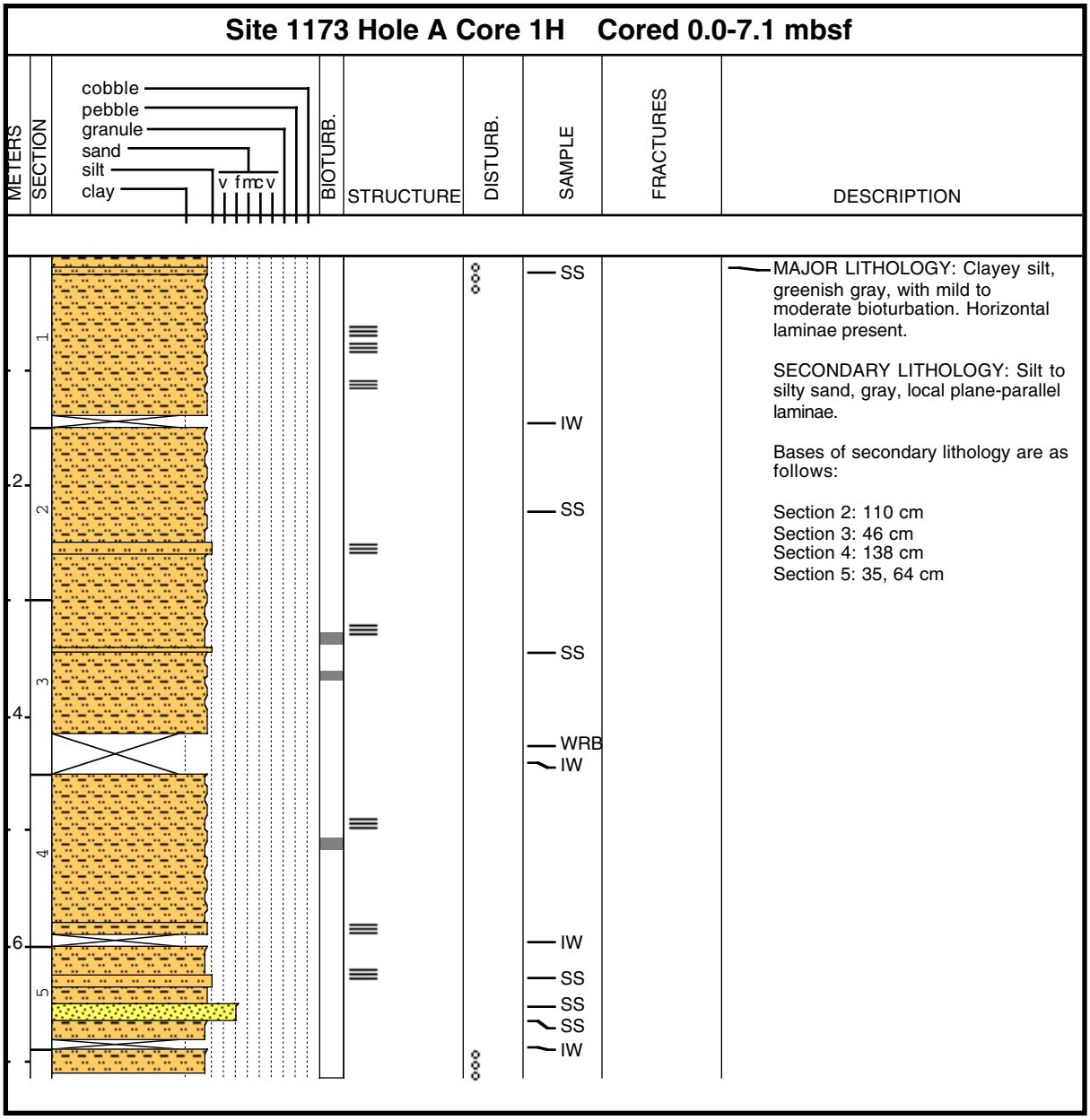
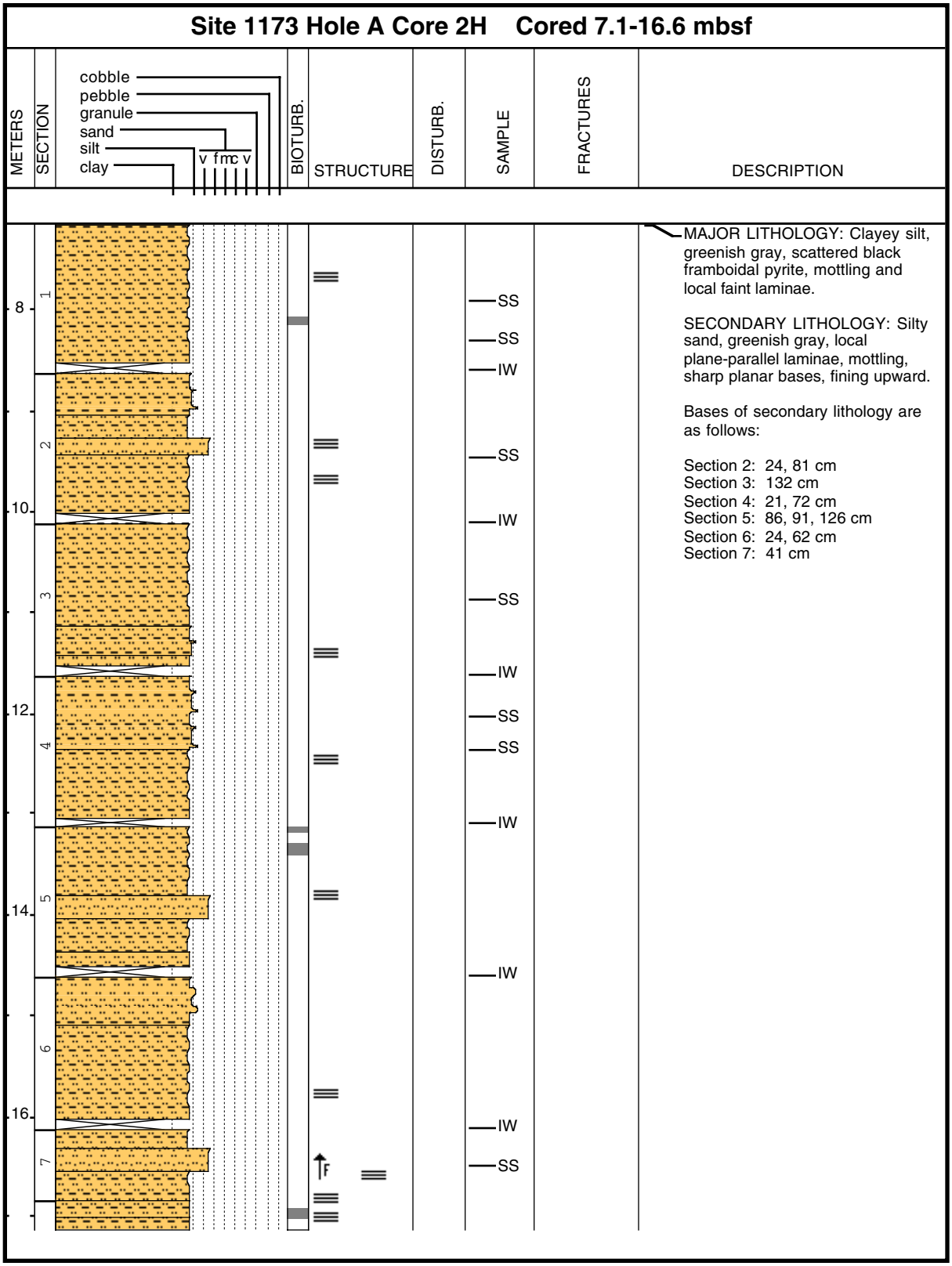
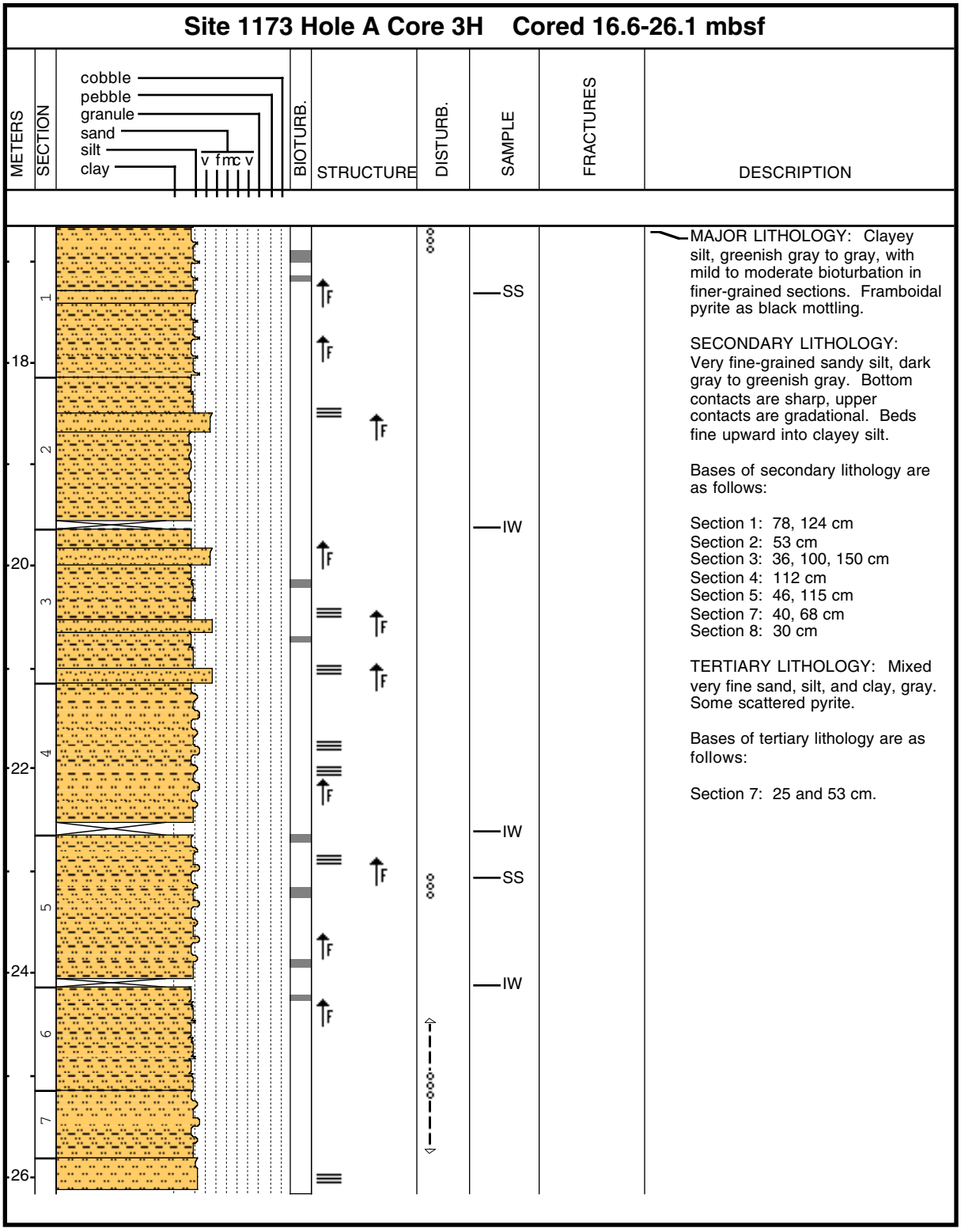
Core Photo


Site 1173 Hole A Core 1H Cored 0.0-7.1 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
SS
IW
SS
SS
WRB
IW
IW
SS
SS
SS
IW
MAJOR LITHOLOGY: Clayey silt, greenish gray, with mild to moderate bioturbation. Horizontal laminae present.
SECONDARY LITHOLOGY: Silt to silty sand, gray, local plane-parallel laminae.
Bases of secondary lithology are as follows:
Section 2: 110 cm
Section 3: 46 cm
Section 4: 138 cm
Section 5: 35, 64 cm

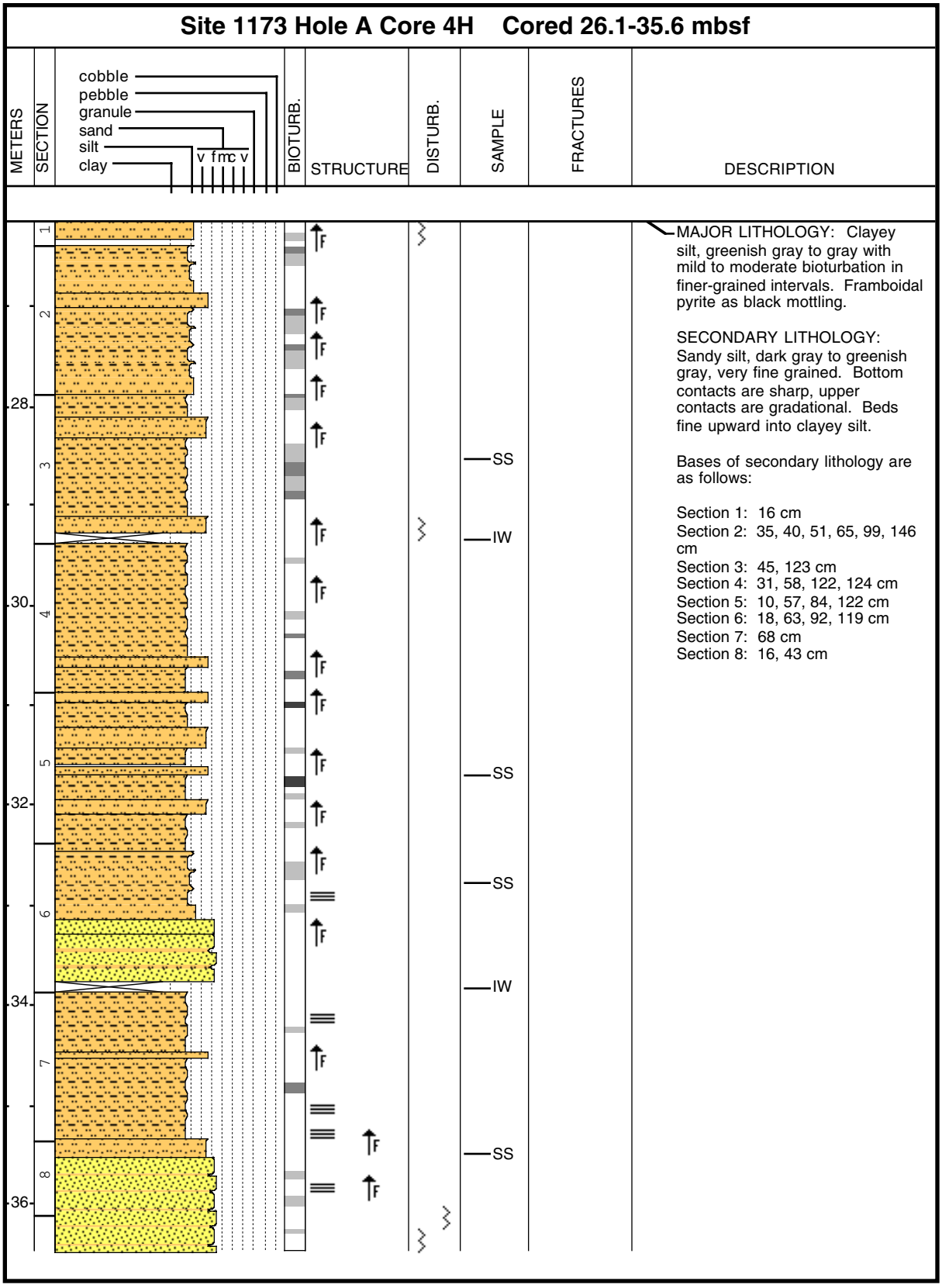
Core Photo


Site 1173 Hole A Core 2H Cored 7.1-16.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
8
10
12
14
16
1
2
3
4
5
6
7
SS
SS
IW
SS
IW
SS
IW
SS
SS
IW
IW
IW
SS
MAJOR LITHOLOGY: Clayey silt, greenish gray, scattered black framboidal pyrite, mottling and local faint laminae.
SECONDARY LITHOLOGY: Silty sand, greenish gray, local plane-parallel laminae, mottling, sharp planar bases, fining upward.
Bases of secondary lithology are as follows:
Section 2: 24, 81 cm
Section 3: 132 cm
Section 4: 21, 72 cm
Section 5: 86, 91, 126 cm
Section 6: 24, 62 cm
Section 7: 41 cm

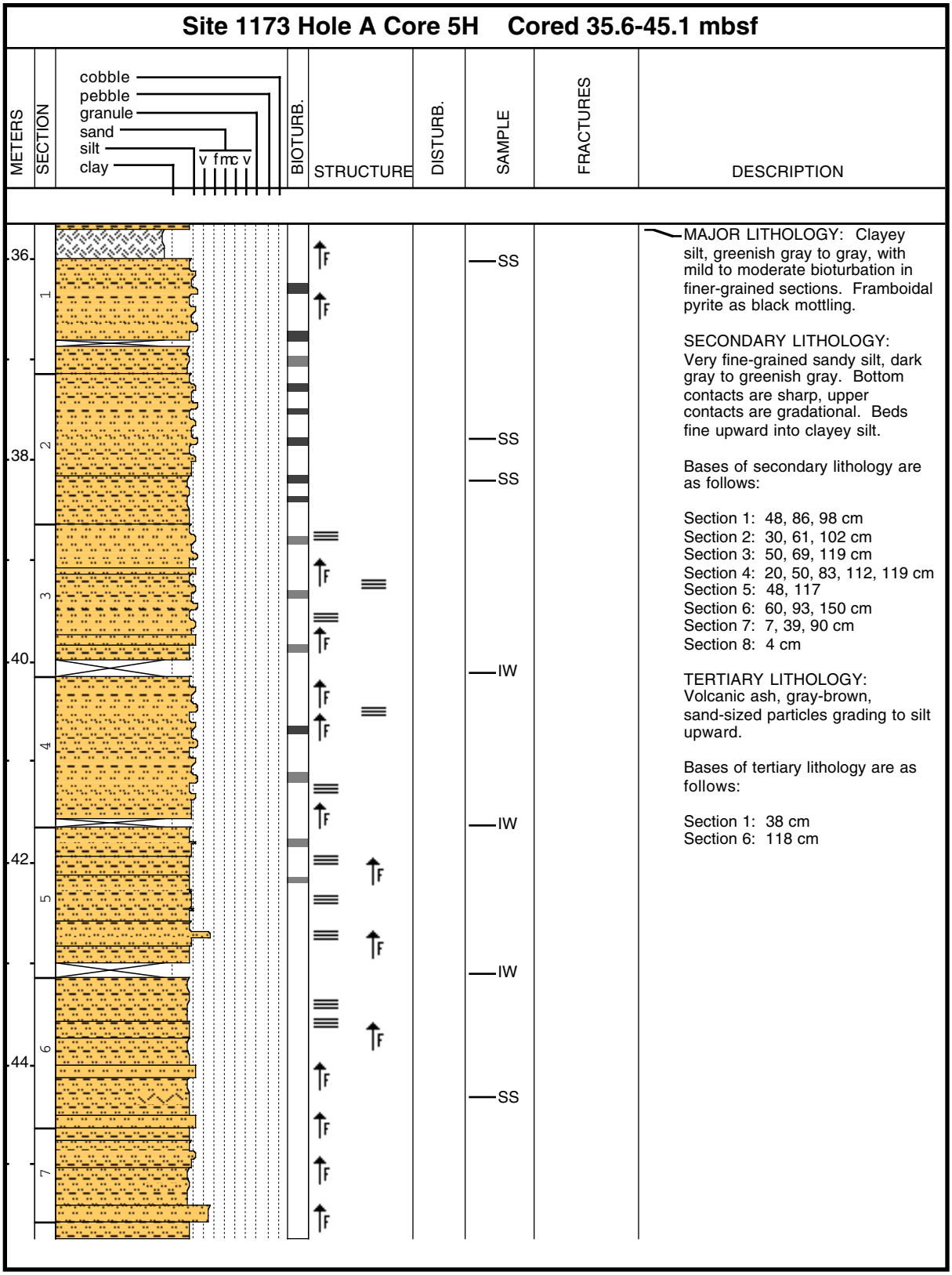
Core Photo


Site 1173 Hole A Core 3H Cored 16.6-26.1 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
18
20
22
24
26
1
2
3
4
5
6
7
F
SS
IW
IW
SS
IW
MAJOR LITHOLOGY: Clayey silt, greenish gray to gray, with mild to moderate bioturbation in finer-grained sections. Framboidal pyrite as black mottling.
SECONDARY LITHOLOGY: Very fine-grained sandy silt, dark gray to greenish gray. Bottom contacts are sharp, upper contacts are gradational. Beds fine upward into clayey silt.
Bases of secondary lithology are as follows:
Section 1: 78, 124 cm
Section 2: 53 cm
Section 3: 36, 100, 150 cm
Section 4: 112 cm
Section 5: 46, 115 cm
Section 7: 40, 68 cm
Section 8: 30 cm
TERTIARY LITHOLOGY: Mixed very fine sand, silt, and clay, gray. Some scattered pyrite.
Bases of tertiary lithology are as follows:
Section 7: 25 and 53 cm.

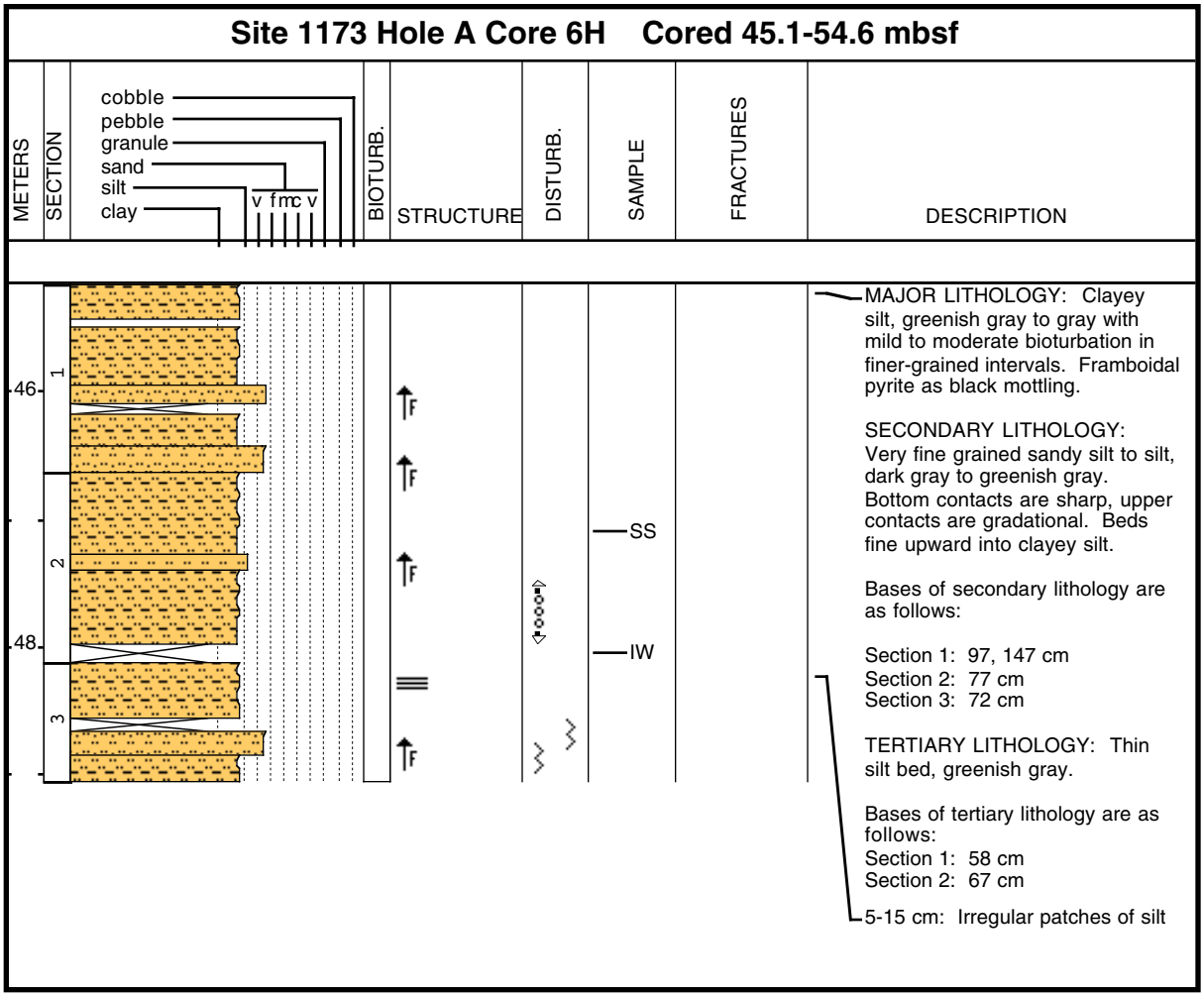
Core Photo


Site 1173 Hole A Core 4H Cored 26.1-35.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
28
30
32
34
36
1
2
3
4
5
6
7
8
F
SS
IW
SS
SS
IW
SS
MAJOR LITHOLOGY: Clayey silt, greenish gray to gray with mild to moderate bioturbation in finer-grained intervals. Framboidal pyrite as black mottling.
SECONDARY LITHOLOGY: Sandy silt, dark gray to greenish gray, very fine grained. Bottom contacts are sharp, upper contacts are gradational. Beds fine upward into clayey silt.
Bases of secondary lithology are as follows:
Section 1: 16 cm
Section 2: 35, 40, 51, 65, 99, 146 cm
Section 3: 45, 123 cm
Section 4: 31, 58, 122, 124 cm
Section 5: 10, 57, 84, 122 cm
Section 6: 18, 63, 92, 119 cm
Section 7: 68 cm
Section 8: 16, 43 cm

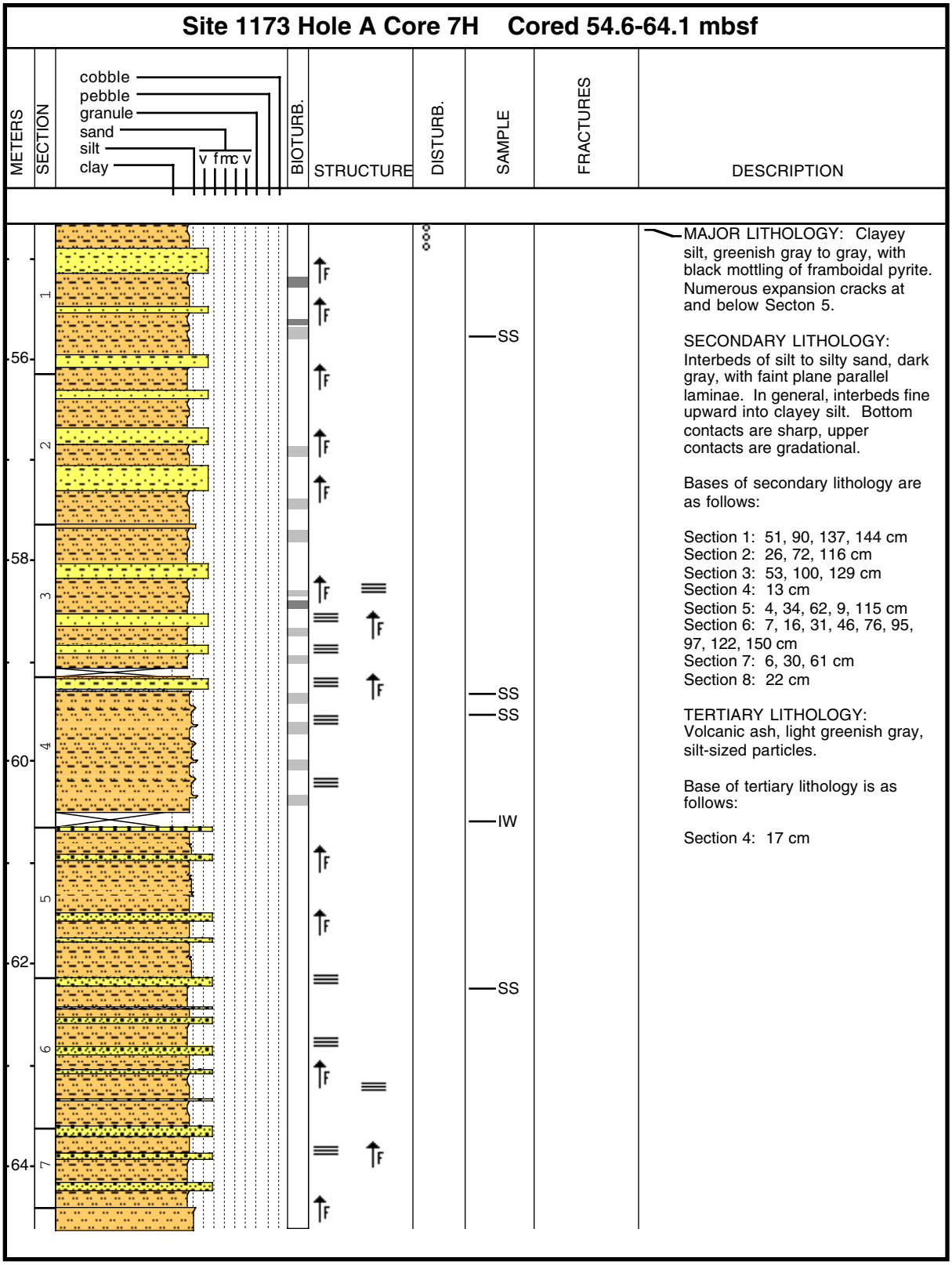
Core Photo


Site 1173 Hole A Core 5H Cored 35.6-45.1 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
36
38
40
42
44
1
2
3
4
5
6
7
F
SS
IW
MAJOR LITHOLOGY: Clayey silt, greenish gray to gray, with mild to moderate bioturbation in finer-grained sections. Framboidal pyrite as black mottling.
SECONDARY LITHOLOGY: Very fine-grained sandy silt, dark gray to greenish gray. Bottom contacts are sharp, upper contacts are gradational. Beds fine upward into clayey silt.
Bases of secondary lithology are as follows:
Section 1: 48, 86, 98 cm
Section 2: 30, 61, 102 cm
Section 3: 50, 69, 119 cm
Section 4: 20, 50, 83, 112, 119 cm
Section 5: 48, 117
Section 6: 60, 93, 150 cm
Section 7: 7, 39, 90 cm
Section 8: 4 cm
TERTIARY LITHOLOGY: Volcanic ash, gray-brown, sand-sized particles grading to silt upward.
Bases of tertiary lithology are as follows:
Section 1: 38 cm
Section 6: 118 cm

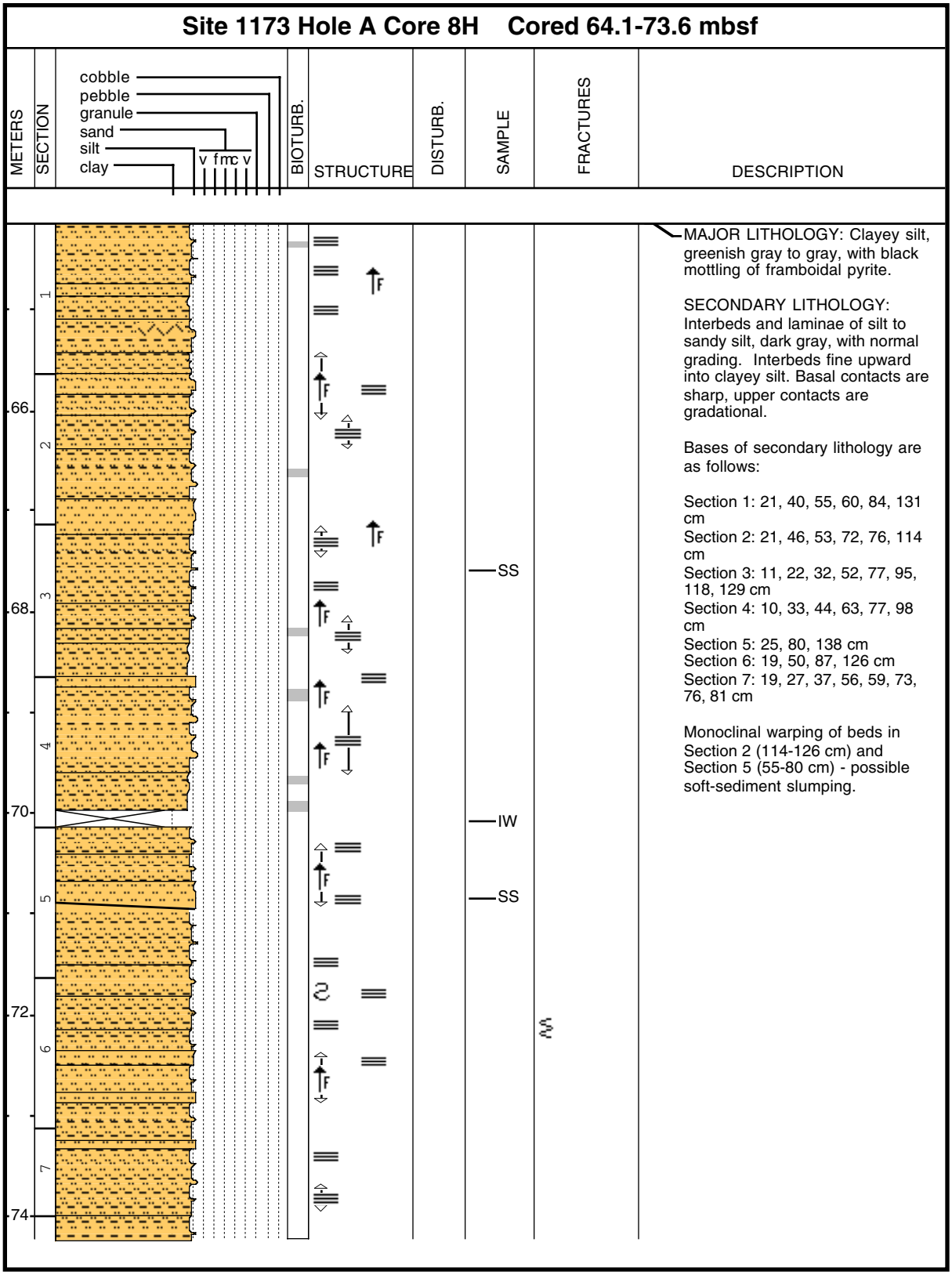
Core Photo


Site 1173 Hole A Core 6H Cored 45.1-54.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
46
48
1
2
3
F
SS
IW
MAJOR LITHOLOGY: Clayey silt, greenish gray to gray with mild to moderate bioturbation in finer-grained intervals. Framboidal pyrite as black mottling.
SECONDARY LITHOLOGY: Very fine grained sandy silt to silt, dark gray to greenish gray. Bottom contacts are sharp, upper contacts are gradational. Beds fine upward into clayey silt.
Bases of secondary lithology are as follows:
Section 1: 97, 147 cm
Section 2: 77 cm
Section 3: 72 cm
TERTIARY LITHOLOGY: Thin silt bed, greenish gray.
Bases of tertiary lithology are as follows:
Section 1: 58 cm
Section 2: 67 cm
5-15 cm: Irregular patches of silt

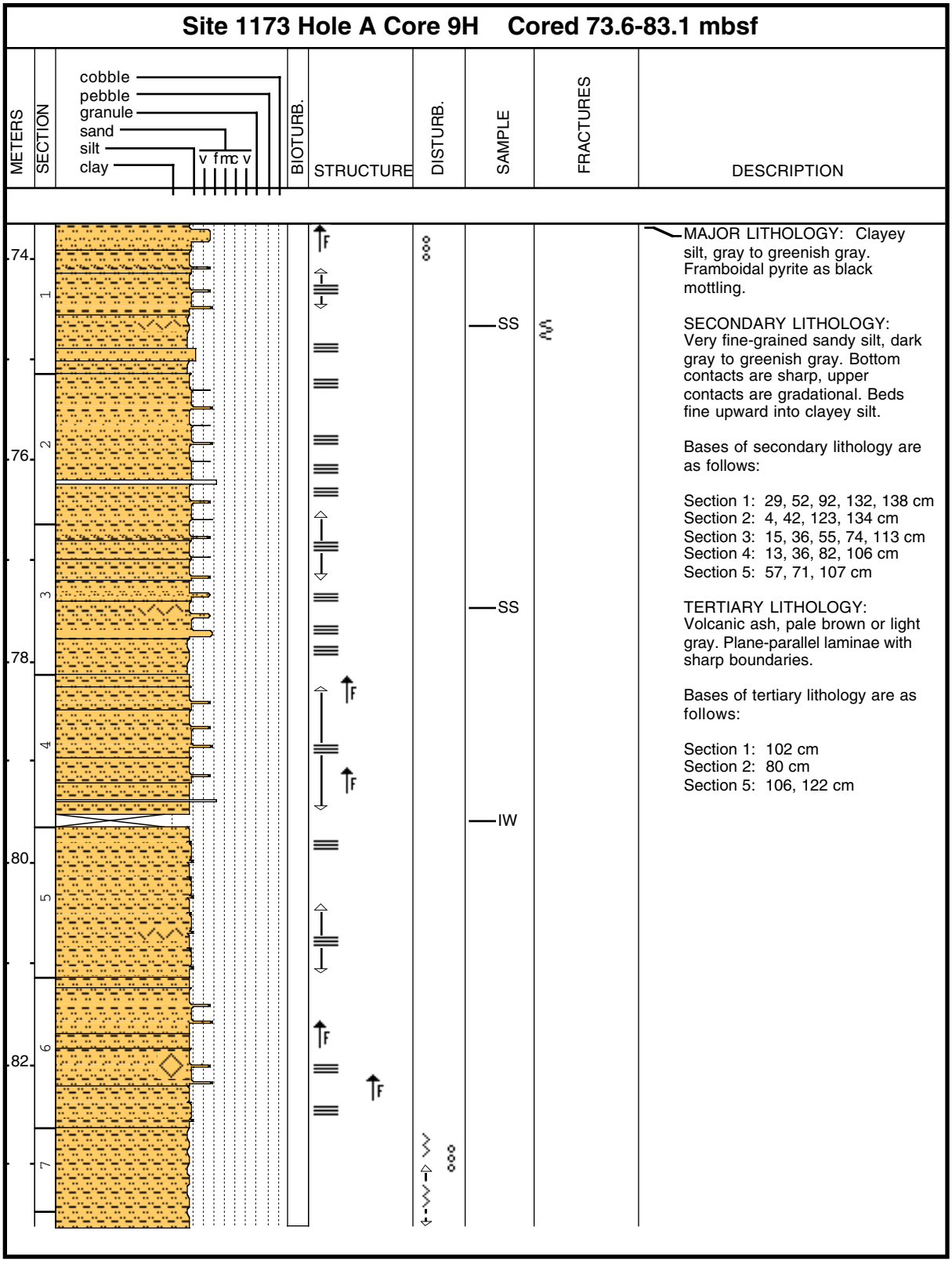
Core Photo


Site 1173 Hole A Core 7H Cored 54.6-64.1 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
56
58
60
62
64
1
2
3
4
5
6
7
SS
SS
SS
IW
SS
MAJOR LITHOLOGY: Clayey silt, greenish gray to gray, with black mottling of framboidal pyrite. Numerous expansion cracks at and below Secton 5.
SECONDARY LITHOLOGY: Interbeds of silt to silty sand, dark gray, with faint plane parallel laminae. In general, interbeds fine upward into clayey silt. Bottom contacts are sharp, upper contacts are gradational.
Bases of secondary lithology are as follows:
Section 1: 51, 90, 137, 144 cm
Section 2: 26, 72, 116 cm
Section 3: 53, 100, 129 cm
Section 4: 13 cm
Section 5: 4, 34, 62, 9, 115 cm
Section 6: 7, 16, 31, 46, 76, 95, 97, 122, 150 cm
Section 7: 6, 30, 61 cm
Section 8: 22 cm
TERTIARY LITHOLOGY: Volcanic ash, light greenish gray, silt-sized particles.
Base of tertiary lithology is as follows:
Section 4: 17 cm

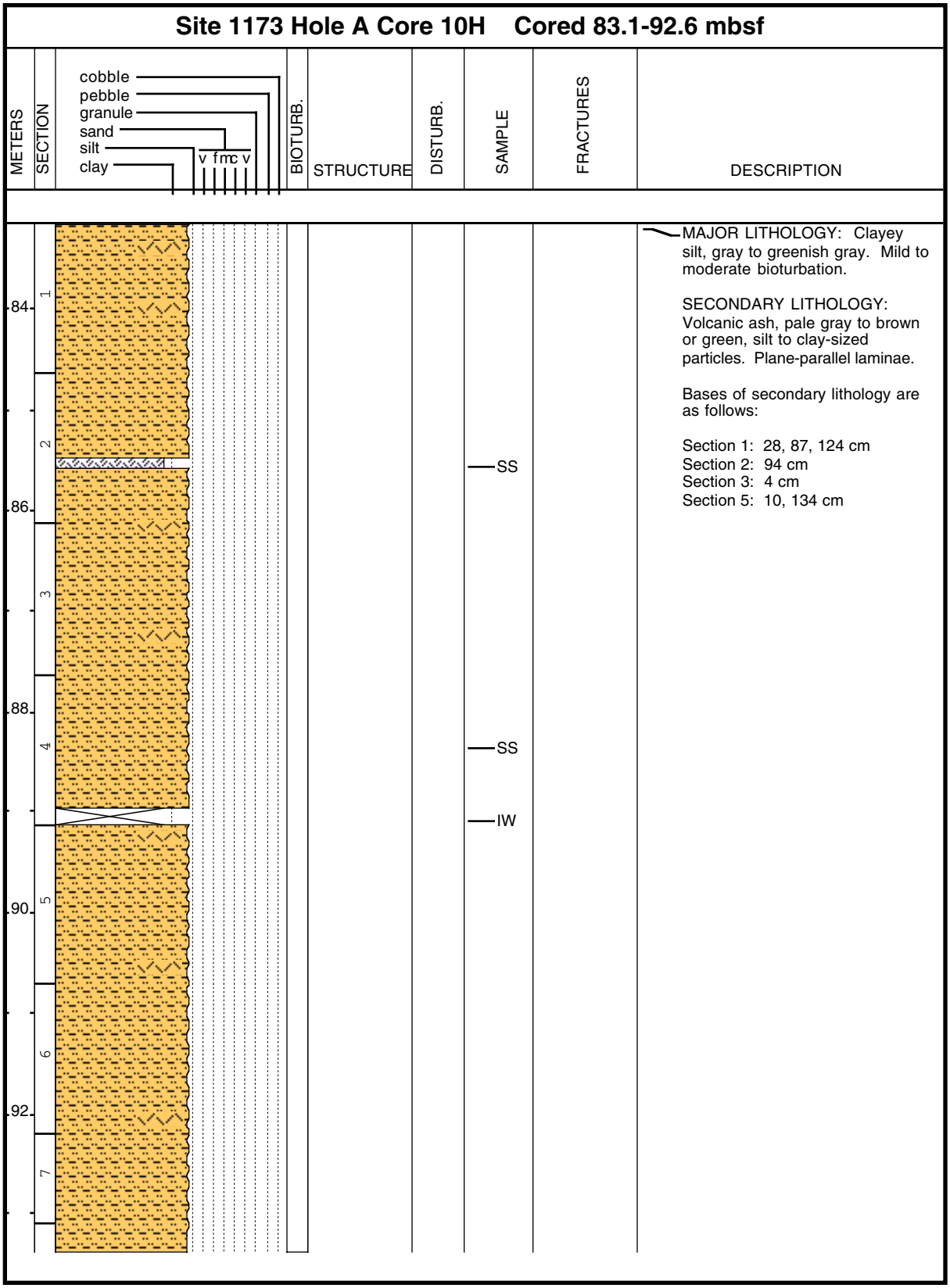
Core Photo


Site 1173 Hole A Core 8H Cored 64.1-73.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
66
68
70
72
74
1
2
3
4
5
6
7
SS
IW
SS
MAJOR LITHOLOGY: Clayey silt, greenish gray to gray, with black mottling of framboidal pyrite.
SECONDARY LITHOLOGY: Interbeds and laminae of silt to sandy silt, dark gray, with normal grading. Interbeds fine upward into clayey silt. Basal contacts are sharp, upper contacts are gradational.
Bases of secondary lithology are as follows:
Section 1: 21, 40, 55, 60, 84, 131 cm
Section 2: 21, 46, 53, 72, 76, 114 cm
Section 3: 11, 22, 32, 52, 77, 95, 118, 129 cm
Section 4: 10, 33, 44, 63, 77, 98 cm
Section 5: 25, 80, 138 cm
Section 6: 19, 50, 87, 126 cm
Section 7: 19, 27, 37, 56, 59, 73, 76, 81 cm
Monoclinal warping of beds in Section 2 (114-126 cm) and Section 5 (55-80 cm) - possible soft-sediment slumping.

