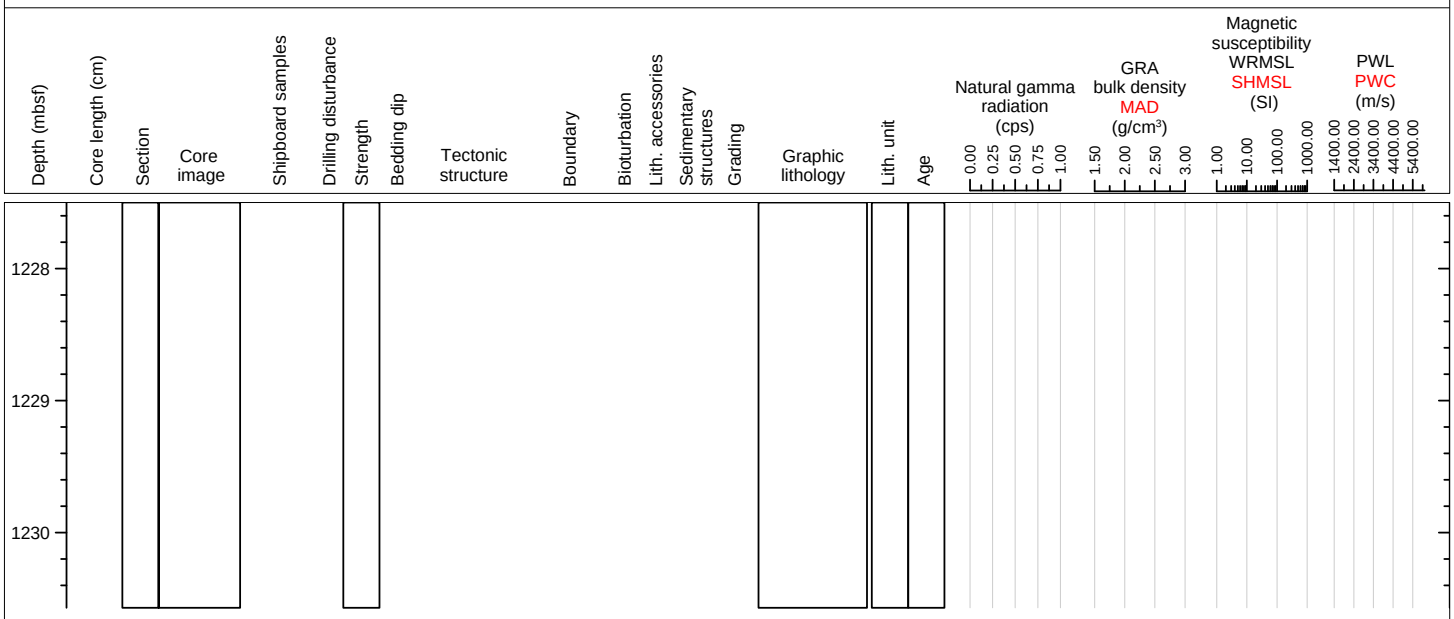
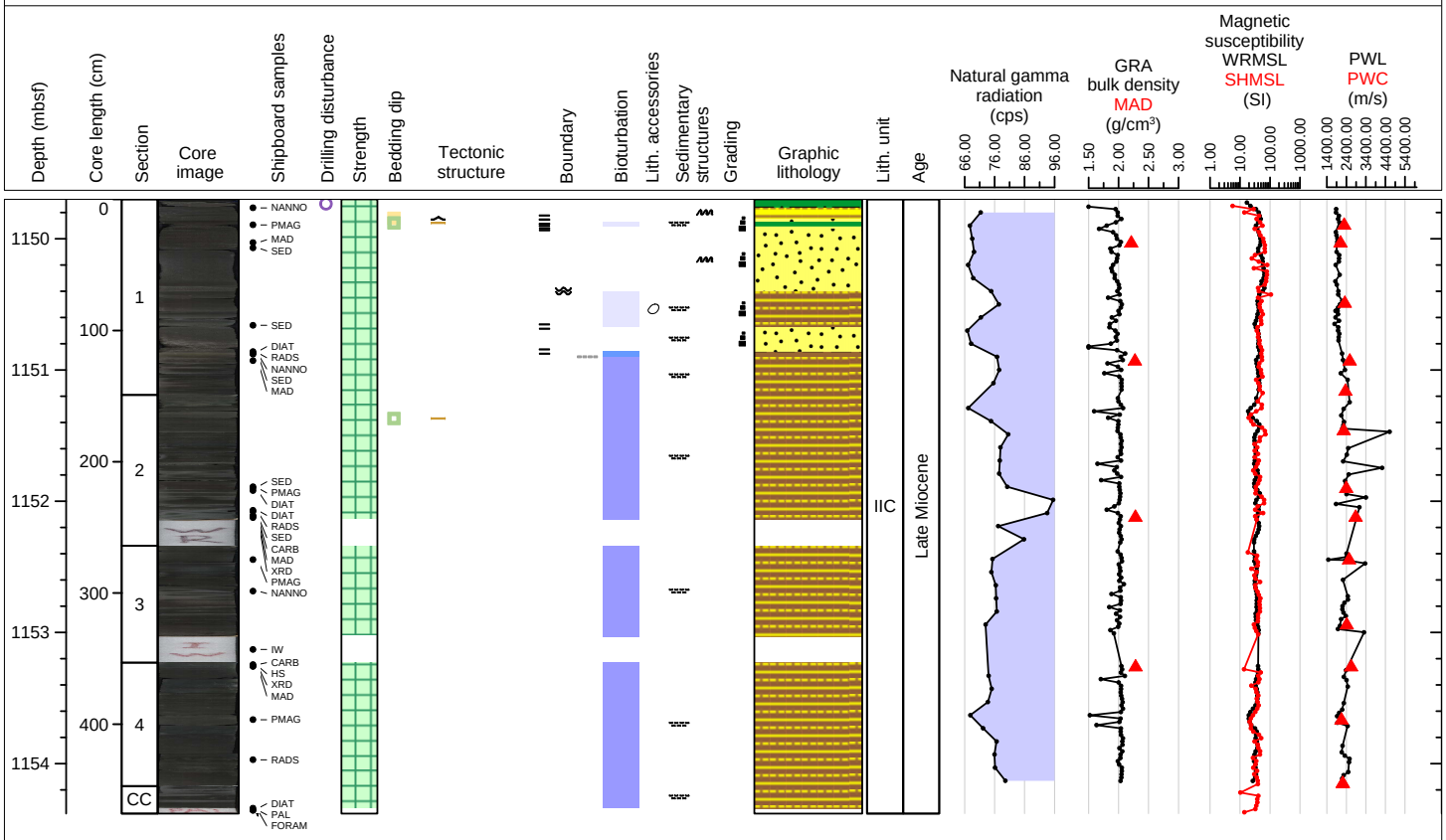
DRILLED INTERVAL Hole 362-U1481A Core 11, Interval 0.0-0.0 m (CSF-A)



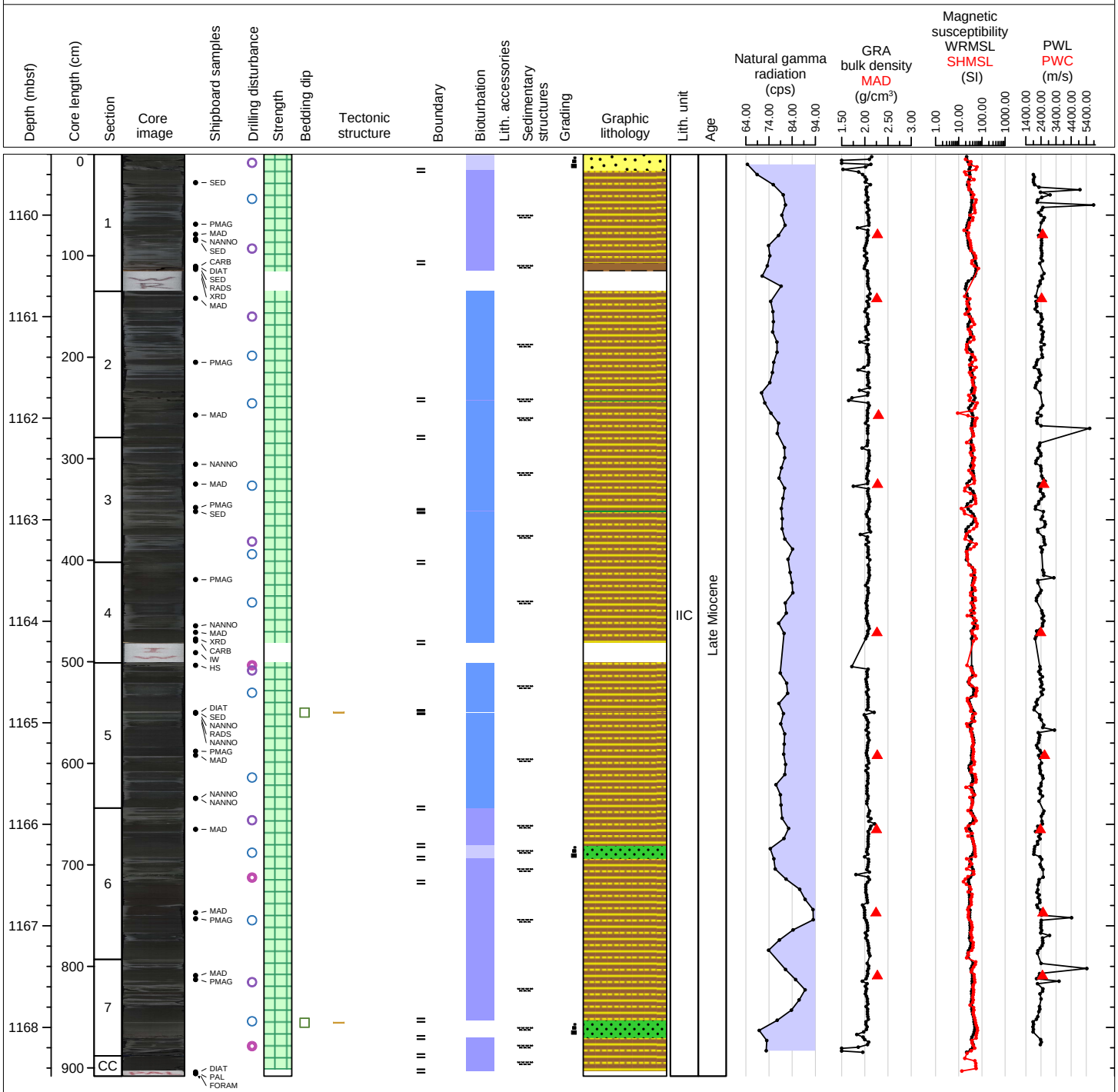
Hole 362-U1481A Core 2R, Interval 1149.7-1154.38 m (CSF-A)

The core shows alternating fine- to very fine-grained sand and silty clay until Section 1, 0-120 cm. From Section 1, 120 cm through CC is alternating silty/silty-clay and clay. The clay contains agglutinated forams and is moderately to intensively bioturbated. Beds are typically thin and show normal grading with bioturbation becoming more intense at the top.



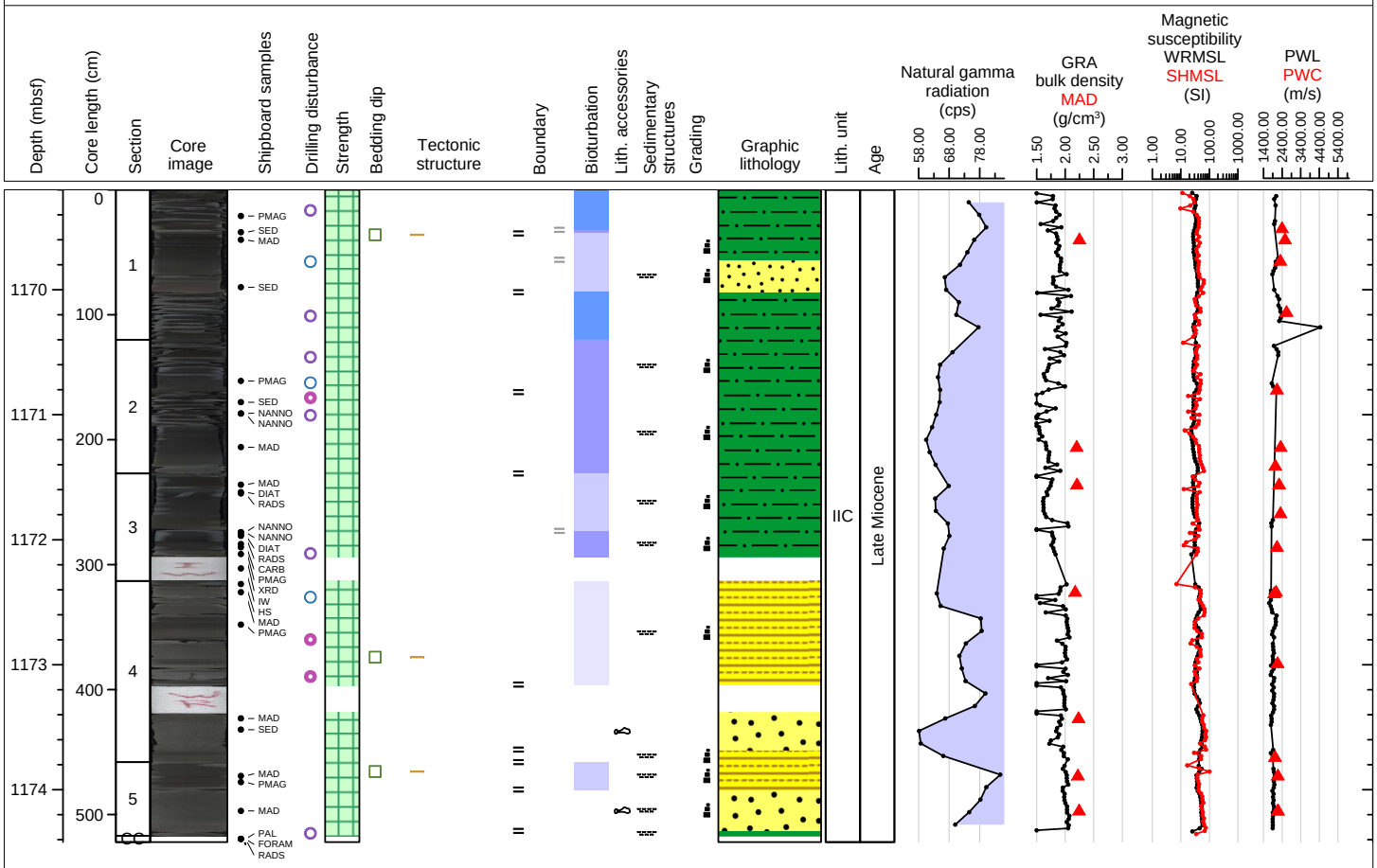
Hole 362-U1481A Core 3R, Interval 1159.4-1168.48 m (CSF-A)

The core shows alternating clay and silt in cm beds and fine laminae with some thin normally-graded beds from very fine-grained sand or silt to clay intercalated in the background sediment. The clay contains agglutinated forams and is moderately to intensively bioturbated. Two intercalations of calcareous clay are observed in Section 3 (73 cm) and Section 5 (49 cm). Centimeter-sized pyrite lenses are present in the lower part of Section 6.



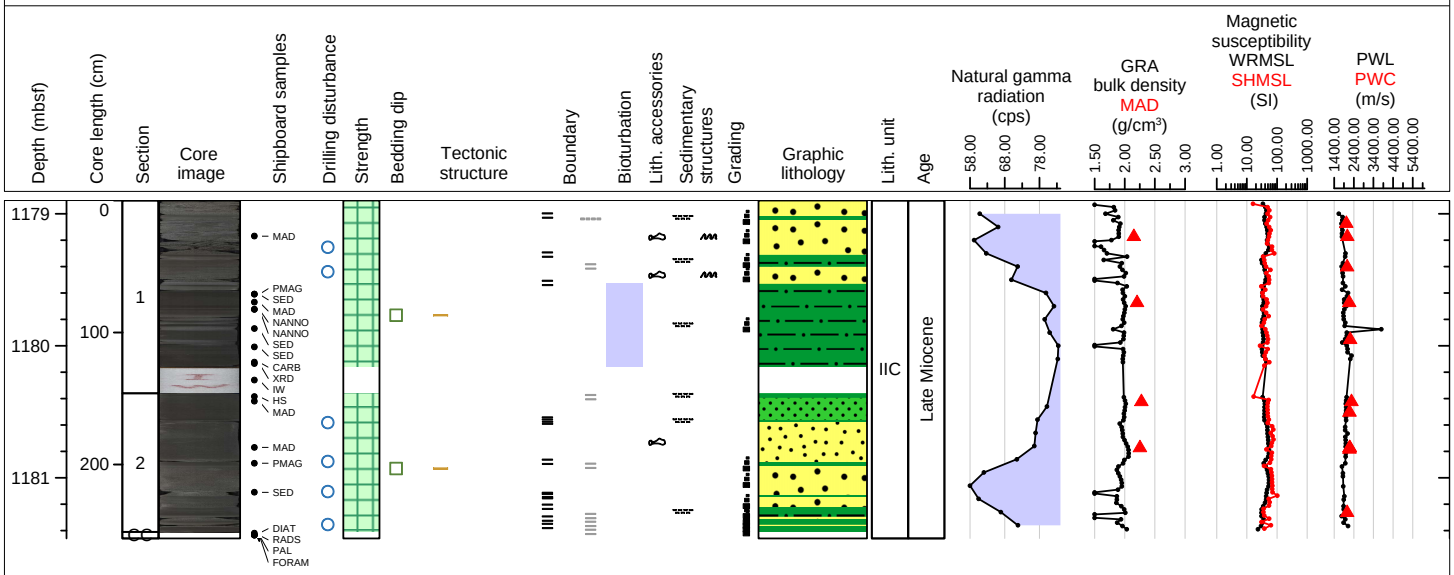
Hole 362-U1481A Core 4R, Interval 1169.2-1174.42 m (CSF-A)

The core is composed of two major lithologies. From top of Section 1 to Section 3 dark gray silty clay beds and very thin laminae occur. Additionally some thin normal graded beds from very fine-grained sand or silt to clay are intercalated in the background sediment. Some clay layers are heavily bioturbated. Cm-sized pyrite lenses can be found in the upper part of Section 1. Section 4 and Section 5 contain thin to thick layers of alternating fine sand and clay. Sand layers contain common plant fragment. Thin sand layers are normally graded from fine-grained sand to clay.



