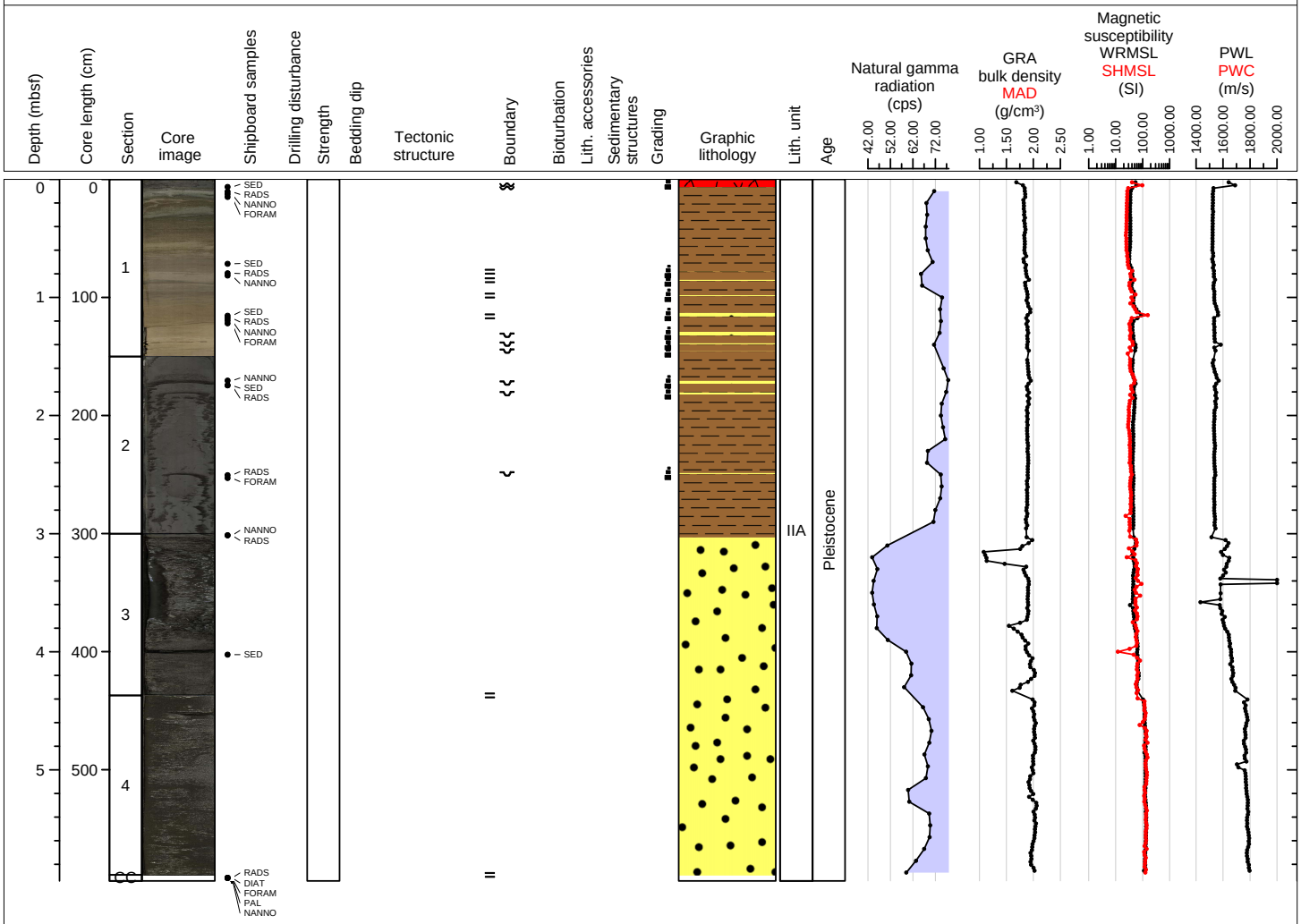
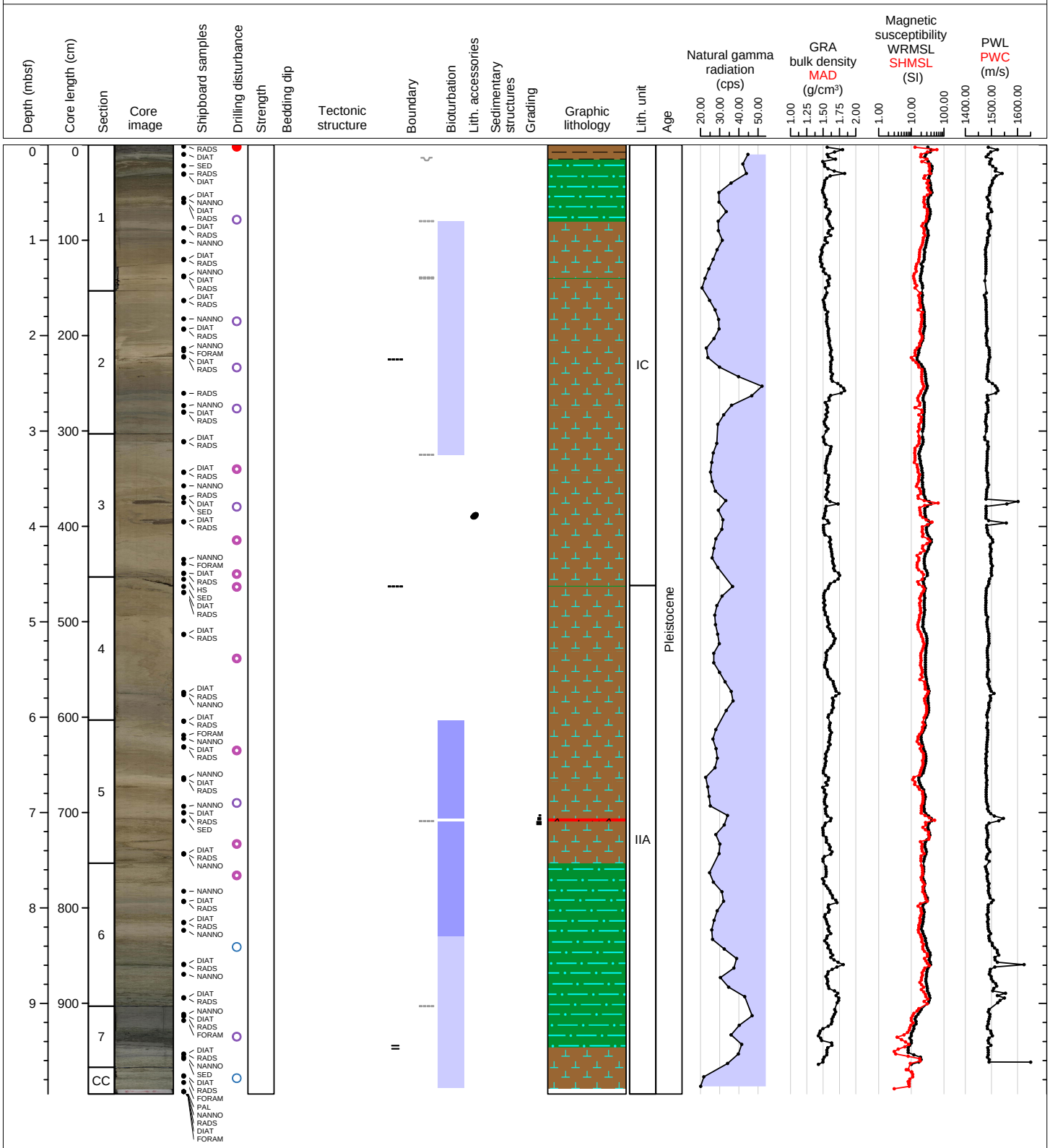
Hole 362-U1480A Core 1H, Interval 0.0-5.94 m (CSF-A)

Upper half of the core until Section 3 consists of clay with several, normal graded, thin fine sand layers. Lower part consists of structureless medium sand with rare mollusk fragments. One normally graded pinkish ash layer is observed in Section 1 (0-6 cm). NO MUDLINE ESTABLISHED.



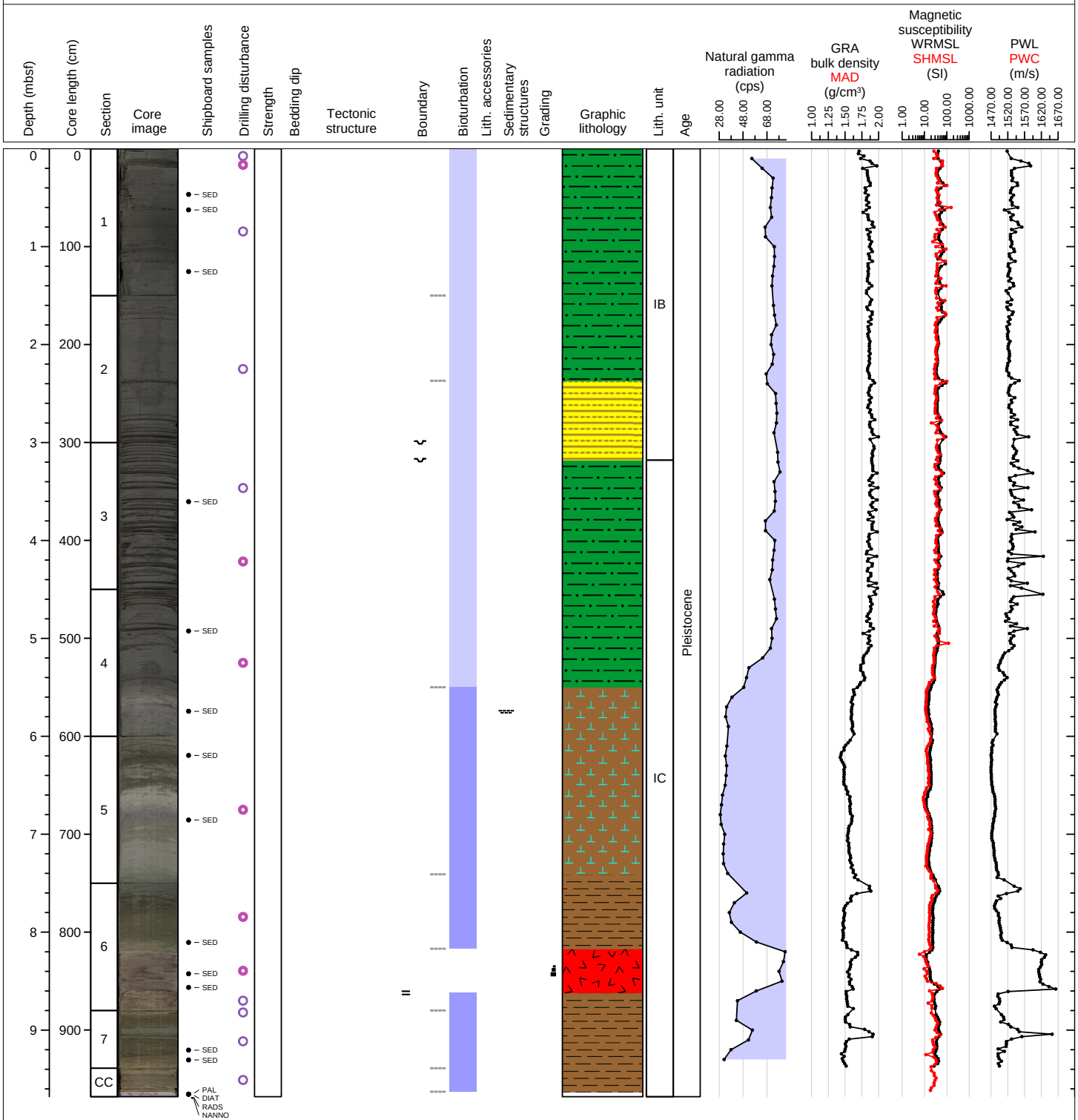
Hole 362-U1480B Core 1H, Interval 0.0-9.95 m (CSF-A)

The core is composed predominantly of moderately-bioturbated, brownish to beige, clay with calcareous bio-components in variable amount. In Sections 1-2 and 6-7, greenish-gray silty clay contains pyrite nodules calcareous bio-components. Vitric ash is dispersed in the background sediment. One intact ash layer in Section 5, 103-106 cm and two large ash pods from a displaced ash layer (Section 3, 70-74, 90-95 cm) are observed. Overall, foraminifers are rare to common in the core and in Section 4, 9-10 cm an organic-rich silt layer is vertically displaced over the section. Section 3, 4, and 5 are heavily disturbed by drilling. NO MUDLINE ESTABLISHED.



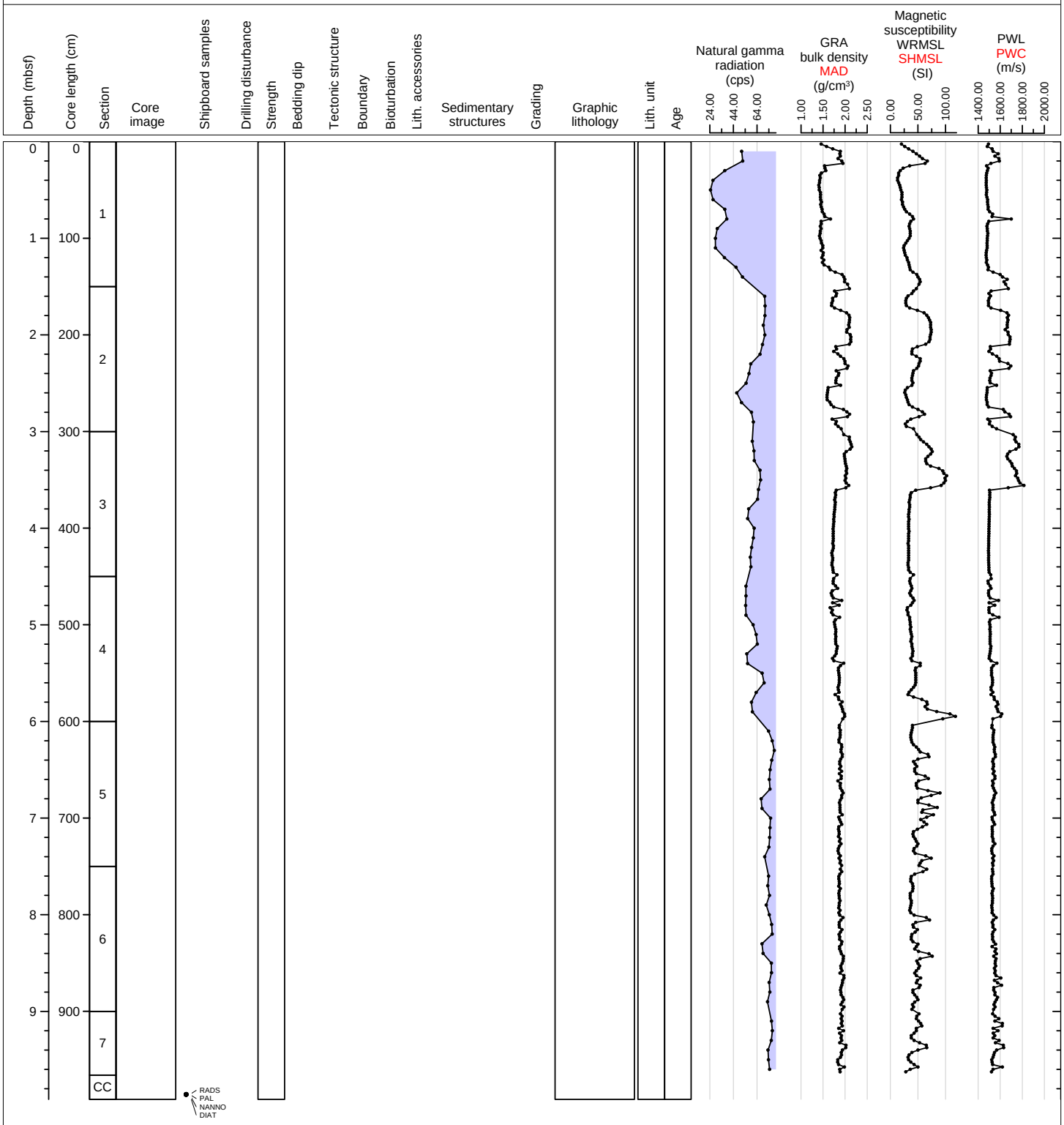
Hole 362-U1480C Core 1H, Interval 0.0-9.68 m (CSF-A)

The core is characterized by dark greenish-gray silty clay as the major lithology in Sections 1 to 4, with layers of pyrite concentrations in Sections 1 and 2, as well as many intercalated, cm-thick, normally-graded, fine-grained sand to silt layers in Sections 3 and 4 that grade into clay. An abrupt change to calcareous clay occurs at 100 cm in Section 5 and shows a gradual decrease in the amount of calcareous nannofossils until the top of a large ash layer in Section 6. Below the ash layer, the background sediment is characterized by clay with calcareous nannofossils. The ash layer appears in Section 6 from 68 cm to 112 cm. Bioturbation is slight in the upper part and moderate in the lower part of the core. NO MUDLINE ESTABLISHED.



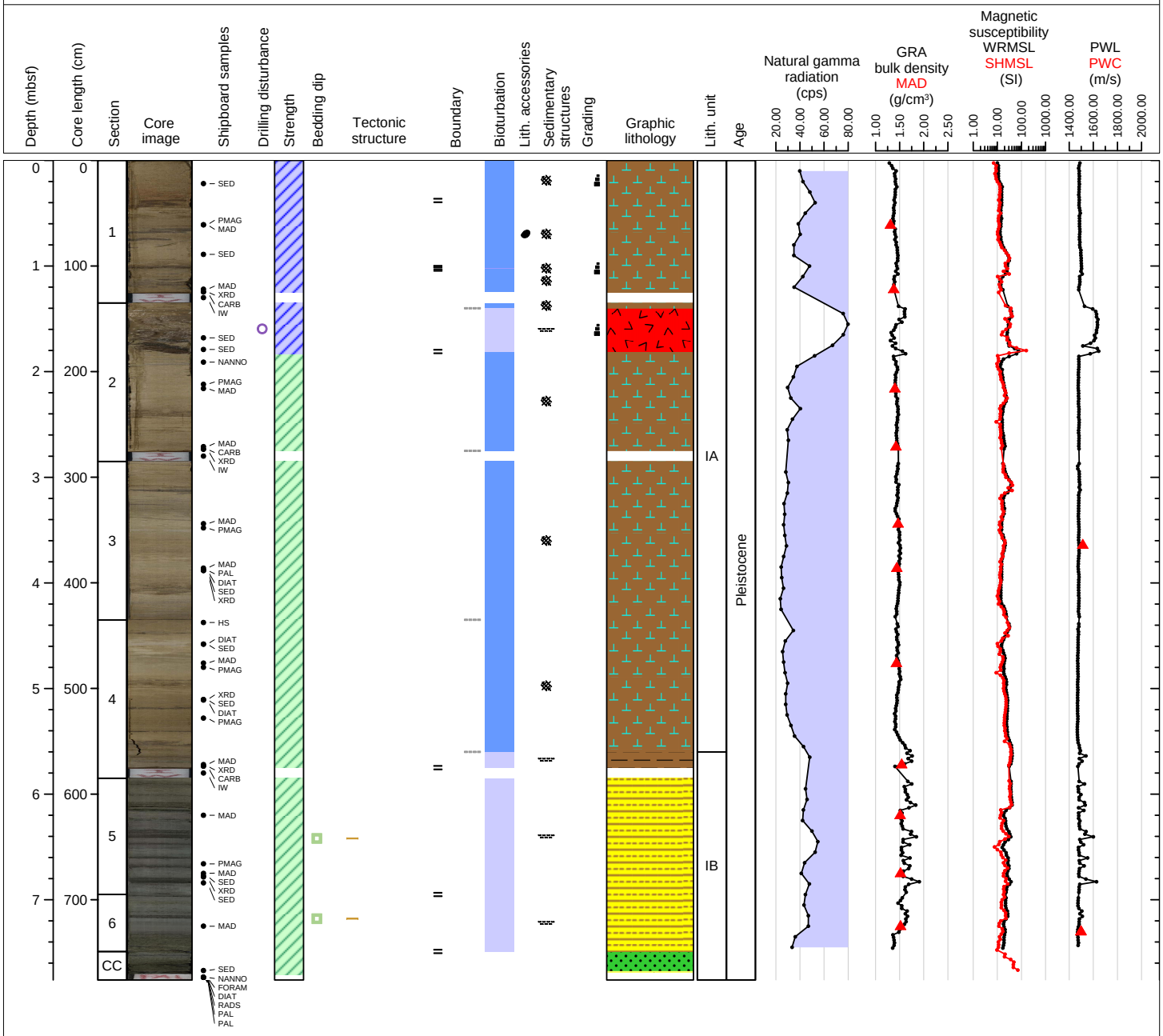
Hole 362-U1480D Core 1H, Interval 0.0-9.91 m (CSF-A)

This core was not split. NO MUDLINE ESTABLISHED.



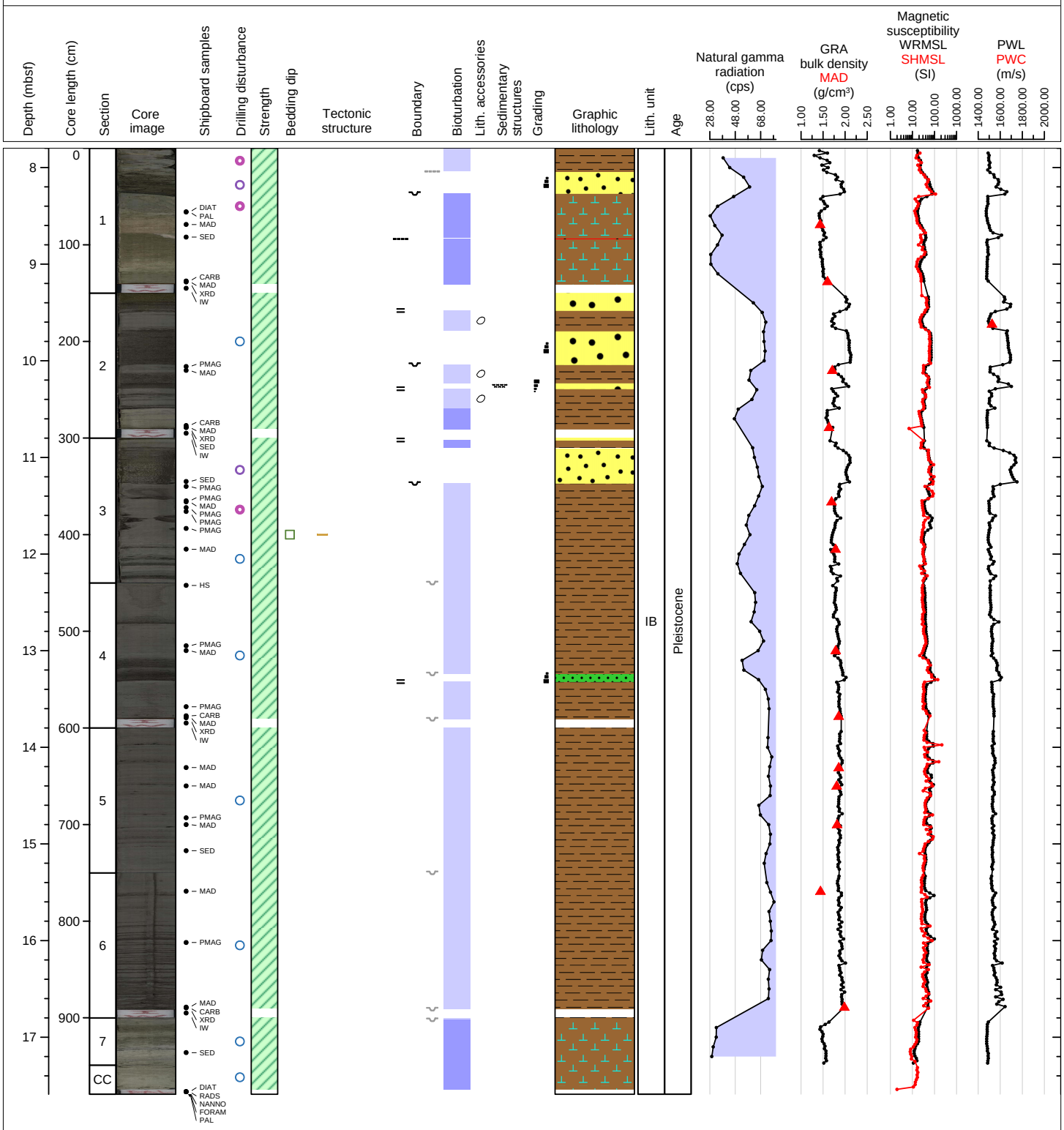
Hole 362-U1480E Core 1H, Interval 0.0-7.76 m (CSF-A)

Section 1 to 4 is predominantly calcareous clay with an ash in Section 2, 5-47 cm. Mottled throughout. Bioturbation mainly Thalassinoides. Sections 5 to CC show alternating silts and graded, parallel laminated fine- to very fine-grained sands.



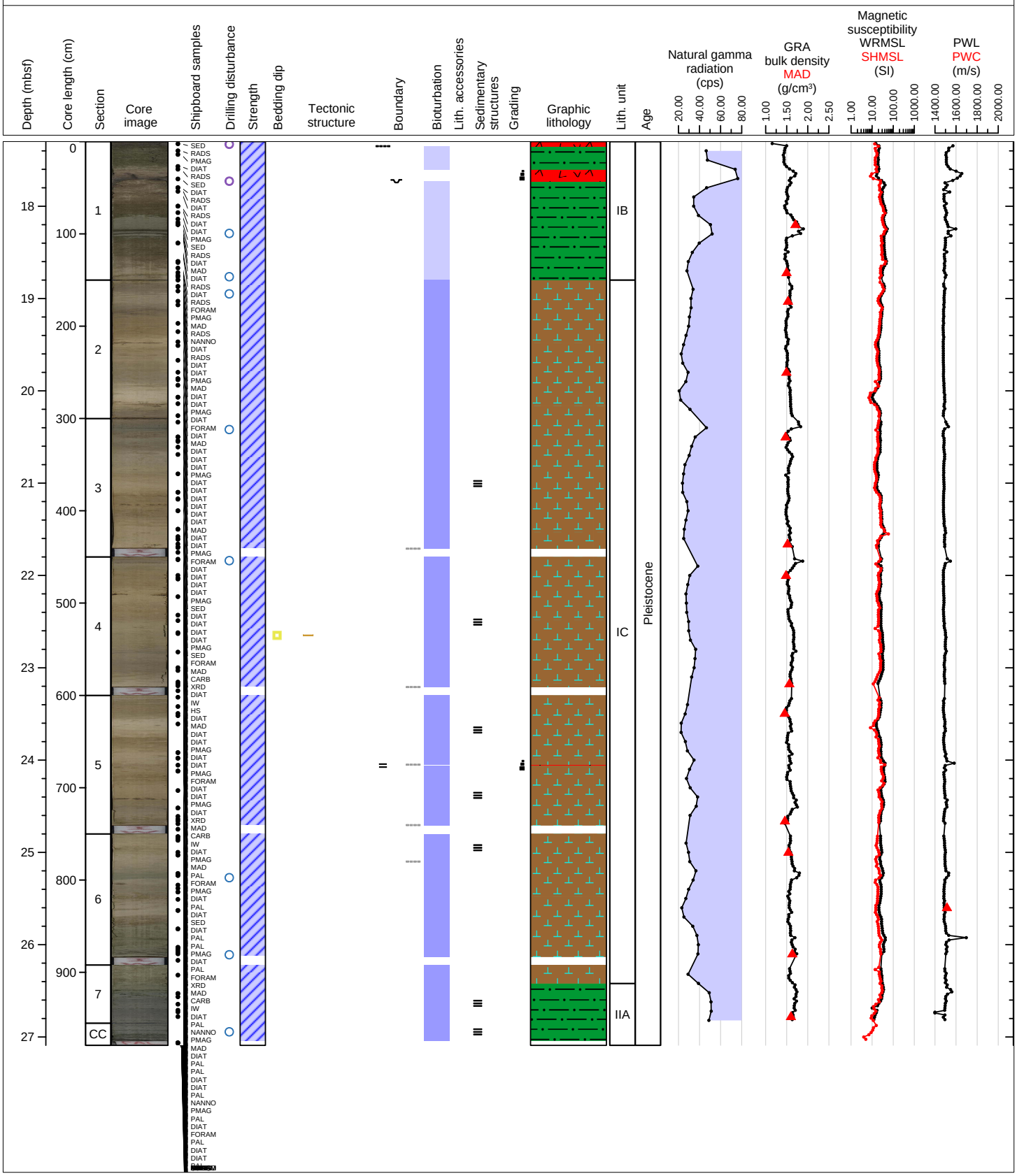
Hole 362-U1480E Core 2H, Interval 7.8-17.59 m (CSF-A)

Core 2H is mainly clay and common calcareous clay at the base and the top of the core with numerous intercalated fine-grained sand layers and disseminated pyrite nodules. One large white ash pod in Section 1, 90-93 cm.



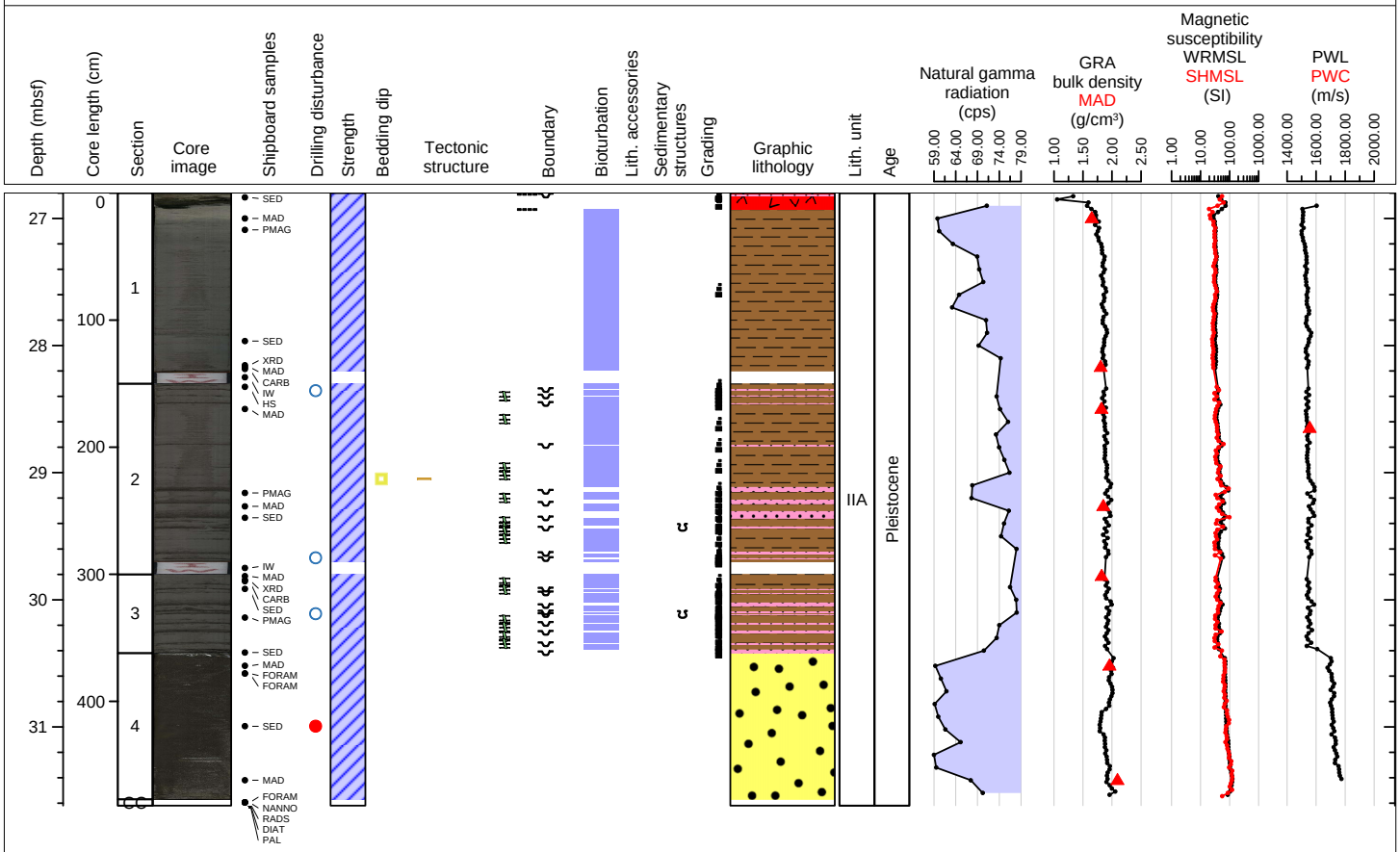
Hole 362-U1480E Core 3H, Interval 17.3-27.09 m (CSF-A)

Core 3H is predominantly, moderately bioturbated, brownish to beige, calcareous clay with variable amount of clay. Sections 2 to 5 contain greenish grey silty clay with pyrite nodules. Three ash layers are observed: Section 1, 0-5 cm, and 30-43 cm, and Section 5, 75-76 cm, with grain sizes normally-grading from coarse-grained sand to silt in Section 1 and from silt to clay in Section 5.



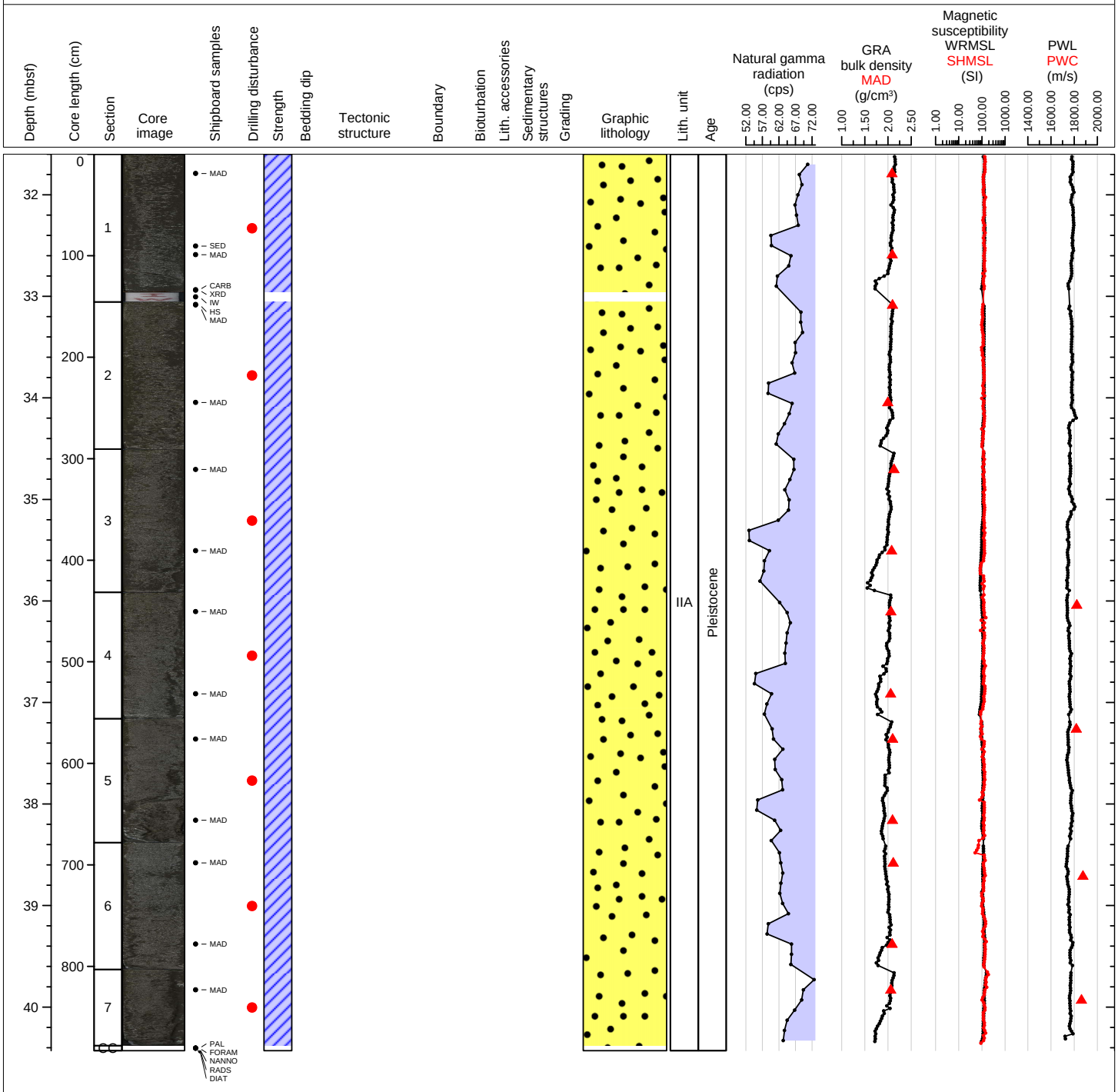
Hole 362-U1480E Core 4H, Interval 26.8-31.62 m (CSF-A)

Core 4H consists of two main lithologies: (i) in the upper part of the core, there is greenish-gray clay alternating with mm- to cm sized tuffaceous silt layers, and (ii) at the bottom of the core, there is a very thick (115 cm) continuous, monotonous dark greenish gray structureless fine- to medium-grained sand layer.



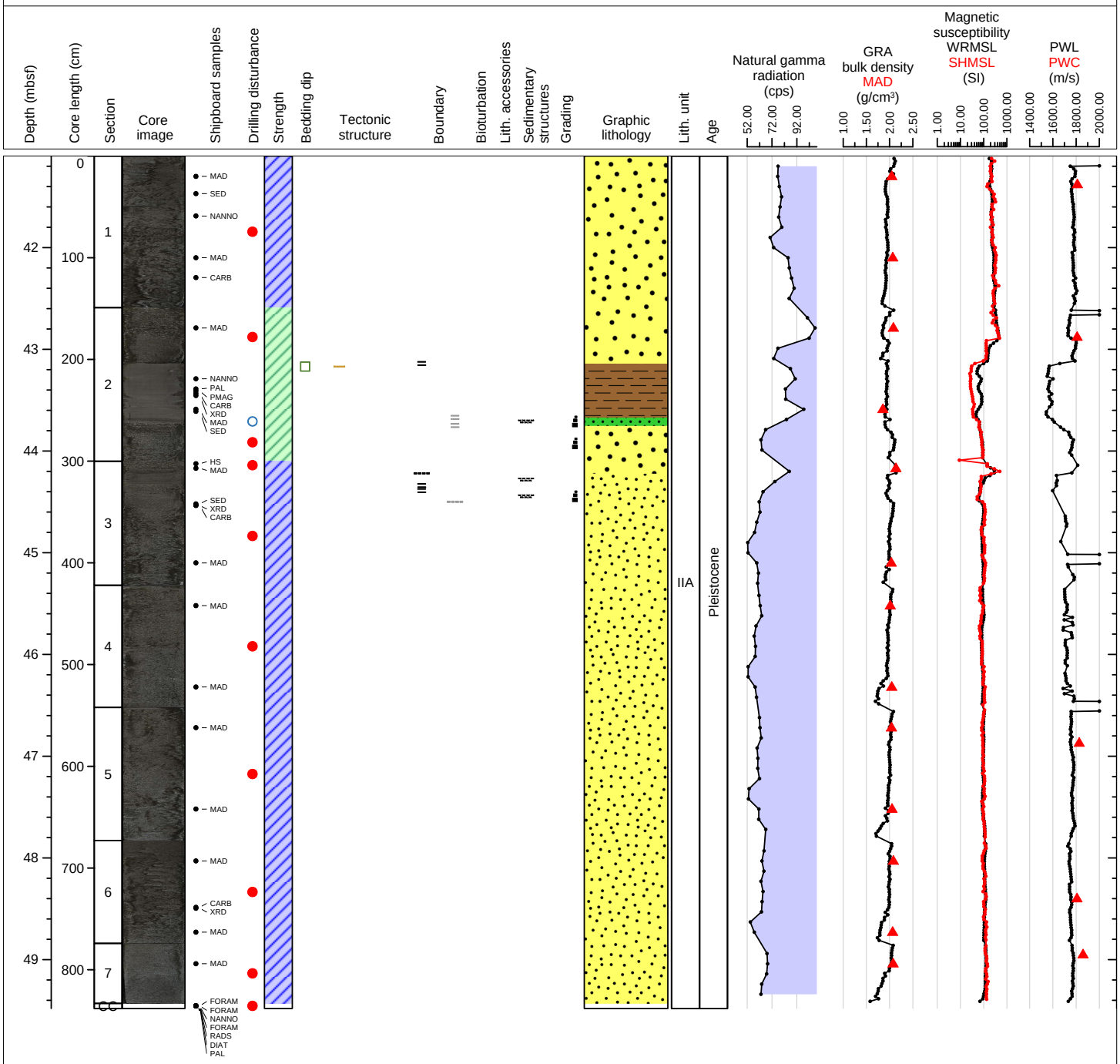
Hole 362-U1480E Core 5H, Interval 31.6-40.43 m (CSF-A)

Core 5H consists of a very thick continuous, monotonous and structureless bed of sand that has a median grain size range of fine- to medium-grained sand and minor components of silt.



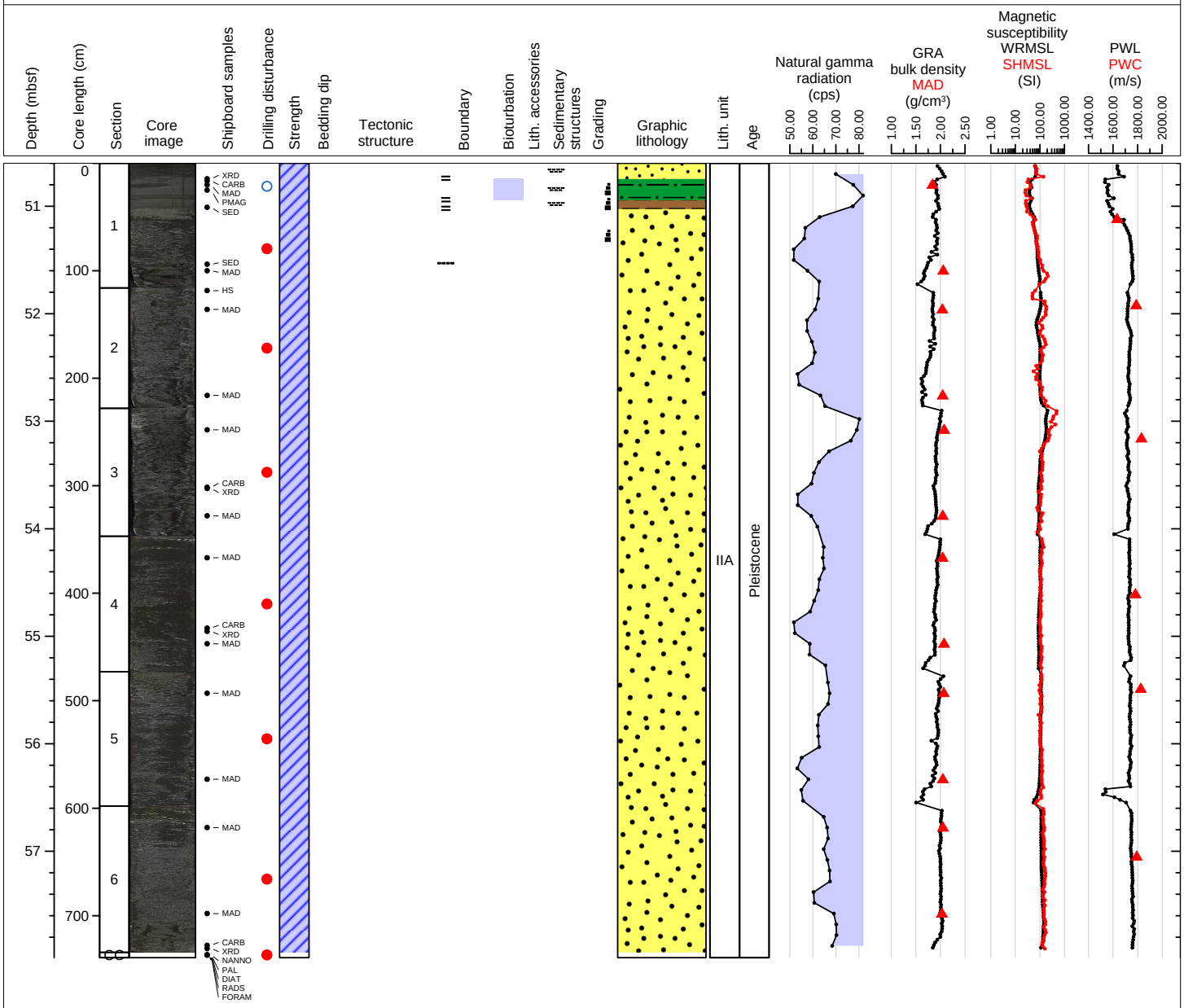
Hole 362-U1480E Core 6H, Interval 41.1-49.48 m (CSF-A)

Mainly fine greenish-gray poorly-sorted structureless sand with minor normal-graded beds for Core 6H. Minor lithology of greenish-gray clays appears and is obscured by common coring-induced deformation.



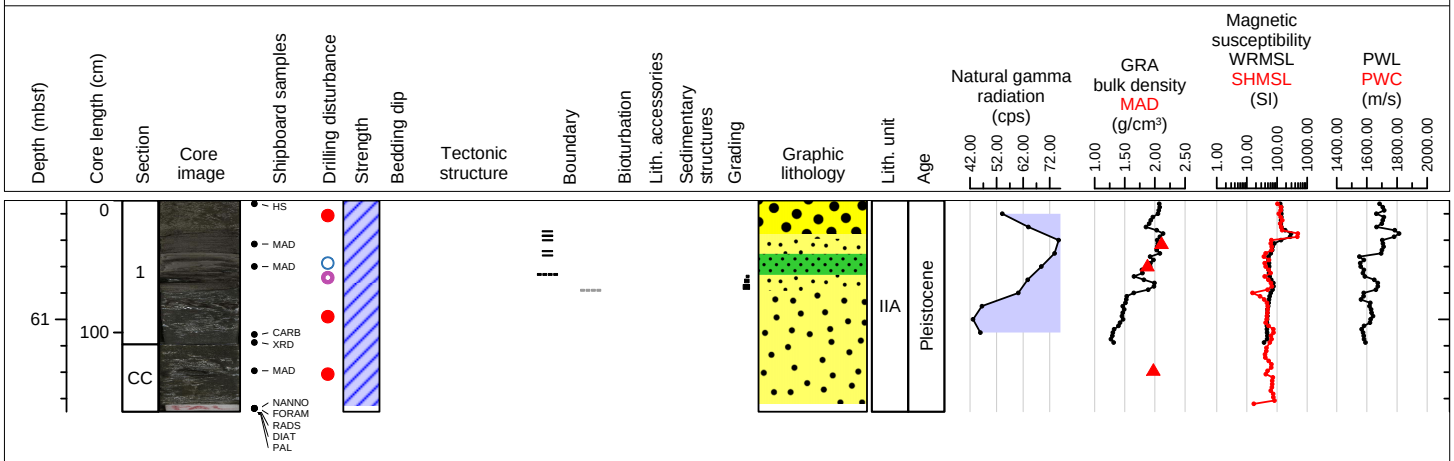
Hole 362-U1480E Core 7H, Interval 50.6-57.99 m (CSF-A)

Almost the entire Core 7H comprises structureless, moderately-sorted, dark greenish-gray fine-grained sand. Section 1, 13-42 cm shows a clay-rich interval with mm-scale graded beds with parallel lamination.



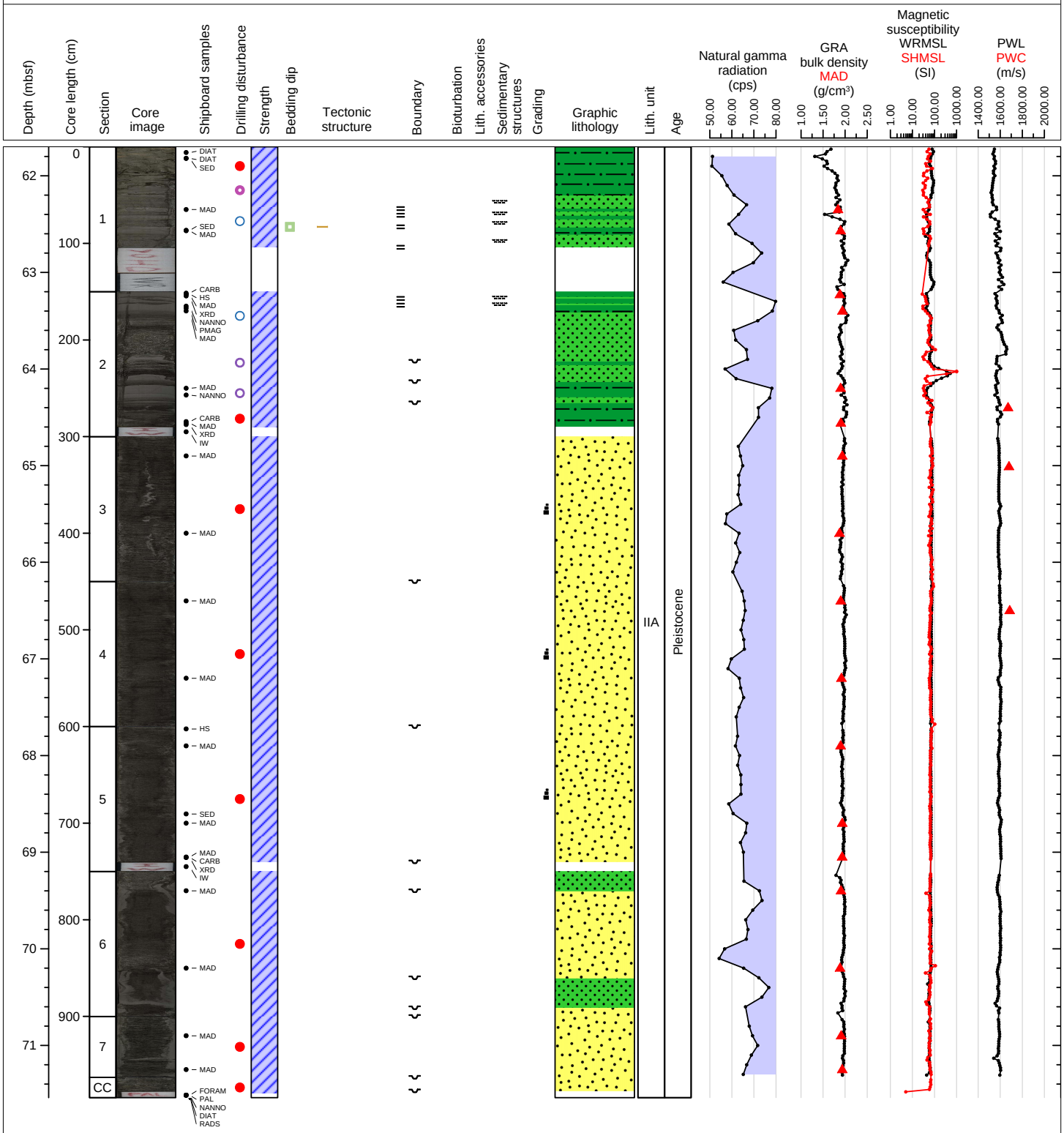
Hole 362-U1480E Core 8H, Interval 60.1-61.7 m (CSF-A)

Core 8H shows mostly gray structureless, moderately sorted fine-grained sand. Laminated clays appear at 40-56 cm in Section 1 that are deformed by coring.



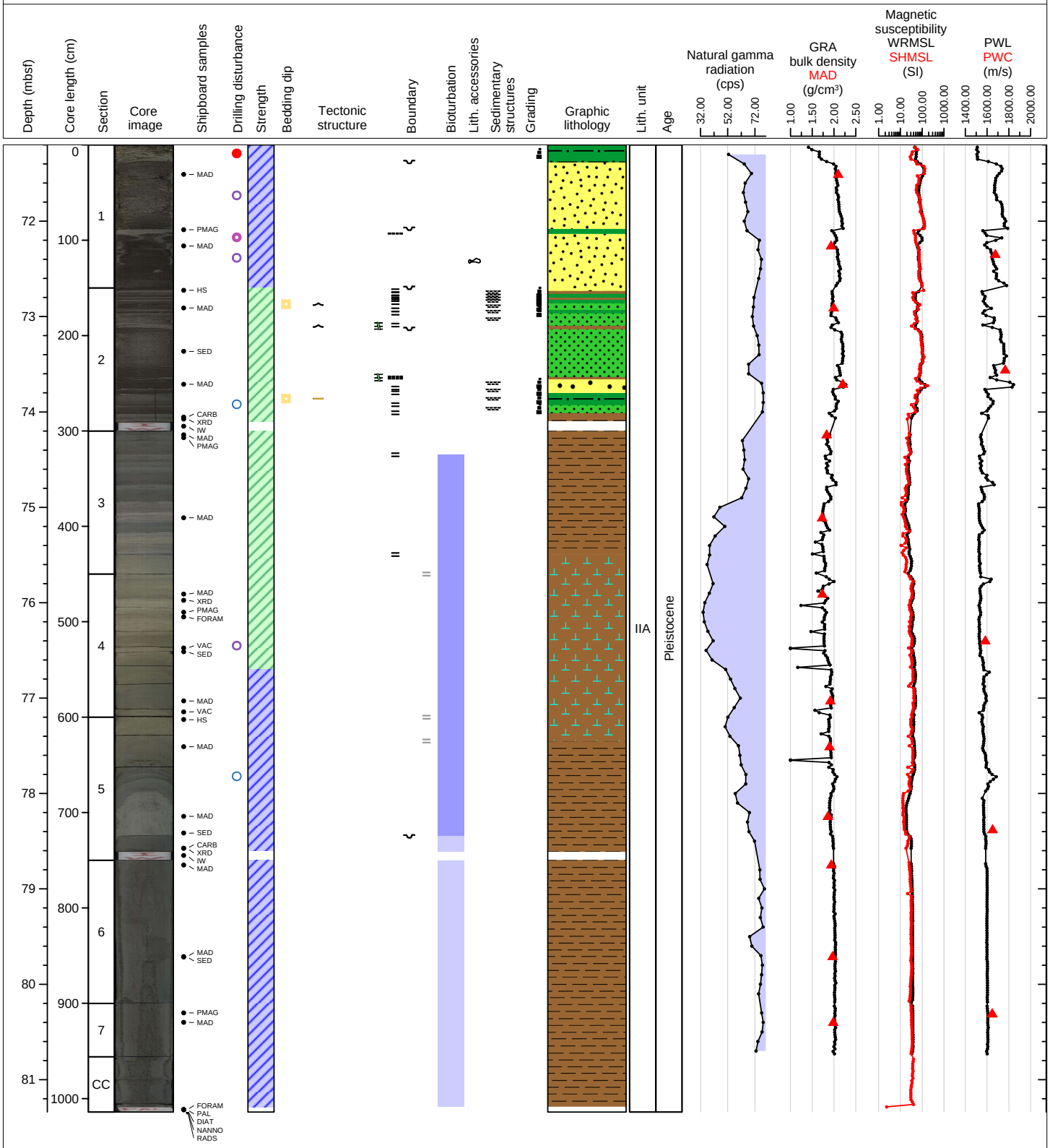
Hole 362-U1480E Core 9H, Interval 61.7-71.54 m (CSF-A)

Greenish gray silty clay is the major lithology of Sections 1 and 2. Silt with clay showing normal grading and parallel lamination in medium beds is minor lithology. Very thick greenish-gray, very fine-grained sand beds, commonly with normal grading from fine-grained sand to silt is the major lithology from Section 3 to CC. Silt with clay showing curvy planar boundaries at several cm thick beds is minor lithology.



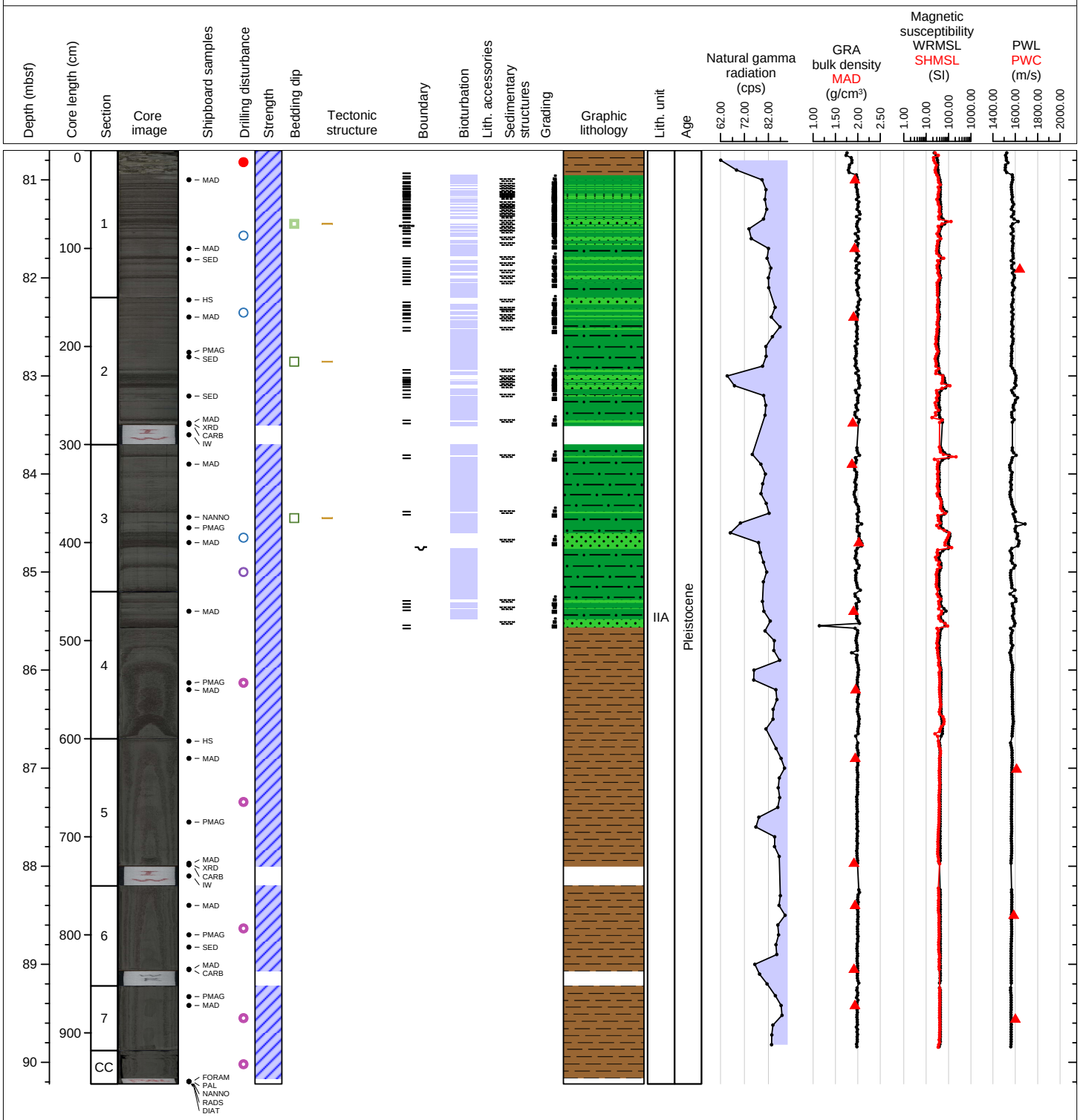
Hole 362-U1480E Core 10H, Interval 71.2-81.34 m (CSF-A)

Greenish gray very fine-grained sand is the major lithology of Sections 1 and 2. Silt with clay as background sediment alternating with thin beds of normally-graded silt to clay showing parallel lamination characterizes the minor lithology. Sections 3 to 5 are composed mainly of moderately bioturbated, light greenish-gray calcareous clay with variable amounts of clay. From the bottom of Section 5 to CC, dark gray clay is the major lithology.



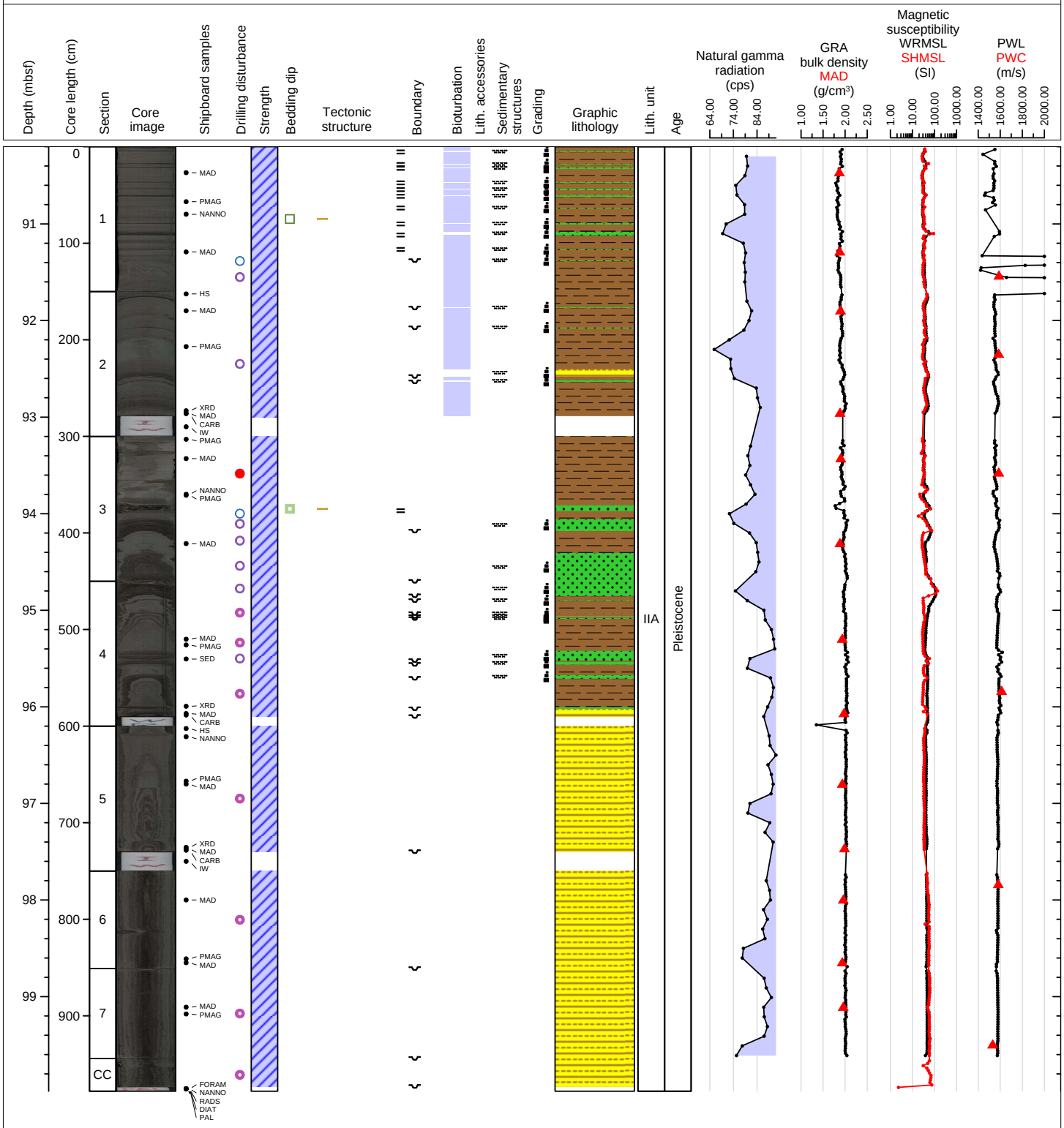
Hole 362-U1480E Core 11H, Interval 80.7-90.22 m (CSF-A)

Gray silty clay is the major lithology from Section 1 to top of Section 4. Silt with clay showing normal grading and parallel-lamination in thin beds is minor lithology and alternate frequently within the major lithology.

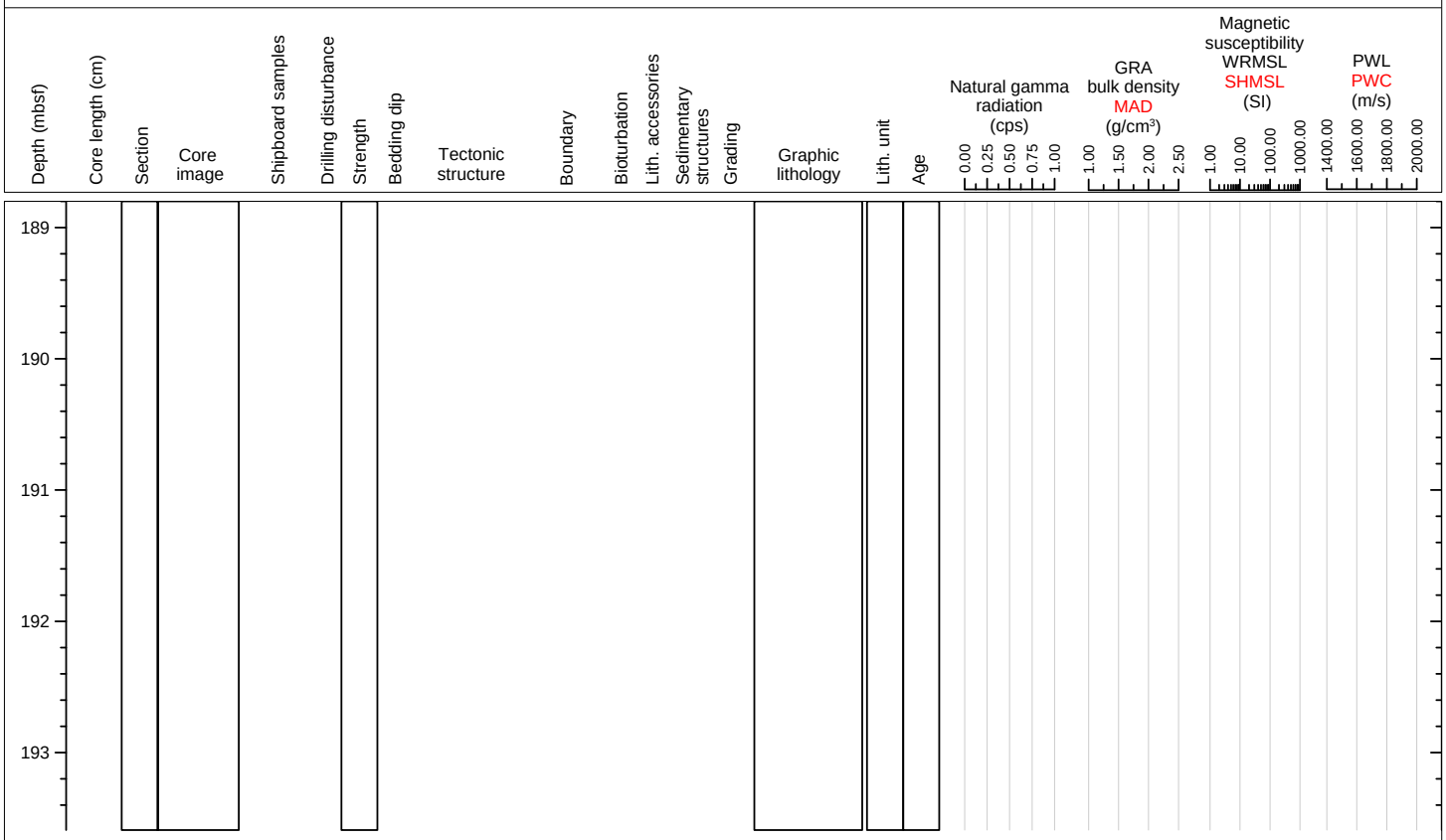


Hole 362-U1480E Core 12H, Interval 90.2-99.98 m (CSF-A)

Slightly bioturbated gray clay is the major lithology from Section 1 to bottom of Section 4. Dark gray silty clay to silt showing normal grading and parallel lamination in thin beds is the minor lithology. From bottom of Section 4 to CC, alternating gray silty clay with clayey silt is the major lithology.

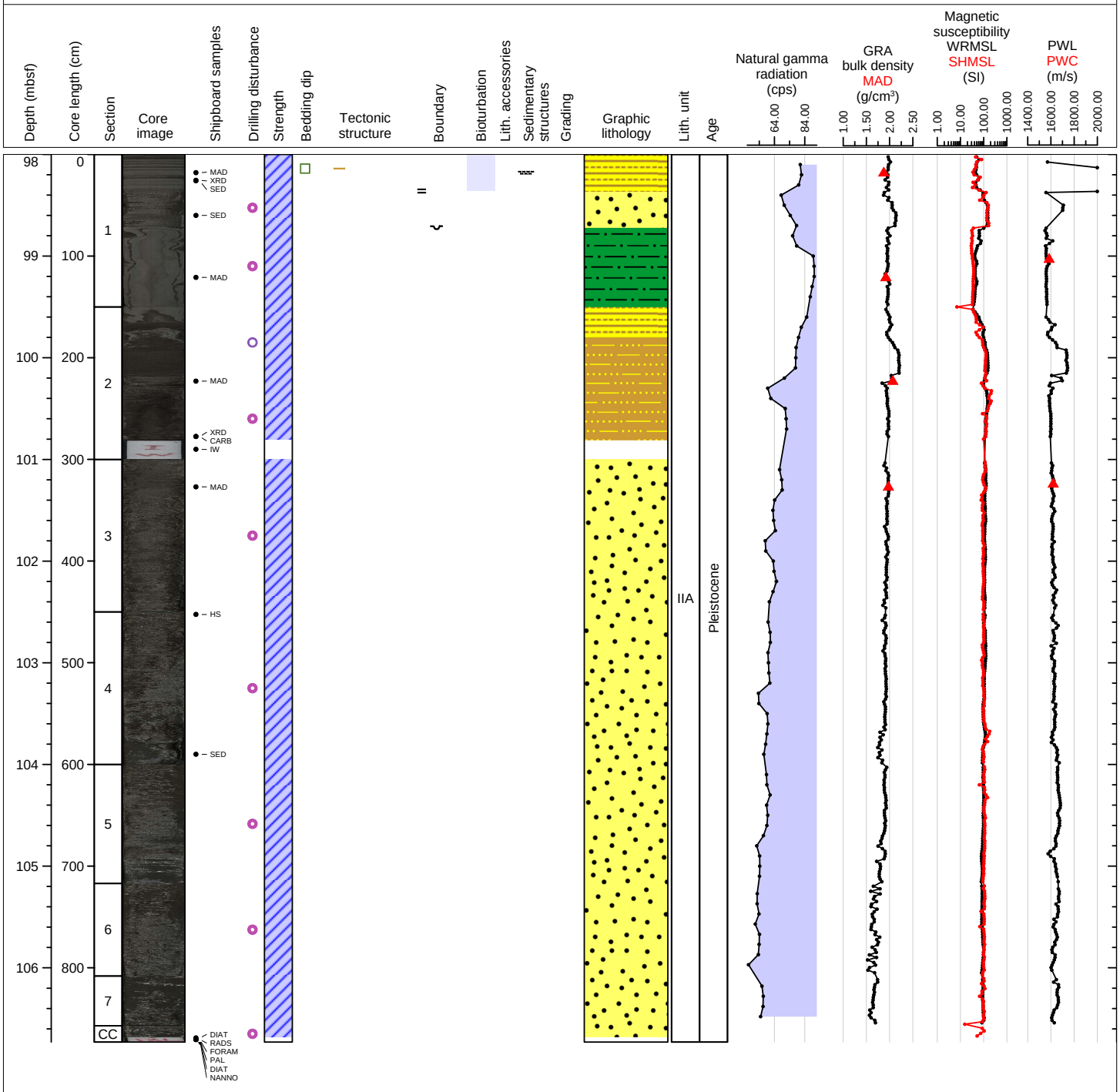


DRILLED INTERVAL Hole 362-U1480F Core 11, Interval 0.0-0.0 m (CSF-A)



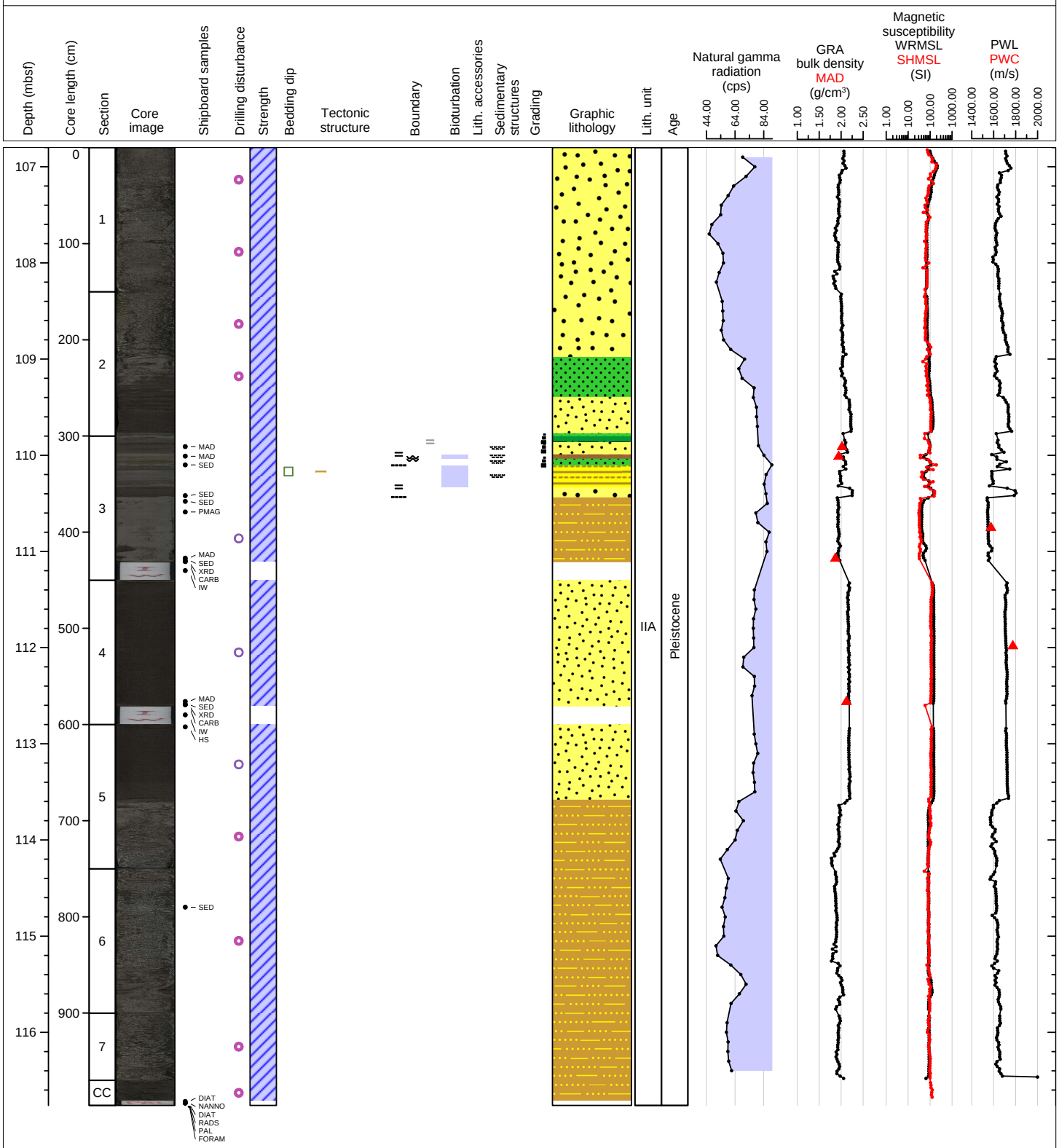
Hole 362-U1480F Core 2H, Interval 98.0-106.73 m (CSF-A)

Mainly fine-grained sand with clay. Severe coring disturbance throughout apart from Section 1, 0-35 cm, where bedding is well-preserved as very fine-grained sand and clay with alternating thin, very thin beds and laminae.



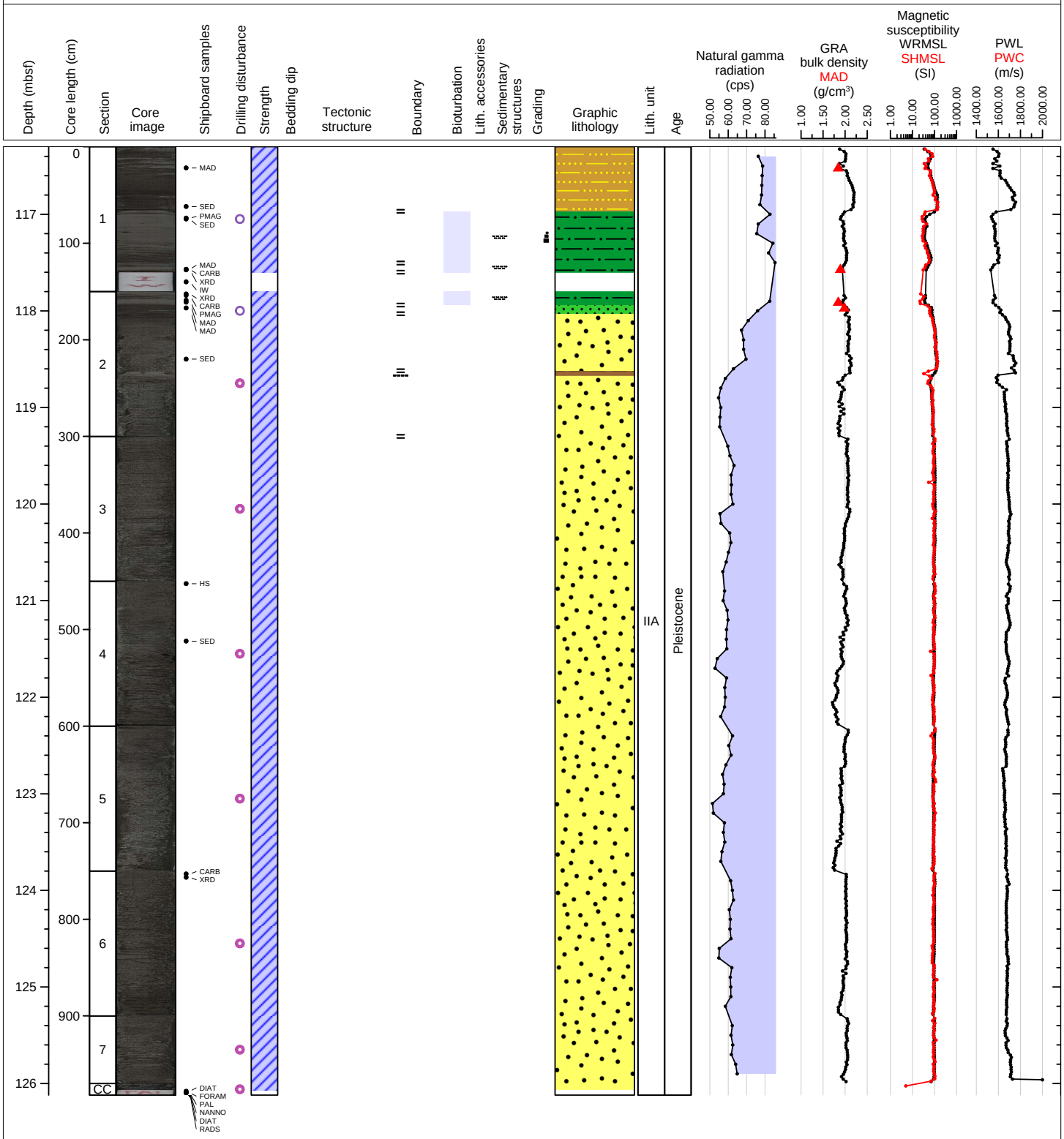
Hole 362-U1480F Core 3H, Interval 106.8-116.76 m (CSF-A)

Severe coring disturbance with distorted mud layers and soupy sand in sections 1-2, 6-CC. Section 3 has well-preserved bed forms with alternating thin-bedded fine-grained sands and clays from 0 to 64 cm (coring disturbance below). Section 4 and 5 (0-77 cm; disturbance below) shows homogeneous fine-grained sand with clay, with moderate to severe coring disturbance



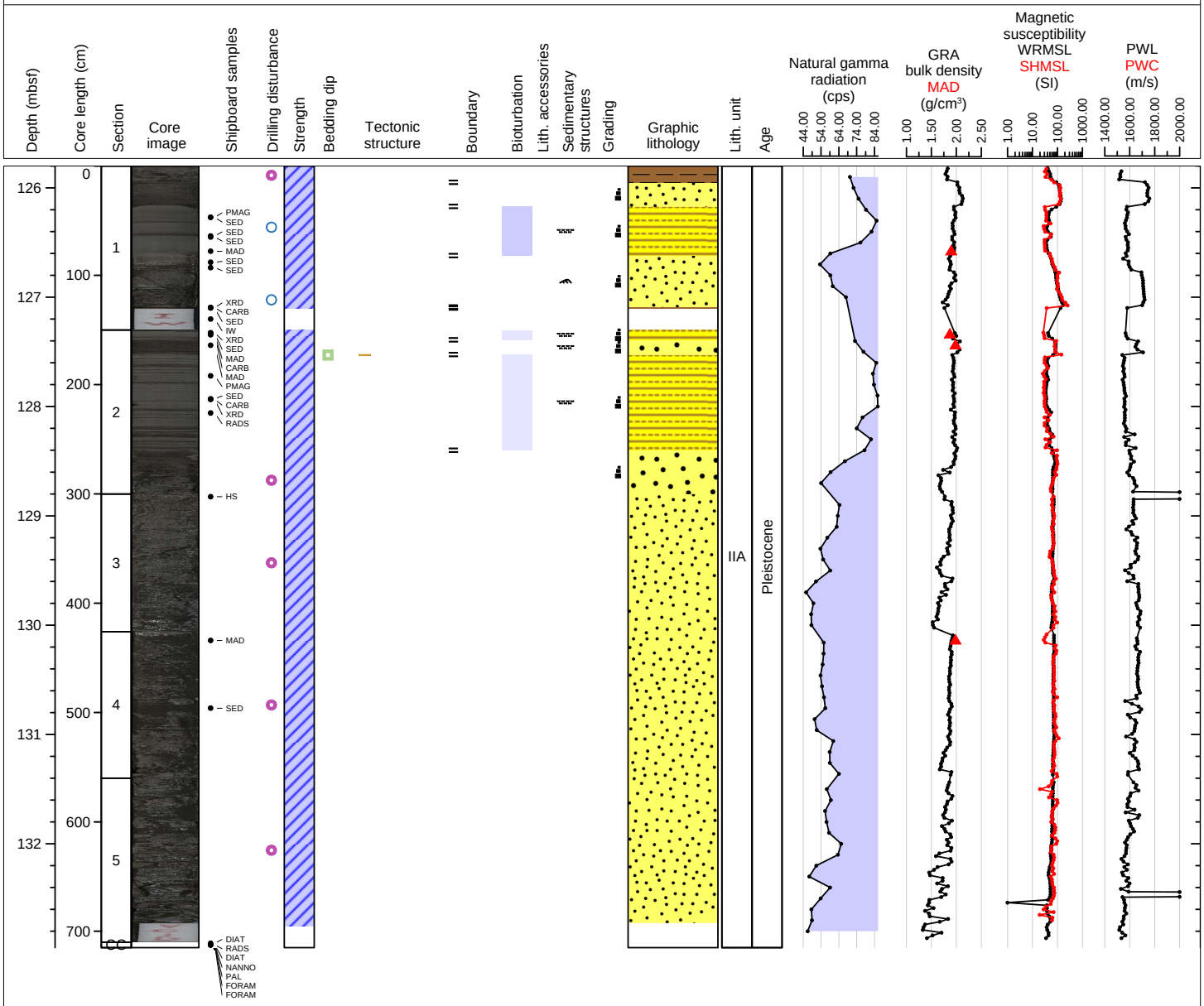
Hole 362-U1480F Core 4H, Interval 116.3-126.12 m (CSF-A)

Mainly structureless very fine-grained sand up to fine-grained sand showing moderate-severe coring disturbance. Chaotic rounded clay-clast conglomerate with clasts up to 2.5 cm maximum dimension.



