with light and dark laminae throughout. There are two beds of light gray NANNOFOSSIL OOZE within this section which may be intact. The disturbed zone is a finely laminated sequence with light (white 5Y 8/1) and dark (light gray 5Y 7/1). The layers are 2 to 10 mm thick. The relatively undisturbed upper part of the core is moderately bioturbated and contains Zoophycos in Section 2.

Core Photo

1123B-20X 172.3-181.9 mbsf

Leg 181 Site 1123 Hole B Core 20X

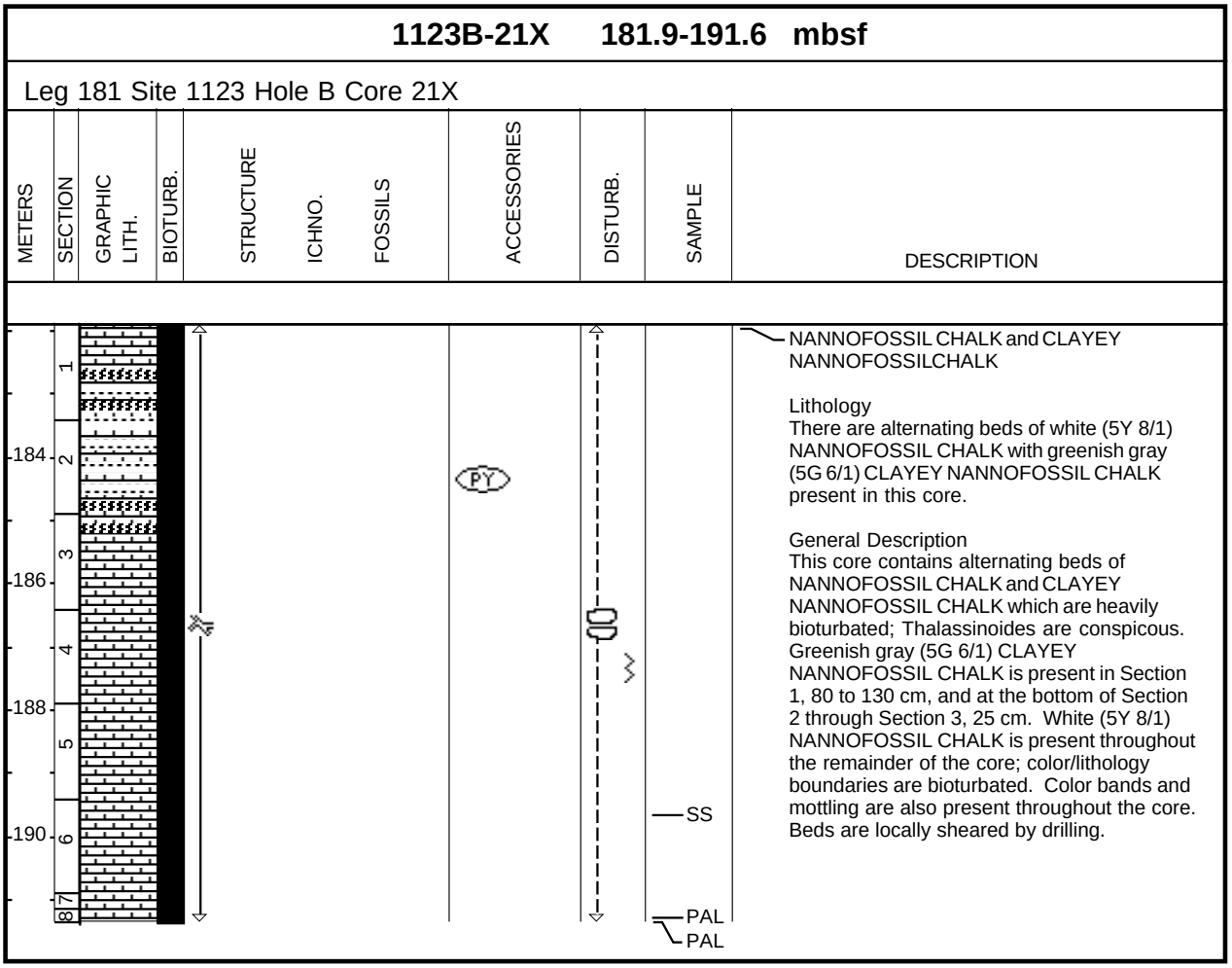


NANNOFOSSIL OOZE, CLAYEY NANNOFOSSIL OOZE, and TEPHRA

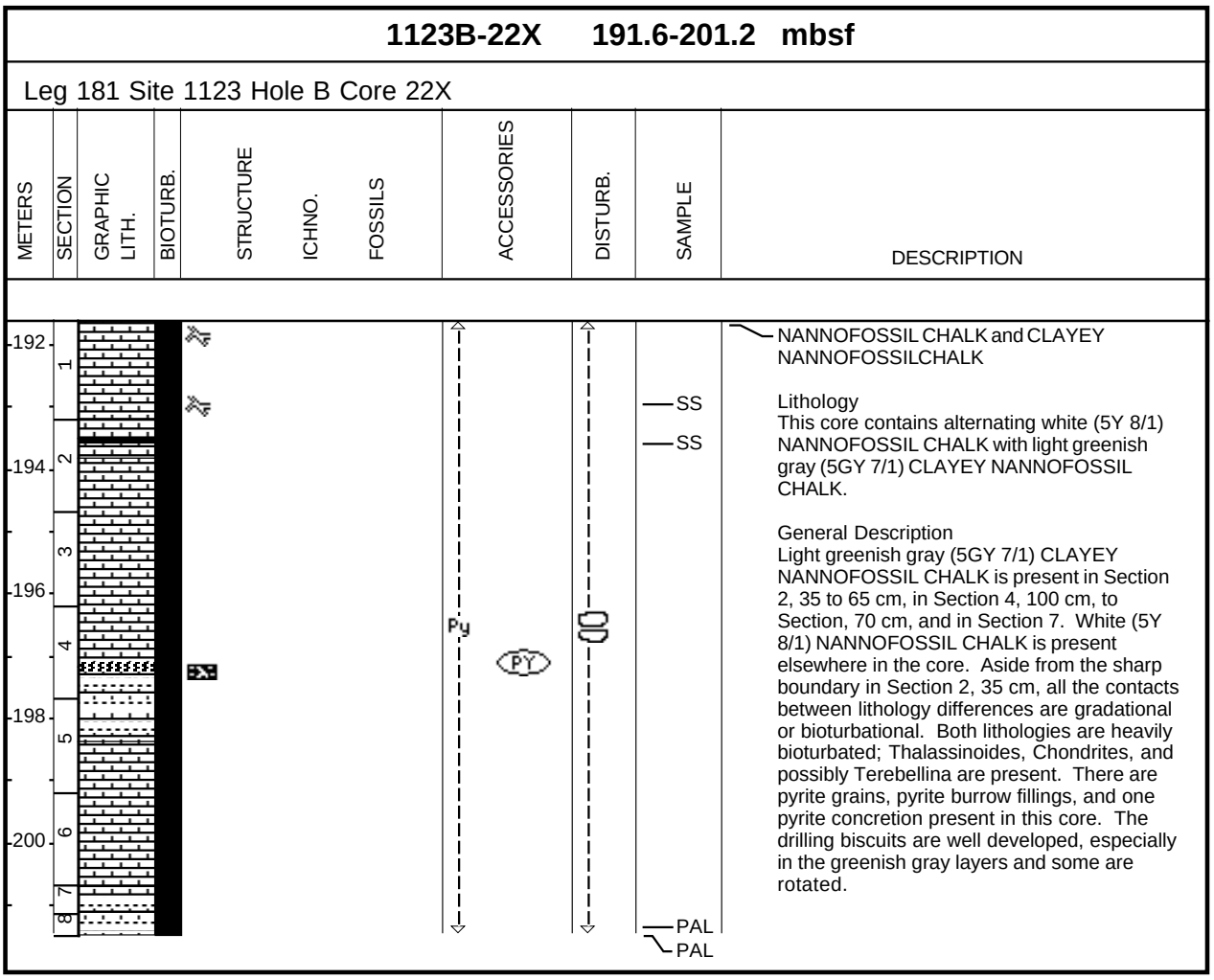
Lithology
This core contains alternating beds of white (5Y 8/1) and various hues of light greenish gray (5G 7/1, 5BG 7/1, and 5B 7/1) NANNOFOSSIL OOZE interbedded with various hues of greenish gray (5GY 5/1, 5BG 6/1, 5G 6/1, and 5GY 6/1) CLAYEY NANNOFOSSIL OOZE.

General Description
This core contains heavily bioturbated and mottled NANNOFOSSIL OOZE and CLAYEY NANNOFOSSIL OOZE. The NANNOFOSSIL OOZE shows signs of incipient chalkification. There is faint color banding with green and pink; pyrite smears are seen infrequently. Observed trace fossils include Zoophycos, Palaeophycus, and Chondrites (Sections 5 and 6). There is a 1.5 cm thick TEPHRA layer in Section 2, 143 cm.

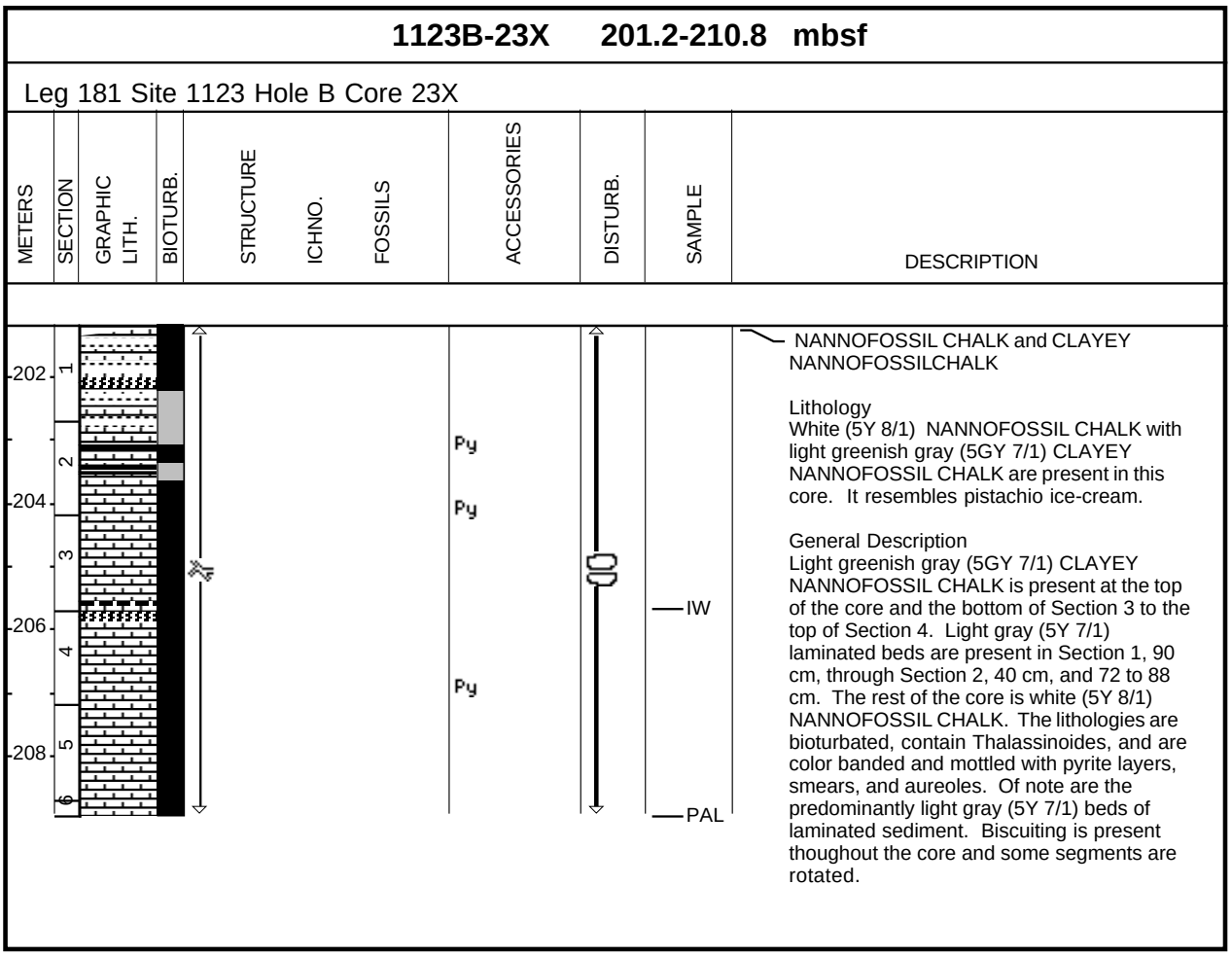
Core Photo


1123B-21X 181.9-191.6 mbsf
Leg 181 Site 1123 Hole B Core 21X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
184
186
188
190
1
2
3
4
5
6
7
PY
SS
PAL
PAL
NANNOFOSSIL CHALK and CLAYEY NANNOFOSSILCHALK
Lithology
There are alternating beds of white (5Y 8/1) NANNOFOSSIL CHALK with greenish gray (5G 6/1) CLAYEY NANNOFOSSIL CHALK present in this core.
General Description
This core contains alternating beds of NANNOFOSSIL CHALK and CLAYEY NANNOFOSSIL CHALK which are heavily bioturbated; Thalassinoides are conspicous. Greenish gray (5G 6/1) CLAYEY NANNOFOSSIL CHALK is present in Section 1, 80 to 130 cm, and at the bottom of Section 2 through Section 3, 25 cm. White (5Y 8/1) NANNOFOSSIL CHALK is present throughout the remainder of the core; color/lithology boundaries are bioturbated. Color bands and mottling are also present throughout the core. Beds are locally sheared by drilling.

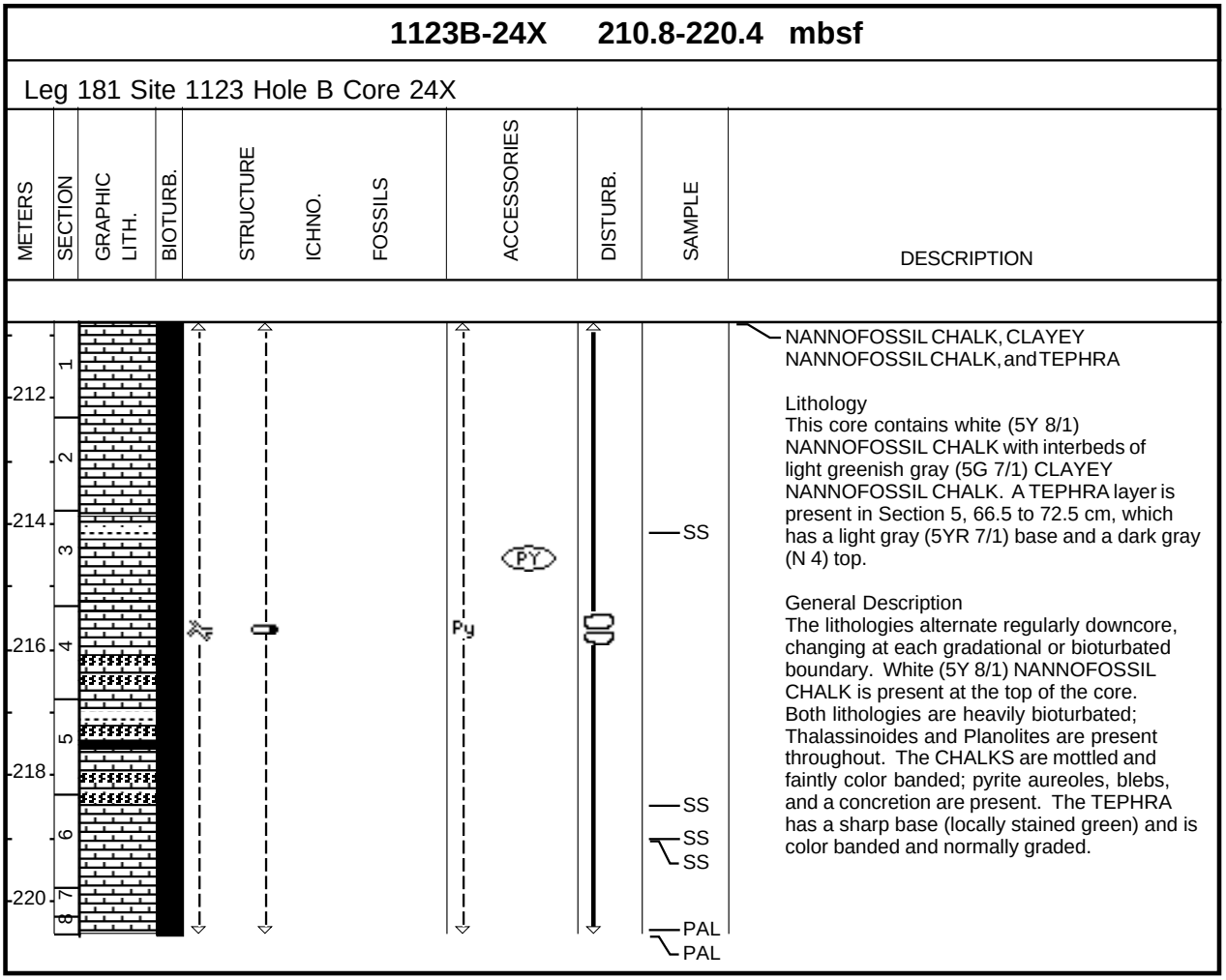
Core Photo


1123B-22X 191.6-201.2 mbsf
Leg 181 Site 1123 Hole B Core 22X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
192
194
196
198
200
1
2
3
4
5
6
7
8
Py
PY
SS
SS
PAL
PAL
NANNOFOSSIL CHALK and CLAYEY NANNOFOSSILCHALK
Lithology
This core contains alternating white (5Y 8/1) NANNOFOSSIL CHALK with light greenish gray (5GY 7/1) CLAYEY NANNOFOSSIL CHALK.
General Description
Light greenish gray (5GY 7/1) CLAYEY NANNOFOSSIL CHALK is present in Section 2, 35 to 65 cm, in Section 4, 100 cm, to Section, 70 cm, and in Section 7. White (5Y 8/1) NANNOFOSSIL CHALK is present elsewhere in the core. Aside from the sharp boundary in Section 2, 35 cm, all the contacts between lithology differences are gradational or bioturbational. Both lithologies are heavily bioturbated; Thalassinoides, Chondrites, and possibly Terebellina are present. There are pyrite grains, pyrite burrow fillings, and one pyrite concretion present in this core. The drilling biscuits are well developed, especially in the greenish gray layers and some are rotated.

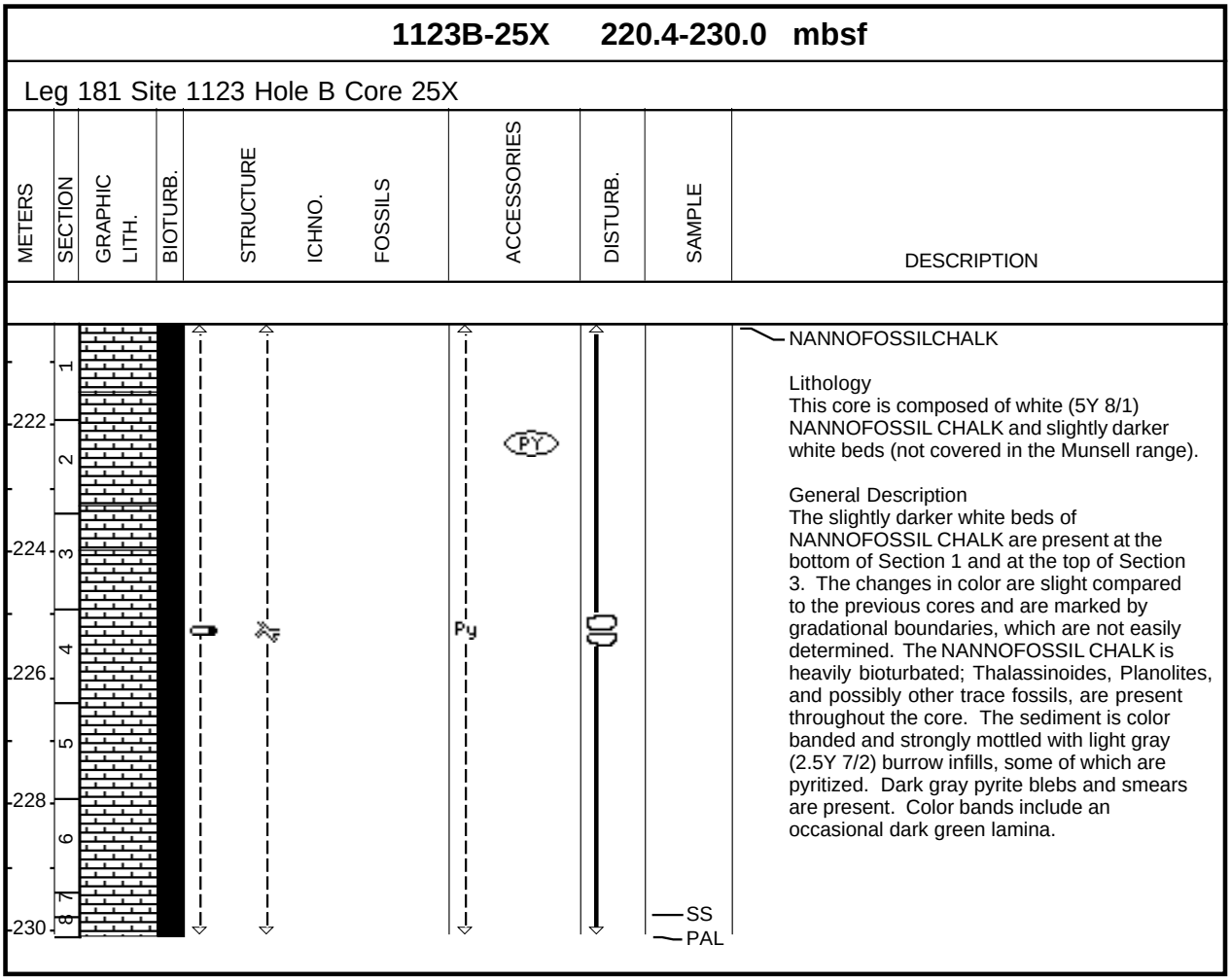
Core Photo


1123B-23X 201.2-210.8 mbsf
Leg 181 Site 1123 Hole B Core 23X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
202
204
206
208
1
2
3
4
5
6
Py
Py
Py
IW
PAL
NANNOFOSSIL CHALK and CLAYEY NANNOFOSSILCHALK
Lithology
White (5Y 8/1) NANNOFOSSIL CHALK with light greenish gray (5GY 7/1) CLAYEY NANNOFOSSIL CHALK are present in this core. It resembles pistachio ice-cream.
General Description
Light greenish gray (5GY 7/1) CLAYEY NANNOFOSSIL CHALK is present at the top of the core and the bottom of Section 3 to the top of Section 4. Light gray (5Y 7/1) laminated beds are present in Section 1, 90 cm, through Section 2, 40 cm, and 72 to 88 cm. The rest of the core is white (5Y 8/1) NANNOFOSSIL CHALK. The lithologies are bioturbated, contain Thalassinoides, and are color banded and mottled with pyrite layers, smears, and aureoles. Of note are the predominantly light gray (5Y 7/1) beds of laminated sediment. Biscuiting is present thoughout the core and some segments are rotated.

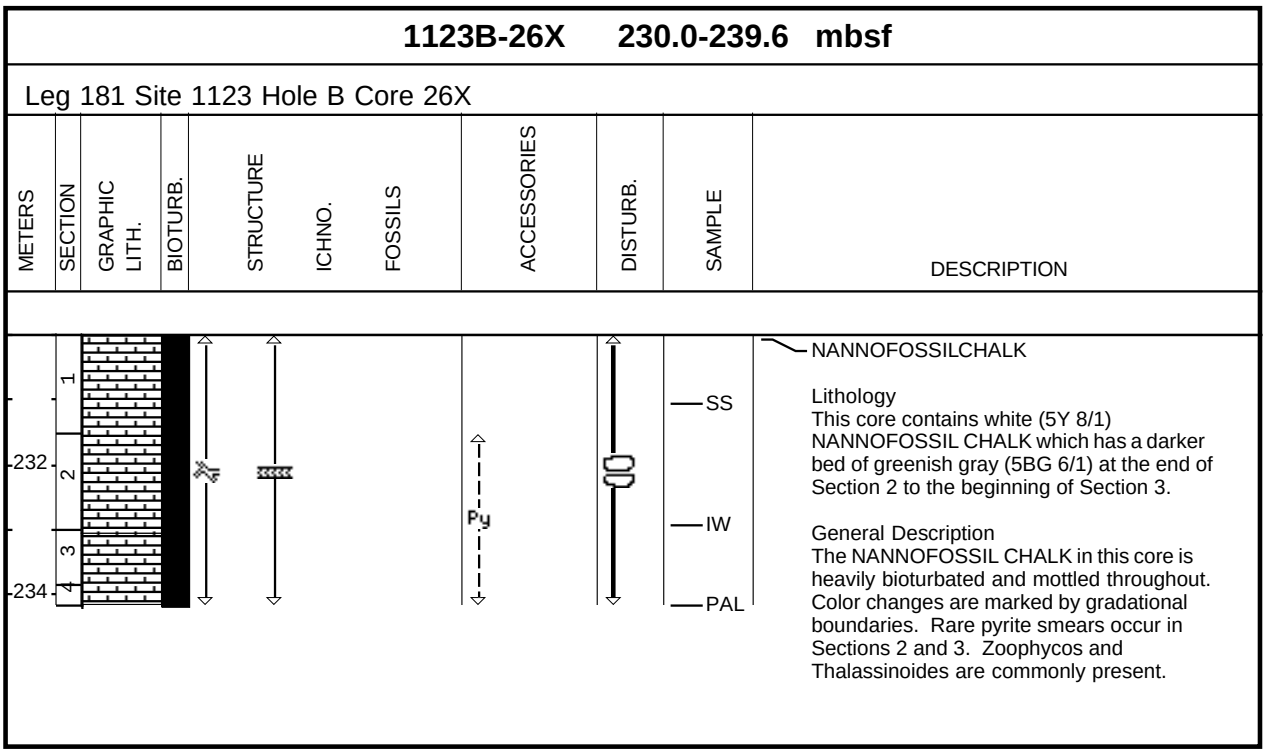
Core Photo


1123B-24X 210.8-220.4 mbsf
Leg 181 Site 1123 Hole B Core 24X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
212
214
216
218
220
1
2
3
4
5
6
7
8
Py
SS
SS
SS
SS
PAL
PAL
NANNOFOSSIL CHALK, CLAYEY NANNOFOSSIL CHALK, and TEPHRA
Lithology
This core contains white (5Y 8/1) NANNOFOSSIL CHALK with interbeds of light greenish gray (5G 7/1) CLAYEY NANNOFOSSIL CHALK. A TEPHRA layer is present in Section 5, 66.5 to 72.5 cm, which has a light gray (5YR 7/1) base and a dark gray (N 4) top.
General Description
The lithologies alternate regularly downcore, changing at each gradational or bioturbated boundary. White (5Y 8/1) NANNOFOSSIL CHALK is present at the top of the core. Both lithologies are heavily bioturbated; Thalassinoides and Planolites are present throughout. The CHALKS are mottled and faintly color banded; pyrite aureoles, blebs, and a concretion are present. The TEPHRA has a sharp base (locally stained green) and is color banded and normally graded.

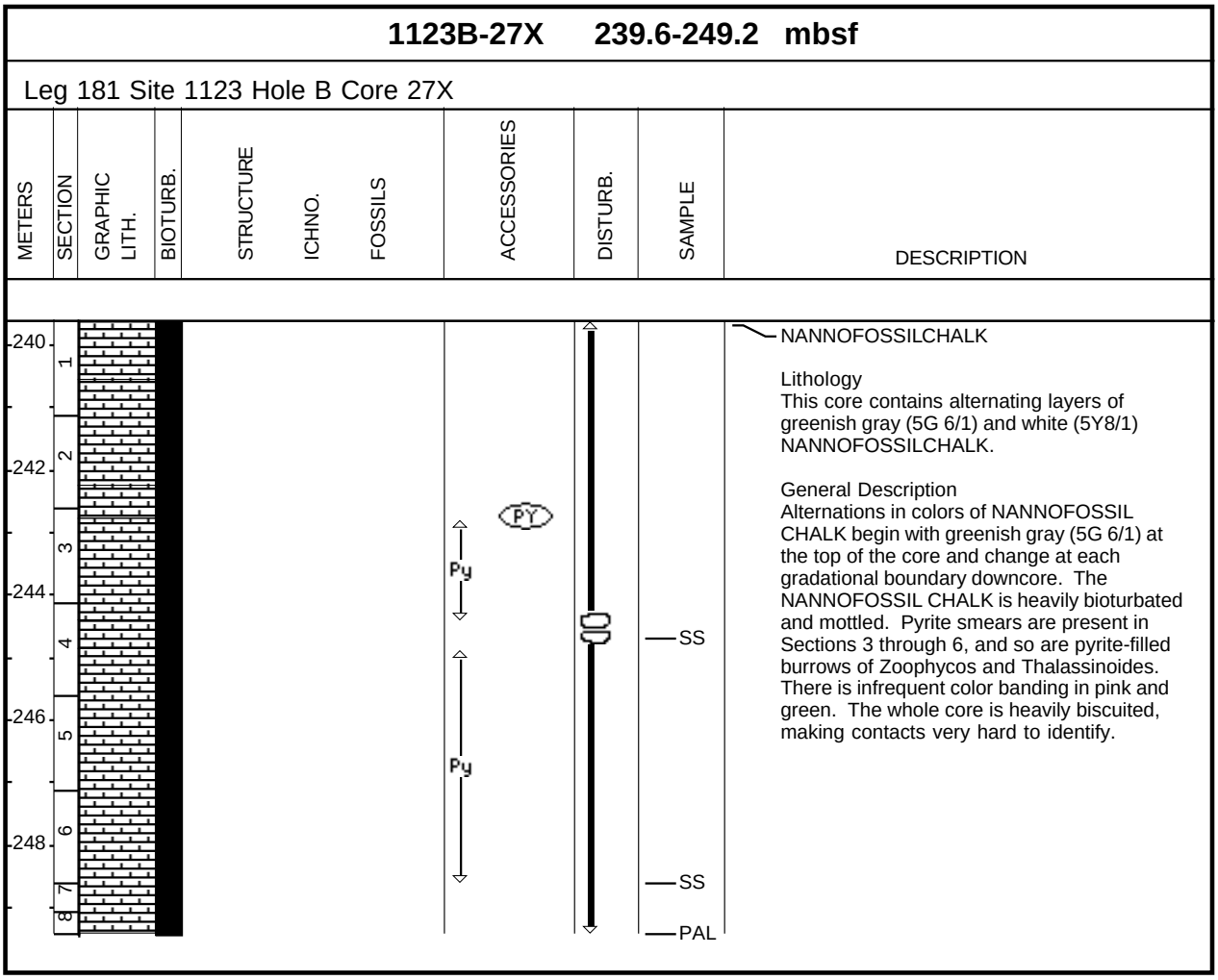
Core Photo


1123B-25X 220.4-230.0 mbsf
Leg 181 Site 1123 Hole B Core 25X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
222
224
226
228
230
1
2
3
4
5
6
7
PY
Py
SS
PAL
NANNOFOSSILCHALK
Lithology
This core is composed of white (5Y 8/1) NANNOFOSSIL CHALK and slightly darker white beds (not covered in the Munsell range).
General Description
The slightly darker white beds of NANNOFOSSIL CHALK are present at the bottom of Section 1 and at the top of Section 3. The changes in color are slight compared to the previous cores and are marked by gradational boundaries, which are not easily determined. The NANNOFOSSIL CHALK is heavily bioturbated; Thalassinoides, Planolites, and possibly other trace fossils, are present throughout the core. The sediment is color banded and strongly mottled with light gray (2.5Y 7/2) burrow infills, some of which are pyritized. Dark gray pyrite blebs and smears are present. Color bands include an occasional dark green lamina.

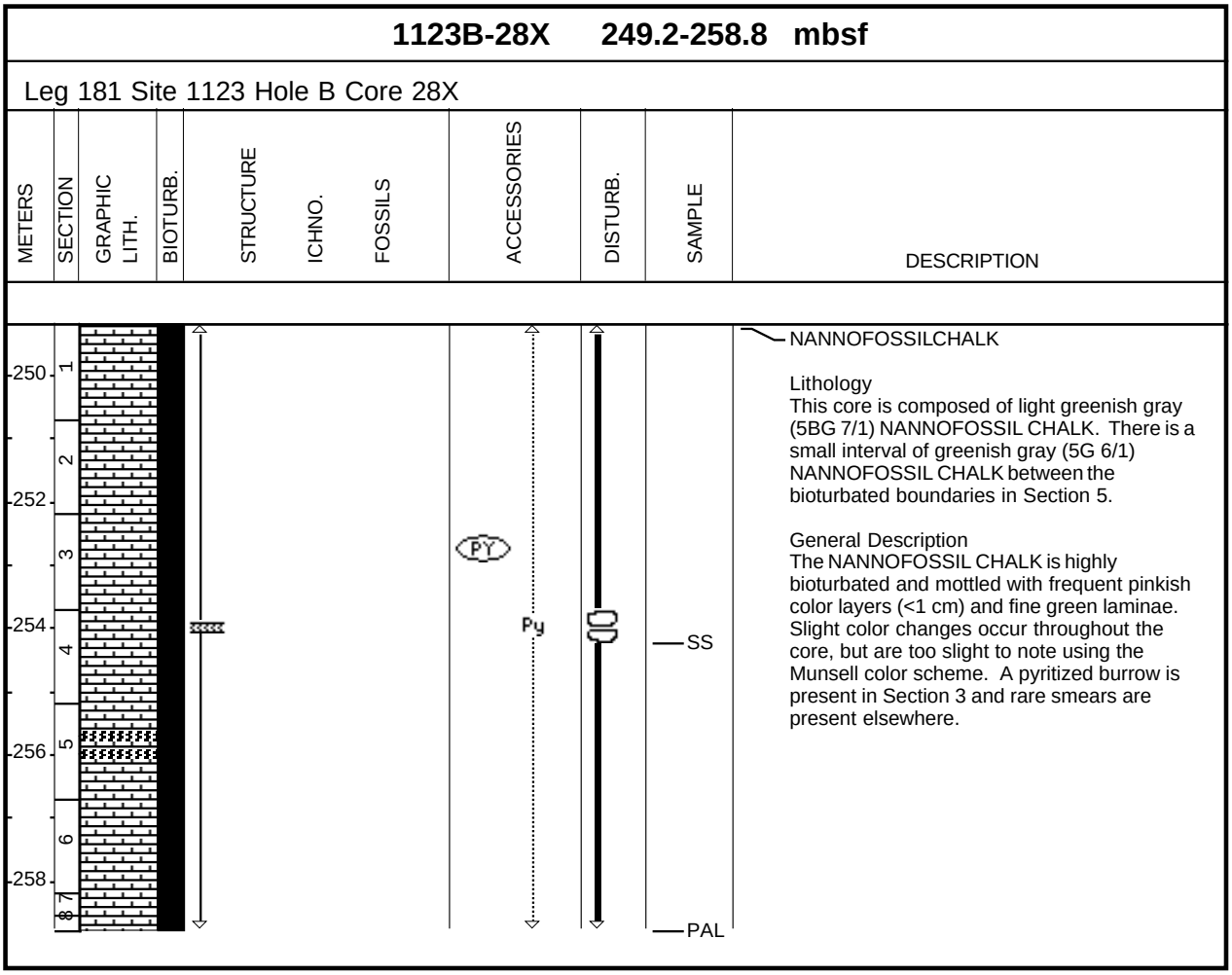
Core Photo


1123B-26X 230.0-239.6 mbsf
Leg 181 Site 1123 Hole B Core 26X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
232
234
1
2
3
4
Py
SS
IW
PAL
NANNOFOSSILCHALK
Lithology
This core contains white (5Y 8/1) NANNOFOSSIL CHALK which has a darker bed of greenish gray (5BG 6/1) at the end of Section 2 to the beginning of Section 3.
General Description
The NANNOFOSSIL CHALK in this core is heavily bioturbated and mottled throughout. Color changes are marked by gradational boundaries. Rare pyrite smears occur in Sections 2 and 3. Zoophycos and Thalassinoides are commonly present.

