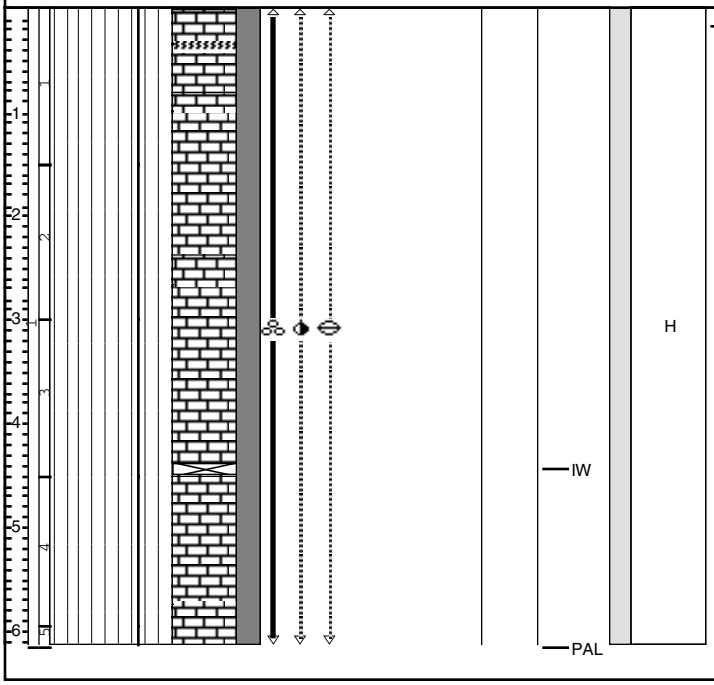
Core Photo

Site 1197 Hole A Core 1H Cored 0.0-6.1 mbsf

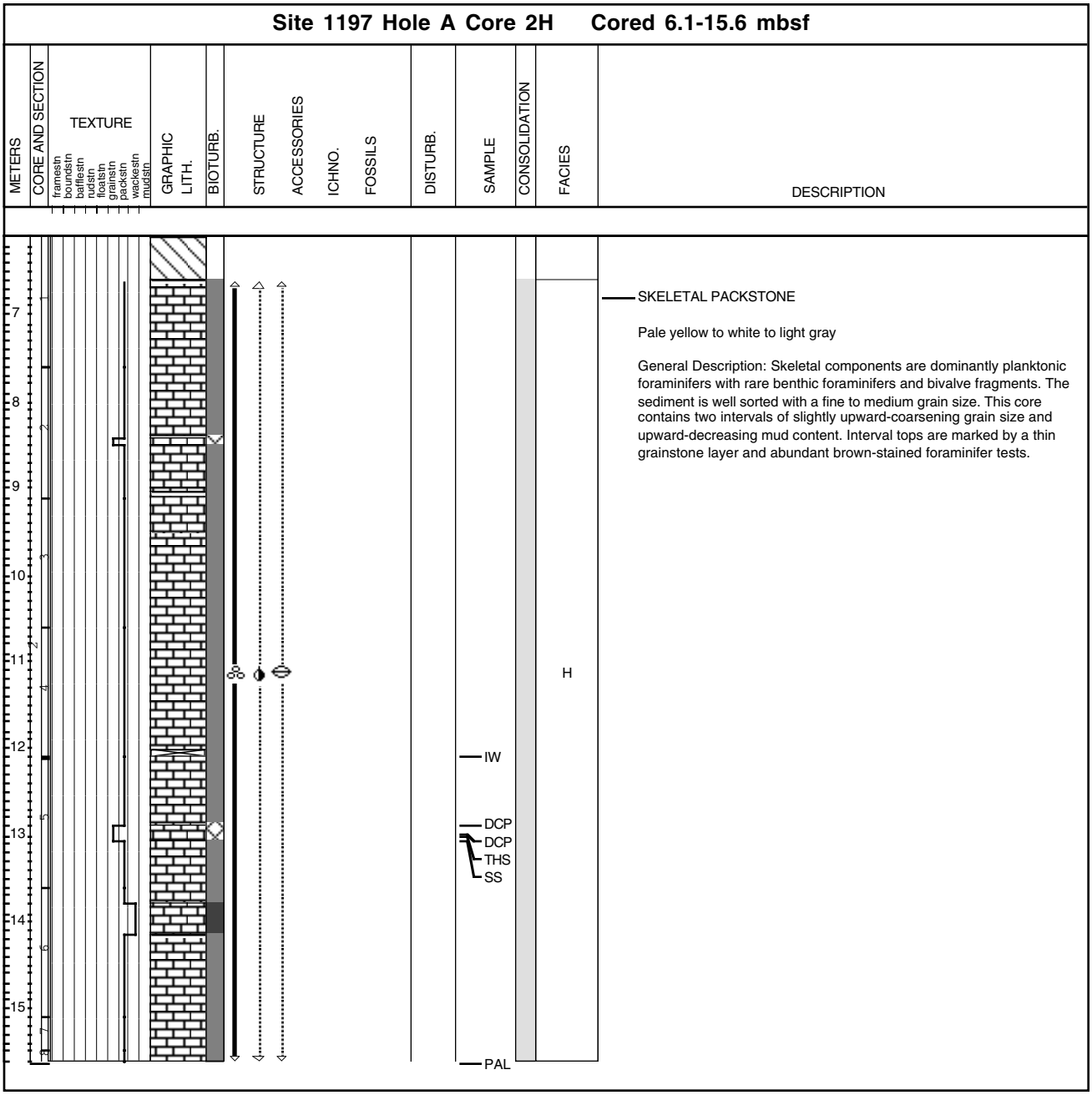


SKELETAL PACKSTONE

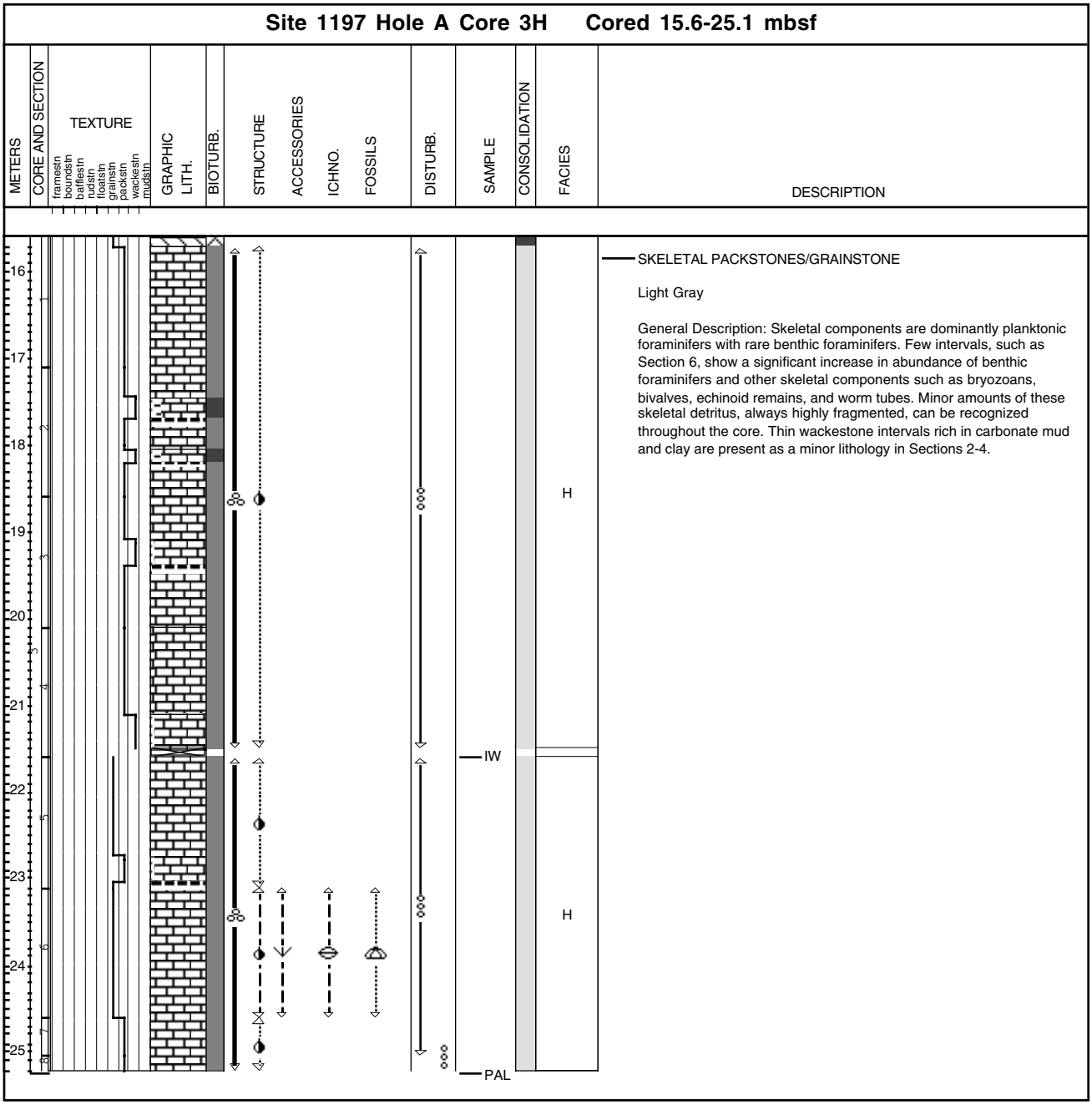
Pale yellow to white

General Description: Skeletal components are dominantly planktonic foraminifers with rare benthic foraminifers and bivalve fragments. The sediment is well sorted with a fine to medium-grain size. This core contains three intervals of slightly upward-coarsening grain size and upward-decreasing mud content. Intervals tops, at 0.00, 0.80, and 2.38 mbsf, are marked by abundant brown-stained foraminifer tests.

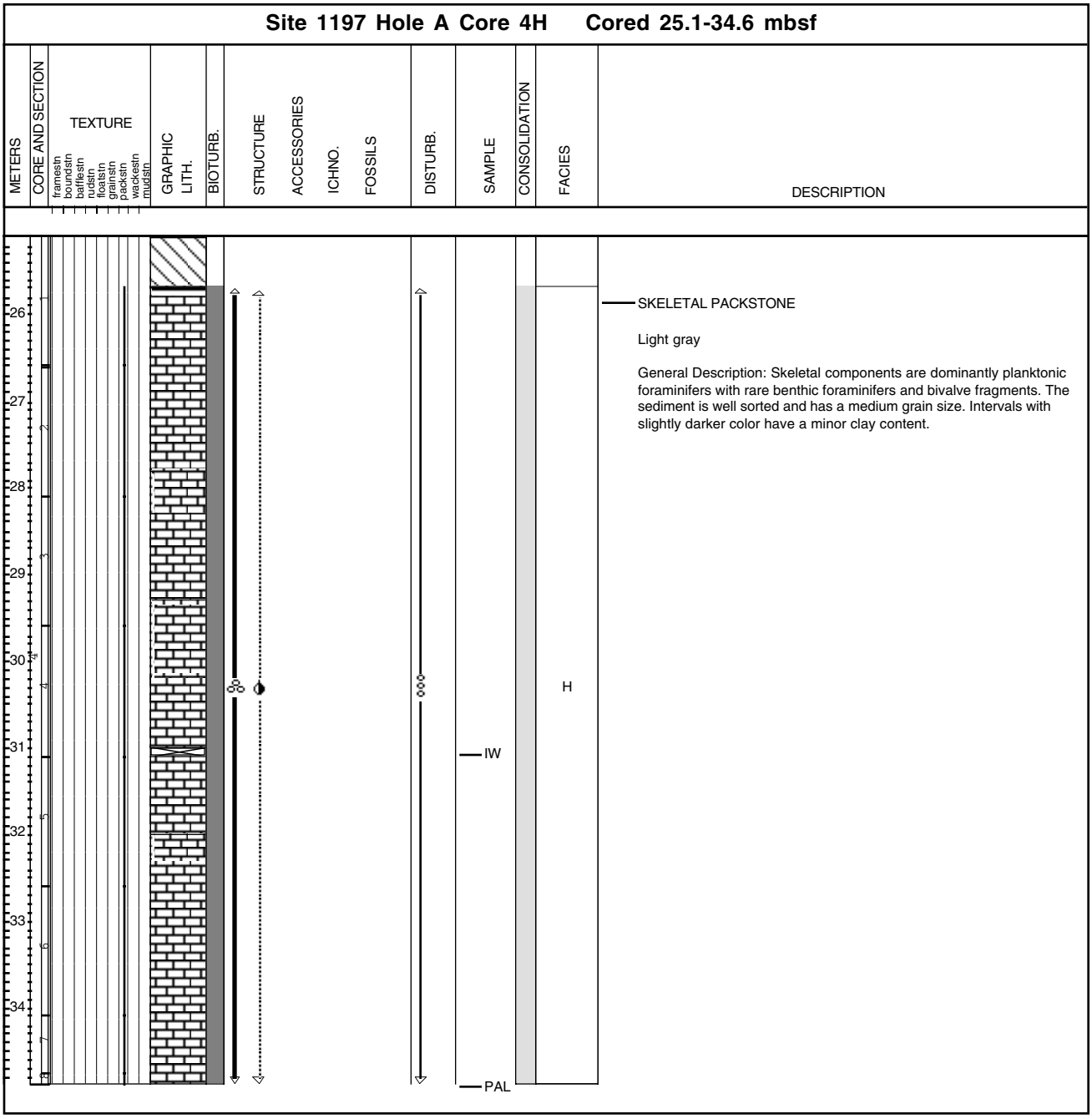
Core Photo


Site 1197 Hole A Core 2H Cored 6.1-15.6 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
7
8
9
10
11
12
13
14
15
IW
DCP
DCP
THS
SS
PAL
H
SKELETAL PACKSTONE
Pale yellow to white to light gray
General Description: Skeletal components are dominantly planktonic foraminifers with rare benthic foraminifers and bivalve fragments. The sediment is well sorted with a fine to medium grain size. This core contains two intervals of slightly upward-coarsening grain size and upward-decreasing mud content. Interval tops are marked by a thin grainstone layer and abundant brown-stained foraminifer tests.

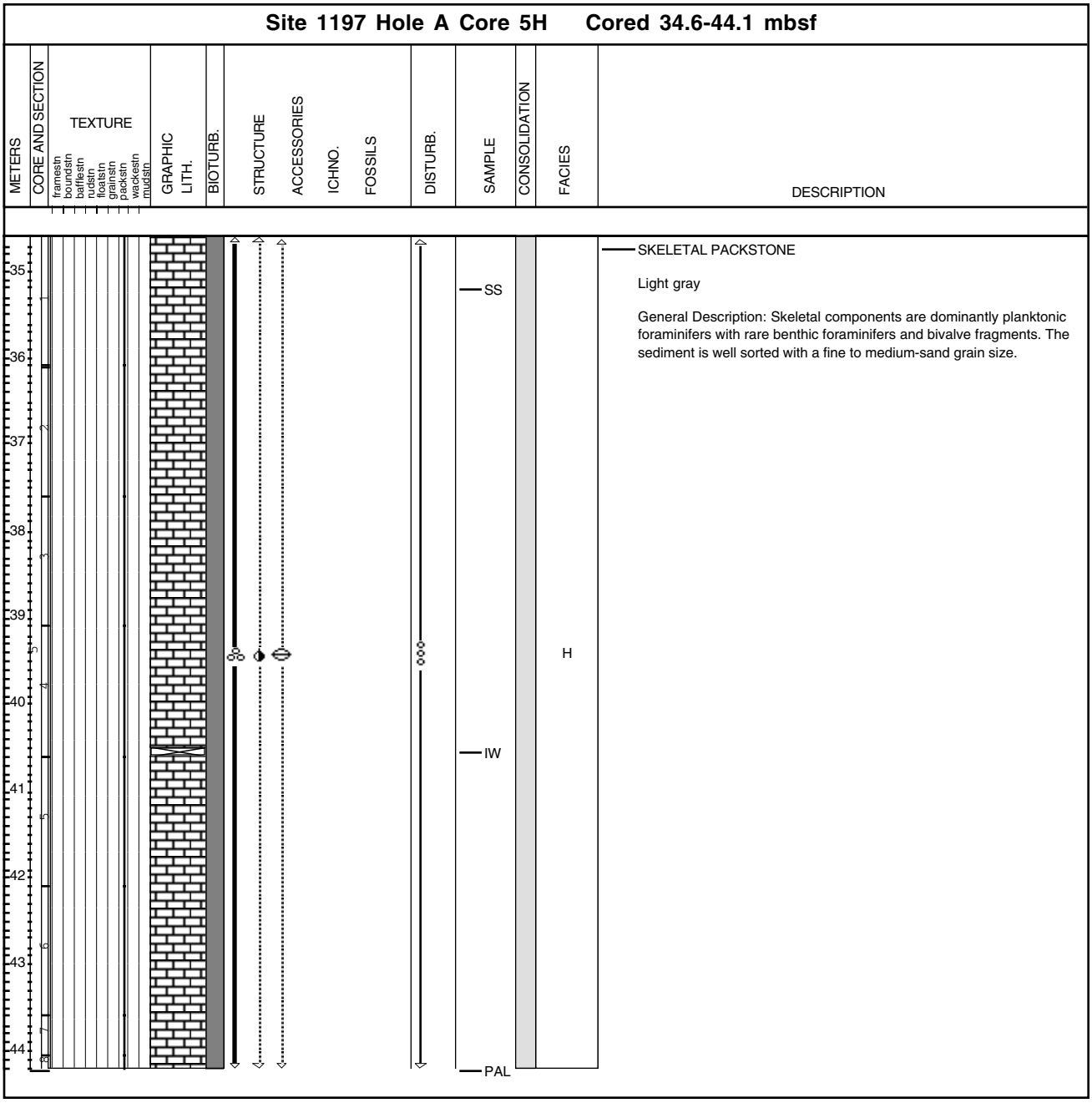
Core Photo


Site 1197 Hole A Core 3H Cored 15.6-25.1 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
16
17
18
19
20
21
22
23
24
25
IW
PAL
H
H
SKELETAL PACKSTONES/GRAINSTONE
Light Gray
General Description: Skeletal components are dominantly planktonic foraminifers with rare benthic foraminifers. Few intervals, such as Section 6, show a significant increase in abundance of benthic foraminifers and other skeletal components such as bryozoans, bivalves, echinoid remains, and worm tubes. Minor amounts of these skeletal detritus, always highly fragmented, can be recognized throughout the core. Thin wackestone intervals rich in carbonate mud and clay are present as a minor lithology in Sections 2-4.

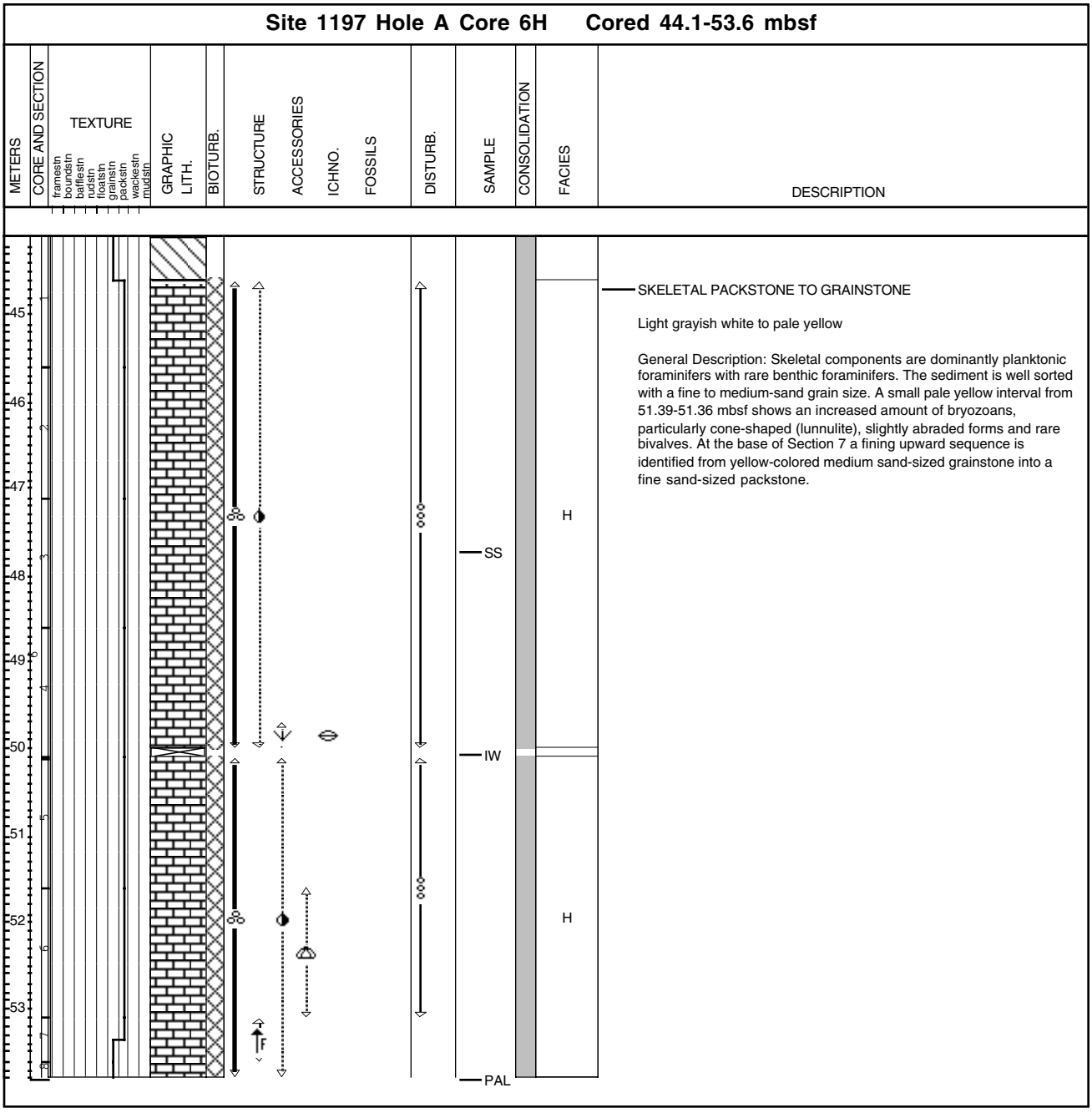
Core Photo


Site 1197 Hole A Core 4H Cored 25.1-34.6 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
26
27
28
29
30
31
32
33
34
IW
PAL
H
SKELETAL PACKSTONE
Light gray
General Description: Skeletal components are dominantly planktonic foraminifers with rare benthic foraminifers and bivalve fragments. The sediment is well sorted and has a medium grain size. Intervals with slightly darker color have a minor clay content.

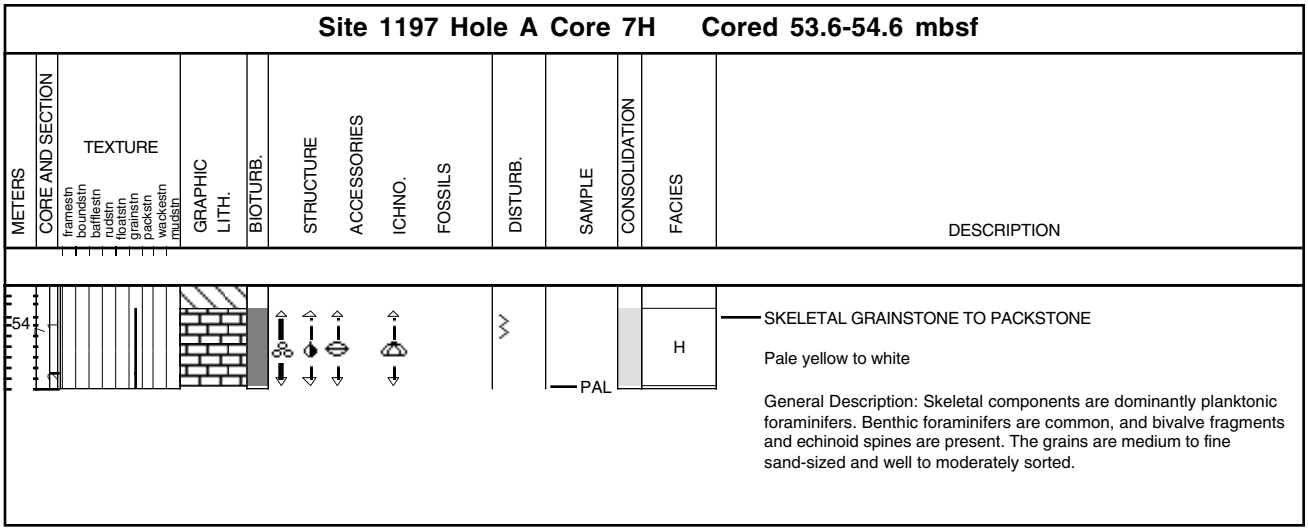
Core Photo


Site 1197 Hole A Core 5H Cored 34.6-44.1 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
35
36
37
38
39
40
41
42
43
44
SS
IW
PAL
H
SKELETAL PACKSTONE
Light gray
General Description: Skeletal components are dominantly planktonic foraminifers with rare benthic foraminifers and bivalve fragments. The sediment is well sorted with a fine to medium-sand grain size.

Core Photo


Site 1197 Hole A Core 6H Cored 44.1-53.6 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
45
46
47
48
49
50
51
52
53
SS
IW
PAL
H
H
SKELETAL PACKSTONE TO GRAINSTONE
Light grayish white to pale yellow
General Description: Skeletal components are dominantly planktonic foraminifers with rare benthic foraminifers. The sediment is well sorted with a fine to medium-sand grain size. A small pale yellow interval from 51.39-51.36 mbsf shows an increased amount of bryozoans, particularly cone-shaped (lunnulite), slightly abraded forms and rare bivalves. At the base of Section 7 a fining upward sequence is identified from yellow-colored medium sand-sized grainstone into a fine sand-sized packstone.