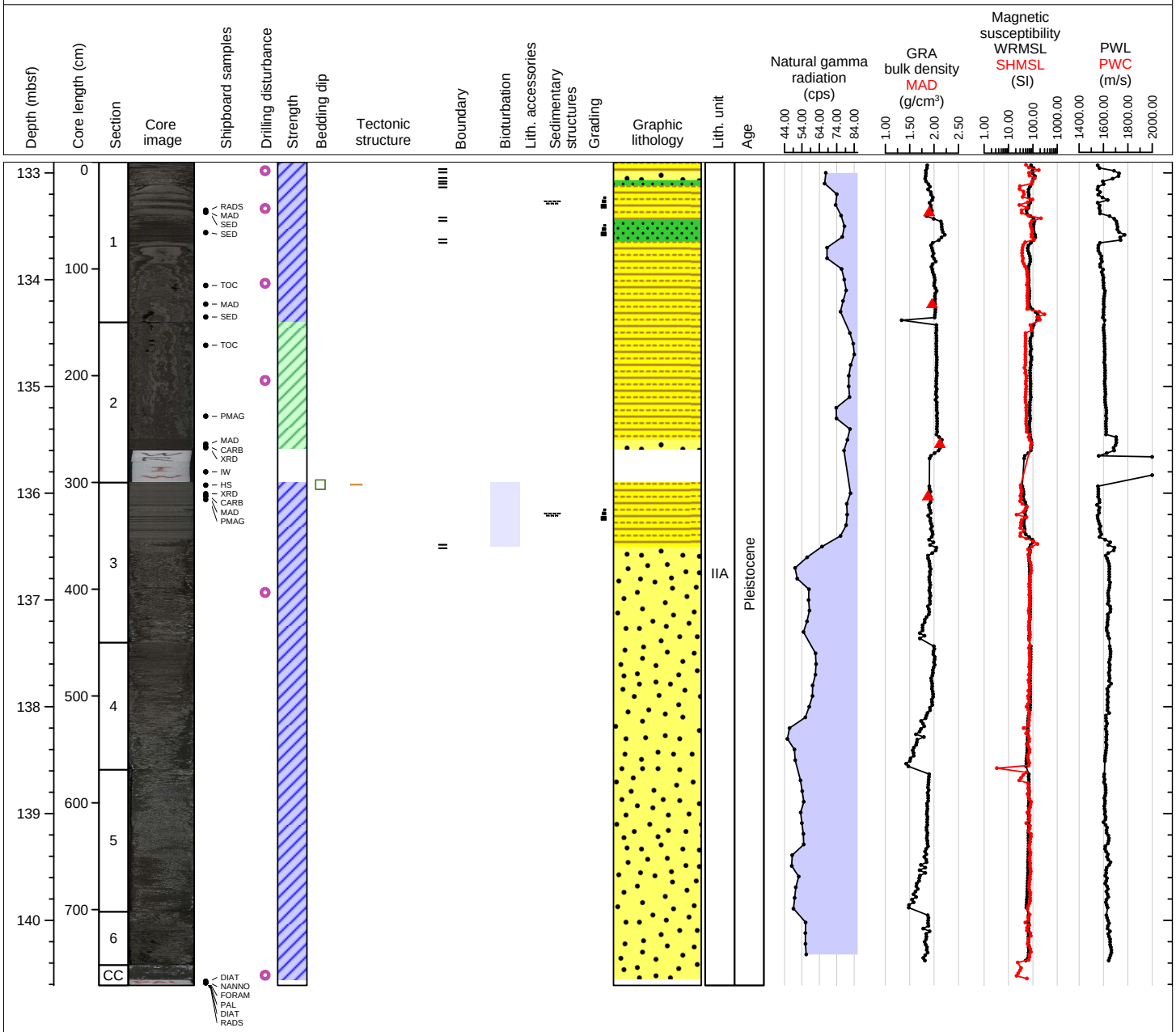
Hole 362-U1480F Core 5H, Interval 125.8-132.95 m (CSF-A)

Severe core disturbance from section 3 to 5 (mixed fine-grained sand and silt). Sections 1 and 2 show a succession of normally-graded (silt to clay) thin beds that alternate with 3 medium-bedded fine-grained sand.



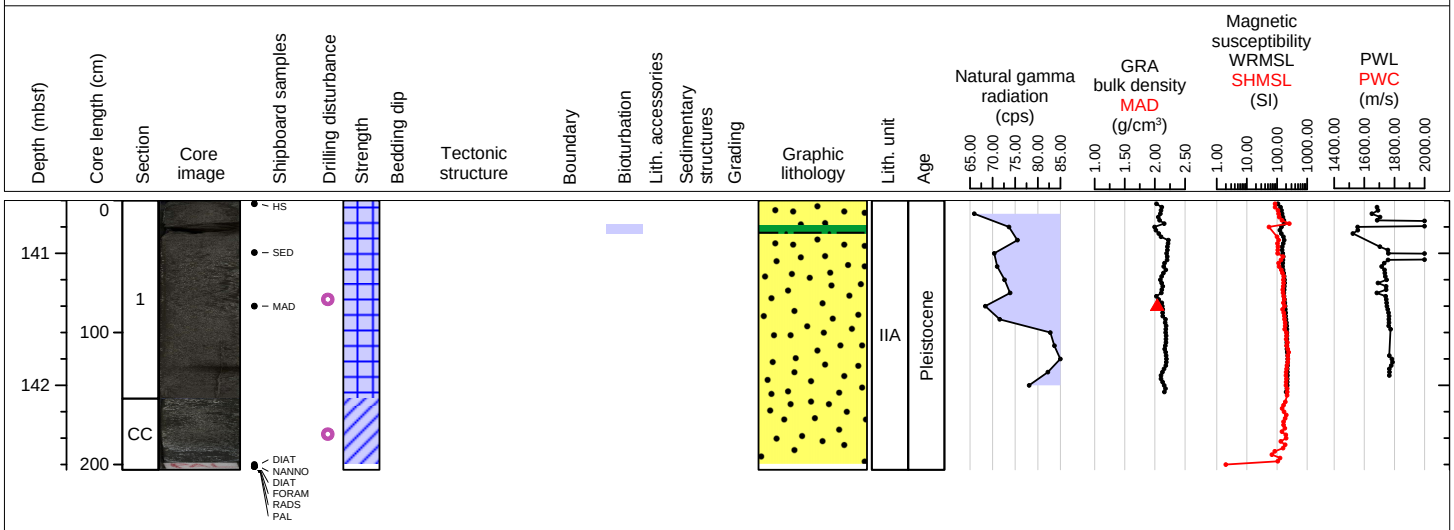
Hole 362-U1480F Core 6H, Interval 132.9-140.61 m (CSF-A)

The core shows severe coring-disturbed beds alternating with well-preserved mainly sand and mud. Section 1 shows coring-induced disturbance, although some beddings are well-preserved (30-74 cm). Sections 2, 4-CC are severely deformed, as well as the lower part of Section 3 (60-150 cm). The upper part of Section 3 (0-60 cm) shows well-preserved very thin, normally-graded beds with sparse bioturbation on top.



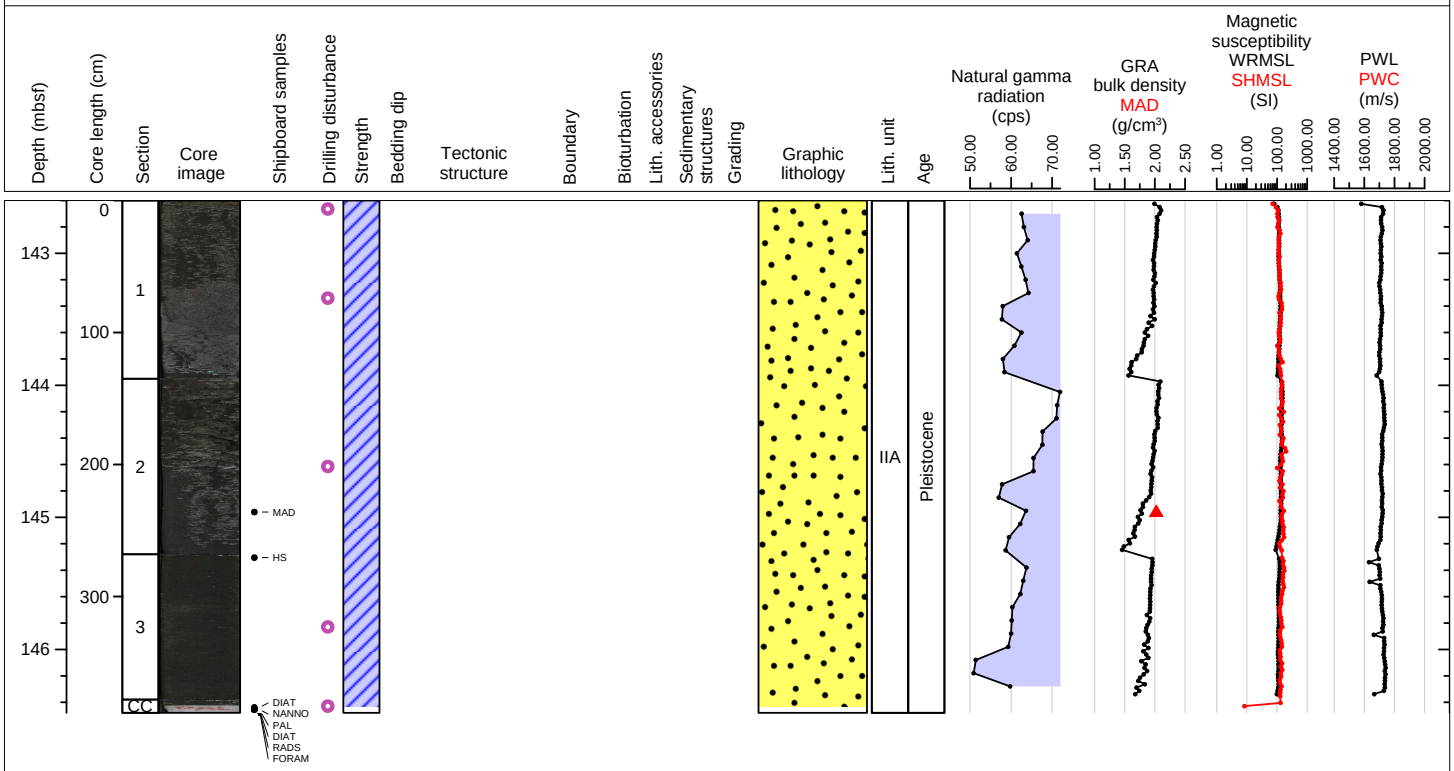
Hole 362-U1480F Core 7H, Interval 140.6-142.64 m (CSF-A)

Almost the entire core comprises structureless, well sorted, dark-gray, fine-grained sand with severe disturbance by drilling. Section 362-U1480F-7A-1, 18-25 cm shows a clay-rich interval (silty clay), probably not in situ.



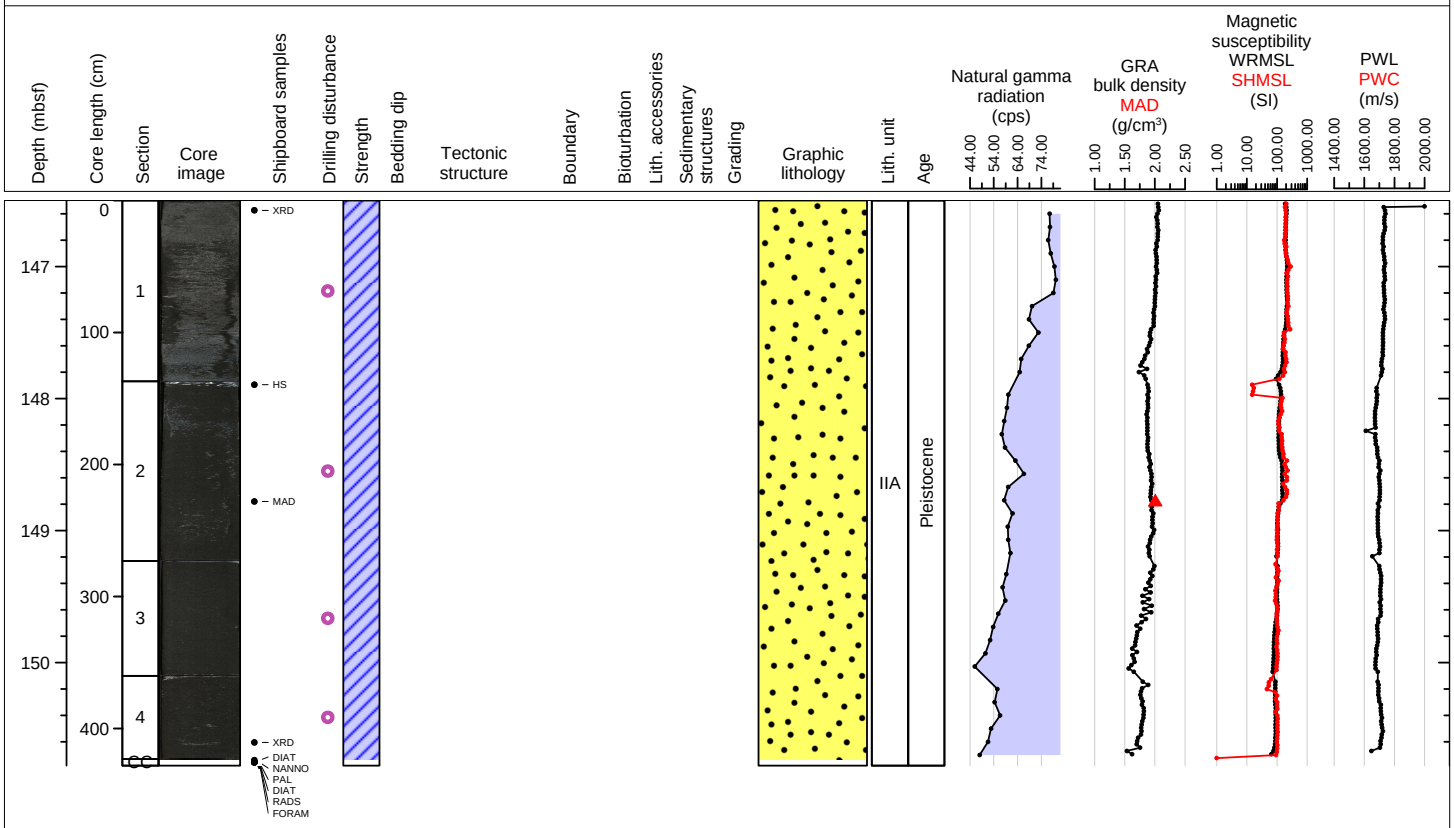
Hole 362-U1480F Core 8H, Interval 142.6-146.48 m (CSF-A)

Entire core comprises structureless, well sorted, dark-gray fine-grained sand, severely disturbed by drilling.



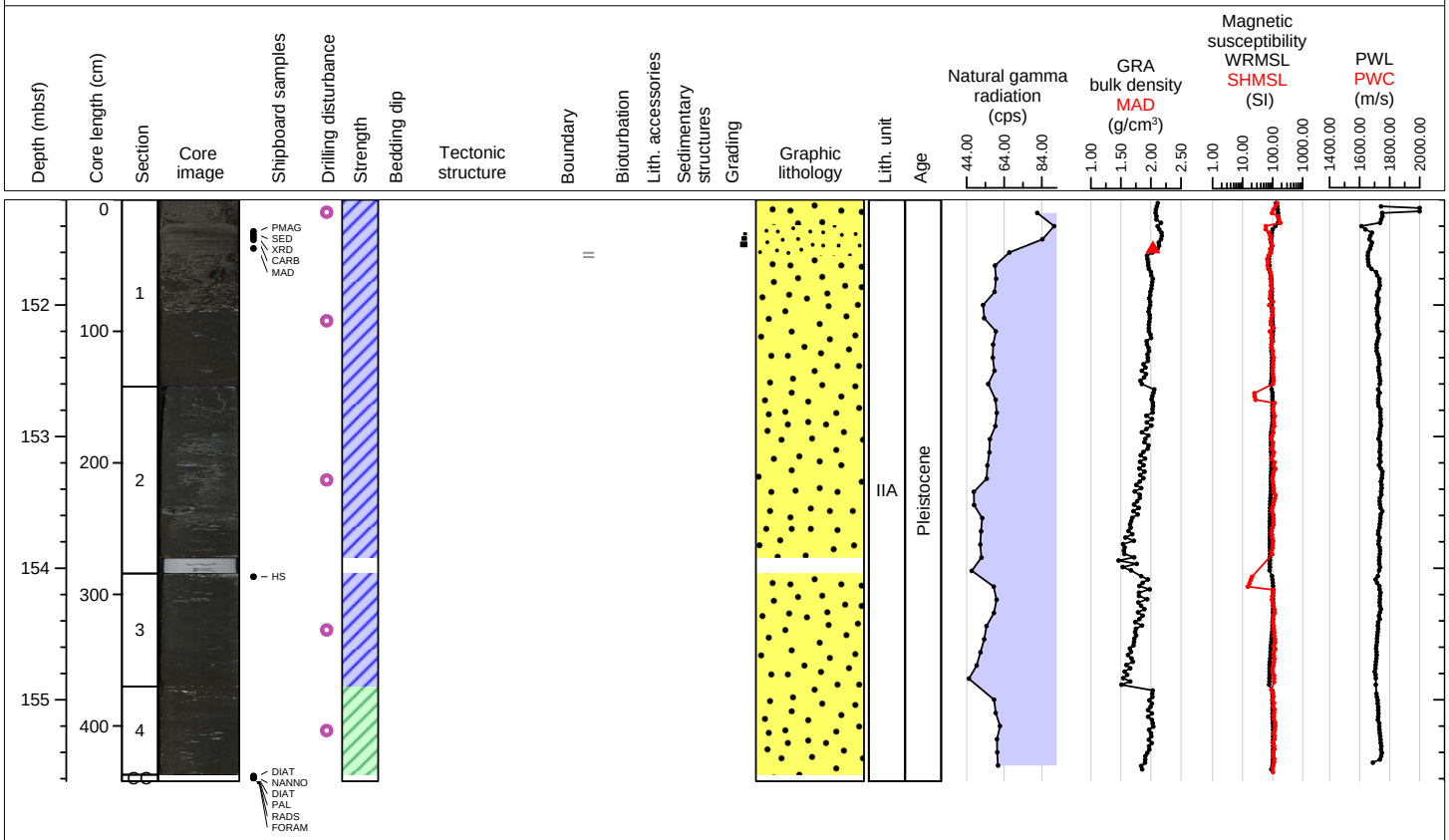
Hole 362-U1480F Core 9F, Interval 146.5-150.78 m (CSF-A)

Entire core comprises structureless, well sorted, dark-gray fine-grained sand with maximum grain size of medium-grained sand, severely disturbed by drilling.



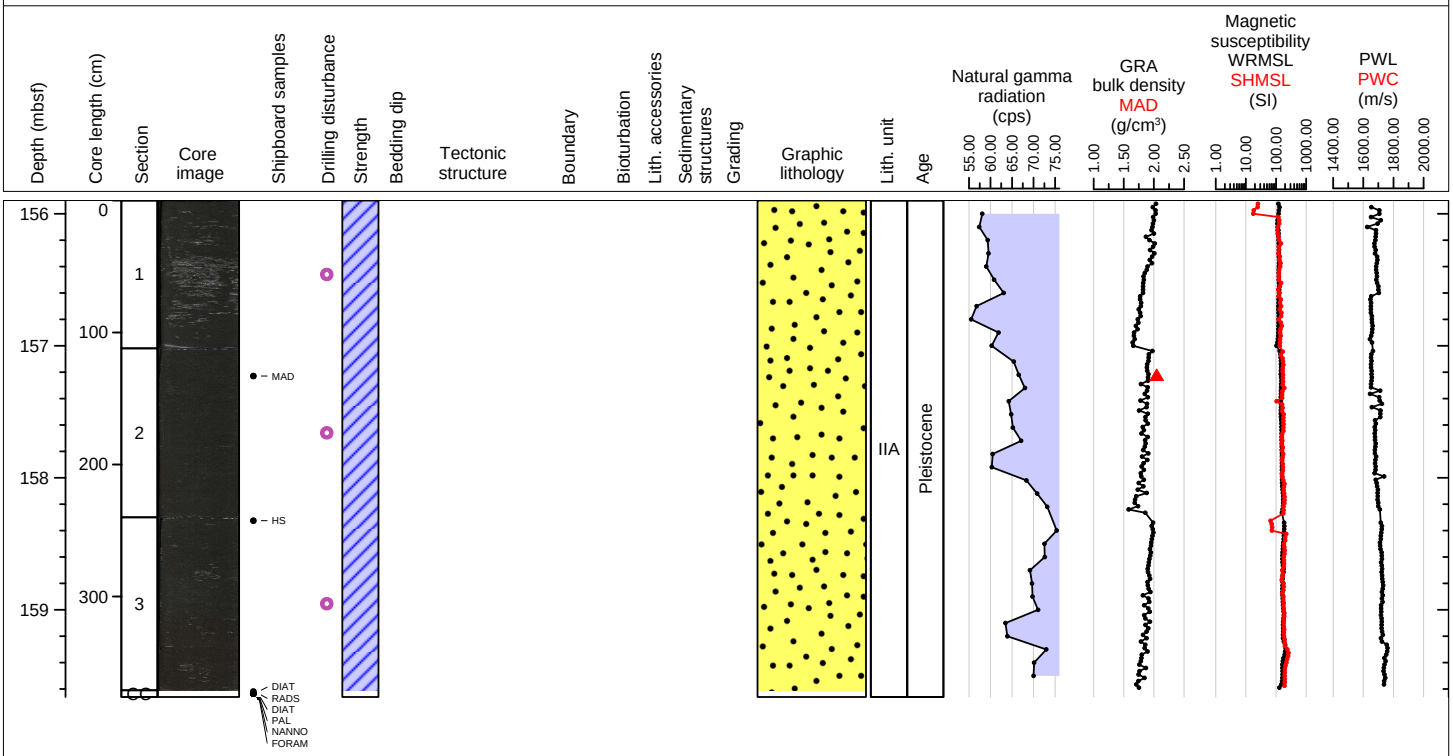
Hole 362-U1480F Core 10F, Interval 151.2-155.62 m (CSF-A)

Almost the entire core comprises structureless, well sorted, dark-gray, fine-grained sand that is severely disturbed by drilling. Section 10A-1, 19-42 cm is a normally-graded bed that is still intact and, therefore,was less affected by drilling disturbance; it continues into a very thick-bedded normally-graded sand layer which is severely disturbed by drilling.



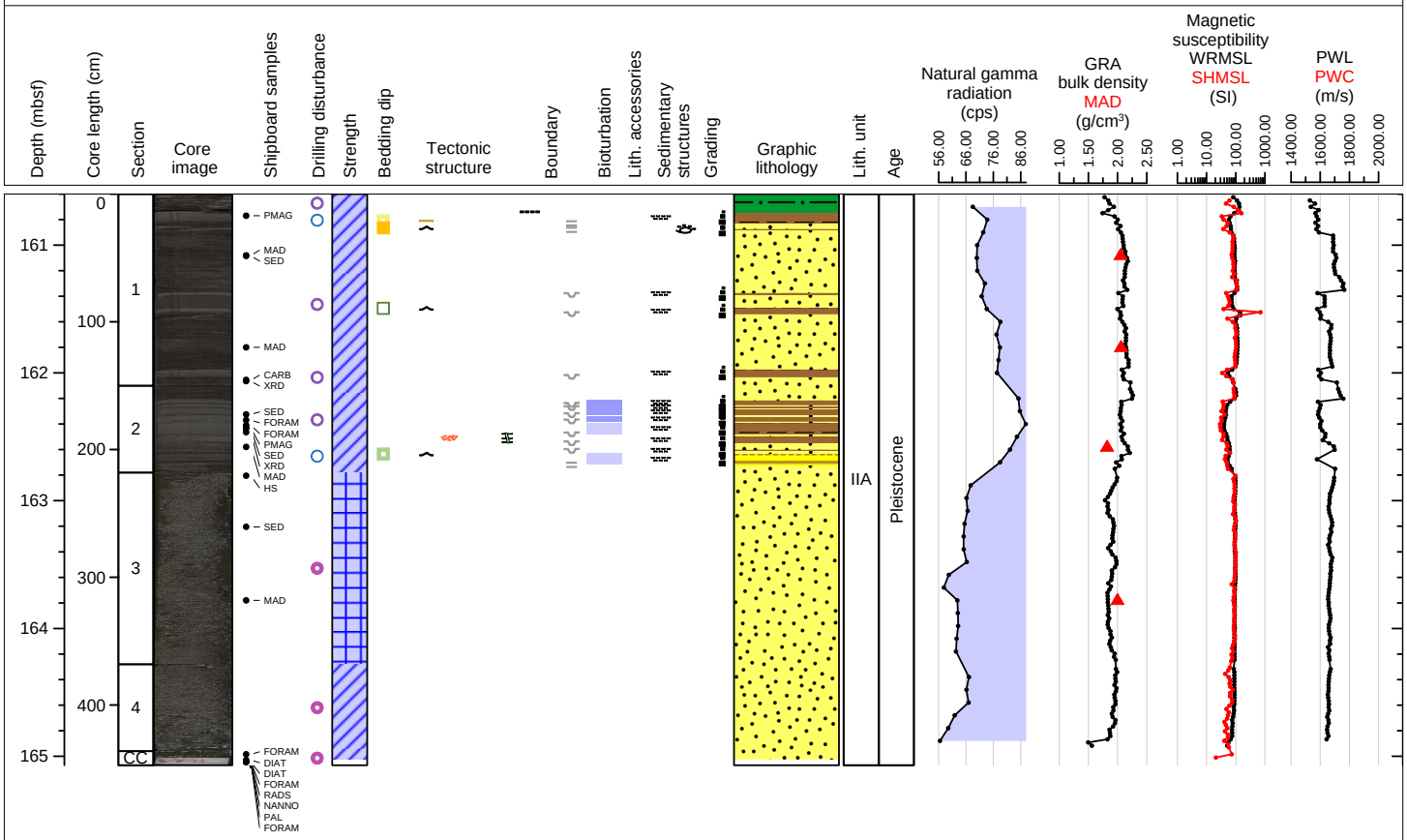
Hole 362-U1480F Core 11F, Interval 155.9-159.66 m (CSF-A)

Entire core comprises structureless, well-sorted, dark-gray fine-grained sand with maximum grain size of medium sand. Severe drilling-induced core disturbed.



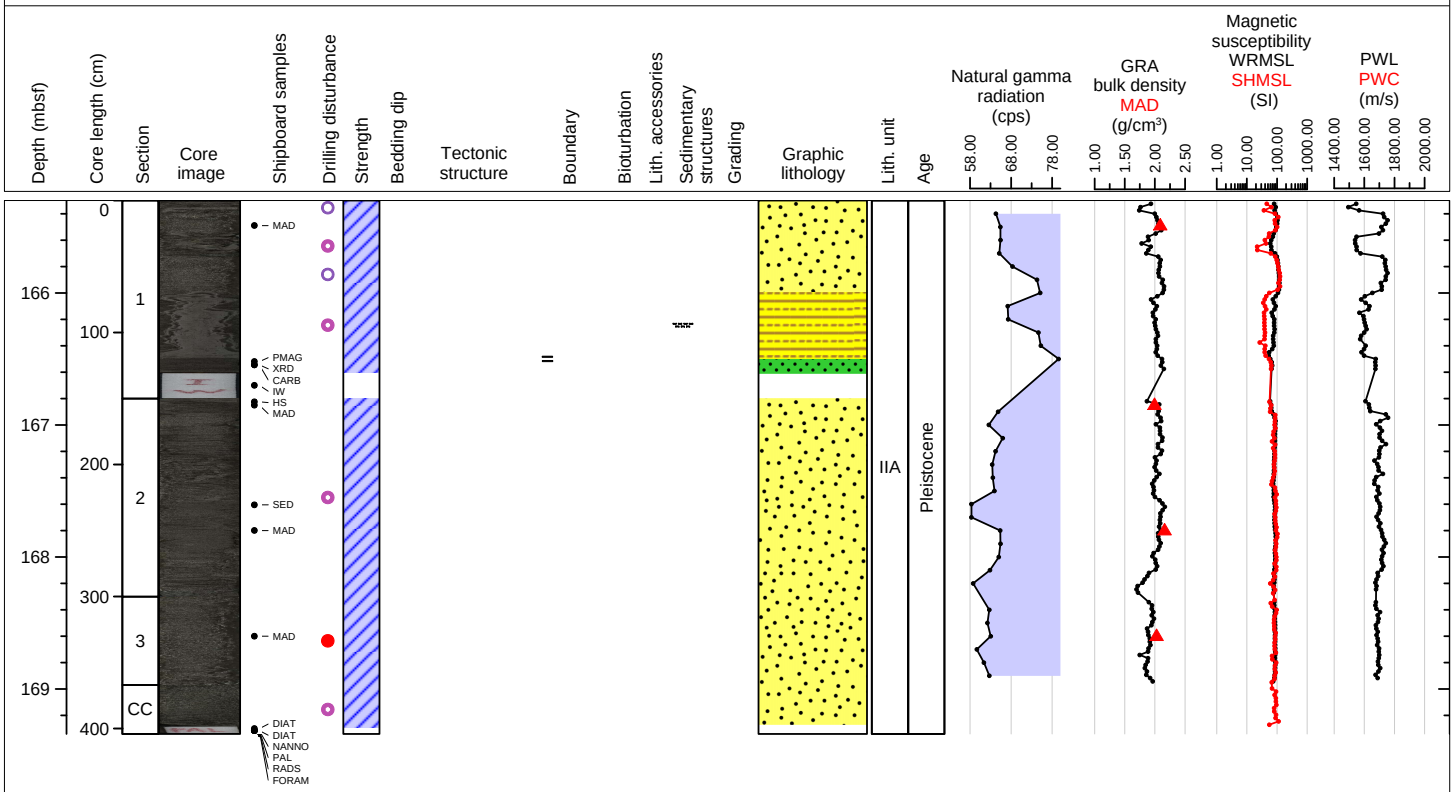
Hole 362-U1480F Core 12F, Interval 160.6-165.07 m (CSF-A)

Thin-bedded, normally-grading, parallel-laminated, dark-gray silty sand is the major lithology in Section 1 to CC. Clay in cm- to dm-thick beds is a minor lithology and alternates with the major lithology in Section 1 and Section 2. Bioturbation is moderate and Planolites is observed at some boundaries between clay and silt in Section 2.



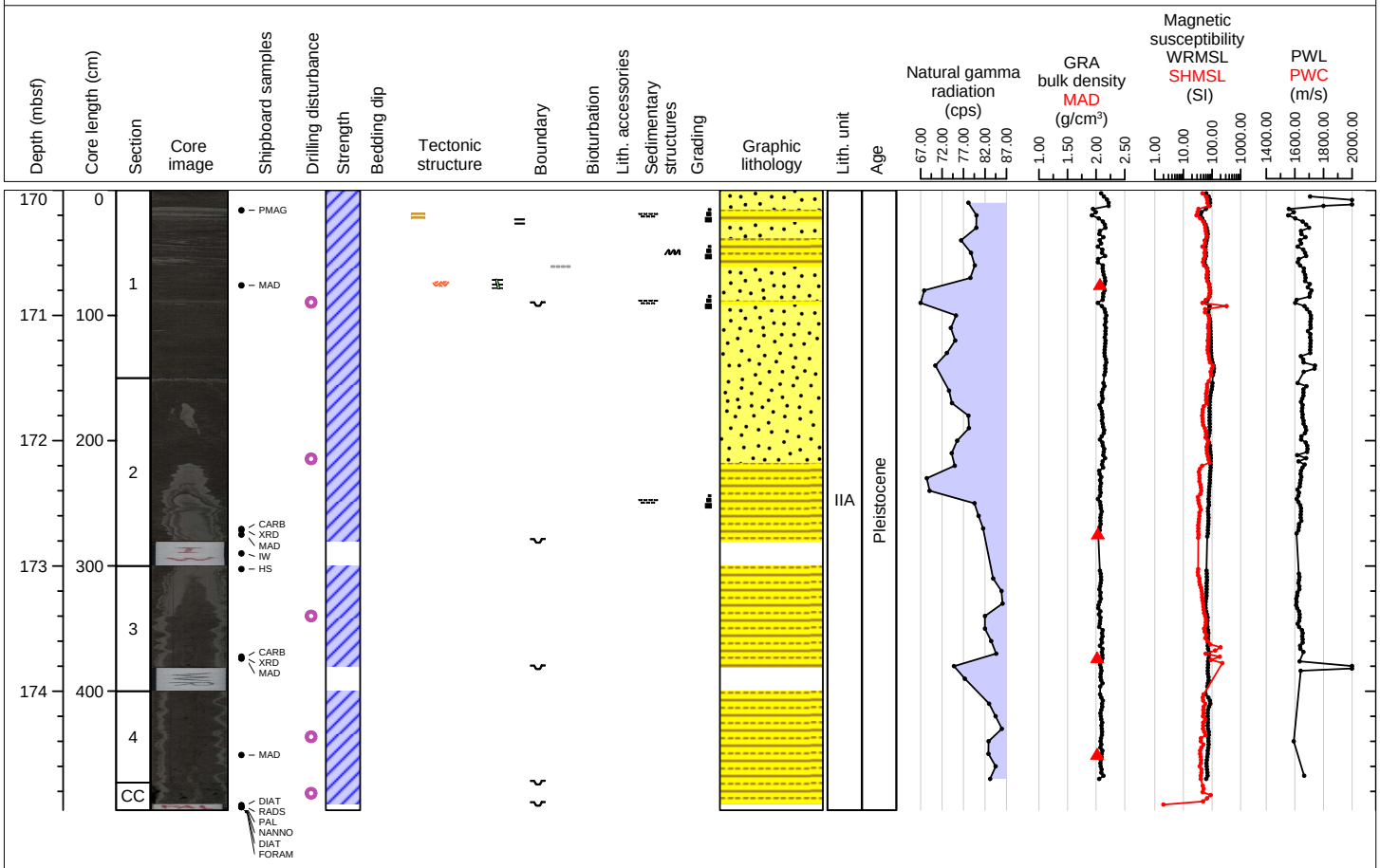
Hole 362-U1480F Core 13F, Interval 165.3-169.34 m (CSF-A)

Core 13 consists of mostly structureless, well-sorted, dark-gray, fine-grained silty sand severely disturbed by drilling. Only Section 1 contains a short interval of clay between 70 and 120 cm that also contains strongly deformed planar-laminated beds of silt. Lowermost part is 11 cm thick structureless silt.



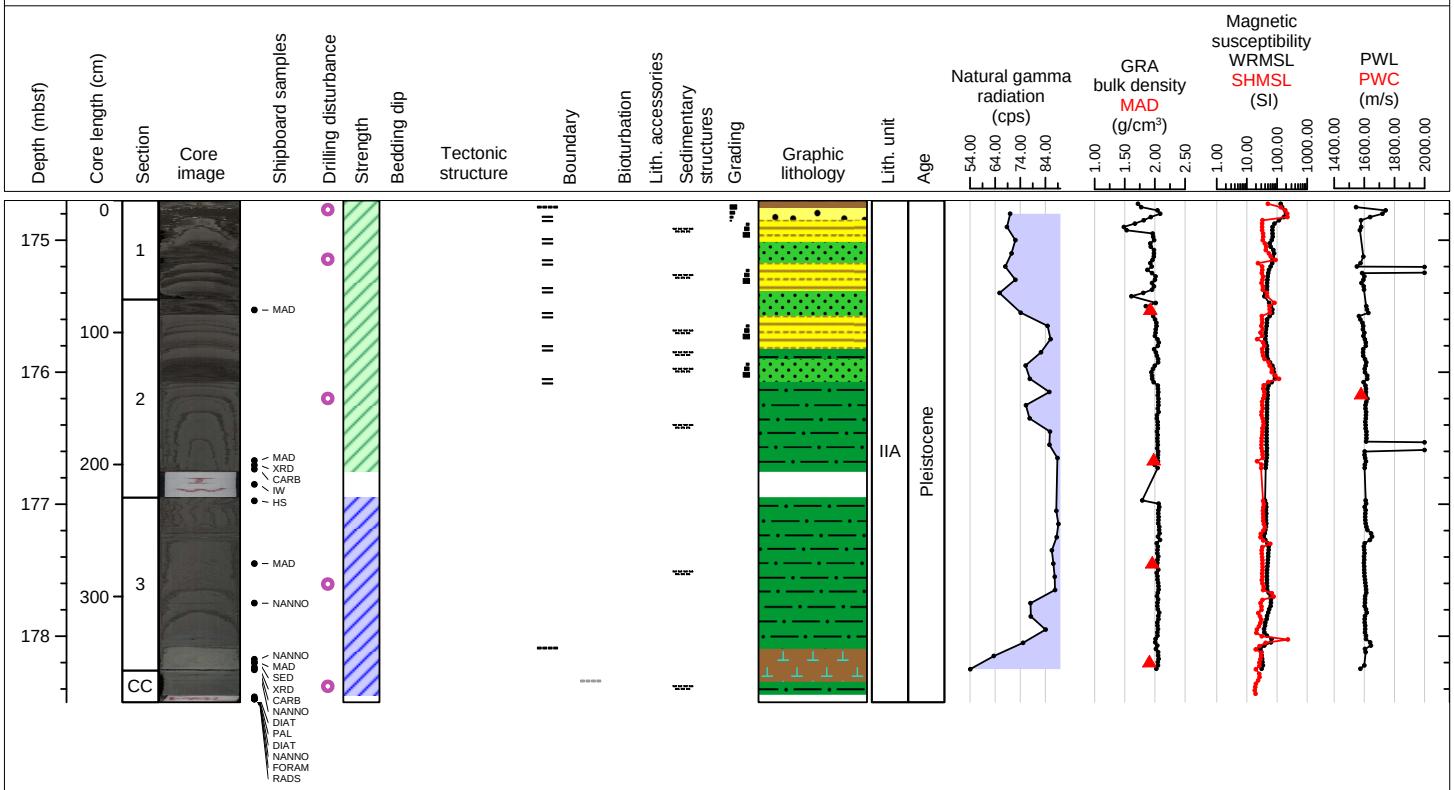
Hole 362-U1480F Core 14F, Interval 170.0-174.95 m (CSF-A)

Dark-gray sandy silt is the major lithology from Section 1 to middle of Section 2. Clay in cm- to dm-thick beds is minor lithology and alternates frequently with the major lithology. Woody fragments are rare. From middle of Section 2 to CC, the dominant lithology is poorly-sorted sand and silt with clay and alternation of mm- to cm-size layers severely deformed by piston coring. Woody fragments are common.



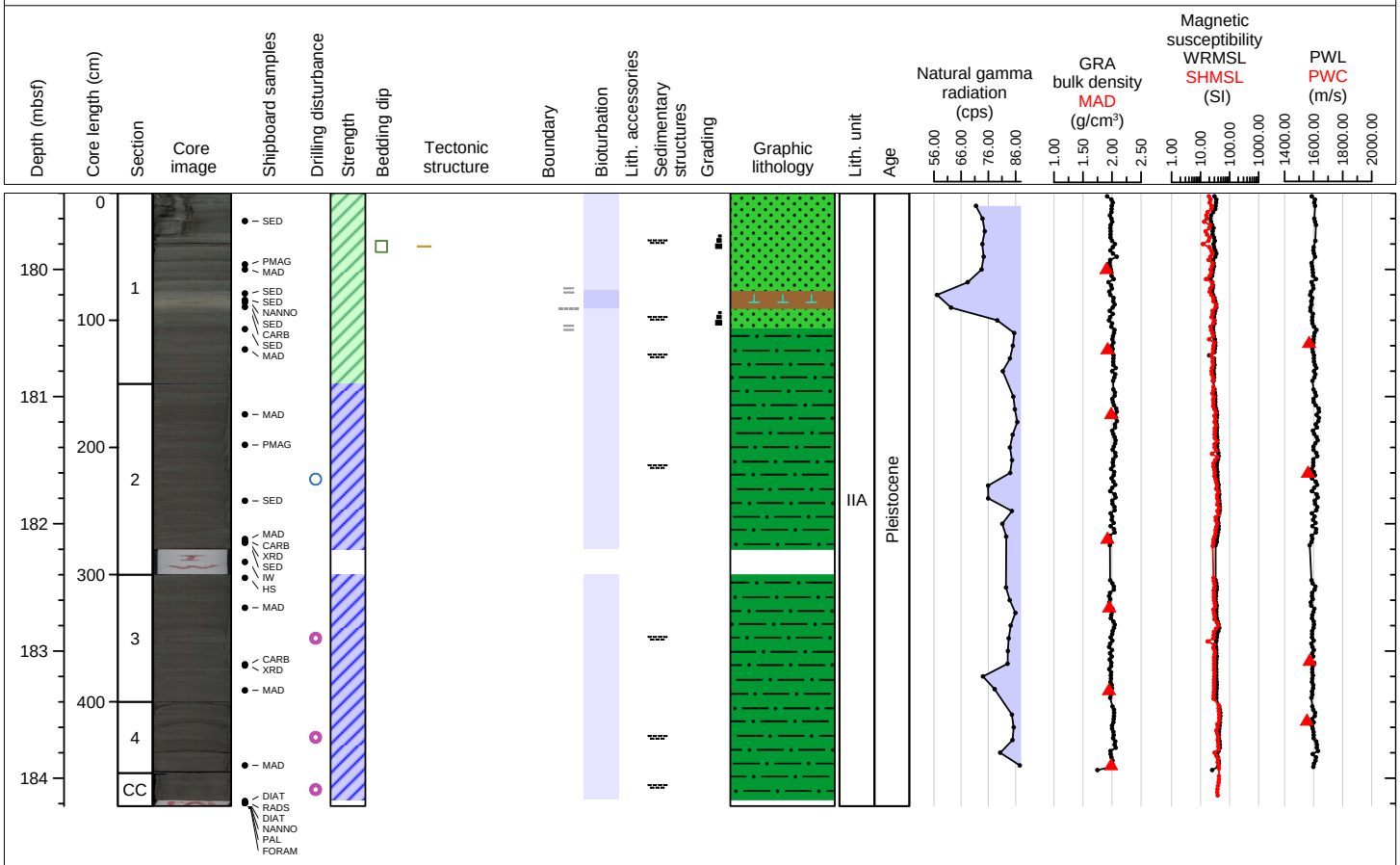
Hole 362-U1480F Core 15F, Interval 174.7-178.5 m (CSF-A)

The core shows alternating silt and clay beds (thickness of silt beds ranges from lamina to medium) with severe coring disturbance. Silt beds are either moderately sorted with clays (medium- to thin-bedded) or well sorted (lamina to thin beds). Calcareous (nannofossil) clay (greenish clay layer) at 178.09-178.34 cm with a sharp upper boundary and gradational lower boundary.



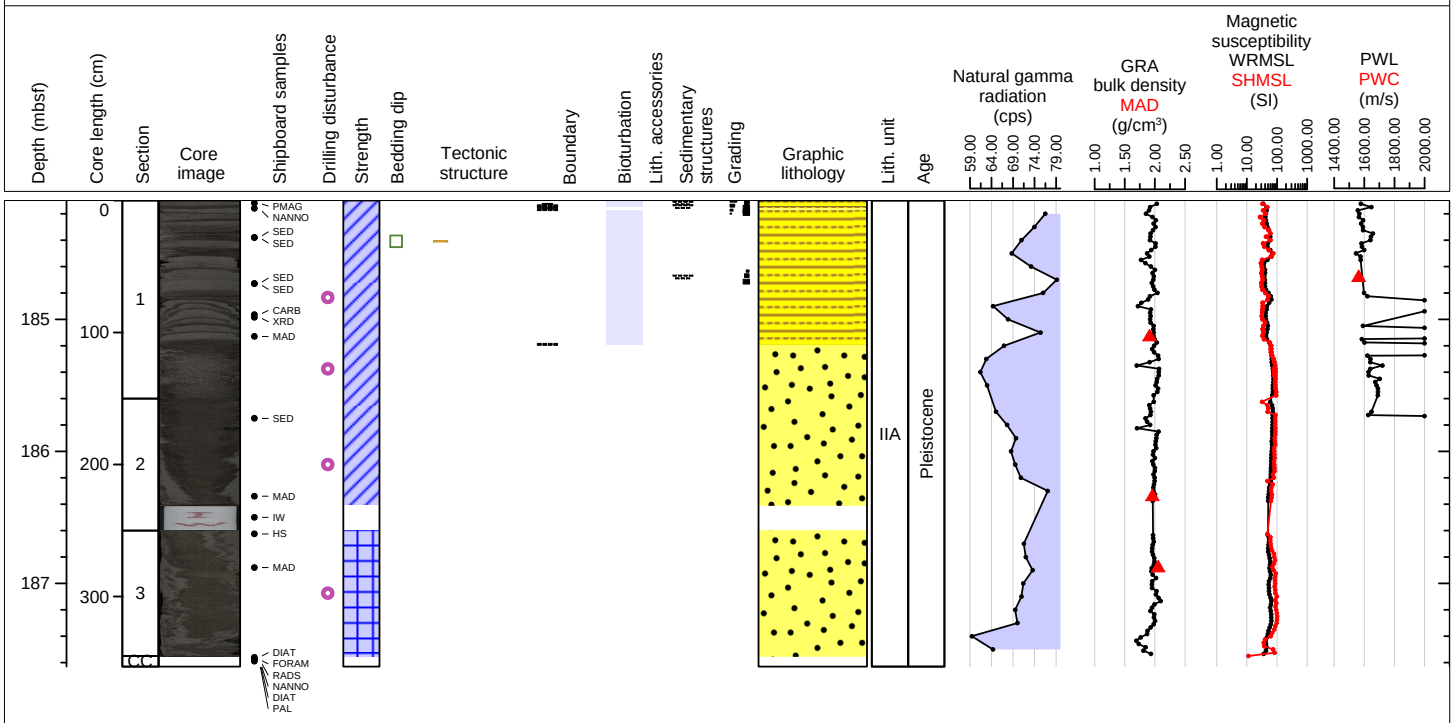
Hole 362-U1480F Core 16F, Interval 179.4-184.22 m (CSF-A)

The core shows well-laminated clays and silty clay. Several silt lamina and very thin beds. Distinct light-colour calcareous clay interval in Section 1, 76.5-91 cm.



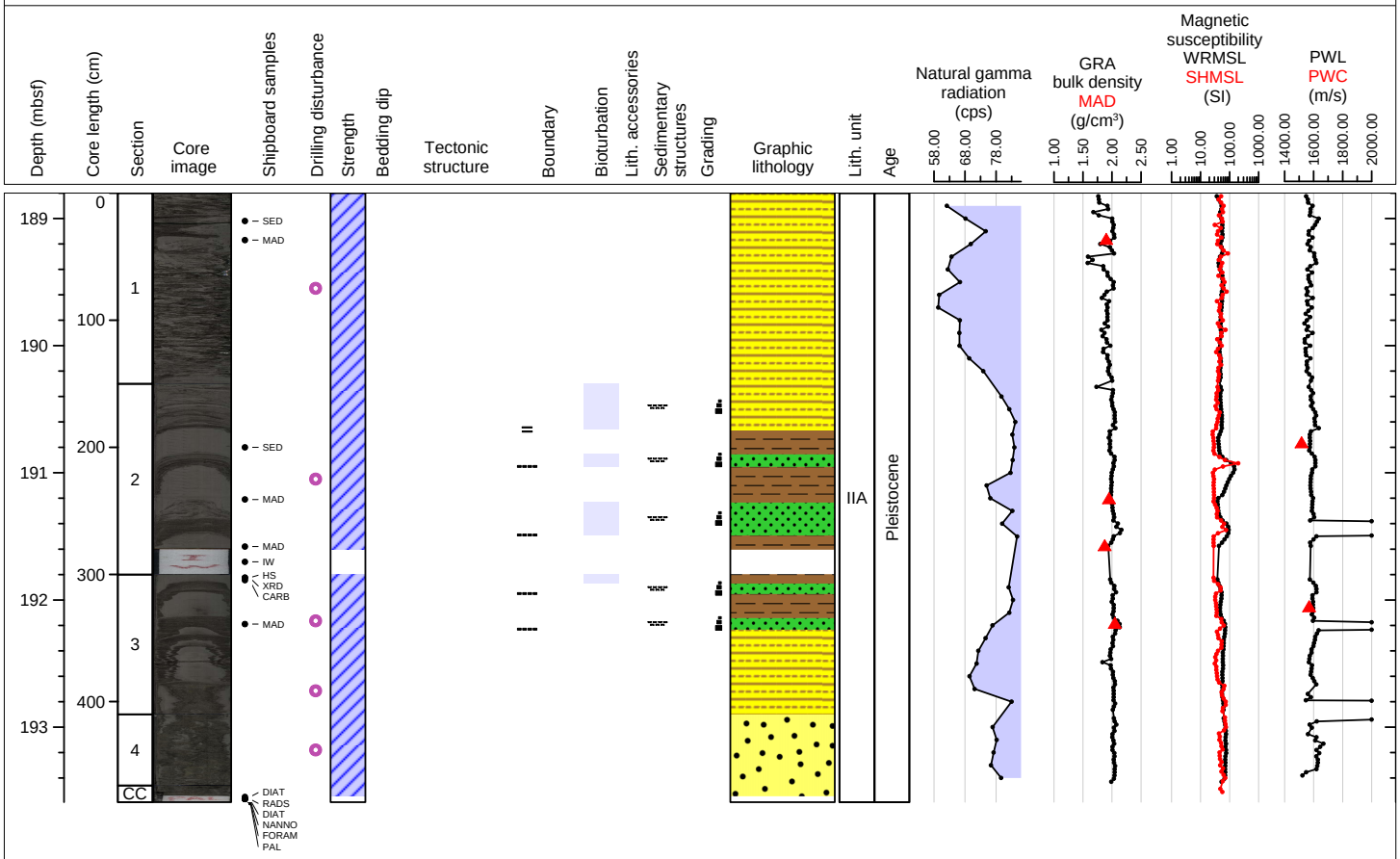
Hole 362-U1480F Core 17F, Interval 184.1-187.63 m (CSF-A)

The upper portion of the core is well preserved and shows alternating thin-bedded clays and silts to fine-grained sands. Severe coring disturbance starts at Section 1, 75 cm and overprints original bedding from sections 2 to 3. A 0.25 cm-thick calcareous clay layer occurs in Section 1, 4 cm. Lithology similar to the one seen in Core 16, Section 1, 85 cm.



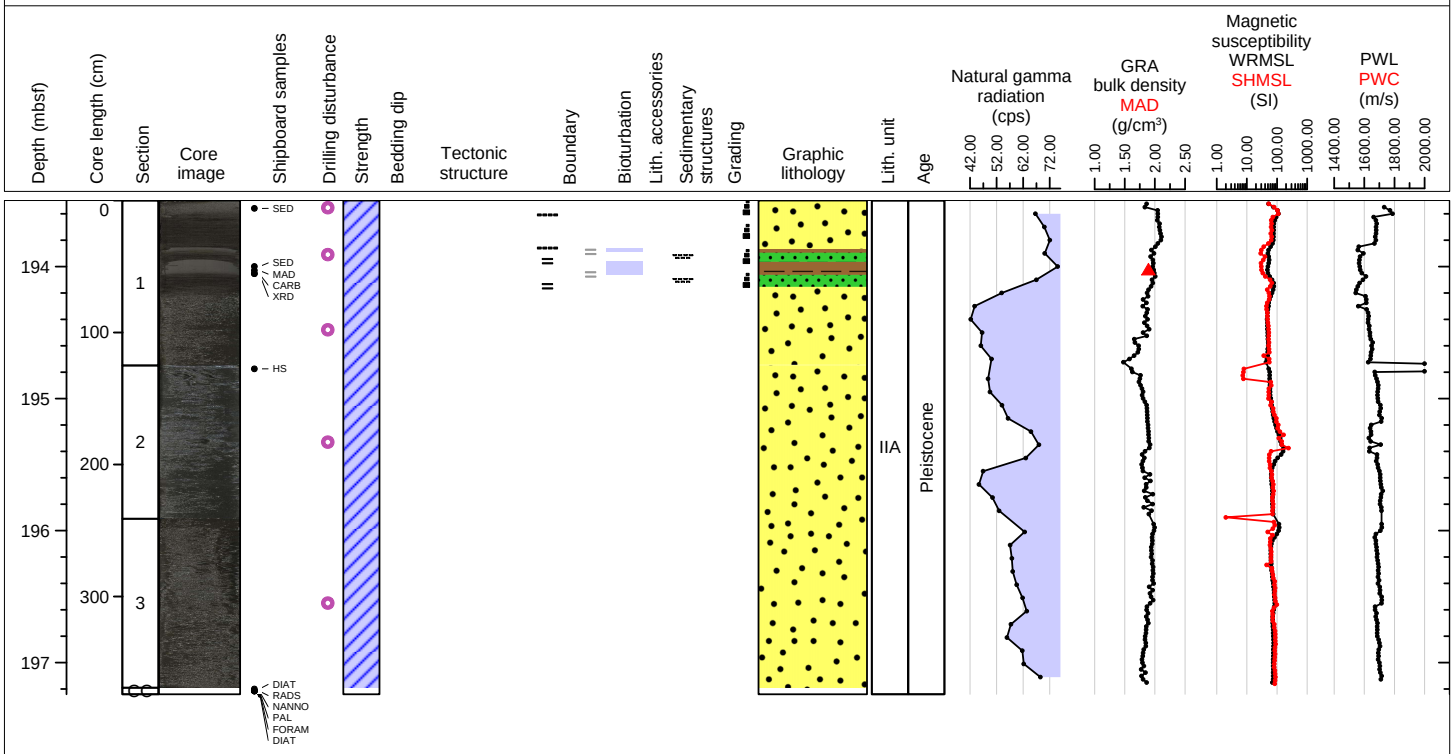
Hole 362-U1480F Core 18F, Interval 188.8-193.59 m (CSF-A)

Section 1 is dominated by clay, sections 2-3 shows alternating sand and mud layers, and sections 4-CC are dominated by fine-grained sand. The core shows severe coring disturbance in section 1, 3-CC. Although drilling disturbance remains severe in Section 2 and Section 3, 0-43 cm, it is possible to identify medium-bedded, normally-graded, moderately sorted fine-grained sand that grades into clays.



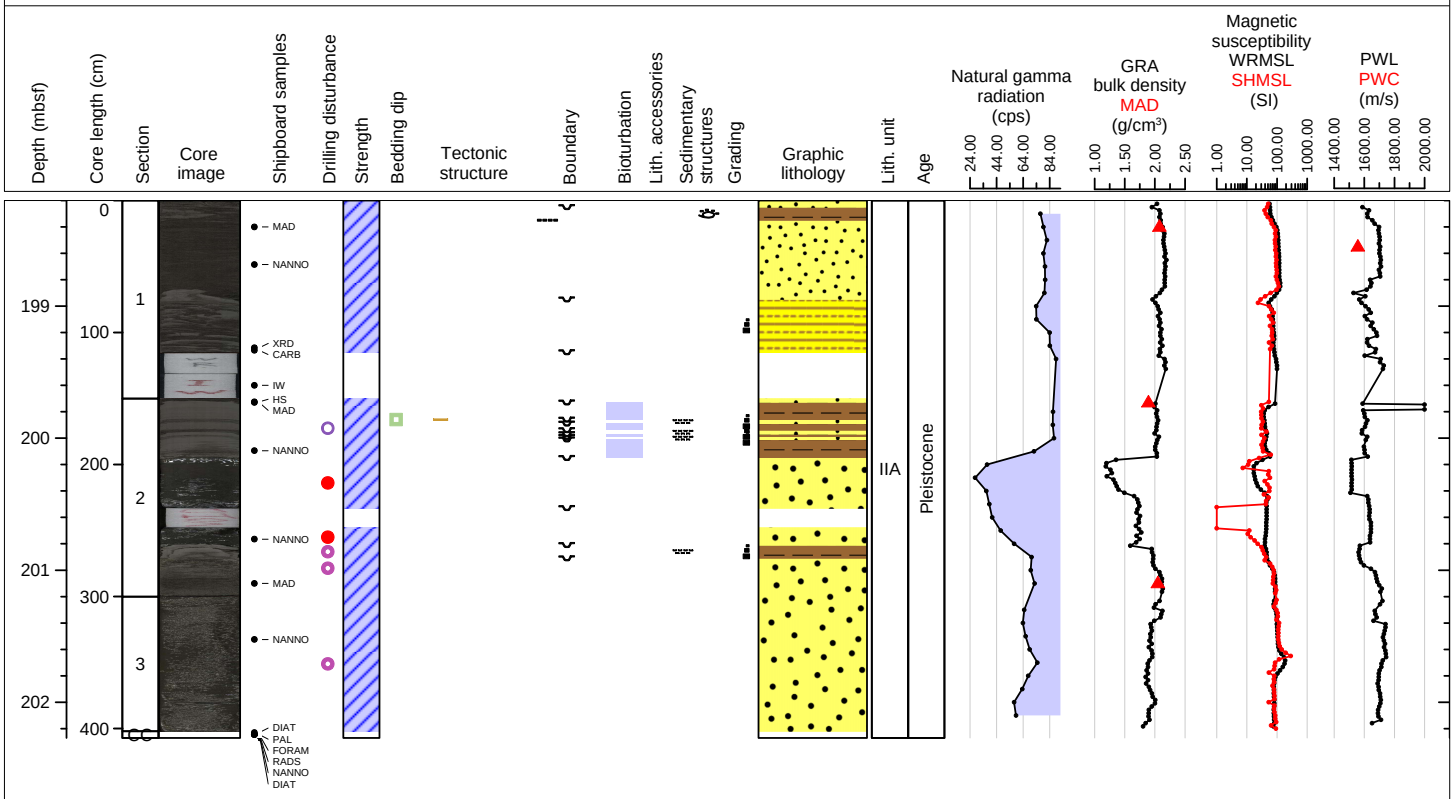
Hole 362-U1480F Core 19F, Interval 193.5-197.24 m (CSF-A)

The core is dominated by structureless fine-grained, sand apart from Section 1, 65, which shows stacked thin- to medium-bedded, fine-grained sand that grades into silt or clay.



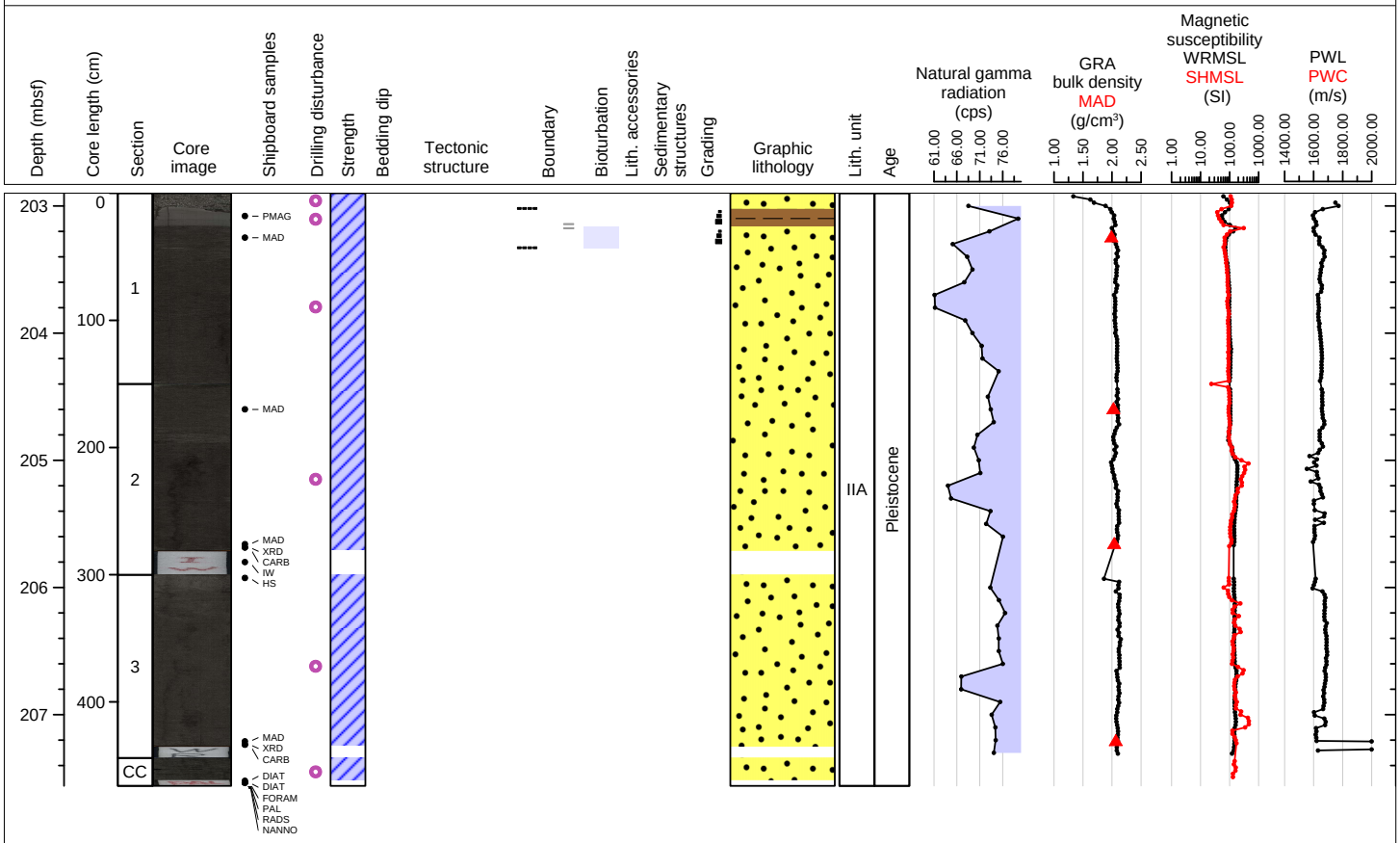
Hole 362-U1480F Core 20F, Interval 198.2-202.27 m (CSF-A)

Core 20 is dominated by structureless fine-grained sand, that shows stacked thin- to medium-bedded, fine-grained sand that grades into silt or clay. Planolites occurs some boundaries between clay and silt in Section 2.



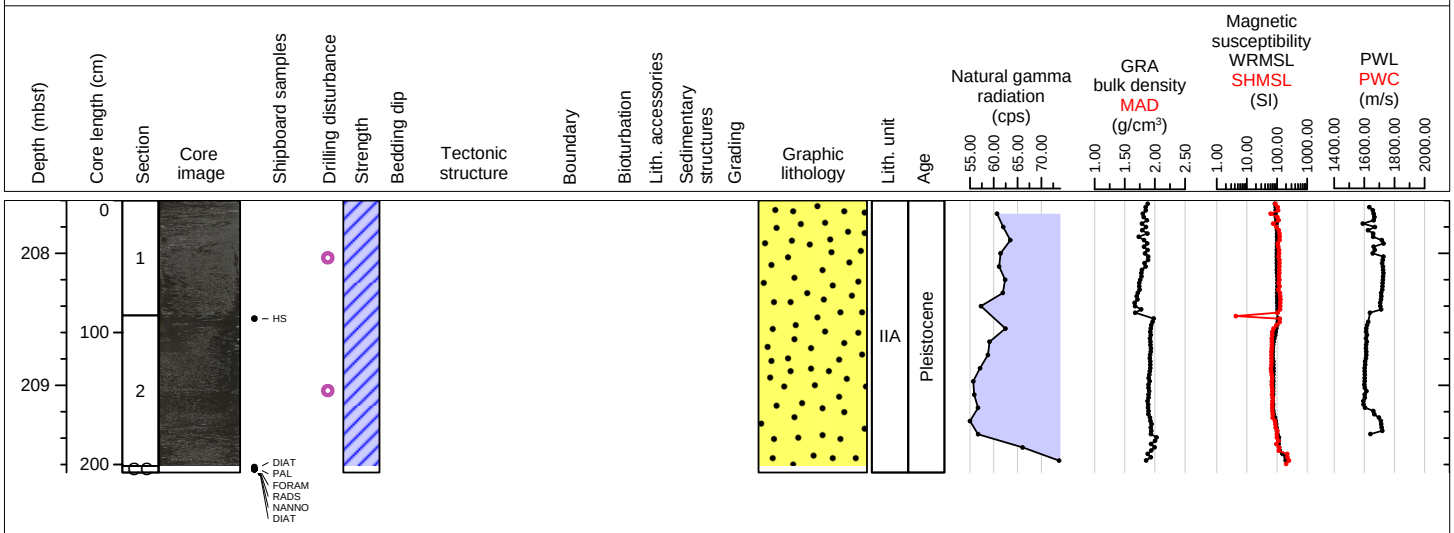
Hole 362-U1480F Core 21F, Interval 202.9-207.56 m (CSF-A)

Core lithology is dominated by fine-grained sand with silt that is severely disturbed. Section 1, 0-43 cm, shows preserved beds of alternating medium-bedded, normally-graded sand and mud layers.



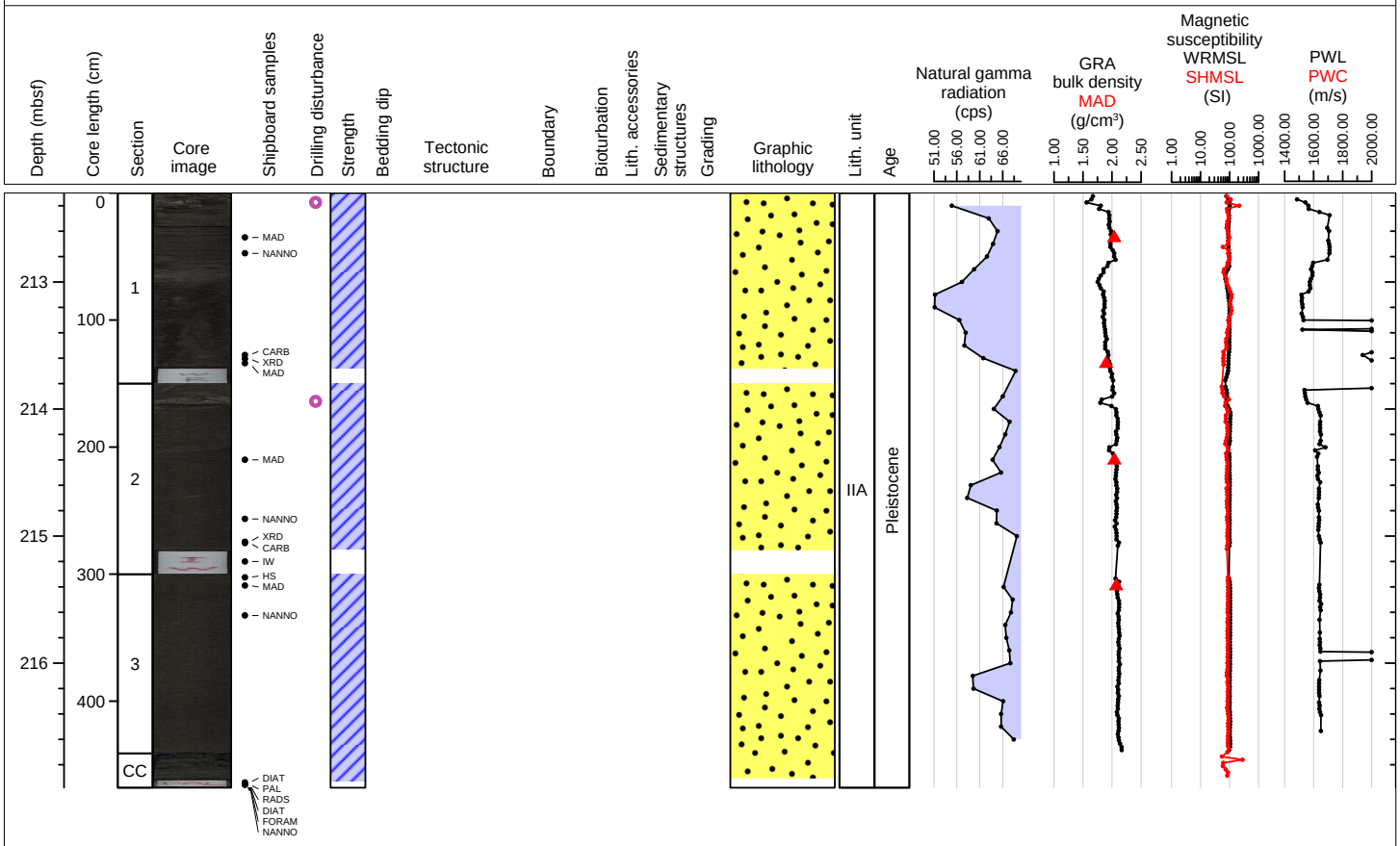
Hole 362-U1480F Core 22F, Interval 207.6-209.66 m (CSF-A)

The core shows homogeneous, moderately-sorted, structureless fine-grained sand. Presence of mud clast in the upper part of Section 1.



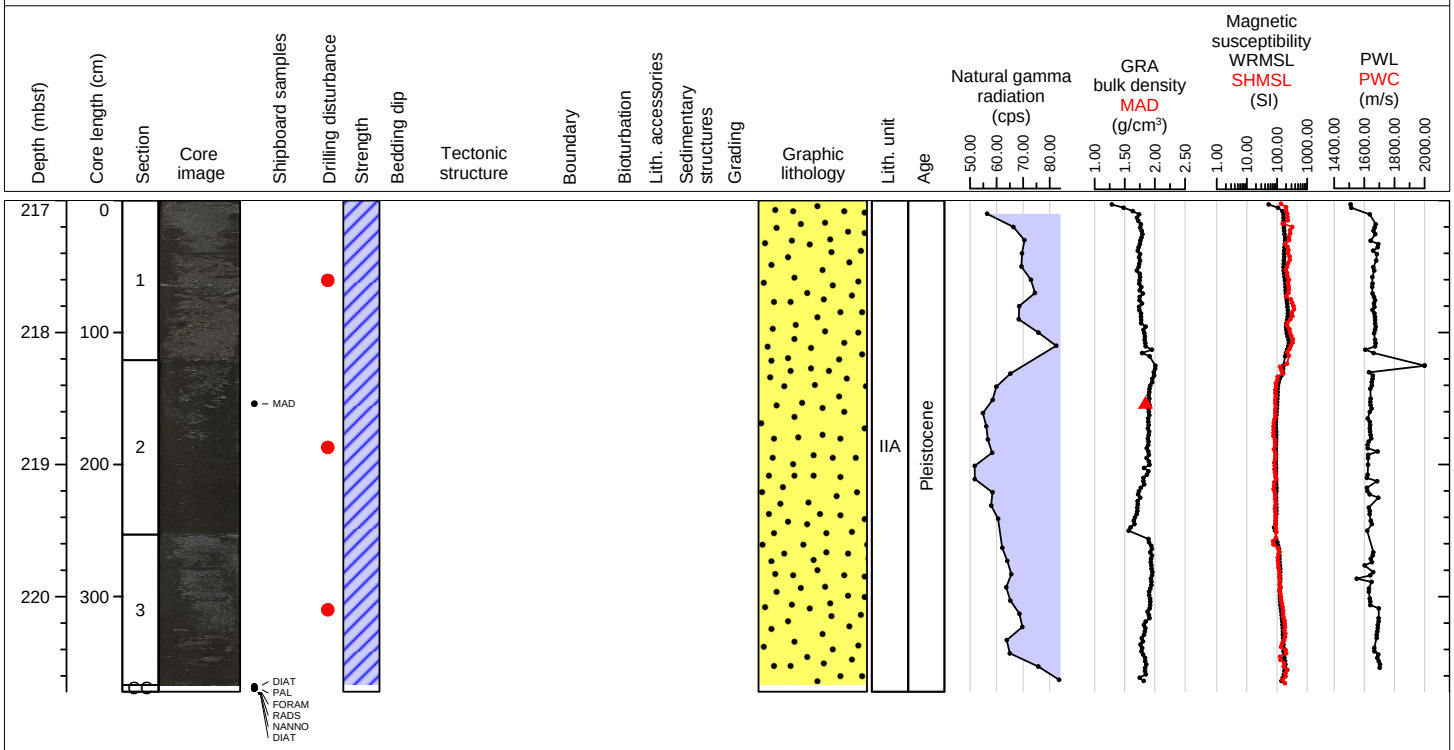
Hole 362-U1480F Core 23F, Interval 212.3-216.98 m (CSF-A)

The core is dominated by structureless, dark-gray fine-grained sand homogenized by severe drilling disturbance.



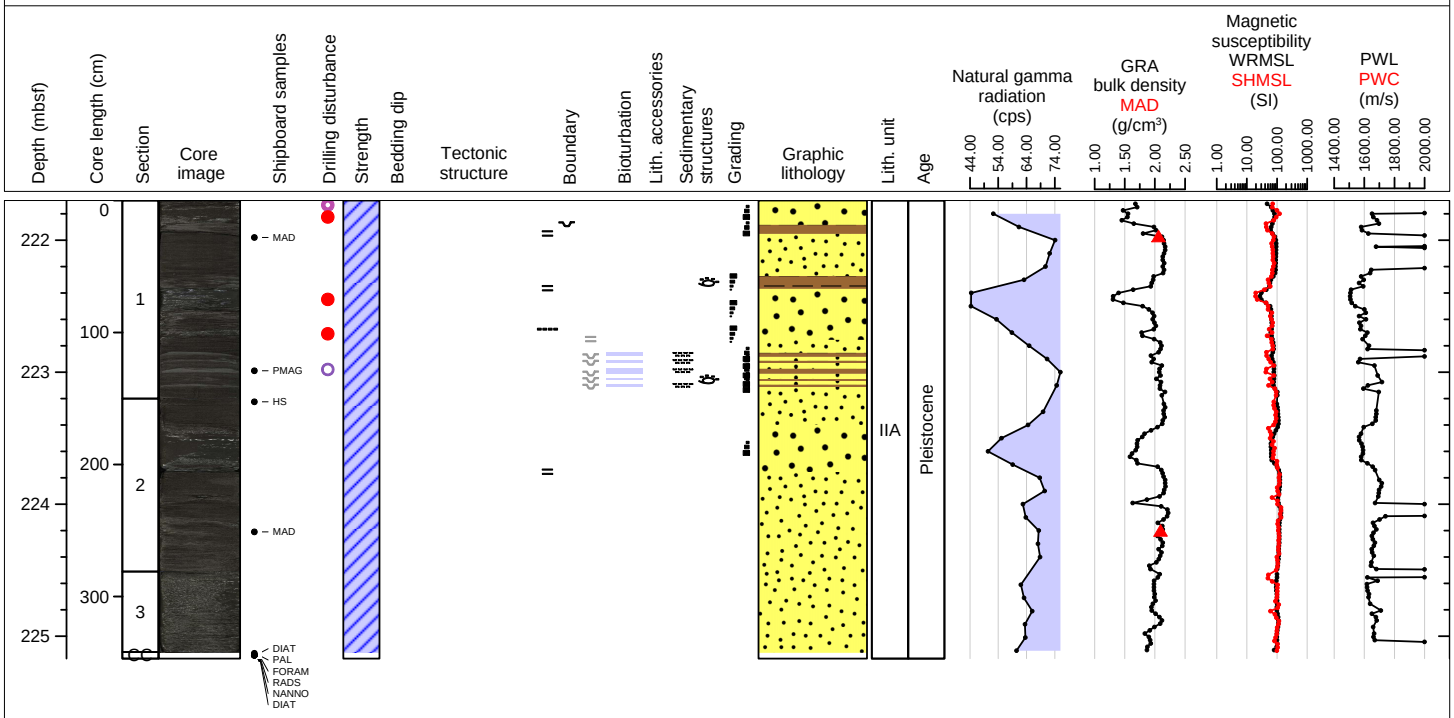
Hole 362-U1480F Core 24F, Interval 217.0-220.72 m (CSF-A)

The core is dominated by structureless, dark-gray fine-grained where structures are destroyed by drilling disturbance.



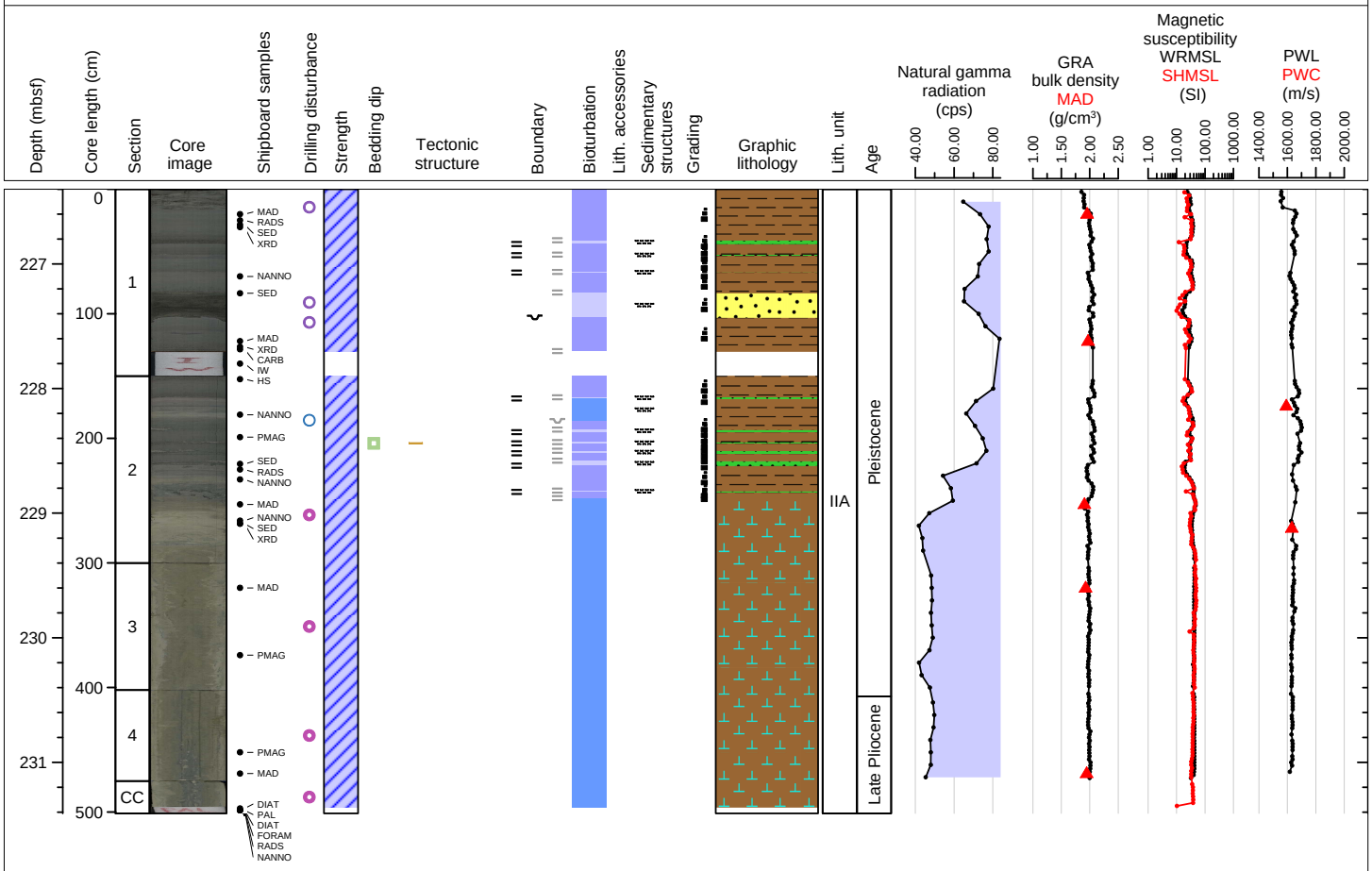
Hole 362-U1480F Core 25F, Interval 221.7-225.17 m (CSF-A)

Dark-gray very fine-grained sand is the major lithology from Section 1 to CC. Alternating cm- to dm-thick beds of clay and fine-grained sand are a minor lithology. Some fine-grained sand layers show inverse grading. Planolites occurs at some boundaries between clay and silt in Section 1.



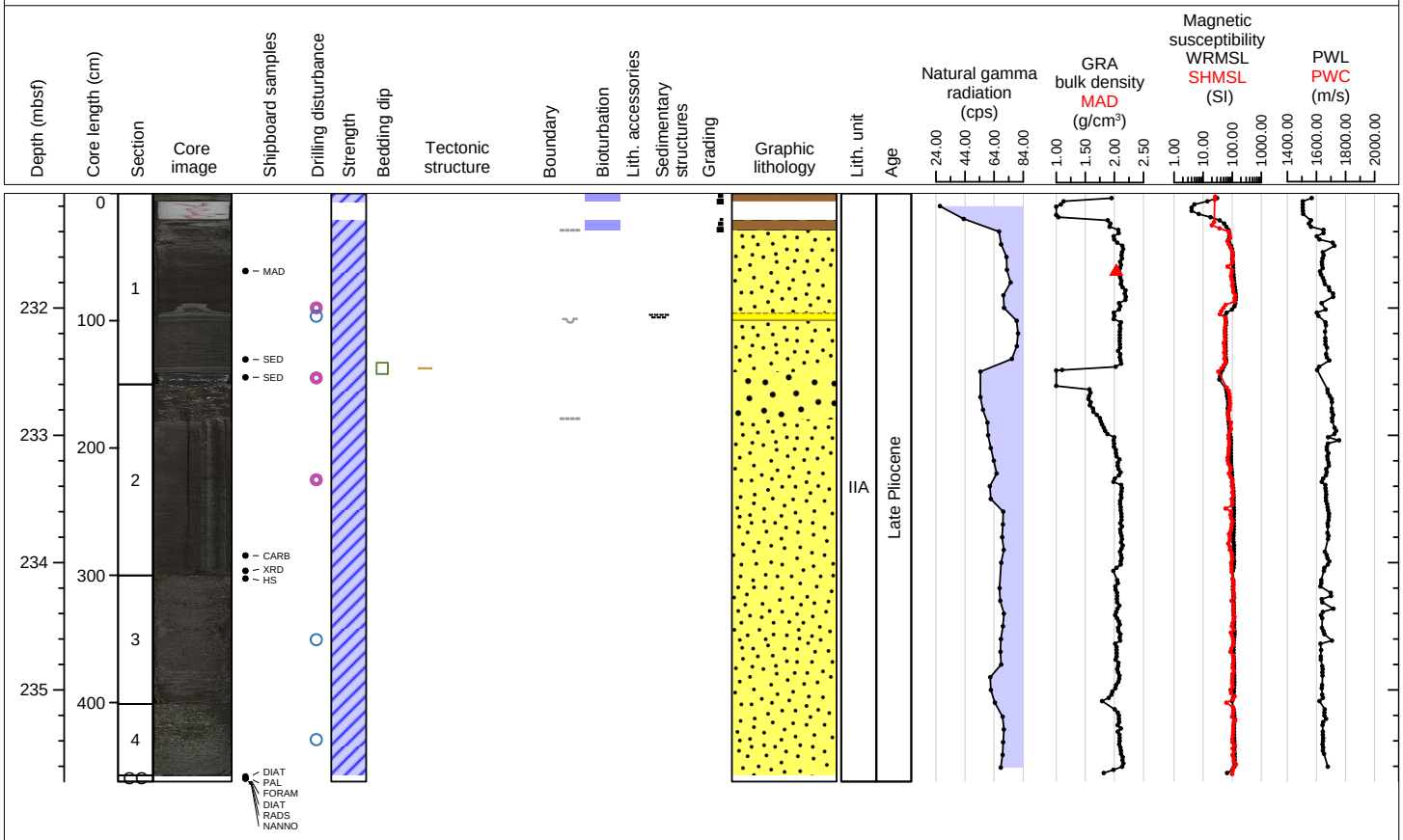
Hole 362-U1480F Core 26F, Interval 226.4-231.41 m (CSF-A)

Upper part of Core 26 contains dark greenish-gray clay (major lithology) with intercalated cm-sized silt layers (minor lithology). Lower part contains intensely bioturbated light greenish-gray calcareous clay (major lithology) with intercalated silt beds (minor lithology) that has undergone severe drilling disturbance.