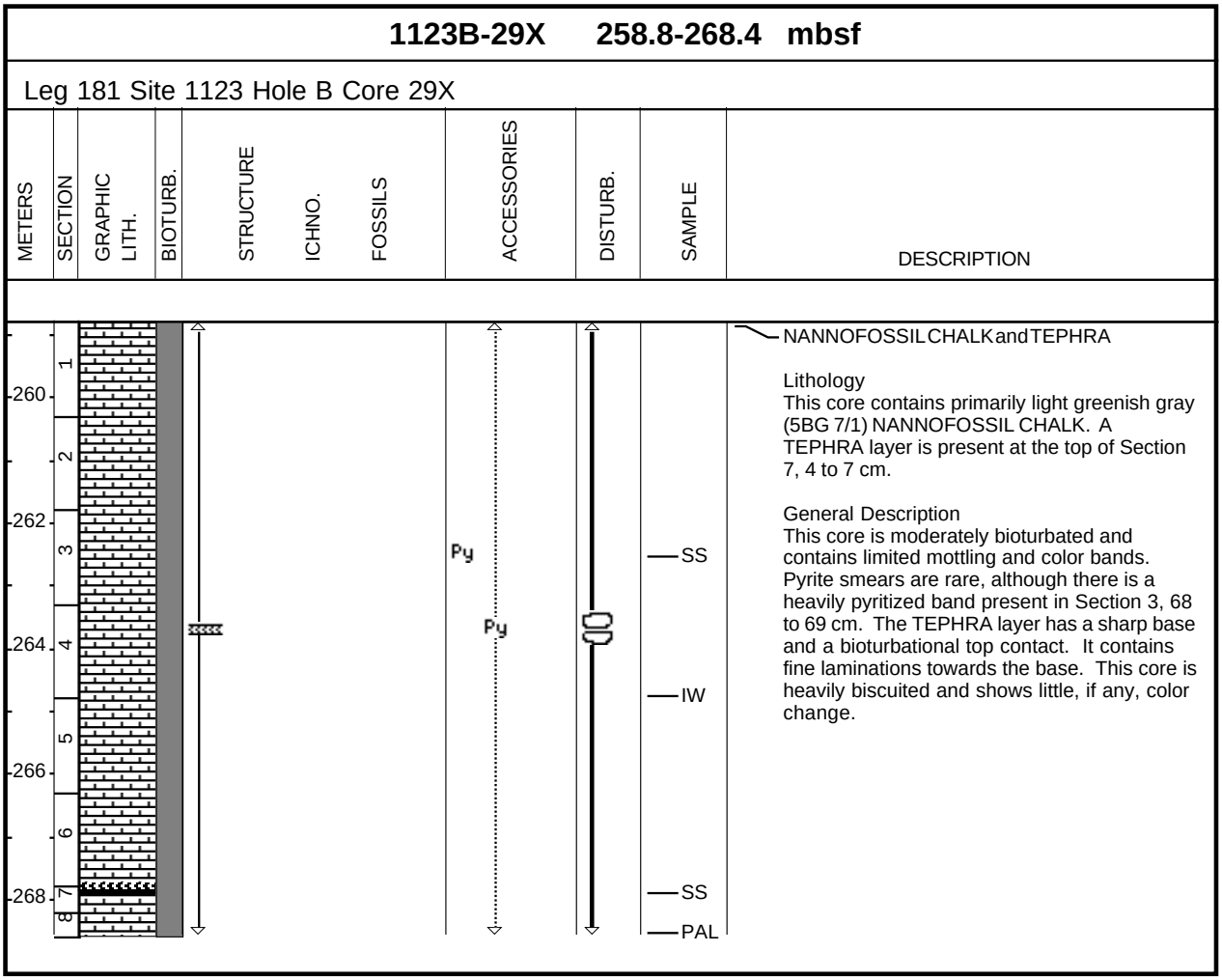
Core Photo


1123B-27X 239.6-249.2 mbsf
Leg 181 Site 1123 Hole B Core 27X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
240
242
244
246
248
1
2
3
4
5
6
7
8
PY
Py
Py
SS
SS
PAL
NANNOFOSSILCHALK
Lithology
This core contains alternating layers of greenish gray (5G 6/1) and white (5Y8/1) NANNOFOSSILCHALK.
General Description
Alternations in colors of NANNOFOSSIL CHALK begin with greenish gray (5G 6/1) at the top of the core and change at each gradational boundary downcore. The NANNOFOSSIL CHALK is heavily bioturbated and mottled. Pyrite smears are present in Sections 3 through 6, and so are pyrite-filled burrows of Zoophycos and Thalassinoides. There is infrequent color banding in pink and green. The whole core is heavily biscuited, making contacts very hard to identify.

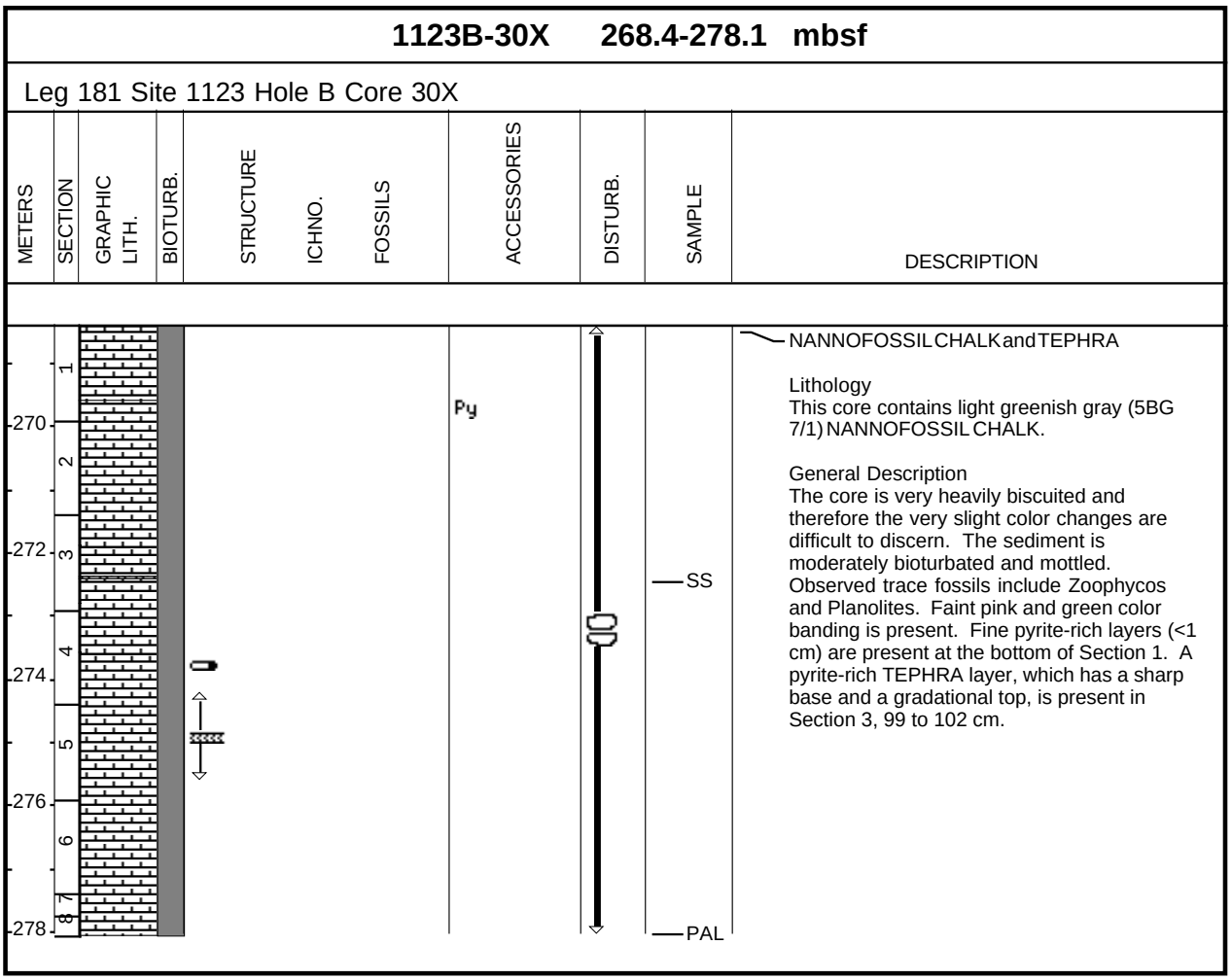
Core Photo


1123B-28X 249.2-258.8 mbsf
Leg 181 Site 1123 Hole B Core 28X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
250
252
254
256
258
1
2
3
4
5
6
7
PY
Py
SS
PAL
NANNOFOSSILCHALK
Lithology
This core is composed of light greenish gray (5BG 7/1) NANNOFOSSIL CHALK. There is a small interval of greenish gray (5G 6/1) NANNOFOSSIL CHALK between the bioturbated boundaries in Section 5.
General Description
The NANNOFOSSIL CHALK is highly bioturbated and mottled with frequent pinkish color layers (<1 cm) and fine green laminae. Slight color changes occur throughout the core, but are too slight to note using the Munsell color scheme. A pyritized burrow is present in Section 3 and rare smears are present elsewhere.

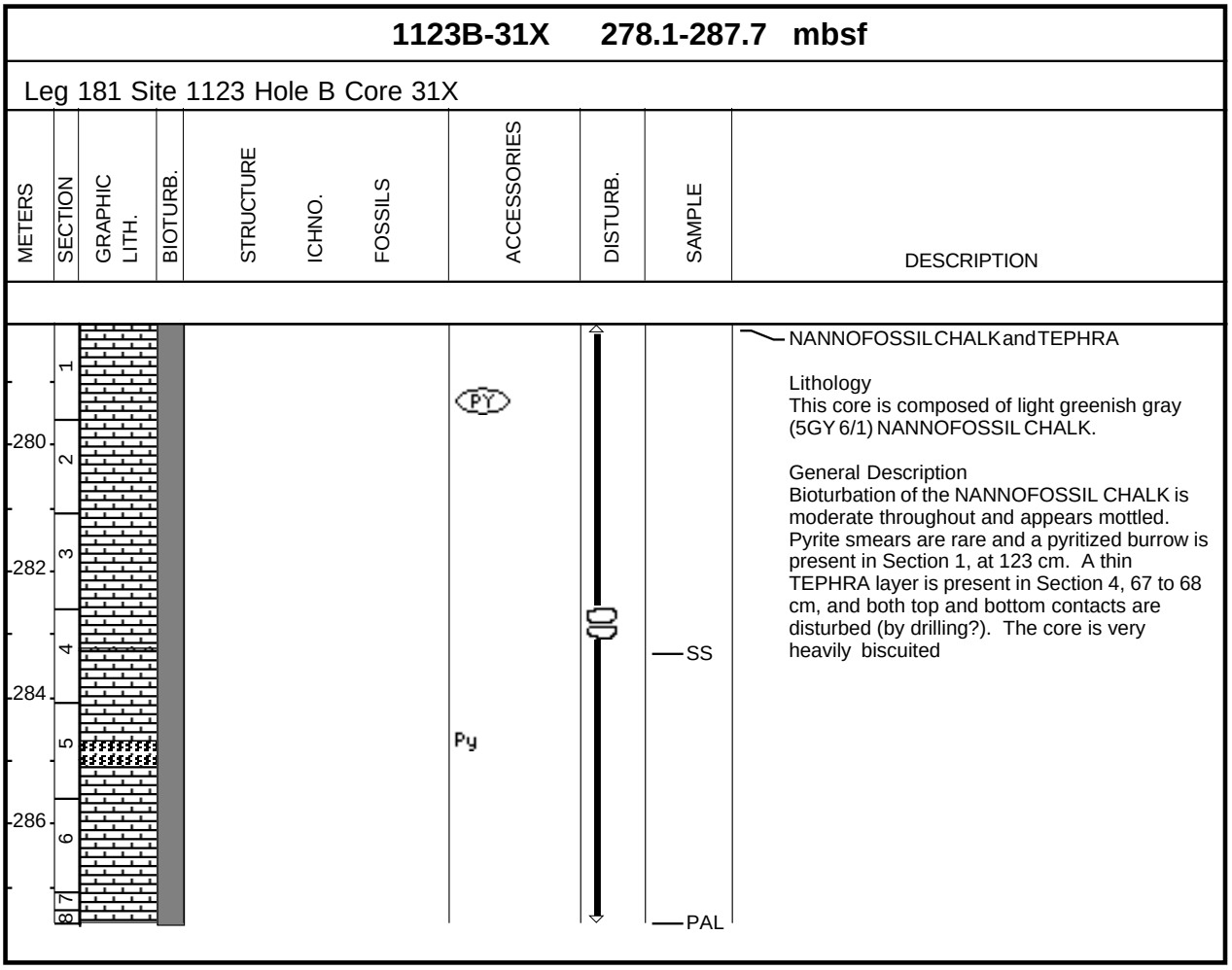
Core Photo


1123B-29X 258.8-268.4 mbsf
Leg 181 Site 1123 Hole B Core 29X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
260
262
264
266
268
1
2
3
4
5
6
7
8
Py
Py
SS
IW
SS
PAL
NANNOFOSSIL CHALK and TEPHRA
Lithology
This core contains primarily light greenish gray (5BG 7/1) NANNOFOSSIL CHALK. A TEPHRA layer is present at the top of Section 7, 4 to 7 cm.
General Description
This core is moderately bioturbated and contains limited mottling and color bands. Pyrite smears are rare, although there is a heavily pyritized band present in Section 3, 68 to 69 cm. The TEPHRA layer has a sharp base and a bioturbational top contact. It contains fine laminations towards the base. This core is heavily biscuited and shows little, if any, color change.

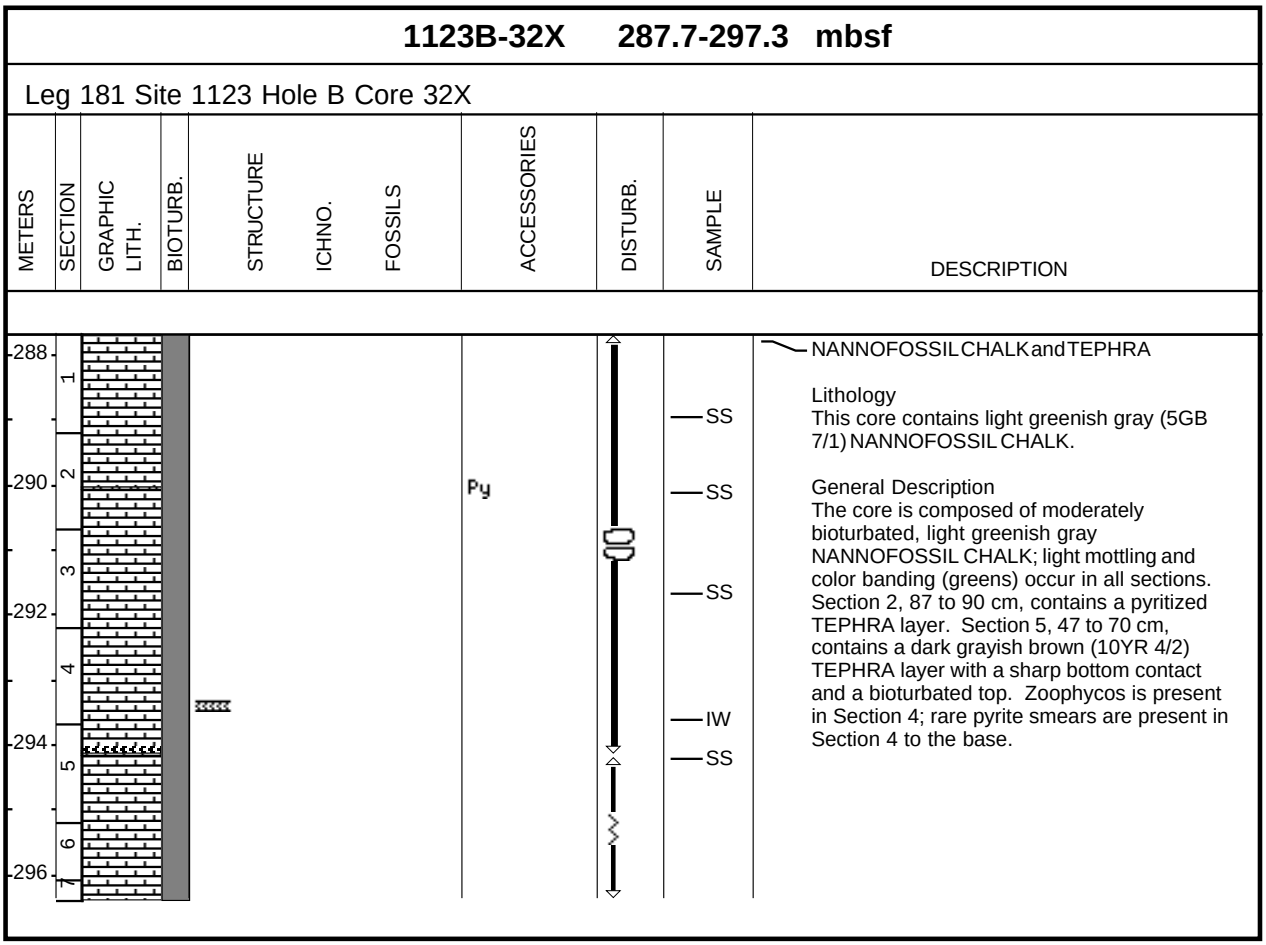
Core Photo


1123B-30X 268.4-278.1 mbsf
Leg 181 Site 1123 Hole B Core 30X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
270
272
274
276
278
1
2
3
4
5
6
7
Py
SS
PAL
NANNOFOSSIL CHALK and TEPHRA
Lithology
This core contains light greenish gray (5BG 7/1) NANNOFOSSIL CHALK.
General Description
The core is very heavily biscuited and therefore the very slight color changes are difficult to discern. The sediment is moderately bioturbated and mottled. Observed trace fossils include Zoophycos and Planolites. Faint pink and green color banding is present. Fine pyrite-rich layers (<1 cm) are present at the bottom of Section 1. A pyrite-rich TEPHRA layer, which has a sharp base and a gradational top, is present in Section 3, 99 to 102 cm.

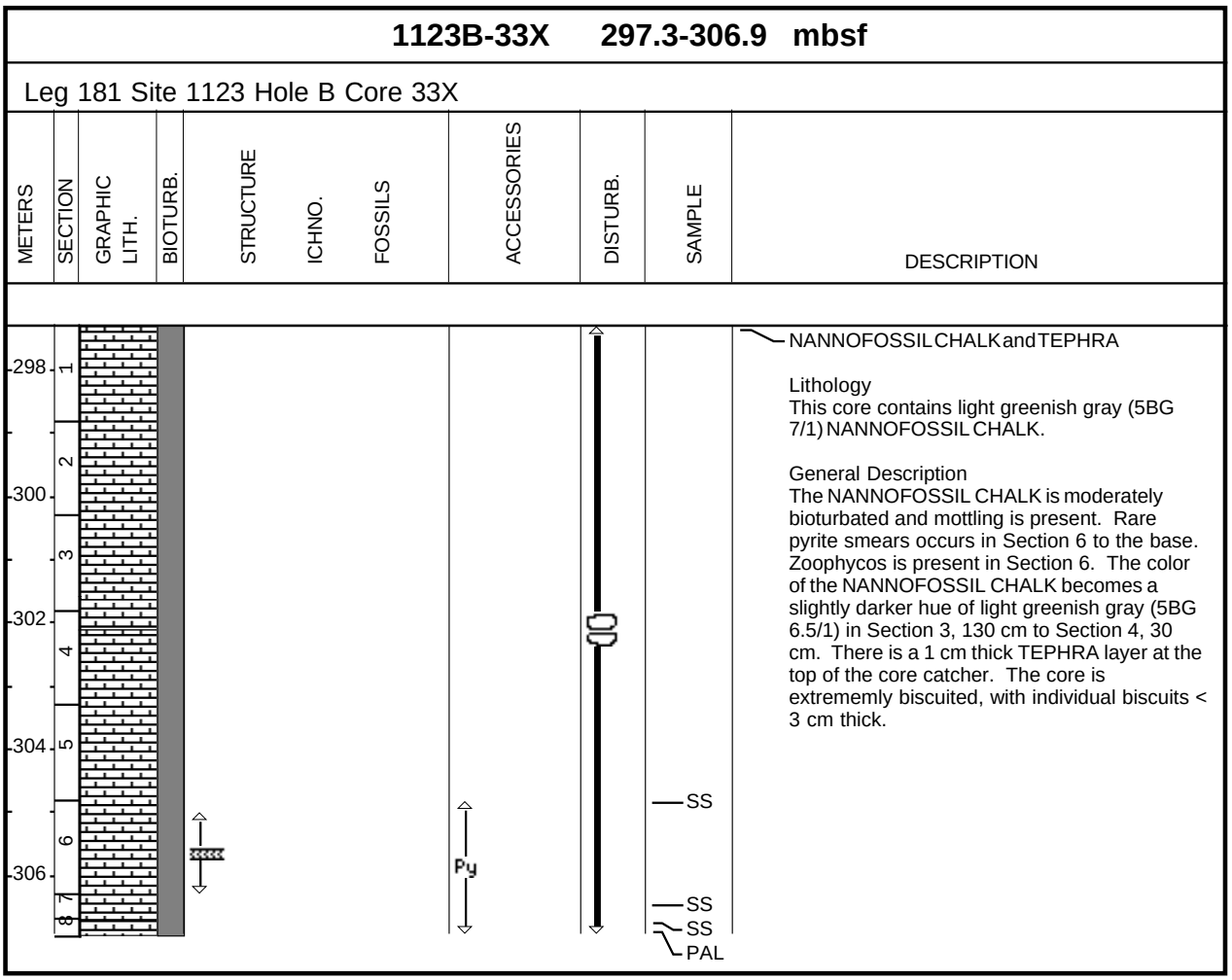
Core Photo


1123B-31X 278.1-287.7 mbsf
Leg 181 Site 1123 Hole B Core 31X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
280
282
284
286
1
2
3
4
5
6
7
PY
Py
SS
PAL
NANNOFOSSIL CHALK and TEPHRA
Lithology
This core is composed of light greenish gray (5GY 6/1) NANNOFOSSIL CHALK.
General Description
Bioturbation of the NANNOFOSSIL CHALK is moderate throughout and appears mottled. Pyrite smears are rare and a pyritized burrow is present in Section 1, at 123 cm. A thin TEPHRA layer is present in Section 4, 67 to 68 cm, and both top and bottom contacts are disturbed (by drilling?). The core is very heavily biscuited

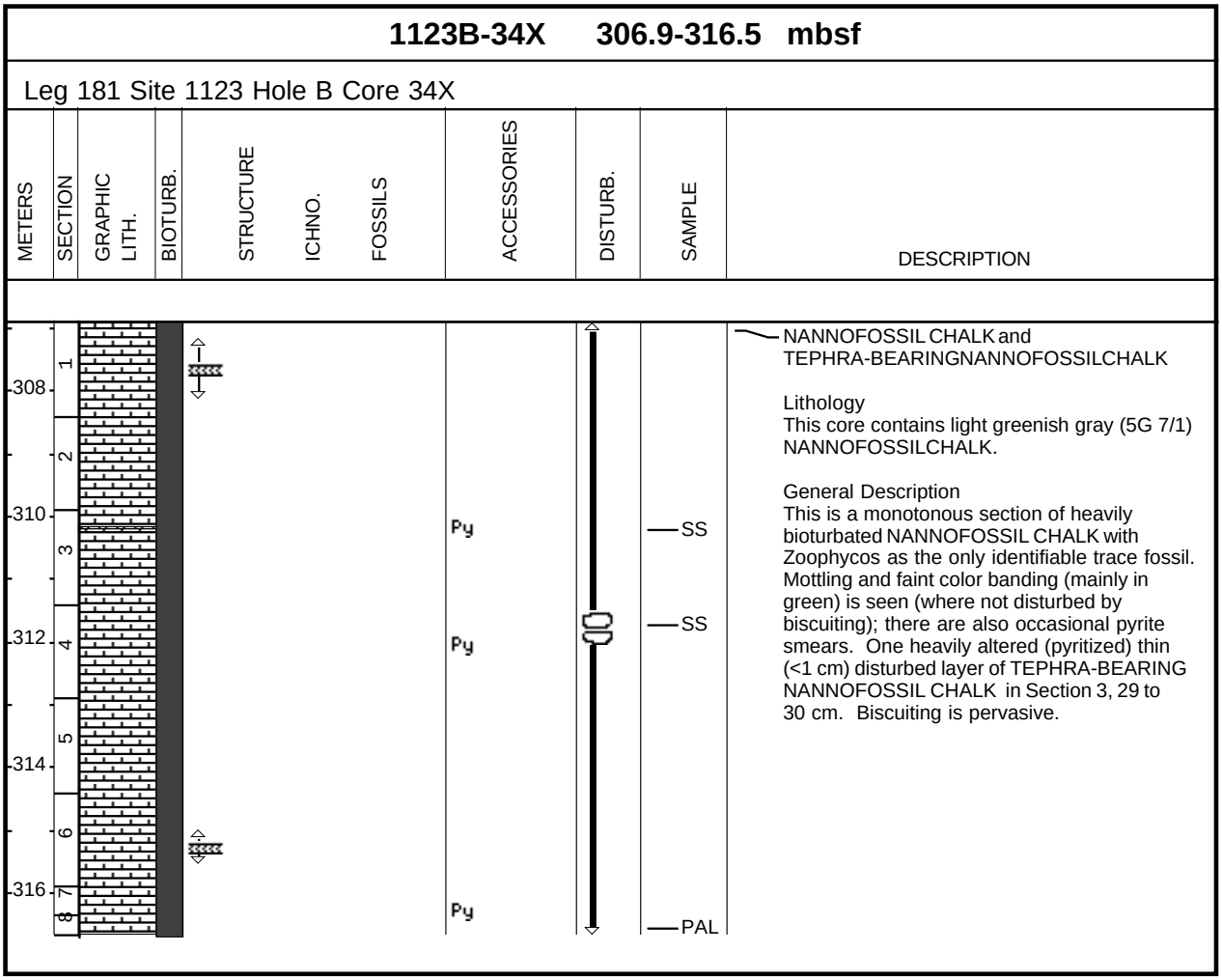
Core Photo


1123B-32X 287.7-297.3 mbsf
Leg 181 Site 1123 Hole B Core 32X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
288
290
292
294
296
1
2
3
4
5
6
7
Py
SS
SS
SS
IW
SS
NANNOFOSSIL CHALK and TEPHRA
Lithology
This core contains light greenish gray (5GB 7/1) NANNOFOSSIL CHALK.
General Description
The core is composed of moderately bioturbated, light greenish gray NANNOFOSSIL CHALK; light mottling and color banding (greens) occur in all sections. Section 2, 87 to 90 cm, contains a pyritized TEPHRA layer. Section 5, 47 to 70 cm, contains a dark grayish brown (10YR 4/2) TEPHRA layer with a sharp bottom contact and a bioturbated top. Zoophycos is present in Section 4; rare pyrite smears are present in Section 4 to the base.

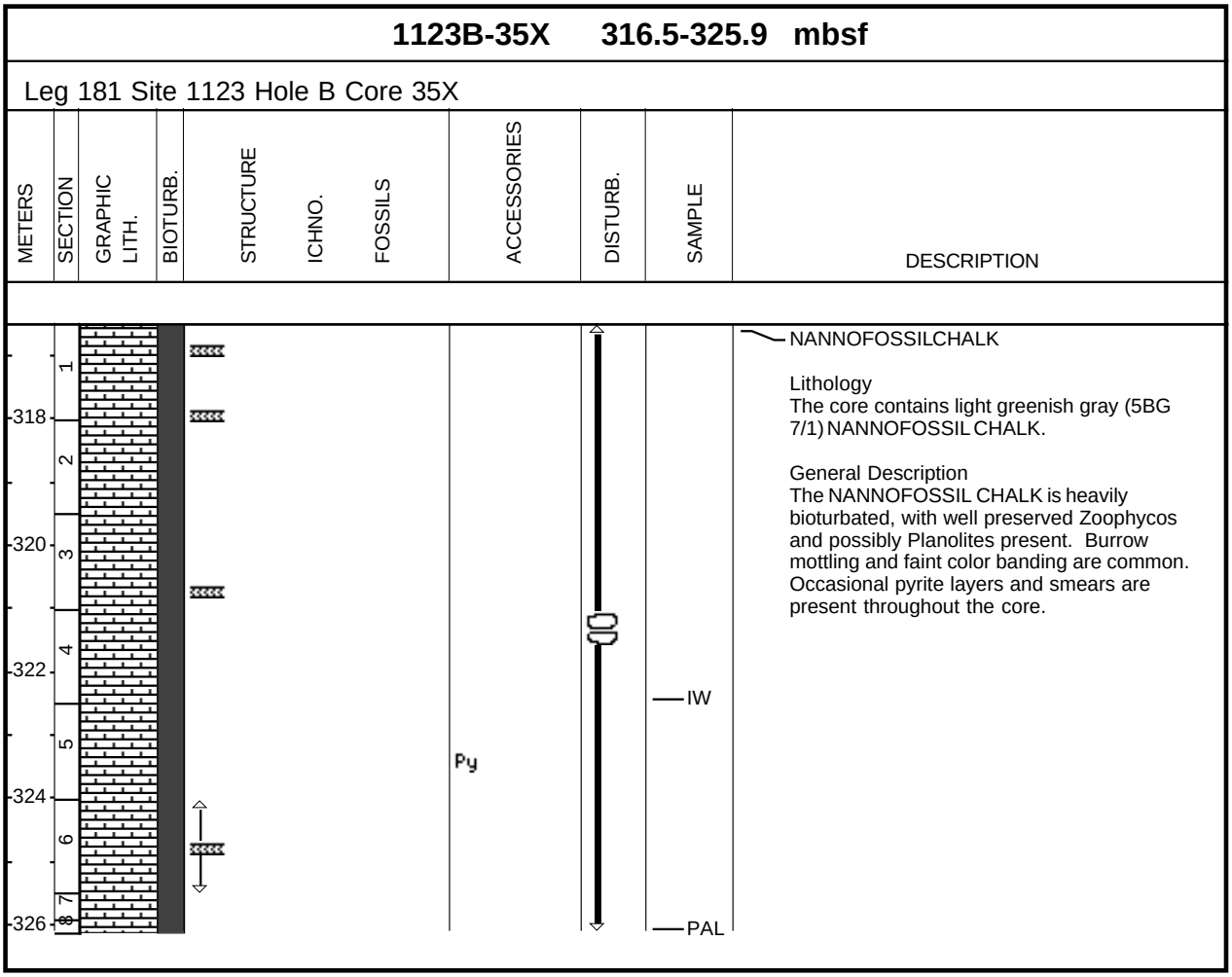
Core Photo


1123B-33X 297.3-306.9 mbsf
Leg 181 Site 1123 Hole B Core 33X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
298
300
302
304
306
1
2
3
4
5
6
7
Py
SS
SS
SS
PAL
NANNOFOSSIL CHALK and TEPHRA
Lithology
This core contains light greenish gray (5BG 7/1) NANNOFOSSIL CHALK.
General Description
The NANNOFOSSIL CHALK is moderately bioturbated and mottling is present. Rare pyrite smears occurs in Section 6 to the base. Zoophycos is present in Section 6. The color of the NANNOFOSSIL CHALK becomes a slightly darker hue of light greenish gray (5BG 6.5/1) in Section 3, 130 cm to Section 4, 30 cm. There is a 1 cm thick TEPHRA layer at the top of the core catcher. The core is extrememly biscuited, with individual biscuits < 3 cm thick.

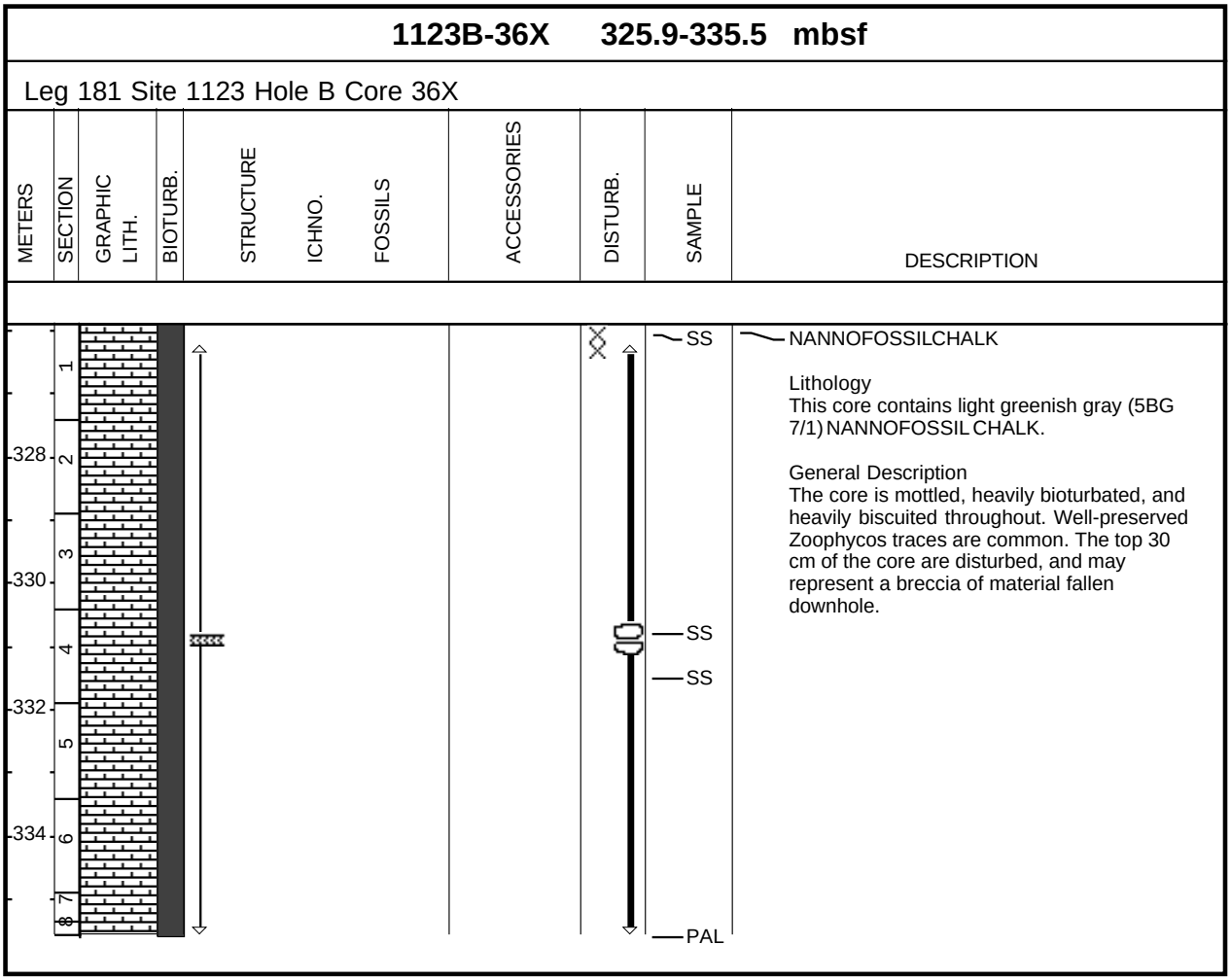
Core Photo


1123B-34X 306.9-316.5 mbsf
Leg 181 Site 1123 Hole B Core 34X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
308
310
312
314
316
1
2
3
4
5
6
7
8
Py
Py
Py
SS
SS
PAL
NANNOFOSSIL CHALK and TEPHRA-BEARINGNANNOFOSSILCHALK
Lithology
This core contains light greenish gray (5G 7/1) NANNOFOSSILCHALK.
General Description
This is a monotonous section of heavily bioturbated NANNOFOSSIL CHALK with Zoophycos as the only identifiable trace fossil. Mottling and faint color banding (mainly in green) is seen (where not disturbed by biscuiting); there are also occasional pyrite smears. One heavily altered (pyritized) thin (<1 cm) disturbed layer of TEPHRA-BEARING NANNOFOSSIL CHALK in Section 3, 29 to 30 cm. Biscuiting is pervasive.

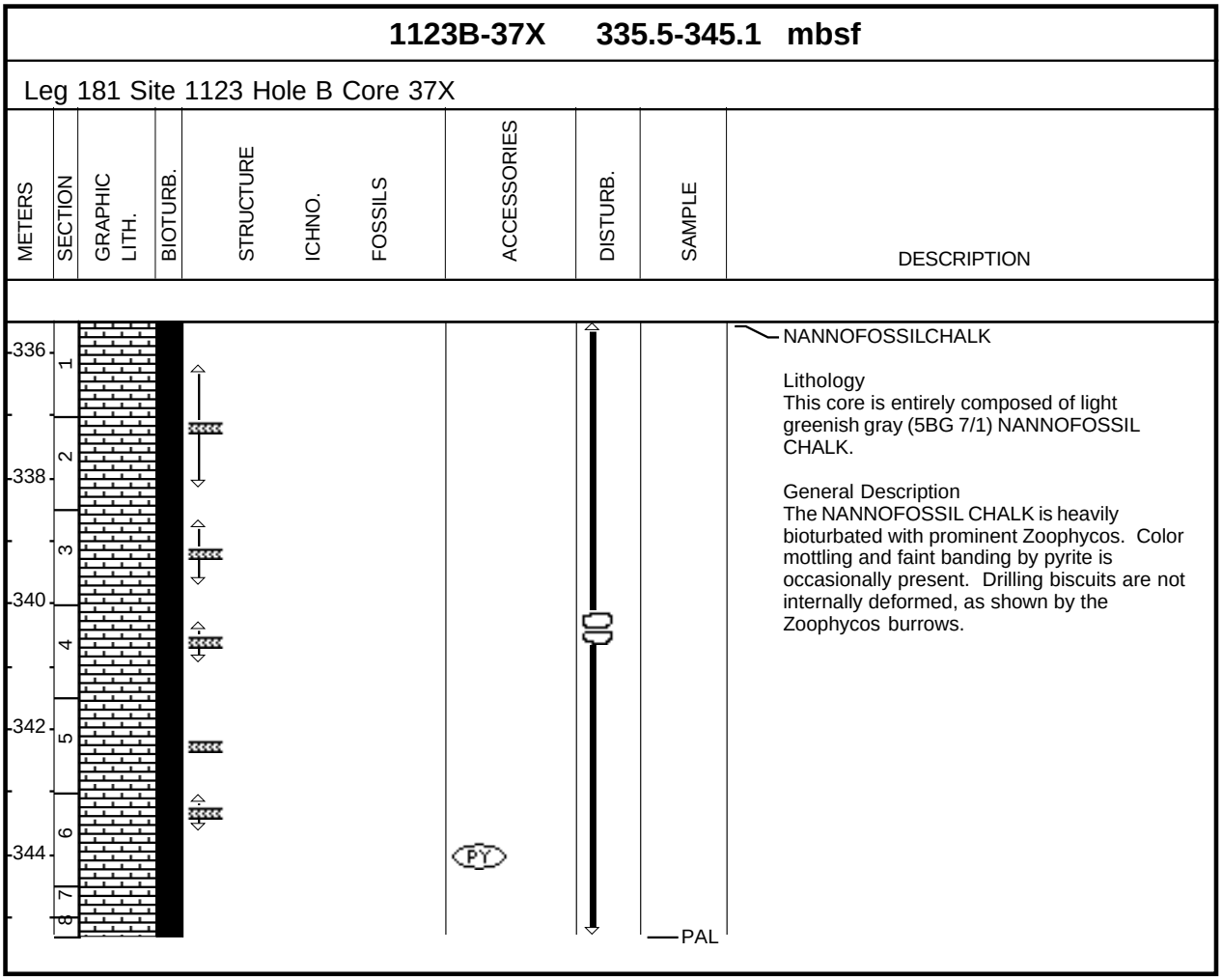
Core Photo


1123B-35X 316.5-325.9 mbsf
Leg 181 Site 1123 Hole B Core 35X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
318
320
322
324
326
1
2
3
4
5
6
7
Py
IW
PAL
NANNOFOSSILCHALK
Lithology
The core contains light greenish gray (5BG 7/1) NANNOFOSSIL CHALK.
General Description
The NANNOFOSSIL CHALK is heavily bioturbated, with well preserved Zoophycos and possibly Planolites present. Burrow mottling and faint color banding are common. Occasional pyrite layers and smears are present throughout the core.

