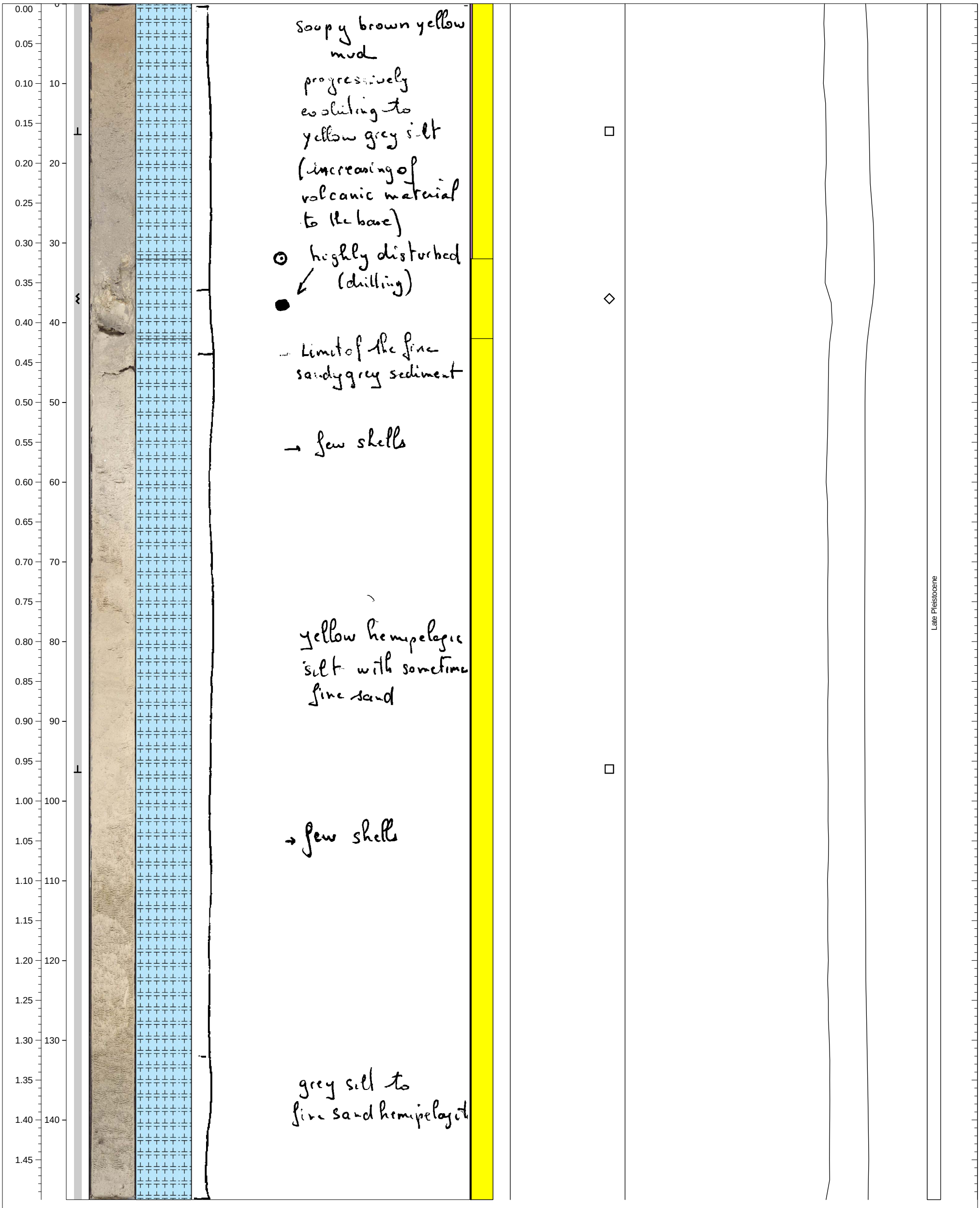
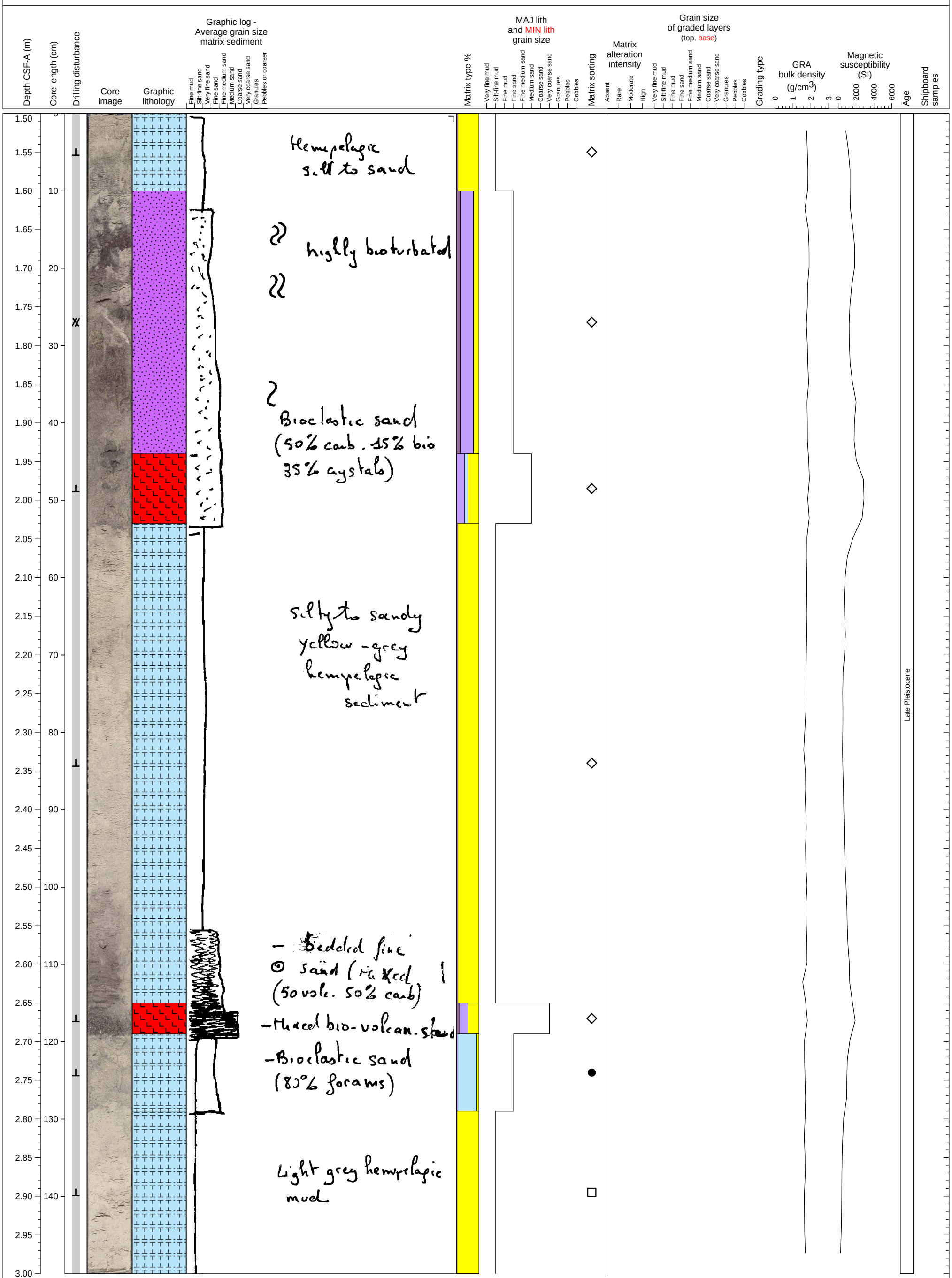
Hole 340-U1396C-1H Section 1, Top of Section: 0.0 CSF-A (m)

Hemipelagic sediment, with slightly higher proportion of lava grains towards top.



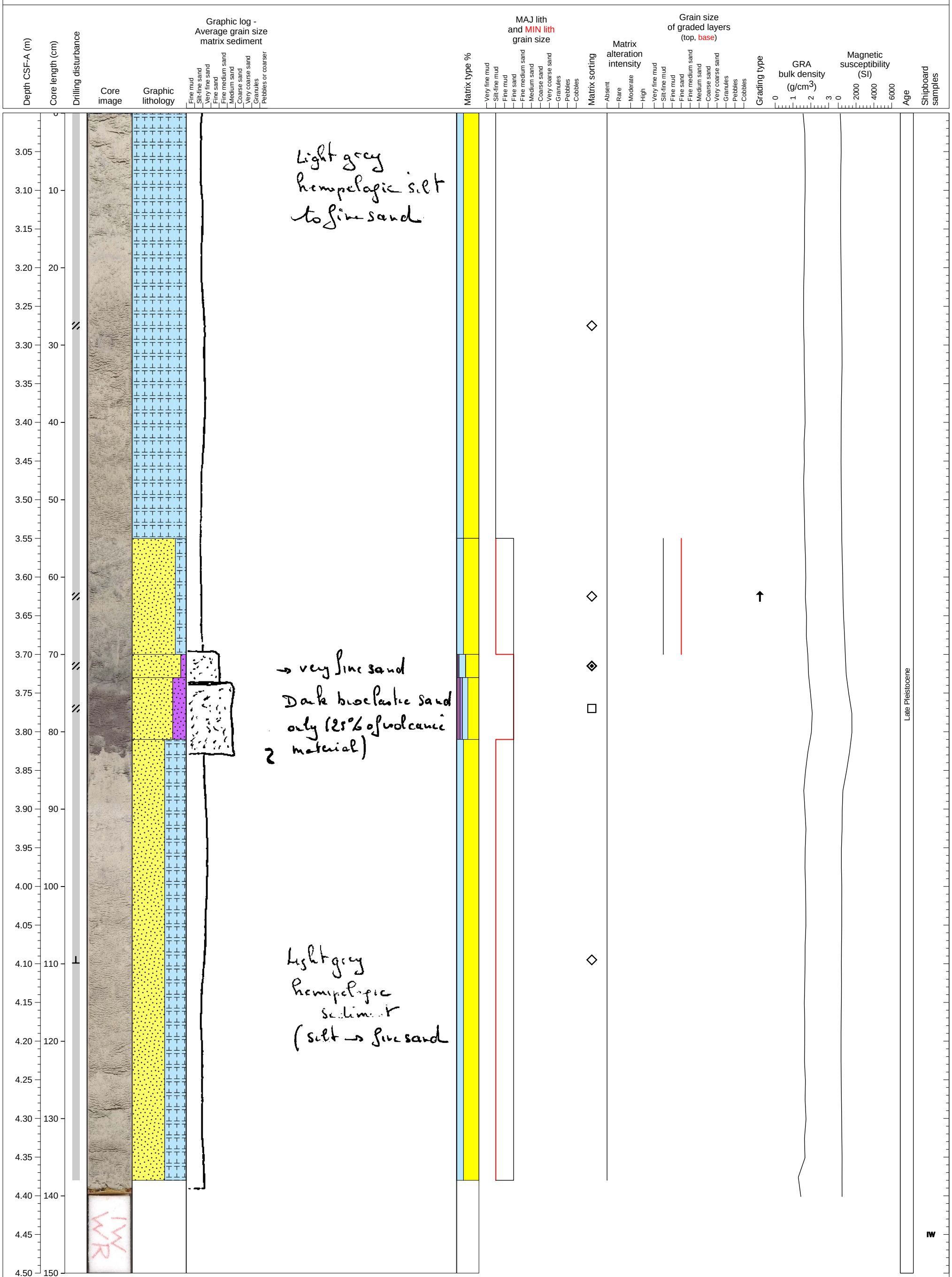
Hole 340-U1396C-1H Section 2, Top of Section: 1.5 CSF-A (m)

Predominantly hemipelagic sediments with two ash layers and volcaniclastic sand. Also, a layer containing 85% forams.



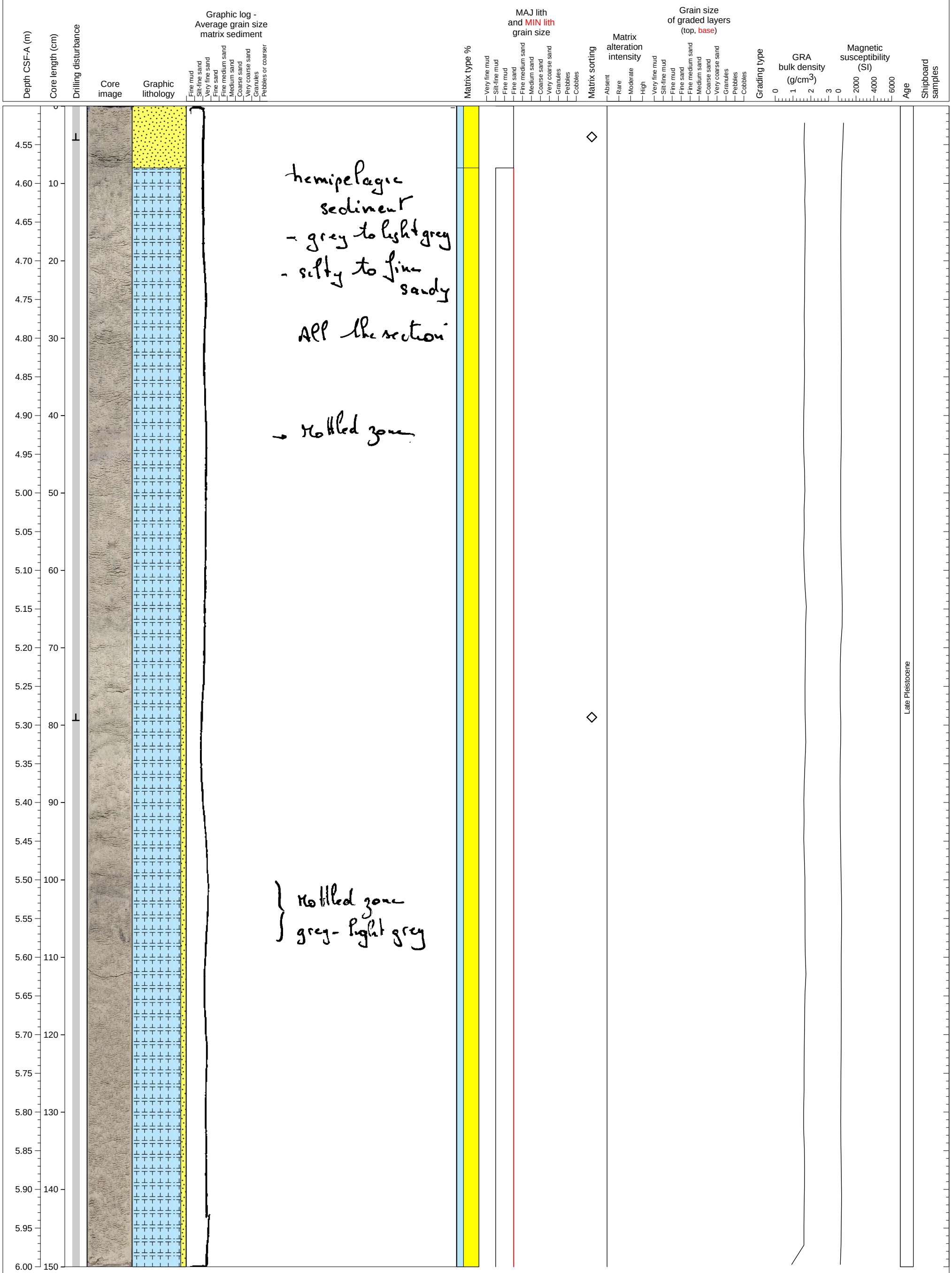
Hole 340-U1396C-1H Section 3, Top of Section: 3.0 CSF-A (m)

Mottled hemipelagic fine sediments with intercalated layers of mixture of bioclastic and volcaniclastic materials



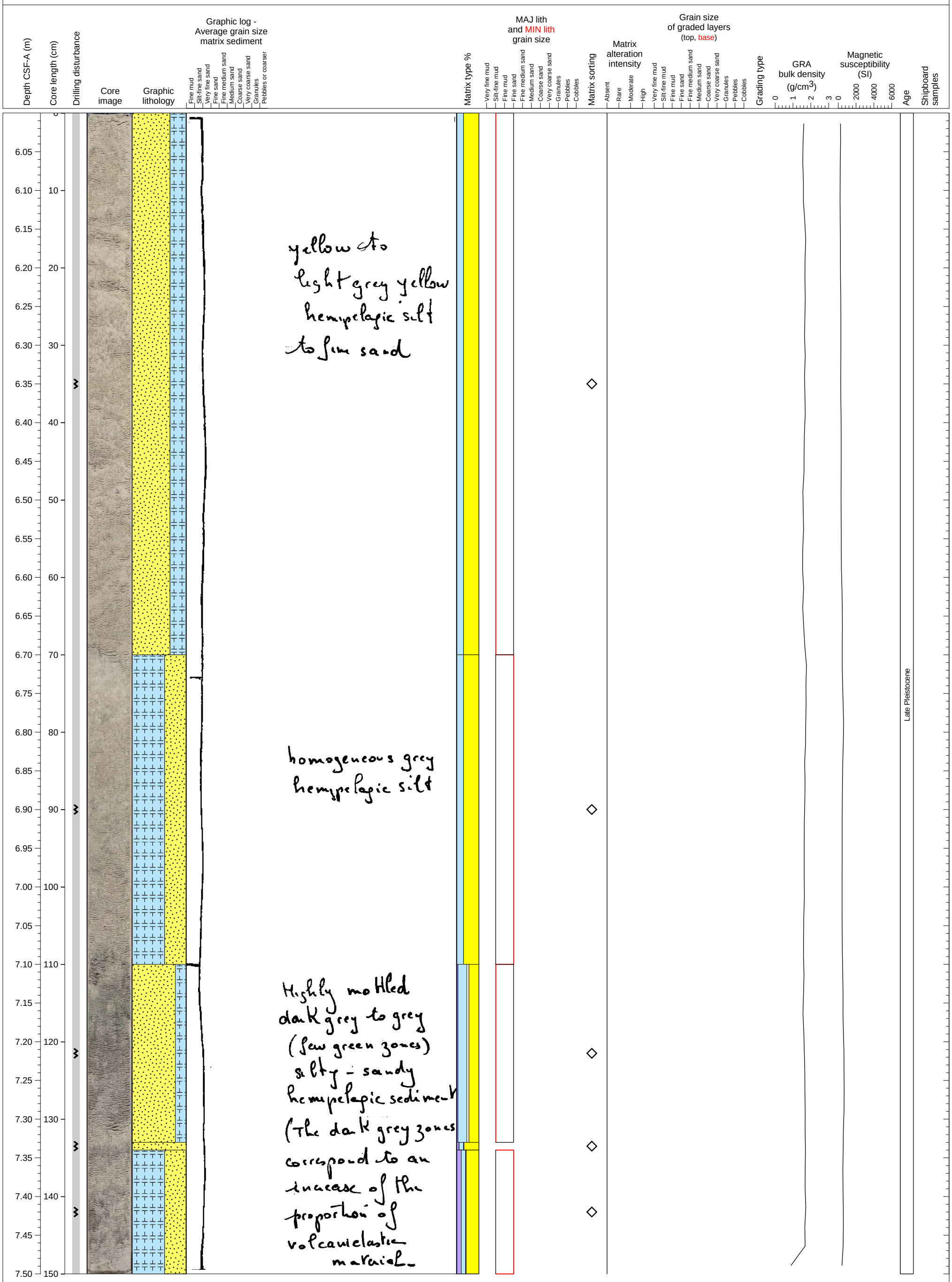
Hole 340-U1396C-1H Section 4, Top of Section: 4.5 CSF-A (m)

Mottled hemipelagic sediments with very rare pumiceous clasts



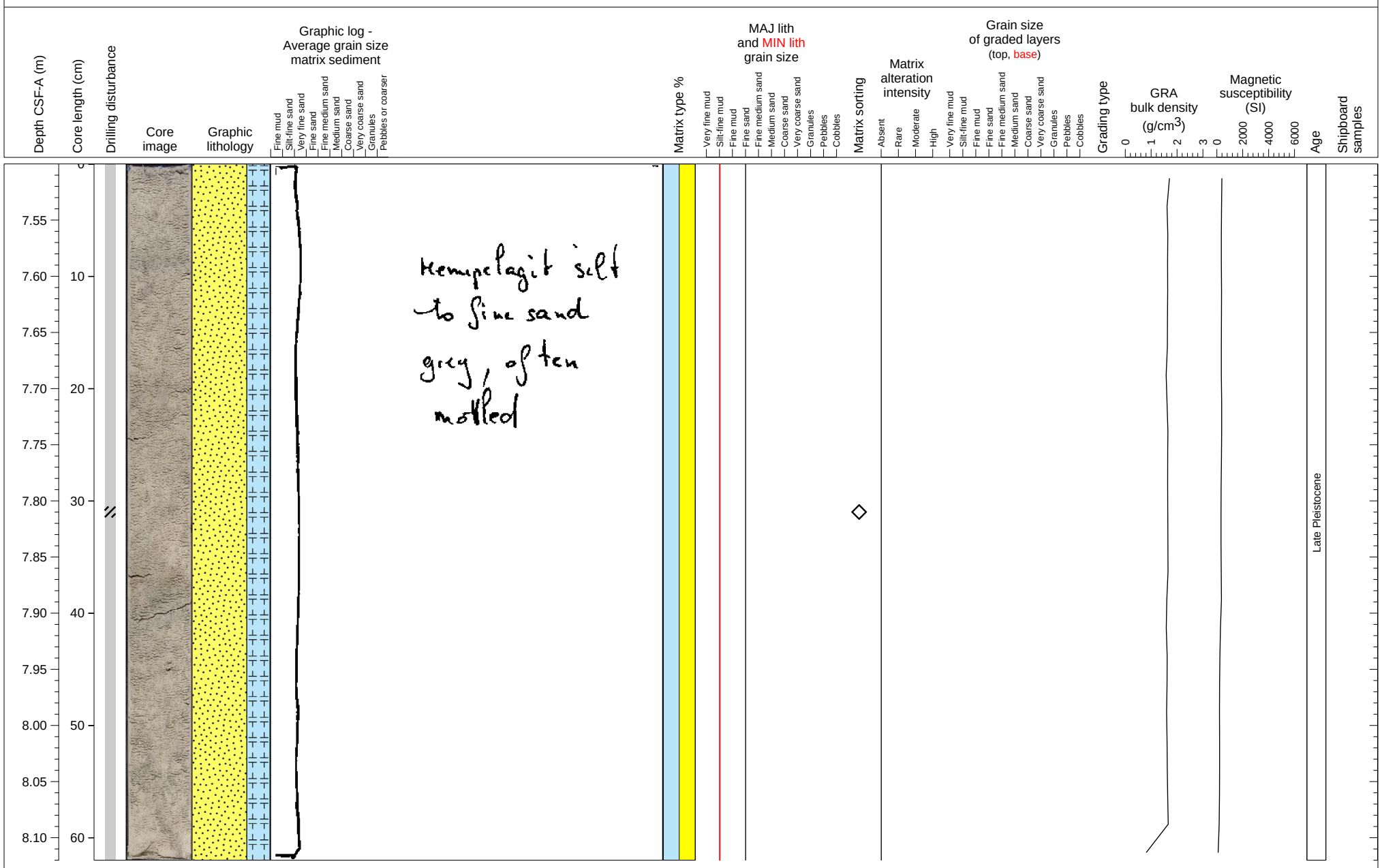
Hole 340-U1396C-1H Section 5, Top of Section: 6.0 CSF-A (m)

Hemipelagic fines.



Hole 340-U1396C-1H Section 6, Top of Section: 7.5 CSF-A (m)

Mottled hemipelagic sediments with moderately bioturbated.

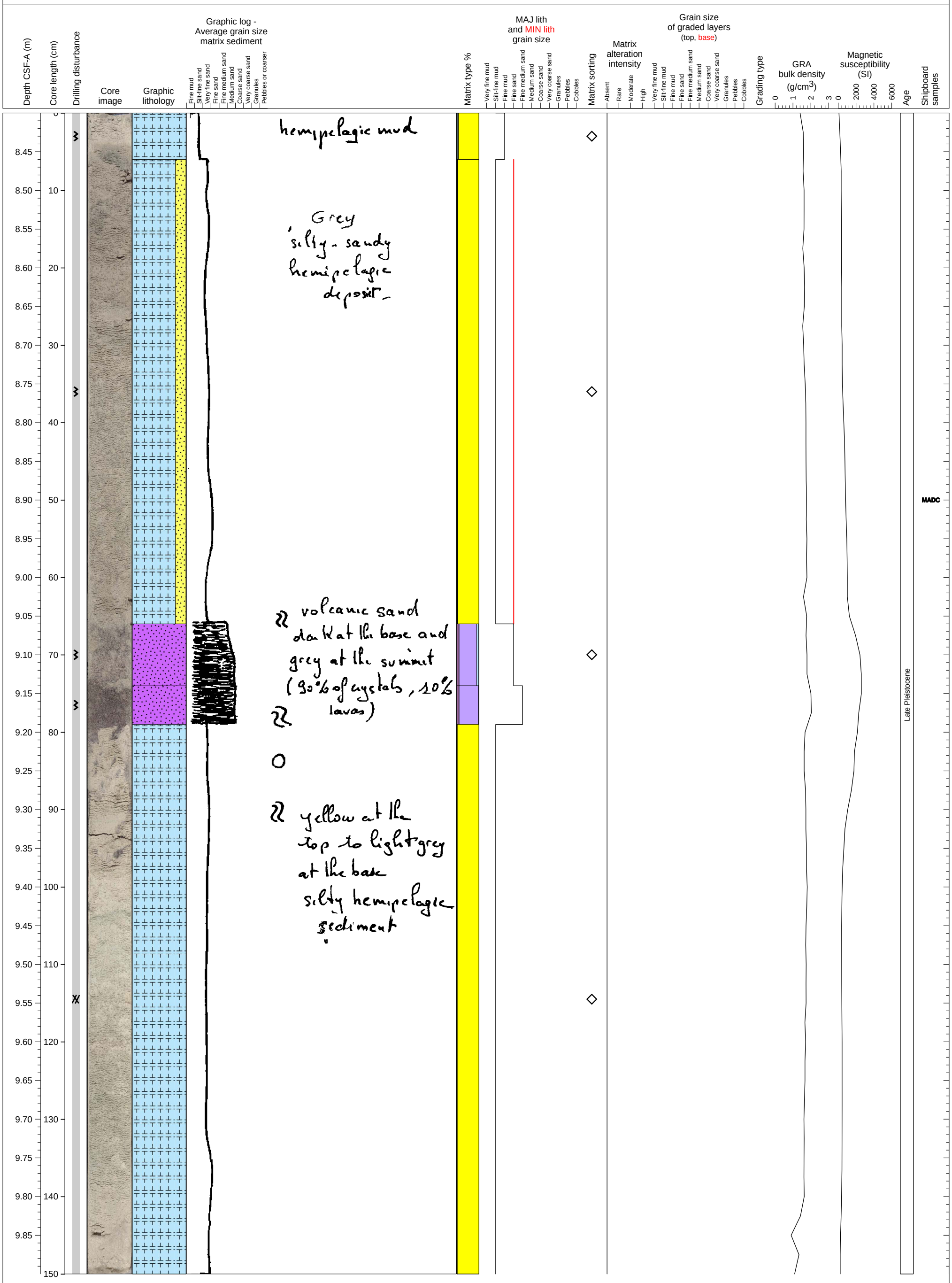


Hole 340-U1396C-1H Section CC, Top of Section: 8.12 CSF-A (m)

Hemipelagic sediment.

Hole 340-U1396C-2H Section 1, Top of Section: 8.4 CSF-A (m)

Hemipelagic fines with 1 volcaniclasic sand bed



Hole 340-U1396C-2H Section 2, Top of Section: 9.9 CSF-A (m)

SIlty and sandy hemipelagice sediments, with a single, coarse-grained ash fall.

Depth CSF-A (m)

Core length (cm)

Drilling disturbance

Core image

Graphic lithology

Graphic log - Average grain size matrix sediment
Fine mud
Silt-fine sand
Very fine sand
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles or coarser

Matrix type %

MAJ lith and MIN lith grain size
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles

Matrix sorting

Matrix alteration intensity
Absent
Rare
Moderate
High

Grain size of graded layers (top, base)
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles

Grading type

GRA bulk density (g/cm^3)
0
1
2
3

Magnetic susceptibility (SI)
0
2000
4000
6000

Age

Shipboard samples

Light grey - yellow hemipelagic silt

Nomally graded mixed bioclastic volcaniclastic sandy layer.

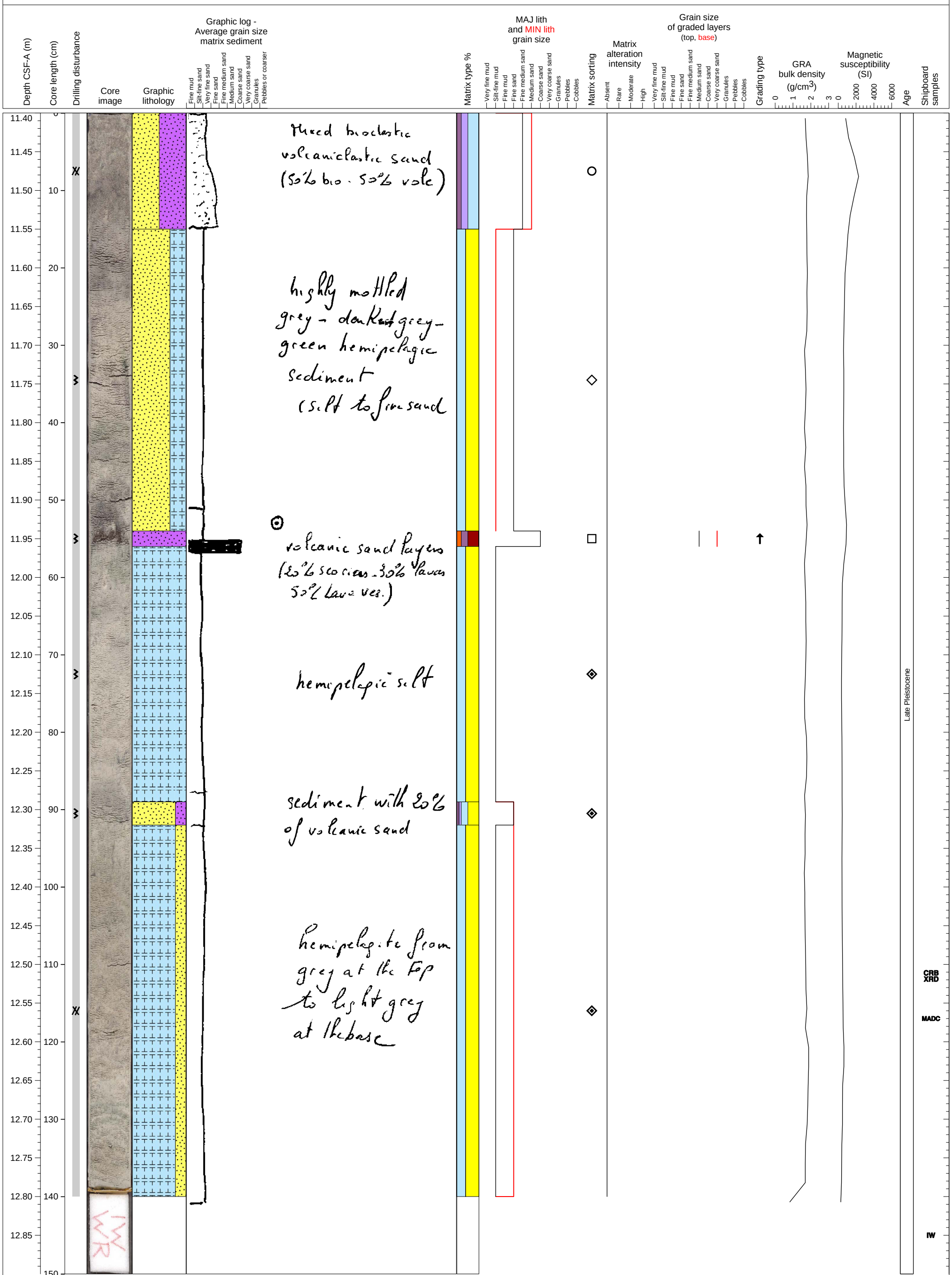
Mottled grey to light grey hemipelagic mud

Mottled grey to light grey - green hemipelagic silt

Late Pleistocene

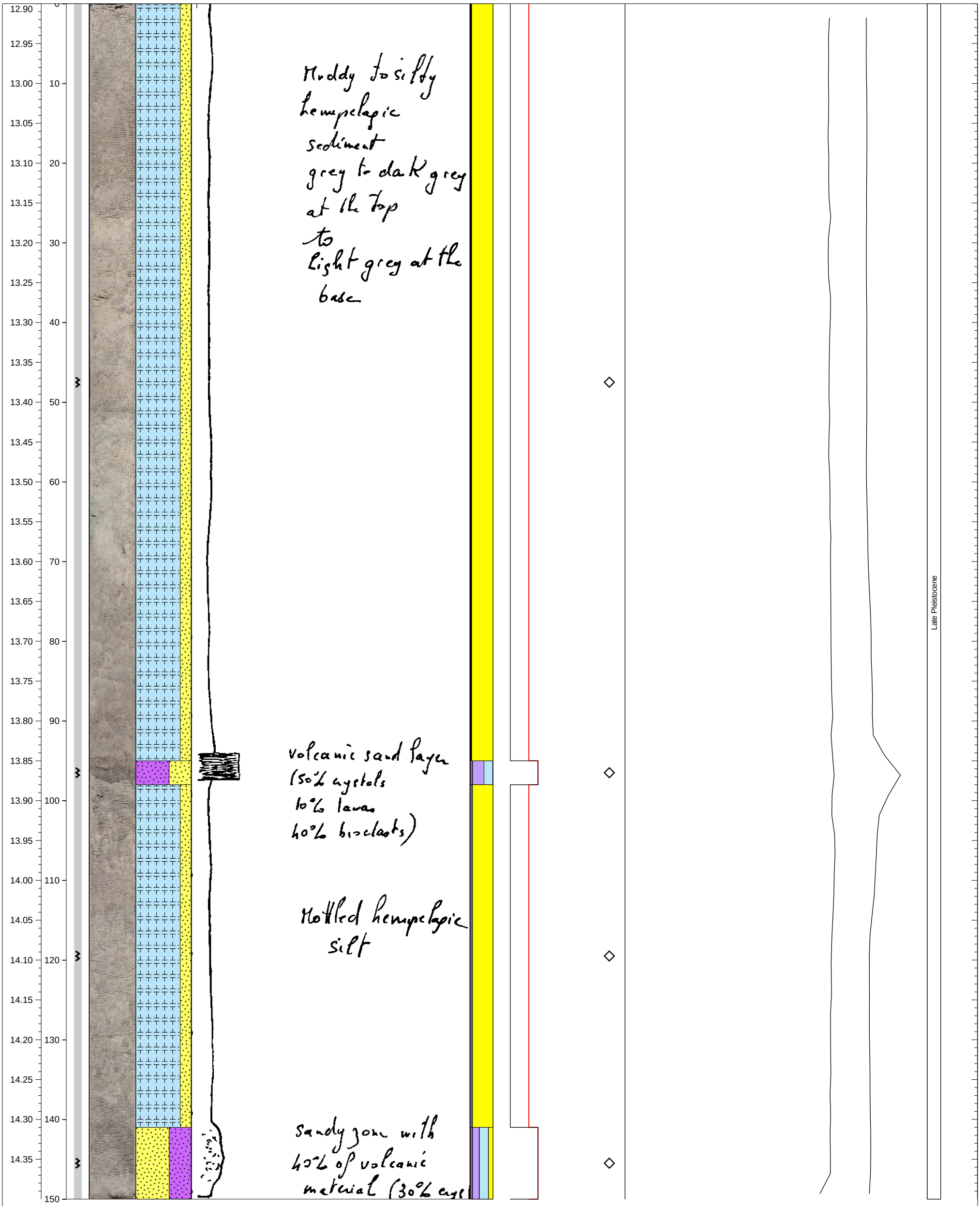
Hole 340-U1396C-2H Section 3, Top of Section: 11.4 CSF-A (m)

Mottled bioturbated hemipelagic sediments with intercalation of volcanic ash layer and layers of the mixture of volcaniclastic and bioclastic materials



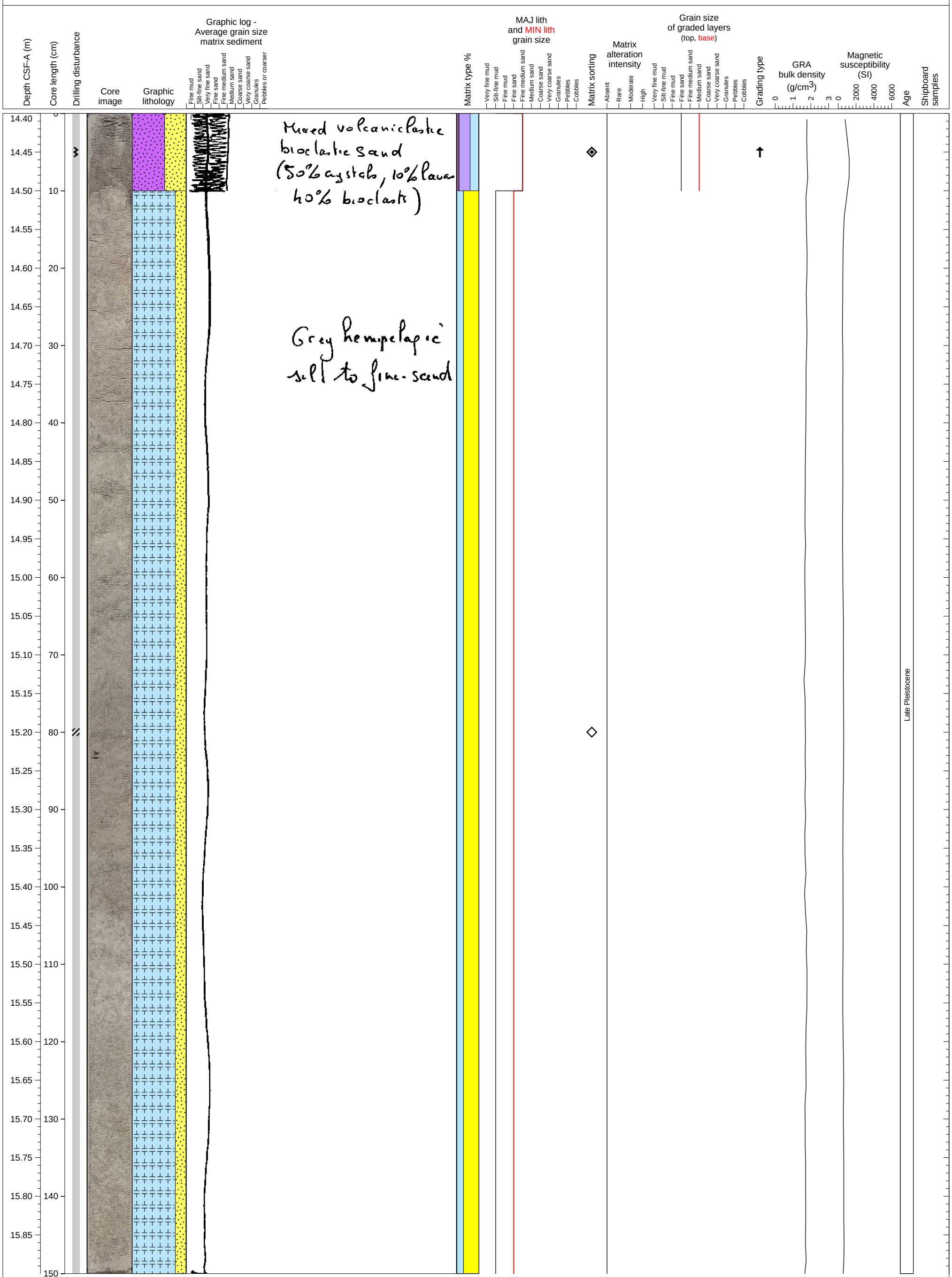
Hole 340-U1396C-2H Section 4, Top of Section: 12.9 CSF-A (m)

Hemipelagic sediments with 2 mixed (volcaniclastic/bioclastic) beds



Hole 340-U1396C-2H Section 5, Top of Section: 14.4 CSF-A (m)

Hemipelagic sediment with mixed layer of volcaniclastic and bioclastic materials



Hole 340-U1396C-2H Section 6, Top of Section: 15.9 CSF-A (m)

Mottled hemipelagic sediments

Depth CSF-A (m)
Core length (cm)
Drilling disturbance
Core image
Graphic lithology
Graphic log - Average grain size matrix sediment
Fine mud
Silt-fine sand
Very fine sand
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles or coarser
Matrix type %
MAJ lith and MIN lith grain size
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles
Matrix sorting
Matrix alteration intensity
Absent
Rare
Moderate
High
Grain size of graded layers (top, base)
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles
Grading type
GRA bulk density (g/cm3)
Magnetic susceptibility (SI)
Age
Shipboard samples

Grey hemipelagic silt grey to light grey (all the section)

→ green zone

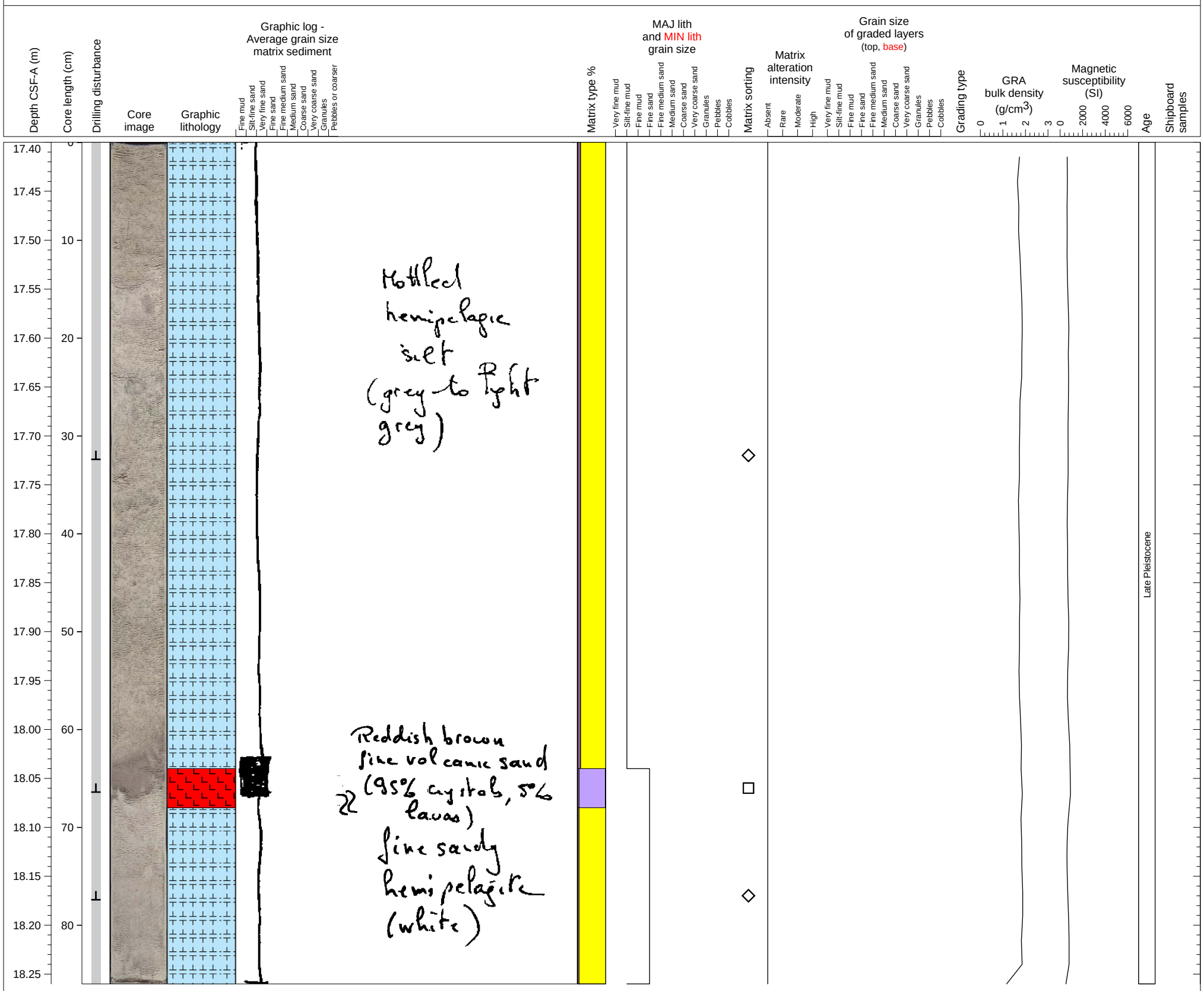
MADC

Late Pleistocene

IW

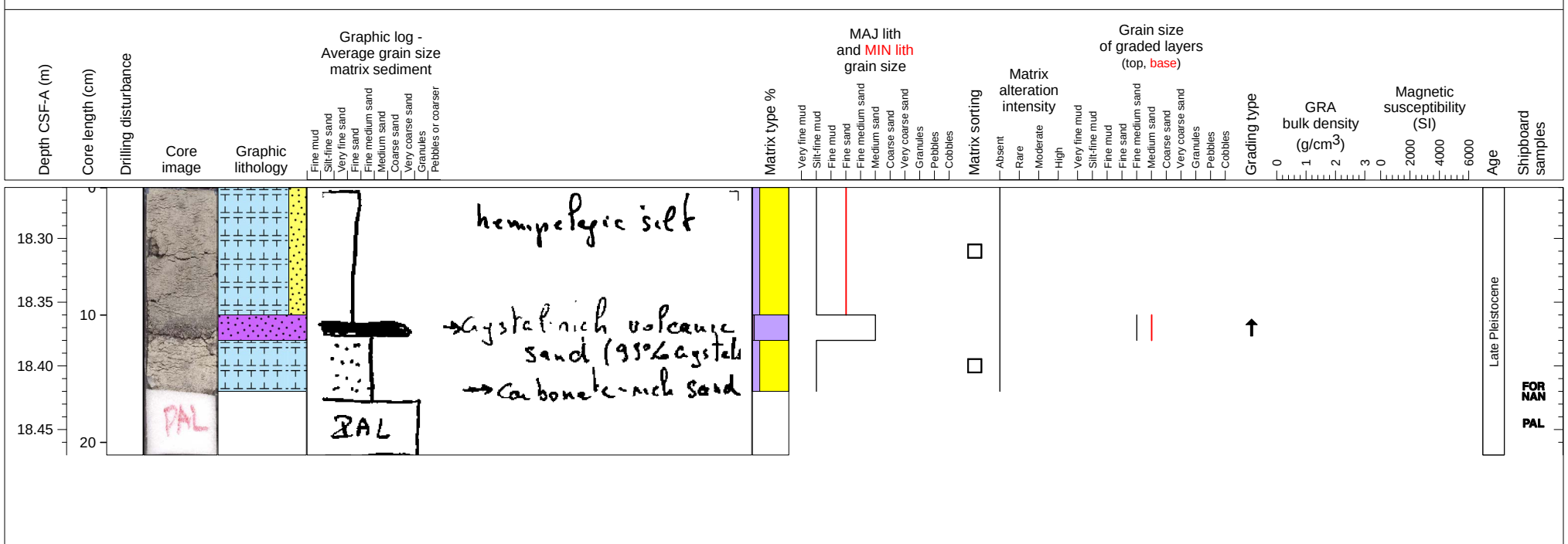
Hole 340-U1396C-2H Section 7, Top of Section: 17.4 CSF-A (m)

Silty to sandy hemipelagic sediment with a single, crystal-rich ash layer.