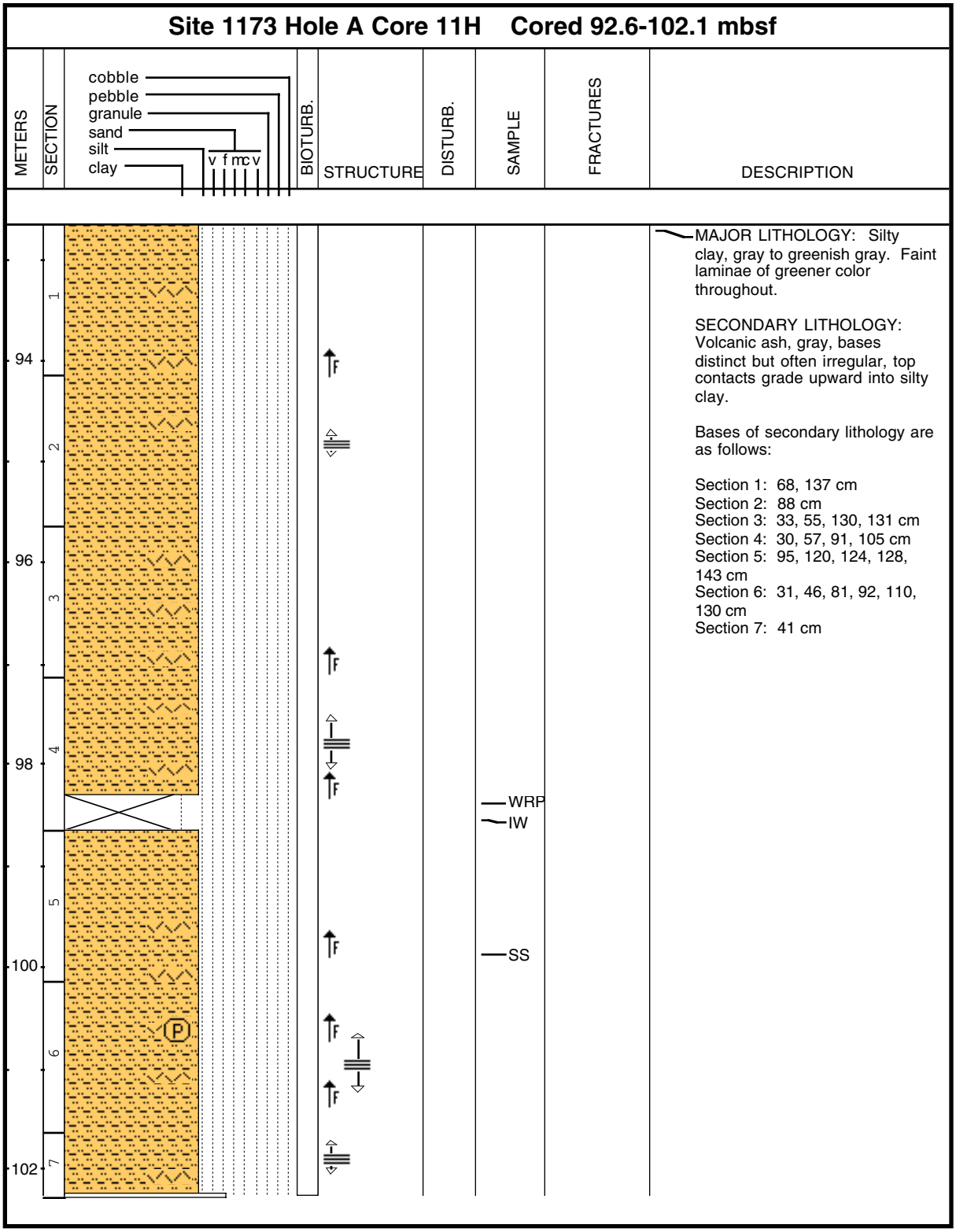
Core Photo


Site 1173 Hole A Core 9H Cored 73.6-83.1 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
74
76
78
80
82
1
2
3
4
5
6
7
F
SS
SS
IW
MAJOR LITHOLOGY: Clayey silt, gray to greenish gray. Framboidal pyrite as black mottling.
SECONDARY LITHOLOGY: Very fine-grained sandy silt, dark gray to greenish gray. Bottom contacts are sharp, upper contacts are gradational. Beds fine upward into clayey silt.
Bases of secondary lithology are as follows:
Section 1: 29, 52, 92, 132, 138 cm
Section 2: 4, 42, 123, 134 cm
Section 3: 15, 36, 55, 74, 113 cm
Section 4: 13, 36, 82, 106 cm
Section 5: 57, 71, 107 cm
TERTIARY LITHOLOGY: Volcanic ash, pale brown or light gray. Plane-parallel laminae with sharp boundaries.
Bases of tertiary lithology are as follows:
Section 1: 102 cm
Section 2: 80 cm
Section 5: 106, 122 cm

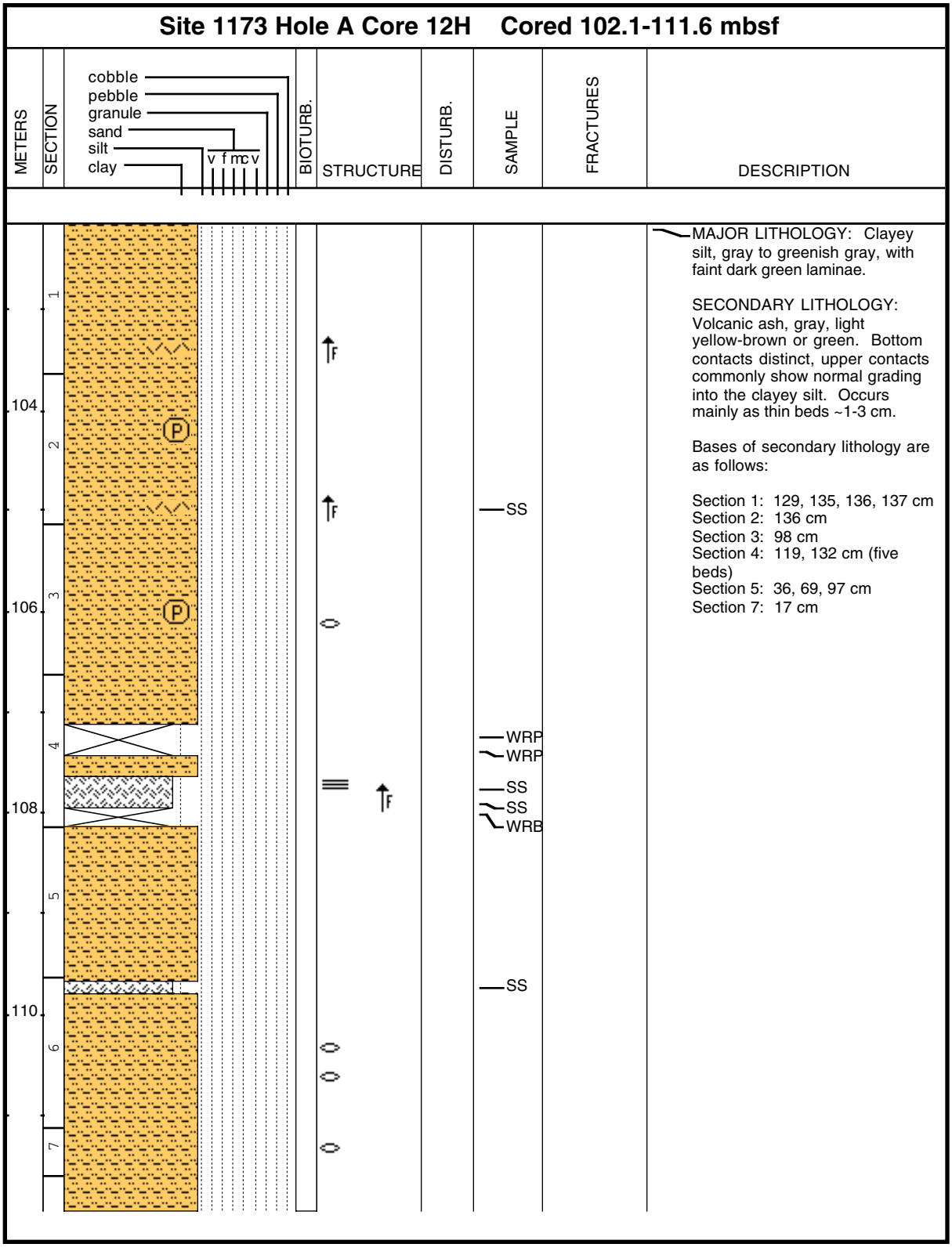
Core Photo


Site 1173 Hole A Core 10H Cored 83.1-92.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
84
86
88
90
92
1
2
3
4
5
6
7
SS
SS
IW
MAJOR LITHOLOGY: Clayey silt, gray to greenish gray. Mild to moderate bioturbation.
SECONDARY LITHOLOGY: Volcanic ash, pale gray to brown or green, silt to clay-sized particles. Plane-parallel laminae.
Bases of secondary lithology are as follows:
Section 1: 28, 87, 124 cm
Section 2: 94 cm
Section 3: 4 cm
Section 5: 10, 134 cm

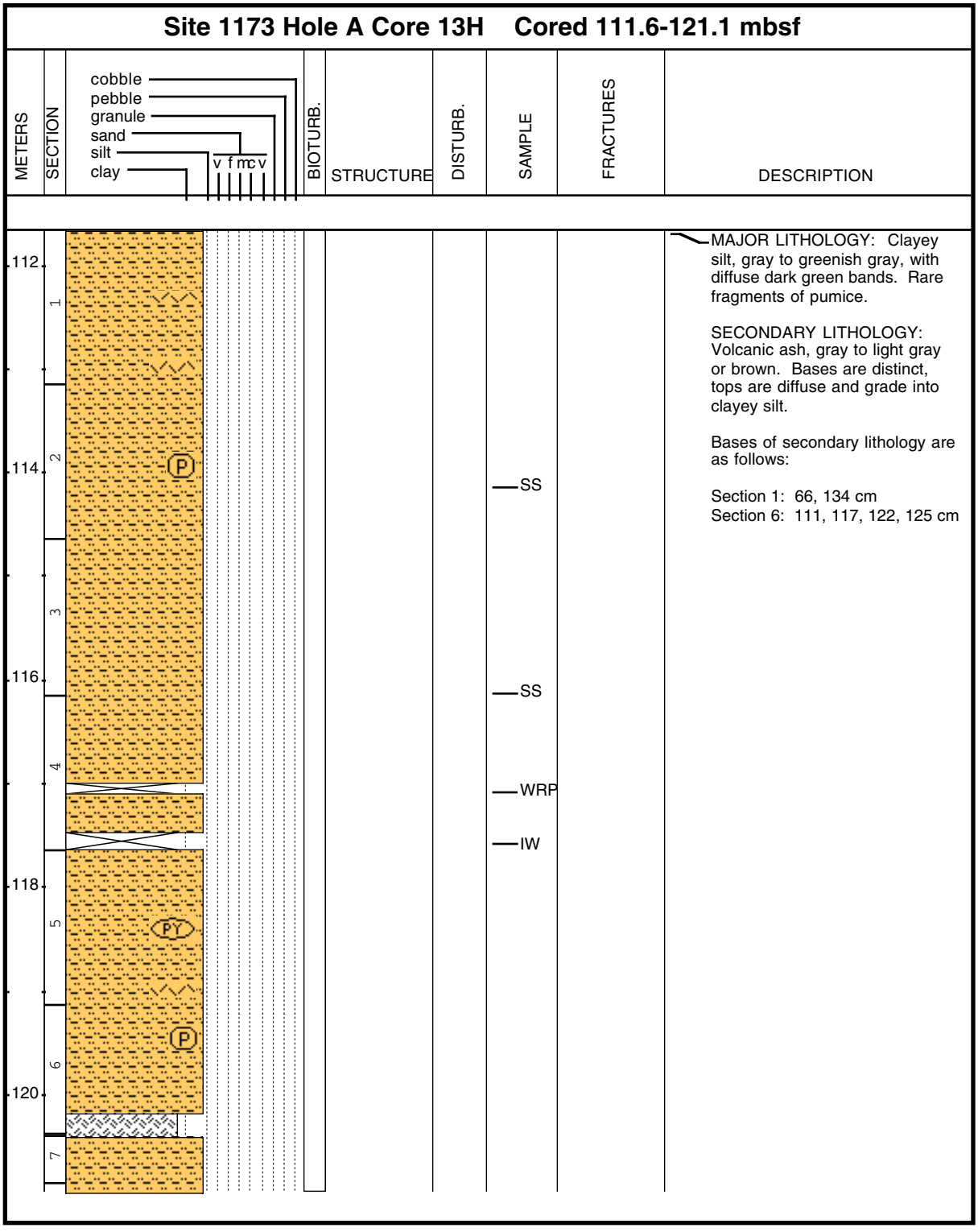
Core Photo


Site 1173 Hole A Core 11H Cored 92.6-102.1 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
94
96
98
100
102
1
2
3
4
5
6
7
F
P
WRP
IW
SS
MAJOR LITHOLOGY: Silty clay, gray to greenish gray. Faint laminae of greener color throughout.
SECONDARY LITHOLOGY: Volcanic ash, gray, bases distinct but often irregular, top contacts grade upward into silty clay.
Bases of secondary lithology are as follows:
Section 1: 68, 137 cm
Section 2: 88 cm
Section 3: 33, 55, 130, 131 cm
Section 4: 30, 57, 91, 105 cm
Section 5: 95, 120, 124, 128, 143 cm
Section 6: 31, 46, 81, 92, 110, 130 cm
Section 7: 41 cm

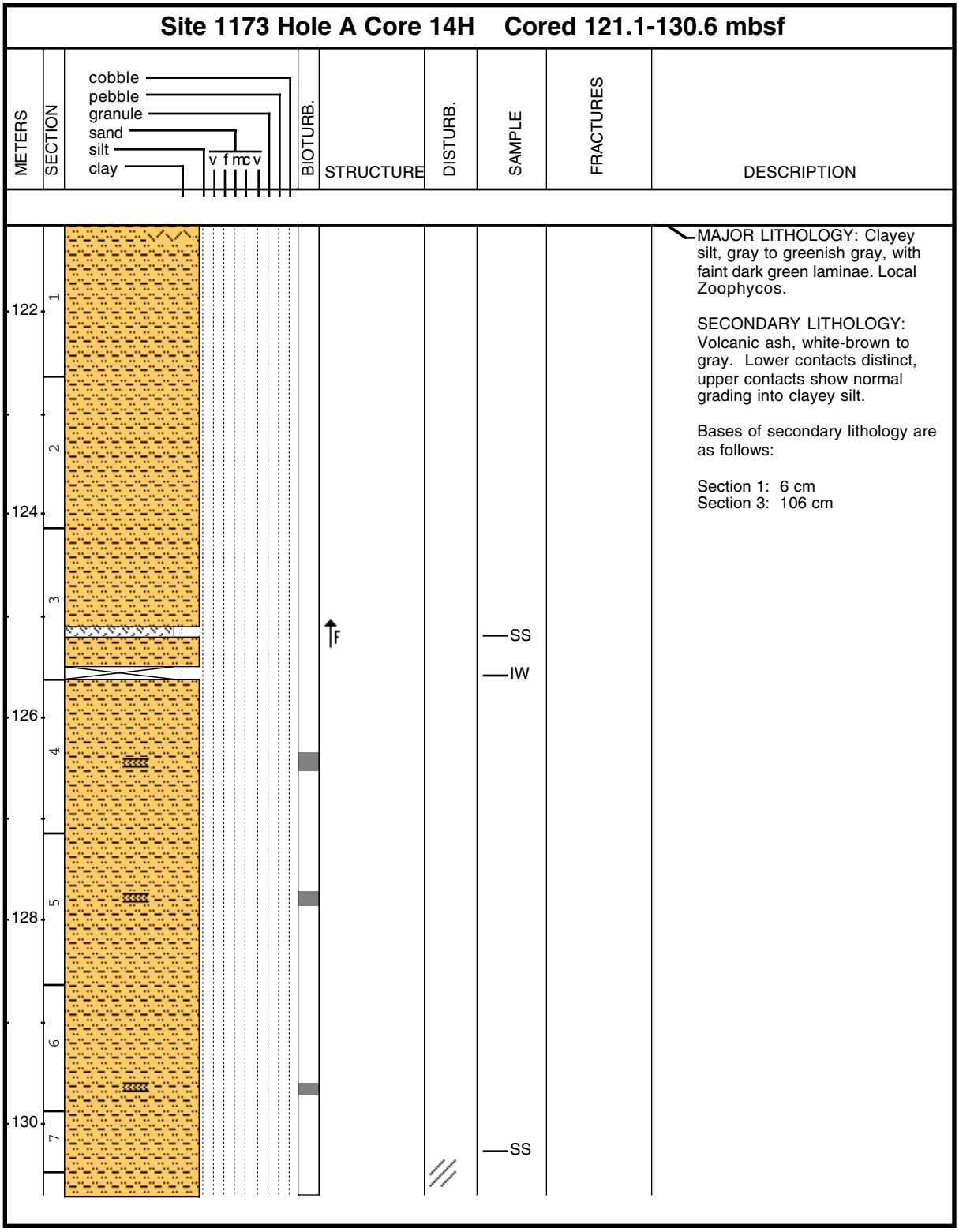
Core Photo


Site 1173 Hole A Core 12H Cored 102.1-111.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
104
106
108
110
1
2
3
4
5
6
7
P
F
SS
WRP
WRP
SS
SS
WRB
SS
MAJOR LITHOLOGY: Clayey silt, gray to greenish gray, with faint dark green laminae.
SECONDARY LITHOLOGY: Volcanic ash, gray, light yellow-brown or green. Bottom contacts distinct, upper contacts commonly show normal grading into the clayey silt. Occurs mainly as thin beds ~1-3 cm.
Bases of secondary lithology are as follows:
Section 1: 129, 135, 136, 137 cm
Section 2: 136 cm
Section 3: 98 cm
Section 4: 119, 132 cm (five beds)
Section 5: 36, 69, 97 cm
Section 7: 17 cm

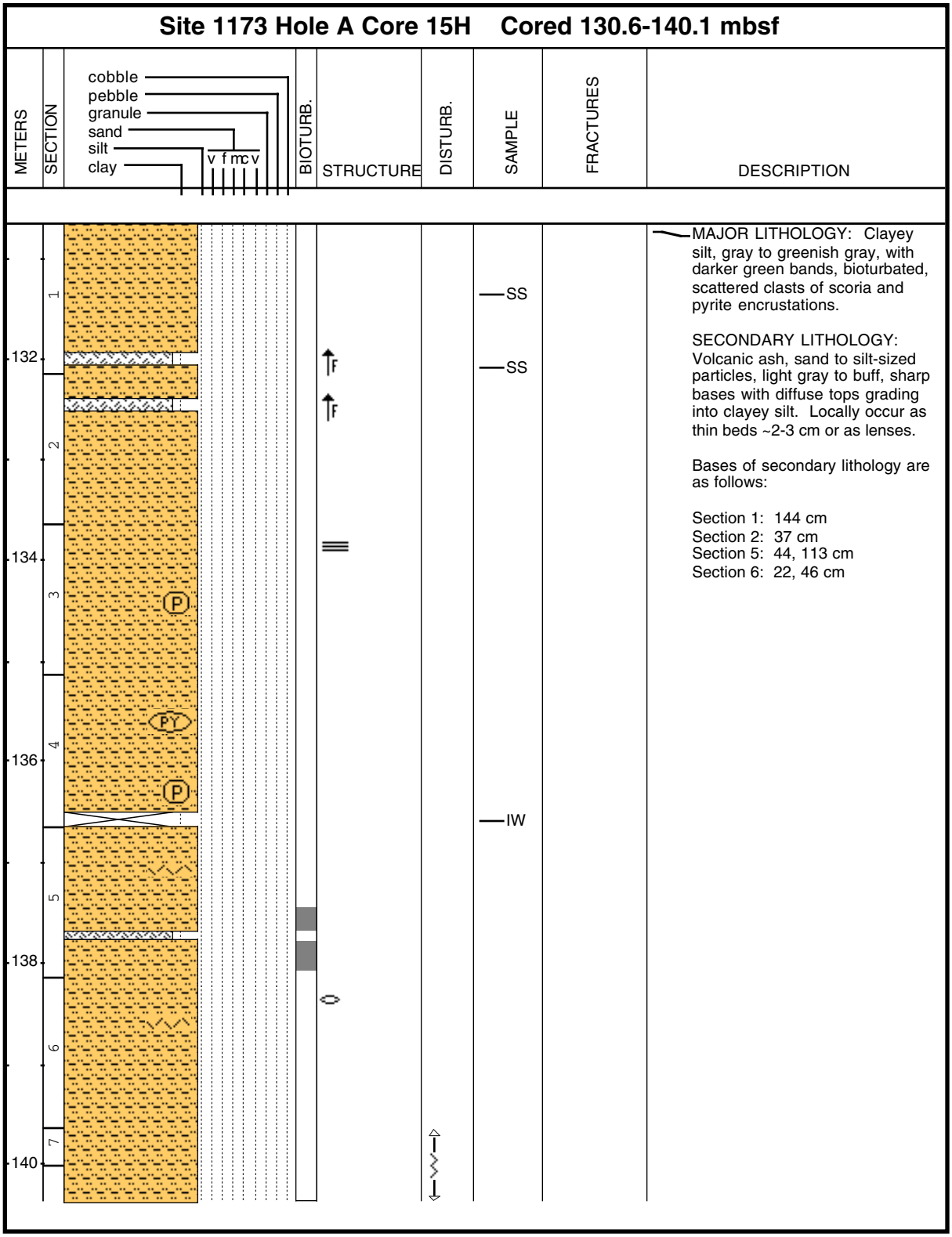
Core Photo


Site 1173 Hole A Core 13H Cored 111.6-121.1 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
112
114
116
118
120
1
2
3
4
5
6
7
P
PY
SS
SS
WRP
IW
MAJOR LITHOLOGY: Clayey silt, gray to greenish gray, with diffuse dark green bands. Rare fragments of pumice.
SECONDARY LITHOLOGY: Volcanic ash, gray to light gray or brown. Bases are distinct, tops are diffuse and grade into clayey silt.
Bases of secondary lithology are as follows:
Section 1: 66, 134 cm
Section 6: 111, 117, 122, 125 cm

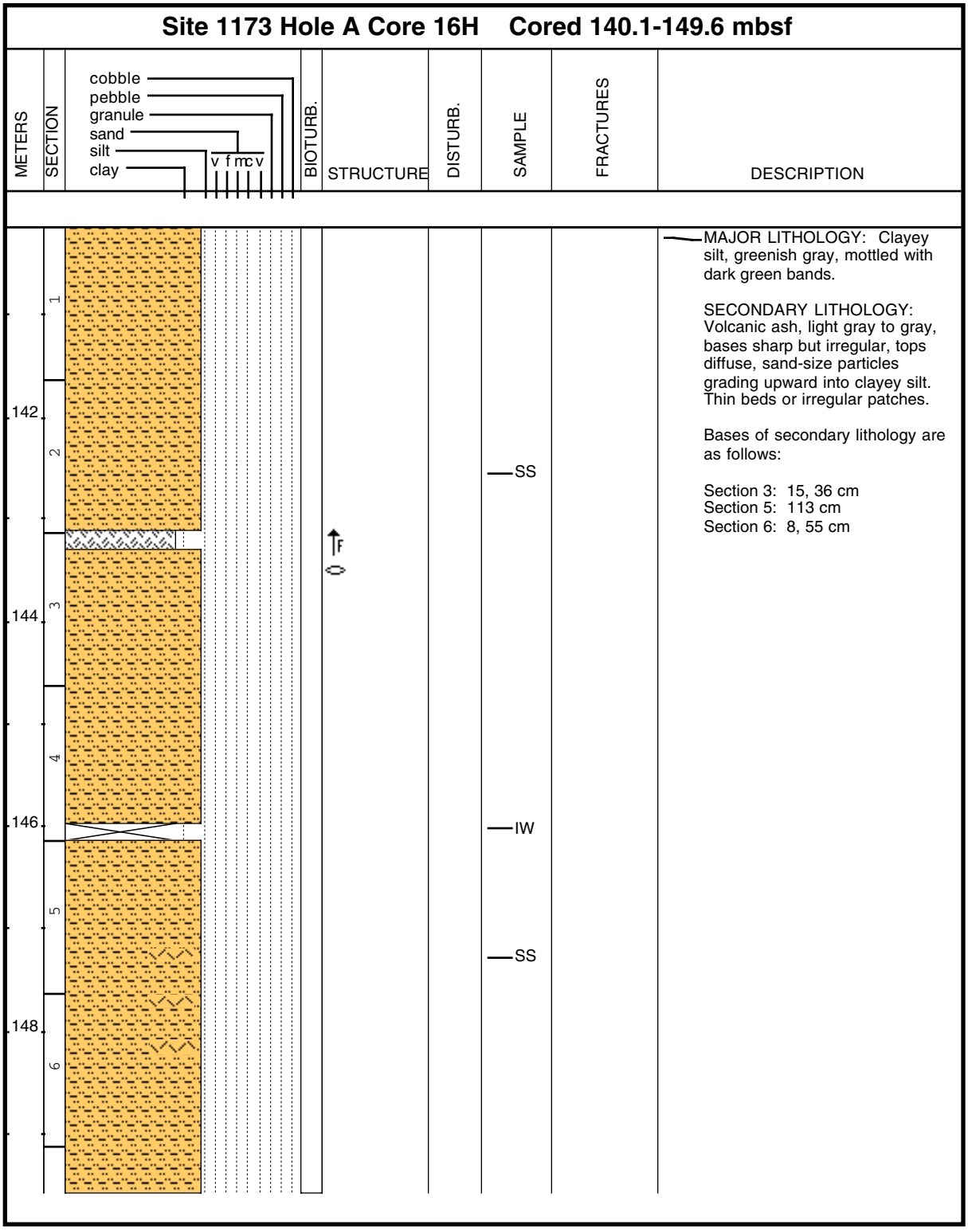
Core Photo


Site 1173 Hole A Core 14H Cored 121.1-130.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
122
124
126
128
130
1
2
3
4
5
6
7
F
SS
IW
SS
MAJOR LITHOLOGY: Clayey silt, gray to greenish gray, with faint dark green laminae. Local Zoophycos.
SECONDARY LITHOLOGY: Volcanic ash, white-brown to gray. Lower contacts distinct, upper contacts show normal grading into clayey silt.
Bases of secondary lithology are as follows:
Section 1: 6 cm
Section 3: 106 cm

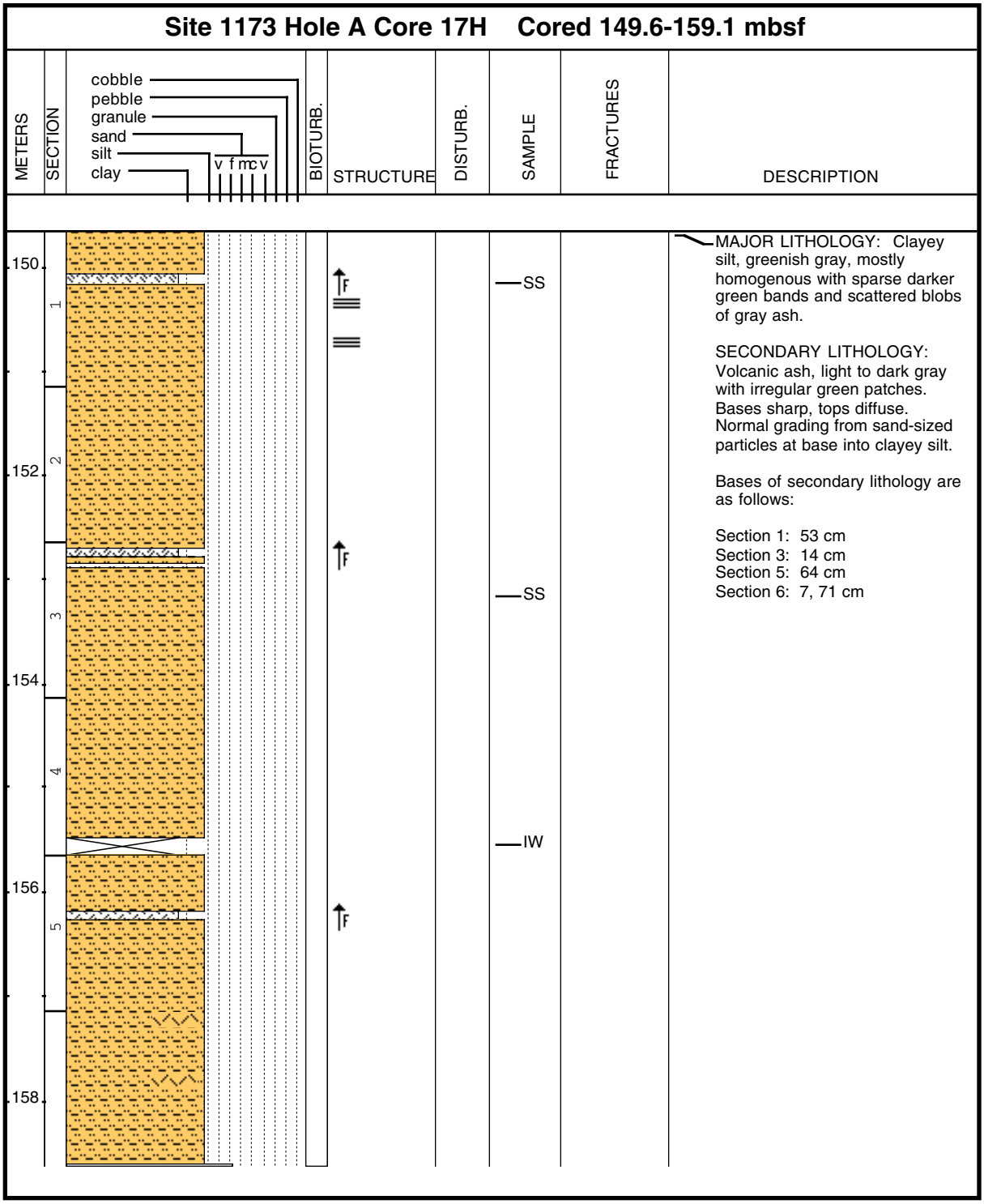
Core Photo


Site 1173 Hole A Core 15H Cored 130.6-140.1 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
132
134
136
138
140
1
2
3
4
5
6
7
F
F
P
PY
P
SS
SS
IW
MAJOR LITHOLOGY: Clayey silt, gray to greenish gray, with darker green bands, bioturbated, scattered clasts of scoria and pyrite encrustations.
SECONDARY LITHOLOGY: Volcanic ash, sand to silt-sized particles, light gray to buff, sharp bases with diffuse tops grading into clayey silt. Locally occur as thin beds ~2-3 cm or as lenses.
Bases of secondary lithology are as follows:
Section 1: 144 cm
Section 2: 37 cm
Section 5: 44, 113 cm
Section 6: 22, 46 cm

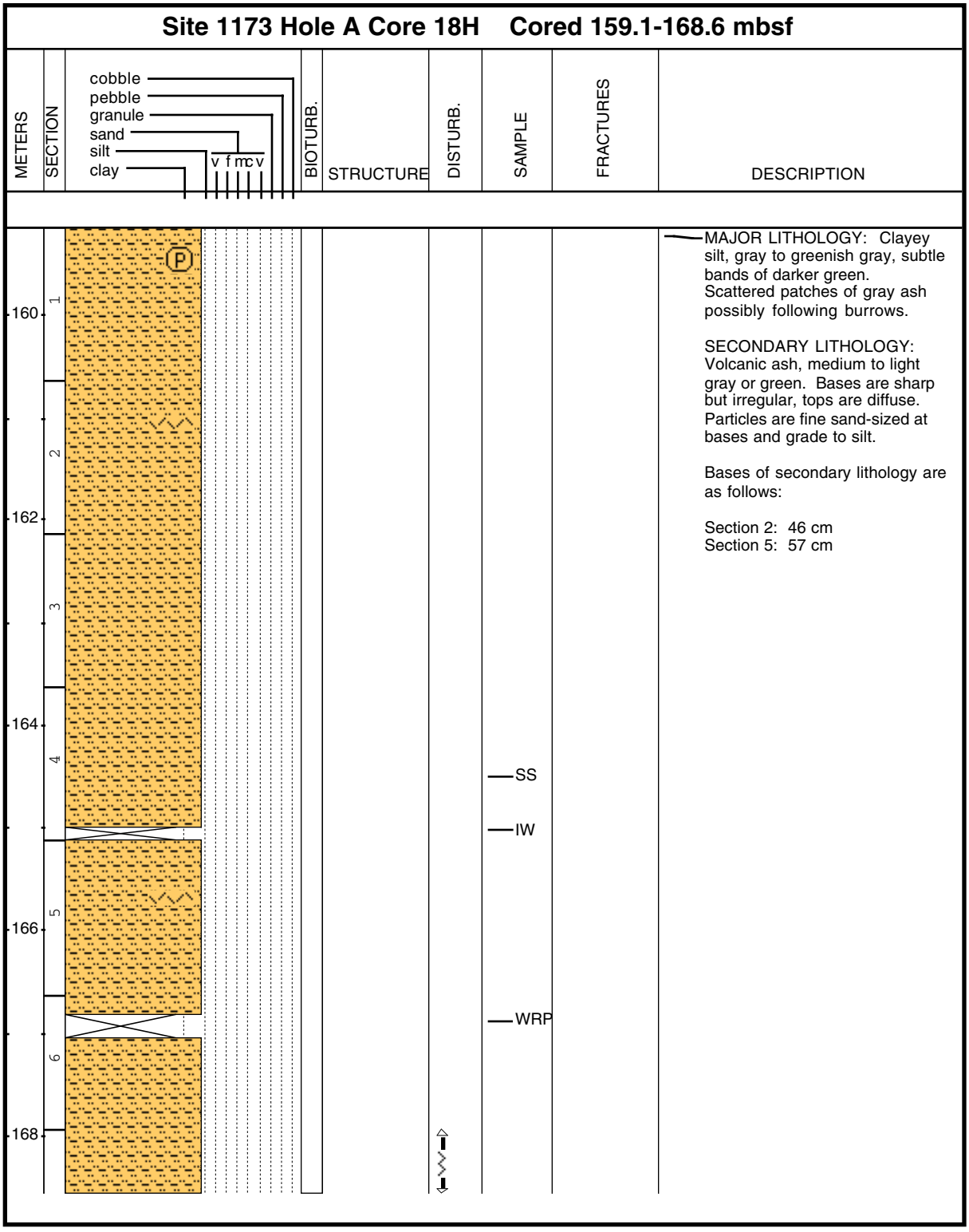
Core Photo


Site 1173 Hole A Core 16H Cored 140.1-149.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
142
144
146
148
1
2
3
4
5
6
F
SS
IW
SS
MAJOR LITHOLOGY: Clayey silt, greenish gray, mottled with dark green bands.
SECONDARY LITHOLOGY: Volcanic ash, light gray to gray, bases sharp but irregular, tops diffuse, sand-size particles grading upward into clayey silt. Thin beds or irregular patches.
Bases of secondary lithology are as follows:
Section 3: 15, 36 cm
Section 5: 113 cm
Section 6: 8, 55 cm

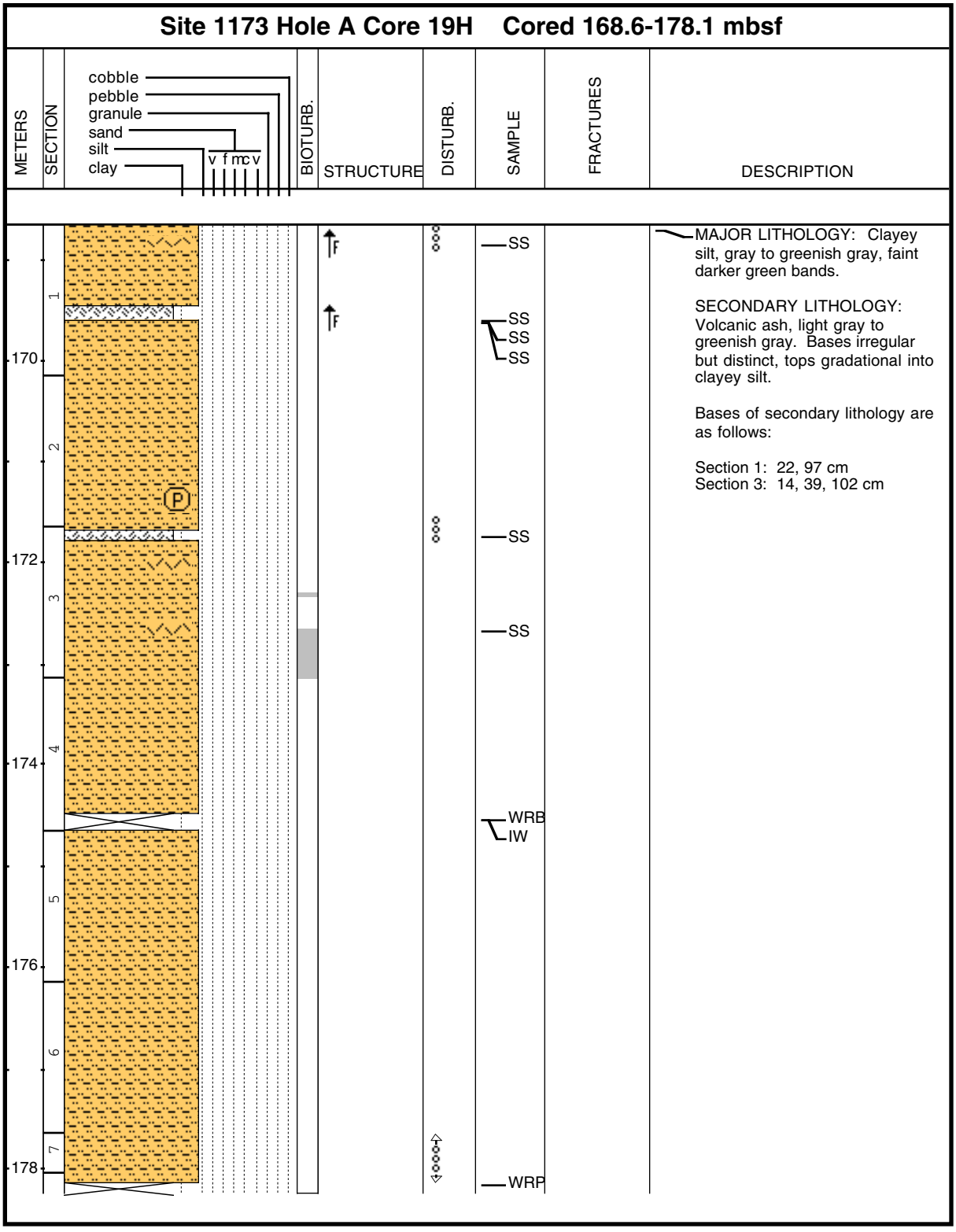
Core Photo


Site 1173 Hole A Core 17H Cored 149.6-159.1 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
150
152
154
156
158
1
2
3
4
5
F
SS
SS
IW
MAJOR LITHOLOGY: Clayey silt, greenish gray, mostly homogenous with sparse darker green bands and scattered blobs of gray ash.
SECONDARY LITHOLOGY: Volcanic ash, light to dark gray with irregular green patches. Bases sharp, tops diffuse. Normal grading from sand-sized particles at base into clayey silt.
Bases of secondary lithology are as follows:
Section 1: 53 cm
Section 3: 14 cm
Section 5: 64 cm
Section 6: 7, 71 cm

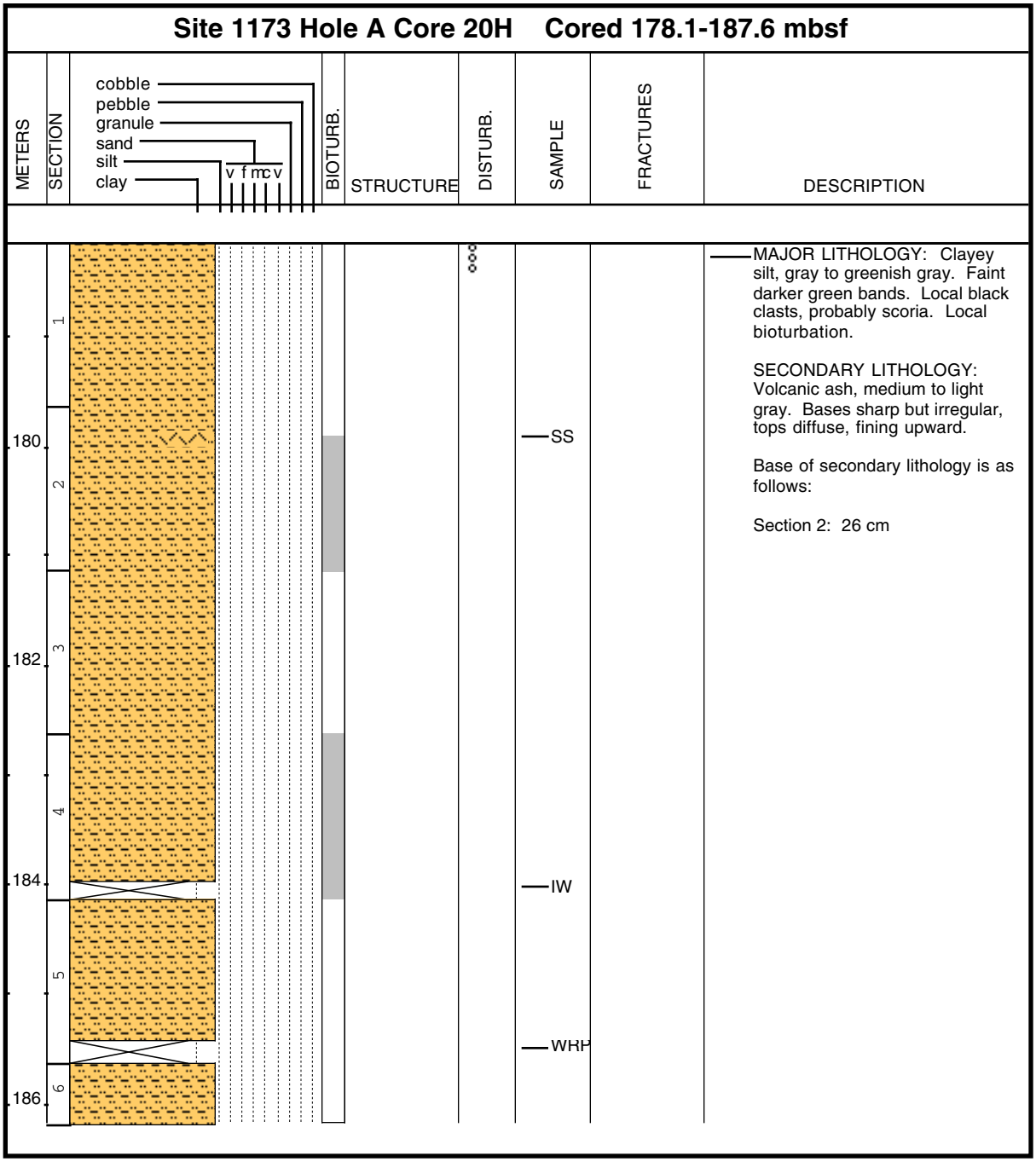
Core Photo


Site 1173 Hole A Core 18H Cored 159.1-168.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
160
162
164
166
168
1
2
3
4
5
6
P
SS
IW
WRP
MAJOR LITHOLOGY: Clayey silt, gray to greenish gray, subtle bands of darker green. Scattered patches of gray ash possibly following burrows.
SECONDARY LITHOLOGY: Volcanic ash, medium to light gray or green. Bases are sharp but irregular, tops are diffuse. Particles are fine sand-sized at bases and grade to silt.
Bases of secondary lithology are as follows:
Section 2: 46 cm
Section 5: 57 cm