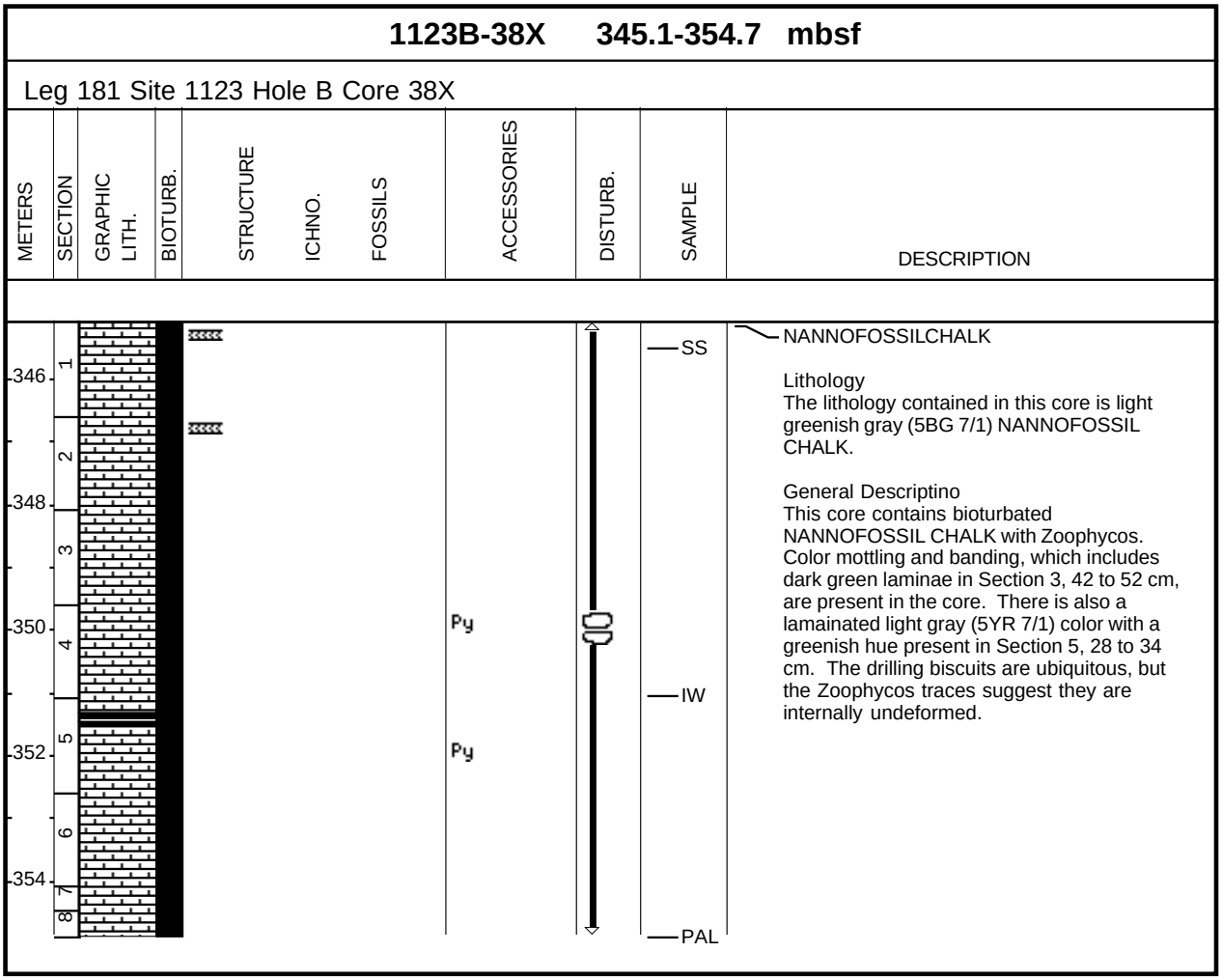
Core Photo


1123B-36X 325.9-335.5 mbsf
Leg 181 Site 1123 Hole B Core 36X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
328
330
332
334
1
2
3
4
5
6
7
SS
SS
SS
PAL
NANNOFOSSILCHALK
Lithology
This core contains light greenish gray (5BG 7/1) NANNOFOSSIL CHALK.
General Description
The core is mottled, heavily bioturbated, and heavily biscuited throughout. Well-preserved Zoophycos traces are common. The top 30 cm of the core are disturbed, and may represent a breccia of material fallen downhole.

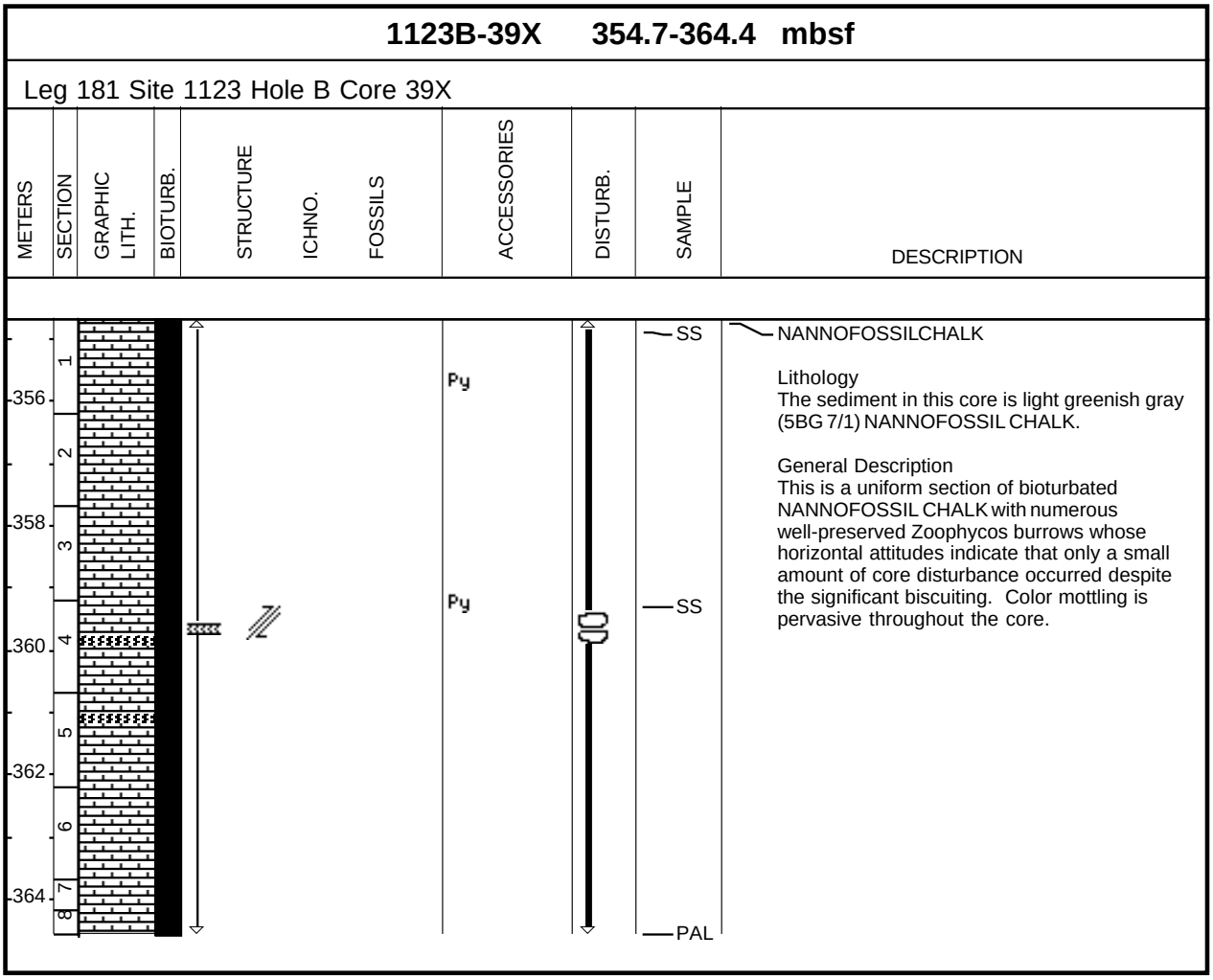
Core Photo


1123B-37X 335.5-345.1 mbsf
Leg 181 Site 1123 Hole B Core 37X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
336
338
340
342
344
1
2
3
4
5
6
7
PY
PAL
NANNOFOSSILCHALK
Lithology
This core is entirely composed of light greenish gray (5BG 7/1) NANNOFOSSIL CHALK.
General Description
The NANNOFOSSIL CHALK is heavily bioturbated with prominent Zoophycos. Color mottling and faint banding by pyrite is occasionally present. Drilling biscuits are not internally deformed, as shown by the Zoophycos burrows.

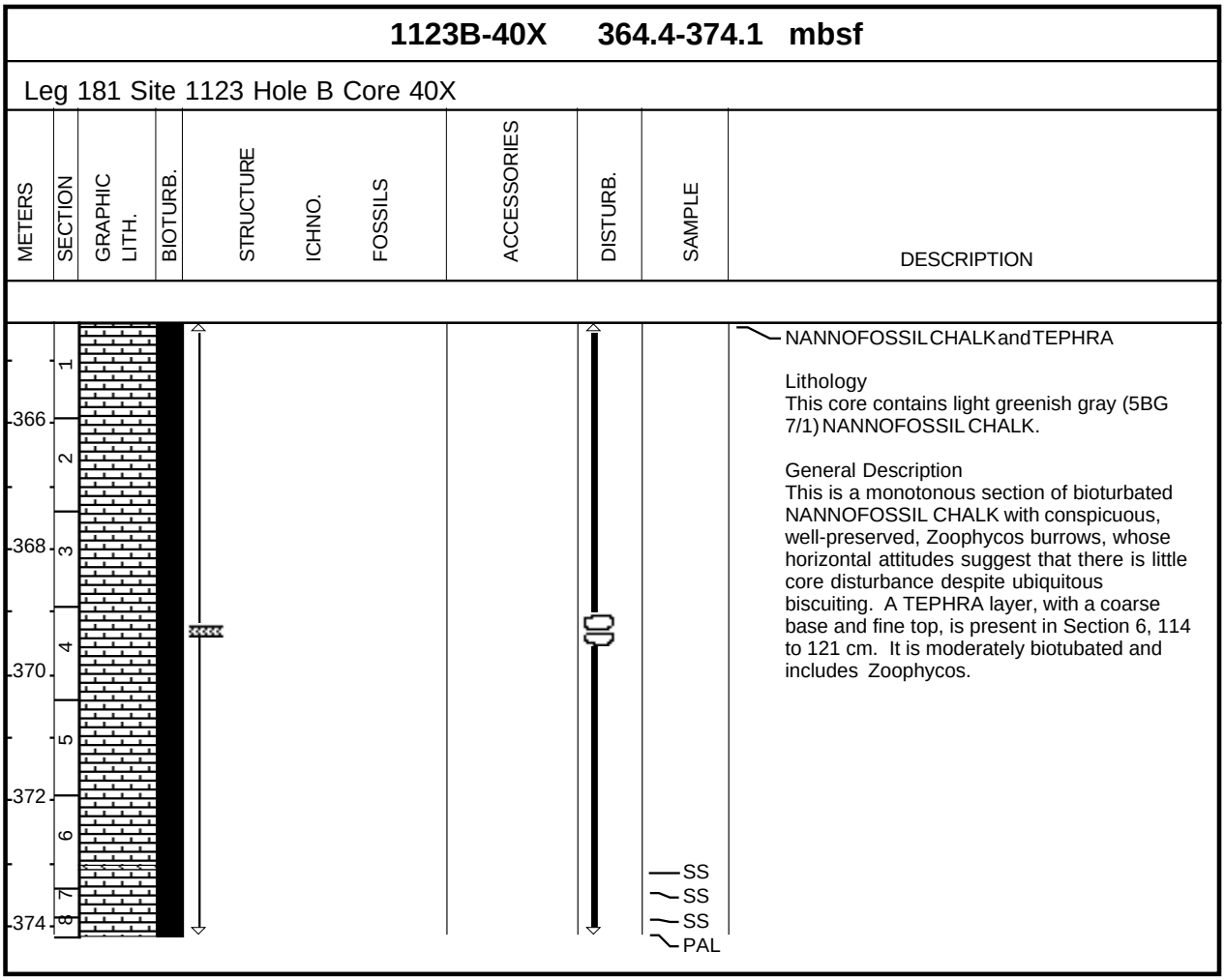
Core Photo


1123B-38X 345.1-354.7 mbsf
Leg 181 Site 1123 Hole B Core 38X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
346
348
350
352
354
1
2
3
4
5
6
7
8
Py
Py
SS
IW
PAL
NANNOFOSSILCHALK
Lithology
The lithology contained in this core is light greenish gray (5BG 7/1) NANNOFOSSIL CHALK.
General Descriptino
This core contains bioturbated NANNOFOSSIL CHALK with Zoophycos. Color mottling and banding, which includes dark green laminae in Section 3, 42 to 52 cm, are present in the core. There is also a lamainated light gray (5YR 7/1) color with a greenish hue present in Section 5, 28 to 34 cm. The drilling biscuits are ubiquitous, but the Zoophycos traces suggest they are internally undeformed.

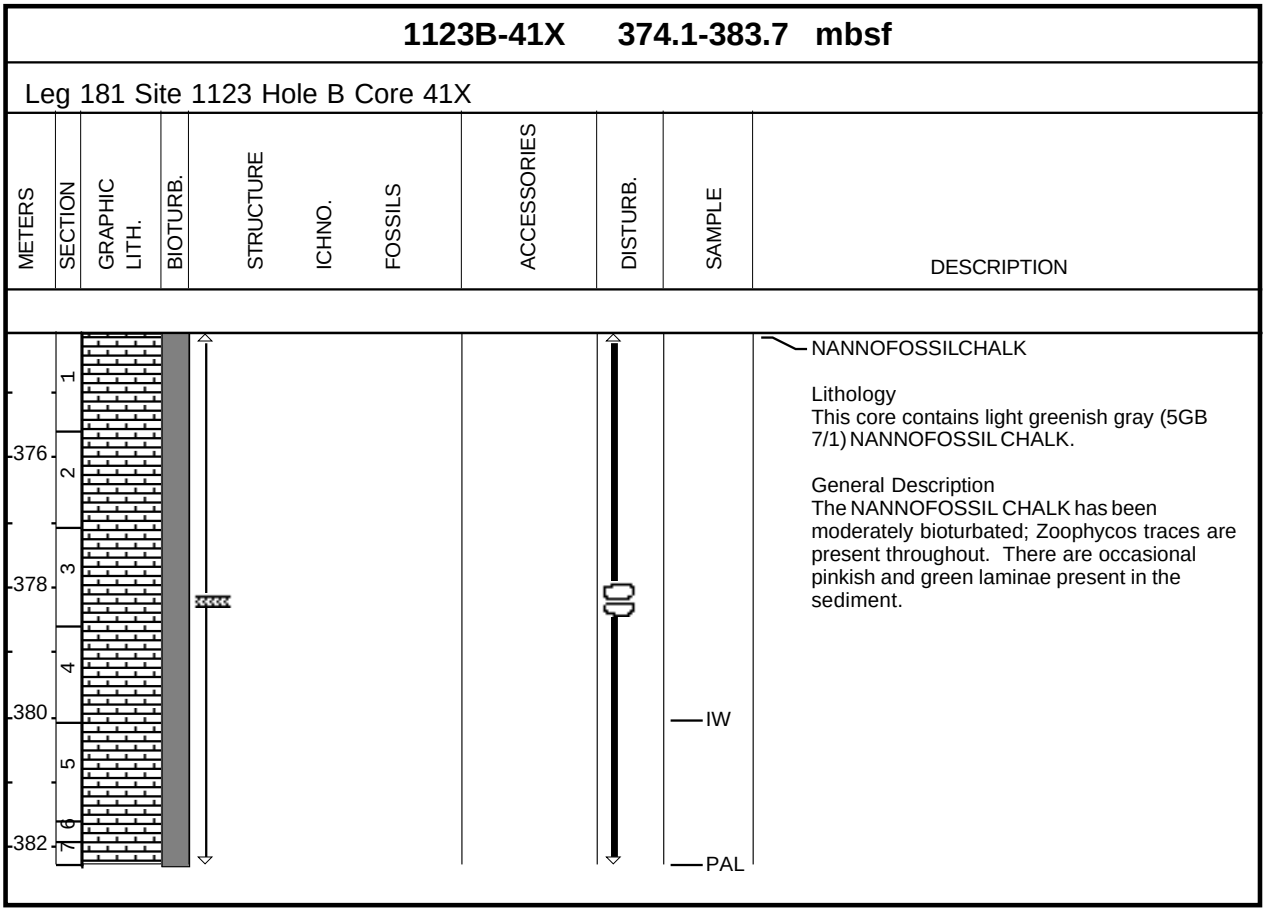
Core Photo


1123B-39X 354.7-364.4 mbsf
Leg 181 Site 1123 Hole B Core 39X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
356
358
360
362
364
1
2
3
4
5
6
7
8
Py
Py
SS
SS
PAL
NANNOFOSSILCHALK
Lithology
The sediment in this core is light greenish gray (5BG 7/1) NANNOFOSSIL CHALK.
General Description
This is a uniform section of bioturbated NANNOFOSSIL CHALK with numerous well-preserved Zoophycos burrows whose horizontal attitudes indicate that only a small amount of core disturbance occurred despite the significant biscuiting. Color mottling is pervasive throughout the core.

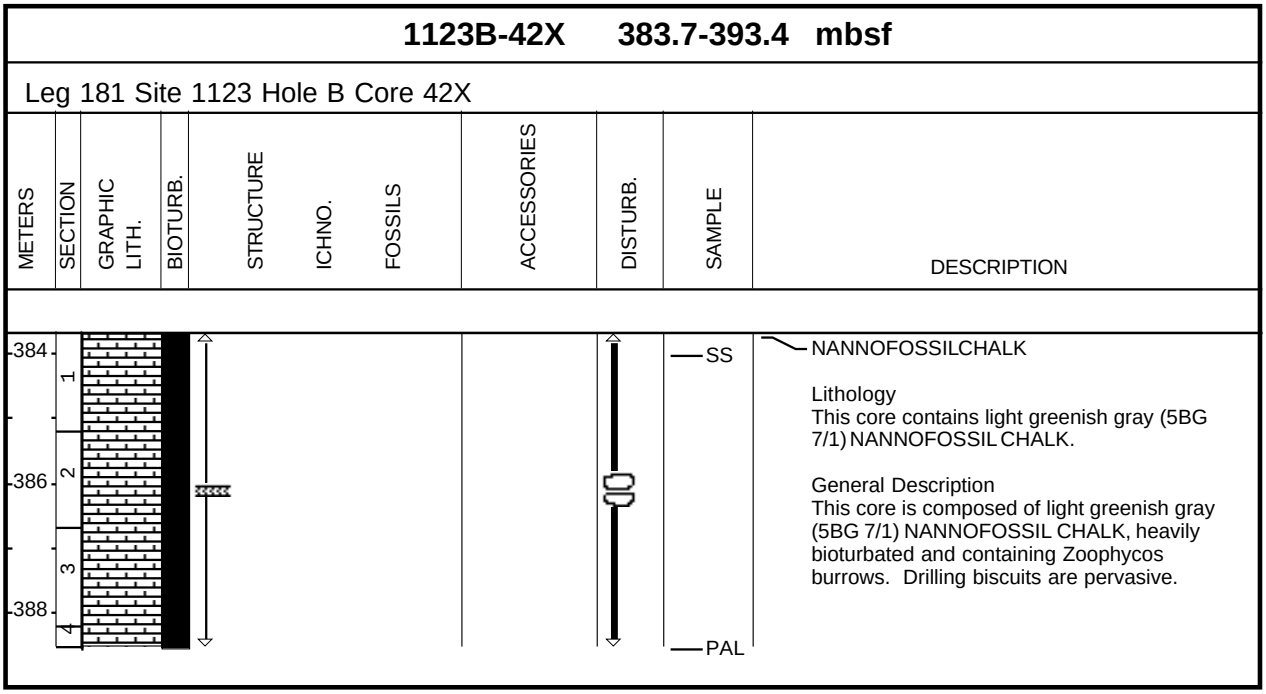
Core Photo


1123B-40X 364.4-374.1 mbsf
Leg 181 Site 1123 Hole B Core 40X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
366
368
370
372
374
1
2
3
4
5
6
7
SS
SS
SS
PAL
NANNOFOSSIL CHALK and TEPHRA
Lithology
This core contains light greenish gray (5BG 7/1) NANNOFOSSIL CHALK.
General Description
This is a monotonous section of bioturbated NANNOFOSSIL CHALK with conspicuous, well-preserved, Zoophycos burrows, whose horizontal attitudes suggest that there is little core disturbance despite ubiquitous biscuiting. A TEPHRA layer, with a coarse base and fine top, is present in Section 6, 114 to 121 cm. It is moderately biotubated and includes Zoophycos.

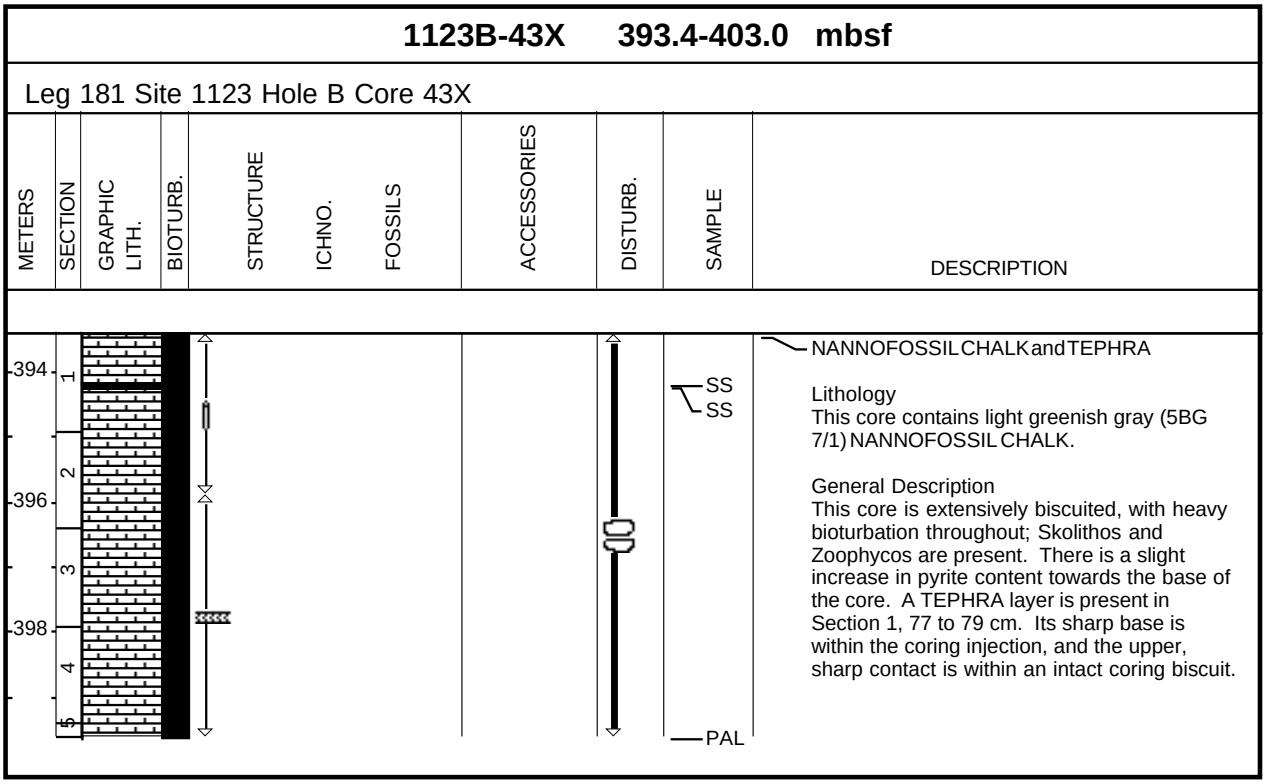
Core Photo


1123B-41X 374.1-383.7 mbsf
Leg 181 Site 1123 Hole B Core 41X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
376
378
380
382
1
2
3
4
5
6
7
IW
PAL
NANNOFOSSILCHALK
Lithology
This core contains light greenish gray (5GB 7/1) NANNOFOSSIL CHALK.
General Description
The NANNOFOSSIL CHALK has been moderately bioturbated; Zoophycos traces are present throughout. There are occasional pinkish and green laminae present in the sediment.

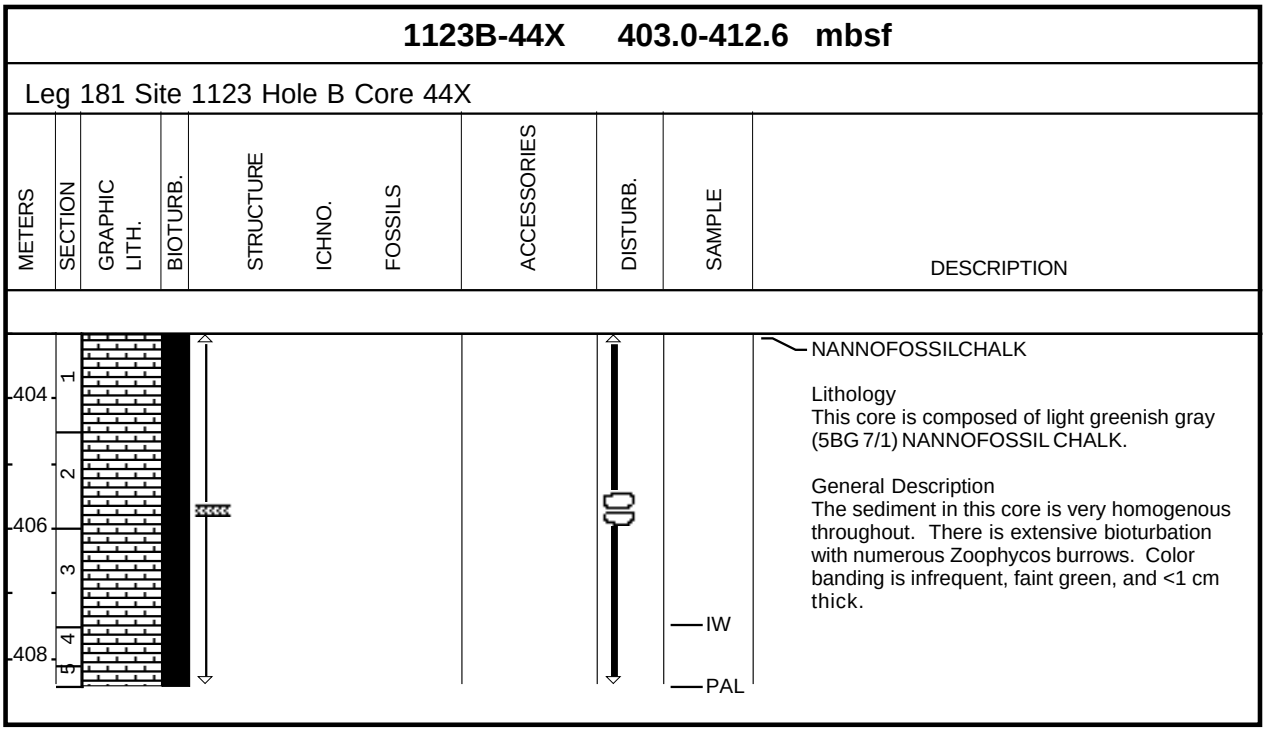
Core Photo


1123B-42X 383.7-393.4 mbsf
Leg 181 Site 1123 Hole B Core 42X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
384
386
388
1
2
3
4
SS
PAL
NANNOFOSSILCHALK
Lithology
This core contains light greenish gray (5BG 7/1) NANNOFOSSIL CHALK.
General Description
This core is composed of light greenish gray (5BG 7/1) NANNOFOSSIL CHALK, heavily bioturbated and containing Zoophycos burrows. Drilling biscuits are pervasive.

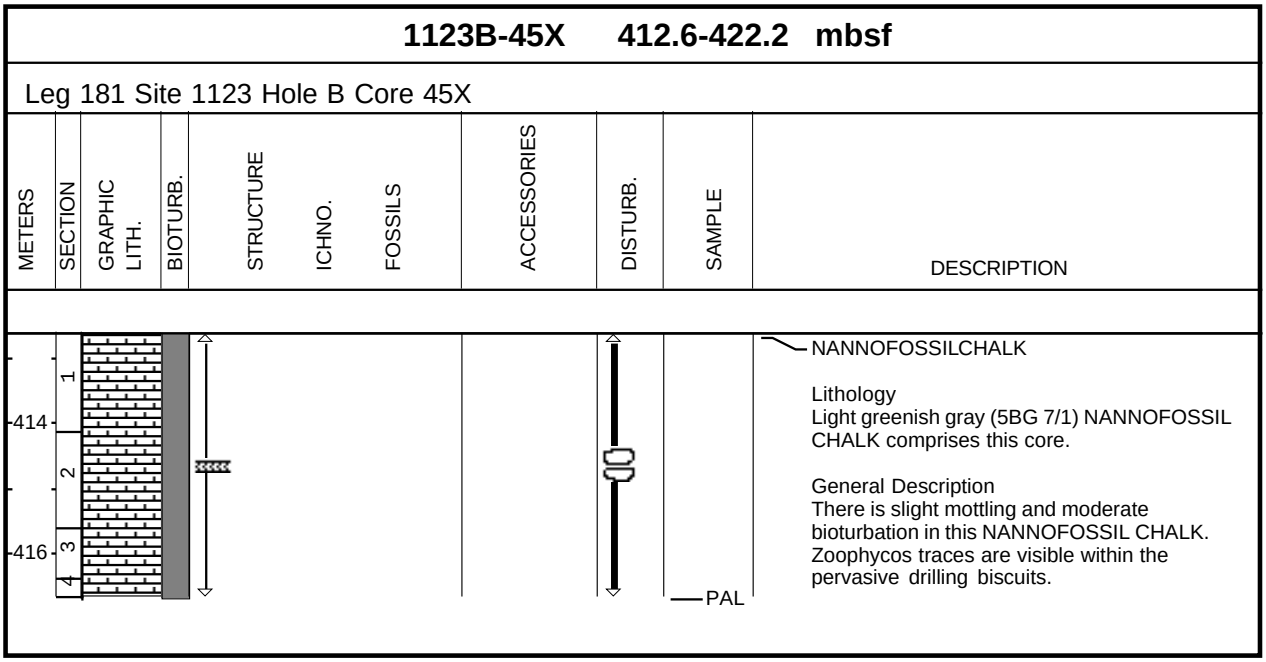
Core Photo


1123B-43X 393.4-403.0 mbsf
Leg 181 Site 1123 Hole B Core 43X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
394
396
398
1
2
3
4
5
SS
SS
PAL
NANNOFOSSIL CHALK and TEPHRA
Lithology
This core contains light greenish gray (5BG 7/1) NANNOFOSSIL CHALK.
General Description
This core is extensively biscuited, with heavy bioturbation throughout; Skolithos and Zoophycos are present. There is a slight increase in pyrite content towards the base of the core. A TEPHRA layer is present in Section 1, 77 to 79 cm. Its sharp base is within the coring injection, and the upper, sharp contact is within an intact coring biscuit.

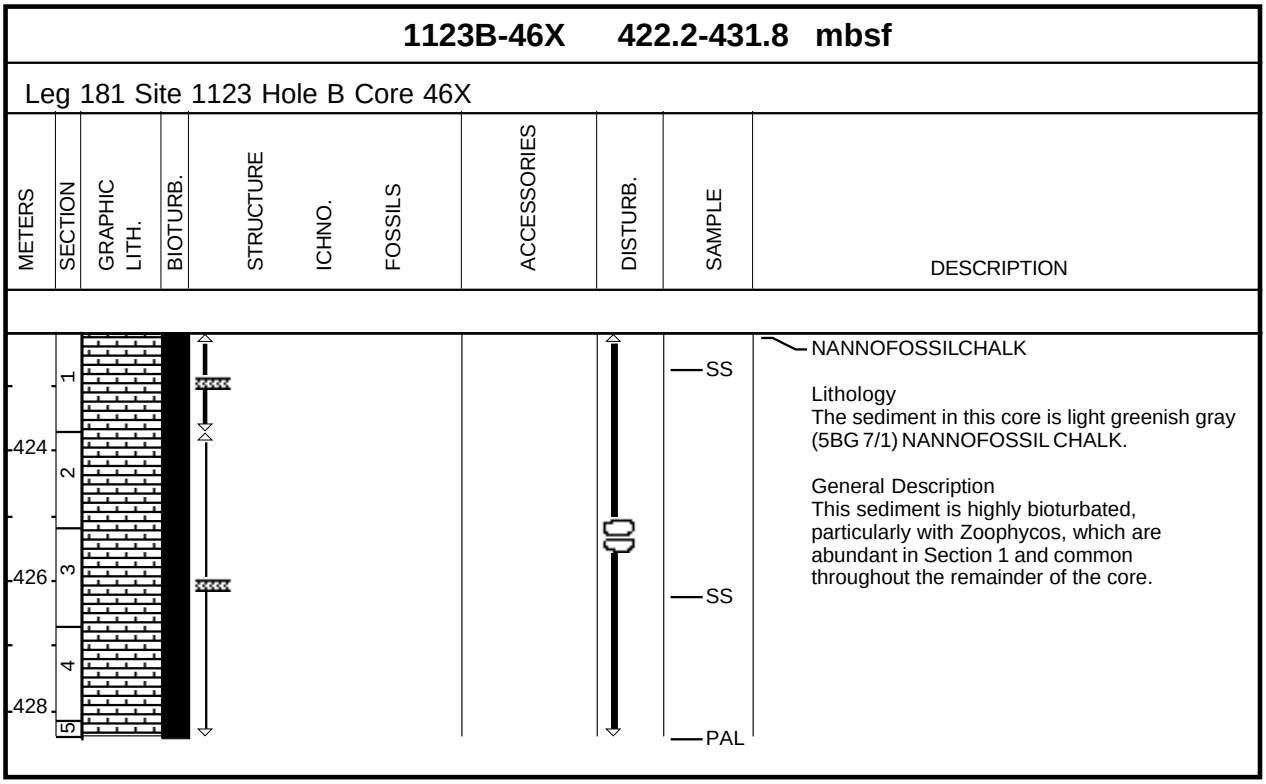
Core Photo


1123B-44X 403.0-412.6 mbsf
Leg 181 Site 1123 Hole B Core 44X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
404
406
408
1
2
3
4
5
IW
PAL
NANNOFOSSILCHALK
Lithology
This core is composed of light greenish gray (5BG 7/1) NANNOFOSSIL CHALK.
General Description
The sediment in this core is very homogenous throughout. There is extensive bioturbation with numerous Zoophycos burrows. Color banding is infrequent, faint green, and <1 cm thick.

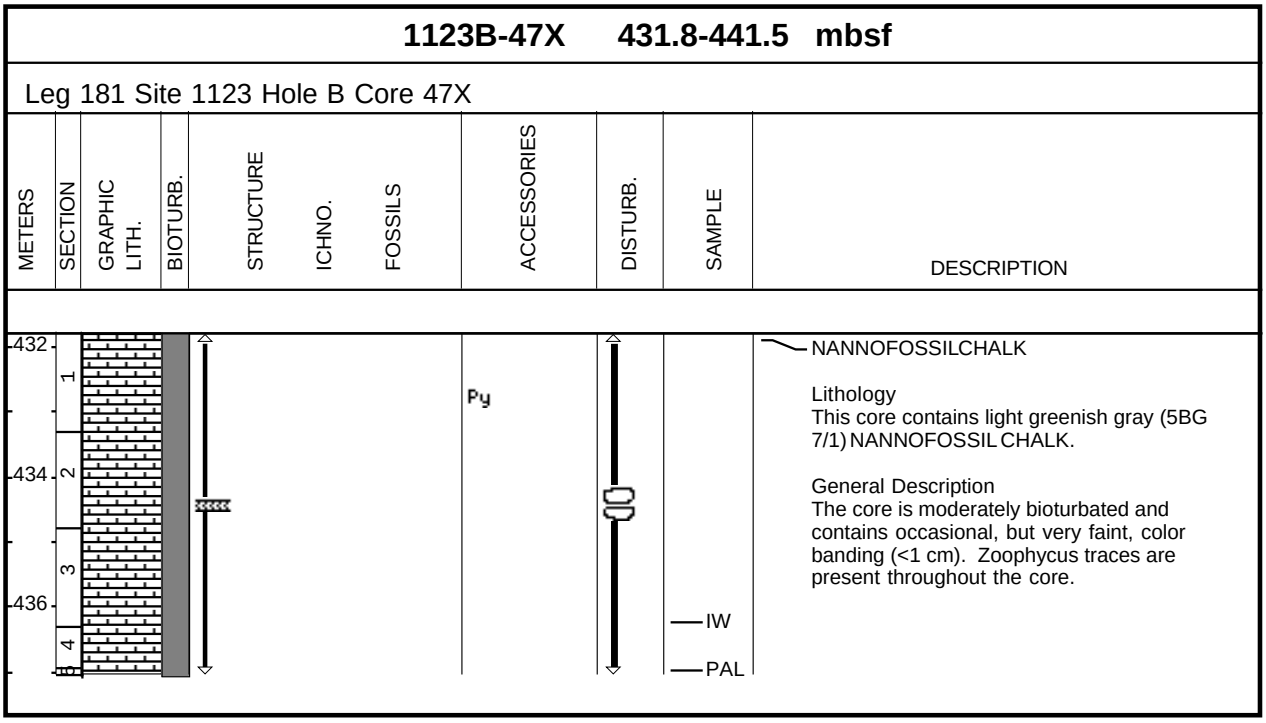
Core Photo


1123B-45X 412.6-422.2 mbsf
Leg 181 Site 1123 Hole B Core 45X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
414
416
1
2
3
4
PAL
NANNOFOSSILCHALK
Lithology
Light greenish gray (5BG 7/1) NANNOFOSSIL CHALK comprises this core.
General Description
There is slight mottling and moderate bioturbation in this NANNOFOSSIL CHALK. Zoophycos traces are visible within the pervasive drilling biscuits.

