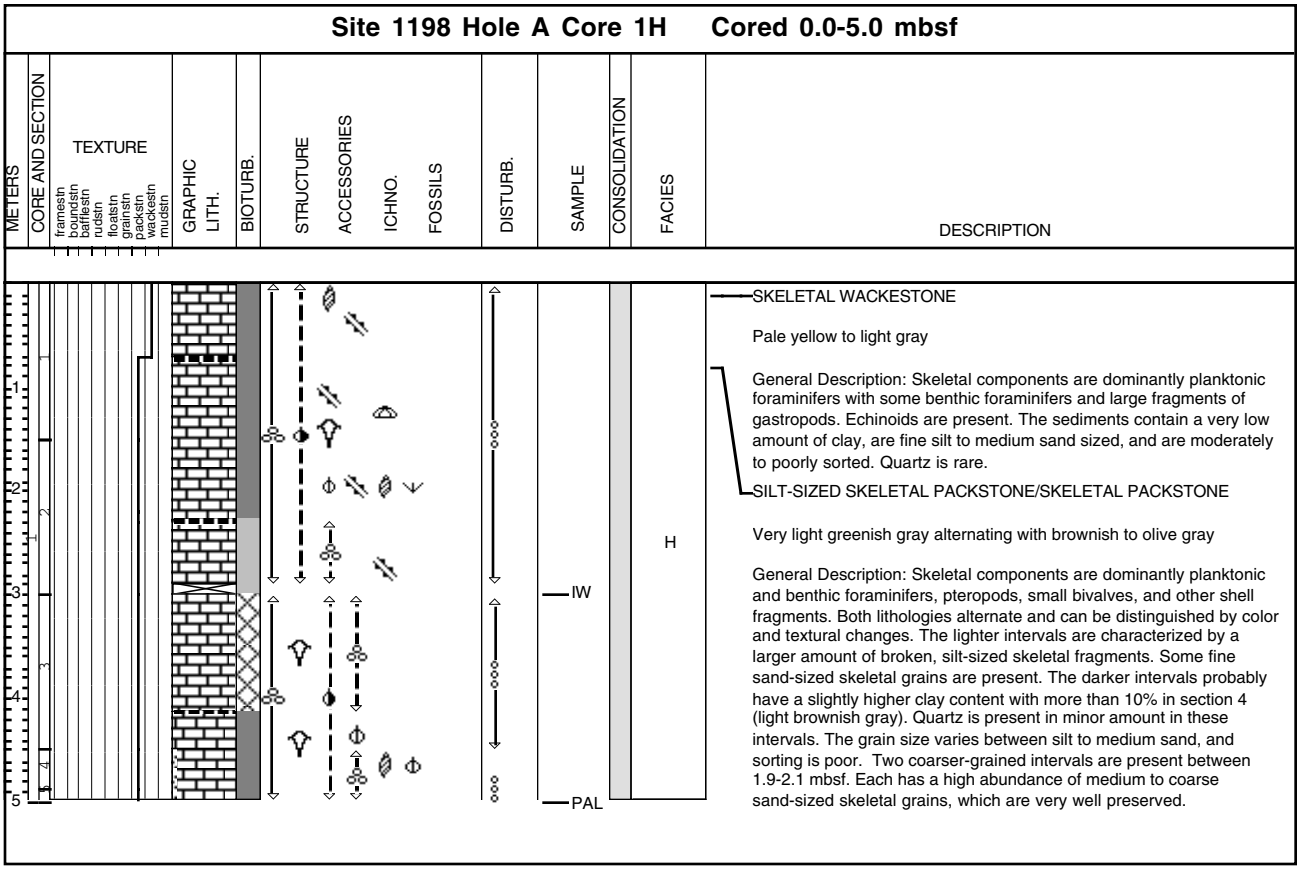
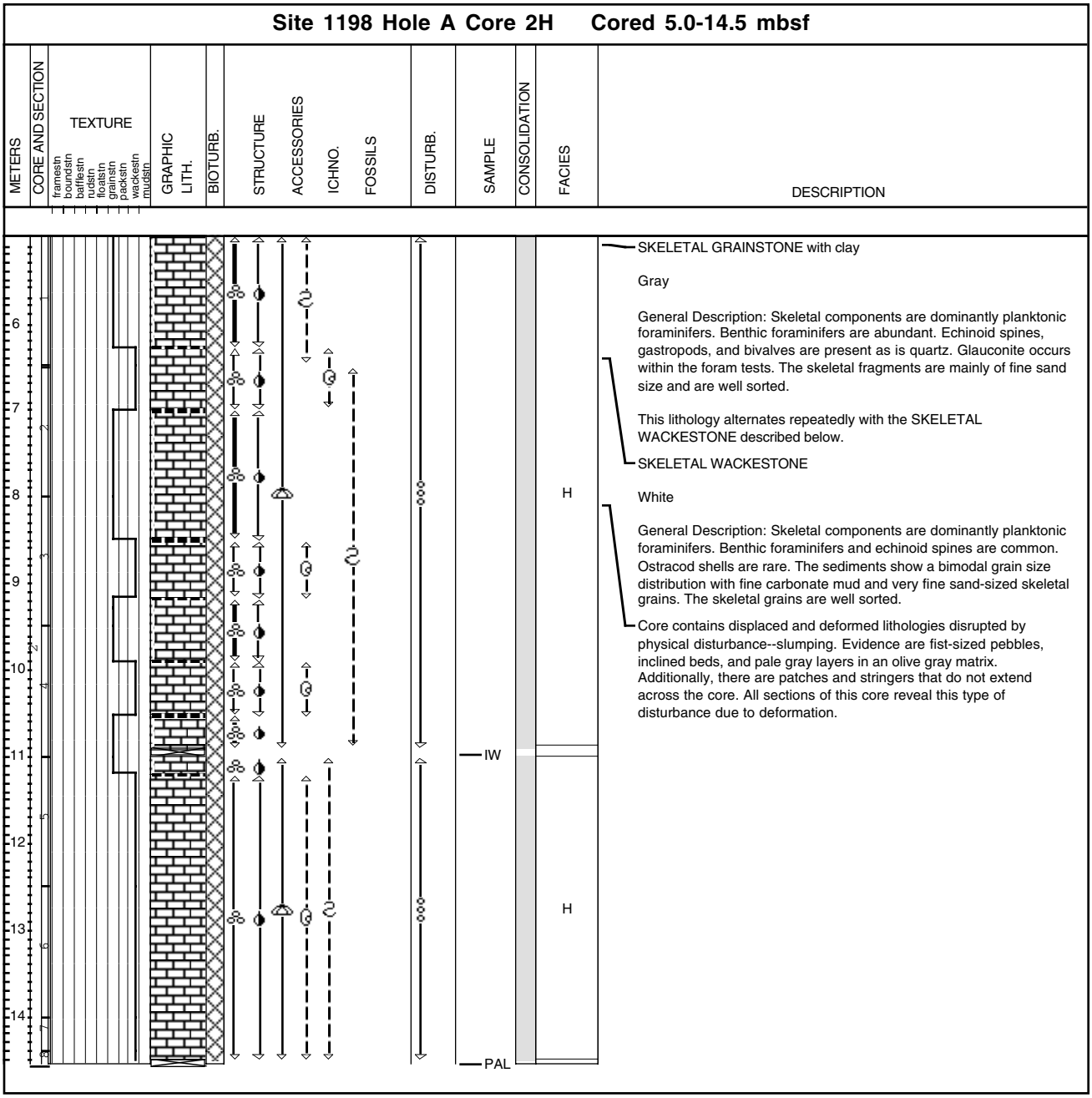
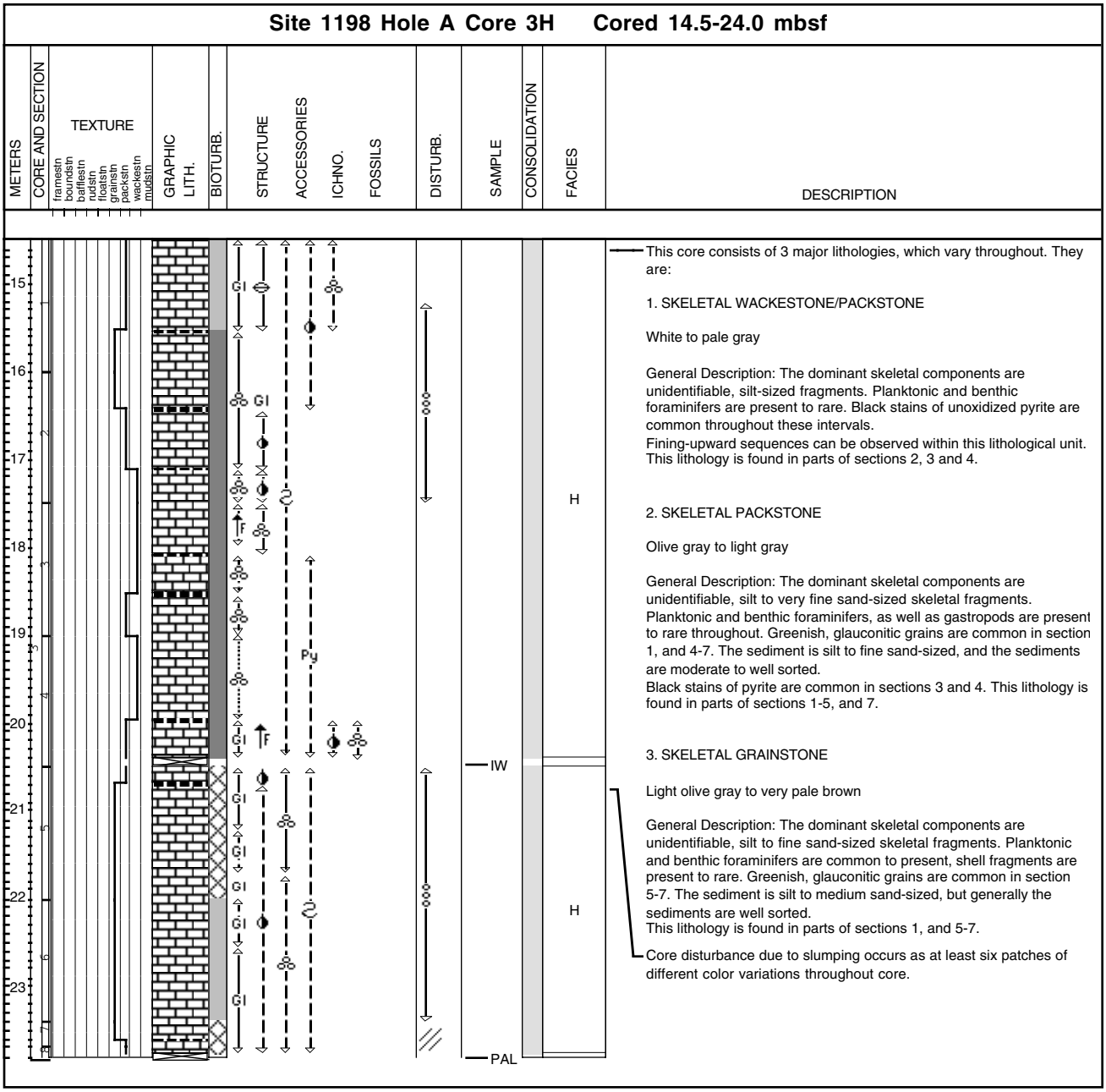
Core Photo


Site 1198 Hole A Core 1H Cored 0.0-5.0 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
bafflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
IW
PAL
H
SKELETAL WACKESTONE
Pale yellow to light gray
General Description: Skeletal components are dominantly planktonic foraminifers with some benthic foraminifers and large fragments of gastropods. Echinoids are present. The sediments contain a very low amount of clay, are fine silt to medium sand sized, and are moderately to poorly sorted. Quartz is rare.
SILT-SIZED SKELETAL PACKSTONE/SKELETAL PACKSTONE
Very light greenish gray alternating with brownish to olive gray
General Description: Skeletal components are dominantly planktonic and benthic foraminifers, pteropods, small bivalves, and other shell fragments. Both lithologies alternate and can be distinguished by color and textural changes. The lighter intervals are characterized by a larger amount of broken, silt-sized skeletal fragments. Some fine sand-sized skeletal grains are present. The darker intervals probably have a slightly higher clay content with more than 10% in section 4 (light brownish gray). Quartz is present in minor amount in these intervals. The grain size varies between silt to medium sand, and sorting is poor. Two coarser-grained intervals are present between 1.9-2.1 mbsf. Each has a high abundance of medium to coarse sand-sized skeletal grains, which are very well preserved.

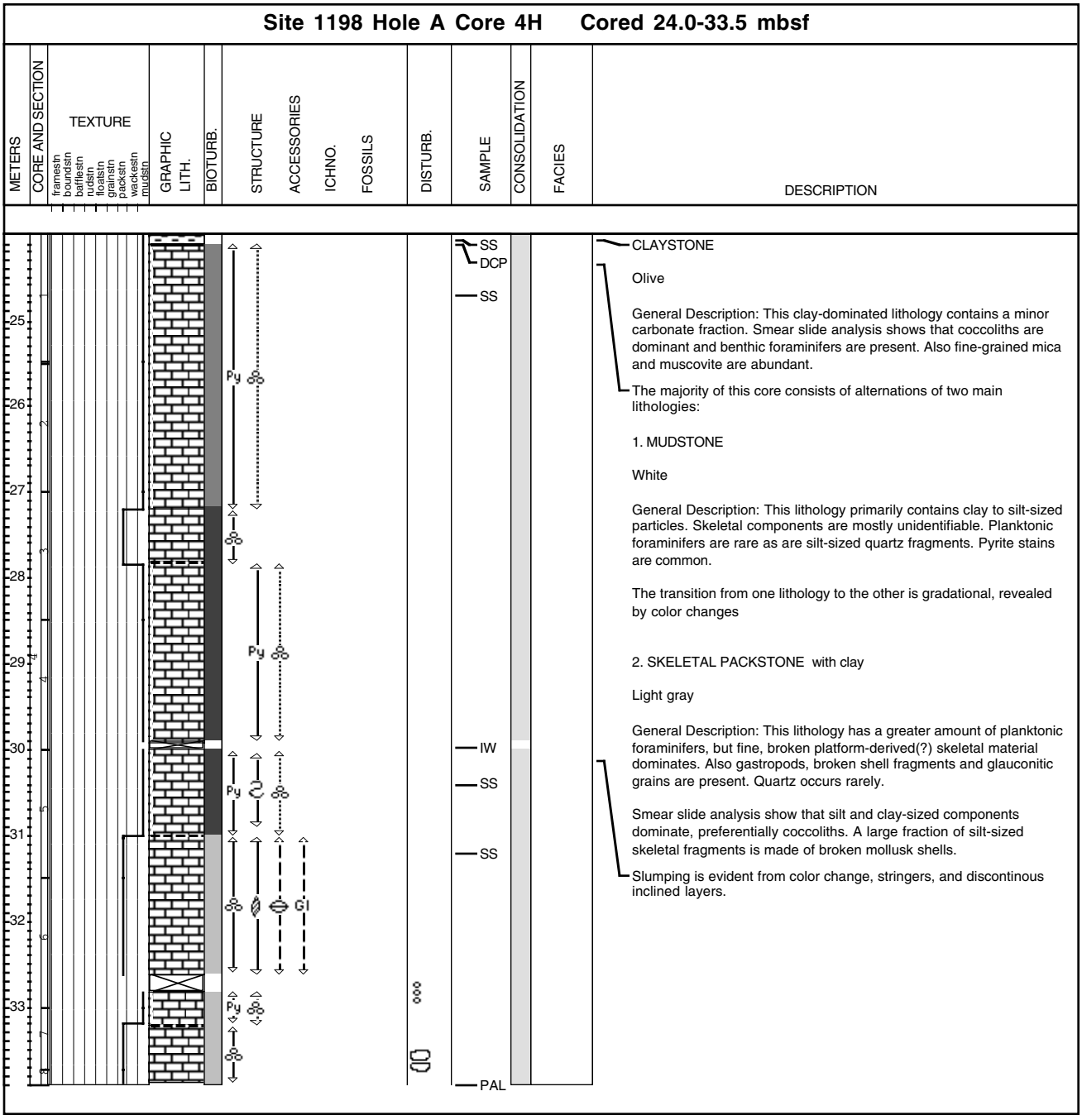
Core Photo


Site 1198 Hole A Core 2H Cored 5.0-14.5 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
bafflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
6
7
8
9
10
11
12
13
14
IW
PAL
H
H
SKELETAL GRAINSTONE with clay
Gray
General Description: Skeletal components are dominantly planktonic foraminifers. Benthic foraminifers are abundant. Echinoid spines, gastropods, and bivalves are present as is quartz. Glauconite occurs within the foram tests. The skeletal fragments are mainly of fine sand size and are well sorted.
This lithology alternates repeatedly with the SKELETAL WACKESTONE described below.
SKELETAL WACKESTONE
White
General Description: Skeletal components are dominantly planktonic foraminifers. Benthic foraminifers and echinoid spines are common. Ostracod shells are rare. The sediments show a bimodal grain size distribution with fine carbonate mud and very fine sand-sized skeletal grains. The skeletal grains are well sorted.
Core contains displaced and deformed lithologies disrupted by physical disturbance--slumping. Evidence are fist-sized pebbles, inclined beds, and pale gray layers in an olive gray matrix. Additionally, there are patches and stringers that do not extend across the core. All sections of this core reveal this type of disturbance due to deformation.

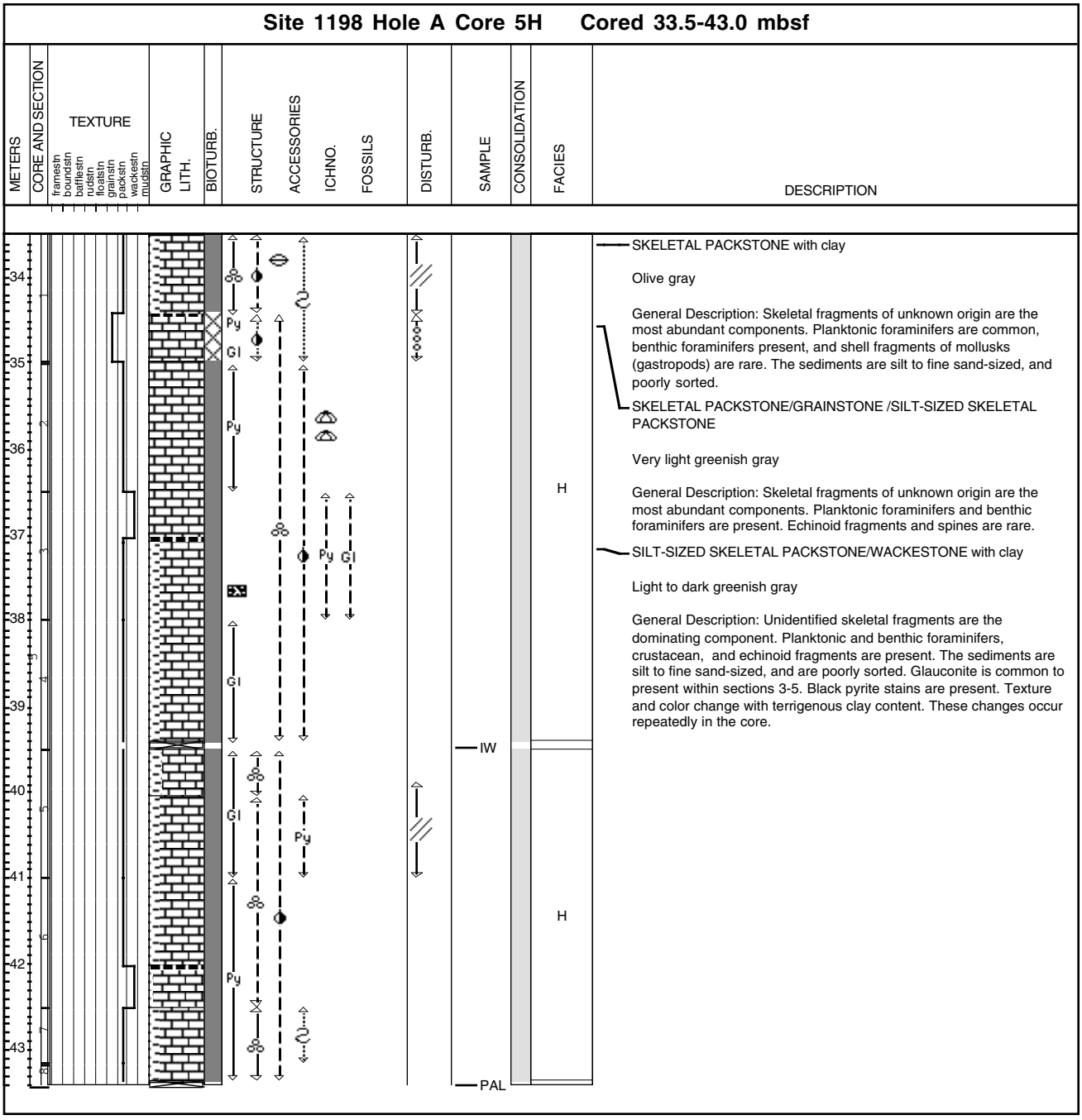
Core Photo


Site 1198 Hole A Core 3H Cored 14.5-24.0 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffiestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
15
16
17
18
19
20
21
22
23
Gl
F
Py
IW
PAL
H
H
This core consists of 3 major lithologies, which vary throughout. They are:
1. SKELETAL WACKESTONE/PACKSTONE
White to pale gray
General Description: The dominant skeletal components are unidentifiable, silt-sized fragments. Planktonic and benthic foraminifers are present to rare. Black stains of unoxidized pyrite are common throughout these intervals.
Fining-upward sequences can be observed within this lithological unit. This lithology is found in parts of sections 2, 3 and 4.
2. SKELETAL PACKSTONE
Olive gray to light gray
General Description: The dominant skeletal components are unidentifiable, silt to very fine sand-sized skeletal fragments. Planktonic and benthic foraminifers, as well as gastropods are present to rare throughout. Greenish, glauconitic grains are common in section 1, and 4-7. The sediment is silt to fine sand-sized, and the sediments are moderate to well sorted.
Black stains of pyrite are common in sections 3 and 4. This lithology is found in parts of sections 1-5, and 7.
3. SKELETAL GRAINSTONE
Light olive gray to very pale brown
General Description: The dominant skeletal components are unidentifiable, silt to fine sand-sized skeletal fragments. Planktonic and benthic foraminifers are common to present, shell fragments are present to rare. Greenish, glauconitic grains are common in section 5-7. The sediment is silt to medium sand-sized, but generally the sediments are well sorted.
This lithology is found in parts of sections 1, and 5-7.
Core disturbance due to slumping occurs as at least six patches of different color variations throughout core.

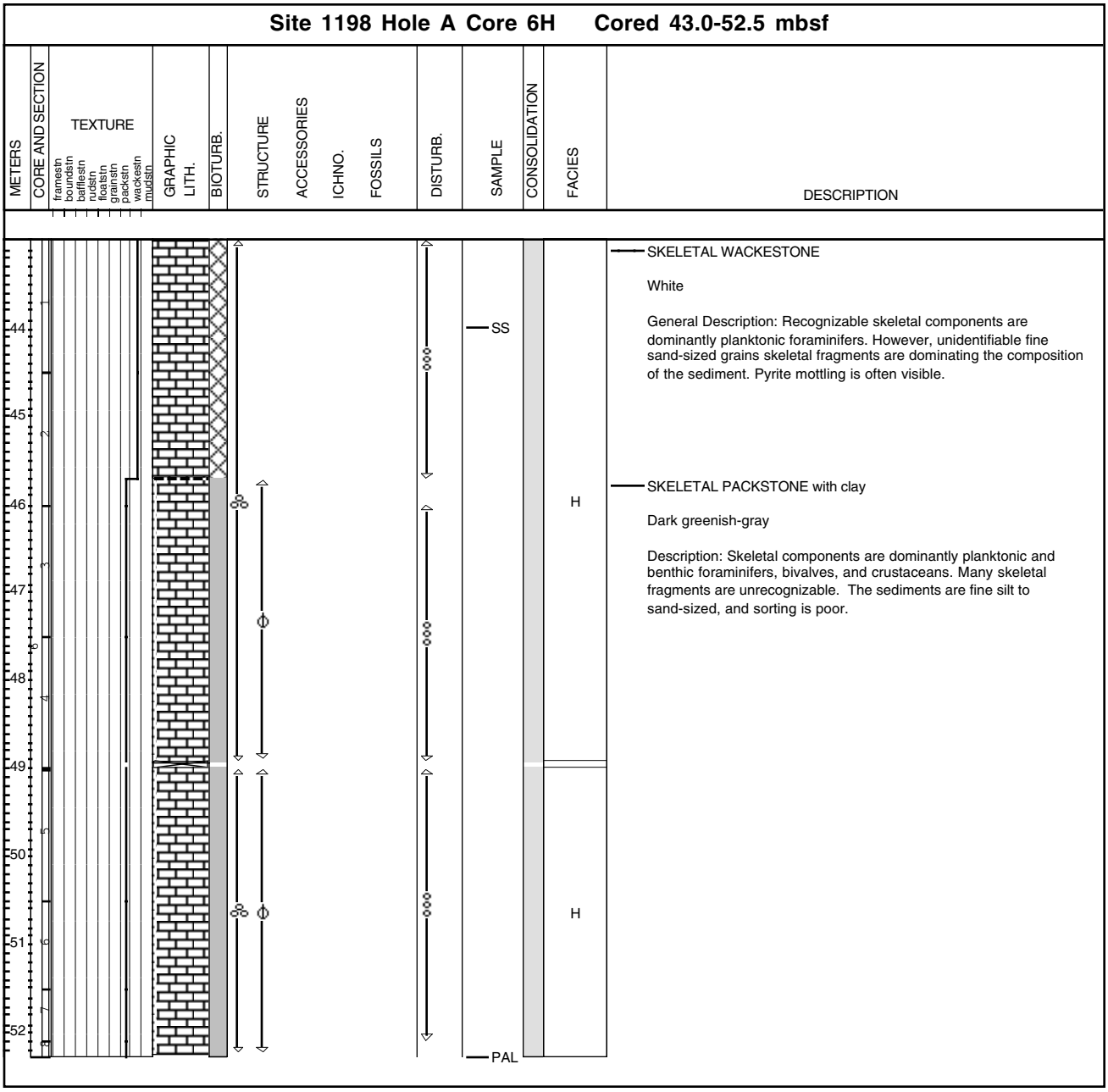
Core Photo


Site 1198 Hole A Core 4H Cored 24.0-33.5 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
SS
DCP
SS
IW
SS
SS
PAL
25
26
27
28
29
30
31
32
33
CLAYSTONE
Olive
General Description: This clay-dominated lithology contains a minor carbonate fraction. Smear slide analysis shows that coccoliths are dominant and benthic foraminifers are present. Also fine-grained mica and muscovite are abundant.
The majority of this core consists of alternations of two main lithologies:
1. MUDSTONE
White
General Description: This lithology primarily contains clay to silt-sized particles. Skeletal components are mostly unidentifiable. Planktonic foraminifers are rare as are silt-sized quartz fragments. Pyrite stains are common.
The transition from one lithology to the other is gradational, revealed by color changes
2. SKELETAL PACKSTONE with clay
Light gray
General Description: This lithology has a greater amount of planktonic foraminifers, but fine, broken platform-derived(?) skeletal material dominates. Also gastropods, broken shell fragments and glauconitic grains are present. Quartz occurs rarely.
Smear slide analysis show that silt and clay-sized components dominate, preferentially coccoliths. A large fraction of silt-sized skeletal fragments is made of broken mollusk shells.
Slumping is evident from color change, stringers, and discontinous inclined layers.