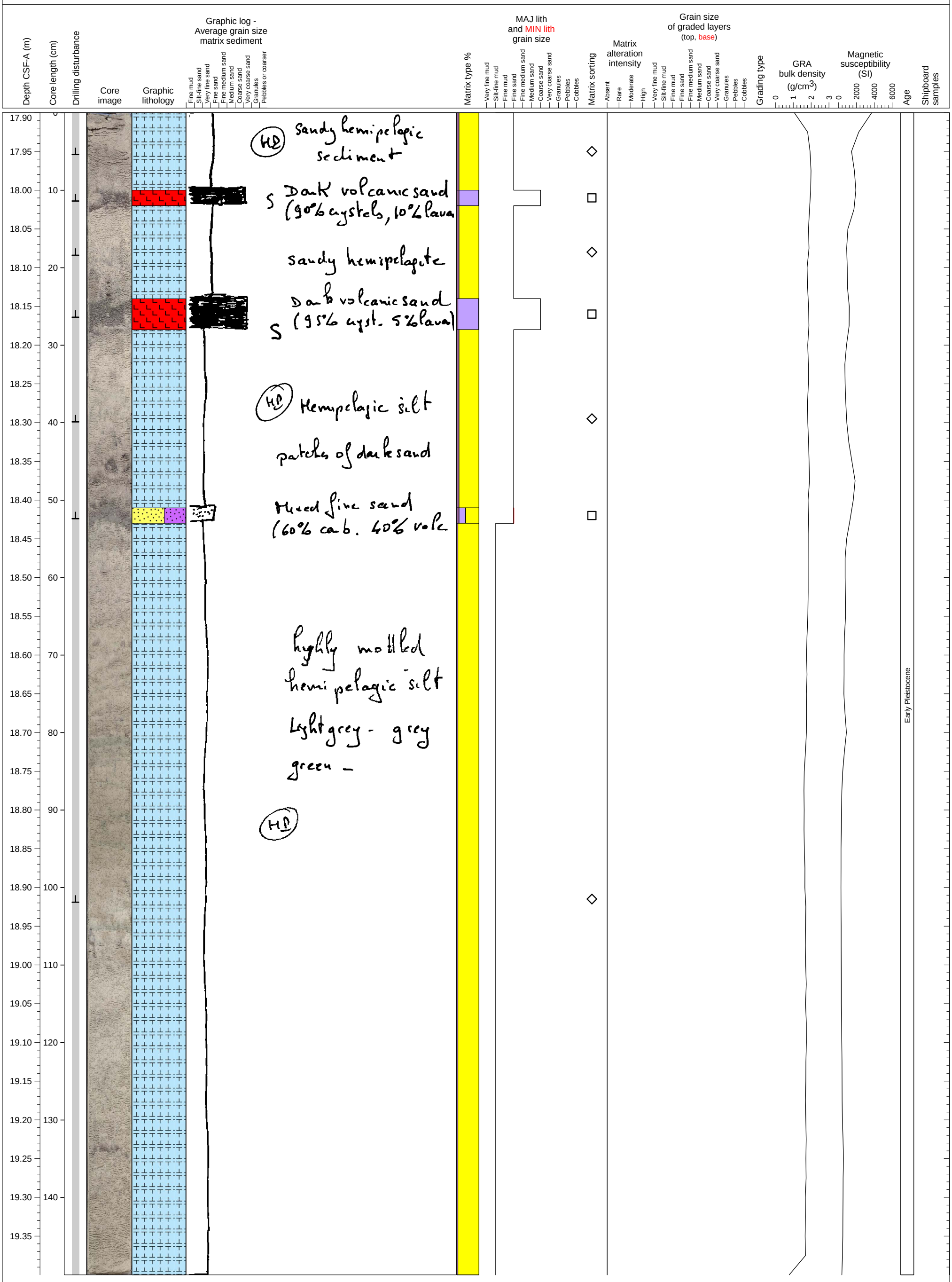
Hole 340-U1396C-2H Section CC, Top of Section: 18.26 CSF-A (m)

Hemipelagic fines with 1 ashfall layer



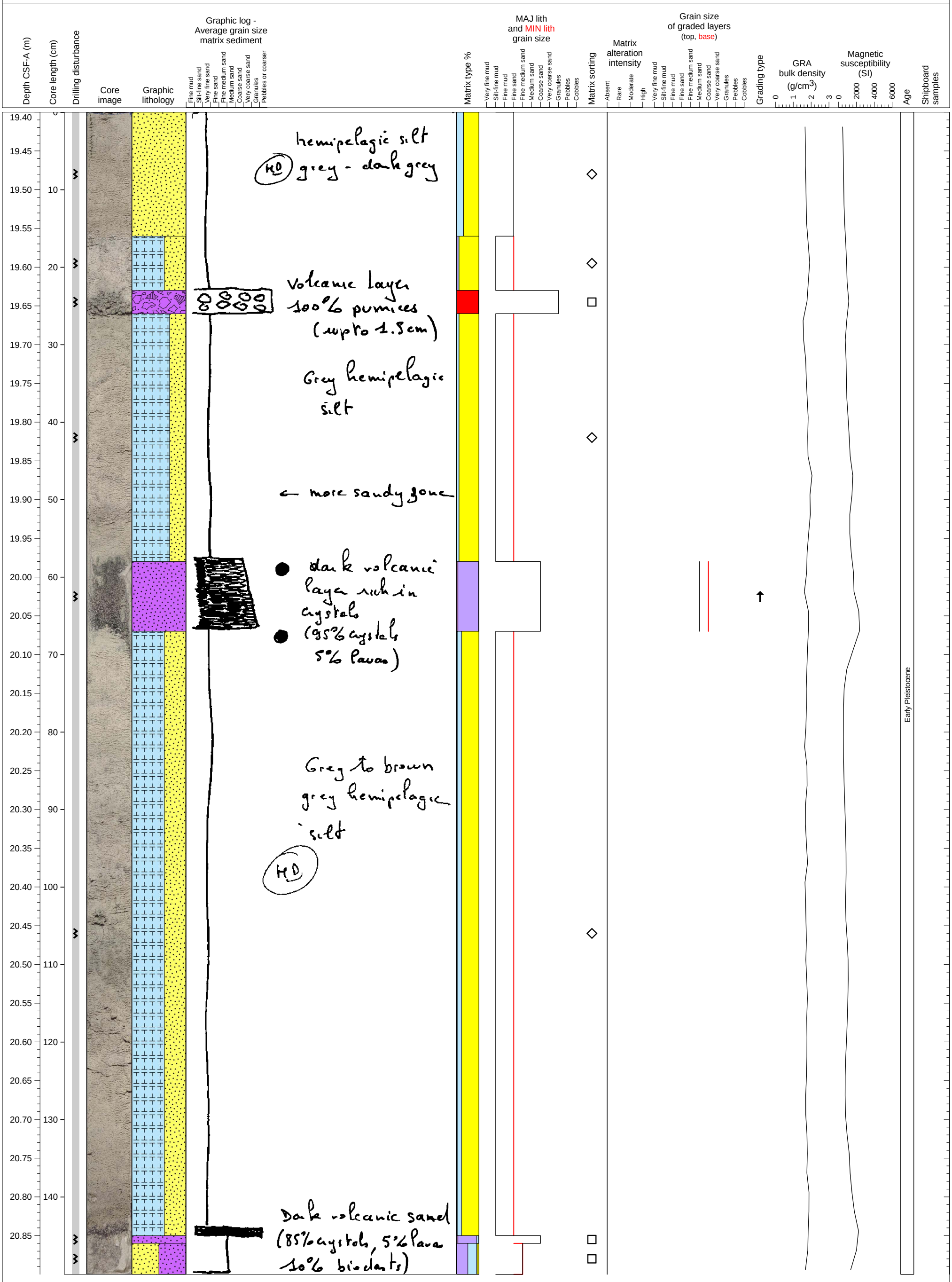
Hole 340-U1396C-3H Section 1, Top of Section: 17.9 CSF-A (m)

Sandy hemipelagce sediments with three crystal rich ash fall layers.



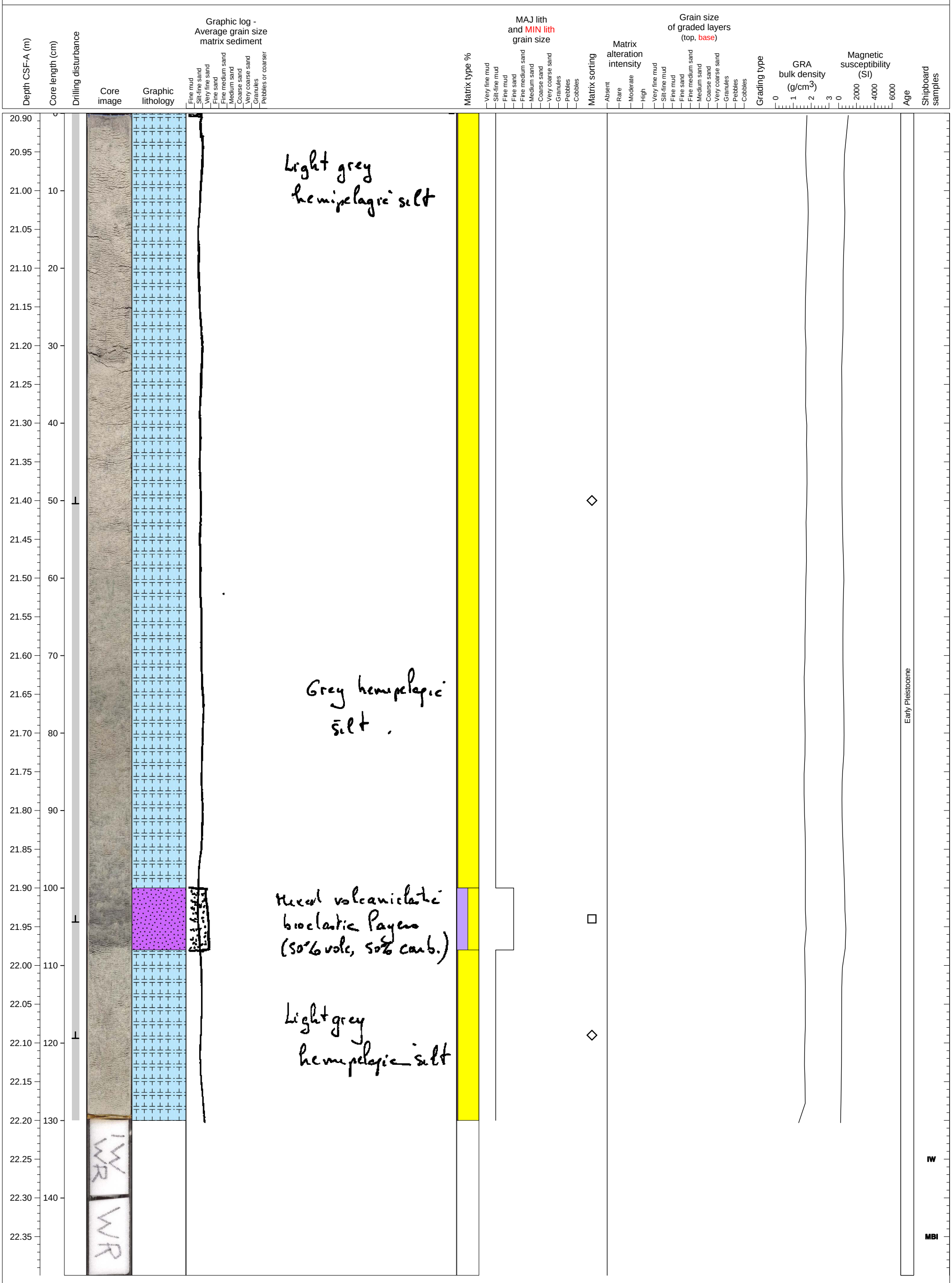
Hole 340-U1396C-3H Section 2, Top of Section: 19.4 CSF-A (m)

Hemipelagic sediments with 1 pumice fall layer and 2 ash fall (?) layers.



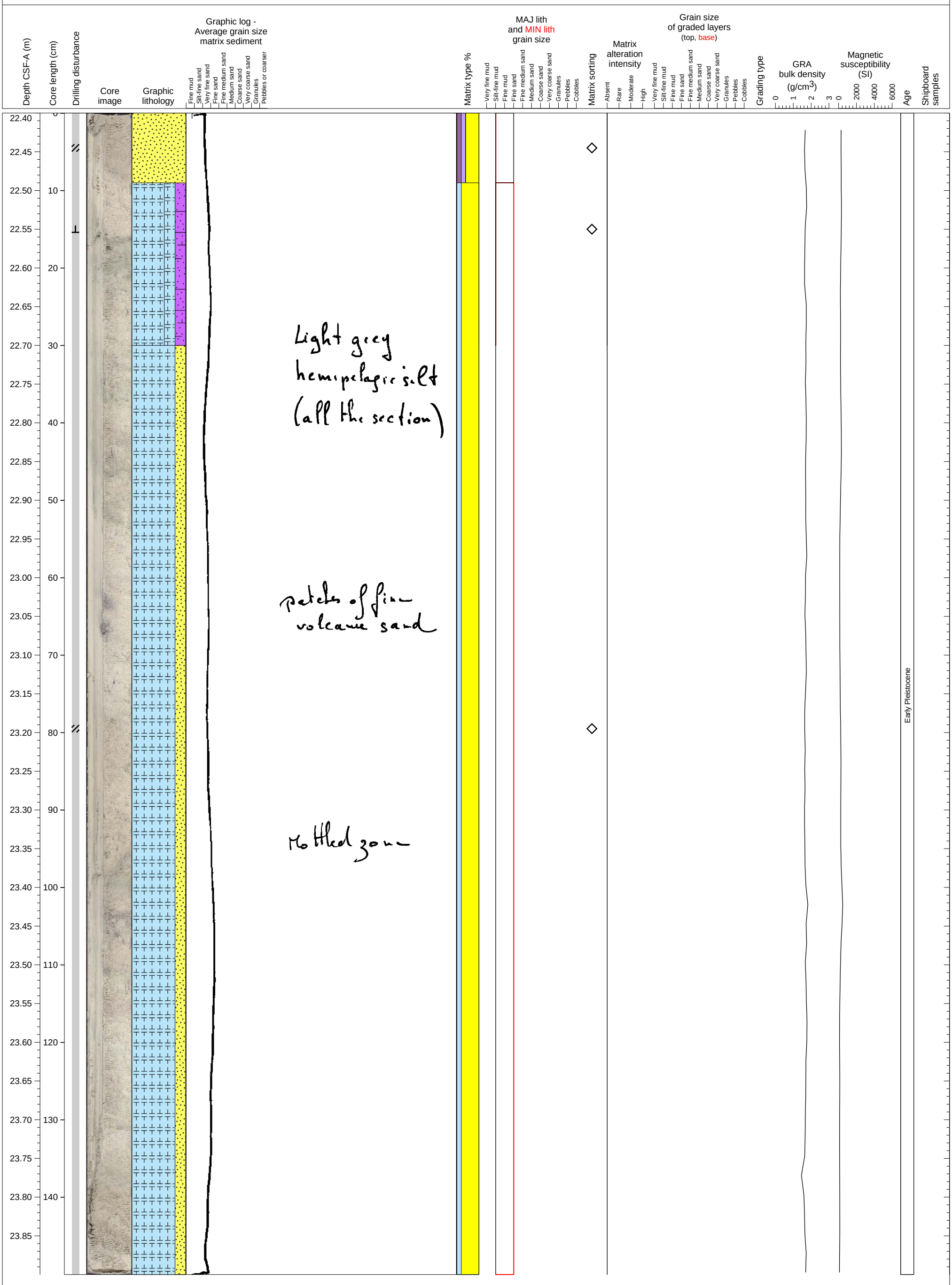
Hole 340-U1396C-3H Section 3, Top of Section: 20.9 CSF-A (m)

Silty hemipelagic sediments with a single, crystal rich ash layer.



Hole 340-U1396C-3H Section 4, Top of Section: 22.4 CSF-A (m)

Mottled hemipelagic sediments.



Hole 340-U1396C-3H Section 5, Top of Section: 23.9 CSF-A (m)

Silty hemipelagic sediment

Depth CSF-A (m)

Core length (cm)

Drilling disturbance

Core image

Graphic lithology

Graphic log - Average grain size matrix sediment
Fine mud
Silt-fine sand
Very fine sand
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles or coarser

Matrix type %

MAJ lith and MIN lith grain size
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles

Matrix sorting

Matrix alteration intensity
Absent
Rare
Moderate
High

Grain size of graded layers (top, base)
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles

Grading type

GRA bulk density (g/cm^3)
0
1
2
3

Magnetic susceptibility (SI)
0
2000
4000
6000

Age

Shipboard samples

23.90 – 0
23.95
24.00 – 10
24.05
24.10 – 20
24.15
24.20 – 30
24.25
24.30 – 40
24.35
24.40 – 50
24.45
24.50 – 60
24.55
24.60 – 70
24.65
24.70 – 80
24.75
24.80 – 90
24.85
24.90 – 100
24.95
25.00 – 110
25.05
25.10 – 120
25.15
25.20 – 130
25.25
25.30 – 140
25.35

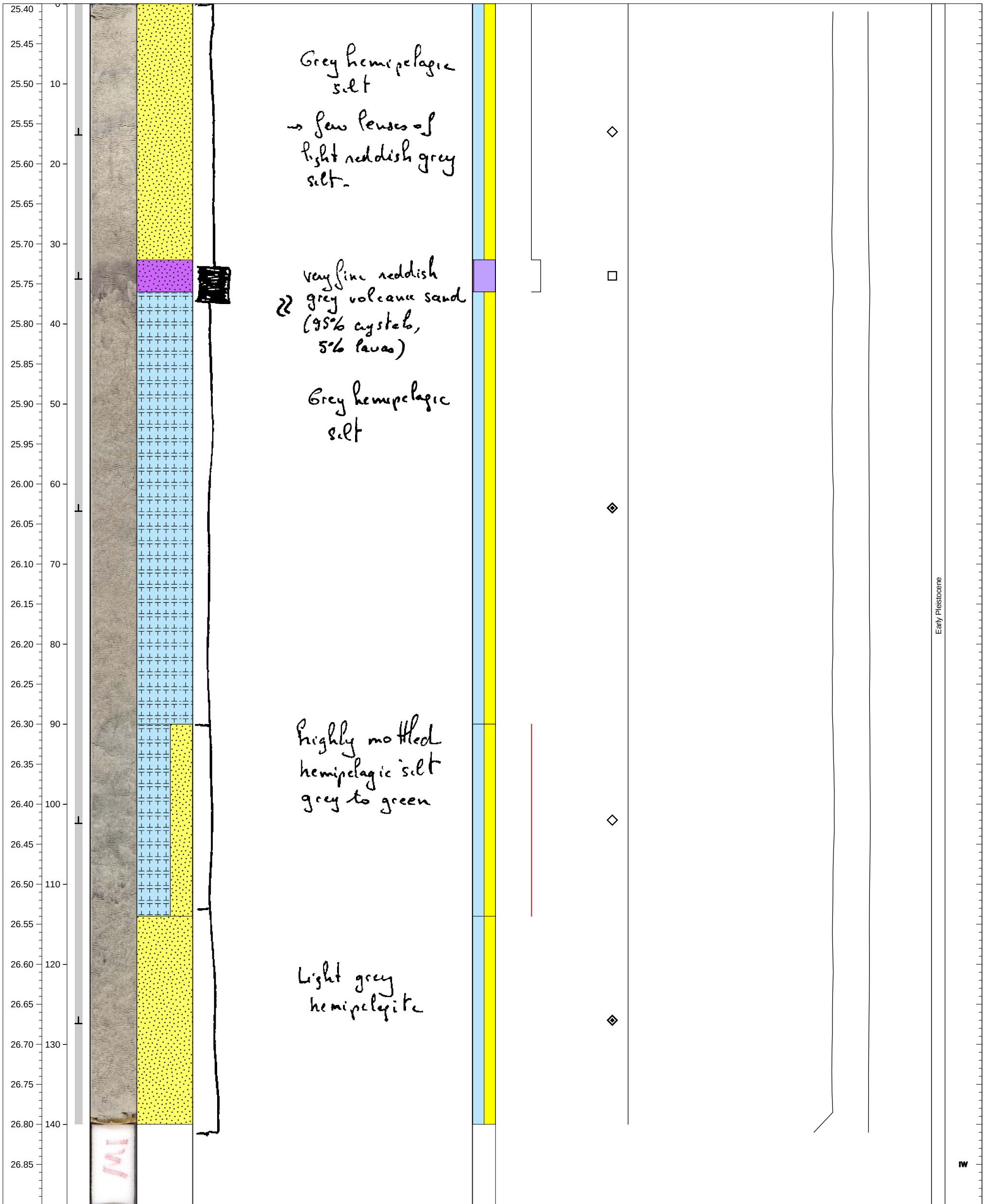
- Hemipelagic sediment all along the section
- grey to green (in some zones)
- silty with fine sand

HL

Early Pleistocene

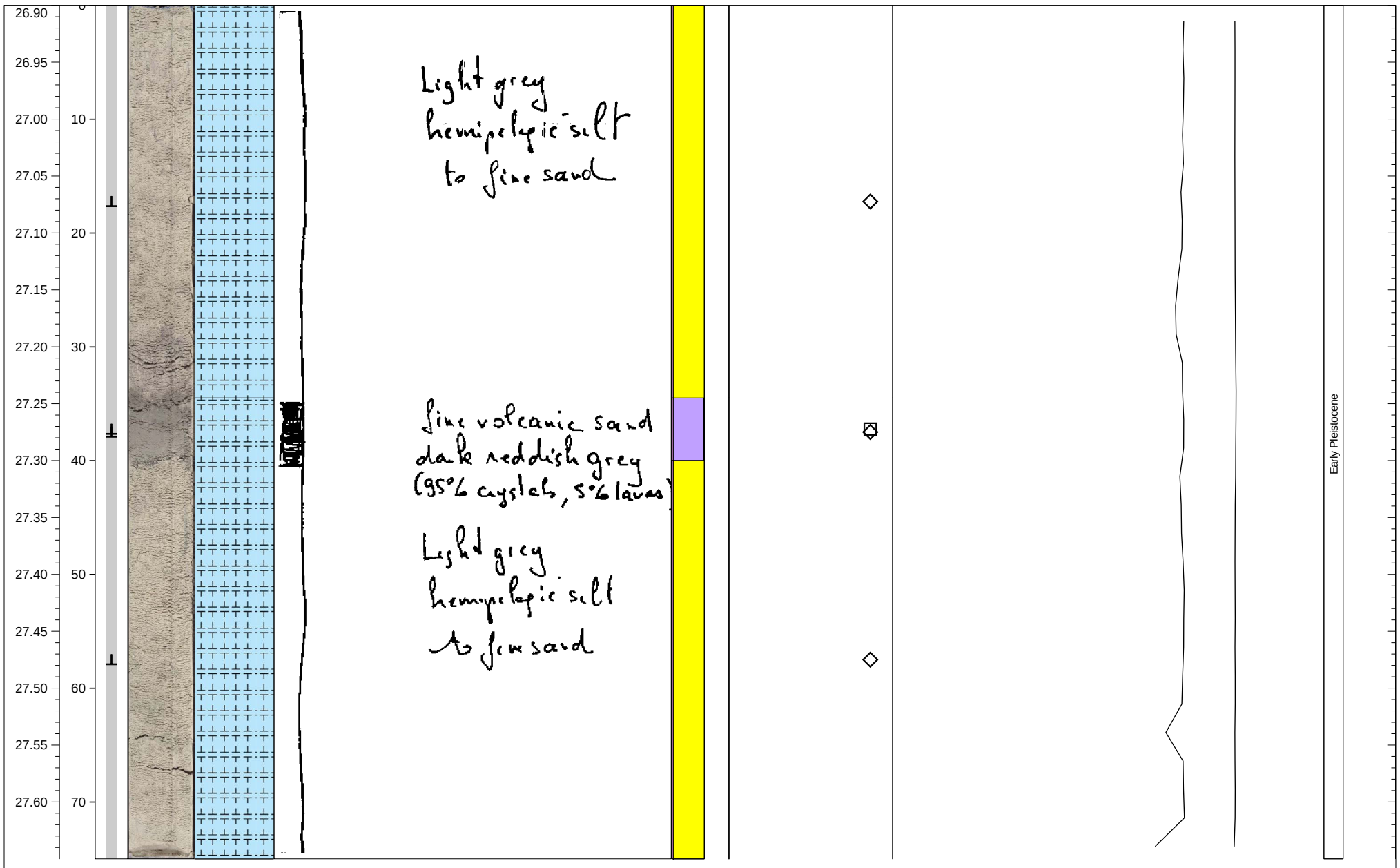
Hole 340-U1396C-3H Section 6, Top of Section: 25.4 CSF-A (m)

Fine grained hemipelagic sediments with intercalated 1 volcanic ash layer



Hole 340-U1396C-3H Section 7, Top of Section: 26.9 CSF-A (m)

Silty hemipelagic sediment with a thin ash fall.



Hole 340-U1396C-3H Section CC, Top of Section: 27.65 CSF-A (m)

Silty hemipelagic sediment.

Hole 340-U1396C-4H Section 1, Top of Section: 27.4 CSF-A (m)

Silty hemipelagic sediments with a patch of volcaniclastic sand - bioturbated tephra?

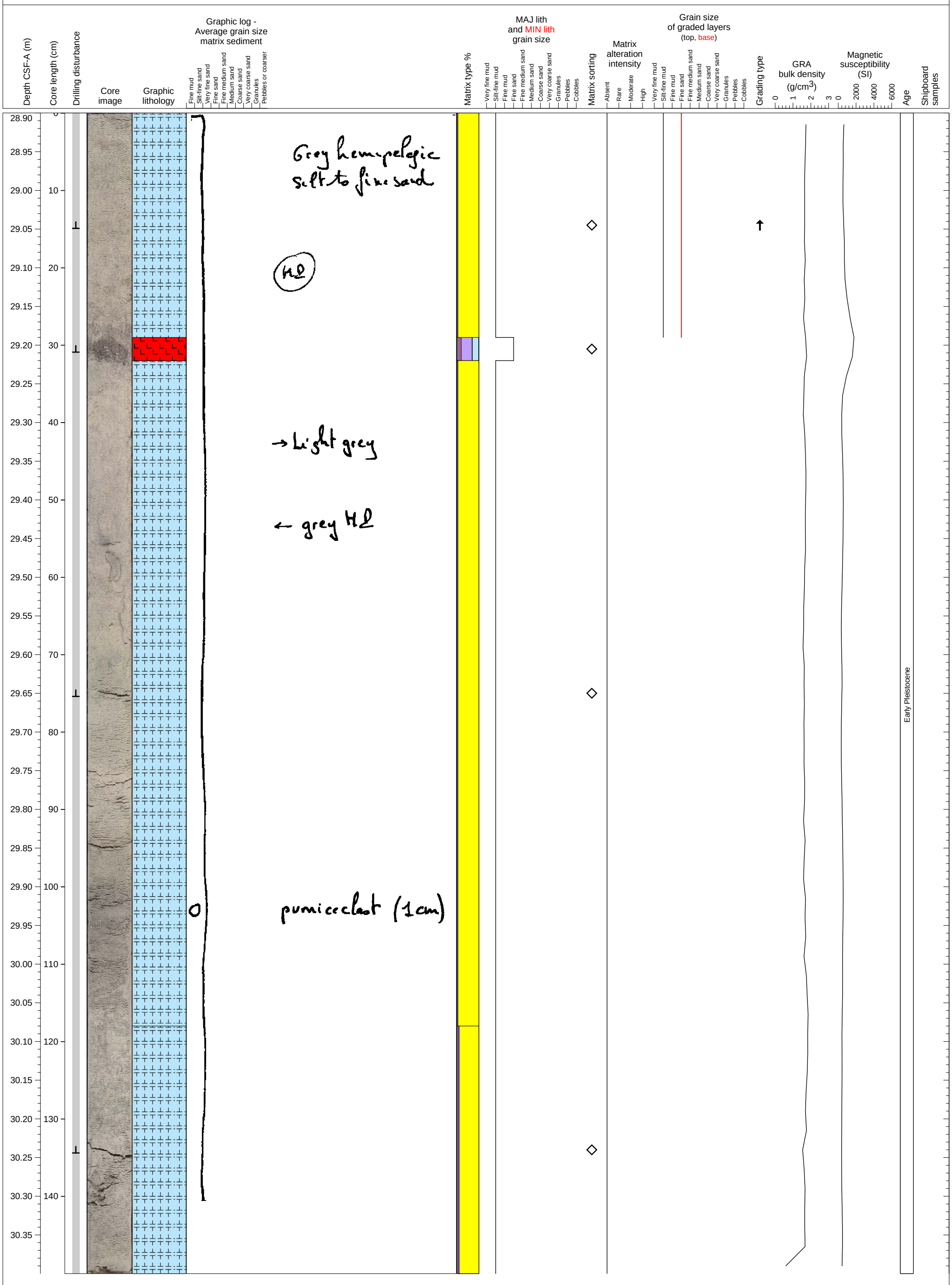
Depth CSF-A (m)
Core length (cm)
Drilling disturbance
Core image
Graphic lithology
Graphic log - Average grain size matrix sediment
Fine mud | Silt-fine sand | Very fine sand | Fine sand | Fine medium sand | Medium sand | Coarse sand | Very coarse sand | Granules | Pebbles or coarser
Matrix type %
MAJ lith and MIN lith grain size
Very fine mud | Silt-fine mud | Fine mud | Fine sand | Fine medium sand | Medium sand | Coarse sand | Very coarse sand | Granules | Pebbles | Cobbles
Matrix sorting
Matrix alteration intensity
Absent | Rare | Moderate | High
Grain size of graded layers (top, base)
Very fine mud | Silt-fine mud | Fine mud | Fine sand | Fine medium sand | Medium sand | Coarse sand | Very coarse sand | Granules | Pebbles | Cobbles
Grading type
GRA bulk density (g/cm^3)
0 | 1 | 2 | 3
Magnetic susceptibility (SI)
0 | 2000 | 4000 | 6000
Age
Shipboard samples

27.40 | 0
27.45
27.50 | 10
27.55
27.60 | 20
27.65
27.70 | 30
27.75
27.80 | 40
27.85
27.90 | 50
27.95
28.00 | 60
28.05
28.10 | 70
28.15
28.20 | 80
28.25
28.30 | 90
28.35
28.40 | 100
28.45
28.50 | 110
28.55
28.60 | 120
28.65
28.70 | 130
28.75
28.80 | 140
28.85

Grey to dark grey hemipelagic sediment
silt → fine sand
patch of sand
Grey hemipelagite
Patch of dark sand (70% crystals, 30% lavas) part of a tephra?
Early Pleistocene

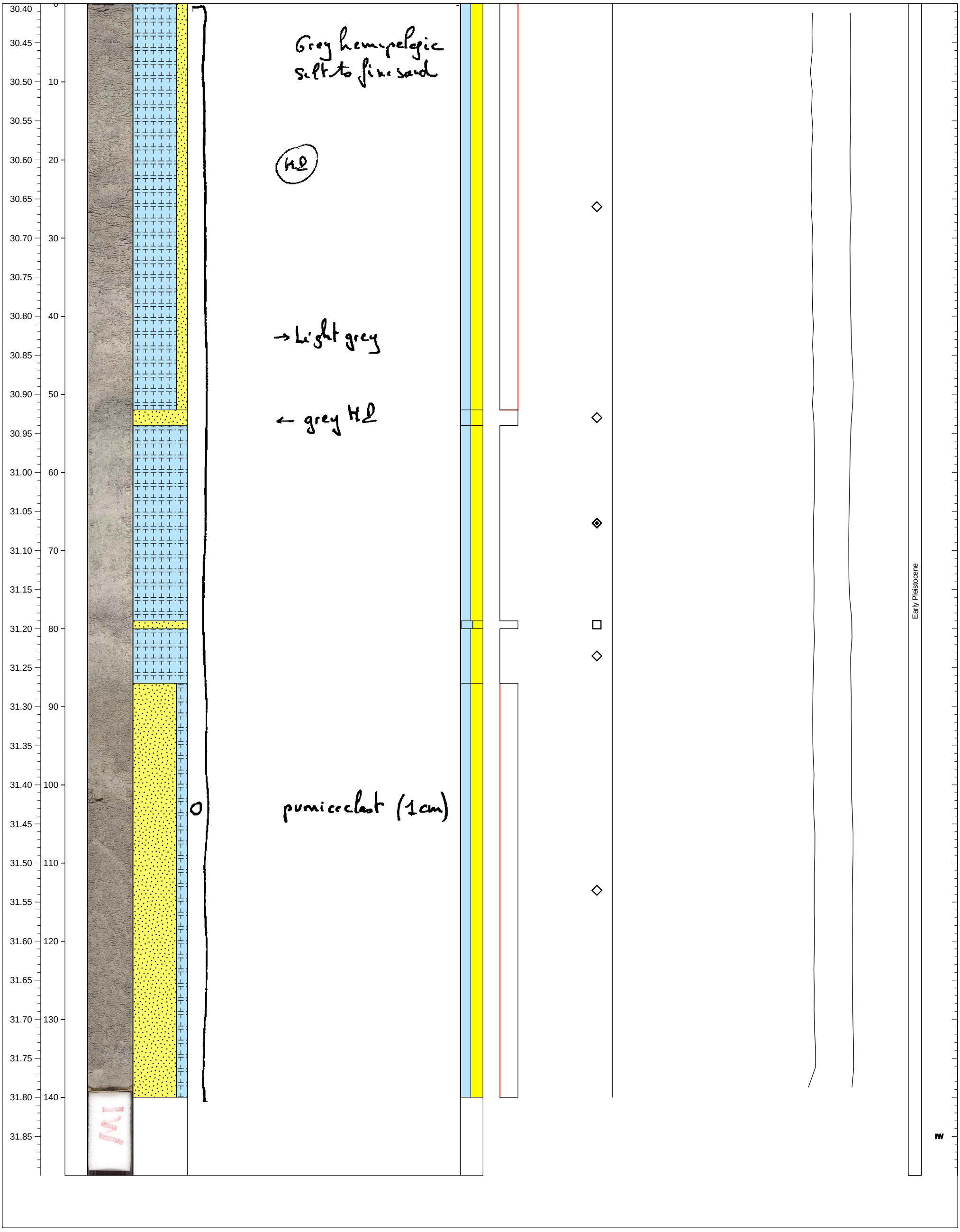
Hole 340-U1396C-4H Section 2, Top of Section: 28.9 CSF-A (m)

Silty hemipelgaic sediment with a single ash layer.



Hole 340-U1396C-4H Section 3, Top of Section: 30.4 CSF-A (m)

Mottled hemipelagic sediments.



Hole 340-U1396C-4H Section 4, Top of Section: 31.9 CSF-A (m)

Hemipelagite.

Depth CSF-A (m)
Core length (cm)
Drilling disturbance
Core image
Graphic lithology
Graphic log - Average grain size matrix sediment
Fine mud
Silt-fine sand
Very fine sand
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles or coarser
Matrix type %
MAJ lith and MIN lith grain size
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles
Matrix sorting
Matrix alteration intensity
Absent
Rare
Moderate
High
Grain size of graded layers (top, base)
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles
Grading type
GRA bulk density (g/cm^3)
0
1
2
3
Magnetic susceptibility (SI)
0
2000
4000
6000
Age
Shipboard samples

31.90
10
32.00
20
32.05
32.10
30
32.15
32.20
40
32.25
32.30
50
32.35
32.40
60
32.45
32.50
70
32.55
32.60
80
32.65
32.70
90
32.75
32.80
100
32.85
32.90
110
32.95
33.00
120
33.05
33.10
130
33.15
33.20
140
33.25
33.30
33.35

very dark grey hemipelagic sediment silt - fine sand High proportion of volcanic clay material (20% crystals, 20% flakes, 50% biocarb)

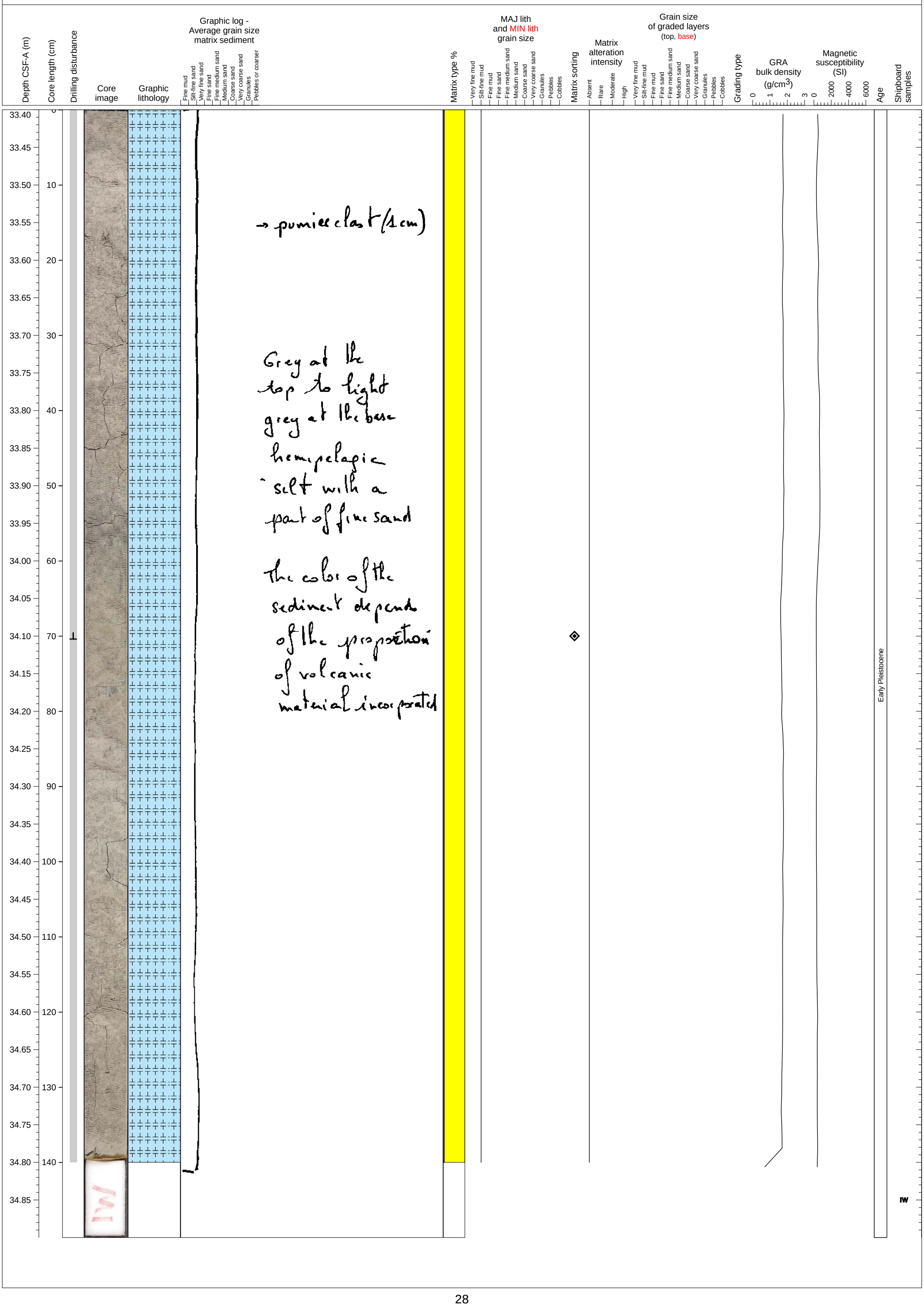
Light grey to grey hemipelagic silt- to fine sand

More muddy hemipelagic

Early Pleistocene

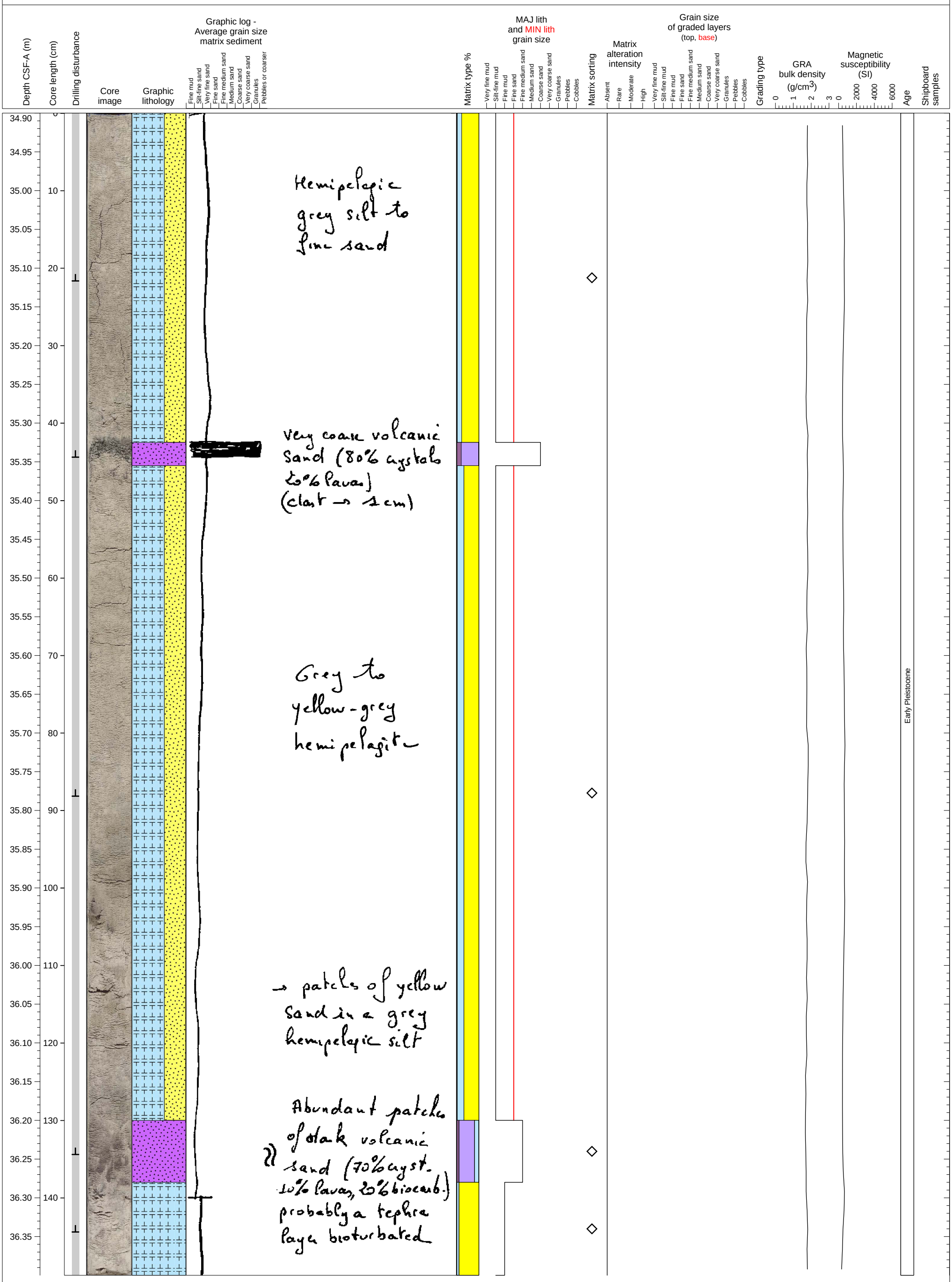
Hole 340-U1396C-4H Section 5, Top of Section: 33.4 CSF-A (m)

Hemipelagite.



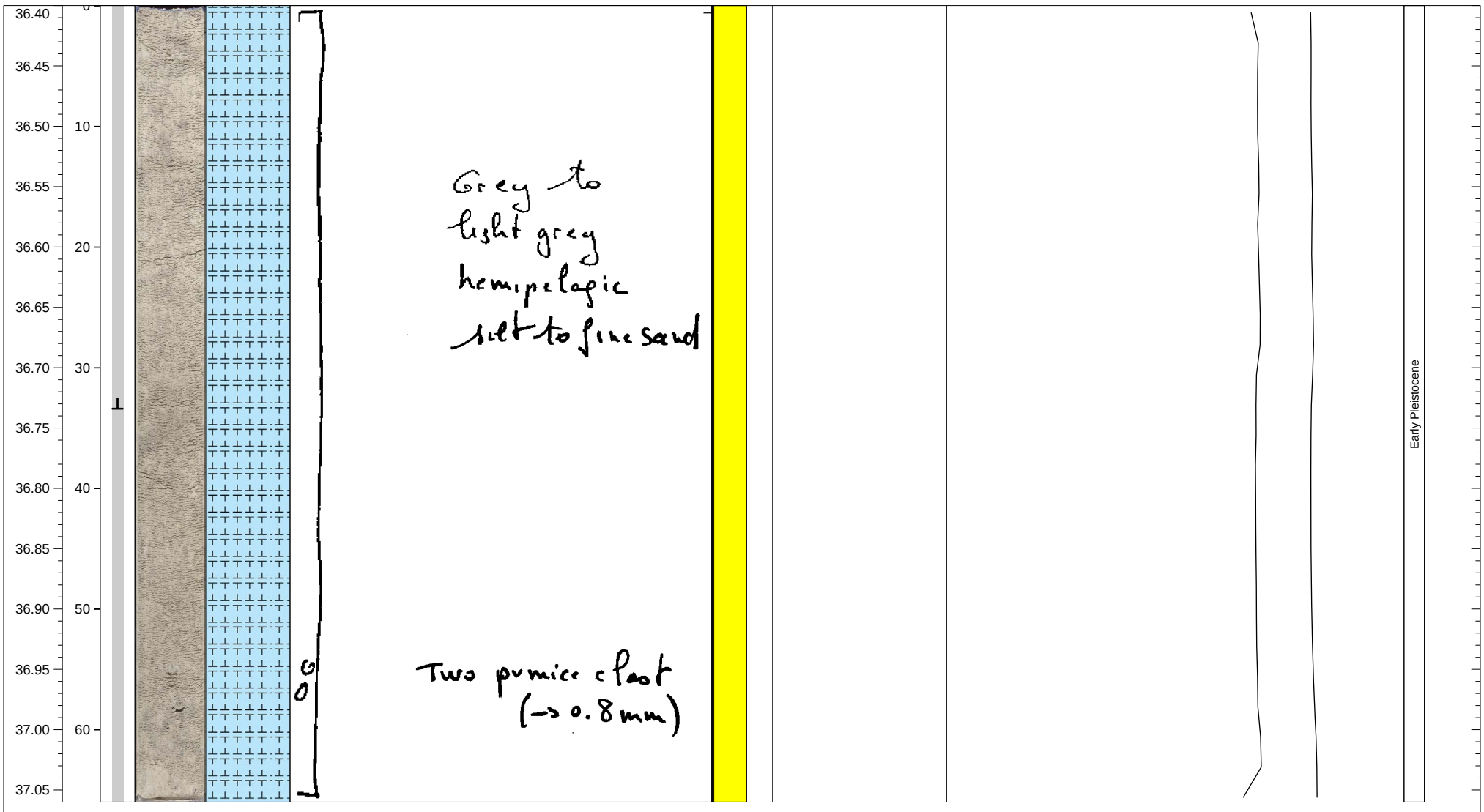
Hole 340-U1396C-4H Section 6, Top of Section: 34.9 CSF-A (m)

Hemipelagic sediment with 2 volcaniclastic sand layers (probable of ashfall origin but bioturbated)



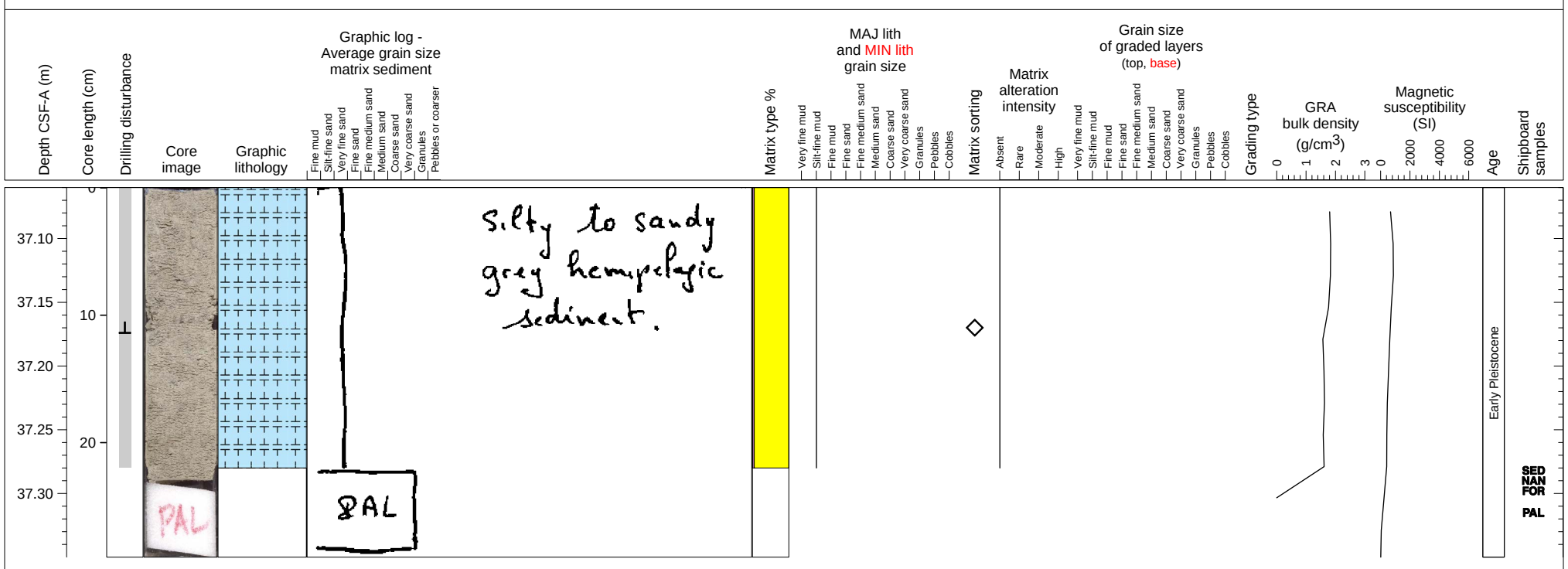
Hole 340-U1396C-4H Section 7, Top of Section: 36.4 CSF-A (m)

Hemipelagic sediments.



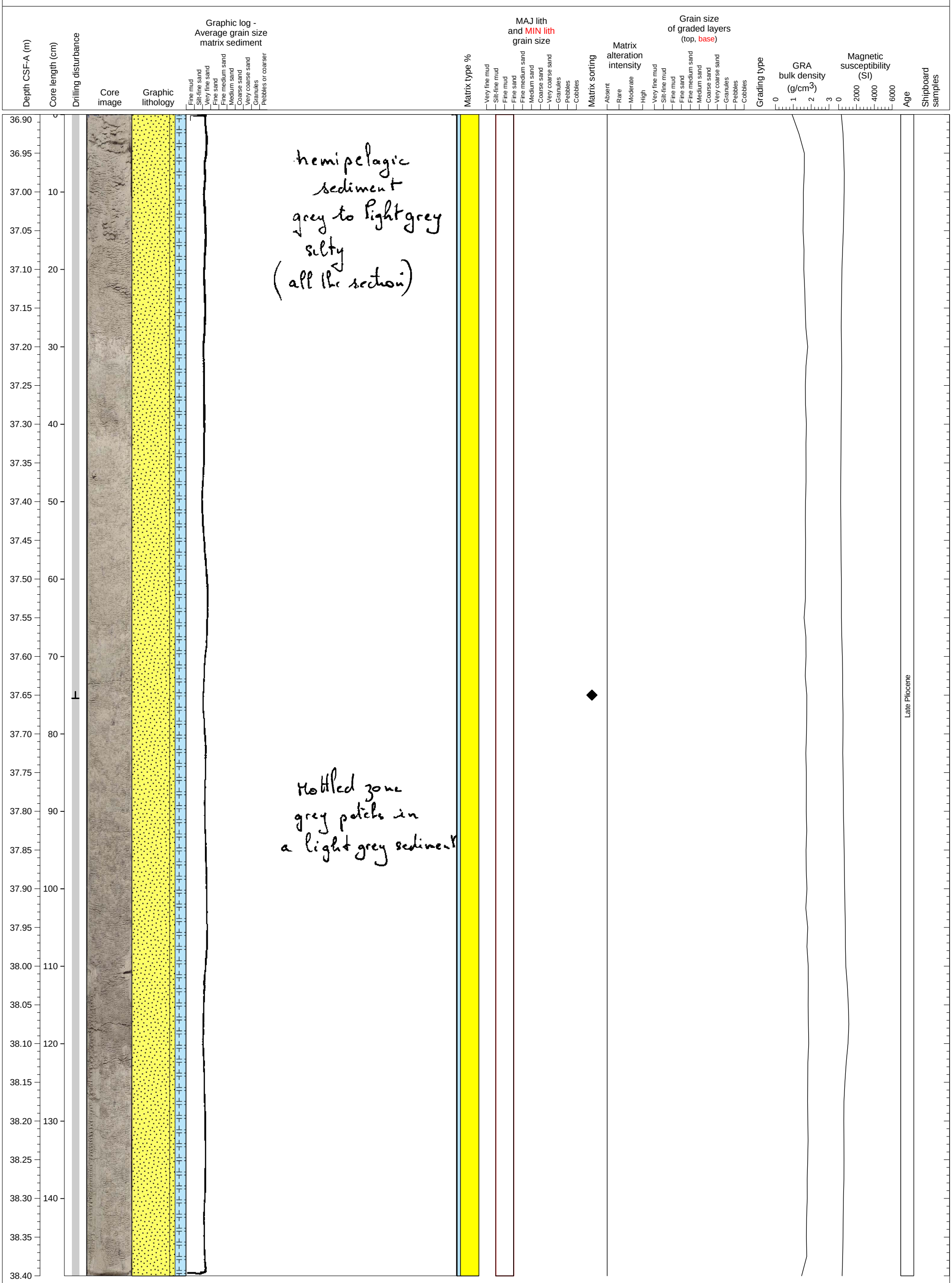
Hole 340-U1396C-4H Section CC, Top of Section: 37.06 CSF-A (m)

Hemipelagite.



