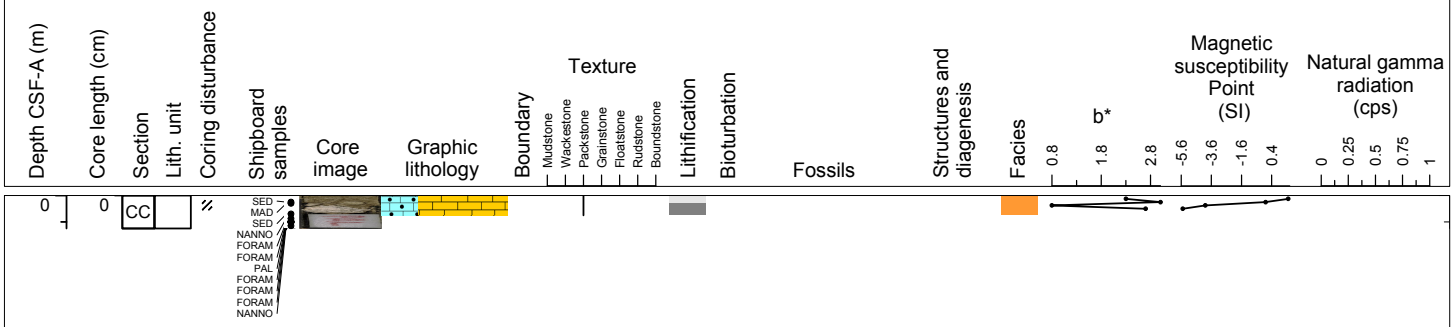
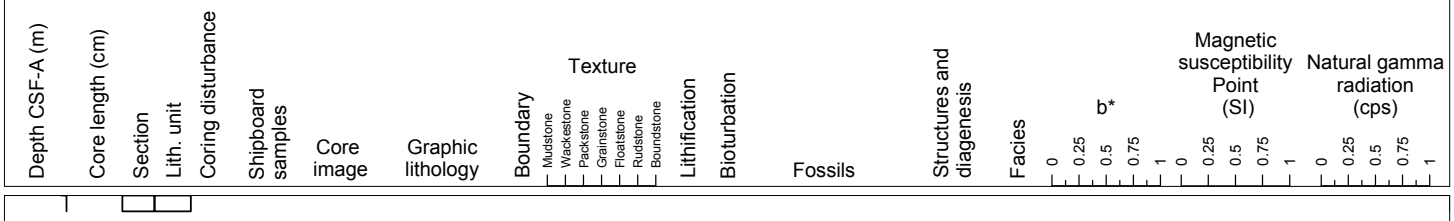
Hole 356-U1462A Core 1X, Interval 0.0-0.25 m (CSF-A)

Unlithified, light brown, peloid-rich, PACKSTONE with sand-size grains, glauconite and bivalves (0-6 cm depth) transitions to partly-lithified, off-white, peloid-rich, PACKSTONE with sand-size grains and glauconite (6-15 cm).



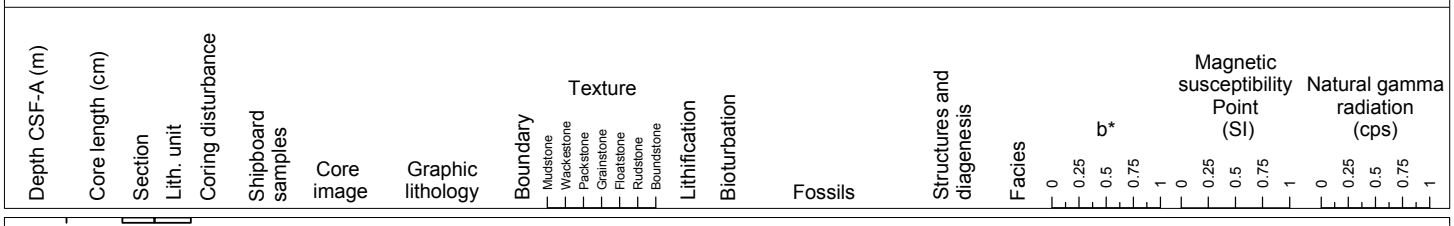
NO RECOVERY

Hole 356-U1462A Core 2X, Interval 9.7-9.7 m (CSF-A)



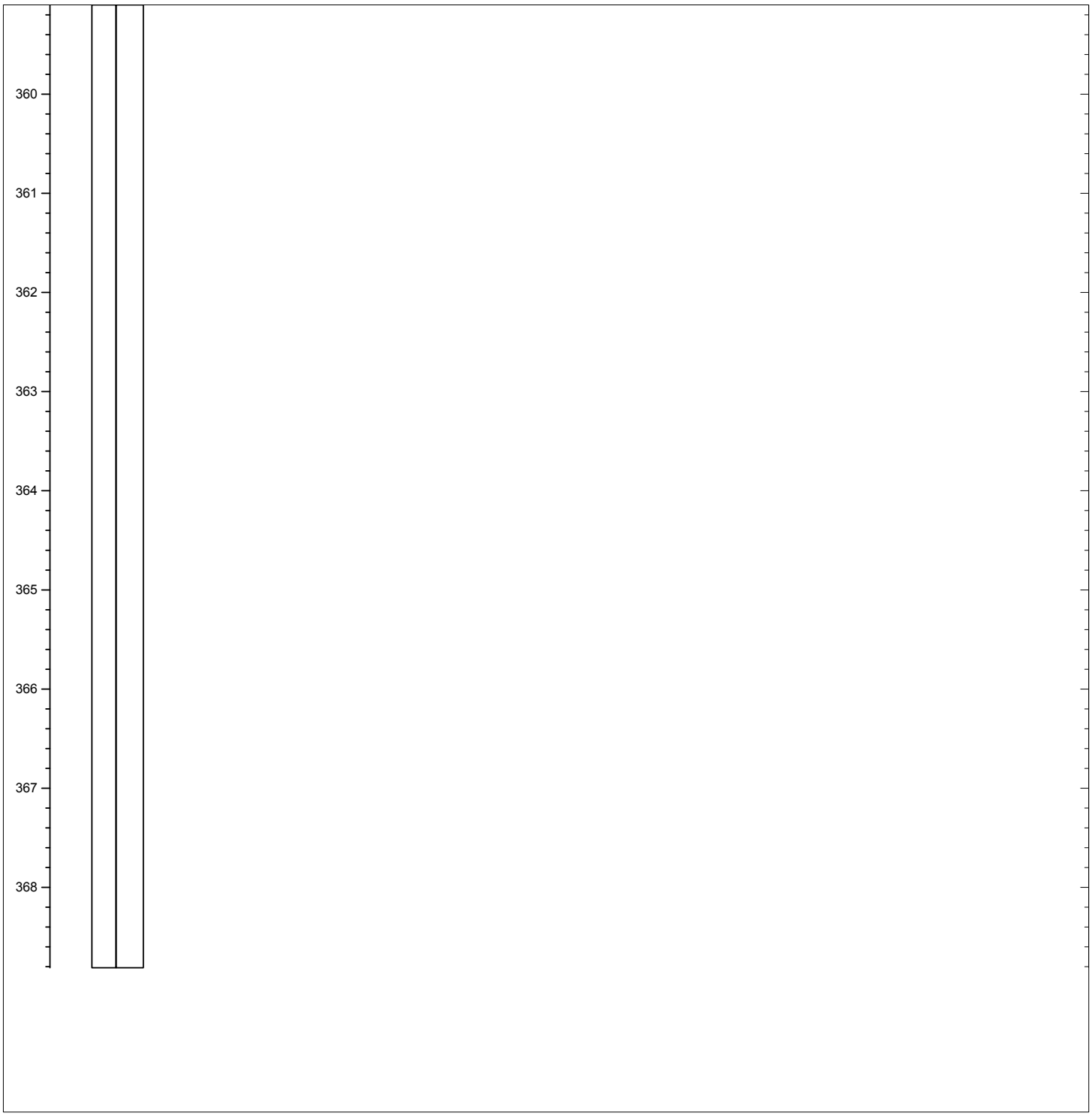
NO RECOVERY

Hole 356-U1462A Core 3X, Interval 19.4-19.4 m (CSF-A)



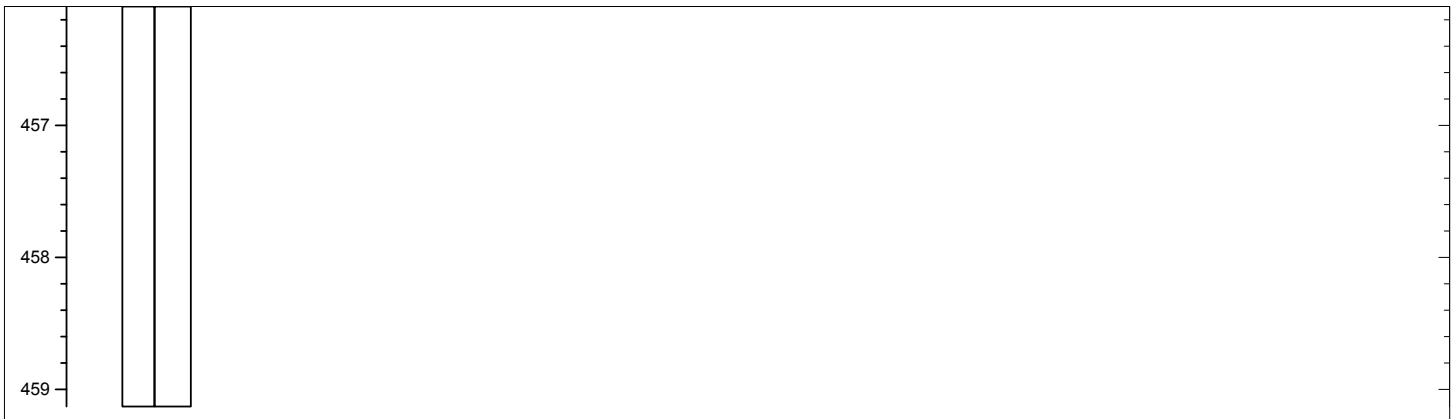
NO RECOVERY

Hole 356-U1462A Core 4X, Interval 29.1-29.1 m (CSF-A)



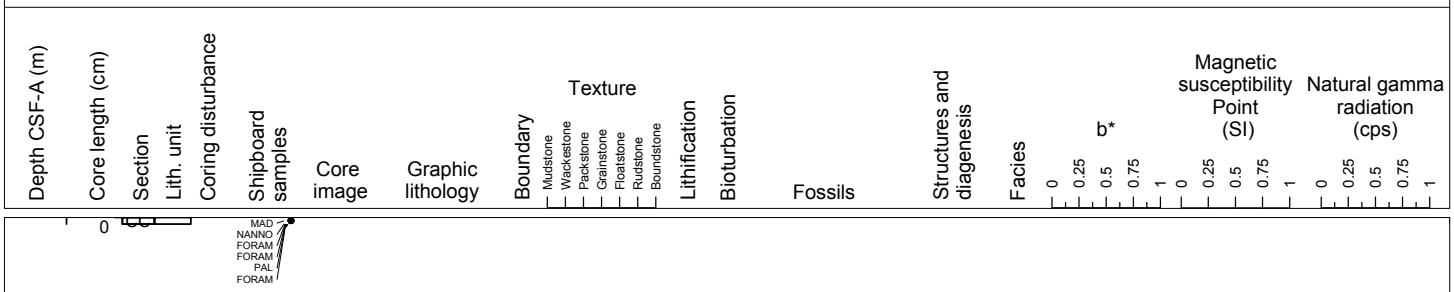
NO RECOVERY

Hole 356-U1462A Core 5X, Interval 38.8-38.8 m (CSF-A)



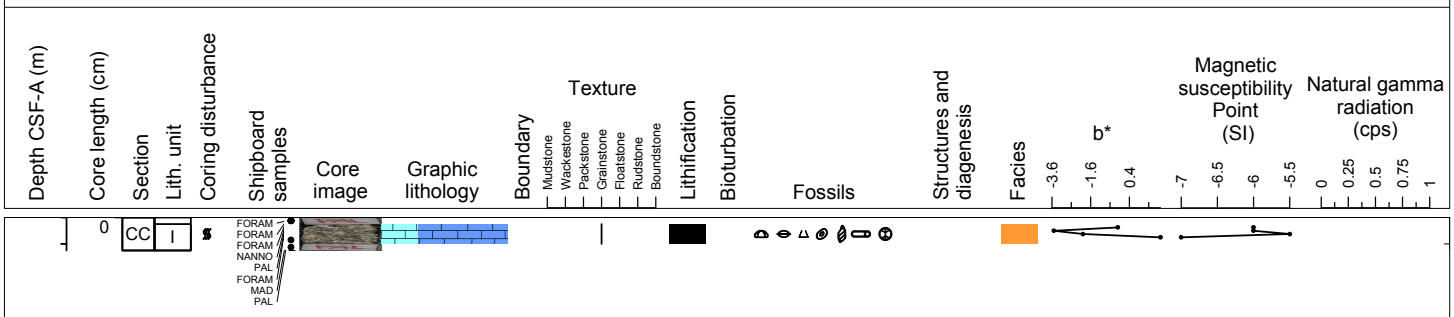
ALL TO PAL

Hole 356-U1462A Core 6X, Interval 48.5-48.55 m (CSF-A)



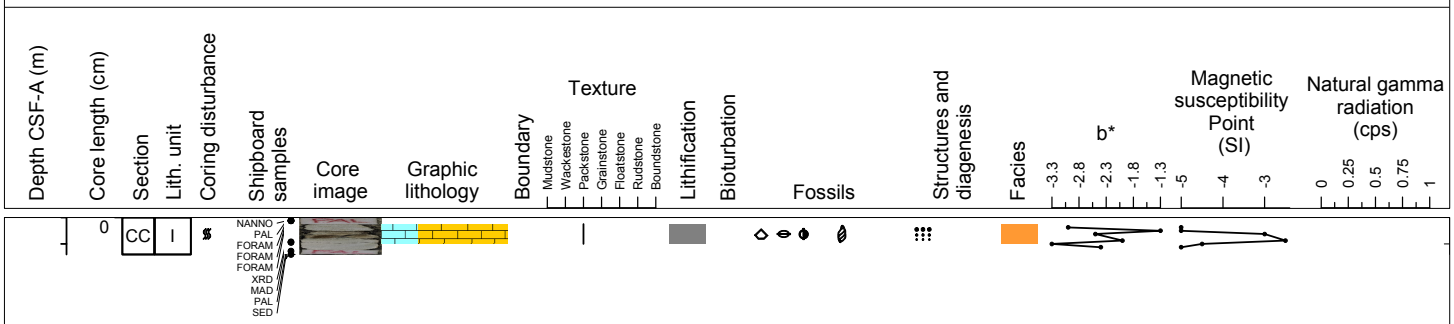
Hole 356-U1462A Core 7F, Interval 58.2-58.45 m (CSF-A)

Lithified, creamy gray to greenish gray to cream, skeletal GRAINSTONE with macrofossils (bivalves, a barnacle, a solitary coral, echinoderms, gastropods, rhodoliths, scphopods) and lithic fragments (carbonate cement, dark gray and cream color cemented pebbles, manganese and/or phosphate nodule).



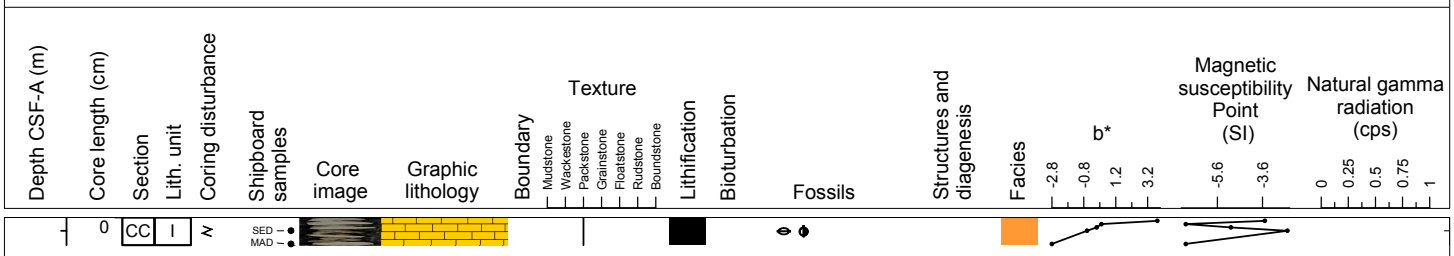
Hole 356-U1462A Core 8X, Interval 58.4-58.68 m (CSF-A)

Partially-lithified, light gray, skeletal, PACKSTONE with coarse sand-size grains and macrofossil fragments (bivalve, gastropod, and large and small benthic foraminifers), lithic grains (carbonate cement, green and gray grains), and glauconite.



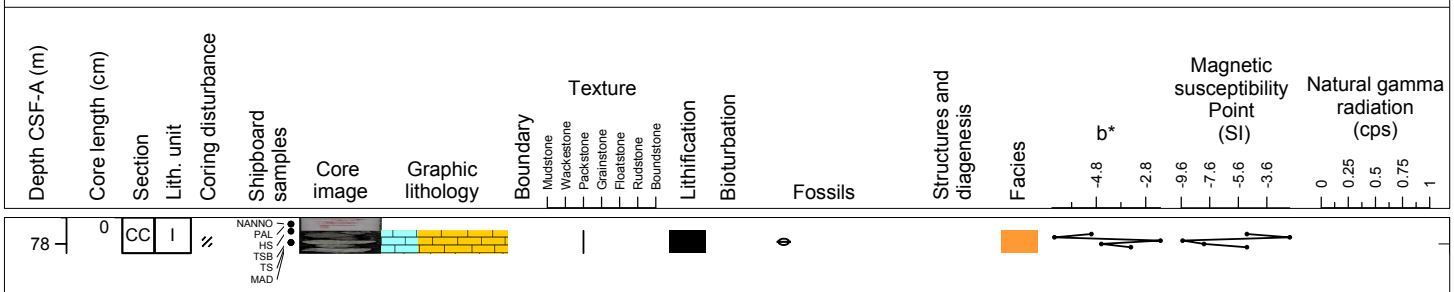
Hole 356-U1462A Core 9X, Interval 68.1-68.31 m (CSF-A)

Lithified, light gray, PACKSTONE with coarse sand-size grains, macrofossils (bivalves, large and small benthic foraminifers), and glauconite.



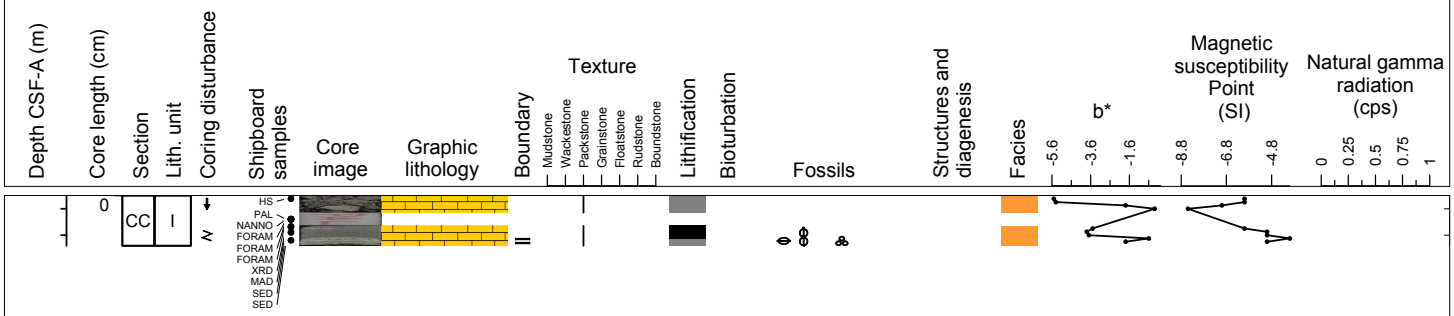
Hole 356-U1462A Core 10X, Interval 77.8-78.07 m (CSF-A)

Lithified, dark greenish-gray, skeletal PACKSTONE with gravel and coarse sand-size grains, bivalve fragments, and dark gray lithic grains and cement.



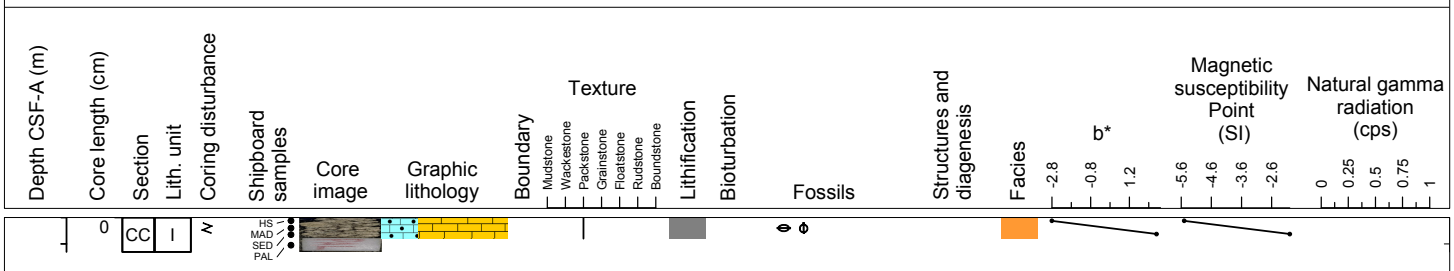
Hole 356-U1462A Core 11X, Interval 87.5-87.88 m (CSF-A)

Partially-lithified, dark greenish-gray, PACKSTONE (fall-in) with sand-size grains in the upper 13 cm is underlain by lithified, dark greenish-gray, PACKSTONE with coarse sand-size grains, large benthic foraminifers, and carbonate lithic fragments and non-carbonate lithic fragments (dark greenish gray and dark gray) between 23-33 cm. From 33-36 cm there is partially-lithified, creamy-gray, PACKSTONE with coarse sand-size grains, large and small benthic foraminifers and bivalves, lithic fragments (white carbonate grains, dark gray, dark greenish-gray). There are more lithic fragments than macrofossils. This bed coarsens upwards between 36 and 38 cm, where there is partially-lithified, light greenish-gray PACKSTONE with coarse sand-size grains, large and small benthic foraminifers and bivalves, and lithic fragments (white carbonate grains, dark gray,dark greenish-gray). As above, there are lithic grains than macrofossils.



Hole 356-U1462A Core 12X, Interval 97.2-97.46 m (CSF-A)

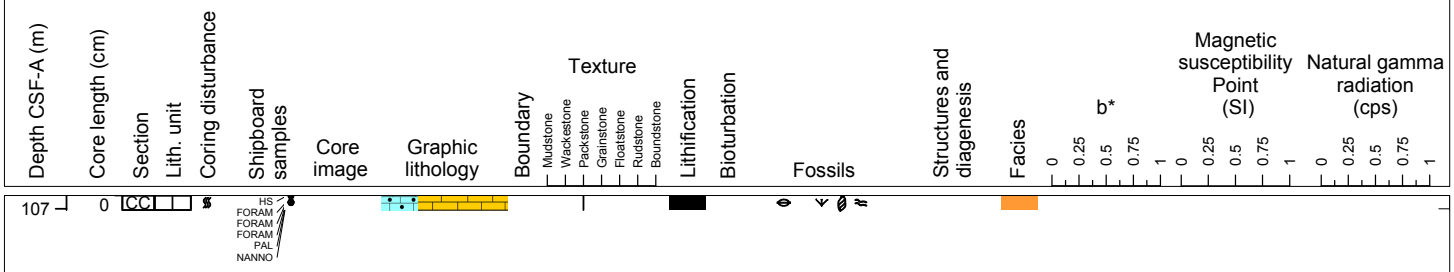
Partially-lithified, cream, non-skeletal, grain-rich, PACKSTONE with coarse sand- to gravel-size grains, bivalve fragments, peloids, and lithic fragments (carbonate cement, green and gray granules). Possibly a manganese or phosphate crust?



ALL TO PAL

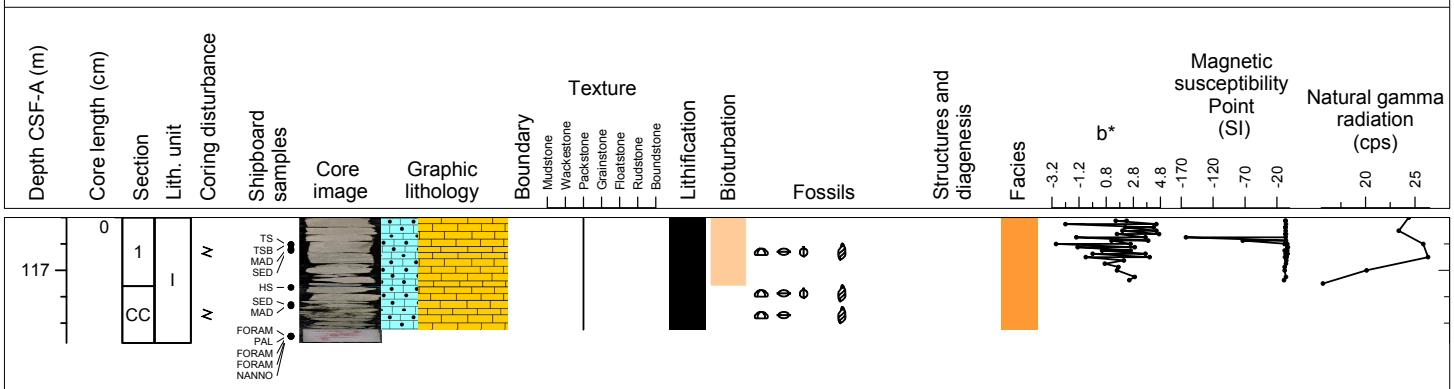
Hole 356-U1462A Core 13X, Interval 106.9-107.01 m (CSF-A)

Lithified, cream, non-skeletal, grain-rich, PACKSTONE with gravel-size macrofossils and lithic fragments (more macrofossils than lithic grains; could be a coral reef). In the core catcher there are fragments of a lithified, cream, peloid-rich, PACKSTONE.



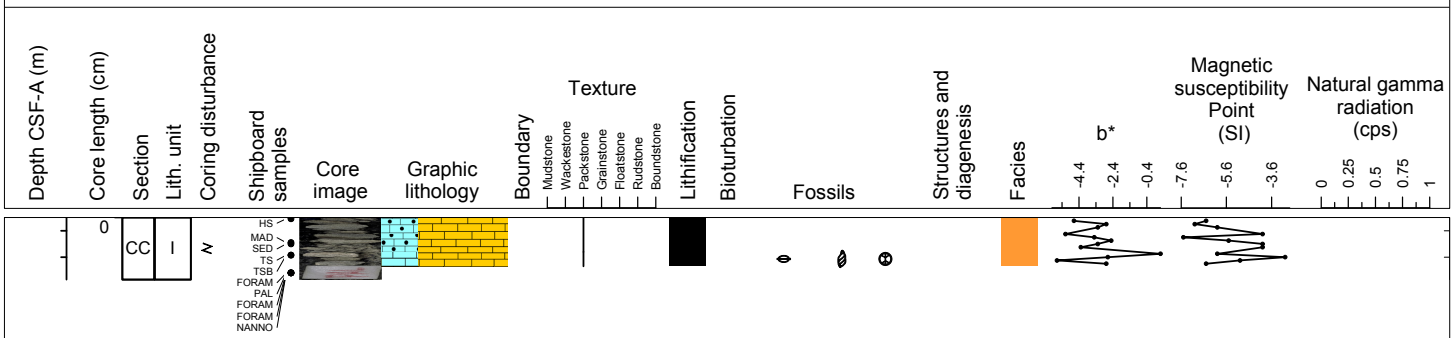
Hole 356-U1462A Core 14X, Interval 116.6-117.55 m (CSF-A)

Lithified, creamy gray, non-skeletal, grain-rich, PACKSTONE with many macrofossils (bivalves, gastropods, echinoderms, and large benthic foraminifers).



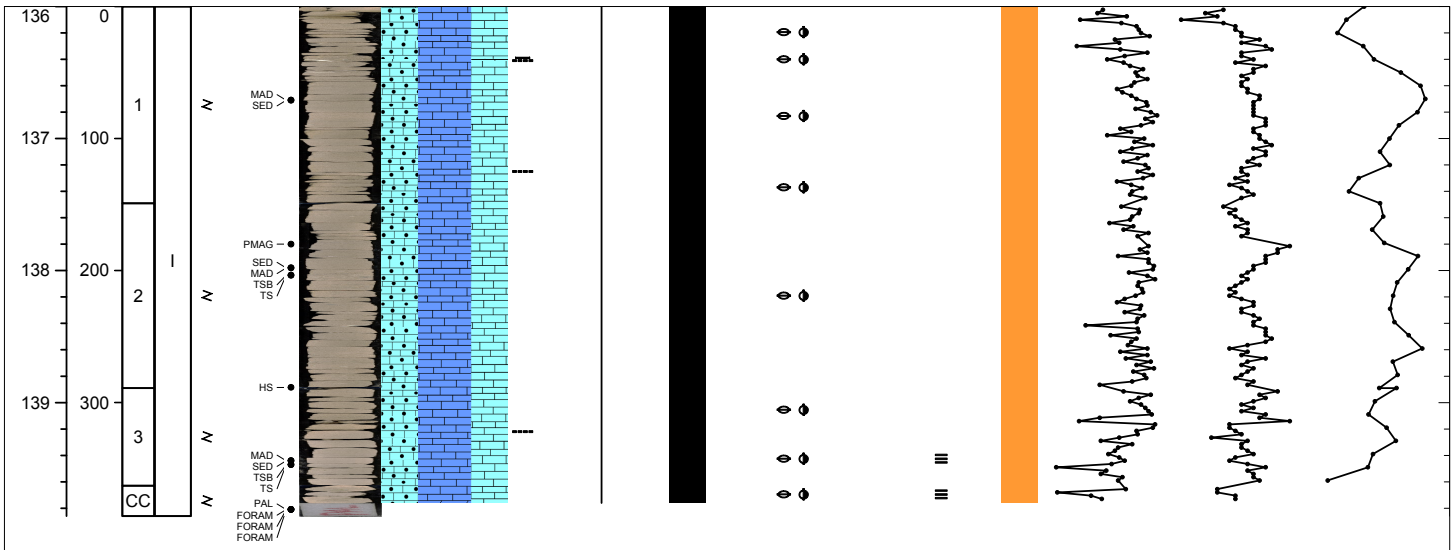
Hole 356-U1462A Core 15X, Interval 126.3-126.77 m (CSF-A)

Lithified, light bluish-gray, non-skeletal, grain-rich, very coarse, sand- to gravel-sized, PACKSTONE.



Hole 356-U1462A Core 16X, Interval 136.0-139.86 m (CSF-A)

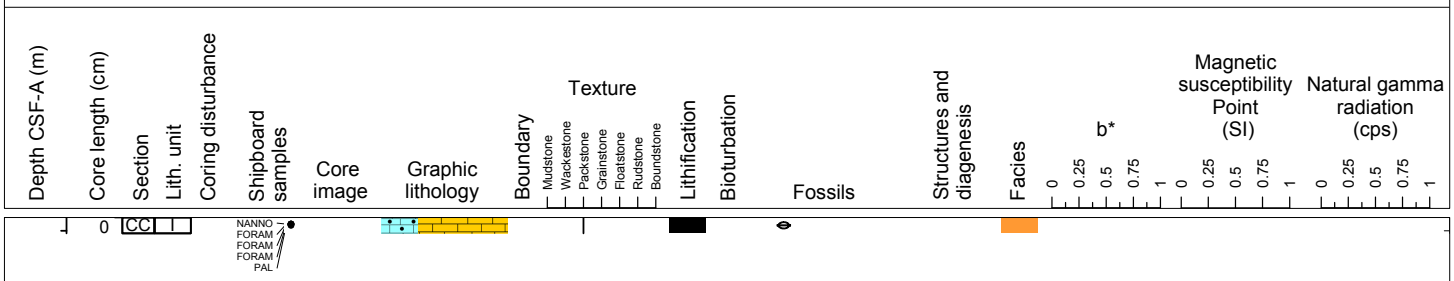
Lithified, cream, non-skeletal grain-rich, GRAINSTONE with medium to fine sand-size grains that are mostly ooids/peloids. There are intervals of lithified, white creamy, non-skeletal, bivalve- and foraminifer-rich, GRAINSTONE with coarse sand-size grains (ooids/peloids). There is high porosity and calcite cement.



ALL TO PAL

Hole 356-U1462A Core 17X, Interval 145.7-145.82 m (CSF-A)

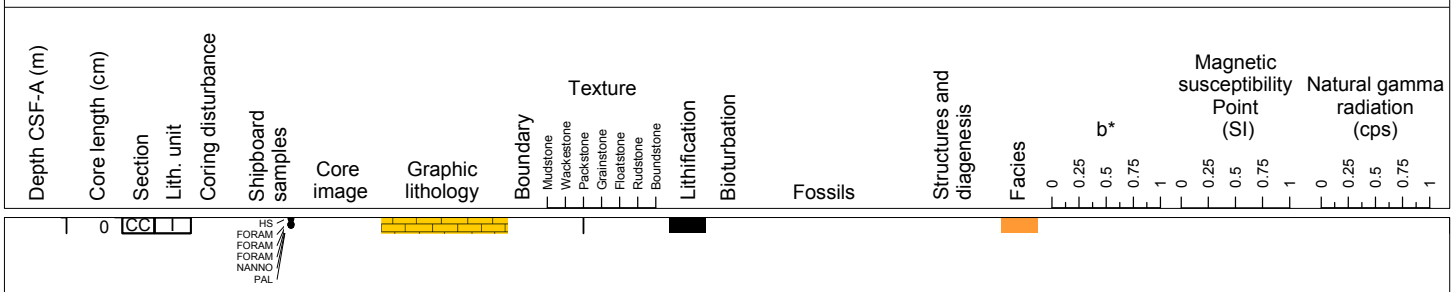
Lithified, cream, non-skeletal grain-rich, PACKSTONE with peloids, bivalve fragments, and biomoldic porosity.



ALL TO PAL

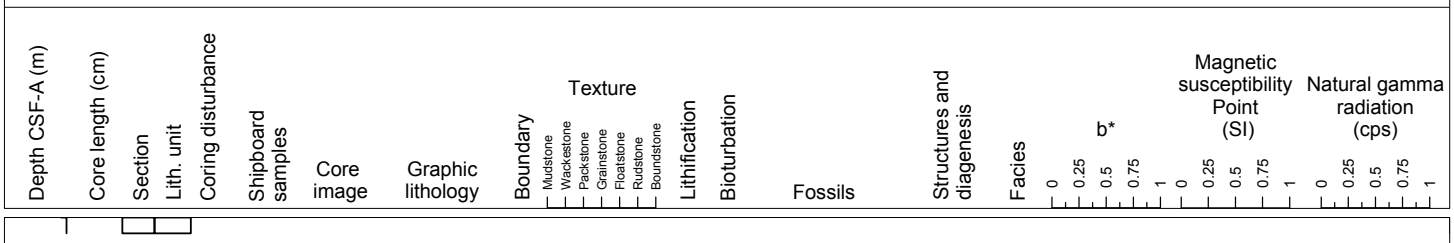
Hole 356-U1462A Core 18X, Interval 155.4-155.52 m (CSF-A)

Lithified, gray, PACKSTONE.



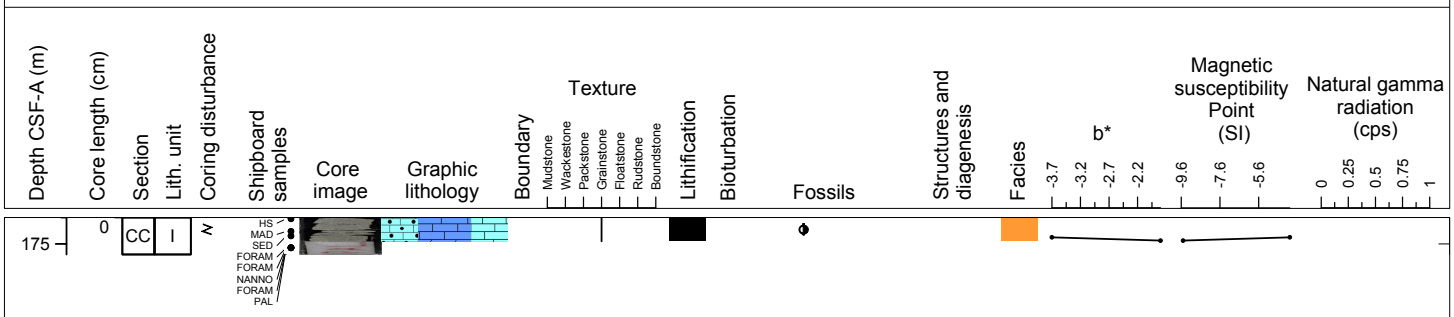
NO RECOVERY

Hole 356-U1462A Core 19X, Interval 165.1-165.1 m (CSF-A)



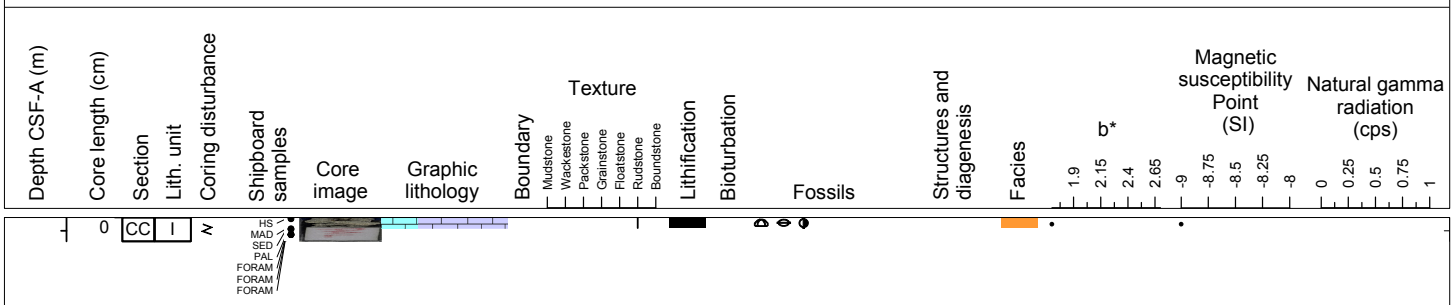
Hole 356-U1462A Core 20X, Interval 174.8-175.08 m (CSF-A)

Lithified, light gray, non-skeletal grain-rich, medium sand-sized, GRAINSTONE with foraminifers, high porosity, and calcite cement. Non-skeletal grains are ooids or peloids.



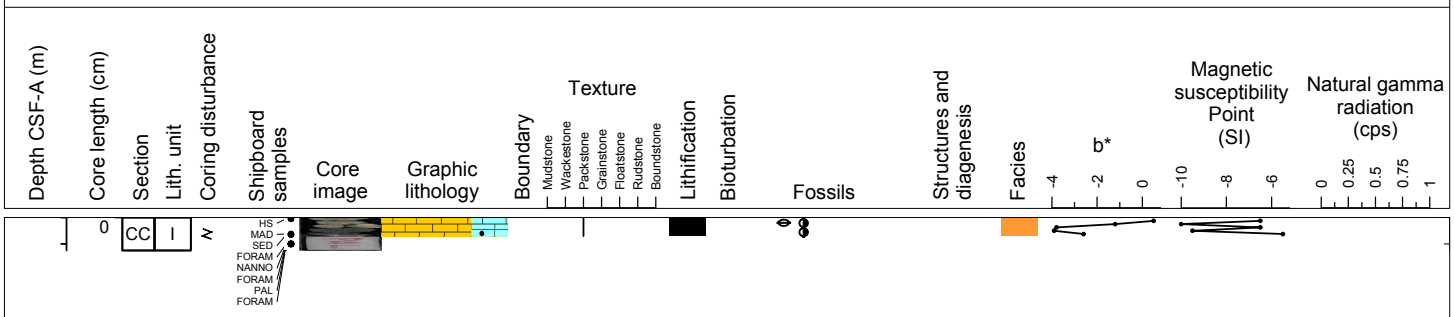
Hole 356-U1462A Core 21X, Interval 184.5-184.68 m (CSF-A)

Lithified, light gray, coarse-grained, skeletal, RUDSTONE with macrofossil fragments (bivalves,small benthic foraminifers, and echinoderms).



Hole 356-U1462A Core 22X, Interval 194.2-194.45 m (CSF-A)

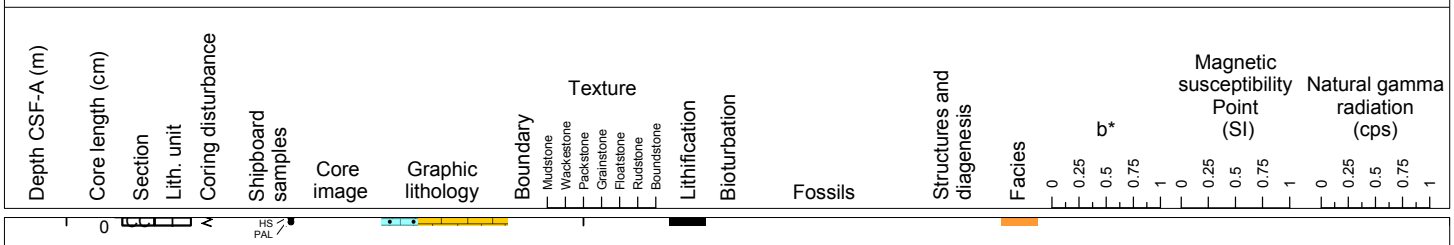
Lithified, cream, coarse sand-size, PACKSTONE with bivalves and small benthic foraminifers, and non-skeletal carbonate grains (ooids or peloids) changes to lithified, dark gray, fine sand-sized, PACKSTONE with small benthic foraminfers and non-skeletal carbonate grains (ooids or peloids). There is high porosity, calcite cement, and some grains with a black coating/stain (possibly manganese).



ALL TO PAL

Hole 356-U1462A Core 23X, Interval 203.9-203.96 m (CSF-A)

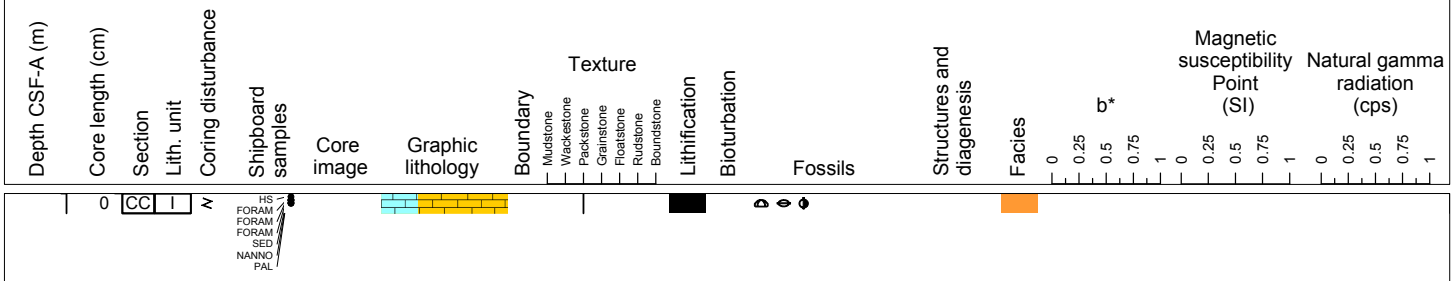
Lithified, dark greenish-gray, non-skeletal grain-rich, sand-sized, PACKSTONE. Grains are dark gray, dark greenish gray, and black.



ALL TO PAL

Hole 356-U1462A Core 24X, Interval 213.6-213.75 m (CSF-A)

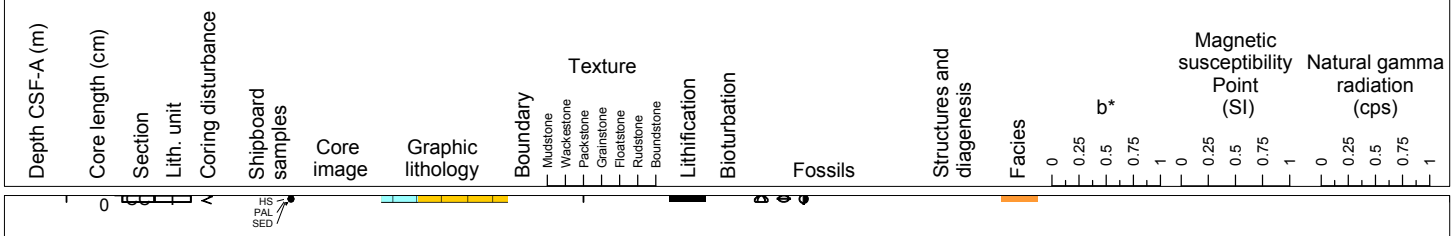
Described from PAL sample: Lithified, dark gray, skeletal, PACKSTONE with abundant macrofossil fragments (bivalves, echinoderm spines, and small benthic foraminifers).



ALL TO PAL

Hole 356-U1462A Core 25X, Interval 223.3-223.35 m (CSF-A)

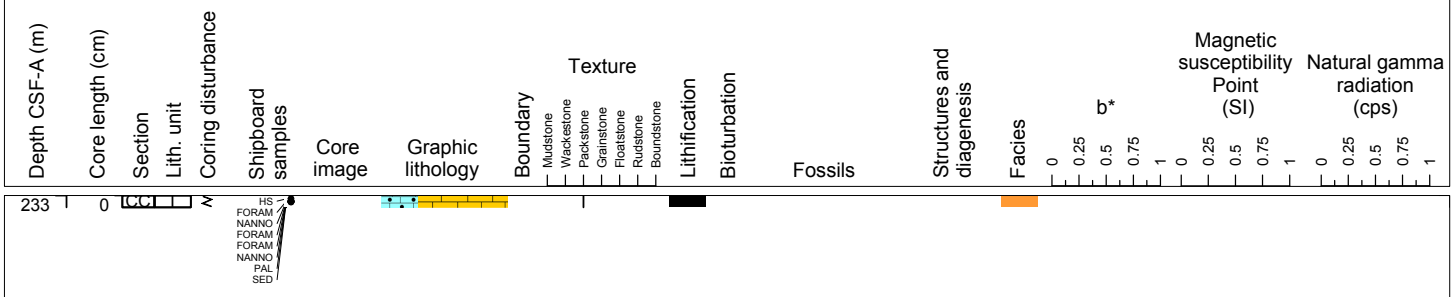
Described from PAL sample: Lithified, dark gray, skeletal, PACKSTONE with abundant macrofossil fragments (bivalves, echinoderm spines, and small benthic foraminifers).



ALL TO PAL

Hole 356-U1462A Core 26X, Interval 233.0-233.09 m (CSF-A)

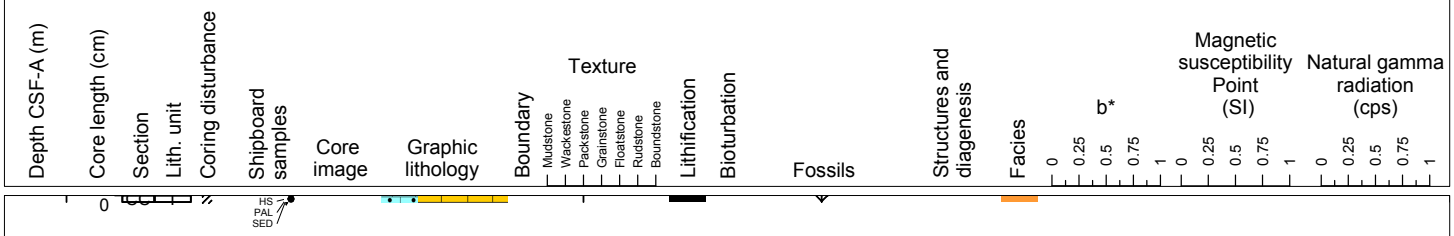
Lithified, dark greenish-gray, non-skeletal grain-rich, sand-size, PACKSTONE with ooids/peloids(?). Grains are dark greenish-gray, dark gray, and black.



ALL TO PAL

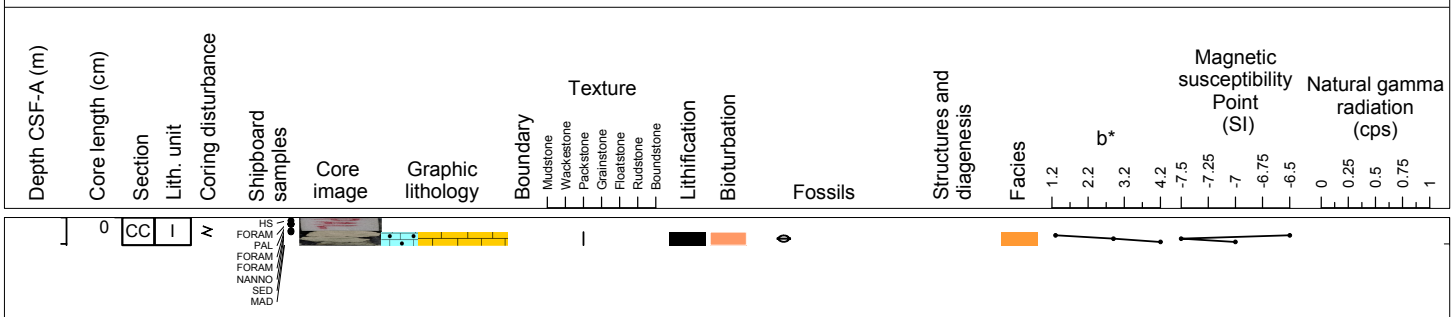
Hole 356-U1462A Core 27X, Interval 242.7-242.75 m (CSF-A)

Lithified, dark grayish-green, non-skeletal grain-rich, sand-sized, PACKSTONE with ooids or peloids. Grains are greenish gray and dark greenish-gray. There is moldic porosity due to dissolved bivalves.



Hole 356-U1462A Core 28X, Interval 252.4-252.61 m (CSF-A)

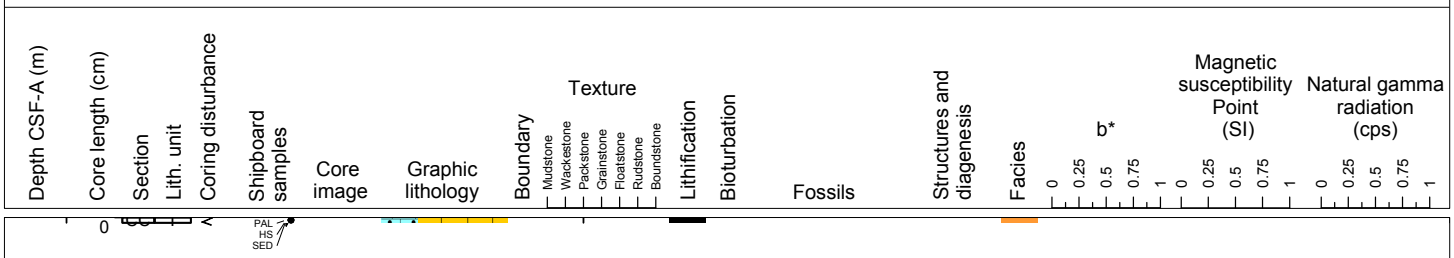
Lithified, creamy gray, non-skeletal grain-rich, medium sand-sized, PACKSTONE with moderate bioturbation.



ALL TO PAL

Hole 356-U1462A Core 29X, Interval 262.1-262.14 m (CSF-A)

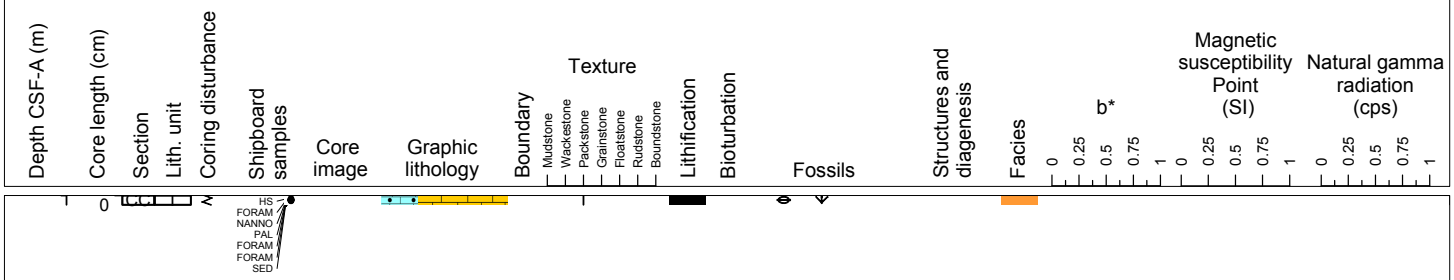
Lithified, dark grayish-green, non-skeletal grain-rich, sand-size PACKSTONE with peloids. Grains are black, dark greenish-gray, and light greenish-gray.



ALL TO PAL

Hole 356-U1462A Core 30X, Interval 271.8-271.87 m (CSF-A)

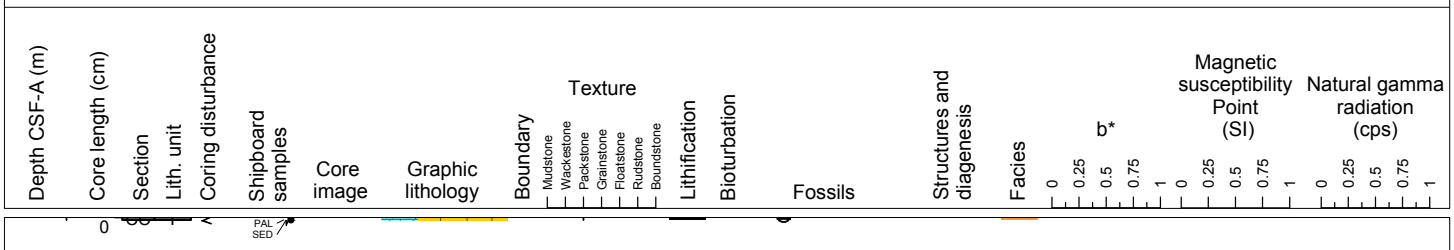
Lithified, light grayish-green, non-skeletal grain-rich, sand-size PACKSTONE with peloids and macrofossil fragments (bivalves and bryozoans). Grains are dark greenish-gray, light greenish-gray, and black.



ALL TO PAL

Hole 356-U1462A Core 31X, Interval 281.5-281.52 m (CSF-A)

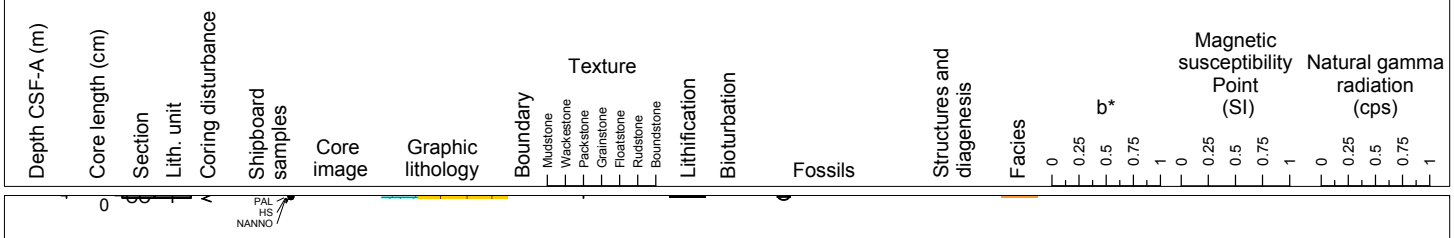
LIthified, light grayish-green, non-skeletal, sand-size, PACKSTONE with peloids and rare macrofossil fragments. Grains are dark greenish-gray and dark gray



ALL TO PAL

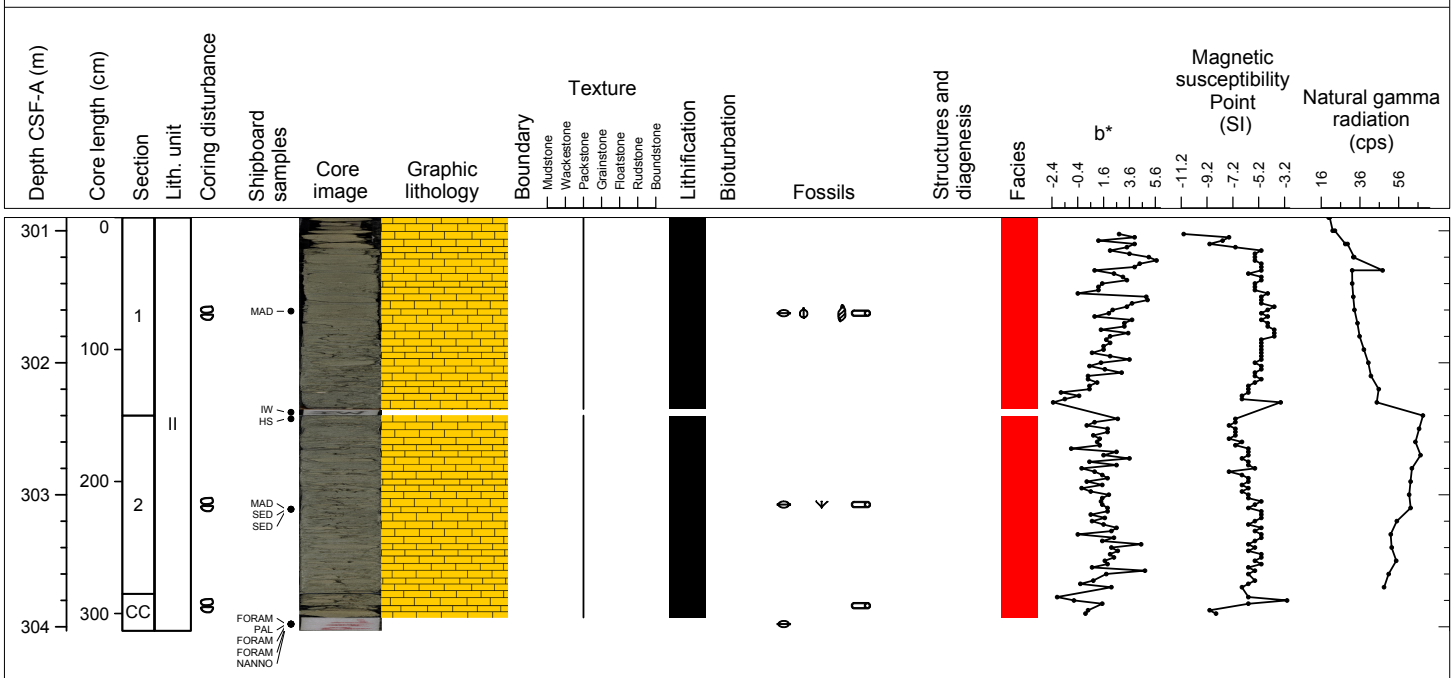
Hole 356-U1462A Core 32X, Interval 291.2-291.22 m (CSF-A)

Lithified, light grayish-green, non-skeletal grain-rich, sand-sized, PACKSTONE with peloids and sparse bivalve fragments. Grains are dark greenish-gray, grayish green, and black.



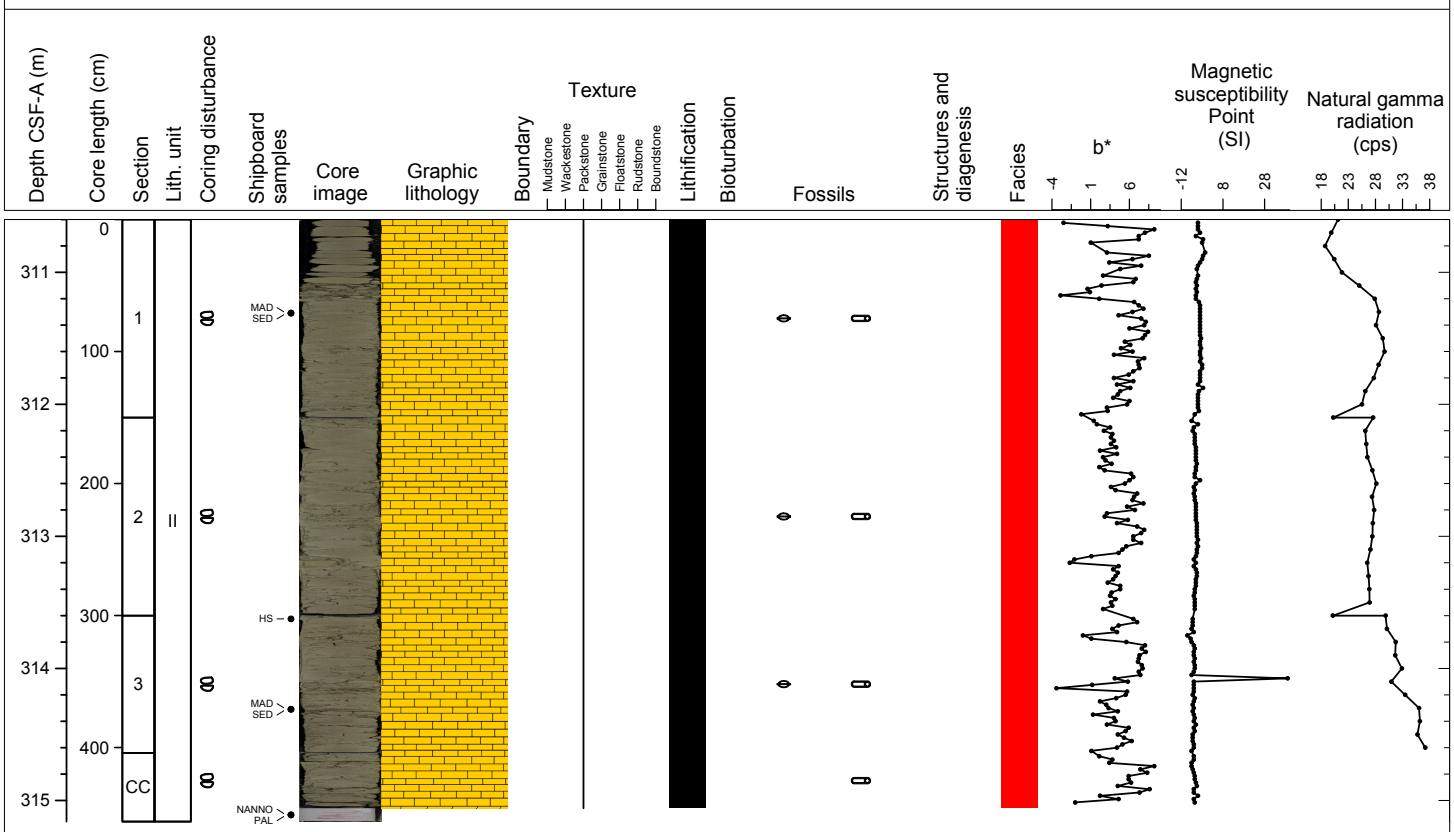
Hole 356-U1462A Core 33X, Interval 300.9-304.03 m (CSF-A)

Lithified, light grayish-green, fine sand-sized, PACKSTONE with macrofossils (bryozoans and scaphopods abundant 0-75 cm, sparse large bivalves, gastropods, and large benthic foraminifers). A few burrows (cm's long) are present. Sand-size grains are black.



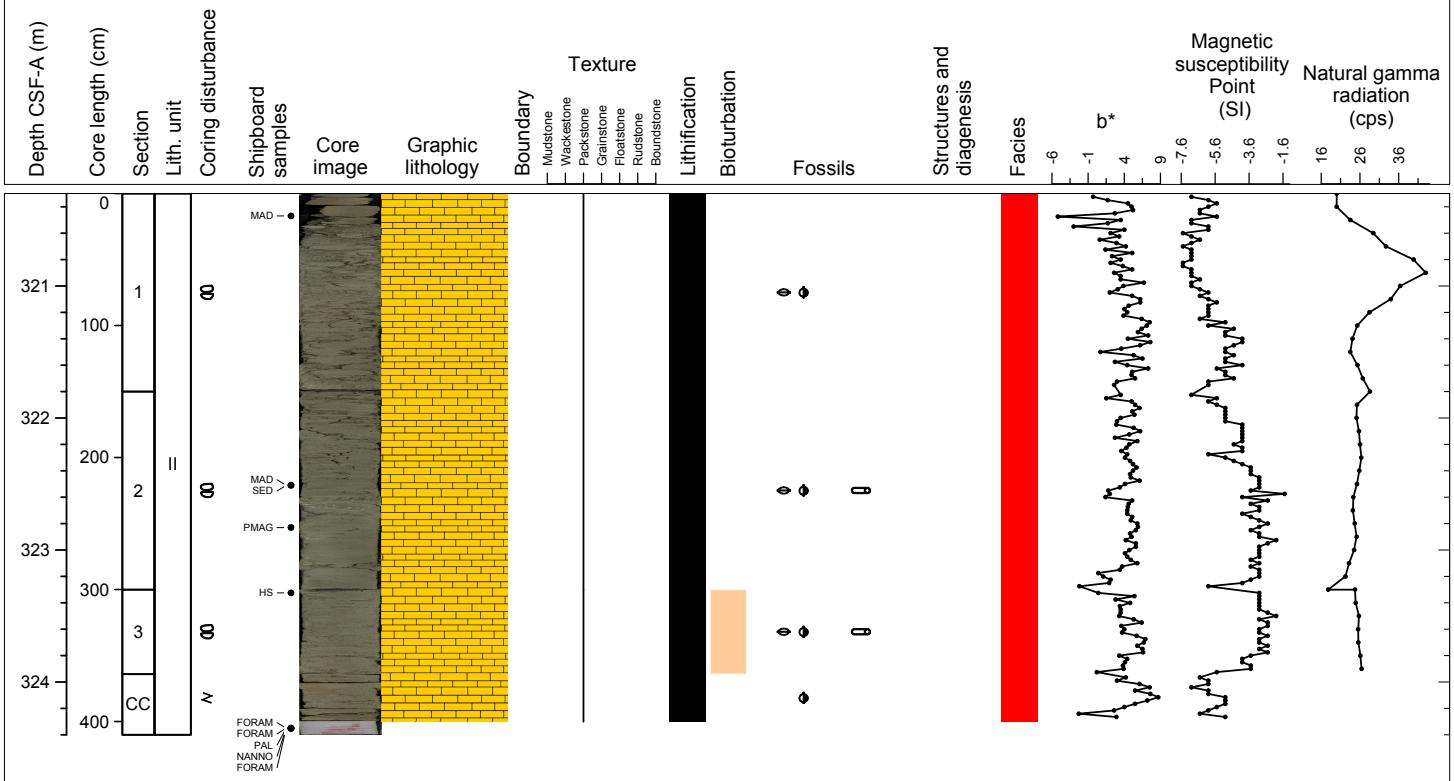
Hole 356-U1462A Core 34X, Interval 310.6-315.16 m (CSF-A)

Lithified, light grayish-green, fine sand-sized, PACKSTONE with abundant scaphopod fragments and few bivalve fragments. Grains are greenish black.



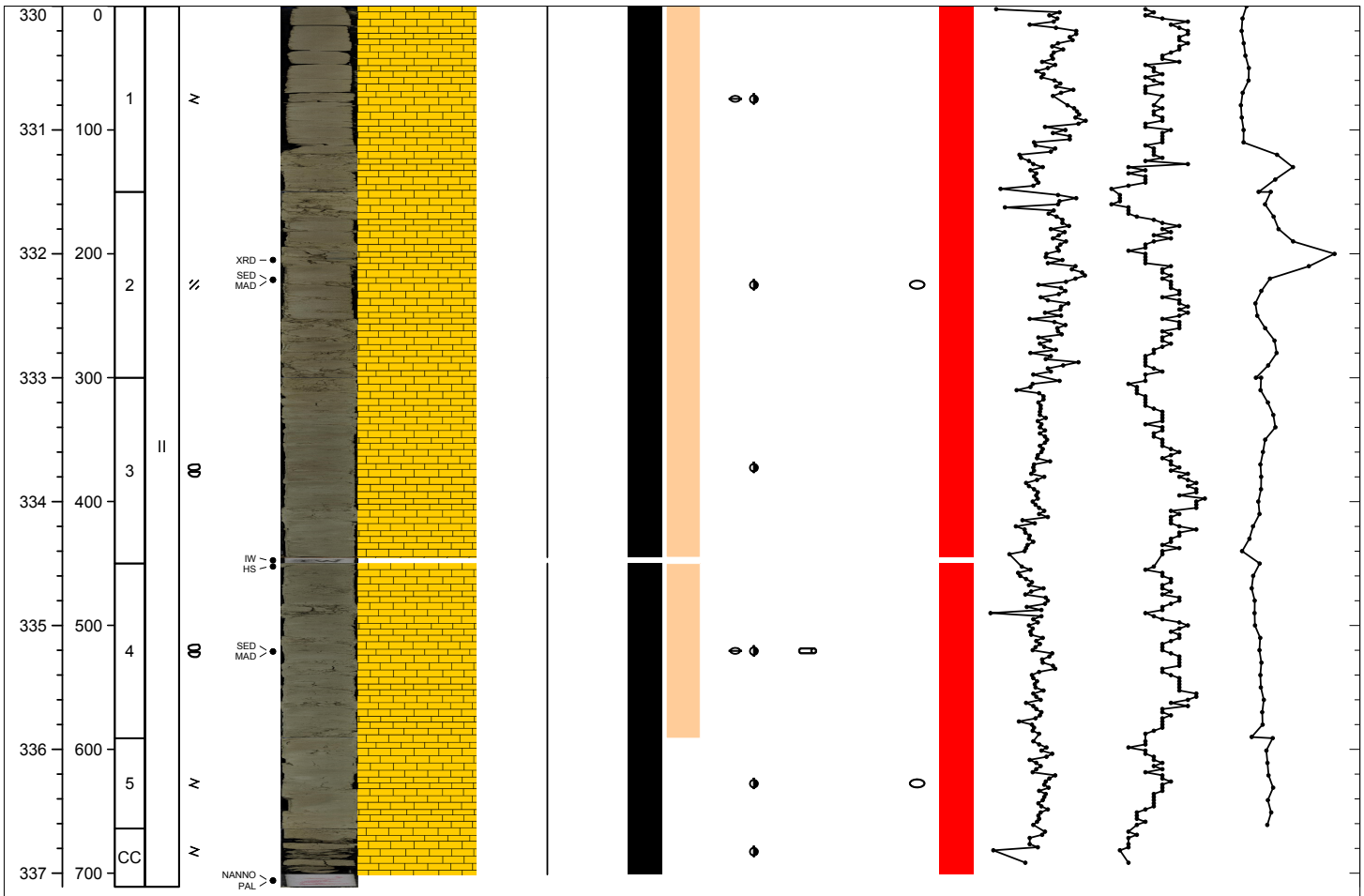
Hole 356-U1462A Core 35X, Interval 320.3-324.4 m (CSF-A)

Lithified, light grayish-green, fine sand-sized, PACKSTONE with a few small benthic foraminfers and fragments of bivalves and scaphopods. Grains are black, small, and sparse.



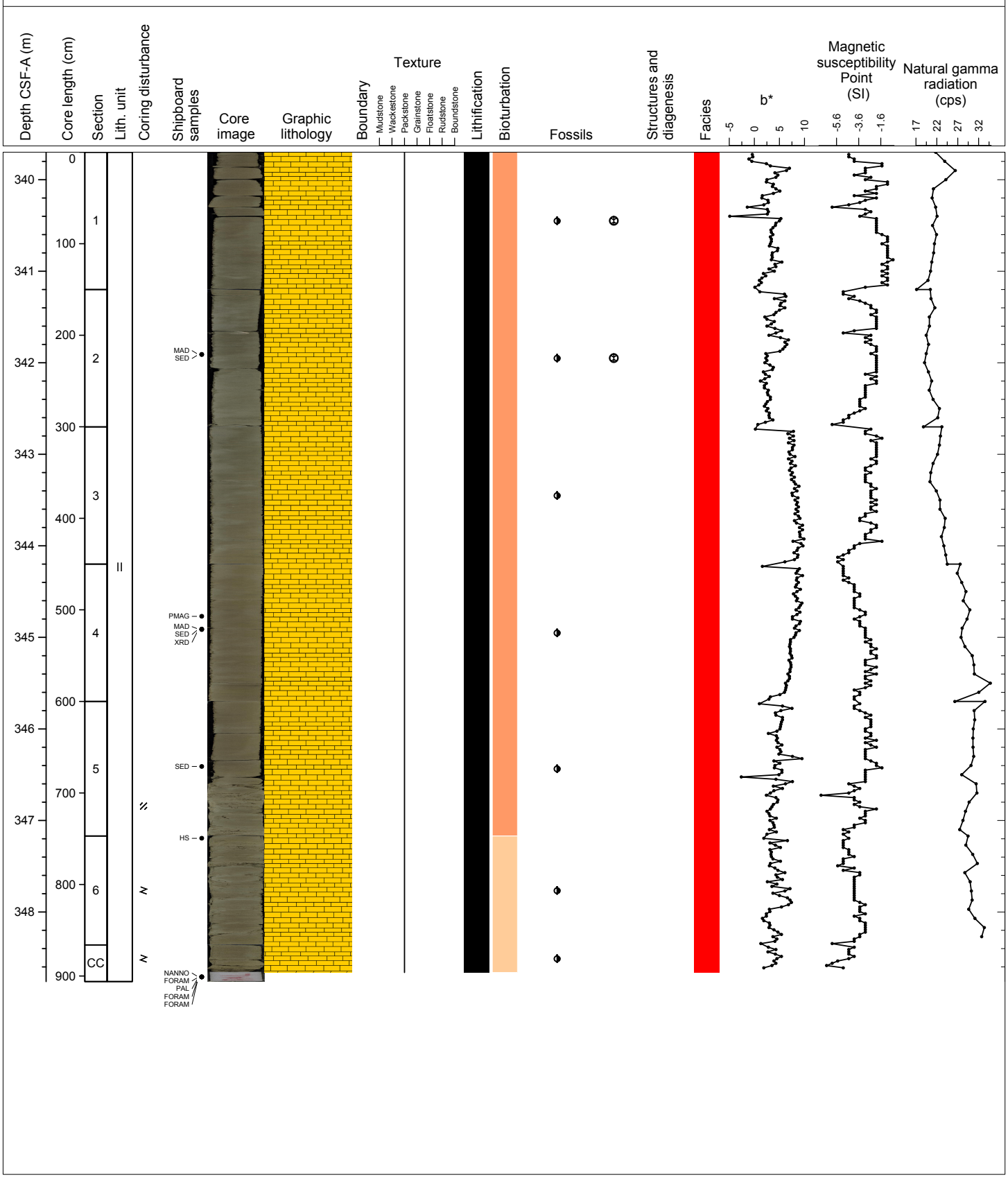
Hole 356-U1462A Core 36X, Interval 330.0-337.11 m (CSF-A)

Lithified, light olive gray to olive gray, fine sand-sized, PACKSTONE with fragments of bivalves and scaphopods. Small benthic foraminifers are common but become sparser down core. Black and greenish gray grains are sparse. There is slight bioturbation, and a green outline of possibly a burrow. There are occasional black nodules/concretions (each a few mm in diameter).



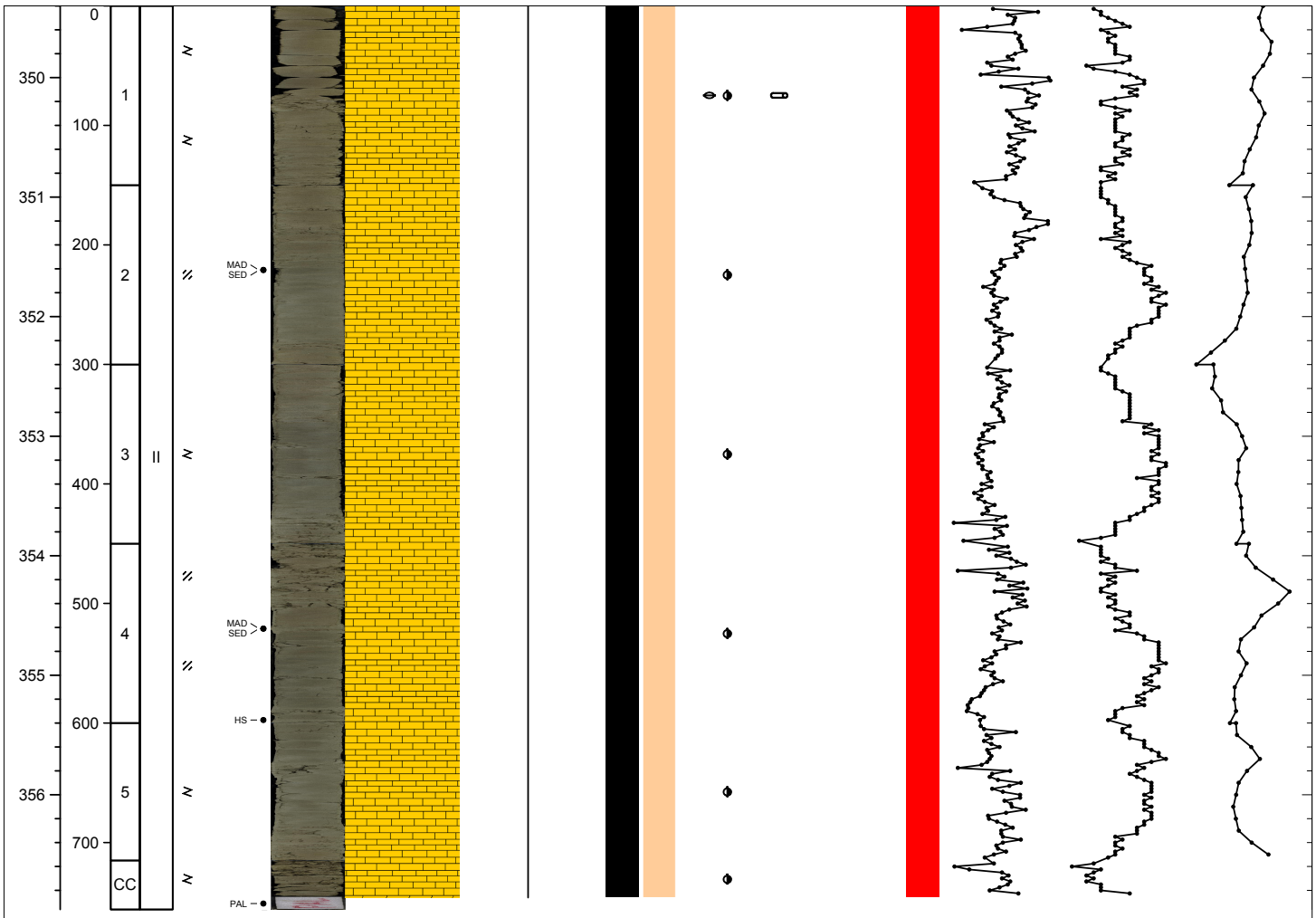
Hole 356-U1462A Core 37X, Interval 339.7-348.76 m (CSF-A)

Lithified, olive gray, fine sand-sized PACKSTONE transitions to very fine sand-size grains in the lower half of the core. Small benthic foraminifers are common but become sparser down core. There are cccasional bivalve, scaphopod, and solitary coral fragments. There is slight to moderate bioturbation; burrows are sometimes stained green. Grains are black and greenish gray.



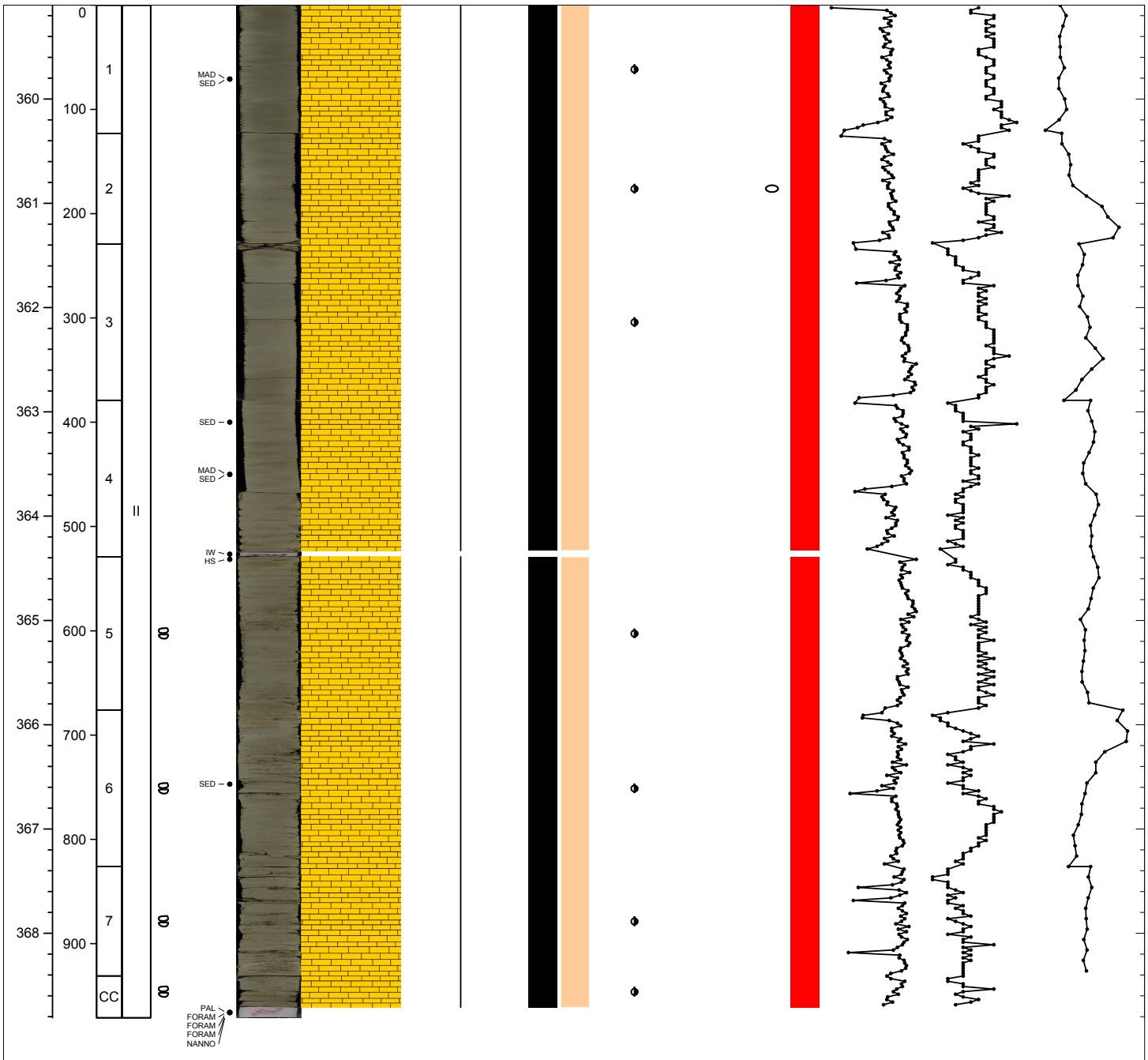
Hole 356-U1462A Core 38X, Interval 349.4-356.96 m (CSF-A)

Lithified, olive gray, very fine to fine sand-size, PACKSTONE with macrofossil fragments (bivalves, scaphopods, and bryozoans), a cluster of barnacles, and small benthic foraminifers. Grains are black and greenish gray (grains and shell fragments increase towards the middle of the core and then become sparser towards the bottom). Slight bioturbation near the top of the core.



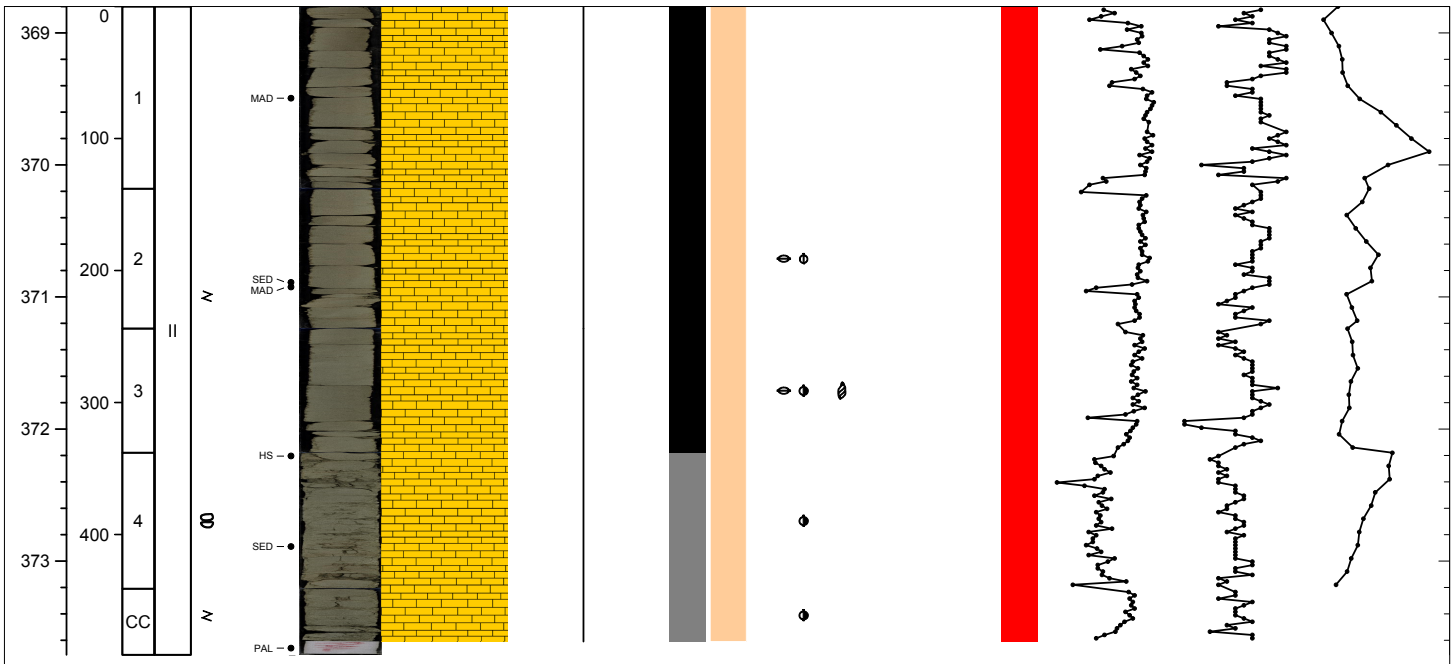
Hole 356-U1462A Core 39X, Interval 359.1-368.81 m (CSF-A)

Homogeneous, lithified, olive gray, very fine sand-sized, PACKSTONE with sparse small benthic foraminifers, bivalve fragments, and black and greenish gray grains. Near the base of the core, there is a black concretion as well as a few unidentified tubes (hollow and only a few mm's wide; not scaphopods).



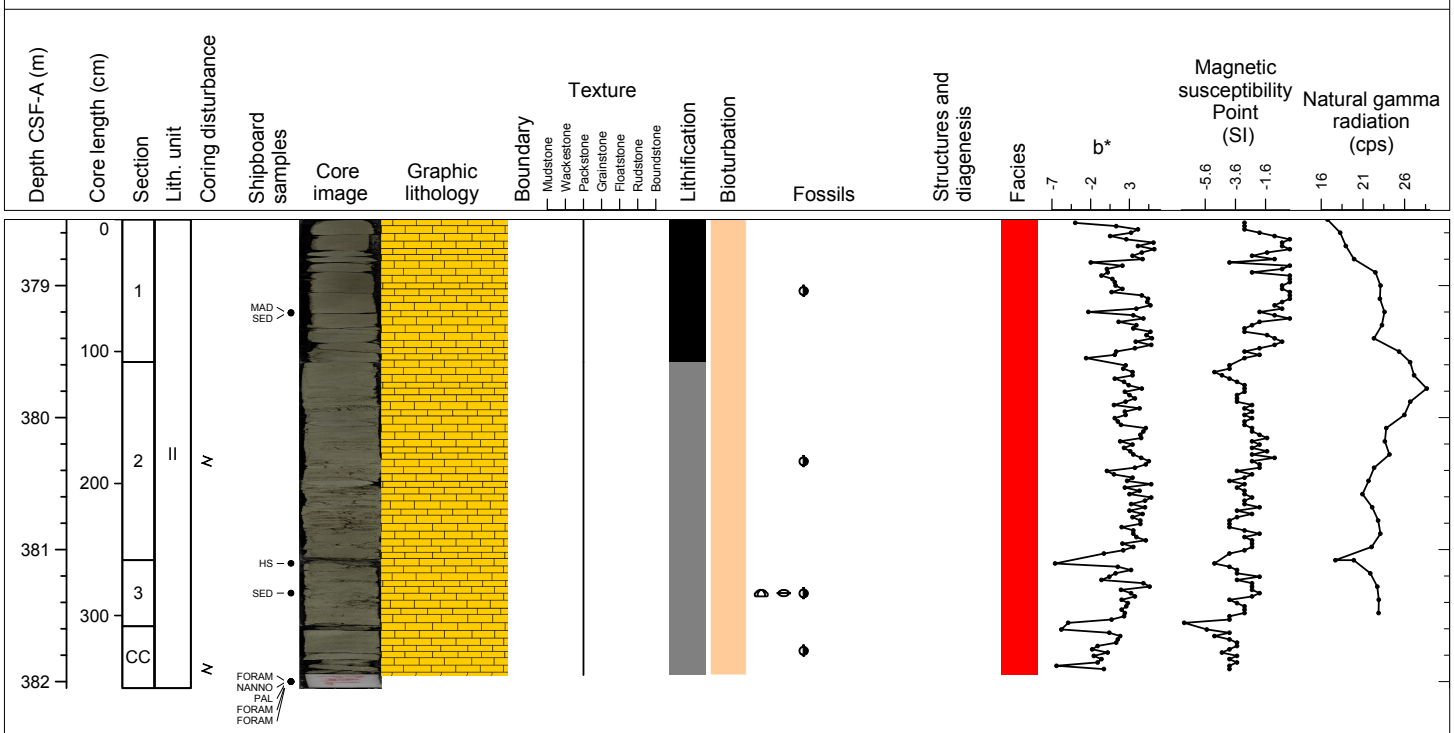
Hole 356-U1462A Core 40X, Interval 368.8-373.71 m (CSF-A)

Homogeneous, lithified to partially-lithified, olive gray, fine sand-sized, PACKSTONE with sporadic fragments of bivalves and small benthic foraminifers.



