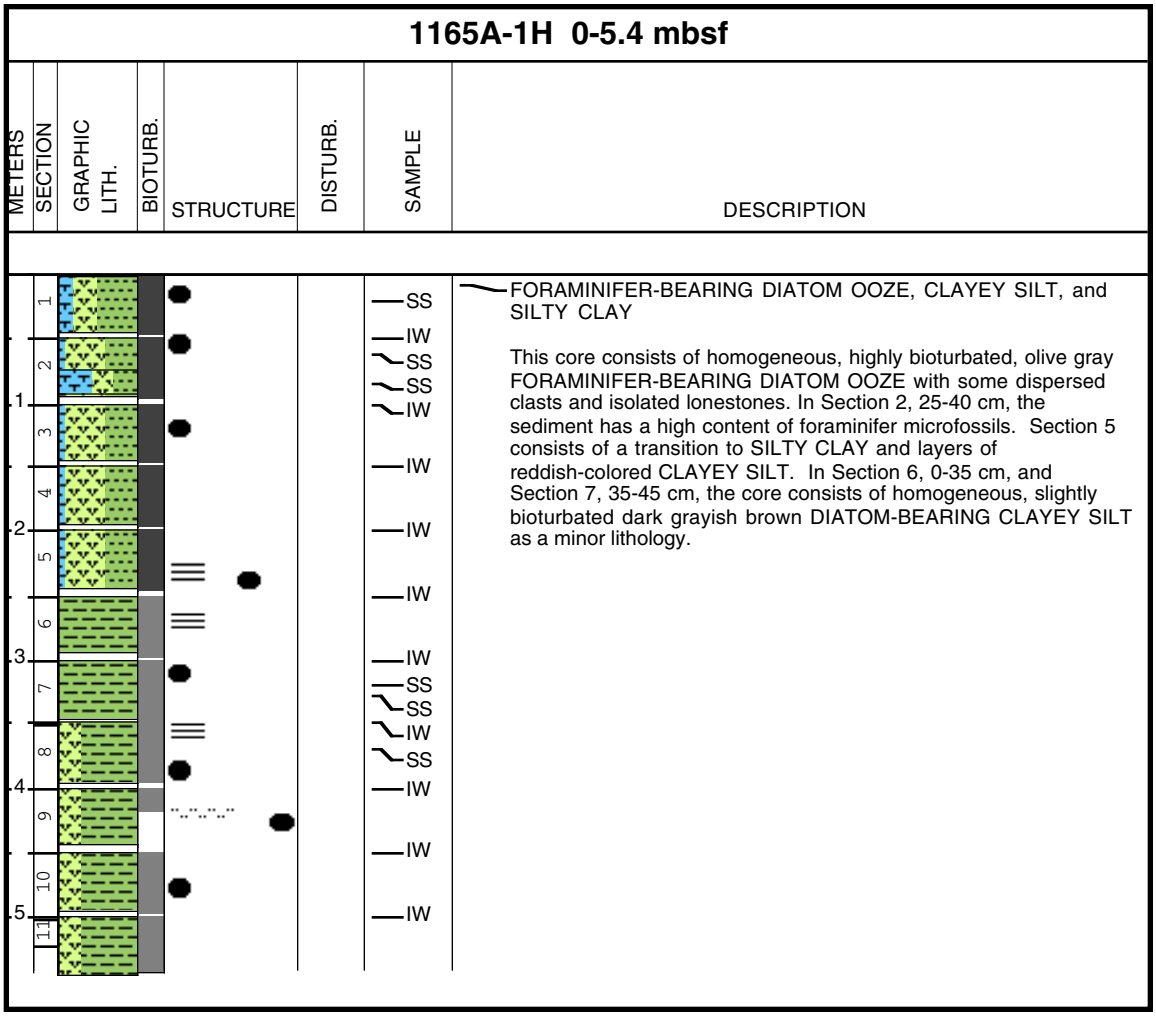
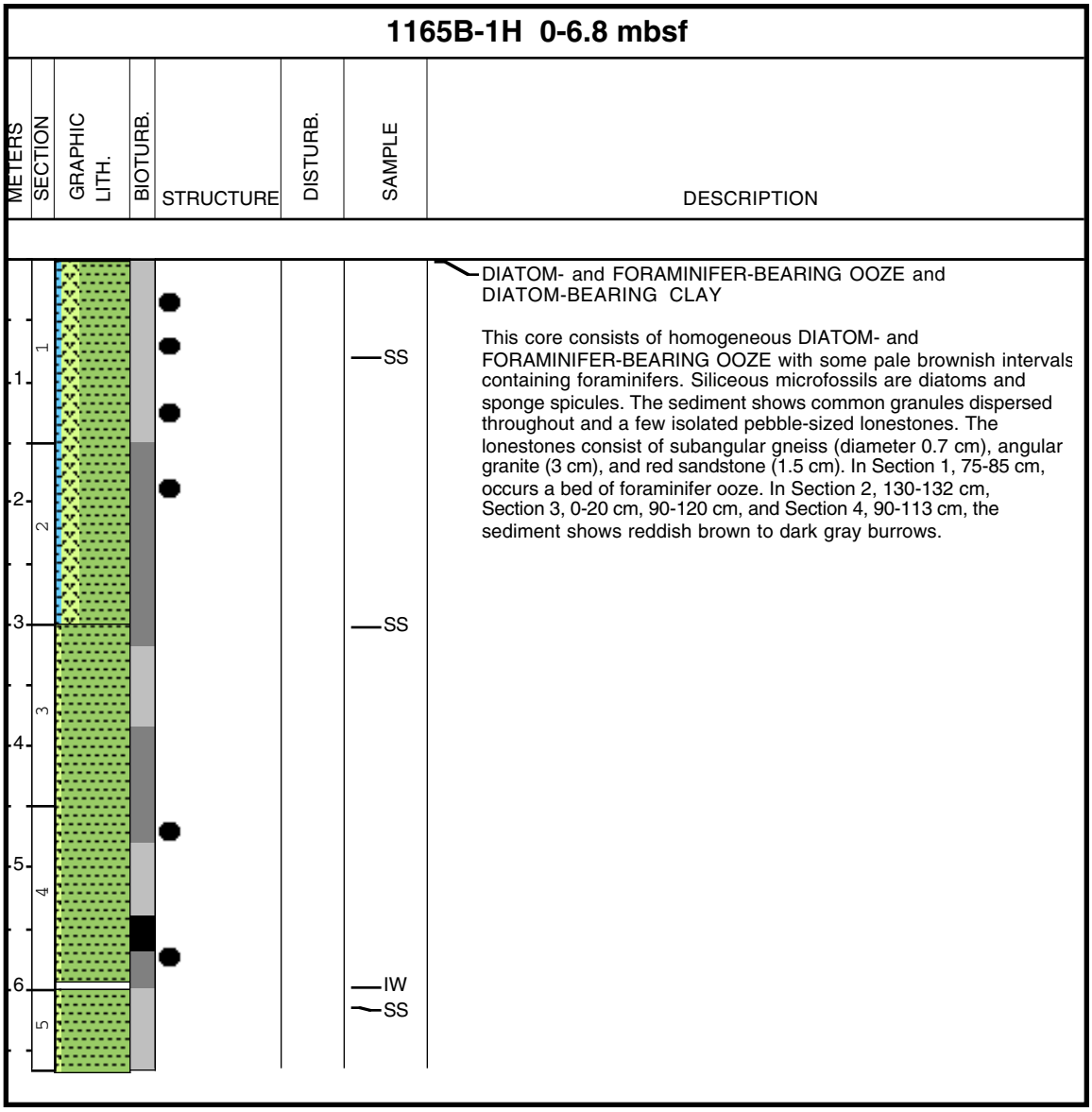
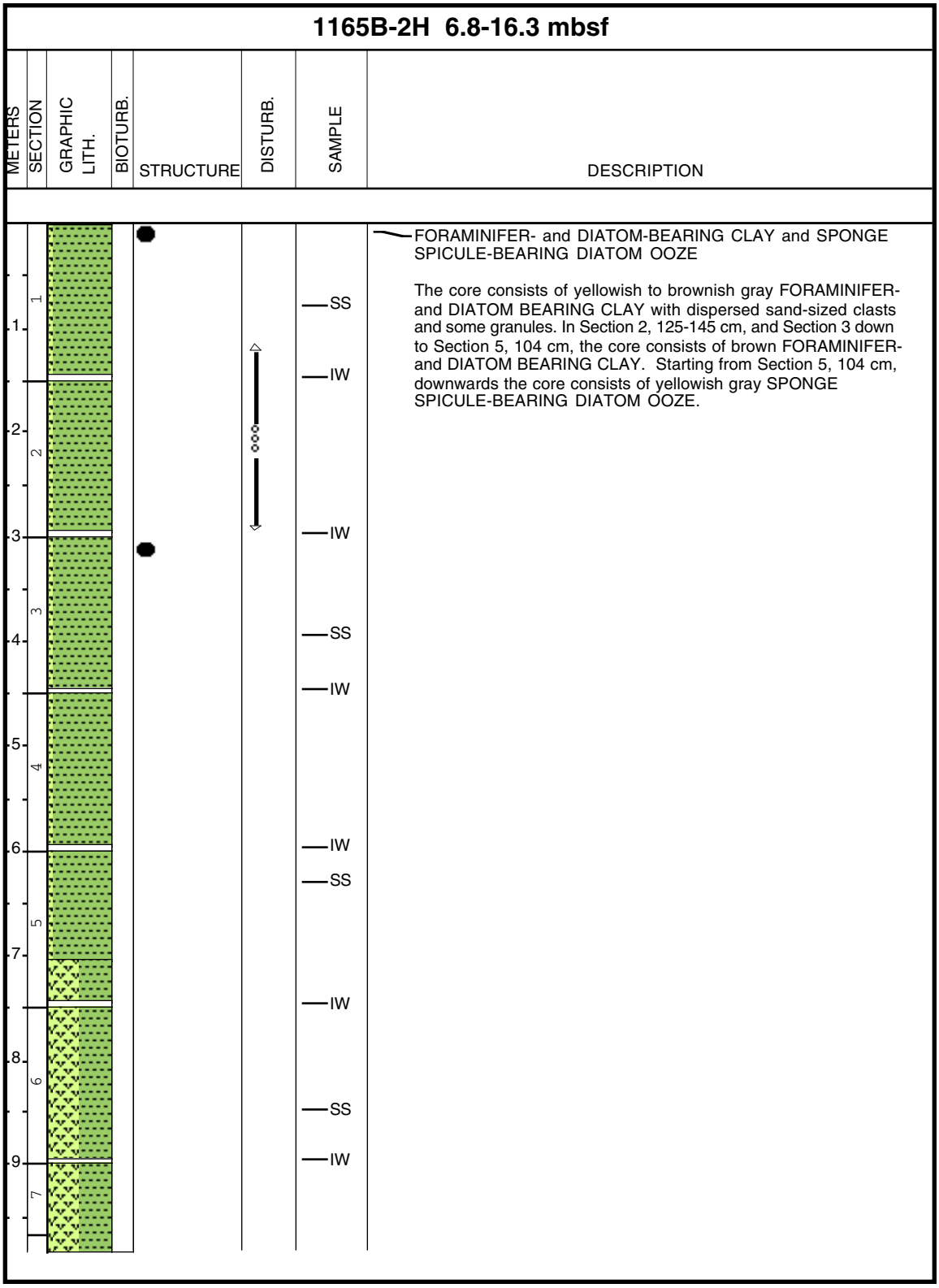
Core Photo


1165A-1H 0-5.4 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
SS
IW
SS
SS
IW
IW
IW
IW
IW
SS
SS
IW
SS
IW
IW
IW
FORAMINIFER-BEARING DIATOM OOZE, CLAYEY SILT, and SILTY CLAY
This core consists of homogeneous, highly bioturbated, olive gray FORAMINIFER-BEARING DIATOM OOZE with some dispersed clasts and isolated lonestones. In Section 2, 25-40 cm, the sediment has a high content of foraminifer microfossils. Section 5 consists of a transition to SILTY CLAY and layers of reddish-colored CLAYEY SILT. In Section 6, 0-35 cm, and Section 7, 35-45 cm, the core consists of homogeneous, slightly bioturbated dark grayish brown DIATOM-BEARING CLAYEY SILT as a minor lithology.

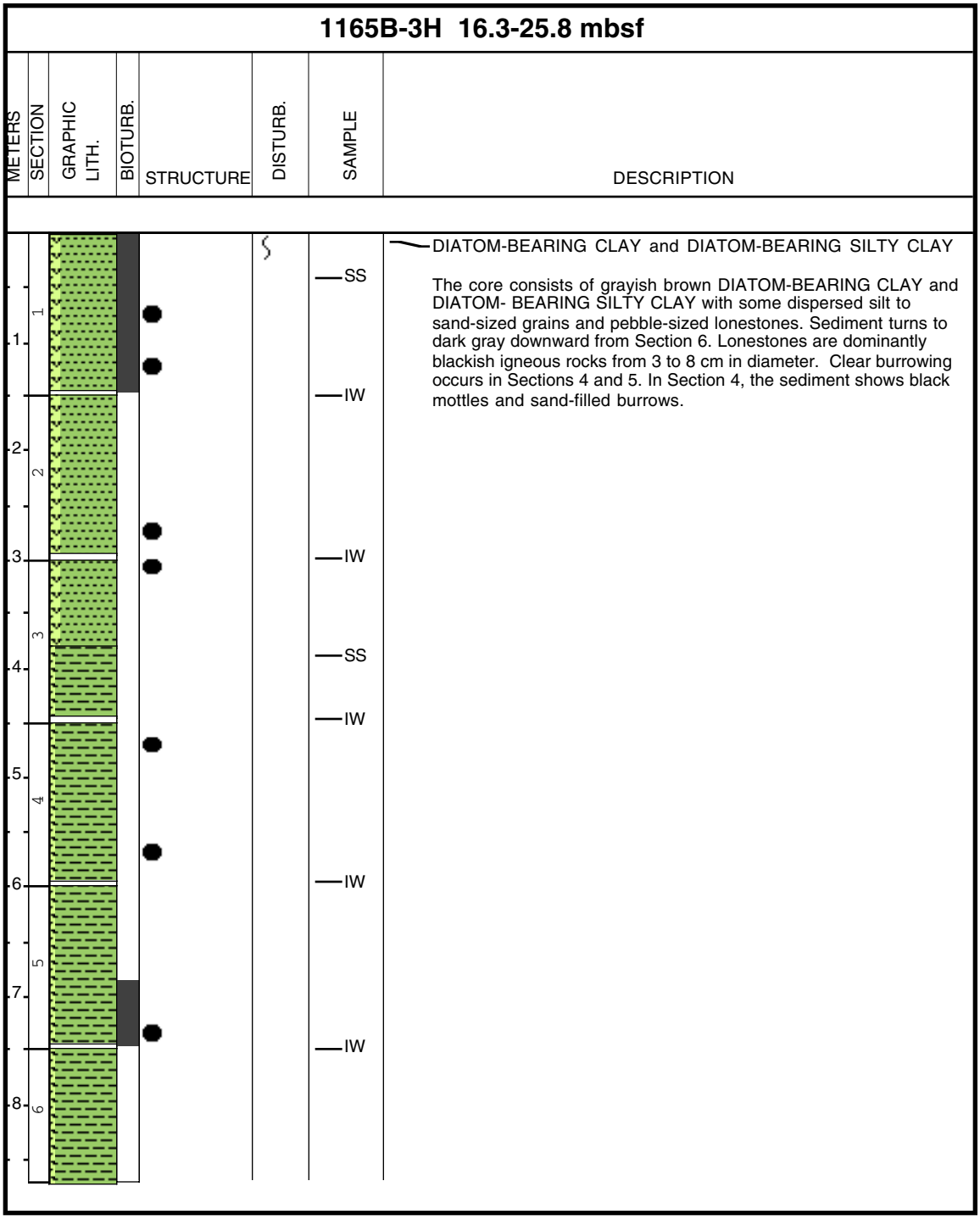
Core Photo


1165B-1H 0-6.8 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
SS
SS
IW
SS
DIATOM- and FORAMINIFER-BEARING OOZE and DIATOM-BEARING CLAY
This core consists of homogeneous DIATOM- and FORAMINIFER-BEARING OOZE with some pale brownish intervals containing foraminifers. Siliceous microfossils are diatoms and sponge spicules. The sediment shows common granules dispersed throughout and a few isolated pebble-sized lonestones. The lonestones consist of subangular gneiss (diameter 0.7 cm), angular granite (3 cm), and red sandstone (1.5 cm). In Section 1, 75-85 cm, occurs a bed of foraminifer ooze. In Section 2, 130-132 cm, Section 3, 0-20 cm, 90-120 cm, and Section 4, 90-113 cm, the sediment shows reddish brown to dark gray burrows.

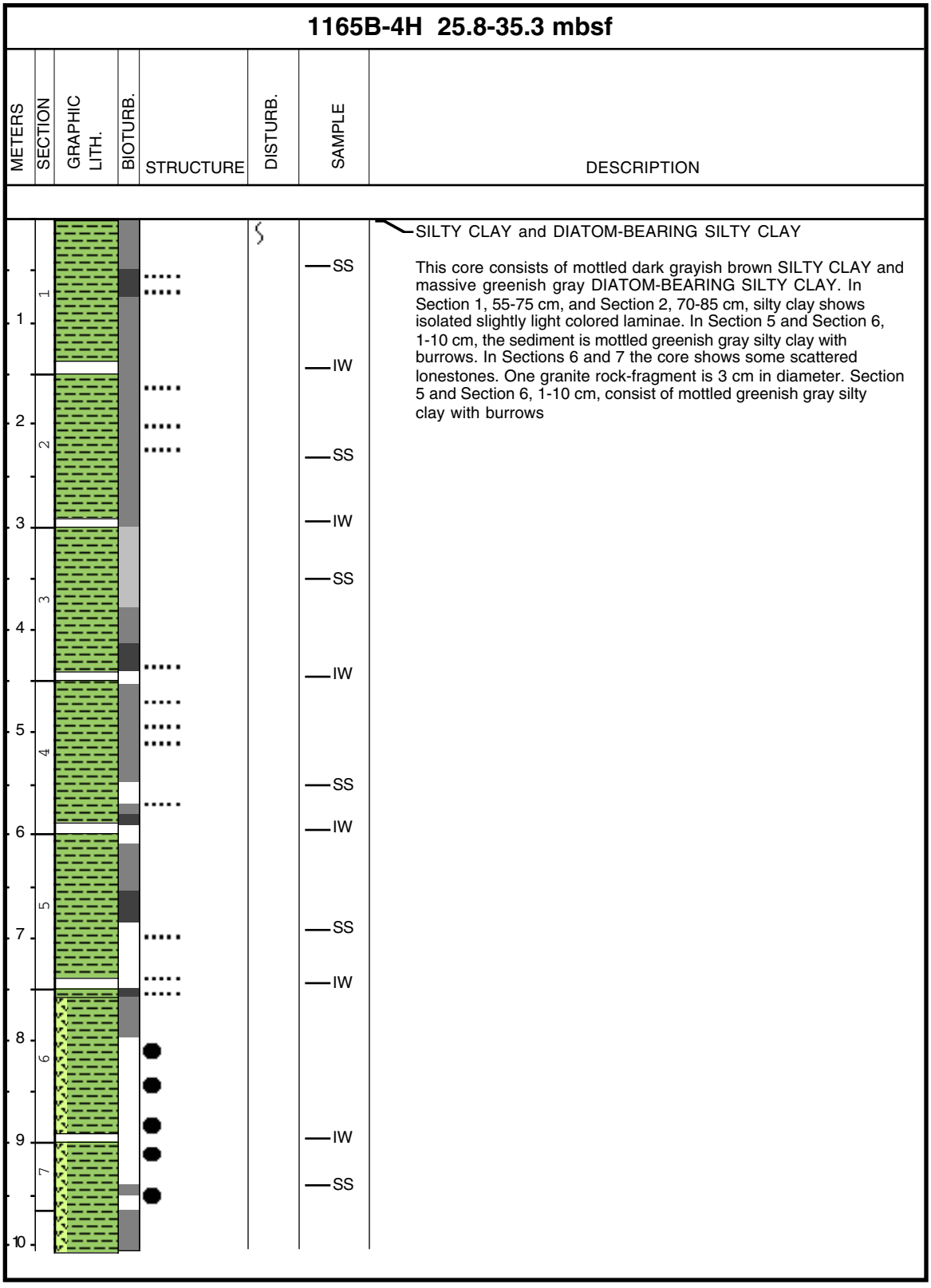
Core Photo


1165B-2H 6.8-16.3 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
SS
IW
IW
SS
IW
IW
SS
IW
SS
IW
FORAMINIFER- and DIATOM-BEARING CLAY and SPONGE SPICULE-BEARING DIATOM OOZE
The core consists of yellowish to brownish gray FORAMINIFER- and DIATOM BEARING CLAY with dispersed sand-sized clasts and some granules. In Section 2, 125-145 cm, and Section 3 down to Section 5, 104 cm, the core consists of brown FORAMINIFER- and DIATOM BEARING CLAY. Starting from Section 5, 104 cm, downwards the core consists of yellowish gray SPONGE SPICULE-BEARING DIATOM OOZE.

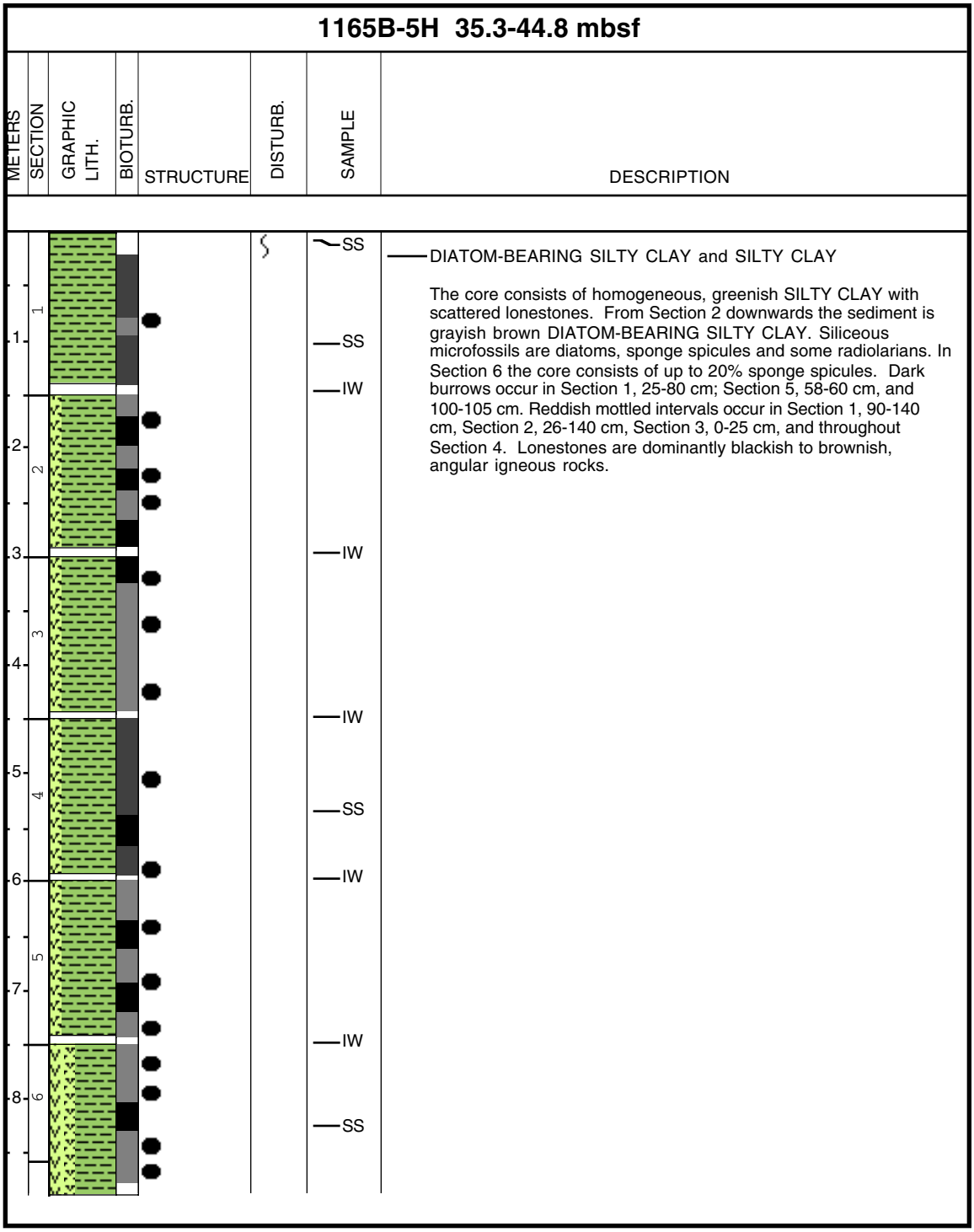
Core Photo


1165B-3H 16.3-25.8 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
SS
IW
IW
SS
IW
IW
IW
DIATOM-BEARING CLAY and DIATOM-BEARING SILTY CLAY
The core consists of grayish brown DIATOM-BEARING CLAY and DIATOM- BEARING SILTY CLAY with some dispersed silt to sand-sized grains and pebble-sized lonestones. Sediment turns to dark gray downward from Section 6. Lonestones are dominantly blackish igneous rocks from 3 to 8 cm in diameter. Clear burrowing occurs in Sections 4 and 5. In Section 4, the sediment shows black mottles and sand-filled burrows.

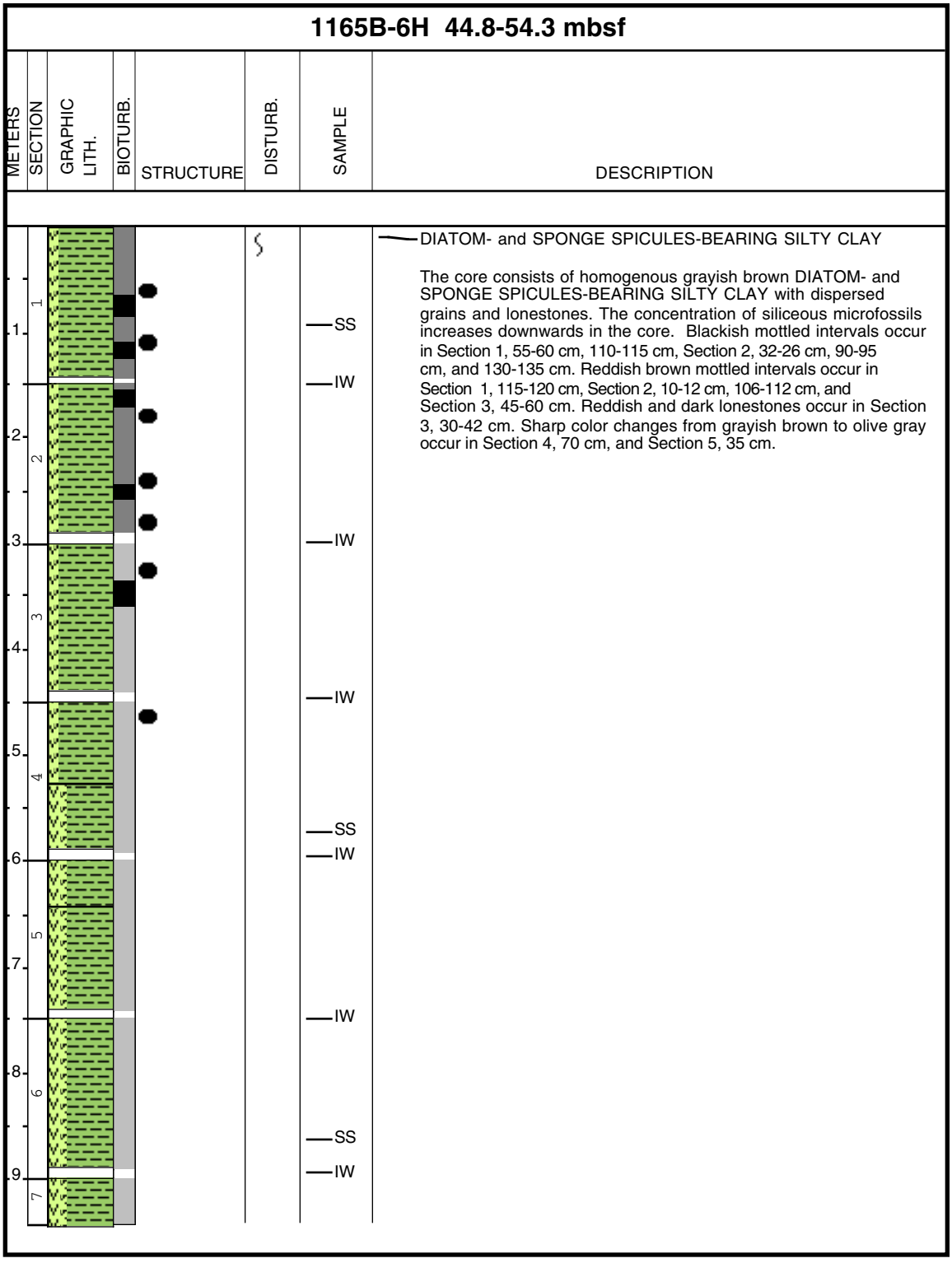
Core Photo


1165B-4H 25.8-35.3 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
SILTY CLAY and DIATOM-BEARING SILTY CLAY
This core consists of mottled dark grayish brown SILTY CLAY and massive greenish gray DIATOM-BEARING SILTY CLAY. In Section 1, 55-75 cm, and Section 2, 70-85 cm, silty clay shows isolated slightly light colored laminae. In Section 5 and Section 6, 1-10 cm, the sediment is mottled greenish gray silty clay with burrows. In Sections 6 and 7 the core shows some scattered lonestones. One granite rock-fragment is 3 cm in diameter. Section 5 and Section 6, 1-10 cm, consist of mottled greenish gray silty clay with burrows
SS
IW
SS
IW
SS
IW
SS
IW
SS
IW
IW
SS

Core Photo

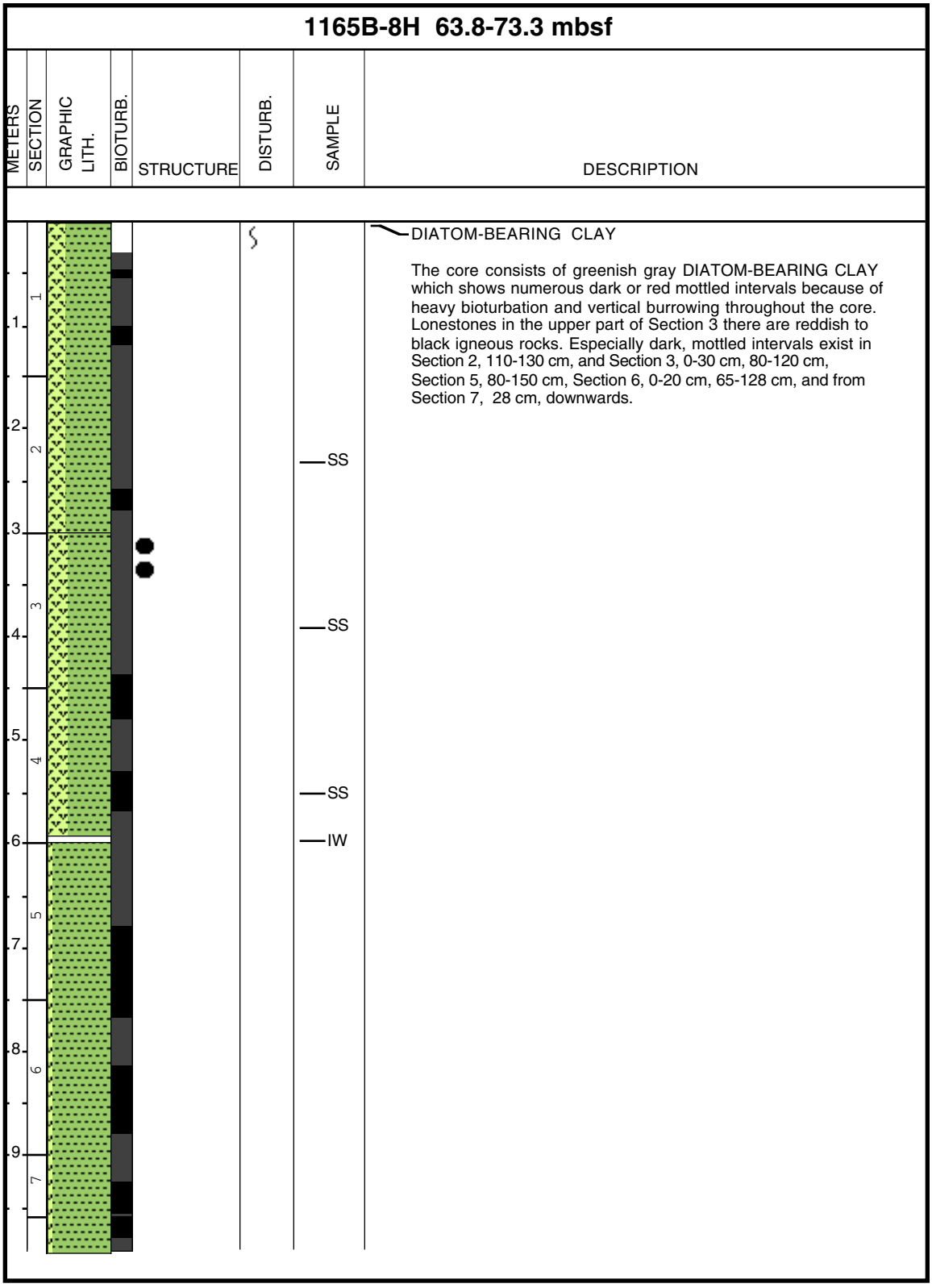

1165B-5H 35.3-44.8 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
SS
SS
IW
IW
IW
SS
IW
IW
SS
DIATOM-BEARING SILTY CLAY and SILTY CLAY
The core consists of homogeneous, greenish SILTY CLAY with scattered lonestones. From Section 2 downwards the sediment is grayish brown DIATOM-BEARING SILTY CLAY. Siliceous microfossils are diatoms, sponge spicules and some radiolarians. In Section 6 the core consists of up to 20% sponge spicules. Dark burrows occur in Section 1, 25-80 cm; Section 5, 58-60 cm, and 100-105 cm. Reddish mottled intervals occur in Section 1, 90-140 cm, Section 2, 26-140 cm, Section 3, 0-25 cm, and throughout Section 4. Lonestones are dominantly blackish to brownish, angular igneous rocks.

Core Photo

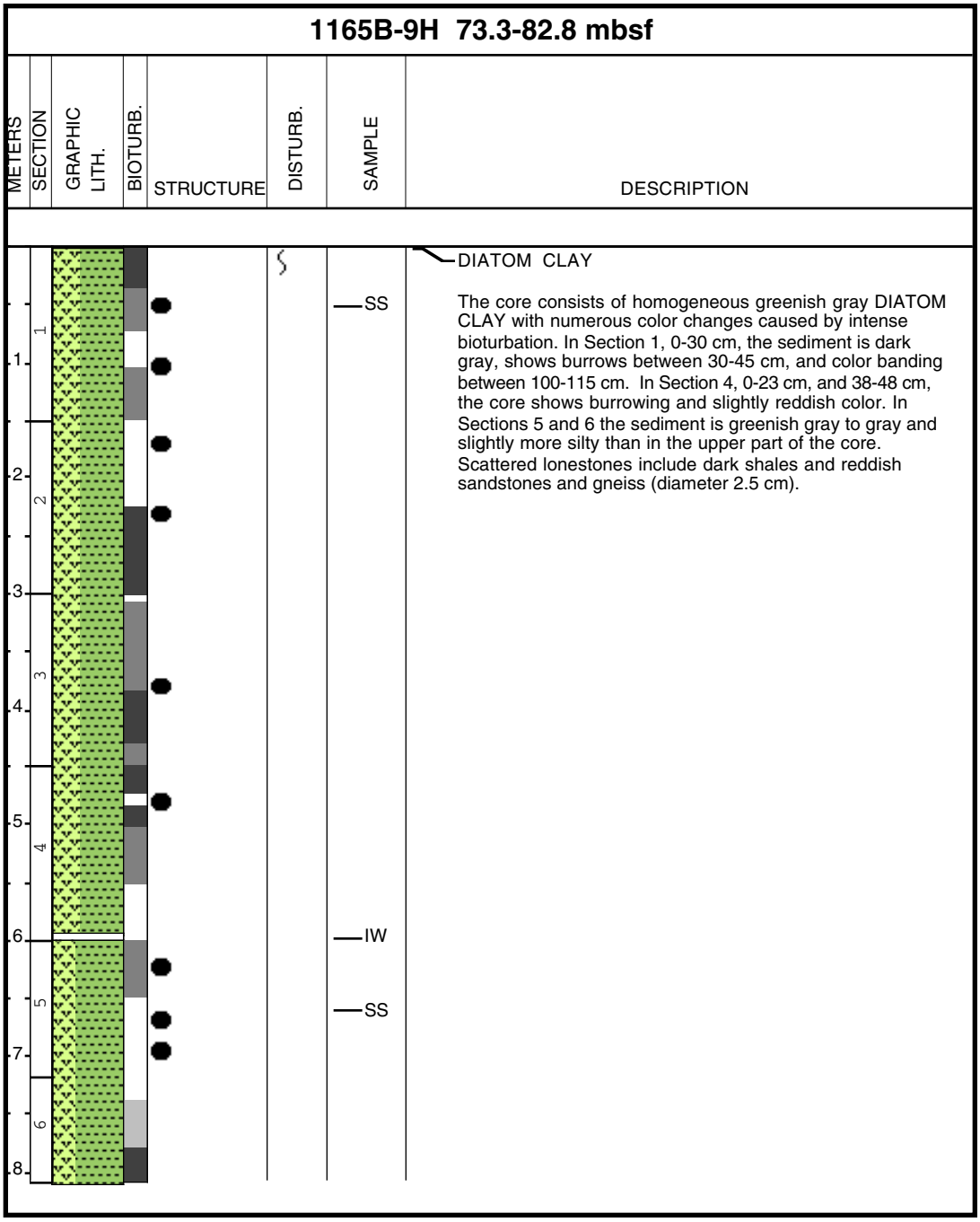


1165B-7H NO RECOVERY

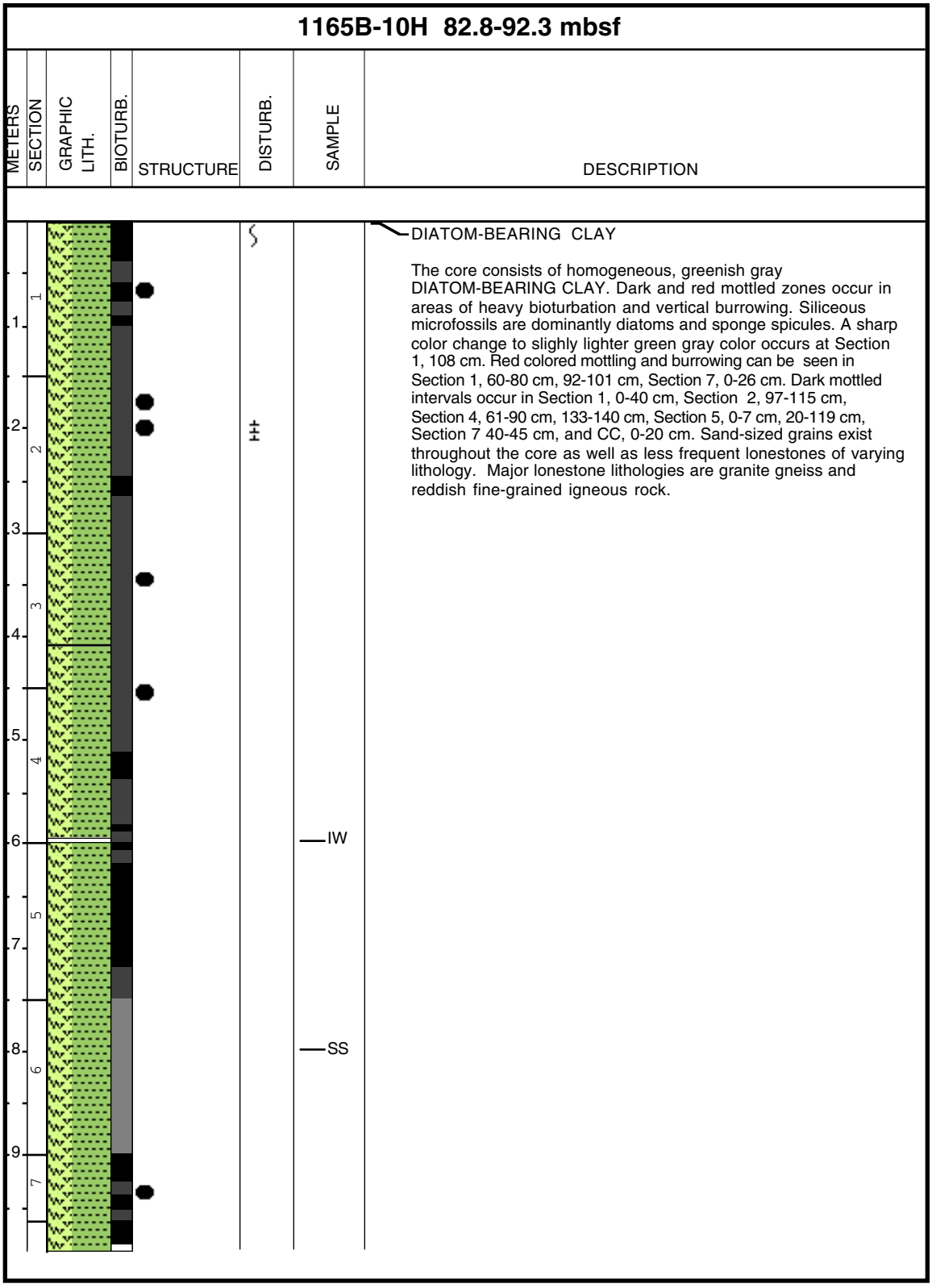
Core Photo


1165B-8H 63.8-73.3 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
DIATOM-BEARING CLAY
The core consists of greenish gray DIATOM-BEARING CLAY which shows numerous dark or red mottled intervals because of heavy bioturbation and vertical burrowing throughout the core. Lonestones in the upper part of Section 3 there are reddish to black igneous rocks. Especially dark, mottled intervals exist in Section 2, 110-130 cm, and Section 3, 0-30 cm, 80-120 cm, Section 5, 80-150 cm, Section 6, 0-20 cm, 65-128 cm, and from Section 7, 28 cm, downwards.
SS
SS
SS
IW

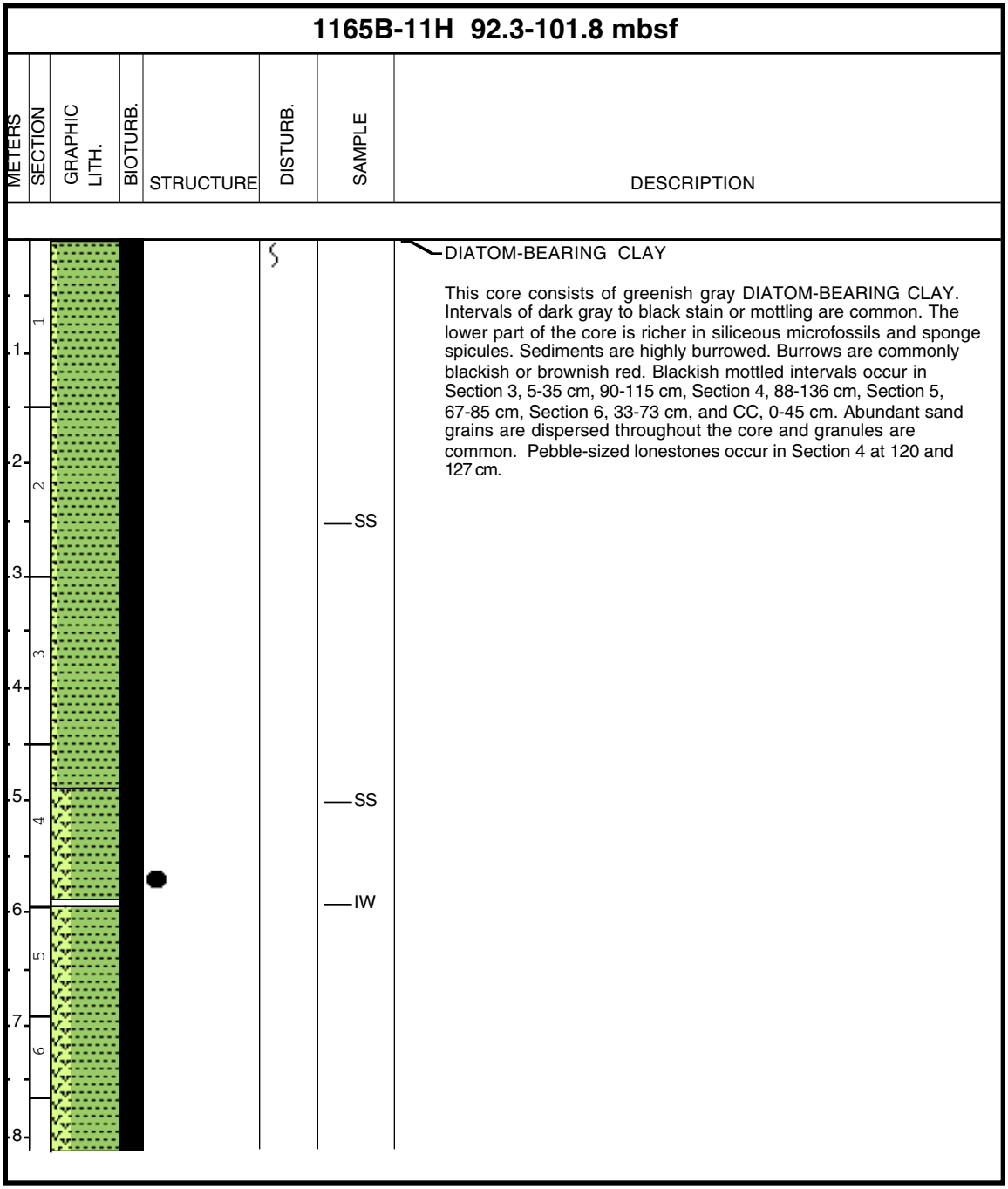
Core Photo


1165B-9H 73.3-82.8 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
DIATOM CLAY
SS
IW
SS
The core consists of homogeneous greenish gray DIATOM CLAY with numerous color changes caused by intense bioturbation. In Section 1, 0-30 cm, the sediment is dark gray, shows burrows between 30-45 cm, and color banding between 100-115 cm. In Section 4, 0-23 cm, and 38-48 cm, the core shows burrowing and slightly reddish color. In Sections 5 and 6 the sediment is greenish gray to gray and slightly more silty than in the upper part of the core. Scattered lonestones include dark shales and reddish sandstones and gneiss (diameter 2.5 cm).