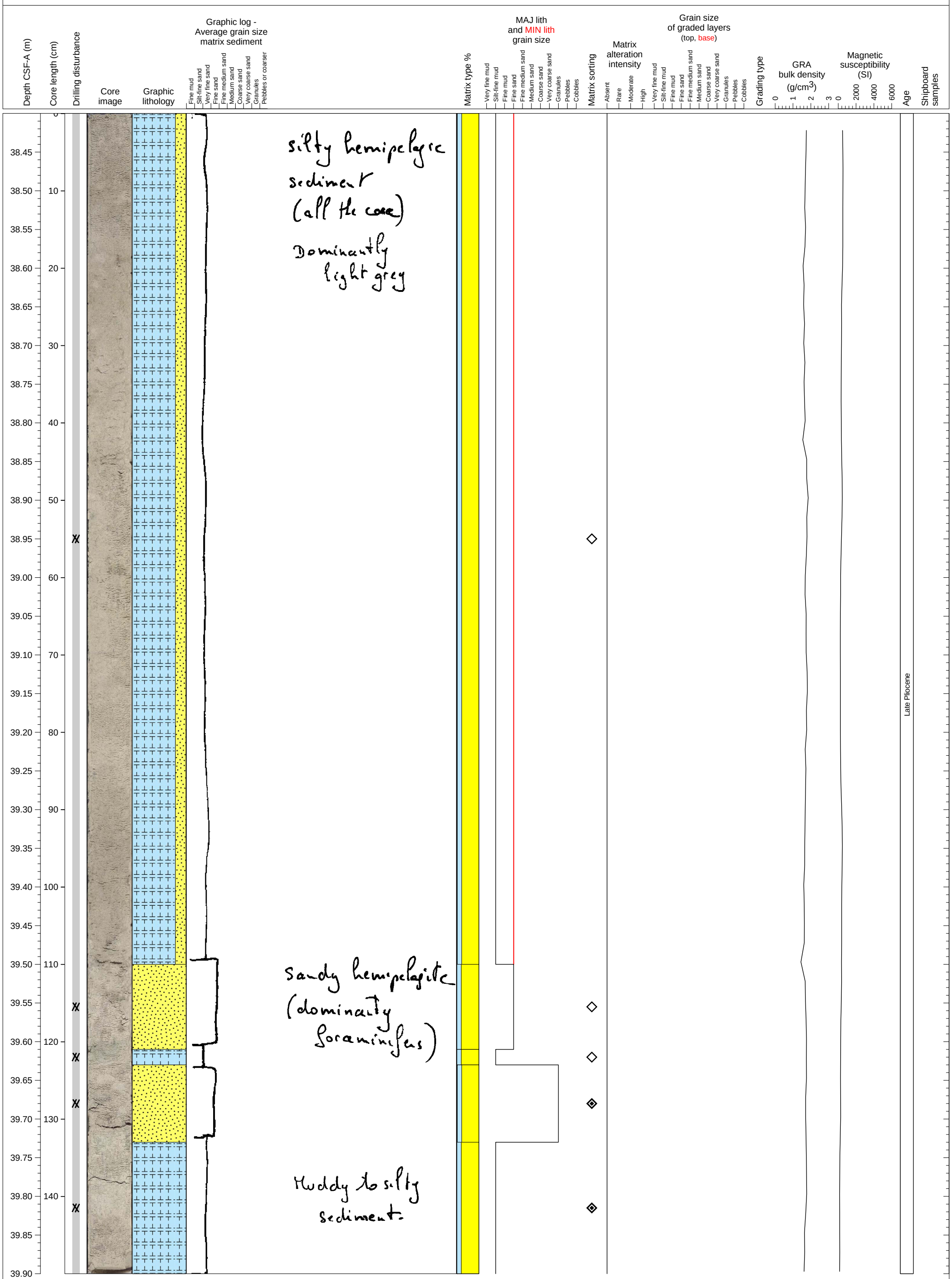
Hole 340-U1396C-5H Section 1, Top of Section: 36.9 CSF-A (m)

Hemipelagic sediments.



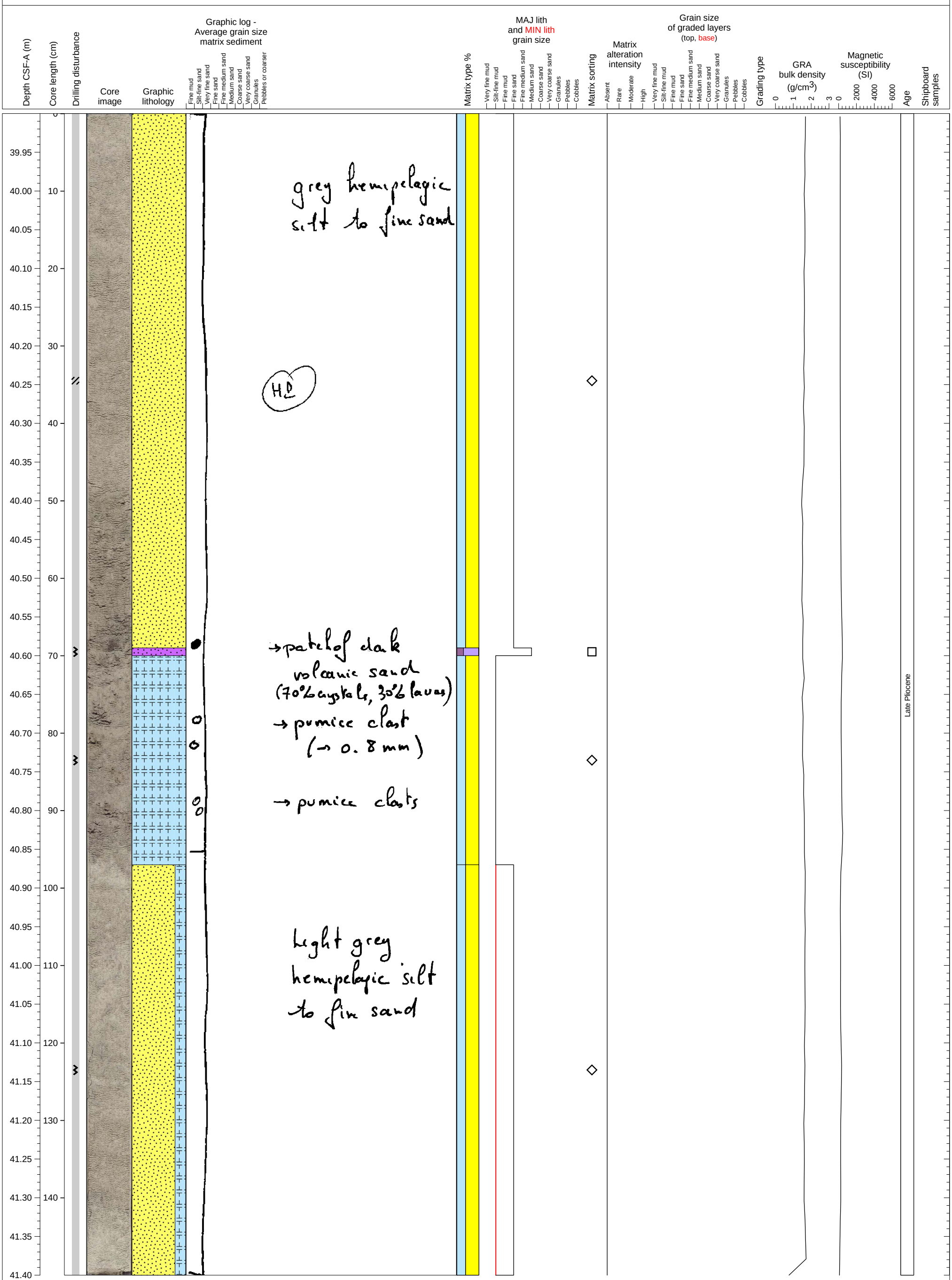
Hole 340-U1396C-5H Section 2, Top of Section: 38.4 CSF-A (m)

Mottled hemipelagic sediments.



Hole 340-U1396C-5H Section 3, Top of Section: 39.9 CSF-A (m)

Mottled hemipelagic sediments with intercalated volcanic ash layer, bioturbated.



Hole 340-U1396C-5H Section 4, Top of Section: 41.4 CSF-A (m)

Silty hemipelagic sediment.

Depth CSF-A (m)
Core length (cm)
Drilling disturbance
Core image
Graphic lithology
Graphic log - Average grain size matrix sediment
Fine mud
Silt-fine sand
Very fine sand
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles or coarser
Matrix type %
MAJ lith and MIN lith grain size
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles
Matrix sorting
Matrix alteration intensity
Absent
Rare
Moderate
High
Grain size of graded layers (top, base)
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles
Grading type
GRA bulk density (g/cm^3)
0
1
2
3
Magnetic susceptibility (SI)
0
2000
4000
6000
Age
Shipboard samples

41.45 – 0
41.50 – 10
41.55 –
41.60 – 20
41.65 –
41.70 – 30
41.75 –
41.80 – 40
41.85 –
41.90 – 50
41.95 –
42.00 – 60
42.05 –
42.10 – 70
42.15 –
42.20 – 80
42.25 –
42.30 – 90
42.35 –
42.40 – 100
42.45 –
42.50 – 110
42.55 –
42.60 – 120
42.65 –
42.70 – 130
42.75 –
42.80 – 140
42.85 –
42.90 –

Grey hemipelagic silt - (all the section)

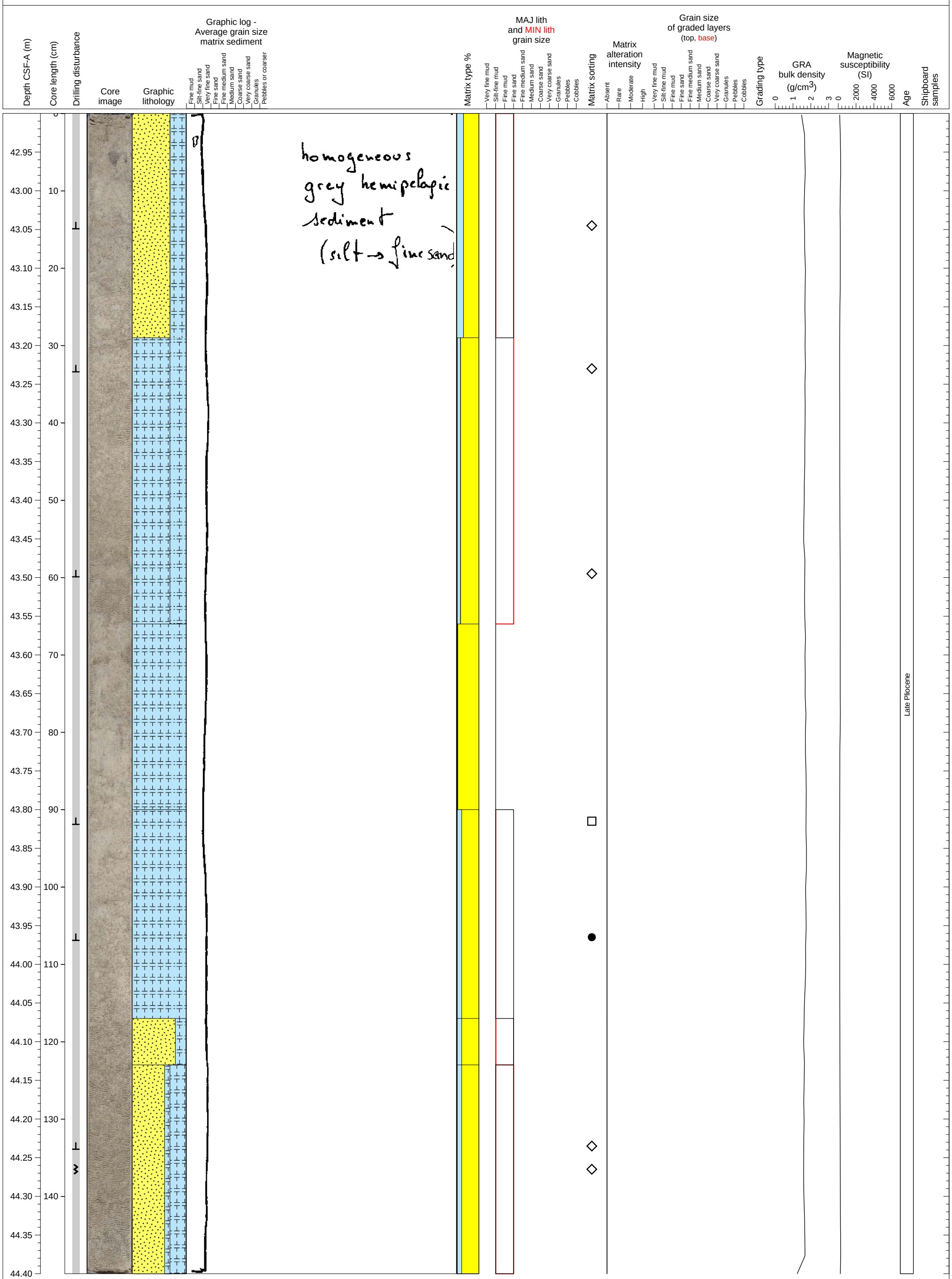
Mottled reddish-grey - grey hemipelagic silt.

Late Pliocene

IW

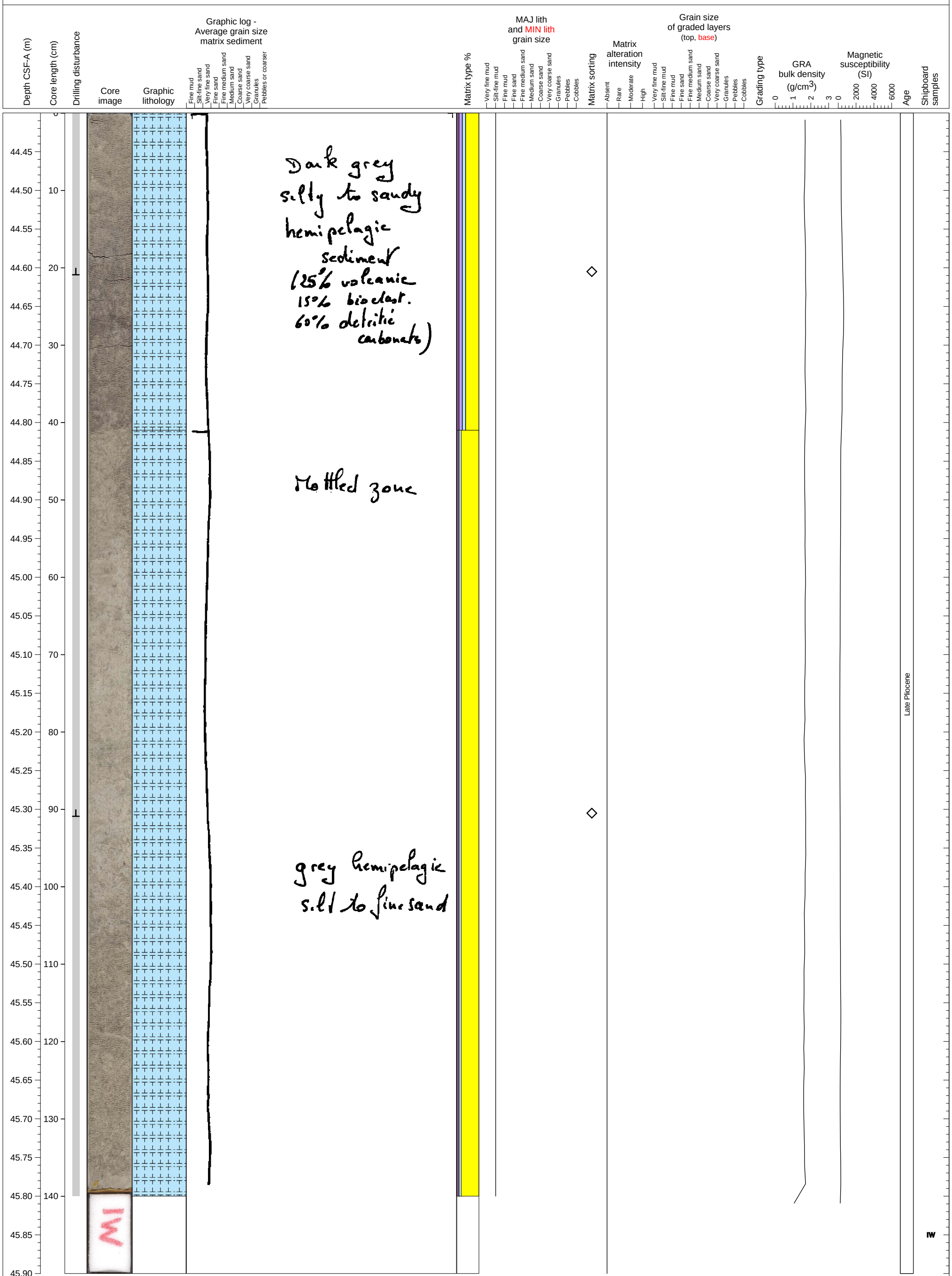
Hole 340-U1396C-5H Section 5, Top of Section: 42.9 CSF-A (m)

Mottled, bioturbated, hemipelagic sediments.



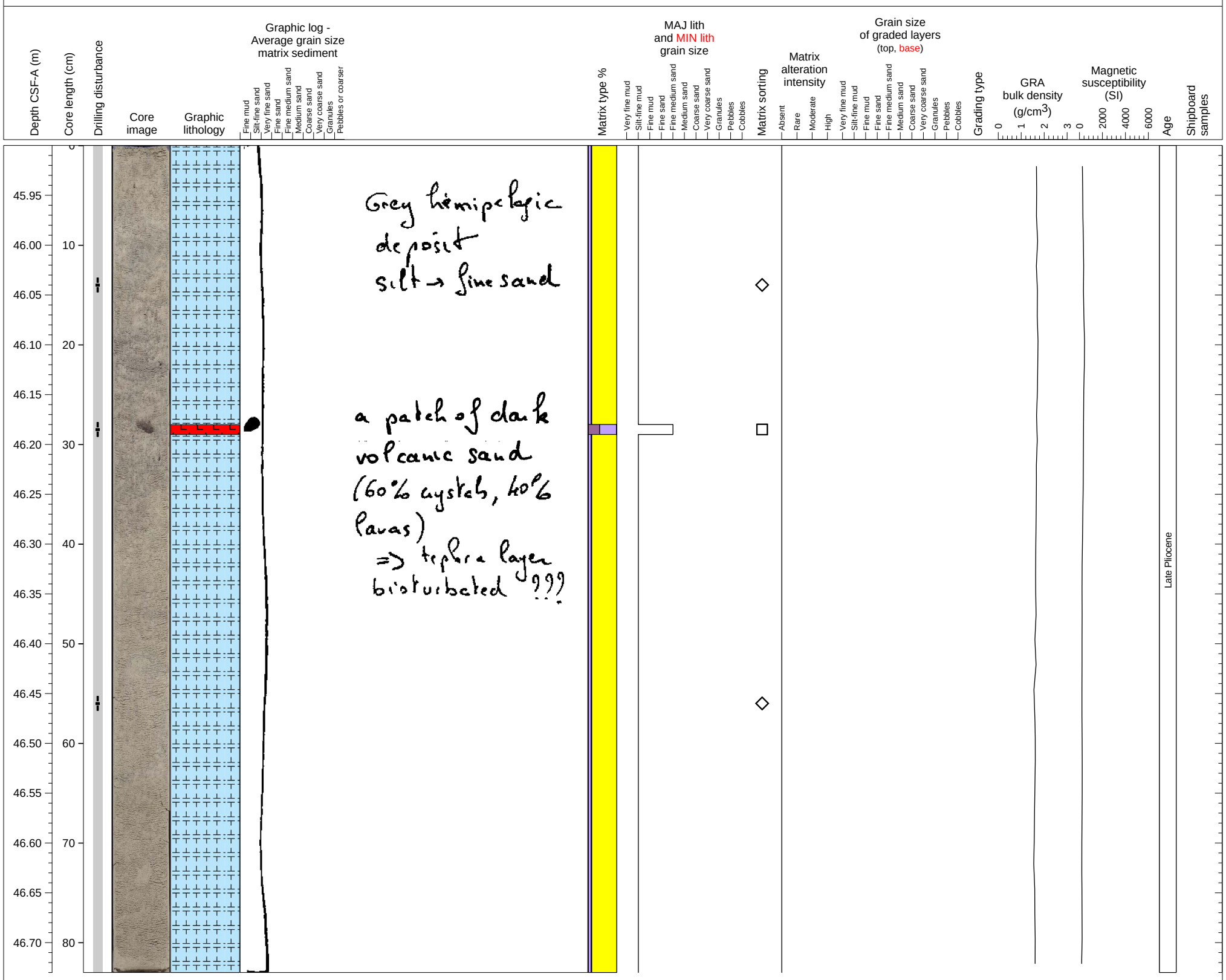
Hole 340-U1396C-5H Section 6, Top of Section: 44.4 CSF-A (m)

Silty hemipelagice sediment, upper 41 cm contains more volcanic particles.



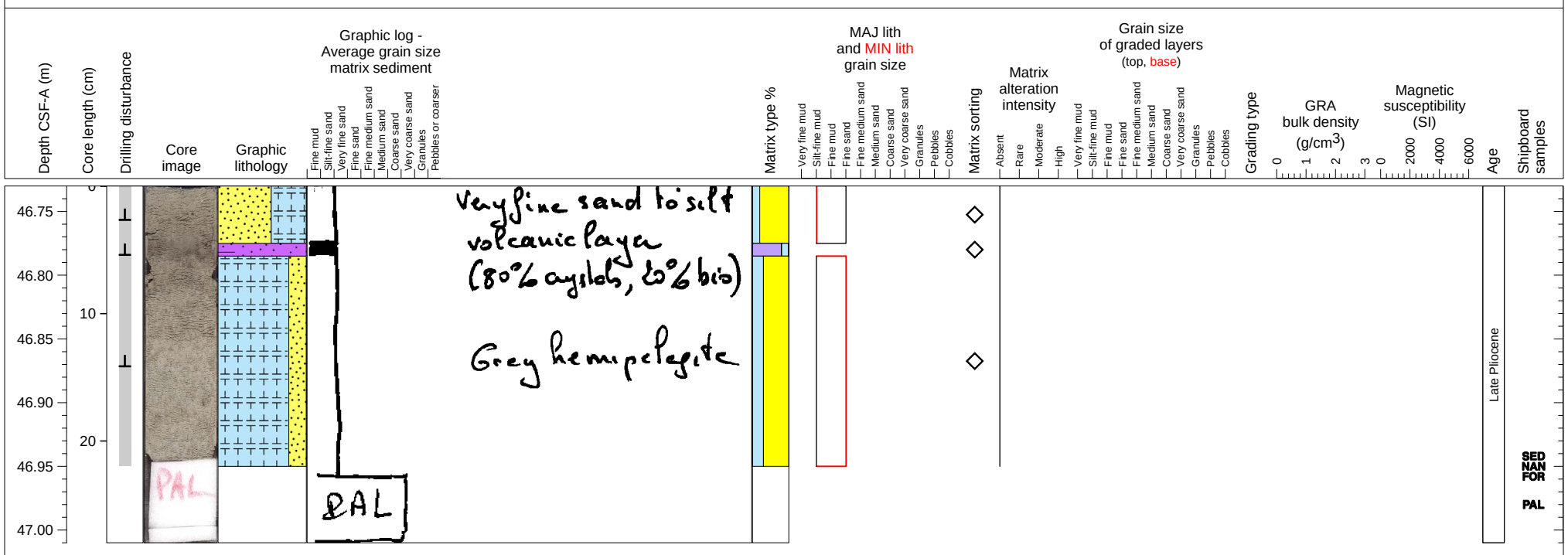
Hole 340-U1396C-5H Section 7, Top of Section: 45.9 CSF-A (m)

Silty hemipelagic sediment with a patch of dark volcaniclastic sand (60% crystals). Possible bioturbated ash.



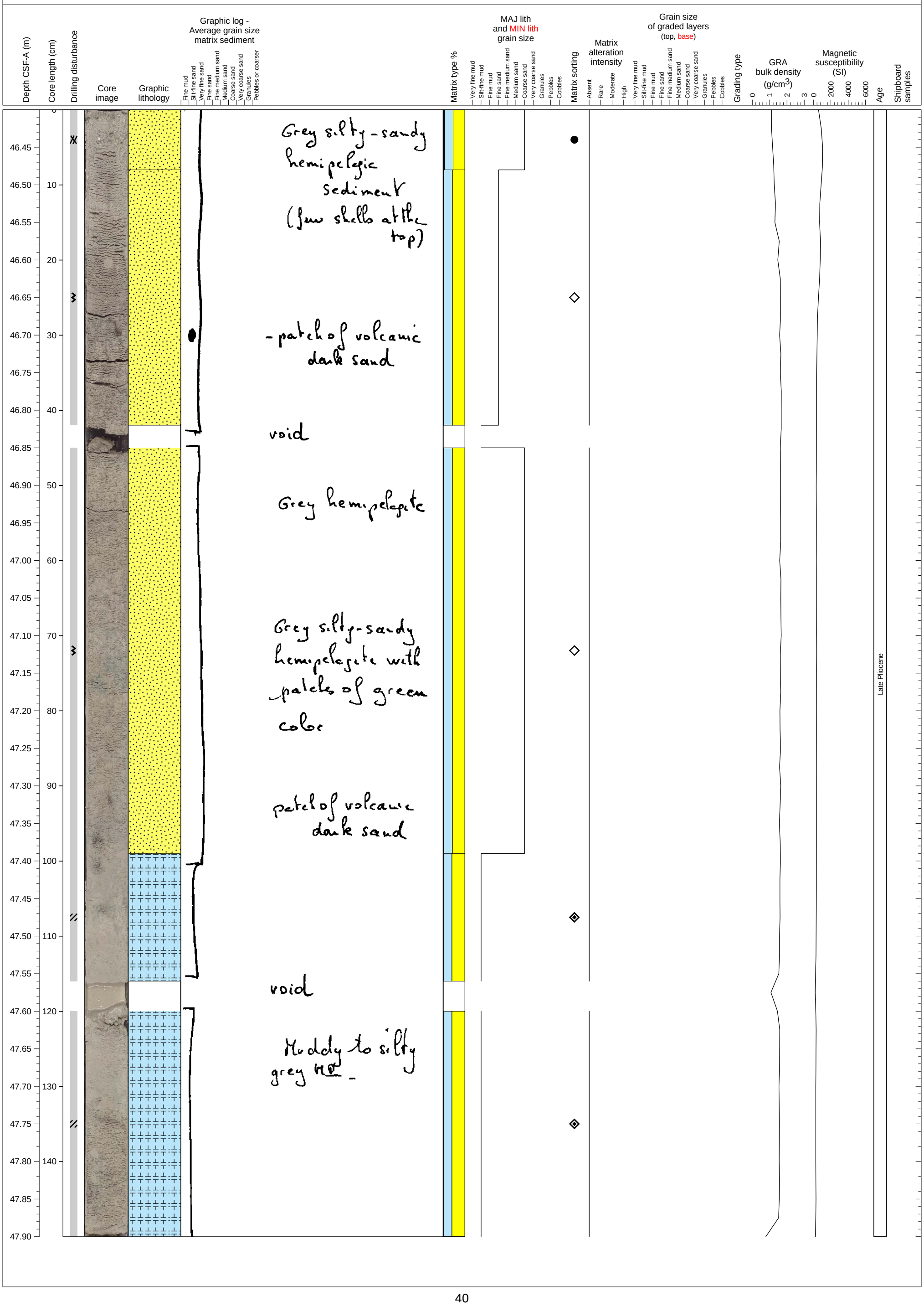
Hole 340-U1396C-5H Section CC, Top of Section: 46.73 CSF-A (m)

Hemipelagic fines with 1 thin ashfall (?) layer in core catcher.



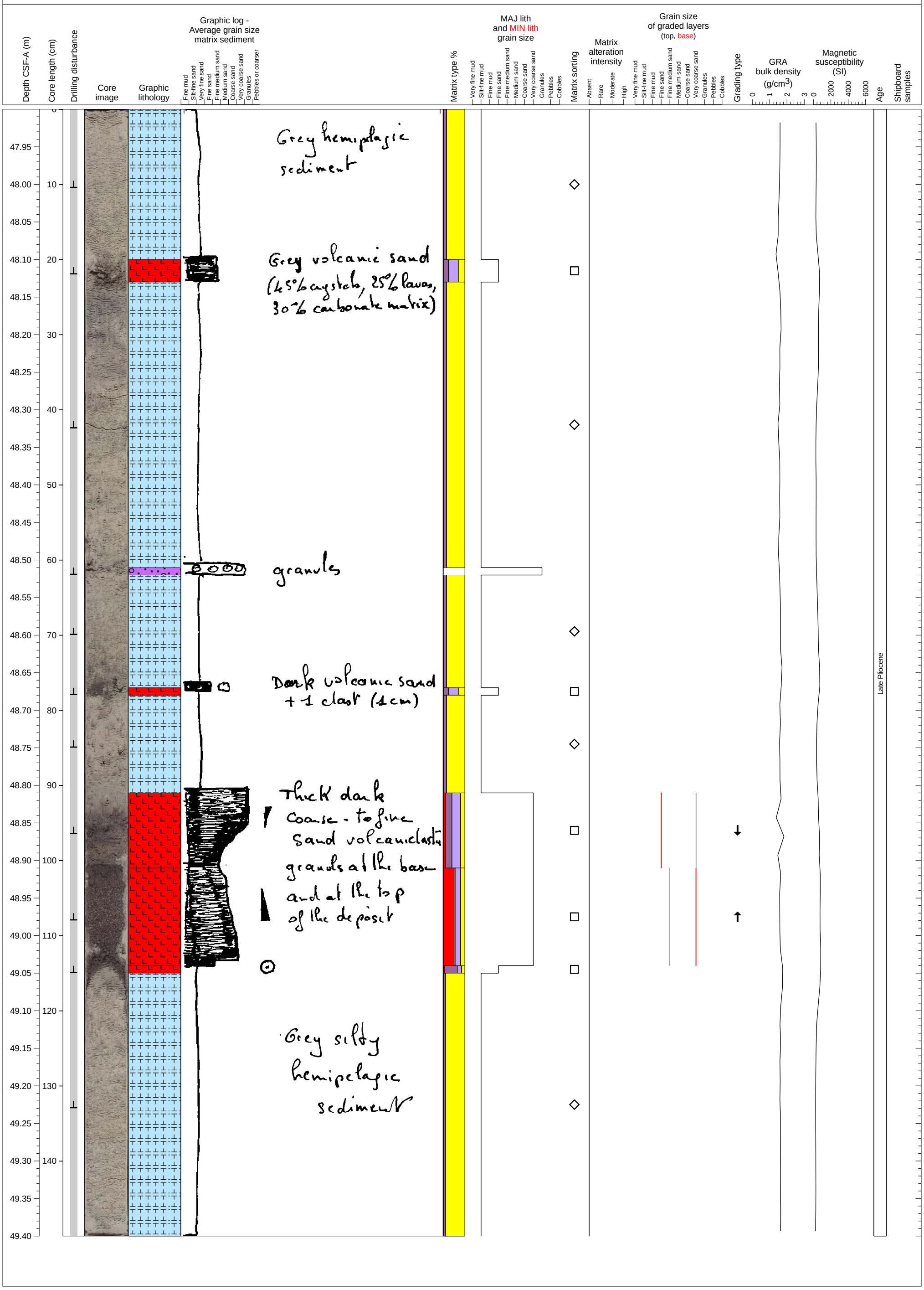
Hole 340-U1396C-6H Section 1, Top of Section: 46.4 CSF-A (m)

Mottled hemipelagic sediments.



Hole 340-U1396C-6H Section 2, Top of Section: 47.9 CSF-A (m)

Silty hemipelagic sediments with several volcanic ash layers, including a normally and reverse graded set.



Hole 340-U1396C-6H Section 3, Top of Section: 49.4 CSF-A (m)

Hemipelagic mud with three thin ashes.

Depth CSF-A (m)
Core length (cm)
Drilling disturbance
Core image
Graphic lithology
Graphic log - Average grain size matrix sediment
Fine mud
Silt-fine sand
Very fine sand
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles or coarser
Matrix type %
MAJ lith and MIN lith grain size
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles
Matrix sorting
Matrix alteration intensity
Absent
Rare
Moderate
High
Grain size of graded layers (top, base)
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles
Grading type
GRA bulk density (g/cm3)
Magnetic susceptibility (SI)
Age
Shipboard samples

Grey silty-sandy hemipelagic sediments

Succession of 3 dark coarse volcanic sand rich in massive lava (50% lavas, 5% pomices 20% cgyitals 15% bio carb 15% detritic carb.)

Grey silty to sandy hemipelagite

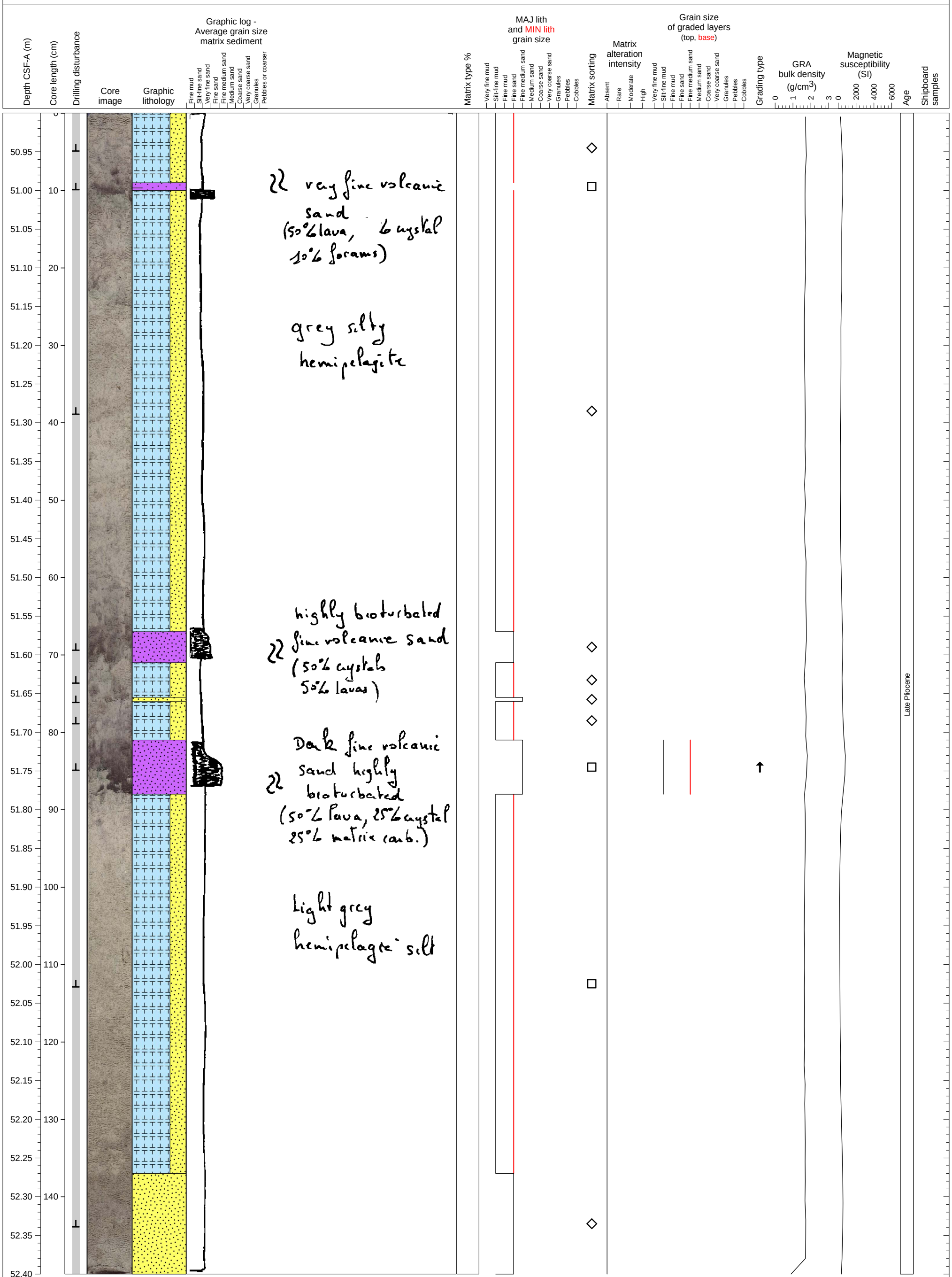
Late Pliocene

IW

MBI

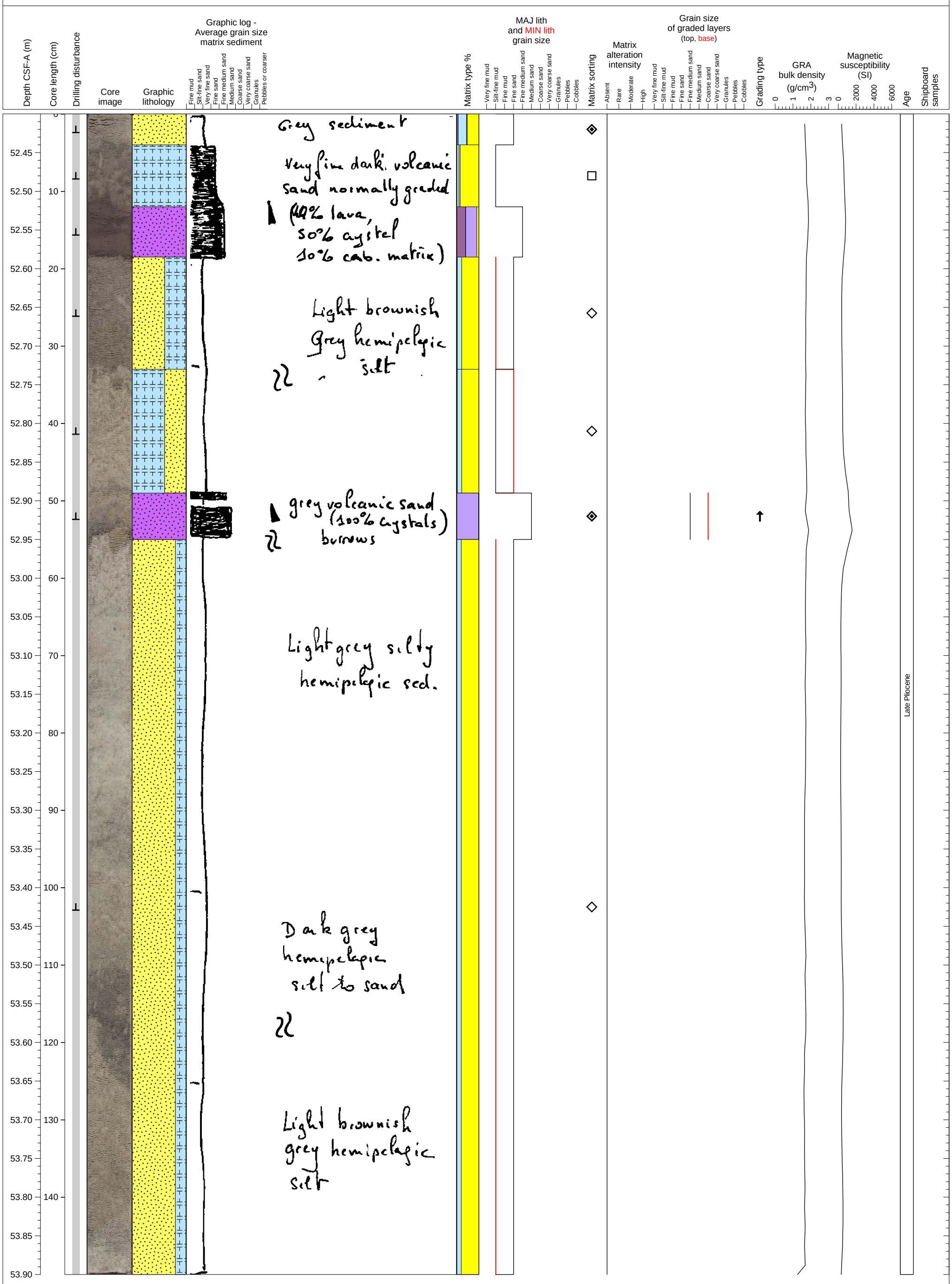
Hole 340-U1396C-6H Section 4, Top of Section: 50.9 CSF-A (m)

This section contains three ash fall layers. The second layer (81-88 cm) has normal grading fining upward from fine-medium sand to silt. Bioturbation is common throughout the section.



Hole 340-U1396C-6H Section 5, Top of Section: 52.4 CSF-A (m)

Bioturbated hemipelagic sediments with a couple of ashfall layers.



Hole 340-U1396C-6H Section 6, Top of Section: 53.9 CSF-A (m)

Mottled hemipelagic sediments.

Depth CSF-A (m)
Core length (cm)
Drilling disturbance
Core image
Graphic lithology
Graphic log - Average grain size matrix sediment
Fine mud
Silt-fine sand
Very fine sand
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles or coarser
Matrix type %
MAJ lith and MIN lith grain size
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles
Matrix sorting
Matrix alteration intensity
Absent
Rare
Moderate
High
Grain size of graded layers (top, base)
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles
Grading type
GRA bulk density (g/cm^3)
0
1
2
3
Magnetic susceptibility (SI)
0
2000
4000
6000
Age
Shipboard samples

53.95
54.00
54.05
54.10
54.15
54.20
54.25
54.30
54.35
54.40
54.45
54.50
54.55
54.60
54.65
54.70
54.75
54.80
54.85
54.90
54.95
55.00
55.05
55.10
55.15
55.20
55.25
55.30
55.35
55.40

0
10
20
30
40
50
60
70
80
90
100
110
120
130
140

Grey hemipelagic sand

Light grey hemipelagic silt

Mottled hemipelagic silt

Grey hemipelagic silt to fine sand

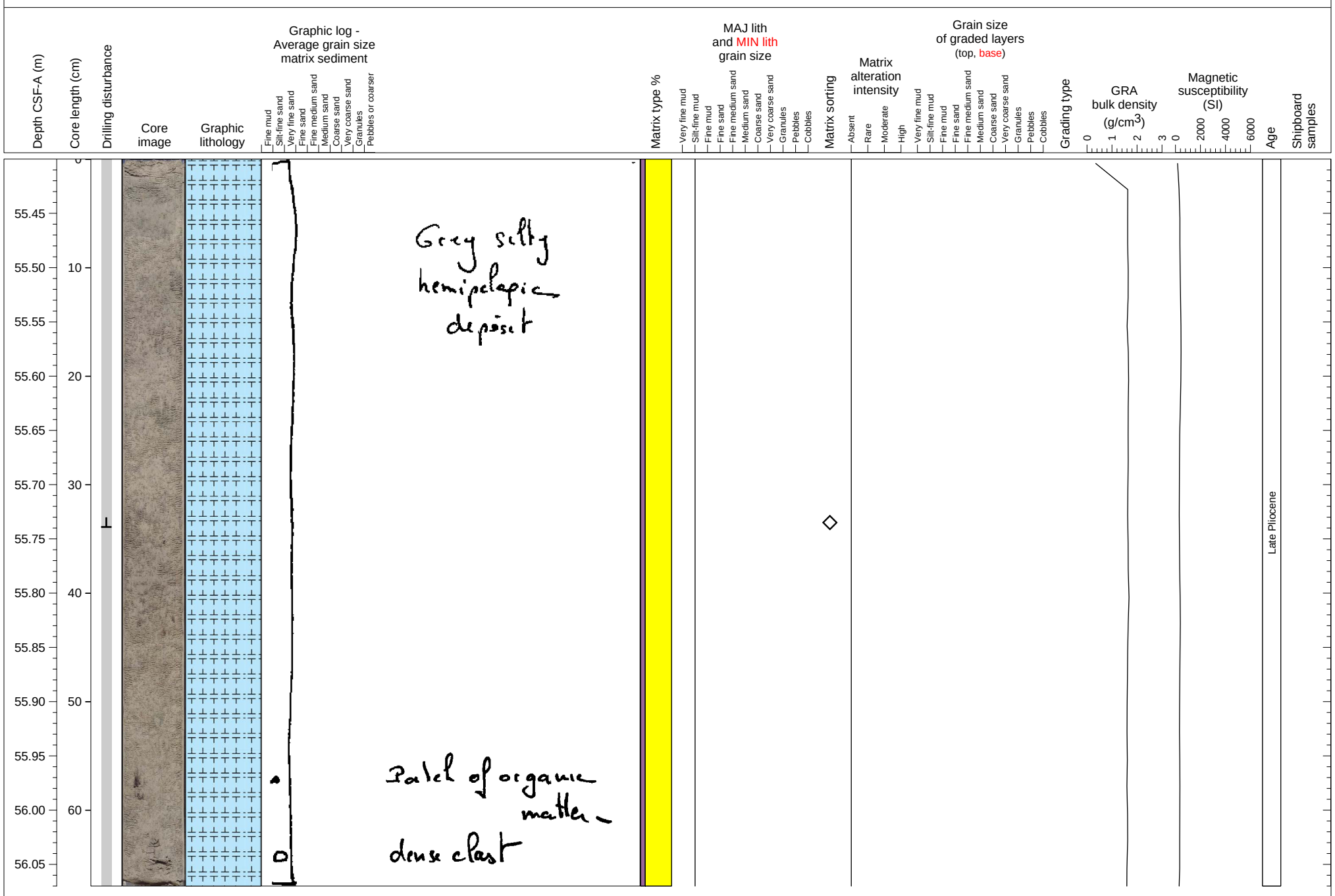
Grey hemipelagic silt.

Late Pliocene

IW

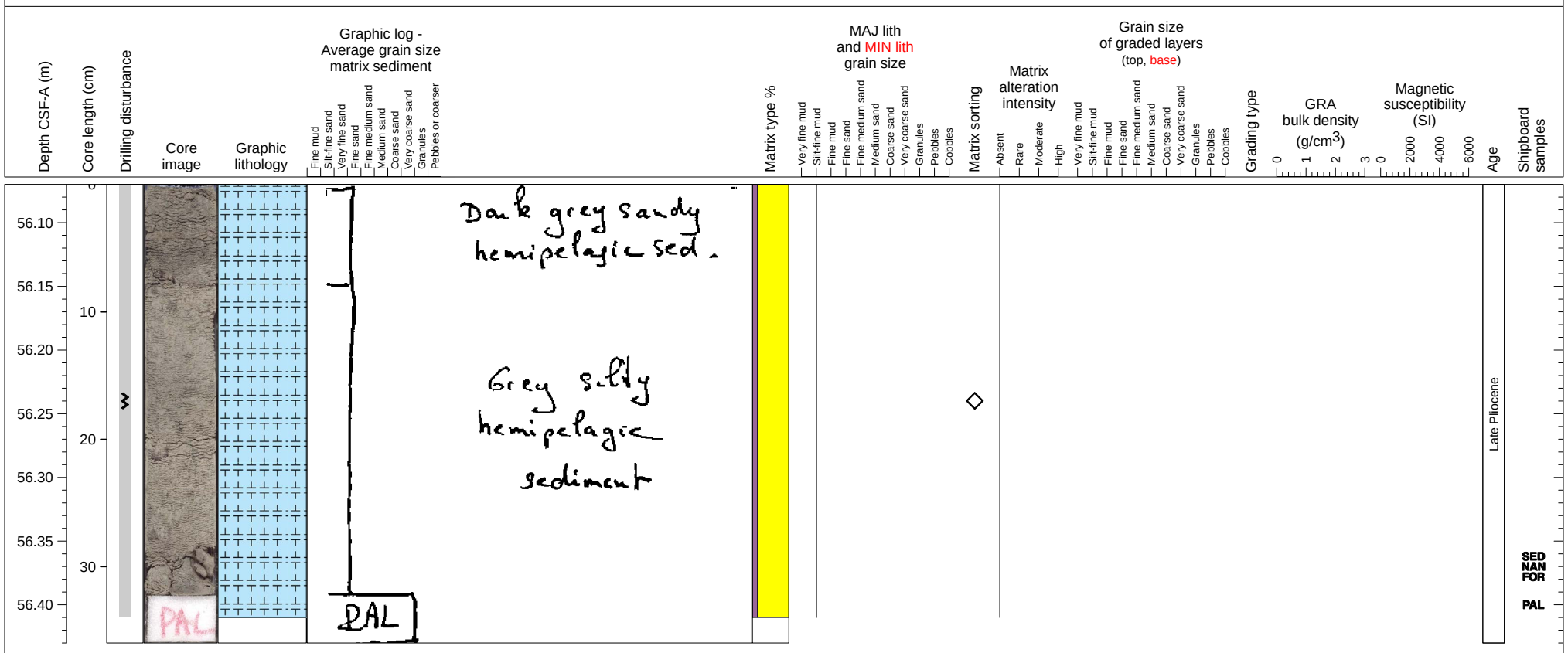
Hole 340-U1396C-6H Section 7, Top of Section: 55.4 CSF-A (m)

Hemipelagic mud.