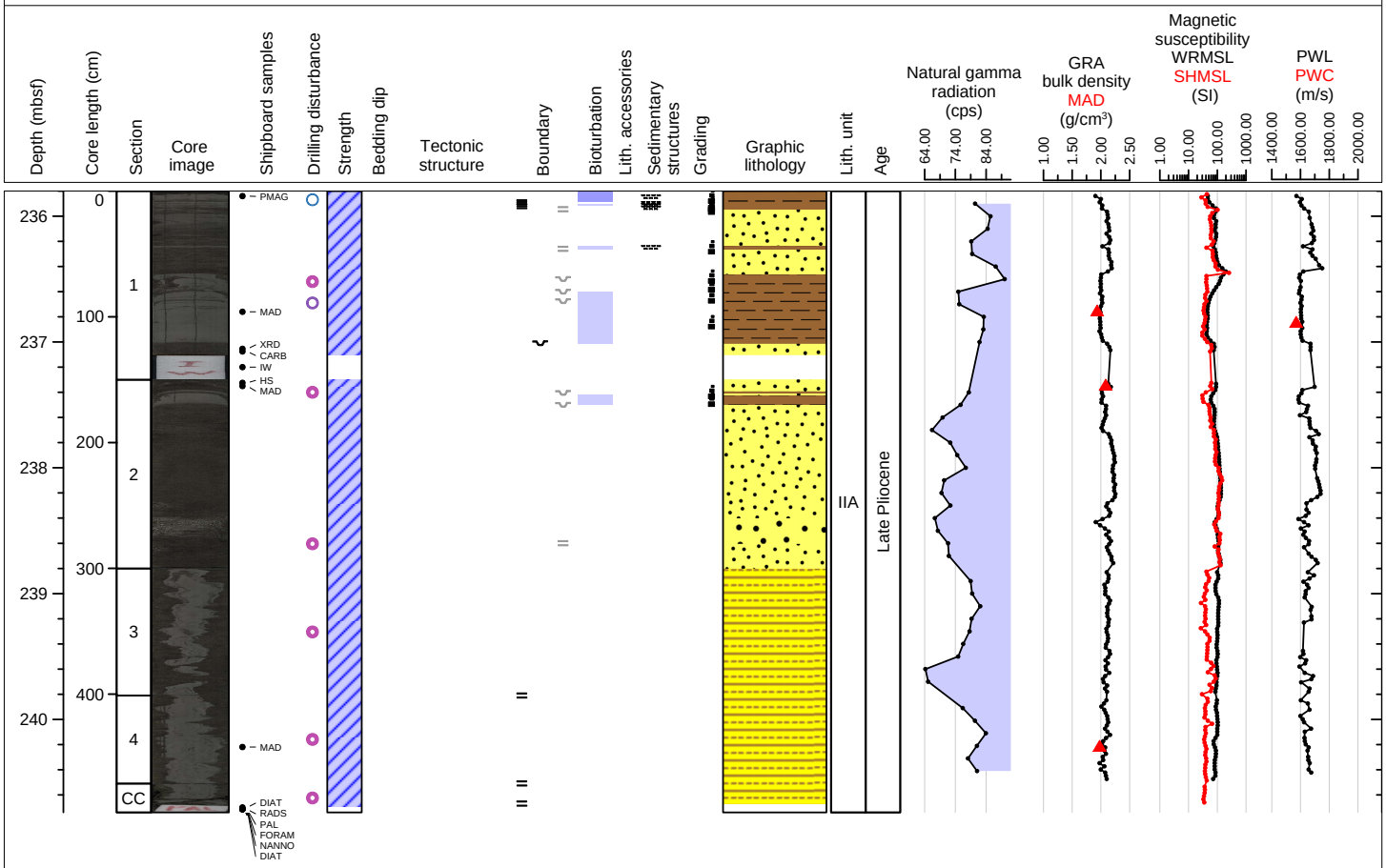
Hole 362-U1480F Core 27F, Interval 231.1-235.72 m (CSF-A)

Core lithology is dominated by very fine-grained sand layers with clay, poorly sorted and severely disturbed (upper part). The very fine-grained sand layers contain intercalations of clay layers (very thin-to thin-bedded) between 0-29 cm (1A). Alternating very fine-grained sand and clay layers (Section 1, 93-100 cm) and fine-grained sand layers (Section 1, 140-150 cm, and Section 2, 0-29 cm).



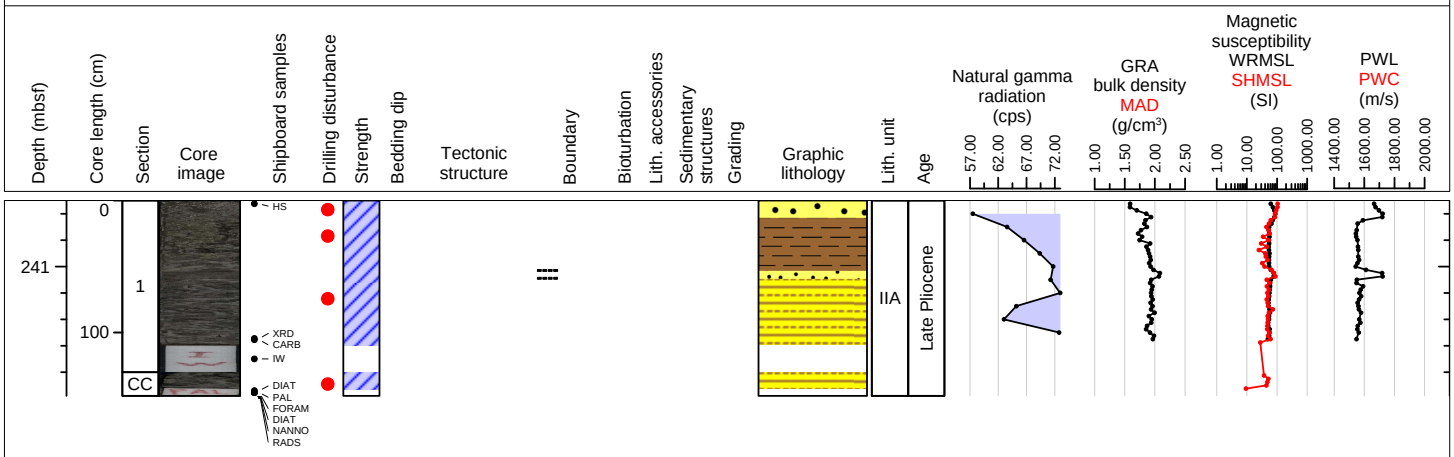
Hole 362-U1480F Core 28F, Interval 235.8-240.74 m (CSF-A)

Dark-gray very fine-grained sand is the major lithology in Section 1 to CC. There are alternations of cm- to dm-thick beds of clay; fine-grained sand is a minor lithology Planolites is observed at some boundaries between clay and silt in sections 1 and 2. Alternating layer of clay and fine-grained sand are present. Drilling disturbance ranges from slight to severe in the upper core but becomes severe in the lower core.

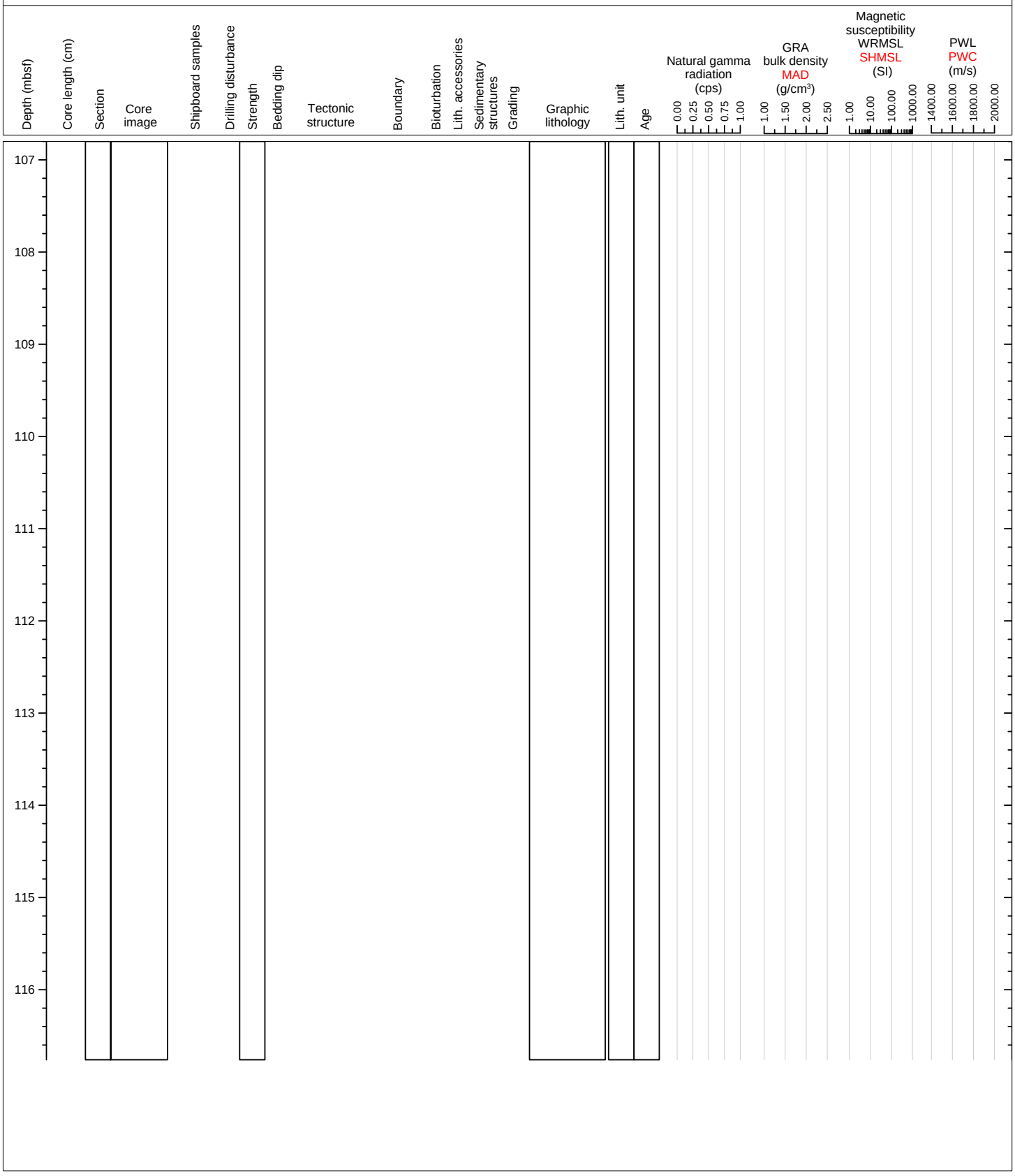


Hole 362-U1480F Core 29F, Interval 240.5-241.98 m (CSF-A)

Core lithology is dominated by alternating sand/mud layers where most structures are destroyed by severe drilling disturbance. In Section 1, there is a 13 cm-thick fine-grained sand layer at the top; a 13 to 53 cm a clay layer 53 to 59 cm , and a very fine-grained sand layer.

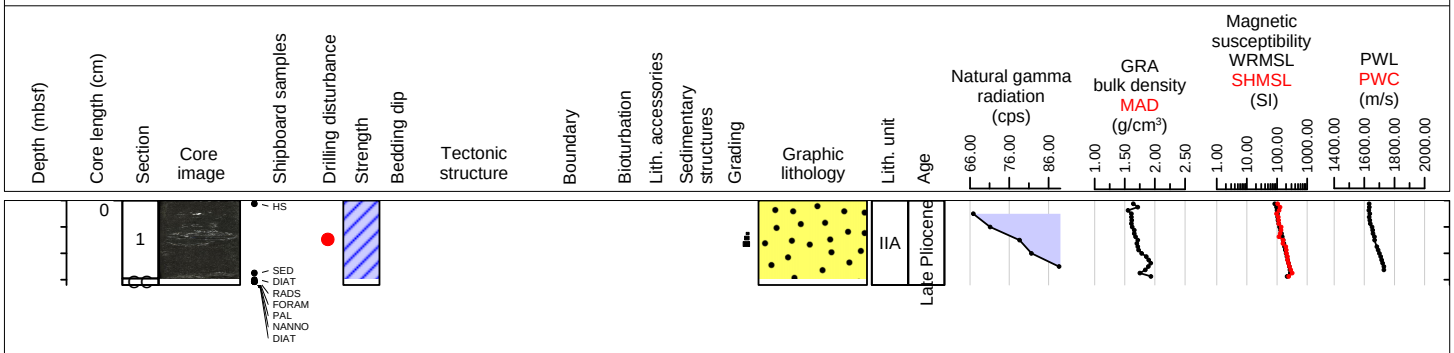


DRILLED INTERVAL Hole 362-U1480F Core 301, Interval 245.2-245.2 m (CSF-A)

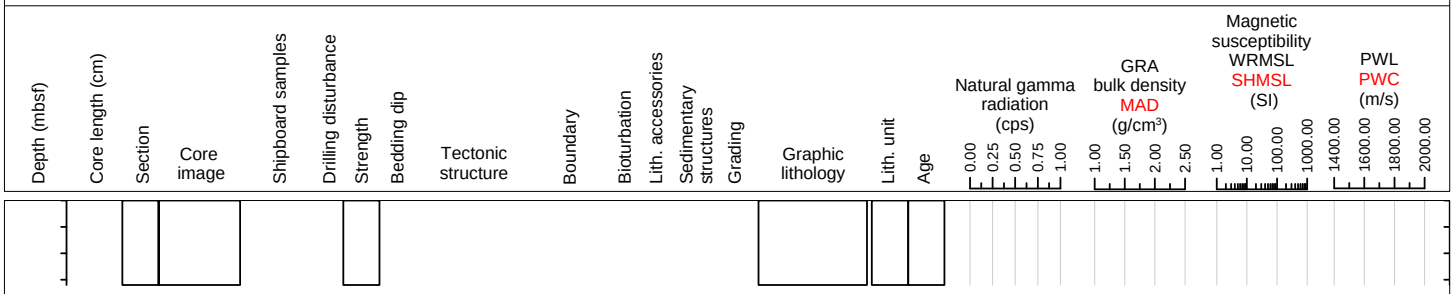


Hole 362-U1480F Core 31F, Interval 250.2-250.84 m (CSF-A)

The core contains normally-graded, fine-grained sand.

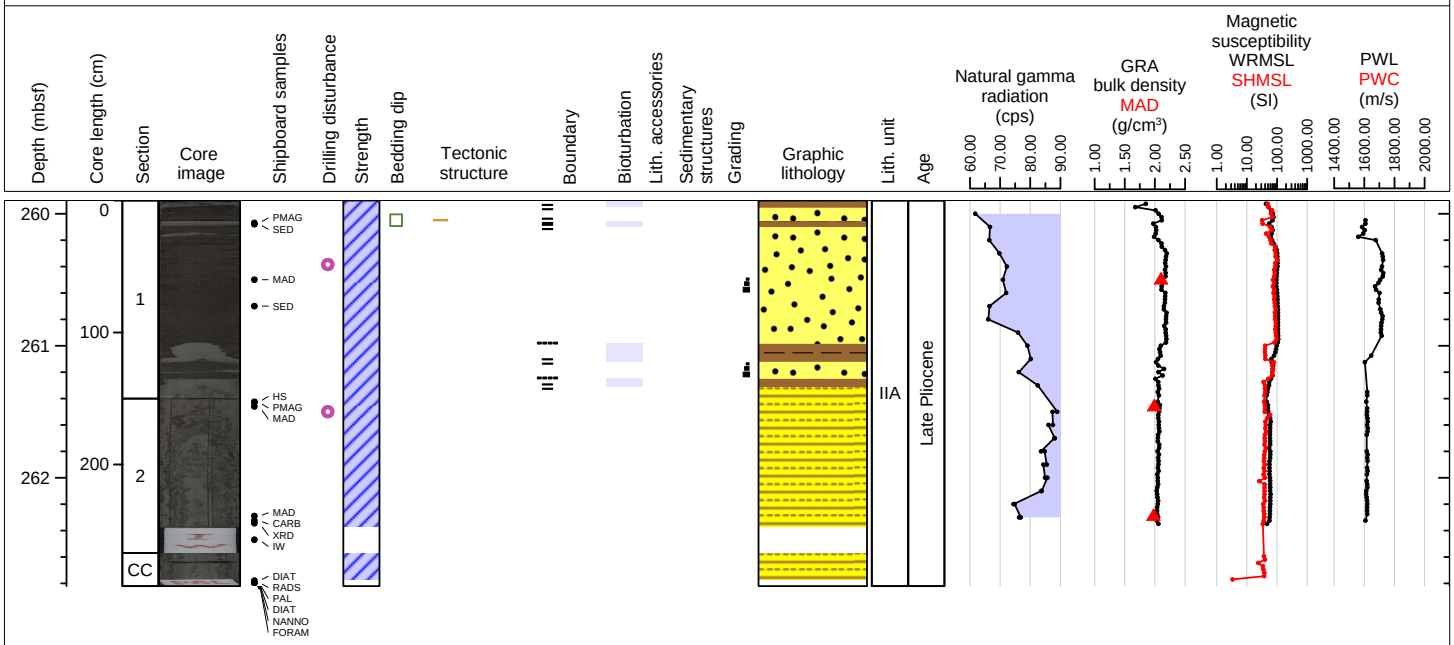


DRILLED INTERVAL Hole 362-U1480F Core 321, Interval 254.9-254.9 m (CSF-A)



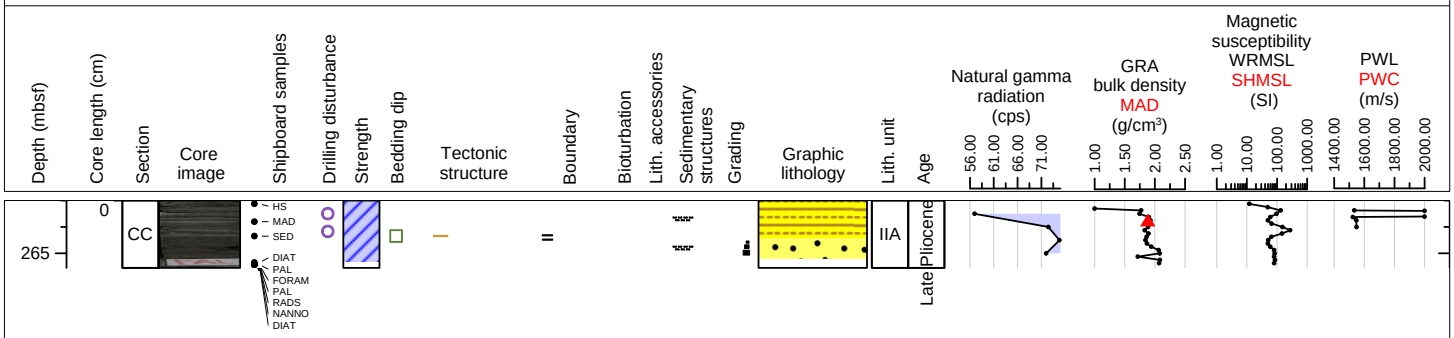
Hole 362-U1480F Core 33F, Interval 259.9-262.82 m (CSF-A)

The core is severely disturbed at the base (Section 2 - CC) where the dominant lithology is alternating clay and silts. Section 1 has thin- to medium-bedded, fine-grained sand and clay. Sand beds are moderately sorted from fine-grained sand to silt with a planar sharp sub-horizontal basal boundary.



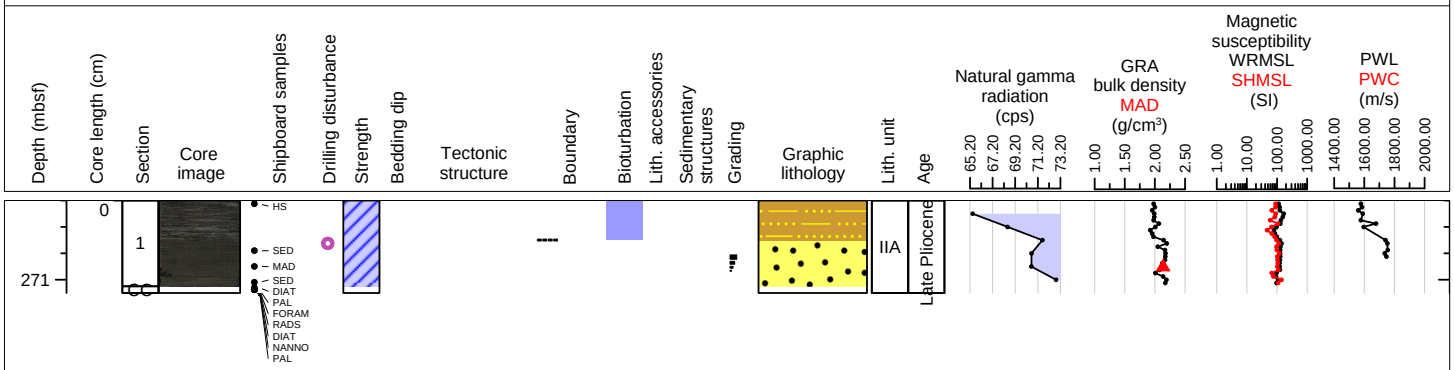
Hole 362-U1480F Core 34X, Interval 264.6-265.11 m (CSF-A)

The core contains two lithological units. From 0 to 28 cm, there is alternating very thin beds of fine-grained sands to silt and clay that are normally graded. From 28 to 44 cm, there is a normally-graded fine-grained sand.



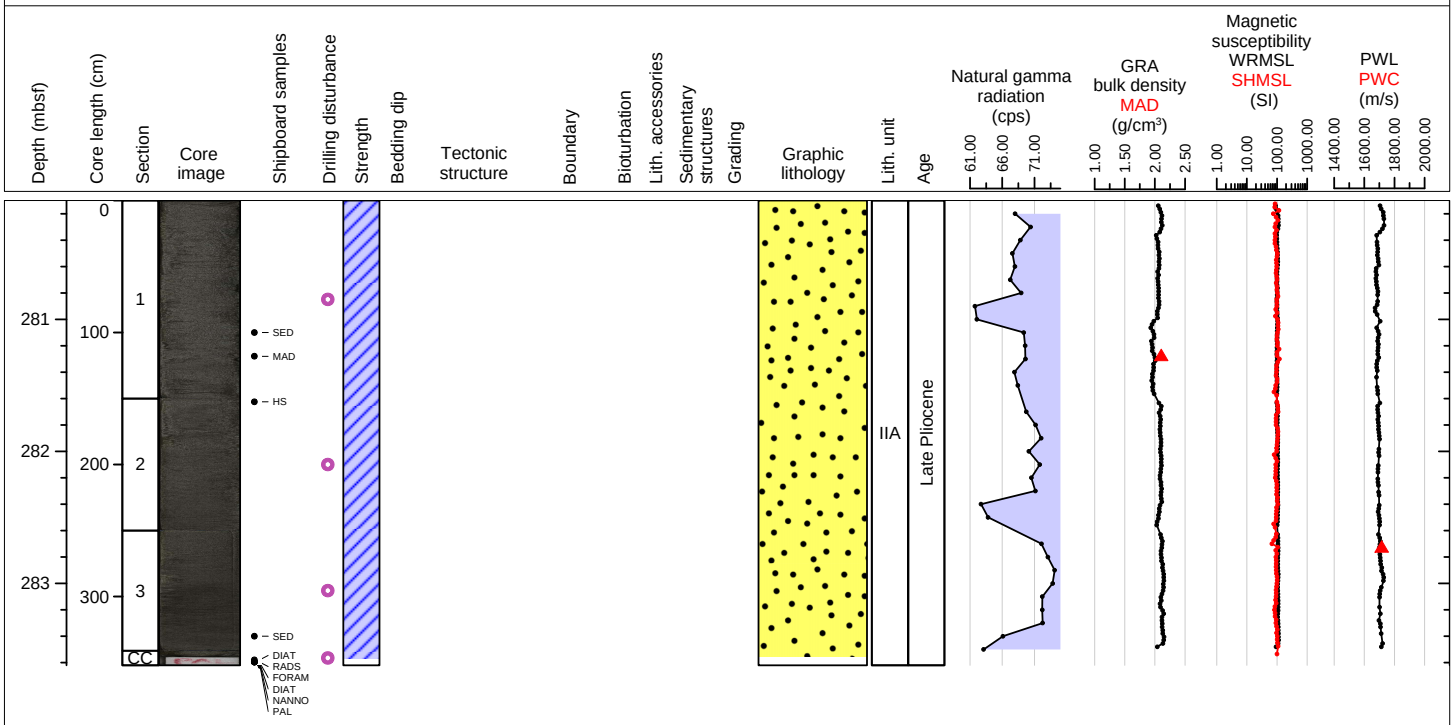
Hole 362-U1480F Core 35X, Interval 270.4-271.1 m (CSF-A)

The core contains two main lithologies. From 0 to 30 cm, there is mixed sand-silt-clay with possible medium-grained sand-filled burrows. From 30 to 65 cm, inversely-graded, structureless, fine- to medium-grained sand.



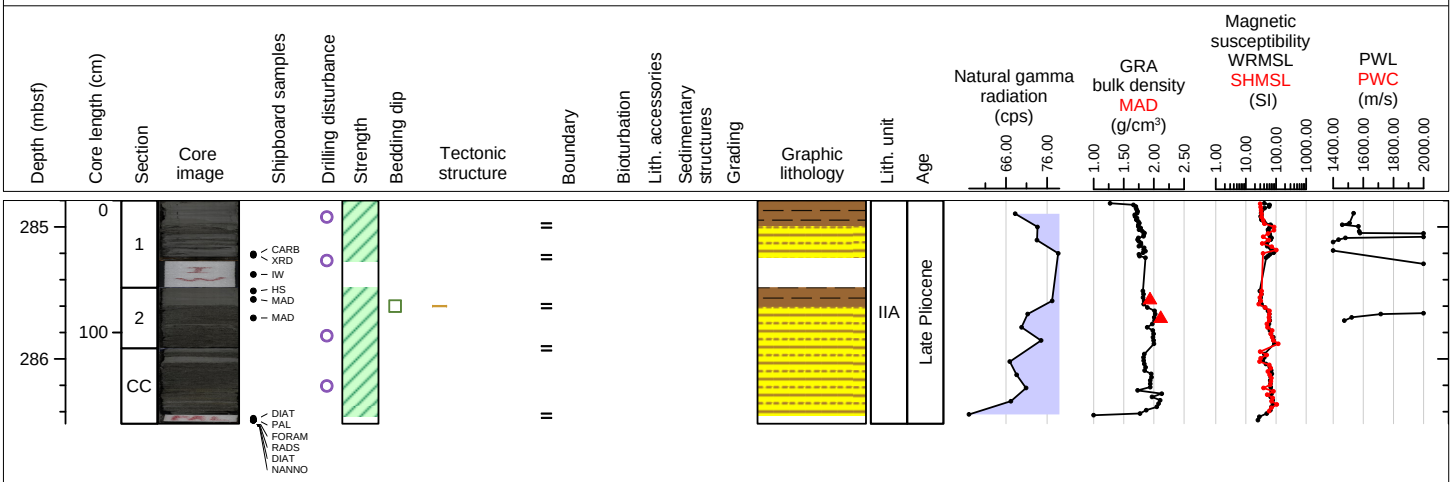
Hole 362-U1480F Core 36F, Interval 280.1-283.62 m (CSF-A)

The core shows homogeneous (structureless) fine-grained sand with silt.

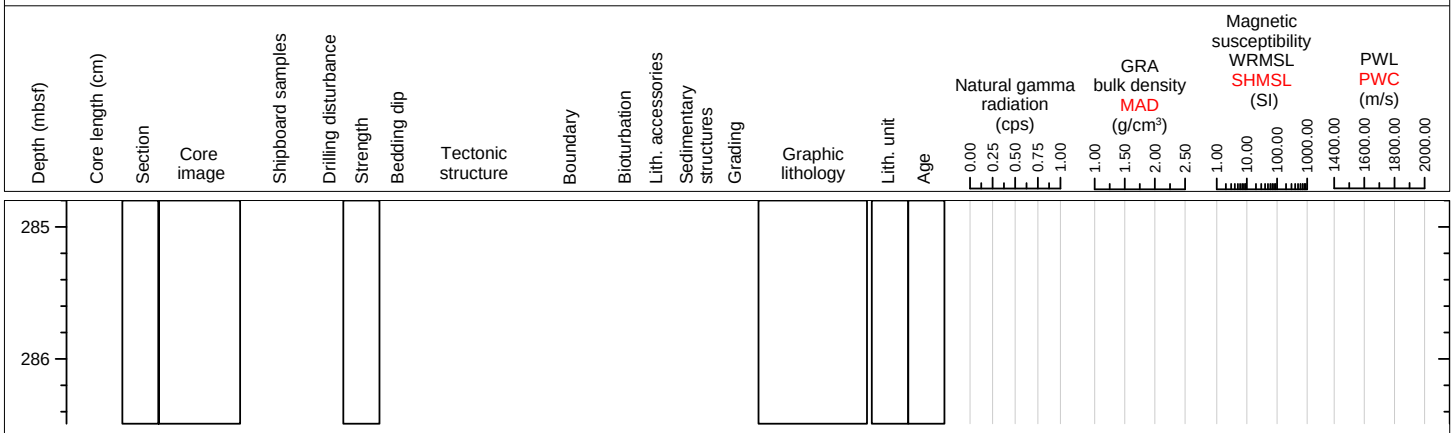


Hole 362-U1480F Core 37X, Interval 284.8-286.49 m (CSF-A)

Mainly alternating very thin- and thin-bedded, gray, structureless, very fine-grained sand and clay. Moderate drilling disturbance.

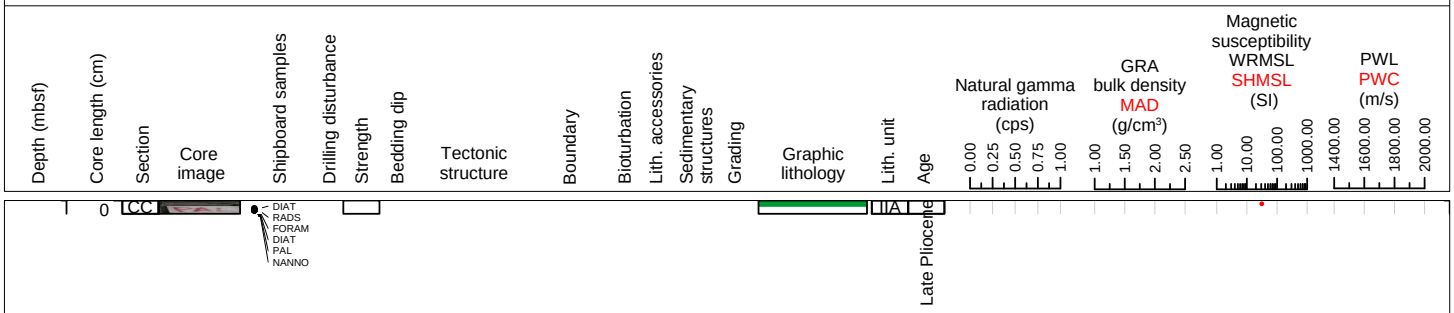


DRILLED INTERVAL Hole 362-U1480F Core 381, Interval 289.8-289.8 m (CSF-A)

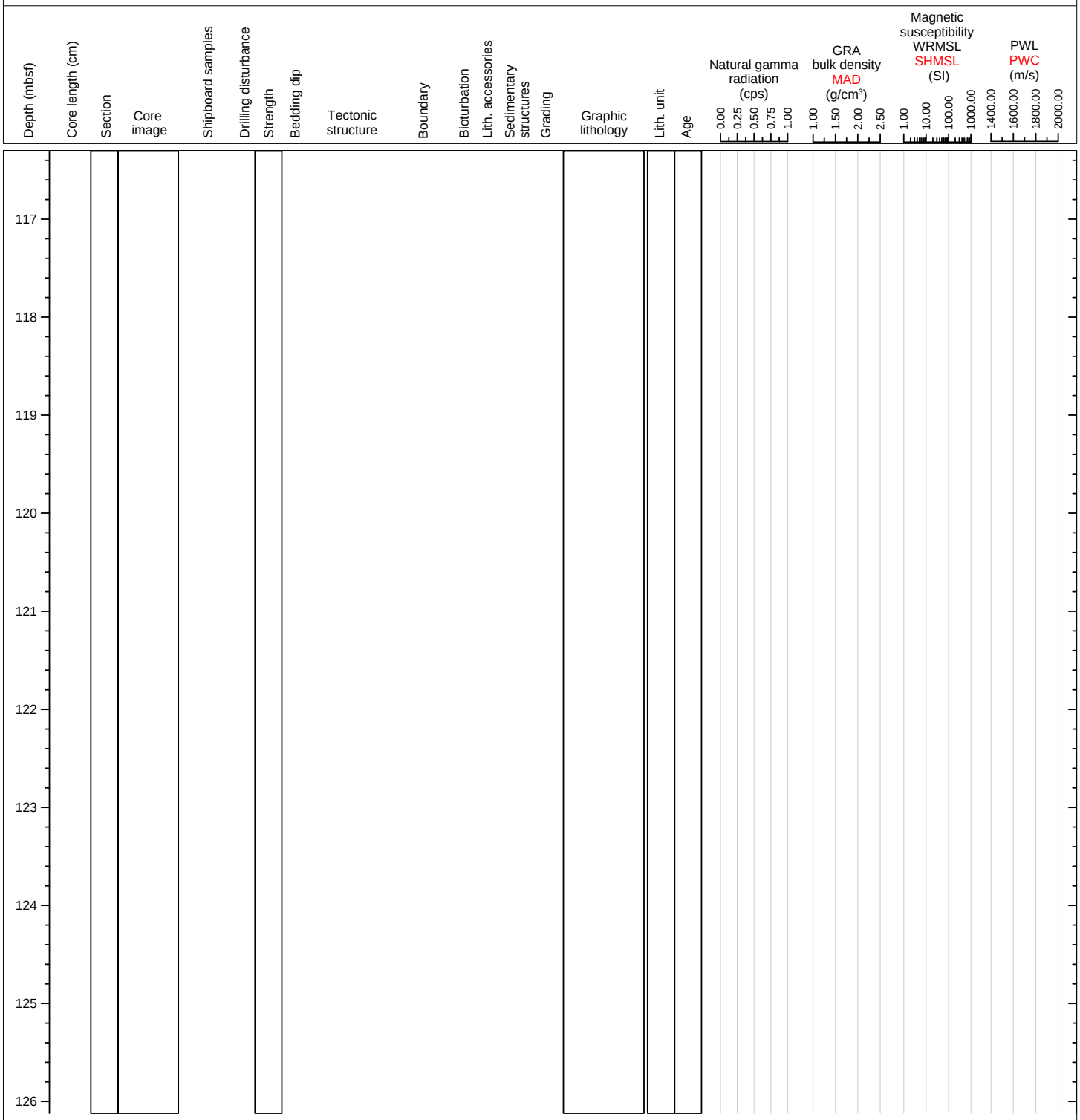


Hole 362-U1480F Core 39F, Interval 294.8-294.9 m (CSF-A)

The core contains silty clay

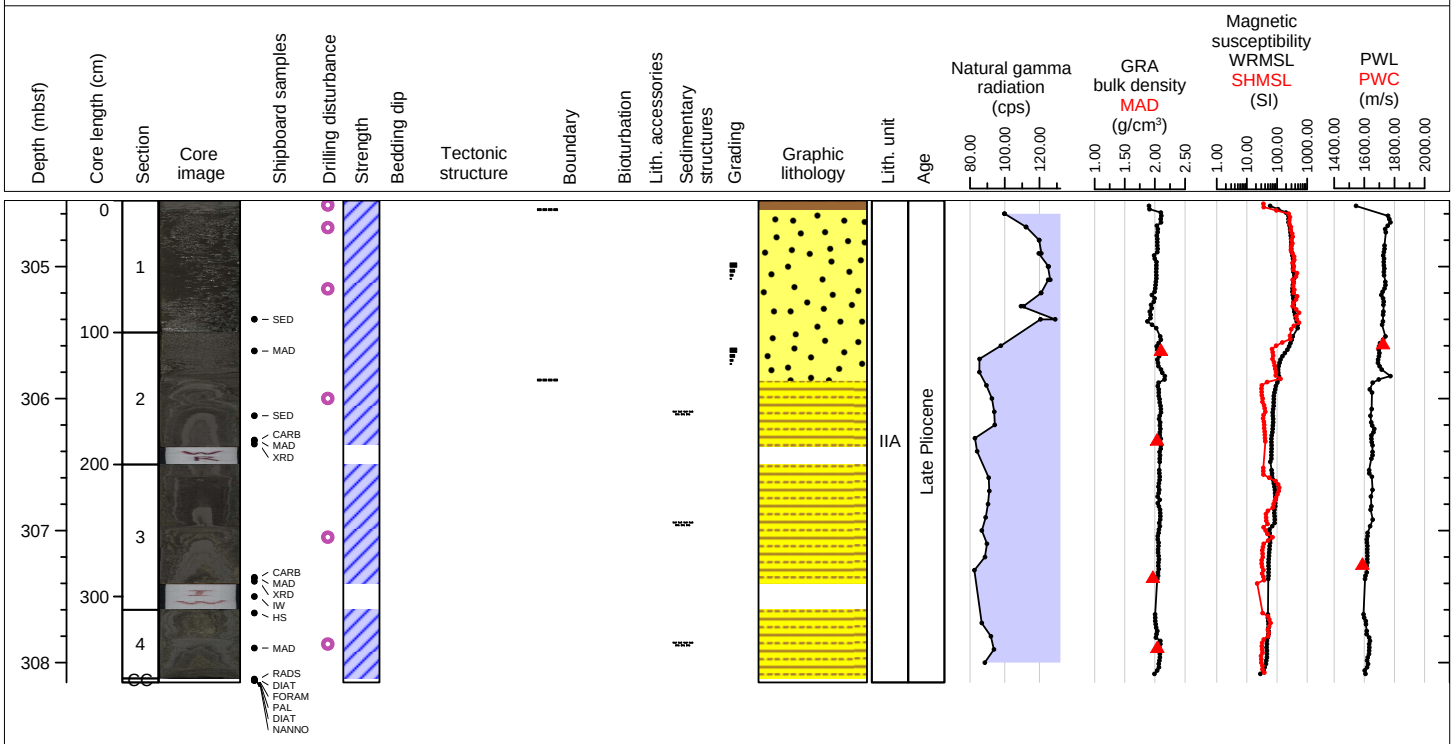


DRILLED INTERVAL Hole 362-U1480F Core 401, Interval 299.5-299.5 m (CSF-A)

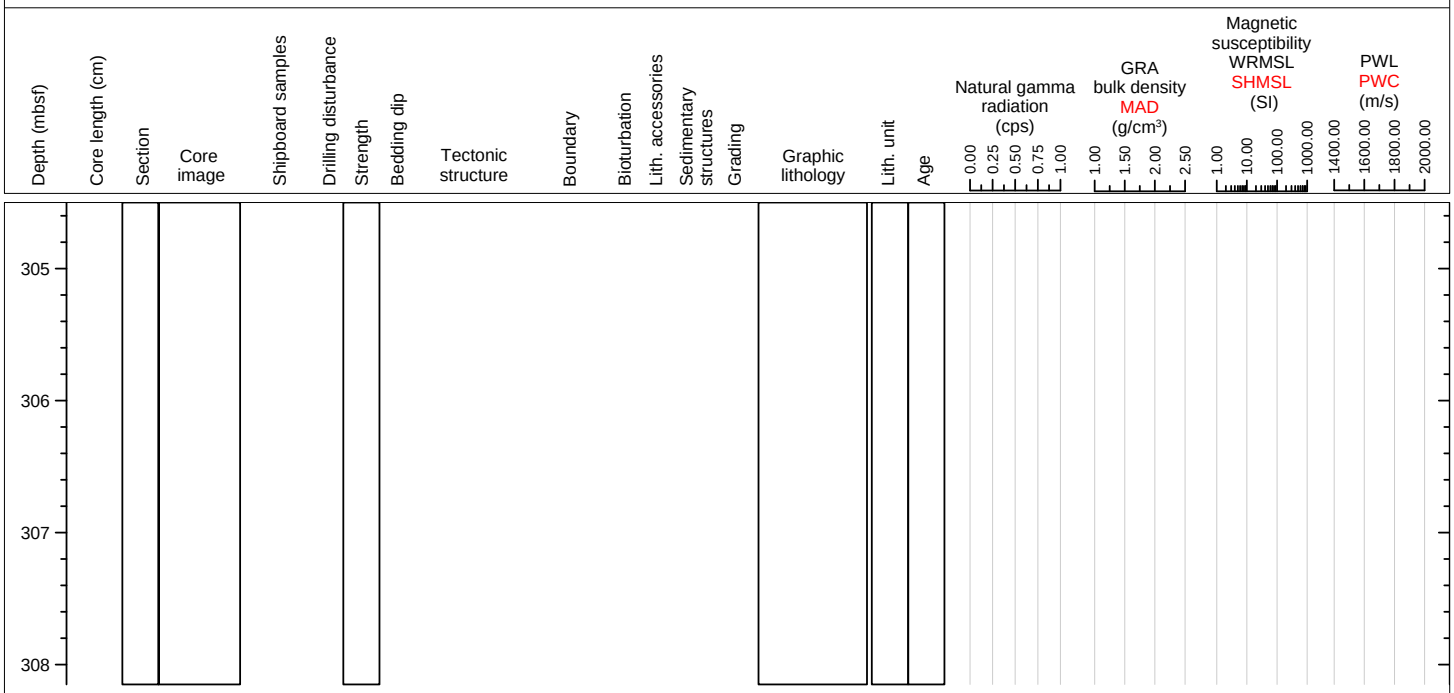


Hole 362-U1480F Core 41F, Interval 304.5-308.15 m (CSF-A)

The core shows severe coring disturbance at its base, from Section 2, 36 cm to Section 4. The less disturbed (severe) upper portion contain a topmost 6 cm clay layer overlying an homogeneous, structureless, inversely-graded, fine-grained sand in a very thick bed. The sand contains shell fragments. The lower interval contains alternating silt and clay beds.

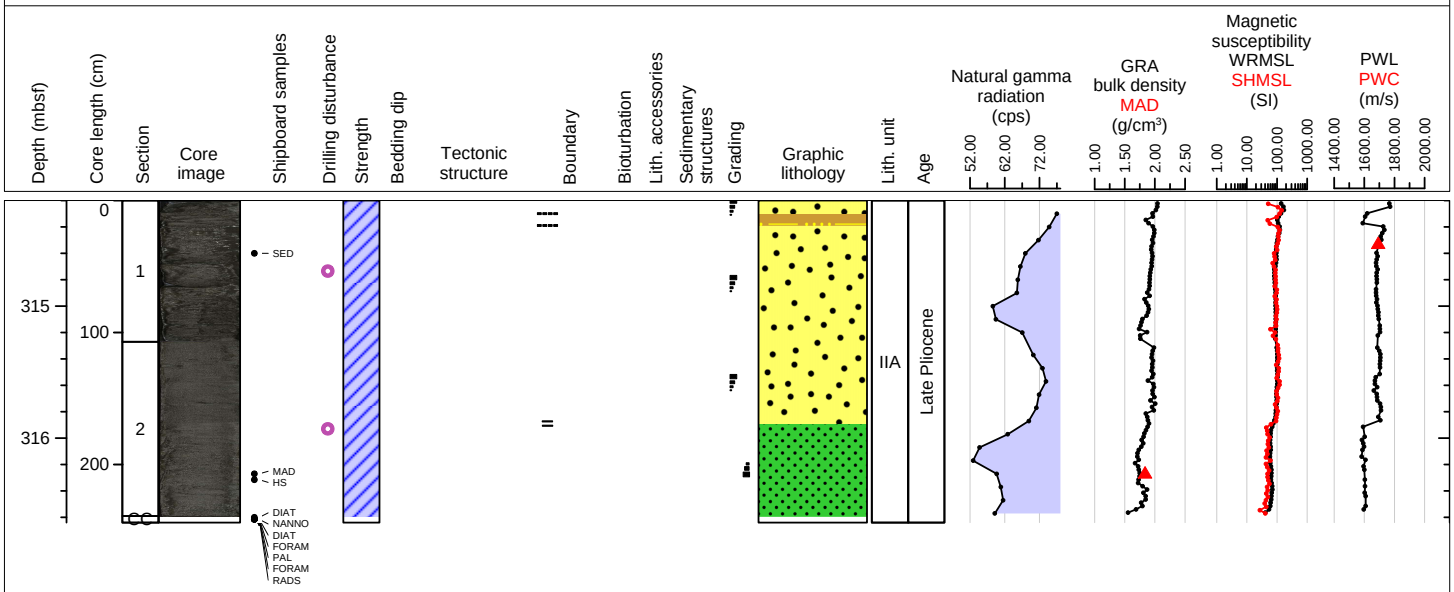


DRILLED INTERVAL Hole 362-U1480F Core 421, Interval 309.2-309.2 m (CSF-A)

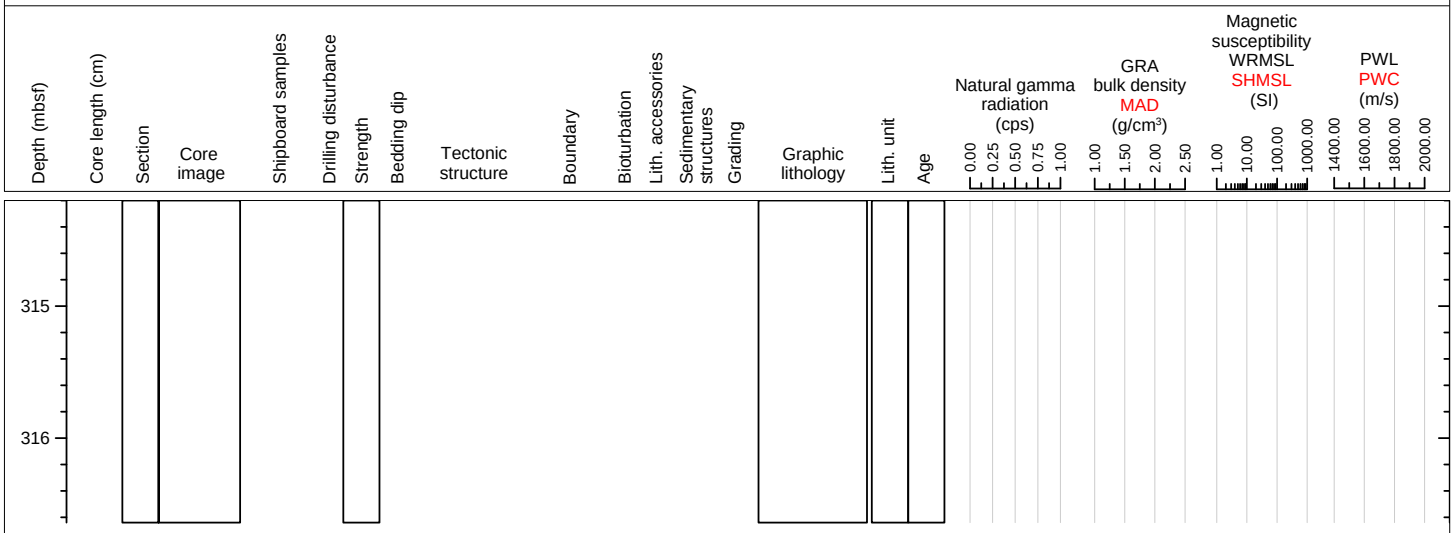


Hole 362-U1480F Core 43F, Interval 314.2-316.64 m (CSF-A)

The core is sand-rich and shows signs of severe coring disturbance. Shell fragments are observed in the sand.

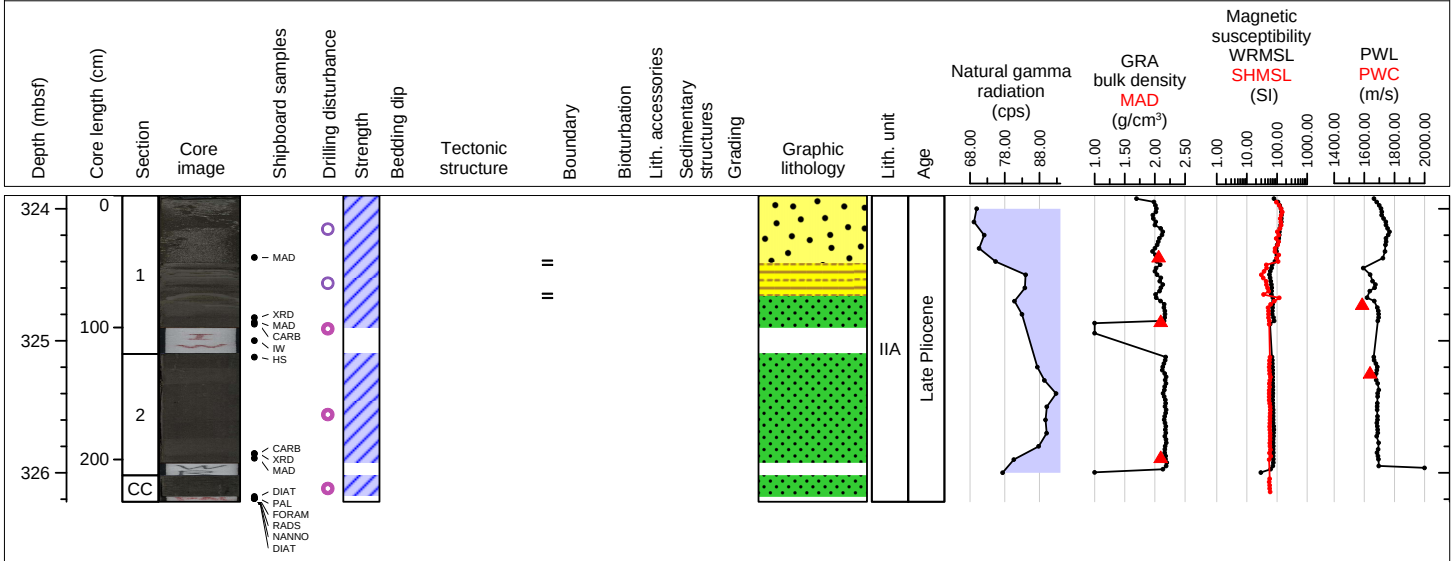


DRILLED INTERVAL Hole 362-U1480F Core 441, Interval 318.9-318.9 m (CSF-A)

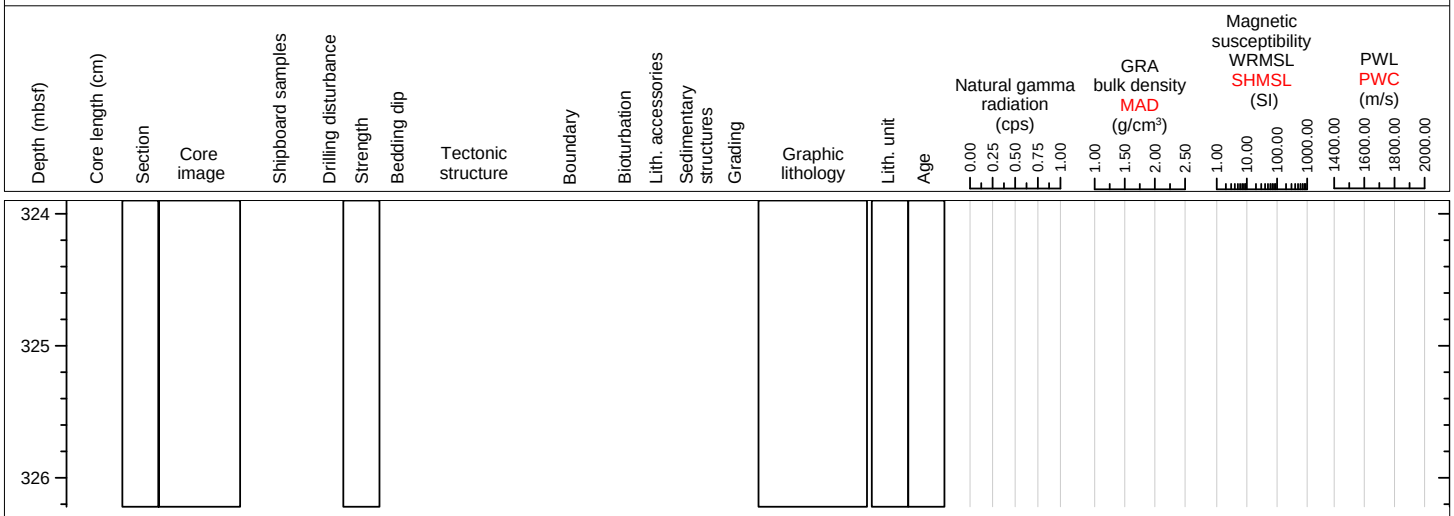


Hole 362-U1480F Core 45F, Interval 323.9-326.22 m (CSF-A)

Mostly structureless, gray, silty sand with clay. Some intervals show discrete very thin and thin beds of normally-graded, fine-grained sand. In Section 362-U1480F-45-2-A, there are mm-scale plant material aligned vertically within sand at 37 cm, 78 cm, 81 cm.

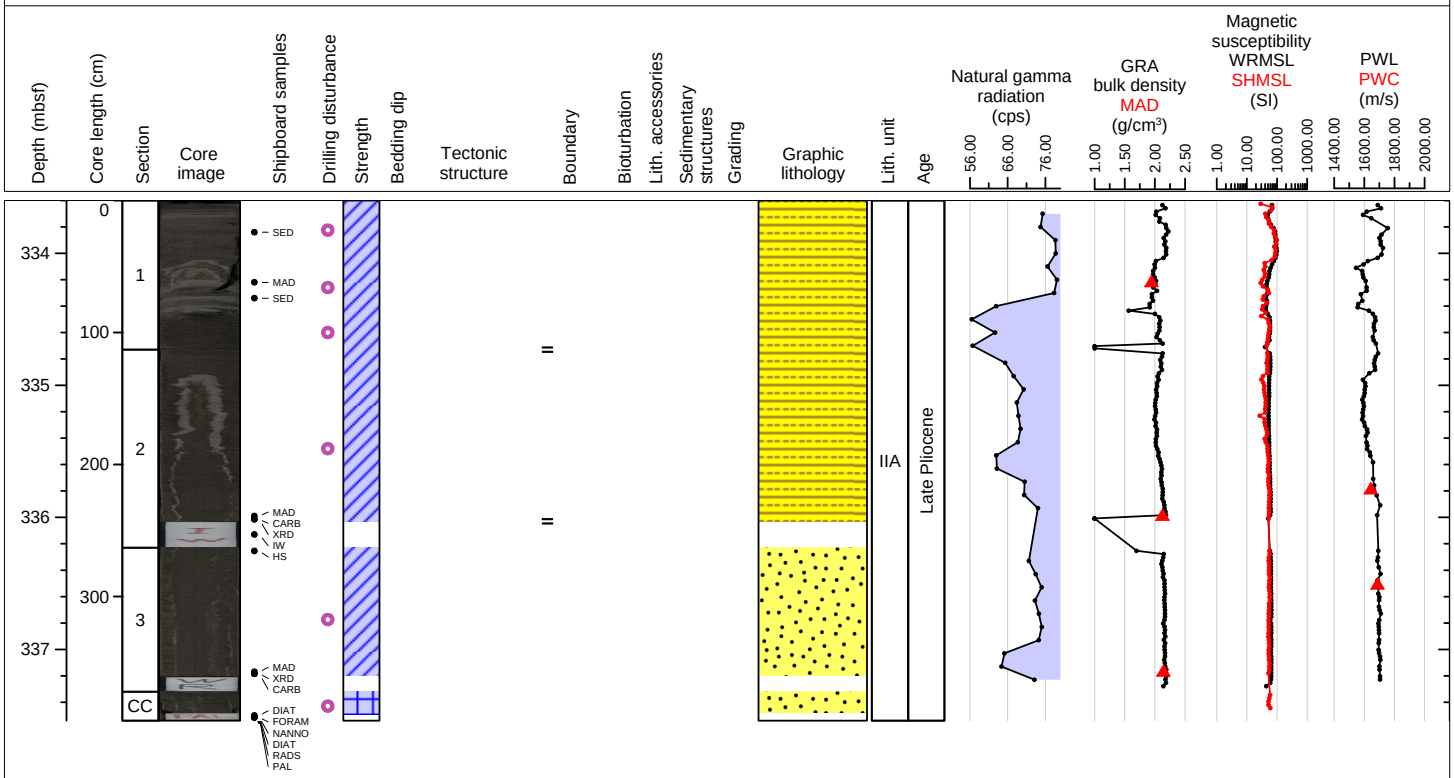


DRILLED INTERVAL Hole 362-U1480F Core 461, Interval 328.6-328.6 m (CSF-A)

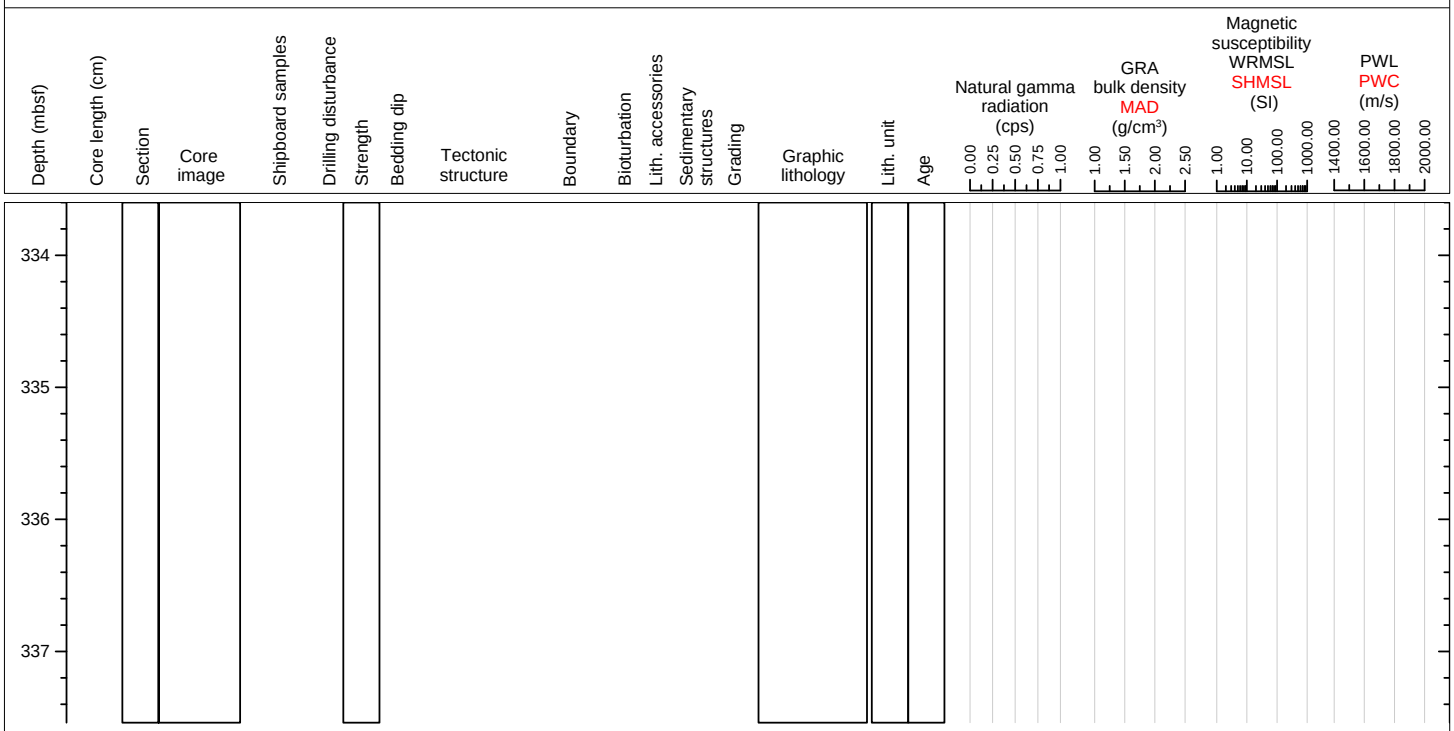


Hole 362-U1480F Core 47F, Interval 333.6-337.54 m (CSF-A)

Alternating gray, structureless, very fine-grained sand with clay, fine-grained sand, some of which shows vestigial very thin and thin beds. Severe drilling-induced core disturbance throughout, being most severe in Sections 2A, 3A and CC. Any reliable appreciation of bed thickness and sedimentary structures is not possible.

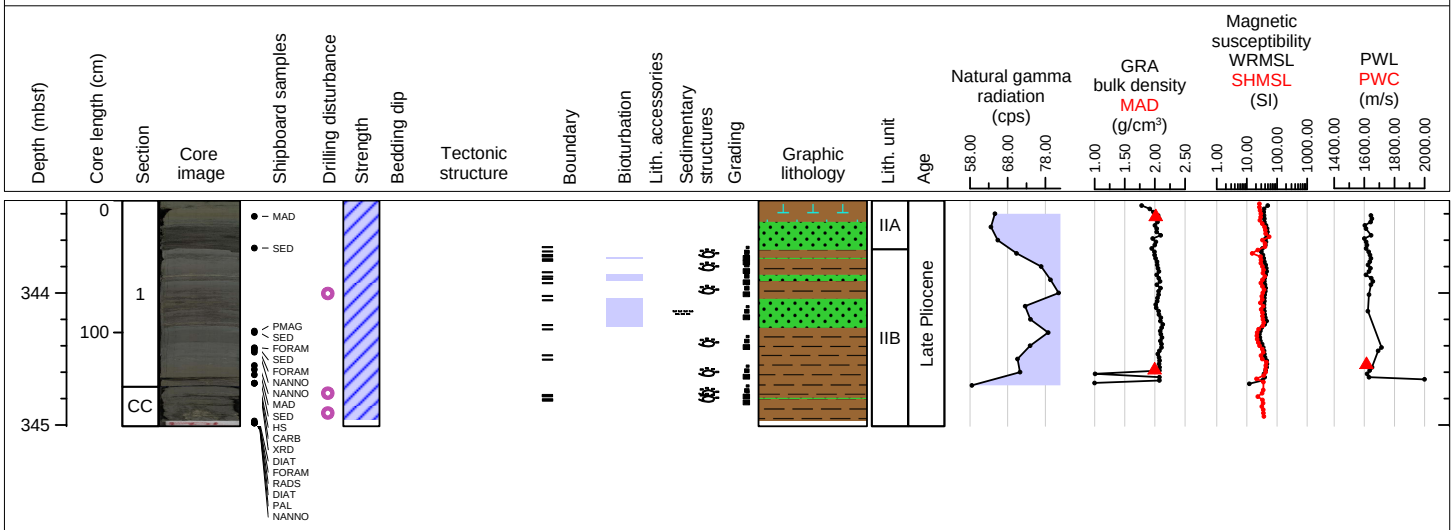


DRILLED INTERVAL Hole 362-U1480F Core 481, Interval 338.3-338.3 m (CSF-A)

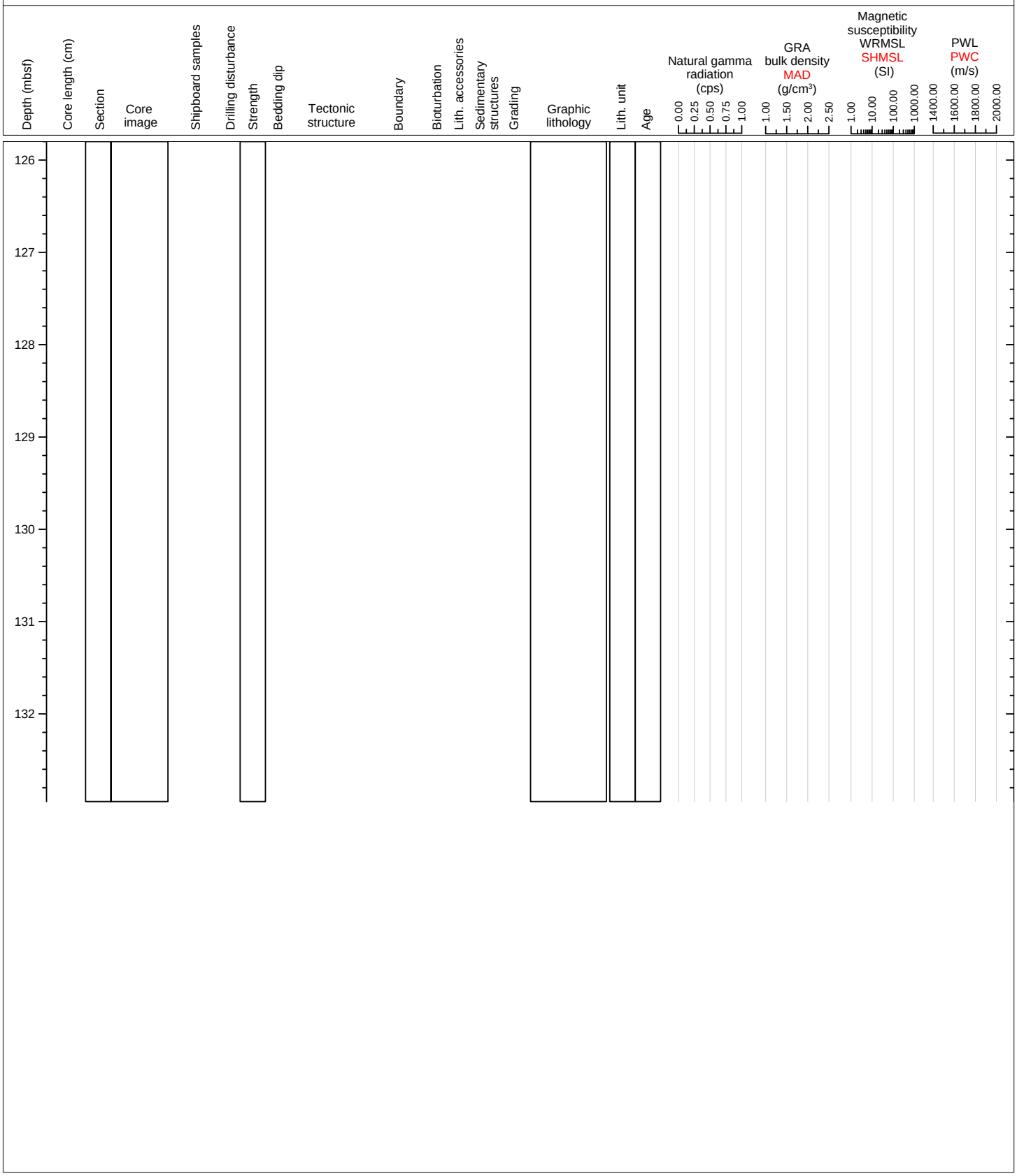


Hole 362-U1480F Core 49F, Interval 343.3-345.01 m (CSF-A)

Background sedimentation is structureless likely thoroughly bioturbated clay, some of which contains nannofossils. Some very thin-bedded, graded, very well sorted, ripple-laminated, siltstones.

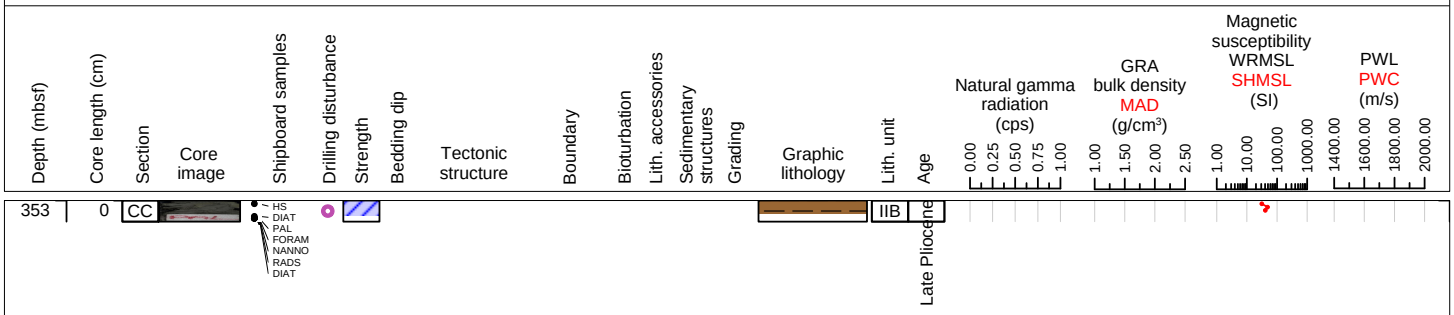


DRILLED INTERVAL Hole 362-U1480F Core 501, Interval 348.0-348.0 m (CSF-A)



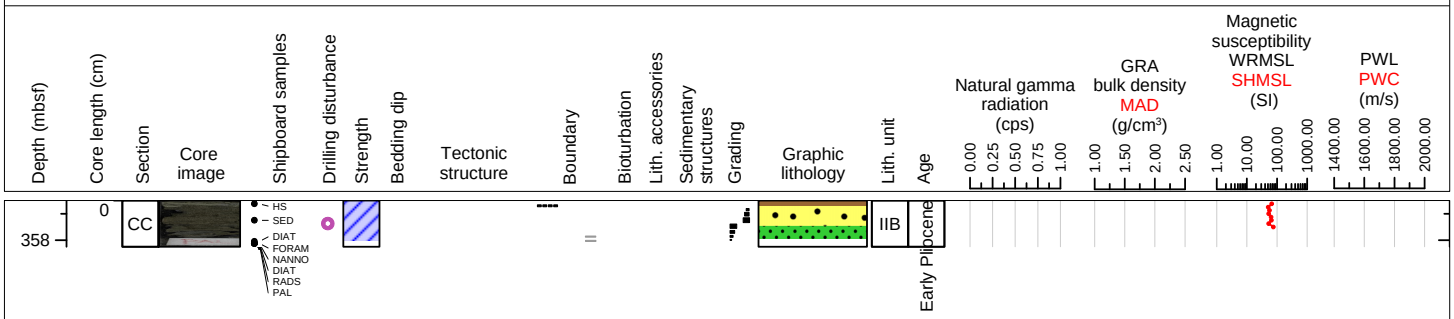
Hole 362-U1480F Core 51F, Interval 353.0-353.16 m (CSF-A)

The core is dominated by structureless dark-gray clay.



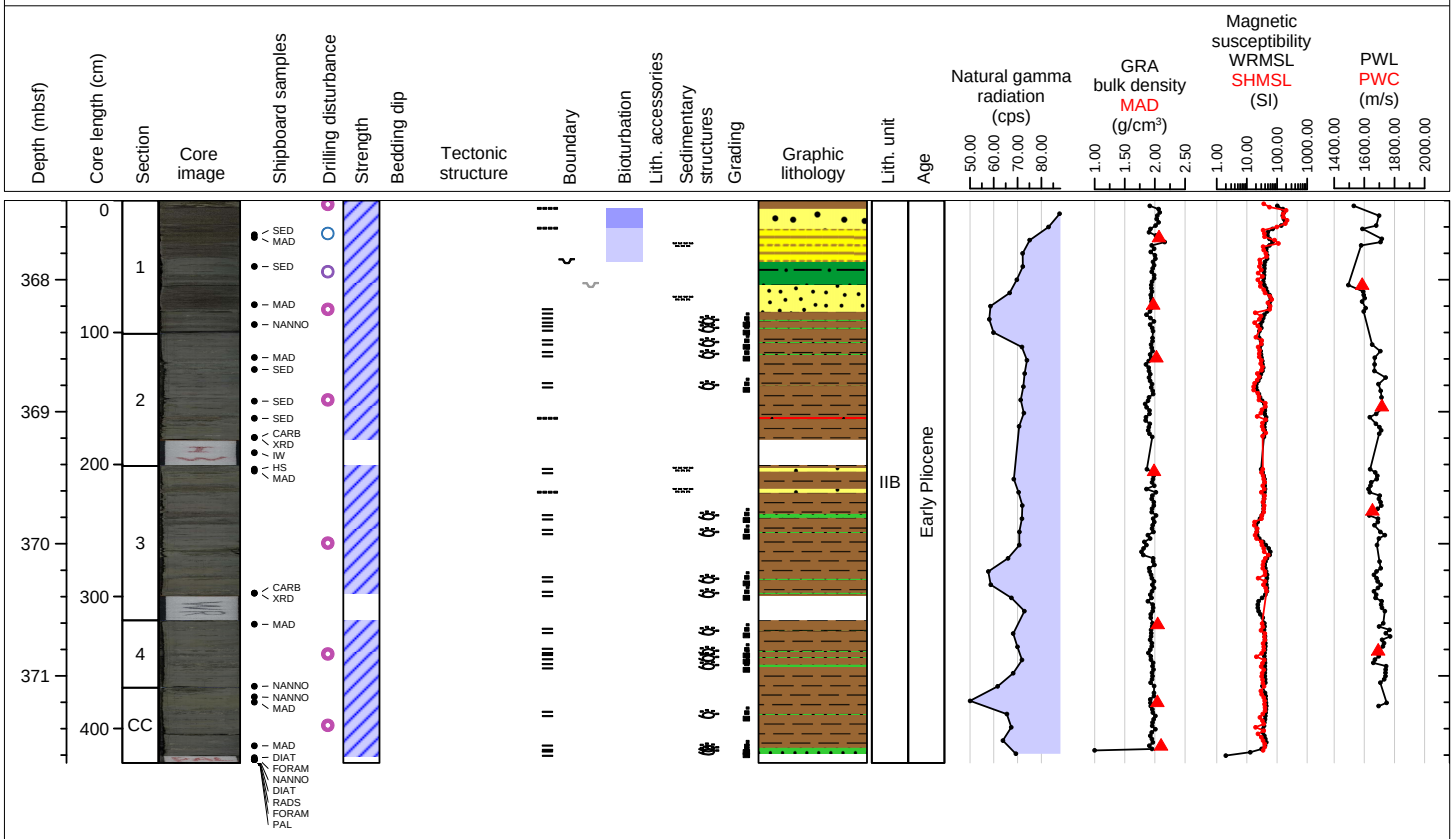
Hole 362-U1480F Core 52X, Interval 357.7-358.05 m (CSF-A)

Core contains predominantly layers of dark-gray fine-grained sand. At the top of the Core a 4 cm, there is a thick clay layer and at the bottom of the core, there is a 10 cm thick very fine-grained sand layer.



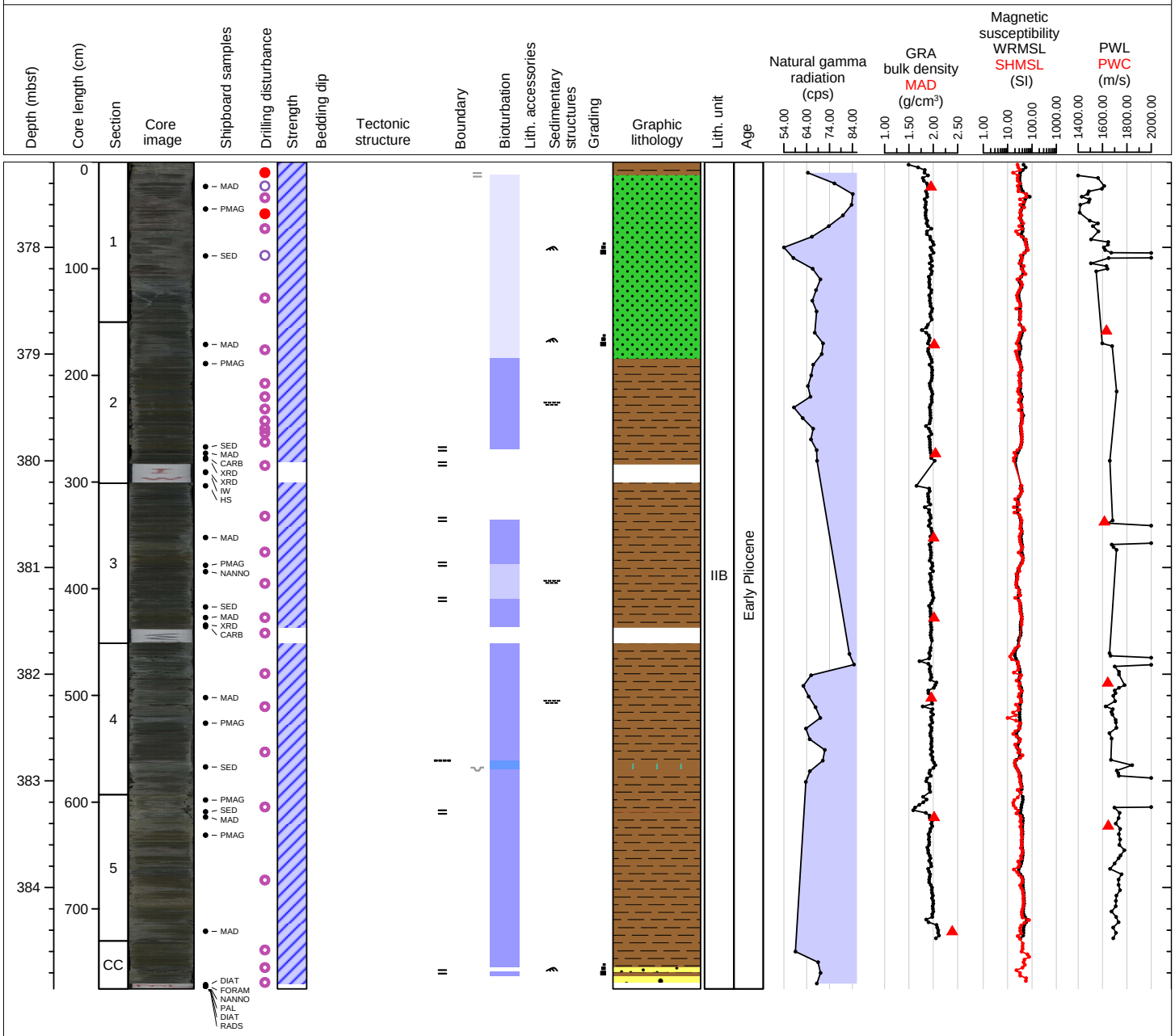
Hole 362-U1480F Core 53X, Interval 367.4-371.66 m (CSF-A)

The core is dominated by dark-gray clay to silty clay including several mm-thick silt layers (11 cm), one ash layer (63-64 cm, Section 2), one sand silt layer (1-4 cm, Section 3) and one very fine-grained sand layer (17-20 cm, Section 3). Additionally, Section 1 contains two very fine-grained sand layers (6-46 cm and 64-84 cm).



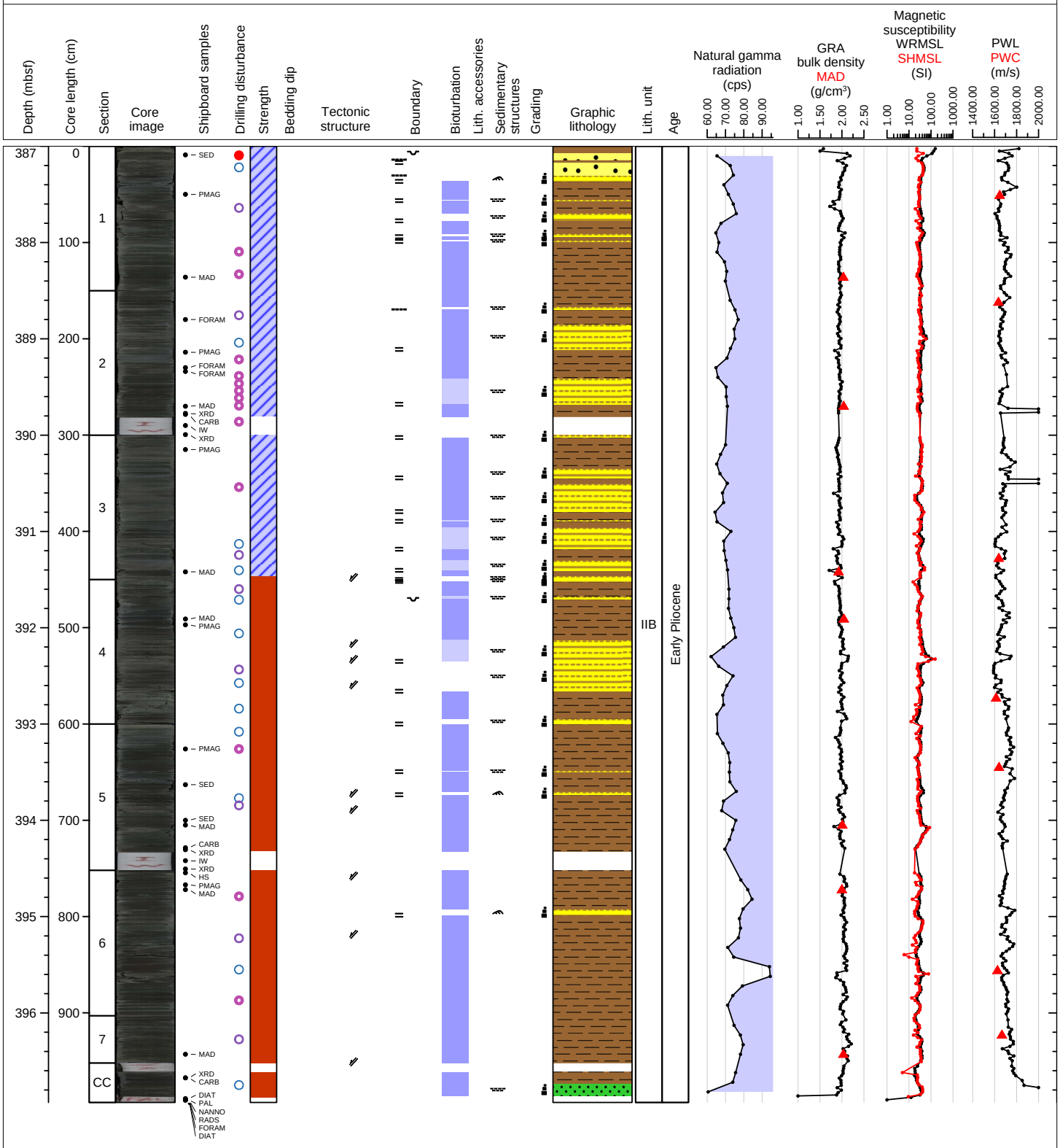
Hole 362-U1480F Core 54X, Interval 377.2-384.95 m (CSF-A)

The core has two main lithologies: (1) dark-gray clayey silt layer (Section 1); (2) dominant greenish-gray clay throughout the rest of the core. Minor lithology is gray clay intercalated as layers in Sections 2, 3, 4. Additionally, calcareous clay occurs between 110 and 118 cm in Section 5, whereas fine-grained sand layers with cross-lamination occur at end of the core at 33-45 cm, and CC. A very thin ash layer occurs in Section 5 at 16 cm.



