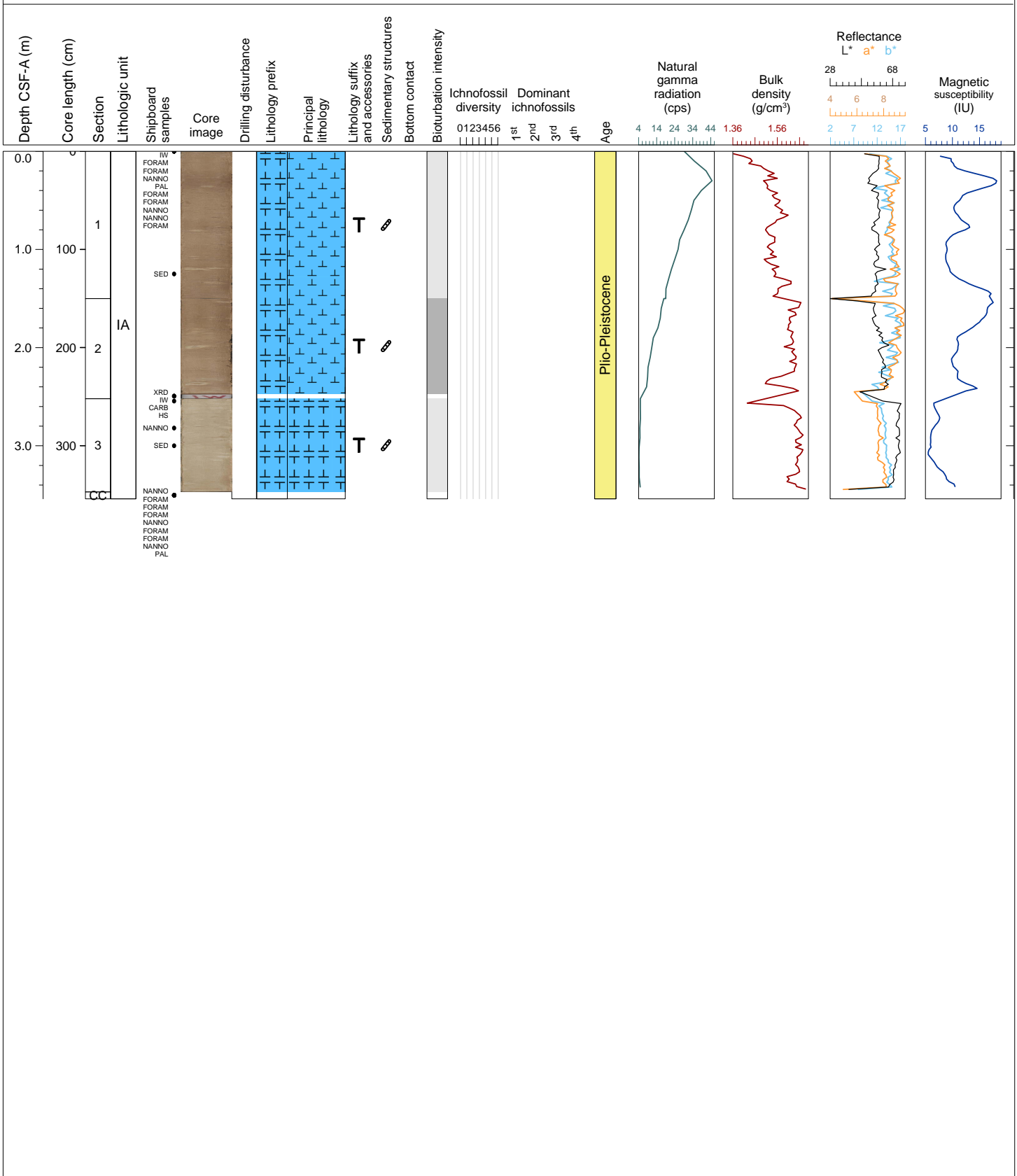


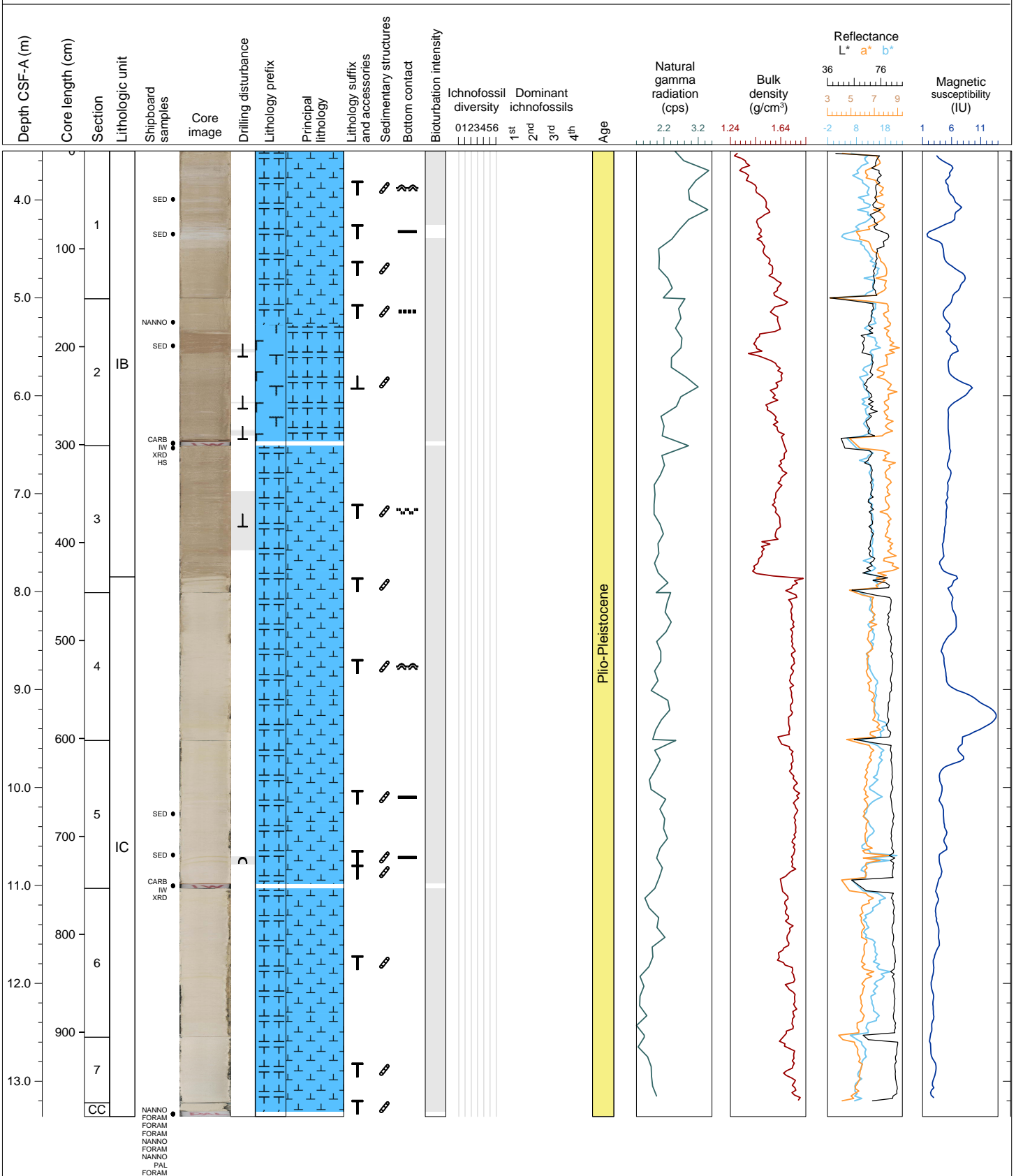
Hole 390C-U1559A Core 1H, Interval 0.0-3.54 m (CSF-A)

Core 1H is dominated by pale brown (10YR 6/3) nannofossil-rich calcareous ooze with foraminifers. There is some sparse bioturbation. Drilling disturbance has resulted in slight up-arching and two minor cracks.



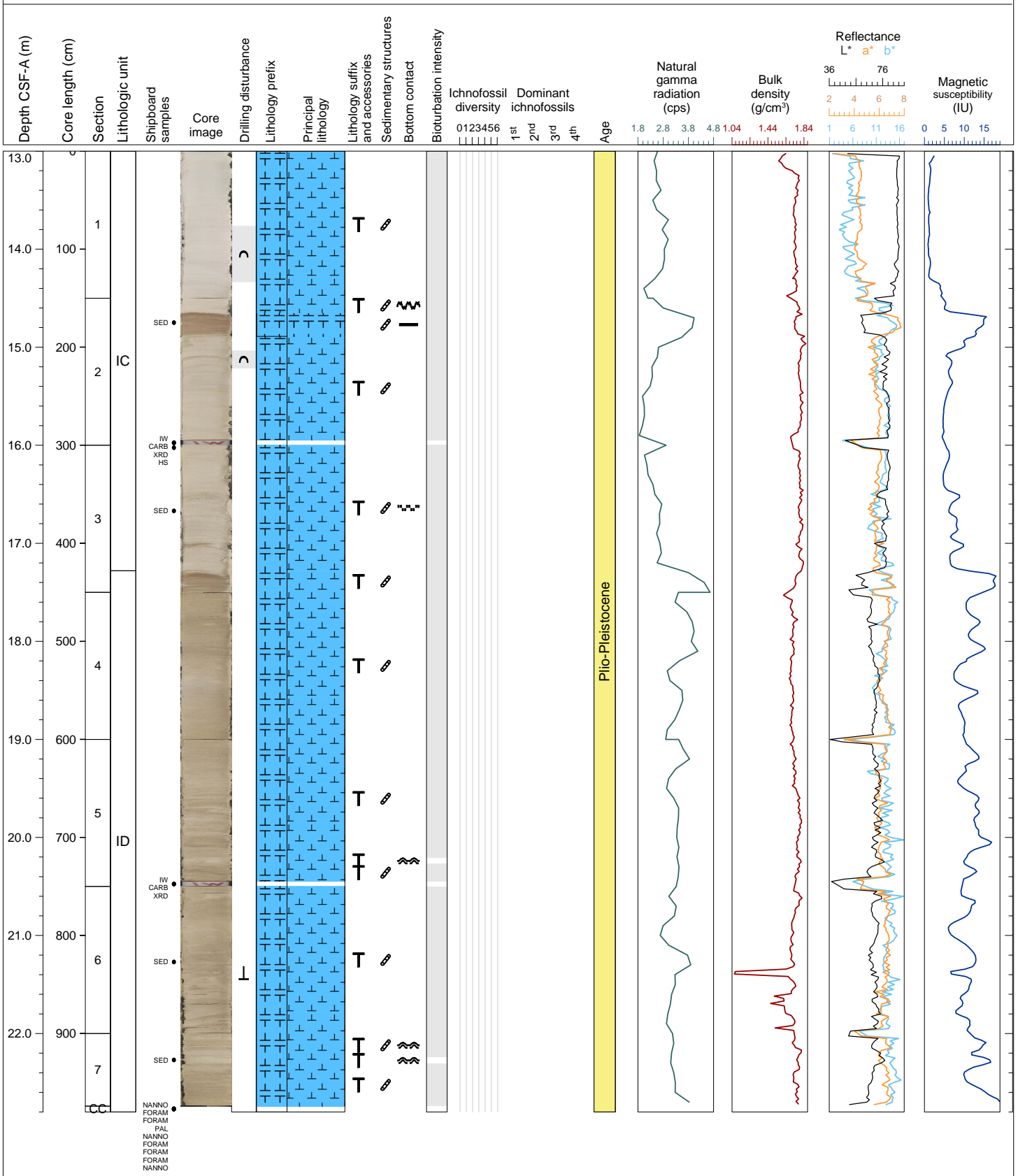
Hole 390C-U1559A Core 2H, Interval 3.5-13.36 m (CSF-A)

Core 2H is dominated by pale brown (10YR 6/3) or white (10YR 8/1) nannofossil-rich calcareous ooze with foraminifers. There is some sparse bioturbation.



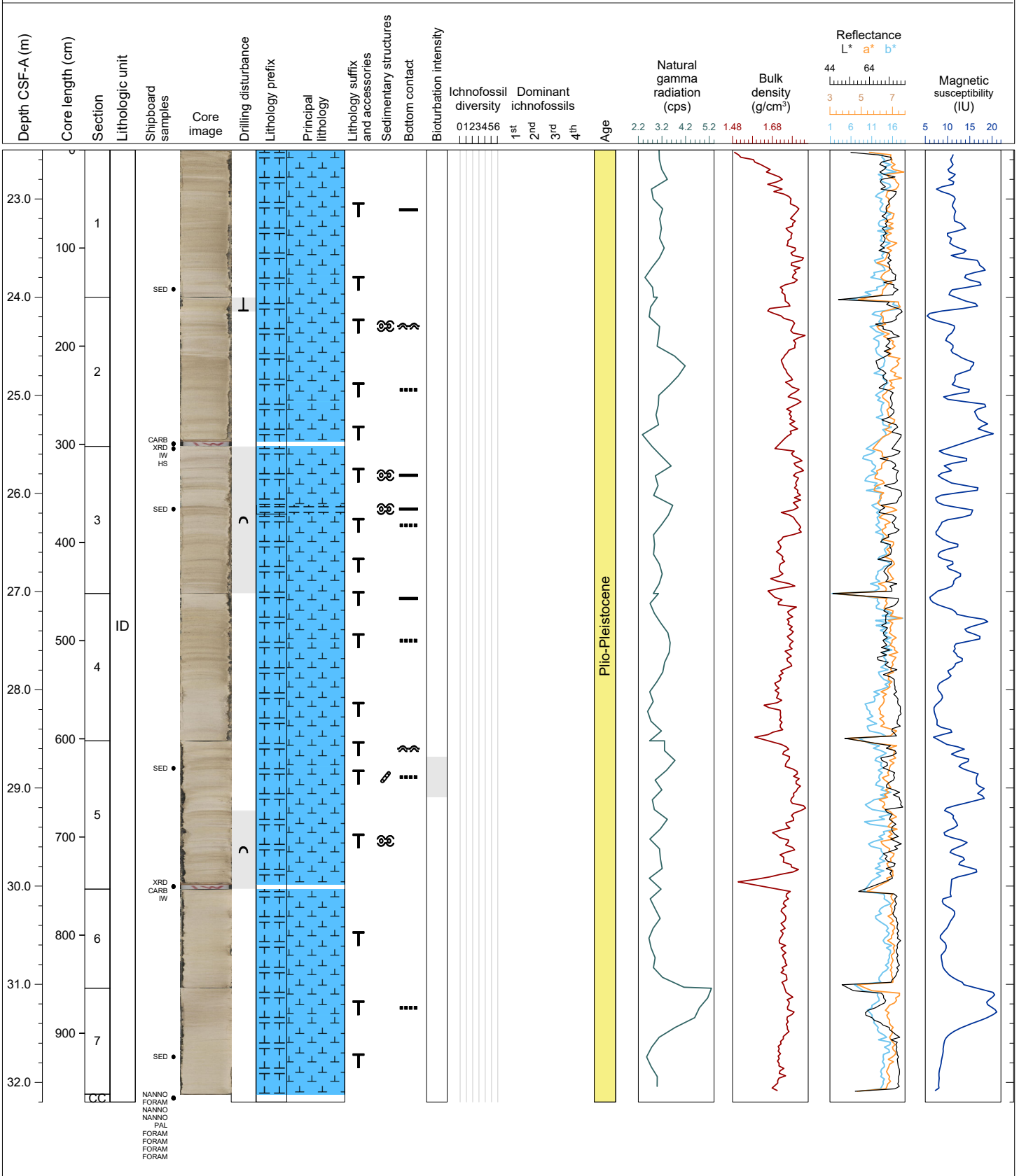
Hole 390C-U1559A Core 3H, Interval 13.0-22.8 m (CSF-A)

Core 3H is dominated by pale brown (10YR 6/3) or white (10YR 8/1) nannofossil-rich calcareous ooze with foraminifers. There is some sparse bioturbation.