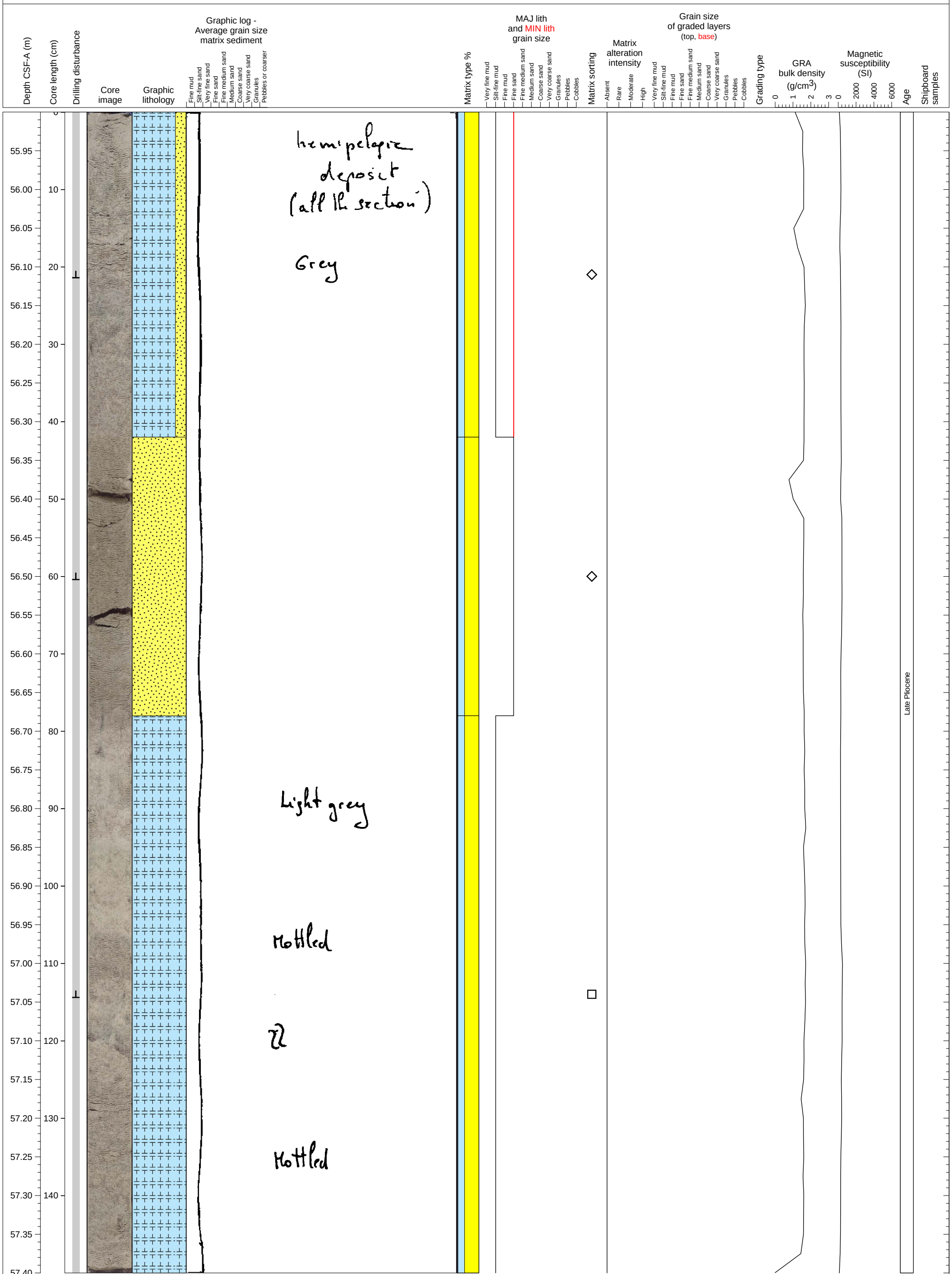
Hole 340-U1396C-6H Section CC, Top of Section: 56.07 CSF-A (m)

Moderately disturbed silty hemipelagic clay.



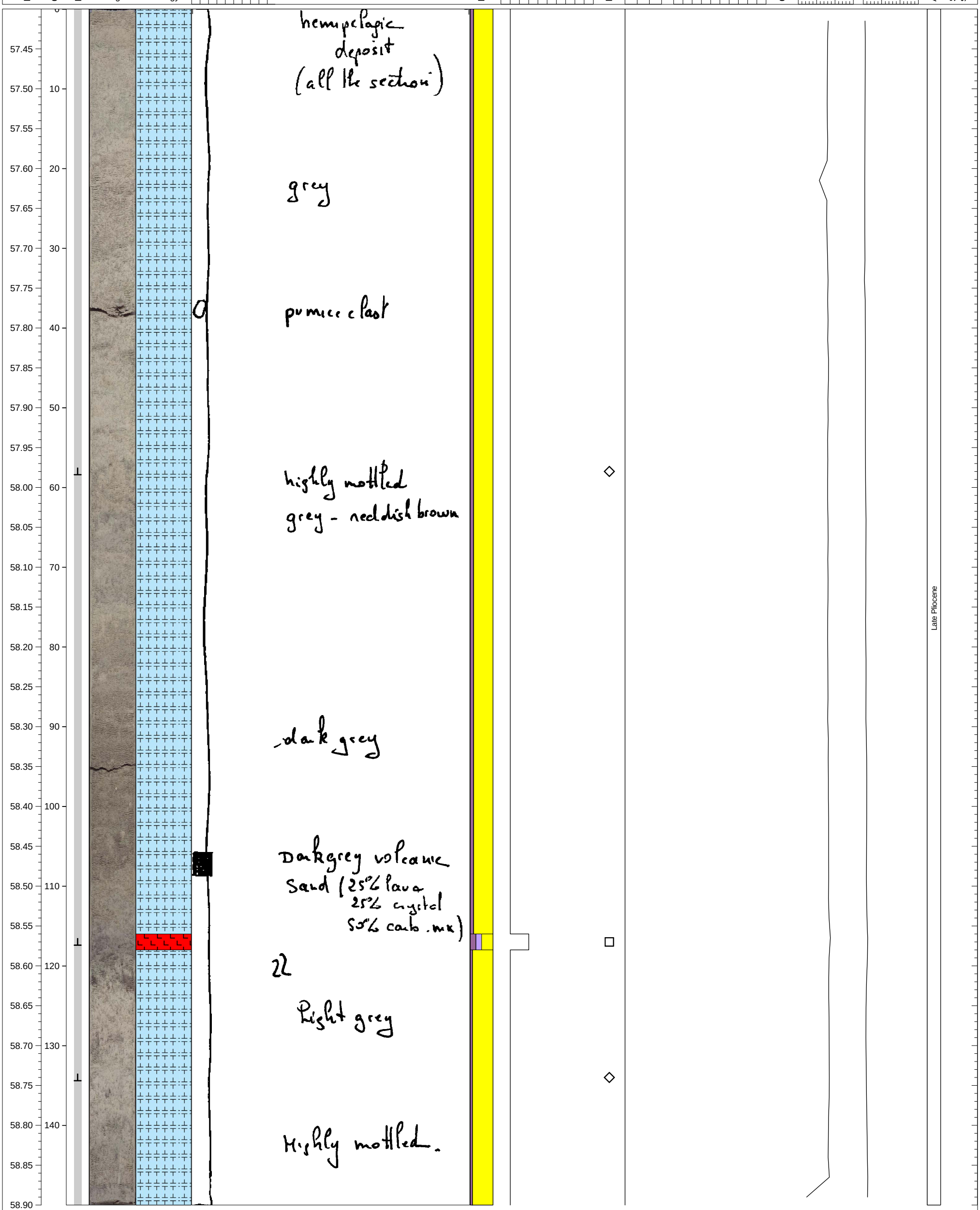
Hole 340-U1396C-7H Section 1, Top of Section: 55.9 CSF-A (m)

Mottled hemipelagic sediments.



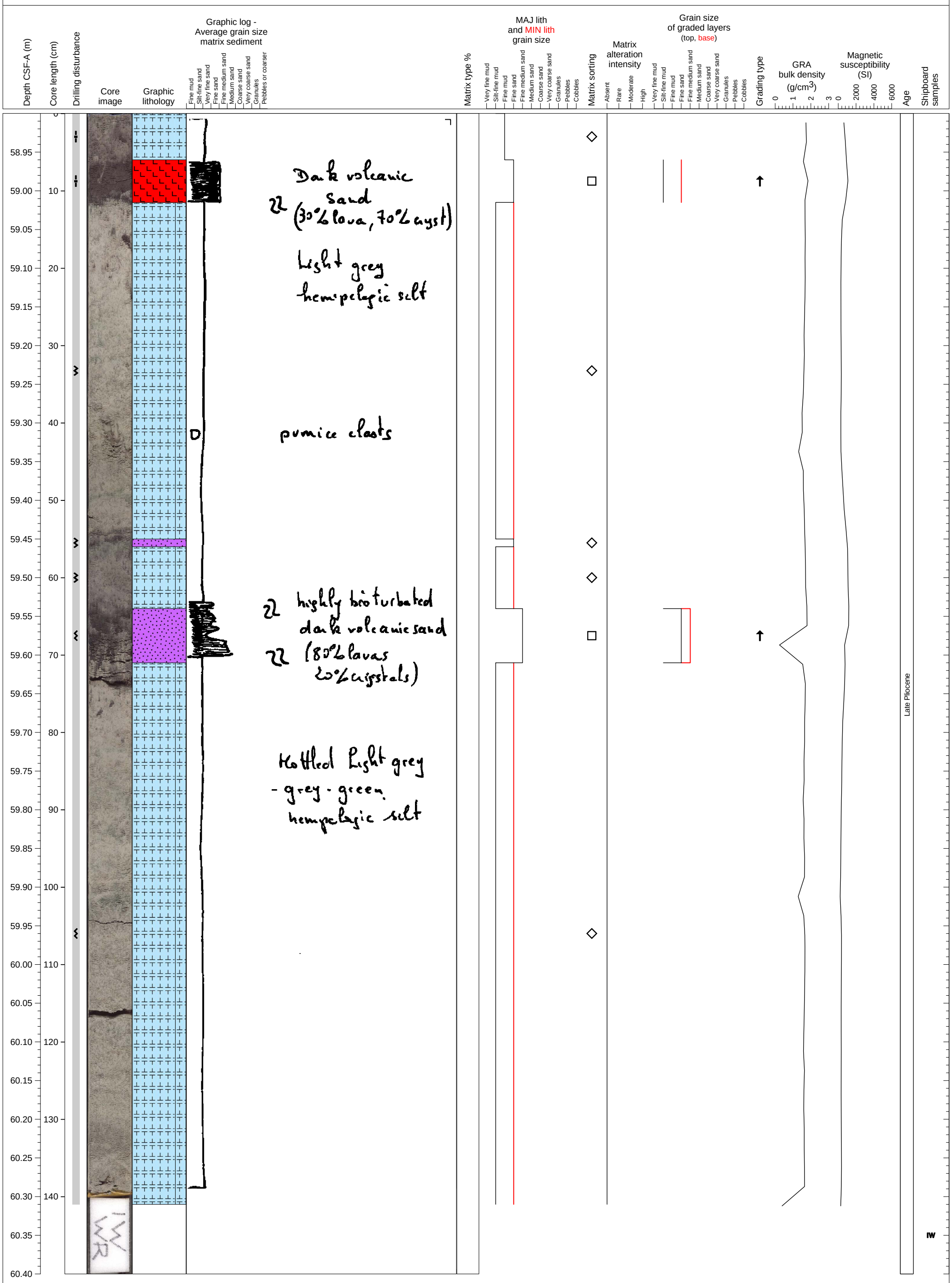
Hole 340-U1396C-7H Section 2, Top of Section: 57.4 CSF-A (m)

Hemipelagic sediment with a thin, fien-grained ash layer.



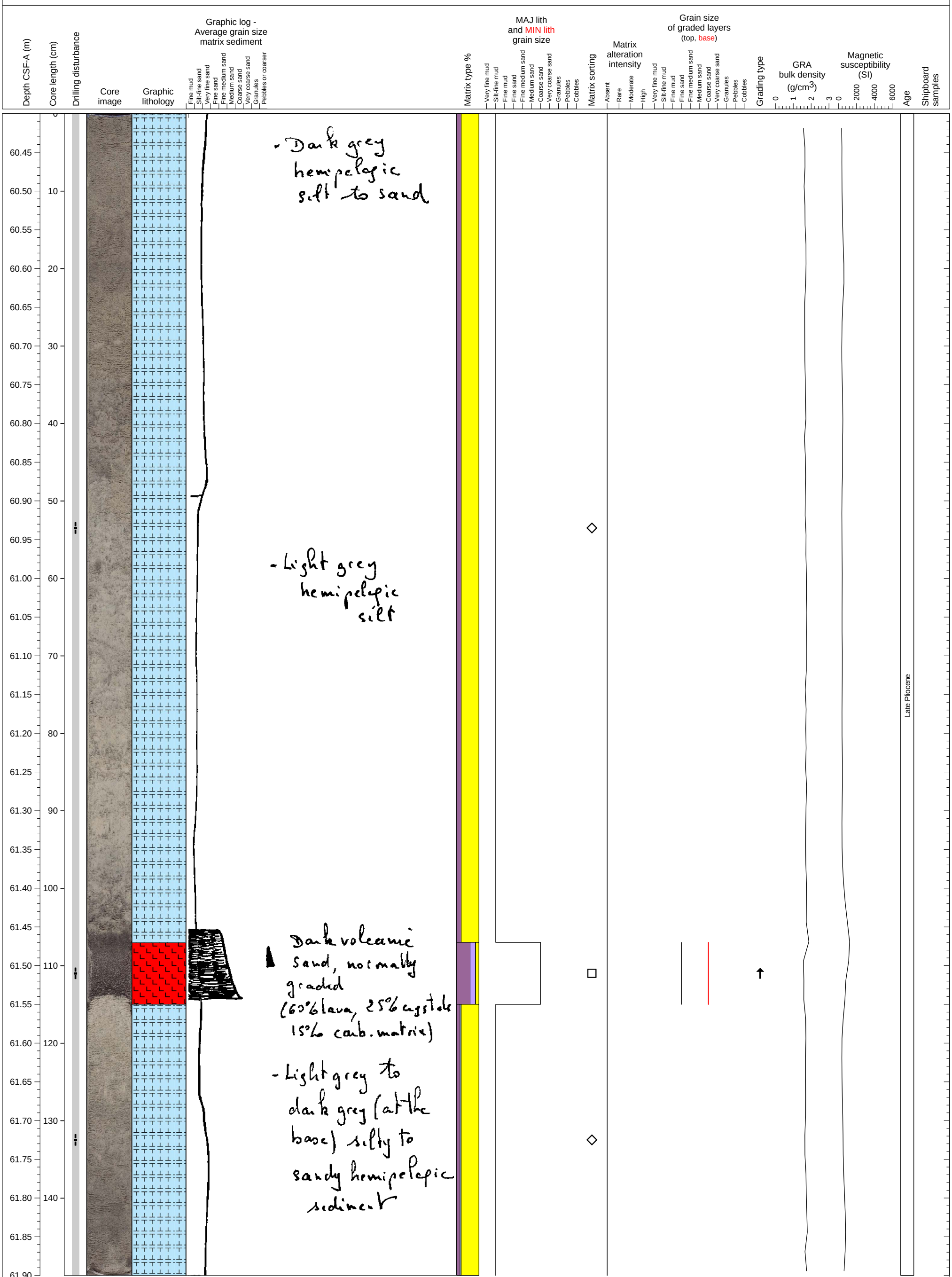
Hole 340-U1396C-7H Section 3, Top of Section: 58.9 CSF-A (m)

This section contains two normal grading ash layers of 5-7 cm. The upper layer is crystal rich and the lower layer contains less crystals and more massive lava fragments.



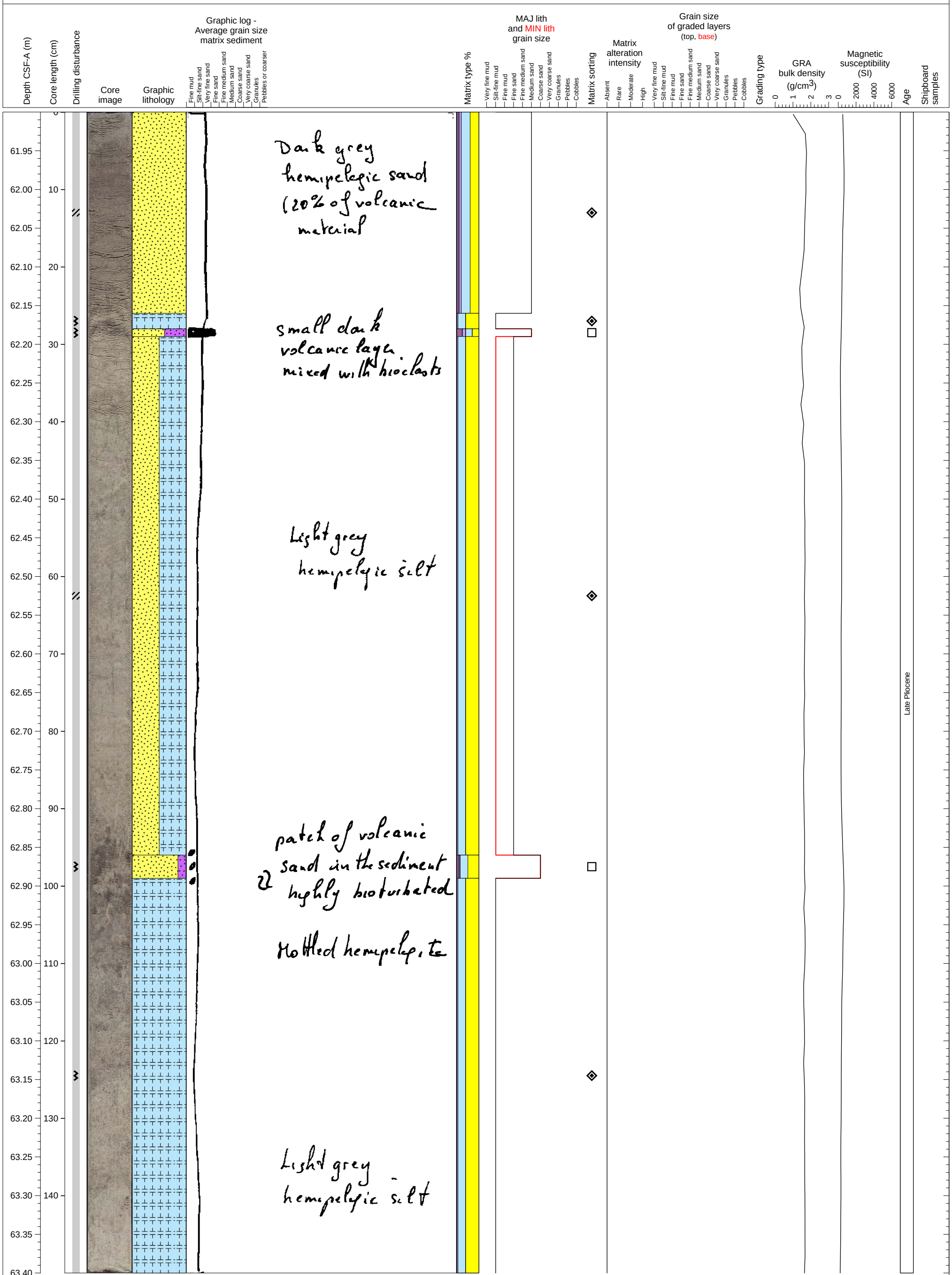
Hole 340-U1396C-7H Section 4, Top of Section: 60.4 CSF-A (m)

Hemipelagic mud with ash sand at 110 cm.



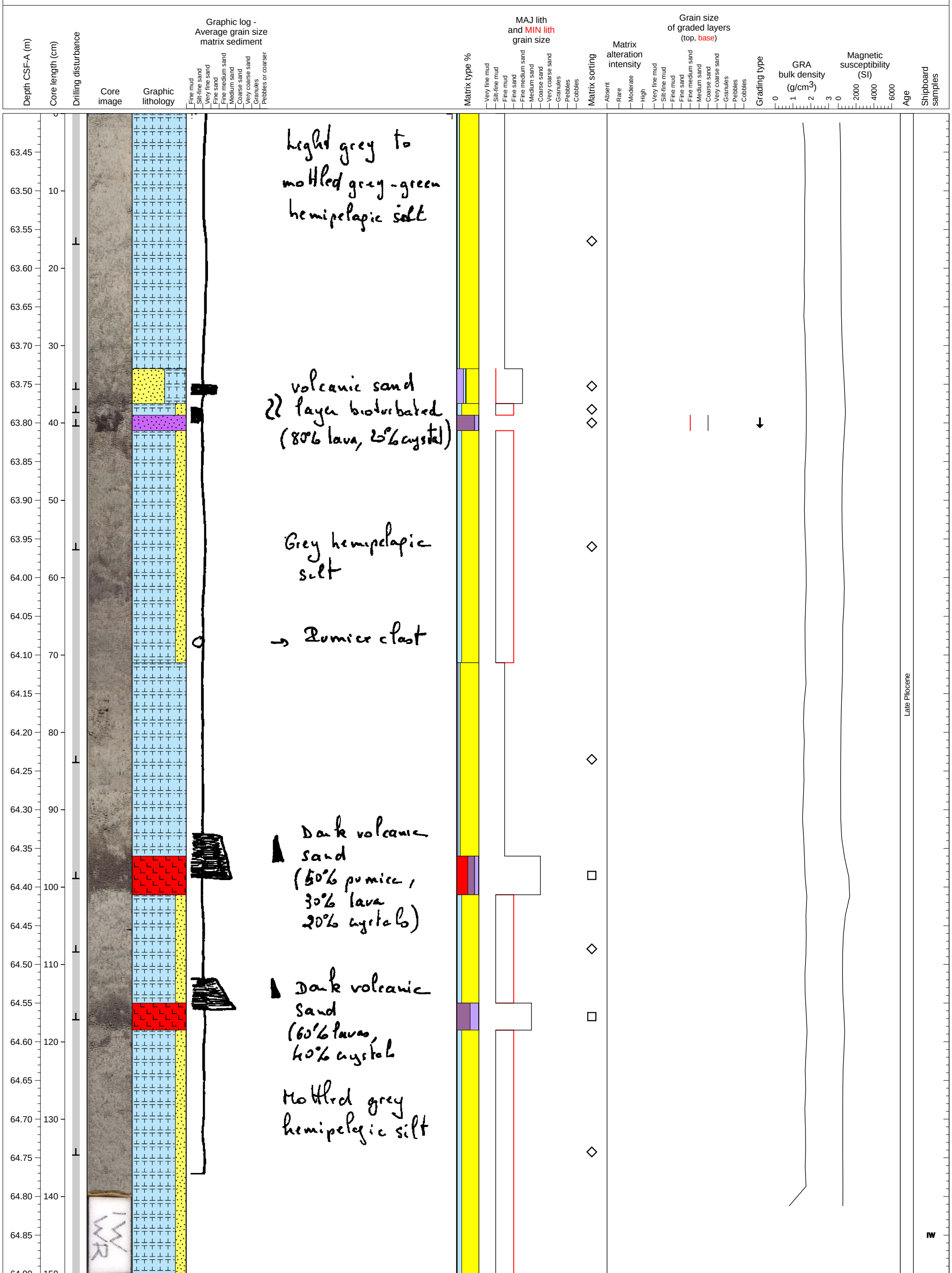
Hole 340-U1396C-7H Section 5, Top of Section: 61.9 CSF-A (m)

Mottled hemipelagic sediments with intercalated volcanic ash layers, partly bioturbated.



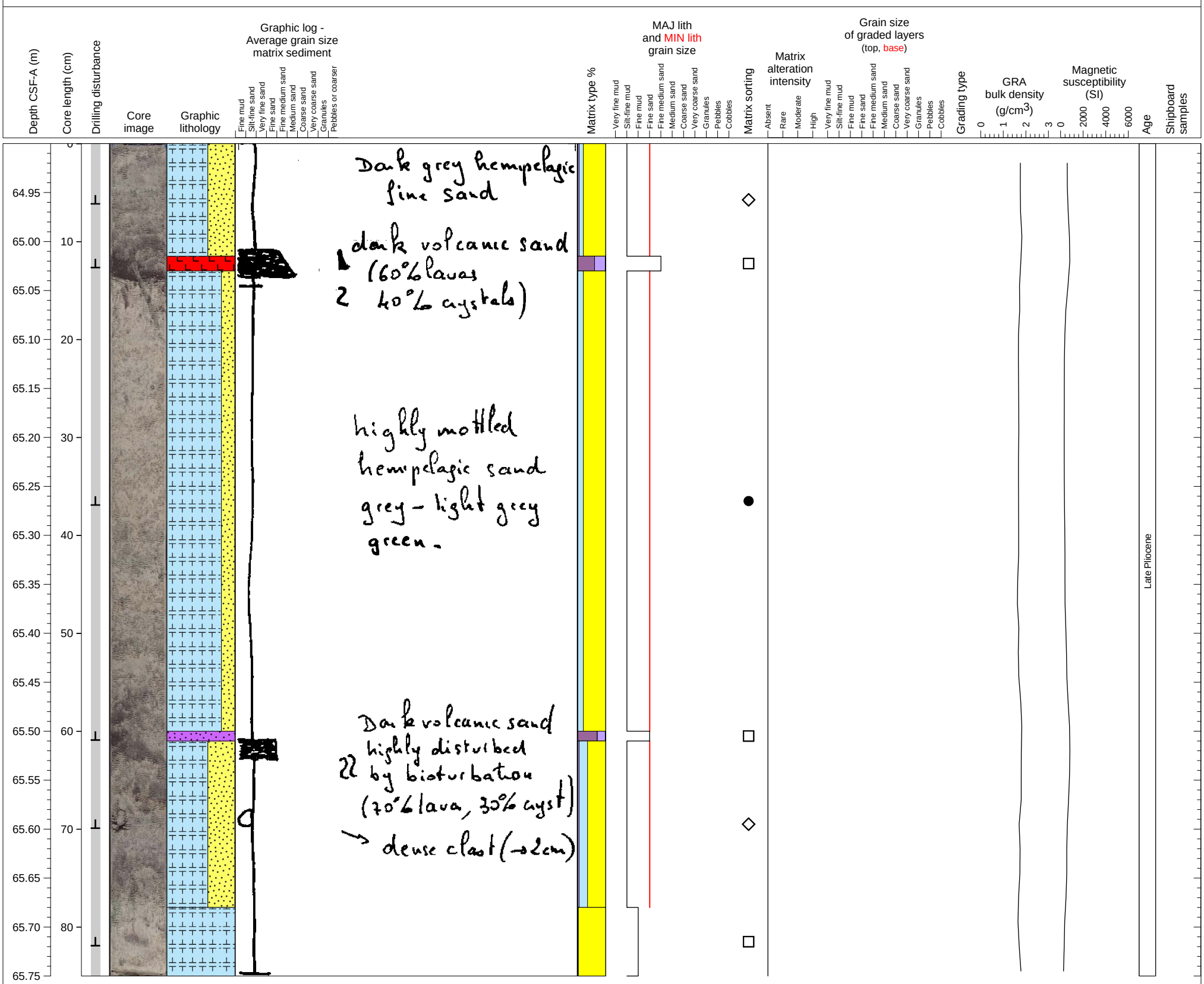
Hole 340-U1396C-7H Section 6, Top of Section: 63.4 CSF-A (m)

Hemipelagic fine sediment with a couple of ashfall layers (bioturbated).



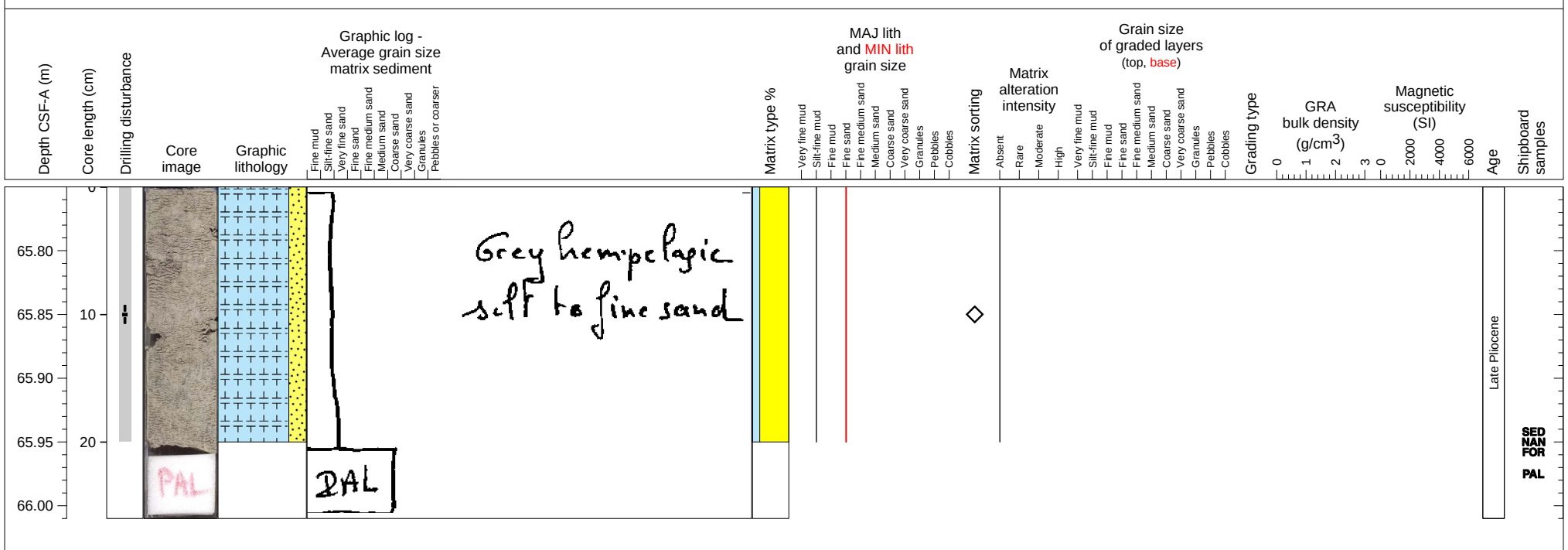
Hole 340-U1396C-7H Section 7, Top of Section: 64.9 CSF-A (m)

This section has two possible ash layers in hemipelagic silt ooze.



Hole 340-U1396C-7H Section CC, Top of Section: 65.75 CSF-A (m)

This section is hemipelagic clay mottled by bioturbaion.



Hole 340-U1396C-8H Section 1, Top of Section: 65.4 CSF-A (m)

This section is all hemipelagic ooze consisting ill-sorted silt. Color changes from white at the bottom to light gray in the upper part.

Depth CSF-A (m)
Core length (cm)
Drilling disturbance
Core image
Graphic lithology
Graphic log - Average grain size matrix sediment
Fine mud
Silt-fine sand
Very fine sand
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles or coarser
Matrix type %
MAJ lith and MIN lith grain size
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles
Matrix sorting
Matrix alteration intensity
Absent
Rare
Moderate
High
Grain size of graded layers (top, base)
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles
Grading type
GRA bulk density (g/cm3)
0
1
2
3
Magnetic susceptibility (SI)
0
2000
4000
6000
Age
Shipboard samples

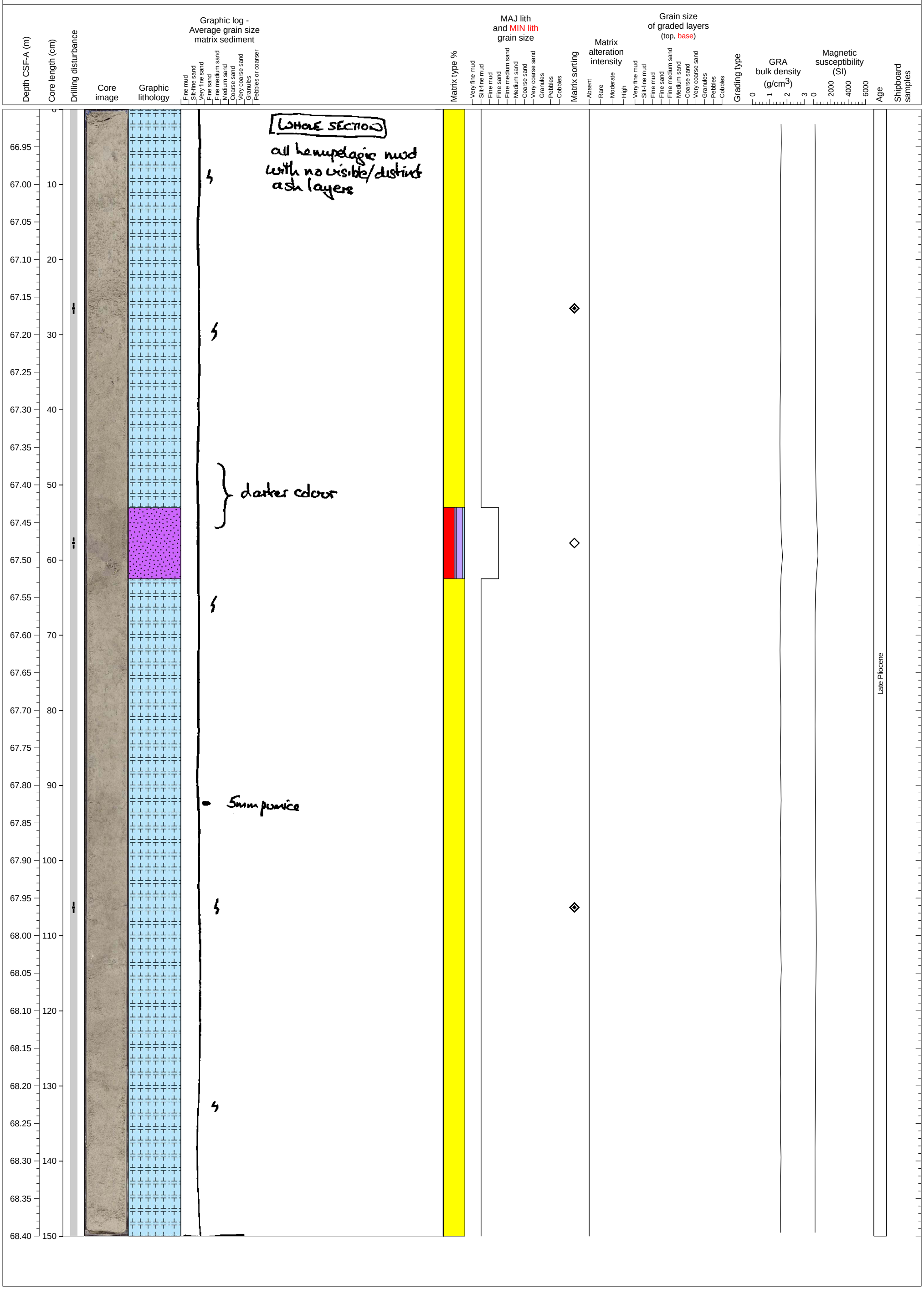
65.45
65.50
65.55
65.60
65.65
65.70
65.75
65.80
65.85
65.90
65.95
66.00
66.05
66.10
66.15
66.20
66.25
66.30
66.35
66.40
66.45
66.50
66.55
66.60
66.65
66.70
66.75
66.80
66.85
66.90

0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150

WHOLE SECTION
all hemipelagic mud with no visible/distinct ash layers
darker colour
5mm pumice
Late Pliocene

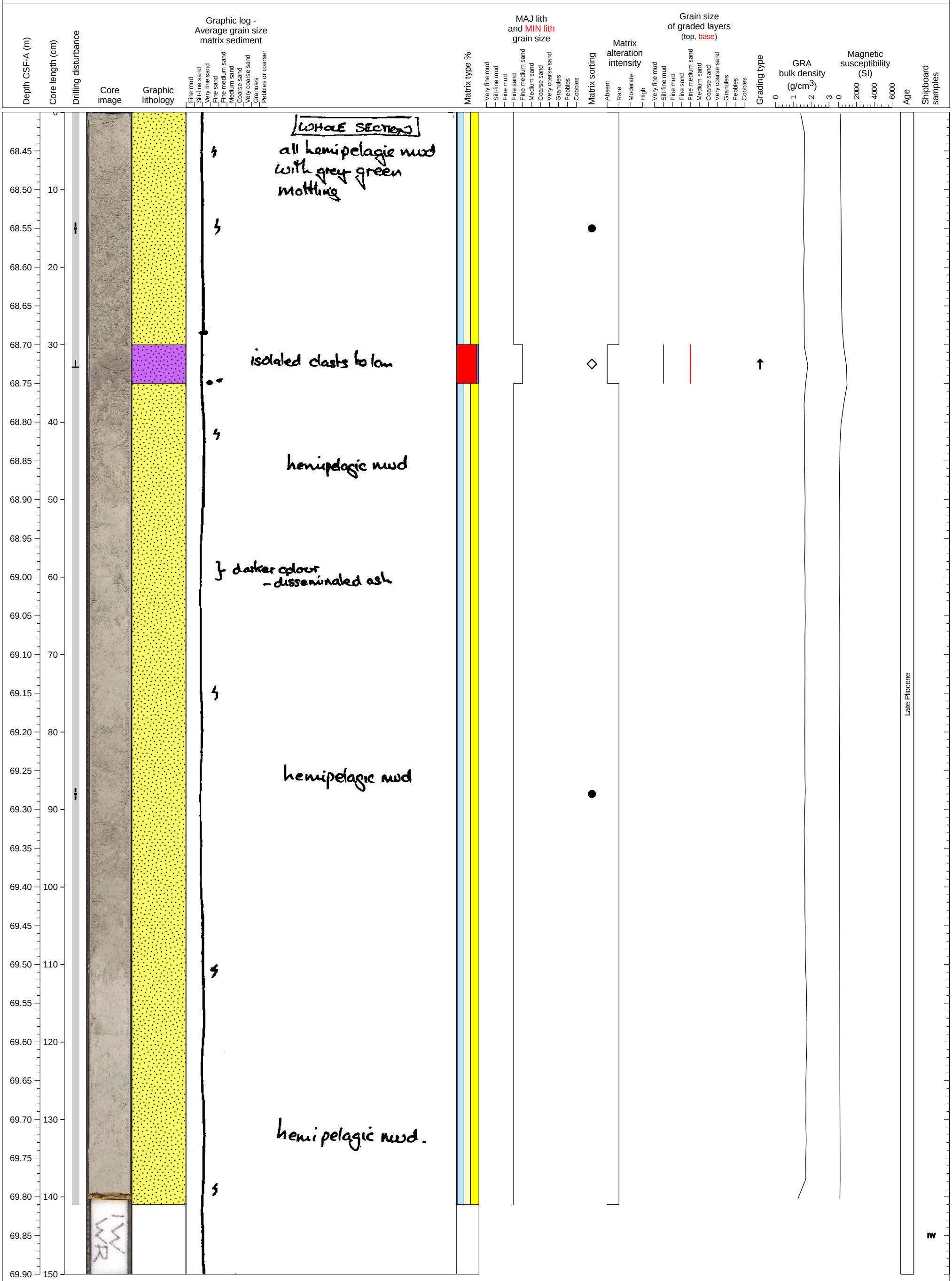
Hole 340-U1396C-8H Section 2, Top of Section: 66.9 CSF-A (m)

Hemipelagic clay with diffuse layer of volcaniclastic fine sand.



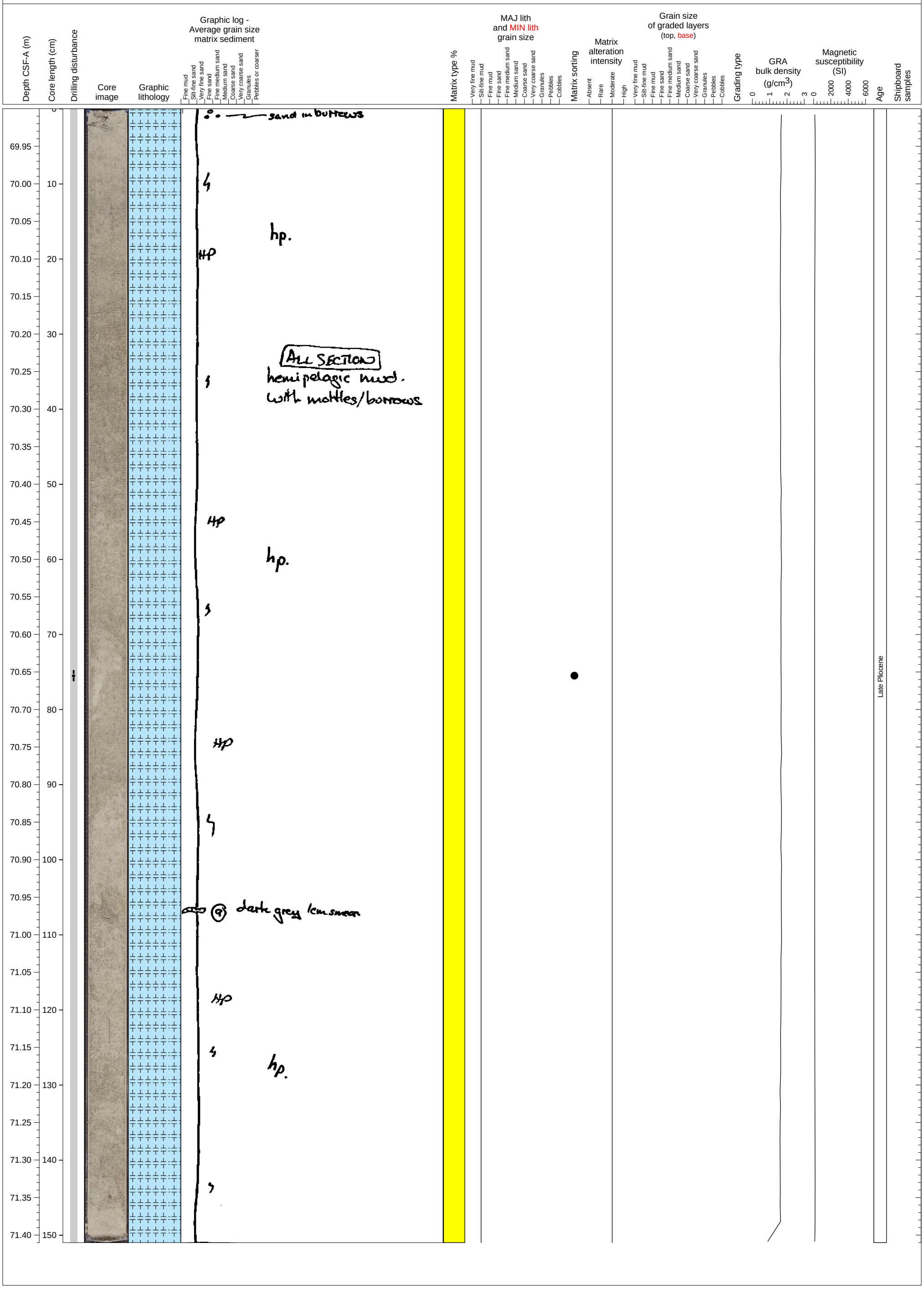
Hole 340-U1396C-8H Section 3, Top of Section: 68.4 CSF-A (m)

Hemipelagic callcareous silty sand with a diffuse ash layer.



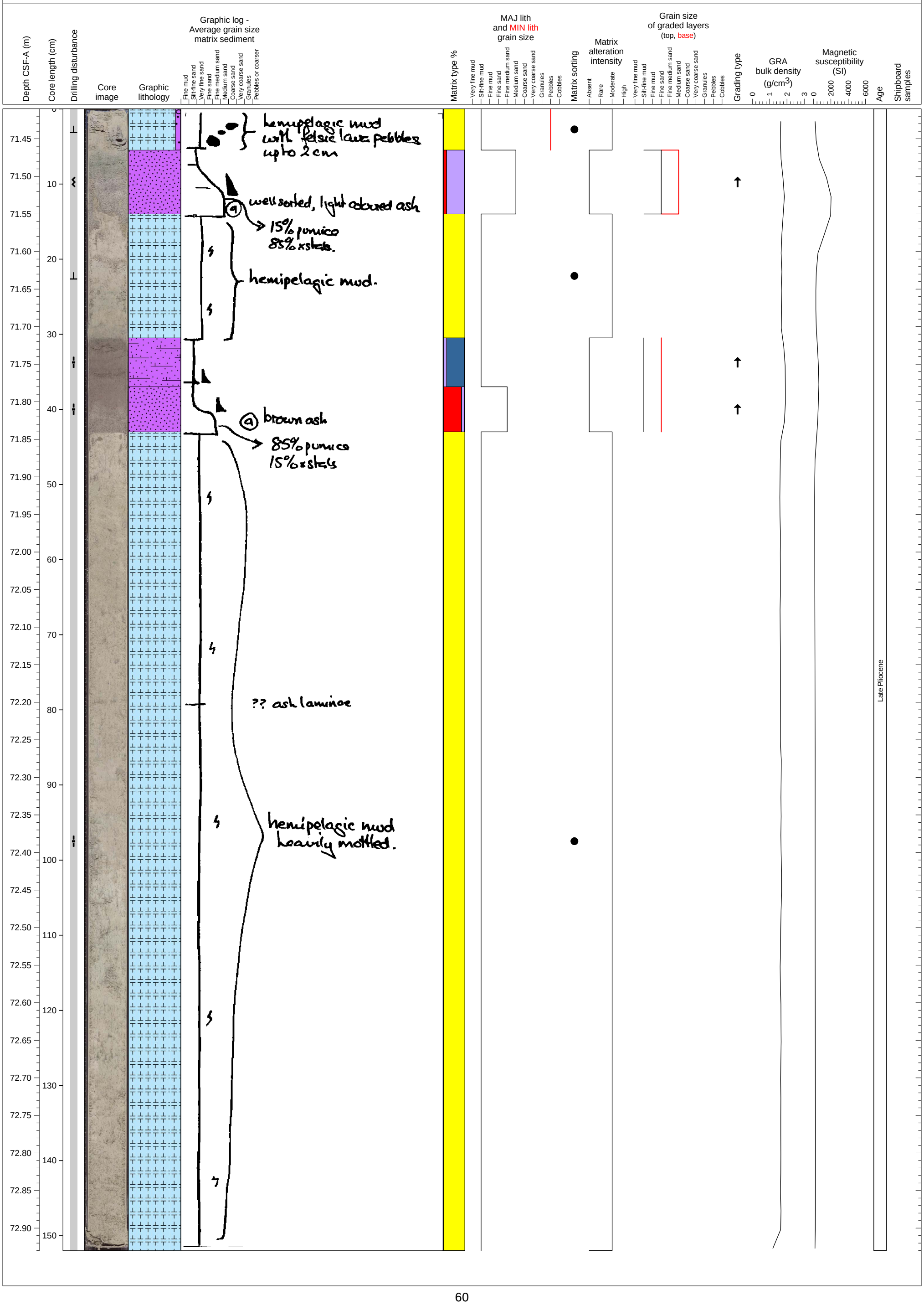
Hole 340-U1396C-8H Section 4, Top of Section: 69.9 CSF-A (m)

The whole section is only hemiplelagic sediment.



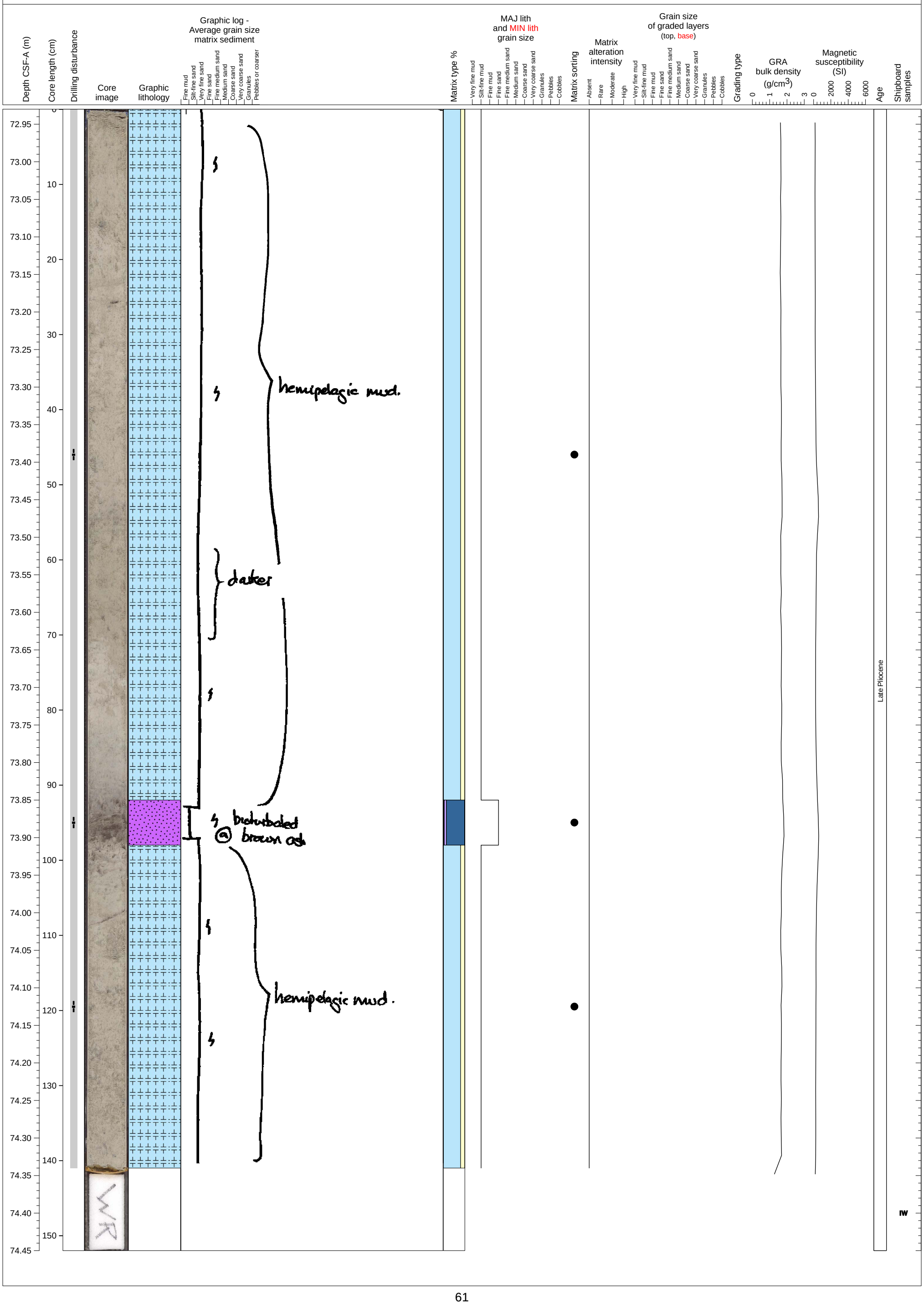
Hole 340-U1396C-8H Section 5, Top of Section: 71.41 CSF-A (m)

At least two pumiceous and crystal-rich tephra layers in hemipelagic sediments. The lower one has double normal grading.