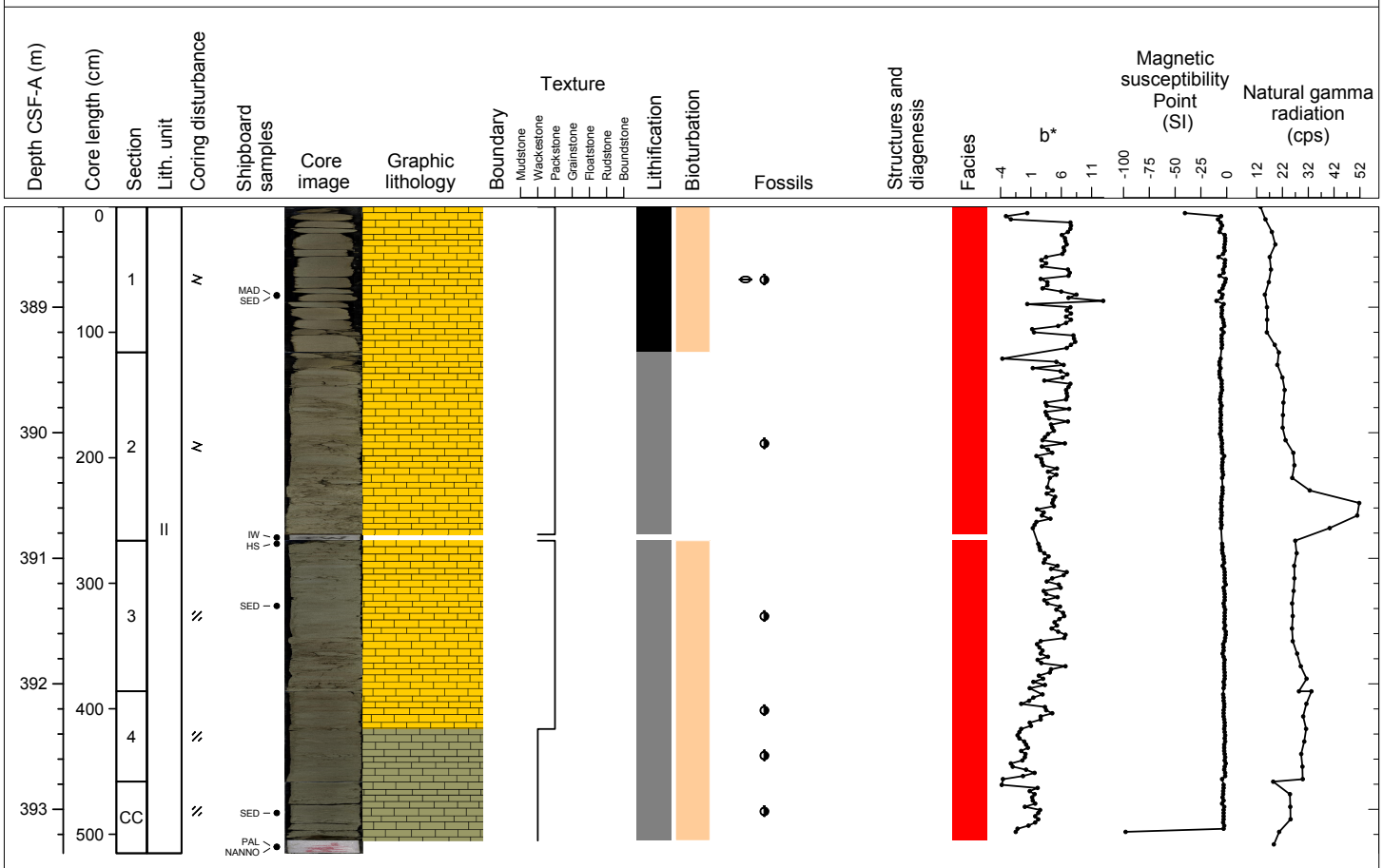
Hole 356-U1462A Core 41X, Interval 378.5-382.05 m (CSF-A)

Homogeneous, lithified to partially-lithified, olive gray, PACKSTONE with small benthic foraminifers, echinoderms, and bivalves.



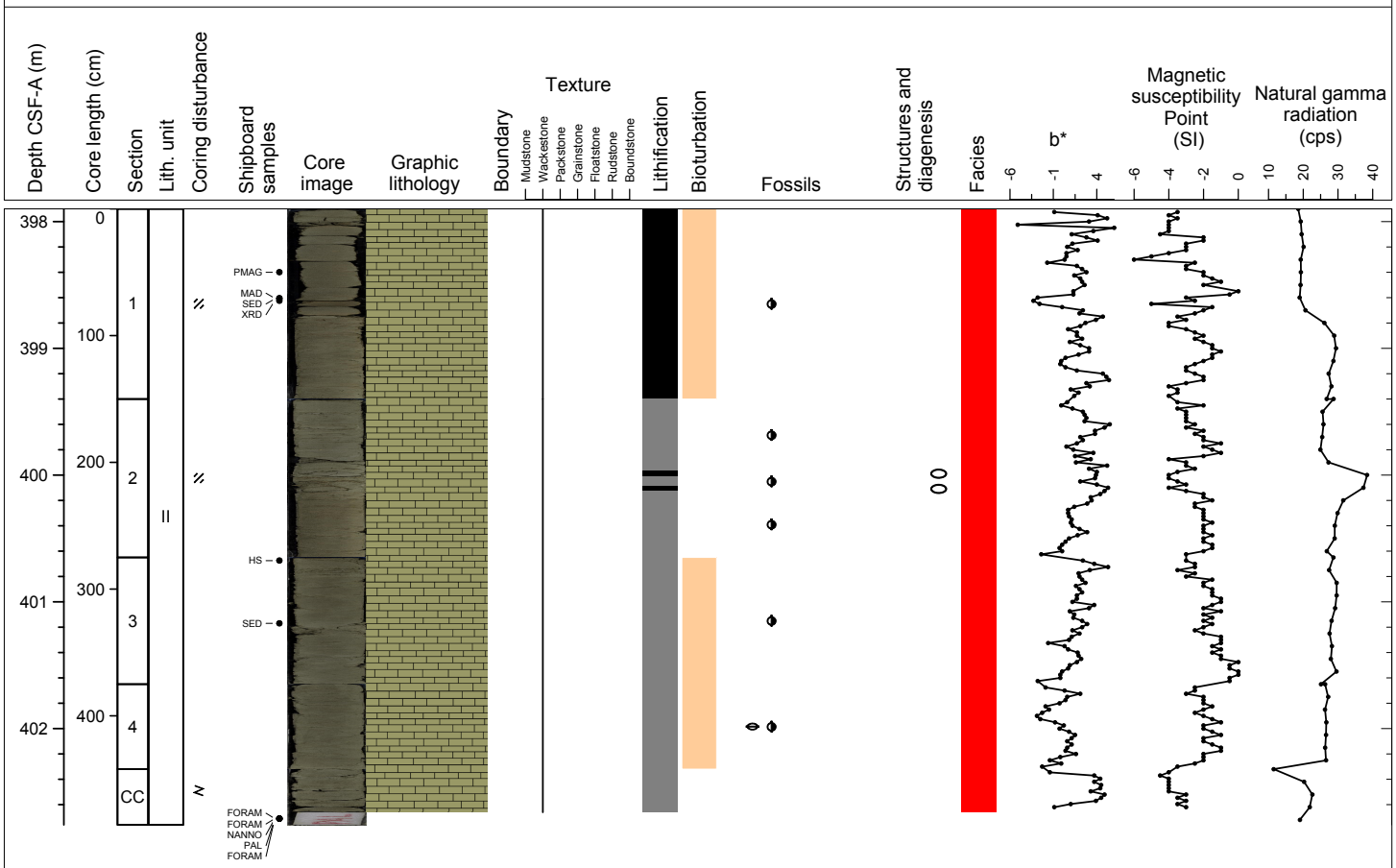
Hole 356-U1462A Core 42X, Interval 388.2-393.35 m (CSF-A)

Homogeneous, Ilithified to partially-lithified, olive gray, PACKSTONE with small benthic foraminifers and bivalves transitions to partially-lithified, dark grayish-green, WACKESTONE with small benthic foraminifers and slight bioturbation.



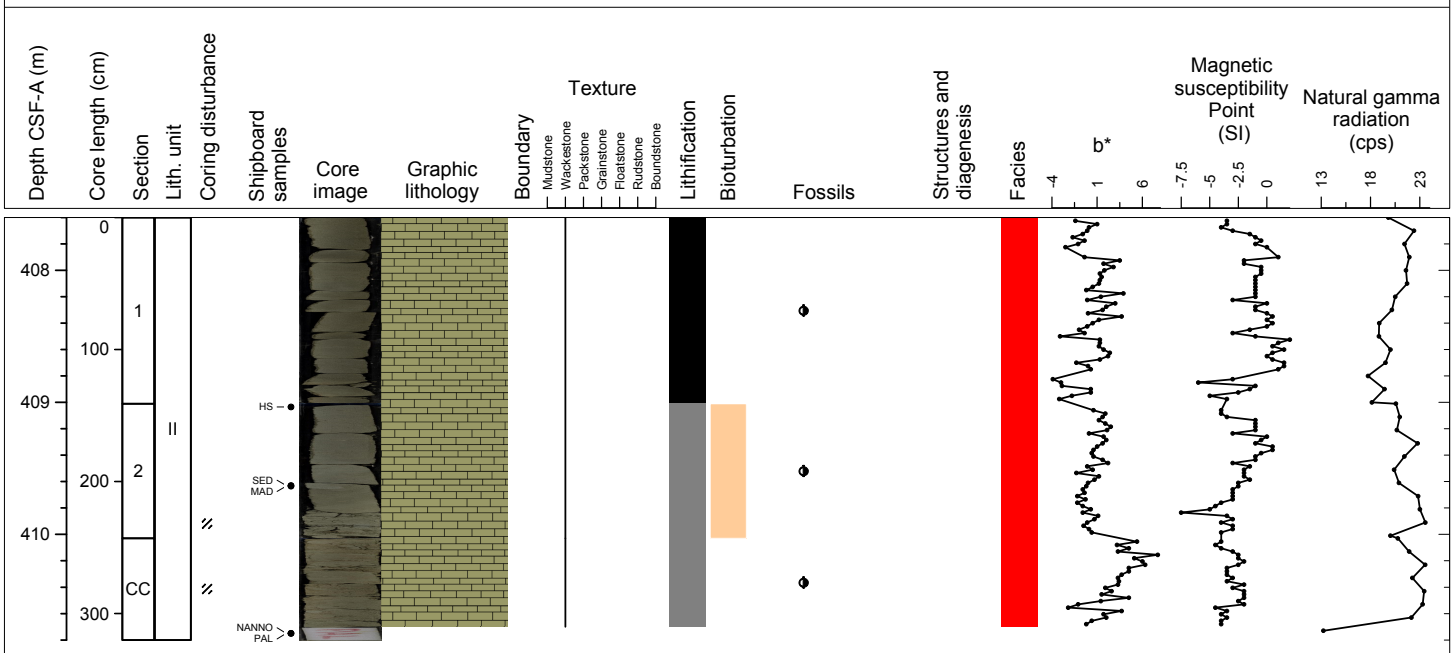
Hole 356-U1462A Core 43X, Interval 397.9-402.76 m (CSF-A)

Partially-lithified to lithified, dark grayish-green, PACKSTONE with small benthic foraminifers and slight bioturbation. At the middle part of the core (2A, 57-61, 69-73 cm depth), there is a strongly lithified, intercalated, WACKESTONE concretion.



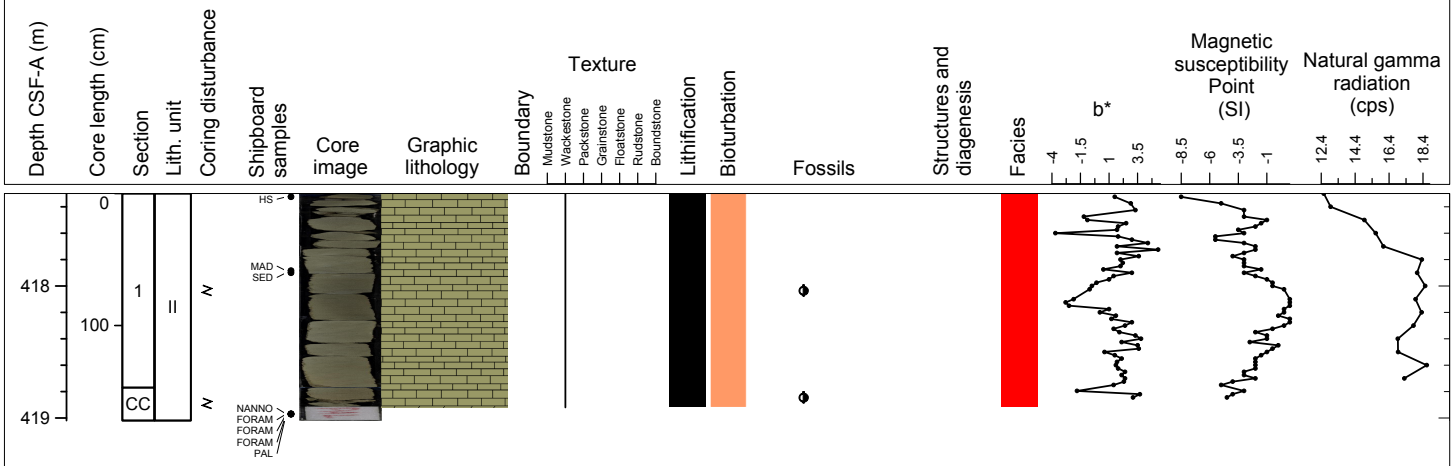
Hole 356-U1462A Core 44X, Interval 407.6-410.8 m (CSF-A)

Lithified to partially-lithified, dark grayish-green, WACKESTONE with foraminifers. Within the wackestone, there are frequent bands and patches of very fine sand-sized PACKSTONE.



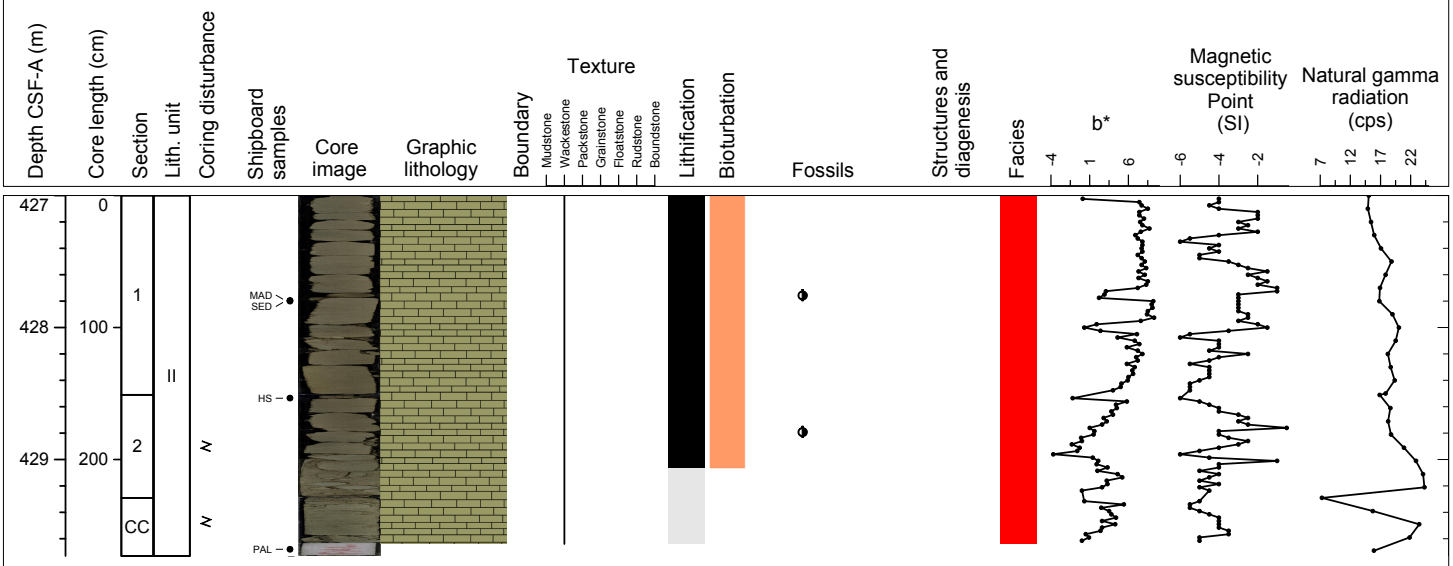
Hole 356-U1462A Core 45X, Interval 417.3-419.02 m (CSF-A)

Homogenous, lithified, olive gray, WACKESTONE with small benthic foraminifers and moderate bioturbation.



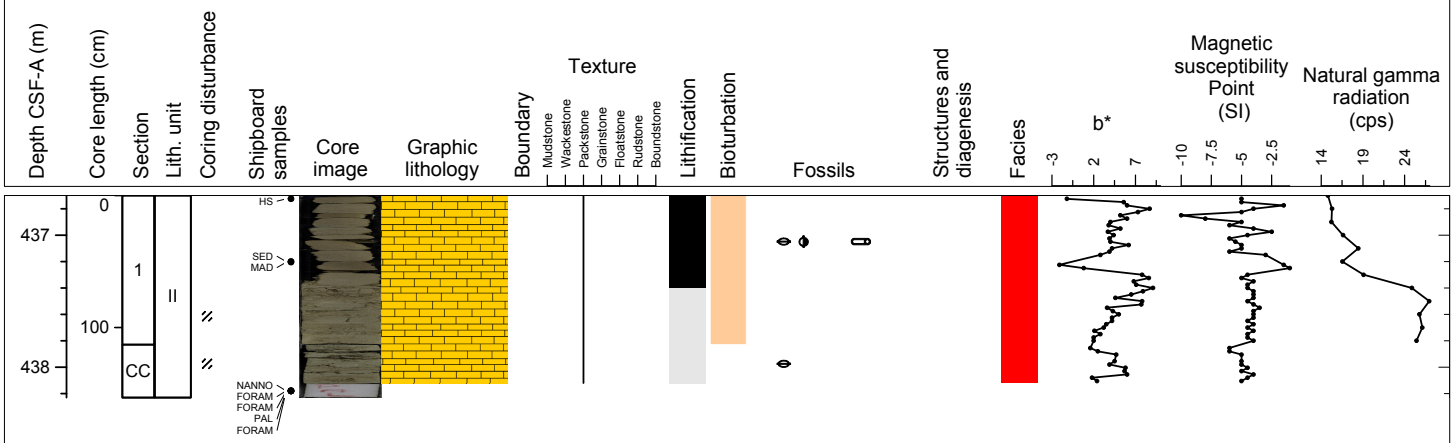
Hole 356-U1462A Core 46X, Interval 427.0-429.73 m (CSF-A)

Homogeneous, lithified to unlithified, olve gray, WACKESTONE with sporadic small benthic foraminifer-rich patches.



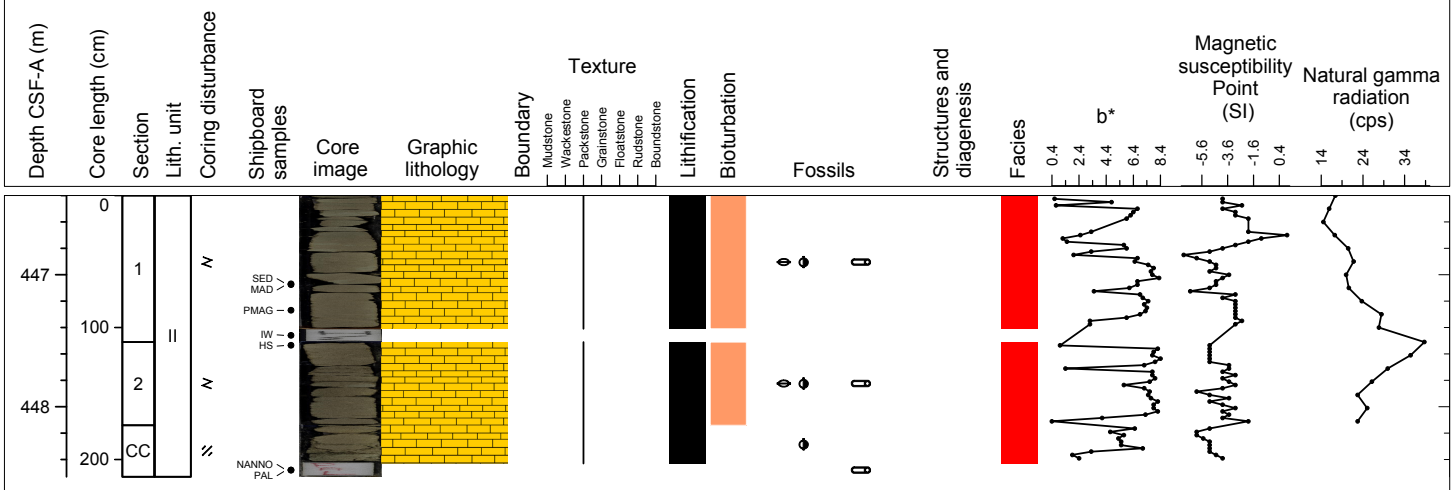
Hole 356-U1462A Core 47X, Interval 436.7-438.23 m (CSF-A)

Homogenous, lithified to unlithified, light greenish-gray, fine sand-sized, PACKSTONE with occasional macrofossils.



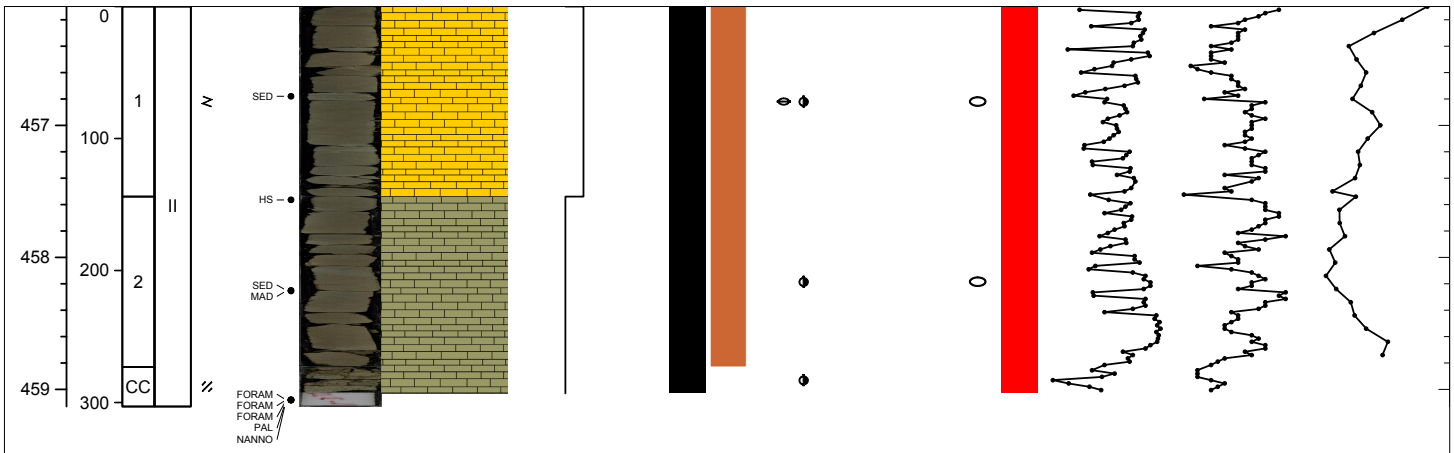
Hole 356-U1462A Core 48X, Interval 446.4-448.53 m (CSF-A)

Lithified, light greenish-gray to dark grayish-green, very fine to medium sand-sized, PACKSTONE with macrofossils and abundant, medium, sand-sized, dark, grains.



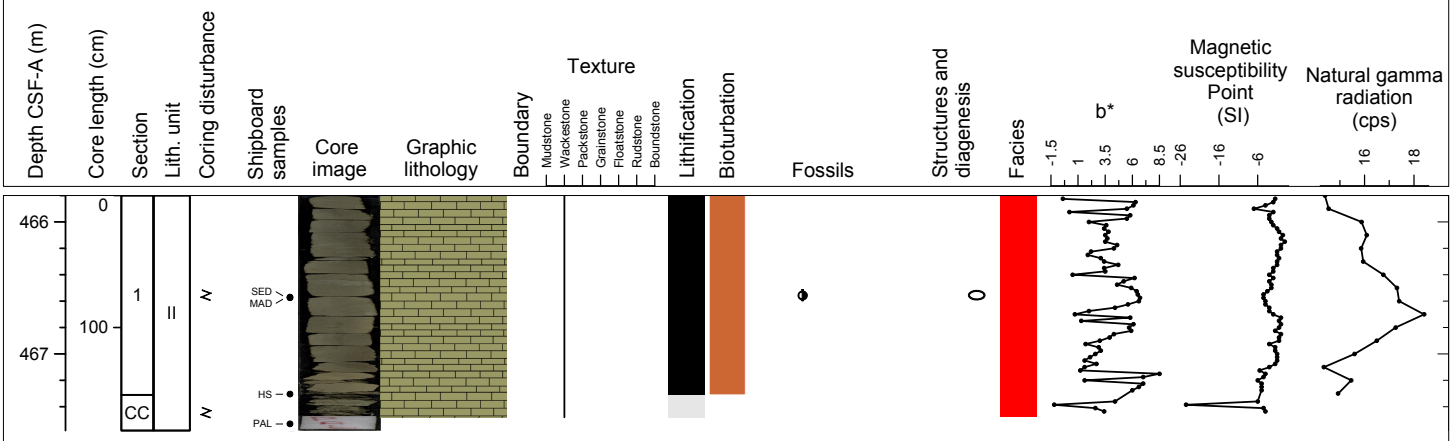
Hole 356-U1462A Core 49X, Interval 456.1-459.13 m (CSF-A)

Homogeneous, lithified, grayish green, fine sand-sized, PACKSTONE to WACKESTONE with frequent, intercalated, concreted patches and layers.



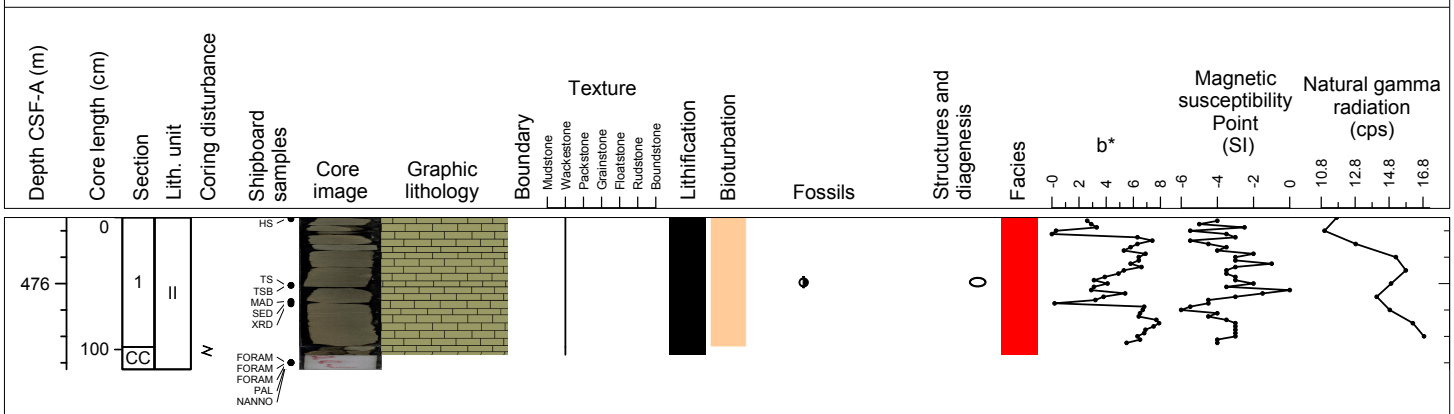
Hole 356-U1462A Core 50X, Interval 465.8-467.58 m (CSF-A)

Homoenous, lithified to unlithified, grayish green, WACKESTONE with lithified layers and patches. There is a long, straight burrow (~20 cm long).



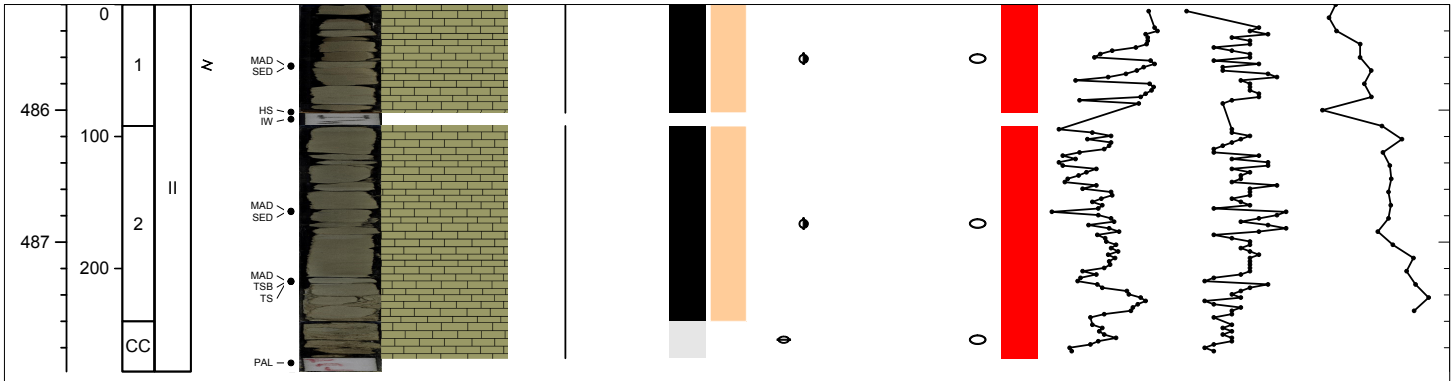
Hole 356-U1462A Core 51X, Interval 475.5-476.65 m (CSF-A)

Homogenous, lithified, grayish green, WACKESTONE with frequent, intercalated, concreted patches and layers.



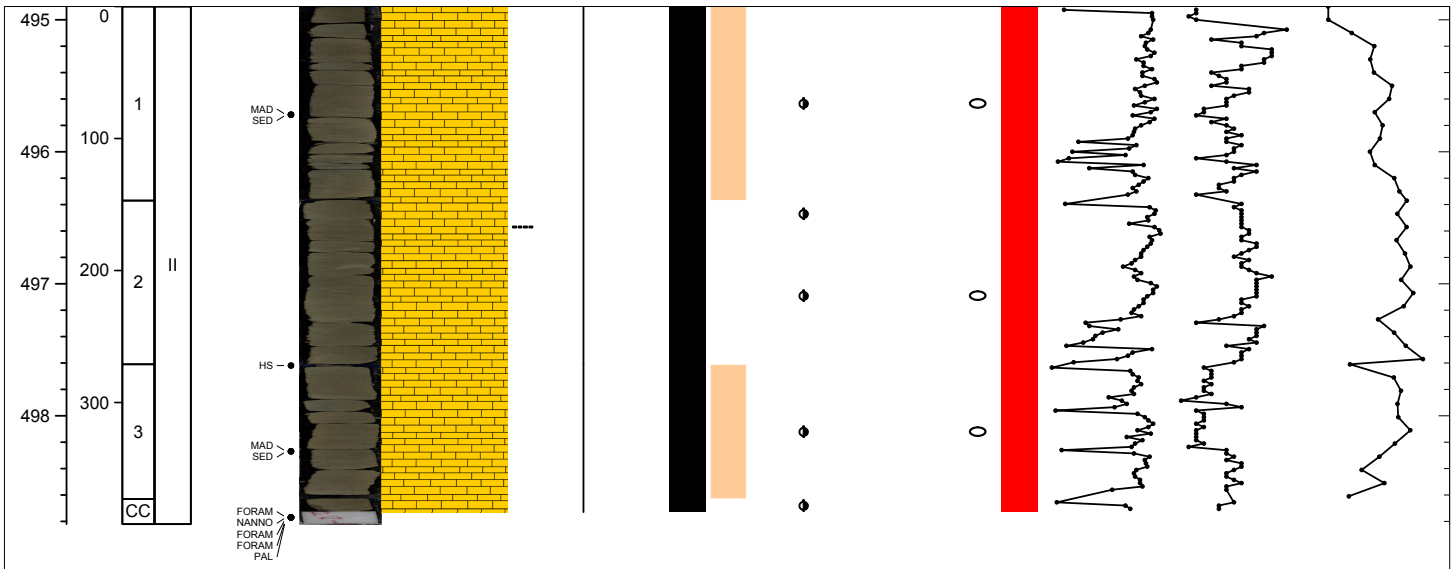
Hole 356-U1462A Core 52X, Interval 485.2-487.98 m (CSF-A)

Lithified to unlithified, grayish green, WACKESTONE with occasional bivalve fragments and small benthic foraminifers as well as intercalated, concreted patches and layers.



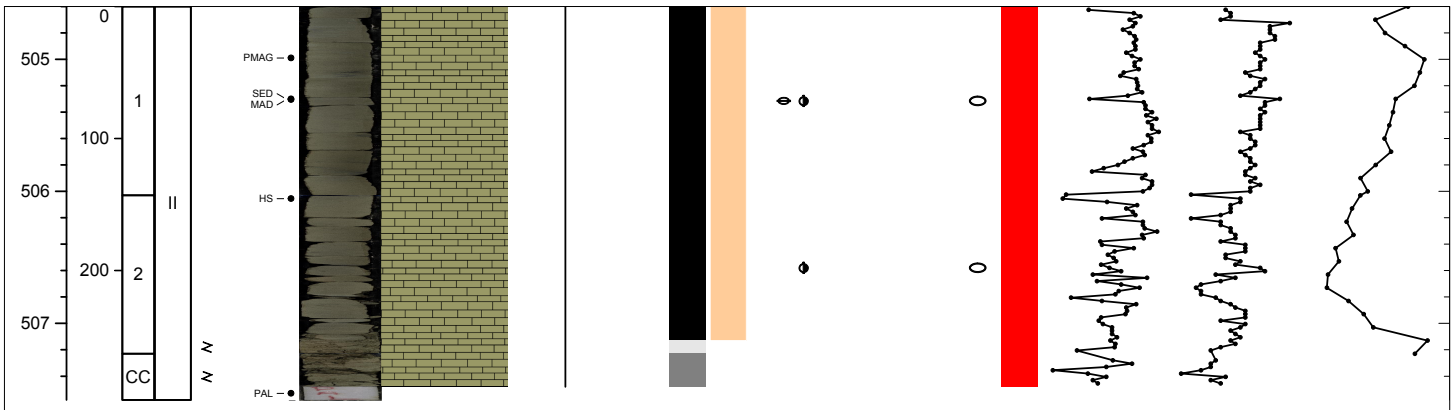
Hole 356-U1462A Core 53X, Interval 494.9-498.82 m (CSF-A)

Homogeneous, lithified, grayish green, very fine sand-sized, PACKSTONE with small benthic foraminfers and frequent, intercalated, concreted patches and layers.



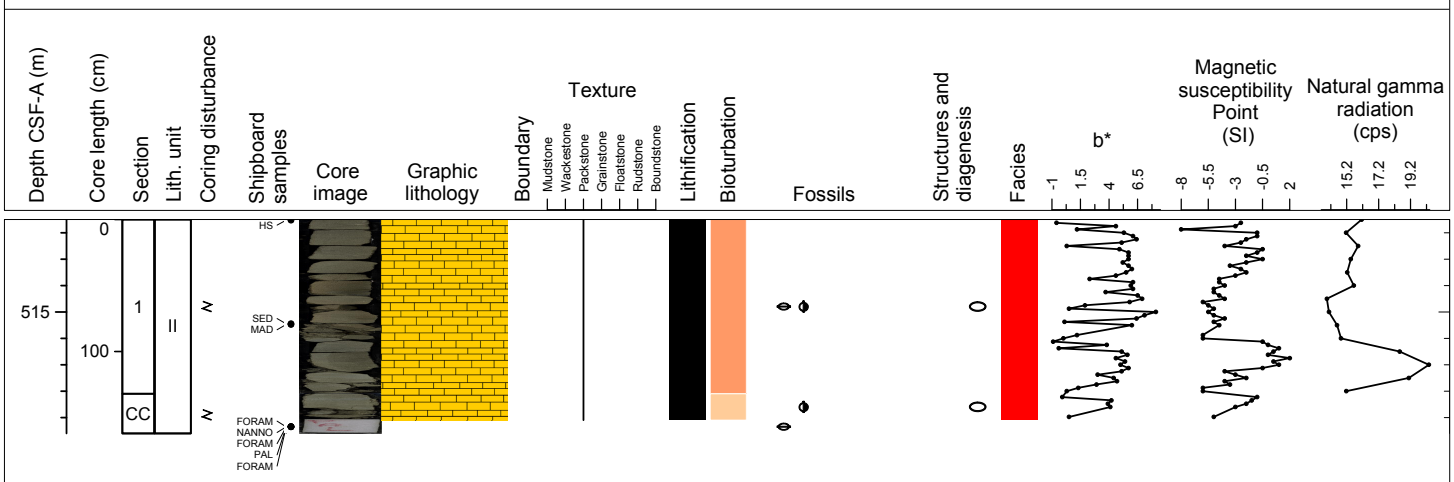
Hole 356-U1462A Core 54X, Interval 504.6-507.58 m (CSF-A)

Homogeneous, lithified to unlithified, grayish green, WACKESTONE with small benthic foraminifers and occasional bivalve fragments as well as intercalated, concreted patches.



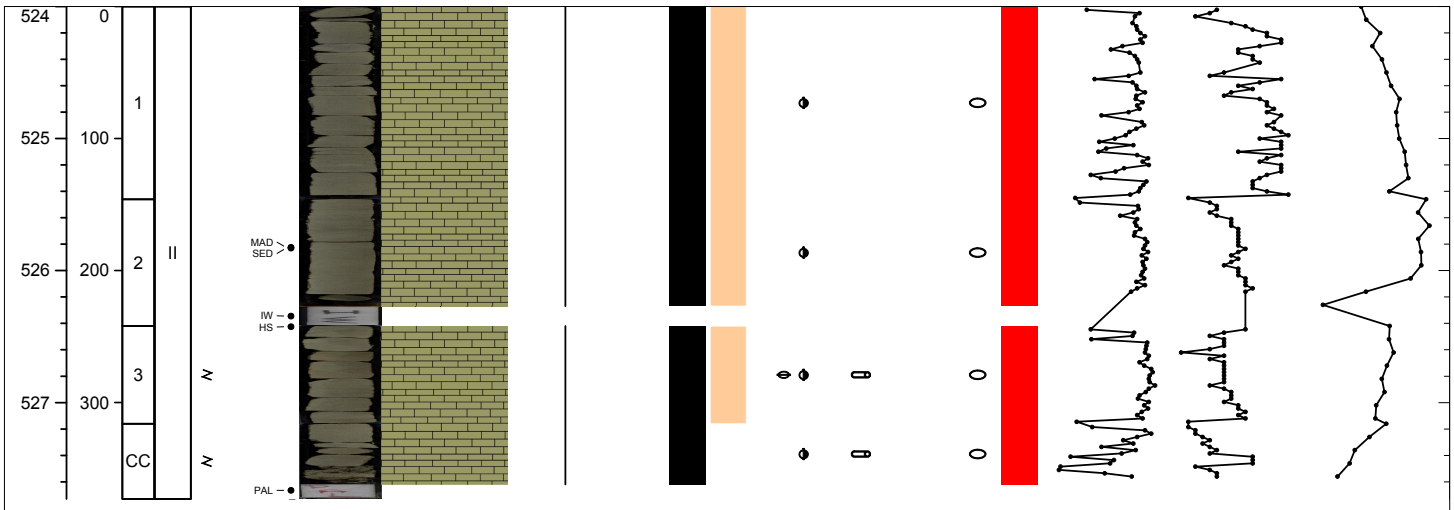
Hole 356-U1462A Core 55X, Interval 514.3-515.92 m (CSF-A)

Lithified, grayish green, fine sand-size, PACKSTONE with small benthic foraminifers and occasional bivalve fragments as well as intercalated, concreted patches.



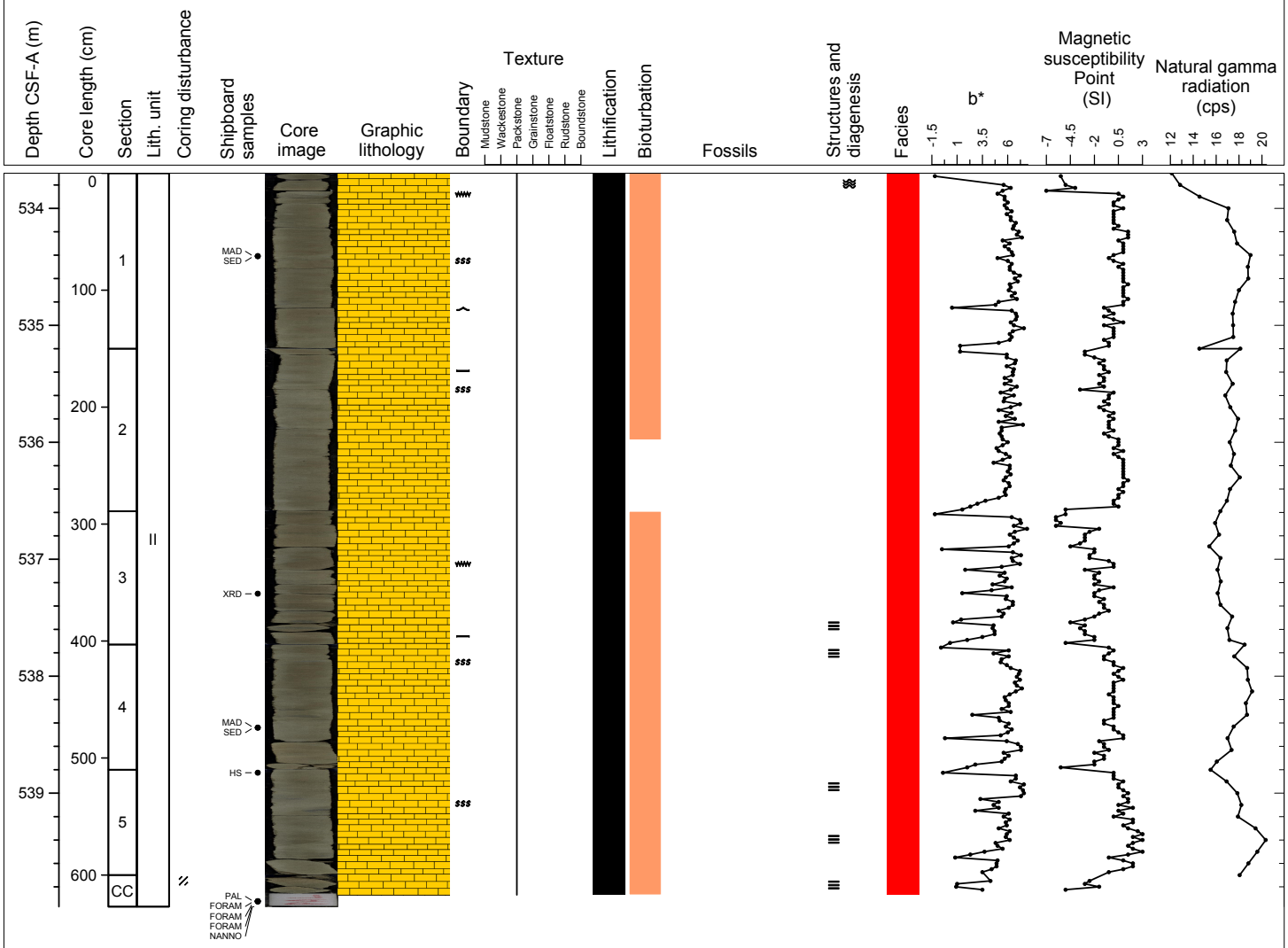
Hole 356-U1462A Core 56X, Interval 524.0-527.73 m (CSF-A)

Homogeneous, lithified, grayish green, WACKESTONE with small benthic foraminifers and occasional bivalve and scaphopod fragments as well as intercalated, concreted patches.



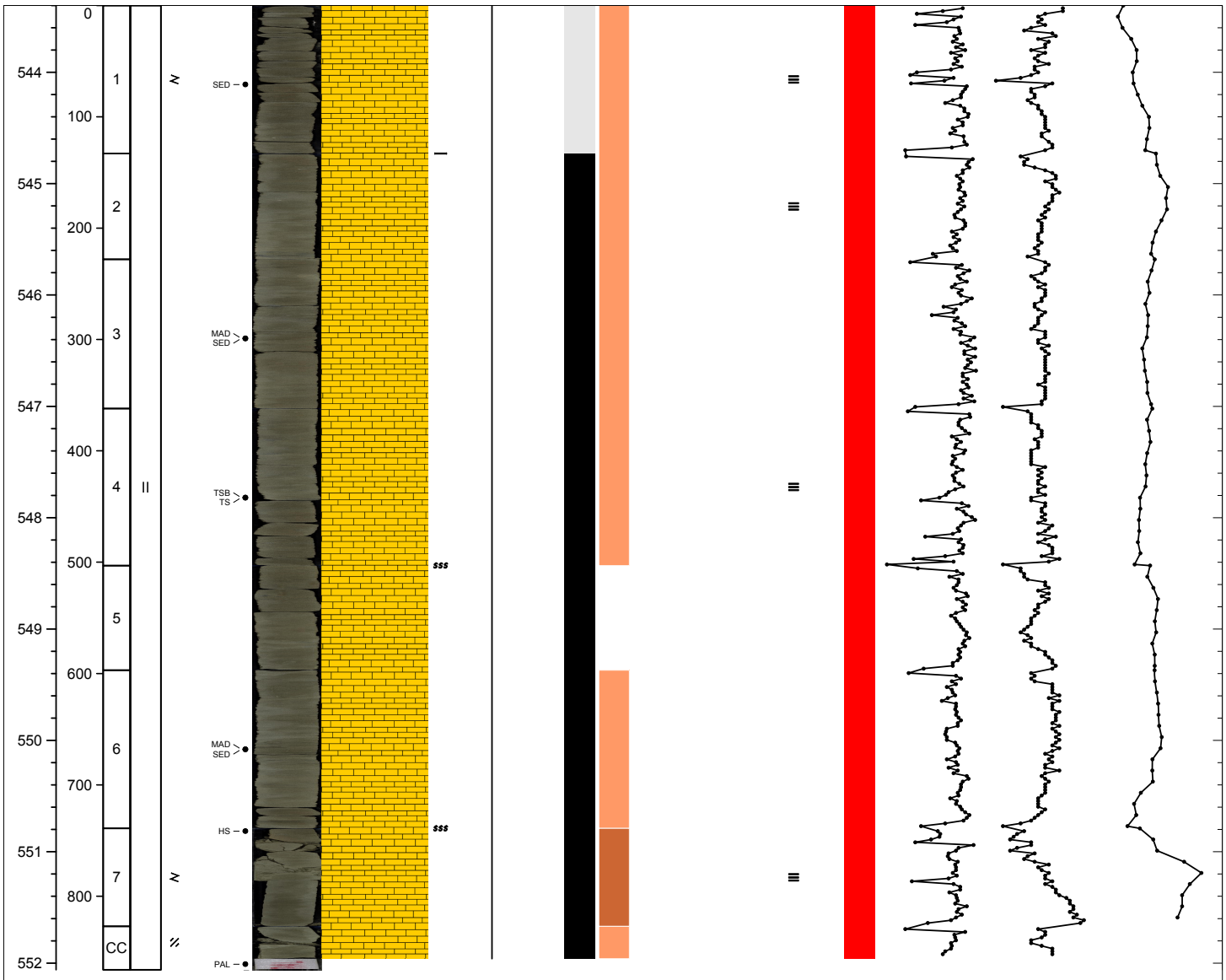
Hole 356-U1462A Core 57X, Interval 533.7-539.97 m (CSF-A)

Lithified, olive gray, coarse to fine sand-sized, PACKSTONE. There are sharp scoured contacts (with coarse sand-size grains) as well as bioturbated basal contacts that have coarser sand-size grains and abundant black grains, foraminifers, and small tubes (unidentified) associated with it. There are sometimes planar laminations above bioturbated, basal contacts. Bioturbation is moderate, and coarser grains accumulate in burrows. Burrows are often large, 2 x 4 -5 cm in size; one is 34-37 cm and contains black grains and foraminifers. Benthic foraminiferss vary from sparse to common. There are occasional bivalve fragments; tubes and possible brachiopod fragments are also present. The following featrures also occur: wavy laminae, parallel laminae (one interval is ~5 cm thick), small concretions, possible pyrite concretions, and celestite crystalline concretions (~ 4 mm x 11 cm).



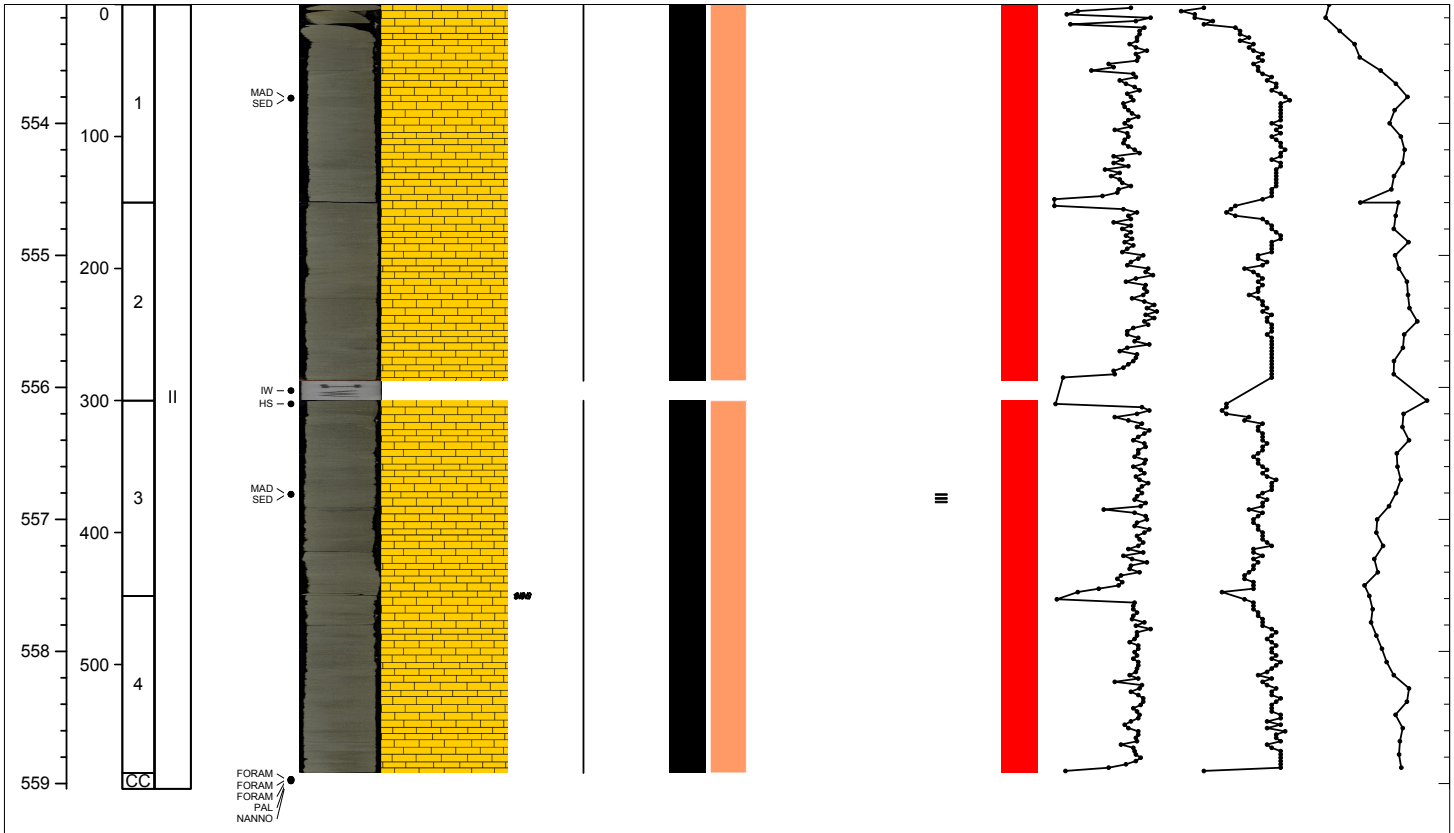
Hole 356-U1462A Core 58X, Interval 543.4-552.06 m (CSF-A)

Lithified, olive gray, coarse sand-sized, PACKSTONE that transitions down core to medium sand-size, sand-size, and then very fine sand-size (near base of core) grains. Throughout the core, there are intervals with coarser sand grains, bivalve (and sometimes gastropod) fragments (concentrated), black grains, bioturbation, and sometimes tubes (unidentified) and small benthic foraminifers. Moderate bioturbation occurs throughout the core. There are intervals of planar laminations, and there are contacts associated with laminations and bioturbation.



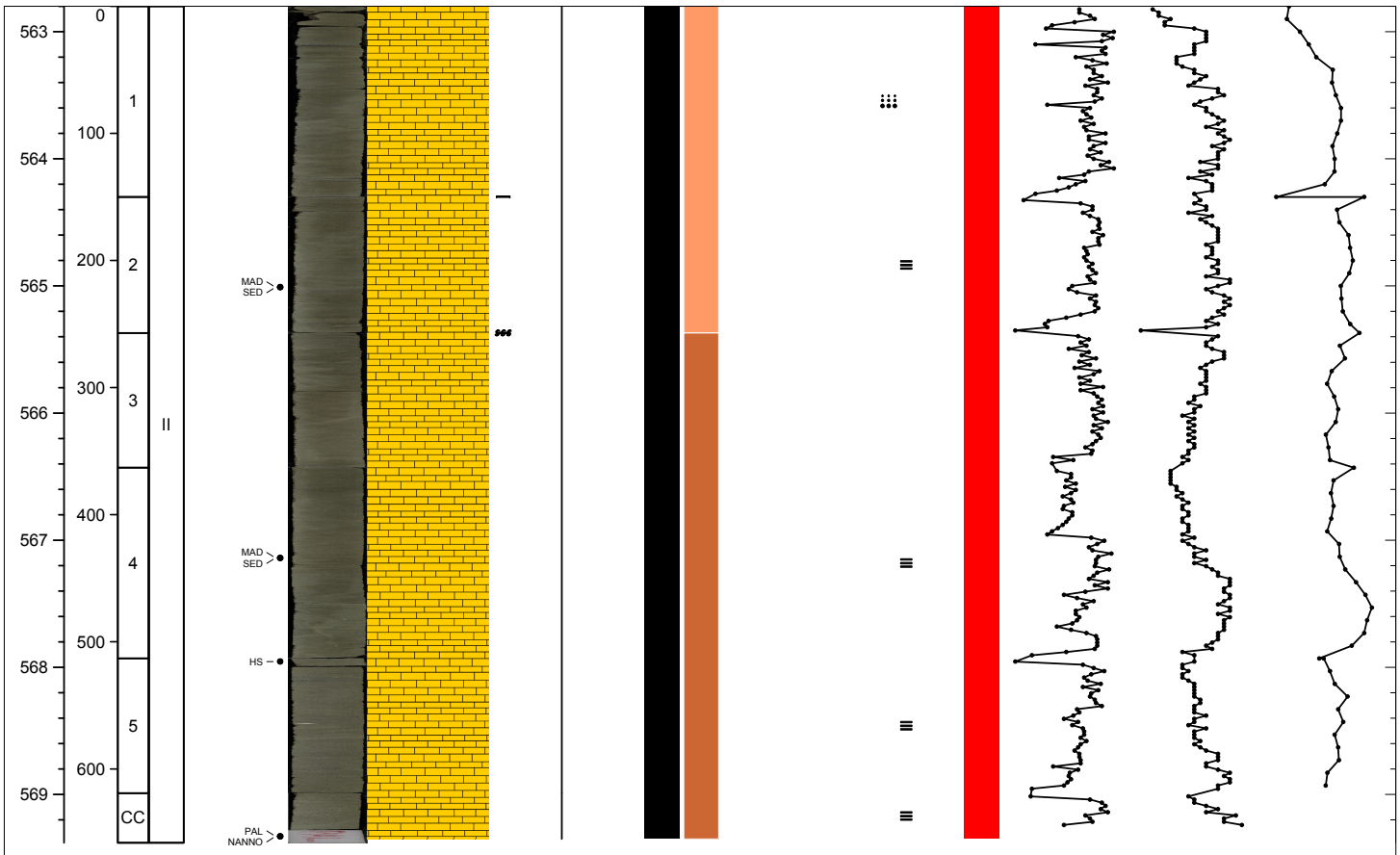
Hole 356-U1462A Core 59X, Interval 553.1-559.04 m (CSF-A)

Lithified, olive gray, sand-sized, PACKSTONE with moderate bioturbation. Throughout the core, there are intervals of coarse sand-size grains, black grains, bivalve fragments, foraminifers, and tube (unidentified) fragments. Benthic foraminifers are occasionally common. There are intervals with sedimentary structures - such as planar laminations and scoured contacts. At the scoured contact, there are coarse sand-size grains, black grains, and the macrofossils listed above.



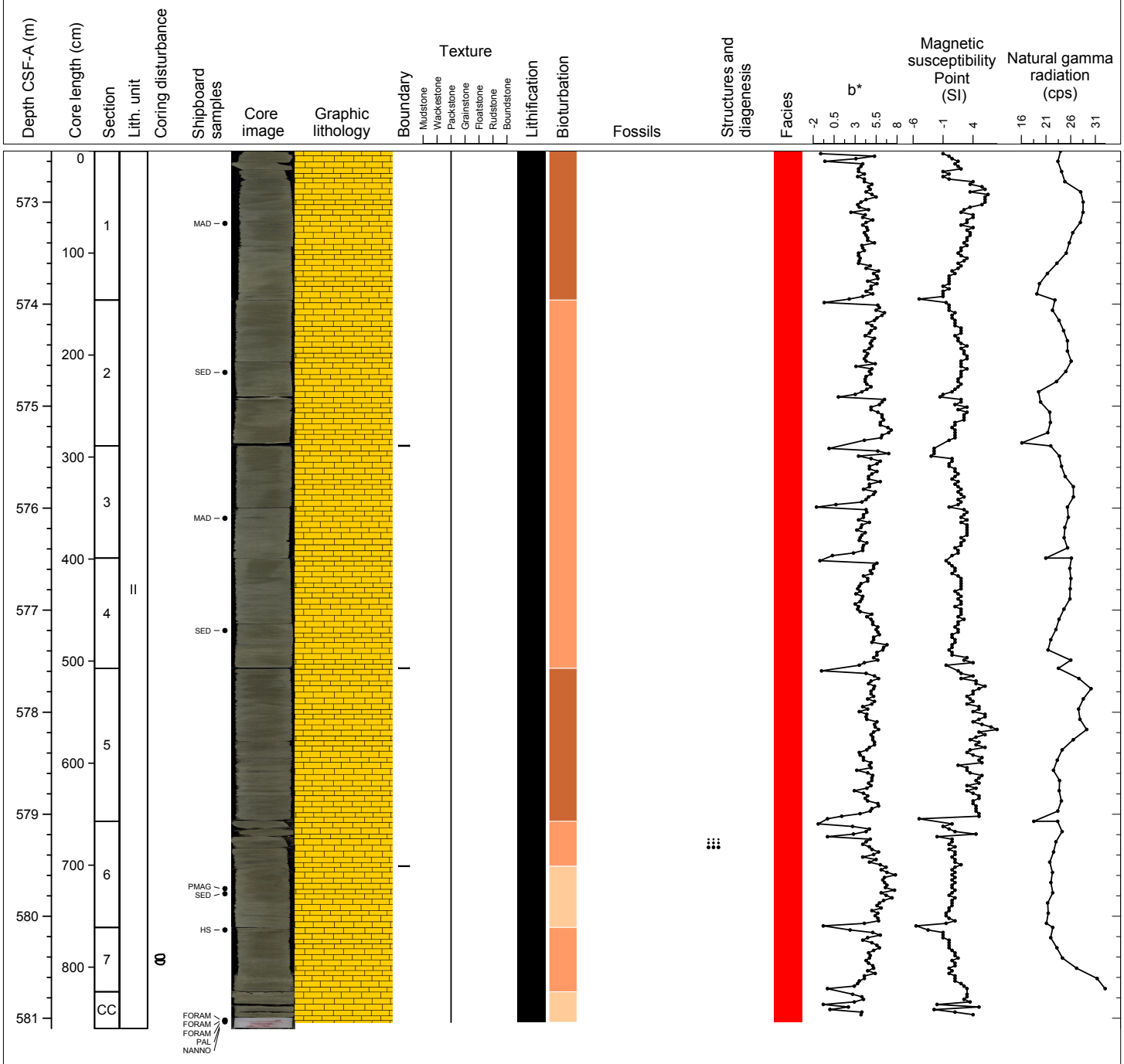
Hole 356-U1462A Core 60X, Interval 562.8-569.38 m (CSF-A)

Lithified, olive gray, coarse sand-size, PACKSTONE with moderate bioturbation. Coarser sand grains occur as beds (associated with black grains) with sharp basal or bioturbated contacts, in-filling burrows, and scattered throughout the matrix. Black grains are common, scattered throughout the matrix and concentrated in sandy areas and burrows. Bioturbation is generally common; bivalve fragments and benthic foraminifers are typically sparse. Occasionally there are very large burrows (e.g. 4 to 20 cm); dark crystal minerals are sometimes found in these larger burrows. Parallel/planar laminations (containing finer-grained sediment) occur throughout the core.



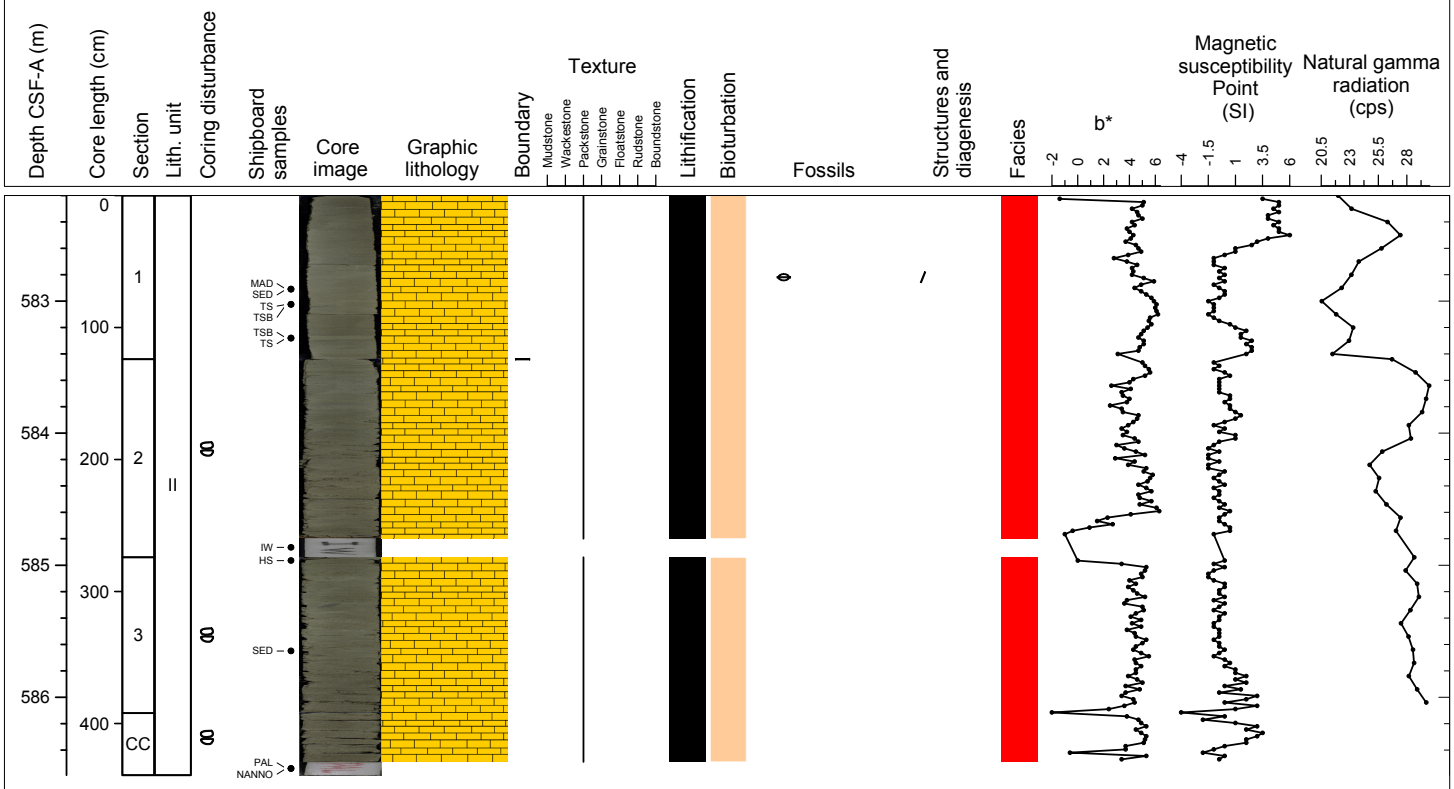
Hole 356-U1462A Core 61X, Interval 572.5-581.1 m (CSF-A)

Lithified, olive gray, sand-sized, PACKSTONE, sometimes with coarse sand-size grains scattered throughout the sediment. Bioturbation is moderate; some burrows are very large (cm's long), and some can be identified as zoophycus. Burrows are usually in-filled with sand-size grains and black grains. Beds (coarser-grained) and sharp contacts occur throughout the core; some contacts are sub-vertical and others are inclined. Some beds contain parallel laminations. In general, bivalve fragments and foraminifers are sparse. There is one very large clam fragment that looks to be bored by sponges (sample taken); bioeroded. Black grains sparse, typically throughout the core, sometimes more abundant above or below contacts. Near the base of the core, grain size transitions to very fine sand size, bioturbation becomes slight, macrofossils (foraminifers and bivalves) are rare to absent, and black grains are rare.



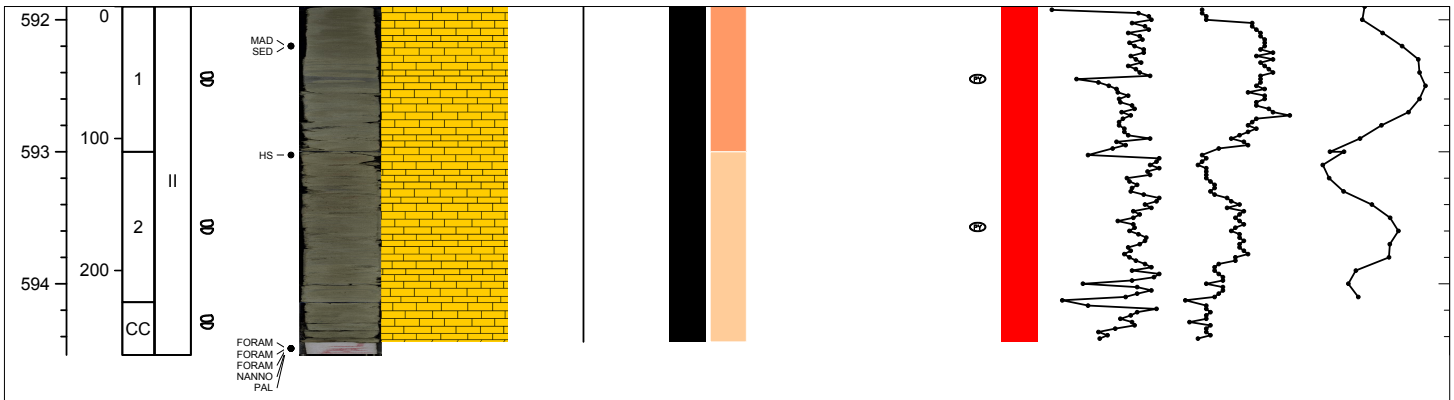
Hole 356-U1462A Core 62X, Interval 582.2-586.59 m (CSF-A)

Lithified, olive gray, sand-sized, PACKSTONE grades to fine sand-size grains in the lower half of the core. Bioturbation is moderate and decreases down core. Foraminifers range from sparse to common. Black grains vary from spare to common; they are most abundant in burrows. Bivalve fragments are rare. Synsedimentary faulting in Section 1, manifested by sediment displacement and linear features. Sharp contacts also occur in Section 1, noted by a light olive gray material between the contacts.



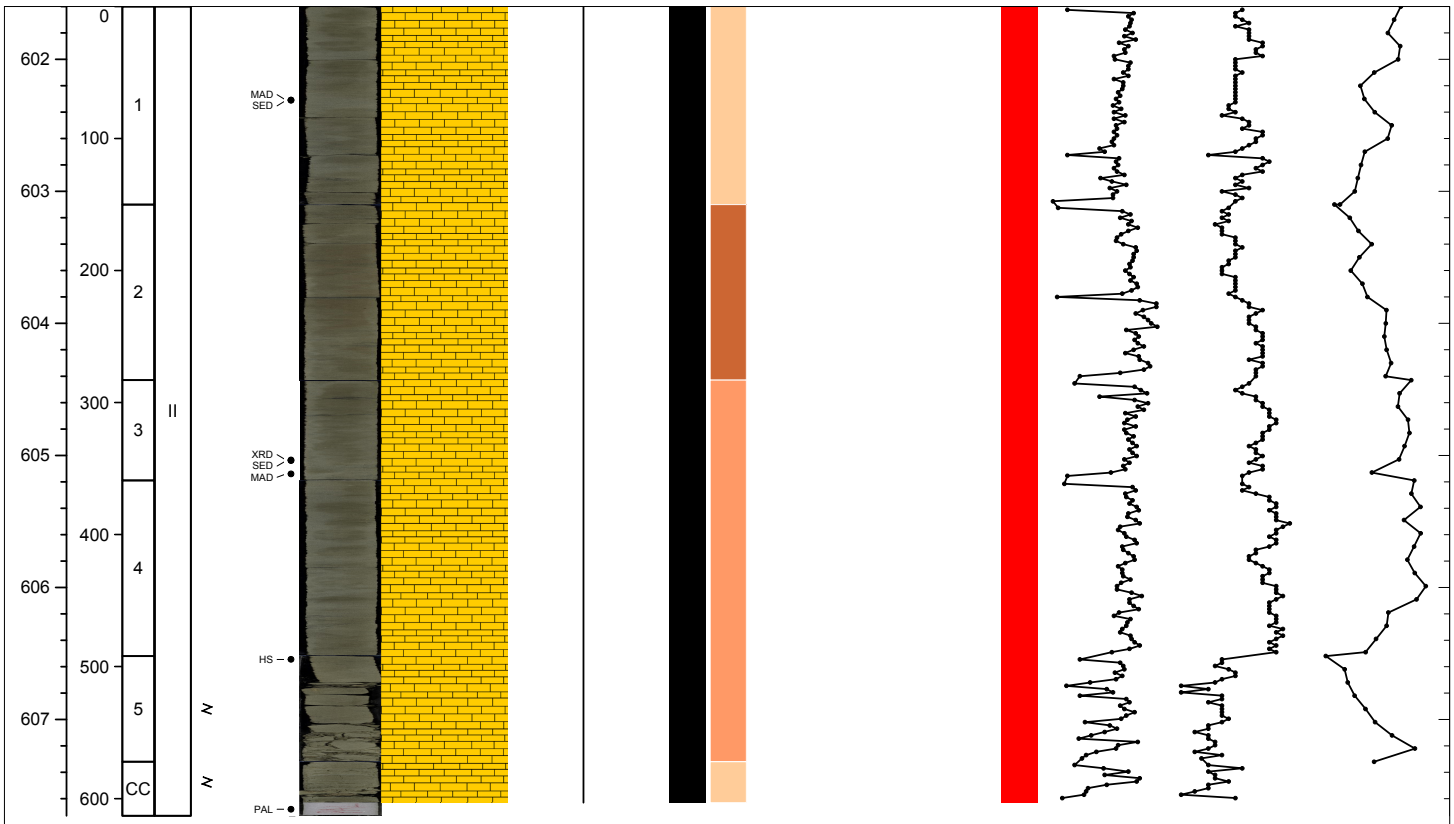
Hole 356-U1462A Core 63X, Interval 591.9-594.54 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE. Bioturbation is moderate near the top of the core and decreases in abundance with depth. Foraminifers and bivalves are sparse. There are many pyrite nodules (gravel size) throughout the core.



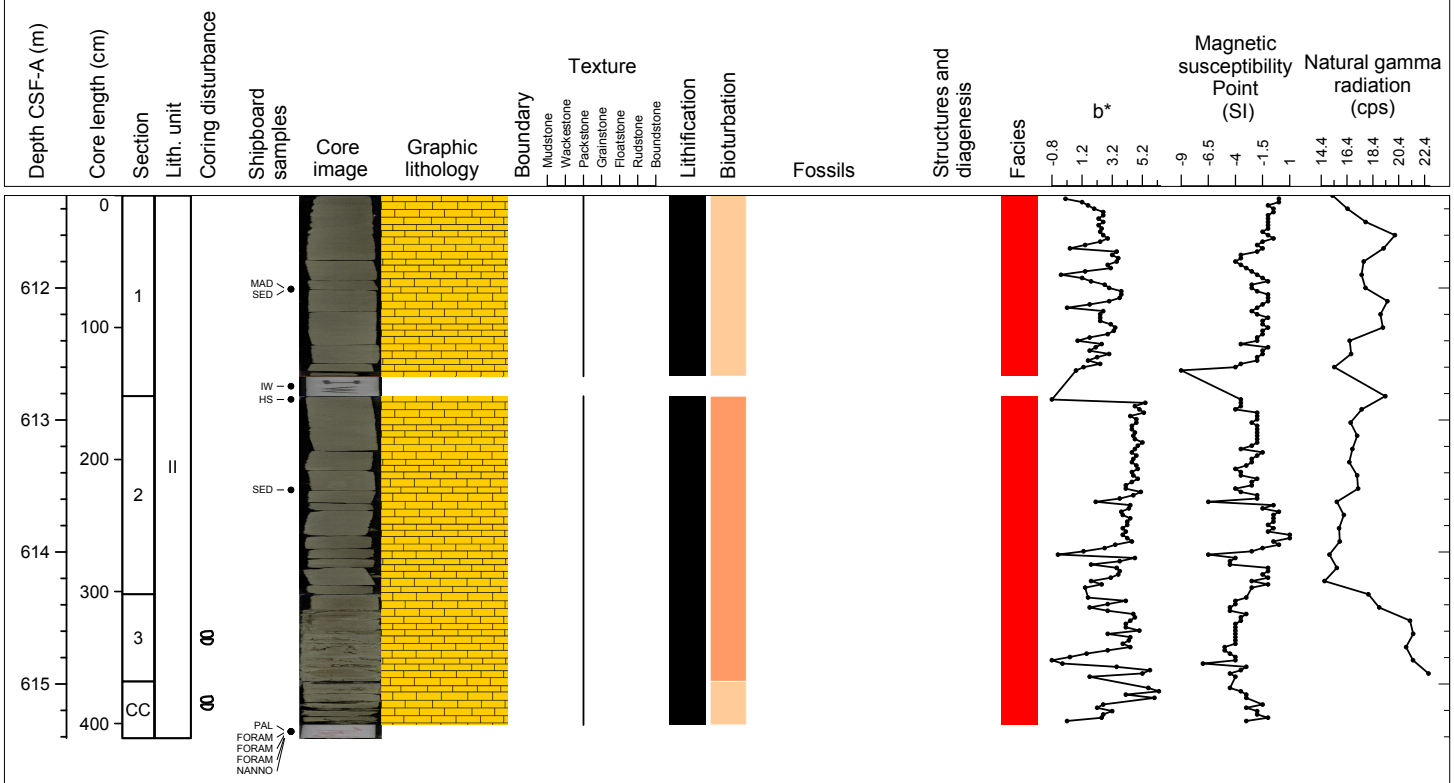
Hole 356-U1462A Core 64X, Interval 601.6-607.73 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE. Bioturbation is common to moderate, becoming less common with depth. Foraminifers and bivalve fragments are sparse. Black grains are present but concentrated in burrows. There is a contact in Section 4.



Hole 356-U1462A Core 65X, Interval 611.3-615.41 m (CSF-A)

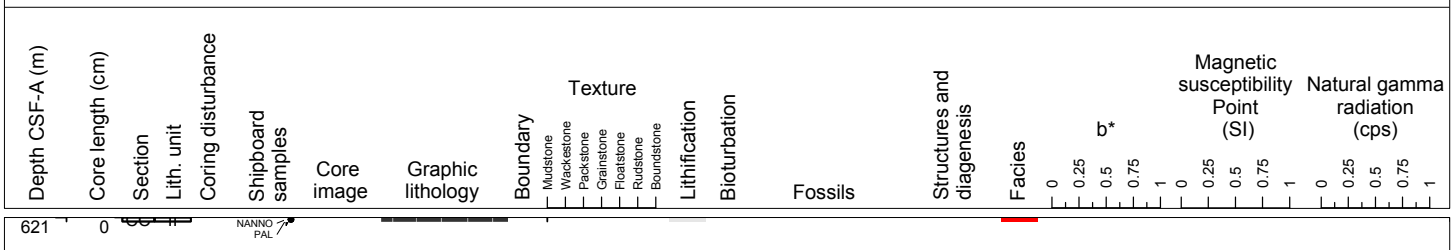
Lithified, olive gray, very fine to fine sand-sized, PACKSTONE. Bioturbation is moderate, and burrows sometimes contain celestite (small sand-size grains). Black gains are scattered throughout some of the sections of the core. Benthic foraminifers and bivalve fragments are sparse.



ALL TO PAL

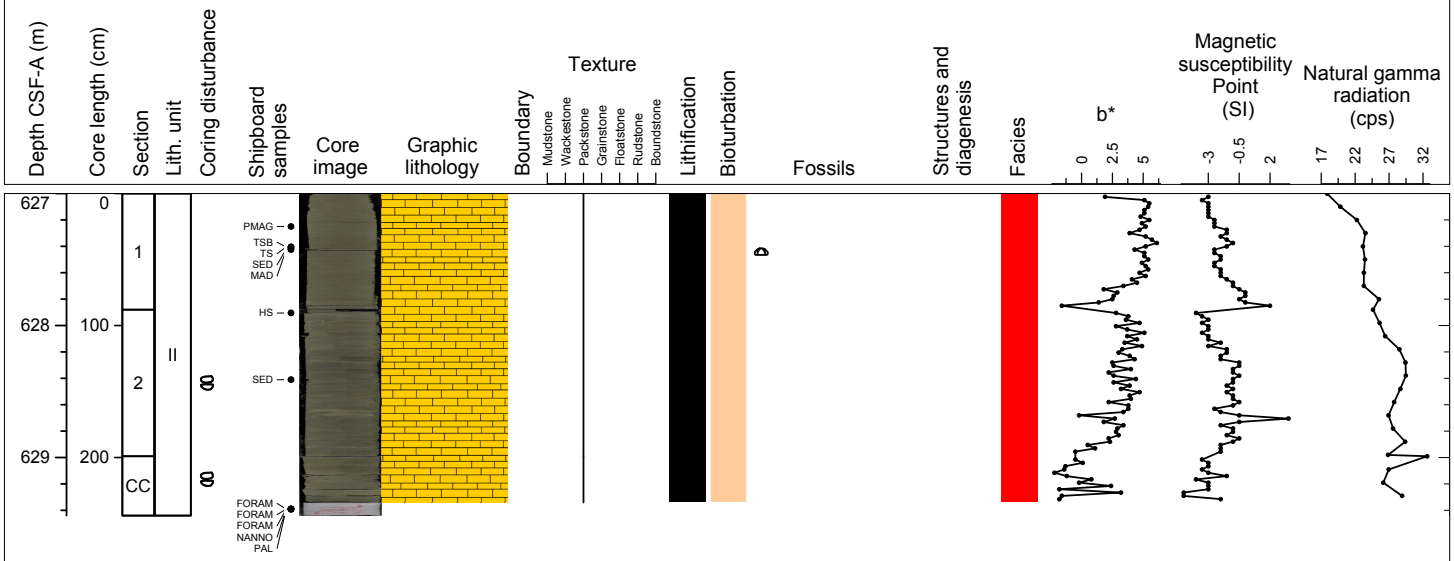
Hole 356-U1462A Core 66X, Interval 621.0-621.03 m (CSF-A)

Unlithified, greenish gray, MUDSTONE.



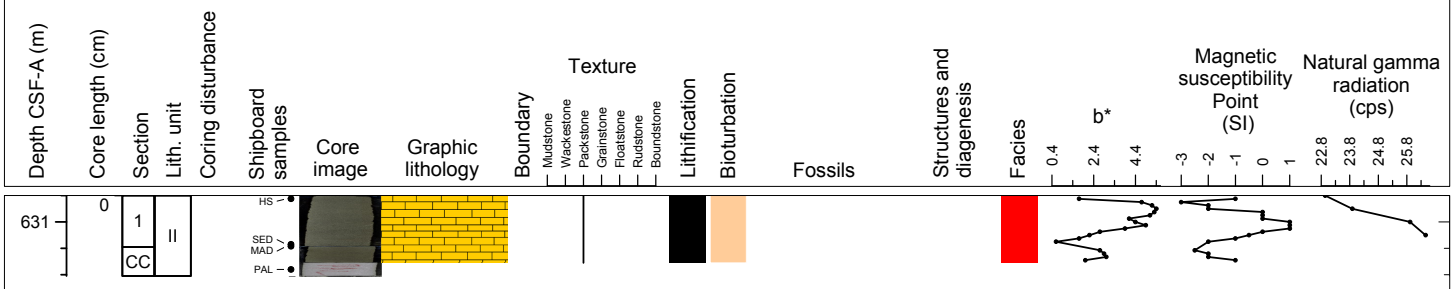
Hole 356-U1462A Core 67X, Interval 627.0-629.44 m (CSF-A)

Lithified, olive gray, very fine sand-sized, PACKSTONE with slight bioturbation. Small benthic foraminifers are abundant in the first core section. Drilling disturbance is due to bowing and biscuiting.



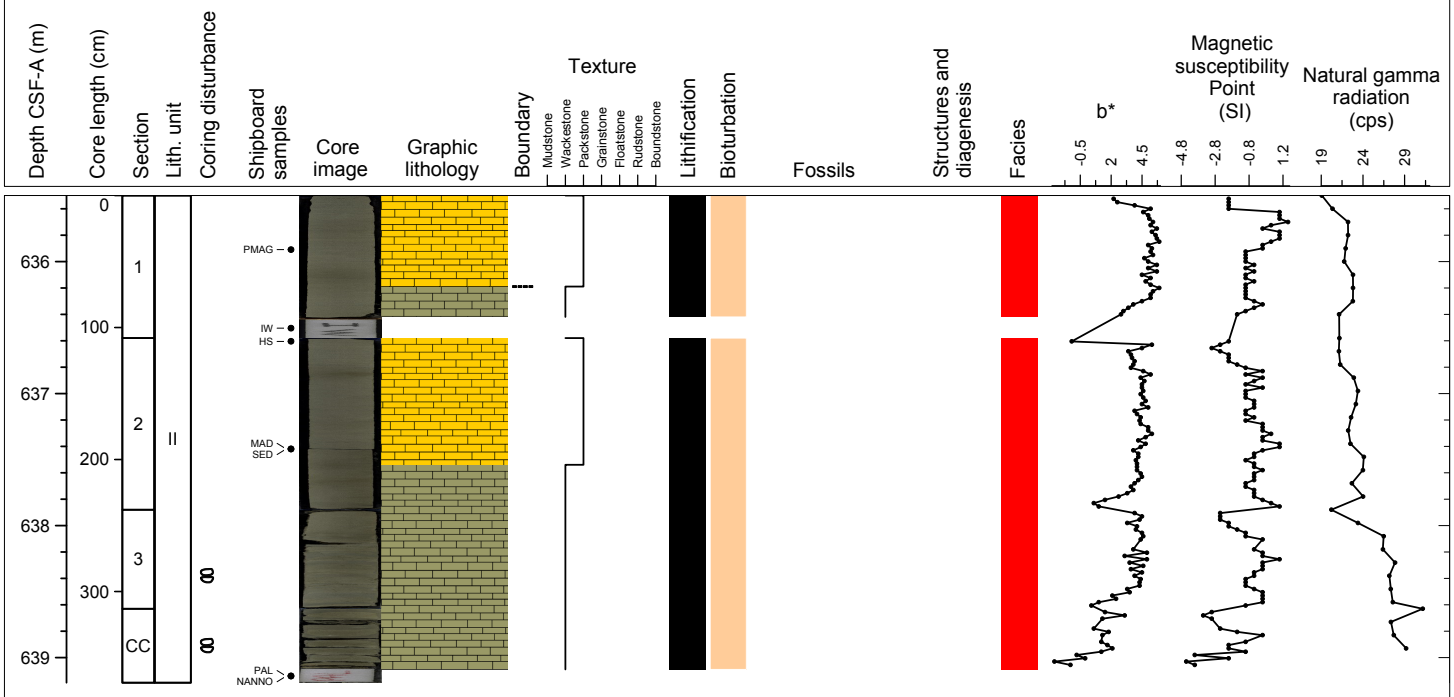
Hole 356-U1462A Core 68X, Interval 630.8-631.41 m (CSF-A)

Lithified, olive gray, very fine sand- to silt-sized, PACKSTONE. Flaser bedding-like texture with dark olive-green WACKSTONE occurs within the fine-grained packstone, and may possibly be due to bioturbation,



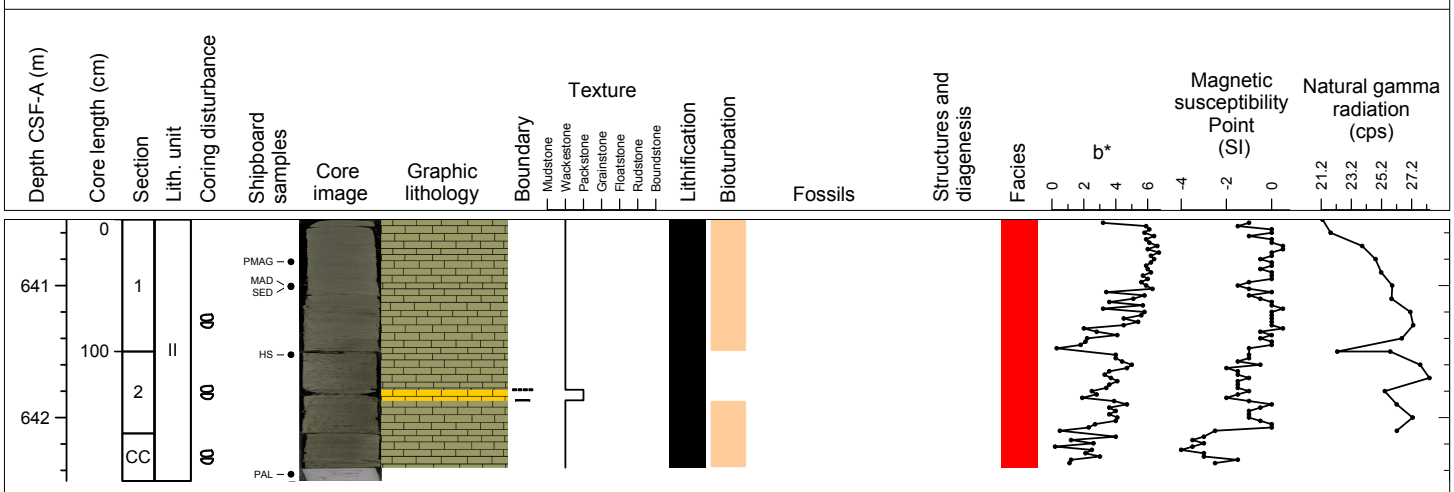
Hole 356-U1462A Core 69X, Interval 635.5-639.19 m (CSF-A)

Lithified, olive gray, silt to very fine sand-sized, PACKSTONE alternates with wavy layers of lithified, dark grayish green, fine sand-sized, WACKESTONE with small benthic formainifers. There is slight bioturbation.