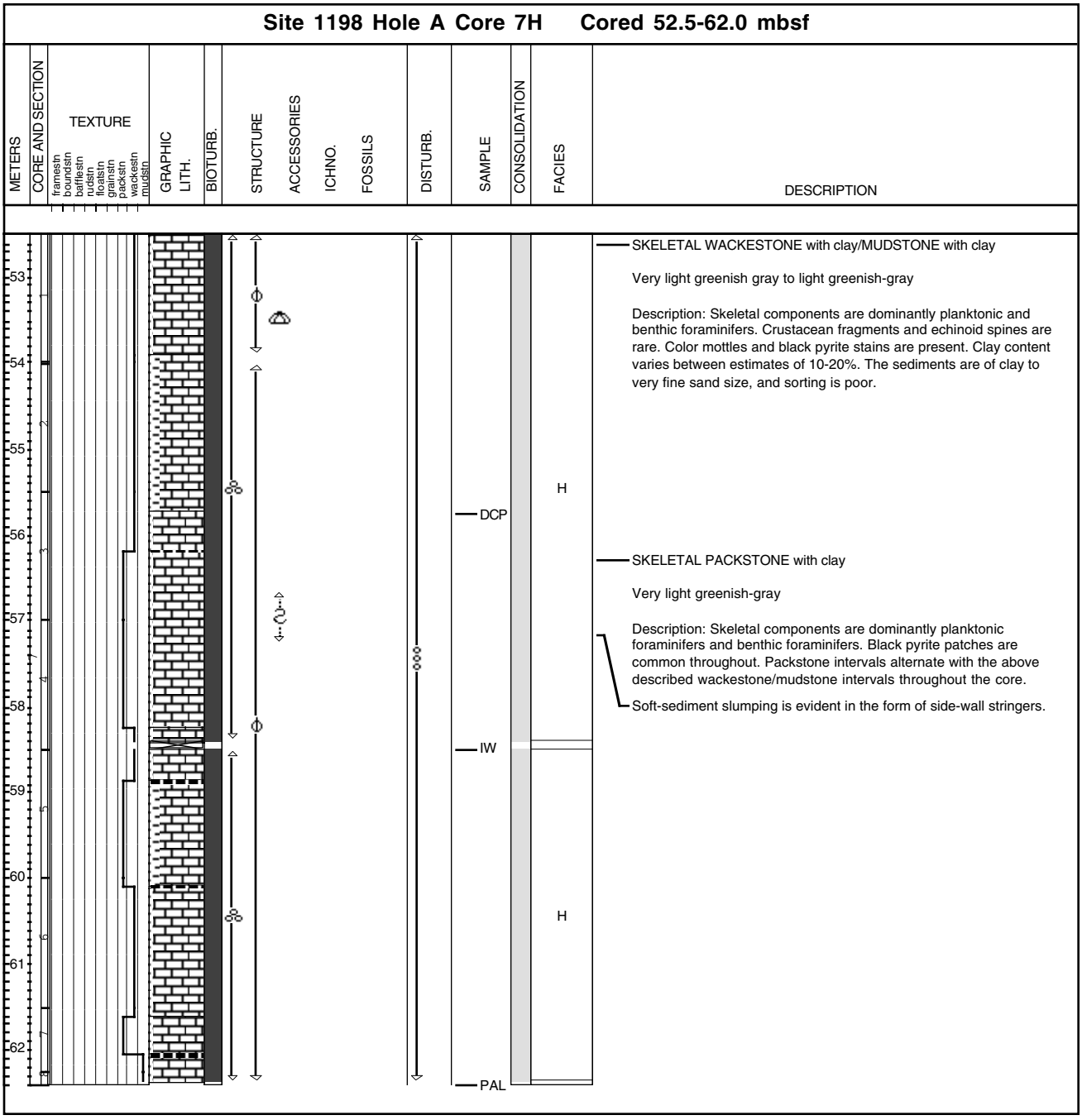
Core Photo


Site 1198 Hole A Core 5H Cored 33.5-43.0 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
bafflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
34
35
36
37
38
39
40
41
42
43
Py
Gl
IW
PAL
H
H
SKELETAL PACKSTONE with clay
Olive gray
General Description: Skeletal fragments of unknown origin are the most abundant components. Planktonic foraminifers are common, benthic foraminifers present, and shell fragments of mollusks (gastropods) are rare. The sediments are silt to fine sand-sized, and poorly sorted.
SKELETAL PACKSTONE/GRAINSTONE /SILT-SIZED SKELETAL PACKSTONE
Very light greenish gray
General Description: Skeletal fragments of unknown origin are the most abundant components. Planktonic foraminifers and benthic foraminifers are present. Echinoid fragments and spines are rare.
SILT-SIZED SKELETAL PACKSTONE/WACKESTONE with clay
Light to dark greenish gray
General Description: Unidentified skeletal fragments are the dominating component. Planktonic and benthic foraminifers, crustacean, and echinoid fragments are present. The sediments are silt to fine sand-sized, and are poorly sorted. Glauconite is common to present within sections 3-5. Black pyrite stains are present. Texture and color change with terrigenous clay content. These changes occur repeatedly in the core.

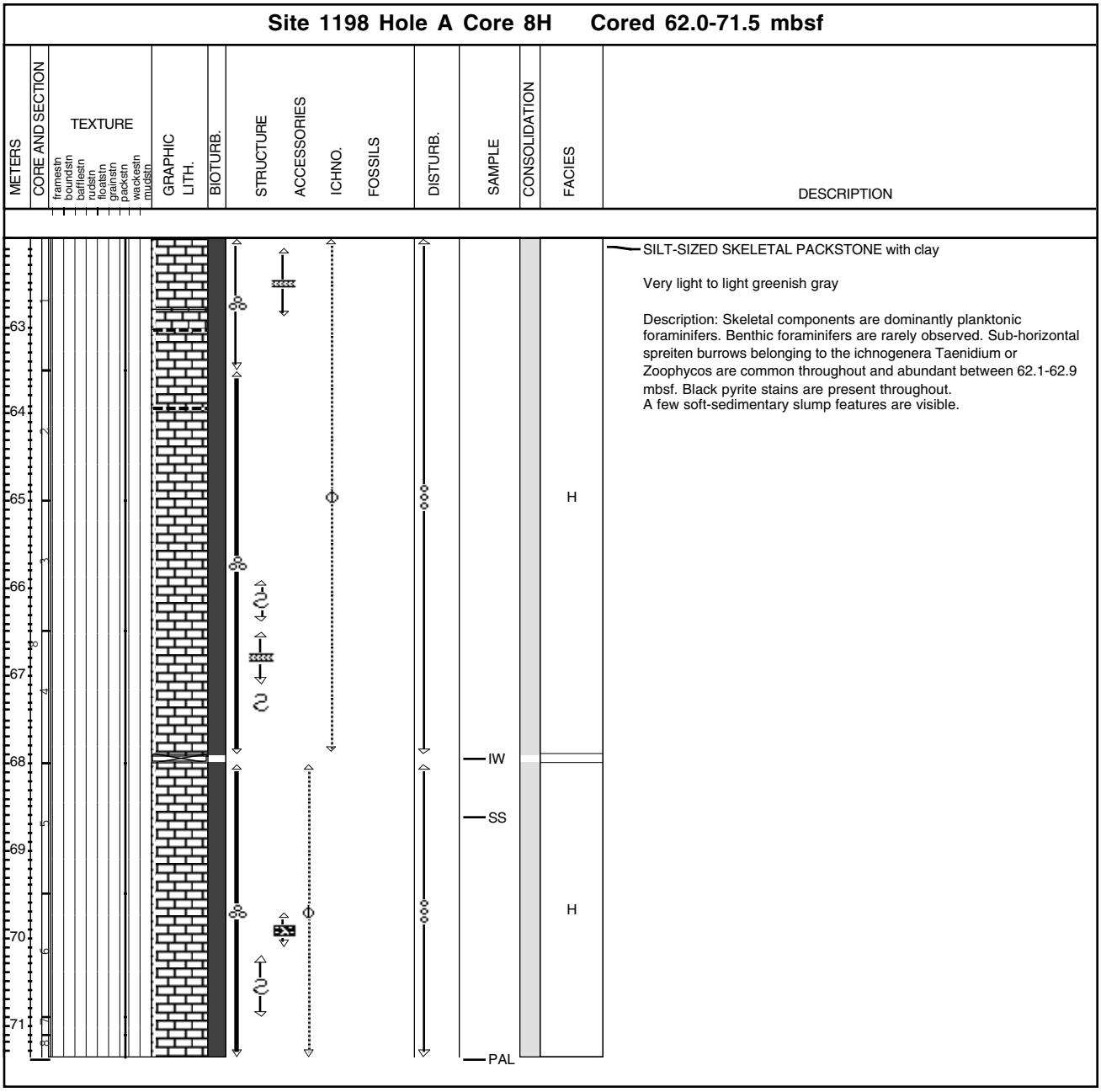
Core Photo


Site 1198 Hole A Core 6H Cored 43.0-52.5 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
44
45
46
47
48
49
50
51
52
SS
PAL
H
H
SKELETAL WACKESTONE
White
General Description: Recognizable skeletal components are dominantly planktonic foraminifers. However, unidentifiable fine sand-sized grains skeletal fragments are dominating the composition of the sediment. Pyrite mottling is often visible.
SKELETAL PACKSTONE with clay
Dark greenish-gray
Description: Skeletal components are dominantly planktonic and benthic foraminifers, bivalves, and crustaceans. Many skeletal fragments are unrecognizable. The sediments are fine silt to sand-sized, and sorting is poor.

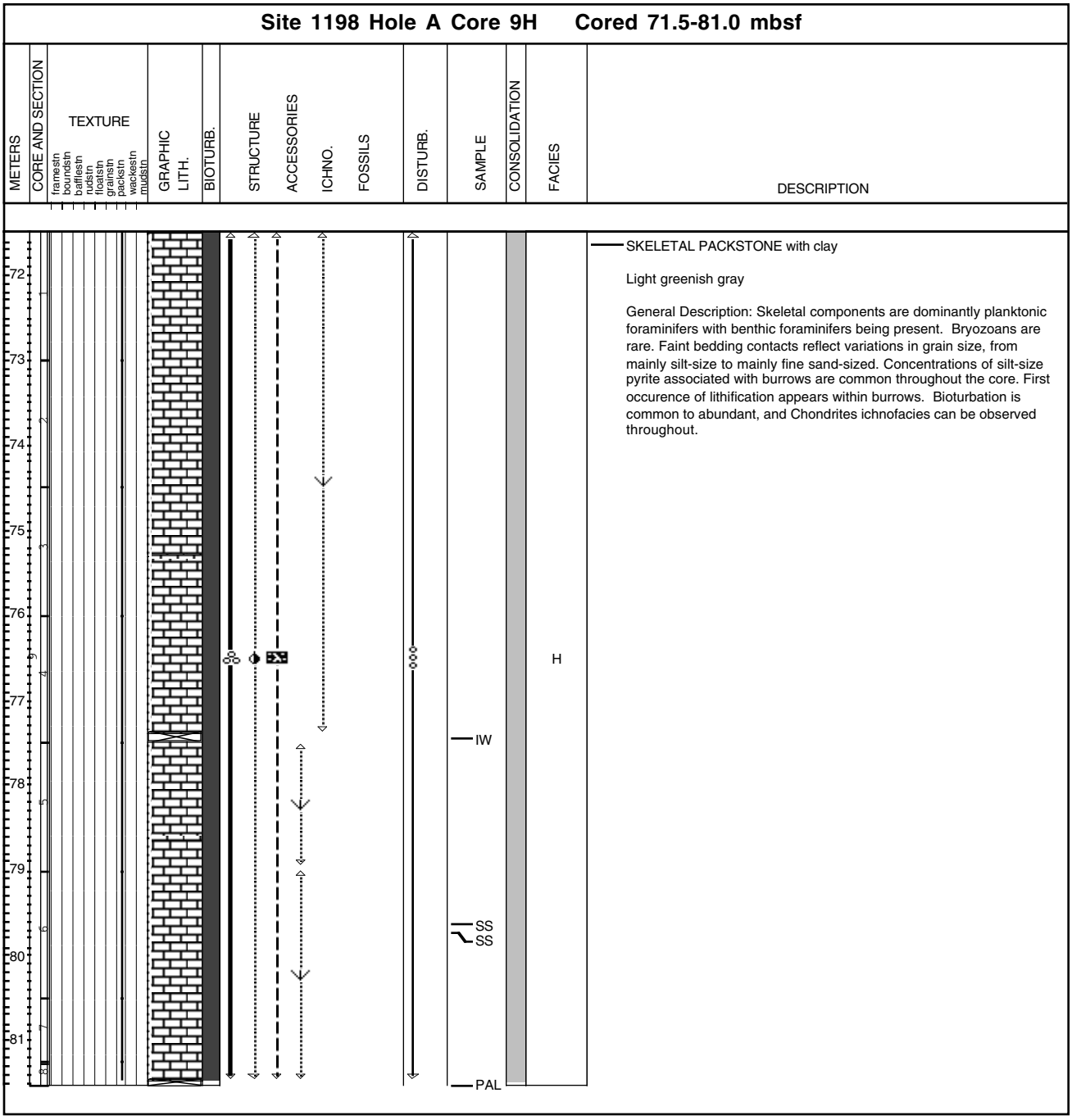
Core Photo


Site 1198 Hole A Core 7H Cored 52.5-62.0 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
53
54
55
56
57
58
59
60
61
62
DCP
IW
PAL
H
H
SKELETAL WACKESTONE with clay/MUDSTONE with clay
Very light greenish gray to light greenish-gray
Description: Skeletal components are dominantly planktonic and benthic foraminifers. Crustacean fragments and echinoid spines are rare. Color mottles and black pyrite stains are present. Clay content varies between estimates of 10-20%. The sediments are of clay to very fine sand size, and sorting is poor.
SKELETAL PACKSTONE with clay
Very light greenish-gray
Description: Skeletal components are dominantly planktonic foraminifers and benthic foraminifers. Black pyrite patches are common throughout. Packstone intervals alternate with the above described wackestone/mudstone intervals throughout the core.
Soft-sediment slumping is evident in the form of side-wall stringers.

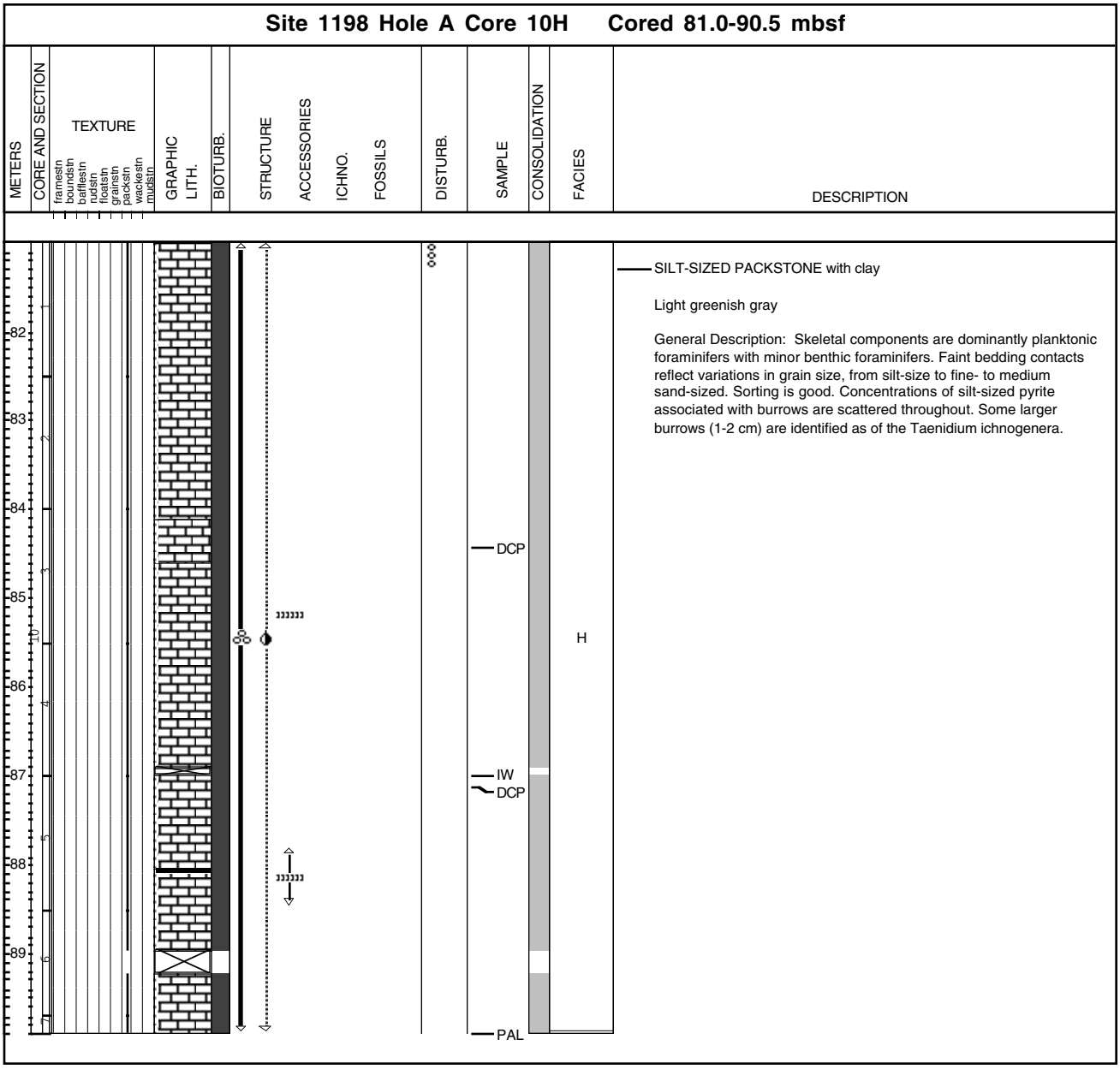
Core Photo


Site 1198 Hole A Core 8H Cored 62.0-71.5 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffliestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
63
64
65
66
67
68
69
70
71
IW
SS
PAL
H
H
SILT-SIZED SKELETAL PACKSTONE with clay
Very light to light greenish gray
Description: Skeletal components are dominantly planktonic foraminifers. Benthic foraminifers are rarely observed. Sub-horizontal spreiten burrows belonging to the ichnogenera Taenidium or Zoophycos are common throughout and abundant between 62.1-62.9 mbsf. Black pyrite stains are present throughout.
A few soft-sedimentary slump features are visible.

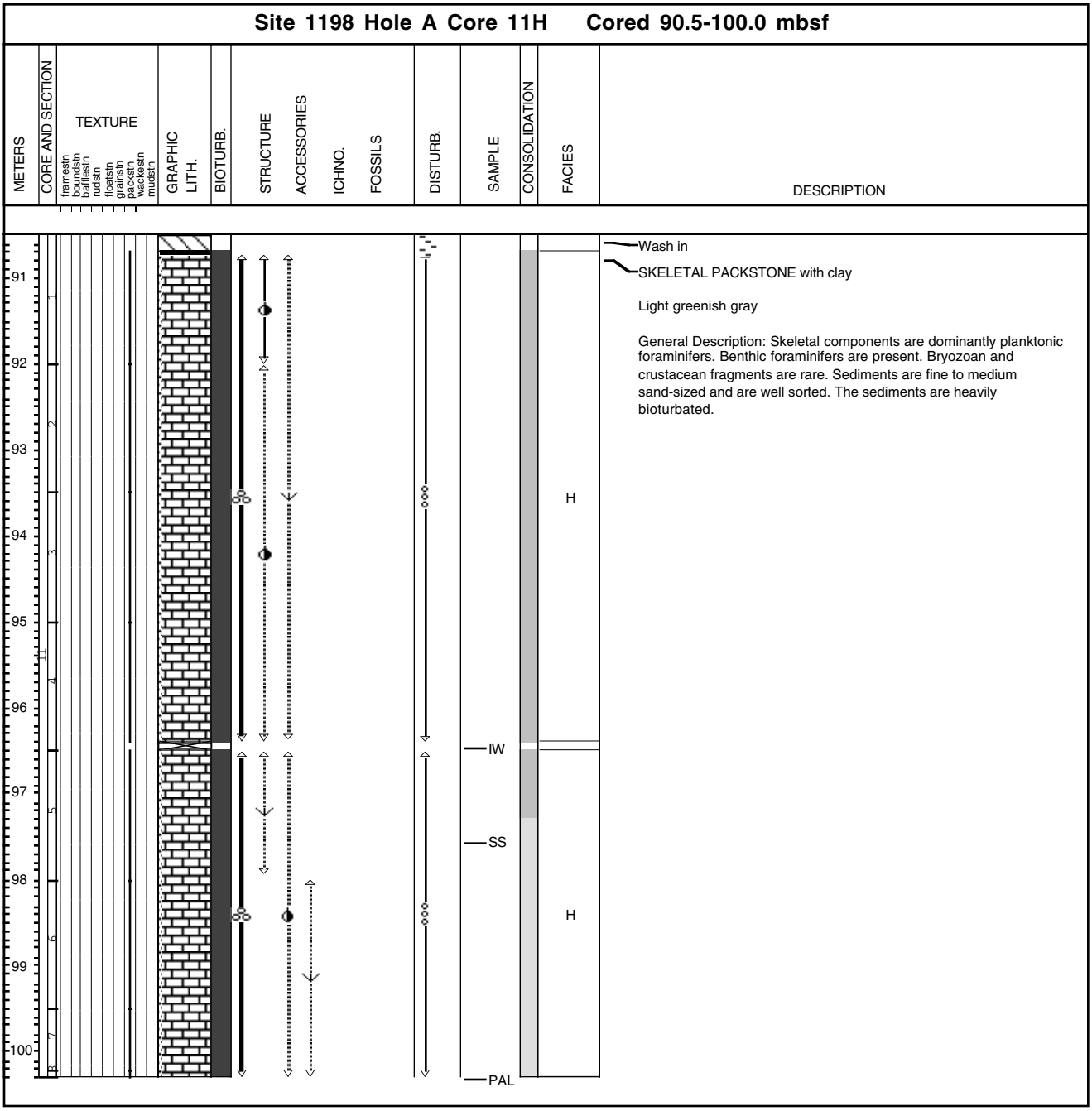
Core Photo


Site 1198 Hole A Core 9H Cored 71.5-81.0 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
72
73
74
75
76
77
78
79
80
81
IW
SS
SS
PAL
H
SKELETAL PACKSTONE with clay
Light greenish gray
General Description: Skeletal components are dominantly planktonic foraminifers with benthic foraminifers being present. Bryozoans are rare. Faint bedding contacts reflect variations in grain size, from mainly silt-size to mainly fine sand-sized. Concentrations of silt-size pyrite associated with burrows are common throughout the core. First occurence of lithification appears within burrows. Bioturbation is common to abundant, and Chondrites ichnofacies can be observed throughout.

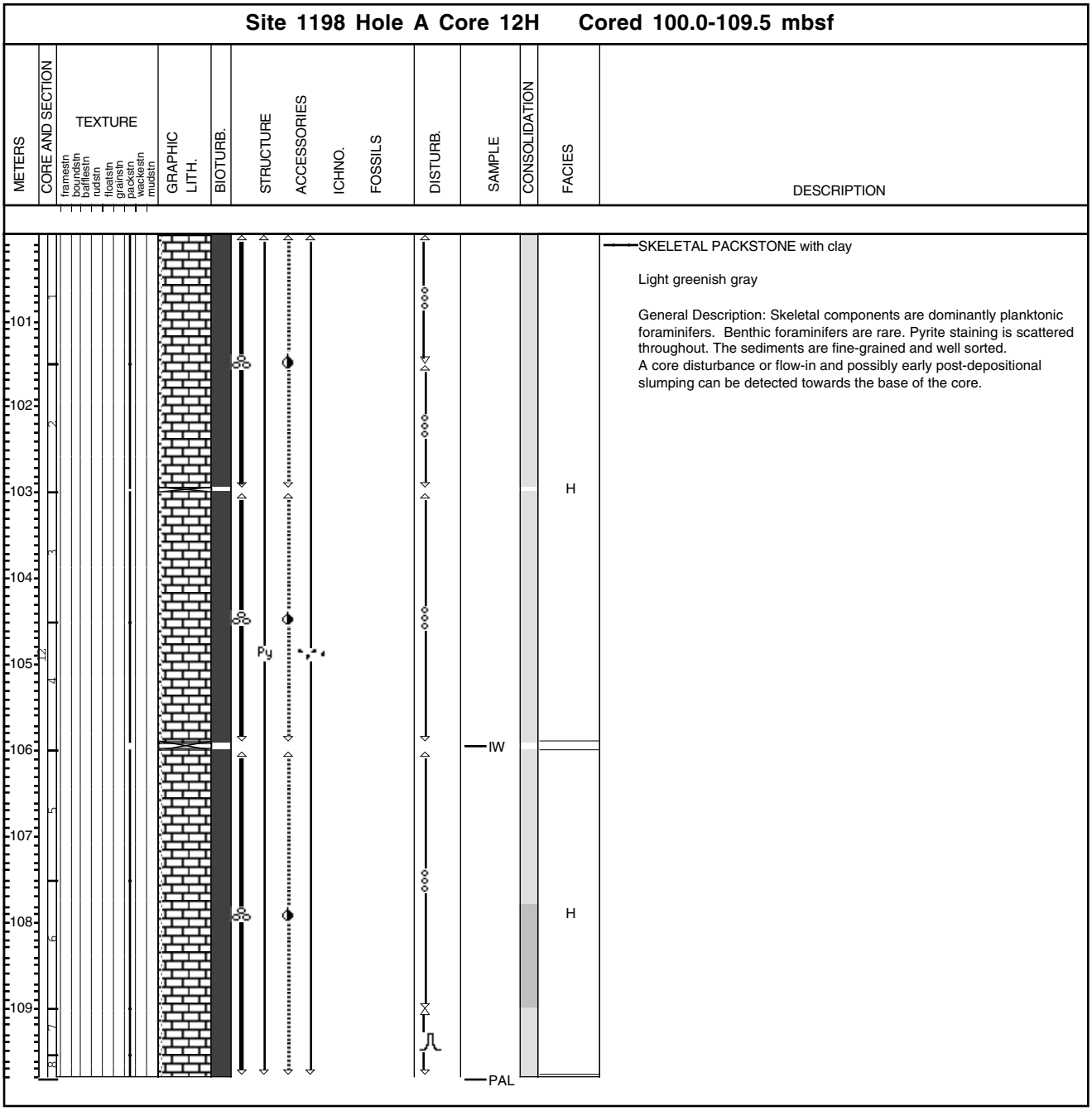
Core Photo


Site 1198 Hole A Core 10H Cored 81.0-90.5 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffiestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
82
83
84
85
86
87
88
89
DCP
IW
DCP
PAL
H
SILT-SIZED PACKSTONE with clay
Light greenish gray
General Description: Skeletal components are dominantly planktonic foraminifers with minor benthic foraminifers. Faint bedding contacts reflect variations in grain size, from silt-size to fine- to medium sand-sized. Sorting is good. Concentrations of silt-sized pyrite associated with burrows are scattered throughout. Some larger burrows (1-2 cm) are identified as of the Taenidium ichnogenera.