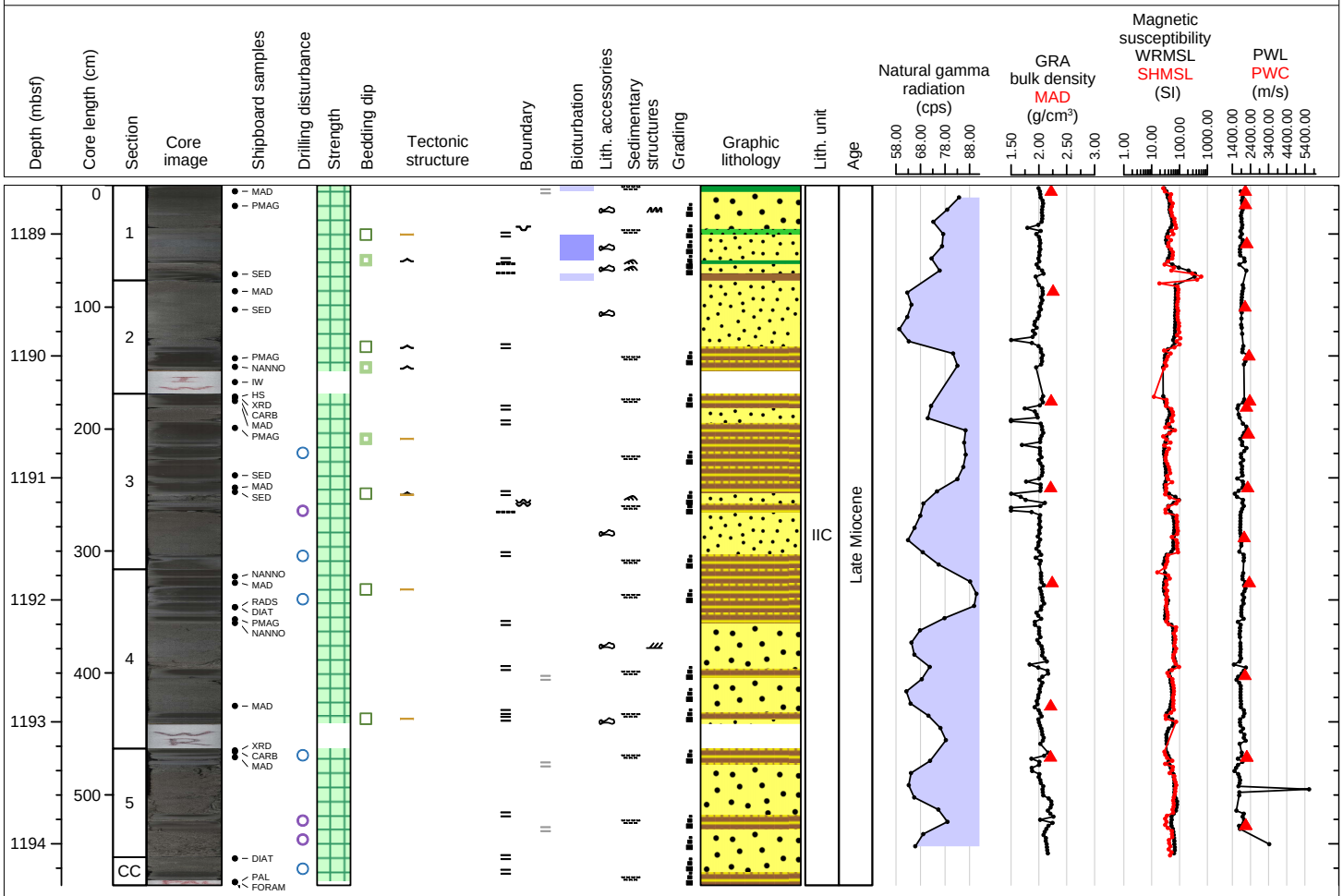
Hole 362-U1481A Core 5R, Interval 1178.9-1181.46 m (CSF-A)

The core shows alternating thin to thick beds of silty clay with calcareous allochems and fine-grained sand. Thin silt lamina are intercalated in silty clay layers. The fine-grained sand layers contain rare to common plant fragments.



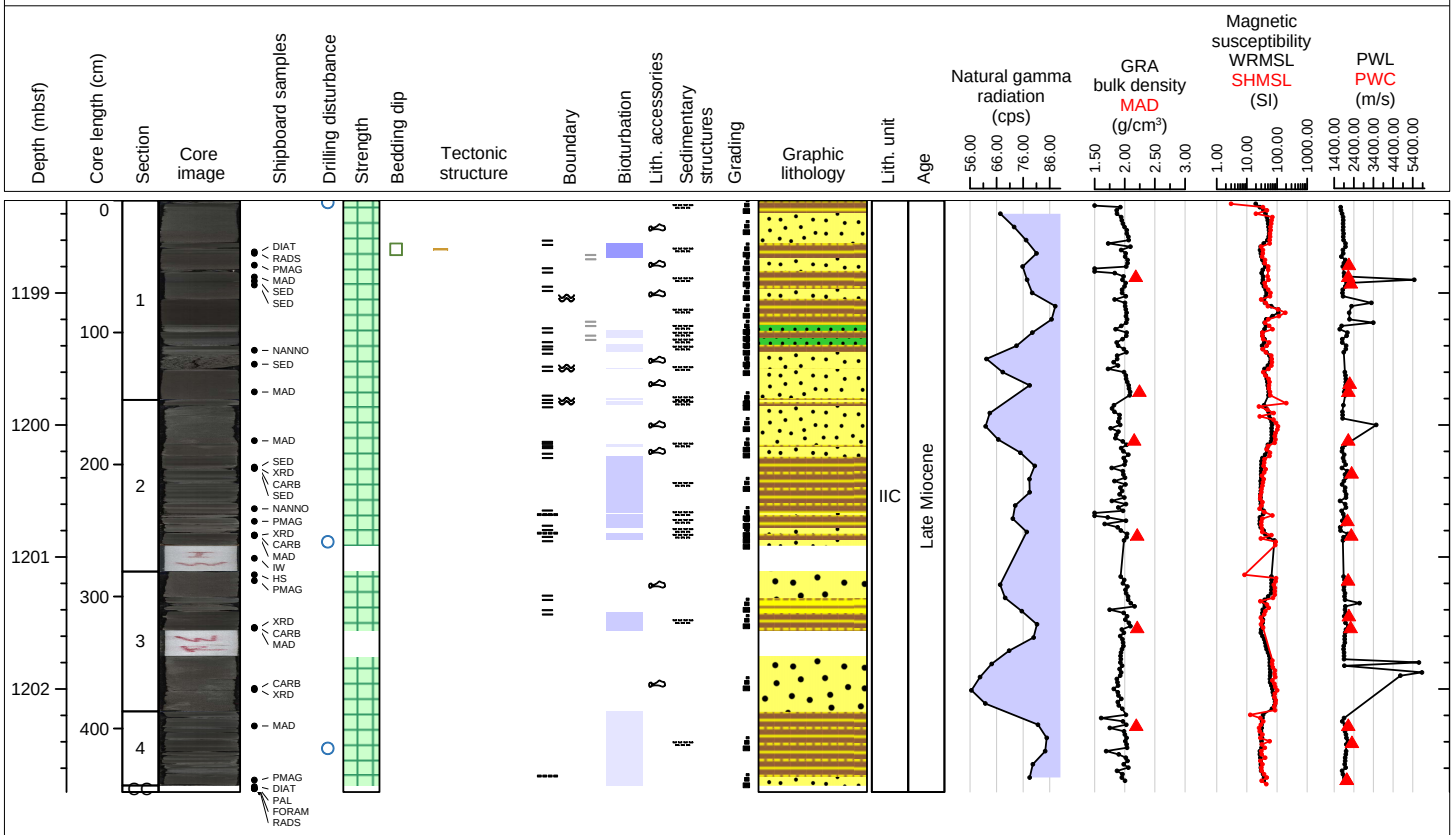
Hole 362-U1481A Core 6R, Interval 1188.6-1194.34 m (CSF-A)

The core shows alternating thin to thick beds of silty clay with calcareous allochems and fine-grained sand. Thin silt lamina are intercalated in silty clay layers. The fine-grained sand layers contain rare to common plant fragments.



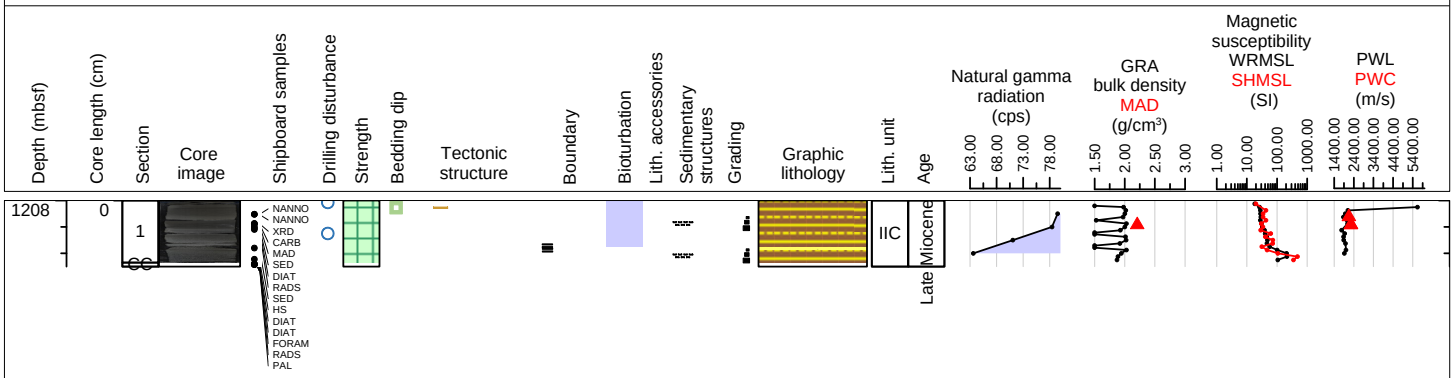
Hole 362-U1481A Core 7R, Interval 1198.3-1202.78 m (CSF-A)

The core shows alternating thin to very thin beds of silt and clay with intercalation of thin- to medium-bedded, normally-graded fine-grained to very fine-grained sand. The coarse material is rich in plant fragments and sand beds commonly contain rip-up clasts and load cast at their top. Planar lamination is the dominant sedimentary structure, although cross-lamination (ripple-lamination) is locally present.



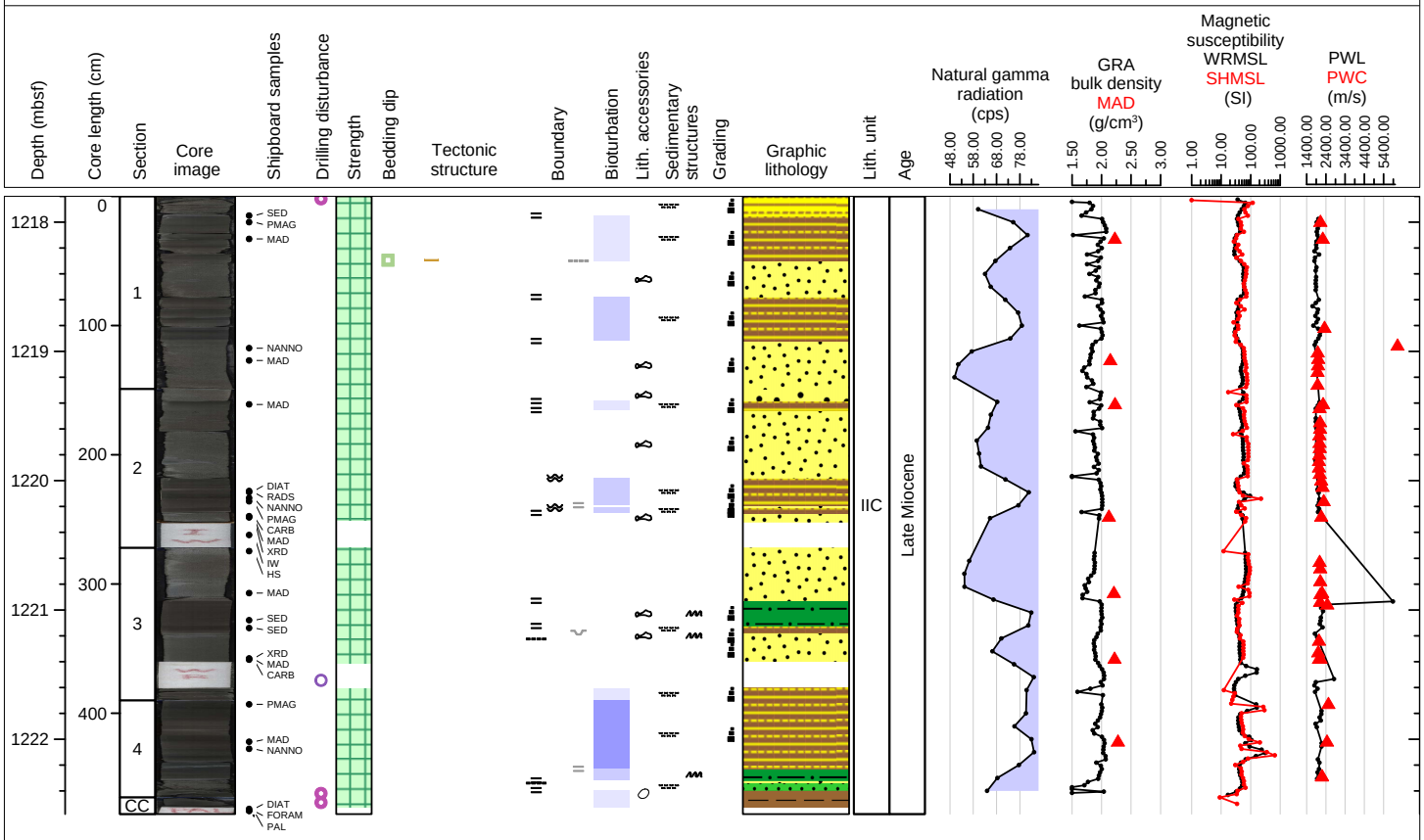
Hole 362-U1481A Core 8R, Interval 1208.0-1208.5 m (CSF-A)

The core shows alternating silt and clay arranged as normally graded thin beds from silt to clay with planar lamination, plant fragment at base and bioturbation on top. One fine-grained sand bed, rich in plant material, is observed in Section 1, 35-37 cm, and probably represents the remnant of thicker bed disrupted after deposition.



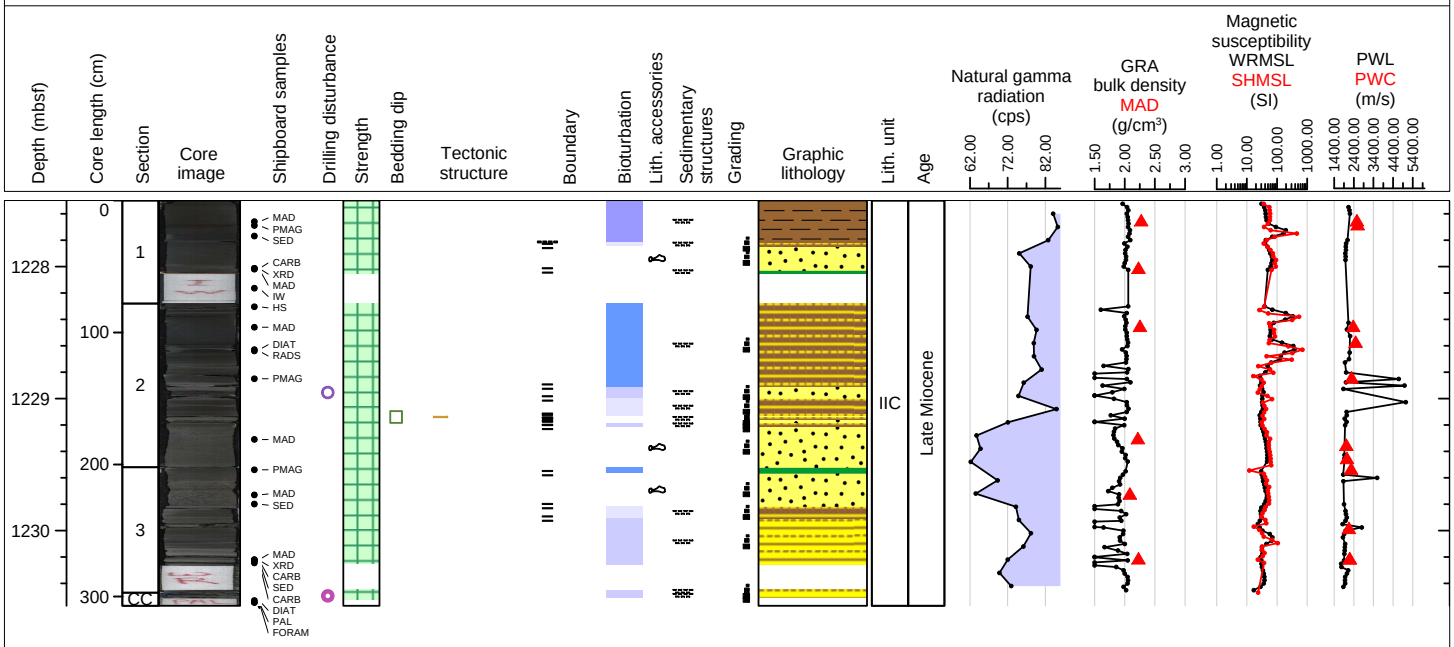
Hole 362-U1481A Core 9R, Interval 1217.8-1222.58 m (CSF-A)

The core shows normally graded, thin beds of silt to clay, with sparse to slight bioturbation and agglutinated forams on the top. In sections 1 to 3, this lithology is interbedded with medium to thick beds of structureless very fine- to fine-grained sand that are poorly sorted, rich in plant fragment and rip-up clasts.