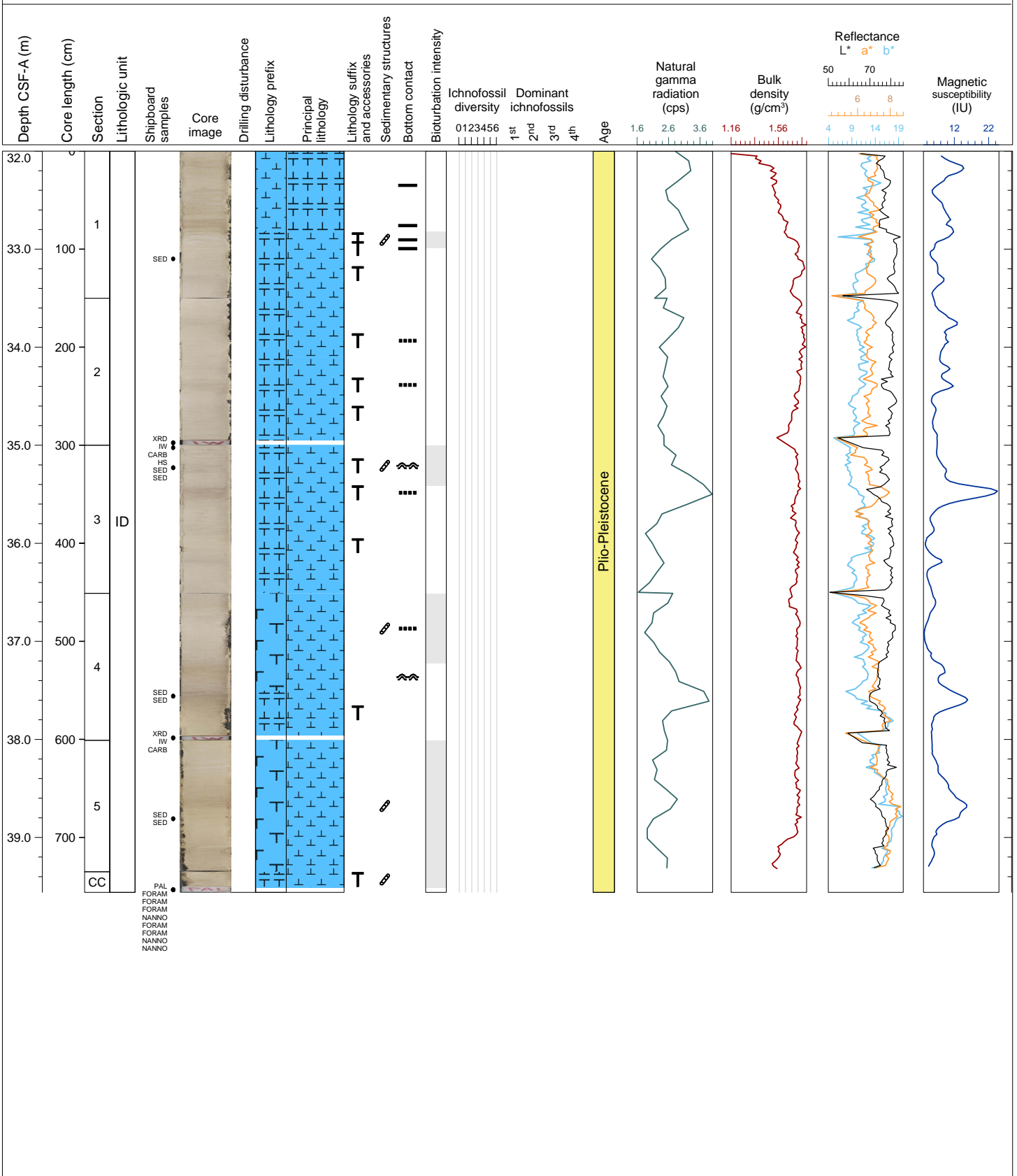
Hole 390C-U1559A Core 4H, Interval 22.5-32.2 m (CSF-A)

Core 4H is dominated by very pale brown (10YR 7/3 to 8/3) nannofossil-rich calcareous ooze with foraminifers. There is some sparse bioturbation. Drilling disturbance has resulted in slight up-arching in one section.



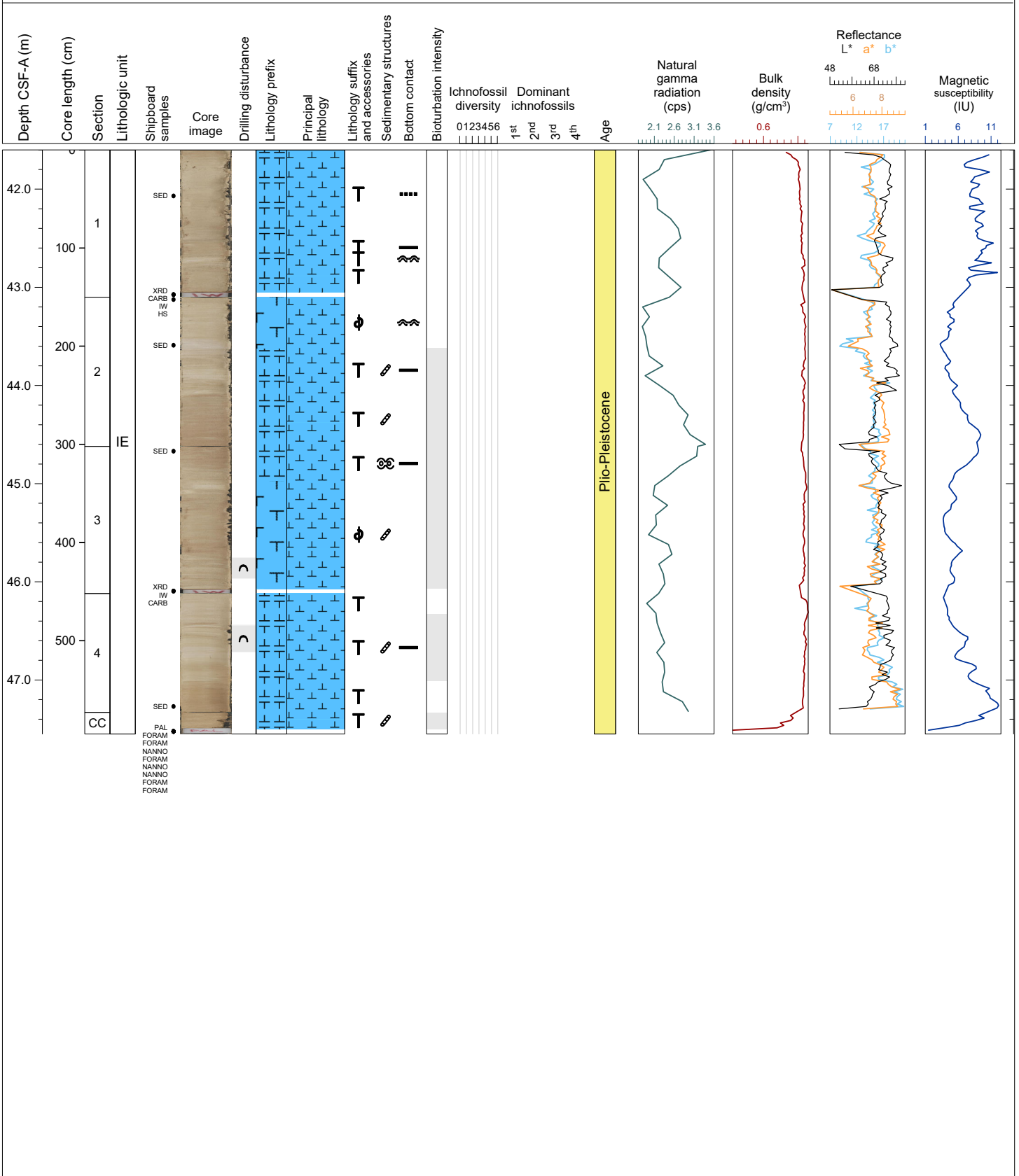
Hole 390C-U1559A Core 5X, Interval 32.0-39.56 m (CSF-A)

Core 5X contains mostly very pale brown (10YR 7/3, 8/2, 8/3) nannofossil-rich calcareous ooze with foraminifers. In addition, particular Sections contain mainly very pale brown (10YR 7/3, 8/3) nannofossil-rich calcareous ooze (1A) and foraminiferal nannofossil ooze (4A, 5A). There is some sparse bioturbation.



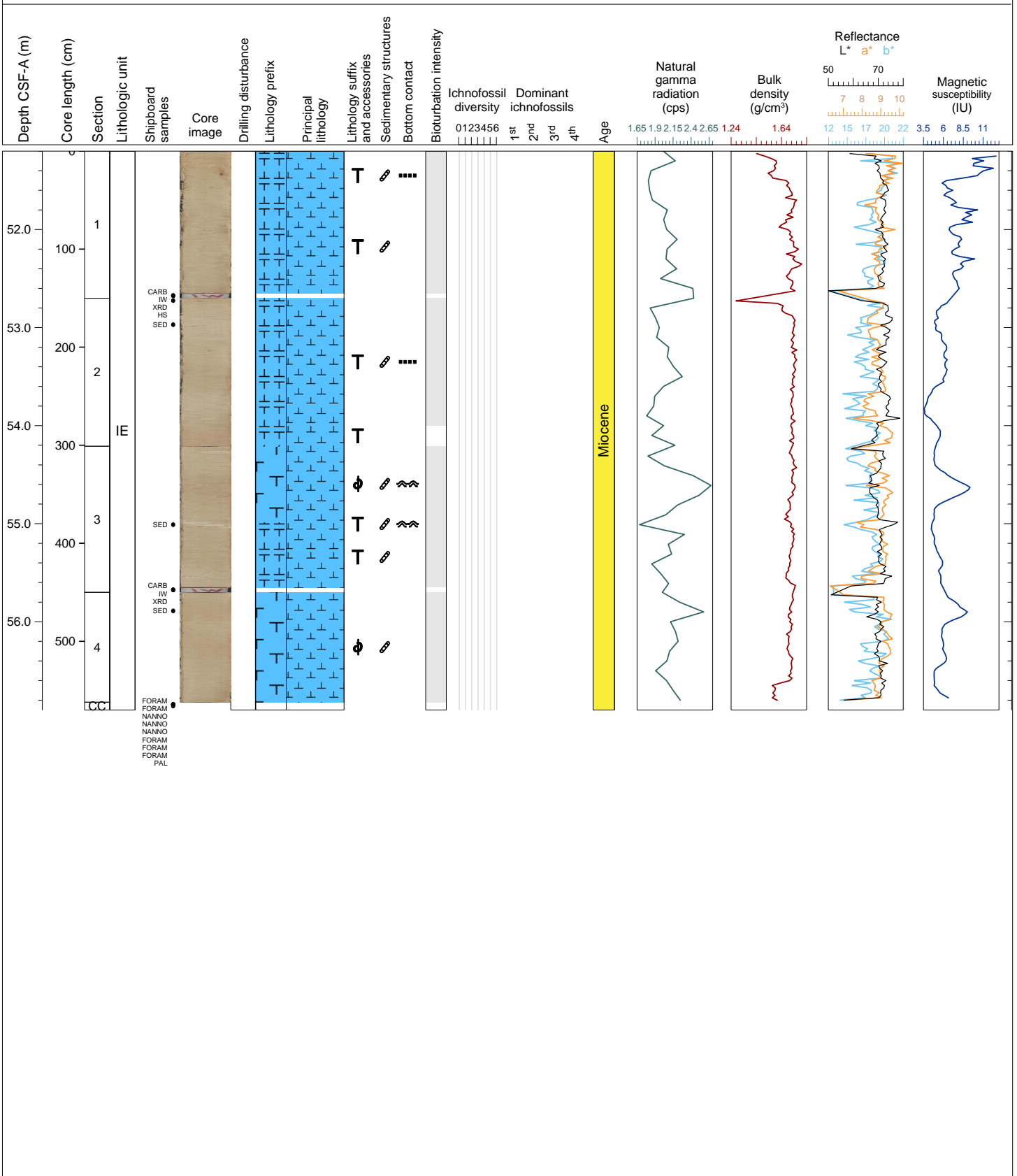
Hole 390C-U1559A Core 6X, Interval 41.6-47.55 m (CSF-A)

Core 6X is mainly very pale brown (10YR 7/3 to 8/3) calcareous nannofossil ooze with foraminifera. In addition, very pale brown (10YR 8/2) foraminiferal nannofossil ooze with bioclasts occurs in Sections 2A and 3A. There is some sparse bioturbation. Drilling disturbance has resulted in slight up-arching in 3A and 4A.



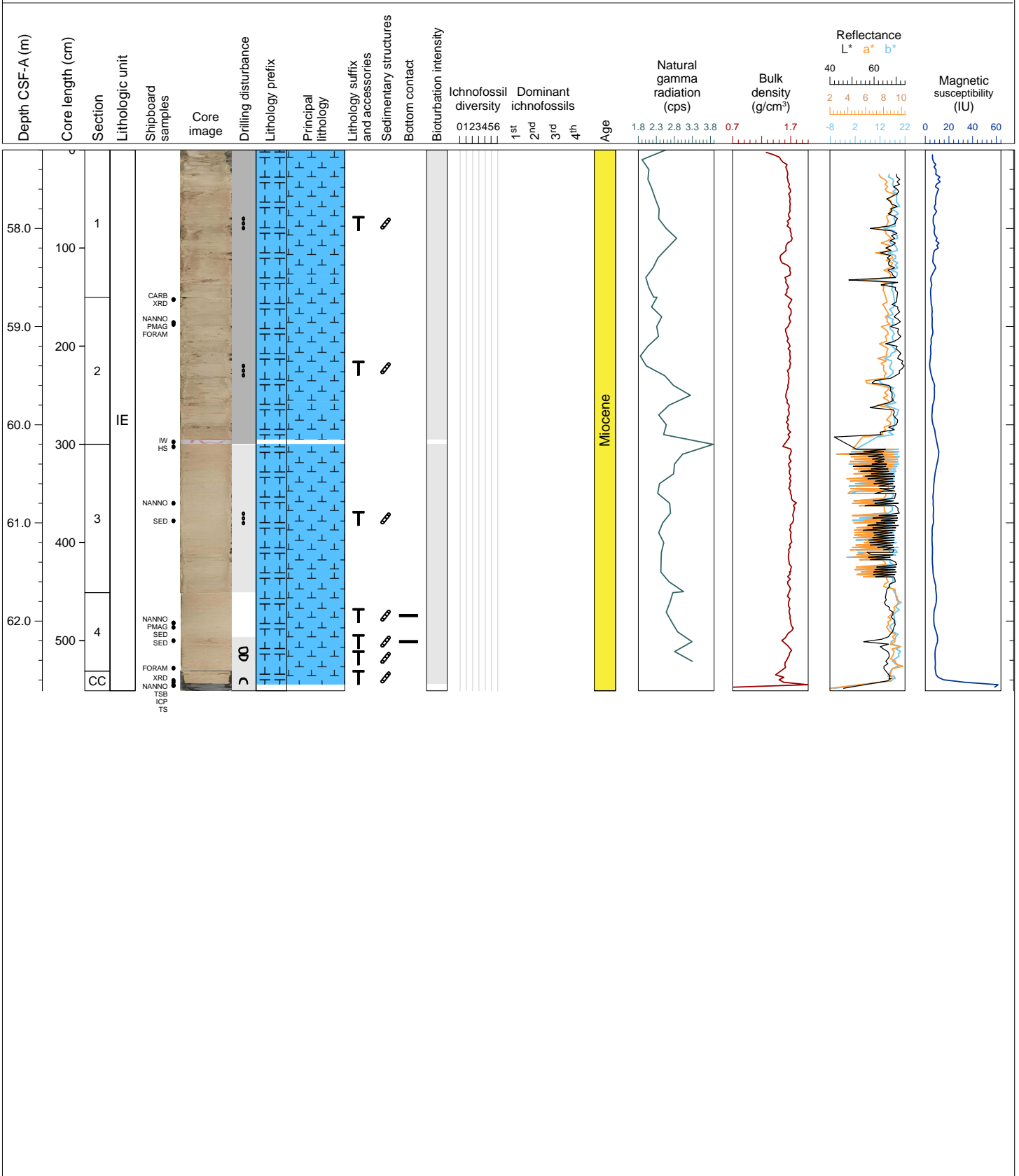
Hole 390C-U1559A Core 7X, Interval 51.2-56.9 m (CSF-A)




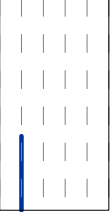


Core 7X consists of very pale brown (10YR 8/2 to 8/4) calcareous nannofossil ooze with foraminifera and foraminiferal nannofossil ooze with bioclasts. There is some sparse bioturbation.