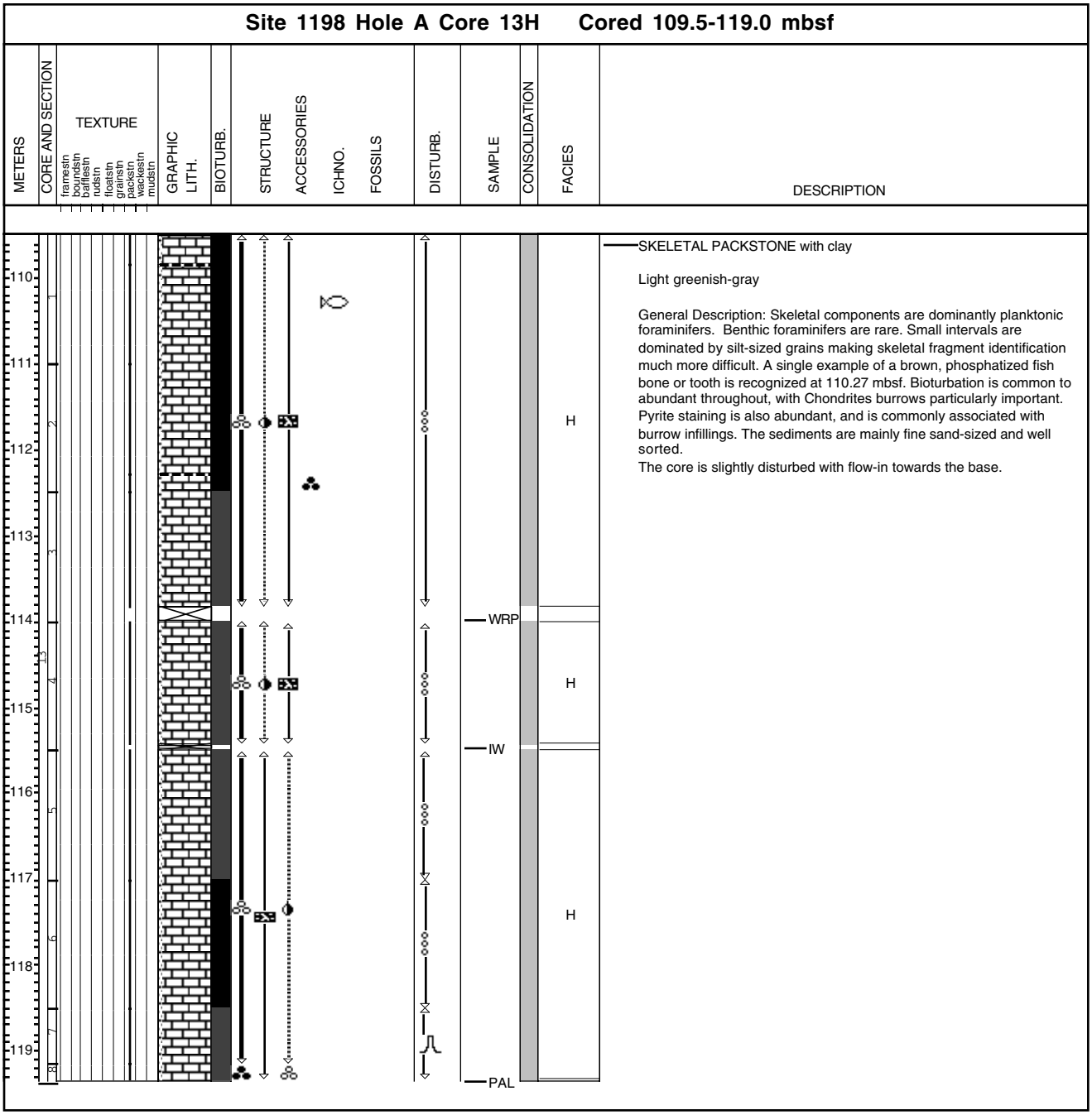
Core Photo


Site 1198 Hole A Core 11H Cored 90.5-100.0 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
batflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
91
92
93
94
95
96
97
98
99
100
IW
SS
PAL
H
H
Wash in
SKELETAL PACKSTONE with clay
Light greenish gray
General Description: Skeletal components are dominantly planktonic foraminifers. Benthic foraminifers are present. Bryozoan and crustacean fragments are rare. Sediments are fine to medium sand-sized and are well sorted. The sediments are heavily bioturbated.

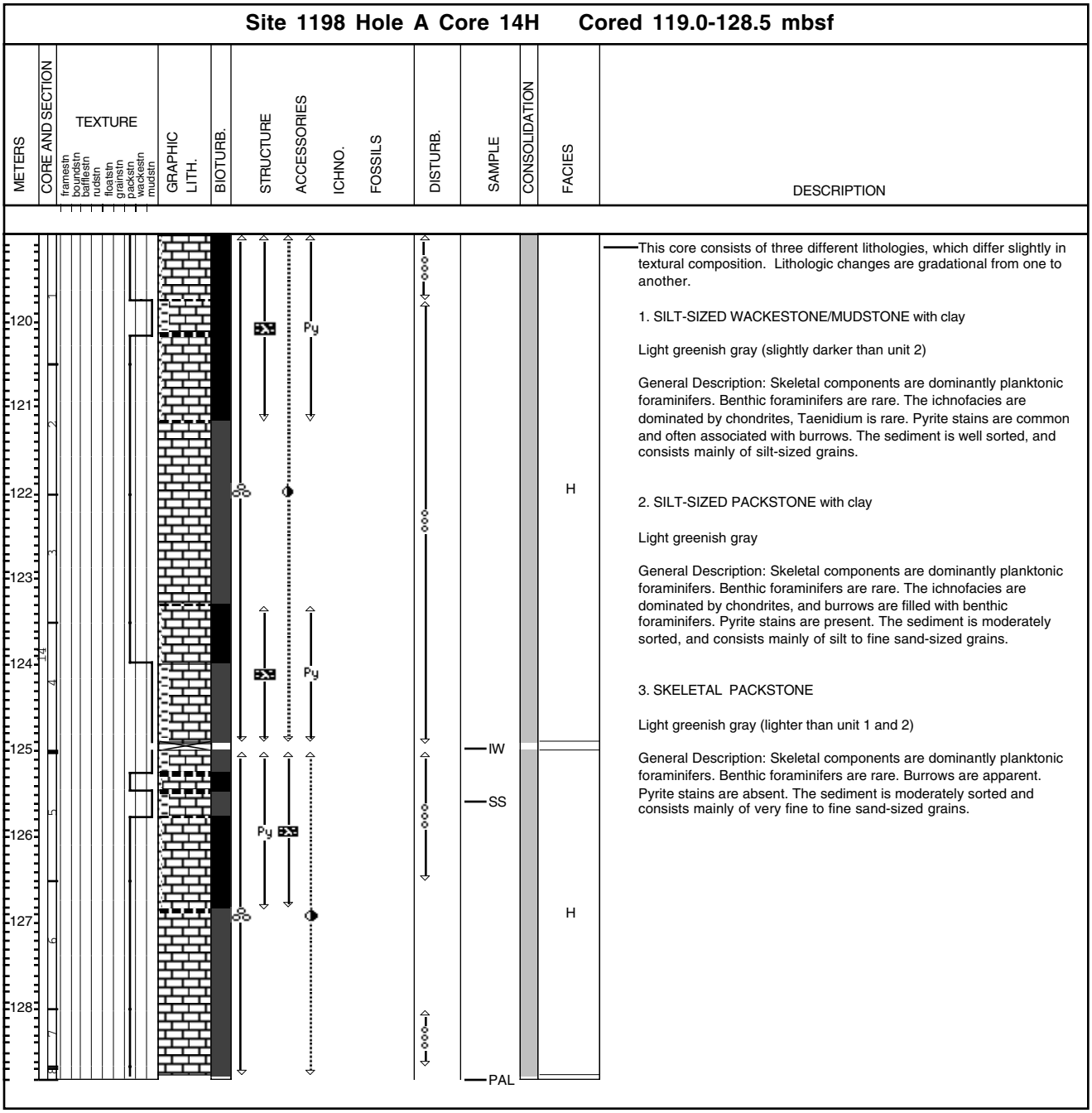
Core Photo


Site 1198 Hole A Core 12H Cored 100.0-109.5 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
batflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
101
102
103
104
105
106
107
108
109
Py
IW
PAL
H
H
SKELETAL PACKSTONE with clay
Light greenish gray
General Description: Skeletal components are dominantly planktonic foraminifers. Benthic foraminifers are rare. Pyrite staining is scattered throughout. The sediments are fine-grained and well sorted.
A core disturbance or flow-in and possibly early post-depositional slumping can be detected towards the base of the core.

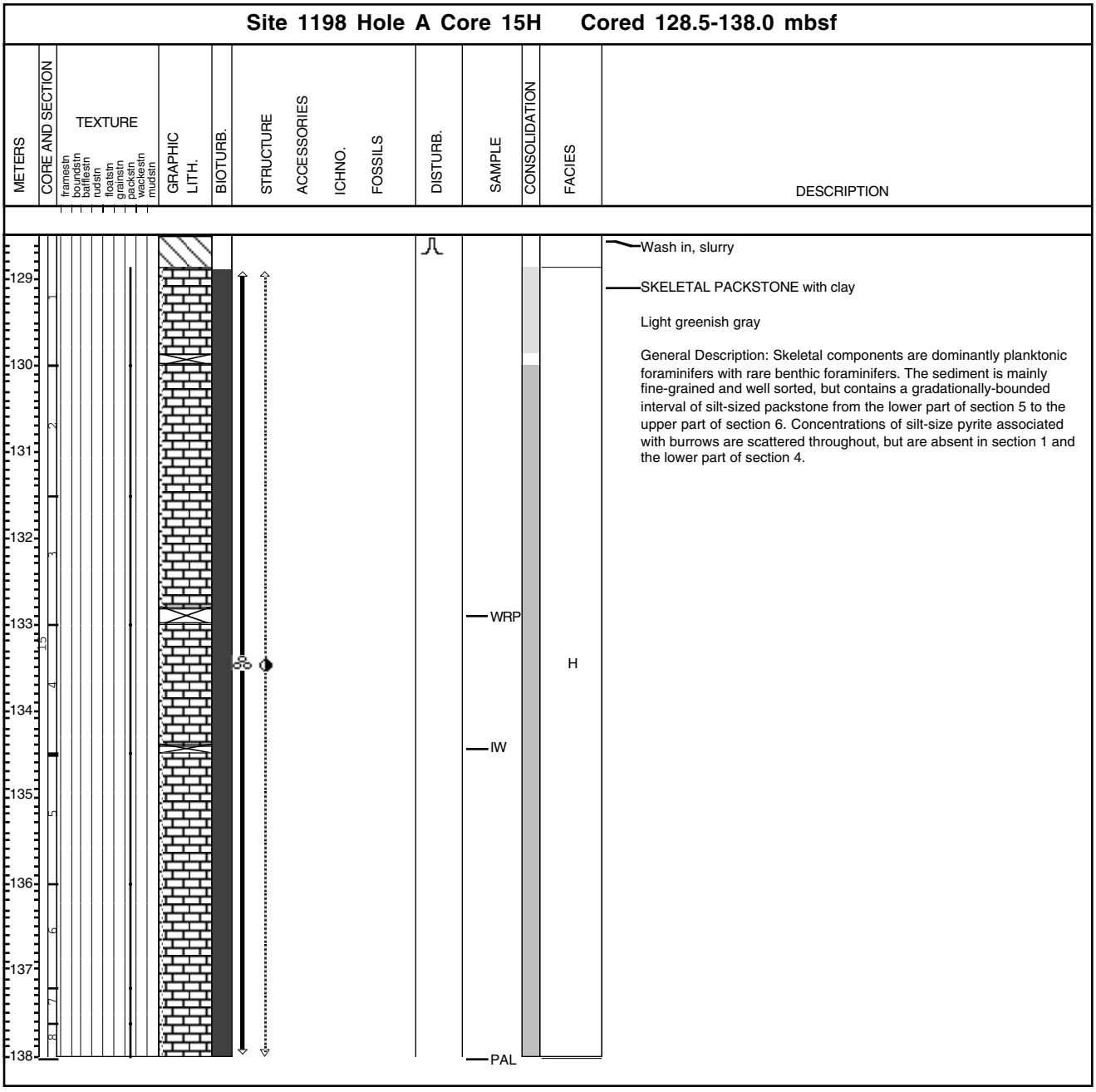
Core Photo


Site 1198 Hole A Core 13H Cored 109.5-119.0 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
bafflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
110
111
112
113
114
115
116
117
118
119
WRP
IW
PAL
H
H
H
SKELETAL PACKSTONE with clay
Light greenish-gray
General Description: Skeletal components are dominantly planktonic foraminifers. Benthic foraminifers are rare. Small intervals are dominated by silt-sized grains making skeletal fragment identification much more difficult. A single example of a brown, phosphatized fish bone or tooth is recognized at 110.27 mbsf. Bioturbation is common to abundant throughout, with Chondrites burrows particularly important. Pyrite staining is also abundant, and is commonly associated with burrow infillings. The sediments are mainly fine sand-sized and well sorted.
The core is slightly disturbed with flow-in towards the base.

Core Photo

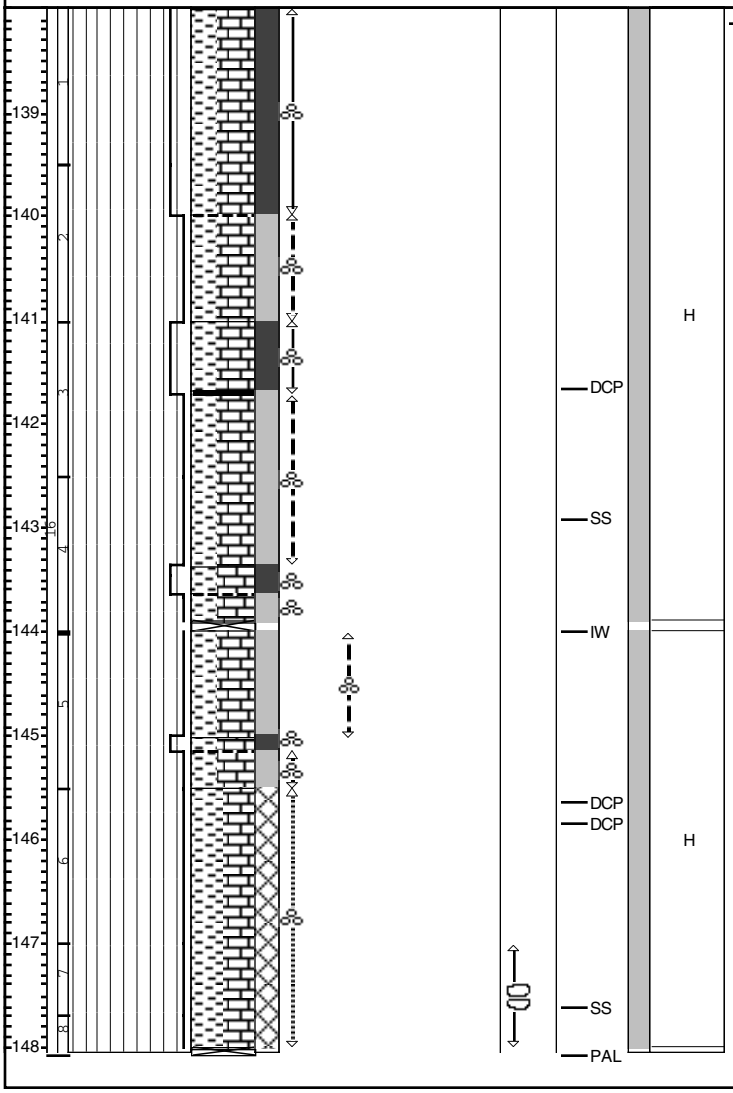

Site 1198 Hole A Core 14H Cored 119.0-128.5 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
120
121
122
123
124
125
126
127
128
Py
IW
SS
PAL
H
H
This core consists of three different lithologies, which differ slightly in textural composition. Lithologic changes are gradational from one to another.
1. SILT-SIZED WACKESTONE/MUDSTONE with clay
Light greenish gray (slightly darker than unit 2)
General Description: Skeletal components are dominantly planktonic foraminifers. Benthic foraminifers are rare. The ichnofacies are dominated by chondrites, Taenidium is rare. Pyrite stains are common and often associated with burrows. The sediment is well sorted, and consists mainly of silt-sized grains.
2. SILT-SIZED PACKSTONE with clay
Light greenish gray
General Description: Skeletal components are dominantly planktonic foraminifers. Benthic foraminifers are rare. The ichnofacies are dominated by chondrites, and burrows are filled with benthic foraminifers. Pyrite stains are present. The sediment is moderately sorted, and consists mainly of silt to fine sand-sized grains.
3. SKELETAL PACKSTONE
Light greenish gray (lighter than unit 1 and 2)
General Description: Skeletal components are dominantly planktonic foraminifers. Benthic foraminifers are rare. Burrows are apparent. Pyrite stains are absent. The sediment is moderately sorted and consists mainly of very fine to fine sand-sized grains.

Core Photo


Site 1198 Hole A Core 15H Cored 128.5-138.0 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
bafflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
129
130
131
132
133
134
135
136
137
138
WRP
IW
PAL
H
Wash in, slurry
SKELETAL PACKSTONE with clay
Light greenish gray
General Description: Skeletal components are dominantly planktonic foraminifers with rare benthic foraminifers. The sediment is mainly fine-grained and well sorted, but contains a gradationally-bounded interval of silt-sized packstone from the lower part of section 5 to the upper part of section 6. Concentrations of silt-size pyrite associated with burrows are scattered throughout, but are absent in section 1 and the lower part of section 4.

Core Photo

Site 1198 Hole A Core 16H Cored 138.0-147.5 mbsf



DESCRIPTION

This core consists of two lithological units, which differ slightly in their textural composition, and are distinguished from each other by gradational changes:

SILT-SIZED WACKESTONE with clay

Pale olive

General Description: The only skeletal components observed are planktonic foraminifers. Pyrite stains are abundant and are often associated with burrow infilling. The sediment is well sorted and consists mainly of silt-sized grains.

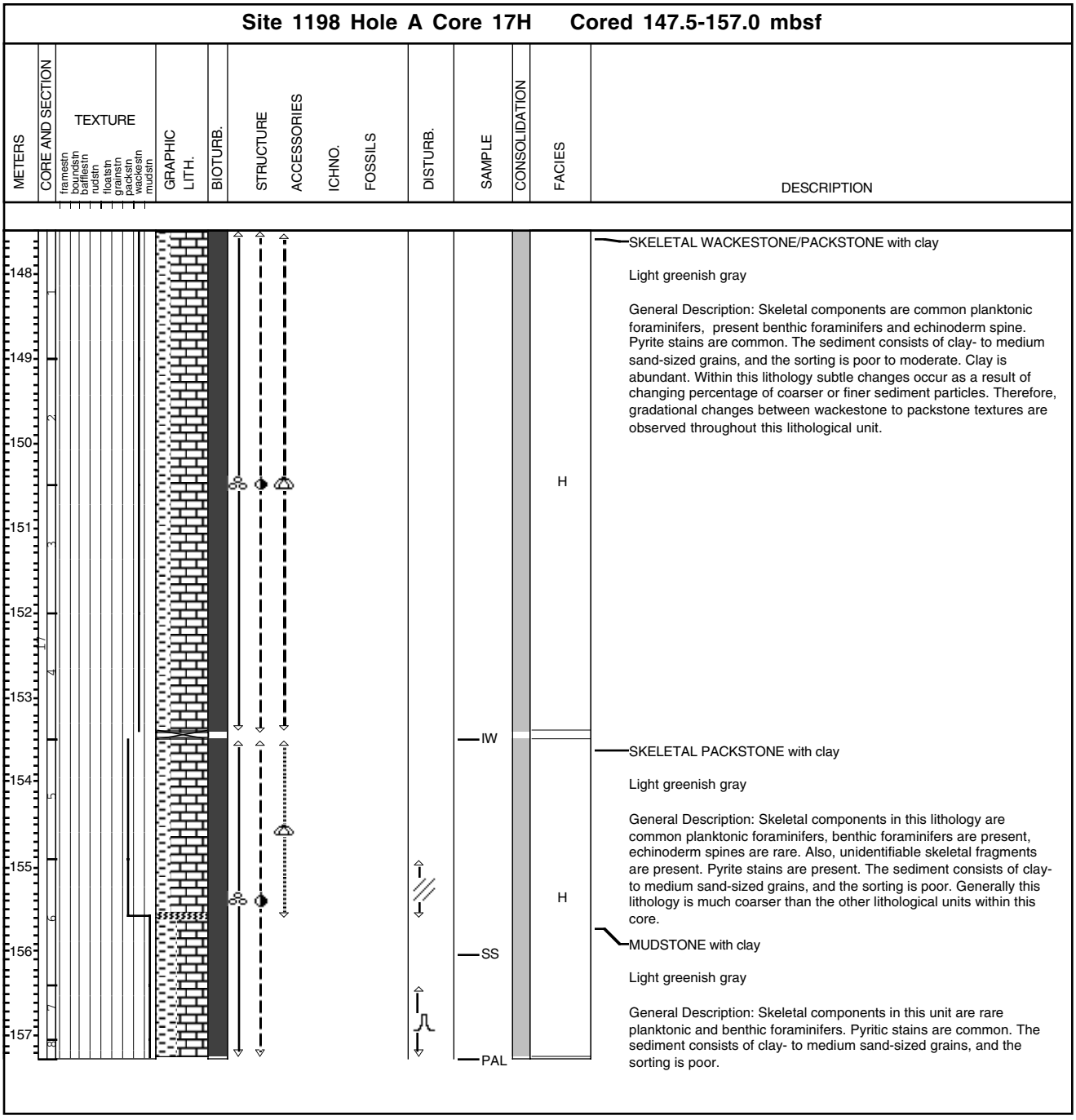
MUDSTONE with clay

Pale olive

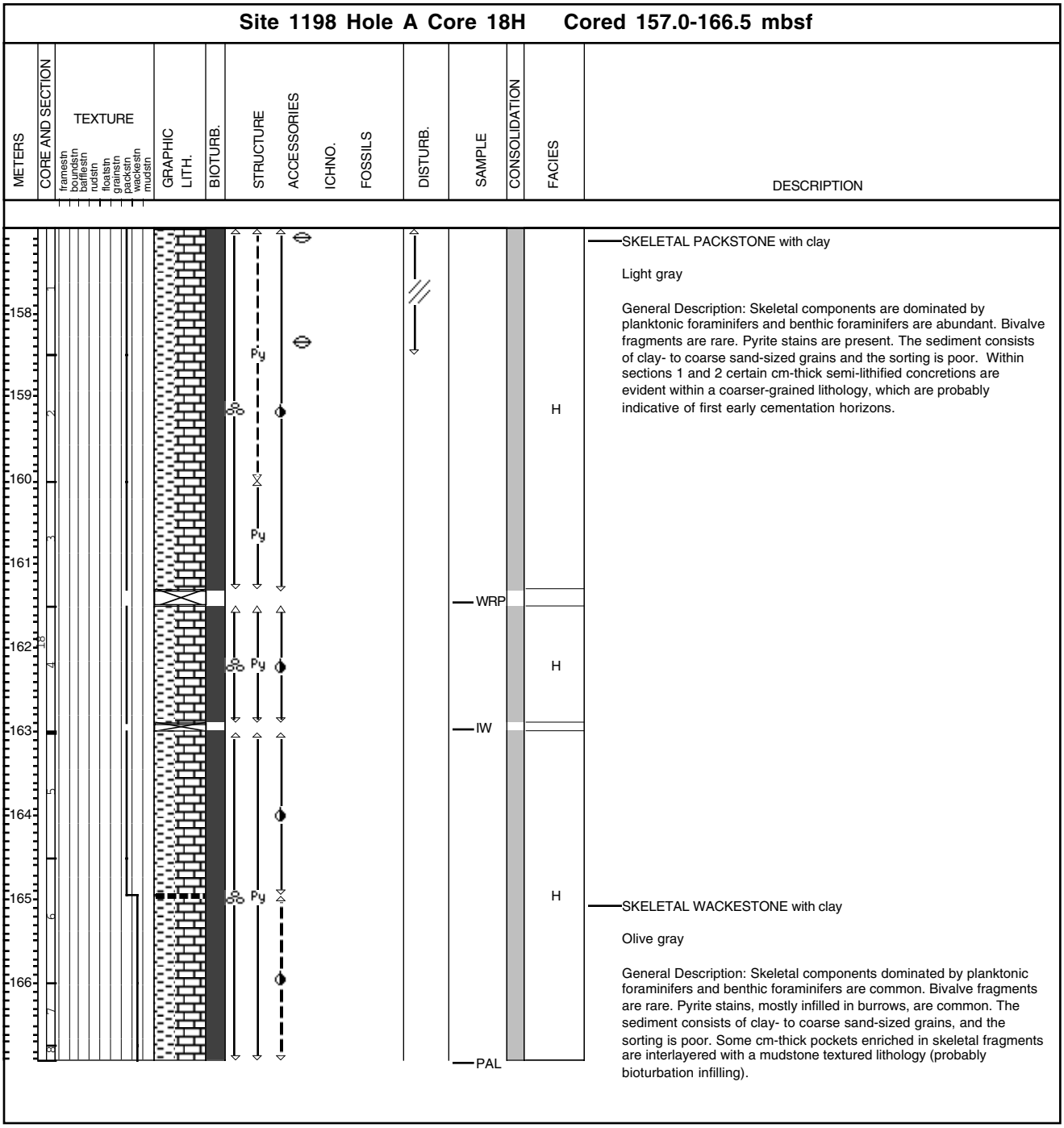
General Description: Planktonic foraminifers are present and are the only observed skeletal component. Pyrite stains are common and associated with burrow infilling. The sediment is moderately sorted, and consists mainly of clay-sized grains. The content of clay is high, and varies between 40% (upper 5 sections) and up to 50% (lower sections of the core).

Between 141.7-141.8 mbsf, a soft sediment pebble was observed. Between 145.6-145.7 mbsf, a drilling-induced mudclast was present. Additionally, there are three distinct thinner coarser-grained horizons that might be the remains of small-scale turbidites.