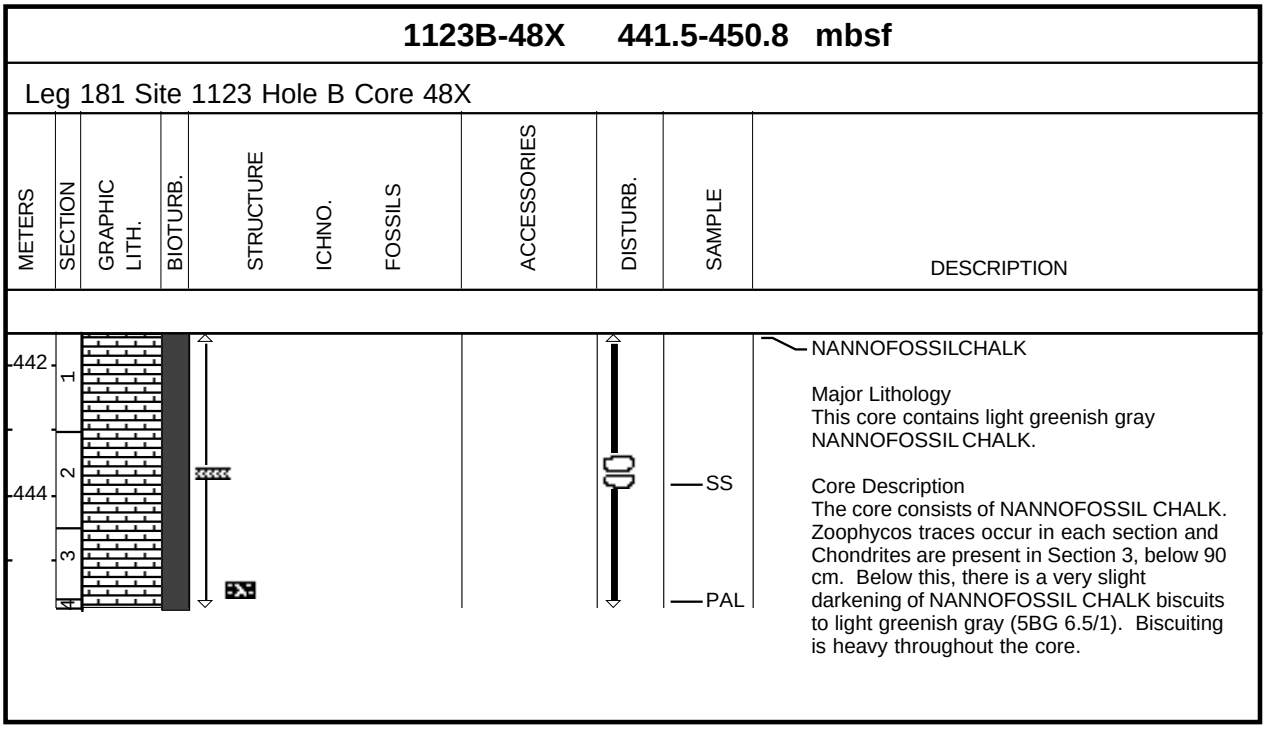
Core Photo


1123B-46X 422.2-431.8 mbsf
Leg 181 Site 1123 Hole B Core 46X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
424
426
428
1
2
3
4
5
SS
SS
PAL
NANNOFOSSILCHALK
Lithology
The sediment in this core is light greenish gray (5BG 7/1) NANNOFOSSIL CHALK.
General Description
This sediment is highly bioturbated, particularly with Zoophycos, which are abundant in Section 1 and common throughout the remainder of the core.

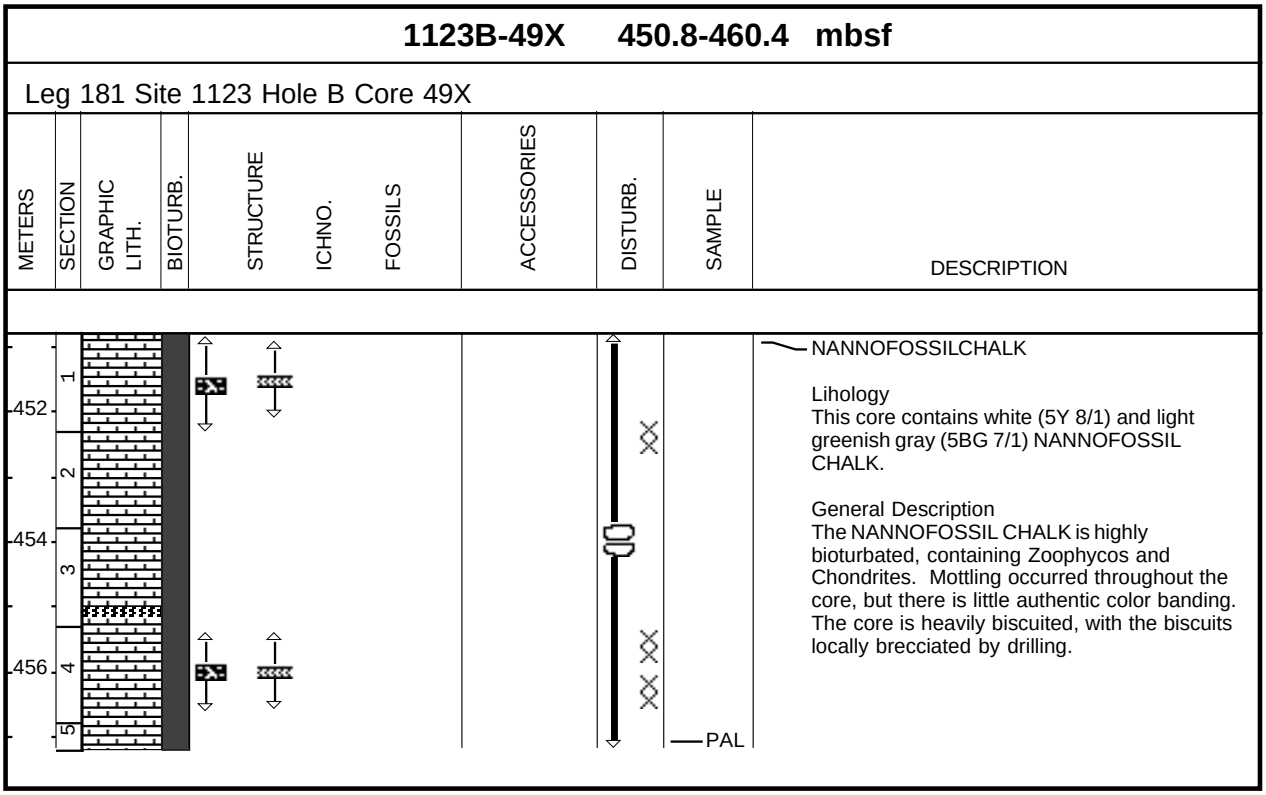
Core Photo


1123B-47X 431.8-441.5 mbsf
Leg 181 Site 1123 Hole B Core 47X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
432
434
436
1
2
3
4
Py
IW
PAL
NANNOFOSSILCHALK
Lithology
This core contains light greenish gray (5BG 7/1) NANNOFOSSIL CHALK.
General Description
The core is moderately bioturbated and contains occasional, but very faint, color banding (<1 cm). Zoophycus traces are present throughout the core.

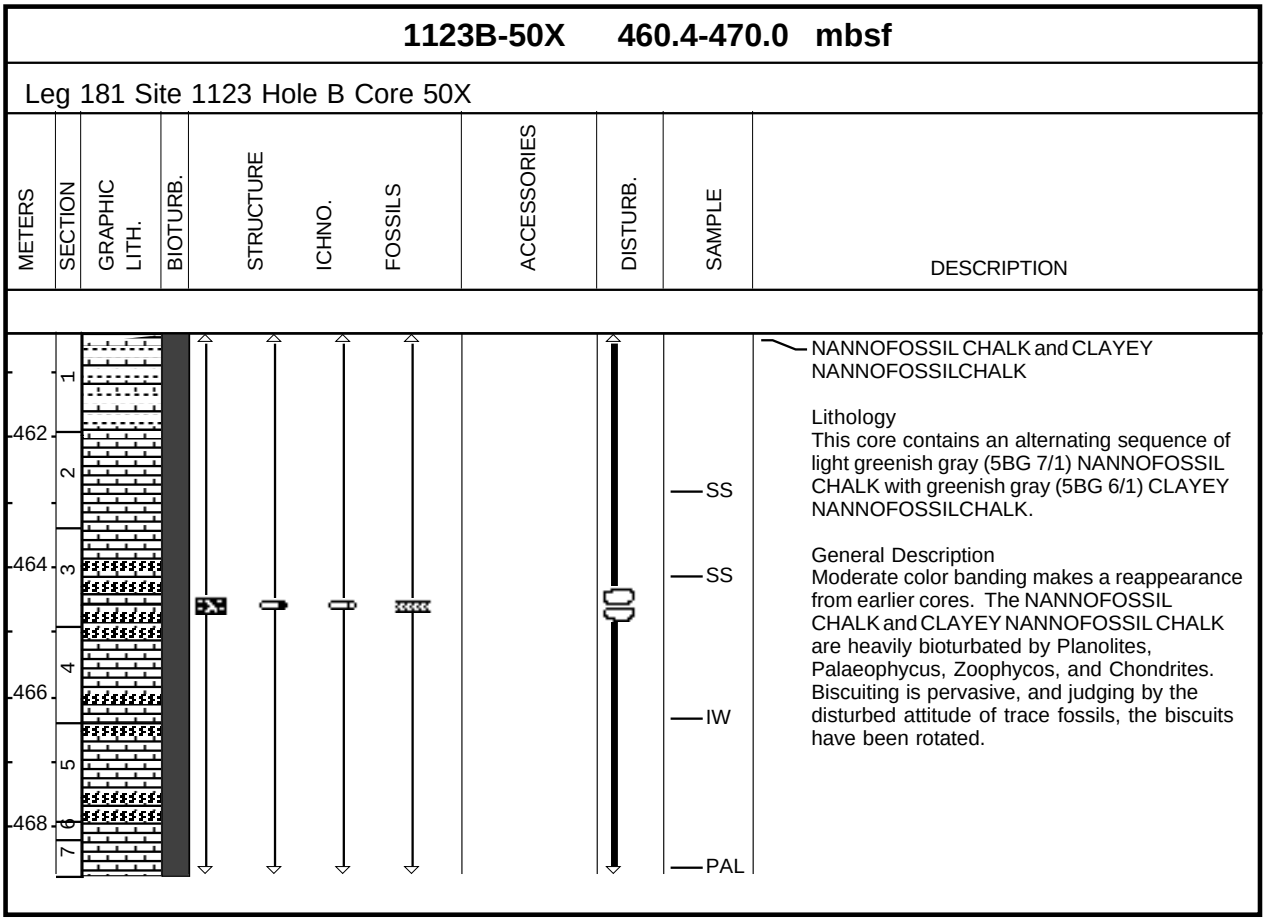
Core Photo


1123B-48X 441.5-450.8 mbsf
Leg 181 Site 1123 Hole B Core 48X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
442
444
1
2
3
4
SS
PAL
NANNOFOSSILCHALK
Major Lithology
This core contains light greenish gray NANNOFOSSIL CHALK.
Core Description
The core consists of NANNOFOSSIL CHALK. Zoophycos traces occur in each section and Chondrites are present in Section 3, below 90 cm. Below this, there is a very slight darkening of NANNOFOSSIL CHALK biscuits to light greenish gray (5BG 6.5/1). Biscuiting is heavy throughout the core.

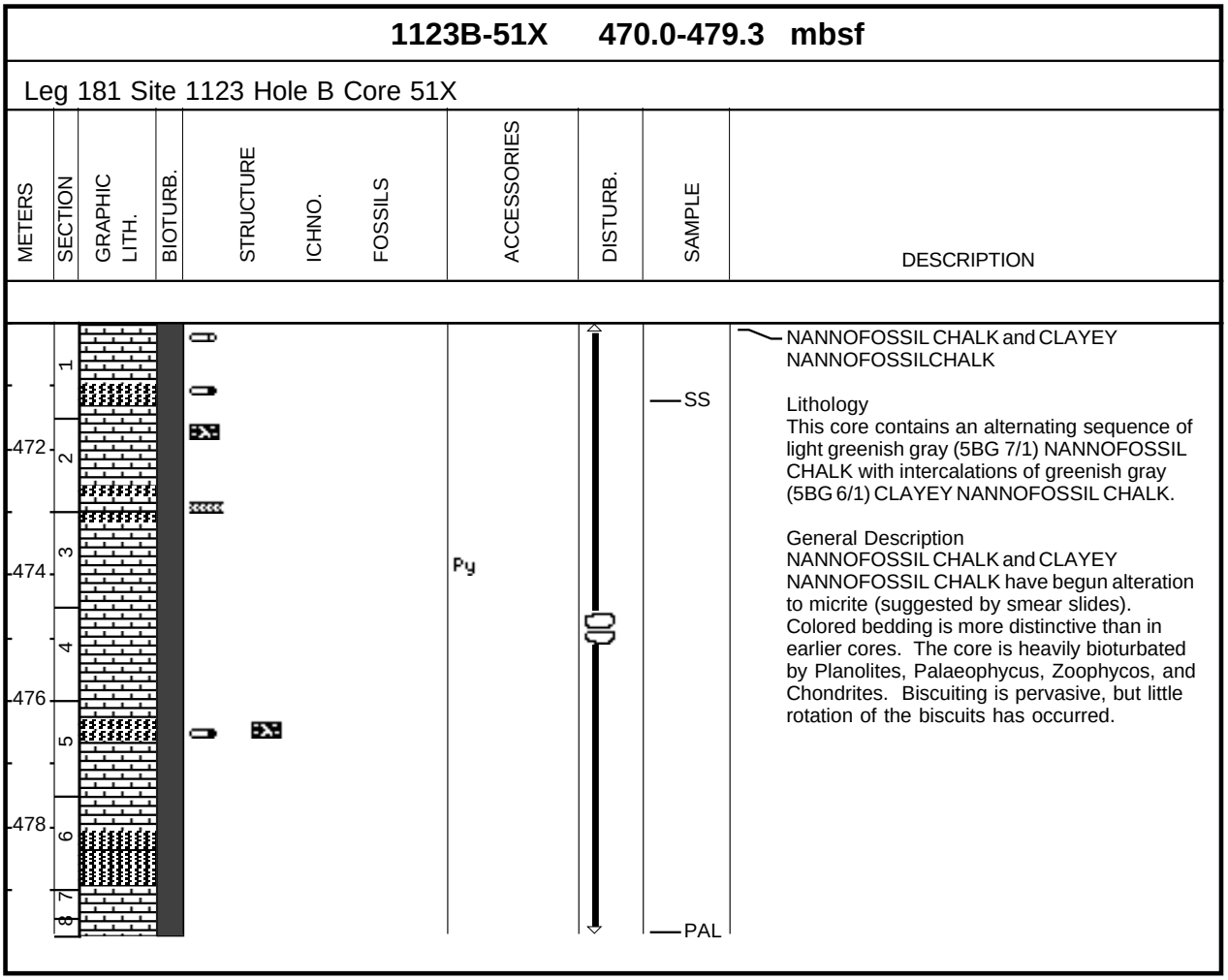
Core Photo


1123B-49X 450.8-460.4 mbsf
Leg 181 Site 1123 Hole B Core 49X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
452
454
456
1
2
3
4
5
PAL
NANNOFOSSILCHALK
Lihology
This core contains white (5Y 8/1) and light greenish gray (5BG 7/1) NANNOFOSSIL CHALK.
General Description
The NANNOFOSSIL CHALK is highly bioturbated, containing Zoophycos and Chondrites. Mottling occurred throughout the core, but there is little authentic color banding. The core is heavily biscuited, with the biscuits locally brecciated by drilling.

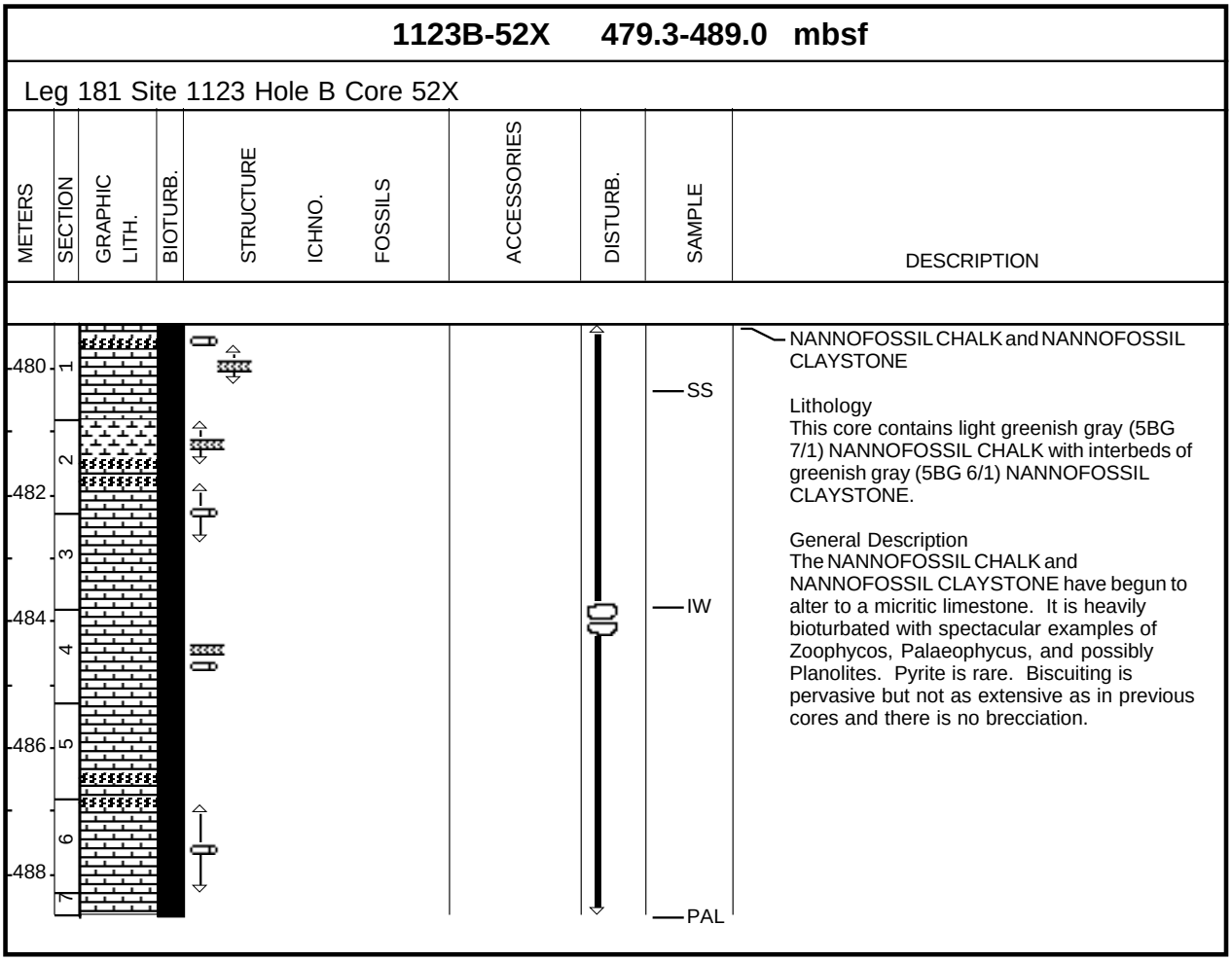
Core Photo


1123B-50X 460.4-470.0 mbsf
Leg 181 Site 1123 Hole B Core 50X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
462
464
466
468
1
2
3
4
5
6
7
SS
SS
IW
PAL
NANNOFOSSIL CHALK and CLAYEY NANNOFOSSILCHALK
Lithology
This core contains an alternating sequence of light greenish gray (5BG 7/1) NANNOFOSSIL CHALK with greenish gray (5BG 6/1) CLAYEY NANNOFOSSILCHALK.
General Description
Moderate color banding makes a reappearance from earlier cores. The NANNOFOSSIL CHALK and CLAYEY NANNOFOSSIL CHALK are heavily bioturbated by Planolites, Palaeophycus, Zoophycos, and Chondrites. Biscuiting is pervasive, and judging by the disturbed attitude of trace fossils, the biscuits have been rotated.

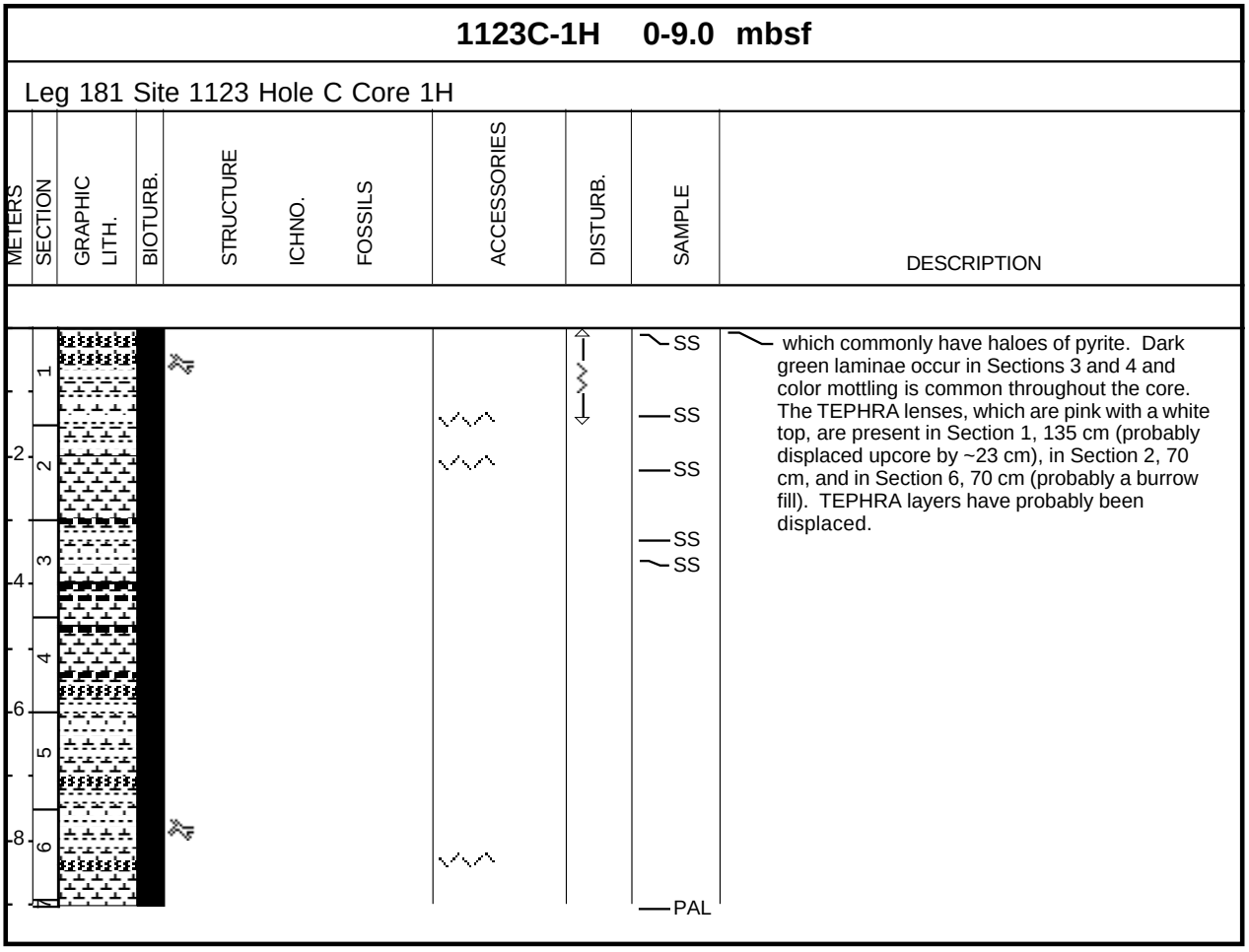
Core Photo


1123B-51X 470.0-479.3 mbsf
Leg 181 Site 1123 Hole B Core 51X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
472
474
476
478
1
2
3
4
5
6
7
Py
SS
PAL
NANNOFOSSIL CHALK and CLAYEY NANNOFOSSILCHALK
Lithology
This core contains an alternating sequence of light greenish gray (5BG 7/1) NANNOFOSSIL CHALK with intercalations of greenish gray (5BG 6/1) CLAYEY NANNOFOSSIL CHALK.
General Description
NANNOFOSSIL CHALK and CLAYEY NANNOFOSSIL CHALK have begun alteration to micrite (suggested by smear slides). Colored bedding is more distinctive than in earlier cores. The core is heavily bioturbated by Planolites, Palaeophycus, Zoophycos, and Chondrites. Biscuiting is pervasive, but little rotation of the biscuits has occurred.

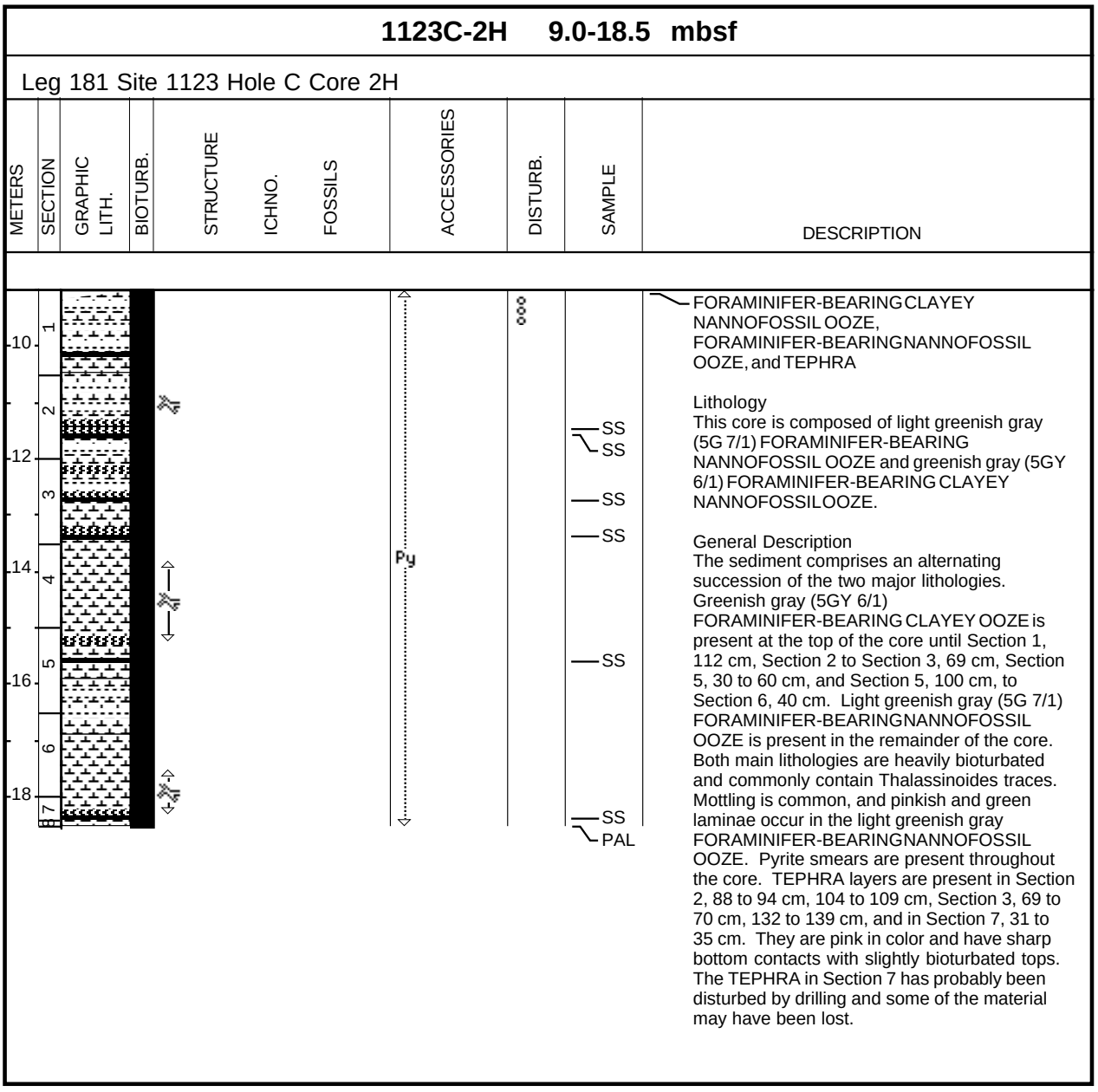
Core Photo


1123B-52X 479.3-489.0 mbsf
Leg 181 Site 1123 Hole B Core 52X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
480
482
484
486
488
1
2
3
4
5
6
7
SS
IW
PAL
NANNOFOSSIL CHALK and NANNOFOSSIL CLAYSTONE
Lithology
This core contains light greenish gray (5BG 7/1) NANNOFOSSIL CHALK with interbeds of greenish gray (5BG 6/1) NANNOFOSSIL CLAYSTONE.
General Description
The NANNOFOSSIL CHALK and NANNOFOSSIL CLAYSTONE have begun to alter to a micritic limestone. It is heavily bioturbated with spectacular examples of Zoophycos, Palaeophycus, and possibly Planolites. Pyrite is rare. Biscuiting is pervasive but not as extensive as in previous cores and there is no brecciation.

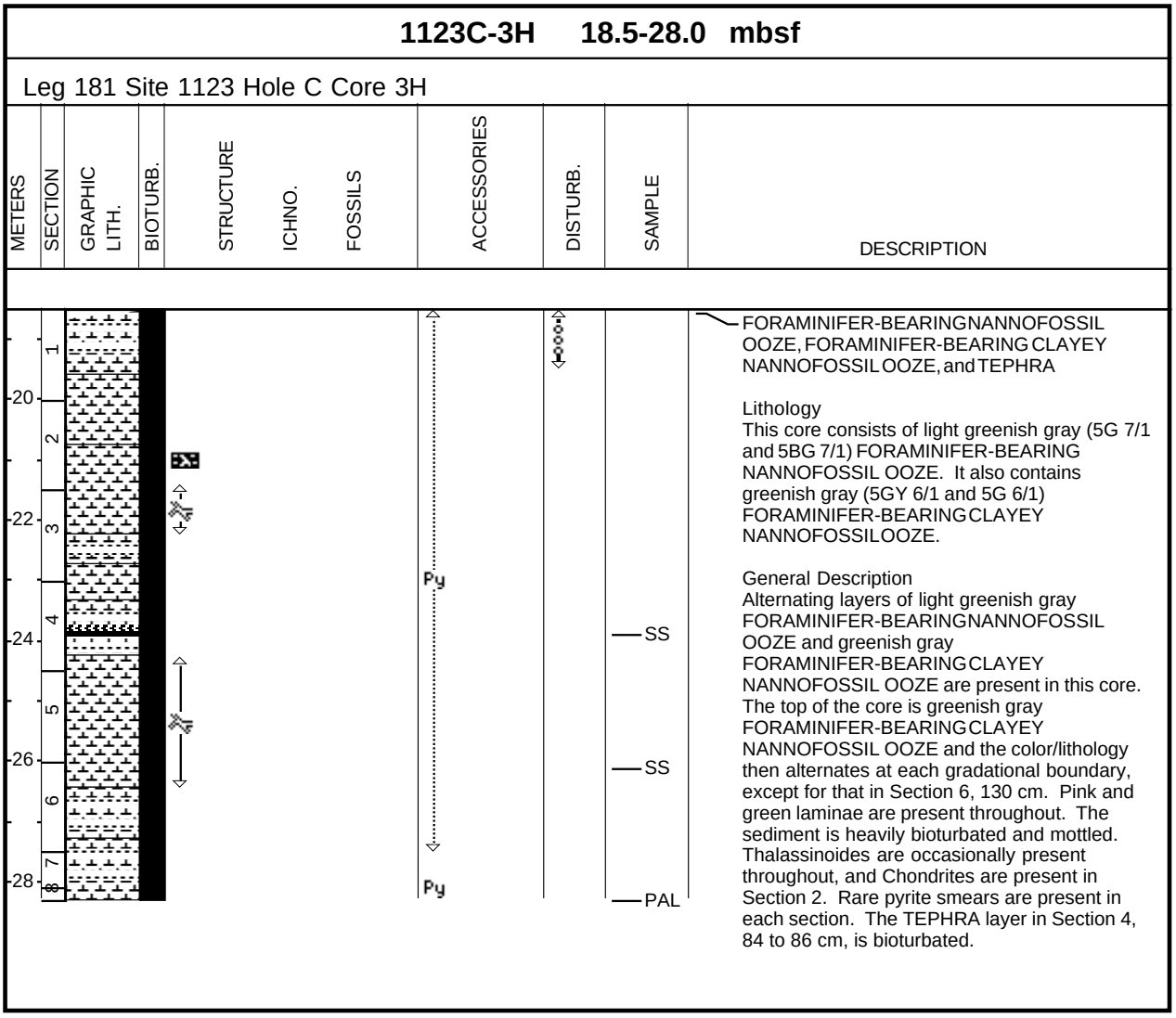
Core Photo


1123C-1H 0-9.0 mbsf
Leg 181 Site 1123 Hole C Core 1H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
SS
SS
SS
SS
SS
PAL
which commonly have haloes of pyrite. Dark green laminae occur in Sections 3 and 4 and color mottling is common throughout the core. The TEPHRA lenses, which are pink with a white top, are present in Section 1, 135 cm (probably displaced upcore by ~23 cm), in Section 2, 70 cm, and in Section 6, 70 cm (probably a burrow fill). TEPHRA layers have probably been displaced.

Core Photo


1123C-2H 9.0-18.5 mbsf
Leg 181 Site 1123 Hole C Core 2H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
10
12
14
16
18
1
2
3
4
5
6
7
Py
SS
SS
SS
SS
SS
SS
PAL
FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE, FORAMINIFER-BEARING NANNOFOSSIL OOZE, and TEPHRA
Lithology
This core is composed of light greenish gray (5G 7/1) FORAMINIFER-BEARING NANNOFOSSIL OOZE and greenish gray (5GY 6/1) FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE.
General Description
The sediment comprises an alternating succession of the two major lithologies. Greenish gray (5GY 6/1) FORAMINIFER-BEARING CLAYEY OOZE is present at the top of the core until Section 1, 112 cm, Section 2 to Section 3, 69 cm, Section 5, 30 to 60 cm, and Section 5, 100 cm, to Section 6, 40 cm. Light greenish gray (5G 7/1) FORAMINIFER-BEARING NANNOFOSSIL OOZE is present in the remainder of the core. Both main lithologies are heavily bioturbated and commonly contain Thalassinoides traces. Mottling is common, and pinkish and green laminae occur in the light greenish gray FORAMINIFER-BEARING NANNOFOSSIL OOZE. Pyrite smears are present throughout the core. TEPHRA layers are present in Section 2, 88 to 94 cm, 104 to 109 cm, Section 3, 69 to 70 cm, 132 to 139 cm, and in Section 7, 31 to 35 cm. They are pink in color and have sharp bottom contacts with slightly bioturbated tops. The TEPHRA in Section 7 has probably been disturbed by drilling and some of the material may have been lost.

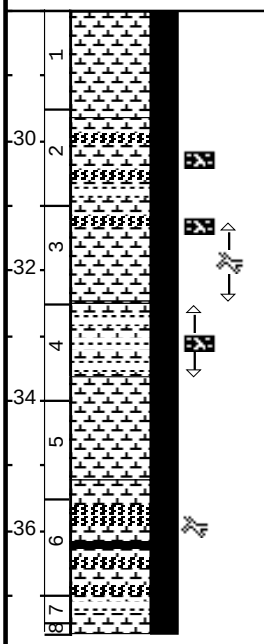
Core Photo


1123C-3H 18.5-28.0 mbsf
Leg 181 Site 1123 Hole C Core 3H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
20
22
24
26
28
1
2
3
4
5
6
7
Py
Py
SS
SS
PAL
FORAMINIFER-BEARING NANNOFOSSIL OOZE, FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE, and TEPHRA
Lithology
This core consists of light greenish gray (5G 7/1 and 5BG 7/1) FORAMINIFER-BEARING NANNOFOSSIL OOZE. It also contains greenish gray (5GY 6/1 and 5G 6/1) FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE.
General Description
Alternating layers of light greenish gray FORAMINIFER-BEARING NANNOFOSSIL OOZE and greenish gray FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE are present in this core. The top of the core is greenish gray FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE and the color/lithology then alternates at each gradational boundary, except for that in Section 6, 130 cm. Pink and green laminae are present throughout. The sediment is heavily bioturbated and mottled. Thalassinoides are occasionally present throughout, and Chondrites are present in Section 2. Rare pyrite smears are present in each section. The TEPHRA layer in Section 4, 84 to 86 cm, is bioturbated.