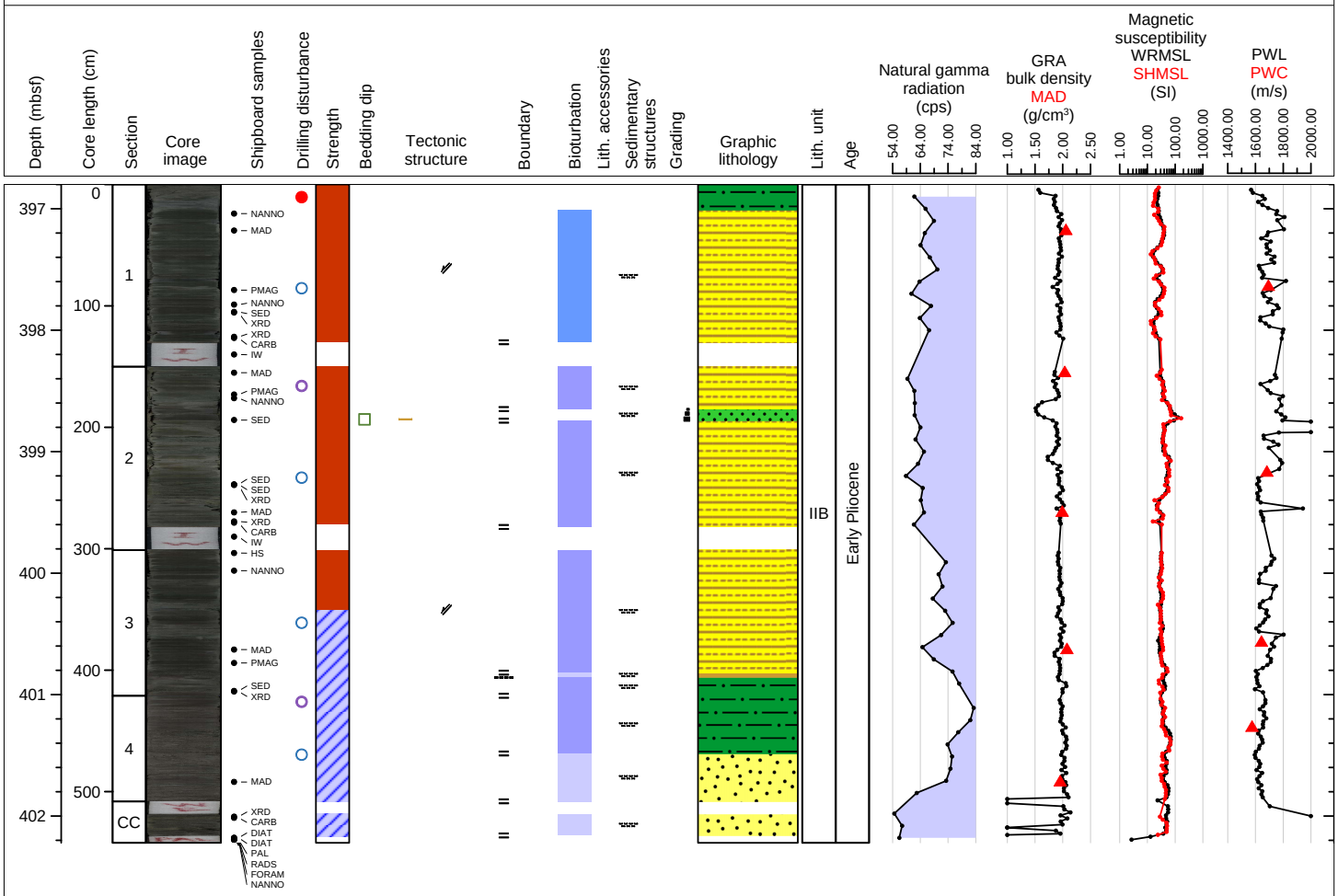
Hole 362-U1480F Core 55X, Interval 387.0-396.93 m (CSF-A)

The core is dominated by moderately bioturbated greenish-gray clay. Several mm to decimeter thick layers of silty clay and silt are intercalated in the background sedimentation. The upper portion of Section 1 contain medium- to thick-bedded, fine-grained sand, showing parallel- and cross-lamination. Organic material occurs between 77 and 78 cm of Section 4. Abundant normal faults occur from Section 4-CC.



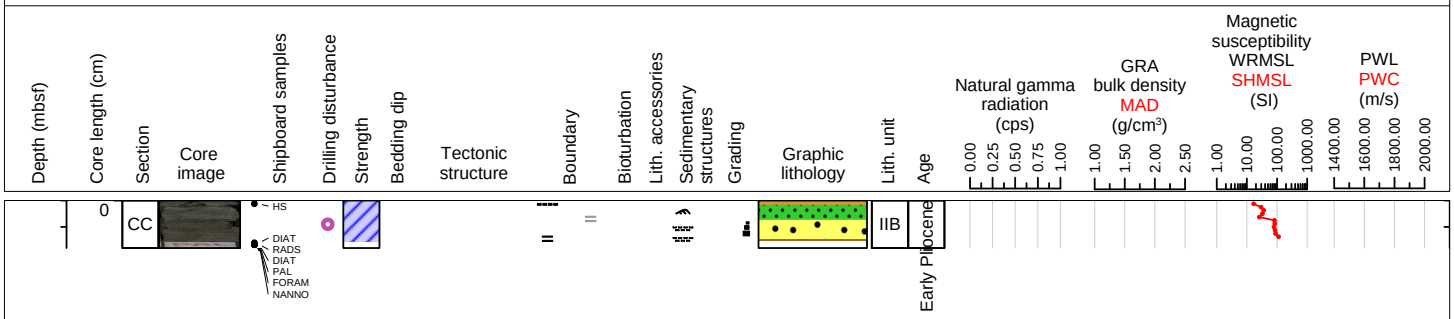
Hole 362-U1480F Core 56X, Interval 396.8-402.22 m (CSF-A)

The core is dominated by moderately (partially intensively bioturbated alternating clay to silt beds (some fine-grained); common parallel- and cross-lamination, and some load structures and small-scale sediment slides/slumps. Organic material occurs between 100 and 105 cm in Section 3, bottom of Section 4 and CC. Normal faults occur down to the top of Section 3.



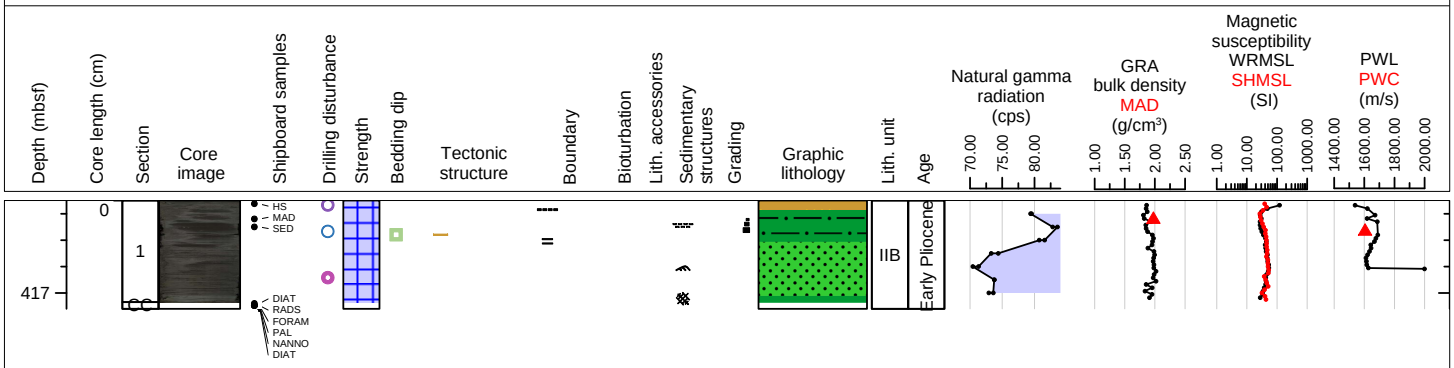
Hole 362-U1480F Core 57X, Interval 406.6-406.96 m (CSF-A)

The core contains a fining-upward unit of fine-grained sand to clay. Severe coring disturbance with fall-in in topmost 3 cm.



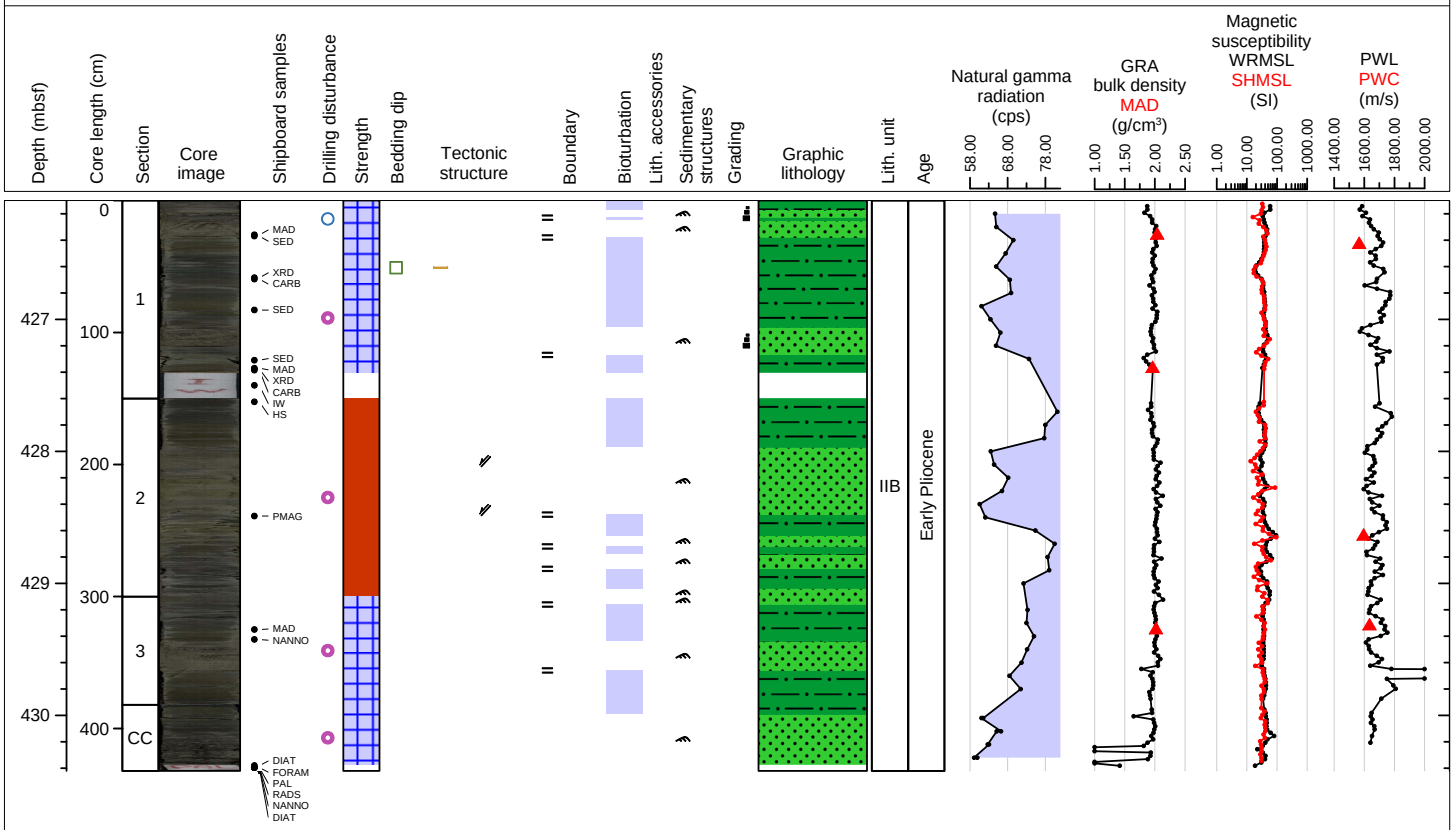
Hole 362-U1480F Core 58X, Interval 416.3-417.12 m (CSF-A)

The core shows cross-laminated silt with clay, overlain by planar-laminated silty clay. Basal (severe) and upper (moderate) sections of the core are disturbed by coring.



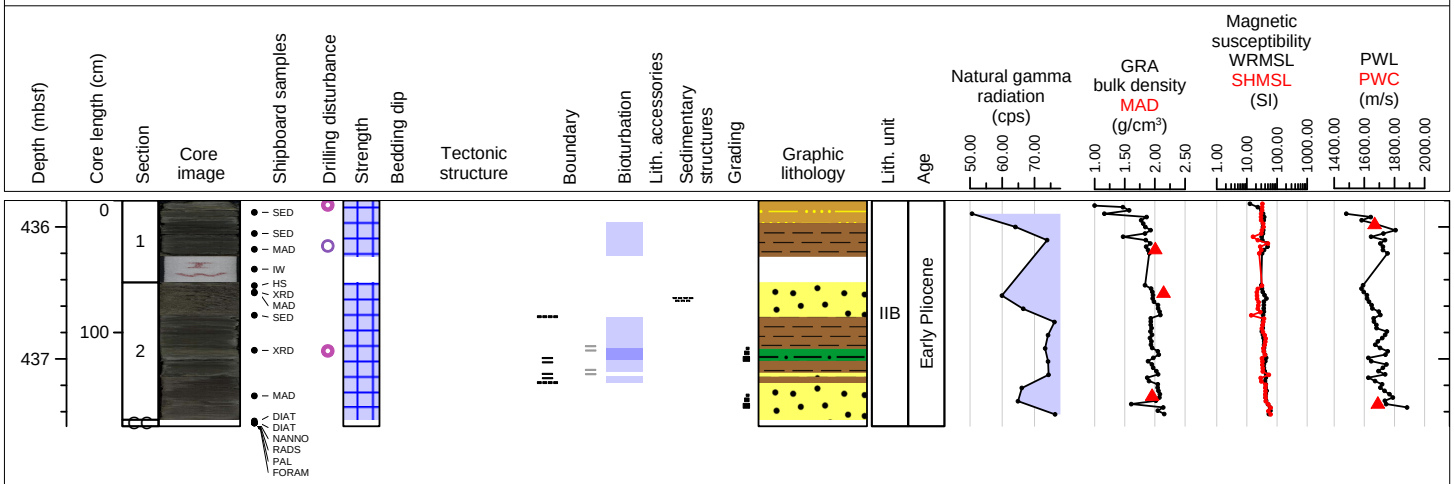
Hole 362-U1480F Core 59X, Interval 426.1-430.42 m (CSF-A)

The core contains alternations of structureless, slightly bioturbated, silty clay and thin- to very thin-bedded, cross-laminated, silt. Ripple height ~1 cm. Silt laminae are also sparsely present within the silty clay. CC, 20-45 cm, there is abundant mm-scale plant debris. Severe core disturbance created by drilling biscuit development. Normal faults observed in Section 2.



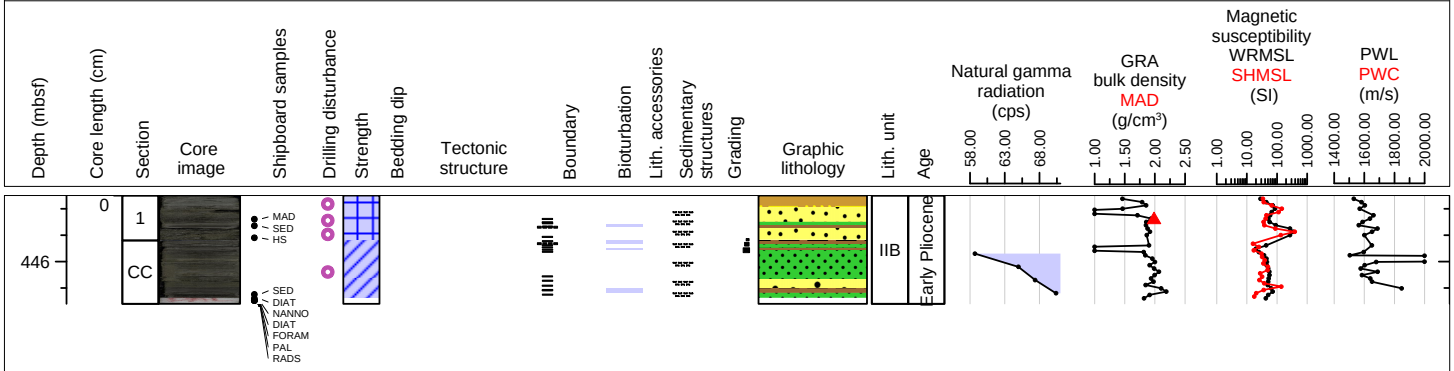
Hole 362-U1480F Core 60X, Interval 435.8-437.51 m (CSF-A)

The core consists of clay-rich drilling biscuits (moderate to severe disruption) with thin- to medium-bedded, fine-grained sand to silt beds that contain traces of plant matter Bioturbation is sparse to slight. Normally-graded calcareous silty clay bed in Section 2, 49-59 cm. The topmost 17 cm of Section 1 is composed of mixed sediment and drilling mud created by severe drilling disturbance.



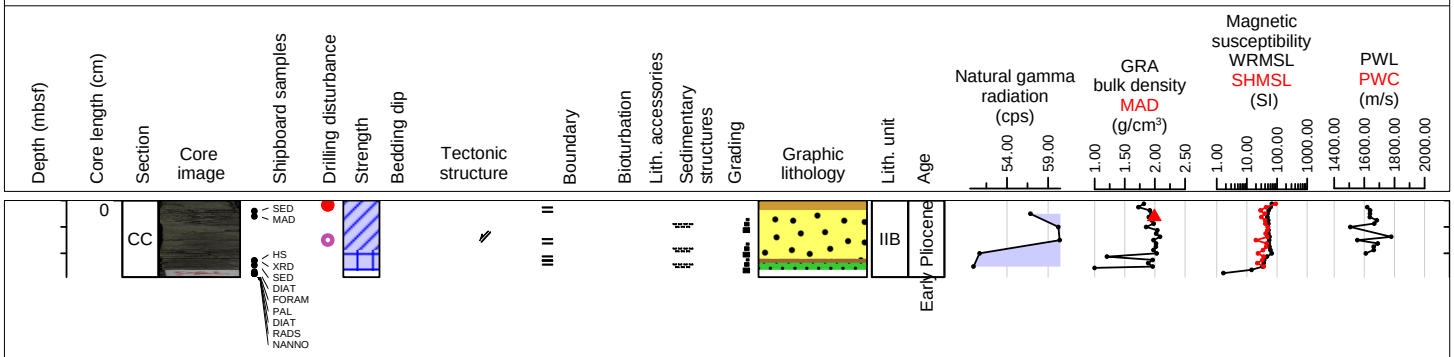
Hole 362-U1480F Core 61X, Interval 445.5-446.32 m (CSF-A)

The core shows very thin-bedded, cross-laminated, silt that alternates with very thin beds to laminae of clay. Common planar lamination. Isolated thin beds of fine-grained sand with rare plant fragments.



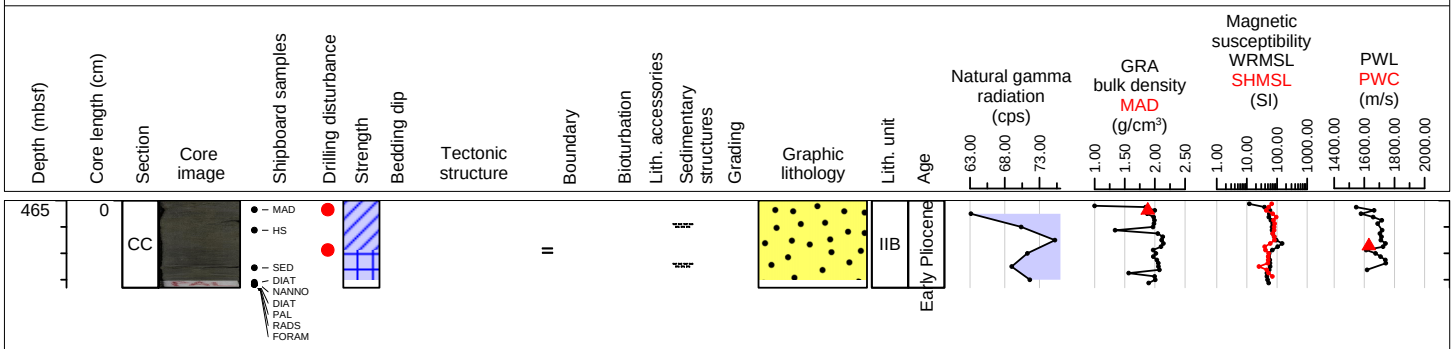
Hole 362-U1480F Core 62X, Interval 455.2-455.78 m (CSF-A)

The core is predominantly composed of normally-graded, medium-bedded, fine-grained sand. Many clay laminae and trace of plant fragments occur within the sand.



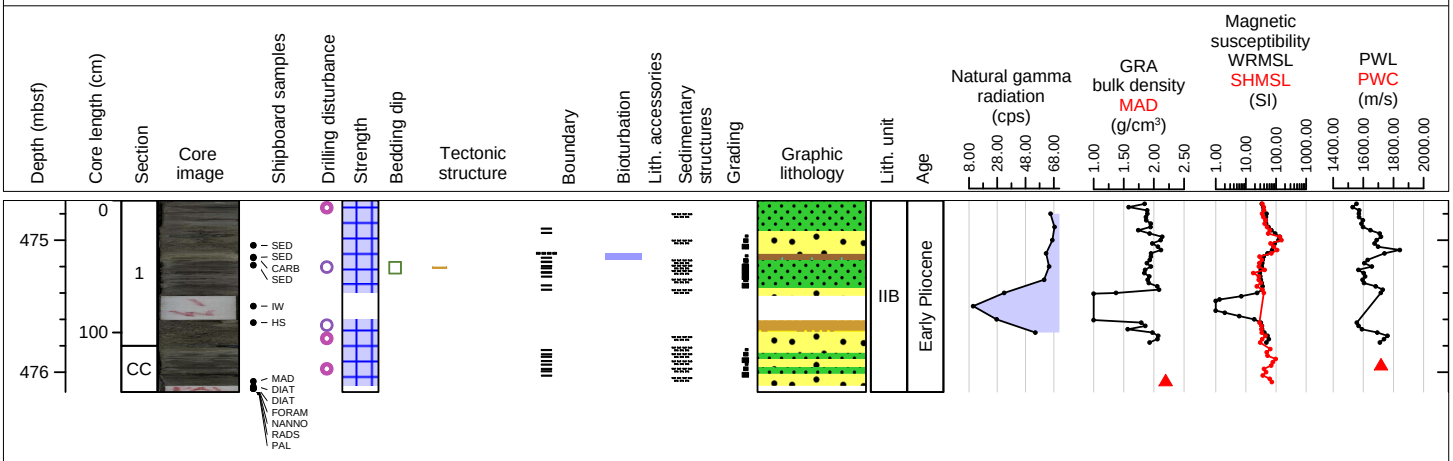
Hole 362-U1480F Core 63X, Interval 465.0-465.66 m (CSF-A)

The core is dominated by non graded, moderately-sorted, fine-grained sand. Clay laminae alternate with sand at the base of the Core (38-60 cm). Abundant plant debris visible at the top of the core (0-38 cm).



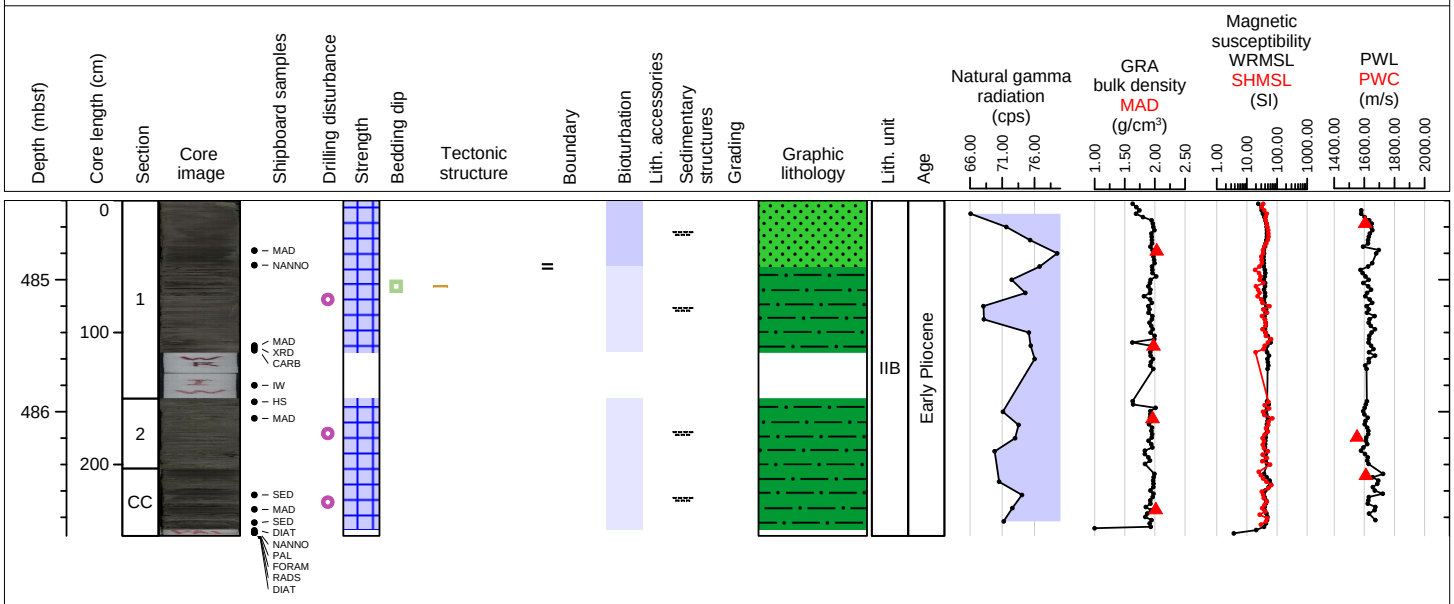
Hole 362-U1480F Core 64X, Interval 474.7-476.15 m (CSF-A)

The core shows alternating thin- to medium-bedded, fine-grained sands and silty clay. Internal structure is dominated by planar lamination. Trace of plant debris visible in most of the sands. Presence of a lighter-coloured calcareous clay bed, moderately bioturbated in Section 1, 41-45 cm.



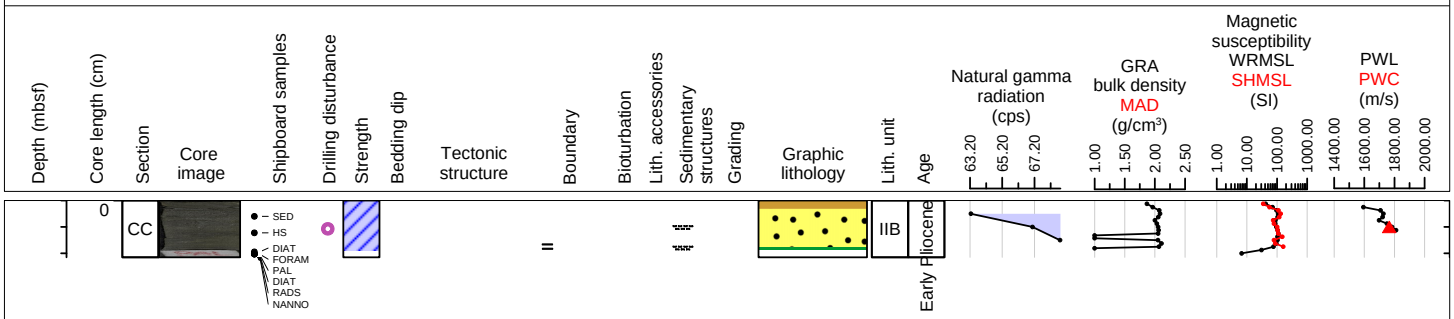
Hole 362-U1480F Core 65X, Interval 484.4-486.94 m (CSF-A)

The core shows an overall fining upward trend with stacked normally-graded silt to clay thin to very thin beds. The thickness and the grain size in beds increases down core, where plant fragment-rich laminaa are recorded within the silt/fine-grained sand beds.



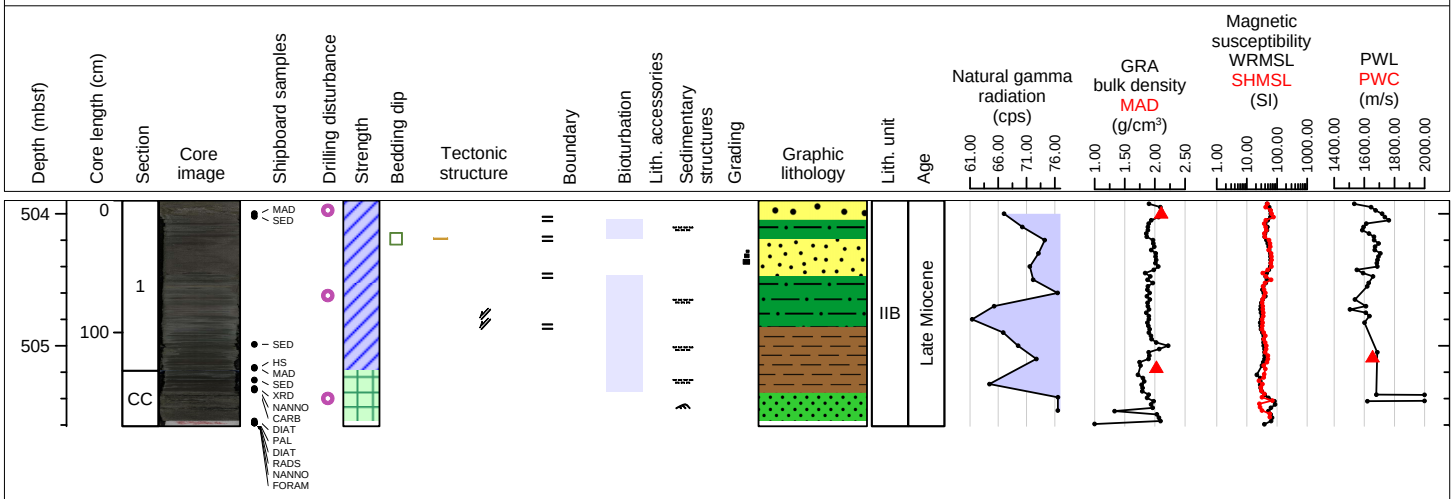
Hole 362-U1480F Core 66X, Interval 494.2-494.63 m (CSF-A)

The core contains well sorted, non graded fine-grained sand with planar lamination.



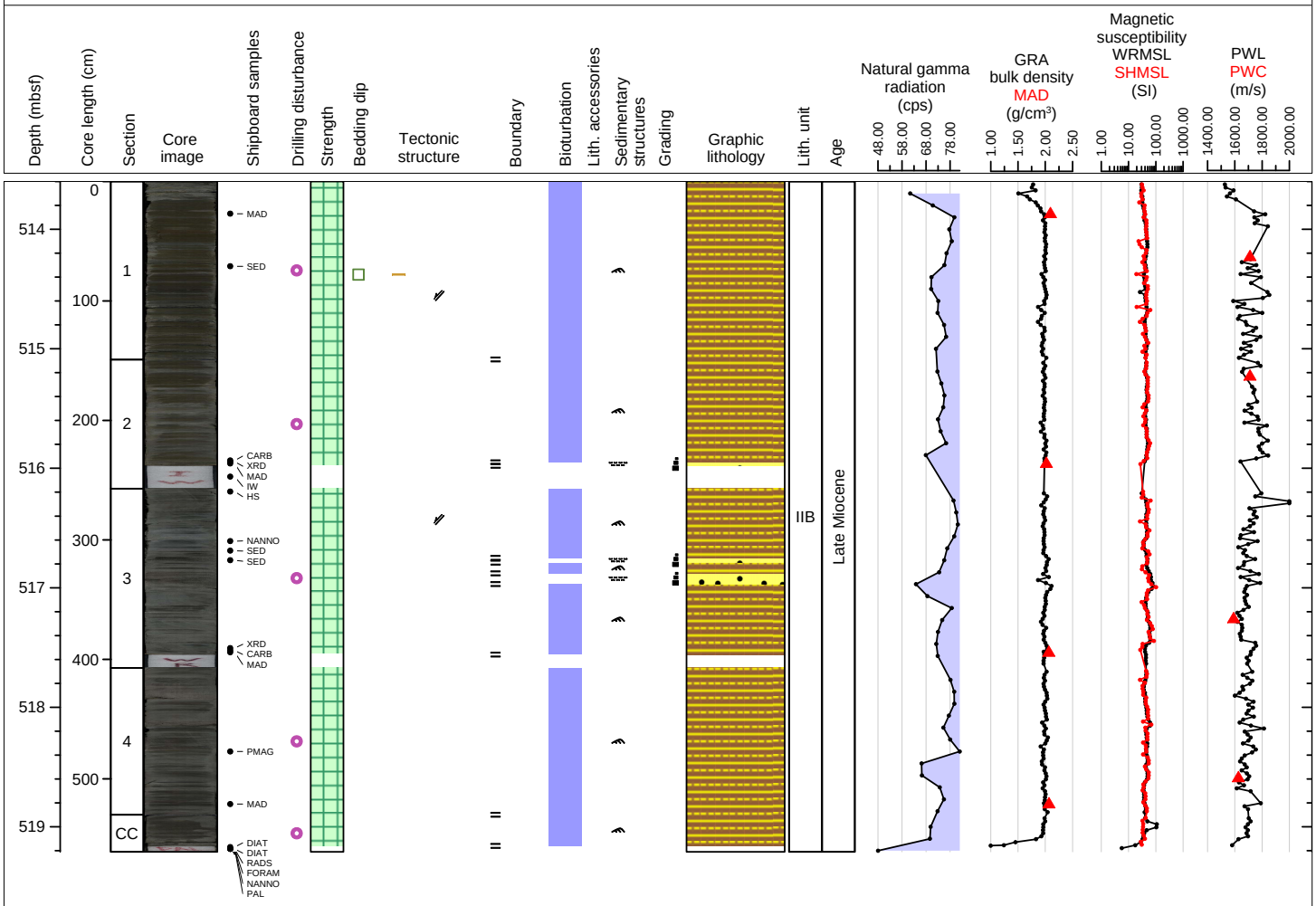
Hole 362-U1480F Core 67X, Interval 503.9-505.61 m (CSF-A)

The core is mainly composed of very thin beds of silt with traces of plant matter, separated by clay laminae. Isolated thin beds of fine-grained sand with traces of plant fragments. As in above cores, similar lithologies; silt beds have well developed cross-lamination (current ripples). Minor normal faults observed.



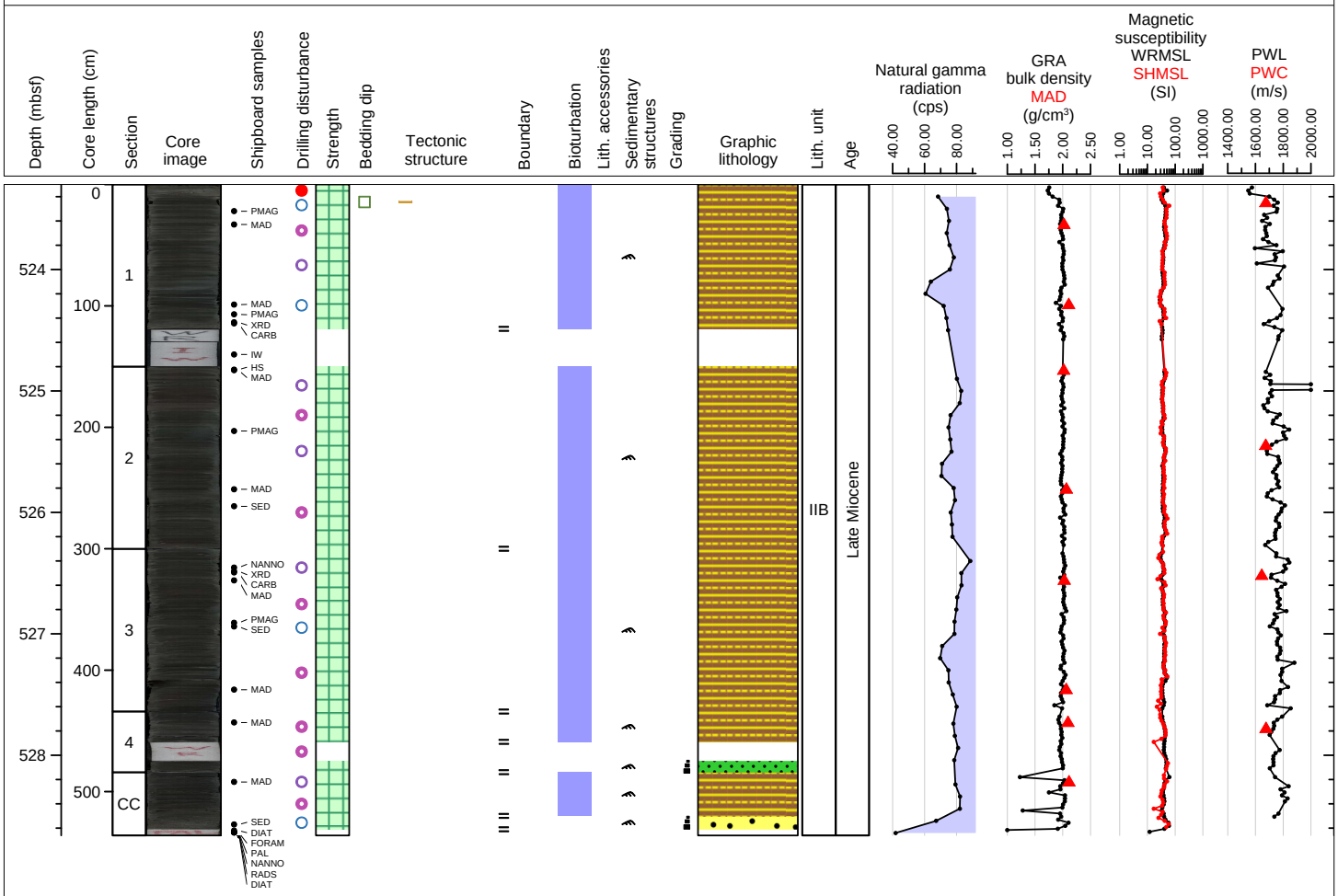
Hole 362-U1480F Core 68X, Interval 513.6-519.21 m (CSF-A)

Background sedimentation is mottled brown clay. 1-2 cm, normally-graded, cross-laminated silty beds throughout the core. Locally abundant plant debris (pyritized). Minor normal faults observed.



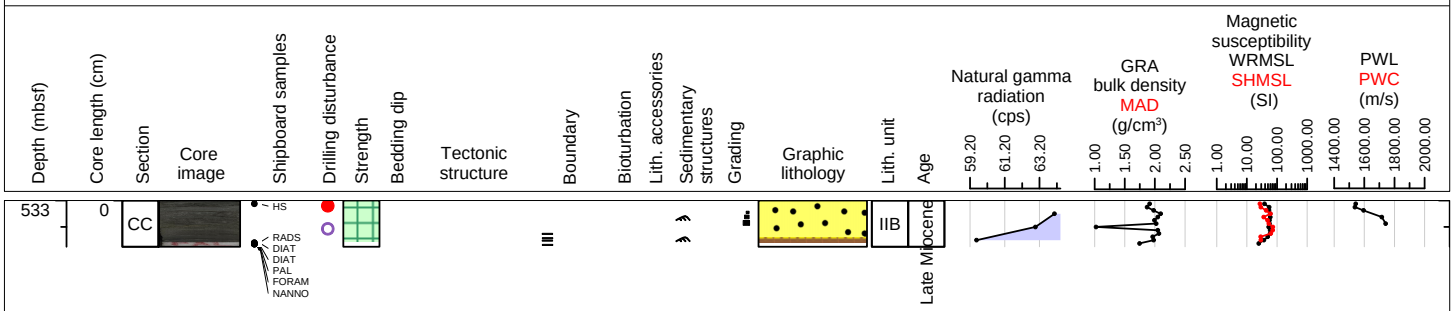
Hole 362-U1480F Core 69X, Interval 523.3-528.66 m (CSF-A)

Background sedimentation is mottled dark greenish-gray clay, moderately bioturbated. 1-2 cm, normally-graded, cross- and parallel-laminated silty beds throughout the core. Two larger decimeter-sized silt to fine-grained sand layers present in Section 4 and the CC. Locally, plant debris (pyritized).



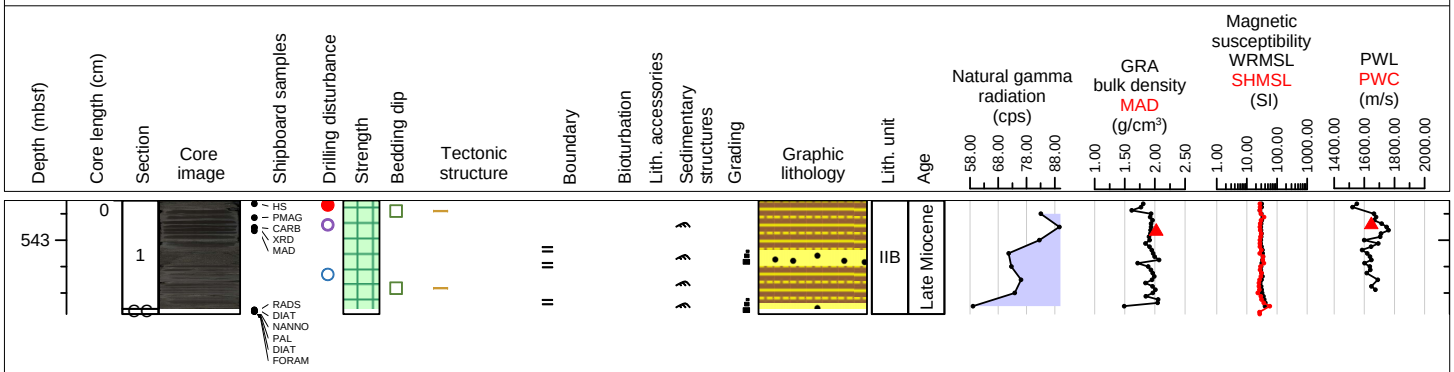
Hole 362-U1480F Core 70X, Interval 533.0-533.35 m (CSF-A)

Very low core recovery. Background deposits are mottled dark greenish-gray clay, moderately bioturbated. 1-2 cm, normally-graded, cross- and parallel-laminated silty beds appear towards bottom of the core. A larger, normal-graded, decimeter-sized silt to fine-grained sand layer is present in the upper part of the recovered sediment.



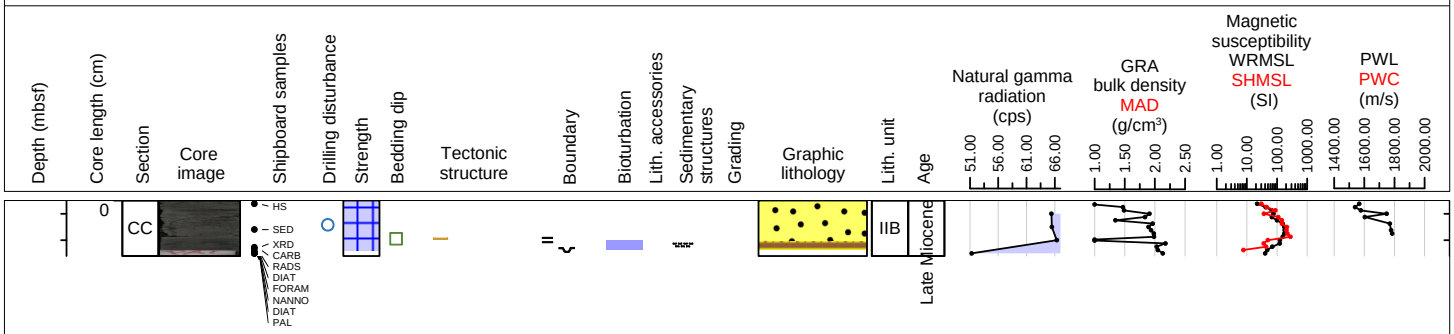
Hole 362-U1480F Core 71X, Interval 542.7-543.56 m (CSF-A)

Background sedimentation is dark greenish-gray clay, slightly bioturbated. 1-2 cm, normally-graded, cross- and parallel-laminated silty beds throughout the core. Decimeter-sized normal-graded silt to fine-grained sand layers present.



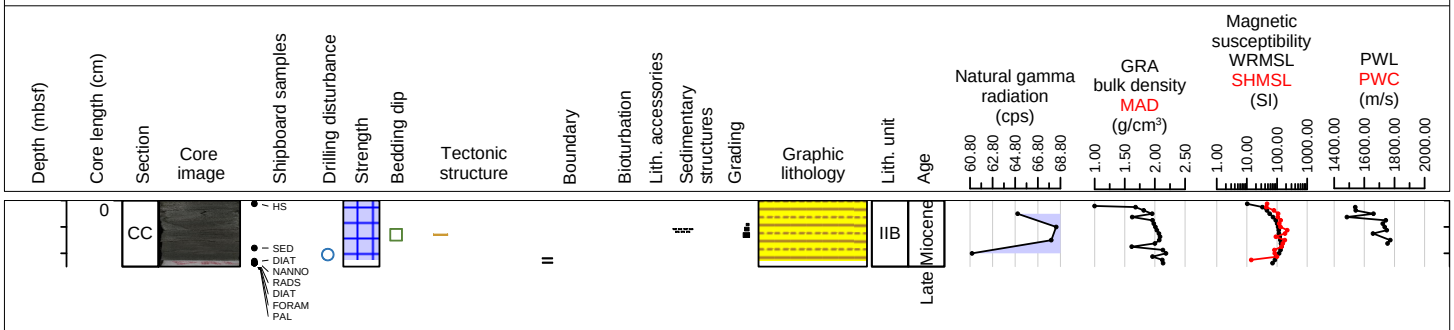
Hole 362-U1480F Core 72X, Interval 552.5-552.92 m (CSF-A)

Very low core recovery. Background sediments are alternating silt and clay and fine-grained sand. 1-2 cm, normally-graded, cross- and parallel-laminated silty beds and fine-grained sand likely thoroughly bioturbated) present towards bottom of core.



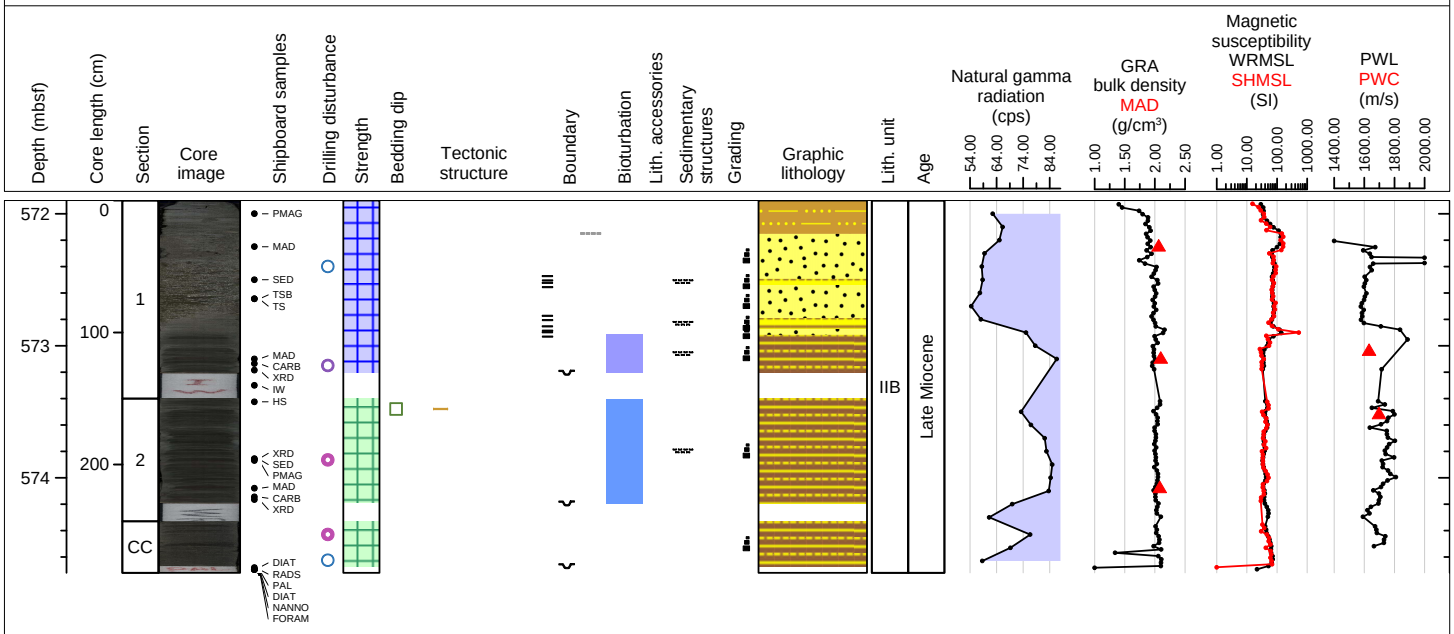
Hole 362-U1480F Core 73X, Interval 562.2-562.7 m (CSF-A)

Very low core recovery. Background sediments are alternating silt and clay as well as sand and mud layers. 1-2 cm, normally-graded, parallel-laminated fine-grained sand beds and mm-scale or smaller plant debris in the background.



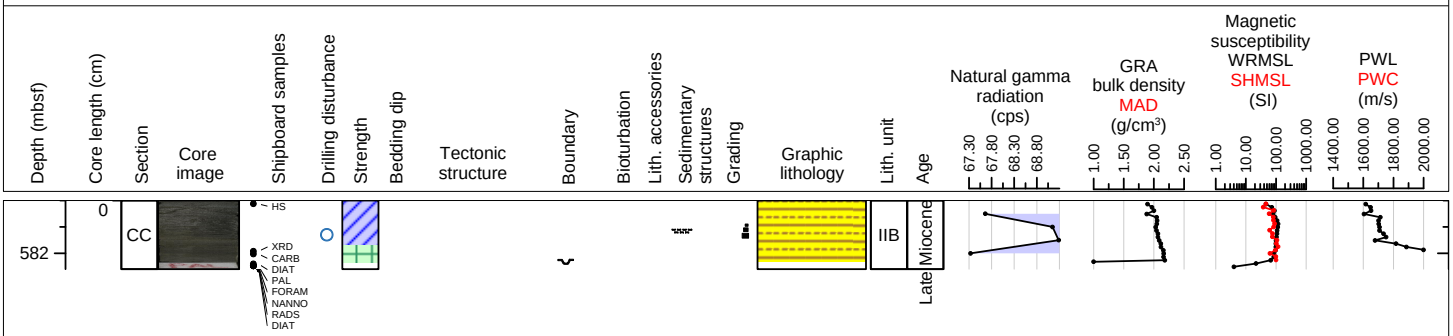
Hole 362-U1480F Core 74X, Interval 571.9-574.72 m (CSF-A)

Background sedimentation is alternating silt and clay with mm-scale lamination, as well as sand and mud layers with small-sized plant debris. Intensively bioturbated silty clay bed is interbedded from bottom of section 1 to top of CC. 1-2 cm, normally-graded, cross- and parallel-laminated silty beds throughout the core.



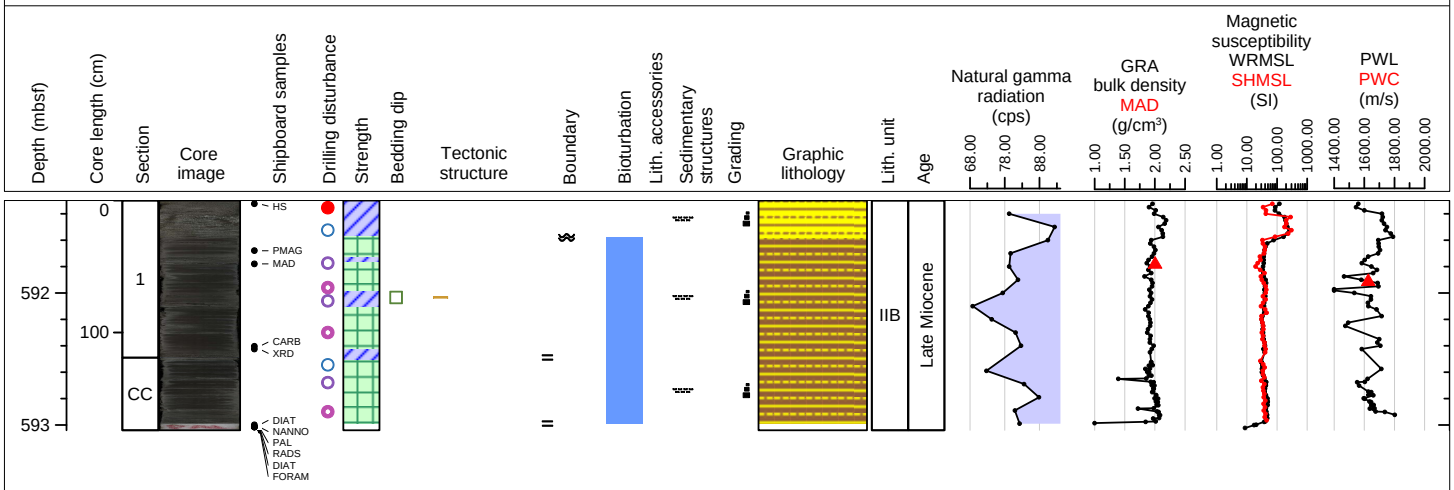
Hole 362-U1480F Core 75X, Interval 581.6-582.12 m (CSF-A)

Very low core recovery. Background sedimentation is alternating sand and mud layers. 1-2 cm thick, normally-graded, cross-laminated silty beds throughout the core. Locally small amount of plant debris.



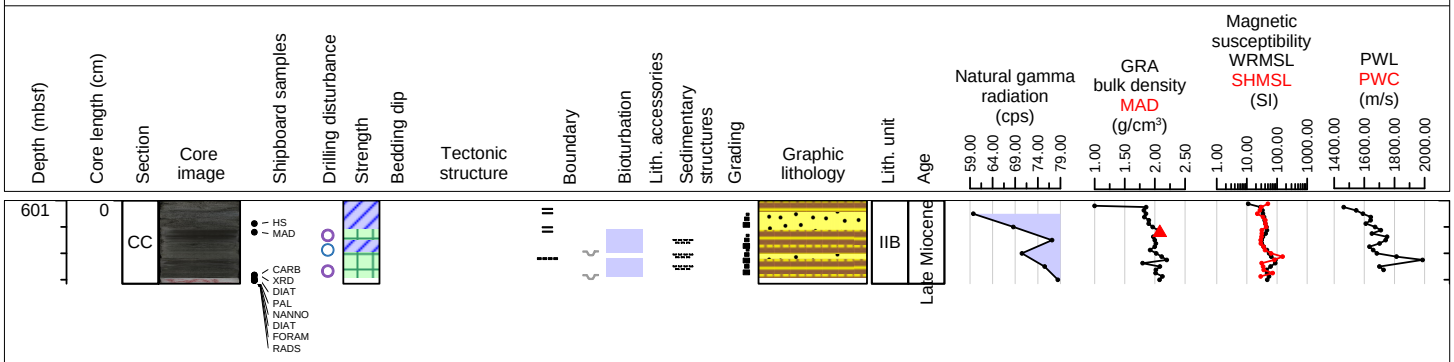
Hole 362-U1480F Core 76X, Interval 591.3-593.04 m (CSF-A)

Upper part of Core 76 has minor lithology of greenish-gray very fine-grained sand and a lower part that is intensively bioturbated silty clay as major lithology. Normally-graded, cross- and parallel-laminated silty beds occur throughout the core.



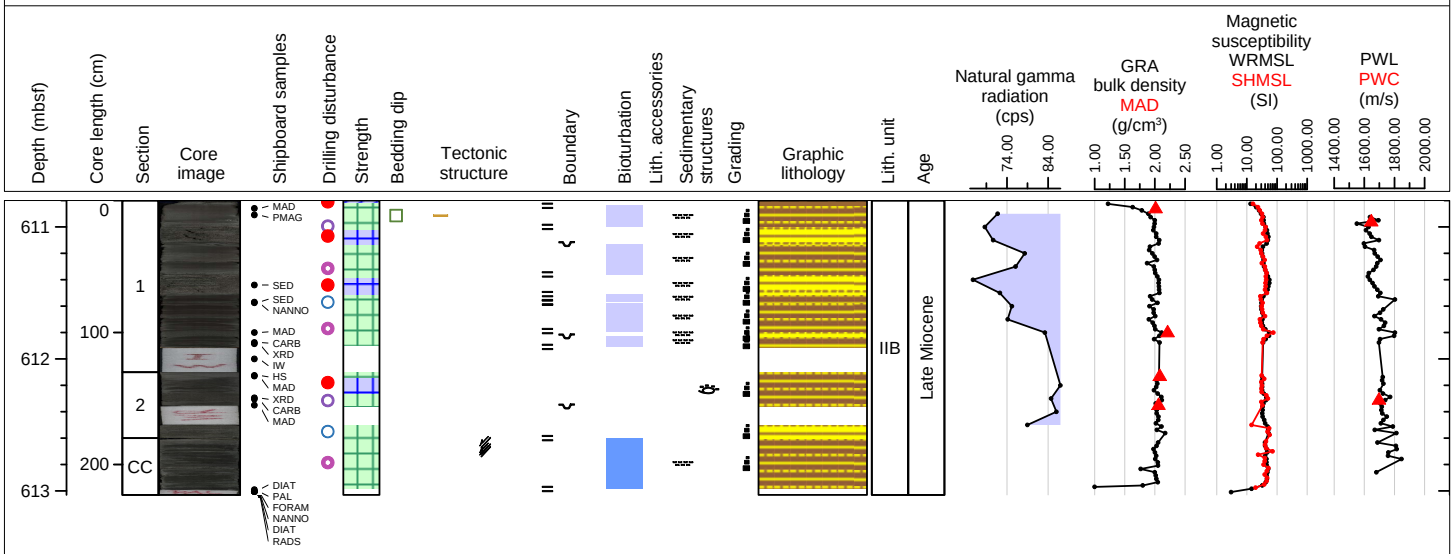
Hole 362-U1480F Core 77X, Interval 601.0-601.63 m (CSF-A)

Core recovery is very low. In CC, 8-58 cm, there are two main units: (1) very fine-grained sand with normal grading, and (2) alternating clay and silt layers. The top of section (0-8 cm) contains fall-in material from drilling.



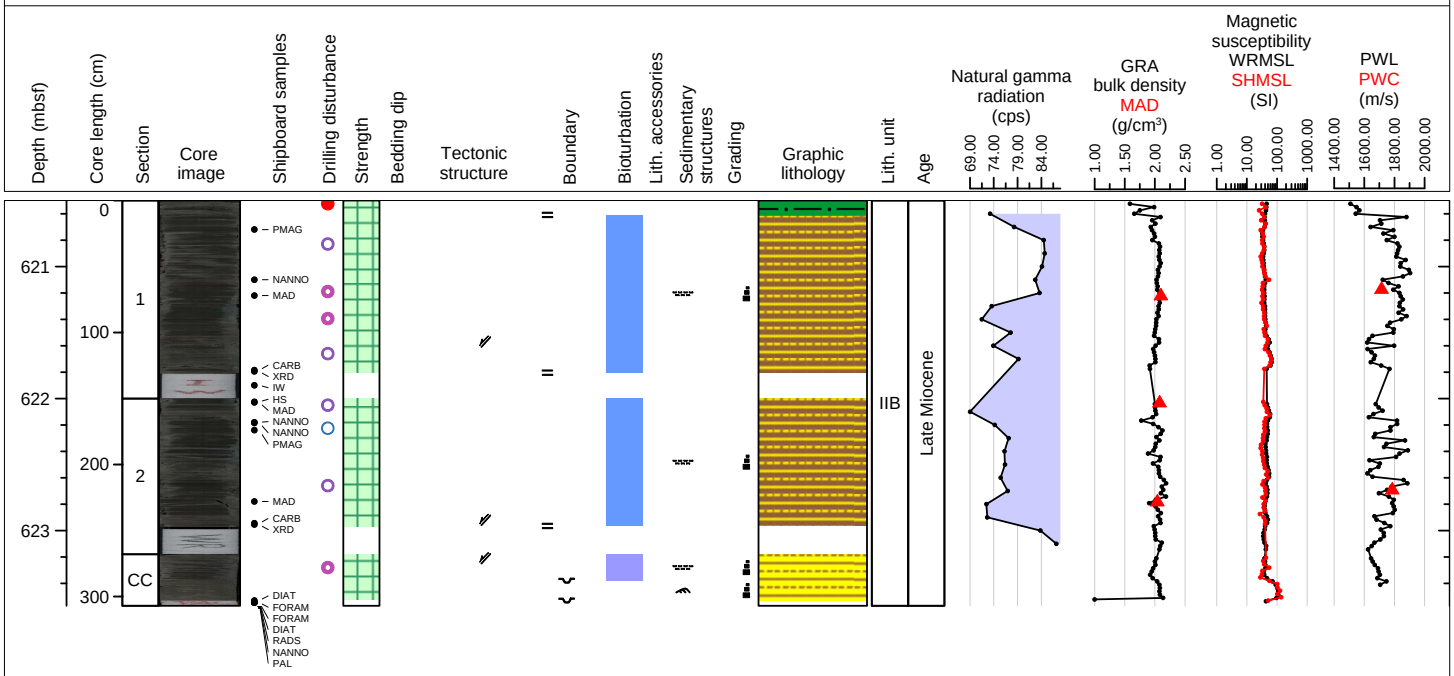
Hole 362-U1480F Core 78X, Interval 610.8-613.03 m (CSF-A)

Background sedimentation is locally intensively bioturbated mottled dark gray silty clay. Normally-graded, cross- and parallel-laminated silty beds and very fine-grained sand with mm-scale lamination or smaller plant debris throughout the core. Minor normal faults observed.



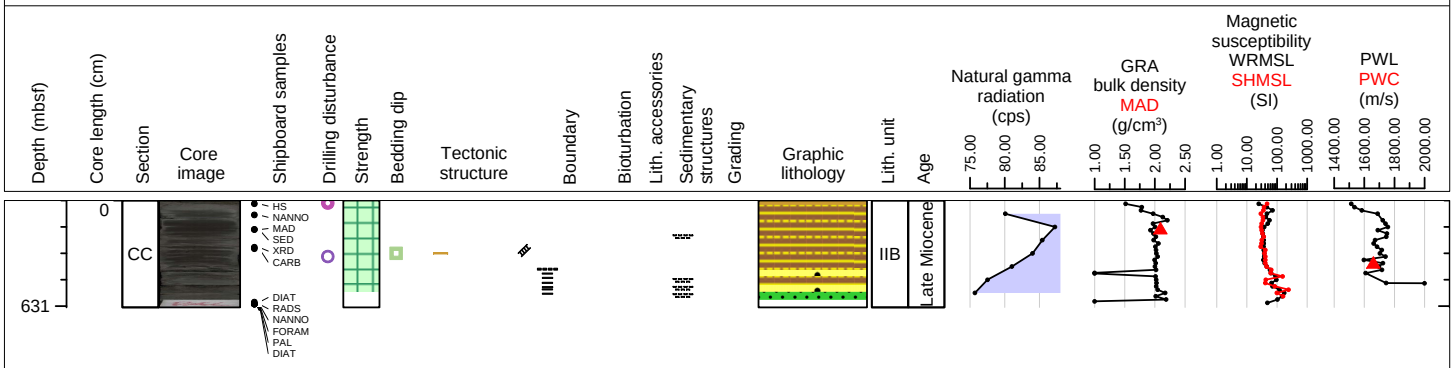
Hole 362-U1480F Core 79X, Interval 620.5-623.57 m (CSF-A)

Background sedimentation is locally intensively bioturbated mottled dark-gray silty clay. Normally-graded, cross- and parallel-laminated silty beds and very fine-grained sand throughout the core. Minor normal faults observed.



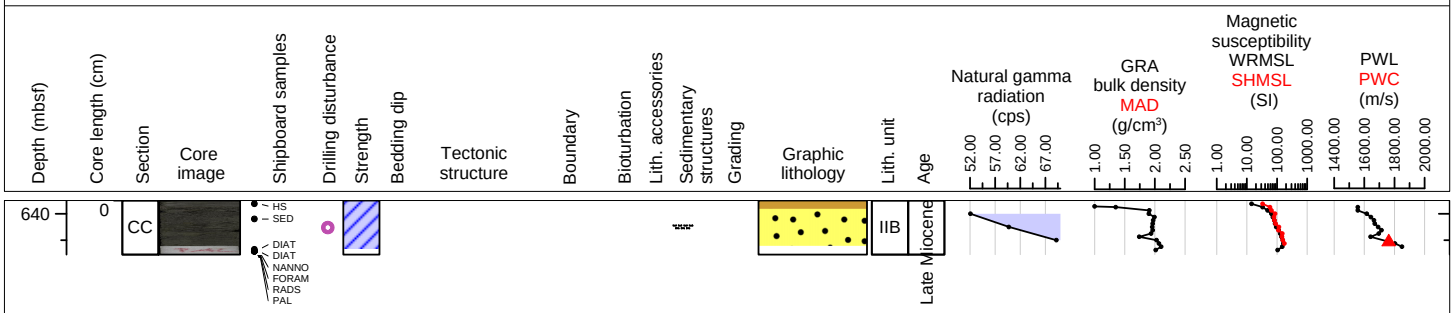
Hole 362-U1480F Core 80X, Interval 630.2-631.01 m (CSF-A)

The core shows mainly alternating thin- to medium-bedded silt and clay, with thin-bedded, fine-grained sand at 52-57 cm and 64-69 cm. Well preserved mm-scale sand injections at 33-40 cm.



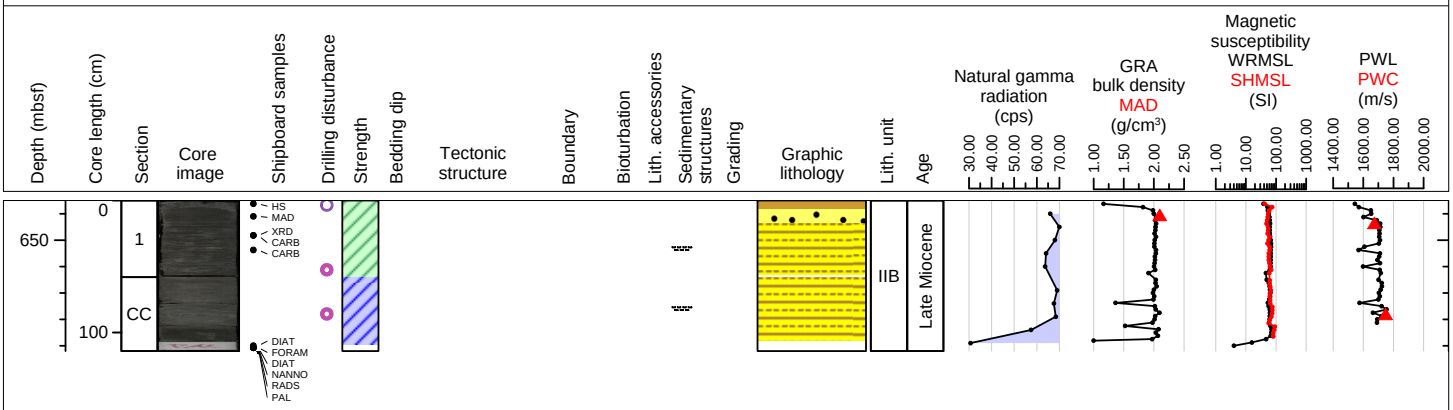
Hole 362-U1480F Core 81X, Interval 639.9-640.31 m (CSF-A)

The core shows fine-grained sand and silt laminae, with abundant plant fragments.



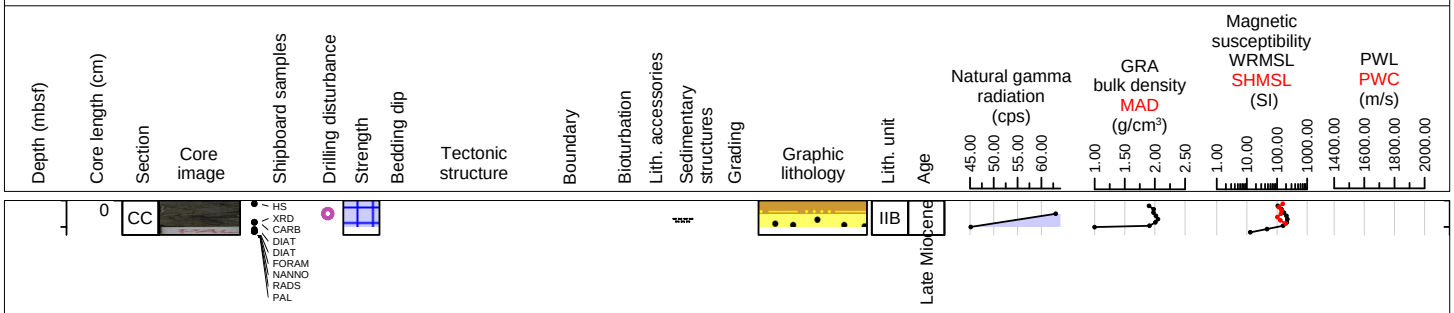
Hole 362-U1480F Core 82X, Interval 649.7-650.84 m (CSF-A)

The core shows mostly thin-bedded, fine-grained sand (with rare plant fragments) that alternates with silt laminae. One, medium-bedded, fine-grained sand in Section 1, 6-17 cm.



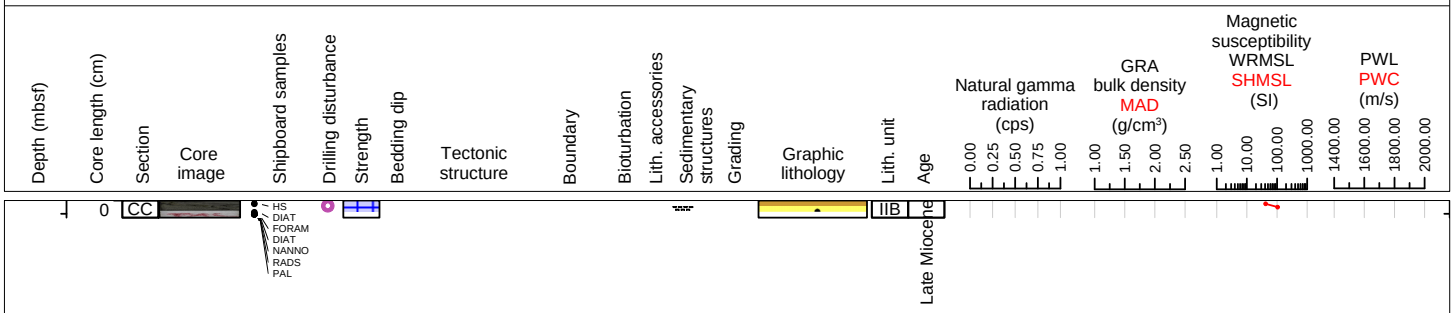
Hole 362-U1480F Core 83X, Interval 659.4-659.66 m (CSF-A)

The core contains planar-laminated, fine-grained sand. The topmost 10 cm includes fall-in drilling disturbance.



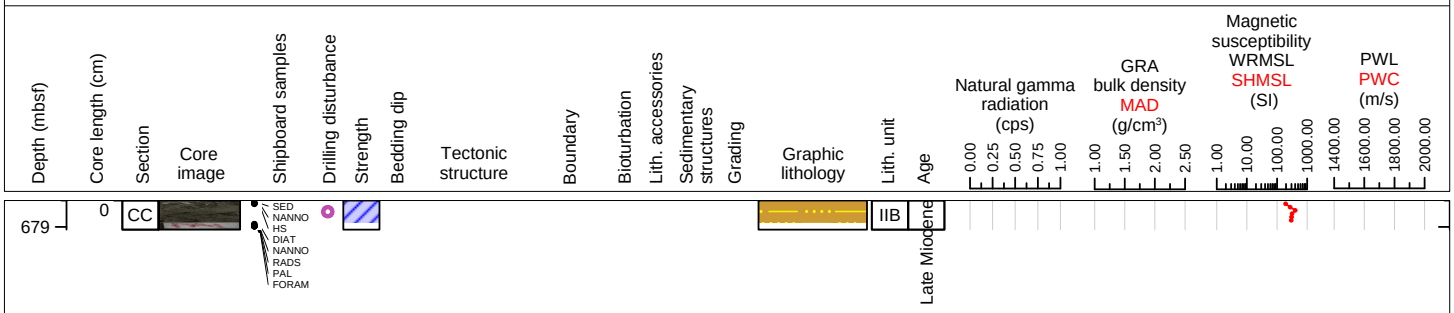
Hole 362-U1480F Core 84X, Interval 669.1-669.23 m (CSF-A)

The core contains planar-laminated, fine-grained sand. The topmost 4 cm includes fall-in drilling disturbance.



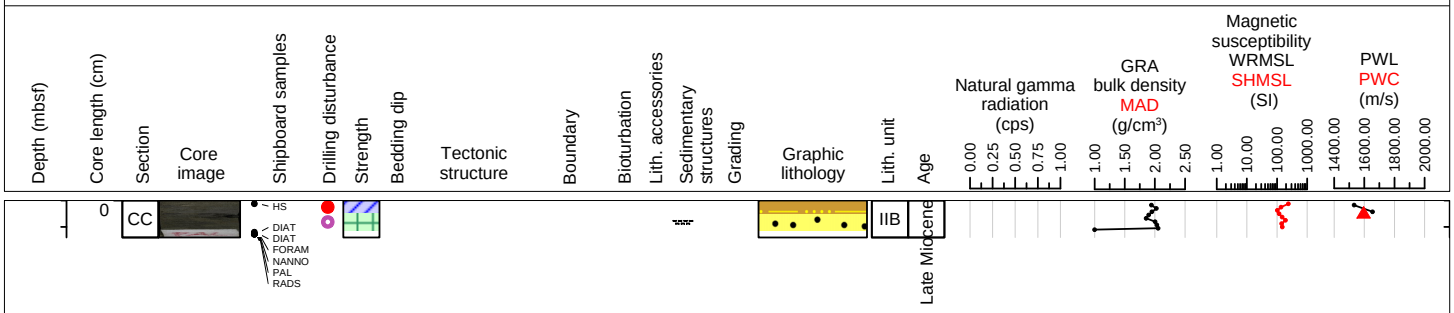
Hole 362-U1480F Core 85X, Interval 678.8-679.02 m (CSF-A)

The core is entirely made up severely disturbed, mostly fine-grained sand, as in Core 84. The basal part (11-17 cm) shows remnants of lamination within fine-grained sand.



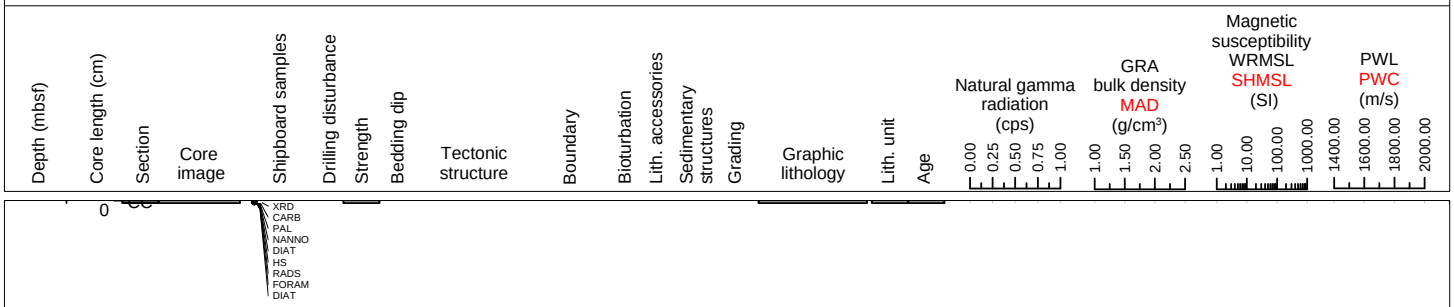
Hole 362-U1480F Core 86X, Interval 688.6-688.88 m (CSF-A)

The core shows an upper part made up of fall-in drilling disturbance (destroyed) that overlies a severely disturbed interval of planar-laminated, fine-grained sand with trace amounts of plant fragments.



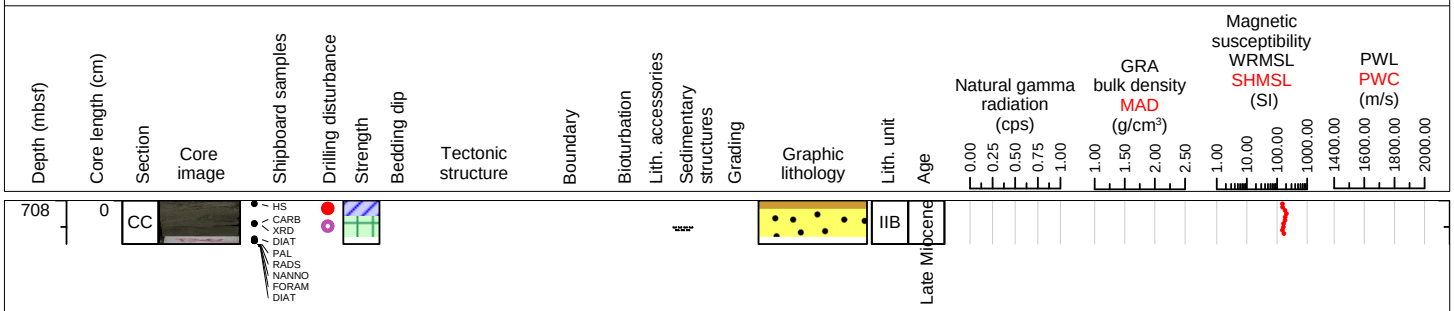
ALL TO PAL

Hole 362-U1480F Core 87X, Interval 698.3-698.32 m (CSF-A)



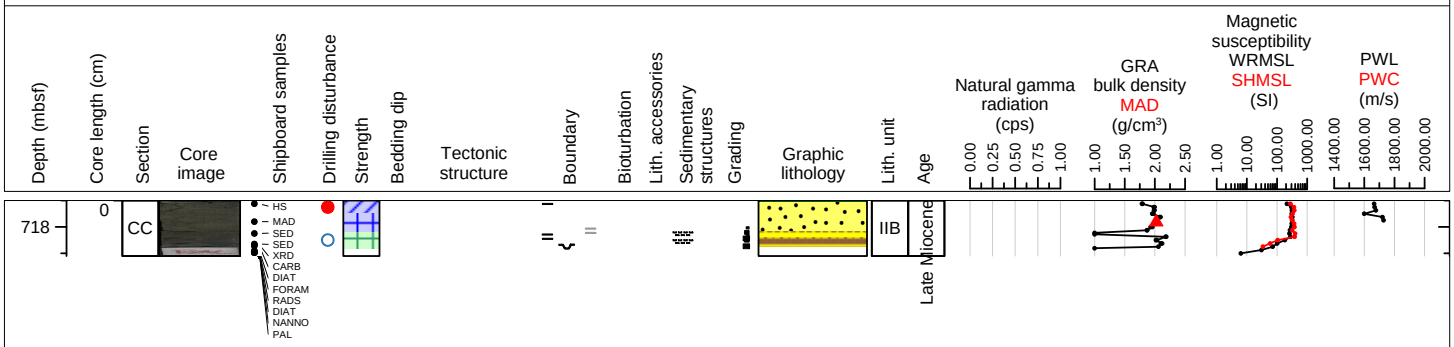
Hole 362-U1480F Core 88X, Interval 708.0-708.33 m (CSF-A)

The core contains an upper part made up of fall-in drilling disturbance (destroyed) that overlies a severely disturbed interval of planar-laminated, fine-grained sand with trace of plant fragments.



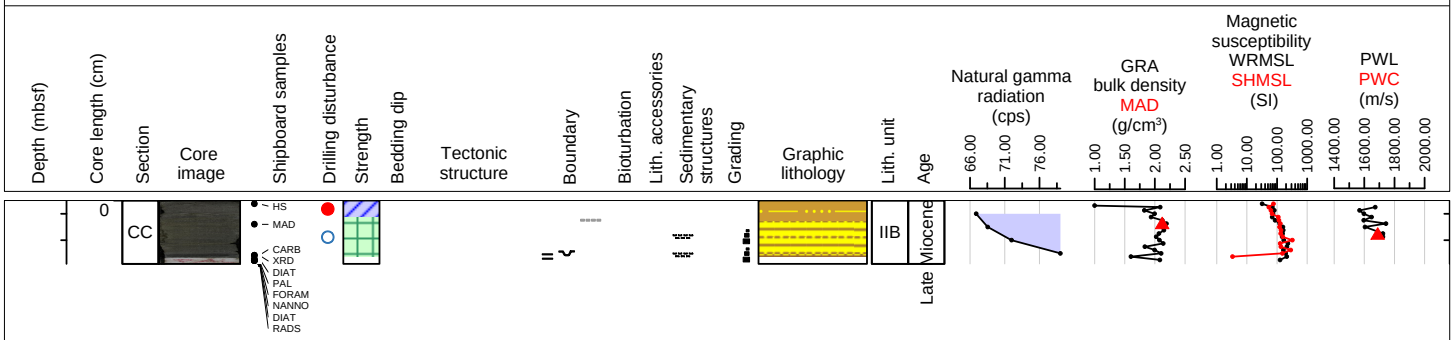
Hole 362-U1480F Core 89X, Interval 717.8-718.22 m (CSF-A)

The core is composed of very fine-grained sand and silty clay. Upper portion of sand layer (1-23 cm) is structureless; lower portion of sand layer (23-27.5 cm) and clay layer (27.5-35 cm) is planar-laminated with very thin laminae. The uppermost 1 cm consists of fall-in drilling disturbance.



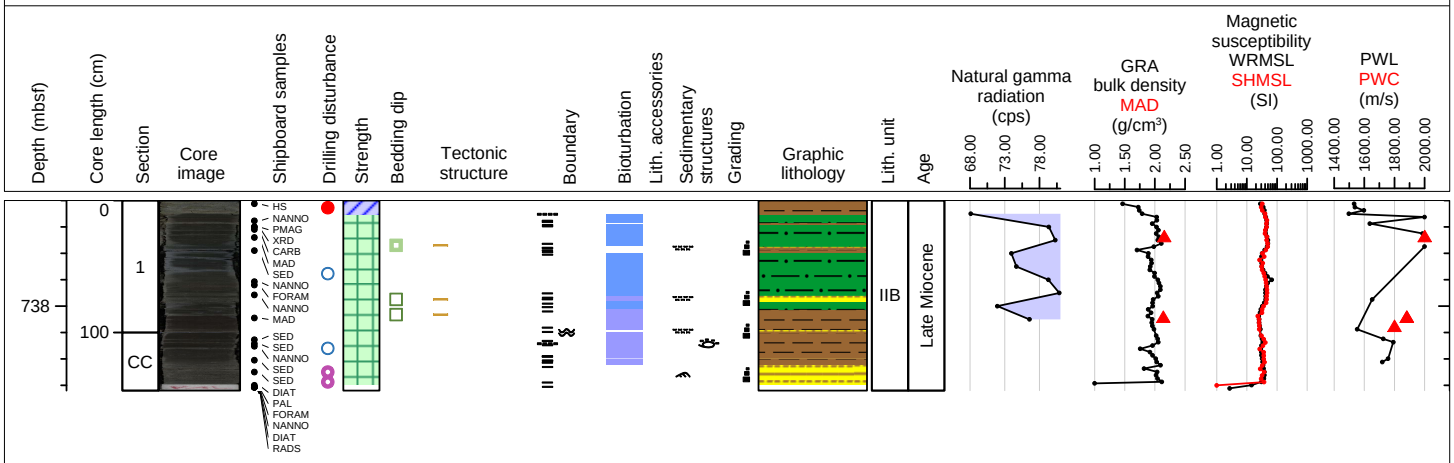
Hole 362-U1480F Core 90X, Interval 727.5-727.98 m (CSF-A)

The core is composed of very fine-grained sand and silty clay. The sand layer (15-40 cm) and clay layer (40-42.5 cm) is planar-laminated with very thin laminae. The uppermost 15 cm consists of fall-in drilling disturbance including mm-cm size angular mud fragments in the very fine-grained sand matrix.