Core Photo

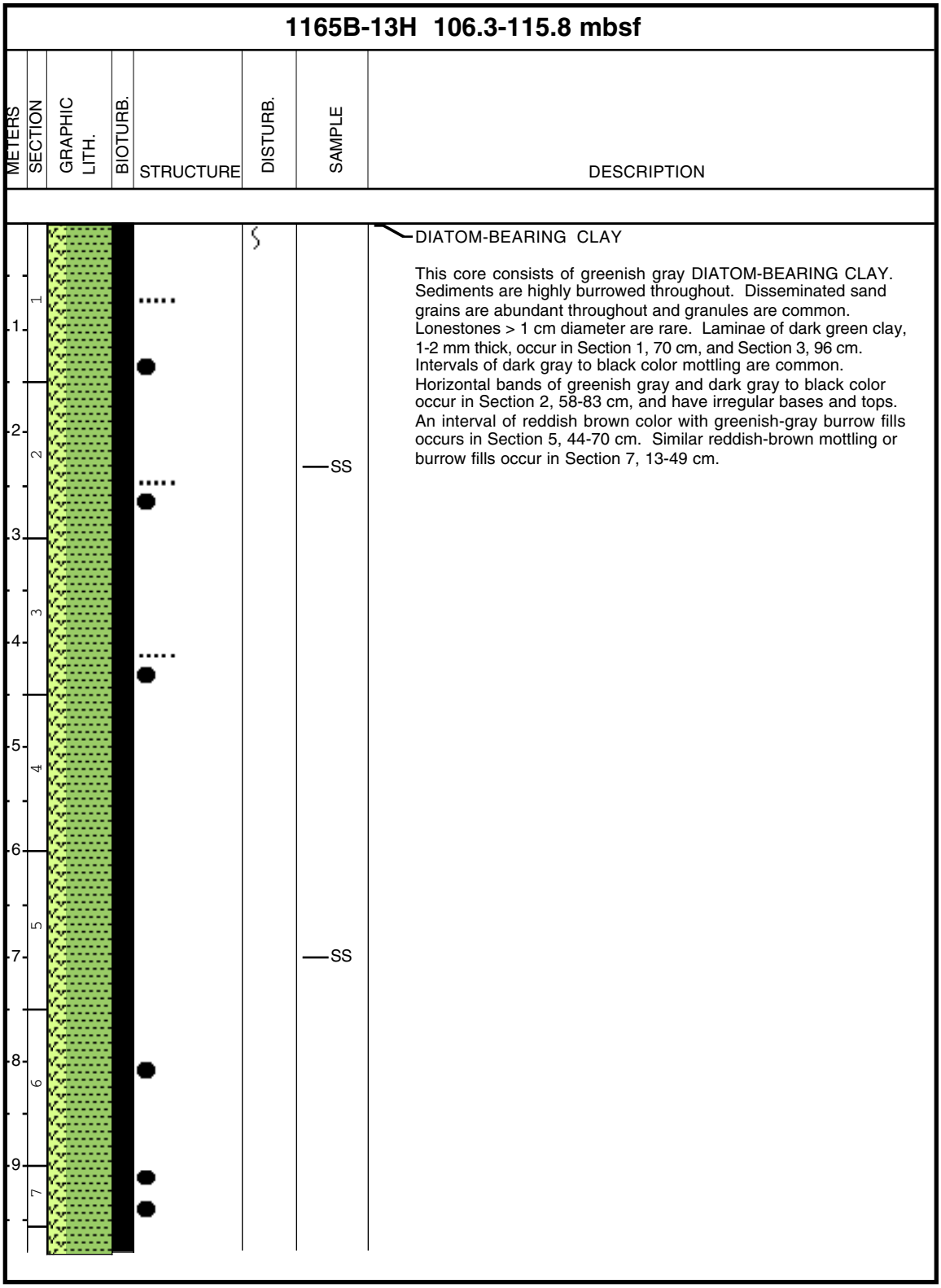

1165B-10H 82.8-92.3 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
DIATOM-BEARING CLAY
The core consists of homogeneous, greenish gray DIATOM-BEARING CLAY. Dark and red mottled zones occur in areas of heavy bioturbation and vertical burrowing. Siliceous microfossils are dominantly diatoms and sponge spicules. A sharp color change to slighly lighter green gray color occurs at Section 1, 108 cm. Red colored mottling and burrowing can be seen in Section 1, 60-80 cm, 92-101 cm, Section 7, 0-26 cm. Dark mottled intervals occur in Section 1, 0-40 cm, Section 2, 97-115 cm, Section 4, 61-90 cm, 133-140 cm, Section 5, 0-7 cm, 20-119 cm, Section 7 40-45 cm, and CC, 0-20 cm. Sand-sized grains exist throughout the core as well as less frequent lonestones of varying lithology. Major lonestone lithologies are granite gneiss and reddish fine-grained igneous rock.
IW
SS

Core Photo

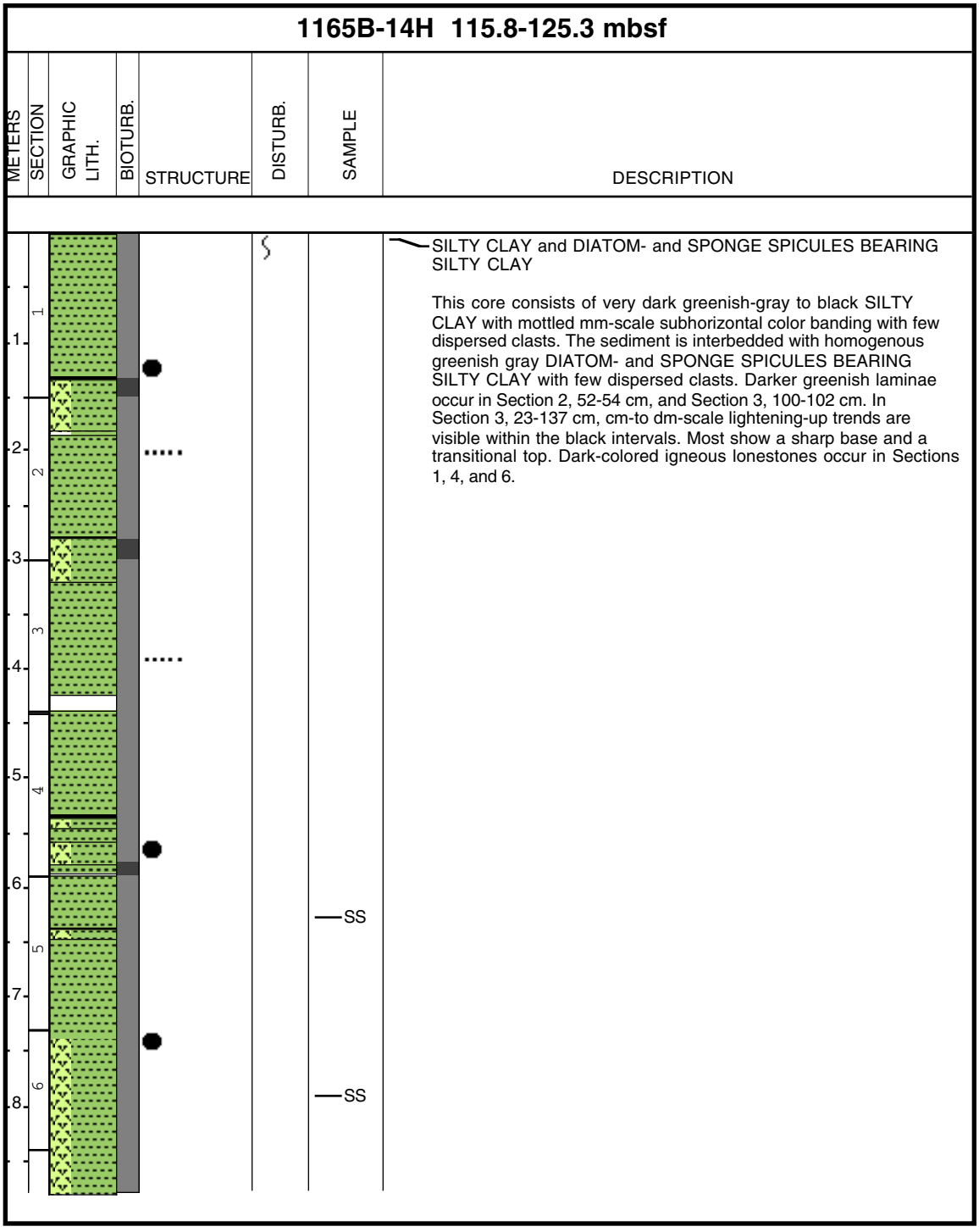


1165B-12H ENTIRE CORE GIVEN TO PALEONTOLOGISTS

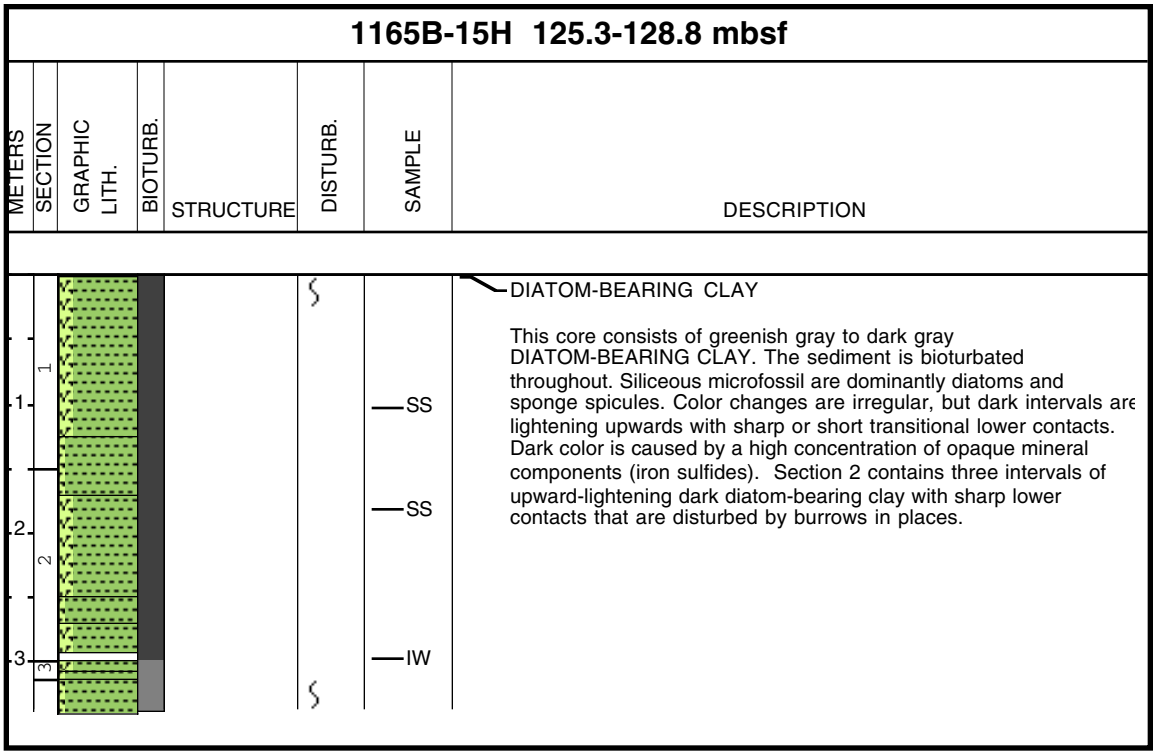
Core Photo


1165B-13H 106.3-115.8 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
DIATOM-BEARING CLAY
This core consists of greenish gray DIATOM-BEARING CLAY. Sediments are highly burrowed throughout. Disseminated sand grains are abundant throughout and granules are common. Lonestones > 1 cm diameter are rare. Laminae of dark green clay, 1-2 mm thick, occur in Section 1, 70 cm, and Section 3, 96 cm. Intervals of dark gray to black color mottling are common. Horizontal bands of greenish gray and dark gray to black color occur in Section 2, 58-83 cm, and have irregular bases and tops. An interval of reddish brown color with greenish-gray burrow fills occurs in Section 5, 44-70 cm. Similar reddish-brown mottling or burrow fills occur in Section 7, 13-49 cm.
SS
SS

Core Photo

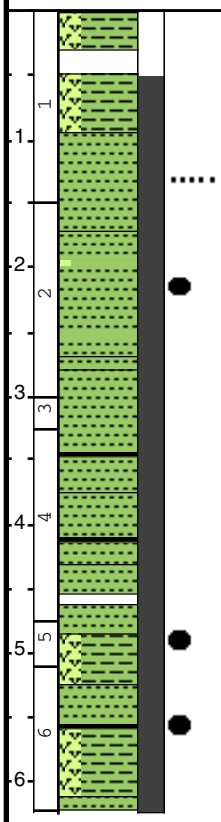

1165B-14H 115.8-125.3 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
SILTY CLAY and DIATOM- and SPONGE SPICULES BEARING SILTY CLAY
This core consists of very dark greenish-gray to black SILTY CLAY with mottled mm-scale subhorizontal color banding with few dispersed clasts. The sediment is interbedded with homogenous greenish gray DIATOM- and SPONGE SPICULES BEARING SILTY CLAY with few dispersed clasts. Darker greenish laminae occur in Section 2, 52-54 cm, and Section 3, 100-102 cm. In Section 3, 23-137 cm, cm-to dm-scale lightening-up trends are visible within the black intervals. Most show a sharp base and a transitional top. Dark-colored igneous lonestones occur in Sections 1, 4, and 6.
SS
SS

Core Photo


1165B-15H 125.3-128.8 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
2
3
SS
SS
IW
DIATOM-BEARING CLAY
This core consists of greenish gray to dark gray DIATOM-BEARING CLAY. The sediment is bioturbated throughout. Siliceous microfossil are dominantly diatoms and sponge spicules. Color changes are irregular, but dark intervals are lightening upwards with sharp or short transitional lower contacts. Dark color is caused by a high concentration of opaque mineral components (iron sulfides). Section 2 contains three intervals of upward-lightening dark diatom-bearing clay with sharp lower contacts that are disturbed by burrows in places.

Core Photo

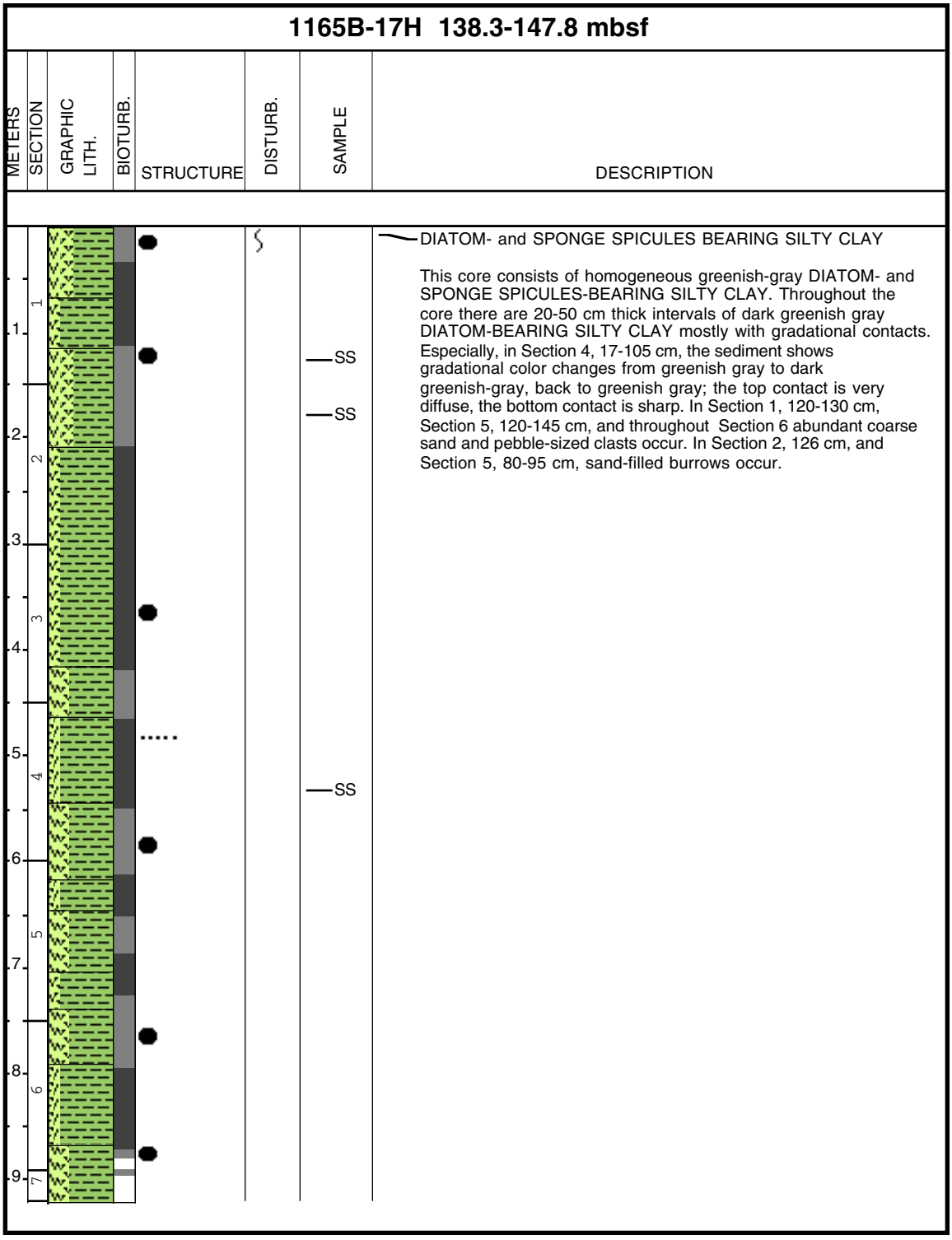
1165B-16H 128.8-138.3 mbsf



DIATOM-BEARING SILTY CLAY and CLAY

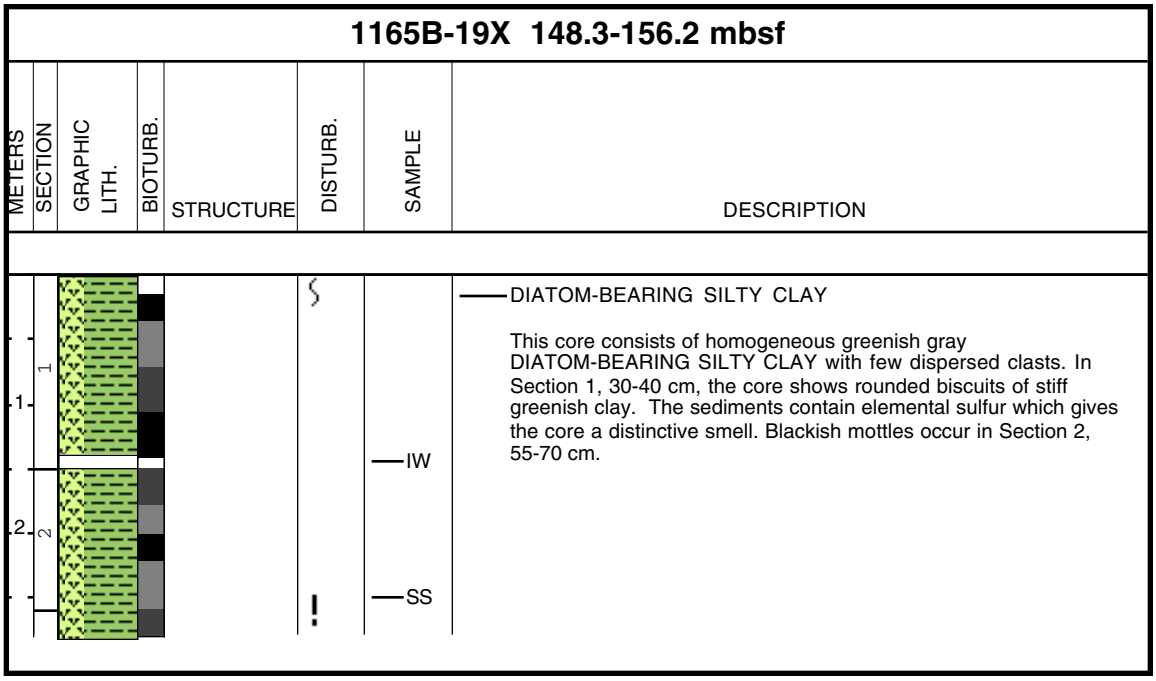
This core consists of greenish gray DIATOM-BEARING SILTY CLAY with dispersed clasts and very dark greenish gray to black CLAY. It contains only a few dispersed clasts but is mottled throughout and shows mm- to cm-scale sub-horizontal color banding. Green laminae occur in Section 1, 138-139 cm. In Section 4, alternations of very dark greenish gray and black colors occur as minor cycles within a major black CLAY interval.

Core Photo

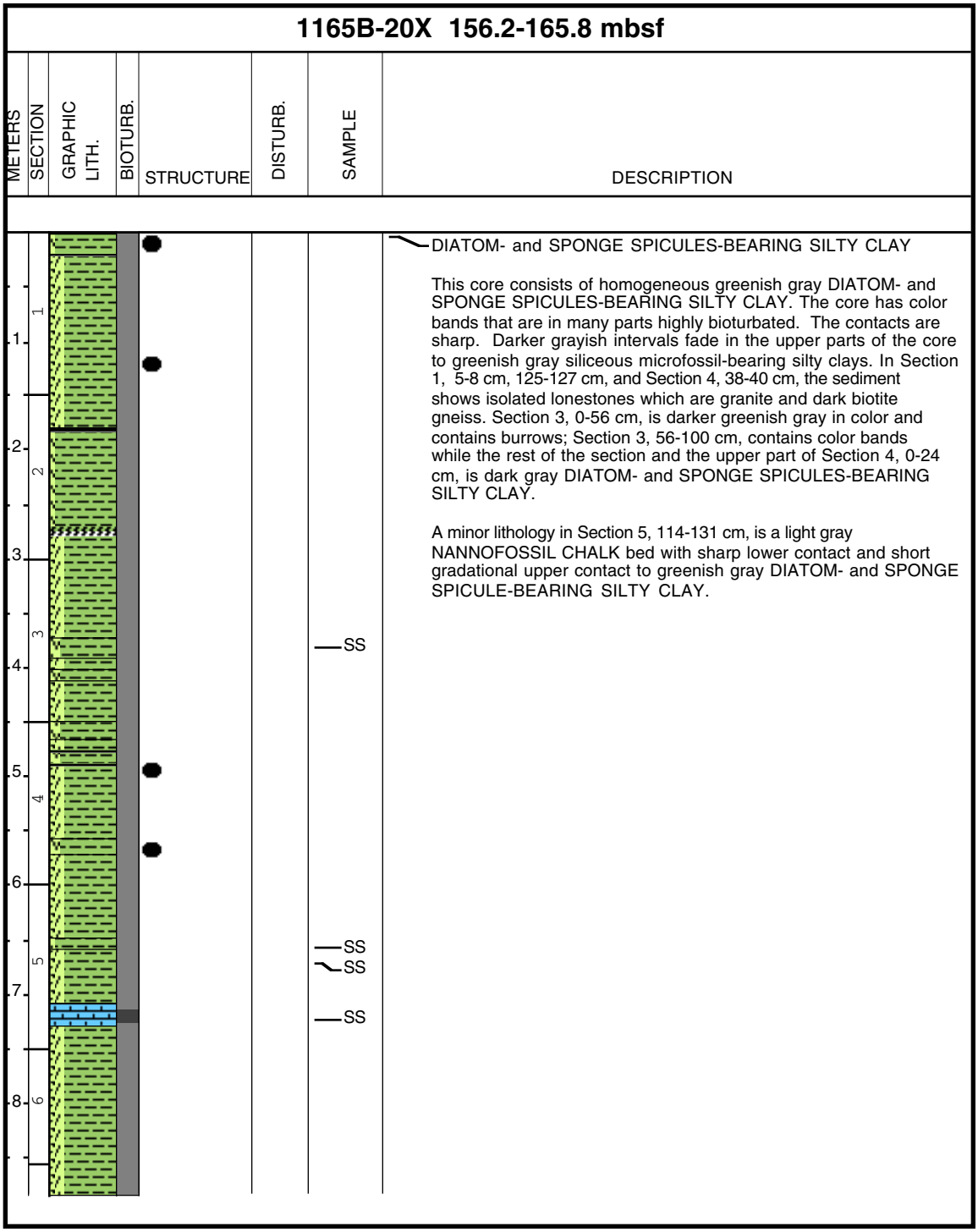


1165B-18H ENTIRE CORE GIVEN TO PALEONTOLOGISTS

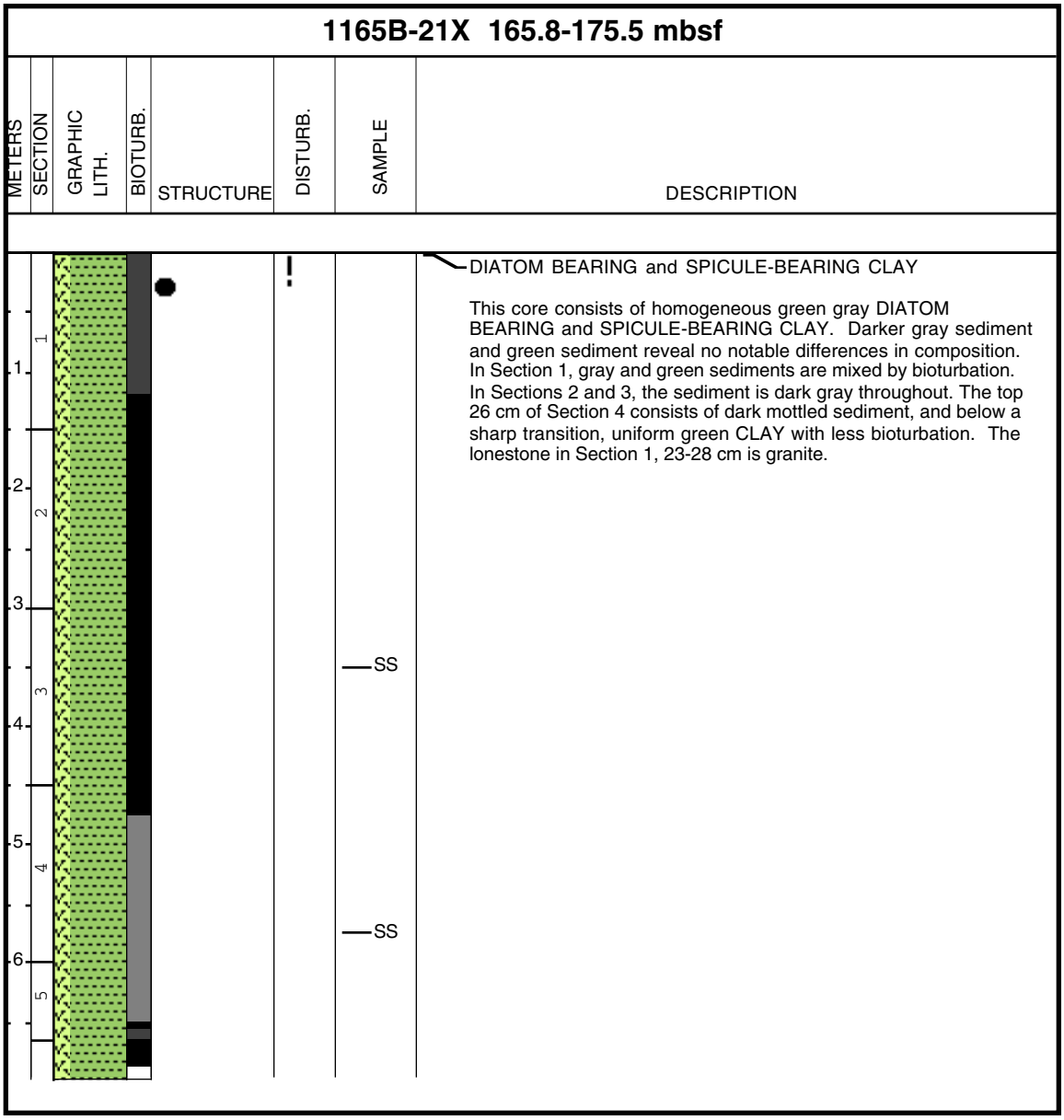
Core Photo


1165B-19X 148.3-156.2 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
2
1
2
IW
SS
DIATOM-BEARING SILTY CLAY
This core consists of homogeneous greenish gray DIATOM-BEARING SILTY CLAY with few dispersed clasts. In Section 1, 30-40 cm, the core shows rounded biscuits of stiff greenish clay. The sediments contain elemental sulfur which gives the core a distinctive smell. Blackish mottles occur in Section 2, 55-70 cm.

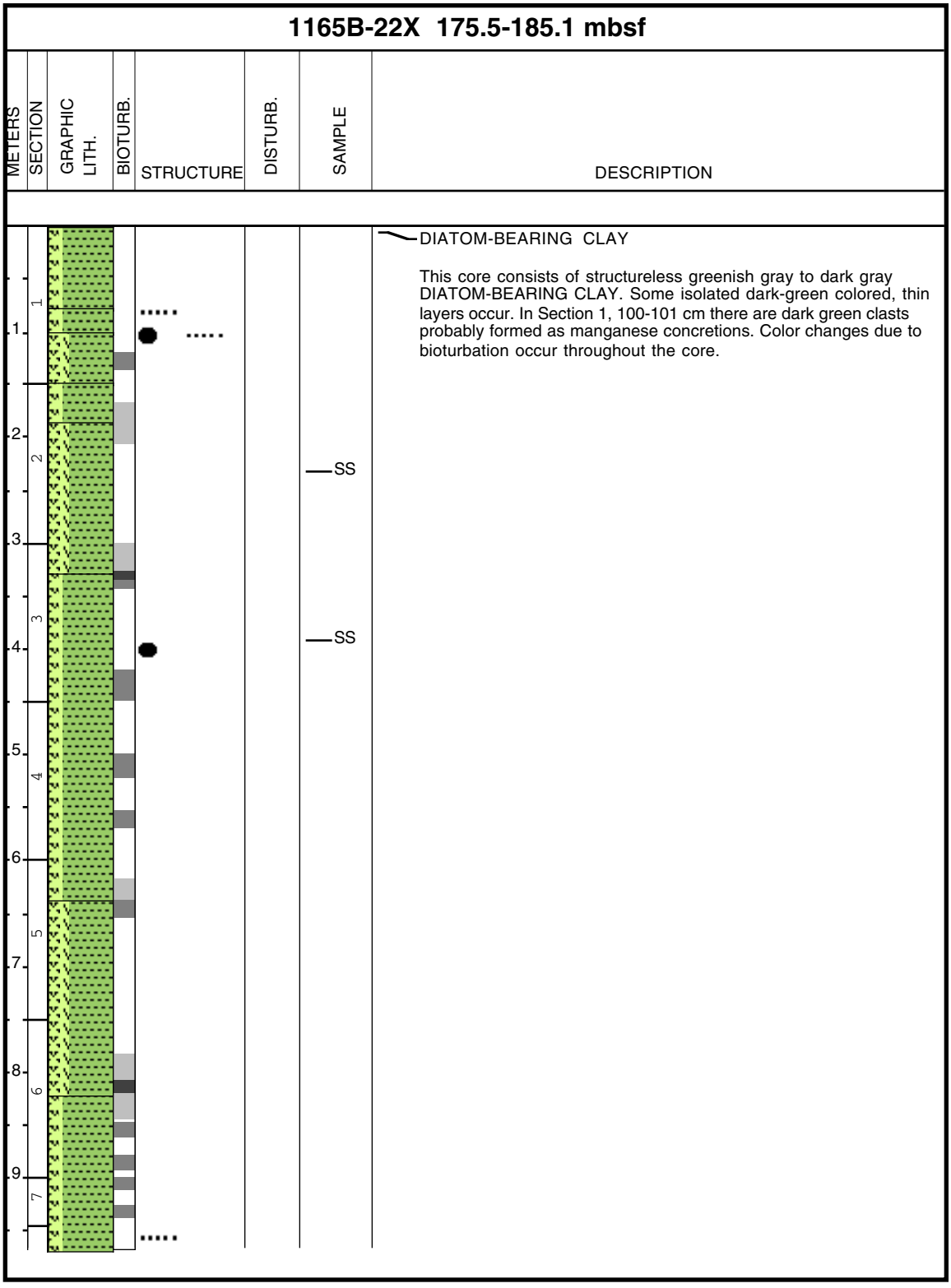
Core Photo


1165B-20X 156.2-165.8 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
SS
SS
SS
SS
DIATOM- and SPONGE SPICULES-BEARING SILTY CLAY
This core consists of homogeneous greenish gray DIATOM- and SPONGE SPICULES-BEARING SILTY CLAY. The core has color bands that are in many parts highly bioturbated. The contacts are sharp. Darker grayish intervals fade in the upper parts of the core to greenish gray siliceous microfossil-bearing silty clays. In Section 1, 5-8 cm, 125-127 cm, and Section 4, 38-40 cm, the sediment shows isolated lonestones which are granite and dark biotite gneiss. Section 3, 0-56 cm, is darker greenish gray in color and contains burrows; Section 3, 56-100 cm, contains color bands while the rest of the section and the upper part of Section 4, 0-24 cm, is dark gray DIATOM- and SPONGE SPICULES-BEARING SILTY CLAY.
A minor lithology in Section 5, 114-131 cm, is a light gray NANNOFOSSIL CHALK bed with sharp lower contact and short gradational upper contact to greenish gray DIATOM- and SPONGE SPICULE-BEARING SILTY CLAY.

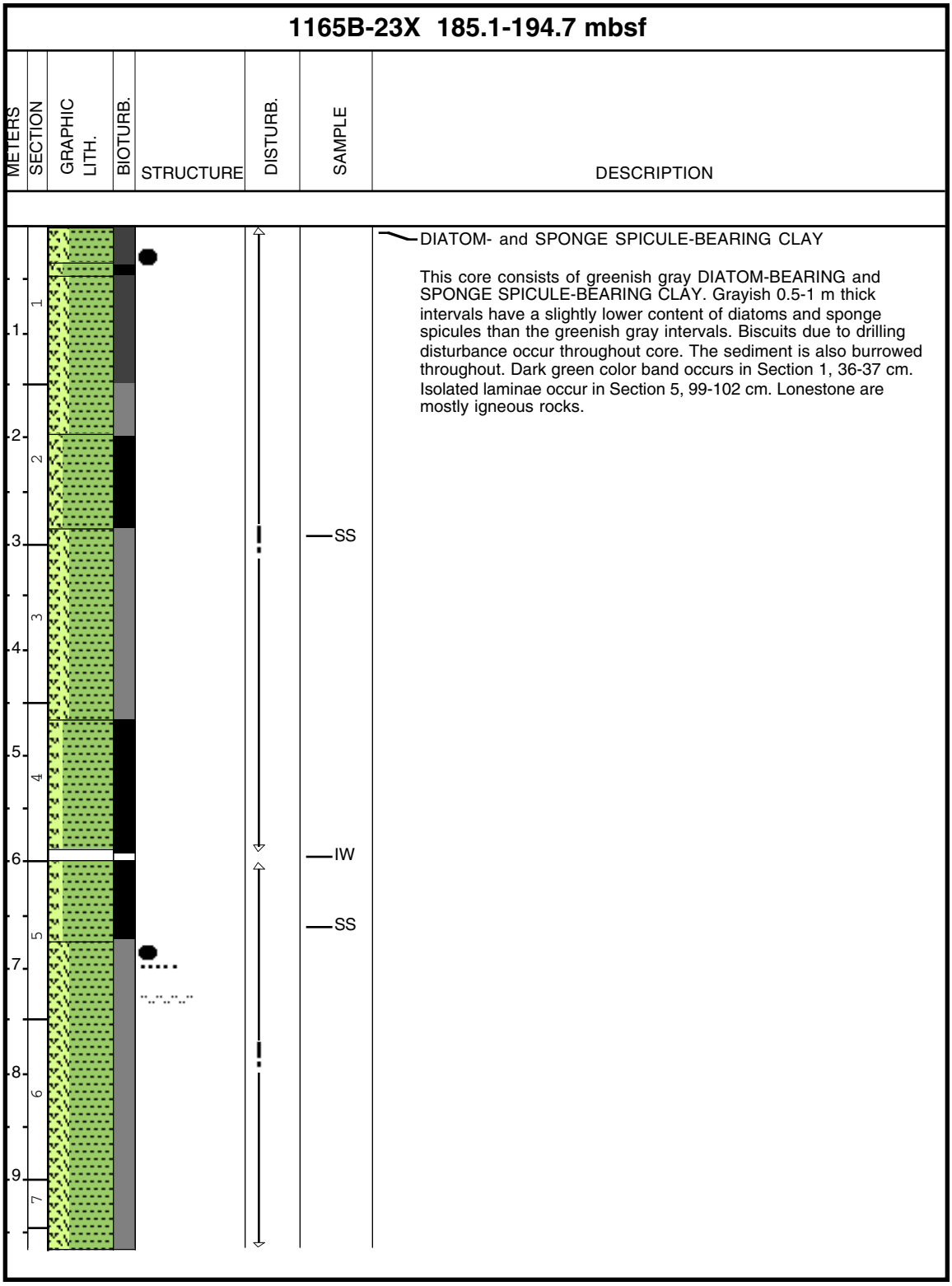
Core Photo


1165B-21X 165.8-175.5 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
DIATOM BEARING and SPICULE-BEARING CLAY
This core consists of homogeneous green gray DIATOM BEARING and SPICULE-BEARING CLAY. Darker gray sediment and green sediment reveal no notable differences in composition. In Section 1, gray and green sediments are mixed by bioturbation. In Sections 2 and 3, the sediment is dark gray throughout. The top 26 cm of Section 4 consists of dark mottled sediment, and below a sharp transition, uniform green CLAY with less bioturbation. The lonestone in Section 1, 23-28 cm is granite.
SS
SS

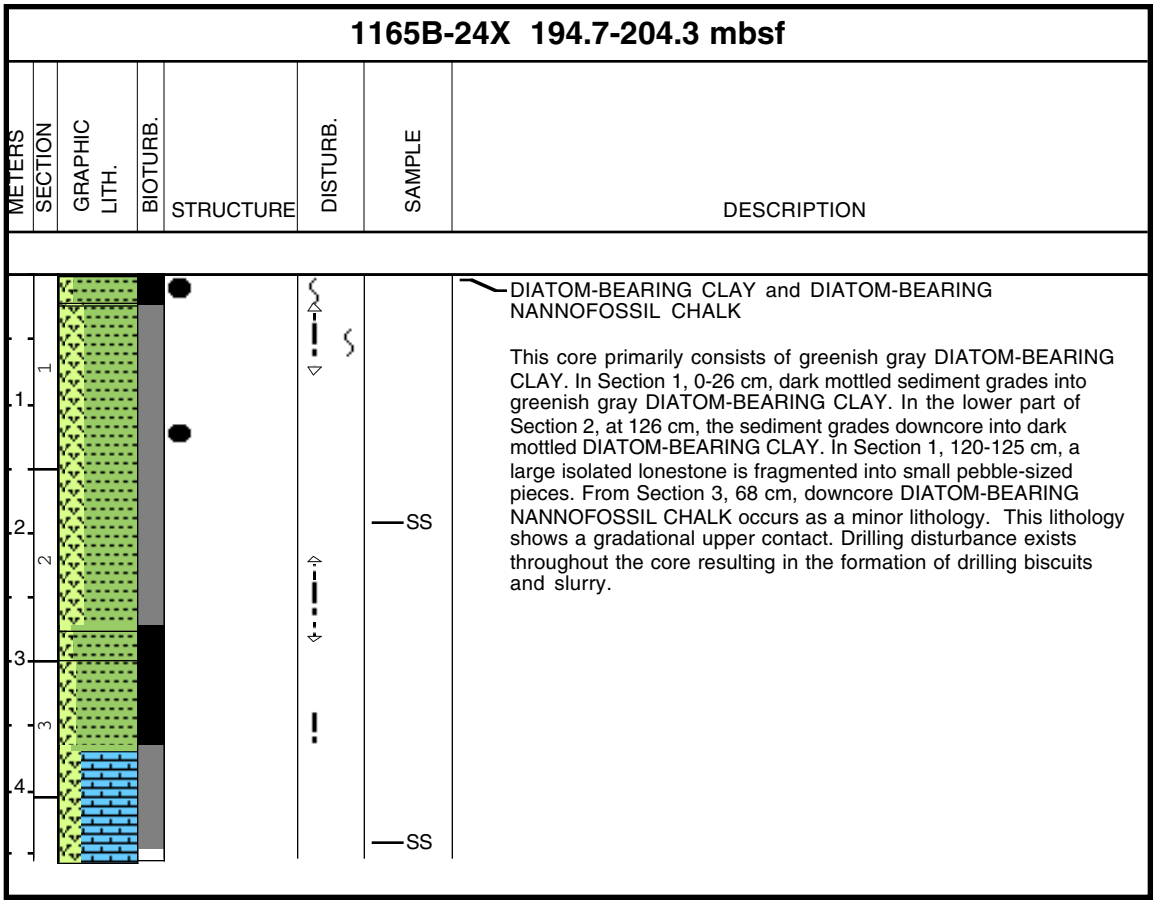
Core Photo


1165B-22X 175.5-185.1 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
DIATOM-BEARING CLAY
This core consists of structureless greenish gray to dark gray DIATOM-BEARING CLAY. Some isolated dark-green colored, thin layers occur. In Section 1, 100-101 cm there are dark green clasts probably formed as manganese concretions. Color changes due to bioturbation occur throughout the core.
SS
SS

Core Photo


1165B-23X 185.1-194.7 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
DIATOM- and SPONGE SPICULE-BEARING CLAY
This core consists of greenish gray DIATOM-BEARING and SPONGE SPICULE-BEARING CLAY. Grayish 0.5-1 m thick intervals have a slightly lower content of diatoms and sponge spicules than the greenish gray intervals. Biscuits due to drilling disturbance occur throughout core. The sediment is also burrowed throughout. Dark green color band occurs in Section 1, 36-37 cm. Isolated laminae occur in Section 5, 99-102 cm. Lonestone are mostly igneous rocks.
SS
IW
SS

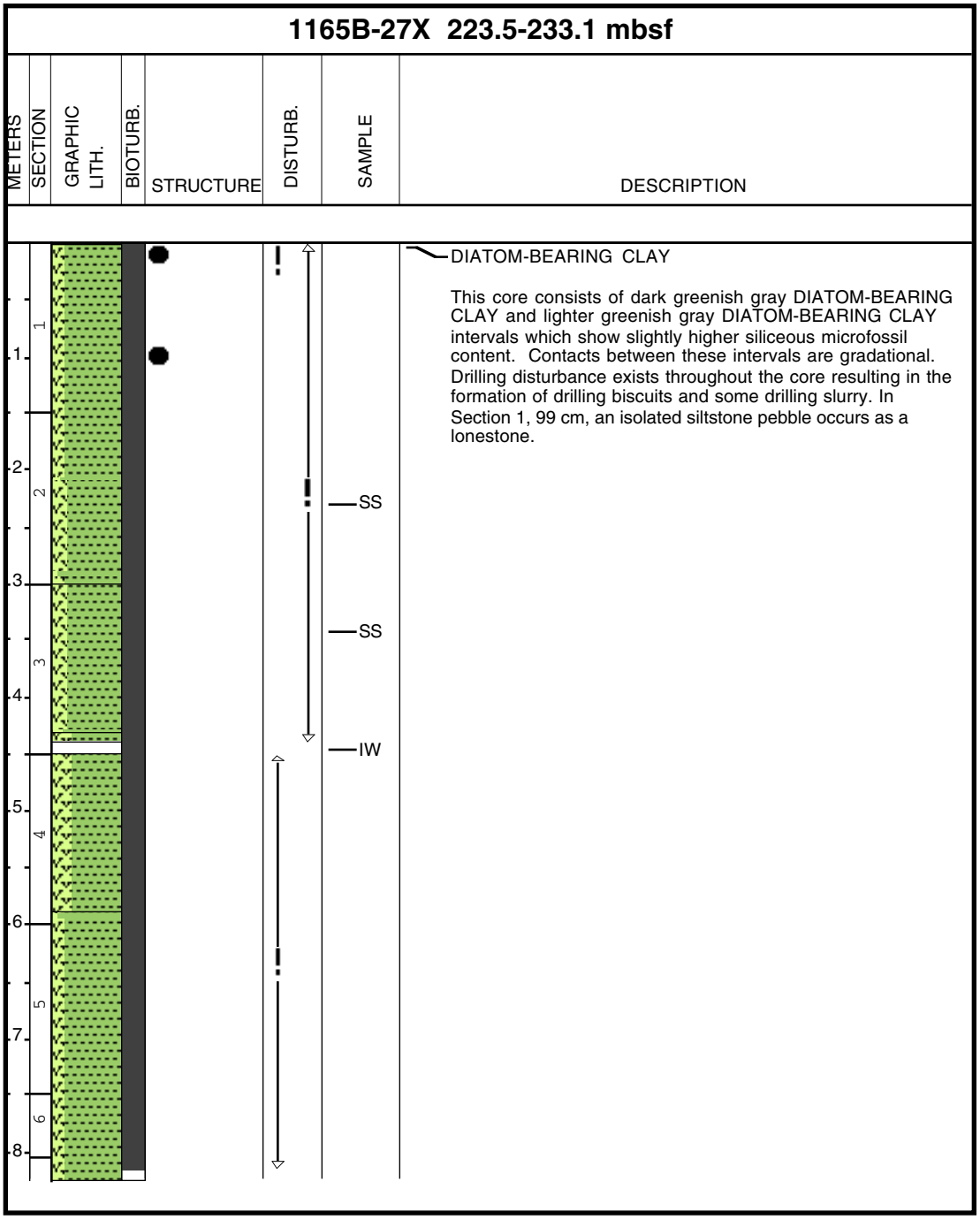
Core Photo



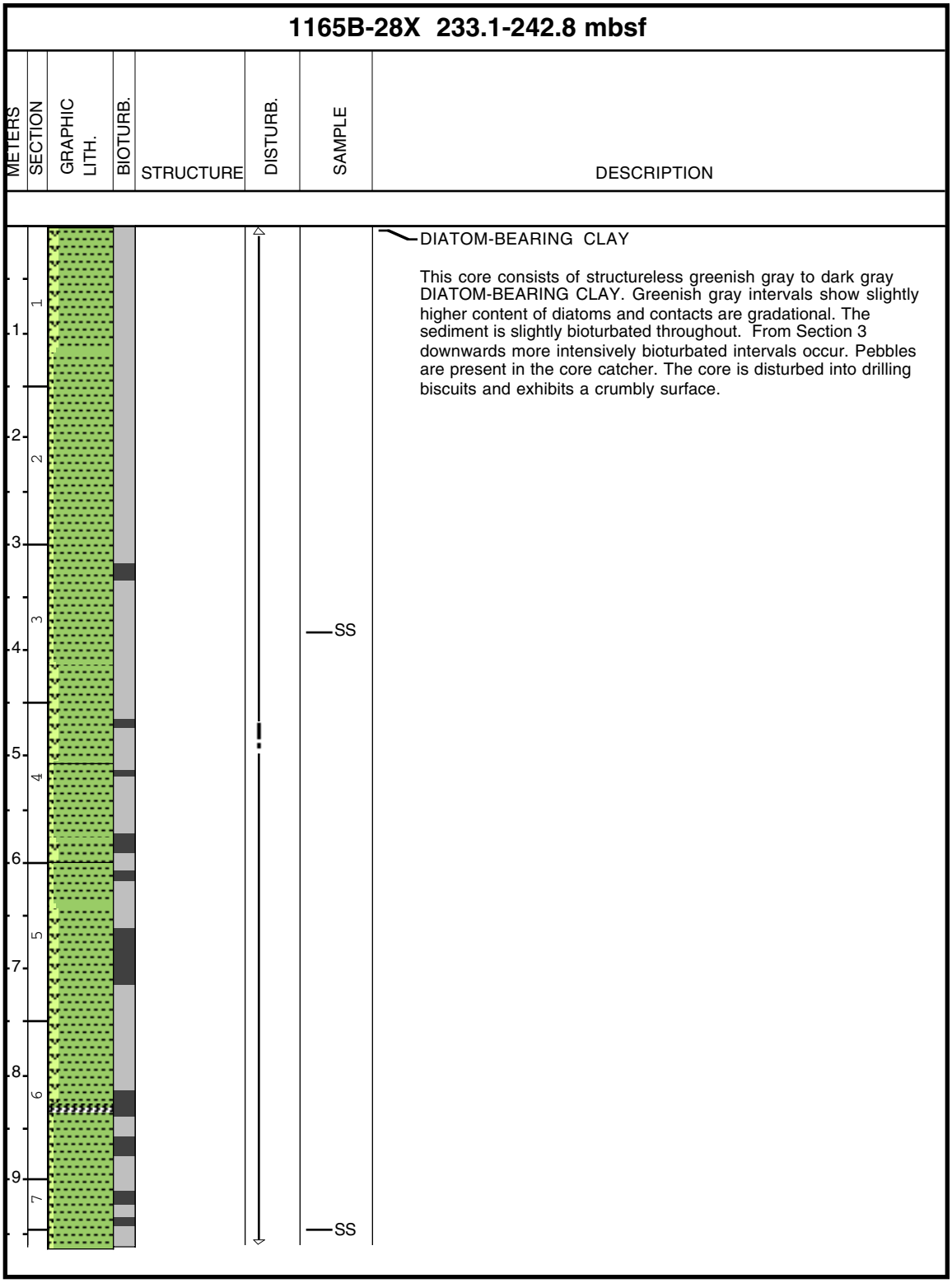
1165B-25X NO RECOVERY

1165B-26X ENTIRE CORE GIVEN TO PALEONTOLOGISTS

Core Photo


1165B-27X 223.5-233.1 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
DIATOM-BEARING CLAY
This core consists of dark greenish gray DIATOM-BEARING CLAY and lighter greenish gray DIATOM-BEARING CLAY intervals which show slightly higher siliceous microfossil content. Contacts between these intervals are gradational. Drilling disturbance exists throughout the core resulting in the formation of drilling biscuits and some drilling slurry. In Section 1, 99 cm, an isolated siltstone pebble occurs as a lonestone.
SS
SS
IW

Core Photo



1165B-29X NO RECOVERY

Core Photo

1165B-30X 252.4-253.8 mbsf

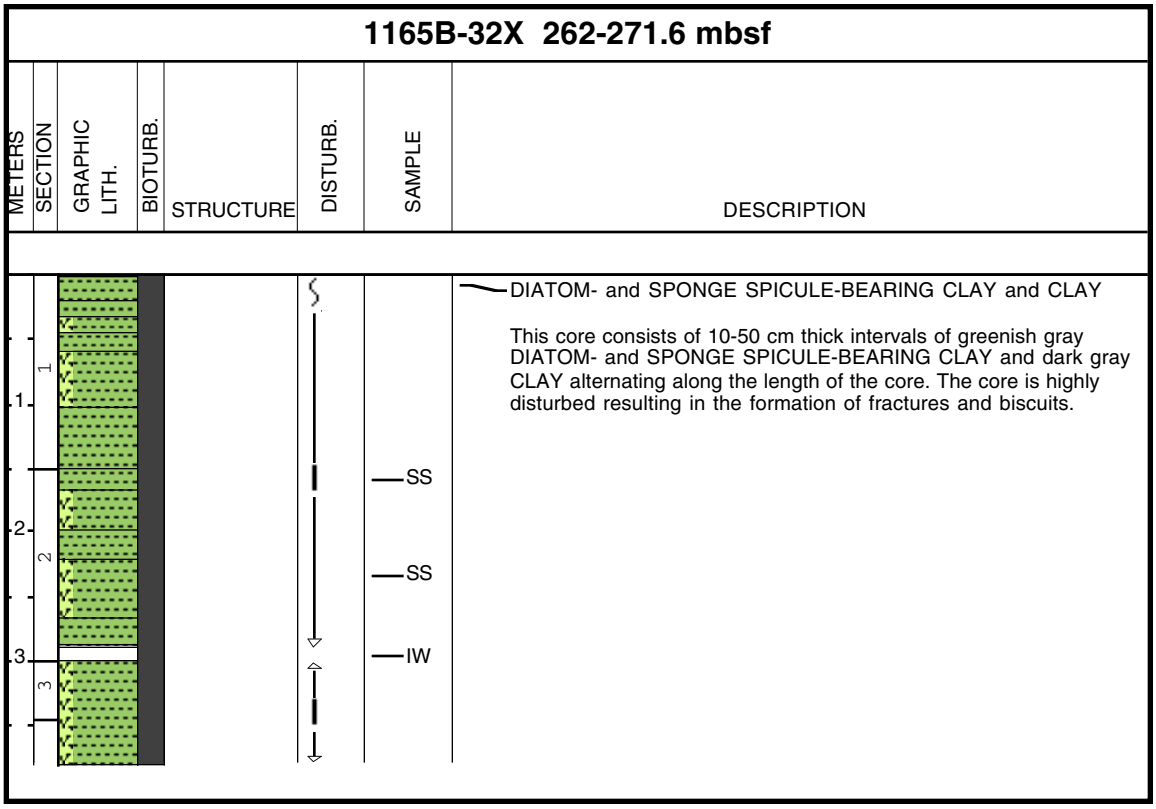
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	DISTURB.	SAMPLE	DESCRIPTION
1	1						DIATOM-BEARING CLAY This core consists of greenish gray and dark gray DIATOM-BEARING CLAY. In Section 1, 75-80 cm, three large 3-4 cm sized lonestones consisting of metamorphic rock and siltstone occur. The core is highly fractured and broken apart throughout.