Hole 390C-U1559A Core 8X, Interval 57.2-62.71 m (CSF-A)

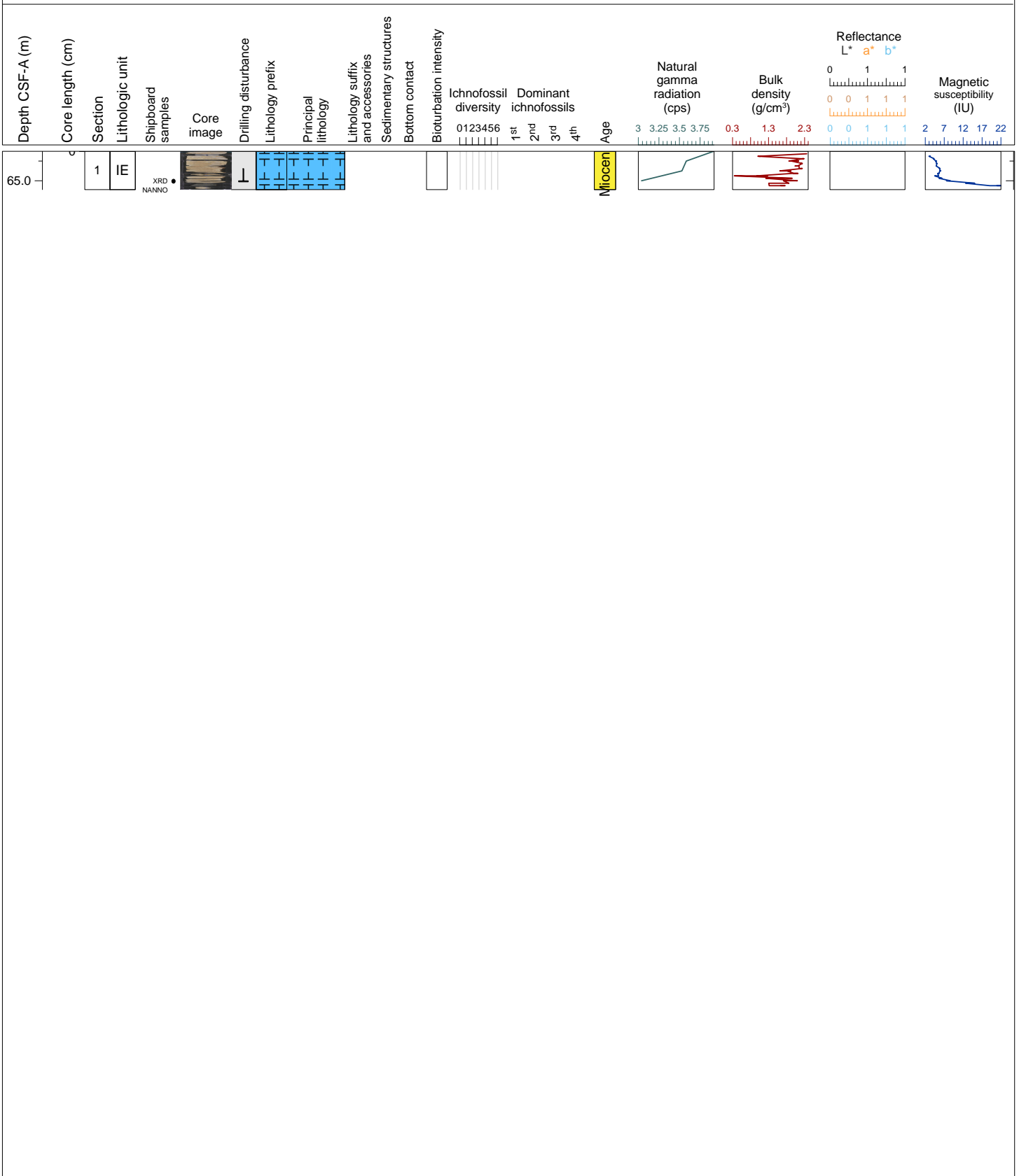
Core 8X is dominated by very pale brown (10YR 8/3) calcareous nannofossil ooze with foraminifera. There is some sparse bioturbation. Drilling disturbance includes slight to severe soupy slurry (type), slight biscuits (4A), and slight up-arching (CC).



| Hole 390C-U1559A-8X Section CC, Top of Section: 62.51 m (CSF-A) | | | | | | | | | | | | | | | |
|---|---------------------|--------------|---|-------------|-----|-------------------|-----------|------------|---|---|---|---|---|------------------|--|
| Depth (mbstf) | Section length (cm) | Piece number | Core image | Orientation | DMT | Shipboard samples | Lithology | Lith. unit | Plagioclase Olivine | Glass | Groundmass size | Vesicle abundance | Alteration intensity rank | Veins/Structures | Description |
| 62.51 | 0 | |  | | | | | |  |  |  |  |  | | <p>390C-U1559A-8X-CC-A, 13-20 cm UNIT: 1 LITHOLOGY: aphyric basalt TEXTURE: aphyric COLOR: Basalt: gray (GLEY 1 5/N) PHENOCRYSTS: Microphenocrysts of plagioclase are visible in the groundmass GROUNDMASS: cryptocrystalline VESICLES: Nonvesicular, but a few tiny ~0.1mm spherical vesicles, unfilled can be observed with a hand lens ALTERATION: Minor dark grey background alteration of basalt and alteration halos are developed around the (originally vein bounded) edges of the basalt pieces. VEINS: Thin saponite lined veins of pinkish carbonate form bounding edges of basalt rubble with 4mm dark halo</p> |
| 62.56 | | | | | | | | | | | | | | | |
| 62.61 | 10 | | | | | | | | | | | | | | |
| 62.66 | | | | | | | | | | | | | | | |
| 62.71 | 20 | | | | | | | | | | | | | | |

Hole 390C-U1559A Core 9X, Interval 64.7-65.09 m (CSF-A)

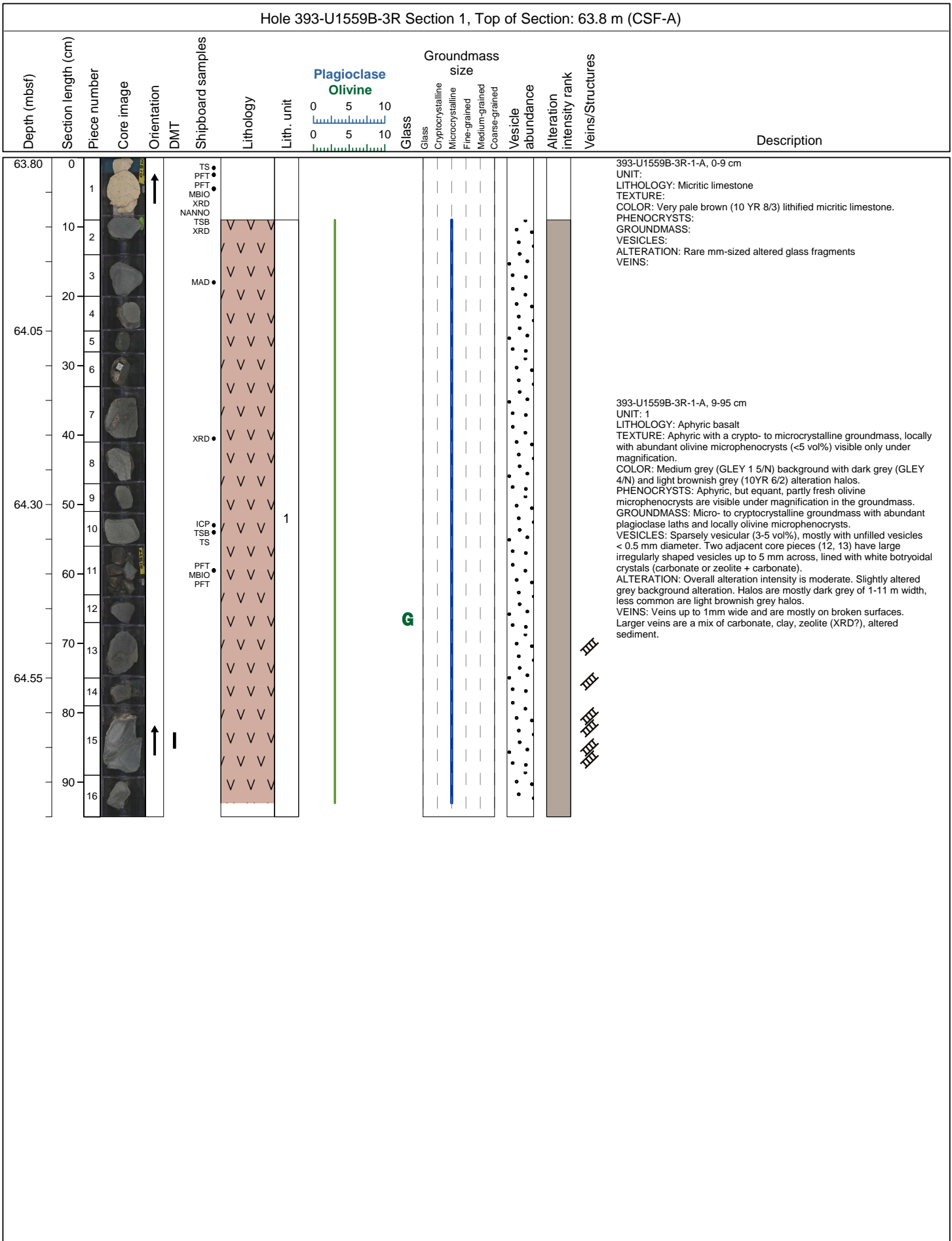
Core 9X contains very pale brown (10YR 8/2) monomict micritic limestone. Calcareous ooze likely lithified by hydrothermal alteration or contact metamorphism. Thin section shows particles of basaltic glass.