Core Photo

1123C-4H 28.0-37.5 mbsf

Leg 181 Site 1123 Hole C Core 4H

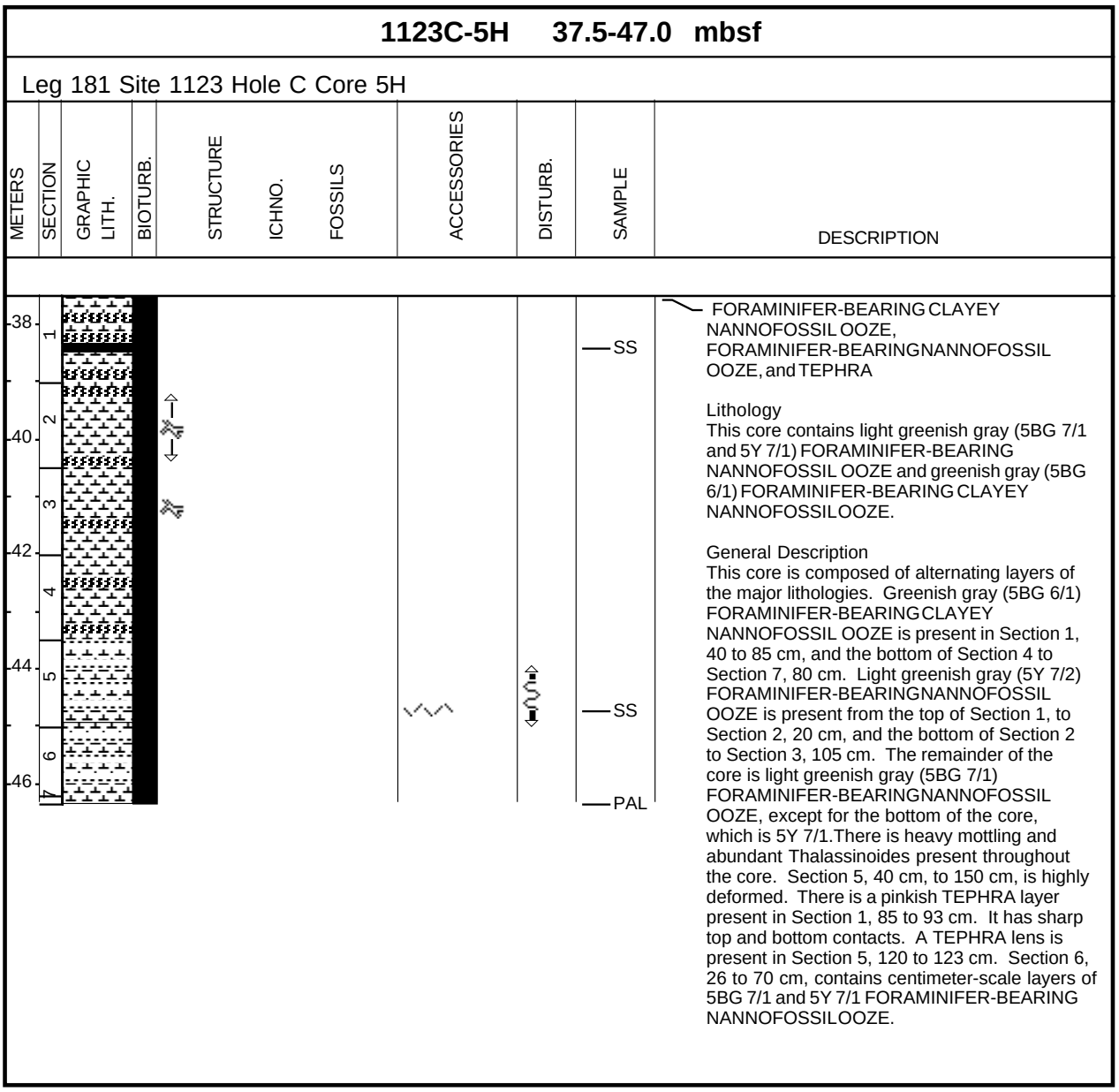


FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE, FORAMINIFER-BEARING NANNOFOSSIL OOZE, and TEPHRA

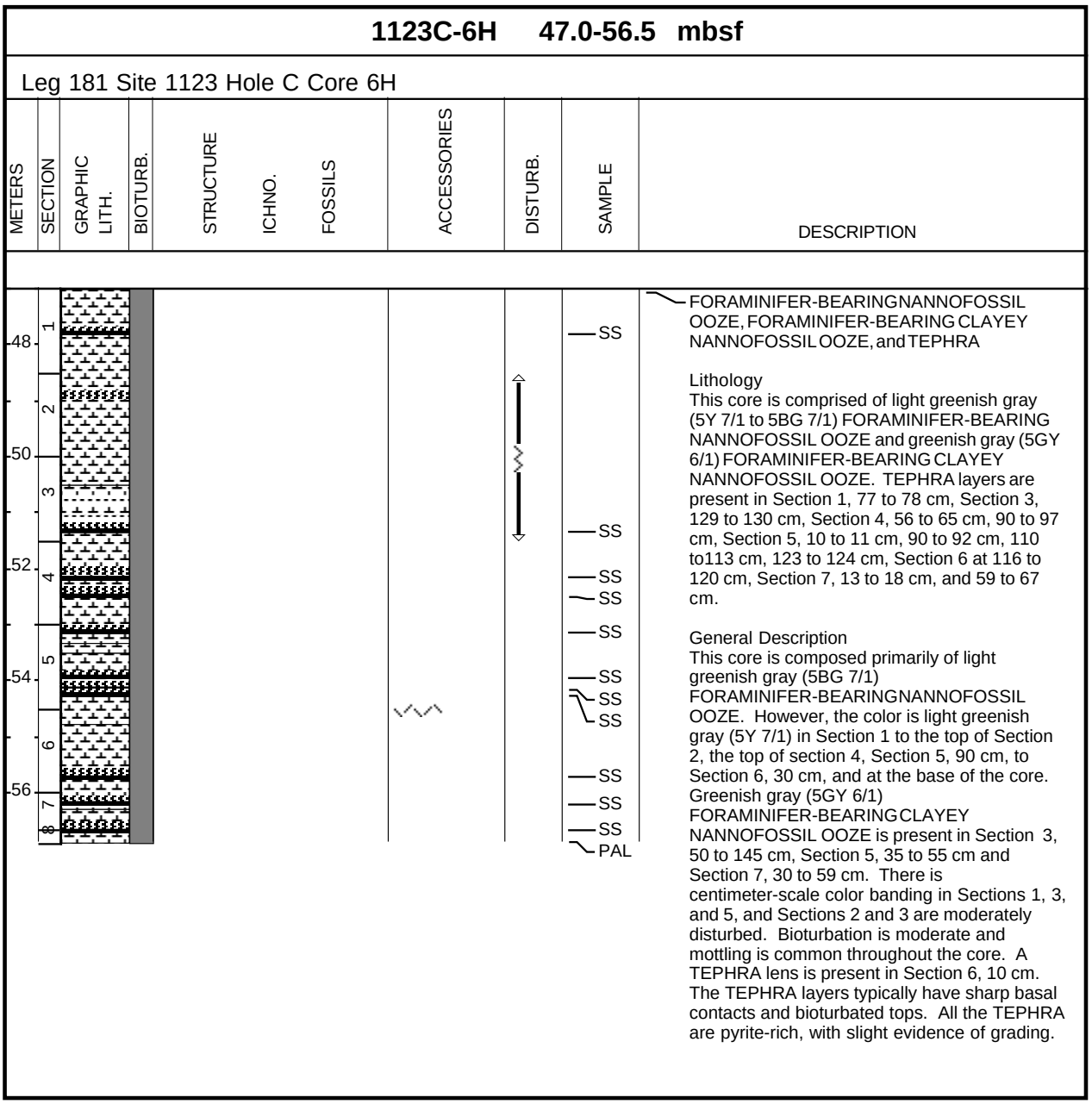
Lithology
Greenish gray (5BG 6/1) FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE and light greenish gray (5BG 7/1) FORAMINIFER-BEARING NANNOFOSSIL OOZE comprise this core.

General Description
This core contains an alternating succession of the major lithologies. The top of the core is light greenish gray (5BG 7/1) FORAMINIFER-BEARING NANNOFOSSIL OOZE and the lithology alternates at every gradational or bioturbational contact after that (except Section 6, 20 cm) with greenish gray (5BG 6/1) FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE. The sediment is heavily bioturbated and Thalassinoides and Chondrites (Sections 2, 3, and 4) traces are present. This has given rise to heavy mottling and green and pink color banding. Pyrite occurs infrequently throughout the core. A pink TEPHRA layer is present in Section 6, 68 to 73 cm, and has a sharp base and top contact. TEPHRA lens is present in Section 4 and contains pyrite.

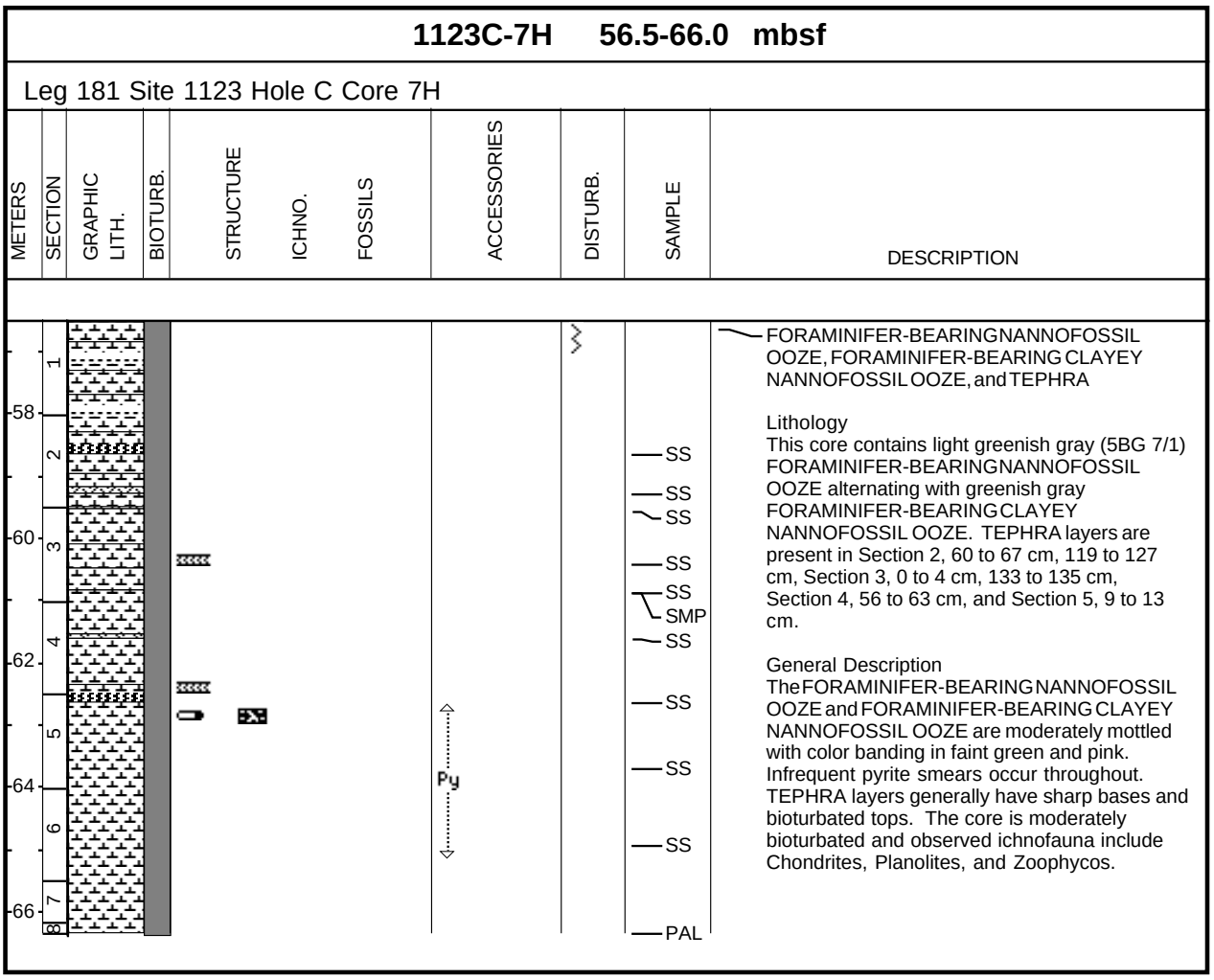
Core Photo


1123C-5H 37.5-47.0 mbsf
Leg 181 Site 1123 Hole C Core 5H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
38
40
42
44
46
1
2
3
4
5
6
7
SS
SS
PAL
FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE, FORAMINIFER-BEARING NANNOFOSSIL OOZE, and TEPHRA
Lithology
This core contains light greenish gray (5BG 7/1 and 5Y 7/1) FORAMINIFER-BEARING NANNOFOSSIL OOZE and greenish gray (5BG 6/1) FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE.
General Description
This core is composed of alternating layers of the major lithologies. Greenish gray (5BG 6/1) FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE is present in Section 1, 40 to 85 cm, and the bottom of Section 4 to Section 7, 80 cm. Light greenish gray (5Y 7/2) FORAMINIFER-BEARING NANNOFOSSIL OOZE is present from the top of Section 1, to Section 2, 20 cm, and the bottom of Section 2 to Section 3, 105 cm. The remainder of the core is light greenish gray (5BG 7/1) FORAMINIFER-BEARING NANNOFOSSIL OOZE, except for the bottom of the core, which is 5Y 7/1.There is heavy mottling and abundant Thalassinoides present throughout the core. Section 5, 40 cm, to 150 cm, is highly deformed. There is a pinkish TEPHRA layer present in Section 1, 85 to 93 cm. It has sharp top and bottom contacts. A TEPHRA lens is present in Section 5, 120 to 123 cm. Section 6, 26 to 70 cm, contains centimeter-scale layers of 5BG 7/1 and 5Y 7/1 FORAMINIFER-BEARING NANNOFOSSIL OOZE.

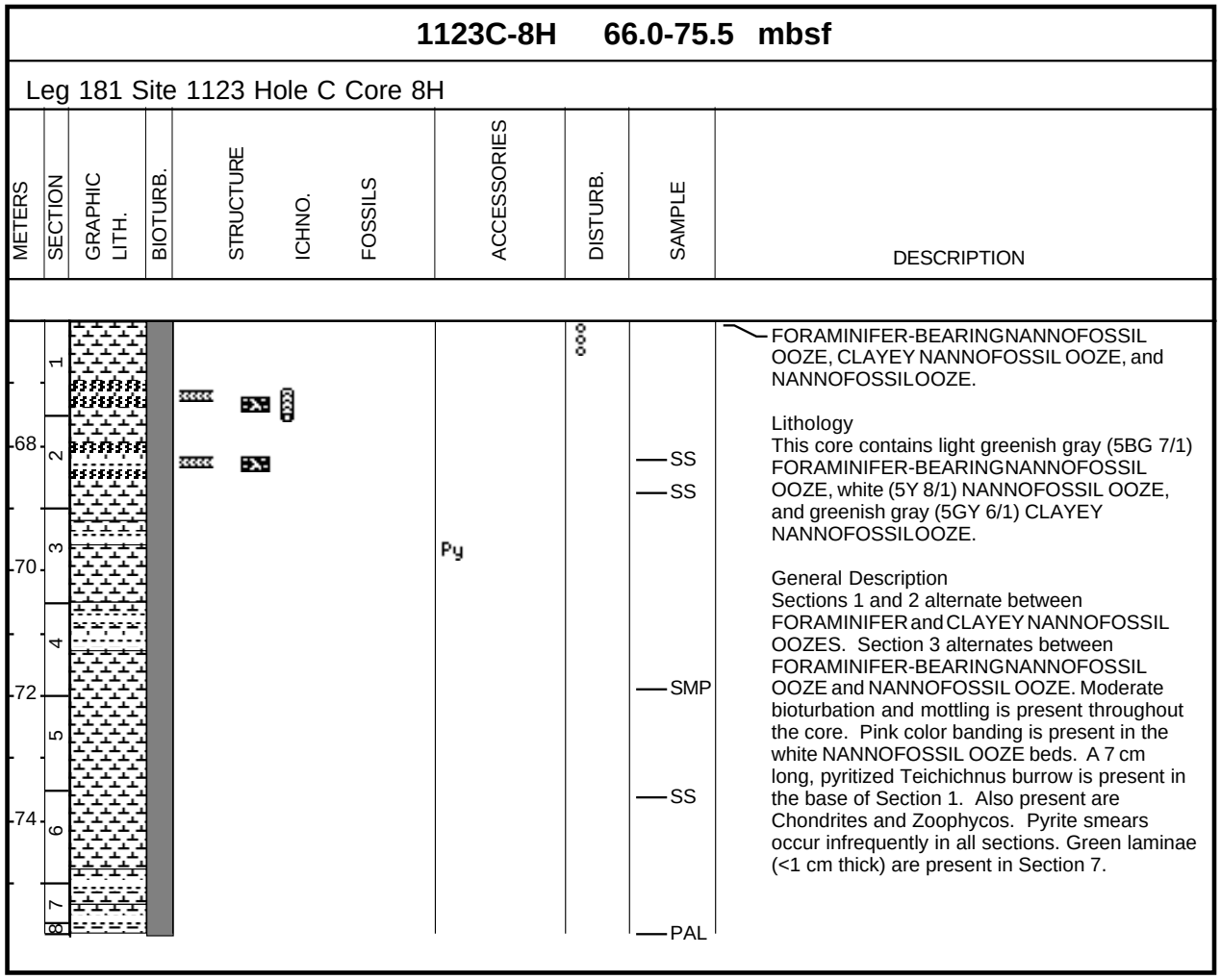
Core Photo


1123C-6H 47.0-56.5 mbsf
Leg 181 Site 1123 Hole C Core 6H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
48
50
52
54
56
1
2
3
4
5
6
7
SS
SS
SS
SS
SS
SS
SS
SS
SS
SS
SS
PAL
FORAMINIFER-BEARING NANNOFOSSIL OOZE, FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE, and TEPHRA
Lithology
This core is comprised of light greenish gray (5Y 7/1 to 5BG 7/1) FORAMINIFER-BEARING NANNOFOSSIL OOZE and greenish gray (5GY 6/1) FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE. TEPHRA layers are present in Section 1, 77 to 78 cm, Section 3, 129 to 130 cm, Section 4, 56 to 65 cm, 90 to 97 cm, Section 5, 10 to 11 cm, 90 to 92 cm, 110 to113 cm, 123 to 124 cm, Section 6 at 116 to 120 cm, Section 7, 13 to 18 cm, and 59 to 67 cm.
General Description
This core is composed primarily of light greenish gray (5BG 7/1) FORAMINIFER-BEARING NANNOFOSSIL OOZE. However, the color is light greenish gray (5Y 7/1) in Section 1 to the top of Section 2, the top of section 4, Section 5, 90 cm, to Section 6, 30 cm, and at the base of the core. Greenish gray (5GY 6/1) FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE is present in Section 3, 50 to 145 cm, Section 5, 35 to 55 cm and Section 7, 30 to 59 cm. There is centimeter-scale color banding in Sections 1, 3, and 5, and Sections 2 and 3 are moderately disturbed. Bioturbation is moderate and mottling is common throughout the core. A TEPHRA lens is present in Section 6, 10 cm. The TEPHRA layers typically have sharp basal contacts and bioturbated tops. All the TEPHRA are pyrite-rich, with slight evidence of grading.

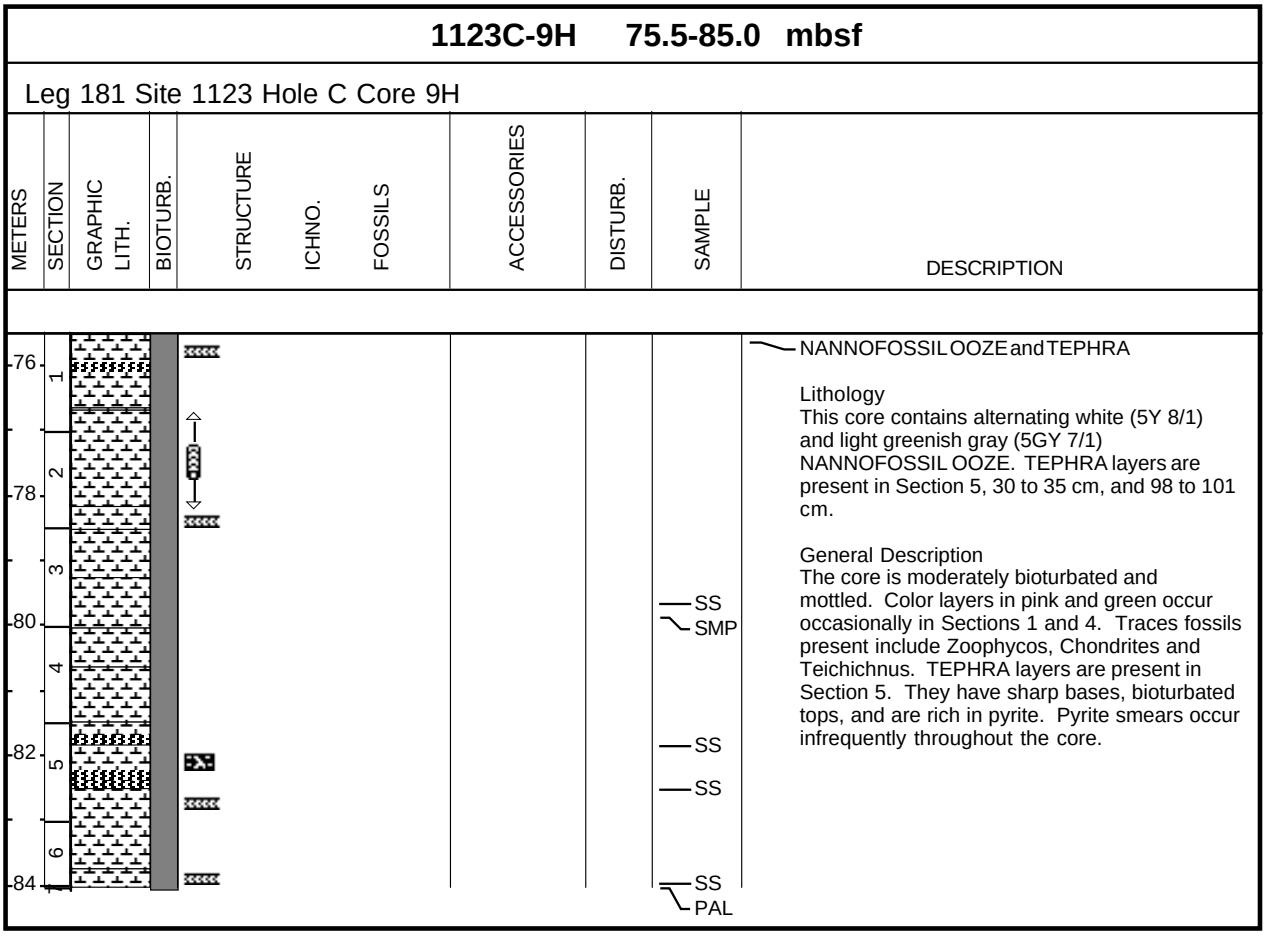
Core Photo


1123C-7H 56.5-66.0 mbsf
Leg 181 Site 1123 Hole C Core 7H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
58
60
62
64
66
1
2
3
4
5
6
7
Py
SS
SS
SS
SS
SS
SMP
SS
SS
SS
SS
PAL
FORAMINIFER-BEARING NANNOFOSSIL OOZE, FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE, and TEPHRA
Lithology
This core contains light greenish gray (5BG 7/1) FORAMINIFER-BEARING NANNOFOSSIL OOZE alternating with greenish gray FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE. TEPHRA layers are present in Section 2, 60 to 67 cm, 119 to 127 cm, Section 3, 0 to 4 cm, 133 to 135 cm, Section 4, 56 to 63 cm, and Section 5, 9 to 13 cm.
General Description
The FORAMINIFER-BEARING NANNOFOSSIL OOZE and FORAMINIFER-BEARING CLAYEY NANNOFOSSIL OOZE are moderately mottled with color banding in faint green and pink. Infrequent pyrite smears occur throughout. TEPHRA layers generally have sharp bases and bioturbated tops. The core is moderately bioturbated and observed ichnofauna include Chondrites, Planolites, and Zoophycos.

Core Photo


1123C-8H 66.0-75.5 mbsf
Leg 181 Site 1123 Hole C Core 8H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
68
70
72
74
1
2
3
4
5
6
7
8
Py
SS
SS
SMP
SS
PAL
FORAMINIFER-BEARINGNANNOFOSSIL OOZE, CLAYEY NANNOFOSSIL OOZE, and NANNOFOSSILOOZE.
Lithology
This core contains light greenish gray (5BG 7/1) FORAMINIFER-BEARINGNANNOFOSSIL OOZE, white (5Y 8/1) NANNOFOSSIL OOZE, and greenish gray (5GY 6/1) CLAYEY NANNOFOSSILOOZE.
General Description
Sections 1 and 2 alternate between FORAMINIFER and CLAYEY NANNOFOSSIL OOZES. Section 3 alternates between FORAMINIFER-BEARINGNANNOFOSSIL OOZE and NANNOFOSSIL OOZE. Moderate bioturbation and mottling is present throughout the core. Pink color banding is present in the white NANNOFOSSIL OOZE beds. A 7 cm long, pyritized Teichichnus burrow is present in the base of Section 1. Also present are Chondrites and Zoophycos. Pyrite smears occur infrequently in all sections. Green laminae (<1 cm thick) are present in Section 7.

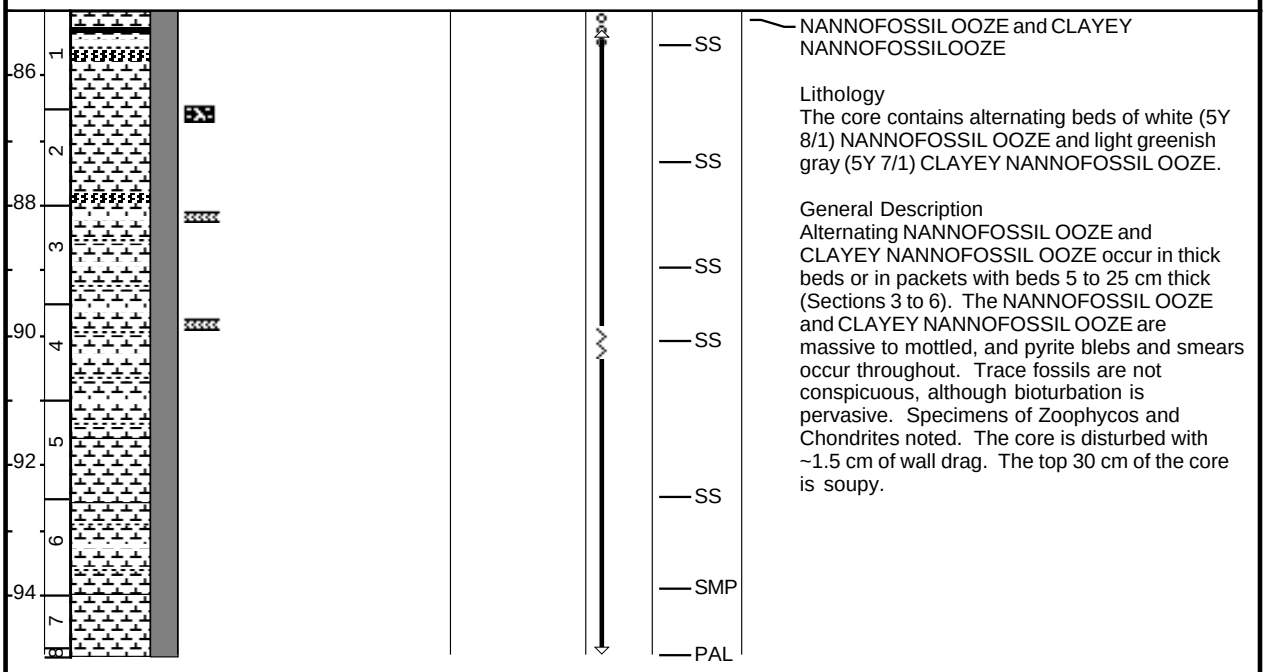
Core Photo


1123C-9H 75.5-85.0 mbsf
Leg 181 Site 1123 Hole C Core 9H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
76
78
80
82
84
1
2
3
4
5
6
SS
SMP
SS
SS
SS
PAL
NANNOFOSSIL OOZE and TEPHRA
Lithology
This core contains alternating white (5Y 8/1) and light greenish gray (5GY 7/1) NANNOFOSSIL OOZE. TEPHRA layers are present in Section 5, 30 to 35 cm, and 98 to 101 cm.
General Description
The core is moderately bioturbated and mottled. Color layers in pink and green occur occasionally in Sections 1 and 4. Traces fossils present include Zoophycos, Chondrites and Teichichnus. TEPHRA layers are present in Section 5. They have sharp bases, bioturbated tops, and are rich in pyrite. Pyrite smears occur infrequently throughout the core.

Core Photo

1123C-10H 85.0-94.5 mbsf

Leg 181 Site 1123 Hole C Core 10H

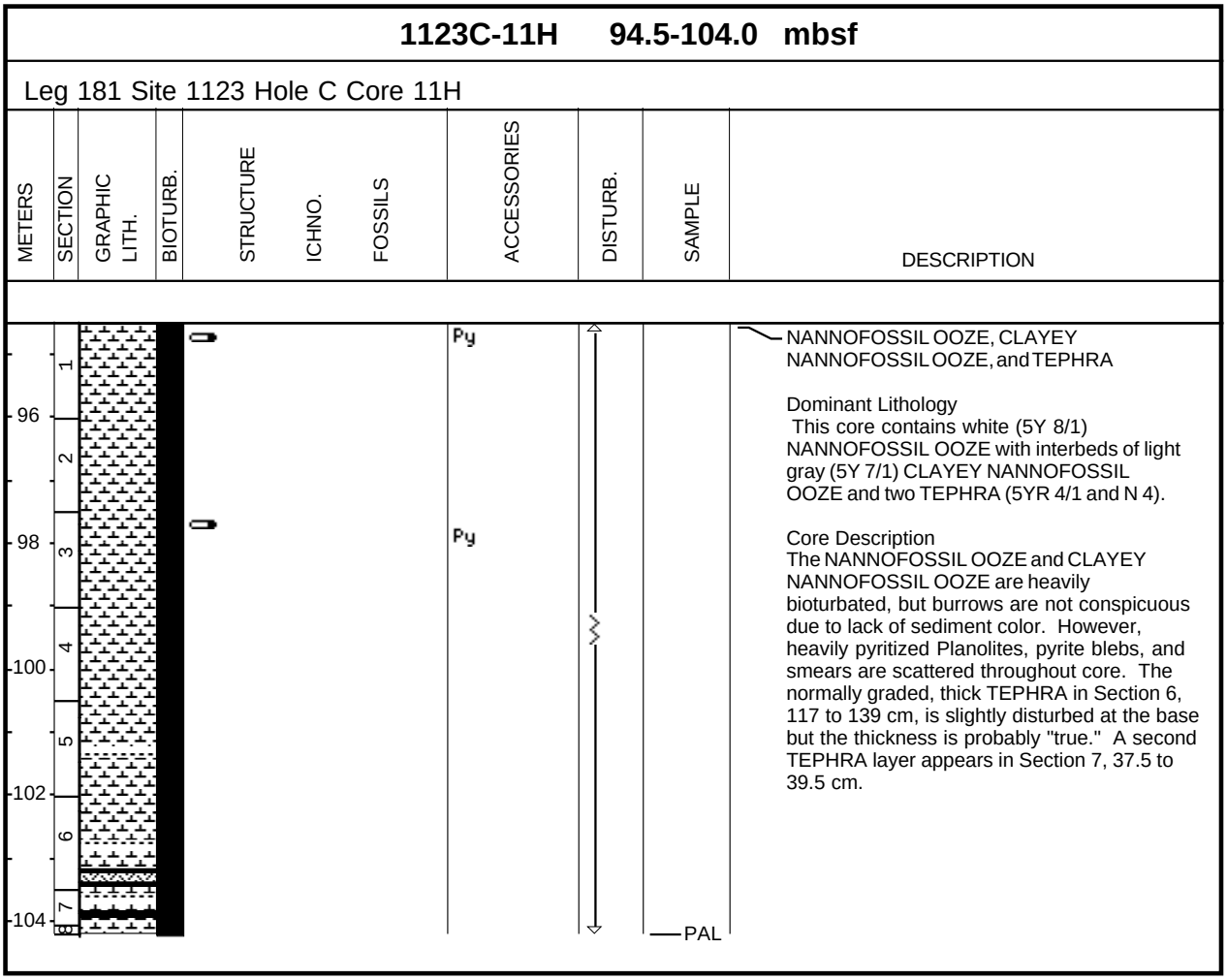


NANNOFOSSIL OOZE and CLAYEY NANNOFOSSILOOZE

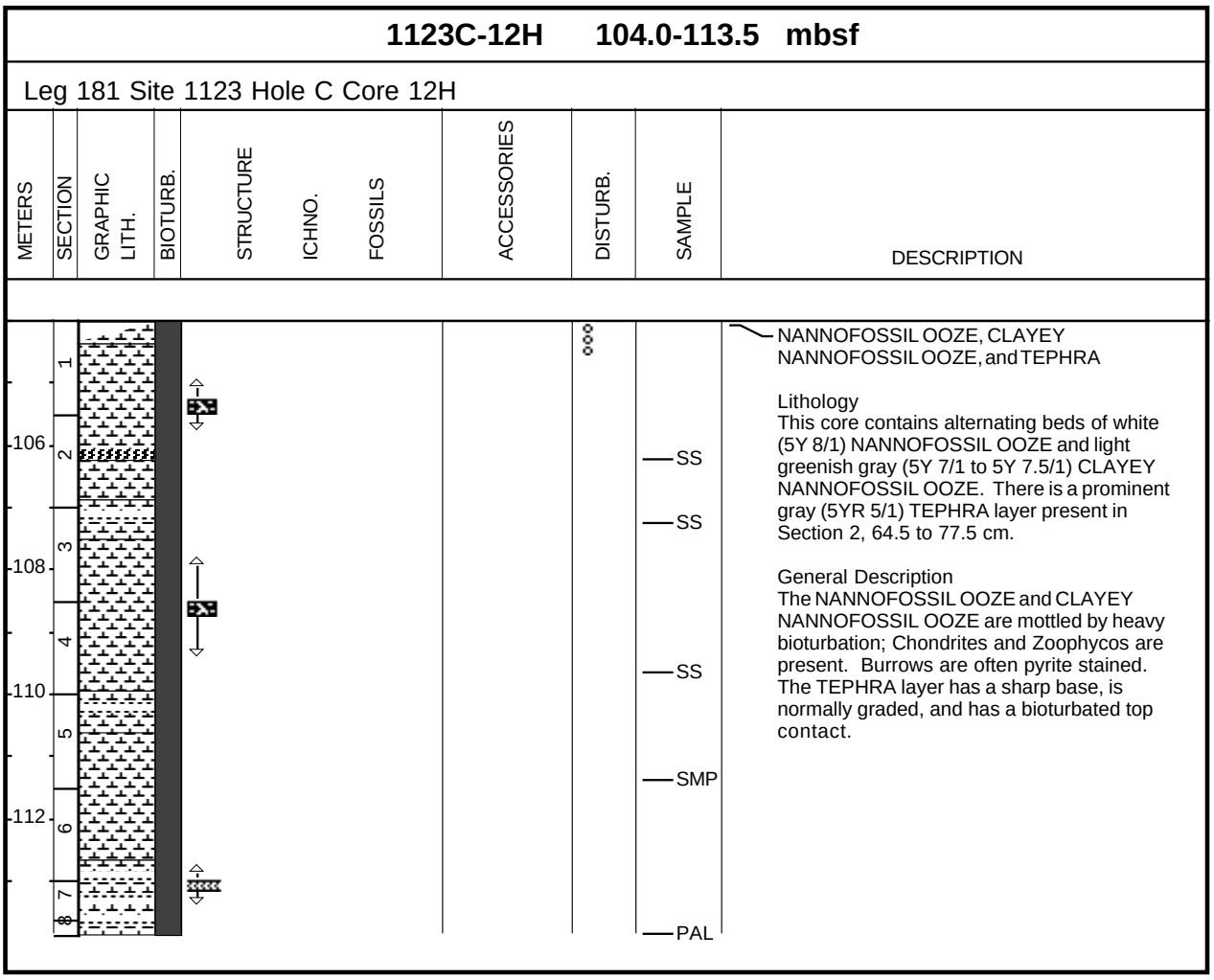
Lithology
The core contains alternating beds of white (5Y 8/1) NANNOFOSSIL OOZE and light greenish gray (5Y 7/1) CLAYEY NANNOFOSSIL OOZE.

General Description
Alternating NANNOFOSSIL OOZE and CLAYEY NANNOFOSSIL OOZE occur in thick beds or in packets with beds 5 to 25 cm thick (Sections 3 to 6). The NANNOFOSSIL OOZE and CLAYEY NANNOFOSSIL OOZE are massive to mottled, and pyrite blebs and smears occur throughout. Trace fossils are not conspicuous, although bioturbation is pervasive. Specimens of Zoophycos and Chondrites noted. The core is disturbed with ~1.5 cm of wall drag. The top 30 cm of the core is soupy.