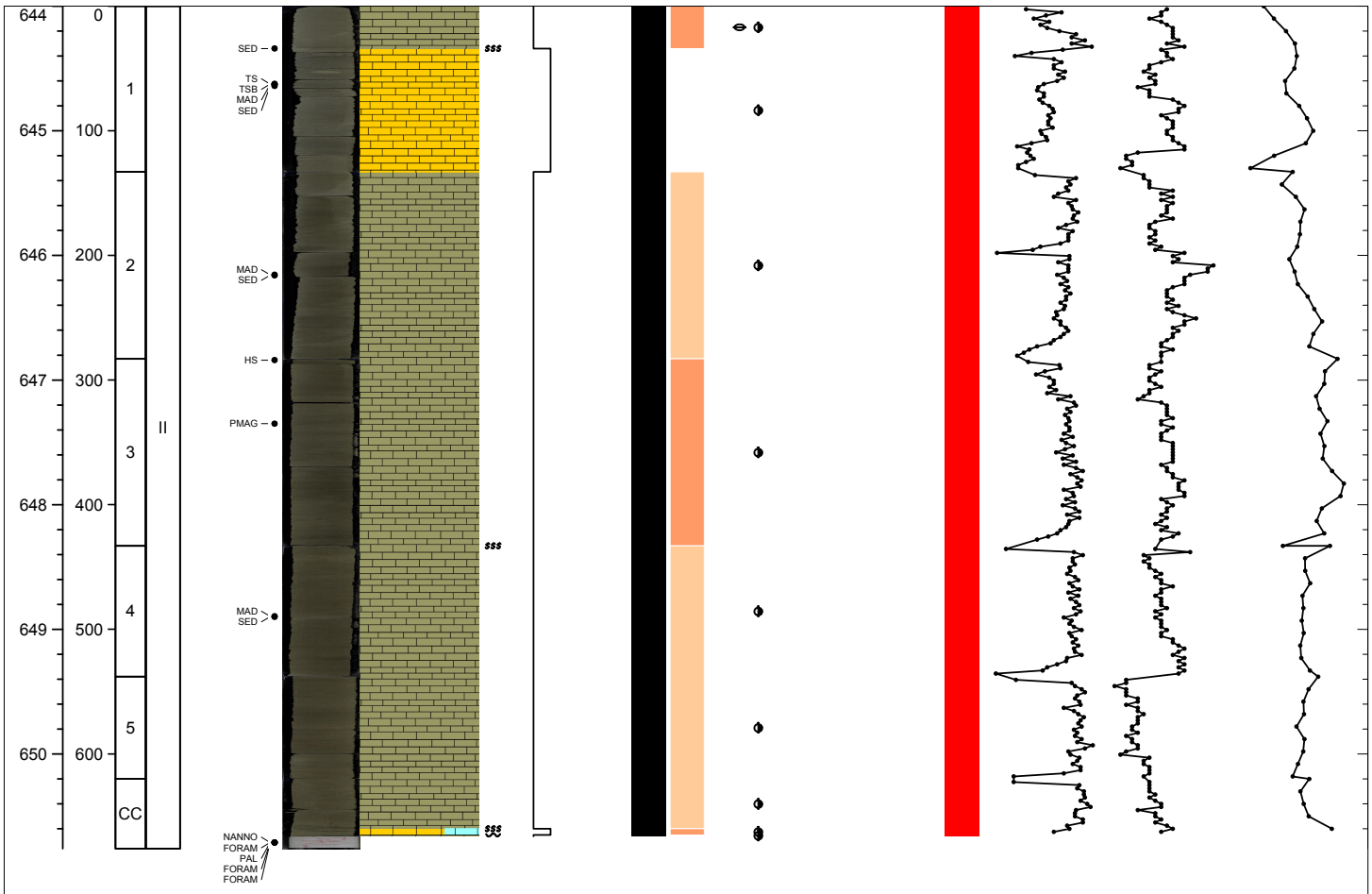
Hole 356-U1462A Core 70X, Interval 640.5-642.48 m (CSF-A)

Lithified, olive gray to dark grayish-green, silt to very fine sand-sized, WACKESTONE with wavy layers of lithified, fine sand-sized, PACKSTONE with small benthic foraminifers.



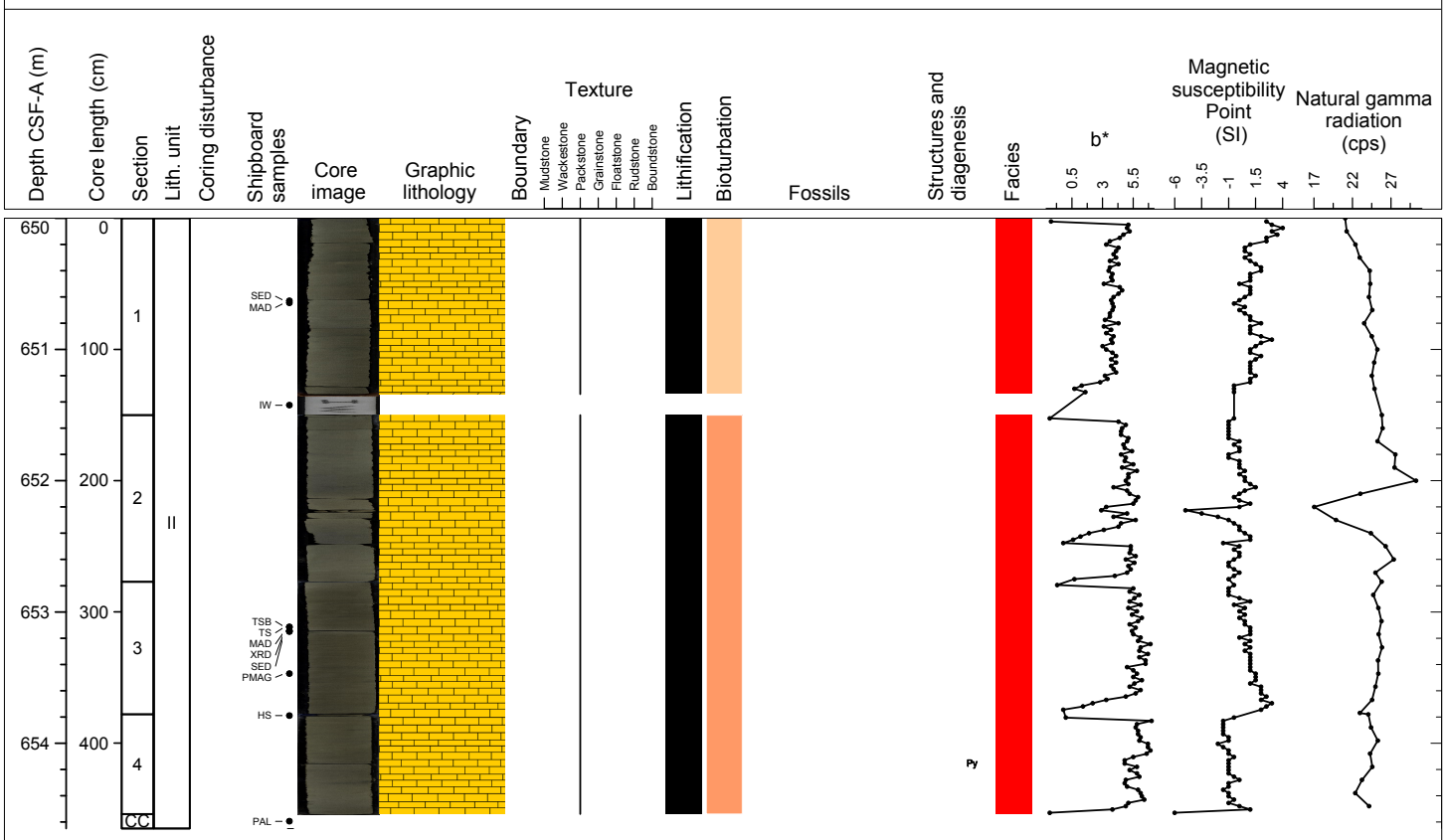
Hole 356-U1462A Core 71X, Interval 644.0-650.76 m (CSF-A)

Lithified, dark green, very fine sand-sized, WACKESTONE to PACKSTONE with pyritized, small benthic foraminifers and bivalve fragments. There is slight bioturbation.



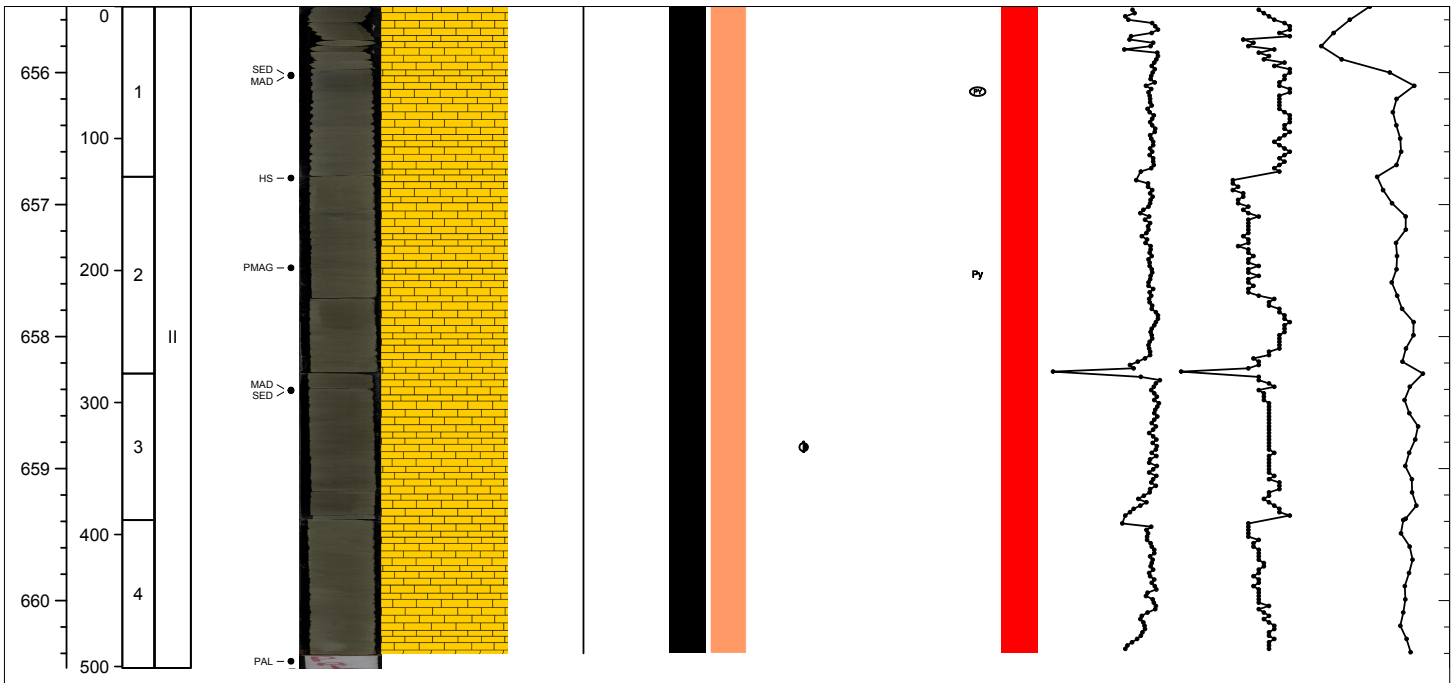
Hole 356-U1462A Core 72X, Interval 650.0-654.65 m (CSF-A)

Lithified, olive gray, very fine sand- to silt-sized, PACKSTONE. Flaser bedding-like texture with dark olive-green WACKESTONE occurs within the packstone; this possibly could be due to bioturbation. Disseminated pyrite occurs sporadically. There are slight changes in color and grain size that may possibly indicate erosional bottom contacts.



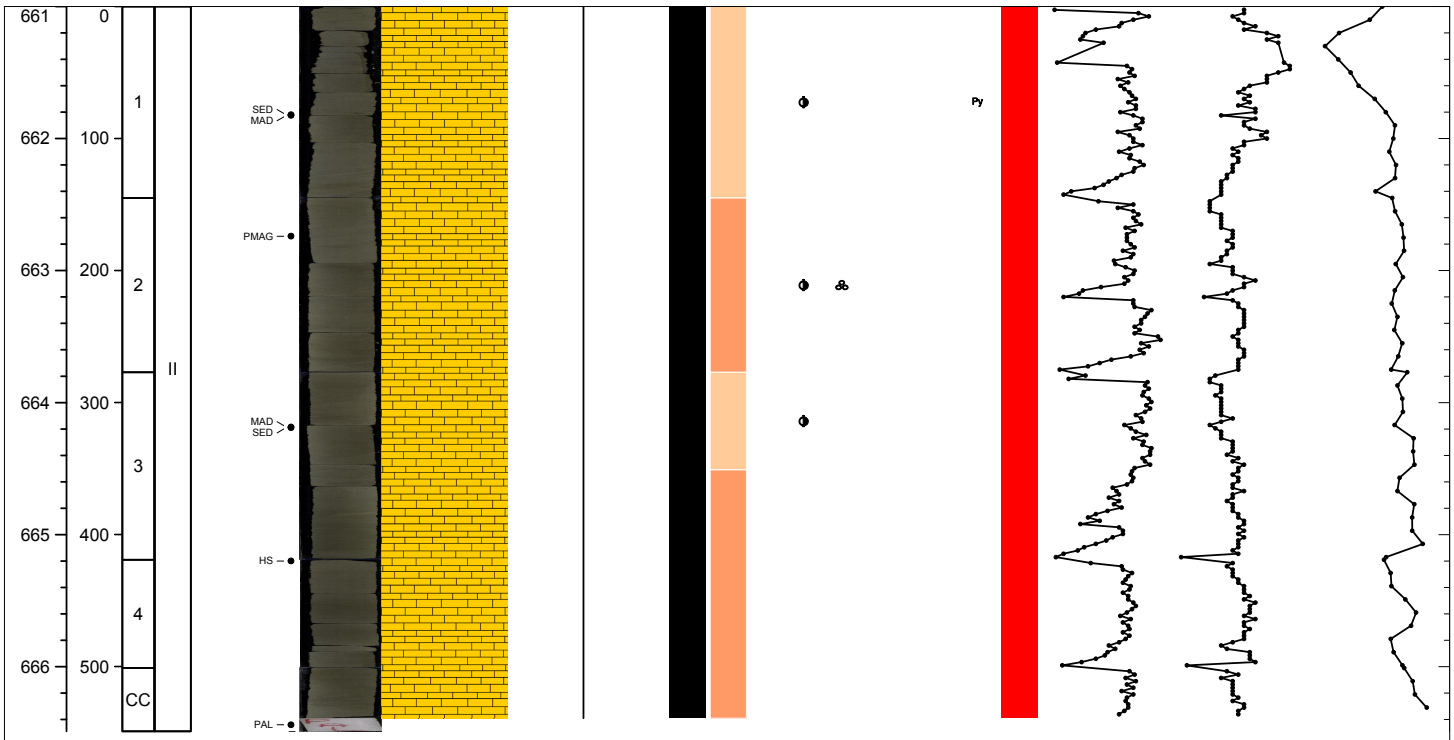
Hole 356-U1462A Core 73X, Interval 655.5-660.51 m (CSF-A)

Lithified, olive gray, very fine sand- to silt-sized, PACKSTONE. Flaser bedding-like texture with dark olive green WACKESTONE occurs within the packstone; this possibly could be due to bioturbation. Small benthic foraminifers are present throughout the core and also concentrated in some cm-thick layers.



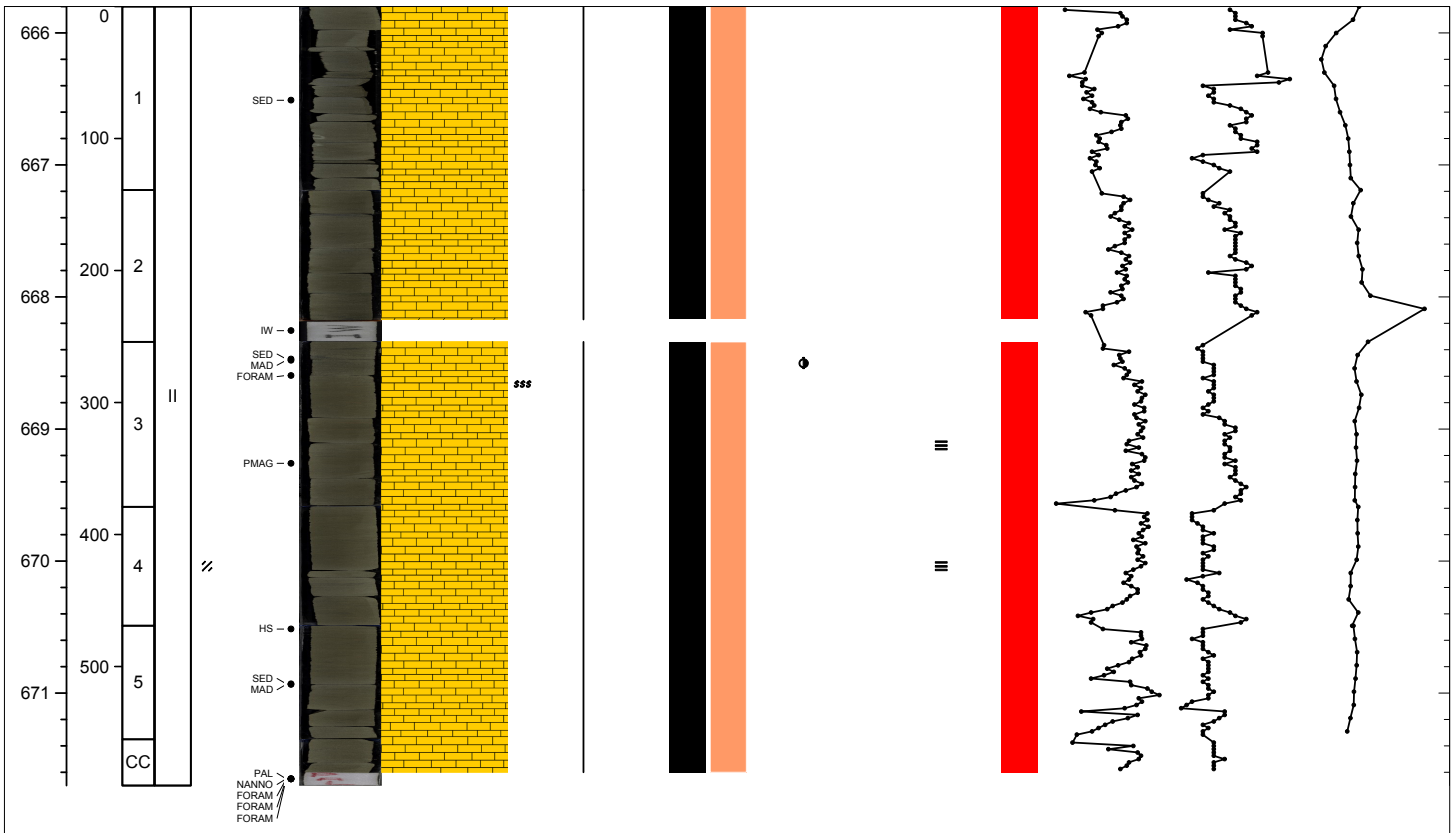
Hole 356-U1462A Core 74X, Interval 661.0-666.49 m (CSF-A)

Lithified, dark greenish-gray, fine sand-sized, PACKSTONE. Small benthic foraminifers are present throughout the core but become very abundant in the upper part of core section 3.



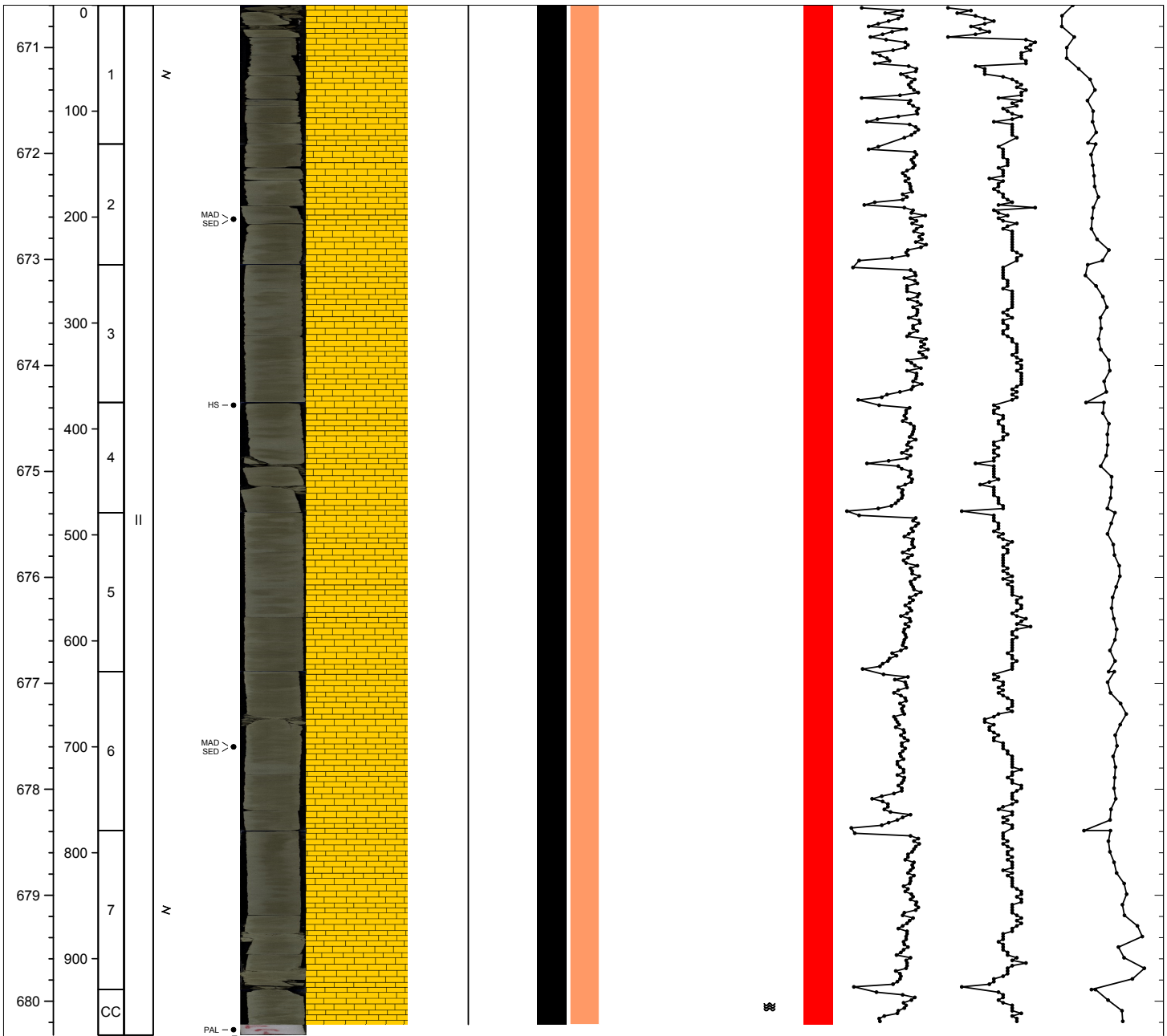
Hole 356-U1462A Core 75X, Interval 665.8-671.7 m (CSF-A)

Lithified, dark greenish-gray, PACKSTONE. Grain size fluctuates between very fine sand-size to fine to coarse sand-sized grains. Bioturbation is moderate. Small benthic foraminifers are present throughout the core but range from abundant to sparse; they are concentrated in burrows as well. Patches of disseminated pyrite and parallel laminae occur in the lower half of the core.



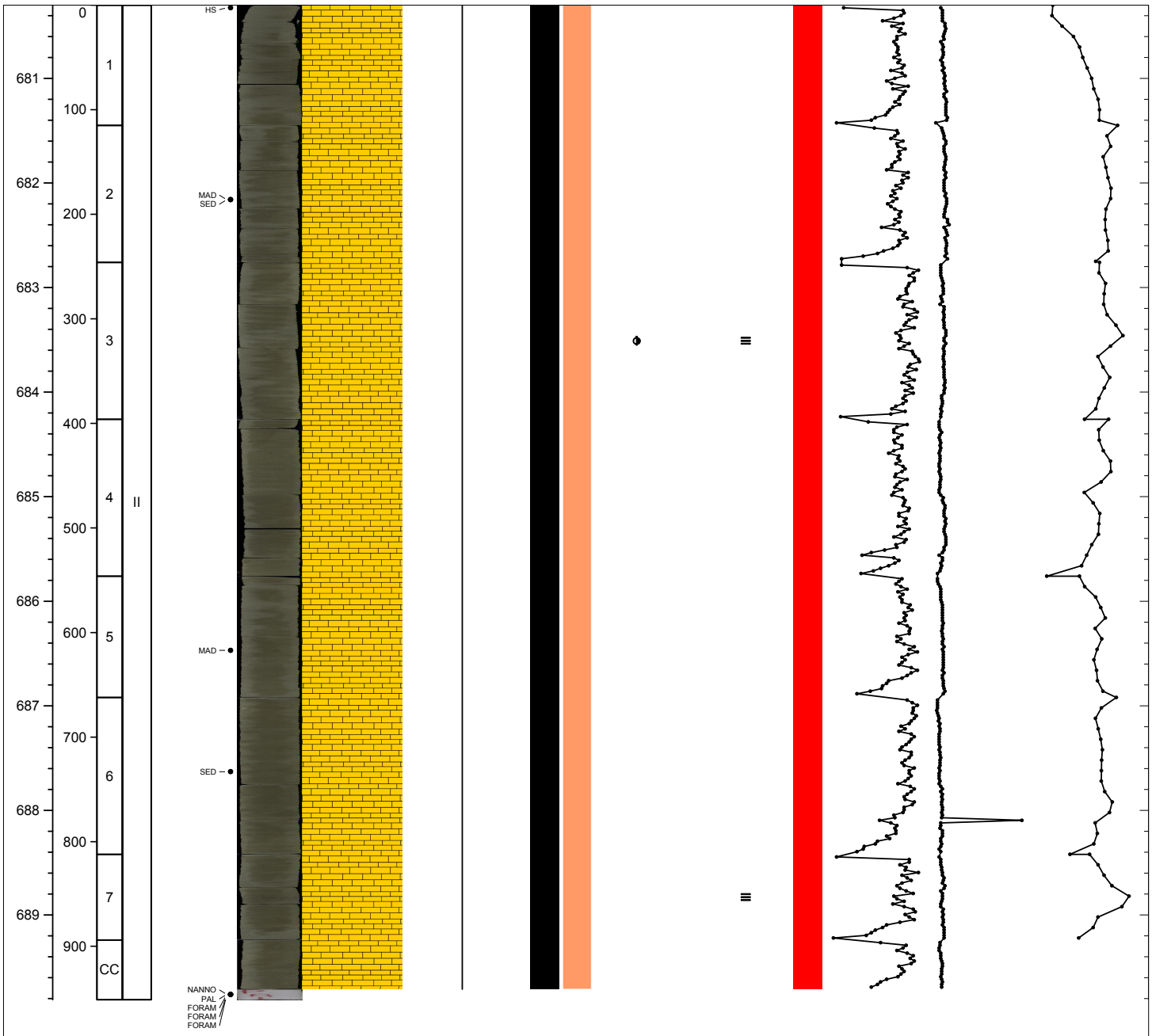
Hole 356-U1462A Core 76X, Interval 670.6-680.32 m (CSF-A)

Lithified, dark greenish-gray, fine sand-sized, PACKSTONE with moderate bioturbation. Small benthic foraminifers are sparse, yet concentrated in burrows. Black minerals are common and are also concentrated in burrows. Parallel laminae (with mineral concentrations between them) occur near the top of the core, and wavy laminae occur near the base of the core.



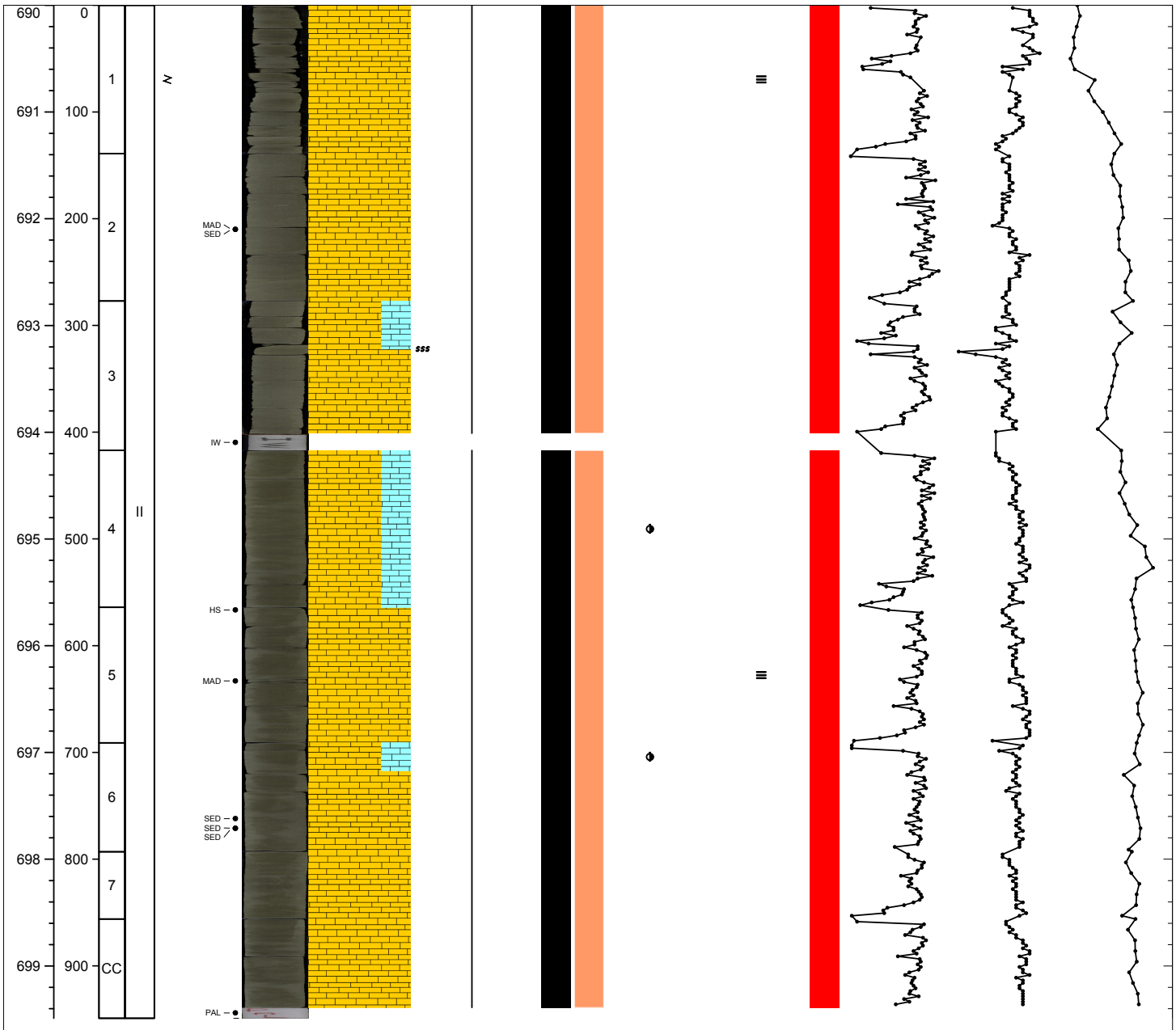
Hole 356-U1462A Core 77X, Interval 680.3-689.81 m (CSF-A)

Lithified, dark greenish-gray, fine sand-sized, PACKSTONE with moderate bioturbation. Small benthic foraminifers are generally sparse but are common in some intervals; they are also more concentrated in burrows - as are black mineral grains. Wavy laminae (1-2 cm thick and containing greater concentrations of benthic foraminifers and black grains) and planar laminae (without foraminifers but with black mineral grains) occur in the lower half of the core.



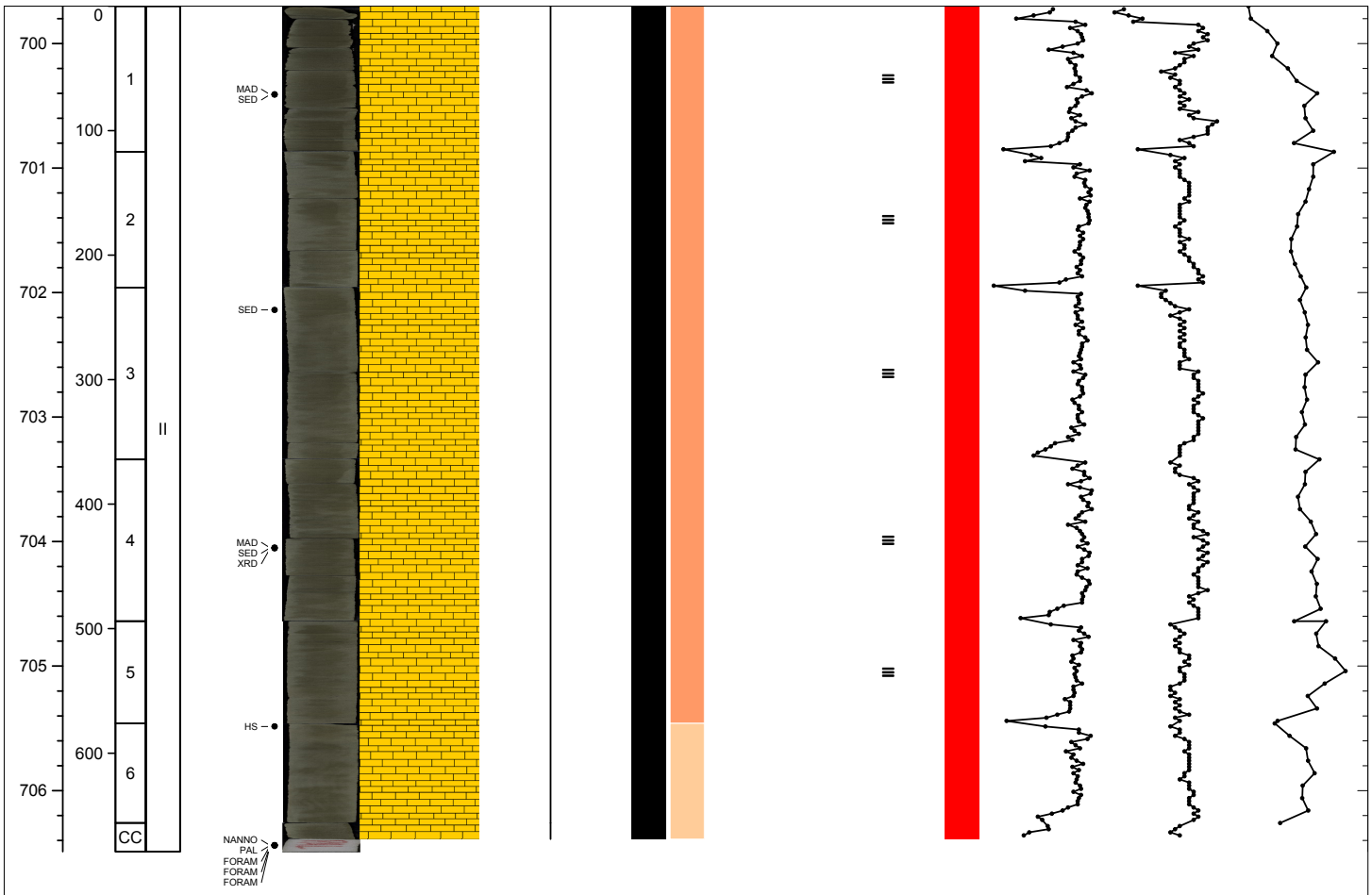
Hole 356-U1462A Core 78X, Interval 690.0-699.49 m (CSF-A)

Lithified, dark greenish-gray, sand to fine sand-sized, PACKSTONE with moderate bioturbation. Small benthic foraminifers are generally common, except near the base of the core where they become sparse. There are intervals of parallel laminae throughout the core. Coarser sands, foraminifers, and black minerals are concentrated in these intervals. There are also "vertical wiggly features" (unidentified) occurring throughout the bottom half of the core.



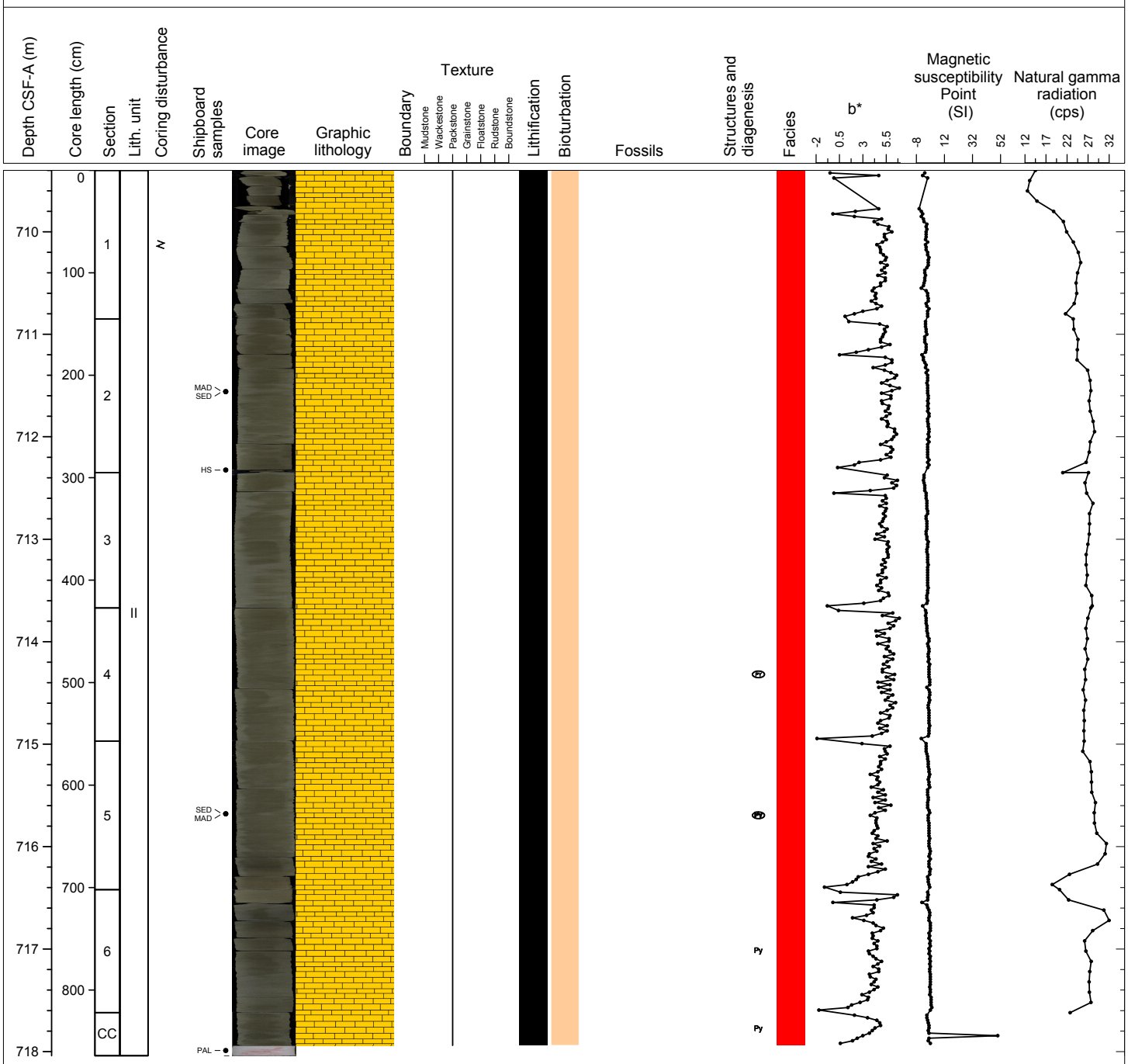
Hole 356-U1462A Core 79X, Interval 699.7-706.49 m (CSF-A)

Lithified, dark greenish-gray, fine sand-sized, PACKSTONE with moderate bioturbation. Bioturbation decreases near the base of the core. Parallel laminations are common throughout the core. Some laminae are rich in black minerals, whereas others contain a lot of benthic foraminifers.



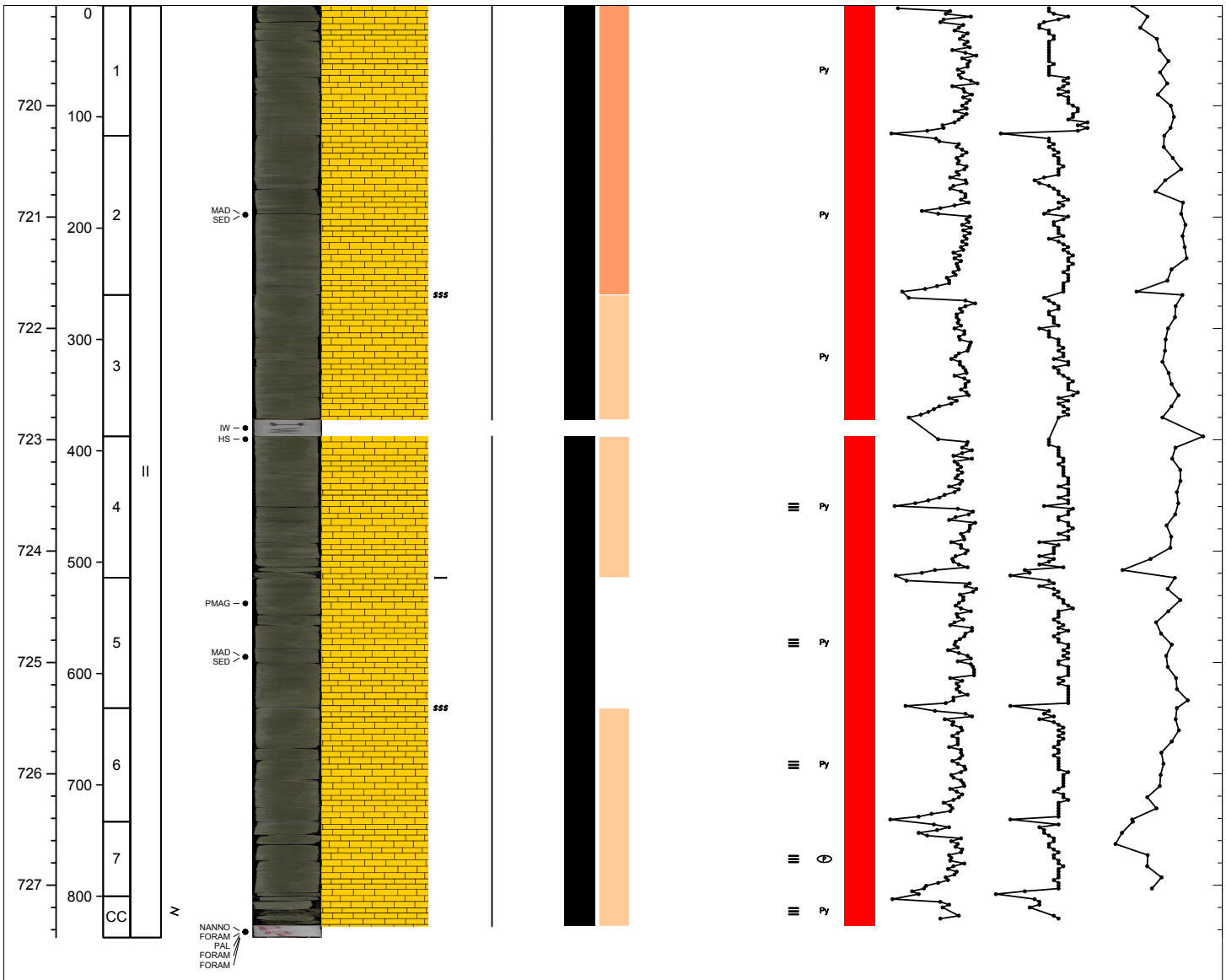
Hole 356-U1462A Core 80X, Interval 709.4-718.04 m (CSF-A)

Homogeneous, lithified, dark greenish-gray, fine sand-sized, PACKSTONE with slight bioturbation and sparse small benthic foraminifers (concentrated in burrows). Halfway down the core, grain size fines to very fine sand-size grains and pyrite occurs as disseminated grains and nodules.



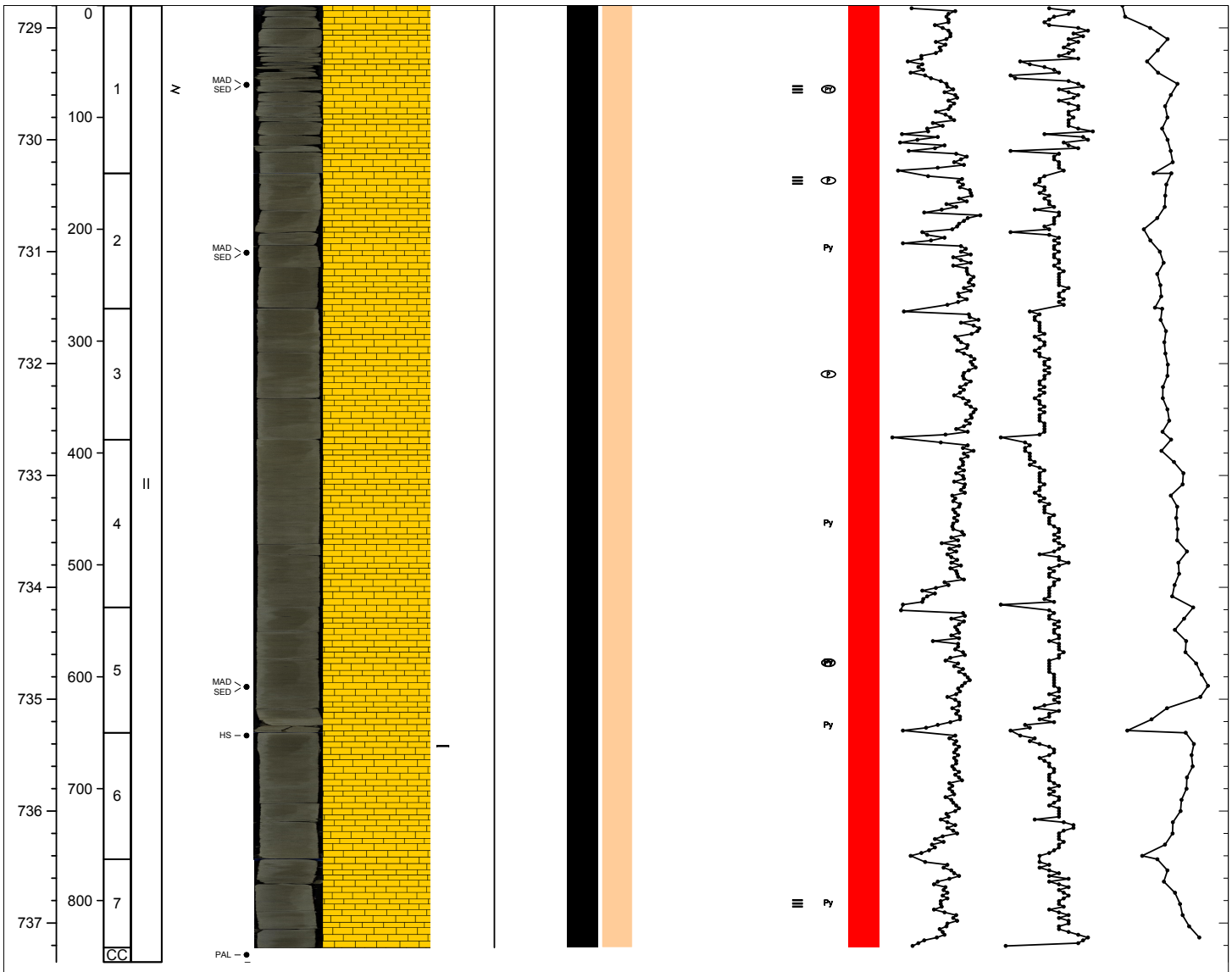
Hole 356-U1462A Core 81X, Interval 719.1-727.47 m (CSF-A)

Homogeneous, lithified, dark greenish-gray, very fine sand-sized, PACKSTONE with moderate bioturbation. Bioturbation decreases with depth and is slight for most of the core. Parallel laminae are present throughout much of the core, and they typically contain pyrite. Pyrite is also disseminated throughout the core. There are bioturbated contacts as well as a few sharp sub-horizontal contacts associated with several laminae and pyrite. Benthic foraminifers are sparse.



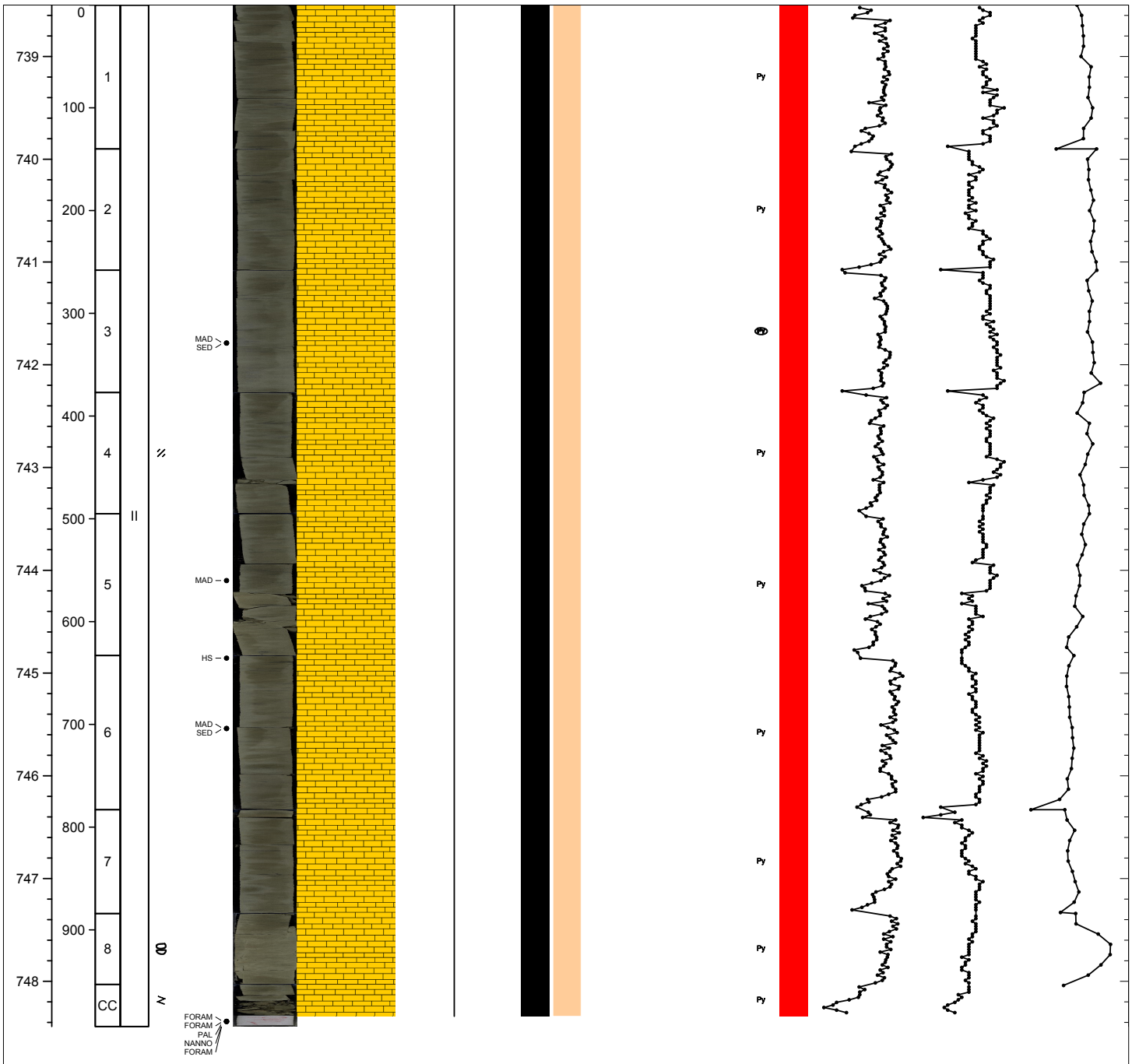
Hole 356-U1462A Core 82X, Interval 728.8-737.35 m (CSF-A)

Lithified, dark greenish-gray, sand-sized, PACKSTONE that fines to very fine sand-size grains with depth. Bioturbation is slight. (Dense) laminations are common and often contain abundant pyrite grains and coarser sand-size grains. Benthic foraminifers are very sparse.



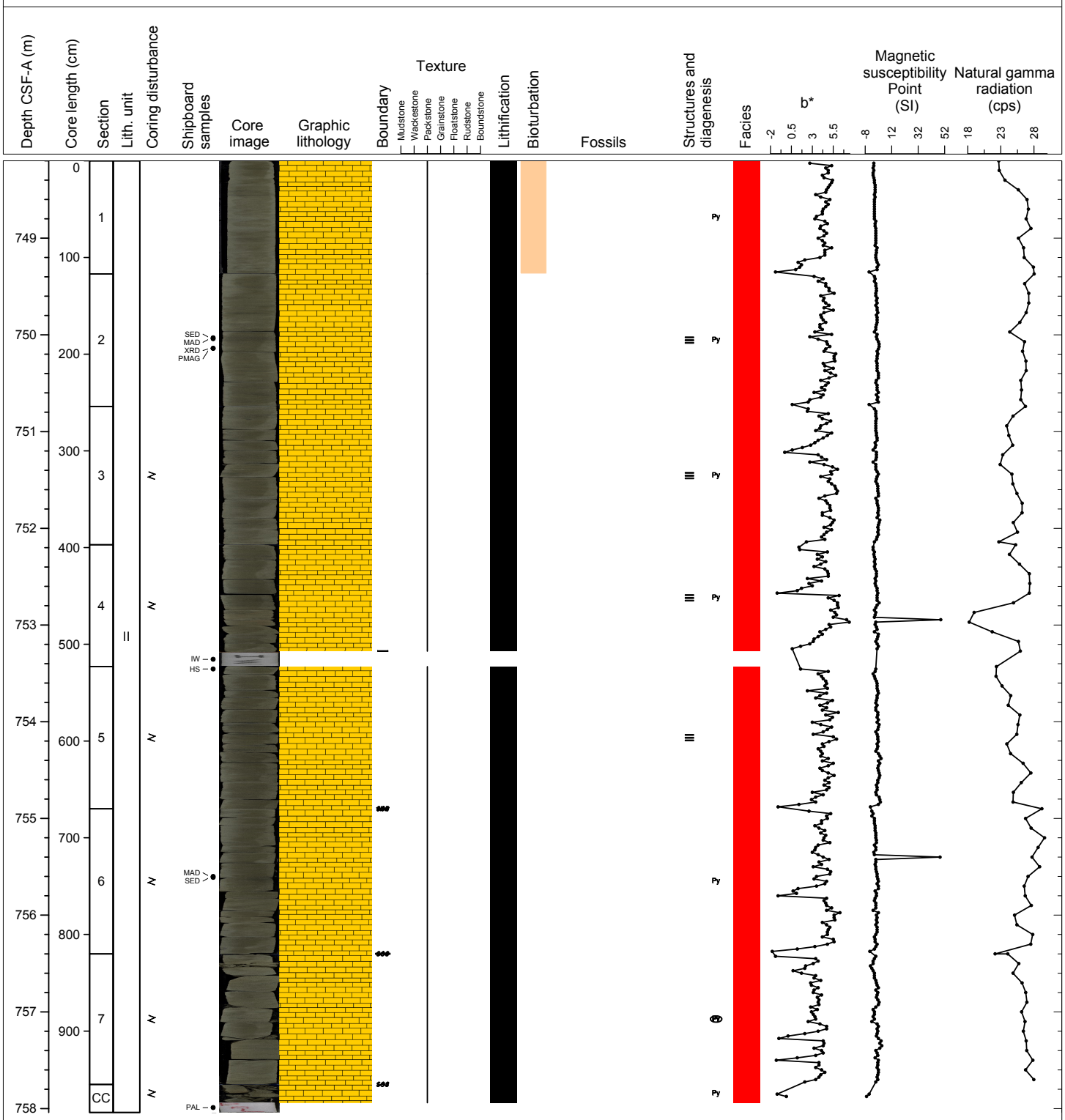
Hole 356-U1462A Core 83X, Interval 738.5-748.44 m (CSF-A)

Lithified, dark greenish-gray, very fine sand-size, PACKSTONE with slight bioturbation. Disseminated pyrite is abundant at the top of the core and then becomes common for the rest of the core. Benthic foraminifers are very sparse.



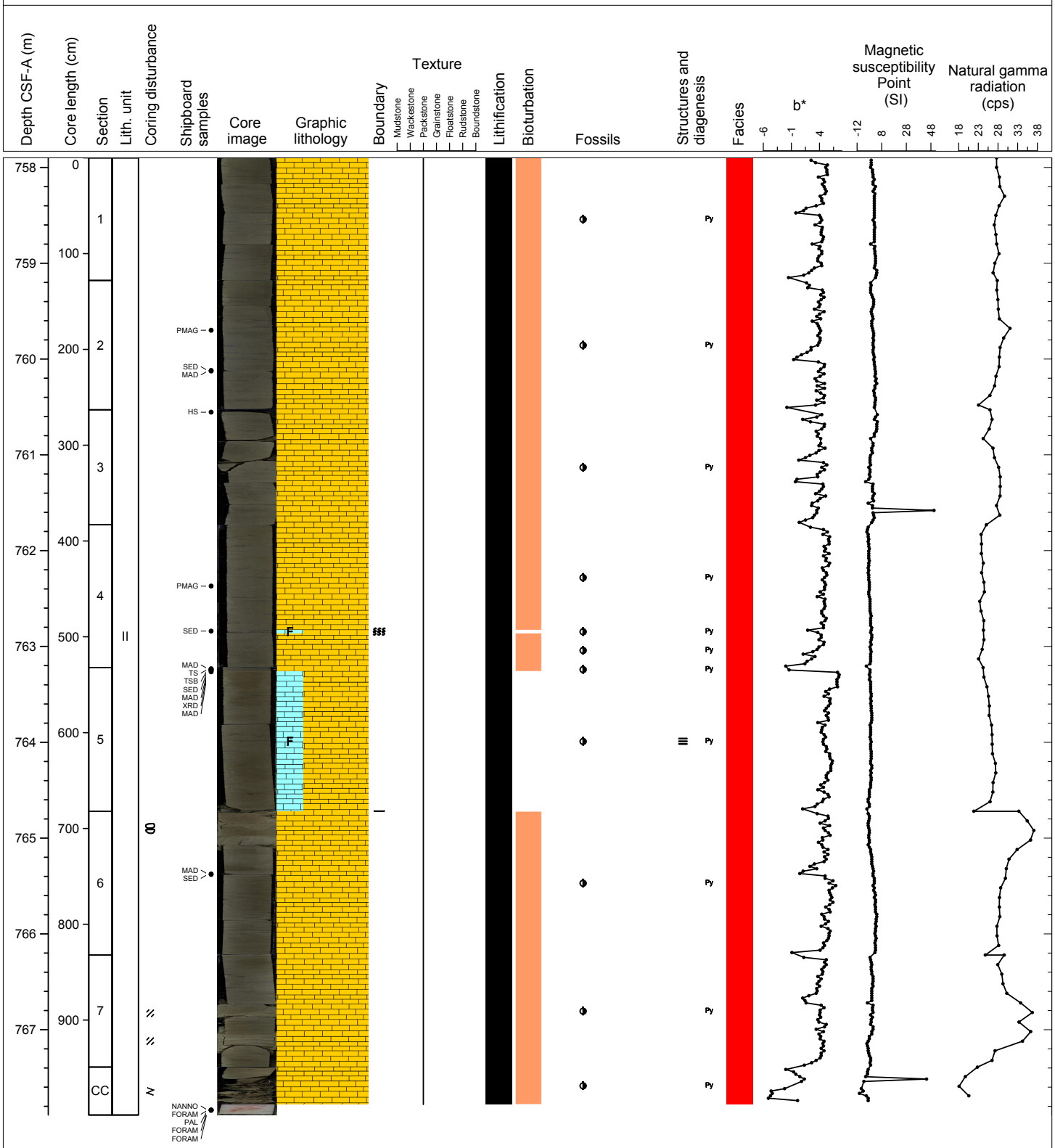
Hole 356-U1462A Core 84X, Interval 748.2-758.04 m (CSF-A)

Lithified, dark greenish-gray, very fine sand-sized, PACKSTONE with slight bioturbation. Disseminated pyrite varies from sparse to common throughout the core. Parallel and wavy laminae are present and are noted by pyrite grains. Benthic foraminifers are very sparse. In Section 3, grain size coarsens to sand-size grains. Within sand-rich intervals, disseminated pyrite is common. Sand-size grains are concentrated in/especially common with parallel laminae and beds, wavy and bioturbated contacts, and burrows. There are various contact surfaces present in Section 5. Bivalve fragments are rare, and there are small pyrite nodules (mm's length).



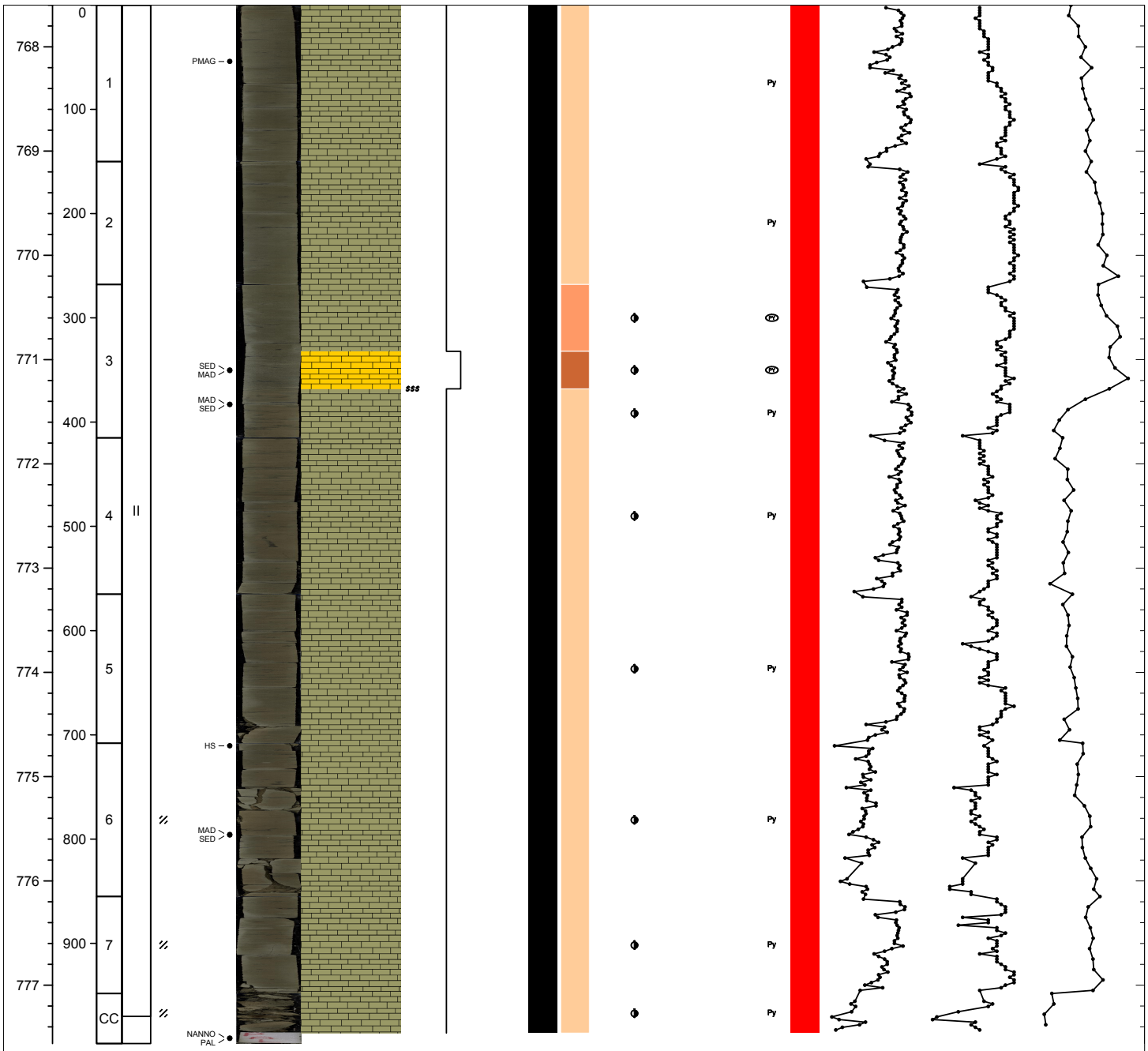
Hole 356-U1462A Core 85X, Interval 757.9-767.89 m (CSF-A)

Lithified, dark greenish-gray, very fine to fine sand-sized, PACKSTONE with small benthic foraminifers and sparse macrofossils. Within the sand-size-rich intervals, foraminifers and disseminated pyrite are common.



Hole 356-U1462A Core 86X, Interval 767.6-777.56 m (CSF-A)

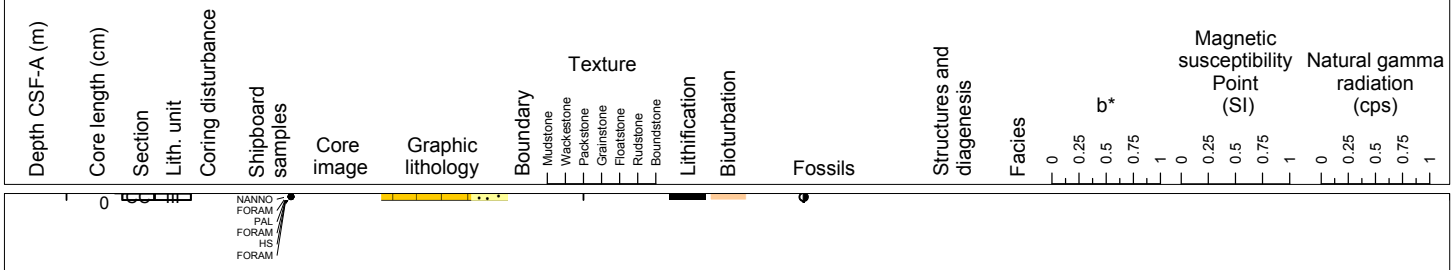
Lithified, dark greenish-gray to olive gray, WACKESTONE with with variable amounts of small benthic foraminifers. Foraminifers are often concentrated in bioturbation traces. In section 3 the content of small benthic foraminifers is high, forming a PACKSTONE interval. The bottom contact between the packstone and the underlying wackestone is bioturbated and marked by a change in color from dark greenish gray to olive grey. Pyrite occurs in nodular and disseminated form.



ALL TO PAL

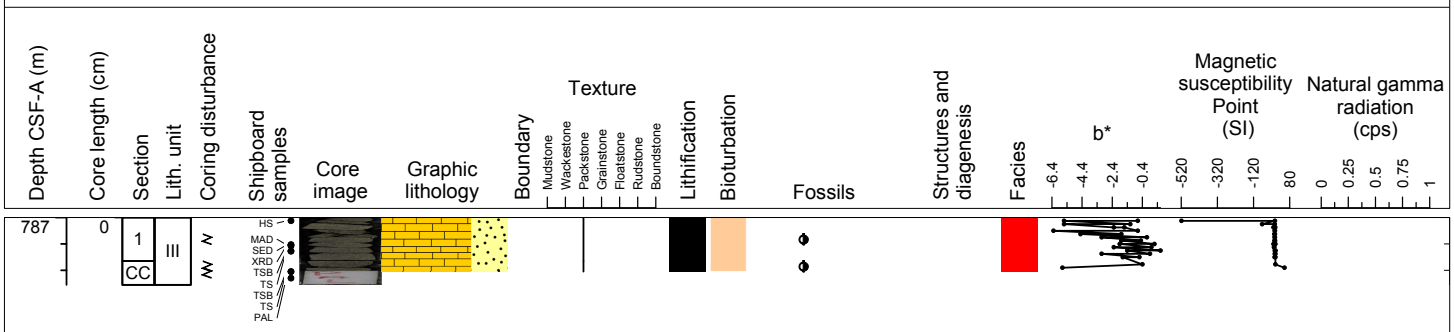
Hole 356-U1462A Core 87X, Interval 777.3-777.35 m (CSF-A)

Lithified, gray, fine to medium sand-sized, PACKSTONE with beige speckles, quartz, small benthic foraminifers, and some macrofossils. There is a strong contrast in lithology between this core and the overlying core. The sample went to paleo, but it was described here to refine the lithologic boundary.



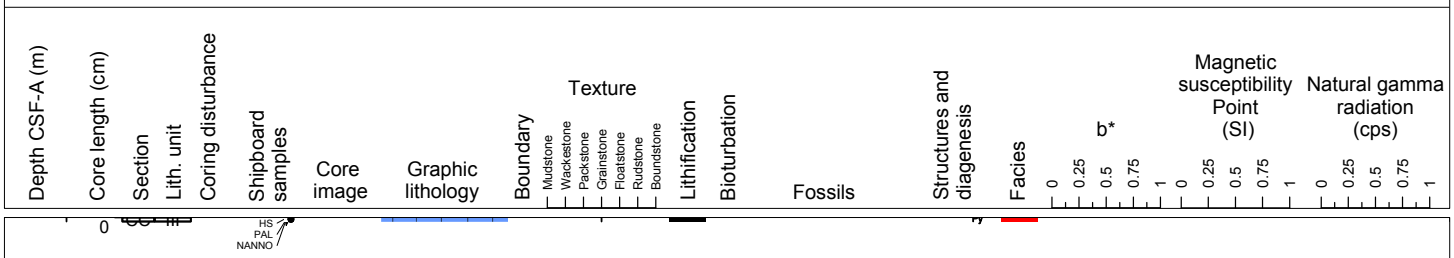
Hole 356-U1462A Core 88X, Interval 787.0-787.51 m (CSF-A)

Lithified, gray packstone with beige speckles, fine to medium sand sized grains. Abundant bioclasts, probably mostly bivales.



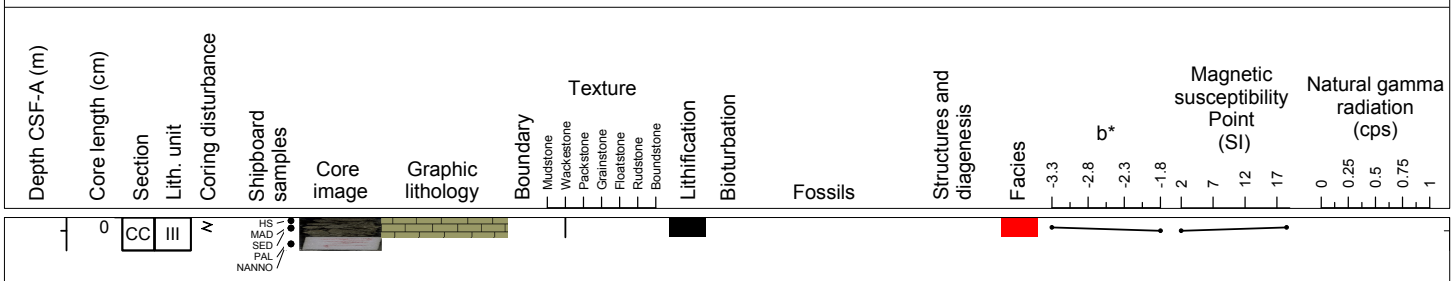
ALL TO PAL

Hole 356-U1462A Core 89X, Interval 796.7-796.73 m (CSF-A)



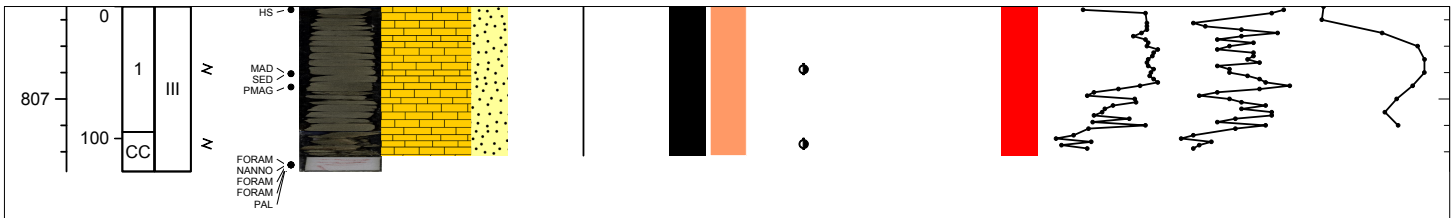
Hole 356-U1462A Core 90X, Interval 801.5-801.75 m (CSF-A)

Lithified, dark greenish gray to gray, fine to medium sand-sized, WACKESTONE with beige speckles and small benthic foraminifers.



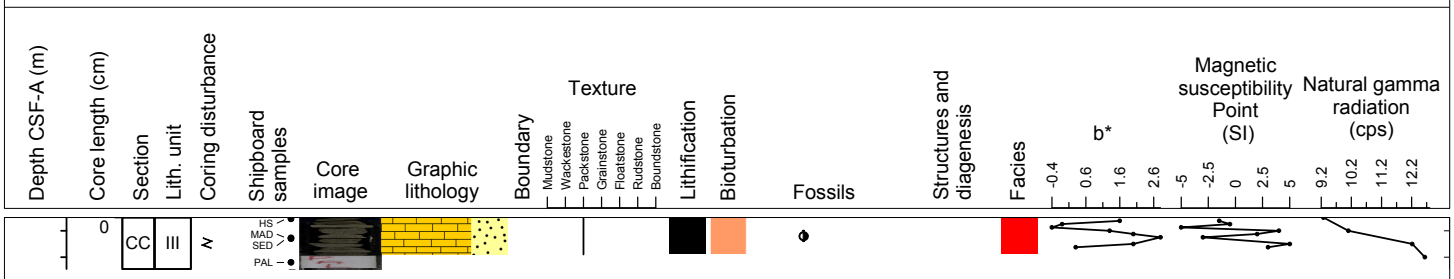
Hole 356-U1462A Core 91X, Interval 806.3-807.55 m (CSF-A)

Lithified, gray, fine to medium sand-sized, PACKSTONE with quartz, beige speckles, small benthic foraminifers, and some flakes of mica.



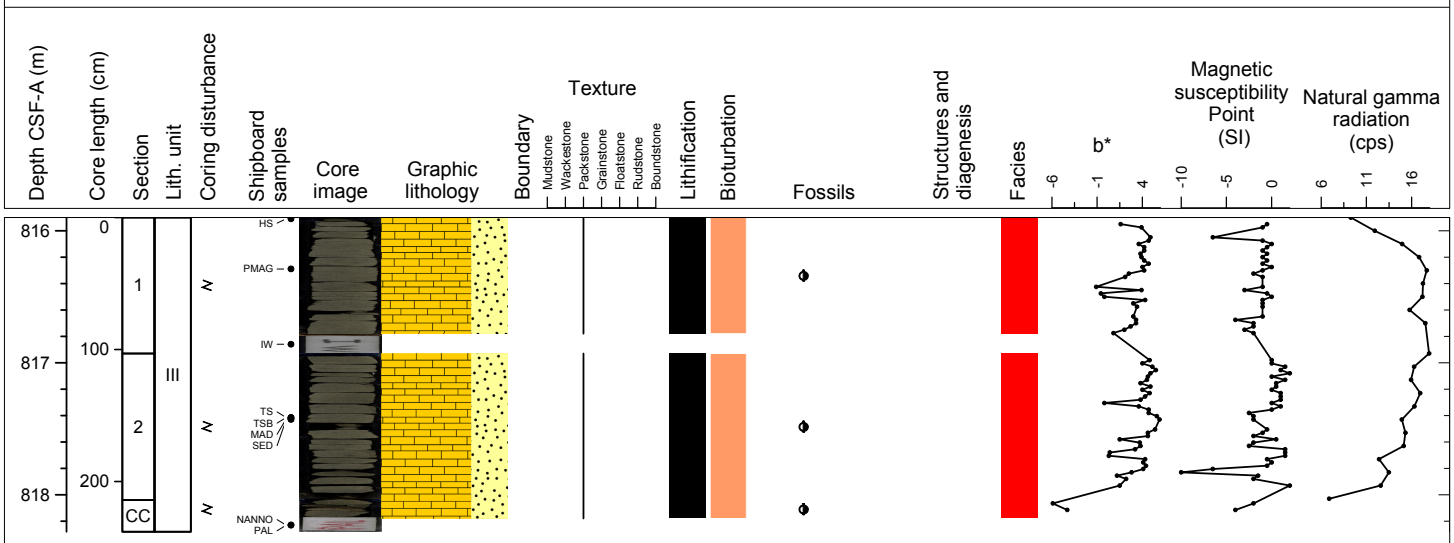
Hole 356-U1462A Core 92X, Interval 811.1-811.49 m (CSF-A)

Lithified, gray, fine to medium sand-sized, PACKSTONE with quartz, beige speckles, and small benthic foraminifers. Siliciclastic content is difficult to determine. Rock still shows reaction with HCL.



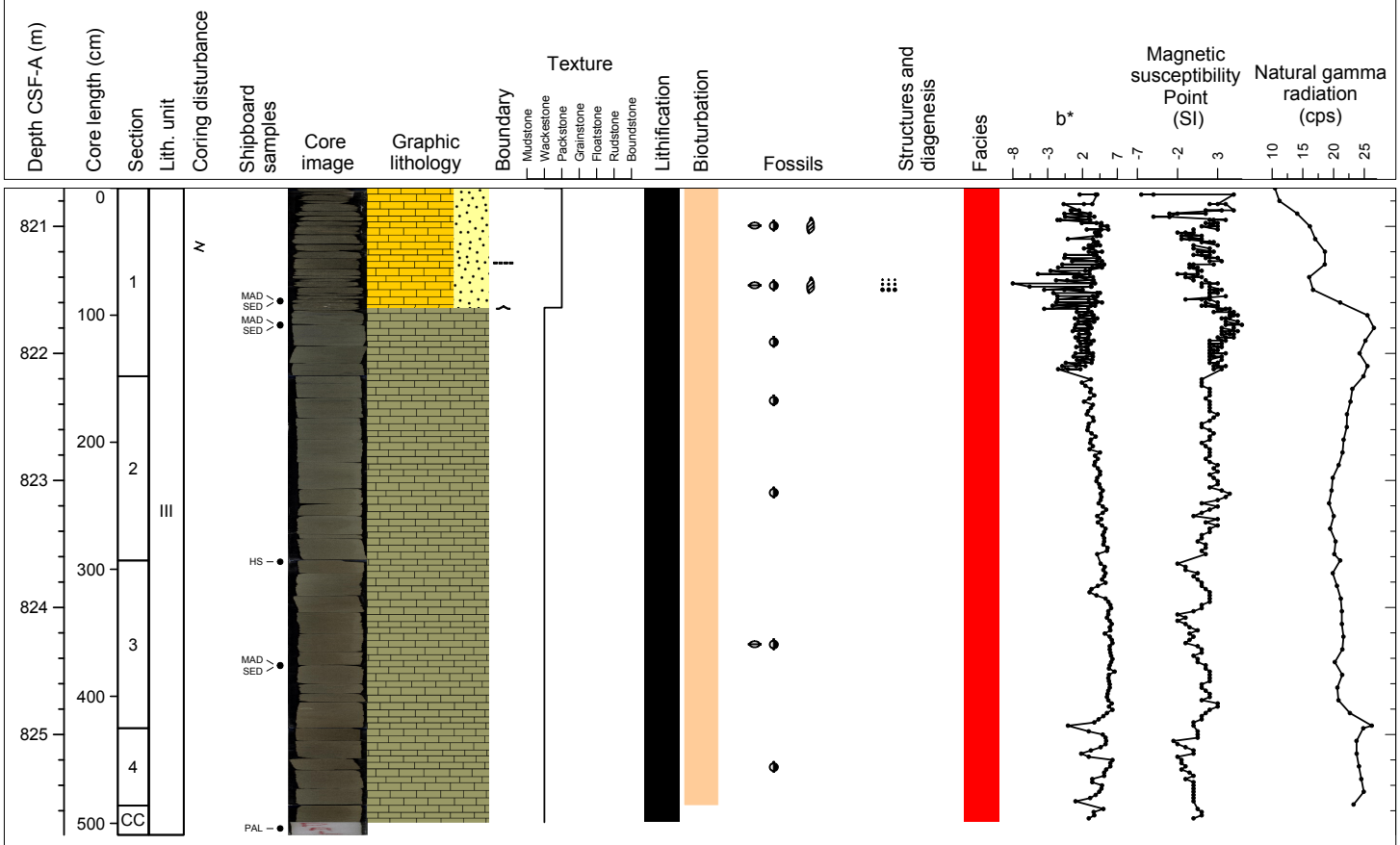
Hole 356-U1462A Core 93X, Interval 815.9-818.28 m (CSF-A)

Lithified, gray, fine to medium sand-sized, PACKSTONE with quartz and beige speckles, moderate bioturbation, and small benthic foraminifers. Siliciclastic content is difficult to determine. Rock still shows reaction with HCL.



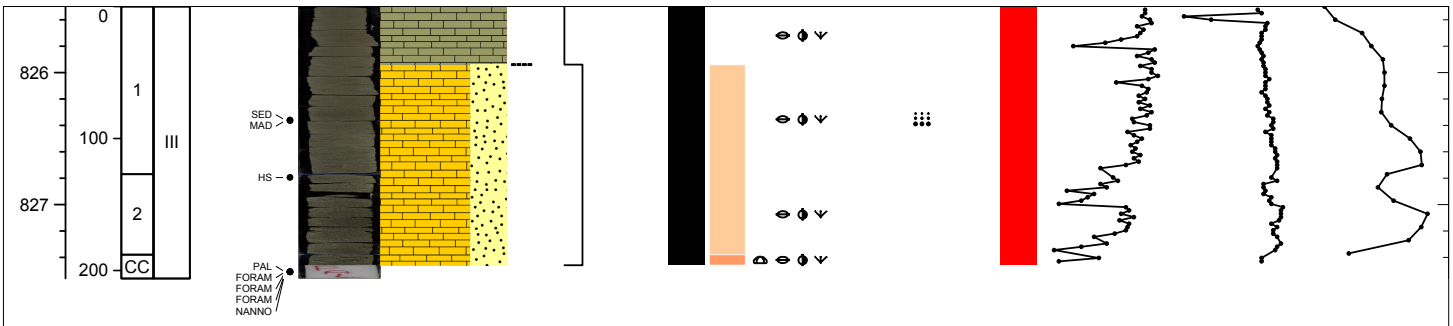
Hole 356-U1462A Core 94X, Interval 820.7-825.79 m (CSF-A)

Lithified, gray, fine to medium sand-sized, PACKSTONE with quartz and beige speckles, small benthic foraminifers, and macrofossil fragments. The bottom contact between the packstone and the underlying wackestone is characterized by a sharp erosived surface. Lithified, dark greenish-gray to olive gray WACKESTONE with small benthic foraminifers.



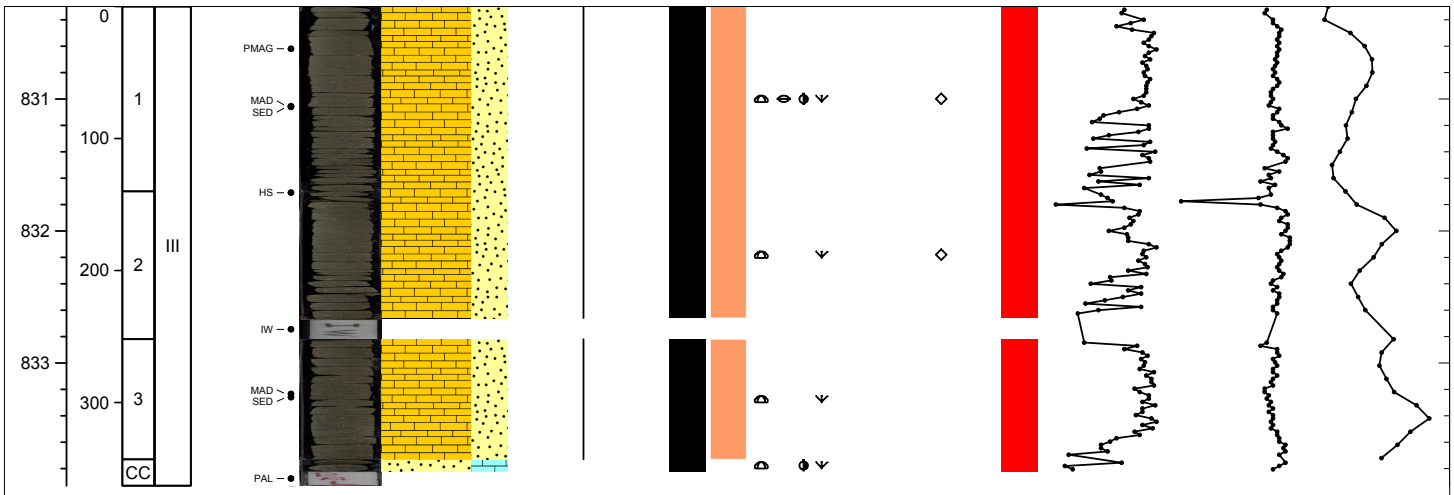
Hole 356-U1462A Core 95X, Interval 825.5-827.56 m (CSF-A)

Primarily lithified, olive gray, PACKSTONE with quartz, some small benthic foraminifers, and macrofossil fragments.



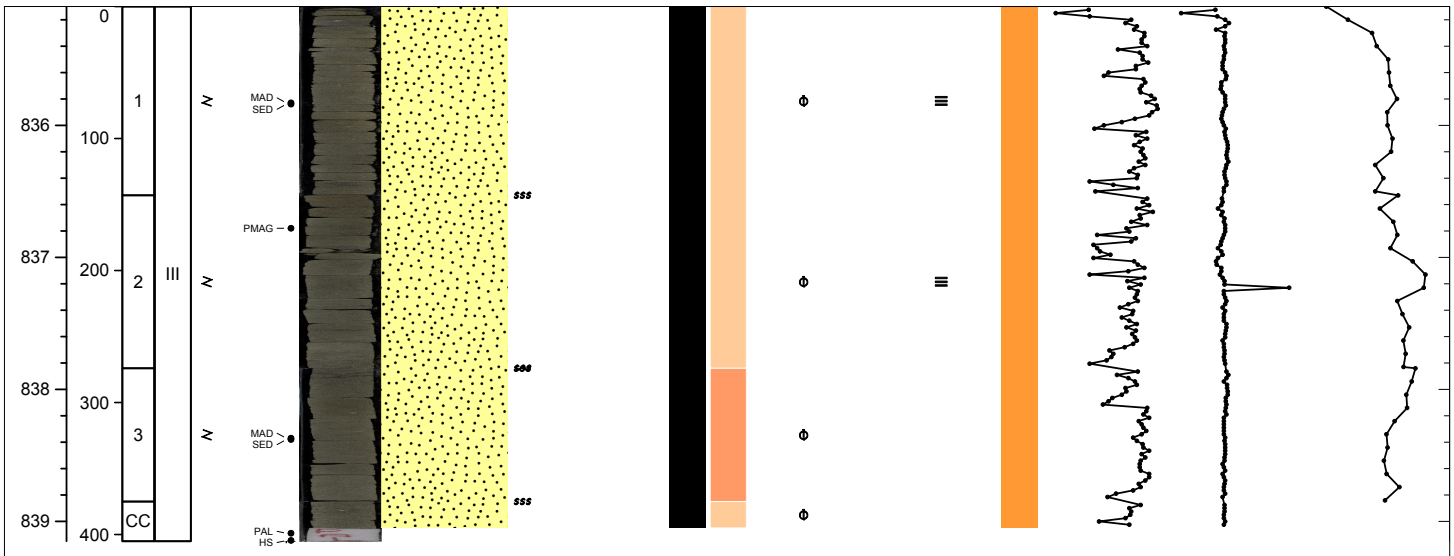
Hole 356-U1462A Core 96X, Interval 830.3-833.93 m (CSF-A)

Lithified, olive gray, PACKSTONE with quartz. Overall the grains in the packstone are bimodal with fine to medium sand-sized grains forming the bulk of the sediment and >2 mm macrofossils, mainly bryozoa, forming a minor component (<10%). The number of sand-sized, black, grains is high in this core. In the core catcher, the sediment transitions to a lithified, olive gray, SANDSTONE with skeletal carbonate and macrofossils.



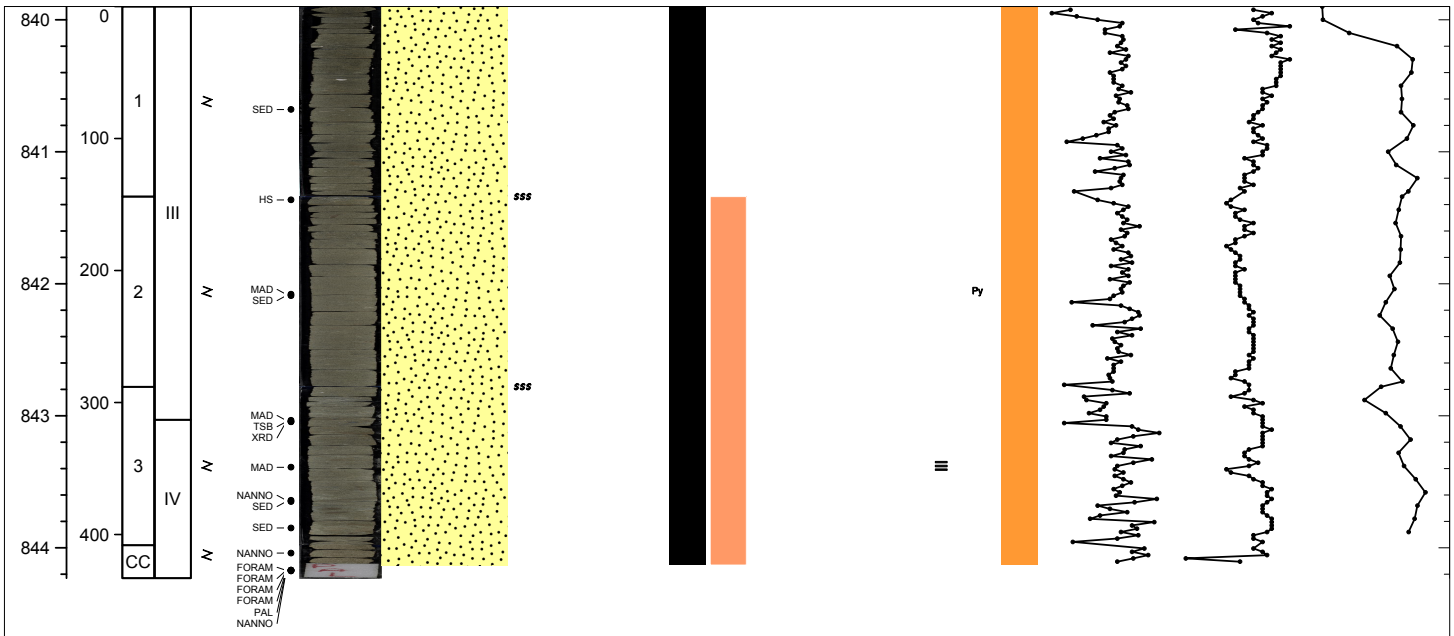
Hole 356-U1462A Core 97X, Interval 835.1-839.15 m (CSF-A)

Lithified, dark greenish-gray, coarse-grained, poorly-sorted, SANDSTONE with quartz, bioturbation, glauconite grains, and macrofossils (bivalves, echinoderms, and small benthic foraminfers). There are bioturbated and wavy contacts and intervals of parallel laminae. Glauconite is more abundant where bedding is more obvious.