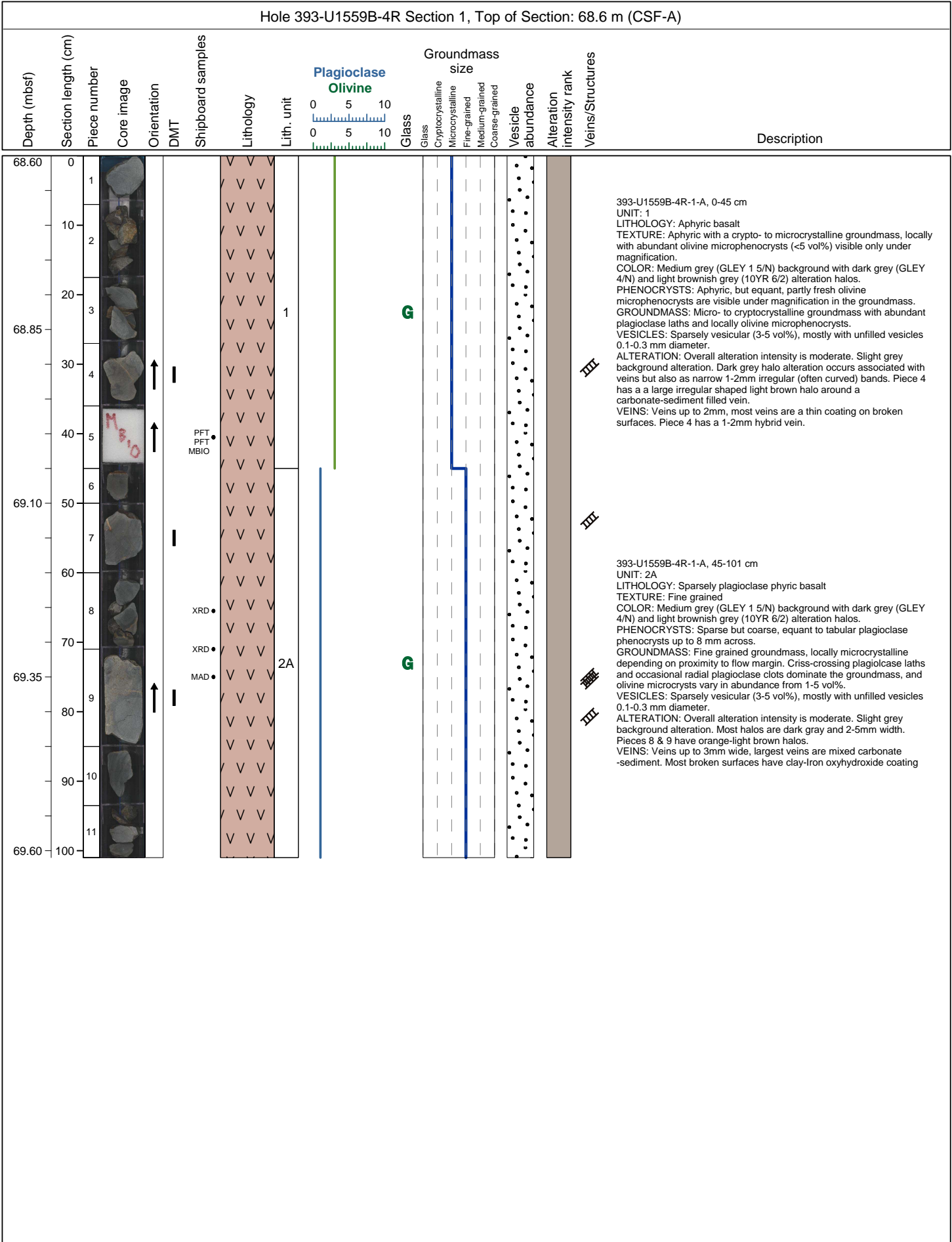


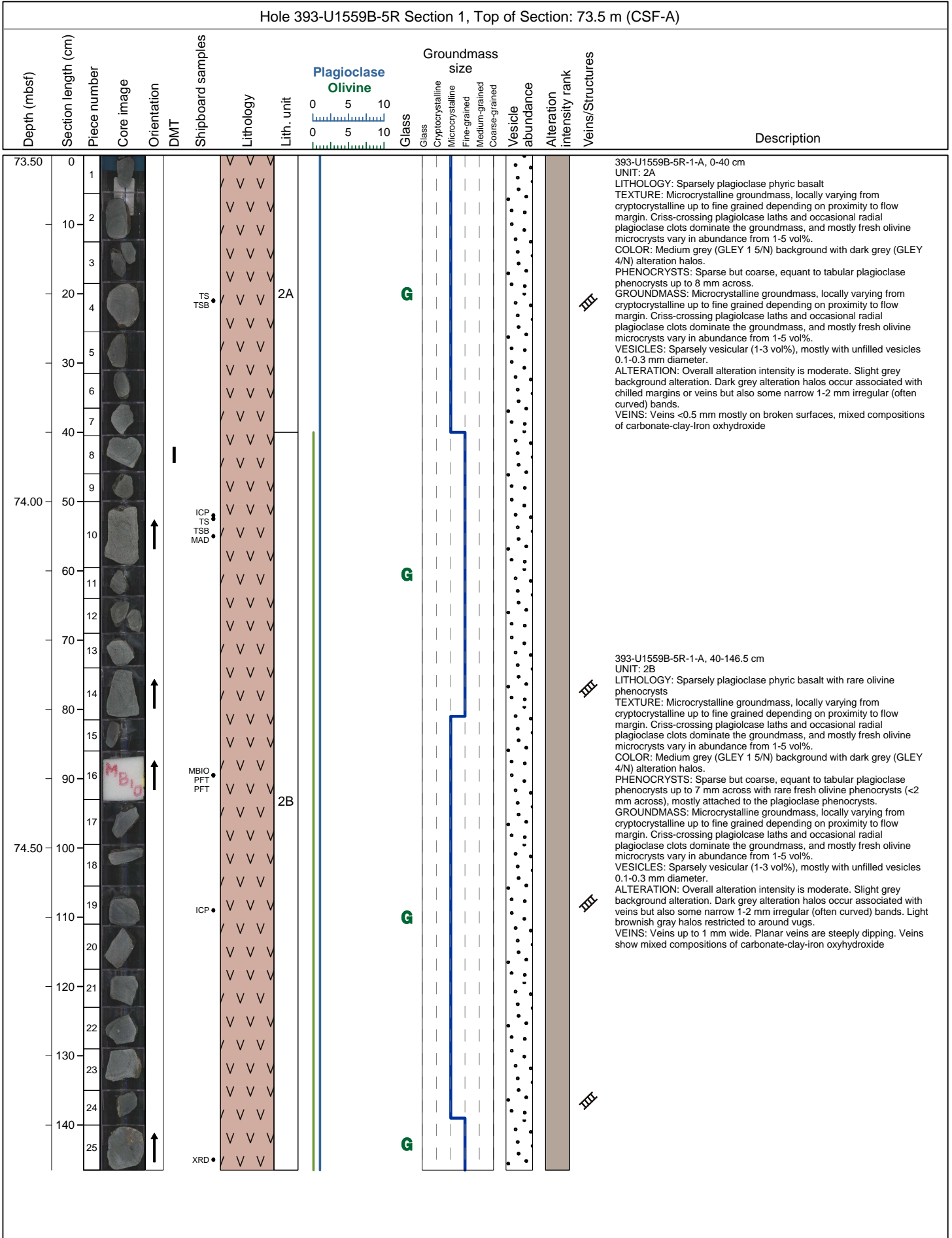
| Hole 390C-U1559A-9X Section 1, Top of Section: 64.7 m (CSF-A) | | | | | | | | | | | | |
|---|---------------------|--------------|------------|-------------|-----|-------------------|-----------|------------|------------------------|---|------------------|---|
| Depth (mbsf) | Section length (cm) | Piece number | Core image | Orientation | DMT | Shipboard samples | Lithology | Lith. unit | Plagioclase Olivine | Groundmass size | Veins/Structures | Description |
| | | | | | | | | | 0 5 10 0 5 10 | Glass Glass Cryptocrystalline Microcrystalline Fine-grained Medium-grained Coarse-grained | | |
| 64.70 | 0 | 1 | | ↑ | | | | 1 | | G | | |
| 64.80 | 10 | 2 | | ↑ | | | | | | | | |
| 64.90 | 20 | 3 | | ↑ | | | | | | | | |
| 65.00 | 30 | 4 | | ↑ | | | | | | | | |
| | | 5 | | ↑ | | | | | | | | |
| | | 6 | | ↑ | | | | | | | | |
| | | | | | | | | | | | | <p>390C-U1559A-9X-1-A, 0-41.5 cm UNIT: 1 LITHOLOGY: basaltic glass with sediment TEXTURE: The basaltic glass is microporphyritic with microphenocrysts of plagioclase and sparse olivine. The basalt clast is aphyric and microcrystalline. COLOR: Glass: bright orange (5YR 5/6); Carbonate sediment: light orange (10YR 8/2) PHENOCRYSTS: GROUNDMASS: Glassy VESICLES: nonvesicular ALTERATION: Basaltic glass has been altered to orange palagonite with no remnants of fresh glass. VEINS: Vertical vein like structures of paler/greyer carbonate cut subvertically through carbonate sediment. Irregular (<1 - 30 mm wide) and anastomosing. Appear possibly to be fluid escape zones related to intrusion of basalt.</p> |

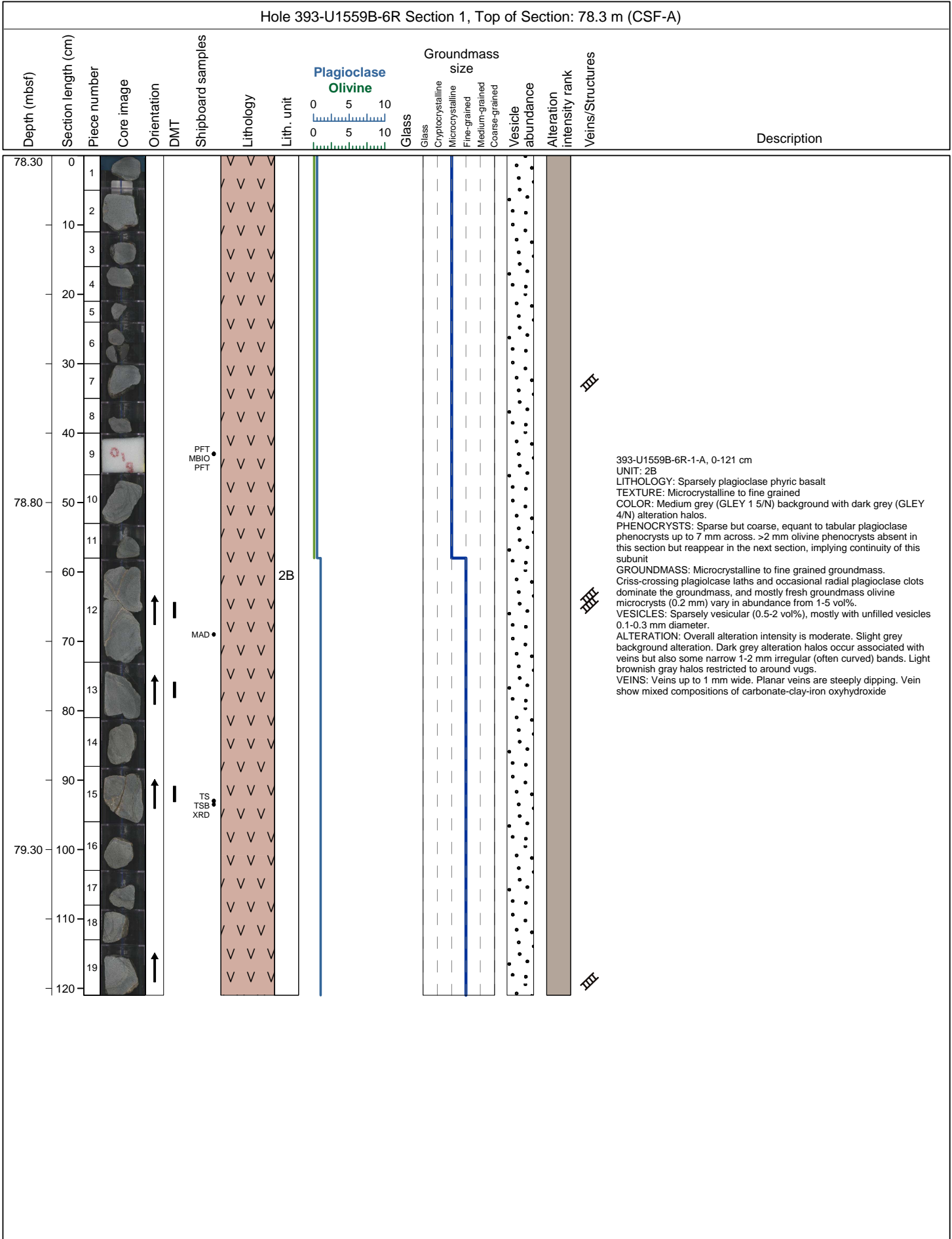
| Hole 393-U1559B-2R Section 1, Top of Section: 58.9 m (CSF-A) | | | | | | | | | | | | | |
|--|---------------------|--------------|------------|-------------|-----|-------------------|-----------|------------|-------------|---------|---|--|-------------|
| Depth (mbst) | Section length (cm) | Piece number | Core image | Orientation | DMT | Shipboard samples | Lithology | Lith. unit | Plagioclase | Olivine | Glass | Groundmass size | Description |
| | | | | | | | | 0 5 10 | 0 5 10 | Glass | Cryptocrystalline Microcrystalline Fine-grained Medium-grained Coarse-grained | Vesicle abundance Alteration intensity rank Veins/Structures | |