Core Photo

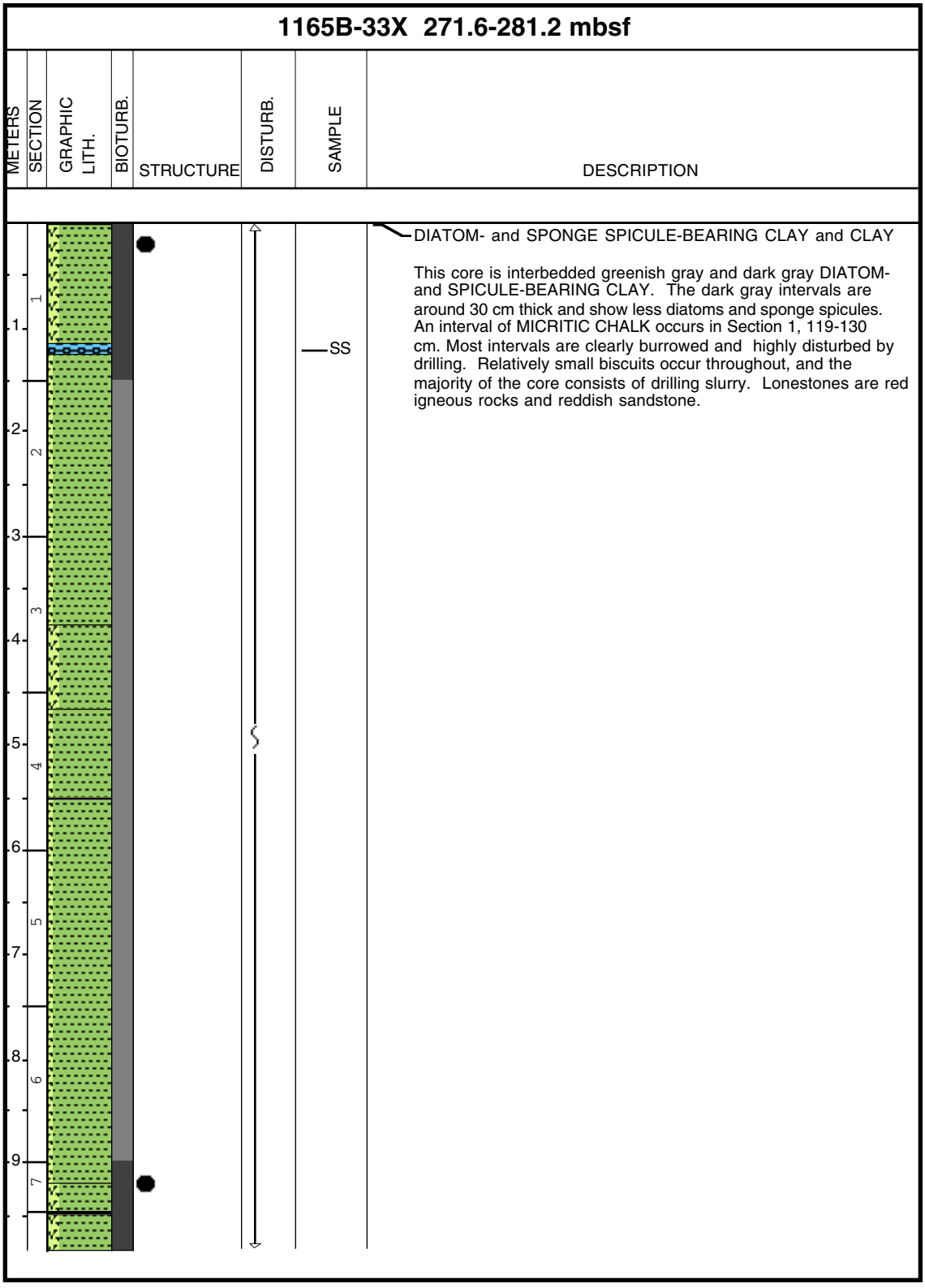
1165B-31X 253.8-262 mbsf

METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	DISTURB.	SAMPLE	DESCRIPTION
	1						This core consists of about 15 pebbles of various sizes and lithologies. Pebbles are probably not in situ.

Core Photo

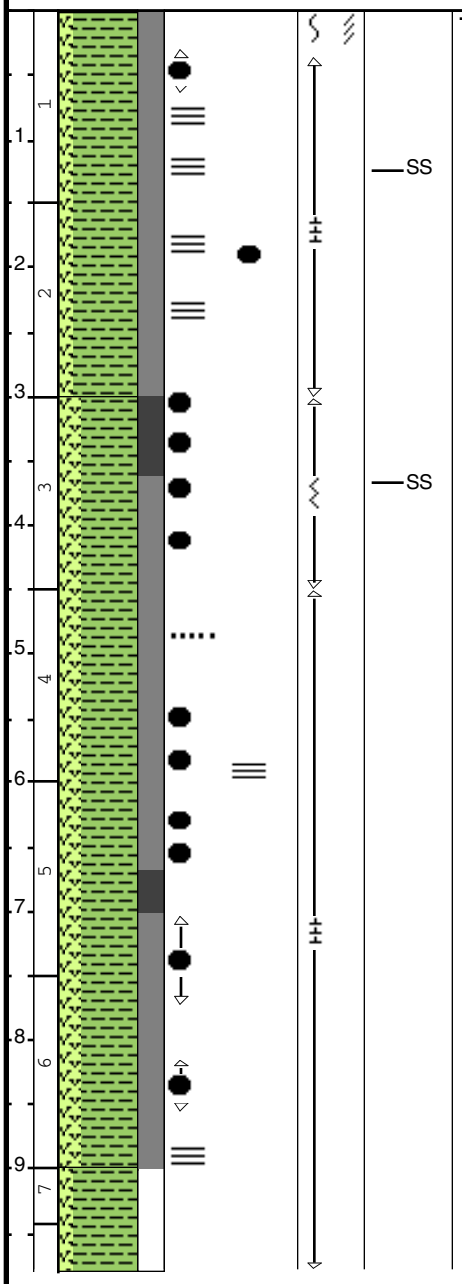

1165B-32X 262-271.6 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
2
3
1
2
3
SS
SS
IW
DIATOM- and SPONGE SPICULE-BEARING CLAY and CLAY
This core consists of 10-50 cm thick intervals of greenish gray DIATOM- and SPONGE SPICULE-BEARING CLAY and dark gray CLAY alternating along the length of the core. The core is highly disturbed resulting in the formation of fractures and biscuits.

Core Photo


1165B-33X 271.6-281.2 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
SS
DIATOM- and SPONGE SPICULE-BEARING CLAY and CLAY
This core is interbedded greenish gray and dark gray DIATOM- and SPICULE-BEARING CLAY. The dark gray intervals are around 30 cm thick and show less diatoms and sponge spicules. An interval of MICRITIC CHALK occurs in Section 1, 119-130 cm. Most intervals are clearly burrowed and highly disturbed by drilling. Relatively small biscuits occur throughout, and the majority of the core consists of drilling slurry. Lonestones are red igneous rocks and reddish sandstone.

Core Photo

1165B-34X 281.2-290.5 mbsf

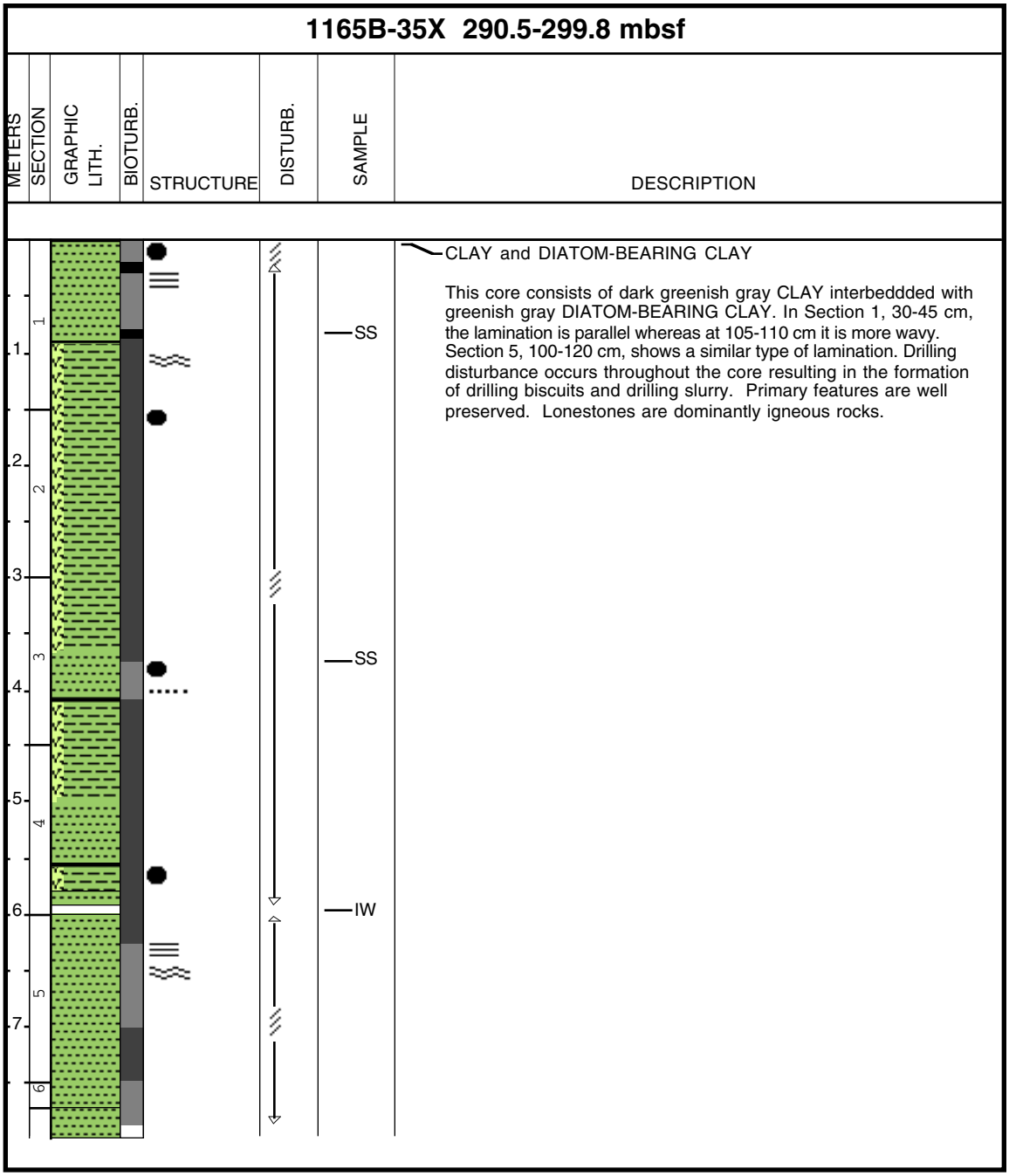


DESCRIPTION

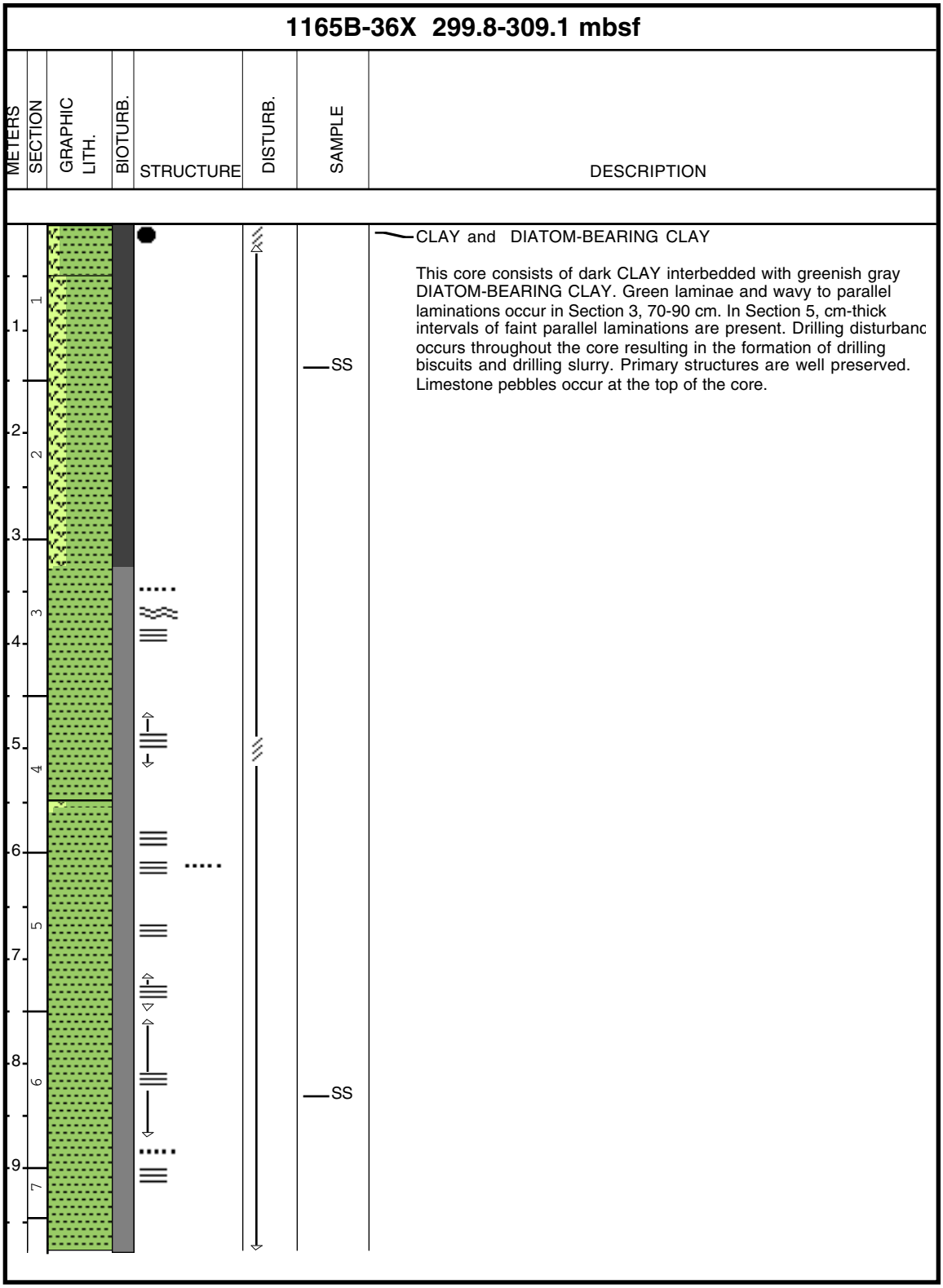
DIATOM- AND SPONGE SPICULES-BEARING SILTY CLAY and CLAY.

The core consists of greenish gray DIATOM- and SPONGE SPICULE-BEARING SILTY CLAY and CLAY. The sediments are disturbed by drilling resulting in drilling biscuits throughout the core. In some biscuits, laminations are preserved and burrows cut some individual laminae. In Sections 2 and 4, the core shows color changes from greenish gray to darker greenish gray. The darker intervals contain slightly more silt and less biogenic material. Abundant lonestones occur throughout the core, however, biscuits do not include any clasts. Major types of lonestones are biotite gneiss, quartz-feldspar gneiss, garnet gneiss, quartz porphyry, black schist, tonalite, granite, reddish quartzite, limestone, and light brownish claystone.

Core Photo

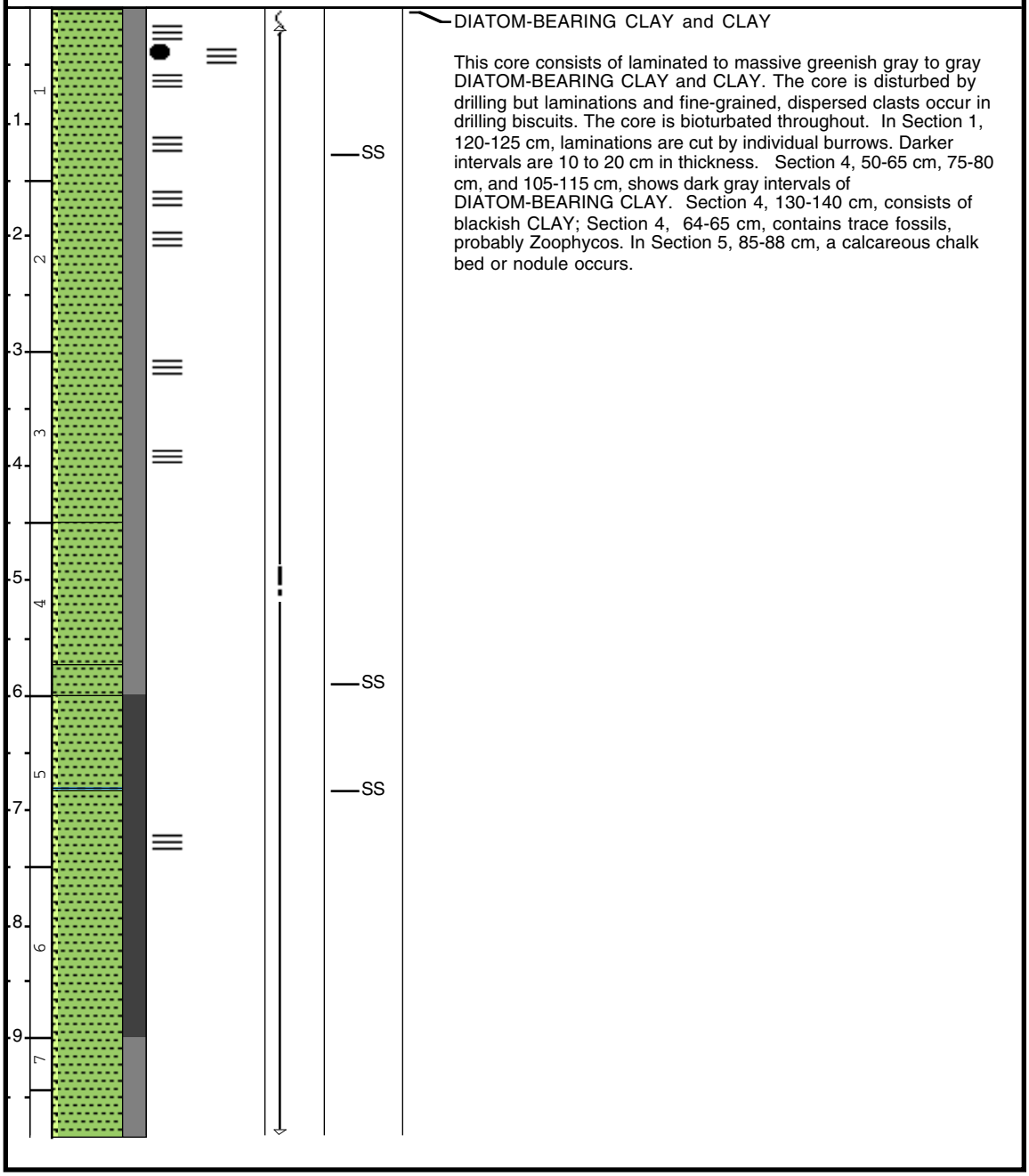

1165B-35X 290.5-299.8 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
SS
SS
IW
CLAY and DIATOM-BEARING CLAY
This core consists of dark greenish gray CLAY interbeddded with greenish gray DIATOM-BEARING CLAY. In Section 1, 30-45 cm, the lamination is parallel whereas at 105-110 cm it is more wavy. Section 5, 100-120 cm, shows a similar type of lamination. Drilling disturbance occurs throughout the core resulting in the formation of drilling biscuits and drilling slurry. Primary features are well preserved. Lonestones are dominantly igneous rocks.

Core Photo


1165B-36X 299.8-309.1 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAY and DIATOM-BEARING CLAY
This core consists of dark CLAY interbedded with greenish gray DIATOM-BEARING CLAY. Green laminae and wavy to parallel laminations occur in Section 3, 70-90 cm. In Section 5, cm-thick intervals of faint parallel laminations are present. Drilling disturbanc occurs throughout the core resulting in the formation of drilling biscuits and drilling slurry. Primary structures are well preserved. Limestone pebbles occur at the top of the core.
SS
SS

Core Photo

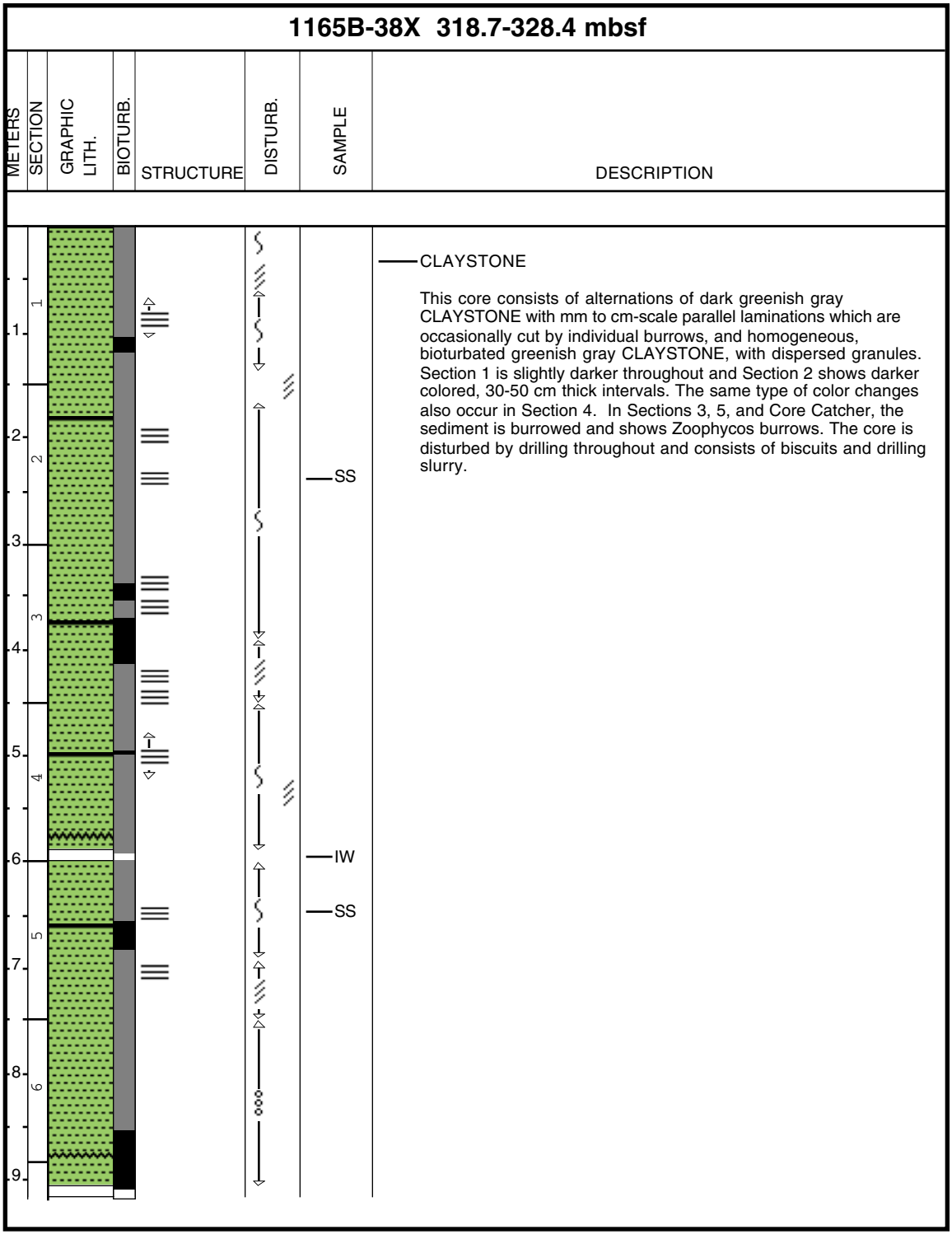
1165B-37X 309.1-318.7 mbsf



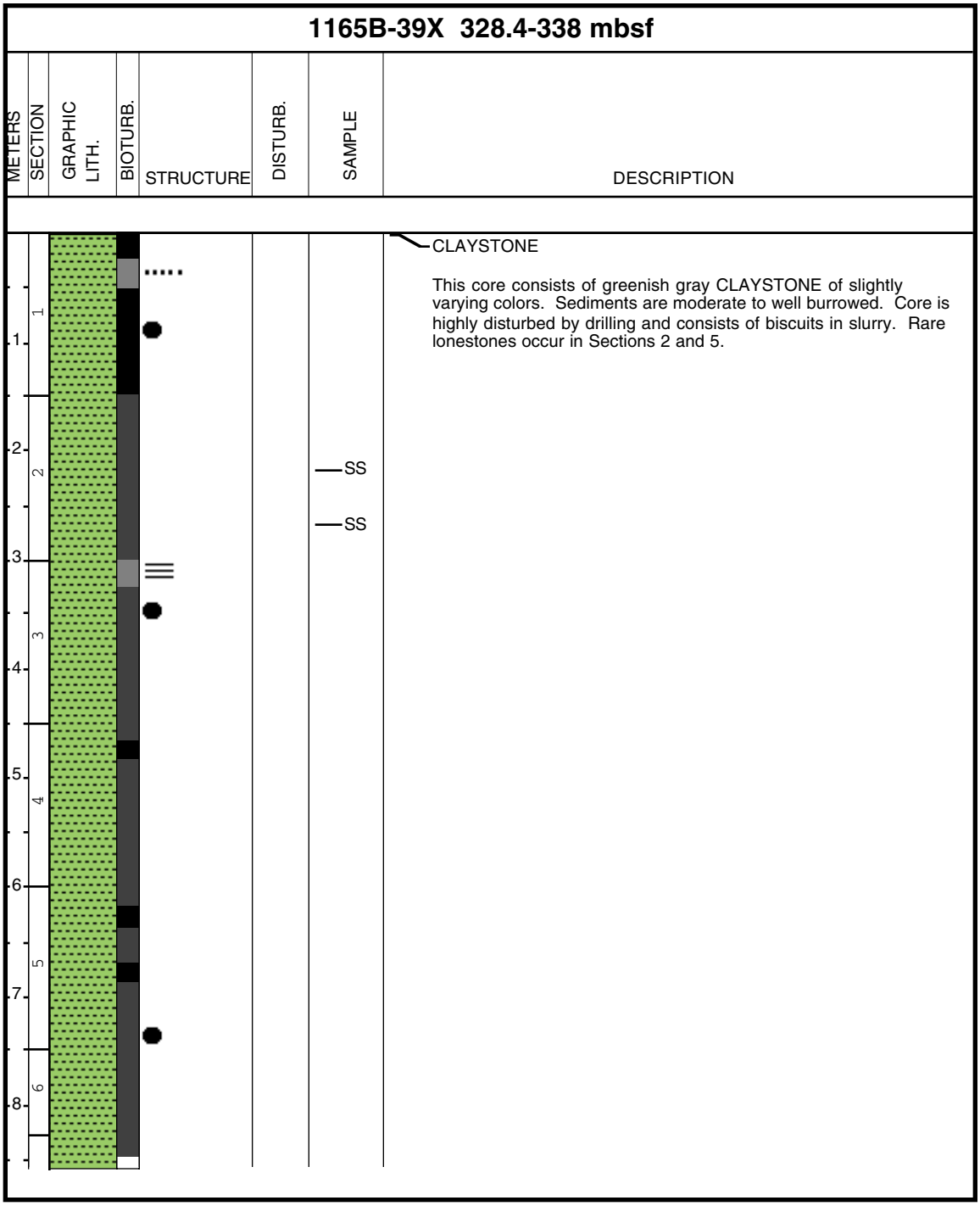
DIATOM-BEARING CLAY and CLAY

This core consists of laminated to massive greenish gray to gray DIATOM-BEARING CLAY and CLAY. The core is disturbed by drilling but laminations and fine-grained, dispersed clasts occur in drilling biscuits. The core is bioturbated throughout. In Section 1, 120-125 cm, laminations are cut by individual burrows. Darker intervals are 10 to 20 cm in thickness. Section 4, 50-65 cm, 75-80 cm, and 105-115 cm, shows dark gray intervals of DIATOM-BEARING CLAY. Section 4, 130-140 cm, consists of blackish CLAY; Section 4, 64-65 cm, contains trace fossils, probably Zoophycos. In Section 5, 85-88 cm, a calcareous chalk bed or nodule occurs.

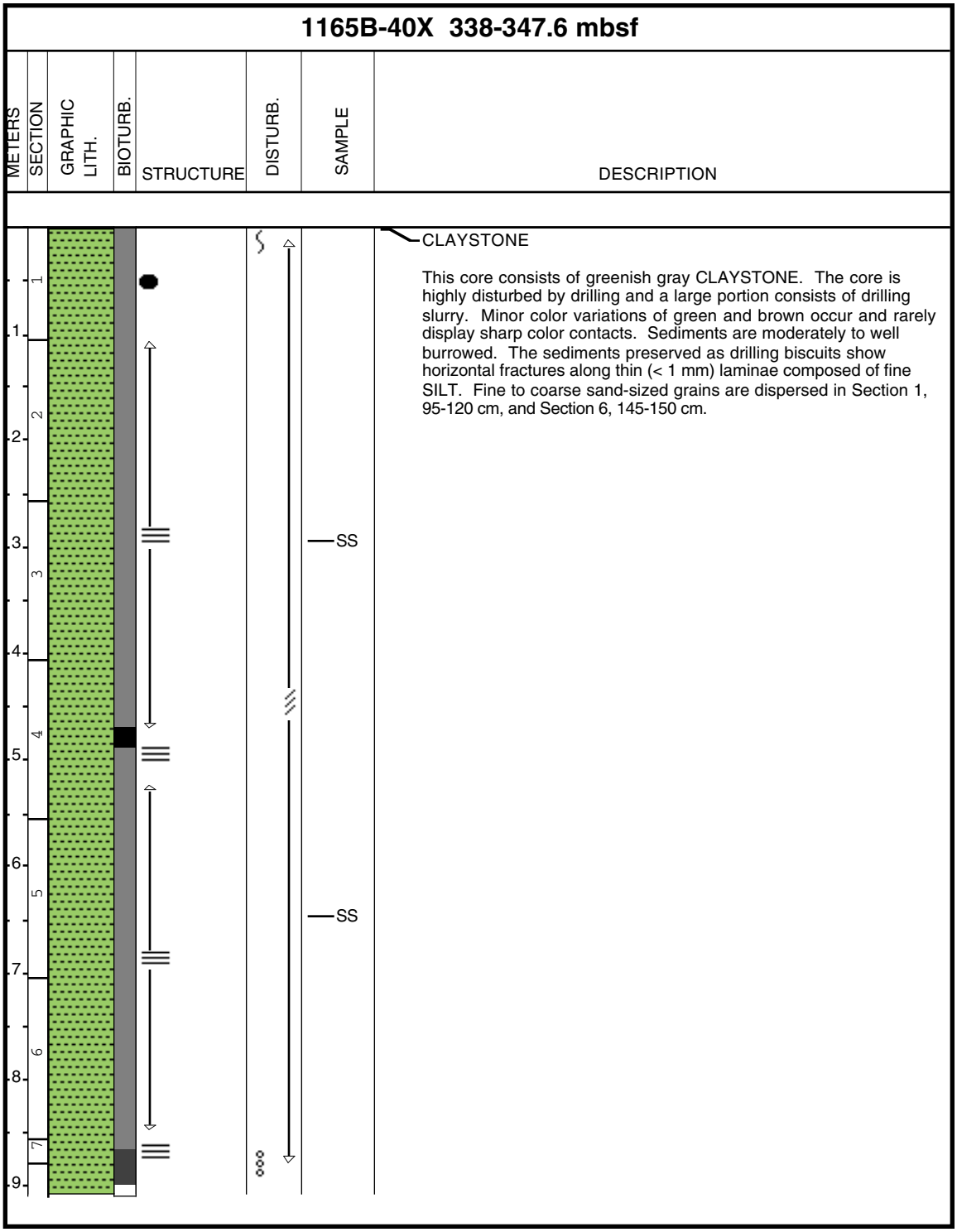
Core Photo


1165B-38X 318.7-328.4 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core consists of alternations of dark greenish gray CLAYSTONE with mm to cm-scale parallel laminations which are occasionally cut by individual burrows, and homogeneous, bioturbated greenish gray CLAYSTONE, with dispersed granules. Section 1 is slightly darker throughout and Section 2 shows darker colored, 30-50 cm thick intervals. The same type of color changes also occur in Section 4. In Sections 3, 5, and Core Catcher, the sediment is burrowed and shows Zoophycos burrows. The core is disturbed by drilling throughout and consists of biscuits and drilling slurry.
SS
IW
SS

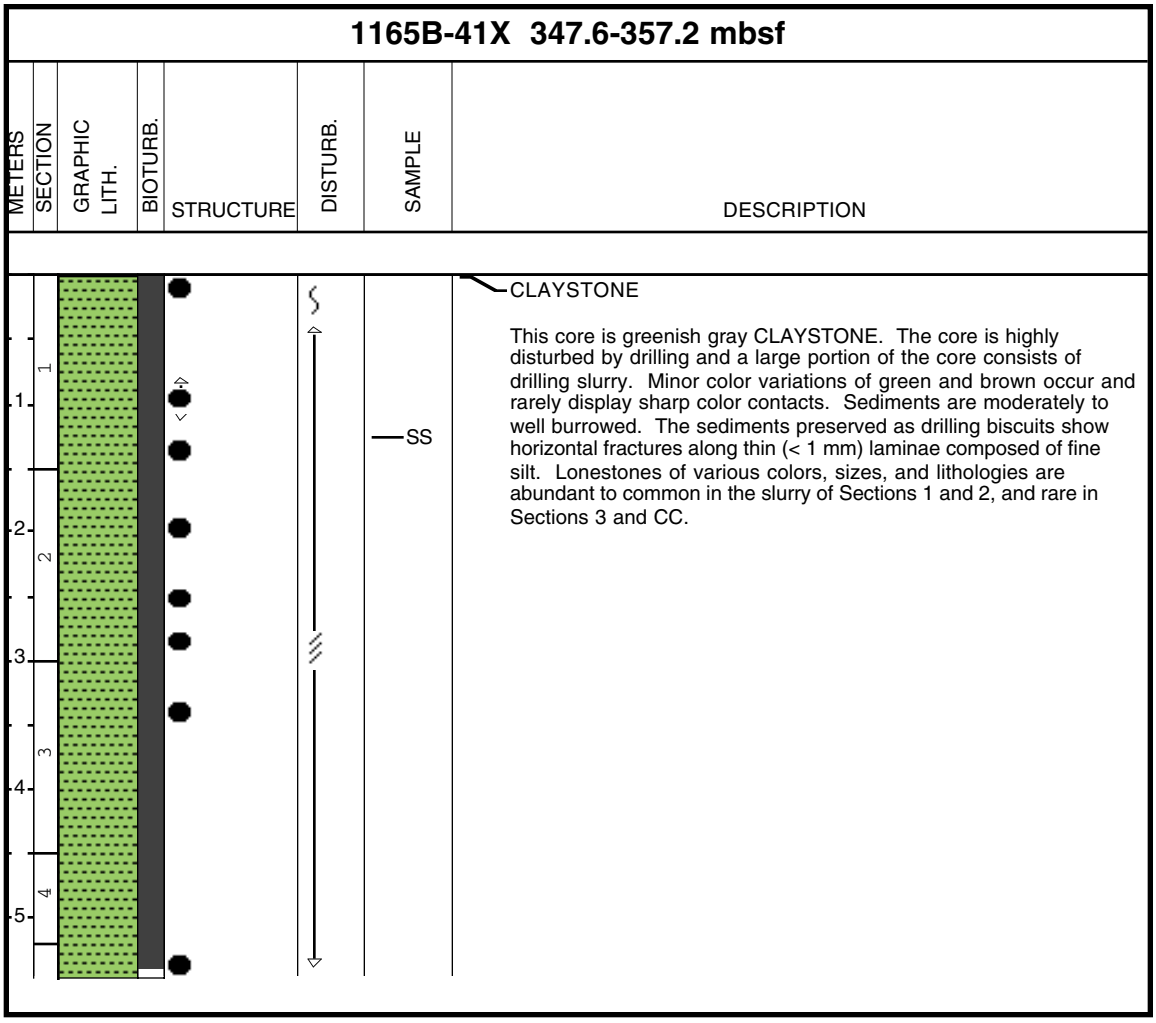
Core Photo


1165B-39X 328.4-338 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core consists of greenish gray CLAYSTONE of slightly varying colors. Sediments are moderate to well burrowed. Core is highly disturbed by drilling and consists of biscuits in slurry. Rare lonestones occur in Sections 2 and 5.
SS
SS

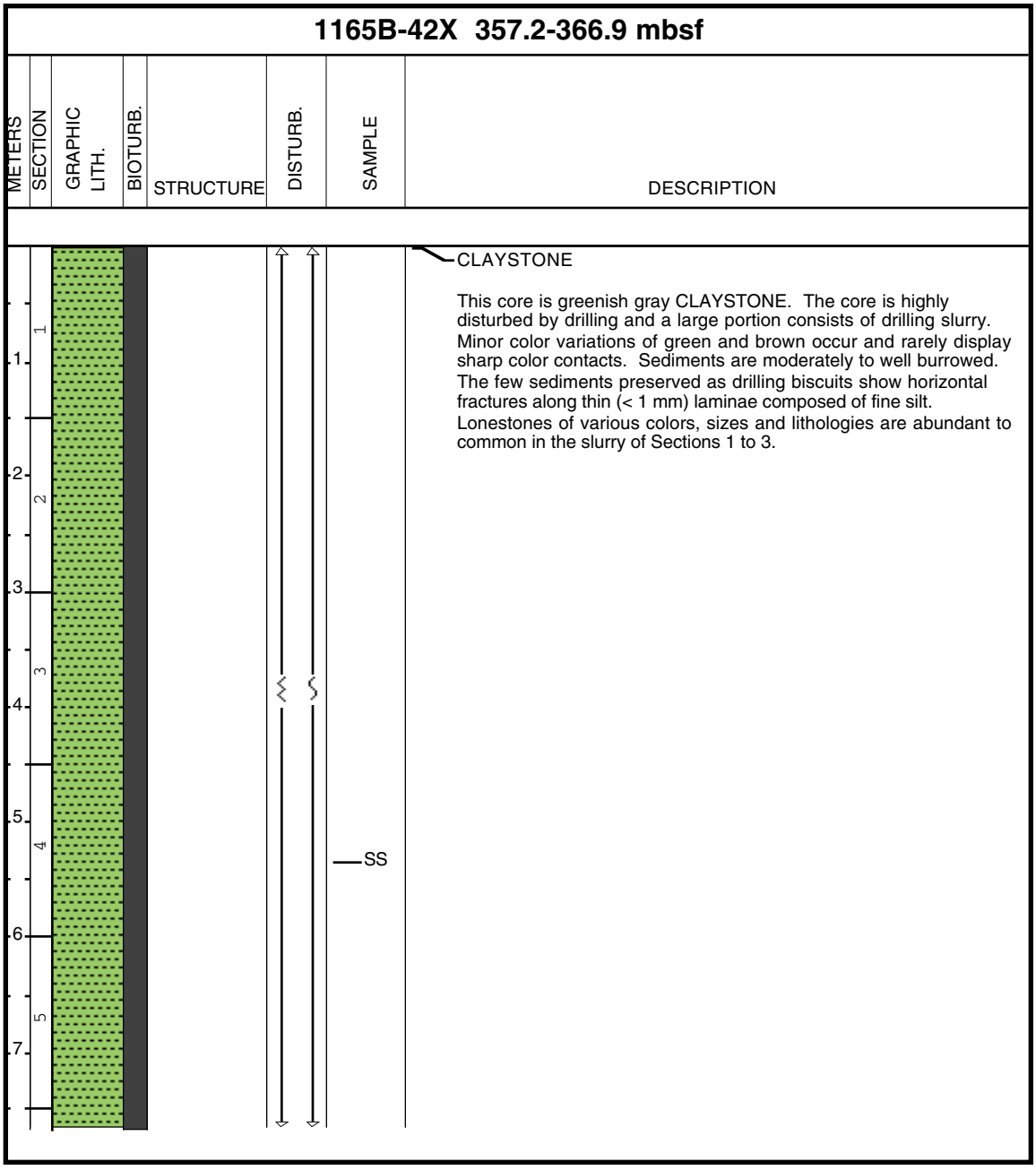
Core Photo


1165B-40X 338-347.6 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core consists of greenish gray CLAYSTONE. The core is highly disturbed by drilling and a large portion consists of drilling slurry. Minor color variations of green and brown occur and rarely display sharp color contacts. Sediments are moderately to well burrowed. The sediments preserved as drilling biscuits show horizontal fractures along thin (< 1 mm) laminae composed of fine SILT. Fine to coarse sand-sized grains are dispersed in Section 1, 95-120 cm, and Section 6, 145-150 cm.
SS
SS

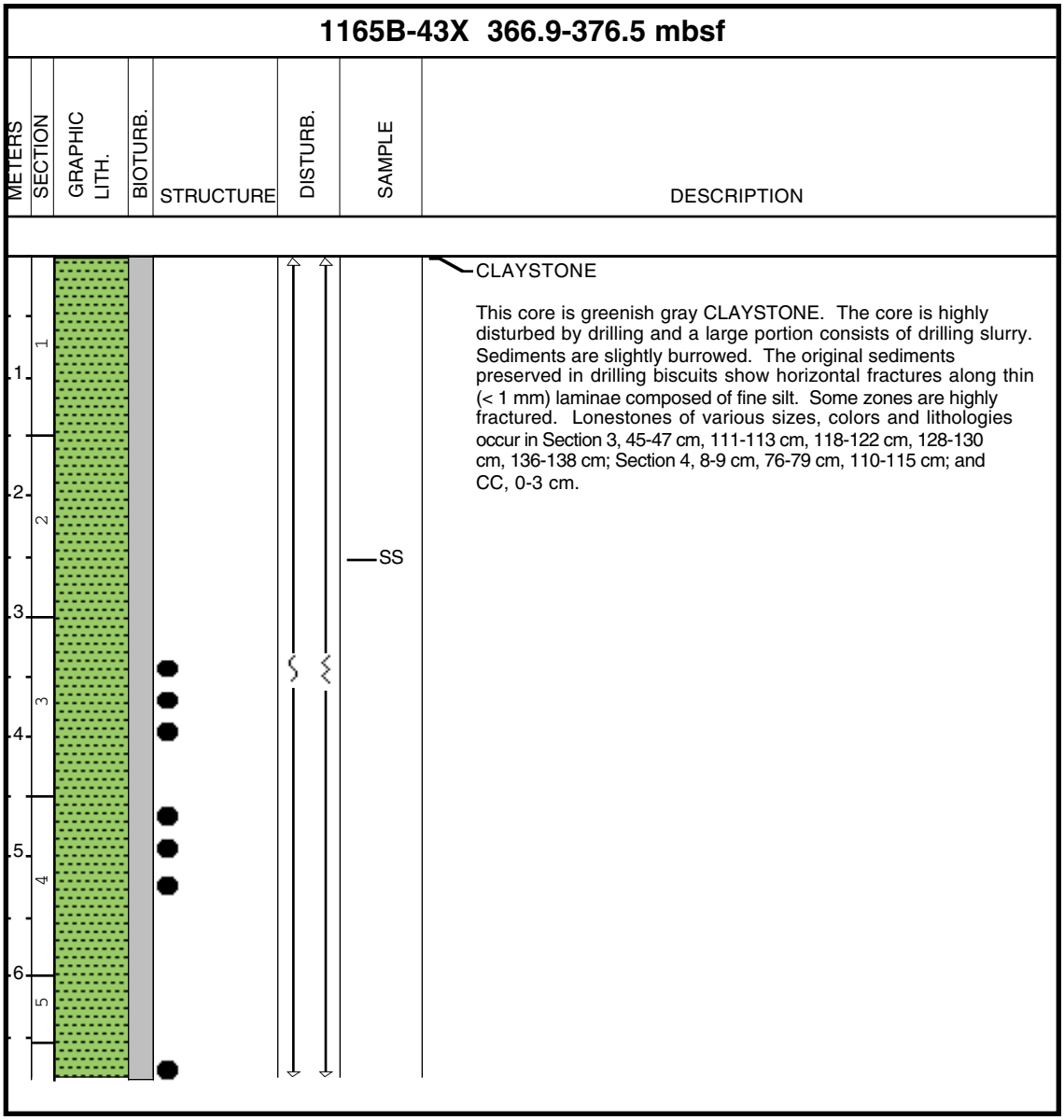
Core Photo


1165B-41X 347.6-357.2 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE. The core is highly disturbed by drilling and a large portion of the core consists of drilling slurry. Minor color variations of green and brown occur and rarely display sharp color contacts. Sediments are moderately to well burrowed. The sediments preserved as drilling biscuits show horizontal fractures along thin (< 1 mm) laminae composed of fine silt. Lonestones of various colors, sizes, and lithologies are abundant to common in the slurry of Sections 1 and 2, and rare in Sections 3 and CC.
SS
1
2
3
4
5

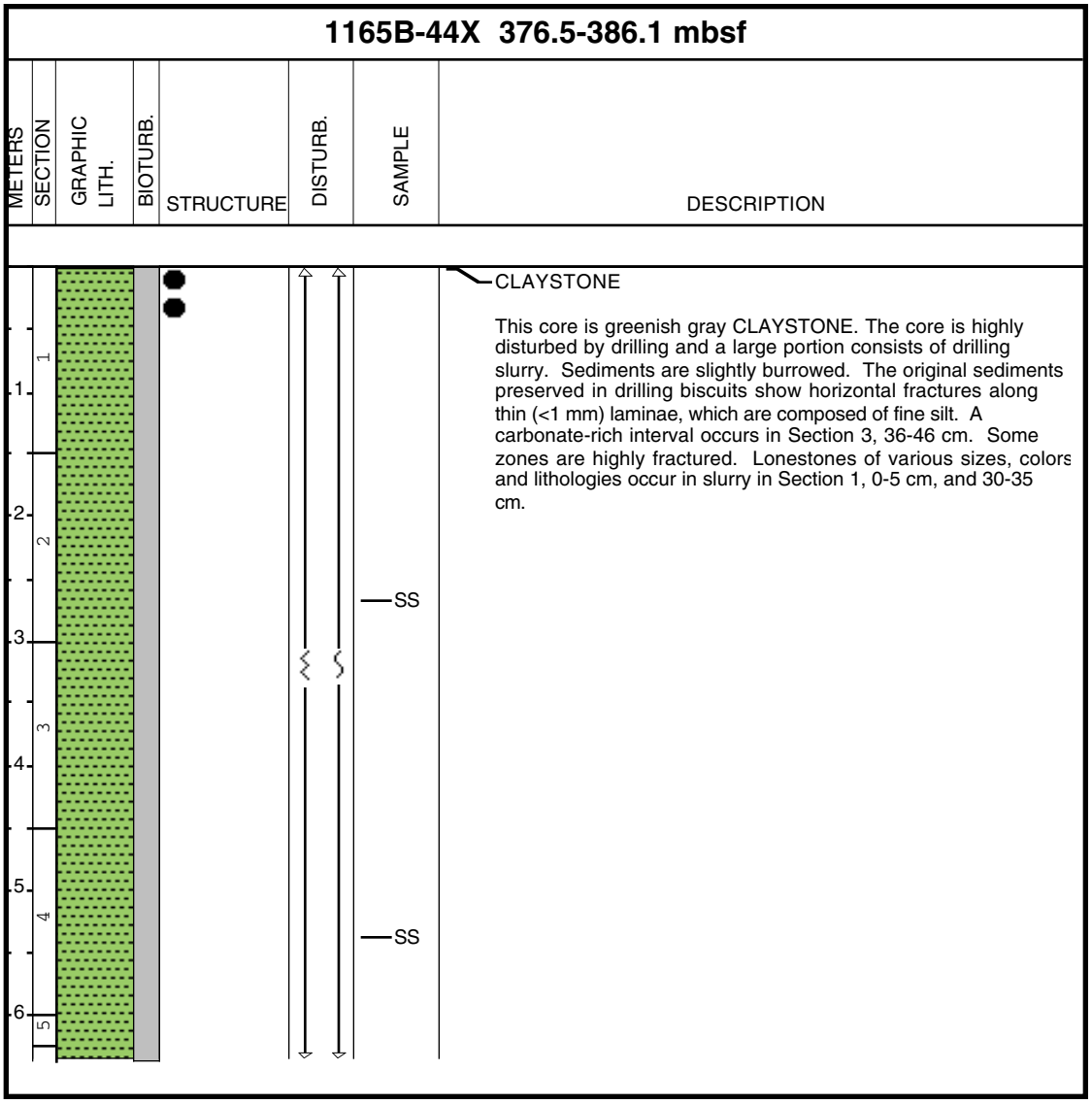
Core Photo


1165B-42X 357.2-366.9 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE. The core is highly disturbed by drilling and a large portion consists of drilling slurry. Minor color variations of green and brown occur and rarely display sharp color contacts. Sediments are moderately to well burrowed. The few sediments preserved as drilling biscuits show horizontal fractures along thin (< 1 mm) laminae composed of fine silt. Lonestones of various colors, sizes and lithologies are abundant to common in the slurry of Sections 1 to 3.
SS

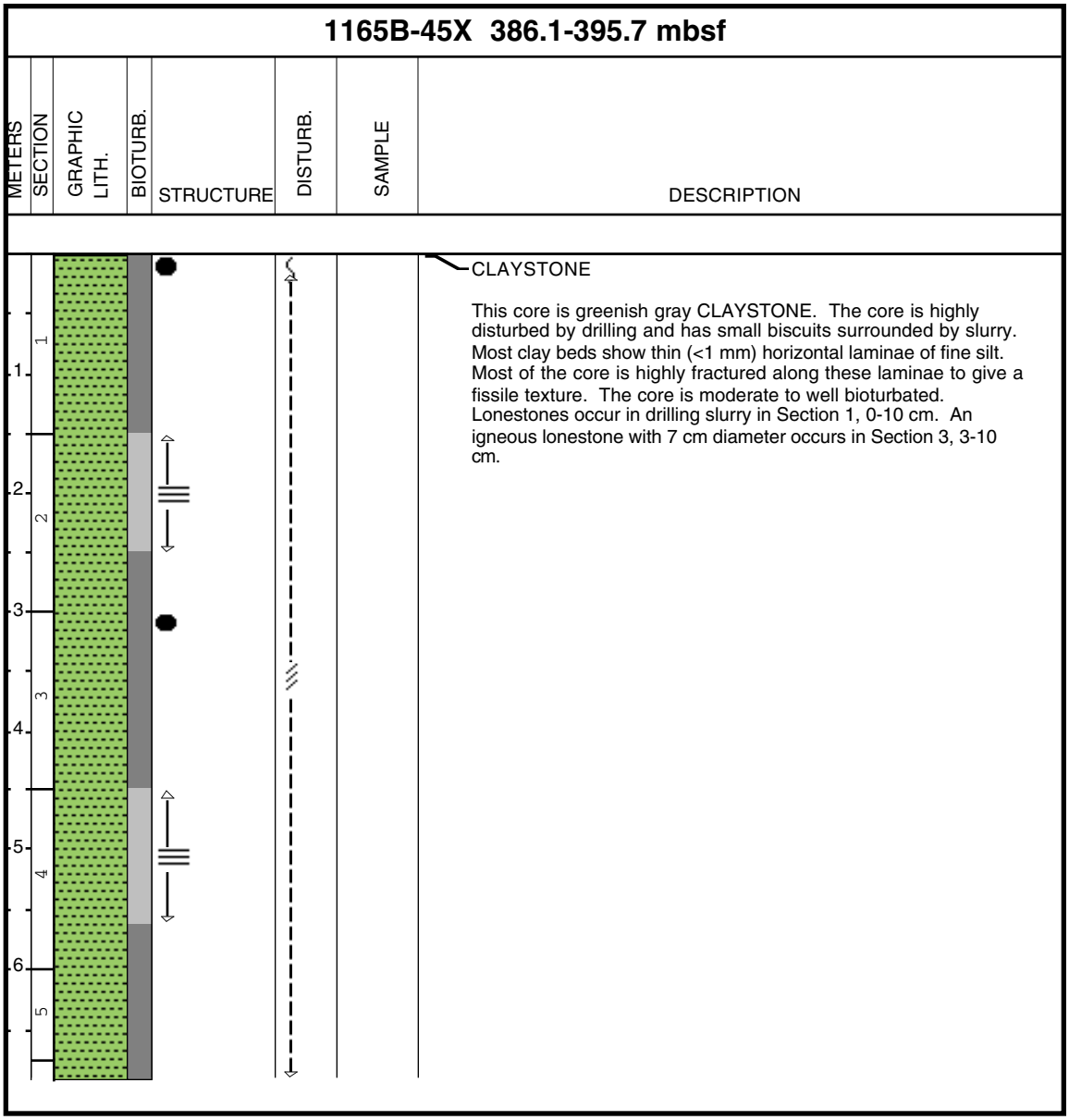
Core Photo


1165B-43X 366.9-376.5 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE. The core is highly disturbed by drilling and a large portion consists of drilling slurry. Sediments are slightly burrowed. The original sediments preserved in drilling biscuits show horizontal fractures along thin (< 1 mm) laminae composed of fine silt. Some zones are highly fractured. Lonestones of various sizes, colors and lithologies occur in Section 3, 45-47 cm, 111-113 cm, 118-122 cm, 128-130 cm, 136-138 cm; Section 4, 8-9 cm, 76-79 cm, 110-115 cm; and CC, 0-3 cm.
SS

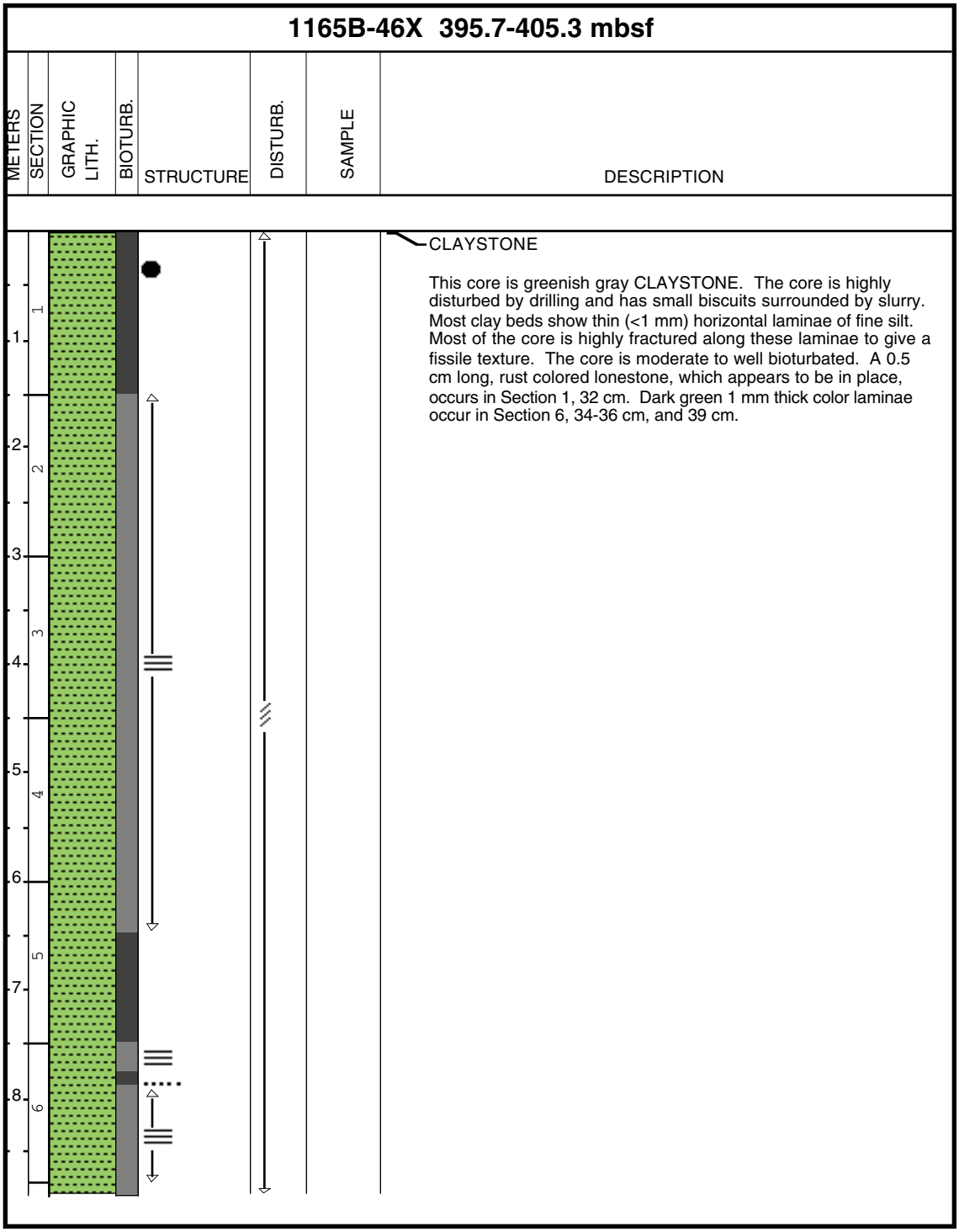
Core Photo


1165B-44X 376.5-386.1 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE. The core is highly disturbed by drilling and a large portion consists of drilling slurry. Sediments are slightly burrowed. The original sediments preserved in drilling biscuits show horizontal fractures along thin (<1 mm) laminae, which are composed of fine silt. A carbonate-rich interval occurs in Section 3, 36-46 cm. Some zones are highly fractured. Lonestones of various sizes, colors and lithologies occur in slurry in Section 1, 0-5 cm, and 30-35 cm.
SS
SS

Core Photo


1165B-45X 386.1-395.7 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE. The core is highly disturbed by drilling and has small biscuits surrounded by slurry. Most clay beds show thin (<1 mm) horizontal laminae of fine silt. Most of the core is highly fractured along these laminae to give a fissile texture. The core is moderate to well bioturbated. Lonestones occur in drilling slurry in Section 1, 0-10 cm. An igneous lonestone with 7 cm diameter occurs in Section 3, 3-10 cm.