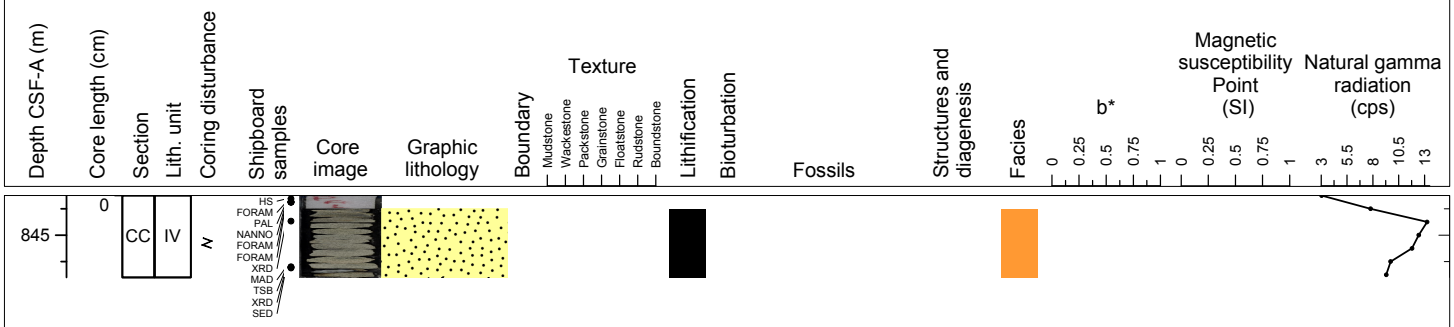
Hole 356-U1462A Core 98X, Interval 839.9-844.23 m (CSF-A)

Lithified, dark greenish gray to light brownish gray to gray, coarse-grained, poorly-sorted, SANDSTONE with quartz, pyrite and glauconite grains. Bioturbation is common and brown in color. Macrofossils are common and include fragments of bivalves, bryozoans, and echinoderms. Benthic foraminifers are also common. There are bioturbated contacts as well as planar laminae and an inclusion that is not composed of silica or calcium carbonate. There are bioturbated contacts as well as planar laminae and an inclusion that is not composed of silica or calcium carbonate.



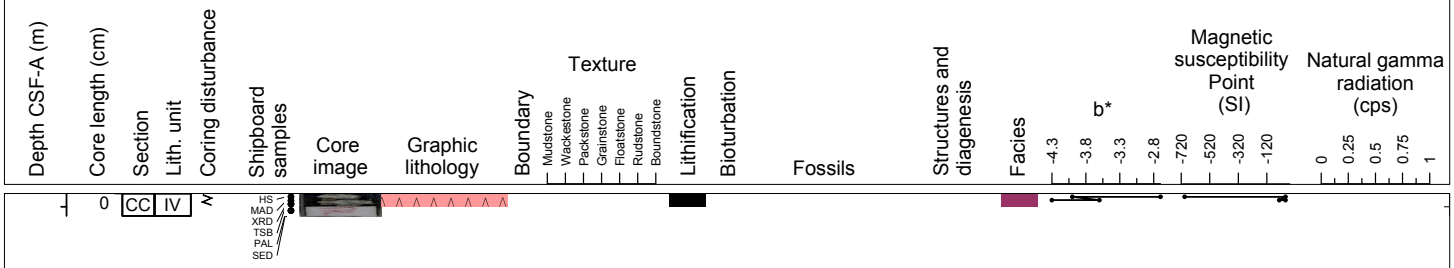
Hole 356-U1462A Core 99X, Interval 844.7-845.32 m (CSF-A)

Lithified, gray, coarse-grained, poorly-sorted, SANDSTONE with possible dolomite, quartz, and pyrite grains. A clast composed of off-white to light-gray grains resembling anhydrite chicken wire texture is at the base of the section.



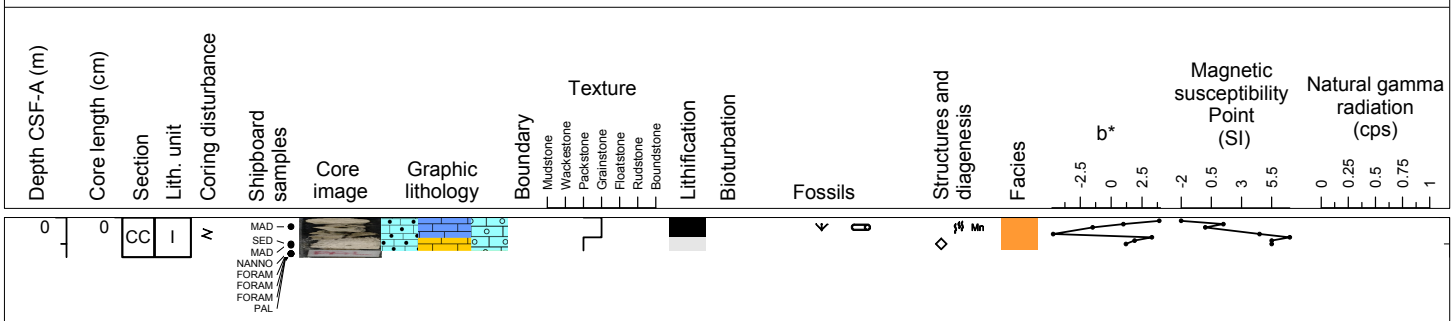
Hole 356-U1462A Core 100X, Interval 849.5-849.67 m (CSF-A)

ANHYDRITE nodule with chickenwire texture.



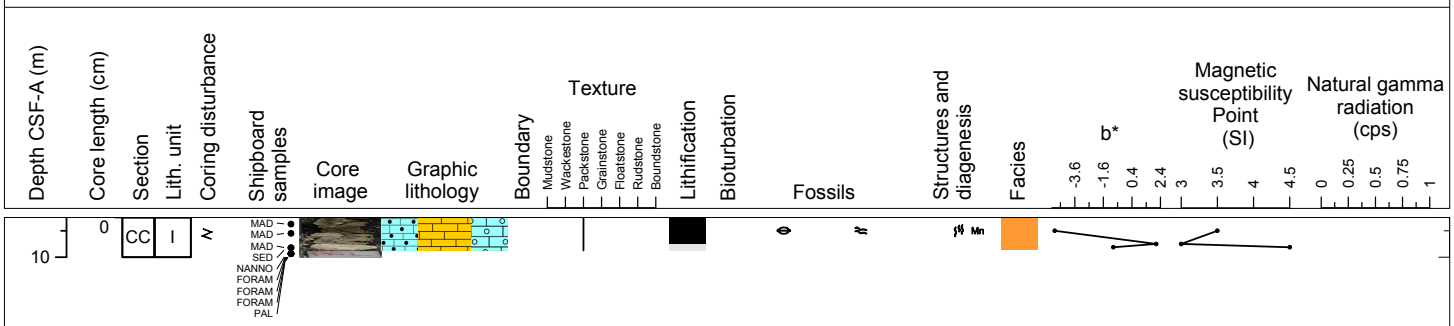
Hole 356-U1462B Core 1X, Interval 0.0-0.3 m (CSF-A)

The top 15 cm is composed of lithified, light gray, non-skeletal grain-rich (ooid-rich), GRAINSTONE with macrofossil fragments (scaphopods and bryozoans), solution cavities, and possible manganese coatings on grains. From 15-25 cm, there is unlithified, cream, non-skeletal grain-rich (ooid-rich), PACKSTONE with intralclasts.



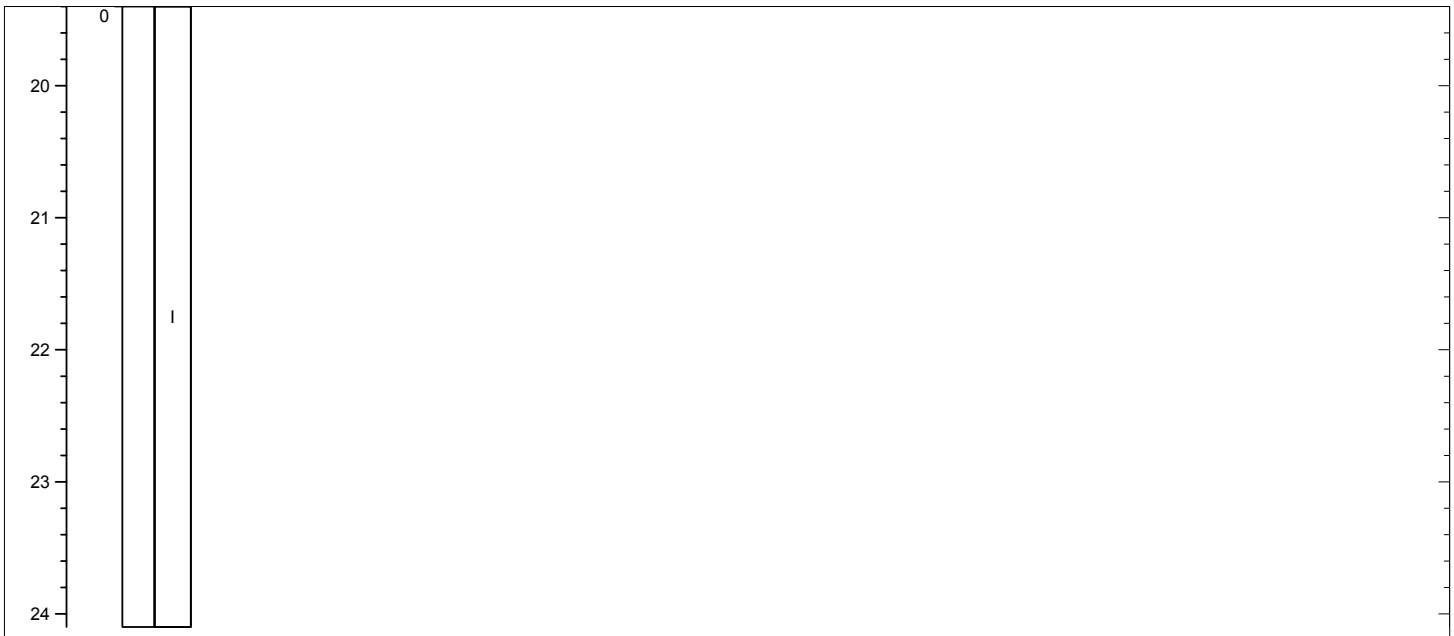
Hole 356-U1462B Core 2X, Interval 9.7-10.0 m (CSF-A)

Lithified, creamy gray, non-skeletal grain-rich (ooid-rich), PACKSTONE with solution cavities, a possible manganese crust and macrofossils (serpulids, bivalves, and echinoderms) underlain by unlithified, cream, non-skeletal grain-rich, PACKSTONE with ooids and bedding planes.



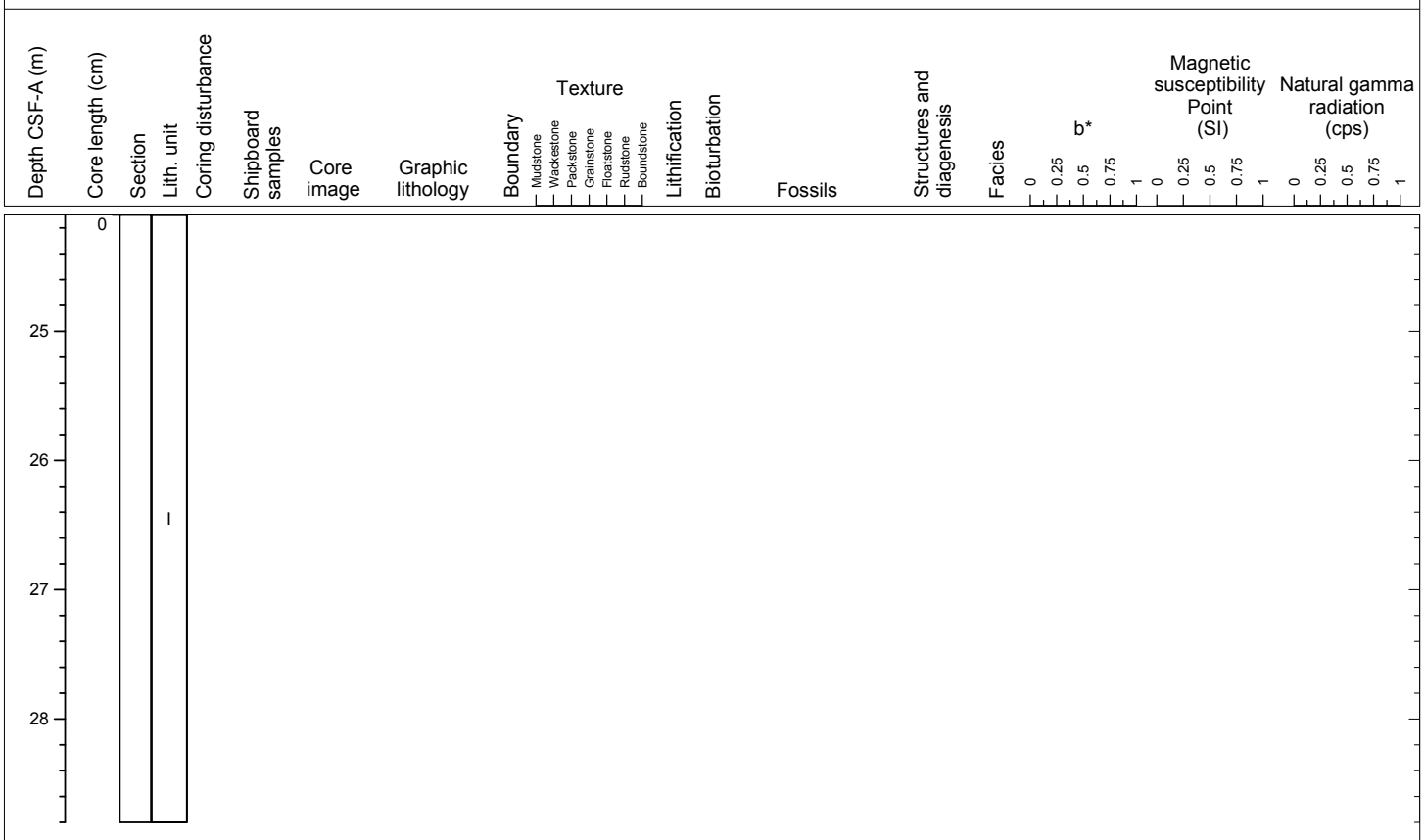
NO RECOVERY

Hole 356-U1462B Core 3X, Interval 19.4-24.1 m (CSF-A)



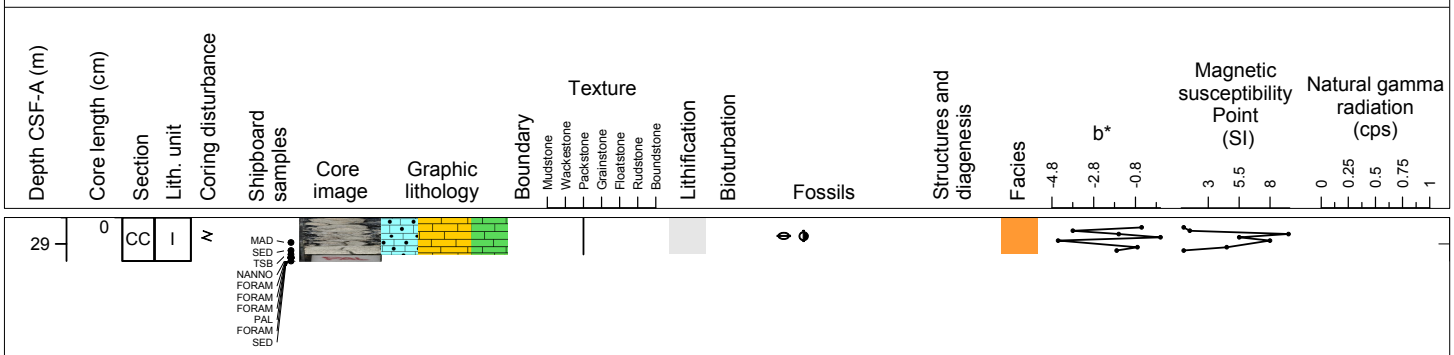
NO RECOVERY

Hole 356-U1462B Core 4X, Interval 24.1-28.8 m (CSF-A)



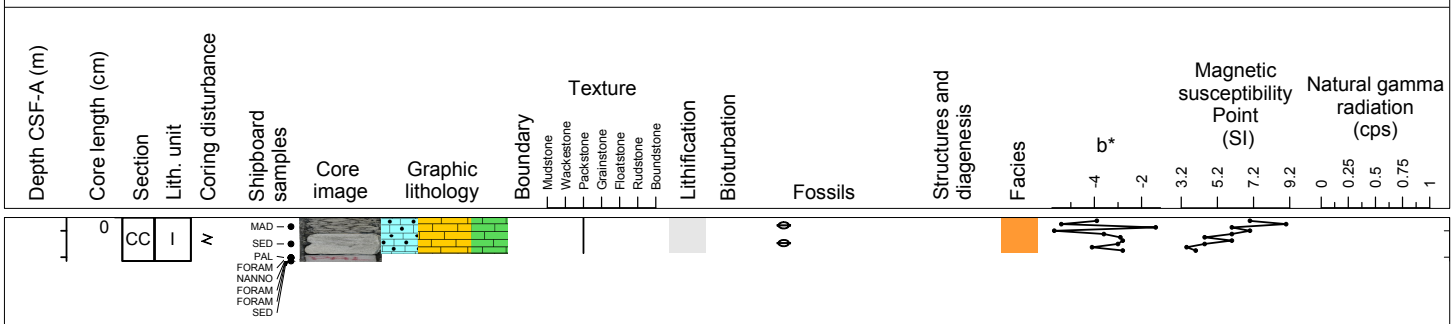
Hole 356-U1462B Core 5X, Interval 28.8-29.13 m (CSF-A)

Unlithified, off-white, non-skeletal grain-rich, fine sand-sized, PACKSTONE with glauconite and bivalve fragments.



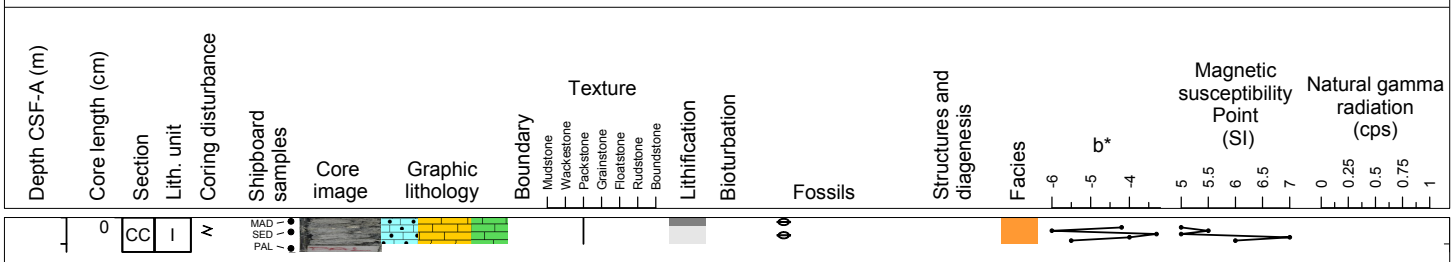
Hole 356-U1462B Core 6X, Interval 33.5-33.83 m (CSF-A)

Unlithified, light bluish gray, non-skeletal grain-rich, fine sand-sized, PACKSTONE with ooids, abundant glauconite, and common bivalve fragments.



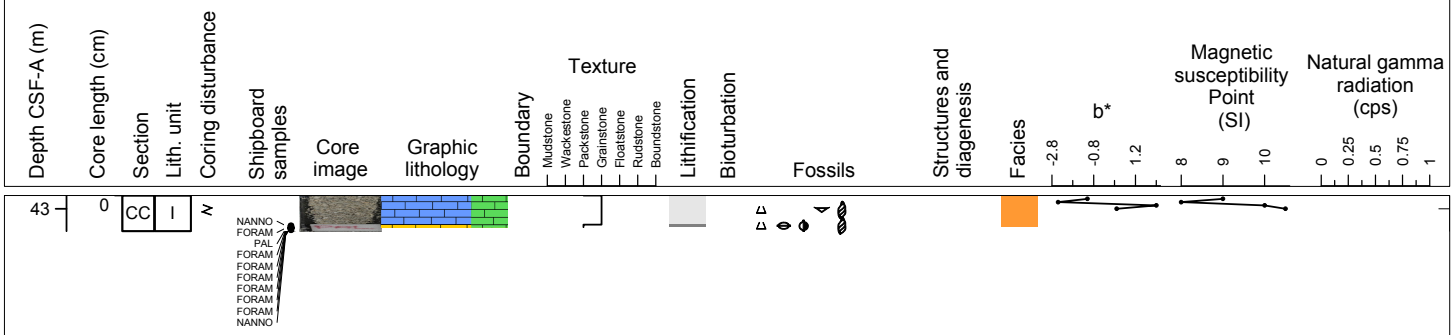
Hole 356-U1462B Core 7X, Interval 38.2-38.46 m (CSF-A)

Partially-lithified to unlithified, light bluish gray, non-skeletal grain-rich, fine sand-sized, PACKSTONE with ooids, abundant glauconite, and common bivalve fragments.



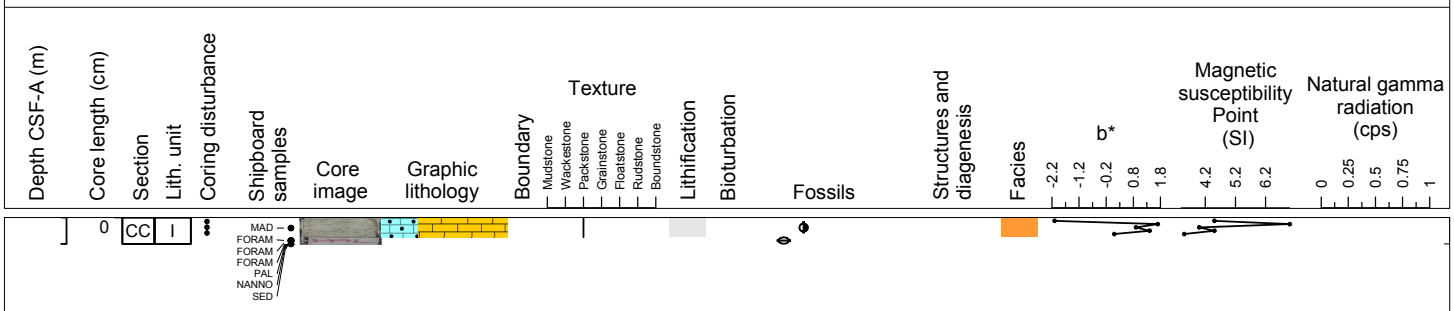
Hole 356-U1462B Core 8X, Interval 42.9-43.17 m (CSF-A)

Unlithified, creamy gray, gravel-sized, GRIANSTONE with glauconite, macrofossils (barnacles, brachiopods, and gastropods), and lithic fragments (carbonate cement and glauconite) is underlain by partially-lithified, light bluish gray, sand- and gravel-sized, PACKSTONE with macrofossils (bivalves, barnacles, and gastropods) and lithic fragments (carbonate sediment and glauconite).



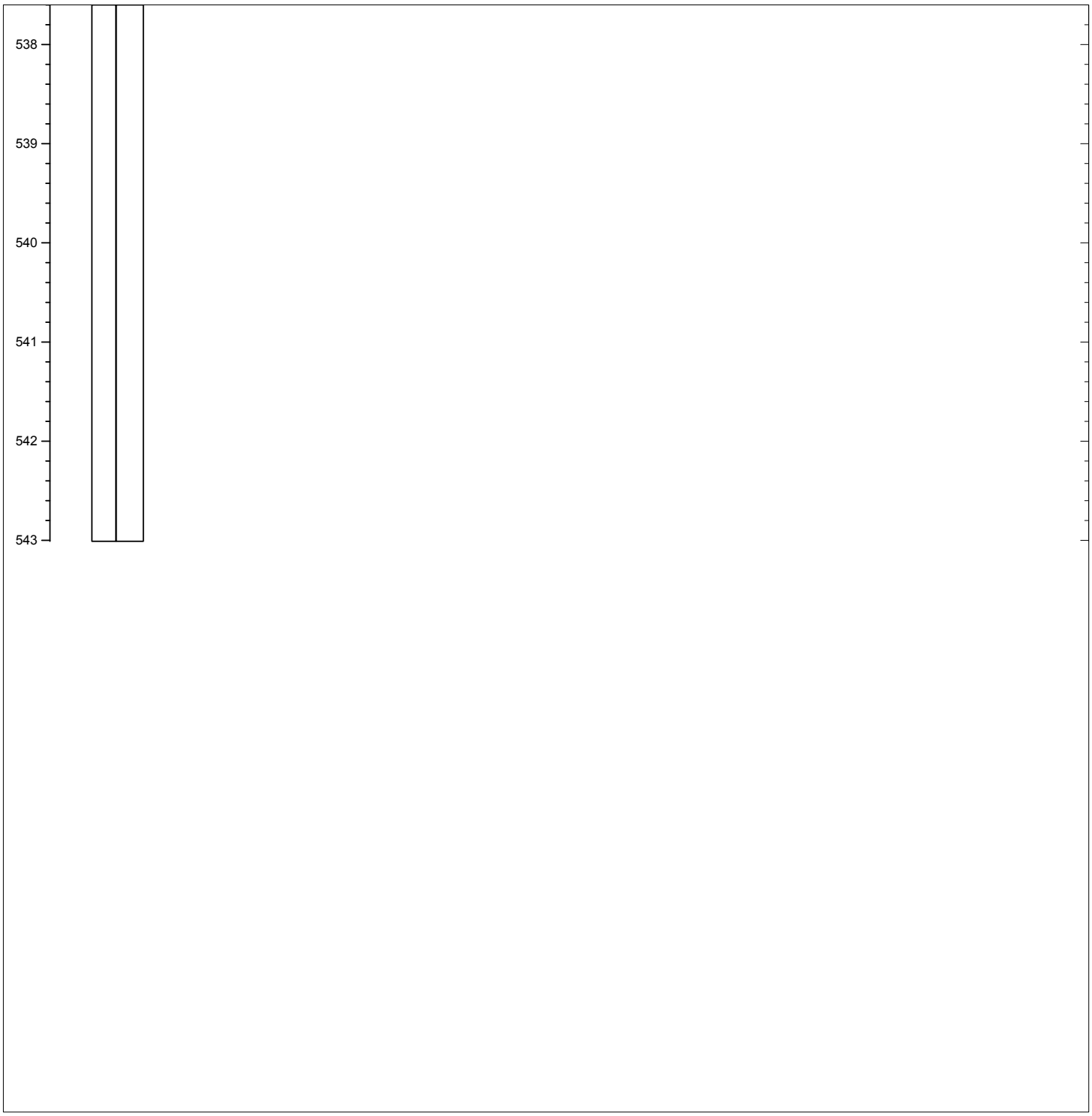
Hole 356-U1462B Core 9X, Interval 47.6-47.8 m (CSF-A)

Unlithified, creamy gray, non-skeletal grain-rich, PACKSTONE with medium sand-sized dark bluish-gray grains and well-preserved bivalves.



DRILLED INTERVAL

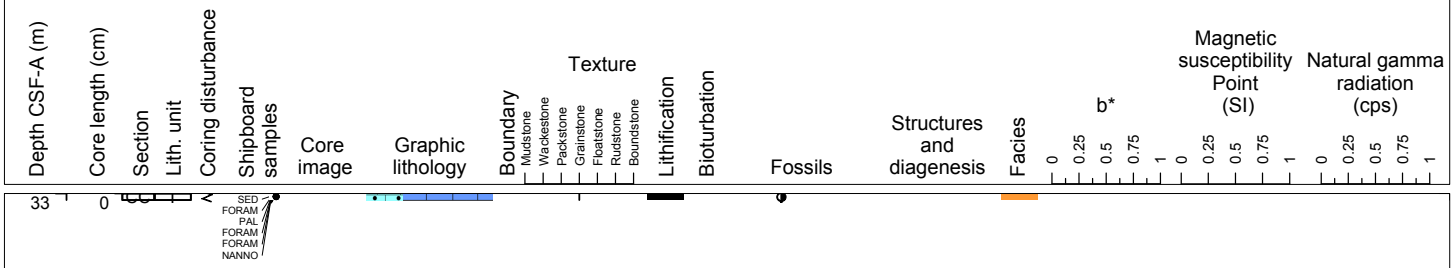
Hole 356-U1462C Core 11, Interval 0.0-0.0 m (CSF-A)



ALL TO PAL

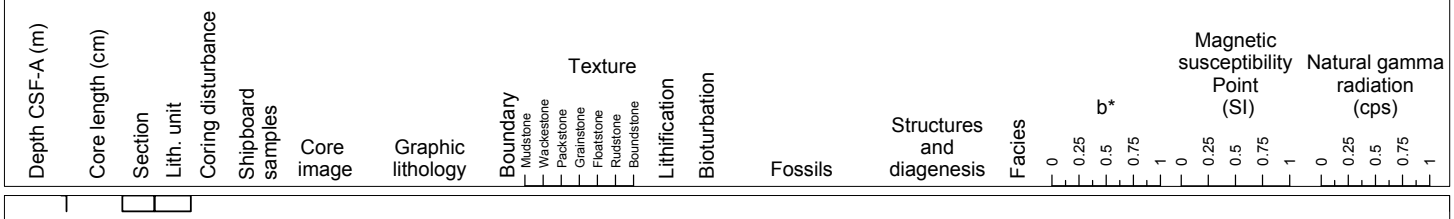
Hole 356-U1462C Core 2R, Interval 33.0-33.05 m (CSF-A)

Liithified, beige, non-skeletal grain-rich, medium to coarse sand-sized, GRAINSTONE with small benthic foraminifers and black, sand-sized grains.



NO RECOVERY

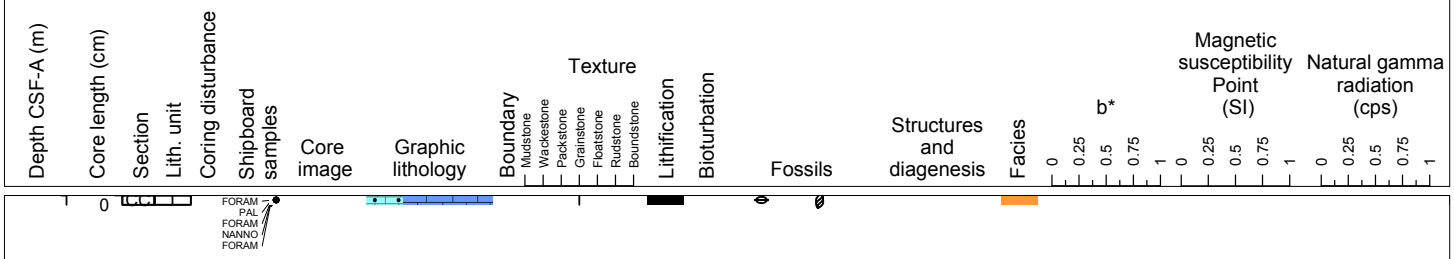
Hole 356-U1462C Core 3R, Interval 37.8-37.8 m (CSF-A)



ALL TO PAL

Hole 356-U1462C Core 4R, Interval 42.6-42.67 m (CSF-A)

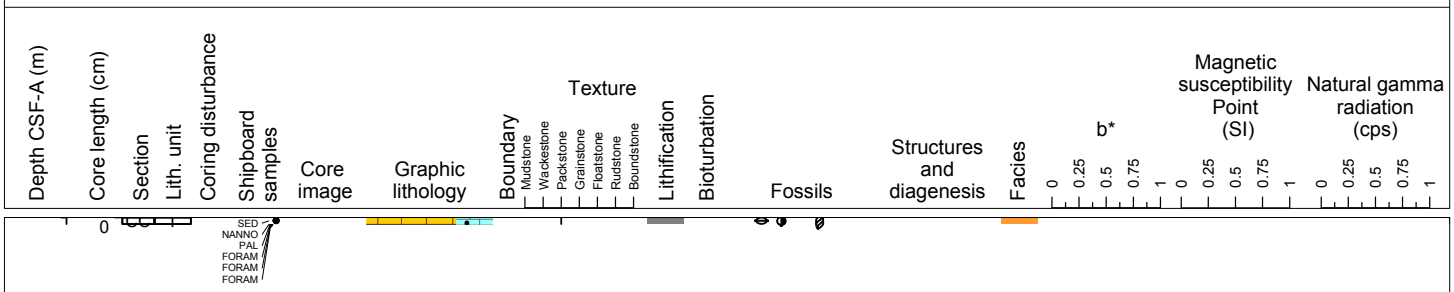
Lithified, beige, non-skeletal grain-rich, medium sand-sized, GRAINSTONE with bivalves, gastropods and black, sand-sized grains.



ALL TO PAL

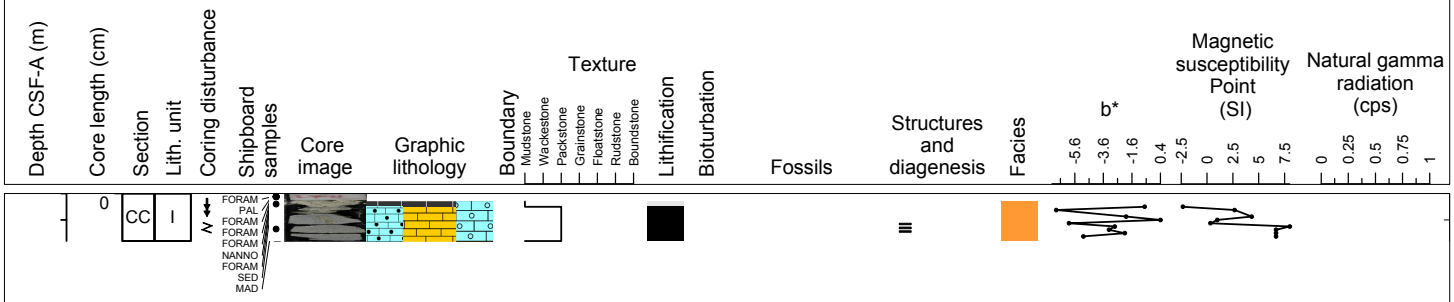
Hole 356-U1462C Core 5R, Interval 47.4-47.45 m (CSF-A)

Partially-lithified, beige, PACKSTONE with a few non-skeletal grains (possibly peloids) and macrofossils (bivalves, small benthic foraminifers, and possibly red algae), bioclasts of bivalves and small benthic foraminifera and possibly a red algea. Black, sand-sized grains are common.



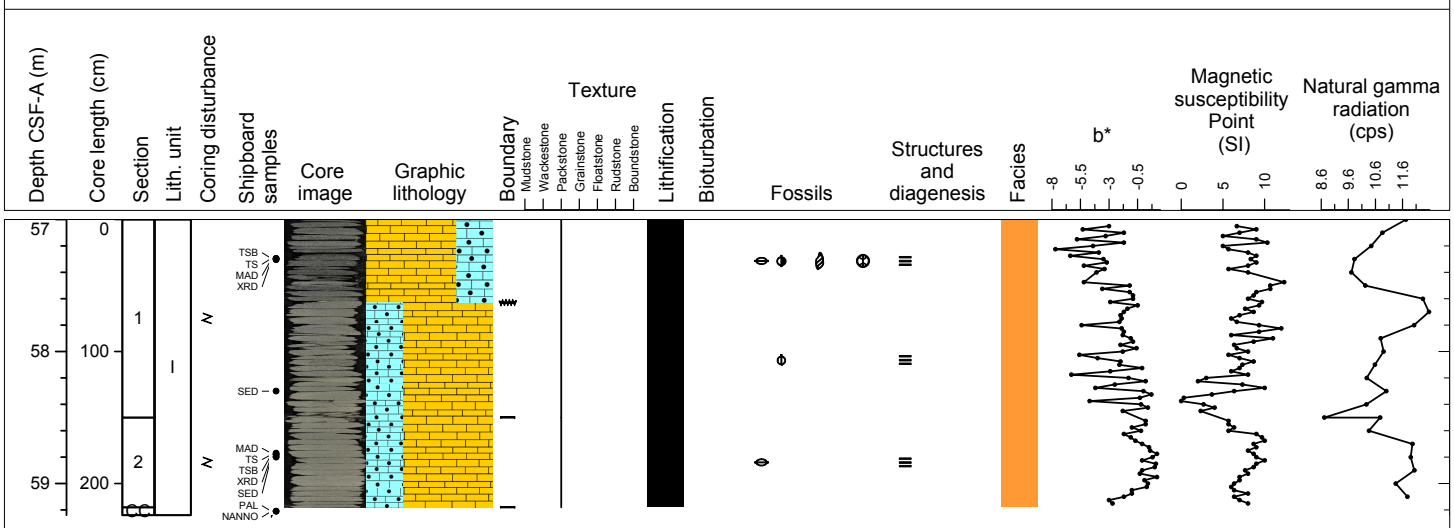
Hole 356-U1462C Core 6R, Interval 52.2-52.56 m (CSF-A)

Unlithified, off-white, MUDSTONE (fall-in?) with ooids between 6-10 cm. From 10-16 cm, there is lithified, light bluish-gray, non-skeletal grain-rich, sand-size, PACKSTONE with sand-size ooids, glauconite, bivalve fragments and small benthic foraminifers. Between 16-36 cm, the non-skeletal PACKSTONE continues with gravel-sized macrofossils; bivalves are abundant. Burrow in-fill is not as lithified as the sediment and is composed of mud and crystals of an unknown mineral.



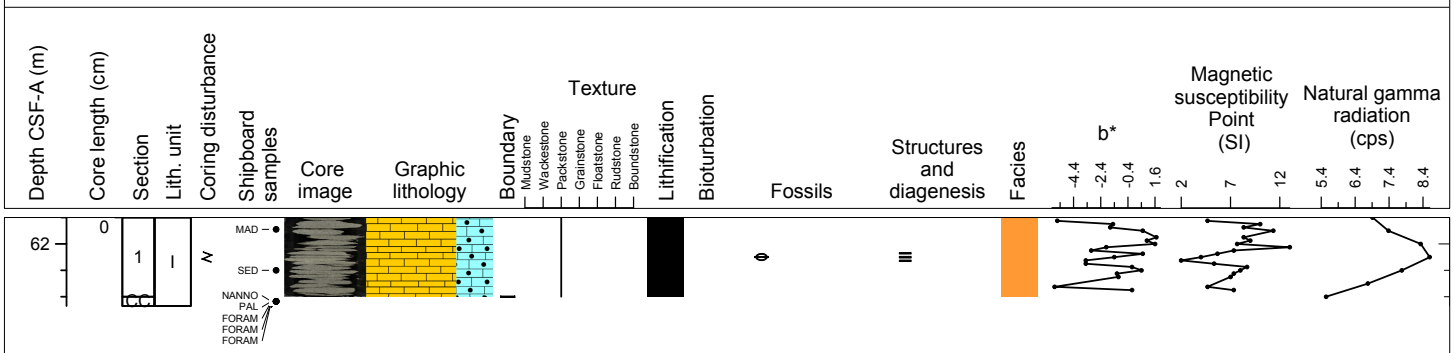
Hole 356-U1462C Core 7R, Interval 57.0-59.24 m (CSF-A)

Section 1 (0-63 cm) contains lithified, dark grayish-green PACKSTONE with coarse sand-size ooids or peloids and gravel-size macrofossils. Bivalves are most abundant. There are sharp contacts with coarser grains and gravel-size microfossils; bivalve fragments are orientated flat along the bedding. There is also a sharp scoured surface. Macrofossil fragments also include a Fungiid coral and possible Halidmeda plates. The lower part of the section contains lithified, light grayish-green, non-skeletal grain-rich, PACKSTONE with sand-sized ooids, gravel-sized macrofossils, parallel laminae, and a sharp contact. Section 2 contains lithified, light greenish-gray, non-skeletal grain-rich, PACKSTONE with sand-size ooids, bivalve fragments, planar laminae, a sharp contact, and less glauconite than in Section 1.



Hole 356-U1462C Core 8R, Interval 61.8-62.47 m (CSF-A)

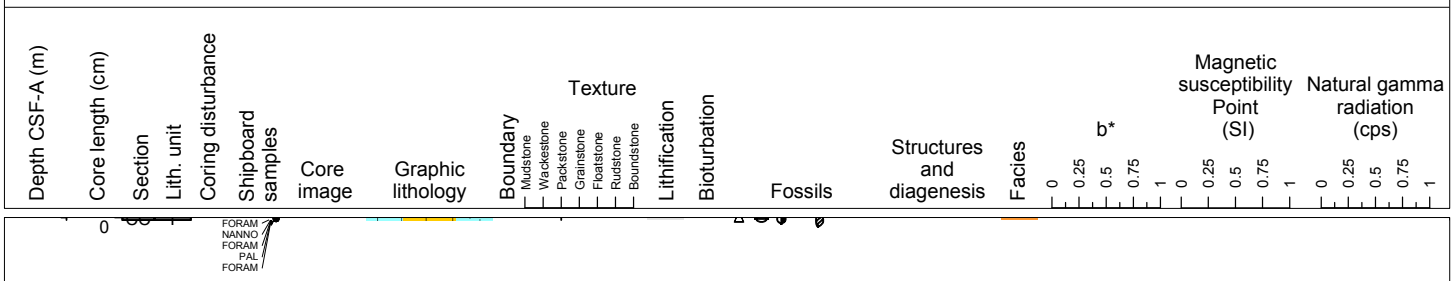
Lithified, light greenish-gray, non-skeletal grain-rich, PACKSTONE with sand-size peloids or ooids and sand-sized bivalve fragments, Contacts occur at 11 cm, 27 cm, 45 cm. Planar laminae occur between 43-45 cm. There are possible Halimeda plates, and glauconite scarser than in the previous core.



ALL TO PAL

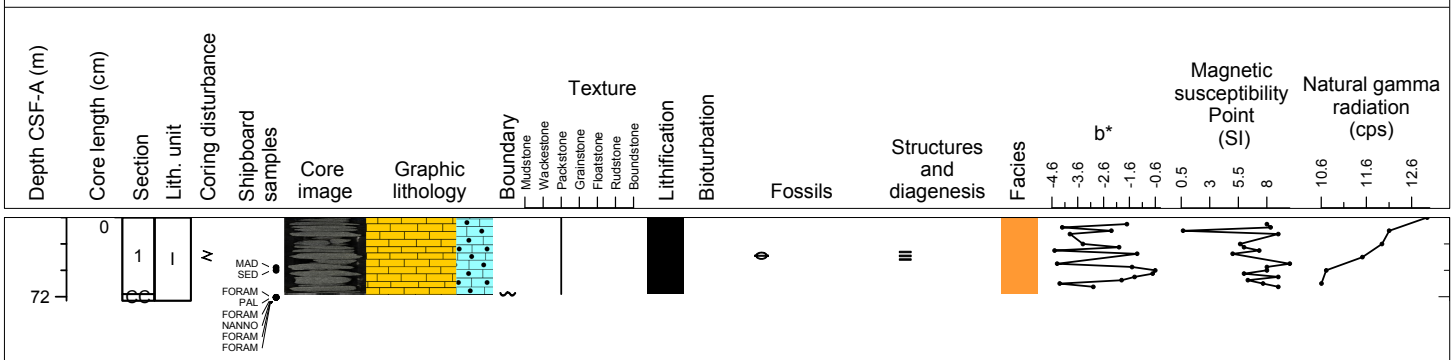
Hole 356-U1462C Core 9R, Interval 66.6-66.62 m (CSF-A)

Unlithified, creamy gray, skeletal, PACKSTONE with very coarse sand-size non-skeletal grains, black sand-sized grains, and macrofossils.



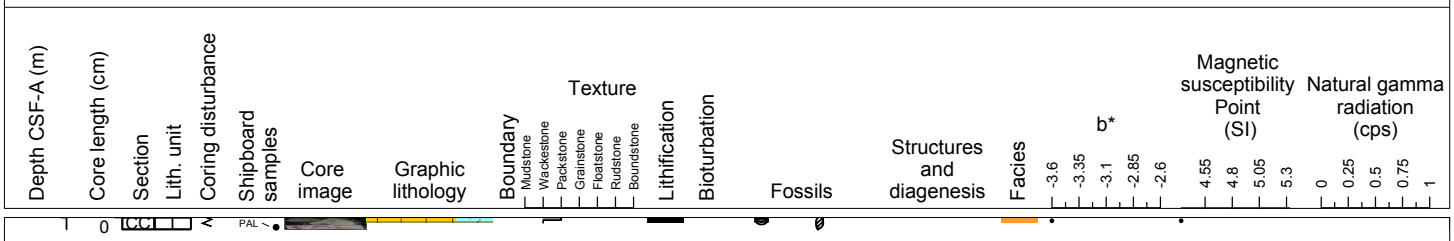
Hole 356-U1462C Core 10R, Interval 71.4-72.03 m (CSF-A)

Lihtified, dark greenish-gray, PACKSTONE with sand-size peloids or ooids. Glauconite is common, and pyrite may also be present. There are intervals of parallel laminae between 0-15 cm, noted by sharp color variations between the dark and light greenish-gray. Bivalve fragments are abundant and gastropods are present. There are sharp contacts at 54 cm, and there is a bed from 54-56 cm.



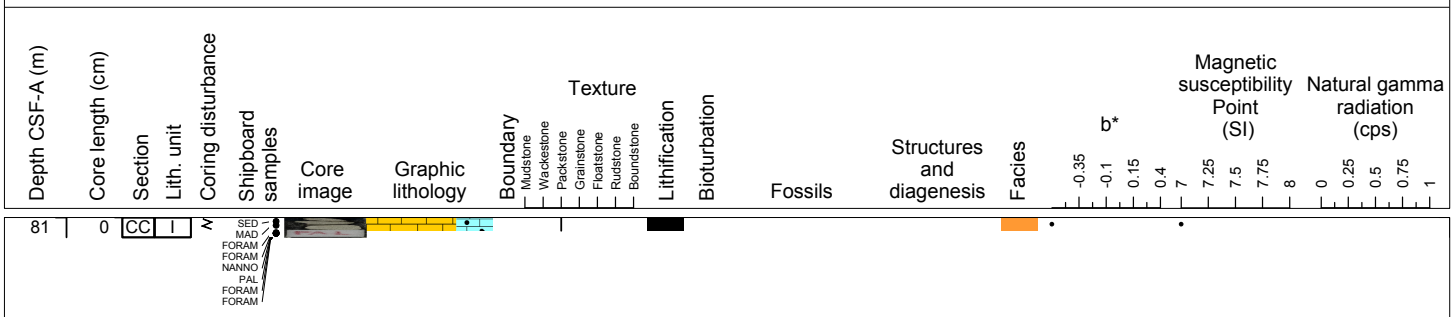
Hole 356-U1462C Core 11R, Interval 76.2-76.29 m (CSF-A)

Lithified, dark greenish-gray, PACKSTONE with peloids or ooids and medium sand-size grains grades into lithified, light greenish-gray, sand-sized, WACKESTONE with bivalve fragments and occasional foraminifers.



Hole 356-U1462C Core 12R, Interval 81.0-81.15 m (CSF-A)

Lithified, light gray, non-skeletal, PACKSTONE with sand-sized peloids or ooids. Bedding is apparent.



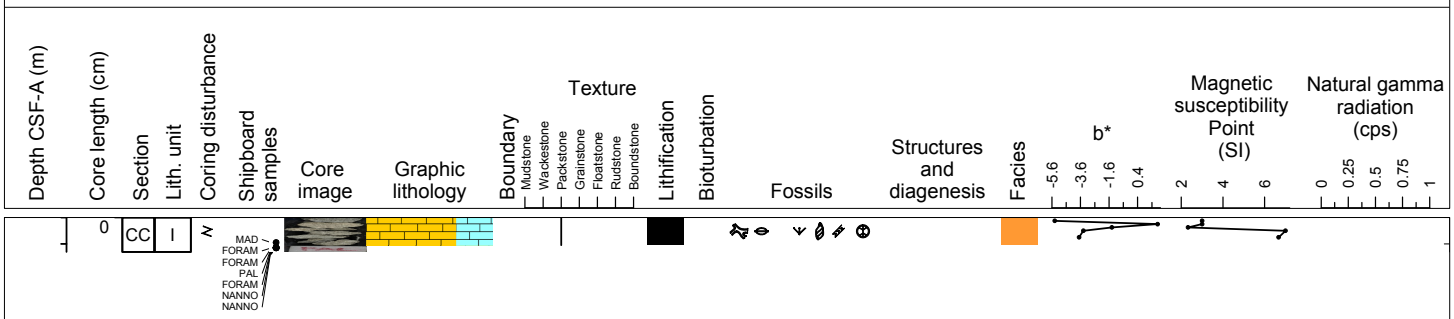
ALL TO PAL

Hole 356-U1462C Core 13R, Interval 85.8-85.82 m (CSF-A)

Lithified, beige, non-skeletal grain-rich, sand-sized, PACKSTONE with peloids or ooids and glauconite. There are no visible macrofossils.

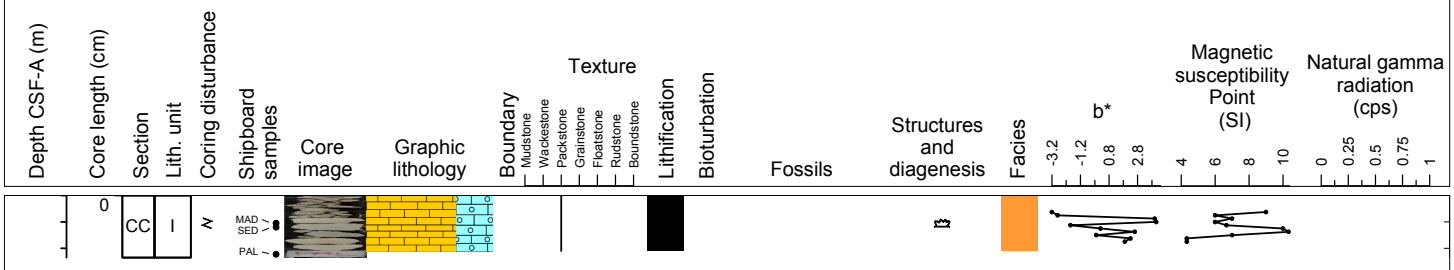
Hole 356-U1462C Core 14R, Interval 90.6-90.86 m (CSF-A)

Lithified, creamy gray, PACKSTONE with gravel-sized skeletal carbonate, gravel- and sand-sized glauconite grains, and macrofossils (bivalves, bryozoans, and gastropods.) There are maybe/at least three coral species (fragments), including Montipora? Pachyseris? There are also solution cavities in the rock.



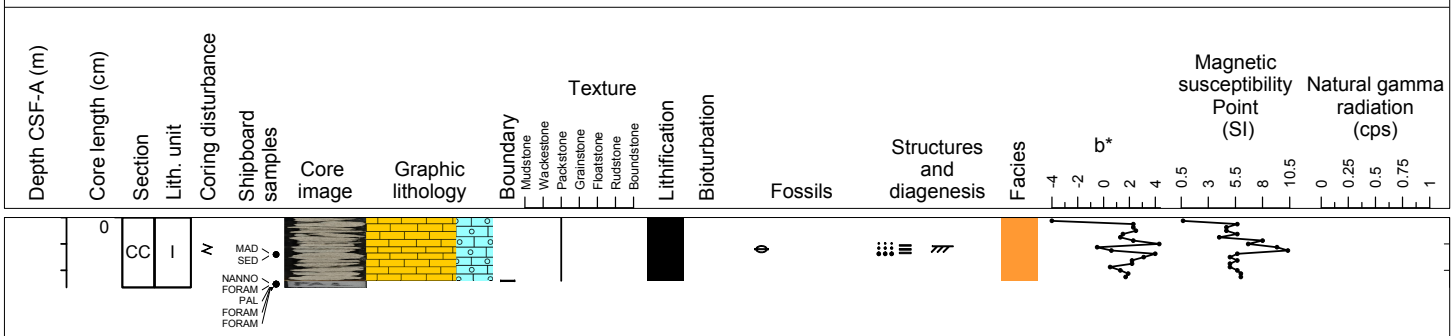
Hole 356-U1462C Core 15R, Interval 95.4-95.87 m (CSF-A)

Lithfiied, creamy gray, PACKSTONE with sand-sized ooids and sand-sized shell fragments. There is a possible microbialite within the PACKSTONE between 1-3 cm. There is an unidentified crystal in the upper 2 cm of 15R-CC-W



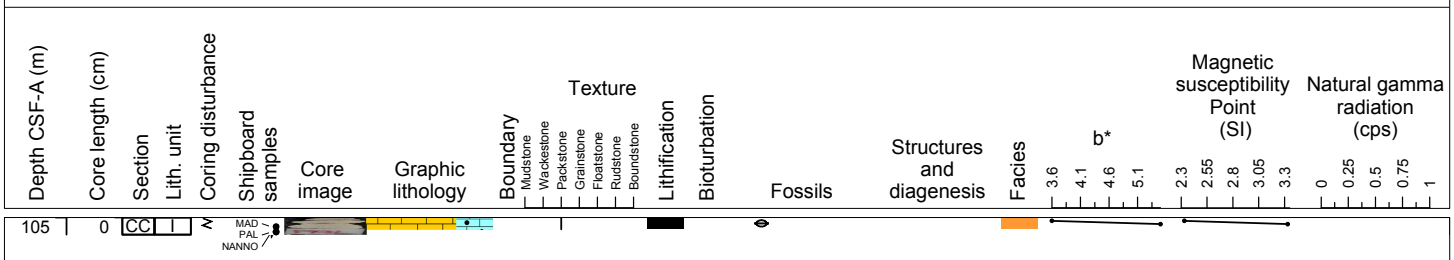
Hole 356-U1462C Core 16R, Interval 100.2-100.73 m (CSF-A)

Lithified, creamy gray, PACKSTONE with coarse sand-sized ooids. Parallel laminations and crossing bedding are common throughout the core, but they are particularly abundant in the upper section. Multiple, graded (normal) beds occur in the upper and lower sections of the core and contain ooids and gravel-sized bivalve fragments and glauconite.



Hole 356-U1462C Core 17R, Interval 105.0-105.13 m (CSF-A)

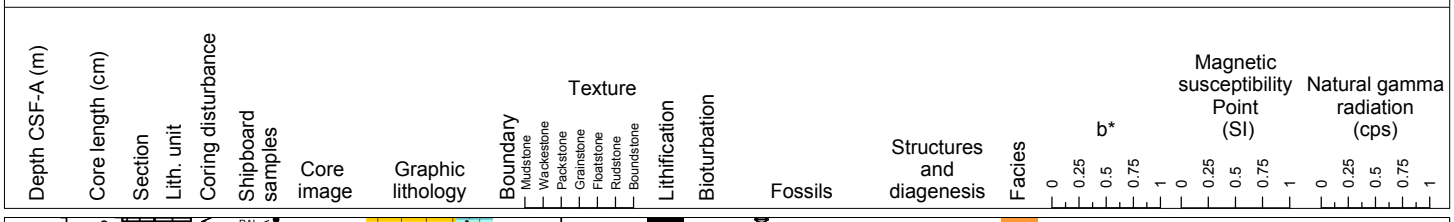
Lithified, creamy gray, PACKSTONE with sand-sized peloids or ooids, bivalve fragments, and sparse glauconite grains.



ALL TO PAL

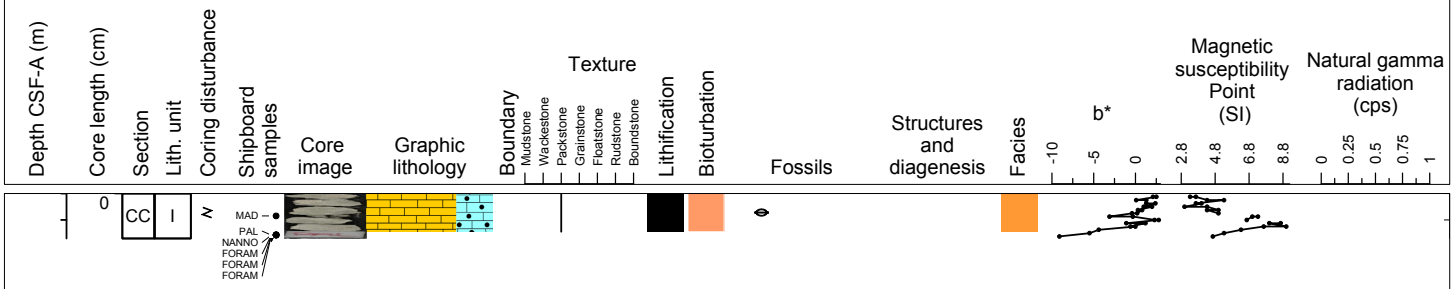
Hole 356-U1462C Core 18R, Interval 109.8-109.83 m (CSF-A)

Lithified, creamy gray, PACKSTONE with sand-sized peloids or ooids, few bivalve fragments, and glauconite grains.



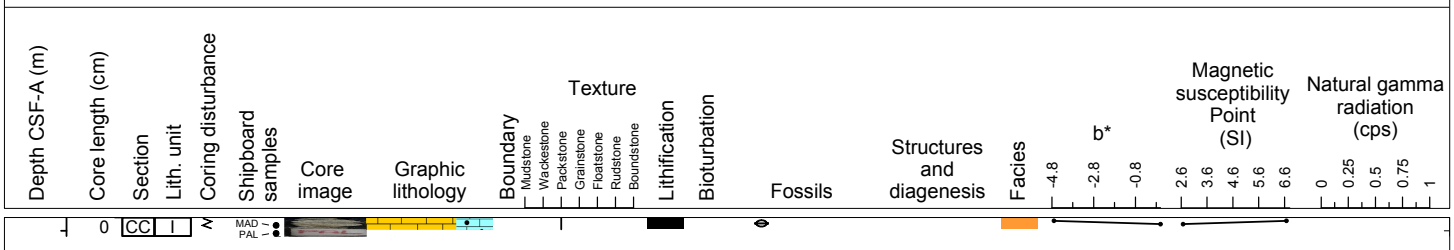
Hole 356-U1462C Core 19R, Interval 114.6-114.94 m (CSF-A)

Lithified, creamy gray, PACKSTONE with medium and coarse sand-sized ooids, coarse sand- to gravel-sized shell fragments, and glauconite grains. Shell fragments can be as large as 5 cm. Dark gray, irregular and up to 5 cm long patches appear to be burrows. There is a lithified, cream MUDSTONE bed a few mm's thick.



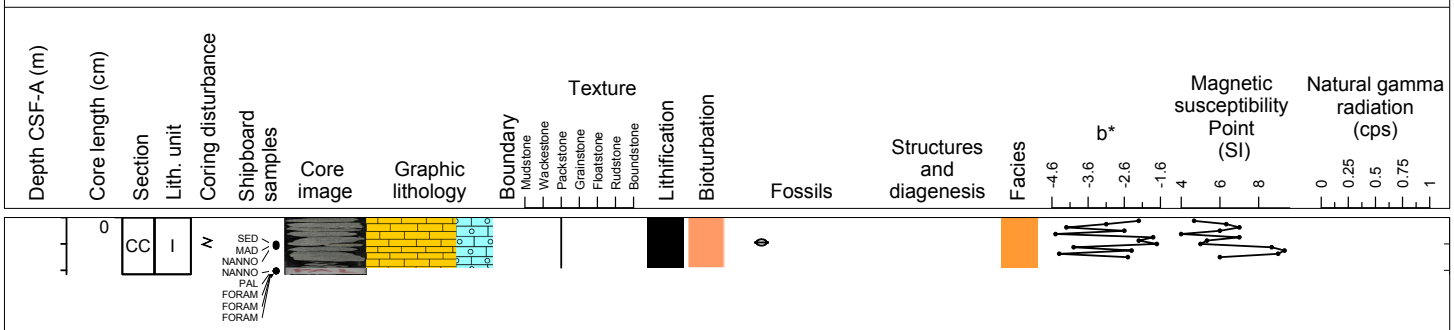
Hole 356-U1462C Core 20R, Interval 119.5-119.64 m (CSF-A)

Lithified, creamy gray, coarse sand- to gravel-sized, PACKSTONE with ooids, shell fragments, glauconite and a black mineral (pyrite?). This material could be fall-in material.



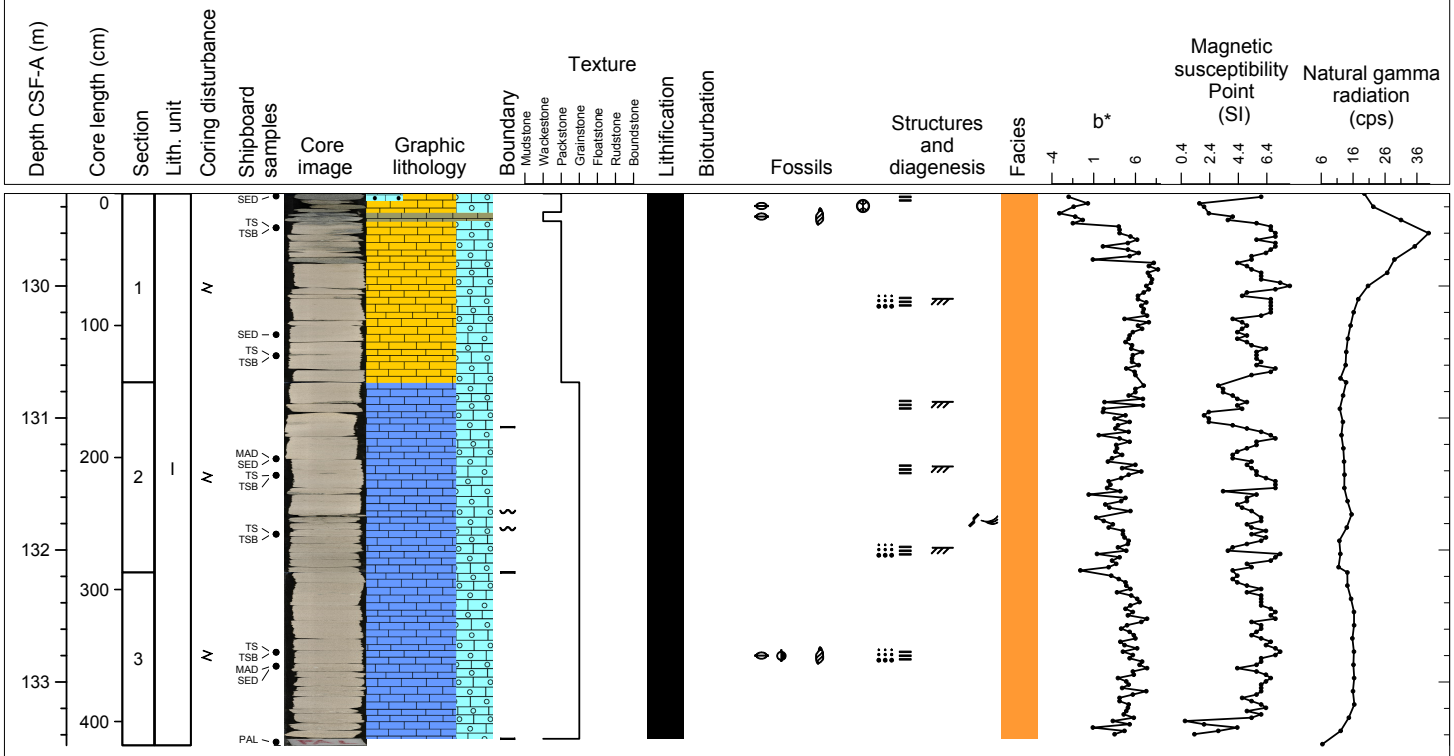
Hole 356-U1462C Core 21R, Interval 124.4-124.83 m (CSF-A)

Lithified, dark greenish-gray, sand-sized, PACKSTONE with ooids, glauconite, rare macrofossils, and a brown, mud-filled burrow several cm's long.



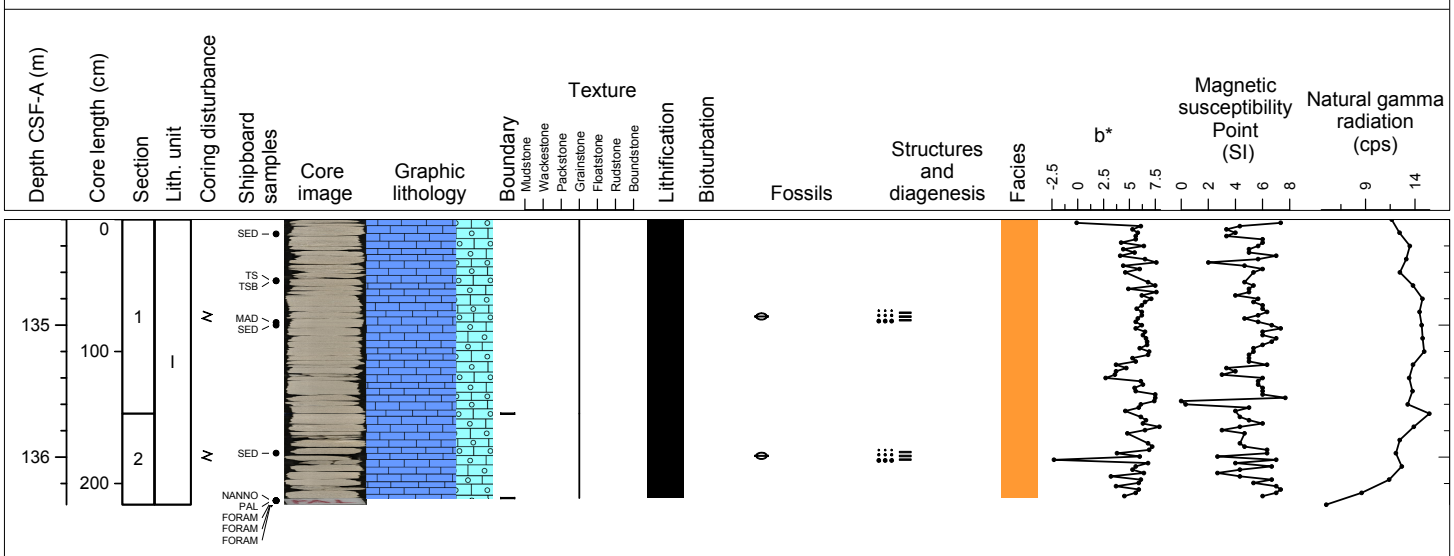
Hole 356-U1462C Core 22R, Interval 129.3-133.48 m (CSF-A)

At the top of the core there is lithified, dark greenish gray to grayish green, PACKSTONE with sand-size ooids and bivalve fragments, occasional bryozoans, and a single Dendrophylliidae solitary coral. This lithology forms sharp, irregular contacts with the underlying (and intermixed) lithified, cream, ooid-rich, GRAINSTONE that is devoid of macrofossils; there is discoloration of the cream GRAINSTONE near the contacts. The intermixed dark WACKESTONE occurs in irregular sizes and shapes, and it often contains bivalve fragments of coarse sand size. The cream GRAINSTONE contains parallel laminae, cross bedding, normal grading, contacts, and burrows. Further down the core, the cream GRAINSTONE is modified and contains solution and recrystallization features of the above-mentioned WACKESTONE; horizontal and vertical fractures are filled with the WACKESTONE and bivalve fragments.



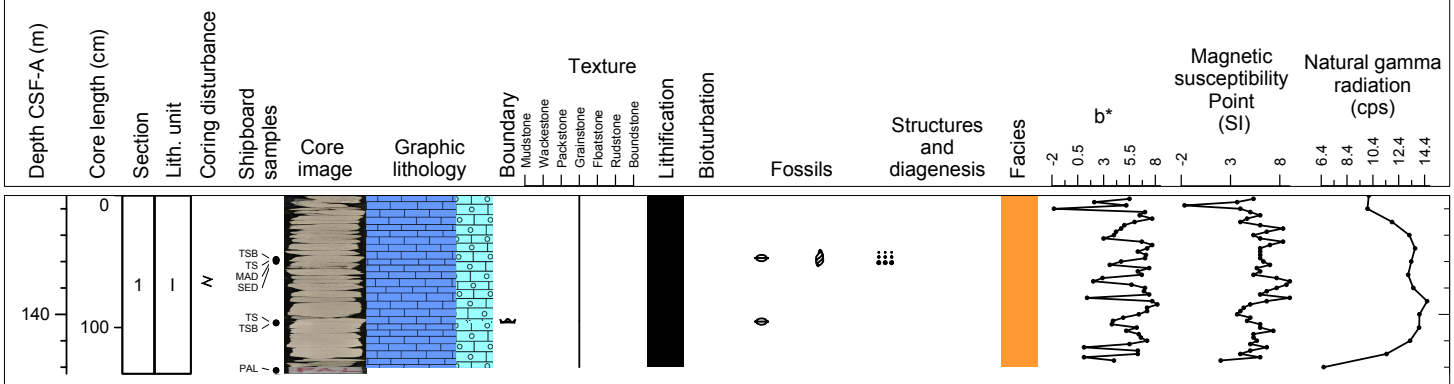
Hole 356-U1462C Core 23R, Interval 134.2-136.36 m (CSF-A)

Lithified, cream to creamy gray, GRAINSTONE with medium to coarse sand-size ooids and sand- to gravel-sized macrofossils, mainly bivalves. There are planar laminae, normal grading, sharp contacts, burrows (filled with finer-grained PACKSTONE), and possible cross-bedding. There is secondary mineralization mainly associated with bivalves.



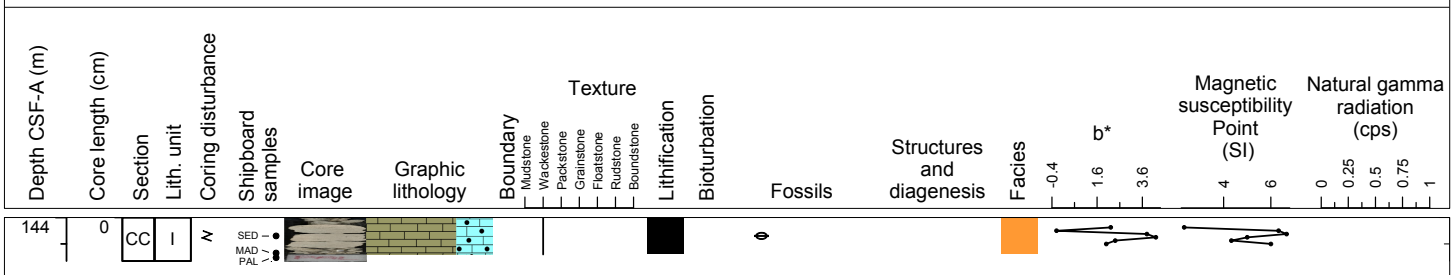
Hole 356-U1462C Core 24R, Interval 139.1-140.45 m (CSF-A)

Lithified, cream, GRAINSTONE with ooids that grade from coarse to medium to fine sand-size down core. There are graded beds with sharp and wavy basal contacts in the upper part of the core; macrofossils and ooids (gravel to coarse sand size) occur above the contacts. In the lower part of the core there are faint laminations.



Hole 356-U1462C Core 25R, Interval 144.0-144.33 m (CSF-A)

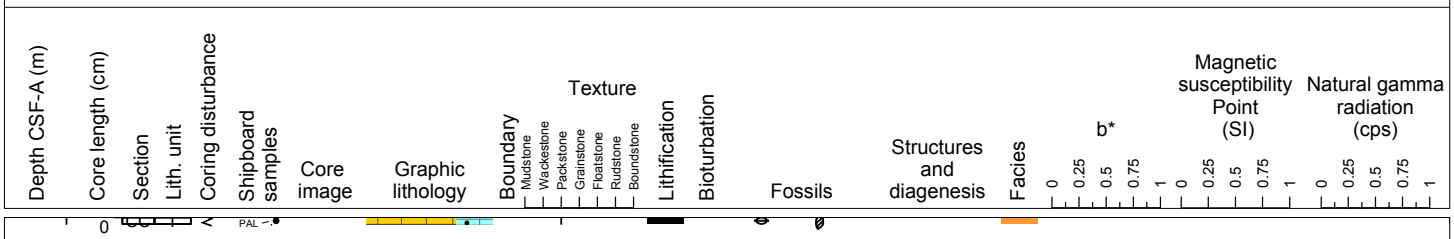
Lithified, cream, WACKESTONE with fine sand-size peloids or ooids and sparse bivalve fragments.



ALL TO PAL

Hole 356-U1462C Core 26R, Interval 148.9-148.95 m (CSF-A)

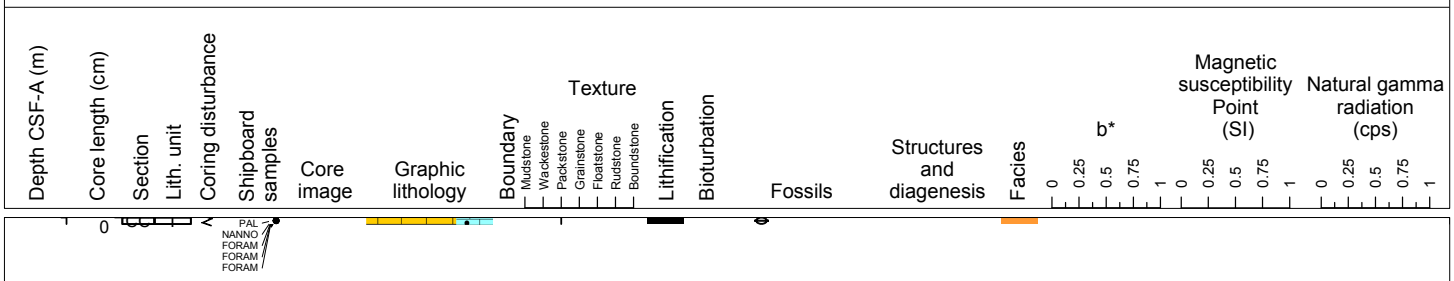
Lithified, cream, PACKSTONE with fine sand-size peloids or ooids and bivalve and gastropod fragments.



ALL TO PAL

Hole 356-U1462C Core 27R, Interval 153.8-153.85 m (CSF-A)

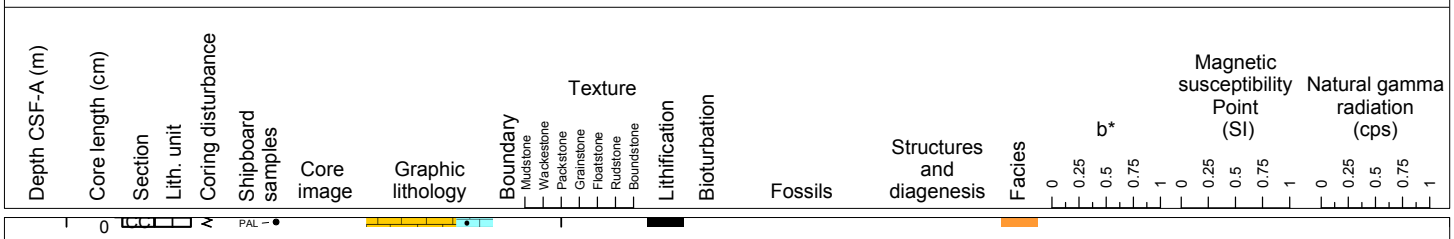
Lithified, light greenish-gray, PACKSTONE with sand-size peloids or ooids and bivalve fragments. There is more glauconite in this core than previous cores. All to pal.



ALL TO PAL

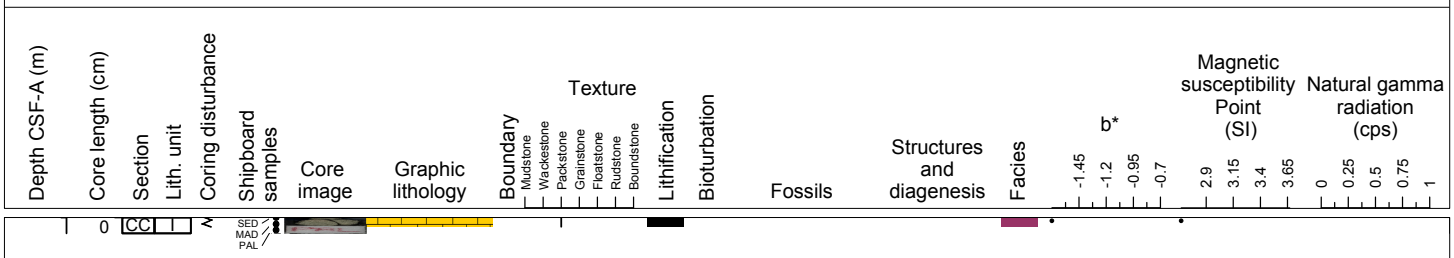
Hole 356-U1462C Core 28R, Interval 158.7-158.77 m (CSF-A)

Lithified, dark greenish-gray, PACKSTONE with coarse sand-size peloids or ooids, glauconite, and a rare bivalve fragment. All to pal.



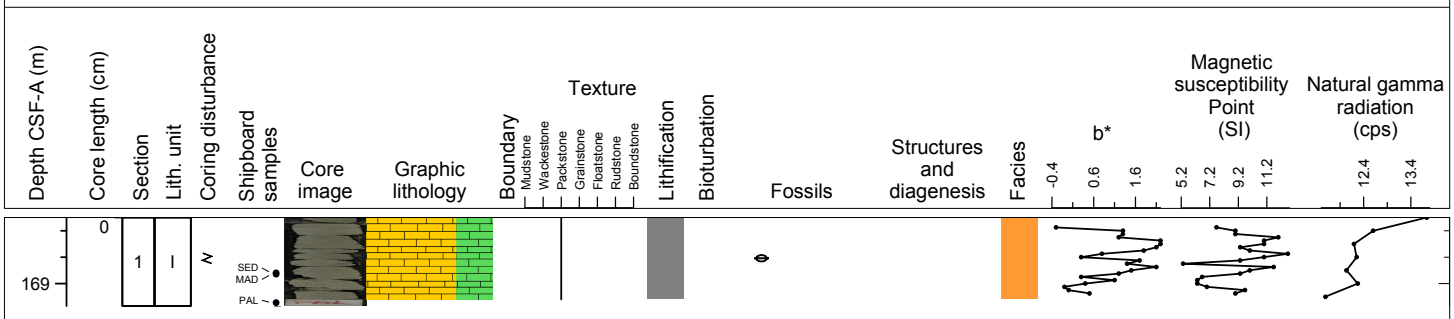
Hole 356-U1462C Core 29R, Interval 163.6-163.72 m (CSF-A)

Lithified, dark greenish-gray, PACKSTONE with sand-size glauconite grains.



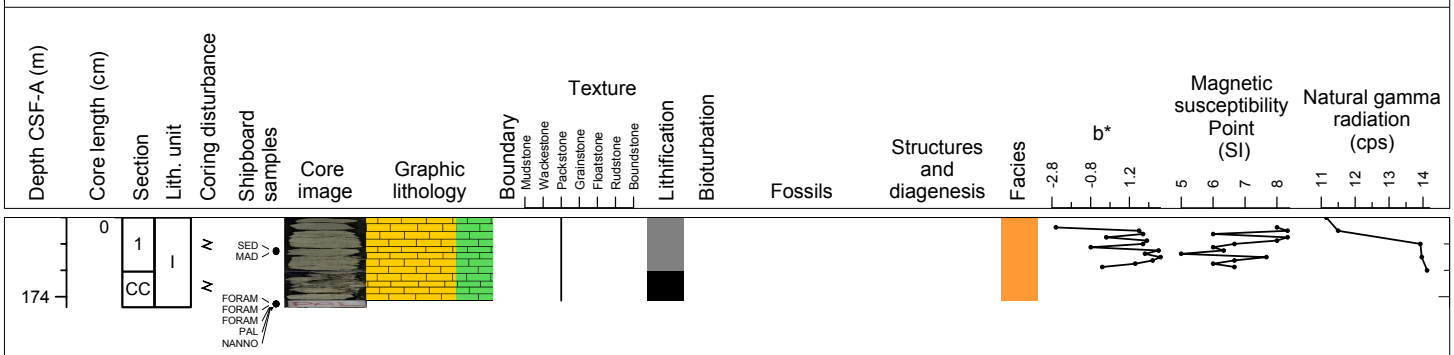
Hole 356-U1462C Core 30R, Interval 168.5-169.17 m (CSF-A)

Partially-lithified, dark greenish-gray, fine to medium sand-size, PACKSTONE with glauconite and a few bivalve fragments.



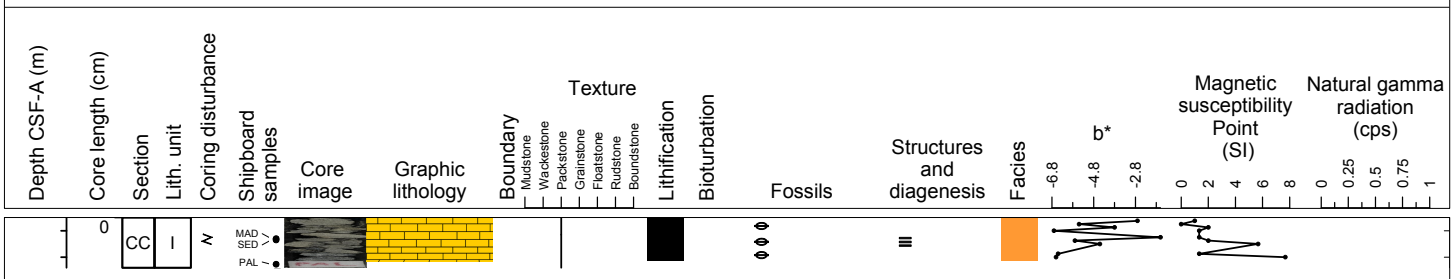
Hole 356-U1462C Core 31R, Interval 173.4-174.08 m (CSF-A)

Lithified to partially-lithified, dark greenish-gray, fine to medium sand-sized, PACKSTONE with glauconite and a few bivalve fragments.



Hole 356-U1462C Core 32R, Interval 178.3-178.68 m (CSF-A)

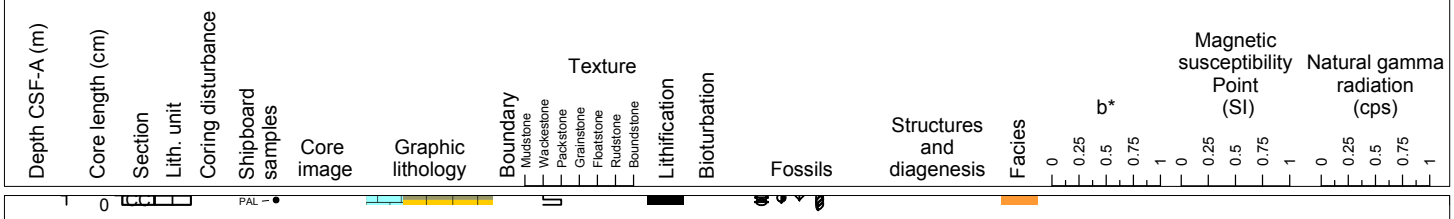
Lithified, dark greenish-gray, PACKSTONE with grains that grade from coarse to fine sand size down core. Bivalves and black grains are common. There are planar laminae.



ALL TO PAL

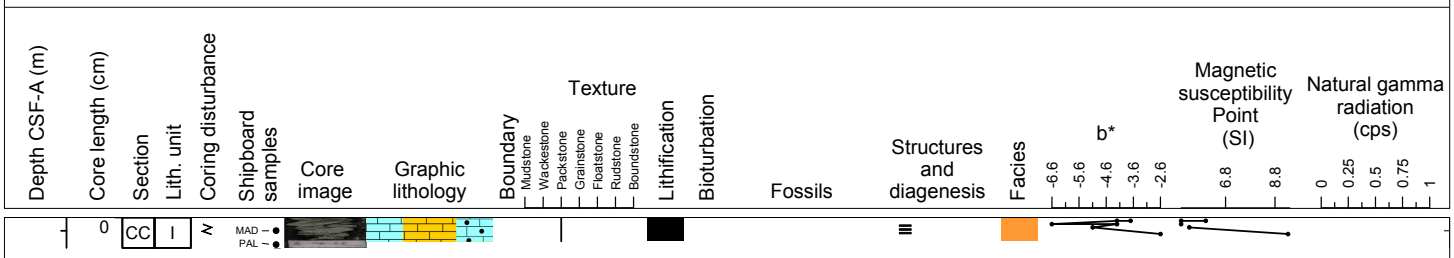
Hole 356-U1462C Core 33R, Interval 183.2-183.27 m (CSF-A)

Lithified, dark greenish-gray, skeletal, WACKESTONE with bivalves, foraminifers, bryozoans, and gastropods. There are inclusions composed of PACKSTONE with very fine sand-sized grains in the WACKESTONE. The lower part of the core catcher is composed of lithified, dark grayish-green, skeletal, PACKSTONE with coarse sand-sized macrofossils and gravel-sized glauconite grains.



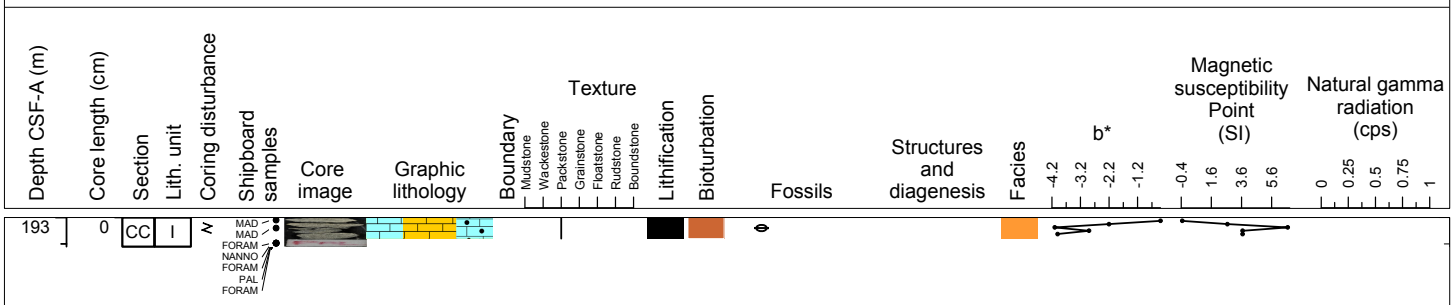
Hole 356-U1462C Core 34R, Interval 188.1-188.33 m (CSF-A)

Lithified, dark greenish-gray, skeletal, PACKSTONE with sand-size peloids or ooids, black grains, and fragments of lithified, skeletal, WACKSTONE with gravel-sized bivalve fragments (it it the same material found in the previous Section). Parallel laminae are common.



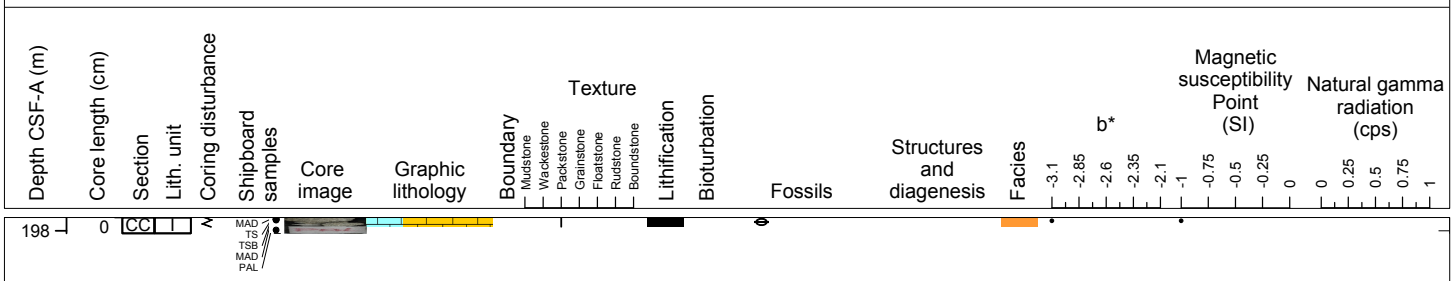
Hole 356-U1462C Core 35R, Interval 193.0-193.22 m (CSF-A)

Lithified, dark greenis-gray, skeletal, PACKSTONE with coarse and fine sand-size grains (black and green) and gravel-sized macrofossils (bivalves are dominant). Burrows filled with micrite are common.