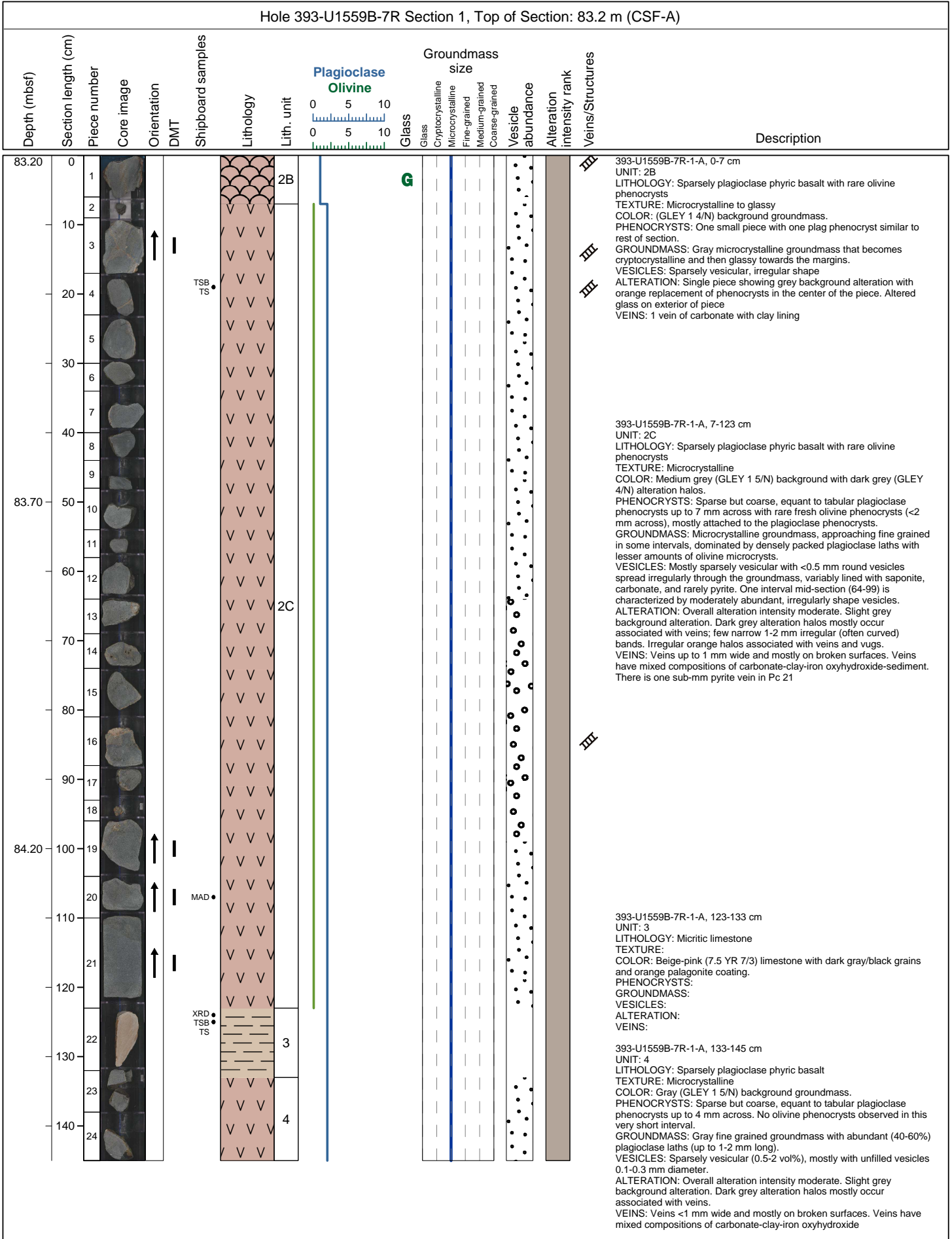
NO RECOVERY 58.9-63.8 m

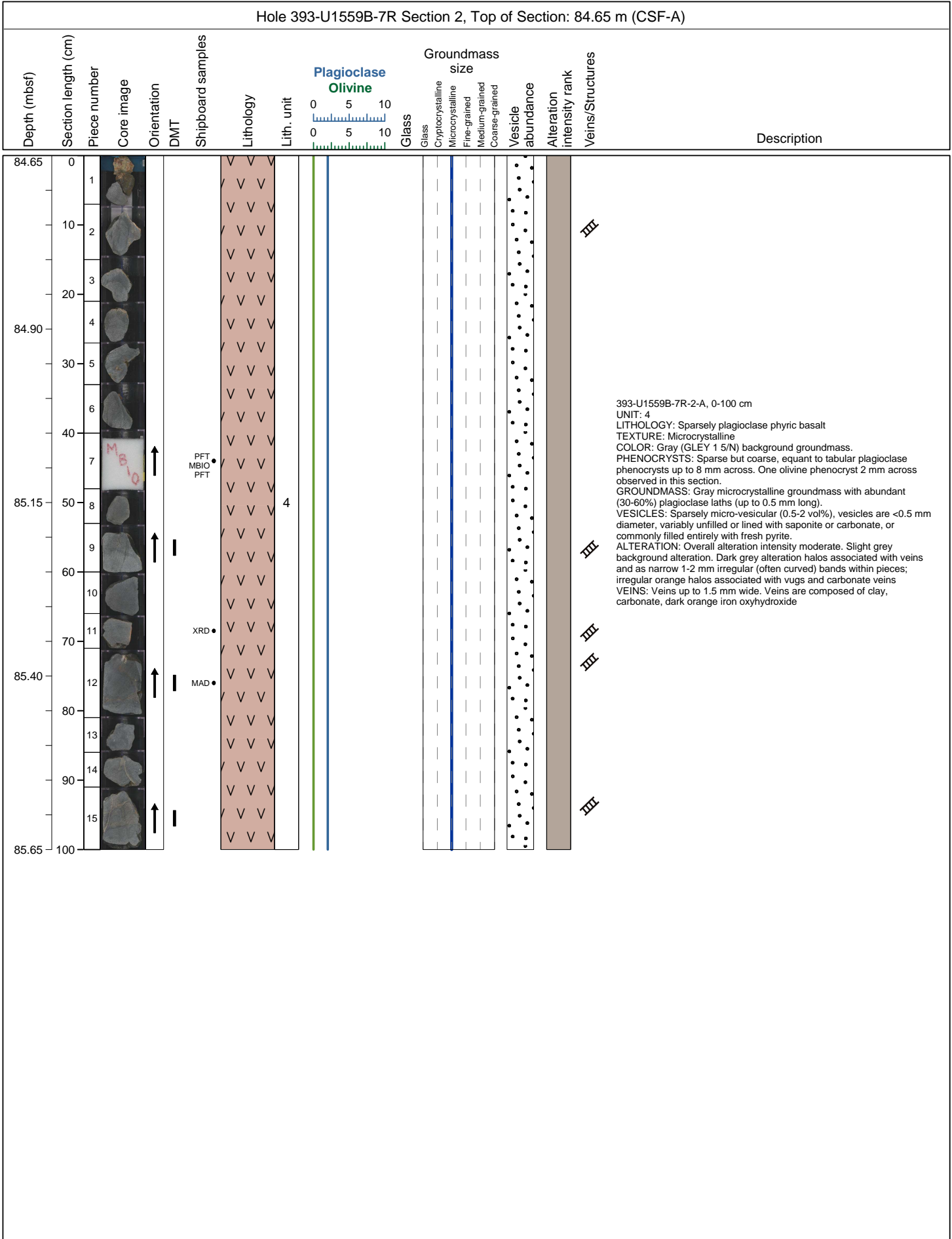


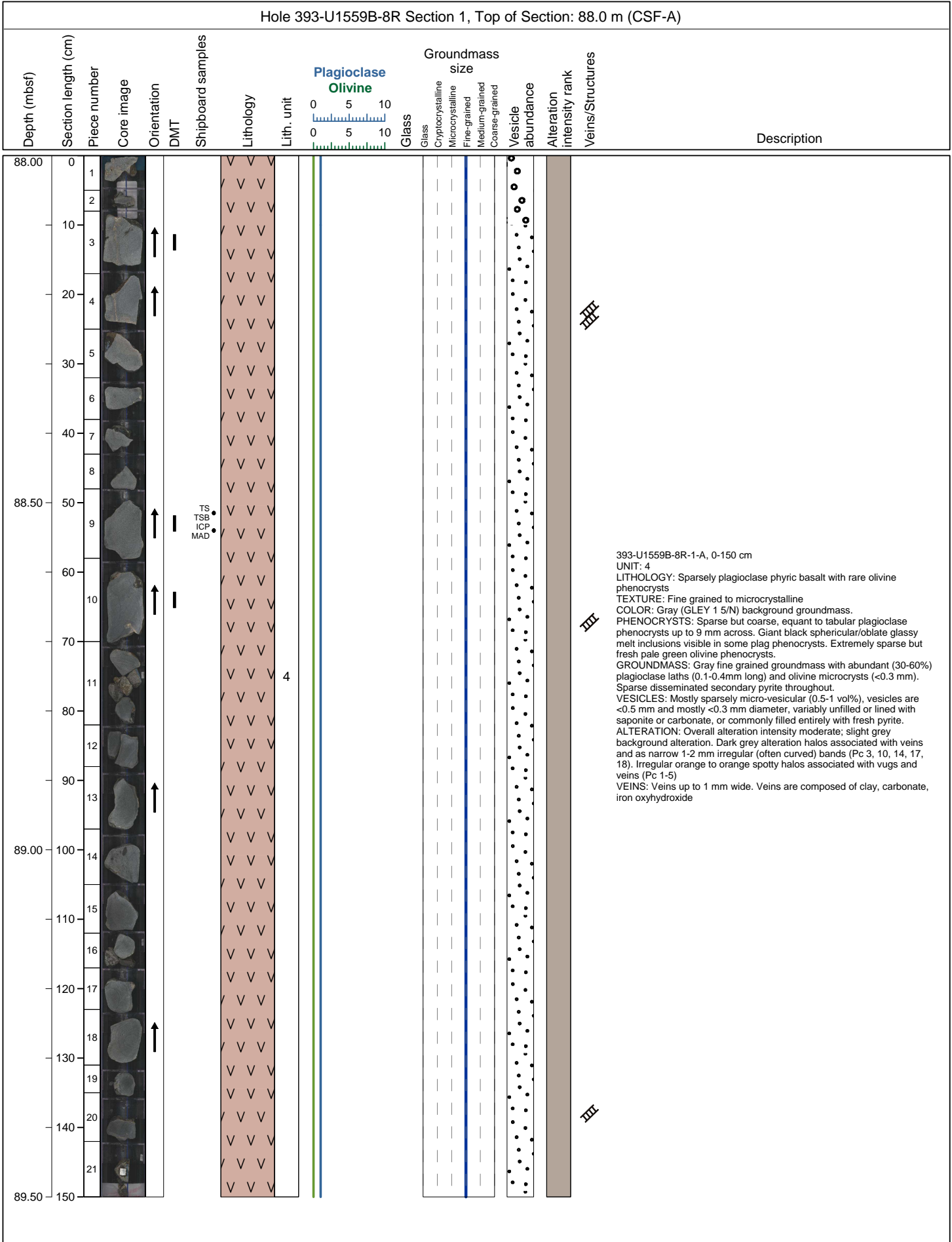












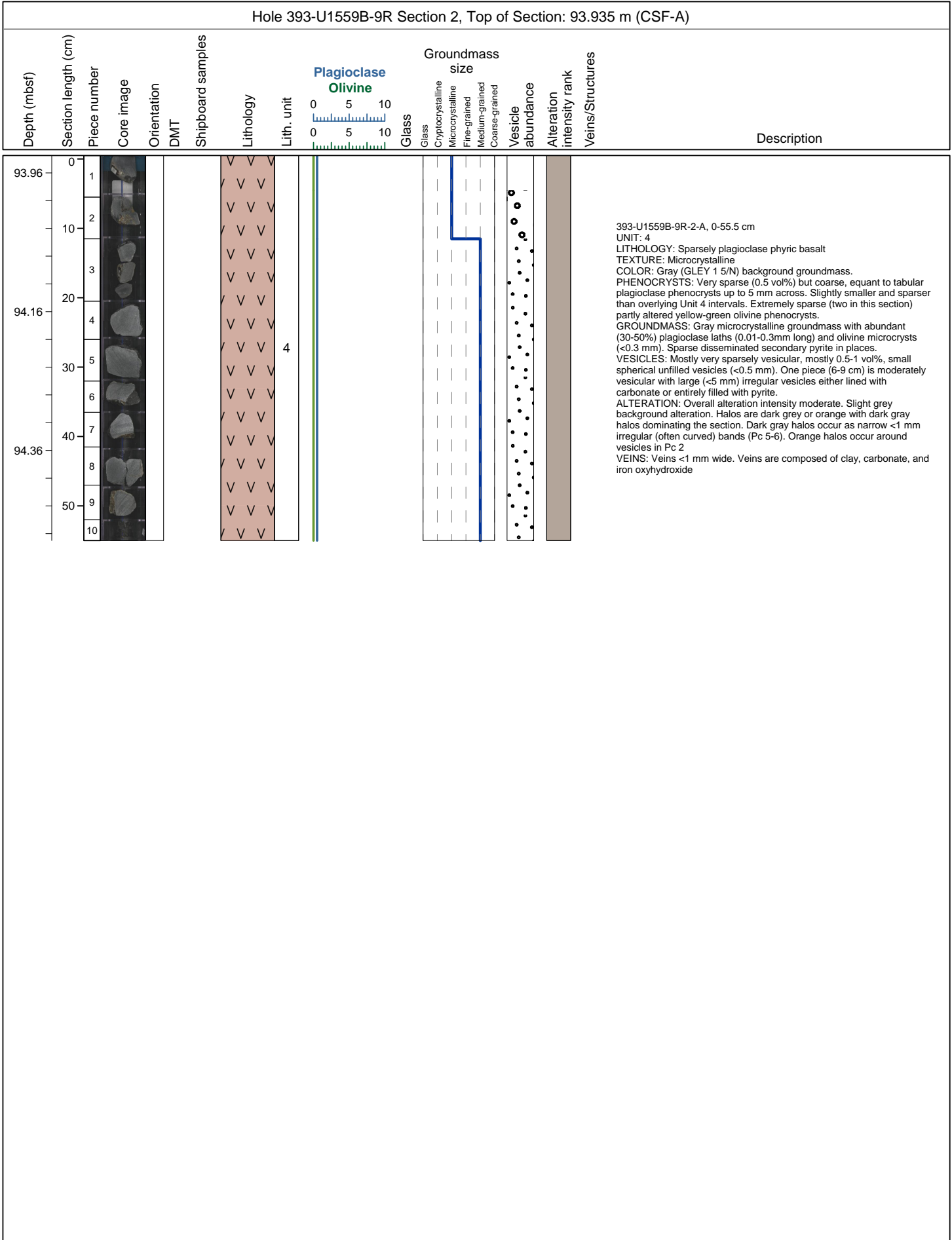






| Hole 393-U1559B-8R Section 2, Top of Section: 89.5 m (CSF-A) | | | | | | | | | | | | | | | |
|--|---------------------|--------------|---|-------------|-----|-------------------|-----------|------------|------------------------|-------|-----------------|-------------------|---------------------------|------------------|--|
| Depth (mbsf) | Section length (cm) | Piece number | Core image | Orientation | DMT | Shipboard samples | Lithology | Lith. unit | Plagioclase Olivine | Glass | Groundmass size | Vesicle abundance | Alteration intensity rank | Veins/Structures | Description |
| 89.52 | 0 | 1 |  | | | | | | | | | | | | <p>393-U1559B-8R-2-A, 0-45 cm UNIT: 4 LITHOLOGY: Sparsely plagioclase phyric basalt with rare olivine phenocrysts TEXTURE: Fine grained to microcrystalline COLOR: Gray (GLEY 1.5/N) background groundmass. PHENOCRYSTS: Sparse but coarse, equant to tabular plagioclase phenocrysts up to 9 mm across. Extremely sparse but fresh pale green olivine phenocrysts. GROUNDMASS: Gray fine grained groundmass with abundant (30-60%) plagioclase laths (0.1-0.4mm long) and olivine microcrysts (<0.3 mm). Sparse disseminated secondary pyrite throughout. VESICLES: Mostly sparsely micro-vesicular (0.5-1 vol%), vesicles are <0.5 mm and mostly <0.3 mm diameter, variably unfilled or lined with saponite or carbonate, or commonly filled entirely with fresh pyrite. ALTERATION: Overall alteration intensity moderate; slight grey background alteration. Dark grey halos associated with veins and as narrow 1-2 mm irregular (often curved) bands (Pc 3, 5). Pc 3 shows 3 types of halos VEINS: Veins <1 mm wide. Veins are composed of clay, carbonate, iron oxyhydroxide and rare sediment</p> |
| | 10 | 2 |  | | | | | | | | | | | | |
| | 20 | 4 |  | | | | | | | | | | | | |
| 89.72 | 30 | 5 |  | | | | | | | | | | | | |
| | 40 | 6 |  | | | | | | | | | | | | |
| | | 7 |  | | | | | | | | | | | | |
| 89.92 | | | | | | | | | | | | | | | |

| Hole 393-U1559B-9R Section 1, Top of Section: 92.9 m (CSF-A) | | | | | | | | | | | | | | | | | | | |
|--|---------------------|--------------|------------|-------------|-----|-------------------|-----------|------------|------------------------|---|-----------------|-------|-------|-------------------|------------------|-------------------|---------------------------|---|-------------|
| Depth (mbstf) | Section length (cm) | Piece number | Core image | Orientation | DMT | Shipboard samples | Lithology | Lith. unit | Plagioclase Olivine | | Groundmass size | | | | | Vesicle abundance | Alteration intensity rank | Veins/Structures | Description |
| | | | | | | | | | 0 | 5 | 10 | Glass | Glass | Cryptocrystalline | Microcrystalline | | | | |
| 92.90 | 0 | 1 | | | | | V | | | | | | | | | | | <p>393-U1559B-9R-1-A, 0-103.5 cm UNIT: 4 LITHOLOGY: Sparsely plagioclase phyric basalt TEXTURE: Microcrystalline to locally fine grained COLOR: Gray (GLEY 1 5/N) background groundmass. PHENOCRYSTS: Very sparse (0.5 vol%) but coarse, equant to tabular plagioclase phenocrysts up to 5 mm across. Slightly smaller and sparser than overlying Unit 4 intervals. Extremely sparse (two in this section) partly altered yellow-green olivine phenocrysts. GROUNDMASS: Gray microcrystalline groundmass with abundant (30-50%) plagioclase laths (0.01-0.3mm long) and olivine microcrysts (<0.3 mm). Sparse disseminated secondary pyrite in places. VESICLES: Very sparsely vesicular, mostly 0.1-0.5 vol%. Patches a few cm across with sparse/moderate vesicularity. ALTERATION: Overall alteration intensity moderate. Slight grey background alteration. Halos are either dark grey or gray; gray halos dominate the section. Dark gray halos occur as narrow <1 mm irregular (often curved) bands (Pc 2-4, 8, 13-16) VEINS: Veins up to 1 mm wide. Veins are composed of clay, carbonate, iron oxyhydroxide</p> | |
| | 2 | | | | | | V | | | | | | | | | | | | |
| | 3 | | | | | | V | | | | | | | | | | | | |
| | 4 | | | | | | V | | | | | | | | | | | | |
| | 5 | | | | | | V | | | | | | | | | | | | |
| 93.15 | 6 | | | ↑ | | | V | | | | | | | | | | | | |
| | 7 | | | ↑ | | | V | | | | | | | | | | | | |
| | 8 | | | ↑ | | | V | | | | | | | | | | | | |
| | 9 | | | ↑ | | | V | | | | | | | | | | | | |
| 93.40 | 10 | | | ↑ | | | V | 4 | | | | | | | | | | | |
| | 11 | | | ↑ | | | V | | | | | | | | | | | | |
| | 12 | | | ↑ | | | V | | | | | | | | | | | | |
| 93.65 | 13 | | | ↑ | | | V | | | | | | | | | | | | |
| | 14 | | | ↑ | | | V | | | | | | | | | | | | |
| | 15 | | | ↑ | | | V | | | | | | | | | | | | |
| 93.90 | 16 | | | ↑ | | | V | | | | | | | | | | | | |



Hole 393-U1559B-10R Section 1, Top of Section: 97.7 m (CSF-A)

| Depth (mbsf) | Section length (cm) | Piece number | Core image | Orientation | DMT | Shipboard samples | Lithology | Lith. unit | Plagioclase Olivine | Glass | Groundmass size | Vesicle abundance | Alteration intensity rank | Veins/Structures | Description |
|--------------|---------------------|--------------|------------|-------------|-----|-------------------|-----------|------------|------------------------|-------|-----------------|-------------------|---------------------------|------------------|---|
| 97.72 | 0 | 1 | | | | | V V | | 0 5 10 | | | | | | <p>393-U1559B-10R-1-A, 0-80 cm UNIT: 4 LITHOLOGY: Sparsely plagioclase phyric basalt with rare olivine TEXTURE: Fine grained COLOR: Gray (GLEY 1 5/N to GLEY 1 4/N) background groundmass. PHENOCRYSTS: Sparse but coarse, equant to tabular plagioclase phenocrysts up to 9 mm across. Extremely sparse (<0.1%) but fresh pale green olivine phenocrysts, generally attached to plagioclases. GROUNDMASS: Gray groundmass, dominated by blocky and lath shaped plagioclase microcrysts (30-60%). Mostly fresh equant olivine groundmass microcrysts are <0.1 mm (5-15 vol%). VESICLES: Very sparsely vesicular (0.1-1 vol%), spherical (micro-)vesicles, varies from piece to piece but overall no millimetric vesicles. ALTERATION: Overall alteration intensity moderate. Slight grey background alteration, Pc 14 shows orange spotted background alteration. Halos are dark grey or orange with dark gray halos dominating the section. Dark gray halos as narrow <1 mm irregular (often curved) bands occur in Pc 3, 7, 12, 14. Orange halo is only in Pc 11 VEINS: Veins up to 1.5 mm wide. Veins are composed of clay, carbonate, and iron oxyhydroxide</p> |
| | 2 | | | | | V V | | | | | | | | | |
| | 10 | | | | | V V | | | | | | | | | |
| | 3 | | | | | V V | | | | | | | | | |
| | 4 | | | | | V V | | | | | | | | | |
| 97.92 | 20 | | | | | V V | | | | | | | | | |
| | 5 | | | | | V V | | | | | | | | | |
| | 6 | | | | | V V | | | | | | | | | |
| | 30 | | | | | V V | | | | | | | | | |
| | 7 | | | | | V V | | | | | | | | | |
| | 40 | | | | | V V | 4 | | | | | | | | |
| 98.12 | 40 | | | | | V V | | | | | | | | | |
| | 8 | | | | | V V | | | | | | | | | |
| | 9 | | | | | V V | | | | | | | | | |
| | 50 | | | | | V V | | | | | | | | | |
| | 10 | | | | | V V | | | | | | | | | |
| | 11 | | | | | V V | | | | | | | | | |
| | 60 | | | | | V V | | | | | | | | | |
| 98.32 | 60 | | | | | V V | | | | | | | | | |
| | 12 | | | | | V V | | | | | | | | | |
| | 13 | | | | | V V | | | | | | | | | |
| | 70 | | | | | V V | | | | | | | | | |
| | 14 | | | | | V V | | | | | | | | | |
| | 80 | | | | | V V | | | | | | | | | |