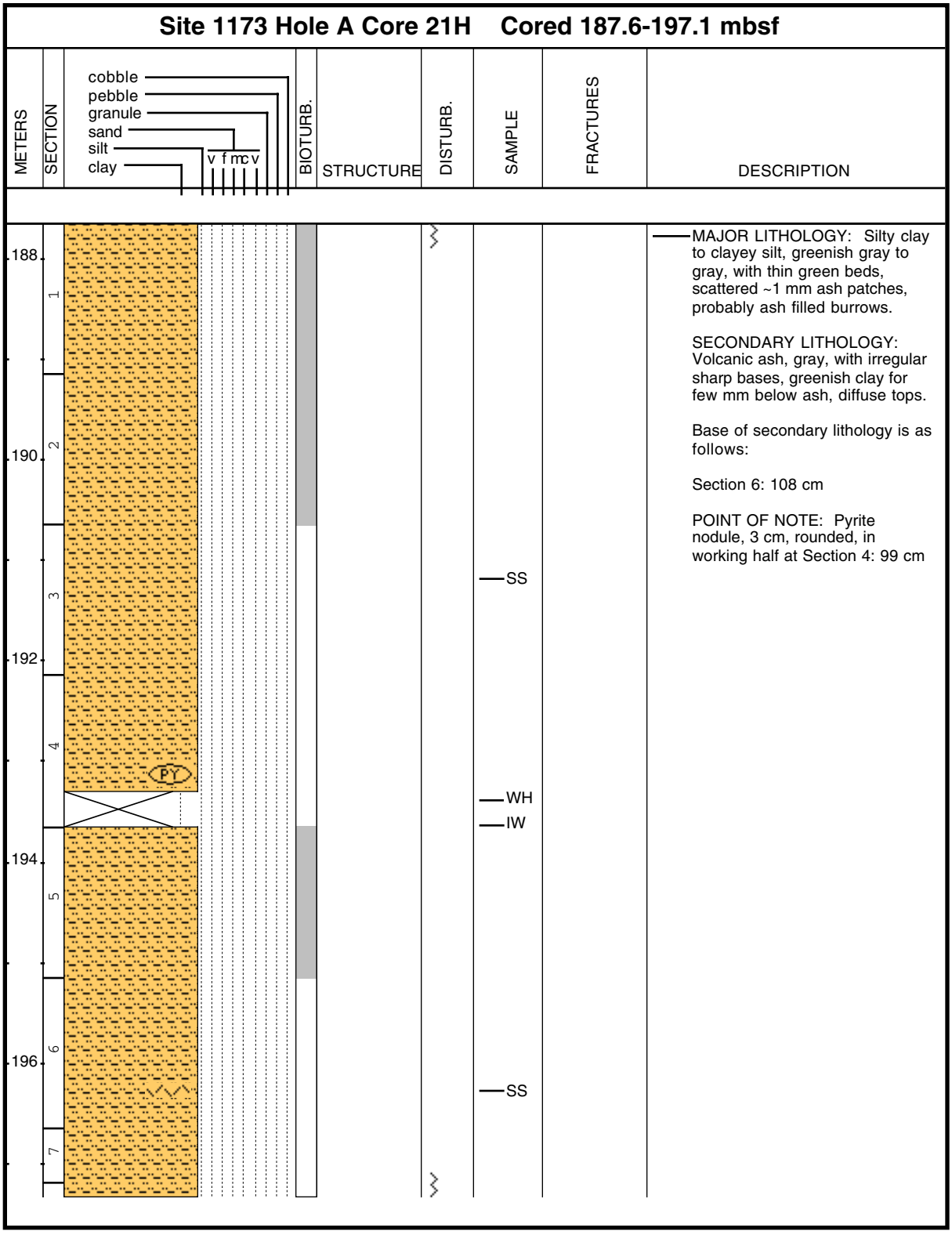
Core Photo


Site 1173 Hole A Core 19H Cored 168.6-178.1 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
170
172
174
176
178
1
2
3
4
5
6
7
P
F
F
SS
SS
SS
SS
SS
WRB
IW
WRP
MAJOR LITHOLOGY: Clayey silt, gray to greenish gray, faint darker green bands.
SECONDARY LITHOLOGY: Volcanic ash, light gray to greenish gray. Bases irregular but distinct, tops gradational into clayey silt.
Bases of secondary lithology are as follows:
Section 1: 22, 97 cm
Section 3: 14, 39, 102 cm

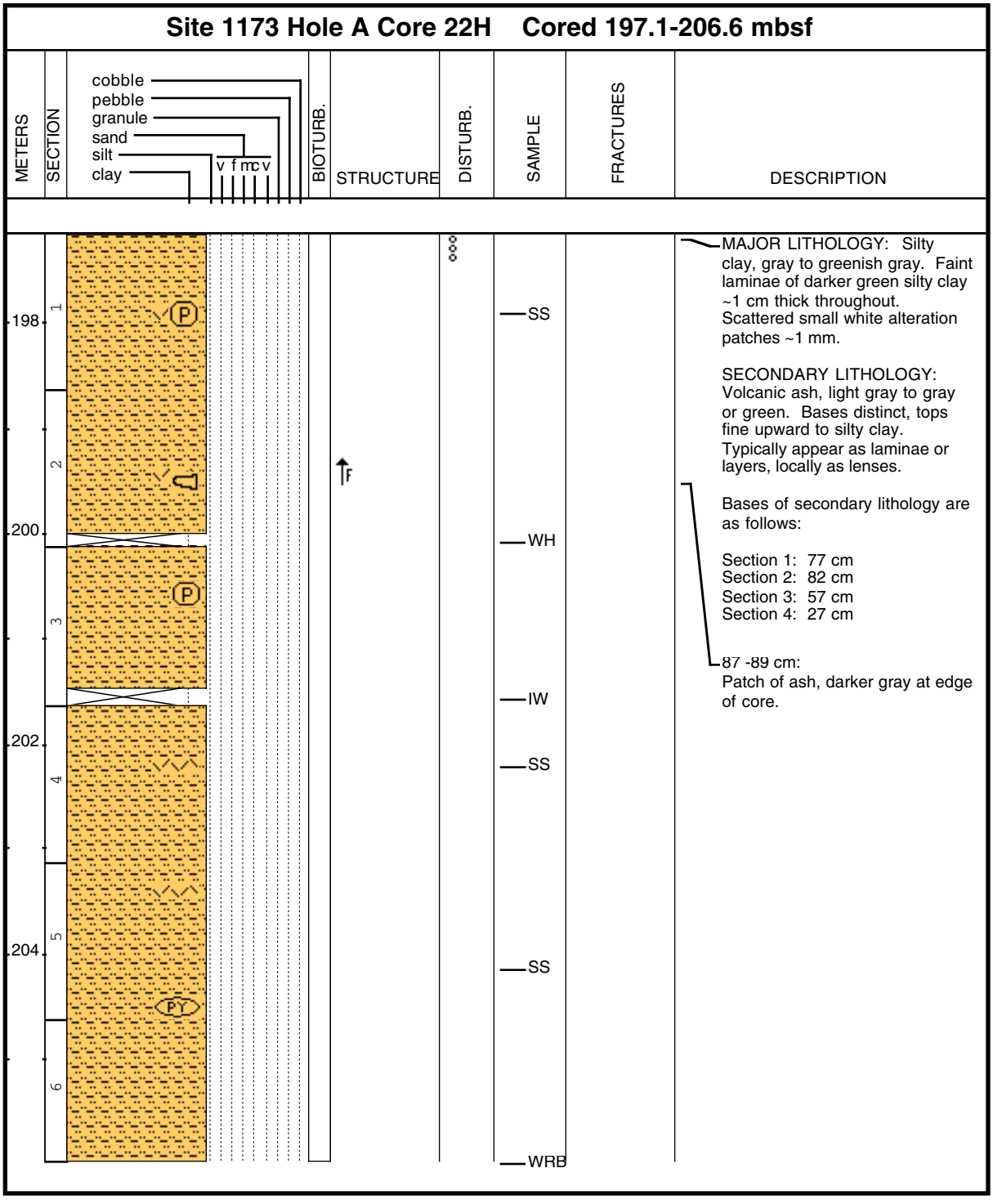
Core Photo


Site 1173 Hole A Core 20H Cored 178.1-187.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
180
182
184
186
1
2
3
4
5
6
SS
IW
WRP
MAJOR LITHOLOGY: Clayey silt, gray to greenish gray. Faint darker green bands. Local black clasts, probably scoria. Local bioturbation.
SECONDARY LITHOLOGY: Volcanic ash, medium to light gray. Bases sharp but irregular, tops diffuse, fining upward.
Base of secondary lithology is as follows:
Section 2: 26 cm

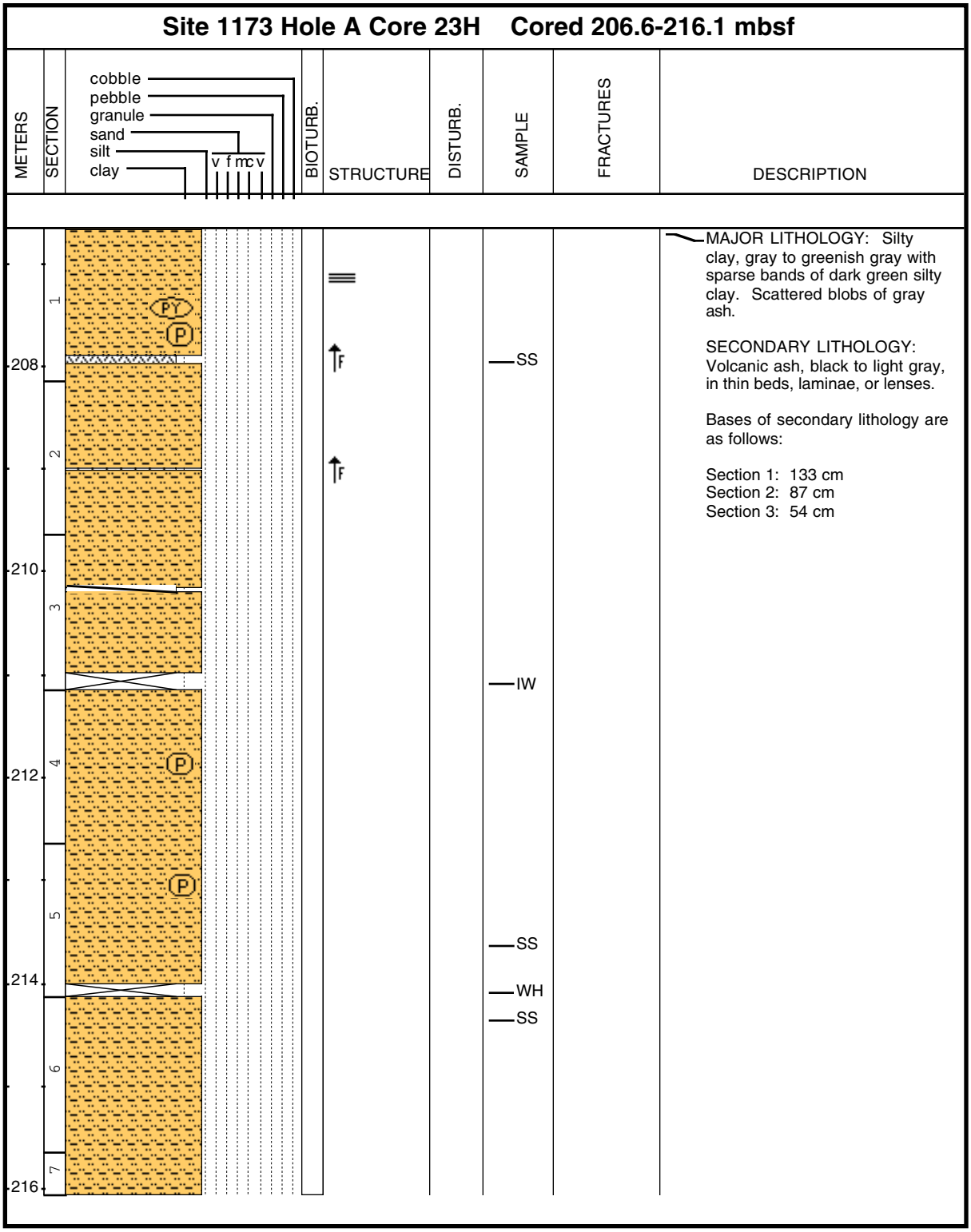
Core Photo


Site 1173 Hole A Core 21H Cored 187.6-197.1 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
188
190
192
194
196
1
2
3
4
5
6
7
PY
SS
WH
IW
SS
MAJOR LITHOLOGY: Silty clay to clayey silt, greenish gray to gray, with thin green beds, scattered ~1 mm ash patches, probably ash filled burrows.
SECONDARY LITHOLOGY: Volcanic ash, gray, with irregular sharp bases, greenish clay for few mm below ash, diffuse tops.
Base of secondary lithology is as follows:
Section 6: 108 cm
POINT OF NOTE: Pyrite nodule, 3 cm, rounded, in working half at Section 4: 99 cm

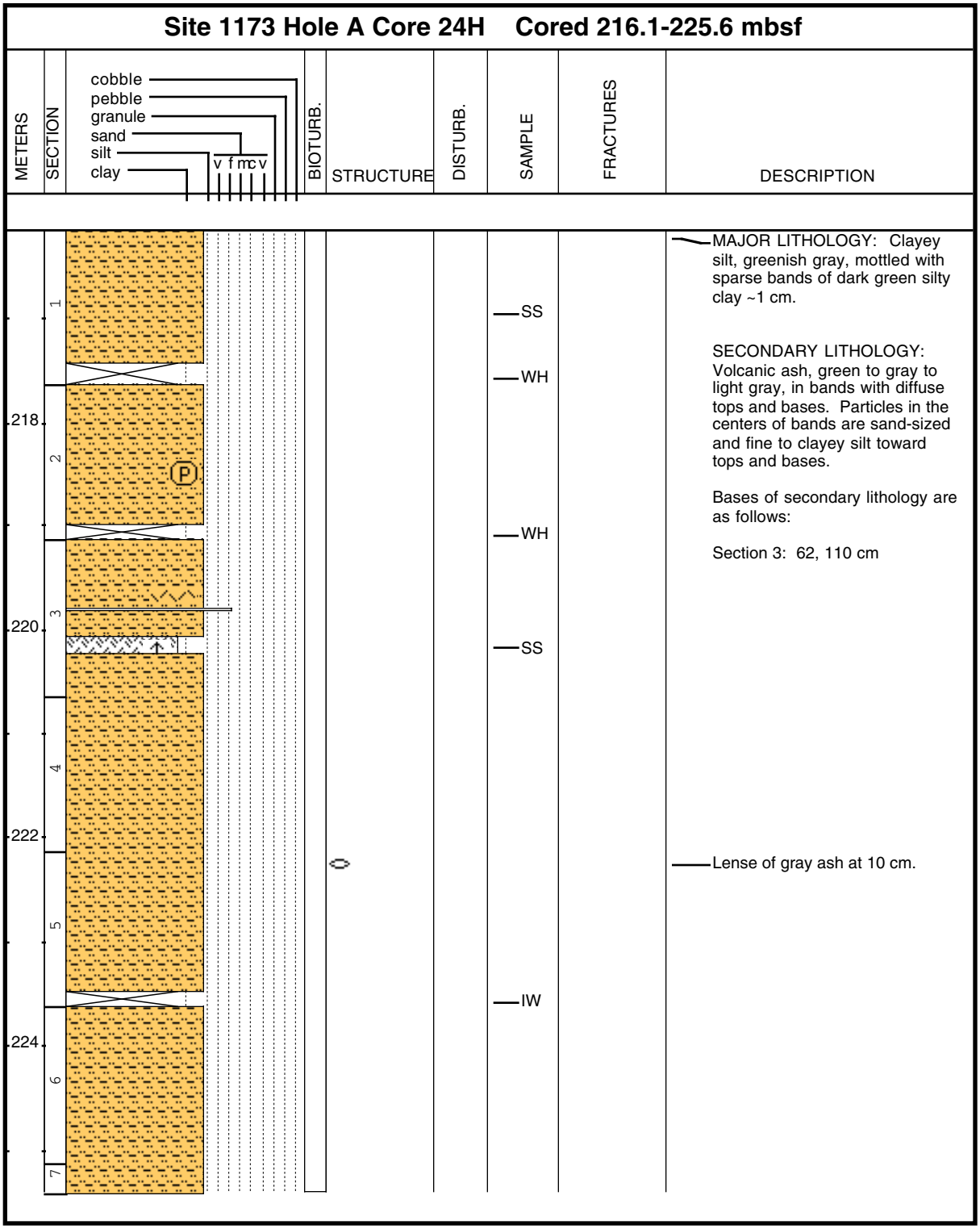
Core Photo


Site 1173 Hole A Core 22H Cored 197.1-206.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
198
200
202
204
1
2
3
4
5
6
P
P
PY
F
SS
WH
IW
SS
SS
WRB
MAJOR LITHOLOGY: Silty clay, gray to greenish gray. Faint laminae of darker green silty clay ~1 cm thick throughout. Scattered small white alteration patches ~1 mm.
SECONDARY LITHOLOGY: Volcanic ash, light gray to gray or green. Bases distinct, tops fine upward to silty clay. Typically appear as laminae or layers, locally as lenses.
Bases of secondary lithology are as follows:
Section 1: 77 cm
Section 2: 82 cm
Section 3: 57 cm
Section 4: 27 cm
87 -89 cm:
Patch of ash, darker gray at edge of core.

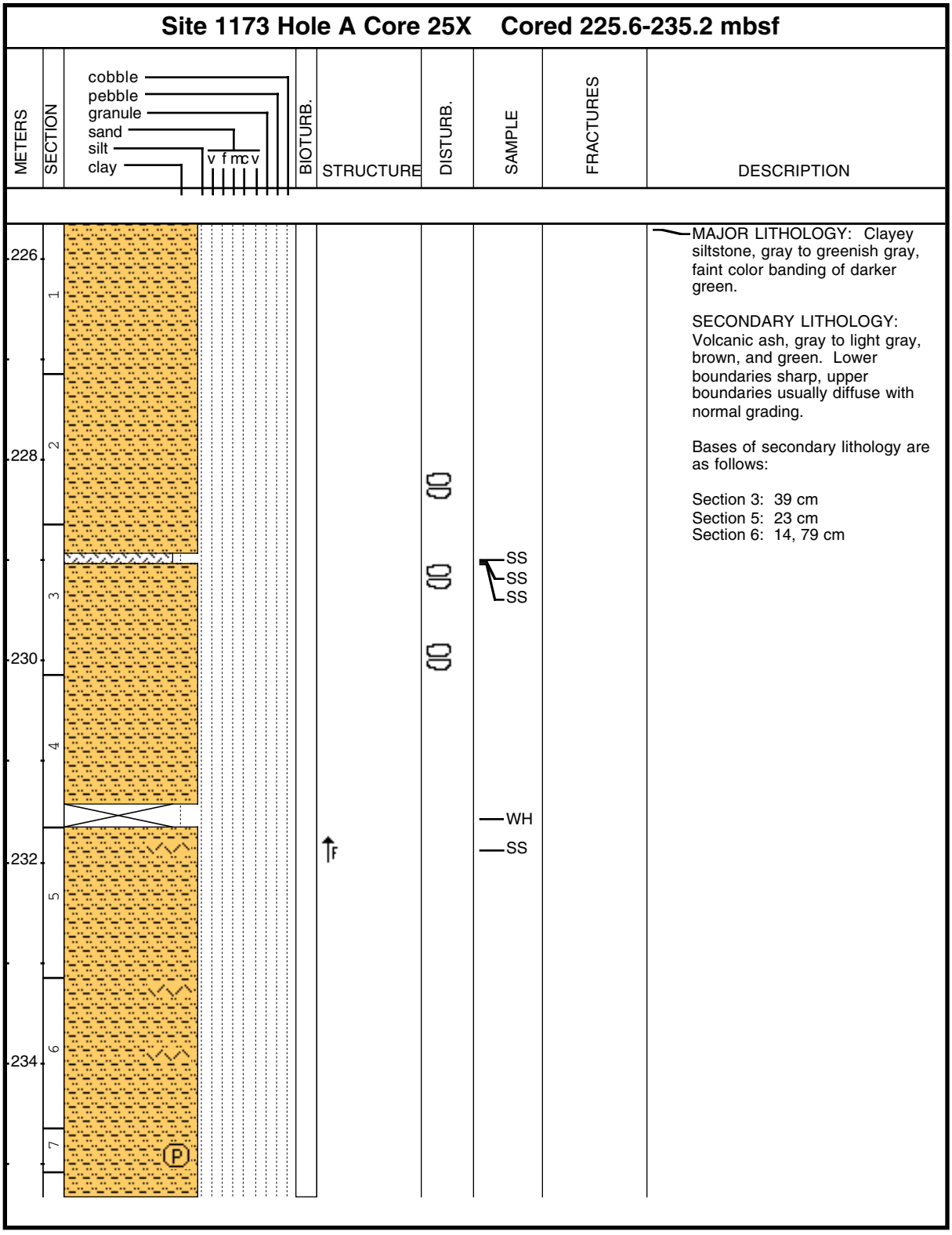
Core Photo


Site 1173 Hole A Core 23H Cored 206.6-216.1 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
208
210
212
214
216
1
2
3
4
5
6
7
PY
P
F
SS
IW
SS
WH
SS
MAJOR LITHOLOGY: Silty clay, gray to greenish gray with sparse bands of dark green silty clay. Scattered blobs of gray ash.
SECONDARY LITHOLOGY: Volcanic ash, black to light gray, in thin beds, laminae, or lenses.
Bases of secondary lithology are as follows:
Section 1: 133 cm
Section 2: 87 cm
Section 3: 54 cm

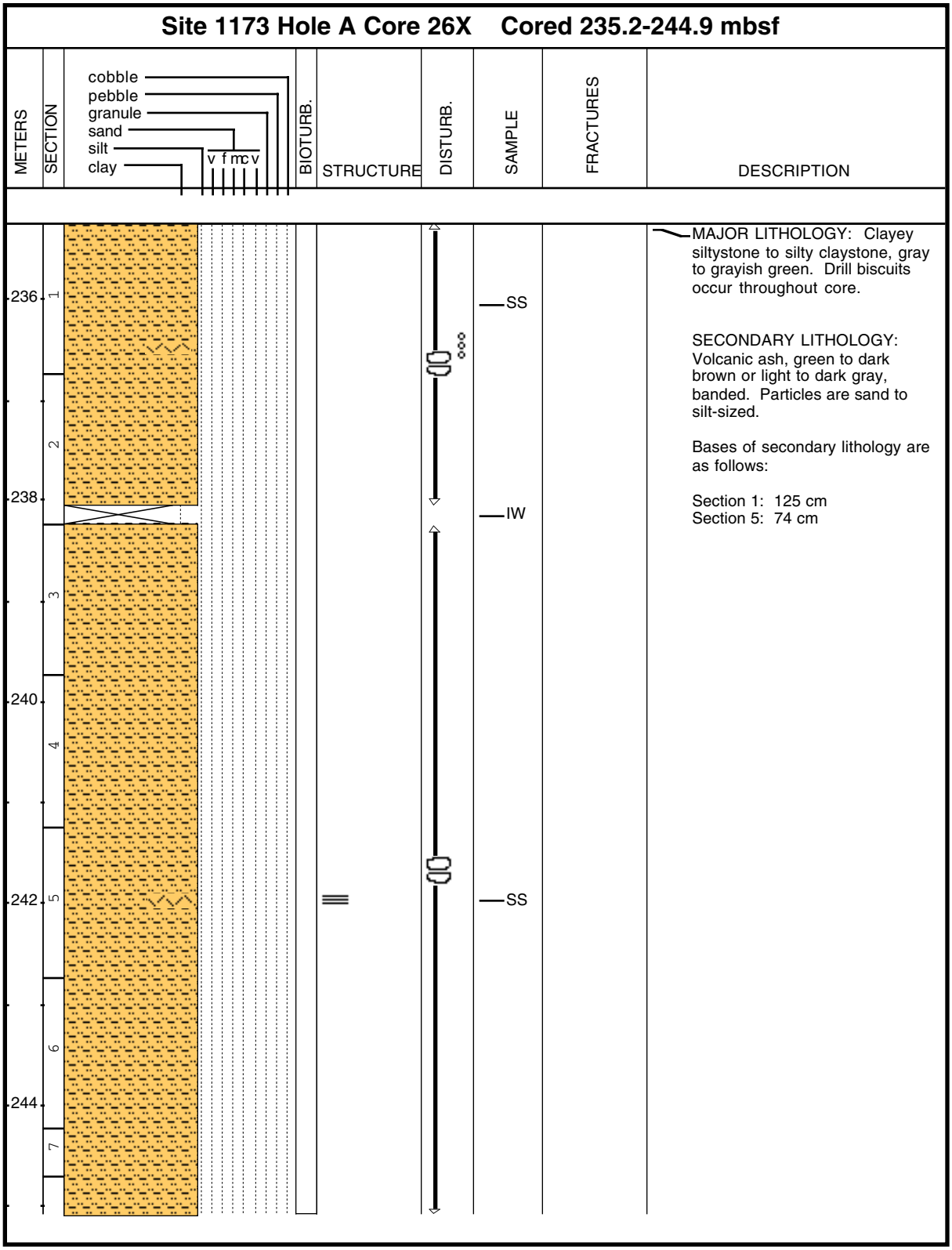
Core Photo


Site 1173 Hole A Core 24H Cored 216.1-225.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
218
220
222
224
1
2
3
4
5
6
7
P
SS
WH
WH
SS
IW
MAJOR LITHOLOGY: Clayey silt, greenish gray, mottled with sparse bands of dark green silty clay ~1 cm.
SECONDARY LITHOLOGY: Volcanic ash, green to gray to light gray, in bands with diffuse tops and bases. Particles in the centers of bands are sand-sized and fine to clayey silt toward tops and bases.
Bases of secondary lithology are as follows:
Section 3: 62, 110 cm
Lense of gray ash at 10 cm.

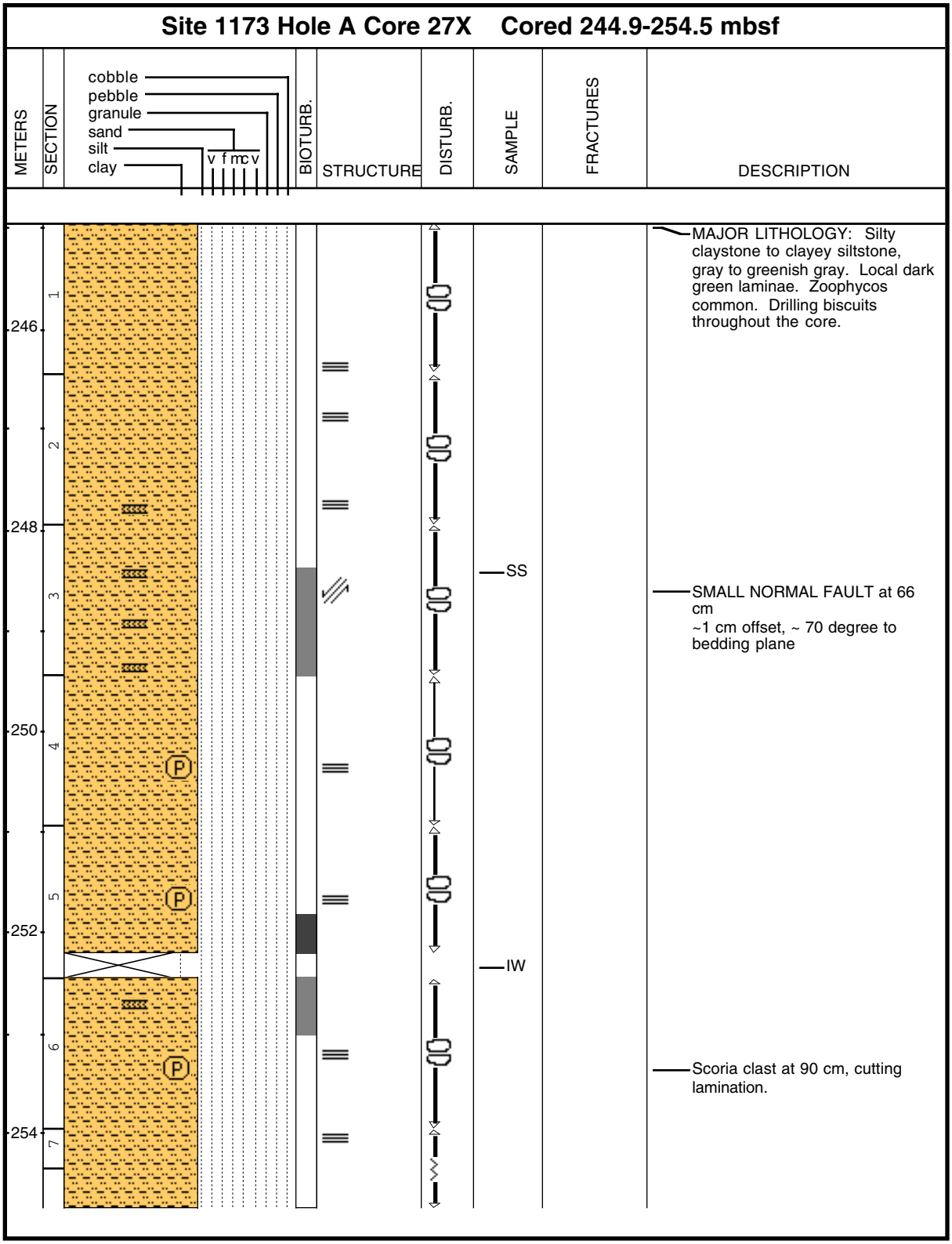
Core Photo


Site 1173 Hole A Core 25X Cored 225.6-235.2 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
226
228
230
232
234
1
2
3
4
5
6
7
SS
SS
SS
WH
SS
F
P
MAJOR LITHOLOGY: Clayey siltstone, gray to greenish gray, faint color banding of darker green.
SECONDARY LITHOLOGY: Volcanic ash, gray to light gray, brown, and green. Lower boundaries sharp, upper boundaries usually diffuse with normal grading.
Bases of secondary lithology are as follows:
Section 3: 39 cm
Section 5: 23 cm
Section 6: 14, 79 cm

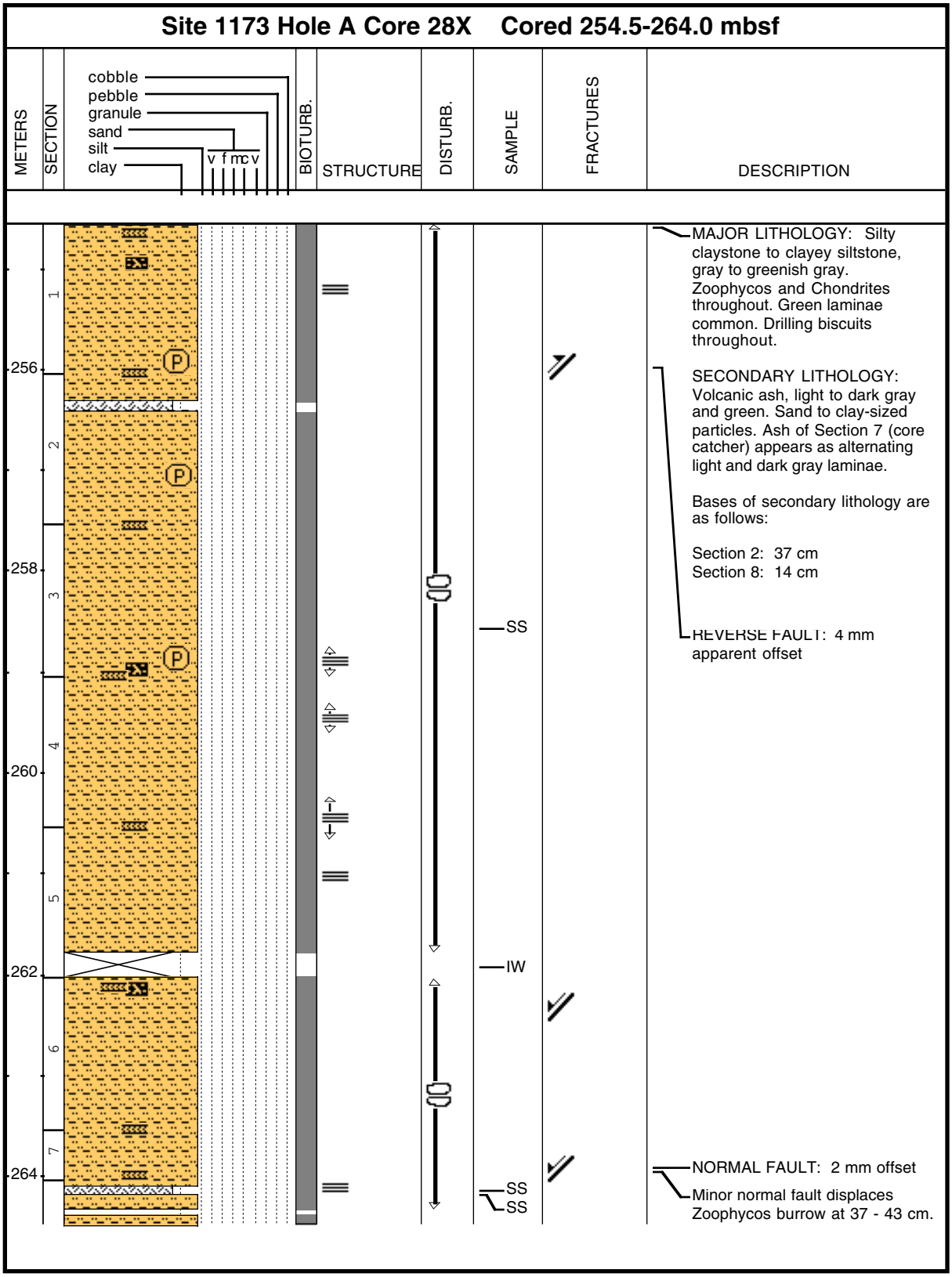
Core Photo


Site 1173 Hole A Core 26X Cored 235.2-244.9 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
236
238
240
242
244
1
2
3
4
5
6
7
SS
IW
SS
MAJOR LITHOLOGY: Clayey siltystone to silty claystone, gray to grayish green. Drill biscuits occur throughout core.
SECONDARY LITHOLOGY: Volcanic ash, green to dark brown or light to dark gray, banded. Particles are sand to silt-sized.
Bases of secondary lithology are as follows:
Section 1: 125 cm
Section 5: 74 cm

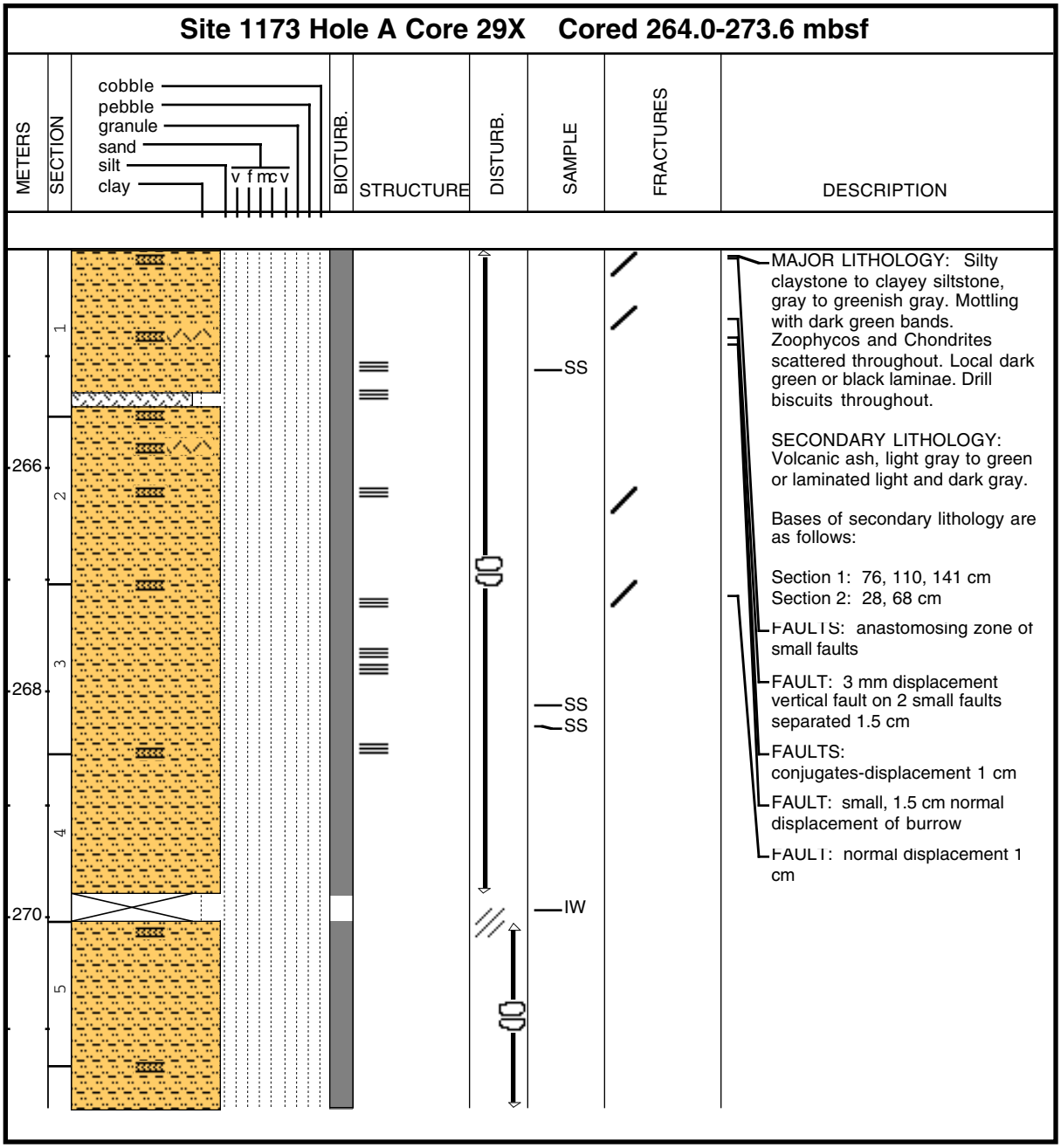
Core Photo


Site 1173 Hole A Core 27X Cored 244.9-254.5 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
246
248
250
252
254
1
2
3
4
5
6
7
P
SS
IW
MAJOR LITHOLOGY: Silty claystone to clayey siltstone, gray to greenish gray. Local dark green laminae. Zoophycos common. Drilling biscuits throughout the core.
SMALL NORMAL FAULT at 66 cm
~1 cm offset, ~ 70 degree to bedding plane
Scoria clast at 90 cm, cutting lamination.

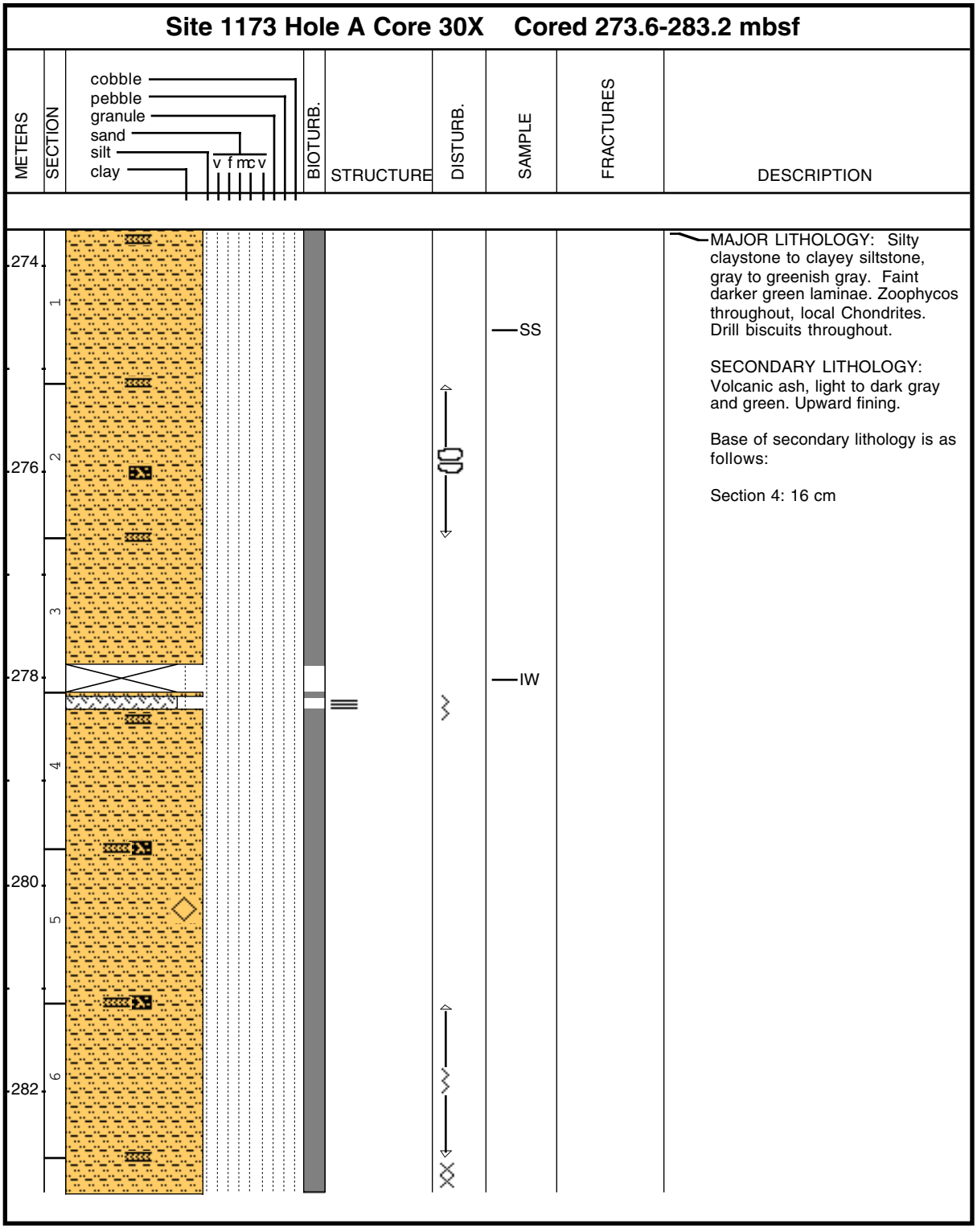
Core Photo


Site 1173 Hole A Core 28X Cored 254.5-264.0 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
256
258
260
262
264
1
2
3
4
5
6
7
P
SS
IW
SS
SS
MAJOR LITHOLOGY: Silty claystone to clayey siltstone, gray to greenish gray. Zoophycos and Chondrites throughout. Green laminae common. Drilling biscuits throughout.
SECONDARY LITHOLOGY: Volcanic ash, light to dark gray and green. Sand to clay-sized particles. Ash of Section 7 (core catcher) appears as alternating light and dark gray laminae.
Bases of secondary lithology are as follows:
Section 2: 37 cm
Section 8: 14 cm
REVERSE FAULT: 4 mm apparent offset
NORMAL FAULT: 2 mm offset
Minor normal fault displaces Zoophycos burrow at 37 - 43 cm.