Core Photo

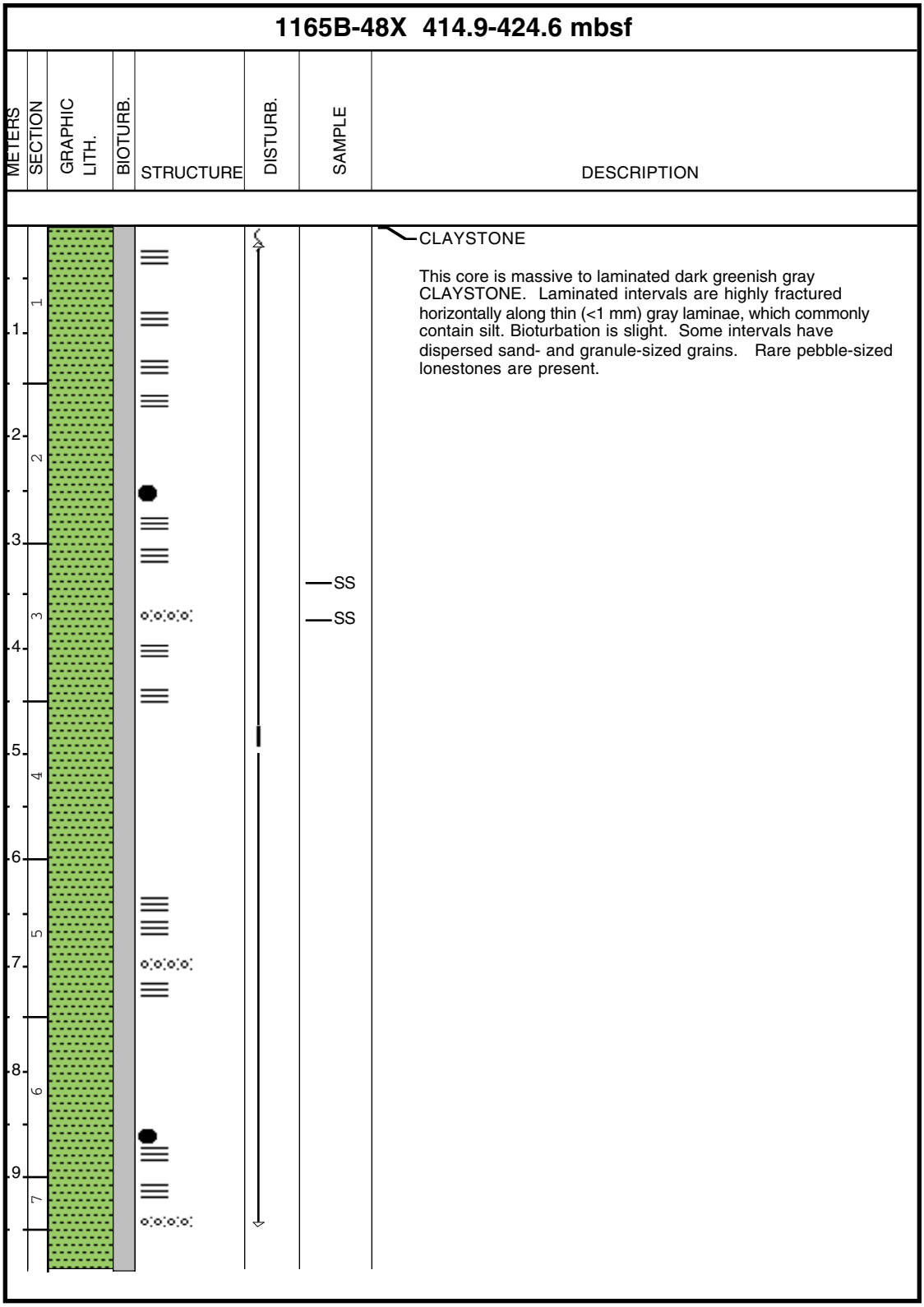

1165B-46X 395.7-405.3 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE. The core is highly disturbed by drilling and has small biscuits surrounded by slurry. Most clay beds show thin (<1 mm) horizontal laminae of fine silt. Most of the core is highly fractured along these laminae to give a fissile texture. The core is moderate to well bioturbated. A 0.5 cm long, rust colored lonestone, which appears to be in place, occurs in Section 1, 32 cm. Dark green 1 mm thick color laminae occur in Section 6, 34-36 cm, and 39 cm.

Core Photo

1165B-47X 405.3-414.9 mbsf

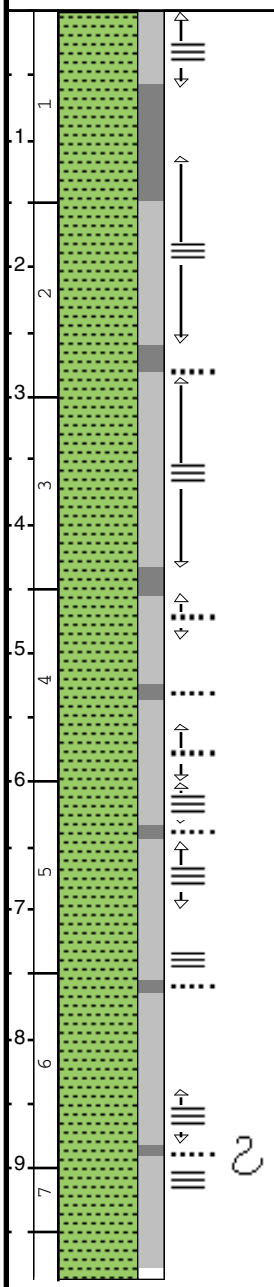
METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	DISTURB.	SAMPLE	DESCRIPTION
	1						This core recovered no sediments, only 8 pebbles of variegated color, size, and lithology that probably fell downhole during drilling.

Core Photo

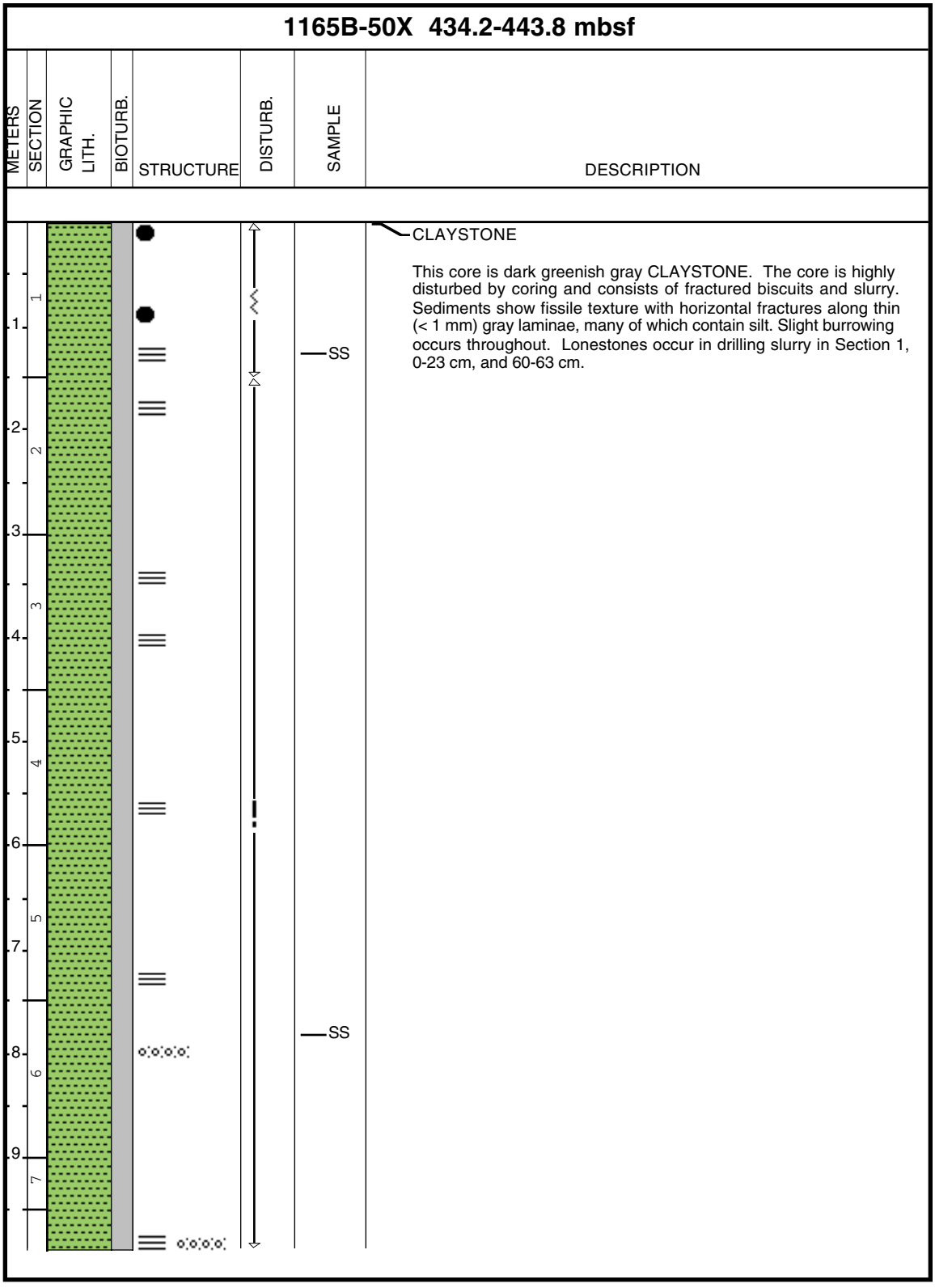

1165B-48X 414.9-424.6 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is massive to laminated dark greenish gray CLAYSTONE. Laminated intervals are highly fractured horizontally along thin (<1 mm) gray laminae, which commonly contain silt. Bioturbation is slight. Some intervals have dispersed sand- and granule-sized grains. Rare pebble-sized lonestones are present.
SS
SS

Core Photo

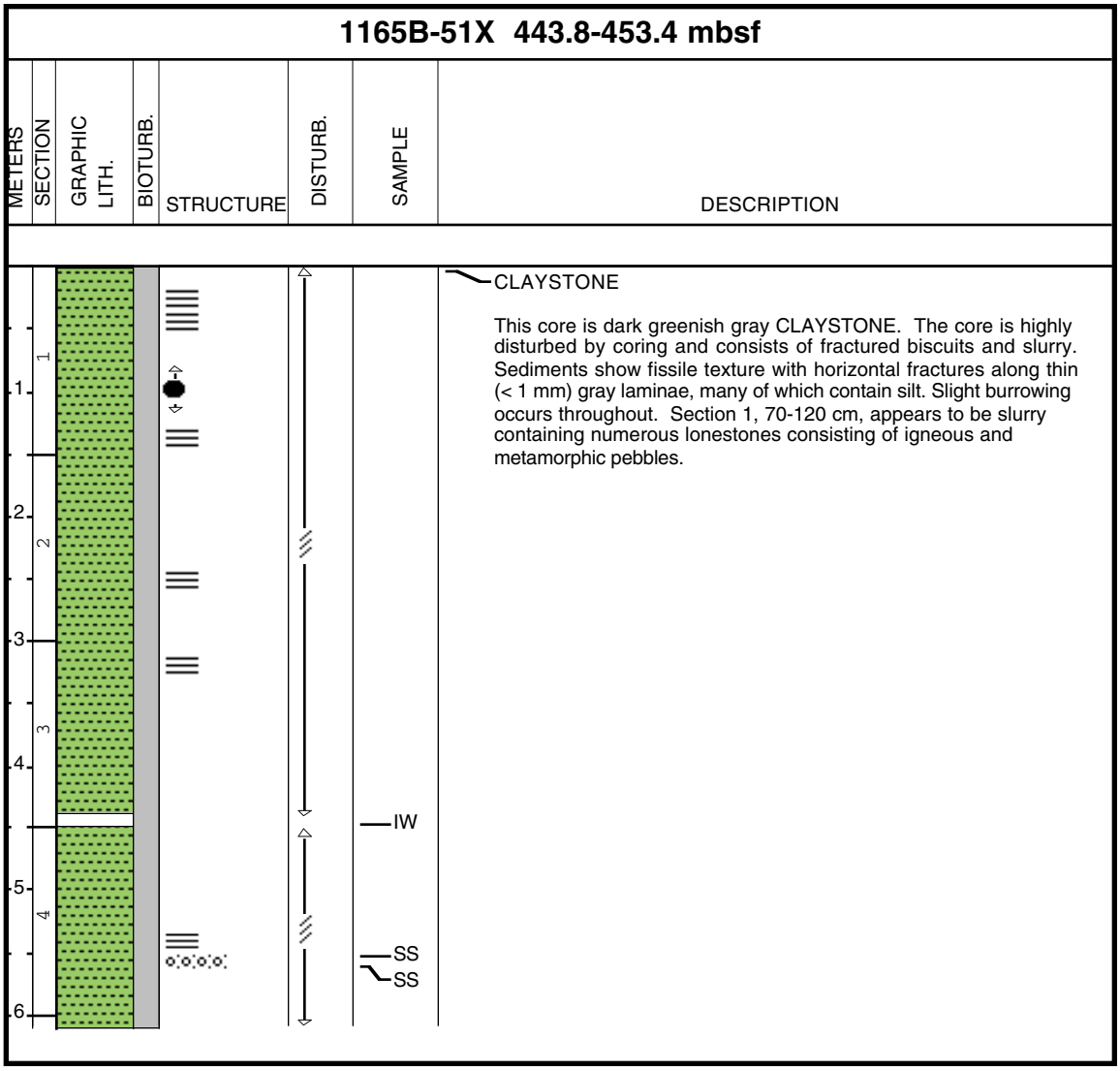
1165B-49X 424.6-434.2 mbsf



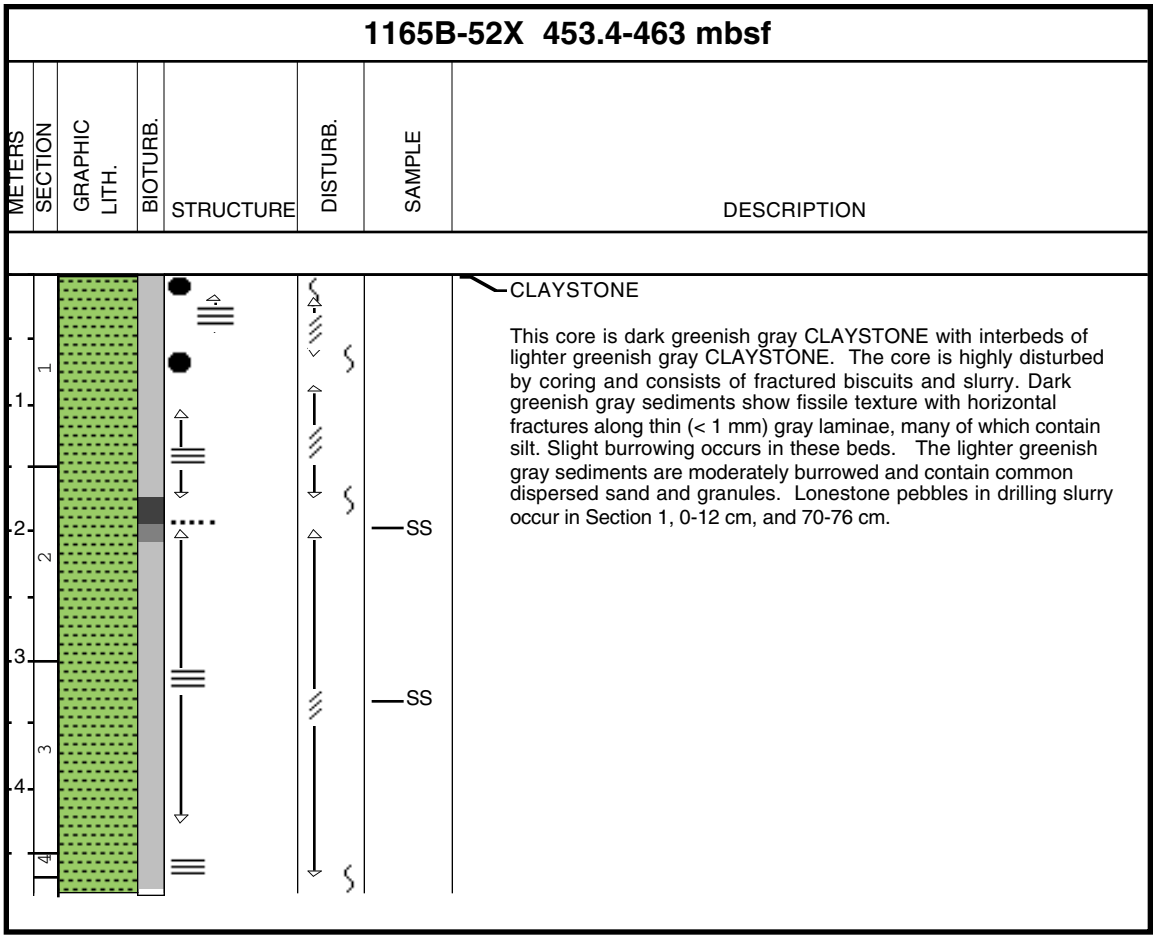
Core Photo


1165B-50X 434.2-443.8 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. Sediments show fissile texture with horizontal fractures along thin (< 1 mm) gray laminae, many of which contain silt. Slight burrowing occurs throughout. Lonestones occur in drilling slurry in Section 1, 0-23 cm, and 60-63 cm.
SS
SS

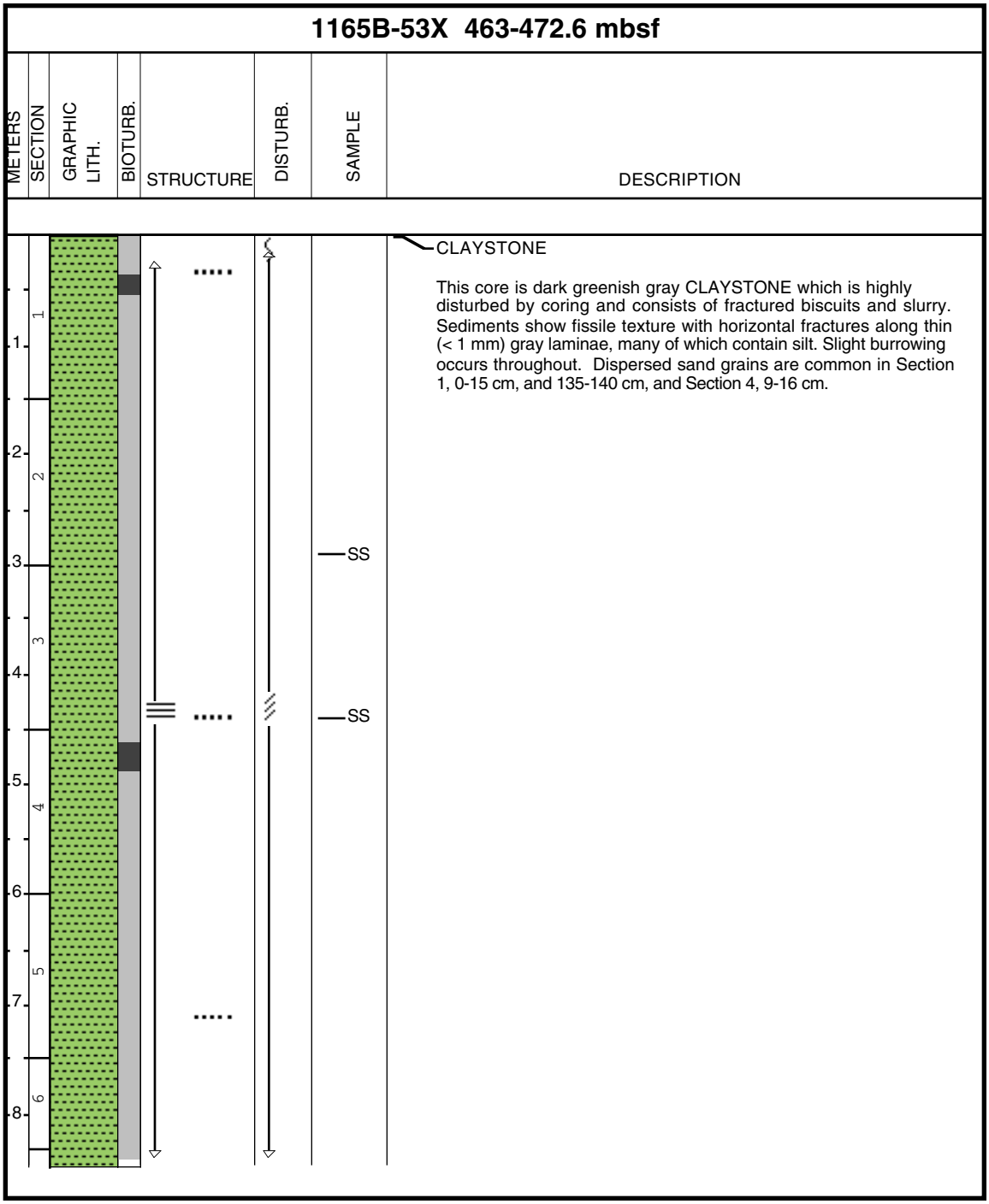
Core Photo


1165B-51X 443.8-453.4 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. Sediments show fissile texture with horizontal fractures along thin (< 1 mm) gray laminae, many of which contain silt. Slight burrowing occurs throughout. Section 1, 70-120 cm, appears to be slurry containing numerous lonestones consisting of igneous and metamorphic pebbles.
IW
SS
SS

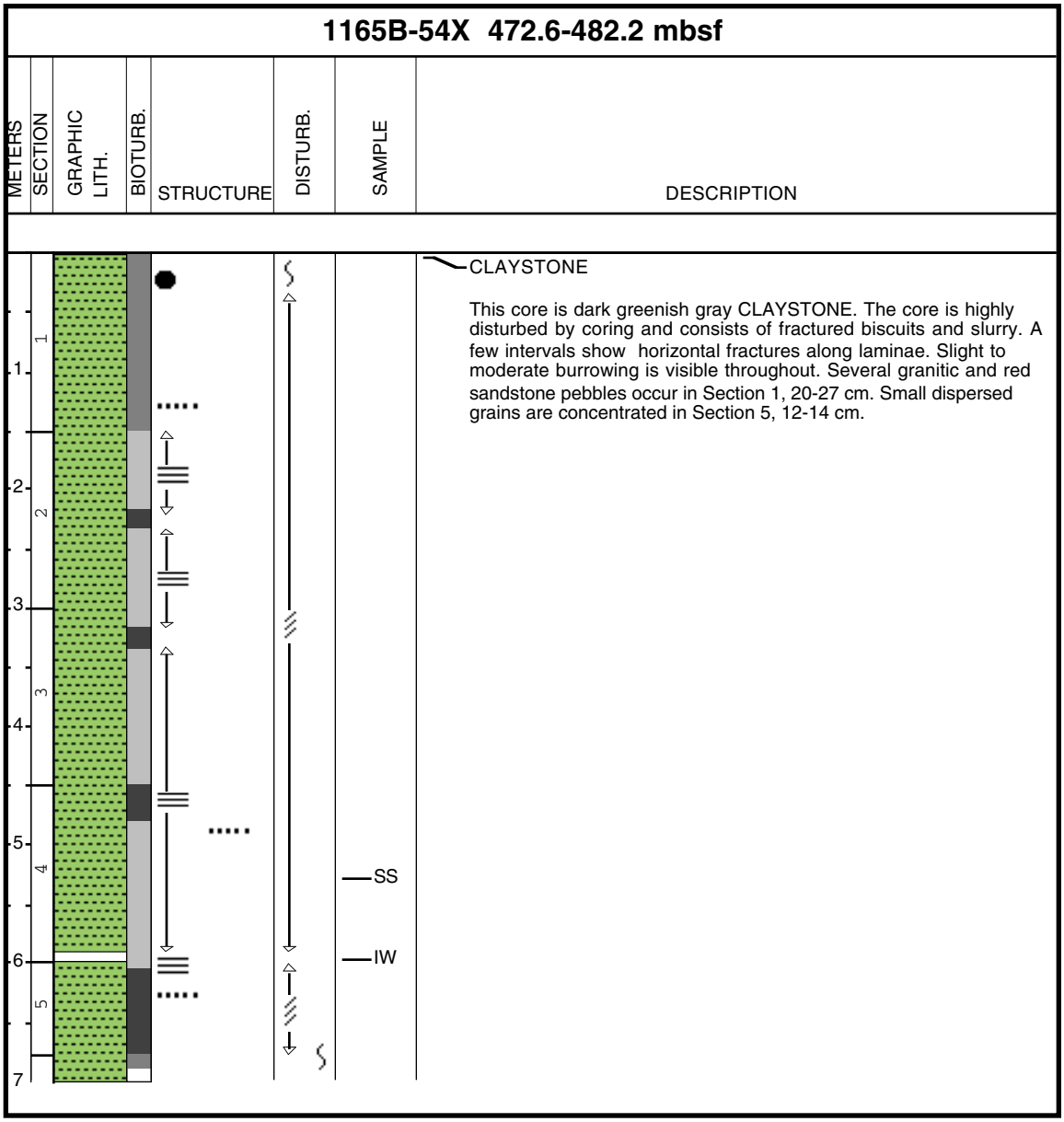
Core Photo


1165B-52X 453.4-463 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is dark greenish gray CLAYSTONE with interbeds of lighter greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. Dark greenish gray sediments show fissile texture with horizontal fractures along thin (< 1 mm) gray laminae, many of which contain silt. Slight burrowing occurs in these beds. The lighter greenish gray sediments are moderately burrowed and contain common dispersed sand and granules. Lonestone pebbles in drilling slurry occur in Section 1, 0-12 cm, and 70-76 cm.
SS
SS

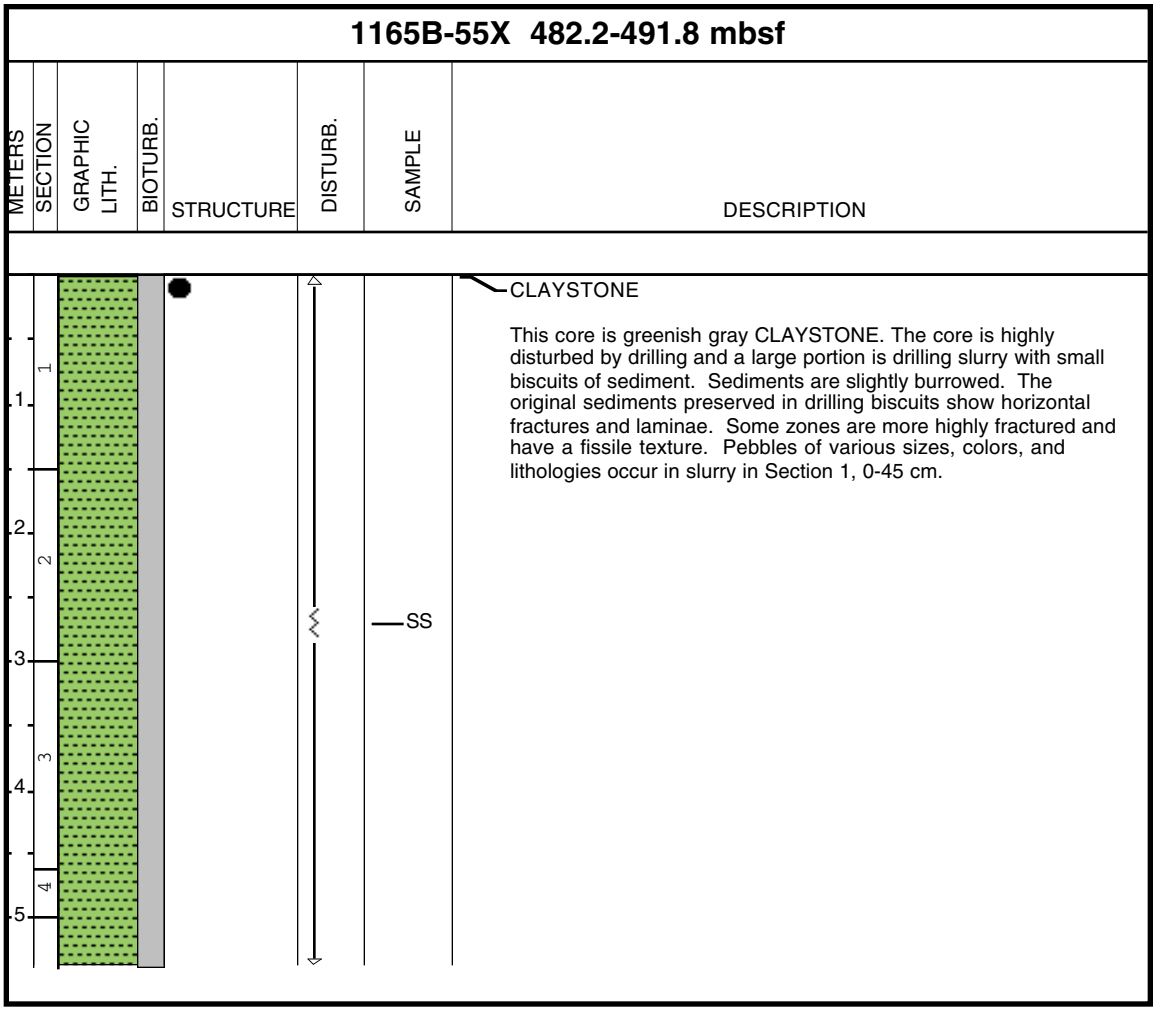
Core Photo


1165B-53X 463-472.6 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is dark greenish gray CLAYSTONE which is highly disturbed by coring and consists of fractured biscuits and slurry. Sediments show fissile texture with horizontal fractures along thin (< 1 mm) gray laminae, many of which contain silt. Slight burrowing occurs throughout. Dispersed sand grains are common in Section 1, 0-15 cm, and 135-140 cm, and Section 4, 9-16 cm.
SS
SS

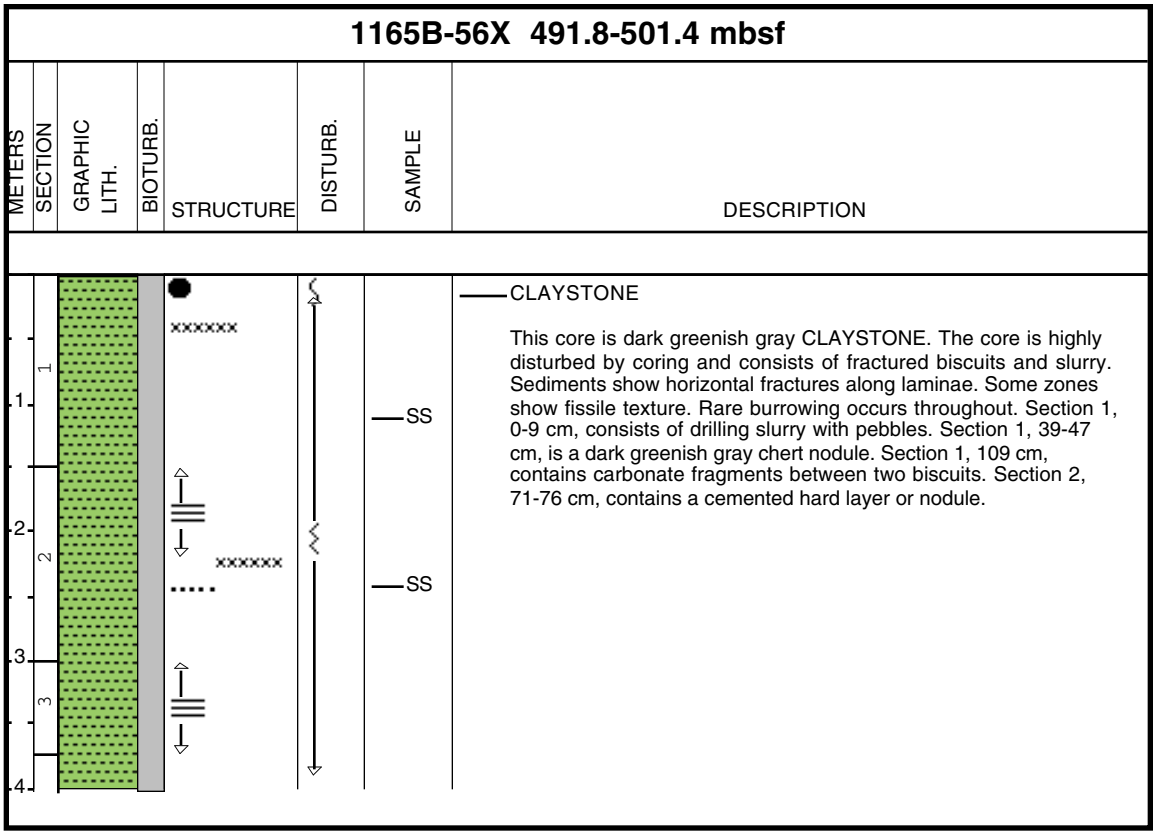
Core Photo


1165B-54X 472.6-482.2 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. A few intervals show horizontal fractures along laminae. Slight to moderate burrowing is visible throughout. Several granitic and red sandstone pebbles occur in Section 1, 20-27 cm. Small dispersed grains are concentrated in Section 5, 12-14 cm.
SS
IW

Core Photo


1165B-55X 482.2-491.8 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE. The core is highly disturbed by drilling and a large portion is drilling slurry with small biscuits of sediment. Sediments are slightly burrowed. The original sediments preserved in drilling biscuits show horizontal fractures and laminae. Some zones are more highly fractured and have a fissile texture. Pebbles of various sizes, colors, and lithologies occur in slurry in Section 1, 0-45 cm.
SS
1
2
3
4
5

Core Photo


1165B-56X 491.8-501.4 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. Sediments show horizontal fractures along laminae. Some zones show fissile texture. Rare burrowing occurs throughout. Section 1, 0-9 cm, consists of drilling slurry with pebbles. Section 1, 39-47 cm, is a dark greenish gray chert nodule. Section 1, 109 cm, contains carbonate fragments between two biscuits. Section 2, 71-76 cm, contains a cemented hard layer or nodule.
SS
SS
1
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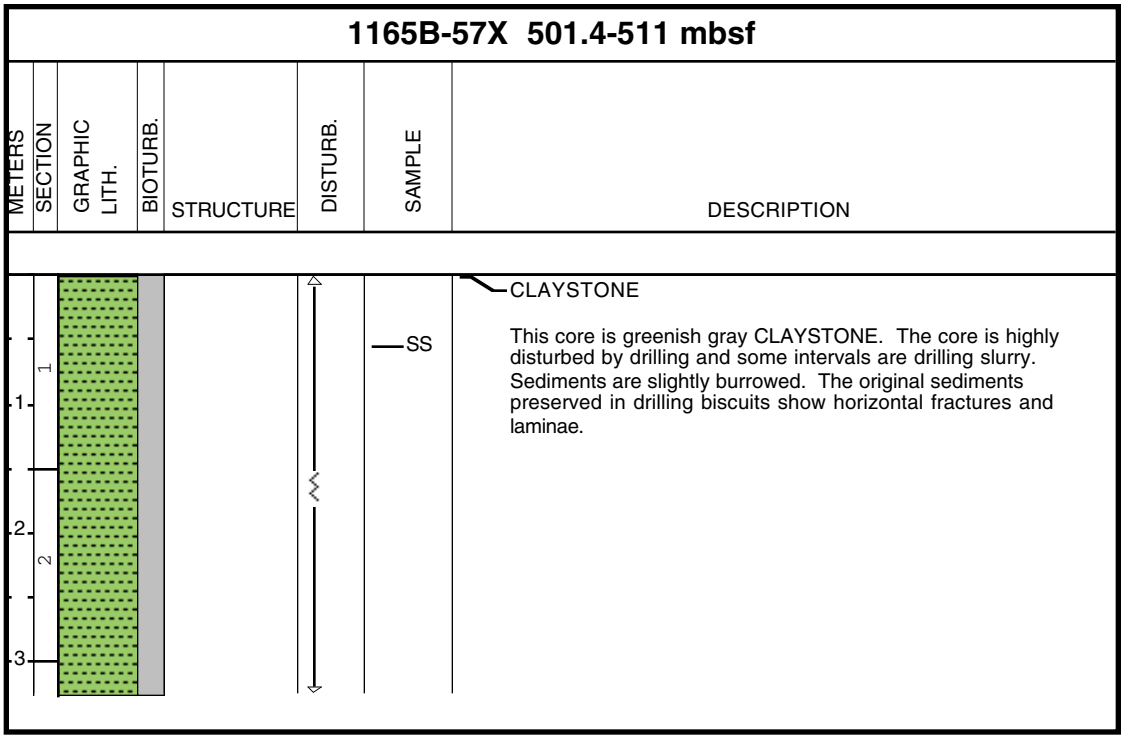
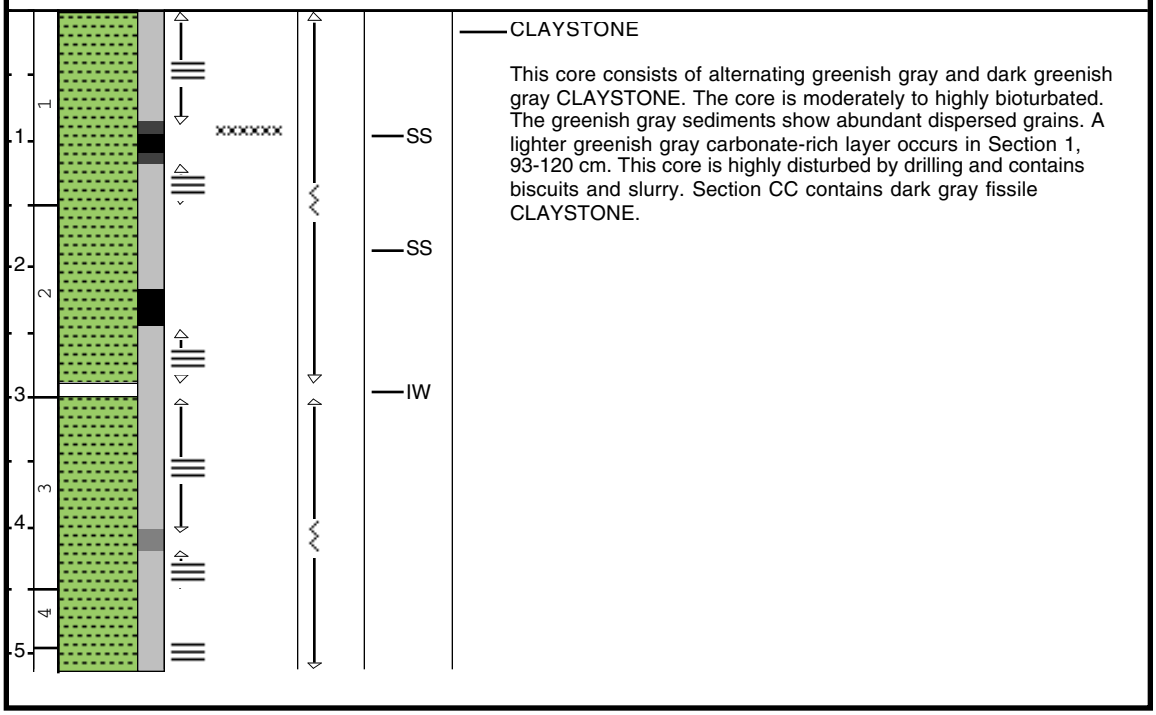
4

Core Photo


1165B-57X 501.4-511 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
2
3
1
2
SS
CLAYSTONE
This core is greenish gray CLAYSTONE. The core is highly disturbed by drilling and some intervals are drilling slurry. Sediments are slightly burrowed. The original sediments preserved in drilling biscuits show horizontal fractures and laminae.

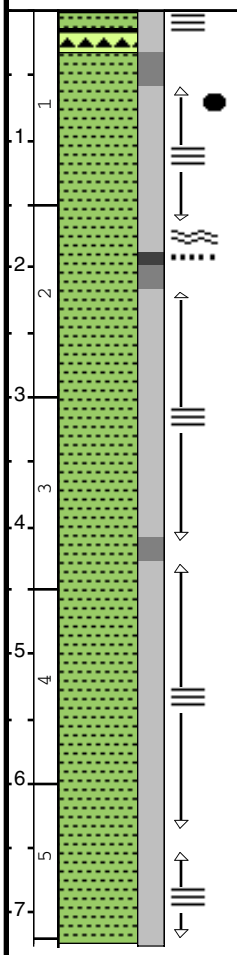
Core Photo

1165B-58X 511-520.7 mbsf

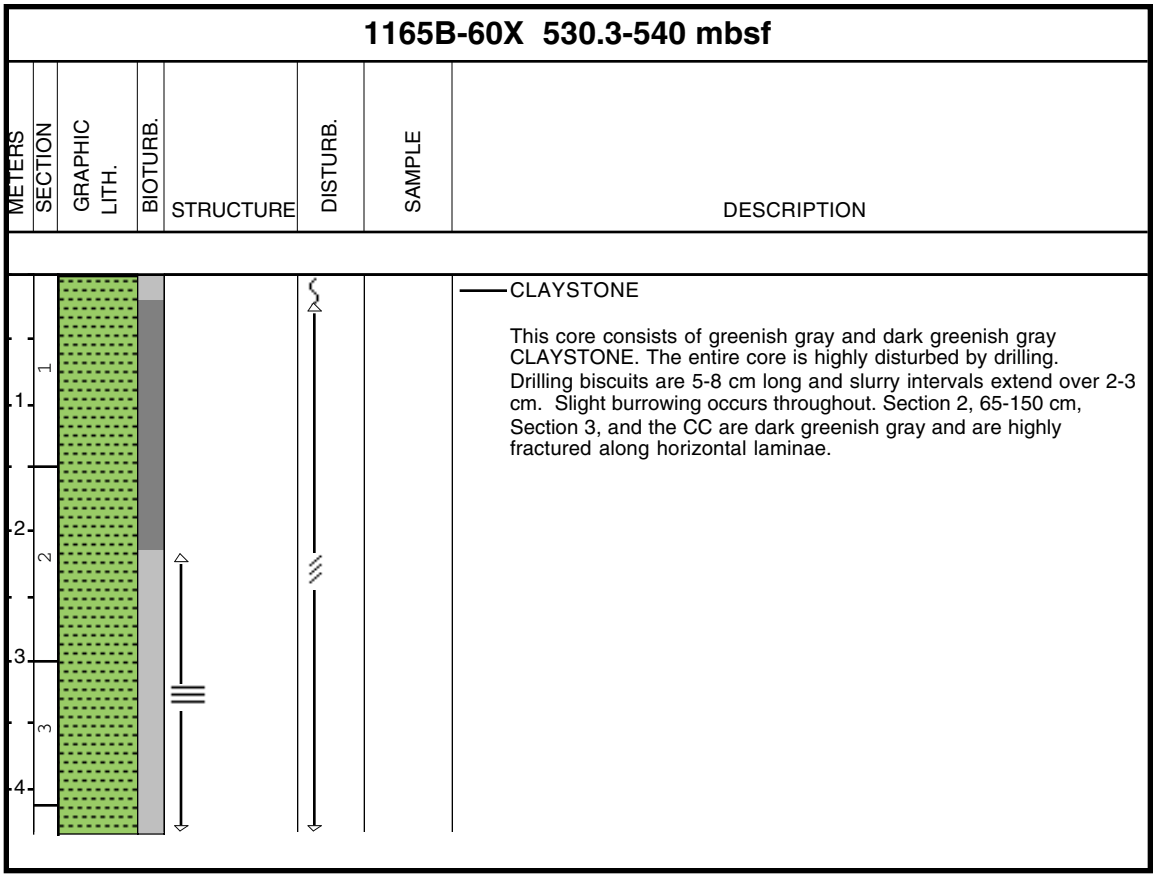


Core Photo

1165B-59X 520.7-530.3 mbsf

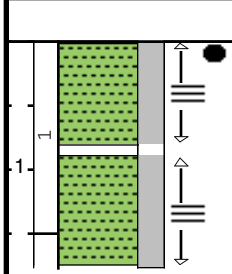


Core Photo


1165B-60X 530.3-540 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
2
3
4
CLAYSTONE
This core consists of greenish gray and dark greenish gray CLAYSTONE. The entire core is highly disturbed by drilling. Drilling biscuits are 5-8 cm long and slurry intervals extend over 2-3 cm. Slight burrowing occurs throughout. Section 2, 65-150 cm, Section 3, and the CC are dark greenish gray and are highly fractured along horizontal laminae.