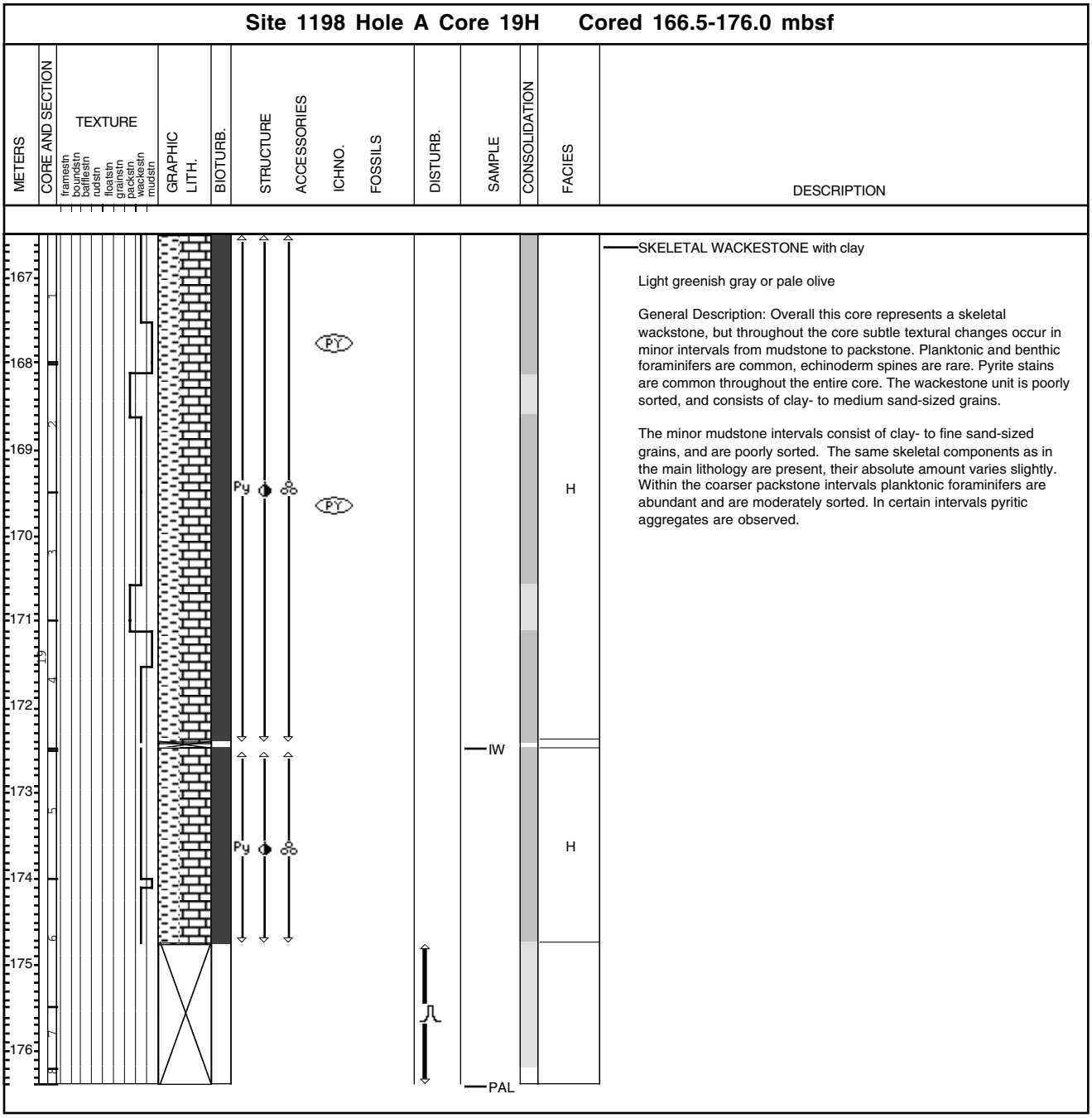
Core Photo


Site 1198 Hole A Core 17H Cored 147.5-157.0 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
batflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
148
149
150
151
152
153
154
155
156
157
1
2
3
4
5
6
7
CC
IW
SS
PAL
H
H
SKELETAL WACKESTONE/PACKSTONE with clay
Light greenish gray
General Description: Skeletal components are common planktonic foraminifers, present benthic foraminifers and echinoderm spine. Pyrite stains are common. The sediment consists of clay- to medium sand-sized grains, and the sorting is poor to moderate. Clay is abundant. Within this lithology subtle changes occur as a result of changing percentage of coarser or finer sediment particles. Therefore, gradational changes between wackestone to packstone textures are observed throughout this lithological unit.
SKELETAL PACKSTONE with clay
Light greenish gray
General Description: Skeletal components in this lithology are common planktonic foraminifers, benthic foraminifers are present, echinoderm spines are rare. Also, unidentifiable skeletal fragments are present. Pyrite stains are present. The sediment consists of clay- to medium sand-sized grains, and the sorting is poor. Generally this lithology is much coarser than the other lithological units within this core.
MUDSTONE with clay
Light greenish gray
General Description: Skeletal components in this unit are rare planktonic and benthic foraminifers. Pyritic stains are common. The sediment consists of clay- to medium sand-sized grains, and the sorting is poor.

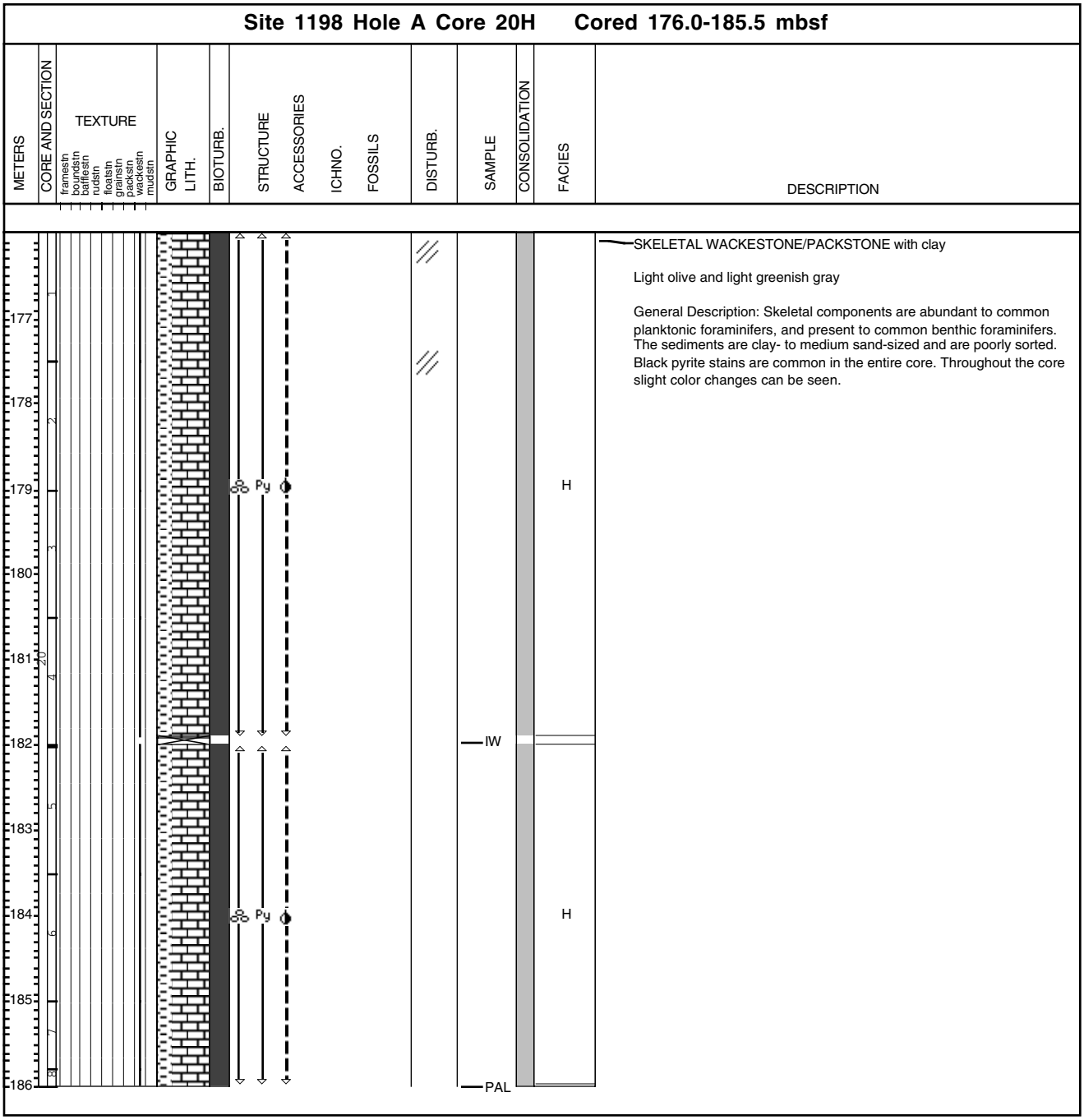
Core Photo


Site 1198 Hole A Core 18H Cored 157.0-166.5 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
batflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
158
159
160
161
162
163
164
165
166
Py
WRP
IW
PAL
H
SKELETAL PACKSTONE with clay
Light gray
General Description: Skeletal components are dominated by planktonic foraminifers and benthic foraminifers are abundant. Bivalve fragments are rare. Pyrite stains are present. The sediment consists of clay- to coarse sand-sized grains and the sorting is poor. Within sections 1 and 2 certain cm-thick semi-lithified concretions are evident within a coarser-grained lithology, which are probably indicative of first early cementation horizons.
SKELETAL WACKESTONE with clay
Olive gray
General Description: Skeletal components dominated by planktonic foraminifers and benthic foraminifers are common. Bivalve fragments are rare. Pyrite stains, mostly infilled in burrows, are common. The sediment consists of clay- to coarse sand-sized grains, and the sorting is poor. Some cm-thick pockets enriched in skeletal fragments are interlayered with a mudstone textured lithology (probably bioturbation infilling).

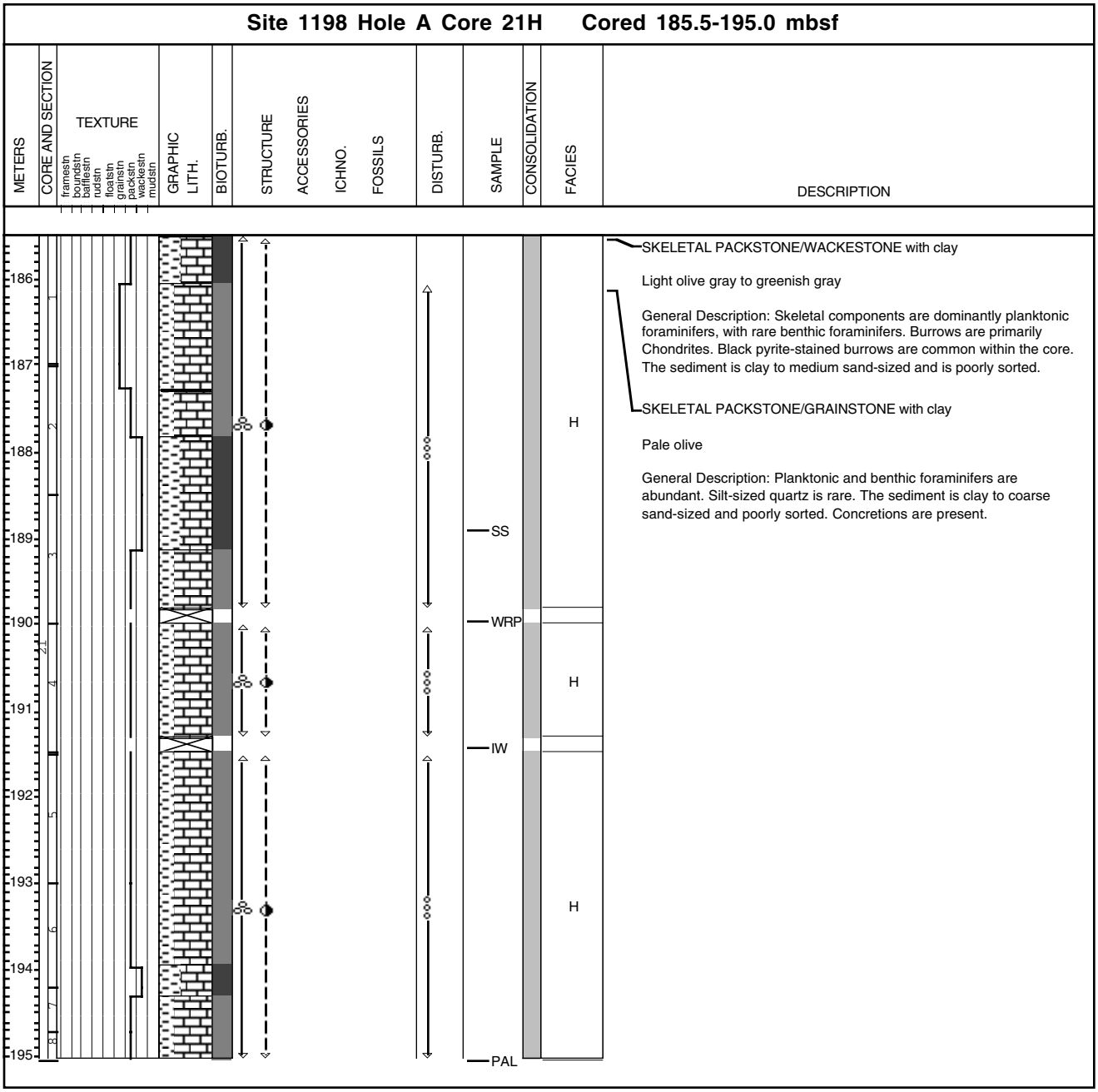
Core Photo


Site 1198 Hole A Core 19H Cored 166.5-176.0 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
167
168
169
170
171
172
173
174
175
176
19
Py
PY
IW
PAL
H
H
SKELETAL WACKESTONE with clay
Light greenish gray or pale olive
General Description: Overall this core represents a skeletal wackstone, but throughout the core subtle textural changes occur in minor intervals from mudstone to packstone. Planktonic and benthic foraminifers are common, echinoderm spines are rare. Pyrite stains are common throughout the entire core. The wackestone unit is poorly sorted, and consists of clay- to medium sand-sized grains.
The minor mudstone intervals consist of clay- to fine sand-sized grains, and are poorly sorted. The same skeletal components as in the main lithology are present, their absolute amount varies slightly. Within the coarser packstone intervals planktonic foraminifers are abundant and are moderately sorted. In certain intervals pyritic aggregates are observed.

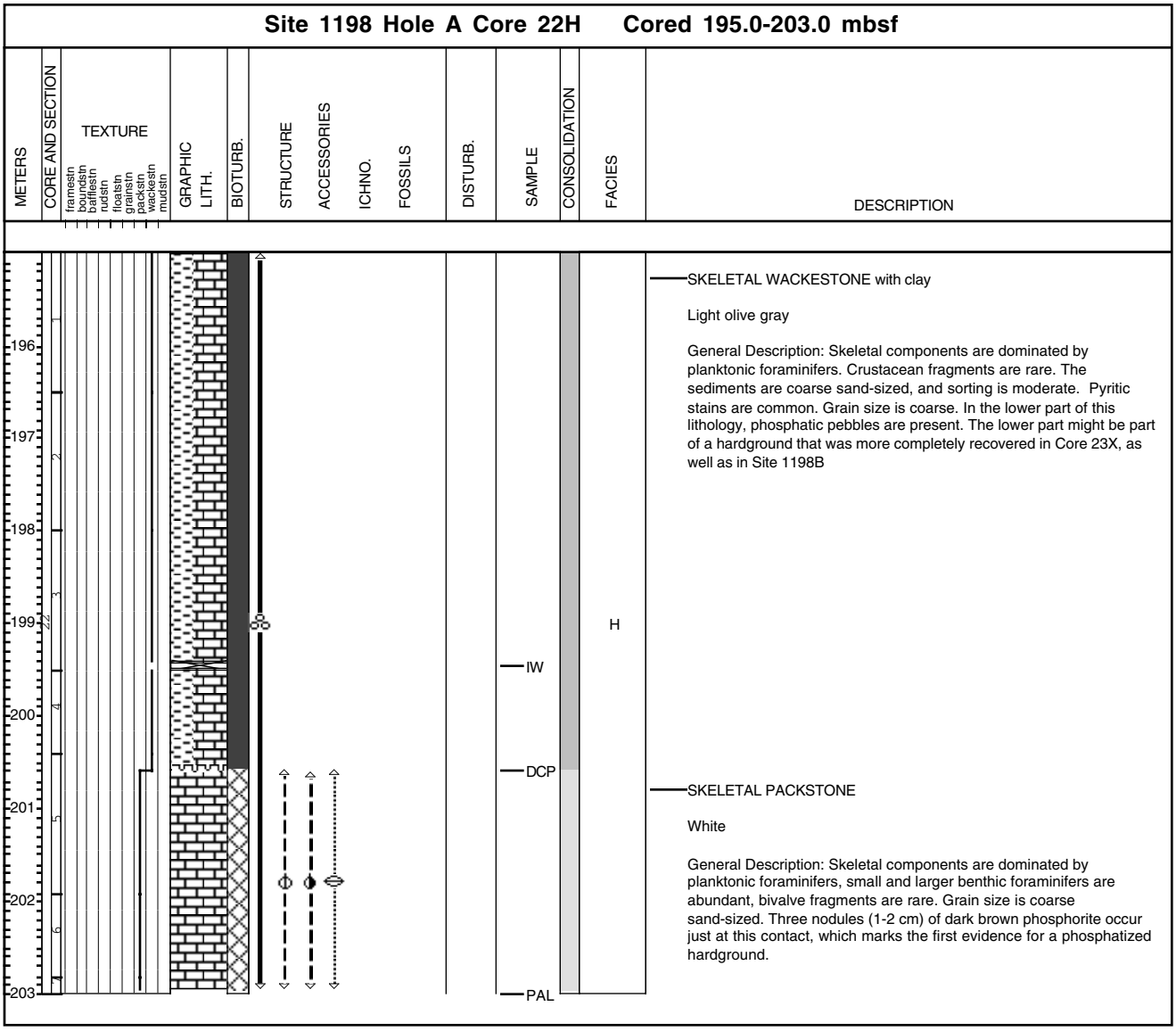
Core Photo


Site 1198 Hole A Core 20H Cored 176.0-185.5 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
177
178
179
180
181
182
183
184
185
186
Py
Py
H
H
IW
PAL
SKELETAL WACKESTONE/PACKSTONE with clay
Light olive and light greenish gray
General Description: Skeletal components are abundant to common planktonic foraminifers, and present to common benthic foraminifers. The sediments are clay- to medium sand-sized and are poorly sorted. Black pyrite stains are common in the entire core. Throughout the core slight color changes can be seen.

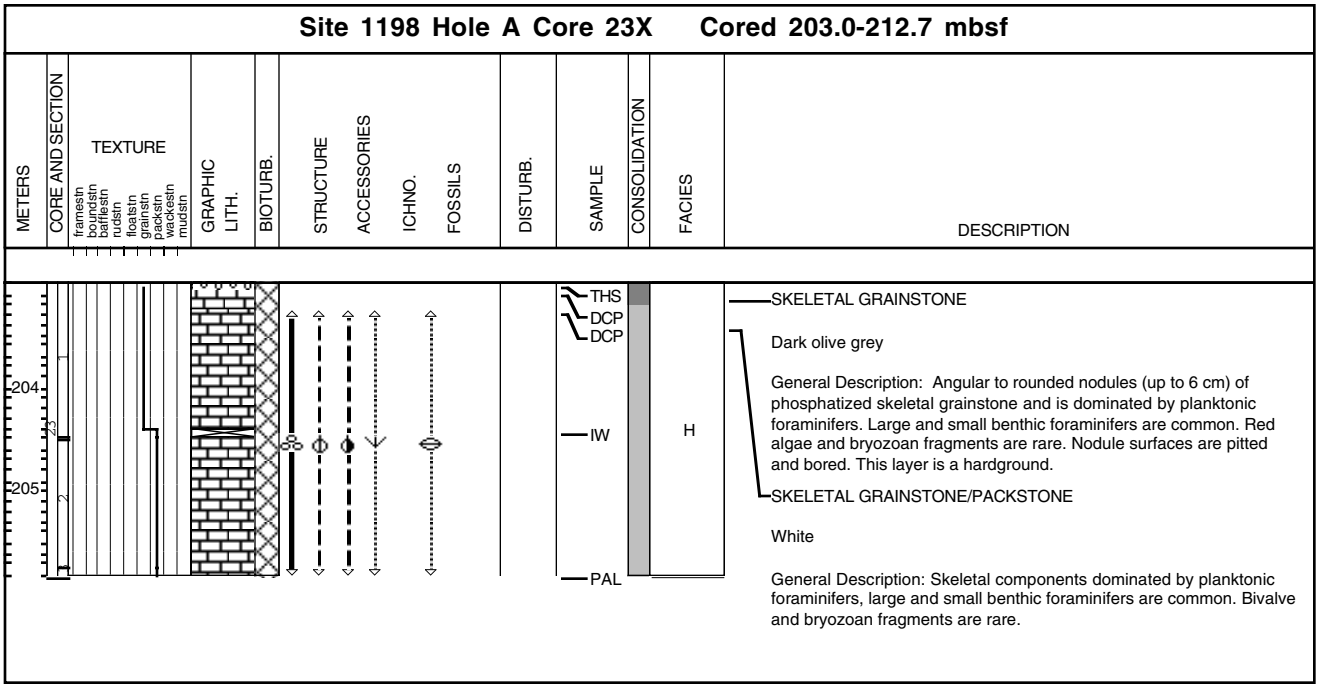
Core Photo


Site 1198 Hole A Core 21H Cored 185.5-195.0 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
bafflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
186
187
188
189
190
191
192
193
194
195
SS
WRP
IW
PAL
H
H
H
SKELETAL PACKSTONE/WACKESTONE with clay
Light olive gray to greenish gray
General Description: Skeletal components are dominantly planktonic foraminifers, with rare benthic foraminifers. Burrows are primarily Chondrites. Black pyrite-stained burrows are common within the core. The sediment is clay to medium sand-sized and is poorly sorted.
SKELETAL PACKSTONE/GRAINSTONE with clay
Pale olive
General Description: Planktonic and benthic foraminifers are abundant. Silt-sized quartz is rare. The sediment is clay to coarse sand-sized and poorly sorted. Concretions are present.

Core Photo

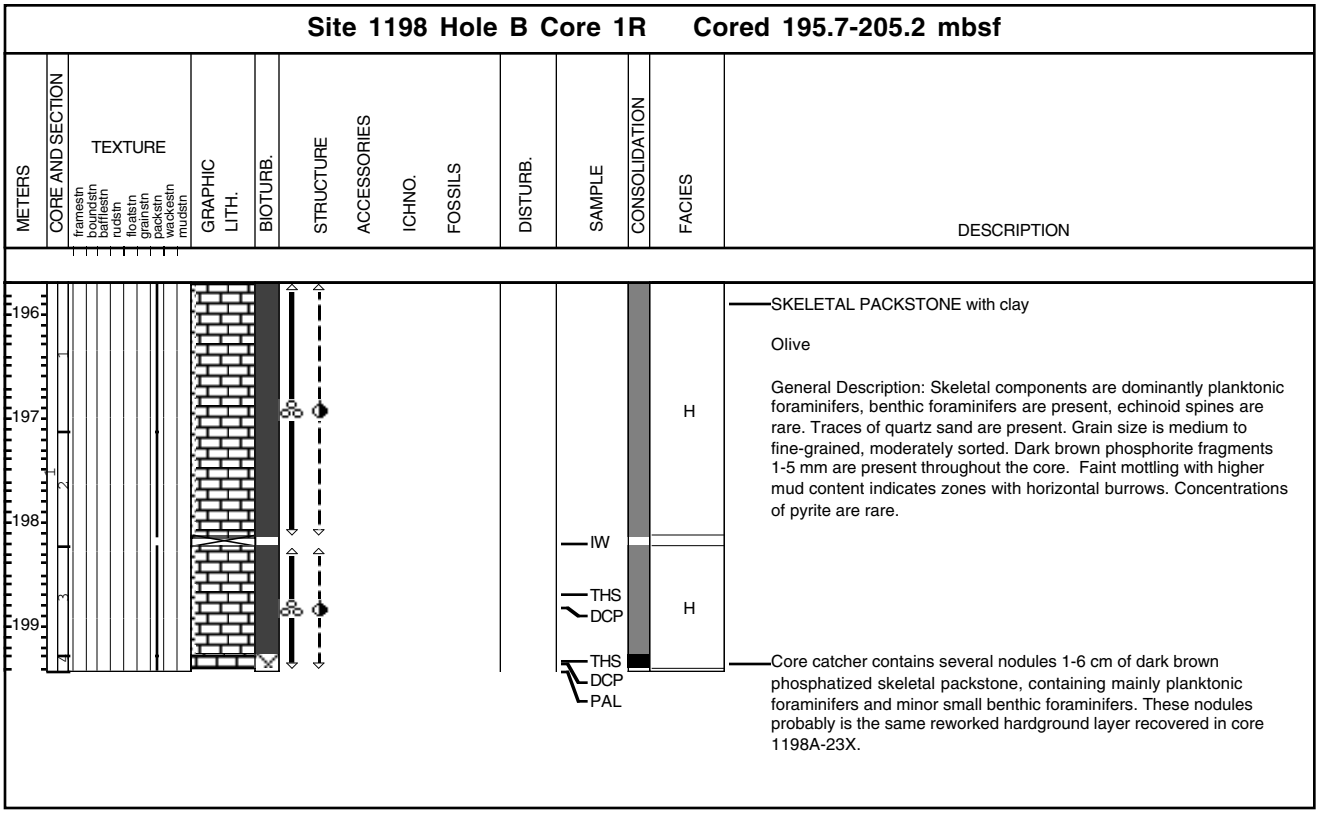

Site 1198 Hole A Core 22H Cored 195.0-203.0 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
bafflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
196
197
198
199
200
201
202
203
22
1
2
3
4
5
6
7
IW
DCP
PAL
H
SKELETAL WACKESTONE with clay
Light olive gray
General Description: Skeletal components are dominated by planktonic foraminifers. Crustacean fragments are rare. The sediments are coarse sand-sized, and sorting is moderate. Pyritic stains are common. Grain size is coarse. In the lower part of this lithology, phosphatic pebbles are present. The lower part might be part of a hardground that was more completely recovered in Core 23X, as well as in Site 1198B
SKELETAL PACKSTONE
White
General Description: Skeletal components are dominated by planktonic foraminifers, small and larger benthic foraminifers are abundant, bivalve fragments are rare. Grain size is coarse sand-sized. Three nodules (1-2 cm) of dark brown phosphorite occur just at this contact, which marks the first evidence for a phosphatized hardground.