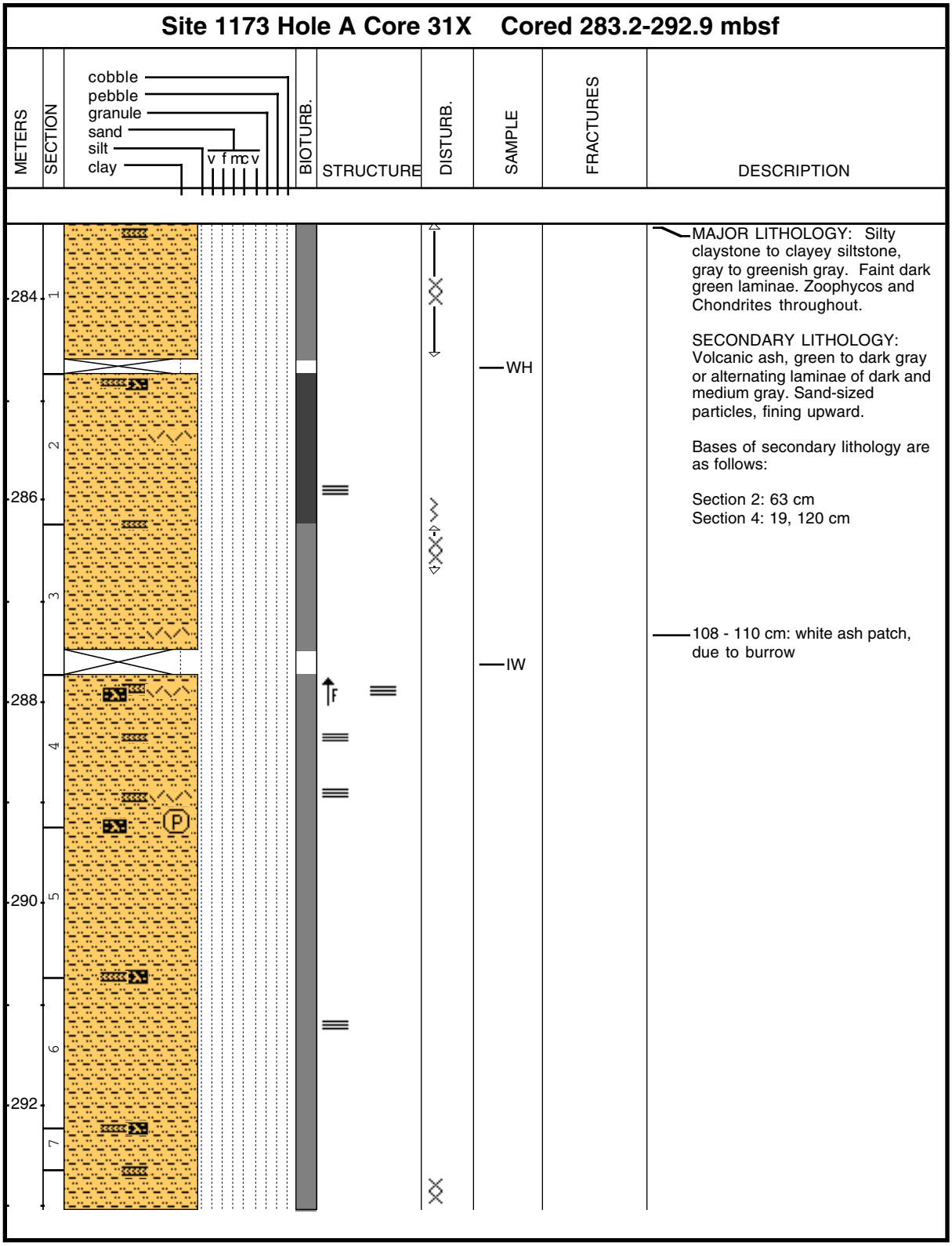
Core Photo


Site 1173 Hole A Core 29X Cored 264.0-273.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
266
268
270
1
2
3
4
5
SS
SS
SS
IW
MAJOR LITHOLOGY: Silty claystone to clayey siltstone, gray to greenish gray. Mottling with dark green bands. Zoophycos and Chondrites scattered throughout. Local dark green or black laminae. Drill biscuits throughout.
SECONDARY LITHOLOGY: Volcanic ash, light gray to green or laminated light and dark gray.
Bases of secondary lithology are as follows:
Section 1: 76, 110, 141 cm
Section 2: 28, 68 cm
FAULTS: anastomosing zone of small faults
FAULT: 3 mm displacement vertical fault on 2 small faults separated 1.5 cm
FAULTS: conjugates-displacement 1 cm
FAULT: small, 1.5 cm normal displacement of burrow
FAULT: normal displacement 1 cm

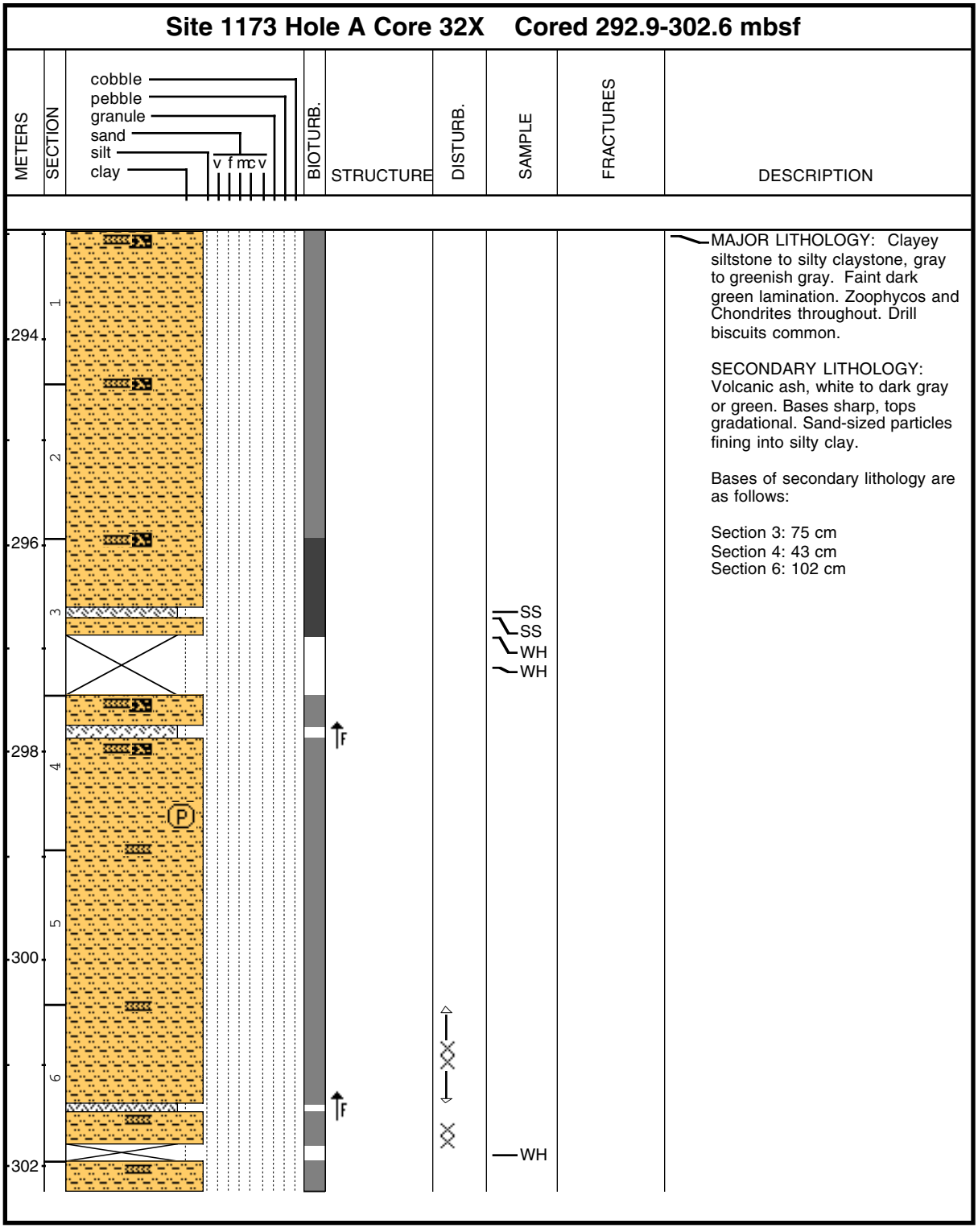
Core Photo


Site 1173 Hole A Core 30X Cored 273.6-283.2 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
274
276
278
280
282
1
2
3
4
5
6
SS
IW
MAJOR LITHOLOGY: Silty claystone to clayey siltstone, gray to greenish gray. Faint darker green laminae. Zoophycos throughout, local Chondrites. Drill biscuits throughout.
SECONDARY LITHOLOGY: Volcanic ash, light to dark gray and green. Upward fining.
Base of secondary lithology is as follows:
Section 4: 16 cm

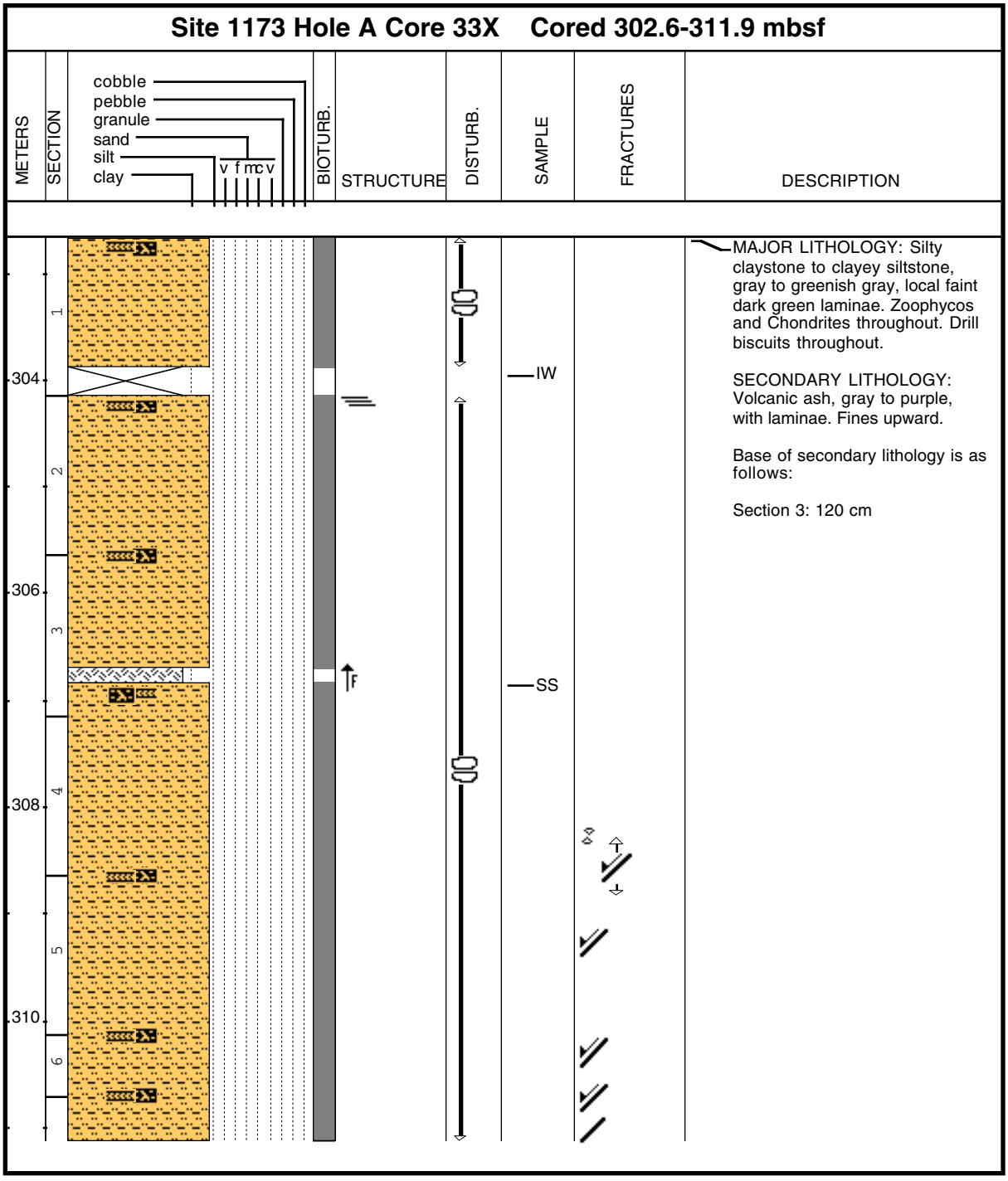
Core Photo


Site 1173 Hole A Core 31X Cored 283.2-292.9 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
284
286
288
290
292
1
2
3
4
5
6
7
WH
IW
F
P
MAJOR LITHOLOGY: Silty claystone to clayey siltstone, gray to greenish gray. Faint dark green laminae. Zoophycos and Chondrites throughout.
SECONDARY LITHOLOGY: Volcanic ash, green to dark gray or alternating laminae of dark and medium gray. Sand-sized particles, fining upward.
Bases of secondary lithology are as follows:
Section 2: 63 cm
Section 4: 19, 120 cm
108 - 110 cm: white ash patch, due to burrow

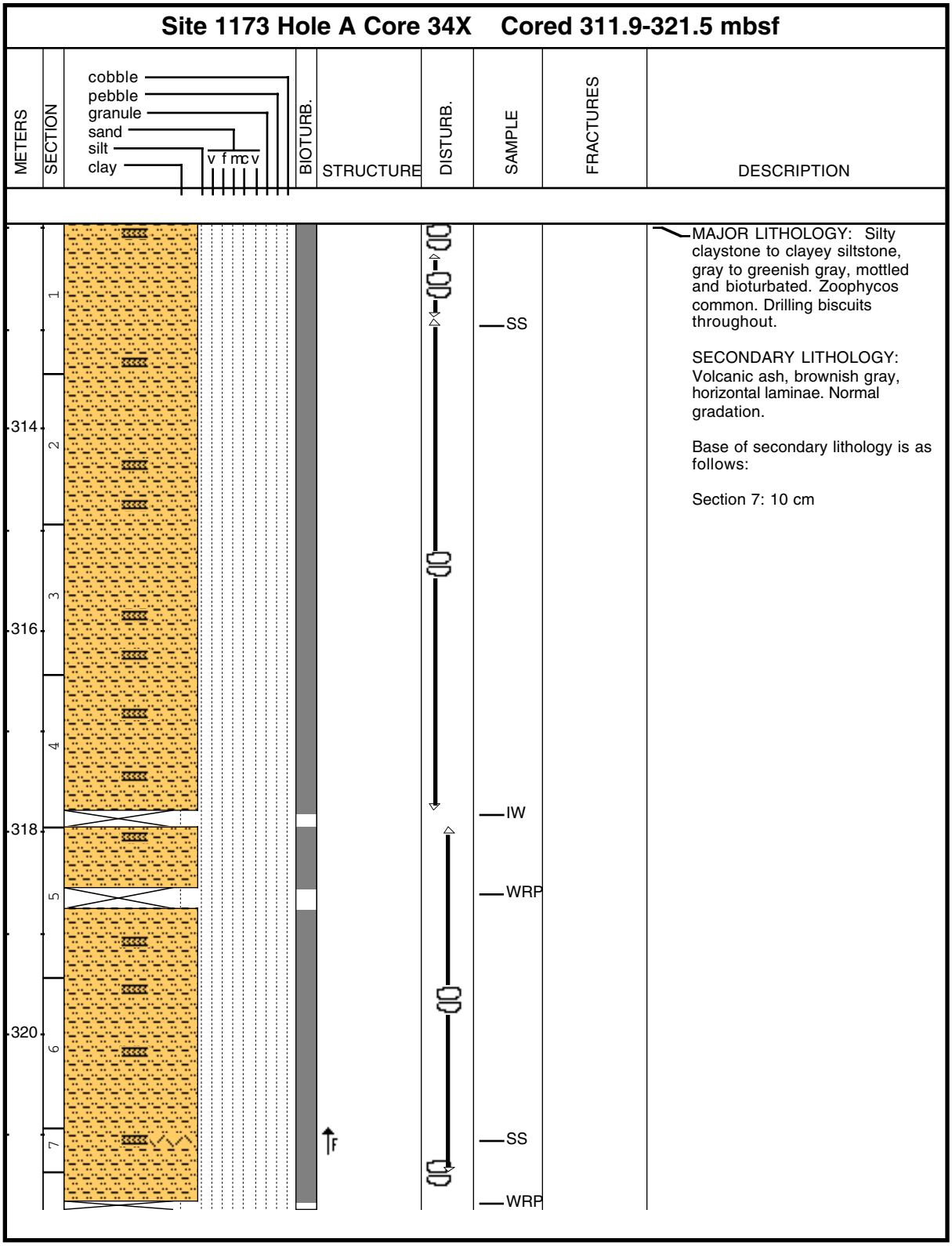
Core Photo


Site 1173 Hole A Core 32X Cored 292.9-302.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
294
296
298
300
302
1
2
3
4
5
6
P
F
F
SS
SS
WH
WH
WH
MAJOR LITHOLOGY: Clayey siltstone to silty claystone, gray to greenish gray. Faint dark green lamination. Zoophycos and Chondrites throughout. Drill biscuits common.
SECONDARY LITHOLOGY: Volcanic ash, white to dark gray or green. Bases sharp, tops gradational. Sand-sized particles fining into silty clay.
Bases of secondary lithology are as follows:
Section 3: 75 cm
Section 4: 43 cm
Section 6: 102 cm

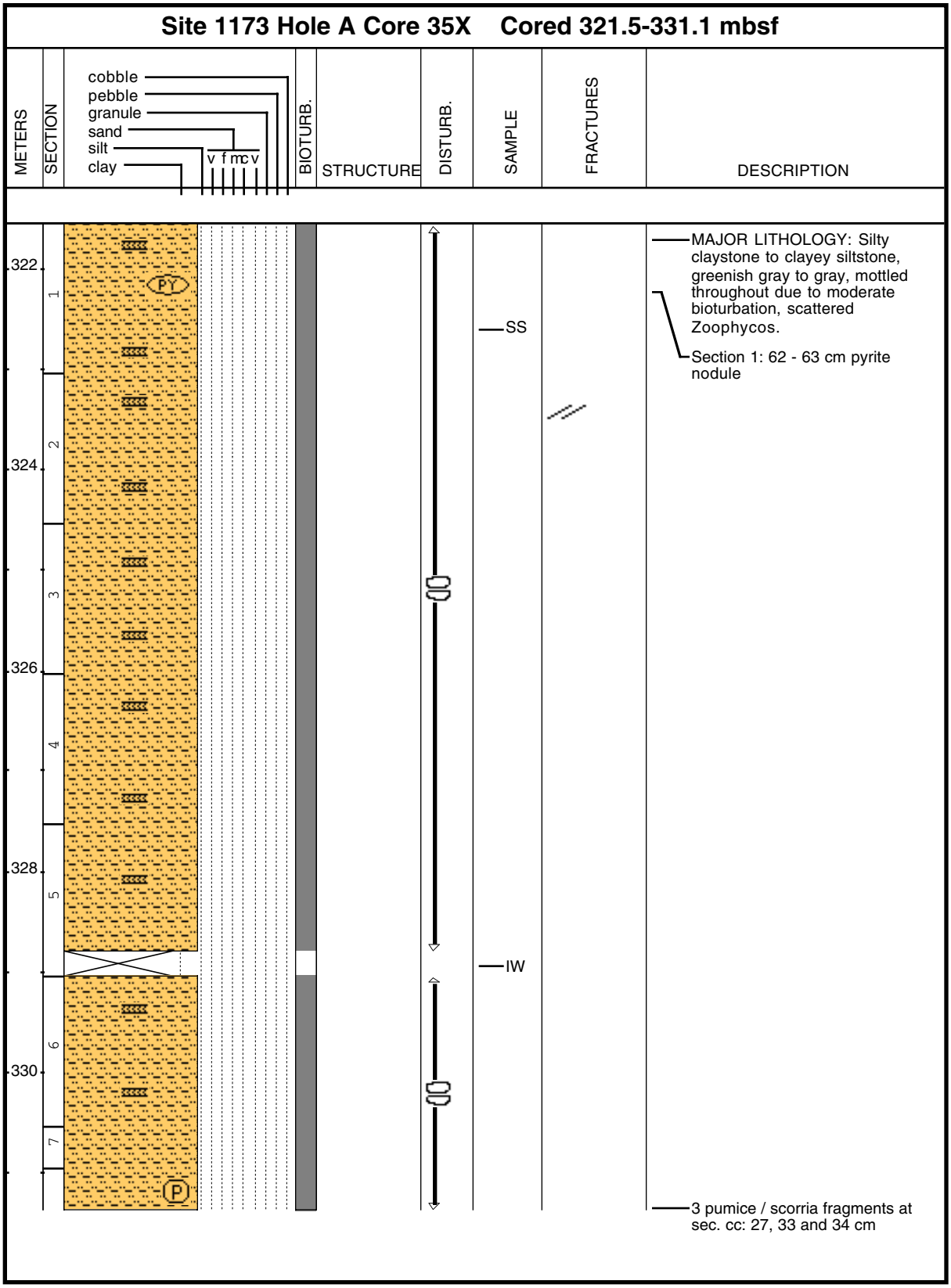
Core Photo


Site 1173 Hole A Core 33X Cored 302.6-311.9 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
304
306
308
310
1
2
3
4
5
6
F
IW
SS
MAJOR LITHOLOGY: Silty claystone to clayey siltstone, gray to greenish gray, local faint dark green laminae. Zoophycos and Chondrites throughout. Drill biscuits throughout.
SECONDARY LITHOLOGY: Volcanic ash, gray to purple, with laminae. Fines upward.
Base of secondary lithology is as follows:
Section 3: 120 cm

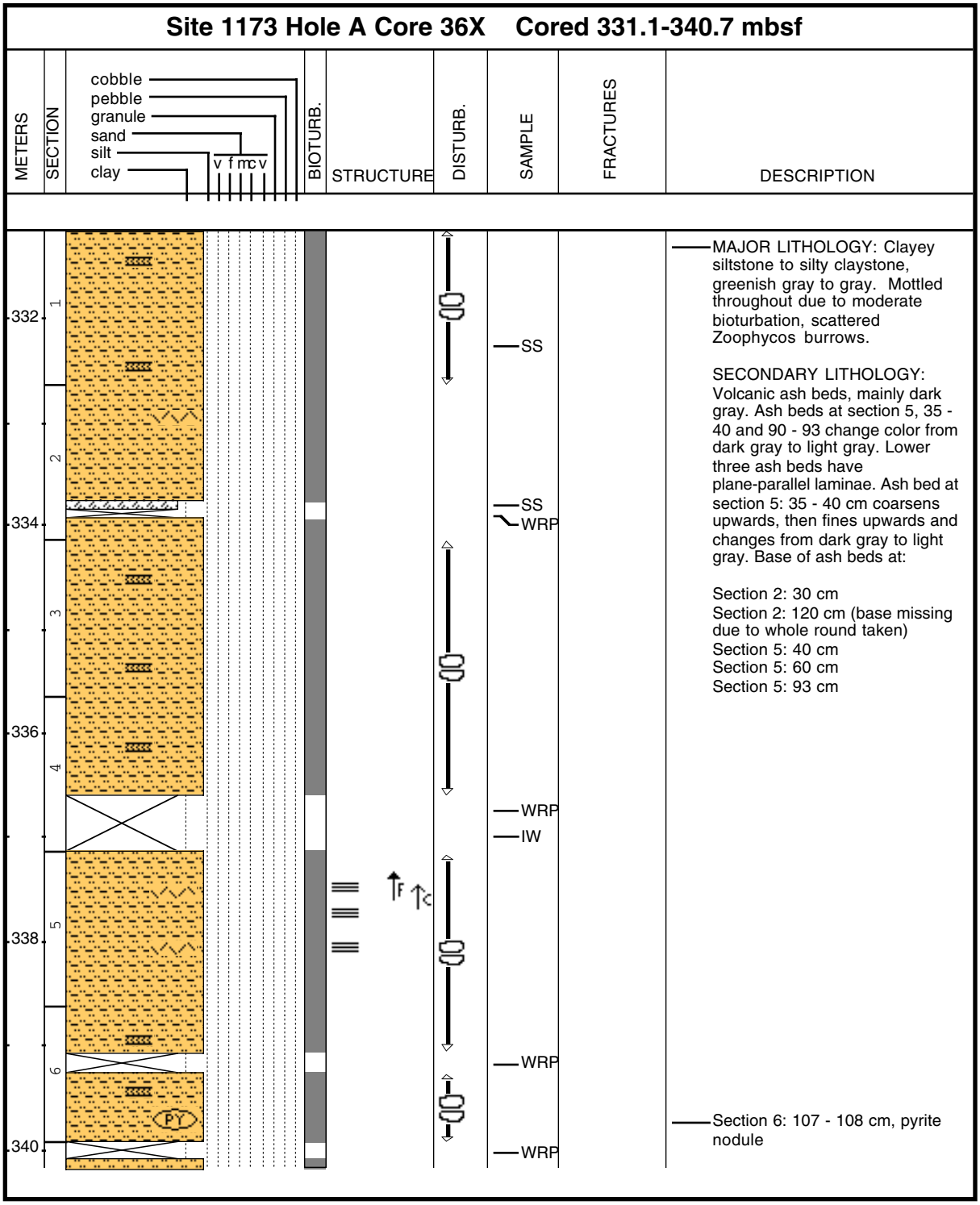
Core Photo


Site 1173 Hole A Core 34X Cored 311.9-321.5 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
314
316
318
320
1
2
3
4
5
6
7
SS
IW
WRP
SS
WRP
MAJOR LITHOLOGY: Silty claystone to clayey siltstone, gray to greenish gray, mottled and bioturbated. Zoophycos common. Drilling biscuits throughout.
SECONDARY LITHOLOGY: Volcanic ash, brownish gray, horizontal laminae. Normal gradation.
Base of secondary lithology is as follows:
Section 7: 10 cm

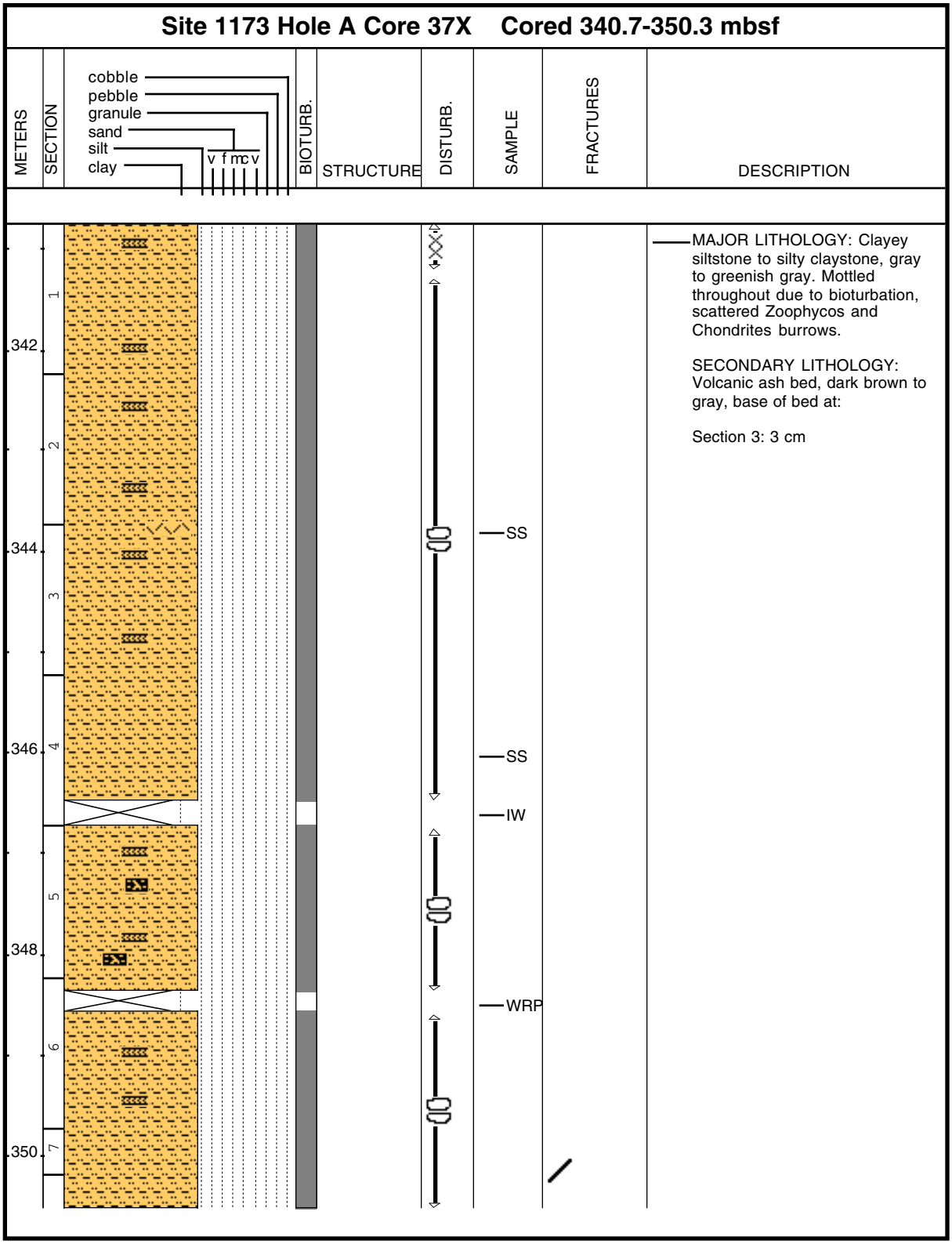
Core Photo


Site 1173 Hole A Core 35X Cored 321.5-331.1 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
322
324
326
328
330
1
2
3
4
5
6
7
PY
P
SS
IW
MAJOR LITHOLOGY: Silty claystone to clayey siltstone, greenish gray to gray, mottled throughout due to moderate bioturbation, scattered Zoophycos.
Section 1: 62 - 63 cm pyrite nodule
3 pumice / scorria fragments at sec. cc: 27, 33 and 34 cm

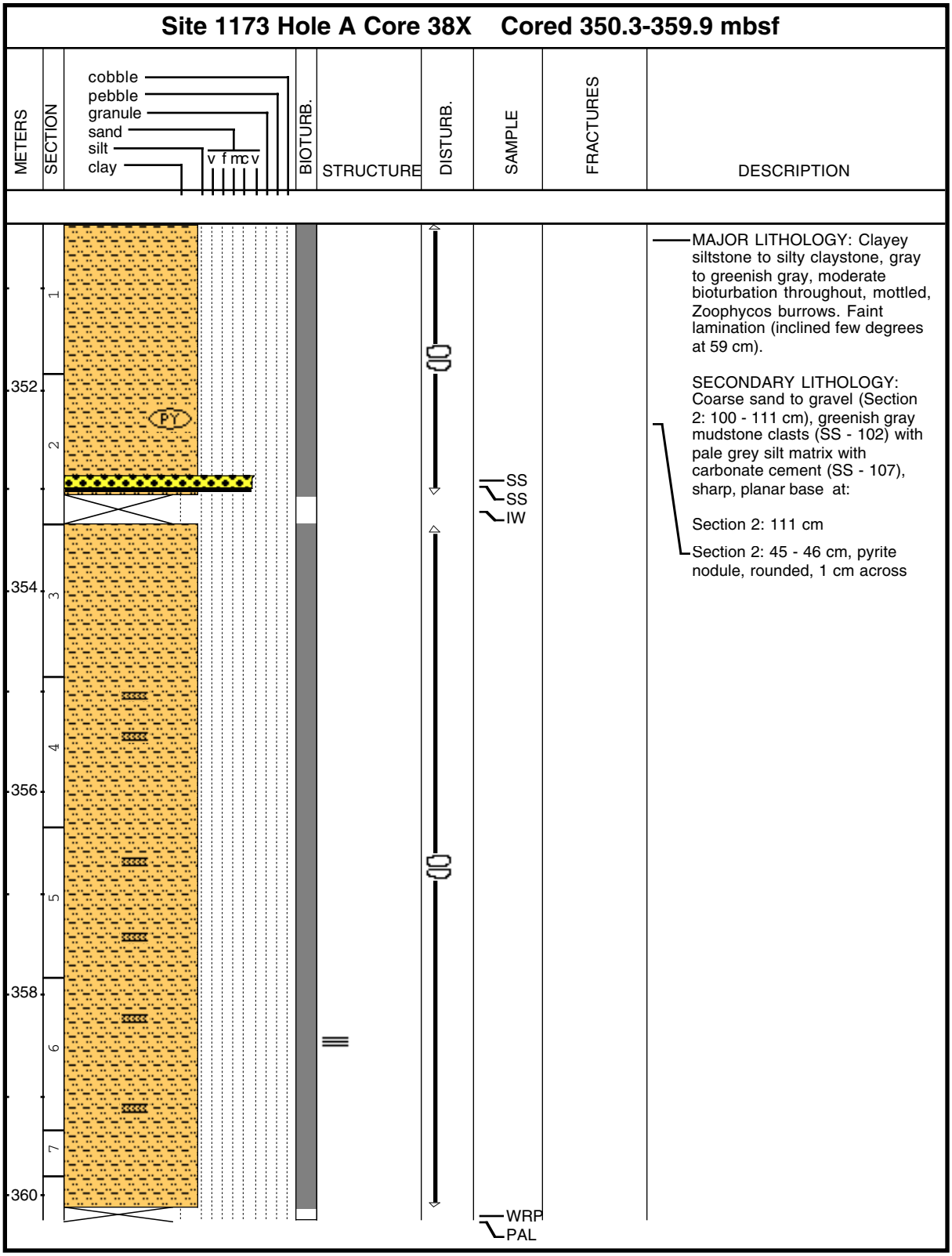
Core Photo


Site 1173 Hole A Core 36X Cored 331.1-340.7 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
332
334
336
338
340
1
2
3
4
5
6
PY
SS
SS
WRP
WRP
IW
WRP
WRP
MAJOR LITHOLOGY: Clayey siltstone to silty claystone, greenish gray to gray. Mottled throughout due to moderate bioturbation, scattered Zoophycos burrows.
SECONDARY LITHOLOGY: Volcanic ash beds, mainly dark gray. Ash beds at section 5, 35 - 40 and 90 - 93 change color from dark gray to light gray. Lower three ash beds have plane-parallel laminae. Ash bed at section 5: 35 - 40 cm coarsens upwards, then fines upwards and changes from dark gray to light gray. Base of ash beds at:
Section 2: 30 cm
Section 2: 120 cm (base missing due to whole round taken)
Section 5: 40 cm
Section 5: 60 cm
Section 5: 93 cm
Section 6: 107 - 108 cm, pyrite nodule

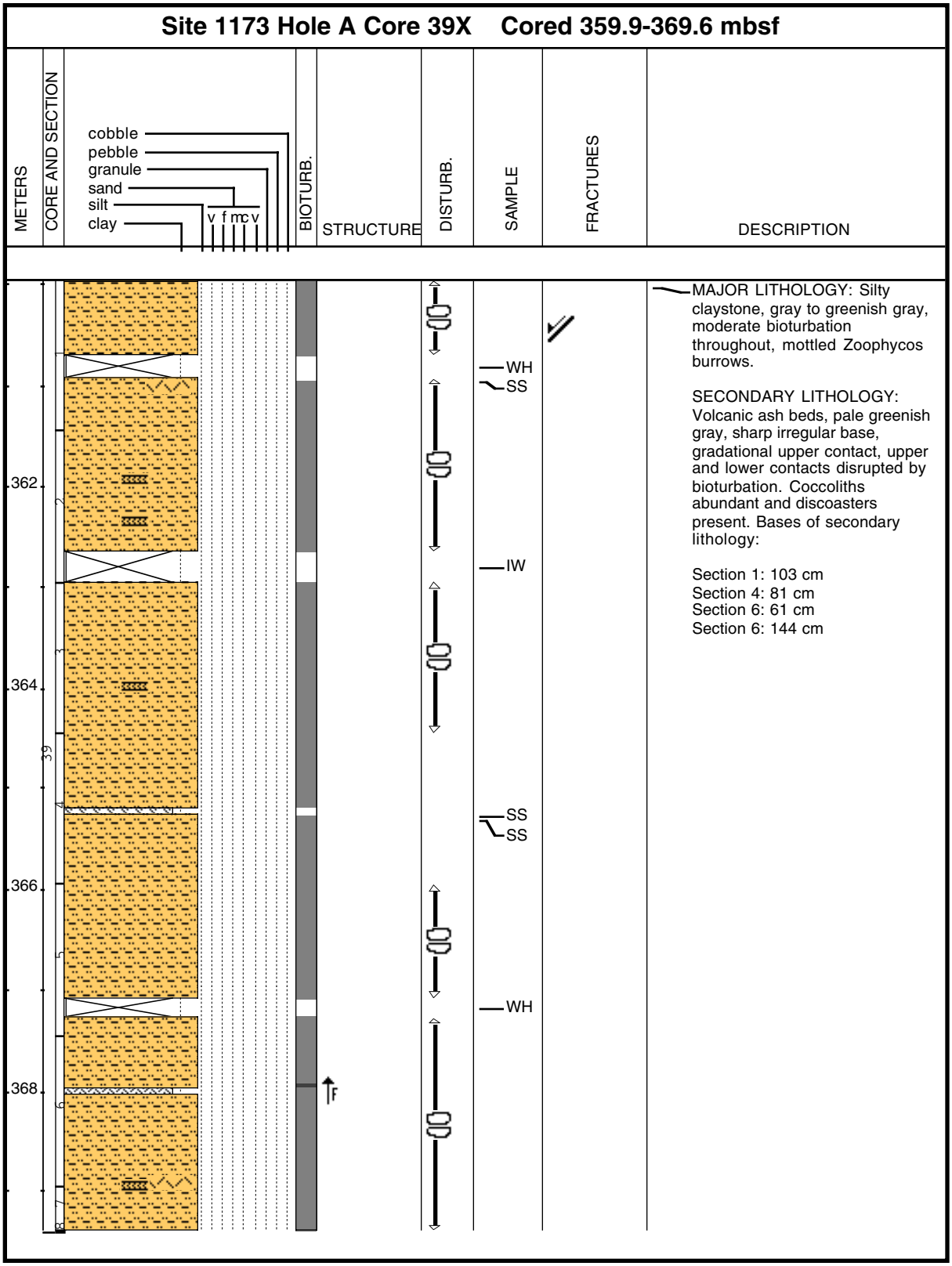
Core Photo


Site 1173 Hole A Core 37X Cored 340.7-350.3 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
342
344
346
348
350
1
2
3
4
5
6
7
SS
SS
IW
WRP
MAJOR LITHOLOGY: Clayey siltstone to silty claystone, gray to greenish gray. Mottled throughout due to bioturbation, scattered Zoophycos and Chondrites burrows.
SECONDARY LITHOLOGY: Volcanic ash bed, dark brown to gray, base of bed at:
Section 3: 3 cm

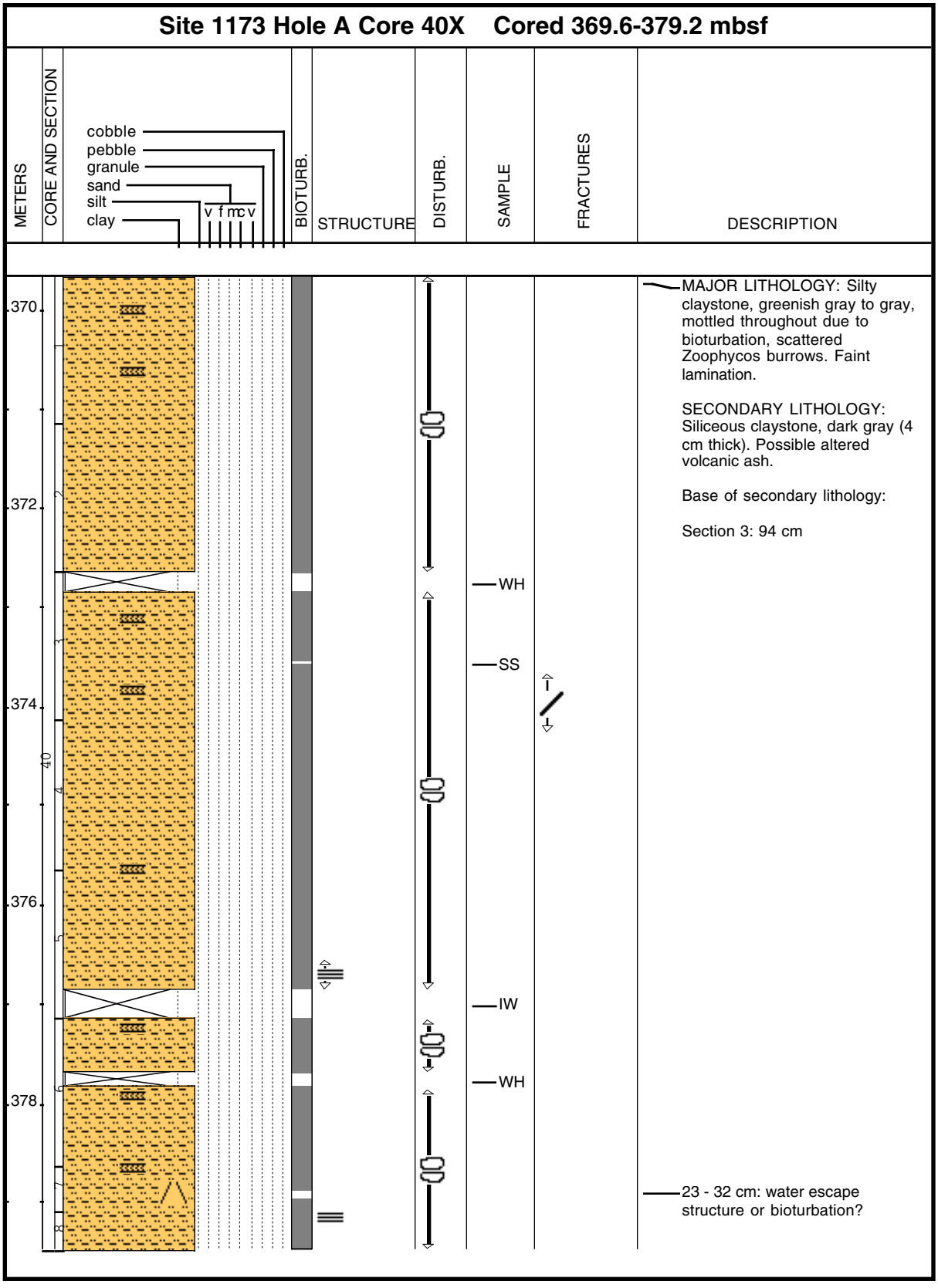
Core Photo


Site 1173 Hole A Core 38X Cored 350.3-359.9 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
352
354
356
358
360
1
2
3
4
5
6
7
PY
SS
SS
IW
WRP
PAL
MAJOR LITHOLOGY: Clayey siltstone to silty claystone, gray to greenish gray, moderate bioturbation throughout, mottled, Zoophycos burrows. Faint lamination (inclined few degrees at 59 cm).
SECONDARY LITHOLOGY: Coarse sand to gravel (Section 2: 100 - 111 cm), greenish gray mudstone clasts (SS - 102) with pale grey silt matrix with carbonate cement (SS - 107), sharp, planar base at:
Section 2: 111 cm
Section 2: 45 - 46 cm, pyrite nodule, rounded, 1 cm across