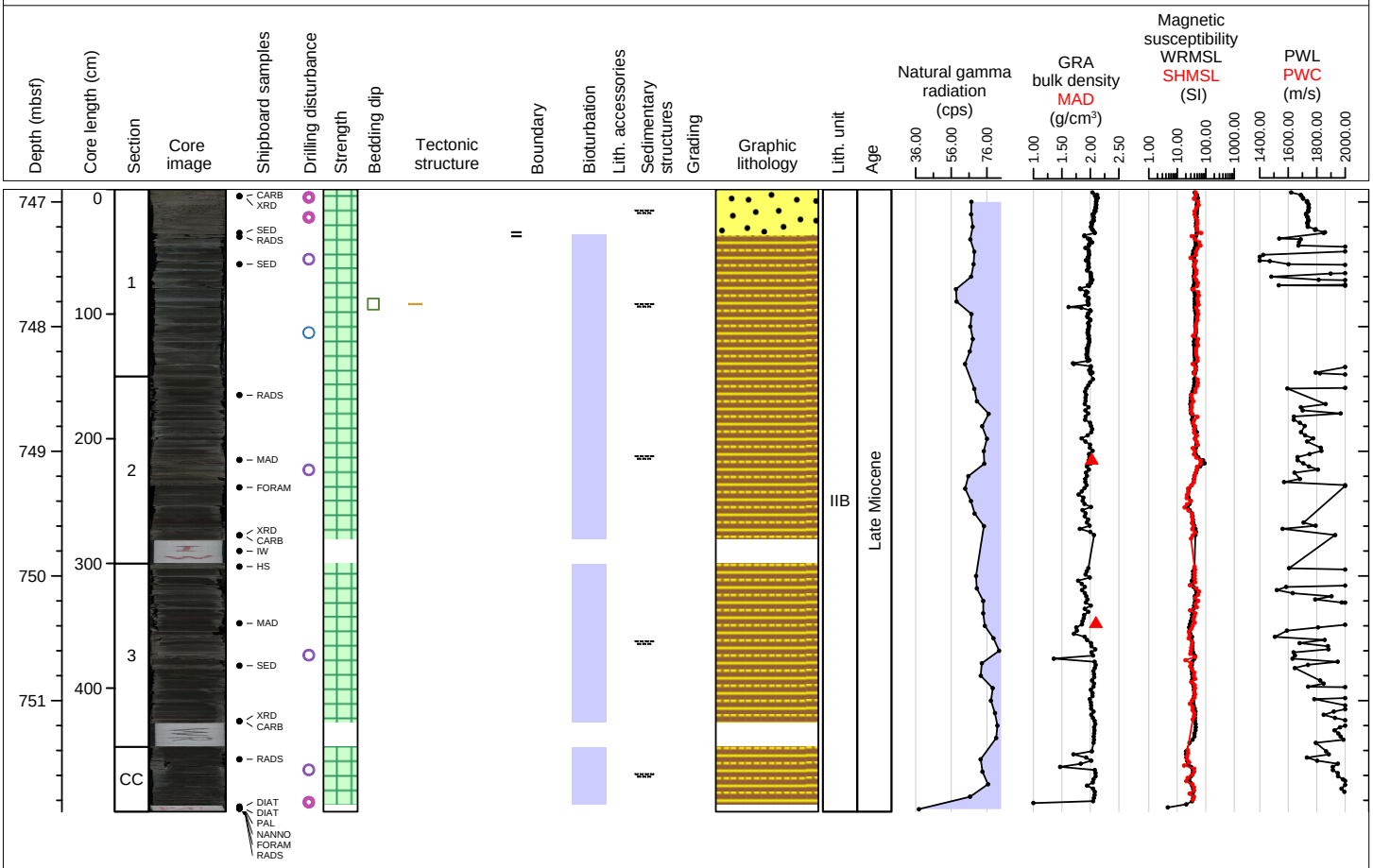
Hole 362-U1480F Core 91X, Interval 737.2-738.64 m (CSF-A)

The core is composed of intensively bioturbated and mottled, dark greenish silty clay (10-72 cm in Section 1), dark-gray clay with calcareous allochems (from 72 cm of section 1 to 24.5 cm in CC), and very fine-grained sand (bottom of CC). Thin-bedded, laminated, very fine-grained sand layers are interbedded with silty clay layers (34.5-37.5 cm, 72-76.5 cm). A lenticular thin pyrite nodule occurs in the dark-gray clay layer (8-8.5 cm). The sand layer is planar-laminated with very thin lamina. The uppermost 10 cm consists of fall-in drilling disturbance including mm-cm size angular mud fragments in a silty clay matrix.



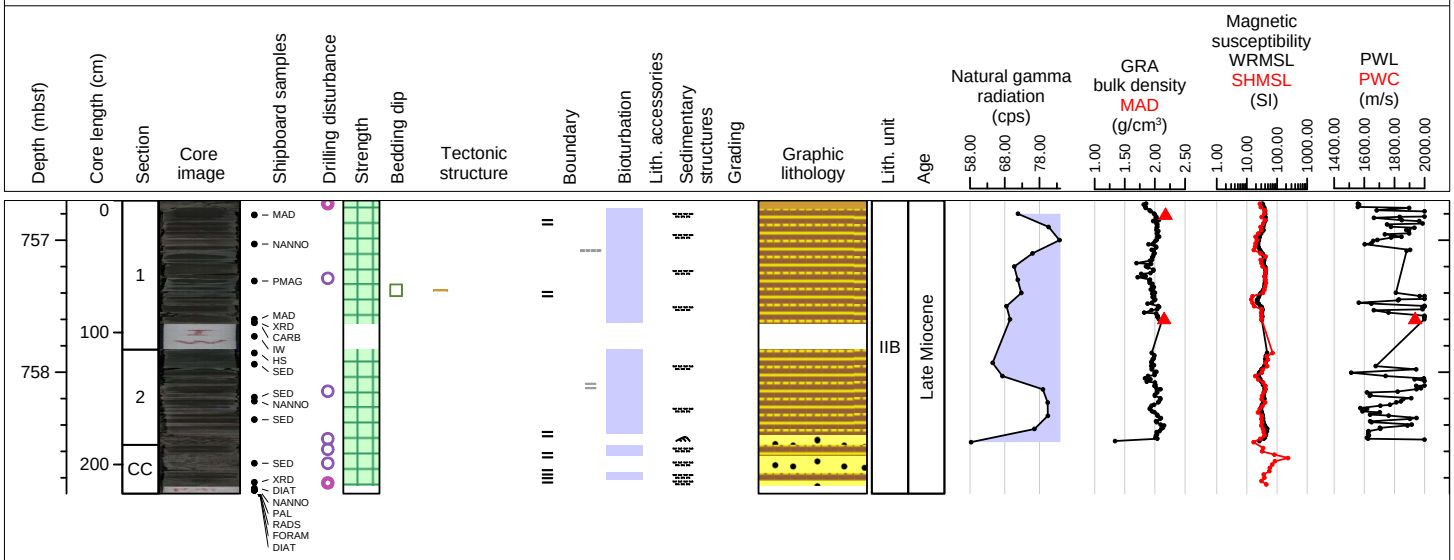
Hole 362-U1480F Core 92X, Interval 746.9-751.89 m (CSF-A)

The core is composed of alternating very thin-bedded silt and clay beds. Silts show cross-lamination and have a planar, sharp, horizontal base. The uppermost 36 cm of the core is made up of planar-laminated fine-grained sand.



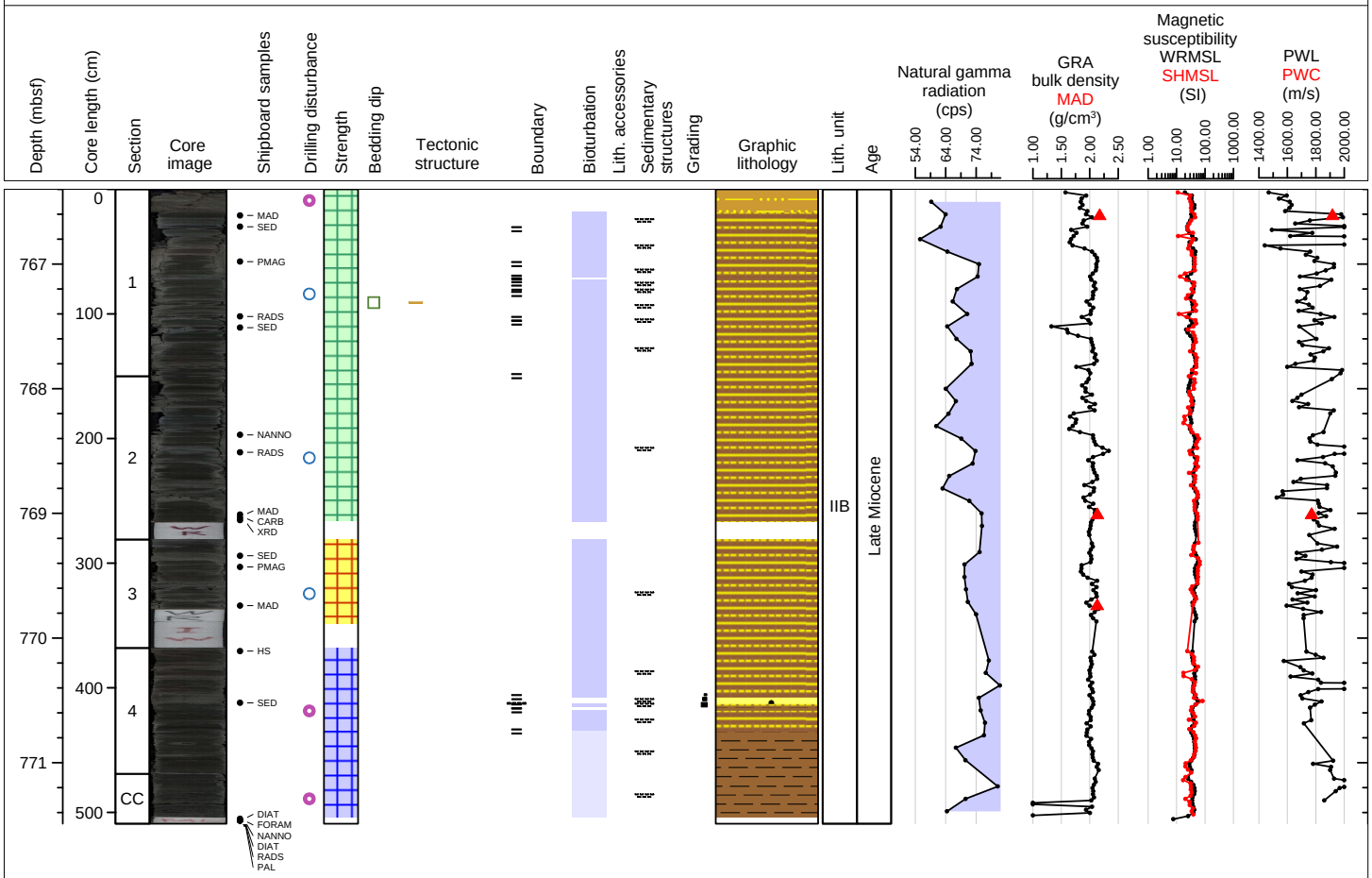
Hole 362-U1480F Core 93X, Interval 756.7-758.92 m (CSF-A)

The core is composed of alternating very thin beds to laminae of silt and clay. This lithology is divided into two sub-units based on color changes: from very dark gray to very dark green; smear-slide analysis shows no significant differences between these. Thin beds of fine-grained sand occur in Section 2 and CC.



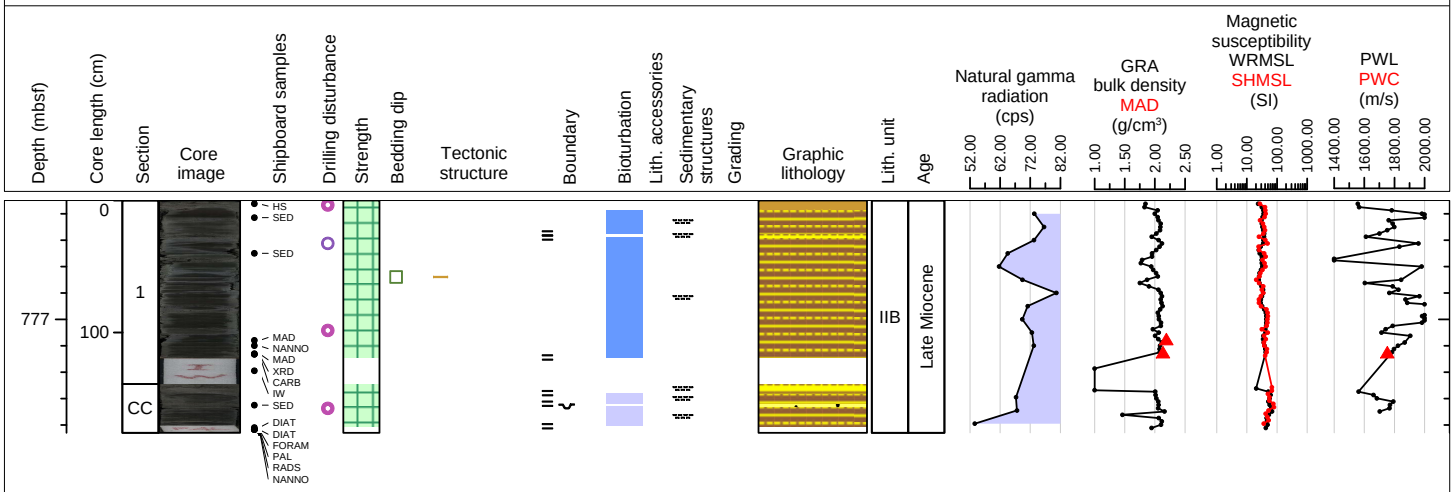
Hole 362-U1480F Core 94X, Interval 766.4-771.49 m (CSF-A)

The core mostly shows bioturbated alternating silt lamina to very thin beds and clay. Silty beds show cross-lamination. There is an overall coarsening upward trend up-core from basal clay (from Section 4, 67 cm to CC) to alternating silt and clay.



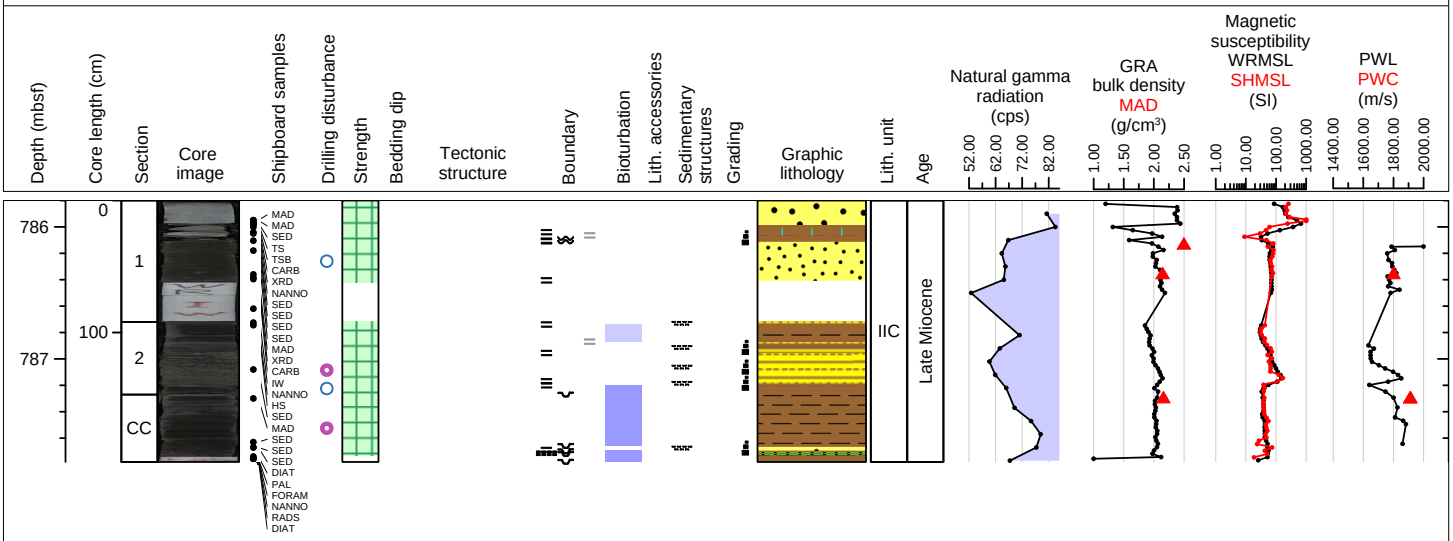
Hole 362-U1480F Core 95X, Interval 776.1-777.86 m (CSF-A)

The core is composed of alternating very thin beds to lamina of silt and clay. Alternating very thin beds of fine-grained sand and silt are preserved in Section 1 (25-27 cm) and CC (0-7 cm). Thin beds of silty sand are preserved in CC (15-17 cm).



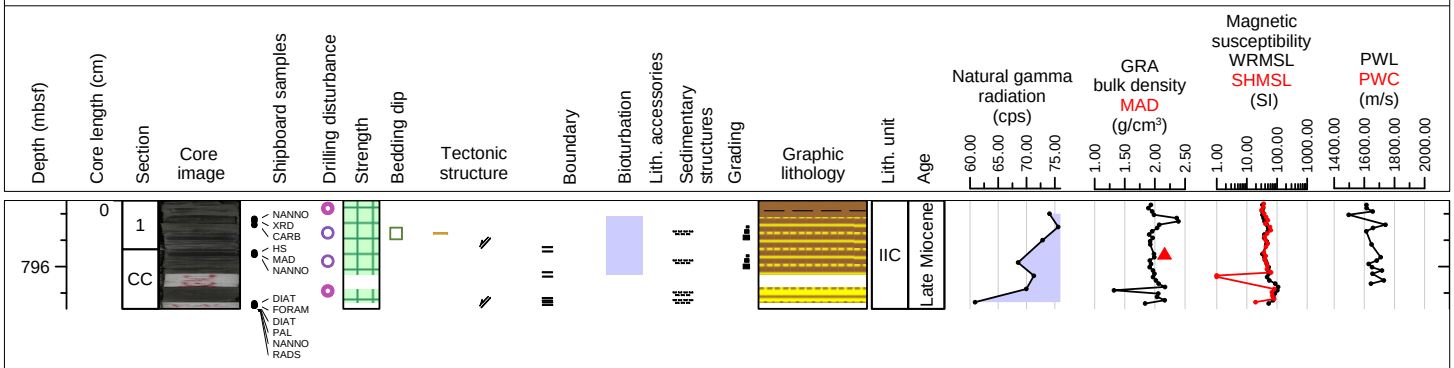
Hole 362-U1480F Core 96X, Interval 785.8-787.78 m (CSF-A)

The core is composed of calcareous-cemented lithified-gray fine-grained sand and greenish-gray clay (in top to middle of Section 1), partially lithified dark-gray clay, alternating very thin beds and laminae of silt and fine-grained sand and unlithified very fine-grained sand with organic matter. Laminae of clay with nannofossils are interbedded in Section 1 (30 cm). Alternating very thin beds of fine-grained sand and silt occur in Section 1 (25-27 cm) and CC (0-7 cm). Thin beds of very fine-grained sand occur in CC (15-17 cm).



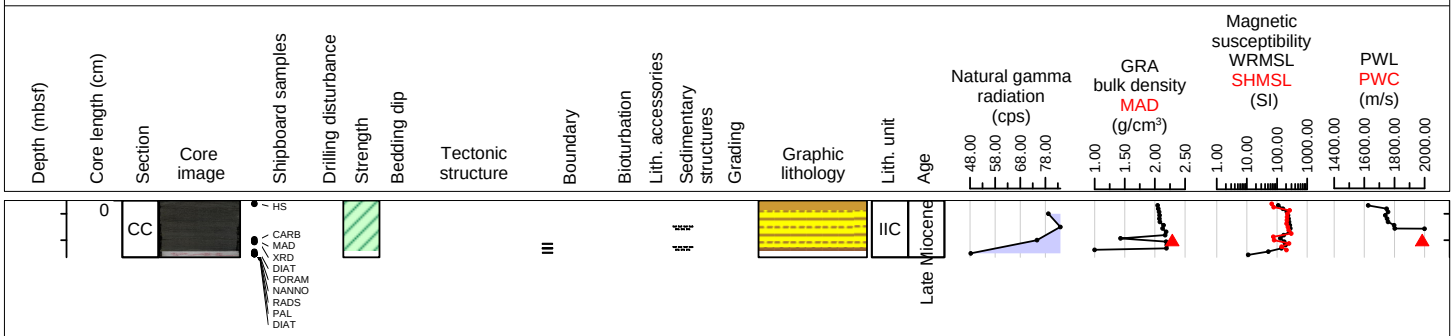
Hole 362-U1480F Core 97X, Interval 795.5-796.32 m (CSF-A)

The core consists of clay and thin-bedded, very fine-grained sand, with planar- and cross-lamination. The uppermost 12 cm consist of fall-in drilling disturbance.



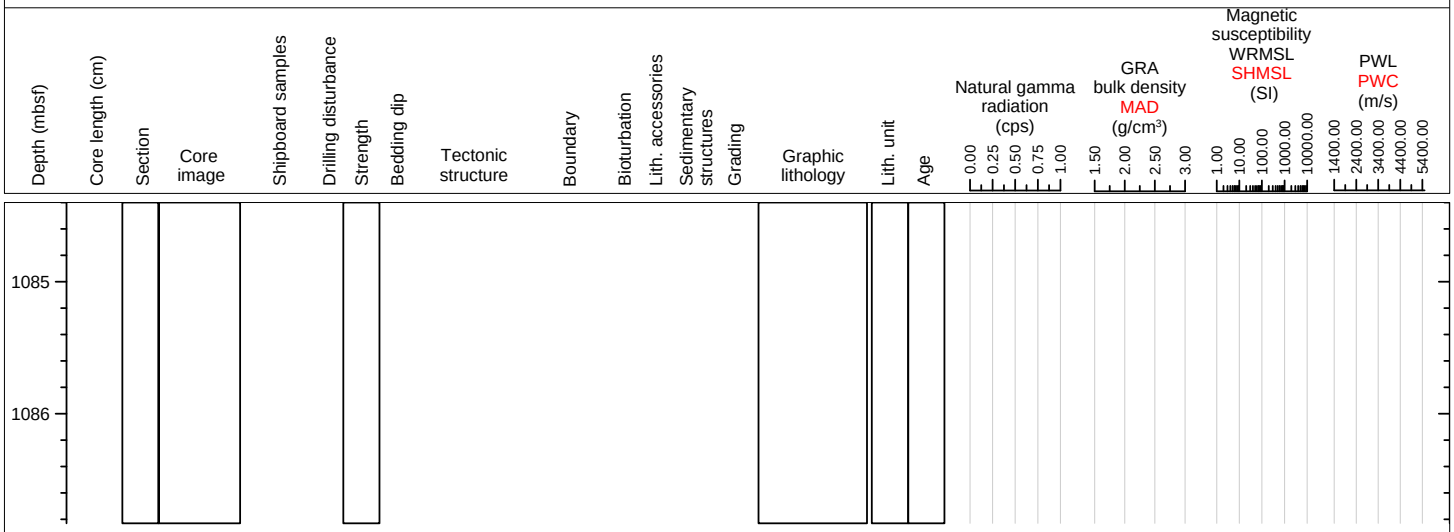
Hole 362-U1480F Core 98X, Interval 805.3-805.73 m (CSF-A)

The core consists of clay and thin-bedded, very fine-grained sand, with planar- and cross-lamination. The uppermost 7 cm consist of fall-in drilling disturbance.



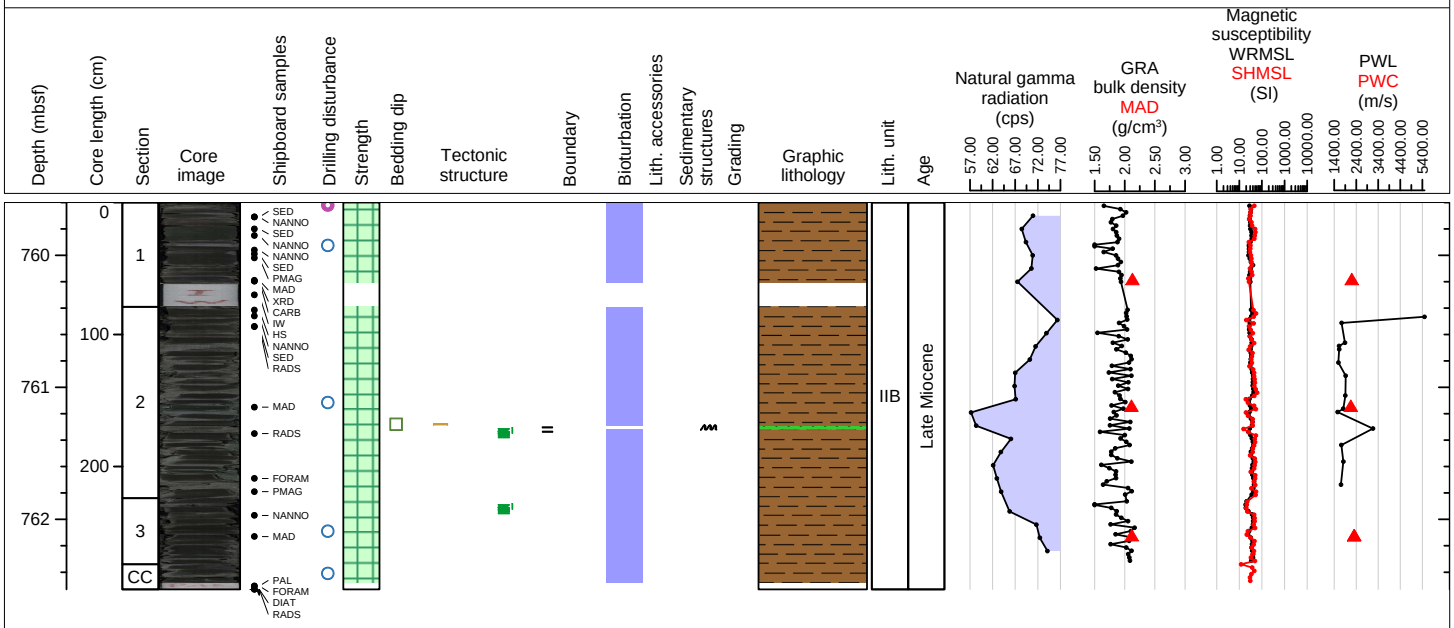
DRILLED INTERVAL

Hole 362-U1480G Core 11, Interval 0.0-0.0 m (CSF-A)



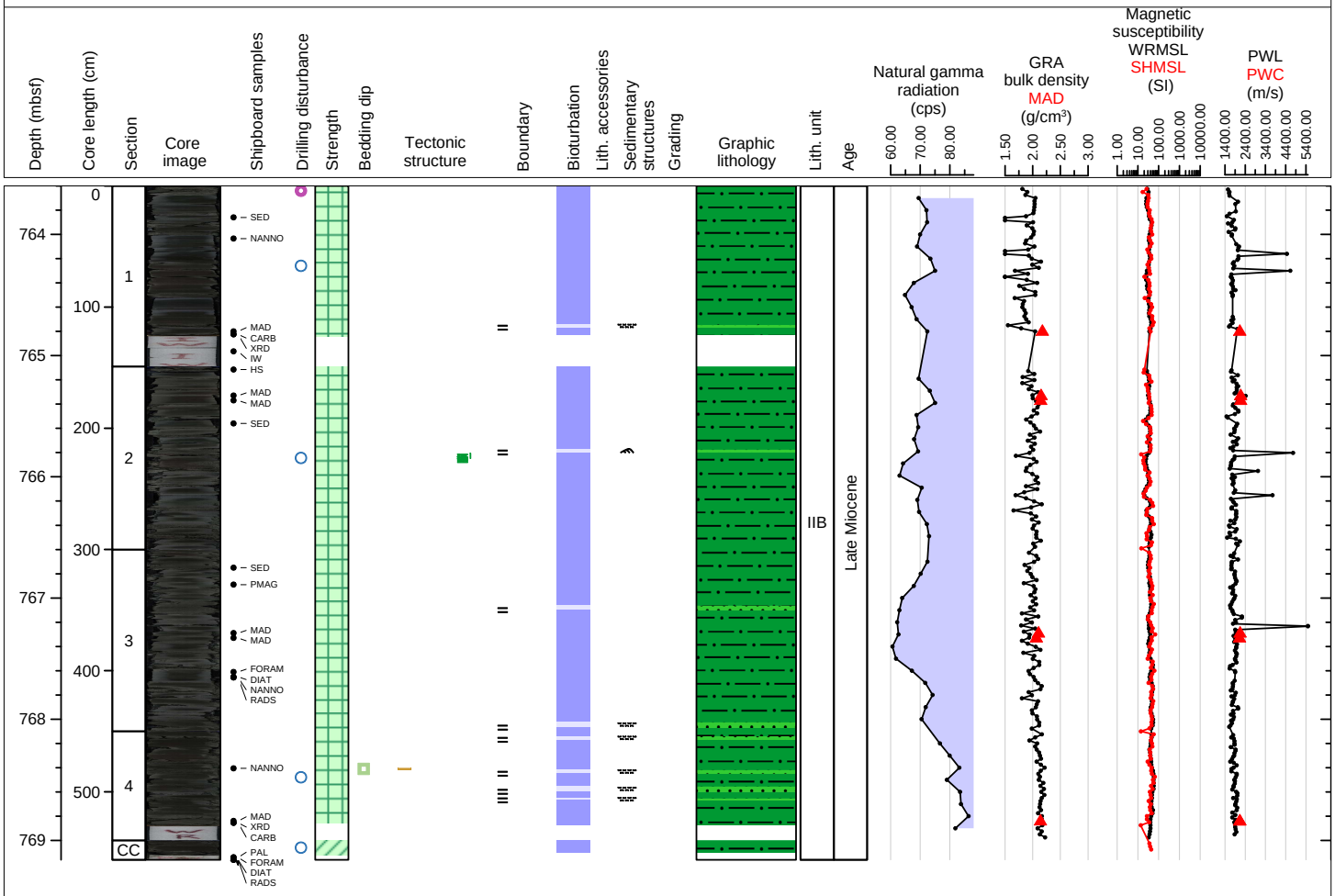
Hole 362-U1480G Core 2R, Interval 759.6-762.53 m (CSF-A)

The entire core is composed of mottled reddish green (2.5YR 2.5/1) and dark greenish-gray (GLEY1 2.5/10GY) clay with rare silt laminae.



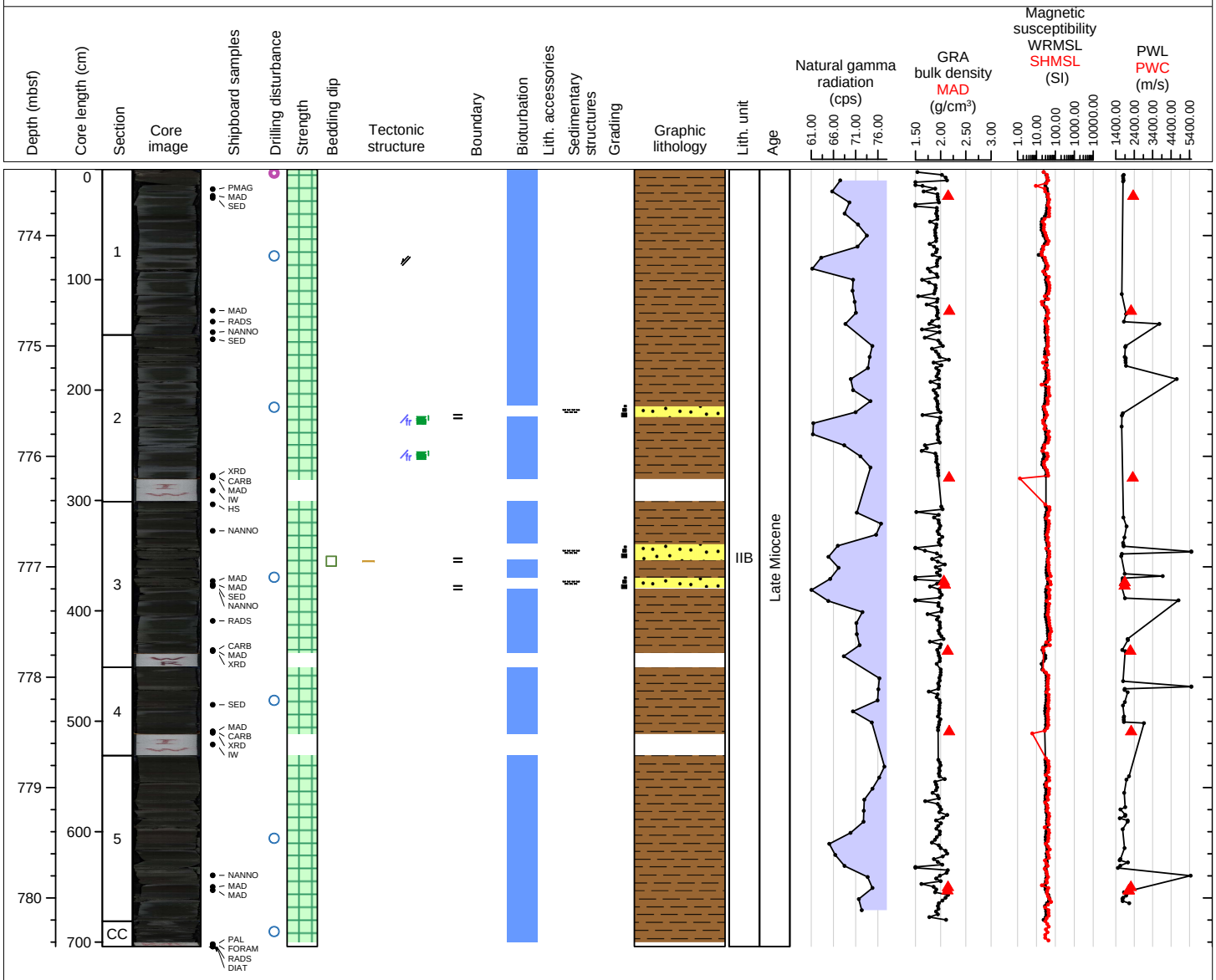
Hole 362-U1480G Core 3R, Interval 763.6-769.16 m (CSF-A)

The core is dominated by silty clay. Several thin beds of silt with planar- and cross-lamination are present throughout the core. The silt bed in Section 4, 46-50 cm, contains plant fragment and overlain a very thin bed of fractured clay. This same interval was inferred to be present in Hole U1480F at Core 94, Section 3, 25-39 cm.



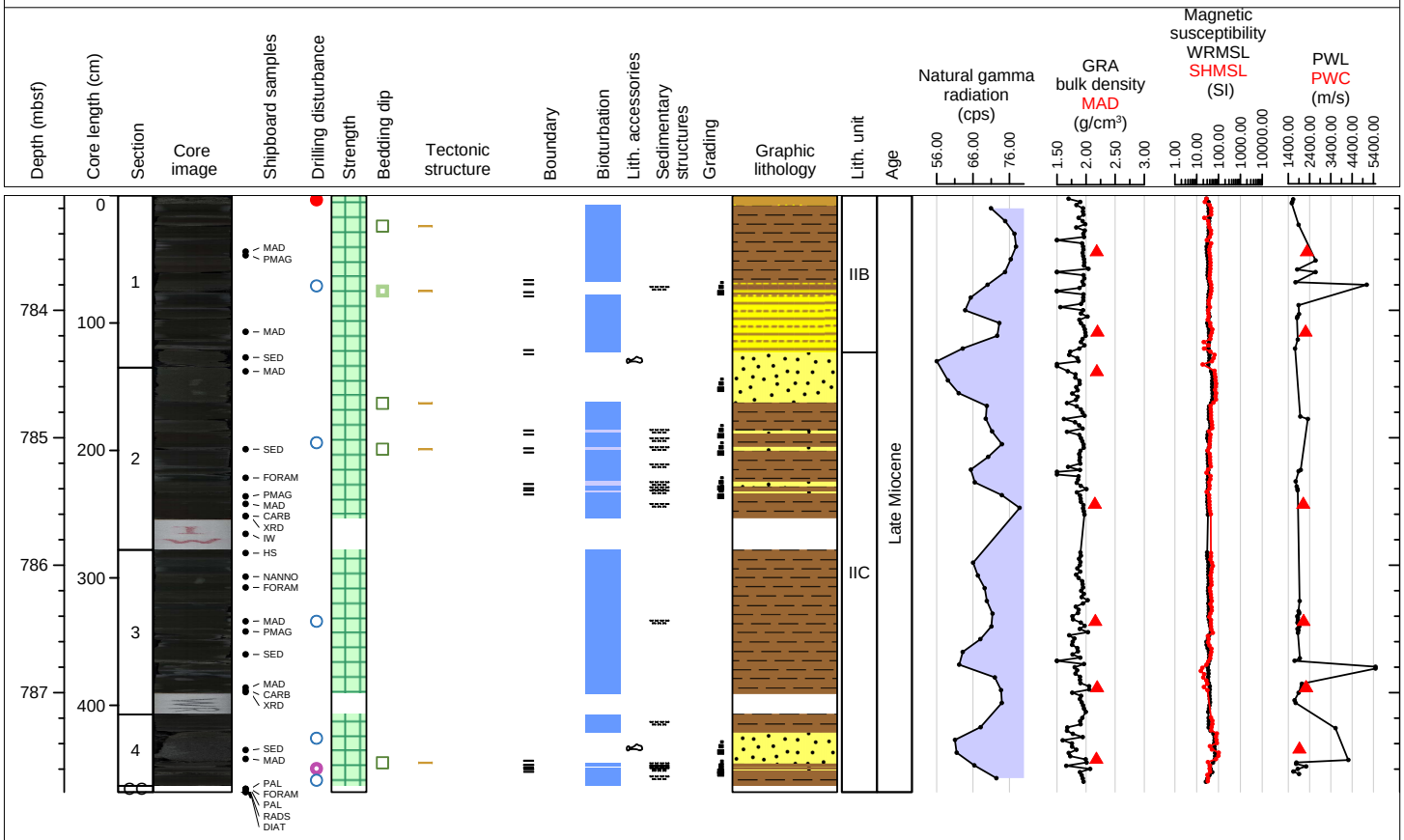
Hole 362-U1480G Core 4R, Interval 773.4-780.44 m (CSF-A)

Throughout the core, dark greenish-gray mottled clay with silt laminae showing parallel-lamination dominate the lithology.



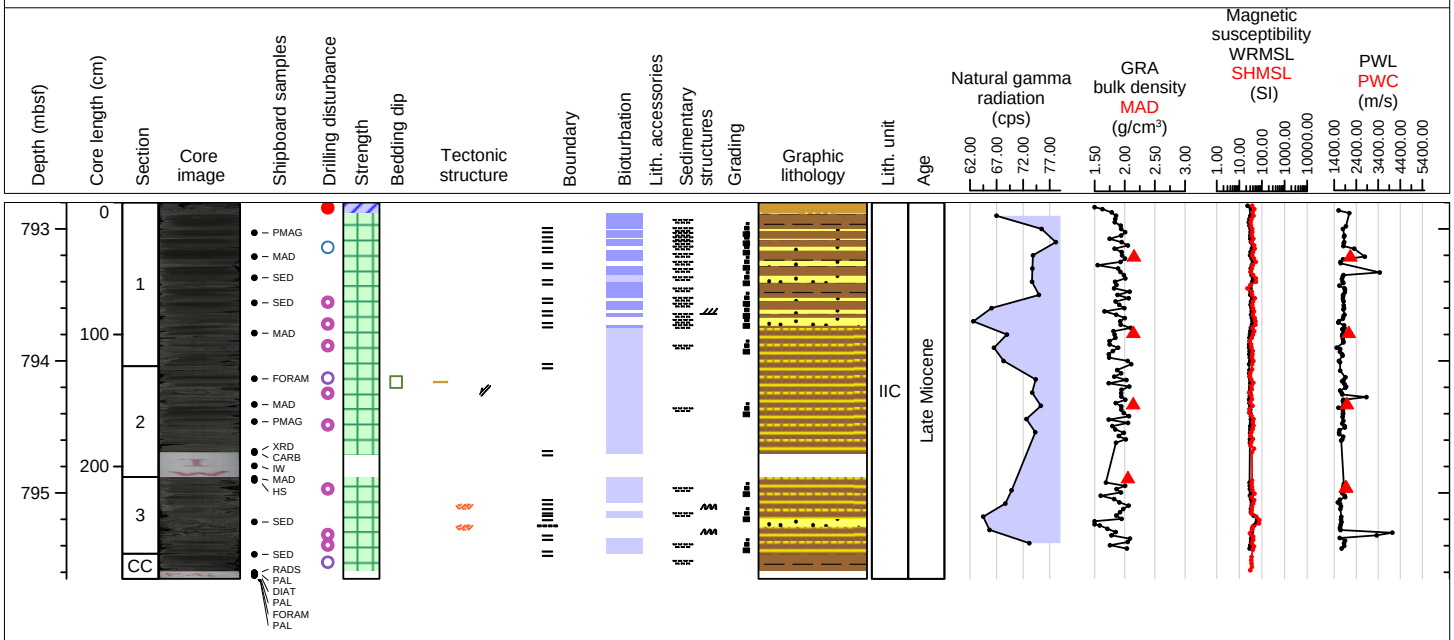
Hole 362-U1480G Core 5R, Interval 783.1-787.78 m (CSF-A)

Major lithology in core 5R is partly intensely bioturbated, very dark gray to black clay with silt that is intercalated with parallel-laminated mm- to cm- scale laminae of normally-graded silts and very fine-grained sand. The mm-scale laminations in the clay are caused by slightly higher amounts of silt and are locally disrupted by bioturbation into horizontally-aligned layers of more silty lenses. Also, agglutinated foraminifers occur throughout the core. In sections 1 and 2 (122-134; 0-28 cm), as well as in Section 4 (13-38 cm), normally-graded, medium-bedded, fine-grained sand to silt are intercalated, with well-rounded rip-up mud clasts and horizontally-aligned plant fragments in their upper parts.



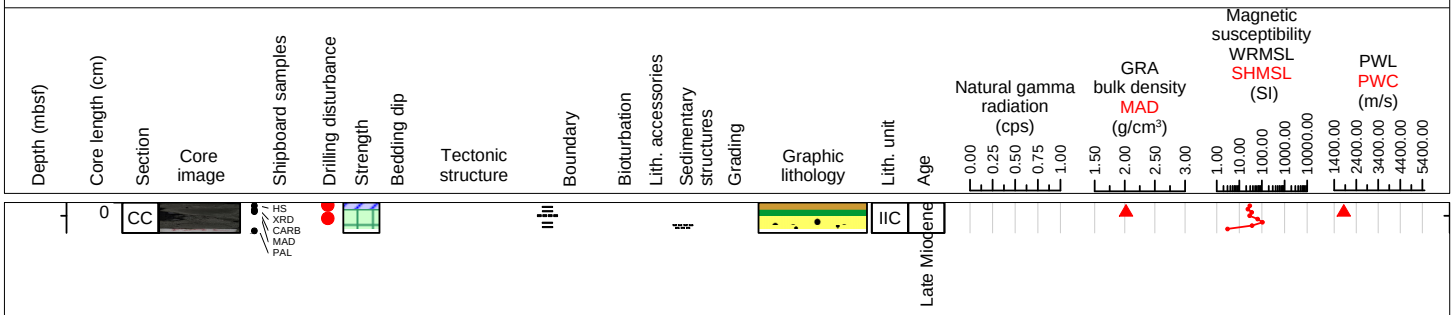
Hole 362-U1480G Core 6R, Interval 792.8-795.65 m (CSF-A)

Background deposits are very dark gray to black clay with silt that has intercalated parallel-laminated mm- to cm- scale laminae of normally-graded silt and very fine-grained sand. The silt and sand beds contain plant fragments. In Section 3, sediment slides (slumps) are present at 19-27 cm and 31-37 cm.



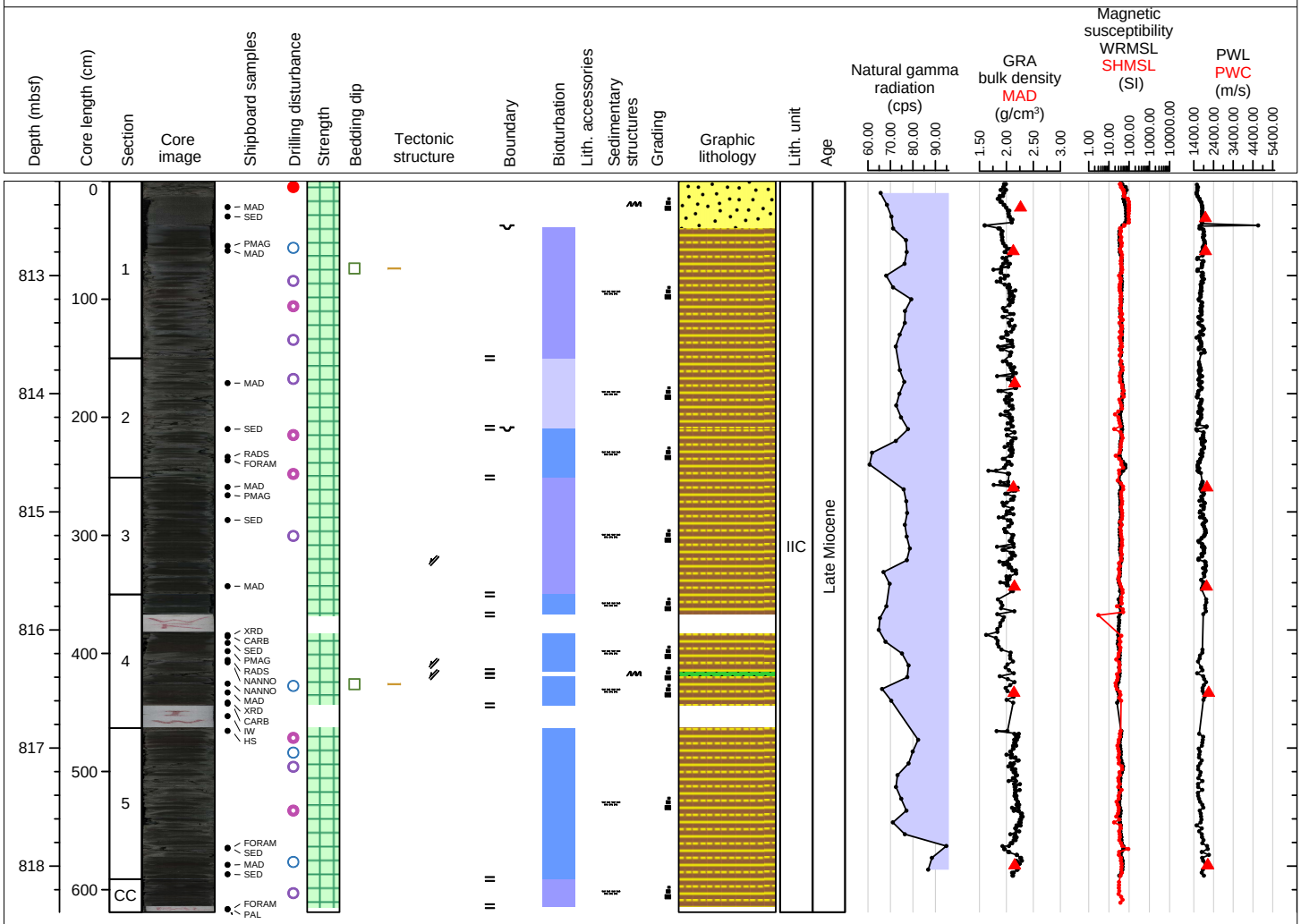
Hole 362-U1480G Core 7R, Interval 802.5-802.73 m (CSF-A)

Core recovery was very low. The core is composed of silty clay, fine-grained sand with clay and very fine-grained sand. The very fine-grained sand layer (17-19.5 cm) is planar-laminated with thin laminae. The entire core is destroyed by drilling.



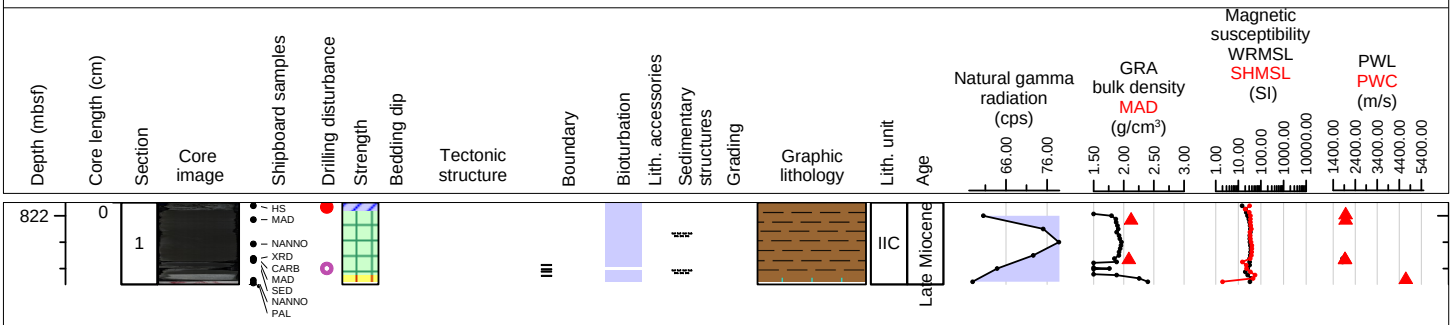
Hole 362-U1480G Core 8R, Interval 812.2-818.39 m (CSF-A)

Major lithology in Core 8R is partly intensely bioturbated, very dark gray clay with silt with intervals of parallel-laminated mm- to cm- scale laminae of normally-graded silts and very fine-grained sand. In Section 2, a very thin bed of calcareous clay with carbonate allochems is present at 59-60 cm. Drilling biscuits occur throughout the core and range from slight to severe.



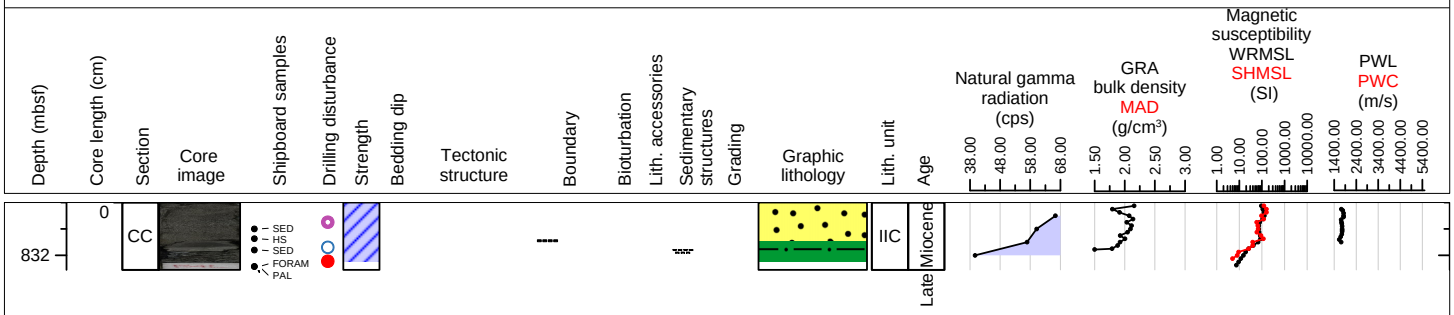
Hole 362-U1480G Core 9R, Interval 821.9-822.52 m (CSF-A)

The core is dominated by dark-gray clay with rare thin silt laminae. The clay changes to a gray mudstone at 54 cm. Centimeter-length coal fragments are observed at 45 cm.



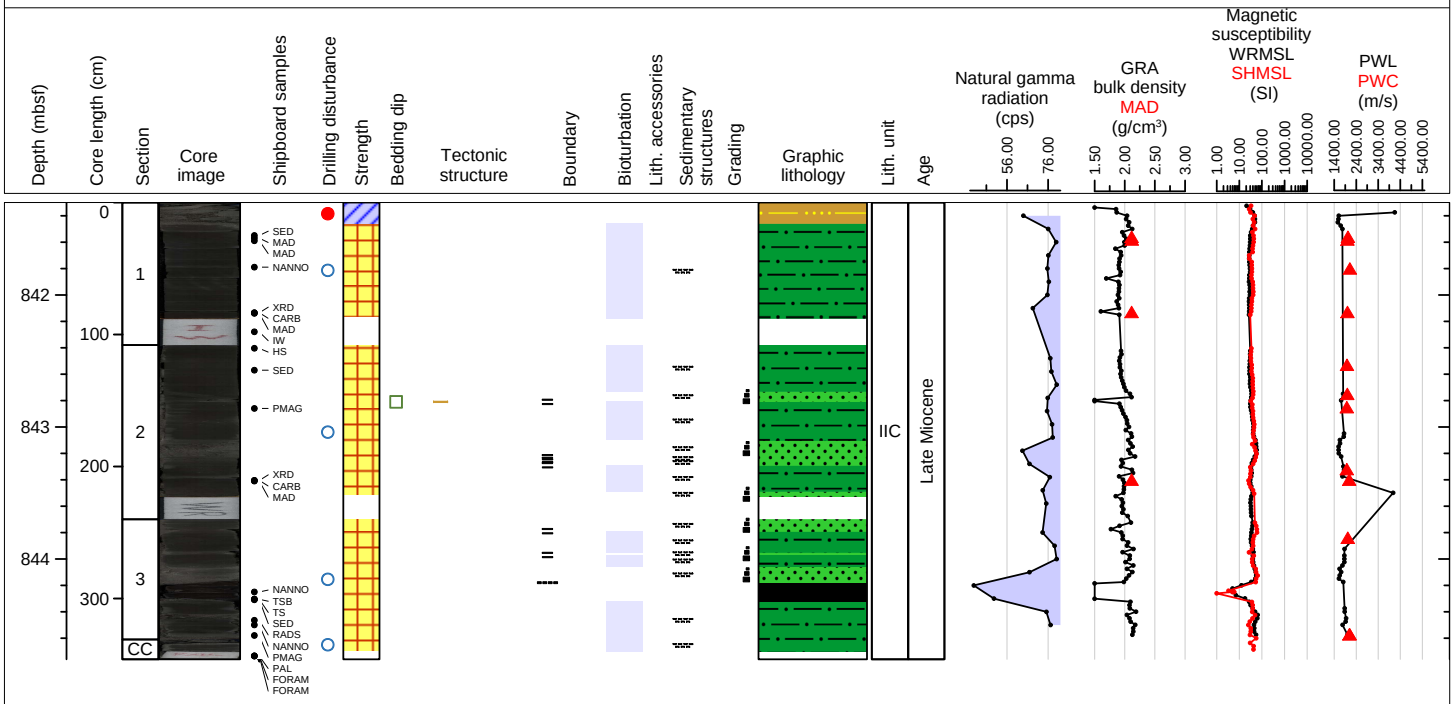
Hole 362-U1480G Core 10R, Interval 831.6-832.11 m (CSF-A)

The core contains two lithologies: structureless very fine-grained sand at 0-29 cm and planar-laminated silty clay with calcareous clasts at 29-45 cm.



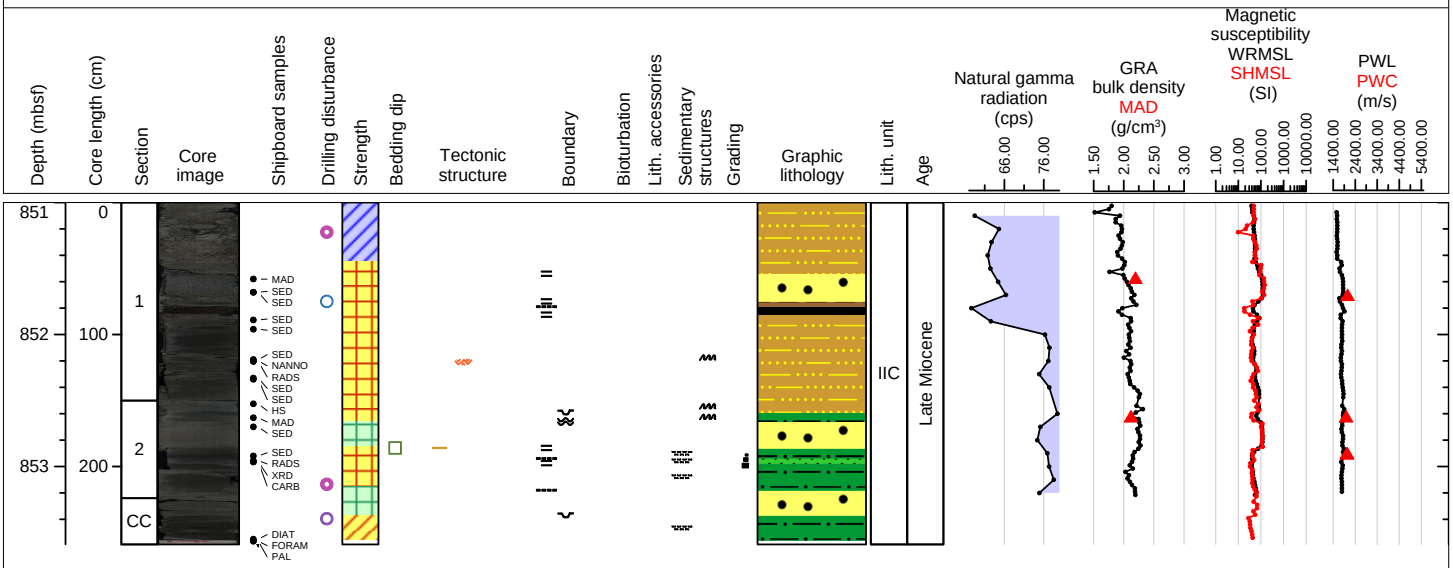
Hole 362-U1480G Core 11R, Interval 841.3-844.76 m (CSF-A)

The core is dominated by normally-graded, planar-laminated, very thin beds of silty-clay to clay. Abundant normally-graded, planar-laminated, medium- to thin-bedded silt is present with planar, sharp, horizontal bases. In Section 3, 48 to 62 cm, a coal layer is observed that probably represents a wood fragment.



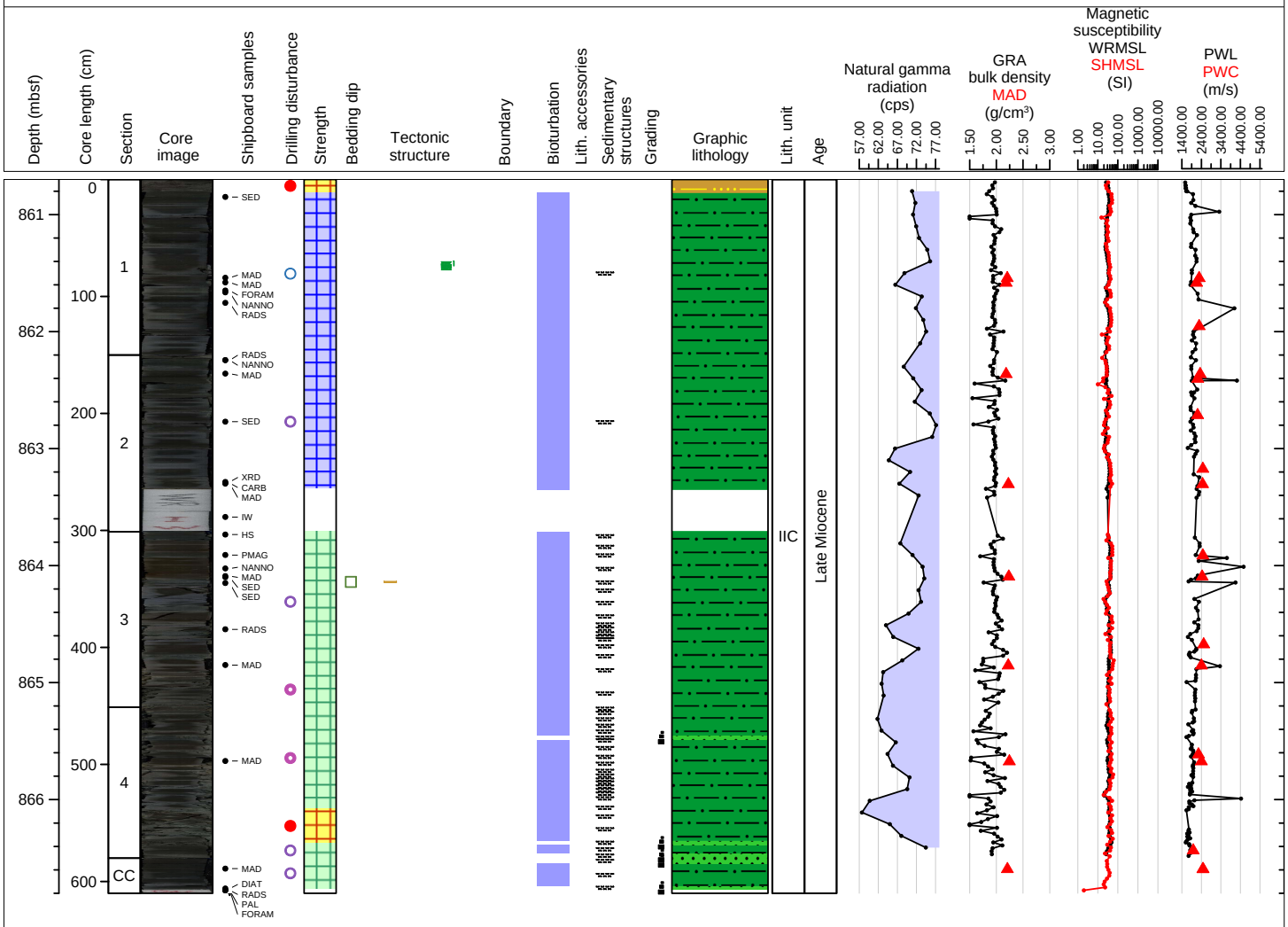
Hole 362-U1480G Core 12R, Interval 851.0-853.59 m (CSF-A)

Intervals of structureless, medium-grained sand with silty clay and clay clasts up to pebble size. Prominent pyritized coal layer in Section 1, 79-85 cm, consisting of individual platy coal clasts with rounded ends and typically 10-30 mm long x 1 mm thick. Abundant pyritized woody (coaly) material throughout the sandy parts. Injection structures of medium-/fine-grained sand at various angles to bedding structures. Synsedimentary recumbent fold in Section 1 at 118 cm. Entire core might be a single or several amalgamated cohesive-flow deposits (e.g., debris-flow deposits as a mass transport deposit (MTD)).



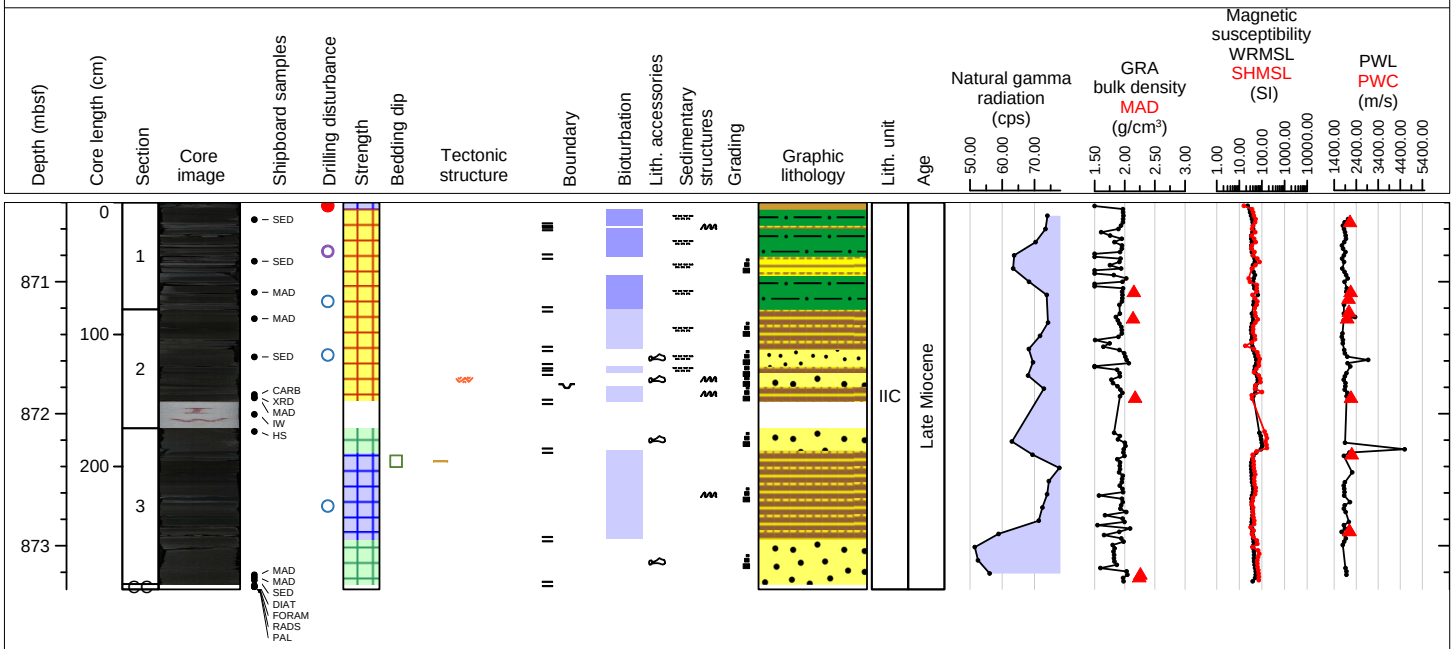
Hole 362-U1480G Core 13R, Interval 860.7-866.8 m (CSF-A)

The core consist of silty clay in alternating gray-green and red-brown intervals, with very thin- and thin-bedded, parallel-laminated, normally-graded silt.



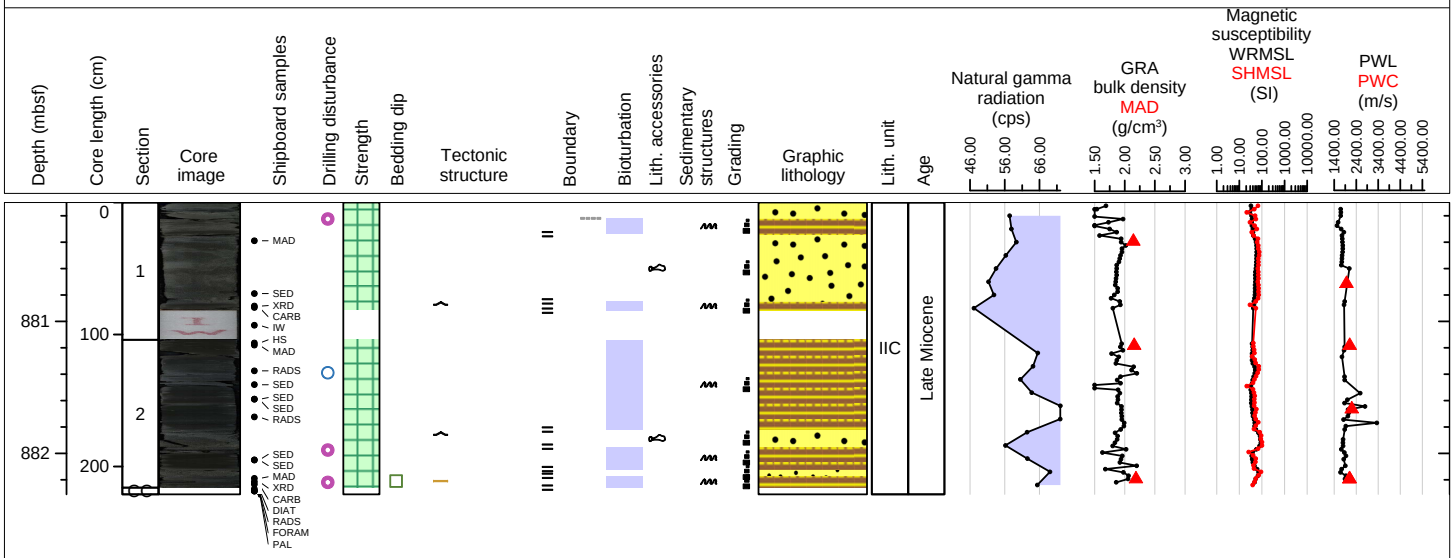
Hole 362-U1480G Core 14R, Interval 870.4-873.33 m (CSF-A)

Background lithology of this core is alternating, greenish black, clay and silt. Silt layers commonly show convolute lamination. Intercalated in the background sediment, there are greenish black, thin to medium-bedded, normally-graded, very fine- to fine-grained sand layers that contain reworked and rounded clay clasts as well as rare to common amounts of plant debris. Sand layers in the upper part of the core (Section 1 and 2) typically show convolute lamination, whereas in Section 3 the sand beds are mainly structureless.



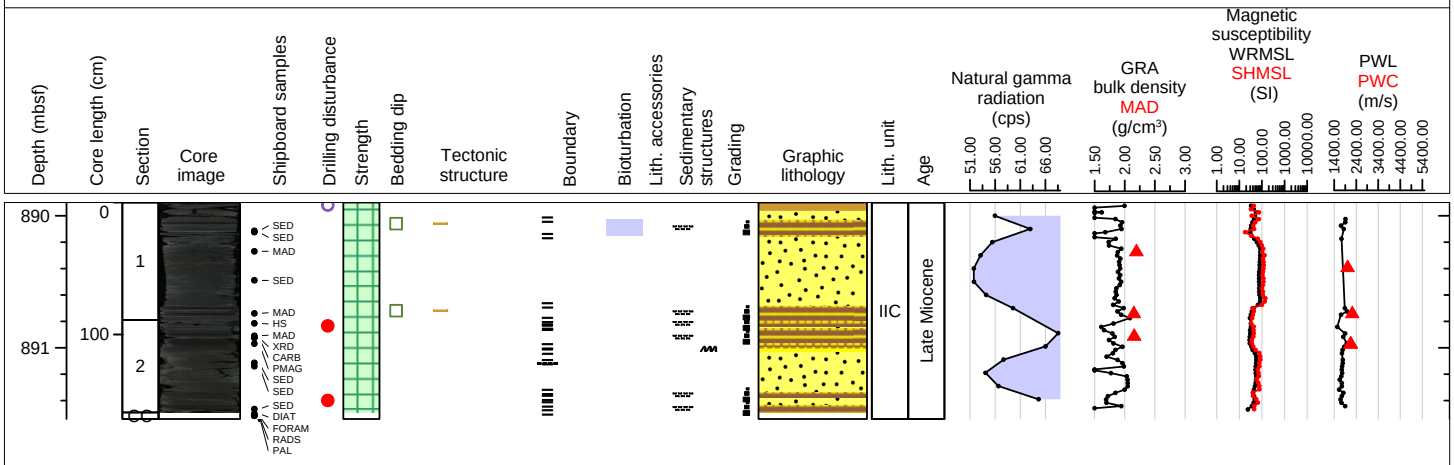
Hole 362-U1480G Core 15R, Interval 880.1-882.31 m (CSF-A)

Background lithology of this core is alternating, greenish black, clay and silt. Silt layers may be normally-graded, with local convolute lamination. Background sediment is greenish black, thin- to medium-bedded, normally-graded, very fine- and fine-grained sand layers that contain reworked and rounded clay clasts as well as rare to common amounts of plant debris. Sand layers are mainly structureless.



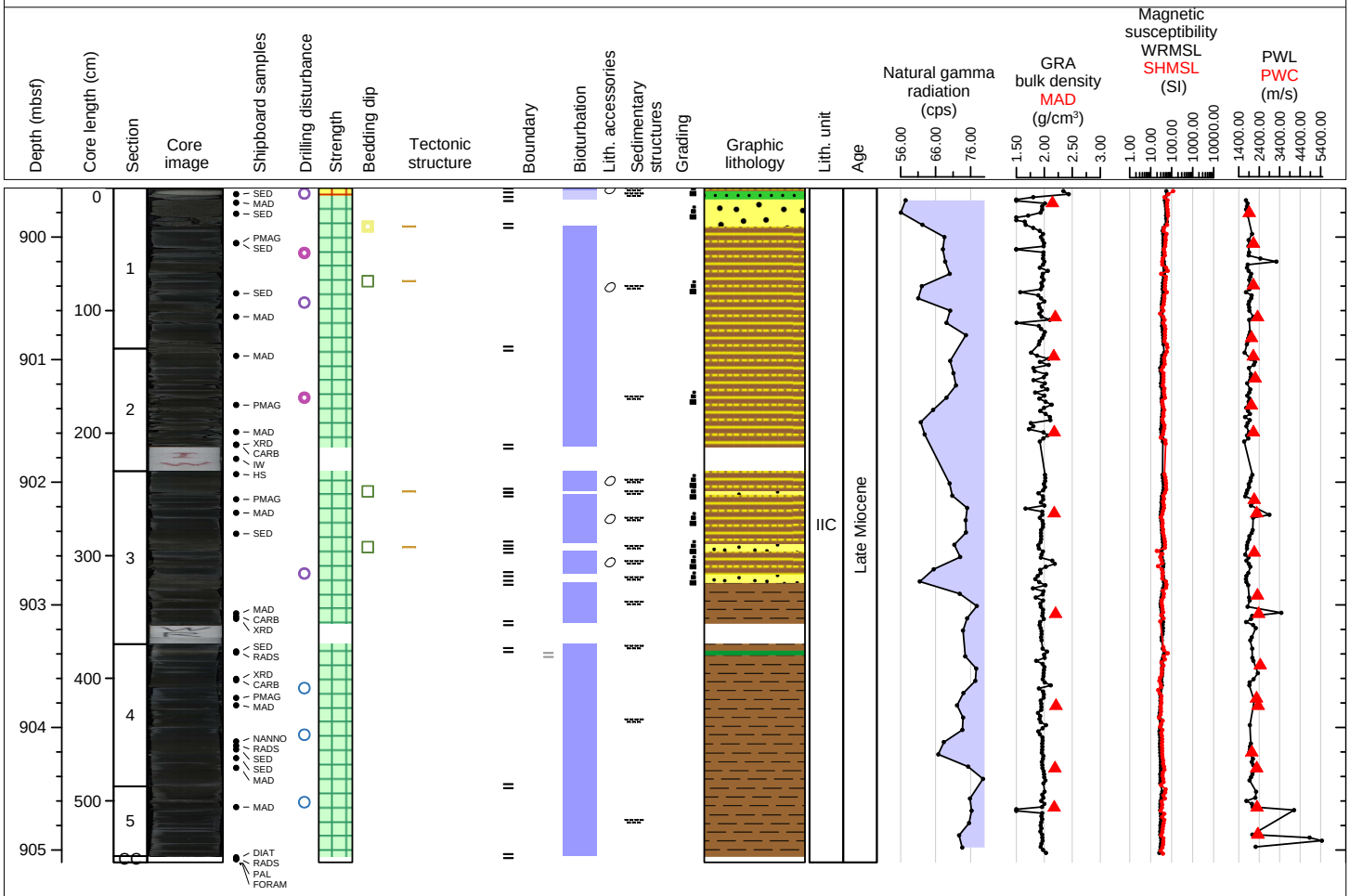
Hole 362-U1480G Core 16R, Interval 889.9-891.54 m (CSF-A)

This core shows a background lithology of alternating dark gray clay and silt. Silt layers commonly show convolute lamination. Intercalated in the background sediment, there are very thin laminae of black very fine- to fine-grained sand layers that contain rare to common amounts of plant debris. The very fine-grained sand layers in Section 2 at 32-33 cm contain black clasts of wood and mafic glass.



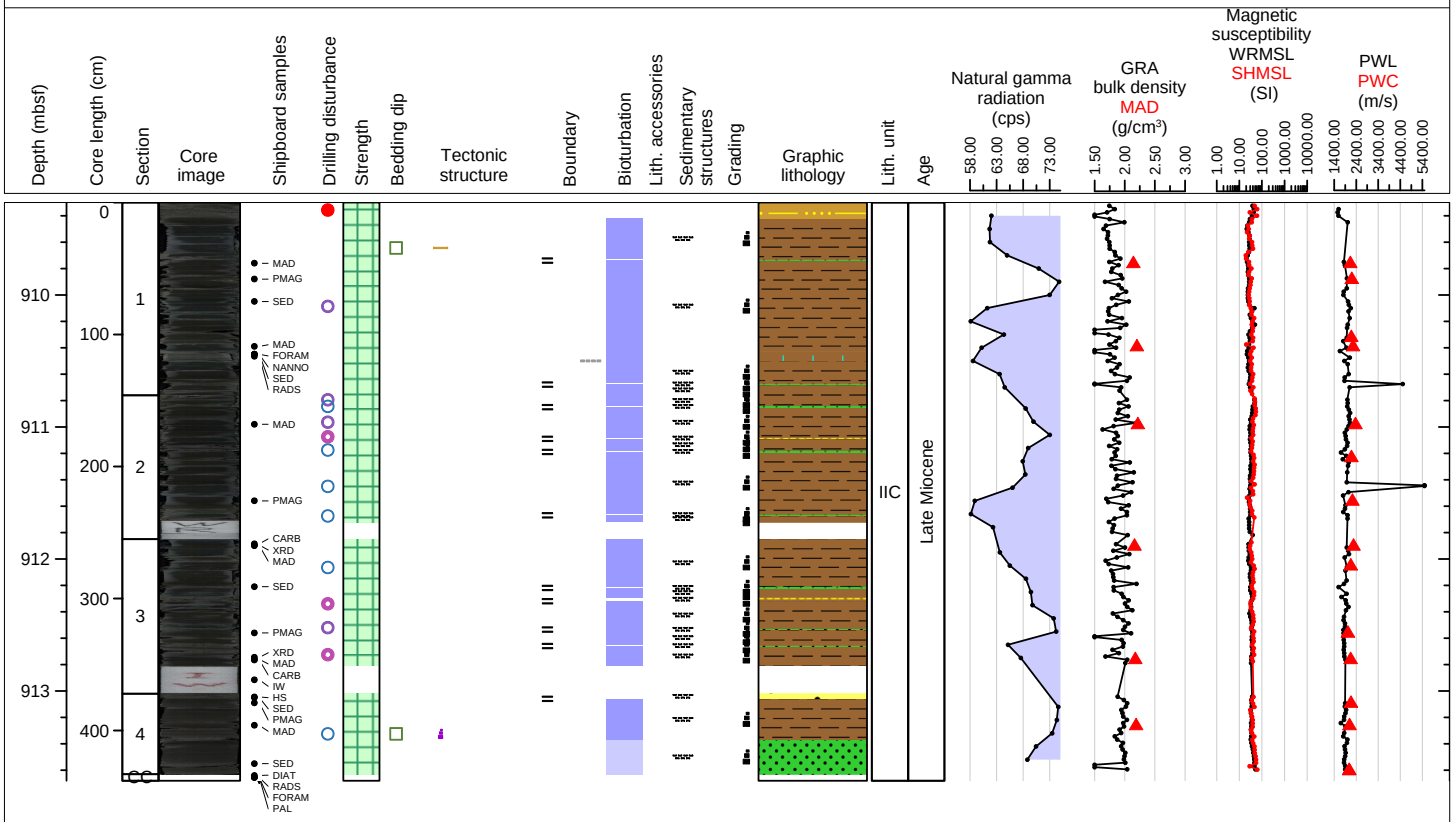
Hole 362-U1480G Core 17R, Interval 899.6-905.1 m (CSF-A)

Background lithology of this core is alternating dark gray clay and silt. Intercalated in the background sediment are very thin beds of normally-graded greenish gray very fine- and fine-grained sand layers. Silt layers are predominantly parallel laminated. Upper part of Section 1 contains partially-lithified sandstone (0-10 cm) and a normally-graded, fine-grained sand with abundant wood fragments (10-31 cm). Starting from Section 3 at 94 cm, the silt layers become finer-grained and less abundant, and the entire sediment is made out of clay with slightly variable silt content that varies in mm to cm size and correlates with color change from greenish gray to very dark greenish gray.



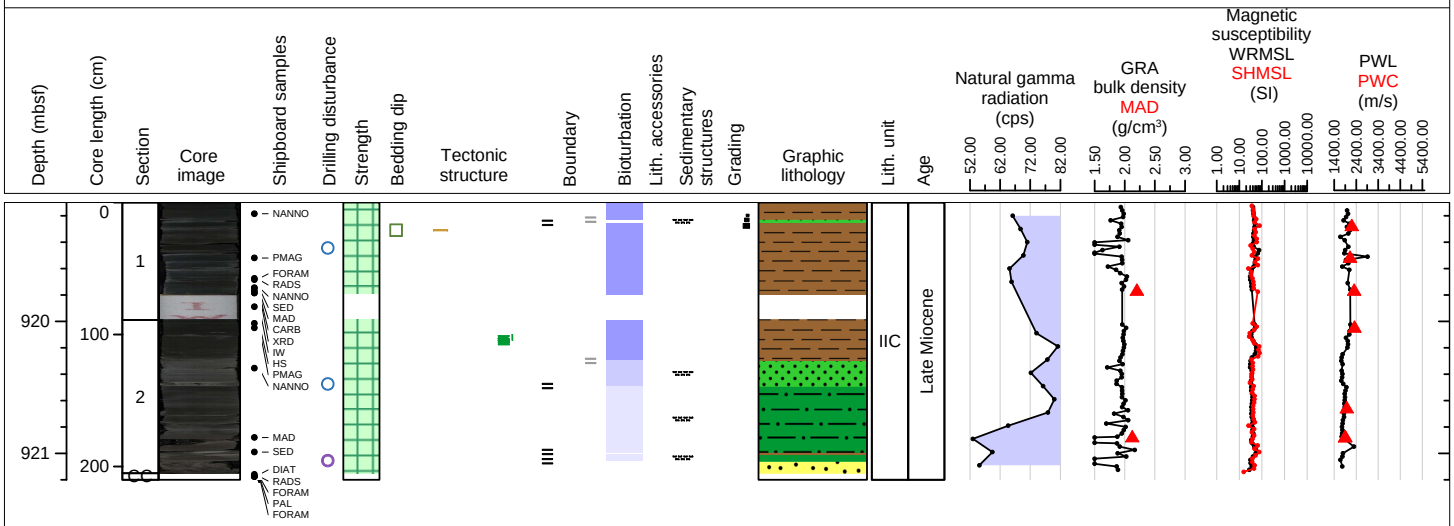
Hole 362-U1480G Core 18R, Interval 909.3-913.68 m (CSF-A)

The background lithology of this core consists of very thin to thin beds of clay with sub-mm laminae of silt. Intercalated layers are very thin-bedded silts with normal grading, medium-bedded silts and thin- bedded very fine-grained sands. A thin bed of calcareous clay with recrystallized nannofossils is observed at 113-120 cm in Section 1.



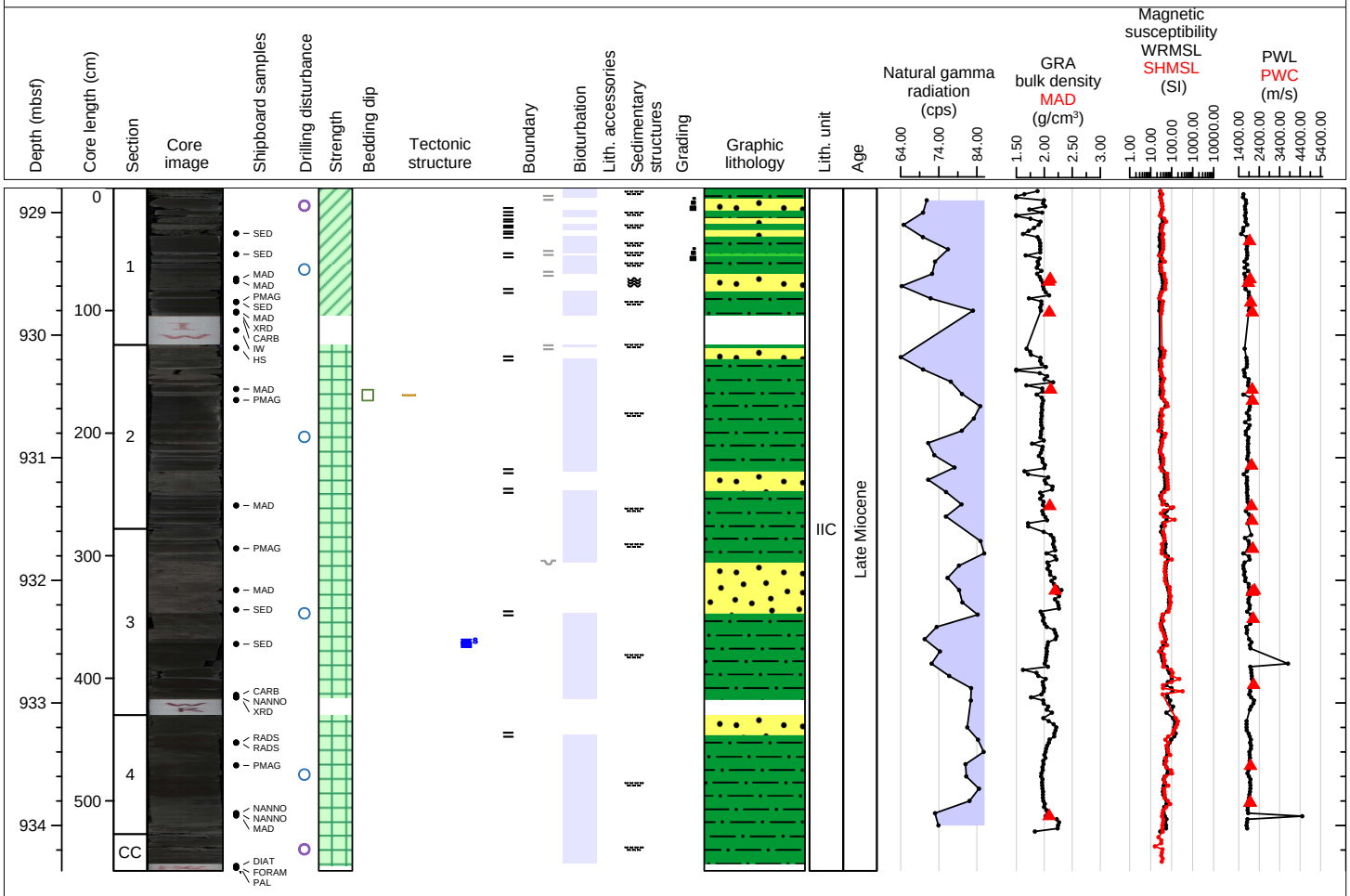
Hole 362-U1480G Core 19R, Interval 919.1-921.2 m (CSF-A)

The core contains two major lithologies: (1) in Section 1 and Section 2, 0-31 cm, dark-greenish clay, moderately bioturbated, with isolated silt laminae, (2) in Section 2, 31-116 cm, dark-gray silty clays arranged as normally-graded thin beds with slight bioturbation.