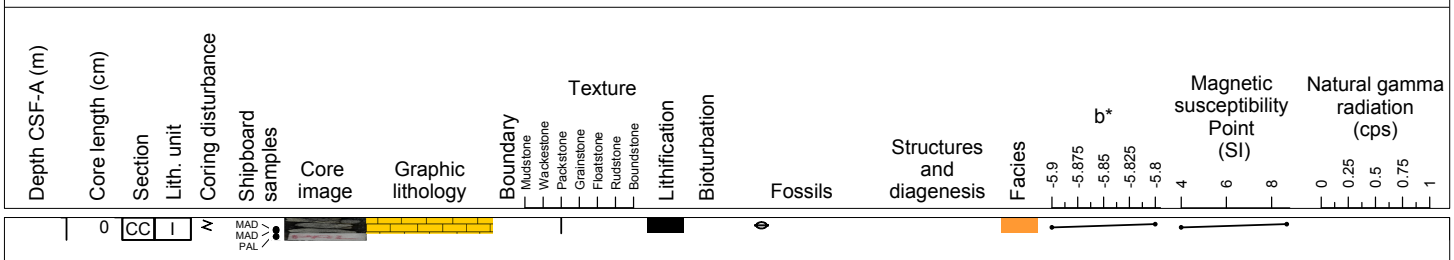
Hole 356-U1462C Core 36R, Interval 197.9-198.02 m (CSF-A)

Lithified, dark greenish-gray, skeletal, PACKSTONE with coarse sand-sized grains up to large pebble-sized bivalve fragments and few gastropod molds.



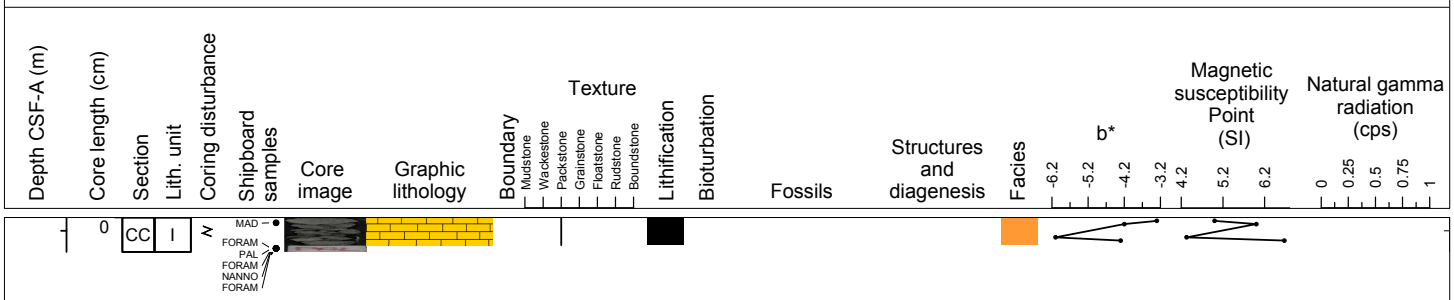
Hole 356-U1462C Core 37R, Interval 202.8-202.97 m (CSF-A)

Lithified, dark greenish-gray, PACKSTONE with sand-sized grains (black and green) and macrofossil fragments (bivalves).



Hole 356-U1462C Core 38R, Interval 207.7-207.96 m (CSF-A)

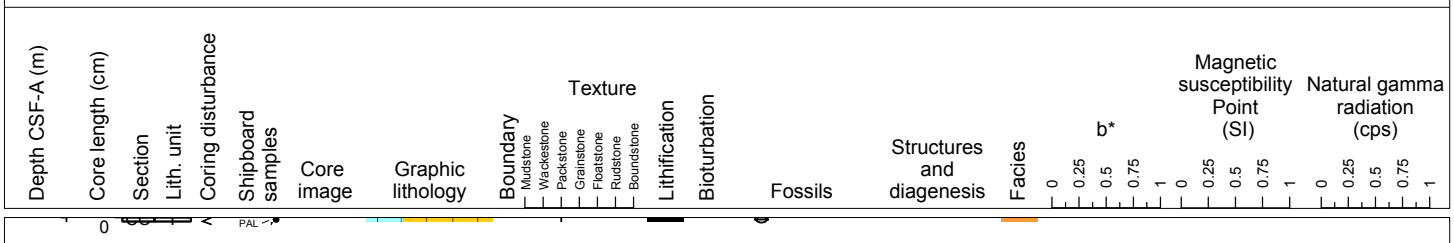
Lithified, dark greenish-gray, PACKSTONE with sand-sized grains (black and green grains) and a large burrow, 2 cm long.



ALL TO PAL

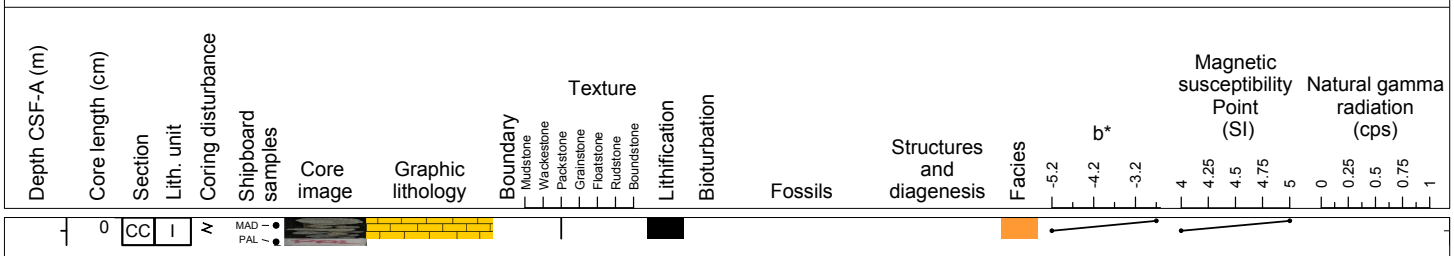
Hole 356-U1462C Core 39R, Interval 212.6-212.63 m (CSF-A)

Lithified, dark greenish-gray, skeletal, PACKSTONE with coarse sand-size grains (black and green) and macrofossil fragments (bivalves, benthic foraminifers and a Fungiid coral).



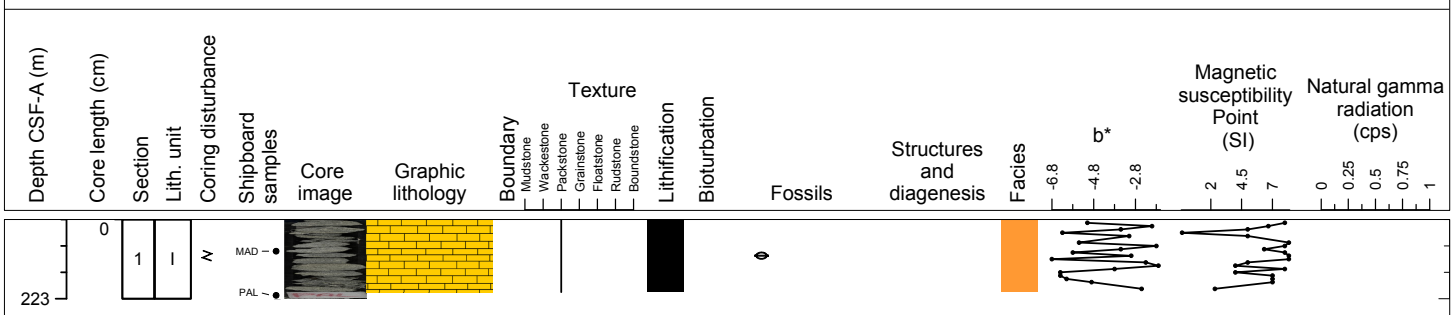
Hole 356-U1462C Core 40R, Interval 217.5-217.71 m (CSF-A)

Lithified, dark greenish-gray, PACKSTONE with sand-size grains (black and green).



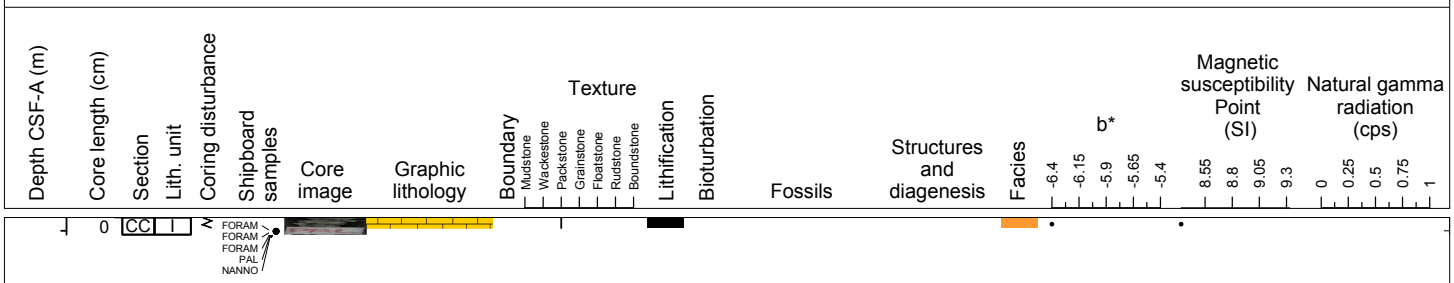
Hole 356-U1462C Core 41R, Interval 222.4-223.0 m (CSF-A)

Lithified, light greenish-gray, PACKSTONE with coarse sand-sized grains (black and green) and macrofossil fragments (mainly bivalve with some gastropods). There are crystals inside cavities.



Hole 356-U1462C Core 42R, Interval 227.3-227.43 m (CSF-A)

Lithified, dark greenish-gray, PACKSTONE with sand-sized grains (black and green).



ALL TO PAL

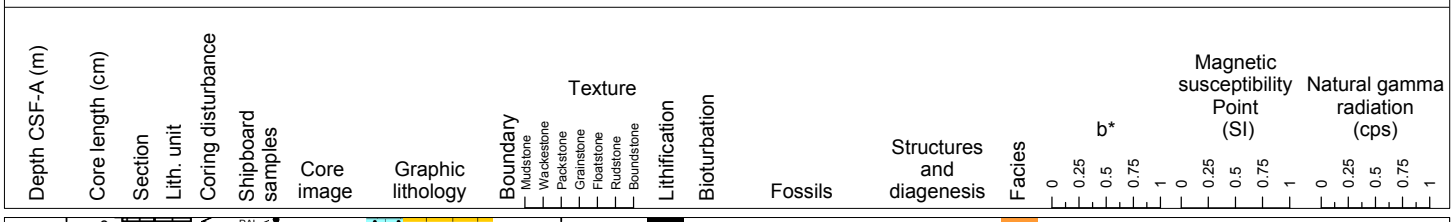
Hole 356-U1462C Core 43R, Interval 232.2-232.29 m (CSF-A)

Lithified, dark greenish-gray, non-skeletal, PACKSTONE with sand-sized grains (black and green). All to pal.

ALL TO PAL

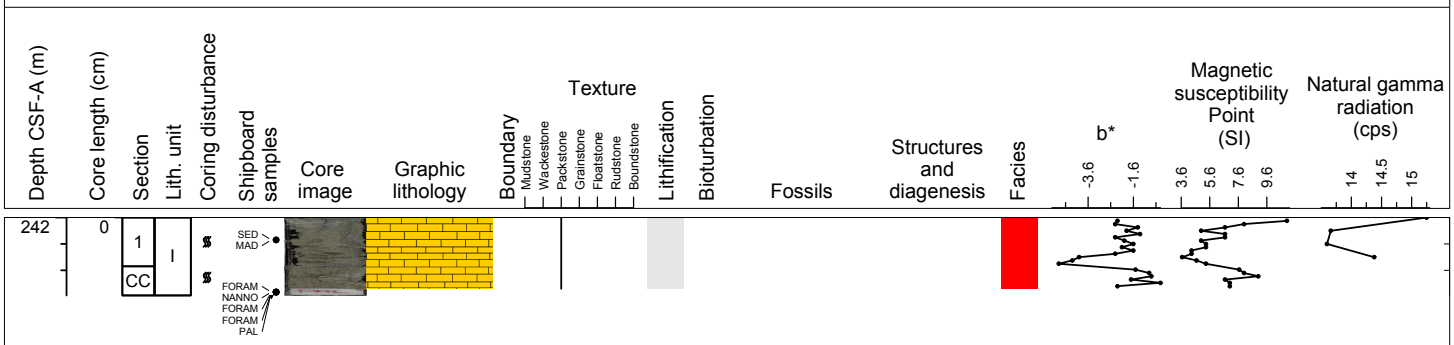
Hole 356-U1462C Core 44R, Interval 237.1-237.13 m (CSF-A)

Lithified, dark greenish-gray, non-skeletal, PACKSTONE with sand-sized grains (black and green grains). All to pal.



Hole 356-U1462C Core 45R, Interval 242.0-242.59 m (CSF-A)

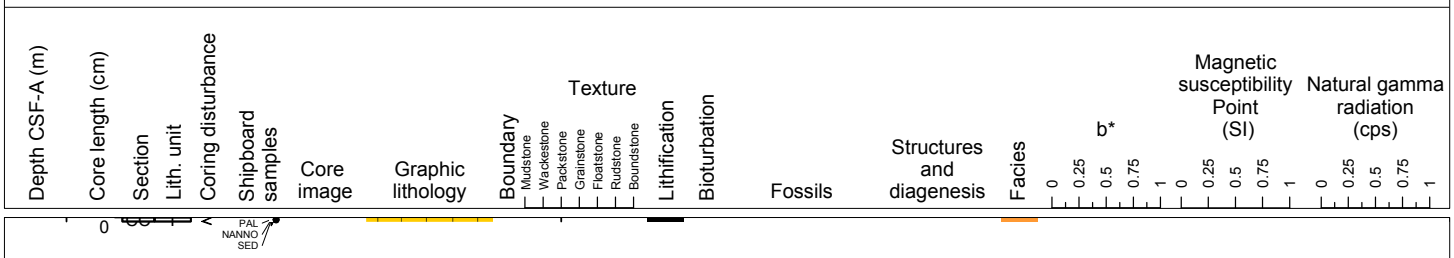
Unlithified, dark greenish gray to dark grayish green, PACKSTONE with sand-size grains (black and green) and macrofossil fragments.



ALL TO PAL

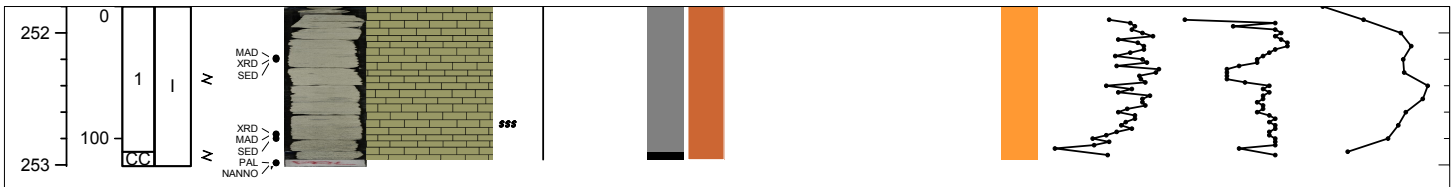
Hole 356-U1462C Core 46R, Interval 246.9-246.93 m (CSF-A)

Lithified, light grayish-green, PACKSTONE with very fine sand-sized grains (green), bivalve fragments, and a crustacean fragment. All to pal.



Hole 356-U1462C Core 47R, Interval 251.8-253.01 m (CSF-A)

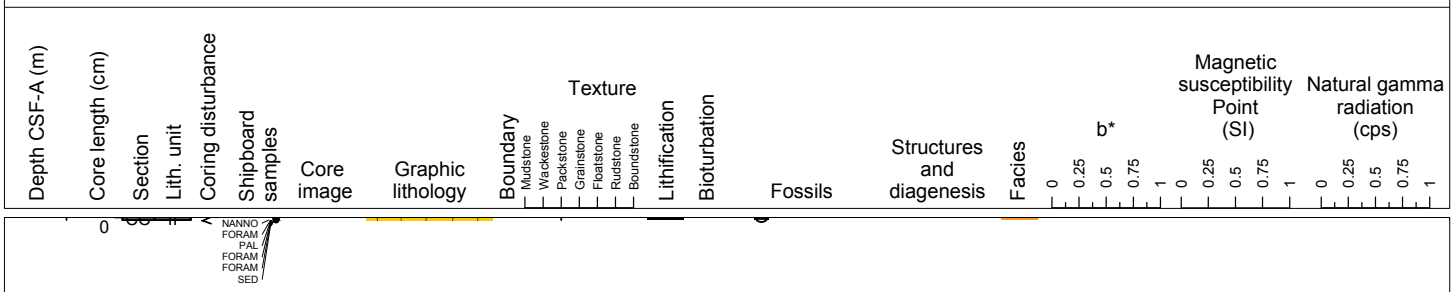
Partially to lithified, cream gray to light greenish-gray, very fine sand-sized, WACKESTONE with dark grains (green/black). These dark grains as well as bioturbation, macrofossil fragments (including bivalves, gastropods, tubes), and small benthic foraminifers are present throughout the core but increase with depth. Color transitions to light greenish gray with depth as well. Bioturbated contacts are also present.



ALL TO PAL

Hole 356-U1462C Core 48R, Interval 256.7-256.72 m (CSF-A)

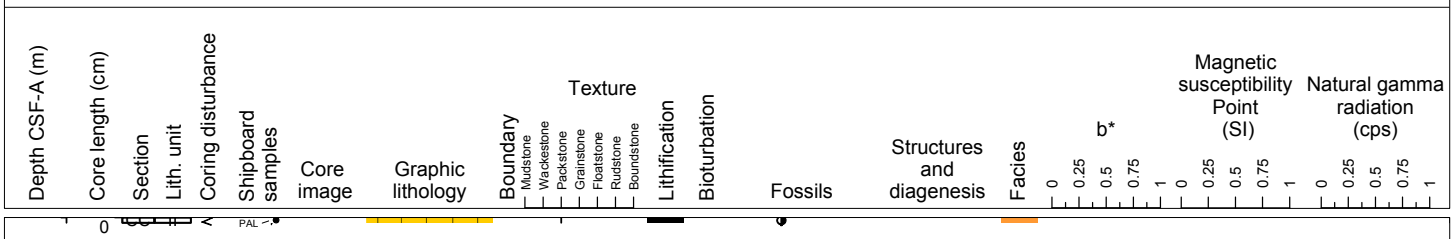
Lithified, gray, medium sand-sized, PACKSTONE with larger unidentified biocrasts. All to pal.



ALL TO PAL

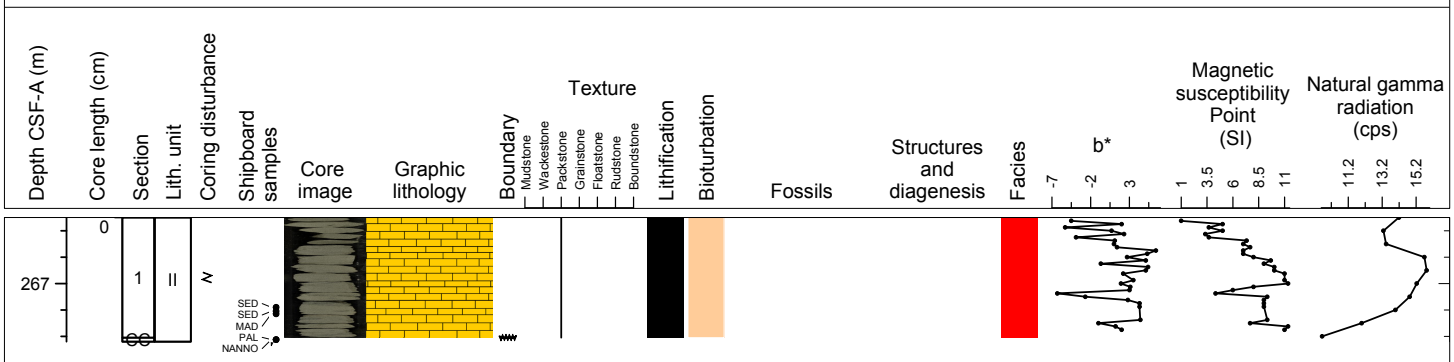
Hole 356-U1462C Core 49R, Interval 261.6-261.64 m (CSF-A)

Lithified, gray, medium sand-sized, PACKSTONE with rare benthic foraminifers. All to pal.



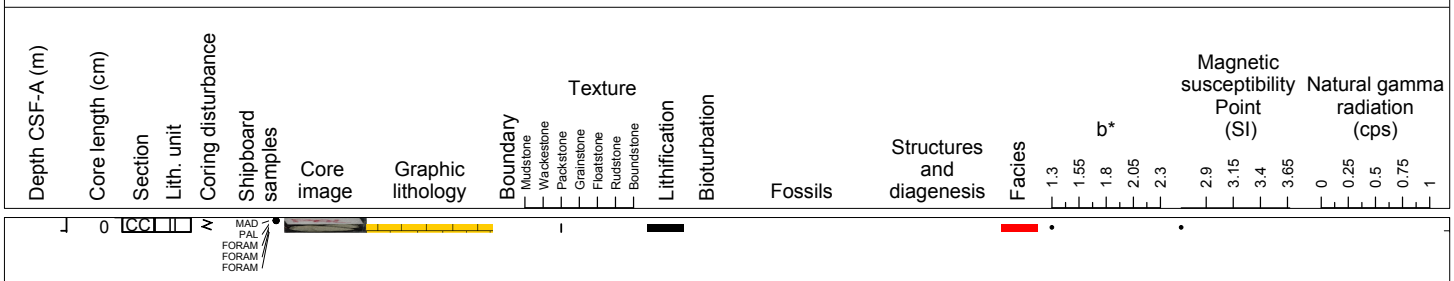
Hole 356-U1462C Core 50R, Interval 266.5-267.44 m (CSF-A)

Lithified, light greenish gray, coarse sand-sized, PACKSTONE with black grains that are sparse and small except in the in-filled burrows and above contacts. There are occasional bivalve fragments and benthic foraminifers.



Hole 356-U1462C Core 51R, Interval 271.3-271.41 m (CSF-A)

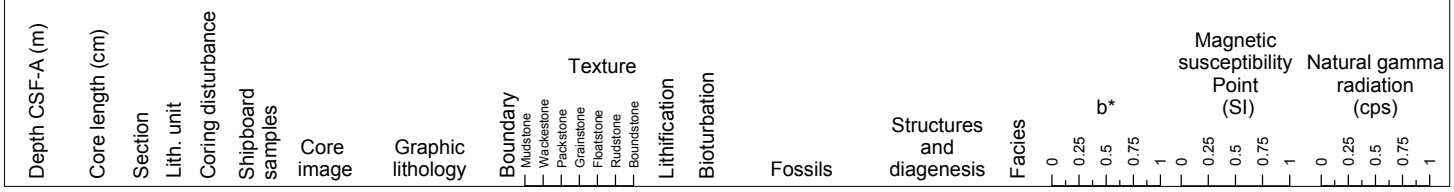
Lithified, light olive-gray, coarse sand-sized, PACKSTONE with black grains and sparse bivalve fragments.



NO RECOVERY

Hole 356-U1462C Core 52R, Interval 276.1-276.1 m (CSF-A)

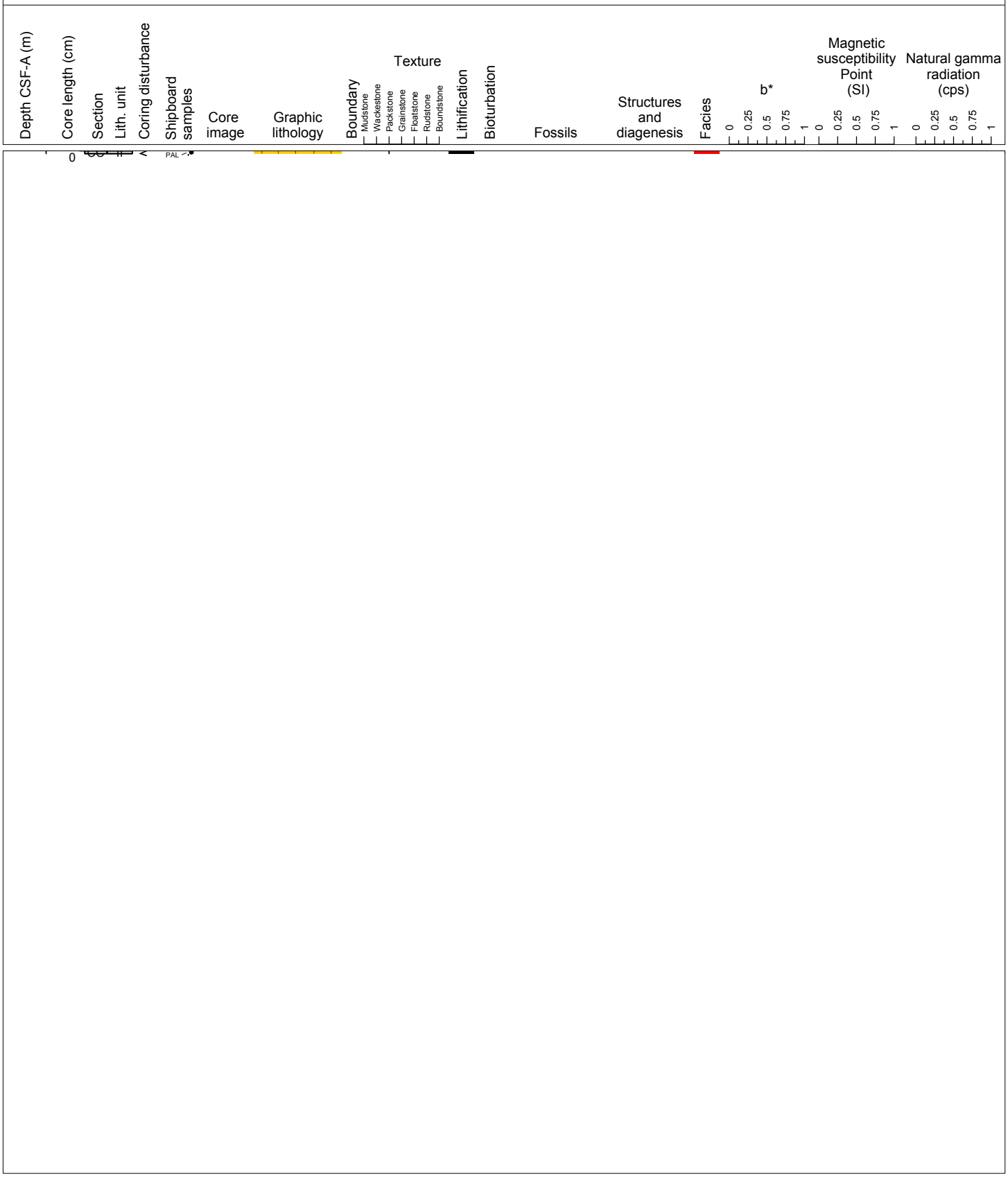
no recovery



ALL TO PAL

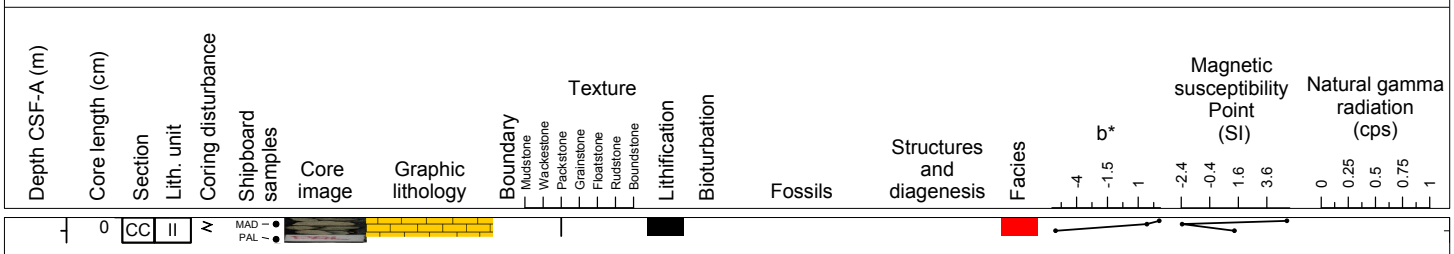
Hole 356-U1462C Core 53R, Interval 280.9-280.93 m (CSF-A)

Lithified, light grayish-green, sand-sized, PACKSTONE with green grains and bivalve fragments.



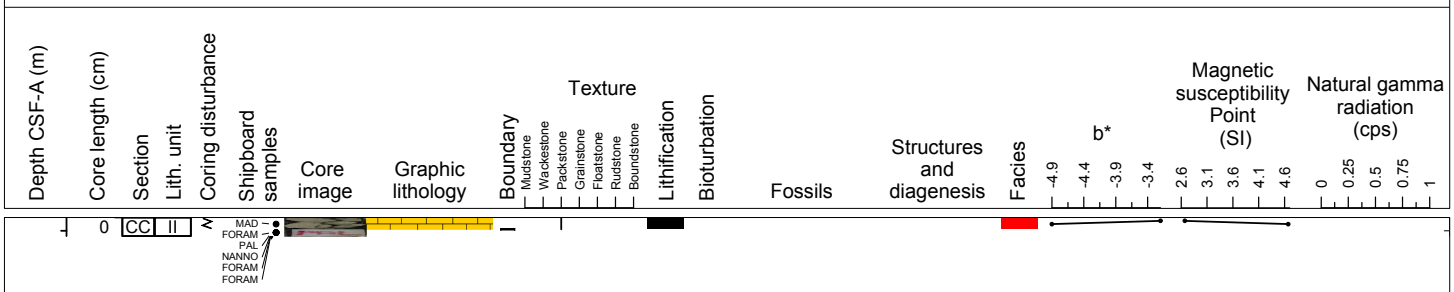
Hole 356-U1462C Core 54R, Interval 285.7-285.89 m (CSF-A)

Lithified, dark greenish-gray, medium sand-sized, PACKSTONE with green and black grains and macrofossil fragments (bivalve, gastropods, and tubes).



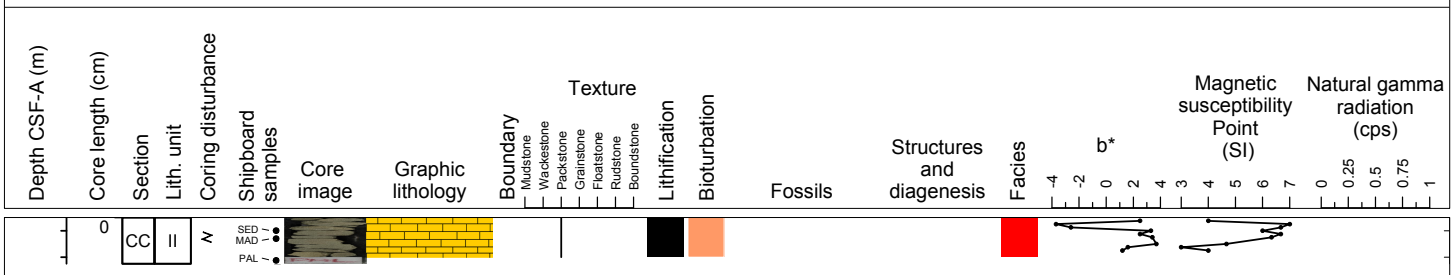
Hole 356-U1462C Core 55R, Interval 290.5-290.64 m (CSF-A)

Lithified, dark greenish-gray, medium sand-sized, PACKSTONE with black and green grains and abundant bivalve fragments. There is a sharp contact between darker and light greenish-gray PACKSTONE.



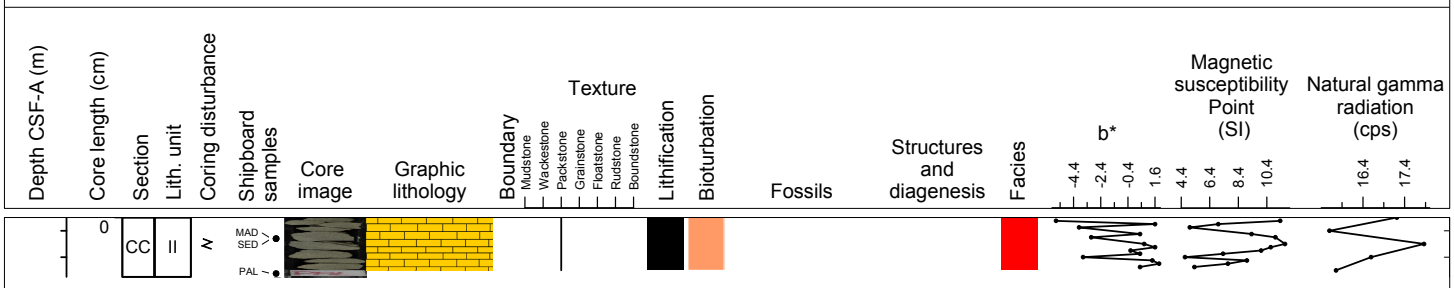
Hole 356-U1462C Core 56R, Interval 295.3-295.65 m (CSF-A)

Lithified, olive gray, medium sand-sized, PACKSTONE with black and green grains, abundant tubes, common bivalves, and occasional benthic foraminifers. with medium sand size grains. Burrows in-filled with PACKSTONE material are common.



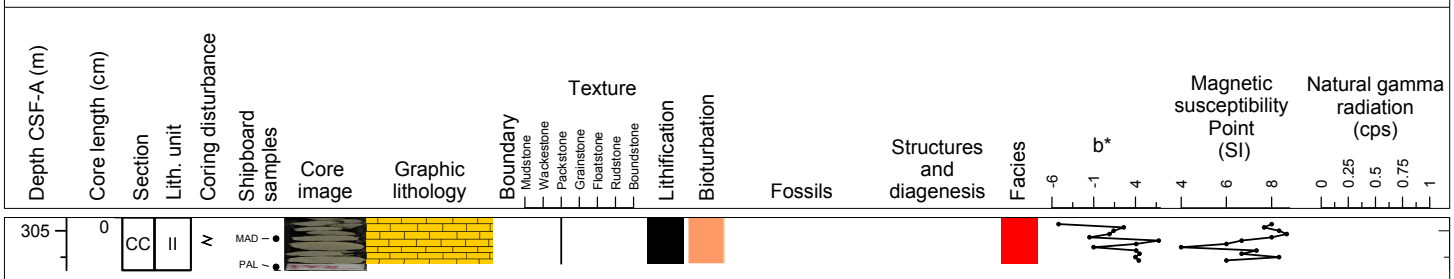
Hole 356-U1462C Core 57R, Interval 300.1-300.55 m (CSF-A)

Lithified, olive gray PACKSTONE with medium sand size grains. Grains are black and green. Occasional bivalves and benthic foram. Burrows infilled with PACKSTONE material moderate



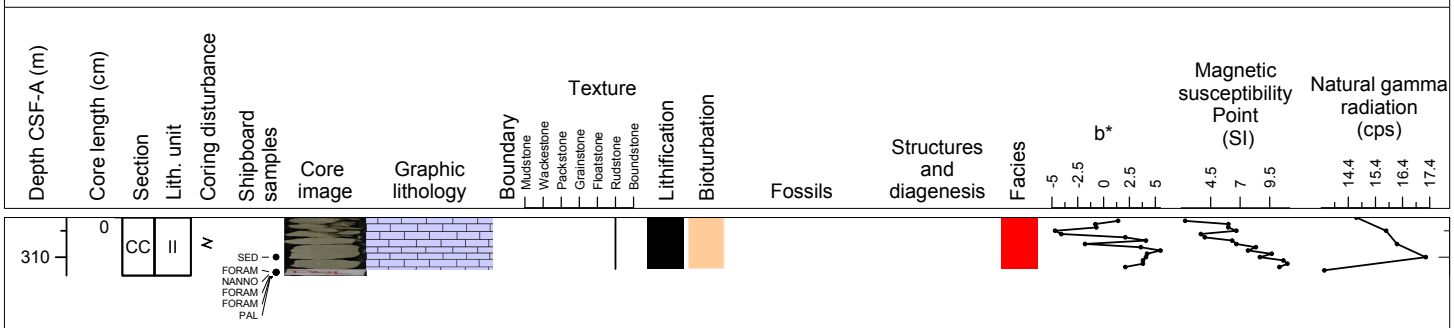
Hole 356-U1462C Core 58R, Interval 304.9-305.3 m (CSF-A)

Lithified, olive gray, sand-sized, PACKSTONE with black and green grains, common tubes, and sparse bivalves. Burrows in-filled with PACKSTONE material is moderately common.



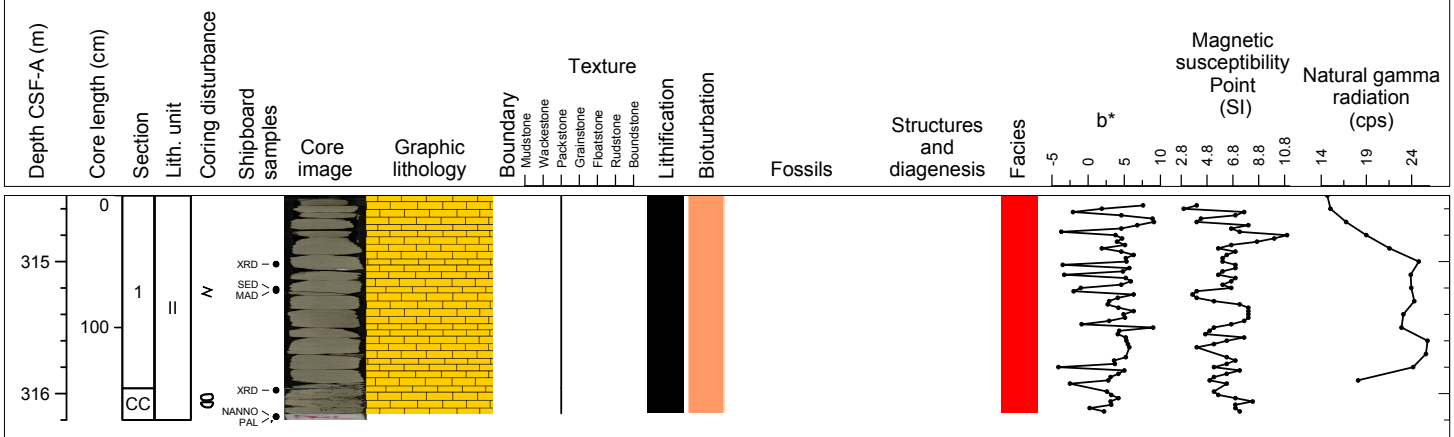
Hole 356-U1462C Core 59R, Interval 309.7-310.14 m (CSF-A)

Lithified, olive gray, medium sand-sized, RUDSTONE with black grains that are small and sparse, bivalve and tube fragments, and slight bioturbation.



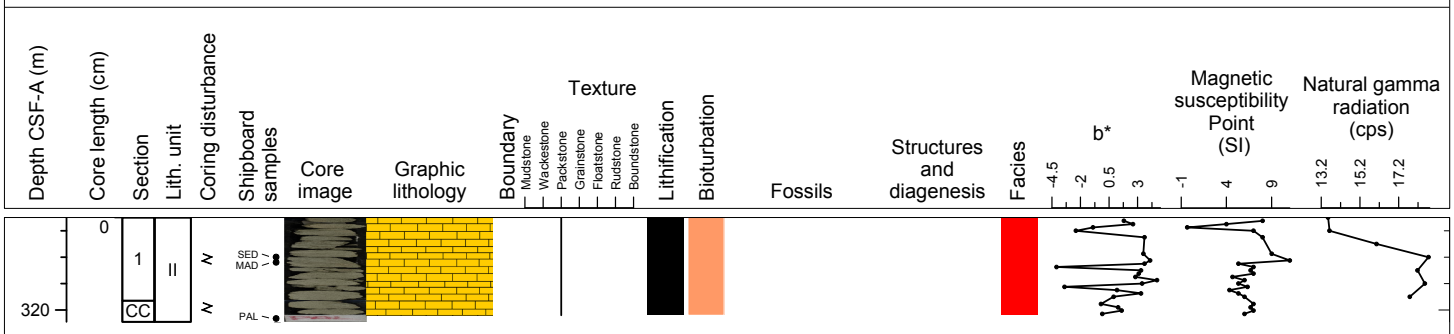
Hole 356-U1462C Core 60R, Interval 314.5-316.2 m (CSF-A)

Lithfiied, olive gray, sand-sized, PACKSTONE with black grains are few and small. Bioturbation is moderate; burrows are filled with the PACKSTONE. There was a burrow filled with transparent, white crystalline mineral 6 cm long. The material does not fizz with HCl, and it is hard. Bivalve and tube fragments are sparse.



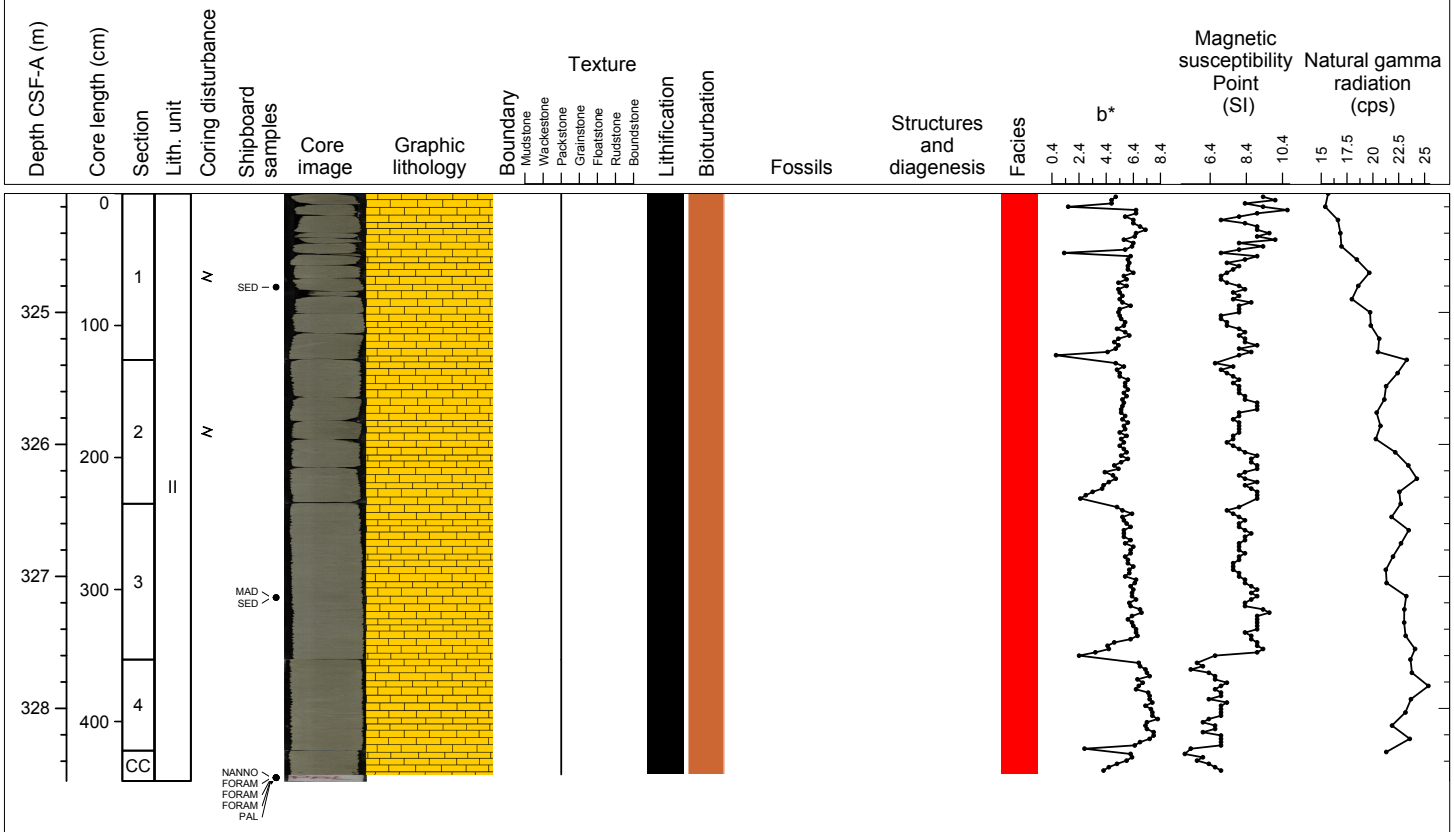
Hole 356-U1462C Core 61R, Interval 319.3-320.09 m (CSF-A)

Lithified, olive gray, sand-sized, PACKSTONE with dark concretions a few cm's long and sparse bivalve and tube fragments. Bioturbation is moderate; burrows are filled with PACKSTONE except for a few that are filled with a dark mineral (not pyrite).



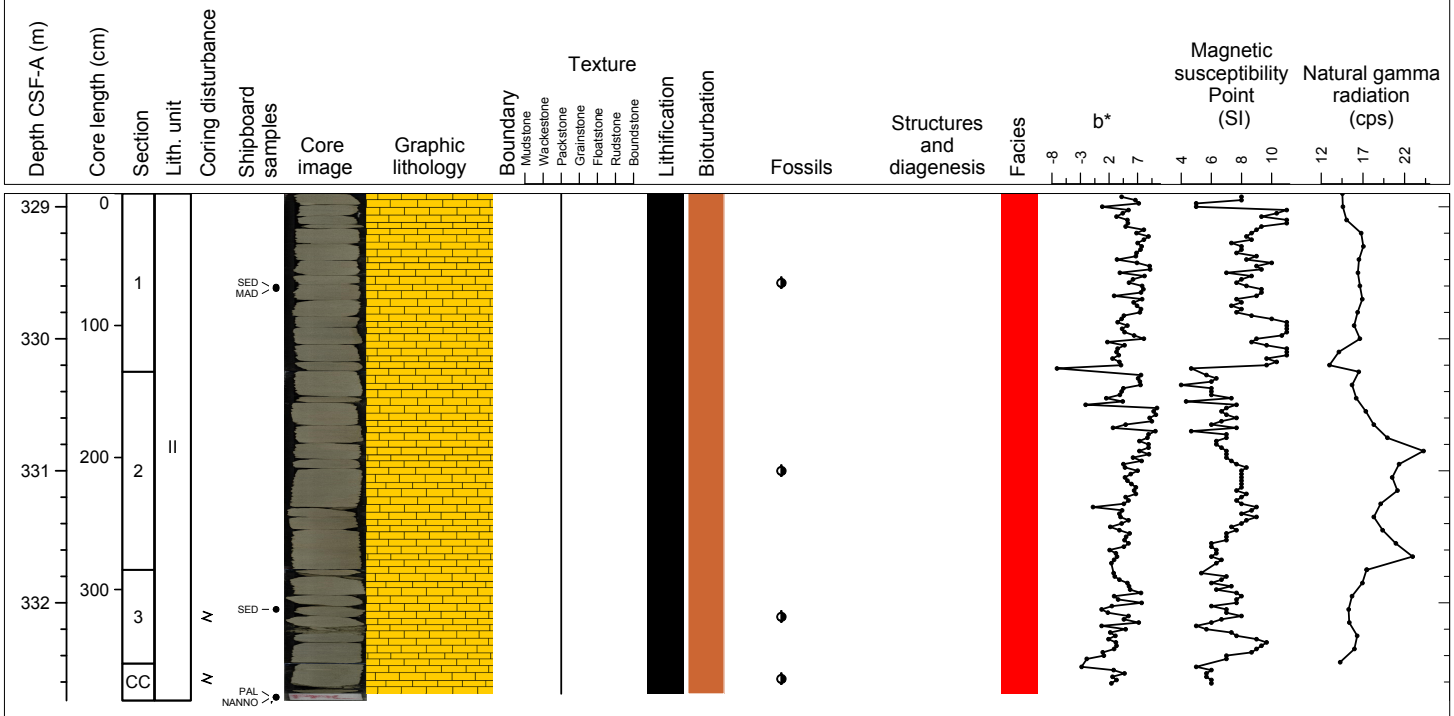
Hole 356-U1462C Core 62R, Interval 324.1-328.55 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE with common bioturbation. Occasional macrofossils include fragments of bivalves, gastropods, and tubes. Benthic foraminifers and a few dark concretions are also present.



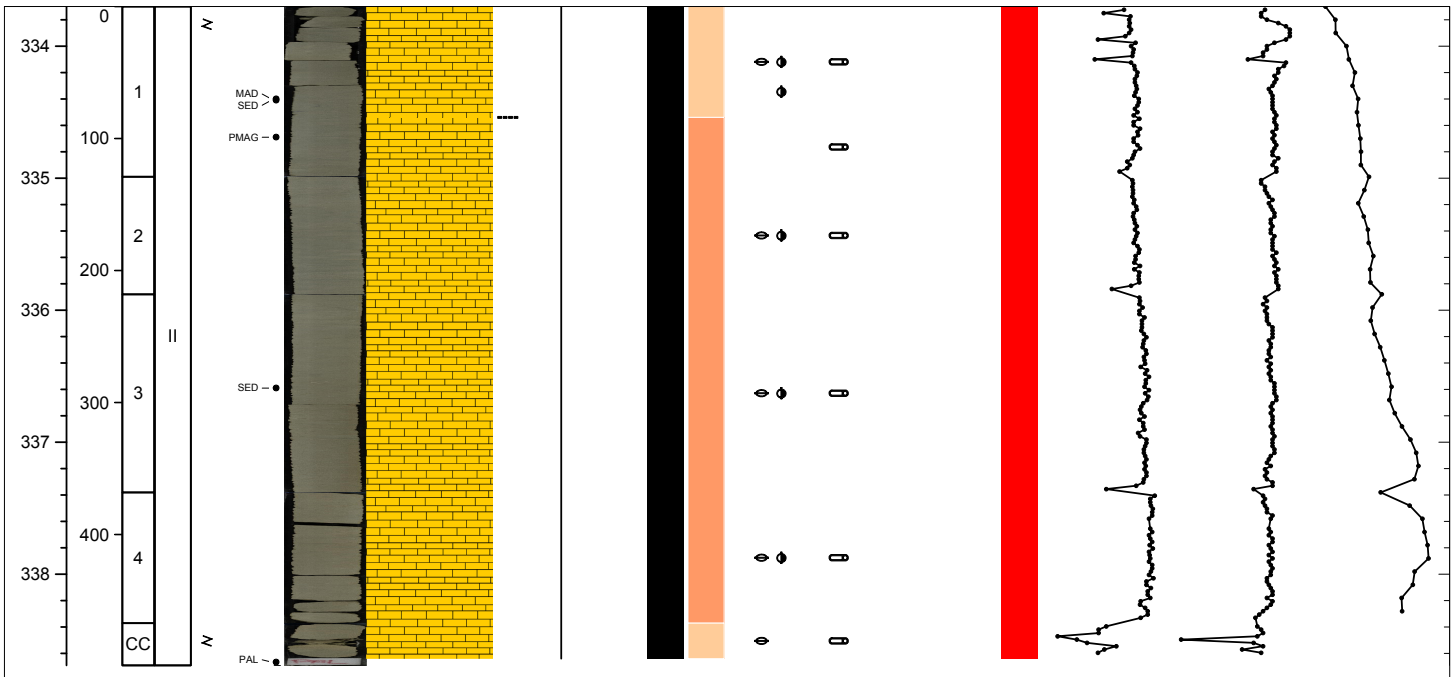
Hole 356-U1462C Core 63R, Interval 328.9-332.74 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE with common bioturbation. Most burrows are filled with the PACKSTONE material. There are occasional fragments of bivalves, and small benthic foraminiferss are common.



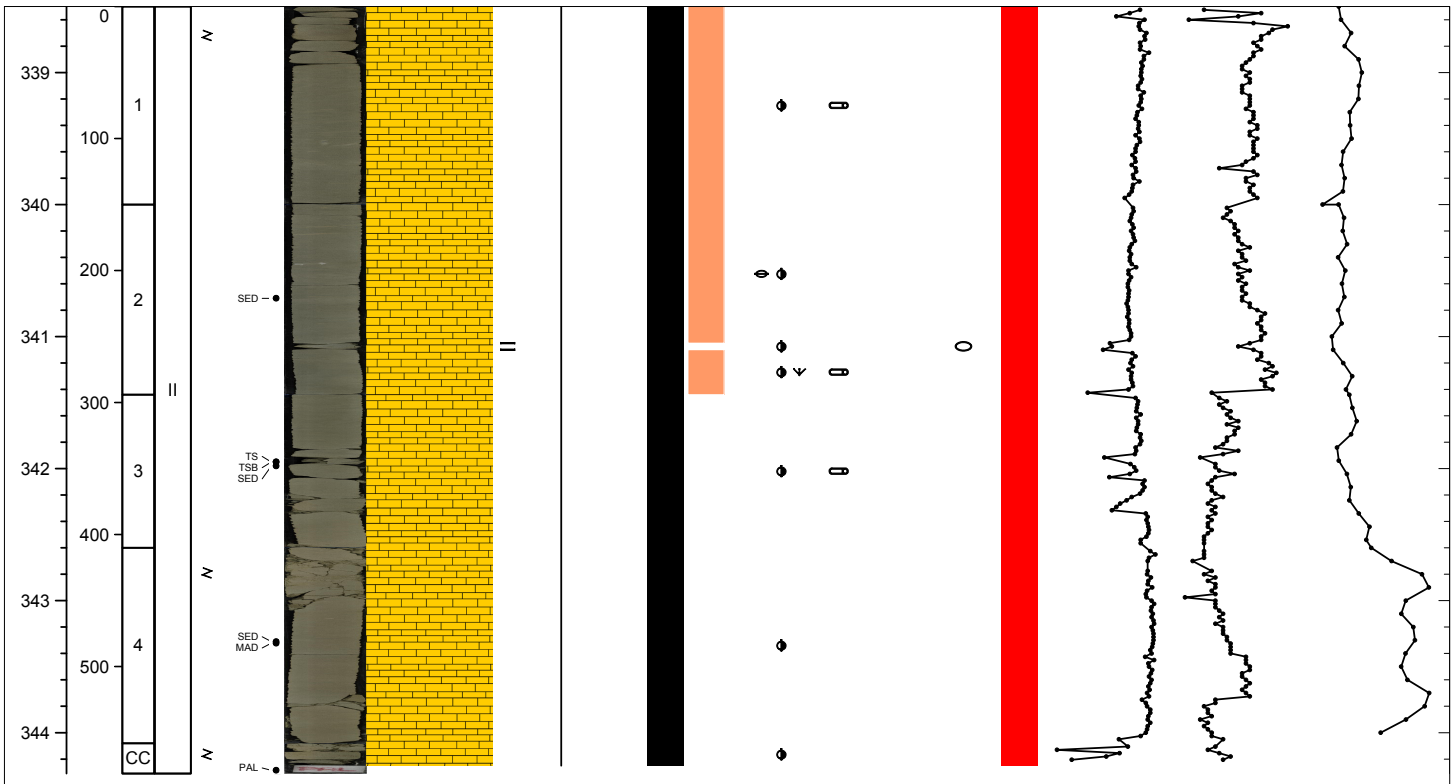
Hole 356-U1462C Core 64R, Interval 333.7-338.69 m (CSF-A)

Lithified, greenish- to olive-gray, very fine to fine sand-sized, PACKSTONE with abundant scaphopods, lesser amounts of other macrofossils, and moderate bioturbation.



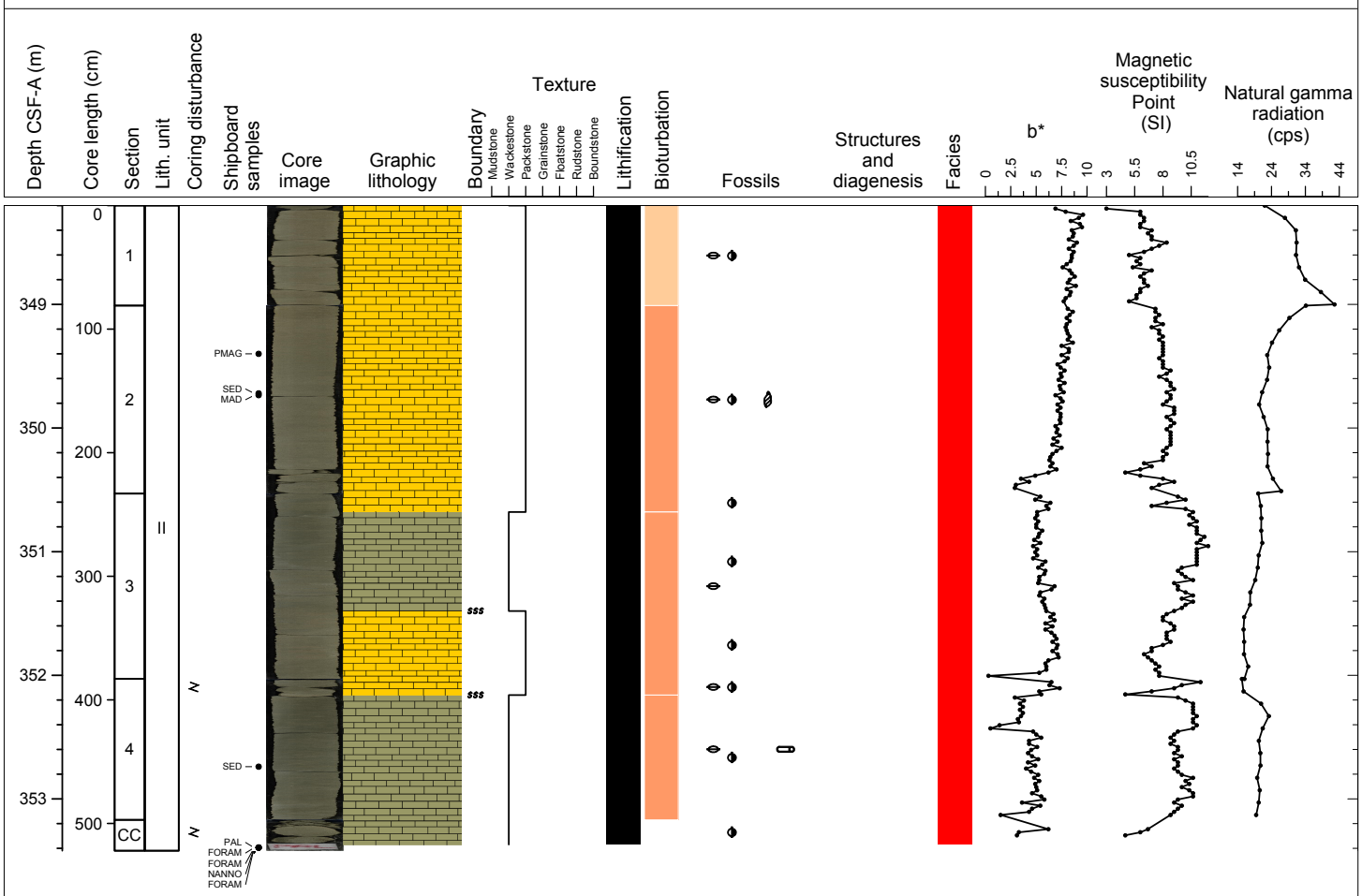
Hole 356-U1462C Core 65R, Interval 338.5-344.31 m (CSF-A)

Lithified, olive gray to light olive-gray, very fine to fine sand-sized, PACKSTONE with macrofossils and intercalated foraminifer-rich patches. Celestite concretions occur in the upper part of the core (1A, 102 cm depth).



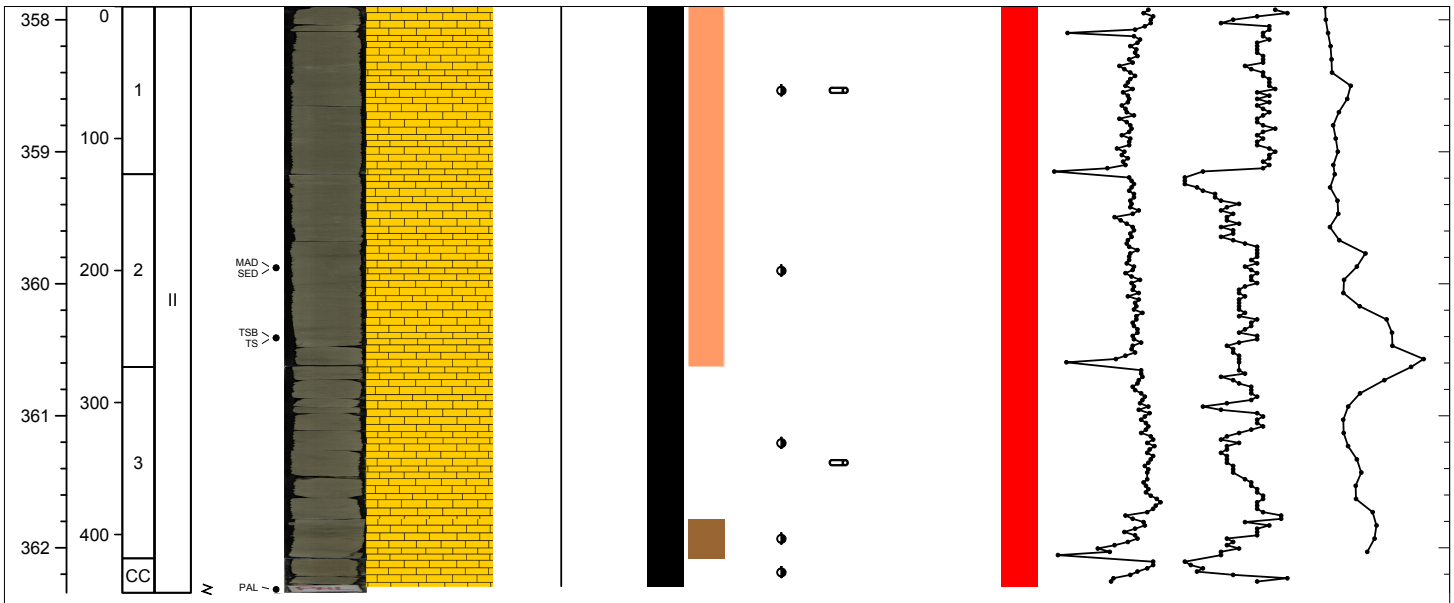
Hole 356-U1462C Core 66R, Interval 348.2-353.42 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE with moderate bioturbation and frequent patches and bands of dark grayish-green WACKESTONE.



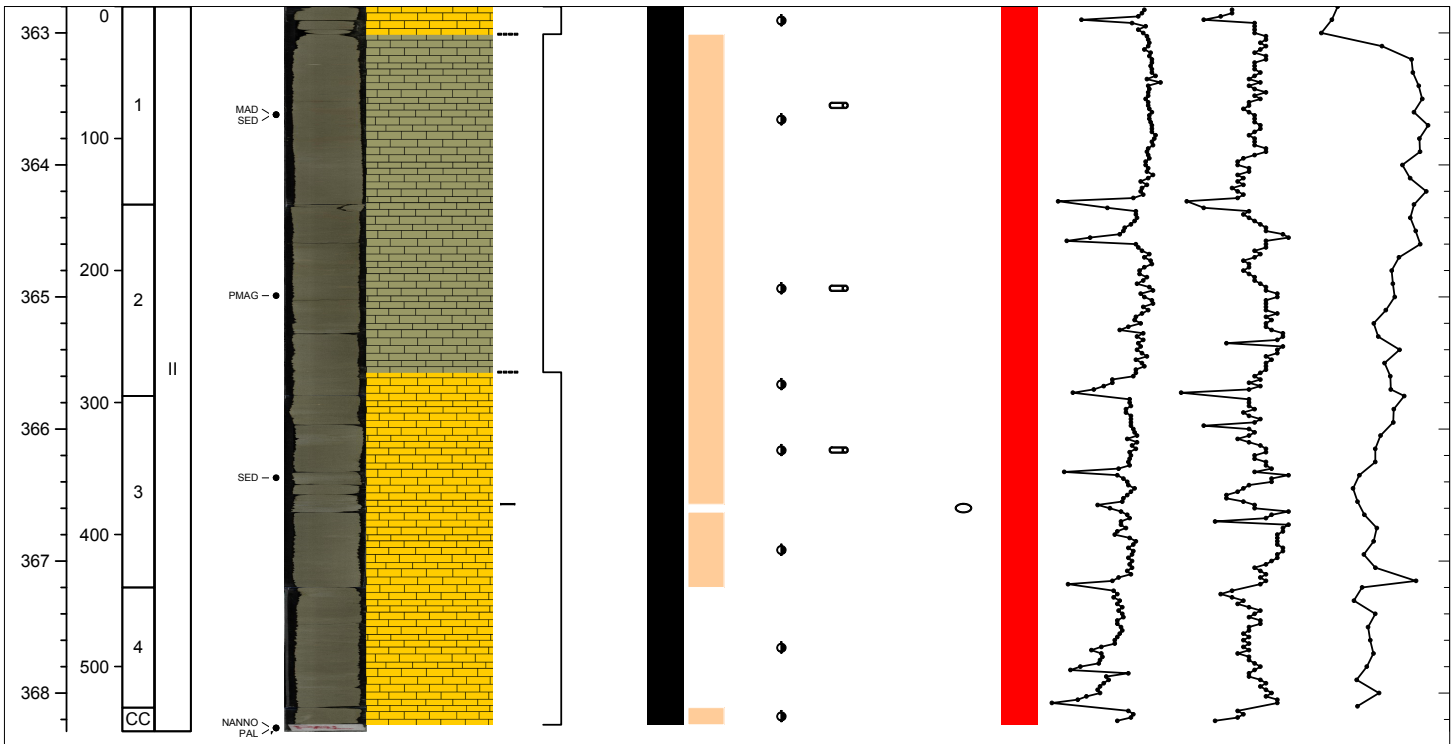
Hole 356-U1462C Core 67R, Interval 357.9-362.34 m (CSF-A)

Lithified, mottled color (olive gray and dark grayish green), fine sand-sized, PACKSTONE with moderate bioturbation. At the upper part of the core (2A, 123 cm depth), a celecate concretion occurs.



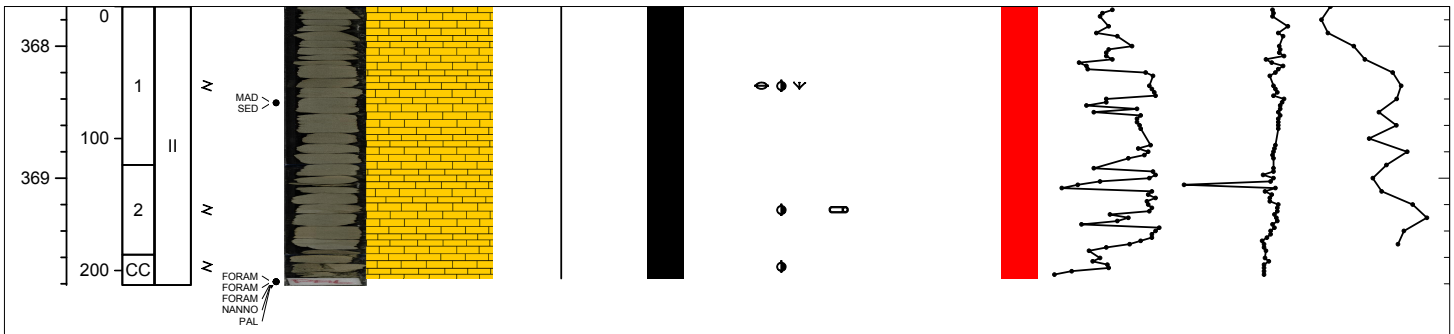
Hole 356-U1462C Core 68R, Interval 362.8-368.29 m (CSF-A)

Homogeneous, lithified, olive gray, very fine sand-sized, PACKSTONE with benthic foraminifers, intraclasts, and slight bioturbation.



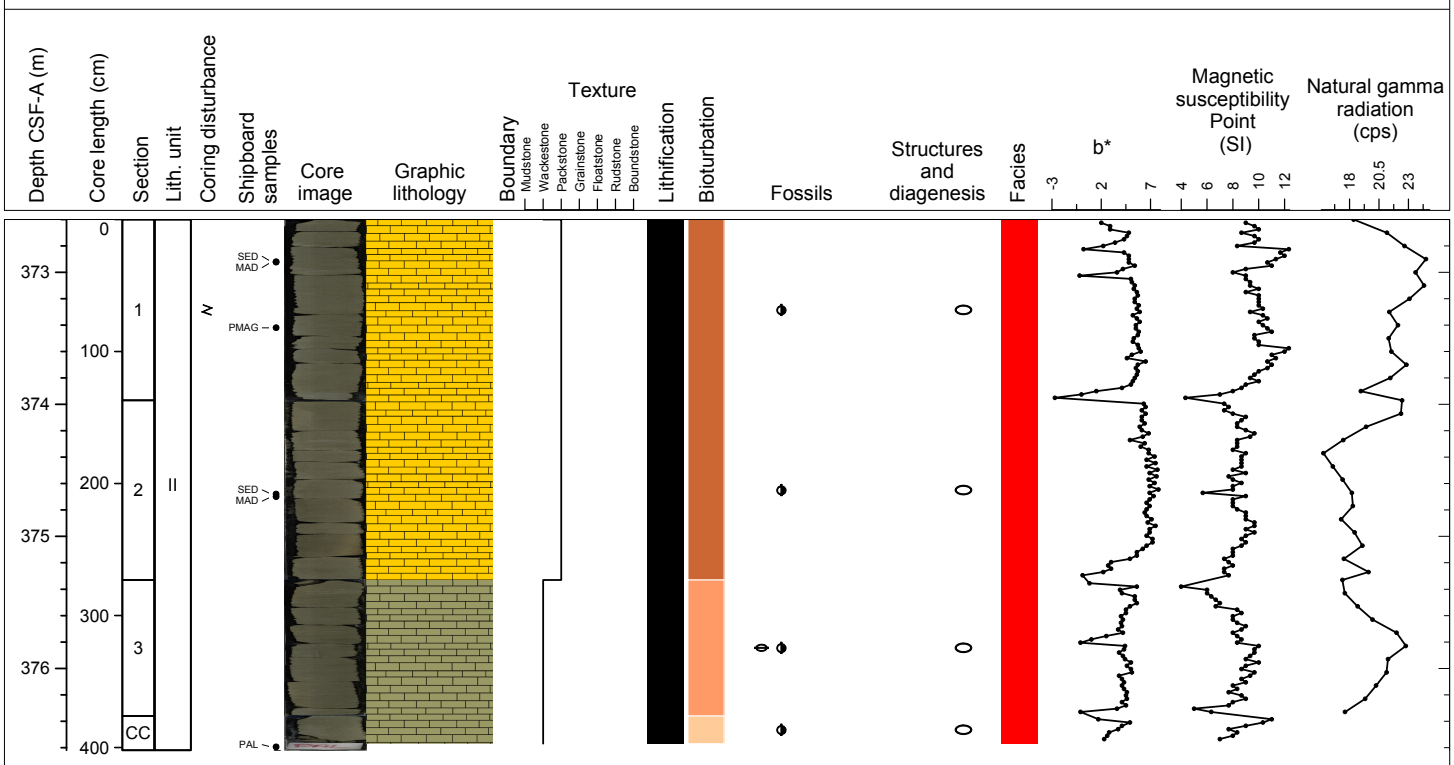
Hole 356-U1462C Core 69R, Interval 367.7-369.81 m (CSF-A)

Homogeneous, lithified, olive gray, very fine sand-sized, PACKSTONE with occasional macrofossil fragments (bivalves, bryzoans, and small benthic foraminifers).



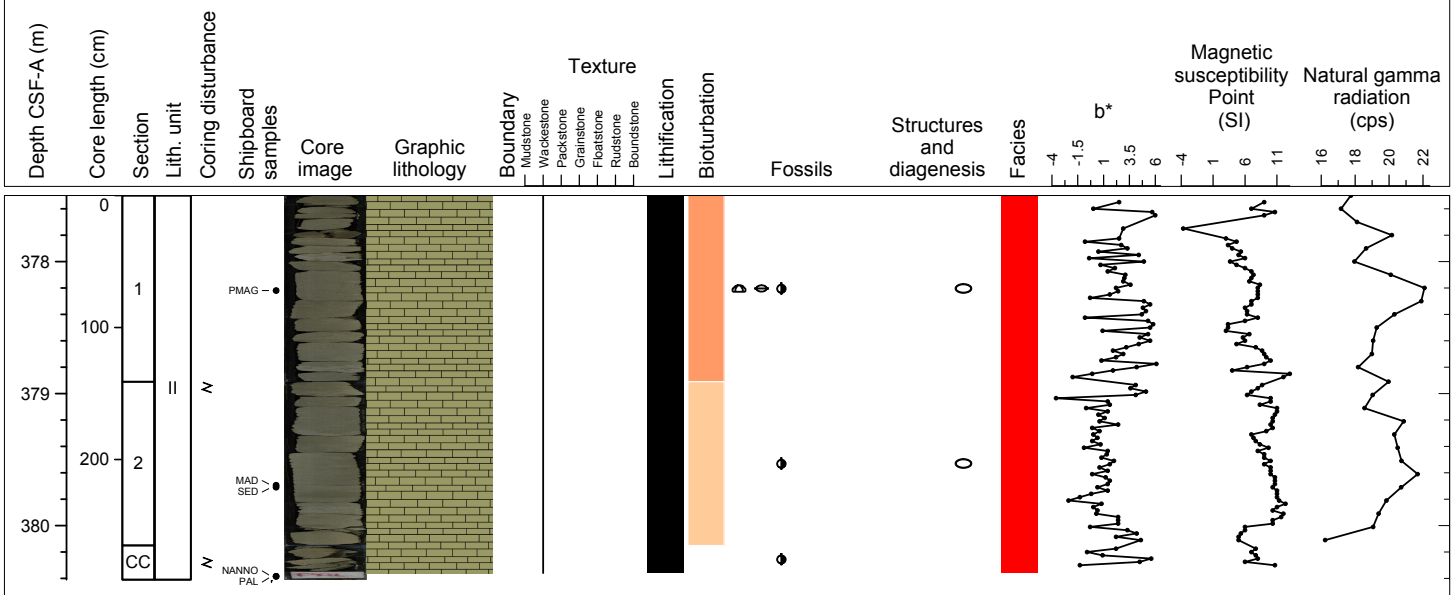
Hole 356-U1462C Core 70R, Interval 372.6-376.62 m (CSF-A)

Lithified, olive gray, PACKSTONE transitions to dark grayish-green WACKESTONE with rare small benthic foraminifers. This core frequently contains strongly-lithified concretion patches.



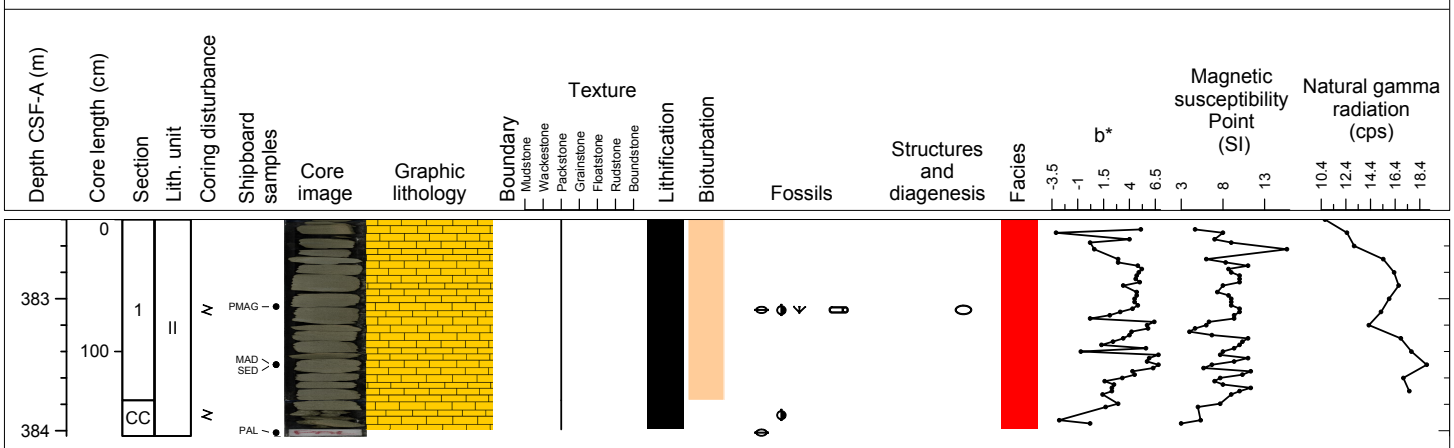
Hole 356-U1462C Core 71R, Interval 377.5-380.41 m (CSF-A)

Lithified, dark grayish-green, WACKESTONE with moderate bioturbation, small benthic foraminifers, macrofossils (bivalve fragments, and echinoderms), and an outer-mold of bivalves.



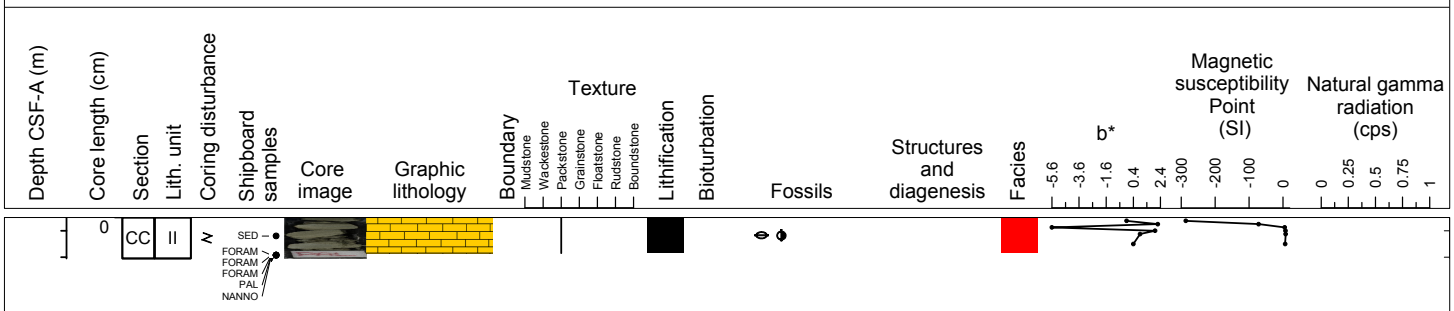
Hole 356-U1462C Core 72R, Interval 382.4-384.04 m (CSF-A)

Lithified, olive gray, very fine sand-sized, PACKSTONE with macrofossils fragments (scaphopods and bivalves) and small benthic foraminifers.



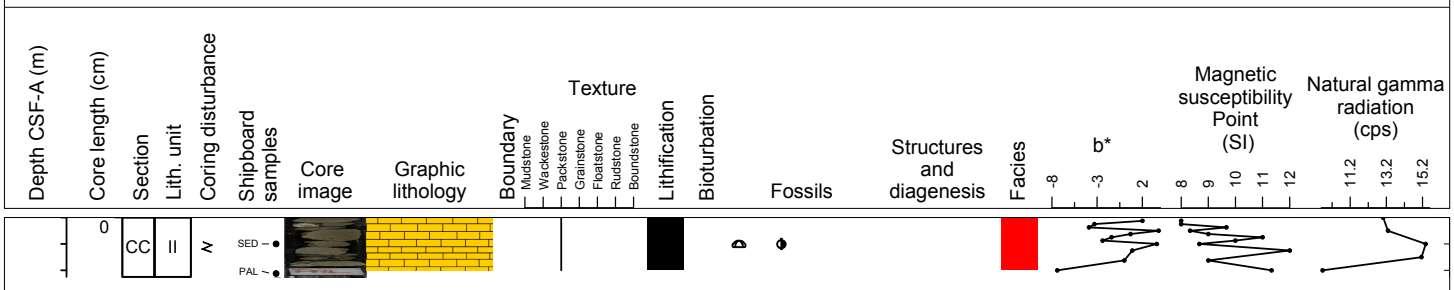
Hole 356-U1462C Core 73R, Interval 387.3-387.61 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE with bivalve molds. All to pal.



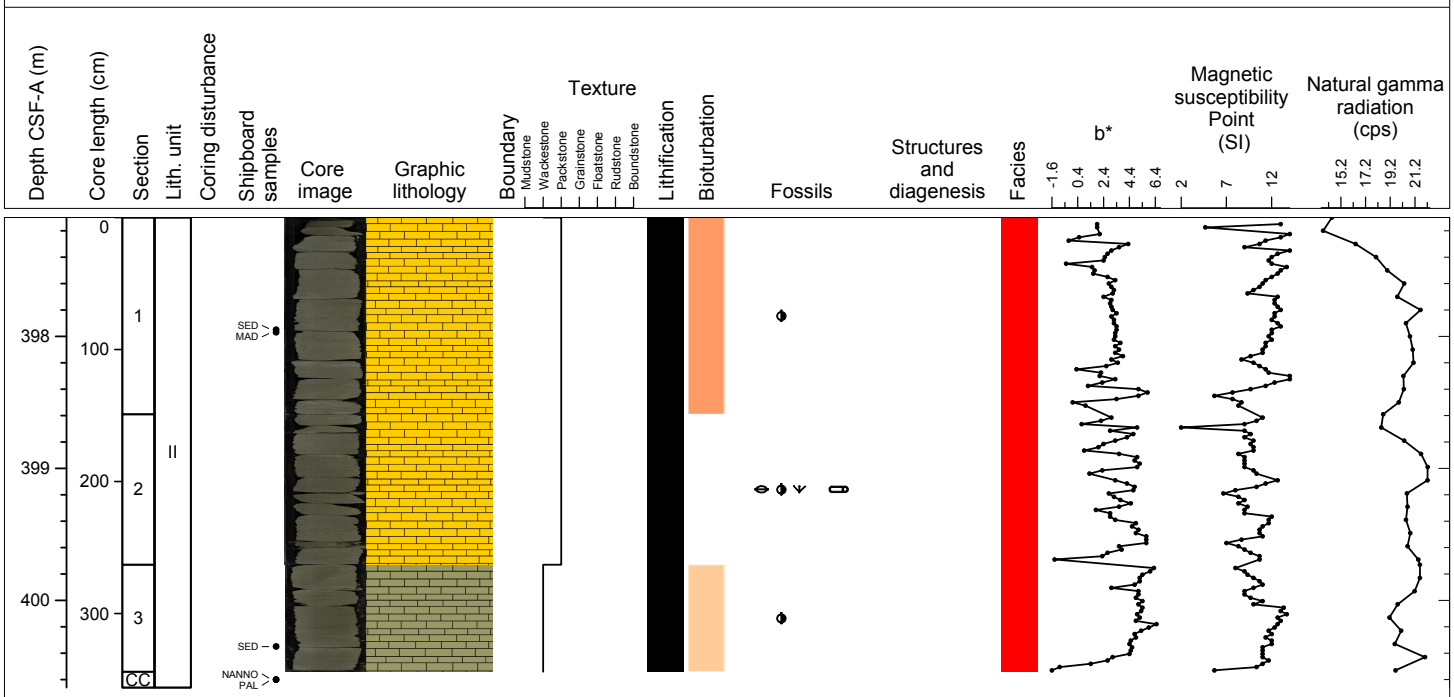
Hole 356-U1462C Core 74R, Interval 392.2-392.65 m (CSF-A)

Homogeneous, lithified, olive gray, very fine sand-sized, PACKSTONE with small benthic foraminifers.



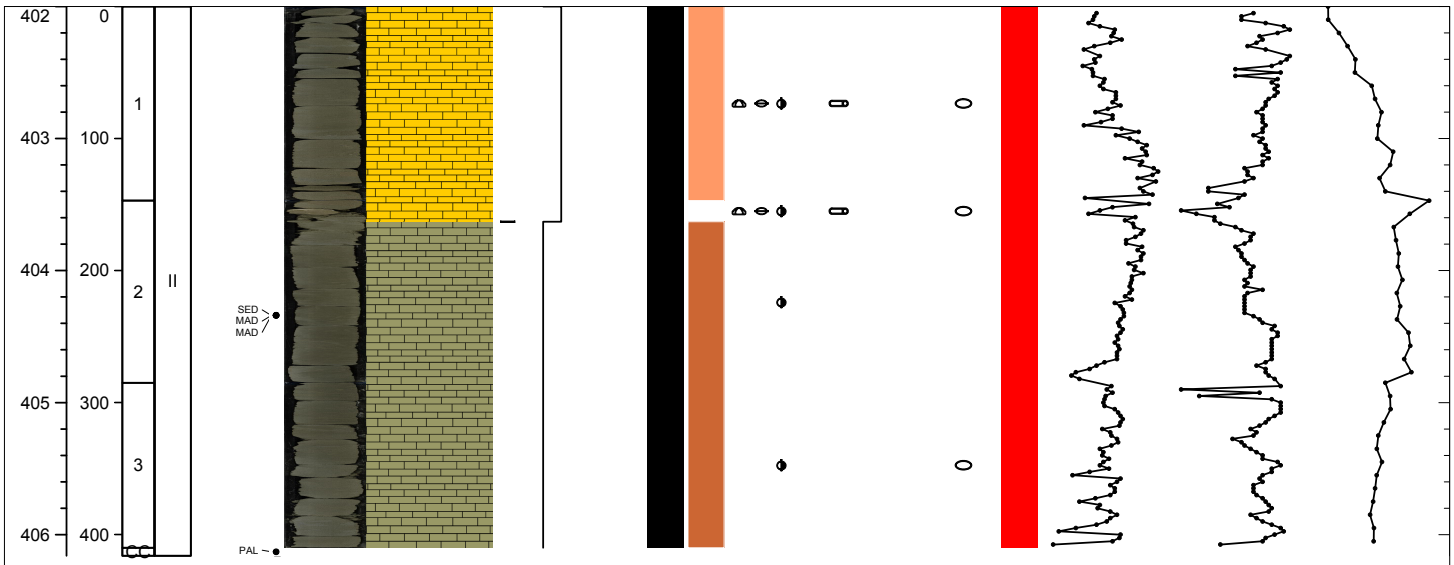
Hole 356-U1462C Core 75R, Interval 397.1-400.66 m (CSF-A)

Lithified, dark grayish green to olive gray, PACKSTONE with foraminifers, intraclasts, and moderate bioturbation. In the upper part of the core (5-7 cm depth), there is good preservation of an echinoderm fossil (L=4 cm).



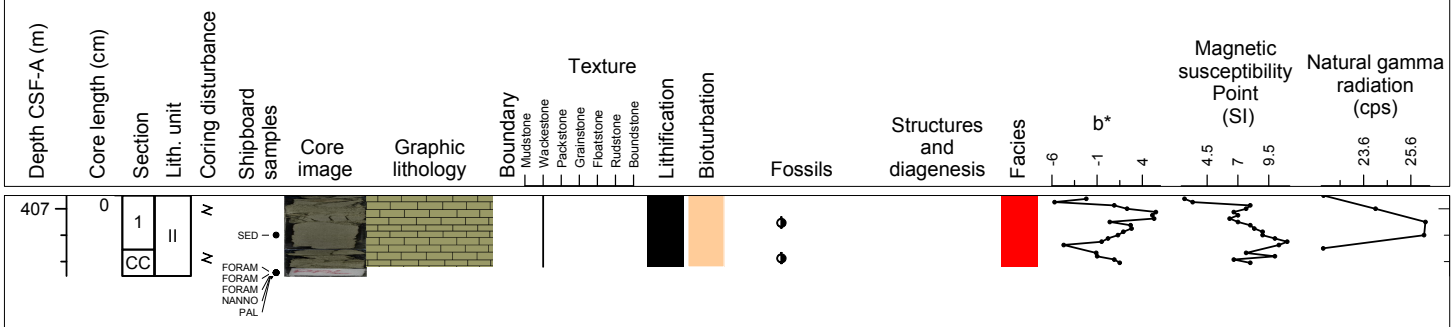
Hole 356-U1462C Core 76R, Interval 402.0-406.16 m (CSF-A)

Lithified, olive gray, very fine sand-sized, PACKSTONE transitions to lithified, dark grayish green, WACKESTONE with common bioturbation. The PACKSTONE and WACKESTONE contain strongly lithified concretions/patches that are interpreted to be celestine.



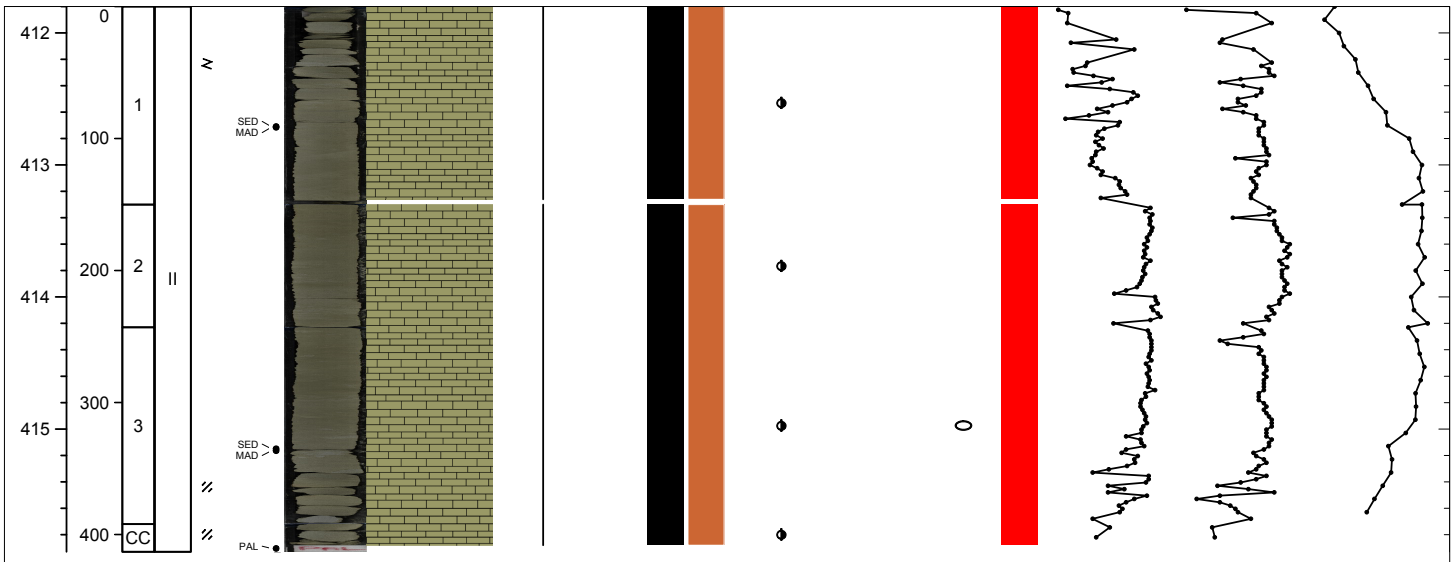
Hole 356-U1462C Core 77R, Interval 406.9-407.51 m (CSF-A)

Homogeneous, lithified, dark grayish-green, very fine to fine sand-sized, WACKESTONE with small benthic foraminifers.