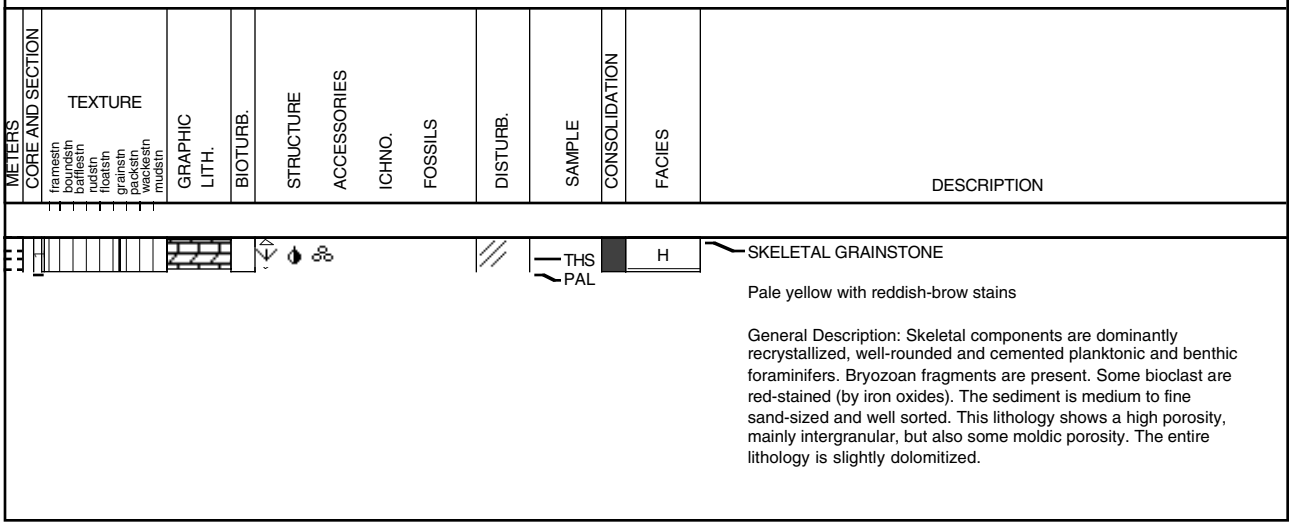
Core Photo



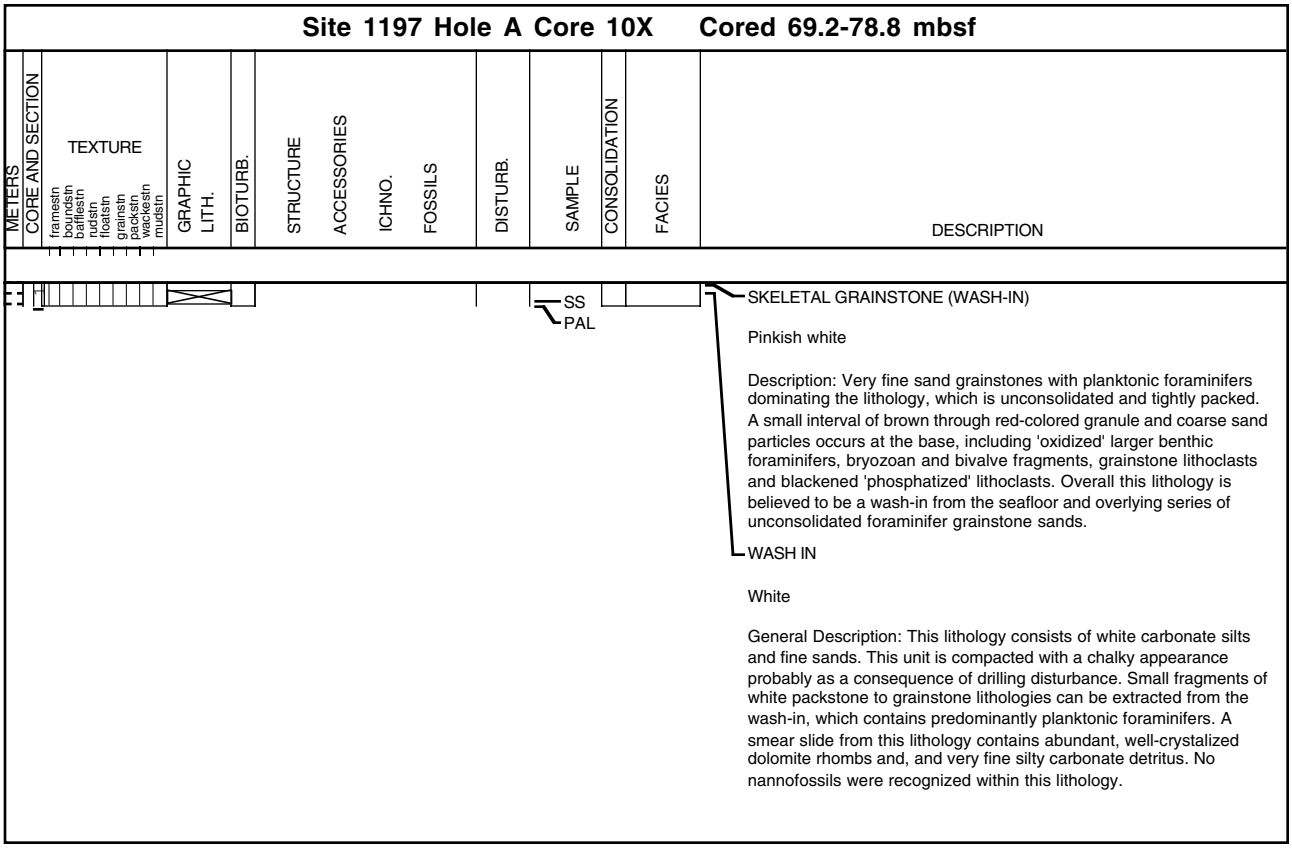
1197A-8X NO RECOVERY

Core Photo

Site 1197 Hole A Core 9X Cored 59.6-69.2 mbsf

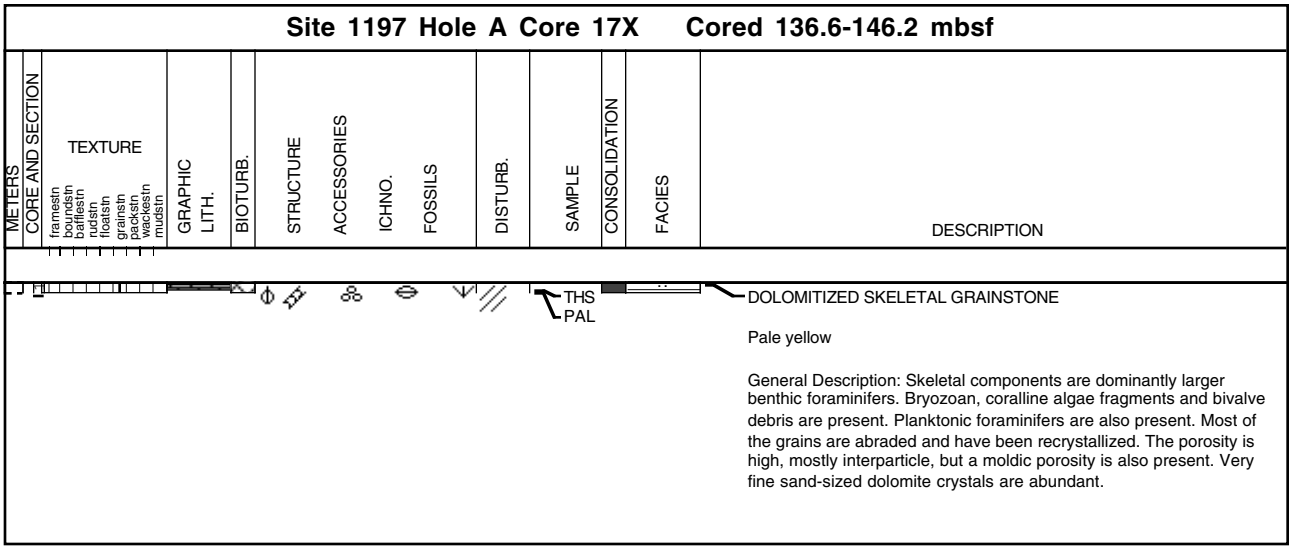


Core Photo



1197A-11X ENITRE CORE TO PALEONTOLOGISTS
1197A-12X NO RECOVERY
1197A-13X NO RECOVERY
1197A-14X NO RECOVERY
1197A-15X NO RECOVERY
1197A-16X NO RECOVERY

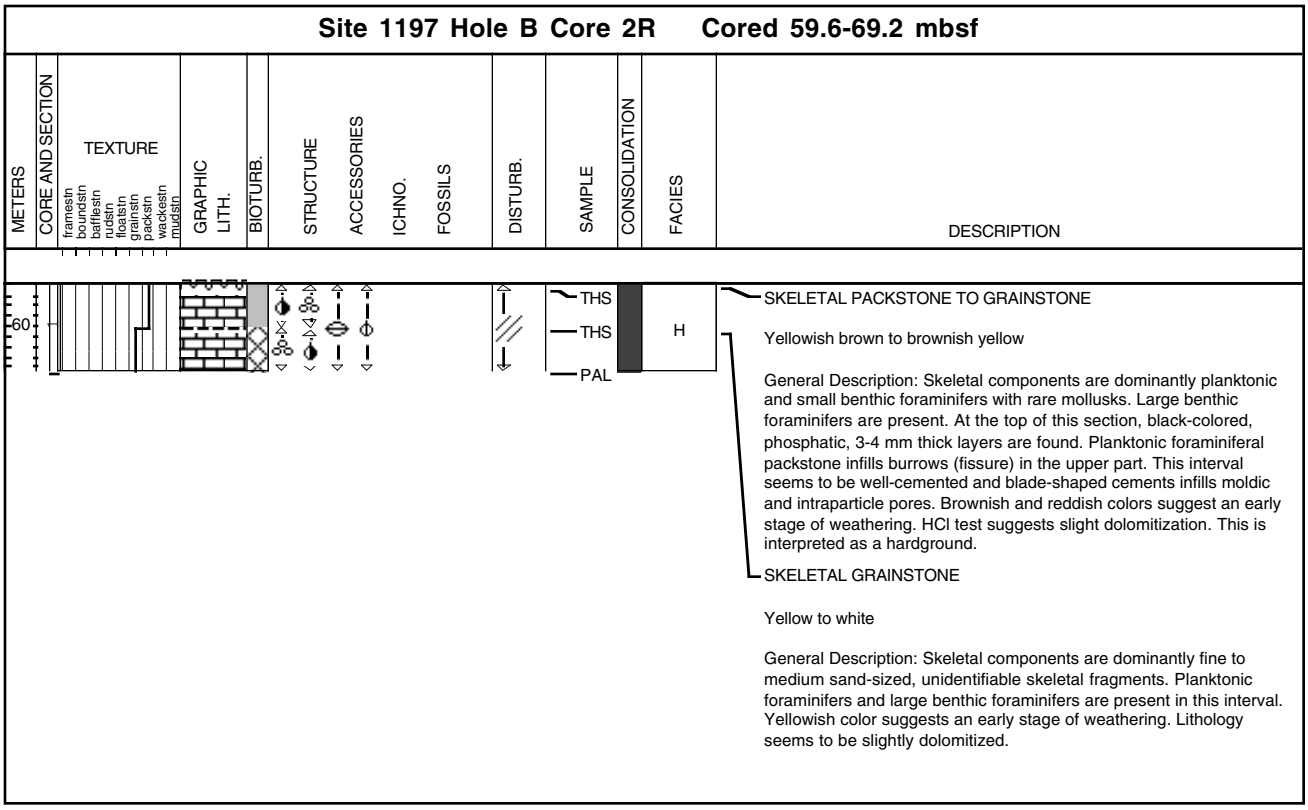
Core Photo



1197A-18X NO RECOVERY
1197A-19X NO RECOVERY
1197A-20X ENTIRE CORE TO PALEONTOLOGISTS
1197A-21X NO RECOVERY
1197A-22X NO RECOVERY
1197A-23X NO RECOVERY

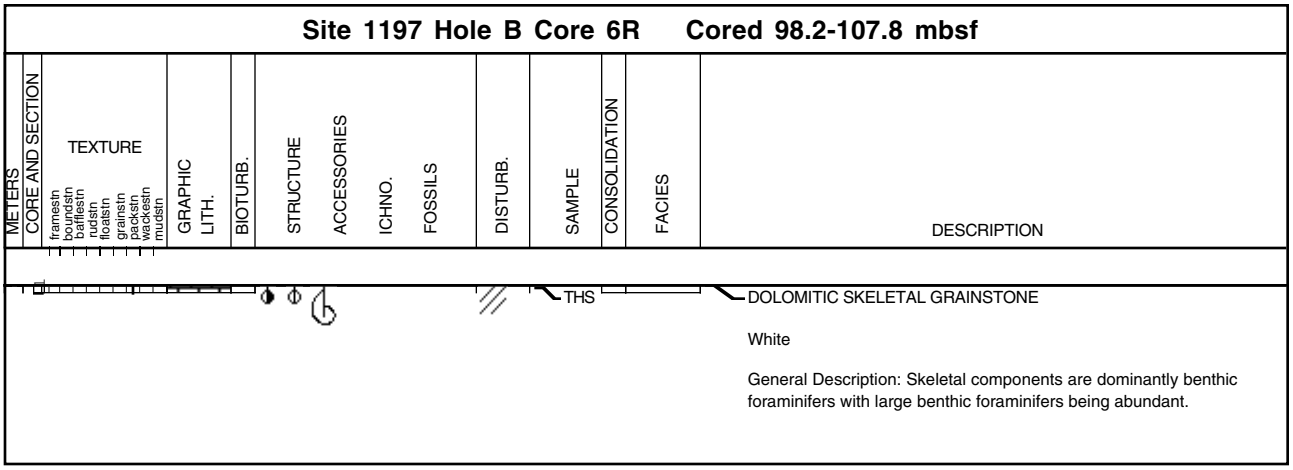
Core Photo

1197B-1R NO RECOVERY



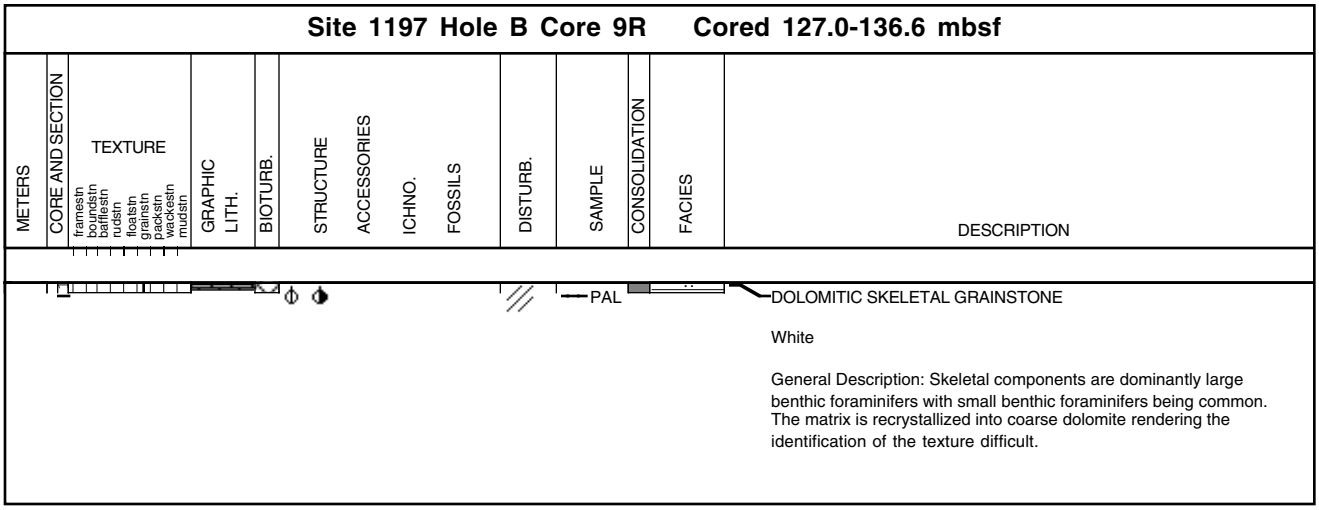
1197B-3R ENTIRE CORE TO PALEONTOLOGISTS
1197B-4R NO RECOVERY
1197B-5R ENTIRE CORE TO PALEONTOLOGISTS

Core Photo



1197B-7R NO RECOVERY
1197B-8R ENTIRE CORE TO PALEONTOLOGISTS

Core Photo

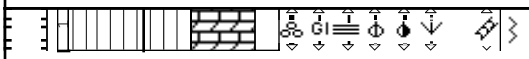


1197B-10R NO RECOVERY
1197B-11R ENTIRE CORE TO PALEONTOLOGISTS
1197B-12R ENTIRE CORE TO PALEONTOLOGISTS
1197B-13R ENTIRE CORE TO PALEONTOLOGISTS

Core Photo

Site 1197 Hole B Core 14R Cored 175.0-184.6 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

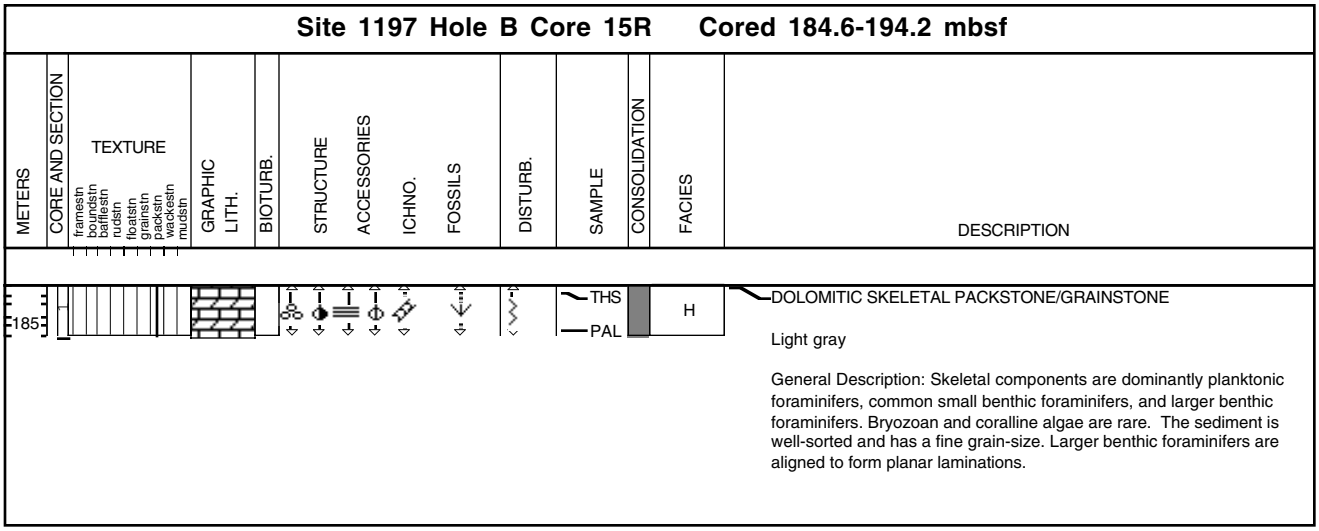
H

DOLOMITIC SKELETAL GRAINSTONE

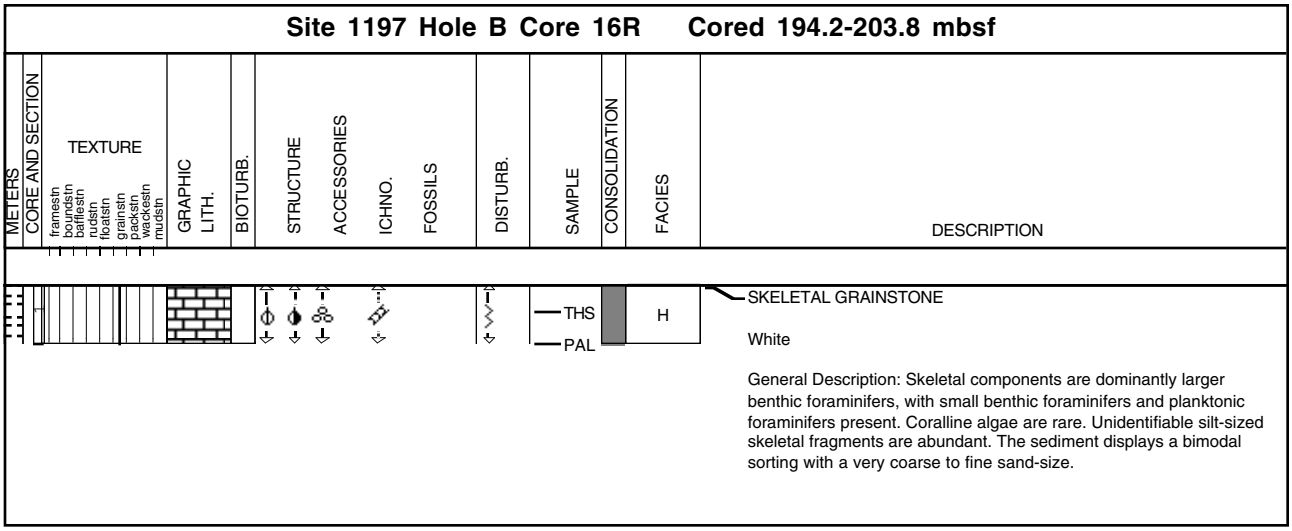
White

General Description: Skeletal components are dominantly planktonic foraminifers with larger and smaller benthic foraminifers present. Bryozoan, coralline algae, and glauconite grains are rare. The rock has a medium to coarse grain-size and displays some discrete planar laminations.

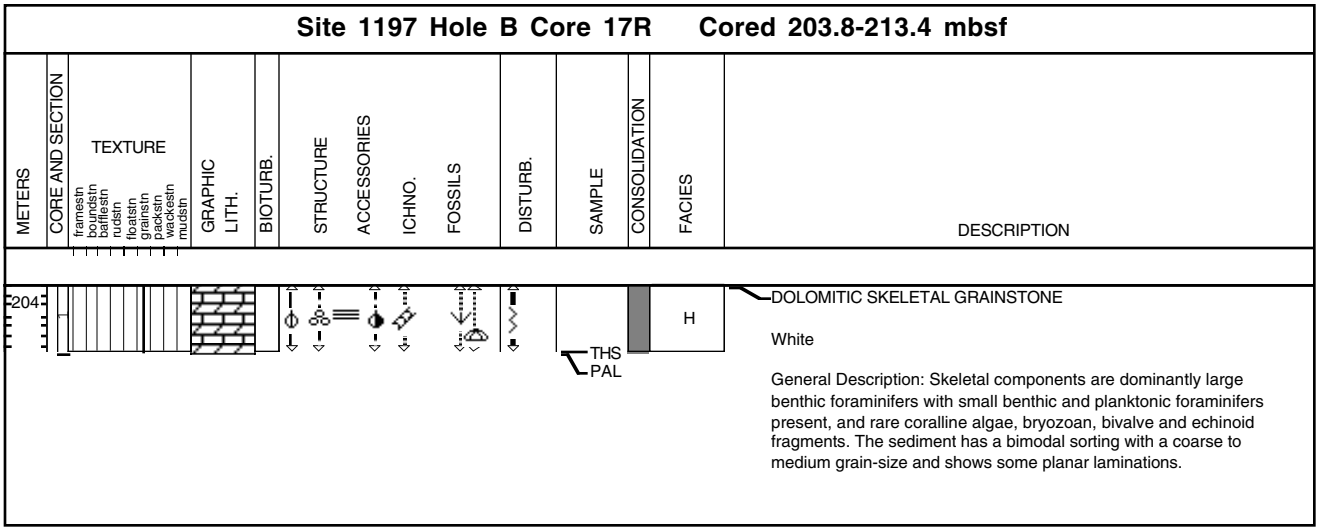
Core Photo


Site 1197 Hole B Core 15R Cored 184.6-194.2 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
185
THS
PAL
H
DOLOMITIC SKELETAL PACKSTONE/GRAINSTONE
Light gray
General Description: Skeletal components are dominantly planktonic foraminifers, common small benthic foraminifers, and larger benthic foraminifers. Bryozoan and coralline algae are rare. The sediment is well-sorted and has a fine grain-size. Larger benthic foraminifers are aligned to form planar laminations.

Core Photo


Site 1197 Hole B Core 16R Cored 194.2-203.8 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
THS
PAL
H
SKELETAL GRAINSTONE
White
General Description: Skeletal components are dominantly larger benthic foraminifers, with small benthic foraminifers and planktonic foraminifers present. Coralline algae are rare. Unidentifiable silt-sized skeletal fragments are abundant. The sediment displays a bimodal sorting with a very coarse to fine sand-size.

Core Photo

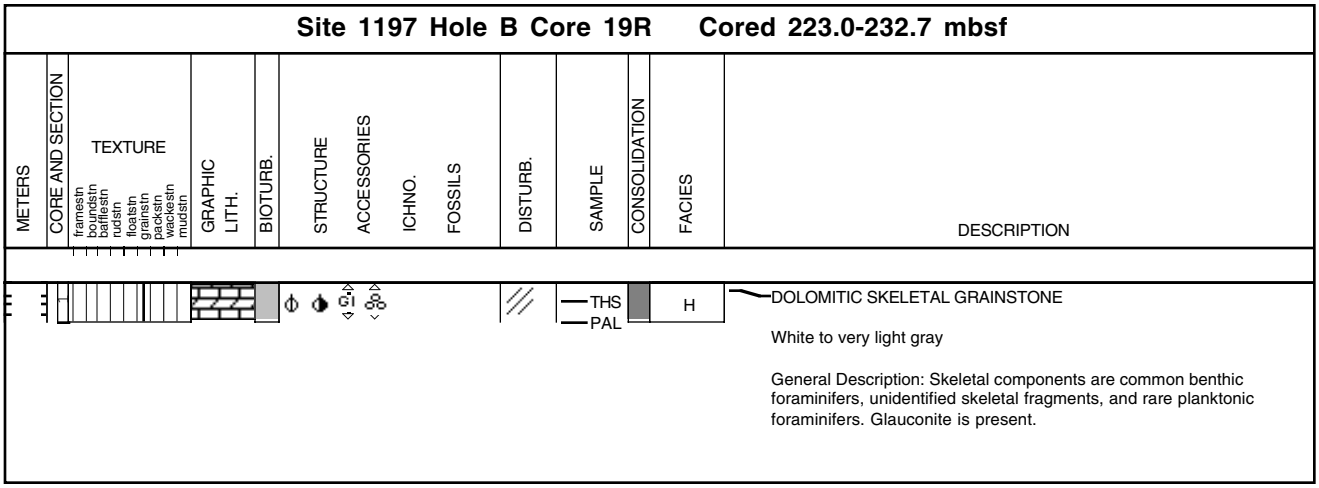

Site 1197 Hole B Core 17R Cored 203.8-213.4 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
204
THS
PAL
H
DOLOMITIC SKELETAL GRAINSTONE
White
General Description: Skeletal components are dominantly large benthic foraminifers with small benthic and planktonic foraminifers present, and rare coralline algae, bryozoan, bivalve and echinoid fragments. The sediment has a bimodal sorting with a coarse to medium grain-size and shows some planar laminations.

Core Photo

Site 1197 Hole B Core 18R Cored 213.4-223.0 mbsf

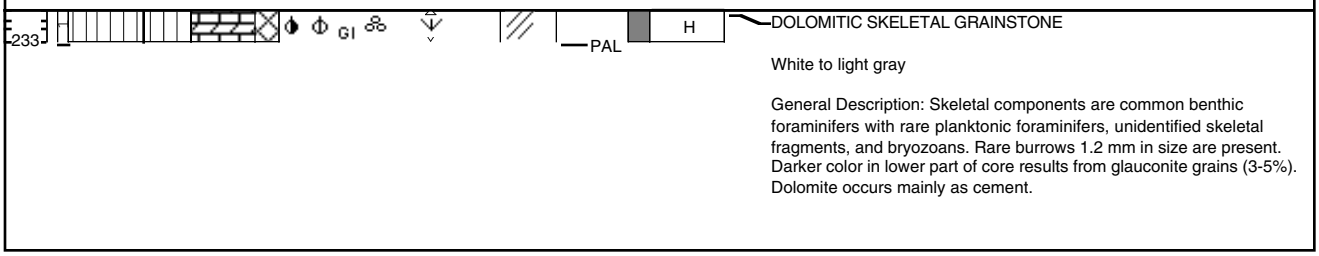
METERS	CORE AND SECTION	TEXTURE (framestn, boundstn, baffllestn, rudstn, floatstn, grainstn, packstn, wackestn, mudstn)	GRAPHIC LITH.	BIOTURB.	STRUCTURE	ACCESSORIES	ICHNO.	FOSSILS	DISTURB.	SAMPLE	CONSOLIDATION	FACIES	DESCRIPTION
										THS PAL		H	DOLOMITIC SKELETAL GRAINSTONE White General Description: Skeletal components are dominantly benthic foraminifers, unidentified skeletal fragments, planktonic foraminifers, and rare bryozoan and bivalve fragments.

Core Photo


Site 1197 Hole B Core 19R Cored 223.0-232.7 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
THS
PAL
H
DOLOMITIC SKELETAL GRAINSTONE
White to very light gray
General Description: Skeletal components are common benthic foraminifers, unidentified skeletal fragments, and rare planktonic foraminifers. Glauconite is present.