Core Photo



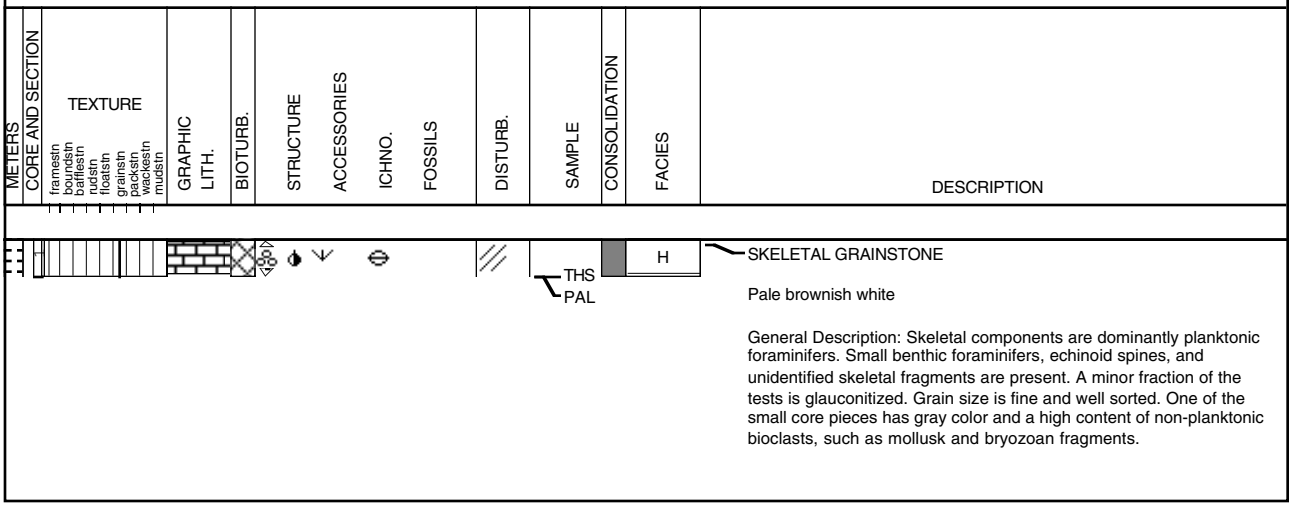
1198A-24X NO RECOVERY
1198A-25X NO RECOVERY
1198A-26X NO RECOVERY
1198A-27X NO RECOVERY

Core Photo


Site 1198 Hole B Core 1R Cored 195.7-205.2 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
bafflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
196
197
198
199
IW
THS
DCP
THS
DCP
PAL
H
H
SKELETAL PACKSTONE with clay
Olive
General Description: Skeletal components are dominantly planktonic foraminifers, benthic foraminifers are present, echinoid spines are rare. Traces of quartz sand are present. Grain size is medium to fine-grained, moderately sorted. Dark brown phosphorite fragments 1-5 mm are present throughout the core. Faint mottling with higher mud content indicates zones with horizontal burrows. Concentrations of pyrite are rare.
Core catcher contains several nodules 1-6 cm of dark brown phosphatized skeletal packstone, containing mainly planktonic foraminifers and minor small benthic foraminifers. These nodules probably is the same reworked hardground layer recovered in core 1198A-23X.

Core Photo

Site 1198 Hole B Core 2R Cored 205.2-214.8 mbsf



Core Photo

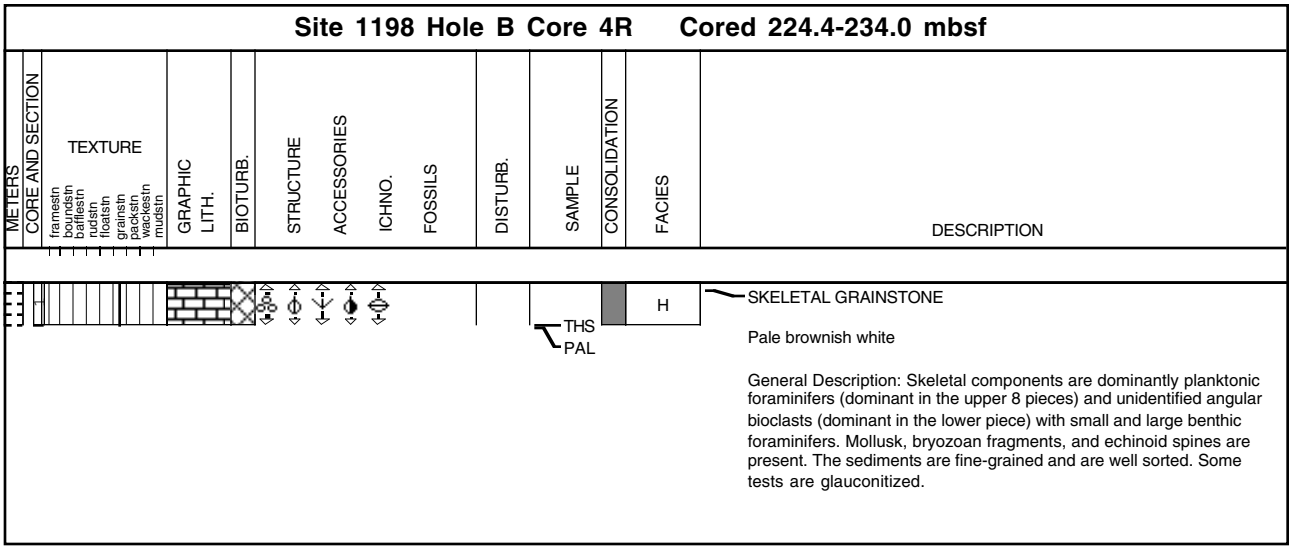
Site 1198 Hole B Core 3R Cored 214.8-224.4 mbsf

METERS	CORE AND SECTION	TEXTURE (framestn, boundstn, baffiestn, rudstn, floatstn, grainstn, packstn, wackestn, mudstn)	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	CONSOLIDATION	FACIES	DESCRIPTION
										PAL			SKELETAL GRAINSTONE

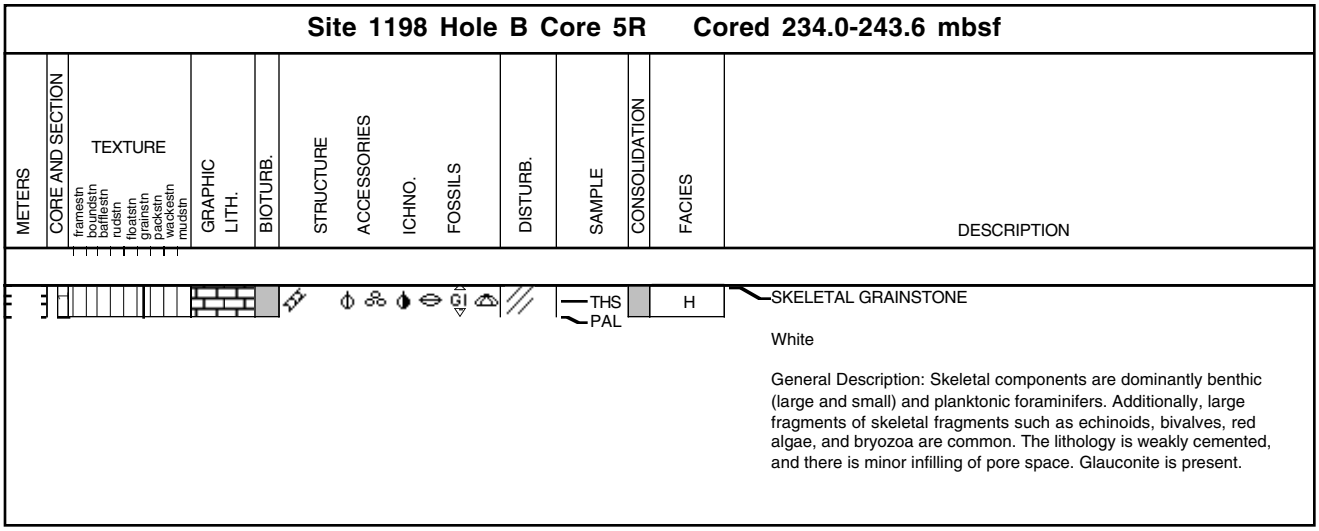
Pale brownish white

General Description: Skeletal components are dominantly planktonic foraminifers and unidentified angular skeletal fragments with minor small benthic foraminifers and echinoid spines. Sediments are fine to medium sand-sized and are moderately sorted.

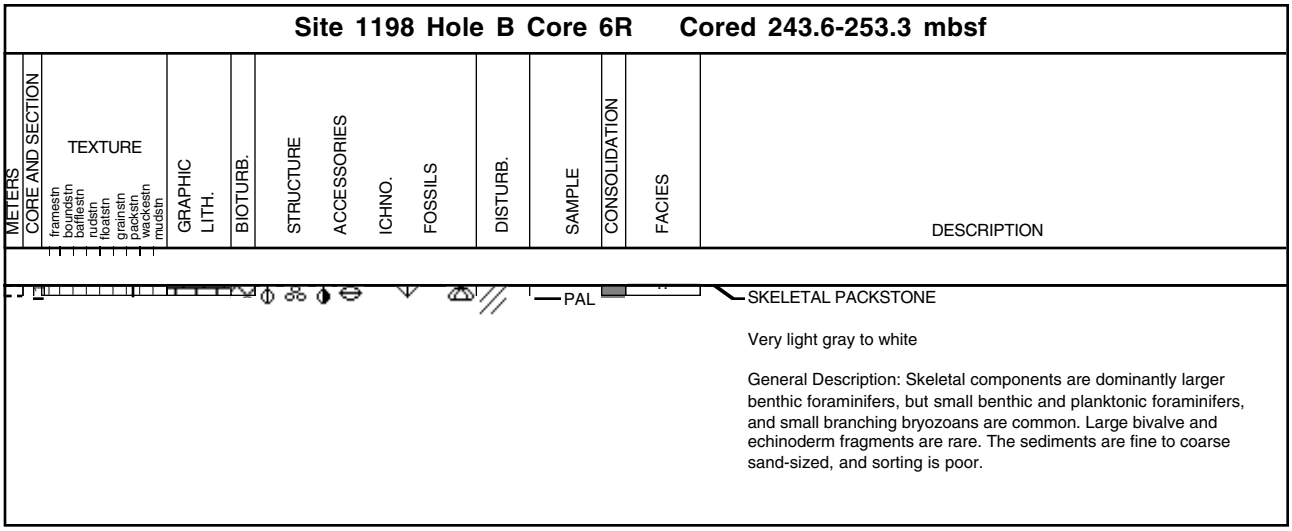
Core Photo


Site 1198 Hole B Core 4R Cored 224.4-234.0 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
THS
PAL
H
SKELETAL GRAINSTONE
Pale brownish white
General Description: Skeletal components are dominantly planktonic foraminifers (dominant in the upper 8 pieces) and unidentified angular bioclasts (dominant in the lower piece) with small and large benthic foraminifers. Mollusk, bryozoan fragments, and echinoid spines are present. The sediments are fine-grained and are well sorted. Some tests are glauconitized.

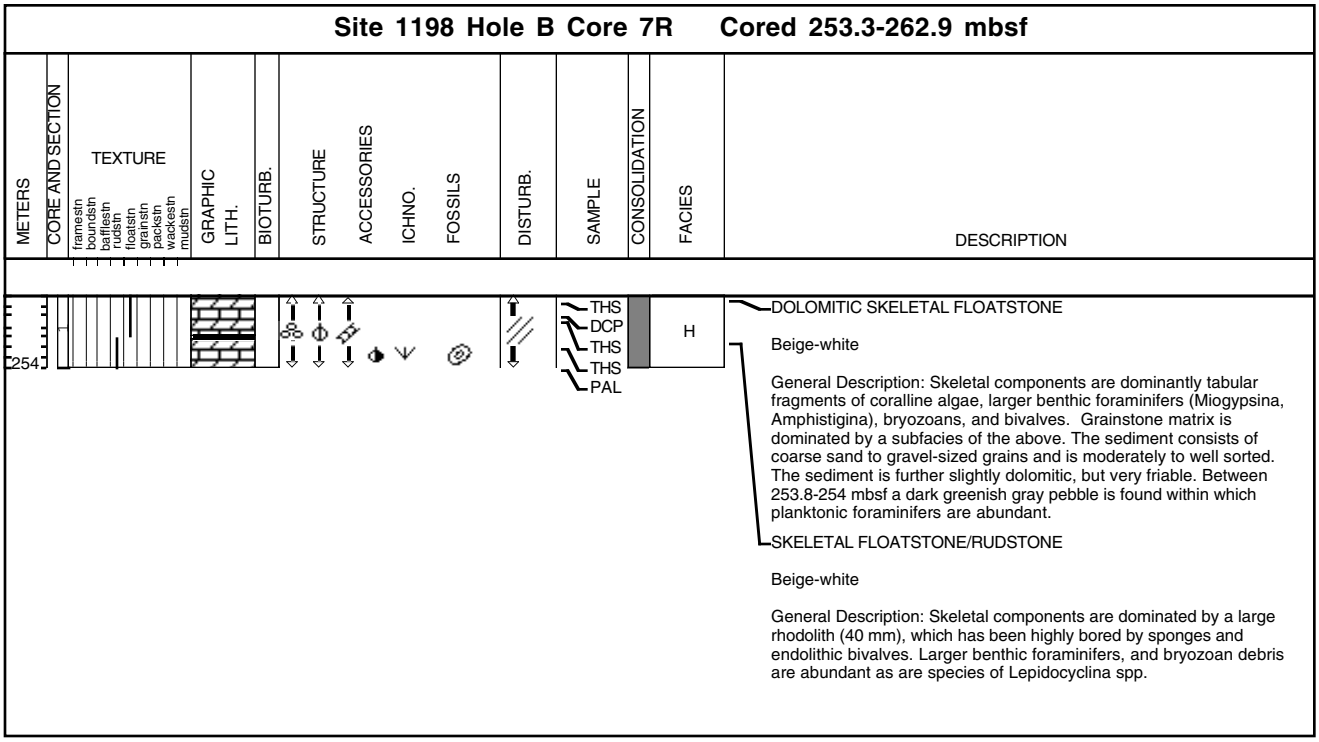
Core Photo


Site 1198 Hole B Core 5R Cored 234.0-243.6 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
THS
PAL
H
SKELETAL GRAINSTONE
White
General Description: Skeletal components are dominantly benthic (large and small) and planktonic foraminifers. Additionally, large fragments of skeletal fragments such as echinoids, bivalves, red algae, and bryozoa are common. The lithology is weakly cemented, and there is minor infilling of pore space. Glauconite is present.

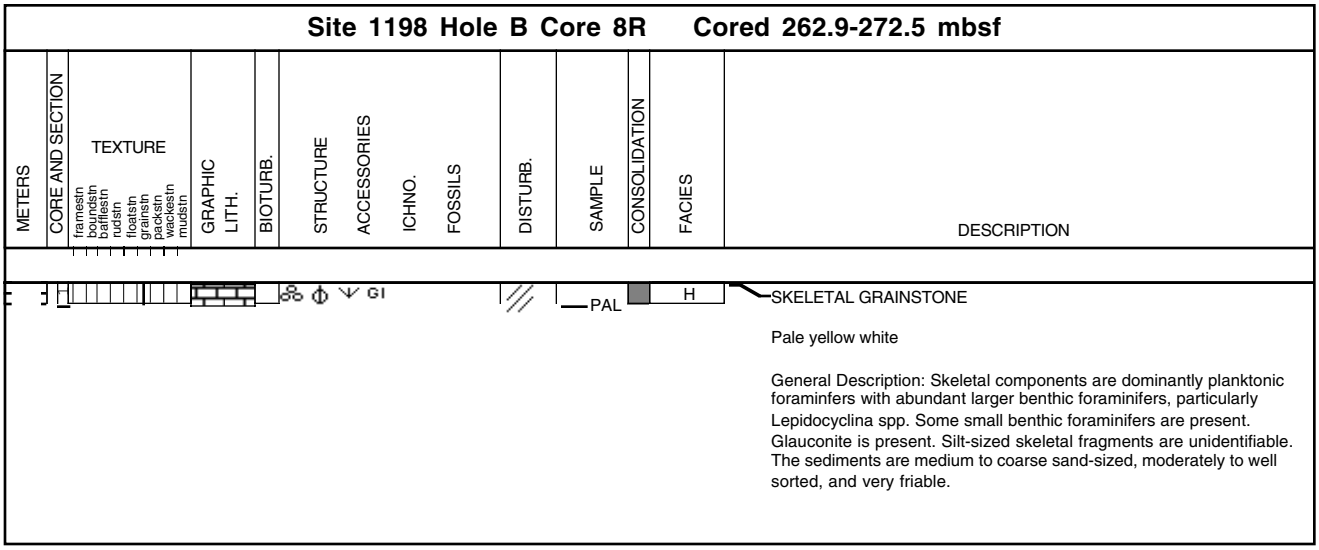
Core Photo


Site 1198 Hole B Core 6R Cored 243.6-253.3 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
PAL
SKELETAL PACKSTONE
Very light gray to white
General Description: Skeletal components are dominantly larger benthic foraminifers, but small benthic and planktonic foraminifers, and small branching bryozoans are common. Large bivalve and echinoderm fragments are rare. The sediments are fine to coarse sand-sized, and sorting is poor.

Core Photo

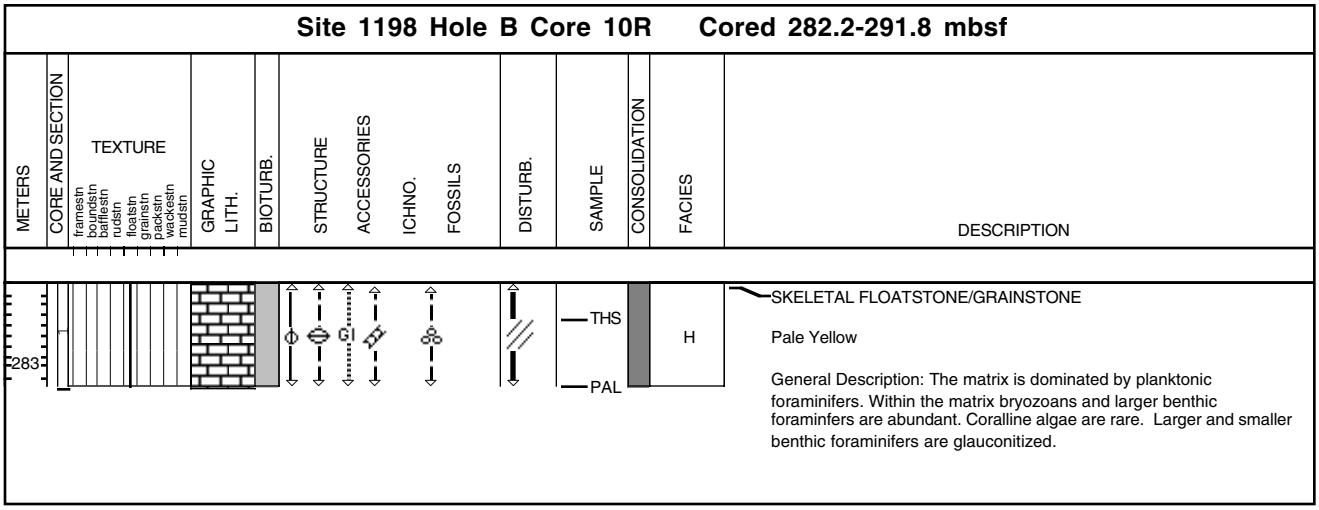

Site 1198 Hole B Core 7R Cored 253.3-262.9 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
254
THS
DCP
THS
THS
PAL
H
DOLOMITIC SKELETAL FLOATSTONE
Beige-white
General Description: Skeletal components are dominantly tabular fragments of coralline algae, larger benthic foraminifers (Miogypsina, Amphistigina), bryozoans, and bivalves. Grainstone matrix is dominated by a subfacies of the above. The sediment consists of coarse sand to gravel-sized grains and is moderately to well sorted. The sediment is further slightly dolomitic, but very friable. Between 253.8-254 mbsf a dark greenish gray pebble is found within which planktonic foraminifers are abundant.
SKELETAL FLOATSTONE/RUDSTONE
Beige-white
General Description: Skeletal components are dominated by a large rhodolith (40 mm), which has been highly bored by sponges and endolithic bivalves. Larger benthic foraminifers, and bryozoan debris are abundant as are species of Lepidocyclina spp.

Core Photo

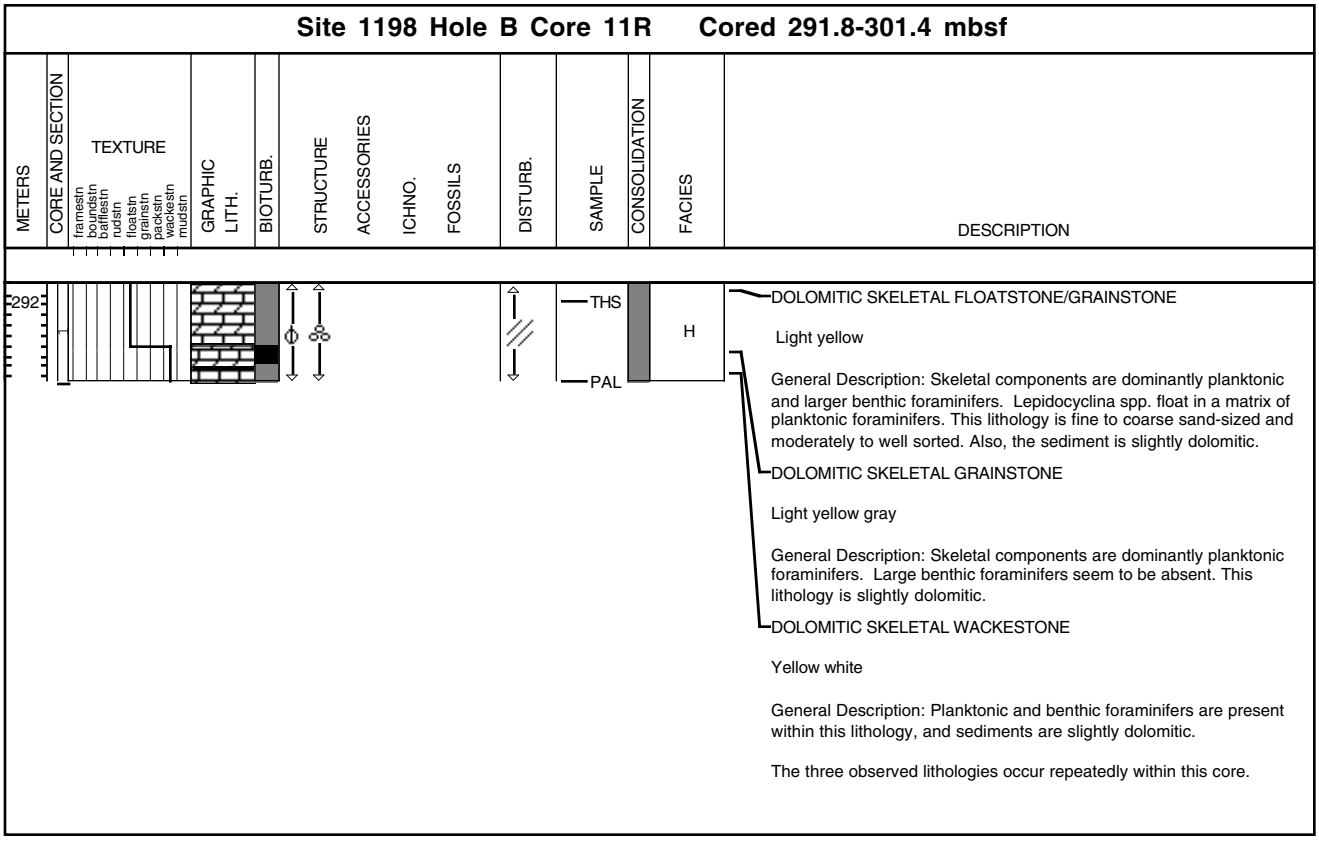


1198B-9R NO RECOVERY

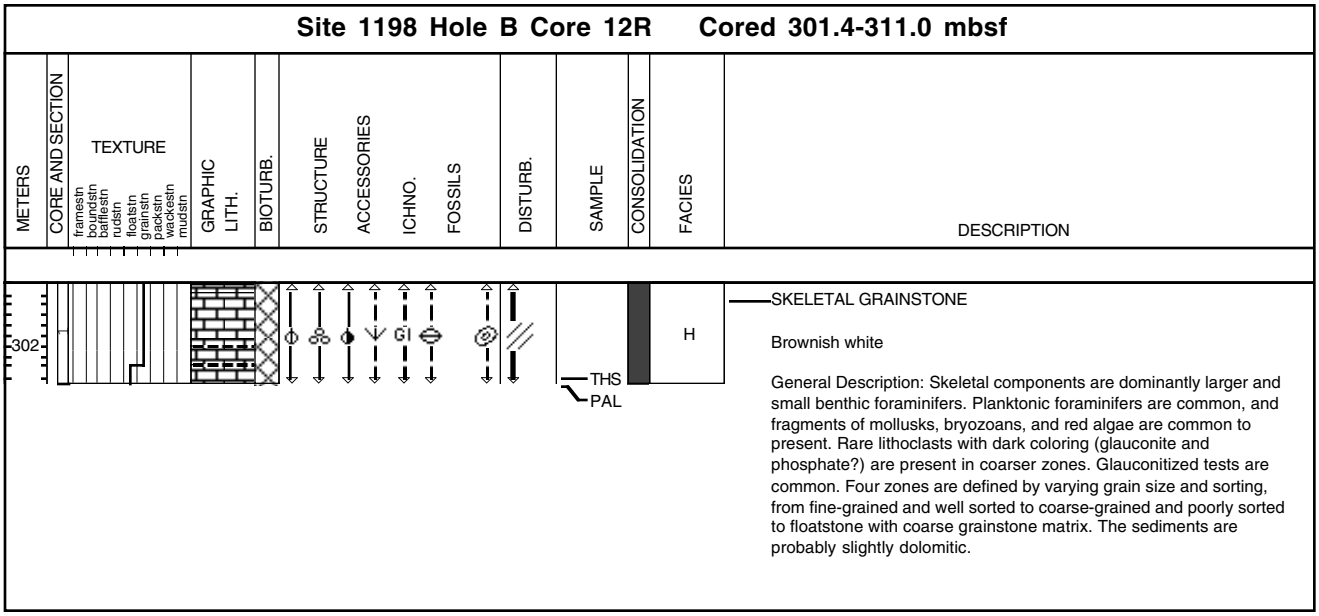
Core Photo


Site 1198 Hole B Core 10R Cored 282.2-291.8 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
283
THS
PAL
H
SKELETAL FLOATSTONE/GRAINSTONE
Pale Yellow
General Description: The matrix is dominated by planktonic foraminifers. Within the matrix bryozoans and larger benthic foraminfers are abundant. Coralline algae are rare. Larger and smaller benthic foraminifers are glauconitized.

Core Photo


Site 1198 Hole B Core 11R Cored 291.8-301.4 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
bafflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
292
THS
PAL
H
DOLOMITIC SKELETAL FLOATSTONE/GRAINSTONE
Light yellow
General Description: Skeletal components are dominantly planktonic and larger benthic foraminifers. Lepidocyclina spp. float in a matrix of planktonic foraminifers. This lithology is fine to coarse sand-sized and moderately to well sorted. Also, the sediment is slightly dolomitic.
DOLOMITIC SKELETAL GRAINSTONE
Light yellow gray
General Description: Skeletal components are dominantly planktonic foraminifers. Large benthic foraminifers seem to be absent. This lithology is slightly dolomitic.
DOLOMITIC SKELETAL WACKESTONE
Yellow white
General Description: Planktonic and benthic foraminifers are present within this lithology, and sediments are slightly dolomitic.
The three observed lithologies occur repeatedly within this core.