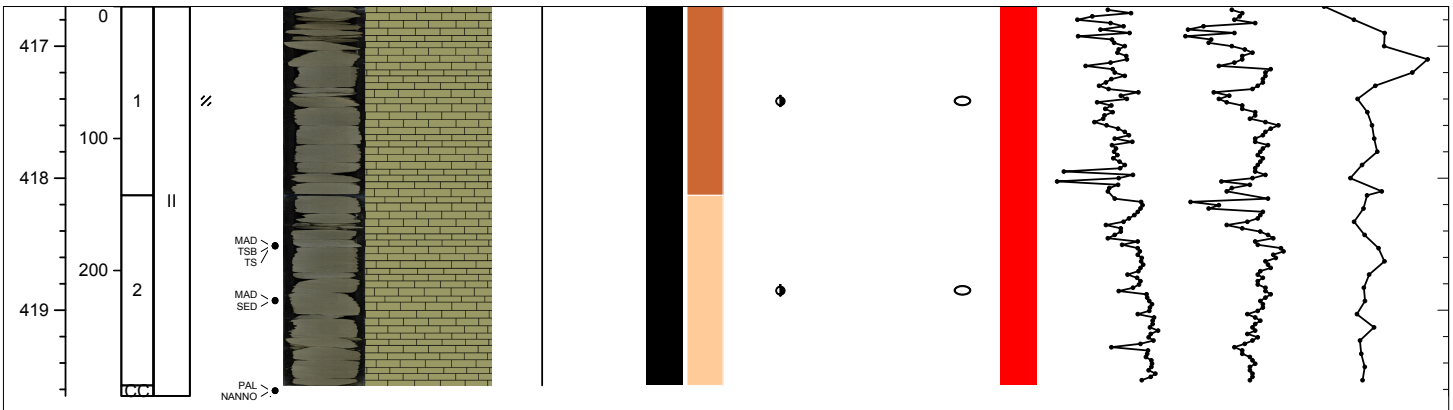
Hole 356-U1462C Core 78R, Interval 411.8-415.93 m (CSF-A)

Homogeneous, lithified, dark grayish green, very fine to fine sand-sized, WACKESTONE with small benthic foraminifers. Concretions occur throughout the core. These concretion are mainly visible through a higher reflectivity and are interpreted to be celestine.



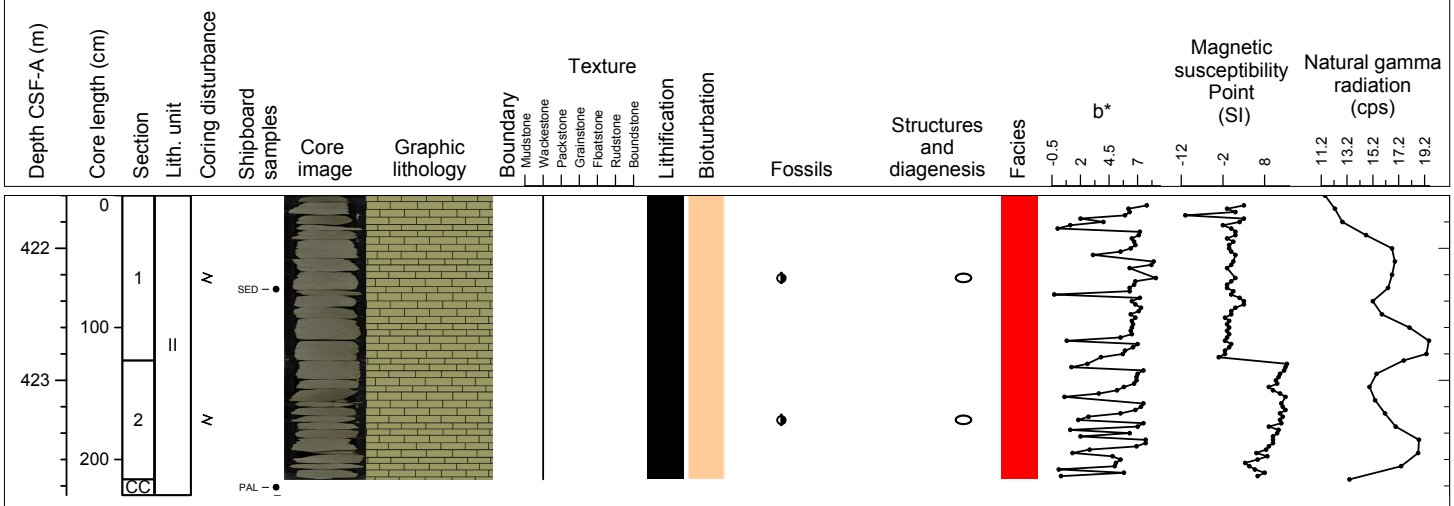
Hole 356-U1462C Core 79R, Interval 416.7-419.65 m (CSF-A)

Homogeneous, lithified, dark grayish green, very fine to fine sand-sized, WACKESTONE with small benthic foraminifers and concretions throughout the section.



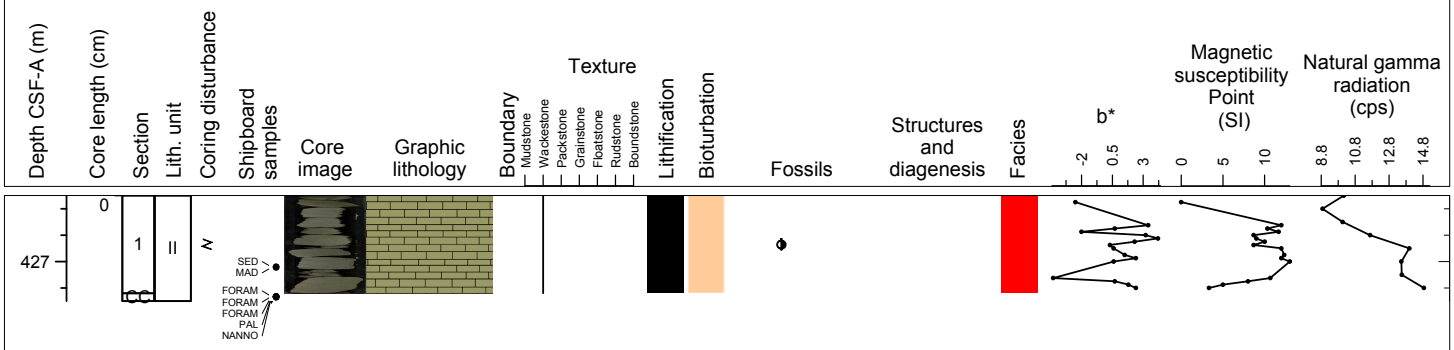
Hole 356-U1462C Core 80R, Interval 421.6-423.87 m (CSF-A)

Homogeneous, lithified, dark grayish green, very fine to fine sand-sized, WACKESTONE with small benthic foraminifers and concretions throughout the section. There is also possibly celestite.



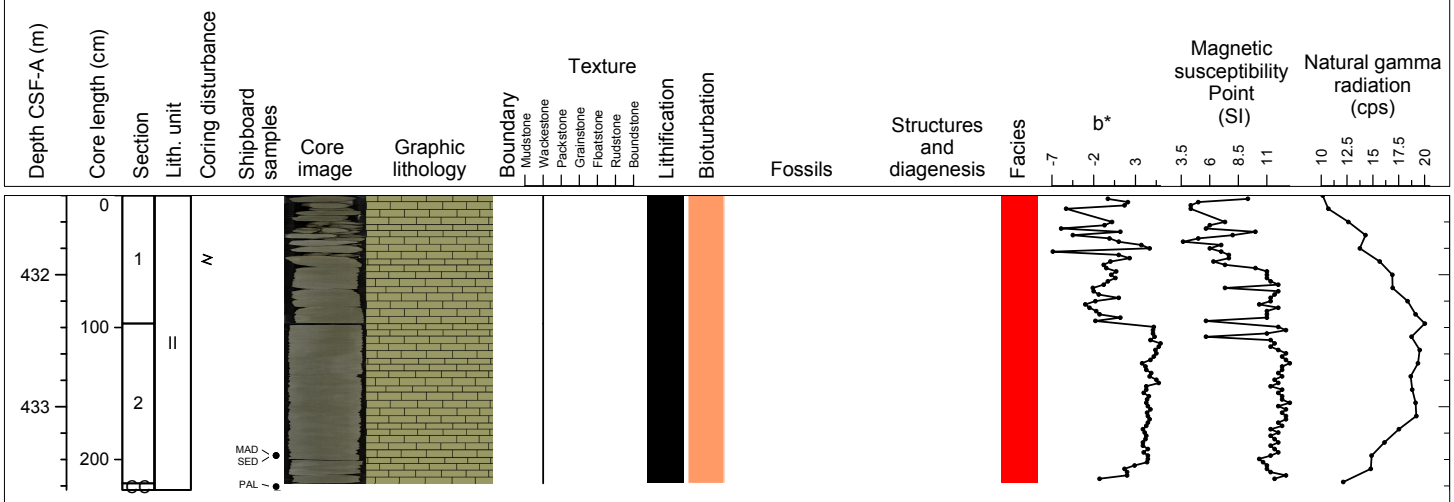
Hole 356-U1462C Core 81R, Interval 426.5-427.3 m (CSF-A)

Homogeneous, lithified, dark grayish-green, very fine to fine sand-sized, WACKESTONE with small benthic foraminifers.



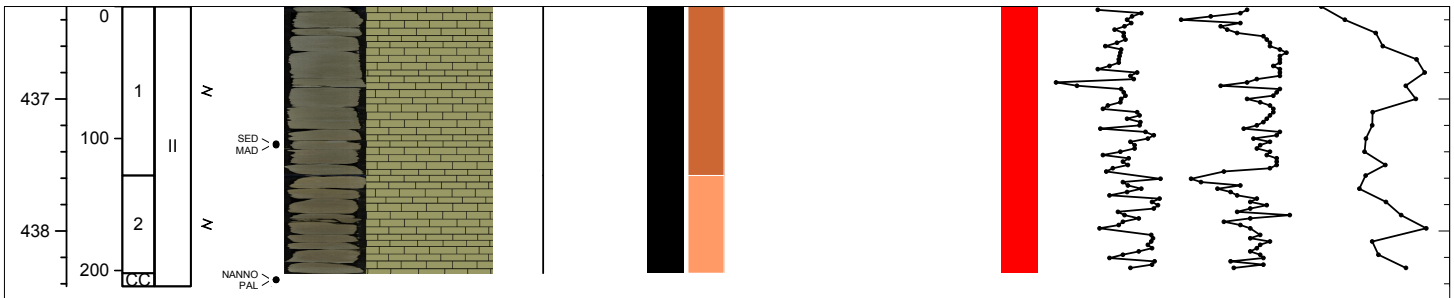
Hole 356-U1462C Core 82R, Interval 431.4-433.63 m (CSF-A)

Lithified, olive gray, very fine sand-sized, WACKESTONE with moderate bioturbation. Burrows are filled with sand-sized grains. Small benthic foraminfers are very sparse and bivalve fragments occur occasionally.



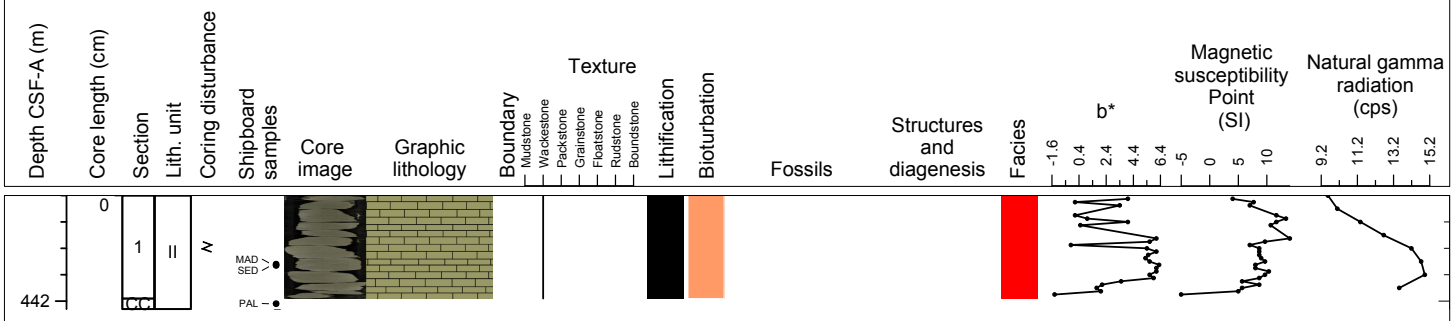
Hole 356-U1462C Core 83R, Interval 436.3-438.42 m (CSF-A)

Lithified, olive gray, very fine sand-sized, WACKESTONE with common to moderate bioturbation. Burrows are filled with sand-size grains and benthic foraminifers. Small benthic foraminfers are very sparse and bivalve fragments occur occasionally.



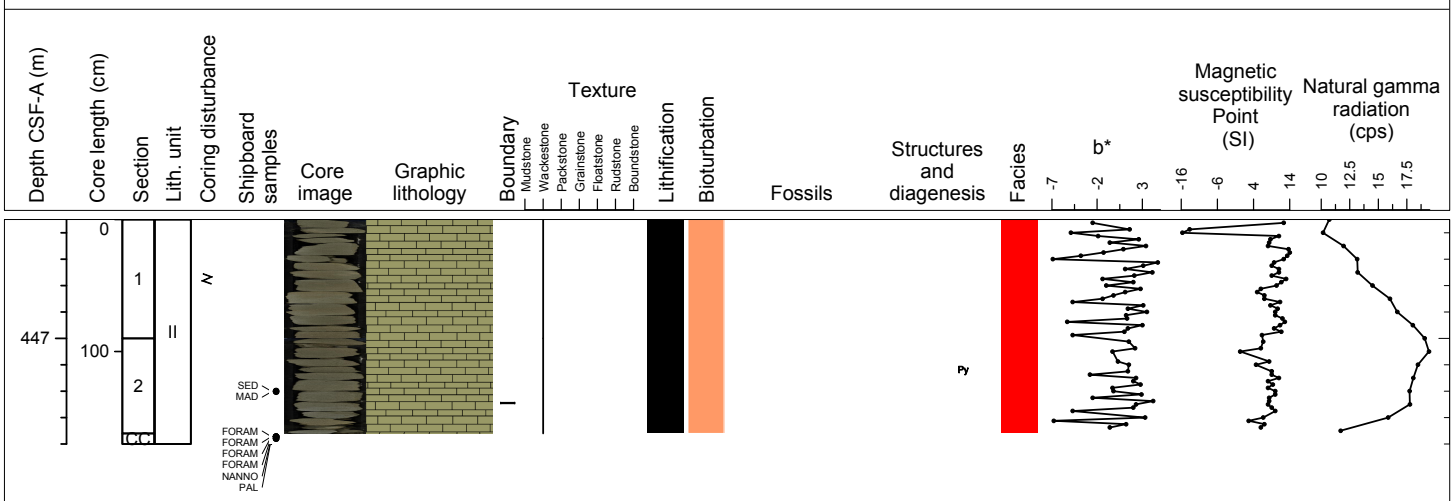
Hole 356-U1462C Core 84R, Interval 441.2-442.06 m (CSF-A)

Lithified, light olive gray, very fine sand-sized, WACKESTONE with moderate biourbation. Burrows are filled with sand-sized grains. Small benthic foraminfers are very sparse and bivalve fragments occur occasionally.



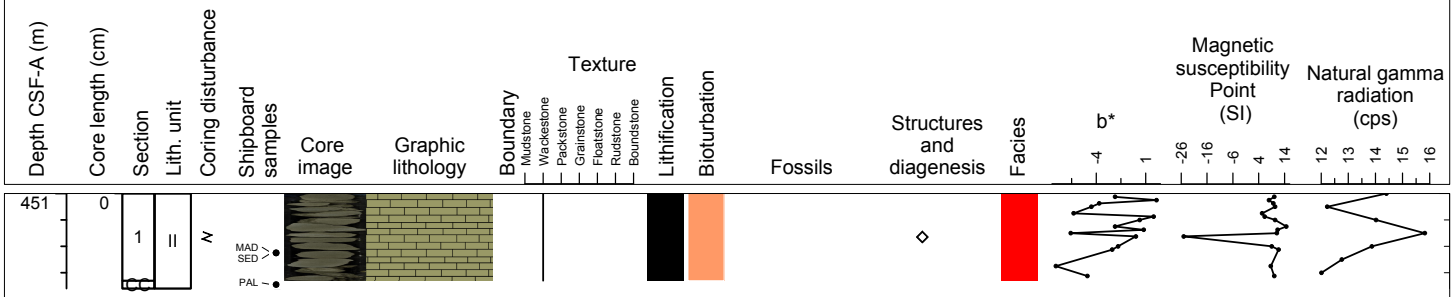
Hole 356-U1462C Core 85R, Interval 446.1-447.8 m (CSF-A)

Lithified, olive gray, fine sand-sized, WACKESTONE with moderate bioturbation. Burrows are filled with sand-sized grains. Small benthic foraminifers are very sparse; there is one large benthic foraminifer, a couple of tubes, and occasional bivalve fragments. Pyrite grains are very sparsely disseminated. Near the base of the core, the color grades to light olive gray and grain size grades to very fine sand size.



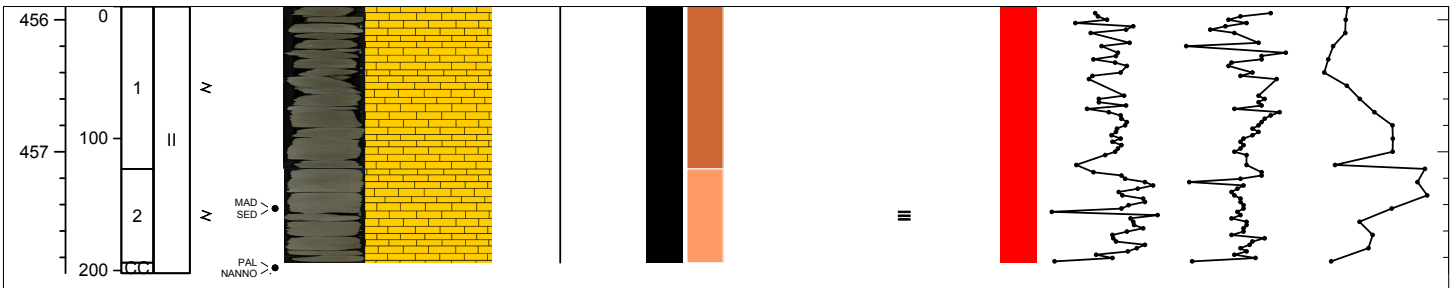
Hole 356-U1462C Core 86R, Interval 451.0-451.72 m (CSF-A)

Lithified, light olive gray, fine sand-sized, WACKESTONE with moderate bioturbation. Burrows are filled with sand-sized grains. Small benthic foraminifers are very sparse. There are intervals with intraclasts throughout the core. Intraclasts are finer-grained and have fewer benthic foraminifers than the sediment.



Hole 356-U1462C Core 87R, Interval 455.9-457.92 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE with moderate biourbation. Burrows are filled with sand-sized grains, and some are replaced by mineralization. Small benthic foraminfers are very sparse and bivalve fragments occur occasionally. There is an interval of parallel laminae.

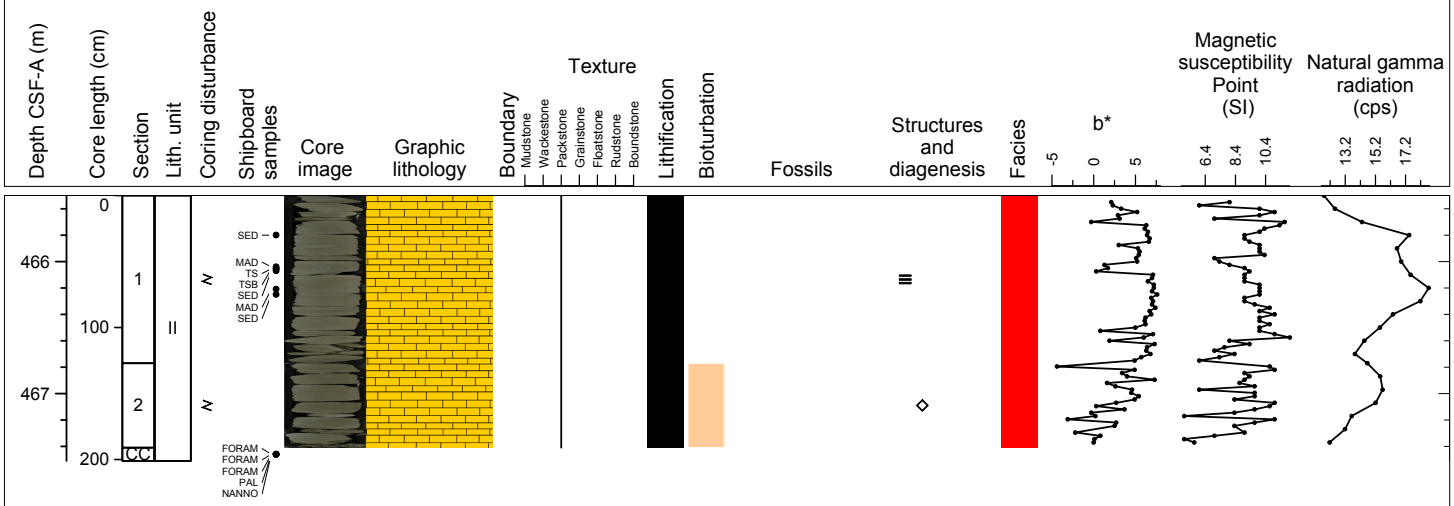


Hole 356-U1462C Core 88R, Interval 460.7-462.75 m (CSF-A)

Lithified, olive gray, medium to fine sand-sized, PACKSTONE with moderate bioturbation. Burrows are filled with sand and are sometimes green. PACKSTONE contains small benthic foraminifers. Sedimentary features include laminae with wavy contacts and intraclasts.

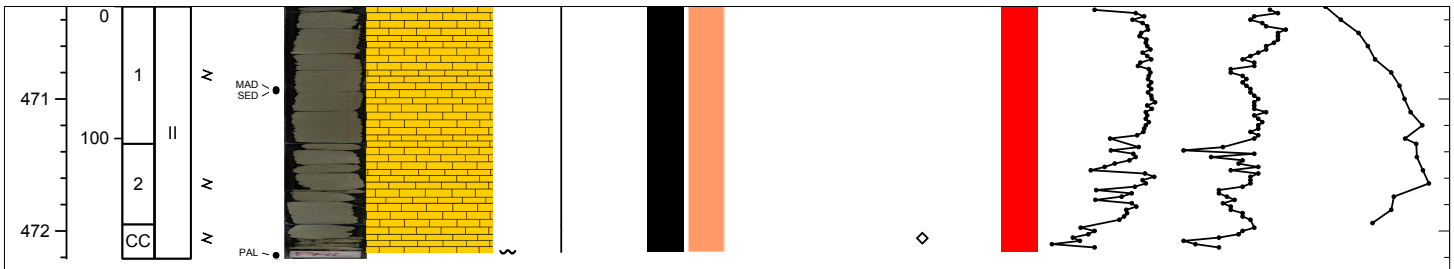
Hole 356-U1462C Core 89R, Interval 465.5-467.51 m (CSF-A)

Lithified, olive gray, sand-sized, PACKSTONE with moderate bioturbation. Burrows are filled with fine-grained PACKSTONE. There are intervals of coarser-grained sediment with intraclasts and wavy basal contacts/irregular surface. Parallel laminations are also present. Very small black grains are sparse, as are small benthic foraminifers and bivalve fragments.



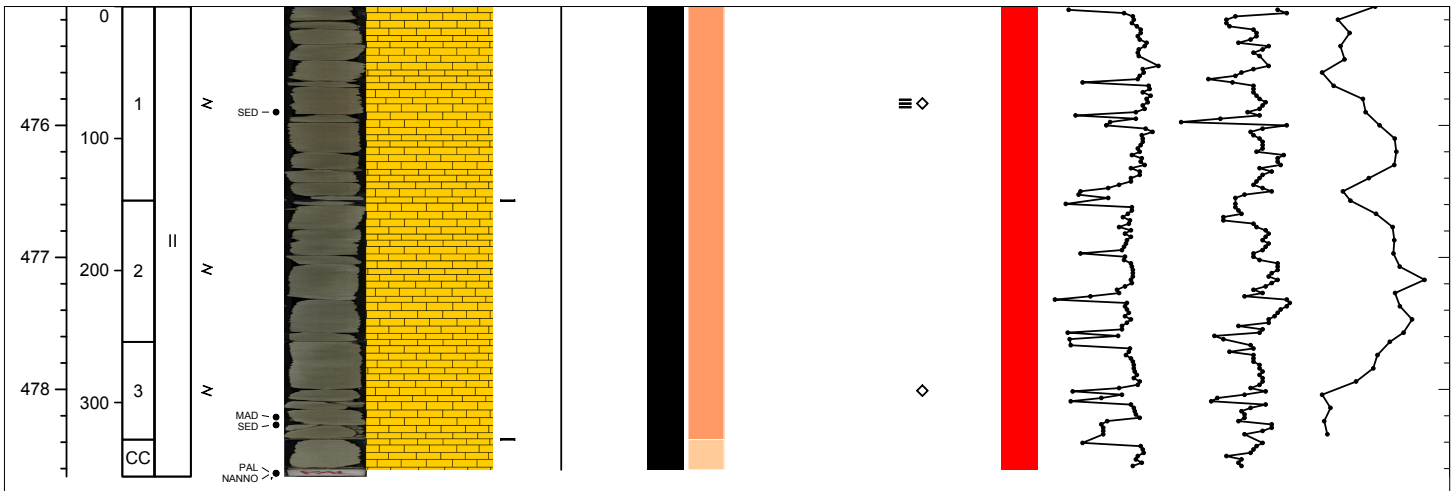
Hole 356-U1462C Core 90R, Interval 470.3-472.21 m (CSF-A)

Lithified, olive gray, medium to fine sand-sized, PACKSTONE with moderate bioturbation. Small benthic foraminifers are generally sparse, but they are more abundant in some 20cm-thick intervals. There is also an interval with intraclasts and wavy contacts.



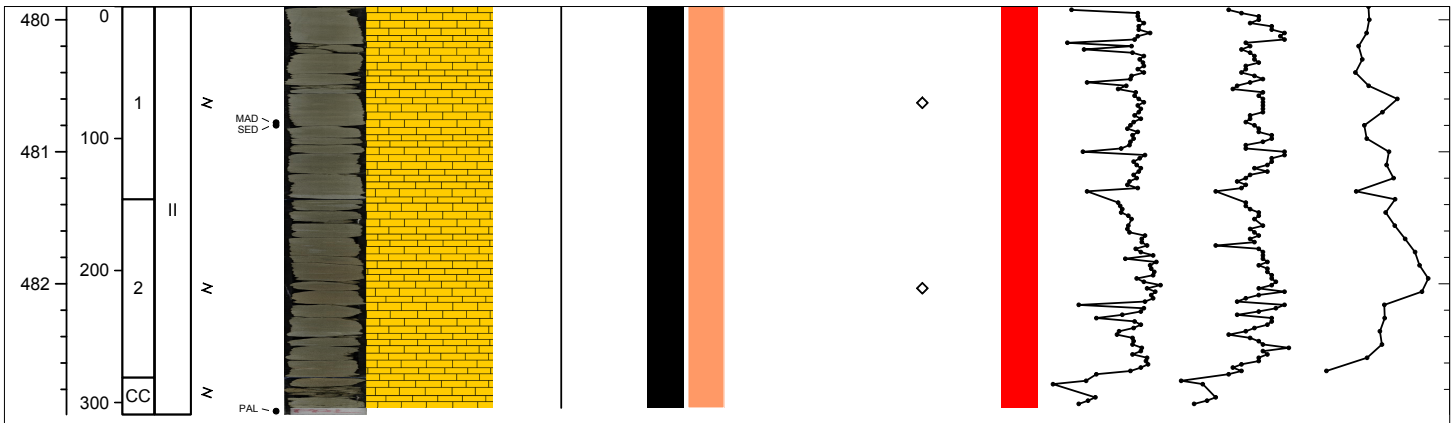
Hole 356-U1462C Core 91R, Interval 475.1-478.66 m (CSF-A)

Lithified, olive gray, medium to fine sand-sized, PACKSTONE with moderate bioturbation. Sedimentary features such as parallel laminae, intraclasts, and sharp contacts are common. Bivalve fragments are few; small benthic foraminifers are common; black grains and foraminifers fill burrows.



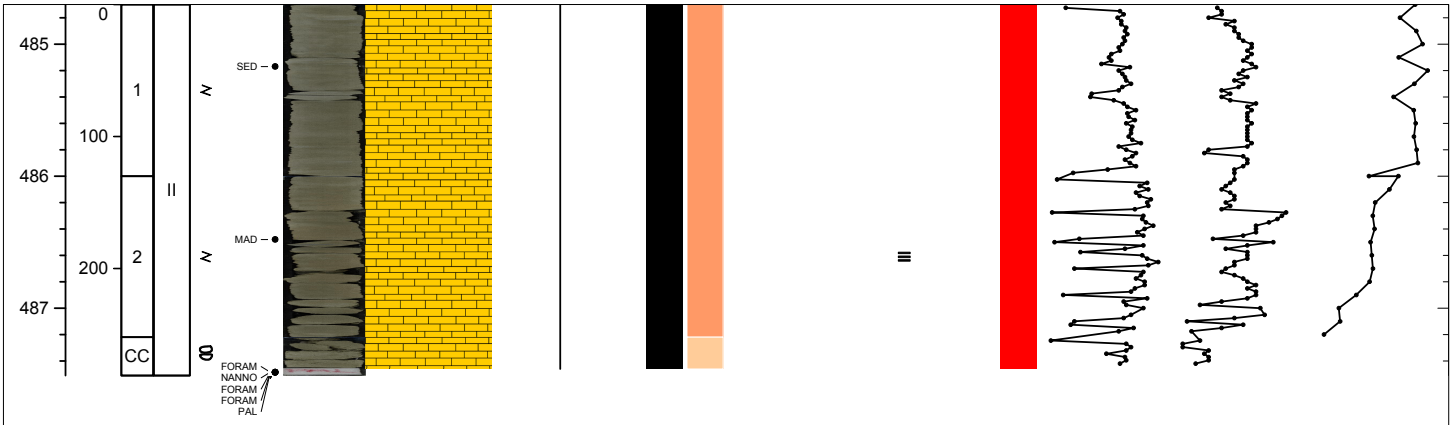
Hole 356-U1462C Core 92R, Interval 479.9-482.99 m (CSF-A)

Lithified, olive gray, fine to medium sand-sized, PACKSTONE with moderate bioturbation. Intraclasts are common. Bivalve fragments and tubes are present. Burrows are filled with coarser sand. Black grains are sparse but increase with depth. Small benthic foraminifers are also sparse.



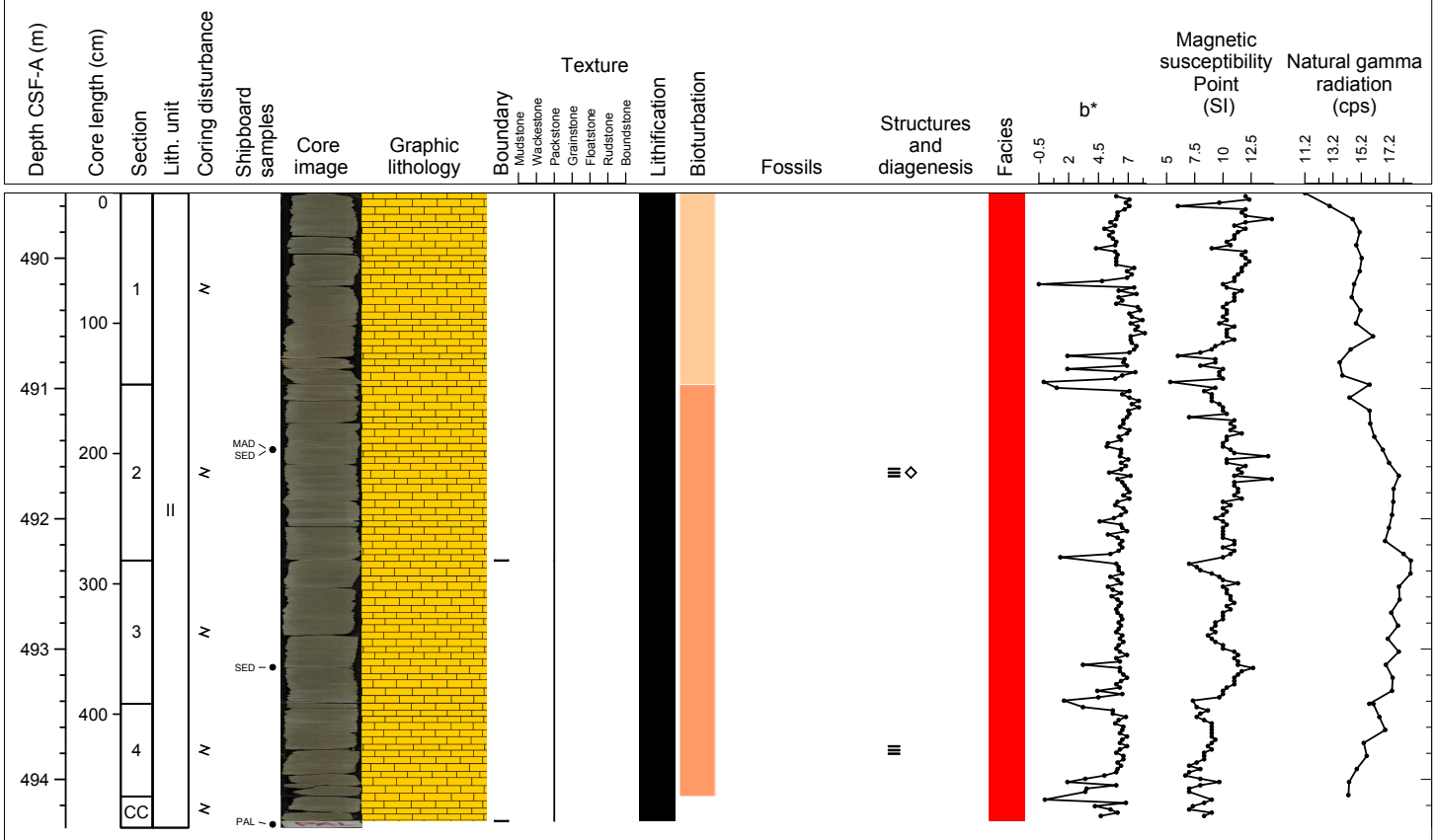
Hole 356-U1462C Core 93R, Interval 484.7-487.51 m (CSF-A)

Lithified, olive gray, sand-sized, PACKSTONE with moderate bioturbation, sparse small benthic foraminifers, common black grains (finer and less abundant than in above cores). There are a few intervals of parallel laminations.



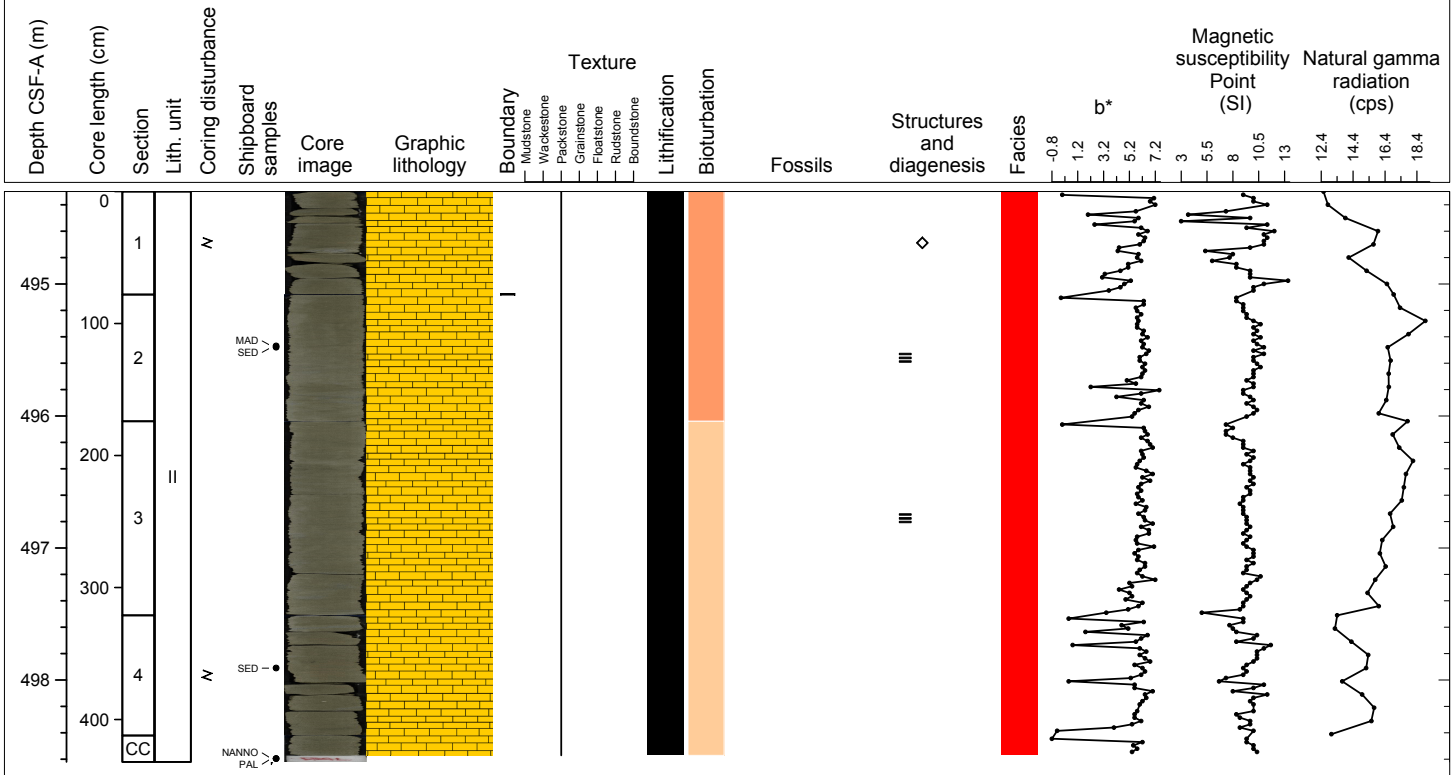
Hole 356-U1462C Core 94R, Interval 489.5-494.37 m (CSF-A)

Lithified, olive gray, sand-sized, PACKSTONE with moderate bioturbation. Black grains are more abundant than in the above core. There are occasional bivalve fragments, large benthic foraminifer fragments, and sparse small benthic foraminifers. Burrows are filled with medium sand-sized black grains. There are also various sedimentary features including several intervals with sharp contacts, parallel laminae and intraclasts.



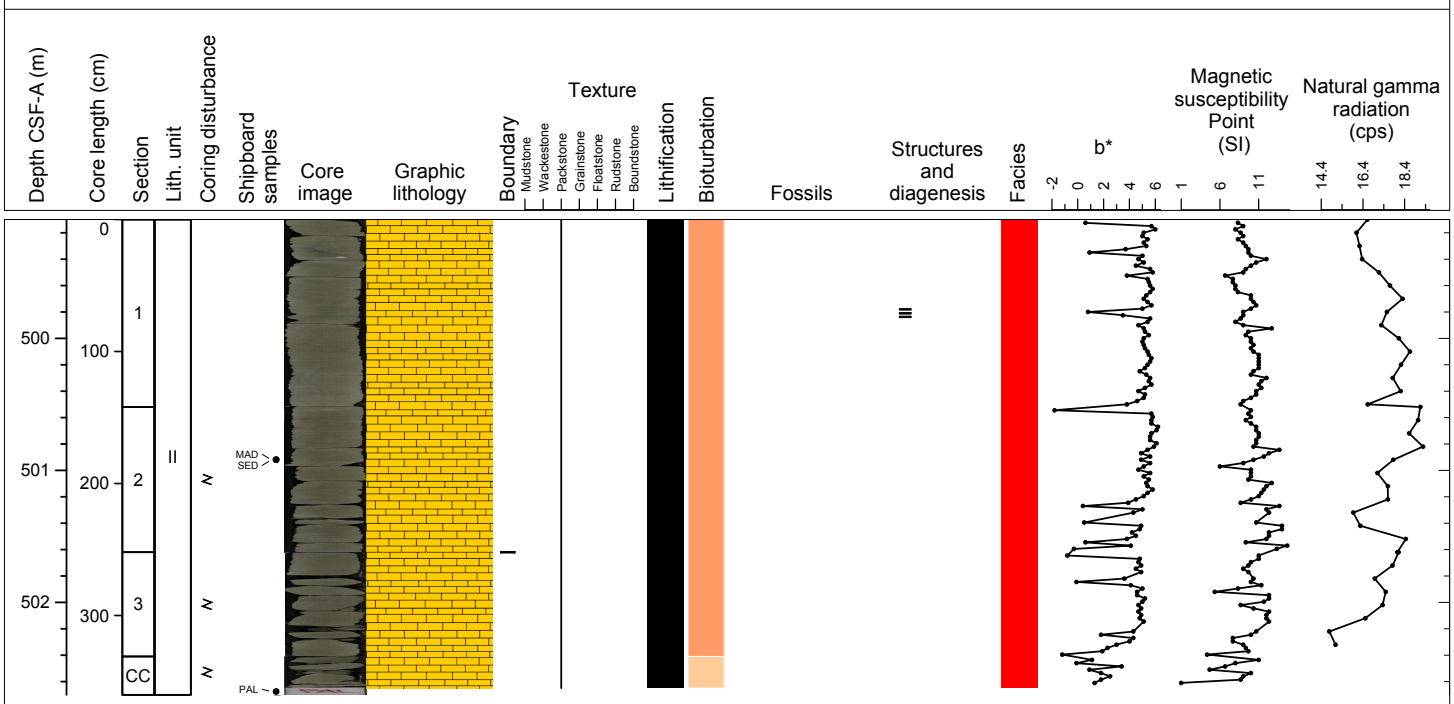
Hole 356-U1462C Core 95R, Interval 494.3-498.62 m (CSF-A)

Lithified, olive gray, medium sand-sized, PACKSTONE with slight bioturbation. Small benthic foraminifers and bivalves are typically sparse, but they are sometimes common; black sand-size grains are common. There are intervals of parallel laminae (coarse sand-size grains are associated with these intervals).



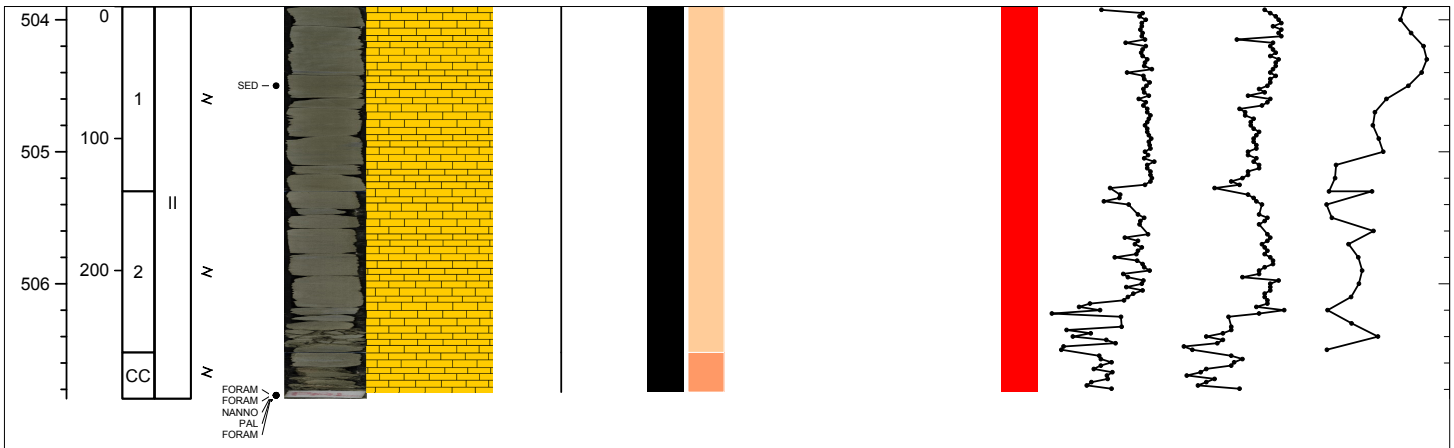
Hole 356-U1462C Core 96R, Interval 499.1-502.7 m (CSF-A)

Lithified, olive gray, medium to fine sand-sized, PACKSTONE with moderate bioturbation. Small benthic foraminifers are common, and bivalves are sparse. Black grains, possibly pyrite, are common. There are intervals of parallel laminae as well as beds with sharp sub-horizontal and sub-vertical contacts.



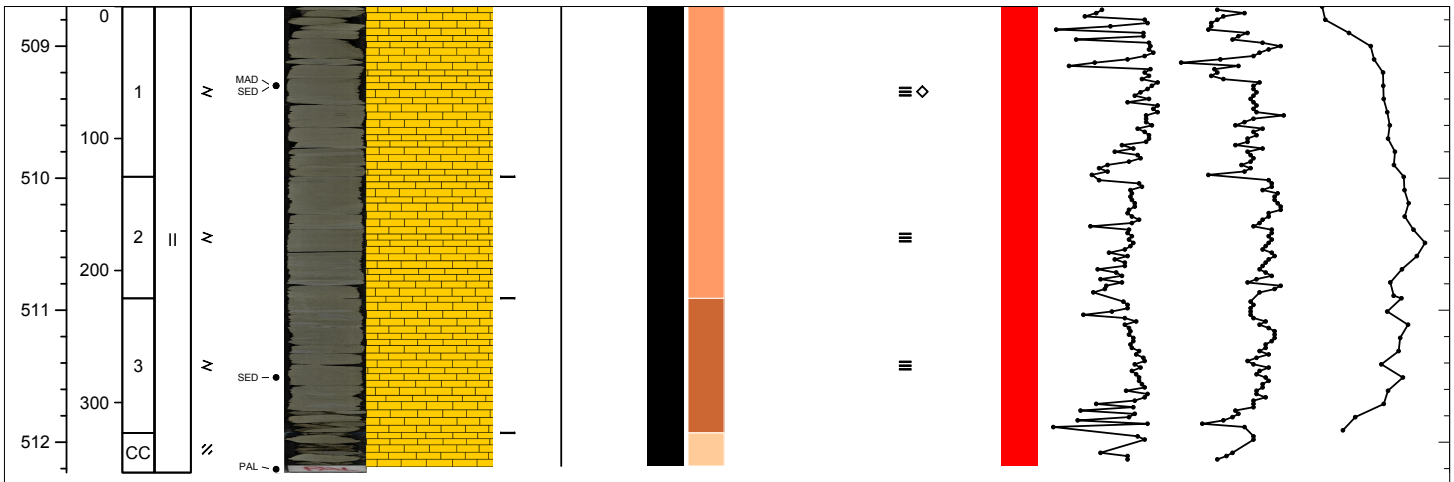
Hole 356-U1462C Core 97R, Interval 503.9-506.87 m (CSF-A)

Lithified, olive gray, very fine to fine sand-sized, PACKSTONE with slight bioturbation. Burrows are large, 2x5 cm. Small benthic foraminifers are sparse, and there are some bivalve fragments. There is some mineralization (dark brown, celestite?).



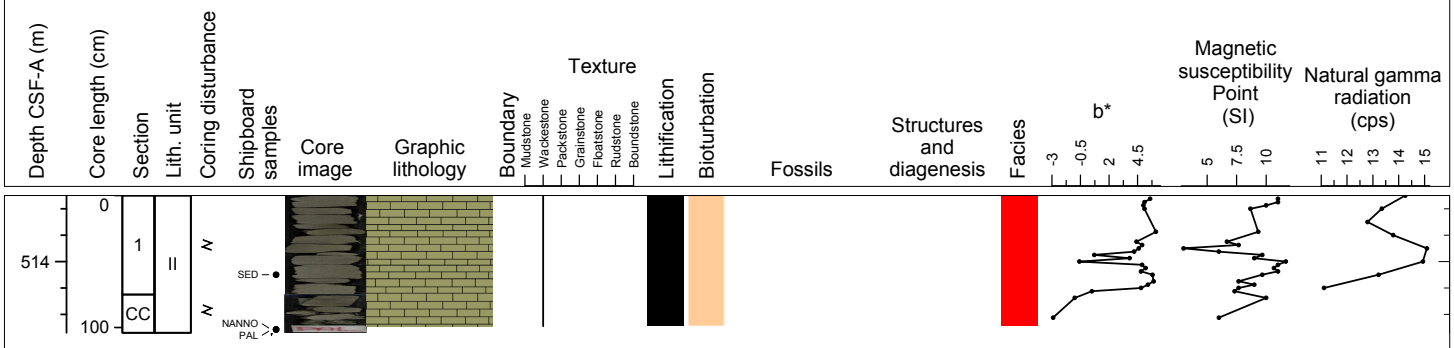
Hole 356-U1462C Core 98R, Interval 508.7-512.23 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE with moderate bioturbation and sparse small benthic foraminifers and black grains. There are intervals of parallel laminae (with coarser sand-size grains) and intraclasts as well as scoured and sharp contacts. There are some dissolution cavities.



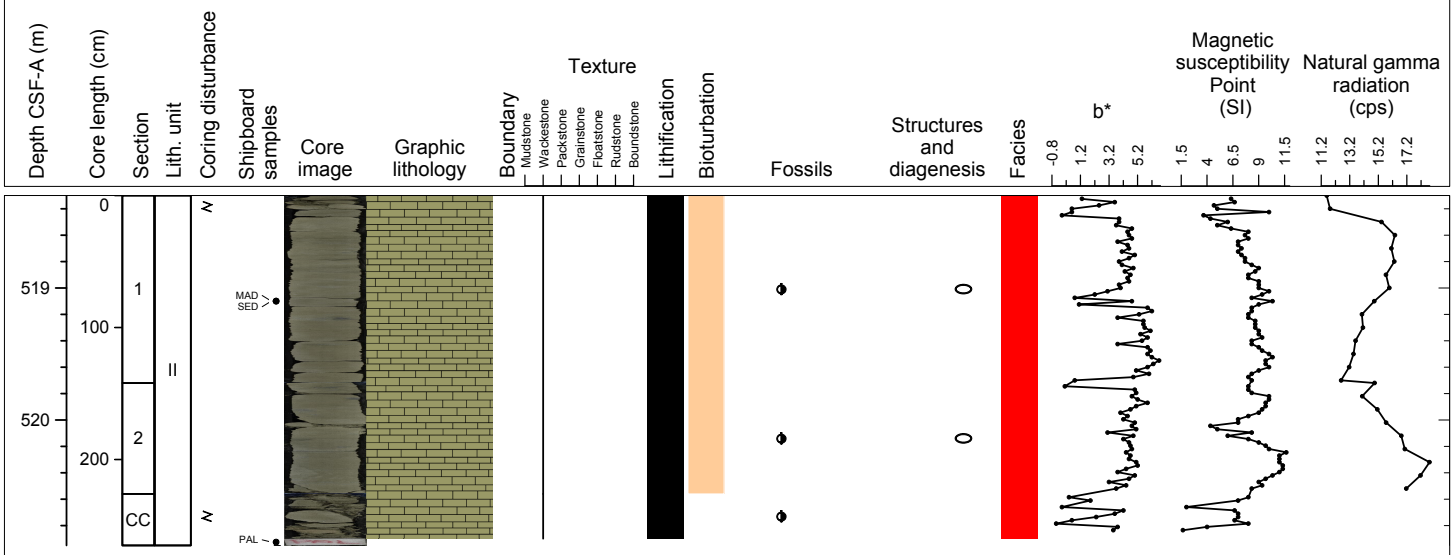
Hole 356-U1462C Core 99R, Interval 513.5-514.54 m (CSF-A)

Lithified, olive gray, fine sand-sized, WACKSTONE with slight bioturbation and sparse small benthic foraminifers, black grains, and bivalve fragments.



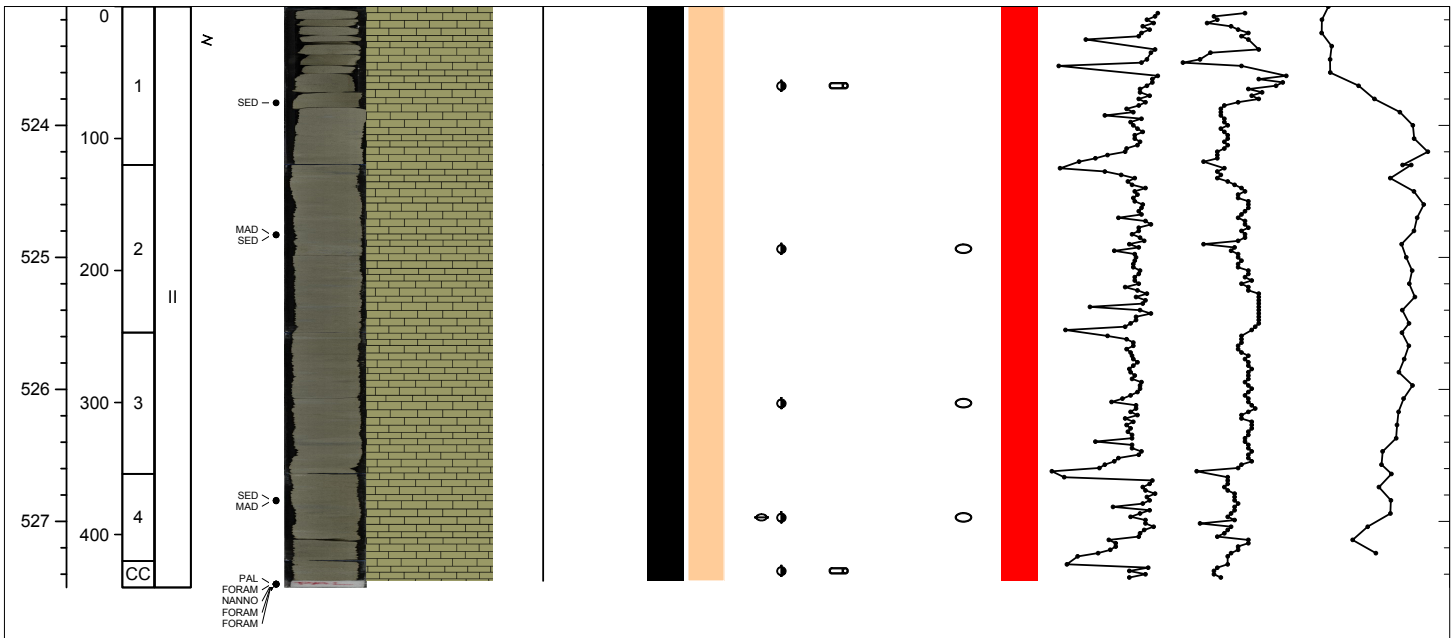
Hole 356-U1462C Core 100R, Interval 518.3-520.95 m (CSF-A)

Homogeneous, lithified, olive gray, very fine to fine sand-sized, WACKESTONE with slight bioturbation and frequent dark gray concretions with foraminifer-rich patches.



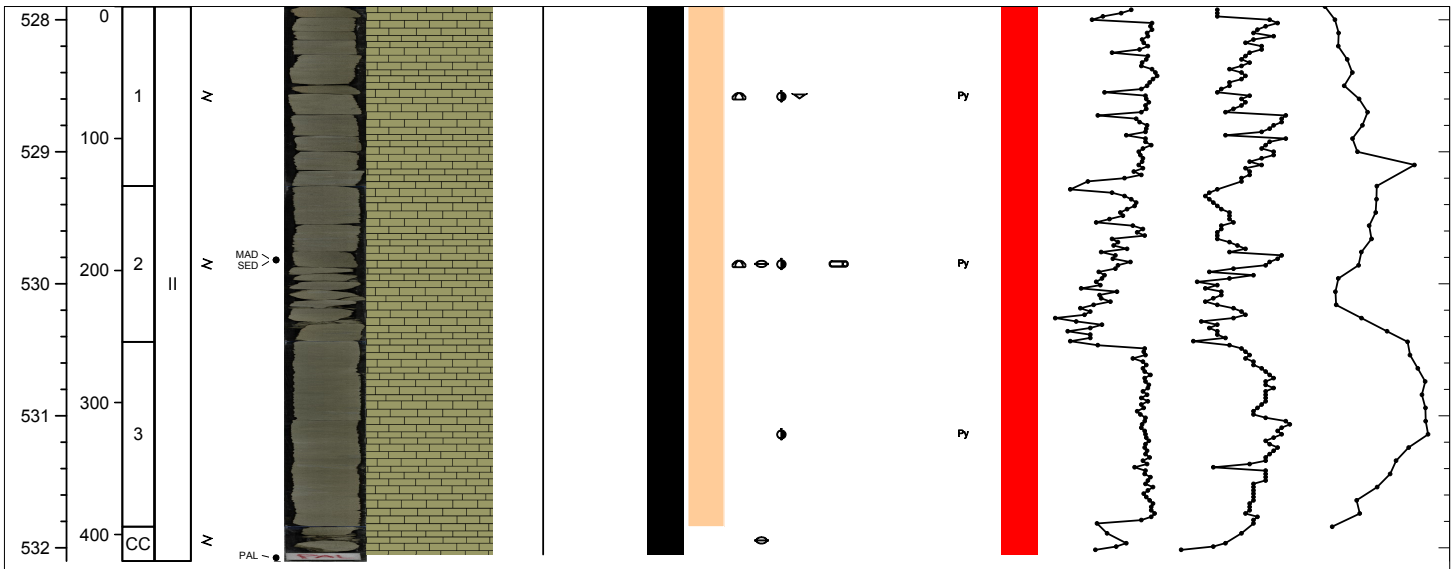
Hole 356-U1462C Core 101R, Interval 523.1-527.5 m (CSF-A)

Homogeneous, lithified, olive gray, very fine to fine sand-sized, WACKESTONE with slight bioturbation, intraclasts, small benthic foraminifers, and strongly-lithified/concreted patches and bands.



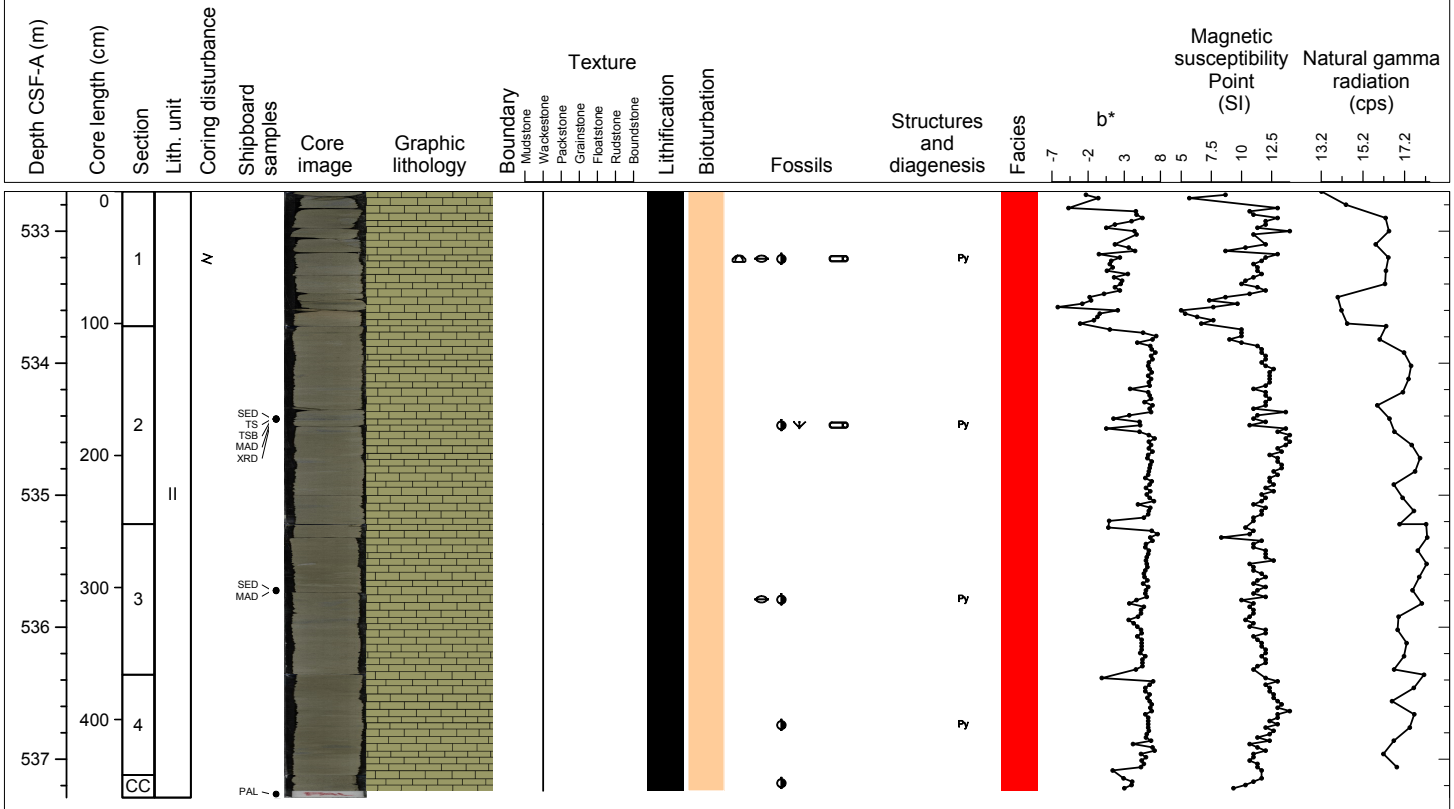
Hole 356-U1462C Core 102R, Interval 527.9-532.1 m (CSF-A)

Homogeneous, lithified, dark grayish-green, very fine to fine sand-sized, WACKESTONE with slight bioturbation, benthic foraminifers, intraclasts, and occasional macrofossil fragments (bivalves, echinoderms, and scaphopods). There are strongly-lithified, dark gray pyrite concentrations, occuring as patches and bands. There are also small benthic foraminifer-rich patches throughout the hole.



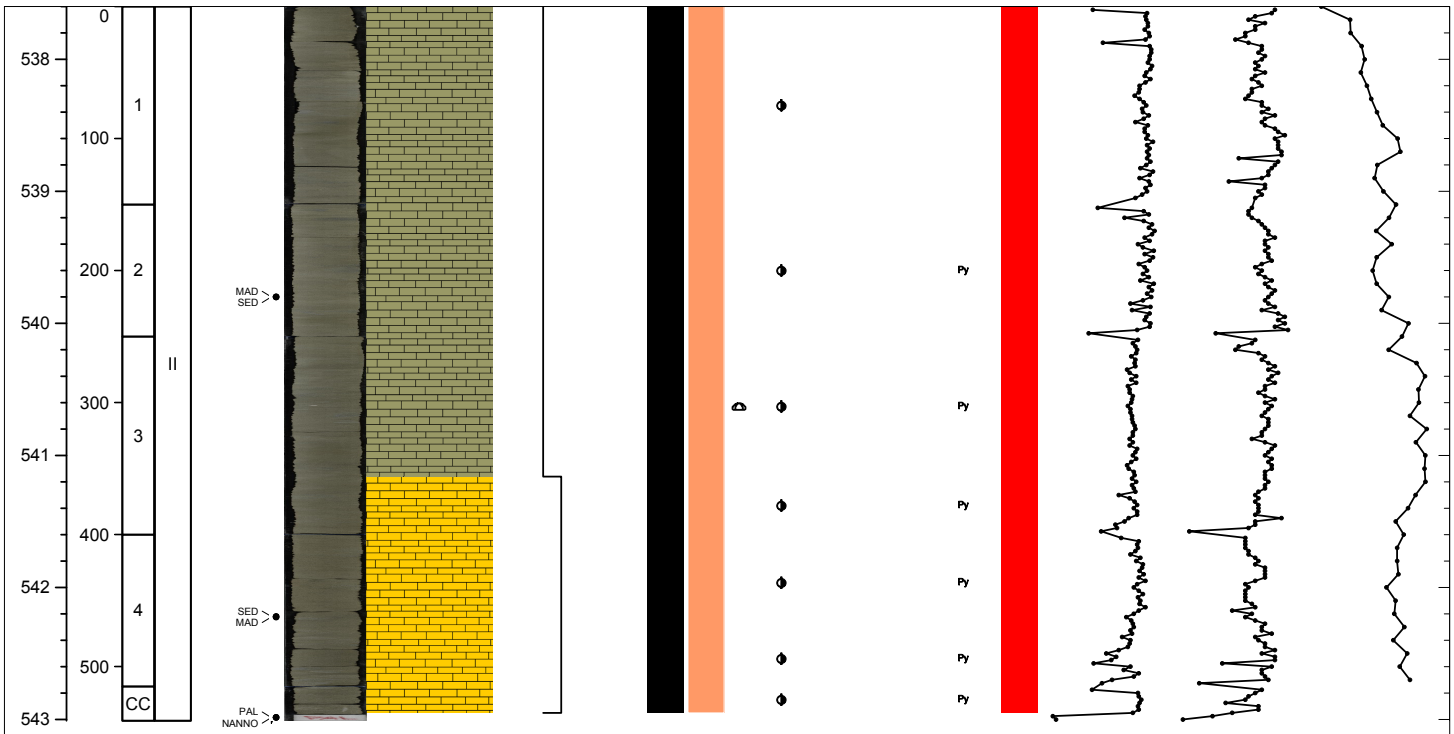
Hole 356-U1462C Core 103R, Interval 532.7-537.29 m (CSF-A)

Homogeneous, lithified, dark grayish green to olive gray, fine sand-sized, WACKESTONE with slight bioturbation, small foraminifers, macrofossil fragments, and disseminated pyrite.



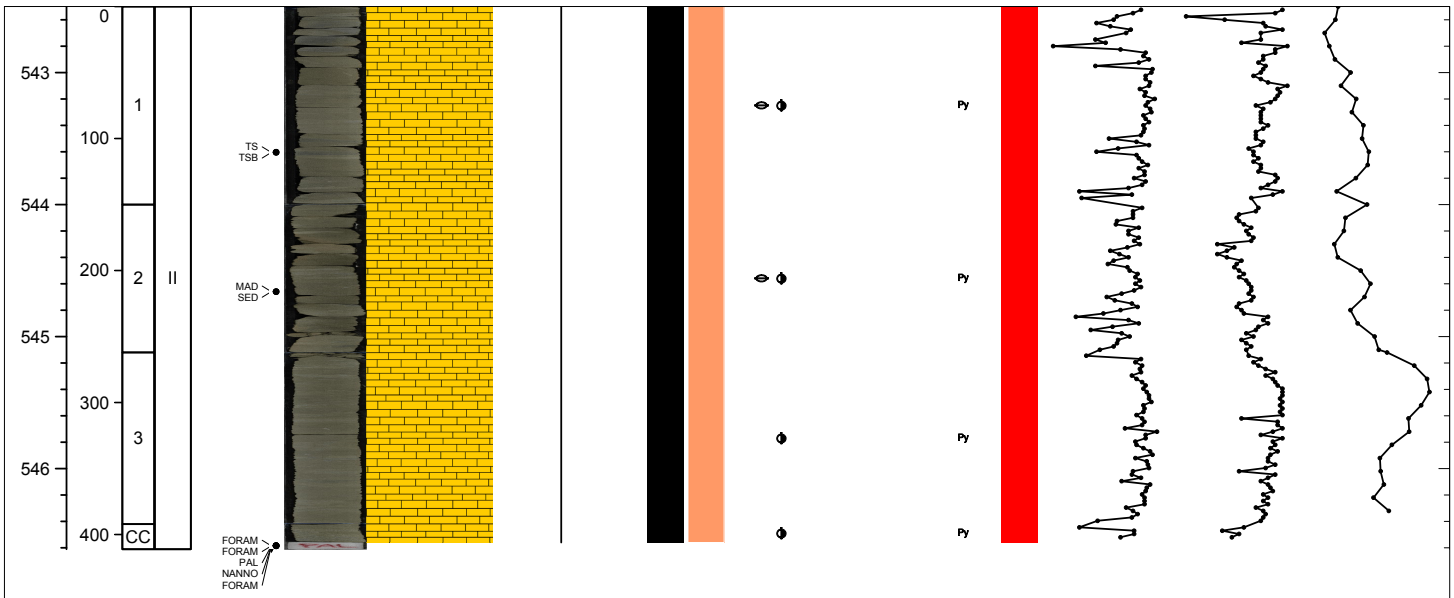
Hole 356-U1462C Core 104R, Interval 537.6-543.01 m (CSF-A)

Lithified, olive gray, fine sand-sized, WACKESTONE transitions to PACKSTONE. Small benthic foraminifers are present but not abundant. Lighter-colored patches seem to have been cemented relatively early because the surrounding sediment shows a compactional drape. The patches are interpreted as bioturbation.



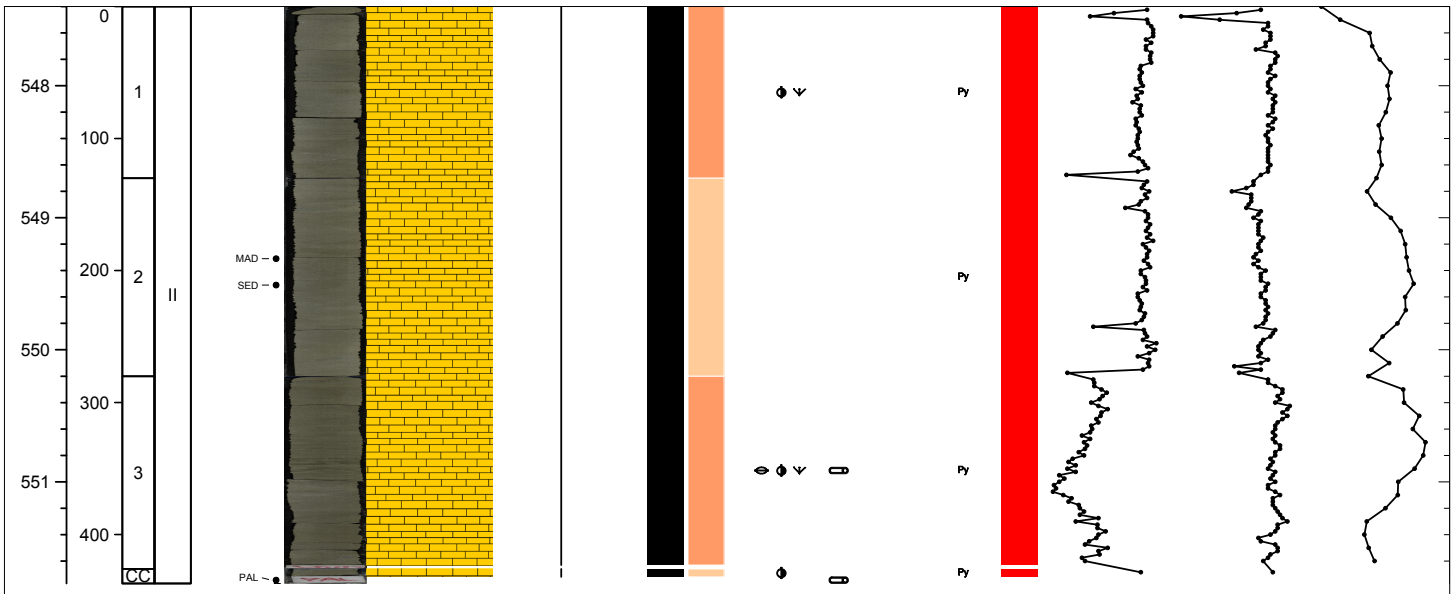
Hole 356-U1462C Core 105R, Interval 542.5-546.61 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE with common macrofossils. There is indistinct layering in this core section which is disturbed by bioturbation.



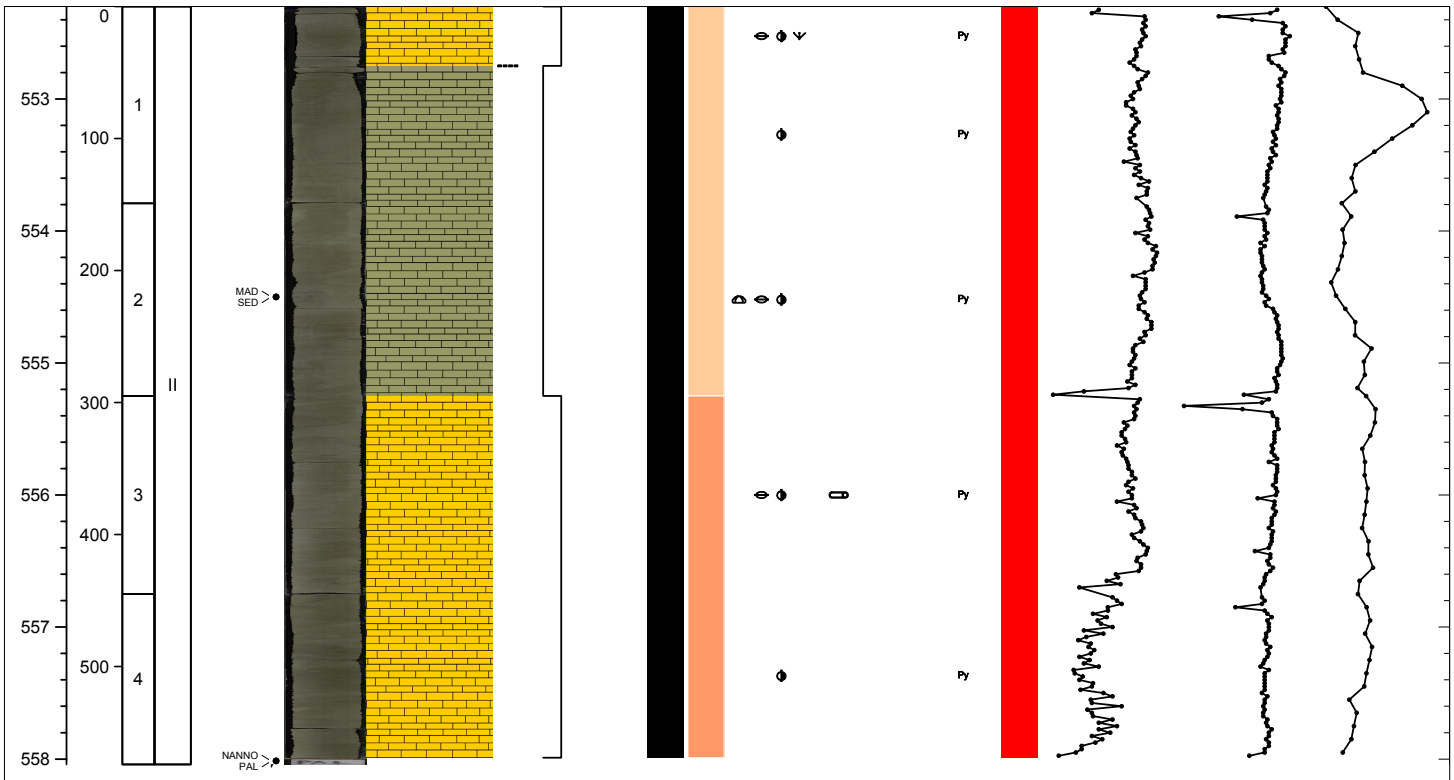
Hole 356-U1462C Core 106R, Interval 547.4-551.77 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE with common macrofossils. There is indistinct layering in this core section which is disturbed by bioturbation.



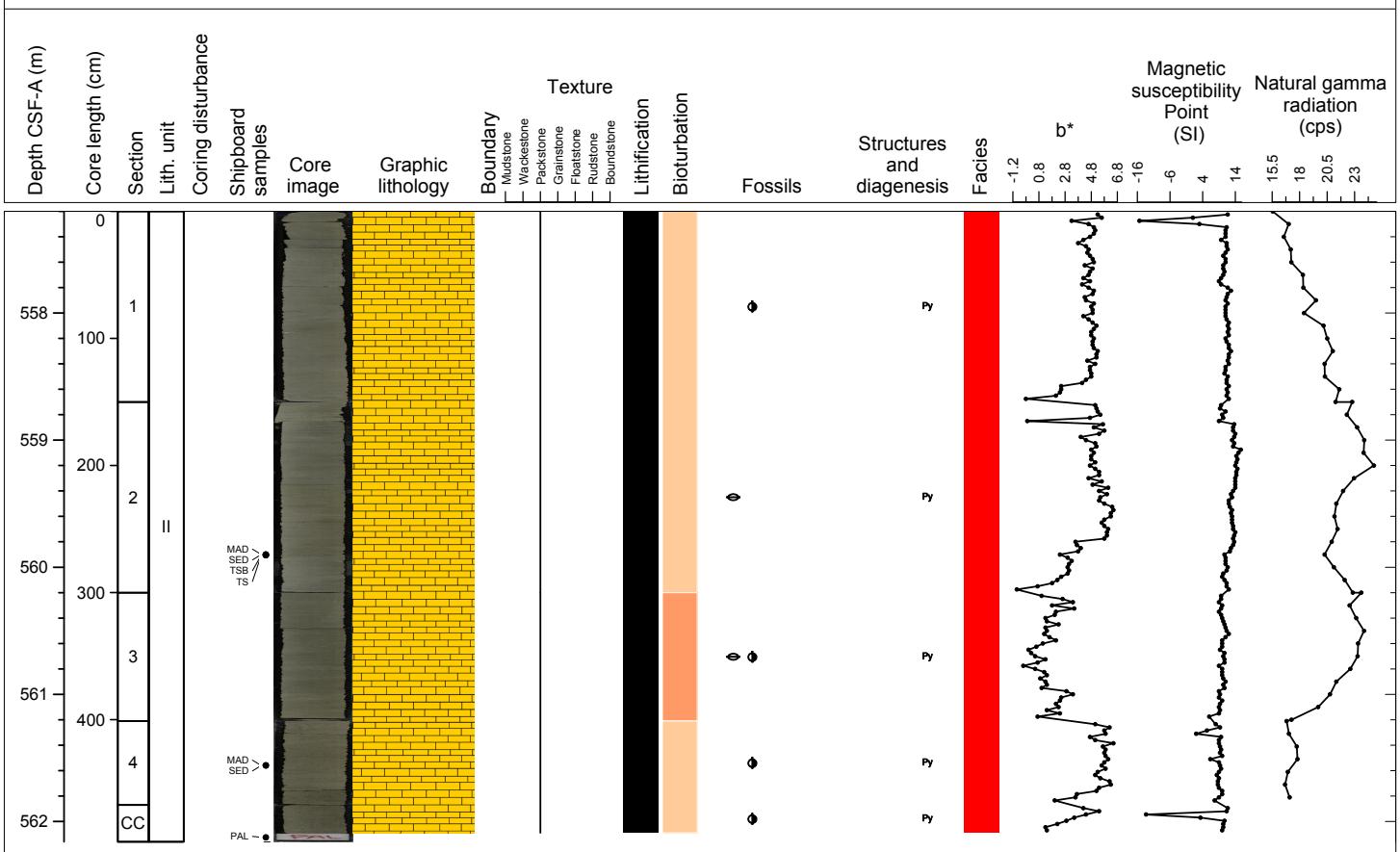
Hole 356-U1462C Core 107R, Interval 552.3-558.04 m (CSF-A)

Lithified, light grayish-green, very fine to fine sand-sized, PACKSTONE with moderate bioturbation. In the middle part of the core, a homogeneous, light grayish-green, WACKESTONE bed is intercalated with the PACKSTONE.



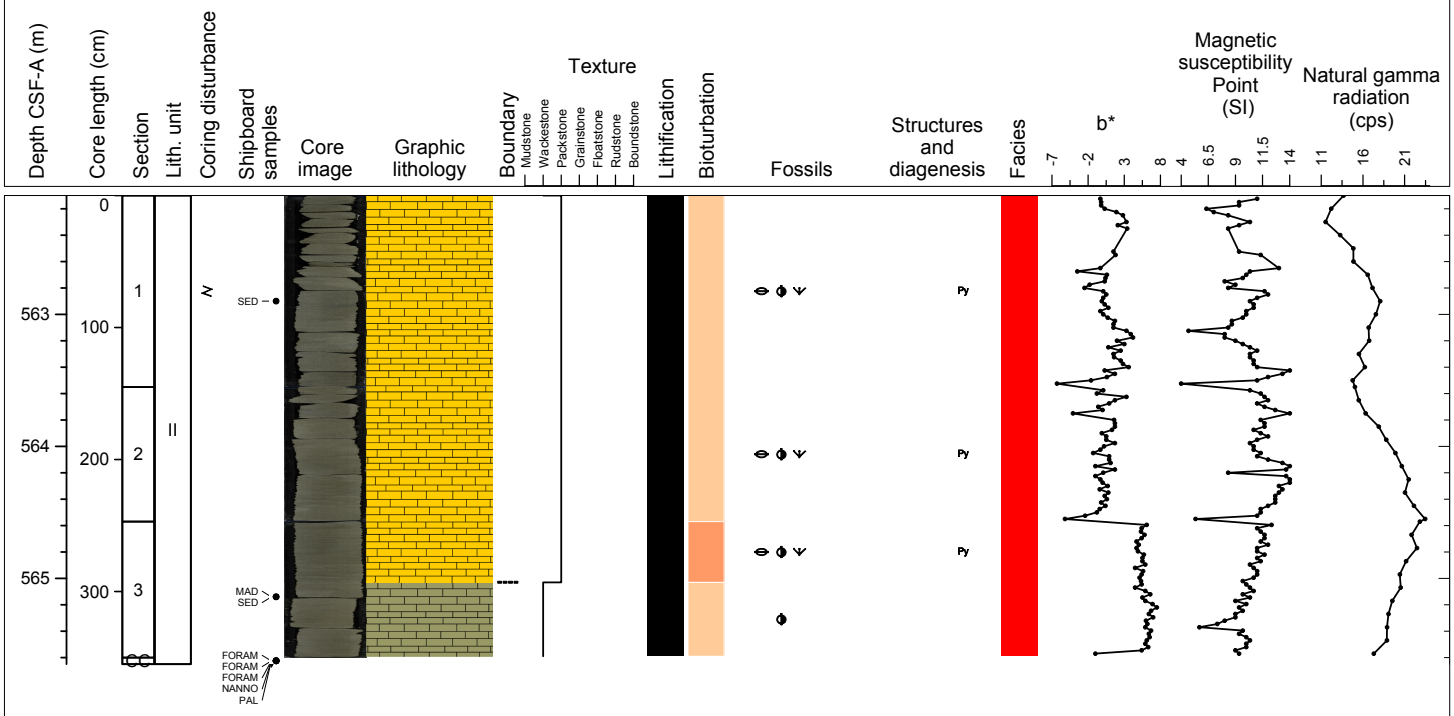
Hole 356-U1462C Core 108R, Interval 557.2-562.16 m (CSF-A)

Homogenous, lithified, light greenish-gray, fine sand-sized, PACKSTONE with moderate bioturbation.



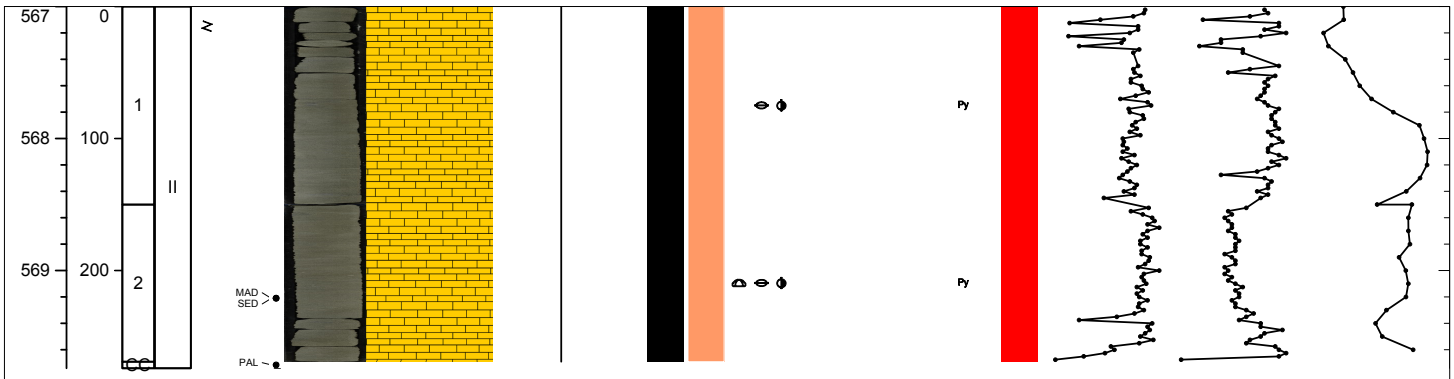
Hole 356-U1462C Core 109R, Interval 562.1-565.65 m (CSF-A)

Homogeneous, lithified, light greenish-gray, fine sand-sized, PACKSTONE with intraclasts, benthic foraminifers, macrofossil fragments (bivalves and bryozoans), and slight bioturbation. At the base of the core the PACKSTONE transitions to lithified, olive gray, WACKESTONE.



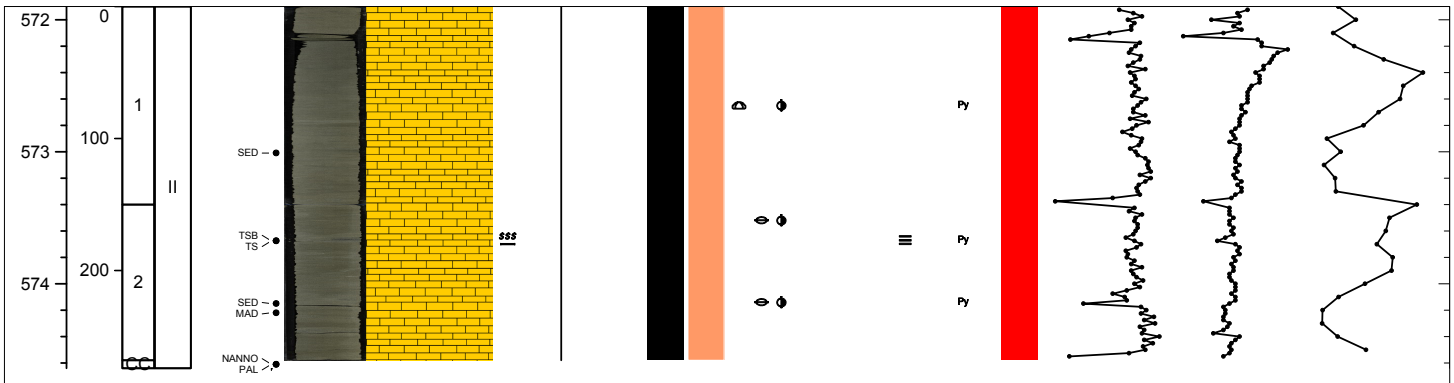
Hole 356-U1462C Core 110R, Interval 567.0-569.74 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE with small benthic foraminifers, bioclasts, and moderate bioturbation.