Core Photo

Site 1197 Hole B Core 20R Cored 232.7-242.3 mbsf

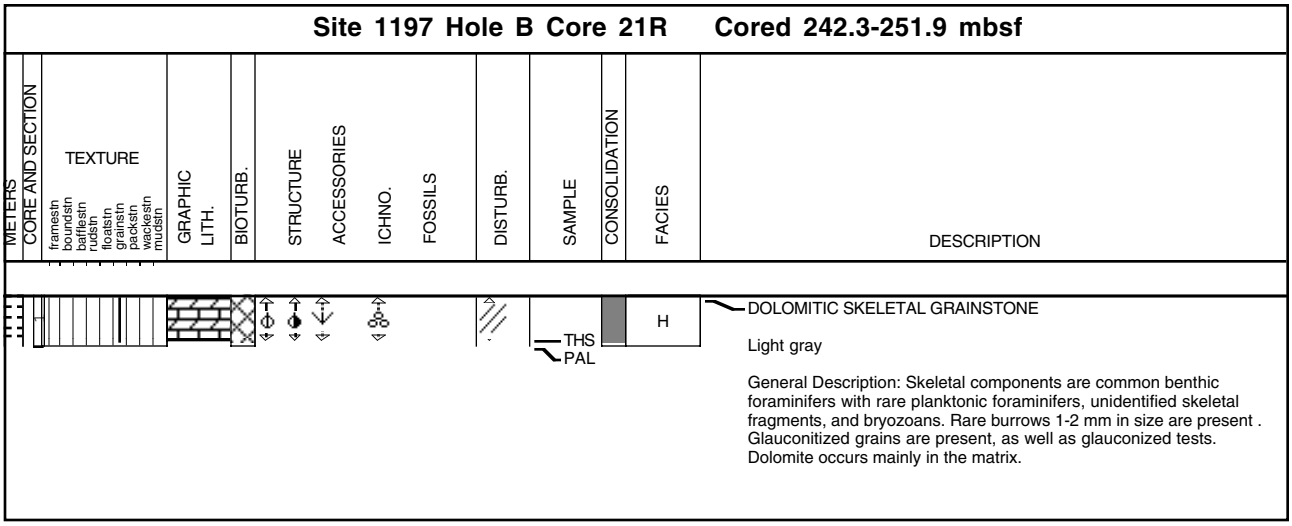


DOLOMITIC SKELETAL GRAINSTONE

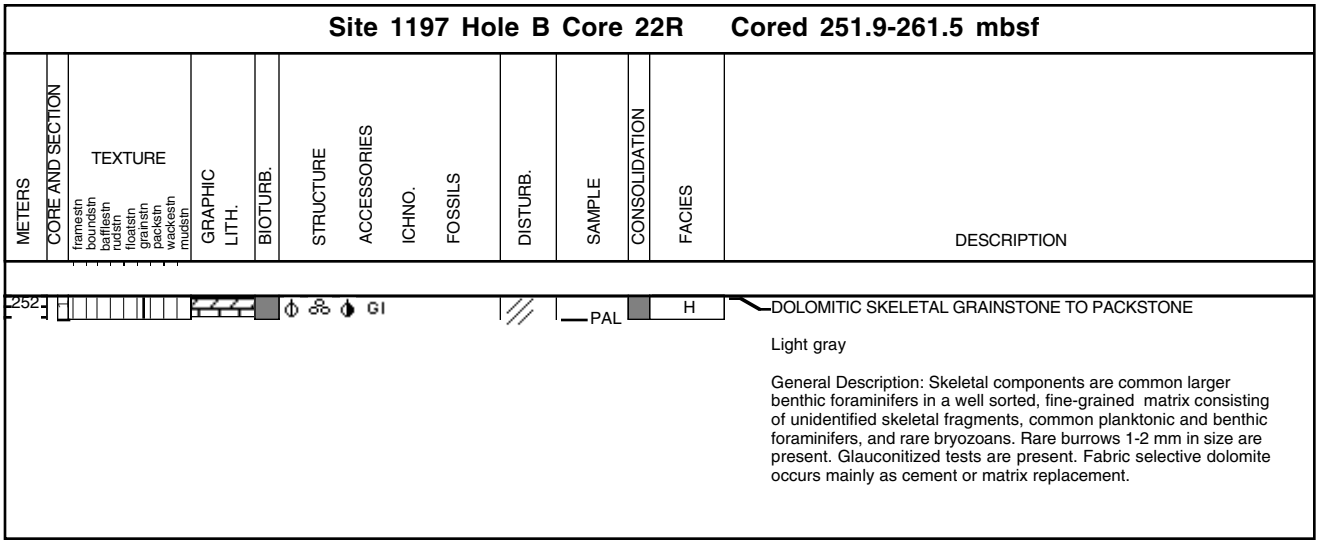
White to light gray

General Description: Skeletal components are common benthic foraminifers with rare planktonic foraminifers, unidentified skeletal fragments, and bryozoans. Rare burrows 1.2 mm in size are present. Darker color in lower part of core results from glauconite grains (3-5%). Dolomite occurs mainly as cement.

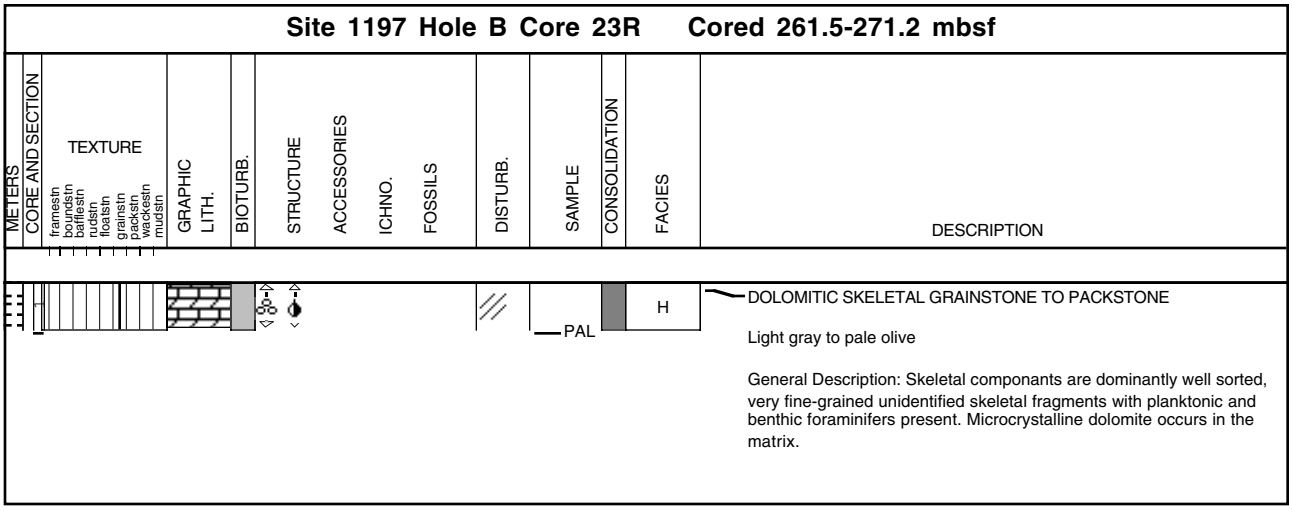
Core Photo


Site 1197 Hole B Core 21R Cored 242.3-251.9 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
THS
PAL
H
DOLOMITIC SKELETAL GRAINSTONE
Light gray
General Description: Skeletal components are common benthic foraminifers with rare planktonic foraminifers, unidentified skeletal fragments, and bryozoans. Rare burrows 1-2 mm in size are present . Glauconitized grains are present, as well as glauconized tests. Dolomite occurs mainly in the matrix.

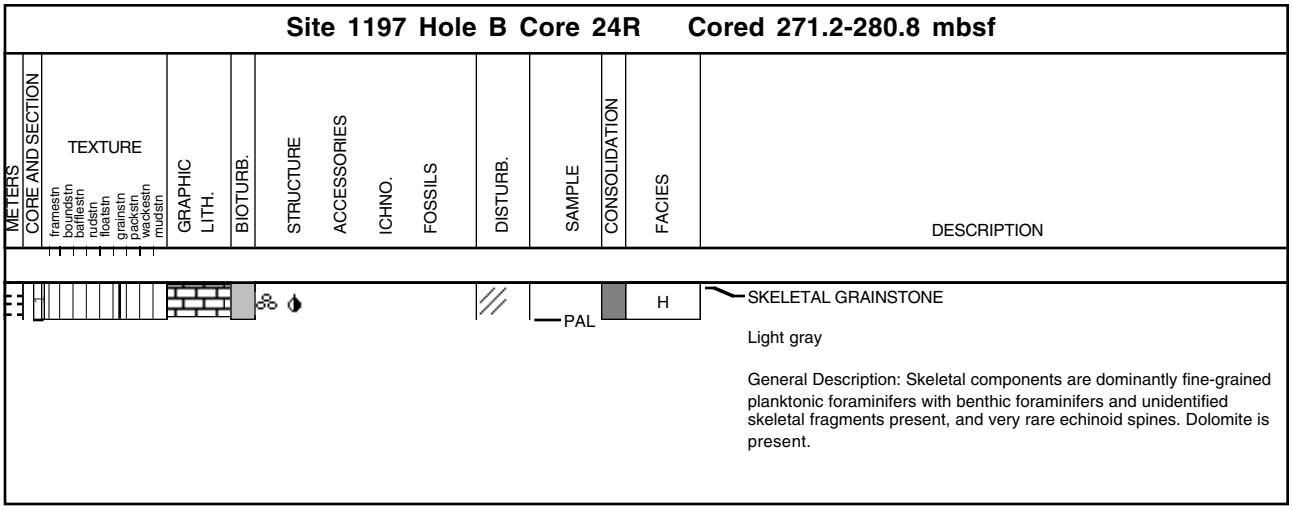
Core Photo


Site 1197 Hole B Core 22R Cored 251.9-261.5 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
252
GI
PAL
H
DOLOMITIC SKELETAL GRAINSTONE TO PACKSTONE
Light gray
General Description: Skeletal components are common larger benthic foraminifers in a well sorted, fine-grained matrix consisting of unidentified skeletal fragments, common planktonic and benthic foraminifers, and rare bryozoans. Rare burrows 1-2 mm in size are present. Glauconitized tests are present. Fabric selective dolomite occurs mainly as cement or matrix replacement.

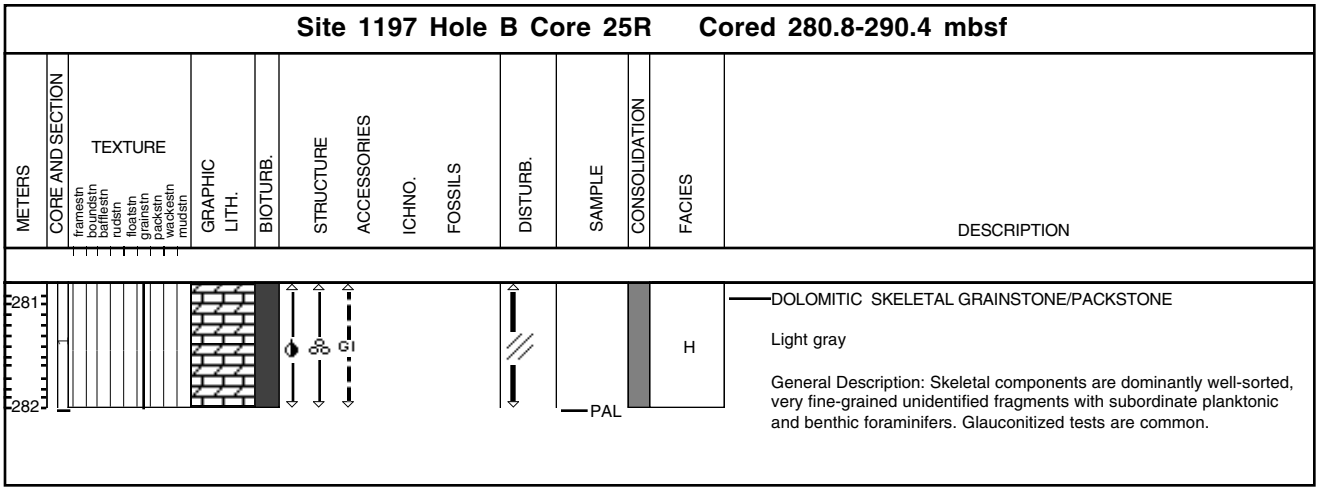
Core Photo


Site 1197 Hole B Core 23R Cored 261.5-271.2 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
H
DOLOMITIC SKELETAL GRAINSTONE TO PACKSTONE
Light gray to pale olive
General Description: Skeletal componants are dominantly well sorted, very fine-grained unidentified skeletal fragments with planktonic and benthic foraminifers present. Microcrystalline dolomite occurs in the matrix.

Core Photo

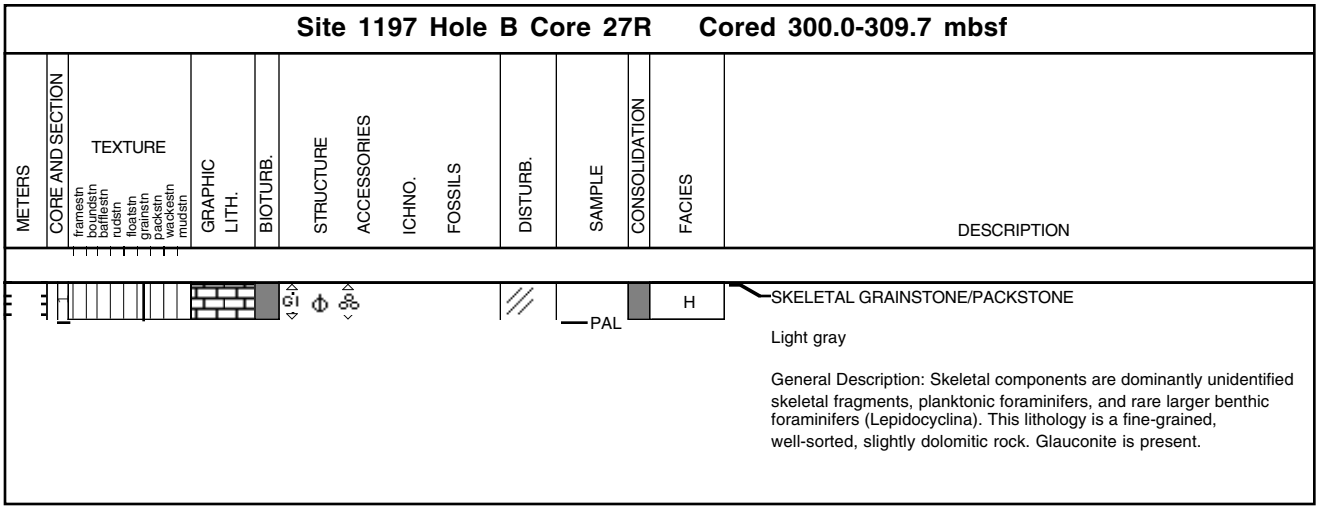

Site 1197 Hole B Core 24R Cored 271.2-280.8 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
PAL
H
SKELETAL GRAINSTONE
Light gray
General Description: Skeletal components are dominantly fine-grained planktonic foraminifers with benthic foraminifers and unidentified skeletal fragments present, and very rare echinoid spines. Dolomite is present.

Core Photo

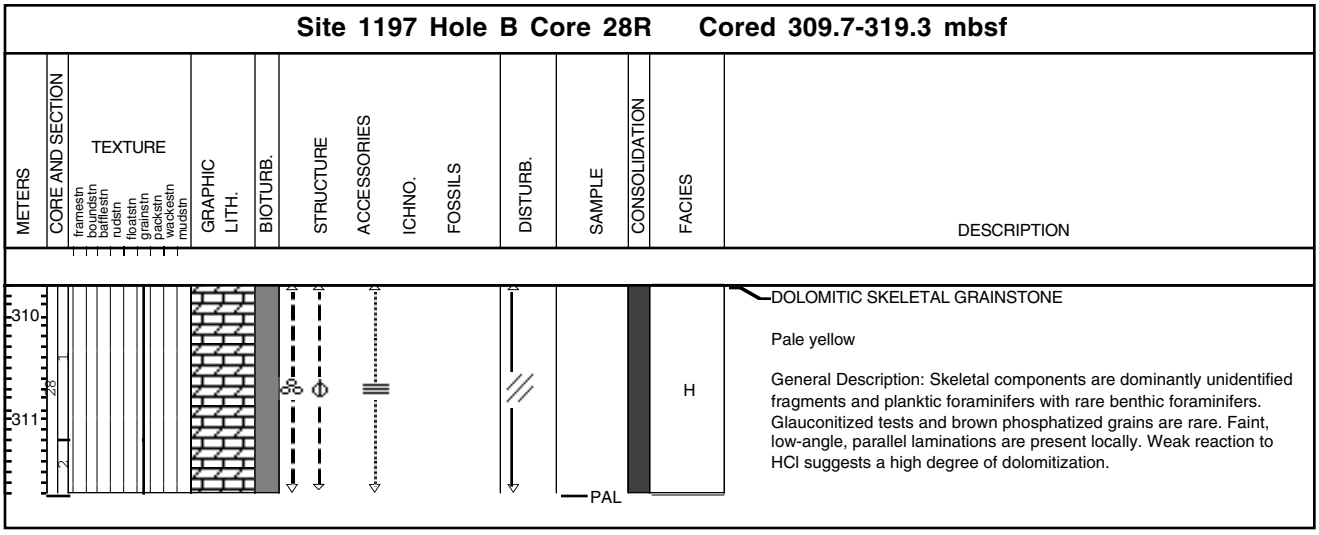


1197B-26R NO RECOVERY

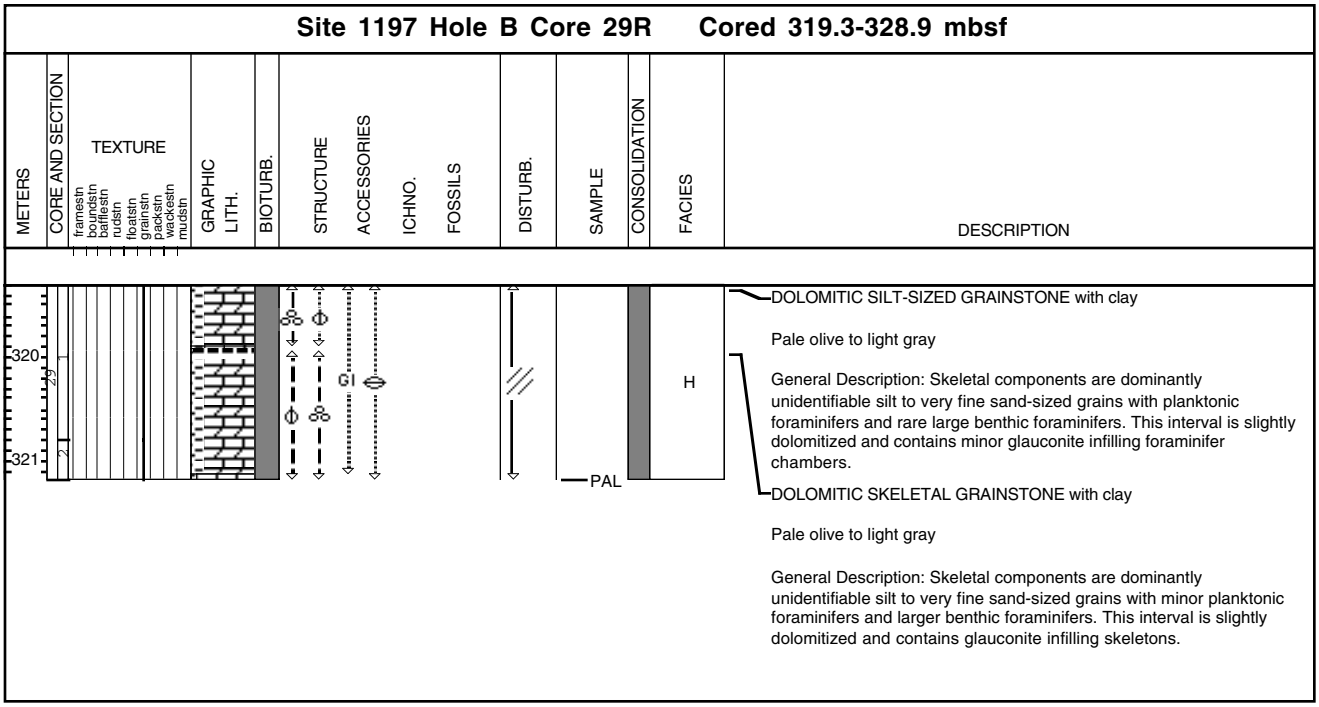
Core Photo


Site 1197 Hole B Core 27R Cored 300.0-309.7 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
H
PAL
SKELETAL GRAINSTONE/PACKSTONE
Light gray
General Description: Skeletal components are dominantly unidentified skeletal fragments, planktonic foraminifers, and rare larger benthic foraminifers (Lepidocyclina). This lithology is a fine-grained, well-sorted, slightly dolomitic rock. Glauconite is present.

Core Photo

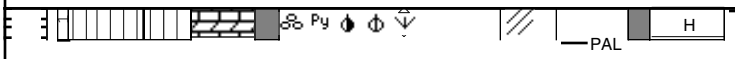

Site 1197 Hole B Core 28R Cored 309.7-319.3 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
310
311
28
1
2
H
PAL
DOLOMITIC SKELETAL GRAINSTONE
Pale yellow
General Description: Skeletal components are dominantly unidentified fragments and planktic foraminifers with rare benthic foraminifers. Glauconitized tests and brown phosphatized grains are rare. Faint, low-angle, parallel laminations are present locally. Weak reaction to HCl suggests a high degree of dolomitization.

Core Photo


Site 1197 Hole B Core 29R Cored 319.3-328.9 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
320
321
29
1
2
1
Gl
PAL
H
DOLOMITIC SILT-SIZED GRAINSTONE with clay
Pale olive to light gray
General Description: Skeletal components are dominantly unidentifiable silt to very fine sand-sized grains with planktonic foraminifers and rare large benthic foraminifers. This interval is slightly dolomitized and contains minor glauconite infilling foraminifer chambers.
DOLOMITIC SKELETAL GRAINSTONE with clay
Pale olive to light gray
General Description: Skeletal components are dominantly unidentifiable silt to very fine sand-sized grains with minor planktonic foraminifers and larger benthic foraminifers. This interval is slightly dolomitized and contains glauconite infilling skeletons.

Core Photo

Site 1197 Hole B Core 30R Cored 328.9-338.6 mbsf

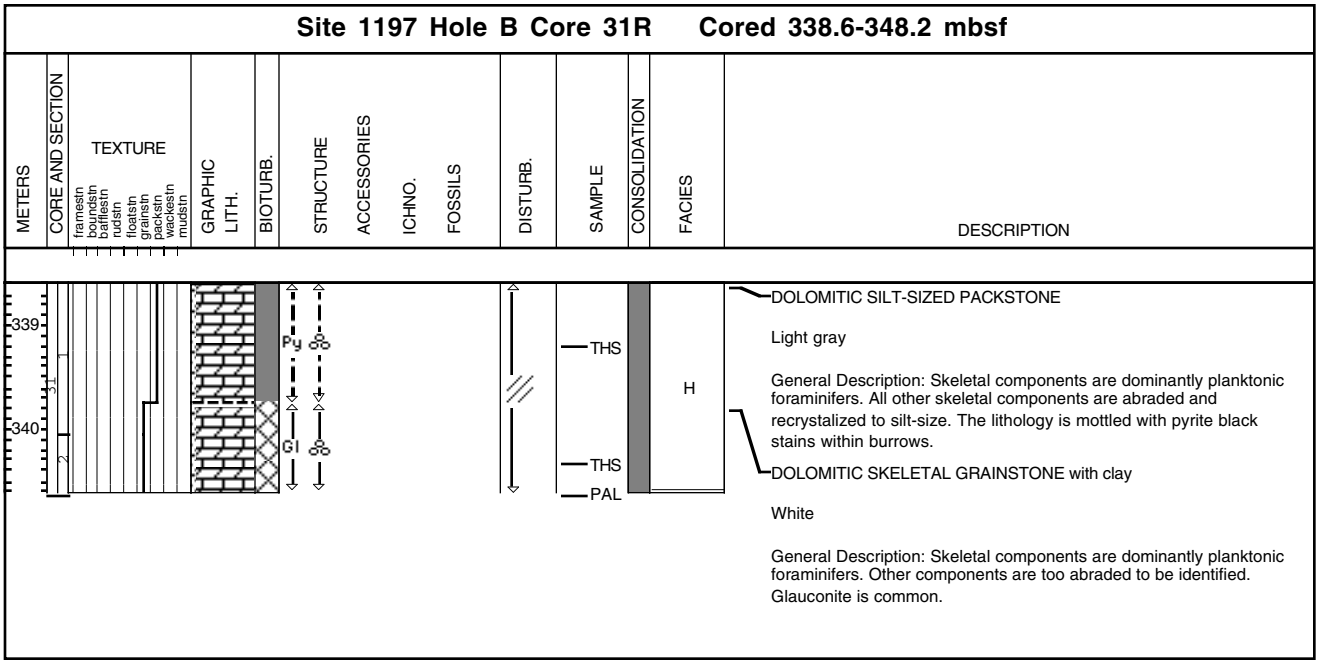


DOLOMITIC SILT-SIZED GRAINSTONE/SKELETAL GRAINSTONE

White to light gray

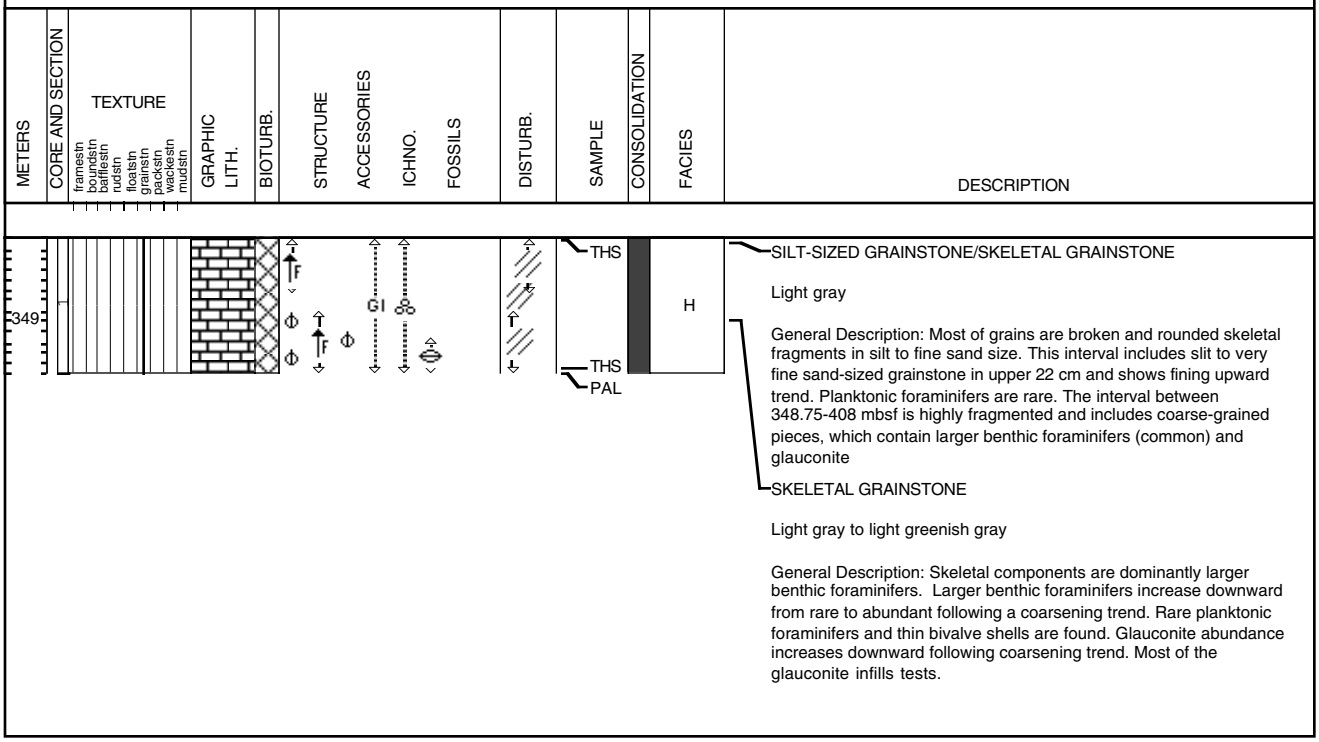
General Description: The sediment dominantly consists of fine-grained skeletal detritus. Some grains can be identified, with planktonic and benthic foraminifers common, and rare bryozoan fragments. The sediment is silt- to fine sand-sized, and well sorted. Pyrite grains can be found as traces. Porosity is high, mostly interskeletal/particular, and some moldic porosity occurs. The grains are largely recrystallized and cemented, and probably also partly dolomitized. The grade of dolomitization increases downcore.

Core Photo

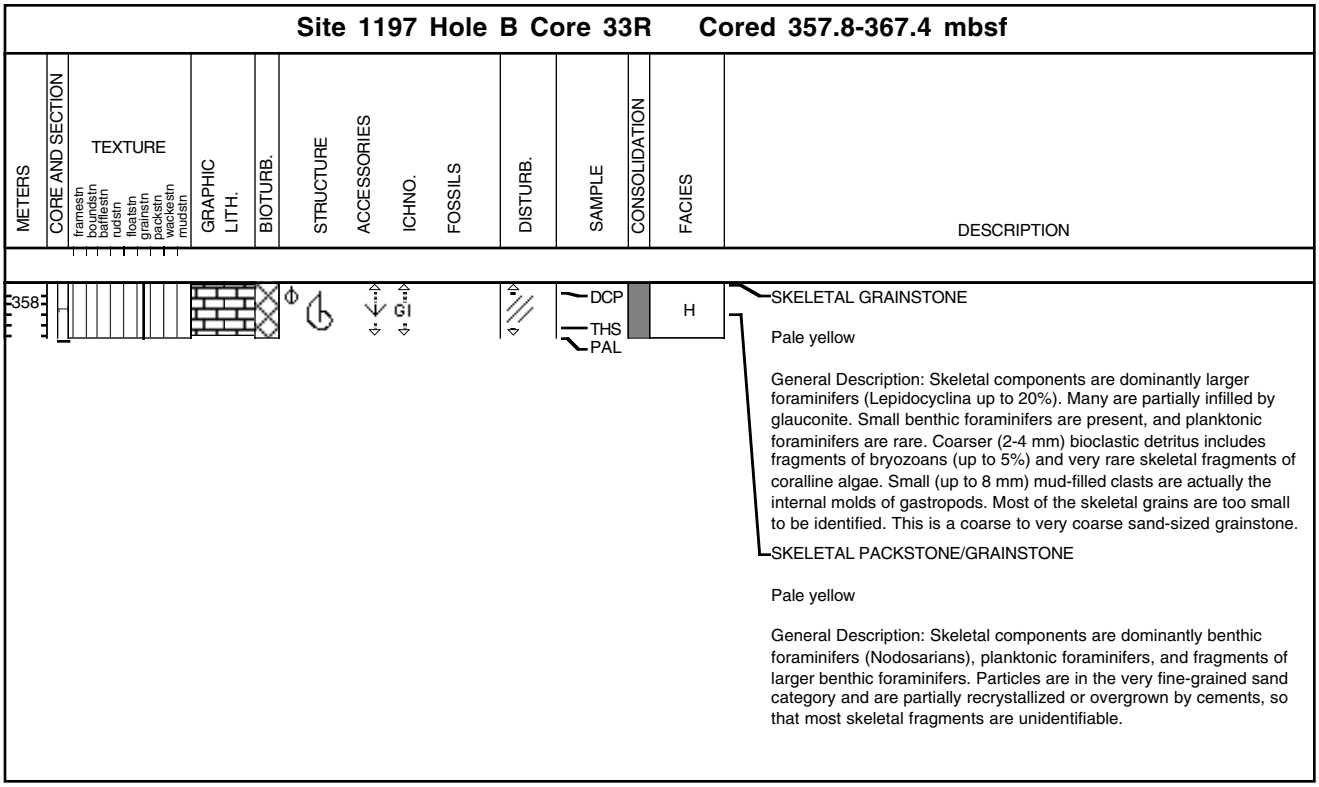

Site 1197 Hole B Core 31R Cored 338.6-348.2 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
batflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
339
340
31
1
2
Py
Gl
THS
THS
PAL
H
DOLOMITIC SILT-SIZED PACKSTONE
Light gray
General Description: Skeletal components are dominantly planktonic foraminifers. All other skeletal components are abraded and recrystalized to silt-size. The lithology is mottled with pyrite black stains within burrows.
DOLOMITIC SKELETAL GRAINSTONE with clay
White
General Description: Skeletal components are dominantly planktonic foraminifers. Other components are too abraded to be identified. Glauconite is common.