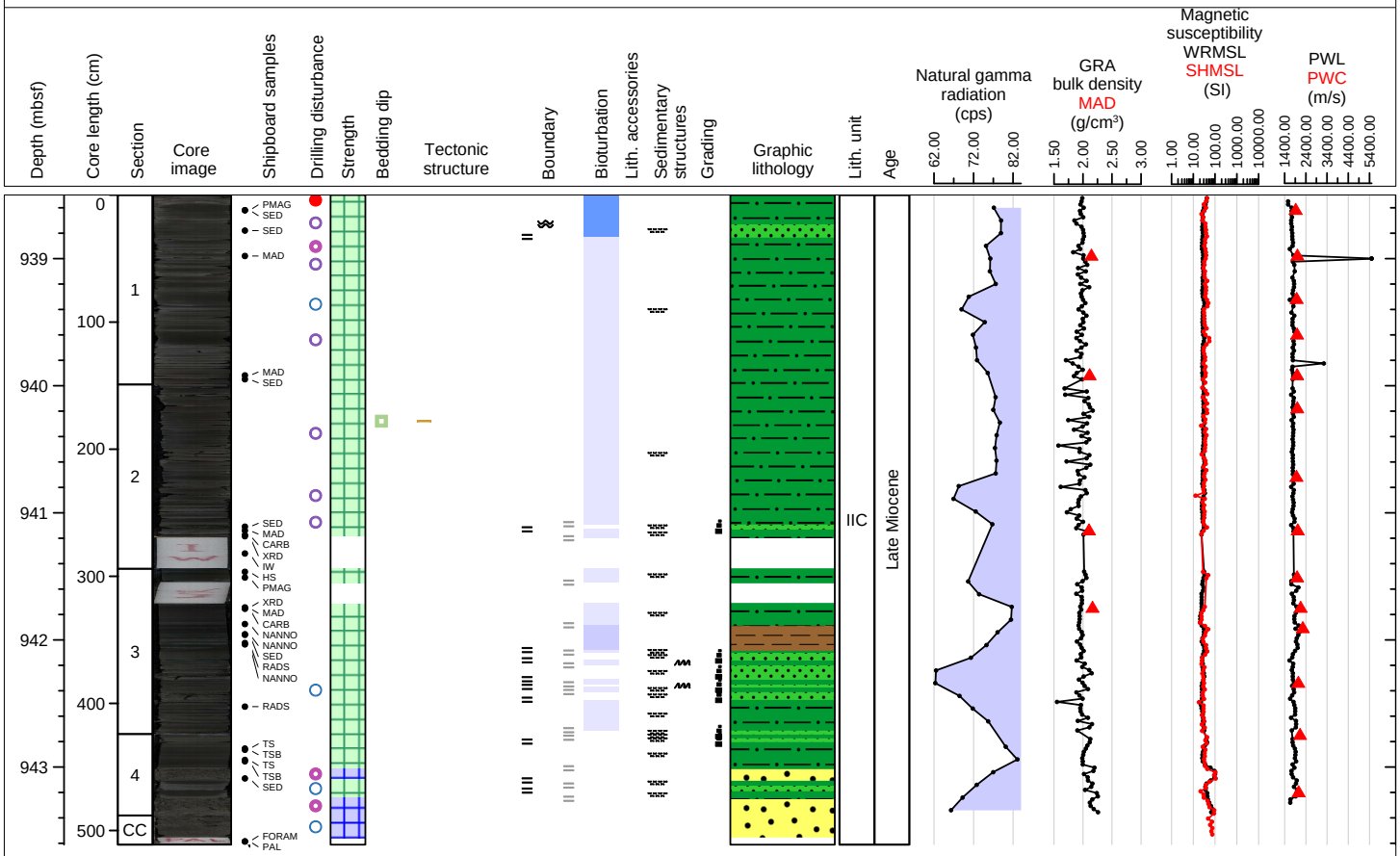
Hole 362-U1480G Core 20R, Interval 928.8-934.37 m (CSF-A)

The core is dominated by normally-graded, thin-bedded, planar-laminated silty clay; some having a distinct silt lamina at the base. Several thin- to medium-bedded, fine-grained sand beds with silt are intercalated in Sections 1-4 that are rich in plant fragments, and containing mm-thick mud clasts. Larger mud clasts (cm-wide) are observed in Section 1, 8-18 cm.



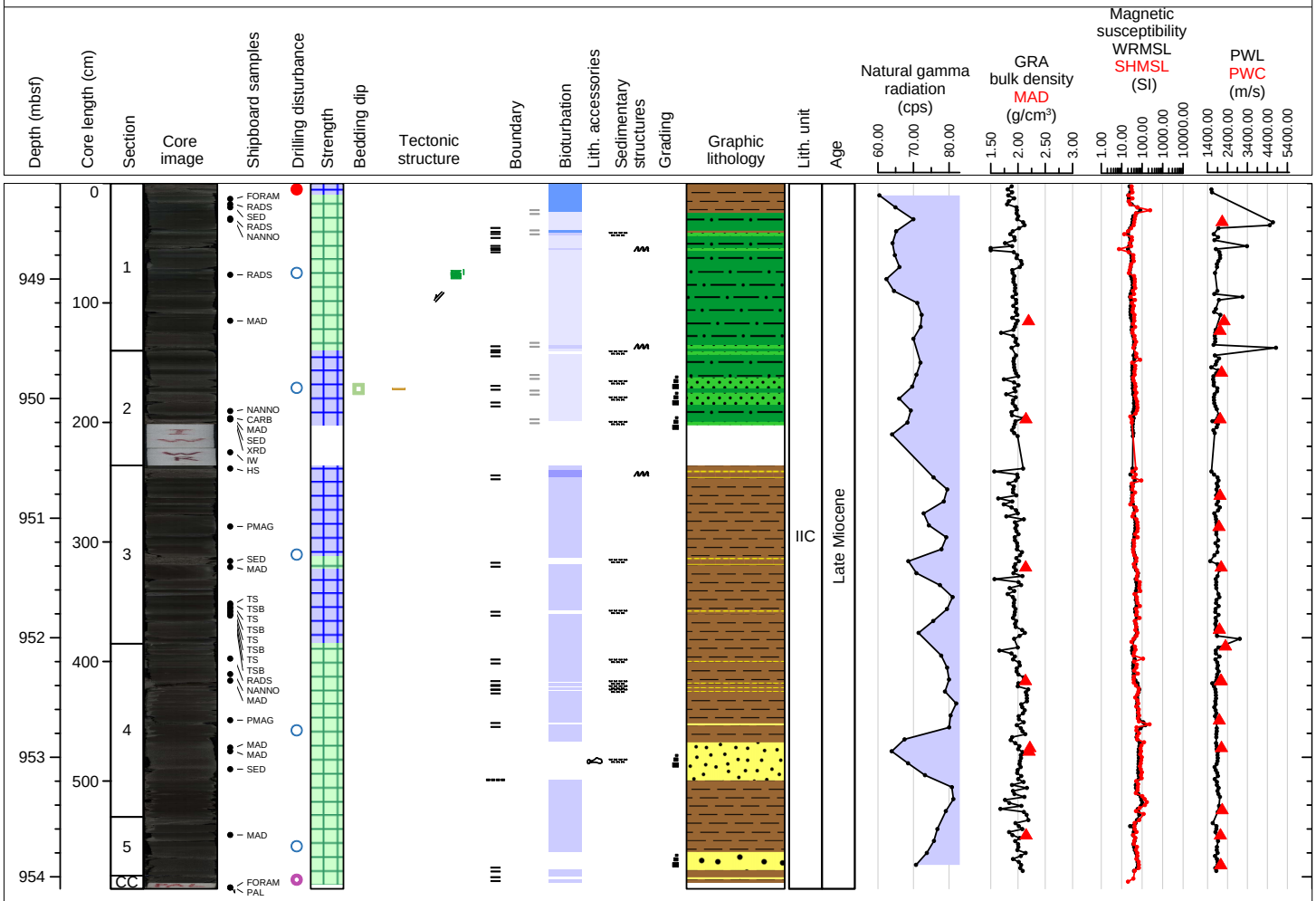
Hole 362-U1480G Core 21R, Interval 938.5-943.61 m (CSF-A)

The core is predominantly made up of very thin-bedded, normally-graded silt to silty-clay, with planar, sharp horizontal bases. Slight bioturbation is present. Some beds have a basal reverse grading. Downhole, the overall lithology becomes coarser grained. Thin silt beds start from Section 2, 96 cm, and medium beds of fine-grained sand, rich in plant fragments are present from Section 4, 27 cm. One lighter colored interval is observed in Section 3, 43-62 cm that shows stronger bioturbation.



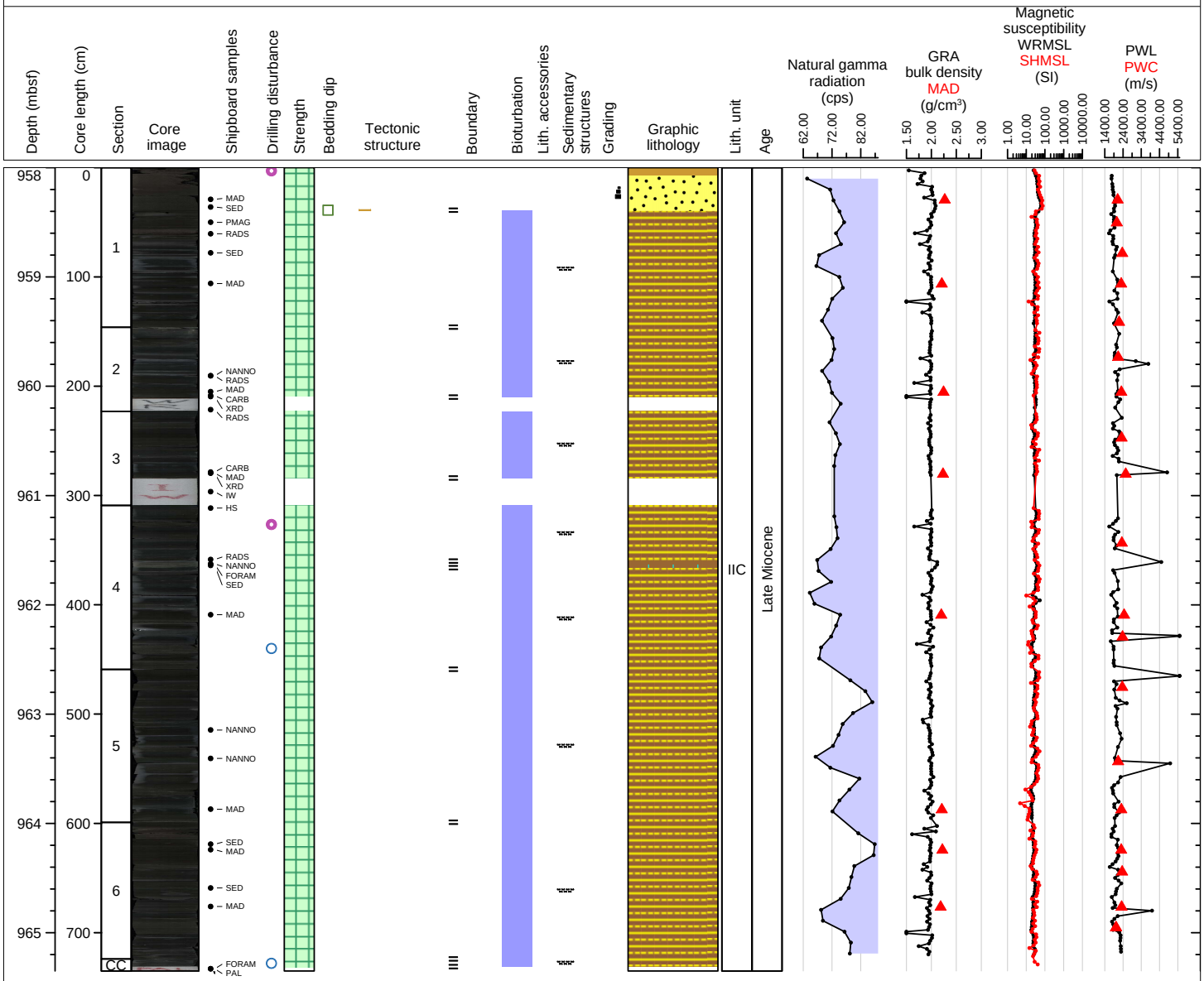
Hole 362-U1480G Core 22R, Interval 948.2-954.1 m (CSF-A)

Background lithology is alternating, dark gray, moderately bioturbated clay and very thin beds of silt. Silt layers are sometimes normally graded and display rare convolute lamination. Intercalated in the background sediment, there are dark gray, thin- to medium-bedded, normally-graded, very fine-grained sand and fine-grained sand layers with reworked and rounded clay clasts, as well as rare to common amounts of plant debris. Sand layers are mainly structureless.



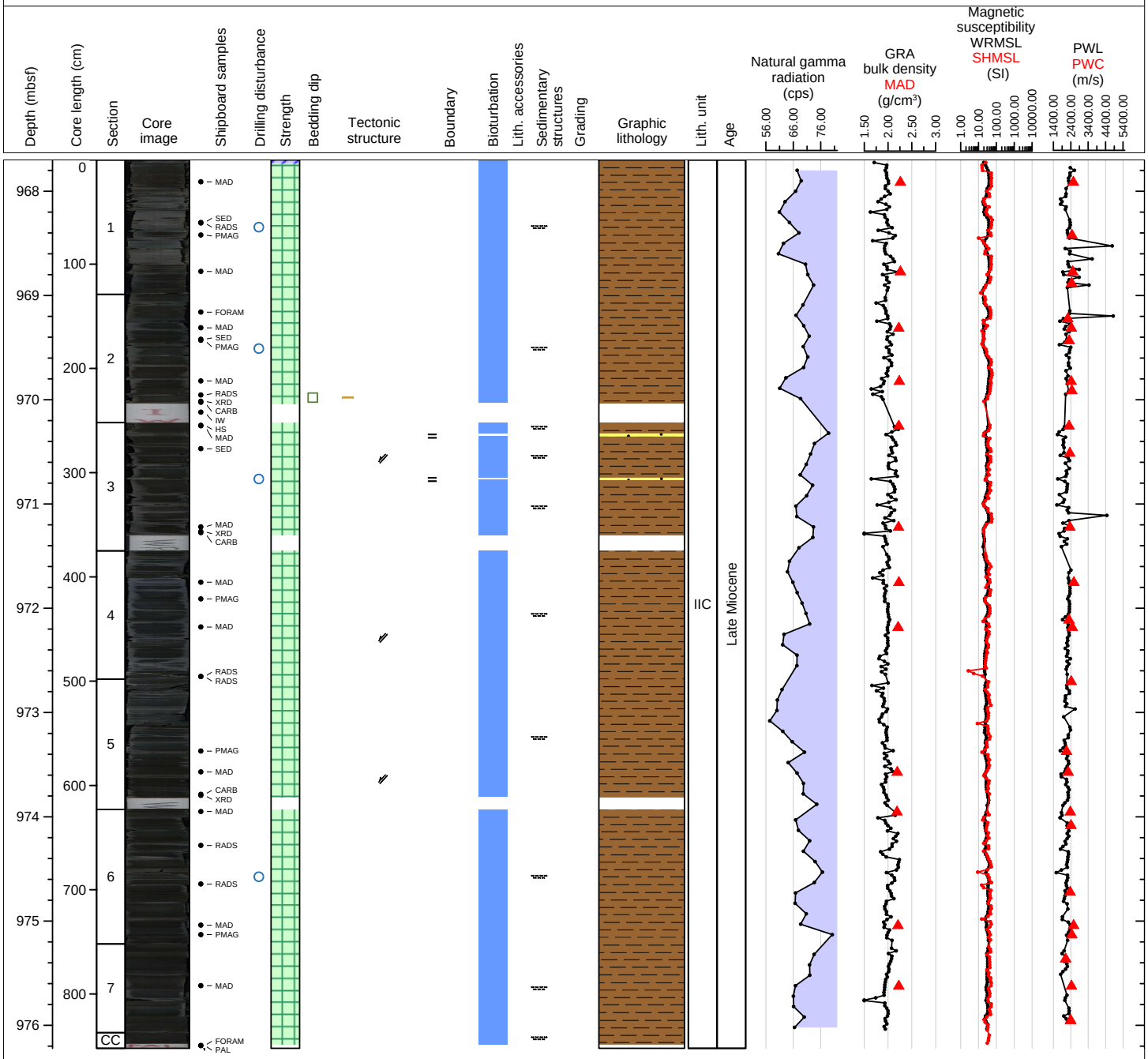
Hole 362-U1480G Core 23R, Interval 958.0-965.35 m (CSF-A)

The core has a background lithology of alternating, dark gray, moderately bioturbated clay and very thin-bedded, parallel-laminated silt. Silt layers may show normal grading and rare convolute- and cross-lamination. Intercalated in the background sediment, there is dark gray, thick-bedded, normally-graded, very fine-grained sand (Section 1, 7-39 cm) and thin calcareous clay bed (Section 3, 51-57 cm). Very fine-grained sand layers contain common amounts of plant debris.



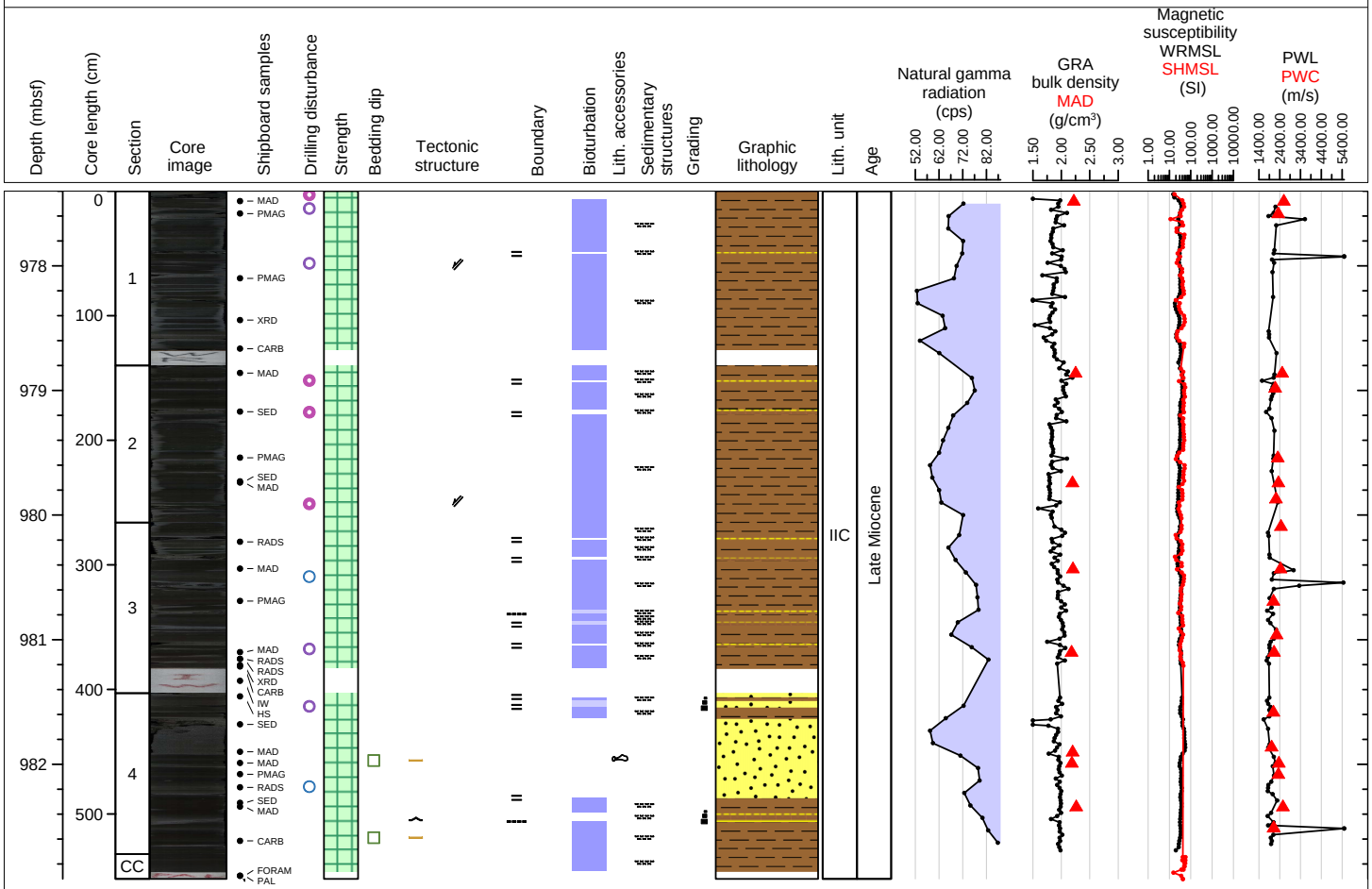
Hole 362-U1480G Core 24R, Interval 967.7-976.22 m (CSF-A)

The core is dominated by mottled dark grayish-brown, dark gray, and dark greenish gray clay. Several thin beds of silt with planar lamination are present throughout the core. mm-sized pyrite nodules are rarely observed.



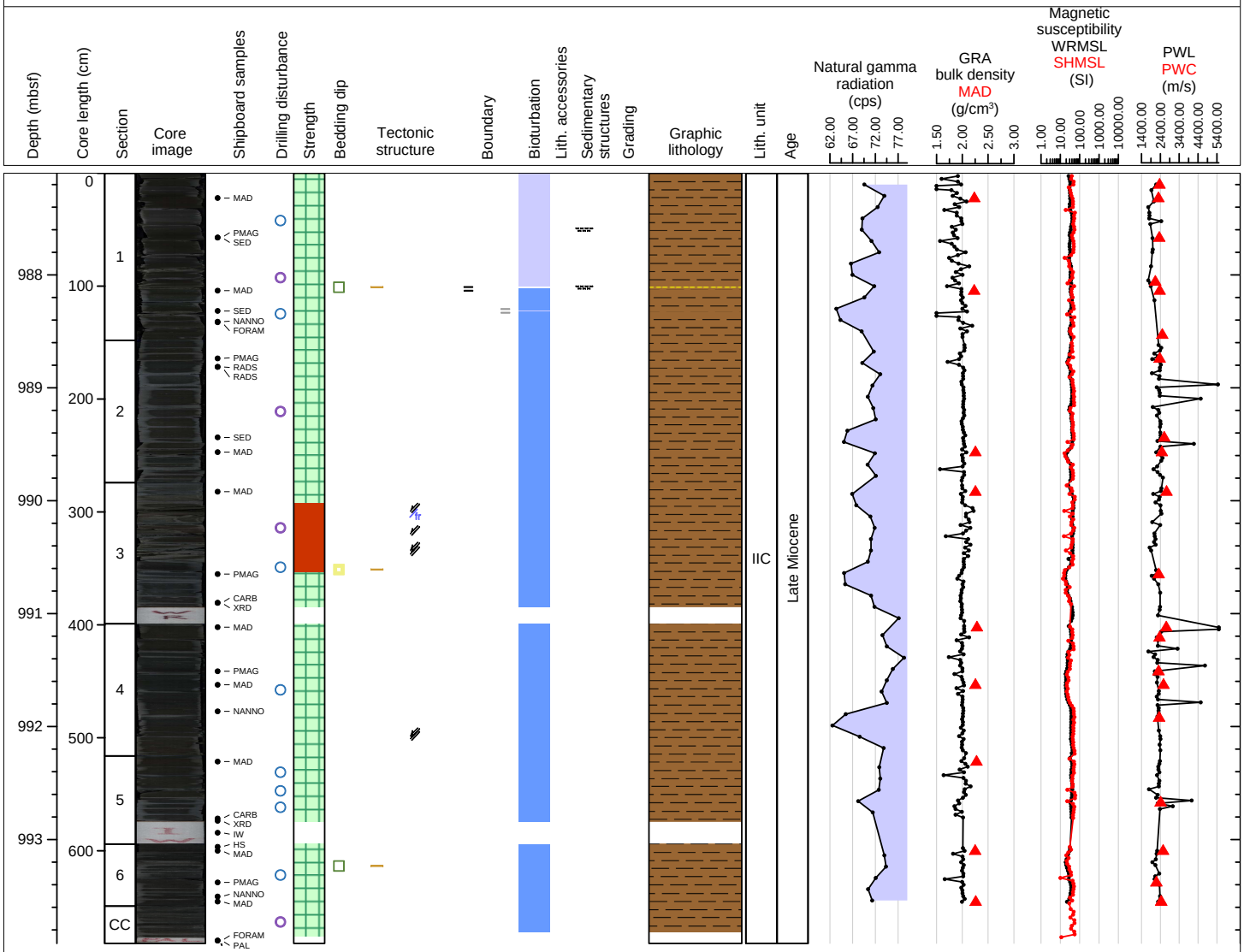
Hole 362-U1480G Core 25R, Interval 977.4-982.92 m (CSF-A)

The core is dominated by mottled, moderately bioturbated, very dark gray and dark gray clay. Several thin beds of silt with planar lamination are present throughout the core. Dark gray, thin- to thick-bedded, normally-graded and non-graded very fine-grained sands and fine-grained sand layers are intercalated in the background sediments. Fine-grained sand layers contain abundant plant debris. Minor normal faults observed.



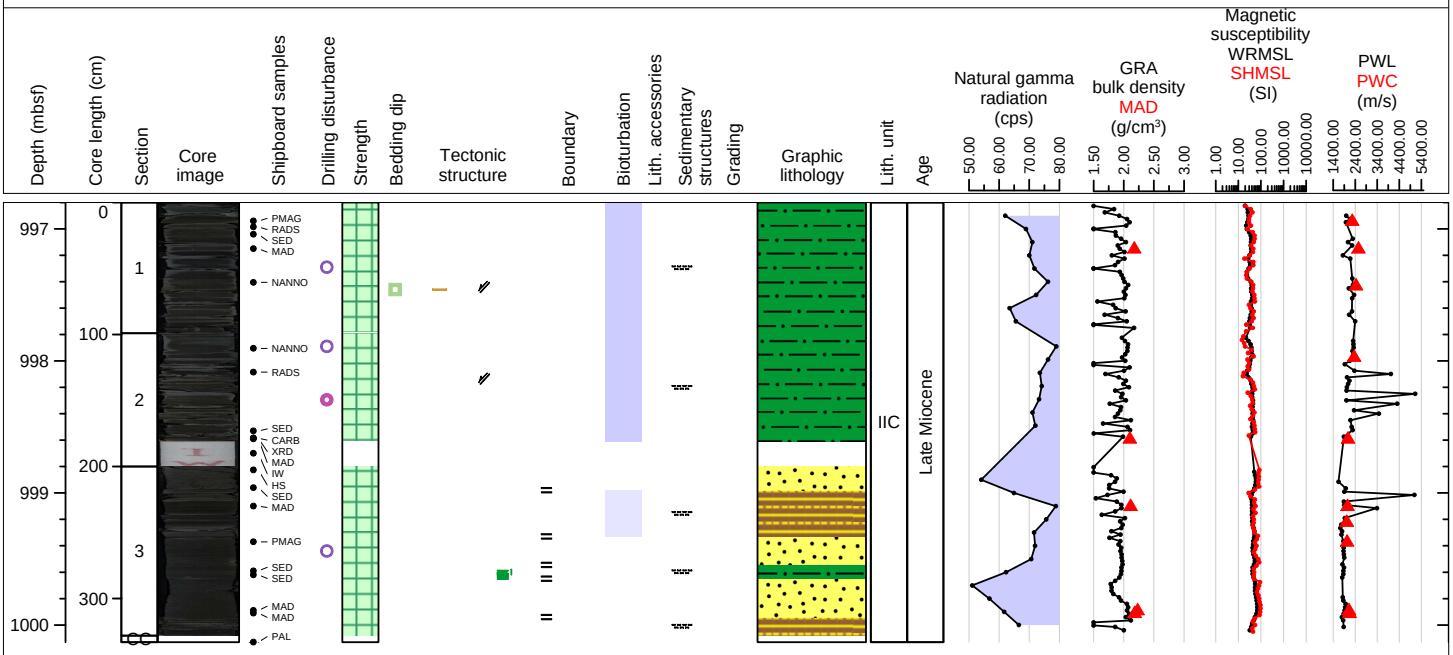
Hole 362-U1480G Core 26R, Interval 987.1-993.92 m (CSF-A)

The core is dominated by mottled, heavily bioturbated, greenish black (GLEY1 2.5/5GY) and black (2.5Y 2.5/1) clay with agglutinated forams. Several thin beds of silt with planar lamination are present throughout the core. The middle part of Section 3 has some fractures. Boundary of intercalated laminae below 71 cm in Section 3 are sub-horizontal. Anomalous concentration of normal faults observed in Section 3.



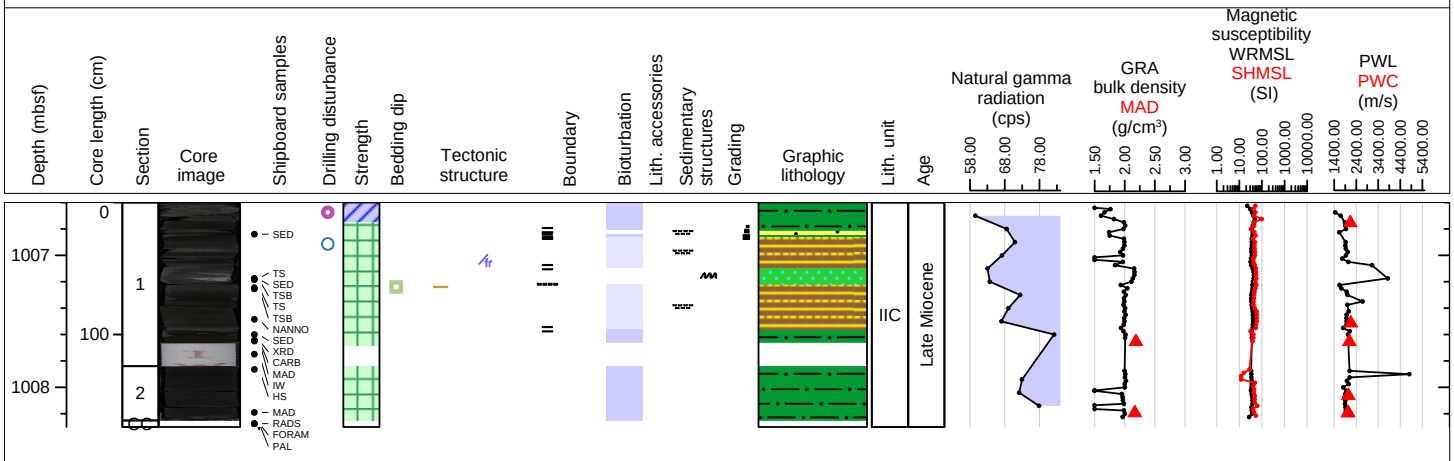
Hole 362-U1480G Core 27R, Interval 996.8-1000.13 m (CSF-A)

The core is dominated by silty clay, with an overall fining-upward trend up core. Prominent plant fragments rich very fine-grained sand layers in Section 3 that contain cm-wide mud clasts. Minor normal faults observed, and shear structure with indeterminate shear sense observed in Section 3, 80 cm.



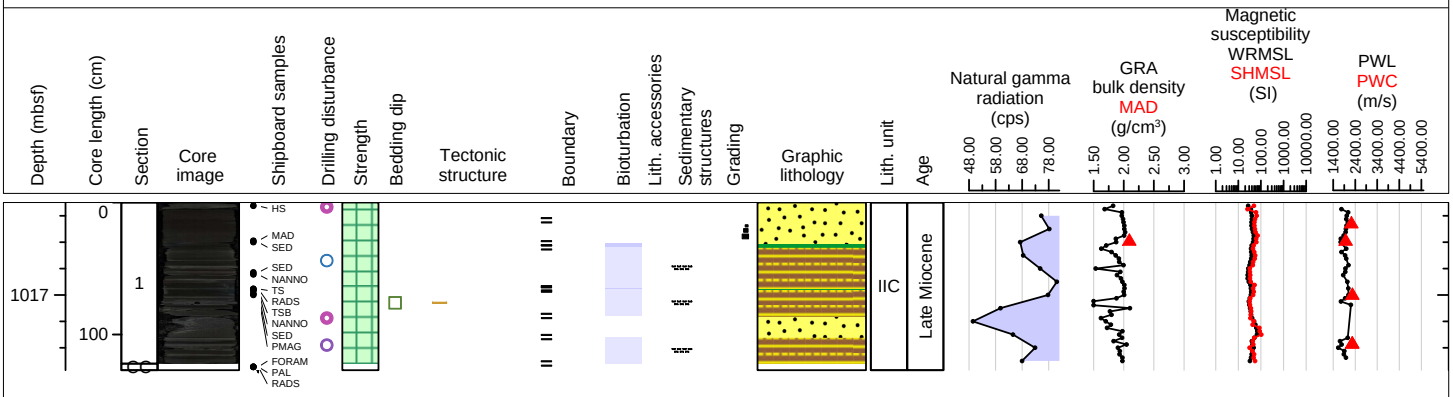
Hole 362-U1480G Core 28R, Interval 1006.6-1008.3 m (CSF-A)

The core shows silty clay and alternating silt and clay. The upper 14 cm of the core contains fall-in drilling disturbance (severe). One plant fragment rich very fine-grained sand bed is present in Section 1, 21-24 cm. One carbonate concretion is observed in Section 1, 49-62 cm that is made up of a convolute-laminated silt.



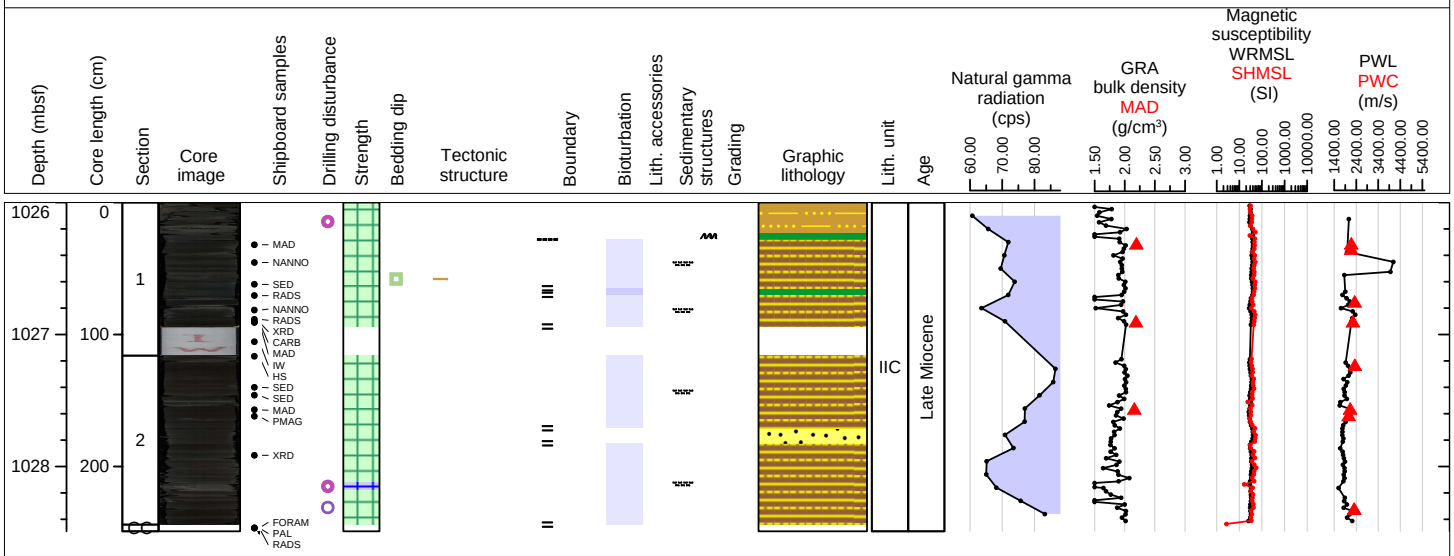
Hole 362-U1480G Core 29R, Interval 1016.3-1017.57 m (CSF-A)

The core shows 3 lithologies: very fine-grained sand beds, rich in plant fragments and with mud clasts; alternating silt and clay, and silty clay.



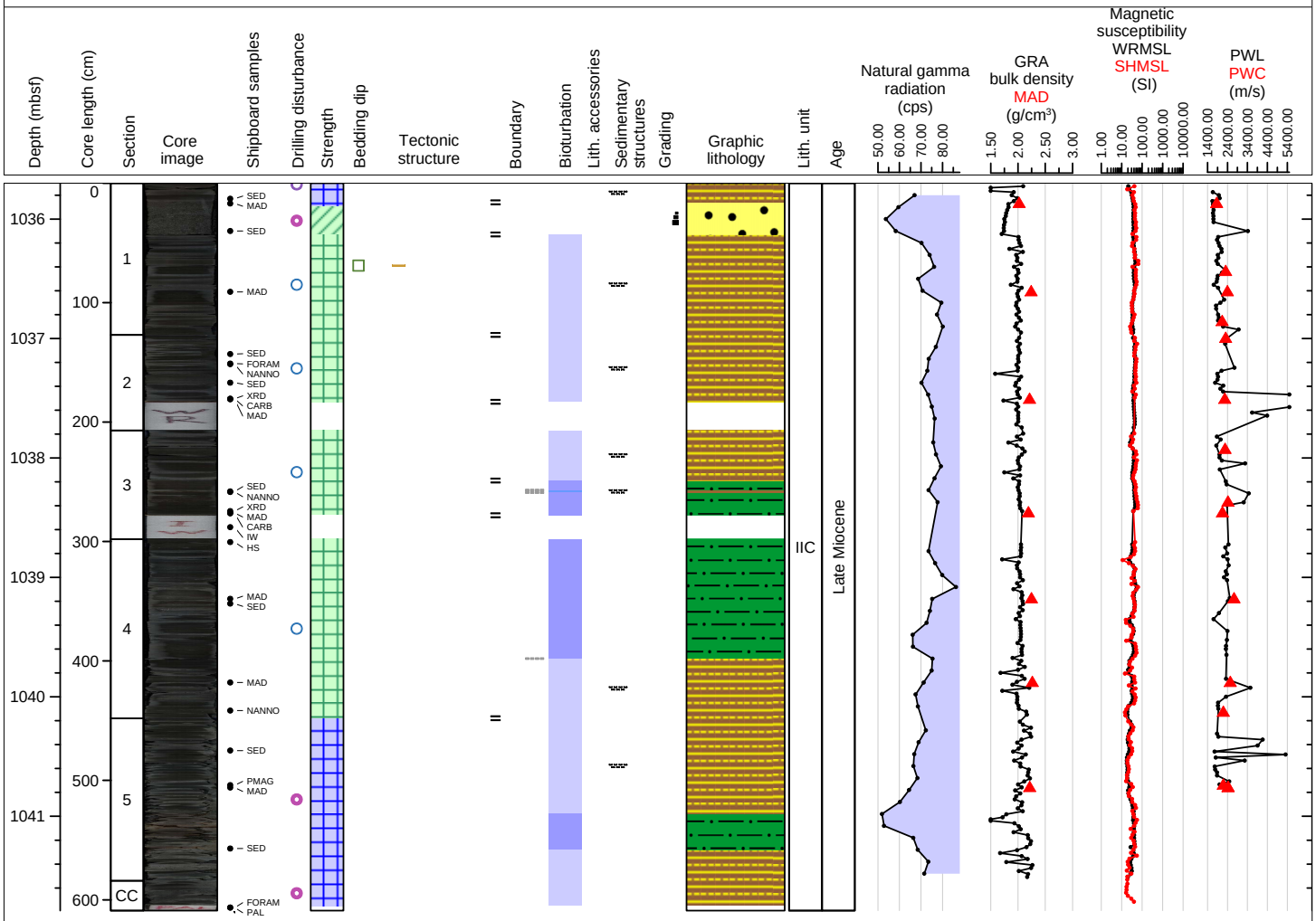
Hole 362-U1480G Core 30R, Interval 1026.0-1028.49 m (CSF-A)

Three lithologies are present in the core: very fine-grained sand beds, rich in plant fragments and with mud clasts (one in Section 2, 55-66.5 cm); alternating silt and clay; silty clay.



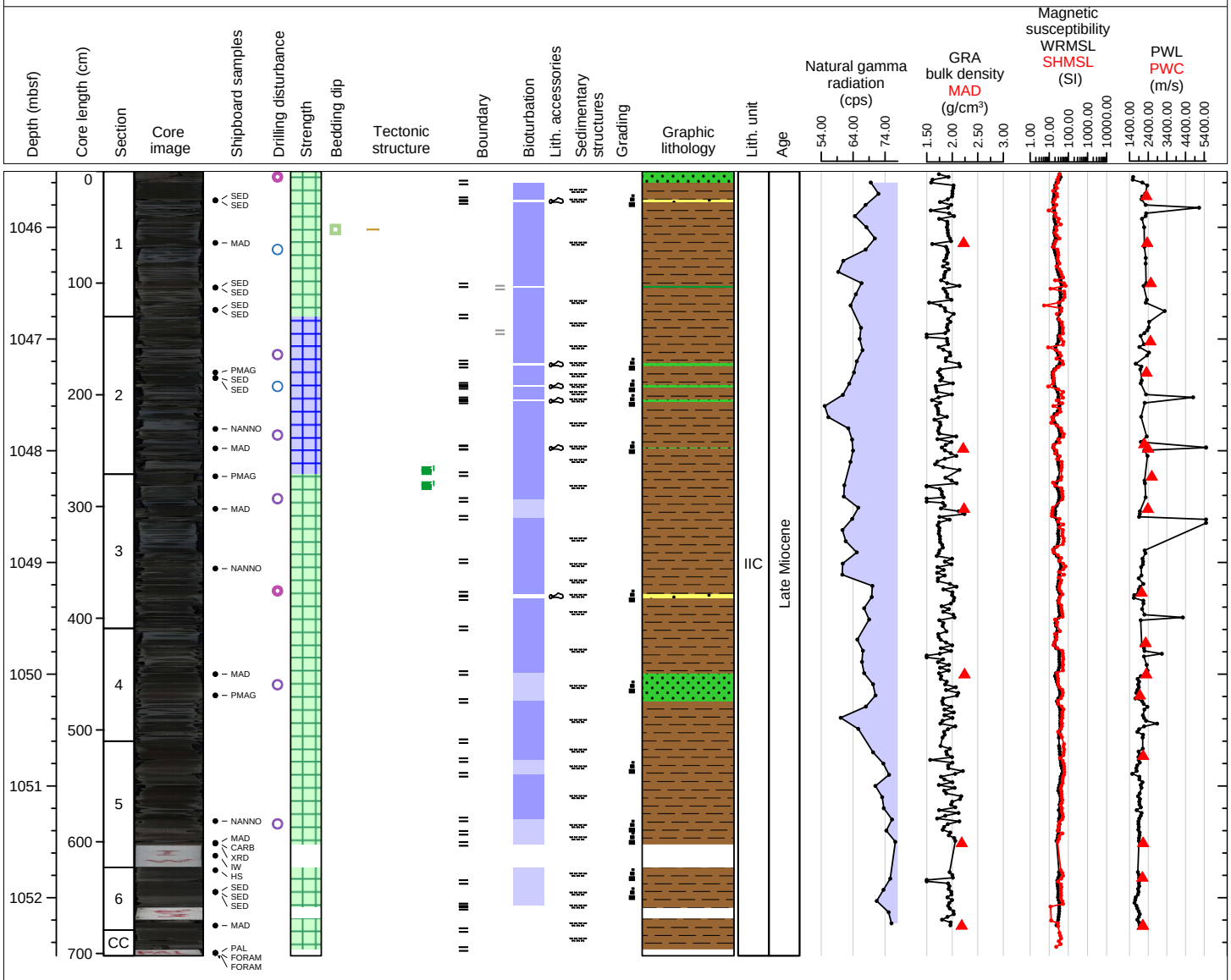
Hole 362-U1480G Core 31R, Interval 1035.7-1041.79 m (CSF-A)

The core shows mostly thin beds of alternating silt and clay. One medium-bedded, medium-grained sand with plant fragments is present in Section 1, 16-43 cm. 2-cm-thick calcareous clay in Section 3, 50-52 cm. From Section 3, 41 cm, a brownish clay occurs that is more bioturbated than the other lithologies and alternates with the general background lithology of silt and clay.



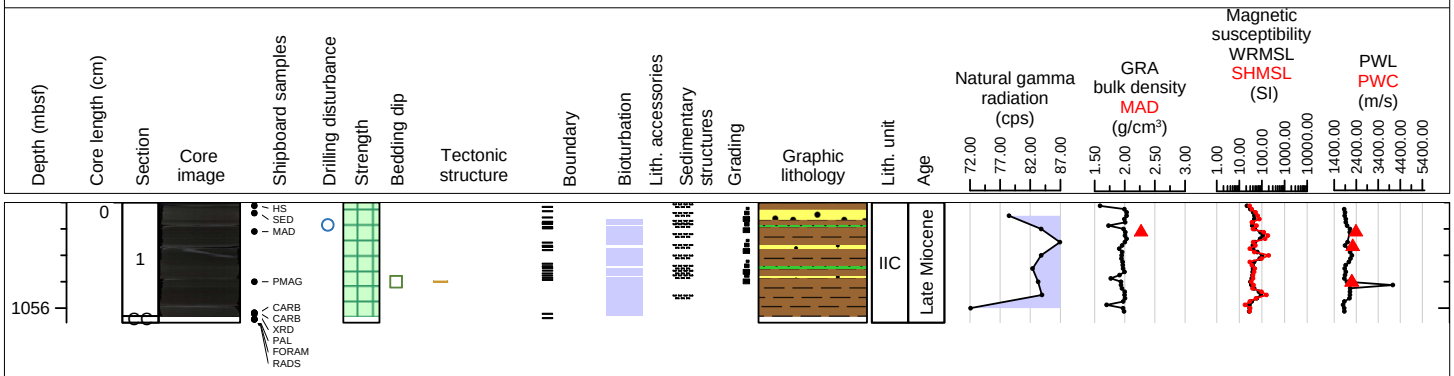
Hole 362-U1480G Core 32R, Interval 1045.5-1052.52 m (CSF-A)

Mostly thin beds of parallel-laminated, moderately-bioturbated, black alternating silt and silty clay in the upper part of the core until Section 4, 40 cm. In the lower part of the core (Section 4 to CC) medium-bedded, gray to dark gray silt with clay dominates the lithology, commonly with normal grading from very fine-grained sand to clayey silt and planar lamination within the first centimeters of the bed. From Section 6 downward in the core, the silt with clay features small variations in silt content typically resulting in alternating mm-scaled laminae.



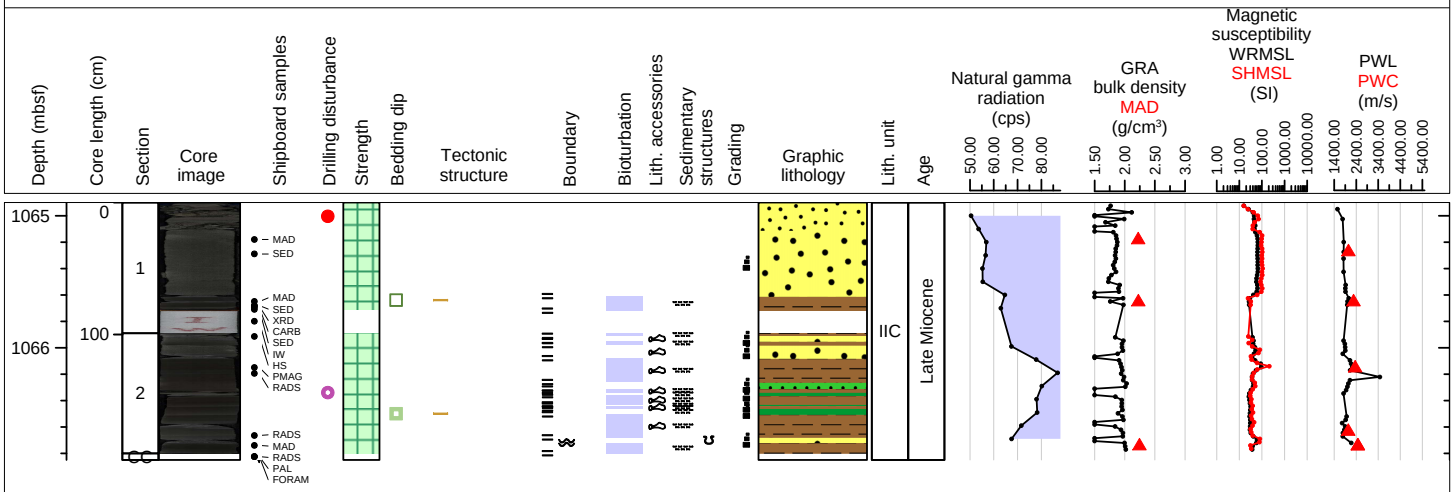
Hole 362-U1480G Core 33R, Interval 1055.2-1056.11 m (CSF-A)

The core contains very dark gray clay with silt, slightly bioturbated, with parallel lamination. Lamination is less common in the lower part of the section. Minor lithology are dark gray thin- to very thin-bedded, fine- to very fine-grained sand showing normal grading and parallel lamination; also, wood fragments.



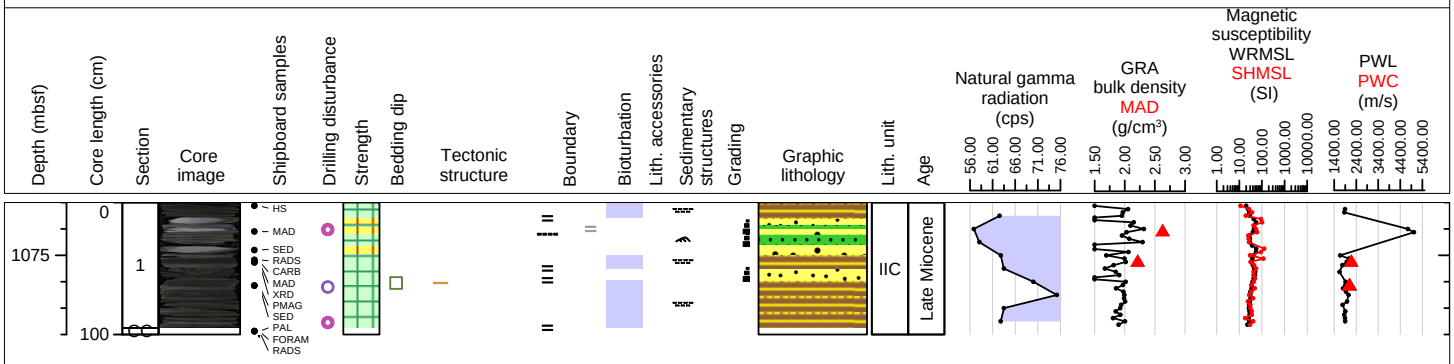
Hole 362-U1480G Core 34R, Interval 1064.9-1066.85 m (CSF-A)

The upper part of the core (Section 1) is dominated by a thick-bedded, structureless fine-grained sand containing wood fragments. Very dark gray clay with silt, slightly bioturbated, with parallel lamination, dominates the lithology in the lower part of the core. Lamination is on cm-scale. Minor lithology is dark gray very thin beds of fine- to very fine-grained sand showing normal grading, parallel lamination, reworked and rounded clay lenses, wood fragments and in one case (Section 2, 79-83 cm) load casts.



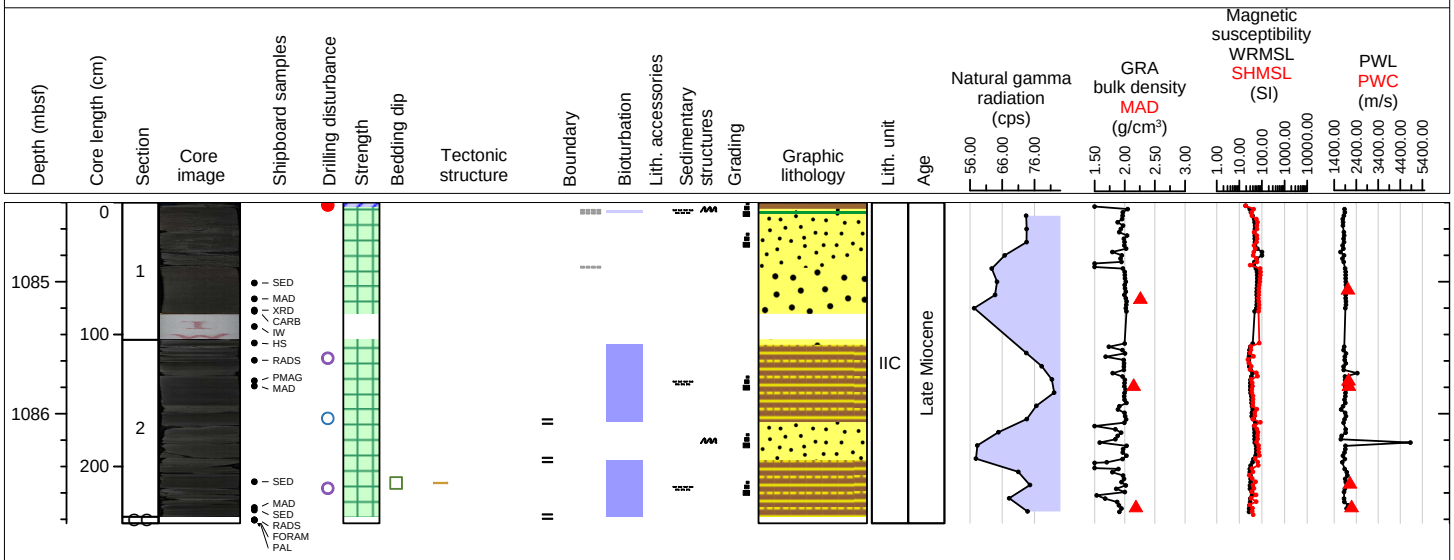
Hole 362-U1480G Core 35R, Interval 1074.6-1075.6 m (CSF-A)

The core shows 3 lithologies: (1) alternating clay and very thin-bedded, planar-laminated silt; (2) alternating calcareous fine-grained sand and silt with calcareous allochems (12-39.5 cm); (3) very fine-grained sand beds with rare plant fragments (50-59 cm). Silt layers may show normal grading and rare convolute lamination.



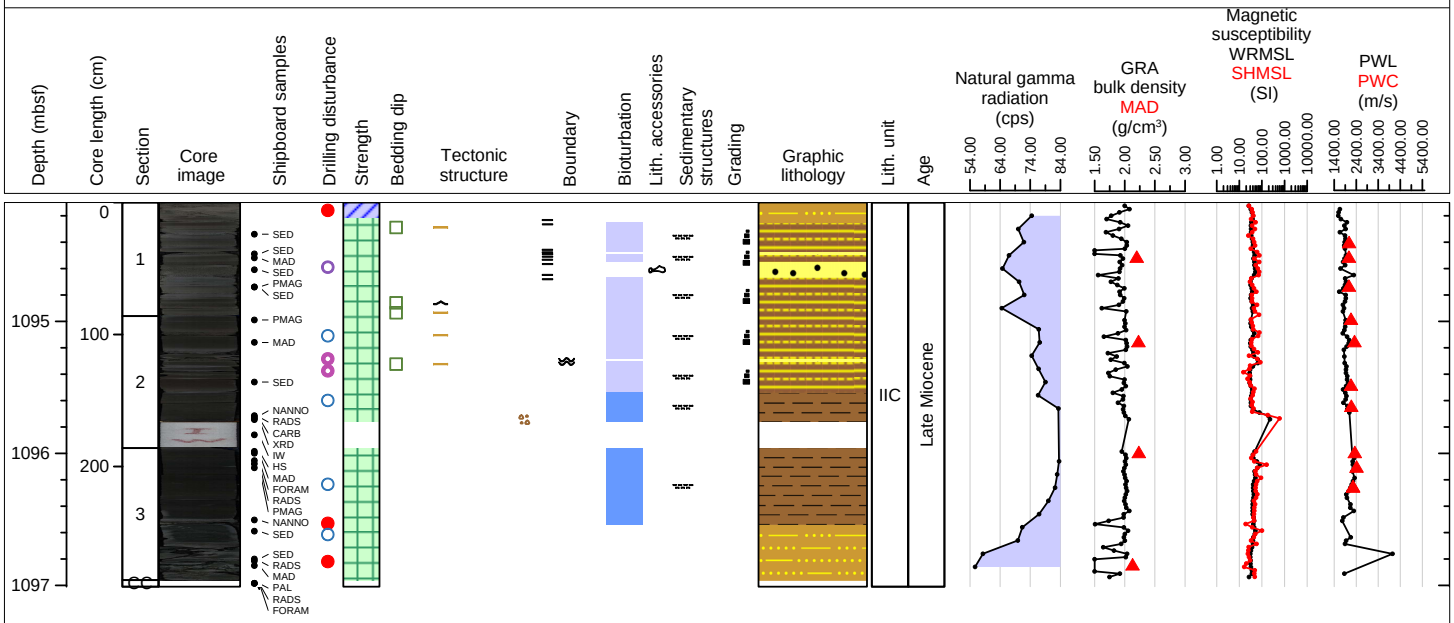
Hole 362-U1480G Core 36R, Interval 1084.4-1086.83 m (CSF-A)

The core shows 3 lithologies: very fine sand; fine sand with silt; alternating normally graded thin to medium beds of silt and clay. The very fine sand layer in section 1 at 49 cm shows a slump fold. Sand beds contain common plant fragments.



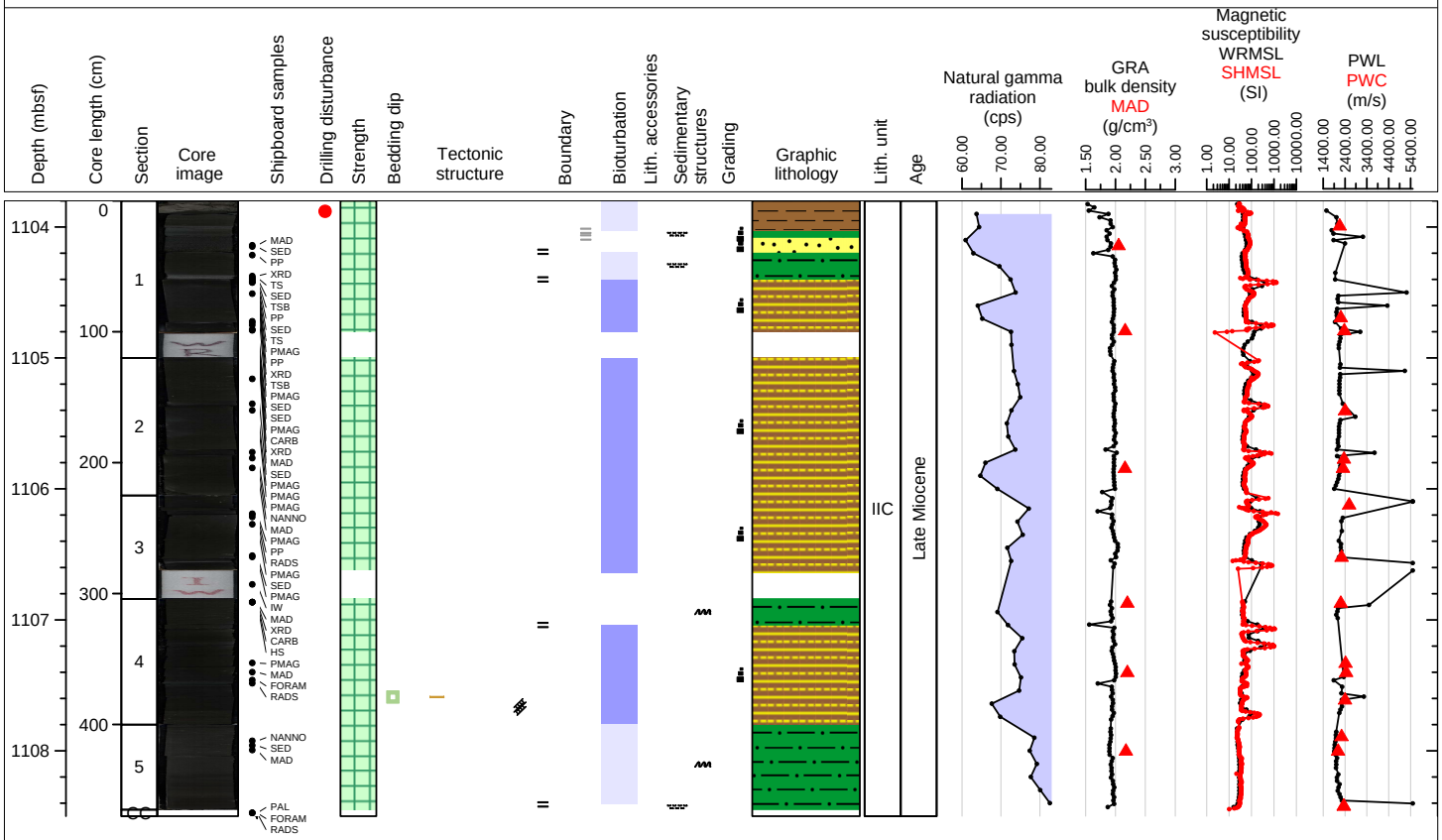
Hole 362-U1480G Core 37R, Interval 1094.1-1097.01 m (CSF-A)

Three lithologies dominate the core: (1) alternating normally-graded thin- to medium-bedded silt and clay; (2) clay and brecciated lithified clay clasts in the lithified fine-grained sand matrix; (3) fine-grained sand layers with silt intercalated in the alternating clay and silt layers. Sand beds contain common plant fragments.



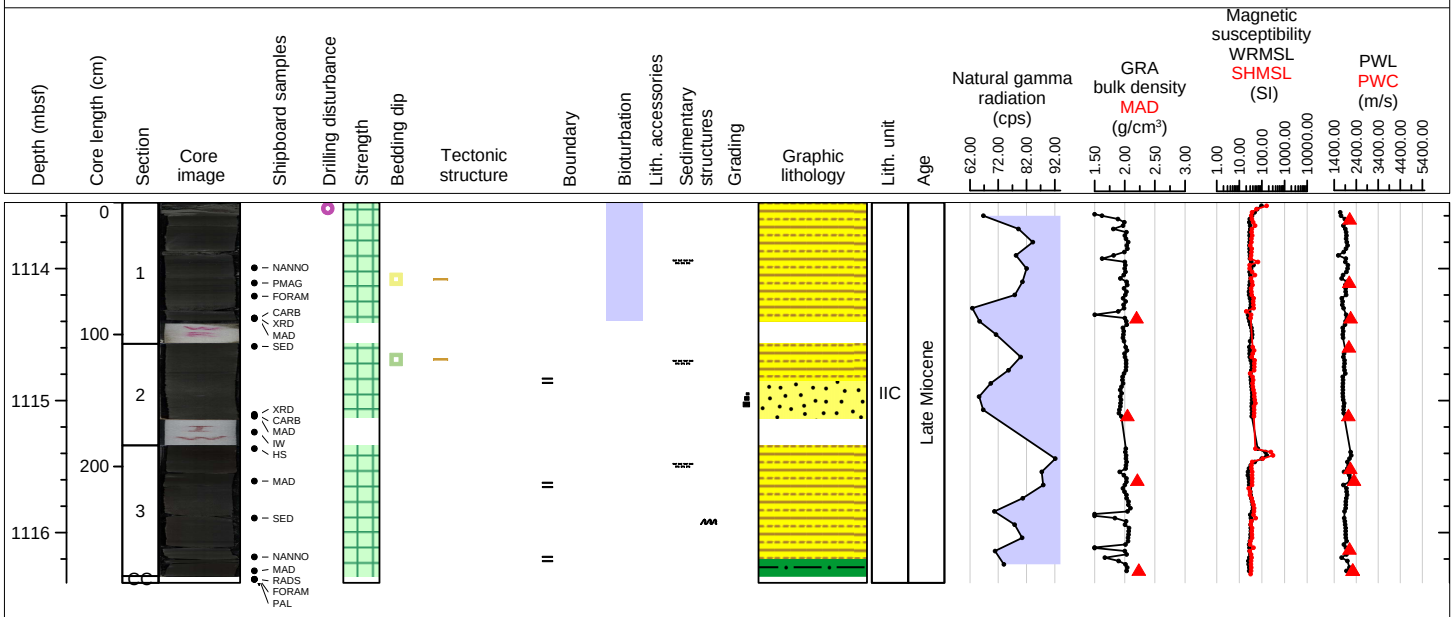
Hole 362-U1480G Core 38R, Interval 1103.8-1108.5 m (CSF-A)

The core is dominated by medium beds of black, normally-graded silty clay beds with moderate bioturbation. One very fine-grained sand bed, rich in plant debris occurs in Section 1, 28-39 cm, and two layers are present that have convolute lamination in Section 4, 0-20 cm, and Section 5, 0-61 cm.



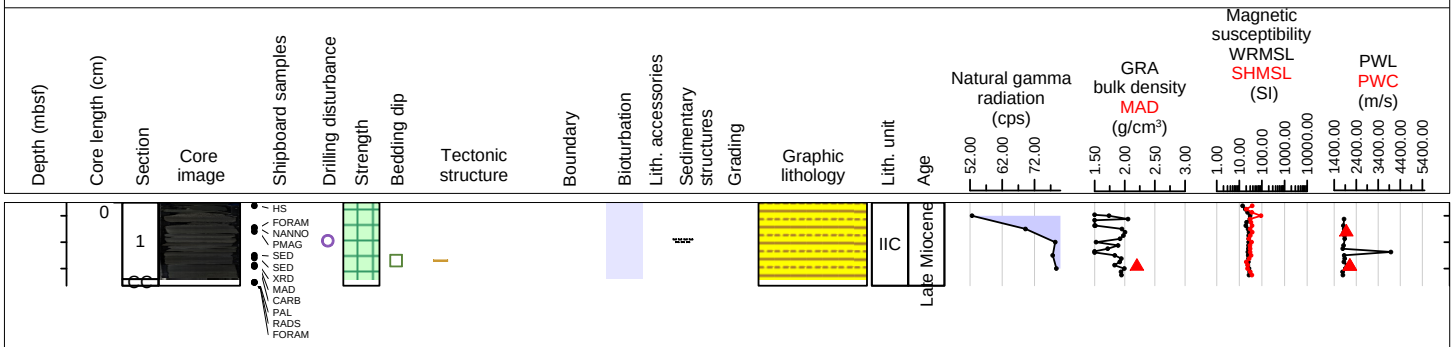
Hole 362-U1480G Core 39R, Interval 1113.5-1116.38 m (CSF-A)

The core shows alternating sand and mud organized as fining-upward trends of thin beds that are rich in plant fragments. Sand beds contain mud clasts in Section 2. Convolute beds are present and in Section 3.



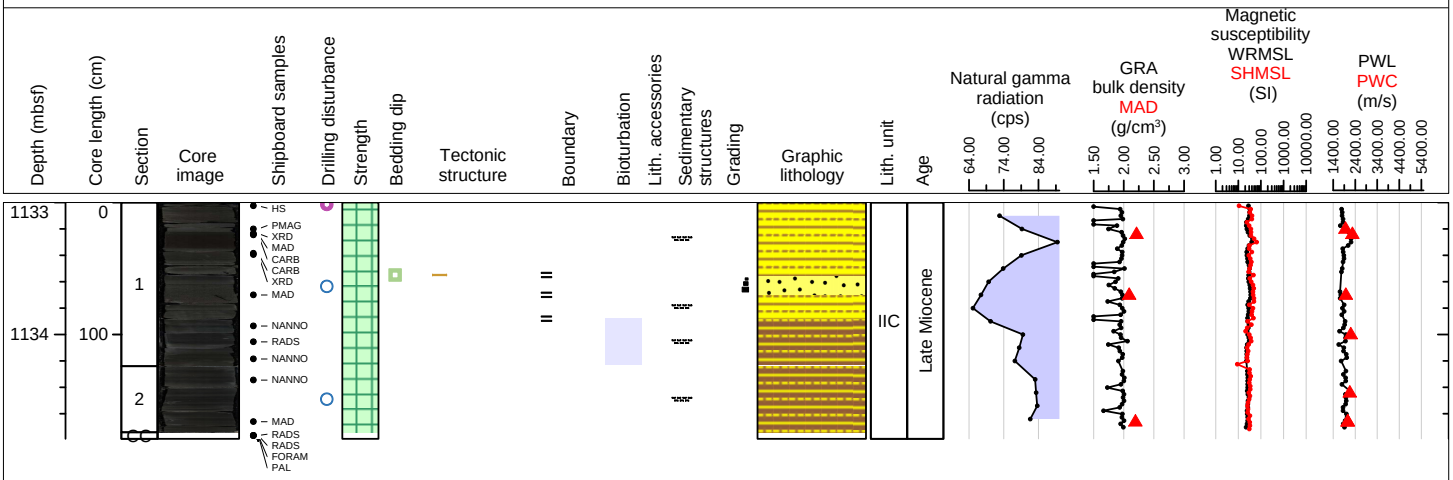
Hole 362-U1480G Core 40R, Interval 1123.3-1123.93 m (CSF-A)

The core shows alternating sand and mud beds that occur as thin beds and are arranged in a general fining-upward trends from fine-grained sand to silty clay.



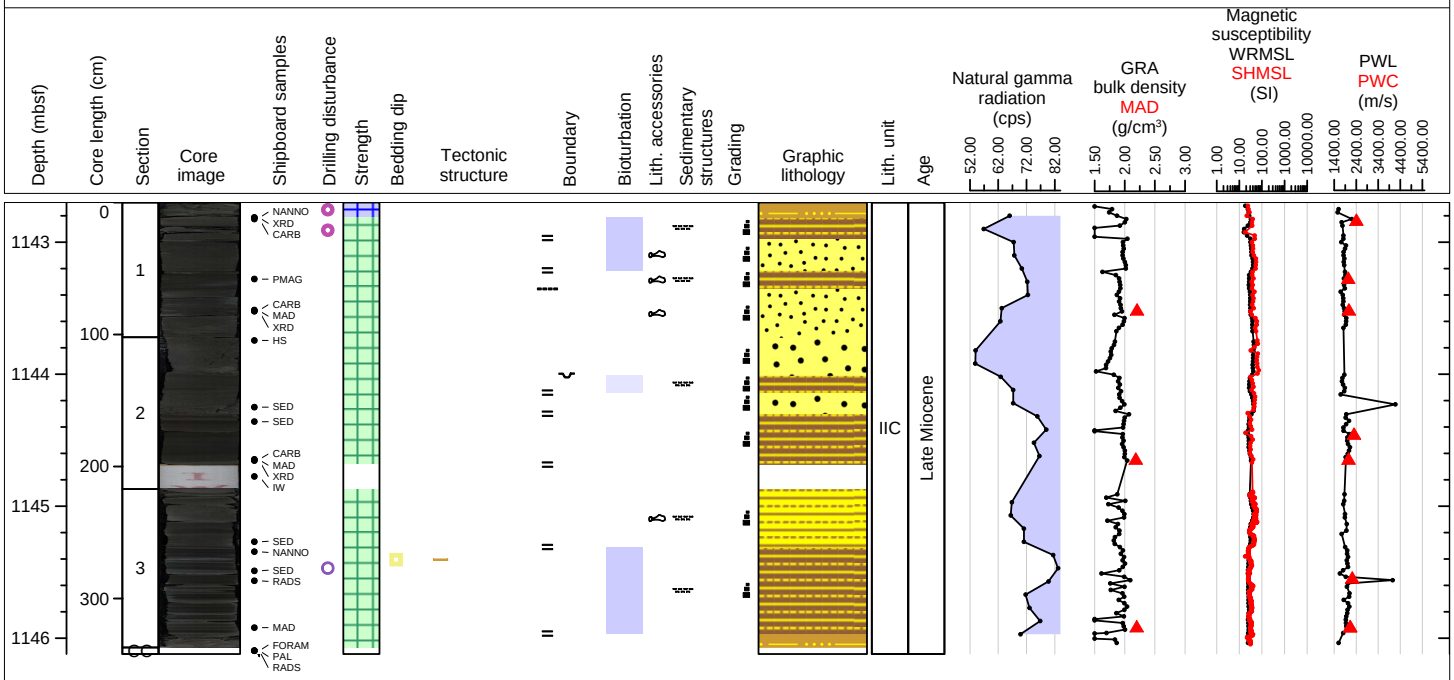
Hole 362-U1480G Core 41R, Interval 1133.0-1134.79 m (CSF-A)

The core shows alternating sand and mud beds in Section 1, 0-88 cm. One very fine-grained sand bed occurs in Section 1, 55-70 cm, that has mud clasts. Additionally, alternating silt and clay beds are present in Section 1, 88-123 cm, and Section 2. All sand and silt beds contain plant fragments, and bioturbation is slight to absent.



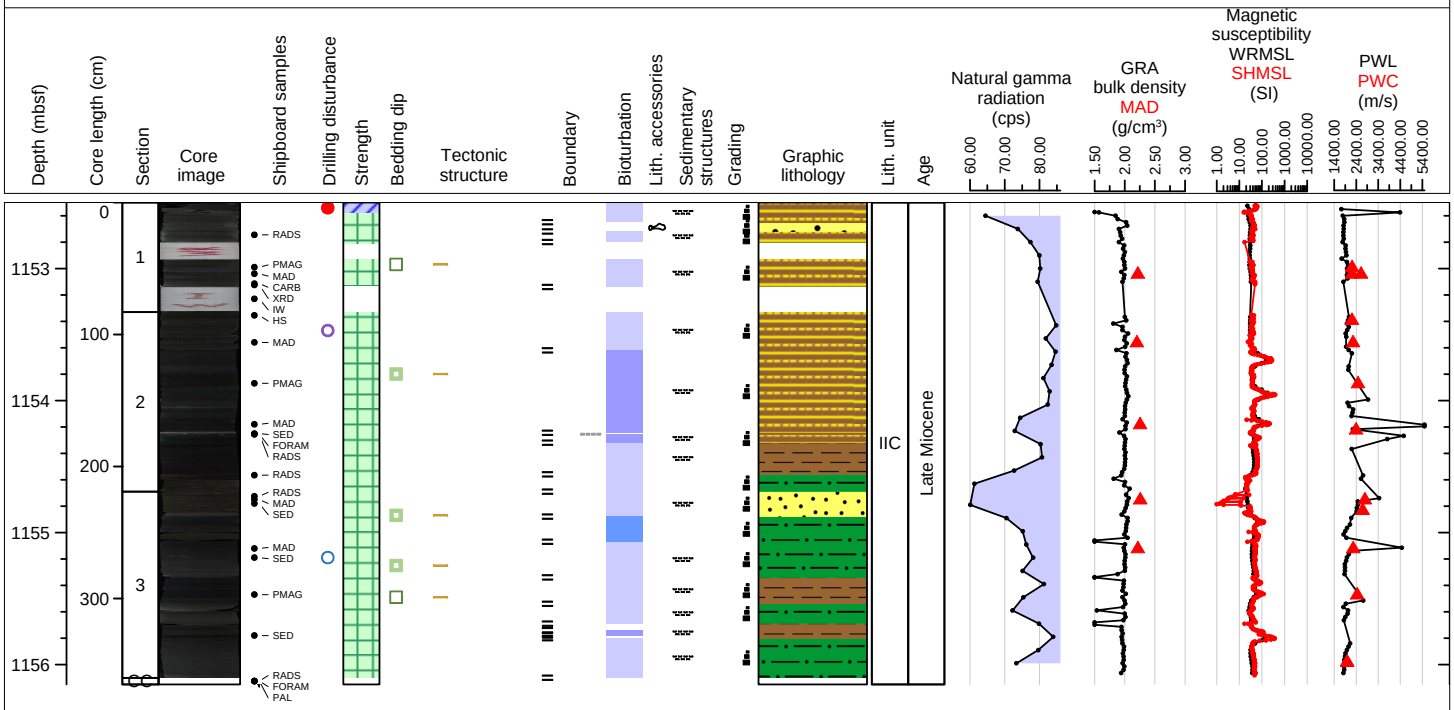
Hole 362-U1480G Core 42R, Interval 1142.7-1146.12 m (CSF-A)

The core shows alternating sand and clay as background lithology or silt and clay beds that occur as thin graded beds, from fine-grained sand to silty clay, and silt to clay.



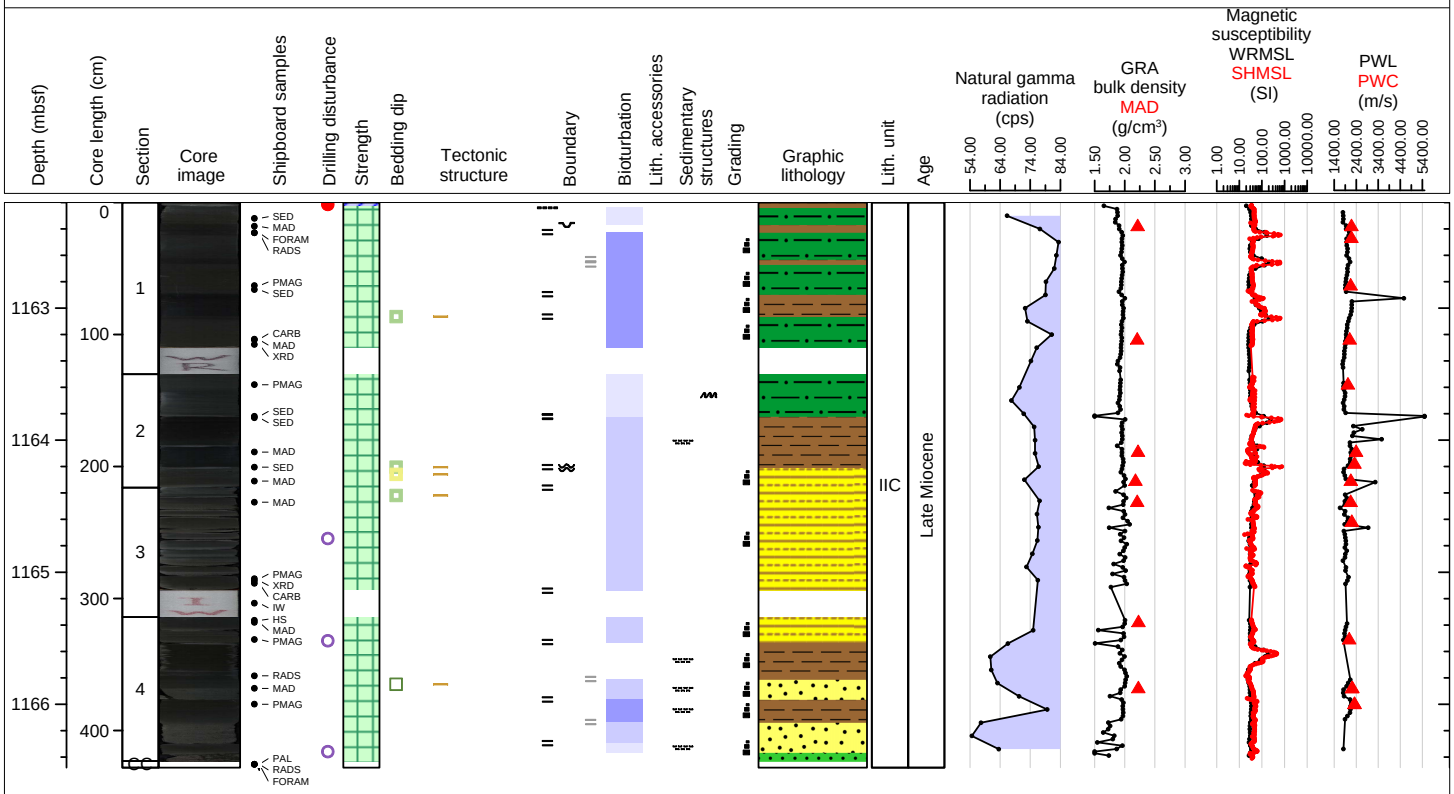
Hole 362-U1480G Core 43R, Interval 1152.5-1156.15 m (CSF-A)

The major lithology of the core is made of very dark gray to black clay with variable amounts of silt resulting in fining-upward trends and mm and cm-scaled laminations that are represented by lighter colors. Carbonate content is moderate to high in some of the beds in Section 3. One sand layer is observed in Section 1 (15-22 cm) and one layer of calcareous clay is present in Section 2 (90.5-93 cm).