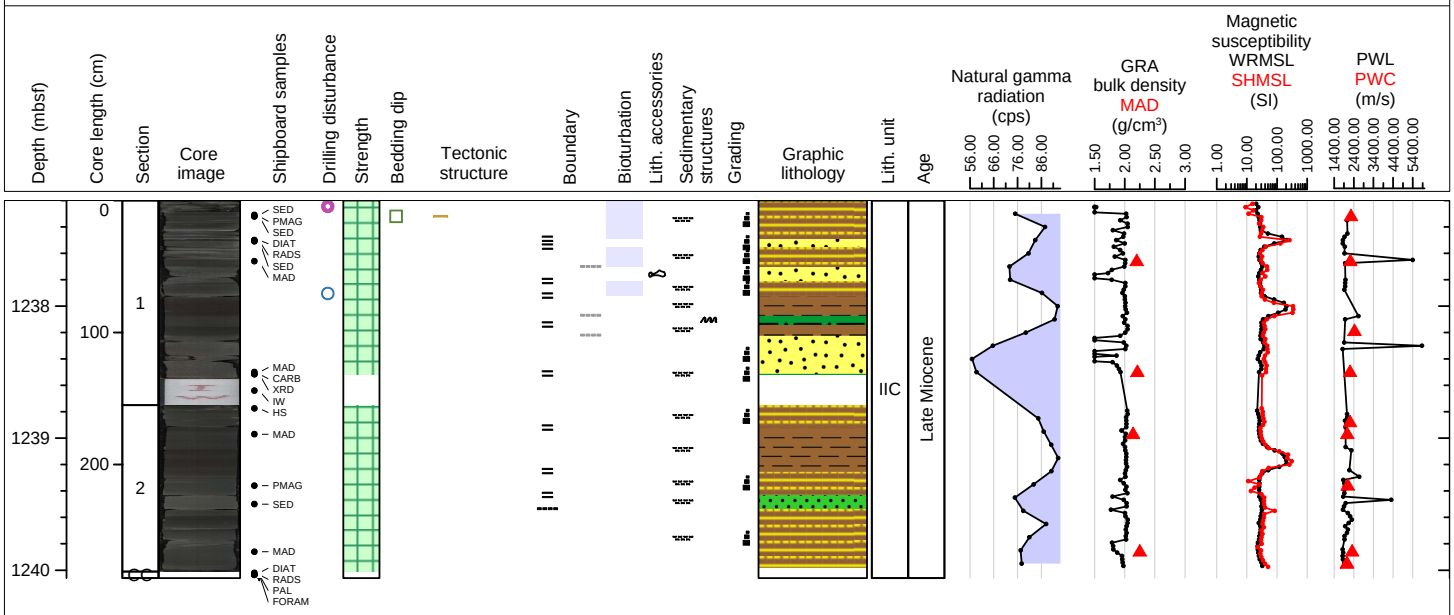
Hole 362-U1481A Core 10R, Interval 1227.5-1230.57 m (CSF-A)

The core shows two interbedded lithologies: alternating silt and clay arranged as thin, normally-graded beds (from very fine-grained/silt to clay), and alternating sand and mud arranged as medium- to very thin-bedded, normally-graded (from very fine-grained/fine-grained sand to silt/silty clay). The sand is commonly rich in plant fragment and contains rip up clasts. Agglutinated forams are observed in clay intervals in Section 1 and 2.



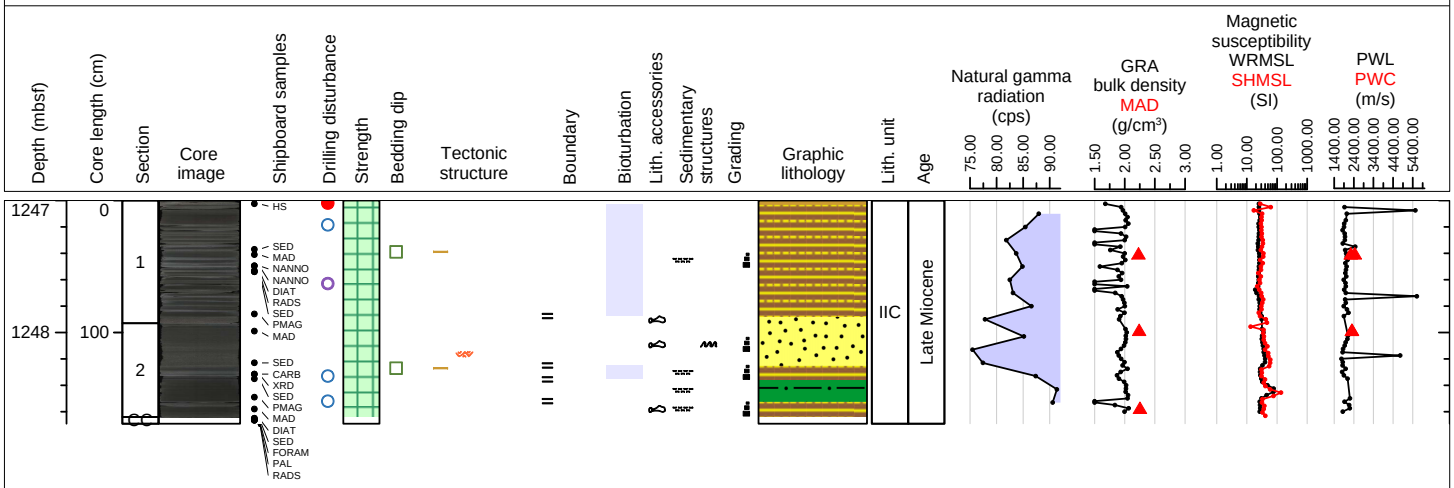
Hole 362-U1481A Core 11R, Interval 1237.2-1240.06 m (CSF-A)

The core shows alternating silt and clay arranged as thin to very thin beds that are normally-graded from silt to clay. Thin, very fine-grained sand beds are present in Section 1. They are rich in plant material and some contain rip up clasts. One is capped by an organic-rich very thin bed at Section 1, 29-30.5 cm.



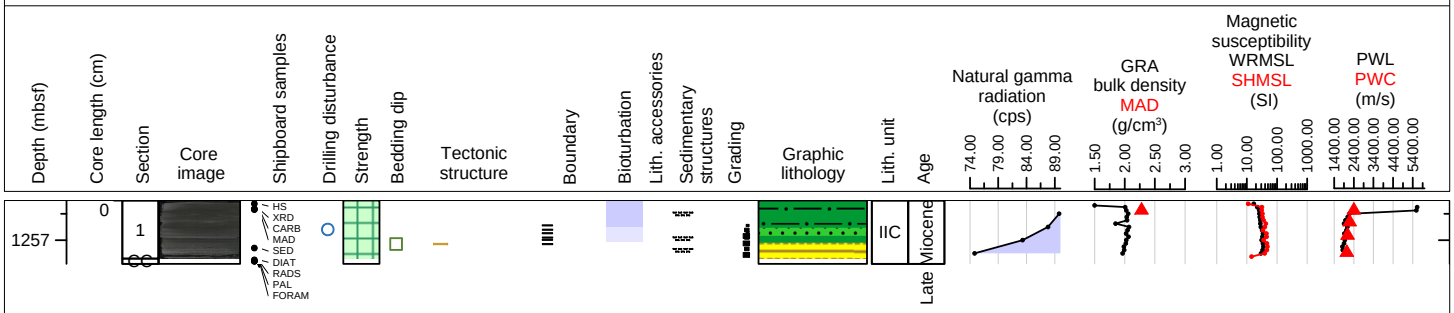
Hole 362-U1481A Core 12R, Interval 1247.0-1248.69 m (CSF-A)

The core shows alternating silt and clay arranged as thin to very thin beds that are normally-graded from silt to clay. A very fine-grained sand lamina with abundant plant fragments is intercalated in the silty clay layer at Section 2, 41.5-42 cm.



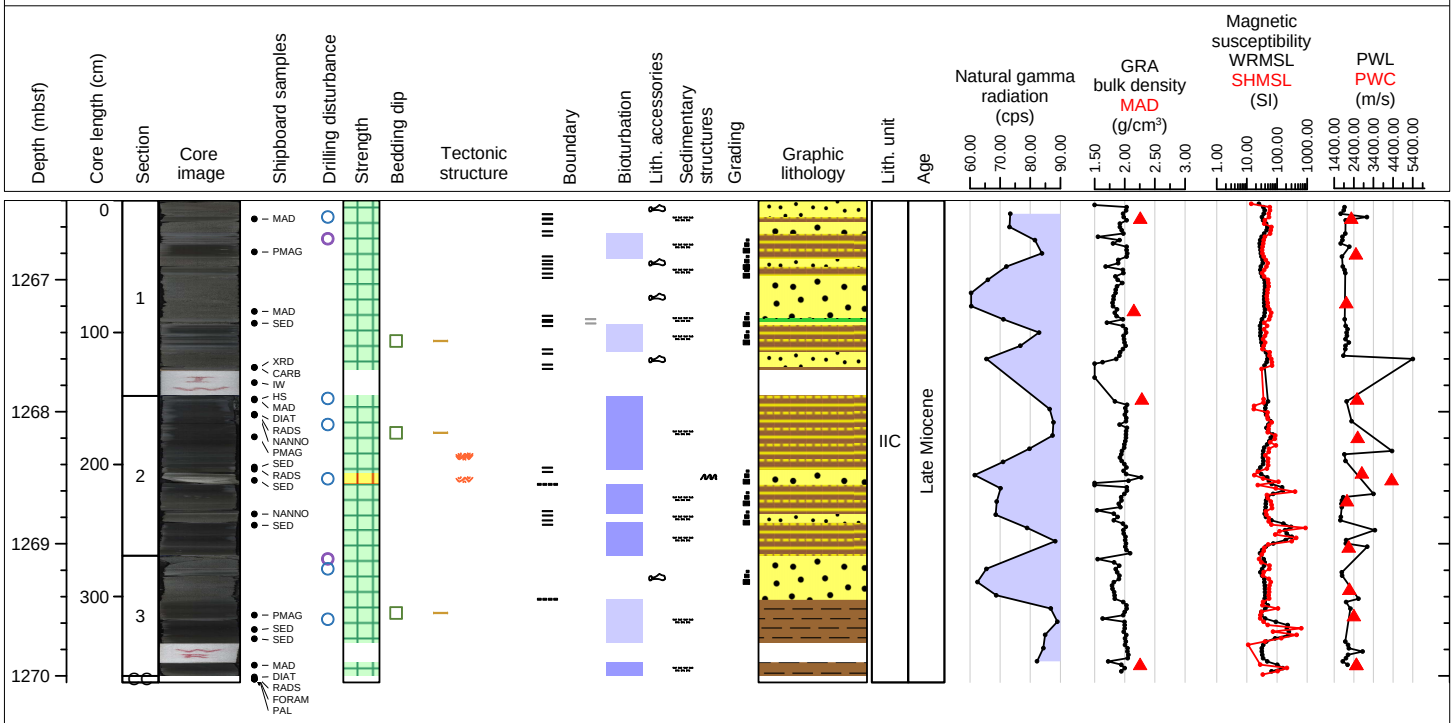
Hole 362-U1481A Core 13R, Interval 1256.7-1257.18 m (CSF-A)

The core shows alternating very fine-grained sand and silty clay arranged as very thin to medium, normally graded beds (from very fine-grained sand to clay). Very fine-grained sand laminae at 16.5, 26, 36 cm contain abundant plant fragments.



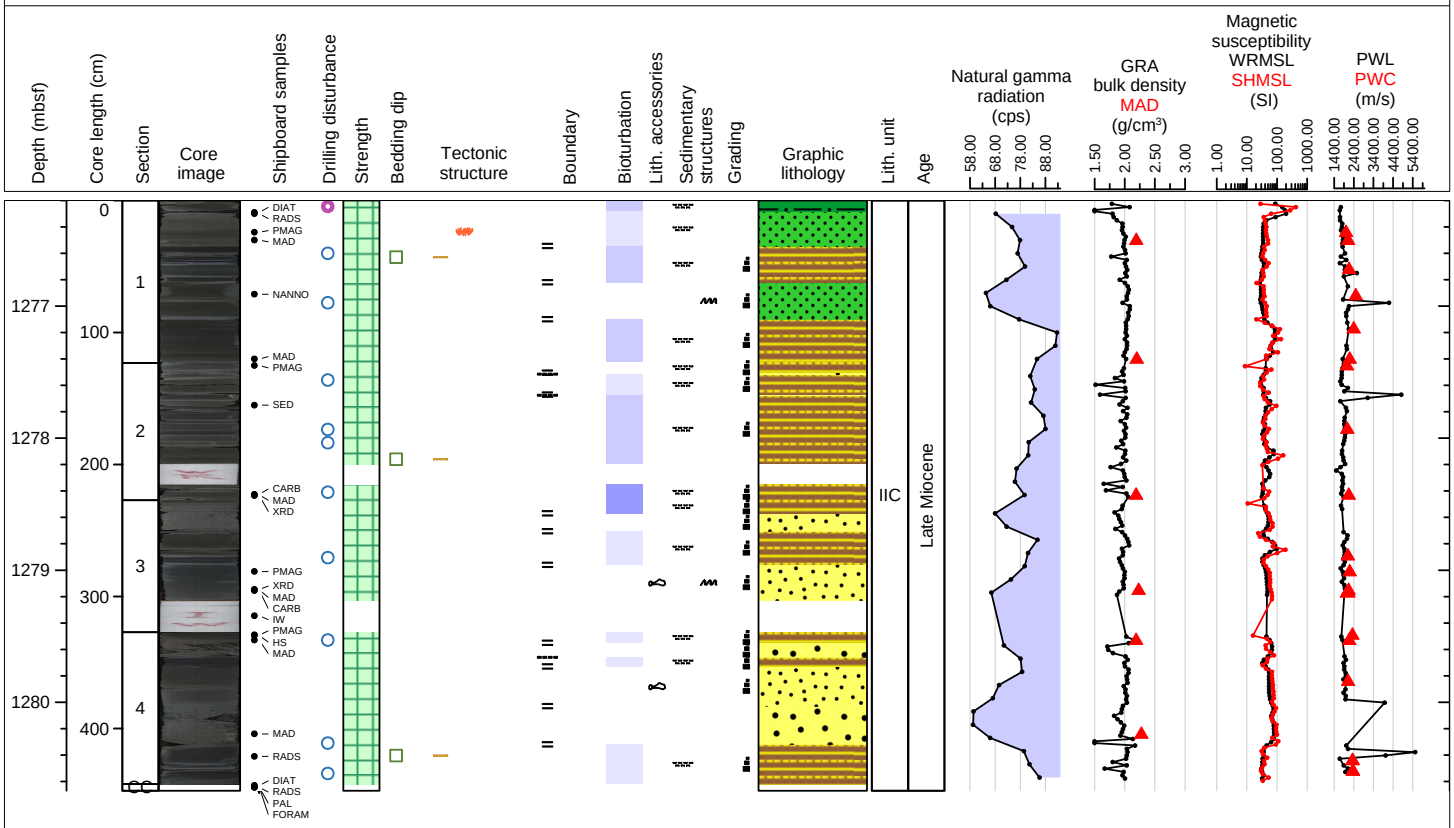
Hole 362-U1481A Core 14R, Interval 1266.4-1270.05 m (CSF-A)

The core contains silt and clay arranged as alternating thin to very thin, normally-graded beds (from silt to clay). Some thin to thick beds of fine-grained sand with plant fragments are intercalated in the background sediments. A carbonate cemented fine-grained sandstone is observed in Section 2, 56-67 cm.