Core Photo

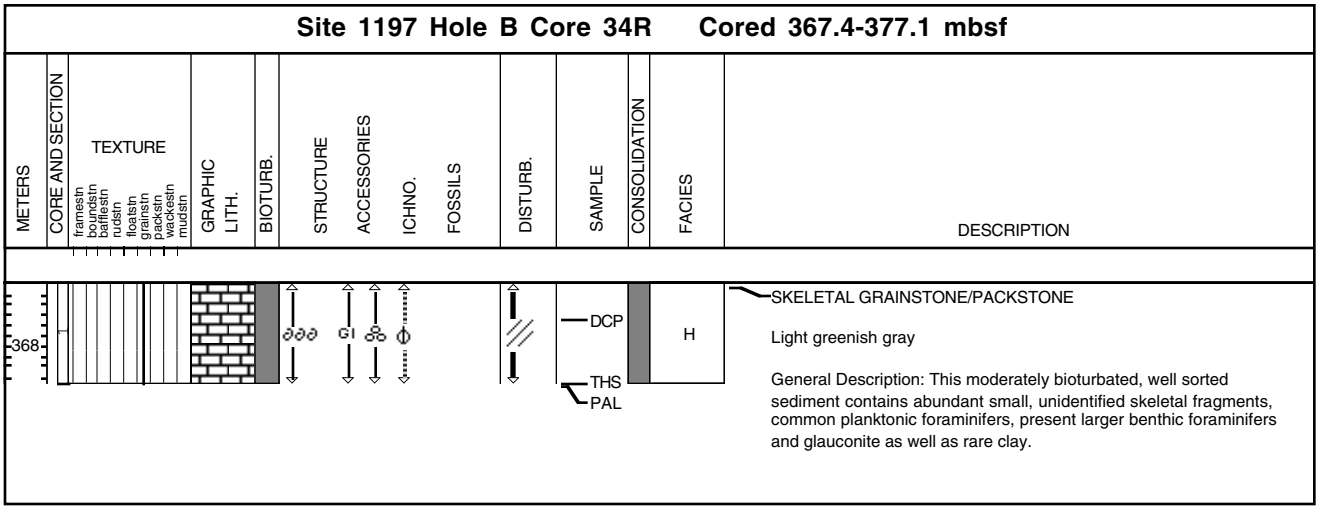
Site 1197 Hole B Core 32R Cored 348.2-357.8 mbsf



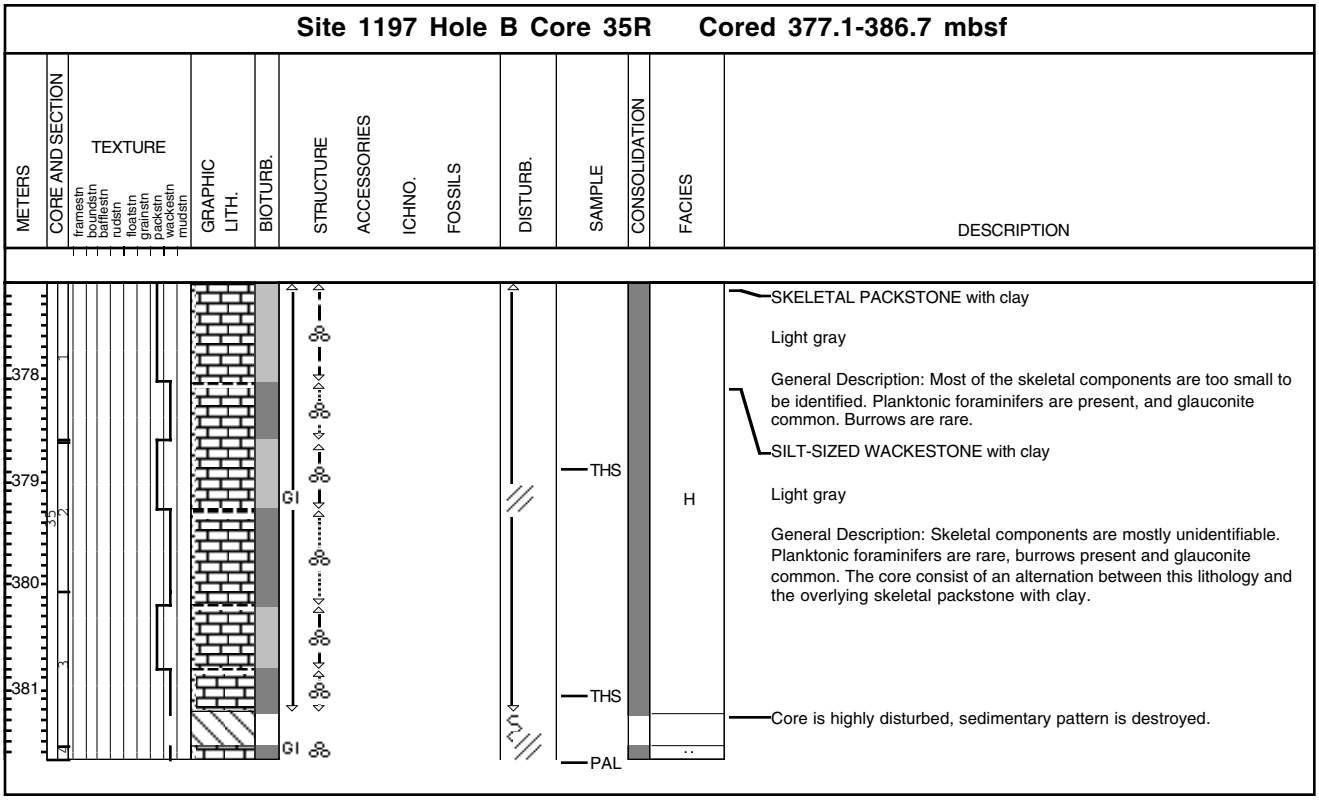
Core Photo


Site 1197 Hole B Core 33R Cored 357.8-367.4 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
358
DCP
THS
PAL
H
SKELETAL GRAINSTONE
Pale yellow
General Description: Skeletal components are dominantly larger foraminifers (Lepidocyclina up to 20%). Many are partially infilled by glauconite. Small benthic foraminifers are present, and planktonic foraminifers are rare. Coarser (2-4 mm) bioclastic detritus includes fragments of bryozoans (up to 5%) and very rare skeletal fragments of coralline algae. Small (up to 8 mm) mud-filled clasts are actually the internal molds of gastropods. Most of the skeletal grains are too small to be identified. This is a coarse to very coarse sand-sized grainstone.
SKELETAL PACKSTONE/GRAINSTONE
Pale yellow
General Description: Skeletal components are dominantly benthic foraminifers (Nodosarians), planktonic foraminifers, and fragments of larger benthic foraminifers. Particles are in the very fine-grained sand category and are partially recrystallized or overgrown by cements, so that most skeletal fragments are unidentifiable.

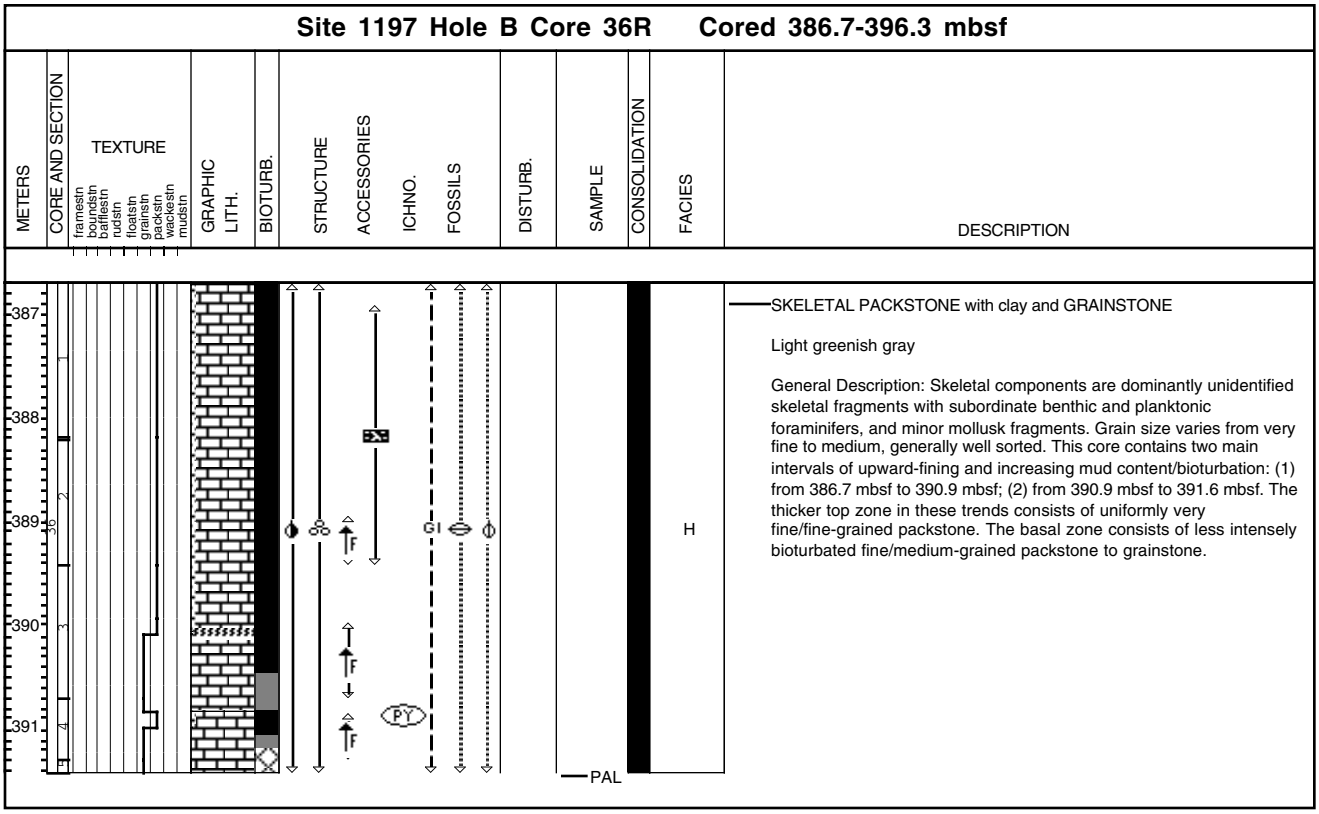
Core Photo


Site 1197 Hole B Core 34R Cored 367.4-377.1 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
368
GI
DCP
THS
PAL
H
SKELETAL GRAINSTONE/PACKSTONE
Light greenish gray
General Description: This moderately bioturbated, well sorted sediment contains abundant small, unidentified skeletal fragments, common planktonic foraminifers, present larger benthic foraminifers and glauconite as well as rare clay.

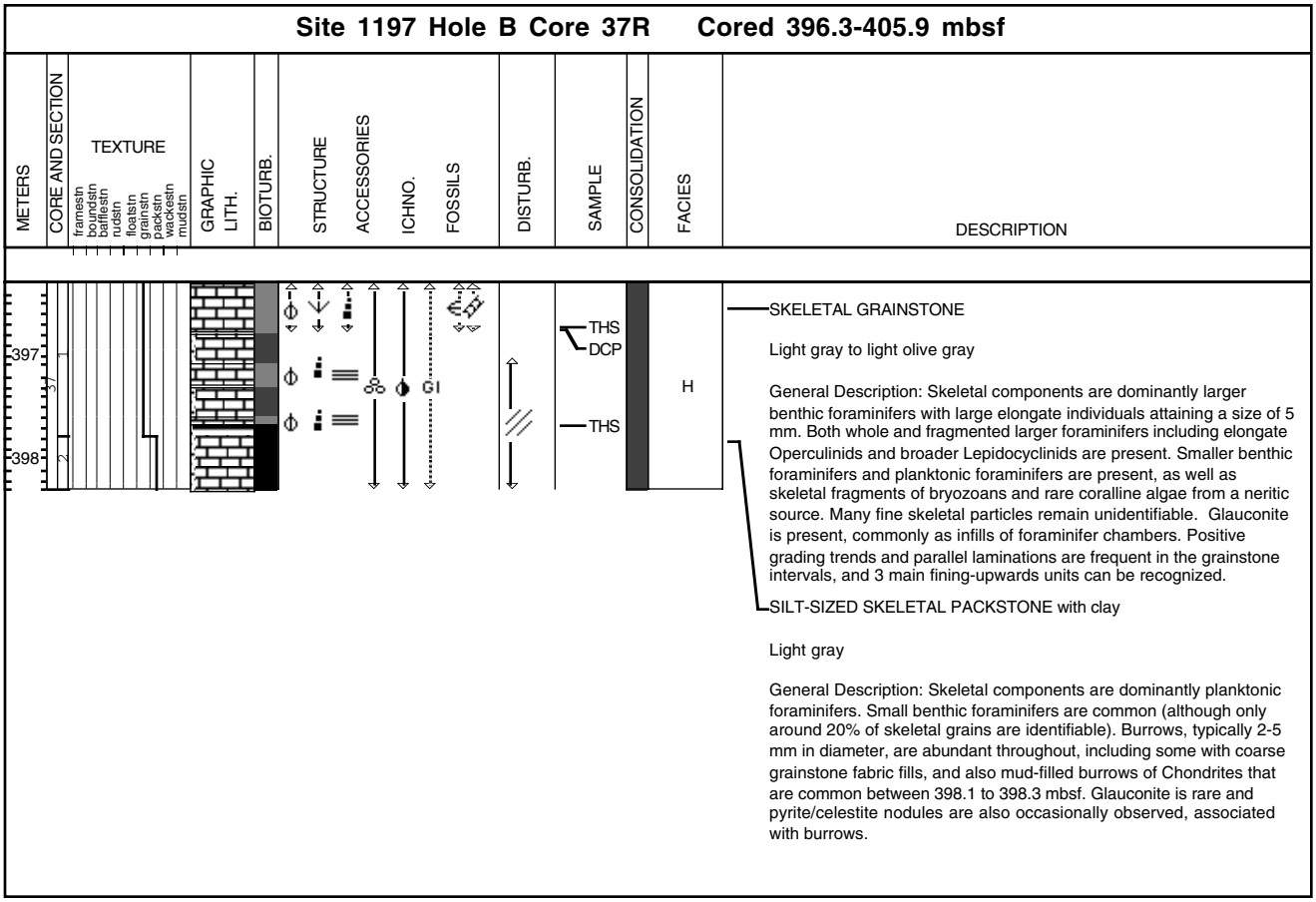
Core Photo


Site 1197 Hole B Core 35R Cored 377.1-386.7 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
378
379
380
381
GI
GI
THS
THS
PAL
H
SKELETAL PACKSTONE with clay
Light gray
General Description: Most of the skeletal components are too small to be identified. Planktonic foraminifers are present, and glauconite common. Burrows are rare.
SILT-SIZED WACKESTONE with clay
Light gray
General Description: Skeletal components are mostly unidentifiable. Planktonic foraminifers are rare, burrows present and glauconite common. The core consist of an alternation between this lithology and the overlying skeletal packstone with clay.
Core is highly disturbed, sedimentary pattern is destroyed.

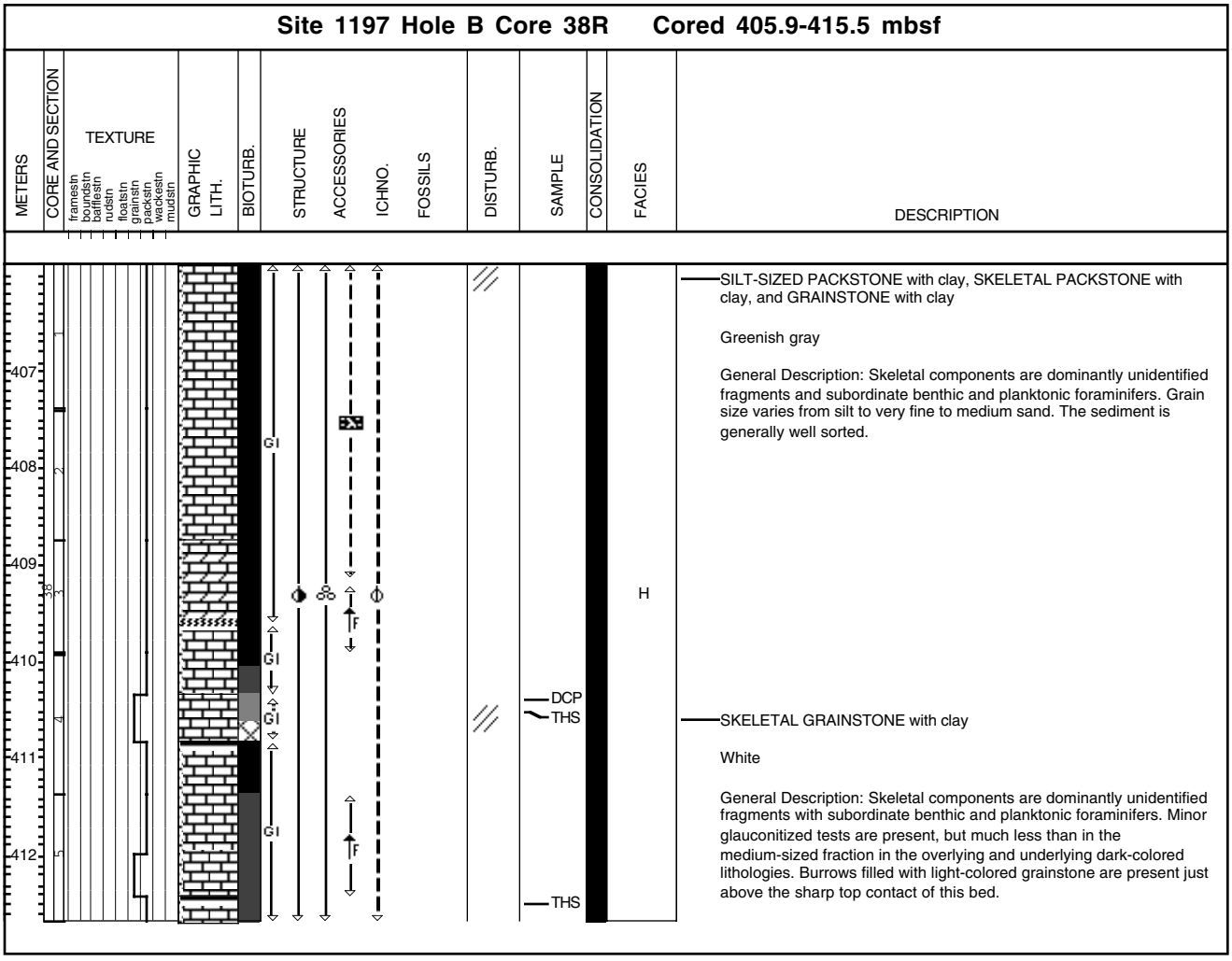
Core Photo


Site 1197 Hole B Core 36R Cored 386.7-396.3 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
387
388
389
390
391
36
1
2
3
4
CC
F
GI
PY
H
PAL
SKELETAL PACKSTONE with clay and GRAINSTONE
Light greenish gray
General Description: Skeletal components are dominantly unidentified skeletal fragments with subordinate benthic and planktonic foraminifers, and minor mollusk fragments. Grain size varies from very fine to medium, generally well sorted. This core contains two main intervals of upward-fining and increasing mud content/bioturbation: (1) from 386.7 mbsf to 390.9 mbsf; (2) from 390.9 mbsf to 391.6 mbsf. The thicker top zone in these trends consists of uniformly very fine/fine-grained packstone. The basal zone consists of less intensely bioturbated fine/medium-grained packstone to grainstone.

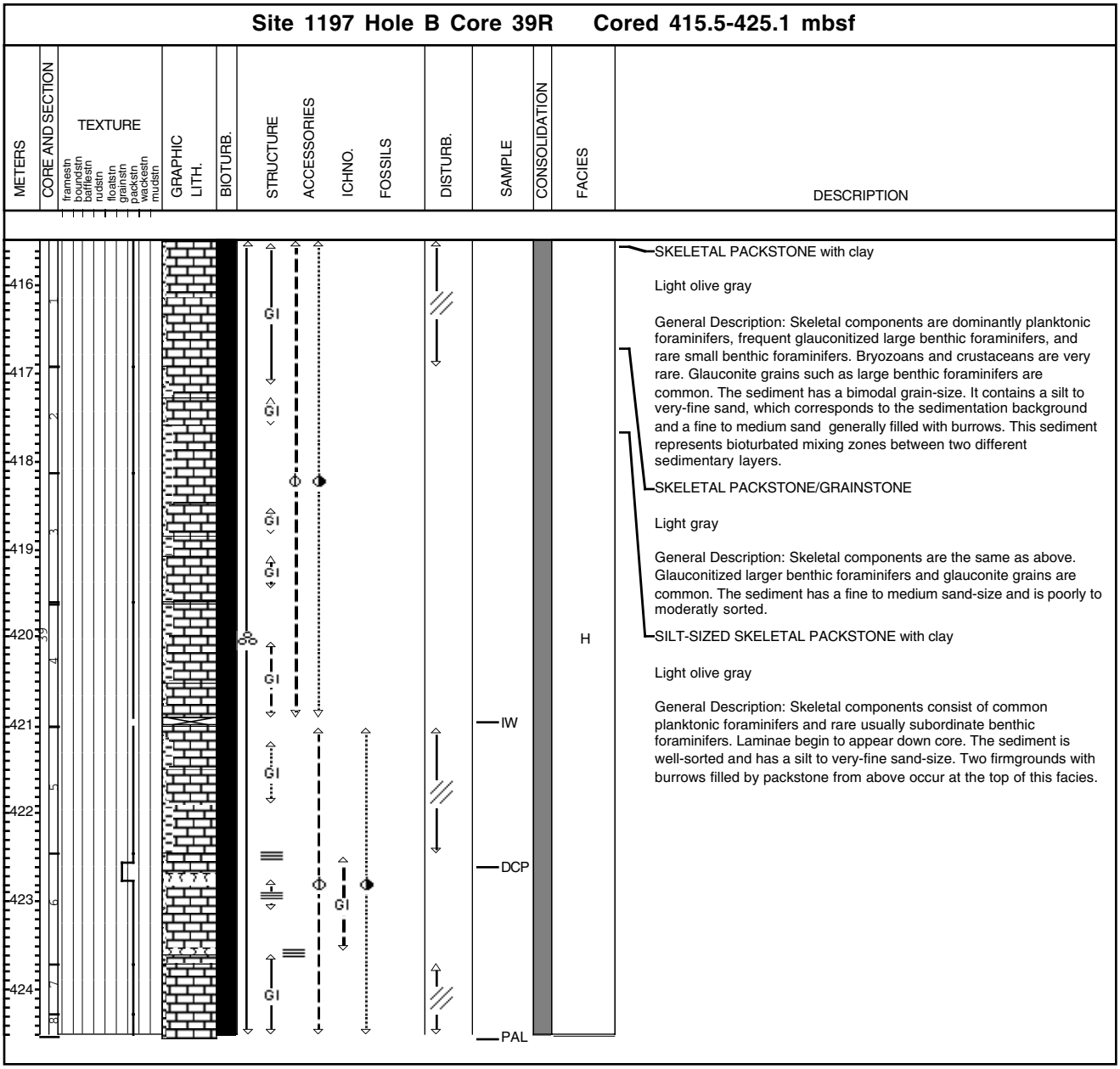
Core Photo


Site 1197 Hole B Core 37R Cored 396.3-405.9 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
397
398
37
1
2
GI
THS
DCP
THS
H
SKELETAL GRAINSTONE
Light gray to light olive gray
General Description: Skeletal components are dominantly larger benthic foraminifers with large elongate individuals attaining a size of 5 mm. Both whole and fragmented larger foraminifers including elongate Operculinids and broader Lepidocyclinids are present. Smaller benthic foraminifers and planktonic foraminifers are present, as well as skeletal fragments of bryozoans and rare coralline algae from a neritic source. Many fine skeletal particles remain unidentifiable. Glauconite is present, commonly as infills of foraminifer chambers. Positive grading trends and parallel laminations are frequent in the grainstone intervals, and 3 main fining-upwards units can be recognized.
SILT-SIZED SKELETAL PACKSTONE with clay
Light gray
General Description: Skeletal components are dominantly planktonic foraminifers. Small benthic foraminifers are common (although only around 20% of skeletal grains are identifiable). Burrows, typically 2-5 mm in diameter, are abundant throughout, including some with coarse grainstone fabric fills, and also mud-filled burrows of Chondrites that are common between 398.1 to 398.3 mbsf. Glauconite is rare and pyrite/celestite nodules are also occasionally observed, associated with burrows.

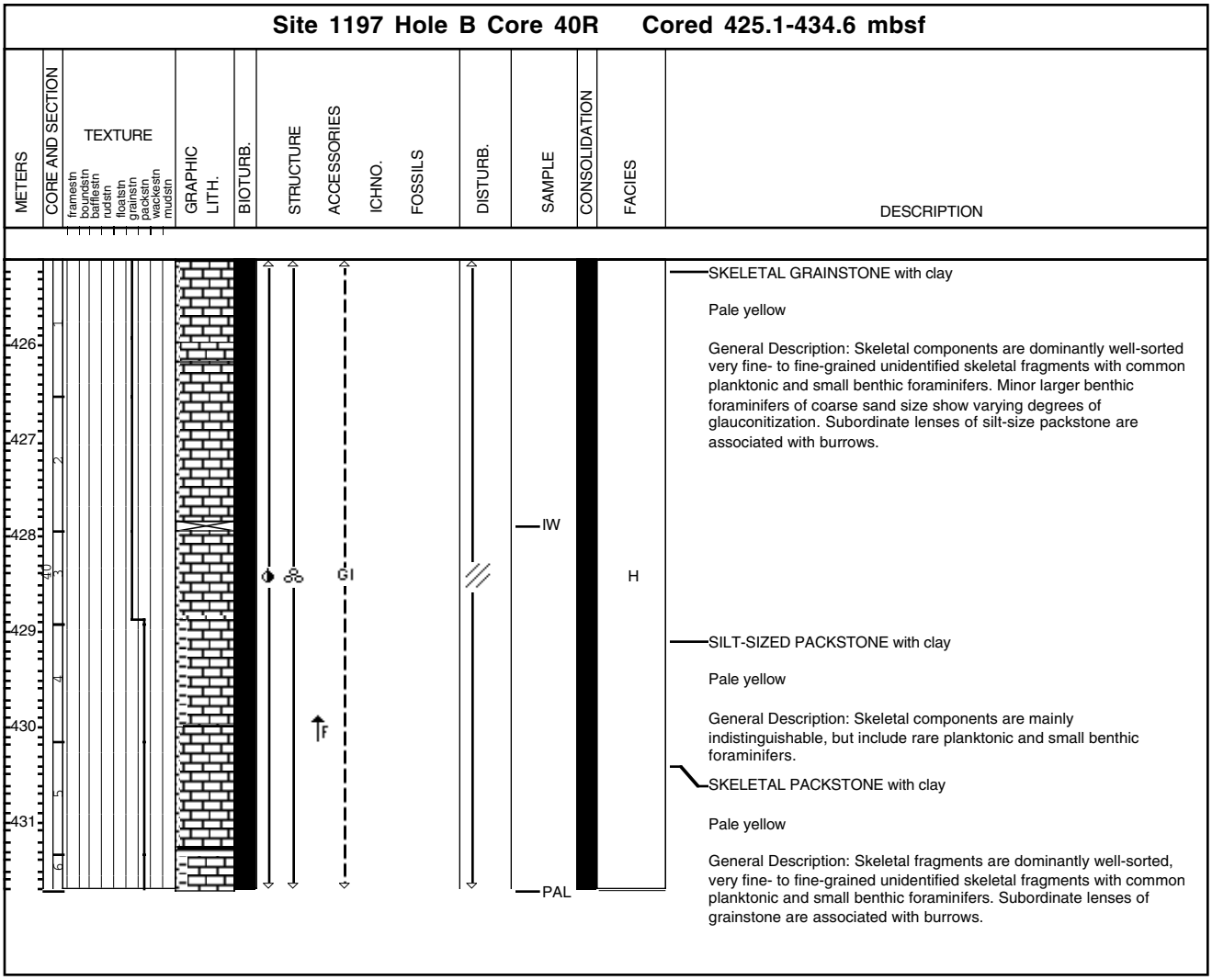
Core Photo


Site 1197 Hole B Core 38R Cored 405.9-415.5 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
407
408
409
410
411
412
38
1
2
3
4
5
GI
F
H
DCP
THS
THS
SILT-SIZED PACKSTONE with clay, SKELETAL PACKSTONE with clay, and GRAINSTONE with clay
Greenish gray
General Description: Skeletal components are dominantly unidentified fragments and subordinate benthic and planktonic foraminifers. Grain size varies from silt to very fine to medium sand. The sediment is generally well sorted.
SKELETAL GRAINSTONE with clay
White
General Description: Skeletal components are dominantly unidentified fragments with subordinate benthic and planktonic foraminifers. Minor glauconitized tests are present, but much less than in the medium-sized fraction in the overlying and underlying dark-colored lithologies. Burrows filled with light-colored grainstone are present just above the sharp top contact of this bed.