Core Photo

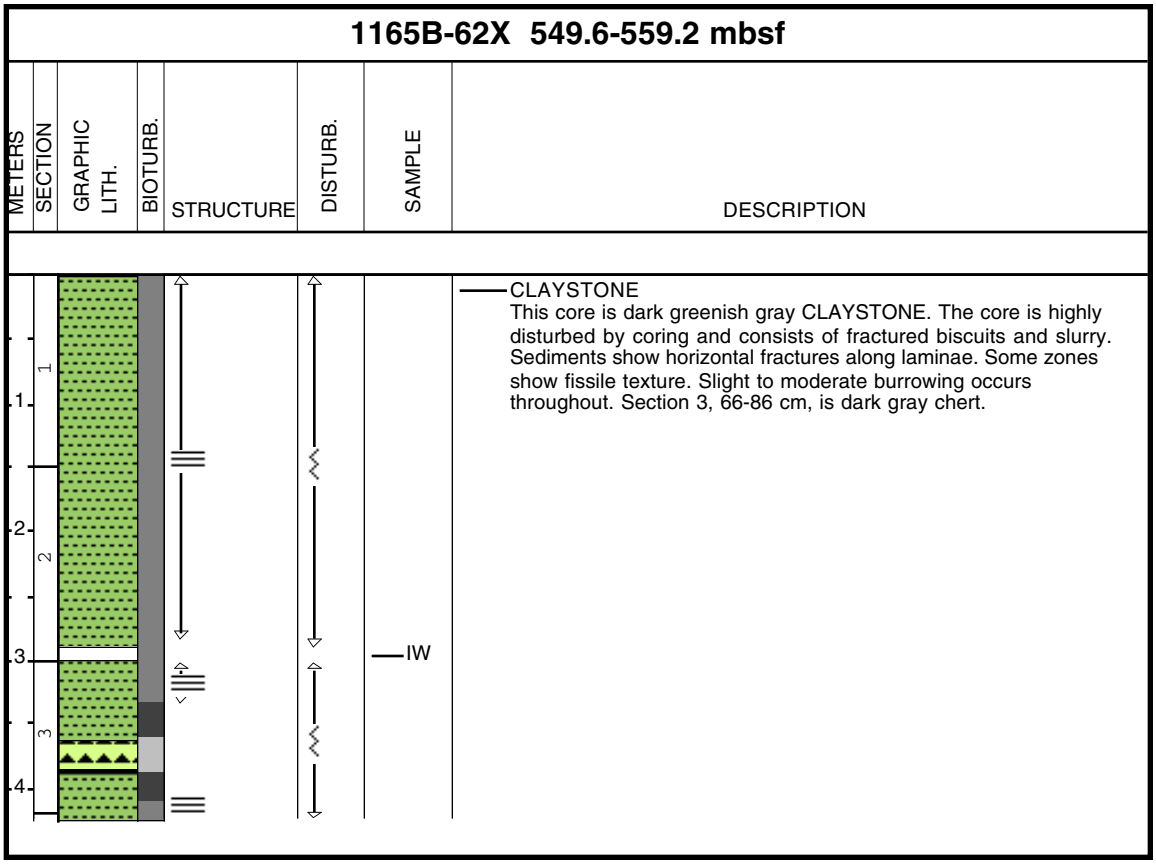
1165B-61X 540-549.6 mbsf



CLAYSTONE

This core is dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. Sediments show horizontal fractures along laminae. Some zones show fissile texture. Slight to moderate burrowing occurs throughout. A large igneous pebble occurs in Section 1, 0-5 cm, and is probably not in situ.

Core Photo

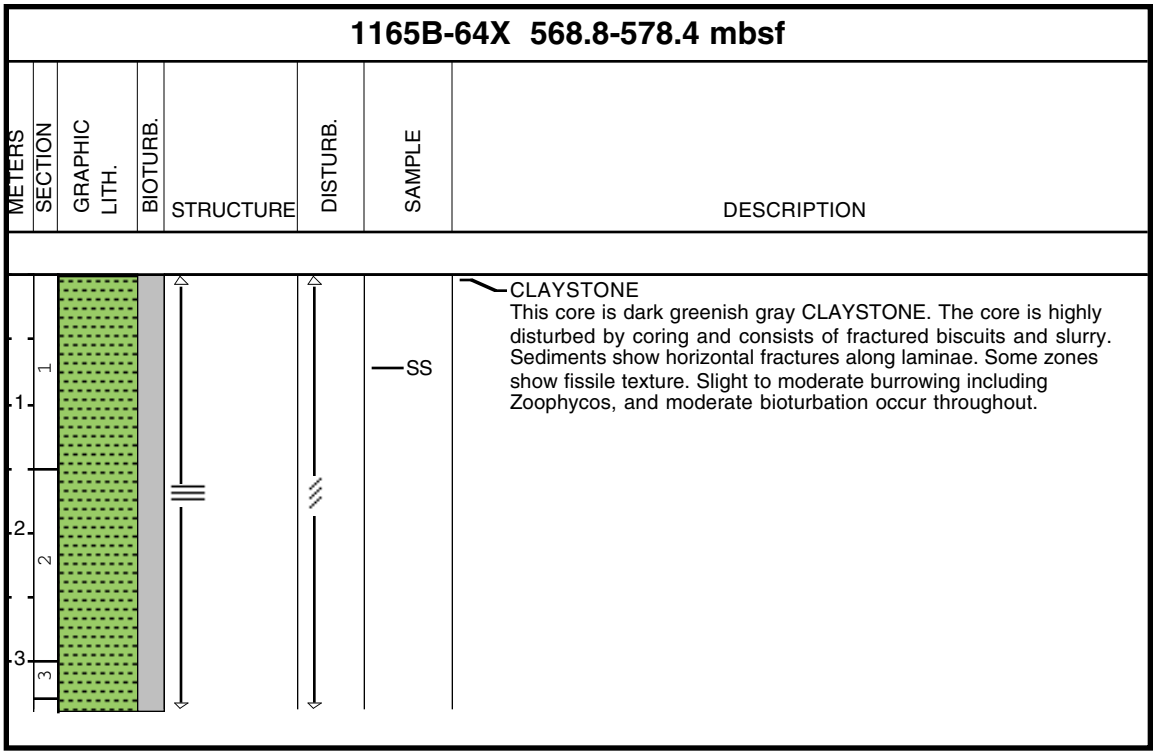

1165B-62X 549.6-559.2 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
2
3
4
1
2
3
IW
CLAYSTONE
This core is dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. Sediments show horizontal fractures along laminae. Some zones show fissile texture. Slight to moderate burrowing occurs throughout. Section 3, 66-86 cm, is dark gray chert.

Core Photo

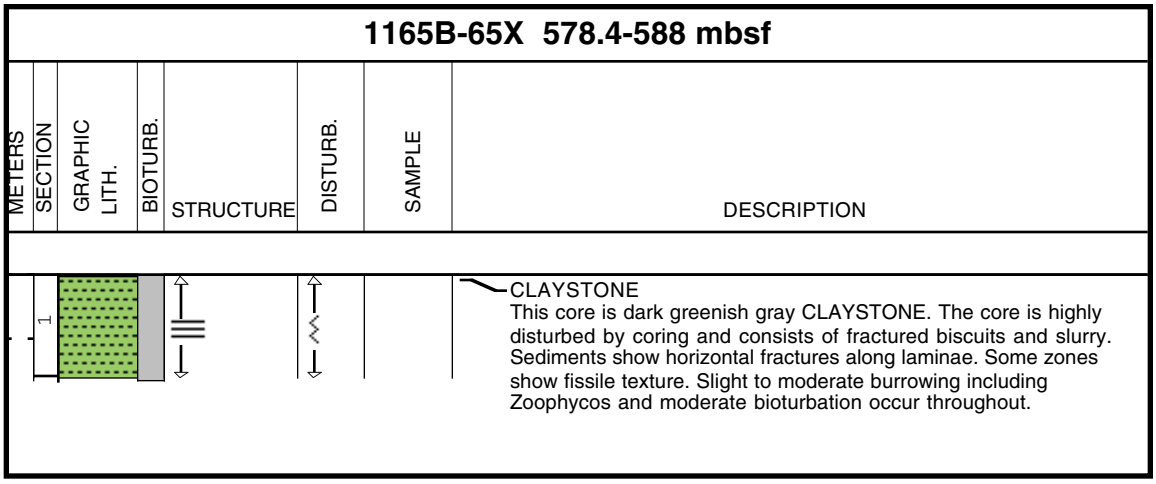
1165B-63X 559.2-568.8 mbsf

METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	DISTURB.	SAMPLE	DESCRIPTION
	1				!		GRAVEL This core consists of numerous pebbles. Pebbles are up to 5 x 3 cm in size and include igneous rock, chert, and pieces of claystone.

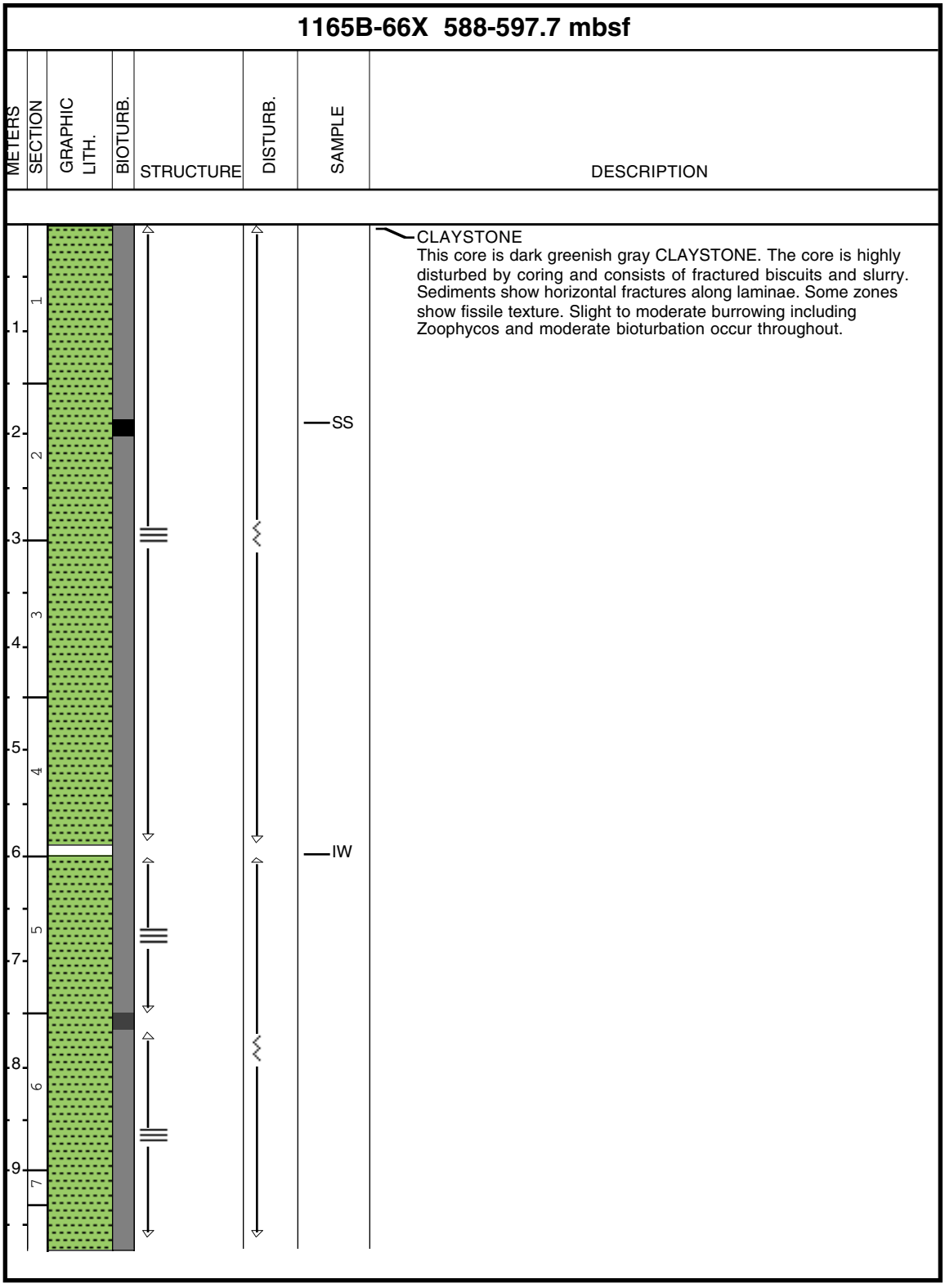
Core Photo


1165B-64X 568.8-578.4 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
2
3
SS
CLAYSTONE
This core is dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. Sediments show horizontal fractures along laminae. Some zones show fissile texture. Slight to moderate burrowing including Zoophycos, and moderate bioturbation occur throughout.

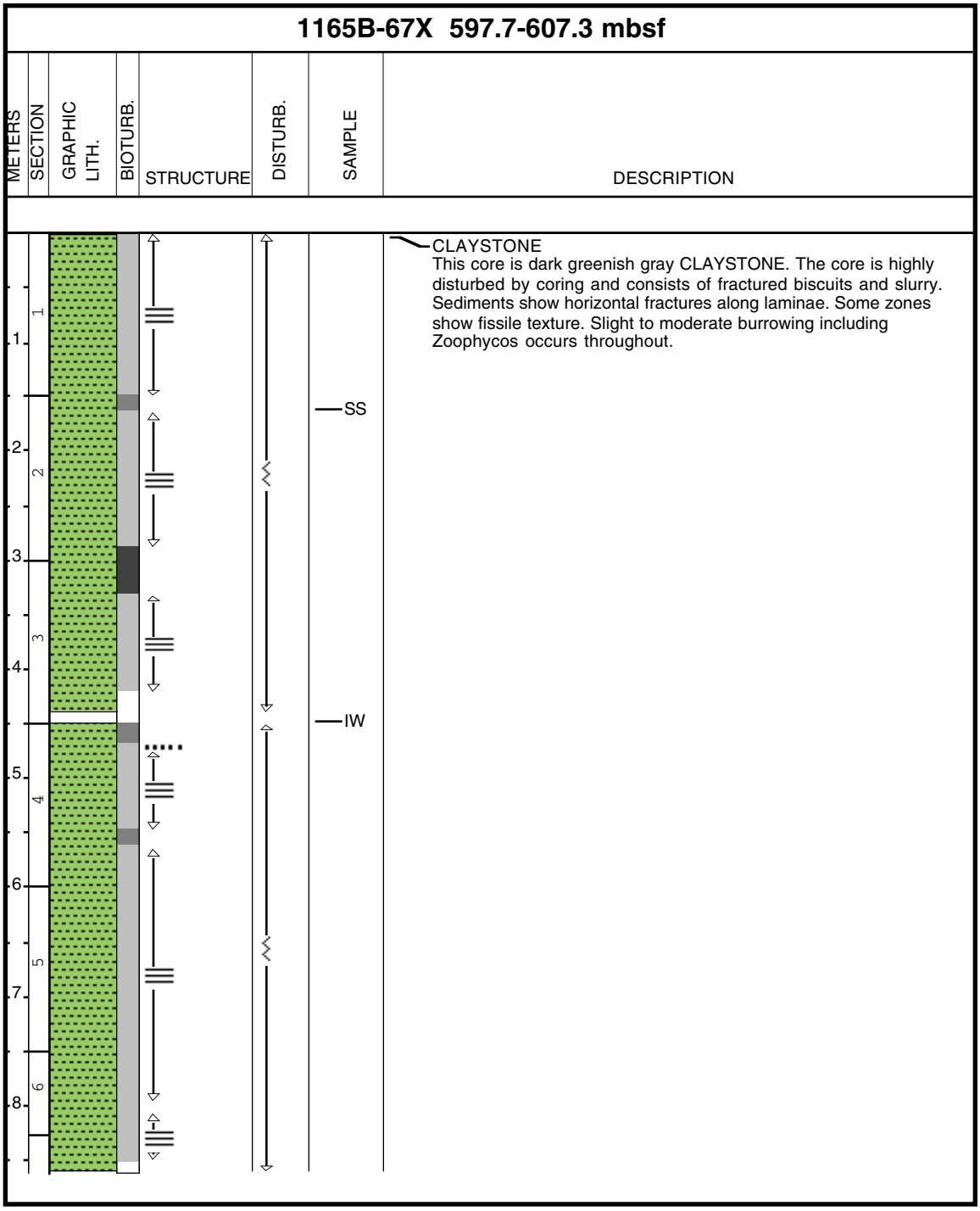
Core Photo


1165B-65X 578.4-588 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
CLAYSTONE
This core is dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. Sediments show horizontal fractures along laminae. Some zones show fissile texture. Slight to moderate burrowing including Zoophycos and moderate bioturbation occur throughout.

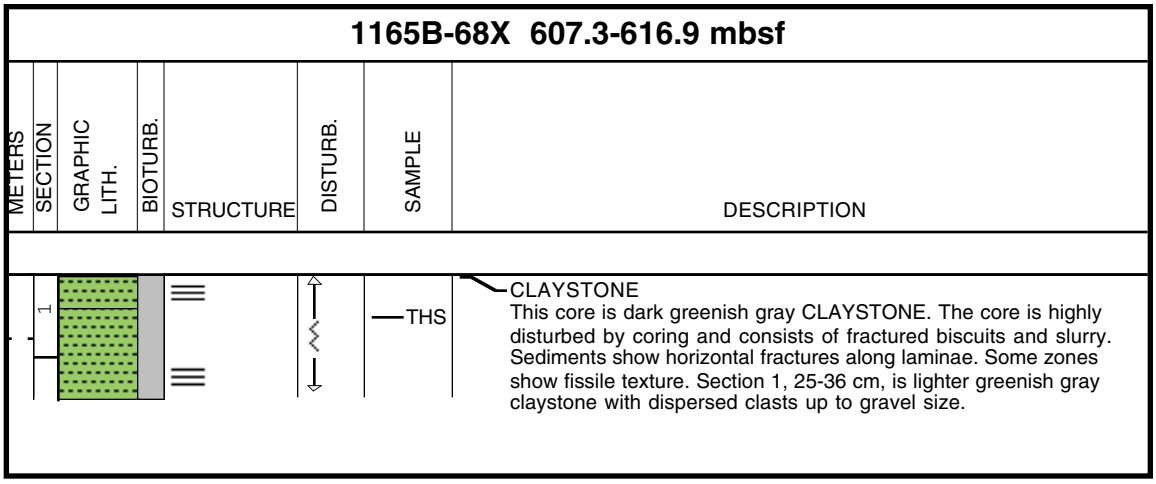
Core Photo


1165B-66X 588-597.7 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. Sediments show horizontal fractures along laminae. Some zones show fissile texture. Slight to moderate burrowing including Zoophycos and moderate bioturbation occur throughout.
SS
IW

Core Photo


1165B-67X 597.7-607.3 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
SS
IW
CLAYSTONE
This core is dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. Sediments show horizontal fractures along laminae. Some zones show fissile texture. Slight to moderate burrowing including Zoophycos occurs throughout.

Core Photo

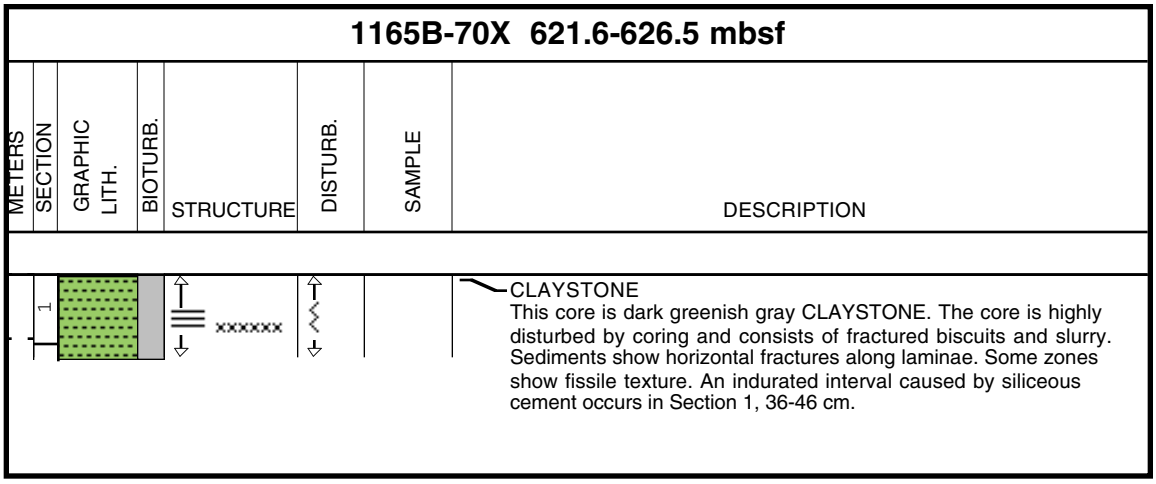

1165B-68X 607.3-616.9 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
THS
CLAYSTONE
This core is dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. Sediments show horizontal fractures along laminae. Some zones show fissile texture. Section 1, 25-36 cm, is lighter greenish gray claystone with dispersed clasts up to gravel size.

Core Photo

1165B-69X 616.9-621.6 mbsf

METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	DISTURB.	SAMPLE	DESCRIPTION
	1						CLAYSTONE This core is dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. Sediments show horizontal fractures along laminae. Some zones show fissile texture.

Core Photo

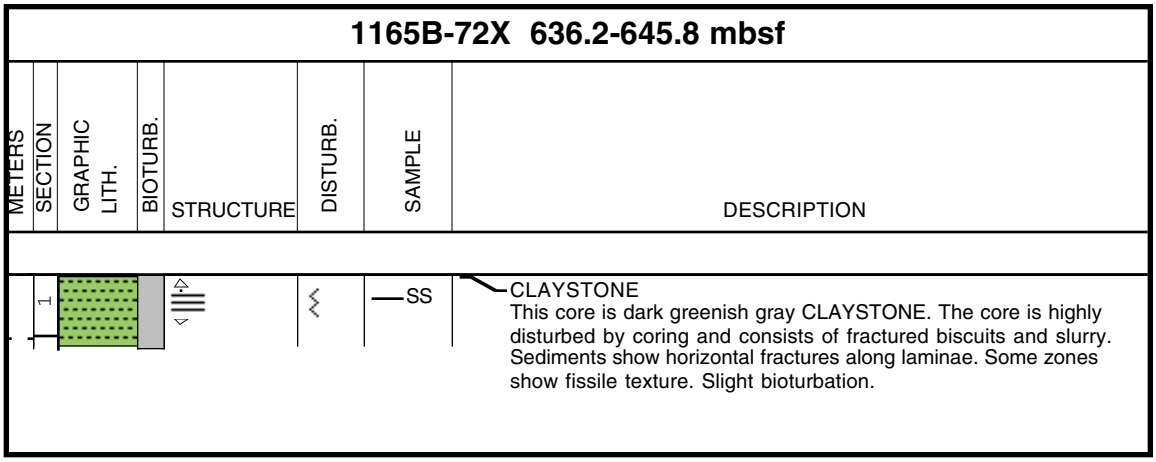

1165B-70X 621.6-626.5 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
xxxxxx
CLAYSTONE
This core is dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. Sediments show horizontal fractures along laminae. Some zones show fissile texture. An indurated interval caused by siliceous cement occurs in Section 1, 36-46 cm.

Core Photo

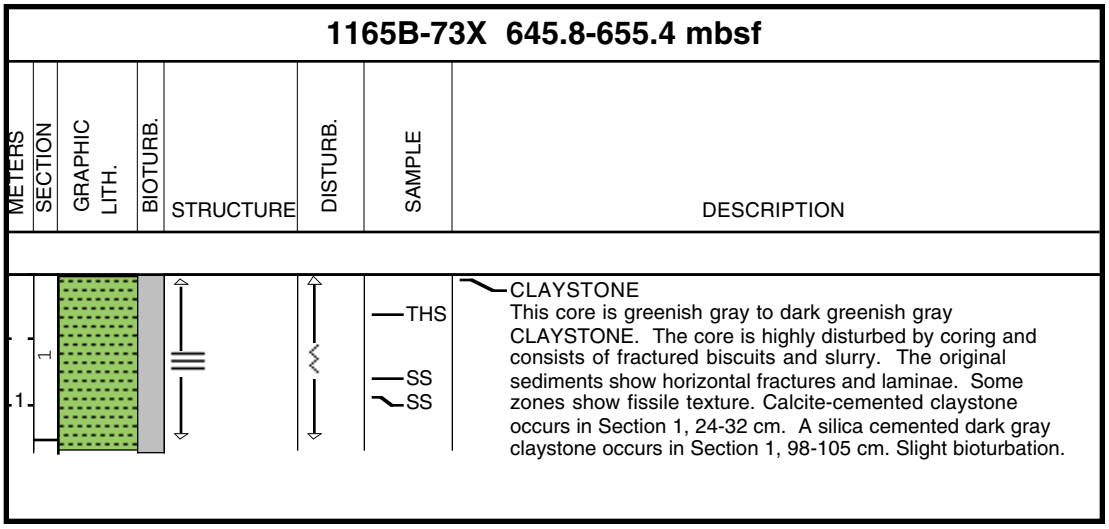
1165B-71X 626.5-636.2 mbsf

METERS	SECTION	GRAPHIC LITH.	BIOTURB.	STRUCTURE	DISTURB.	SAMPLE	DESCRIPTION
	1						CLAYSTONE This core is dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. Sediments show horizontal fractures along laminae. Some zones show fissile texture.

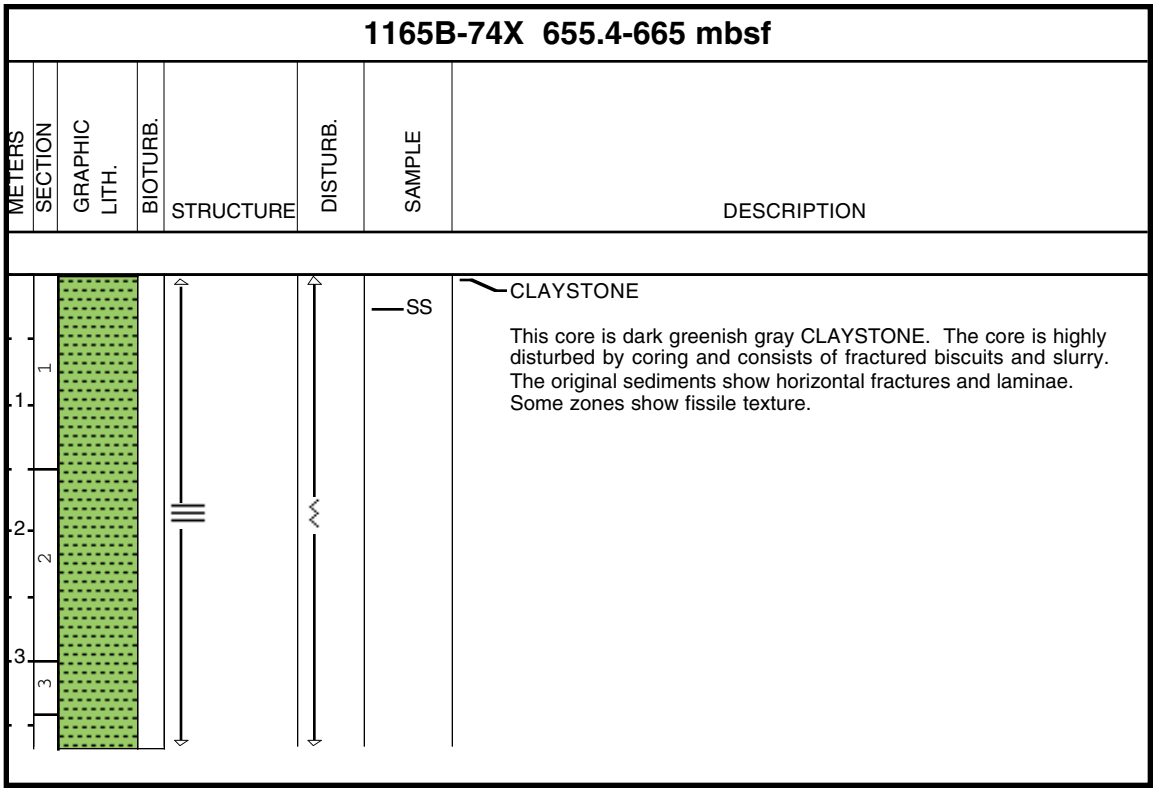
Core Photo


1165B-72X 636.2-645.8 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
SS
CLAYSTONE
This core is dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. Sediments show horizontal fractures along laminae. Some zones show fissile texture. Slight bioturbation.

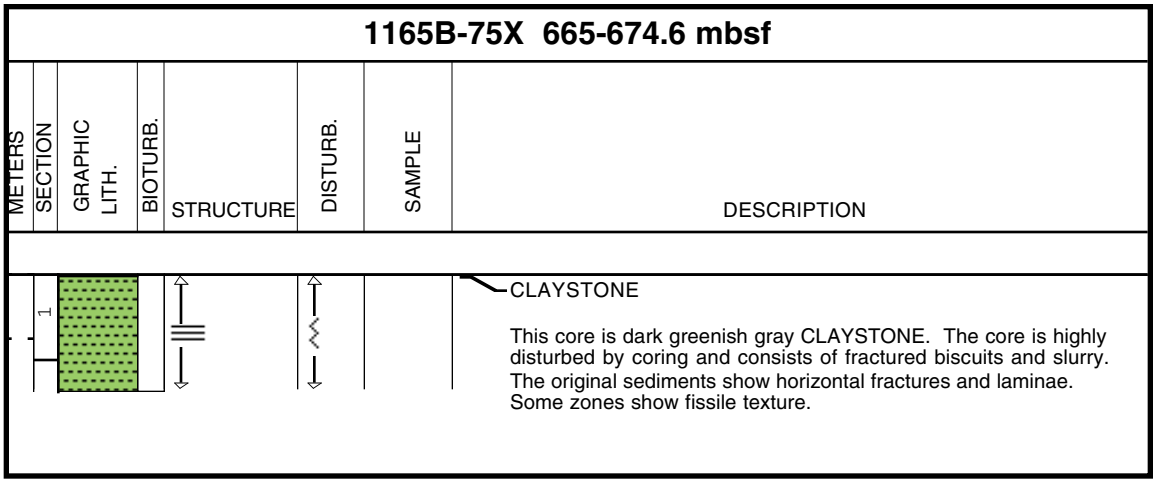
Core Photo


1165B-73X 645.8-655.4 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
1
THS
SS
SS
CLAYSTONE
This core is greenish gray to dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. The original sediments show horizontal fractures and laminae. Some zones show fissile texture. Calcite-cemented claystone occurs in Section 1, 24-32 cm. A silica cemented dark gray claystone occurs in Section 1, 98-105 cm. Slight bioturbation.

Core Photo

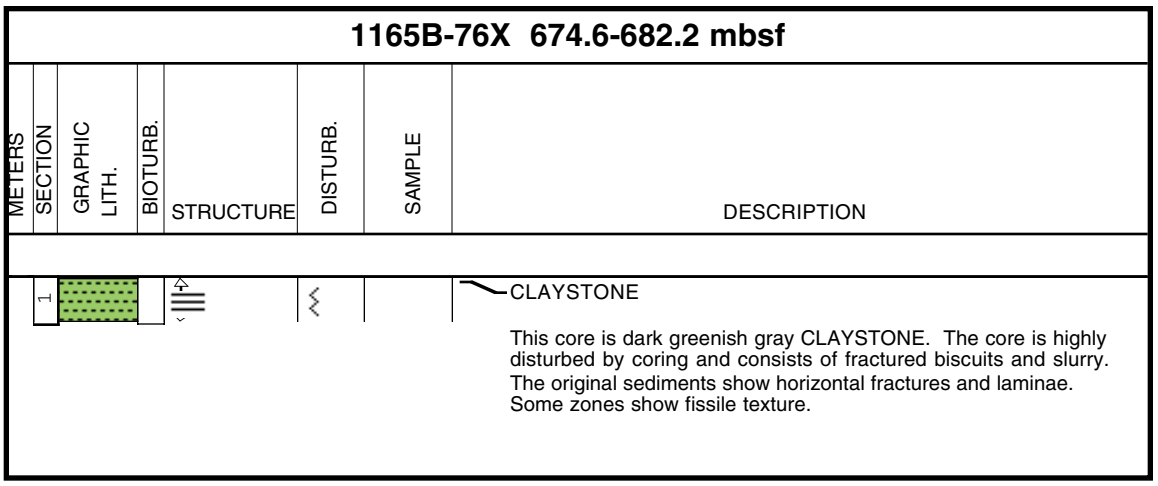

1165B-74X 655.4-665 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
2
3
SS
CLAYSTONE
This core is dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. The original sediments show horizontal fractures and laminae. Some zones show fissile texture.

Core Photo

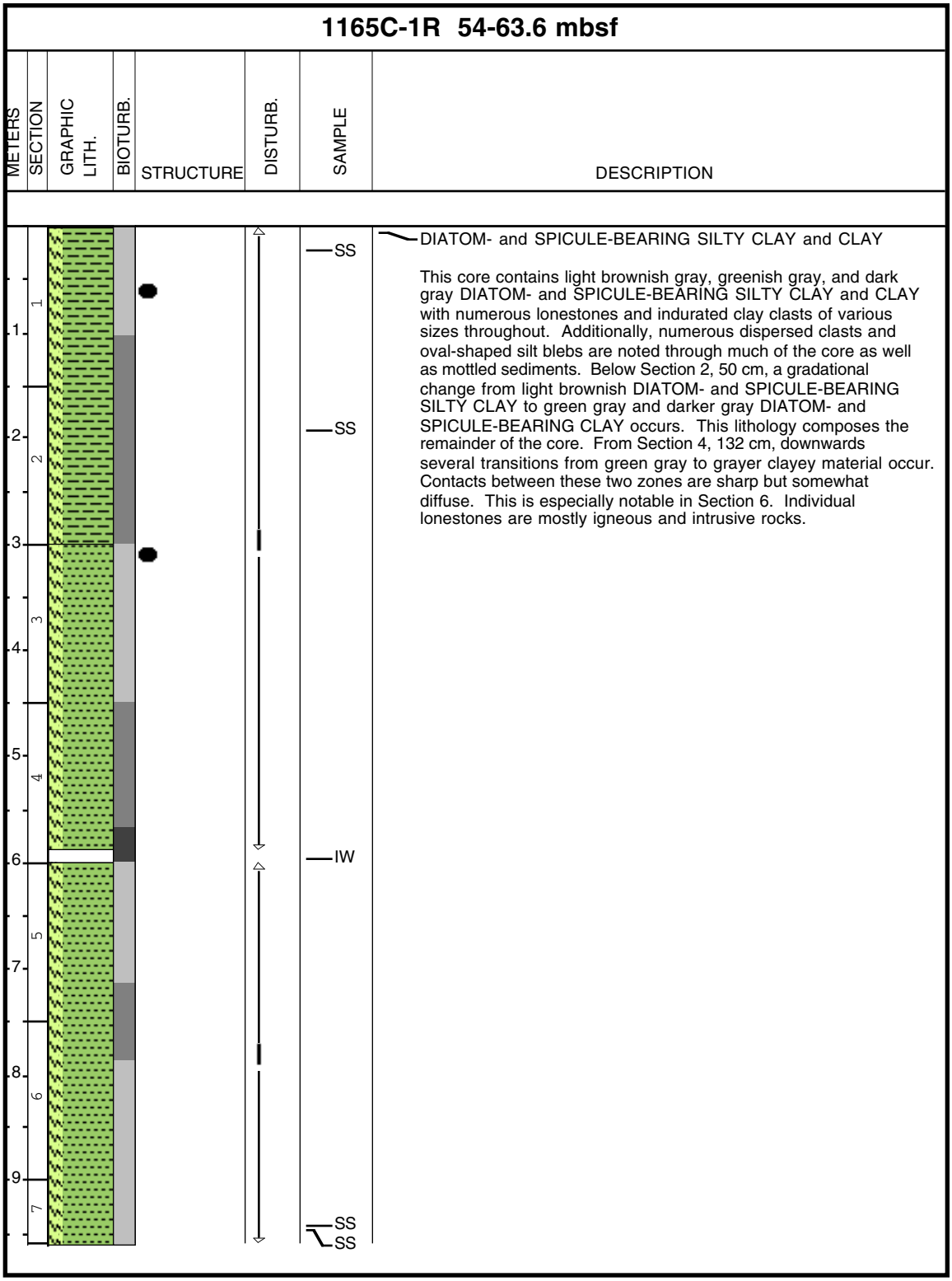

1165B-75X 665-674.6 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
CLAYSTONE
This core is dark greenish gray CLAYSTONE. The core is highly disturbed by coring and consists of fractured biscuits and slurry. The original sediments show horizontal fractures and laminae. Some zones show fissile texture.

Core Photo

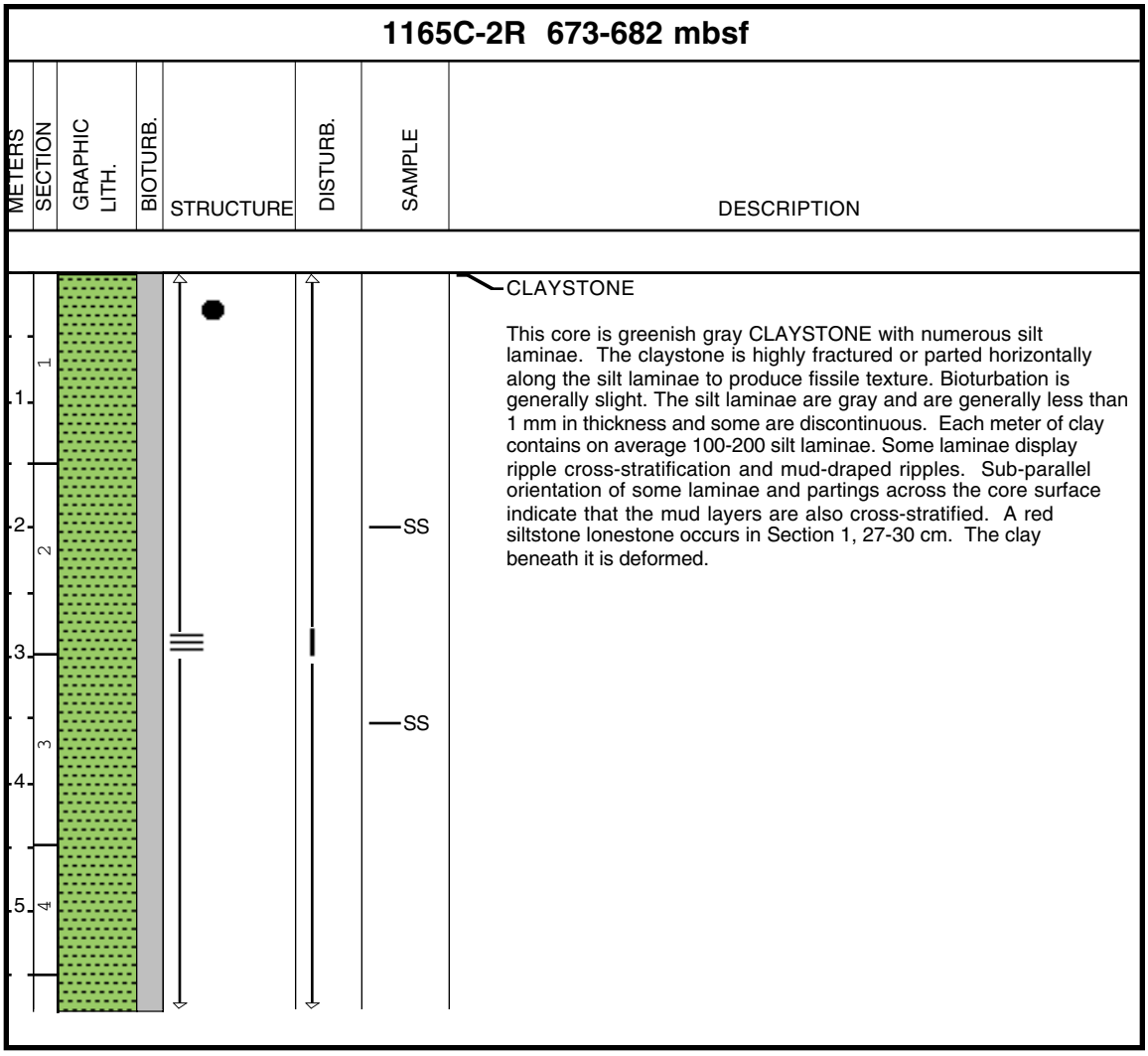
1165B-76X 674.6-682.2 mbsf



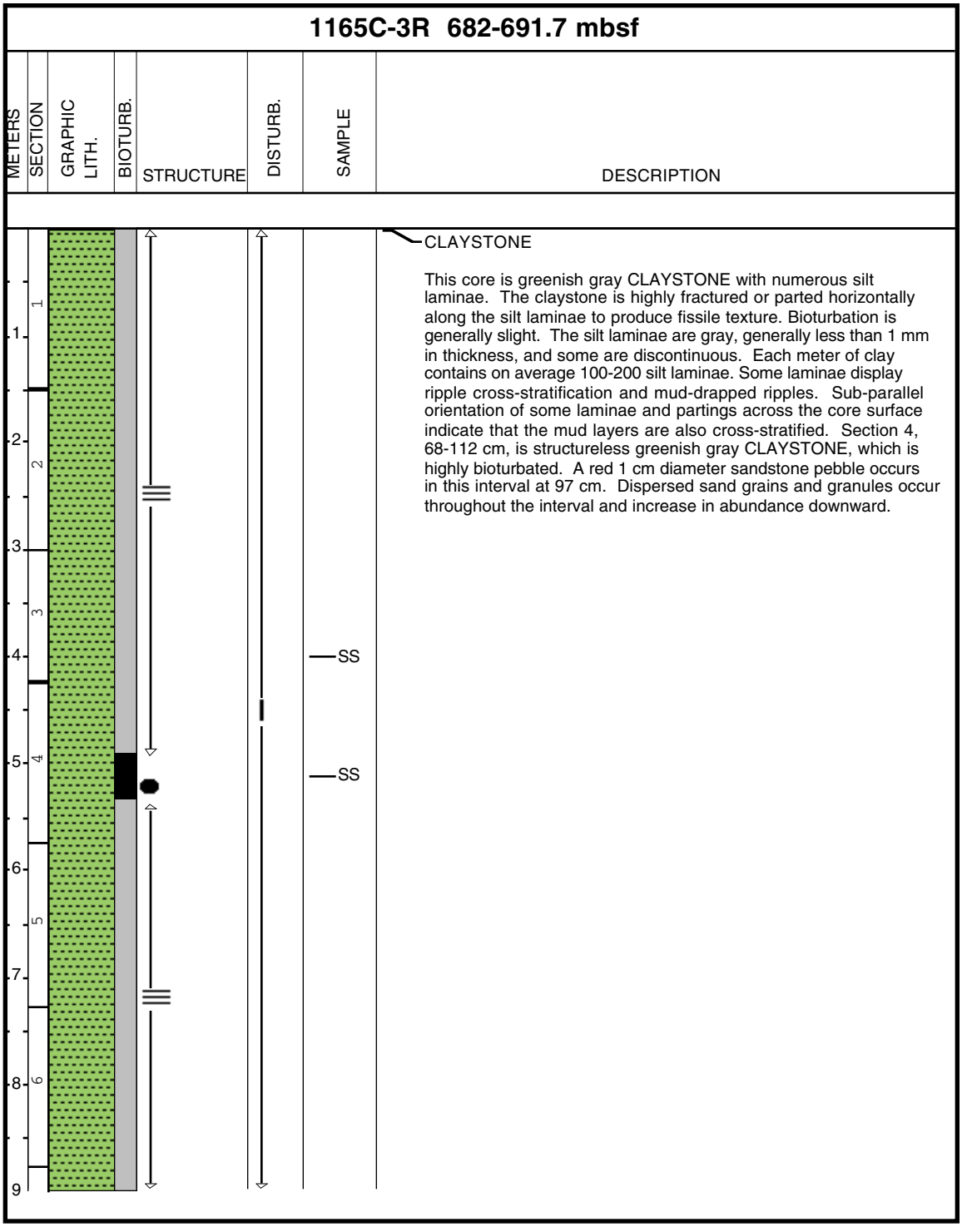
Core Photo


1165C-1R 54-63.6 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
SS
SS
IW
SS
SS
DIATOM- and SPICULE-BEARING SILTY CLAY and CLAY
This core contains light brownish gray, greenish gray, and dark gray DIATOM- and SPICULE-BEARING SILTY CLAY and CLAY with numerous lonestones and indurated clay clasts of various sizes throughout. Additionally, numerous dispersed clasts and oval-shaped silt blebs are noted through much of the core as well as mottled sediments. Below Section 2, 50 cm, a gradational change from light brownish DIATOM- and SPICULE-BEARING SILTY CLAY to green gray and darker gray DIATOM- and SPICULE-BEARING CLAY occurs. This lithology composes the remainder of the core. From Section 4, 132 cm, downwards several transitions from green gray to grayer clayey material occur. Contacts between these two zones are sharp but somewhat diffuse. This is especially notable in Section 6. Individual lonestones are mostly igneous and intrusive rocks.

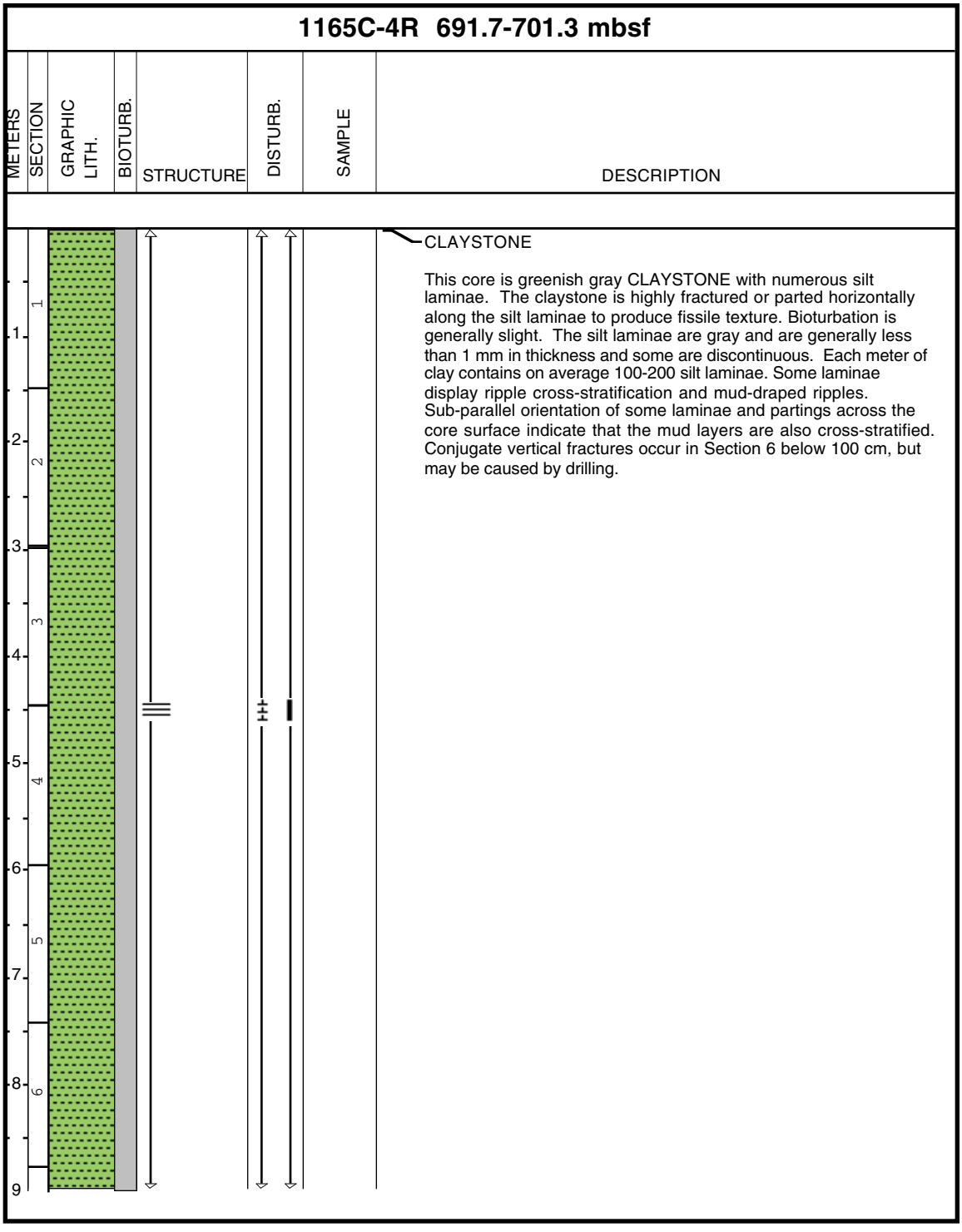
Core Photo


1165C-2R 673-682 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
2
3
4
5
SS
SS
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae to produce fissile texture. Bioturbation is generally slight. The silt laminae are gray and are generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 silt laminae. Some laminae display ripple cross-stratification and mud-draped ripples. Sub-parallel orientation of some laminae and partings across the core surface indicate that the mud layers are also cross-stratified. A red siltstone lonestone occurs in Section 1, 27-30 cm. The clay beneath it is deformed.