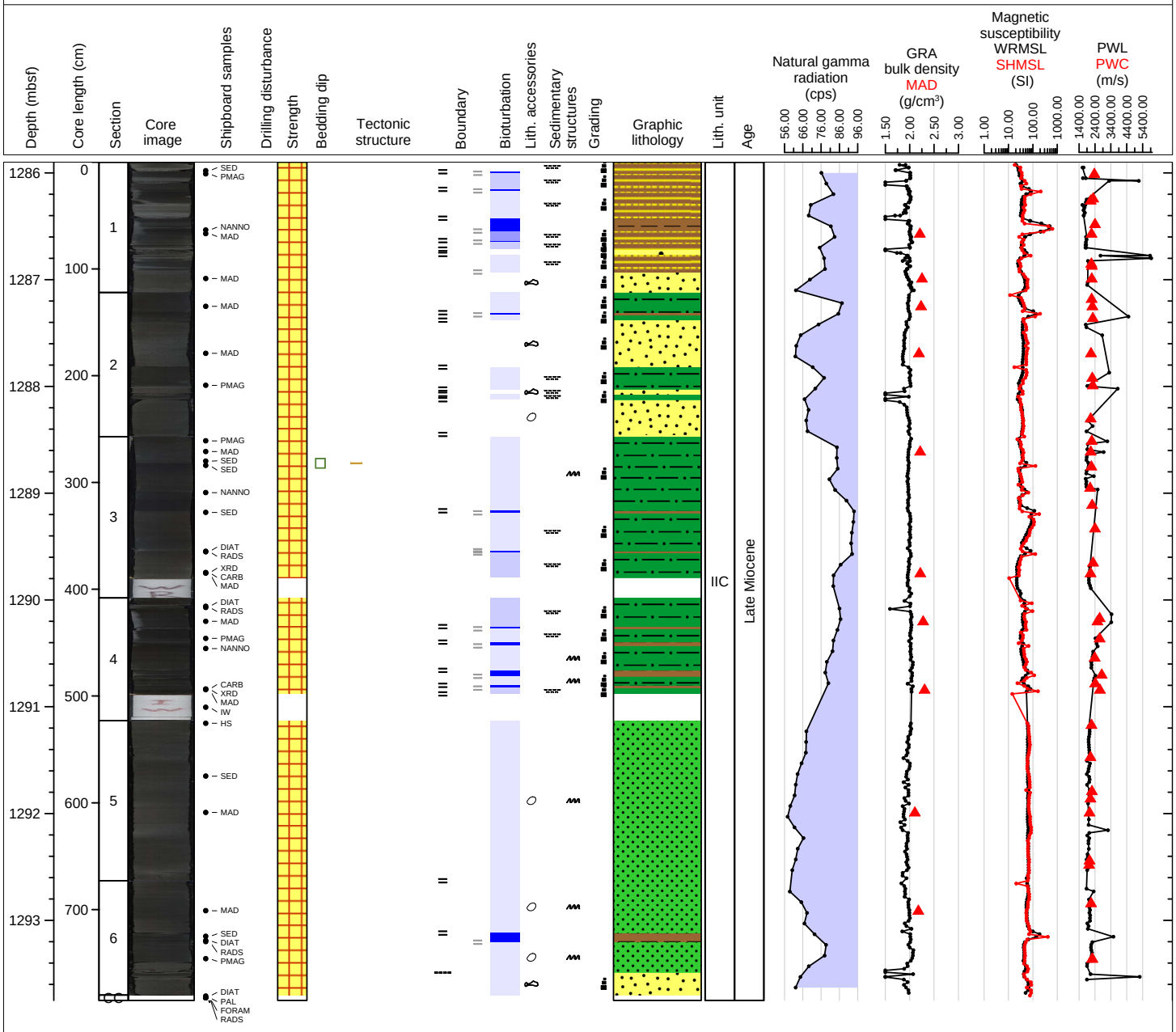
Hole 362-U1481A Core 15R, Interval 1276.2-1280.67 m (CSF-A)

The core contains silt and clay arranged as alternating thin to very thin, normally-graded beds (from silt to clay). Prominent medium beds of very fine- to fine-grained sand occur in sections 3 to 4, locally containing rip-up clasts and convolute bedding. Section 1 contains two medium beds of convolute-laminated silt. Plant fragments are observed throughout the core within coarse-grained beds (silt and sand).



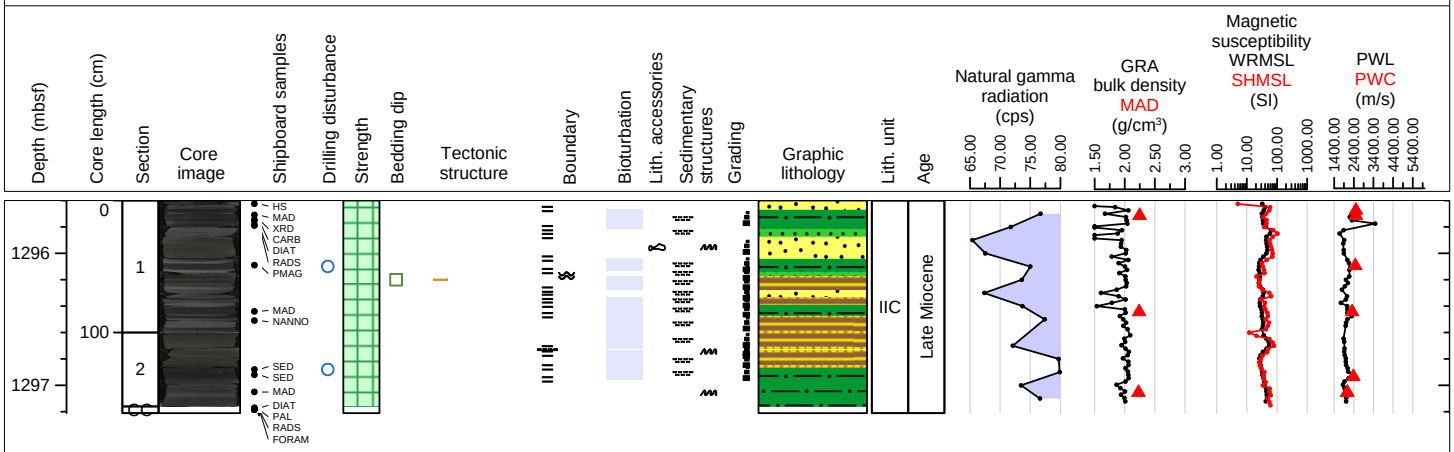
Hole 362-U1481A Core 16R, Interval 1285.9-1293.75 m (CSF-A)

The core shows alternating silt and clay arranged as medium to thin beds. More silty layers are normally graded from silt to clay and often capped by a very thin bed of dark clay that is heavily bioturbated and contains agglutinated forams. Medium to very thin beds of very fine- to fine-grained sand with plant debris and rip up clast are observed throughout the core. In Sections 5 and 6, the core contains very thick to thin beds of poorly sorted silt with convolute bedding.



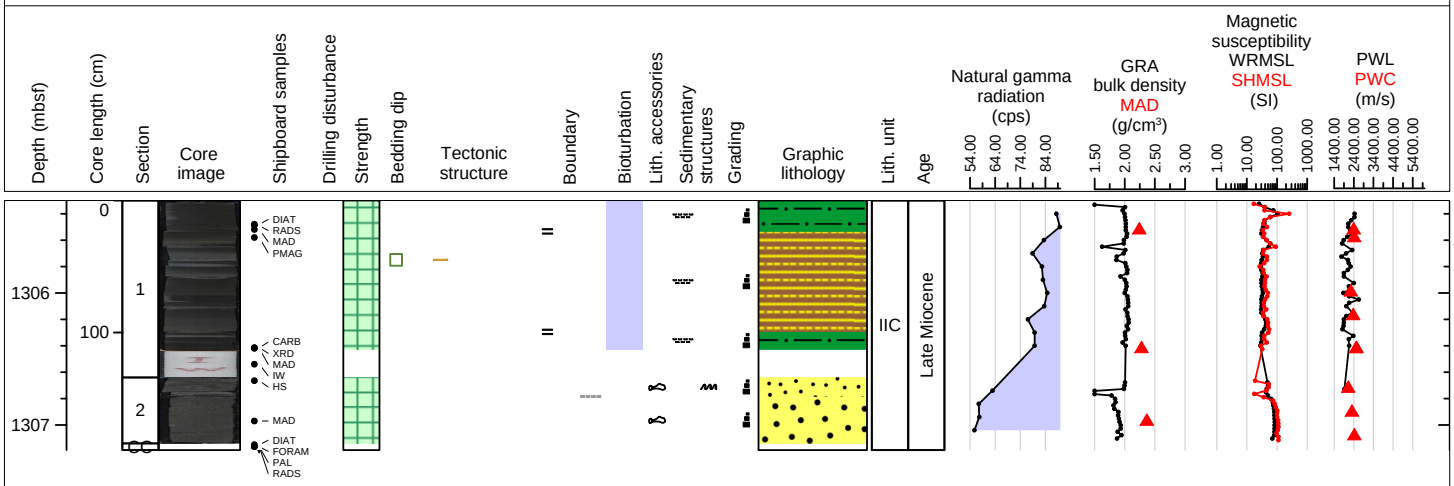
Hole 362-U1481A Core 17R, Interval 1295.6-1297.21 m (CSF-A)

The core shows alternating silt, clay and silty clay, arranged as normally graded very thin beds from silt/silty clay to silty clay. Bioturbation is sparse. Very thin to medium beds of poorly sorted very fine- to medium-grained sand containing plant fragments and rip-up clasts are distributed throughout the core.



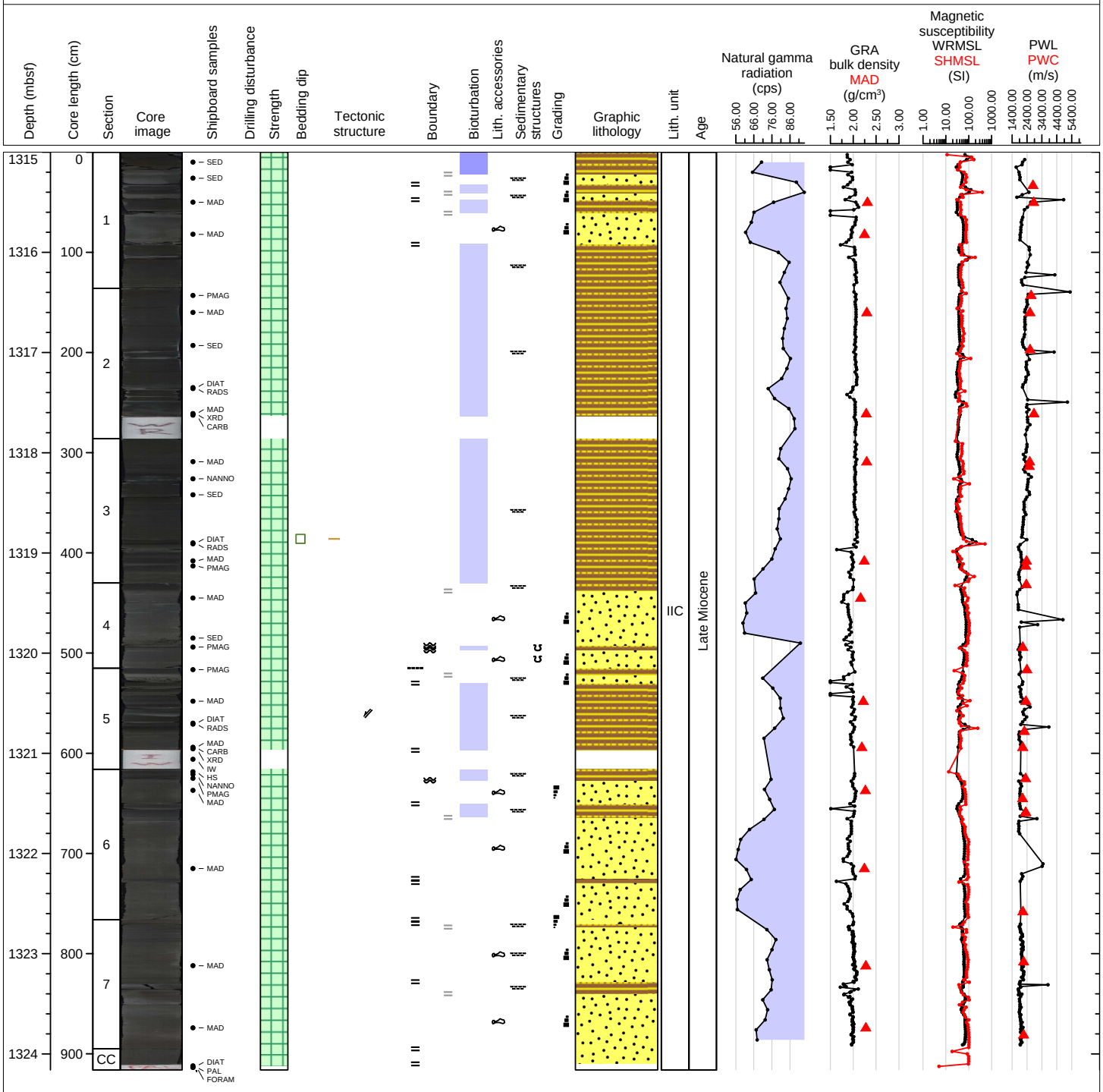
Hole 362-U1481A Core 18R, Interval 1305.3-1307.19 m (CSF-A)

The core shows thin, normally-graded silty clay beds and alternating silt and clay arranged as thin beds in Section 1, and normally-graded medium- to very fine-grained sand with rip up clasts and plant fragments in Section 2.



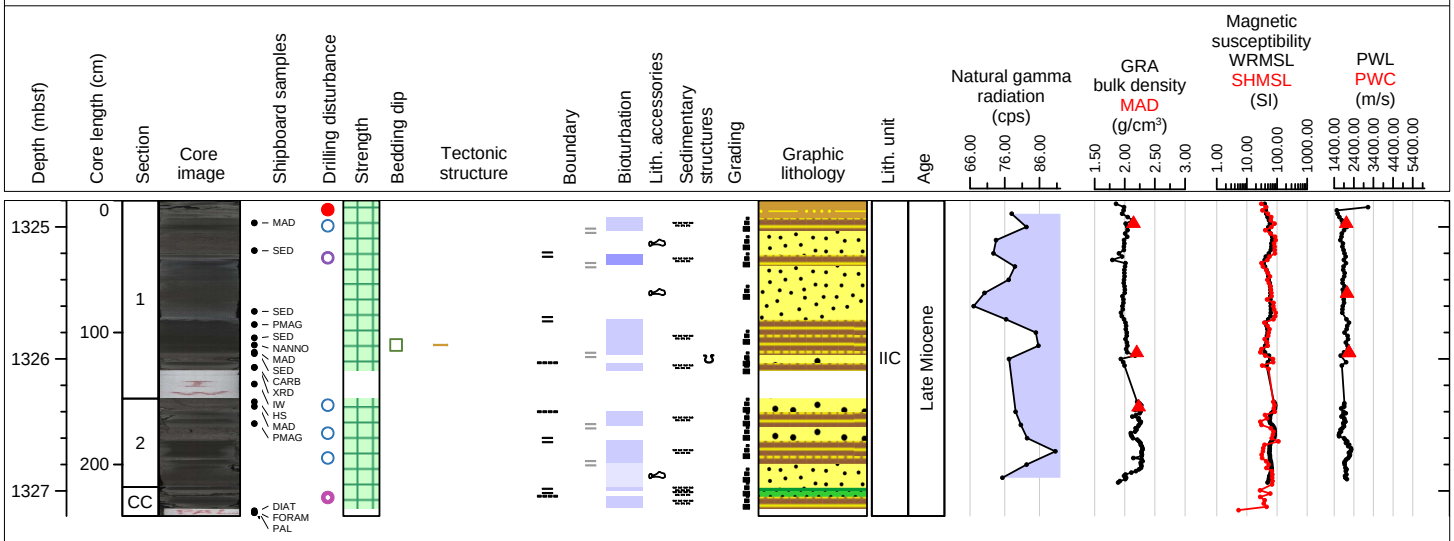
Hole 362-U1481A Core 19R, Interval 1315.0-1324.16 m (CSF-A)

The core contains thin beds of alternating silty clay and silt that are normally-graded from silt to clay. Medium- to very thick-bedded, very fine- to fine-grained sand with locally occurring rip-up clasts and convolute bedding are intercalated in background sediments. Plant fragments are observed throughout the core within coarse-grained beds (silt and sand).



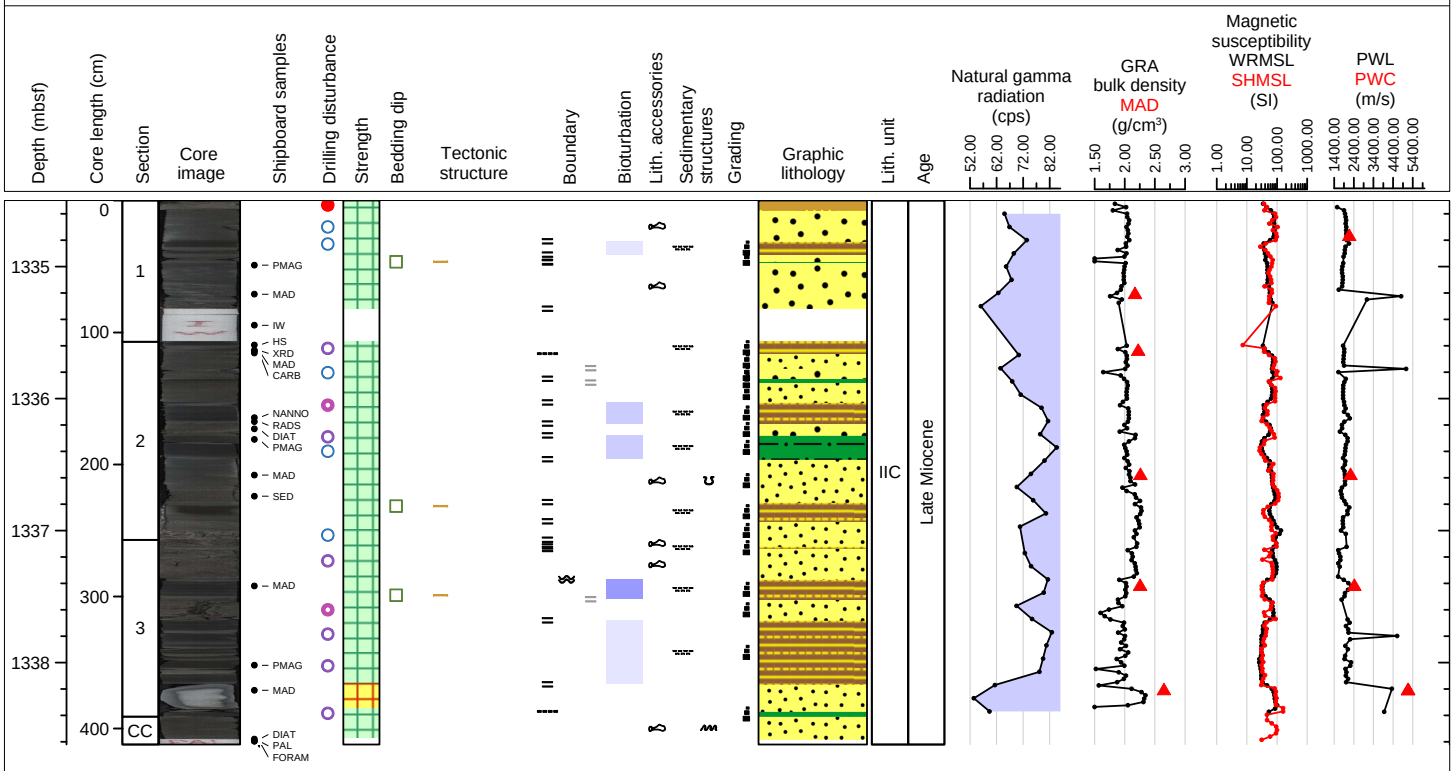
Hole 362-U1481A Core 20R, Interval 1324.8-1327.19 m (CSF-A)

The core contains thin beds of alternating silty clay and silt that are normally graded from silt to clay. Medium beds of very fine- to fine-grained sand with locally rip-up clasts are intercalated in background sediment. Few plant fragments are observed throughout the core within sand beds.