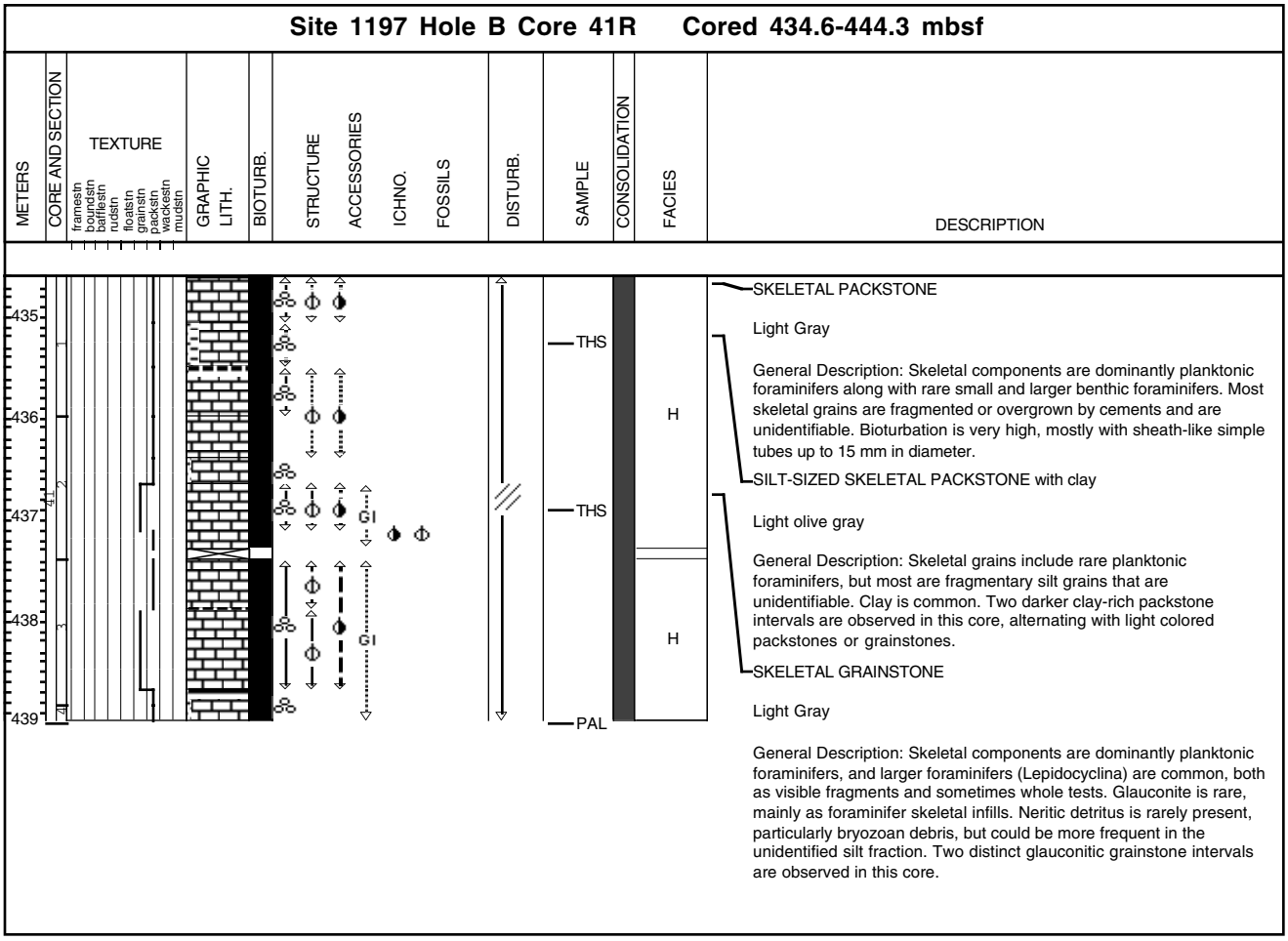
Core Photo


Site 1197 Hole B Core 39R Cored 415.5-425.1 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
416
417
418
419
420
421
422
423
424
39
GI
IW
DCP
PAL
H
SKELETAL PACKSTONE with clay
Light olive gray
General Description: Skeletal components are dominantly planktonic foraminifers, frequent glauconitized large benthic foraminifers, and rare small benthic foraminifers. Bryozoans and crustaceans are very rare. Glauconite grains such as large benthic foraminifers are common. The sediment has a bimodal grain-size. It contains a silt to very-fine sand, which corresponds to the sedimentation background and a fine to medium sand generally filled with burrows. This sediment represents bioturbated mixing zones between two different sedimentary layers.
SKELETAL PACKSTONE/GRAINSTONE
Light gray
General Description: Skeletal components are the same as above. Glauconitized larger benthic foraminifers and glauconite grains are common. The sediment has a fine to medium sand-size and is poorly to moderatly sorted.
SILT-SIZED SKELETAL PACKSTONE with clay
Light olive gray
General Description: Skeletal components consist of common planktonic foraminifers and rare usually subordinate benthic foraminifers. Laminae begin to appear down core. The sediment is well-sorted and has a silt to very-fine sand-size. Two firmgrounds with burrows filled by packstone from above occur at the top of this facies.

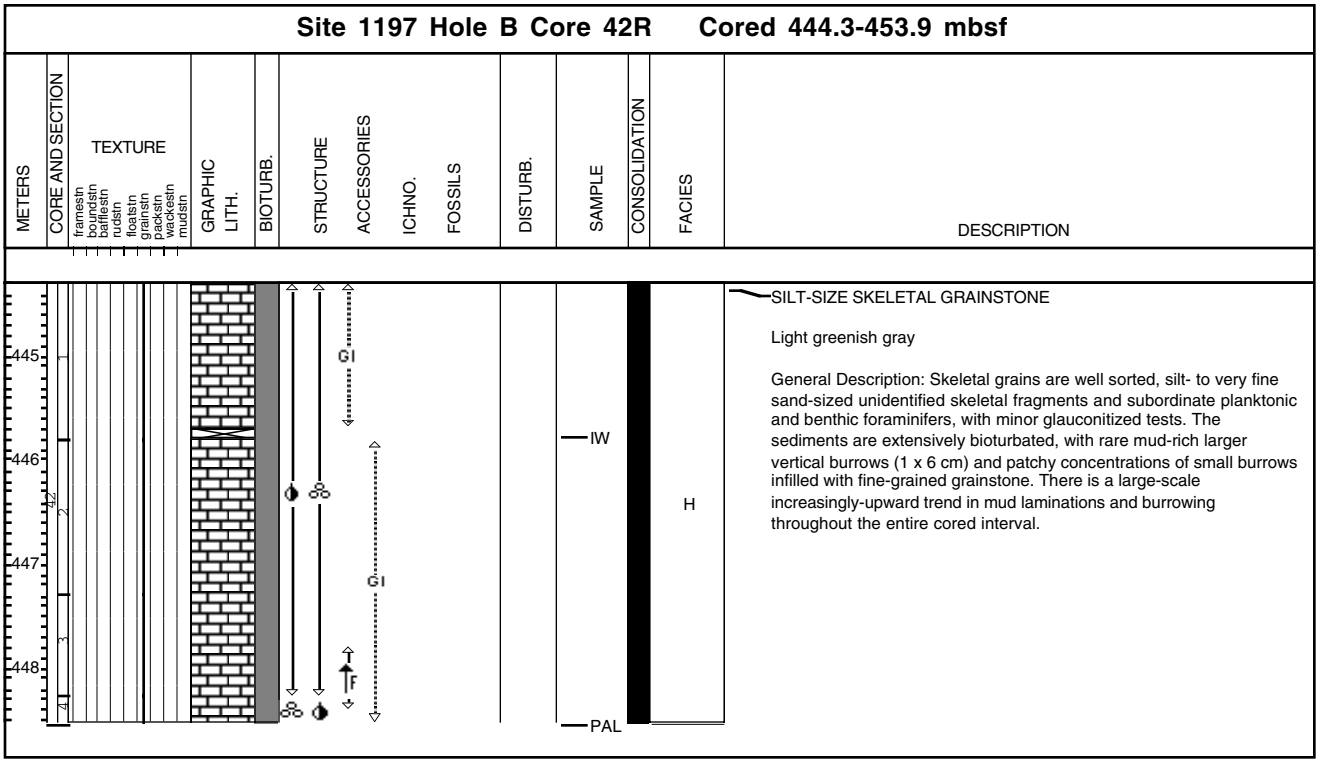
Core Photo


Site 1197 Hole B Core 40R Cored 425.1-434.6 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
426
427
428
429
430
431
GI
F
IW
PAL
H
SKELETAL GRAINSTONE with clay
Pale yellow
General Description: Skeletal components are dominantly well-sorted very fine- to fine-grained unidentified skeletal fragments with common planktonic and small benthic foraminifers. Minor larger benthic foraminifers of coarse sand size show varying degrees of glauconitization. Subordinate lenses of silt-size packstone are associated with burrows.
SILT-SIZED PACKSTONE with clay
Pale yellow
General Description: Skeletal components are mainly indistinguishable, but include rare planktonic and small benthic foraminifers.
SKELETAL PACKSTONE with clay
Pale yellow
General Description: Skeletal fragments are dominantly well-sorted, very fine- to fine-grained unidentified skeletal fragments with common planktonic and small benthic foraminifers. Subordinate lenses of grainstone are associated with burrows.

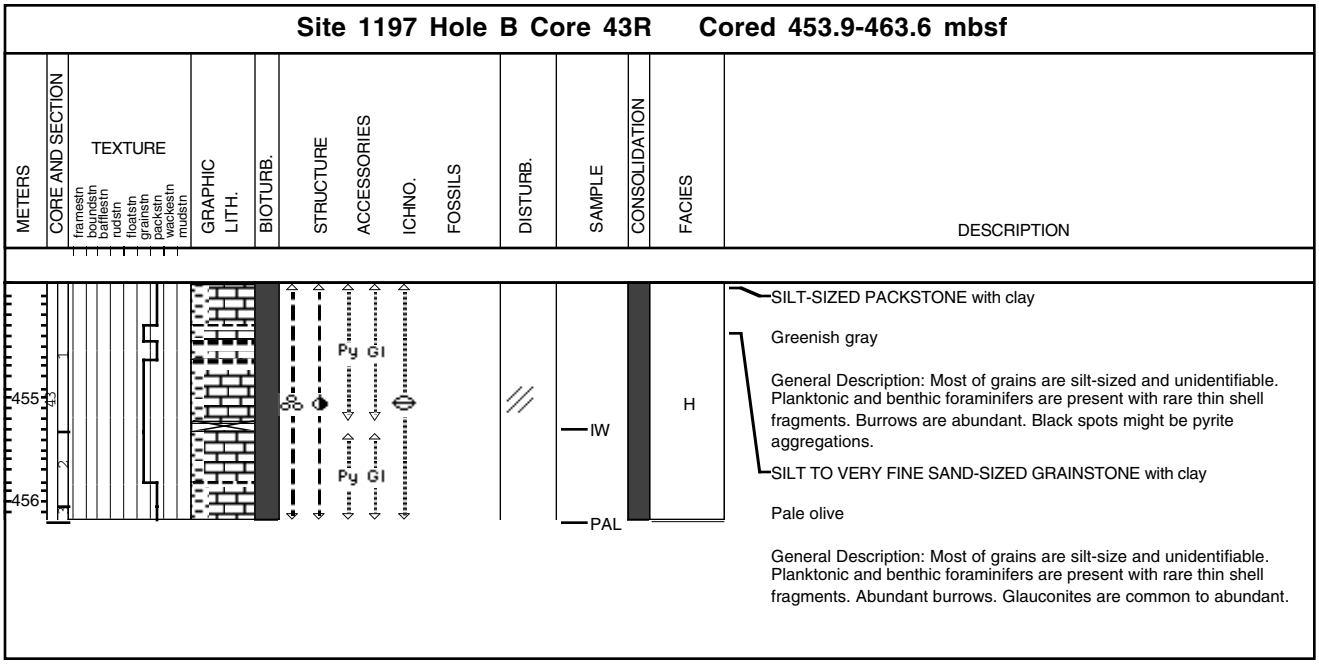
Core Photo


Site 1197 Hole B Core 41R Cored 434.6-444.3 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
435
436
437
438
439
THS
THS
PAL
H
H
GI
GI
SKELETAL PACKSTONE
Light Gray
General Description: Skeletal components are dominantly planktonic foraminifers along with rare small and larger benthic foraminifers. Most skeletal grains are fragmented or overgrown by cements and are unidentifiable. Bioturbation is very high, mostly with sheath-like simple tubes up to 15 mm in diameter.
SILT-SIZED SKELETAL PACKSTONE with clay
Light olive gray
General Description: Skeletal grains include rare planktonic foraminifers, but most are fragmentary silt grains that are unidentifiable. Clay is common. Two darker clay-rich packstone intervals are observed in this core, alternating with light colored packstones or grainstones.
SKELETAL GRAINSTONE
Light Gray
General Description: Skeletal components are dominantly planktonic foraminifers, and larger foraminifers (Lepidocyclina) are common, both as visible fragments and sometimes whole tests. Glauconite is rare, mainly as foraminifer skeletal infills. Neritic detritus is rarely present, particularly bryozoan debris, but could be more frequent in the unidentified silt fraction. Two distinct glauconitic grainstone intervals are observed in this core.

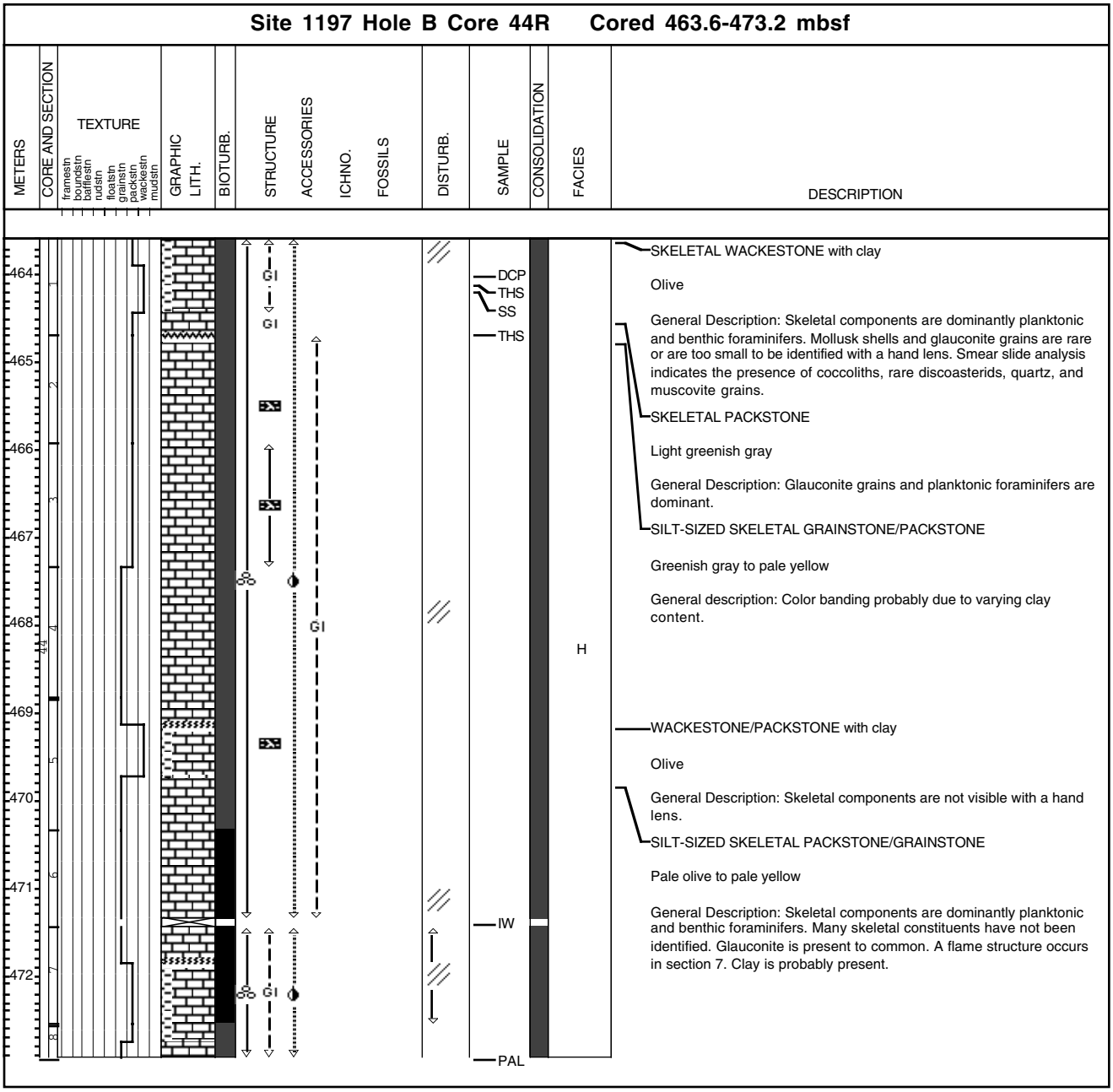
Core Photo


Site 1197 Hole B Core 42R Cored 444.3-453.9 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
445
446
447
448
42
1
2
3
4
GI
GI
F
IW
PAL
H
SILT-SIZE SKELETAL GRAINSTONE
Light greenish gray
General Description: Skeletal grains are well sorted, silt- to very fine sand-sized unidentified skeletal fragments and subordinate planktonic and benthic foraminifers, with minor glauconitized tests. The sediments are extensively bioturbated, with rare mud-rich larger vertical burrows (1 x 6 cm) and patchy concentrations of small burrows infilled with fine-grained grainstone. There is a large-scale increasingly-upward trend in mud laminations and burrowing throughout the entire cored interval.

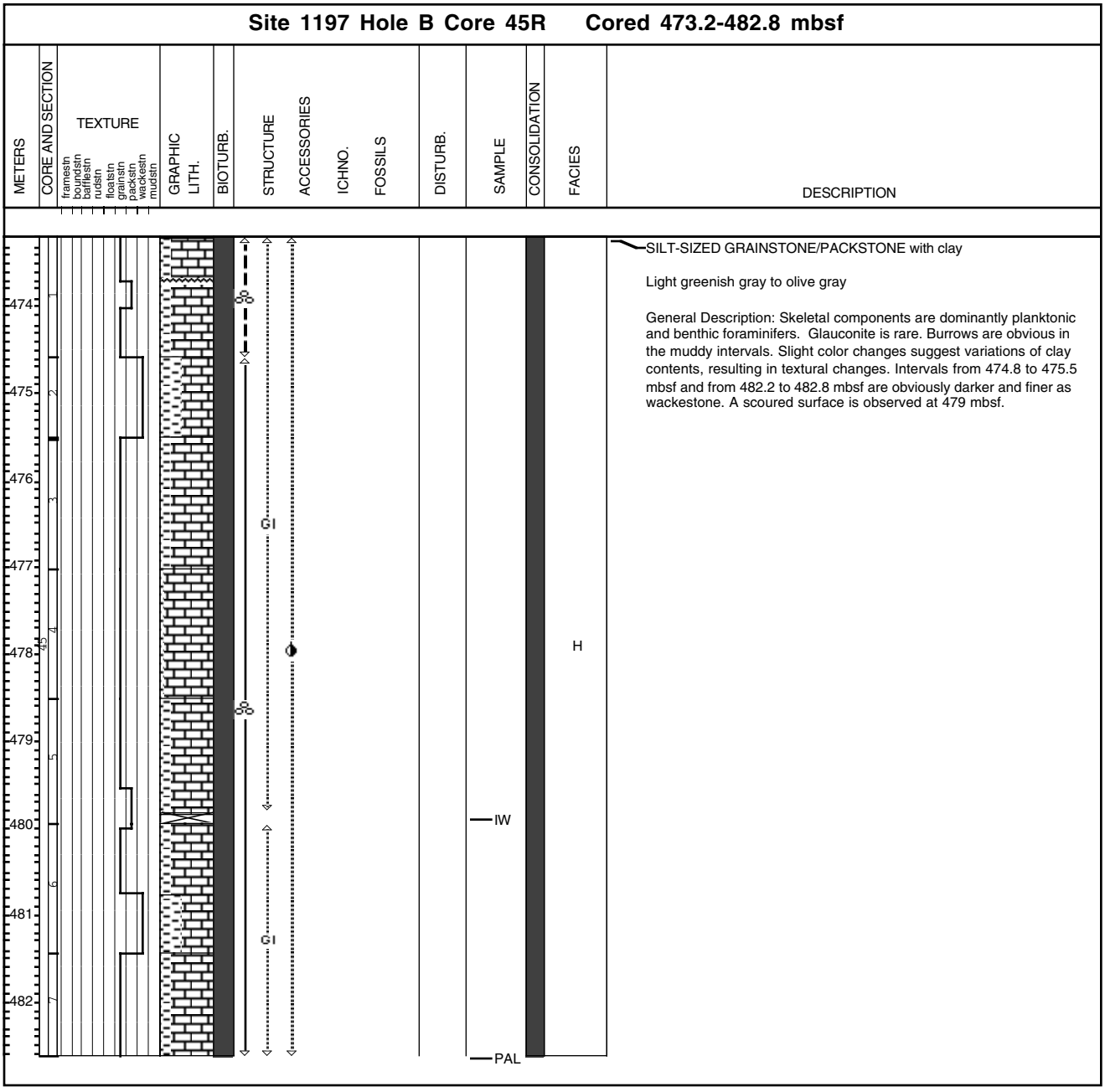
Core Photo


Site 1197 Hole B Core 43R Cored 453.9-463.6 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
455
456
43
1
2
3
Py
Gl
IW
PAL
H
SILT-SIZED PACKSTONE with clay
Greenish gray
General Description: Most of grains are silt-sized and unidentifiable. Planktonic and benthic foraminifers are present with rare thin shell fragments. Burrows are abundant. Black spots might be pyrite aggregations.
SILT TO VERY FINE SAND-SIZED GRAINSTONE with clay
Pale olive
General Description: Most of grains are silt-size and unidentifiable. Planktonic and benthic foraminifers are present with rare thin shell fragments. Abundant burrows. Glauconites are common to abundant.

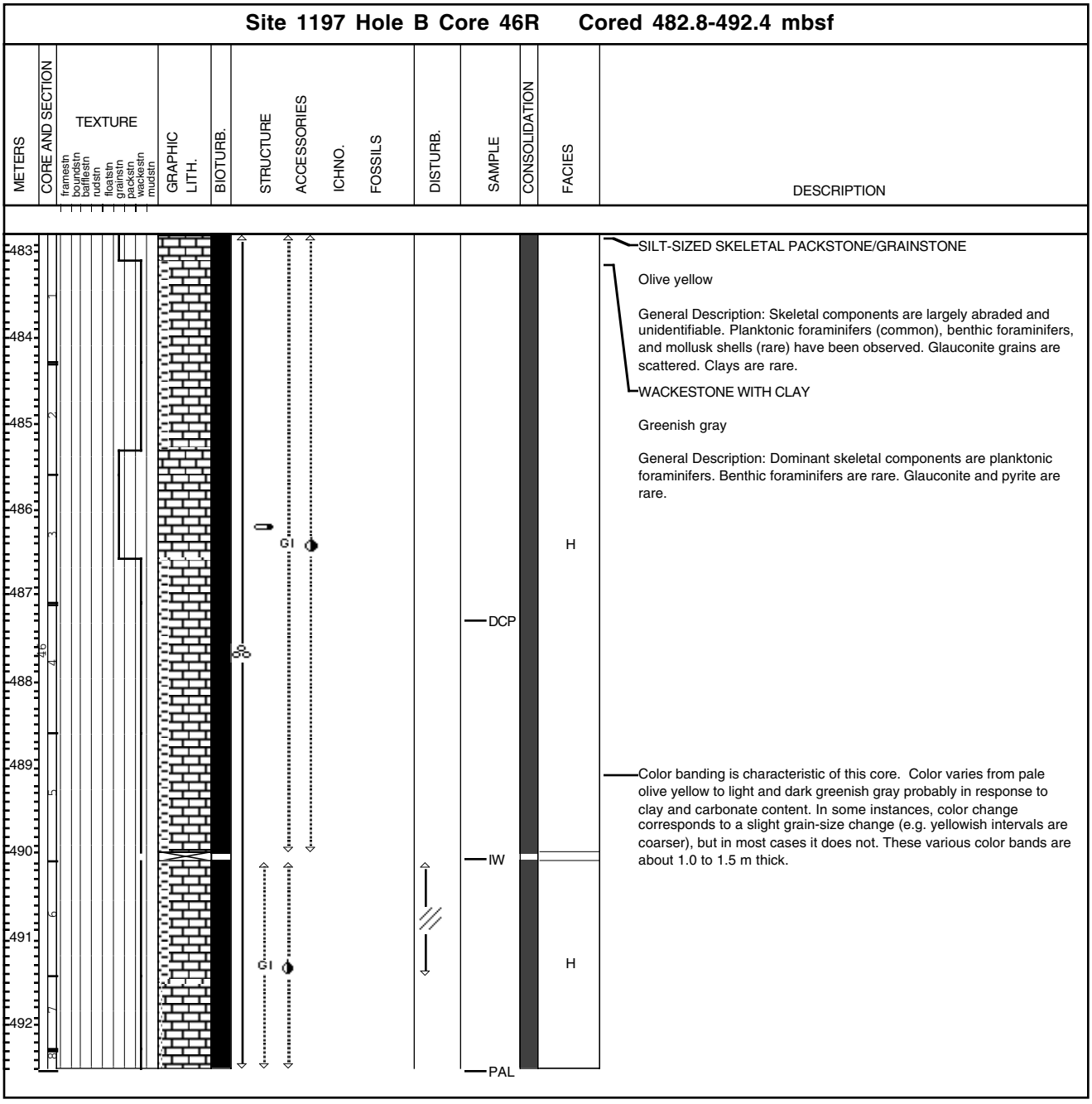
Core Photo


Site 1197 Hole B Core 44R Cored 463.6-473.2 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
464
465
466
467
468
469
470
471
472
44R
DCP
THS
SS
THS
IW
PAL
GI
H
SKELETAL WACKESTONE with clay
Olive
General Description: Skeletal components are dominantly planktonic and benthic foraminifers. Mollusk shells and glauconite grains are rare or are too small to be identified with a hand lens. Smear slide analysis indicates the presence of coccoliths, rare discoasterids, quartz, and muscovite grains.
SKELETAL PACKSTONE
Light greenish gray
General Description: Glauconite grains and planktonic foraminifers are dominant.
SILT-SIZED SKELETAL GRAINSTONE/PACKSTONE
Greenish gray to pale yellow
General description: Color banding probably due to varying clay content.
WACKESTONE/PACKSTONE with clay
Olive
General Description: Skeletal components are not visible with a hand lens.
SILT-SIZED SKELETAL PACKSTONE/GRAINSTONE
Pale olive to pale yellow
General Description: Skeletal components are dominantly planktonic and benthic foraminifers. Many skeletal constituents have not been identified. Glauconite is present to common. A flame structure occurs in section 7. Clay is probably present.