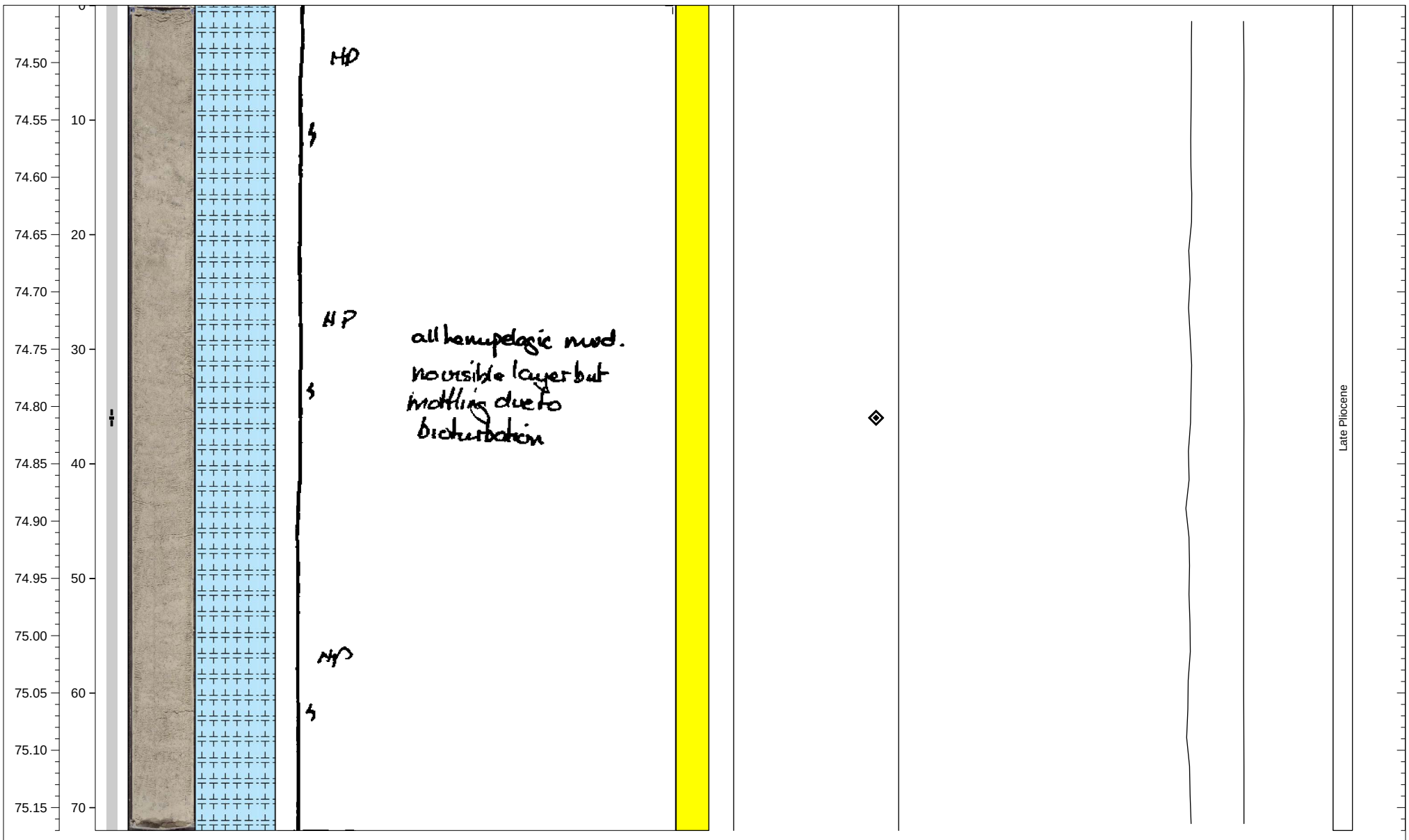
Hole 340-U1396C-8H Section 6, Top of Section: 72.93 CSF-A (m)

This section contain possible one ash layer, which have been highly bioturbated, but contain original pumice and crystals.



Hole 340-U1396C-8H Section 7, Top of Section: 74.45 CSF-A (m)

Hemipelagic clay with moderate bioturbation.

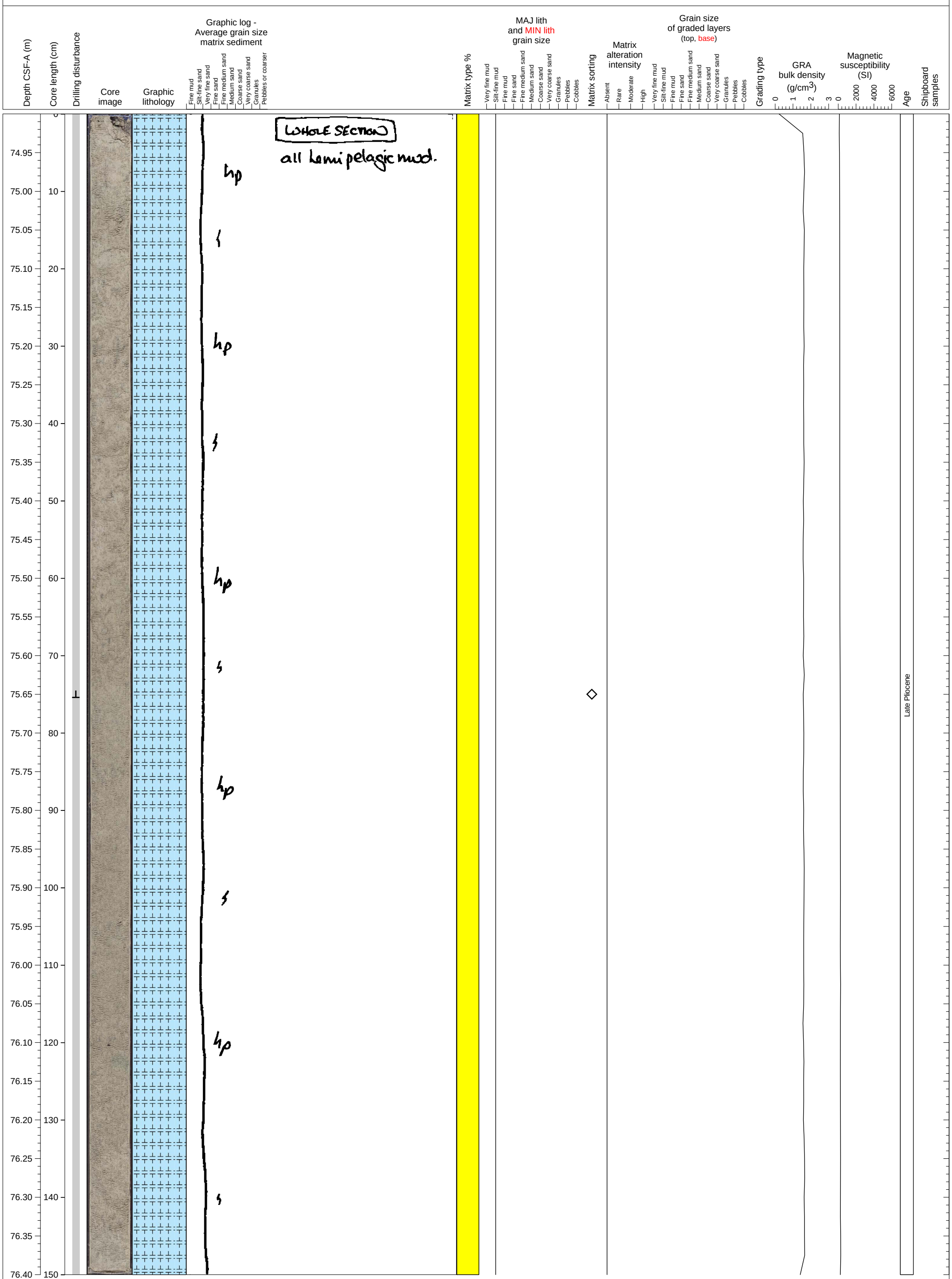


Hole 340-U1396C-8H Section CC, Top of Section: 75.17 CSF-A (m)

Hemipelagic clay. PAL sample from base of section.

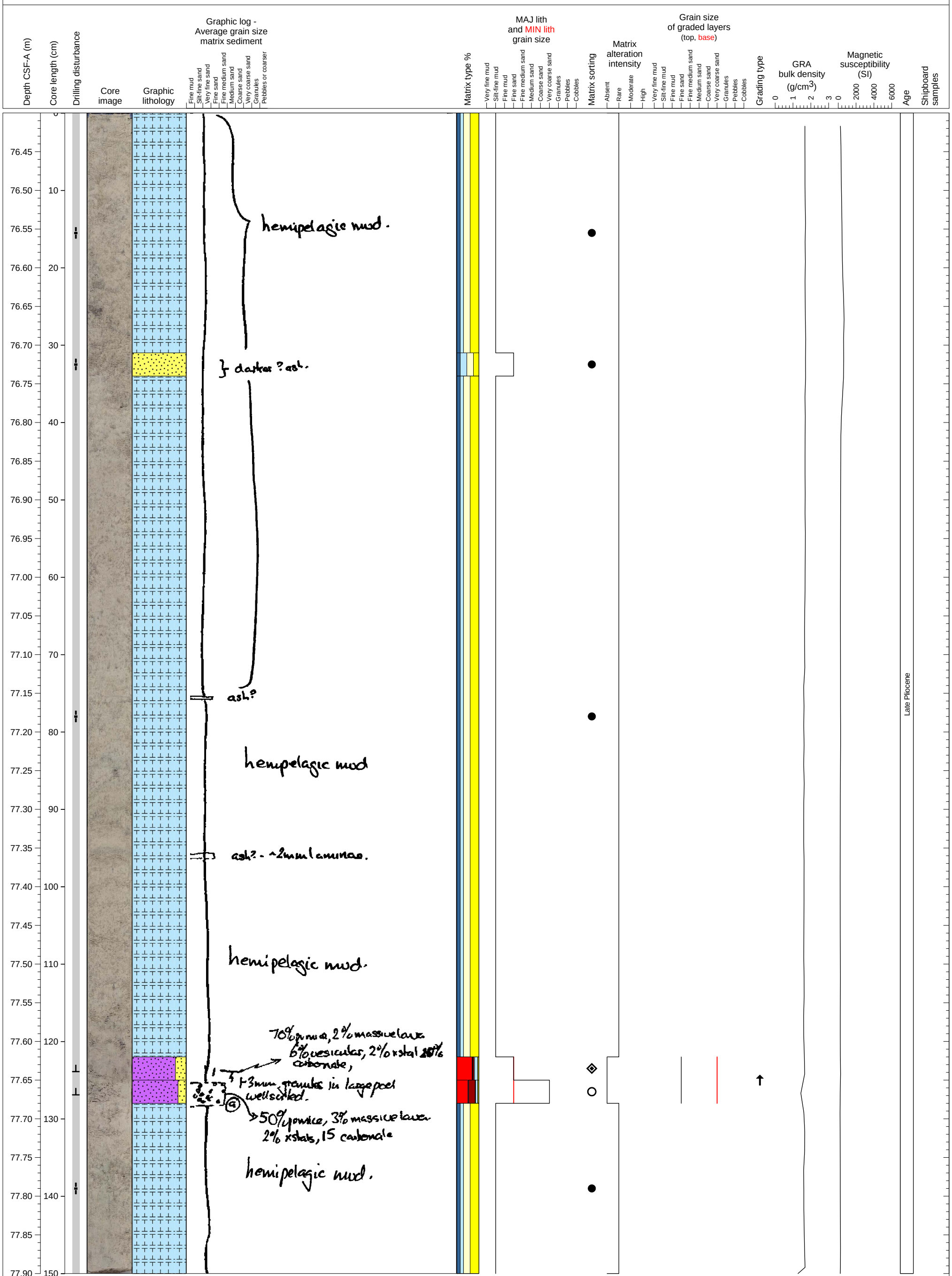
Hole 340-U1396C-9H Section 1, Top of Section: 74.9 CSF-A (m)

Hemipelagic clay with moderate bioturbation.



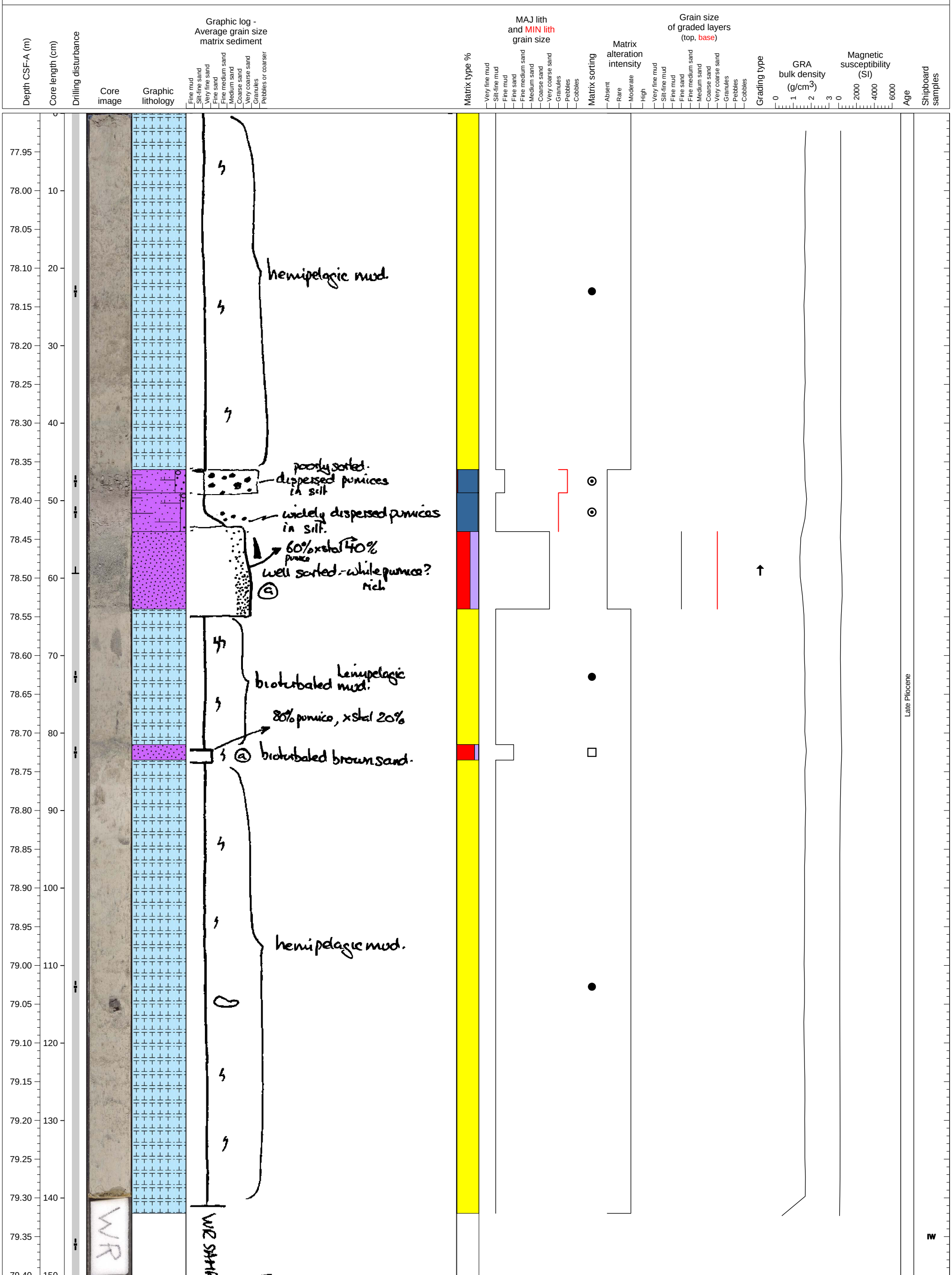
Hole 340-U1396C-9H Section 2, Top of Section: 76.4 CSF-A (m)

Thick hemipelagic mud layer interbed a pumicious sand layer at lower part of section.



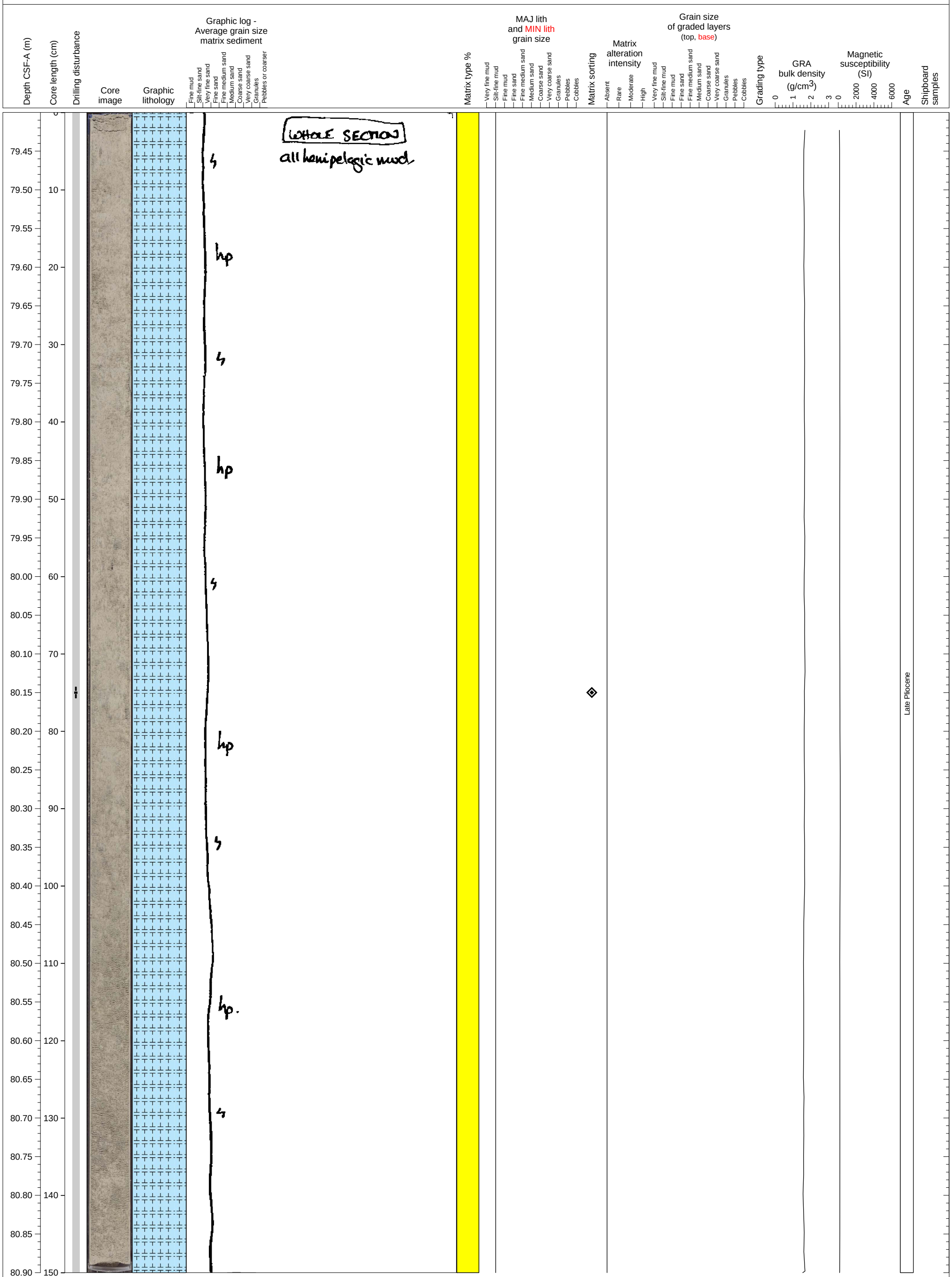
Hole 340-U1396C-9H Section 3, Top of Section: 77.9 CSF-A (m)

Pumice fallout covered by silty-mud containing granule to pebble sized pumice clasts and tephra layer.



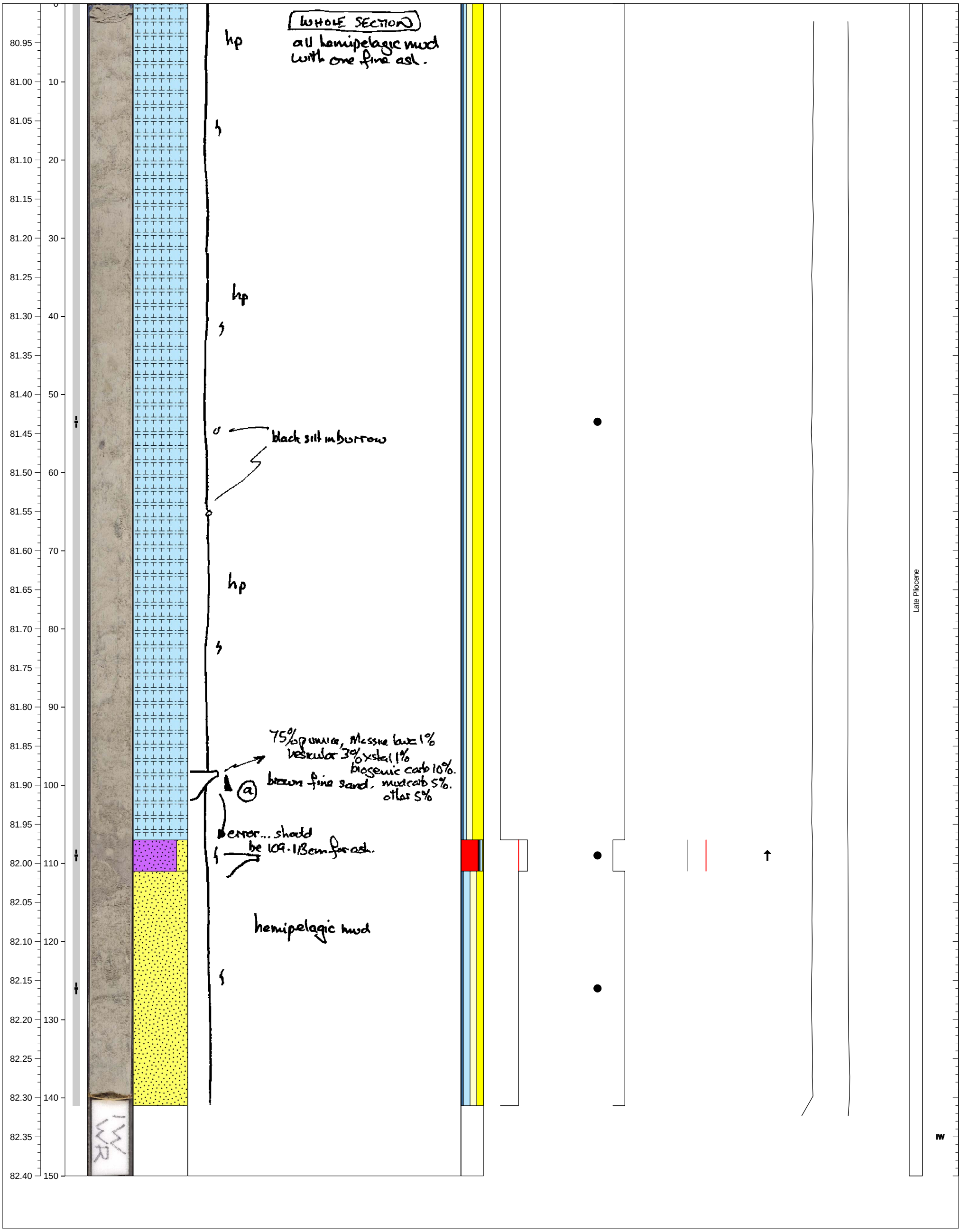
Hole 340-U1396C-9H Section 4, Top of Section: 79.4 CSF-A (m)

Hemipelagic clay with moderate bioturbation.



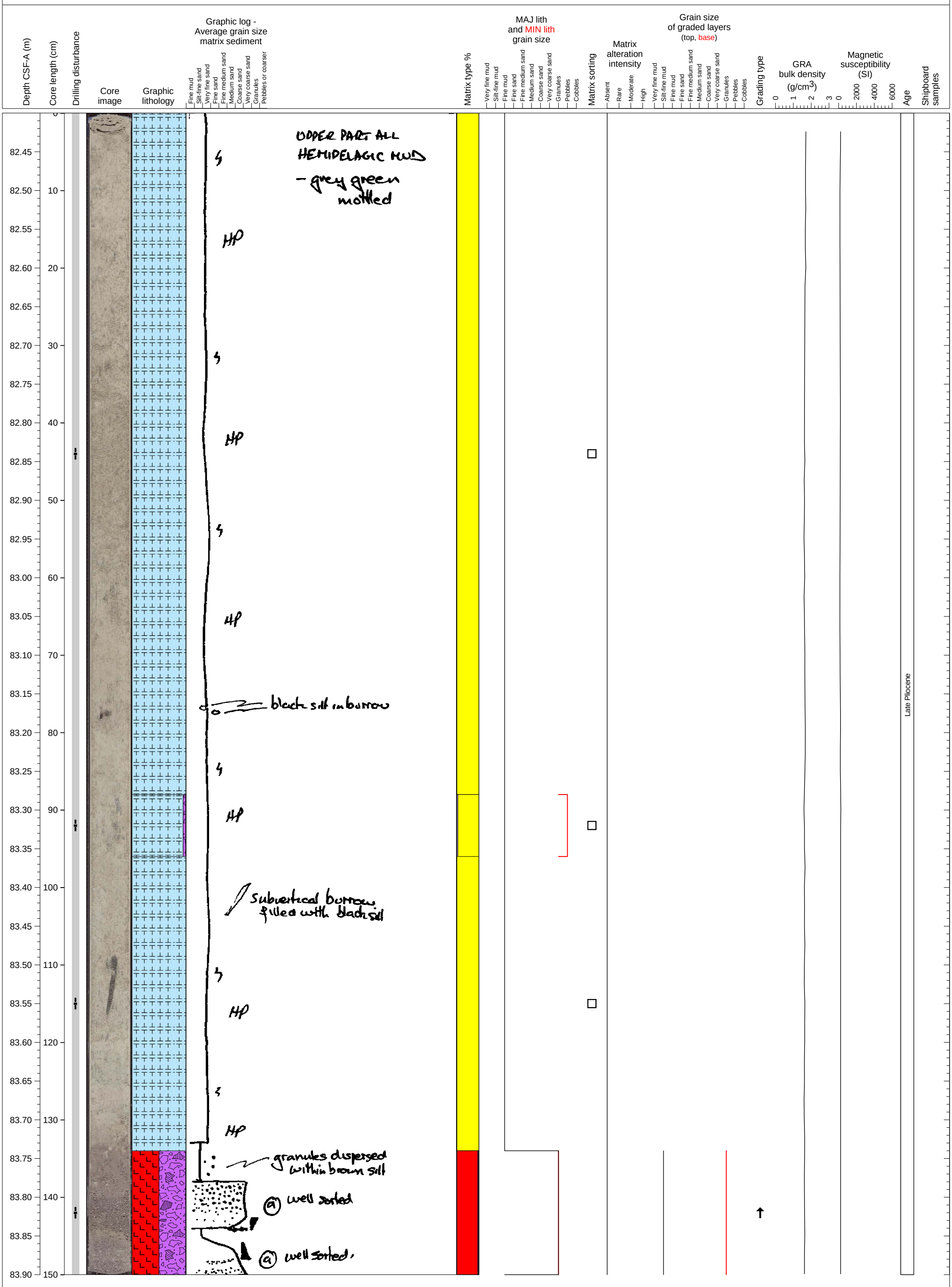
Hole 340-U1396C-9H Section 5, Top of Section: 80.9 CSF-A (m)

Hemipelagic sediments.



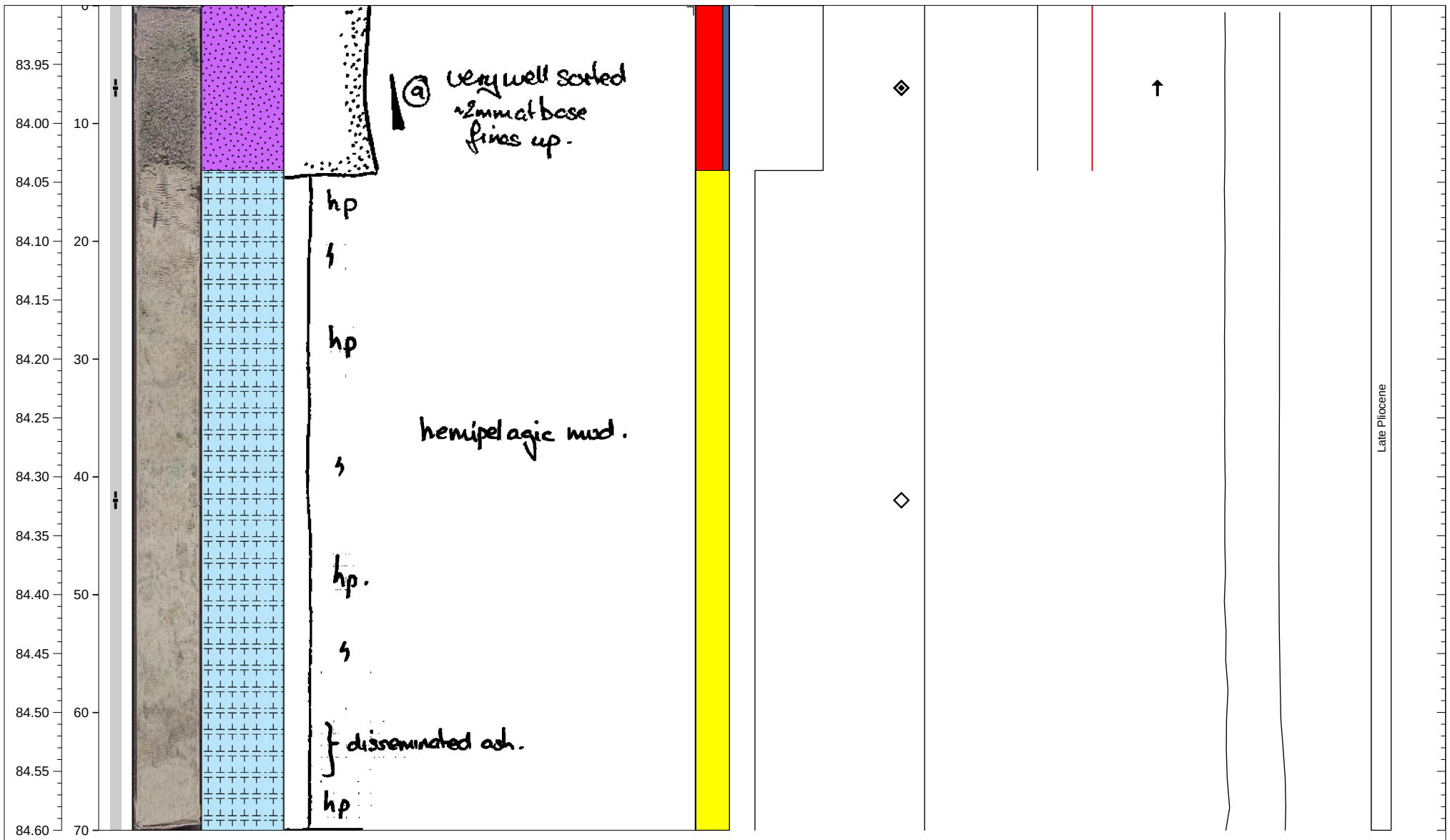
Hole 340-U1396C-9H Section 6, Top of Section: 82.4 CSF-A (m)

Calcareous ooze section underlain by pumice fall deposit.



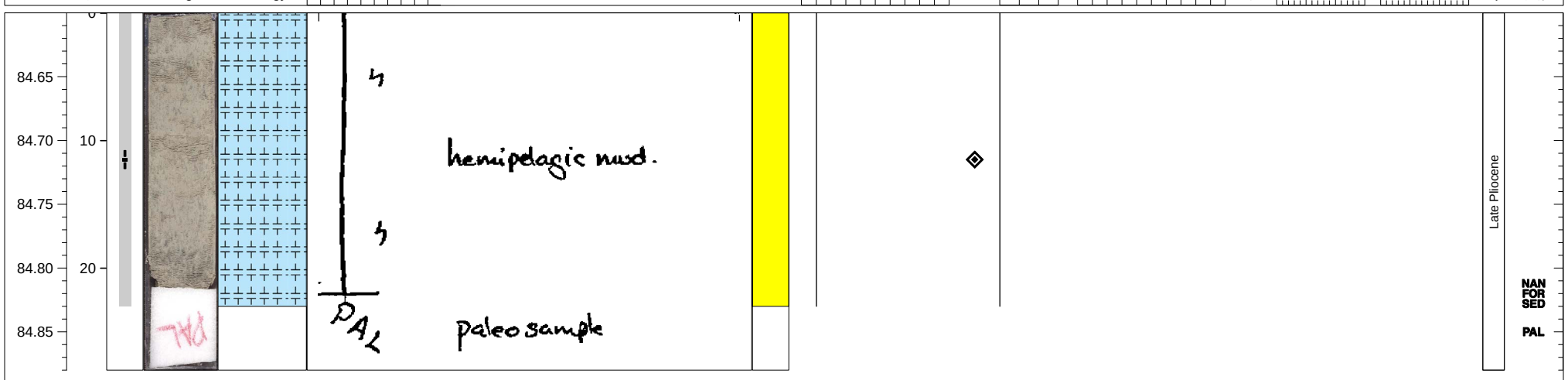
Hole 340-U1396C-9H Section 7, Top of Section: 83.9 CSF-A (m)

Coarse volcaniclastic sand deposit (fallout layer) overlying hemipelagic mud.



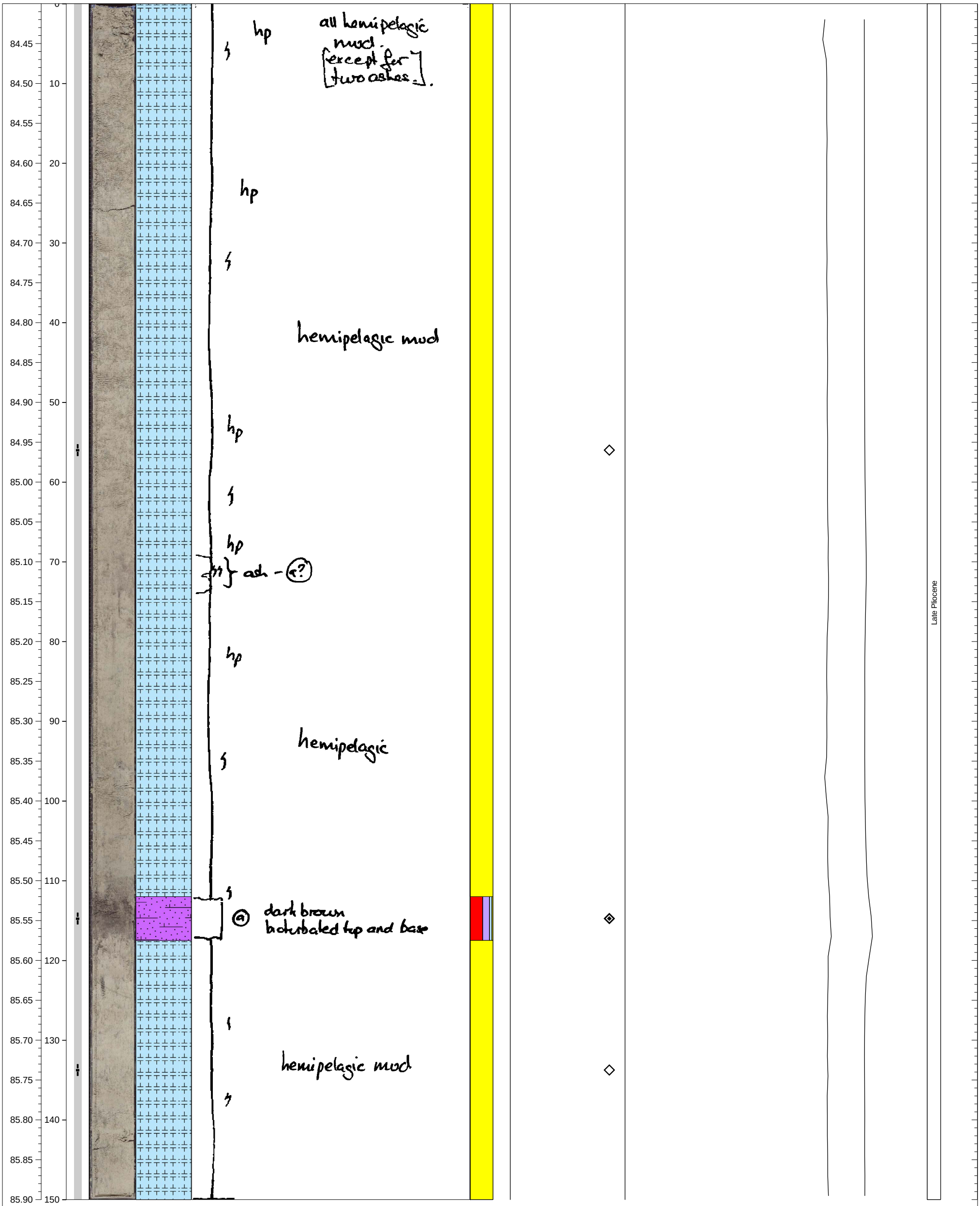
Hole 340-U1396C-9H Section CC, Top of Section: 84.6 CSF-A (m)

Hemipelagic clay with moderate bioturbation.



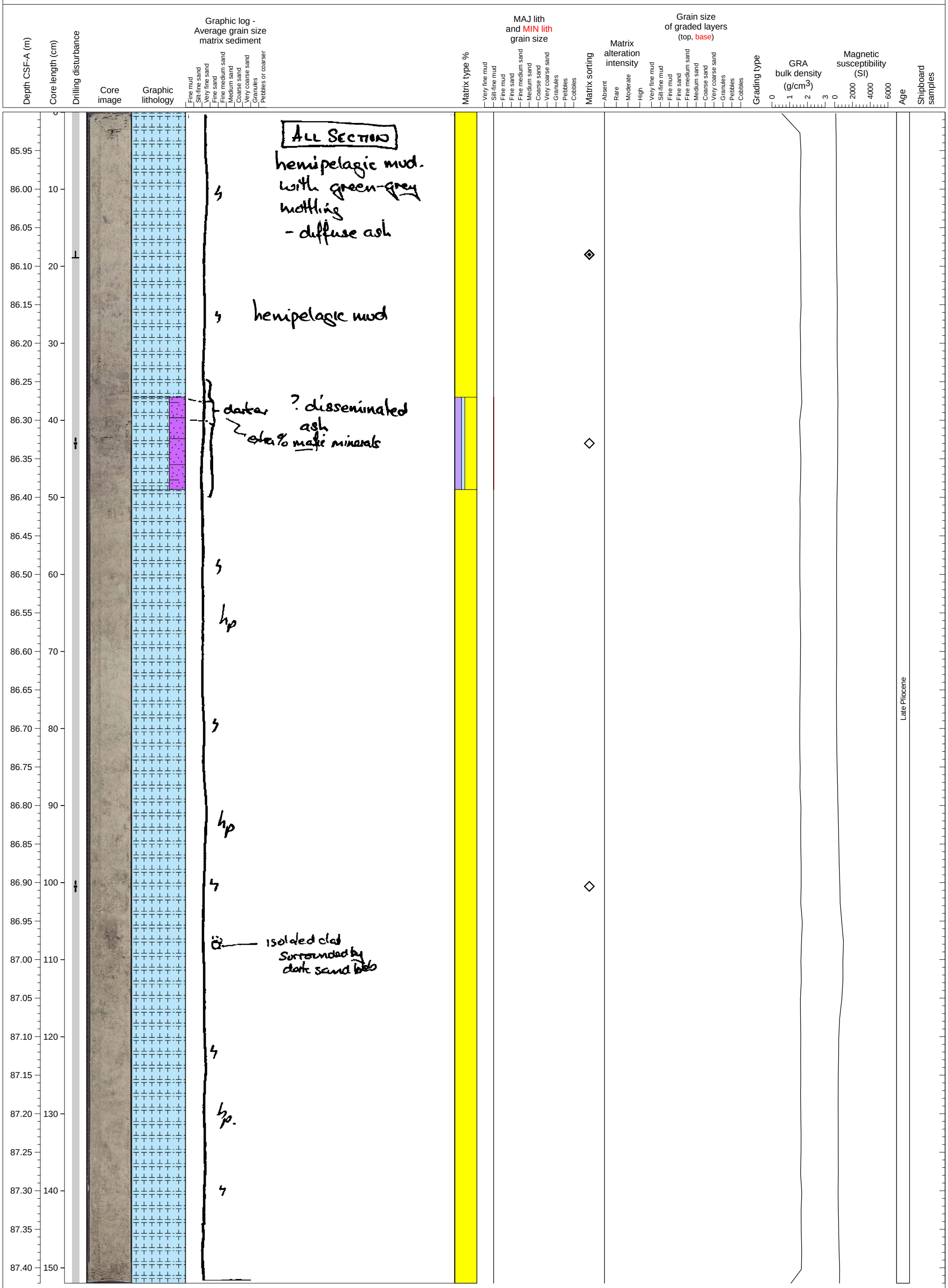
Hole 340-U1396C-10H Section 1, Top of Section: 84.4 CSF-A (m)

Hemipelagic clay interlayered with a thin volcaniclastic bed or potential ash layer.



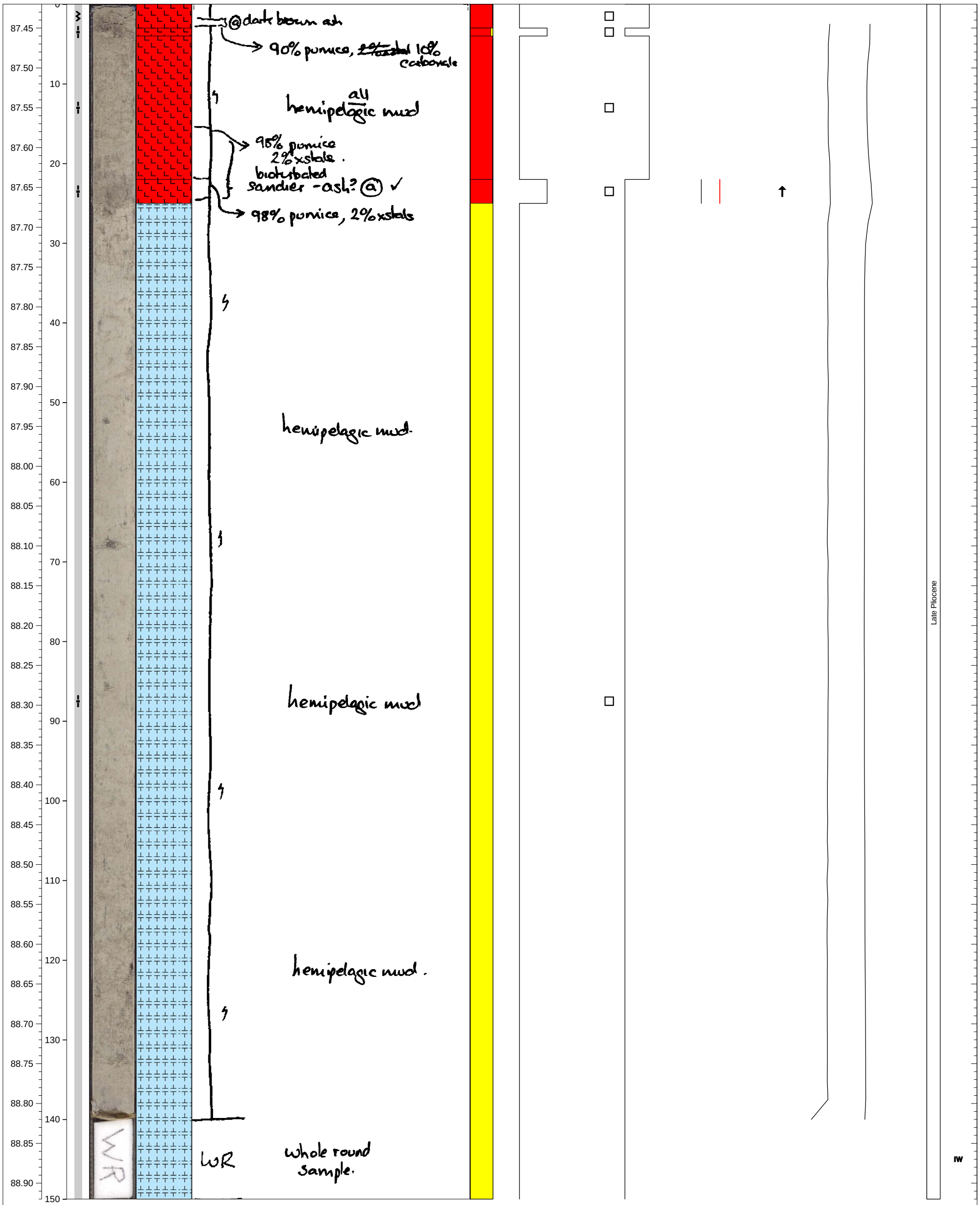
Hole 340-U1396C-10H Section 2, Top of Section: 85.9 CSF-A (m)

Hemipelagic clay interlayered with a hemipelagic clay with an increased concentration of mafic minerals resulting in a darker color.



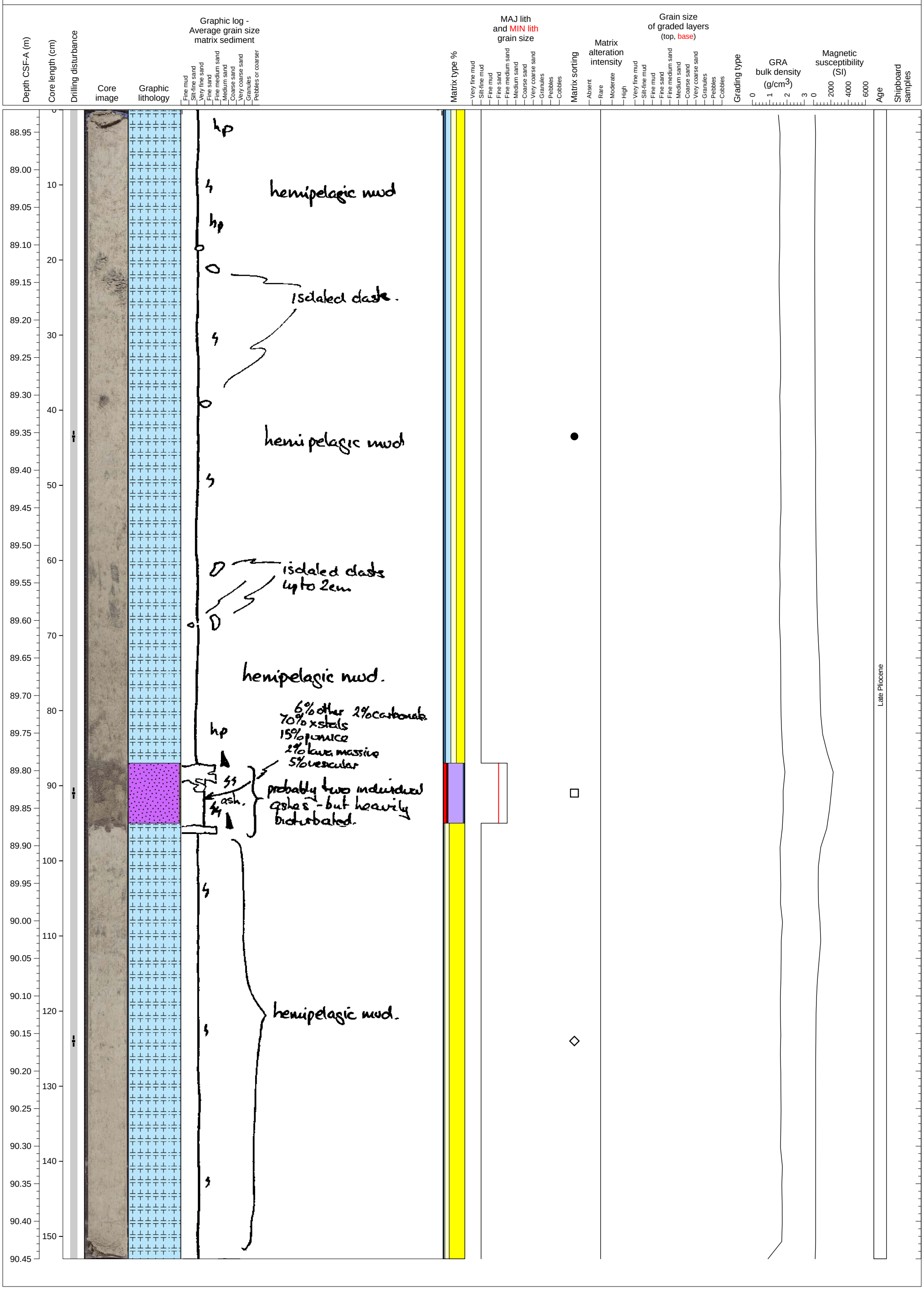
Hole 340-U1396C-10H Section 3, Top of Section: 87.42 CSF-A (m)

Hemipleagic mud, two ashes.



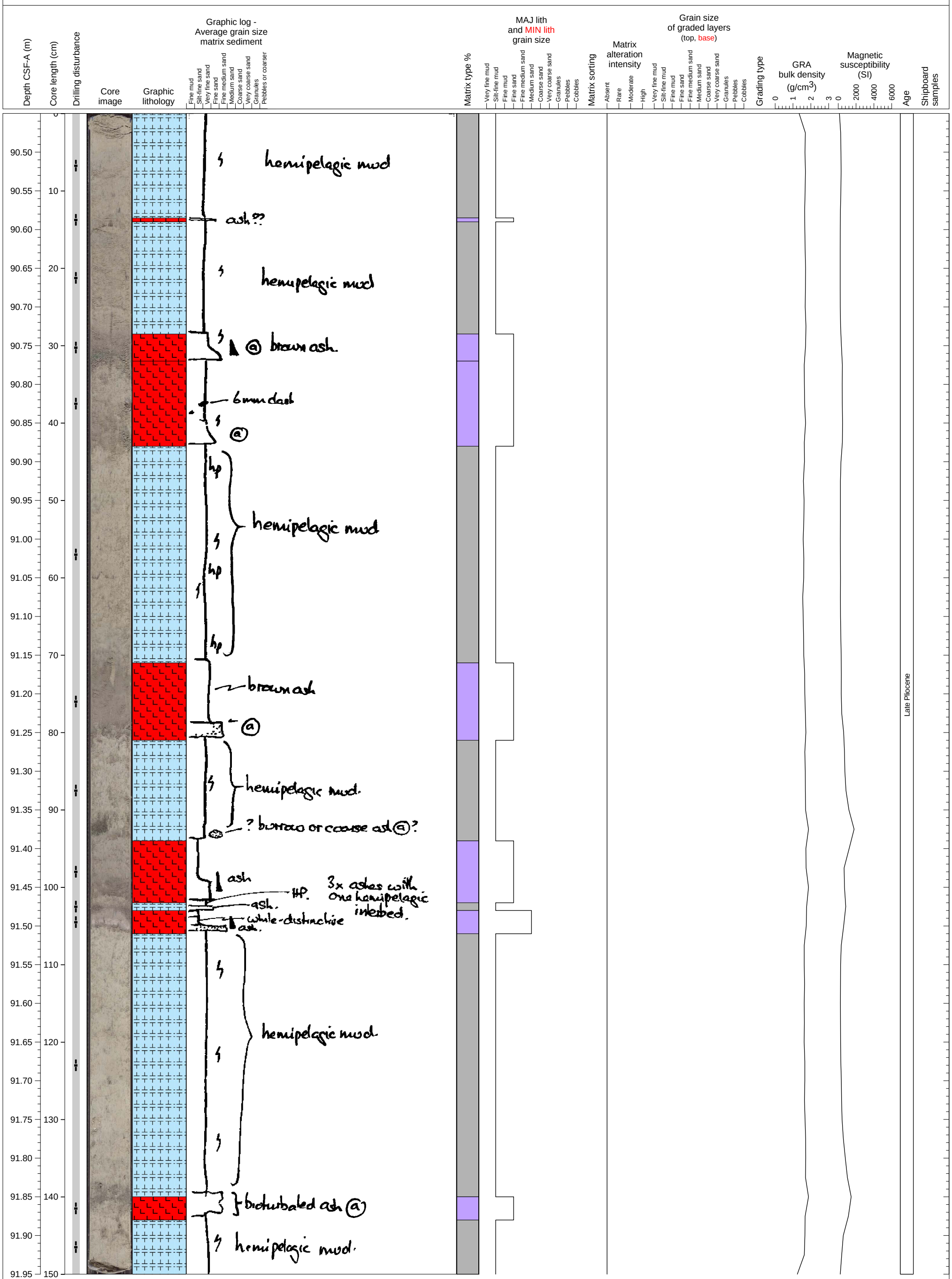
Hole 340-U1396C-10H Section 4, Top of Section: 88.92 CSF-A (m)

Thick hemipelagic clay contains a well sorted (commonly bioturbated) volacaniclastic sand layer at middle part.