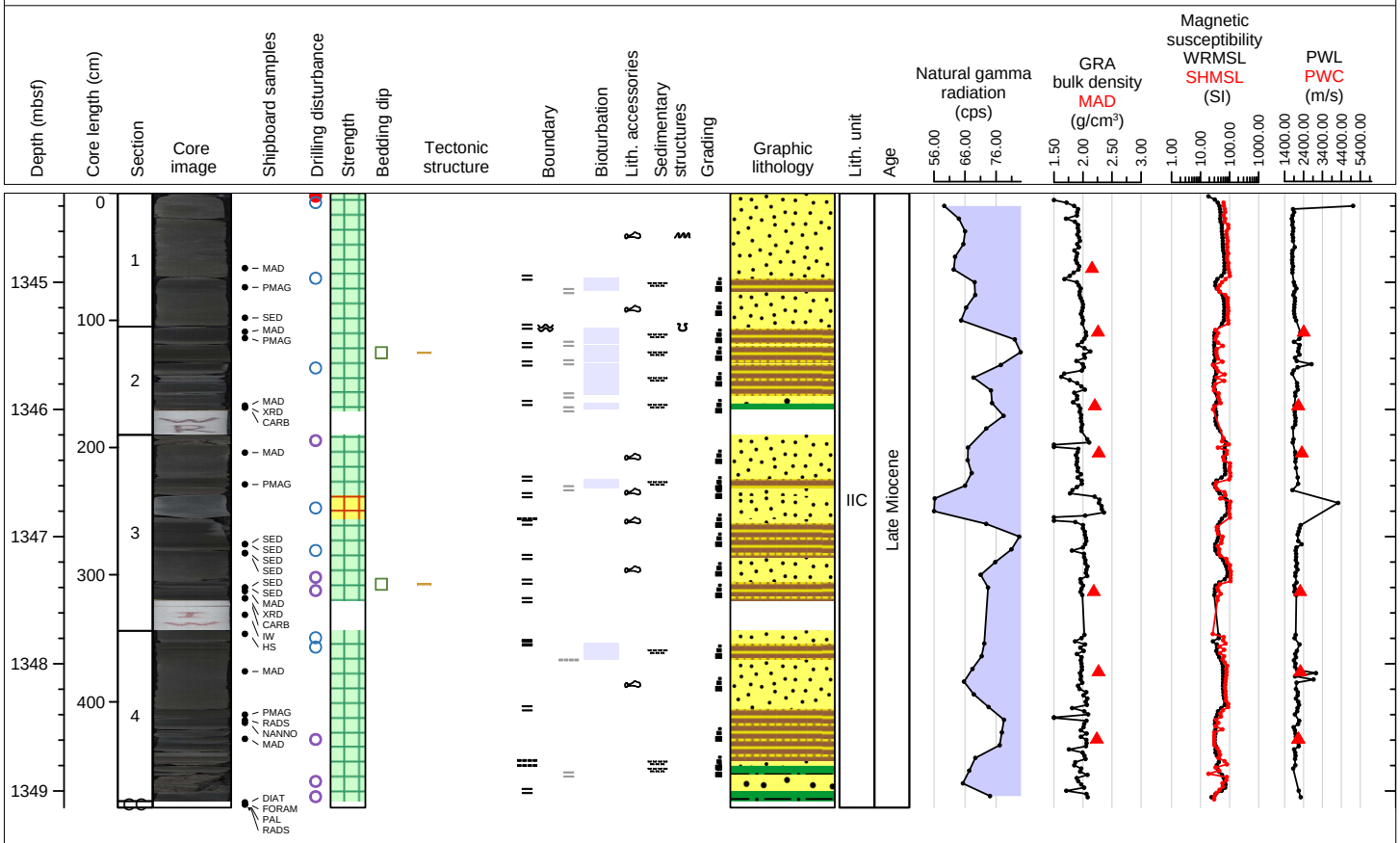
Hole 362-U1481A Core 21R, Interval 1334.5-1338.62 m (CSF-A)

The core contains thin beds of alternating silty clay and silt that are normally-graded from silt to clay. Medium- to thick-bedded, very fine- to fine-grained sand with locally rip-up clasts are intercalated in background sediment. Rare plant fragments are observed throughout the core within the sand beds. A carbonate-cemented very fine-grained sandstone is intercalated in section 3, 109.5-130 cm.



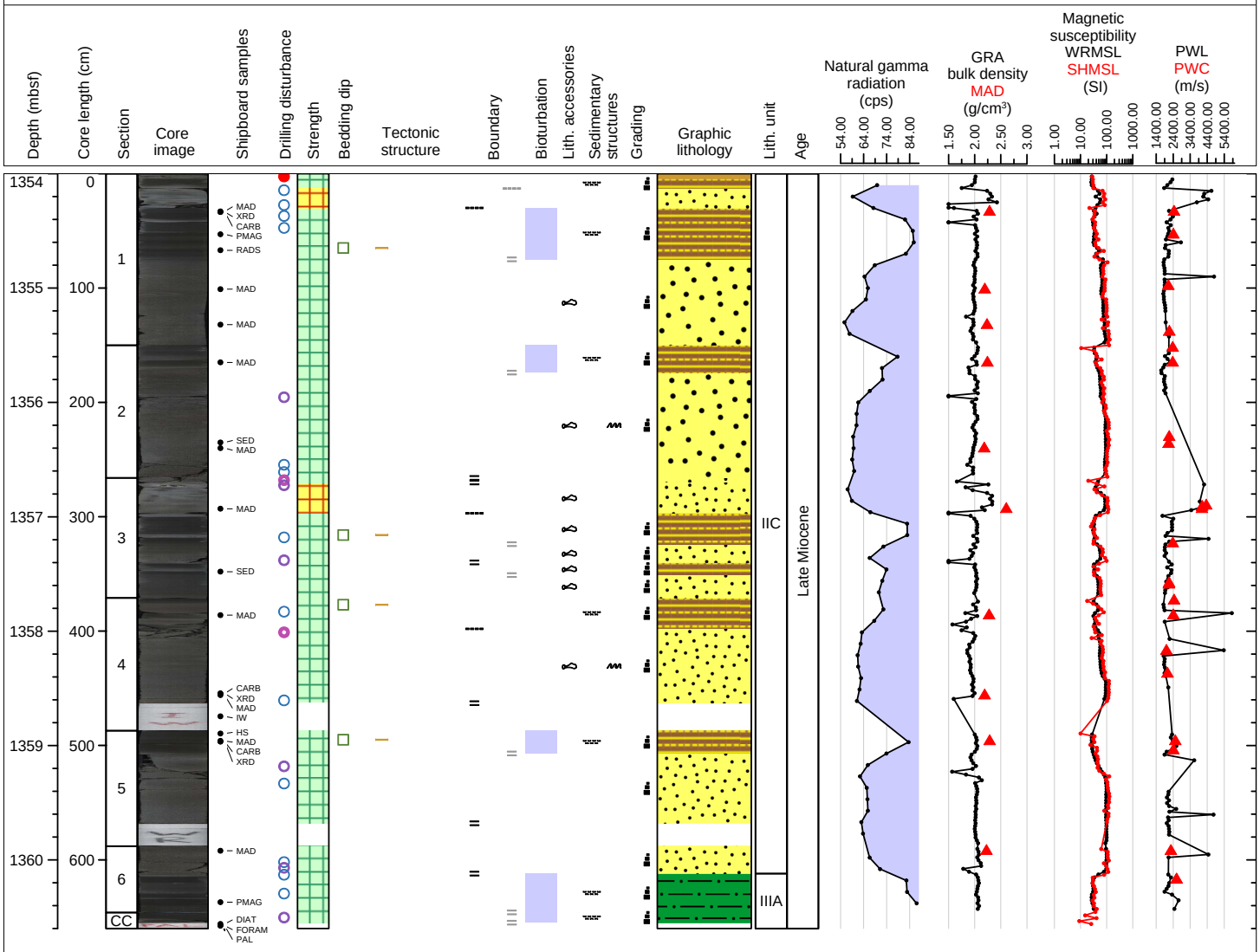
Hole 362-U1481A Core 22R, Interval 1344.3-1349.13 m (CSF-A)

The core contains thin beds of alternating silty clay and silt that are normally-graded from silt to clay. Medium- to thick-bedded, very fine- to fine-grained sand, locally with rip-up clasts, are intercalated in background sediment. Plant fragments are observed throughout the core within sand and silt beds. The core contains small amounts of calcareous allochems. A carbonate-cemented very fine-grained sandstone is intercalated in Section 3, 47.5-66 cm.



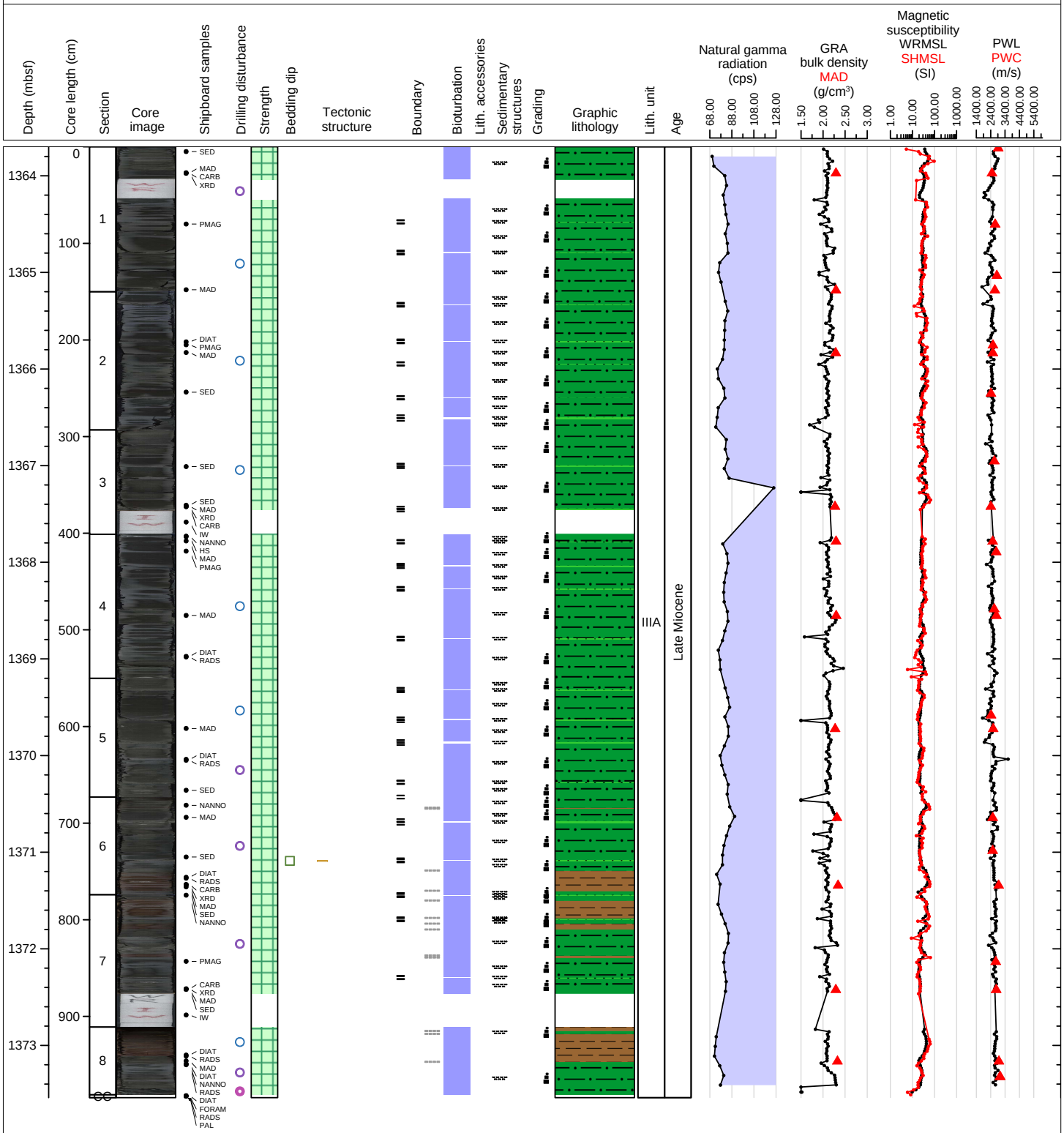
Hole 362-U1481A Core 23R, Interval 1354.0-1360.6 m (CSF-A)

The core consists of alternating silty clay and silt laminae, arranged as normally-graded beds from silt to clay. Medium- to thick-bedded, very fine- to fine-grained sand, locally with rip-up clasts are intercalated in the background sediment. Rare plant fragments occur throughout the core within sand and silt beds. The core contains some calcareous allochems throughout the core. Two carbonate-cemented very fine-grained sandstones are intercalated in Section 1, 13-30 cm and in Section 3, 4-31 cm.



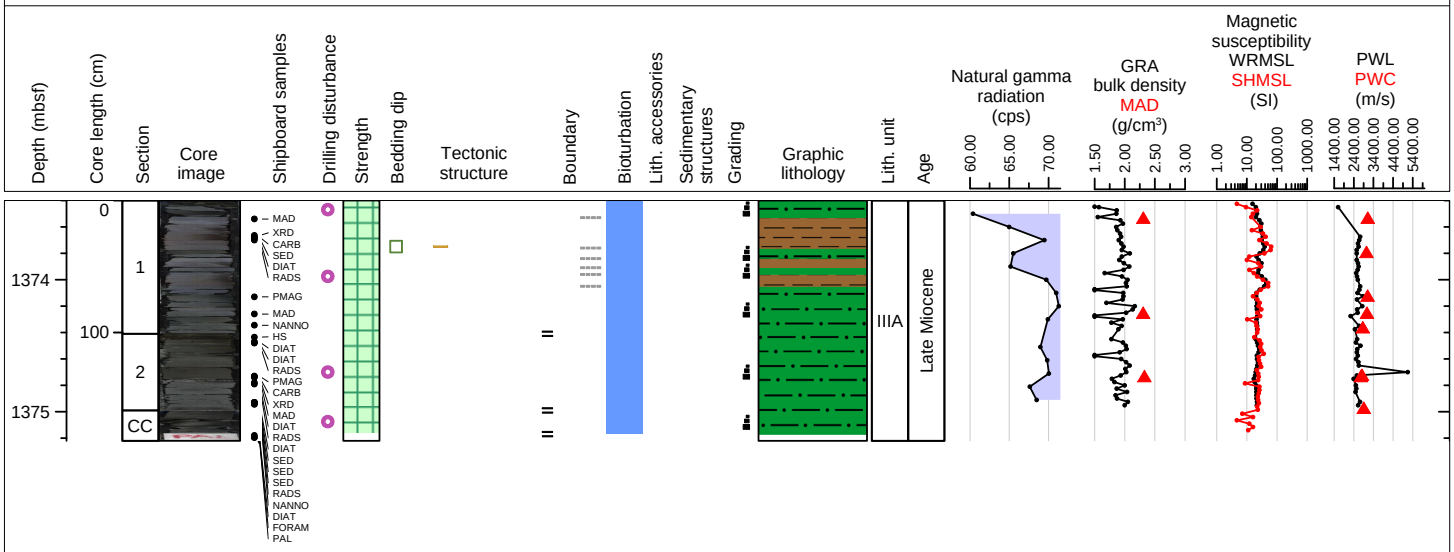
Hole 362-U1481A Core 24R, Interval 1363.7-1373.54 m (CSF-A)

The core is dominated by lithified silty clay arranged as thin, normally-graded beds of silt/silty clay to silty clay with increasing bioturbation intensity and occurrence of agglutinated foraminifers towards the top of the beds. Distinctive very thin beds of silt occur in Sections 1 to 7. Some normally graded beds show convolute bedding. A minor lithology appears from Section 6: reddish brown clay with silt that alternates with the major silty clay lithology.