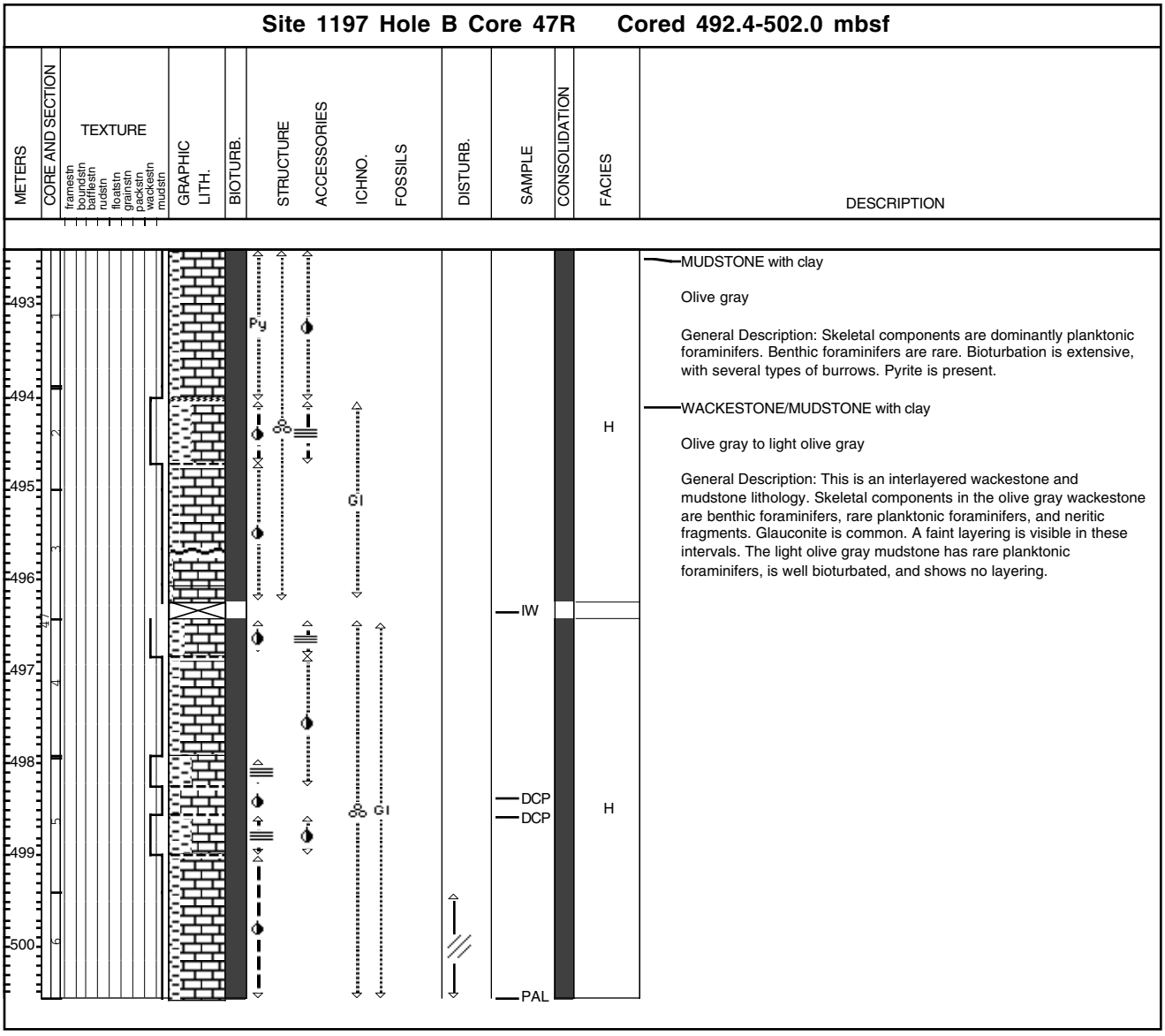
Core Photo


Site 1197 Hole B Core 45R Cored 473.2-482.8 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
474
475
476
477
478
479
480
481
482
45
1
2
3
4
5
6
7
GI
GI
IW
PAL
H
SILT-SIZED GRAINSTONE/PACKSTONE with clay
Light greenish gray to olive gray
General Description: Skeletal components are dominantly planktonic and benthic foraminifers. Glauconite is rare. Burrows are obvious in the muddy intervals. Slight color changes suggest variations of clay contents, resulting in textural changes. Intervals from 474.8 to 475.5 mbsf and from 482.2 to 482.8 mbsf are obviously darker and finer as wackestone. A scoured surface is observed at 479 mbsf.

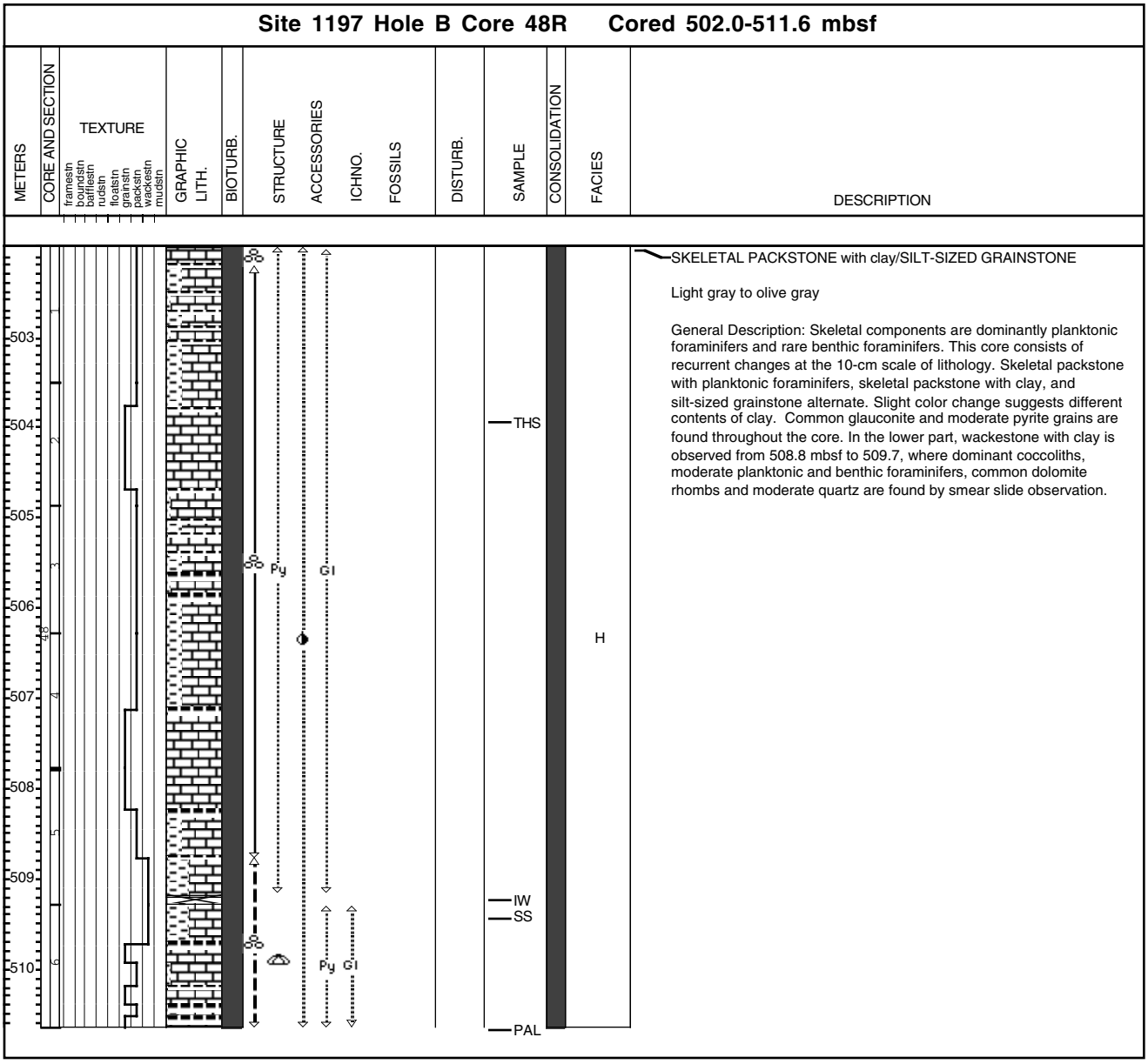
Core Photo


Site 1197 Hole B Core 46R Cored 482.8-492.4 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
483
484
485
486
487
488
489
490
491
492
46
GI
DCP
IW
PAL
H
SILT-SIZED SKELETAL PACKSTONE/GRAINSTONE
Olive yellow
General Description: Skeletal components are largely abraded and unidentifiable. Planktonic foraminifers (common), benthic foraminifers, and mollusk shells (rare) have been observed. Glauconite grains are scattered. Clays are rare.
WACKESTONE WITH CLAY
Greenish gray
General Description: Dominant skeletal components are planktonic foraminifers. Benthic foraminifers are rare. Glauconite and pyrite are rare.
Color banding is characteristic of this core. Color varies from pale olive yellow to light and dark greenish gray probably in response to clay and carbonate content. In some instances, color change corresponds to a slight grain-size change (e.g. yellowish intervals are coarser), but in most cases it does not. These various color bands are about 1.0 to 1.5 m thick.

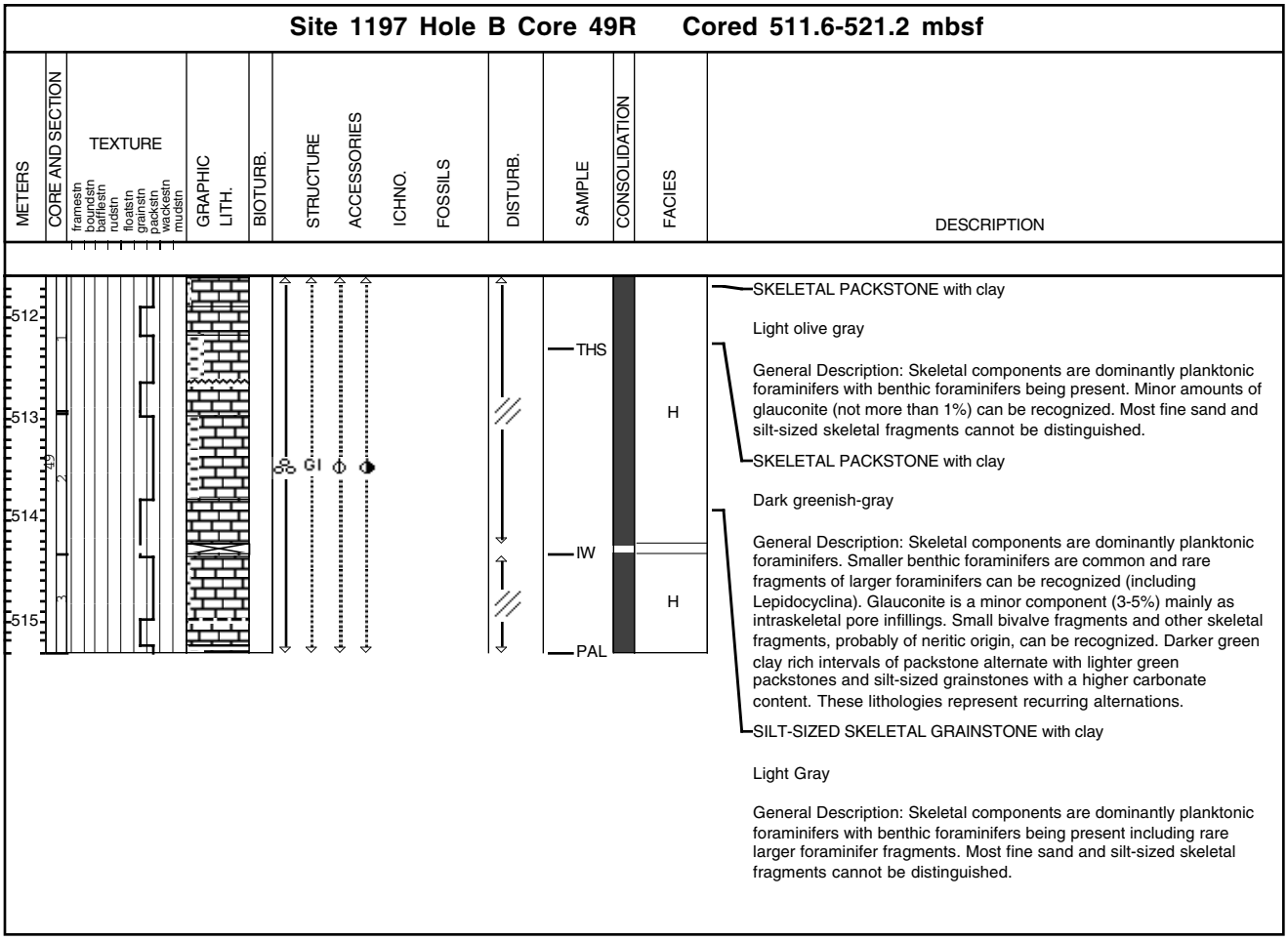
Core Photo


Site 1197 Hole B Core 47R Cored 492.4-502.0 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
493
494
495
496
497
498
499
500
Py
Gl
Gl
IW
DCP
DCP
PAL
H
H
MUDSTONE with clay
Olive gray
General Description: Skeletal components are dominantly planktonic foraminifers. Benthic foraminifers are rare. Bioturbation is extensive, with several types of burrows. Pyrite is present.
WACKESTONE/MUDSTONE with clay
Olive gray to light olive gray
General Description: This is an interlayered wackestone and mudstone lithology. Skeletal components in the olive gray wackestone are benthic foraminifers, rare planktonic foraminifers, and neritic fragments. Glauconite is common. A faint layering is visible in these intervals. The light olive gray mudstone has rare planktonic foraminifers, is well bioturbated, and shows no layering.

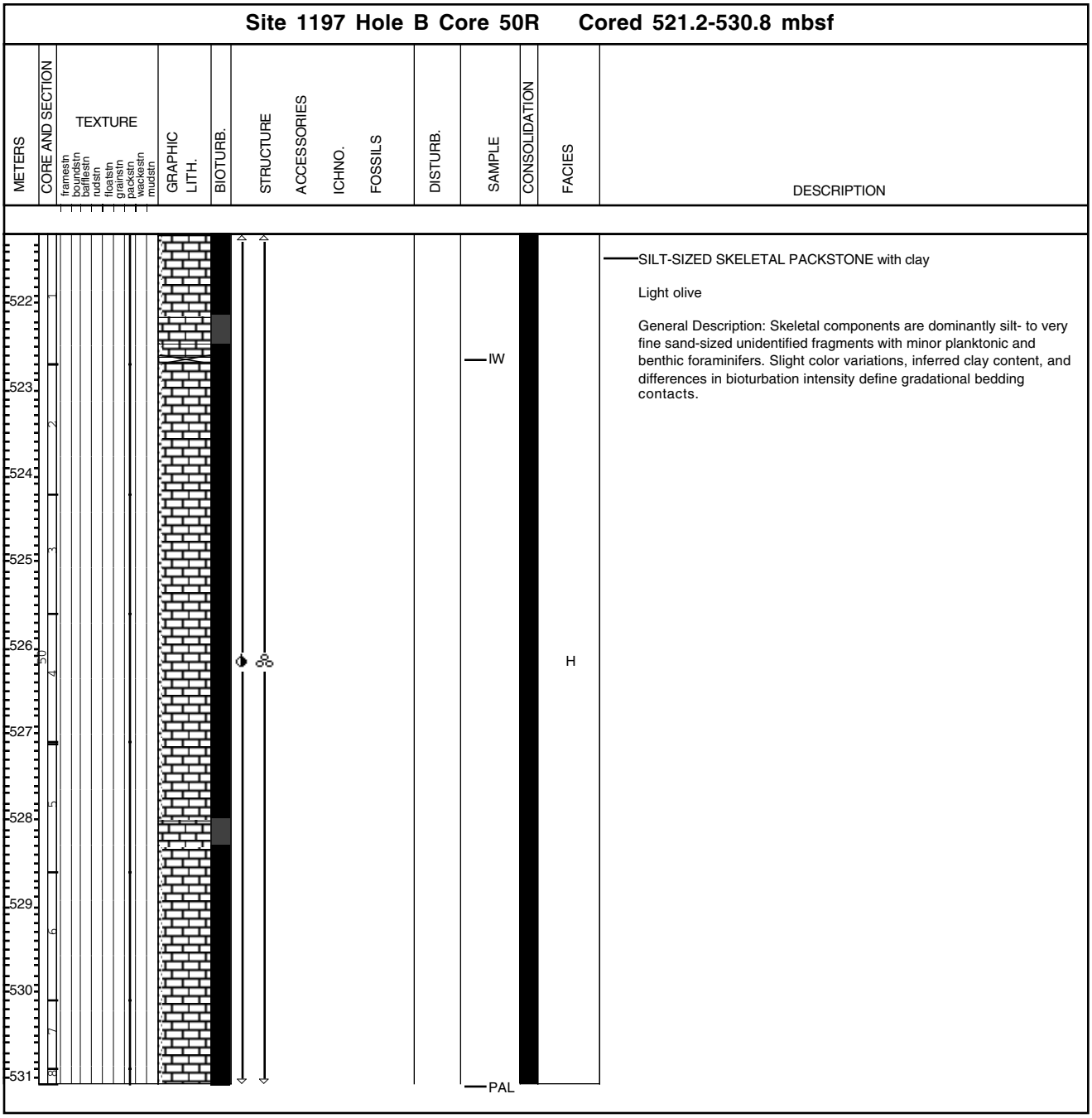
Core Photo


Site 1197 Hole B Core 48R Cored 502.0-511.6 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
503
504
505
506
507
508
509
510
Py
Gl
Py
Gl
THS
IW
SS
PAL
H
SKELETAL PACKSTONE with clay/SILT-SIZED GRAINSTONE
Light gray to olive gray
General Description: Skeletal components are dominantly planktonic foraminifers and rare benthic foraminifers. This core consists of recurrent changes at the 10-cm scale of lithology. Skeletal packstone with planktonic foraminifers, skeletal packstone with clay, and silt-sized grainstone alternate. Slight color change suggests different contents of clay. Common glauconite and moderate pyrite grains are found throughout the core. In the lower part, wackestone with clay is observed from 508.8 mbsf to 509.7, where dominant coccoliths, moderate planktonic and benthic foraminifers, common dolomite rhombs and moderate quartz are found by smear slide observation.

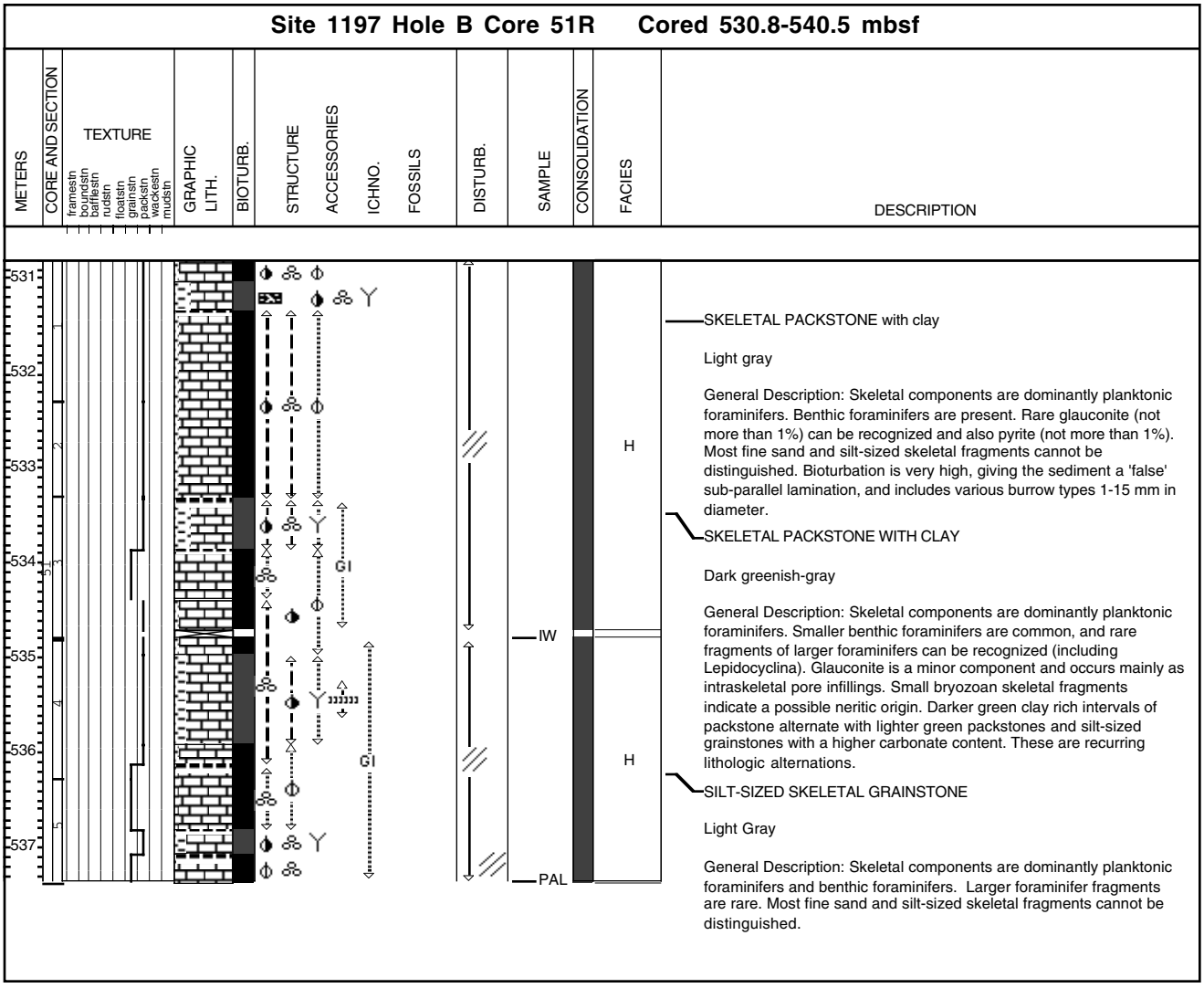
Core Photo


Site 1197 Hole B Core 49R Cored 511.6-521.2 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
512
513
514
515
49
1
2
3
GI
THS
IW
PAL
H
H
SKELETAL PACKSTONE with clay
Light olive gray
General Description: Skeletal components are dominantly planktonic foraminifers with benthic foraminifers being present. Minor amounts of glauconite (not more than 1%) can be recognized. Most fine sand and silt-sized skeletal fragments cannot be distinguished.
SKELETAL PACKSTONE with clay
Dark greenish-gray
General Description: Skeletal components are dominantly planktonic foraminifers. Smaller benthic foraminifers are common and rare fragments of larger foraminifers can be recognized (including Lepidocyclina). Glauconite is a minor component (3-5%) mainly as intraskeletal pore infillings. Small bivalve fragments and other skeletal fragments, probably of neritic origin, can be recognized. Darker green clay rich intervals of packstone alternate with lighter green packstones and silt-sized grainstones with a higher carbonate content. These lithologies represent recurring alternations.
SILT-SIZED SKELETAL GRAINSTONE with clay
Light Gray
General Description: Skeletal components are dominantly planktonic foraminifers with benthic foraminifers being present including rare larger foraminifer fragments. Most fine sand and silt-sized skeletal fragments cannot be distinguished.

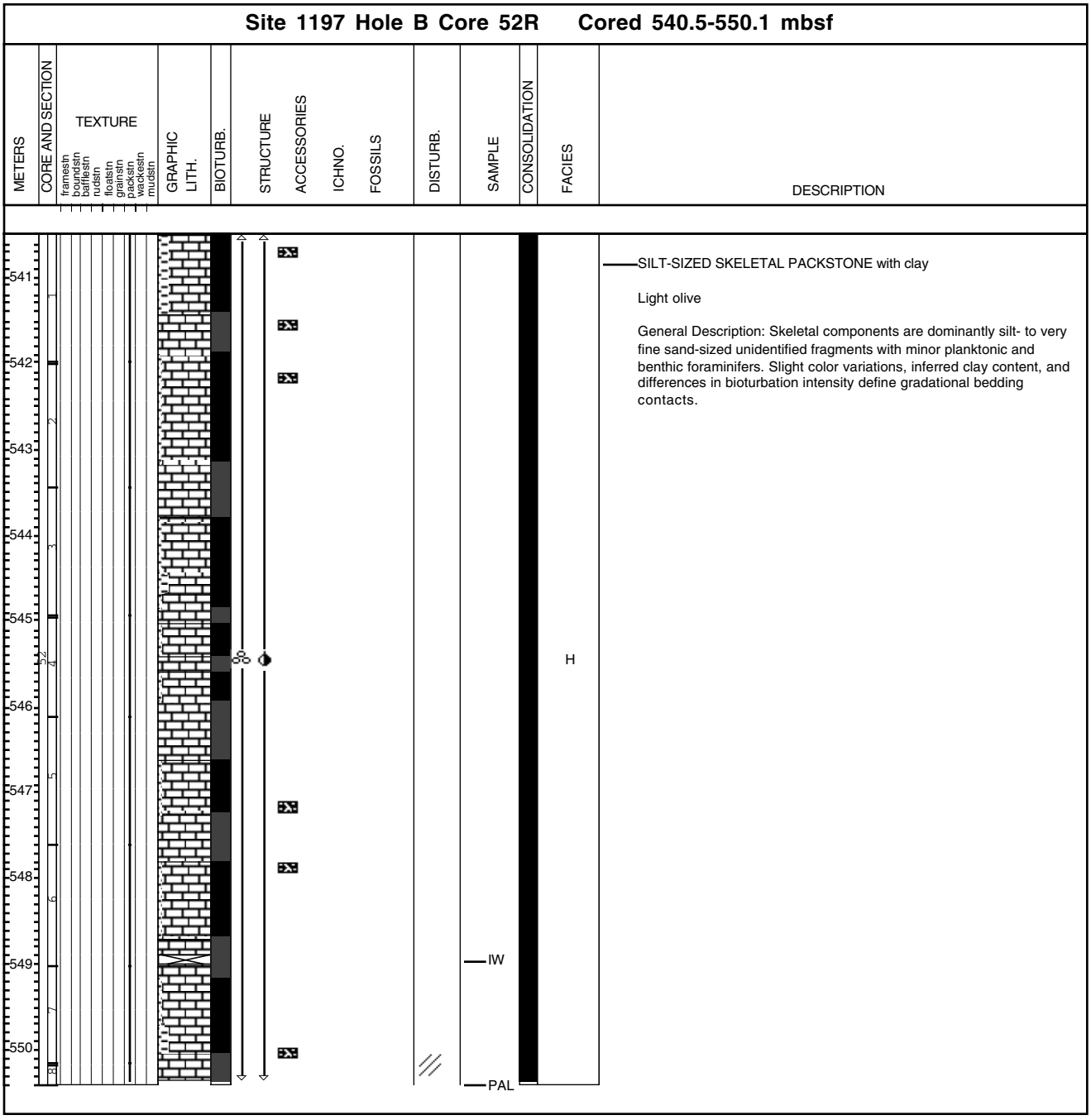
Core Photo


Site 1197 Hole B Core 50R Cored 521.2-530.8 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
522
523
524
525
526
527
528
529
530
531
50
1
2
3
4
5
6
7
8
IW
PAL
H
SILT-SIZED SKELETAL PACKSTONE with clay
Light olive
General Description: Skeletal components are dominantly silt- to very fine sand-sized unidentified fragments with minor planktonic and benthic foraminifers. Slight color variations, inferred clay content, and differences in bioturbation intensity define gradational bedding contacts.