Hole 393-U1559B-10R Section 2, Top of Section: 98.5 m (CSF-A)

| Depth (mbsf) | Section length (cm) | Piece number | Core image | Orientation | DMT | Shipboard samples | Lithology | Lith. unit | Plagioclase | | Olivine | | Groundmass size | | | | Vesicle abundance | Alteration intensity rank | Veins/Structures | Description |
|--------------|---------------------|--------------|------------|-------------|-----|-------------------|-----------|------------|-------------|---|---------|---|-----------------|----|-------|-------------------|-------------------|---------------------------|------------------|-------------|
| | | | | | | | | | 0 | 5 | 10 | 0 | 5 | 10 | Glass | Cryptocrystalline | | | | |
| 98.52 | 0 | 1 | | | | | V V | | | | | | | | | | | | | |
| | 10 | 2 | | | | | V V V | | | | | | | | | | | | | |
| | 20 | 3 | | | | | V V V | | | | | | | | | | | | | |
| | 30 | 4 | | | | | V V V | | | | | | | | | | | | | |
| 98.72 | 40 | 5 | | ↑ | | | V V V | | | | | | | | | | | | | |
| | 50 | 6 | | ↑ | | | V V V | | | | | | | | | | | | | |
| | 60 | 7 | | ↑ | | | V V V | | | | | | | | | | | | | |
| 98.92 | 70 | 8 | | ↑ | | | V V V | | | | | | | | | | | | | |
| | 80 | 9 | | ↑ | | | V V V | | | | | | | | | | | | | |
| | 90 | 10 | | ↑ | | | V V V | | | | | | | | | | | | | |
| 99.12 | | | | | | | V V V | | | | | | | | | | | | | |

393-U1559B-10R-2-A, 0-76 cm
 UNIT: 4
 LITHOLOGY: Sparsely plagioclase phyric basalt with rare olivine
 TEXTURE: Fine grained
 COLOR: Gray (GLEY 1 5/N to GLEY 1 4/N) background groundmass.
 PHENOCRYSTS: Sparse but coarse, equant to tabular plagioclase phenocrysts up to 9 mm across. Extremely sparse (<0.1%) but fresh pale green olivine phenocrysts, generally attached to plagioclases.
 GROUNDMASS: Gray groundmass, dominated by blocky and lath shaped plagioclase microcrysts (50-70%) up to 1-2 mm long. Mostly fresh equant olivine groundmass microcrysts are <0.1 mm (1-5 vol%).
 VESICLES: Extremely sparsely vesicular (<0.5%) to macroscopically non-vesicular.
 ALTERATION: Overall alteration intensity moderate. Slight grey background alteration. Halos are dark grey or gray with dark gray halos dominating the section. Dark gray halos occur as narrow <1 mm irregular (often curved) bands in Pc 2, 4, 5. Wider gray halos occur in Pc 1, 6-9
 VEINS: Veins up to 1mm wide. Compositions include clay, carbonate, FeOH

| Hole 393-U1559B-11R Section 1, Top of Section: 100.7 m (CSF-A) | | | | | | | | | | | | | | | |
|--|---------------------|--------------|------------|-------------|-----|-------------------|-----------|------------|------------------------|-------|----------------------------------|-------------------|---------------------------|------------------|--|
| Depth (mbstf) | Section length (cm) | Piece number | Core image | Orientation | DMT | Shipboard samples | Lithology | Lith. unit | Plagioclase Olivine | Glass | Groundmass size | Vesicle abundance | Alteration intensity rank | Veins/Structures | Description |
| 100.70 | 0 | 1 | | ↑ | I | TSB ICP TS | | 5A | 0-10 0-10 | G | Microcrystalline Fine-grained | ••• | | | 393-U1559B-11R-1-A, 0-95 cm UNIT: 5A LITHOLOGY: Sparsely plagioclase phyric basalt with rare olivine and clinopyroxene phenocrysts TEXTURE: Fine grained COLOR: Gray (GLEY 1 5/N to GLEY 1 4/N) background groundmass. PHENOCRYSTS: Sparse but coarse, equant to tabular plagioclase phenocrysts up to 15 mm across. Very sparse (~0.1%) and variably fresh/alters olivine phenocrysts. Fresh clinopyroxene (extremely sparse <0.1%), sub-equant, prismatic, or intergrown with plagioclase. GROUNDMASS: Gray groundmass, dominated by blocky and lath shaped plagioclase microcrysts (50-60%) up to 0.5 mm long. Equant olivine groundmass microcrysts are <0.1 mm (1-5 vol%). VESICLES: <1 vol% vesicles, very sparse, mostly filled with carbonate or pyrite. Difficult to see without magnification. Slightly more vesicular area just below uppermost chilled margin in Piece 1. ALTERATION: Overall alteration intensity moderate. Slight grey background alteration. Halos are dark grey or grey with grey halos dominating and they are often cm-wide (Pc 2-6) VEINS: Veins up to 1mm wide. Compositions include clay, carbonate, and iron oxyhydroxide |
| | 10 | 2 | | ↑ | I | | | | | | | | | | |
| | 20 | 3 | | ↑ | I | | | | | | | | | | |
| 100.95 | 30 | 4 | | ↑ | I | | | | | | | | | | |
| | 40 | 5 | | ↑ | I | | | | | | | | | | |
| | 50 | 6 | | ↑ | I | | | | | | | | | | |
| 101.20 | 60 | 7 | | ↑ | I | | | | | | | | | | |
| | 70 | 8 | | ↑ | I | | | | | | | | | | |
| | 80 | 9 | | ↑ | I | | | | | | | | | | |
| 101.45 | 90 | 10 | | ↑ | I | TSB ICP TS | | | | | | | | III | |
| | | 11 | | ↑ | I | | | | | | | | | | |

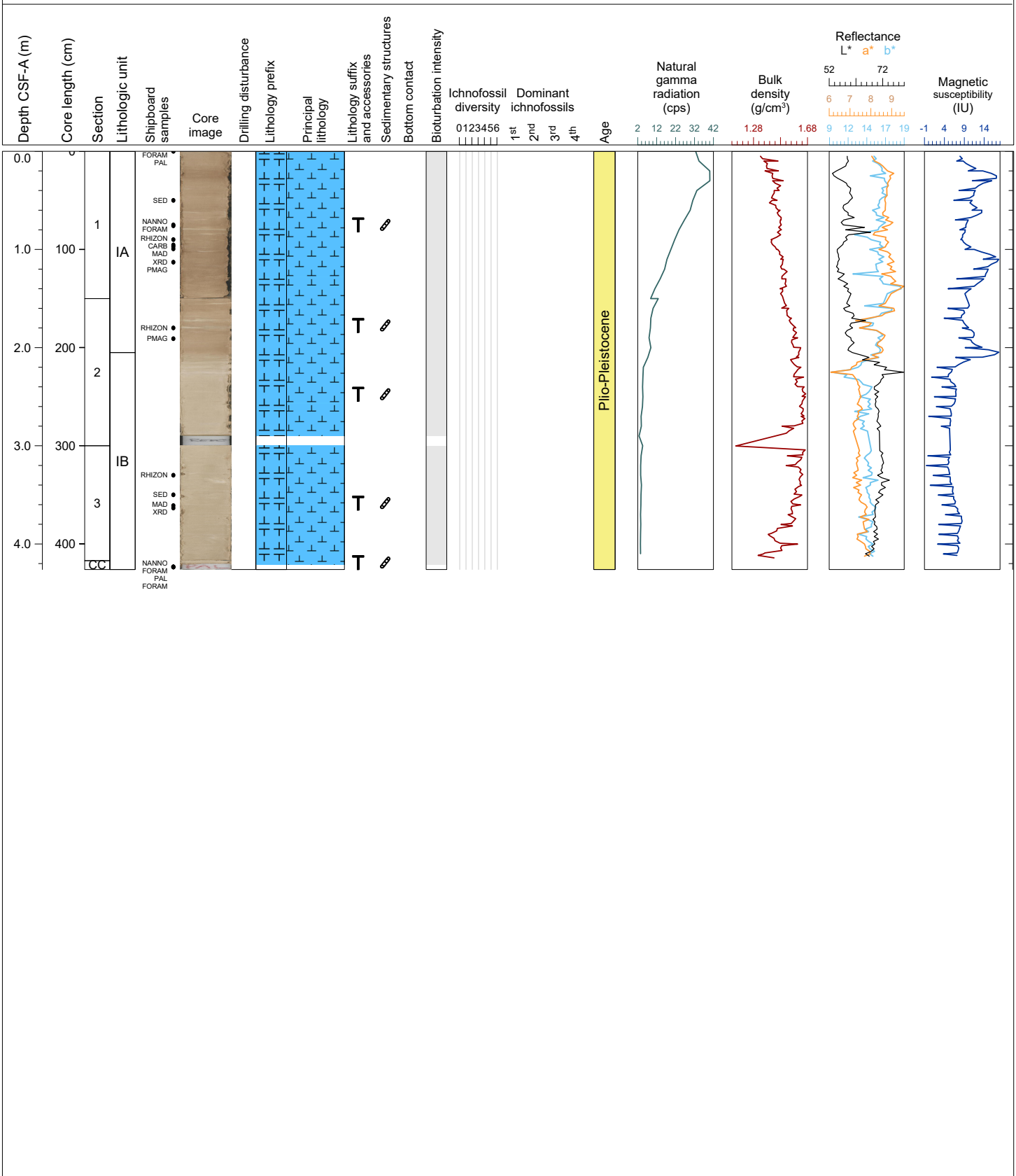
| Hole 393-U1559B-11R Section 2, Top of Section: 101.65 m (CSF-A) | | | | | | | | | | | | | | | | | | |
|---|---------------------|--------------|------------|-------------|-----|-------------------|-----------|------------|-------------|-------|-----------------|-------------------|------------------|--------------|-------------------|---------------------------|------------------|---|
| Depth (mbstf) | Section length (cm) | Piece number | Core image | Orientation | DMT | Shipboard samples | Lithology | Lith. unit | Plagioclase | | Groundmass size | | | | Vesicle abundance | Alteration intensity rank | Veins/Structures | Description |
| | | | | | | | | | Olivine | Glass | Glass | Cryptocrystalline | Microcrystalline | Fine-grained | | | | |
| 101.65 | 0 | 1 | | | | | V V | | | | | | | | | | | <p>393-U1559B-11R-2-A, 0-94 cm UNIT: 5A LITHOLOGY: Sparsely plagioclase phyric basalt with rare olivine and clinopyroxene phenocrysts TEXTURE: Fine-grained to microcrystalline COLOR: Gray (GLEY 1 5/N to GLEY 1 4/N) background groundmass. PHENOCRYSTS: Sparse but coarse, equant to tabular plagioclase phenocrysts up to 5 mm across. Extremely sparse (<0.1%) and small 0.5-1.5 mm) variably fresh/altered olivine phenocrysts. Fresh clinopyroxene (extremely sparse <0.1%), sub-equant, prismatic, or intergrown with plagioclase. GROUNDMASS: Gray groundmass, dominated by blocky and lath shaped plagioclase microcrysts (50-80%) 0.1-0.4 mm long. Equant olivine groundmass microcrysts are 0.05-0.1 mm (1-5 vol%). VESICLES: 0.5-3 vol% vesicles, mostly spherical and unfilled. ALTERATION: Overall alteration intensity moderate. Slight grey background alteration, with Pc 3, 13, 14 showing orange speckled background alteration. Halos are more complex, showing zoning and alternations; 3 halo types are present -dark grey, grey, and orange (only Pc 14). Dark gray halos dominate the section, with cm-wide halos around veins in Pc 7-8. Dark gray halos as narrow <1 mm irregular (often curved) bands in Pc 2-4, 8-10. Orange halo is only in Pc 11 VEINS: Veins up to 1mm wide. Compositions include clay, carbonate, and Iron oxyhydroxide. Piece 14 contains cross-cutting relationships between carbonate-iron oxyhydroxide veins</p> |
| | 10 | 2 | | | | | V V V | | | | | | | | | | | |
| | 20 | 3 | | | | | V V V | | | | | | | | | | | |
| | 30 | 4 | | | | | V V V | | | | | | | | | | | |
| | 35 | 5 | | | | | V V V | | | | | | | | | | | |
| | 40 | 6 | | | | | V V V | | | | | | | | | | | |
| | 45 | 7 | | ↑ | | | V V V | | | | | | | | | | | |
| | 50 | 8 | | ↑ | | | V V V | | | | | | | | | | | |
| | 60 | 9 | | | | | V V V | | | | | | | | | | | |
| | 70 | 10 | | | | | V V V | | | | | | | | | | | |
| | 80 | 11 | | | | | V V V | | | | | | | | | | | |
| | 85 | 12 | | | | | V V V | | | | | | | | | | | |
| | 90 | 13 | | | | | V V V | | | | | | | | | | | |
| | 94 | 14 | | | | | V V V | | | | | | | | | | | |

| Hole 393-U1559B-12R Section 1, Top of Section: 103.1 m (CSF-A) | | | | | | | | | | | | | | | |
|--|---------------------|--------------|------------|-------------|-----|--------------------|-----------|------------|------------------------|-------|---|-------------------|---------------------------|------------------|---|
| Depth (mbstf) | Section length (cm) | Piece number | Core image | Orientation | DMT | Shipboard samples | Lithology | Lith. unit | Plagioclase Olivine | Glass | Groundmass size | Vesicle abundance | Alteration intensity rank | Veins/Structures | Description |
| | | | | | | | | | 0 5 10 0 5 10 | Glass | Cryptocrystalline Microcrystalline Fine-grained Medium-grained Coarse-grained | | | | |
| 103.12 | 0 | 1 | | ↑ | | | V V V | | | | | | | | |
| | 10 | 2 | | ↑ | | XRD • | V V V | | | | | | | | |
| | 20 | 3 | | ↑ | | | V V V | | | | | | | | |
| 103.32 | 30 | 4 | | ↑ | | | V V V | | | | | | | | |
| | 40 | 5 | | ↑ | | | V V V | | | | | | | | |
| 103.52 | 50 | 6 | | ↑ | | MAD • MAD • | V V V | 5A | | G | | | | | |
| | 60 | 7 | | ↑ | | MBIO PFT PFT | V V V | | | | | | | | |
| 103.72 | 70 | 8 | | ↑ | | | V V V | | | | | | | | |
| | 80 | 9 | | ↑ | | | V V V | | | | | | | | |
| 103.92 | 90 | 10 | | ↑ | | | V V V | | | | | | | | |
| | | | | | | | | | | | | | | | <p>393-U1559B-12R-1-A, 0-87 cm UNIT: 5A LITHOLOGY: Sparsely plagioclase phyric basalt with rare olivine and clinopyroxene phenocrysts TEXTURE: Fine-grained to microcrystalline COLOR: Gray (GLEY 1 5/N to GLEY 1 4/N) background groundmass. PHENOCRYSTS: Sparse but coarse, equant to tabular plagioclase phenocrysts up to 5 mm across. Extremely sparse (<0.1%) and small 0.5-1.5 mm) variably fresh/alterned olivine phenocrysts. Fresh clinopyroxene (extremely sparse <0.1%), sub-equant, prismatic, or intergrown with plagioclase. GROUNDMASS: Fine grained to microcrystalline. Plagioclase laths in groundmass are 0.1-0.3 mm long, olivine microcrysts are 0.1 mm across. VESICLES: Sparsely vesicular, ~1 vol%, 0.1-0.3 mm diameter. ALTERATION: Overall alteration intensity moderate. Slight grey and orange speckled background alteration. Halos are dark grey or grey with cm-wide grey halos dominating the section. Orange halo is only in Pc 8 VEINS: Veins <1mm wide. Compositions include clay, carbonate, and iron oxyhydroxide</p> |

| Hole 393-U1559B-13R Section 1, Top of Section: 104.1 m (CSF-A) | | | | | | | | | | | | |
|--|---------------------|--------------|------------|-------------|-----|-------------------|-----------|------------|------------------------|--|------------------|--|
| Depth (mbstf) | Section length (cm) | Piece number | Core image | Orientation | DMT | Shipboard samples | Lithology | Lith. unit | Plagioclase Olivine | Groundmass size | Veins/Structures | Description |
| | | | | | | | | | 0 5 10 0 5 10 | Glass Cryptocrystalline Microcrystalline Fine-grained Medium-grained Coarse-grained | | |
| 104.10 | 0 | 1 | | | | | | | | | | 393-U1559B-13R-1-A, 0-24 cm UNIT: 5A LITHOLOGY: Sparsely plagioclase phyric basalt with rare olivine and clinopyroxene phenocrysts TEXTURE: Fine grained COLOR: Gray (GLEY 1 5/N to GLEY 1 4/N) background groundmass. PHENOCRYSTS: Sparse but coarse, equant to tabular plagioclase phenocrysts up to 5 mm across. Olivine phenocryst not recognized in this short section. Fresh clinopyroxene (very sparse 0.1%), sub-equant, prismatic, or intergrown with plagioclase. GROUNDMASS: Microcrystalline groundmass of plagioclase laths <0.2 mm (40-60%), olivine microcysts 0.05-0.15 mm. VESICLES: Non vesicular apart from Piece 3, a pillow margin fragment with sparse vesicles (<0.3 mm diameter). ALTERATION: Overall alteration intensity moderate. Slight grey and orange speckled background alteration. Halos are dark grey or grey with cm-wide gray halos dominate. VEINS: Veins <1mm wide. Compositions include clay, carbonate, and iron oxyhydroxide |
| 104.20 | 10 | 2 | | | | | | | | | | |
| 104.30 | 20 | 3 | | | | | | | | | | |
| 104.40 | 30 | 4 | | | | | | | | | | |
| | | 5 | | | | | | | | | | 393-U1559B-13R-1-A, 24-34 cm UNIT: 5B LITHOLOGY: Sparsely olivine-plagioclase phyric basalt TEXTURE: Microcrystalline COLOR: Gray (GLEY 1 5/N to GLEY 1 4/N) background groundmass. PHENOCRYSTS: Olivine and plagioclase phenocrysts (0.1-0.3 mm) make up 3-5% of the flow interior. Sparse but coarse tabular plagioclase (6 mm) phenocryst present in this small piece. GROUNDMASS: Microcrystalline groundmass of plagioclase laths <0.2 mm (10-20%) in a cryptocrystalline dark matrix. VESICLES: Sparsely vesicular, <0.5 mm and round to rarely irregular. Some are saponite lined. ALTERATION: Overall alteration intensity moderate. Chilled margin shows orange oxidation front with carbonate veins VEINS: Veins up to 1mm wide. Compositions include clay, carbonate, and iron oxyhydroxide. Carbonate veins cross-cut background oxidation |