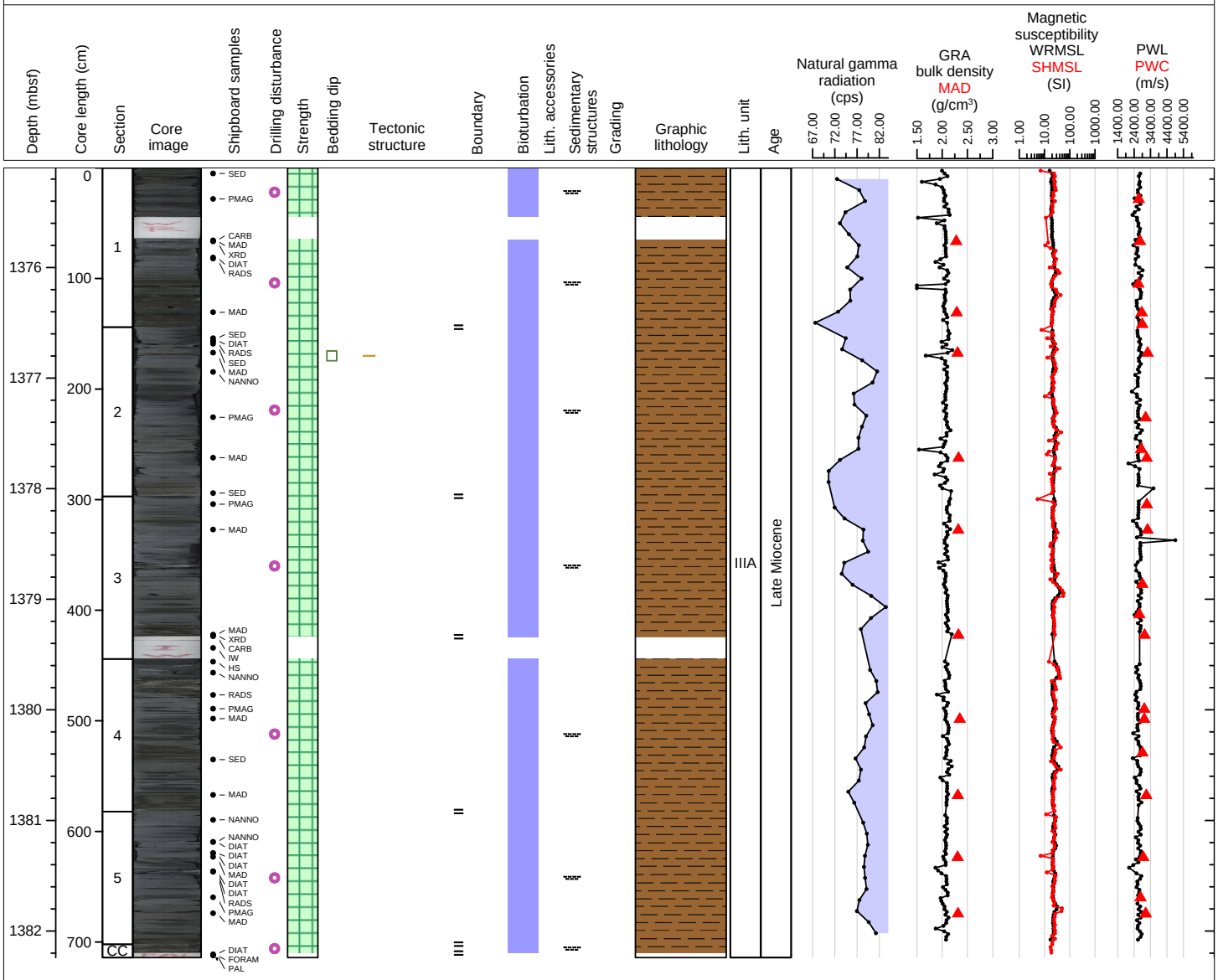
Hole 362-U1481A Core 25R, Interval 1373.4-1375.22 m (CSF-A)

The core is dominated by lithified, structureless and heavily bioturbated, very dark greenish gray silty clay and clay with silt. Minor lithologies include structureless and intensively bioturbated reddish-brown clay with silt in Section 1, and normally-graded very thin to thin beds of silty clay with slight bioturbation throughout the core.



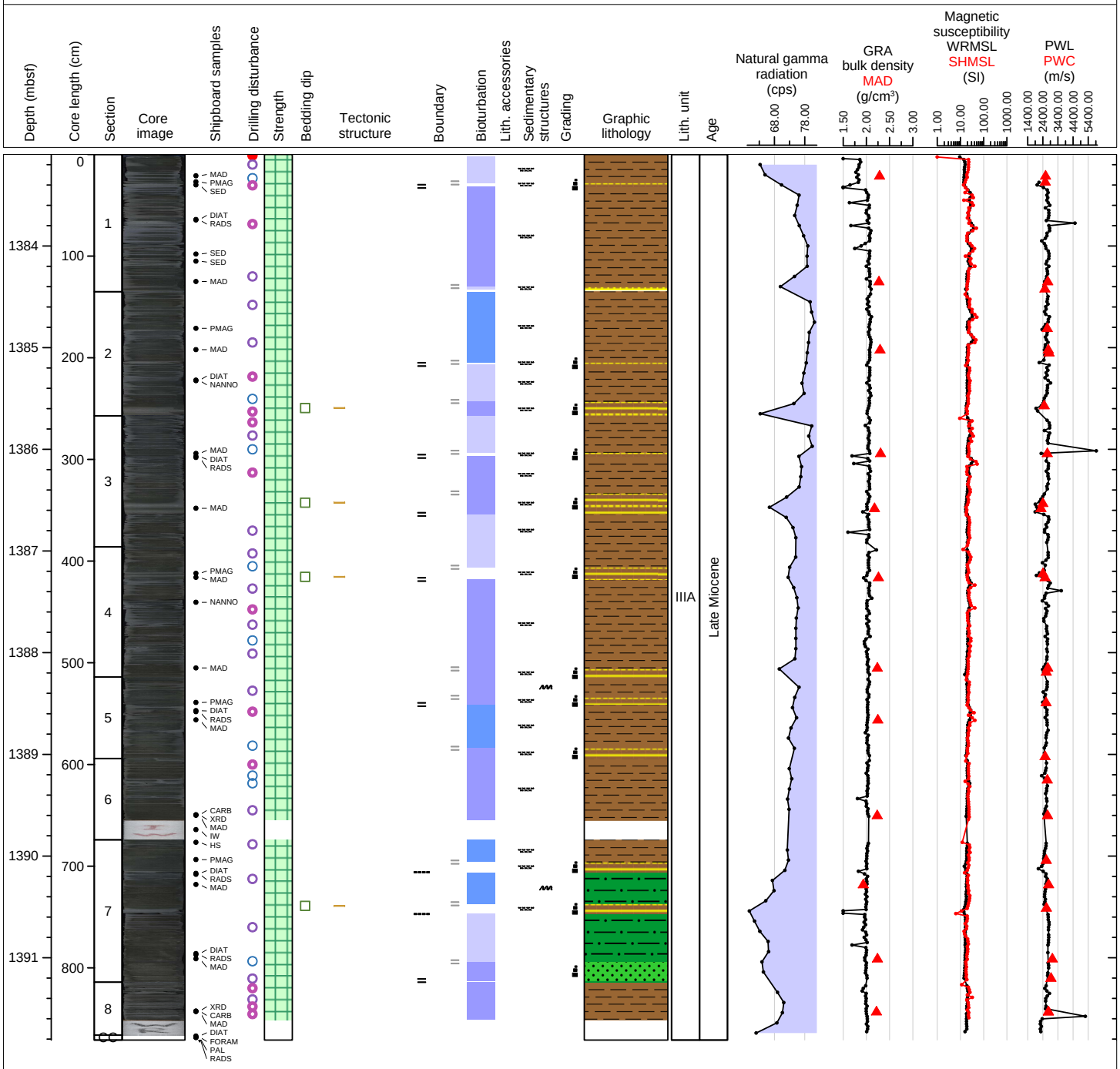
Hole 362-U1481A Core 26R, Interval 1375.1-1382.24 m (CSF-A)

The core contains structureless lithified silty clay with agglutinated foraminifers dispersed throughout the core. Silt laminae occur in cm-scaled intervals and the silt laminae appear to represent many events and not single beds within specified intervals. Carbonate concretion in mudstone in Section 2, 149-150 cm. Large pyrite concretion in Section 2, 114-115 cm.



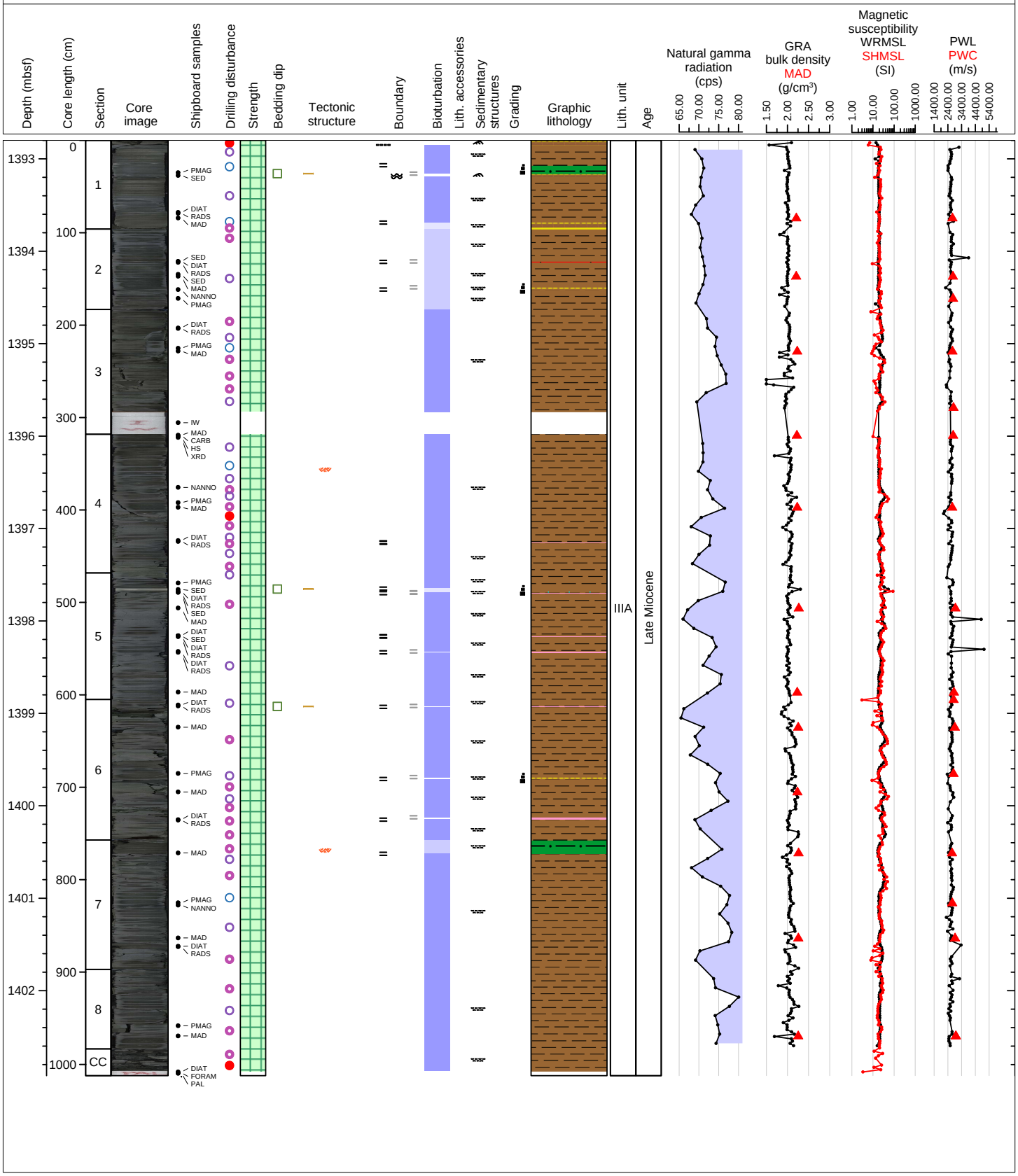
Hole 362-U1481A Core 27R, Interval 1383.1-1391.81 m (CSF-A)

The core shows mottled, dark greenish gray and dark gray, slightly to intensively bioturbated and lithified silty clay. Thin to moderate thick laminae alternate between silt and clay and are intercalated in the background sediment. Laminae appear to represent many events and not single beds within specified intervals. Pyrite concretion in Section 1, 106.5 cm, and Section 4, 4 cm, 54.5 cm, and 102 cm.



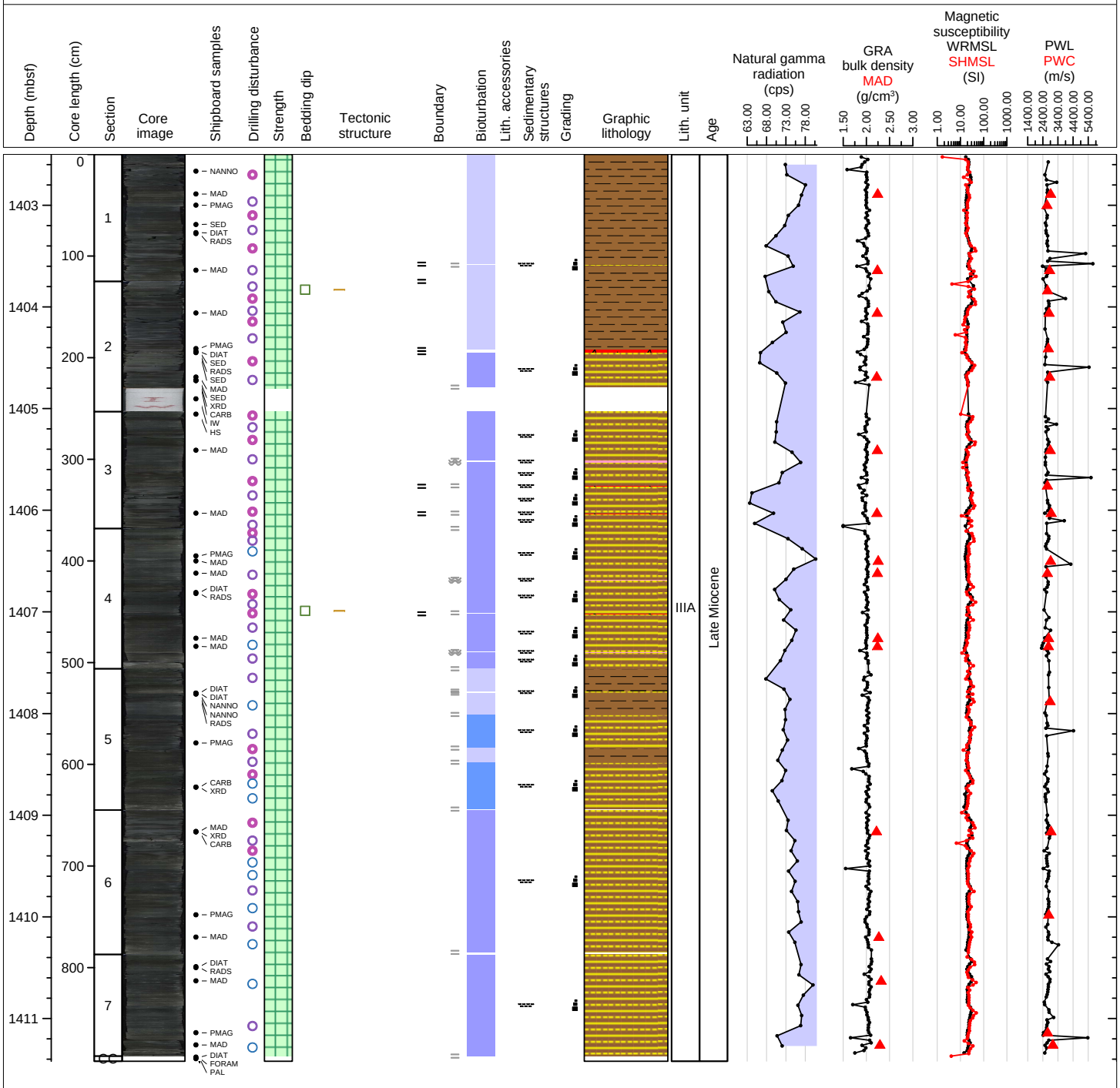
Hole 362-U1481A Core 28R, Interval 1392.8-1402.92 m (CSF-A)

The core shows mottled, dark greenish gray and dark gray, slight- to intensively-bioturbated clay. Thin alternation of silt and clay laminae are intercalated in the background sediment. Laminae appear to represent many events and not single beds within specified intervals. A calcareous clay stone is observed in Section 5, 17-21 cm. One ash/tuff layer is intercalated in Section 2, 35 cm. Laminae of tuffaceous silty clay are observed in Section 4, 117 cm, Section 5, 22 and 85 cm, Section 6, 7 and 130 cm. A pyrite concretion is observed in Section 8, 45.5 cm.