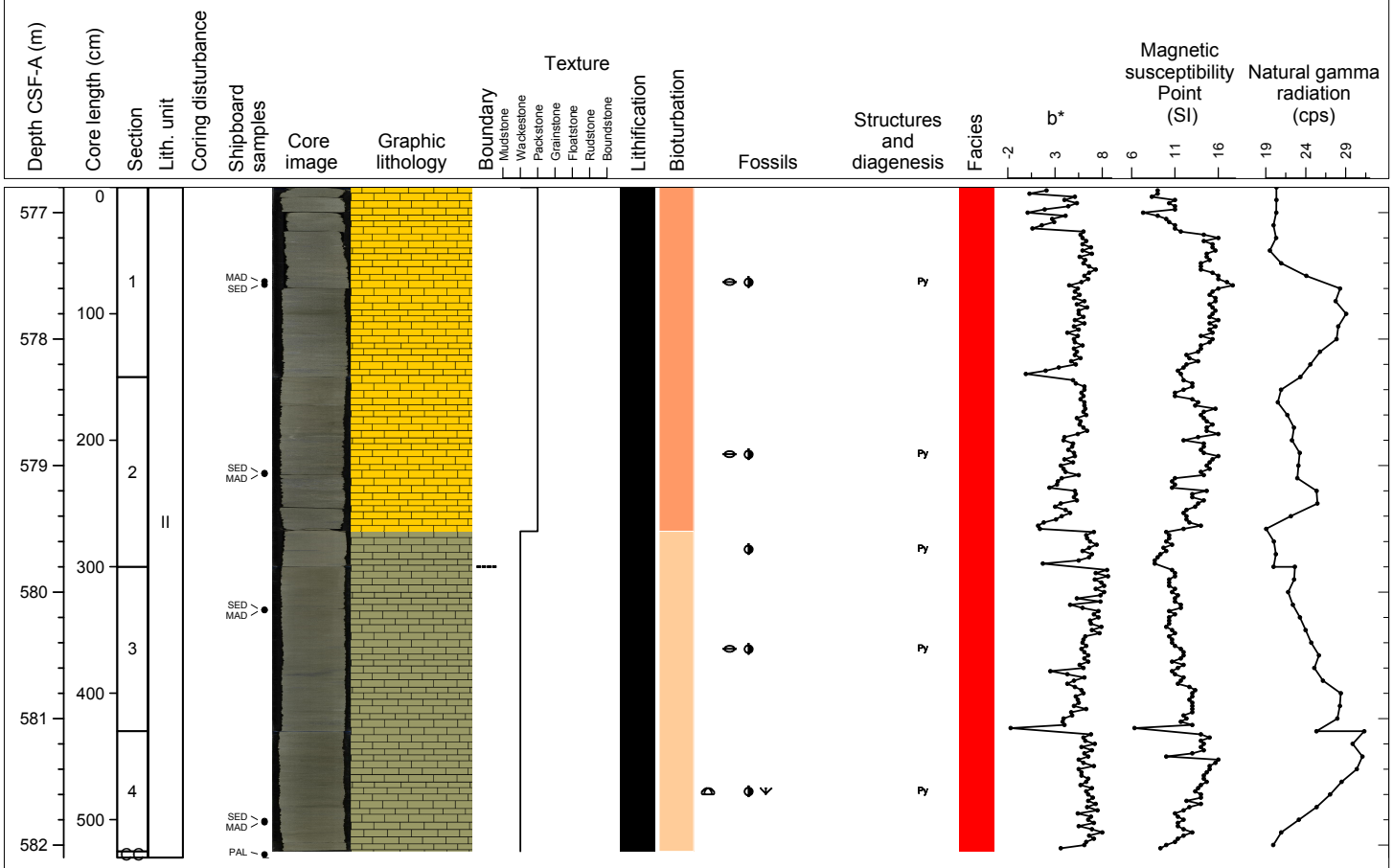
Hole 356-U1462C Core 111R, Interval 571.9-574.64 m (CSF-A)

Lithified, olive gray, very fine to fine sand-sized, PACKSTONE with intraclasts, disseminated pyrite, small benthic foraminifers, and macrofossil fragments (bivalves and echinoderms). At the upper part of the core (2A, 24-30 cm depth), a well-laminated, dark gray, PACKSTONE bed is intercalated with the olive gray PACKSTONE.



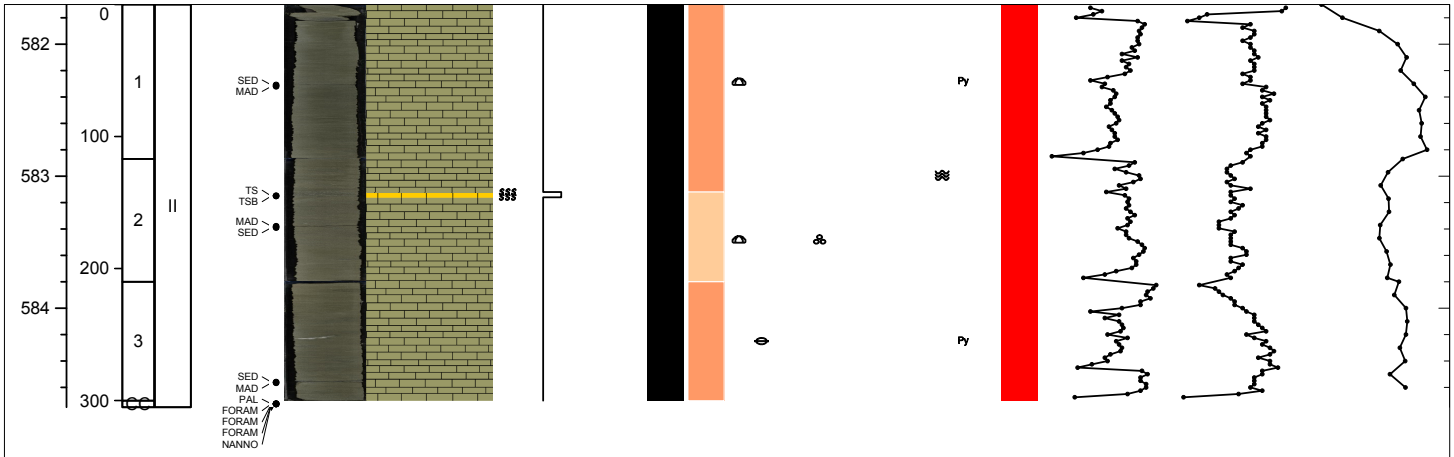
Hole 356-U1462C Core 112R, Interval 576.8-582.1 m (CSF-A)

Lithified, mottled olive gray, fine sand-sized, PACKSTONE contains darker WACKESTONE patches, macrofossil fragments, small benthic foraminifers, and moderate bioturbation transitions to homogenous, lithified, olive gray, WACKESTONE with dark, fine sand-sized patches and bioturbation.



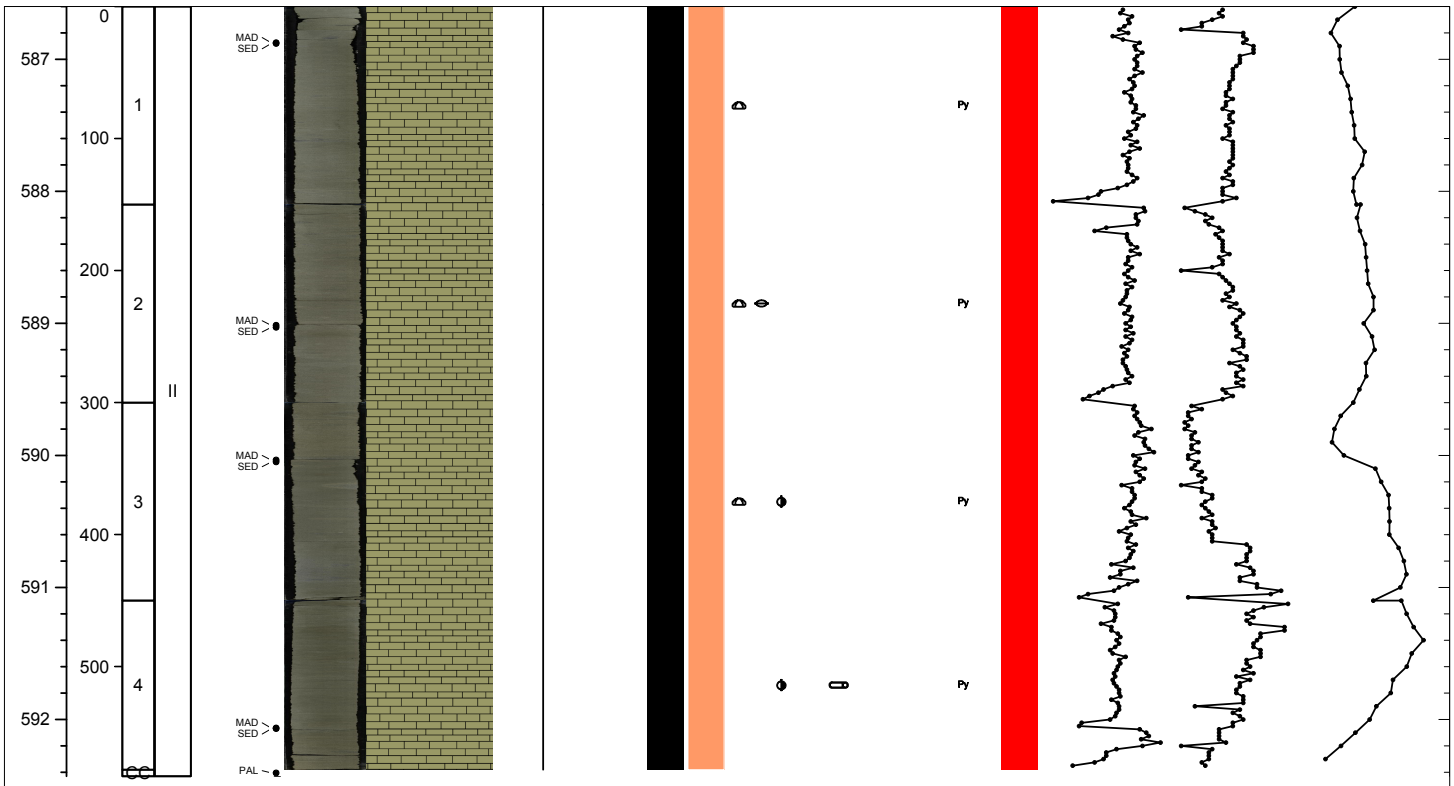
Hole 356-U1462C Core 113R, Interval 581.7-584.75 m (CSF-A)

Primarily lithified, olive gray, fine sand-sized, WACKESTONE with rare macrofossils, patches of disseminated pyrite, and some wavy laminations.



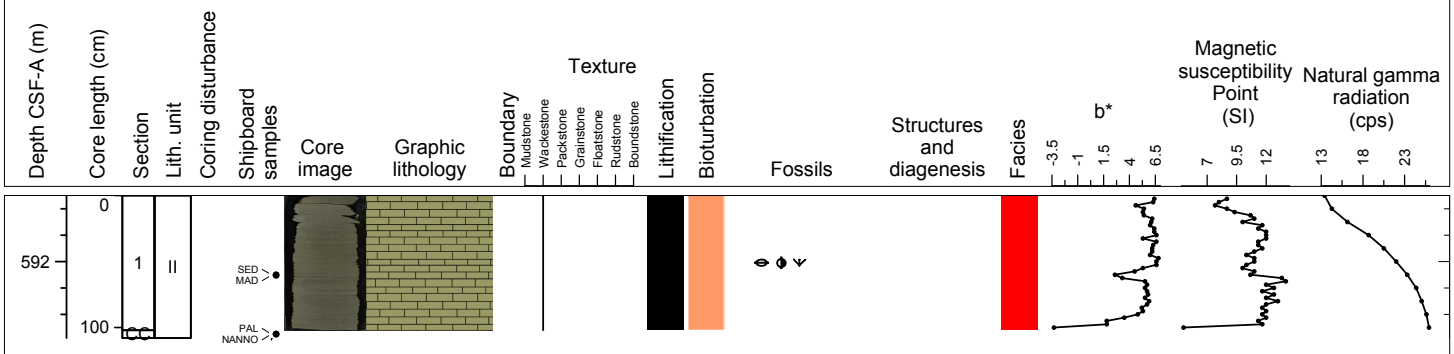
Hole 356-U1462C Core 114R, Interval 586.6-592.43 m (CSF-A)

Lithified, olive gray, fine sand-sized, WACKESTONE with rare macrofossils, patches of disseminated pyrite, and color variations due to wavy laminations and bioturbation.



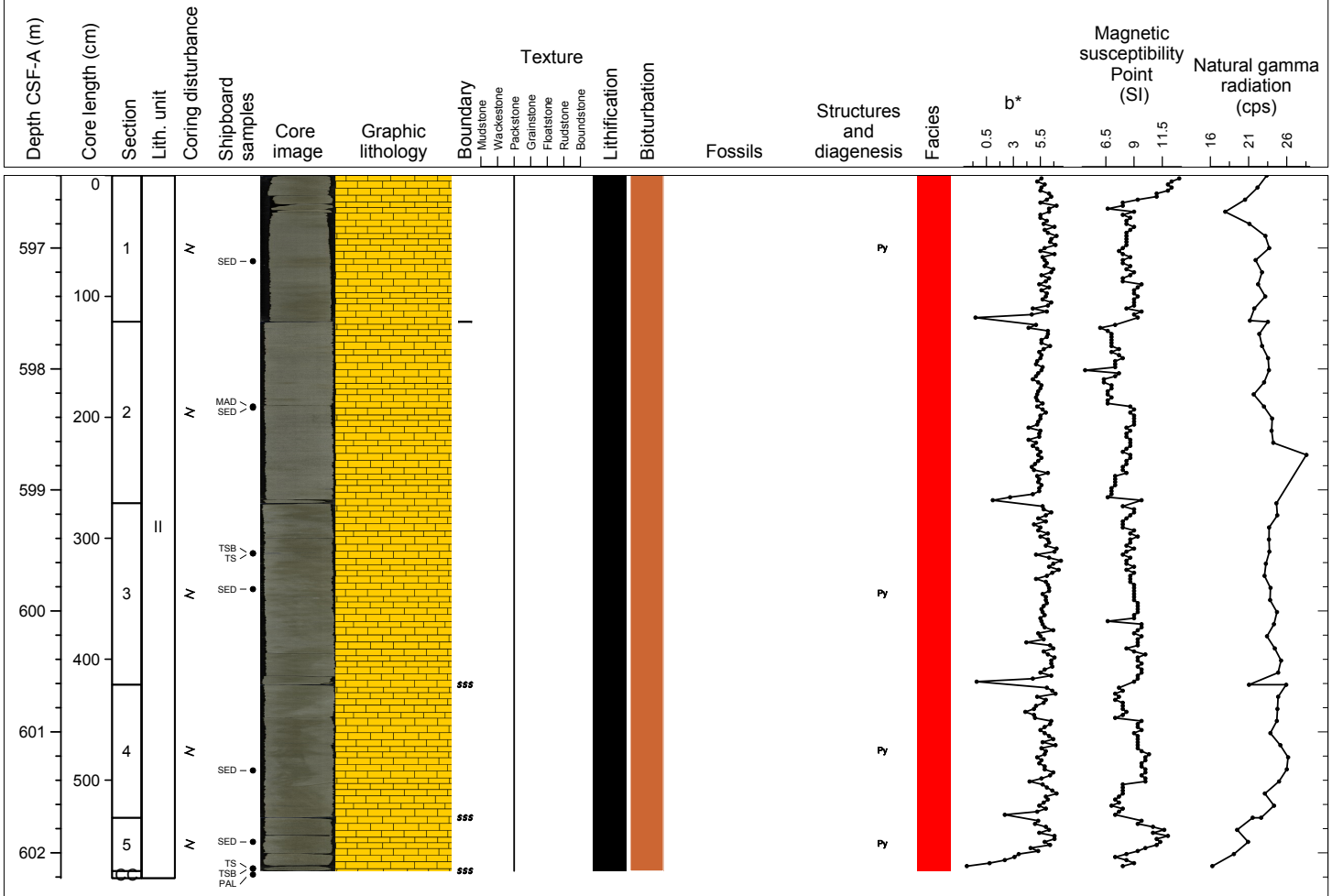
Hole 356-U1462C Core 115R, Interval 591.5-592.58 m (CSF-A)

Lithified, olive gray, silt-sized, WACKESTONE with light grayish-green, fine sand-sized, PACKSTONE patches and bands. Small benthic foraminifers and macrofossils are common.



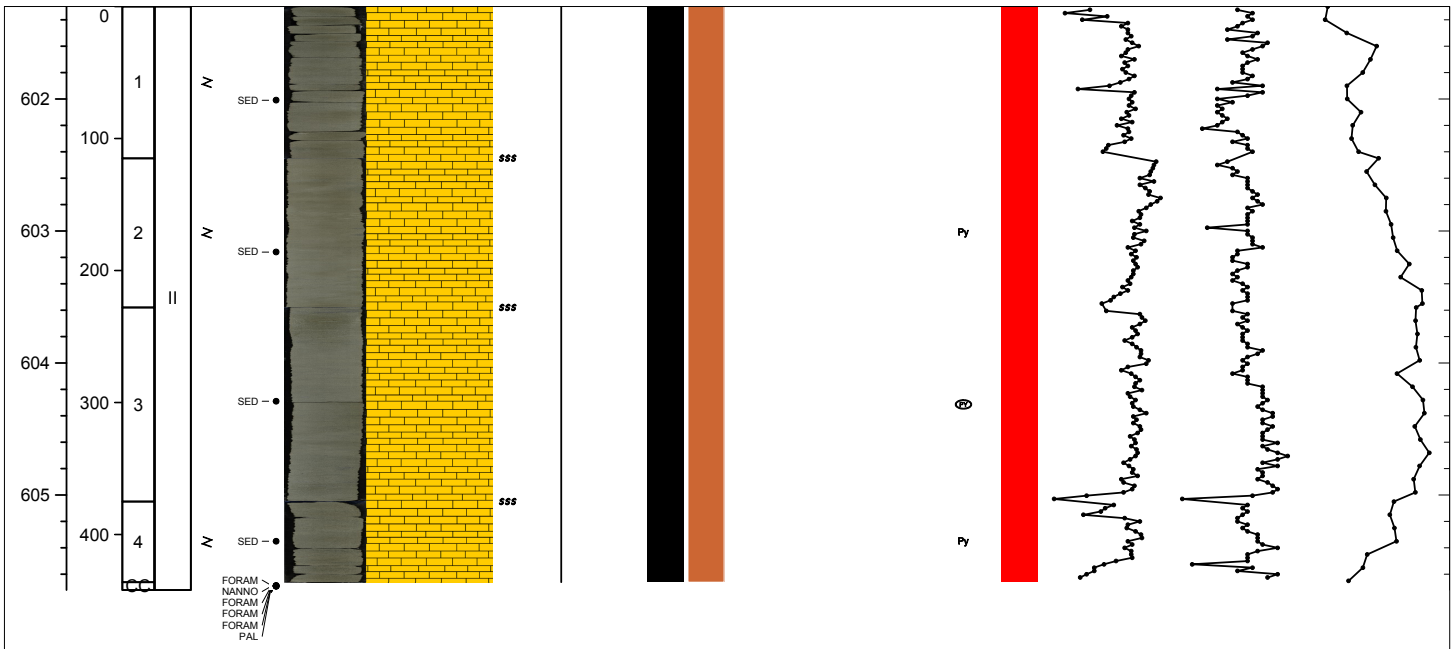
Hole 356-U1462C Core 116R, Interval 596.4-602.21 m (CSF-A)

Lithified, olive gray, fine to medium sand-sized, PACKSTONE with common bioturbation, rare small benthic foraminifers and macrofossils, and mixed intervals of coarser and fine material. The coarser-grained material has more foraminfers and larger grains of pyrite and in some instances sub-horizontal contacts can be identified. There are unidentified, fragmented macrofossils ~3 cm long. Pyrite grains are small and sparse.



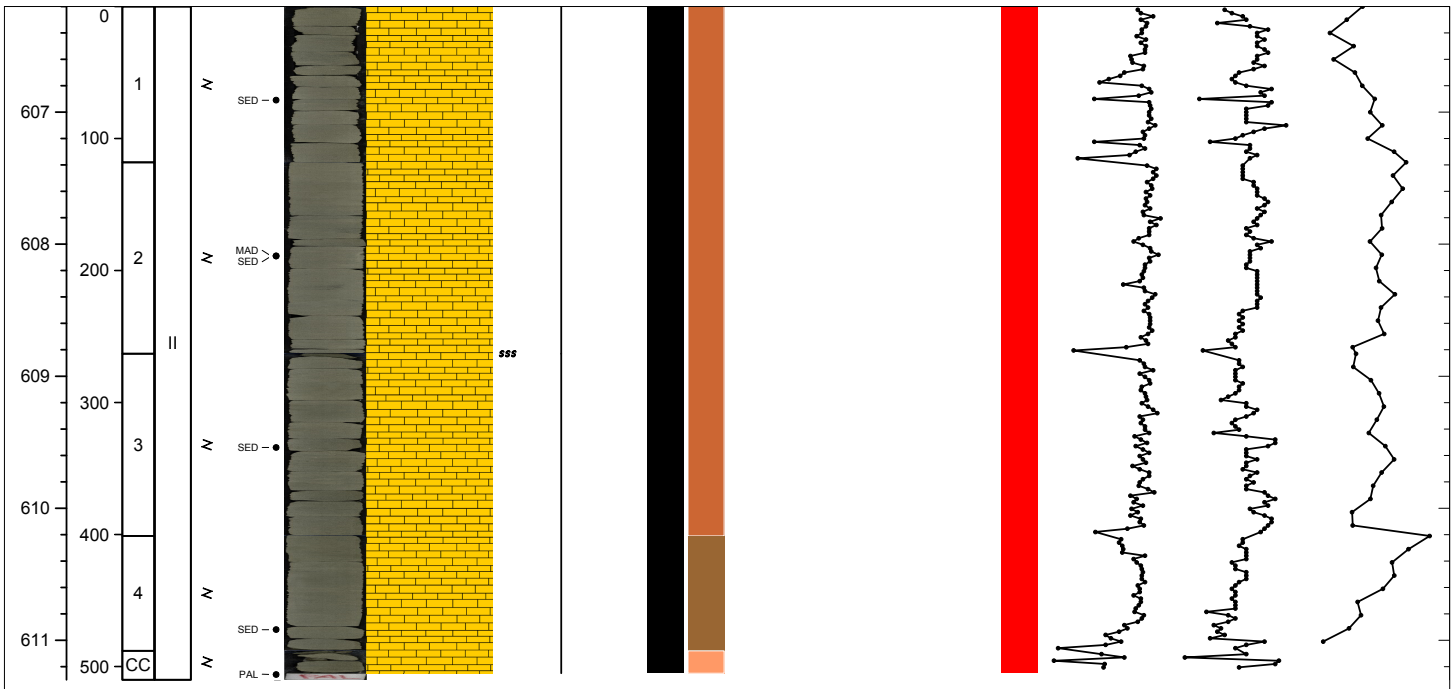
Hole 356-U1462C Core 117R, Interval 601.3-605.72 m (CSF-A)

Lithified, olive gray, mixed fine and coarse sand-sized, PACKSTONE with common bioturbation.The coarse sand-sized grains are composed of bivalve fragments and foraminifers. Pyrite is disseminated but more abundant in association with the coarser-grained components. There are sharp, horizontal contacts and bioturbated contacts. There is one possible brachiopod fragment.



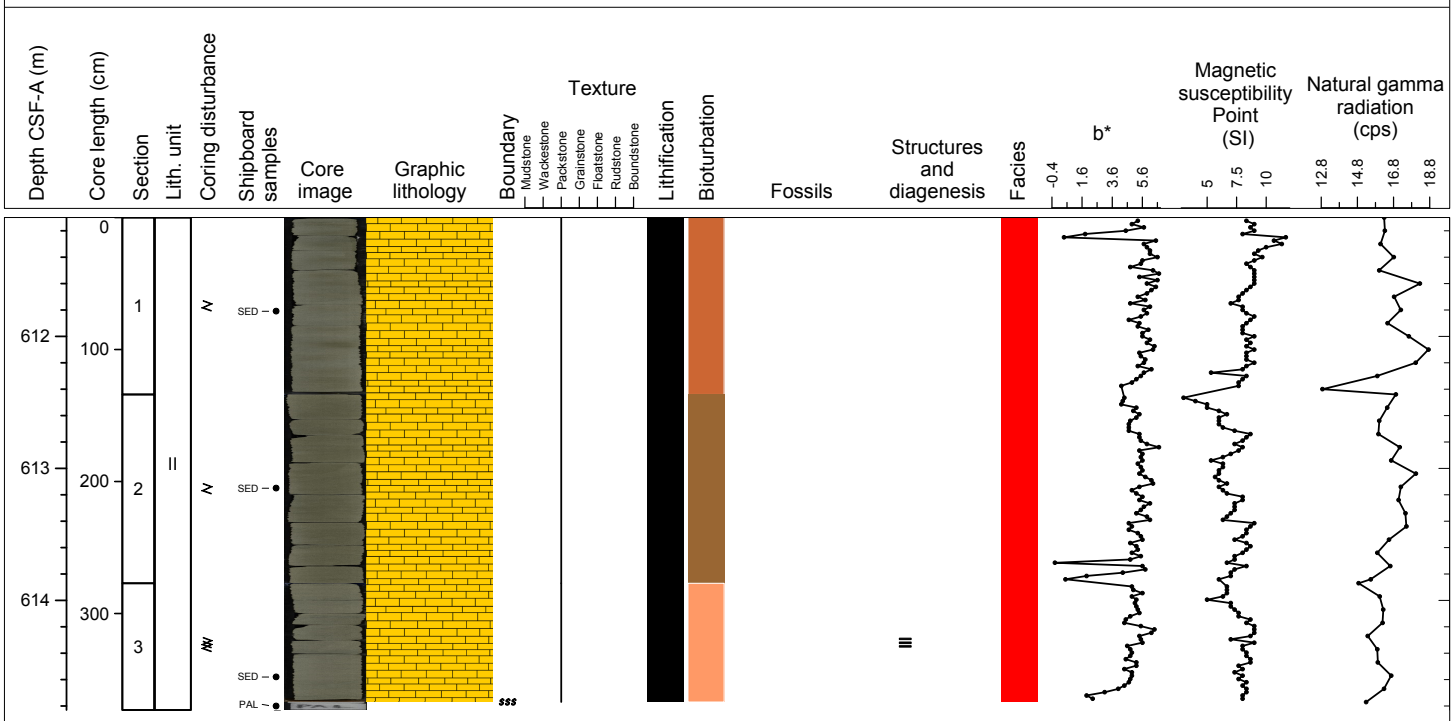
Hole 356-U1462C Core 118R, Interval 606.2-611.3 m (CSF-A)

Lithified, olive gray, mixed fine and coarse sand-sized, PACKSTONE with moderate bioturbation; sparse disseminated pyrite, bivalve, and echinoderm fragments; and very sparse small benthic foraminifers. There are two light brown to pink nodules in Section 1; XRF measurements show Ca, Fe, Sr and Zr. There is a similar feature, in another section, with a brownish pink coating; XRF showed Ca, Si, Fe, Sr and Zr. There are a few bioturbated sub-horizontal contacts associated with coarser-grained material. Much of the sections are homogenous and likely completely homogenized by bioturbation.



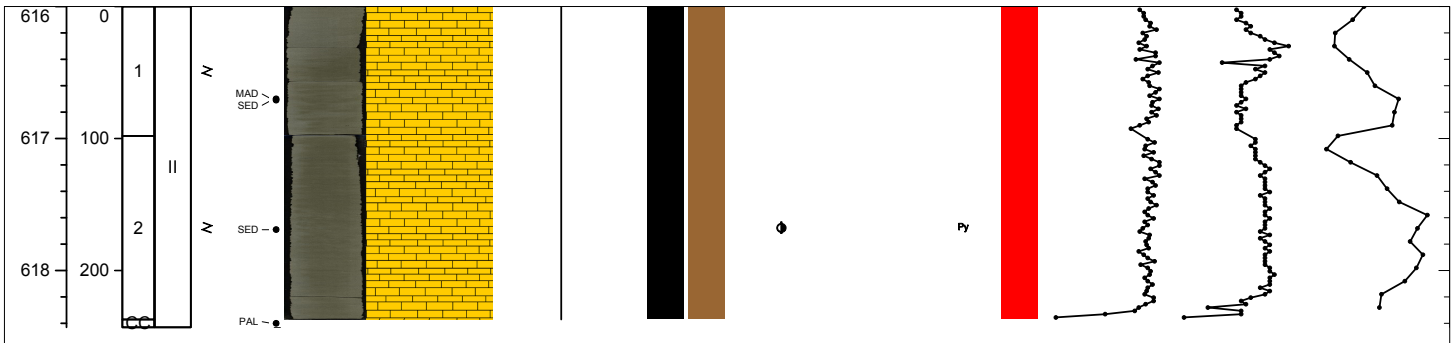
Hole 356-U1462C Core 119R, Interval 611.1-614.83 m (CSF-A)

Lithified, olive gray, mixed fine and coarse sand-sized, PACKSTONE with the coarser component composed of pyrite and small benthic foraminfiers. There is common bioturbation. There are bioturbated contacts, parallel laminae (preserved due to mineralization), and a few bivalve fragments. Overall, it looks very homogenized.



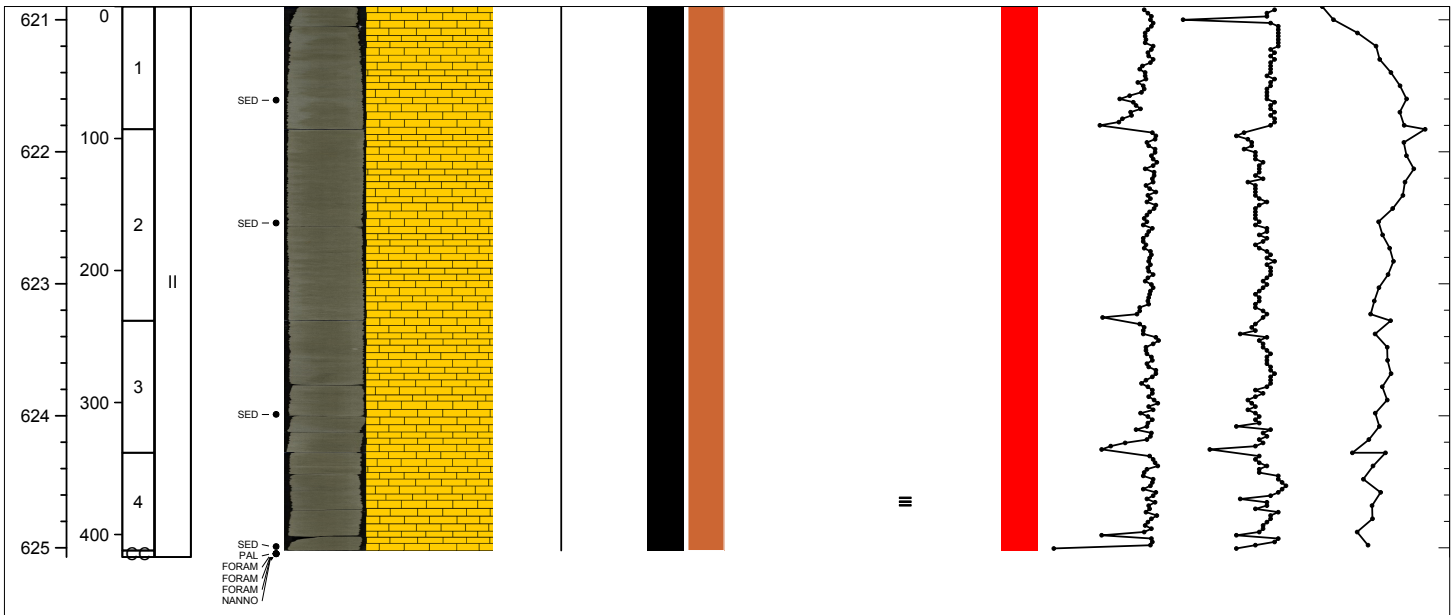
Hole 356-U1462C Core 120R, Interval 616.0-618.43 m (CSF-A)

Lithified, olive gray, mixed fine and medium sand-sized, PACKSTONE with complete bioturbation, common small benthic foraminifers, and sparse, disseminated, small, pyrite grains. The core appears to be completely homogenized by bioturbation.



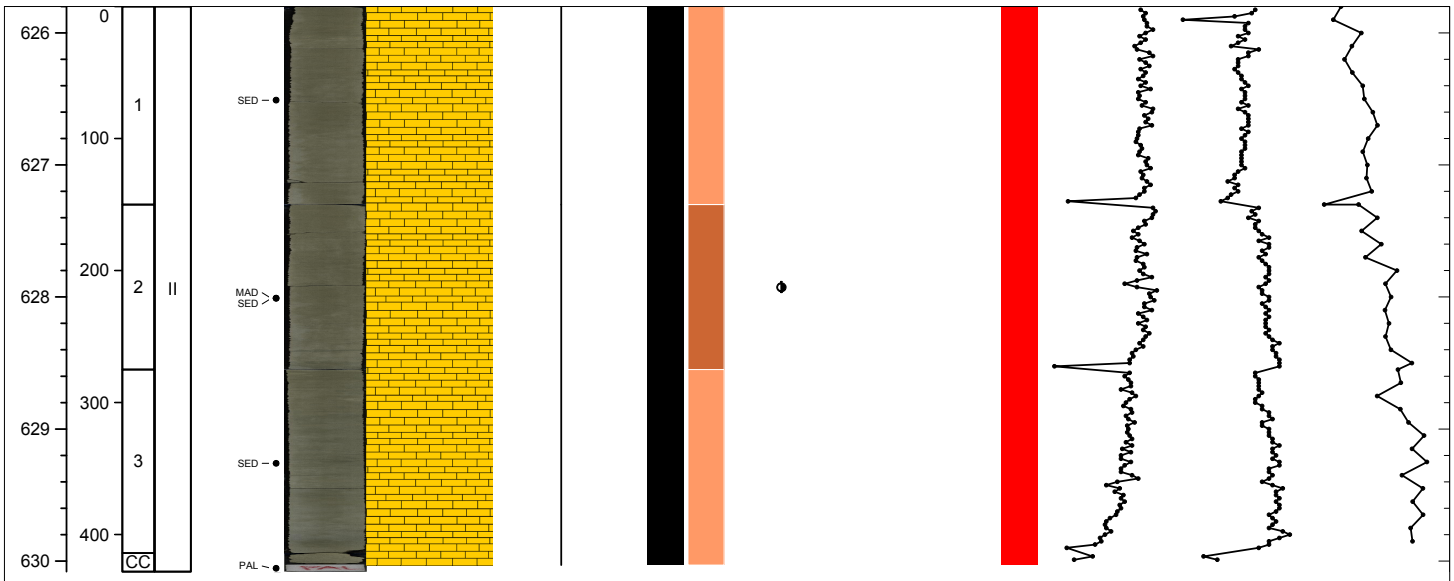
Hole 356-U1462C Core 121R, Interval 620.9-625.07 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE with common bioturbation and a few zones of coarser grains (medium sand sized) infilling burrows, which also contain small benthic foramainifers and pyrite. There are also parallel laminae and a possible sea urchin spine.



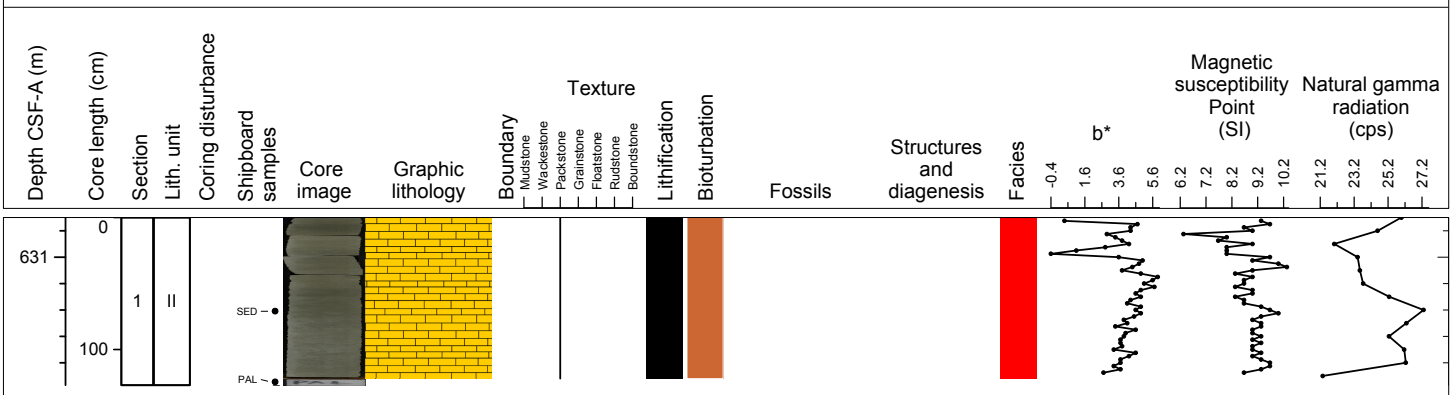
Hole 356-U1462C Core 122R, Interval 625.8-630.08 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE with moderate bioturbation and very sparse small benthic foraminifers (that often fill burrows).



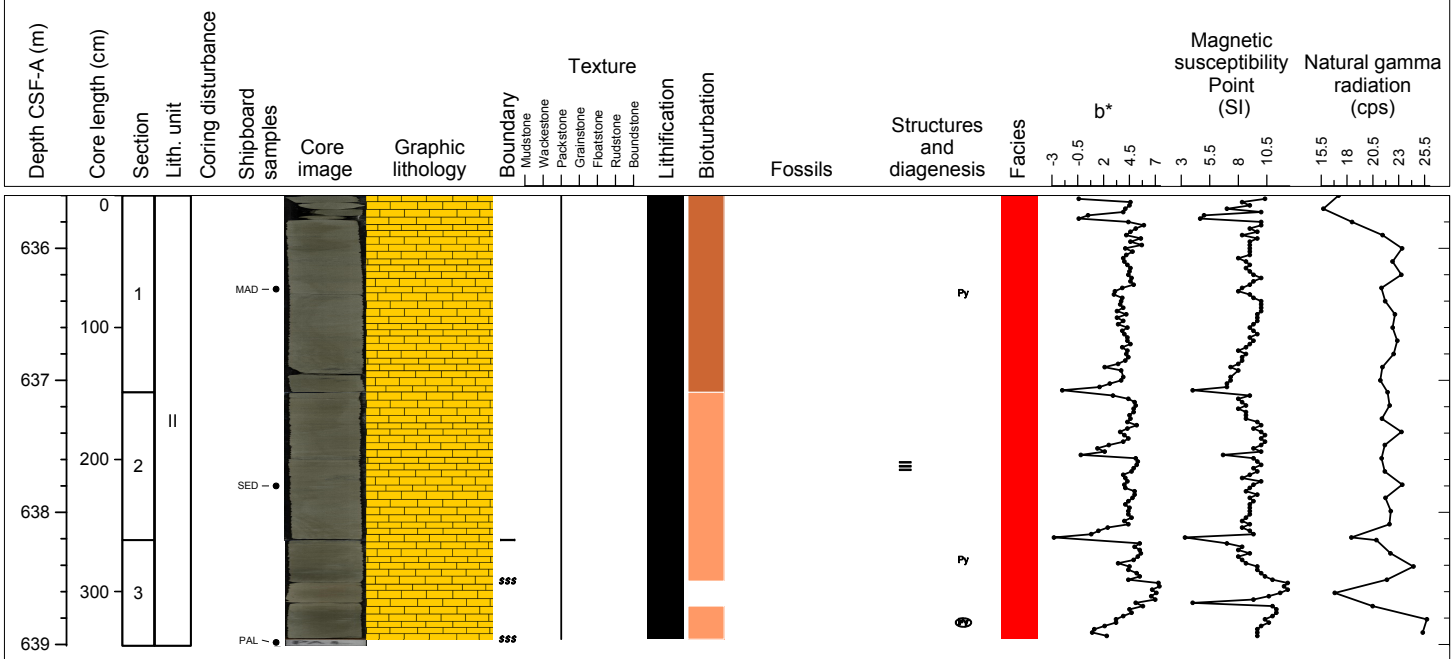
Hole 356-U1462C Core 123R, Interval 630.7-631.97 m (CSF-A)

Lithified, olive gray, fine sand-sized PACKSTONE with common bioturbation.



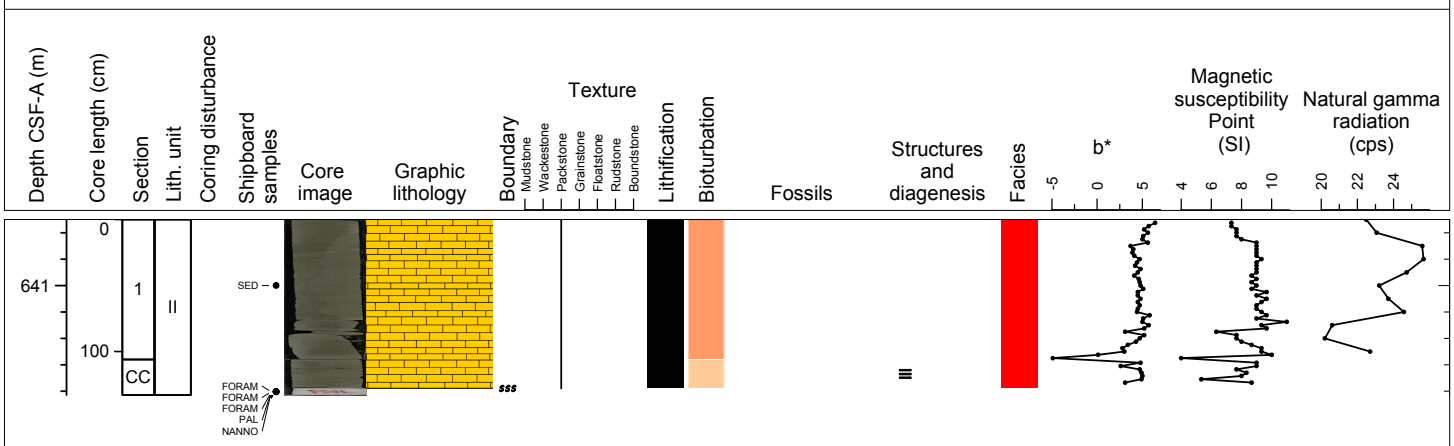
Hole 356-U1462C Core 124R, Interval 635.6-639.01 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE with common bioturbation. There are coarser sand-sized grains that create beds with sharp contacts. There are also gradational contacts. Pyrite occurs as nodules (2 mm long) and as disseminated grains, often occurring more densely in intervals. Benthic foraminifers are generally sparse but common in some zones.



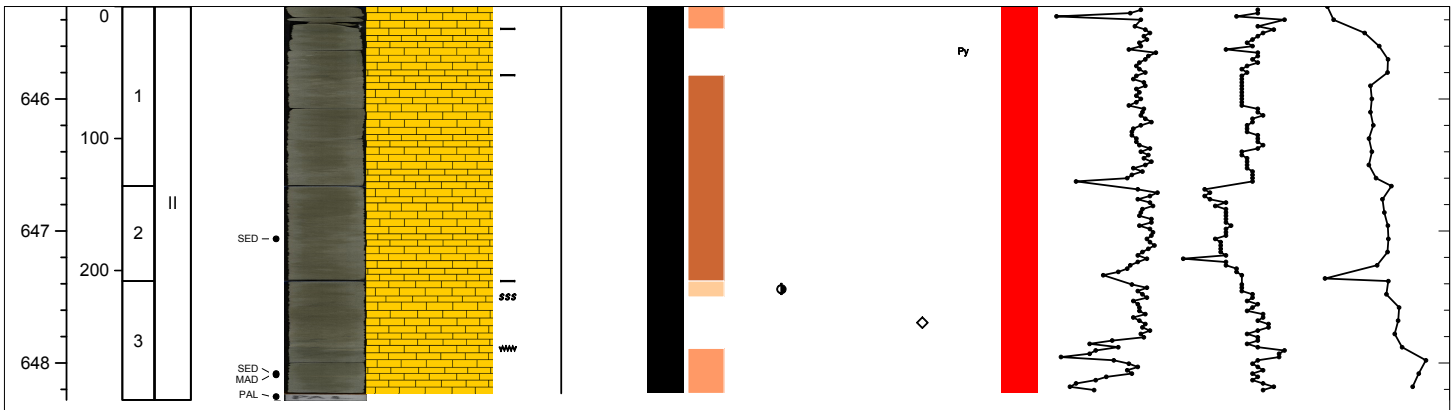
Hole 356-U1462C Core 125R, Interval 640.5-641.83 m (CSF-A)

Lithified, olive gray, mixed fine and medium sand-sized, PACKSTONE with moderate bioturbation, disseminated pyrite, and smal benthic foraminifers. Parallel bedding is common throughout, and the beds often contain pyrite nodules.



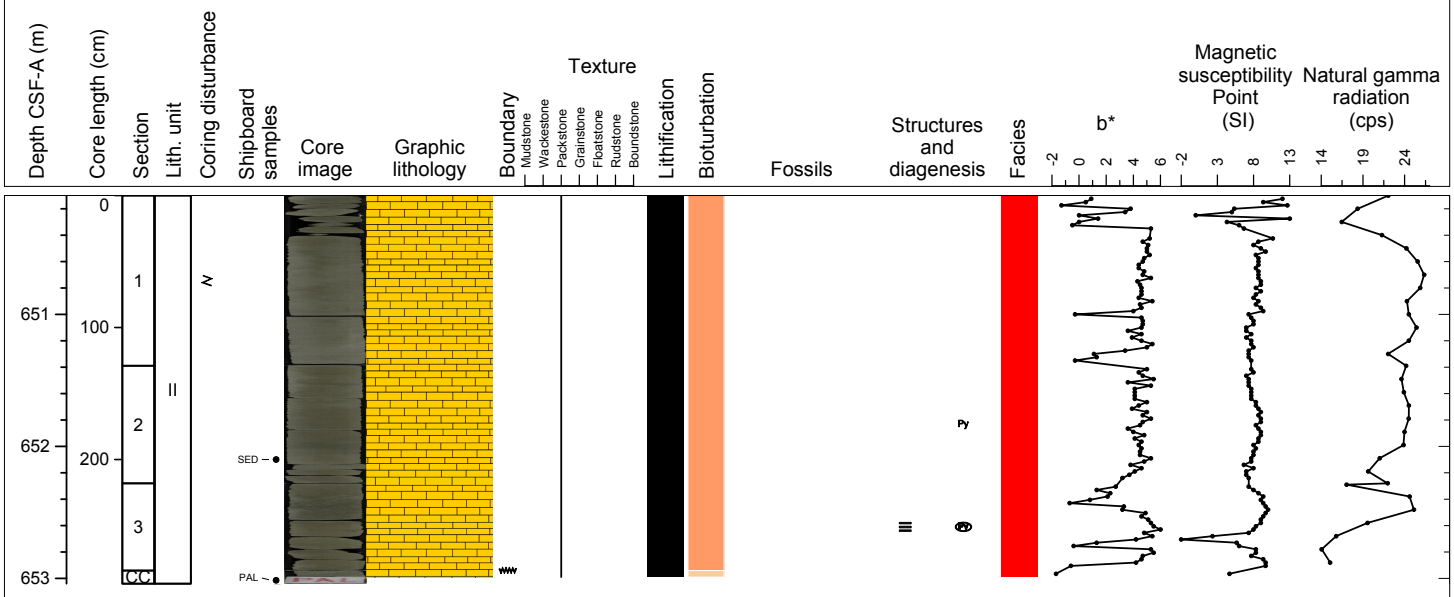
Hole 356-U1462C Core 126R, Interval 645.3-648.28 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE, with moderate bioturbation. There are intervals in which sand-size grains are mixed with the fine sand-size grains, and others where there are sharp contacts between grain sizes. Pyrite grains are scattered throughout, but they also are concentrated at some contacts. There is some bedding (3 cm thick) characterized by sharp and bioturbated contacts. Small benthic foraminifers are abundant in intervals but are otherwise somewhat sparse. Occasional intraclasts associated with/near contacts. Two XRF analyses were made on this core in Section 3; analyses show Si concentrations of 5% and 7%.



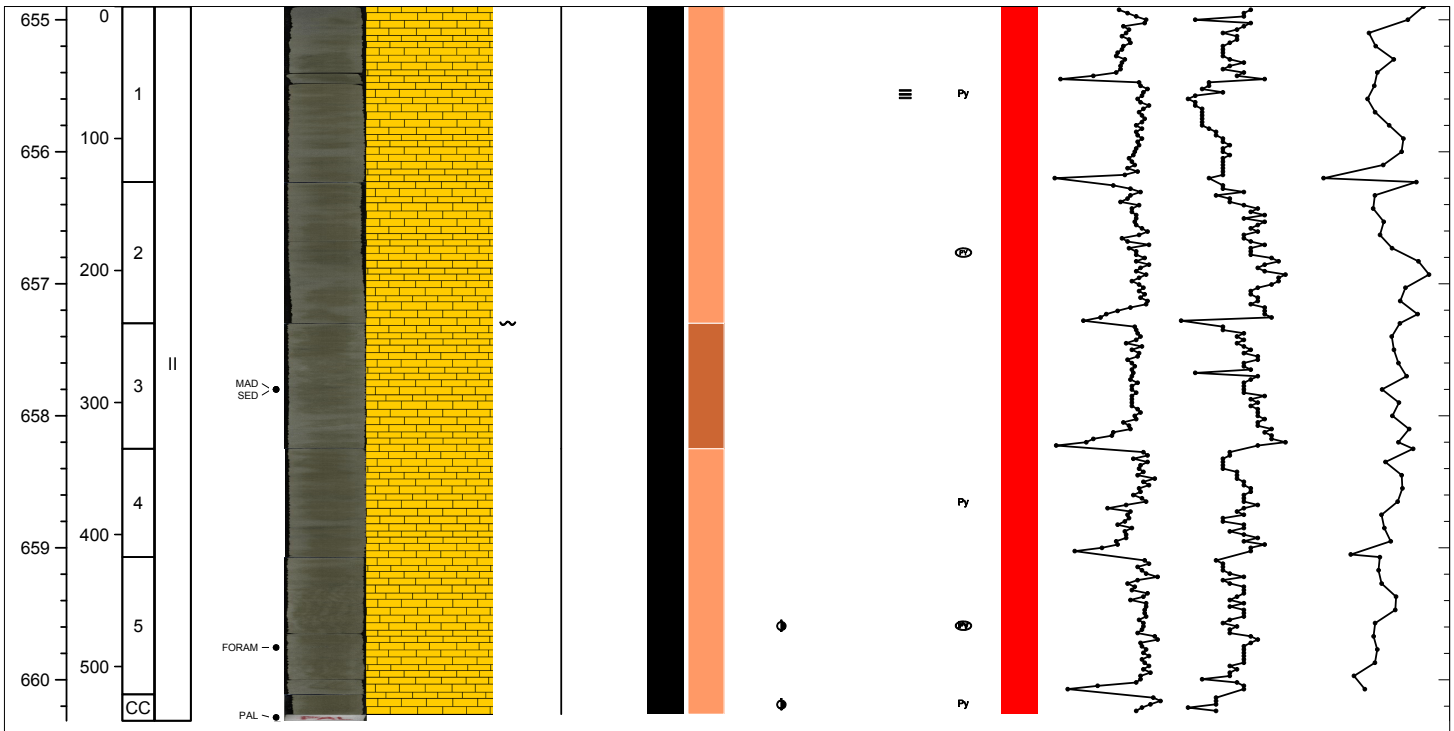
Hole 356-U1462C Core 127R, Interval 650.1-653.04 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE with moderate bioturbation. Pyrite is present as disseminated grains (sand size) and a few nodules. There are intervals of planar laminae (noted by pyrite grains), scoured contacts, and occasional benthic foraminifers.



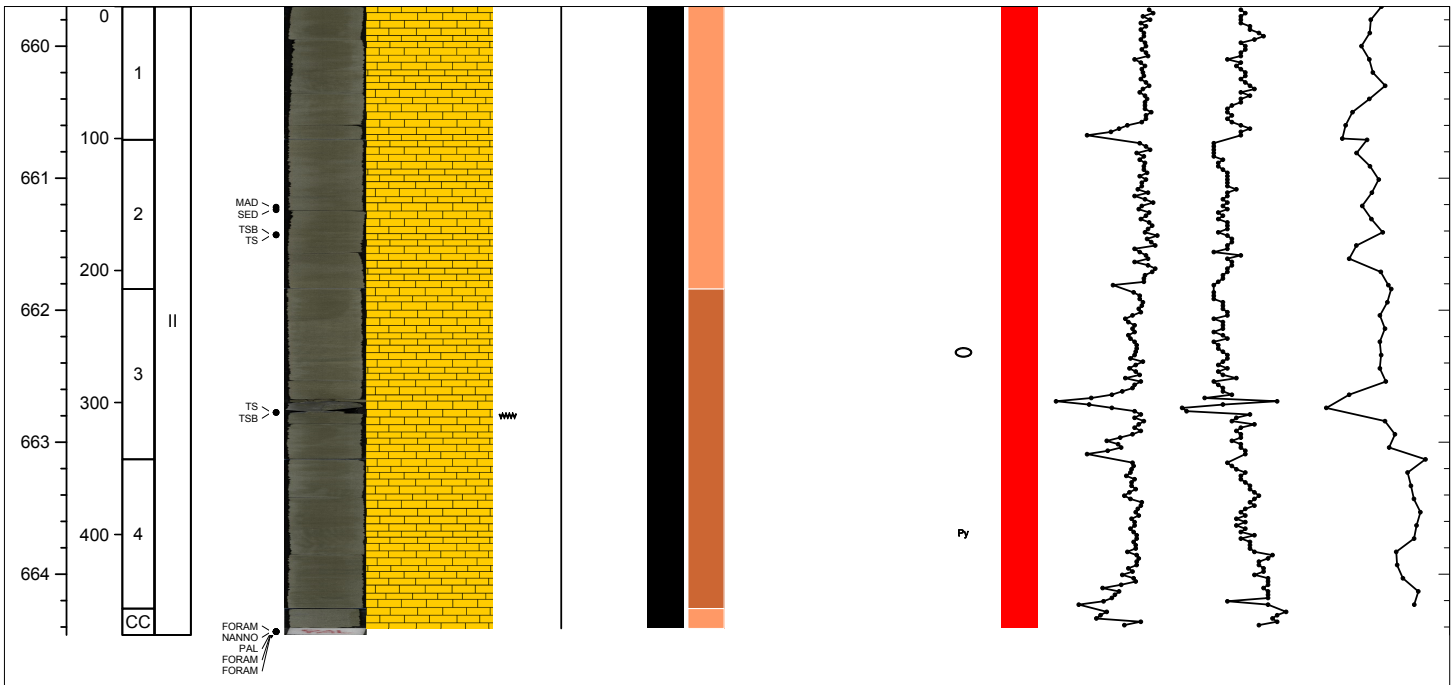
Hole 356-U1462C Core 128R, Interval 654.9-660.31 m (CSF-A)

Lithified, olive gray, mixed fine and medium sand-sized, PACKSTONE with moderate bioturbation. There are intervals of parallel laminae as well as many contacts (e.g. wavy, sharp). Benthic foraminifers are generally sparse but do intermittently appear in abundant layers. Coarser grains are scattered throughout the sediment but also occur in association with contacts and burrows (infilling). Pyrite is present as disseminated (small) grains and as nodules and can be found in burrows. XRF analyses conducted in Section 3.



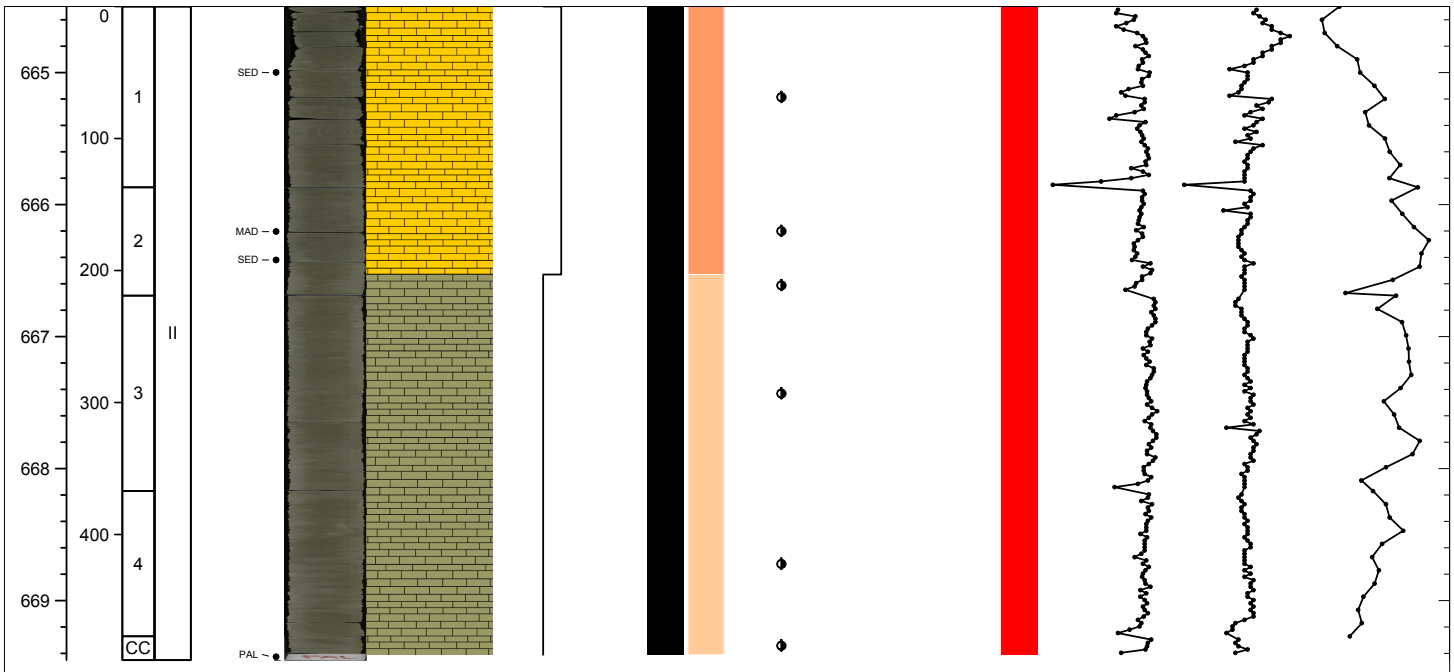
Hole 356-U1462C Core 129R, Interval 659.7-664.46 m (CSF-A)

Lithified, olive gray to dark greenish-gray, mixed fine and medium sand-sized, PACKSTONE. Bioturbation is moderate, and burrows are filled with larger grains of pyrite. One burrow may be filled with many minerals, including pyrite, celestite, dolomite and silica. This mineral assemblage is rimmed by a dark gray band. Outside of the burrows, pyrite is present as disseminated grains. There are also large crystals (pyrite?, celestite?) that extend across the full diameter of the core. XRF analyses yield concentrations of Sr, Si, and Ca with minor Mg and Fe. Benthic foraminifers are common throughout the core.



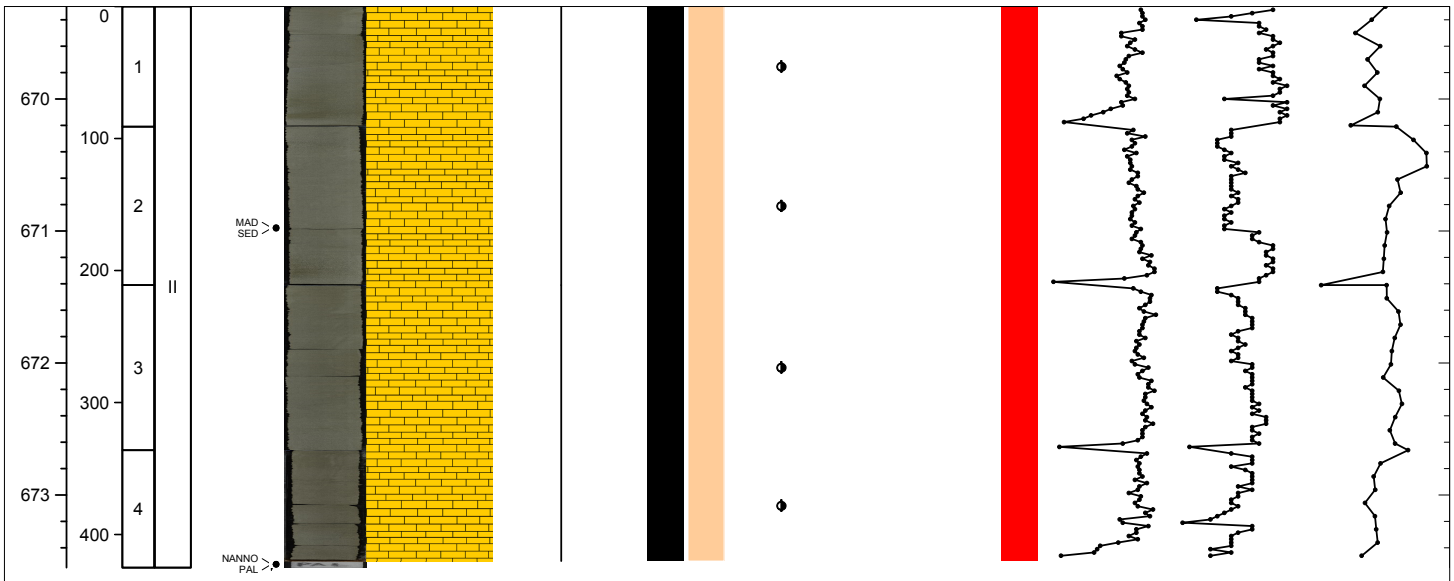
Hole 356-U1462C Core 130R, Interval 664.5-669.45 m (CSF-A)

Lithified, dark greenish-gray, very fine to fine sand-sized, PACKSTONE with small benthic foraminifer-rich patches and macrofossils transitions to homogeneous, lithified, dark grayish-green, silt to very fine sand-sized, WACKESTONE with slight bioturbation and sparse small benthic foraminifers.



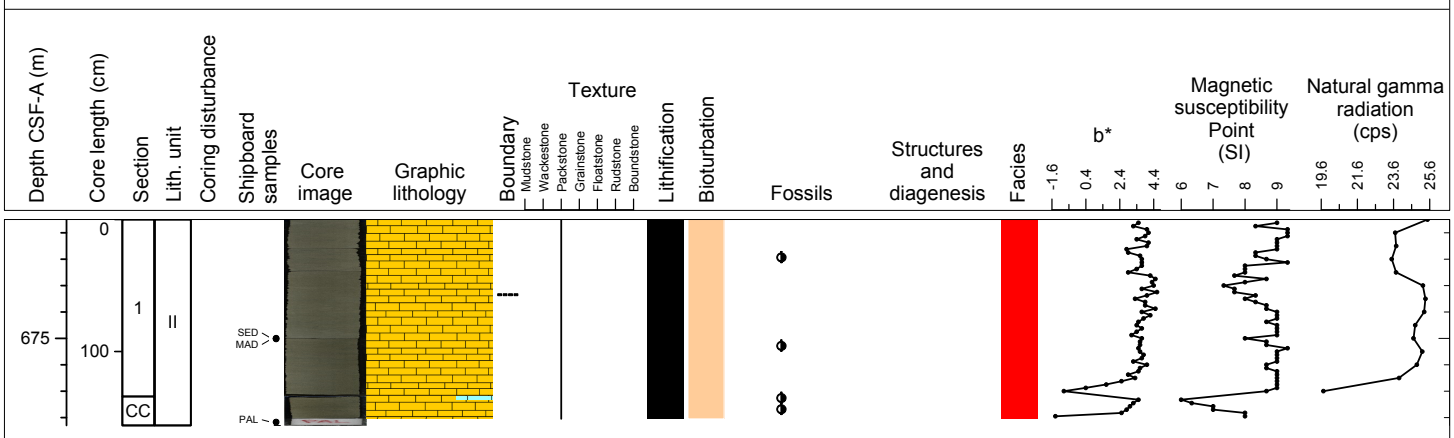
Hole 356-U1462C Core 131R, Interval 669.3-673.55 m (CSF-A)

Homogeneous, lithified, olive gray, very fine to fine sand-sized, PACKSTONE with sparse small foraminifers.



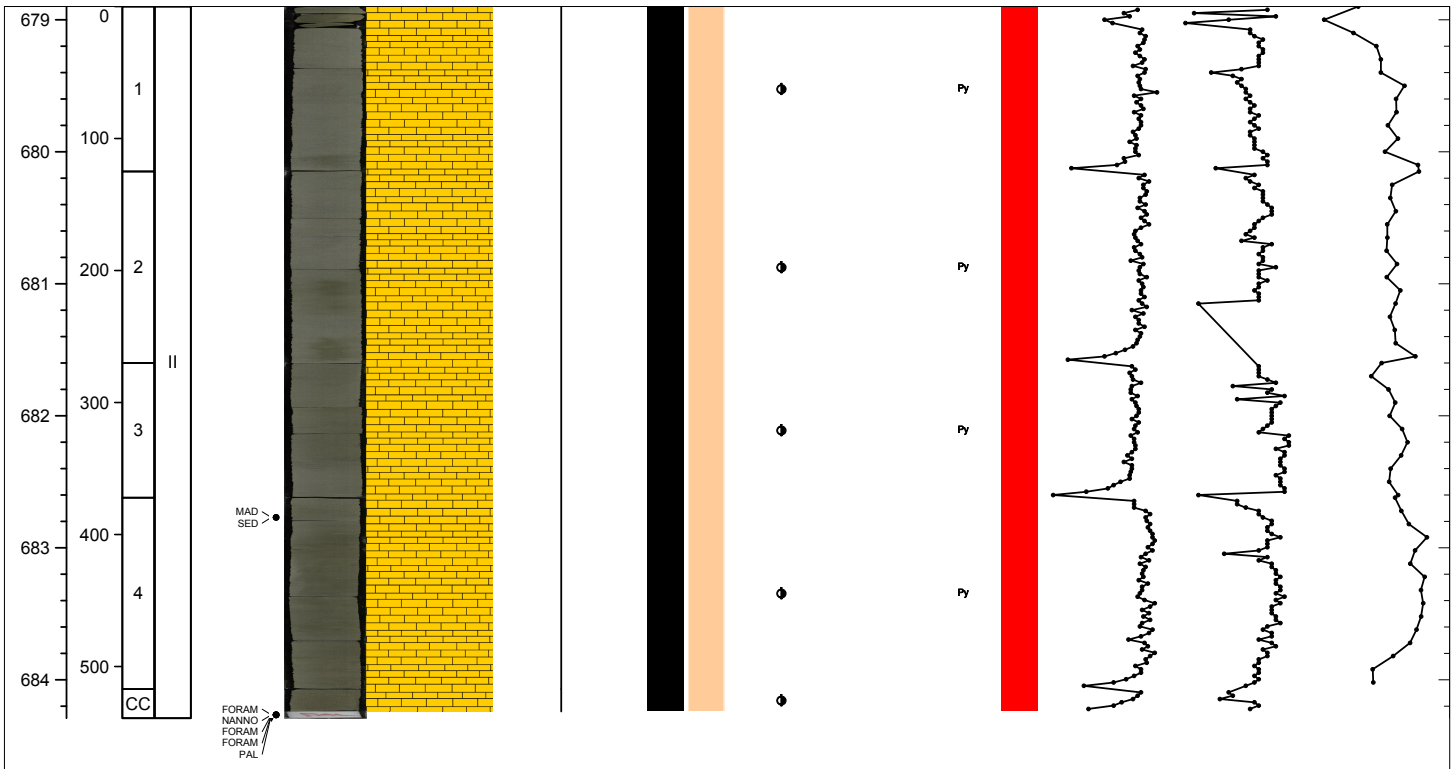
Hole 356-U1462C Core 132R, Interval 674.1-675.66 m (CSF-A)

Homogeneous, lithified, olive gray, very fine to fine sand-sized, PACKSTONE with sparse small benthic foraminifers and macrofossils.



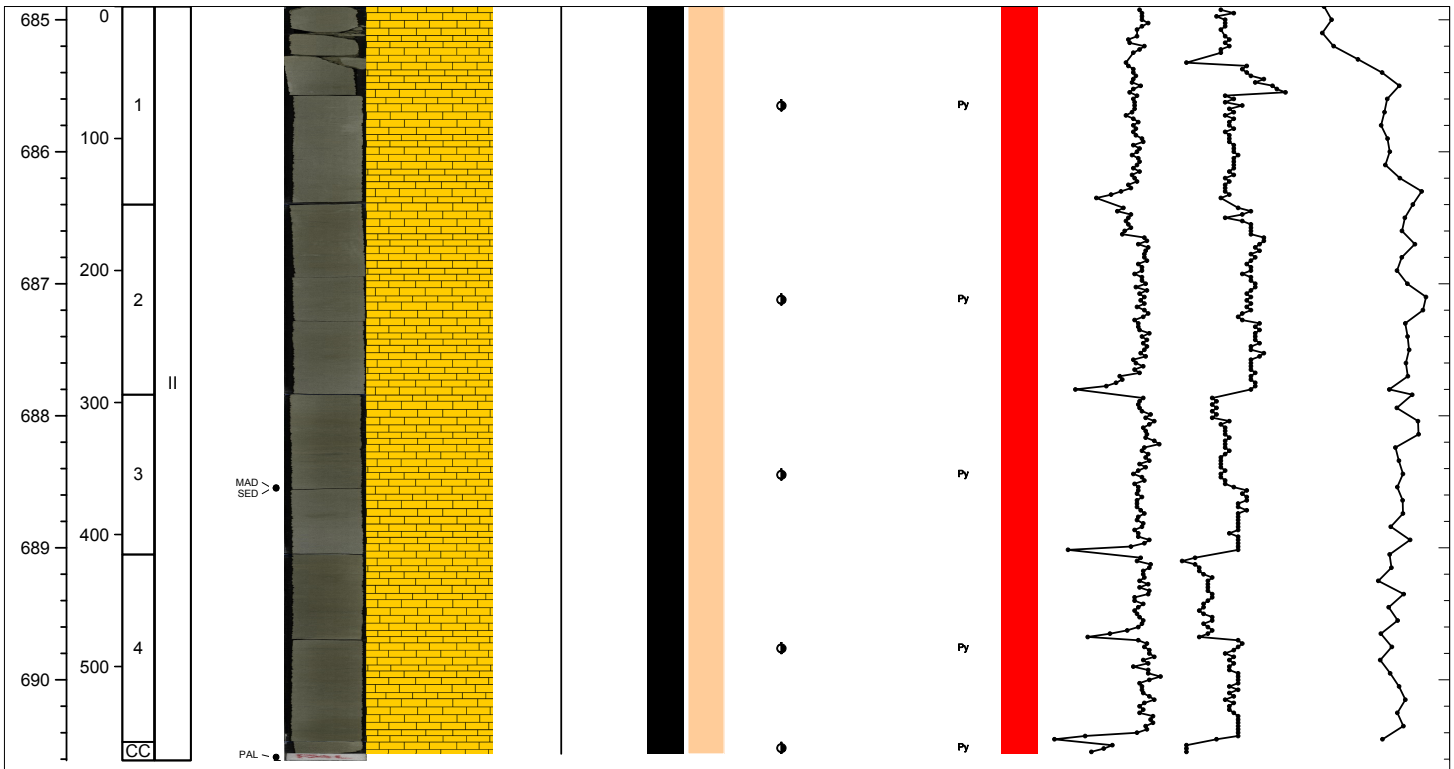
Hole 356-U1462C Core 133R, Interval 678.9-684.29 m (CSF-A)

Homogeneous, lithified, dark greenish-gray, very fine to fine sand-sized, PACKSTONE with sparse small benthic foraminifers. In the lower part of the core, foraminifer-rich patches occassionally occur.



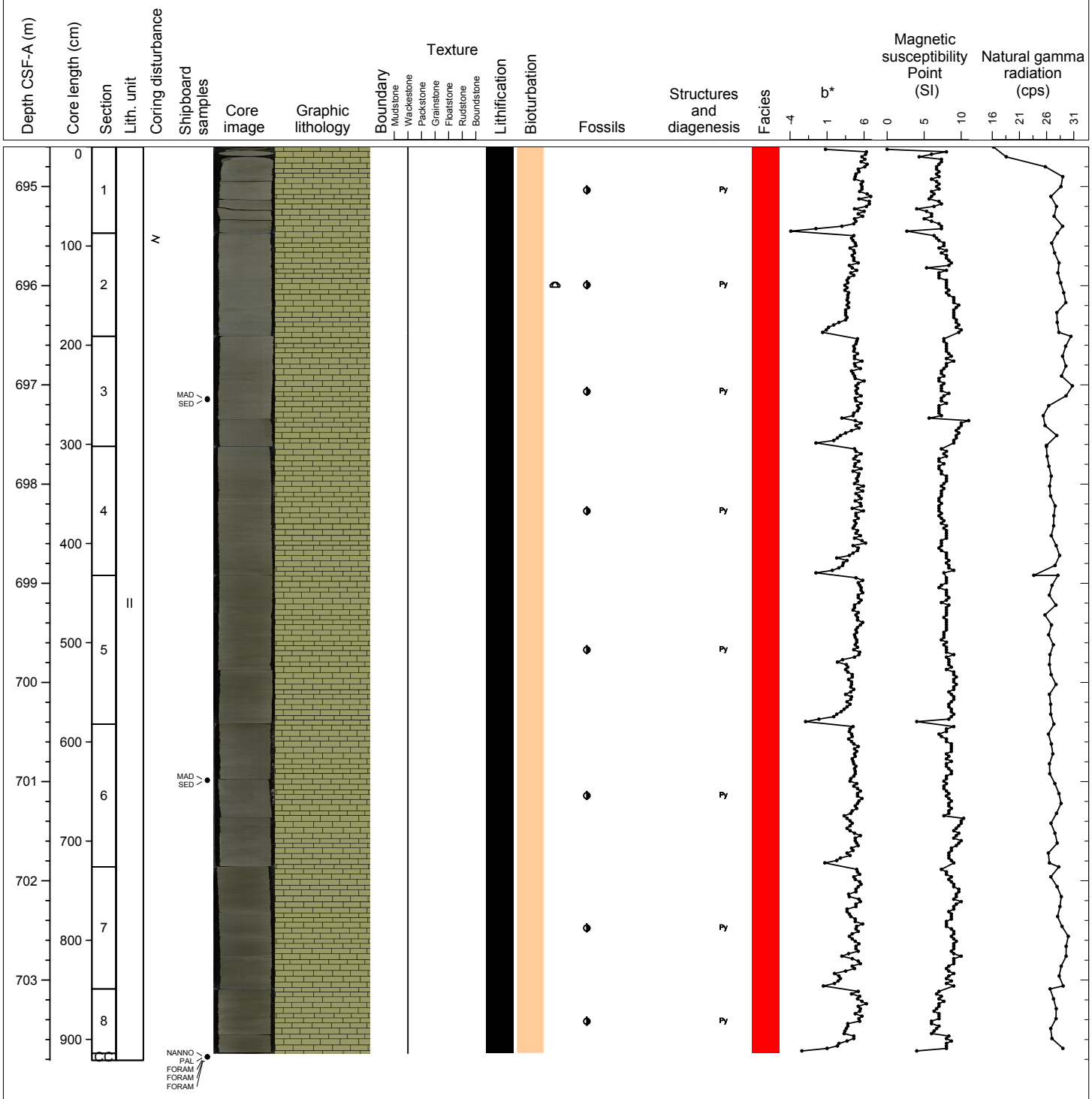
Hole 356-U1462C Core 134R, Interval 684.9-690.61 m (CSF-A)

Homogeneous, lithified, olive gray, fine sand-sized, PACKSTONE with pyrite (disseminated) patches, sparse small benthic foraminifers and macrofossils, and slight bioturbation.



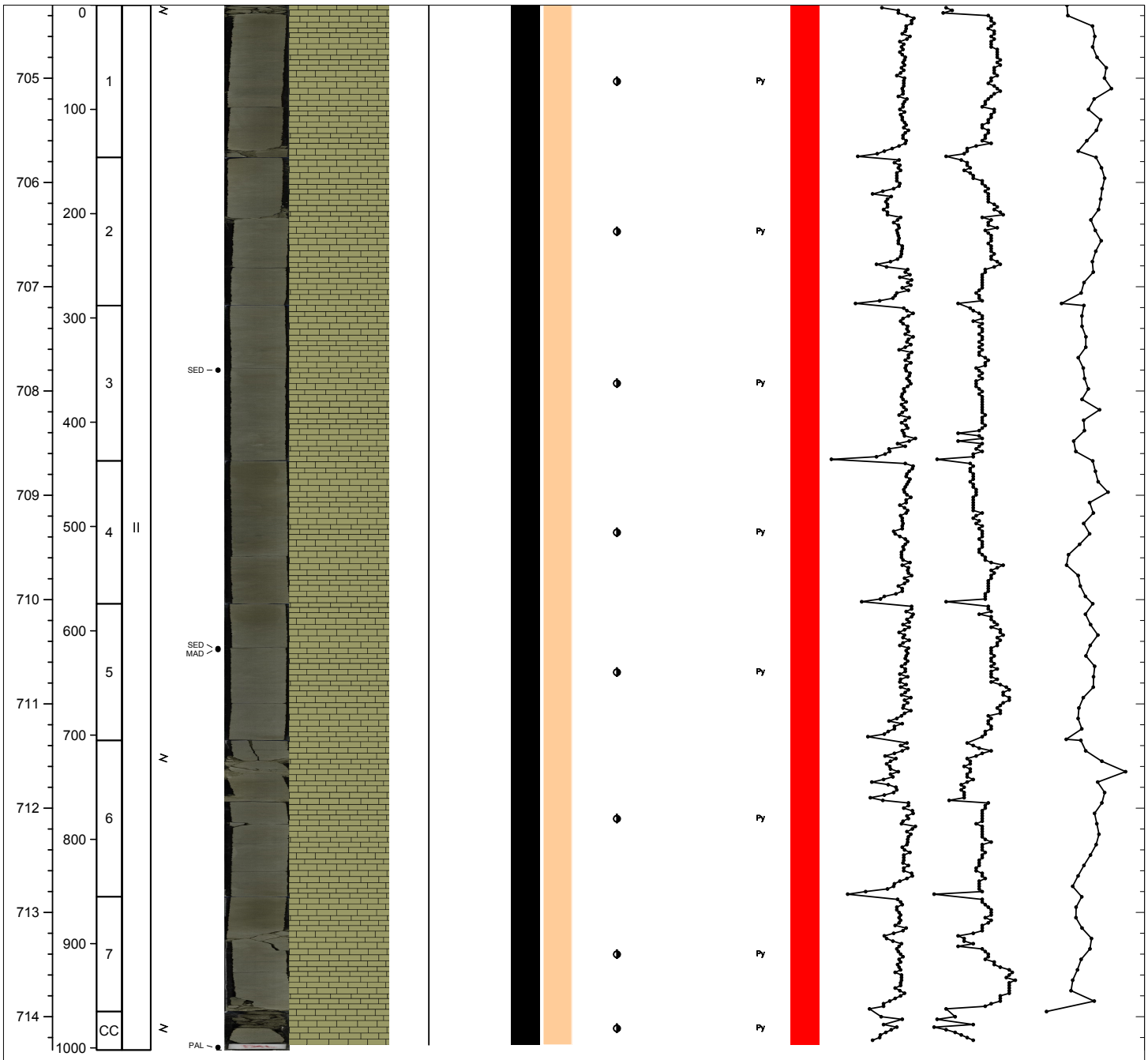
Hole 356-U1462C Core 135R, Interval 694.6-703.81 m (CSF-A)

Homogeneous, lithified, dark grayish-green, very fine sand-sized, WACKESTONE with occasional disseminated pyrite patches and sparse small benthic foraminifers and macrofossils. The upper part of the core contains foraminifer-rich patches and bands.



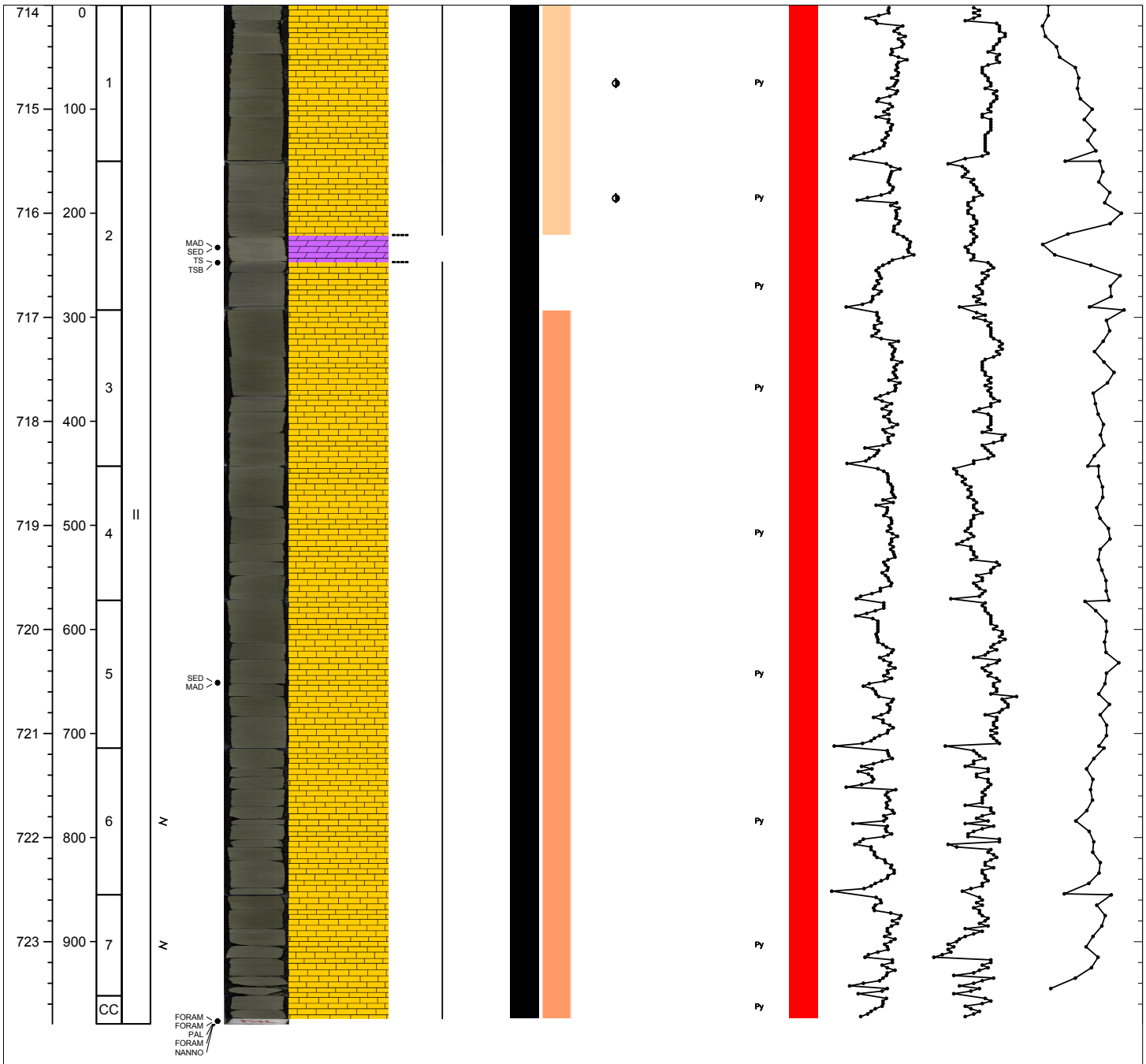
Hole 356-U1462C Core 136R, Interval 704.3-714.32 m (CSF-A)

Homogeneous, lithified, dark grayish-green, very fine to fine sand-sized, WACKESTONE with slight bioturbation and disseminated pyrite concentrations.



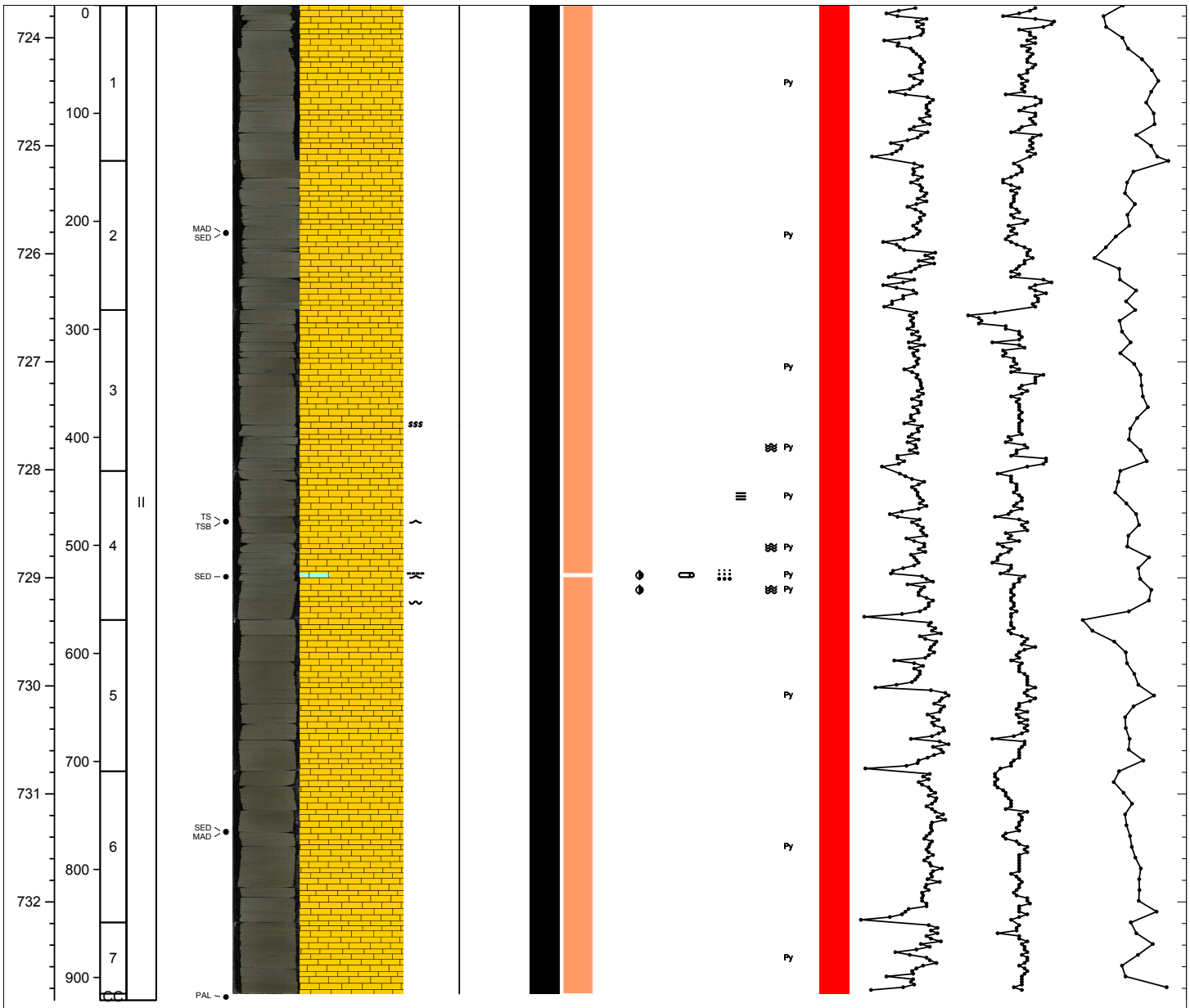
Hole 356-U1462C Core 137R, Interval 714.0-723.79 m (CSF-A)

Lithified, dark grayish-green, fine sand-sized, PACKSTONE with slight bioturbation, sparse macrofossils, small benthic foraminifer-rich patches, and disseminated pyrite patches. At the upper part of the core (2A, 72-96 cm depth), lithified, massive, brown, DOLOSTONE is intercalated with the PACKSTONE bed.



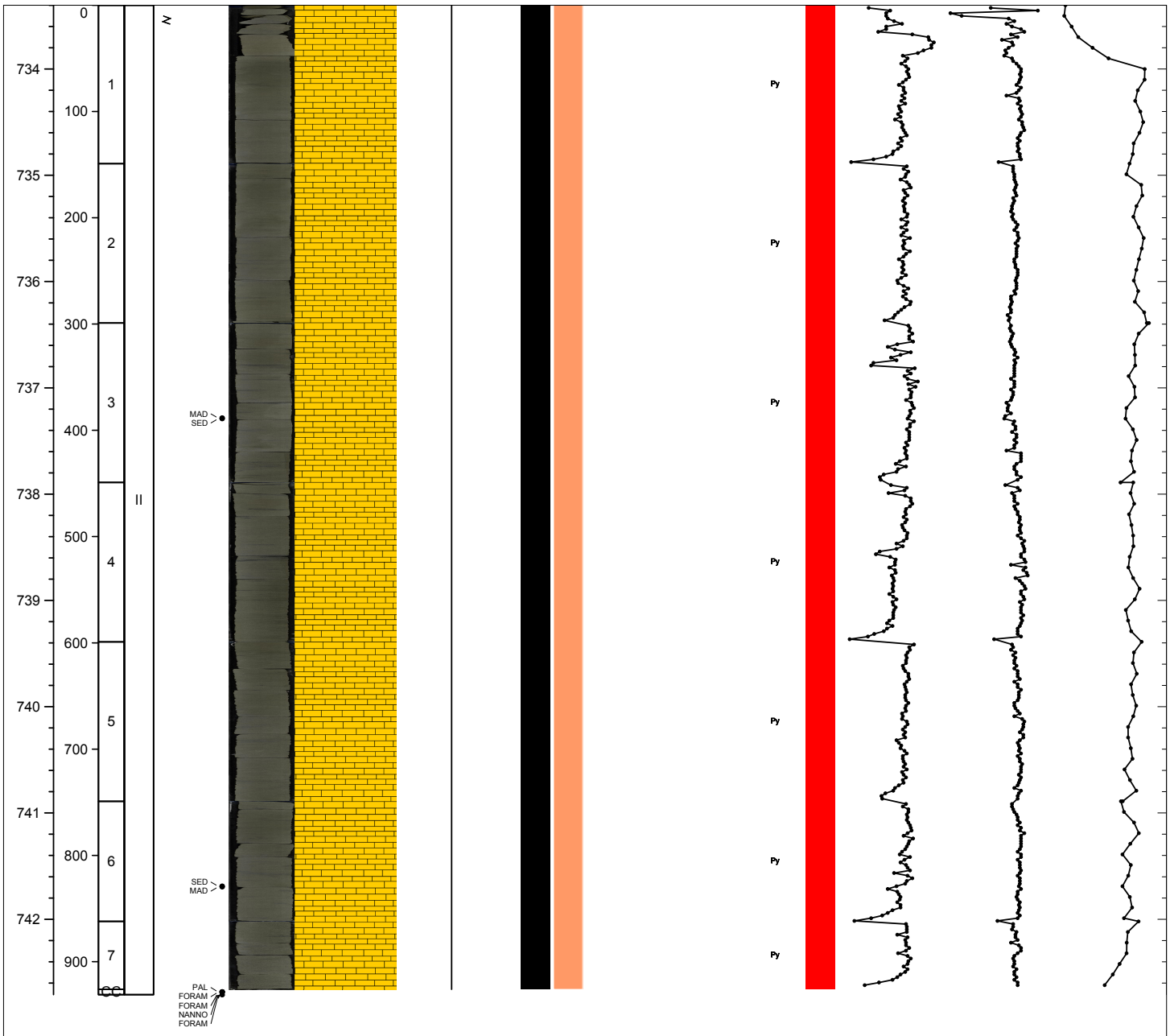
Hole 356-U1462C Core 138R, Interval 723.7-732.91 m (CSF-A)

Lithified, dark grayish-green, fine sand-sized, PACKSTONE with moderate bioturbation and sparse macrofossils and small benthic foraminifers. In the middle part of the core (4A), wavy and parallel laminated, dark greenish-gray PACKSTONE is intercalated. This layer contains thin, dark gray, pyrite-rich layers, and mud layers. Two foraminifer-ich, skeletal, PACKSTONE beds are intercalated with the other PACKSTONE material. The bottom contacts of these beds are characterized by sharp, erosive boundaries. This core may possibly preserve a turbidite.