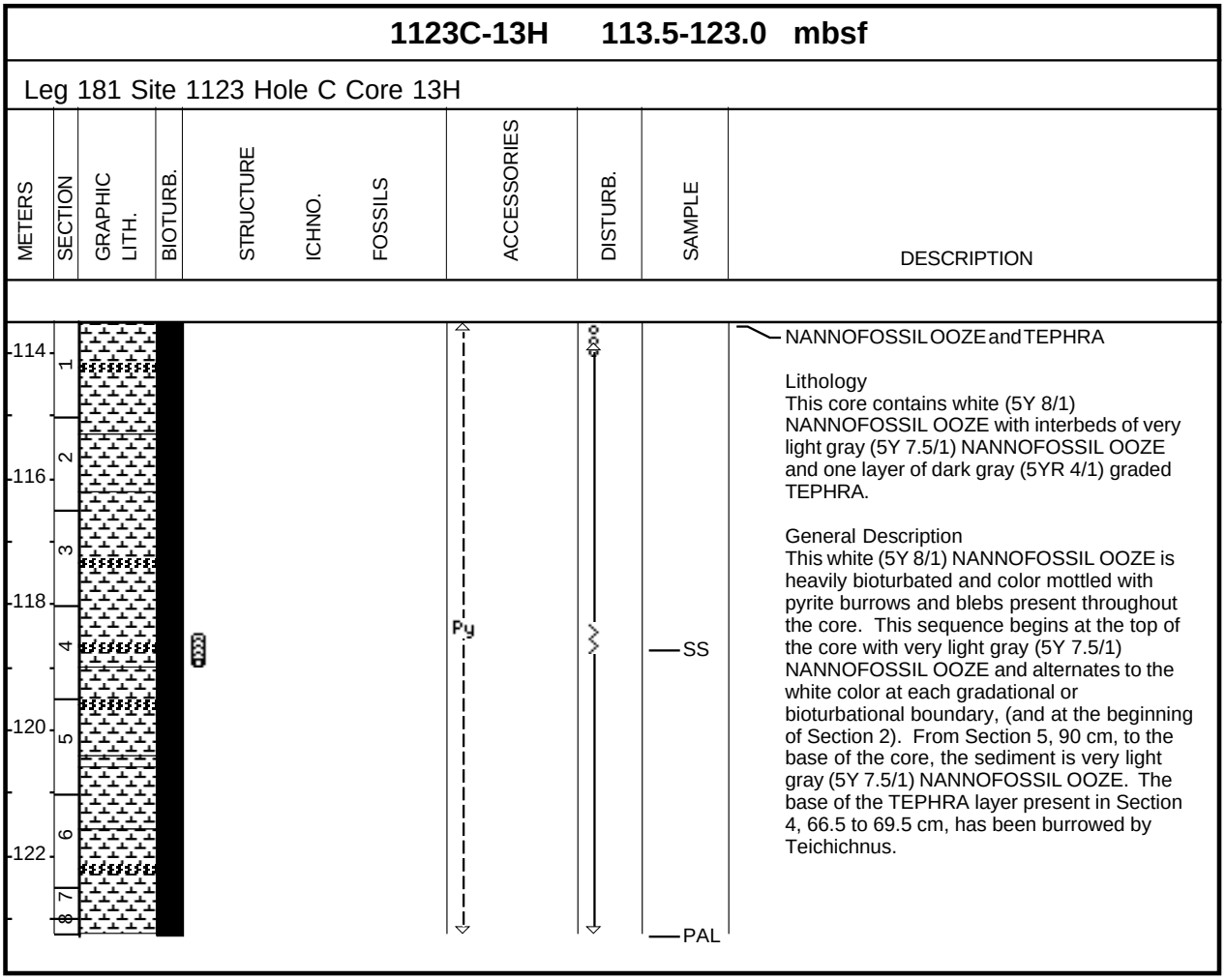
Core Photo


1123C-11H 94.5-104.0 mbsf
Leg 181 Site 1123 Hole C Core 11H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
96
98
100
102
104
Py
Py
PAL
NANNOFOSSIL OOZE, CLAYEY NANNOFOSSIL OOZE, and TEPHRA
Dominant Lithology
This core contains white (5Y 8/1) NANNOFOSSIL OOZE with interbeds of light gray (5Y 7/1) CLAYEY NANNOFOSSIL OOZE and two TEPHRA (5YR 4/1 and N 4).
Core Description
The NANNOFOSSIL OOZE and CLAYEY NANNOFOSSIL OOZE are heavily bioturbated, but burrows are not conspicuous due to lack of sediment color. However, heavily pyritized Planolites, pyrite blebs, and smears are scattered throughout core. The normally graded, thick TEPHRA in Section 6, 117 to 139 cm, is slightly disturbed at the base but the thickness is probably "true." A second TEPHRA layer appears in Section 7, 37.5 to 39.5 cm.

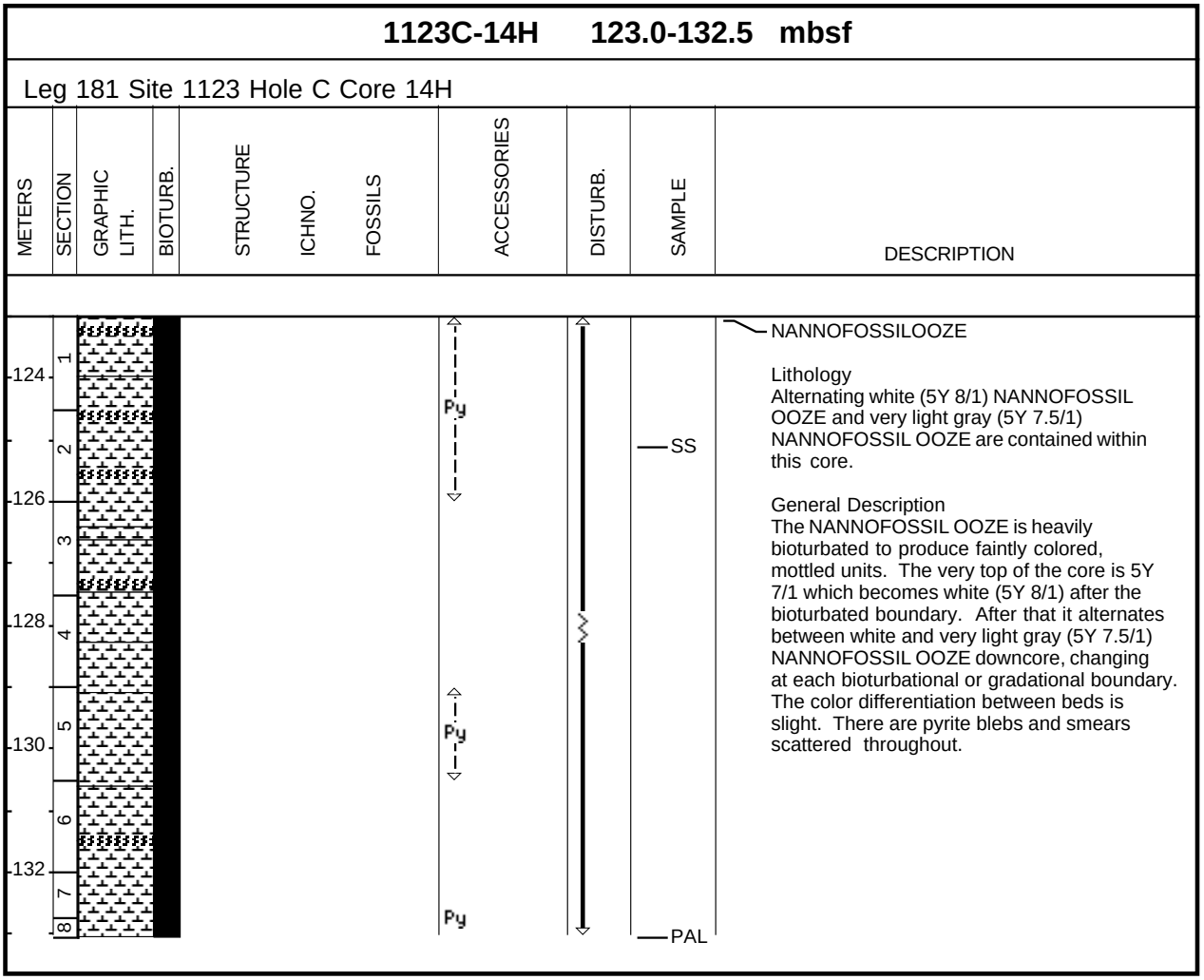
Core Photo


1123C-12H 104.0-113.5 mbsf
Leg 181 Site 1123 Hole C Core 12H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
106
108
110
112
1
2
3
4
5
6
7
SS
SS
SS
SMP
PAL
NANNOFOSSIL OOZE, CLAYEY NANNOFOSSIL OOZE, and TEPHRA
Lithology
This core contains alternating beds of white (5Y 8/1) NANNOFOSSIL OOZE and light greenish gray (5Y 7/1 to 5Y 7.5/1) CLAYEY NANNOFOSSIL OOZE. There is a prominent gray (5YR 5/1) TEPHRA layer present in Section 2, 64.5 to 77.5 cm.
General Description
The NANNOFOSSIL OOZE and CLAYEY NANNOFOSSIL OOZE are mottled by heavy bioturbation; Chondrites and Zoophycos are present. Burrows are often pyrite stained. The TEPHRA layer has a sharp base, is normally graded, and has a bioturbated top contact.

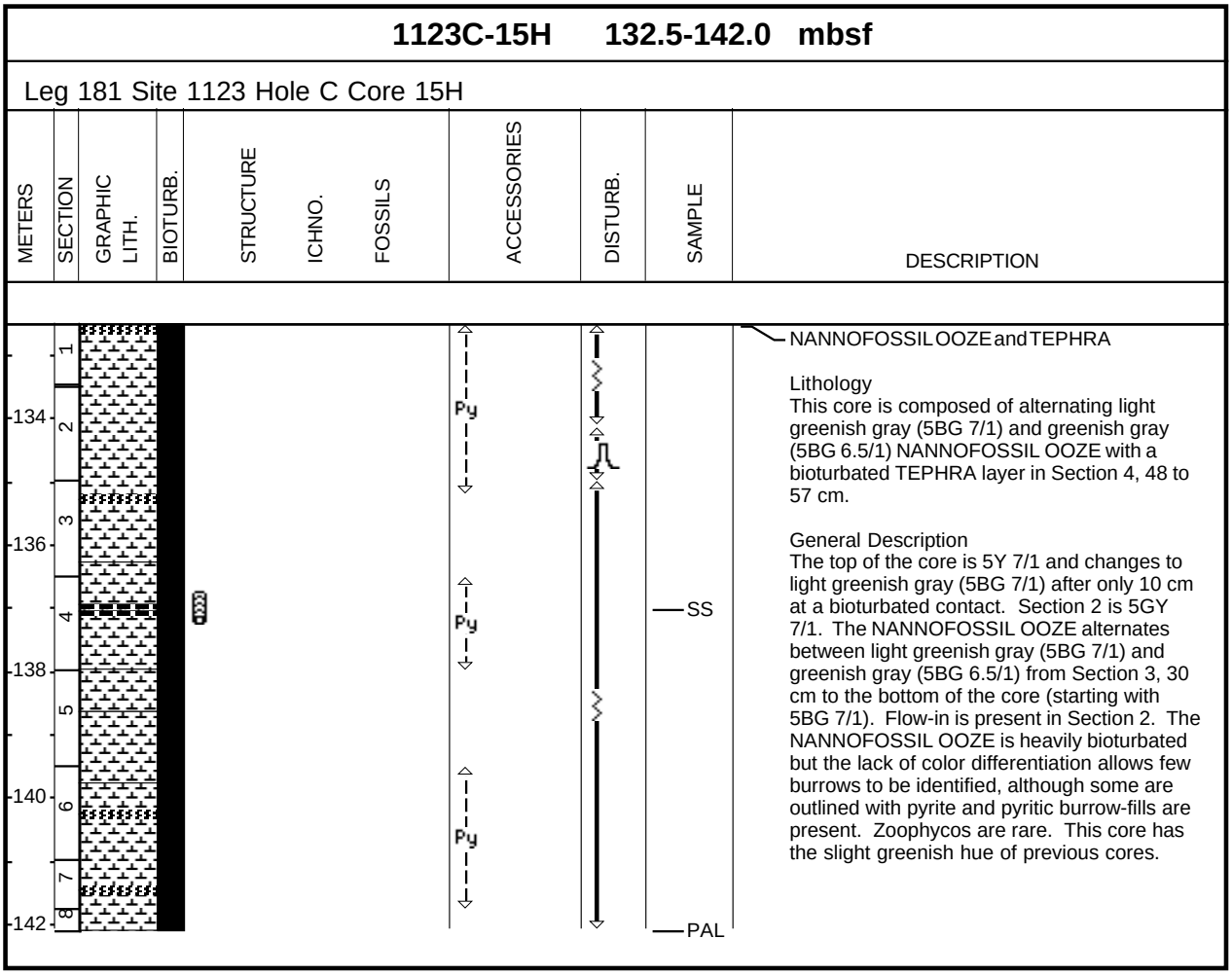
Core Photo


1123C-13H 113.5-123.0 mbsf
Leg 181 Site 1123 Hole C Core 13H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
114
116
118
120
122
1
2
3
4
5
6
7
Py
SS
PAL
NANNOFOSSIL OOZE and TEPHRA
Lithology
This core contains white (5Y 8/1) NANNOFOSSIL OOZE with interbeds of very light gray (5Y 7.5/1) NANNOFOSSIL OOZE and one layer of dark gray (5YR 4/1) graded TEPHRA.
General Description
This white (5Y 8/1) NANNOFOSSIL OOZE is heavily bioturbated and color mottled with pyrite burrows and blebs present throughout the core. This sequence begins at the top of the core with very light gray (5Y 7.5/1) NANNOFOSSIL OOZE and alternates to the white color at each gradational or bioturbational boundary, (and at the beginning of Section 2). From Section 5, 90 cm, to the base of the core, the sediment is very light gray (5Y 7.5/1) NANNOFOSSIL OOZE. The base of the TEPHRA layer present in Section 4, 66.5 to 69.5 cm, has been burrowed by Teichichnus.

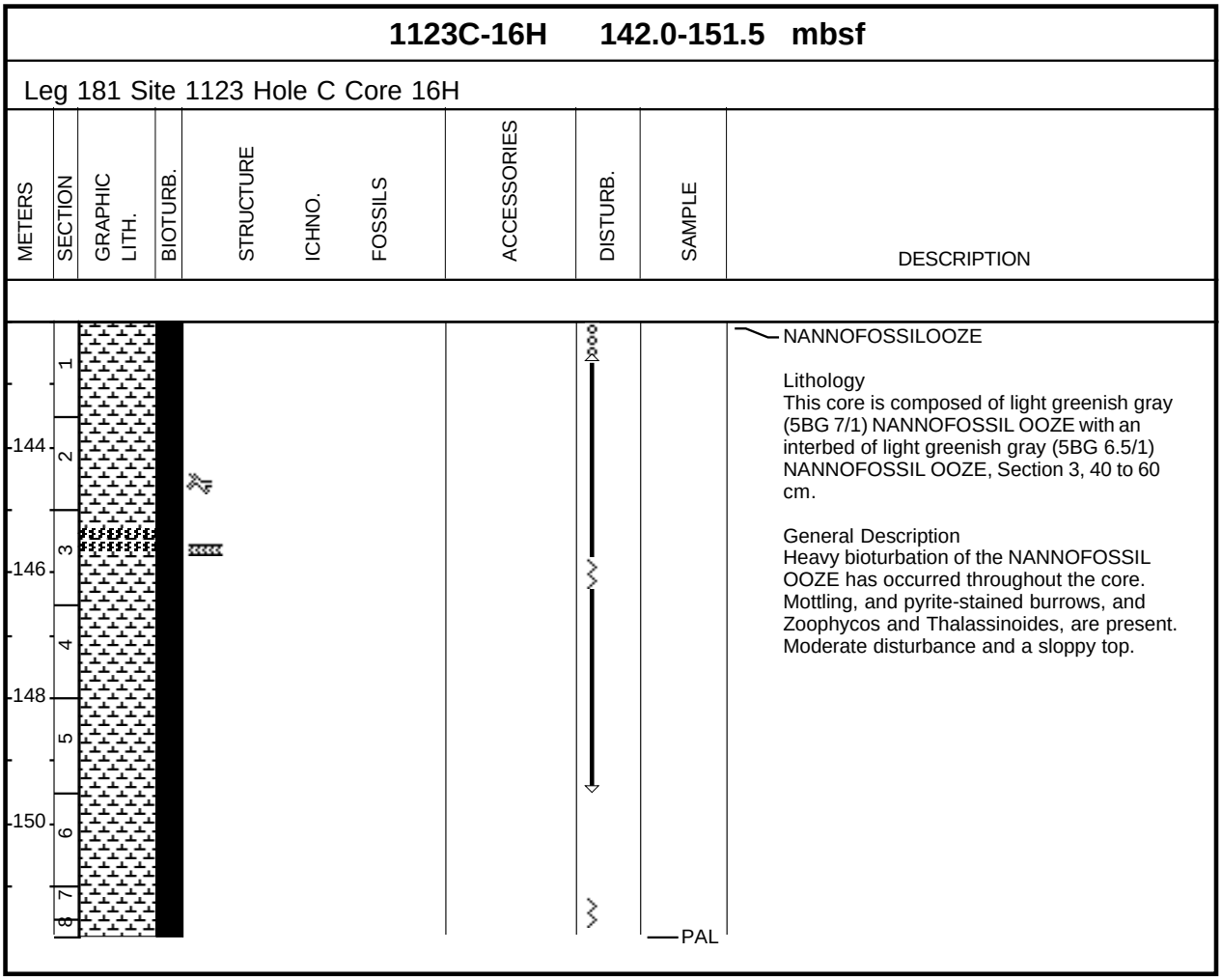
Core Photo


1123C-14H 123.0-132.5 mbsf
Leg 181 Site 1123 Hole C Core 14H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
124
126
128
130
132
1
2
3
4
5
6
7
8
Py
Py
Py
SS
PAL
NANNOFOSSILOOZE
Lithology
Alternating white (5Y 8/1) NANNOFOSSIL OOZE and very light gray (5Y 7.5/1) NANNOFOSSIL OOZE are contained within this core.
General Description
The NANNOFOSSIL OOZE is heavily bioturbated to produce faintly colored, mottled units. The very top of the core is 5Y 7/1 which becomes white (5Y 8/1) after the bioturbated boundary. After that it alternates between white and very light gray (5Y 7.5/1) NANNOFOSSIL OOZE downcore, changing at each bioturbational or gradational boundary. The color differentiation between beds is slight. There are pyrite blebs and smears scattered throughout.

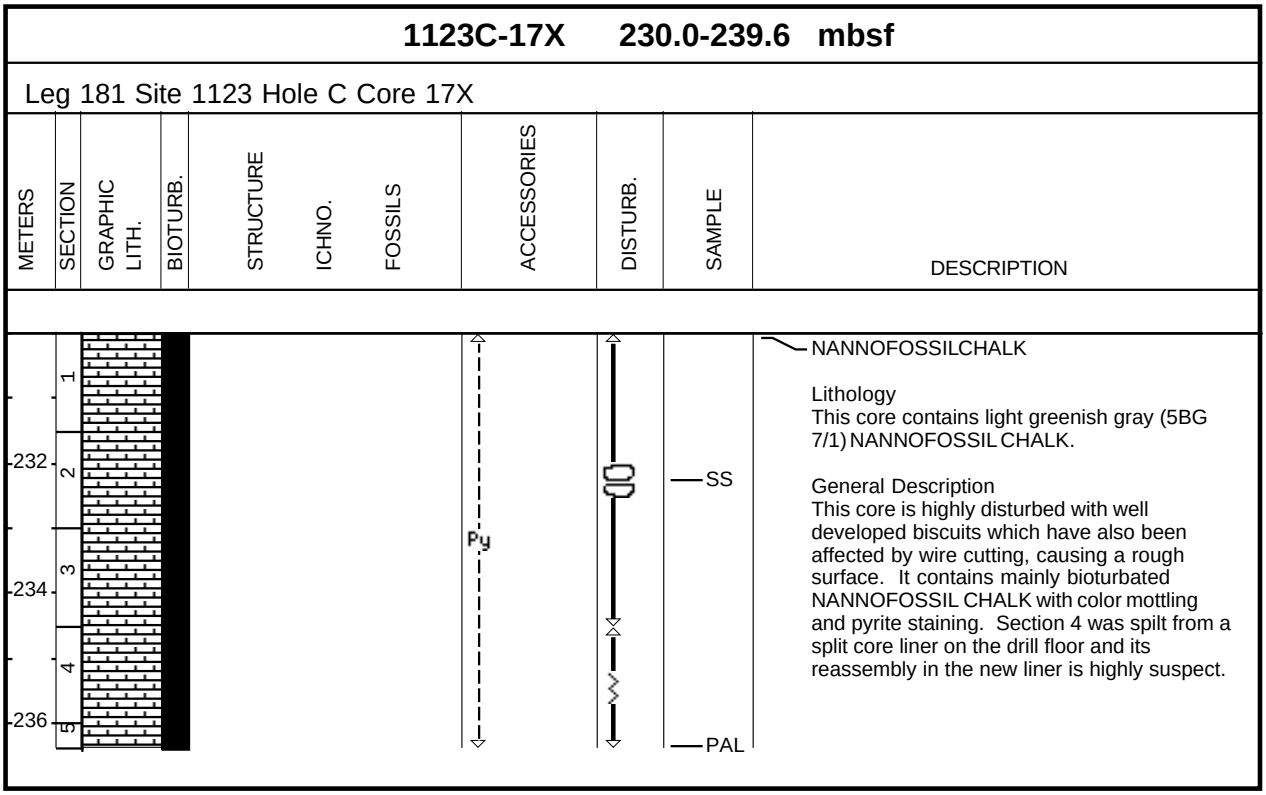
Core Photo


1123C-15H 132.5-142.0 mbsf
Leg 181 Site 1123 Hole C Core 15H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
134
136
138
140
142
1
2
3
4
5
6
7
8
Py
Py
Py
SS
PAL
NANNOFOSSIL OOZE and TEPHRA
Lithology
This core is composed of alternating light greenish gray (5BG 7/1) and greenish gray (5BG 6.5/1) NANNOFOSSIL OOZE with a bioturbated TEPHRA layer in Section 4, 48 to 57 cm.
General Description
The top of the core is 5Y 7/1 and changes to light greenish gray (5BG 7/1) after only 10 cm at a bioturbated contact. Section 2 is 5GY 7/1. The NANNOFOSSIL OOZE alternates between light greenish gray (5BG 7/1) and greenish gray (5BG 6.5/1) from Section 3, 30 cm to the bottom of the core (starting with 5BG 7/1). Flow-in is present in Section 2. The NANNOFOSSIL OOZE is heavily bioturbated but the lack of color differentiation allows few burrows to be identified, although some are outlined with pyrite and pyritic burrow-fills are present. Zoophycos are rare. This core has the slight greenish hue of previous cores.

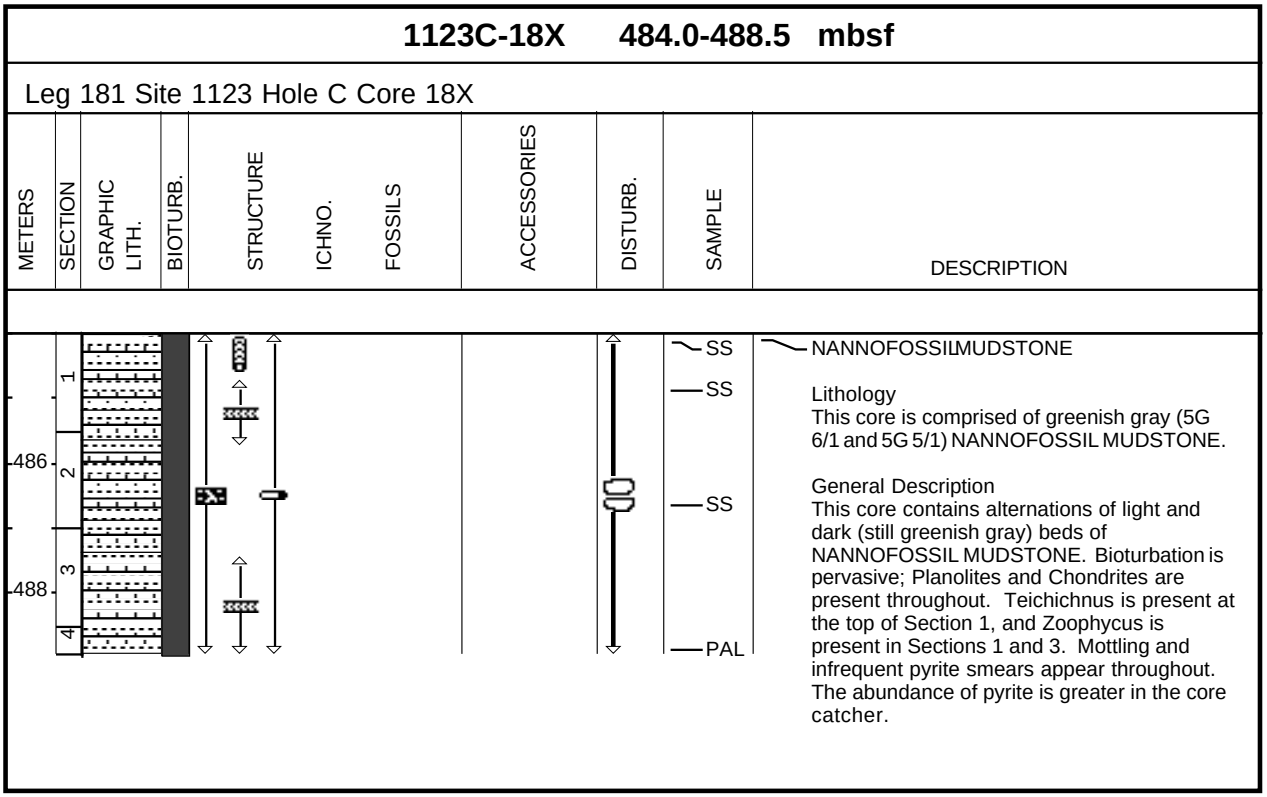
Core Photo


1123C-16H 142.0-151.5 mbsf
Leg 181 Site 1123 Hole C Core 16H
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
144
146
148
150
1
2
3
4
5
6
7
8
PAL
NANNOFOSSILOOZE
Lithology
This core is composed of light greenish gray (5BG 7/1) NANNOFOSSIL OOZE with an interbed of light greenish gray (5BG 6.5/1) NANNOFOSSIL OOZE, Section 3, 40 to 60 cm.
General Description
Heavy bioturbation of the NANNOFOSSIL OOZE has occurred throughout the core. Mottling, and pyrite-stained burrows, and Zoophycos and Thalassinoides, are present. Moderate disturbance and a sloppy top.

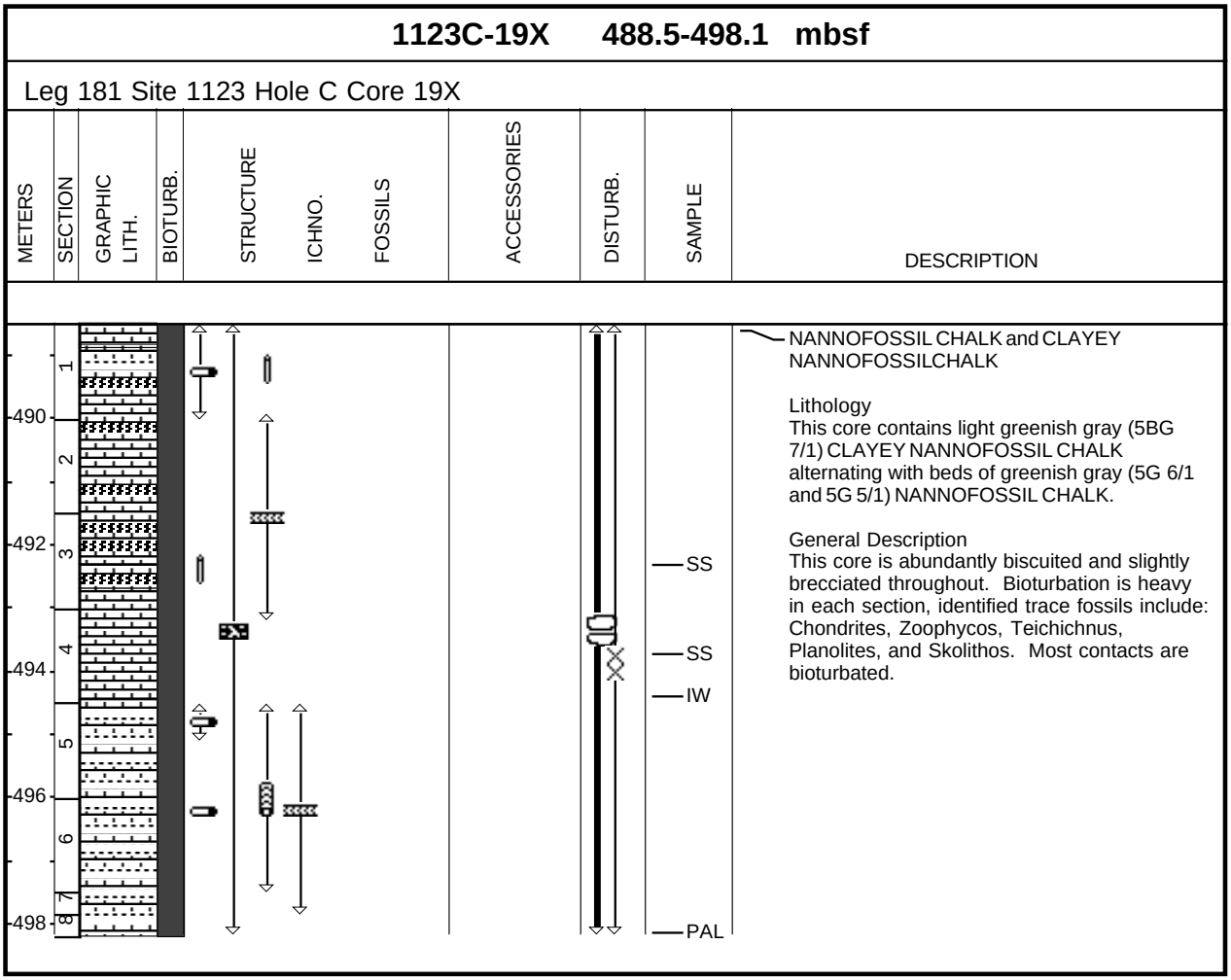
Core Photo


1123C-17X 230.0-239.6 mbsf
Leg 181 Site 1123 Hole C Core 17X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
232
234
236
1
2
3
4
5
Py
SS
PAL
NANNOFOSSILCHALK
Lithology
This core contains light greenish gray (5BG 7/1) NANNOFOSSIL CHALK.
General Description
This core is highly disturbed with well developed biscuits which have also been affected by wire cutting, causing a rough surface. It contains mainly bioturbated NANNOFOSSIL CHALK with color mottling and pyrite staining. Section 4 was spilt from a split core liner on the drill floor and its reassembly in the new liner is highly suspect.

Core Photo


1123C-18X 484.0-488.5 mbsf
Leg 181 Site 1123 Hole C Core 18X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
1
2
3
4
486
488
SS
SS
SS
PAL
NANNOFOSSIL MUDSTONE
Lithology
This core is comprised of greenish gray (5G 6/1 and 5G 5/1) NANNOFOSSIL MUDSTONE.
General Description
This core contains alternations of light and dark (still greenish gray) beds of NANNOFOSSIL MUDSTONE. Bioturbation is pervasive; Planolites and Chondrites are present throughout. Teichichnus is present at the top of Section 1, and Zoophycus is present in Sections 1 and 3. Mottling and infrequent pyrite smears appear throughout. The abundance of pyrite is greater in the core catcher.

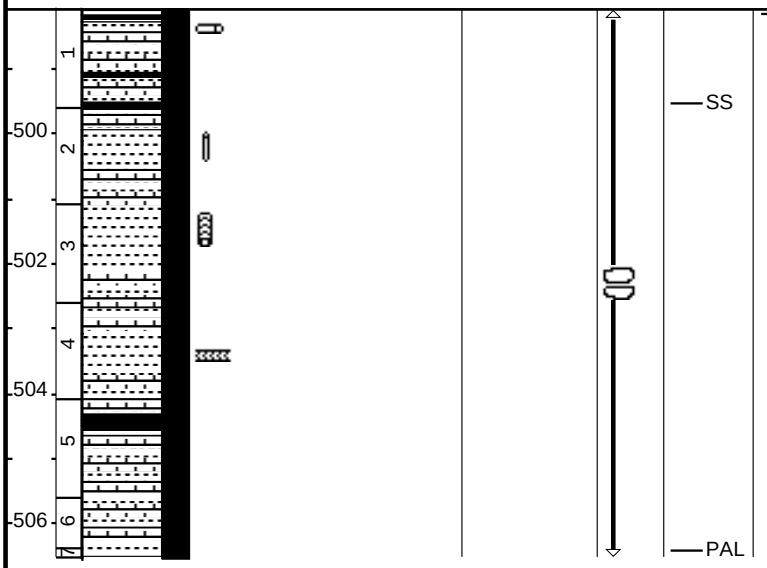
Core Photo


1123C-19X 488.5-498.1 mbsf
Leg 181 Site 1123 Hole C Core 19X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
490
492
494
496
498
1
2
3
4
5
6
7
SS
SS
IW
PAL
NANNOFOSSIL CHALK and CLAYEY NANNOFOSSILCHALK
Lithology
This core contains light greenish gray (5BG 7/1) CLAYEY NANNOFOSSIL CHALK alternating with beds of greenish gray (5G 6/1 and 5G 5/1) NANNOFOSSIL CHALK.
General Description
This core is abundantly biscuited and slightly brecciated throughout. Bioturbation is heavy in each section, identified trace fossils include: Chondrites, Zoophycos, Teichichnus, Planolites, and Skolithos. Most contacts are bioturbated.