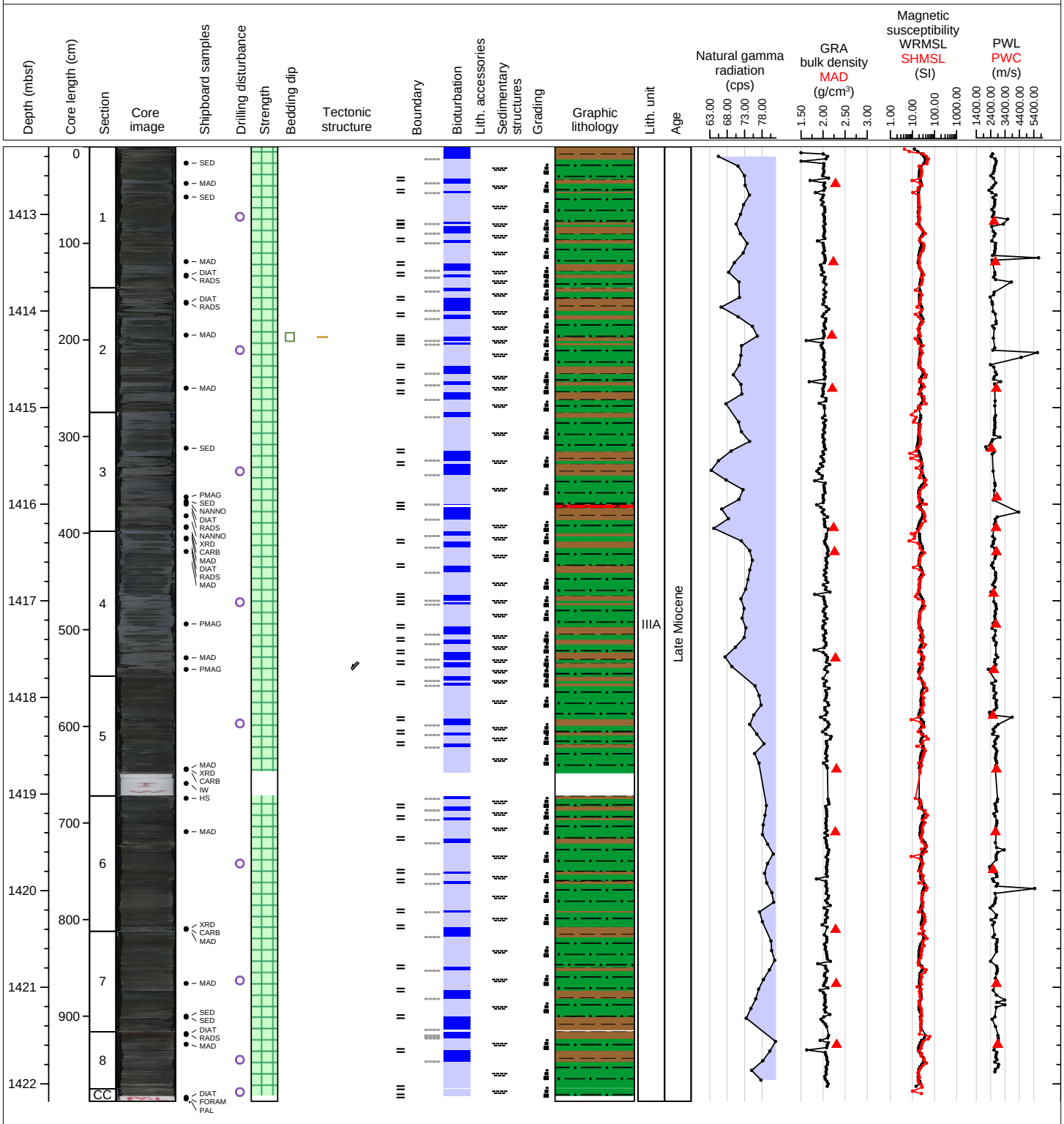
Hole 362-U1481A Core 29R, Interval 1402.5-1411.42 m (CSF-A)

The major lithology of the core is predominantly very dark greenish gray to dark gray clay that alter with thin- to medium-bedded layers of very dark greenish gray clay with silt and mm scaled laminations of dark gray silt. A very thin ash layer is observed in Section 2 (67 to 70 cm). Tuffaceous silty clay is intercalated in Section 3 (48-50 cm), and Section 4 (50-51 and 121-122 cm).



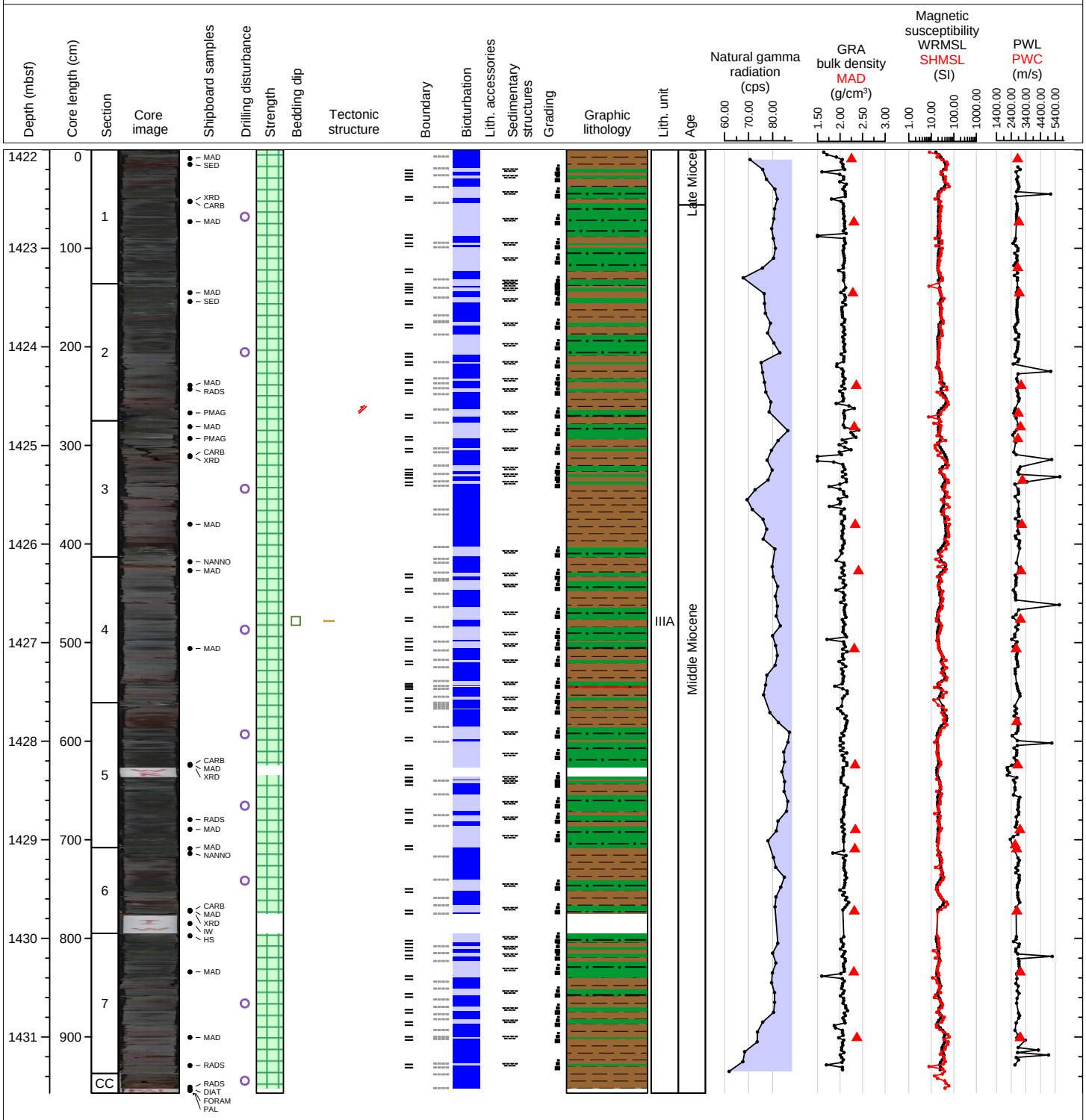
Hole 362-U1481A Core 30R, Interval 1412.3-1422.18 m (CSF-A)

The core shows alternation of (1) thin to medium beds of very dark gray normally graded silty clay with planar and convolute lamination. Moderate bioturbation is dominated by Nereites and increases toward the top of the layers, and (2) very thin to thin beds of structureless greenish black clay with silt and agglutinated foraminifers that show complete bioturbation and occasional black laminae (altered tephra?). Section 3 contains an altered ash layer at 95-98 cm that appear as a black bed. The core experienced clay extension. Some sections lengthen by up to 2 cm.



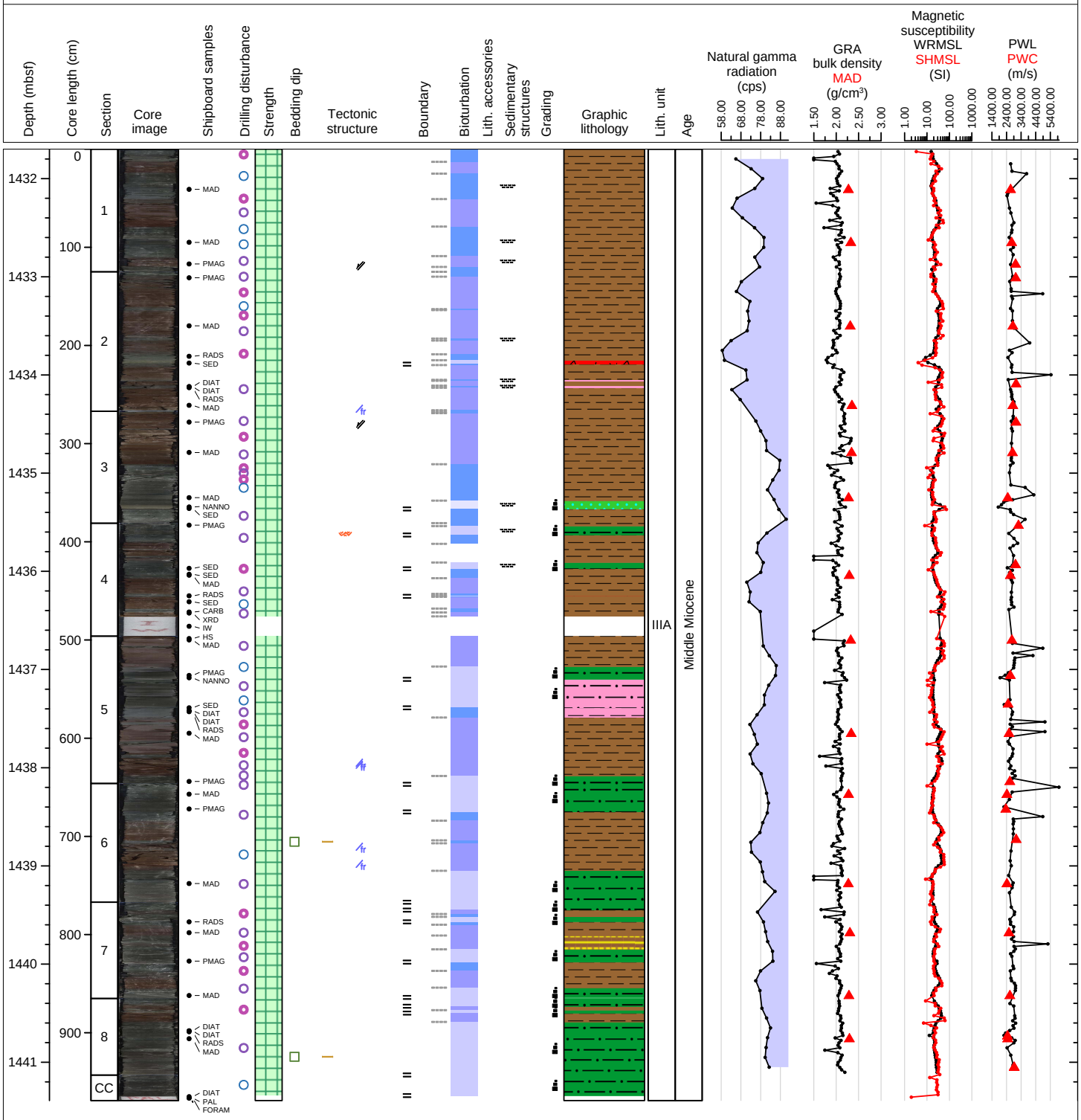
Hole 362-U1481A Core 31R, Interval 1422.0-1431.57 m (CSF-A)

The core shows alternation of (1) thin to medium beds of very dark gray normally graded silty clay with planar and convolute lamination. Moderate bioturbation is dominated by Nereites and increases toward the top of the layers, and (2) very thin to thin beds of structureless greenish black clay with silt and agglutinated foraminifers that show complete bioturbation and occasional black laminae (altered tephra ?). (3) thin to medium beds of structureless reddish brown clay with silt to silty clay with agglutinated forams and complete bioturbation. Section 4 contains an altered ash layer at 131.5-133 cm that appear as a black bed. The core experienced clay extension. Some sections lengthened by up to 2 cm.



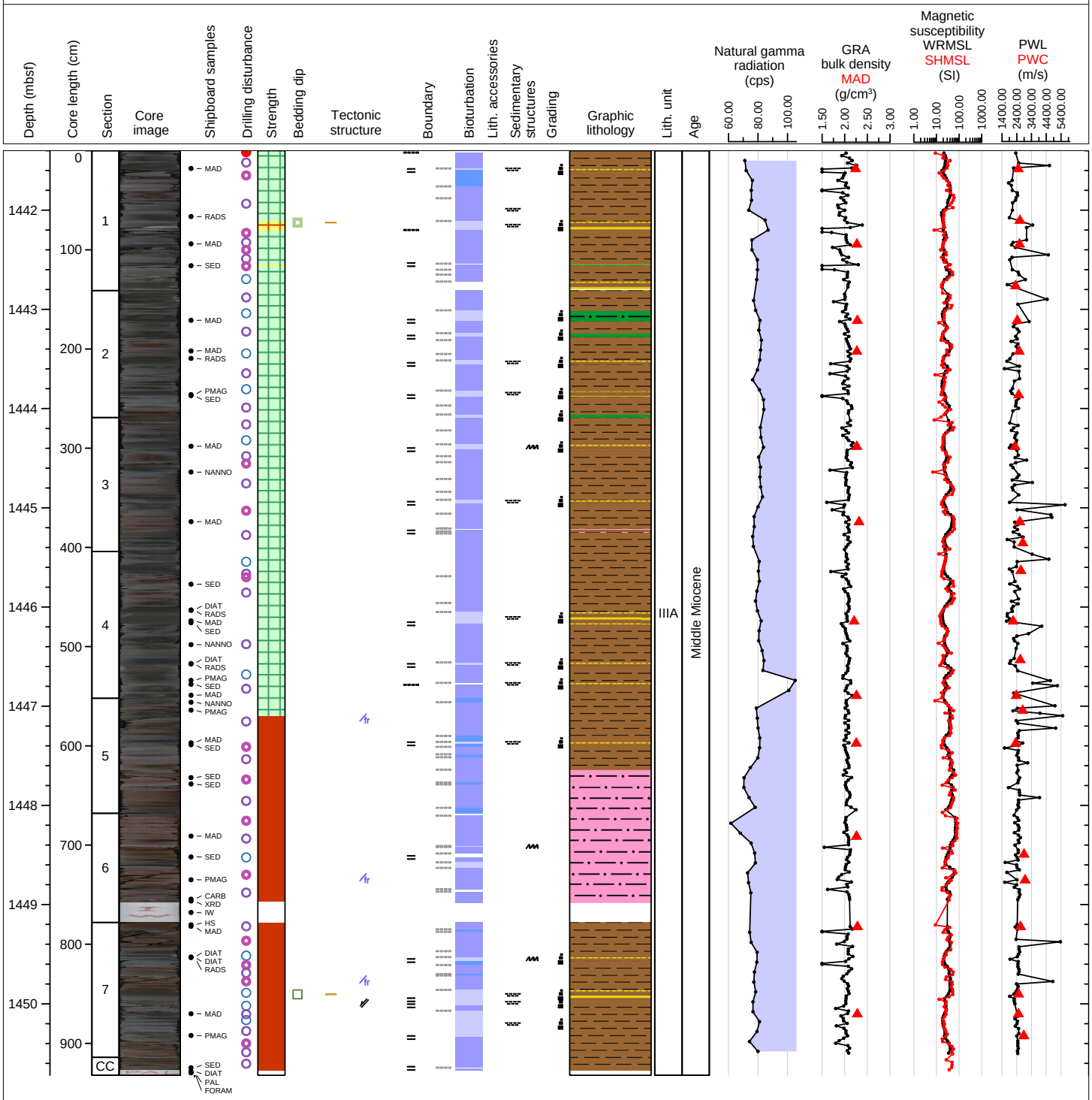
Hole 362-U1481A Core 32R, Interval 1431.7-1441.39 m (CSF-A)

The core contains clay with silt arranged as alternating thin to thick beds, with faint planar lamination at the base and agglutinated foraminifers on top. The color alternates in equal portions of very dark gray and dark reddish brown. Color change is not related to lithological or compositional change. Four planar laminated silt beds that are tuffaceous at the base in Section 2, 111 and 118 cm and Section 5, 73 and 83 cm. Sections 2 and 4 contain altered ash layers at 92-94 and 74-74.5 cm, respectively, that appear as a reddish black beds. Minor faults with indeterminate offset observed in core.