Core Photo



1198B-13R ENTIRE CORE TO PALEONTOLOGISTS
1198B-14R ENTIRE CORE TO PALEONTOLOGISTS

Core Photo

Site 1198 Hole B Core 15R Cored 330.3-339.9 mbsf

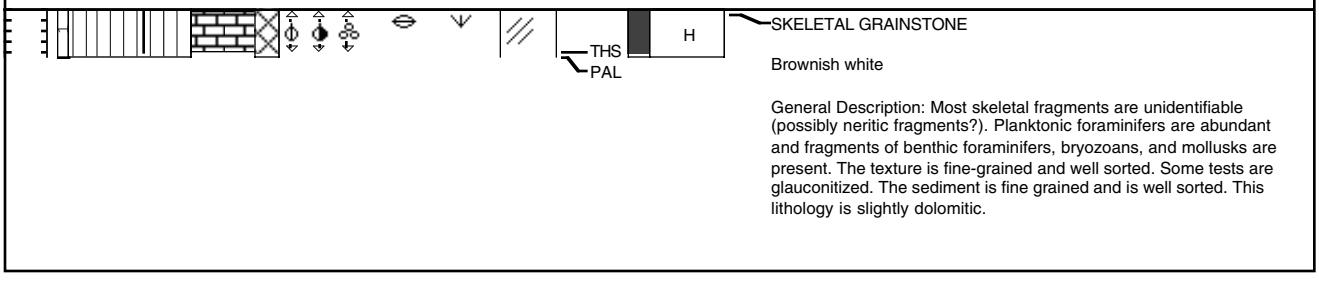
METERS	CORE AND SECTION	TEXTURE (framestn, boundstn, baffllestn, rudstn, floatstn, grainstn, packstn, wackestn, mudstn)	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	CONSOLIDATION	FACIES	DESCRIPTION
								Gl		PAL		H	SKELETAL GRAINSTONE

Brownish white

General Description: Skeletal components are dominantly planktonic foraminifers. However, most skeletal fragments are unidentified due to the small grain size. However, fragments of benthic foraminifers, bryozoans, and mollusks are present. Some tests are glauconized. The sediments are fine-grained and are well sorted. The sediment are slightly dolomitic.

Core Photo

Site 1198 Hole B Core 16R Cored 339.9-349.5 mbsf

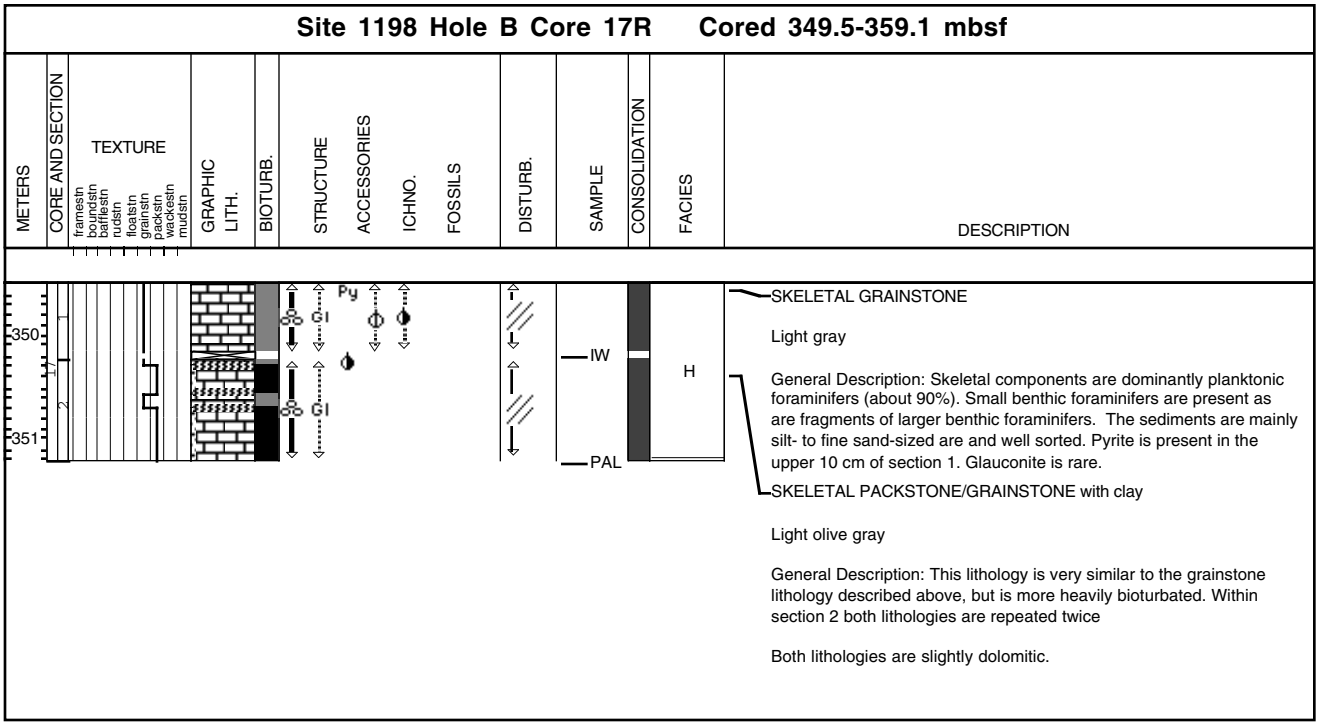


SKELETAL GRAINSTONE

Brownish white

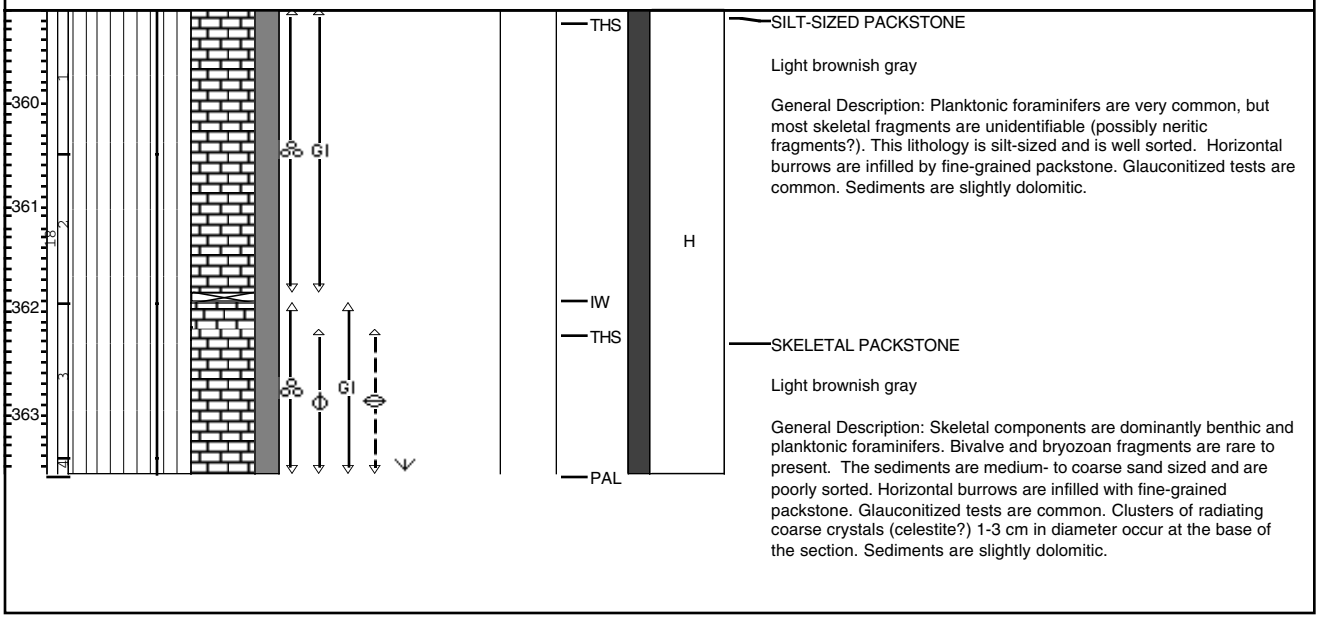
General Description: Most skeletal fragments are unidentifiable (possibly neritic fragments?). Planktonic foraminifers are abundant and fragments of benthic foraminifers, bryozoans, and mollusks are present. The texture is fine-grained and well sorted. Some tests are glauconitized. The sediment is fine grained and is well sorted. This lithology is slightly dolomitic.

Core Photo


Site 1198 Hole B Core 17R Cored 349.5-359.1 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
350
351
1
2
Py
Gl
Gl
IW
PAL
H
SKELETAL GRAINSTONE
Light gray
General Description: Skeletal components are dominantly planktonic foraminifers (about 90%). Small benthic foraminifers are present as are fragments of larger benthic foraminifers. The sediments are mainly silt- to fine sand-sized are and well sorted. Pyrite is present in the upper 10 cm of section 1. Glauconite is rare.
SKELETAL PACKSTONE/GRAINSTONE with clay
Light olive gray
General Description: This lithology is very similar to the grainstone lithology described above, but is more heavily bioturbated. Within section 2 both lithologies are repeated twice
Both lithologies are slightly dolomitic.

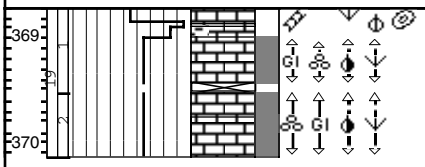
Core Photo

Site 1198 Hole B Core 18R Cored 359.1-368.7 mbsf



Core Photo

Site 1198 Hole B Core 19R Cored 368.7-378.3 mbsf



SKELETAL FLOATSTONE

White

General Description: The skeletal components are dominantly rhodoliths and algal fragments. Bryozoan fragments and large benthic foraminifers are present. The grain size ranges from fine sand to pebble size. The sediments are poorly to moderately sorted.

This lithology might be artificially dispalced by the drilling process!

SKELETAL WACKESTONE/PACKSTONE with clay

Dark greenish gray

General Description: Planktonic and benthic foraminifers are present, coralline fragments are present, also one rhodolith is present in the upper part. Glauconite is common, whereas coarser (<1 cm) phosphatic gravel is rare. The sediments are clay- to pebble-sized, and poorly sorted.

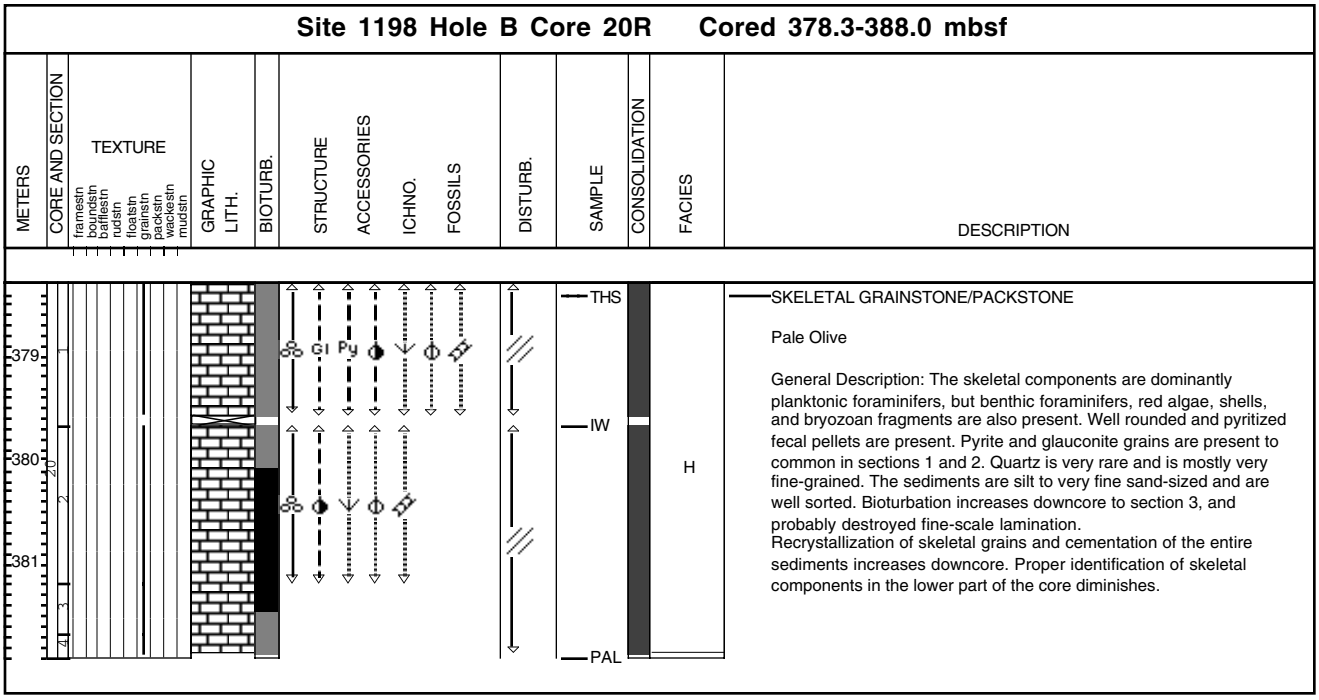
Smear slide analysis show that coccoliths are dominant, whereas quartz is rare.

SKELETAL GRAINSTONE

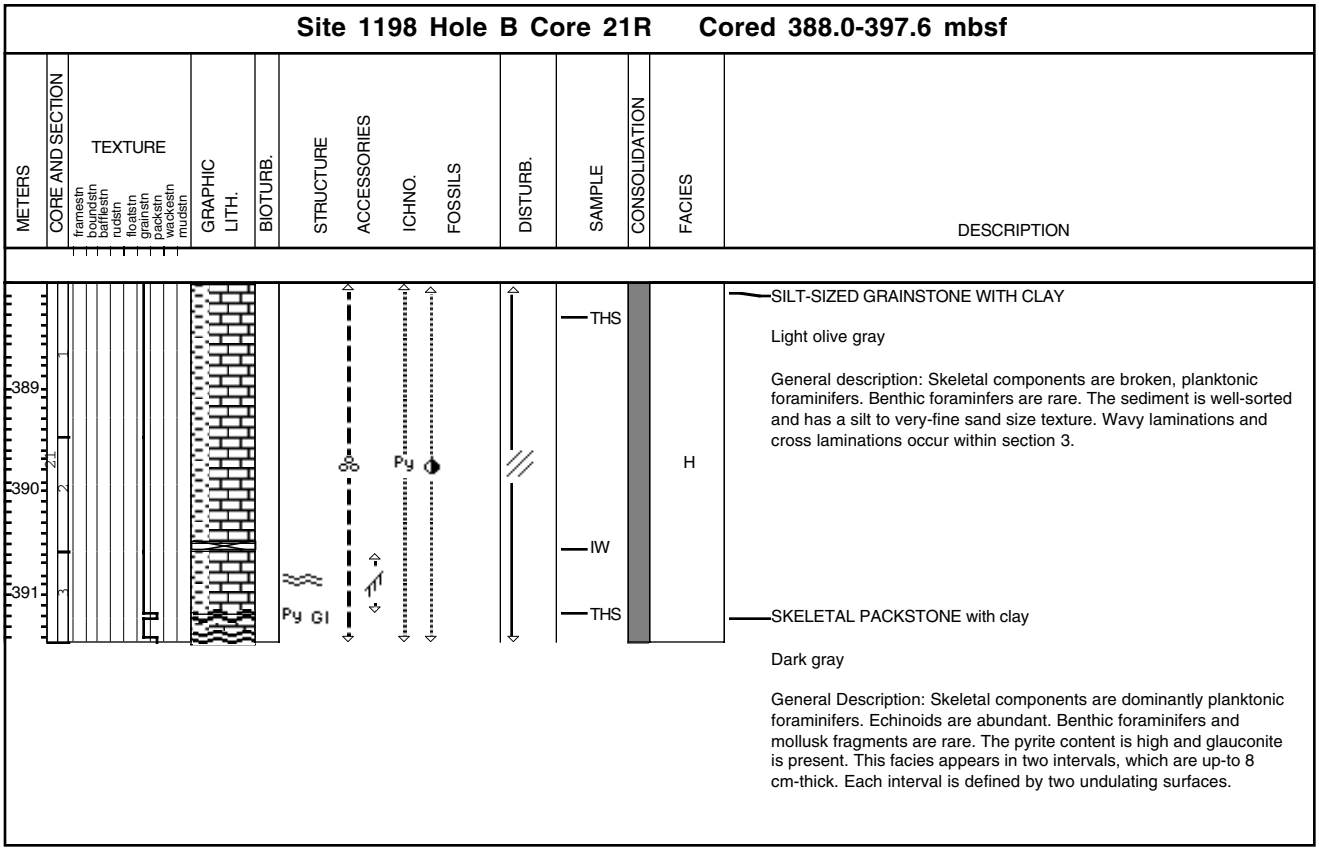
Dark greenish gray

General Description: Planktonic foraminifers are common whereas bryozoan fragments and benthic foraminifers are present. Glauconite is common, phosphatic grains are present, and clasts of up to 5 mm are found. The sediment is silt- to coarse sand-sized and is poorly sorted.

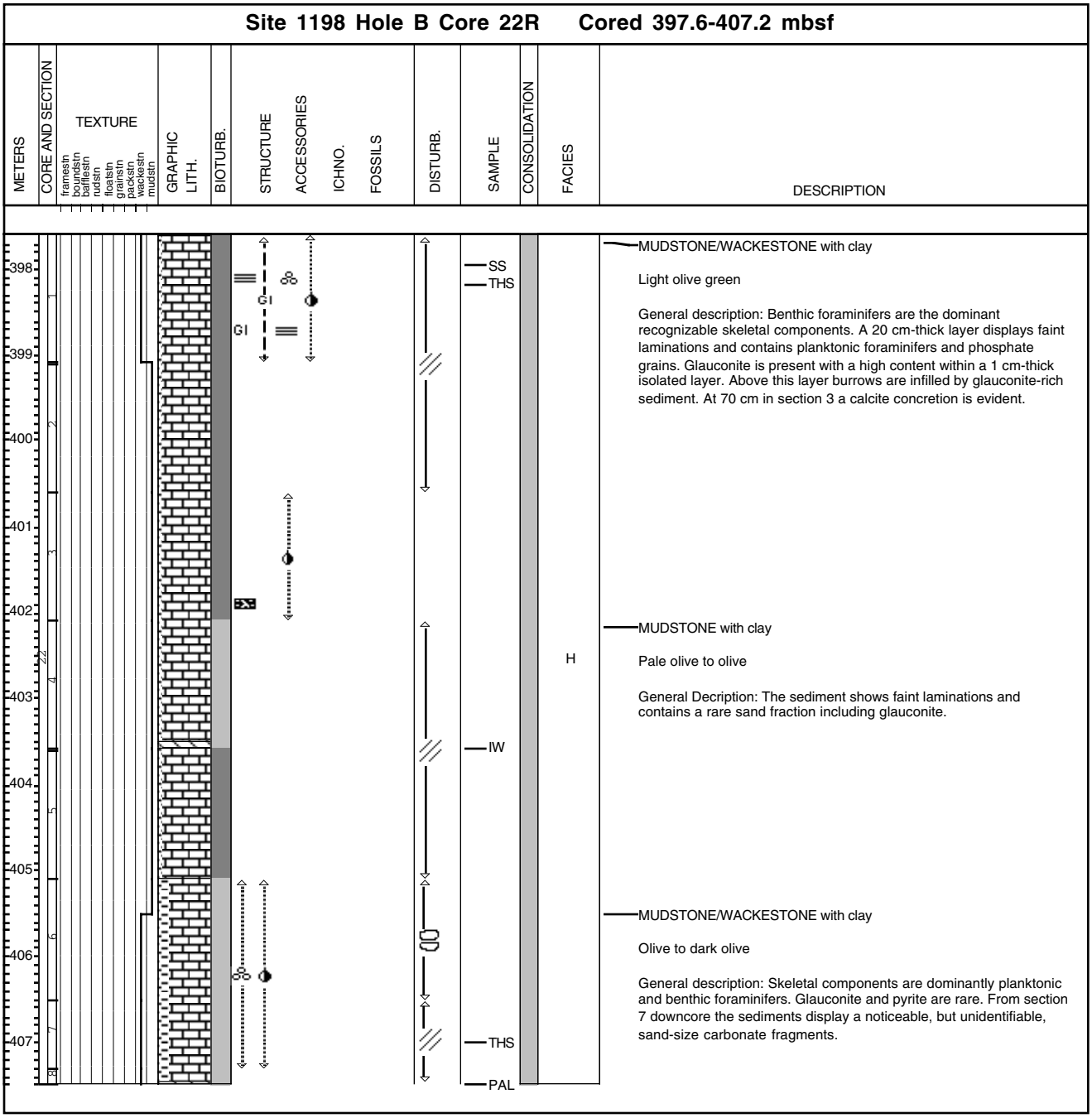
Core Photo


Site 1198 Hole B Core 20R Cored 378.3-388.0 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffilestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
379
380
381
20
1
2
3
4
Gl
Py
THS
IW
PAL
H
SKELETAL GRAINSTONE/PACKSTONE
Pale Olive
General Description: The skeletal components are dominantly planktonic foraminifers, but benthic foraminifers, red algae, shells, and bryozoan fragments are also present. Well rounded and pyritized fecal pellets are present. Pyrite and glauconite grains are present to common in sections 1 and 2. Quartz is very rare and is mostly very fine-grained. The sediments are silt to very fine sand-sized and are well sorted. Bioturbation increases downcore to section 3, and probably destroyed fine-scale lamination.
Recrystallization of skeletal grains and cementation of the entire sediments increases downcore. Proper identification of skeletal components in the lower part of the core diminishes.

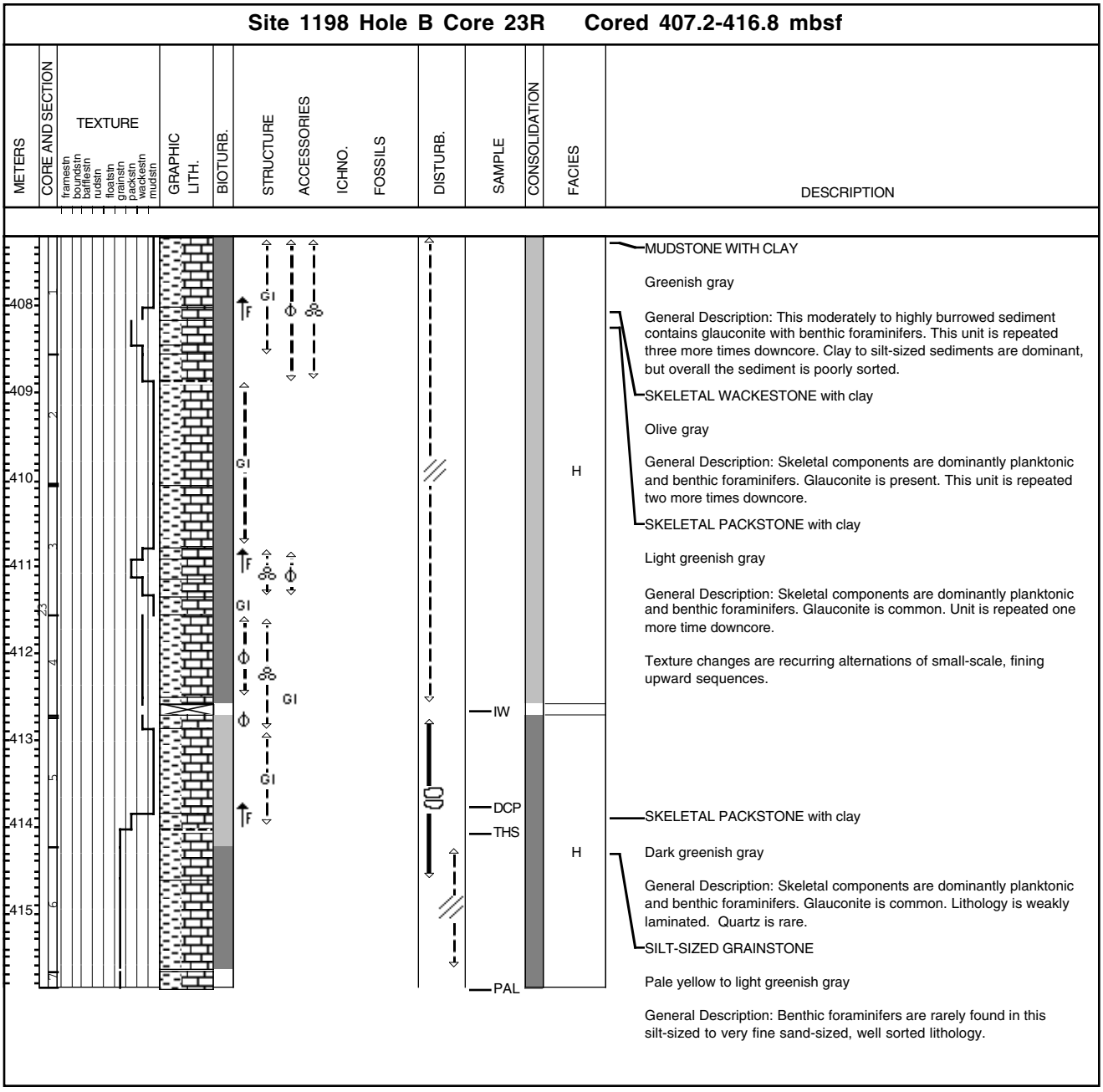
Core Photo


Site 1198 Hole B Core 21R Cored 388.0-397.6 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
389
390
391
1
2
3
Py
Py Gl
THS
IW
THS
H
SILT-SIZED GRAINSTONE WITH CLAY
Light olive gray
General description: Skeletal components are broken, planktonic foraminifers. Benthic foraminfers are rare. The sediment is well-sorted and has a silt to very-fine sand size texture. Wavy laminations and cross laminations occur within section 3.
SKELETAL PACKSTONE with clay
Dark gray
General Description: Skeletal components are dominantly planktonic foraminifers. Echinoids are abundant. Benthic foraminifers and mollusk fragments are rare. The pyrite content is high and glauconite is present. This facies appears in two intervals, which are up-to 8 cm-thick. Each interval is defined by two undulating surfaces.