Core Photo

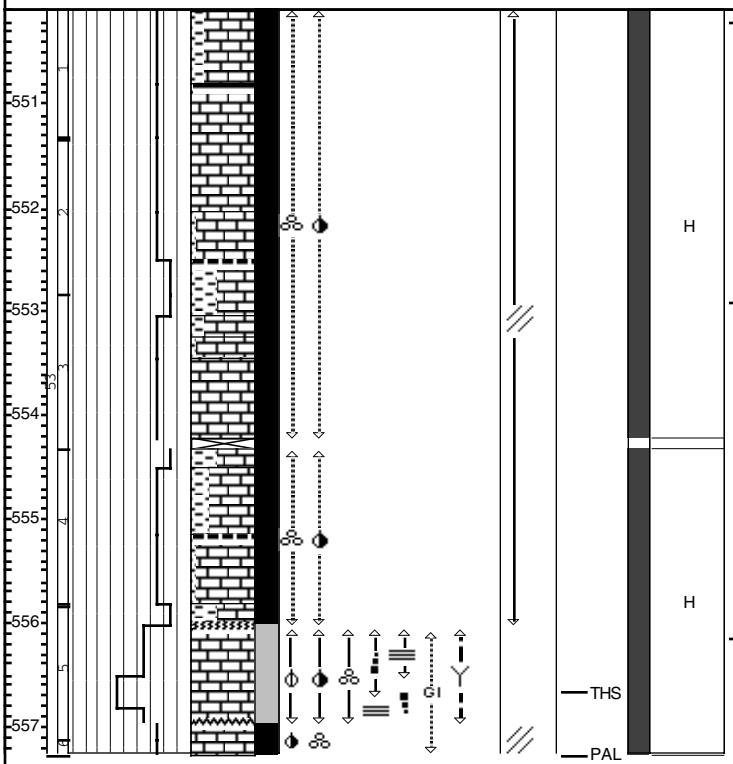

Site 1197 Hole B Core 51R Cored 530.8-540.5 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
bafflestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
531
532
533
534
535
536
537
GI
GI
IW
PAL
H
H
SKELETAL PACKSTONE with clay
Light gray
General Description: Skeletal components are dominantly planktonic foraminifers. Benthic foraminifers are present. Rare glauconite (not more than 1%) can be recognized and also pyrite (not more than 1%). Most fine sand and silt-sized skeletal fragments cannot be distinguished. Bioturbation is very high, giving the sediment a 'false' sub-parallel lamination, and includes various burrow types 1-15 mm in diameter.
SKELETAL PACKSTONE WITH CLAY
Dark greenish-gray
General Description: Skeletal components are dominantly planktonic foraminifers. Smaller benthic foraminifers are common, and rare fragments of larger foraminifers can be recognized (including Lepidocyclina). Glauconite is a minor component and occurs mainly as intraskeletal pore infillings. Small bryozoan skeletal fragments indicate a possible neritic origin. Darker green clay rich intervals of packstone alternate with lighter green packstones and silt-sized grainstones with a higher carbonate content. These are recurring lithologic alternations.
SILT-SIZED SKELETAL GRAINSTONE
Light Gray
General Description: Skeletal components are dominantly planktonic foraminifers and benthic foraminifers. Larger foraminifer fragments are rare. Most fine sand and silt-sized skeletal fragments cannot be distinguished.

Core Photo


Site 1197 Hole B Core 52R Cored 540.5-550.1 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
541
542
543
544
545
546
547
548
549
550
IW
PAL
H
SILT-SIZED SKELETAL PACKSTONE with clay
Light olive
General Description: Skeletal components are dominantly silt- to very fine sand-sized unidentified fragments with minor planktonic and benthic foraminifers. Slight color variations, inferred clay content, and differences in bioturbation intensity define gradational bedding contacts.

Core Photo

Site 1197 Hole B Core 53R Cored 550.1-559.8 mbsf



DESCRIPTION

SILT-SIZED SKELETAL PACKSTONE with clay

Light gray to light greenish gray

General Description: Skeletal components are dominantly planktonic and small benthic foraminifers. Many of the silt-sized skeletal components cannot be deduced with a hand lens. Bioturbation is pervasive and often forms a pseudo-lamination within the lithological texture. Minor color variations are noted and correspond to smaller lithological packages (recurring intervals or alternations) with changes in clay content.

SILT-SIZED SKELETAL WACKESTONE WITH CLAY

Light olive gray

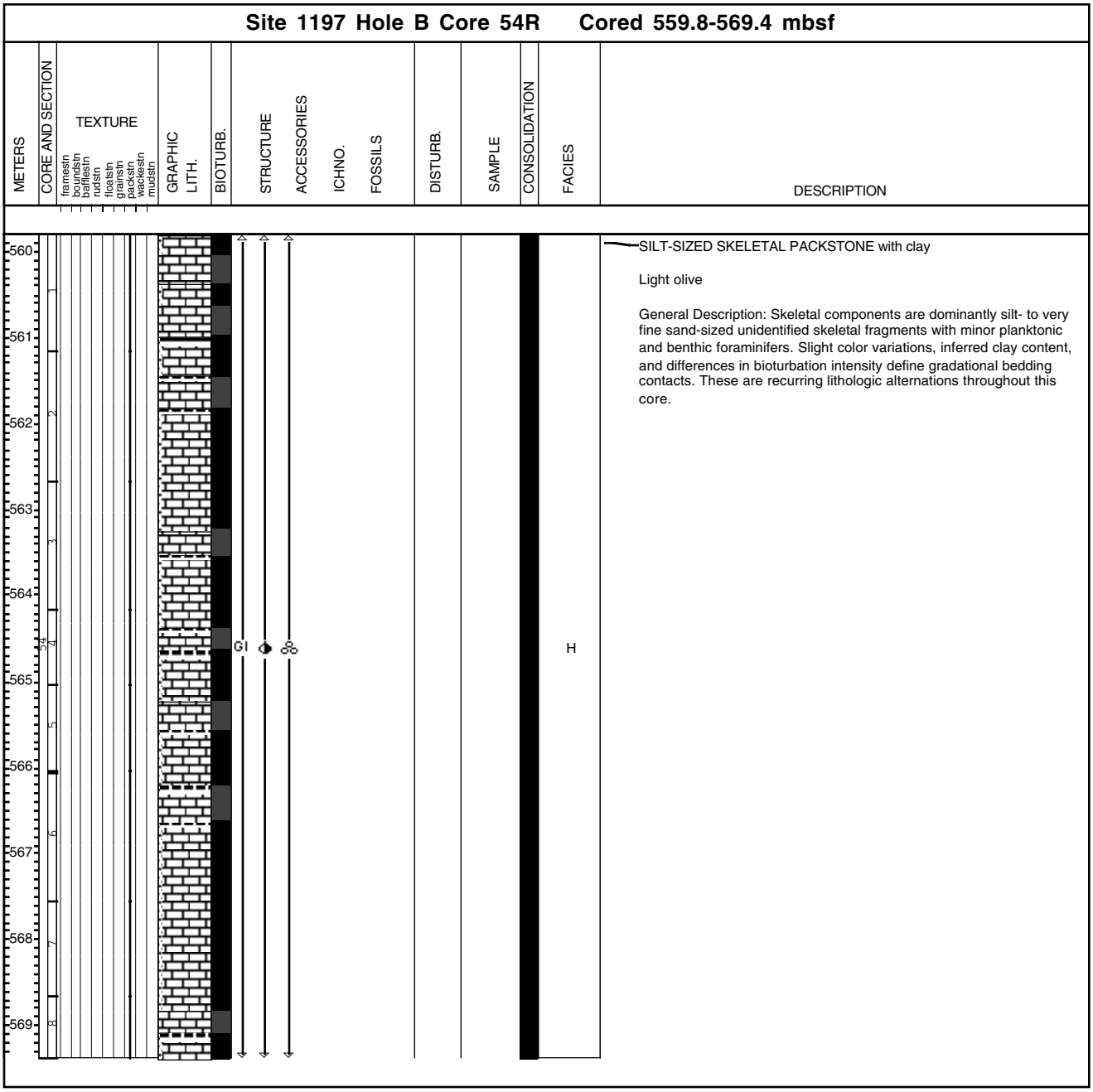
General Description: Skeletal components are dominantly planktonic and smaller benthic foraminifers. Clay is common. Intervals of darker colored wackestone alternate repetitively with packstones.

SKELETAL RUDSTONE/GRAINSTONE

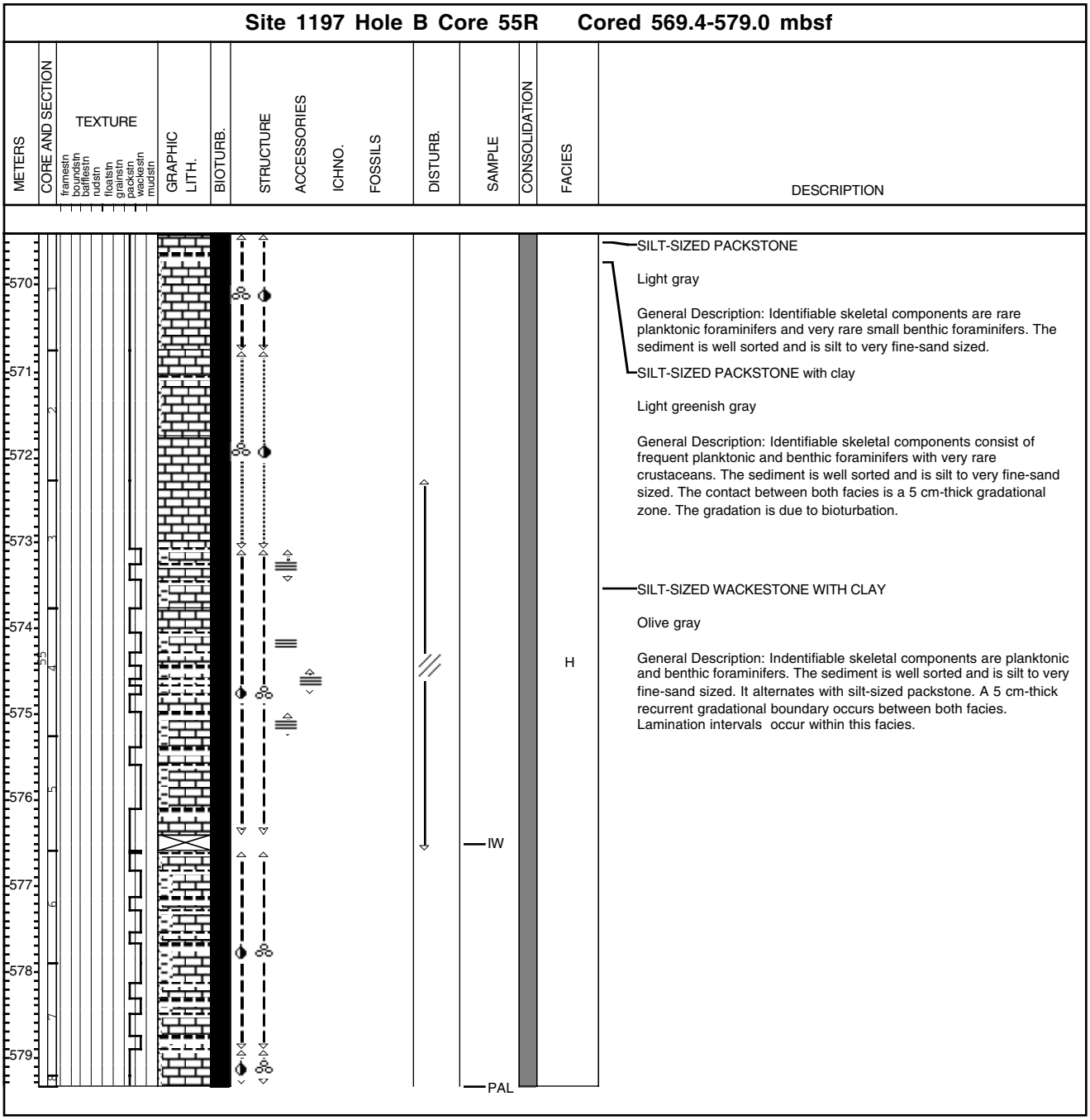
Very light gray

General Description: Skeletal components are dominantly larger benthic foraminifers, smaller benthic foraminifers, and planktonic foraminifers. Coarse visible skeletal fragments are up to 5 mm in size and include fragments of bryozoa and also coralline algae. Glauconite, mainly as infilling of skeletal chambers, is estimated to be at 5-7%. This is a distinctive gravity flow unit defined by a sharp, gently scoured base, a bioturbated cap, overall positive grading of the sediment and a crude parallel lamination.

Core Photo

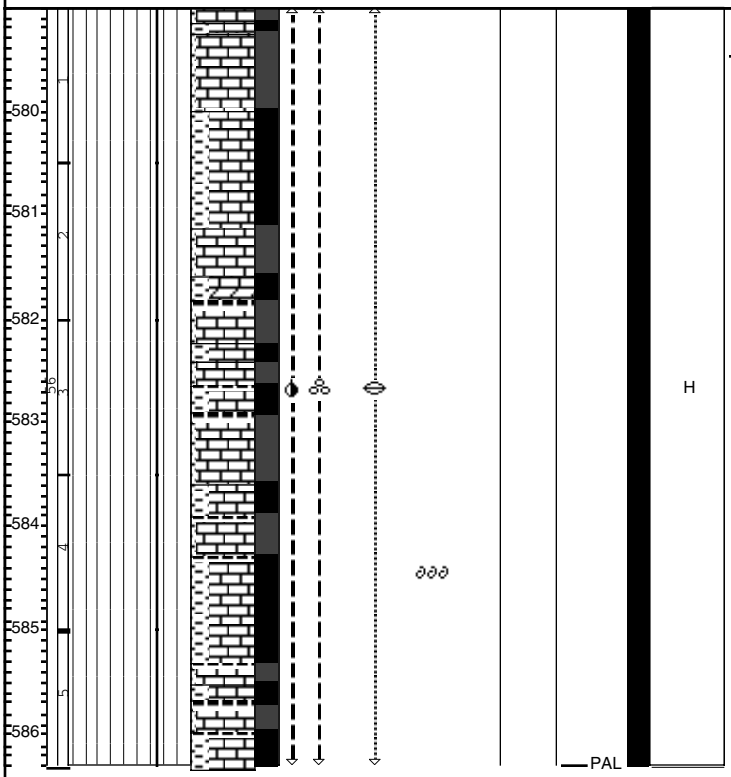

Site 1197 Hole B Core 54R Cored 559.8-569.4 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffilestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
560
561
562
563
564
565
566
567
568
569
GI
H
SILT-SIZED SKELETAL PACKSTONE with clay
Light olive
General Description: Skeletal components are dominantly silt- to very fine sand-sized unidentified skeletal fragments with minor planktonic and benthic foraminifers. Slight color variations, inferred clay content, and differences in bioturbation intensity define gradational bedding contacts. These are recurring lithologic alternations throughout this core.

Core Photo


Site 1197 Hole B Core 55R Cored 569.4-579.0 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
570
571
572
573
574
575
576
577
578
579
IW
PAL
H
SILT-SIZED PACKSTONE
Light gray
General Description: Identifiable skeletal components are rare planktonic foraminifers and very rare small benthic foraminifers. The sediment is well sorted and is silt to very fine-sand sized.
SILT-SIZED PACKSTONE with clay
Light greenish gray
General Description: Identifiable skeletal components consist of frequent planktonic and benthic foraminifers with very rare crustaceans. The sediment is well sorted and is silt to very fine-sand sized. The contact between both facies is a 5 cm-thick gradational zone. The gradation is due to bioturbation.
SILT-SIZED WACKESTONE WITH CLAY
Olive gray
General Description: Indentifiable skeletal components are planktonic and benthic foraminifers. The sediment is well sorted and is silt to very fine-sand sized. It alternates with silt-sized packstone. A 5 cm-thick recurrent gradational boundary occurs between both facies. Lamination intervals occur within this facies.

Core Photo

Site 1197 Hole B Core 56R Cored 579.0-588.6 mbsf

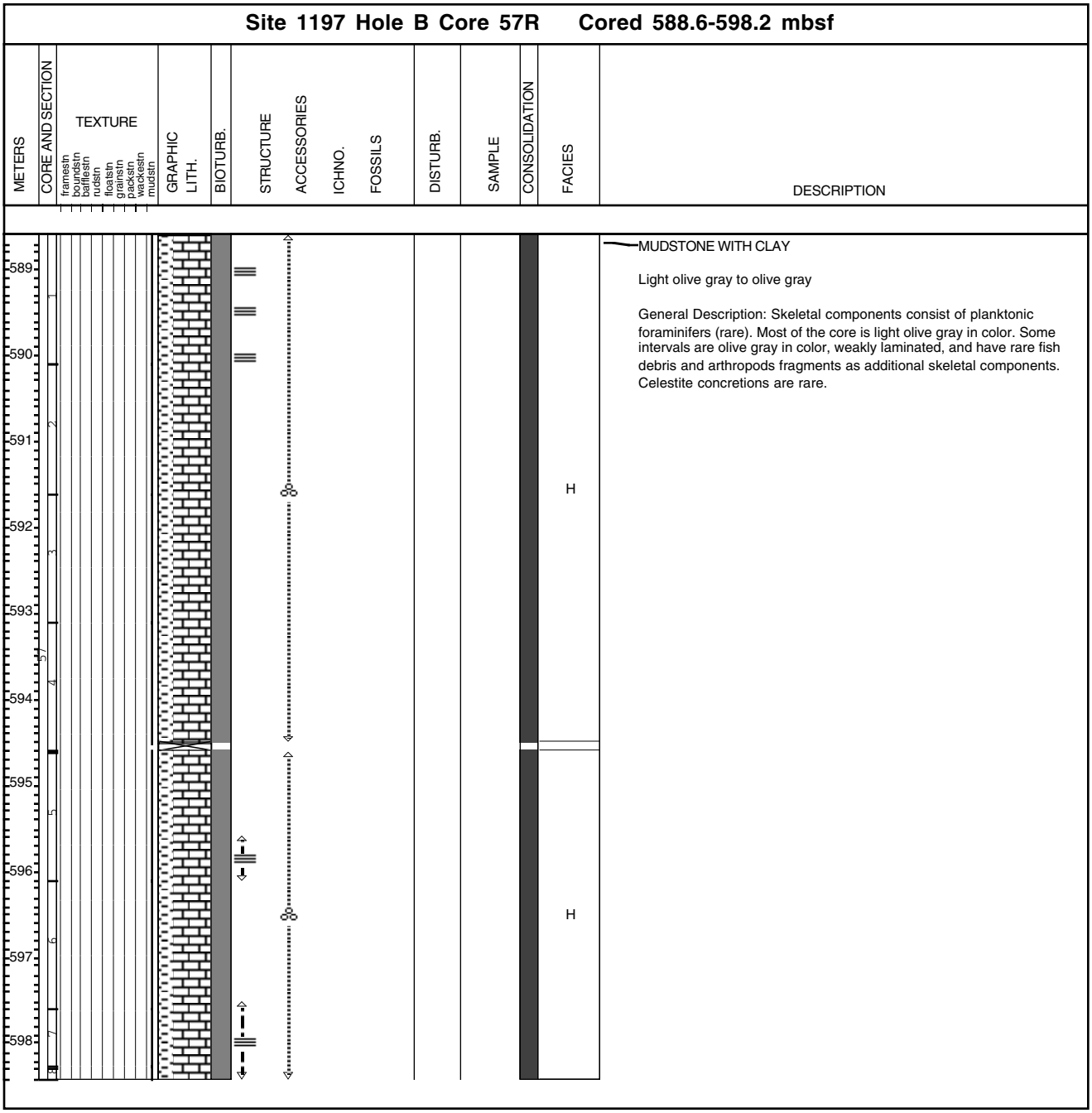


SILT-SIZED PACKSTONE with clay

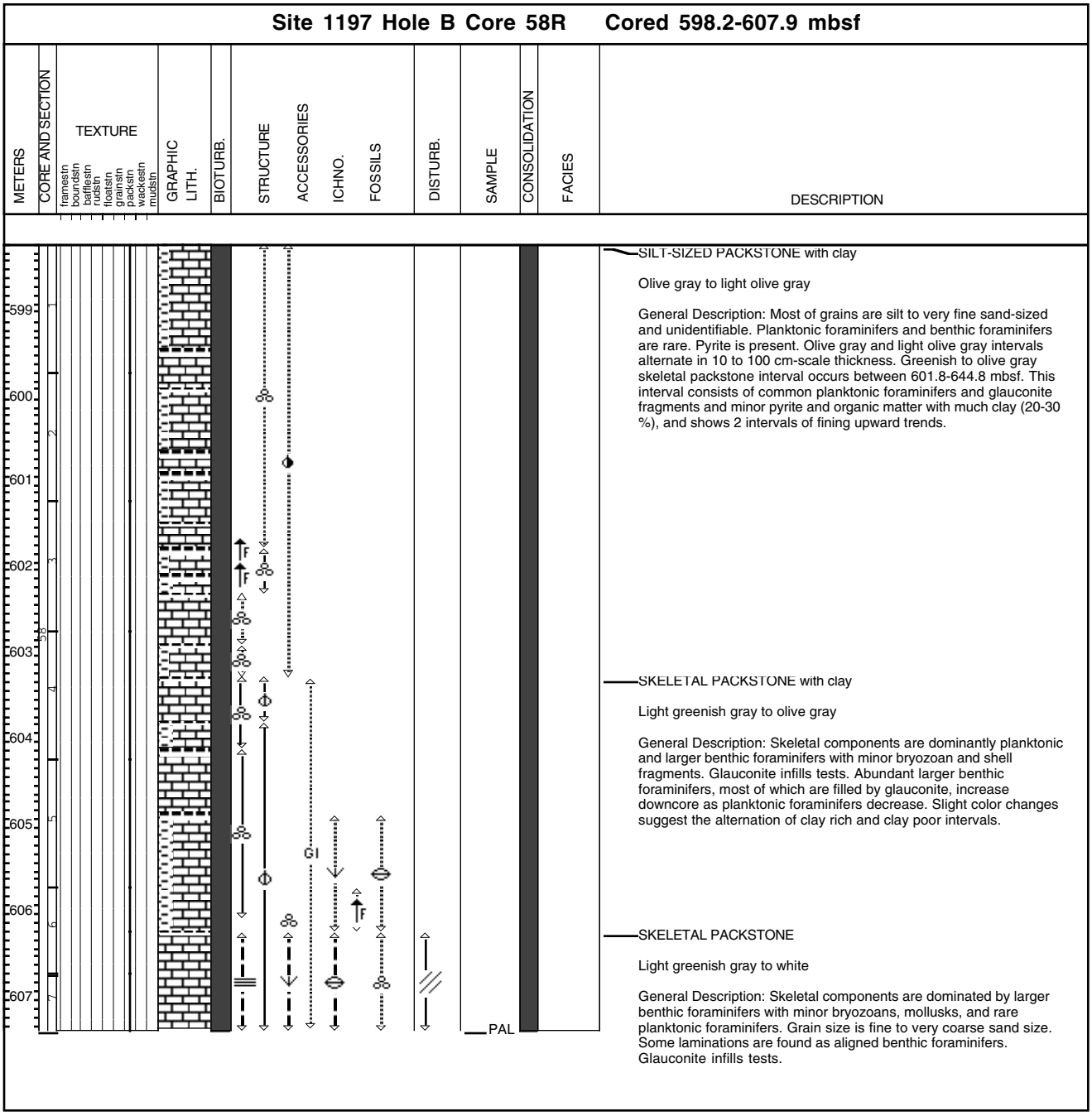
Light gray to light olive gray

General Description: Skeletal components are dominantly well sorted silt- to very fine sand-sized unidentified skeletal fragments. Planktonic and benthic foraminifers are common along with minor whole bivalves up to 0.5 cm in size. The core consists of recurrent alternations of two packstone lithologies with gradational boundaries. Lighter-colored intervals have larger burrows (1 cm). Darker, more thinly laminated intervals are more intensely biotubated with smaller burrows (mostly <0.3 cm). The color becomes more brownish (less greenish) downwards. A whole crustacean shell (1 by 4 cm) is present at 589.4 mbsf.

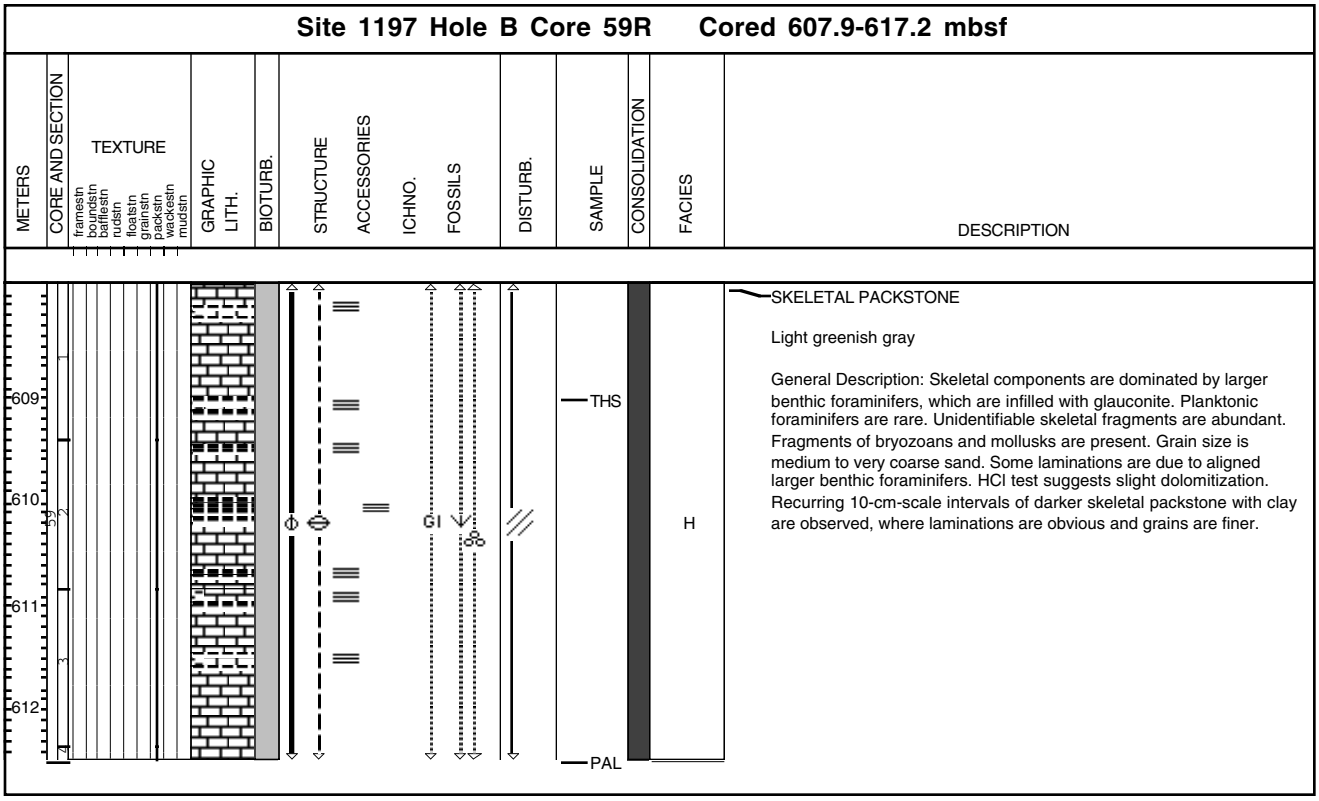
Core Photo


Site 1197 Hole B Core 57R Cored 588.6-598.2 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
589
590
591
592
593
594
595
596
597
598
H
H
MUDSTONE WITH CLAY
Light olive gray to olive gray
General Description: Skeletal components consist of planktonic foraminifers (rare). Most of the core is light olive gray in color. Some intervals are olive gray in color, weakly laminated, and have rare fish debris and arthropods fragments as additional skeletal components. Celestite concretions are rare.