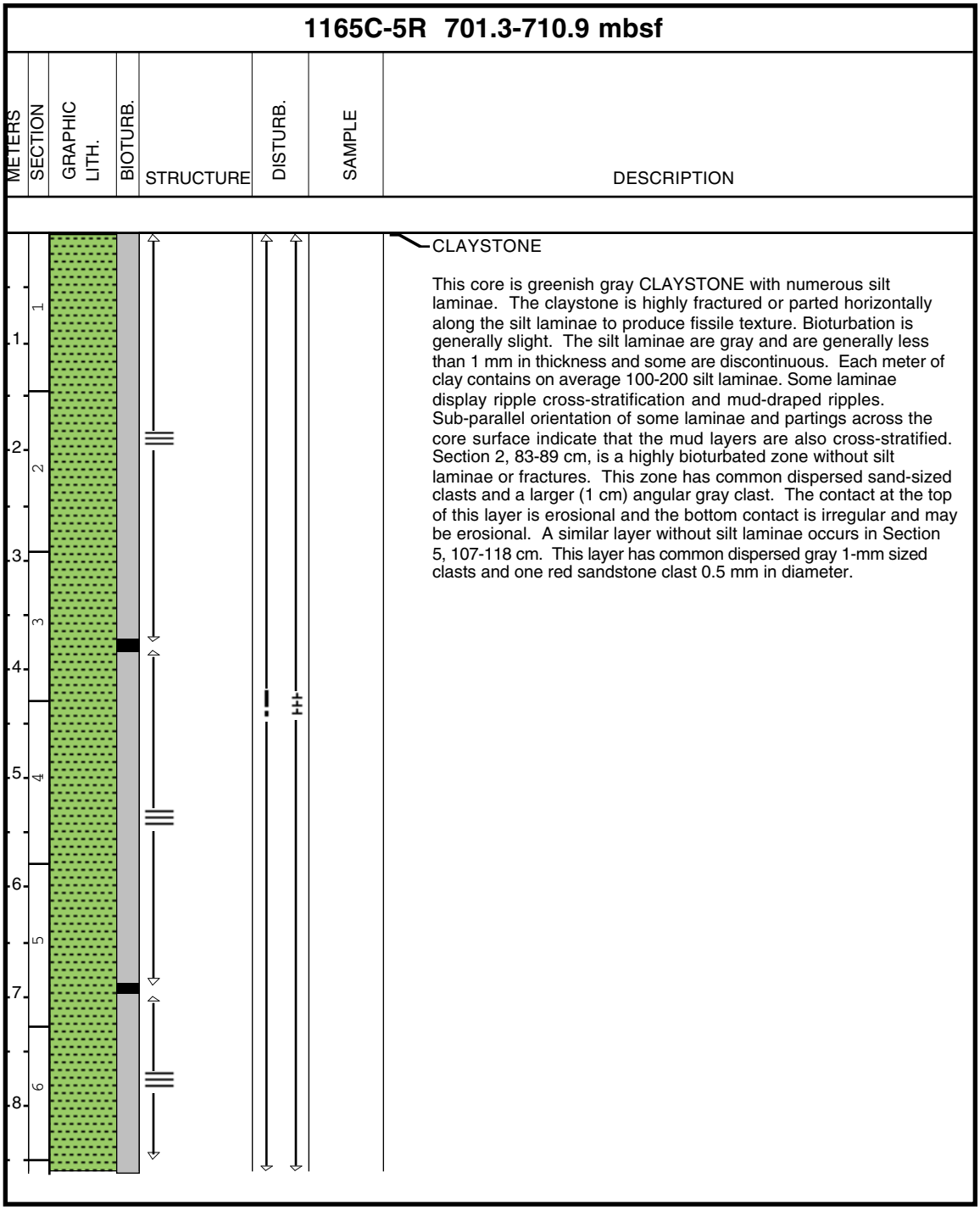
Core Photo


1165C-3R 682-691.7 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae to produce fissile texture. Bioturbation is generally slight. The silt laminae are gray, generally less than 1 mm in thickness, and some are discontinuous. Each meter of clay contains on average 100-200 silt laminae. Some laminae display ripple cross-stratification and mud-draped ripples. Sub-parallel orientation of some laminae and partings across the core surface indicate that the mud layers are also cross-stratified. Section 4, 68-112 cm, is structureless greenish gray CLAYSTONE, which is highly bioturbated. A red 1 cm diameter sandstone pebble occurs in this interval at 97 cm. Dispersed sand grains and granules occur throughout the interval and increase in abundance downward.
SS
SS

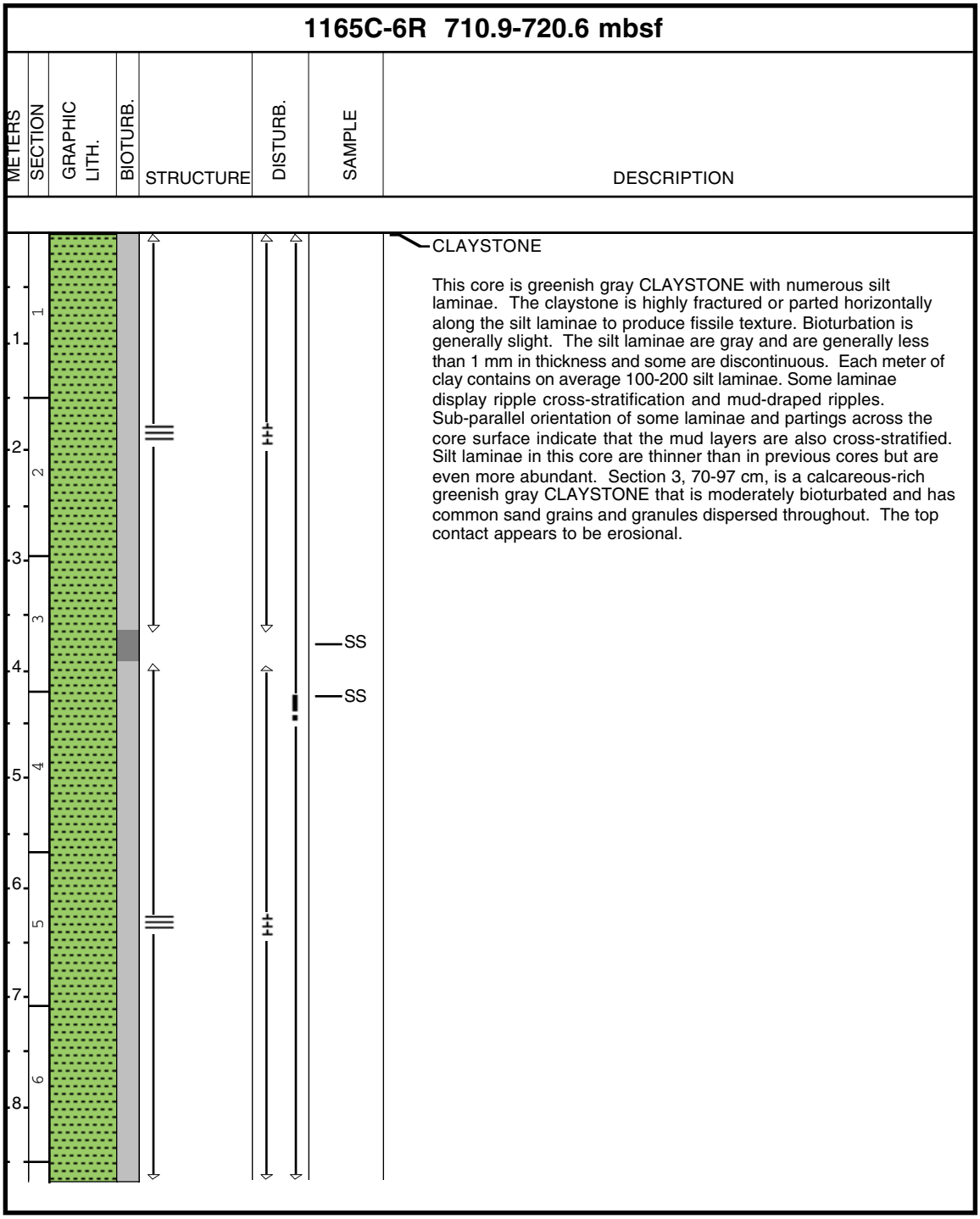
Core Photo


1165C-4R 691.7-701.3 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae to produce fissile texture. Bioturbation is generally slight. The silt laminae are gray and are generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 silt laminae. Some laminae display ripple cross-stratification and mud-draped ripples. Sub-parallel orientation of some laminae and partings across the core surface indicate that the mud layers are also cross-stratified. Conjugate vertical fractures occur in Section 6 below 100 cm, but may be caused by drilling.
1
2
3
4
5
6
7
8
9

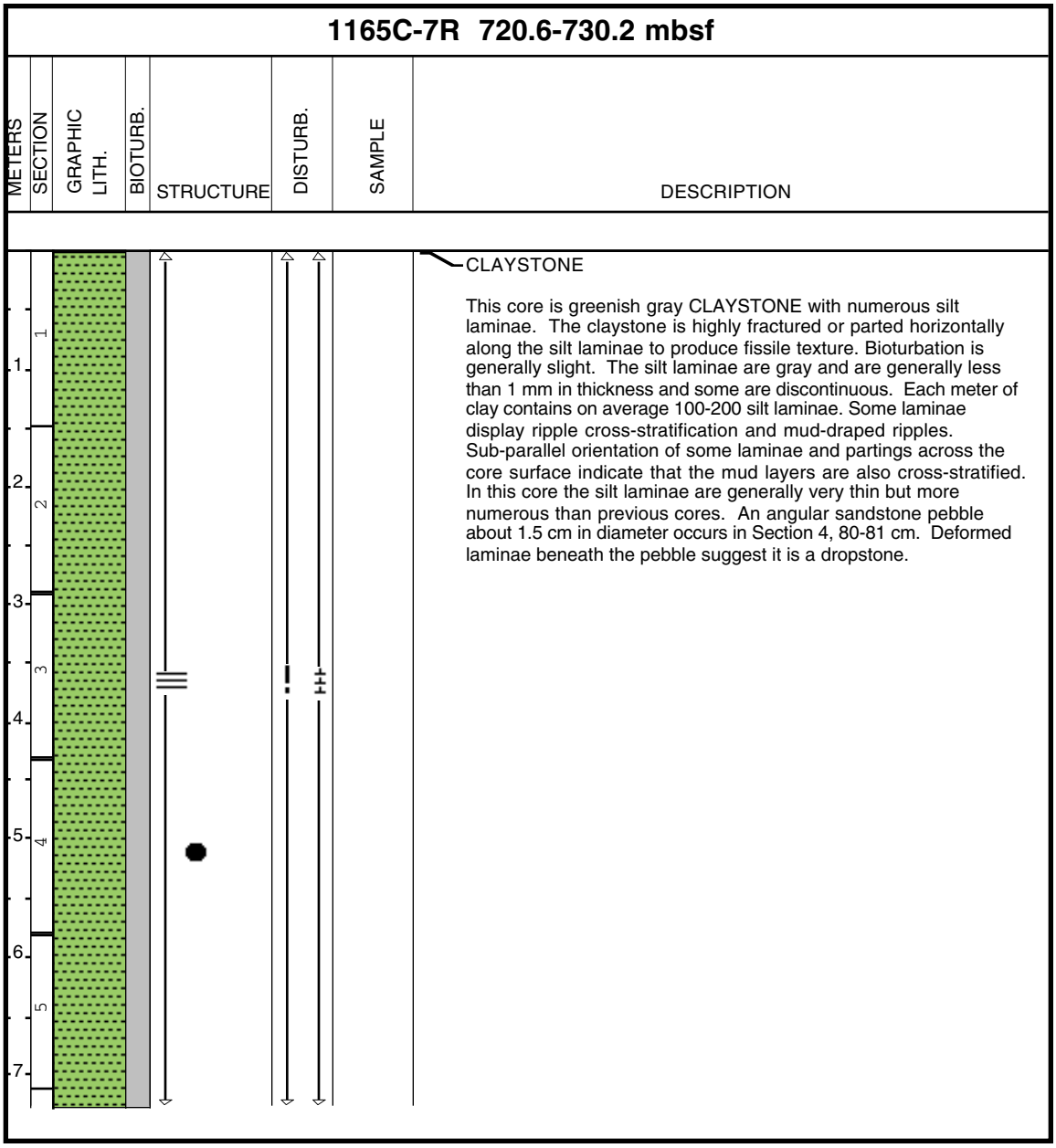
Core Photo


1165C-5R 701.3-710.9 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae to produce fissile texture. Bioturbation is generally slight. The silt laminae are gray and are generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 silt laminae. Some laminae display ripple cross-stratification and mud-draped ripples. Sub-parallel orientation of some laminae and partings across the core surface indicate that the mud layers are also cross-stratified. Section 2, 83-89 cm, is a highly bioturbated zone without silt laminae or fractures. This zone has common dispersed sand-sized clasts and a larger (1 cm) angular gray clast. The contact at the top of this layer is erosional and the bottom contact is irregular and may be erosional. A similar layer without silt laminae occurs in Section 5, 107-118 cm. This layer has common dispersed gray 1-mm sized clasts and one red sandstone clast 0.5 mm in diameter.

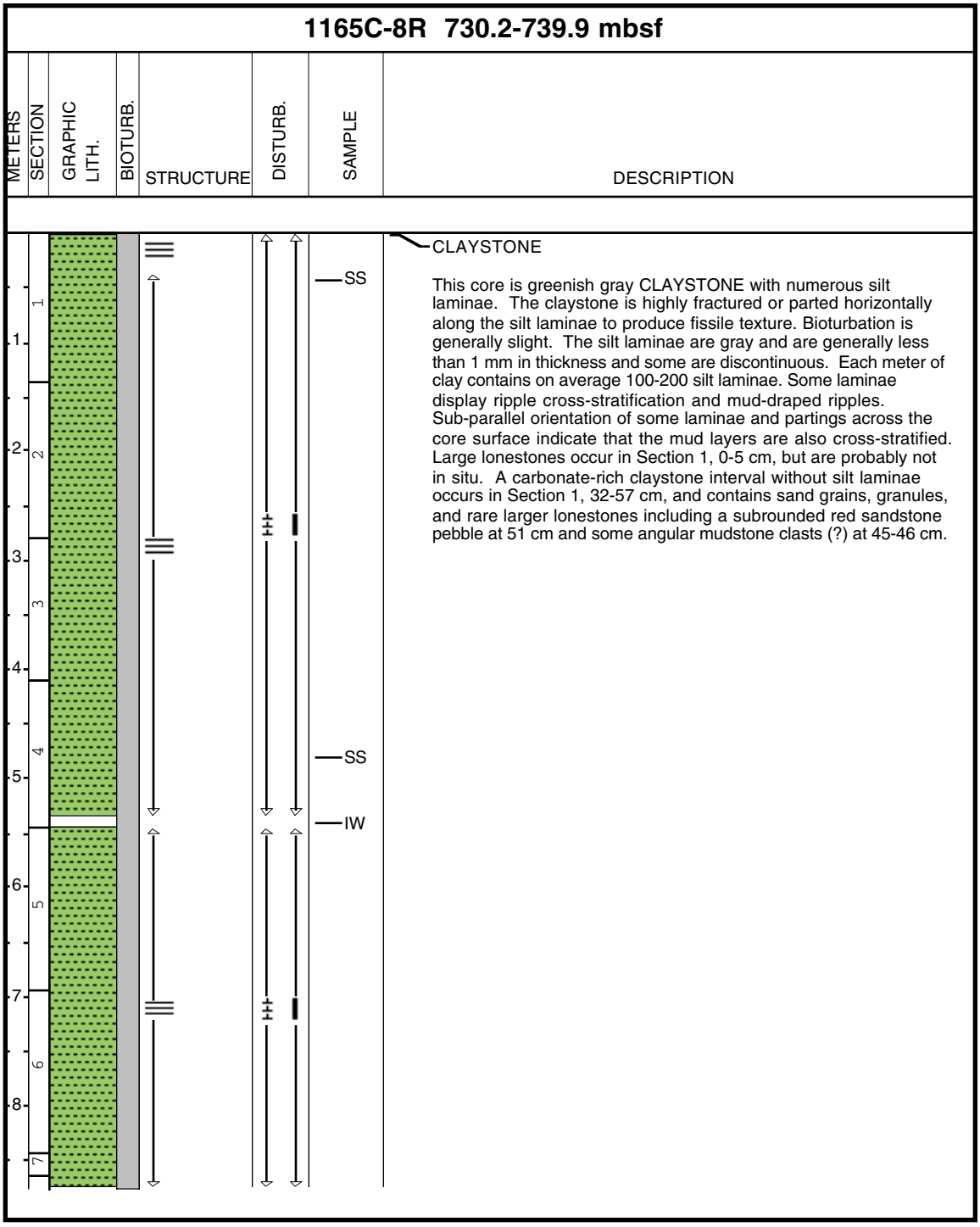
Core Photo


1165C-6R 710.9-720.6 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae to produce fissile texture. Bioturbation is generally slight. The silt laminae are gray and are generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 silt laminae. Some laminae display ripple cross-stratification and mud-draped ripples. Sub-parallel orientation of some laminae and partings across the core surface indicate that the mud layers are also cross-stratified. Silt laminae in this core are thinner than in previous cores but are even more abundant. Section 3, 70-97 cm, is a calcareous-rich greenish gray CLAYSTONE that is moderately bioturbated and has common sand grains and granules dispersed throughout. The top contact appears to be erosional.
SS
SS

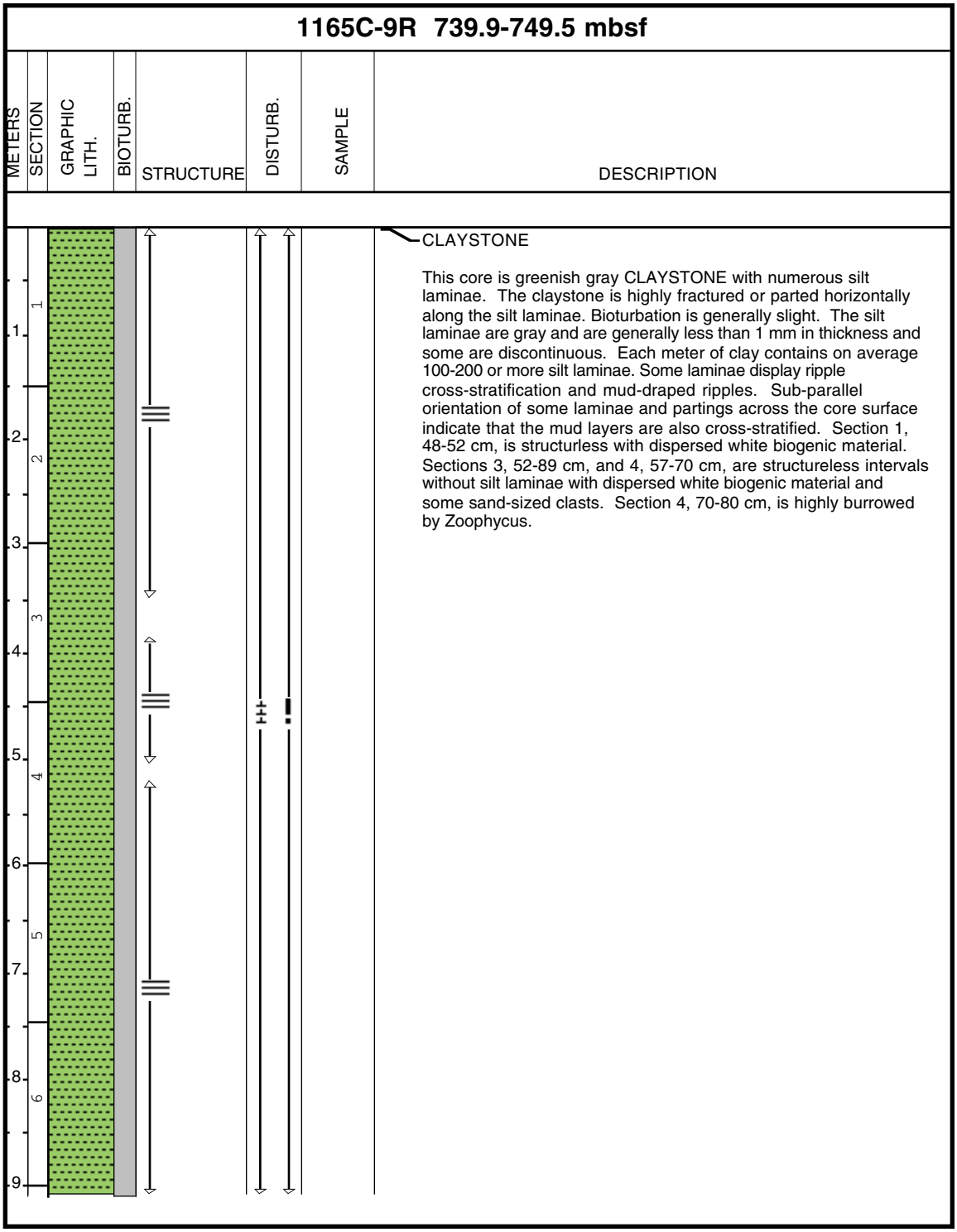
Core Photo


1165C-7R 720.6-730.2 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae to produce fissile texture. Bioturbation is generally slight. The silt laminae are gray and are generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 silt laminae. Some laminae display ripple cross-stratification and mud-draped ripples. Sub-parallel orientation of some laminae and partings across the core surface indicate that the mud layers are also cross-stratified. In this core the silt laminae are generally very thin but more numerous than previous cores. An angular sandstone pebble about 1.5 cm in diameter occurs in Section 4, 80-81 cm. Deformed laminae beneath the pebble suggest it is a dropstone.

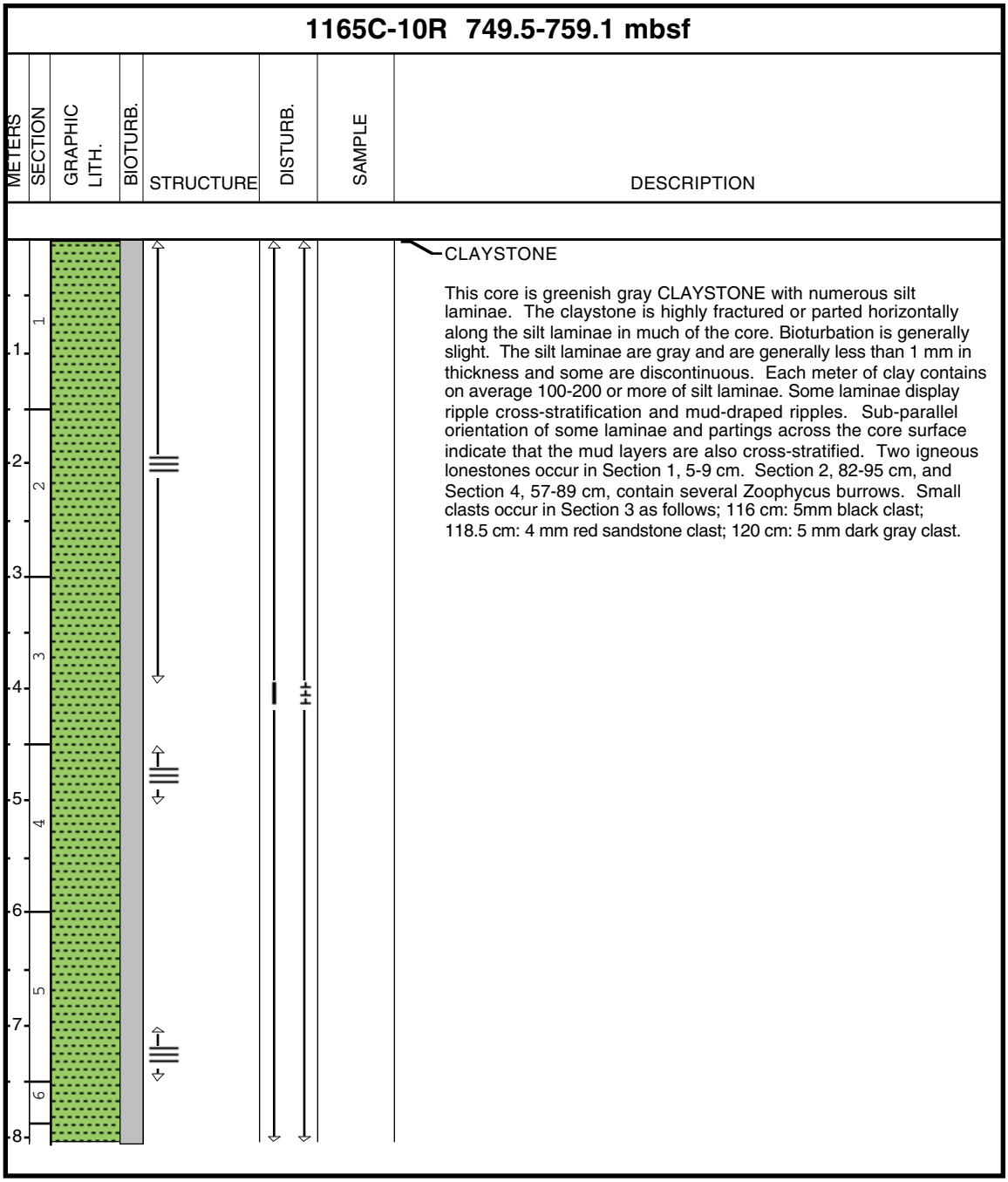
Core Photo


1165C-8R 730.2-739.9 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
SS
SS
IW
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae to produce fissile texture. Bioturbation is generally slight. The silt laminae are gray and are generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 silt laminae. Some laminae display ripple cross-stratification and mud-draped ripples. Sub-parallel orientation of some laminae and partings across the core surface indicate that the mud layers are also cross-stratified. Large lonestones occur in Section 1, 0-5 cm, but are probably not in situ. A carbonate-rich claystone interval without silt laminae occurs in Section 1, 32-57 cm, and contains sand grains, granules, and rare larger lonestones including a subrounded red sandstone pebble at 51 cm and some angular mudstone clasts (?) at 45-46 cm.

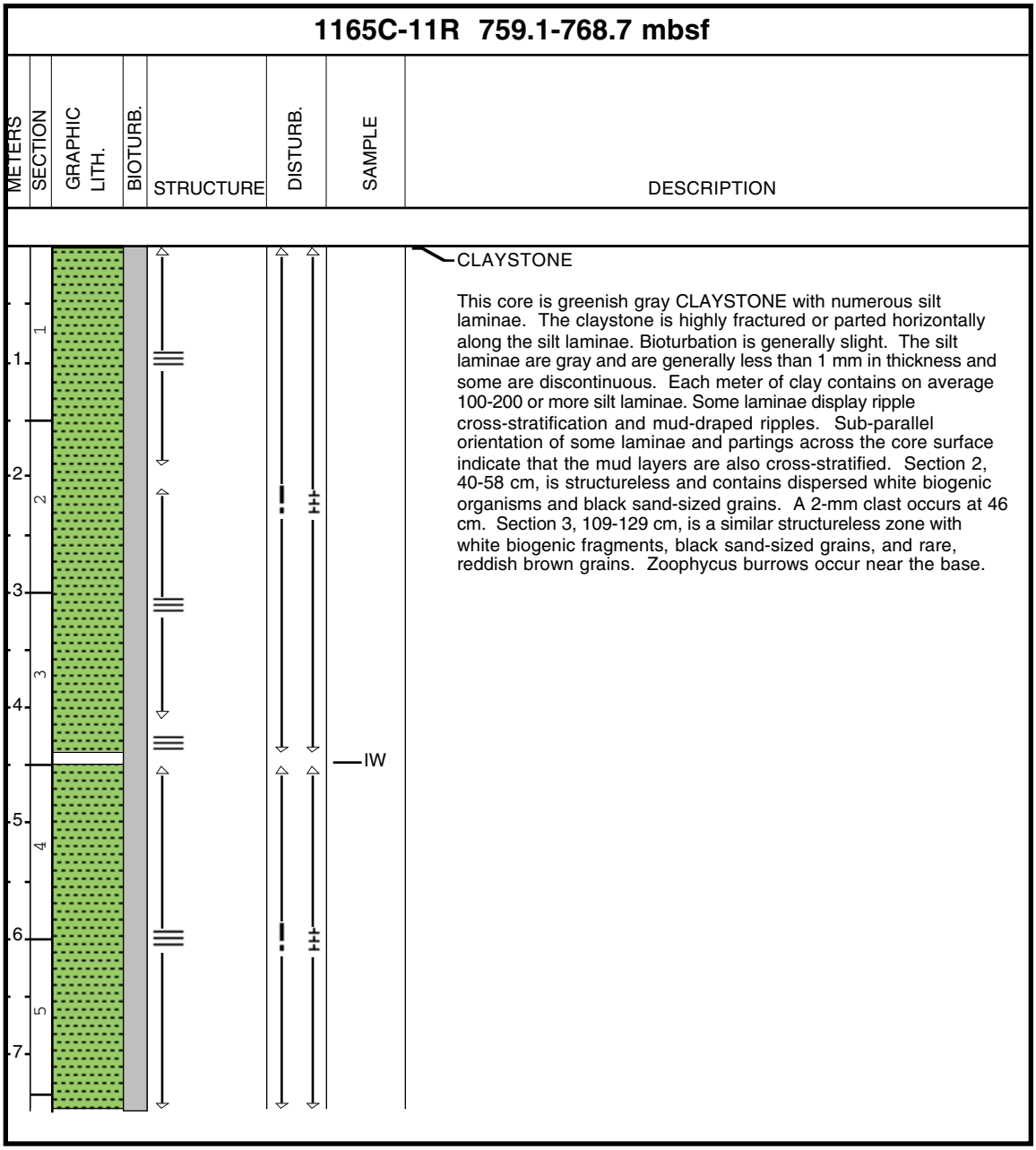
Core Photo


1165C-9R 739.9-749.5 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. Bioturbation is generally slight. The silt laminae are gray and are generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminae display ripple cross-stratification and mud-draped ripples. Sub-parallel orientation of some laminae and partings across the core surface indicate that the mud layers are also cross-stratified. Section 1, 48-52 cm, is structurless with dispersed white biogenic material. Sections 3, 52-89 cm, and 4, 57-70 cm, are structureless intervals without silt laminae with dispersed white biogenic material and some sand-sized clasts. Section 4, 70-80 cm, is highly burrowed by Zoophycus.

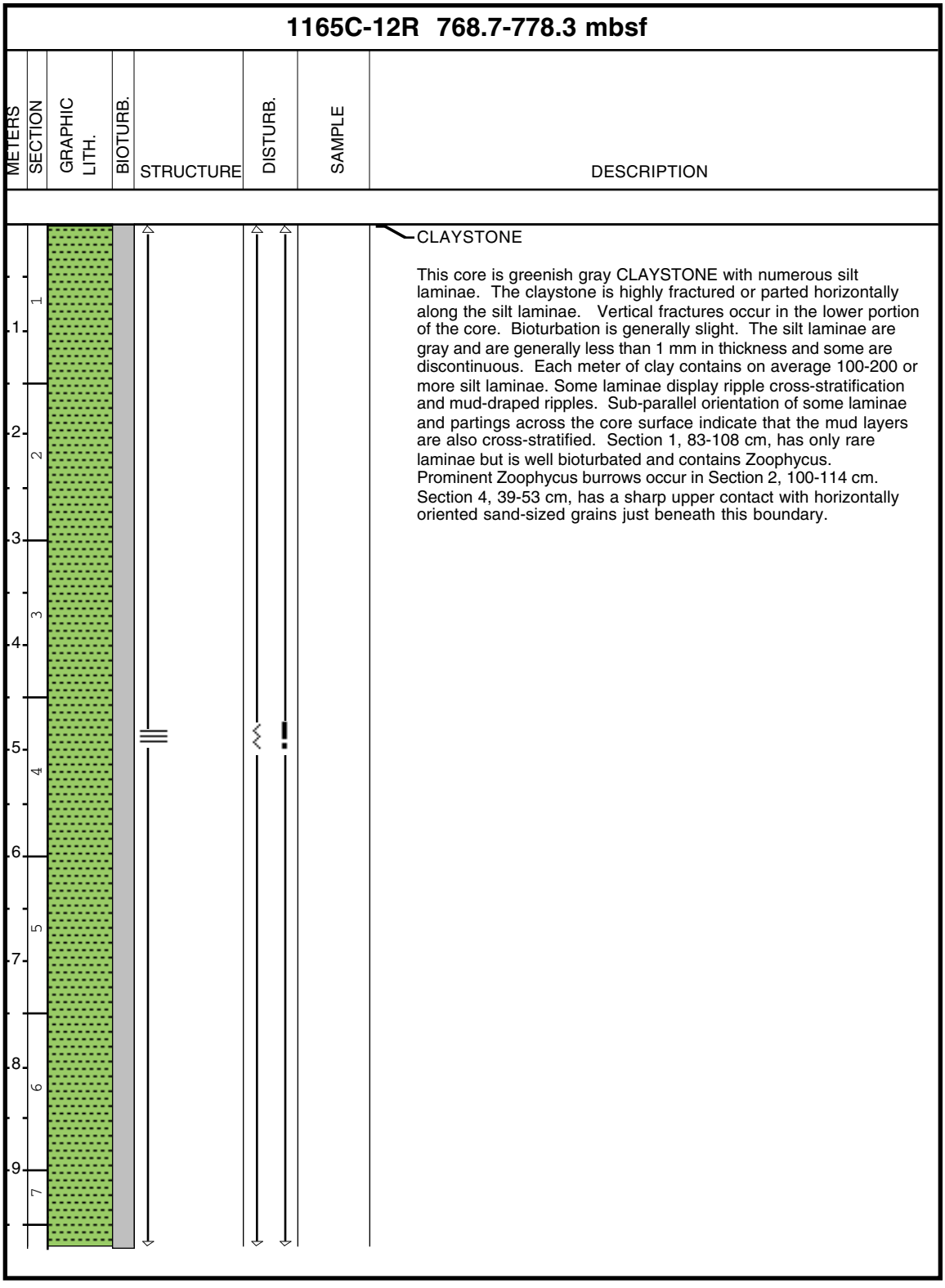
Core Photo


1165C-10R 749.5-759.1 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae in much of the core. Bioturbation is generally slight. The silt laminae are gray and are generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 or more of silt laminae. Some laminae display ripple cross-stratification and mud-draped ripples. Sub-parallel orientation of some laminae and partings across the core surface indicate that the mud layers are also cross-stratified. Two igneous lonestones occur in Section 1, 5-9 cm. Section 2, 82-95 cm, and Section 4, 57-89 cm, contain several Zoophycus burrows. Small clasts occur in Section 3 as follows; 116 cm: 5mm black clast; 118.5 cm: 4 mm red sandstone clast; 120 cm: 5 mm dark gray clast.

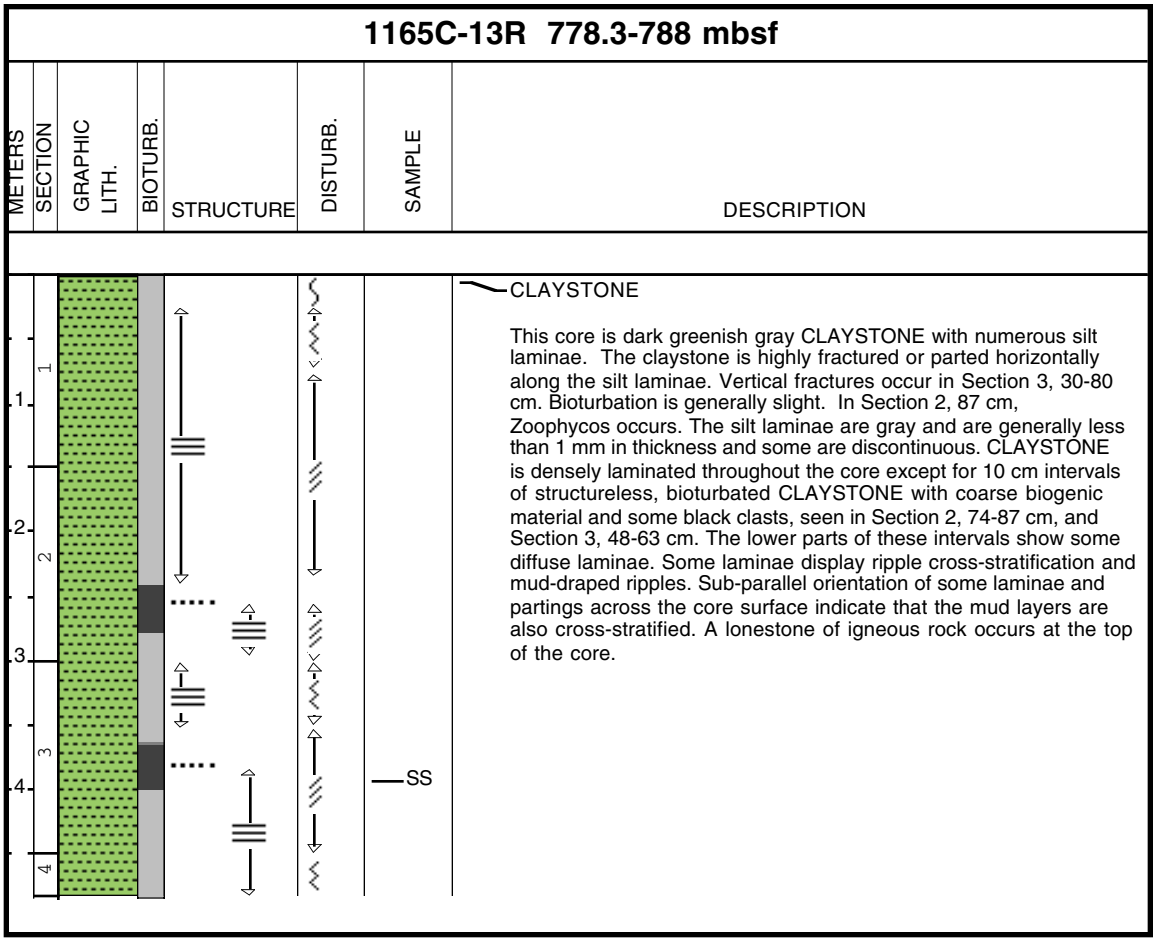
Core Photo


1165C-11R 759.1-768.7 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. Bioturbation is generally slight. The silt laminae are gray and are generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminae display ripple cross-stratification and mud-draped ripples. Sub-parallel orientation of some laminae and partings across the core surface indicate that the mud layers are also cross-stratified. Section 2, 40-58 cm, is structureless and contains dispersed white biogenic organisms and black sand-sized grains. A 2-mm clast occurs at 46 cm. Section 3, 109-129 cm, is a similar structureless zone with white biogenic fragments, black sand-sized grains, and rare, reddish brown grains. Zoophycus burrows occur near the base.
IW

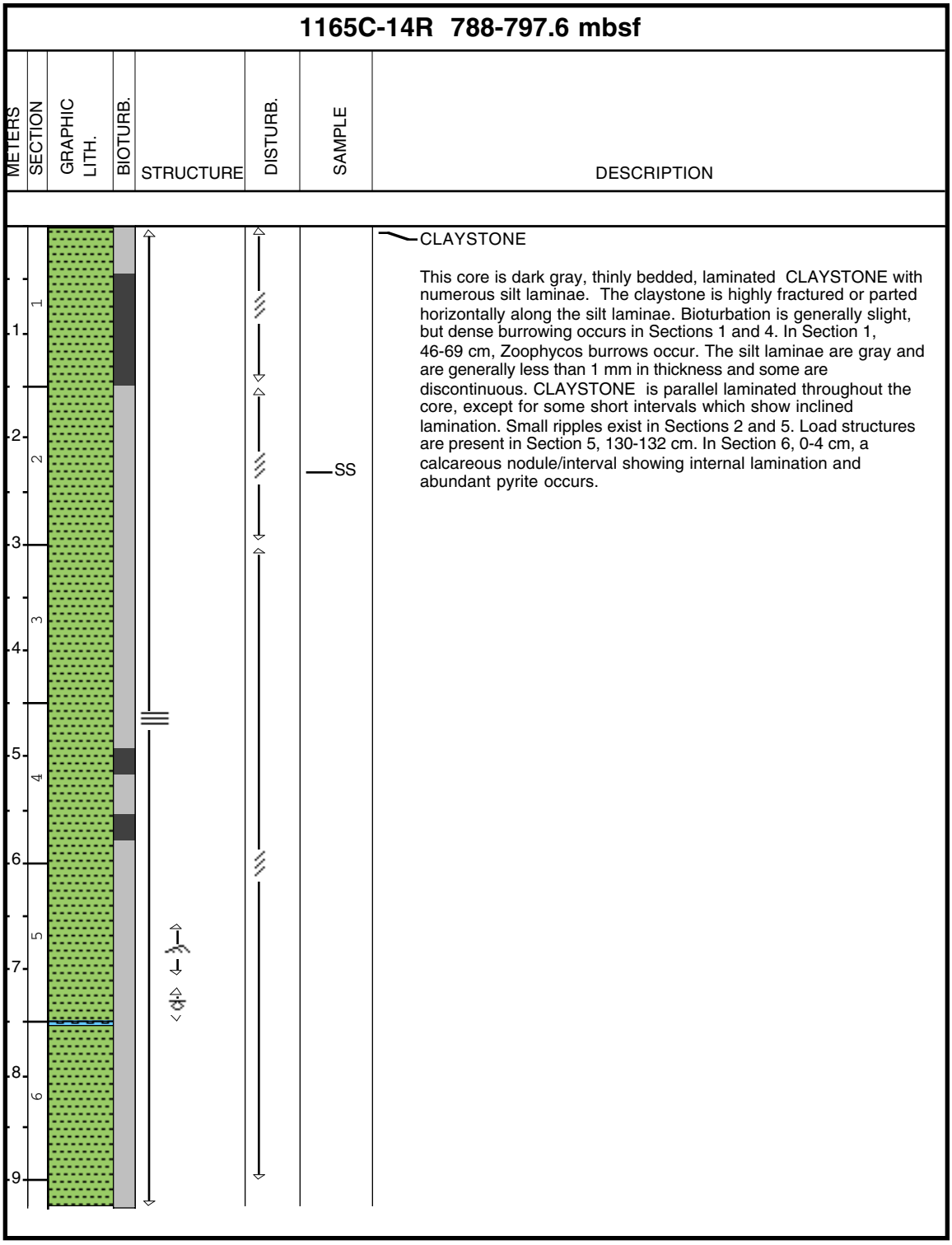
Core Photo


1165C-12R 768.7-778.3 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. Vertical fractures occur in the lower portion of the core. Bioturbation is generally slight. The silt laminae are gray and are generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminae display ripple cross-stratification and mud-draped ripples. Sub-parallel orientation of some laminae and partings across the core surface indicate that the mud layers are also cross-stratified. Section 1, 83-108 cm, has only rare laminae but is well bioturbated and contains Zoophycus. Prominent Zoophycus burrows occur in Section 2, 100-114 cm. Section 4, 39-53 cm, has a sharp upper contact with horizontally oriented sand-sized grains just beneath this boundary.

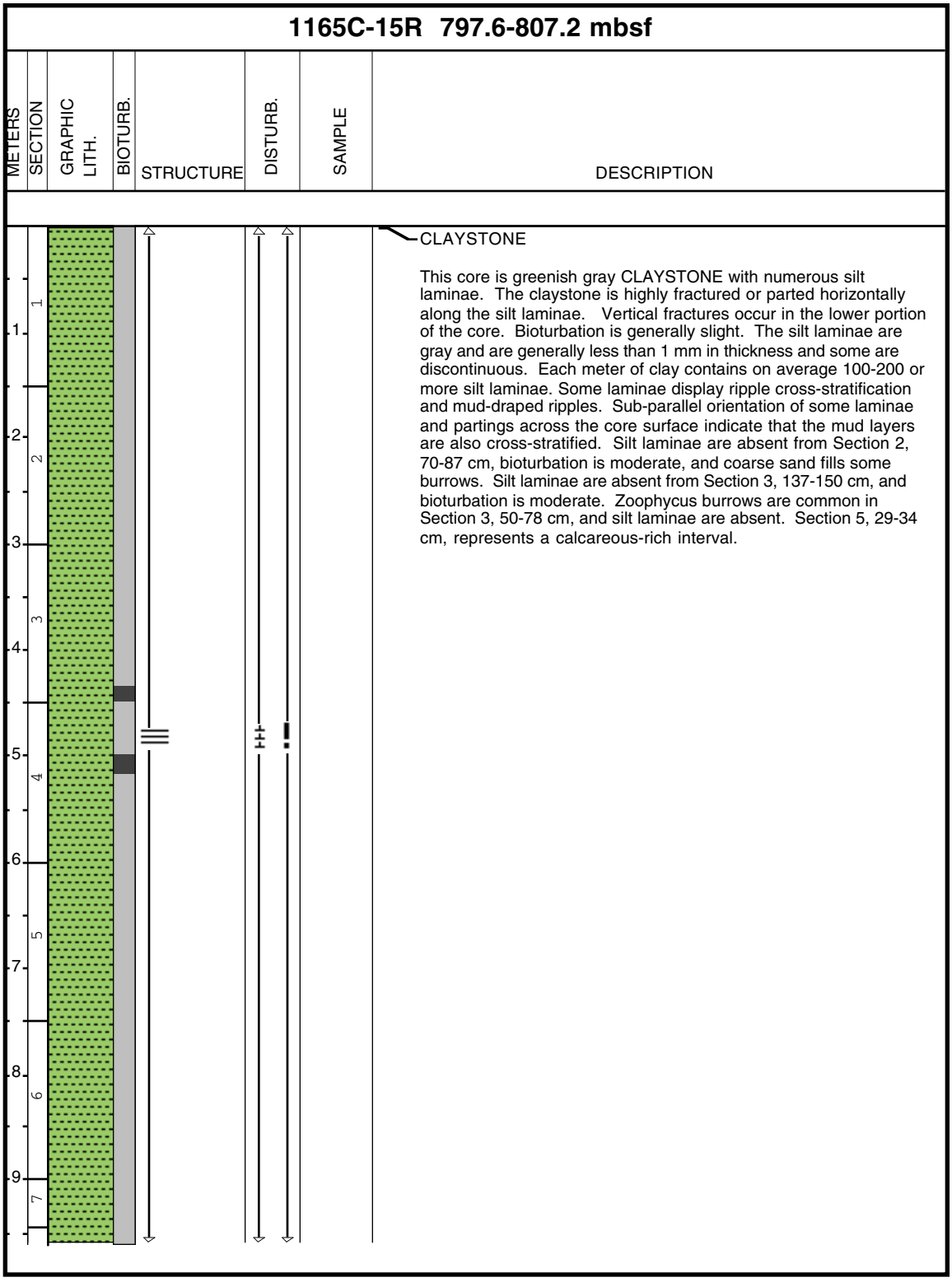
Core Photo


1165C-13R 778.3-788 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
2
3
4
SS
CLAYSTONE
This core is dark greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. Vertical fractures occur in Section 3, 30-80 cm. Bioturbation is generally slight. In Section 2, 87 cm, Zoophycos occurs. The silt laminae are gray and are generally less than 1 mm in thickness and some are discontinuous. CLAYSTONE is densely laminated throughout the core except for 10 cm intervals of structureless, bioturbated CLAYSTONE with coarse biogenic material and some black clasts, seen in Section 2, 74-87 cm, and Section 3, 48-63 cm. The lower parts of these intervals show some diffuse laminae. Some laminae display ripple cross-stratification and mud-draped ripples. Sub-parallel orientation of some laminae and partings across the core surface indicate that the mud layers are also cross-stratified. A lonestone of igneous rock occurs at the top of the core.

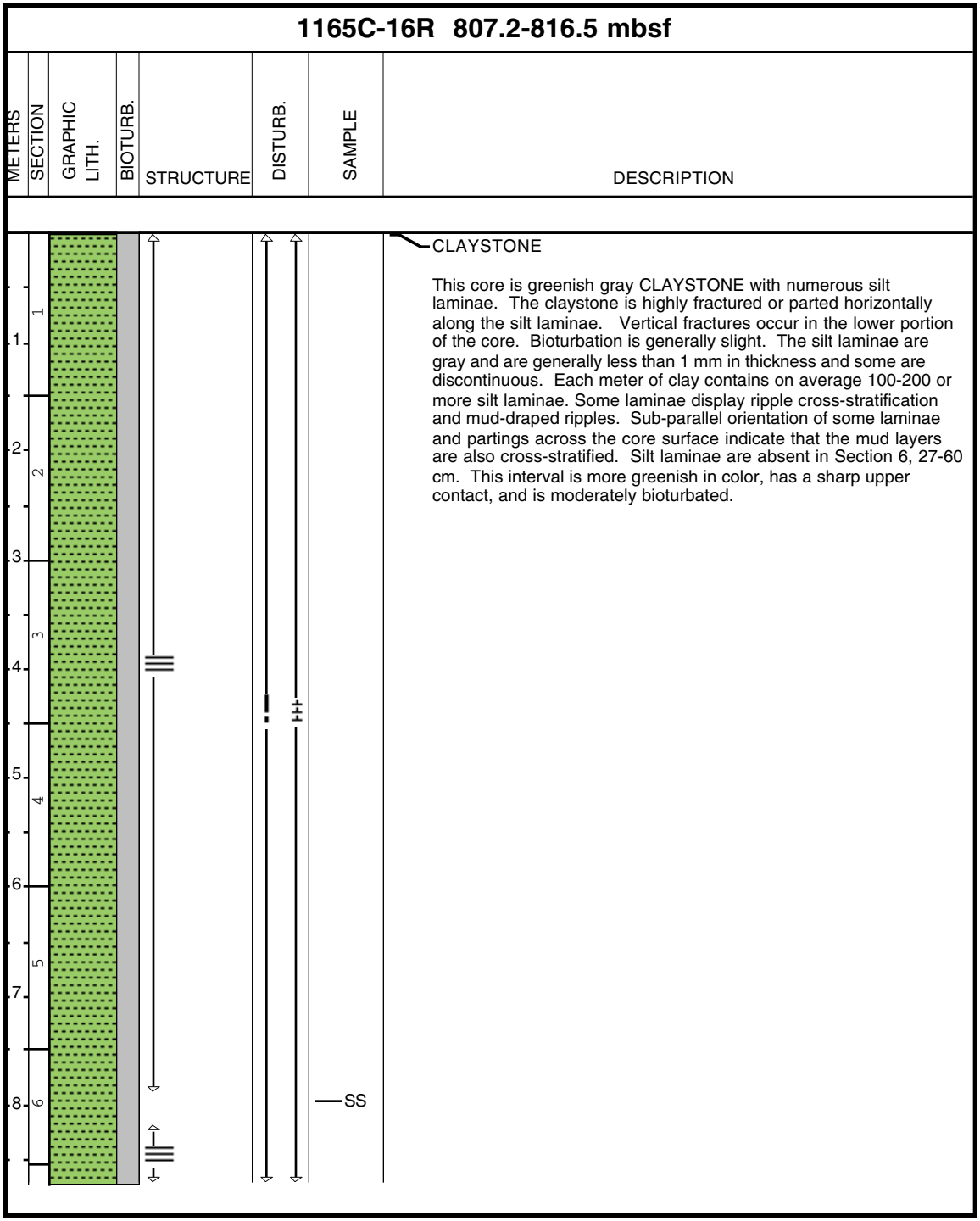
Core Photo


1165C-14R 788-797.6 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
SS
CLAYSTONE
This core is dark gray, thinly bedded, laminated CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. Bioturbation is generally slight, but dense burrowing occurs in Sections 1 and 4. In Section 1, 46-69 cm, Zoophycos burrows occur. The silt laminae are gray and are generally less than 1 mm in thickness and some are discontinuous. CLAYSTONE is parallel laminated throughout the core, except for some short intervals which show inclined lamination. Small ripples exist in Sections 2 and 5. Load structures are present in Section 5, 130-132 cm. In Section 6, 0-4 cm, a calcareous nodule/interval showing internal lamination and abundant pyrite occurs.