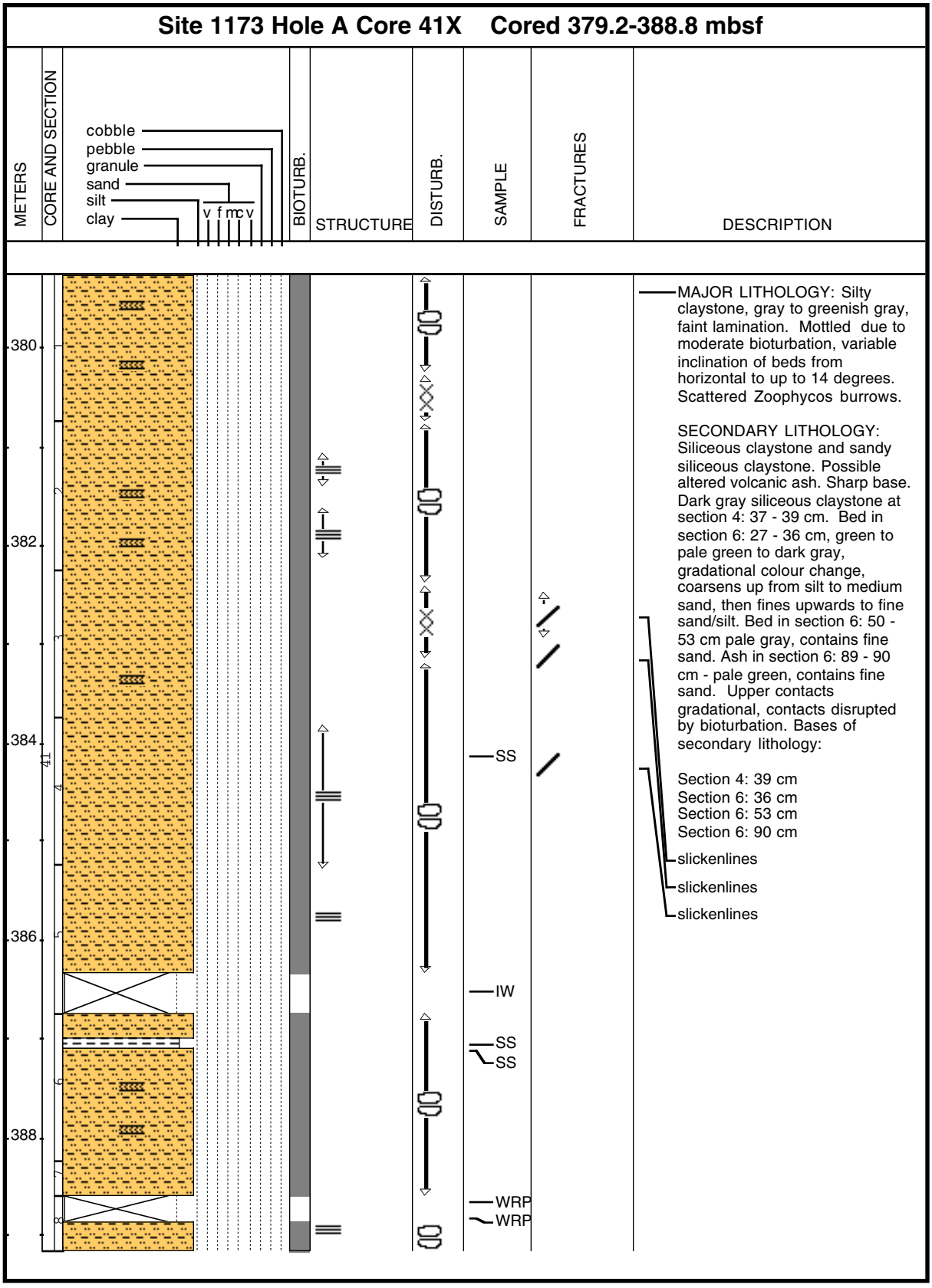
Core Photo


Site 1173 Hole A Core 39X Cored 359.9-369.6 mbsf
METERS
CORE AND SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
362
364
366
368
39
WH
SS
IW
SS
SS
WH
F
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray, moderate bioturbation throughout, mottled Zoophycos burrows.
SECONDARY LITHOLOGY: Volcanic ash beds, pale greenish gray, sharp irregular base, gradational upper contact, upper and lower contacts disrupted by bioturbation. Coccoliths abundant and discoasters present. Bases of secondary lithology:
Section 1: 103 cm
Section 4: 81 cm
Section 6: 61 cm
Section 6: 144 cm

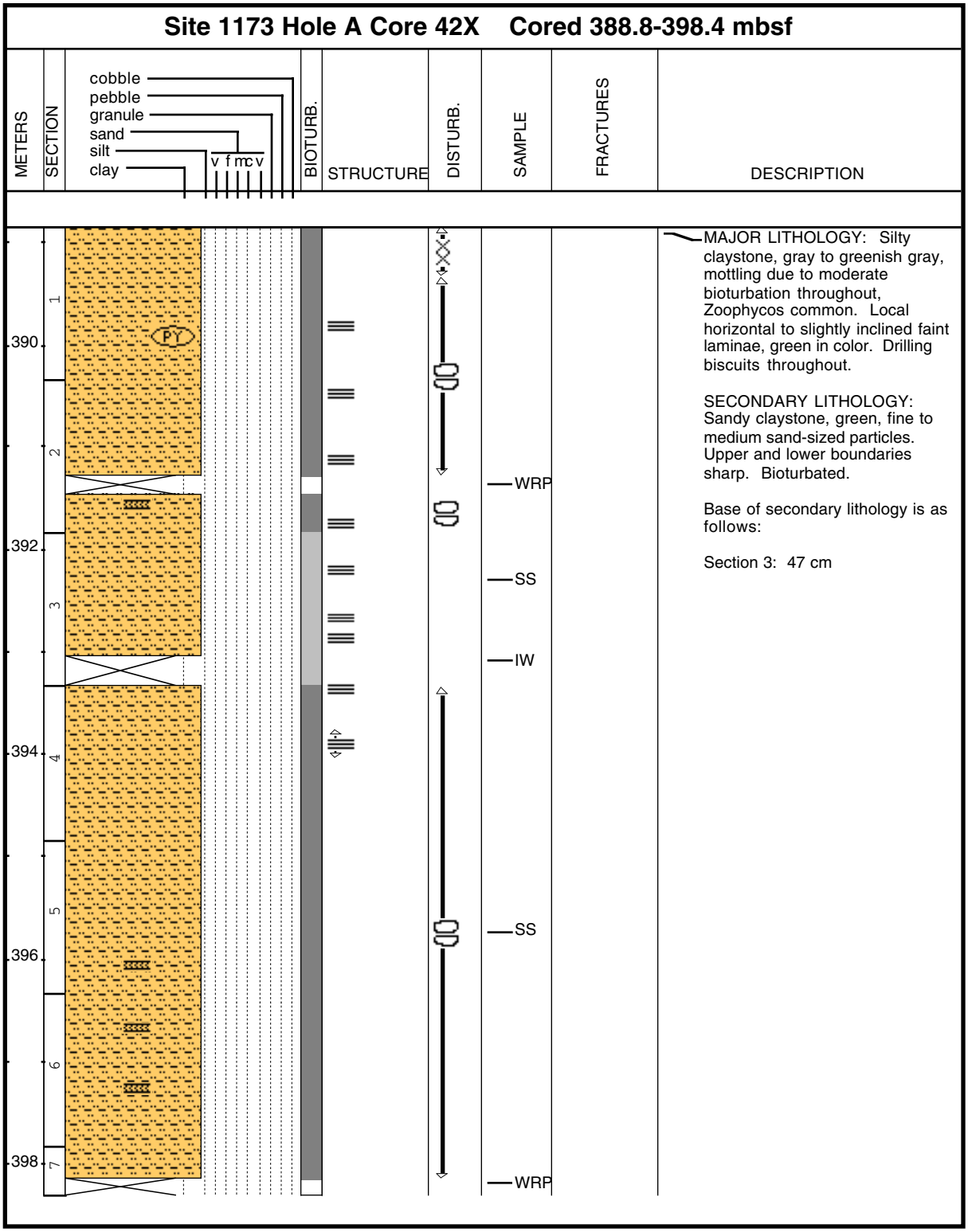
Core Photo


Site 1173 Hole A Core 40X Cored 369.6-379.2 mbsf
METERS
CORE AND SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
370
372
374
376
378
40
WH
SS
IW
WH
MAJOR LITHOLOGY: Silty claystone, greenish gray to gray, mottled throughout due to bioturbation, scattered Zoophycos burrows. Faint lamination.
SECONDARY LITHOLOGY: Siliceous claystone, dark gray (4 cm thick). Possible altered volcanic ash.
Base of secondary lithology:
Section 3: 94 cm
23 - 32 cm: water escape structure or bioturbation?

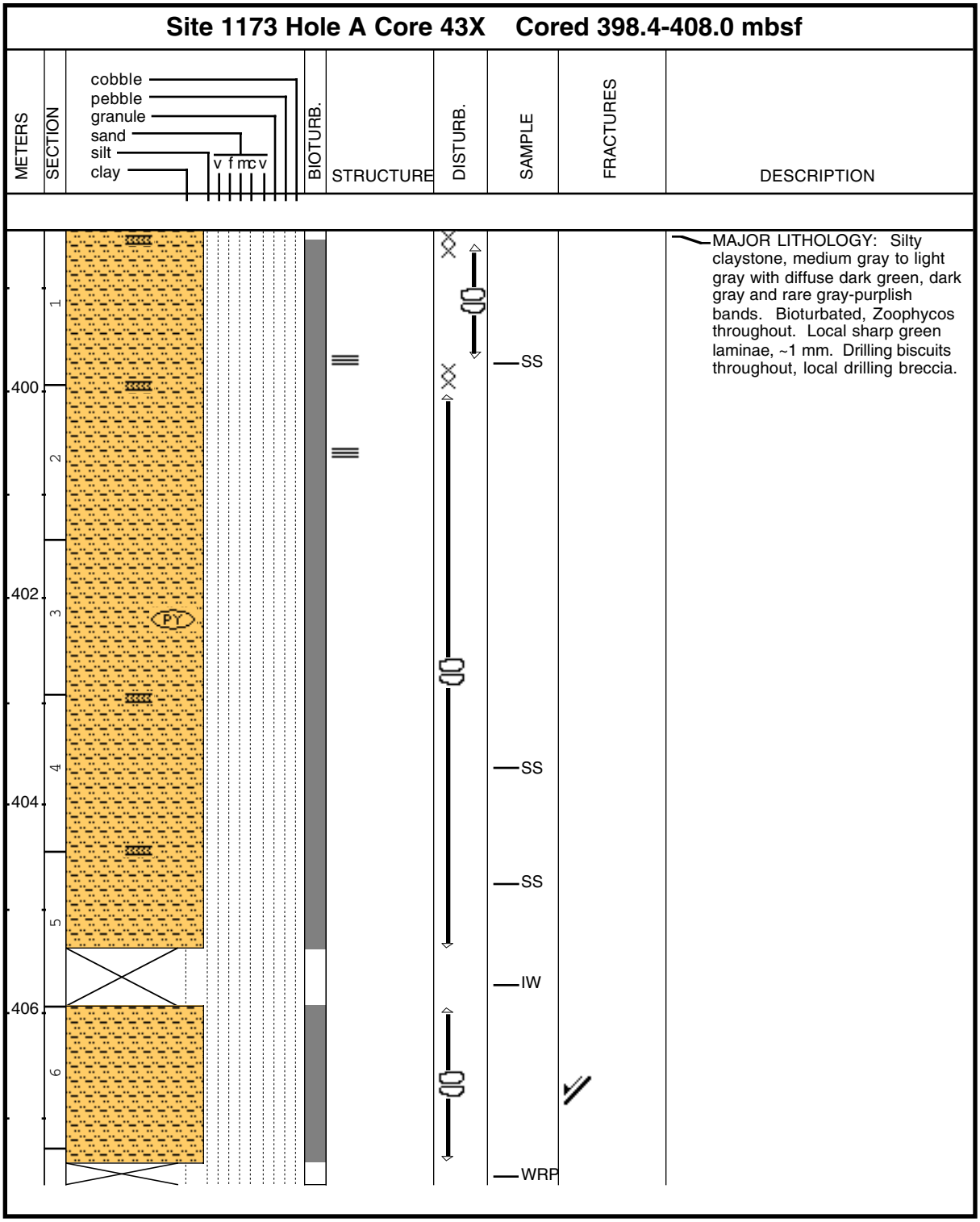
Core Photo


Site 1173 Hole A Core 41X Cored 379.2-388.8 mbsf
METERS
CORE AND SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
380
382
384
386
388
41
SS
IW
SS
SS
WRP
WRP
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray, faint lamination. Mottled due to moderate bioturbation, variable inclination of beds from horizontal to up to 14 degrees. Scattered Zoophycos burrows.
SECONDARY LITHOLOGY: Siliceous claystone and sandy siliceous claystone. Possible altered volcanic ash. Sharp base. Dark gray siliceous claystone at section 4: 37 - 39 cm. Bed in section 6: 27 - 36 cm, green to pale green to dark gray, gradational colour change, coarsens up from silt to medium sand, then fines upwards to fine sand/silt. Bed in section 6: 50 - 53 cm pale gray, contains fine sand. Ash in section 6: 89 - 90 cm - pale green, contains fine sand. Upper contacts gradational, contacts disrupted by bioturbation. Bases of secondary lithology:
Section 4: 39 cm
Section 6: 36 cm
Section 6: 53 cm
Section 6: 90 cm
slickenlines
slickenlines
slickenlines

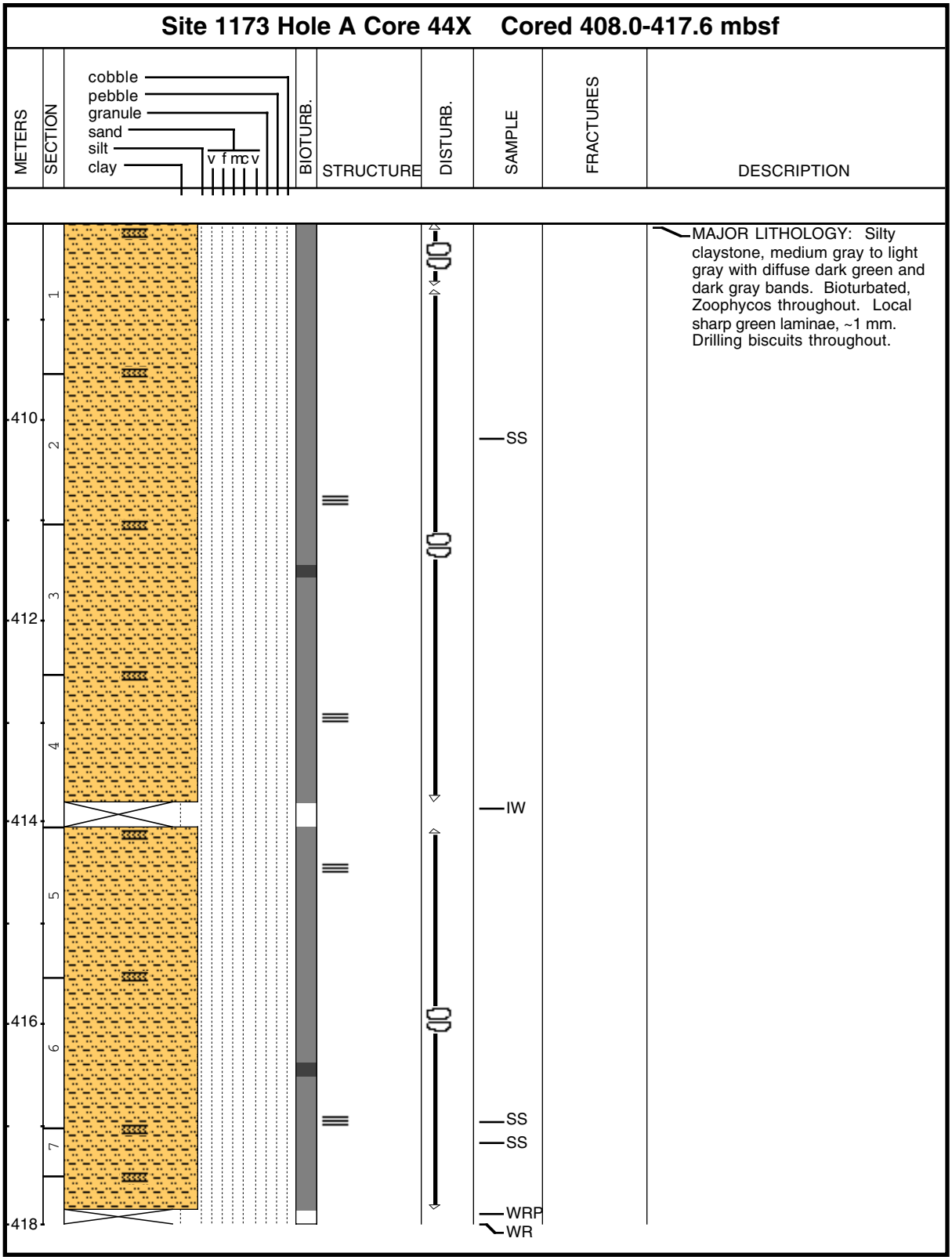
Core Photo


Site 1173 Hole A Core 42X Cored 388.8-398.4 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
390
392
394
396
398
1
2
3
4
5
6
7
PY
WRP
SS
IW
SS
WRP
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray, mottling due to moderate bioturbation throughout, Zoophycos common. Local horizontal to slightly inclined faint laminae, green in color. Drilling biscuits throughout.
SECONDARY LITHOLOGY: Sandy claystone, green, fine to medium sand-sized particles. Upper and lower boundaries sharp. Bioturbated.
Base of secondary lithology is as follows:
Section 3: 47 cm

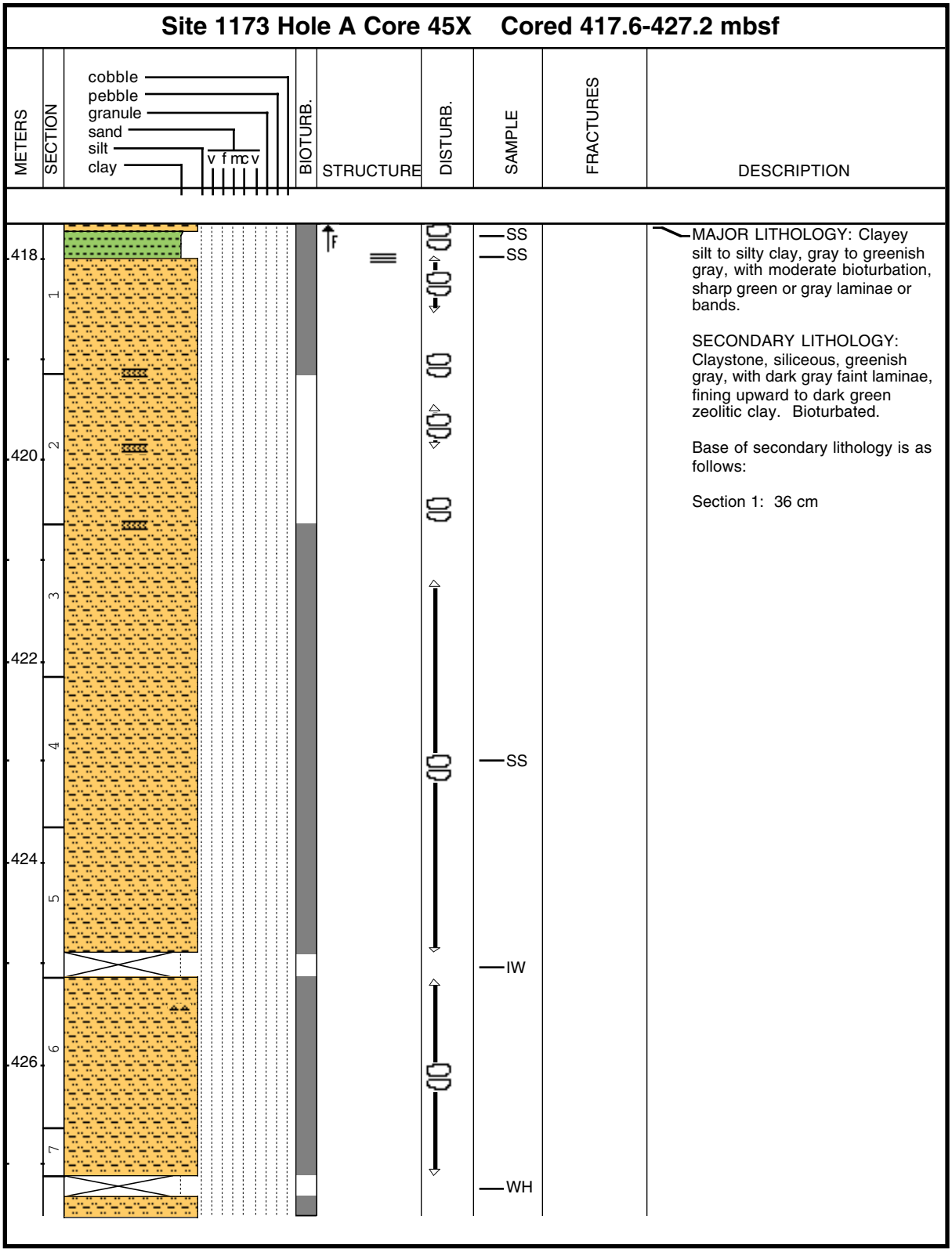
Core Photo


Site 1173 Hole A Core 43X Cored 398.4-408.0 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
400
402
404
406
PY
SS
SS
SS
IW
WRP
MAJOR LITHOLOGY: Silty claystone, medium gray to light gray with diffuse dark green, dark gray and rare gray-purplish bands. Bioturbated, Zoophycos throughout. Local sharp green laminae, ~1 mm. Drilling biscuits throughout, local drilling breccia.

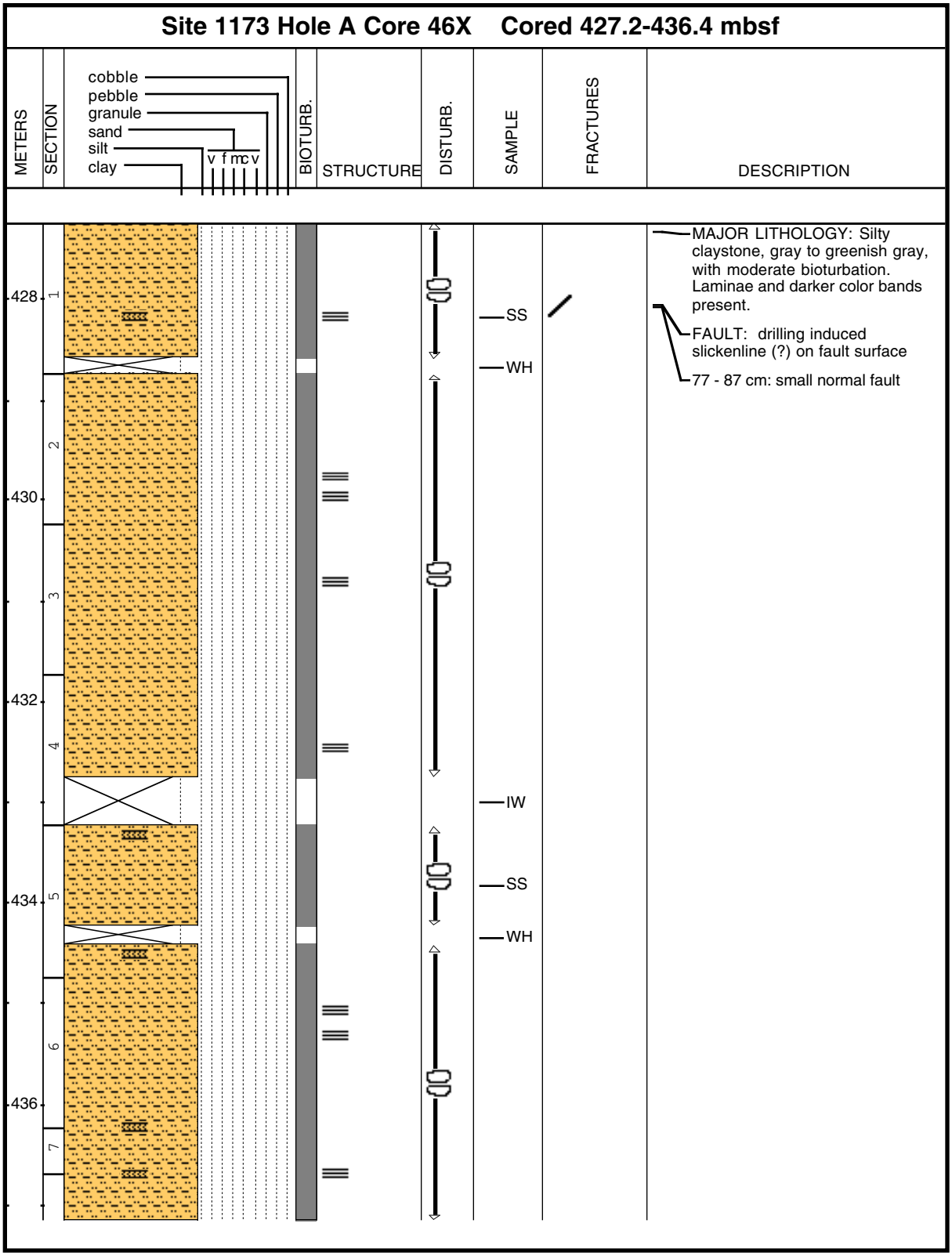
Core Photo


Site 1173 Hole A Core 44X Cored 408.0-417.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
MAJOR LITHOLOGY: Silty claystone, medium gray to light gray with diffuse dark green and dark gray bands. Bioturbated, Zoophycos throughout. Local sharp green laminae, ~1 mm. Drilling biscuits throughout.
410
412
414
416
418
1
2
3
4
5
6
7
SS
IW
SS
SS
WRP
WR

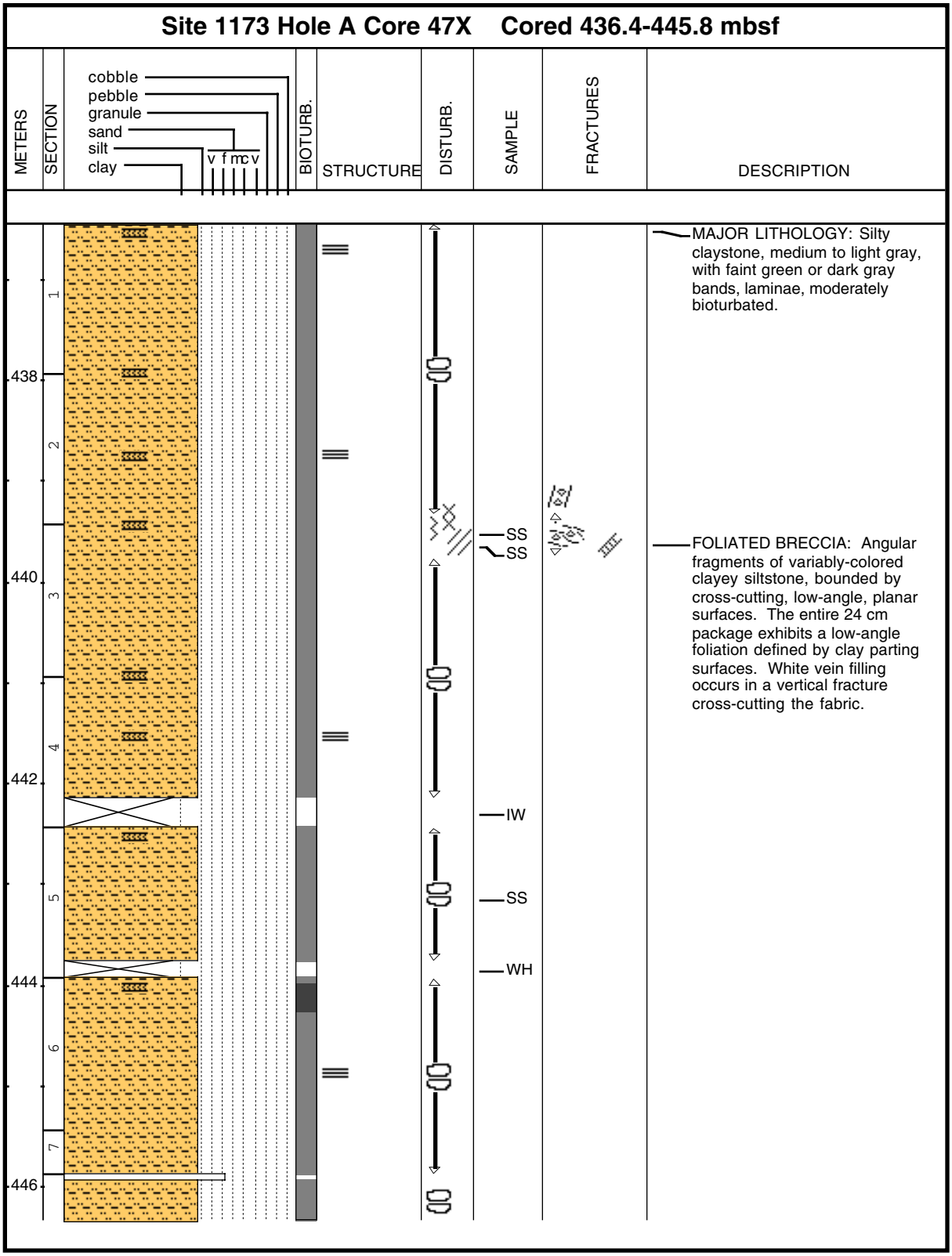
Core Photo


Site 1173 Hole A Core 45X Cored 417.6-427.2 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
418
420
422
424
426
1
2
3
4
5
6
7
F
SS
SS
SS
IW
WH
MAJOR LITHOLOGY: Clayey silt to silty clay, gray to greenish gray, with moderate bioturbation, sharp green or gray laminae or bands.
SECONDARY LITHOLOGY: Claystone, siliceous, greenish gray, with dark gray faint laminae, fining upward to dark green zeolitic clay. Bioturbated.
Base of secondary lithology is as follows:
Section 1: 36 cm

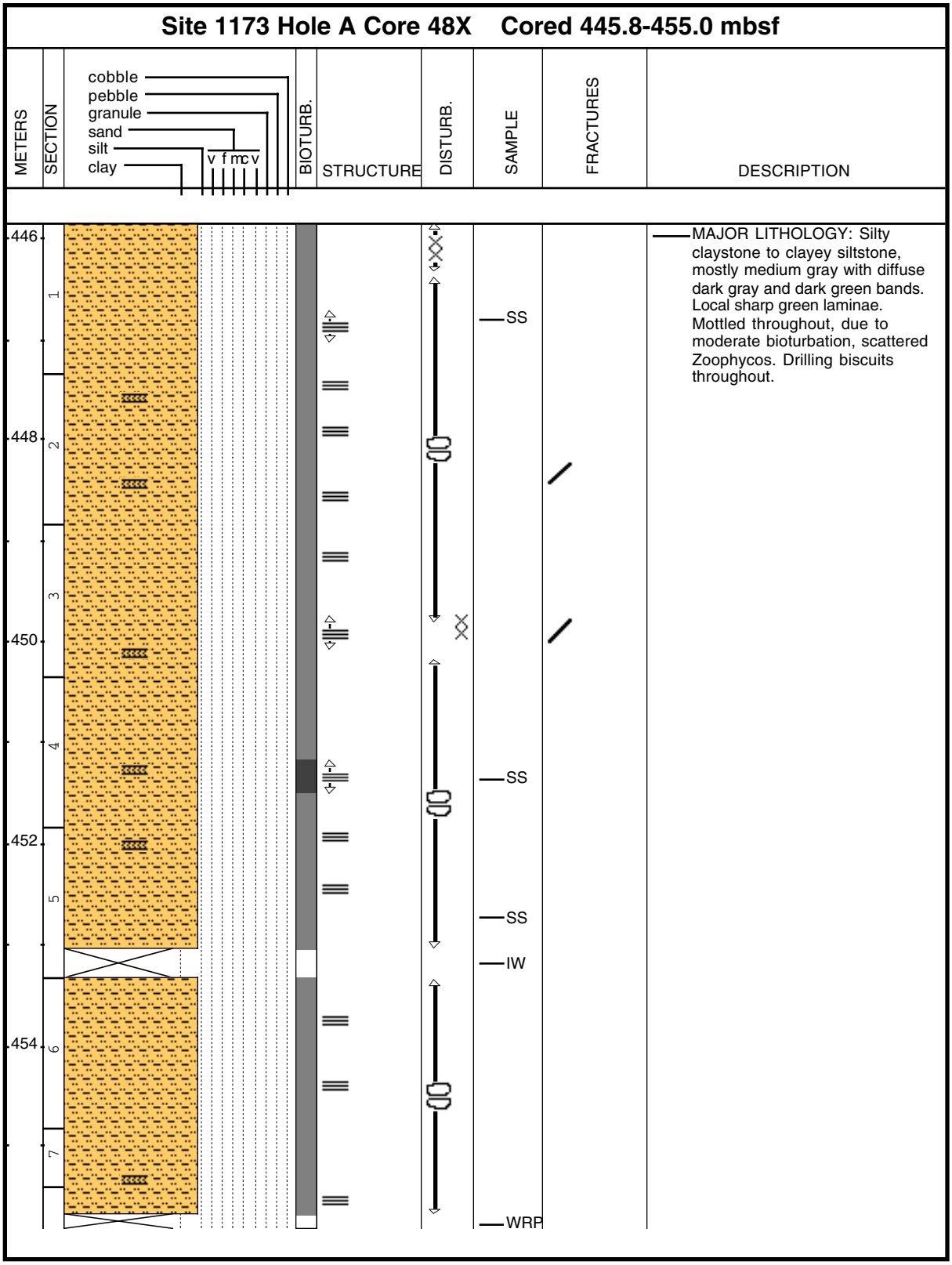
Core Photo


Site 1173 Hole A Core 46X Cored 427.2-436.4 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
428
430
432
434
436
1
2
3
4
5
6
7
SS
WH
IW
SS
WH
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray, with moderate bioturbation. Laminae and darker color bands present.
FAULT: drilling induced slickenline (?) on fault surface
77 - 87 cm: small normal fault

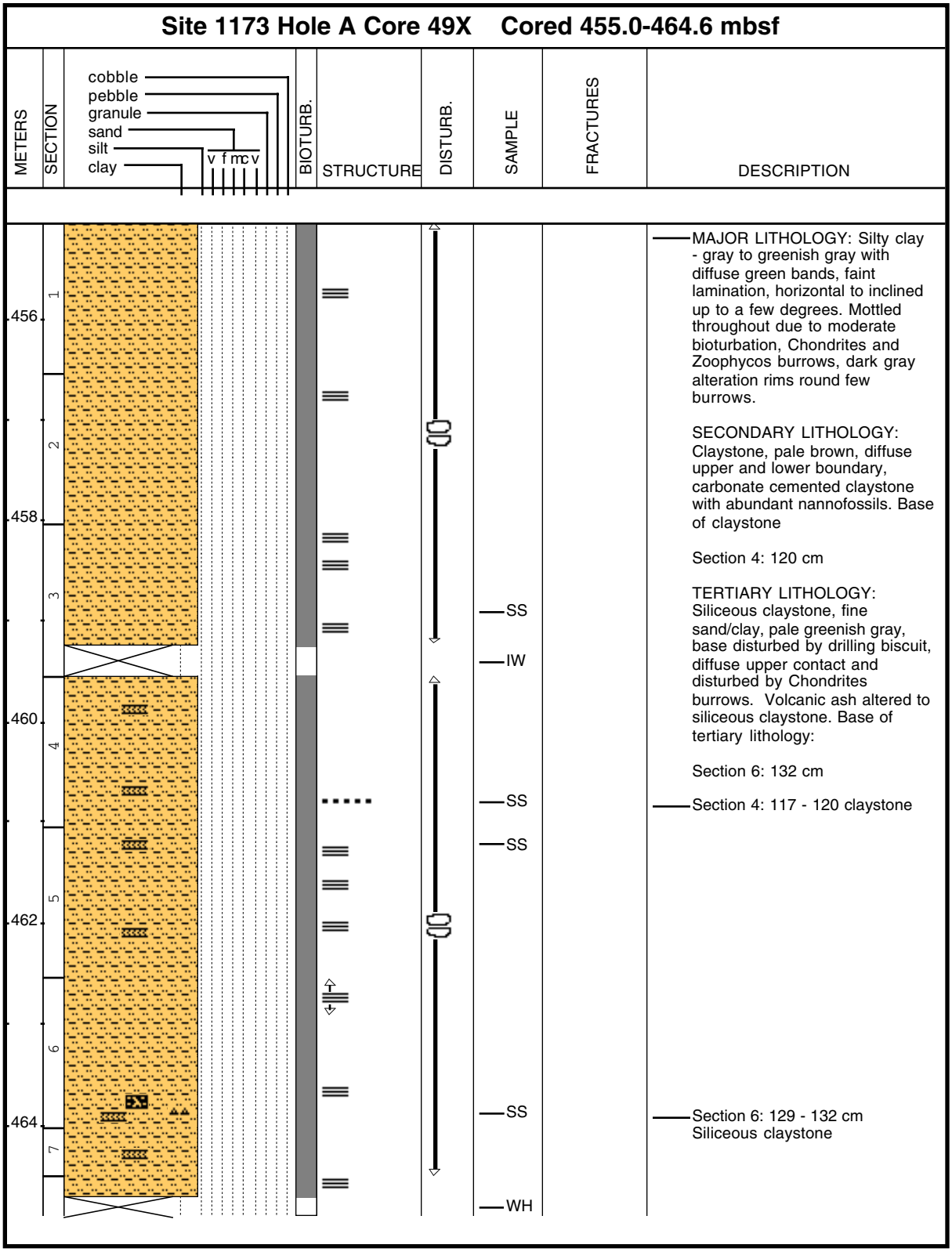
Core Photo


Site 1173 Hole A Core 47X Cored 436.4-445.8 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
438
440
442
444
446
1
2
3
4
5
6
7
SS
SS
IW
SS
WH
MAJOR LITHOLOGY: Silty claystone, medium to light gray, with faint green or dark gray bands, laminae, moderately bioturbated.
FOLIATED BRECCIA: Angular fragments of variably-colored clayey siltstone, bounded by cross-cutting, low-angle, planar surfaces. The entire 24 cm package exhibits a low-angle foliation defined by clay parting surfaces. White vein filling occurs in a vertical fracture cross-cutting the fabric.

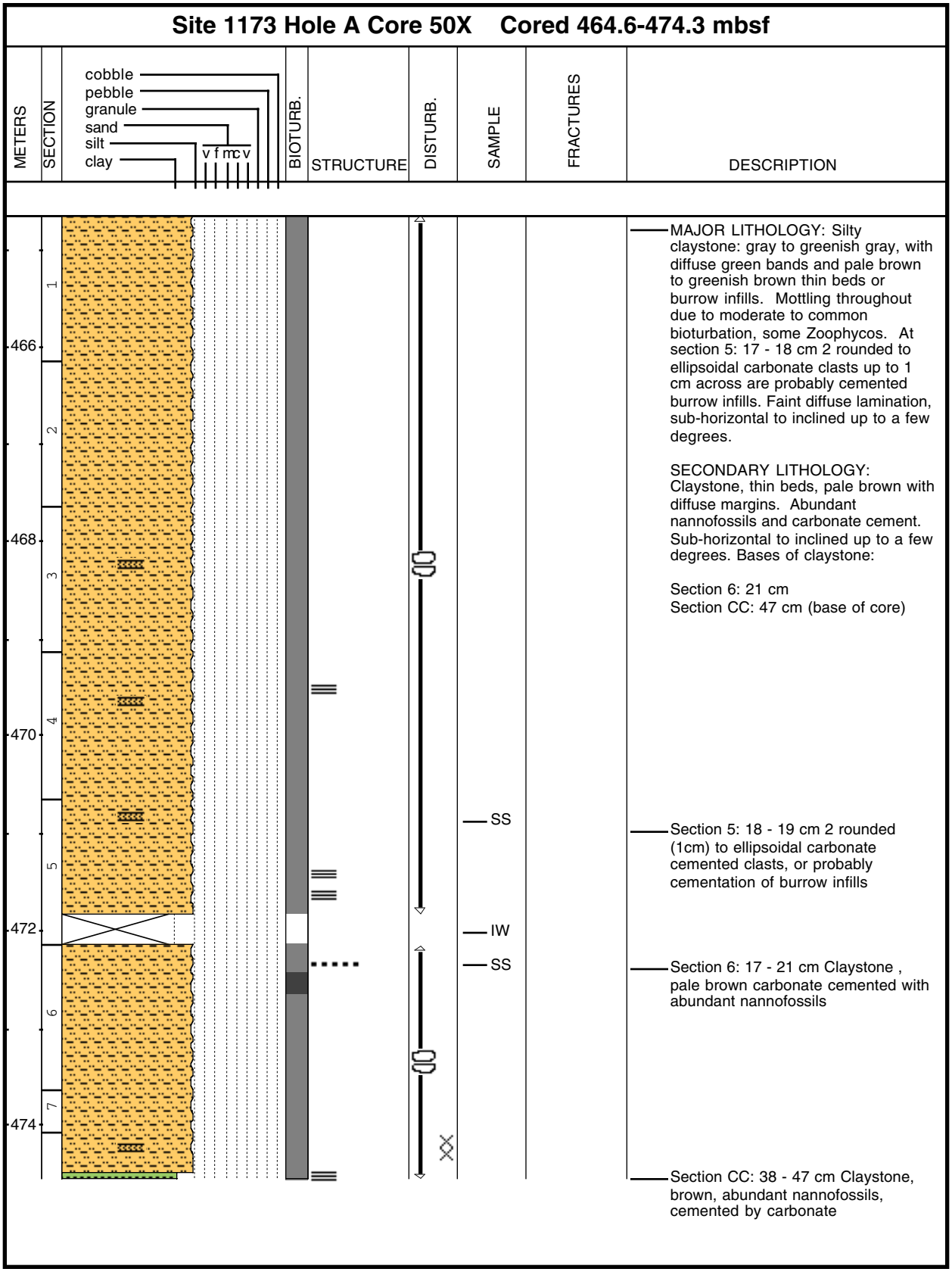
Core Photo


Site 1173 Hole A Core 48X Cored 445.8-455.0 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
446
448
450
452
454
1
2
3
4
5
6
7
SS
SS
SS
IW
WRP
MAJOR LITHOLOGY: Silty claystone to clayey siltstone, mostly medium gray with diffuse dark gray and dark green bands. Local sharp green laminae. Mottled throughout, due to moderate bioturbation, scattered Zoophycos. Drilling biscuits throughout.