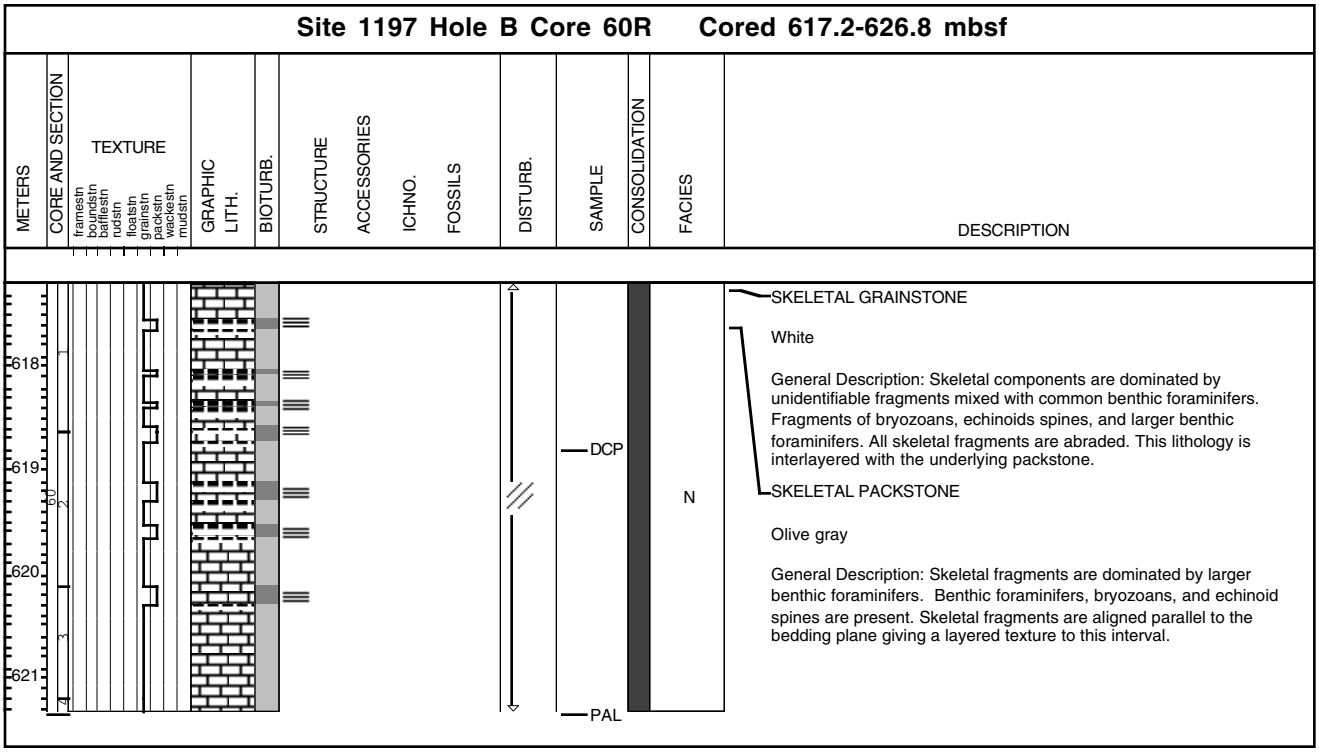
Core Photo


Site 1197 Hole B Core 58R Cored 598.2-607.9 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
599
600
601
602
603
604
605
606
607
58
1
2
3
4
5
6
7
F
F
GI
F
PAL
SILT-SIZED PACKSTONE with clay
Olive gray to light olive gray
General Description: Most of grains are silt to very fine sand-sized and unidentifiable. Planktonic foraminifers and benthic foraminifers are rare. Pyrite is present. Olive gray and light olive gray intervals alternate in 10 to 100 cm-scale thickness. Greenish to olive gray skeletal packstone interval occurs between 601.8-644.8 mbsf. This interval consists of common planktonic foraminifers and glauconite fragments and minor pyrite and organic matter with much clay (20-30 %), and shows 2 intervals of fining upward trends.
SKELETAL PACKSTONE with clay
Light greenish gray to olive gray
General Description: Skeletal components are dominantly planktonic and larger benthic foraminifers with minor bryozoan and shell fragments. Glauconite infills tests. Abundant larger benthic foraminifers, most of which are filled by glauconite, increase downcore as planktonic foraminifers decrease. Slight color changes suggest the alternation of clay rich and clay poor intervals.
SKELETAL PACKSTONE
Light greenish gray to white
General Description: Skeletal components are dominated by larger benthic foraminifers with minor bryozoans, mollusks, and rare planktonic foraminifers. Grain size is fine to very coarse sand size. Some laminations are found as aligned benthic foraminifers. Glauconite infills tests.

Core Photo

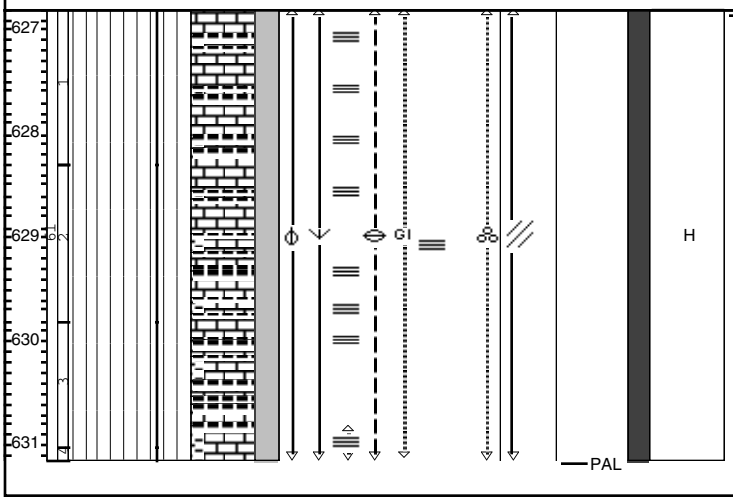

Site 1197 Hole B Core 59R Cored 607.9-617.2 mbsf
METERS
CORE AND SECTION
TEXTURE
framestn
boundstn
baffllestn
rudstn
floatstn
grainstn
packstn
wackestn
mudstn
GRAPHIC LITH.
BIOTURB.
STRUCTURE
ACCESSORIES
ICHNO.
FOSSILS
DISTURB.
SAMPLE
CONSOLIDATION
FACIES
DESCRIPTION
609
610
611
612
59
1
2
3
4
GI
THS
PAL
H
SKELETAL PACKSTONE
Light greenish gray
General Description: Skeletal components are dominated by larger benthic foraminifers, which are infilled with glauconite. Planktonic foraminifers are rare. Unidentifiable skeletal fragments are abundant. Fragments of bryozoans and mollusks are present. Grain size is medium to very coarse sand. Some laminations are due to aligned larger benthic foraminifers. HCl test suggests slight dolomitization. Recurring 10-cm-scale intervals of darker skeletal packstone with clay are observed, where laminations are obvious and grains are finer.

Core Photo


Site 1197 Hole B Core 60R Cored 617.2-626.8 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
618
619
620
621
60
1
2
3
4
DCP
PAL
N
SKELETAL GRAINSTONE
White
General Description: Skeletal components are dominated by unidentifiable fragments mixed with common benthic foraminifers. Fragments of bryozoans, echinoids spines, and larger benthic foraminifers. All skeletal fragments are abraded. This lithology is interlayered with the underlying packstone.
SKELETAL PACKSTONE
Olive gray
General Description: Skeletal fragments are dominated by larger benthic foraminifers. Benthic foraminifers, bryozoans, and echinoid spines are present. Skeletal fragments are aligned parallel to the bedding plane giving a layered texture to this interval.

Core Photo

Site 1197 Hole B Core 61R Cored 626.8-636.5 mbsf



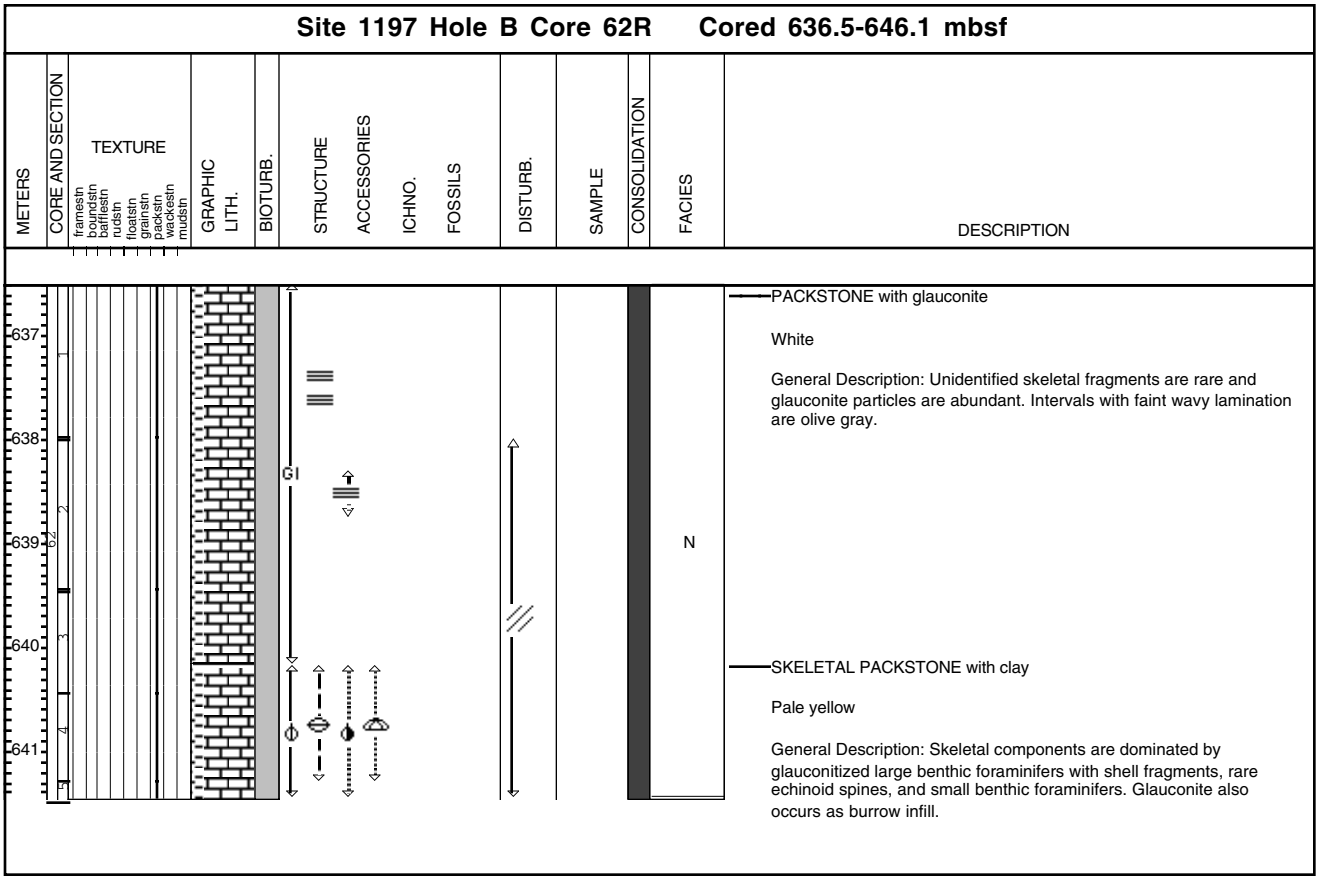
DESCRIPTION

SKELETAL PACKSTONE

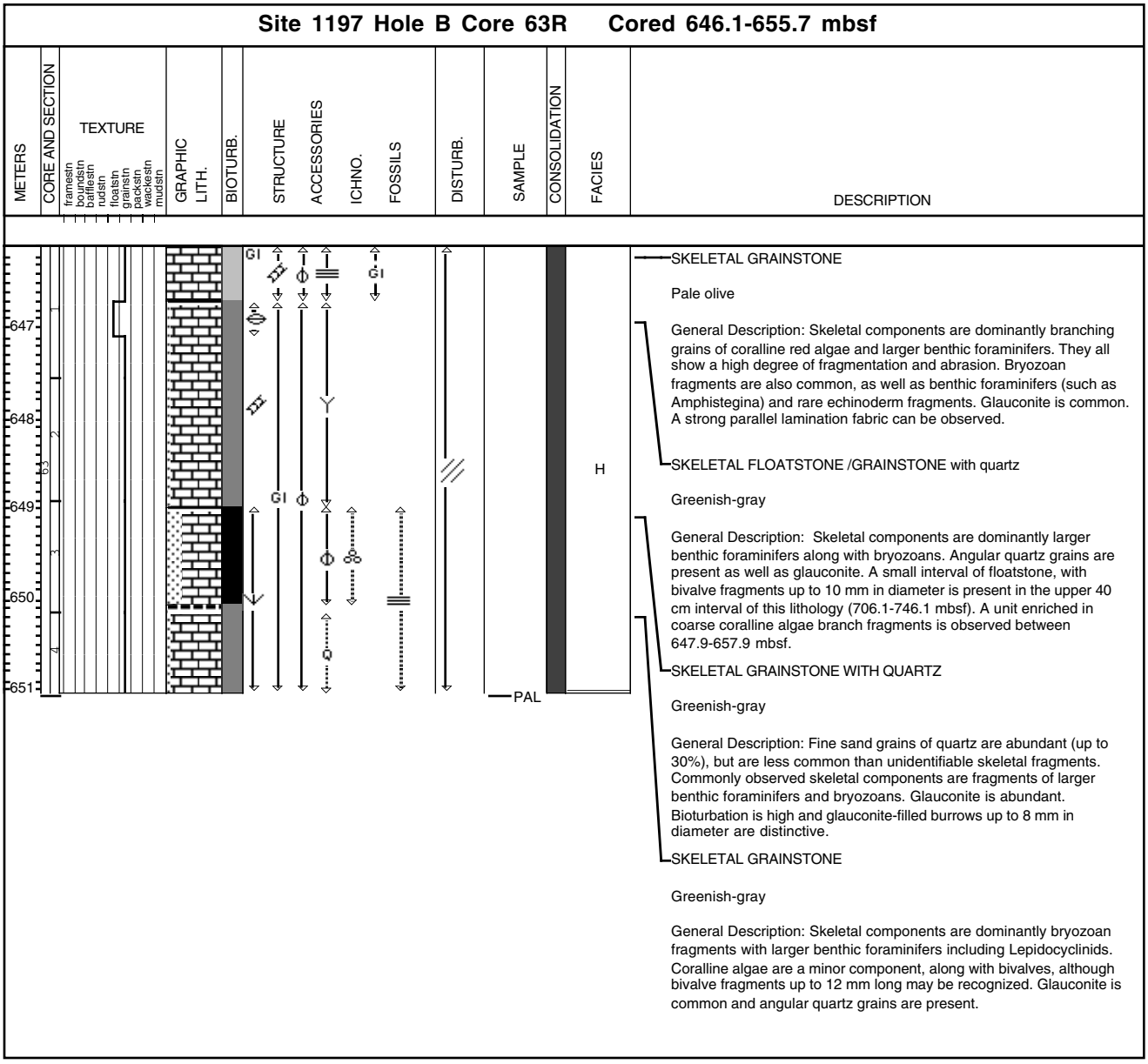
Very light greenish gray

General Description: Skeletal components are dominated by unidentifiable skeletal fragments. Larger benthic foraminifers and bryozoans with minor mollusks, and rare planktonic foraminifer fragments are seen. Many skeletons are infilled with glauconite. Grain size is fine to very coarse sand. Some laminations are due to aligned larger benthic foraminifers. HCl test suggests slight dolomitization. Recurring 10-cm-scale intervals of darker skeletal packstone with clay are observed, where laminations are obvious and grains are finer and broken skeletons. These intervals consist of minor pyrite.

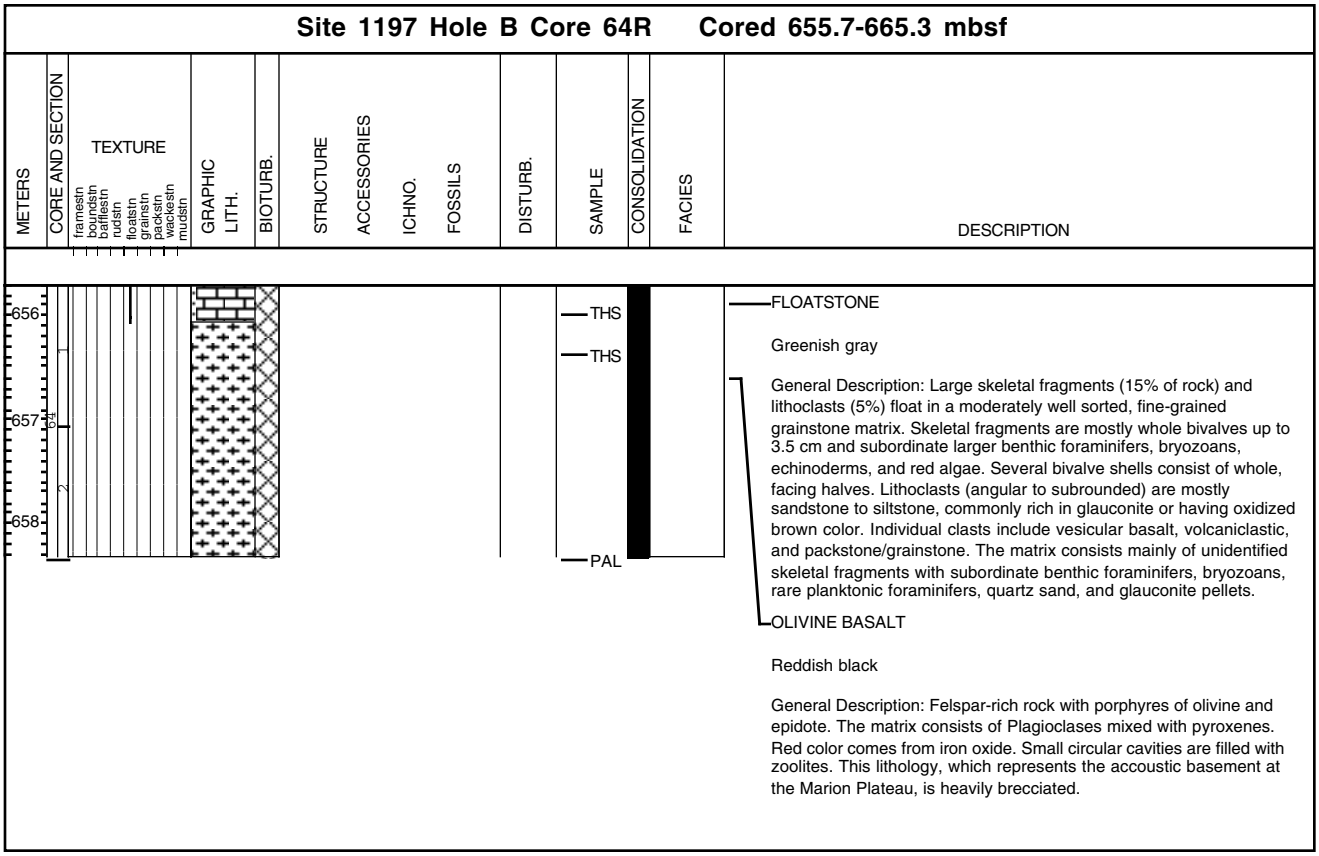
Core Photo


Site 1197 Hole B Core 62R Cored 636.5-646.1 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
637
638
639
640
641
GI
N
PACKSTONE with glauconite
White
General Description: Unidentified skeletal fragments are rare and glauconite particles are abundant. Intervals with faint wavy lamination are olive gray.
SKELETAL PACKSTONE with clay
Pale yellow
General Description: Skeletal components are dominated by glauconitized large benthic foraminifers with shell fragments, rare echinoid spines, and small benthic foraminifers. Glauconite also occurs as burrow infill.

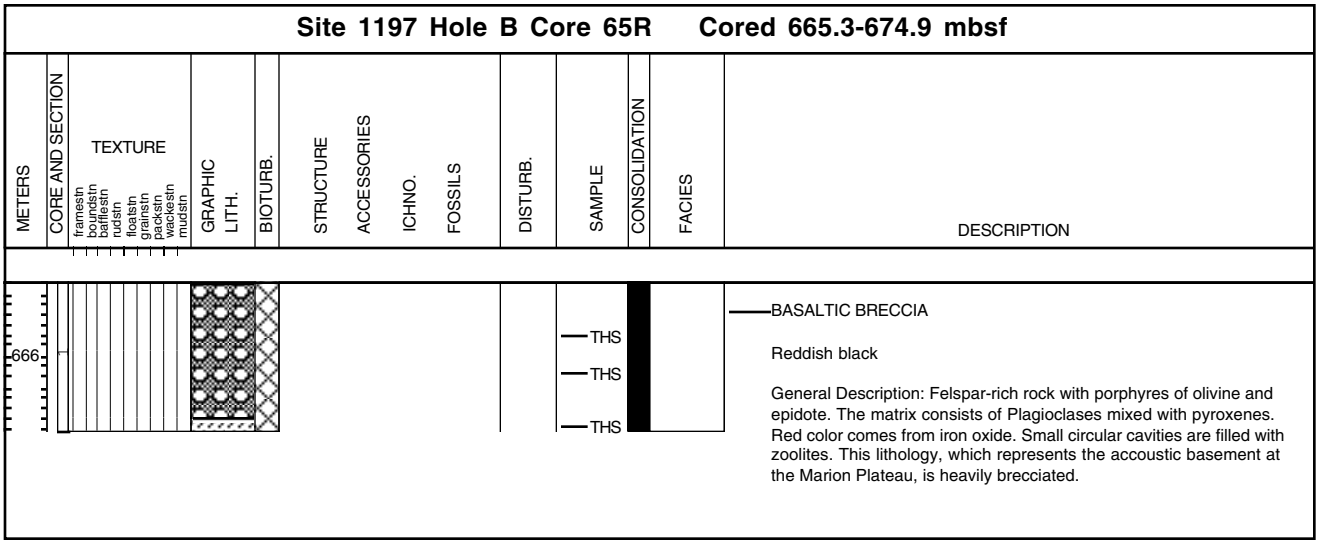
Core Photo


Site 1197 Hole B Core 63R Cored 646.1-655.7 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
647
648
649
650
651
63
1
2
3
4
Gl
H
PAL
SKELETAL GRAINSTONE
Pale olive
General Description: Skeletal components are dominantly branching grains of coralline red algae and larger benthic foraminifers. They all show a high degree of fragmentation and abrasion. Bryozoan fragments are also common, as well as benthic foraminifers (such as Amphistegina) and rare echinoderm fragments. Glauconite is common. A strong parallel lamination fabric can be observed.
SKELETAL FLOATSTONE /GRAINSTONE with quartz
Greenish-gray
General Description: Skeletal components are dominantly larger benthic foraminifers along with bryozoans. Angular quartz grains are present as well as glauconite. A small interval of floatstone, with bivalve fragments up to 10 mm in diameter is present in the upper 40 cm interval of this lithology (706.1-746.1 mbsf). A unit enriched in coarse coralline algae branch fragments is observed between 647.9-657.9 mbsf.
SKELETAL GRAINSTONE WITH QUARTZ
Greenish-gray
General Description: Fine sand grains of quartz are abundant (up to 30%), but are less common than unidentifiable skeletal fragments. Commonly observed skeletal components are fragments of larger benthic foraminifers and bryozoans. Glauconite is abundant. Bioturbation is high and glauconite-filled burrows up to 8 mm in diameter are distinctive.
SKELETAL GRAINSTONE
Greenish-gray
General Description: Skeletal components are dominantly bryozoan fragments with larger benthic foraminifers including Lepidocyclinids. Coralline algae are a minor component, along with bivalves, although bivalve fragments up to 12 mm long may be recognized. Glauconite is common and angular quartz grains are present.

Core Photo


Site 1197 Hole B Core 64R Cored 655.7-665.3 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
656
657
658
64
1
2
THS
THS
PAL
FLOATSTONE
Greenish gray
General Description: Large skeletal fragments (15% of rock) and lithoclasts (5%) float in a moderately well sorted, fine-grained grainstone matrix. Skeletal fragments are mostly whole bivalves up to 3.5 cm and subordinate larger benthic foraminifers, bryozoans, echinoderms, and red algae. Several bivalve shells consist of whole, facing halves. Lithoclasts (angular to subrounded) are mostly sandstone to siltstone, commonly rich in glauconite or having oxidized brown color. Individual clasts include vesicular basalt, volcaniclastic, and packstone/grainstone. The matrix consists mainly of unidentified skeletal fragments with subordinate benthic foraminifers, bryozoans, rare planktonic foraminifers, quartz sand, and glauconite pellets.
OLIVINE BASALT
Reddish black
General Description: Felspar-rich rock with porphyres of olivine and epidote. The matrix consists of Plagioclases mixed with pyroxenes. Red color comes from iron oxide. Small circular cavities are filled with zoolites. This lithology, which represents the accoustic basement at the Marion Plateau, is heavily brecciated.

Core Photo


Site 1197 Hole B Core 65R Cored 665.3-674.9 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
666
THS
THS
THS
BASALTIC BRECCIA
Reddish black
General Description: Felspar-rich rock with porphyres of olivine and epidote. The matrix consists of Plagioclases mixed with pyroxenes. Red color comes from iron oxide. Small circular cavities are filled with zoolites. This lithology, which represents the accoustic basement at the Marion Plateau, is heavily brecciated.

Site 1197 Smear Slides

Sample						Texture			Mineral								Biogenic								
Core	Type	Section	Top (cm)	Depth (mbsf)	Lithology	Sand	Silt	Clay	Calcite	Clay	Dolomite	Glauconite	Mica	Muscovite	Pyrite	Quartz	Benthic Forams	Calcispheres	Coccolith	Discoaster	Echinoid	Echinoid Spine	Mollusk	Planktonic Forams	Comments
1197A																									
2	H	5	40	12.5	D			D	D															D	lots of broken skeletal material
5	H	1	60	35.2	D			D	D				1			1									extensively broken skeletal material, qtz tra
6	H	3	61	47.71	D	A	C	A						*	R	*	P		P					A	
10	X	CC	17	69.37	D	P	C	D	0	D	A	0	0	0	0	0	0	0	0	0	0	0	0	0	Very nice dolomite rhombs, clay.
1197B																									
44	R	1	52	464.12	M	R	A	C			0			P		P	P		D	C					
48	R	6	16	509.44	M	R	D	P			C					P	P		D	R				P	

Site 1197 Thin Sections

Billet	THS	mbsf	photo	Lithology*									Min. grains						Skel grains												Nonskel gr.				Comments	Cem. Min.			Cemfabrics							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
1197A																																																			
239	2H-5-90	13					X	X					m		R				C	C	D	P					P				P					C				D					X		X				
240	9X-1-18	59.8					X	X					m							C	A	T	A			R		P					P					P				D		P	C	P	X		X				
241	17X-1-3	136.6					X	X					m							A	C	R	C			P		P					C					C				A		P	A	C	X		X				
1197B																																																				
299	2R-1-1a	59.6		X		X													D	P	A	R					R																									
	2R-1-1b	59.6					X	X					P							C	A	P	C		T	C		C									P		T				P	P				X	X				
300	2R-1-6	59.7					X						p							P	D	R								A					P			P							X	X			X	
301	2R-1-42	60					X	X					m					T		C	A	P	A			P		P								A				A		C	P		X		X	X				
302	6R-1-0	98.2						X					g							A	A	R	P			P		P								C		A		D		C	C	C	X		X	X				
303	14R-1-36	175.4					X	X					m	T						C	C	P	C			C		P								C		A		A		P	C	P	X		X	X				
304	15R-1-8	184.7						X					m							A	C	P	C			P		P					P			A		R		A		P	A		X		X					
305	16R-124	195.4						X					m							D	P	P	P			P										C		A		A			A	C	X		X					
306	17R-1-56	204.4					X	X					m							D	P	P	C			C		C								C		A		A		P		A	X		X					
307	18R-1-10	213.5					X	X					m							A	C	P	P			P		P								A		P		A		P	A		X		X	X				
308	19R-1-16	223.2					X	X					m				R			A	P	P	P			P		P					C			A		R		A		P	A		X		X					
309	21R-1-42	242.7						X					g							D	C	P	C					P								C		A		A		P		A	X		X					
310	24R-1-24	271.4				X	X						p				R			P	C	R	P			R		R		A?						C		P		A			C		X		X					
311	31R-1-60	339.2				X	X						m				P			P	C	R	T					R								R				A		C					X					
312	31R-2-27	340.3					X	X					m				P			P	A	R	P										C			A		T		A		P	A		X		X					
313	32R-1-0	348.2					X	X					m							C	A	P	P			R		P		C						C		P		D		C	C		X		X					
314	32R-1-121	349.4						X					m							A	T	R	P			C		A					C			A				A			A		X		X					
315	33R-1-42	358.2					X	X					m							C	P	R	R			R		C					C			A				A		P	C		X		X					
316	34R-1-92	368.3					X						p	P			C			C	A	P				P		P								P				A		C	C		X		X					
317	35R-2-99	379.6					X						p	R			C			P	A	P				R		C								P				A		C	C		X		X					
318	35R-3-24	380.3				X	X						p	T			C			C	C	P				R		P								P				A		C	C		X		X					
319	38R-4-54	410.5						X					m	R						C	P		A			P		P					C			A				C		C	A	A	X							
320	38R-5-111	412.5					X						p	C	R		C			C	A	P				R		P								P				A		P	P				X					
321	41R-1-61	435.2				X	X						p		T		C			P	A	P						C								P				A		A	P				X					
322	41R-2-90	436.9					X	X					p	P			P			P	A	P	R					P					C	concretion?		C				A		C	C	P			X					
323	44R-1-52	464.1				X							p	T	R		C			R	C															R				A		C	A				X					
324	44R-1-105	464.7				X	X						p	R	T		C			R	A	P														C				A		C	C	C			X					
325	44R-7-10	471.5				X	X						p	R	R		P			R	C	R	T					P					P			P				C		C		C			X					
326	48R-2-44	503.9				X							p	R	R		C			R	C	R												celestite??	C		T		A		C		C			X					
327	49R-1-90	512.5				X	X						p	C	P		C			P	A	R				T		R								P		T		A		C	C				X					
328	53R-5-92	556.8					X		X					T						A	C	C	A			P		C								P		C		C				A	X		X					
329	59R-2-109	610.5					X			X					R					D	C	C	A			R		R								P				A		C			X		X					
330	64R-1-28	656							X	X				C	C		P			P	P	P				D		P								A				P			D	C	X		X					
331	64R-1-64	656.3		X																		R																													
332	65R-1-49	665.8		X																																																
333	65R-1-82	666.1		X																																															
334	65R-1-134	666.6		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.