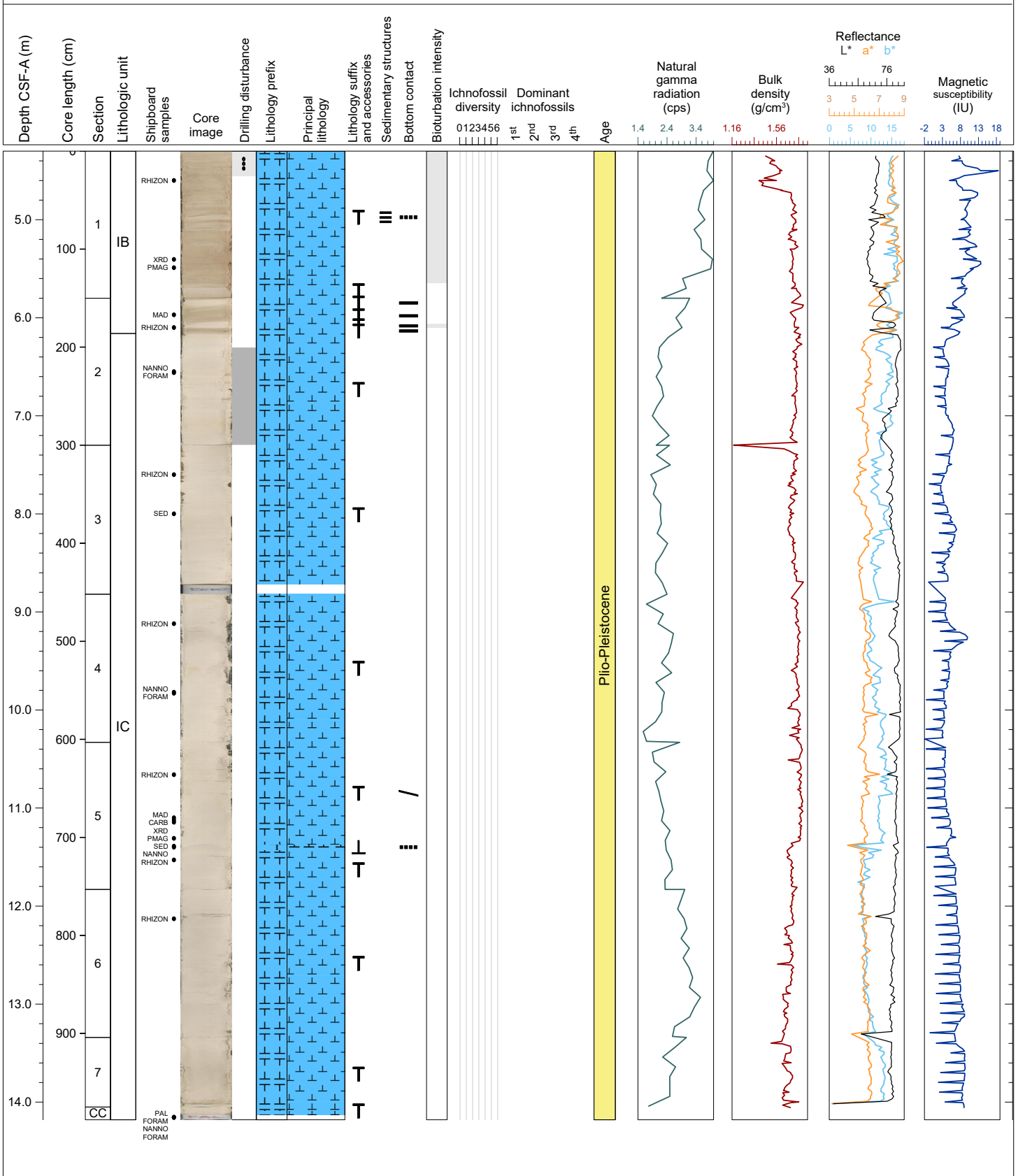
Hole 390-U1559C Core 1H, Interval 0.0-4.26 m (CSF-A)

Core 1H contains mostly pale brown (10YR 6/3) calcareous nannofossil ooze with foraminifera and very pale brown (10YR 8/2) foraminiferal calcareous ooze with nannofossils. There are portions with sparse bioturbation, which is mostly in the form of trace or burrows. There are no drilling disturbances observed.



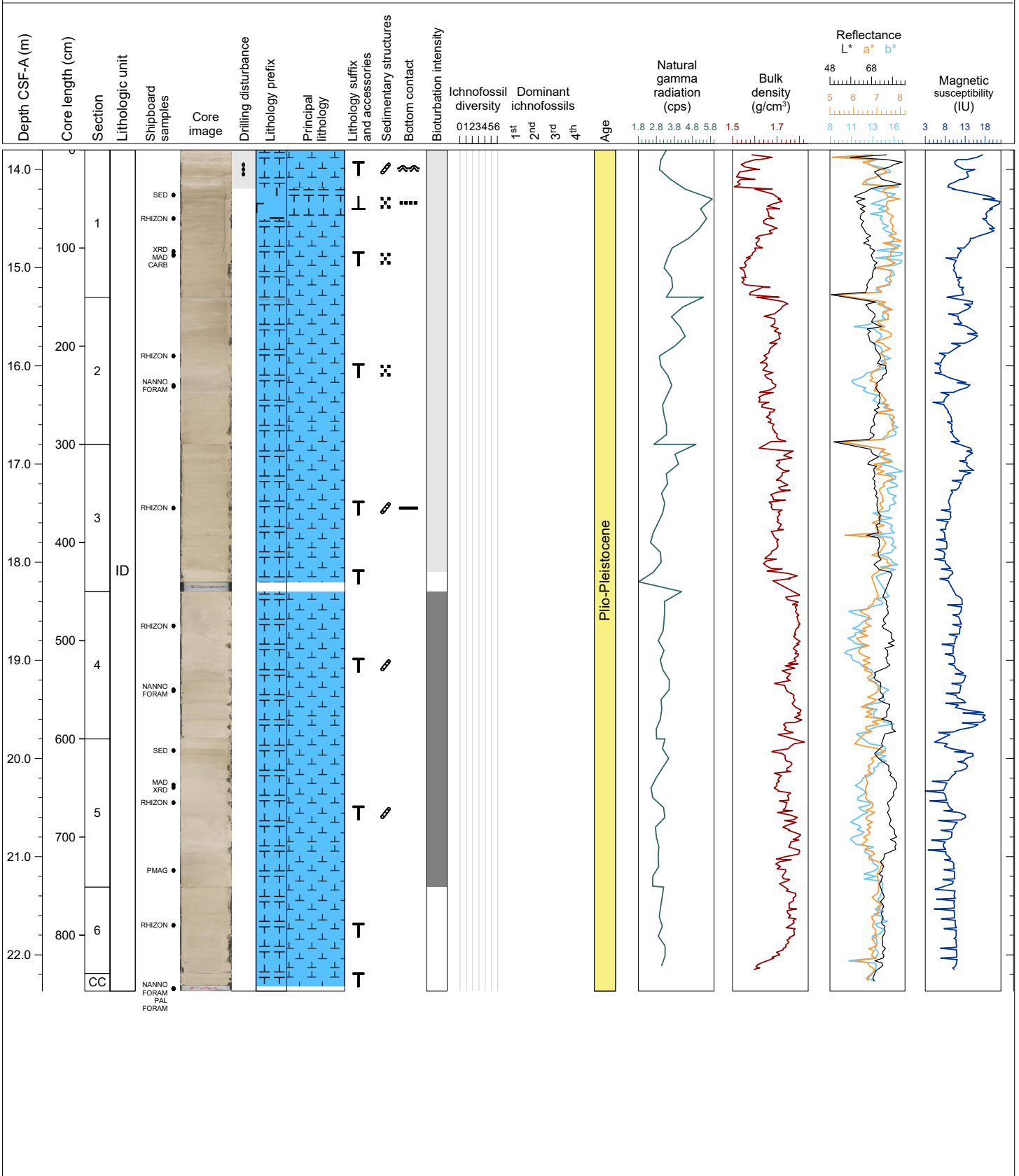
Hole 390-U1559C Core 2H, Interval 4.3-14.18 m (CSF-A)

Core 2H contains mostly white (10YR 8/1) calcareous nannofossil ooze with foraminifera and pale brown (10YR 6/3) calcareous nannofossil ooze with foraminifera. There is white (10YR 8.5/1) foraminiferal calcareous ooze with nannofossils in 5A (104-110 cm). There are portions with none to sparse bioturbation, which is mostly in the form of trace or burrows. Drilling disturbance has resulted in a slight soupy in 1A and slight flow-in in 2A.



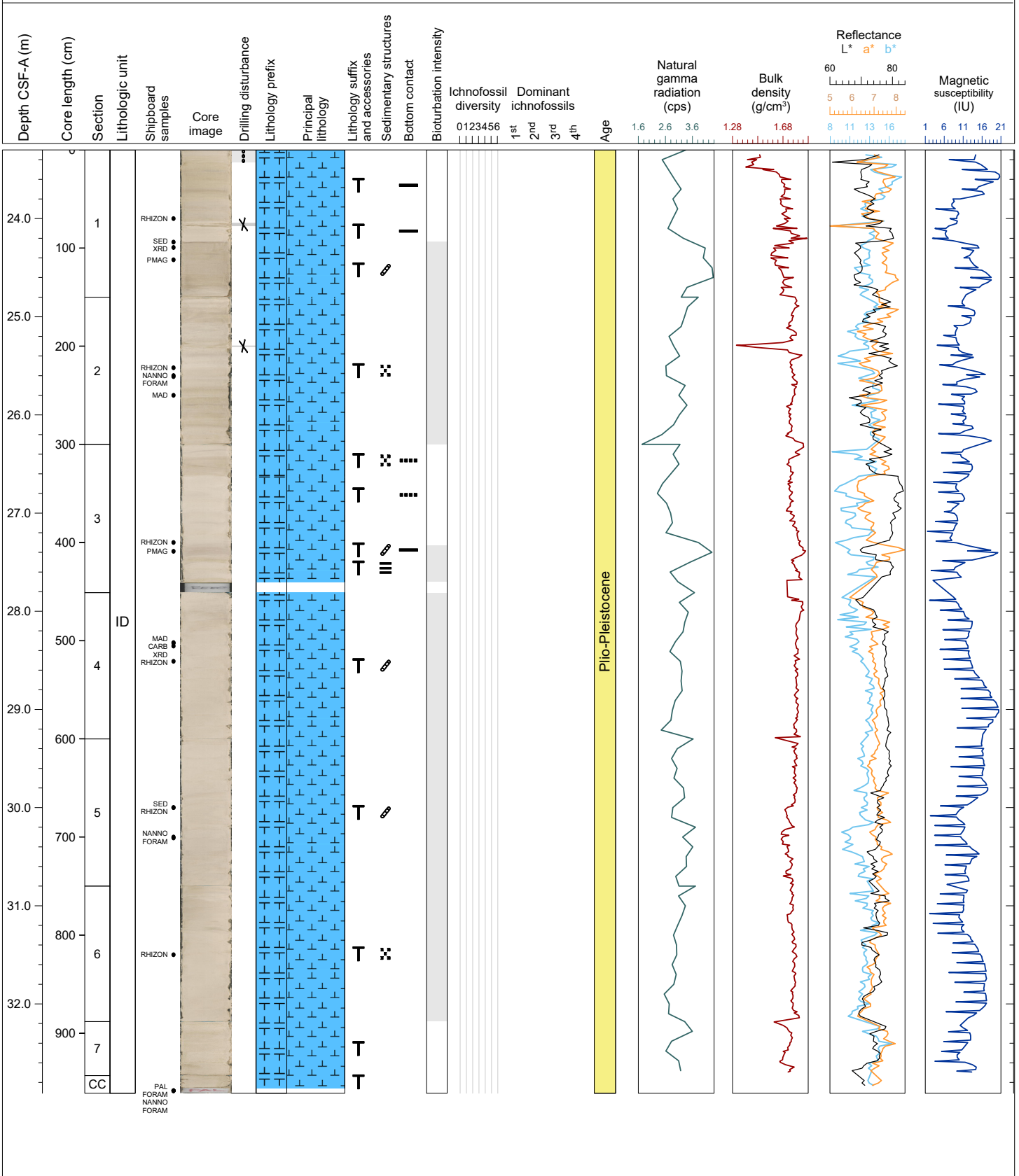
Hole 390-U1559C Core 3H, Interval 13.8-22.37 m (CSF-A)

Core 3H contains mostly white (10YR 8/1) calcareous nannofossil ooze with foraminifera and very pale brown (10YR 8/3) calcareous nannofossil ooze with foraminifera. There are portions with none to moderate bioturbation, which are mostly in the form of trace or burrows. Drilling disturbance has resulted in a slight soupy in 1A.