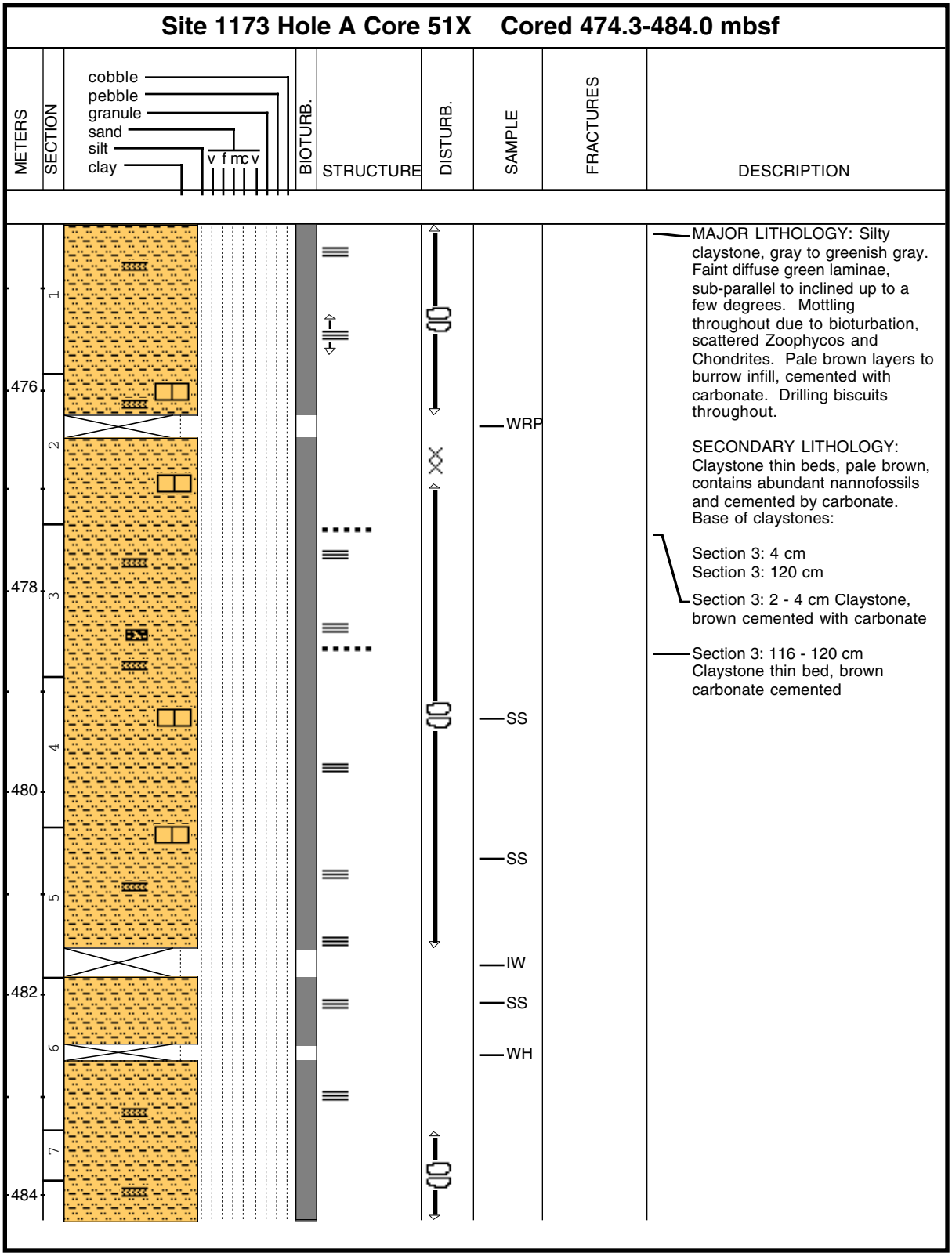
Core Photo


Site 1173 Hole A Core 49X Cored 455.0-464.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
456
458
460
462
464
1
2
3
4
5
6
7
SS
IW
SS
SS
SS
WH
MAJOR LITHOLOGY: Silty clay - gray to greenish gray with diffuse green bands, faint lamination, horizontal to inclined up to a few degrees. Mottled throughout due to moderate bioturbation, Chondrites and Zoophycos burrows, dark gray alteration rims round few burrows.
SECONDARY LITHOLOGY: Claystone, pale brown, diffuse upper and lower boundary, carbonate cemented claystone with abundant nannofossils. Base of claystone
Section 4: 120 cm
TERTIARY LITHOLOGY: Siliceous claystone, fine sand/clay, pale greenish gray, base disturbed by drilling biscuit, diffuse upper contact and disturbed by Chondrites burrows. Volcanic ash altered to siliceous claystone. Base of tertiary lithology:
Section 6: 132 cm
Section 4: 117 - 120 claystone
Section 6: 129 - 132 cm
Siliceous claystone

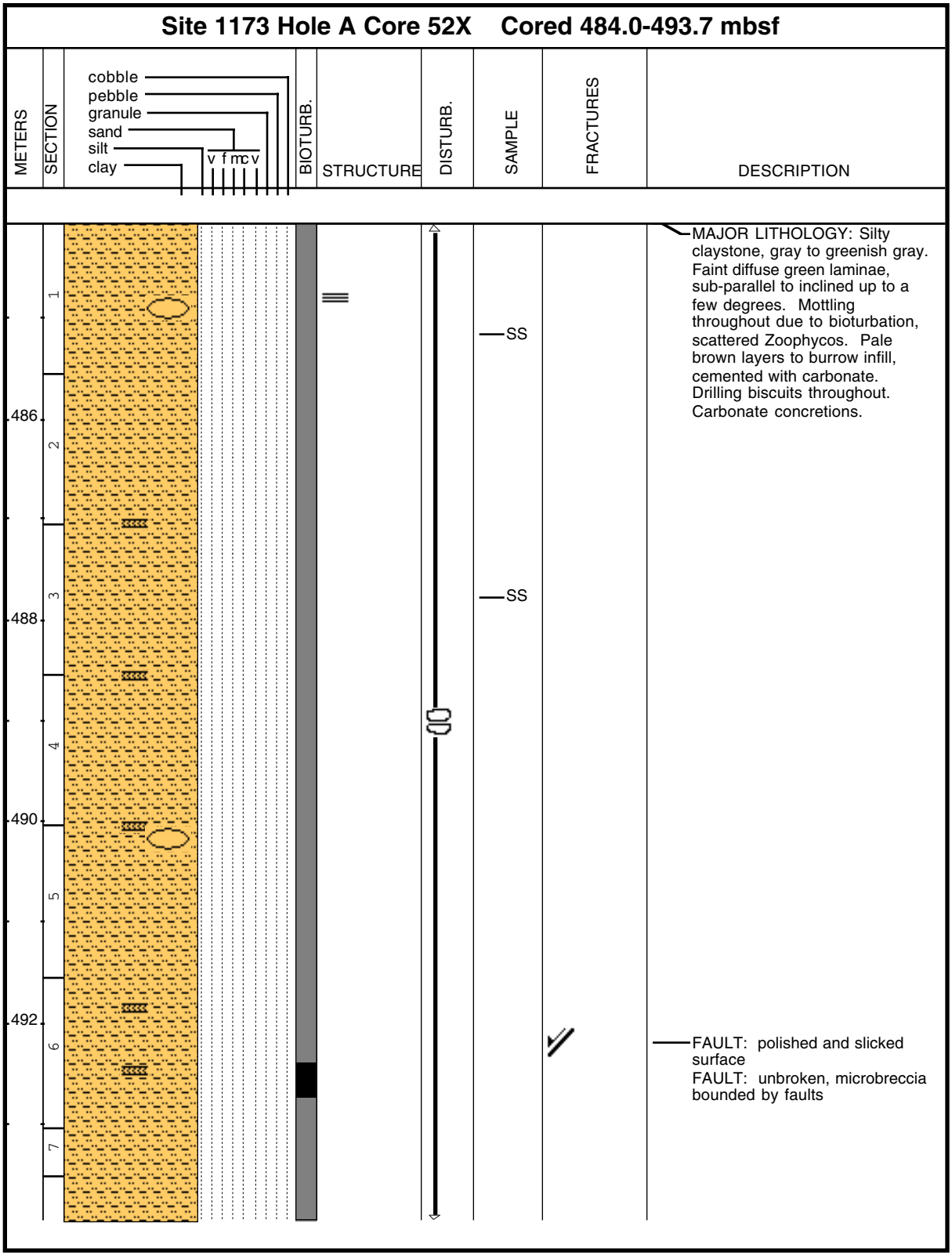
Core Photo


Site 1173 Hole A Core 50X Cored 464.6-474.3 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
466
468
470
472
474
1
2
3
4
5
6
7
SS
IW
SS
MAJOR LITHOLOGY: Silty claystone: gray to greenish gray, with diffuse green bands and pale brown to greenish brown thin beds or burrow infills. Mottling throughout due to moderate to common bioturbation, some Zoophycos. At section 5: 17 - 18 cm 2 rounded to ellipsoidal carbonate clasts up to 1 cm across are probably cemented burrow infills. Faint diffuse lamination, sub-horizontal to inclined up to a few degrees.
SECONDARY LITHOLOGY: Claystone, thin beds, pale brown with diffuse margins. Abundant nannofossils and carbonate cement. Sub-horizontal to inclined up to a few degrees. Bases of claystone:
Section 6: 21 cm
Section CC: 47 cm (base of core)
Section 5: 18 - 19 cm 2 rounded (1cm) to ellipsoidal carbonate cemented clasts, or probably cementation of burrow infills
Section 6: 17 - 21 cm Claystone , pale brown carbonate cemented with abundant nannofossils
Section CC: 38 - 47 cm Claystone, brown, abundant nannofossils, cemented by carbonate

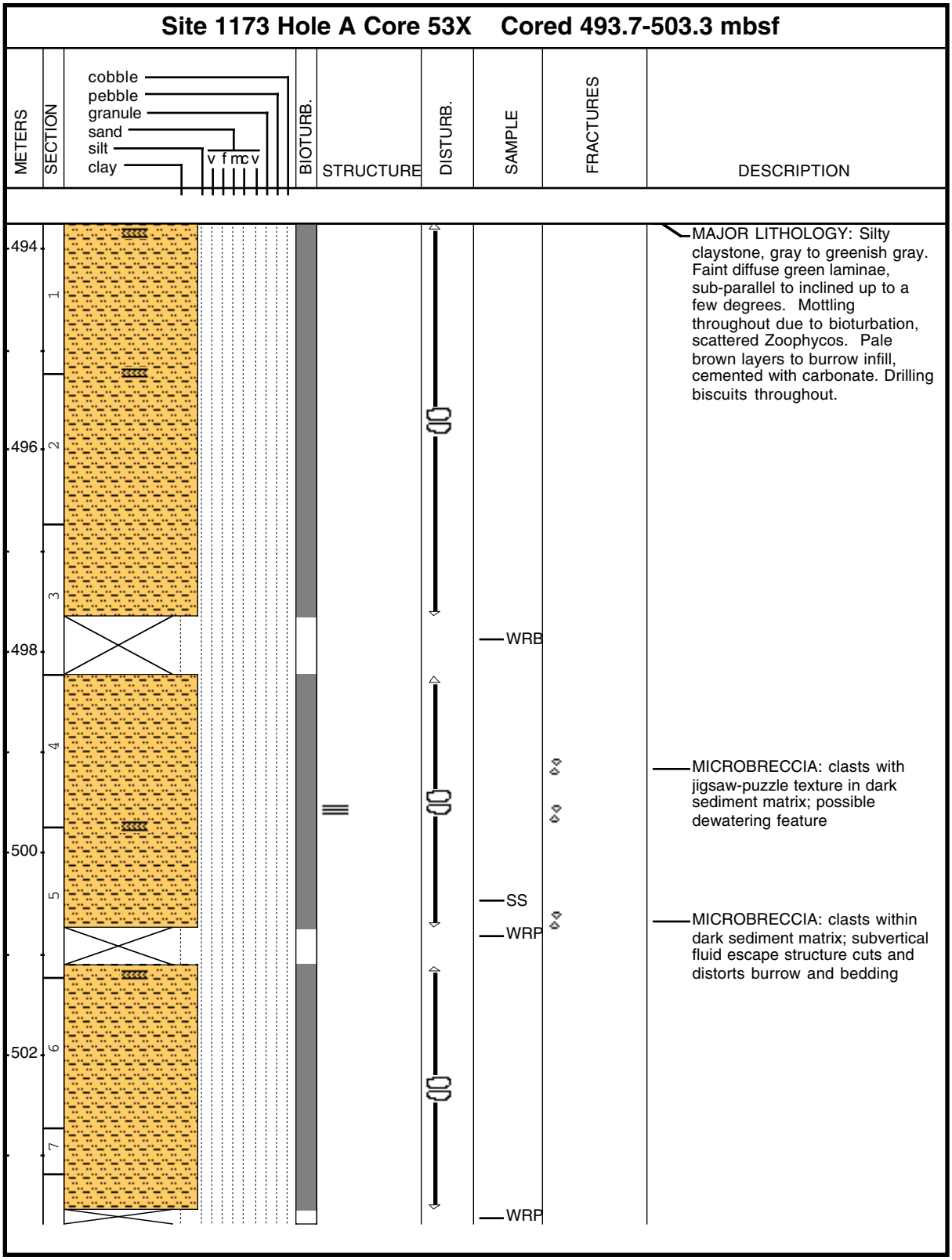
Core Photo


Site 1173 Hole A Core 51X Cored 474.3-484.0 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
476
478
480
482
484
1
2
3
4
5
6
7
WRP
SS
SS
IW
SS
WH
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray. Faint diffuse green laminae, sub-parallel to inclined up to a few degrees. Mottling throughout due to bioturbation, scattered Zoophycos and Chondrites. Pale brown layers to burrow infill, cemented with carbonate. Drilling biscuits throughout.
SECONDARY LITHOLOGY: Claystone thin beds, pale brown, contains abundant nannofossils and cemented by carbonate. Base of claystones:
Section 3: 4 cm
Section 3: 120 cm
Section 3: 2 - 4 cm Claystone, brown cemented with carbonate
Section 3: 116 - 120 cm Claystone thin bed, brown carbonate cemented

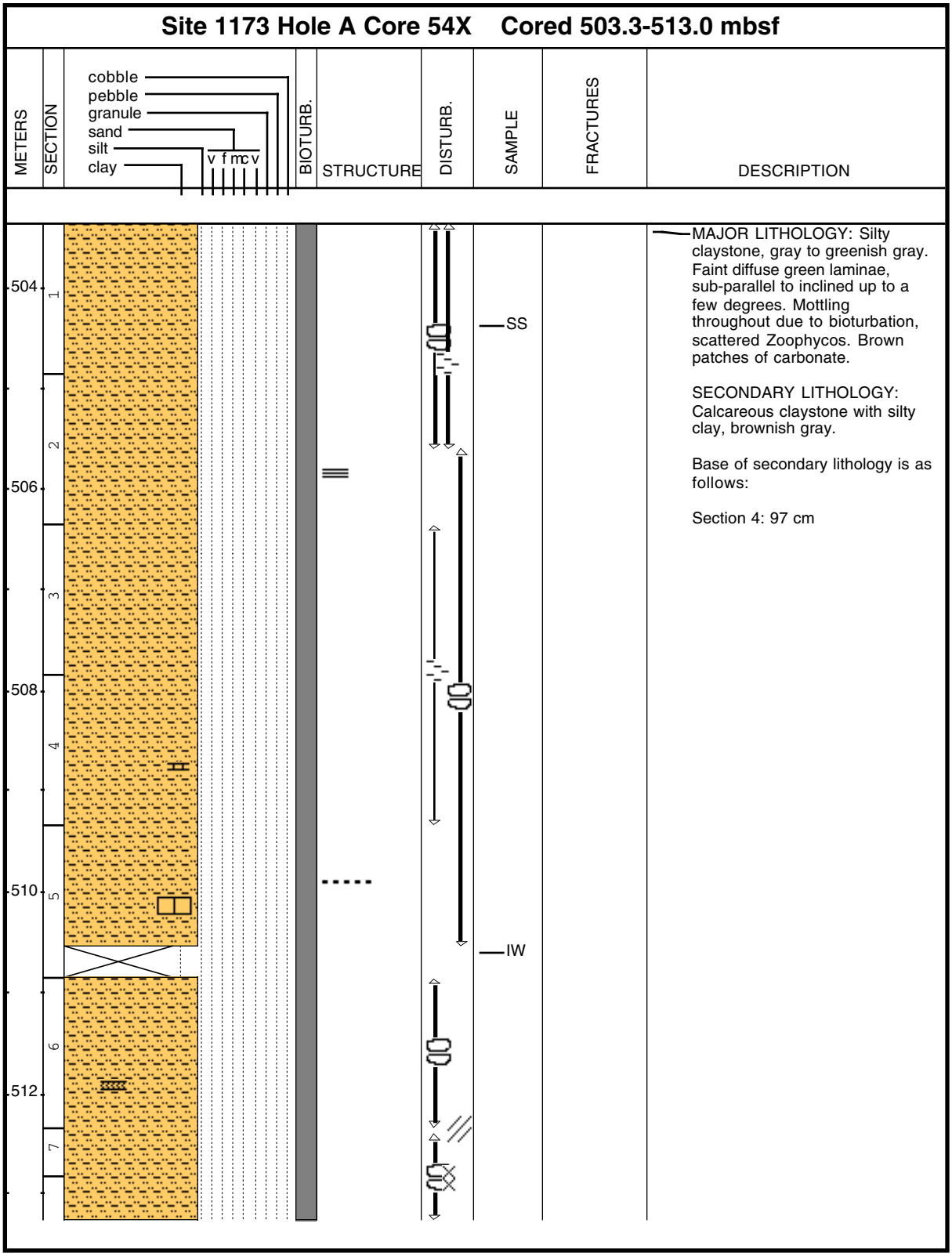
Core Photo


Site 1173 Hole A Core 52X Cored 484.0-493.7 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
486
488
490
492
1
2
3
4
5
6
7
SS
SS
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray. Faint diffuse green laminae, sub-parallel to inclined up to a few degrees. Mottling throughout due to bioturbation, scattered Zoophycos. Pale brown layers to burrow infill, cemented with carbonate. Drilling biscuits throughout. Carbonate concretions.
FAULT: polished and slicked surface
FAULT: unbroken, microbreccia bounded by faults

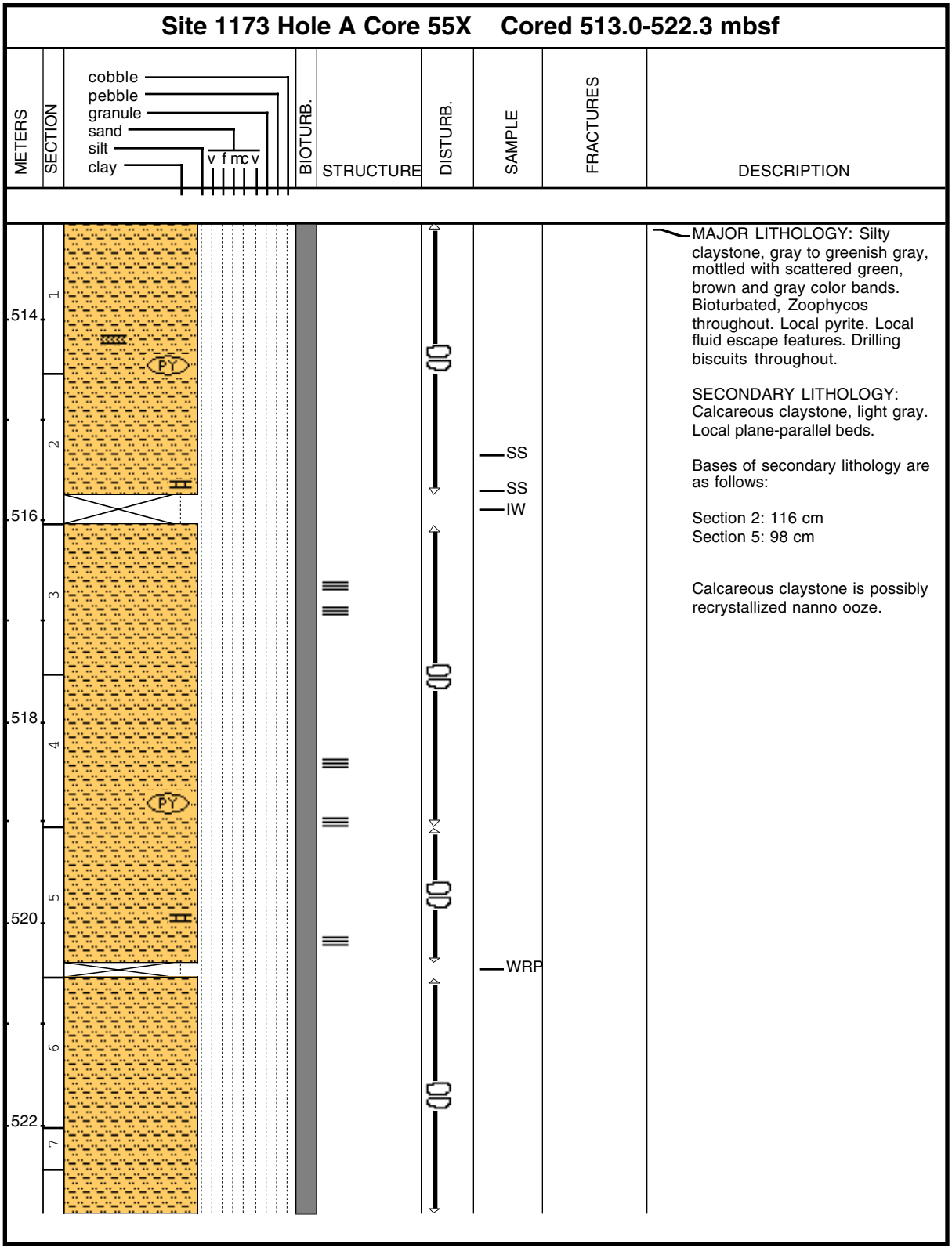
Core Photo


Site 1173 Hole A Core 53X Cored 493.7-503.3 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
494
496
498
500
502
1
2
3
4
5
6
7
WRB
SS
WRP
WRP
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray. Faint diffuse green laminae, sub-parallel to inclined up to a few degrees. Mottling throughout due to bioturbation, scattered Zoophycos. Pale brown layers to burrow infill, cemented with carbonate. Drilling biscuits throughout.
MICROBRECCIA: clasts with jigsaw-puzzle texture in dark sediment matrix; possible dewatering feature
MICROBRECCIA: clasts within dark sediment matrix; subvertical fluid escape structure cuts and distorts burrow and bedding

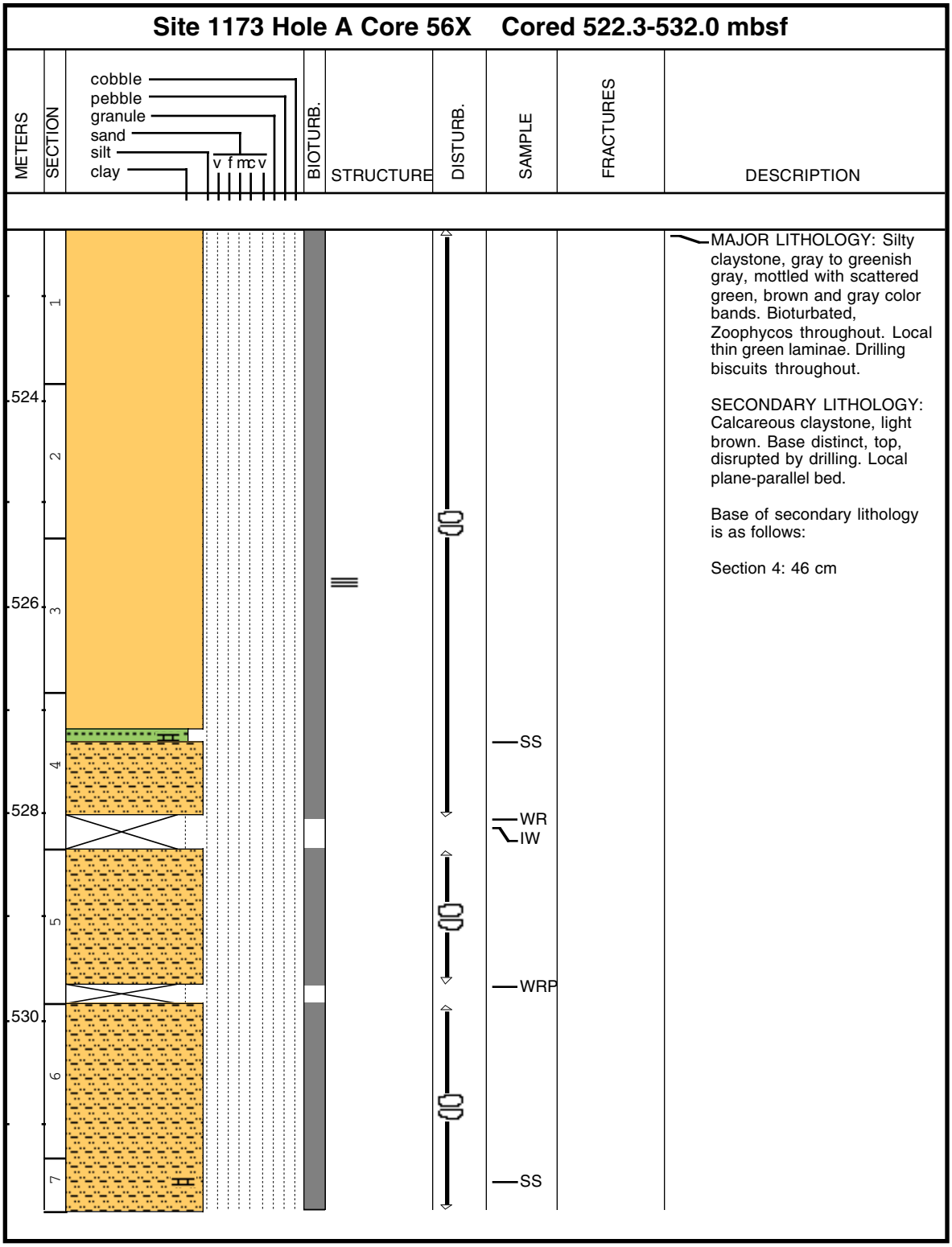
Core Photo


Site 1173 Hole A Core 54X Cored 503.3-513.0 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
504
506
508
510
512
1
2
3
4
5
6
7
SS
IW
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray. Faint diffuse green laminae, sub-parallel to inclined up to a few degrees. Mottling throughout due to bioturbation, scattered Zoophycos. Brown patches of carbonate.
SECONDARY LITHOLOGY: Calcareous claystone with silty clay, brownish gray.
Base of secondary lithology is as follows:
Section 4: 97 cm

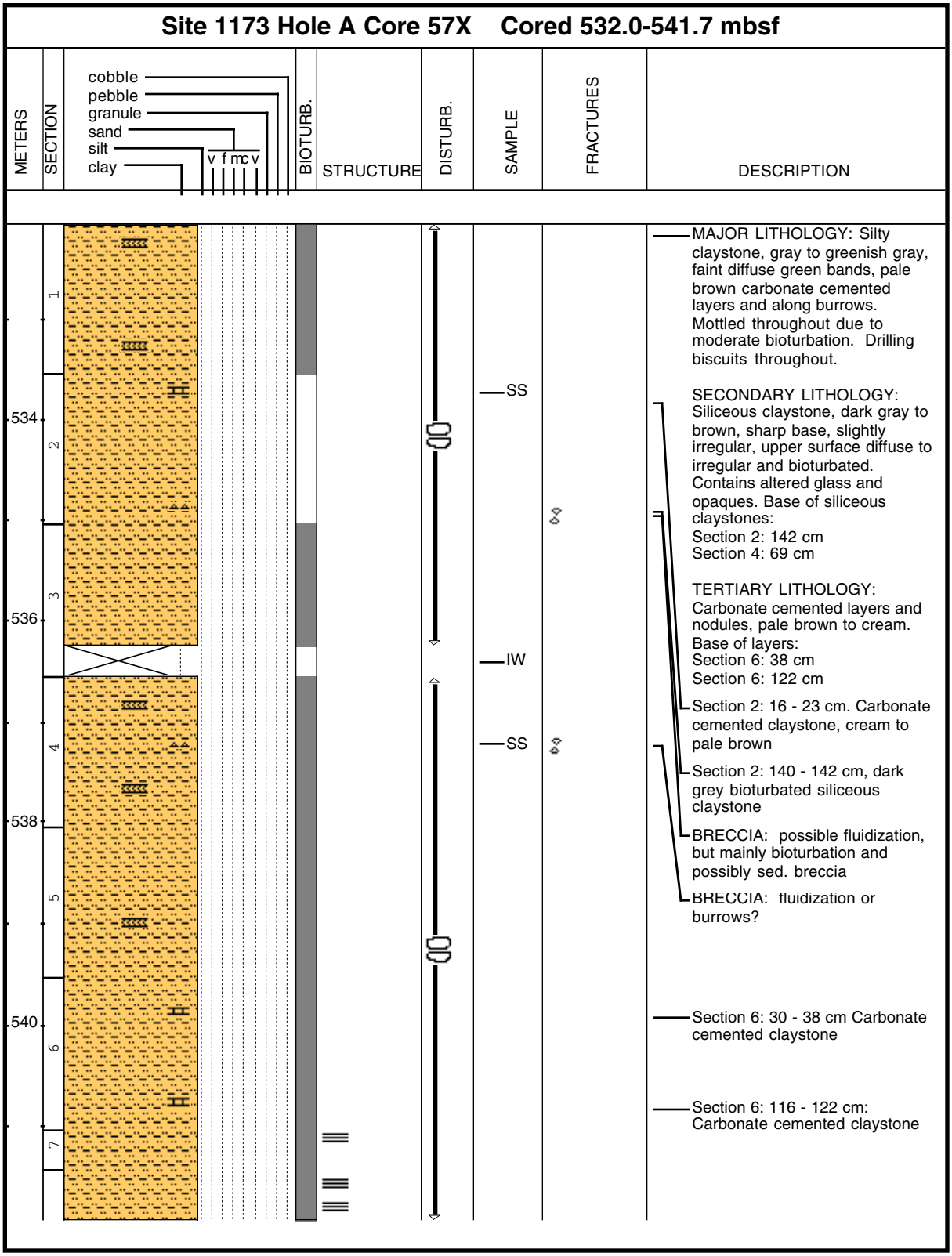
Core Photo


Site 1173 Hole A Core 55X Cored 513.0-522.3 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
514
516
518
520
522
1
2
3
4
5
6
7
PY
H
SS
SS
IW
WRP
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray, mottled with scattered green, brown and gray color bands. Bioturbated, Zoophycos throughout. Local pyrite. Local fluid escape features. Drilling biscuits throughout.
SECONDARY LITHOLOGY: Calcareous claystone, light gray. Local plane-parallel beds.
Bases of secondary lithology are as follows:
Section 2: 116 cm
Section 5: 98 cm
Calcareous claystone is possibly recrystallized nanno ooze.

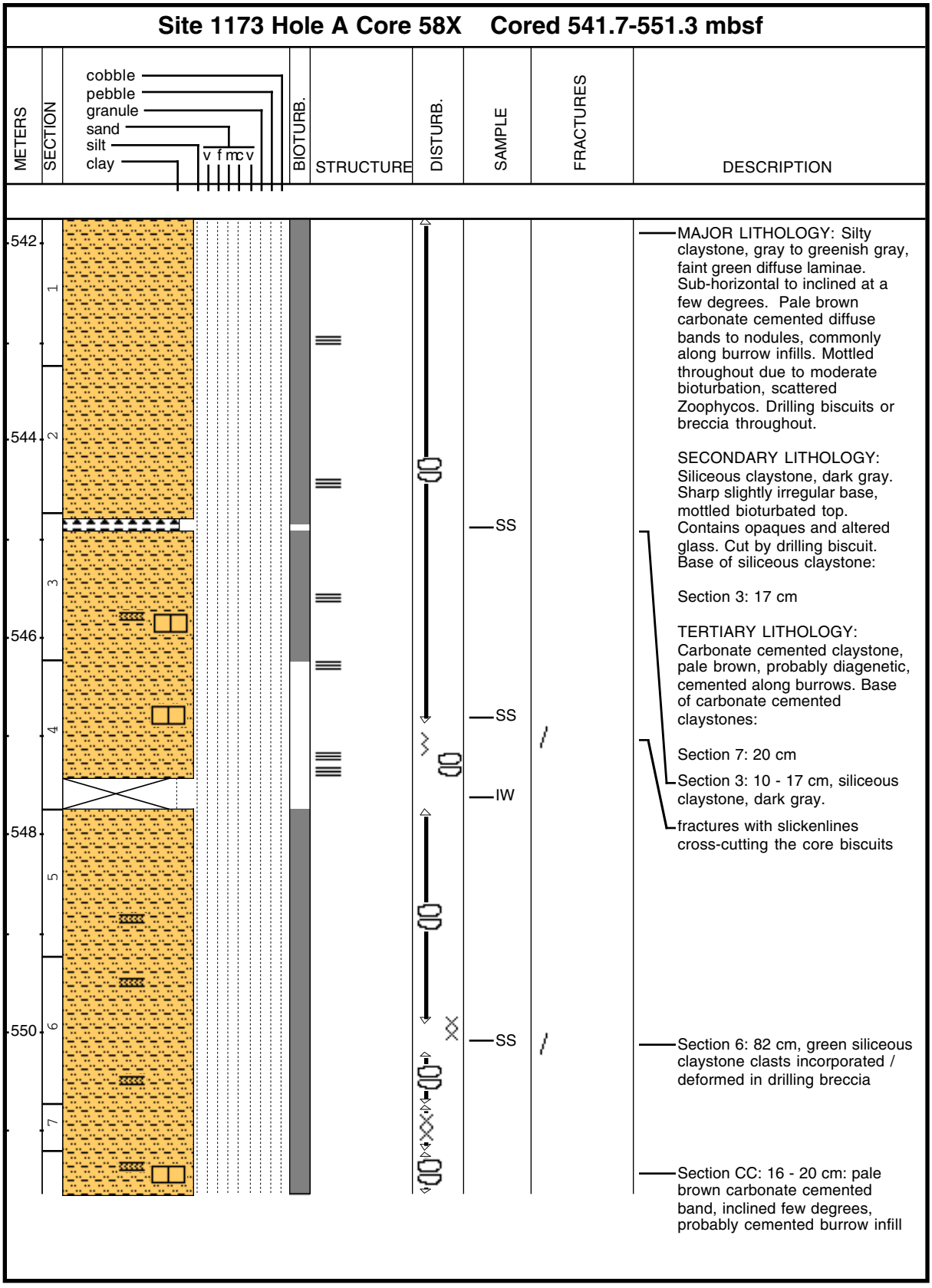
Core Photo


Site 1173 Hole A Core 56X Cored 522.3-532.0 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
524
526
528
530
1
2
3
4
5
6
7
SS
WR
IW
WRP
SS
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray, mottled with scattered green, brown and gray color bands. Bioturbated, Zoophycos throughout. Local thin green laminae. Drilling biscuits throughout.
SECONDARY LITHOLOGY: Calcareous claystone, light brown. Base distinct, top, disrupted by drilling. Local plane-parallel bed.
Base of secondary lithology is as follows:
Section 4: 46 cm

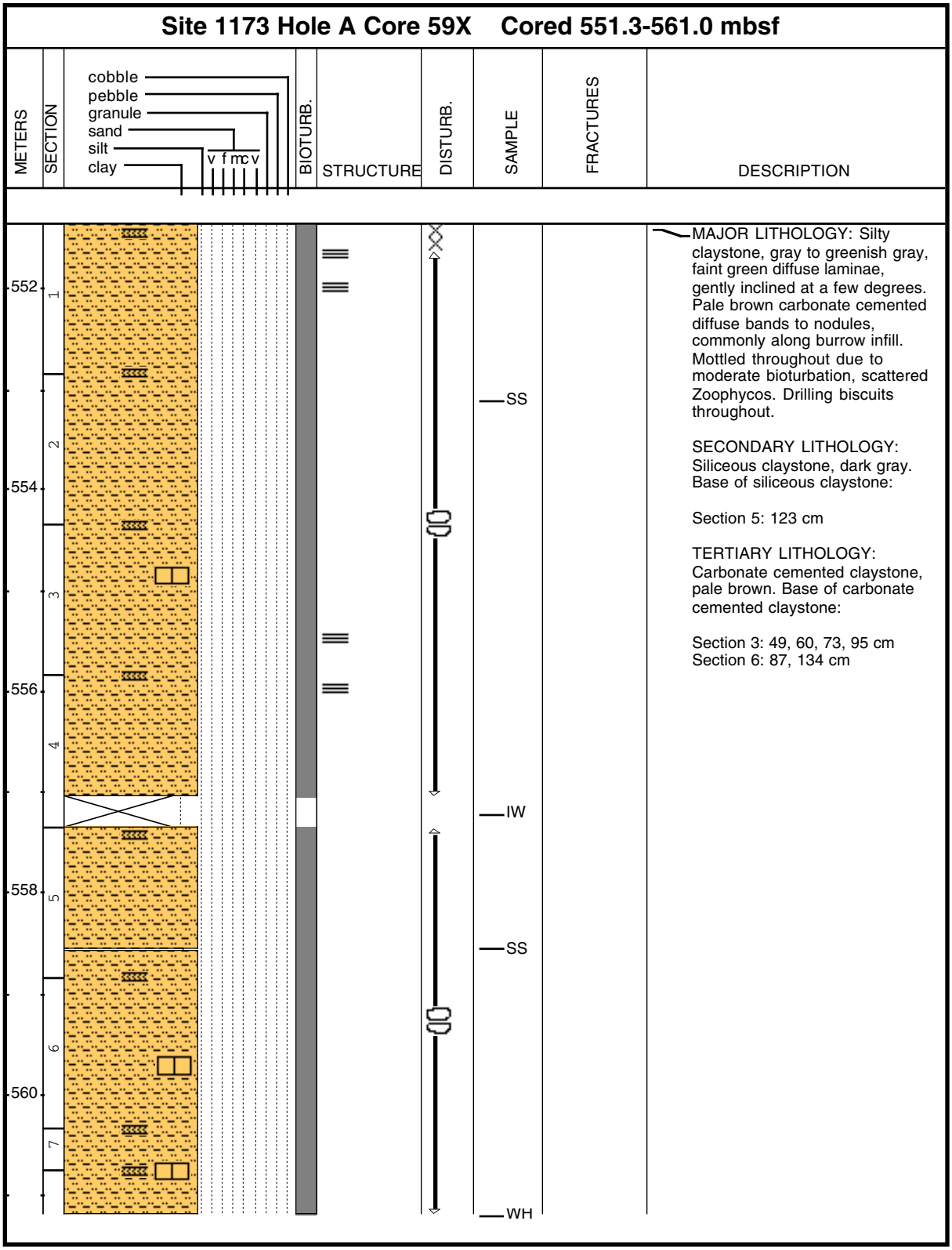
Core Photo


Site 1173 Hole A Core 57X Cored 532.0-541.7 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
534
536
538
540
SS
IW
SS
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray, faint diffuse green bands, pale brown carbonate cemented layers and along burrows. Mottled throughout due to moderate bioturbation. Drilling biscuits throughout.
SECONDARY LITHOLOGY: Siliceous claystone, dark gray to brown, sharp base, slightly irregular, upper surface diffuse to irregular and bioturbated. Contains altered glass and opaques. Base of siliceous claystones:
Section 2: 142 cm
Section 4: 69 cm
TERTIARY LITHOLOGY: Carbonate cemented layers and nodules, pale brown to cream. Base of layers:
Section 6: 38 cm
Section 6: 122 cm
Section 2: 16 - 23 cm. Carbonate cemented claystone, cream to pale brown
Section 2: 140 - 142 cm, dark grey bioturbated siliceous claystone
BRECCIA: possible fluidization, but mainly bioturbation and possibly sed. breccia
BRECCIA: fluidization or burrows?
Section 6: 30 - 38 cm Carbonate cemented claystone
Section 6: 116 - 122 cm: Carbonate cemented claystone

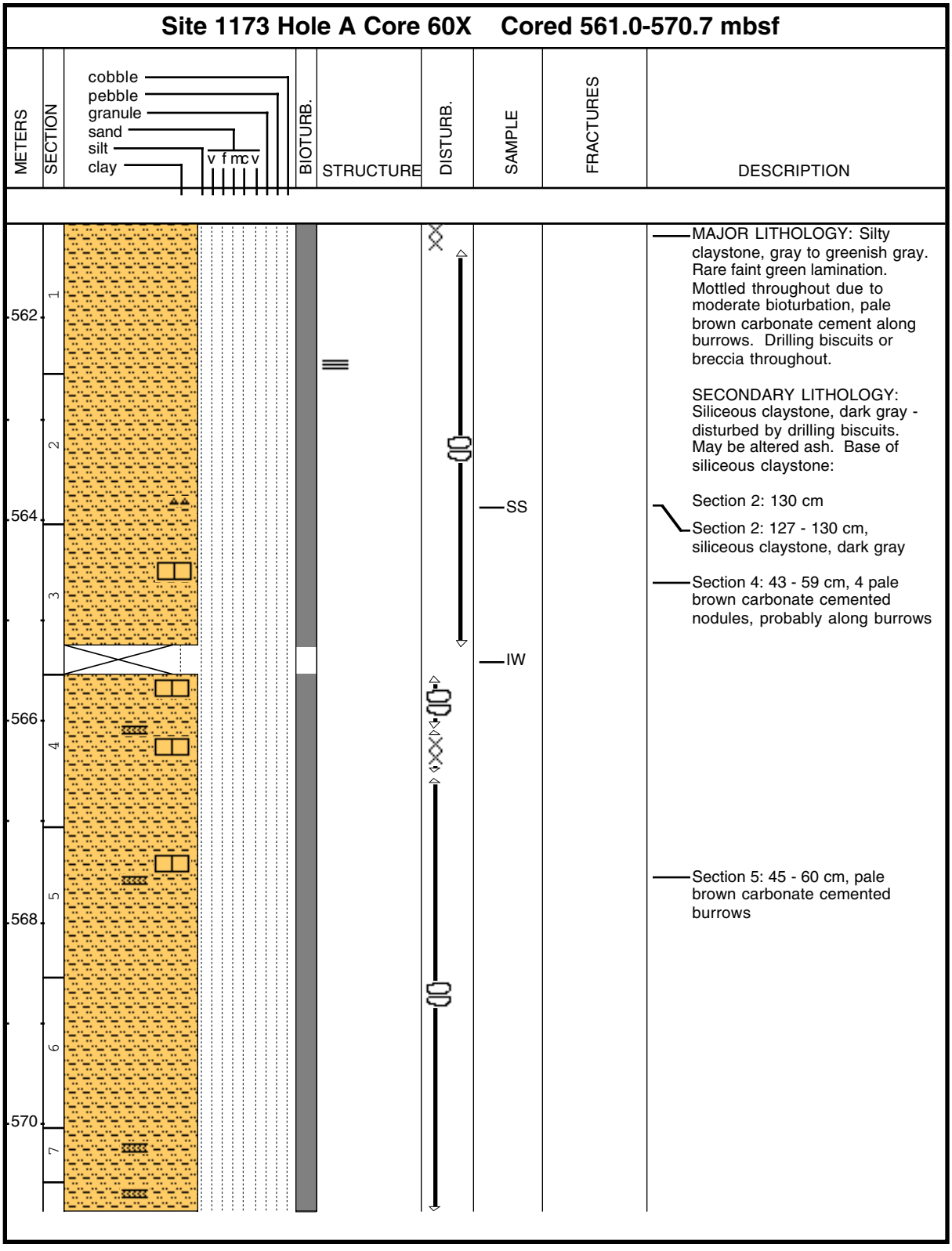
Core Photo


Site 1173 Hole A Core 58X Cored 541.7-551.3 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
542
544
546
548
550
1
2
3
4
5
6
7
SS
SS
IW
SS
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray, faint green diffuse laminae. Sub-horizontal to inclined at a few degrees. Pale brown carbonate cemented diffuse bands to nodules, commonly along burrow infills. Mottled throughout due to moderate bioturbation, scattered Zoophycos. Drilling biscuits or breccia throughout.
SECONDARY LITHOLOGY: Siliceous claystone, dark gray. Sharp slightly irregular base, mottled bioturbated top. Contains opaques and altered glass. Cut by drilling biscuit. Base of siliceous claystone:
Section 3: 17 cm
TERTIARY LITHOLOGY: Carbonate cemented claystone, pale brown, probably diagenetic, cemented along burrows. Base of carbonate cemented claystones:
Section 7: 20 cm
Section 3: 10 - 17 cm, siliceous claystone, dark gray.
fractures with slickenlines cross-cutting the core biscuits
Section 6: 82 cm, green siliceous claystone clasts incorporated / deformed in drilling breccia
Section CC: 16 - 20 cm: pale brown carbonate cemented band, inclined few degrees, probably cemented burrow infill