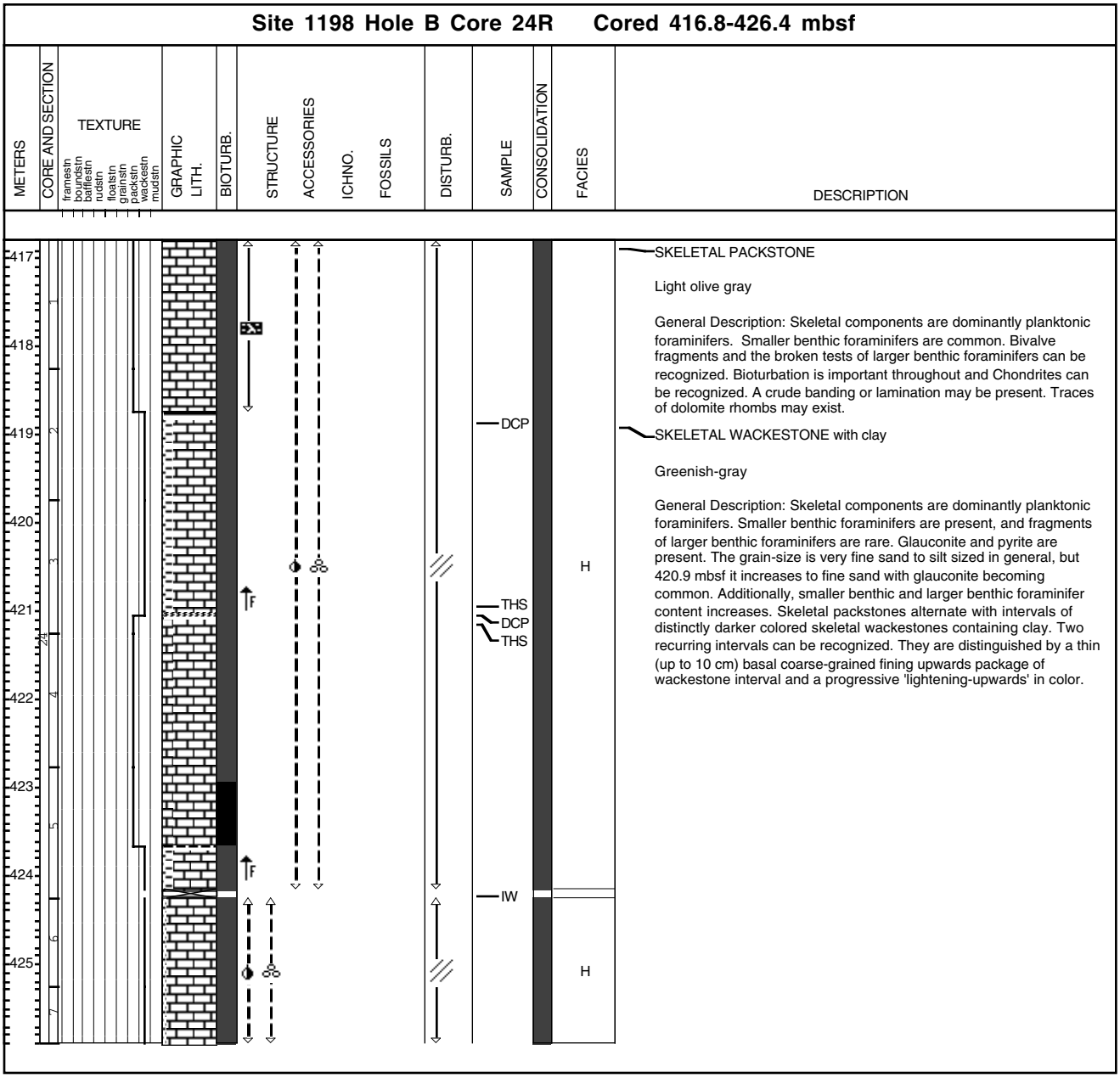
Core Photo


Site 1198 Hole B Core 22R Cored 397.6-407.2 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
bafflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
398
399
400
401
402
403
404
405
406
407
GI
SS
THS
IW
THS
PAL
H
MUDSTONE/WACKESTONE with clay
Light olive green
General description: Benthic foraminifers are the dominant recognizable skeletal components. A 20 cm-thick layer displays faint laminations and contains planktonic foraminifers and phosphate grains. Glauconite is present with a high content within a 1 cm-thick isolated layer. Above this layer burrows are infilled by glauconite-rich sediment. At 70 cm in section 3 a calcite concretion is evident.
MUDSTONE with clay
Pale olive to olive
General Decription: The sediment shows faint laminations and contains a rare sand fraction including glauconite.
MUDSTONE/WACKESTONE with clay
Olive to dark olive
General description: Skeletal components are dominantly planktonic and benthic foraminifers. Glauconite and pyrite are rare. From section 7 downcore the sediments display a noticeable, but unidentifiable, sand-size carbonate fragments.

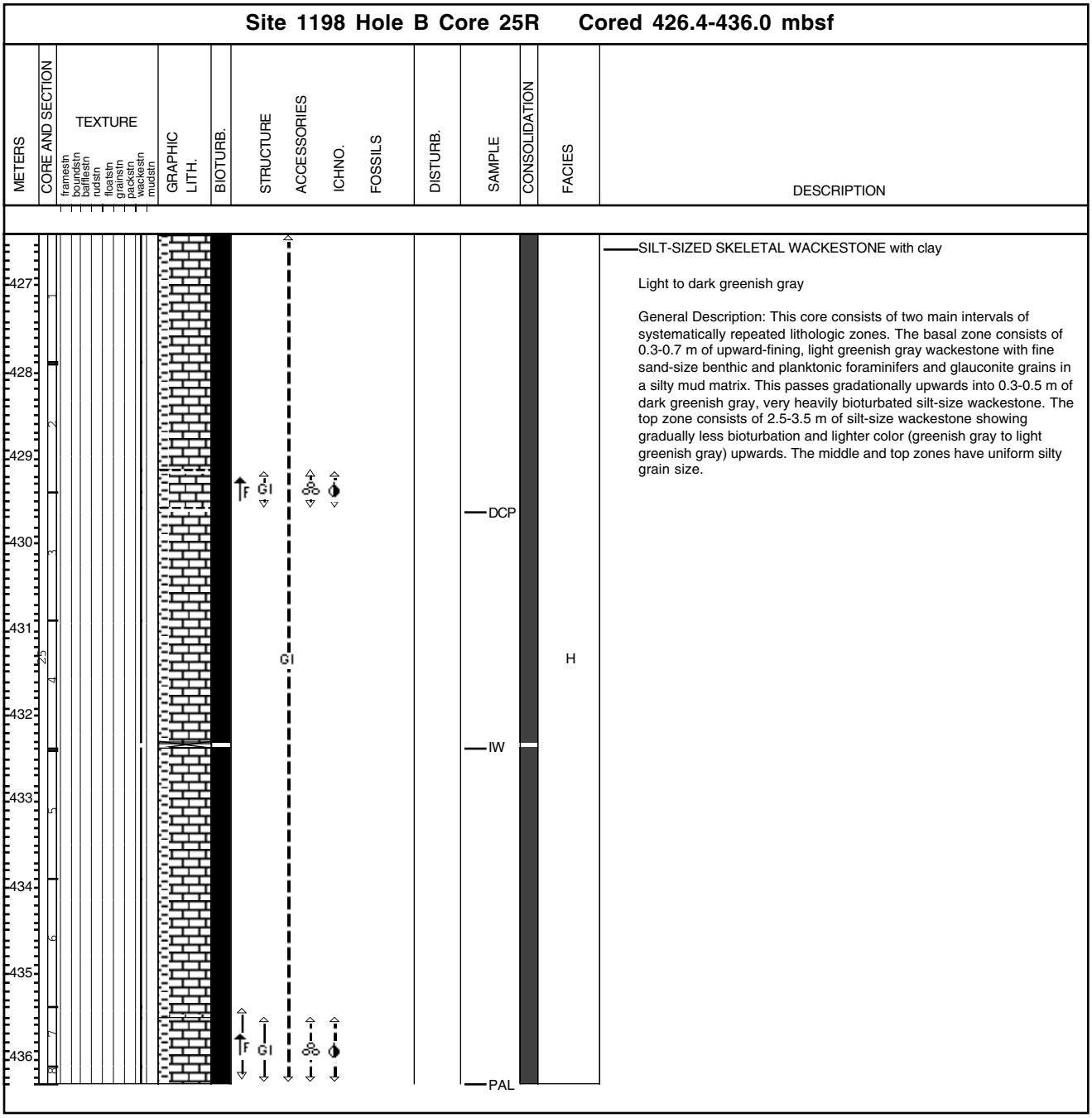
Core Photo


Site 1198 Hole B Core 23R Cored 407.2-416.8 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
408
409
410
411
412
413
414
415
23
1
2
3
4
5
6
7
GI
F
IW
DCP
THS
PAL
H
H
MUDSTONE WITH CLAY
Greenish gray
General Description: This moderately to highly burrowed sediment contains glauconite with benthic foraminifers. This unit is repeated three more times downcore. Clay to silt-sized sediments are dominant, but overall the sediment is poorly sorted.
SKELETAL WACKESTONE with clay
Olive gray
General Description: Skeletal components are dominantly planktonic and benthic foraminifers. Glauconite is present. This unit is repeated two more times downcore.
SKELETAL PACKSTONE with clay
Light greenish gray
General Description: Skeletal components are dominantly planktonic and benthic foraminifers. Glauconite is common. Unit is repeated one more time downcore.
Texture changes are recurring alternations of small-scale, fining upward sequences.
SKELETAL PACKSTONE with clay
Dark greenish gray
General Description: Skeletal components are dominantly planktonic and benthic foraminifers. Glauconite is common. Lithology is weakly laminated. Quartz is rare.
SILT-SIZED GRAINSTONE
Pale yellow to light greenish gray
General Description: Benthic foraminifers are rarely found in this silt-sized to very fine sand-sized, well sorted lithology.

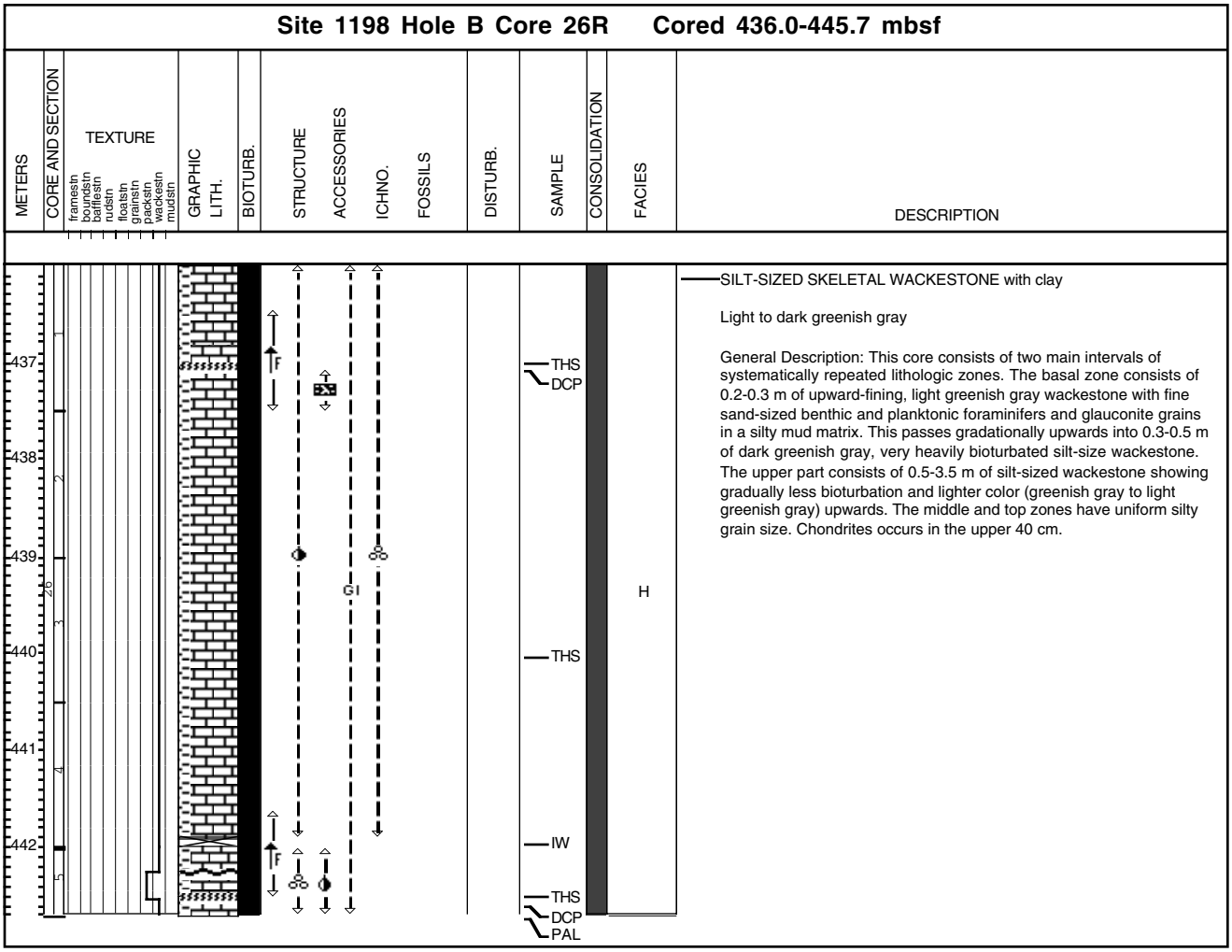
Core Photo


Site 1198 Hole B Core 24R Cored 416.8-426.4 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
417
418
419
420
421
422
423
424
425
DCP
THS
DCP
THS
IW
H
H
SKELETAL PACKSTONE
Light olive gray
General Description: Skeletal components are dominantly planktonic foraminifers. Smaller benthic foraminifers are common. Bivalve fragments and the broken tests of larger benthic foraminifers can be recognized. Bioturbation is important throughout and Chondrites can be recognized. A crude banding or lamination may be present. Traces of dolomite rhombs may exist.
SKELETAL WACKESTONE with clay
Greenish-gray
General Description: Skeletal components are dominantly planktonic foraminifers. Smaller benthic foraminifers are present, and fragments of larger benthic foraminifers are rare. Glauconite and pyrite are present. The grain-size is very fine sand to silt sized in general, but 420.9 mbsf it increases to fine sand with glauconite becoming common. Additionally, smaller benthic and larger benthic foraminifer content increases. Skeletal packstones alternate with intervals of distinctly darker colored skeletal wackestones containing clay. Two recurring intervals can be recognized. They are distinguished by a thin (up to 10 cm) basal coarse-grained fining upwards package of wackestone interval and a progressive 'lightening-upwards' in color.

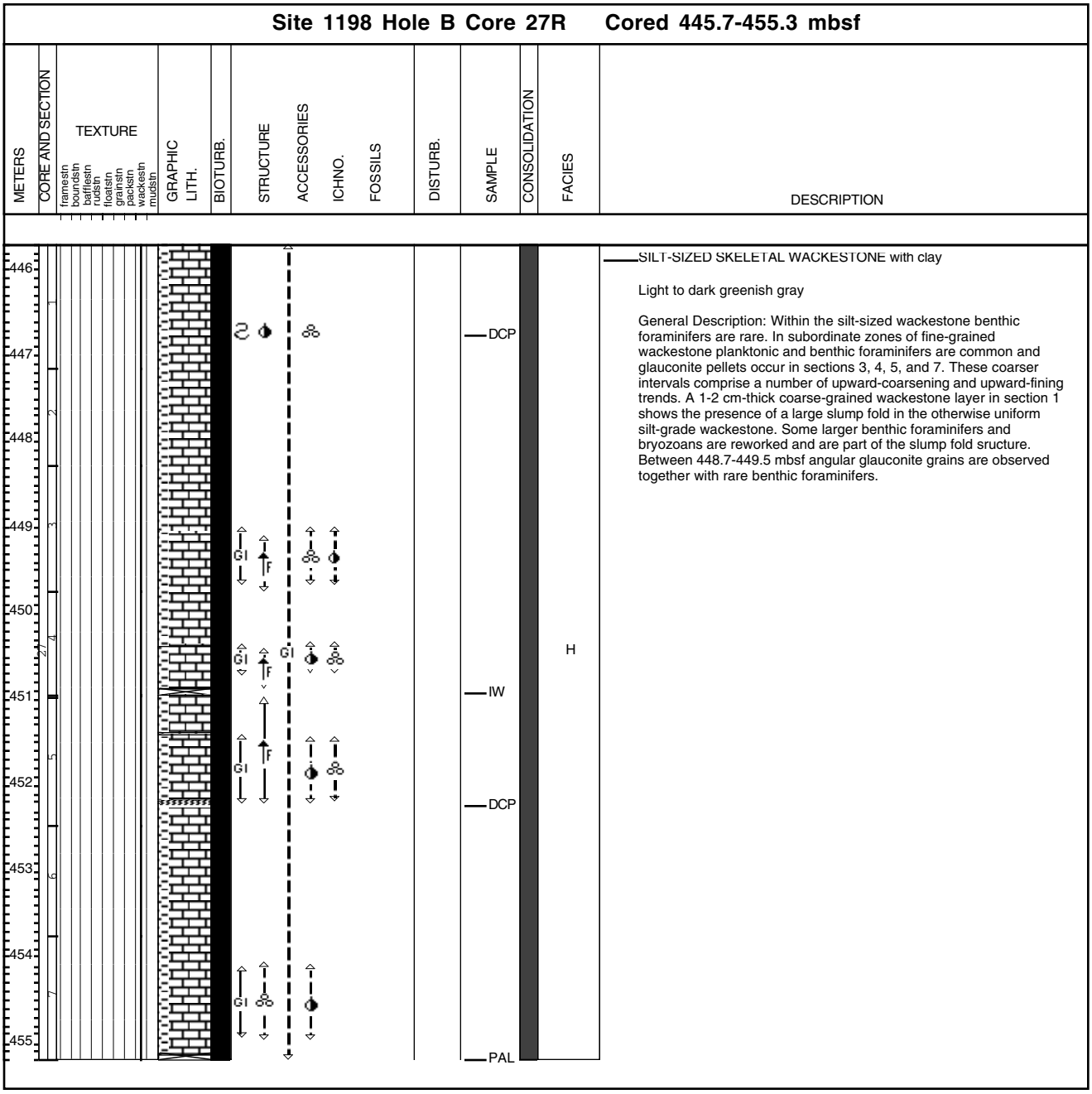
Core Photo


Site 1198 Hole B Core 25R Cored 426.4-436.0 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
bafflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
427
428
429
430
431
432
433
434
435
436
DCP
IW
PAL
H
F
GI
SILT-SIZED SKELETAL WACKESTONE with clay
Light to dark greenish gray
General Description: This core consists of two main intervals of systematically repeated lithologic zones. The basal zone consists of 0.3-0.7 m of upward-fining, light greenish gray wackestone with fine sand-size benthic and planktonic foraminifers and glauconite grains in a silty mud matrix. This passes gradationally upwards into 0.3-0.5 m of dark greenish gray, very heavily bioturbated silt-size wackestone. The top zone consists of 2.5-3.5 m of silt-size wackestone showing gradually less bioturbation and lighter color (greenish gray to light greenish gray) upwards. The middle and top zones have uniform silty grain size.

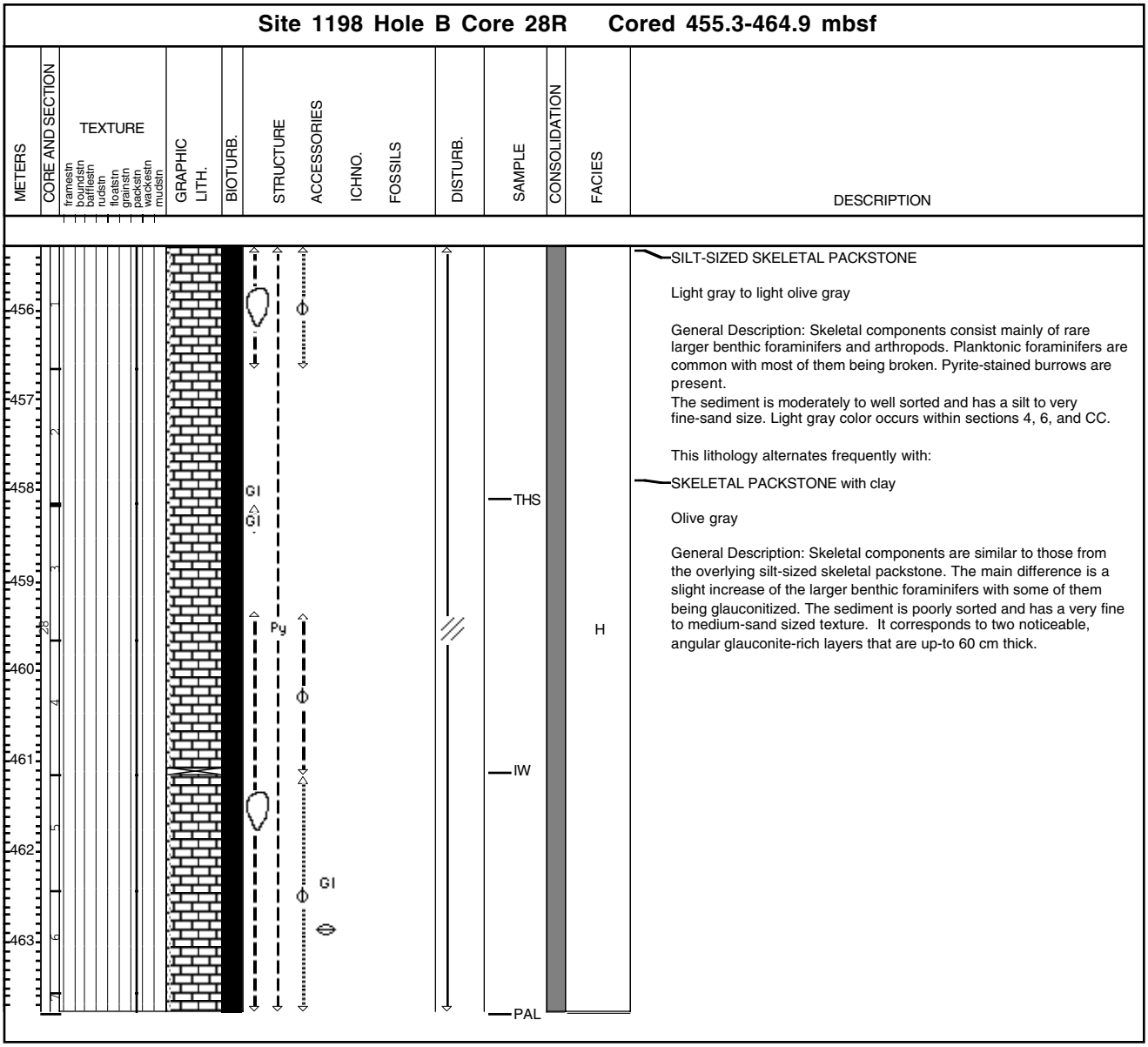
Core Photo


Site 1198 Hole B Core 26R Cored 436.0-445.7 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
437
438
439
440
441
442
26
1
2
3
4
5
F
F
Gl
THS
DCP
THS
IW
THS
DCP
PAL
H
SILT-SIZED SKELETAL WACKESTONE with clay
Light to dark greenish gray
General Description: This core consists of two main intervals of systematically repeated lithologic zones. The basal zone consists of 0.2-0.3 m of upward-fining, light greenish gray wackestone with fine sand-sized benthic and planktonic foraminifers and glauconite grains in a silty mud matrix. This passes gradationally upwards into 0.3-0.5 m of dark greenish gray, very heavily bioturbated silt-size wackestone. The upper part consists of 0.5-3.5 m of silt-sized wackestone showing gradually less bioturbation and lighter color (greenish gray to light greenish gray) upwards. The middle and top zones have uniform silty grain size. Chondrites occurs in the upper 40 cm.

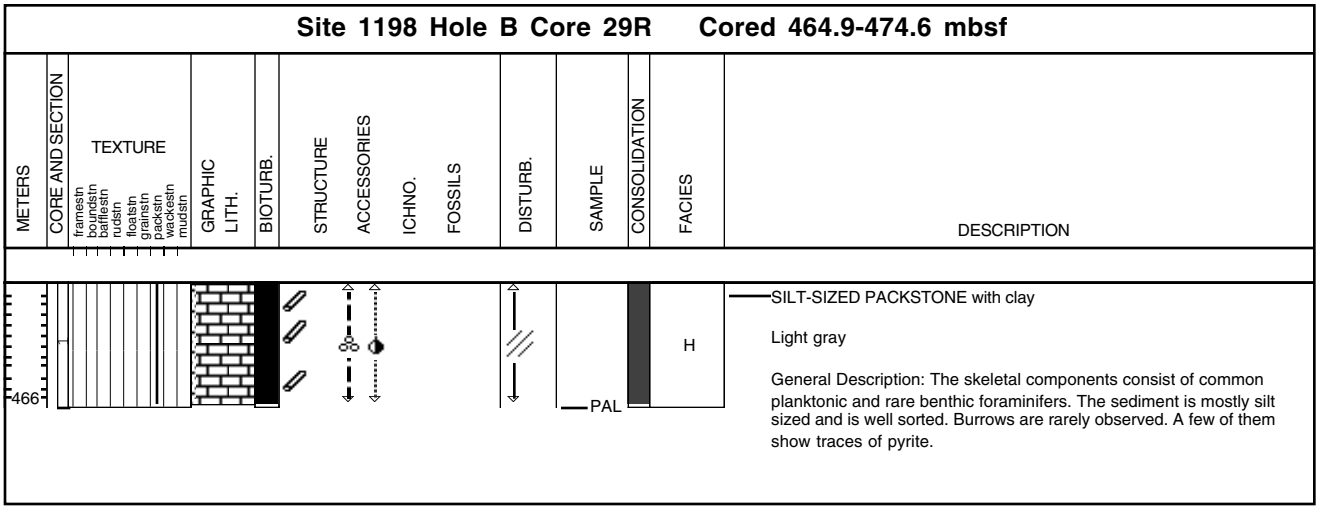
Core Photo


Site 1198 Hole B Core 27R Cored 445.7-455.3 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
446
447
448
449
450
451
452
453
454
455
DCP
IW
DCP
PAL
H
SILT-SIZED SKELETAL WACKESTONE with clay
Light to dark greenish gray
General Description: Within the silt-sized wackestone benthic foraminifers are rare. In subordinate zones of fine-grained wackestone planktonic and benthic foraminifers are common and glauconite pellets occur in sections 3, 4, 5, and 7. These coarser intervals comprise a number of upward-coarsening and upward-fining trends. A 1-2 cm-thick coarse-grained wackestone layer in section 1 shows the presence of a large slump fold in the otherwise uniform silt-grade wackestone. Some larger benthic foraminifers and bryozoans are reworked and are part of the slump fold sructure. Between 448.7-449.5 mbsf angular glauconite grains are observed together with rare benthic foraminifers.