Core Photo

1123C-20X 498.1-507.7 mbsf

Leg 181 Site 1123 Hole C Core 20X

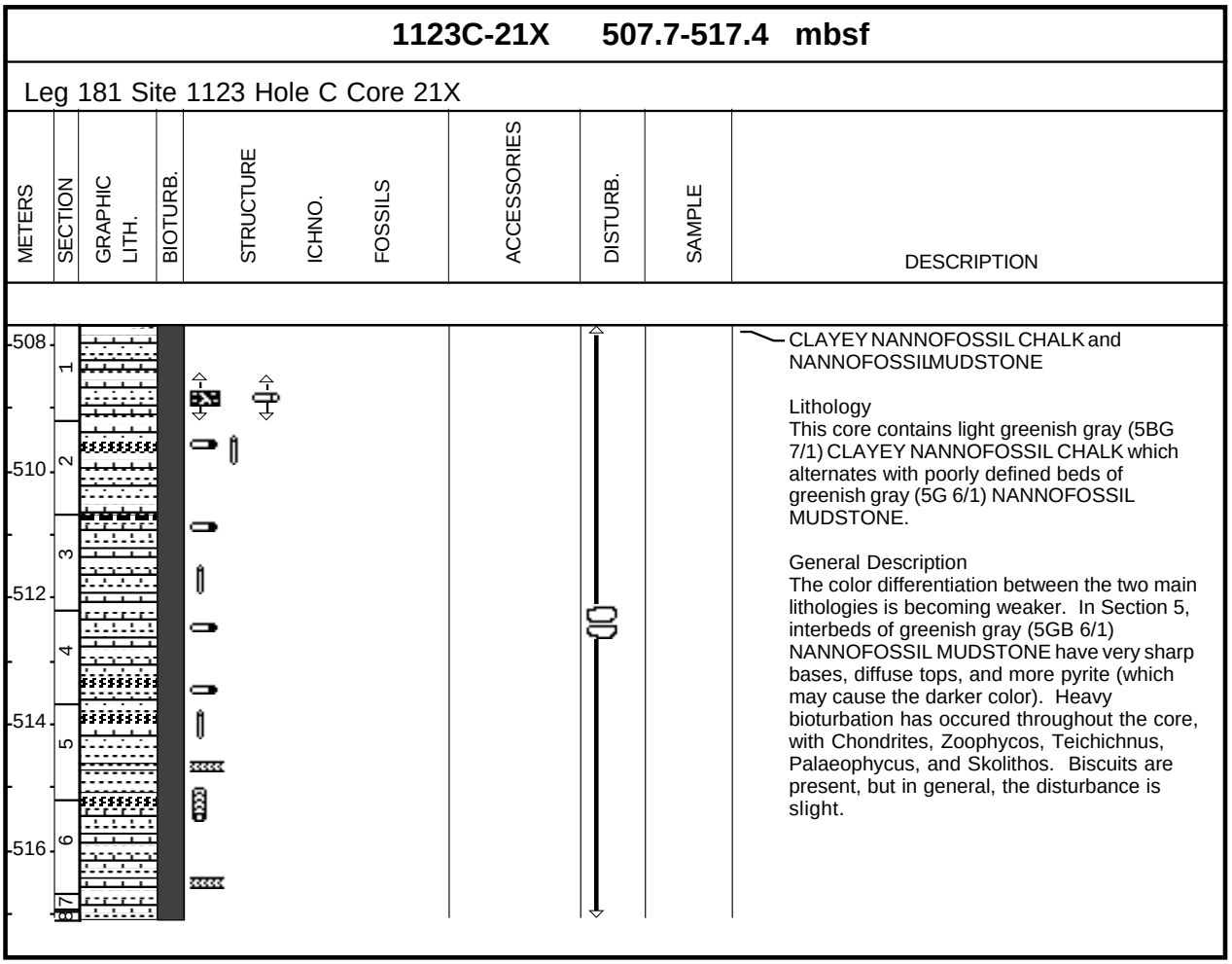


CLAYEY NANNOFOSSIL CHALK and NANNOFOSSILMUDSTONE

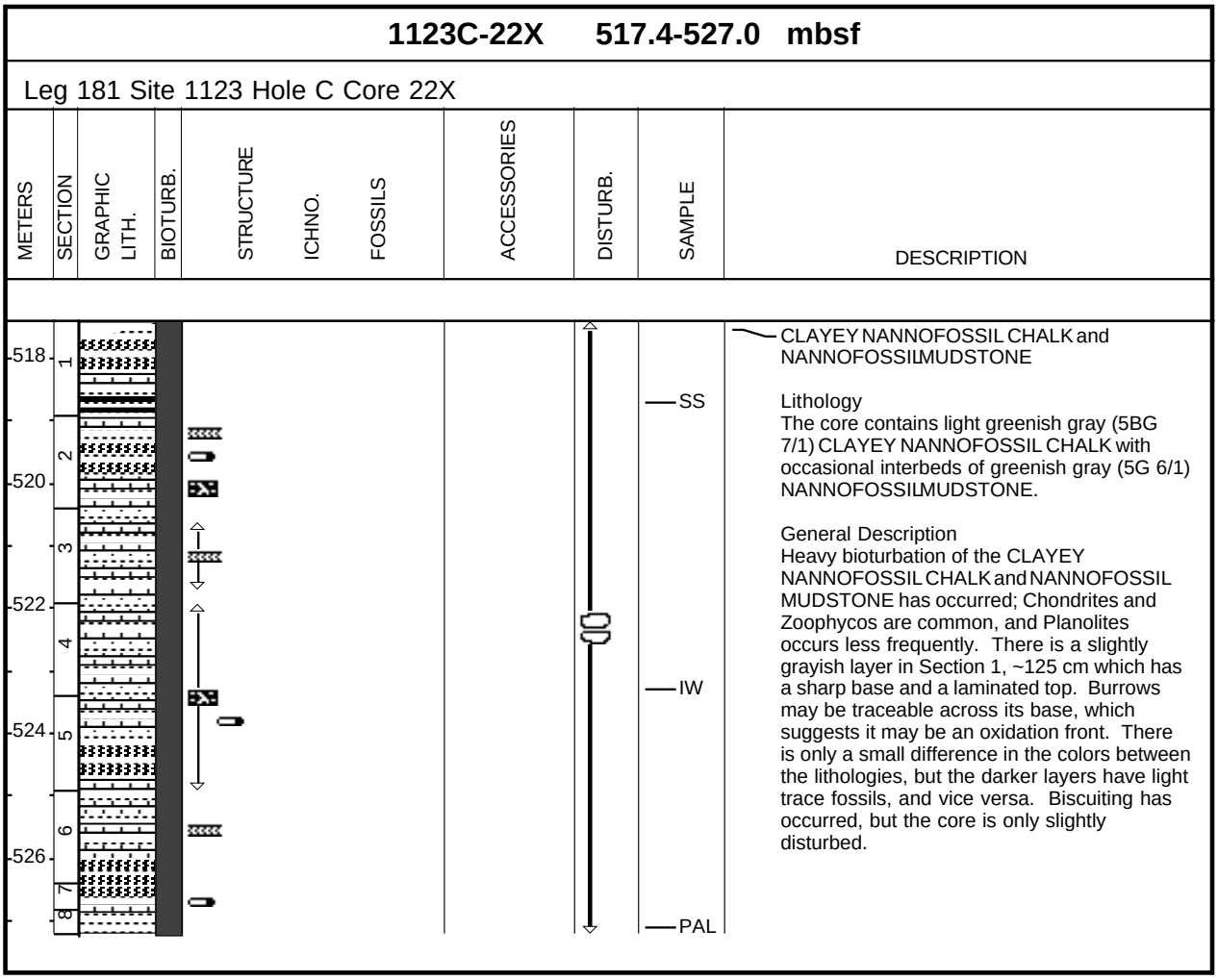
Dominant Lithology
This core consists of light greenish gray (5BG 7/1) CLAYEY NANNOFOSSIL with thin interbeds of greenish gray (5G 6/1) NANNOFOSSIL MUDSTONE. There are also two interbeds of gray (N 6) CLAYEY NANNOFOSSIL CHALK (Section 1, around 100 and 143 cm).

Core Description
This core is strongly bioturbated with Zoophycos, Teichichnus, Palaeophycos, and Skolithos evident. Burrows are well preserved, some have a faint pyrite stain. The gray beds in Section 1 dip at 25 degree angle, and the composition of the interval is similar to the surrounding sediment, with a little more pyrite and a little less clay. Core disturbance is slight, although biscuiting is pervasive. The Skolithos present in the greenish gray layers is indicative of stronger current flow conditions. Nannofossils are becoming corroded in the green layers in Section 5 and there are no small nannofossils left. The discoasters are also corroded.

Core Photo


1123C-21X 507.7-517.4 mbsf
Leg 181 Site 1123 Hole C Core 21X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
508
510
512
514
516
1
2
3
4
5
6
7
CLAYEY NANNOFOSSIL CHALK and NANNOFOSSILMUDSTONE
Lithology
This core contains light greenish gray (5BG 7/1) CLAYEY NANNOFOSSIL CHALK which alternates with poorly defined beds of greenish gray (5G 6/1) NANNOFOSSIL MUDSTONE.
General Description
The color differentiation between the two main lithologies is becoming weaker. In Section 5, interbeds of greenish gray (5GB 6/1) NANNOFOSSIL MUDSTONE have very sharp bases, diffuse tops, and more pyrite (which may cause the darker color). Heavy bioturbation has occured throughout the core, with Chondrites, Zoophycos, Teichichnus, Palaeophycus, and Skolithos. Biscuits are present, but in general, the disturbance is slight.

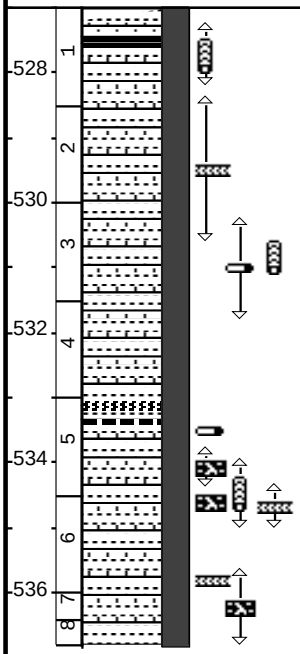
Core Photo


1123C-22X 517.4-527.0 mbsf
Leg 181 Site 1123 Hole C Core 22X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
518
520
522
524
526
1
2
3
4
5
6
7
8
SS
IW
PAL
CLAYEY NANNOFOSSIL CHALK and NANNOFOSSILMUDSTONE
Lithology
The core contains light greenish gray (5BG 7/1) CLAYEY NANNOFOSSIL CHALK with occasional interbeds of greenish gray (5G 6/1) NANNOFOSSILMUDSTONE.
General Description
Heavy bioturbation of the CLAYEY NANNOFOSSIL CHALK and NANNOFOSSIL MUDSTONE has occurred; Chondrites and Zoophycos are common, and Planolites occurs less frequently. There is a slightly grayish layer in Section 1, ~125 cm which has a sharp base and a laminated top. Burrows may be traceable across its base, which suggests it may be an oxidation front. There is only a small difference in the colors between the lithologies, but the darker layers have light trace fossils, and vice versa. Biscuiting has occurred, but the core is only slightly disturbed.

Core Photo

1123C-23X 527.0-536.6 mbsf

Leg 181 Site 1123 Hole C Core 23X

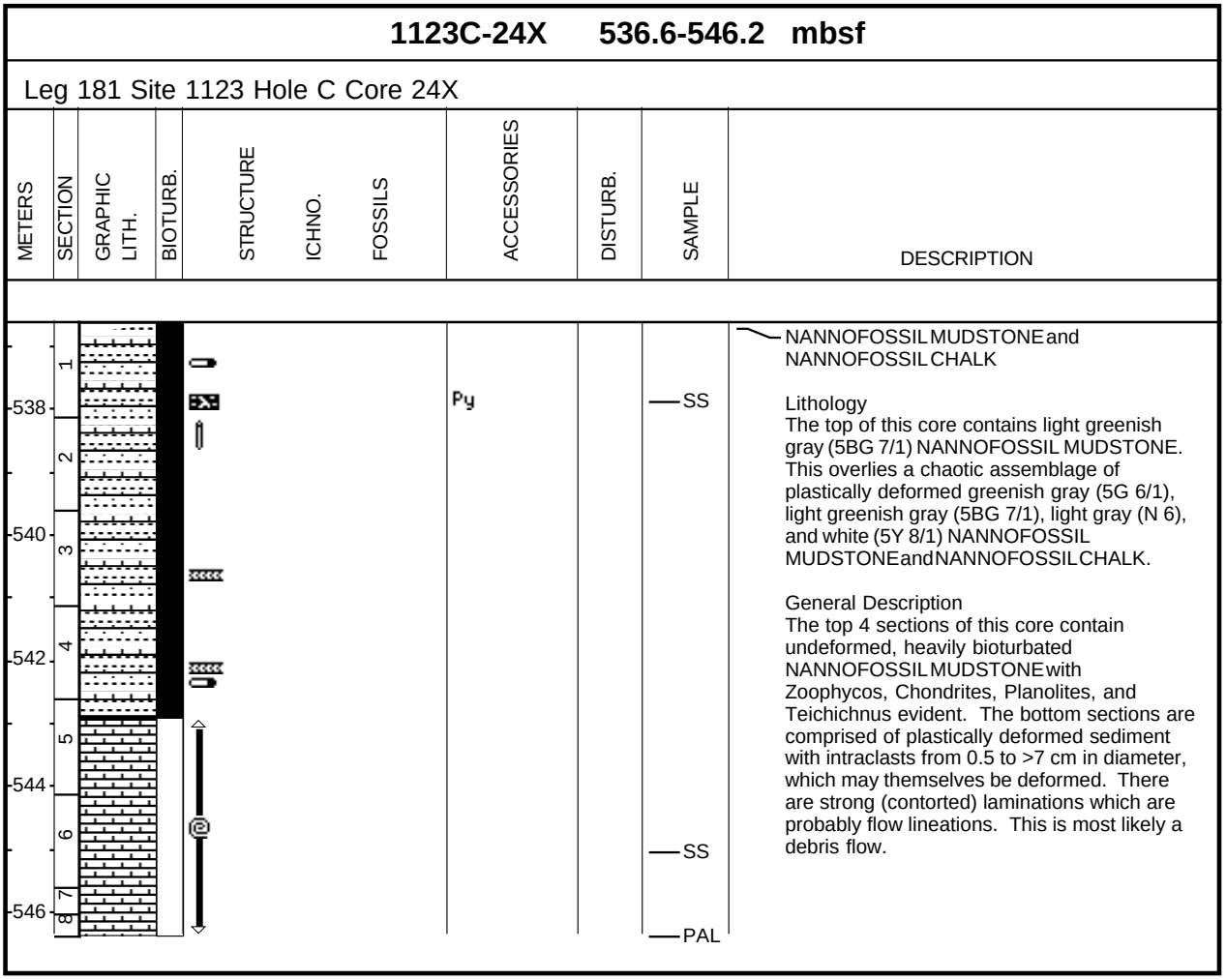


NANNOFOSSIL MUDSTONE

Lithology
This core contains greenish gray (5BG 6/1) NANNOFOSSIL MUDSTONE.

General Description
This core is almost entirely greenish gray (5BG 6/1) NANNOFOSSIL MUDSTONE. However, in Section 1, 48 to 55 cm, the color of the NANNOFOSSIL MUDSTONE is gray (N 6), while in Section 5, 13 to 36 cm, the color is a different hue of greenish gray (5G 6/1). Alternating beds of lighter and darker colors are not present in this core (with the possible exception of the bed in Section 5). Bioturbation is heavy, and identified traces include Zoophycos, Teichichnus, Planolites, and Chondrites. Faint color banding with green is present, but rare. The core is only slightly disturbed, although biscuiting has occurred (except for the top of Section 5 where the biscuiting is extreme).

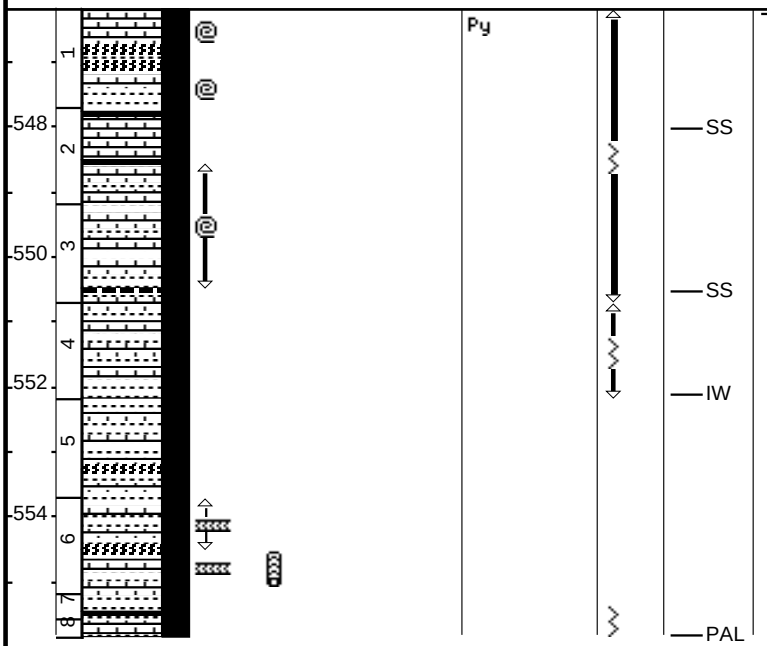
Core Photo


1123C-24X 536.6-546.2 mbsf
Leg 181 Site 1123 Hole C Core 24X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
538
540
542
544
546
1
2
3
4
5
6
7
8
Py
SS
SS
PAL
NANNOFOSSIL MUDSTONE and NANNOFOSSIL CHALK
Lithology
The top of this core contains light greenish gray (5BG 7/1) NANNOFOSSIL MUDSTONE. This overlies a chaotic assemblage of plastically deformed greenish gray (5G 6/1), light greenish gray (5BG 7/1), light gray (N 6), and white (5Y 8/1) NANNOFOSSIL MUDSTONE and NANNOFOSSIL CHALK.
General Description
The top 4 sections of this core contain undeformed, heavily bioturbated NANNOFOSSIL MUDSTONE with Zoophycos, Chondrites, Planolites, and Teichichnus evident. The bottom sections are comprised of plastically deformed sediment with intraclasts from 0.5 to >7 cm in diameter, which may themselves be deformed. There are strong (contorted) laminations which are probably flow lineations. This is most likely a debris flow.

Core Photo

1123C-25X 546.2-555.7 mbsf

Leg 181 Site 1123 Hole C Core 25X



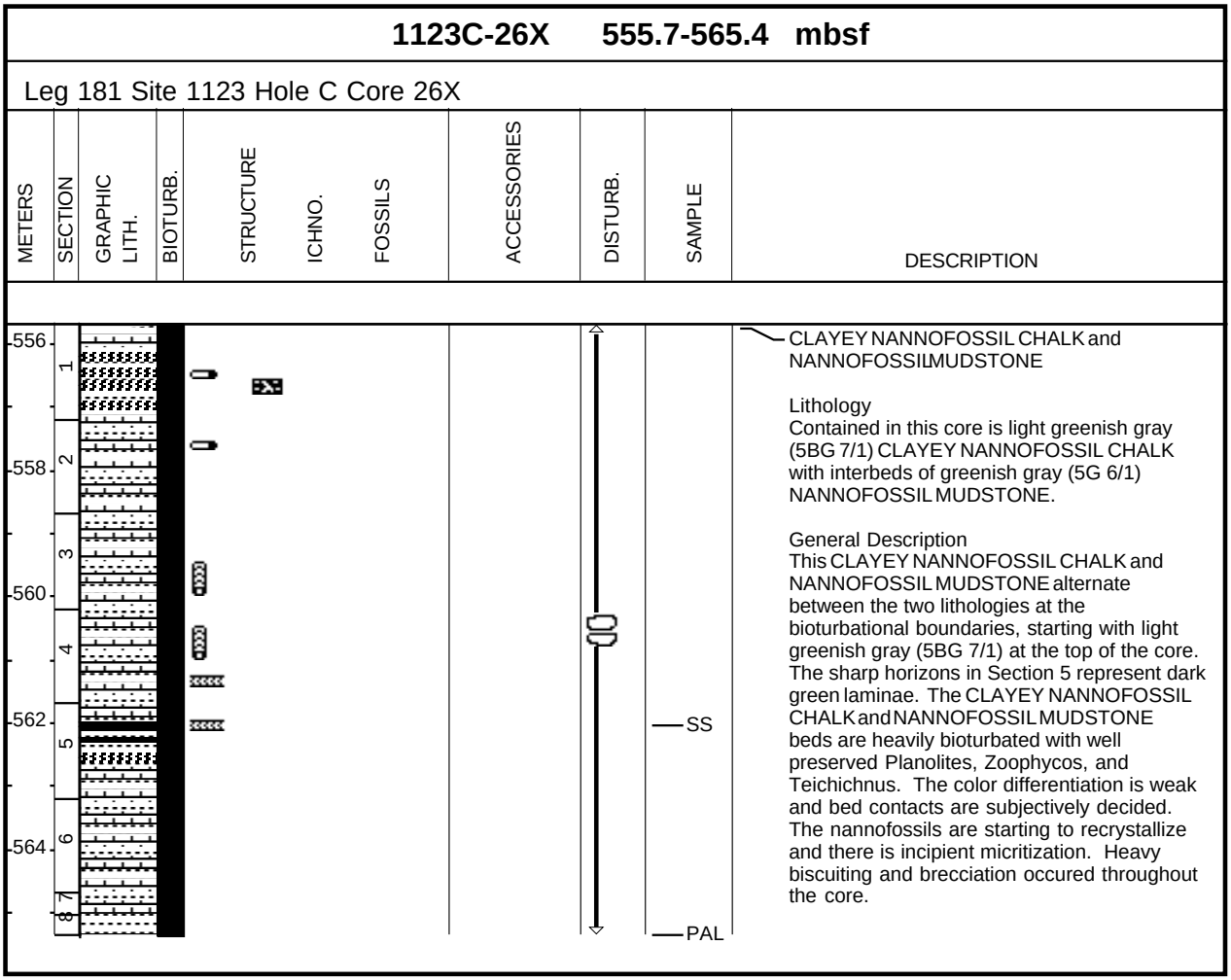
DESCRIPTION

CLAYEY NANNOFOSSIL CHALK, NANNOFOSSIL MUDSTONE, and FORAMINIFER-BEARINGNANNOFOSSIL CHALK

Lithology
This core is composed of light greenish gray (5BG 7/1) CLAYEY NANNOFOSSIL CHALK with interbeds of greenish gray (5GY 6.5/1 to 5BG 6/1) NANNOFOSSIL MUDSTONE. There is a block of white (5Y 8/1) FORAMINIFER-BEARINGNANNOFOSSIL CHALK in Section 3, 10 to 85 cm.

General Description
Section 1 contains deformed sediment associated with a debris flow. The deformed sediment is greenish gray (5G 6/1; Section 1, 0 to 90 cm) and light greenish gray (5BG 7/1). The white chalk block has apparently deformed the sediment in Sections 2 and 3 which is light greenish gray to greenish gray (5BG 7/1 to 5BG 6/1) through an uncertain transition in Section 3, 130 cm, to light greenish gray (5BG 7/1). The sediment immediately above the block appears to be intact. Sections 4 through 7 contain highly bioturbated and mottled sediment with local color banding. Section 5, until 110 cm, is greenish gray (5BG 6/1) and highly color mottled. Below the bioturbated boundary, it becomes a color banded greenish gray (5GY 6.5/1). Section 6, 80 cm, to the base of the core, is light greenish gray (5BG 7/1). Trace fossils include Zoophycos and Teichichnus.

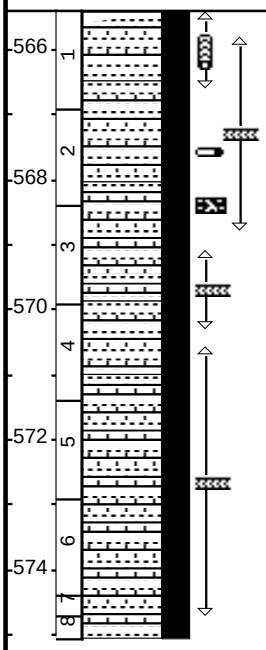
Core Photo


1123C-26X 555.7-565.4 mbsf
Leg 181 Site 1123 Hole C Core 26X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
556
558
560
562
564
1
2
3
4
5
6
7
SS
PAL
CLAYEY NANNOFOSSIL CHALK and NANNOFOSSILMUDSTONE
Lithology
Contained in this core is light greenish gray (5BG 7/1) CLAYEY NANNOFOSSIL CHALK with interbeds of greenish gray (5G 6/1) NANNOFOSSIL MUDSTONE.
General Description
This CLAYEY NANNOFOSSIL CHALK and NANNOFOSSIL MUDSTONE alternate between the two lithologies at the bioturbational boundaries, starting with light greenish gray (5BG 7/1) at the top of the core. The sharp horizons in Section 5 represent dark green laminae. The CLAYEY NANNOFOSSIL CHALK and NANNOFOSSIL MUDSTONE beds are heavily bioturbated with well preserved Planolites, Zoophycos, and Teichichnus. The color differentiation is weak and bed contacts are subjectively decided. The nannofossils are starting to recrystallize and there is incipient micritization. Heavy biscuiting and brecciation occured throughout the core.

Core Photo

1123C-27X 565.4-575.1 mbsf

Leg 181 Site 1123 Hole C Core 27X

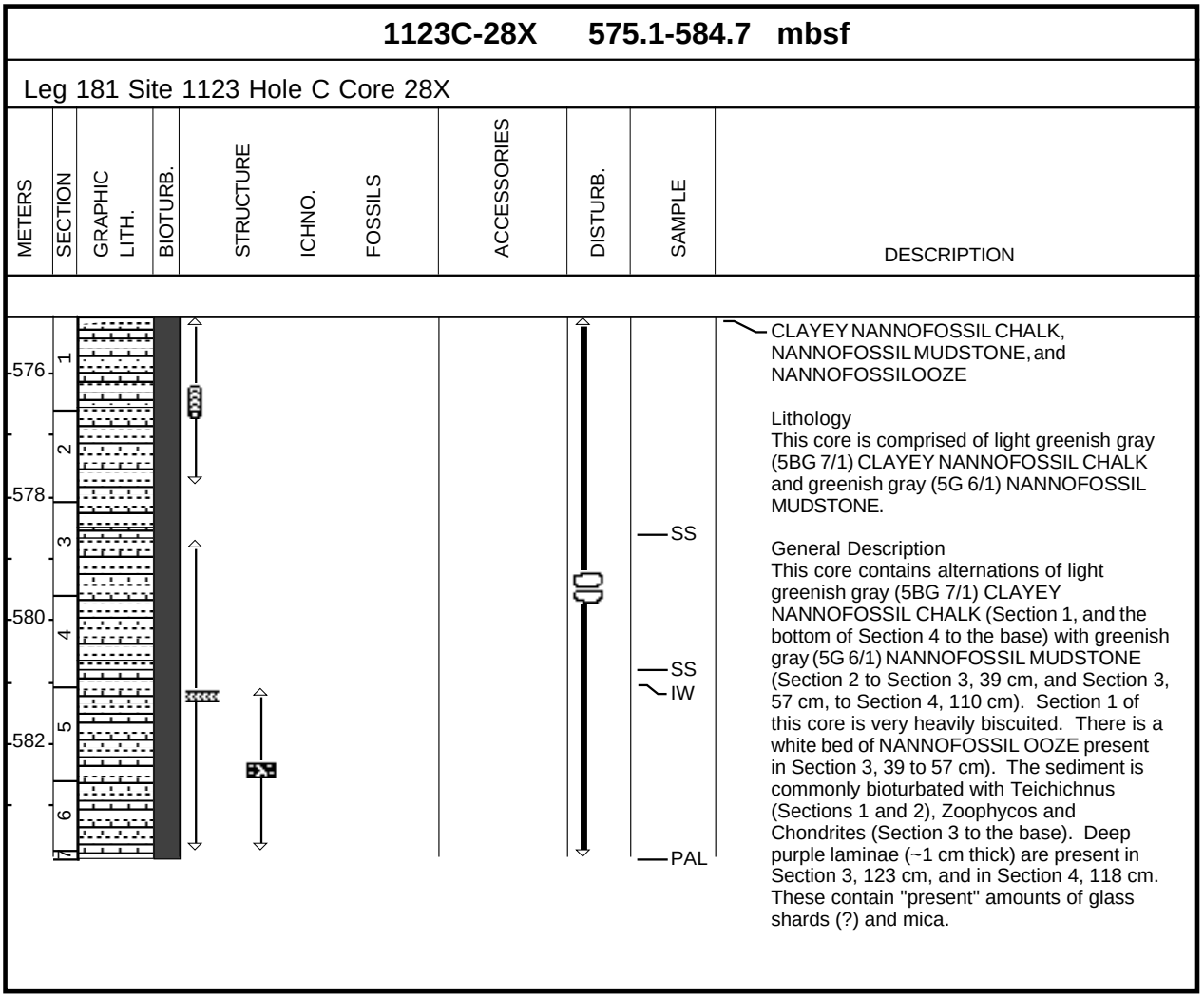


CLAYEY NANNOFOSSIL CHALK AND NANNOFOSSIL MUDSTONE

Lithology
This core is composed of light greenish gray (5BG 7/1 and 5GY 7/1) CLAYEY NANNOFOSSIL CHALK and greenish gray (5G 6/1) NANNOFOSSIL MUDSTONE.

General Description
This core consists of alternating layers of the major lithologies starting with greenish gray (5BG 6/1) at the top, changing to greenish gray (5GY 6/1), light greenish gray (5BG 7/1), greenish gray (5G 6/1), and finally to light greenish gray (5GY 7/1) at the gradational boundaries. The sediment is heavily bioturbated with Zoophycos, Chondrites, Planolites, and Teichichnus. Centimeter-scale dark green laminae are occasionally present in Sections 1 and 4. The position of gradational contacts is questionable due to the biscuiting and slight brecciation.

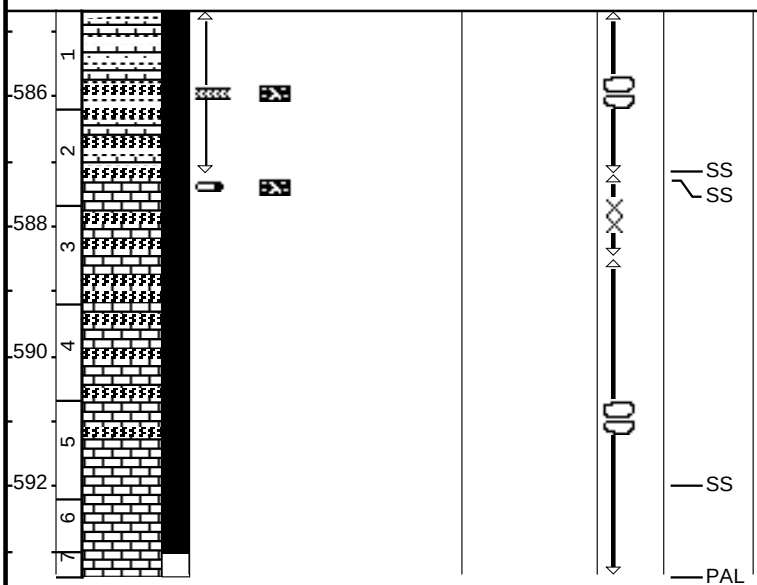
Core Photo


1123C-28X 575.1-584.7 mbsf
Leg 181 Site 1123 Hole C Core 28X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
576
578
580
582
1
2
3
4
5
6
7
SS
SS
IW
PAL
CLAYEY NANNOFOSSIL CHALK, NANNOFOSSIL MUDSTONE, and NANNOFOSSILOOZE
Lithology
This core is comprised of light greenish gray (5BG 7/1) CLAYEY NANNOFOSSIL CHALK and greenish gray (5G 6/1) NANNOFOSSIL MUDSTONE.
General Description
This core contains alternations of light greenish gray (5BG 7/1) CLAYEY NANNOFOSSIL CHALK (Section 1, and the bottom of Section 4 to the base) with greenish gray (5G 6/1) NANNOFOSSIL MUDSTONE (Section 2 to Section 3, 39 cm, and Section 3, 57 cm, to Section 4, 110 cm). Section 1 of this core is very heavily biscuited. There is a white bed of NANNOFOSSIL OOZE present in Section 3, 39 to 57 cm). The sediment is commonly bioturbated with Teichichnus (Sections 1 and 2), Zoophycos and Chondrites (Section 3 to the base). Deep purple laminae (~1 cm thick) are present in Section 3, 123 cm, and in Section 4, 118 cm. These contain "present" amounts of glass shards (?) and mica.

Core Photo

1123C-29X 584.7-594.3 mbsf

Leg 181 Site 1123 Hole C Core 29X

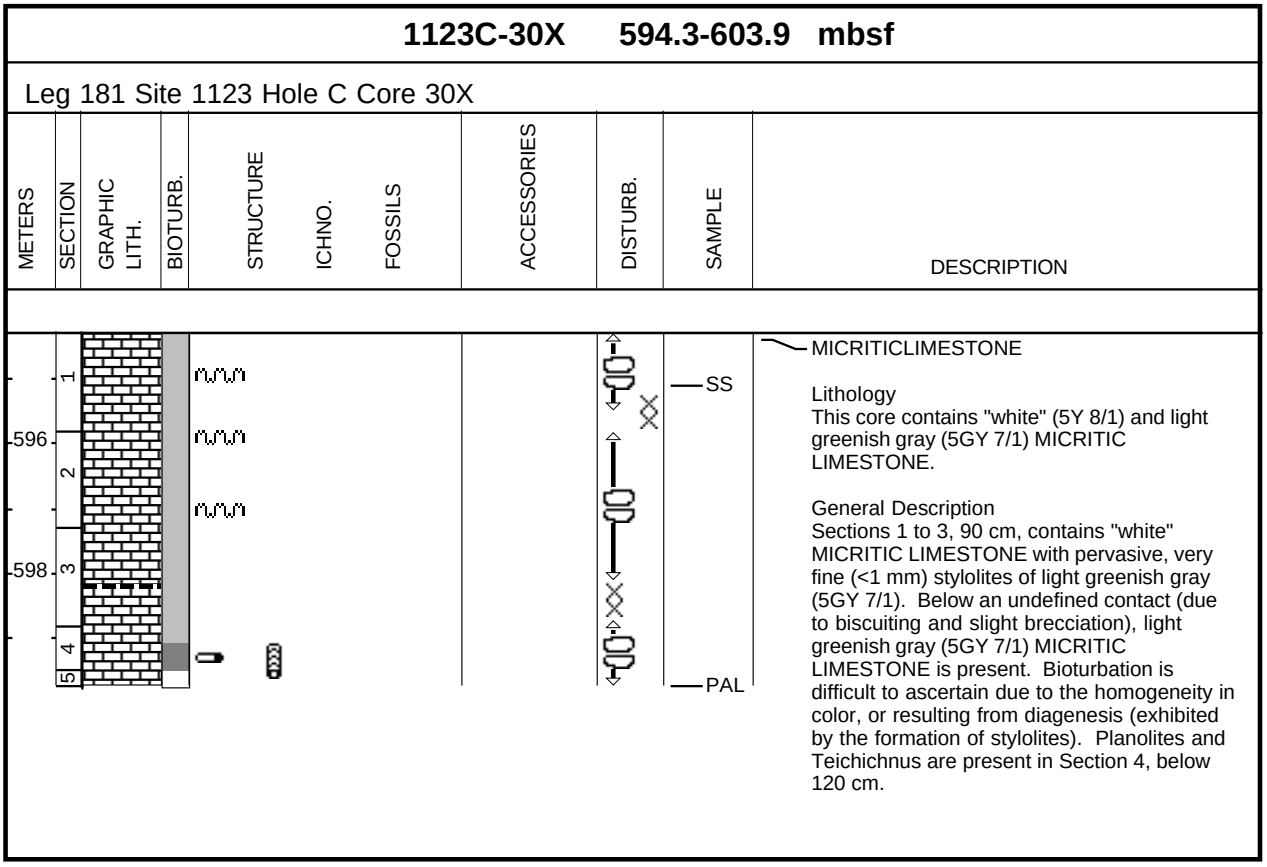


CLAYEY NANNOFOSSIL CHALK, NANNOFOSSIL MUDSTONE, and LIMESTONE

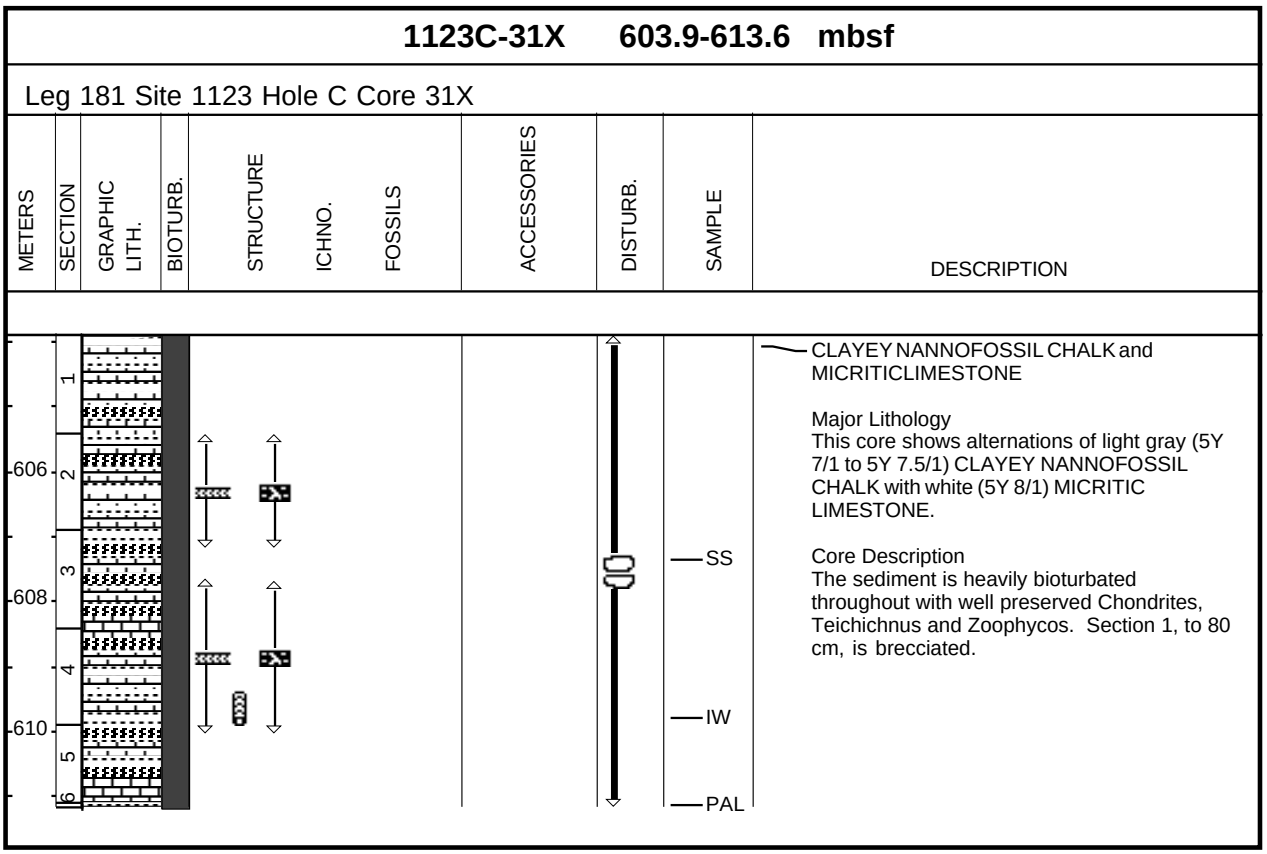
Lithology
Light greenish gray (5GY 7/1) CLAYEY NANNOFOSSIL CHALK, greenish gray (5GY 6/1) NANNOFOSSIL MUDSTONE, and white (5Y 8/1) and light greenish gray (5GY 7/1) LIMESTONE are contained within this core.

General Description
Section 1 through Section 2, 100 cm, contains alternations of light greenish gray (5GY 7/1) CLAYEY NANNOFOSSIL CHALK and greenish gray (5GY 6/1) NANNOFOSSIL MUDSTONE (core top is 5GY 7/1 and the lithology alternates at each bioturbated boundary). These lithologies are heavily bioturbated with Zoophycos and Chondrites and the last cycles show particularly well-preserved trace fossils. Below the bioturbated contact in Section 2, 100 cm alternations of white (5Y 8/1) and light greenish gray (5GY 7/1) LIMESTONE occur (white begins the sequences, and then alternates at each biotubated boundary). The positions of the color changes are difficult to ascertain due to the biscuiting and slight brecciation of the core, but, where observable, the contacts are bioturbated with noticable Planolites and Zoophycos. There are very occasional green laminae present in the white LIMESTONE. The Marshall Paraconformity is present in Section 2, 100 cm.