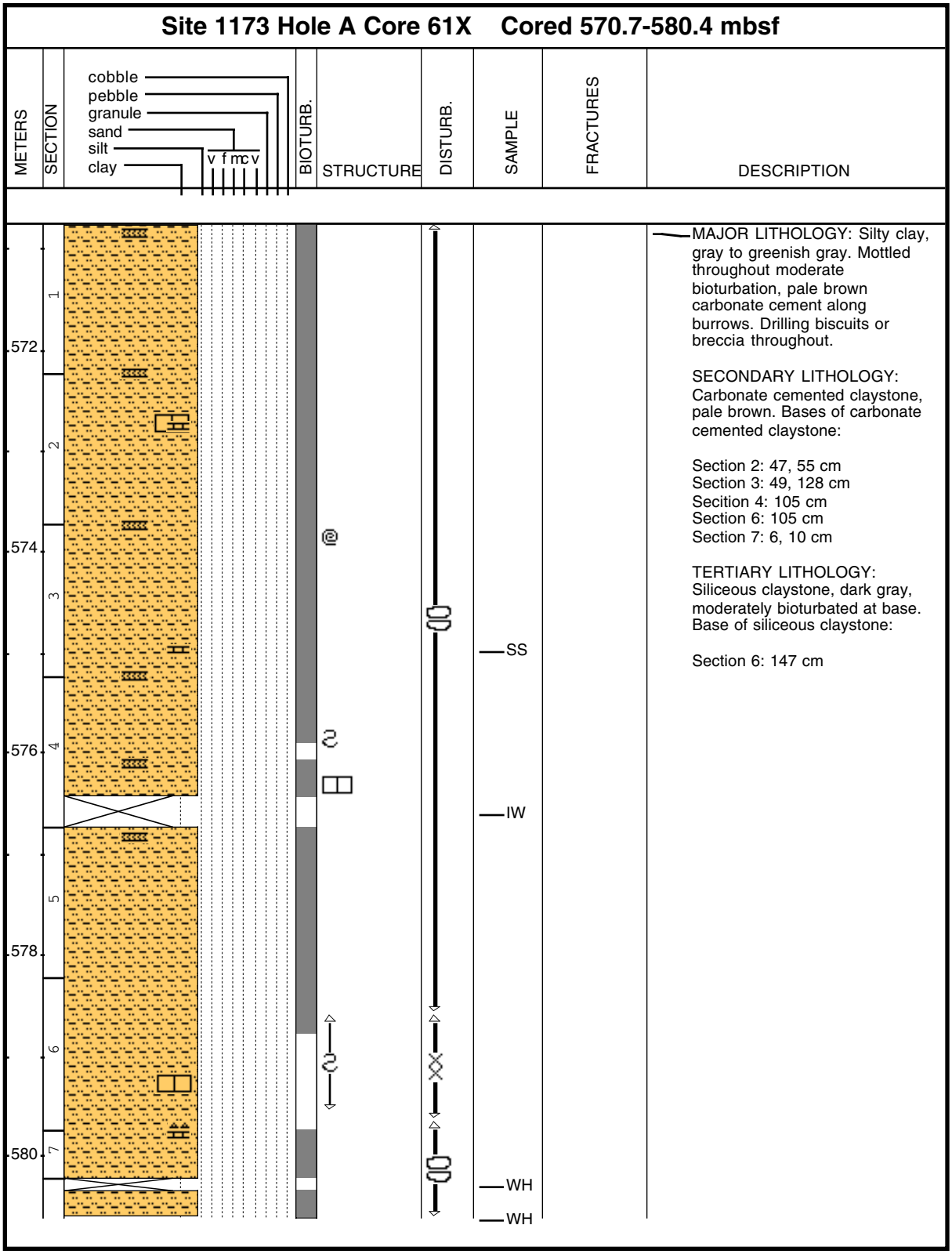
Core Photo


Site 1173 Hole A Core 59X Cored 551.3-561.0 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
552
554
556
558
560
1
2
3
4
5
6
7
SS
IW
SS
WH
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray, faint green diffuse laminae, gently inclined at a few degrees. Pale brown carbonate cemented diffuse bands to nodules, commonly along burrow infill. Mottled throughout due to moderate bioturbation, scattered Zoophycos. Drilling biscuits throughout.
SECONDARY LITHOLOGY: Siliceous claystone, dark gray. Base of siliceous claystone:
Section 5: 123 cm
TERTIARY LITHOLOGY: Carbonate cemented claystone, pale brown. Base of carbonate cemented claystone:
Section 3: 49, 60, 73, 95 cm
Section 6: 87, 134 cm

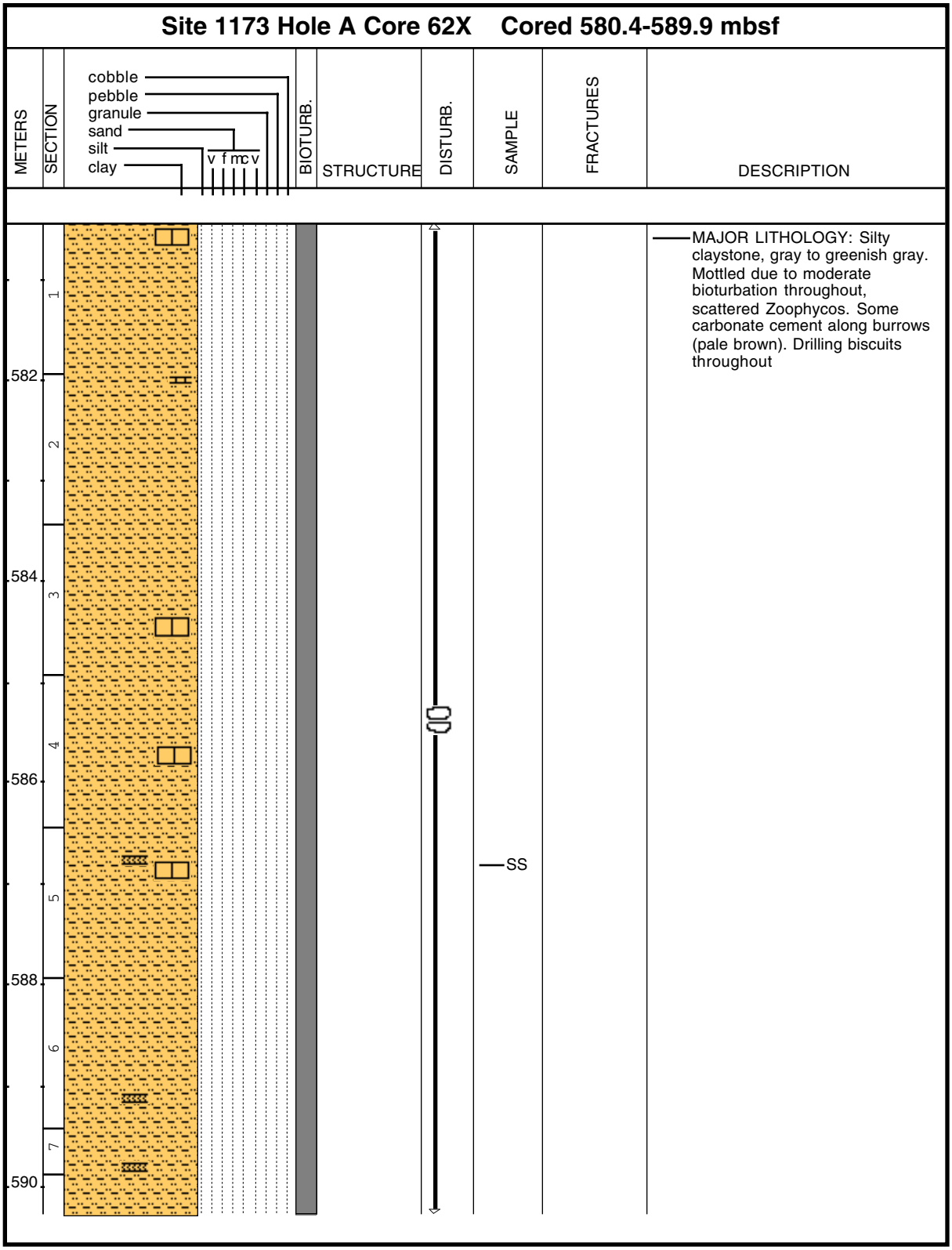
Core Photo


Site 1173 Hole A Core 60X Cored 561.0-570.7 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
562
564
566
568
570
1
2
3
4
5
6
7
SS
IW
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray. Rare faint green lamination. Mottled throughout due to moderate bioturbation, pale brown carbonate cement along burrows. Drilling biscuits or breccia throughout.
SECONDARY LITHOLOGY: Siliceous claystone, dark gray - disturbed by drilling biscuits. May be altered ash. Base of siliceous claystone:
Section 2: 130 cm
Section 2: 127 - 130 cm, siliceous claystone, dark gray
Section 4: 43 - 59 cm, 4 pale brown carbonate cemented nodules, probably along burrows
Section 5: 45 - 60 cm, pale brown carbonate cemented burrows

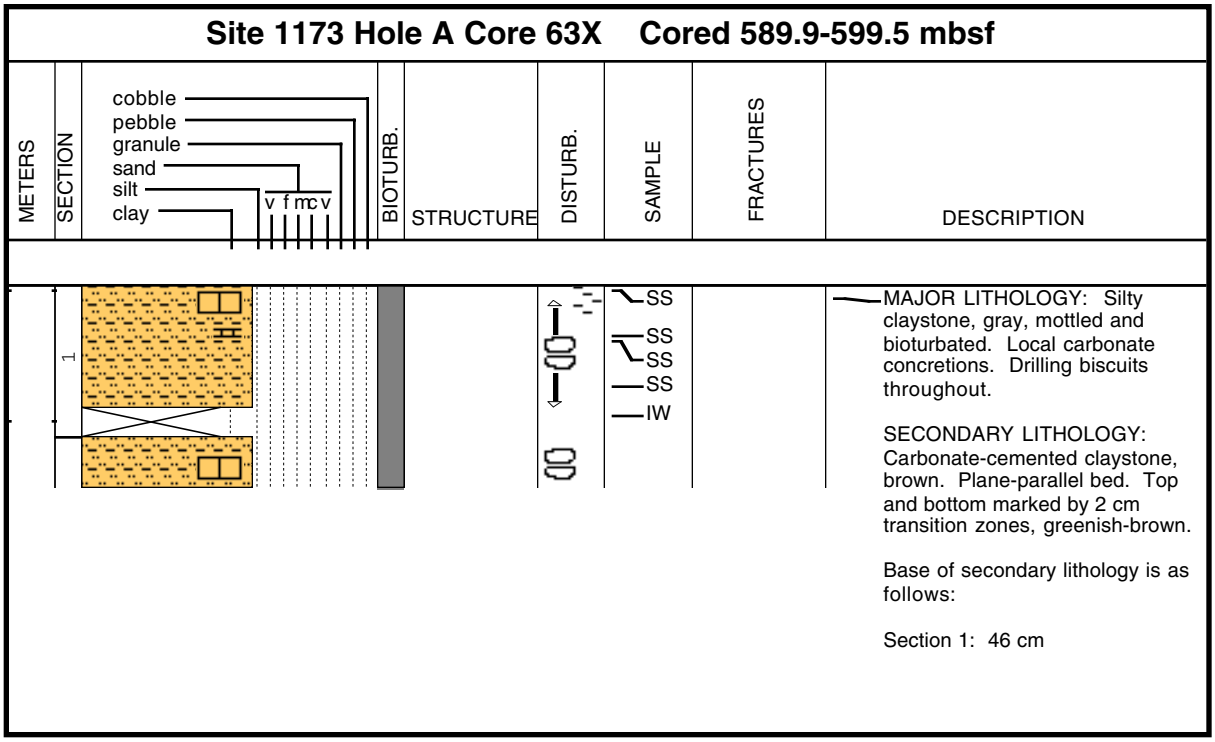
Core Photo


Site 1173 Hole A Core 61X Cored 570.7-580.4 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
572
574
576
578
580
1
2
3
4
5
6
7
SS
IW
WH
WH
MAJOR LITHOLOGY: Silty clay, gray to greenish gray. Mottled throughout moderate bioturbation, pale brown carbonate cement along burrows. Drilling biscuits or breccia throughout.
SECONDARY LITHOLOGY: Carbonate cemented claystone, pale brown. Bases of carbonate cemented claystone:
Section 2: 47, 55 cm
Section 3: 49, 128 cm
Secition 4: 105 cm
Section 6: 105 cm
Section 7: 6, 10 cm
TERTIARY LITHOLOGY: Siliceous claystone, dark gray, moderately bioturbated at base. Base of siliceous claystone:
Section 6: 147 cm

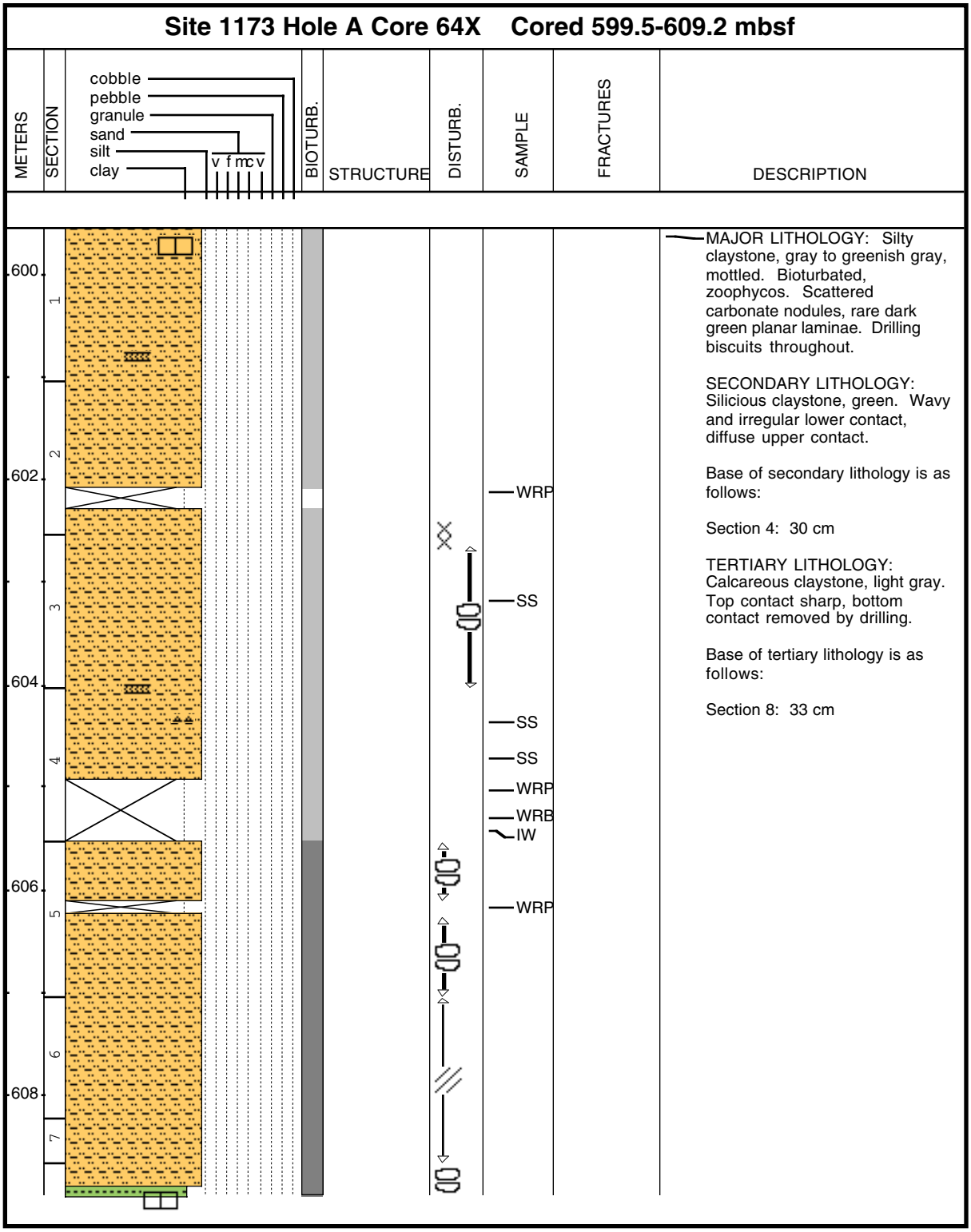
Core Photo


Site 1173 Hole A Core 62X Cored 580.4-589.9 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
582
584
586
588
590
1
2
3
4
5
6
7
H
SS
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray. Mottled due to moderate bioturbation throughout, scattered Zoophycos. Some carbonate cement along burrows (pale brown). Drilling biscuits throughout

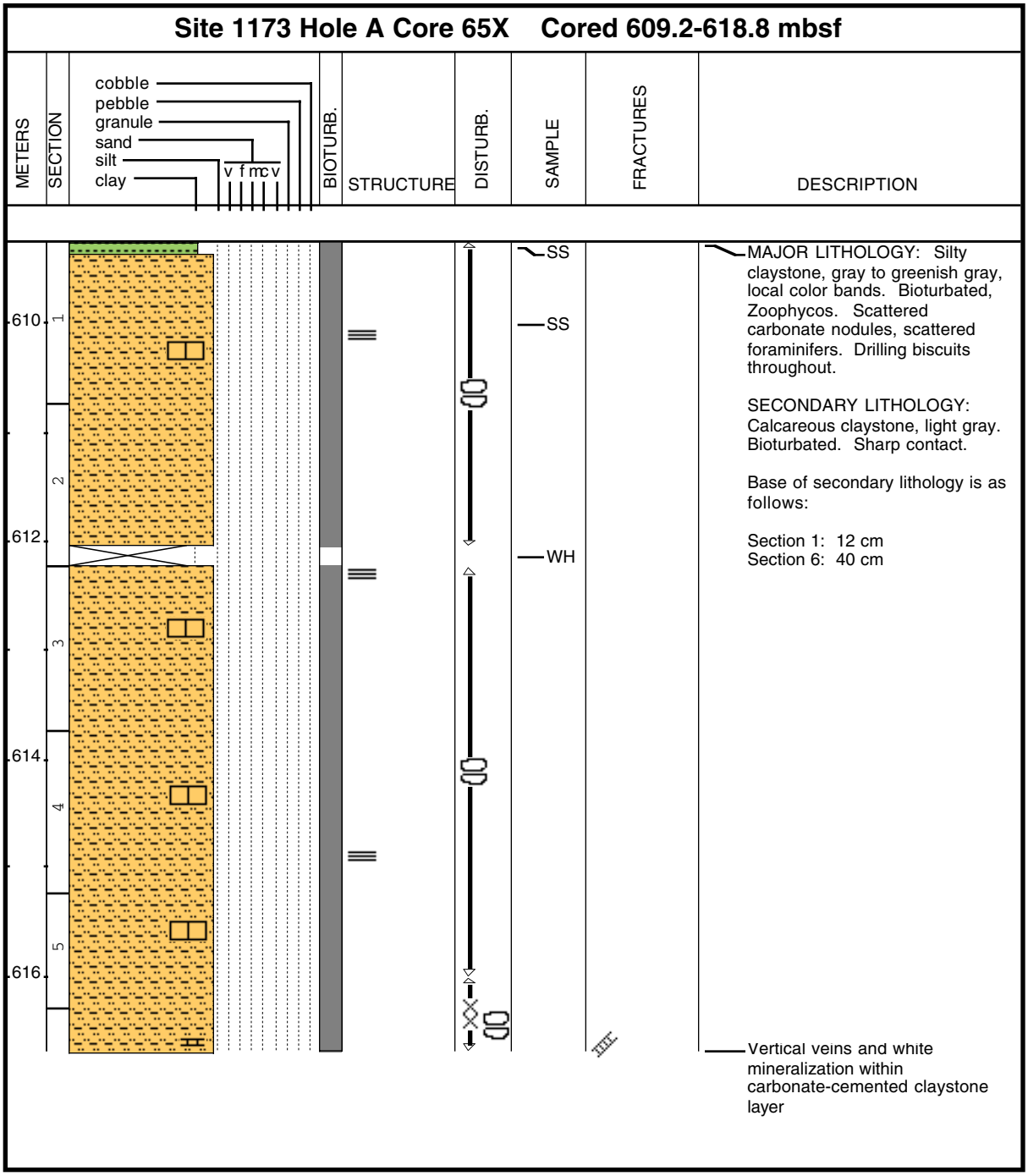
Core Photo


Site 1173 Hole A Core 63X Cored 589.9-599.5 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
1
SS
SS
SS
SS
IW
MAJOR LITHOLOGY: Silty claystone, gray, mottled and bioturbated. Local carbonate concretions. Drilling biscuits throughout.
SECONDARY LITHOLOGY: Carbonate-cemented claystone, brown. Plane-parallel bed. Top and bottom marked by 2 cm transition zones, greenish-brown.
Base of secondary lithology is as follows:
Section 1: 46 cm

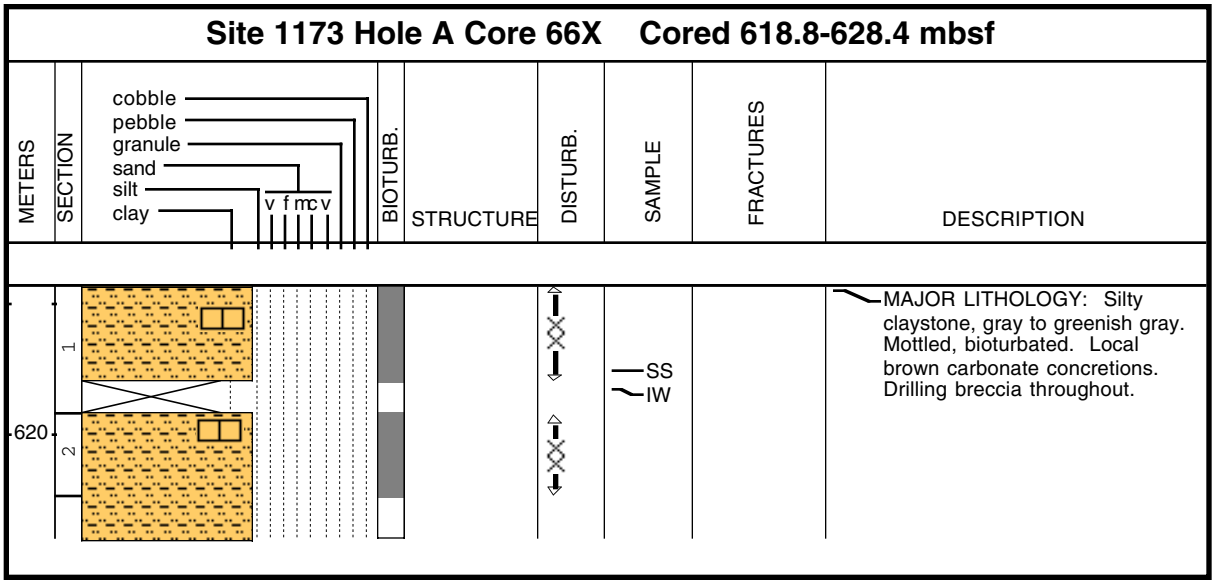
Core Photo


Site 1173 Hole A Core 64X Cored 599.5-609.2 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
600
602
604
606
608
1
2
3
4
5
6
7
WRP
SS
SS
SS
WRP
WRB
IW
WRP
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray, mottled. Bioturbated, zoophycos. Scattered carbonate nodules, rare dark green planar laminae. Drilling biscuits throughout.
SECONDARY LITHOLOGY: Silicious claystone, green. Wavy and irregular lower contact, diffuse upper contact.
Base of secondary lithology is as follows:
Section 4: 30 cm
TERTIARY LITHOLOGY: Calcareous claystone, light gray. Top contact sharp, bottom contact removed by drilling.
Base of tertiary lithology is as follows:
Section 8: 33 cm

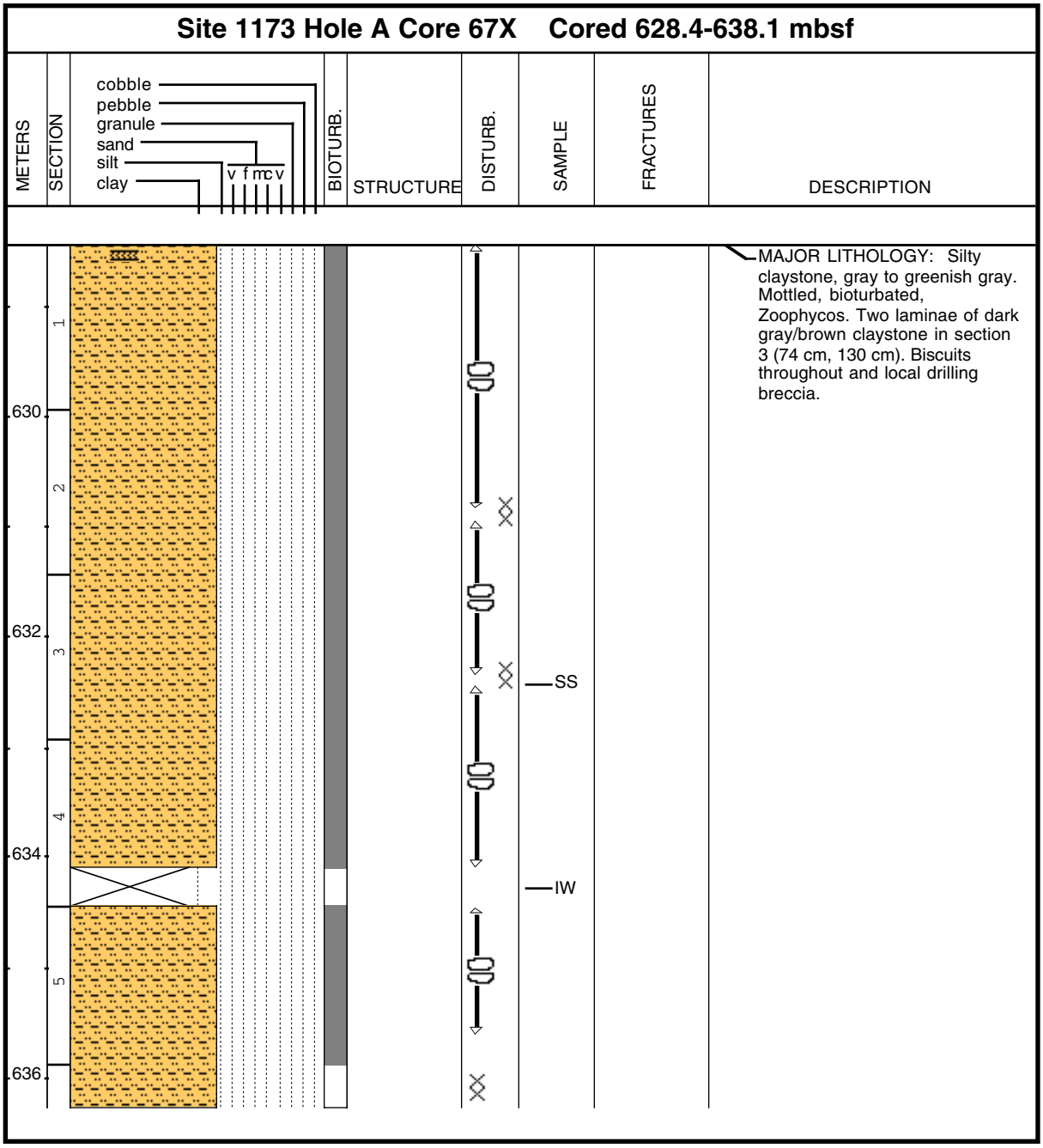
Core Photo


Site 1173 Hole A Core 65X Cored 609.2-618.8 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
610
612
614
616
1
2
3
4
5
SS
SS
WH
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray, local color bands. Bioturbated, Zoophycos. Scattered carbonate nodules, scattered foraminifers. Drilling biscuits throughout.
SECONDARY LITHOLOGY: Calcareous claystone, light gray. Bioturbated. Sharp contact.
Base of secondary lithology is as follows:
Section 1: 12 cm
Section 6: 40 cm
Vertical veins and white mineralization within carbonate-cemented claystone layer

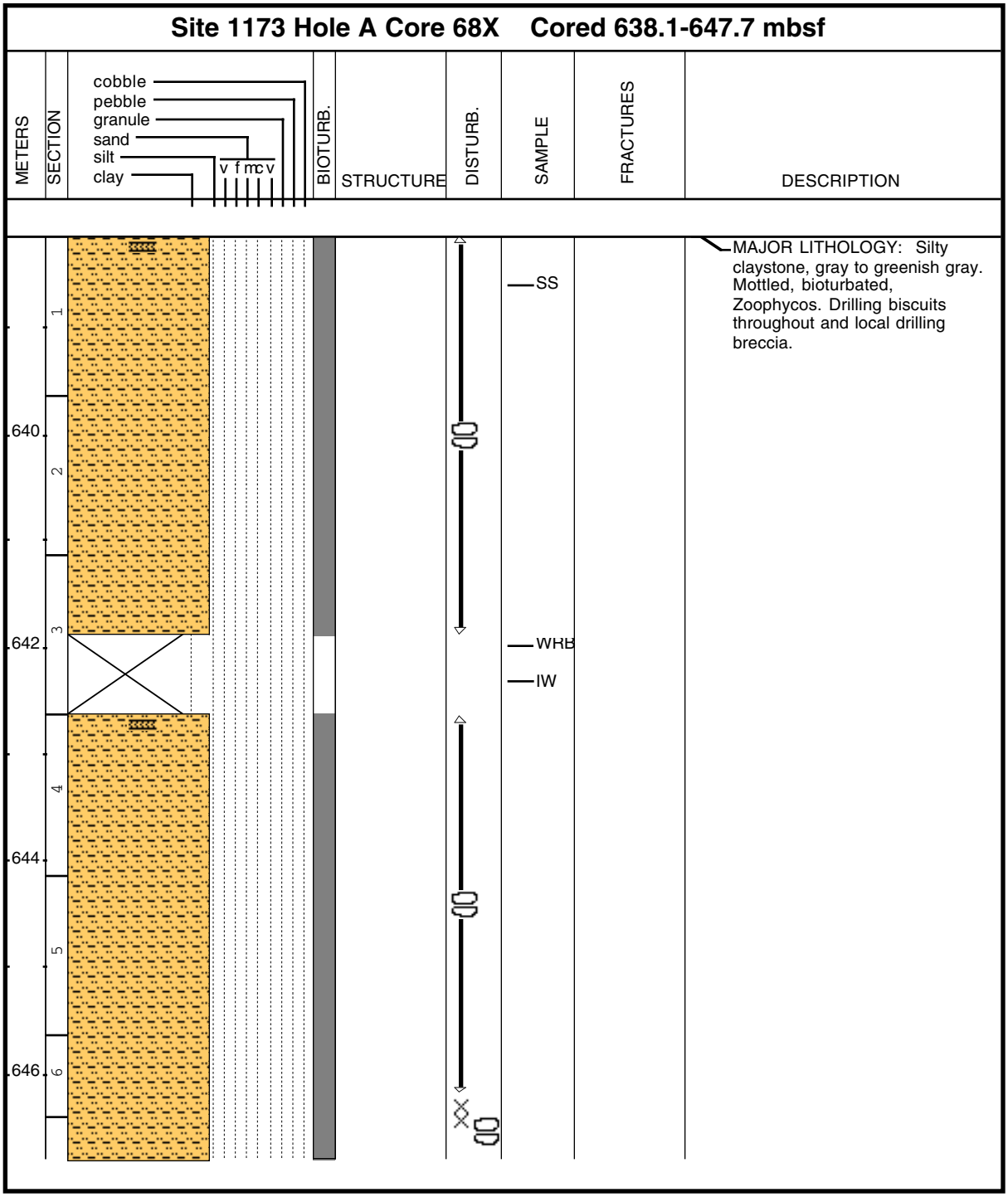
Core Photo


Site 1173 Hole A Core 66X Cored 618.8-628.4 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
620
1
2
SS
IW
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray. Mottled, bioturbated. Local brown carbonate concretions. Drilling breccia throughout.

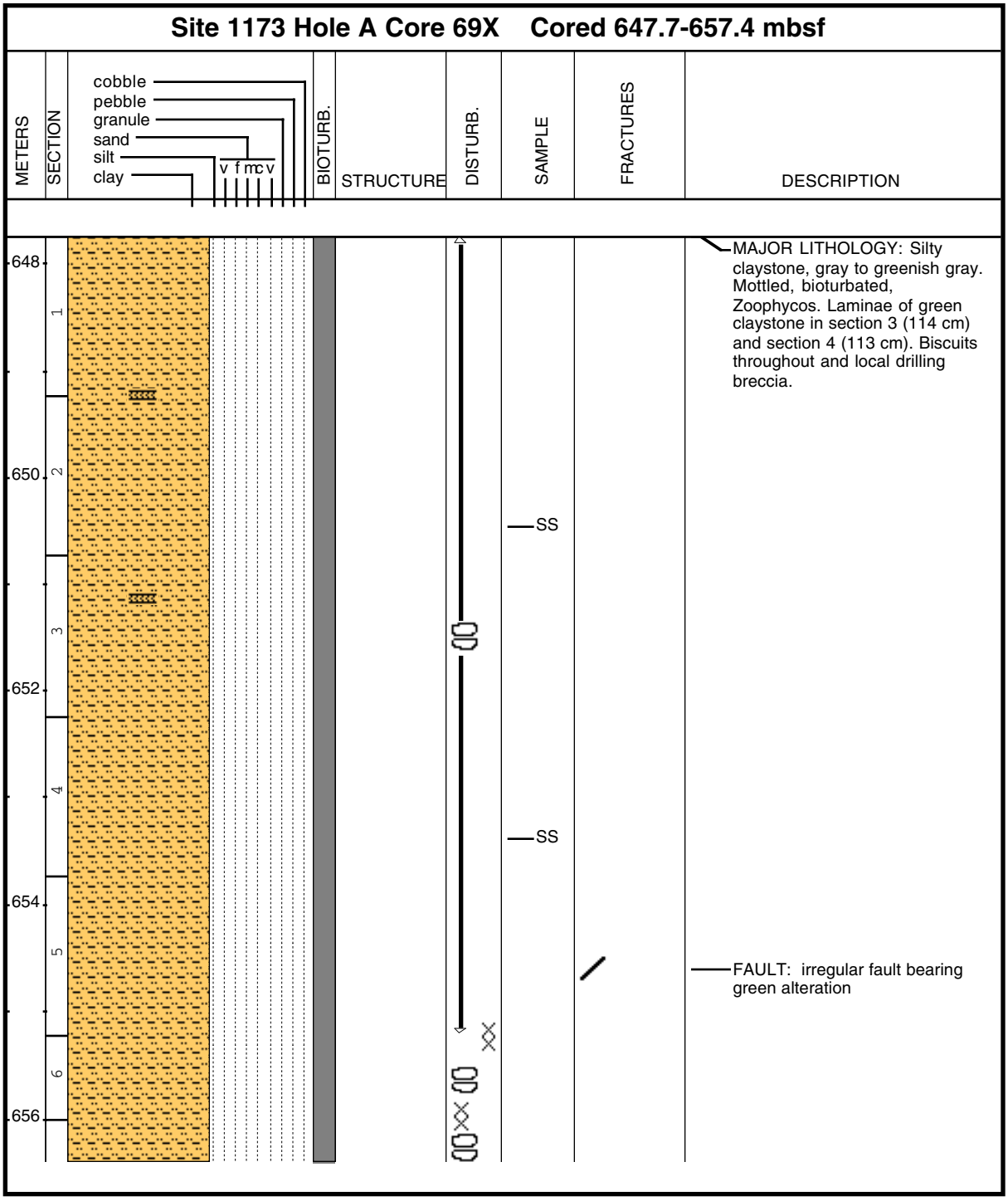
Core Photo


Site 1173 Hole A Core 67X Cored 628.4-638.1 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
630
632
634
636
1
2
3
4
5
SS
IW
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray. Mottled, bioturbated, Zoophycos. Two laminae of dark gray/brown claystone in section 3 (74 cm, 130 cm). Biscuits throughout and local drilling breccia.

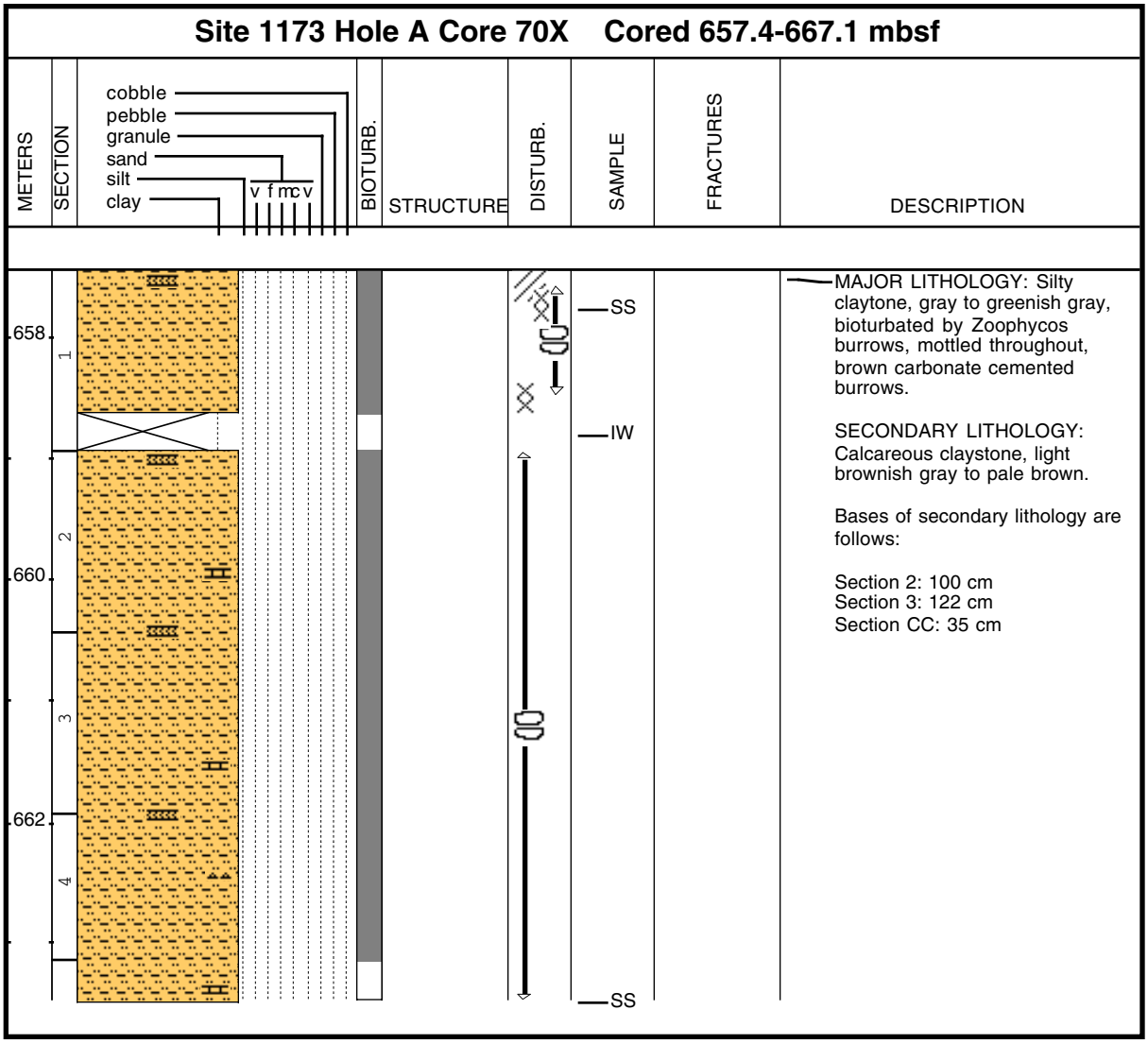
Core Photo


Site 1173 Hole A Core 68X Cored 638.1-647.7 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
640
642
644
646
1
2
3
4
5
6
SS
WRB
IW
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray. Mottled, bioturbated, Zoophycos. Drilling biscuits throughout and local drilling breccia.