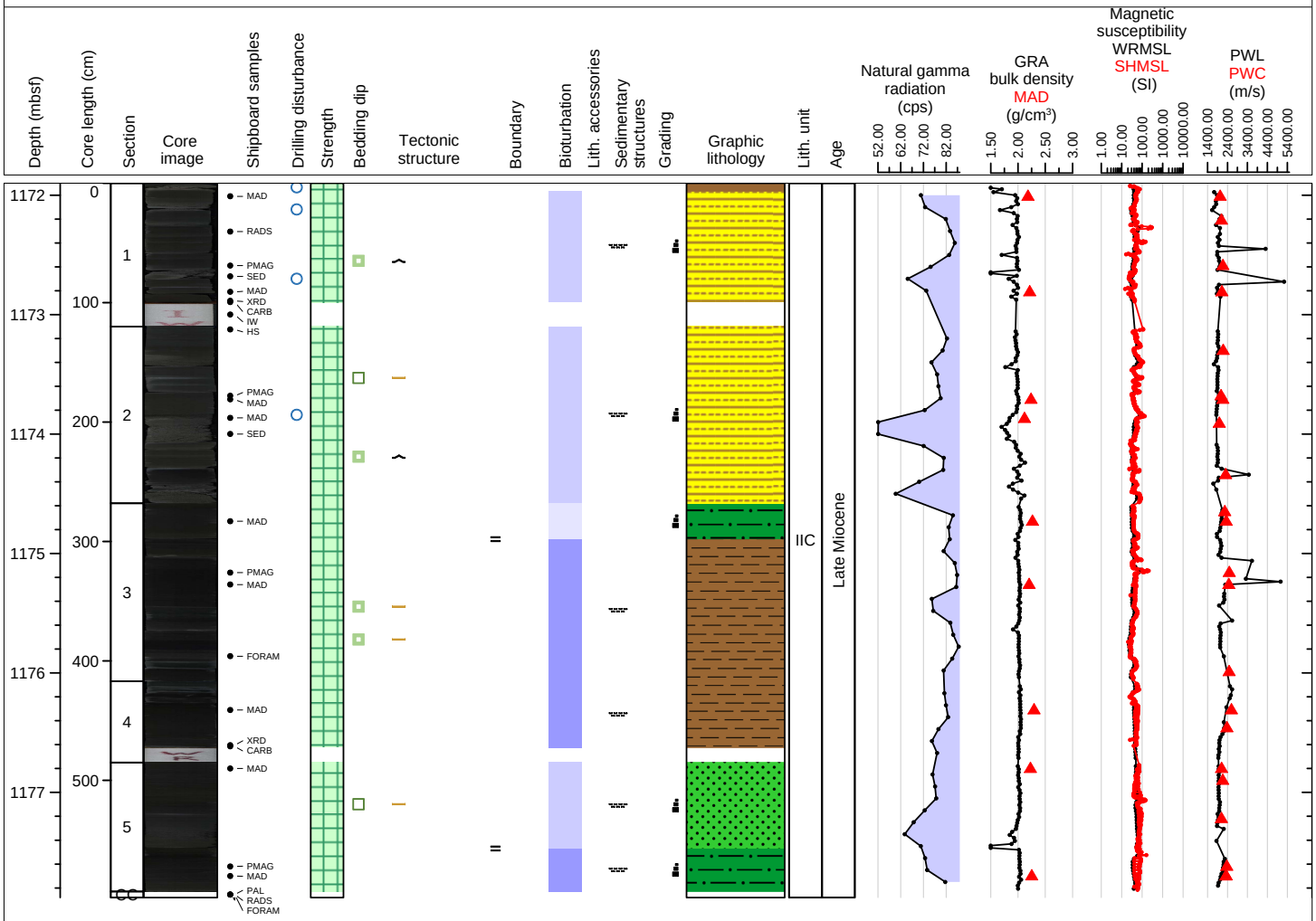
Hole 362-U1480G Core 44R, Interval 1162.2-1166.48 m (CSF-A)

The core has predominantly very dark gray to black clay as major lithology with variable amounts of silt resulting in fining-upward trends and in mm and cm-scale laminations that are represented by lighter colors. A thin lamina of black clay, which contains amount of opaque minerals, is observed in Section 2 (70.5 cm)



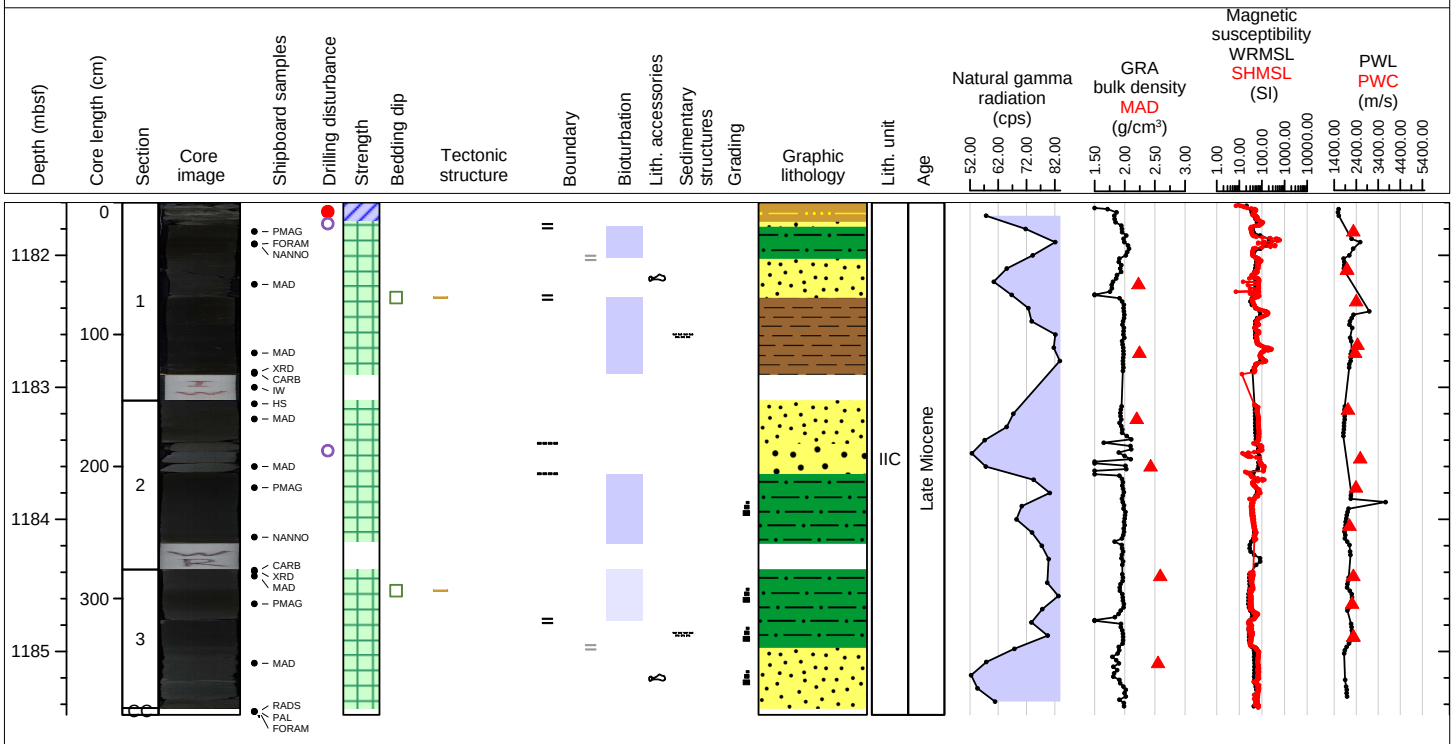
Hole 362-U1480G Core 45R, Interval 1171.9-1177.88 m (CSF-A)

The core is silty-clay and alternating layers of very fine-grained sand and clay fining upward from sand to clay. The very fine-grained sand beds contain rare to common plant fragments.



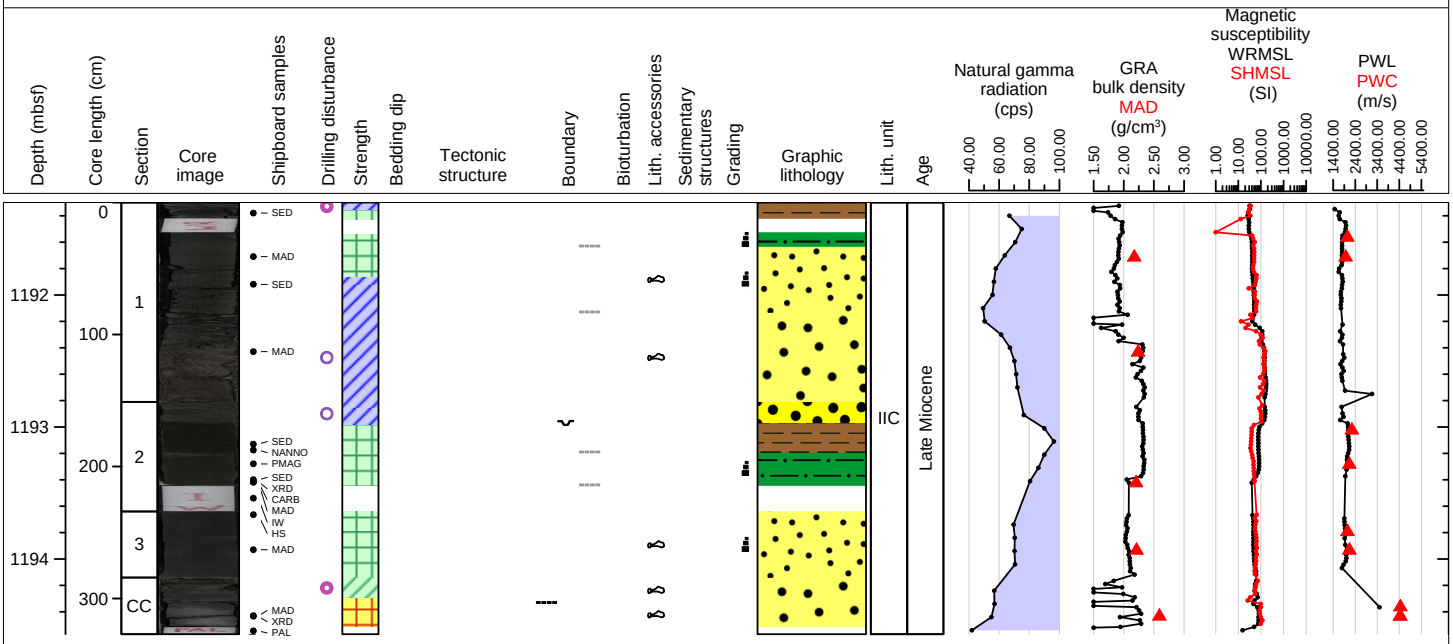
Hole 362-U1480G Core 46R, Interval 1181.6-1185.48 m (CSF-A)

The core is predominantly very dark gray to black clay as major lithology with variable amounts of silt resulting in fining-upward trends Three sand layers are observed in Section 1 (15-22 cm), Section 2 (32-55 cm) and Section 3 (59-106 cm). Reworked mud clast and plant fragments are common in sand layers.



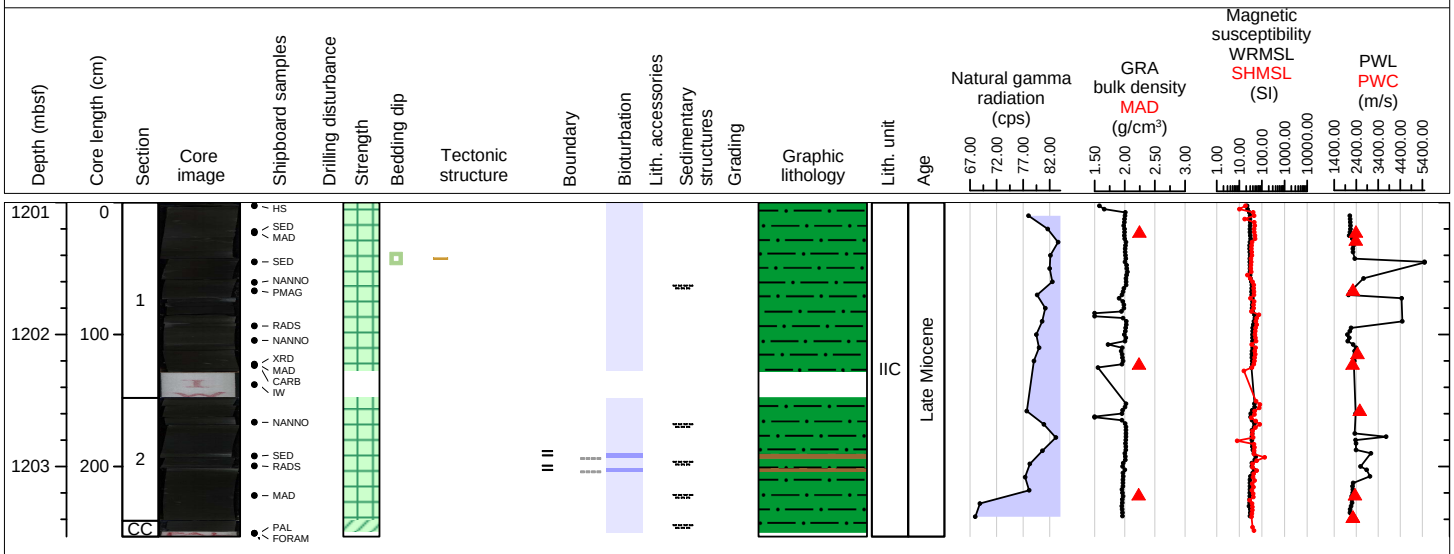
Hole 362-U1480G Core 47R, Interval 1191.3-1194.57 m (CSF-A)

The core shows two very thick beds, normally grading from coarse sand to clay. The sand contains rip-up clasts and plant fragments. The base of the upper bed is in Section 2, 16 cm, while the base of the lower one is at the base of the core. Cemented sandstone in CC, 19-37 cm.



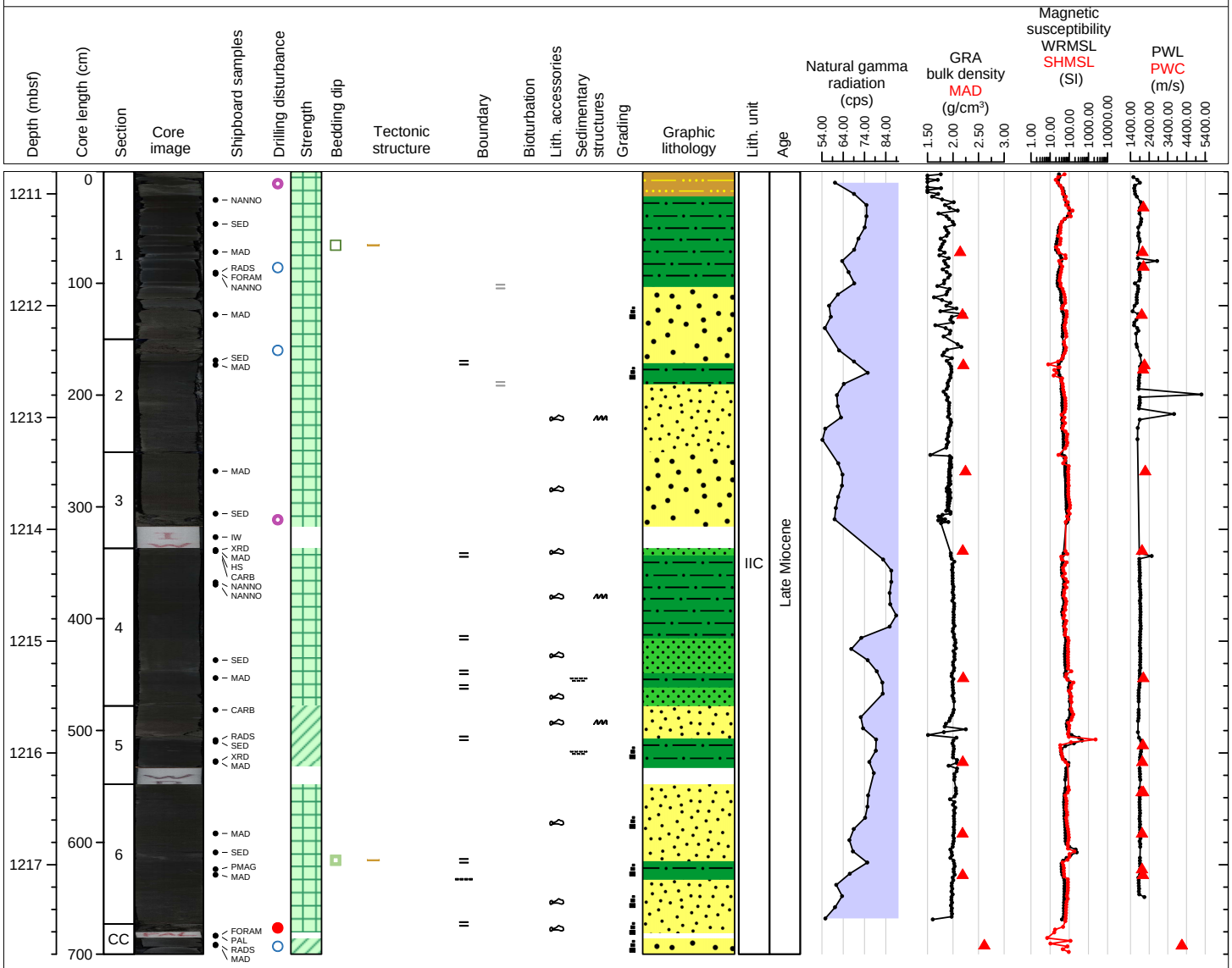
Hole 362-U1480G Core 48R, Interval 1201.0-1203.53 m (CSF-A)

The core is black, normally-graded, thin- to medium-bedded, planar-laminated, silty clay to clay. Presence of agglutinated forams on the top of the beds. Two light gray layers in Section 2 at 42-46 cm and 52-56 cm.



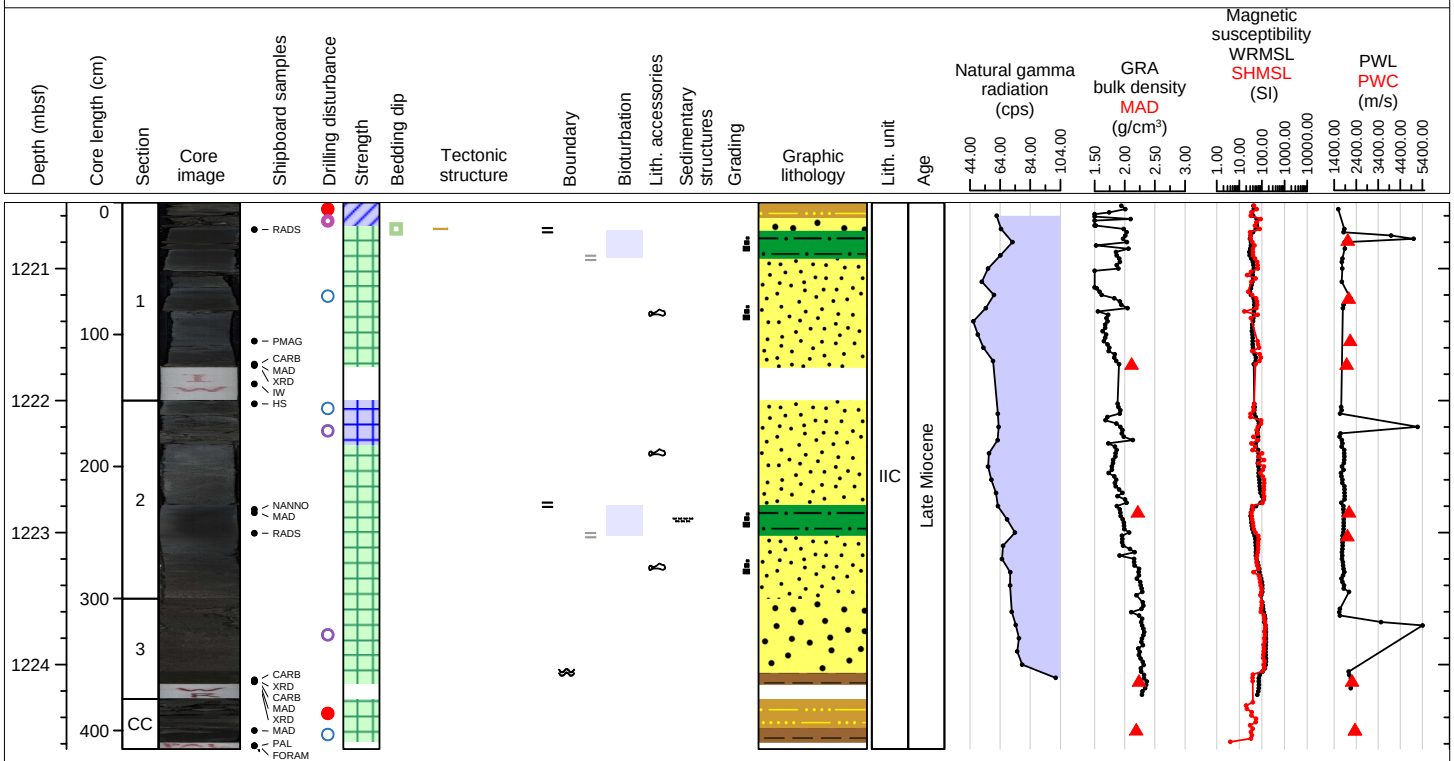
Hole 362-U1480G Core 49R, Interval 1210.8-1217.8 m (CSF-A)

The core contains three very thick beds, fining upward from fine sand to clay. The sand contains rip-up clasts, and plant debris. Convolute bedding is present in Section 2, 40-100 cm. Two cm-thick pyritized wood debris fragments are observed in Section 5, 31 cm, and Section 6, 61 cm.



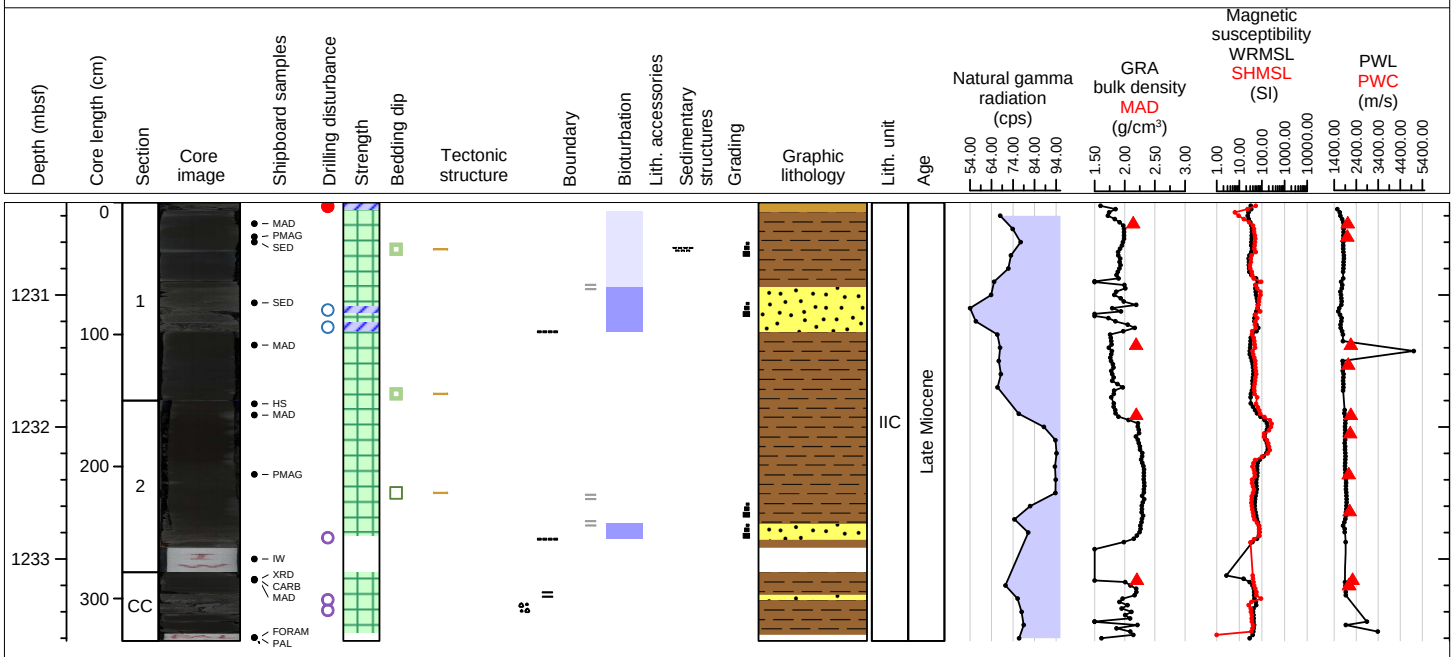
Hole 362-U1480G Core 50R, Interval 1220.5-1224.64 m (CSF-A)

The core shows two very thick beds, that have a fining upward sequence from fine sand to clay. The sand contains rip-up clasts, as well as rare to common plant debris. Dissected limb of slump fold observed at bottom of the silty sand layer of Section 1.



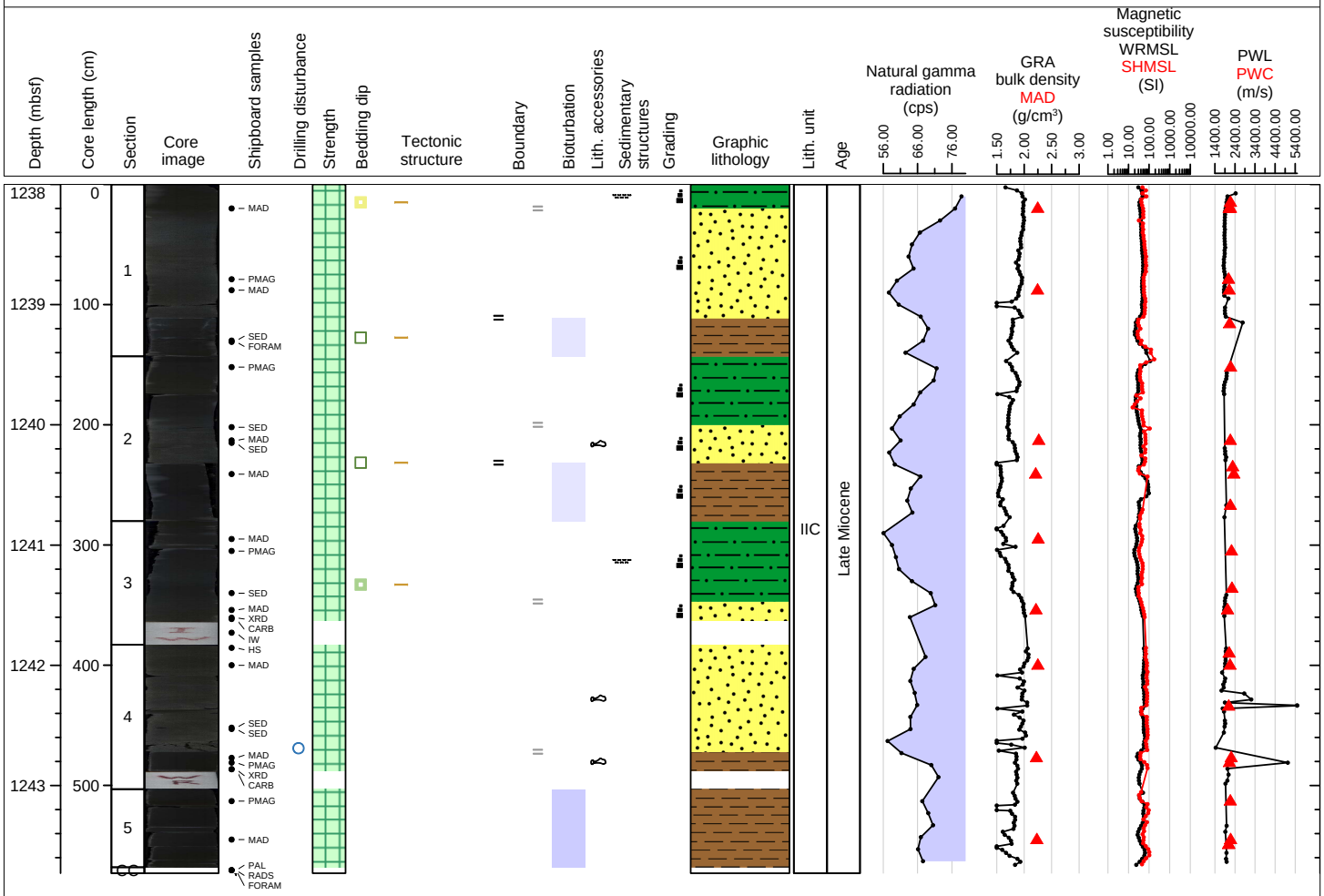
Hole 362-U1480G Core 51R, Interval 1230.3-1233.62 m (CSF-A)

The core contains two very thick beds as fining-upward sequences from fine-grained sand to clay. The sand contains rip-up clasts, and rare to common plant debris.



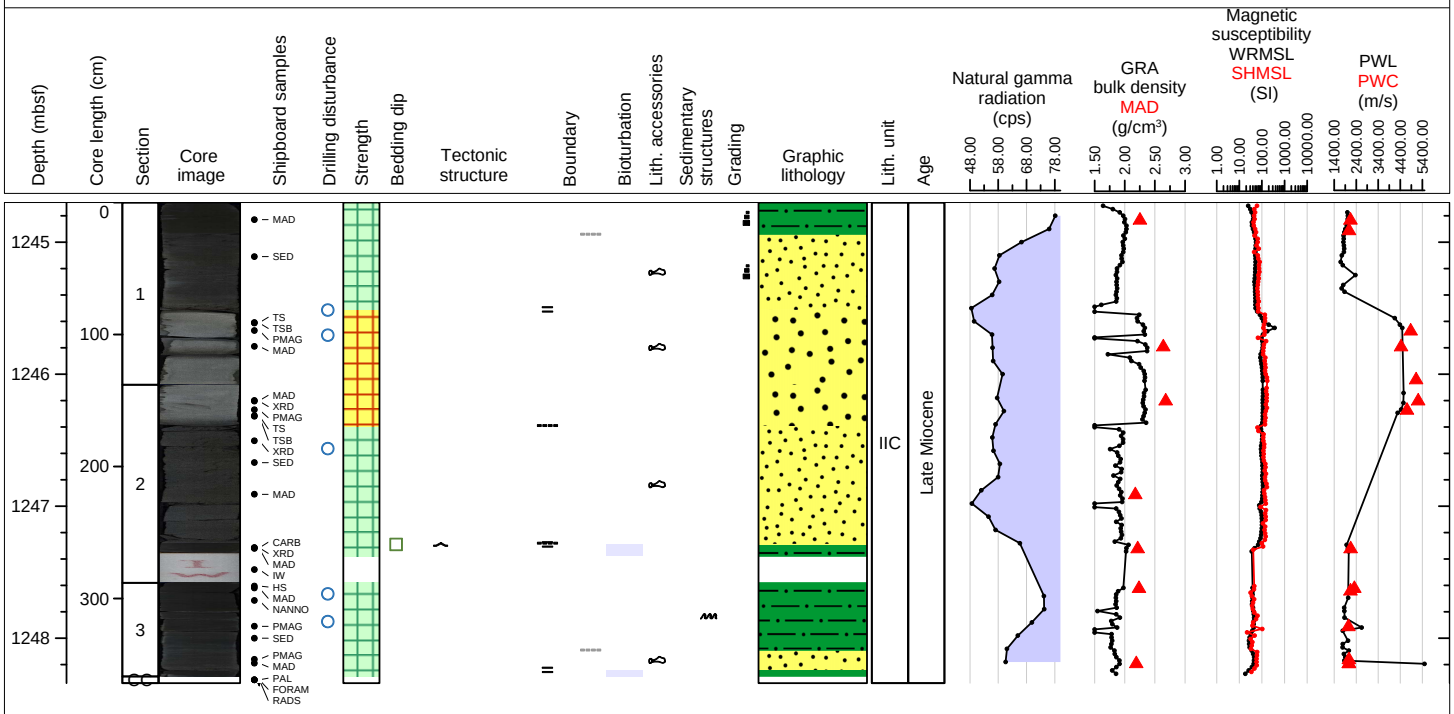
Hole 362-U1480G Core 52R, Interval 1238.0-1243.73 m (CSF-A)

The core shows alteration of some very thick beds, fining upward from fine-grained sand to clay and silt to clay. The sand contains rip-up clasts and rare to common plant debris. A very thin bed of opaque grains is observed in Section 2, 60-62 cm. The sand layer in Section 4 contains a 5 mm large glassy volcanic clast at 69 cm.



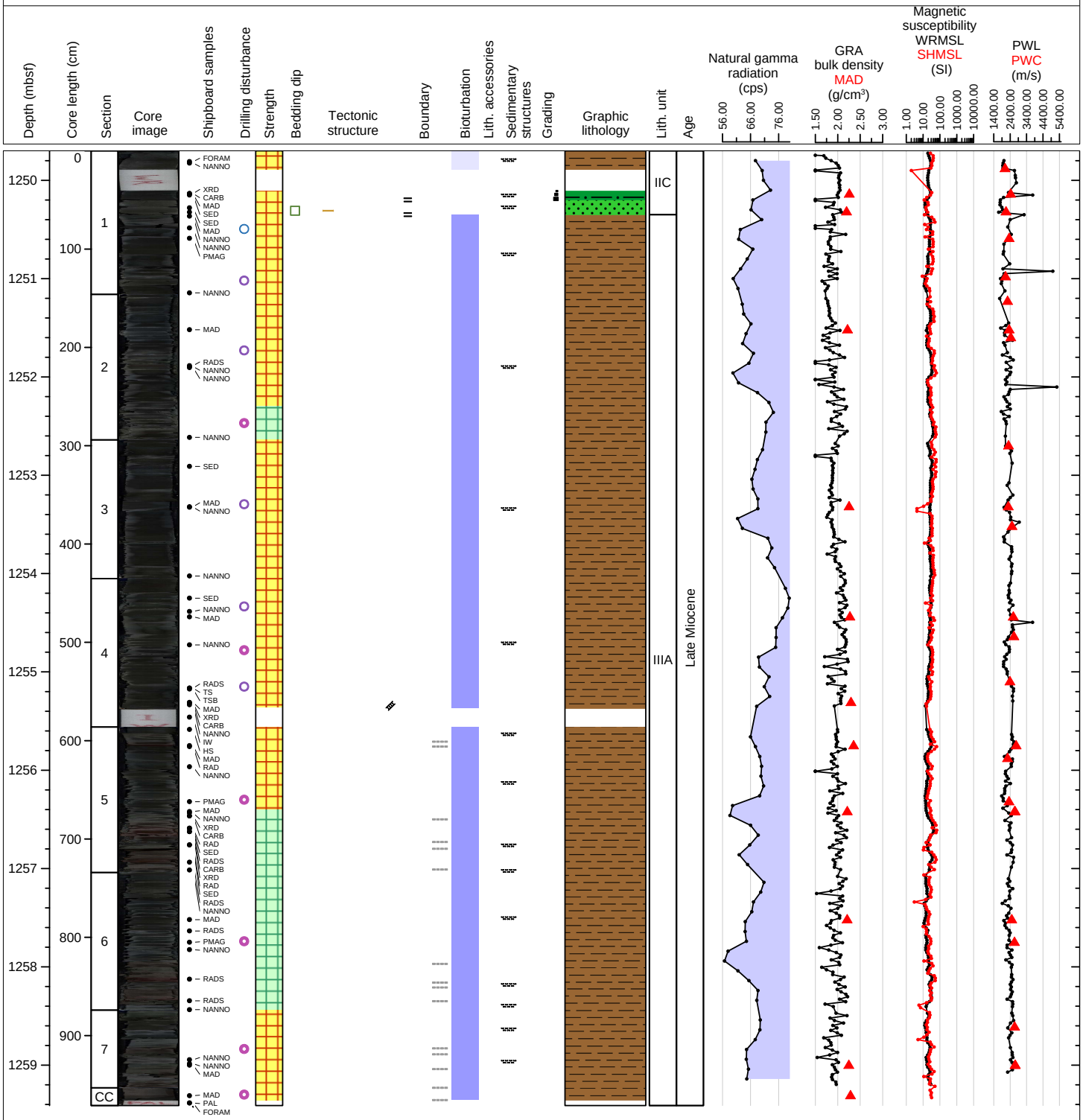
Hole 362-U1480G Core 53R, Interval 1244.7-1248.34 m (CSF-A)

The core has two very thick beds that show fining upward from fine- to medium-grained sand to clay and are rich in plant fragments and shows convolute lamination in the middle part and mud clasts that are enriched in the sandy lower portion of the beds. Cemented sandstone in Section 2, 82-139 cm, and Section 3, 0-32 cm.



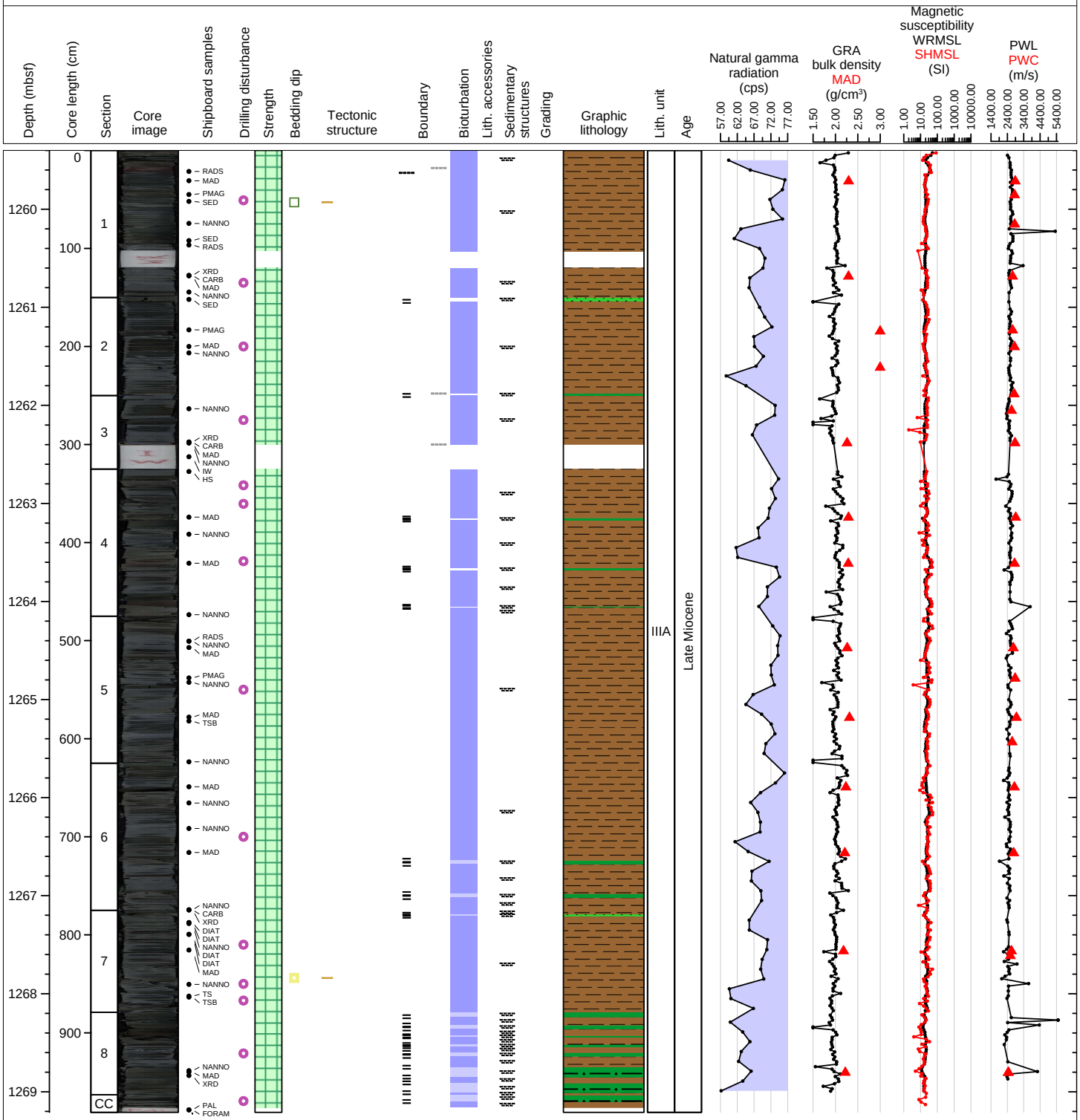
Hole 362-U1480G Core 54R, Interval 1249.7-1259.41 m (CSF-A)

The core shows clay with silt arranged as thin to medium beds, with faint planar lamination at the base and agglutinated forams on top. The overall color is very dark gray, but some layer are dark reddish-brown. Color change is not related to lithological or compositional change. One planar laminated silt bed in Section 1, 50-65 cm.



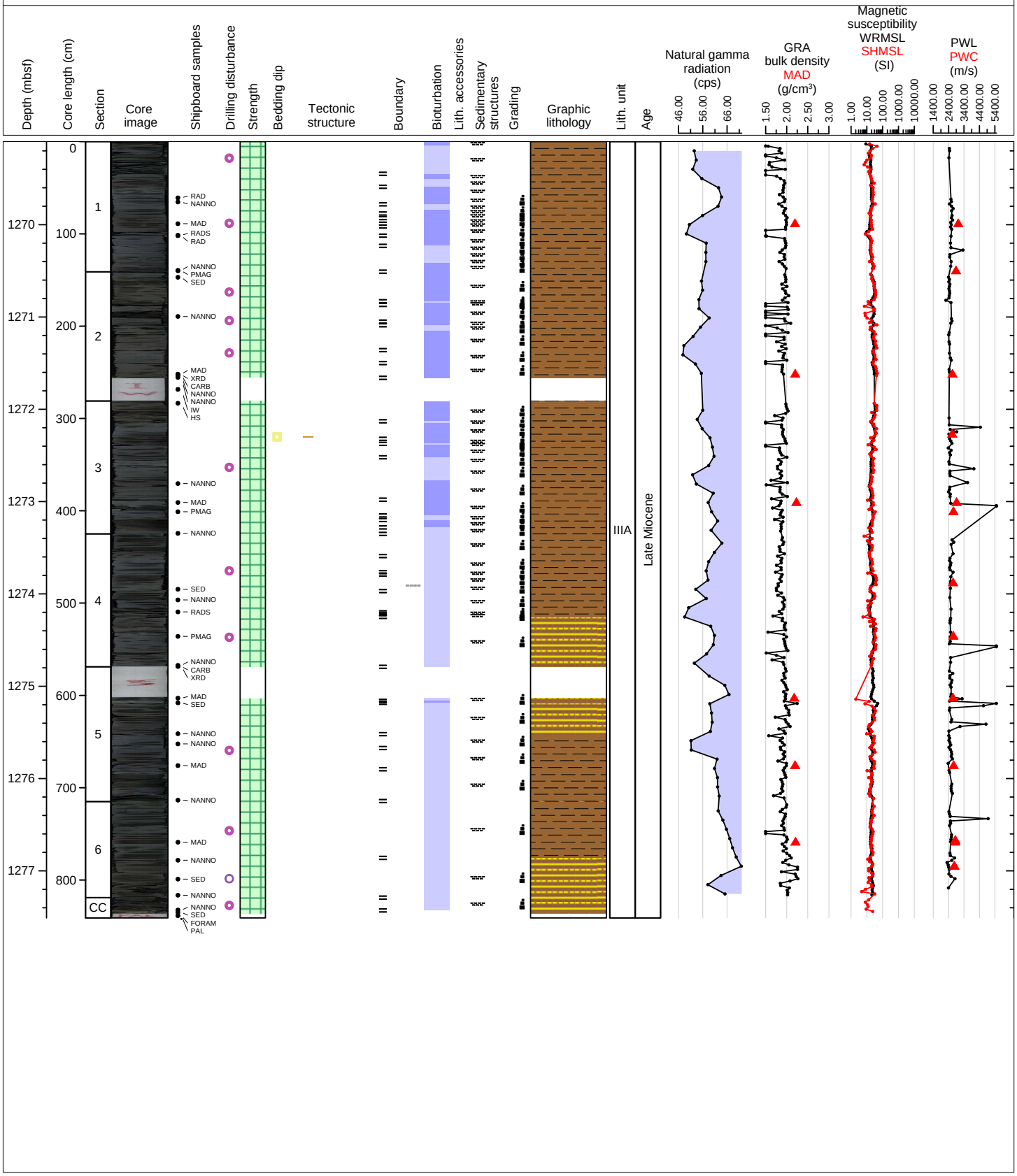
Hole 362-U1480G Core 55R, Interval 1259.4-1269.21 m (CSF-A)

The core contains clay with silt arranged as thin to medium beds, with faint planar laminations (well defined in Section 5 to CC) and agglutinated forams on top. Some beds are normally graded from silty-clay to clay, with increasing bioturbation towards the top. Isolated planar-laminated, very thin beds of silt in Sections 2,4, 6, 8, CC. One dark reddish-brown bed in Section 1, 18-23 cm.



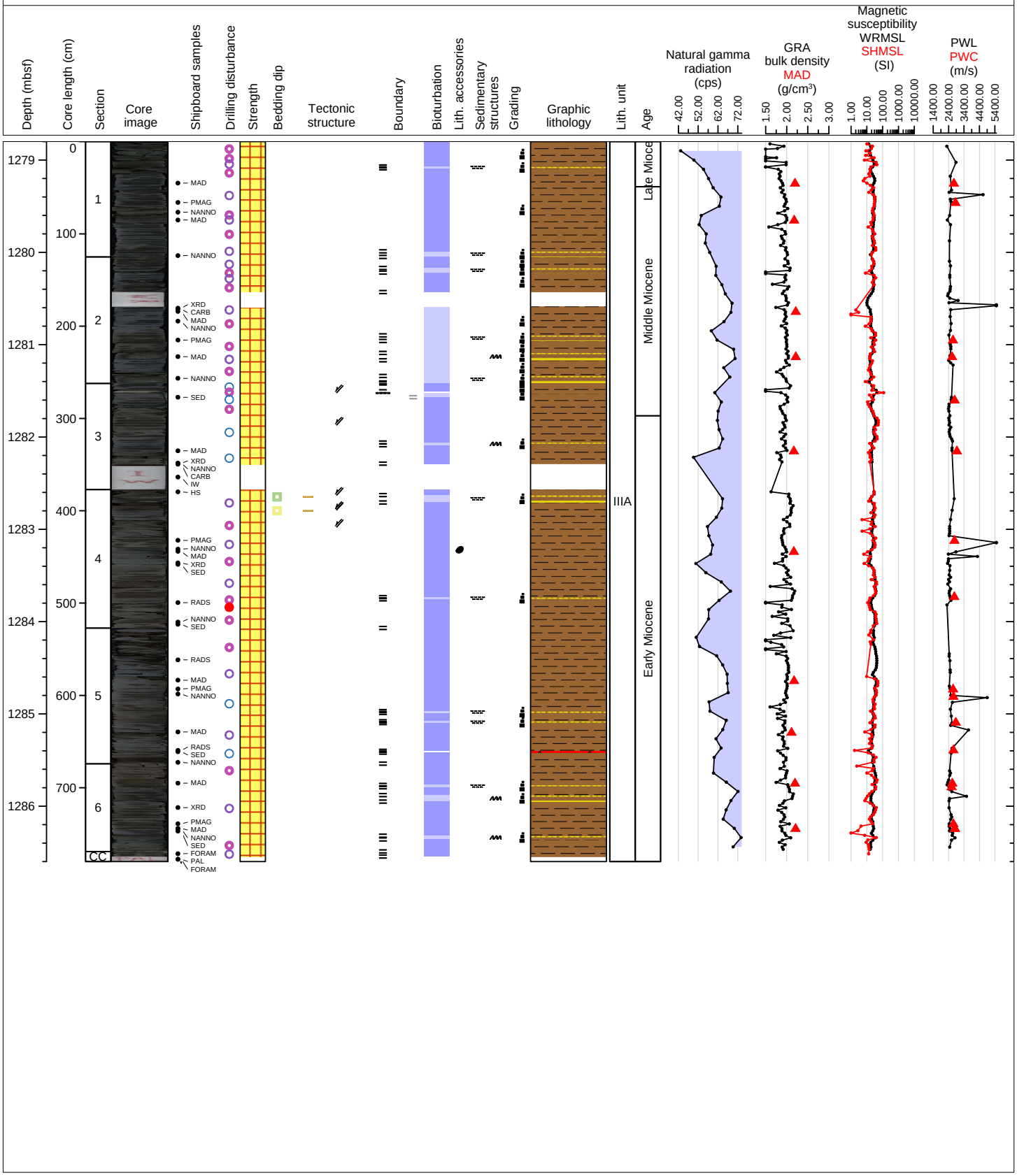
Hole 362-U1480G Core 56R, Interval 1269.1-1277.51 m (CSF-A)

The core is clay with silt in variable amounts in thin to medium beds having very dark green, brownish black, and black colors, with faint planar lamination. In sections 5 and 6, mm-scale silt layers are commonly interbedded within the clays. Some beds are normally graded from silty-clay to clay, with increasing bioturbation towards the top. Foraminifers are rare. Two concretions of mudstone are observed in Section 5 (37-39 cm) and CC (14-17 cm). Isolated planar-laminated, very thin beds of silt are present in all sections.



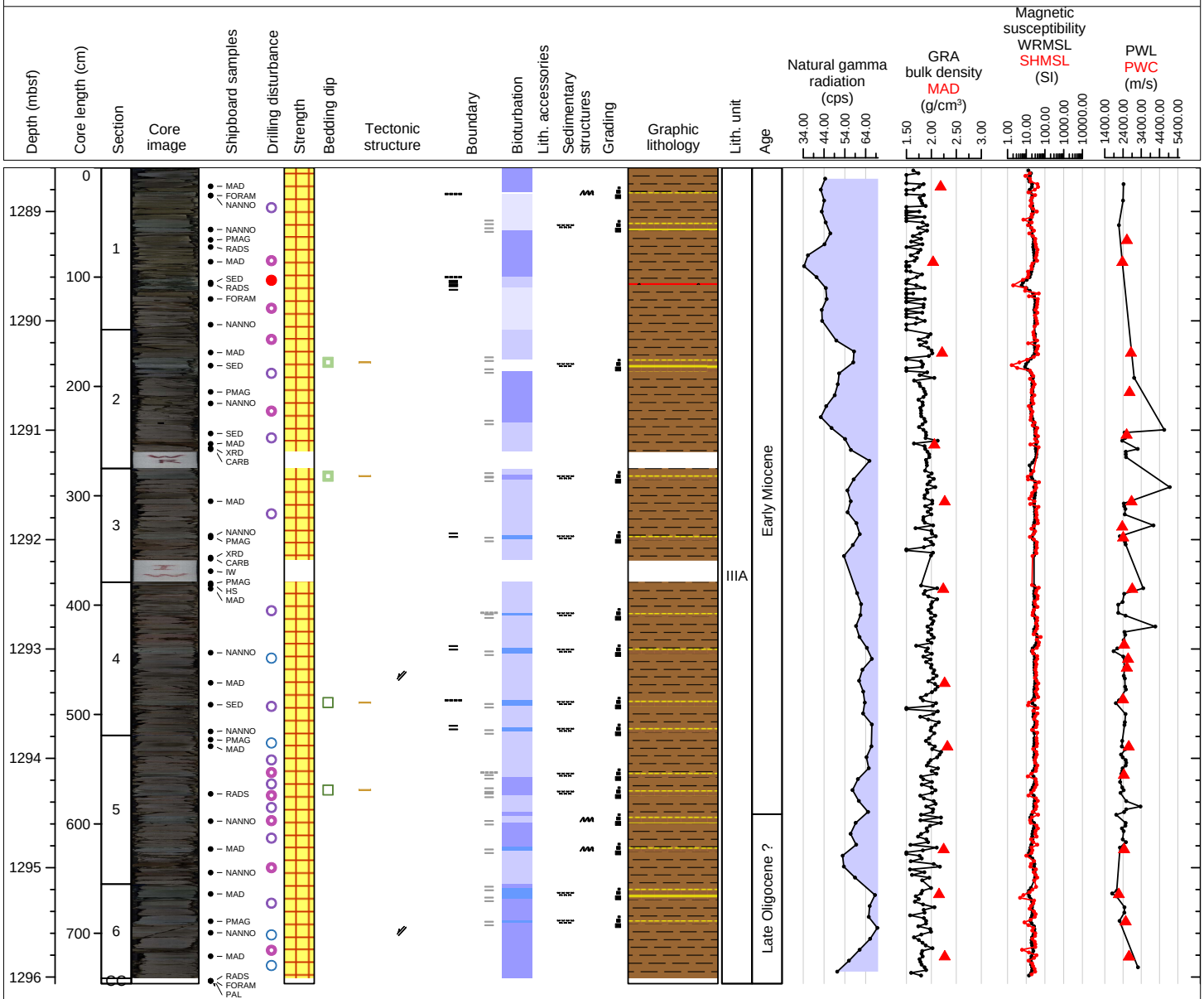
Hole 362-U1480G Core 57R, Interval 1278.8-1286.6 m (CSF-A)

The core is clay with silt in variable amounts that have thin to medium beds having black green, brownish-black, and black colors, with faint planar lamination. In Section 2, 4, and 6 mm-scale silt layers are commonly interbedded within clay. Some beds are normally graded from silty-clay to clay, with increasing bioturbation towards the top. A concretion of mudstone occurs in Section 3 (8.5-10.5 cm). An ash pod and an ash layer is interbedded in Section 4 (80 cm) and Section 5 (133-135 cm).



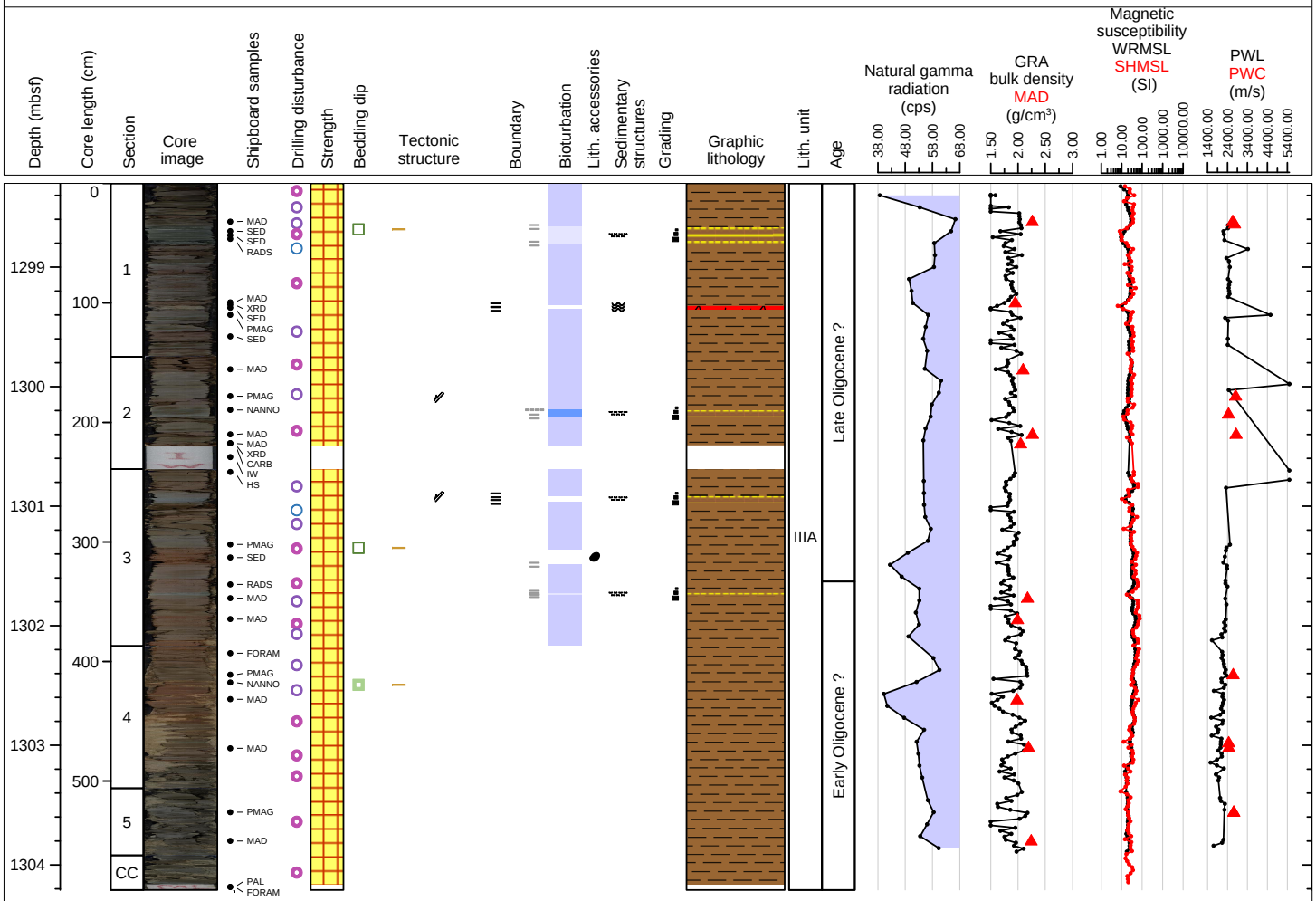
Hole 362-U1480G Core 58R, Interval 1288.6-1296.06 m (CSF-A)

The core is predominantly very dark grayish-brown to dark brown clay as major lithology with some thin to medium/thick alternating layers of very dark greenish gray clay and mm scale laminations of dark greenish gray silt. An ash layer occurs in Section 1 (105-106.5 cm). Agglutinated forams are present in the clay layer at 24, 56, 119 cm in Section 1 as well as 23 cm in Section 2.



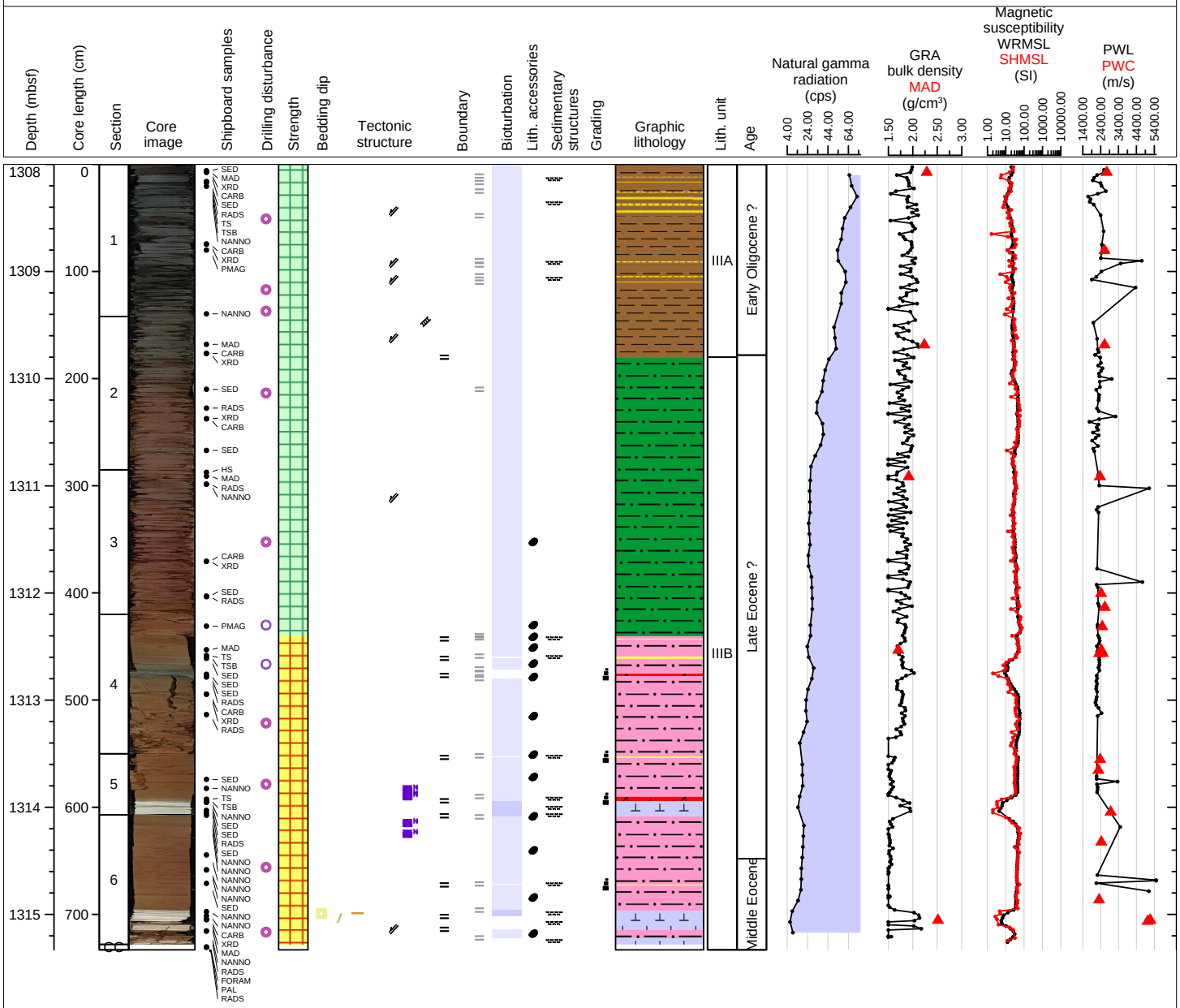
Hole 362-U1480G Core 59R, Interval 1298.3-1304.21 m (CSF-A)

The core has predominantly very dark grayish brown to reddish-brown clay as major lithology with some thin alternating layers of very dark greenish gray clay and mm scale laminations of dark greenish gray silt. An ash layer is observed in Section 1 (102-105 cm). An ash layer pod is intercalated in the reddish-brown clay in Section 2 (74 cm). Minor normal faults observed in core.



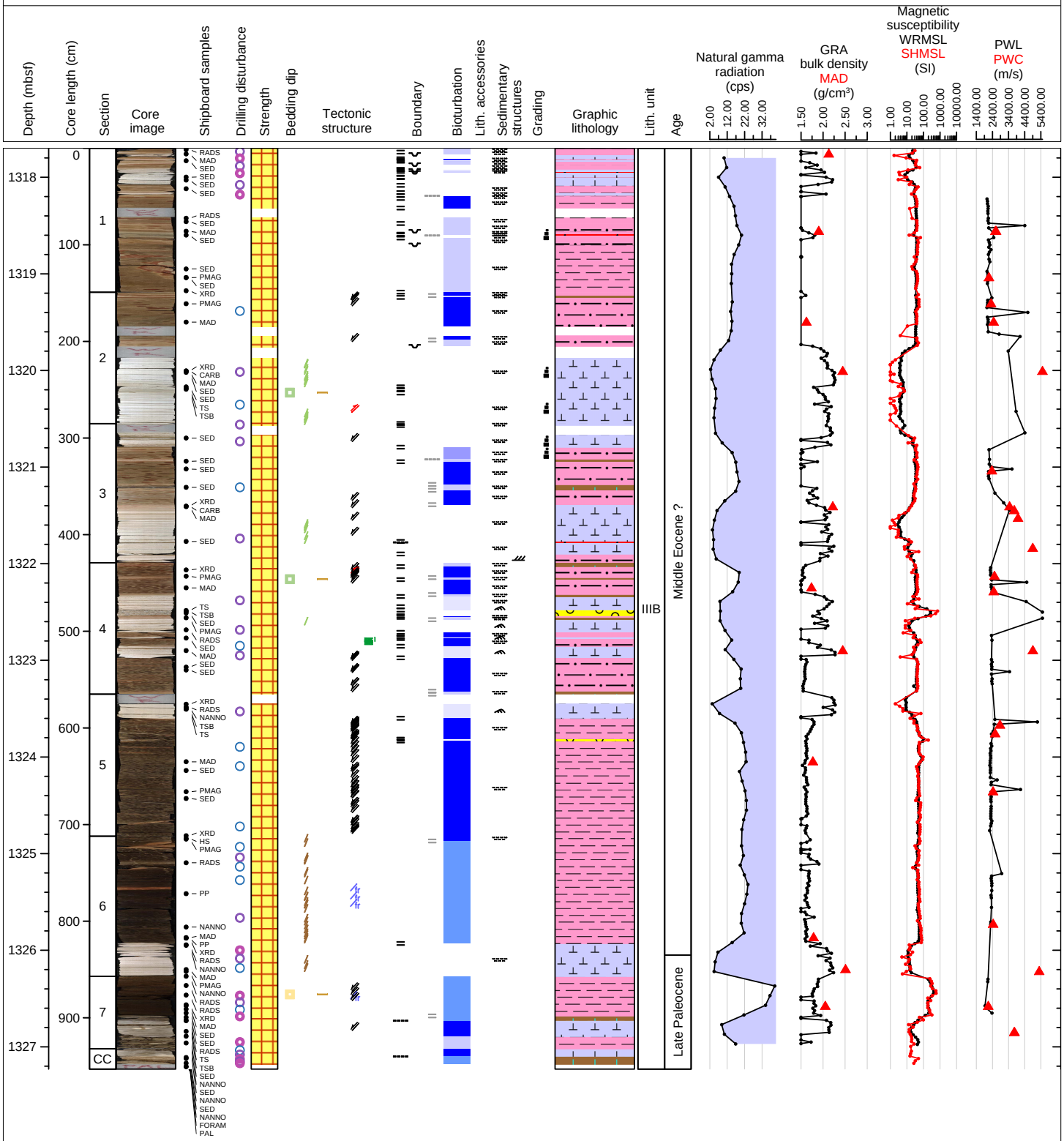
Hole 362-U1480G Core 60R, Interval 1308.0-1315.33 m (CSF-A)

The core shows three main lithologies: (1) very dark gray clay with silt and alternating silt and clay laminae in Section 1 and Section 2, 0-38 cm; (2) dark reddish-brown to red silty clay with ash from Section 2, 38 cm, to Section 4, 20 cm, and (3) light brown tuffaceous silty clay from Section 4, 20 cm to CC. Two minor lithologies are present: (1) an ash bed in Section 4, 55-57 cm, and (2) over- and underlying greenish gray tuffaceous silty clay; and chalk with ash in Section 5, 43-57 cm and Section 6, 95-114 and 122-127 cm. Minor normal faults and vein observed in gray clay interval.



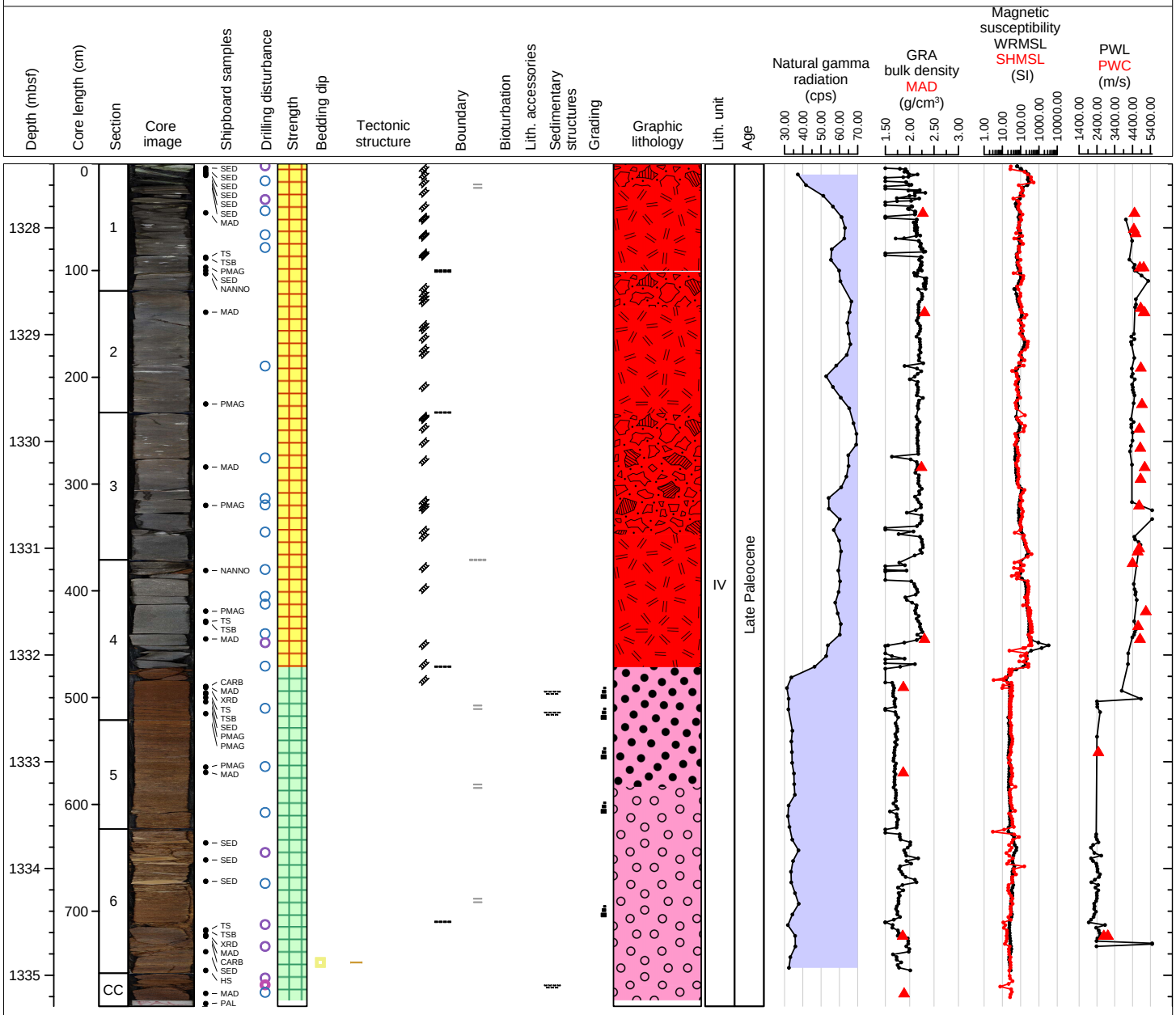
Hole 362-U1480G Core 61R, Interval 1317.7-1327.23 m (CSF-A)

The major lithology is moderately-bioturbated tuffaceous silty clay alternating with decimeter-scale intervals of chalk characterized by abundant stylolites that, in several cases, appear to have originally been cross-laminated and parallel-laminated very thin beds and laminae. There is a small-pebble to granule-grade tuffaceous conglomerate in Section 4, 49-55 cm. Redox spots occur throughout. Dense network of conjugate normal faults developed in section.



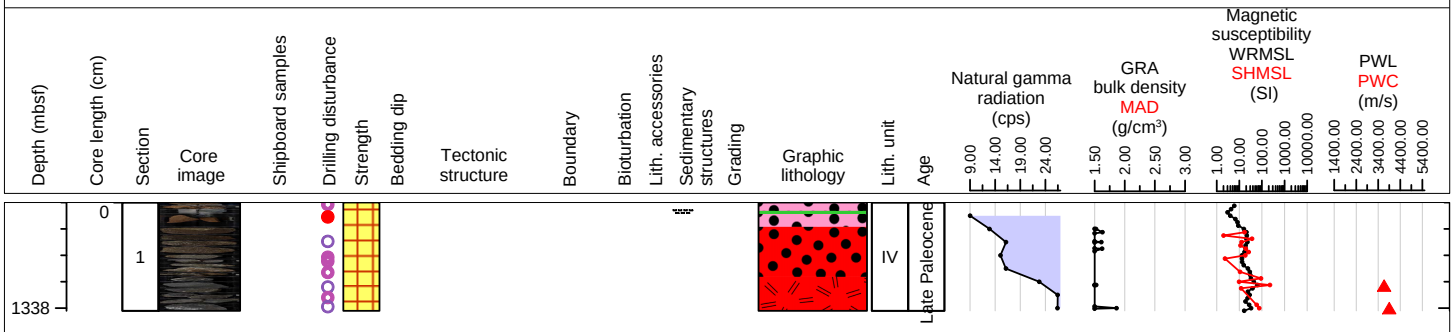
Hole 362-U1480G Core 62R, Interval 1327.4-1335.29 m (CSF-A)

The core contains a glassy volcaniclastic breccia at the uppermost part that contains greenish-white hydrothermal veins and strongly hydrothermal altered microcrystalline plagioclase bearing basalt from 20 cm of Section 1 to 100 cm of Section 4. This igneous portion is followed by tuffaceous sandstone and matrix-supported conglomerates (from 100 cm of Section 4 to CC) that are mainly made out of moderately to strongly altered (palagonite) glass and pumiceous fragments in a completely zeolitized matrix.



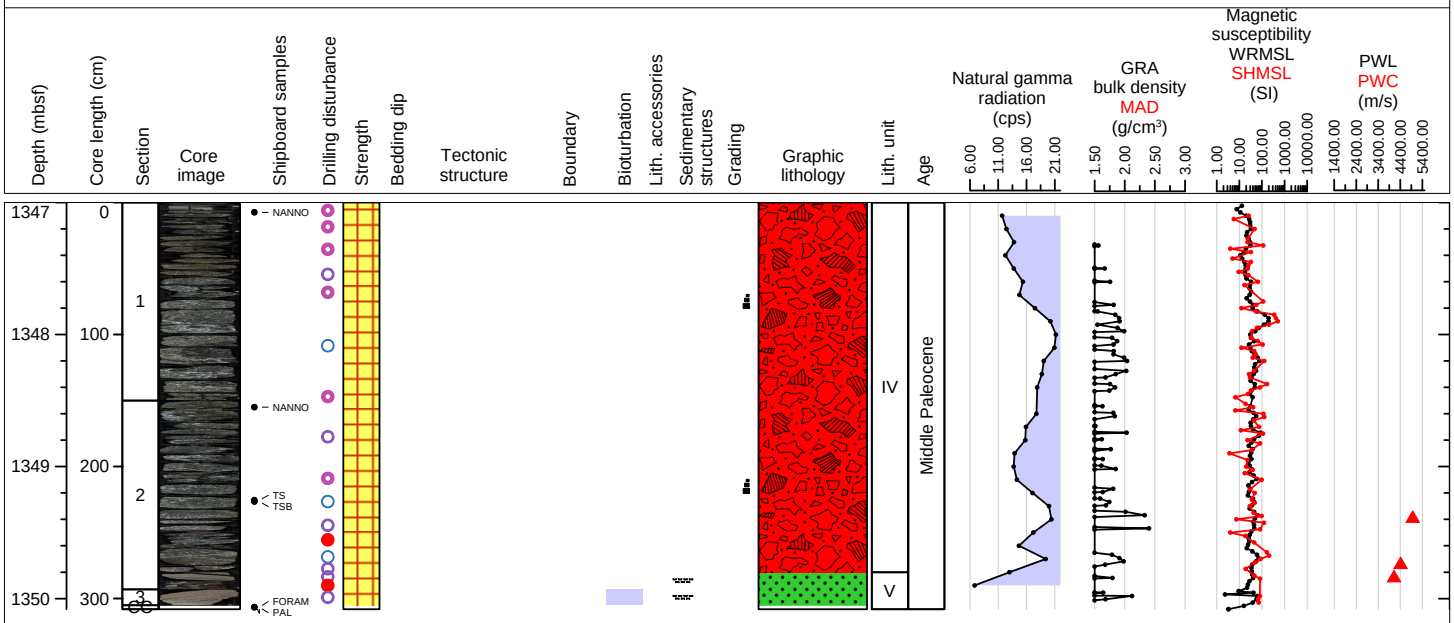
Hole 362-U1480G Core 63R, Interval 1337.2-1338.02 m (CSF-A)

Core 63R comprises one section of rounded pebble sized clasts made out of basalt, tuffaceous sandstone, and volcanic breccias. Clasts are rounded by drilling (severe-destroyed drilling disturbance). In the upper part, there are brown volcaniclastic sandstone clasts. In the lower part, moderately vesicular aphyric basalt predominate the recovery.



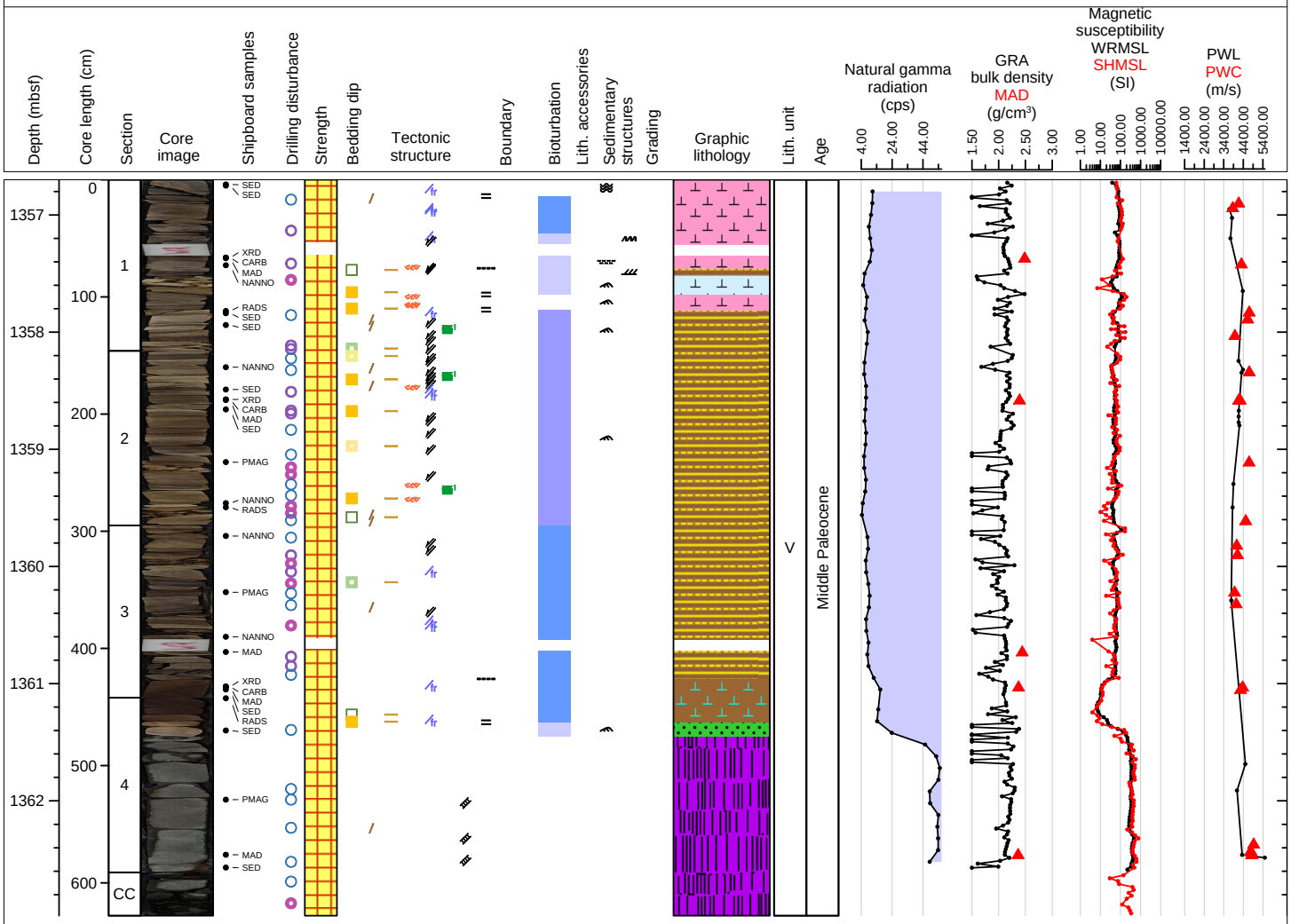
Hole 362-U1480G Core 64R, Interval 1347.0-1350.08 m (CSF-A)

Core 64R consists mainly of volcanic breccias made out of angular to subrounded aphyric, moderately vesical-rich basaltic clasts and tuffaceous and volcaniclastic sandstone clasts in a greenish highly altered matrix. The (basaltic) clasts show normal grading from pebble to granule size throughout sections 1 and 2. The lowermost part of the core (Section 2, 130 cm to CC) consists of grayish brown, parallel-laminated calcareous siltstone.



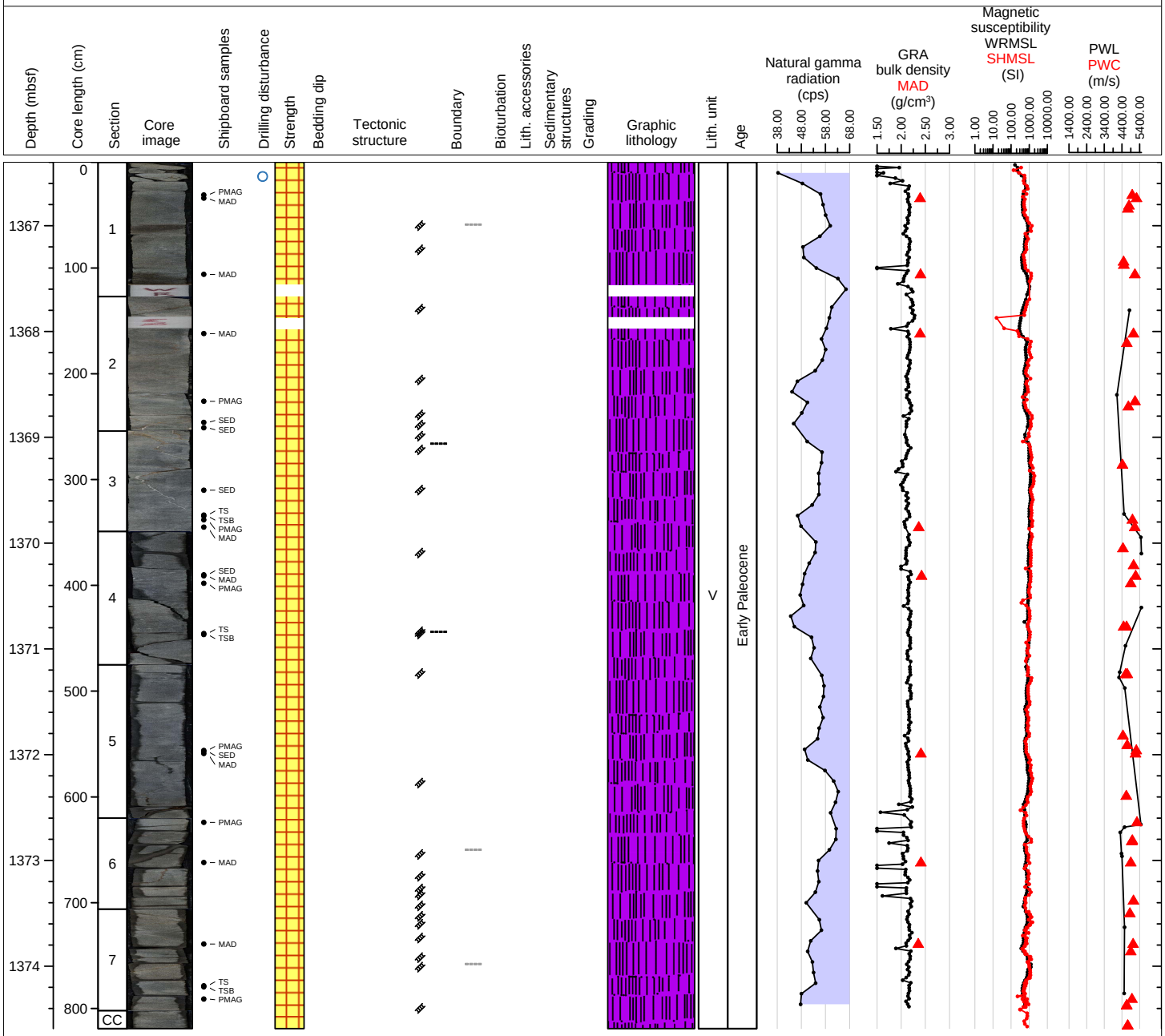
Hole 362-U1480G Core 65R, Interval 1356.7-1362.98 m (CSF-A)

The core consists of reddish brown tuffaceous ooze with re-crystallized agglutinated forams alternating with pale brown calcareous ooze until Section 4, 32 cm. Below, until CC, an intrusion is present that is very fine grained at the boundary to the overlying sediment and is getting coarser crystalline towards CC. Mineral assemblage of Plagioclase >> Pyroxene > Hornblende > Biotite in an ophitic texture classifies the rocks as intermediate intrusive rocks, interpreted as diorites. Abundant minor normal faults observed in core.