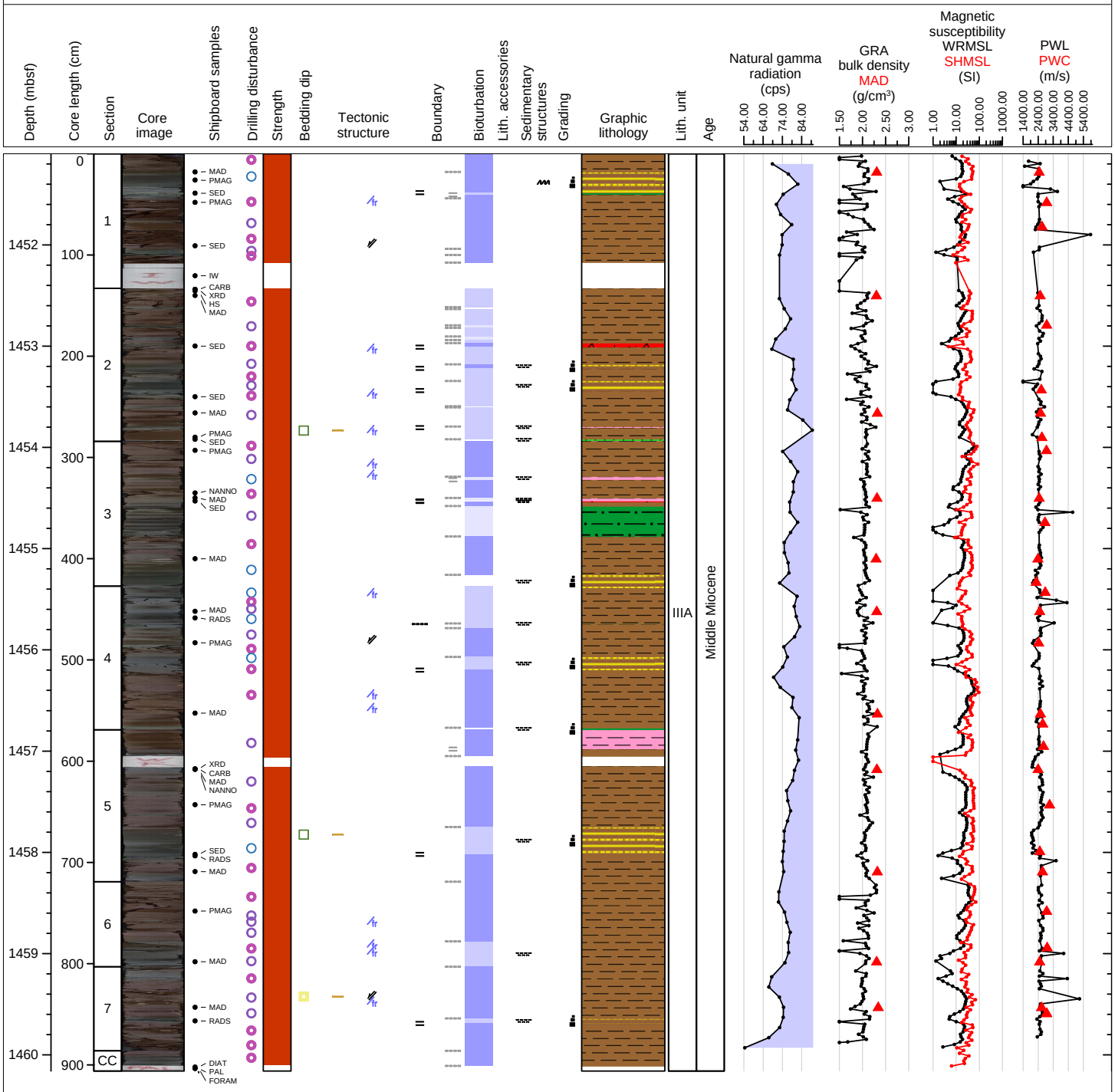
Hole 362-U1481A Core 33R, Interval 1441.4-1450.72 m (CSF-A)

The core contains clay with silt arranged as alternating thin to thick beds, with faint planar lamination at the base and agglutinated forams on top. The color alternates in equal portions of very dark gray and dark reddish brown. Color change is not related to lithological or compositional change. Thin beds of calcareous silt with clay and alternation of silt and clay laminaes are observed at Section 1 (71-80, 114-115 cm), Section 2 (101-107 cm), Section 4 (132.5-134.5 cm). Tuffaceous silty clay layer are intercalated in Section 3 (112-113, 113-115 cm), in the middle of Section 5 (71.5 cm) and the bottom of Section 6. Thin ash laminae are observed at CC (10.5 cm). Faults with indeterminate offset develop from Section 5 to CC.



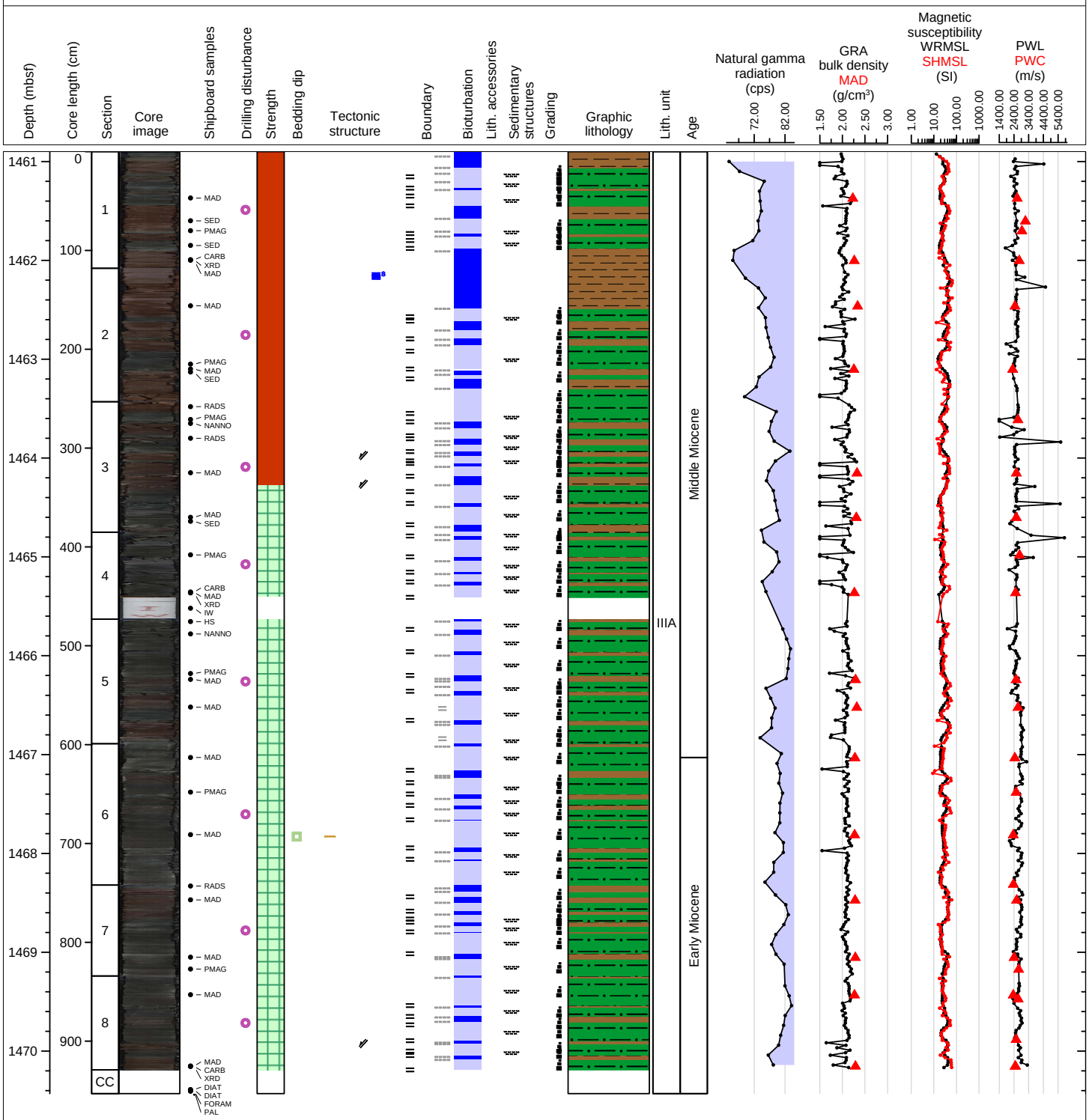
Hole 362-U1481A Core 34R, Interval 1451.1-1460.16 m (CSF-A)

The core contains clay with silt arranged as thin to thick beds, with faint planar lamination. The color alternates in equal portions of very dark greenish gray and dark reddish brown. Color change is not related to lithological or compositional change. Tuffaceous silty clay layers are partially intercalated. Thin beds of calcareous silt with clay and alternating laminae of silt and clay are observed in Section 1 (38.5-40.5 cm). A thin ash layer is observed in Section 2 (54-58 cm). Faults with indeterminate and normal offset occur throughout core.



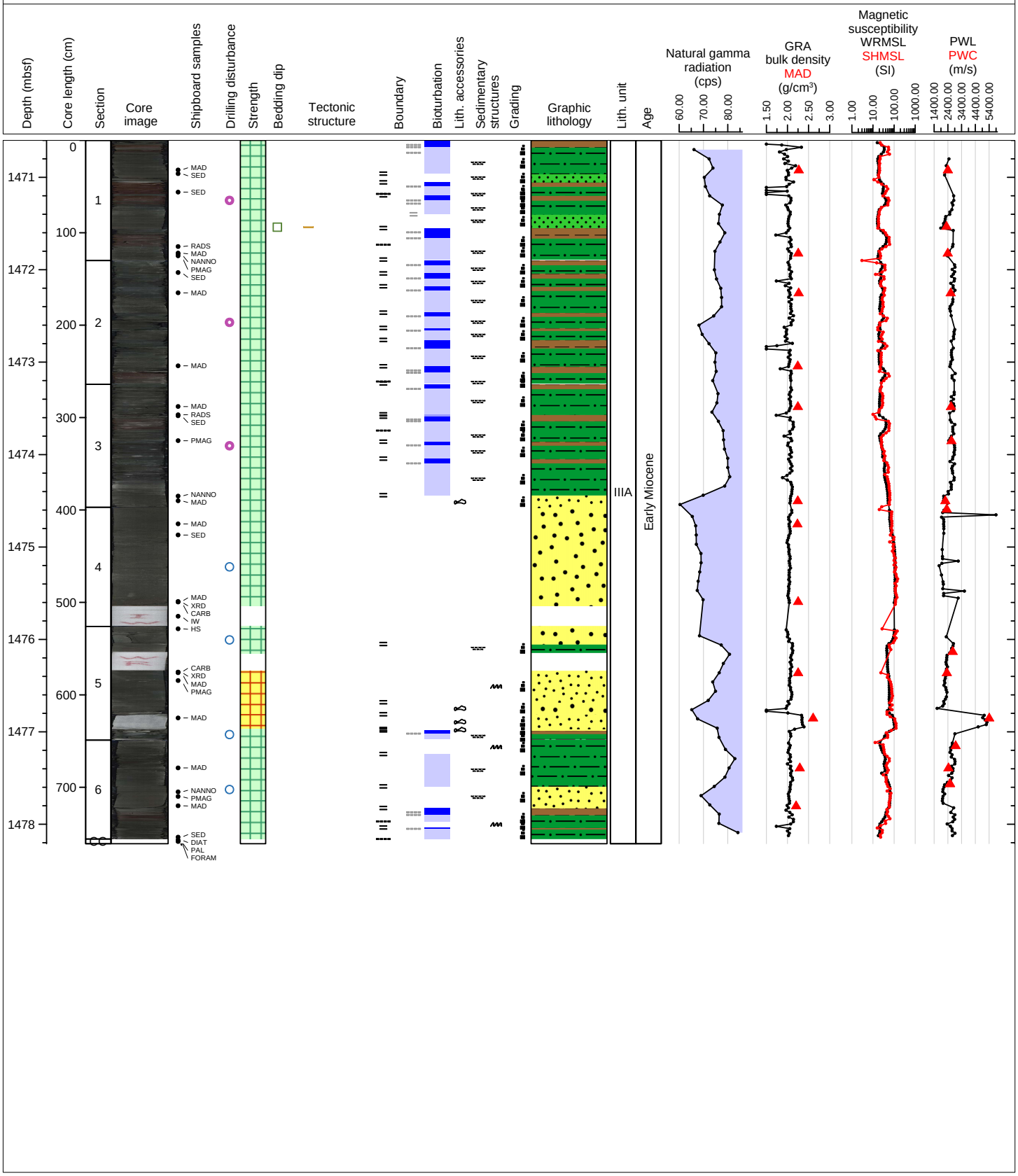
Hole 362-U1481A Core 35R, Interval 1460.9-1470.43 m (CSF-A)

The core contains alternating (1) thin to medium beds of very dark gray normally graded silty clay with convolute and planar lamination as well as bioturbation, dominated by Nereites, increasing upwards in beds, (2) completely bioturbated, very thin to thin beds of structureless greenish black clay with silt and agglutinated foraminifers. Both lithologies can have a reddish brown color, likely related to in situ alteration. Sections 2 (103 cm) and 5 (74 cm) contain altered ash layers (?). The core experience clay extension. Some sections grows by up to 2 cm. Minor normal faults and a shear zone continue in this core.



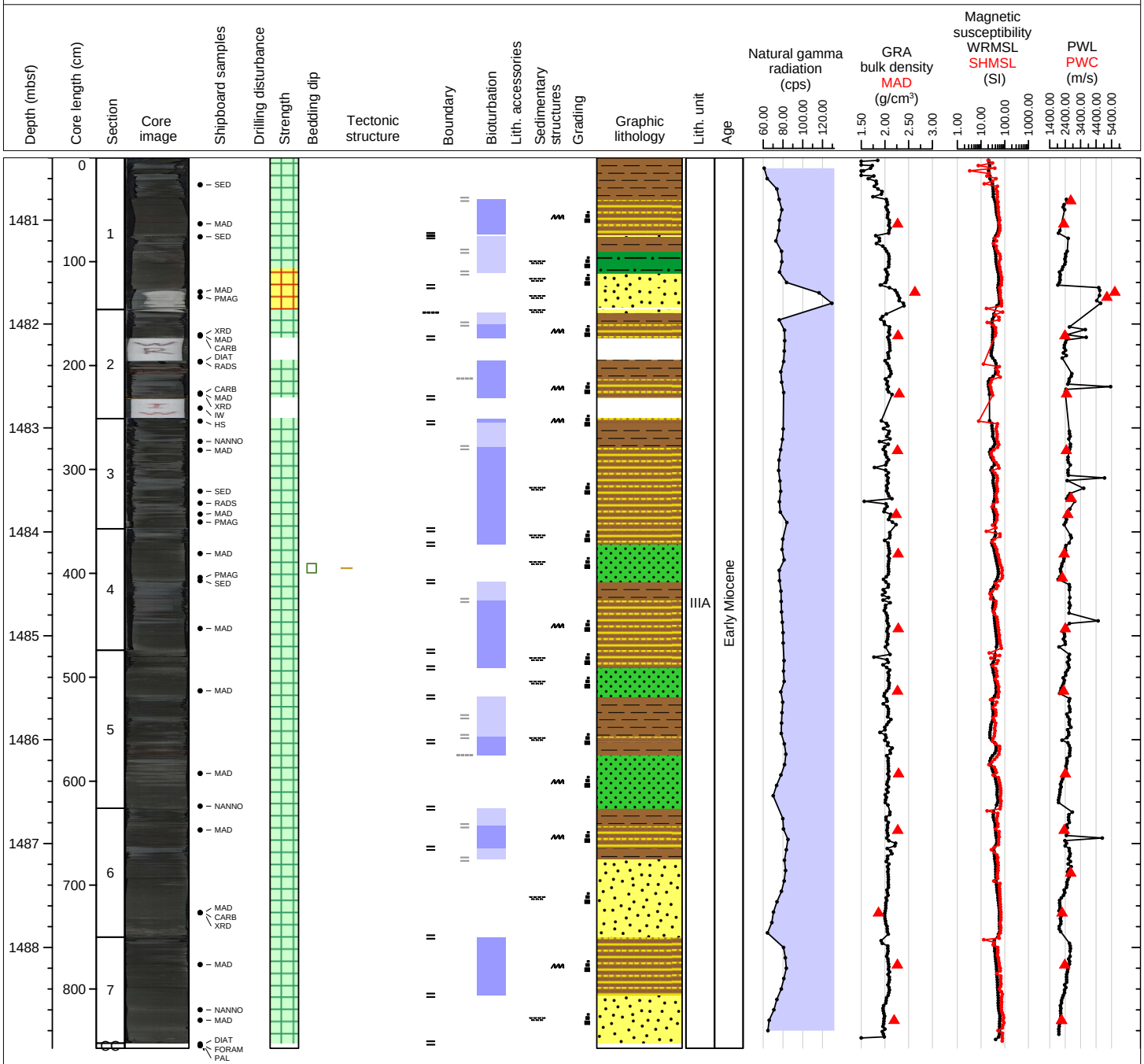
Hole 362-U1481A Core 36R, Interval 1470.6-1478.21 m (CSF-A)

The core shows alternating: (1) thin to medium beds of very dark gray, normally-graded silty clay with convolute- and planar-lamination; bioturbation is dominated by Nereites, increasing upwards in beds, and (2) completely bioturbated, very thin to thin beds of structureless greenish black clay with silt and agglutinated foraminifers. Both lithologies can have a reddish-brown color, likely related to in situ alteration. In sections 4 to 6, the core shows three medium- to thick-bedded, very fine- to fine-grained sand that contain plant fragments and rip up clast. One carbonate-cemented sandstone is observed in Section 5, 96-112 cm. Some normally-graded silty-clay beds are coarser than usual with thin planar-laminated beds at their base.



Hole 362-U1481A Core 37R, Interval 1480.4-1488.97 m (CSF-A)

The core is composed of: (1) very thin to thin beds of structureless mottled black (partially greenish gray or reddish) clay with agglutinated forams; (2) convolute-laminated (partially planar laminated) alternations of silt and clay laminae, and (3) normally-graded, very fine-grained sand with planar (partially convolute) lamination. Carbonate-cemented sandstone is intercalated in Section 1, 124-144 cm and Section 2, 0-3 cm.



Hole 362-U1481A Core 38R, Interval 1490.2-1498.72 m (CSF-A)

The core is composed of (1) very thin to thin beds of structureless mottled black (partially greenish gray or dusky reddish) clay with agglutinated forams, (2) convolute laminated (partially planar laminated) alternations of silt and clay laminae, (3) medium beds of normally graded silt with planar (partially convolute) lamination. Pyrite nodules are observed in Section 3, 45-45.5 cm, Section 4, 51 cm, and Section 5, 106.5 cm. Minor normal faults and a shear zone with indeterminate offset are observed in the core.