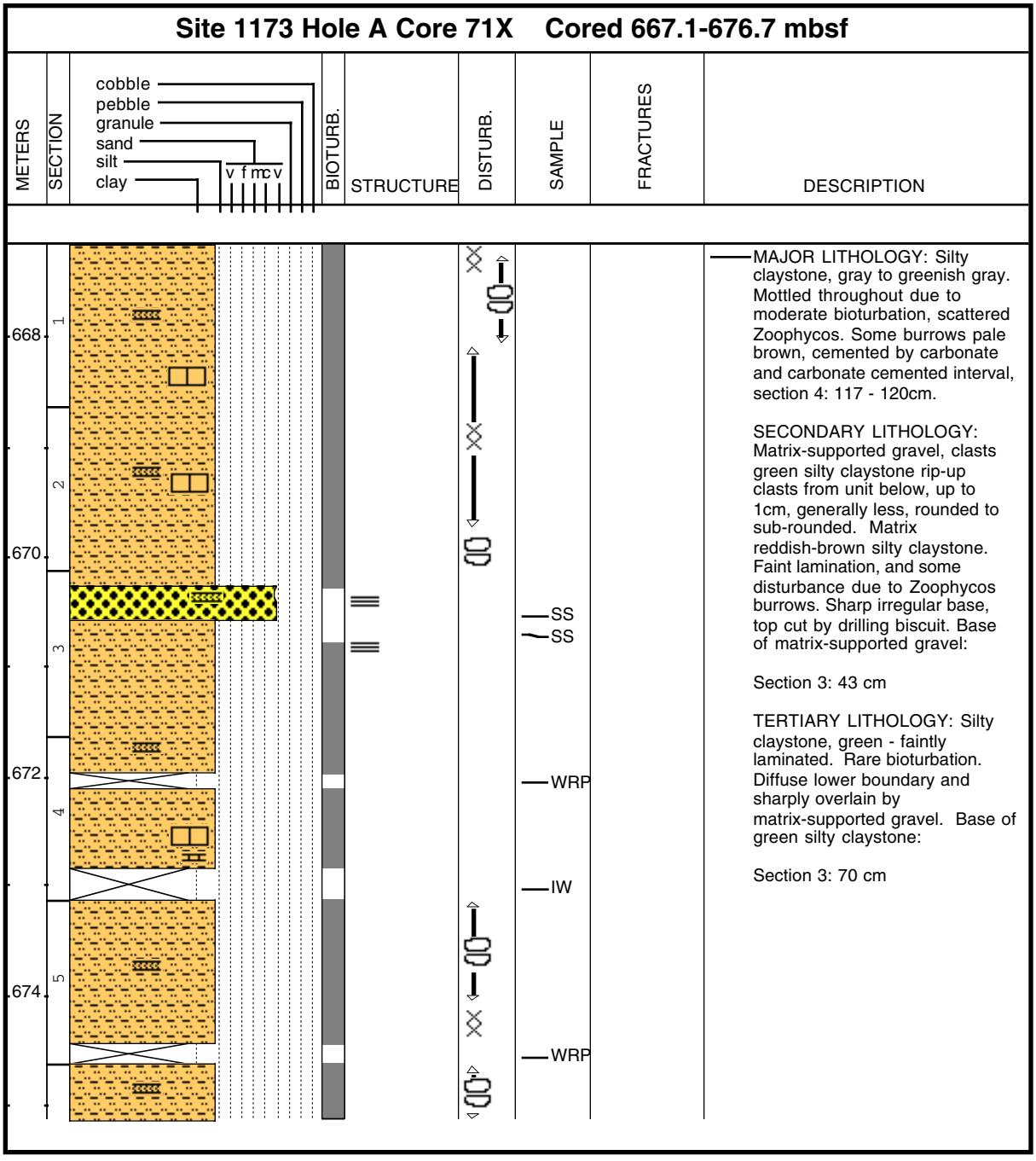
Core Photo


Site 1173 Hole A Core 69X Cored 647.7-657.4 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
648
650
652
654
656
1
2
3
4
5
6
SS
SS
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray. Mottled, bioturbated, Zoophycos. Laminae of green claystone in section 3 (114 cm) and section 4 (113 cm). Biscuits throughout and local drilling breccia.
FAULT: irregular fault bearing green alteration

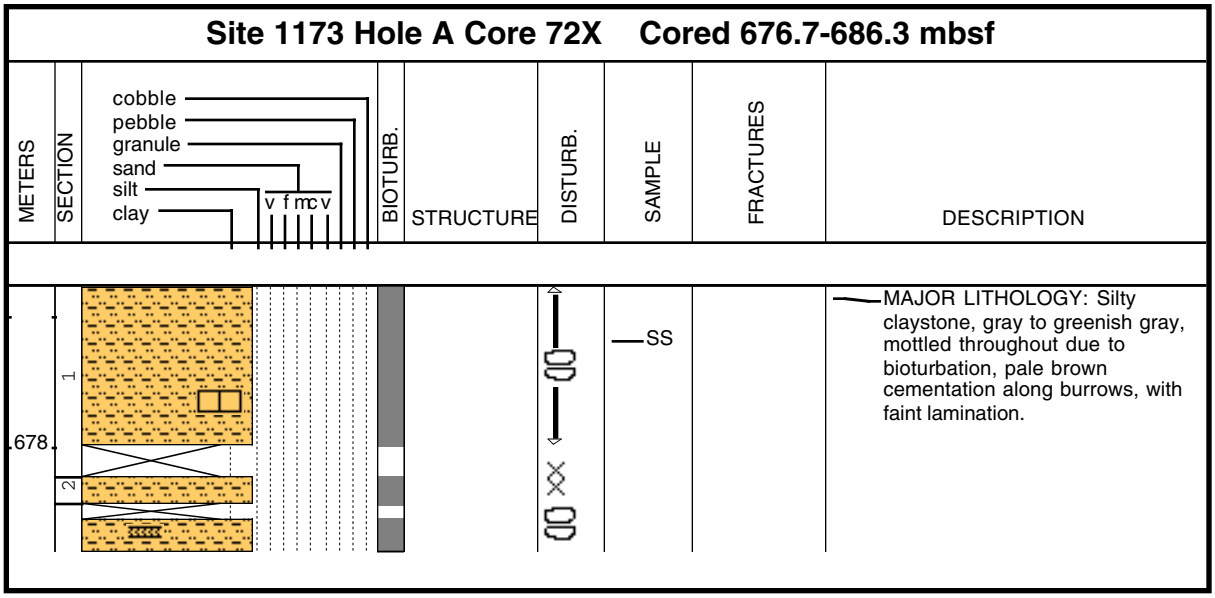
Core Photo


Site 1173 Hole A Core 70X Cored 657.4-667.1 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
658
660
662
1
2
3
4
SS
IW
SS
MAJOR LITHOLOGY: Silty claytone, gray to greenish gray, bioturbated by Zoophycos burrows, mottled throughout, brown carbonate cemented burrows.
SECONDARY LITHOLOGY: Calcareous claystone, light brownish gray to pale brown.
Bases of secondary lithology are follows:
Section 2: 100 cm
Section 3: 122 cm
Section CC: 35 cm

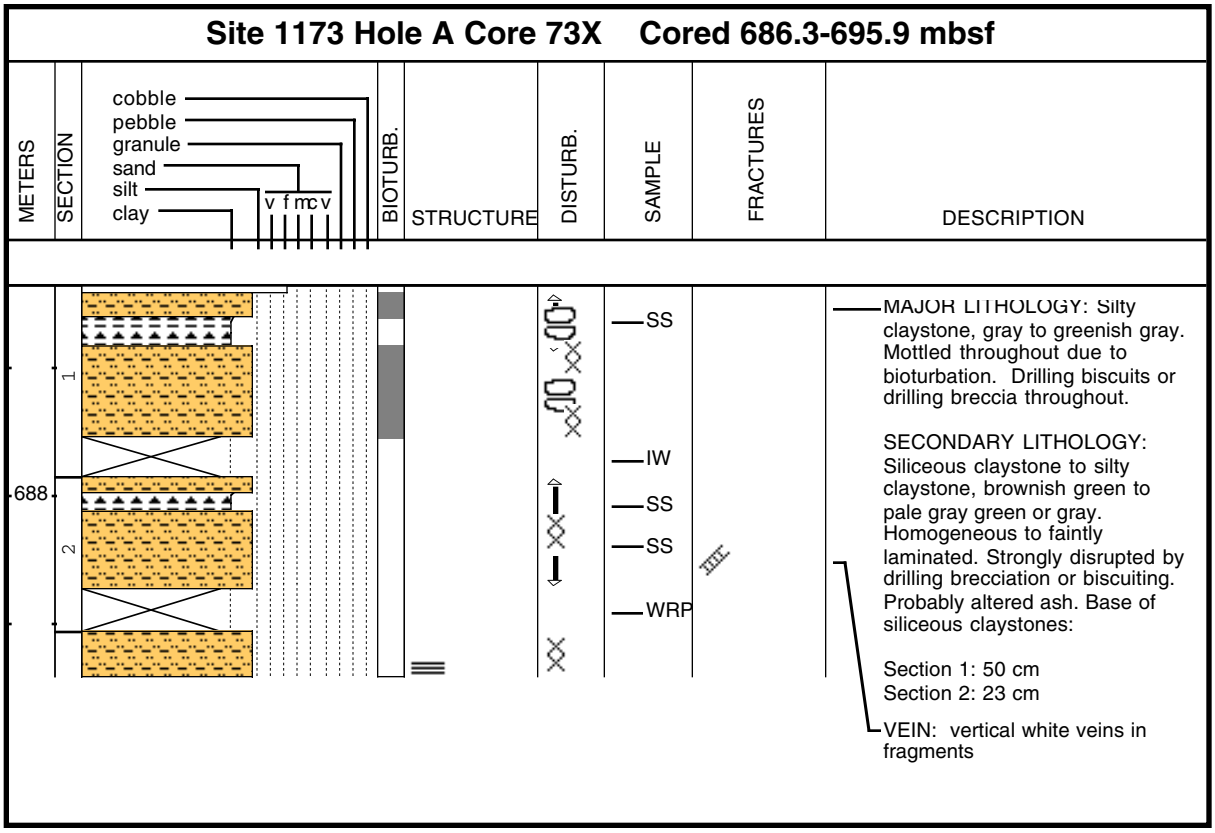
Core Photo


Site 1173 Hole A Core 71X Cored 667.1-676.7 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
668
670
672
674
1
2
3
4
5
SS
SS
WRP
IW
WRP
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray. Mottled throughout due to moderate bioturbation, scattered Zoophycos. Some burrows pale brown, cemented by carbonate and carbonate cemented interval, section 4: 117 - 120cm.
SECONDARY LITHOLOGY: Matrix-supported gravel, clasts green silty claystone rip-up clasts from unit below, up to 1cm, generally less, rounded to sub-rounded. Matrix reddish-brown silty claystone. Faint lamination, and some disturbance due to Zoophycos burrows. Sharp irregular base, top cut by drilling biscuit. Base of matrix-supported gravel:
Section 3: 43 cm
TERTIARY LITHOLOGY: Silty claystone, green - faintly laminated. Rare bioturbation. Diffuse lower boundary and sharply overlain by matrix-supported gravel. Base of green silty claystone:
Section 3: 70 cm

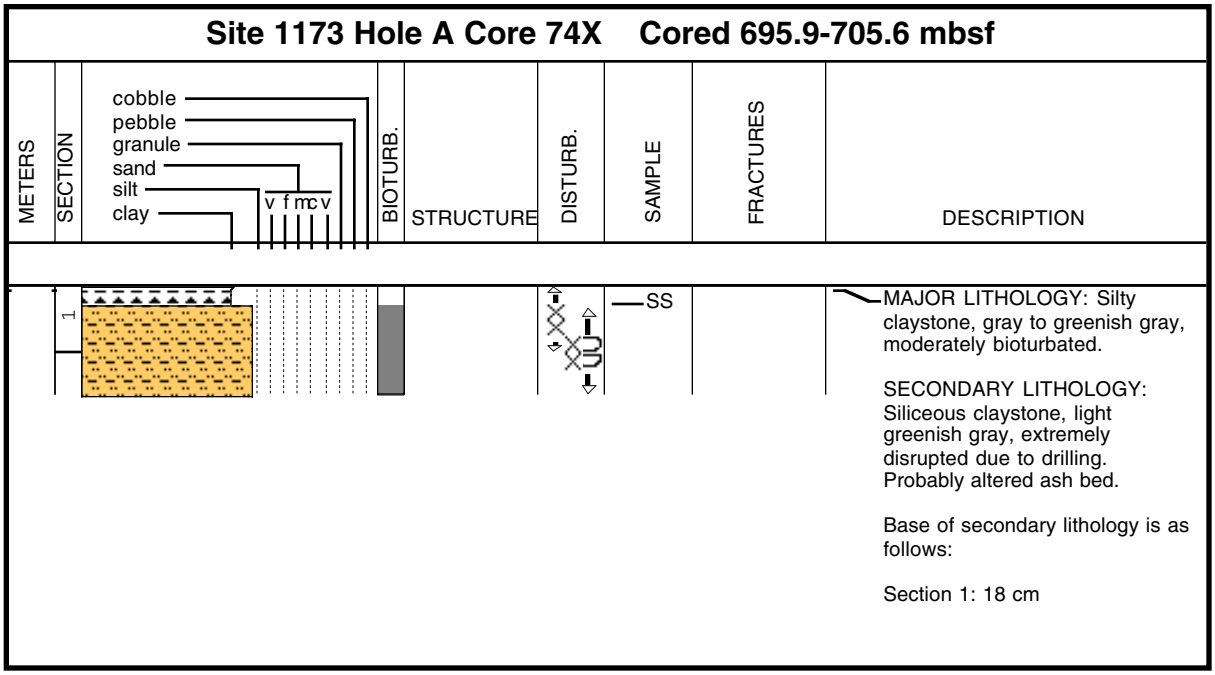
Core Photo


Site 1173 Hole A Core 72X Cored 676.7-686.3 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
678
1
2
SS
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray, mottled throughout due to bioturbation, pale brown cementation along burrows, with faint lamination.

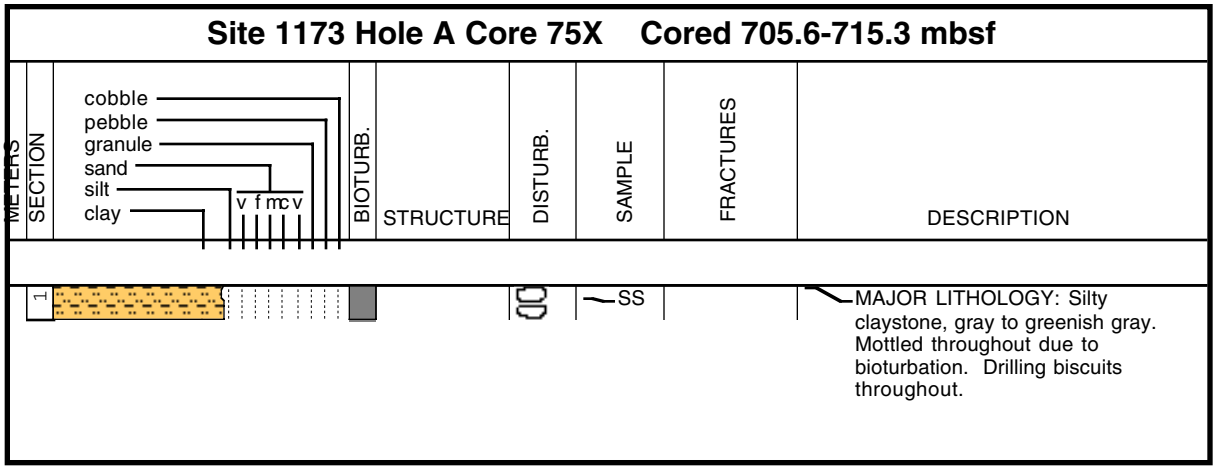
Core Photo


Site 1173 Hole A Core 73X Cored 686.3-695.9 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
688
1
2
SS
IW
SS
SS
WRP
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray. Mottled throughout due to bioturbation. Drilling biscuits or drilling breccia throughout.
SECONDARY LITHOLOGY: Siliceous claystone to silty claystone, brownish green to pale gray green or gray. Homogeneous to faintly laminated. Strongly disrupted by drilling brecciation or biscuiting. Probably altered ash. Base of siliceous claystones:
Section 1: 50 cm
Section 2: 23 cm
VEIN: vertical white veins in fragments

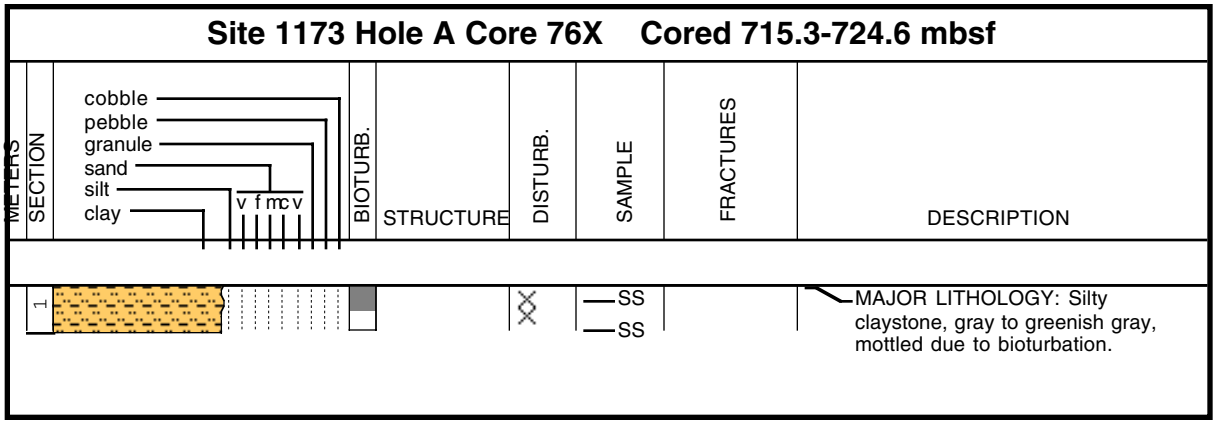
Core Photo


Site 1173 Hole A Core 74X Cored 695.9-705.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
1
SS
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray, moderately bioturbated.
SECONDARY LITHOLOGY: Siliceous claystone, light greenish gray, extremely disrupted due to drilling. Probably altered ash bed.
Base of secondary lithology is as follows:
Section 1: 18 cm

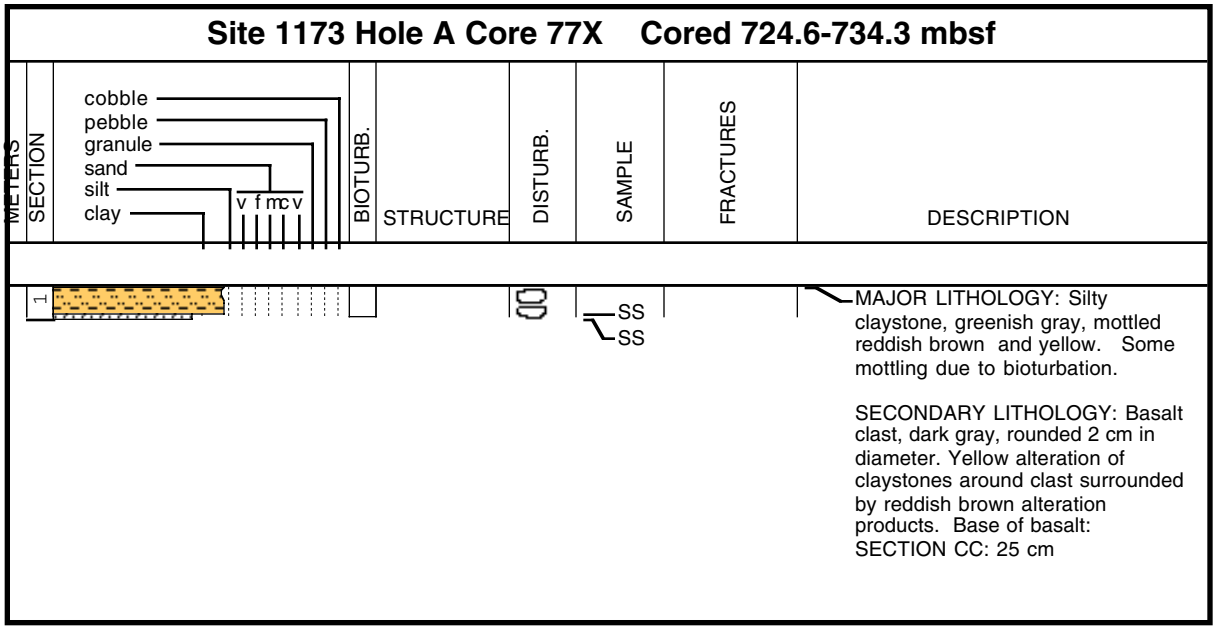
Core Photo


Site 1173 Hole A Core 75X Cored 705.6-715.3 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
1
SS
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray. Mottled throughout due to bioturbation. Drilling biscuits throughout.

Core Photo


Site 1173 Hole A Core 76X Cored 715.3-724.6 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
1
SS
SS
MAJOR LITHOLOGY: Silty claystone, gray to greenish gray, mottled due to bioturbation.

Core Photo


Site 1173 Hole A Core 77X Cored 724.6-734.3 mbsf
METERS
SECTION
cobble
pebble
granule
sand
silt
clay
v f m c v
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
FRACTURES
DESCRIPTION
1
SS
SS
MAJOR LITHOLOGY: Silty claystone, greenish gray, mottled reddish brown and yellow. Some mottling due to bioturbation.
SECONDARY LITHOLOGY: Basalt clast, dark gray, rounded 2 cm in diameter. Yellow alteration of claystones around clast surrounded by reddish brown alteration products. Base of basalt: SECTION CC: 25 cm

Sample							Texture			Mineral												Biogenic						Rock			
Hole	Core	CT	Section	Top (cm)	Depth (mbsf)	Lithology	Sand	Silt	Clay	Accessory Minerals	Biotite	Carbonate	Clay	Feldspar	Muscovite	Opaques	Pyrite	Quartz	Volcanic Glass	Zeolite	Diatoms	Foraminifers	Nannofossils	Radiolarians	Silicoflagellates	Sponge Spicules	Igneous Rock Fragments	Lithic Fragments	Metamorphic Rock Fragments	Comments
1173																															
A	1	H	1	15	0.15	D		D	A	R	R		A	C	R			P	A		P	*	P	R	R	P	A		P	Silty clay/clayey silt
A	1	H	2	70	2.2	D		D	A	R	P		A	A	R	R		P	C		P	*	R	R	R	P	C		P	Silty clay/clayey silt
A	1	H	3	47	3.47	D		D	A	R	P		A	A	R	R		P	P		P	*	R	R	*	P	P	R		Clayey silt
A	1	H	5	27	6.27	D		D	A	*	P		A	A	P	*		P	C		P	*	R	R	P	P	C	P		Silt to silty clay
A	1	H	5	47	6.47	D		A	D	*	R		D	C	*	*		P	P		P	*	*	R	R	P	P	*		Silty clay
A	1	H	5	65	6.65	M	D	P	C	P	P		P	C	P	P		C	P		P	*	R	*		P	A		C	Clayey sand
A	2	H	1	87	8.01	D		D	A	*	*		C	C		*		C	P		P		R			P	P	C		Silty clay/clayey silt
A	2	H	1	113	8.27	D		D	A				A	C			P	C	C		P		P		P	P				Clayey silt
A	2	H	2	80	9.44	D		D	A				A	C				C	P		P		R			P		C		Clayey silt
A	2	H	3	73	10.87	D		A	D				D	C			P	C	P		R		C		R	P		C		Silty clay with pyrite
A	2	H	4	71	12.35	D		D	C	P			C	A		P		A			R		R					P		Clayey silt
A	2	H	7	35	16.49	M	C	D		P				A		P		A	R			*		*				A		Coarse silt to sandy silt
A	3	H	1	68	17.32	D		D	C	R			C	A		P		A			R		P					C		Clayey silt
A	3	H	3	95	20.59	M	C	A	40				D					C										P		Fine sand, (from sieved sample - floaters)
A	3	H	5	40	23.04	M	C	D	C	R			C	A		P		A			R	R	P					A		Silt to sandy silt
A	4	H	3	65	28.53	D		D	A	R			A	C		P		C	R		P			R						Clayey silt to silty clay
A	4	H	5	80	31.68	M	D	A	P	R			R	A		P		A	P		*	*	*					A	*	Silty sand
A	4	H	6	47	32.85	D	*	C	D	P			D	C				C	P		R		C	R	R	P		P		Silty clay
A	4	H	8	11	35.49	D	P	D	A	P			C	A		P		A	P		*	*	P					C		Clayey silt to sandy silt
A	5	H	1	38	36.02	M	D	C	C				*	C				P	D				P	*				P		Sand to clayey sand
A	5	H	2	61.5	37.76	M	P	D	A				A	C				P	P		R		P	*	*	C		R		Sandy silt
A	5	H	2	105	38.19	D	*	D	A				A	C				C	*		P		R	*	*	P				Silty clay
A	5	H	6	117	44.31	M	C	D	A	C			A	C				P	A					*		*		*		Volcanic ash
A	6	H	2	44	47.08	D	*	C	D	C			D	P				P	C		*		C	*	*	R		*		Silty clay
A	7	H	1	111	55.75	D	*	C	D	P				C				C	A		C		R	P	C	D		R		Silty clay
A	7	H	4	15	59.29	M	C	D	P	P				C				C	D		R		P	R	R	C		*		Volcanic ash
A	7	H	4	37	59.51	D		D	C		R		P	R	*			A	A		P		P	R	P	R				Clayey silt
A	7	H	6	8	62.22	D		D	C				C				P									D				Cluster of sponge spicules in silty clay
A	8	H	3	44	67.58	D		A	A				D	P				P	P		P		C	R	R	R		P		Clayey silt
A	8	H	5	70	70.84	M	D	A	C	P				A				A	C									C		Silty sand
A	9	H	1	101	74.65	M	D	C	C	C								C	A		P		R		R	R		C		Volcanic ash
A	9	H	3	81	77.45	D		A	A	C				C				C	R		P			R				A		Clayey silt
A	10	H	2	92	85.56	M	D	A	C	P			C	P				P	A		P	P	C	P		P				Volcanic ash
A	10	H	3	2	86.16	M	D	A	C	P			C	P				P	A			P	P					P		Volcanic ash
A	10	H	4	72	88.36	D		A	A				A	R				P	D		P		R	P	R	P				Silty clay
A	10	H	6	135	92.05	M	A	A	C	P			P	P				P	D				P					P		Volcanic ash
A	11	H	5	121	99.85	M	A	A	A					P				P	A									A		Volcanic ash/lapilli
A	12	H	2	134	104.98	M	D	A	C									P	D											Volcanic ash
A	12	H	4	111	107.75	M	D	A	C	P				P				P	D				C			P				Volcanic ash
A	12	H	4	125	107.89	M	D	A	C	C				P				P	A		R		C	P	R	P		A		Volcanic ash
A	12	H	6	9	109.73	M	A	A	C	P								P	D				R							Volcanic ash
A	13	H	2	94	114.08	D		A	D	R			A					P	P		R		C			P		C		Silty clay
A	13	H	3	145	116.09	D		D	A				A	P	P			P	C				P					A		Silty clay
A	14	H	3	106	125.2	M	D	A	C				C	P				P	D				P							Volcanic ash (white)

Sample							Texture			Mineral											Biogenic						Rock			
Hole	Core	CT	Section	Top (cm)	Depth (mbsf)	Lithology	Sand	Silt	Clay	Accessory Minerals	Biotite	Carbonate	Clay	Feldspar	Muscovite	Opaques	Pyrite	Quartz	Volcanic Glass	Zeolite	Diatoms	Foraminifers	Nannofossils	Radiolarians	Silicoflagellates	Sponge Spicules	Igneous Rock Fragments	Lithic Fragments	Metamorphic Rock Fragments	Comments
1173																														
A	14	H	7	29	130.18	D		A	A				D	P			P	P				P						C		Silty clay
A	15	H	1	70	131.34	D		A	D				D		R			P	P		C	R	P	P		P				Silty clay
A	15	H	1	143	132.07	M	A	A	A	C				P				C	C		R		C					C		Volcanic ash
A	16	H	1	40	140.54	D		A	D	R			A	P		P		P	C		P	R	R	P	P	P				Silty clay
A	16	H	2	90	142.54	D		A	D	P			A	P				P	A				R	*	*	P				Silty clay
A	16	H	5	113	147.27	M		D	*	R									D											Volcanic Ash
A	17	H	1	50	150.14	M		D	*	P				P		P		P	D											Volcanic Ash
A	17	H	3	50	153.14	D		A	A	P			A	P		P		P	A			R	C	R	R	P				Silty clay
A	18	H	4	85	164.49	D		D	A				A	R		R		P	A				P			R				Silty clay
A	19	H	1	20	168.84	M	C	D		P									D											Volcanic ash (white to green)
A	19	H	1	93	169.57	M	A	A	C	R								P	D									P		Volcanic ash (pale gray)
A	19	H	1	96	169.6	M	C	D	C							A		P	A									P		Volcanic ash (dark gray)
A	19	H	1	97	169.61	M	C	D								R		P	D									P		Volcanic ash (pale gray)
A	19	H	3	103	172.67	M	A	A	C									R	D											Volcanic ash (white)
A	20	H	2	27	179.91	M	C	D	C							C		P	D									R		Volcanic ash (medium gray)
A	21	H	3	53	191.17	D		D	A				A		R			P	P				A			R				Silty Clay
A	21	H	6	111	196.25	M	D	A	C	P				P				P	D				P							Volcanic ash
A	22	H	1	76	197.9	M	C	D	C	P								P	D				R							Volcanic ash
A	22	H	2	81	199.45	M	C	D	C	P				P				P	D				P							Ash bed
A	22	H	2	56	199.2	M	A	A	C	P				P				P	D				P							Ash bed
A	22	H	2	99	199.63	D		D	A									A										A		Silty Clay
A	23	H	1	129	207.93	M	C	A	A	P								P	D	P								P		Volcanic ash
A	23	H	3	52	210.16	M	A	A	A	P						P		P	D	P								P		Volcanic ash, black
A	23	H	5	96	213.6	D		A	D	P			D					P										P		Silty clay
A	23	H	6	20	214.34	D	C	A	D				D					P					P			P		P		Silty clay
A	24	H	1	80	216.94	D	P	D	C				A	R				P										A		Silty clay
A	24	H	3	102	220.16	M	D	C	C	P				P				P	D	R			P							Volcanic ash (dark gray to green)
A	25	X	3	33.5	228.98	M	D	A	C	P						P		C	D											Volcanic ash (pale gray)
A	25	X	3	35	228.99	M	A	A	A	R			P					P	D									P		Volcanic ash (white)
A	25	X	3	38	229.02	M	C	D	A	P			C			P		P	D									P		Volcanic ash (green)
A	25	X	5	21	231.85	M	D	A	P	P						C		C	D									C		Volcanic ash
A	26	X	1	80	236.04	D	C	A	D				D					P	C											Silty clay
A	26	X	5	72	241.96	M	C	D	P							P		P	D	R								P		Volcanic ash (light/dark gray)
A	27	X	3	46	248.4	D		A	D				D					P	P	R			C					P		Silty clay
A	28	X	3	100	258.54	D	C	C	D				D		R			P	C	P			C	R				P		Silty clay
A	28	X	CC	8	264.13	M	C	D	C	P						C		P	D									R		Volcanic ash (dark gray laminae)
A	28	X	CC	12	264.17	M	A	D	C	P						P		P	D	P										Volcanic ash (pale gray)
A	29	X	1	106	265.1	M	A	D	C	P						C		P	D	P										Volcanic ash (gray)
A	29	X	3	105	268.09	D		A	A	R																				Silty clay
A	29	X	3	129	268.33	M	C	A	A	P			A					P	D	P										Tuffaceous silty clay
A	29	X	3	105	268.09	D		A	A				D			P		P	A	P			C							Silty clay
A	30	X	2	67	275.81	D	C	A	D				A			P		C	C	P			P					P		Silty clay
A	30	X	4	11	278.25	M	C	A	A							P		P	D	P	P									Volcanic ash (gray)
A	31	X	2	107	285.81	M	C	A	A	R			A						A	P			P					P		Silty clay (tuffaceous green laminae)
A	32	X	3	68	296.62	M	A	D	C	R						C			D	P								R		Volcanic ash (dark gray)
A	32	X	3	74	296.68	M	A	A	C				P			R		P	D	P										Volcanic ash (white)

Sample							Texture			Mineral											Biogenic						Rock			
Hole	Core	CT	Section	Top (cm)	Depth (mbsf)	Lithology	Sand	Silt	Clay	Accessory Minerals	Biotite	Carbonate	Clay	Feldspar	Muscovite	Opaques	Pyrite	Quartz	Volcanic Glass	Zeolite	Diatoms	Foraminifers	Nannofossils	Radiolarians	Silicoflagellates	Sponge Spicules	Igneous Rock Fragments	Lithic Fragments	Metamorphic Rock Fragments	Comments
1173																														
A	33	X	3	119	306.83	M	D	A	C	P								P	D				P							Volcanic ash, purplish-gray
A	33	X	5	83	309.47	D	R	C	D				D					P					P					P		Silty clay
A	34	X	1	100	312.94	D	C	A	D				D	R				P	P	P			C					P		Silty clay
A	34	X	7	10	321.04	M	D	A	C				C	P		R		P	D	P	R		P							Volcanic ash, brown-gray
A	35	X	1	100	322.54	D	P	A	D				D					P		P			P					P		Silty clay
A	36	X	1	110	332.24	D		A	D	R			D	R				P					R					R		Silty clay
A	36	X	2	115	333.79	M	D	A	C	P								P	D	P										Volcanic ash, dark gray
A	37	X	3	1	343.75	M	D	A	C					P				P	D				P					P		Volcanic ash, dark brown/gray
A	37	X	3	88	344.62	M	D	A	C				C					A	C									A		Sand
A	37	X	4	77	346.01	D	C	A	D				D					P		R			P					P		Silty clay
A	38	X	2	102	352.86	M	C	A	D			C	A					P		P								A		Silty clay clast in clay-supported gravel
A	38	X	2	107	352.91	M		A	D	R		A	A					P	C	P										Clay matrix with carbonate cement to gravel
A	39	X	1	98	360.92	M	C	D	C							C		P	D	C								C		Volcanic ash - glass altered (dark gray)
A	39	X	4	80	365.24	M		C	D				D		R			P		P			A					P		Claystone with abundant nannofossils
A	39	X	4	85	365.29	D	P	A	D	P			D					P	C	P			P					P		Silty clay to clayey silt
A	39	X	6	143.5	368.87	M	C	D	C							C			D	P								P		Volcanic ash - glass altered (pink)
A	40	X	3	86	373.5	M	C	A	D				A			C		P	A	C			C					R		Volcanic ash - altered glass (black)
A	40	X	7	41	379.05	D	C	D	A	P		P	D			P		P	C	P			C					P		Silty clay / clayey silt
A	41	X	4	39	384.13	M		D	C	P			C			D		P	C	P										Volcanic ash - glass altered (dark gray)
A	41	X	6	30	387.04	M	C	D	C				C			C			D	C								P		Volcanic ash - glass altered (dark gray)
A	41	X	6	34	387.08	M	C	D	A	P			C			C		C	D	P										Volcanic ash - glass altered (green)
A	42	X	3	45	392.29	M	P	C	D				D					P		P			P							Sandy clay (green)
A	42	X	5	89	395.73	D		A	D				D					P		P			P							Silty clay
A	43	X	1	126	399.7	M		C	D				D							R			P							Silty clay
A	43	X	4	68	403.62	D		A	D				D					P		P			P							Silty clay
A	43	X	5	27	404.71	D		A	D				D							P										Silty claystone, dark gray
A	44	X	2	64	410.18	D		A	D				D					P		P			P							Silty claystone
A	44	X	6	141	416.95	D		A	D				D					P		P			P							Silty claystone
A	44	X	7	11	417.15	D		A	D				D					P		P										Silty claystone
A	45	X	1	11	417.75	D		A	D				D							P			P							Silty claystone
A	45	X	1	32	417.96	M		A	D				D							P			R							Silty claystone, green
A	45	X	4	81	422.95	D		A	D				D					R		P			R							Silty claystone
A	46	X	1	91	428.15	M		D	A				D			P		P		P			R							Silty claystone, green
A	46	X	5	57	433.81	D		D	A				D			R		A		P			R							Silty claystone
A	47	X	3	8	439.52	D		D	C	P			D					P			P		P					P		Silty claystone
A	47	X	3	21	439.65	D	C	A	A			C	D							P			A							Silty claystone
A	47	X	3	21	439.65	M		C	D				D							P			A							Claystone with abundant nannofossils (cement)
A	47	X	5	71	443.15	D	C	C	D				A					P		P			C					C		Silty claystone
A	48	X	1	90	446.74	D	C	A	D			P	D					P		P			C							Silty claystone (dark gray)
A	48	X	4	104	451.38	D	P	C	D			P	D			R		P		P								R		Silty claystone
A	48	X	5	87	452.71	D	C	A	D	P			D			C		P		P								C		Silty clay (green laminae)
A	49	X	3	95	458.99	D		A	D			P	D			P		P		P								P		Silty clay
A	49	X	4	119	460.73	M		D	D			C	A					P		P			C							Claystone with abundant nannofossils (cement)
A	49	X	5	23	461.27	D		A	D			P	D			P		P		P								P		Silty claystone (dark alteration)
A	49	X	6	130	463.84	M	A	A	C				D			C			P	P								P		Siliceous claystone (altered glass)
A	50	X	5	18	470.82	M		D				D	C			P				P										Carbonate cemented burrow

Sample							Texture			Mineral											Biogenic						Rock			
Hole	Core	CT	Section	Top (cm)	Depth (mbsf)	Lithology	Sand	Silt	Clay	Accessory Minerals	Biotite	Carbonate	Clay	Feldspar	Muscovite	Opaques	Pyrite	Quartz	Volcanic Glass	Zeolite	Diatoms	Foraminifers	Nannofossils	Radiolarians	Silicoflagellates	Sponge Spicules	Igneous Rock Fragments	Lithic Fragments	Metamorphic Rock Fragments	Comments
1173																														
A	50	X	6	120	473.34	M	C	D	A			A	A			C			P	R			A					P		Claystone with abundant nannofossils (cement)
A	51	X	4	33	479.17	M		A	D	R		D	A																	Carbonate sitstone (concretion)
A	51	X	5	27	480.61	D	A	A	A				D			C				P								C		Silty claystone
A	51	X	6	21	482.05	D		A	D				D					P					*							Silty claystone
A	52	X	1	72	484.76	M		D	C			D	P					C					R							Silty Claystone (Brown laminae)
A	52	X	3	71	487.75	D		D	C				D			R		C		P			R							Silty Claystone
A	53	X	5	73	500.47	D		D	C			R	D			P		A		P			P							Silty claystone
A	54	X	1	100	504.34	D	P	A	D			P	D					P												Silty claystone
A	54	X	4	94	508.78	M	C	D	A			D	A					R		R										Carbonate cemented claystone
A	55	X	2	80	515.34	D	P	A	D			P	D					P												Silty claystone
A	55	X	2	115	515.69	M	C	A	D			D	A			*				*										Carbonate cemented claystone
A	56	X	3	91	526.25	D		C	D				D					R		*			P							Silty claystone
A	56	X	4	45	527.29	M		A	D			D	A			R														Carbonate cemented claystone
A	56	X	CC	22	532.06	M		A	D			A	D			R														Carbonate cemented claystone
A	57	X	2	19	533.73	M	C	D	C			D	A					P		R										Carbonate cemented claystone
A	57	X	4	69	537.23	M	C	D	C				D			C		P		P								P		Siliceous claystone dark gray
A	57	X	6	69	540.23	D		A	D	P			D			P		P		P			C							Silty claystone
A	58	X	3	11	544.85	M		D	A				A			A		P	P	C								P		Siliceous claystone/siltstone (dark gray)
A	58	X	4	67	546.91	M		A	A			A	A					P	P				P							Carbonate cemented claystone
A	58	X	6	82	550.06	M	C	D	C				D			P				P										Siliceous claystone (altered ash)
A	59	X	1	26	551.6	M	C	D	C				D			P			P	P										Siliceous claystone (green - altered ash)
A	59	X	5	120	558.54	M	C	D	C	P			A			A				P										Siliceous claystone (grey - altered ash)
A	60	X	2	130	563.84	M	C	D	C				D			C		P	R	C										Siliceous claystone (dark gray - altered ash)
A	61	X	3	124	574.98	M		A	D			A	D					P		P										Carbonate cemented claystone layer
A	62	X	5	46	586.9	D		C	D			P	D					P	P	P										Silty claystone
A	63	X	1	4	589.98	M		A	D			D	A																	Carbonate cemented claystone
A	63	X	1	39	590.33	M		A	D			D	A							R										Carbonate cemented claystone
A	63	X	1	42	590.36	M	R	A	D			D	A					R												Carbonate cemented claystone
A	63	X	1	77	590.71	D		A	D			P	D					R		R										Calcareous claystone
A	64	X	3	64	603.18	D		A	D				D					P					R							Silty claystone
A	64	X	4	30	604.34	M		A	D				D			P				R			R							Silty claystone (green)
A	64	X	4	64	604.68	M		A	D			A	A							P										
A	65	X	1	5	609.29	M		C	D		*	D	A																	Calcareous claystone
A	65	X	1	76	610	D		A	D		*	C	D	R		R		R												Silty claystone
A	66	X	1	65	619.49	D		A	D		*	P	D		*	R		R					P							Silty claystone
A	67	X	3	97	632.41	D		A	D		*		D			R		P					R							Silty claystone
A	68	X	1	45	638.59	D		C	D	P		P	A			P		P					A							Silty claystone
A	69	X	2	120	650.44	D	A	A	A	P		P	D			P		P					P							Silty claystone
A	69	X	4	113	653.37	D	C	A	A				D			P		P					P							Silty claystone
A	70	X	1	33	657.77	D	C	A	A	P			D			P		P	P									P		Silty claystone
A	70	X	CC	33	663.47	M	C	A	A			D	A					R												Carbonate cemented claystone
A	71	X	3	39	670.53	M		A	D	P		P	A			P		P		A										Brown silty claystone matrix to gravel
A	71	X	3	60	670.74	M	A	A	A				D			P		P	P	C								P		Green silty claystone to siliceous claystone
A	72	X	1	42	677.16	D		A	D	P		R	D			P			P	C										Silty claystone
A	73	X	1	31	686.65	M	C	A	D	P			D			P			P	C										Siliceous claystone (greenish brown)
A	73	X	2	18	688.02	M	C	A	A				D					P	P	C								P		Siliceous claystone

Sample							Texture			Mineral											Biogenic						Rock			
Hole	Core	CT	Section	Top (cm)	Depth (mbsf)	Lithology	Sand	Silt	Clay	Accessory Minerals	Biotite	Carbonate	Clay	Feldspar	Muscovite	Opaques	Pyrite	Quartz	Volcanic Glass	Zeolite	Diatoms	Foraminifers	Nannofossils	Radiolarians	Silicoflagellates	Sponge Spicules	Igneous Rock Fragments	Lithic Fragments	Metamorphic Rock Fragments	Comments
1173																														
A	73	X	2	53	688.37	M	C	A	A			P	D					P		C								P		Siliceous claystone
A	74	X	1	13	696.07	M	A	A	A			P	D					P	P	P								P		Siliceous claystone
A	75	X	CC	7	705.71	D	C	A	A			P	D			P		P		C			P					P		Silty claystone
A	76	X	CC	10	715.44	D		A	D	P		P	D			P				P			C							Silty claystone
A	76	X	CC	36	715.7	M	C	A	A	P			D			P		P		C								P		Siliceous claystone
A	77	X	CC	22	724.86	D	C	A	A			P	D			P		P										P		Red stained silty claystone
A	77	X	CC	23	724.87	D	C	A	A			P	D			P				C			C					P		Yellow stained silty claystone

Sample						Texture			Mineral											Biogenic								Rock				
Hole	Core	CT	Section	Top (cm)	Depth (mbsf)	Sand	Silt	Clay	Accessory Minerals	Amphibole	Carbonate	Clay	Fe Oxide	Feldspar	Mica	Opaques	Pyrite	Quartz	Volcanic Glass	Diatoms	Foraminifers	Radiolarians	Nannofossils	Plant Debris	Silicoflagellates	Sponge Spicules	Carbonate Grains	Lithoclast	Metamorphic Rock Fragments	Pumice	Volcanic Fragments	Comments
1173																																
A	2	H	7	35	16.49	A	D		P					A	C	P		A			P				P					P	P	Sandy silt
A	3	H	3	95	20.59	A	D		P					A	P	P		A			P	P			P	P					P	Sandy silt
A	4	H	3	41	28.29	D	A		P					A	C	P		A			P					R	R			P	P	C	Sand
A	7	H	2	65	56.79	D	A		P					A	C	P		A		R	P	R				R				P	P	P	Sand
A	8	H	5	72	70.86	D	A		P					A	P	C		A			R				R					P	P	P	Sand
A	9	H	1	11	73.75	D	A		P					A		P		A			P									P	P	A	Silty sand
A	21	H	4	99	193.13	A	A							C			A		A														Pyritised pumice clast
A	65	X	CC	32	616.62			D			A	A		C																D		Carbonate-cemented claystone - vein
A	77	X	CC	25	724.89	D						C	A		C			D														Altered basalt