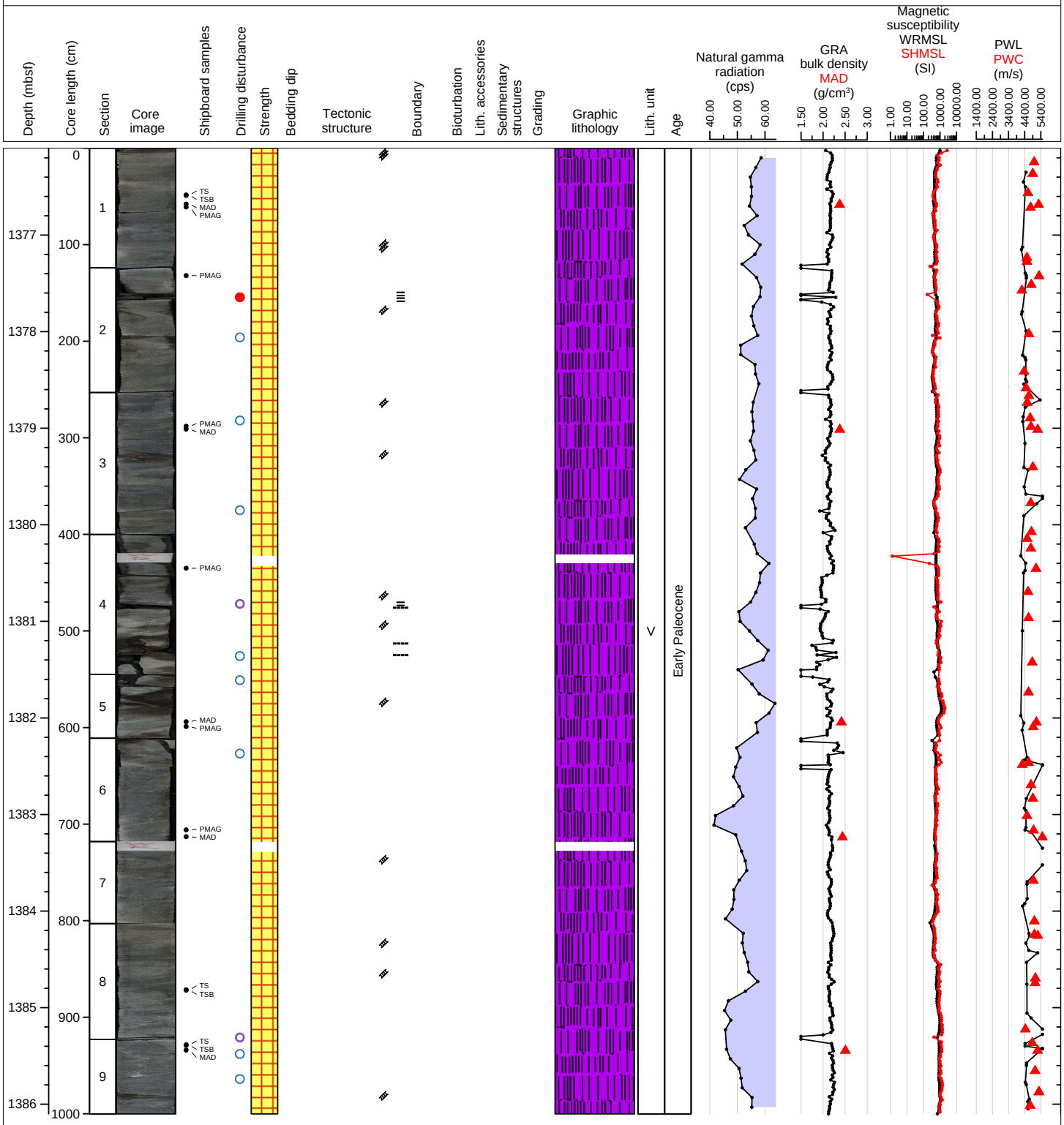
Hole 362-U1480G Core 66R, Interval 1366.4-1374.59 m (CSF-A)

The core consists of variable altered coarse grained igneous rocks subdivided into coarser and finer grained parts. The mineral assemblage of plagioclase >> pyroxene > hornblende > biotite in an ophitic texture classifies the rocks as intermediate intrusive rocks, interpreted as diorites. Abundant carbonate-filled veins are observed within the entire core.



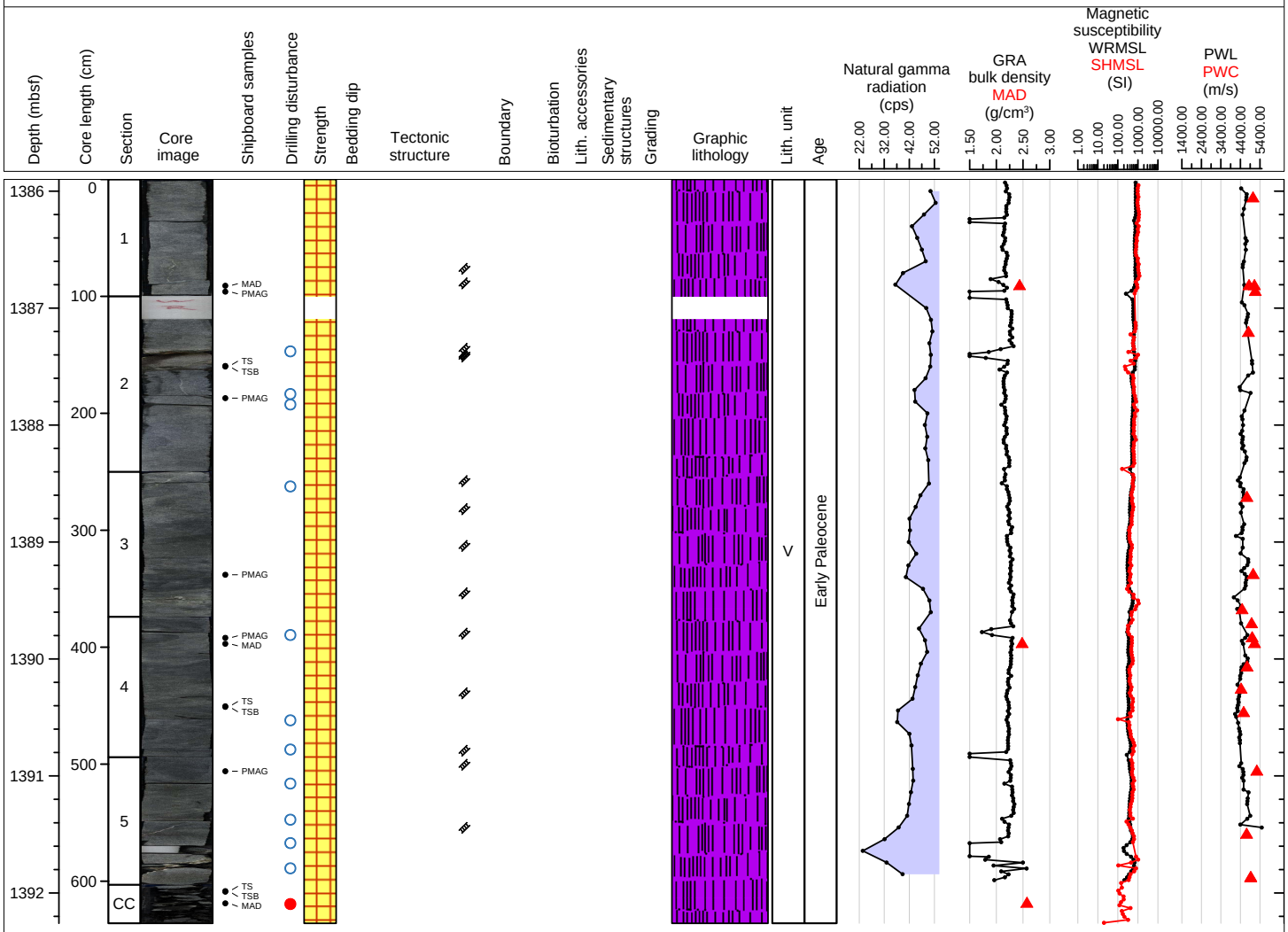
Hole 362-U1480G Core 67R, Interval 1376.1-1386.1 m (CSF-A)

The core consist of variable altered coarse grained igneous rocks subdivided into coarser and finer grained parts. The mineral assemblage of plagioclase >> pyroxene > hornblende > biotite in an ophitic texture classifies the rocks as intermediate intrusive rocks, interpreted as diorites. Some horizontal to sub-vertical carbonate-filled veins are observed within the entire core.



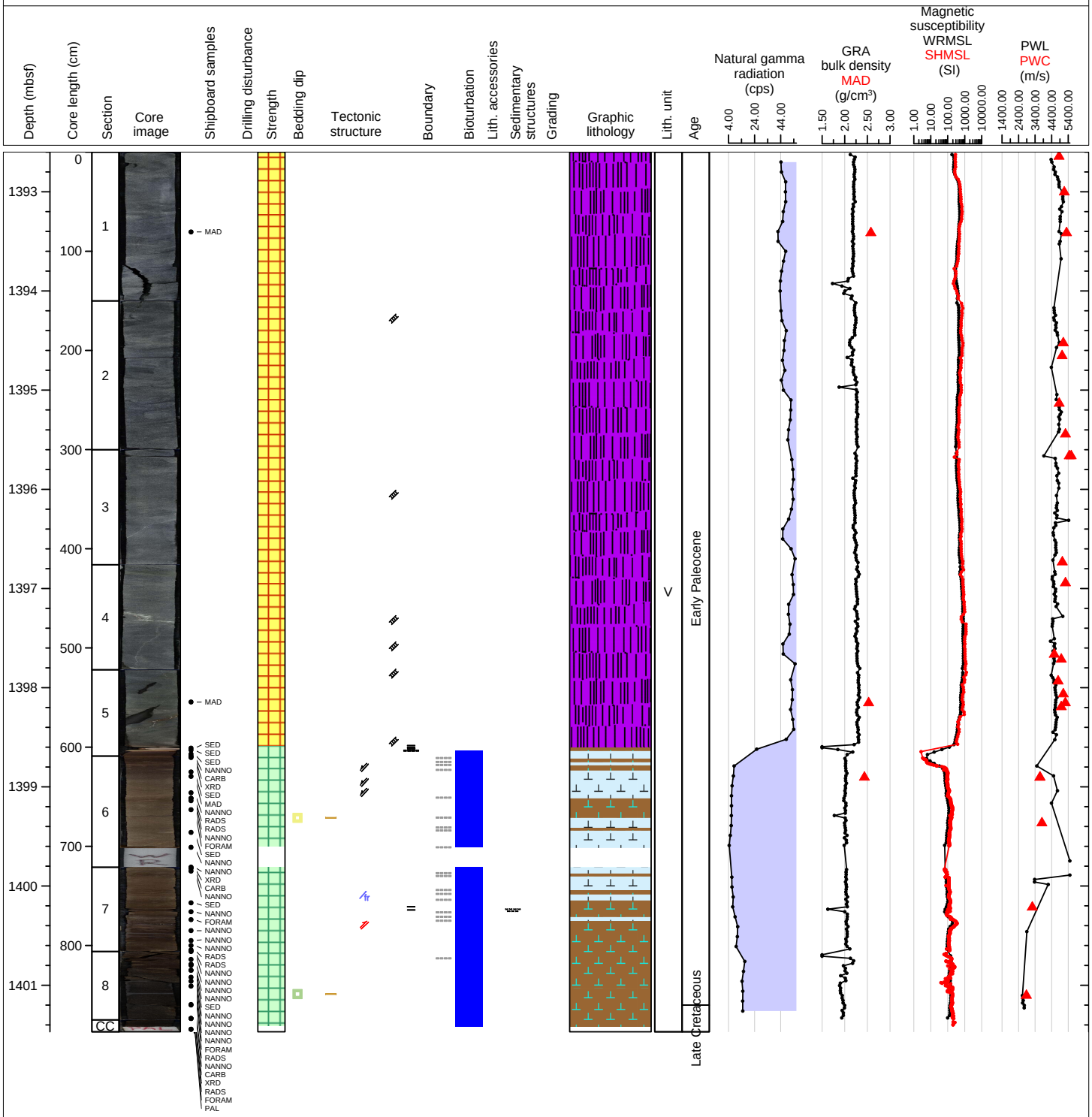
Hole 362-U1480G Core 68R, Interval 1385.9-1392.26 m (CSF-A)

The core consist of variable altered coarse-grained igneous rocks subdivided into coarser- and finer-grained parts. The mineral assemblage of plagioclase >> pyroxene > hornblende > biotite in an ophitic texture classifies the rocks as intermediate intrusive rocks, interpreted as diorites. Some numerous horizontal to sub-vertical carbonate-filled veins are observed within the entire core. Greenish veins starting from Section 2 to CC.



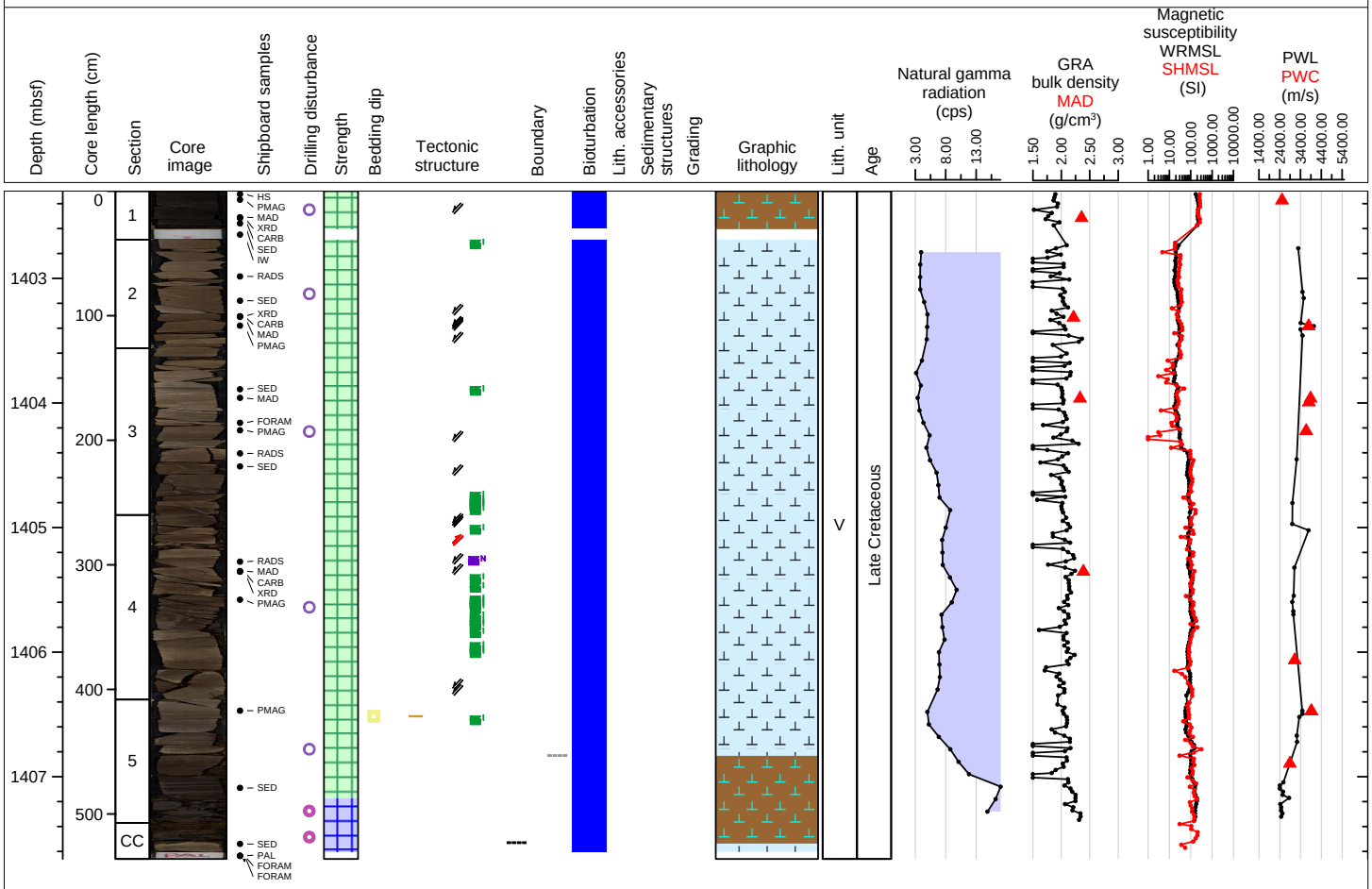
Hole 362-U1480G Core 69R, Interval 1392.6-1401.47 m (CSF-A)

The core shows 2 lithologies: (1) variable altered coarse-grained igneous rocks at Sections 1 to 5, 77 cm, subdivided into coarser- and finer-grained parts. The mineral assemblage of plagioclase >> pyroxene > hornblende > biotite in an ophitic texture classifies the rocks as intermediate intrusive rocks, interpreted as diorites. Crystal size decreases and alteration increases downcore; (2) dark reddish-brown alternating calcareous ooze and calcareous clay with silt from Section 5, 77 cm to CC. The boundary between the two lithologies is marked by altered pinkish to yellowish calcareous clays. Sediment in Sections 8 and CC are darker in color with no change in lithology. Faults occur in sedimentary section.



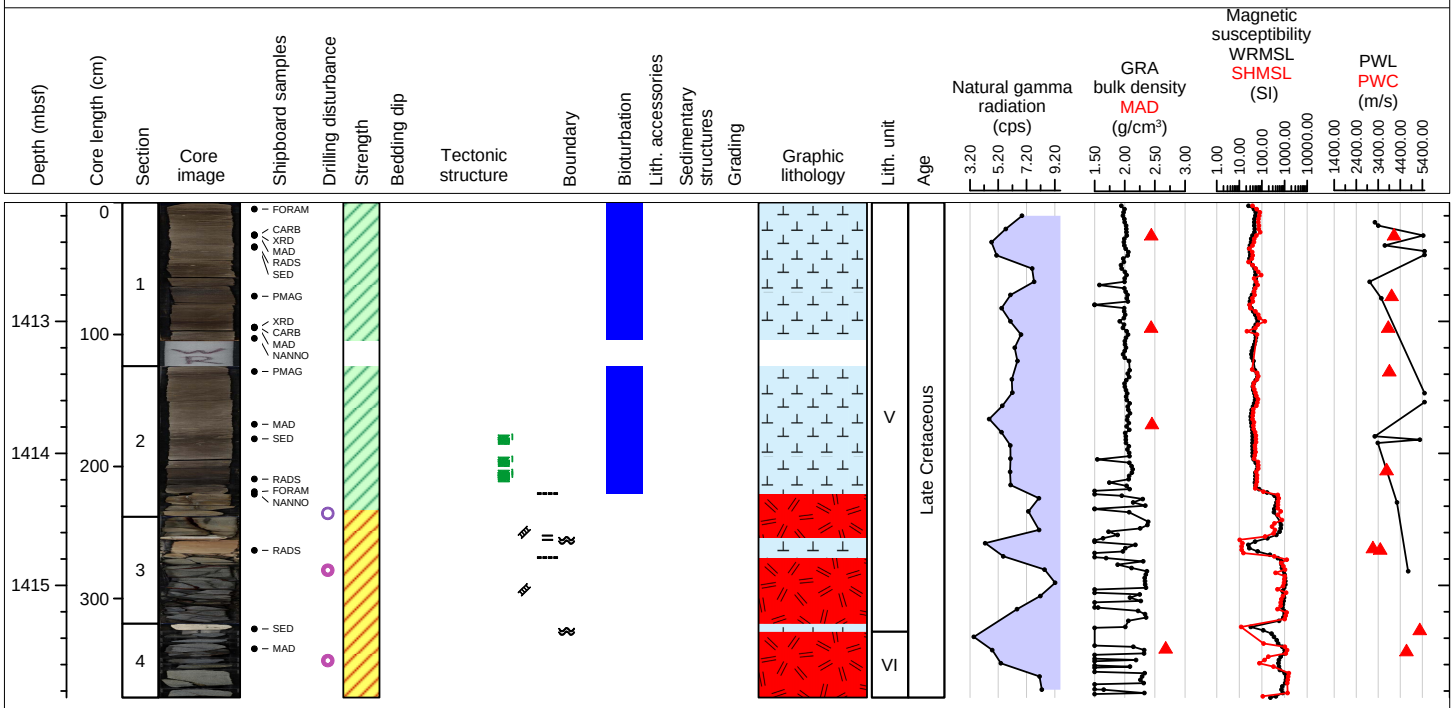
Hole 362-U1480G Core 70R, Interval 1402.3-1407.66 m (CSF-A)

The core consists mostly of dark reddish-brown calcareous ooze with clay. Minor lithology is black calcareous clay with silt in Section 1 and from Section 5, 45 cm, to CC, 16 cm. Both lithologies are completely bioturbated. Severe coring disturbance at the base of Section 5 and top of CC. Core contains abundant faults and shear zones.



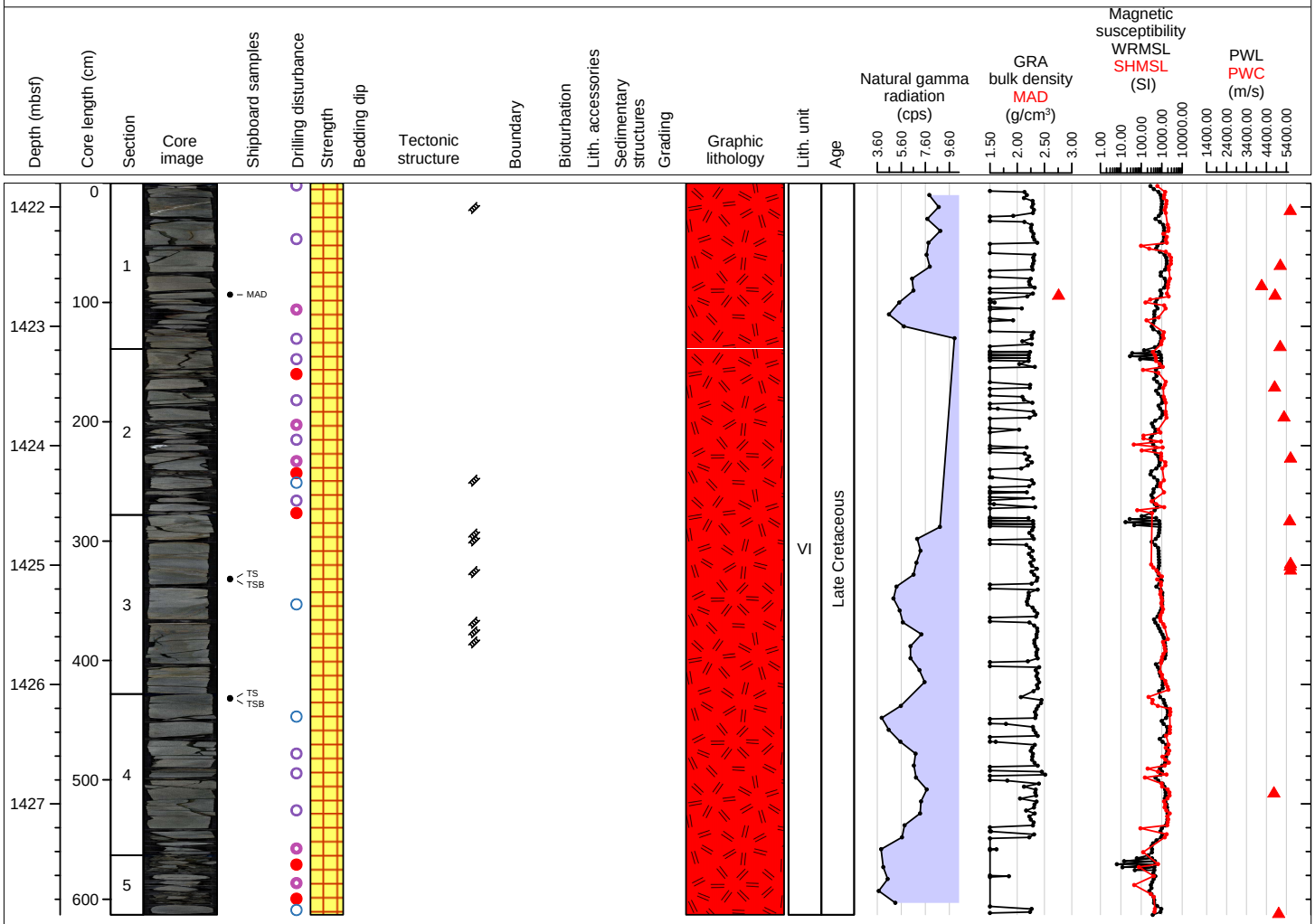
Hole 362-U1480G Core 71R, Interval 1412.1-1415.85 m (CSF-A)

The core shows brown calcareous ooze with clay in Section 1 and Section 2, 0-96.5 cm, that is completely bioturbated. From Section 2, 96.5 cm to CC, the core contains 3 medium beds of micro-crystalline basalt that contain several calcite-filled fractures. They are separated by re-crystallized calcareous ooze at Section 3, 16-33 cm, and Section 4, 0-6 cm. The upper basalt bed is severely altered (brownish color).



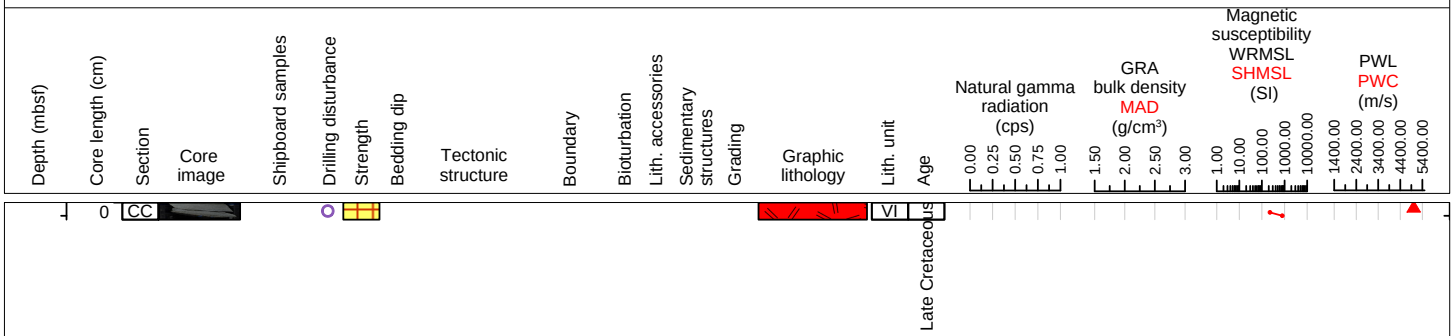
Hole 362-U1480G Core 72R, Interval 1421.8-1427.93 m (CSF-A)

The core consist of fine- to medium-grained plagioclase and pyroxene bearing seriate-textured basalt with very low amount of vesicles <1%; brown color due to alteration that contain several calcite-filled fractures and is subdivided into several intervals on the base of its increasing and decreasing crystal sizes.



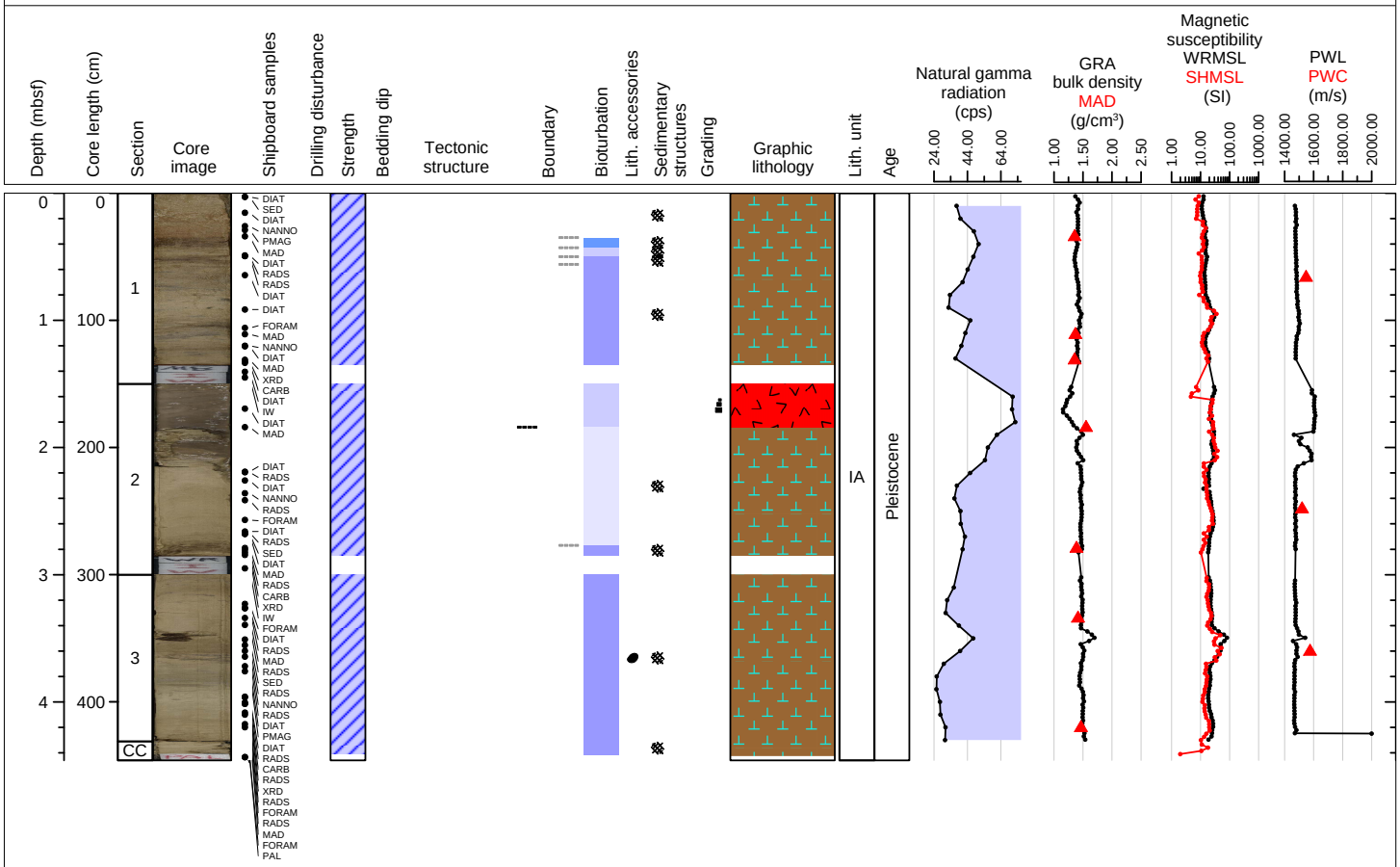
Hole 362-U1480G Core 73R, Interval 1431.5-1431.63 m (CSF-A)

One piece of fine-grained plagioclase- and pyroxene-bearing seriate-textured basalt with low amount of vesicles <1% is recovered.



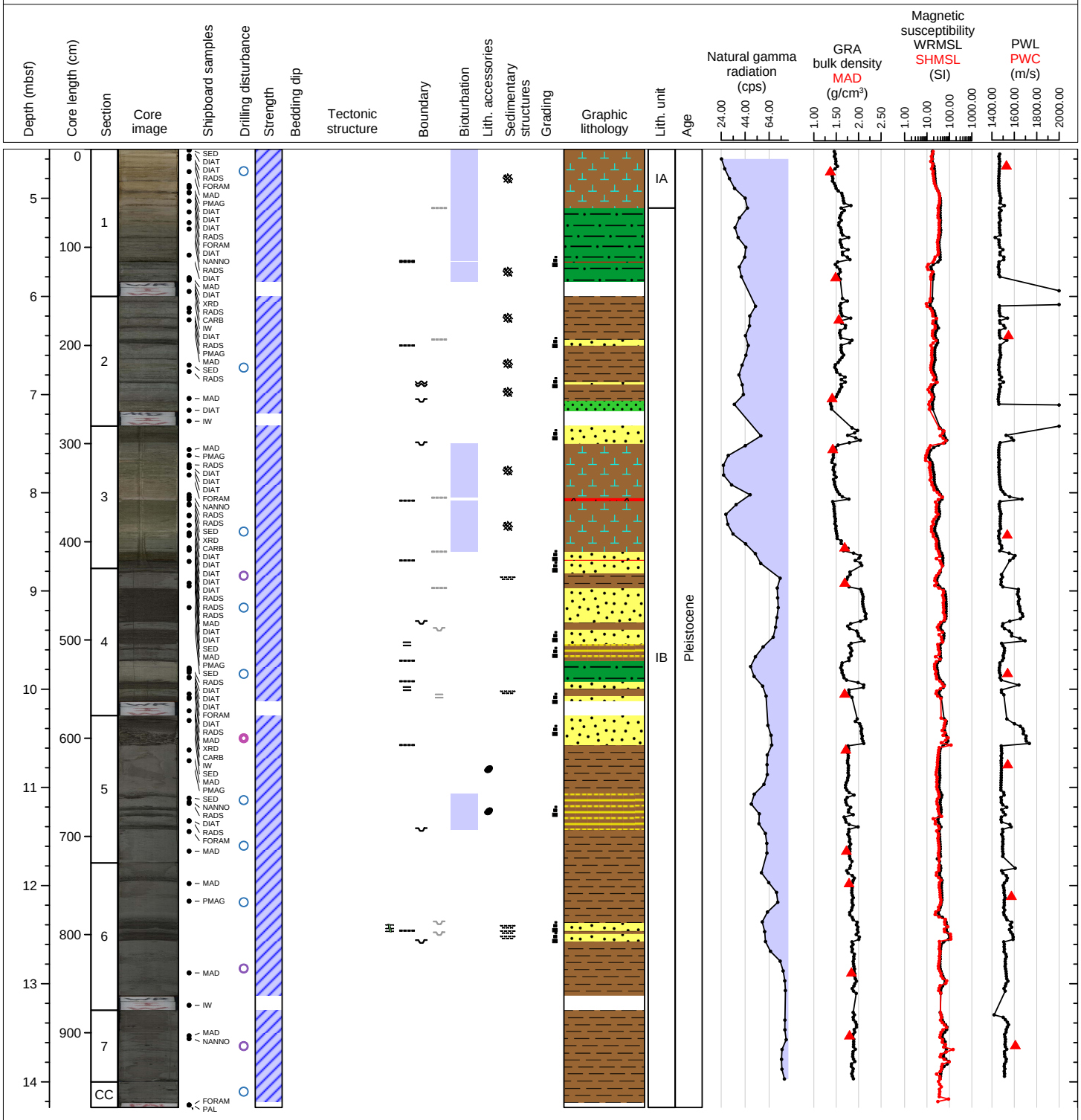
Hole 362-U1480H Core 1H, Interval 0.0-4.46 m (CSF-A)

The core is predominanly mottled pale yellow and brown calcareous silty clay with an thick ash layer in section 2, 0-35 cm. Bioturbation mainly Thalassinoides. 2 cm thick ash pod at the 47-53 cm in section 3.



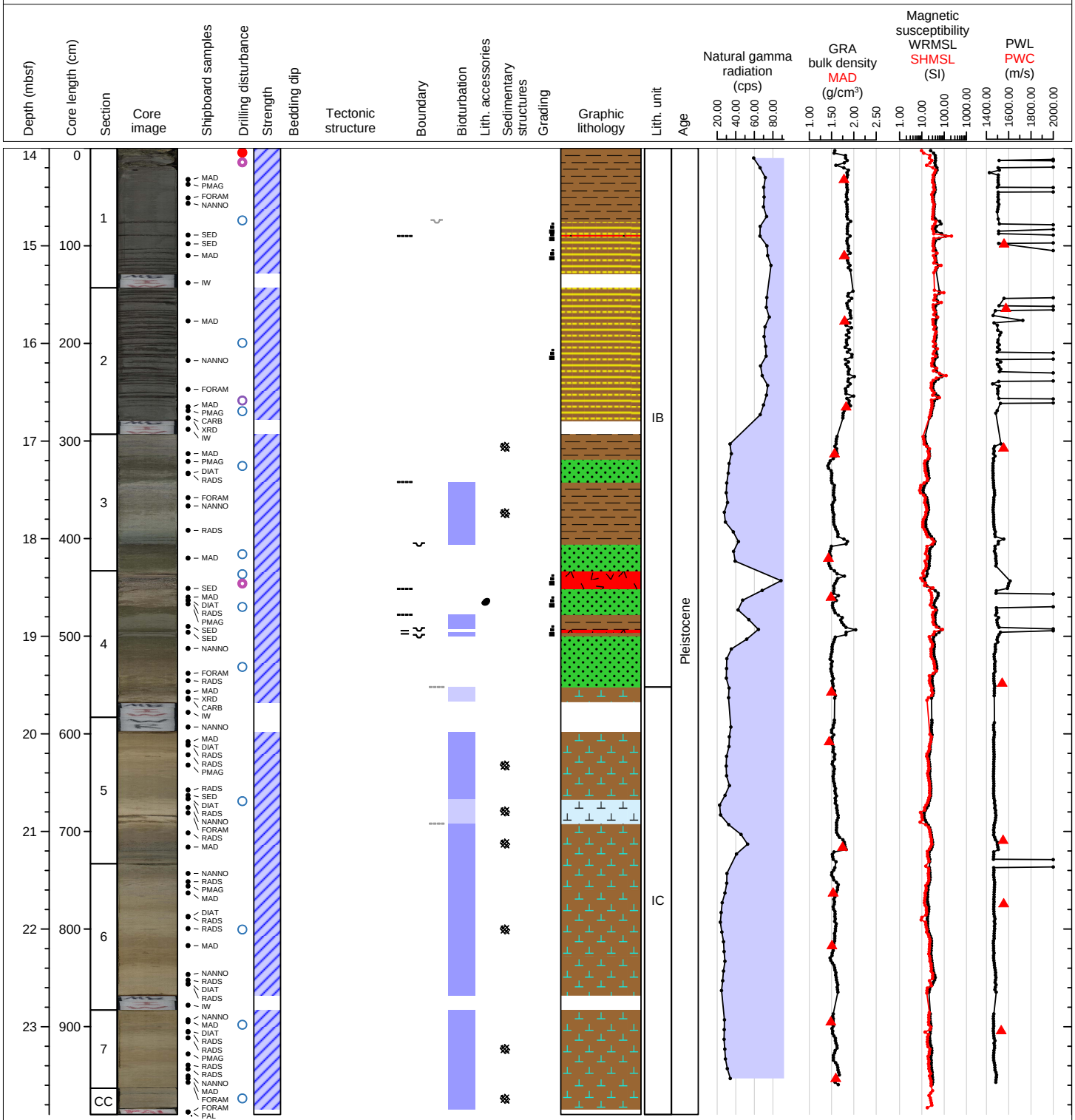
Hole 362-U1480H Core 2H, Interval 4.5-14.26 m (CSF-A)

The core is composed of predominantly calcareous silty clay and clay with silt with numerous intercalated fine-grained sand layers. Disseminated pyrite nodules in section 6. Ash layers at section 1 114-115 cm, section 3 72-76 cm, 137-138 cm. Ash pods at 64 and 82-84 cm.



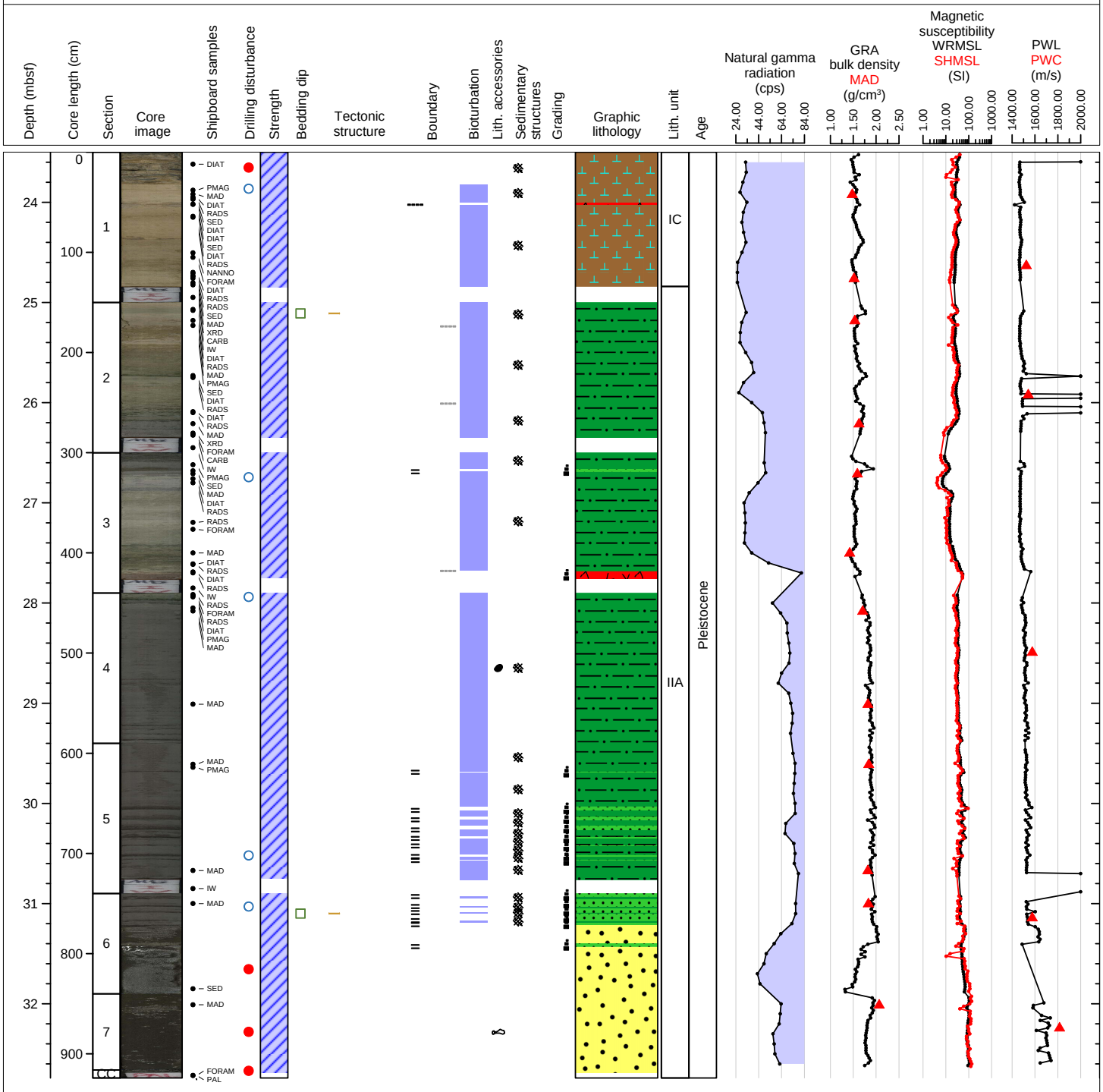
Hole 362-U1480H Core 3H, Interval 14.0-23.9 m (CSF-A)

The section consists of two main lithological units. The first is alternating layers of clay with silt and thin tuffaceous silt from section 1 to middle of section 4. Second is, calcareous clay with silt from middle of section 4 to CC. Some ash layers are intercalated at 89 cm of section 1, 0-19 and 60-63 cm of section 4. A calcareous clay layer is found at 84-109 cm.



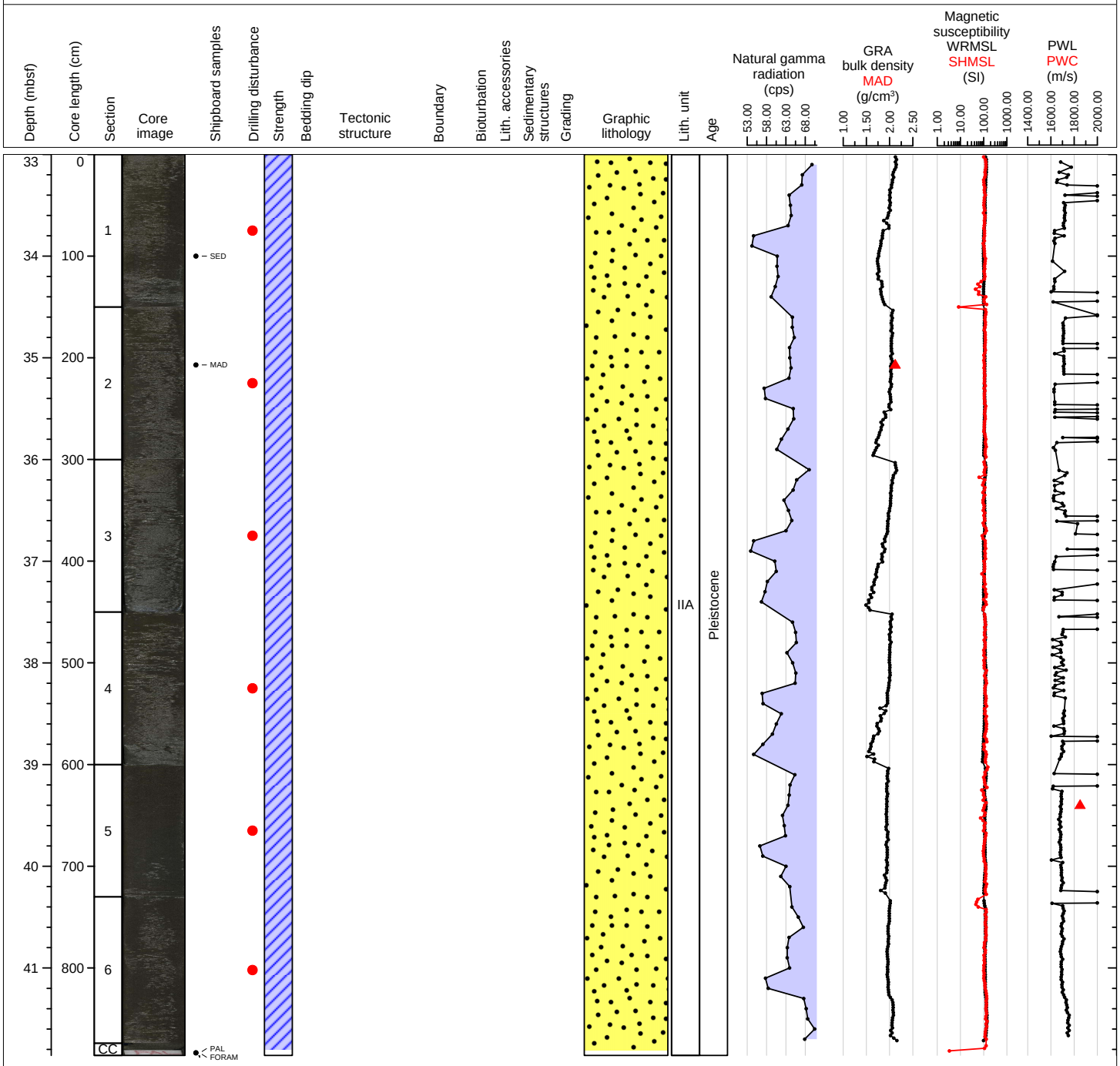
Hole 362-U1480H Core 4H, Interval 23.5-32.74 m (CSF-A)

The core is divided into an upper part (section 1 to 3) that consists of a pale brown to greenish-brown calcareous clay to silty clay with common foraminifers and a lower part that is dominated by dark-gray silty clay that has an increasing amount of normal graded silt layers with depth as well as a very thick structureless fine sand layer starting in section 6 until the CC. Two pinkish ash layers are present in section 1: 51-53 cm and section 3: 118 to 126 cm.



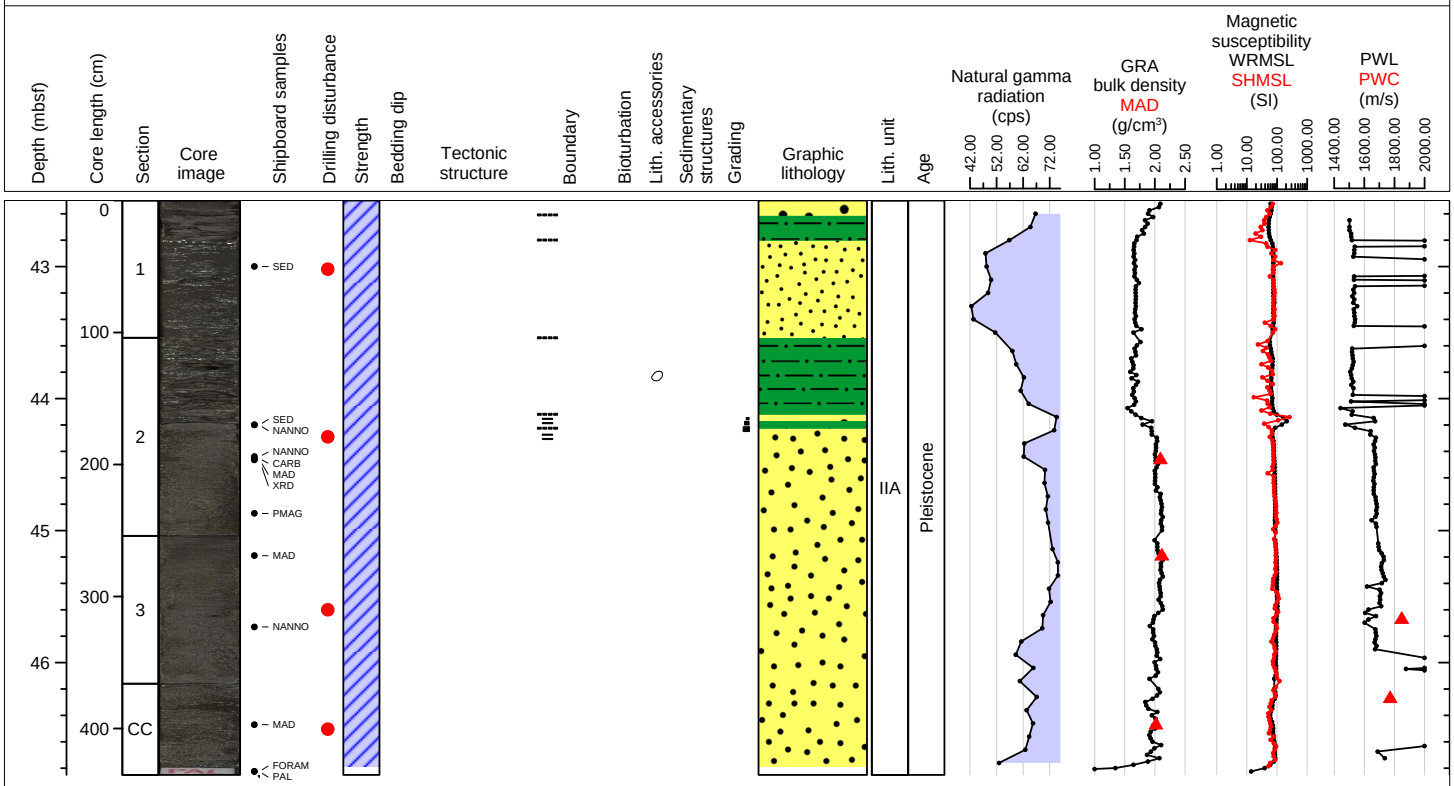
Hole 362-U1480H Core 5H, Interval 33.0-41.86 m (CSF-A)

The core consists of a very thick continuous, monotonous and structure less bed of fine grained sand that range of fine to medium sand and minor components of silt.



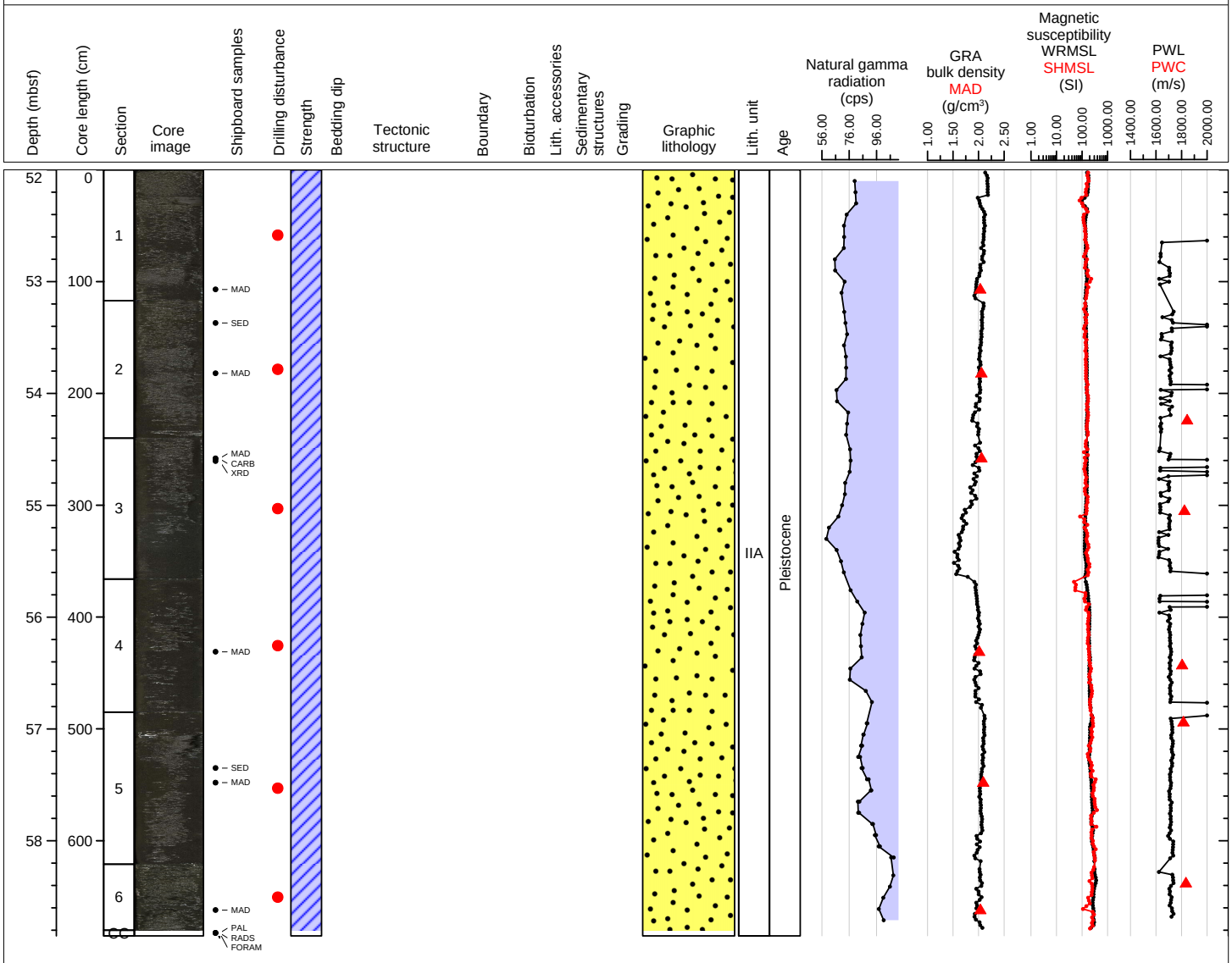
Hole 362-U1480H Core 6H, Interval 42.5-46.85 m (CSF-A)

The core contains structureless fine sand at Section 2, 75 to CC, overlain by alternating sand and silty clay on top of the core. Two medium sand beds in Section 1, 0-11 cm and Section 2, 58-63 cm.



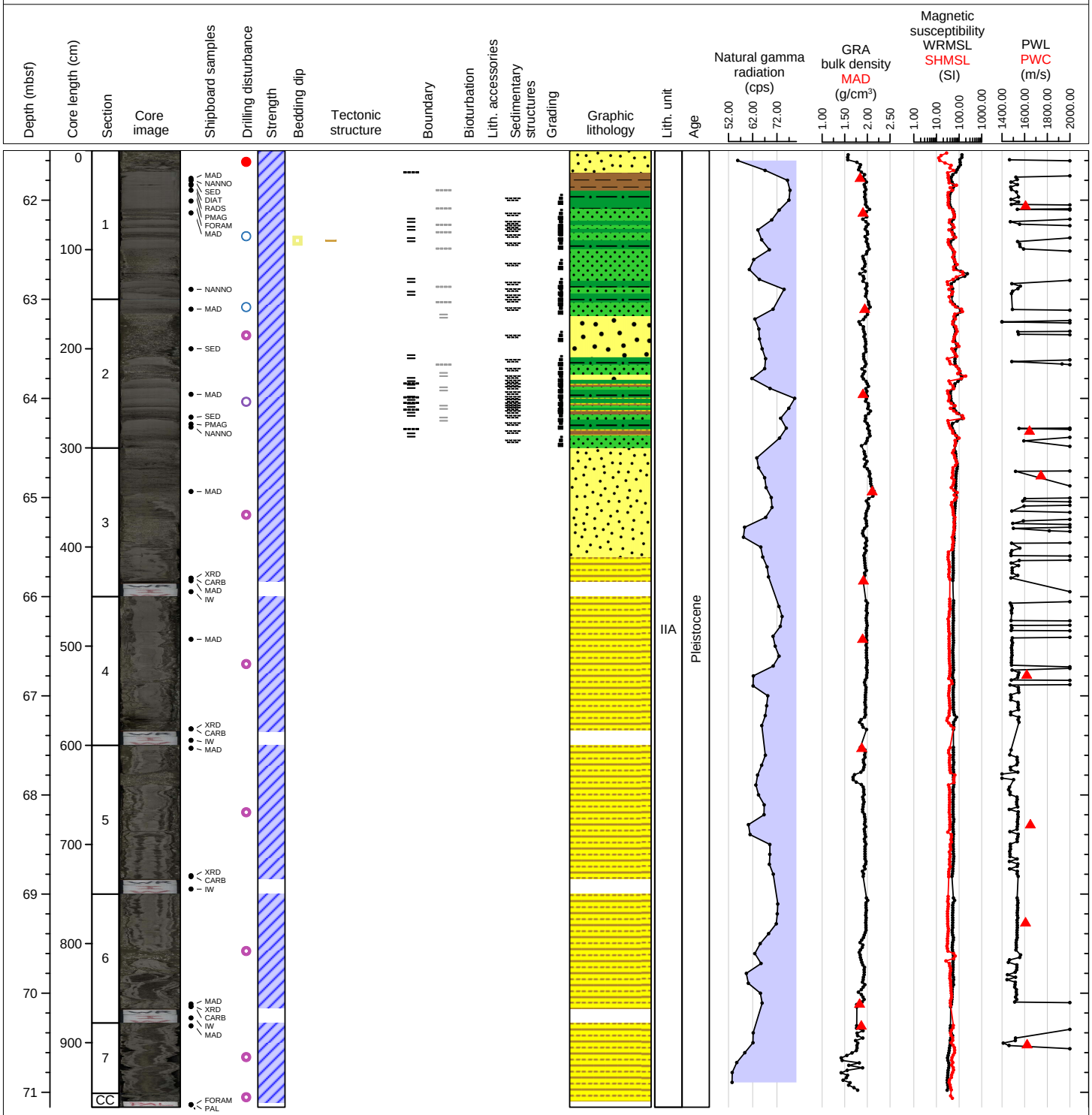
Hole 362-U1480H Core 7H, Interval 52.0-58.85 m (CSF-A)

Structureless fine sand. Micaceous with abundant plant material. Severe coring disturbance. Clay blob in Section 1, 24-33 cm.



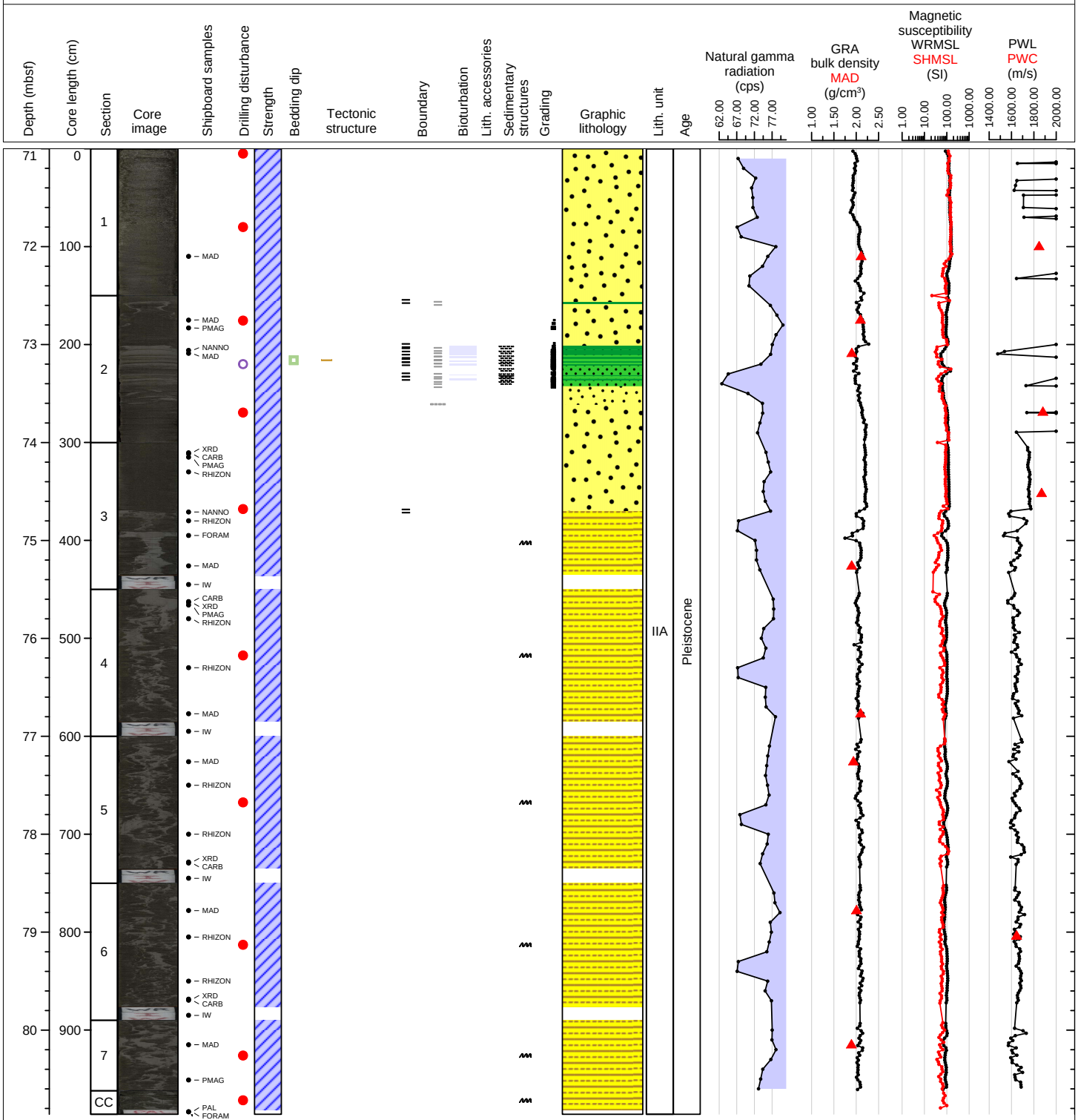
Hole 362-U1480H Core 8H, Interval 61.5-71.15 m (CSF-A)

The core shows a series of thin to medium beds of normally graded silty clay alternating with thin to medium beds of normally graded silt and fine sand. Some sand beds contain plant fragments. Bioturbation is absent. Severe coring disturbance from Section 3 to CC.



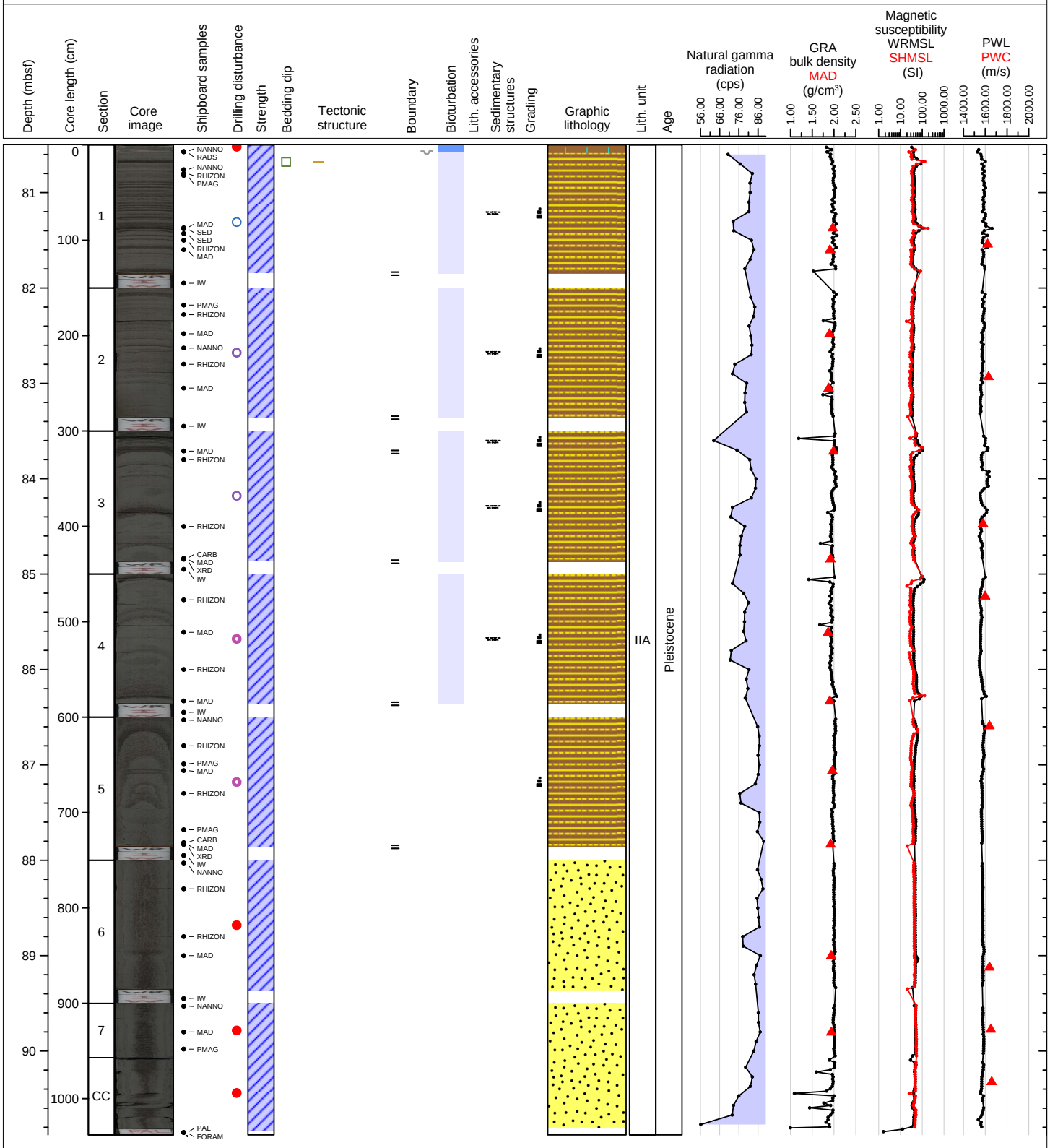
Hole 362-U1480H Core 9H, Interval 71.0-80.86 m (CSF-A)

The core shows severe coring disturbance, and is mostly made up of structureless sand with mud injections. Section 2, 51-92 cm is planar laminated and probably well preserved. This interval shows alternating silt and clay organized in normally graded thin beds.



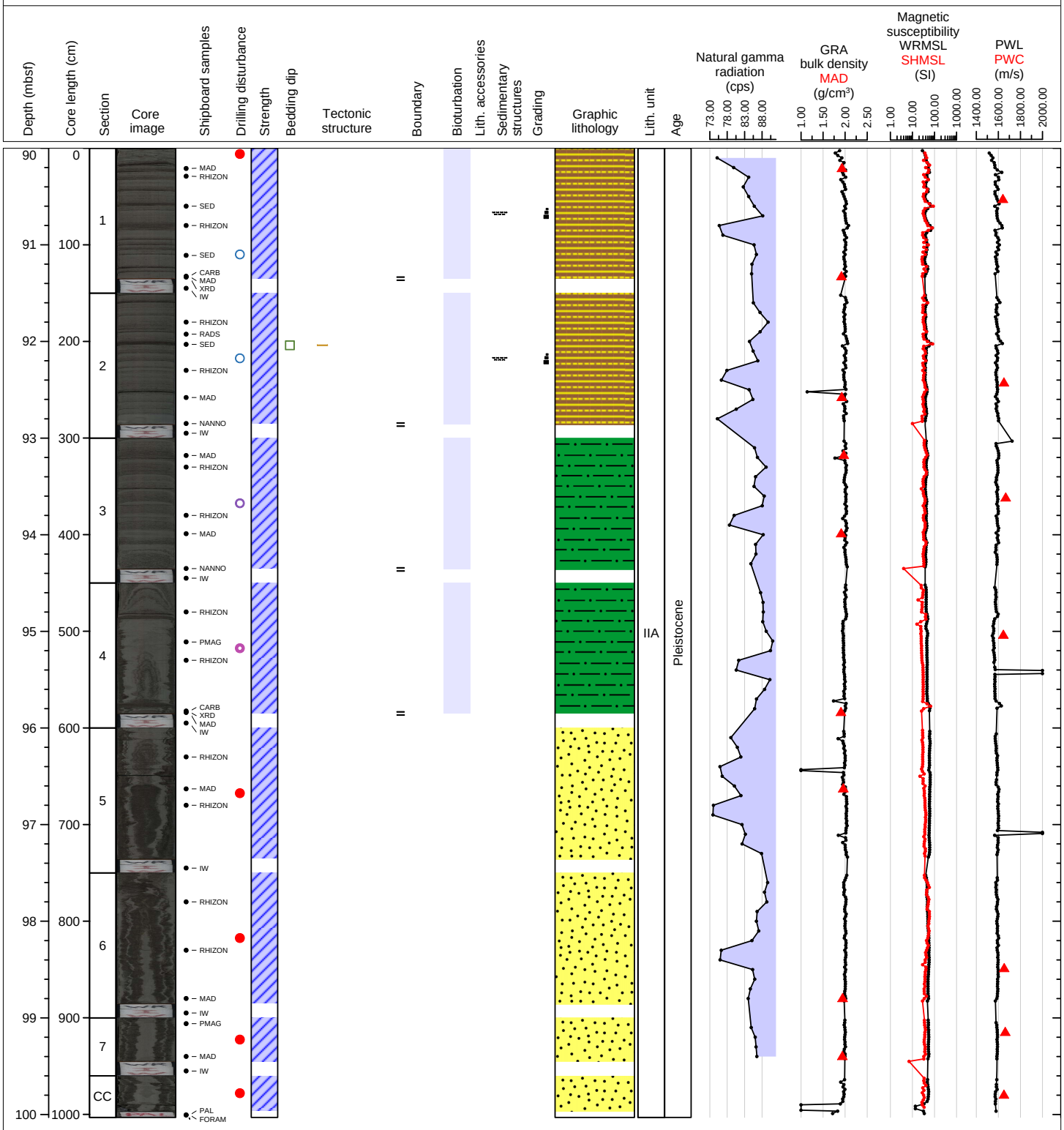
Hole 362-U1480H Core 10H, Interval 80.5-90.88 m (CSF-A)

Alternating parallel-laminated, normally-graded very fine sand in very thin to medium beds. The sandy silt lower parts of the beds are characteristically 0.5-2 cm thick; the rest being structureless silty clay. Coring-induced disturbance severe sections 4, 5, 6, 7 and CC precluding detailed characterization of beds.



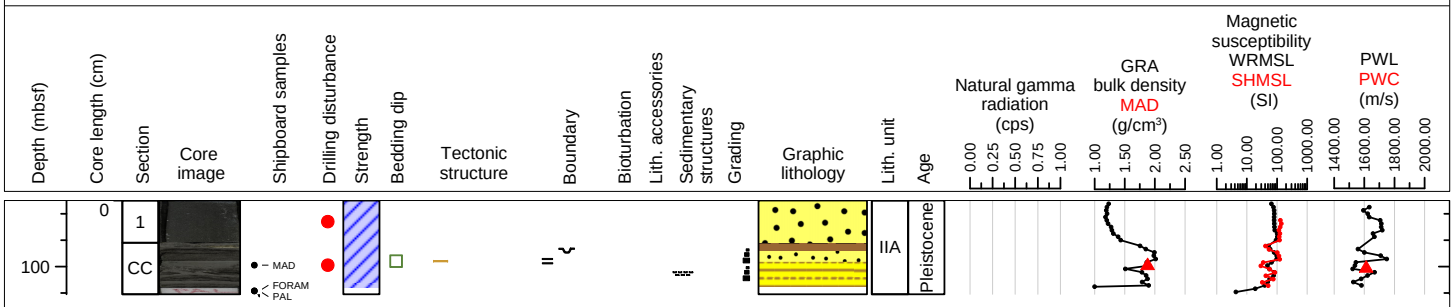
Hole 362-U1480H Core 11H, Interval 90.0-100.03 m (CSF-A)

Alternating parallel-laminated, normally-graded very fine sand in very thin to medium beds of silty clay. The very fine sand in lower parts of the beds is characteristically 0.5-2 cm thick; the rest being structureless silty clay. Coring-induced disturbance severe sections 4, 5, 6, 7 and CC precluding detailed characterization of beds.



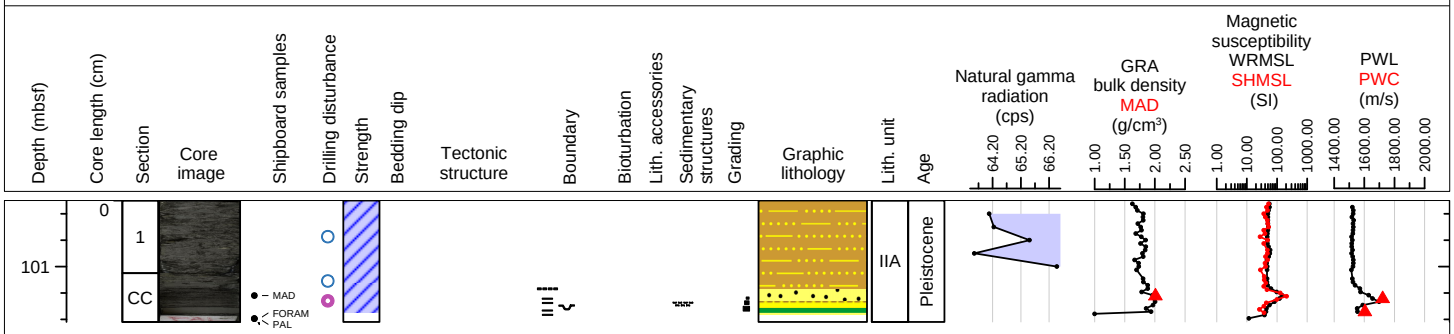
Hole 362-U1480H Core 12H, Interval 99.5-100.21 m (CSF-A)

The core consist of thick bedded fine sand and alternating layer of thin to medium bed of silty clay and very fine sand.

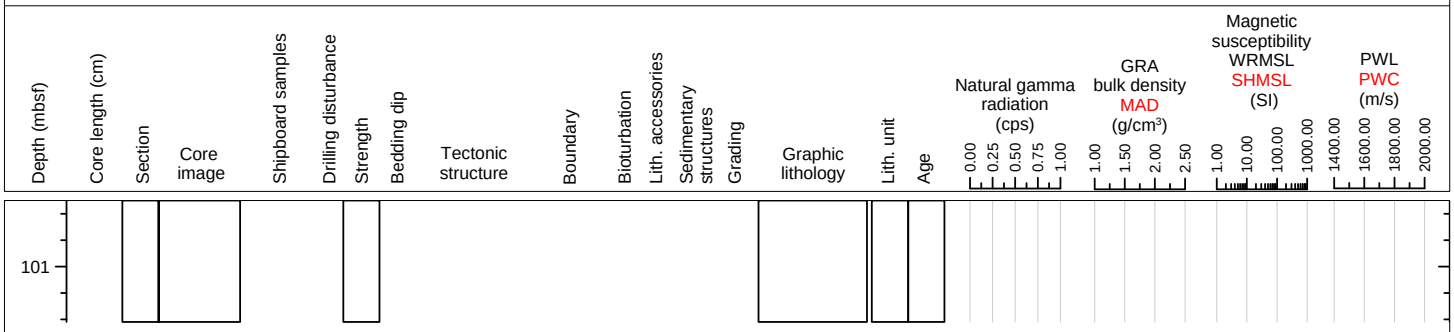


Hole 362-U1480H Core 13H, Interval 100.5-101.42 m (CSF-A)

From top of section 1 to 12 cm of CC of this core is heavy disturbed and mixed up material by coring. Lower part of CC is alternating layer of thin to medium bed of silty clay and very fine sand.

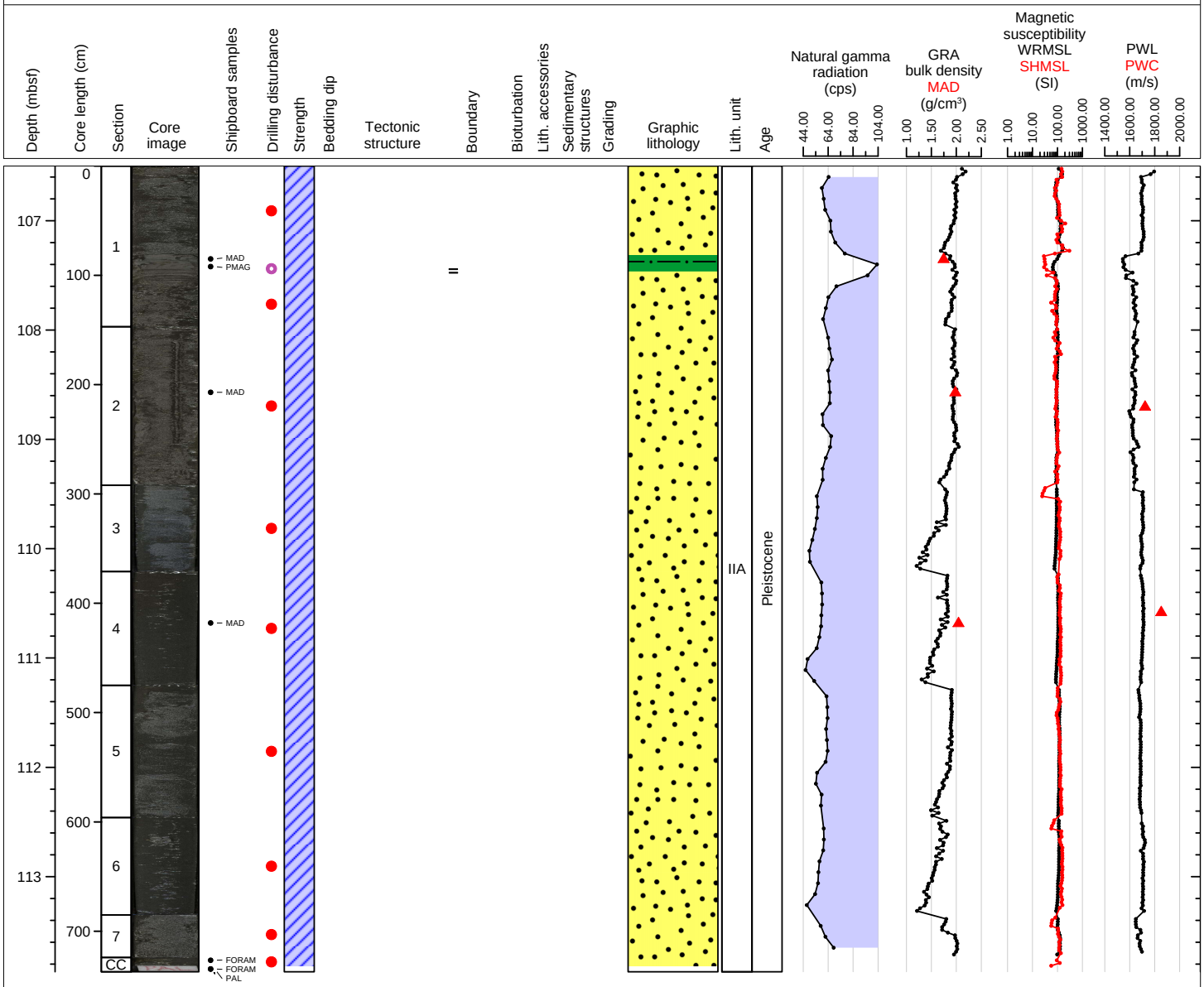


DRILLED INTERVAL Hole 362-U1480H Core 141, Interval 101.5-101.5 m (CSF-A)



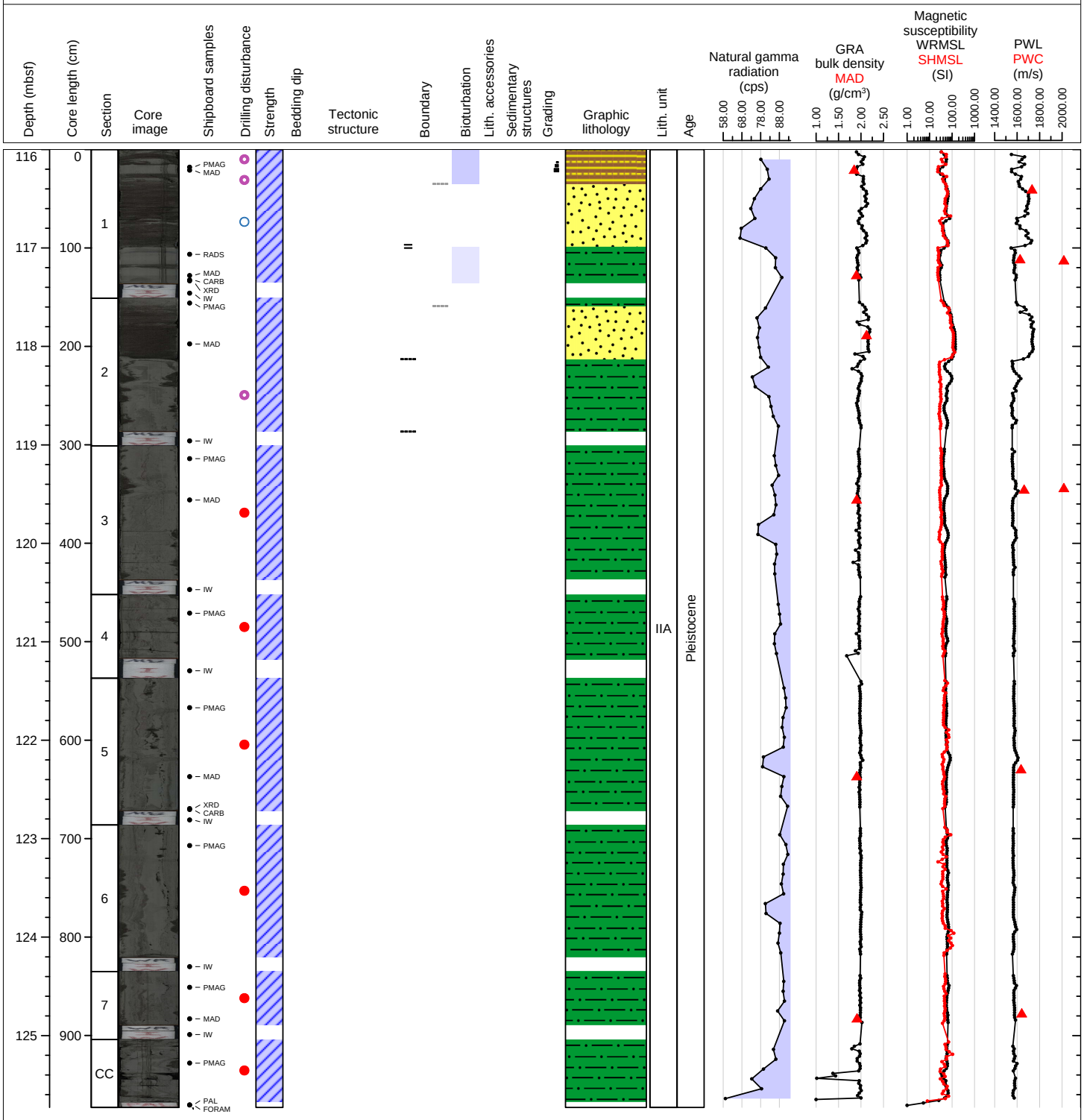
Hole 362-U1480H Core 15H, Interval 106.5-113.87 m (CSF-A)

Entire core is dark gray structureless soupy fine sand with medium sand grains. Destroyed by drilling except one portion in section 1 (81 to 96 cm) where a nearly intact piece of silty clay with silt lenses is recovered.



Hole 362-U1480H Core 16H, Interval 116.0-125.73 m (CSF-A)

The core consists of alternations of thick beds of very fine sand and silty clay (from section 1 to middle of section 2), and a very thick silty clay layer (from middle of section 2 to CC). Coring-induced disturbance is severe sections 3, 4, 5, 6, 7 and CC, precluding detailed characterization of beds. Silty clay layer of section 4, 5, 6, 7 and CC contains some lenses of very fine sand and pyrite nodules.



Hole 362-U1480H Core 17H, Interval 125.5-129.4 m (CSF-A)

The core consists of alternating layers of normally graded thin beds of very fine sand and medium to thick beds of silty clay (from section 1 to middle of section 2), and very thick bed of fine sand.