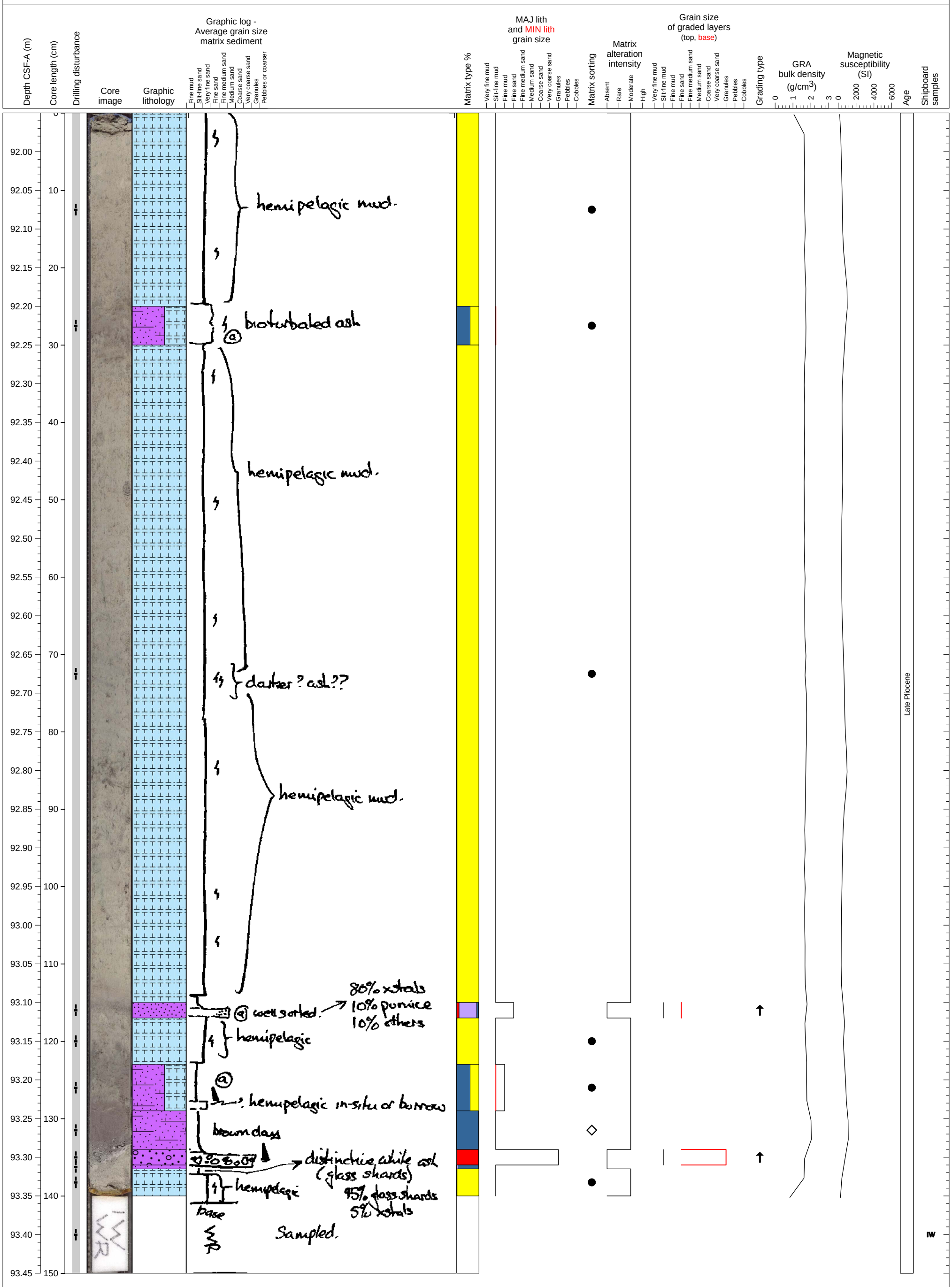
Hole 340-U1396C-10H Section 5, Top of Section: 90.45 CSF-A (m)

Hemipelagic mud with many ash interbeds



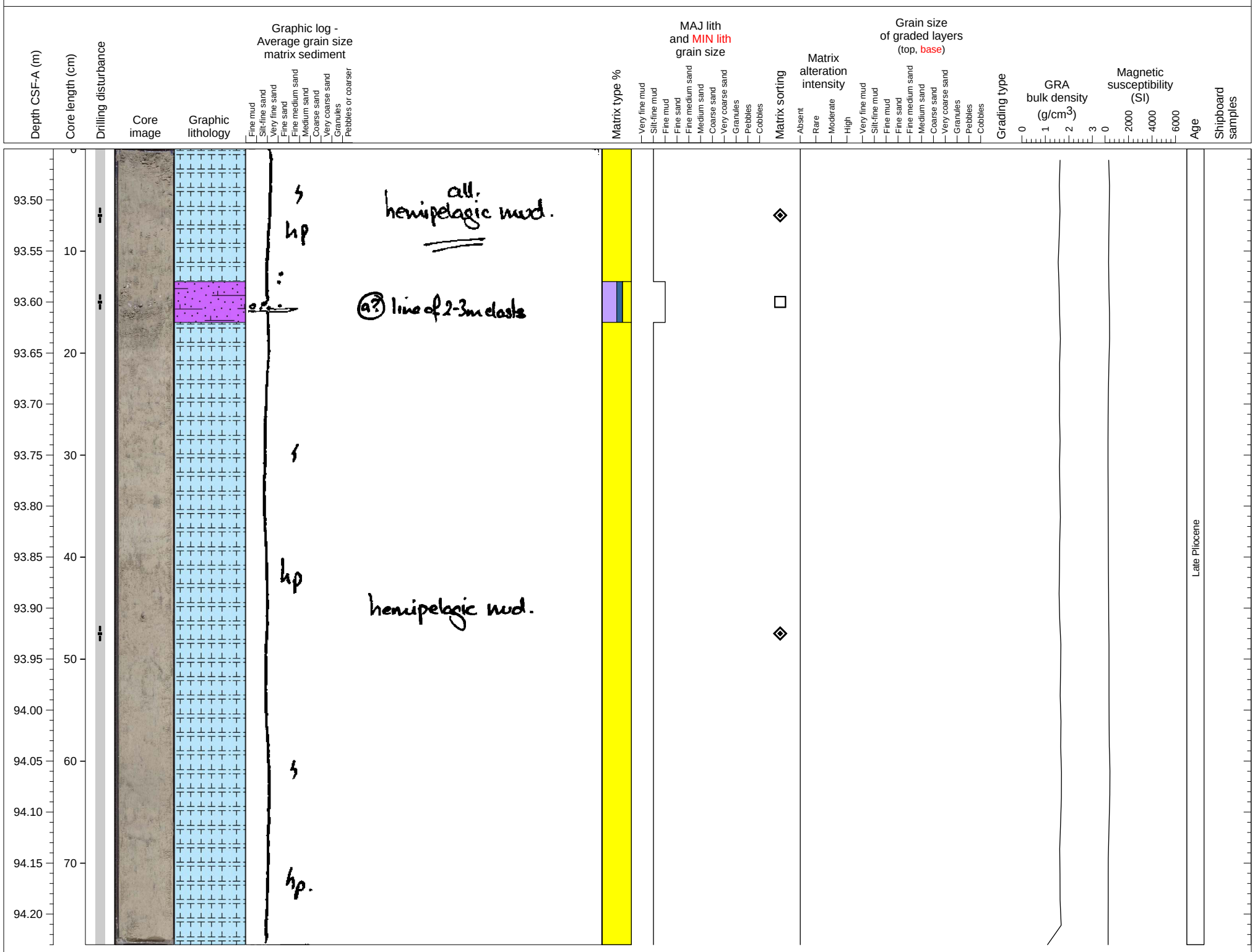
Hole 340-U1396C-10H Section 6, Top of Section: 91.95 CSF-A (m)

At least two tephra layers intercalated by hemipelagic sediments. The lowermost tephra is composed of glass shards indicating a large-scale explosive eruption, which is covered by granule to pebble sized pumice clasts.



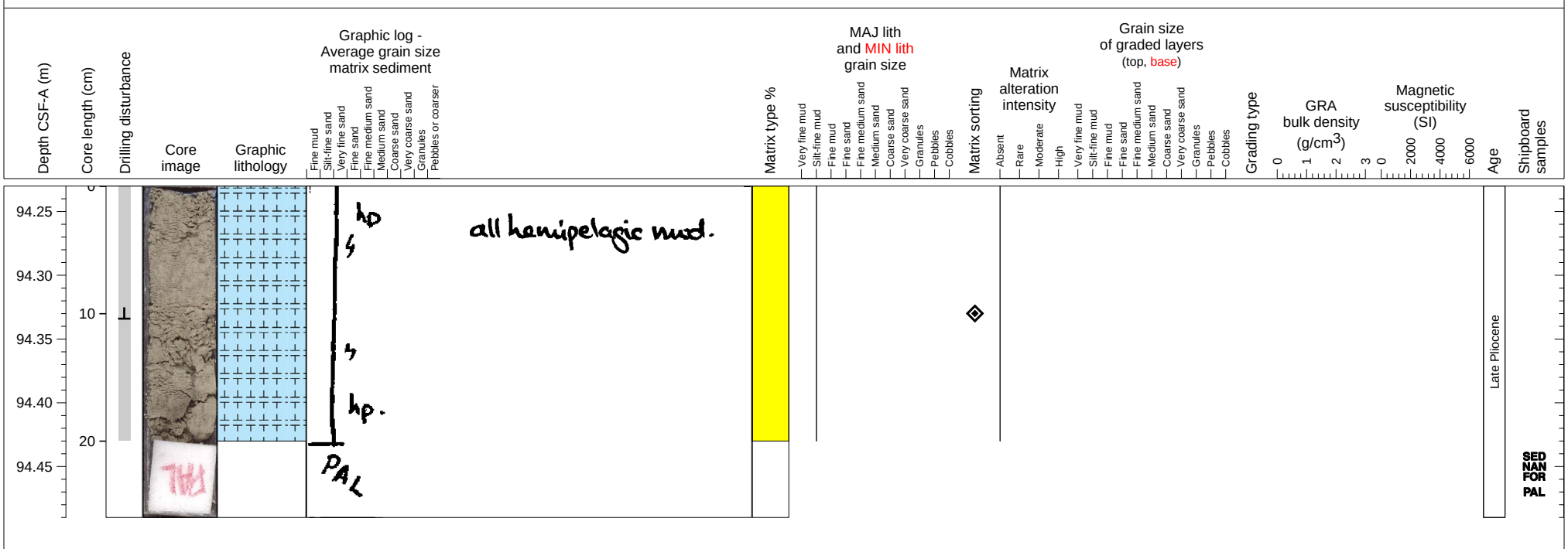
Hole 340-U1396C-10H Section 7, Top of Section: 93.45 CSF-A (m)

Hemipelagic clay with interlayered volcaniclastic mud.



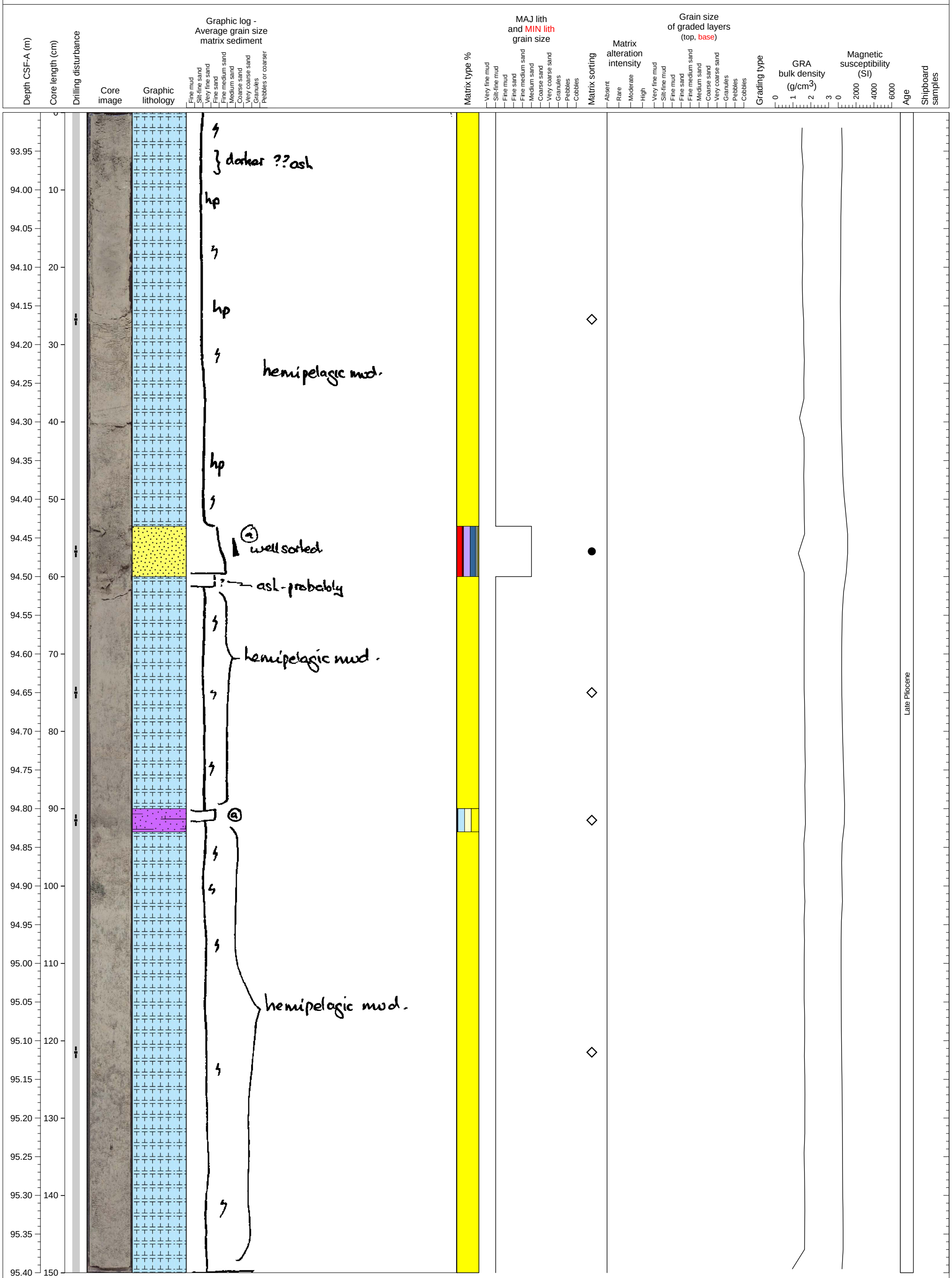
Hole 340-U1396C-10H Section CC, Top of Section: 94.23 CSF-A (m)

Hemipelagic clay. PAL sample from base.



Hole 340-U1396C-11H Section 1, Top of Section: 93.9 CSF-A (m)

Hemipelagic clay interlayered with calcareous sand and volcaniclastic mud (ash).



Hole 340-U1396C-11H Section 2, Top of Section: 95.4 CSF-A (m)

Calcareous ooze having 2 volcanic ash layers. Upper layer is highly disturbed by bioturbation.

Depth CSF-A (m)
Core length (cm)
Drilling disturbance
Core image
Graphic lithology
Graphic log - Average grain size matrix sediment
Fine mud
Silt-fine sand
Very fine sand
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles or coarser
Matrix type %
MAJ lith and MIN lith grain size
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles
Matrix sorting
Matrix alteration intensity
Absent
Rare
Moderate
High
Grain size of graded layers (top, base)
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles
Grading type
GRA bulk density (g/cm^3)
0
1
2
3
Magnetic susceptibility (SI)
0
2000
4000
6000
Age
Shipboard samples

95.45
95.50
95.55
95.60
95.65
95.70
95.75
95.80
95.85
95.90
95.95
96.00
96.05
96.10
96.15
96.20
96.25
96.30
96.35
96.40
96.45
96.50
96.55
96.60
96.65
96.70
96.75
96.80
96.85
96.90

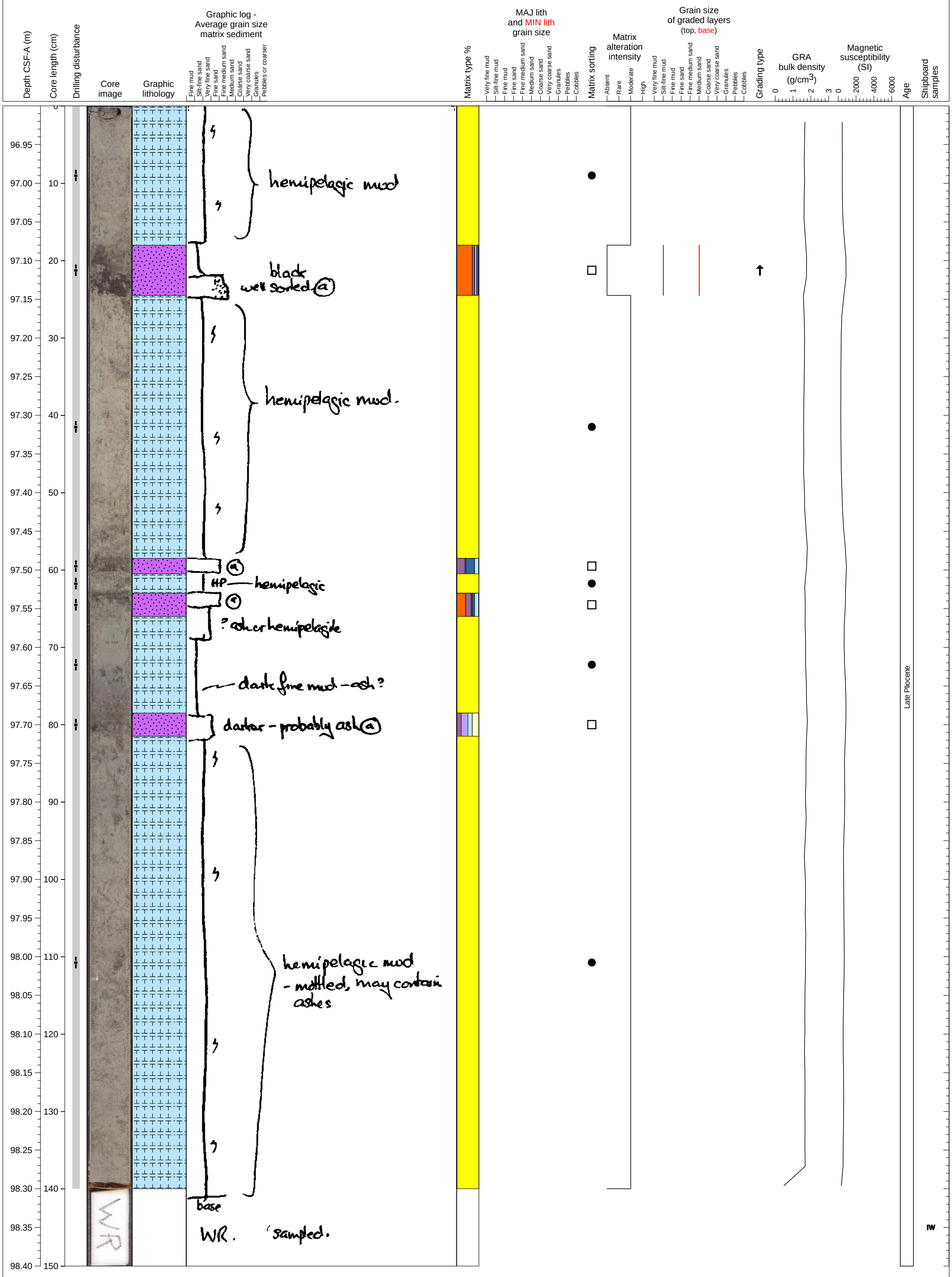
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150

hp
s
hp
s
hp
?ash.
s
hp
s
85% pumice. 10% massive. 5% 5% xstal 2% other vesicles 2% carb.
block @
sandier and darker
?disseminated ash
65% carb. 20% xstal. 10% vesicles. 5% massive.
98% pumice 1% vesicles 1% xstal.
brown ash.
@
99% pumice, 1% xstal.
s
hemipelagic mud.
s
s
darker

Late Pliocene

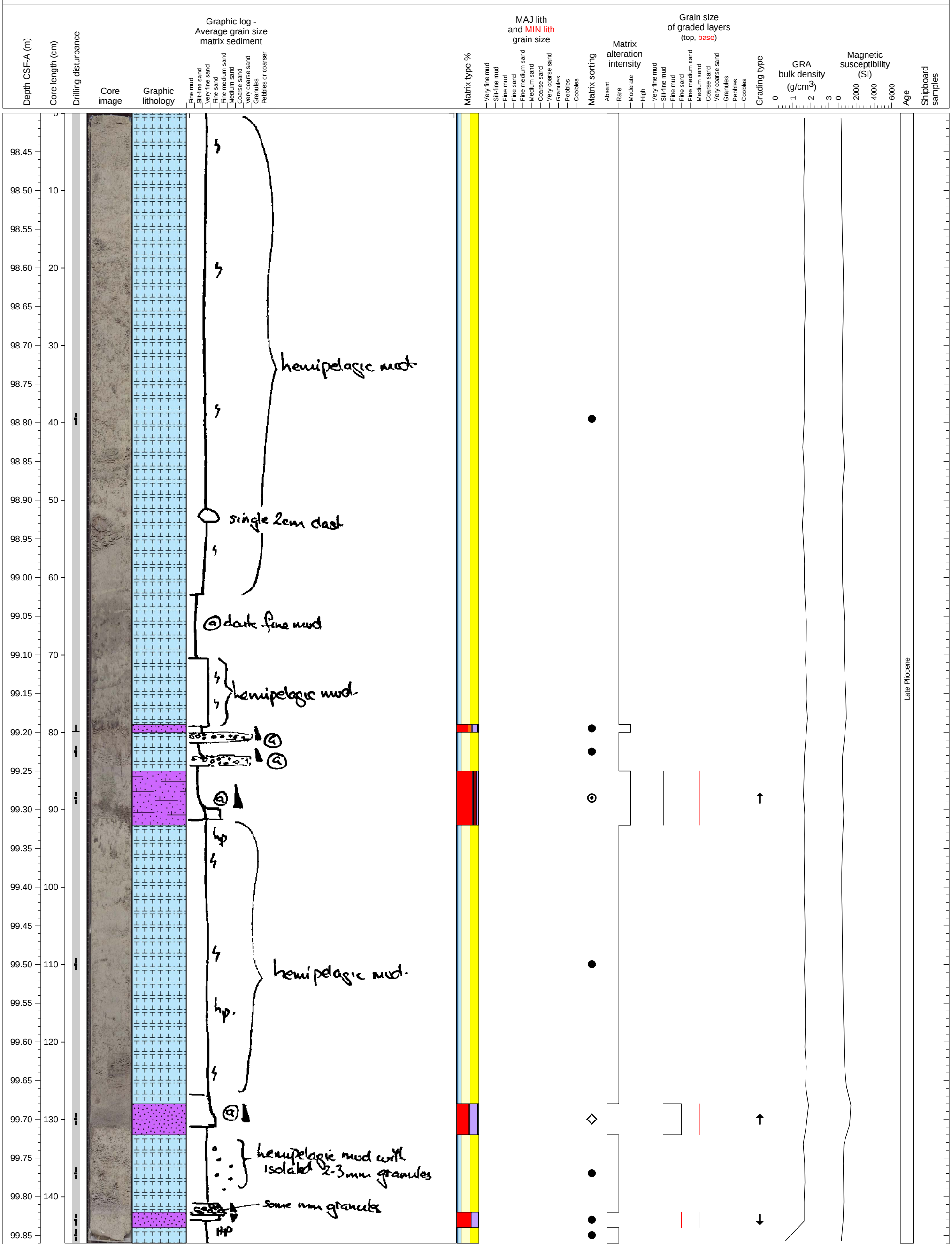
Hole 340-U1396C-11H Section 3, Top of Section: 96.9 CSF-A (m)

At least four basaltic tephra layers intercalating hemipelagic sediments.



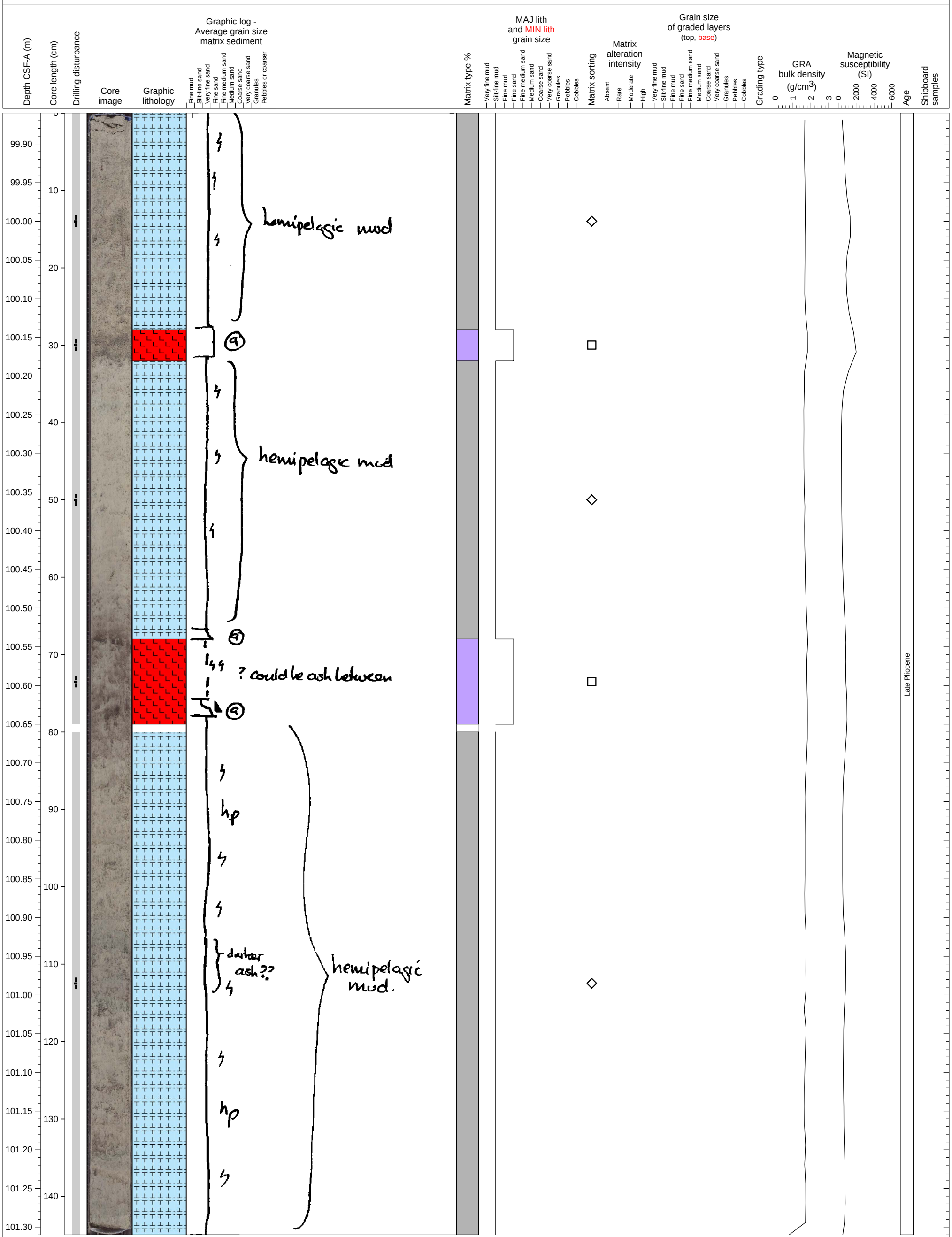
Hole 340-U1396C-11H Section 4, Top of Section: 98.4 CSF-A (m)

Hemipelagic mud beds interbedding two normally grading volcaniclastic sand layers, no grading homogeneous ash layer and reversely grading ash layer.



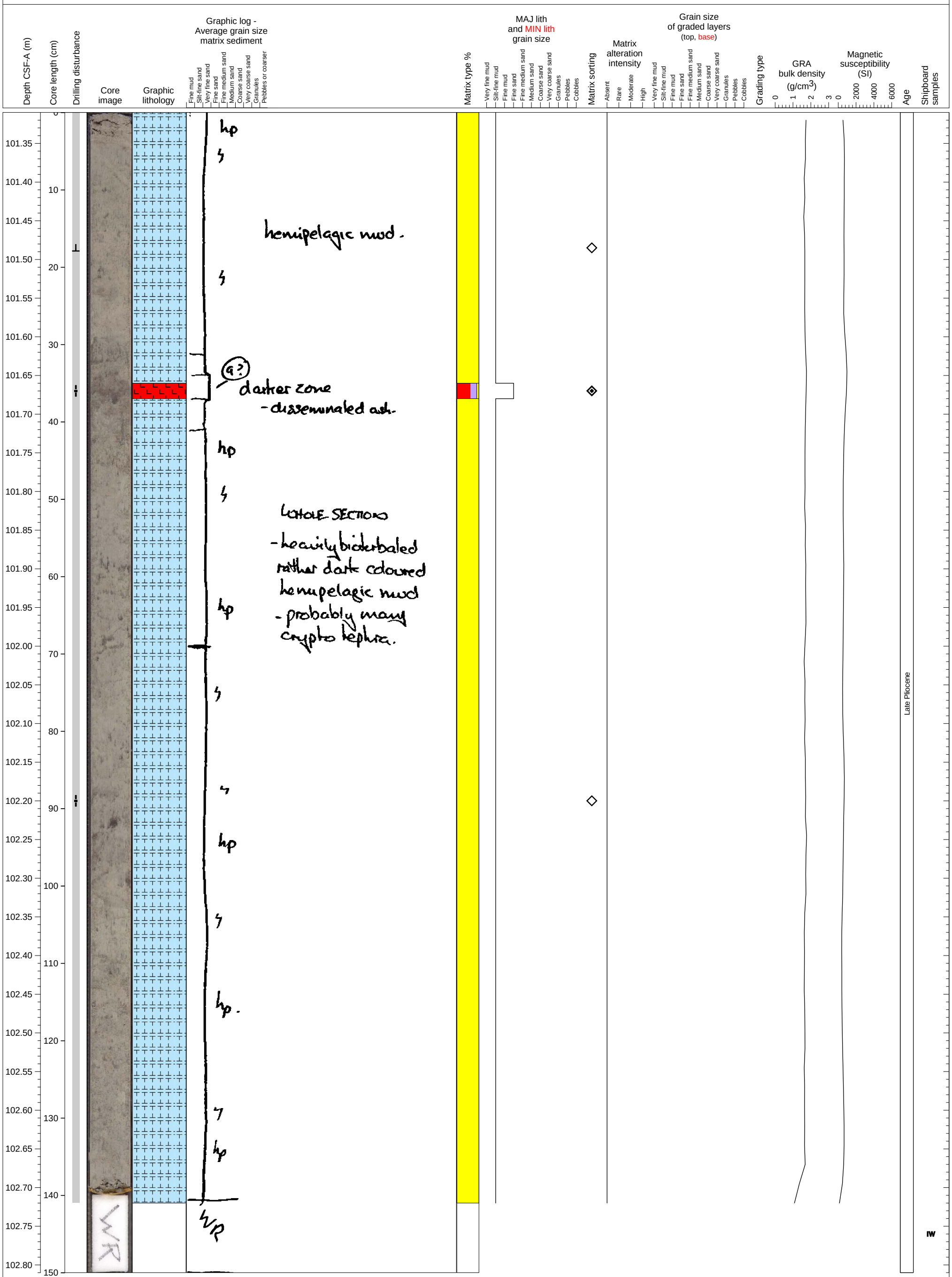
Hole 340-U1396C-11H Section 5, Top of Section: 99.86 CSF-A (m)

Hemipelagic mud with three thin tephra layers.



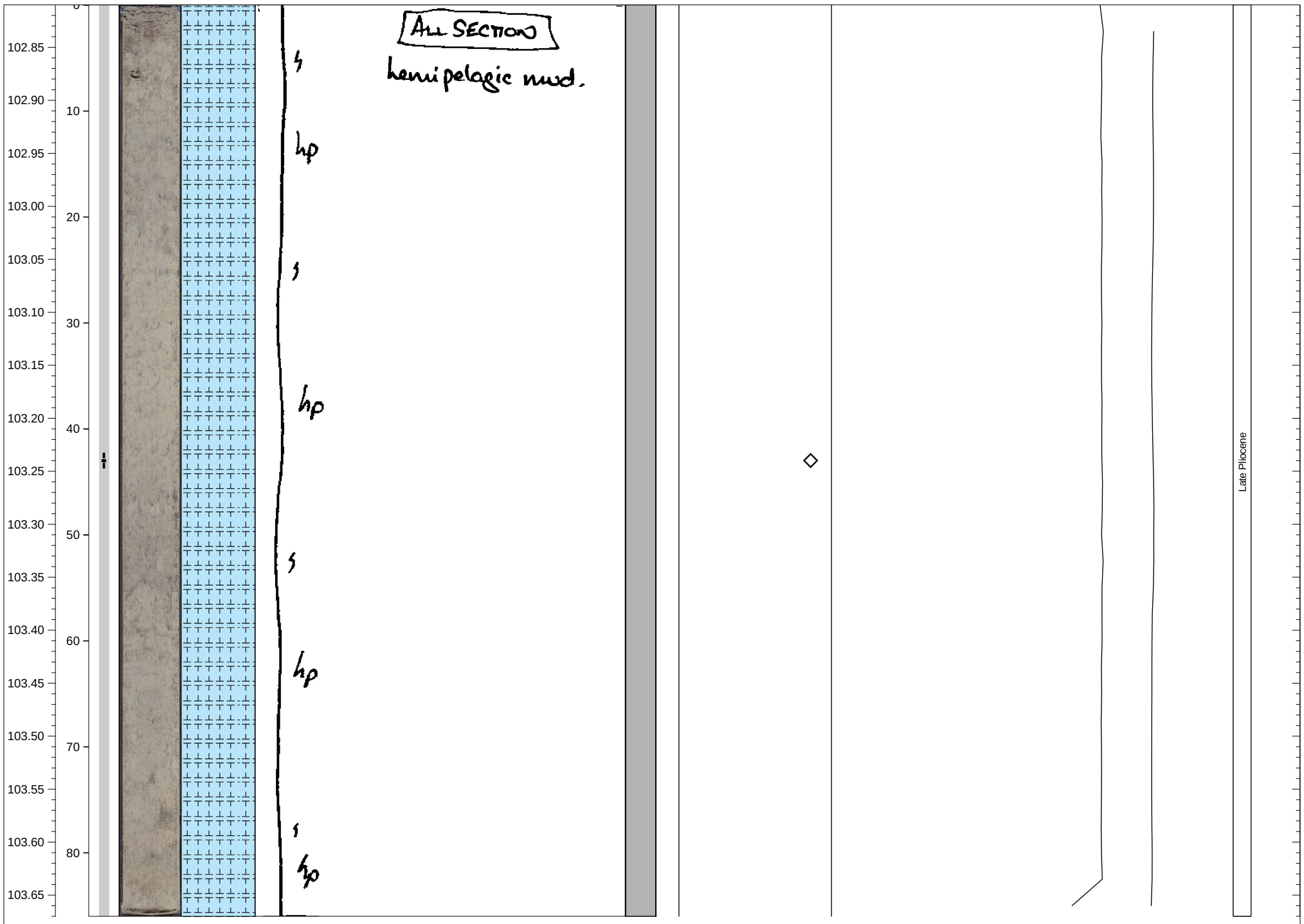
Hole 340-U1396C-11H Section 6, Top of Section: 101.31 CSF-A (m)

Hemipelagic clay with thin ash layer.



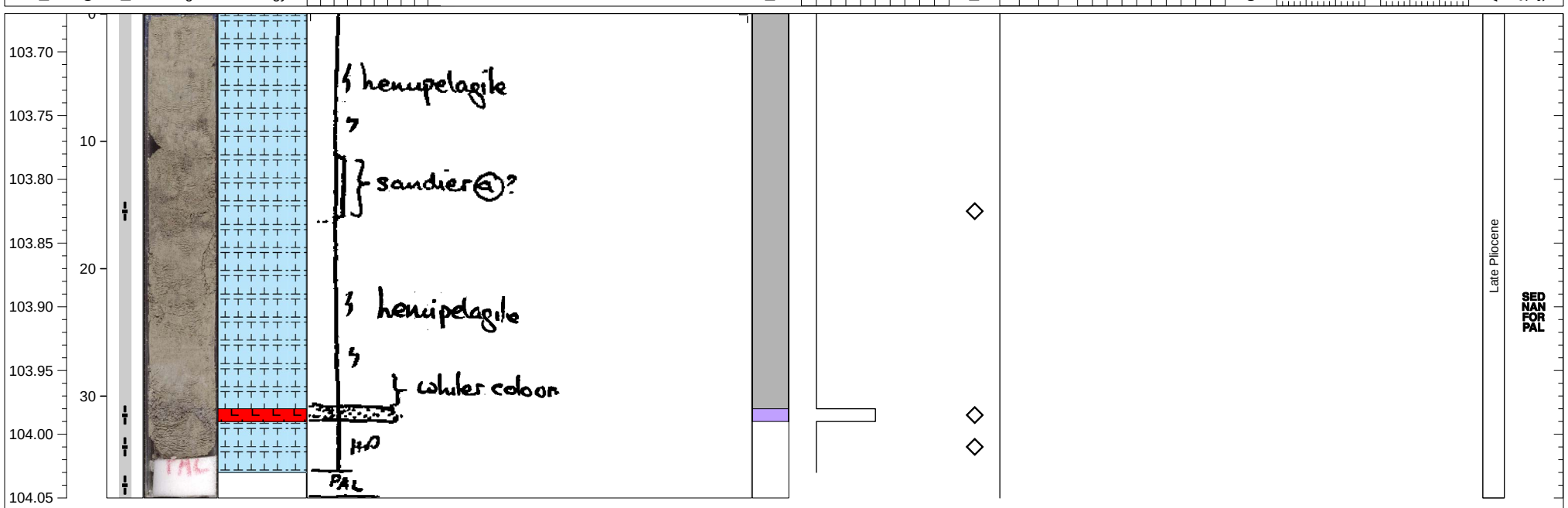
Hole 340-U1396C-11H Section 7, Top of Section: 102.81 CSF-A (m)

Hemipelagic sediments.



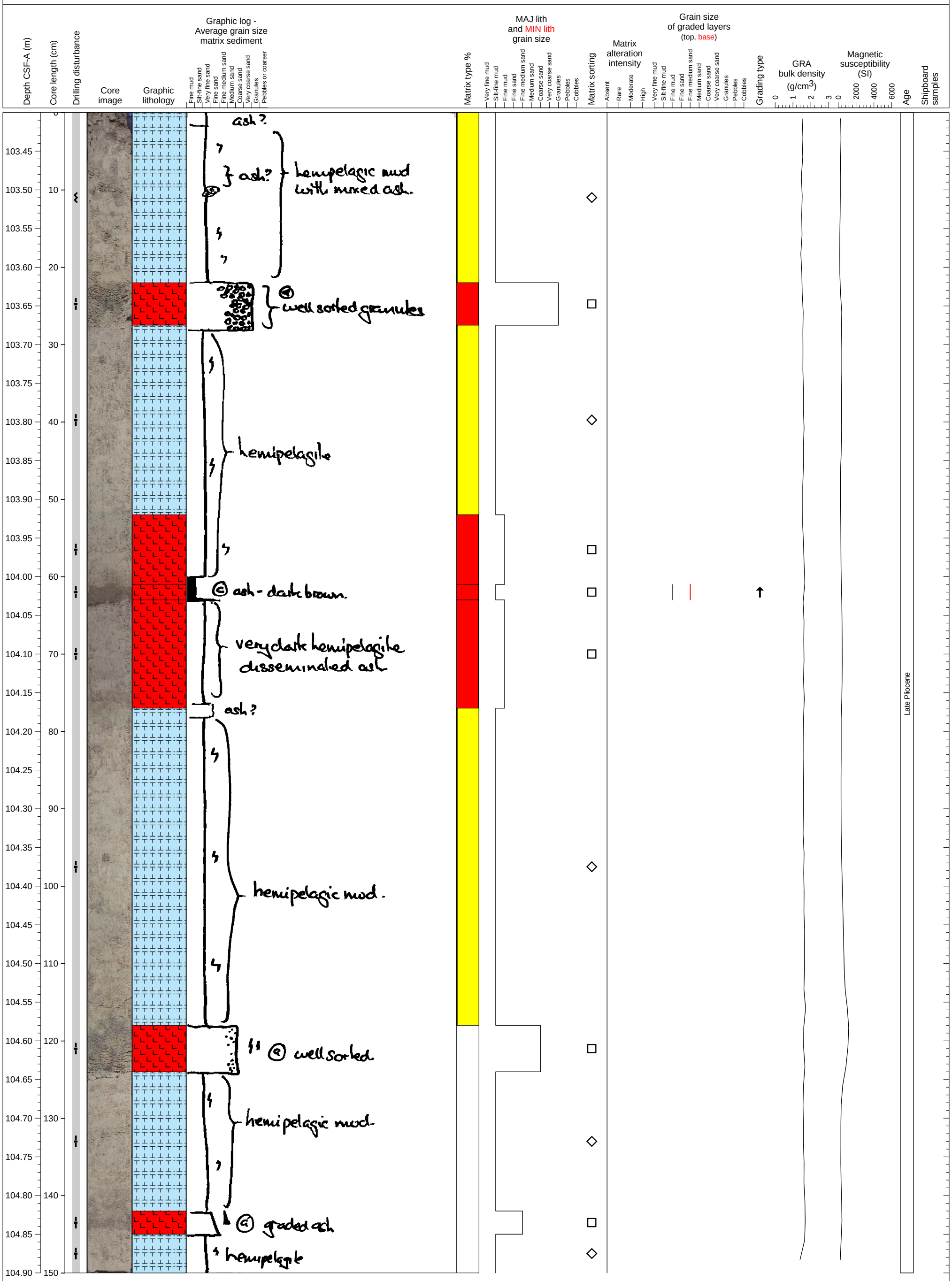
Hole 340-U1396C-11H Section CC, Top of Section: 103.67 CSF-A (m)

Hemipelagic mud with at least one ash.



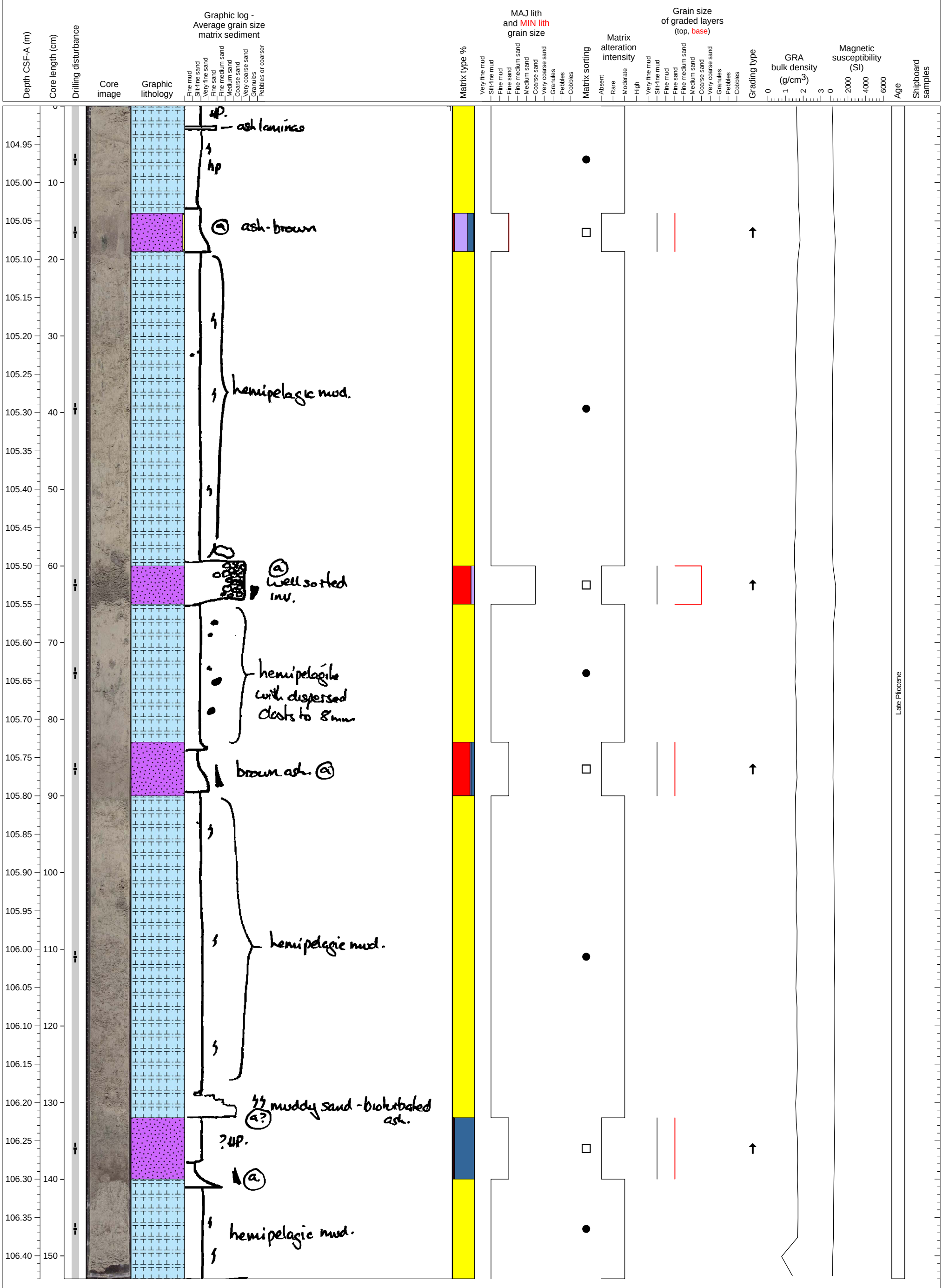
Hole 340-U1396C-12H Section 1, Top of Section: 103.4 CSF-A (m)

This section has four ash layers, ranging from granule-size pumice to very fine mud sized pumice.



Hole 340-U1396C-12H Section 2, Top of Section: 104.9 CSF-A (m)

Fout tephra layers intercalating hemipelagic sediments.



Hole 340-U1396C-12H Section 3, Top of Section: 106.43 CSF-A (m)

Hemipelagic mud with three tephra layers.

Depth CSF-A (m)

Core length (cm)

Drilling disturbance

Core image

Graphic lithology

Graphic log - Average grain size matrix sediment
Fine mud | Silt-fine sand | Very fine sand | Fine sand | Fine medium sand | Medium sand | Coarse sand | Very coarse sand | Granules | Pebbles or coarser

Matrix type %
Very fine mud | Silt-fine mud | Fine mud | Fine sand | Fine medium sand | Medium sand | Coarse sand | Very coarse sand | Granules | Pebbles | Cobbles

MAJ lith and MIN lith grain size

Matrix sorting

Matrix alteration intensity
Absent | Rare | Moderate | High

Grain size of graded layers (top, base)
Very fine mud | Silt-fine mud | Fine mud | Fine sand | Fine medium sand | Medium sand | Coarse sand | Very coarse sand | Granules | Pebbles | Cobbles

Grading type

GRA bulk density (g/cm^3)
0 | 1 | 2 | 3

Magnetic susceptibility (SI)
0 | 2000 | 4000 | 6000

Age

Shipboard samples

Depth CSF-A (m): 106.45, 106.50, 106.55, 106.60, 106.65, 106.70, 106.75, 106.80, 106.85, 106.90, 106.95, 107.00, 107.05, 107.10, 107.15, 107.20, 107.25, 107.30, 107.35, 107.40, 107.45, 107.50, 107.55, 107.60, 107.65, 107.70, 107.75, 107.80, 107.85, 107.90

Core length (cm): 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150

?HP

@

hemipel.

dispersed clasts

well sorted clasts up to 5mm

hemipelagic mud.

darker

black ash. ? tubule as mud clast + erosive (T?)

1cm mud clast

inclined - ?? erosive

hemipelagite

WR whole round.