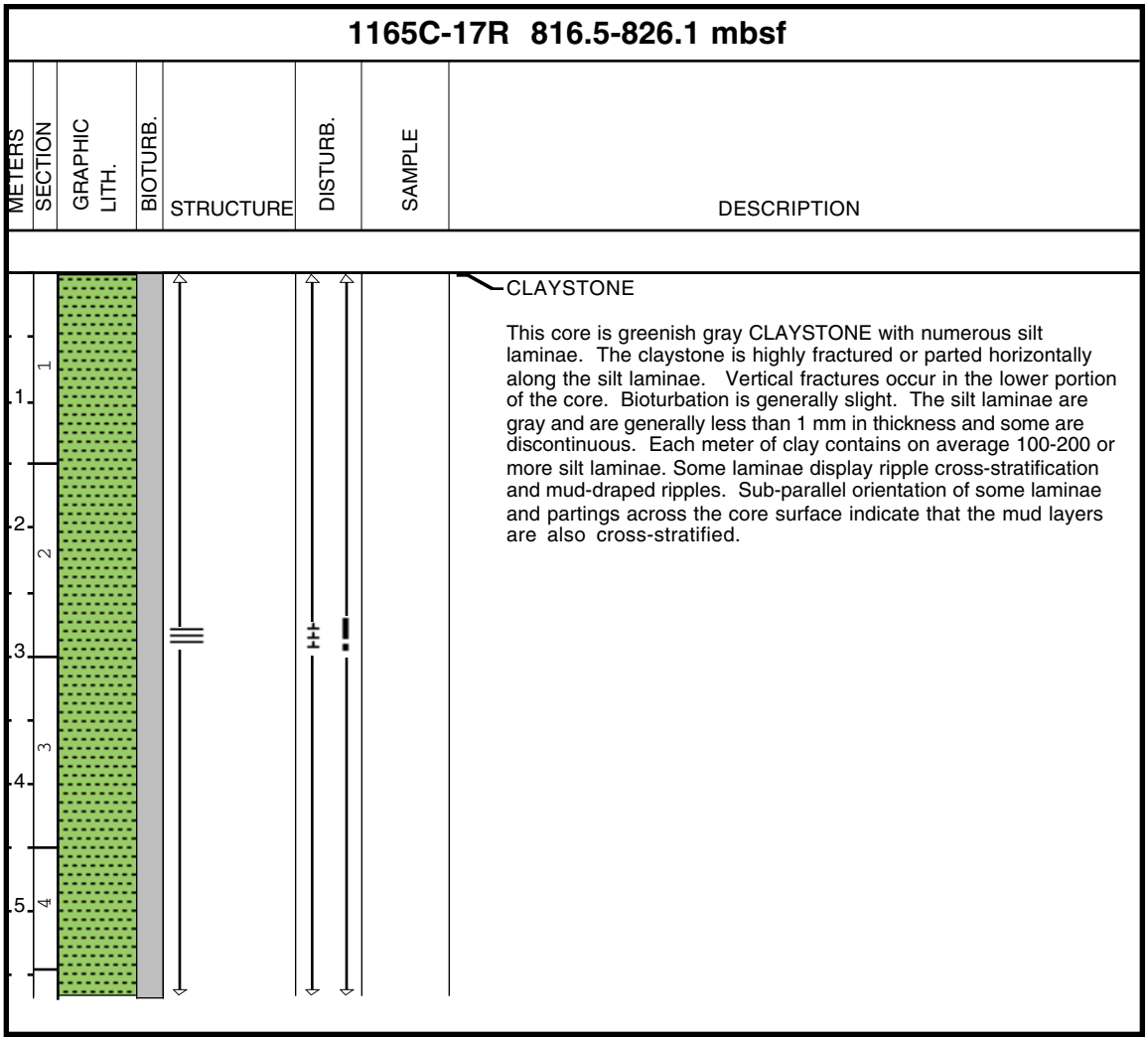
Core Photo


1165C-15R 797.6-807.2 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. Vertical fractures occur in the lower portion of the core. Bioturbation is generally slight. The silt laminae are gray and are generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminae display ripple cross-stratification and mud-draped ripples. Sub-parallel orientation of some laminae and partings across the core surface indicate that the mud layers are also cross-stratified. Silt laminae are absent from Section 2, 70-87 cm, bioturbation is moderate, and coarse sand fills some burrows. Silt laminae are absent from Section 3, 137-150 cm, and bioturbation is moderate. Zoophycus burrows are common in Section 3, 50-78 cm, and silt laminae are absent. Section 5, 29-34 cm, represents a calcareous-rich interval.

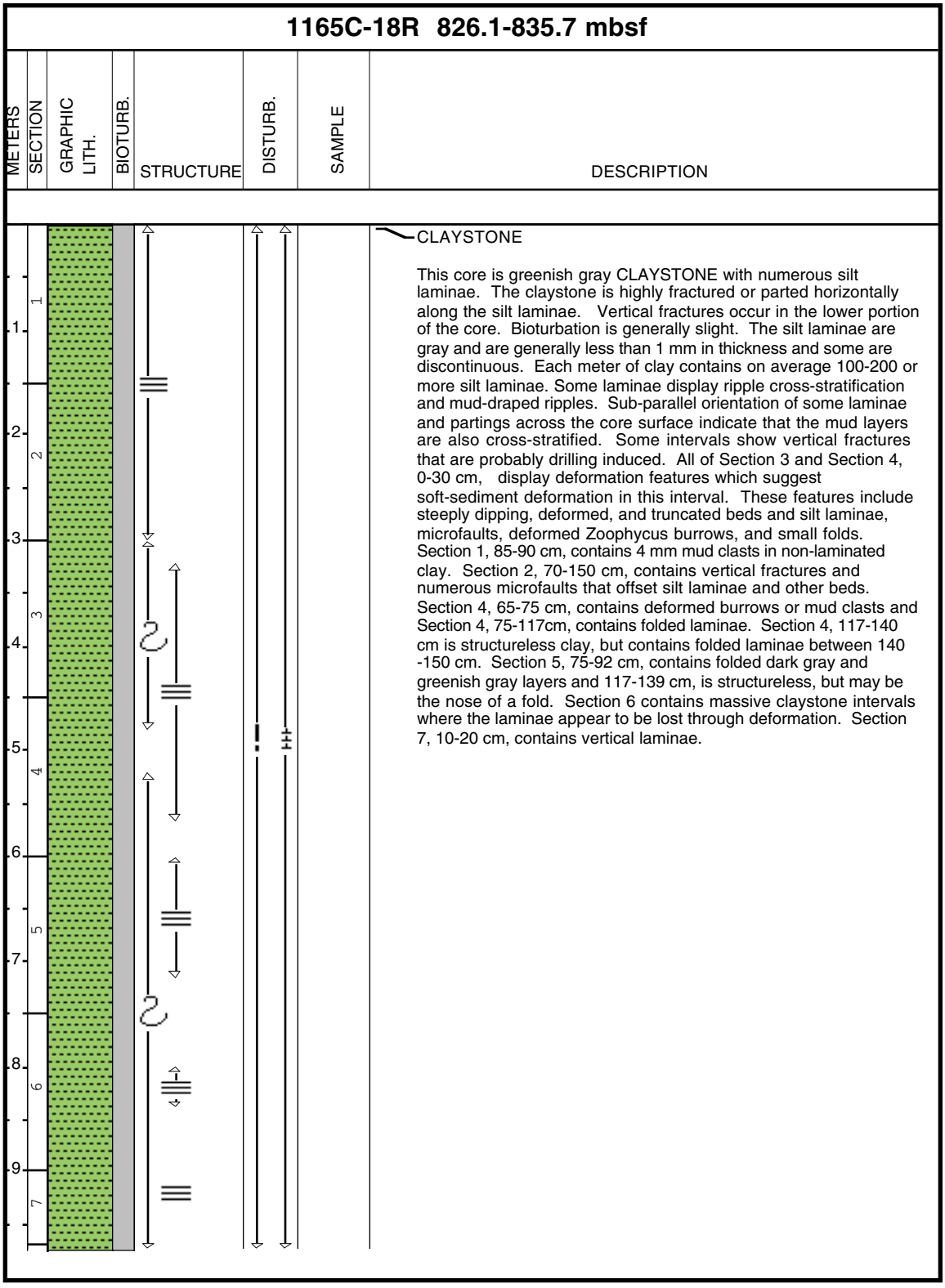
Core Photo


1165C-16R 807.2-816.5 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. Vertical fractures occur in the lower portion of the core. Bioturbation is generally slight. The silt laminae are gray and are generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminae display ripple cross-stratification and mud-draped ripples. Sub-parallel orientation of some laminae and partings across the core surface indicate that the mud layers are also cross-stratified. Silt laminae are absent in Section 6, 27-60 cm. This interval is more greenish in color, has a sharp upper contact, and is moderately bioturbated.
SS

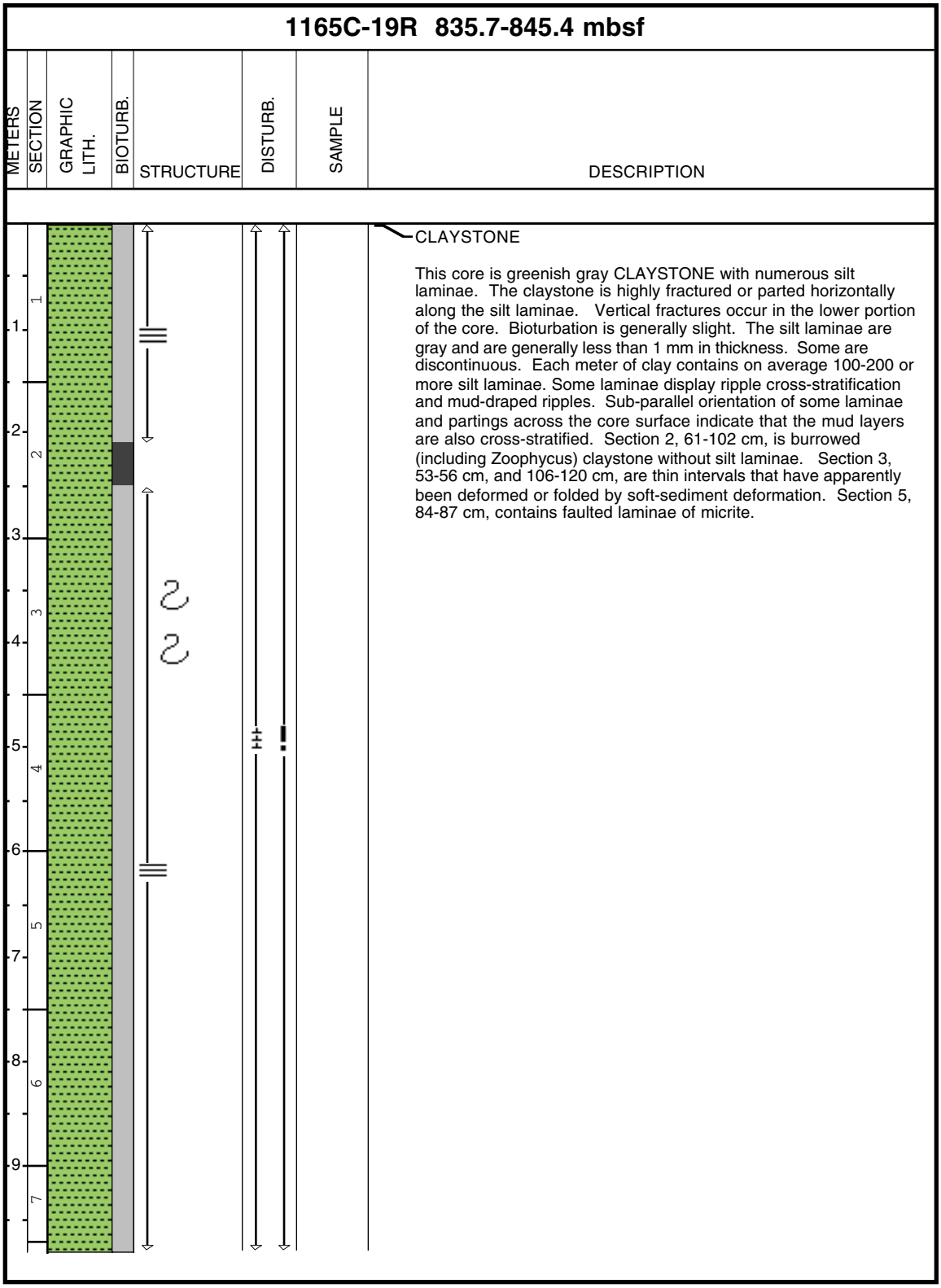
Core Photo


1165C-17R 816.5-826.1 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. Vertical fractures occur in the lower portion of the core. Bioturbation is generally slight. The silt laminae are gray and are generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminae display ripple cross-stratification and mud-draped ripples. Sub-parallel orientation of some laminae and partings across the core surface indicate that the mud layers are also cross-stratified.

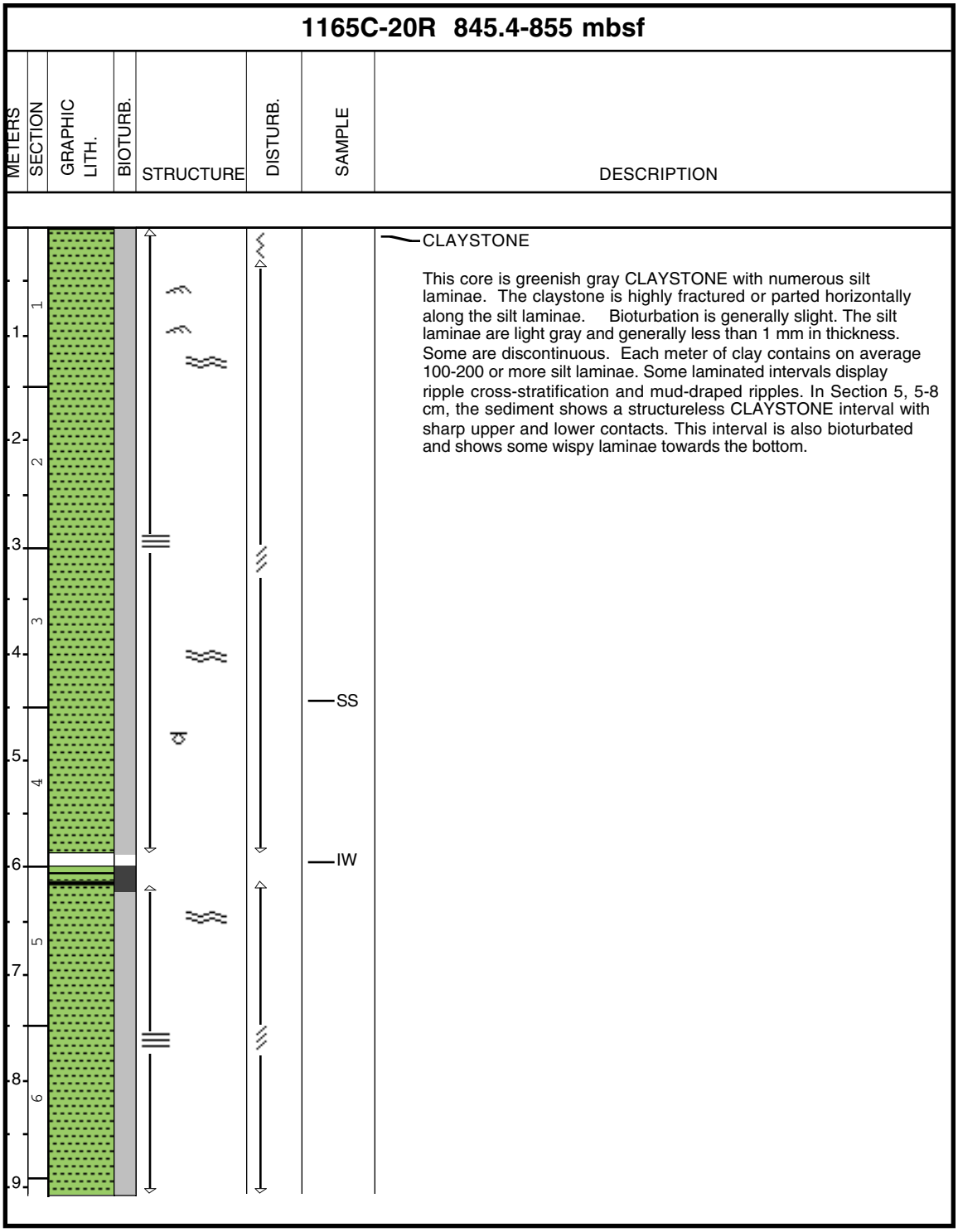
Core Photo


1165C-18R 826.1-835.7 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. Vertical fractures occur in the lower portion of the core. Bioturbation is generally slight. The silt laminae are gray and are generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminae display ripple cross-stratification and mud-draped ripples. Sub-parallel orientation of some laminae and partings across the core surface indicate that the mud layers are also cross-stratified. Some intervals show vertical fractures that are probably drilling induced. All of Section 3 and Section 4, 0-30 cm, display deformation features which suggest soft-sediment deformation in this interval. These features include steeply dipping, deformed, and truncated beds and silt laminae, microfaults, deformed Zoophycus burrows, and small folds. Section 1, 85-90 cm, contains 4 mm mud clasts in non-laminated clay. Section 2, 70-150 cm, contains vertical fractures and numerous microfaults that offset silt laminae and other beds. Section 4, 65-75 cm, contains deformed burrows or mud clasts and Section 4, 75-117cm, contains folded laminae. Section 4, 117-140 cm is structureless clay, but contains folded laminae between 140 -150 cm. Section 5, 75-92 cm, contains folded dark gray and greenish gray layers and 117-139 cm, is structureless, but may be the nose of a fold. Section 6 contains massive claystone intervals where the laminae appear to be lost through deformation. Section 7, 10-20 cm, contains vertical laminae.

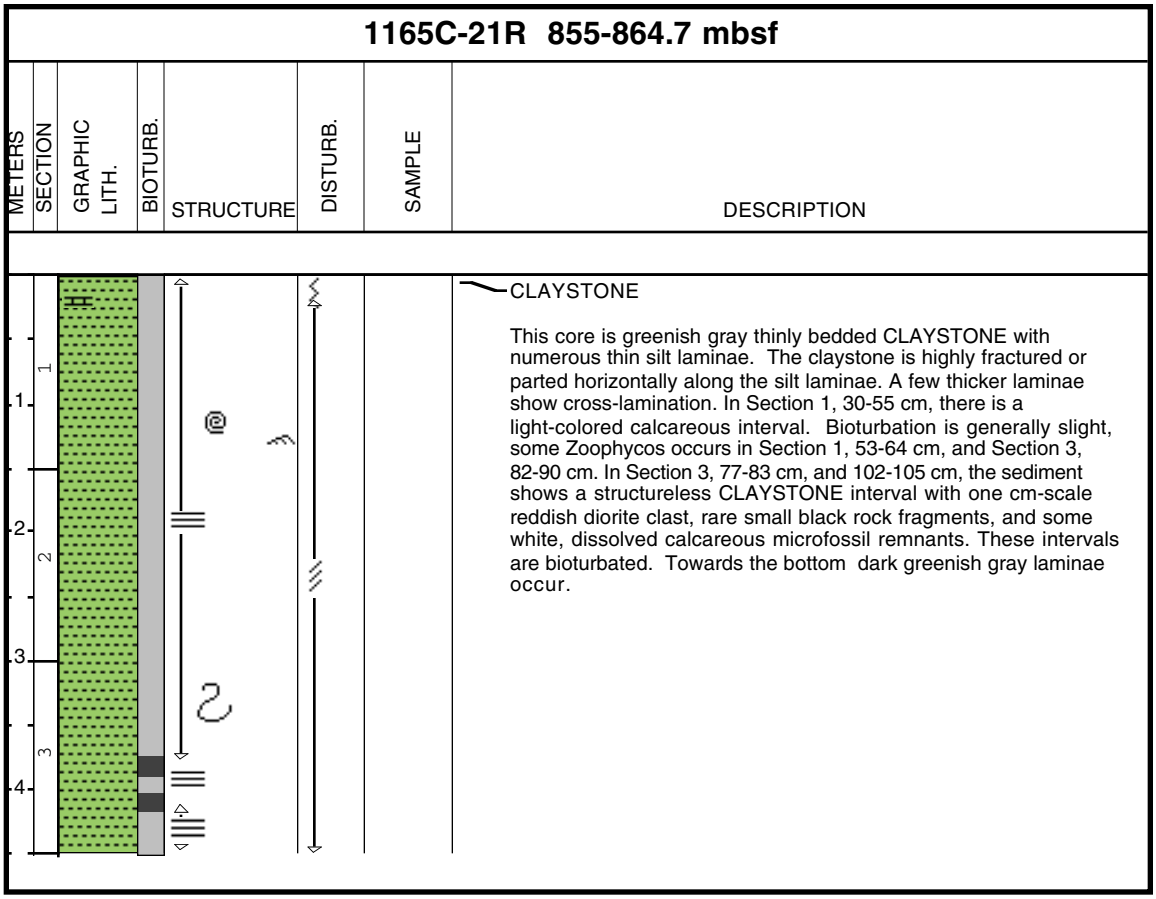
Core Photo


1165C-19R 835.7-845.4 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. Vertical fractures occur in the lower portion of the core. Bioturbation is generally slight. The silt laminae are gray and are generally less than 1 mm in thickness. Some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminae display ripple cross-stratification and mud-draped ripples. Sub-parallel orientation of some laminae and partings across the core surface indicate that the mud layers are also cross-stratified. Section 2, 61-102 cm, is burrowed (including Zoophycus) claystone without silt laminae. Section 3, 53-56 cm, and 106-120 cm, are thin intervals that have apparently been deformed or folded by soft-sediment deformation. Section 5, 84-87 cm, contains faulted laminae of micrite.

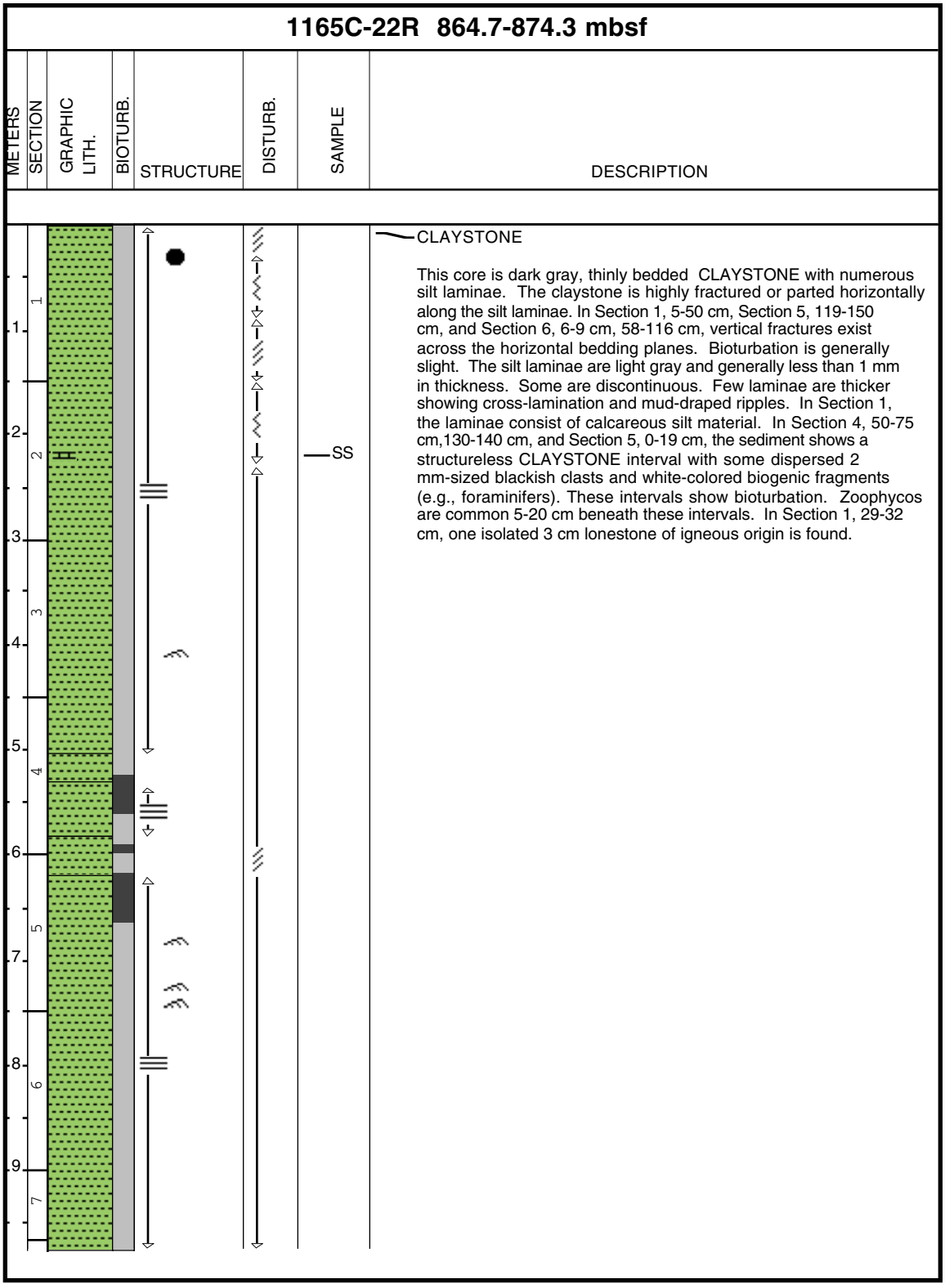
Core Photo


1165C-20R 845.4-855 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. Bioturbation is generally slight. The silt laminae are light gray and generally less than 1 mm in thickness. Some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminated intervals display ripple cross-stratification and mud-draped ripples. In Section 5, 5-8 cm, the sediment shows a structureless CLAYSTONE interval with sharp upper and lower contacts. This interval is also bioturbated and shows some wispy laminae towards the bottom.
SS
IW

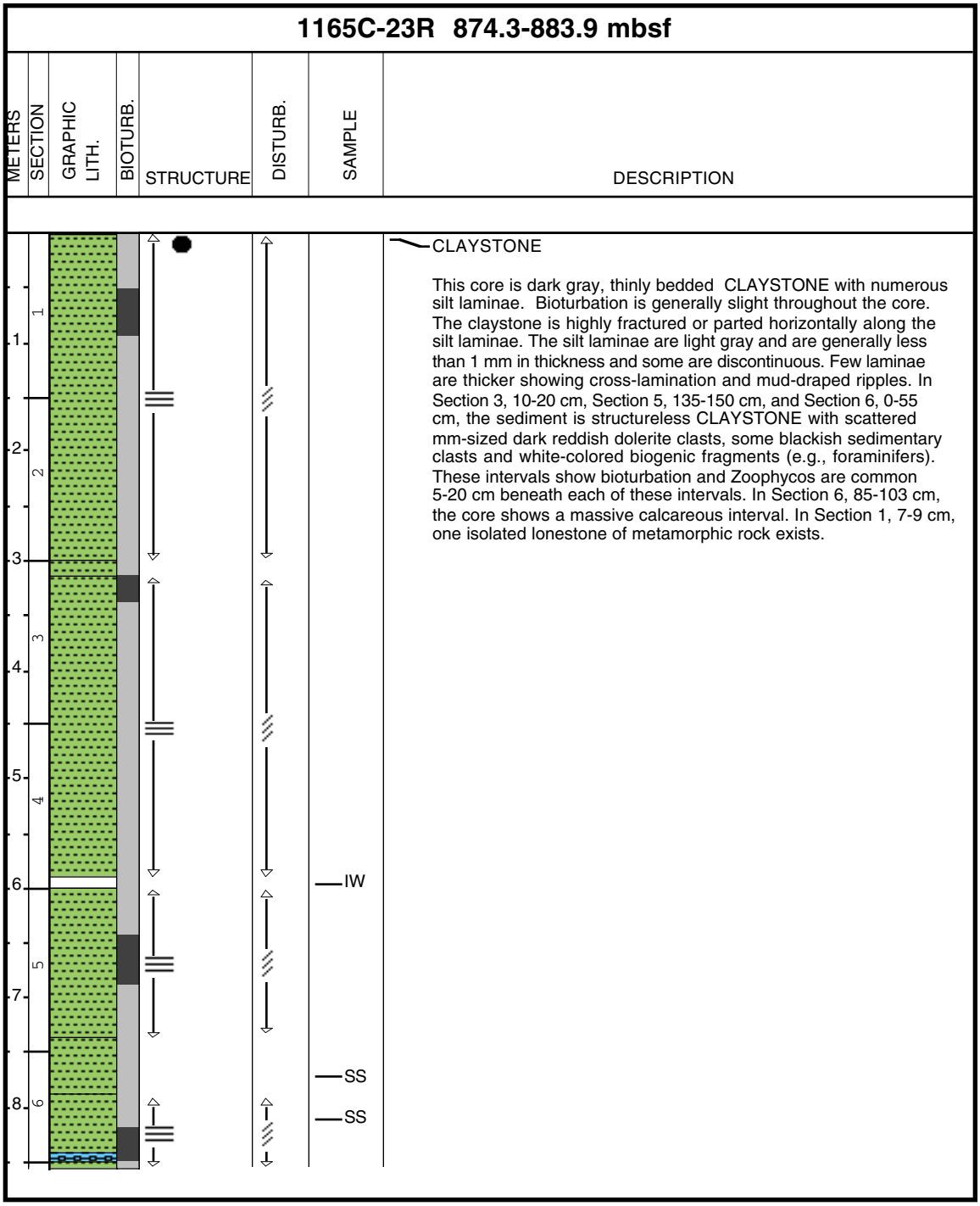
Core Photo


1165C-21R 855-864.7 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray thinly bedded CLAYSTONE with numerous thin silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. A few thicker laminae show cross-lamination. In Section 1, 30-55 cm, there is a light-colored calcareous interval. Bioturbation is generally slight, some Zoophycos occurs in Section 1, 53-64 cm, and Section 3, 82-90 cm. In Section 3, 77-83 cm, and 102-105 cm, the sediment shows a structureless CLAYSTONE interval with one cm-scale reddish diorite clast, rare small black rock fragments, and some white, dissolved calcareous microfossil remnants. These intervals are bioturbated. Towards the bottom dark greenish gray laminae occur.

Core Photo

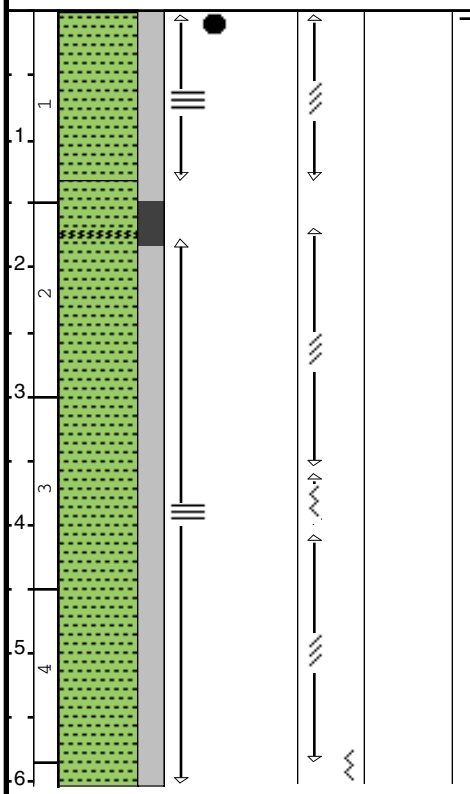

1165C-22R 864.7-874.3 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is dark gray, thinly bedded CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. In Section 1, 5-50 cm, Section 5, 119-150 cm, and Section 6, 6-9 cm, 58-116 cm, vertical fractures exist across the horizontal bedding planes. Bioturbation is generally slight. The silt laminae are light gray and generally less than 1 mm in thickness. Some are discontinuous. Few laminae are thicker showing cross-lamination and mud-draped ripples. In Section 1, the laminae consist of calcareous silt material. In Section 4, 50-75 cm,130-140 cm, and Section 5, 0-19 cm, the sediment shows a structureless CLAYSTONE interval with some dispersed 2 mm-sized blackish clasts and white-colored biogenic fragments (e.g., foraminifers). These intervals show bioturbation. Zoophycos are common 5-20 cm beneath these intervals. In Section 1, 29-32 cm, one isolated 3 cm lonestone of igneous origin is found.
SS

Core Photo


1165C-23R 874.3-883.9 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is dark gray, thinly bedded CLAYSTONE with numerous silt laminae. Bioturbation is generally slight throughout the core. The claystone is highly fractured or parted horizontally along the silt laminae. The silt laminae are light gray and are generally less than 1 mm in thickness and some are discontinuous. Few laminae are thicker showing cross-lamination and mud-draped ripples. In Section 3, 10-20 cm, Section 5, 135-150 cm, and Section 6, 0-55 cm, the sediment is structureless CLAYSTONE with scattered mm-sized dark reddish dolerite clasts, some blackish sedimentary clasts and white-colored biogenic fragments (e.g., foraminifers). These intervals show bioturbation and Zoophycos are common 5-20 cm beneath each of these intervals. In Section 6, 85-103 cm, the core shows a massive calcareous interval. In Section 1, 7-9 cm, one isolated lonestone of metamorphic rock exists.
IW
SS
SS

Core Photo

1165C-24R 883.9-893.6 mbsf

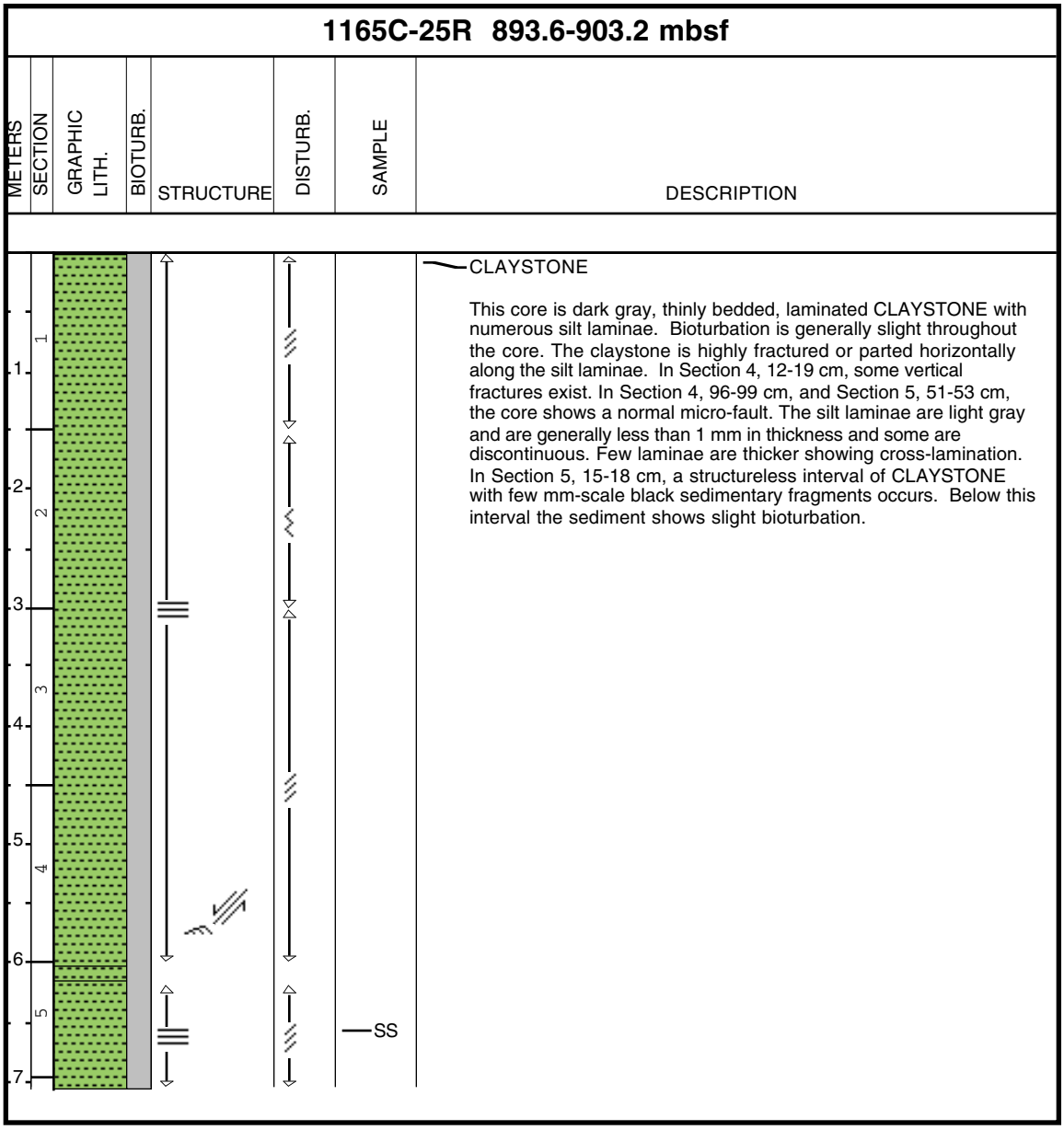


DESCRIPTION

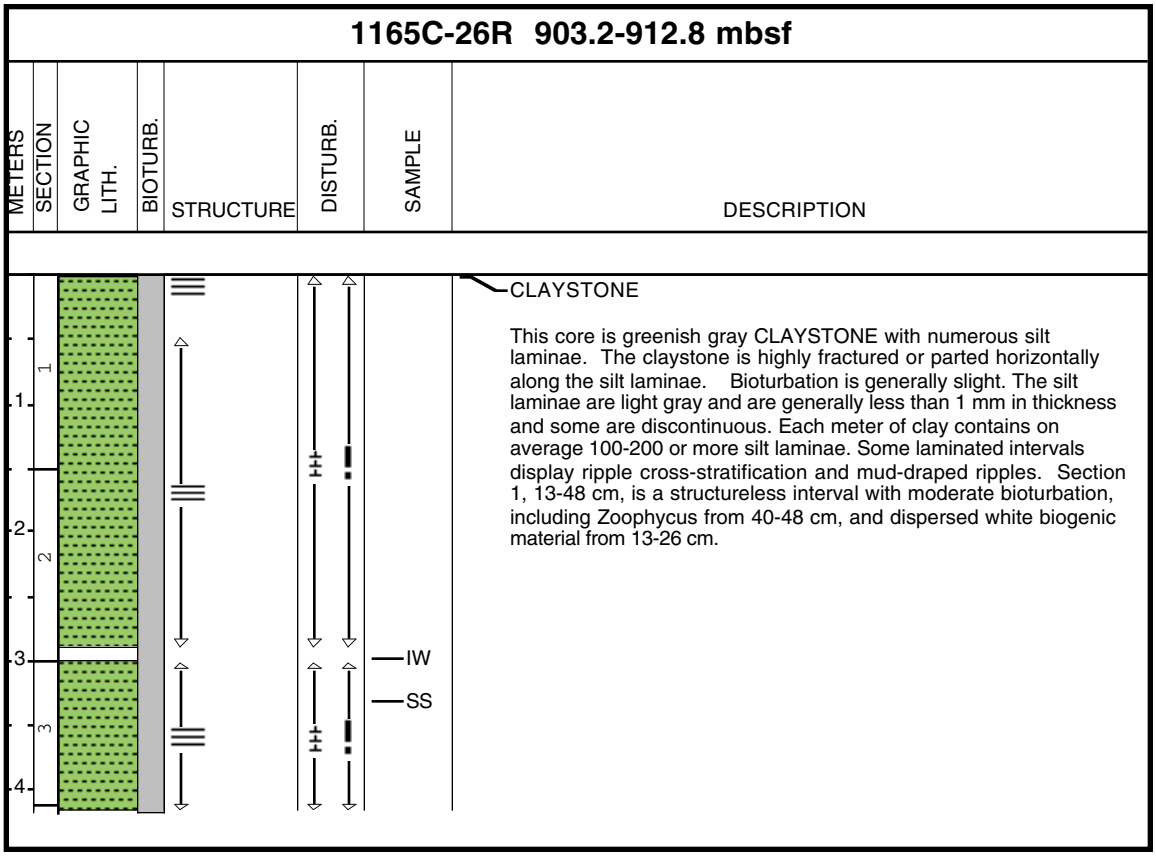
CLAYSTONE

This core is dark gray, thinly bedded, laminated CLAYSTONE with numerous silt laminae. Bioturbation is generally slight throughout the core. The claystone is highly fractured or parted horizontally along the silt laminae. In Section 1, 37-56 cm, Section 3, 46-75 cm, and Section 4, 26-68 cm, vertical fractures exist. The silt laminae are light gray and are generally less than 1 mm in thickness and some are discontinuous. Few laminae are thicker showing cross-lamination and mud-draped ripples. In Section 1, 141-150 cm, Section 2, 0-10 cm, the sediment is structureless CLAYSTONE with few mm-sized blackish sedimentary clasts and white-colored biogenic fragments (e.g., foraminifers). This interval shows some bioturbation. Zoophycos are common 25 cm beneath this interval as well as faint preserved laminations. In Section 1, 0-5 cm, the core shows calcareous laminae. In Section 1, 10-12 cm, one isolated lonestone of igneous rock (diorite) occurs.

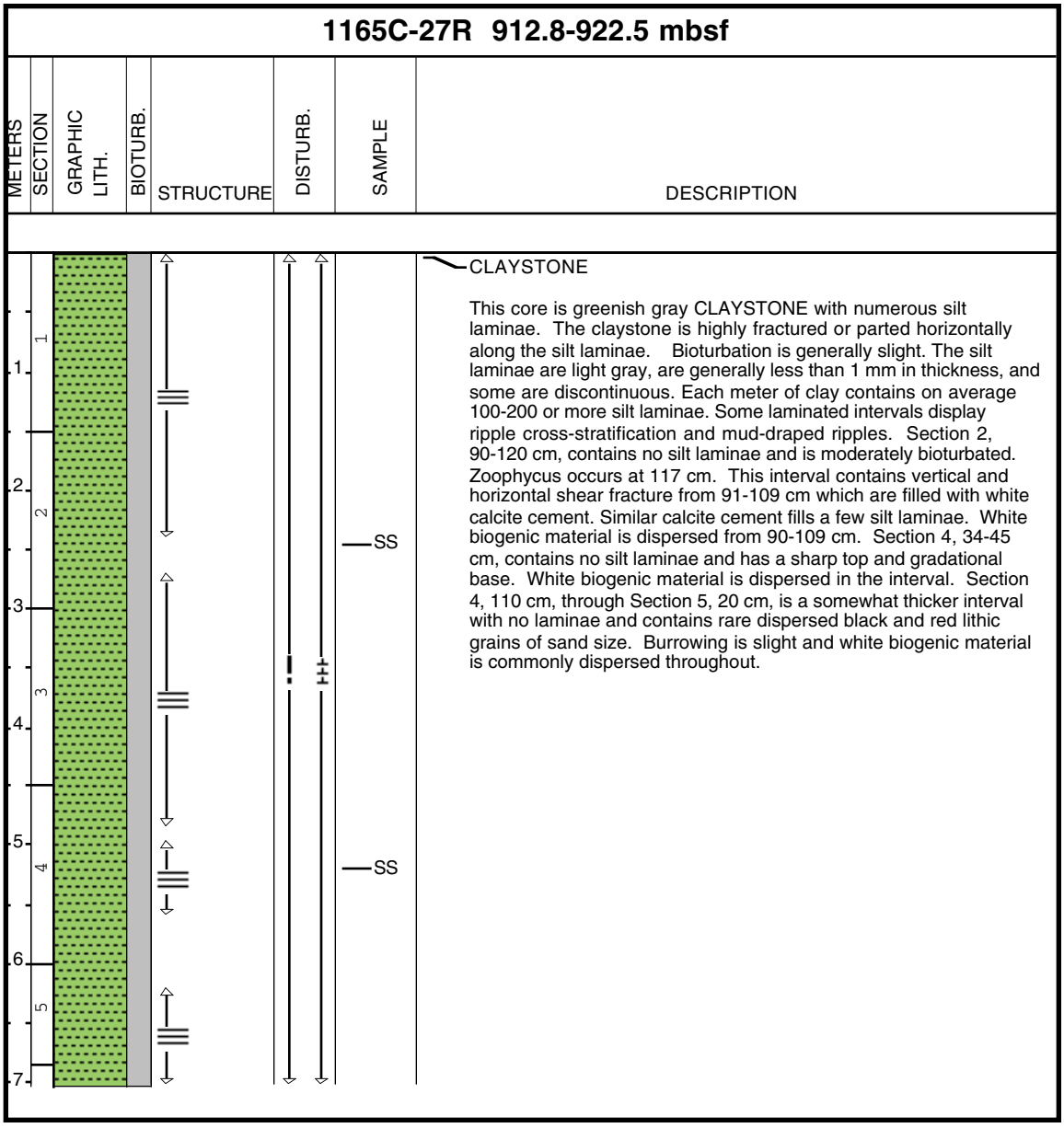
Core Photo


1165C-25R 893.6-903.2 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is dark gray, thinly bedded, laminated CLAYSTONE with numerous silt laminae. Bioturbation is generally slight throughout the core. The claystone is highly fractured or parted horizontally along the silt laminae. In Section 4, 12-19 cm, some vertical fractures exist. In Section 4, 96-99 cm, and Section 5, 51-53 cm, the core shows a normal micro-fault. The silt laminae are light gray and are generally less than 1 mm in thickness and some are discontinuous. Few laminae are thicker showing cross-lamination. In Section 5, 15-18 cm, a structureless interval of CLAYSTONE with few mm-scale black sedimentary fragments occurs. Below this interval the sediment shows slight bioturbation.
SS

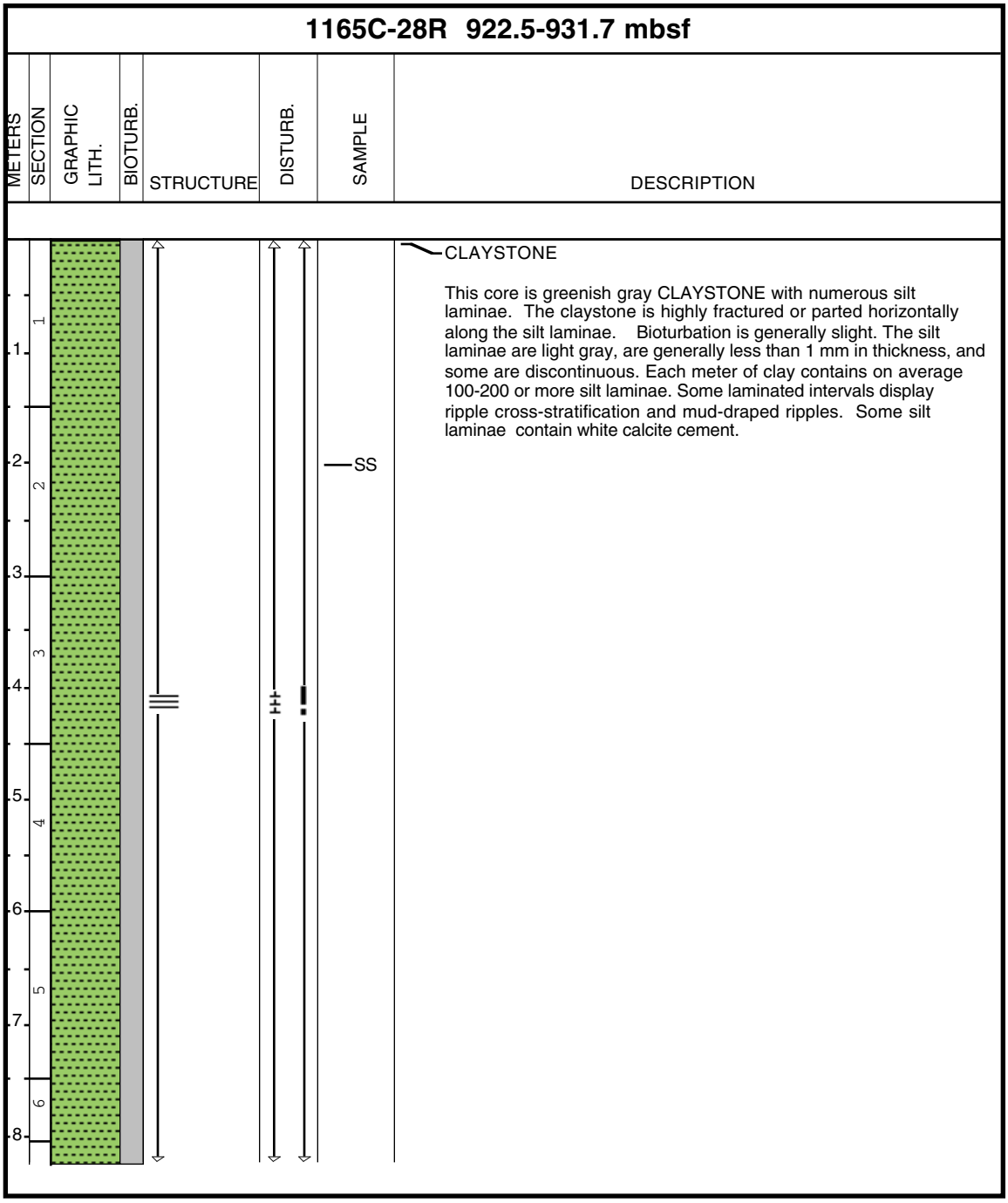
Core Photo


1165C-26R 903.2-912.8 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
2
3
4
IW
SS
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. Bioturbation is generally slight. The silt laminae are light gray and are generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminated intervals display ripple cross-stratification and mud-draped ripples. Section 1, 13-48 cm, is a structureless interval with moderate bioturbation, including Zoophycus from 40-48 cm, and dispersed white biogenic material from 13-26 cm.