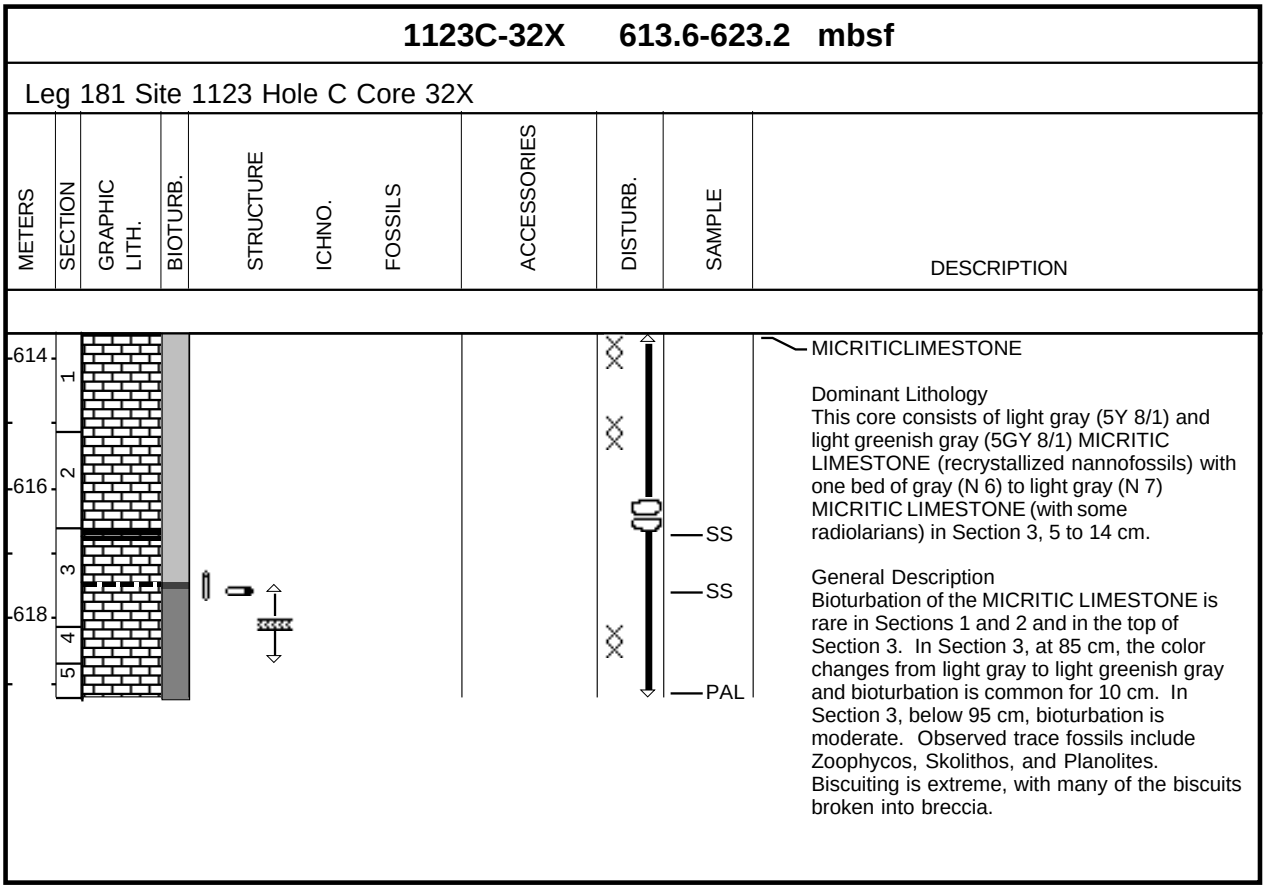
Core Photo


1123C-30X 594.3-603.9 mbsf
Leg 181 Site 1123 Hole C Core 30X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
596
598
1
2
3
4
5
SS
PAL
MICRITICLIMESTONE
Lithology
This core contains "white" (5Y 8/1) and light greenish gray (5GY 7/1) MICRITIC LIMESTONE.
General Description
Sections 1 to 3, 90 cm, contains "white" MICRITIC LIMESTONE with pervasive, very fine (<1 mm) stylolites of light greenish gray (5GY 7/1). Below an undefined contact (due to biscuiting and slight brecciation), light greenish gray (5GY 7/1) MICRITIC LIMESTONE is present. Bioturbation is difficult to ascertain due to the homogeneity in color, or resulting from diagenesis (exhibited by the formation of stylolites). Planolites and Teichichnus are present in Section 4, below 120 cm.

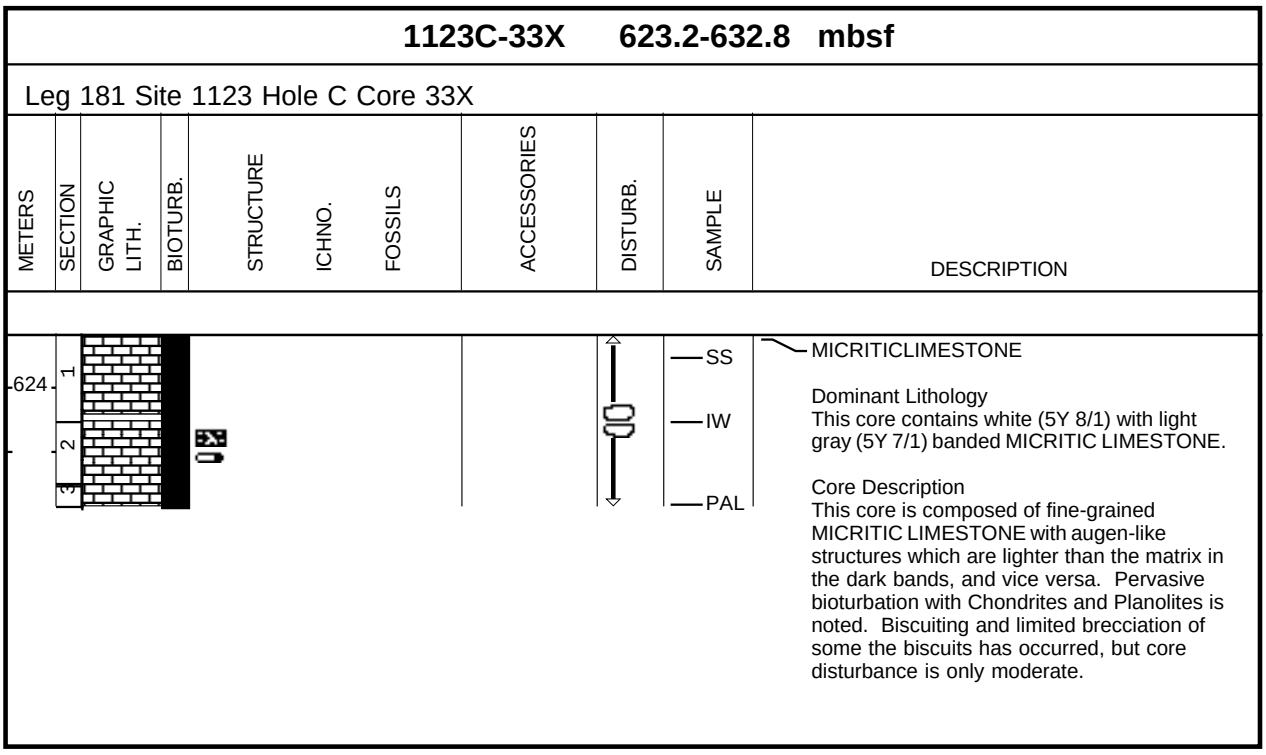
Core Photo


1123C-31X 603.9-613.6 mbsf
Leg 181 Site 1123 Hole C Core 31X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
606
608
610
1
2
3
4
5
6
SS
IW
PAL
CLAYEY NANNOFOSSIL CHALK and MICRITICLIMESTONE
Major Lithology
This core shows alternations of light gray (5Y 7/1 to 5Y 7.5/1) CLAYEY NANNOFOSSIL CHALK with white (5Y 8/1) MICRITIC LIMESTONE.
Core Description
The sediment is heavily bioturbated throughout with well preserved Chondrites, Teichichnus and Zoophycos. Section 1, to 80 cm, is brecciated.

Core Photo


1123C-32X 613.6-623.2 mbsf
Leg 181 Site 1123 Hole C Core 32X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
614
616
618
1
2
3
4
5
SS
SS
PAL
MICRITICLIMESTONE
Dominant Lithology
This core consists of light gray (5Y 8/1) and light greenish gray (5GY 8/1) MICRITIC LIMESTONE (recrystallized nannofossils) with one bed of gray (N 6) to light gray (N 7) MICRITIC LIMESTONE (with some radiolarians) in Section 3, 5 to 14 cm.
General Description
Bioturbation of the MICRITIC LIMESTONE is rare in Sections 1 and 2 and in the top of Section 3. In Section 3, at 85 cm, the color changes from light gray to light greenish gray and bioturbation is common for 10 cm. In Section 3, below 95 cm, bioturbation is moderate. Observed trace fossils include Zoophycos, Skolithos, and Planolites. Biscuiting is extreme, with many of the biscuits broken into breccia.

Core Photo


1123C-33X 623.2-632.8 mbsf
Leg 181 Site 1123 Hole C Core 33X
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ICHNO.
FOSSILS
ACCESSORIES
DISTURB.
SAMPLE
DESCRIPTION
624
1
2
3
SS
IW
PAL
MICRITICLIMESTONE
Dominant Lithology
This core contains white (5Y 8/1) with light gray (5Y 7/1) banded MICRITIC LIMESTONE.
Core Description
This core is composed of fine-grained MICRITIC LIMESTONE with augen-like structures which are lighter than the matrix in the dark bands, and vice versa. Pervasive bioturbation with Chondrites and Planolites is noted. Biscuiting and limited brecciation of some the biscuits has occurred, but core disturbance is only moderate.

Site 1123 Smear Slides									Texture			Mineral														Biogenic							Rock		
Leg	Site	Hole	Core	Type	Section	Interval (cm)	Depth (mbsf)	Lithology	Sand	Silt	Clay	Calcite (30)	Carbonate (35)	Chlorite (45)	Clay (47)	Feldspar (71)	Glauconite (82)	Heavy Minerals (89)	Mica (118)	Opaques (140)	Oxides (146)	Pyrite (169)	Quartz (172)	Volcanic Glass (81)	Zeolite (222)	Diatoms (58)	Foraminifers (78)	Nannofossils (132)	Radiolarians (173)	Silicoflagellates (189)	Skeletal Debris (192)	Sponge Spicules (199)	Fecal Pellet (70)	Lithic Fragments (106)	Comments
181	1123	A	1	H	1	100	1	D	20	50	30		P		P	P							P	C		R	R	A			P				ASH LAYER
181	1123	A	1	H	2	5	1.55	M	50	25	25					P				*			P	D							P				CARBONATE SKELETAL DEBRIS
181	1123	A	1	H	2	8	1.58	M	30	40	30					P				*			P	D				R							
181	1123	A	1	H	4	10	4.55	D	30	20	50									P							C	D			P				
181	1123	A	1	H	4	106	5.51	M	10	20	70									P						R	P	D		P	P				
181	1123	A	2	H	3	30	9.4	D	5	25	70		P		P	R				P			R				C	D	*		P	R			DARK GREEN-GLACIAL-DOMINANT
181	1123	A	2	H	5	138	13.48	M	70	30														D											ASH LAYER
181	1123	A	2	H	6	89	14.49	D	5	25	70								*							R	P	D	*		P				WHITE-INTERGLACIAL
181	1123	A	3	H	1	6	15.66	D	5	15	80		C			R				*			R				P	D		P	P	P			
181	1123	A	3	H	4	48	20.58	M	5	15	80		C			R				P			R				P	D		P	P	P			
181	1123	A	3	H	4	66.5	20.77	M	5	15	80									*							*	D			*	*			LITTLE GREEN GRAINS
181	1123	A	3	H	5	100	22.6	D	5	15	80					R			*				R				P	D							
181	1123	A	4	H	3	23	28.33	D	5	25	70													C		P	P	D	P	P					
181	1123	A	4	H	4	57	30.17	M	80	15	5					P							P	D											ASH LAYER
181	1123	A	4	H	6	126	33.86	M	20	40	40					C				C			C	A		P		A							ASH LAYER + NANNOFOSSILS OOZE
181	1123	A	5	H	2	97	37.07	M	60	30	10					P		P		P			P	D											ASH LAYER
181	1123	A	5	H	3	68	38.28	M	40	20	40					P		P					P	D		*	*	C							ASH
181	1123	A	5	H	5	82	41.42	M	10	30	70								P							P	C	A	P	P	P	P			
181	1123	A	6	H	2	109	46.69	M	10	40	50					P		P	P	P			P	A				A							ASH+NANNOFOSSILS
181	1123	A	6	H	3	139	48.49	M		30	70					P		P		C			P	A				C							ASH+NANNOFOSSILS
181	1123	A	6	H	4	132	49.92	M	80		20					P		P	C	C			P	D				P							ASH
181	1123	A	6	H	5	20	50.3	M	70	10	20					P		P		P			P	D				C							ASH+(NANNOFOSSILS)
181	1123	A	6	H	6	66	52.26	M	20	40	40					P		P	P	P			P	A		*	*	A							ASH+NANNOFOSSILS
181	1123	A	6	H	6	127	52.87	M	60	10	30					P		C		P			P	P		*		A							ASH+NANNOFOSSILS
181	1123	A	6	H	7	15	53.25	M	40	20	40					P		P	P				P	A				A							ASH+NANNOFOSSILS
181	1123	A	6	H	7	43	53.53	M	40	30	30					P			P				P	A				A							ASH+NANNOFOSSILS
181	1123	A	7	H	1	55	54.15	M	80	10	10					P						C	P	D				P			P				ASH
181	1123	A	7	H	2	57	55.67	D		10	90		P		P													D			*	*			NANNOFOSSILS OOZE
181	1123	A	7	H	3	49	57.09	M	70	10	20					P						C	P	D			P	C							ASH+(NANNOFOSSILS)
181	1123	A	7	H	3	107	57.67	M	70	10	20					P						P	P	A				A							ASH+(NANNOFOSSILS)
181	1123	A	7	H	4	110	59.2	M	90		10					C							C	D				P							ASH
181	1123	A	7	H	5	35	59.95	M	90	10						P							P	D											ASH
181	1123	A	7	H	5	126.5	60.87	M	70	20	10					P							P	D											ASH
181	1123	A	7	H	5	127	60.87	M	60	10	30				P	P							P	D											GREEN LAYER
181	1123	A	7	H	CC	3	63.07	M		10	90		P														P	D			P				
181	1123	A	8	H	2	65	65.25	D		*	100				P													D			*				
181	1123	A	8	H	4	125	68.85	M	10		90				P													D							GREEN LAYER
181	1123	A	9	H	3	88	76.48	M		30	70									A						C		A	C						
181	1123	A	9	H	5	101	79.61	M	40	30	30									C				A		*	*	A	*	*					ASH+NANNOFOSSILS
181	1123	A	9	H	5	142	80.02	M	70	20	10				*	C		*					C	D											ASH
181	1123	A	9	H	6	57	80.67	M	30	50	20				P									D				P							ASH+(NANNOFOSSILS)
181	1123	A	9	H	7	8	81.68	M	70	20	10				P	*	*	*		P				D				P							ASH
181	1123	A	11	H	2	59	93.69	M	5		95											P				P	P	A	P						
181	1123	A	11	H	2	124	94.34	M	5		95															P	P	A	P	P					PINK LAYER
181	1123	A	11	H	7	14	100.74	M	5		95											C		C		P		D		P					
181	1123	A	12	H	1	46	101.56	M	90		10					P			P			C	P	D				P							VOLCANIC QUARTZ AND PLAGIOCLASE
181	1123	A	12	H	3	59	104.69	M		10	90															P	P	D	P	P		P			
181	1123	A	13	H	4	42	115.07	D	5	10	85				P	R							R	P		P		A	R	R		P			
181	1123	A	13	H	4	135	116	D		10	90		P													R	*	D				R			

Site 1123 Smear Slides									Texture			Mineral															Biogenic							Rock		
Leg	Site	Hole	Core	Type	Section	Interval (cm)	Depth (mbsf)	Lithology	Sand	Silt	Clay	Calcite (30)	Carbonate (35)	Chlorite (45)	Clay (47)	Feldspar (71)	Glauconite (82)	Heavy Minerals (89)	Mica (118)	Opaques (140)	Oxides (146)	Pyrite (169)	Quartz (172)	Volcanic Glass (81)	Zeolite (222)	Diatoms (58)	Foraminifers (78)	Nannofossils (132)	Radiolarians (173)	Silicoflagellates (189)	Skeletal Debris (192)	Sponge Spicules (199)	Fecal Pellet (70)	Lithic Fragments (106)	Comments
181	1123	A	13	H	5	98	117.13	M	80	10	10				*	P		*					P	D				P							
181	1123	A	14	H	3	85	123.95	D	20	30	50											P		A		P	R	D		R		R			
181	1123	A	14	H	3	92	124.02	M	50	40	10					R				P			R	D				P							
181	1123	A	14	H	6	38	127.98	M	5	15	80											P				P	P	D	P	R		R			
181	1123	A	15	H	3	56	133.16	M	15	35	50		P		P	R							R	R		R	P		R			P			
181	1123	A	15	H	4	81	134.91	M	5	40	55		P		P							P		*		*	R	D				R			
181	1123	A	17	H	3	133	152.93	M	5	55	40				P											R	R	D				R			
181	1123	A	17	H	3	139	152.99	M	5	55	40				P							*				R	R	D							
181	1123	B	1	H	1	6	0.06	D	10	45	45				P	R								*		P	P	D		R		R			
181	1123	B	3	H	6	67	21.07	M	5	35	60											C				P	R	D	P						
181	1123	B	3	H	6	123	21.63	M	5	45	50											C				P	P	D	R						
181	1123	B	4	H	2	123	25.13	M	5		95		P		P							P					P	D		P					GREEN LAYER
181	1123	B	5	H	3	5	34.95	M	80	15	5					P			P			P	P	D				P						P	ASH LAYER
181	1123	B	6	H	6	24	49.14	M	70	10	20					P			P			P	P	D				P							ASH+(NANNOFOSSILS)
181	1123	B	6	H	6	46	49.36	M	30	30	40					P			P			P	P	A				A			P			P	ASH+(NANNOFOSSILS)
181	1123	B	6	H	6	59	49.49	M	10	30	60													A		*		A	*					*	ASH+NANNOFOSSILS
181	1123	B	6	H	6	137	50.27	M	30	50	20					P			P			P	P	D				P							ASH
181	1123	B	7	H	1	130	52.2	M	70	20	10					P						P	P	D				C							ASH (V+S)
181	1123	B	7	H	2	39	52.79	M	60	30	10					C		P				P	C	D				P						P	ASH (V+S)
181	1123	B	7	H	2	90	53.3	M	30	40	30					C		P	P			P	C	D				C			*	*			ASH (BIG SHARDS)
181	1123	B	7	H	3	100	54.9	D	5	15	80													*		P	C	D	P			P			(CHLORITE)
181	1123	B	7	H	4	94	56.34	M	30	10	60													A			C	A	P		C	P			ASH+FORAMINIFERS+NANNOFOSSILS
181	1123	B	7	H	5	117	58.07	M	20	30	50											P		A								A		P	
181	1123	B	7	H	6	14	58.54	M	70	20	10					C		P	P			P	C	D											ASH (G+S)
181	1123	B	7	H	6	87	59.27	M	30	50	20					P						P	P	D											
181	1123	B	8	H	5	67	67.07	M	5	15	80		C									P					P	D	*	P		P			
181	1123	B	10	H	1	38	79.78	M	10	70	20					P		P	P			P	P	D		*									ASH (V+S)
181	1123	B	10	H	1	98	80.38	M	90	10						C		P				C	C	D											ASH (V+S)
181	1123	B	10	H	2	8	80.98	M		10	90		P		P											P		D	*	P					
181	1123	B	10	H	2	33	81.23	M	90	10						C		P				C	C	D				P							ASH (V+S)
181	1123	B	10	H	4	68	84.58	M		10	90		P		P											P	*	D	P	P		P			
181	1123	B	11	H	3	3	91.93	D		5	95		P					P								P	P	D	P	P		P			
181	1123	B	12	H	5	3	104.43	M	20	70	10					P						C	P	D				P							ASH (V+S) FINE
181	1123	B	12	H	6	75	106.65	M		5	95		P													P	P	D	P	P		P			
181	1123	B	13	H	2	23	109.63	M	20	40	40				P							C		D		P		C							
181	1123	B	14	H	2	6	118.96	M	20	40	40		P									C		C		*	R	D	*						
181	1123	B	14	H	5	37	123.77	M	45	25	30		P			R						C		D		*	R	C							
181	1123	B	14	H	5	72	124.12	M	40	40	20		P			R						C		D				A							
181	1123	B	15	H	1	132	128.22	M	25	15	60		P		P							C		A		R	R	A	*						
181	1123	B	15	H	5	64	133.6	M	35	25	40				P							A		A		R	P	A							
181	1123	B	15	H	6	133	135.79	M	30	25	45		P			R						A		A		R		A							
181	1123	B	16	H	1	134	137.74	M	2	23	80		P	P										R		P	R	A	*	R		P			
181	1123	B	16	H	2	116	139.06	M	2	13	85		P		P	R		*				P	R			P	R	A	R			P			
181	1123	B	16	H	2	141	139.31	M	2	13	85				C	R						P	R	*		P	*	A				P			
181	1123	B	16	H	4	8	140.98	D	2	13	85				C			*				P				P	R	P				P			
181	1123	B	17	H	3	85	149.75	D	7	13	80				C							P				P	P	A	R	P		P			
181	1123	B	17	H	5	139	153.29	M	10	10	80				C							P		P		P	R	A				P			
181	1123	B	18	X	3	142	159.82	M	10	50	40											C		P		P	*	A	P			P			
181	1123	B	18	X	4	5	159.95	D	5	15	80				C				P					*		P	*	C	P			P			

Site 1123 Smear Slides									Texture			Mineral																Biogenic							Rock		
Leg	Site	Hole	Core	Type	Section	Interval (cm)	Depth (mbsf)	Lithology	Sand	Silt	Clay	Calcite (30)	Carbonate (35)	Chlorite (45)	Clay (47)	Feldspar (71)	Glauconite (82)	Heavy Minerals (89)	Mica (118)	Opaques (140)	Oxides (146)	Pyrite (169)	Quartz (172)	Volcanic Glass (81)	Zeolite (222)	Diatoms (58)	Foraminifers (78)	Nannofossils (132)	Radiolarians (173)	Silicoflagellates (189)	Skeletal Debris (192)	Sponge Spicules (199)	Fecal Pellet (70)	Lithic Fragments (106)	Comments
181	1123	B	19	X	4	9	167.35	M	20	30	50		P					P						*			P	D				P			LIGHT LAYER
181	1123	B	19	X	4	10	167.36	M	10	20	70		P		P							P		P		C	P	D		P		P			DARK LAYER
181	1123	B	19	X	6	126	171.56	M	25	35	40		P			R			*			A	R	C		P	R	A	*			P			ASH-PYRITE
181	1123	B	20	X	1	10	172.4	M	20	10	70				P							P		P		P		D	P	P	P	P			
181	1123	B	20	X	1	100	173.3	M	10	30	60		P		P			P								P		D	P	P		P			
181	1123	B	20	X	2	95	174.77	D	5	45	50				C	R						*	R	P		P	R	C	*	R		P			
181	1123	B	20	X	2	142	175.24	M		70	30					R			P			C	D					R							ASH (V+S) FINE
181	1123	B	20	X	2	143	175.25	M	80	15	5					P	*	*				C	P	D											ASH (V+S)
181	1123	B	20	X	4	80	177.66	D	5	50	45		P			R							R			P	P	D		R		P			
181	1123	B	21	X	6	23	189.63	M	10	40	50						*					C				P		C	P			C			HARD LAYER
181	1123	B	22	X	1	130	192.9	D	10	20	70		P						P			P		*		C	P	D	C						
181	1123	B	22	X	2	36	193.53	D	10	20	70			P												P		D	P						GREEN LAYER
181	1123	B	24	X	5	69	217.49	M	30	60	10					P						C	P	D				P							ASH LAYER (V+S)
181	1123	B	24	X	5	72	217.52	M	70	20	10					P			P				P	D				P							ASH LAYER (V+S)
181	1123	B	25	X	7	32	229.72	M		10	90											C				P		D	P			P			DARK LAYER
181	1123	B	26	X	1	100	231	D		10	90								P							P	*	D	P						
181	1123	B	27	X	4	53	244.63	D	5	15	80															P		D				P			GREEN LAYER
181	1123	B	27	X	6	145	248.55	M		10	90															P		D				C			BURROW
181	1123	B	28	X	4	51	254.21	M		10	90											A				P		D	P			P			BURROW
181	1123	B	28	X	7	147		M		10	90								P			C					P	D				C			BLACK LAYER
181	1123	B	29	X	3	70	262.5	M	10	20	70											C				P		D	P			P			
181	1123	B	29	X	7	6	267.86	M	30	60	10					P		P					P	D											ASH LAYER (V+S) FINE
181	1123	B	30	X	3	100	272.4	M	80	10	10				R	P						C	R	D				R							ASH LAYER
181	1123	B	31	X	4	68	283.28	M	80	10	10				P							C	P	D				P							ASH
181	1123	B	32	X	1	123	288.93	M	2	28	70		P		P	*			*					R		*	*	A				P			
181	1123	B	32	X	2	88	290.08	M	20	40	40				P							P		A				R							ASH
181	1123	B	32	X	3	90	291.6	D	2	30	68				P	*						P	*	R				A				P			
181	1123	B	32	X	5	48	294.18	M	10	70	20					R		*				P	R	D				R							
181	1123	B	33	X	6	3	304.83	M		40	60		P		C					P				*				A				P			
181	1123	B	33	X	7	15	306.45	M	5	15	80																R	D				P			
181	1123	B	33	X	CC	1	306.71	M	80	10	10											P		D			*	R							ASH
181	1123	B	34	X	3	29.5	310.2	M	20	10	70											C		P				A				*			ASHY LAYER
181	1123	B	34	X	4	30	311.7	M	5	15	80		P		P				*	P						*		D				P			
181	1123	B	36	X	1	15	326.05	M	2	8	90		P		P												*	D				R			
181	1123	B	36	X	4	37	330.77	M	2	8	90		P					*						*				D	*			P			
181	1123	B	36	X	4	106	331.46	D	2	8	90		P		P									*				D							
181	1123	B	38	X	1	40	345.5	D		5	95		P					*	*									D							
181	1123	B	39	X	1	10	354.8	M		10	90		P					*				P		*				D							
181	1123	B	39	X	4	8	359.28	M		10	90		P					*										D							
181	1123	B	40	X	6	120	373.1	M	80	15	5					P		P				P	P	D		*		P				*	P	P	ASH (V+S)
181	1123	B	40	X	7	4	373.44	M		10	90																	D				P			
181	1123	B	40	X	CC	2	373.86	M		10	90																	D				P			
181	1123	B	42	X	1	32	384.02	D		10	90								P									D				P			
181	1123	B	43	X	1	78	394.18	M	60	30	10					P			P			P	P	D				P							COARSE ASH (V+S)
181	1123	B	43	X	1	83	394.23	M	60	30	10					P			P			P	P	D				P							BURROW (ASH)
181	1123	B	46	X	1	52	422.72	M		5	95							*										D				P			
181	1123	B	46	X	3	101	426.21	M		5	95							*				P						D				P			
181	1123	B	48	X	2	78	443.78	D		5	95		P					*										D				P			
181	1123	B	50	X	2	88	462.78	D		5	95																	D							LIGHT GREEN

Site 1123 Smear Slides									Texture			Mineral															Biogenic							Rock		
Leg	Site	Hole	Core	Type	Section	Interval (cm)	Depth (mbsf)	Lithology	Sand	Silt	Clay	Calcite (30)	Carbonate (35)	Chlorite (45)	Clay (47)	Feldspar (71)	Glauconite (82)	Heavy Minerals (89)	Mica (118)	Opaques (140)	Oxides (146)	Pyrite (169)	Quartz (172)	Volcanic Glass (81)	Zeolite (222)	Diatoms (58)	Foraminifers (78)	Nannofossils (132)	Radiolarians (173)	Silicoflagellates (189)	Skeletal Debris (192)	Sponge Spicules (199)	Fecal Pellet (70)	Lithic Fragments (106)	Comments
181	1123	B	50	X	3	70	464.1	D		5	95		P		P	*							*	*		P		D	P			P			DARK GREEN
181	1123	B	50	X	3	70	464.1	D		5	95				A	P							P	*		P									ACID !!!!
181	1123	B	51	X	1	120	471.2	M		5	95				P	R			P				R					P							
181	1123	B	52	X	1	101	480.31	D		5	95		A		P													A							CHALK OR LIMESTONE ?
181	1123	C	1	H	1	18	0.18	D	10	20	70							P						*		P	C	A	P	P	*	P			
181	1123	C	1	H	1	135	1.35	M	30	60	10					P		P	*			*	P	D											ASH (S+V)
181	1123	C	1	H	2	70	2.2	M	40	30	30													A		P	P	A	P		P				ASH+NANNOFOSSILS
181	1123	C	1	H	3	20	3.2	D	5	10	85																P	D	P		P	P			
181	1123	C	1	H	3	60	3.6	D	5	10	85											P				P	P	D	P			P			
181	1123	C	2	H	2	92	11.42	M	80	15	5					P			P			P	P	D											ASH (V+S)
181	1123	C	2	H	2	106	11.56	M	80	15	5					P			*			P	P	D											ASH (V+S)
181	1123	C	2	H	3	69	12.69	M	30	60	10					P						P	P	D				P							ASH+(NANNOFOSSILS)
181	1123	C	2	H	3	136	13.36	M	40	50	10					P			*			P	P	D				P							ASH (V+S)
181	1123	C	2	H	5	57	15.57	M	10	10	80																P	D		P					
181	1123	C	2	H	7	33	18.33	M	10	20	70													A		P		A	P						ASH+NANNOFOSSILS
181	1123	C	3	H	4	85	23.85	M	70	20	10					P			P			P	P	D				P							ASH (V+S)
181	1123	C	3	H	6	10	26.1	M	5	25	70		P									*		*		P	P	D	P		P				
181	1123	C	4	H	4	120	33.7	M	40	40	20					P			P			P	P	D				P							ASH (0 LAYER)
181	1123	C	4	H	6	73	36.23	M	20	60	20					P		P	P			P	P	D											ASH (V+S)
181	1123	C	5	H	1	90	38.4	M	30	60	10					P		P	P			P	P	D				P							ASH (V+S)
181	1123	C	5	H	5	122	44.72	M	10	80	10					P		P	P			P	P	D											ASH (0 LAYER)
181	1123	C	6	H	1	78	47.78	M	10	70	20					P		P	P			C	P	D				P							ASH (V+S)
181	1123	C	6	H	3	130	51.3	M	10	20	70		P									P		A				D			P				(ASH)+NANNOFOSSILS
181	1123	C	6	H	4	63	52.13	M	70	20	10					P		P				P	P	D				P							ASH (V+S)
181	1123	C	6	H	4	96	52.46	M	30	60	10					P		P				P	P	D				P							ASH (S+V)
181	1123	C	6	H	5	10	53.1	M	20	60	20					P		*	P			C	P	D				P							ASH+(NANNOFOSSILS)
181	1123	C	6	H	5	90	53.9	M	50	40	10					P			P			C	P	D				P							ASH+(NANNOFOSSILS)
181	1123	C	6	H	5	112	54.12	M	70	20	10					P		P				C	P	D				P							ASH
181	1123	C	6	H	5	124	54.24	M	10	50	40					P		*	C			P	P	D				C							ASH+(NANNOFOSSILS)
181	1123	C	6	H	6	119	55.69	M	60	30	10					P		P	*			P	P	D				P							ASH
181	1123	C	6	H	7	16	56.16	M	30	60	10					P	*	P				P	P	D				P							ASH+ RARE GLAUCONITE
181	1123	C	6	H	7	64	56.64	M	50	40	10					P		P				C	P	D				P							ASH (V+S)
181	1123	C	7	H	2	64	58.64	M	70	20	10		P			R		P				P	R	D				P							ASH
181	1123	C	7	H	2	124	59.24	M	60	30	10					P	*	P				P	P	D				R							ASH
181	1123	C	7	H	3	3	59.53	M	40	35	25					P		*				R	P	D			P			*					ASH
181	1123	C	7	H	3	87	60.37	M	10	50	40				P	P							P	A				C	*	*	P				ASH
181	1123	C	7	H	3	134	60.84	M	60	30	10					P		P	P				P	D		*		P							ASH
181	1123	C	7	H	4	57	61.57	M	10	60	30					P						P	P	D				R							ASH
181	1123	C	7	H	5	11	62.61	M	80	5	15				P	P	P	*				P	P	D				R							ASH
181	1123	C	7	H	6	89	64.89	M	10	30	60		P		P							P		P				D	*	*	P	R			
181	1123	C	8	H	2	70	68.2	M	2	33	65				P	P		*					P				P	D			P	P			
181	1123	C	8	H	2	123	68.73	D	5	35	60				P											*	P	D	*			P			
181	1123	C	8	H	7	10	75.1	M	2	38	60		P		P	R		*	*				R				R	A				P			
181	1123	C	9	H	3	113	79.63	M	5	45	50		P		P	*						R	*	*			R	A				R			
181	1123	C	9	H	5	33	81.83	M	40	50	10					P		*				P	P	D				*							ASH
181	1123	C	9	H	5	100	82.5	M	50	20	30					C		P				P	C	D				R							ASH
181	1123	C	9	H	6	93	83.93	M	2	38	60		P		P	R							R				*	D	P		P				
181	1123	C	10	H	1	51	85.51	D	10	20	70		P		P									*		P	P	D	P			R			
181	1123	C	10	H	2	80	87.3	D	10	20	70				P											P	C	D	P	*		P			

Site 1123 Smear Slides									Texture			Mineral															Biogenic							Rock		
Leg	Site	Hole	Core	Type	Section	Interval (cm)	Depth (mbsf)	Lithology	Sand	Silt	Clay	Calcite (30)	Carbonate (35)	Chlorite (45)	Clay (47)	Feldspar (71)	Glauconite (82)	Heavy Minerals (89)	Mica (118)	Opaques (140)	Oxides (146)	Pyrite (169)	Quartz (172)	Volcanic Glass (81)	Zeolite (222)	Diatoms (58)	Foraminifers (78)	Nannofossils (132)	Radiolarians (173)	Silicoflagellates (189)	Skeletal Debris (192)	Sponge Spicules (199)	Fecal Pellet (70)	Lithic Fragments (106)	Comments
181	1123	C	10	H	3	90	88.9	D	10	30	60		P		P	*							*			P	P	D	P	*		P			
181	1123	C	10	H	4	55	90.05	D	10	20	70		P		P	*						R	*				P	D	P	*		P			
181	1123	C	10	H	5	143	92.43	D	5	25	70															P	P	D	P			P			
181	1123	C	12	H	2	70	106.2	M	80	20						P		*				P	P	D											ASH
181	1123	C	12	H	3	23	107.23	D	5	45	50		P		P				*							R	P	D		*		P			
181	1123	C	12	H	4	111	109.61	D	5	45	50				P									*		P	R	D	R			P			
181	1123	C	13	H	4	68	118.68	M	80	20						P		*					P	D				R							ASH
181	1123	C	14	H	2	60	125.1	D		10	90															P		D	P	P	P				
181	1123	C	15	H	4	50	136.97	M	40	20	40					P		P	P			P	P	A			P	A			P	P			ASH+NANNOFOSSILS
181	1123	C	17	X	2	74	232.24	D		20	80				P											P	P	D			P				
181	1123	C	18	X	1	12.5	484.13	M	2	18	80				C	R							R	R			R	P							
181	1123	C	18	X	1	84	484.84	D	3	27	70				P	P												A							
181	1123	C	18	X	2	110	486.6	D	3	50	47					P						R	P				R	D							
181	1123	C	19	X	3	77	492.27	D	2	48	50				C	P		R					P					C	R						
181	1123	C	19	X	4	70	493.7	D	5	60	35				P	P							P				*	A	*			P			
181	1123	C	20	X	1	143	499.53	M		60	40				P	R			*			P	R					D				P			
181	1123	C	22	X	1	126	518.66	M	5	55	40				P	R						P	R	*			P	D							
181	1123	C	23	X	2	81	529.31	D		50	50				C	R				P							*	C							
181	1123	C	24	X	1	124	537.84	D		30	70		P		P	P			P			*	P					D							
181	1123	C	24	X	6	90	545	M		10	90		P		P													D							CLAST IN DEBRIS FLOW
181	1123	C	25	X	2	30	548	D	30	40	30		C						P								P	D	P		P	P			LIMESTONE
181	1123	C	25	X	3	129	550.49	M	5	40	55								P					*			P	D				P			GREEN LAYER
181	1123	C	26	X	5	31	562.01	M		10	90		P		P				P									D			P	P			GREEN LAYER
181	1123	C	27	X	4	2	569.92	M		10	90		P		P				P			P		*				D							GREEN LAYER
181	1123	C	28	X	3	52	578.62	D		10	90		C			*			P				*					D				P			
181	1123	C	28	X	4	117	580.77	M		10	90		P		P				C	P				*				D							PINKY DARK LAYER
181	1123	C	29	X	2	95	587.15	D		5	95		C		C	P			P									D							GREEN LAYER
181	1123	C	29	X	2	107	587.27	D		5	95		C		P													D							WHITE LAYER
181	1123	C	29	X	5	128	591.98	D		5	95		C		P													D							
181	1123	C	30	X	1	77	595.07	D	5	55	48																*	D			P				LITHIFIED, CARBONATE FRAGMENTS
181	1123	C	31	X	3	42	607.32	D	2	50	40				P	R							R					D				P			LITHIFIED
181	1123	C	32	X	3	7	616.67	M	5	60	35		C														C	D							
181	1123	C	32	X	3	94	617.54	D					A			*							*					C	*						