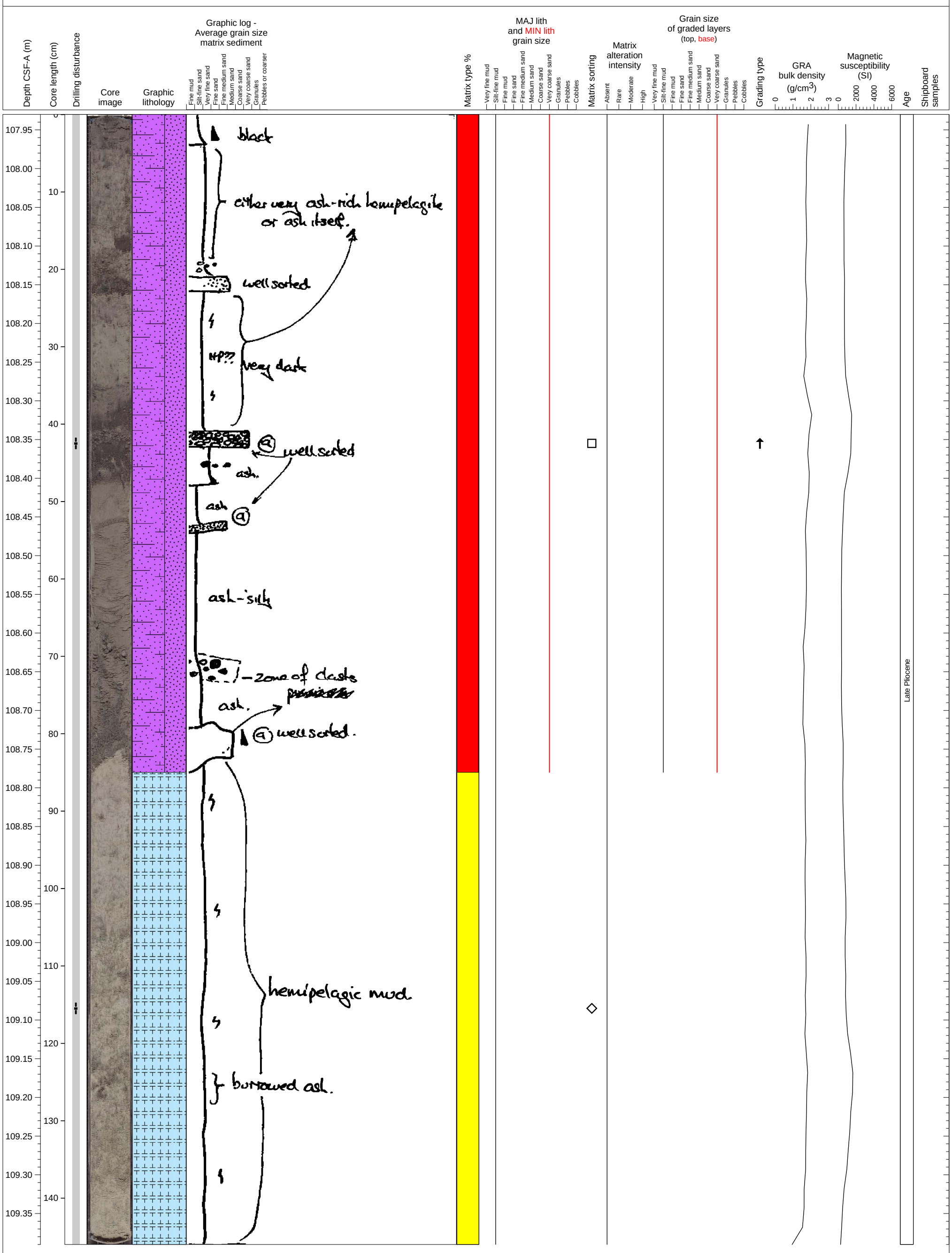
WR

Late Pliocene

IW

Hole 340-U1396C-12H Section 4, Top of Section: 107.93 CSF-A (m)

Four volcaniclastic fining upward sequences (fallout deposits) overtopping hemipelagic clay.



Hole 340-U1396C-12H Section 5, Top of Section: 109.39 CSF-A (m)

Hemipelagic clay interlayered with a bioclastic/volcaniclastic sand layer. Sand is separated into layers by compositon and the layers are at 30 degrees from horizontal.

Depth CSF-A (m)

Core length (cm)

Drilling disturbance

Core image

Graphic lithology

Graphic log - Average grain size matrix sediment
Fine mud
Silt-fine sand
Very fine sand
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles or coarser

Matrix type %

MAJ lith and MIN lith grain size
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles

Matrix sorting

Matrix alteration intensity
Absent
Rare
Moderate
High

Grain size of graded layers (top, base)
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles

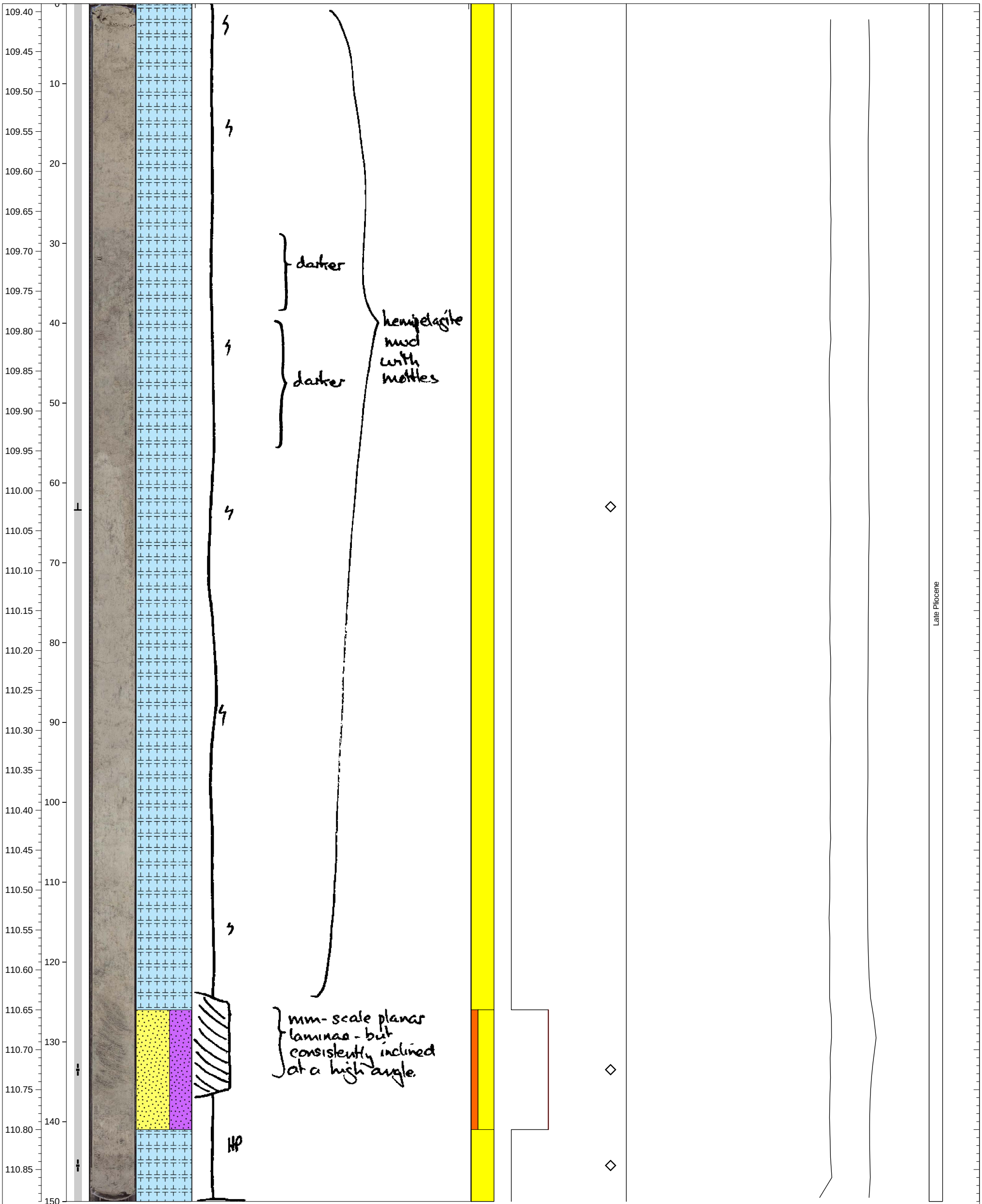
Grading type

GRA bulk density (g/cm^3)
0
1
2
3

Magnetic susceptibility (SI)
0
2000
4000
6000

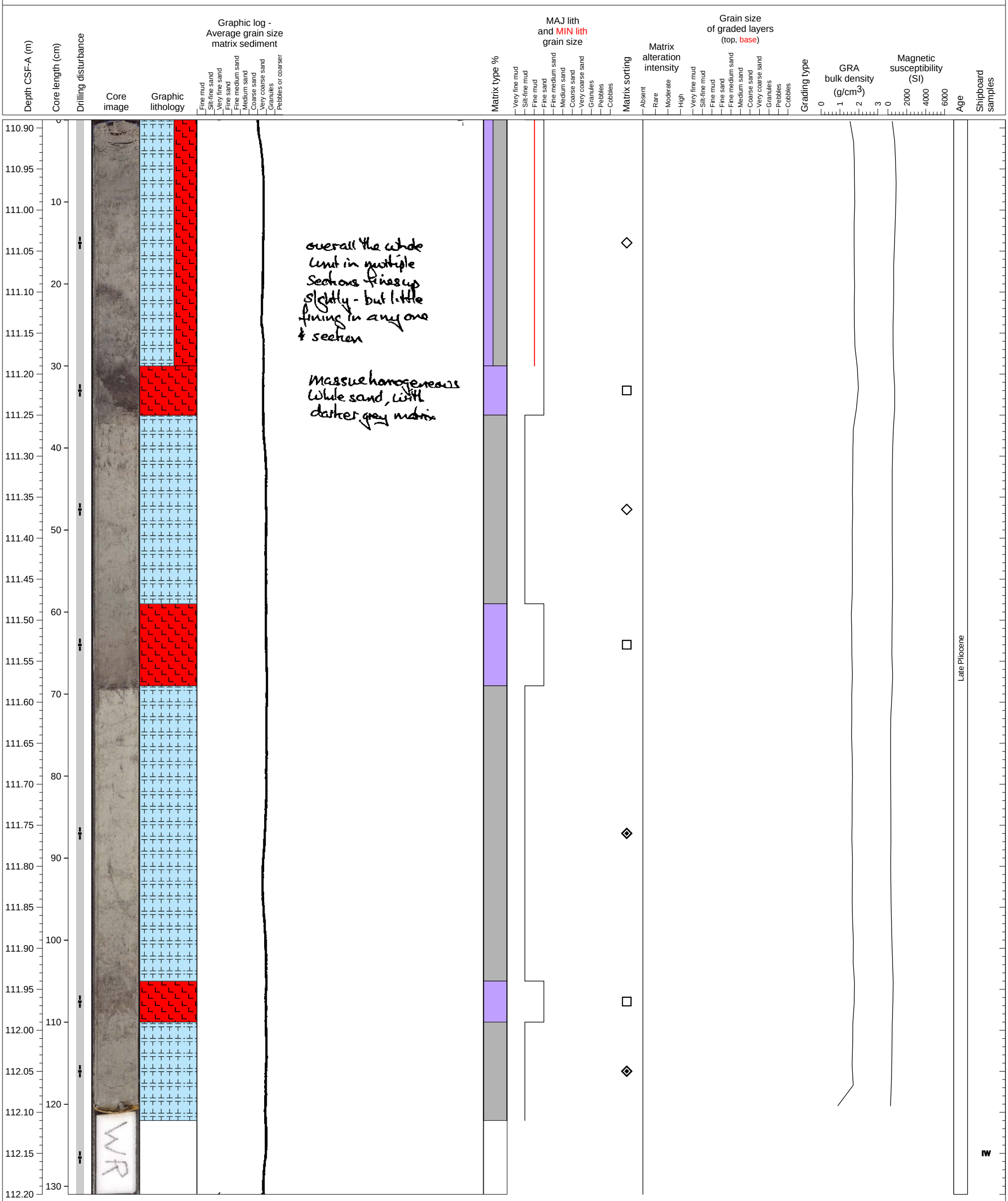
Age

Shipboard samples



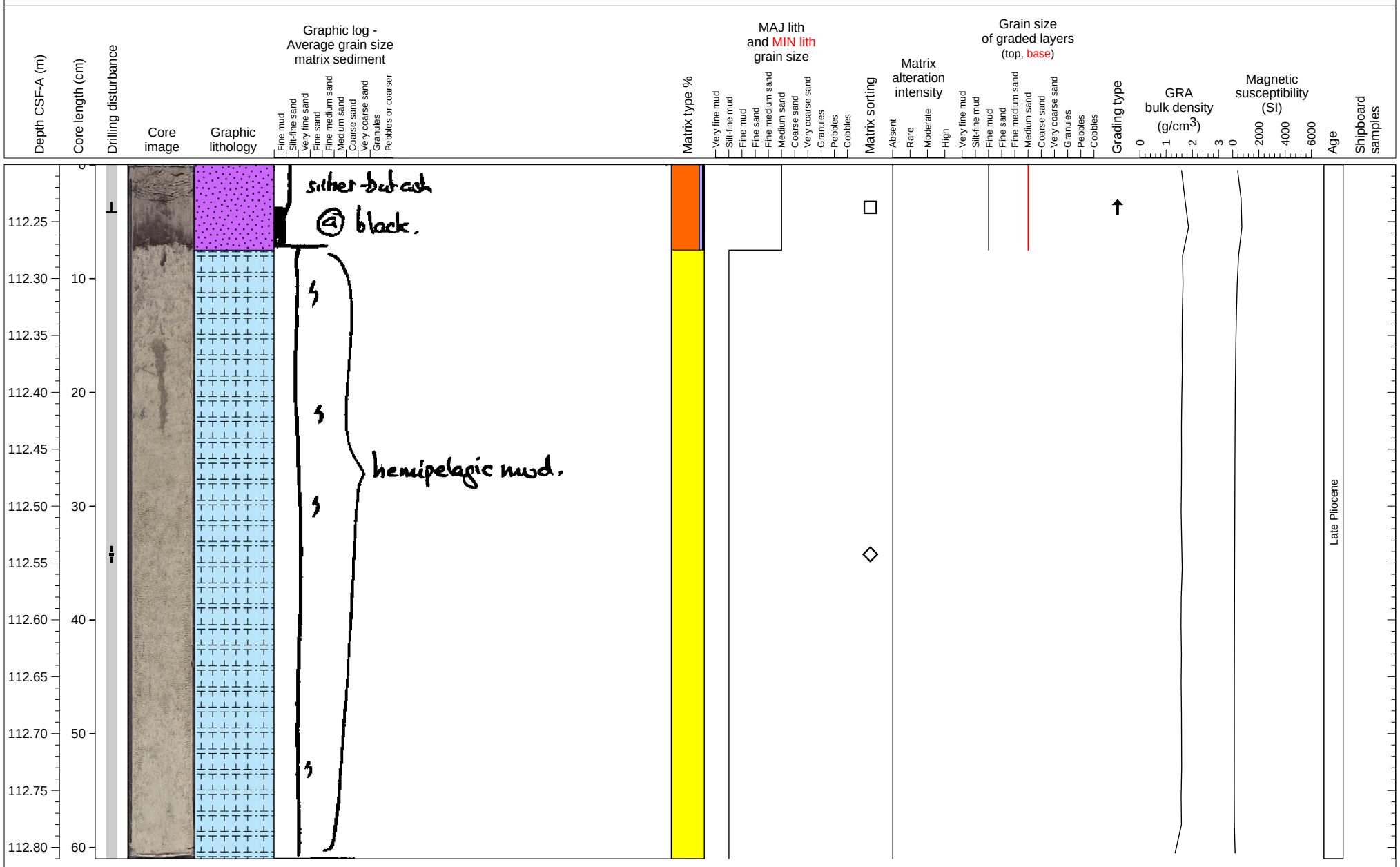
Hole 340-U1396C-12H Section 6, Top of Section: 110.89 CSF-A (m)

Hemipelagic mud with tephra layers.



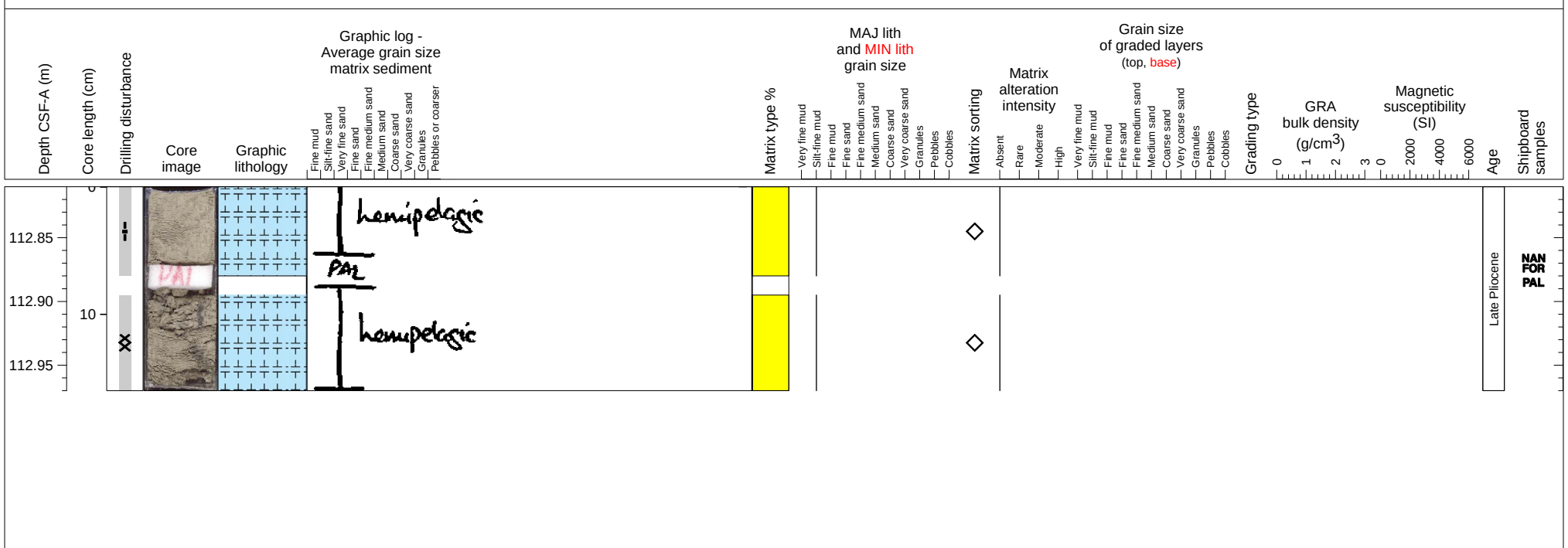
Hole 340-U1396C-12H Section 7, Top of Section: 112.2 CSF-A (m)

Hemipelagic clay layer topped with a fining upward volcaniclastic sequence (fallout deposit).



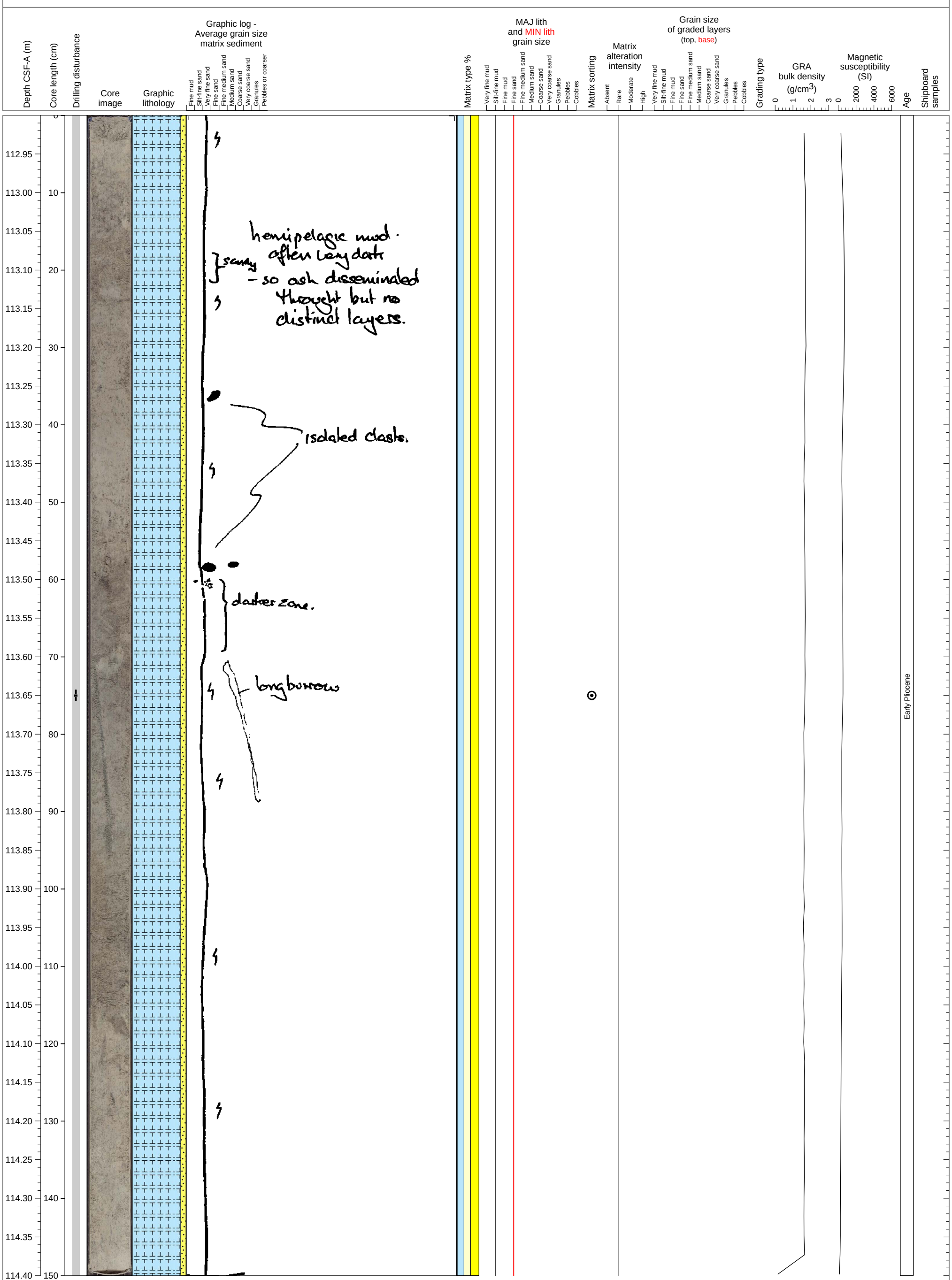
Hole 340-U1396C-12H Section CC, Top of Section: 112.81 CSF-A (m)

Hemipelagic clay. PAL sample from interior.



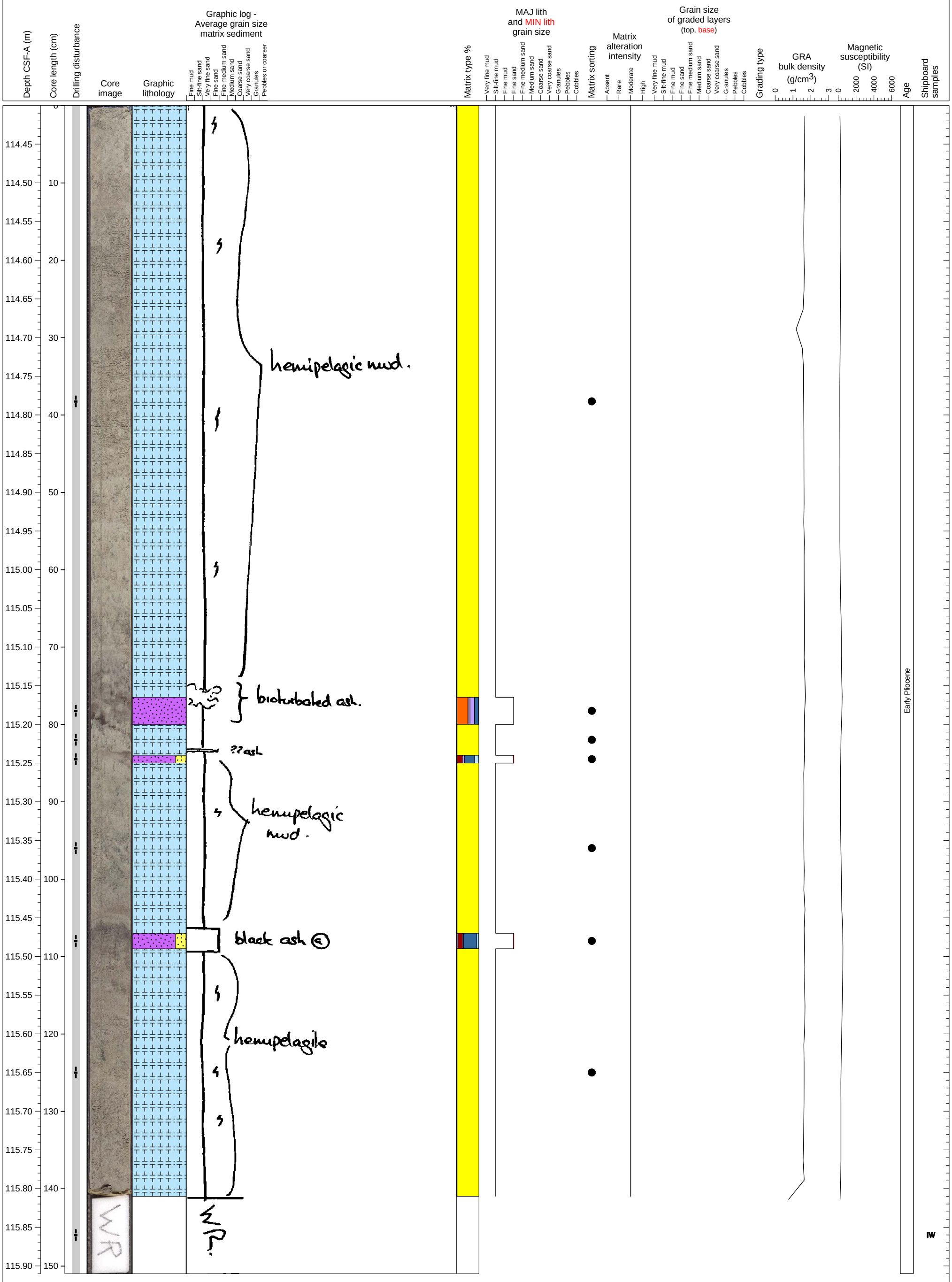
Hole 340-U1396C-13H Section 1, Top of Section: 112.9 CSF-A (m)

Hemipelagic mud.



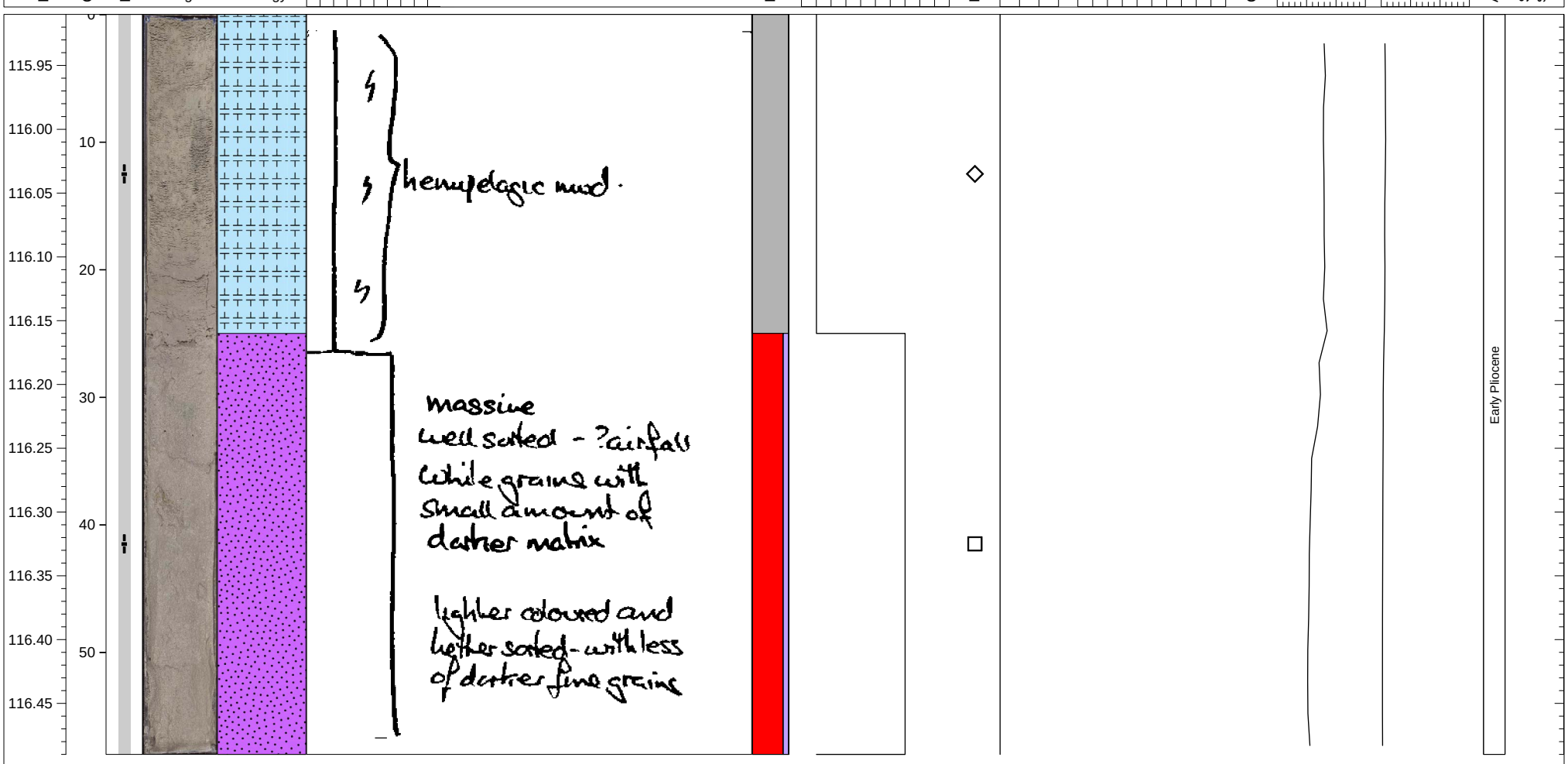
Hole 340-U1396C-13H Section 2, Top of Section: 114.4 CSF-A (m)

At least three tephra layers but all is heavily bioturbatred.



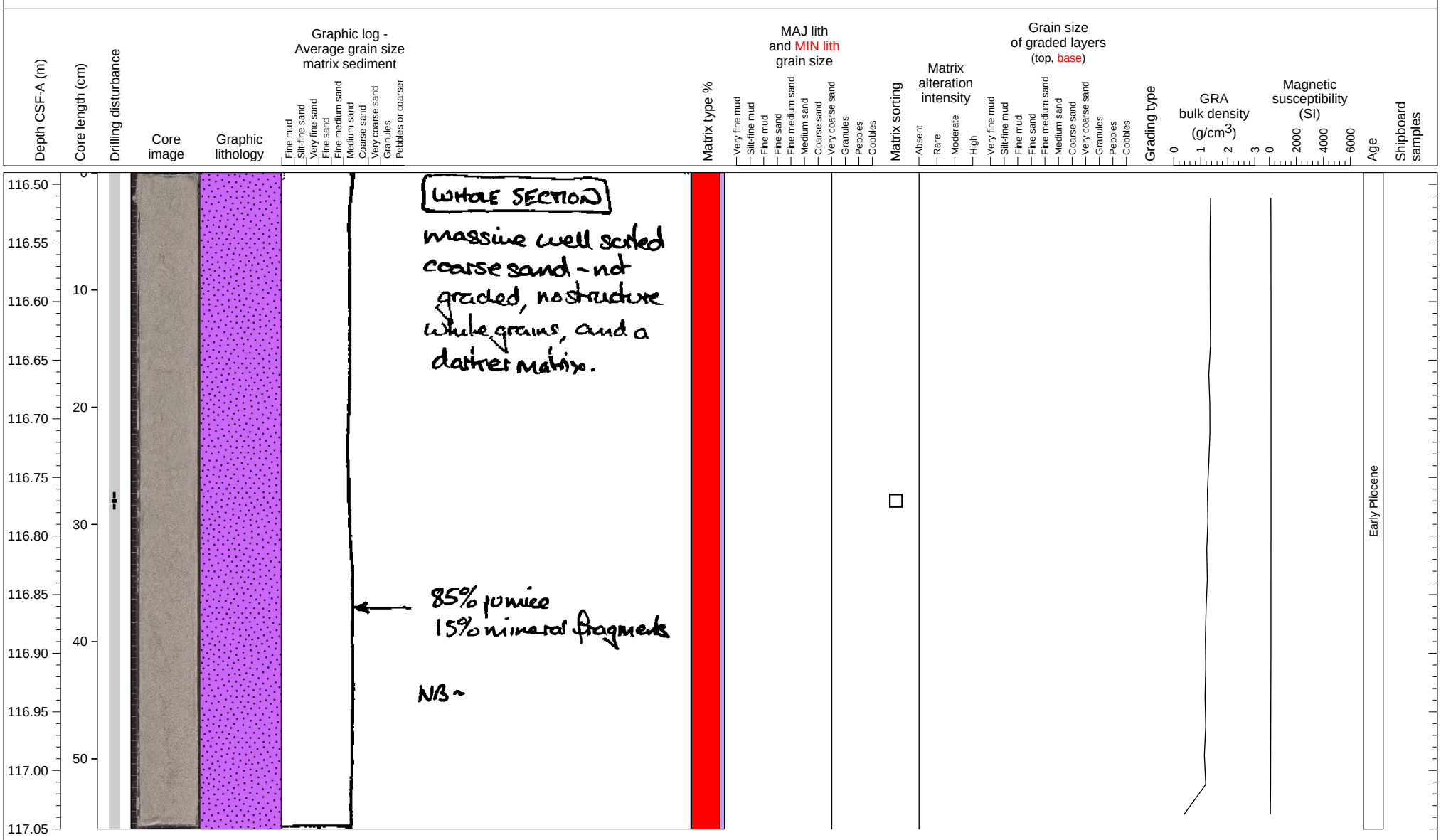
Hole 340-U1396C-13H Section 3, Top of Section: 115.91 CSF-A (m)

Hemipelagic mud with masisve well sorted sand below.



Hole 340-U1396C-13H Section 4, Top of Section: 116.49 CSF-A (m)

Massive well sorted coarse sand.



Hole 340-U1396C-13H Section 5, Top of Section: 117.05 CSF-A (m)

Massive well sorted coarse sand.

Depth CSF-A (m)
Core length (cm)
Drilling disturbance
Core image
Graphic lithology
Graphic log - Average grain size matrix sediment
Fine mud
Silt-fine sand
Very fine sand
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles or coarser
Matrix type %
MAJ lith and MIN lith grain size
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles
Matrix sorting
Matrix alteration intensity
Absent
Rare
Moderate
High
Grain size of graded layers (top, base)
Very fine mud
Silt-fine mud
Fine mud
Fine sand
Fine medium sand
Medium sand
Coarse sand
Very coarse sand
Granules
Pebbles
Cobbles
Grading type
GRA bulk density (g/cm^3)
0
1
2
3
Magnetic susceptibility (SI)
0
2000
4000
6000
Age
Shipboard samples

117.10
117.15
117.20
117.25
117.30
117.35
117.40
117.45
117.50
117.55
117.60
117.65
117.70
117.75
117.80
117.85
117.90
117.95
118.00
118.05
118.10
118.15

0
10
20
30
40
50
60
70
80
90
100
110

WHOLE SECTION

massive homogeneous well sorted sand - with light grey colour from white grains and darker matrix.

WHOLE UNIT.

white + better sorted

richer in matrix and darker

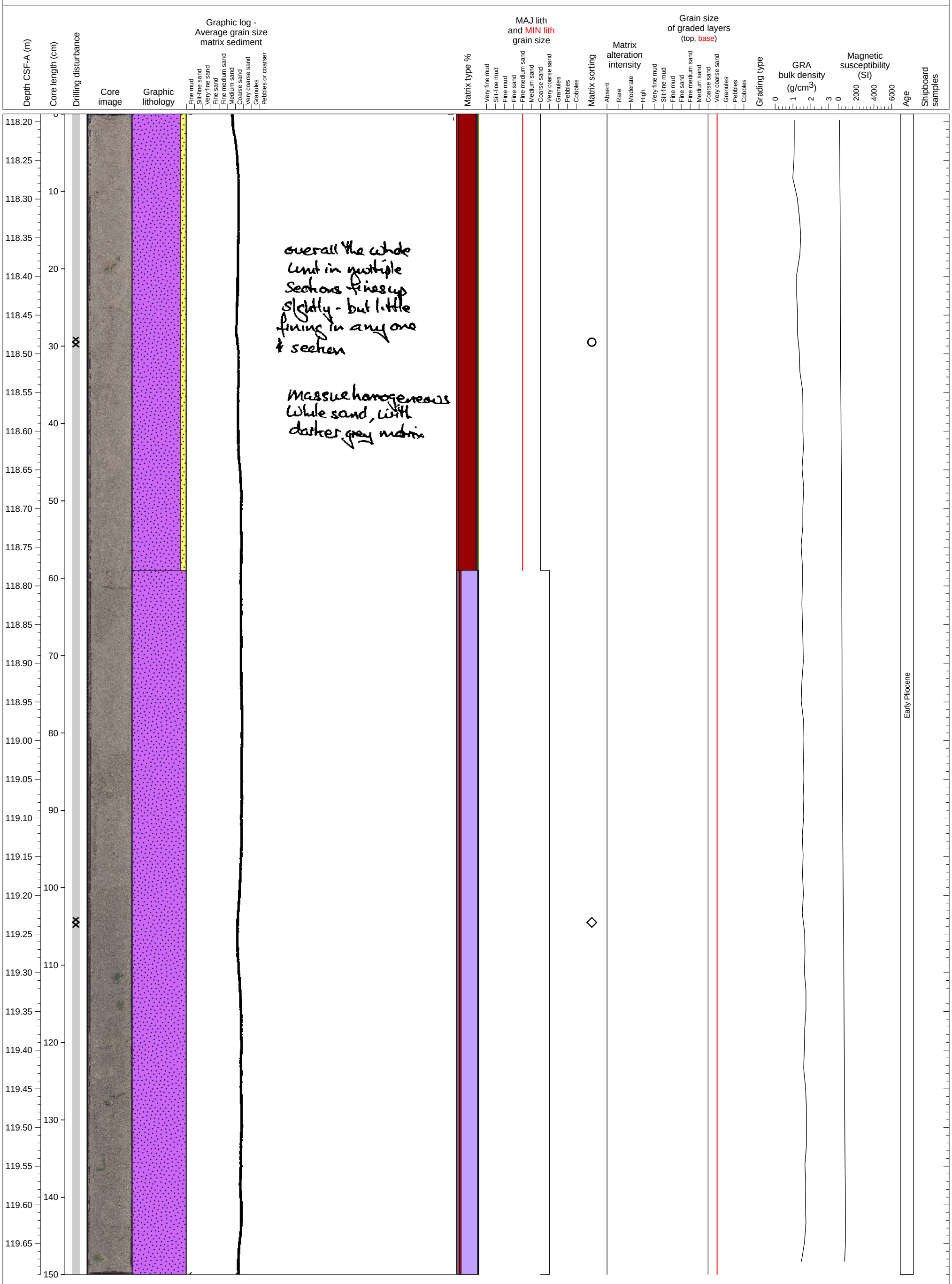
- dark colour from mineral fragments?

~ 85% pumice
15% mineral frags/ xstals

Early Pliocene

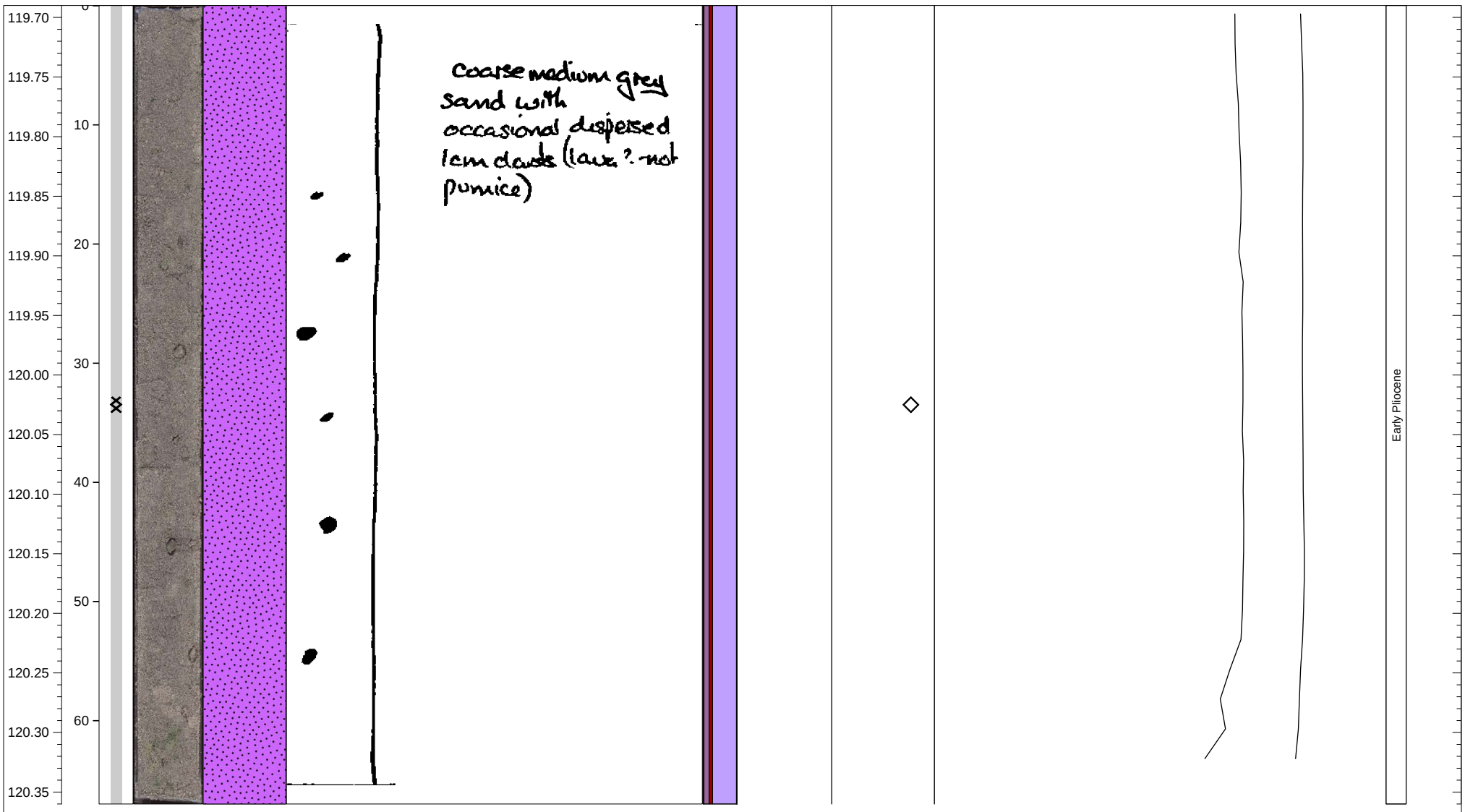
Hole 340-U1396C-13H Section 6, Top of Section: 118.19 CSF-A (m)

Thick volcaniclastic turbidite bed. Upper part is rich in vesicular lava fragments.



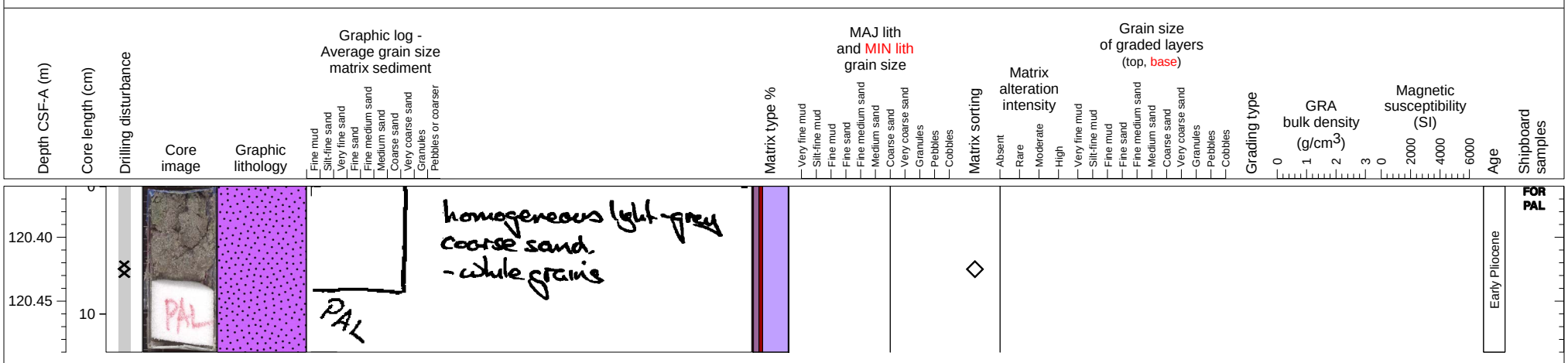
Hole 340-U1396C-13H Section 7, Top of Section: 119.69 CSF-A (m)

Thick volcaniclastic turbidite.



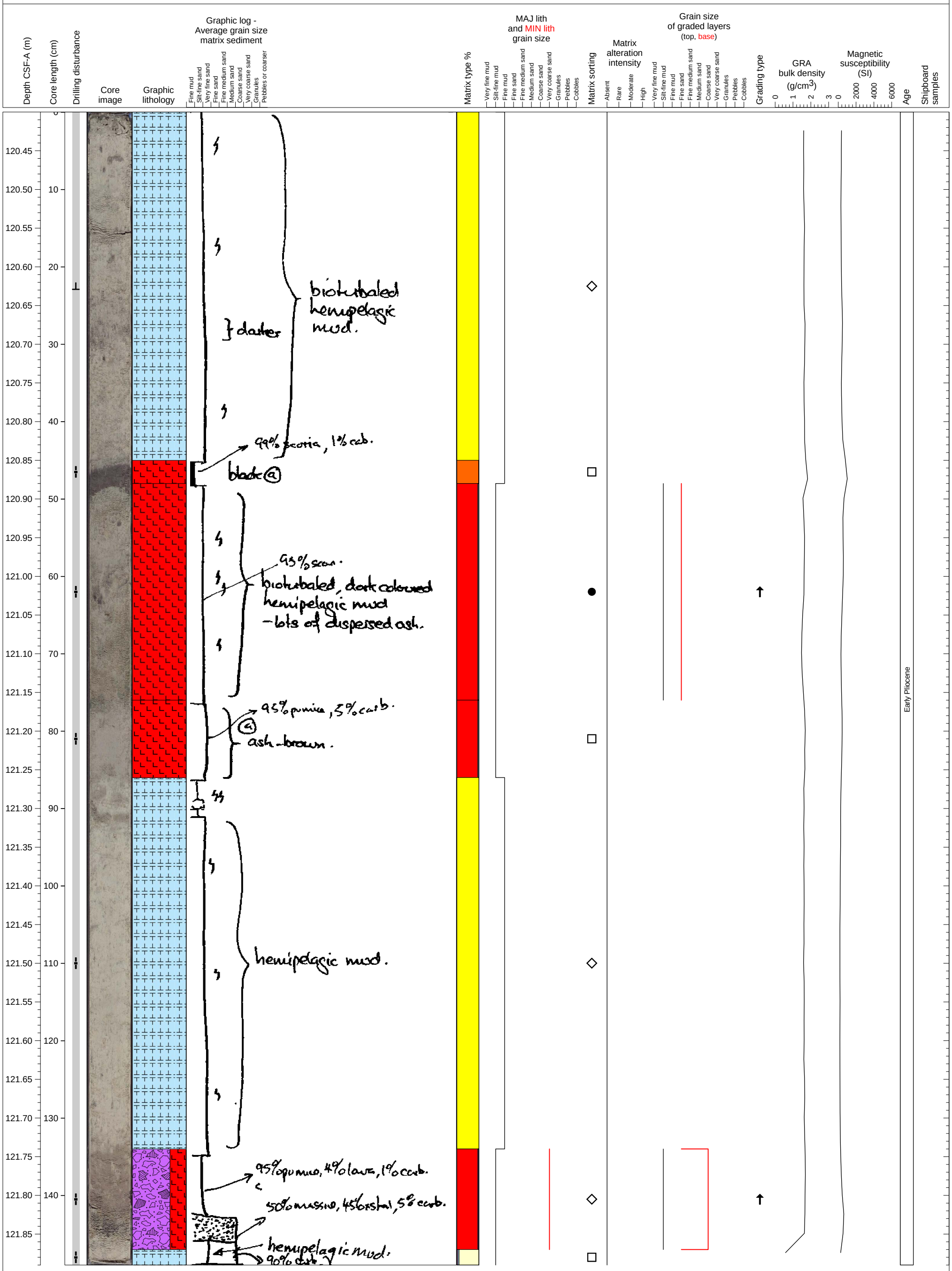
Hole 340-U1396C-13H Section CC, Top of Section: 120.36 CSF-A (m)

The rest of a thick volcanoclastic turbidite succession.



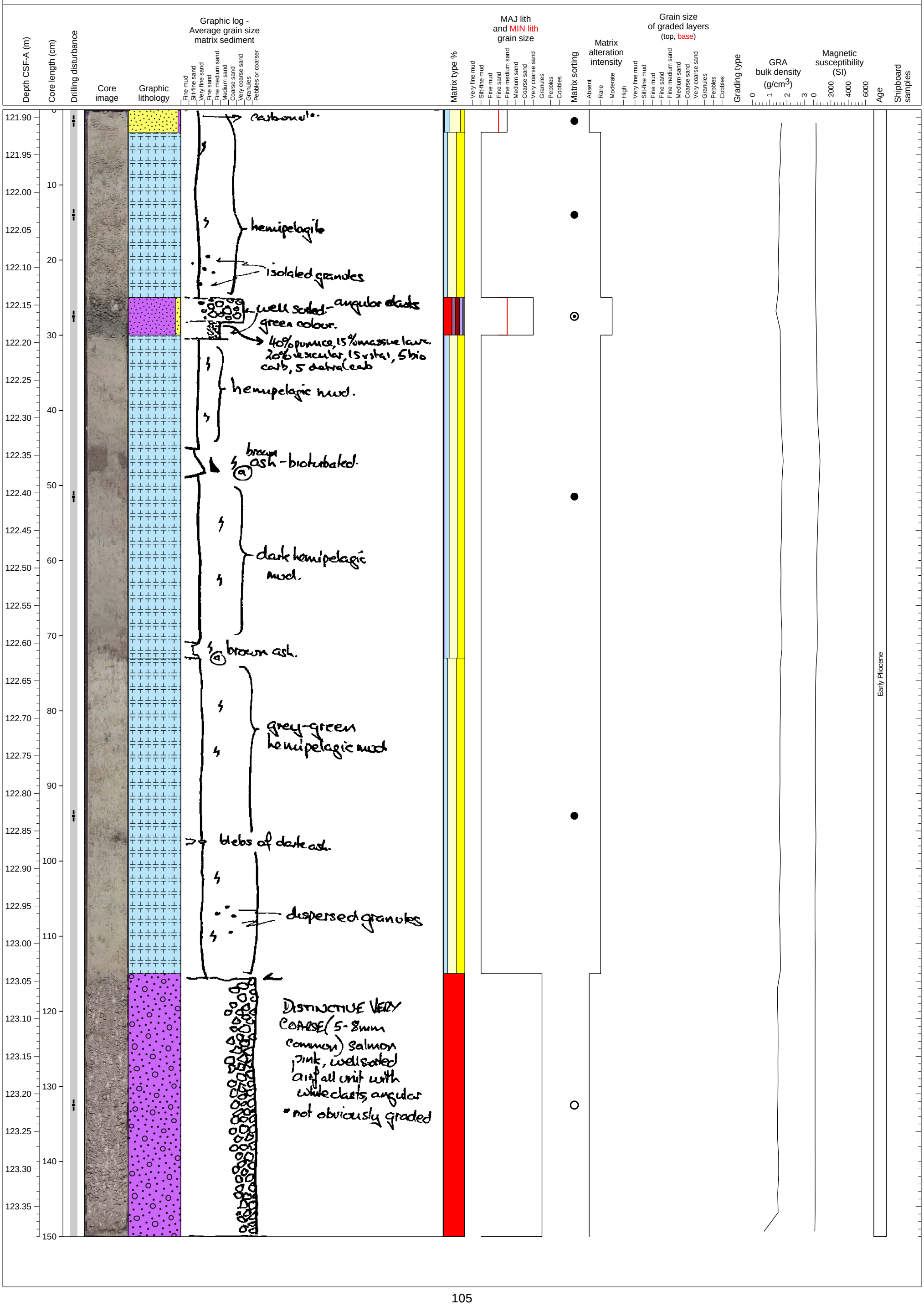
Hole 340-U1396C-14H Section 1, Top of Section: 120.4 CSF-A (m)

Volcanic ash rich section in the background calcareous sediments. From 45 cm to 86 cm is a series of ash layers without intervals of hemipelagic clay, which could be derived from one eruption but the composition changes gradually from dacitic (pumice rich, light gray) to basaltic (scoria rich, dark gray).