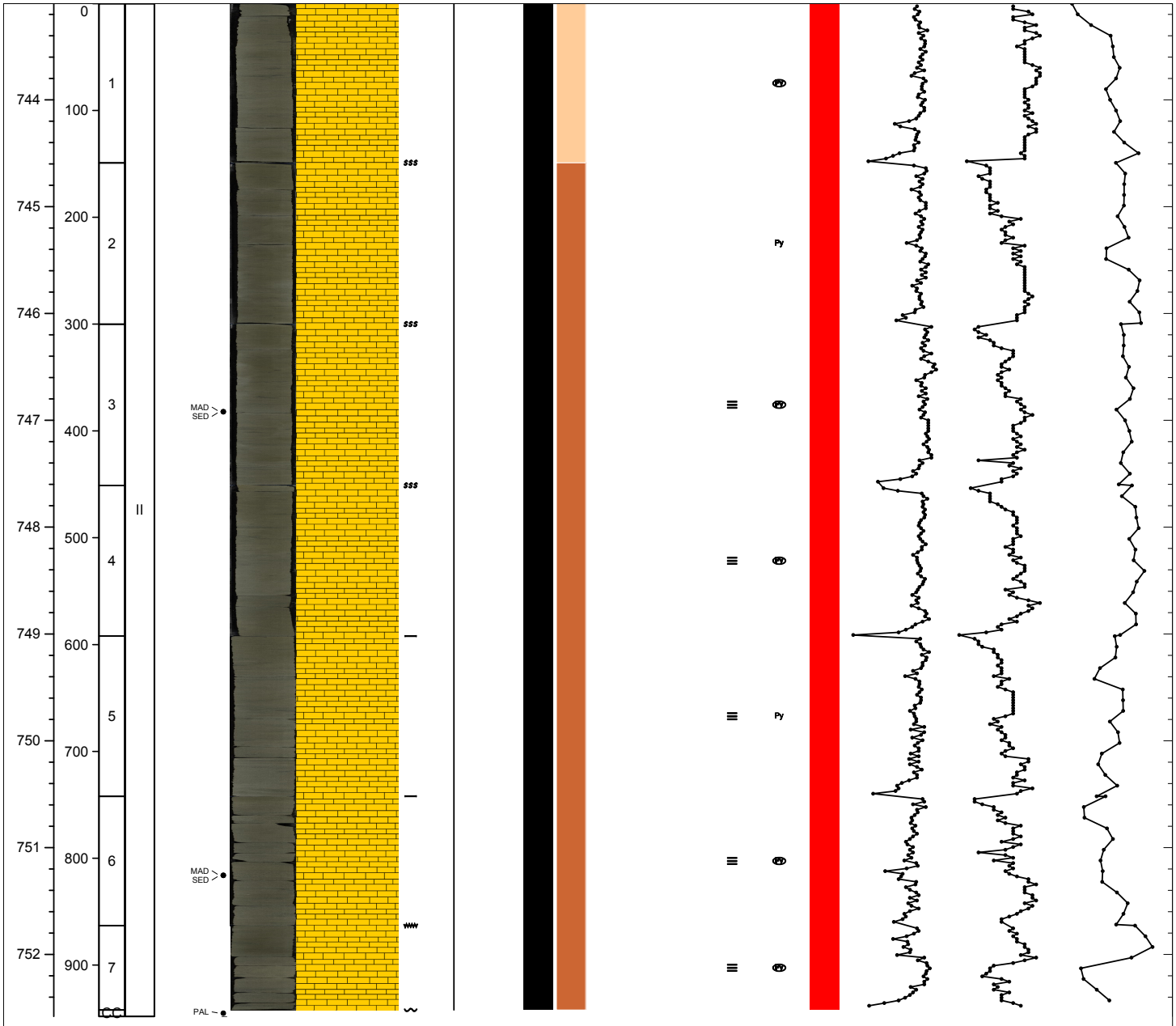
Hole 356-U1462C Core 139R, Interval 733.4-742.71 m (CSF-A)

Lithified, mottled color, dark grayish-green, very fine to fine sand-sized, PACKSTONE with moderate bioturbation and sparse macrofossils and small benthic foraminifers.



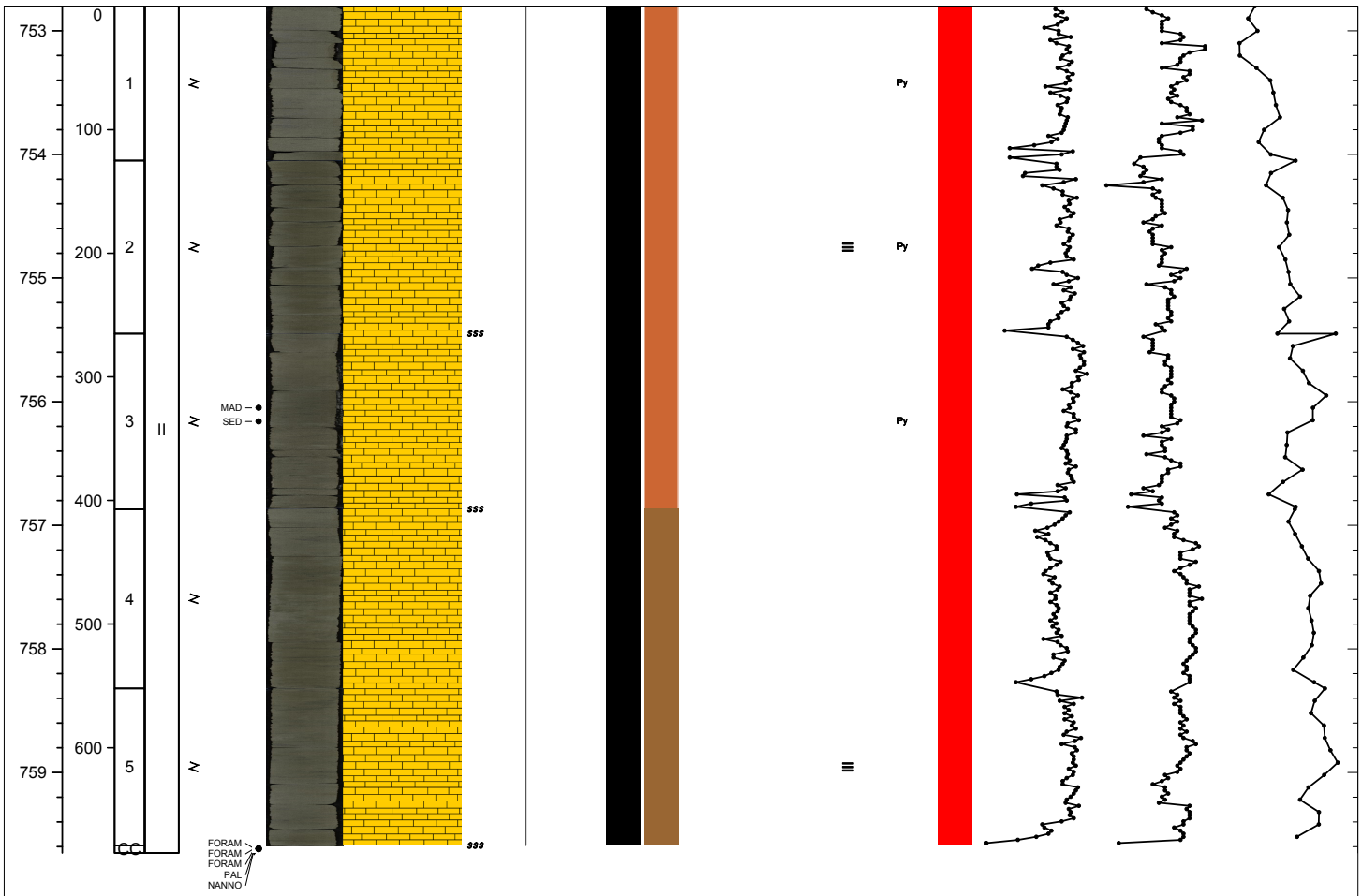
Hole 356-U1462C Core 140R, Interval 743.1-752.58 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE with common bioturbation. Coarser grains become more common with depth in the core. The coarser grains occur in intervals that are associated with sharp and wavy contacts, scoured contacts, planar laminae, thin beds, and pyrite and sometimes carbonate grains. Pyrite is present as disseminated grains and as small nodules. Foraminifers are generally sparse but are more abundant in occasional intervals. Three XRF measurements were made on this core.



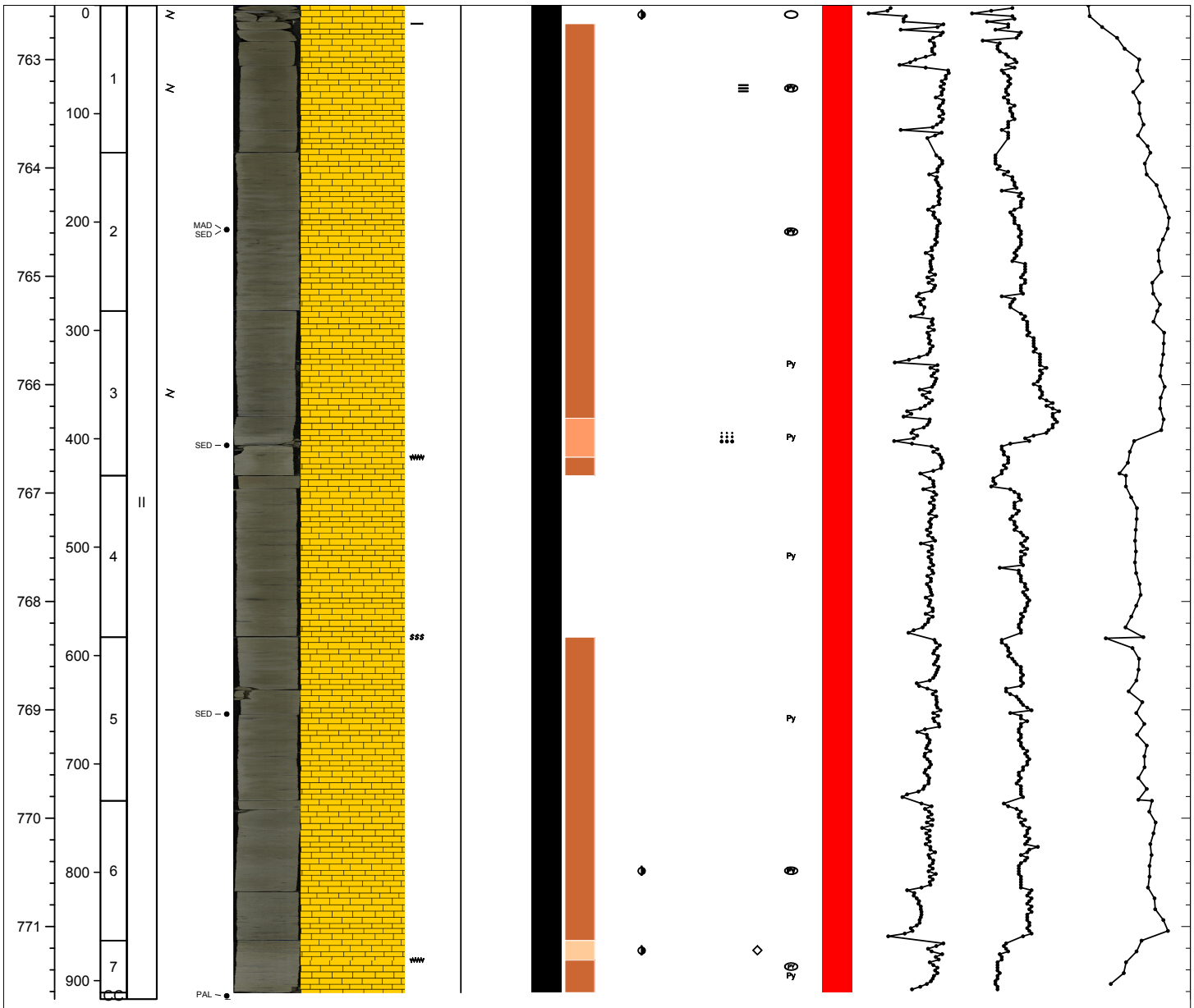
Hole 356-U1462C Core 141R, Interval 752.8-759.65 m (CSF-A)

Lithified, olive gray, mixed coarse to medium and fine sand-sized, PACKSTONE. Bioturbation is common but increases to complete in the bottom half of the core. Pyrite is present as disseminated grains and with coarse material in burrows. Coarse grains are also associated with sharp or bioturbated contacts. Small benthic foraminifers are rare. There is at least one interval of parallel laminations.



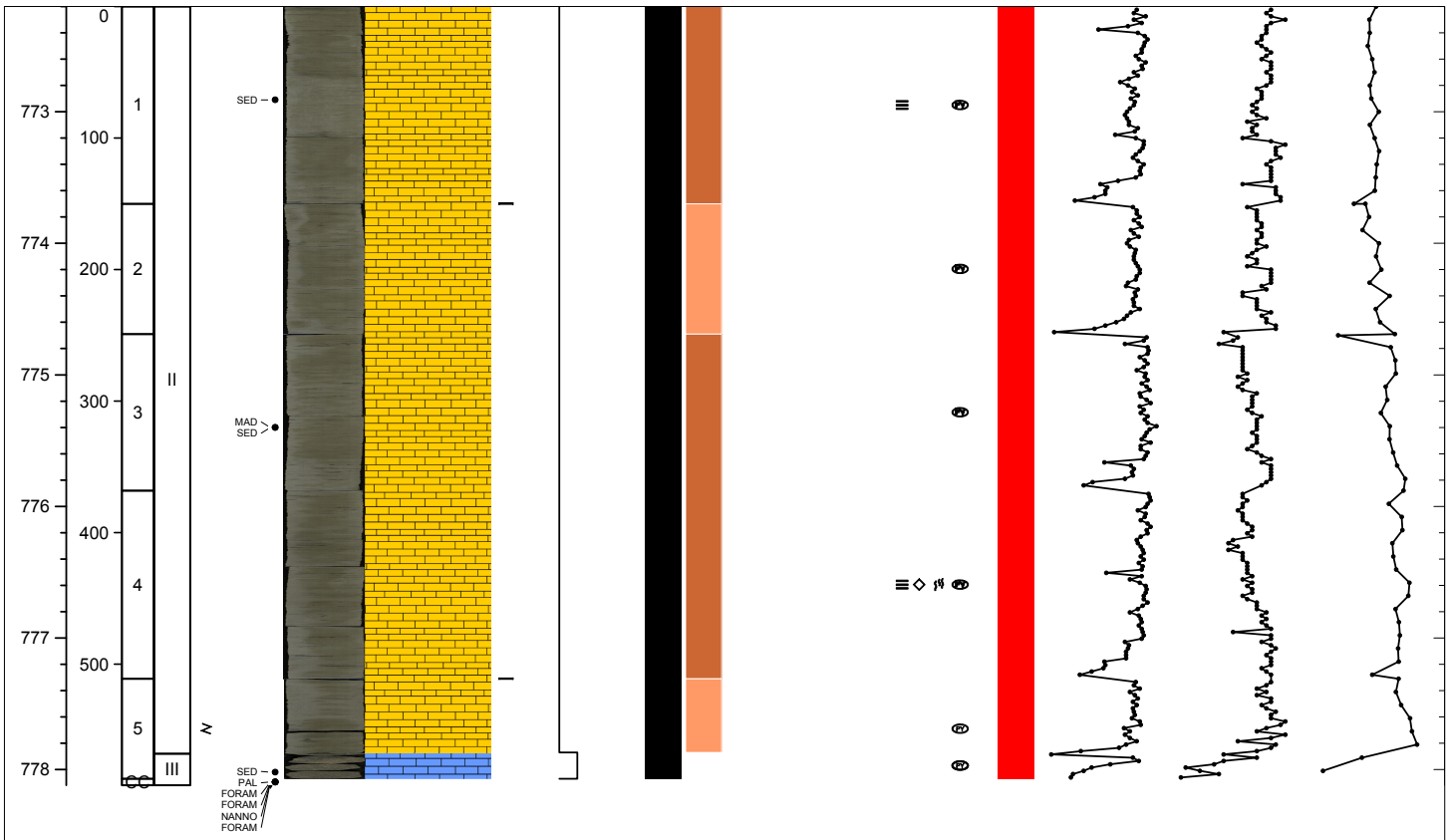
Hole 356-U1462C Core 142R, Interval 762.5-771.67 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE gradually coarsens through the core to medium and then coarse sand-size grains before fining back to fine sand size grains near the base of the core. Bioturbation is common throughout the core. Disseminated pyrite is abundant, and it is also common in burrows and concentrated in laminae. Pyrite nodules are also present. There are sharp and scoured contacts associated with coarser sand-sized grain intervals. Foraminifers are present and increase in abundance down core. There is a dark greenish-gray concretion composed of pyrite and contains Mn. Three XRF measurements were made on this core.



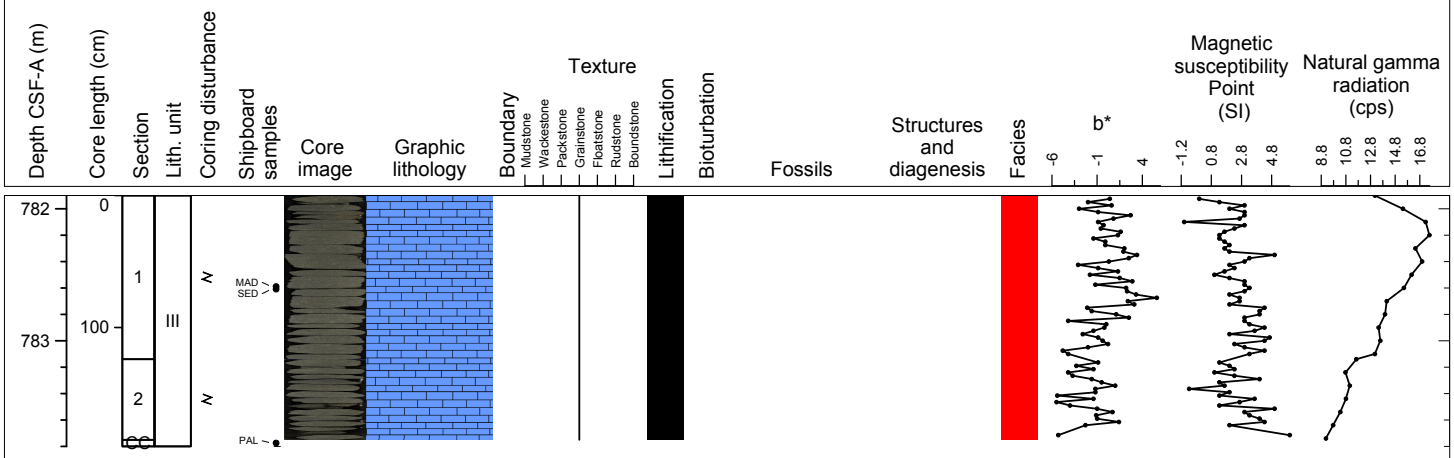
Hole 356-U1462C Core 143R, Interval 772.2-778.12 m (CSF-A)

Lithified, olive gray, fine sand-sized, PACKSTONE with sparse small benthic foraminifers and common bioturbation. Disseminiated pyrite is sparse in the matrix, and there are (1-2 mm long) pyrite nodules. There are sharp contacts with parallel laminate, noted by pyrite content, as well as scattered dissolution cavities and intraclasts. Near the base of the core there is an abrupt transition to well-lithified, dark gray, coarse sand-sized, GRAINSTONE with a few burrows (brown fill) and pyrite. XRF analyses show Ca, Si, and Fe.



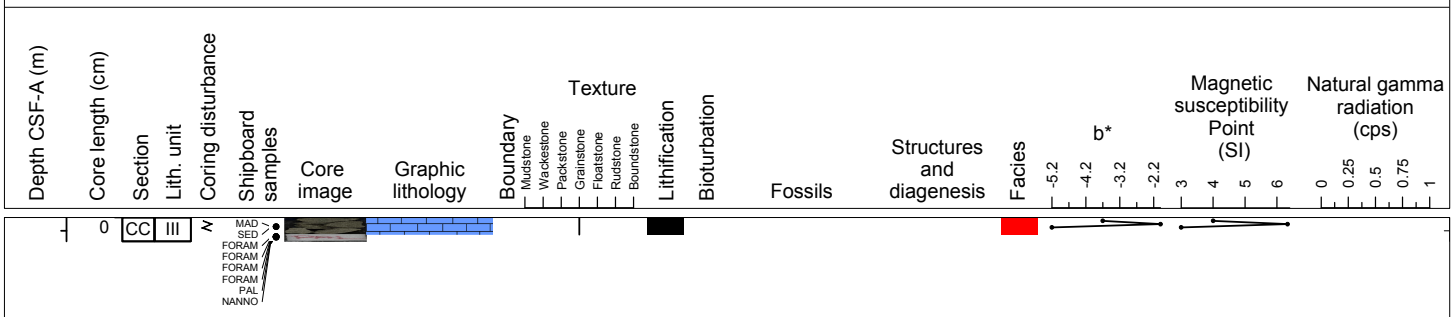
Hole 356-U1462C Core 144R, Interval 781.9-783.8 m (CSF-A)

Lithified, dark gray, coarse sand-sized, GRAINSTONE with occasional large benthic foraminfers and bivalve fragments. Grains are mainly composed of carbonate, some pyrite, and silica. Burrow-like features are filled with carbonate grains. Large brown crystals (up to 5 cm long) could be celestite. XRF analyses show decreasing abundances of: Ca, Si, Fe, and Sr.



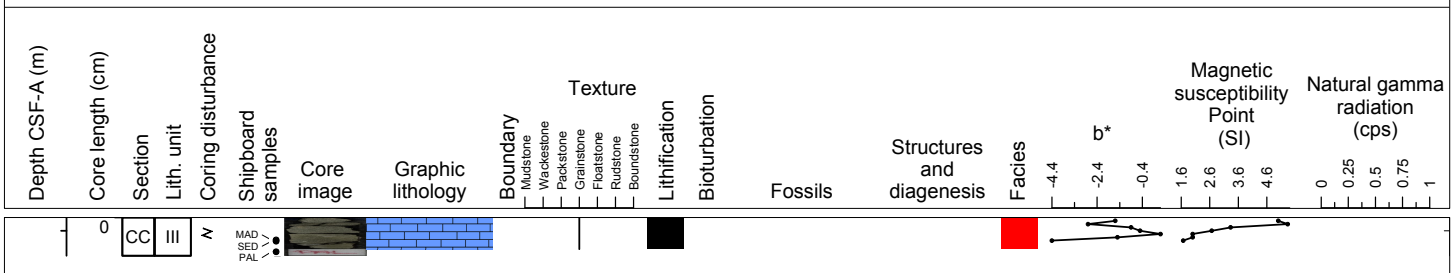
Hole 356-U1462C Core 145R, Interval 786.5-786.68 m (CSF-A)

Lithified, dark gray, coarse sand-sized, GRAINSTONE with occasional large bivalve fragments. Grains are mainly composed of carbonate, some pyrite, and silica. Burrow-like features are filled with carbonate grains. Large brown crystals (up to 5 cm long) could be siderite.



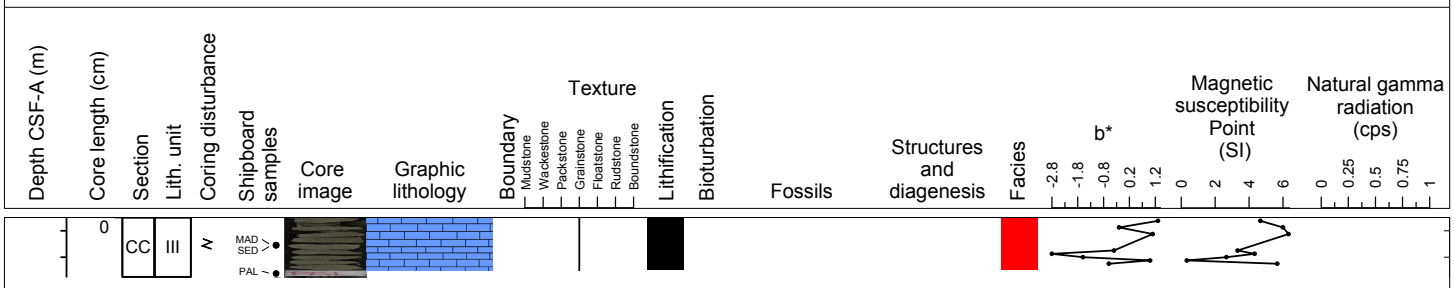
Hole 356-U1462C Core 146R, Interval 791.3-791.59 m (CSF-A)

Lithified, dark gray, coarse sand-sized, GRAINSTONE. Grains are mainly composed of carbonate, some pyrite, and silica. A large light brown mineral could be either celestite or siderite. XRF at 14 cm from high to low: Ca, Si, Fe.



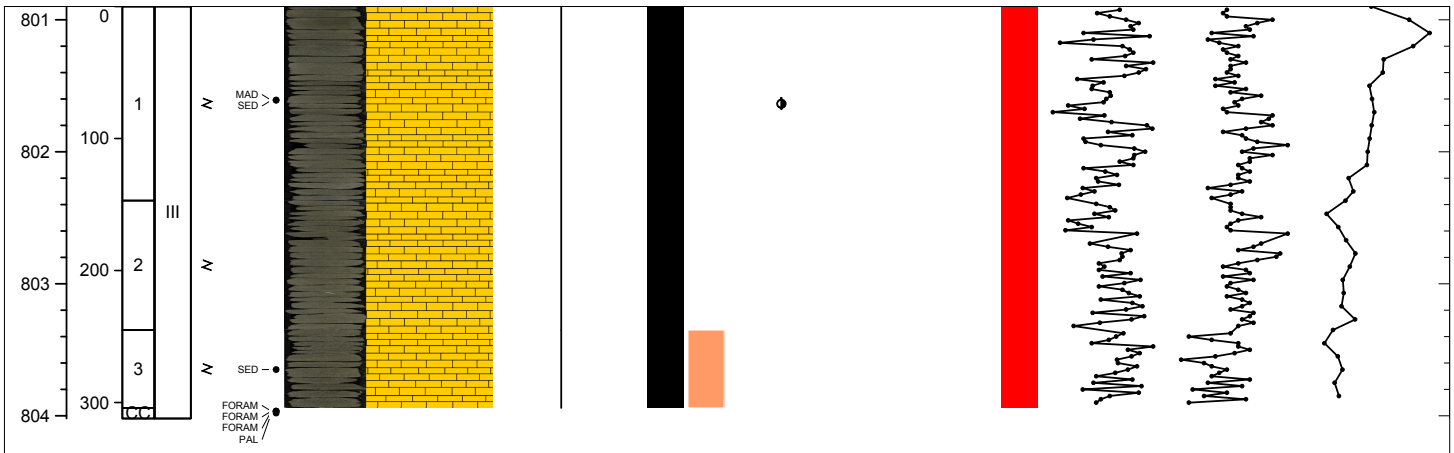
Hole 356-U1462C Core 147R, Interval 796.1-796.55 m (CSF-A)

Lithified, dark gray, coarse sand-sized, GRAINSTONE. Grains are mainly composed of carbonate, some pyrite, and silica. A light brown band could be a contact.



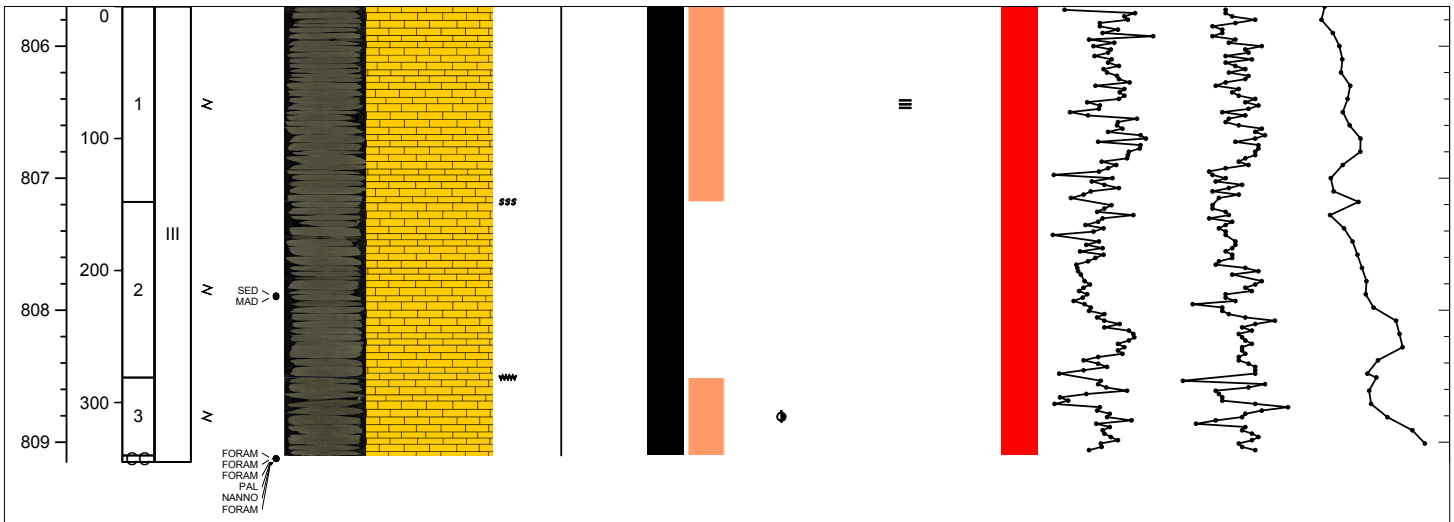
Hole 356-U1462C Core 148R, Interval 800.9-804.02 m (CSF-A)

Lithified, dark greenish-gray, sand-sized, PACKSTONE with zones of coarse sand-size grains. The zones of coarser sand-size grains are dark gray and either form clasts up to 2 cm in diameter or are scattered throughout the sediment. Moderate bioturbation and some burrows are filled with brown mud. Benthic foraminifers are abundant, and there are bivalve, bryozoan, and echioderm fragments. XRF analyses at 46 cm: Ca, Si, Fe.



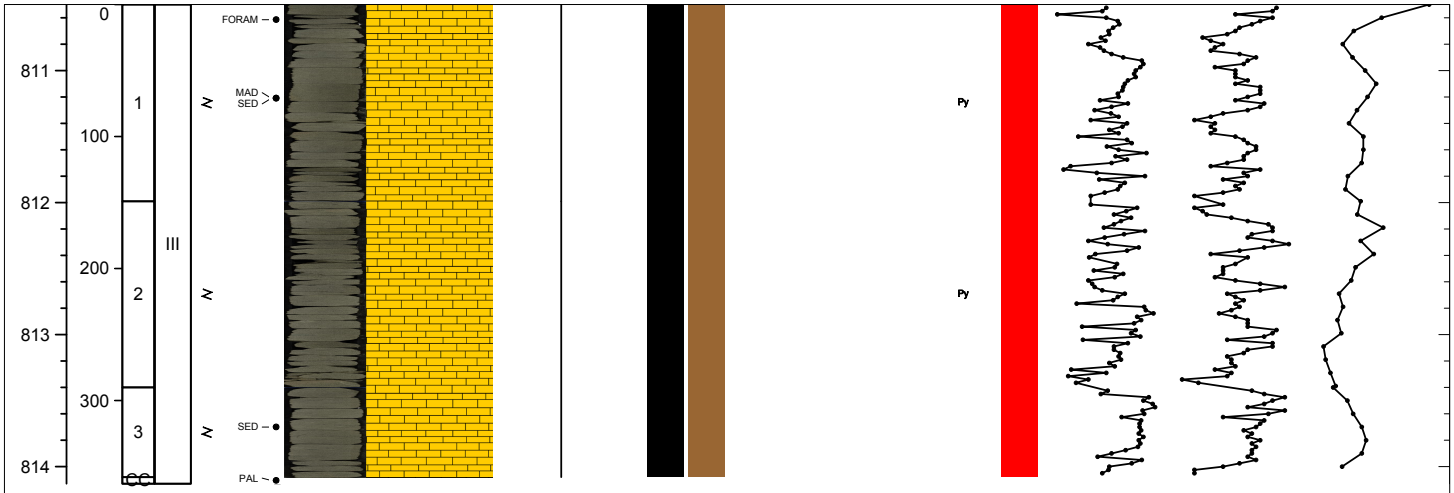
Hole 356-U1462C Core 149R, Interval 805.7-809.15 m (CSF-A)

Lithified, dark greenish-gray, mixed medium and coarse sand-sized, PACKSTONE with moderate bioturbation. There are scoured contacts, parallel laminae, and bioturbated contacts associated with the coarser grains. Foraminifers increase in abundance down core. There are occasional bivalve and bryozoan fragments.



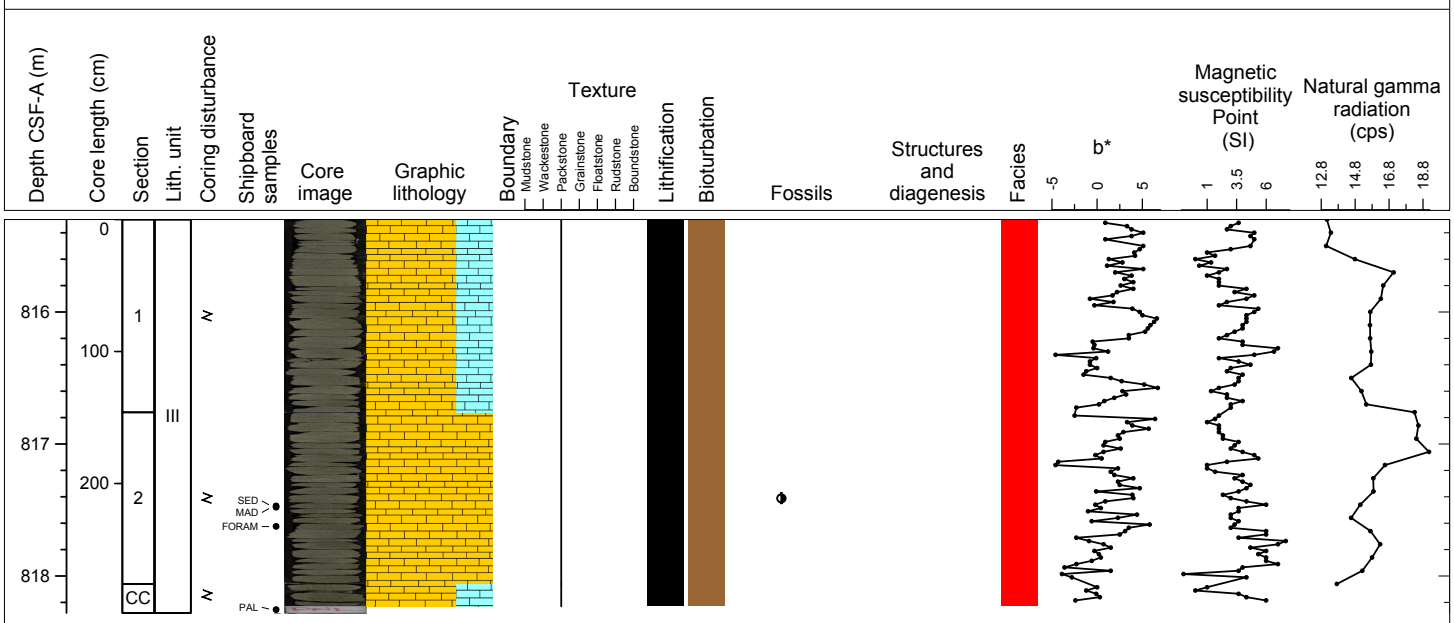
Hole 356-U1462C Core 150R, Interval 810.5-814.13 m (CSF-A)

Lithified, dark greenish-gray, sand-sized, PACKSTONE with complete bioturbation and sparse bryozoan and gastropod fragments. There are intervals with sharp basal contacts associated with coarser sand-size grains and abundant benthic foraminifers. XRF measurements: Ca, Fe, Si elements in decreasing abundance.



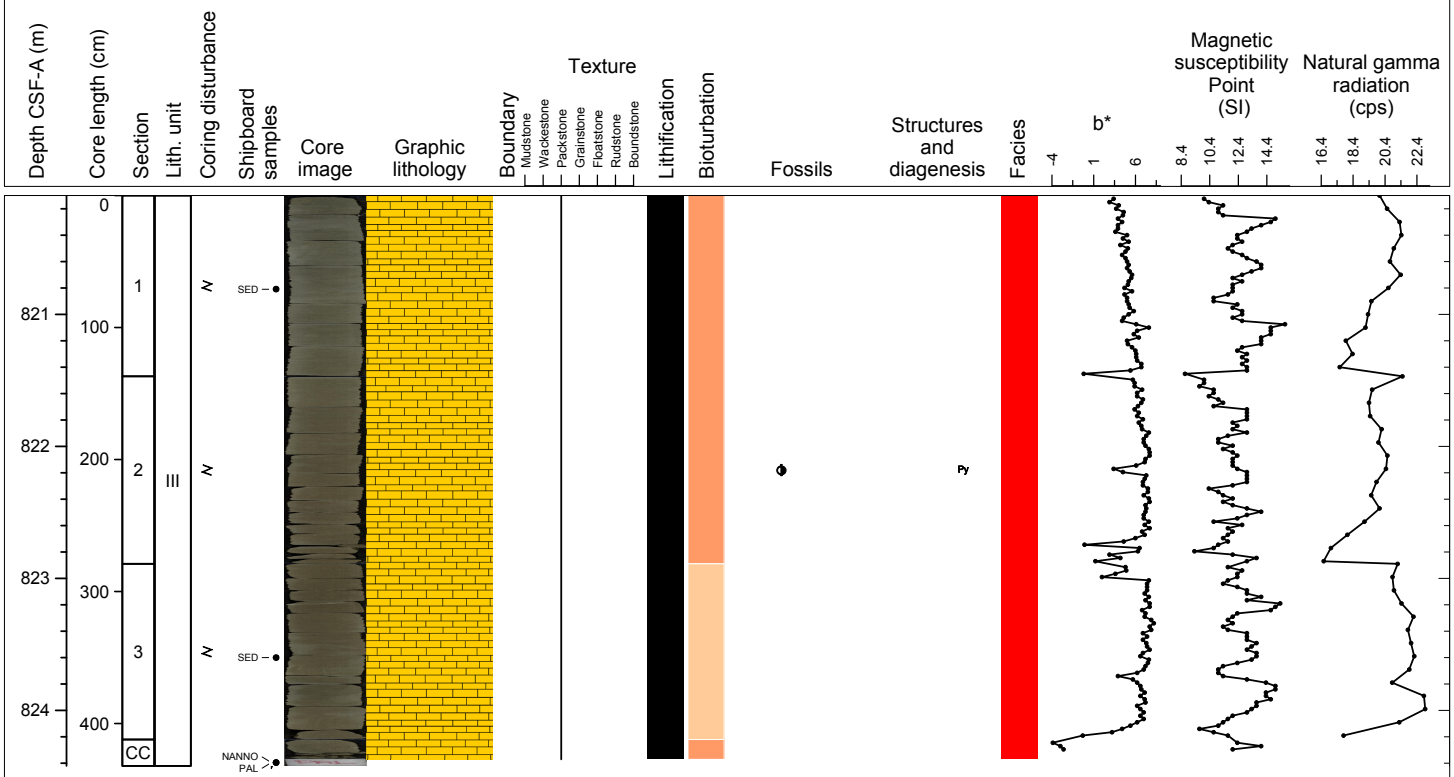
Hole 356-U1462C Core 151R, Interval 815.3-818.28 m (CSF-A)

Lithified, dark greenish-gray, sand-sized, PACKSTONE with small benthic foraminifers, complete bioturbation, and occasional bivalve and bryozoan fragments.



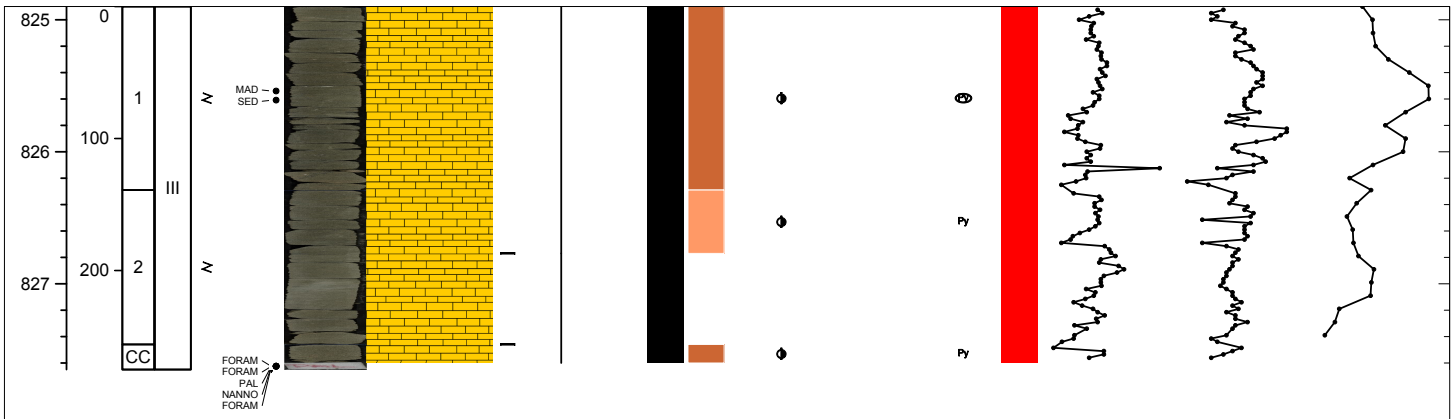
Hole 356-U1462C Core 152R, Interval 820.1-824.42 m (CSF-A)

Lithified, olive gray, very fine sand-sized, PACKSTONE with moderate bioturbation. Two intervals at the very top of the core contain PACKSTONE with very coarse sand-size grains composed of foraminifers, carbonate grains, and pyrite. Throughout the rest of the core, there are occasional bryozoan, bivalve, gastropod, and echinoderm fragments and small benthic foraminifers in burrows.



Hole 356-U1462C Core 153R, Interval 824.9-827.65 m (CSF-A)

Lithified, dark greenish-gray, coarse sand-sized, PACKSTONE with benthic foraminifers, carbonate and pyrite grains, and scattered bryozoans, bivalves, and echinoderms. There are beds of coarse and fine sand-sized grains with sharp contacts. Pyrite is common throughout the matrix and nodules are present, containing Ca, Sr, Fe, and Si. In the lower part of the core, the upper packstone transitions to lithified, olive gray, sand-sized, PACKSTONE with sparse benthic foraminifers, bivalves, and echinoderm fragments.

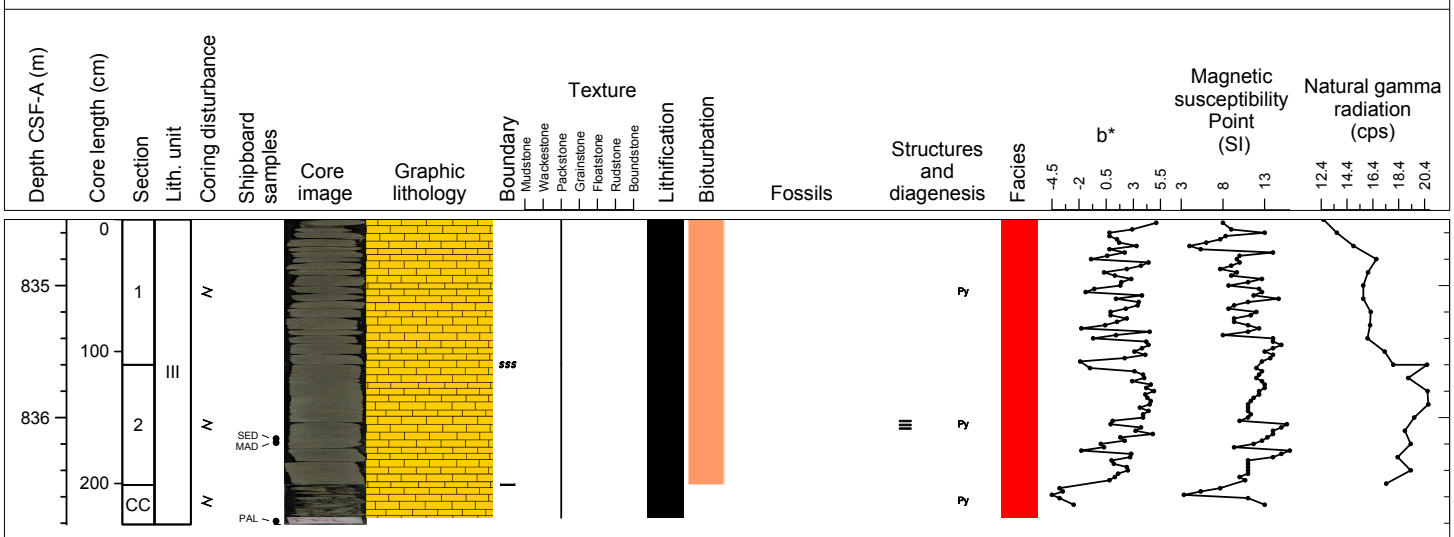


Hole 356-U1462C Core 154R, Interval 829.7-832.77 m (CSF-A)

Lithified, dark gray, very coarse sand-sized, PACKSTONE with pyrite, carbonate, and maybe quartz(?) grains. Foraminifers are common to sparse; bryozoan, gastropod, and echinoderm fragments are common. There are sharp contacts. XRF measurements made (Ca, Si, Fe).

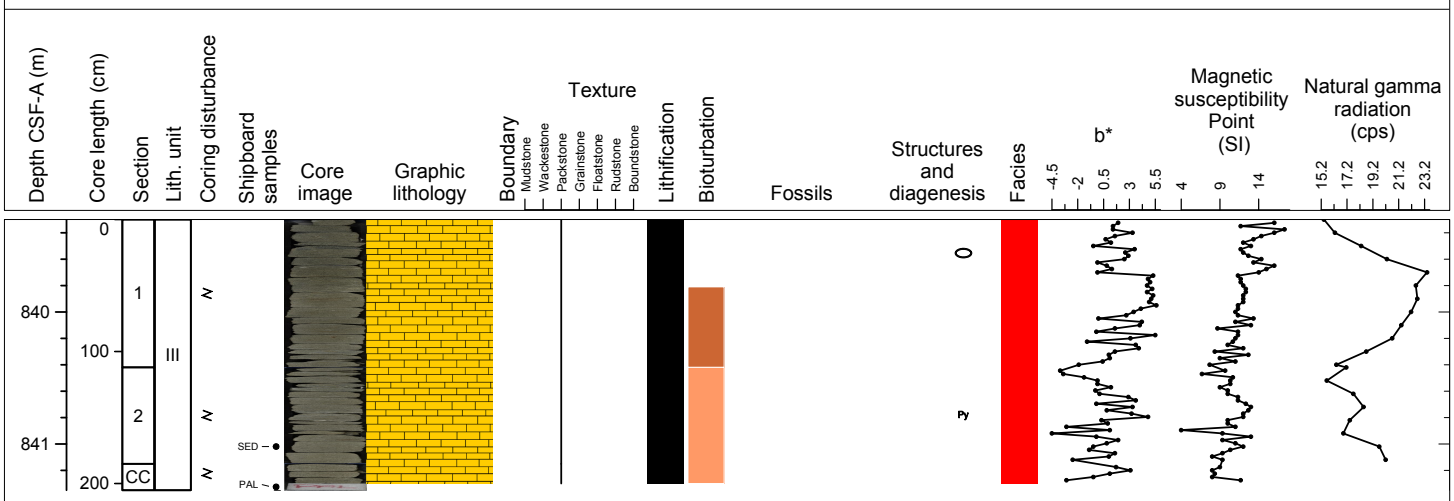
Hole 356-U1462C Core 155R, Interval 834.5-836.81 m (CSF-A)

Lithified, dark greenish-gray, sand-sized, PACKSTONE with pyrite, carbonate, and quartz (?) grains; occasional foraminifers and bryozoan, bivalve, and echinoderm fragments. Color grades to olive gray with depth. There are sharp contacts and parallel laminae.



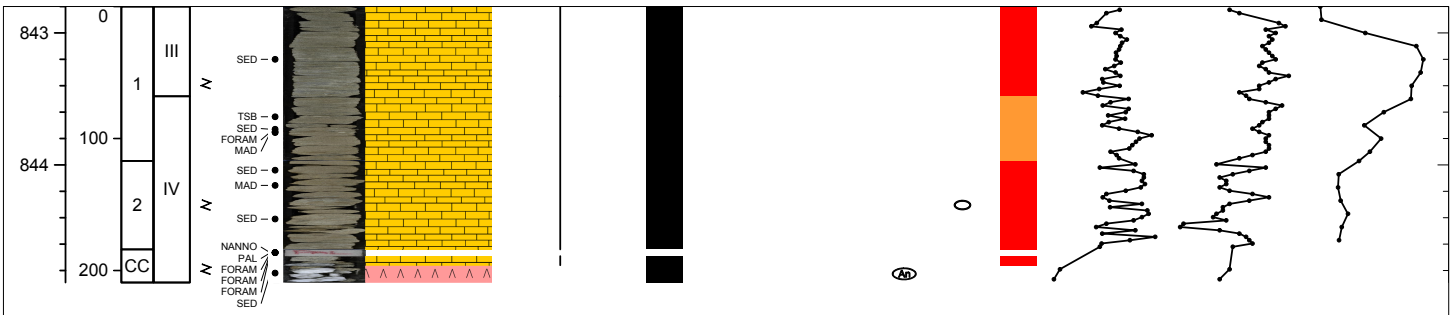
Hole 356-U1462C Core 156R, Interval 839.3-841.35 m (CSF-A)

Lithified, dark greenish-gray, very coarse sand-sized, PACKSTONE with pyrite grains. There are pyritized concretions containing macrofossil fragments (bivalves). Bivalve fragments are common and bryozoan and echinoderm fragments occur occasionally. Underlying the upper packstone is lithified, light brownish-gray, sand-sized, PACKSTONE with less pyrite and fewer macrofossils (bivalves, bryozoans, and echinoderms) than in the above interval. XRF measurement yields Ca, Si, Fe. Lithology changes again down core to lithified, dark greenish-gray, very coarse to mediu sand-sized, PACKSTONE with reddish-brown minerals (hematite?). Pyrite decreases in abundance down core, and macrofossils (same types as above) are rare. XRF yields Ca, Sr, Fe. Lithology changes a final time to lithified, light brownish-gray, sand-sized, PACKSTONE with benthic foraminifers, bivalve fragments, and parallel laminae.



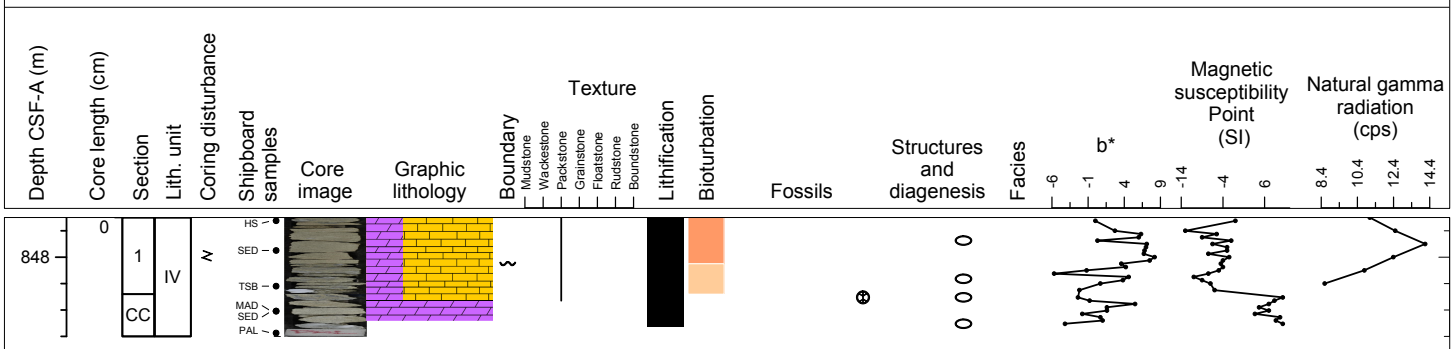
Hole 356-U1462C Core 157R, Interval 842.8-844.89 m (CSF-A)

Lithified, light brownish-gray, coarse sand-sized, PACKSTONE with pyrite and carbonate grains, a possible dolomite matrix, and common bioturbation (burrows in-filled with brown sediment). Macrofossils (bivalves, bryozoans, and echinoderm spines) and benthic foraminifers are common. With depth, grain size fines to sand size, color becomes light brown, pyrite decreases, and ANHYDRITEnodules start appearing. The base of the core is composed of an amorphous mass of ANHYDRITErock with chickenwire structure.



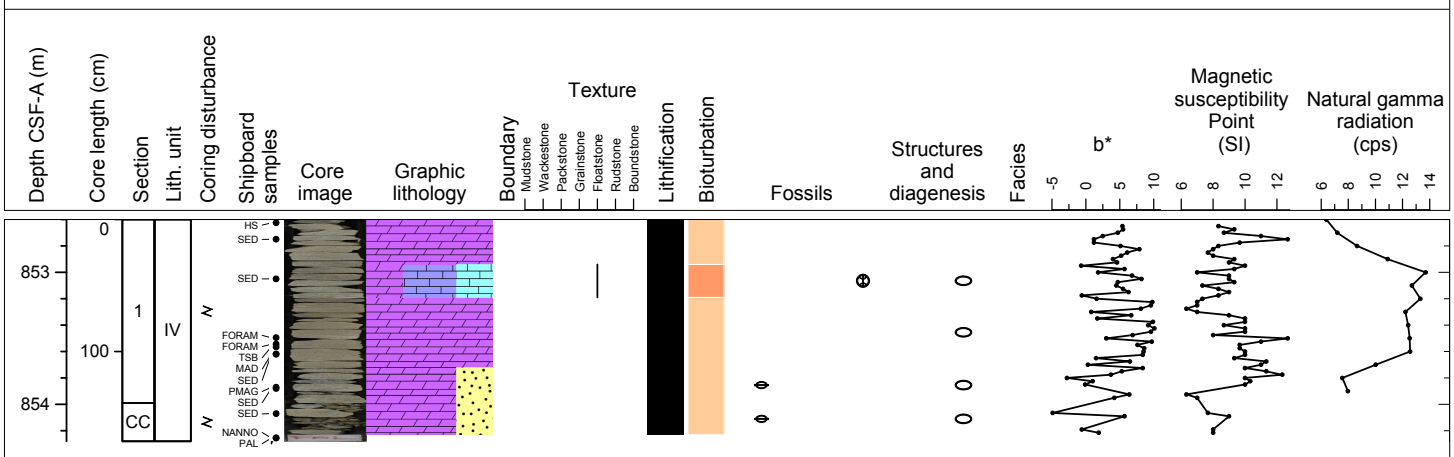
Hole 356-U1462C Core 158R, Interval 847.7-848.6 m (CSF-A)

Lithified, dolomitic, PACKSTONE with ANHYDRITEas concretions and as layers. No primary texture is visible in the ANHYDRITElayers. Bioclasts are present including solitary corals. Lithology changes to beige DOLOSTONE at the base of the core.



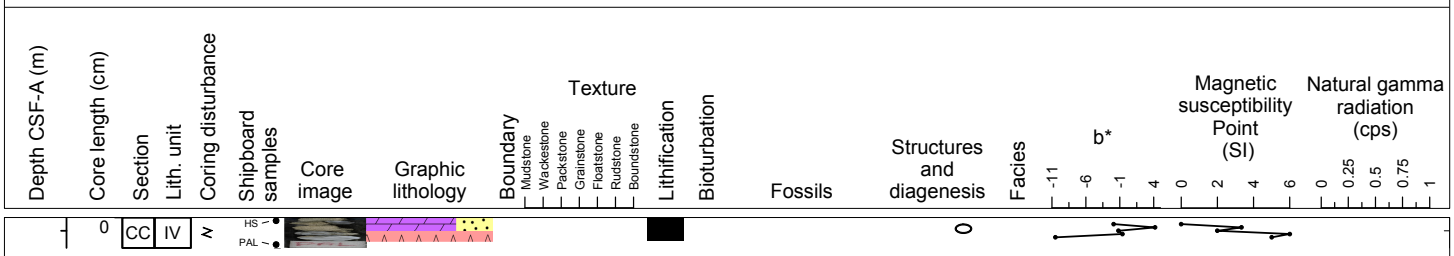
Hole 356-U1462C Core 159R, Interval 852.6-854.28 m (CSF-A)

Primarily beige to light brown DOLOSTONE with macrofossils including several fragments of solitary corals. ANHYDRITEnodules are common and medium to coarse quartz grains increase in abundance towards the base of the core.



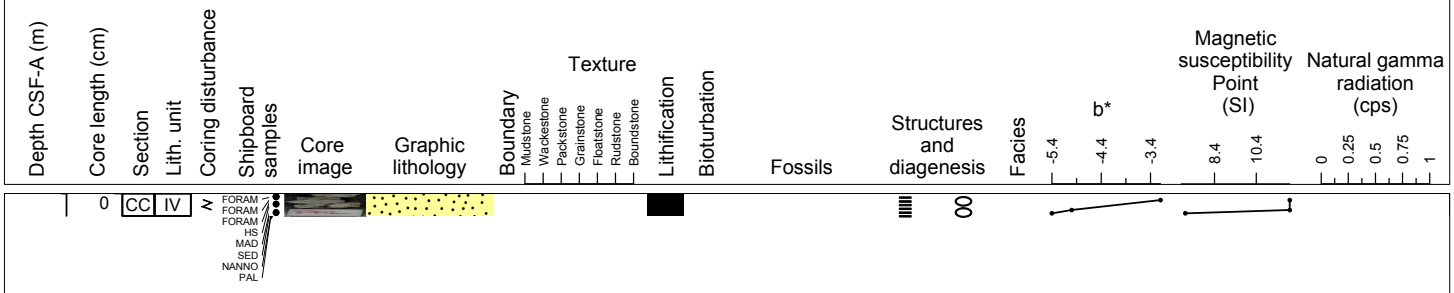
Hole 356-U1462C Core 160R, Interval 857.5-857.73 m (CSF-A)

Lithified beige DOLOSTONE with very coarse quartz grains and white ANHYDRITE concretions.



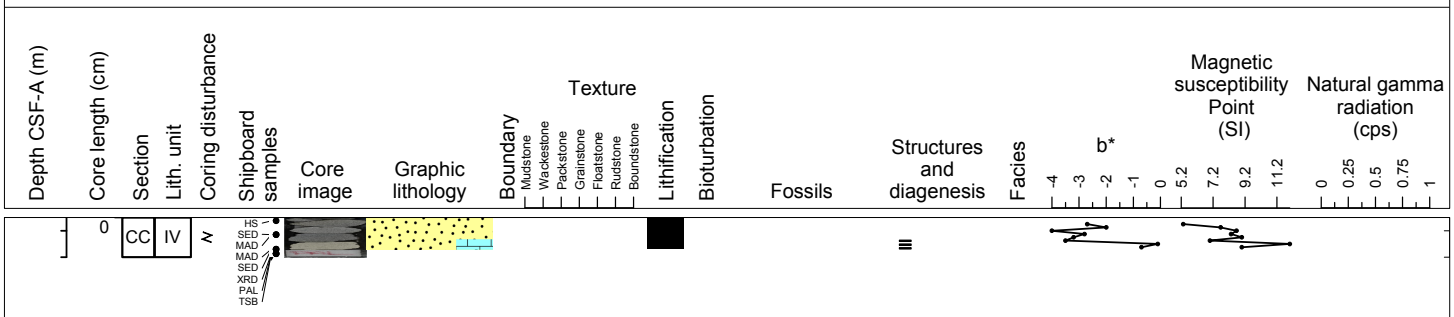
Hole 356-U1462C Core 161R, Interval 862.4-862.57 m (CSF-A)

Lithified, gray, quartz-rich, coarse- to very coarse-grained, SANDSTONE with some parallel lamination, brown staining und (ANHYDRITE?) concretions.



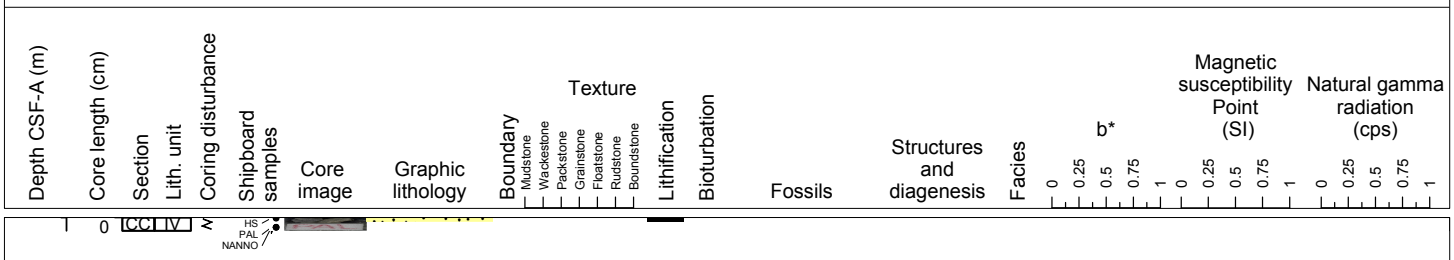
Hole 356-U1462C Core 162R, Interval 867.3-867.6 m (CSF-A)

Lithified, dark to light gray, quartz-rich, medium- to coarse-grained, SANDSTONE with unidentified macrofossils and molds of fossils.



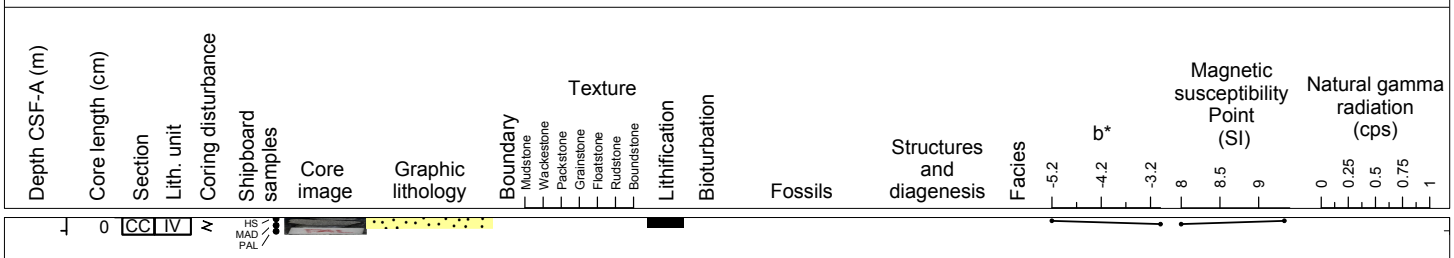
Hole 356-U1462C Core 163R, Interval 872.2-872.3 m (CSF-A)

Lithified, gray, quartz-rich, medium-grained, SANDSTONE with molds of fossils.



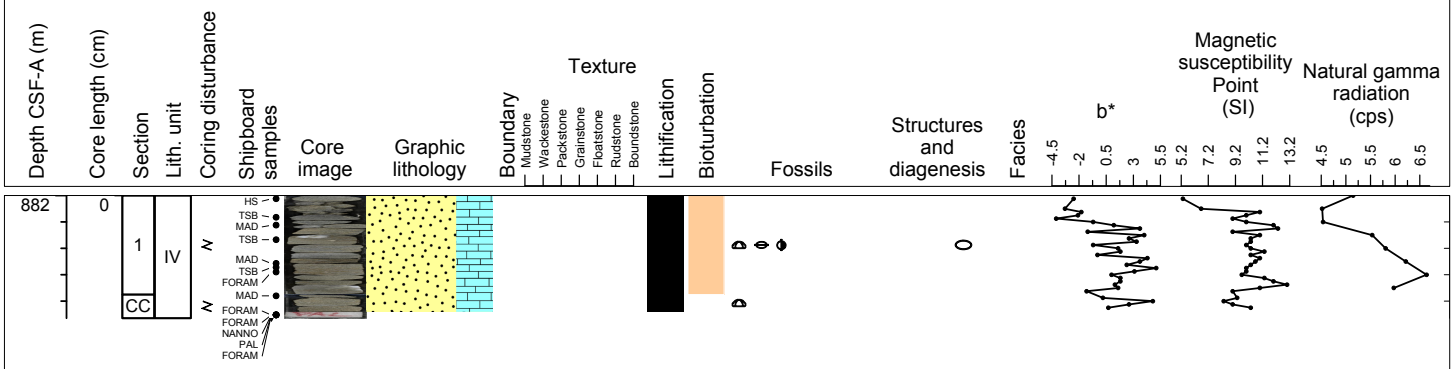
Hole 356-U1462C Core 164R, Interval 877.1-877.23 m (CSF-A)

Lithified, gray, quartz-rich, medium-grained, SANDSTONE.



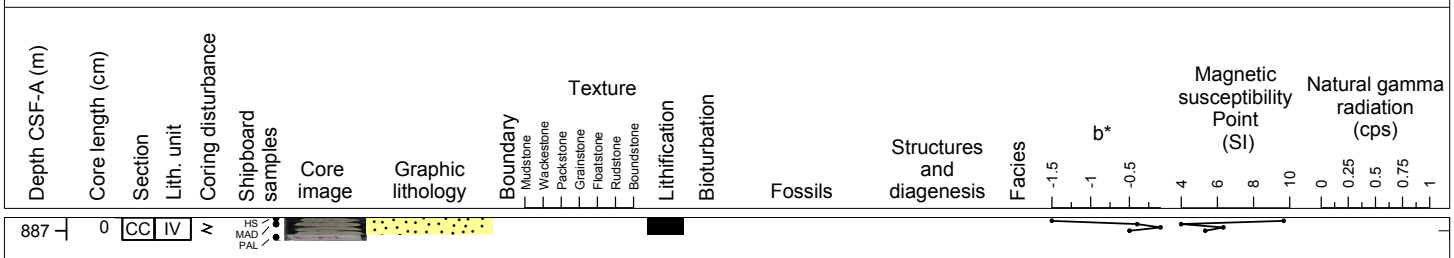
Hole 356-U1462C Core 165R, Interval 882.0-882.93 m (CSF-A)

Lithified, gray, quartz-rich, medium- to very coarse-grained, SANDSTONE with macrofossils (bivalves, echinoderms, and small benthic foraminifers). There are a few quartz-filled veins with apertures < 1 mm. ANHYDRITE is present as a cement and replacement product throughout the core.



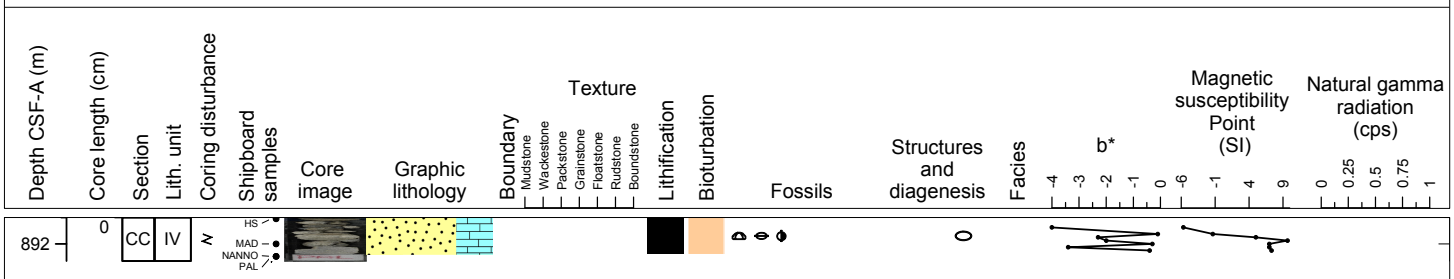
Hole 356-U1462C Core 166R, Interval 886.9-887.07 m (CSF-A)

Lithified, gray, quartz-rich, medium-grained, SANDSTONE.



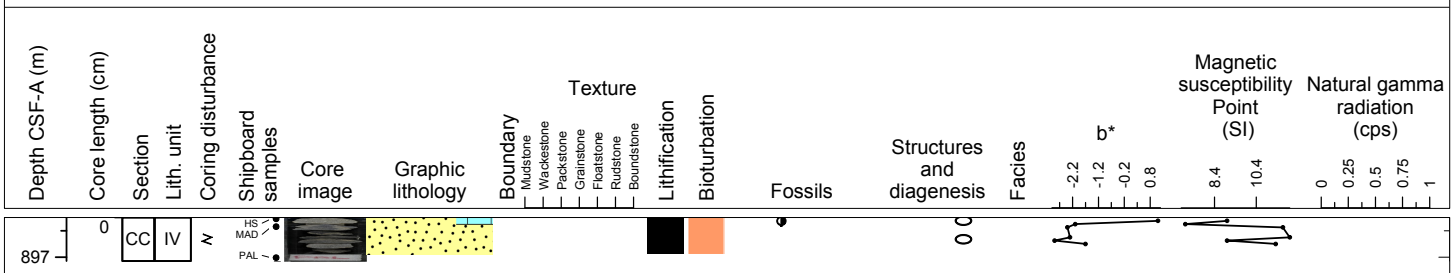
Hole 356-U1462C Core 167R, Interval 891.8-892.13 m (CSF-A)

Lithified, gray, quartz-rich, medium- to coarse-grained, SANDSTONE with macrofossils (benthic foraminifers, bivalves, and echinoderms). It commonly contains rounded, coarse sand-sized quartz grains.



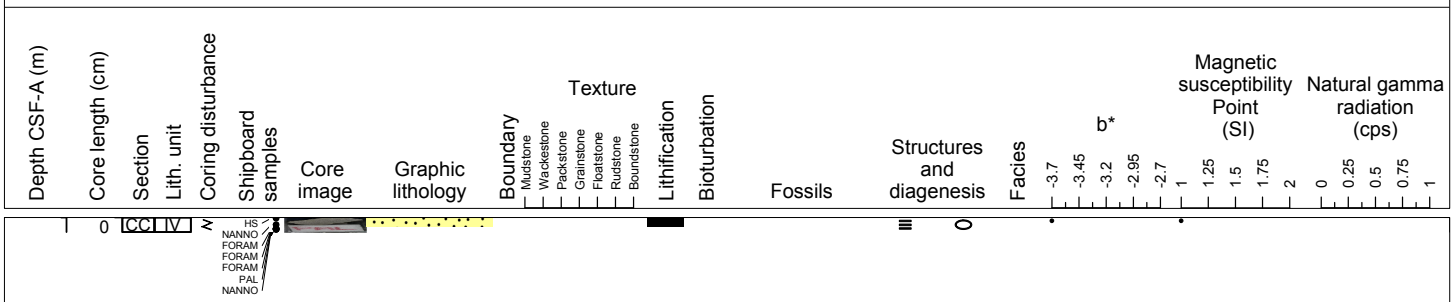
Hole 356-U1462C Core 168R, Interval 896.7-897.03 m (CSF-A)

Lithified, gray, quartz-rich, medium- to coarse-grained, SANDSTONE with macrofossils (benthic foraminifers, bivalves, and echinoderms) and rounded quartz grains transitions to lithified, dark gray, quartz-rich, fine- to medium-grained, SANDSTONE with pyritized bivalve fragments.



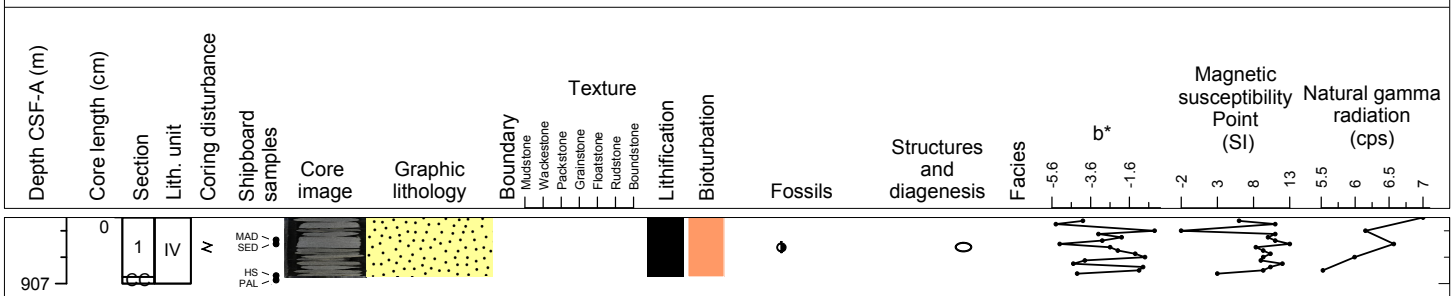
Hole 356-U1462C Core 169R, Interval 901.6-901.71 m (CSF-A)

Lithified, dark gray, quartz-rich, fine- to medium-grained, SANDSTONE with parallel laminations and sparse macrofossils.



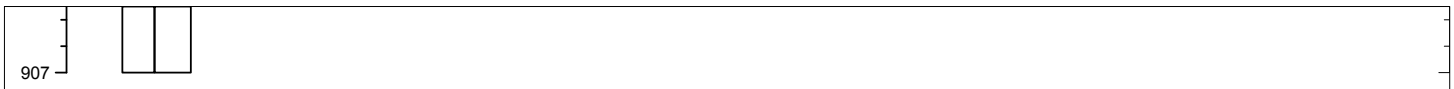
Hole 356-U1462C Core 170R, Interval 906.5-907.0 m (CSF-A)

Lithified, gray, quartz-rich, massive, fine- to medium-grained, SANDSTONE with moderate bioturbation.



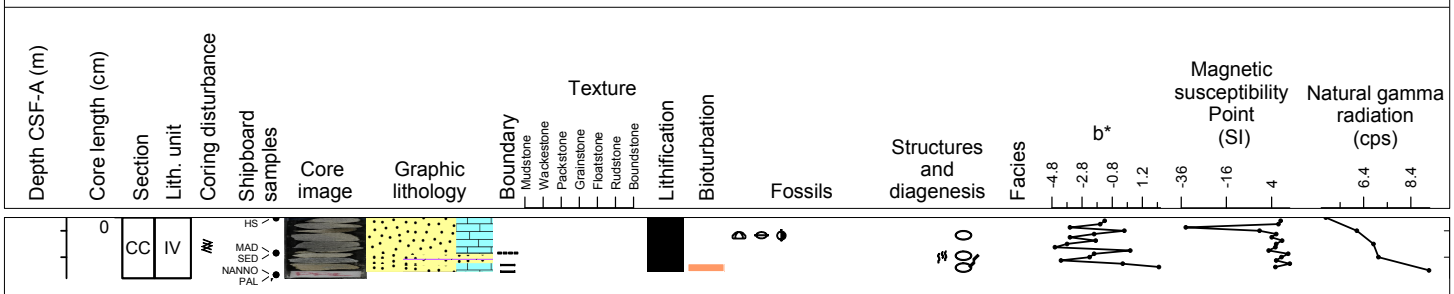
NO RECOVERY

Hole 356-U1462C Core 171R, Interval 911.4-911.4 m (CSF-A)



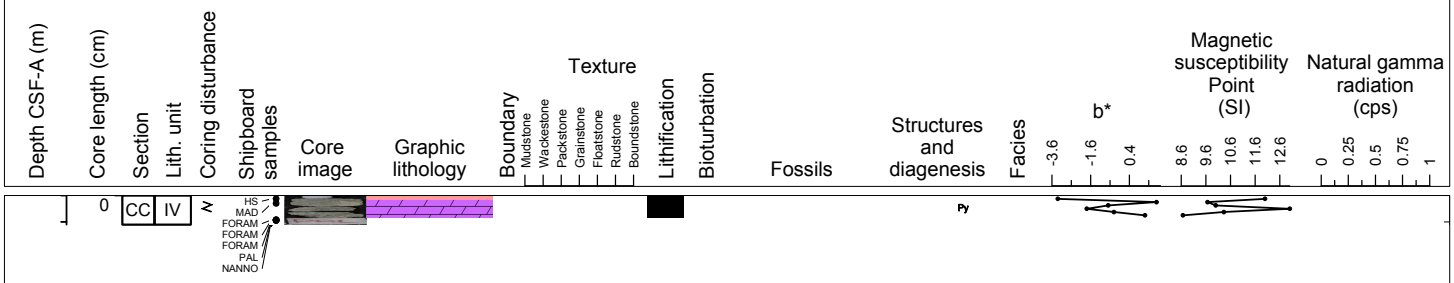
Hole 356-U1462C Core 172R, Interval 916.3-916.76 m (CSF-A)

Lithified, gray to light brown, quartz-rich, medium- to coarse-grained, SANDSTONE with macrofossils (benthic foraminifers, bivalves, and echinoderms), rounded quartz grains, and fossil molds. In the core catcher there are intervals of light brown DOLOSTONE.



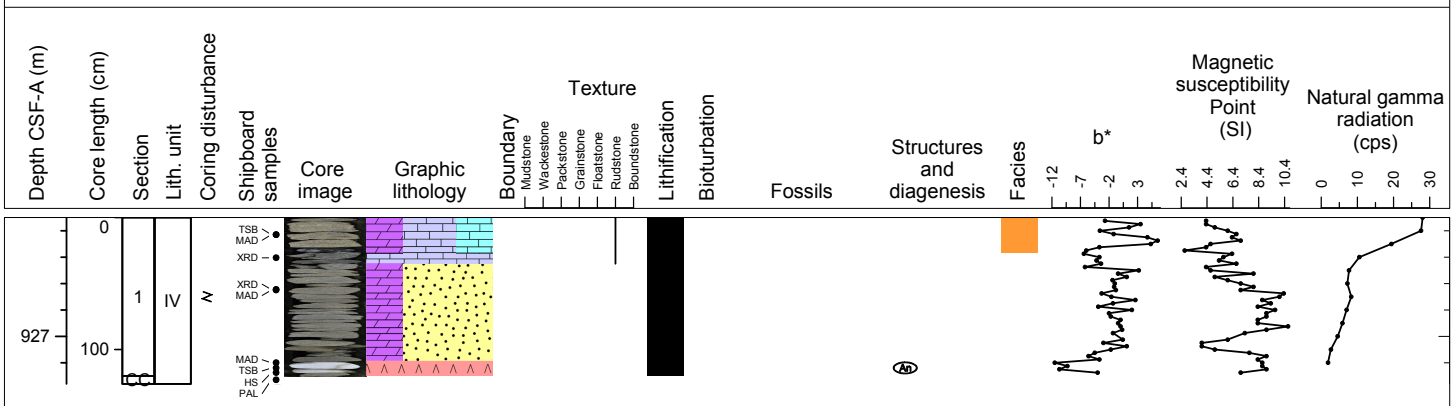
Hole 356-U1462C Core 173R, Interval 921.2-921.42 m (CSF-A)

Lithified, white, massive, ANHYDRITE crystalline nodule on the top of the core is followed by light brownish-gray, DOLOSTONE with sand-size pyrite grains, common moldic porosity and some in-filling of the cavities with dolomite. Burrows are filled with dolomite. Identfiable macrofossils include bivalves, foraminifers, and bryozoans.



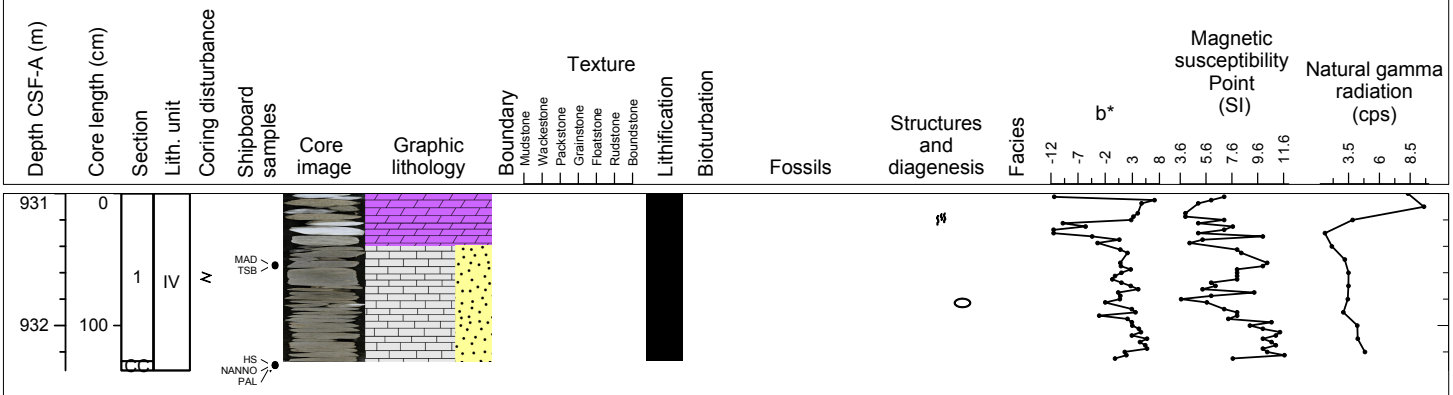
Hole 356-U1462C Core 174R, Interval 926.1-927.36 m (CSF-A)

Lithified, light brown, dolomitic,RUDSTONE with abundant gravel-sized macrofossils (bivalves, gastropods, and coral fragments) and dense moldic porosity. There are possible relics of the original rock (light gray). XRF analyses: Ca, Sr, Fe. With depth, the rudstone becomes non-skeletal, dark gray, and contains white crystals/anhydrite-rich. XRF results: Ca, S. Below the rudstone there is lithified, light brownish-gray, coarse-grained, carbonate-rich, SANDSTONE with unidentifiable microfossils, light to dark brown in-filling of burrows and planar laminae contacts. XRF: Ca- Si. At the base of the core there is lithified, white, massive, ANHYDRITE rock with chickenwire structure.



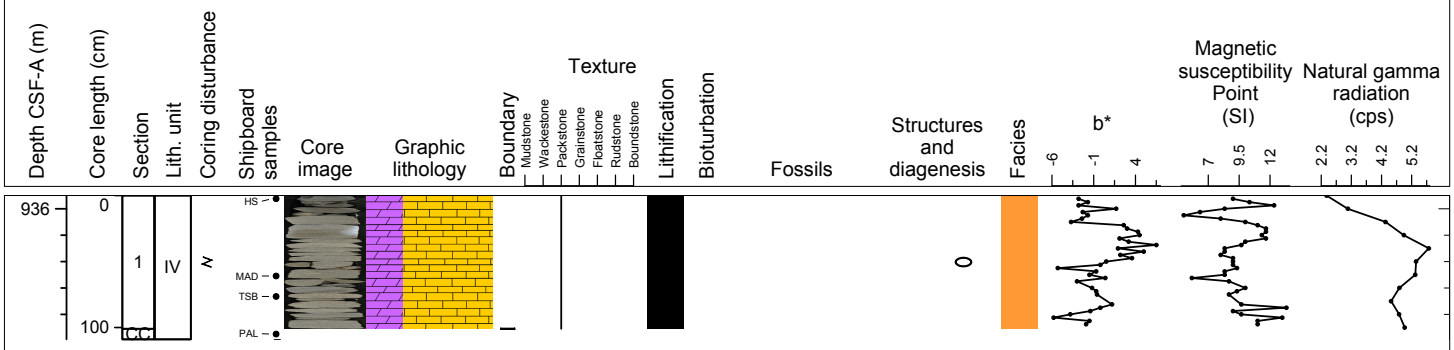
Hole 356-U1462C Core 175R, Interval 931.0-932.34 m (CSF-A)

Lithified, light brown, DOLOSTONE with solution cavities, bivalves, and sand-size pyrite grains. There are different stages of replacement by the DOLOSTONE by ANHYDRITE. Chickenwire texture is present, and it is best developed with large crystals of anhydrite. XRF: Ca, Mg, S (main elements). Below the dolostone, there is lithified, light grayish-brown, coarse-grained, quartz-rich LIMESTONE with ANHYDRITE concretions as well as burrows and shell cavities (both fully- to partially-in-filled with carbonate material). XRF: Ca, Si, S.



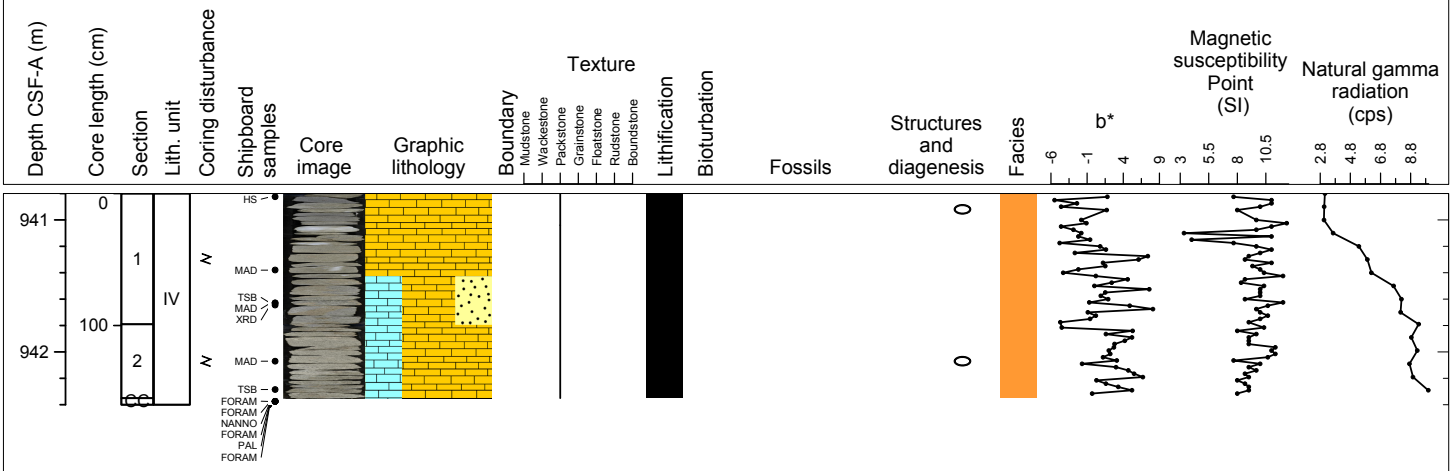
Hole 356-U1462C Core 176R, Interval 935.9-936.99 m (CSF-A)

Lithified, light brownish-gray, dolomitic, PACKSTONE with coarse sand-sized carbonate grains and sparse pyrite. Macrofossils include bivalve fragments and benthic foraminifers. Burrows are visible. There is a large 10 cm-long ANHYDRITE concretion.



Hole 356-U1462C Core 177R, Interval 940.8-942.4 m (CSF-A)

Lithified, light gray and light brownish-gray, fine to coarse sand-sized, PACKSTONE with pyrite grains, ANHYDRITE concretions, bedding planes, and bivalves. XRF: Ca, Sr, S. Below this upper packstone interval there is lithified, light brown, non-skeletal, PACKSTONE with large ANHYDRITE grains, bivalve fragments, small pyrite crystals, and burrows in-filled with packstone material. XRF: Ca, S, Sr. Lithology then changes to lithified, light gray, coarse sand-sized, skeletal, PACKSTONE with quartz, pyrite, abundant macrofossils (bivavles and bryozoans), and ANHYDRITE nodules. XRF: Ca, Si, Sr, S. Lithology changes again to lithified, light grayish-brown, skeletal, PACKSTONE with dolomite, coarse sand- to gravel-sized grains of carbonate and pyrite, and ANHYDRITE nodules. Macrofossils (bivalves and bryozoans) are abundant. There is moldic porosity and in-filling by packstone material. Burrows are also in-filled with this packstone material.



Hole 356-U1462C Core 178R, Interval 945.7-946.09 m (CSF-A)

Lithified, light brown PACKSTONE with dolomite and fine sand size grains. Grains include carbonates and pyrite. There is also moldic porosity and infilling with PACKSTONE material. White ANHYDRITEnodules a up to 5 cm in diameter.