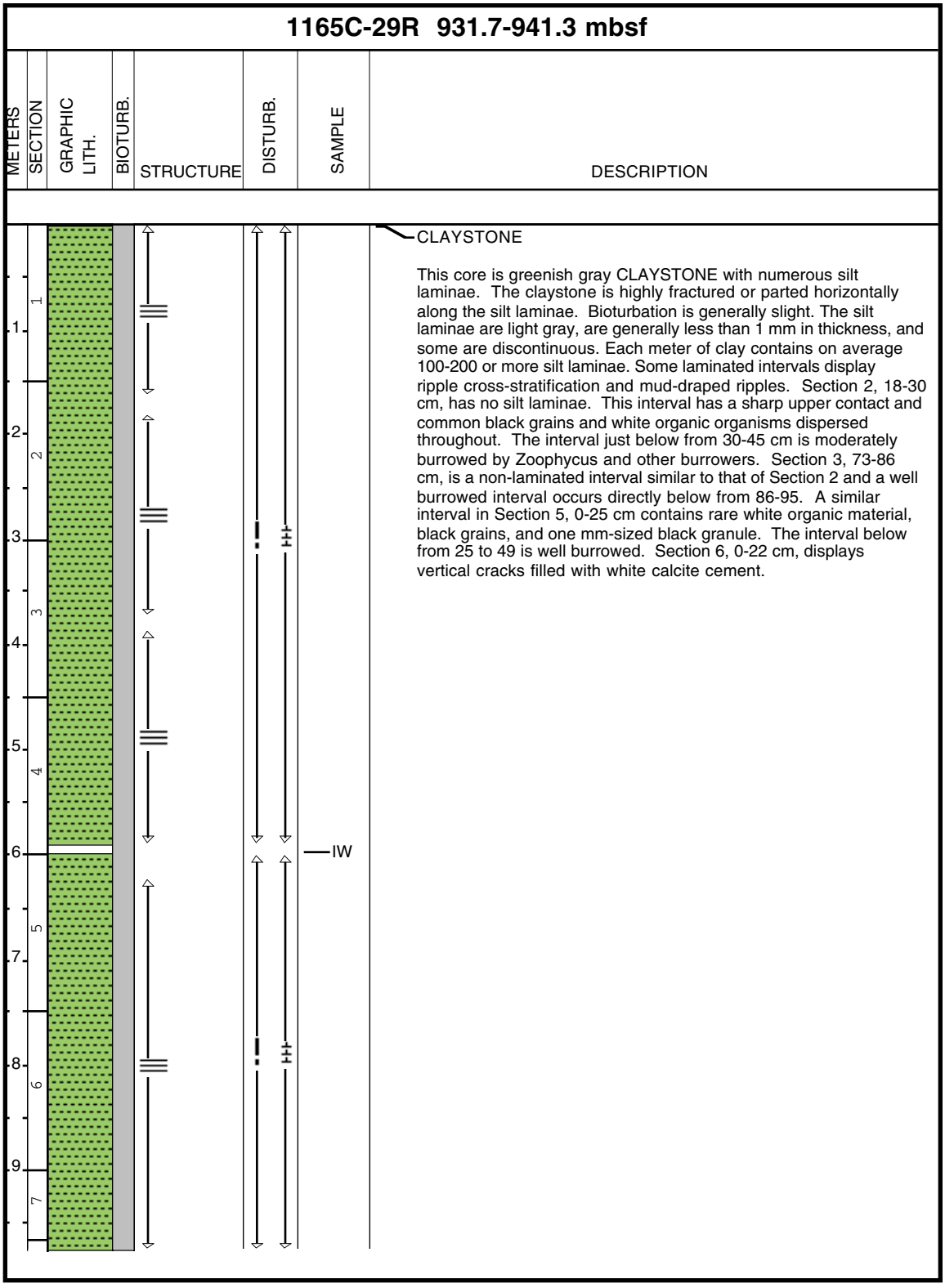
Core Photo


1165C-27R 912.8-922.5 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. Bioturbation is generally slight. The silt laminae are light gray, are generally less than 1 mm in thickness, and some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminated intervals display ripple cross-stratification and mud-draped ripples. Section 2, 90-120 cm, contains no silt laminae and is moderately bioturbated. Zoophycus occurs at 117 cm. This interval contains vertical and horizontal shear fracture from 91-109 cm which are filled with white calcite cement. Similar calcite cement fills a few silt laminae. White biogenic material is dispersed from 90-109 cm. Section 4, 34-45 cm, contains no silt laminae and has a sharp top and gradational base. White biogenic material is dispersed in the interval. Section 4, 110 cm, through Section 5, 20 cm, is a somewhat thicker interval with no laminae and contains rare dispersed black and red lithic grains of sand size. Burrowing is slight and white biogenic material is commonly dispersed throughout.
SS
SS

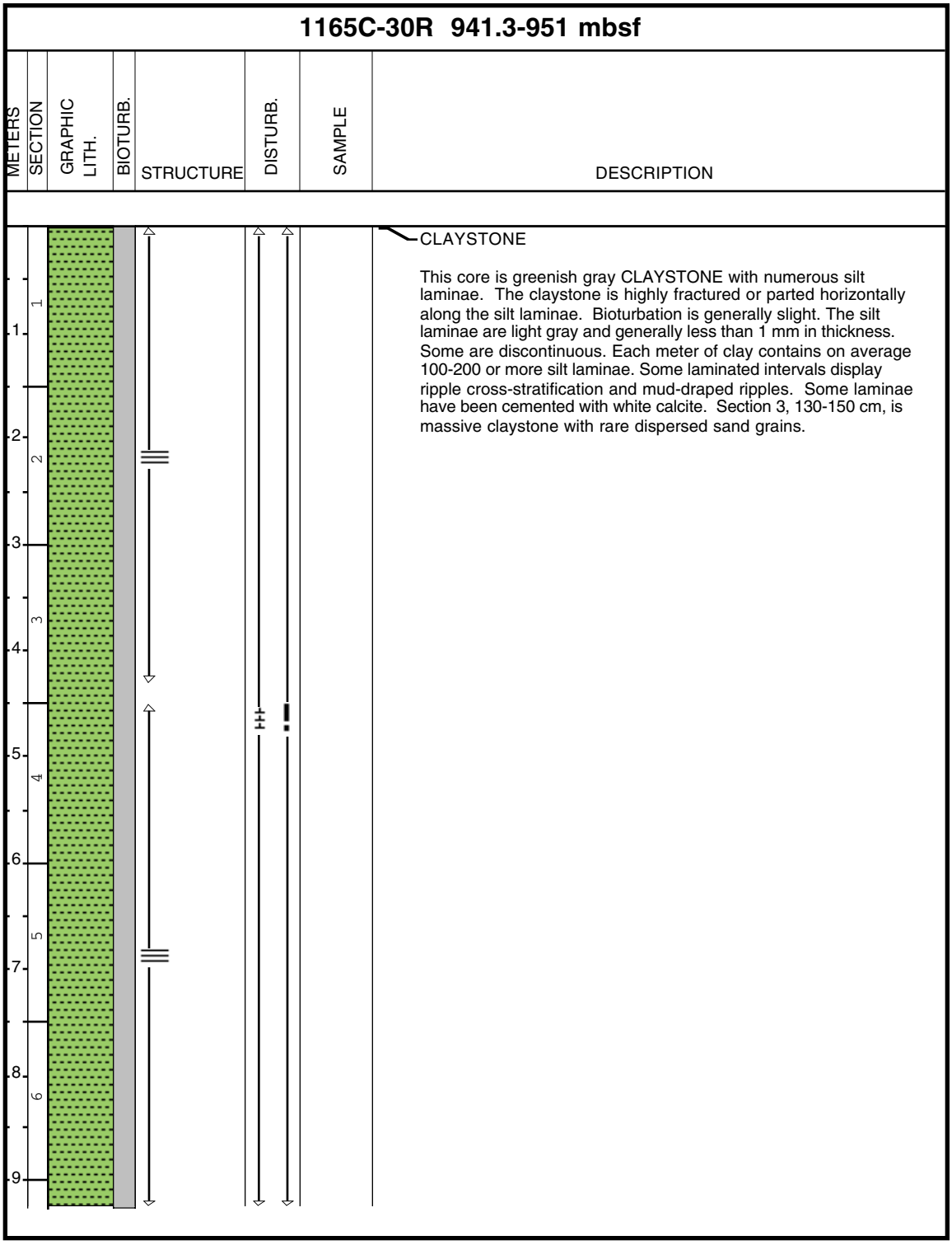
Core Photo


1165C-28R 922.5-931.7 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. Bioturbation is generally slight. The silt laminae are light gray, are generally less than 1 mm in thickness, and some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminated intervals display ripple cross-stratification and mud-draped ripples. Some silt laminae contain white calcite cement.
SS

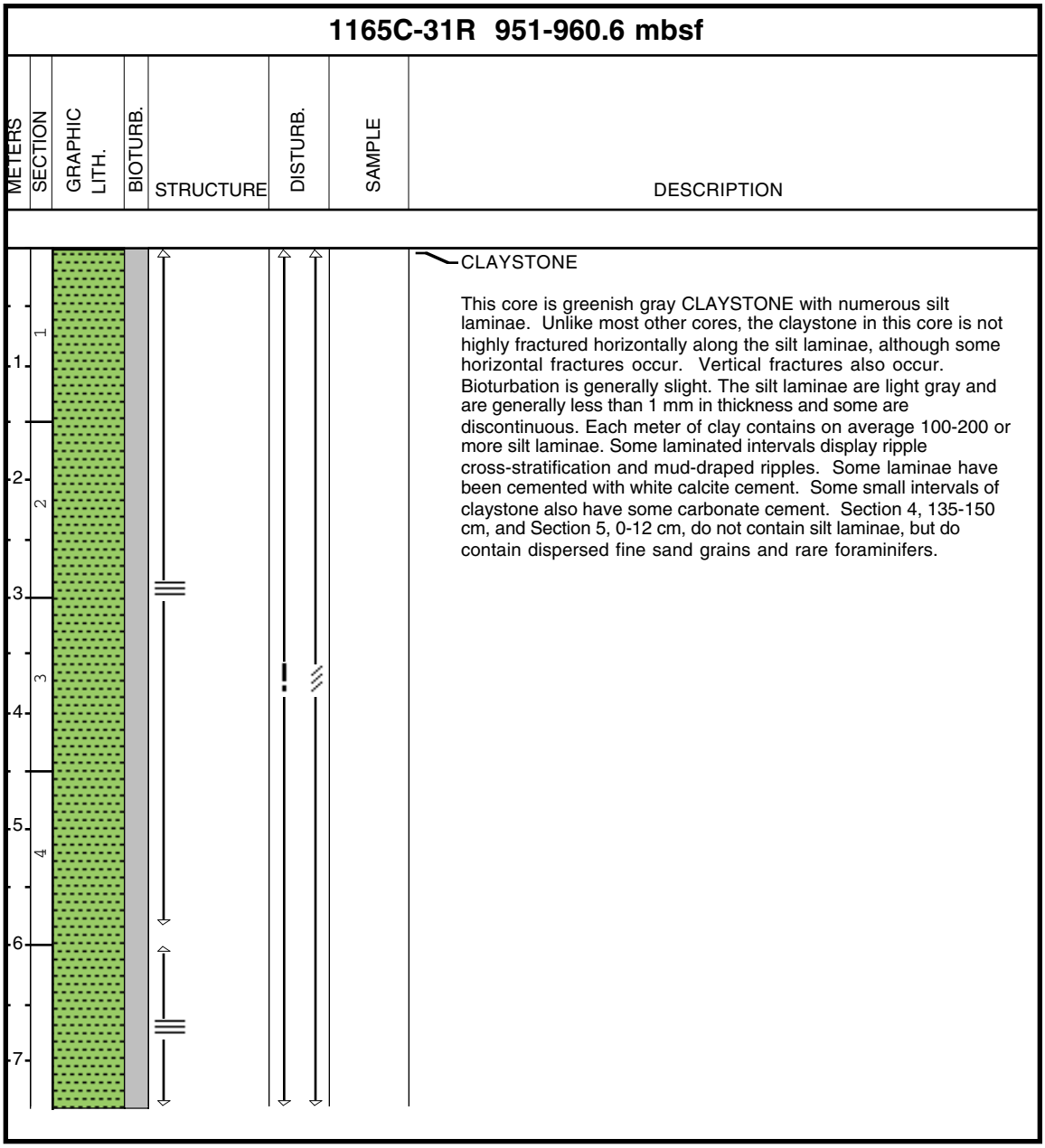
Core Photo


1165C-29R 931.7-941.3 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. Bioturbation is generally slight. The silt laminae are light gray, are generally less than 1 mm in thickness, and some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminated intervals display ripple cross-stratification and mud-draped ripples. Section 2, 18-30 cm, has no silt laminae. This interval has a sharp upper contact and common black grains and white organic organisms dispersed throughout. The interval just below from 30-45 cm is moderately burrowed by Zoophycus and other burrowers. Section 3, 73-86 cm, is a non-laminated interval similar to that of Section 2 and a well burrowed interval occurs directly below from 86-95. A similar interval in Section 5, 0-25 cm contains rare white organic material, black grains, and one mm-sized black granule. The interval below from 25 to 49 is well burrowed. Section 6, 0-22 cm, displays vertical cracks filled with white calcite cement.
IW

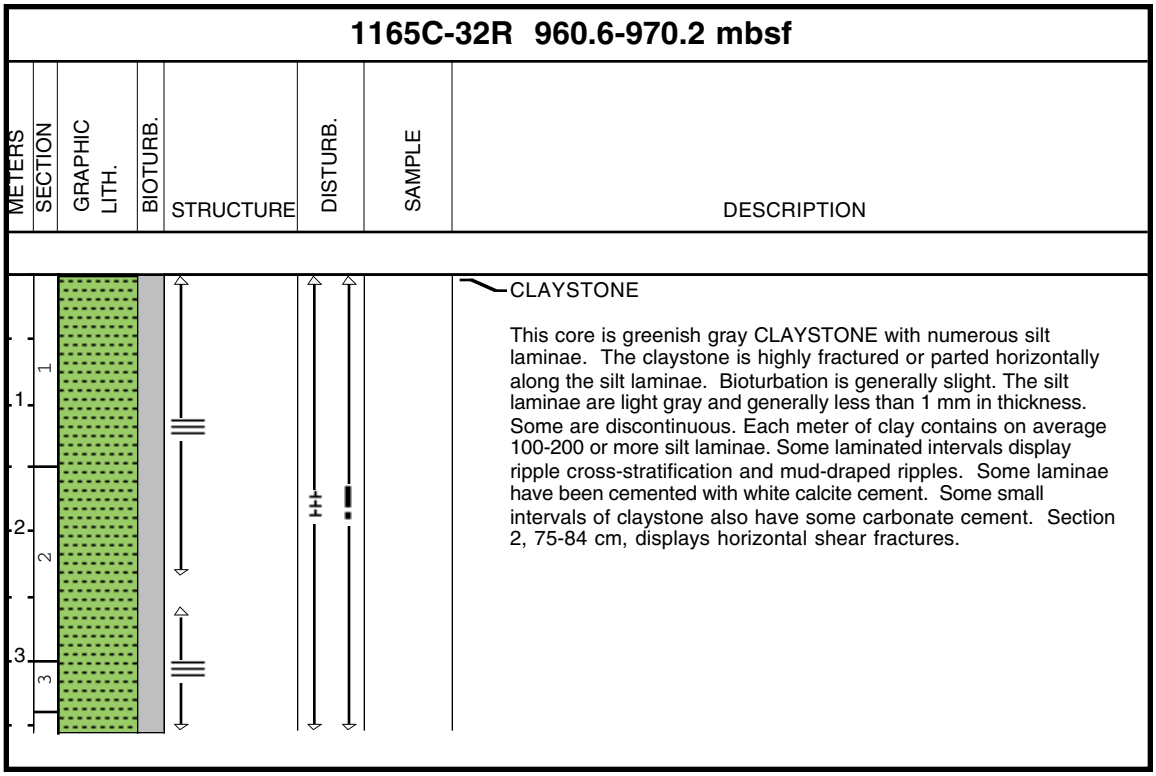
Core Photo


1165C-30R 941.3-951 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. Bioturbation is generally slight. The silt laminae are light gray and generally less than 1 mm in thickness. Some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminated intervals display ripple cross-stratification and mud-draped ripples. Some laminae have been cemented with white calcite. Section 3, 130-150 cm, is massive claystone with rare dispersed sand grains.

Core Photo

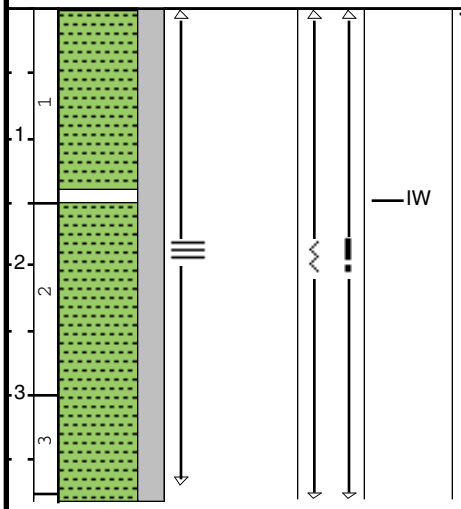

1165C-31R 951-960.6 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. Unlike most other cores, the claystone in this core is not highly fractured horizontally along the silt laminae, although some horizontal fractures occur. Vertical fractures also occur. Bioturbation is generally slight. The silt laminae are light gray and are generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminated intervals display ripple cross-stratification and mud-draped ripples. Some laminae have been cemented with white calcite cement. Some small intervals of claystone also have some carbonate cement. Section 4, 135-150 cm, and Section 5, 0-12 cm, do not contain silt laminae, but do contain dispersed fine sand grains and rare foraminifers.

Core Photo


1165C-32R 960.6-970.2 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
2
3
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is highly fractured or parted horizontally along the silt laminae. Bioturbation is generally slight. The silt laminae are light gray and generally less than 1 mm in thickness. Some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminated intervals display ripple cross-stratification and mud-draped ripples. Some laminae have been cemented with white calcite cement. Some small intervals of claystone also have some carbonate cement. Section 2, 75-84 cm, displays horizontal shear fractures.

Core Photo

1165C-33R 970.2-979.8 mbsf

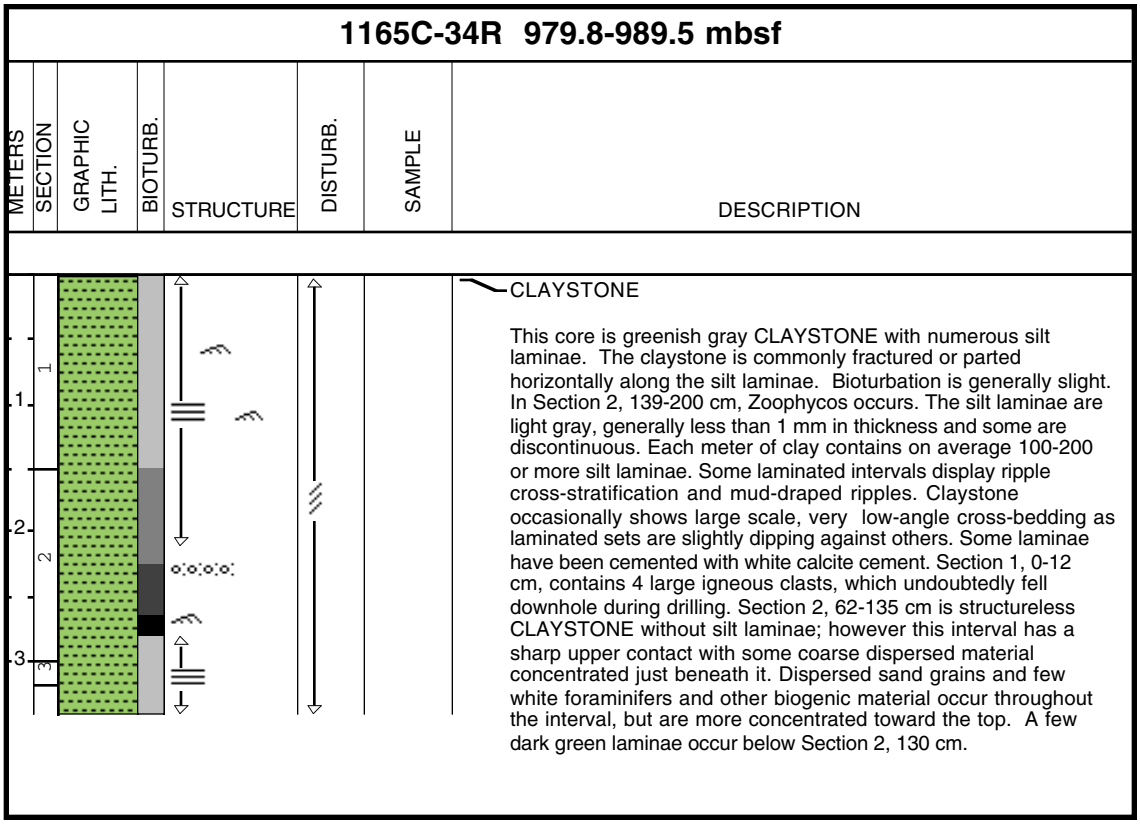


DESCRIPTION

CLAYSTONE

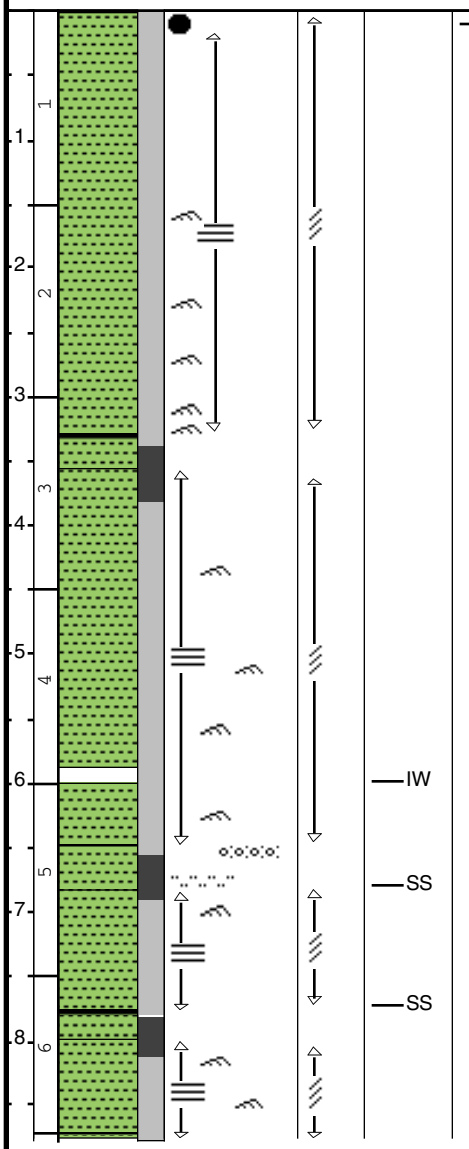
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is commonly fractured or parted horizontally along the silt laminae. Bioturbation is generally slight. The silt laminae are light gray, generally less than 1 mm in thickness and commonly are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminated intervals display ripple cross-stratification and mud-draped ripples. Some laminae have been cemented with white calcite cement. Section 1, 0-7 cm, contains 3 large igneous clasts, which undoubtedly fell downhole during drilling. A loose dolerite clast occurs in Section 2, 20 cm. Section 3, 69-77 cm, is claystone without silt laminae; however this interval has a sharp upper contact with coarse material (including a 3 mm diameter diorite granule) concentrated just beneath it. Dispersed sand grains and white foraminifers and biogenic material occur throughout the interval.

Core Photo


1165C-34R 979.8-989.5 mbsf
METERS
SECTION
GRAPHIC LITH.
BIOTURB.
STRUCTURE
DISTURB.
SAMPLE
DESCRIPTION
1
2
3
CLAYSTONE
This core is greenish gray CLAYSTONE with numerous silt laminae. The claystone is commonly fractured or parted horizontally along the silt laminae. Bioturbation is generally slight. In Section 2, 139-200 cm, Zoophycos occurs. The silt laminae are light gray, generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminated intervals display ripple cross-stratification and mud-draped ripples. Claystone occasionally shows large scale, very low-angle cross-bedding as laminated sets are slightly dipping against others. Some laminae have been cemented with white calcite cement. Section 1, 0-12 cm, contains 4 large igneous clasts, which undoubtedly fell downhole during drilling. Section 2, 62-135 cm is structureless CLAYSTONE without silt laminae; however this interval has a sharp upper contact with some coarse dispersed material concentrated just beneath it. Dispersed sand grains and few white foraminifers and other biogenic material occur throughout the interval, but are more concentrated toward the top. A few dark green laminae occur below Section 2, 130 cm.

Core Photo

1165C-35R 989.5-999.1 mbsf



DESCRIPTION

CLAYSTONE

This core is greenish gray, thinly bedded CLAYSTONE with numerous silt laminae. The claystone is commonly fractured or parted horizontally along the silt laminae. In Section 2, 110-150 cm, the core shows a vertical calcite-filled crack. The silt laminae are light gray, generally less than 1 mm in thickness and some are discontinuous. Each meter of clay contains on average 100-200 or more silt laminae. Some laminated intervals display ripple cross-stratification and mud-draped ripples. Claystone occasionally shows large scale, very low-angle cross-bedding as laminated sets are slightly dipping against others. Some laminae have been cemented with white calcite cement especially seen in Section 6. In other parts of the core, the laminaes are distinctively green. Section 1, 0-8 cm, contains 6 igneous and metamorphic clasts, which undoubtedly fell downhole during drilling. In Section 3, 34-45 cm, Section 5, 49-83 cm, and Section 6, 45-49 cm, are intervals of structureless, greenish gray CLAYSTONE without silt laminae; however these intervals have sharp upper contacts with some coarse dispersed material concentrated just beneath it. Dispersed sand grains and few white foraminifers and other biogenic material occur throughout the intervals, however, they are concentrated at the top. These structureless intervals are slightly bioturbated.

Samples							Texture			Mineral																																Biogenic									Rock				
Hole	Core	Coretype	Section	Top Interval (cm)	Depth (mbsf)	Lithology (D=Dominant, M=Minor)	Sand (%)	Silt (%)	Clay (%)	Accessory Minerals (%)	Amphibole (%)	Apatite (%)	Biotite (%)	Carbonate (%)	Chert (%)	Clay (%)	Clinoptilolite (%)	Feldspar (%)	Garnet (%)	Glauconite (%)	Heavy Minerals (%)	Mica (%)	Muscovite (%)	Olivine (%)	Opaques (%)	Phillipsite (%)	Plagioclase (%)	Pyrite (%)	Quartz (%)	Siderite (%)	Sphene, Titanite (%)	Tridymite (%)	Unspecified Minerals (%)	Volcanic Glass (%)	Zeolite (%)	Zircon (%)	Diatoms (%)	Dinoflagellate (%)	Fish Remains (%)	Foraminifers (%)	Nannofossils (%)	Radiolarians (%)	Siliceous Sponge Spicules (%)	Silicoflagellates (%)	Sponge Spicules (%)	Coal (%)	Lithic Fragments (%)	Micrite (%)	Rock Fragment (%)	Comments
188-1165																																																			
A	1	H	1	19	0.19	D	0	8	92							25												8							40			20		5			2						silt- and foraminifer-bearing diatom ooze
A	1	H	2	10	0.60	D	0	25	75							15												5							65			8		2			5						foraminifer-bearing diatom ooze
A	1	H	2	30	0.80	D										15												8							45			30		2									foraminifer-bearing diatom ooze
A	1	H	6	40	2.90	D	0	40	60							50		5										40							3								2						silty clay with few diatoms
A	1	H	8	17	3.67	D		40	20																										25					5			10						spicule-bearing diatom clayey silt
A	1	H	7	22	3.22	D		50	45																										2					2			1						clayey silt
A	1	H	7	16	3.16	D		40	55							55								2																										silty clay
B	1	H	2	150	3.00	M	0	10	90							89		1						1				8							1			0		0									diatom-bearing clay
B	1	H	1	80	0.80	M		10	90							62												1							25			10		1			1						foraminifer-bearing diatom ooze
B	1	H	5	35	6.35	D		10	90							84								1				1							10			3					1						diatom-bearing clay
B	2	H	1	75	7.55	M		5	95							88								1				1							5			5												diatom-bearing clay
B	2	H	3	90	10.70	D		10	90							95		2						1											1			1												diatom-bearing clay
B	2	H	6	110	15.40	D		12	88							35		1										4							30					10			10						diatom-bearing siliceous ooze
B	2	H	5	27.5	13.07	M	100																	50				50																						Opaques organic? 30% Amphibole fraction
B	3	H	1	40.5	16.70	D		20	75																			5																						diatom-bearing, silt-bearing clay
B	4	H	1	45	26.25	D		48	50																										2														silty clay
B	4	H	2	45	27.75	D		36	60																										3								1						silty clay
B	4	H	3	45	29.25	D		16	80																										2					1			1						silty clay
B	4	H	5	90	32.70	D		6	90																										2														clay
B	4	H	7	45	35.25	D										75												5							15					2			3						diatom-bearing clay
B	4	H	5	90	32.70	D		6	90																															1			1						clay
B	5	H	1	6	35.36	M		6	90																										2					1			1						clay
B	5	H	1	100	36.30	D		6	90	1																									2					1			3						clay
B	5	H	4	80	40.60	D		6	80																										5					1			8						silica-bearing clay
B	5	H	6	100	43.80	D		11	50																										10					4			24						silt-bearing, silica-bearing clay
B	6	H	2	90	47.20	M		9	50															10											3					2			8						ash-bearing (??), silica-bearing clay
B	6	H	4	120	50.50	D		20	50																										10								20						silt-bearing, silica clay
B	6	H	6	90	53.20	D		15	55																										10								20						silt-bearing, silica clay
B	8	H	2	80	66.10	D										60																			25								5						diatom-bearing clay
B	8	H	3	91	67.71	M										60																																		diatom clay
B	8	H	2	80	66.10	D																						5												2									diatom-bearing clay
B	8	H	3	91	67.71	M																													30					5			5						diatom clay
B	8	H	4	100	69.30	D										90												2							5					5			2						clay
B	9	H	1	50	73.80	D		30	70							35		5										5							30														siliceous ooze
B	9	H	5	65	79.95	D										55		2										8							25								10						siliceous clay

Samples							Texture			Mineral																											Biogenic									Rock				
Hole	Core	Coretype	Section	Top Interval (cm)	Depth (mbsf)	Lithology (D=Dominant, M=Minor)	Sand (%)	Silt (%)	Clay (%)	Accessory Minerals (%)	Amphibole (%)	Apatite (%)	Biotite (%)	Carbonate (%)	Chert (%)	Clay (%)	Clinoptilolite (%)	Feldspar (%)	Garnet (%)	Glauconite (%)	Heavy Minerals (%)	Mica (%)	Muscovite (%)	Olivine (%)	Opaques (%)	Phillipsite (%)	Plagioclase (%)	Pyrite (%)	Quartz (%)	Siderite (%)	Sphene, Titanite (%)	Tridymite (%)	Unspecified Minerals (%)	Volcanic Glass (%)	Zeolite (%)	Zircon (%)	Diatoms (%)	Dinoflagellate (%)	Fish Remains (%)	Foraminifers (%)	Nannofossils (%)	Radiolarians (%)	Siliceous Sponge Spicules (%)	Silicoflagellates (%)	Sponge Spicules (%)	Coal (%)	Lithic Fragments (%)	Micrite (%)	Rock Fragment (%)	Comments
B	9	H	1	50	73.80	D		30	70																																	1			25					siliceous ooze
B	10	H	6	48	90.78	D		20	80							55													5								25								15					diatom-bearing clay
B	11	H	2	100	94.80	D		15	85							90									1				2								5								2					clay
B	11	H	4	50	97.30	D		33	67							40		4							1				15								25					5			10					siliceous clay
B	13	H	2	80	108.60	D		10	90							70									1				1								18								10					diatom-bearing clay
B	13	H	5	80	113.10	D		20	80							50									1				1								30					3			15					diatom clay
B	14	H	5	40	122.05	D		10	75																9												3								3					silt-bearing clay (pelletized); black
B	14	H	6	60	123.66	D		20	40																1												20								19					diatom-bearing, spicule-bearing silty clay; g
B	15	H	1	100	126.30	D		10	90							70									5				5								10								10					diatom- and spicule-bearing clay; black
B	15	H	2	30	127.10	D		10	90							76									1				3								10								10					diatom- and spicule-bearing clay: greenish
B	16	H	4	138	133.42	D		9	67																16												3								5					opaque-bearing clay; black
B	16	H	6	100	134.89	D		25	40																1												15								19					diatom-bearing, spicule-bearing silty clay; g
B	17	H	1	133	139.63	D		10	44																1												20								25					diatom-bearing, spicule-bearing silty clay
B	17	H	2	30	140.10	D		20	39																1												15								25					diatom-bearing, spicule-bearing silty clay
B	17	H	4	80	143.60	D		15	85							60									3				7								15								15					diatom- and spicule-bearing silty clay
B	20	X	3	87	160.07	D		20	80							76									1				3								5								15					spicule-bearing clay
B	20	X	5	80	163.00	D		15	85							65									2				8								10								15					diatom- and spicule-bearing clay (green)
B	20	X	5	50	162.70	D		15	85							80		3	2						1				4								5								5					siliceous microfossil-bearing silty clay
B	20	X	5	123	163.43	M		2	98							40		5				2							5								3				40				5					nannofossil chalk
B	21	X	3	48	169.28	D		25	75							70			1						1				3								15								10					diatom- and spicule-bearing clay (dark)
B	21	X	4	121	171.51	D		25	75							75			2						1				1								15								6					diatom- and spicule-bearing clay (green)
B	22	X	2	80	177.80	D		33	67							40		2							15				3		1						20					4		1	15					siliceous clay
B	23	X	2	142	188.02	D		25	75							65			2						1				5								15					2			10					diatom- and spicule-bearing clay (dark lam.)
B	23	X	5	60	191.70	D		20	80							74		1	1						2				5								10								7					diatom- and spicule-bearing clay (dark)
B	24	X	2	41	196.61	D		5	95																												10				80				10					nannofossil chalk
B	24	X	CC	35	199.10	D		20	80							63									1				1								20								15					diatom / spicule-bearing clay
B	27	X	2	78	225.78	D		20	80							71									1				3								15								10					diatom / spicule clay
B	27	X	3	36	226.86	D		20	80							70									1				4								15								10					diatom / spicule clay

Samples							Texture			Mineral																											Biogenic									Rock				
Hole	Core	Coretype	Section	Top Interval (cm)	Depth (mbsf)	Lithology (D=Dominant, M=Minor)	Sand (%)	Silt (%)	Clay (%)	Accessory Minerals (%)	Amphibole (%)	Apatite (%)	Biotite (%)	Carbonate (%)	Chert (%)	Clay (%)	Clinoptilolite (%)	Feldspar (%)	Garnet (%)	Glauconite (%)	Heavy Minerals (%)	Mica (%)	Muscovite (%)	Olivine (%)	Opaques (%)	Phillipsite (%)	Plagioclase (%)	Pyrite (%)	Quartz (%)	Siderite (%)	Sphene, Titanite (%)	Tridymite (%)	Unspecified Minerals (%)	Volcanic Glass (%)	Zeolite (%)	Zircon (%)	Diatoms (%)	Dinoflagellate (%)	Fish Remains (%)	Foraminifers (%)	Nannofossils (%)	Radiolarians (%)	Siliceous Sponge Spicules (%)	Silicoflagellates (%)	Sponge Spicules (%)	Coal (%)	Lithic Fragments (%)	Micrite (%)	Rock Fragment (%)	Comments
B	28	X	3	70	236.80	D		15	85		1					65		2							2				5								15					5		1	4					diatom- and spicule-bearing clay
B	28	X	7	42	242.52	D		15	85							77		1							5				5								10								2					diatom-bearing clay
B	32	X	2	7	263.57	D		10	79																5												3								3					silt-bearing clay; dark
B	32	X	2	80	264.30	D		8	55																2												10								25					diatom- and spicule-bearing clay
B	33	X	1	120	272.80	D																																										100		micritic chalk
B	34	X	1	120	282.40	D		30	48																2												10								10					diatom and spicule-bearing silty clay
B	34	X	3	65	284.85	D		10	60																												20								10					diatom and spicule-bearing clay
B	35	X	1	77.5	291.27	D		10	50																												20								20					diatom and spicule-bearing clay
B	35	X	3	70	294.20	D		10	50																												20								20					diatom and spicule-bearing clay
B	36	X	1	135	301.15	D		10	50																												23					2			15					diatom and spicule-bearing clay; green
B	36	X	6	56	307.86	D		5	84																1												9								1					clay; dark green
B	37	X	1	125	310.35	D		12	88		2					75		2											4								10					1		1	5					diatom bearing clay; from lamination
B	37	X	5	85	315.95	M		20	80		2					13																																85		micrite chalk
B	37	X	4	138	314.98	M		15	85		1					74													10								10								5					diatom-bearing silty clay: dark green
B	38	X	2	84	321.04	D		10	90							81									1				3								10								5					diatom bearing clay
B	38	X	5	46	325.16	D		10	90		1					84									1				7								5								2					diatom bearing clay
B	39	X	2	69	330.59	D		15	85		1					73												1	10								10								5					diatom-bearing clay
B	39	X	2	114	331.04	D	1	20	79		1					63									1				20								10								5					diatom-bearing clay
B	39	X	2	69	330.59	D		15	85		1					73												1	10								10								5					diatom-bearing claystone
B	39	X	2	114	331.04	D	1	20	79		1					63									1				20								10								5					diatom-bearing claystone
B	40	X	3	40	340.95	D		15	85							75									1				7		1						10					1			5					diatom-bearing claystone
B	40	X	5	87	344.42	D		10	90		1					85									1				5								5								3					diatom-bearing claystone
B	41	X	1	128	348.88	D	*	20	80		1					70									1			2	20								3								3					diatom-bearing claystone
B	42	X	4	83	362.56	D		20	80		1					72									1				20								3								3					claystone
B	43	X	2	100	369.40	D		20	80		1					75									1				10								10								3					claystone
B	44	X	2	116	379.16	D		9	71																												15								5					diatom-bearing claystone
B	44	X	4	86	381.86	D		9	61																3												20								7					diatom-bearing claystone
B	45	X	1	108	387.18	D		6	84																												5								5					silica-bearing claystone
B	45	X	4	119	391.79	D		9	69																2												10								10					silica-bearing claystone

Samples							Texture			Mineral																											Biogenic									Rock				
Hole	Core	Coretype	Section	Top Interval (cm)	Depth (mbsf)	Lithology (D=Dominant, M=Minor)	Sand (%)	Silt (%)	Clay (%)	Accessory Minerals (%)	Amphibole (%)	Apatite (%)	Biotite (%)	Carbonate (%)	Chert (%)	Clay (%)	Clinoptilolite (%)	Feldspar (%)	Garnet (%)	Glauconite (%)	Heavy Minerals (%)	Mica (%)	Muscovite (%)	Olivine (%)	Opaques (%)	Phillipsite (%)	Plagioclase (%)	Pyrite (%)	Quartz (%)	Siderite (%)	Sphene, Titanite (%)	Tridymite (%)	Unspecified Minerals (%)	Volcanic Glass (%)	Zeolite (%)	Zircon (%)	Diatoms (%)	Dinoflagellate (%)	Fish Remains (%)	Foraminifers (%)	Nannofossils (%)	Radiolarians (%)	Siliceous Sponge Spicules (%)	Silicoflagellates (%)	Sponge Spicules (%)	Coal (%)	Lithic Fragments (%)	Micrite (%)	Rock Fragment (%)	Comments
B	46	X	3	107	399.77	D		5	83																2												5								5					silica-bearing claystone; intermediate color
B	48	X	3	30	418.20	D		5	95							77																																		diatom-bearing claystone (gray)
B	48	X	3	44	418.34	D	5	10	85		1					73		3							1				10								10								2					diatom-bearing silty claystone (green)
B	48	X	3	30	418.20	D		5	95																				2								15					1			5					diatom-bearing claystone (gray)
B	49	X	2	134	427.44	D	10	5	80											10					1												3								1					glauconite-bearing claystone; very green layer
B	49	X	6	138	433.48	D		5	77																10												5								3					opaque-bearing claystone; black layer
B	49	X	6	138.5	433.48	D		5	91																												2								2					claystone; light layer
B	50	X	1	108.5	435.29	D		9	79																3												7								2					claystone; dark green layer w/fish teeth
B	50	X	6	30	442.00	D		9	88																												2								1					claystone; dark
B	51	X	4	91	449.21	D		10	90		1					68									1				15								10								5					diatom-bearing claystone
B	51	X	4	94	449.24	D		15	85							61													20								15					1			3					diatom-bearing claystone
B	52	X	2	46	455.36	D		15	85		1					61		1							1				20								10					1			5					diatom-bearing claystone
B	52	X	3	31	456.71	D		10	90		1					79									2				10								5								3					diatom-bearing claystone
B	53	X	3	140	467.40	D		15	85		1					76									1				10								10								2					diatom-bearing claystone
B	53	X	4	20	467.70	D		10	90							77									1				10								10								2					diatom-bearing claystone
B	54	X	4	73	477.83	D		10	90							75									2				10								5					3			5					diatom-bearing claystone
B	55	X	2	118	484.88	D		15	85							68													15								15								2					diatom-bearing claystone; one foraminifer
B	56	X	1	109	492.89	D	*	5	95																				5								3				87	2			3					nannofossil (?) chalk
B	56	X	2	89	494.19	D		5	95		1					84									2		1		5								5								2					diatom-bearing claystone
B	57	X	1	53	501.93	D		5	95		1					84													5								3					2			5					claystone
B	58	X	1	95.5	511.95	D		10	90		1					70																													5					nannofossil-bearing claystone
B	58	X	2	34	512.84	D		5																													2													nannofossil chalk; dark
B	58	X	1	95.5	511.95	D		10	90																																20									nannofossil-bearing claystone
B	58	X	2	34	512.84	D		5																	5																87				1					nannofossil chalk; dark

Samples							**Texture**			**Mineral**																											**Biogenic**									**Rock**				
Hole	Core	Coretype	Section	Top Interval (cm)	Depth (mbsf)	Lithology (D=Dominant, M=Minor)	Sand (%)	Silt (%)	Clay (%)	Accessory Minerals (%)	Amphibole (%)	Apatite (%)	Biotite (%)	Carbonate (%)	Chert (%)	Clay (%)	Clinoptilolite (%)	Feldspar (%)	Garnet (%)	Glauconite (%)	Heavy Minerals (%)	Mica (%)	Muscovite (%)	Olivine (%)	Opaques (%)	Phillipsite (%)	Plagioclase (%)	Pyrite (%)	Quartz (%)	Siderite (%)	Sphene, Titanite (%)	Tridymite (%)	Unspecified Minerals (%)	Volcanic Glass (%)	Zeolite (%)	Zircon (%)	Diatoms (%)	Dinoflagellate (%)	Fish Remains (%)	Foraminifers (%)	Nannofossils (%)	Radiolarians (%)	Siliceous Sponge Spicules (%)	Silicoflagellates (%)	Sponge Spicules (%)	Coal (%)	Lithic Fragments (%)	Micrite (%)	Rock Fragment (%)	Comments
B	58	X	1	95.5	511.95	D		10	90																												2					2								nannofossil-bearing claystone
B	64	X	1	70	569.50	D		8	10																1									1							79				1					clay-bearing nannofossil chalk
B	66	X	2	38	589.88	D		5	91																												2								2					claystone
B	67	X	2	10	599.30	D		5	87																												5								3					claystone
B	74	X	1	26	655.66	D		15	85		1					79									3				15		1										1									claystone
C	1	R	1	22	54.22	D		14	40																1												10								15					diatom-bearing, spicule-bearing silty clay
C	1	R	2	41	55.91	D		14	40		1																										10								15					diatom-bearing, spicule-bearing silty clay
C	1	R	7	40	63.40	D		9	73																10									1			3	1							3					opaque-bearing clay (dark)
C	1	R	7	46	63.46	D		10	62																2												10					1			15					diatom and spicule-bearing silty clay (green)
C	2	R	2	51	674.99	D		20	80		2					74									1				20								2								1					claystone (dark)
C	2	R	3	53	676.39	M		65	35		5					33									2				60																					clayey silt (silt lens)
C	3	R	3	100	685.99	D		15	85		3					81									1				15																					claystone (dark)
C	3	R	4	87	687.11	M		10	90		1					84													15																					claystone (green)
C	3	R	3	51	685.50	M		90	10									1			1																										2			clayey siltstone (silt layer)
C	6	R	3	78	714.64	M		10	90					98															2																					chalk (chalk layer)
C	6	R	4	4	715.14	D		15	85		7					82													10																					claystone (dark)
C	7	R	2	110	723.18	D		10	90		7					76									1		1		15																					claystone (dark)
C	8	R	1	41	730.61	M		2	98																																							98		micritic chalk
C	8	R	4	71	735.01	D		5	95																																							5		claystone
C	14	R	2	64	790.14	D		10	90		7					83													10																					claystone
C	15	R	4	57	802.67	D		10	90		3					86													10																					claystone
C	16	R	6	36	815.06	D		10	90		1					87									1		1		10																					claystone
C	23	R	6	36	882.16	D		10	90																																									claystone (light layer w/plagioclase: oligoclase?)
C	25	R	5	68	900.28	D	1	8	91																1																									claystone (w/opal CT?)
C	26	R	3	40	906.60	D		5	90																																							5		claystone
C	27	R	2	93	915.23	M			5																																							95		micrite (calcite vein)
C	28	R	2	48	924.48	M		80	20																																									siltstone (green lamina)
C	28	R	6	45	930.47	M		80	20																																									siltstone (green layer)
C	30	R	5	35	947.65	M	5	80	15							15													85																					siltstone
C	34	R	CC	14	983.14	D																																										100		micrite
C	35	R	5	77	996.27	M		60	40																																									zeolitic(?) siltstone (green lamina)
C	35	R	6	37	997.37	M		5	20																																							75		micrite

188-1165B-3H-3-1-4 cm **Unit:** **OBSERVER:** **19.31 mbsf**

ROCK NAME: **Granodiorite**

WHERE SAMPLED:

GRAIN SIZE: **0.75 mm**

TEXTURE: **hypidiomorphic granular**

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	APPROX. COMP.	MORPHOLOGY	COMMENTS
Hornblende	30		0.1	1	0.5		anhedral	
Biotite	10		0.3	1	0.5		euhedral	
Quartz	19				0.7		anhedral	
Feldspars	20				0.7		anhedral	
Accessories			1					

GROUNDMASS

SECONDARY MINERALOGY	PERCENT	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	REPLACING / FILLING	COMMENTS

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	FILLING / MORPHOLOGY	COMMENTS

COMMENTS :

188-1165B-8H-3-34-38 cm **Unit:** **OBSERVER:** **67.4 mbsf**

ROCK NAME: **Granitic gneiss**
WHERE SAMPLED:
GRAIN SIZE: **~1mm, medium grained**
TEXTURE: **Hypidiomorphic-gneissic**

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	APPROX. COMP.	MORPHOLOGY	COMMENTS
Quartz	55	20	0.2	2	1		anhedral	
K-spar	1	5			0.7			
Myrmekite	5				0.8			
Plagioclase	25							
Muscovite	10							

GROUNDMASS

SECONDARY MINERALOGY	PERCENT	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	REPLACING / FILLING	COMMENTS

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	FILLING / MORPHOLOGY	COMMENTS

COMMENTS :

188-1165B-19X-1-1-2 cm **Unit:** **OBSERVER:** **148.31 mbsf**

ROCK NAME: **Sandstone-Quartzite (Orthoquartzite)**

WHERE SAMPLED:

GRAIN SIZE: **V fine sand.**

TEXTURE: **Well sorted**

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	APPROX. COMP.	MORPHOLOGY	COMMENTS
Quartz	95	95		0.25	0.1		equant, indented edges	Fine quartz sandstone to quartzite. Low-grade burial metamorphism rather than high-grade quartzite as seen in Prince Charles Mts.
Plagioclase	3	3		0.25	0.1		equant	
K-feldspar	0.5	2					altered to illite	

GROUNDMASS

SECONDARY MINERALOGY	PERCENT	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	REPLACING / FILLING	COMMENTS
Illite	1.5				K-spar and in pore lining	
Zircons	tr.					

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	FILLING / MORPHOLOGY	COMMENTS

COMMENTS :

188-1165B-31x-CC						**Unit:**	**OBSERVER:**	**253.80 mbsf**
ROCK NAME:	**Dolerite**							
WHERE SAMPLED:								
GRAIN SIZE:	**0.3 mm, cryptocristalline**							
TEXTURE:	**ophytic**							

PRIMARY	**PERCENT**	**PERCENT**	**SIZE (mm)**			**APPROX.**		
MINERALOGY	**PRESENT**	**ORIGINAL**	**min.**	**max.**	**av.**	**COMP.**	**MORPHOLOGY**	**COMMENTS**
Opaques								
	30	30	0.01	0.15	0.03	?		Various Fe minerals both as primary and replacement minerals present. Fe oxides impart a vivid and distinct color to rock. Good indicator of source area
Plag		50					euhedral	
GROUNDMASS								

SECONDARY			**SIZE (mm)**				
MINERALOGY	**PERCENT**		**min.**	**max.**	**av.**	**REPLACING / FILLING**	**COMMENTS**
Mica+Fe oxides	50		0.01	0.15	0.07	plag	
Fe oxides?	20		0.01	0.15	0.07	placement unclear	

VESICLES/			**SIZE (mm)**				
CAVITIES	**PERCENT**	**LOCATION**	**min.**	**max.**	**av.**	**FILLING / MORPHOLOGY**	**COMMENTS**

COMMENTS :

188-1156B-37X-5-82-85 cm **Unit:** **OBSERVER:** **315.92 mbsf**

ROCK NAME: **Micritic chalk**
WHERE SAMPLED:
GRAIN SIZE:
TEXTURE:

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	APPROX. COMP.	MORPHOLOGY	COMMENTS
Quartz	9	9	0.004	0.04	0.02		subrounded	
Biogenic opal	1						fragmented	
Micrite	90							

GROUNDMASS

SECONDARY MINERALOGY	PERCENT	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	REPLACING / FILLING	COMMENTS

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	FILLING / MORPHOLOGY	COMMENTS

COMMENTS :

188-1165B-47X-CC-2-5 cm **Unit:** **OBSERVER:** **405.32 mbsf**

ROCK NAME: **Tonalite (mafic variety)**

WHERE SAMPLED:

GRAIN SIZE: **phaneritic, medium-grained (1-5 mm)**

TEXTURE: **hypidiomorphic granular**

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	APPROX. COMP.	MORPHOLOGY	COMMENTS
Titanite	12		0.15	5		2.5	subhedral	This very dark-colored rock would probably receive the field description ""gabbro"", but the relatively high quartz content warrants the name Tonalite
Biotite	15		0.15	1		0.9	euhedral-subhedral	
Opaques	15		0.003	1.2		1	anhedral	
Quartz	27		0.3	1.5		1	anhedral	
Plagioclase	23						anhedral	also myrmekite
Accessories	1							
K-spar?		5						

SECONDARY MINERALOGY	PERCENT	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	REPLACING / FILLING	COMMENTS
Sericite	7				Feldspar?	also veinlets in quartz

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	FILLING / MORPHOLOGY	COMMENTS

COMMENTS :

188-1165C-5R-3-23-25cm **Unit:** **OBSERVER:** **704.46mbsf**

ROCK NAME: **Clayey-silt lense**

WHERE SAMPLED:

GRAIN SIZE:

TEXTURE:

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	APPROX. COMP.	MORPHOLOGY	COMMENTS
Clayey silt to silty clay								laminated clayey silt lense intercalated between silty-clay laminae(w/prominent Fe-oxide staining)

SECONDARY MINERALOGY	PERCENT	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	REPLACING / FILLING	COMMENTS

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	FILLING / MORPHOLOGY	COMMENTS

COMMENTS :

188-1165C-5R-3-85-87cm						**Unit:**	**OBSERVER:**	**705.08 mbsf**
ROCK NAME:	**Sand-bearing(15%) clayey(25%)silt(60%)**							
WHERE SAMPLED:								
GRAIN SIZE:	**sand to clay**							
TEXTURE:								

PRIMARY MINERALOGY	**PERCENT PRESENT**	**PERCENT ORIGINAL**	**SIZE (mm) min.**	**max.**	**av.**	**APPROX. COMP.**	**MORPHOLOGY**	**COMMENTS**
Sd&silt sized clasts								
Quartz, feldspar, heavies, bioclasts, silt clasts							subrounded-subangular	
GROUNDMASS								

SECONDARY MINERALOGY	**PERCENT**	**SIZE (mm) min.**	**max.**	**av.**	**REPLACING / FILLING**	**COMMENTS**

VESICLES/ CAVITIES	**PERCENT**	**LOCATION**	**SIZE (mm) min.**	**max.**	**av.**	**FILLING / MORPHOLOGY**	**COMMENTS**

COMMENTS :

188-1165C-12R-4-24-25cm (large t.s.) **Unit:** **OBSERVER:**

ROCK NAME: **Clay-bearing sandy-silt to silty-clay laminae**

WHERE SAMPLED:

GRAIN SIZE: **sand to clay**

TEXTURE:

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	APPROX. COMP.	MORPHOLOGY	COMMENTS
Sandy silt							rounded to subangular	quartz, feldsp., heavies, and bioclasts
Silty clay							slightly laminated	silty coccolith clay

SECONDARY MINERALOGY	PERCENT	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	REPLACING / FILLING	COMMENTS

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	FILLING / MORPHOLOGY	COMMENTS

COMMENTS :

188-1165C-15-2-36-37 cm **Unit:** **OBSERVER:** **799.46 mbsf**

ROCK NAME: **Sand-bearing (20%) silty (25%) claystone (55%)**

WHERE SAMPLED:

GRAIN SIZE: **medium (to coarse) sand to clay**

TEXTURE:

PRIMARY MINERALOGY	PERCENT PRESENT	PERCENT ORIGINAL	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	APPROX. COMP.	MORPHOLOGY	COMMENTS
Sand-sized clasts:							rounded to subangular	clasts are fresh, unaltered
Quartz	**55**							
Feldspars	**35**							
Heavies	**5**							
Lithic frags	**5**							
Matrix								
siilt and clay	**80**							

SECONDARY MINERALOGY	PERCENT	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	REPLACING / FILLING	COMMENTS

VESICLES/ CAVITIES	PERCENT	LOCATION	SIZE (mm) min.	SIZE (mm) max.	SIZE (mm) av.	FILLING / MORPHOLOGY	COMMENTS

COMMENTS :