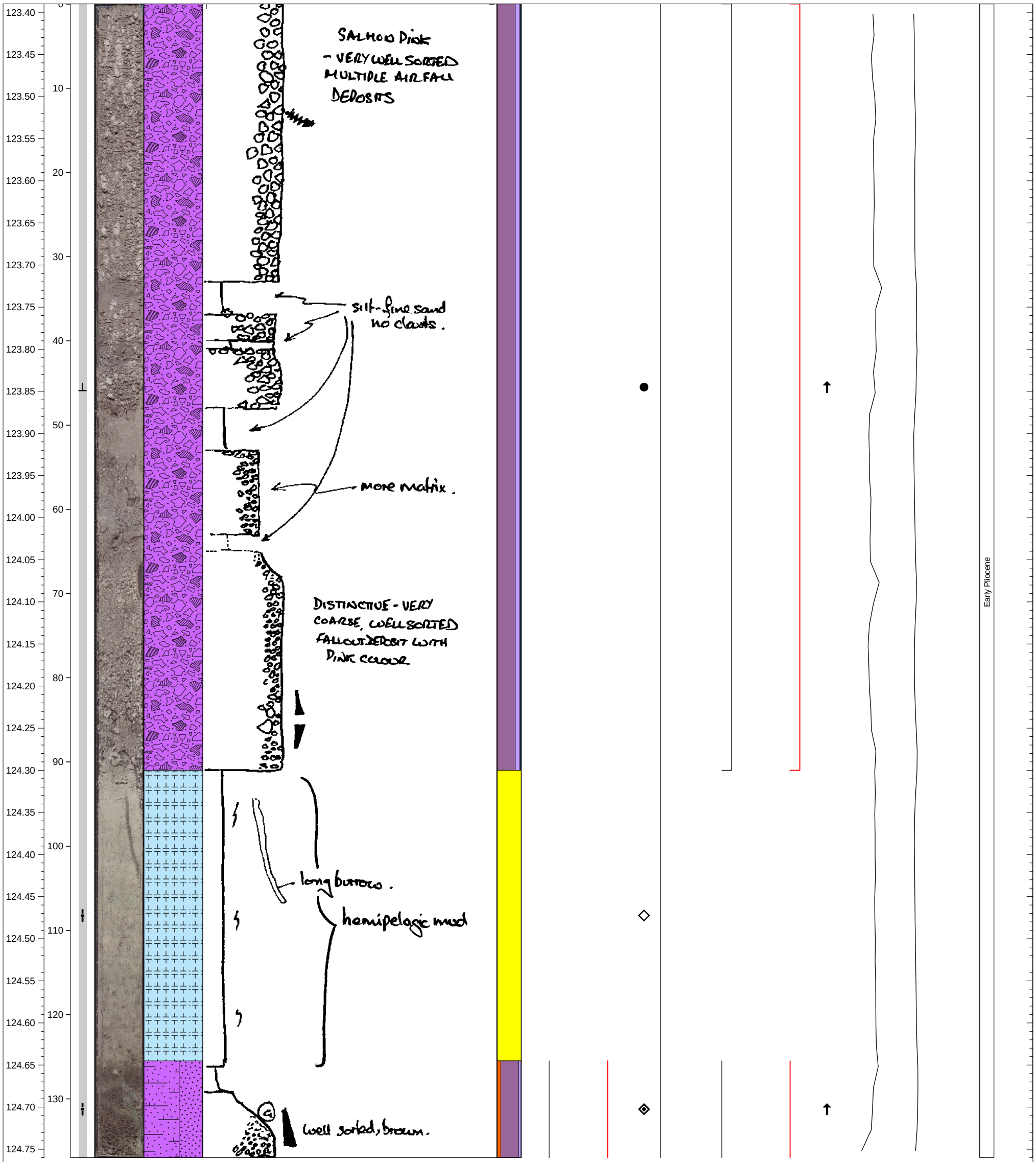
Hole 340-U1396C-14H Section 2, Top of Section: 121.89 CSF-A (m)

Upper part is hemipelagic calcareous sand, and lower 35 cm is volcaniclastic gravel.



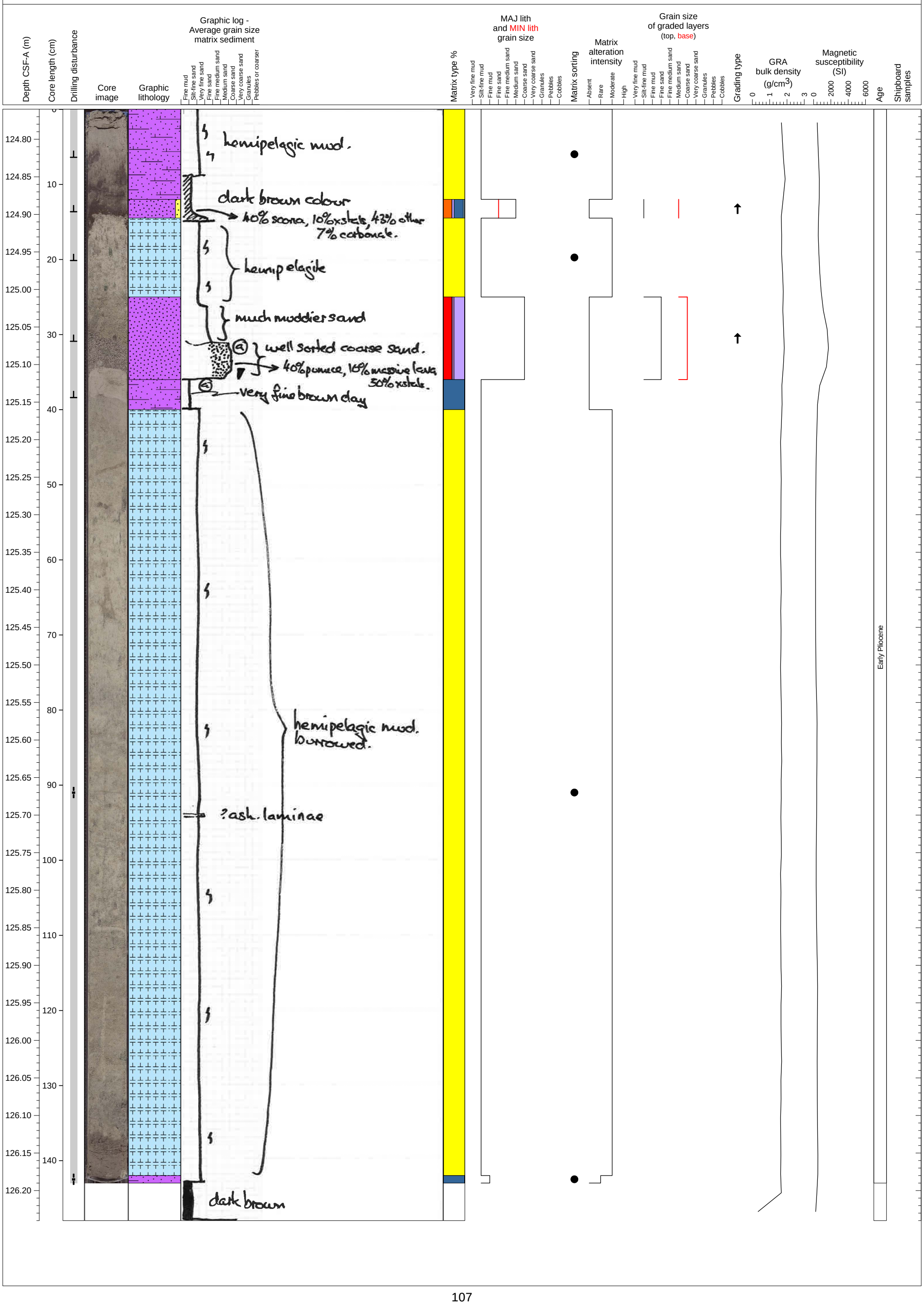
Hole 340-U1396C-14H Section 3, Top of Section: 123.39 CSF-A (m)

Distinctive series of very coarse well sorted massive fallout deposits, separated by finer fall out material, underlain by hemipelagic mud and brown fall out layer



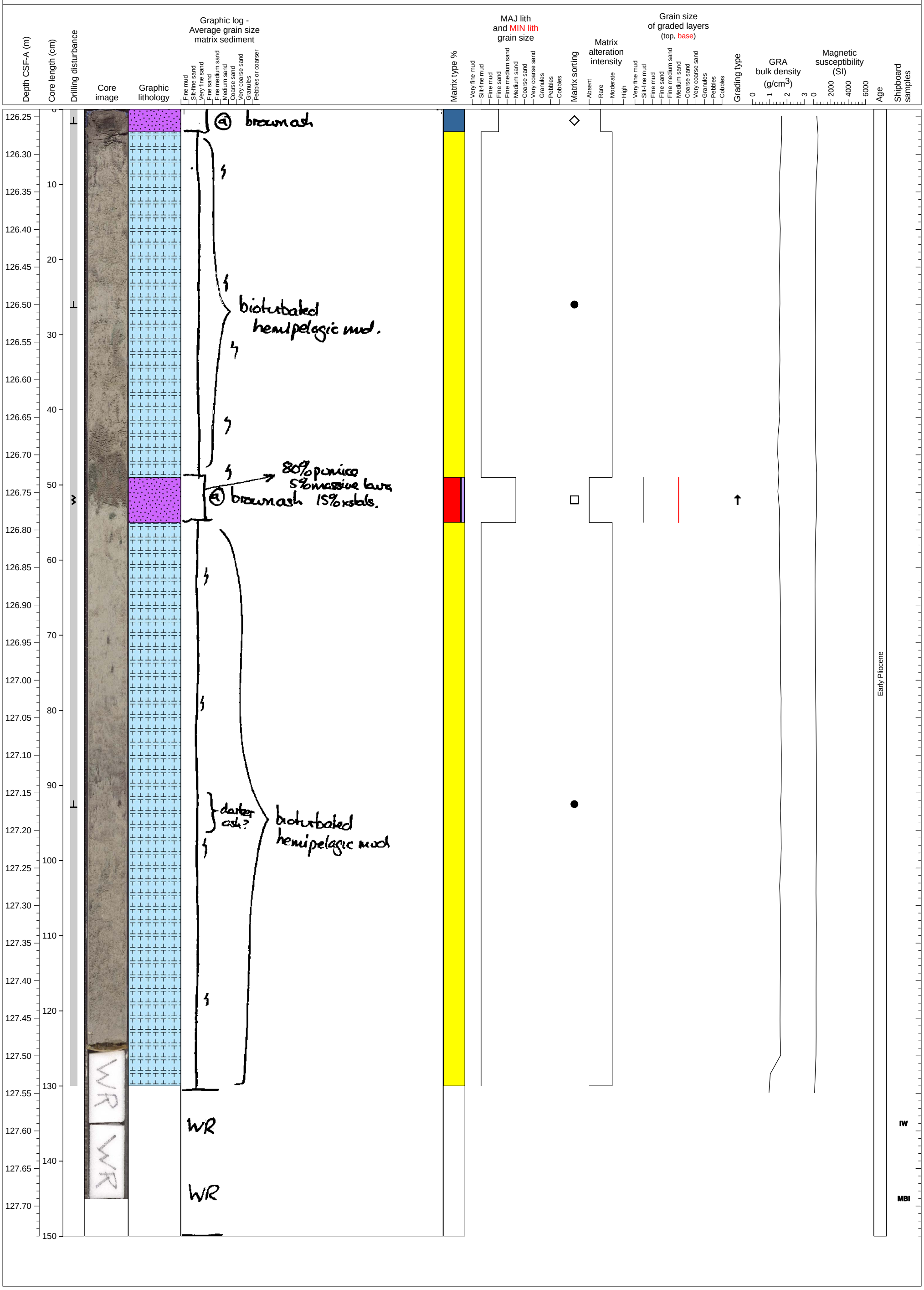
Hole 340-U1396C-14H Section 4, Top of Section: 124.76 CSF-A (m)

Basaltic and silicic tephra layers intercalating hemipelagic sediments.



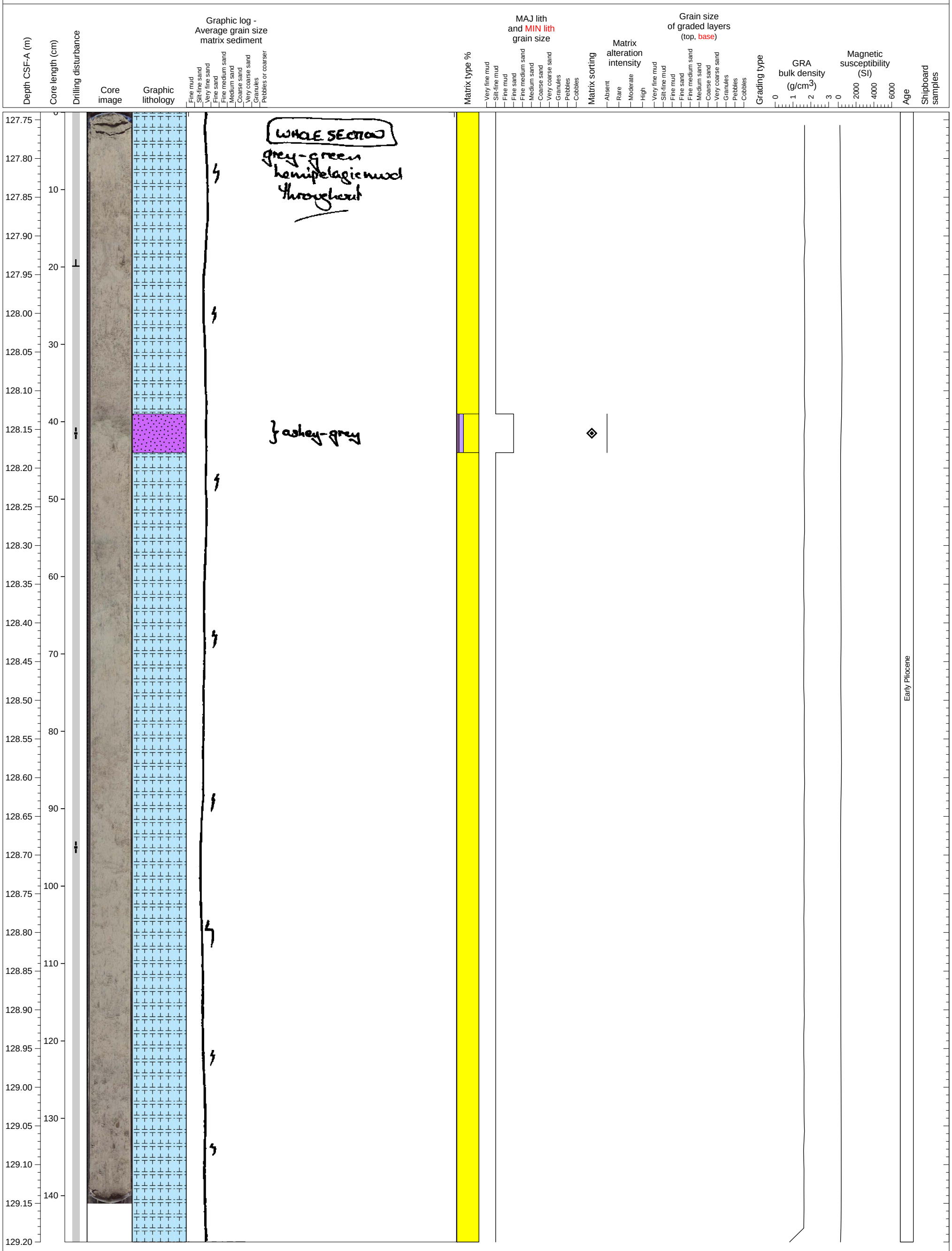
Hole 340-U1396C-14H Section 5, Top of Section: 126.24 CSF-A (m)

Pumice-rich tephra layer intercalating hemipelagic sediment.



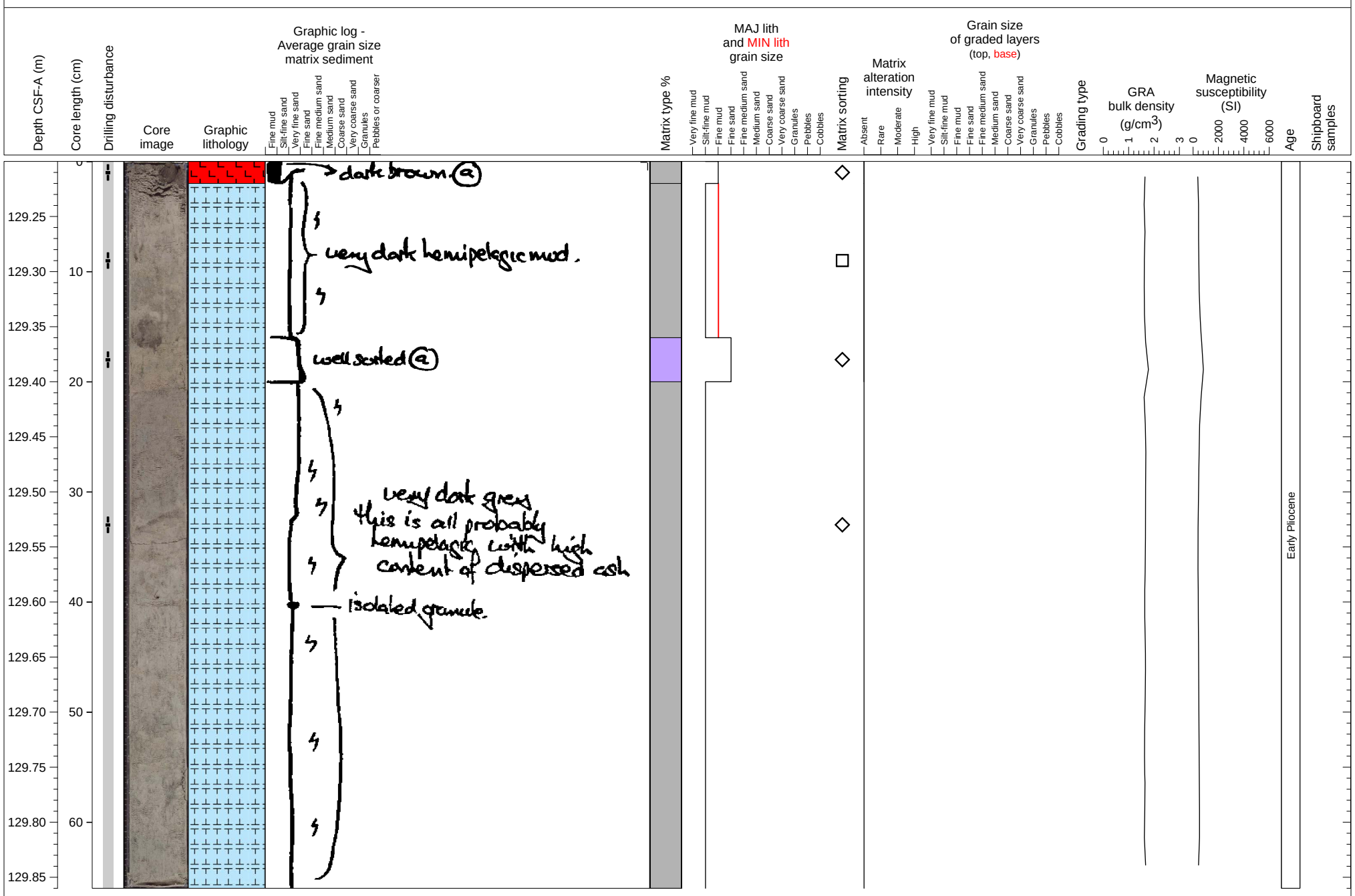
Hole 340-U1396C-14H Section 6, Top of Section: 127.74 CSF-A (m)

Hemipelagic clay with thin disseminated ash layer.



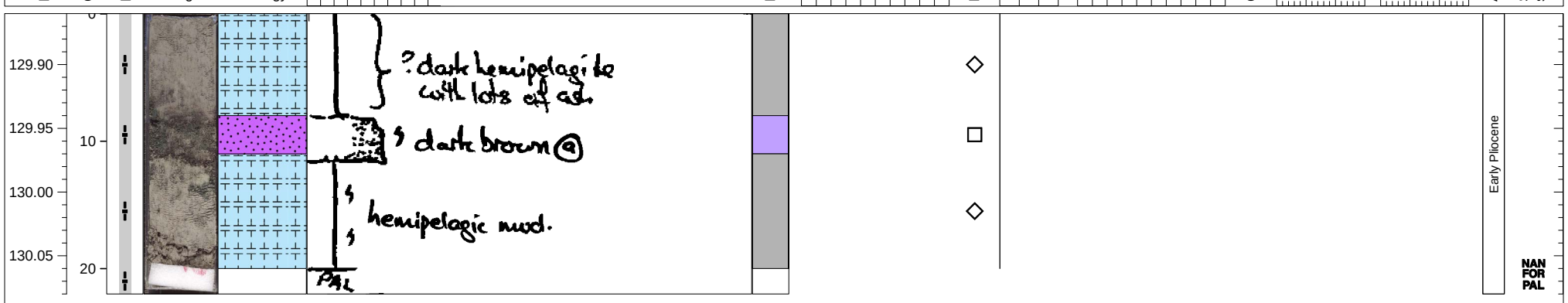
Hole 340-U1396C-14H Section 7, Top of Section: 129.2 CSF-A (m)

Dark hemipelagic mud, with ash at top, and at 20 cm.



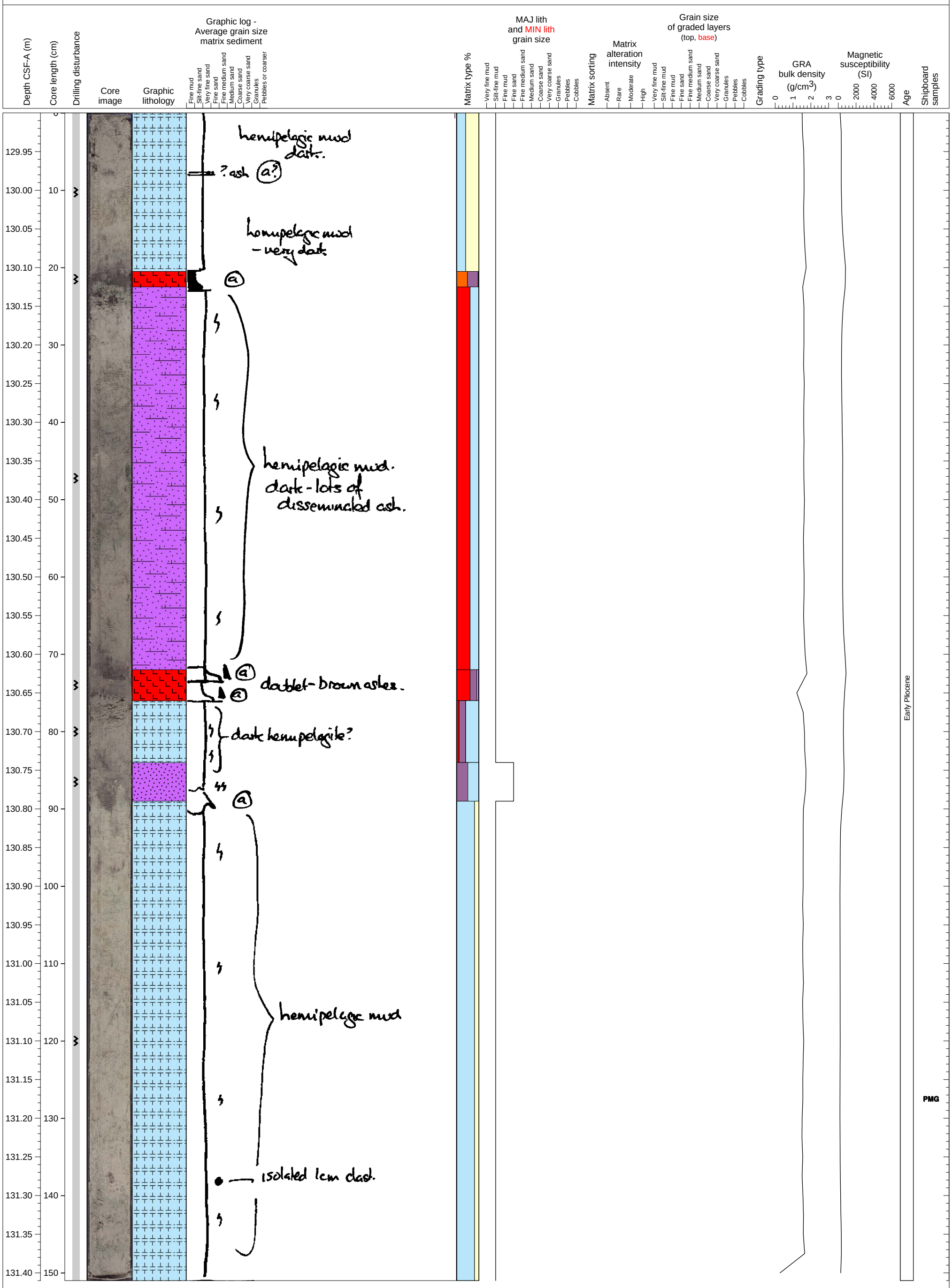
Hole 340-U1396C-14H Section CC, Top of Section: 129.86 CSF-A (m)

Hemipelagic mud and dark brown coarse ash layer.



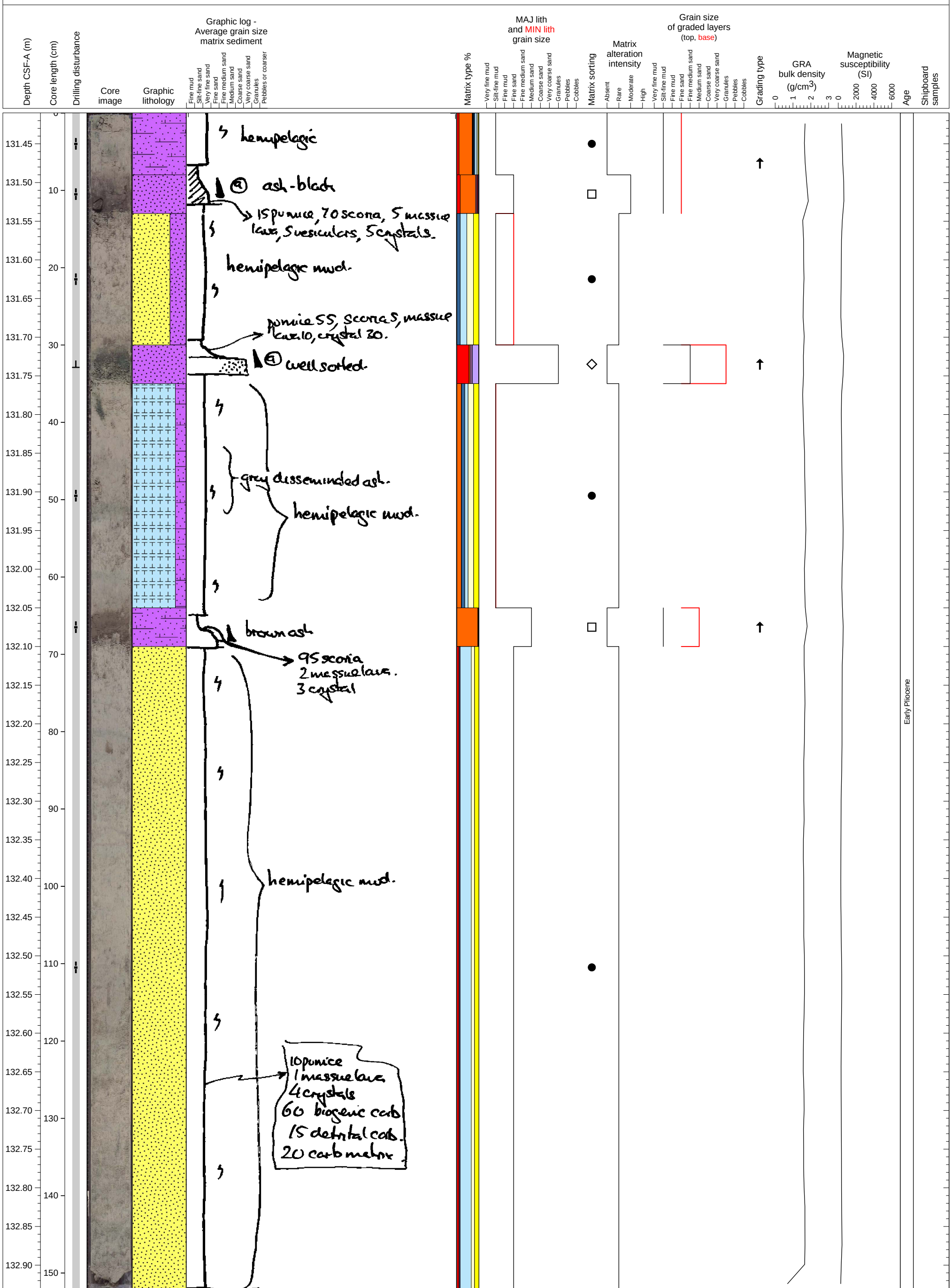
Hole 340-U1396C-15H Section 1, Top of Section: 129.9 CSF-A (m)

This section contains two ash layers. There are some mixing zone below one ash layers, consisting of volcaniclastic materials and biogenic materials.



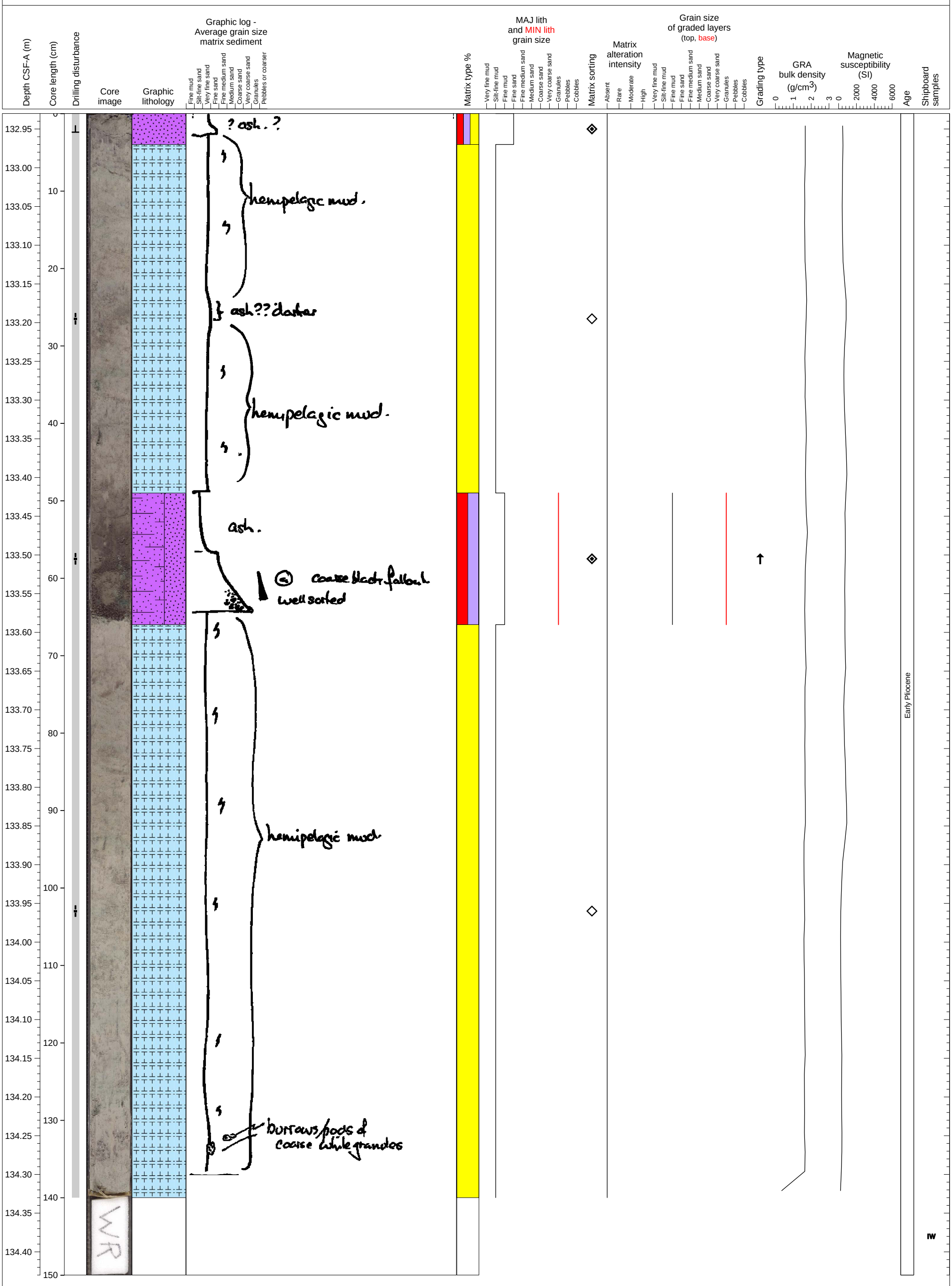
Hole 340-U1396C-15H Section 2, Top of Section: 131.41 CSF-A (m)

Alternation of hemipelagic clay layers and three volcaniclastic sand-silt layers.



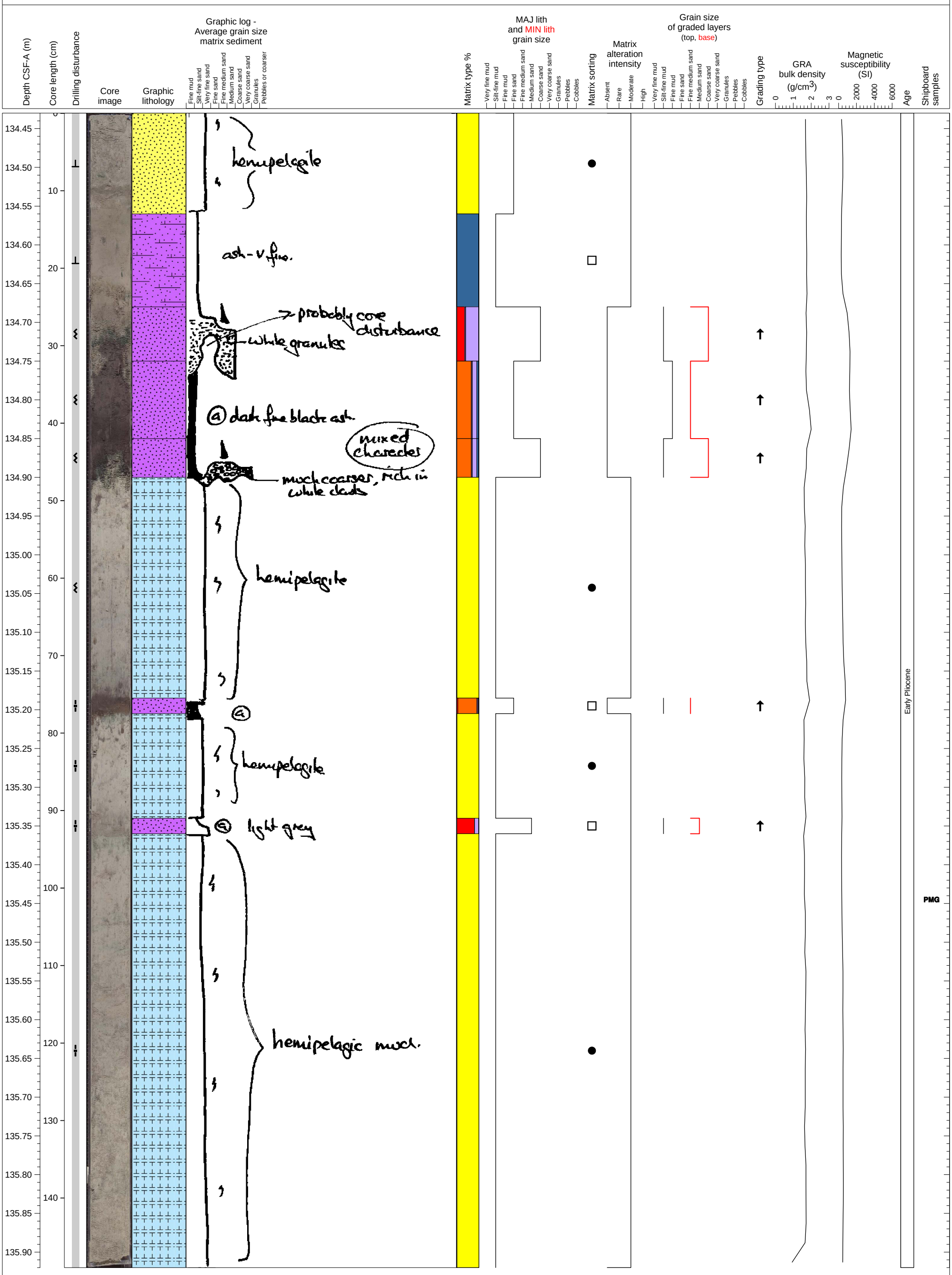
Hole 340-U1396C-15H Section 3, Top of Section: 132.93 CSF-A (m)

Hemipelagic mud with fall out layers inbetween.



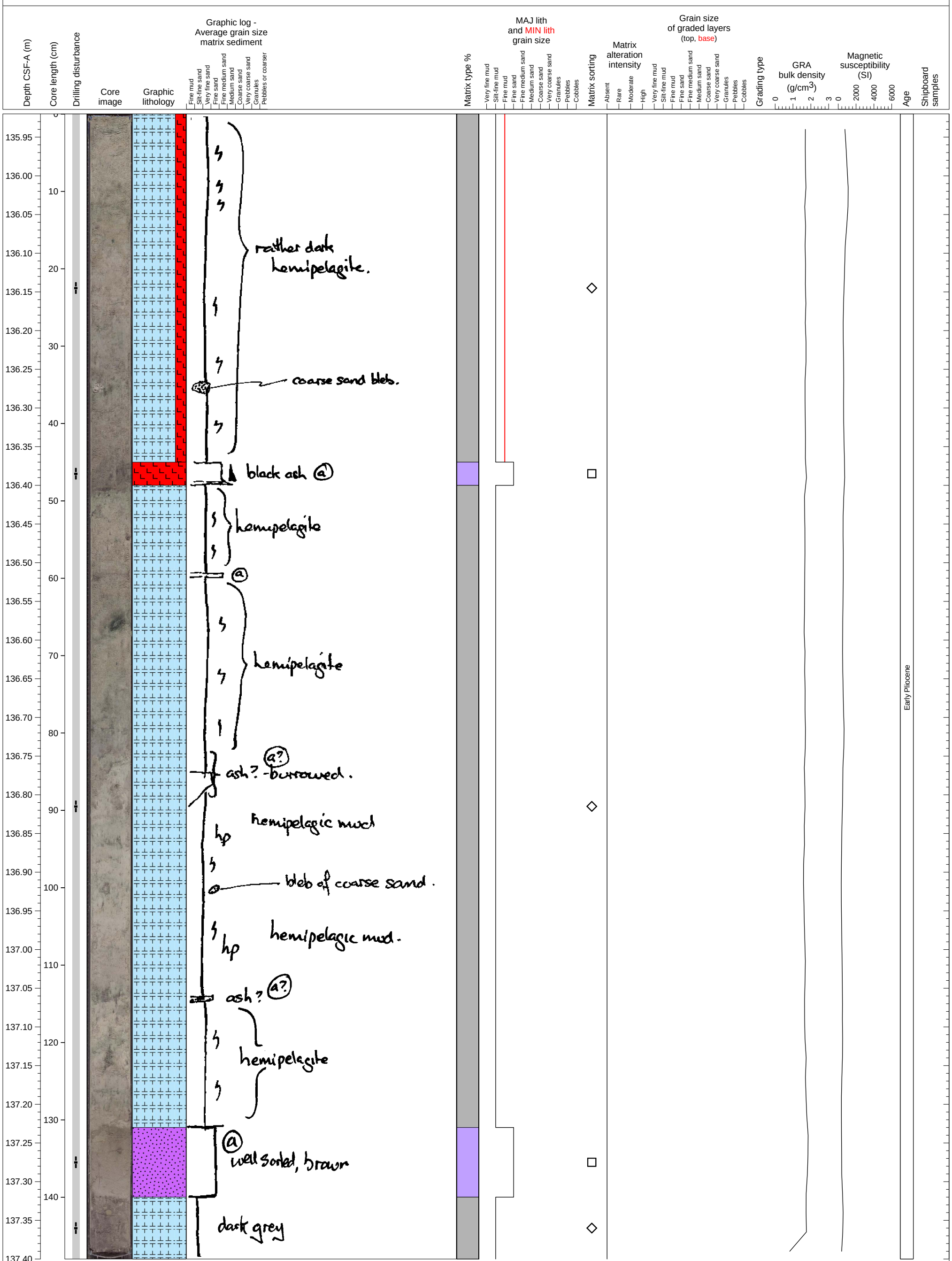
Hole 340-U1396C-15H Section 4, Top of Section: 134.43 CSF-A (m)

Two silicic tephra layers and two mafic tephra layers. In the upper part of this section, no hemipelagic sediment is present between different types of tephra layers.



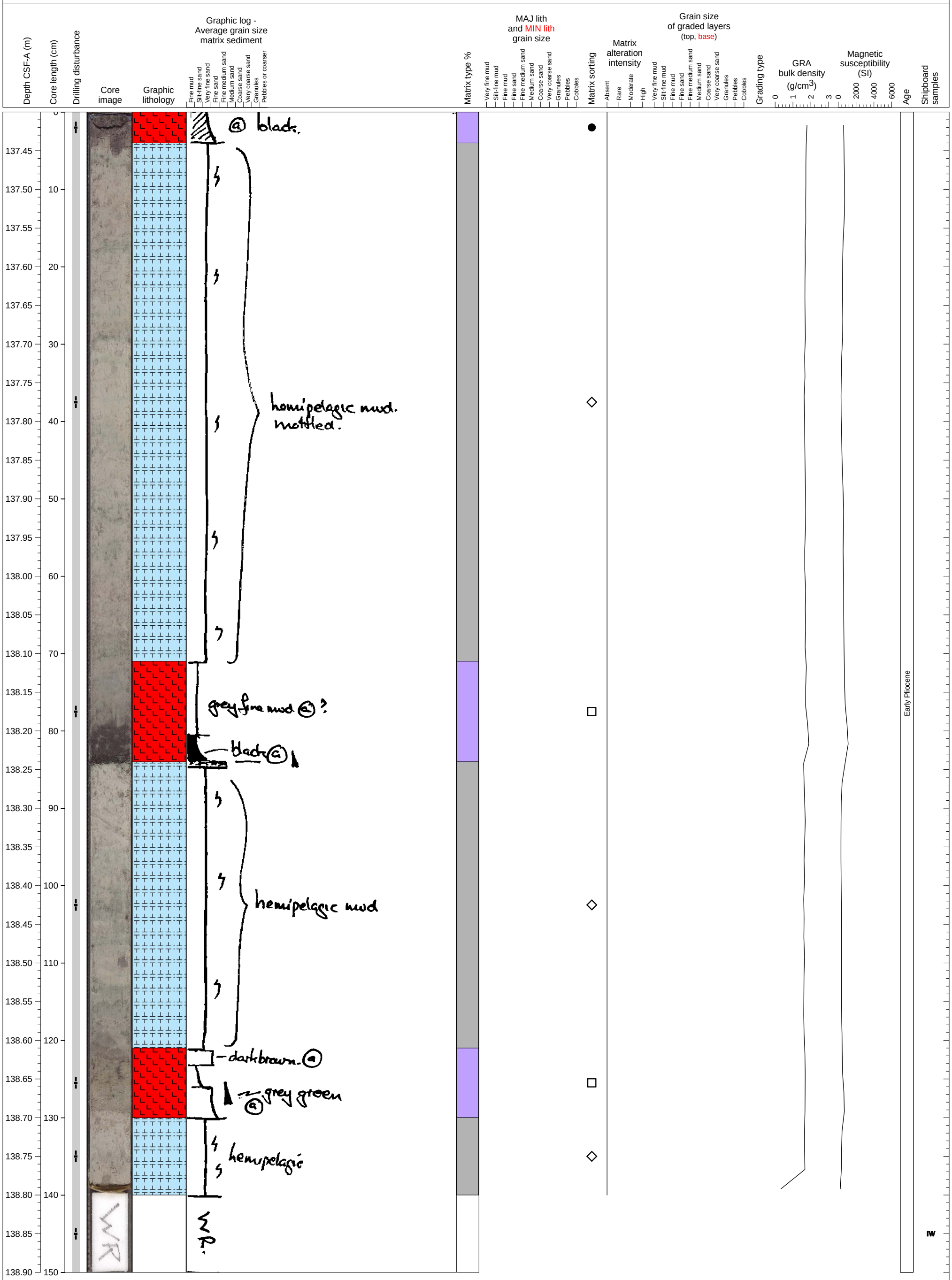
Hole 340-U1396C-15H Section 5, Top of Section: 135.92 CSF-A (m)

Hemipelagic mud with interbedded ash layers.



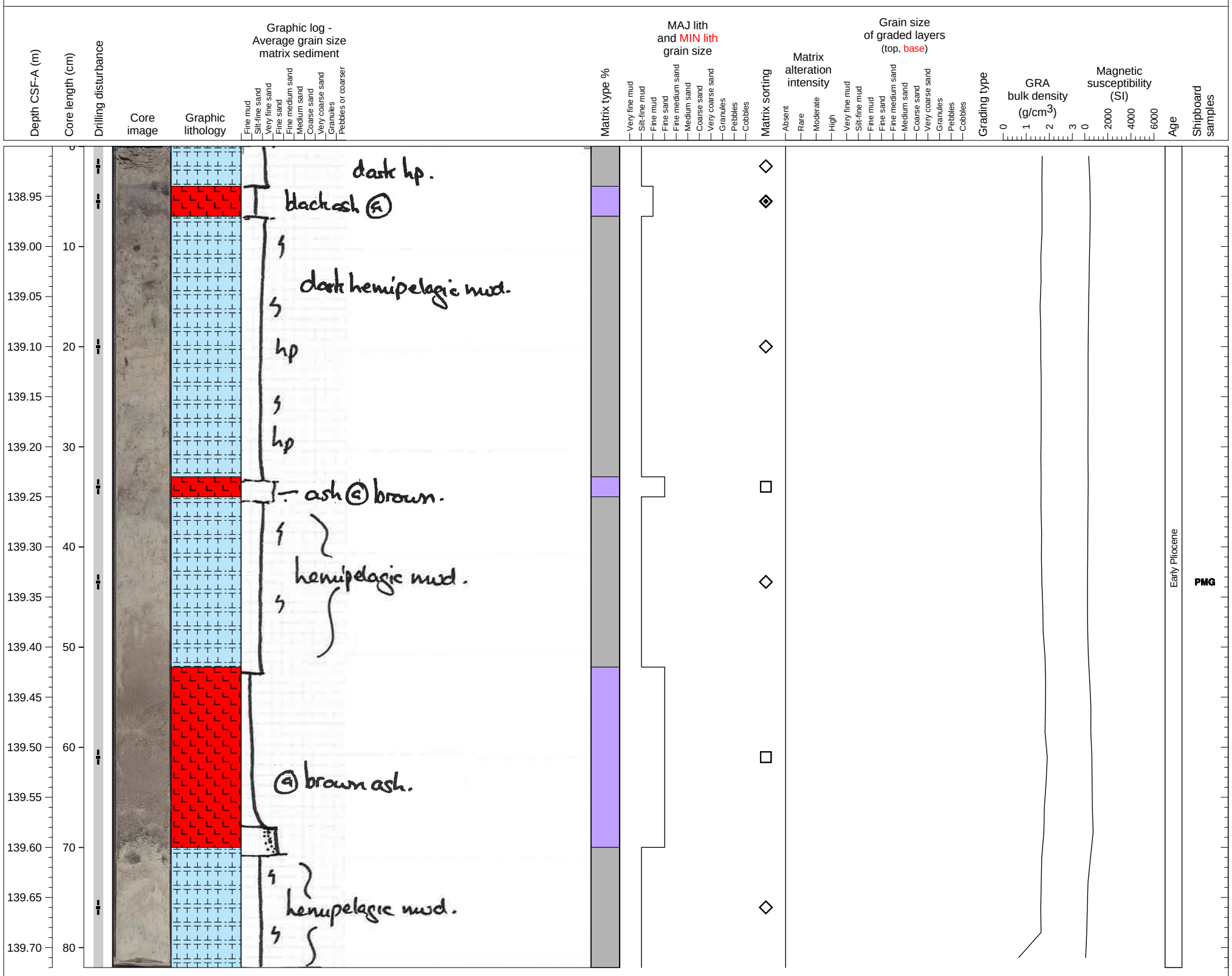
Hole 340-U1396C-15H Section 6, Top of Section: 137.4 CSF-A (m)

Hemipelagic mud with interbedded ash layers.



Hole 340-U1396C-15H Section 7, Top of Section: 138.9 CSF-A (m)

Hemipelagic mud with interbedded ash layers.



Hole 340-U1396C-15H Section CC, Top of Section: 139.72 CSF-A (m)

Hemipelagic mud with interbedded ash layers.