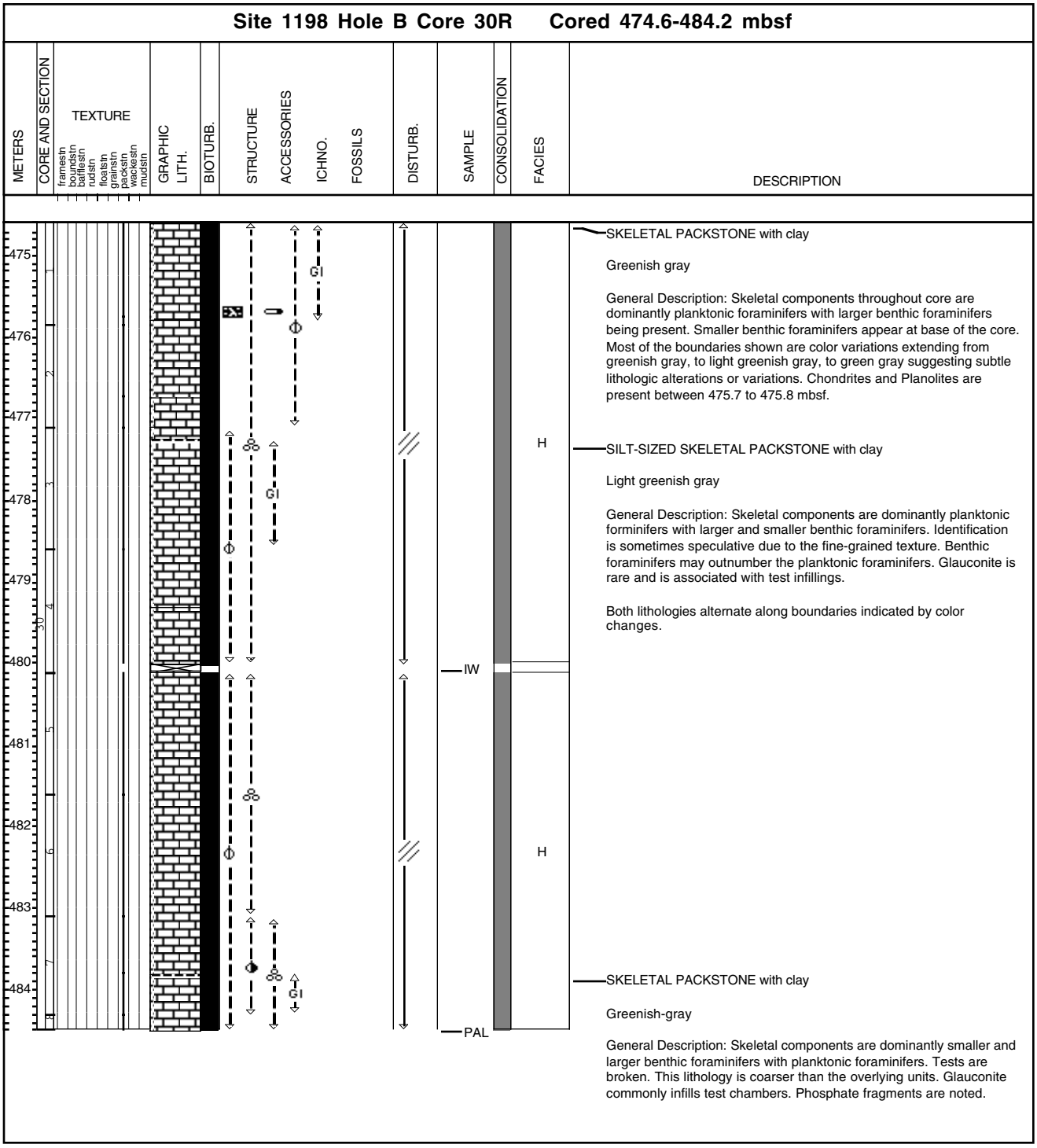
Core Photo


Site 1198 Hole B Core 28R Cored 455.3-464.9 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffliestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
456
457
458
459
460
461
462
463
28
1
2
3
4
5
6
7
GI
GI
Py
GI
THS
IW
PAL
H
SILT-SIZED SKELETAL PACKSTONE
Light gray to light olive gray
General Description: Skeletal components consist mainly of rare larger benthic foraminifers and arthropods. Planktonic foraminifers are common with most of them being broken. Pyrite-stained burrows are present.
The sediment is moderately to well sorted and has a silt to very fine-sand size. Light gray color occurs within sections 4, 6, and CC.
This lithology alternates frequently with:
SKELETAL PACKSTONE with clay
Olive gray
General Description: Skeletal components are similar to those from the overlying silt-sized skeletal packstone. The main difference is a slight increase of the larger benthic foraminifers with some of them being glauconitized. The sediment is poorly sorted and has a very fine to medium-sand sized texture. It corresponds to two noticeable, angular glauconite-rich layers that are up-to 60 cm thick.

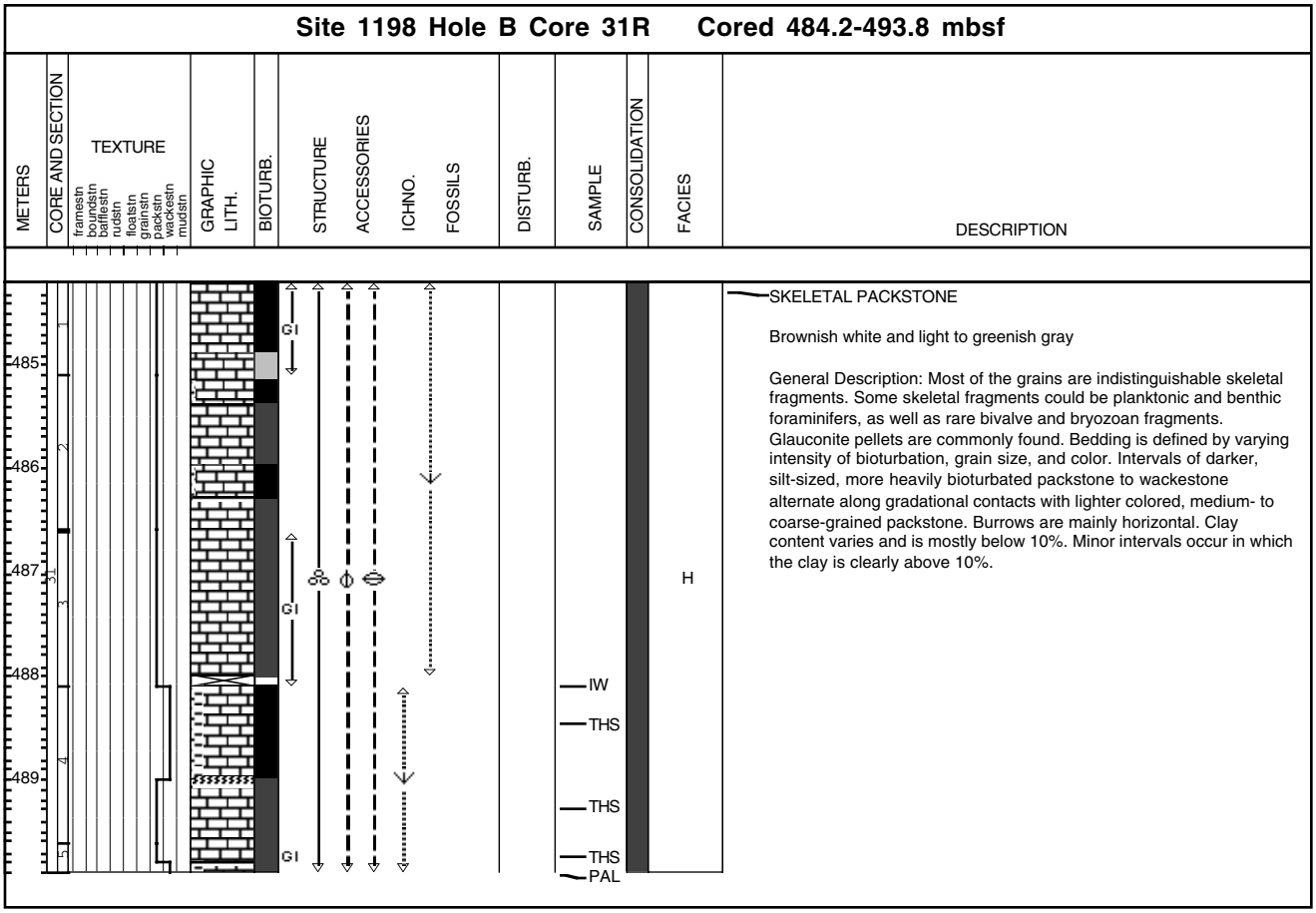
Core Photo


Site 1198 Hole B Core 29R Cored 464.9-474.6 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
466
PAL
H
SILT-SIZED PACKSTONE with clay
Light gray
General Description: The skeletal components consist of common planktonic and rare benthic foraminifers. The sediment is mostly silt sized and is well sorted. Burrows are rarely observed. A few of them show traces of pyrite.

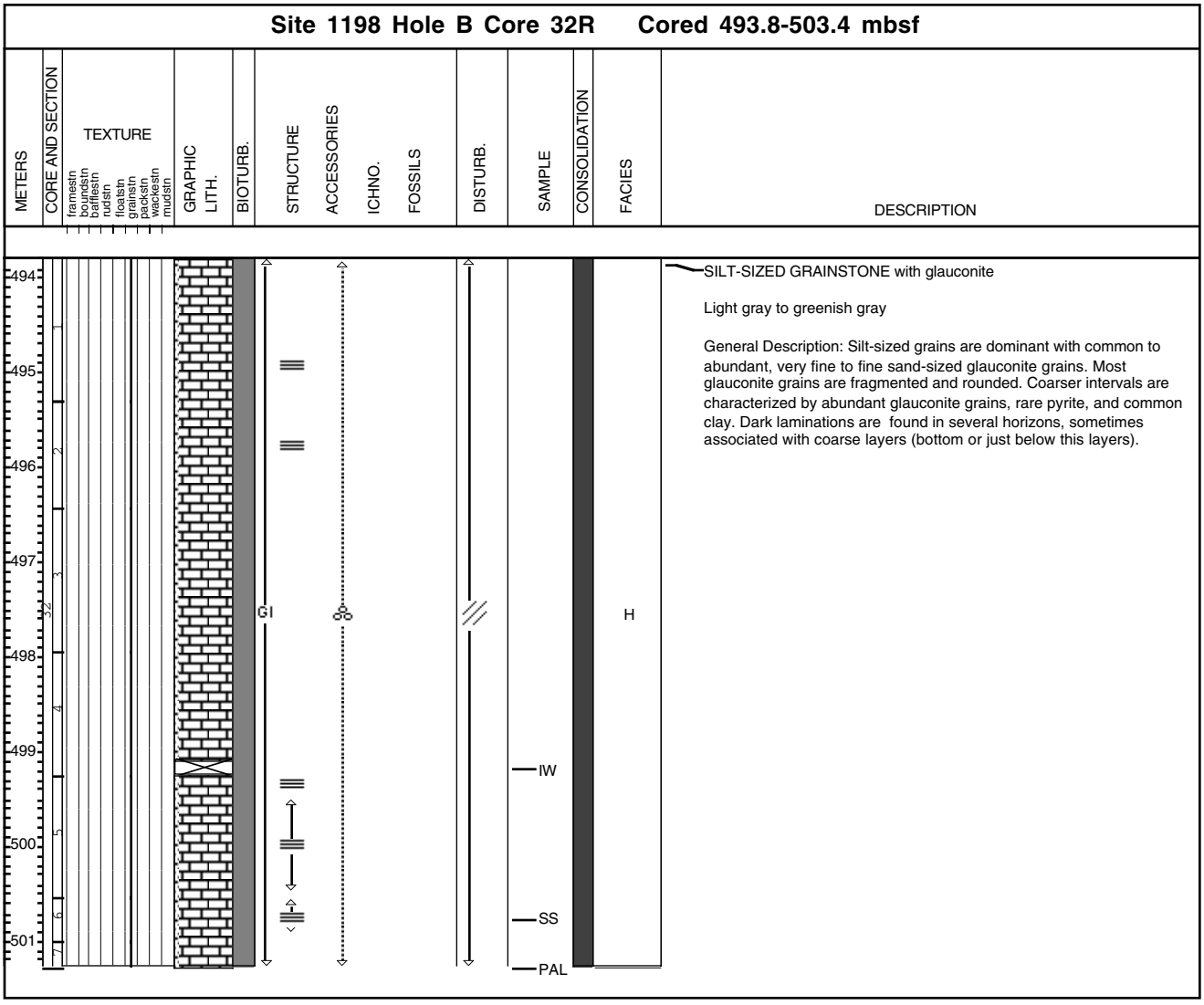
Core Photo


Site 1198 Hole B Core 30R Cored 474.6-484.2 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
bafflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
475
476
477
478
479
480
481
482
483
484
30
GI
IW
PAL
H
H
SKELETAL PACKSTONE with clay
Greenish gray
General Description: Skeletal components throughout core are dominantly planktonic foraminifers with larger benthic foraminifers being present. Smaller benthic foraminifers appear at base of the core. Most of the boundaries shown are color variations extending from greenish gray, to light greenish gray, to green gray suggesting subtle lithologic alterations or variations. Chondrites and Planolites are present between 475.7 to 475.8 mbsf.
SILT-SIZED SKELETAL PACKSTONE with clay
Light greenish gray
General Description: Skeletal components are dominantly planktonic forminifers with larger and smaller benthic foraminifers. Identification is sometimes speculative due to the fine-grained texture. Benthic foraminifers may outnumber the planktonic foraminifers. Glauconite is rare and is associated with test infillings.
Both lithologies alternate along boundaries indicated by color changes.
SKELETAL PACKSTONE with clay
Greenish-gray
General Description: Skeletal components are dominantly smaller and larger benthic foraminifers with planktonic foraminifers. Tests are broken. This lithology is coarser than the overlying units. Glauconite commonly infills test chambers. Phosphate fragments are noted.

Core Photo

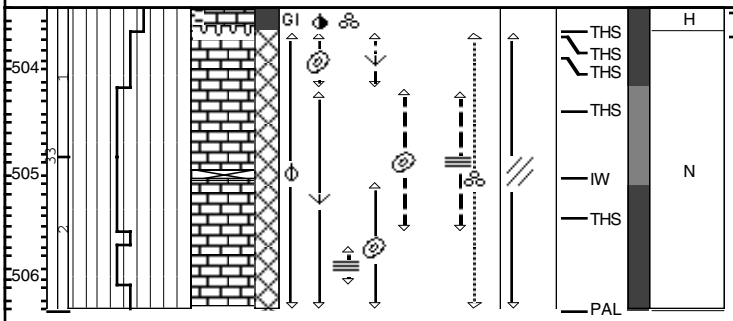

Site 1198 Hole B Core 31R Cored 484.2-493.8 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
485
486
487
488
489
GI
GI
GI
IW
THS
THS
THS
PAL
H
SKELETAL PACKSTONE
Brownish white and light to greenish gray
General Description: Most of the grains are indistinguishable skeletal fragments. Some skeletal fragments could be planktonic and benthic foraminifers, as well as rare bivalve and bryozoan fragments. Glauconite pellets are commonly found. Bedding is defined by varying intensity of bioturbation, grain size, and color. Intervals of darker, silt-sized, more heavily bioturbated packstone to wackestone alternate along gradational contacts with lighter colored, medium- to coarse-grained packstone. Burrows are mainly horizontal. Clay content varies and is mostly below 10%. Minor intervals occur in which the clay is clearly above 10%.

Core Photo


Site 1198 Hole B Core 32R Cored 493.8-503.4 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
494
495
496
497
498
499
500
501
32
1
2
3
4
5
6
7
GI
H
IW
SS
PAL
SILT-SIZED GRAINSTONE with glauconite
Light gray to greenish gray
General Description: Silt-sized grains are dominant with common to abundant, very fine to fine sand-sized glauconite grains. Most glauconite grains are fragmented and rounded. Coarser intervals are characterized by abundant glauconite grains, rare pyrite, and common clay. Dark laminations are found in several horizons, sometimes associated with coarse layers (bottom or just below this layers).

Core Photo

Site 1198 Hole B Core 33R Cored 503.4-513.0 mbsf



SILT-SIZED GRAINSTONE

Light olive gray

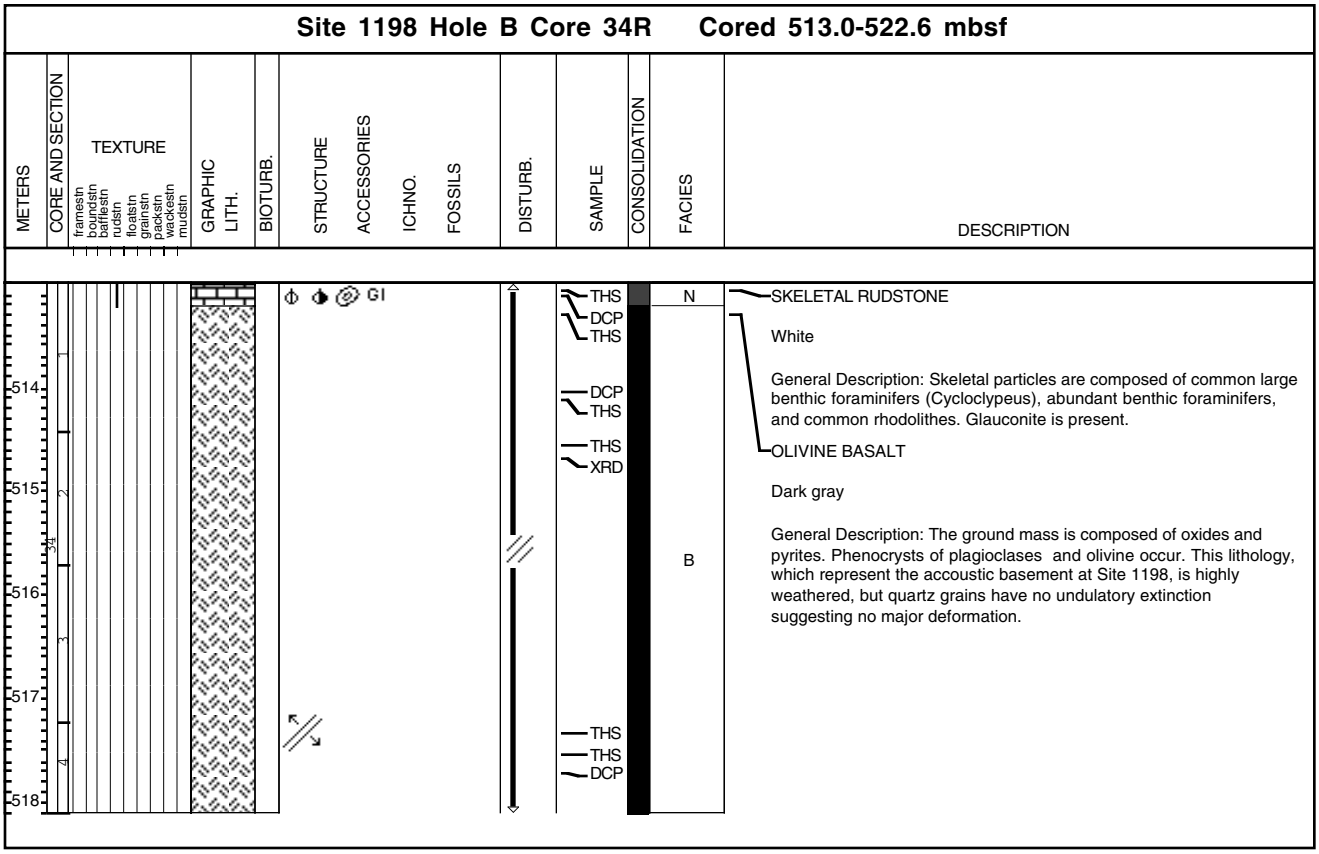
General Description: Skeletal components are dominantly planktonic foraminifers. Benthic foraminifers are rare. The sediments are mainly silt-sized and are well to moderately sorted. Very fine to fine sand-sized glauconite grains are common. Few lithoclasts less than 5 mm in size are found.

SKELETAL FLOATSTONE/GRAINSTONE

White to light greenish gray

General Description: Skeletal components are dominantly larger benthic foraminifers. They are aligned parallel to each other forming lamination-like structure. Bryozoan fragments are fragments are abundant. Planktonic foraminifers extend from being rare to present. Rhodoliths commonly occur in the rudstone intervals. They are platy in the lower part of the core and are more rounded in the upper part. Benthic foraminifers consist mostly of Amphisteginids in the lower part of the core, whereas Cycloclypeus becomes more abundant in the upper part. Alternations of sub-mm scale pyrite and phosphate layers encrust the top of this interval indicating a hardground layer on top of this lithological interval. White colored planktonic and benthic foraminiferal packstone infills fissures with an underlying glauconite rich layer. Matrix varies from brownish to reddish in color, and shows various level of lithification. The sediments are very fine sand to pebble-sized and are poorly to moderately sorted.

Core Photo


Site 1198 Hole B Core 34R Cored 513.0-522.6 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
514
515
516
517
518
34
1
2
3
4
GI
THS
DCP
THS
DCP
THS
THS
XRD
THS
THS
DCP
N
B
SKELETAL RUDSTONE
White
General Description: Skeletal particles are composed of common large benthic foraminifers (Cycloclypeus), abundant benthic foraminifers, and common rhodolithes. Glauconite is present.
OLIVINE BASALT
Dark gray
General Description: The ground mass is composed of oxides and pyrites. Phenocrysts of plagioclases and olivine occur. This lithology, which represent the accoustic basement at Site 1198, is highly weathered, but quartz grains have no undulatory extinction suggesting no major deformation.

Site 1198 Smear Slides

Sample						Texture			Mineral							Biogenic								
Core	Type	Section	Top (cm)	Depth (mbsf)	Lithology	Sand	Silt	Clay	Calcite	Dolomite	Glauconite	Mica	Muscovite	Pyrite	Quartz	Benthic Forams	Calcispheres	Coccolith	Discoaster	Echinoid	Echinoid Spine	Mollusk	Planktonic Forams	Comments
1198A																								
4	H	1	70	24.7	D	C	A	A	P	P	0	C	C	0	0	0	0	A	C	0	0	0	0	
4	H	1	5	24.05	D	P	C	D	0	0	0	A	A	0	0	P	0	D	0	0	0	0	0	
4	H	5	40	30.4	D	A	A	D	C	0	0	D	0	0	0	0	0	A	0	0	0	0	0	Almost only clay minerals and some coccoliths
4	H	5	120	31.2	D	A	A	A	P	C	0	D	0	0	0	0	0	A	0	0	0	0	0	
6	H	1	97	43.97	D	R	C	D	D	P	C	0	C	0	0	0	0	C	A	0	0	0	0	Discoaster common
8	H	5	60	68.6	D	A	A	0	0	A	0	0	P	0	0	R	0	D	0	0	*	0	A	Dolomite rhombs abundant
8	H	6	70	70.2	M	A	A	0	0	A	0	*	P	0	*	*	0	D	0	0	0	0	A	
9	H	6	62	79.62	D	A	C	0	0	C	0	*	P	P	*	*	0	D	0	0	*	0	A	
9	H	6	70	79.7	M	A	C	0	0	P	C	0	P	R	*	*	0	D	0	0	0	0	A	
11	H	5	115	97.65	M	A	C	0	0	0	0	0	A	0	0	*	0	D	0	0	*	0	A	
13	H	2	70	111.7	D	C	A	A		R				P	R	P		C					A	
14	H	5	15	125.15	M	A	A	A	0	0	0	0	0	P	0	P	0	C	0	0	P	0	A	
16	H	4	50	143	D	P	A	D		*			P	R		R		D	C				P	
16	H	7	60	147.6	D	C	A	D		*				P	P	P		A	C				P	
17	H	6	110	156.01	M	C	A	A		*				P	R	C		A	C		P		C	
21	H	3	41	188.91	M	C	A	D	C	*				C	R	P		D	C		P		C	
1198B																								
19	R	1	25	368.95	M	C	A	A		*	R		*		P	P		D	P				P	
22	R	1	35	397.95	D	P	A	A	*	0	0	P	0	0	P	C	0	D	0	0	0	0	0	
23	R	2	90	409.45	D	A	C	D	0	P	0	0	0	R	*	C	0	0	0	0	0	0	*	dominantly fine sand-size peloids and mud
32	R	6	20	500.74	D	C	D	C		*				R	R			C					*	

Site 1198 Thin Sections

Billet	THS	mbsf	photo	Lithology*										Mineral grains							Skeletal grains												Nonskeletal grains					Comments	Cement minerals			Cement fabrics						Porosity						
				X	M	W	P	G	F	R	B	d	So	gl	qz	fp	py	mi	ph	bent	plank	echi	reda	rhodo	halim	bryo	serp	moll	coral	micr	extra	intra	peloid		calc	arag	dolo	meni	isop	pend	synt	drus	mosa	inter	fene	intra	mold	shel	vug	vd.silt
1198A																																																					
242#	23X-1-4	203					X						p							C	D	P	R			R		P								P				A		C	P				X				
1198B																																																				
243	1R-3-46						X						p				P			C	D	R	R			R		R								R				D							X				
244	1R-CC-1	199.3	y				X						p							C	D	P	R			P		R				P																			
246	2R-1-36	205.6					X						p				R			P	D							R								P				A		C										
247	4R-1-47	224.9					X						p							A	A	R	P			C		R								C				A		C	C		X		X	X				
245	5R-1-15	234.2					X		X				p							A	C	P	C			C		P								C				A		P	C		X		X	X				
248	7R-1-5	253.4					X						p		P				C	C	D	P	P			P		A				R				P				D		P	P		X		X	X	X			
249	7R-1-18	253.5								X			m							P	P		D			A		P								C				D								X				
250	7R-1-53	253.8						X					m							A	C	P	C			C		P								C				D		P			X		X					
251	10R-1-27	282.5				X	X						p							C	D	P	C			C		P								C				A		C			X		X					
252	11R-1-11	291.9				X	X						p							C	D	R	P			P		R								P				D		P			X		X					
253	12R-1-90	302.3					X		X				p							A	P	P	A			P		R								P				D		R			X		X					
254	16R-1-38	340.3				X	X						p	R	T		P			P	C	R	C			P		P		C						C				D		P			X		X					
255	18R-1-10	359.2				X							p	T	R		C			P	A	P				T		R								P				A		P	C				X					
256	18R-3-35	362.3				X	X						p	P	R		C			P	A	P				P		P		C						C				A		C	C				X					
257	20R-2-9	379.8	y				X						p	R						A	D		P			A		R																									
258	21R-1-32	388.3					X						g	R			P			A	D	A				P									pyrite concentration																		
259	21R-3-59	391.2				X							p	P	P		C			P	A	P				R		R							sharp contact?	P				A		P					X					
260	22R-1-56	398.2				X	X						p	C	T		P			R	A	R				R		R								R				A			P				X					
261	22R-7-49	407			X	X							m		T		C			R	C	T						T								P				A		C	P				X					
262	23R-1-131	408.5				X							p	P	R		C			R	A	T						R								P				A		C					X					
263	24R-3-116	420.9				X							p	P	R		C	R		R	A	T						P								R				A							X					
264	24R-3-139	421.1				X	X						p	R	R		C			P	A	R						P								P				D		C	P		X		X	X				
265	26R-1-100	437				X	X						p	C	P		C			P	A					P		P								P				A		P					X					
266	26R-3-99	440			X								m	T	R		C	T		R	P	R	R					P							organic?	P				C		C	C				X					
267	26R-5-48	442.5					X						p	R	T		C	T		C	P	P	P			C		P								C				D		P	C		X		X					
268	28R-2-142	458.1				X	X						p	A	T		C			P	A	P				R		P								C				D		P	P				X					
269	31R-4-34a	488.4				X							p	R	R		C			R	A	R														P				A		C	P				X					
	31R-4-34b	488.4						X					p				C			R	C		A			C		P							burrow filling?	P				C			C	P			X					
270	31R-4-116	489.3					X						p	P	R		C			C	A	C	C			C		P								C				D		P					X					
271	31R-5-9	489.7					X	X					m	P	T		C			C	C	P	D			A		R								C				A		R	C		X		X					
274	33R-1-23	503.6	y								X			P	T					C	C	P	D			P		P								P																	
272	33R-1-26	503.7	y								X									C	C	P	D			P	P									P																	
273	33R-1-46	503.9	y								X			P	T					C	C	P	D			P										P																	
275	33R-1-97	504.4	y				X						P	R						D	C	C	A			P																											
276	33R-2-60	505.4						X	X		X		m		T					A		C	D			C										P				D							X					
277	34R-1-4	513							X	X			m							A	T	C	A			C										P				D					X		X					
278	34R-1-27	513.3		X																																																	
279	34R-1-113	514.1		X																																																
280	34R-2-12	514.6		X																																																
281	34R-4-9	517.3		X																																																
282	34R-4-33	517.6		X																																																

Notes: * = lithology abbreviations: X=basement, d=dolostone. # = large thin section. Abundance abbreviations: T = trace, R = rare, P = present, C = common, A = abundant, D = dominant.