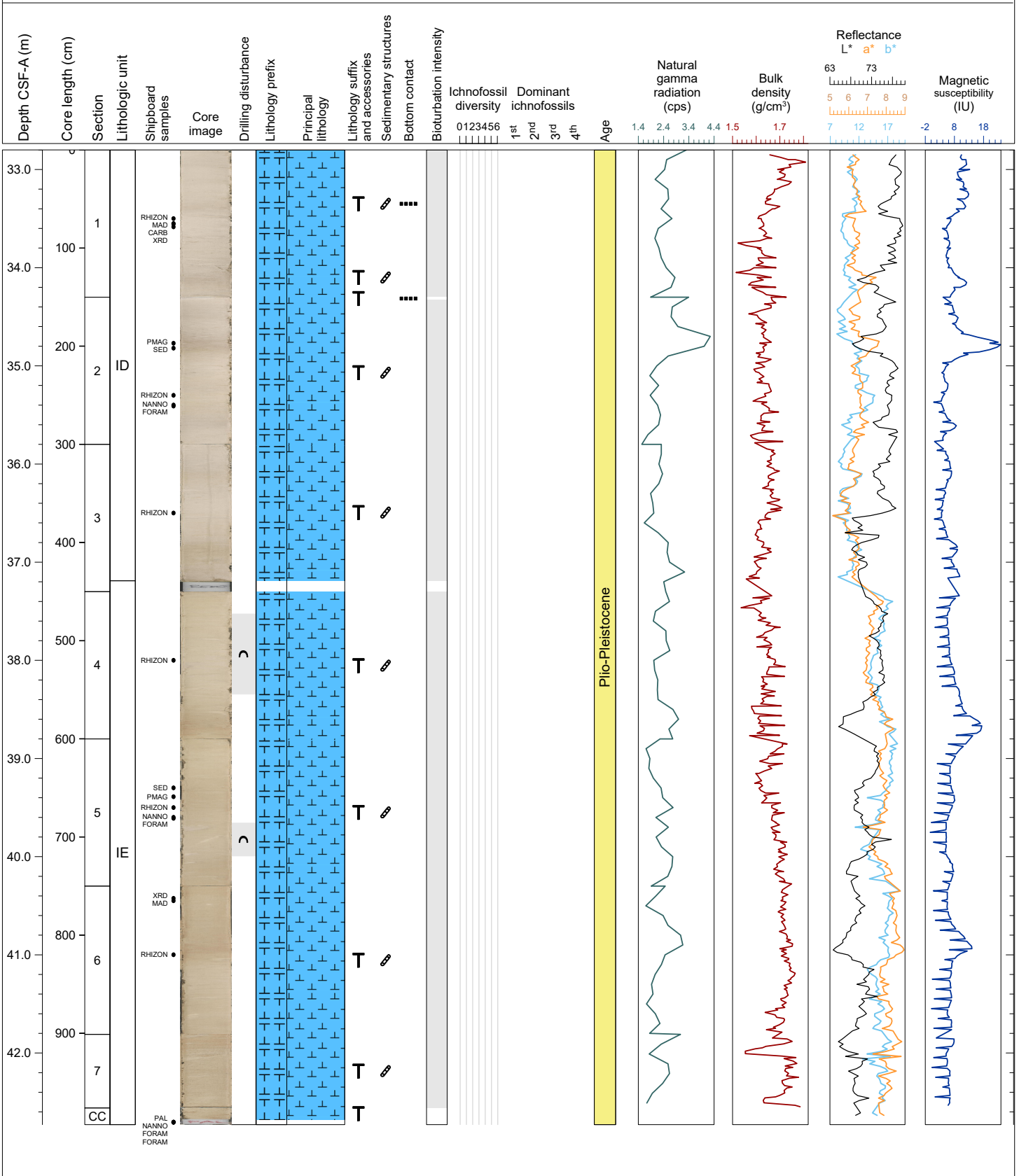
Hole 390-U1559C Core 4H, Interval 23.3-32.91 m (CSF-A)

Core 4H contains mostly white (10YR 8/1) calcareous nannofossil ooze with foraminifera and very pale brown (10YR 8/3) calcareous nannofossil ooze with foraminifera. There are portions with none to sparse bioturbation, which are mostly in the form of trace or burrows. Drilling disturbance has resulted in a slight soupy in 1A and slight void in 1A and 2A.



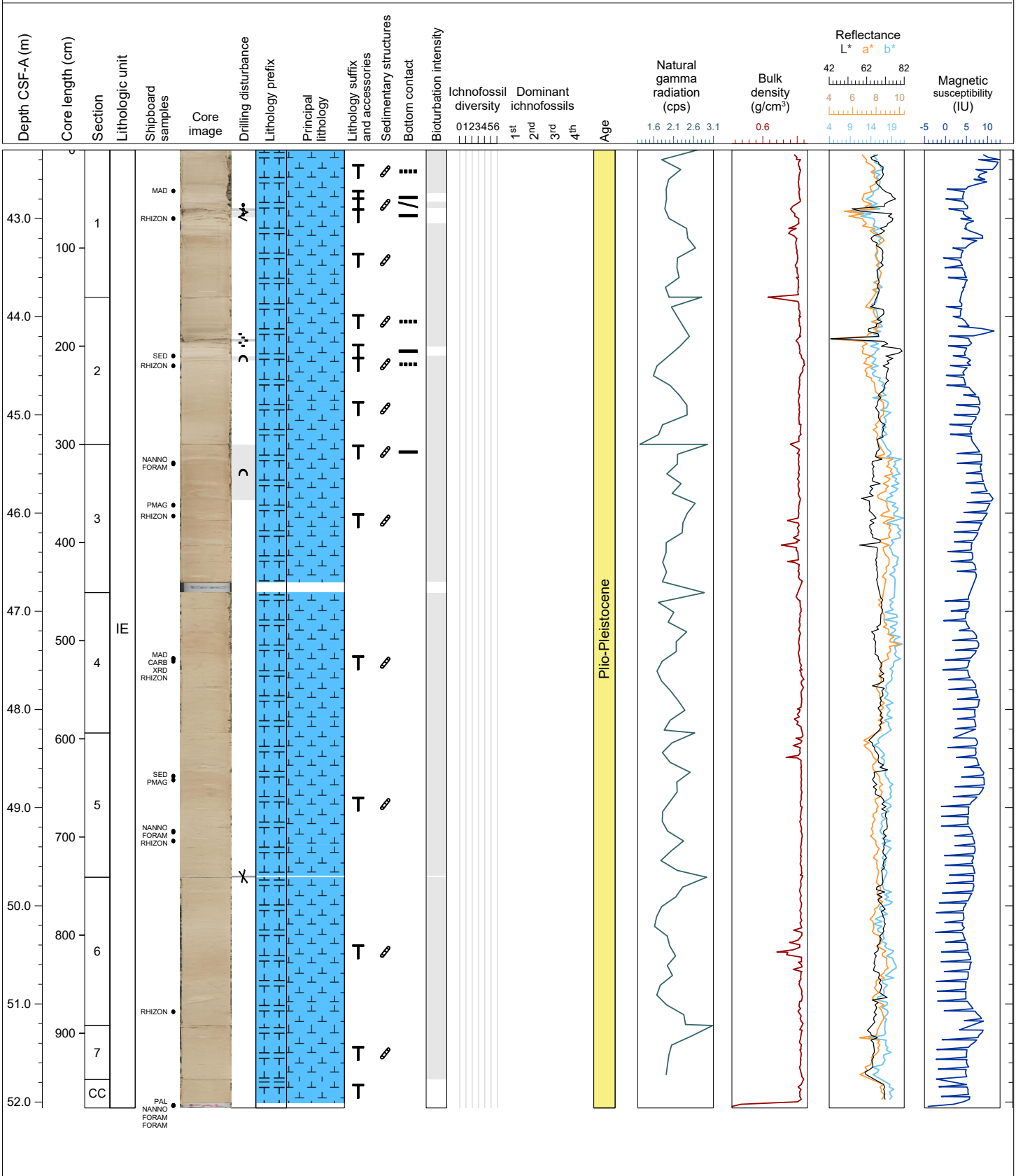
Hole 390-U1559C Core 5H, Interval 32.8-42.73 m (CSF-A)

Core 5H contains mostly very pale brown (10YR 8/2,8/3,8/4) and some white (10YR 8/1) calcareous nannofossil ooze with foraminifera. Areas of splotches and mottling may be more organic rich (e.g. 1A and 2A)? Some areas in sections 5A and 6A are between 10 YR 8/3 and 7/4. Section 5A is rich in Discoaster sp. (see smear slide). There are portions with none to sparse bioturbation, which are mostly in the form of trace or burrows. Drilling disturbance has resulted in slight up-arching, most prominently in 5A.



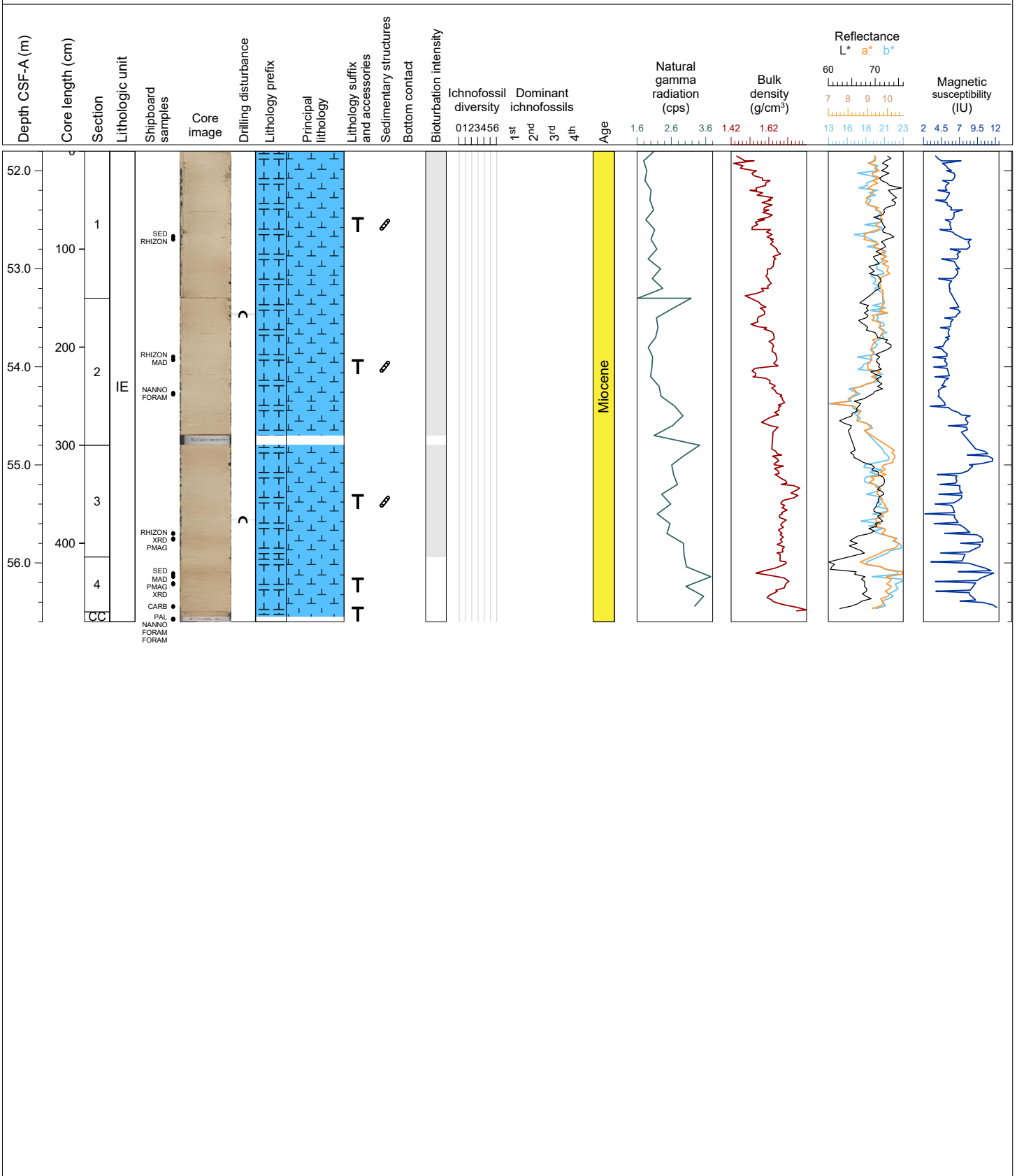
Hole 390-U1559C Core 6H, Interval 42.3-52.06 m (CSF-A)

Core 6H contains mostly very pale brown (10YR 7/4, 8/2,8/3), and in lesser amounts some white (10YR 8/1), calcareous nannofossil ooze with foraminifera. Areas of splotches and mottling in the Core may be more organic rich. Bioturbation is sparse throughout most of the Core. Drilling disturbance has resulted in moderate slurry-soupy (1A), slight slurry (2A) and a void in 5A.



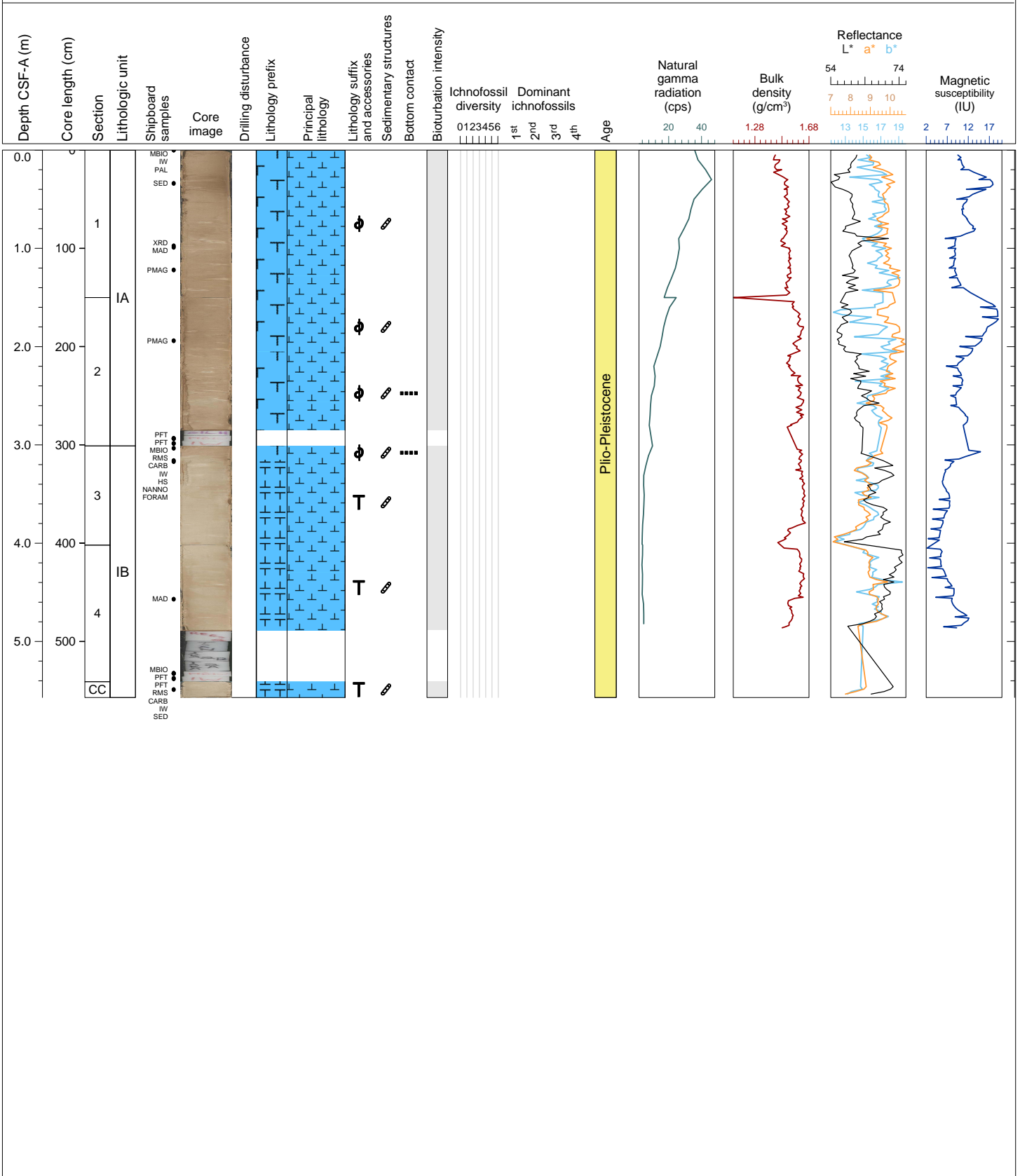
Hole 390-U1559C Core 7X, Interval 51.8-56.6 m (CSF-A)

Core 7H contains very pale brown (10YR 8/2,8/3) calcareous nannofossil ooze with foraminifera. Areas of splotches and mottling in the Core may be more organic rich. Bioturbation is sparse throughout most of the Core. Drilling disturbance has resulted in up-arching in a few places in 2A and 3A.



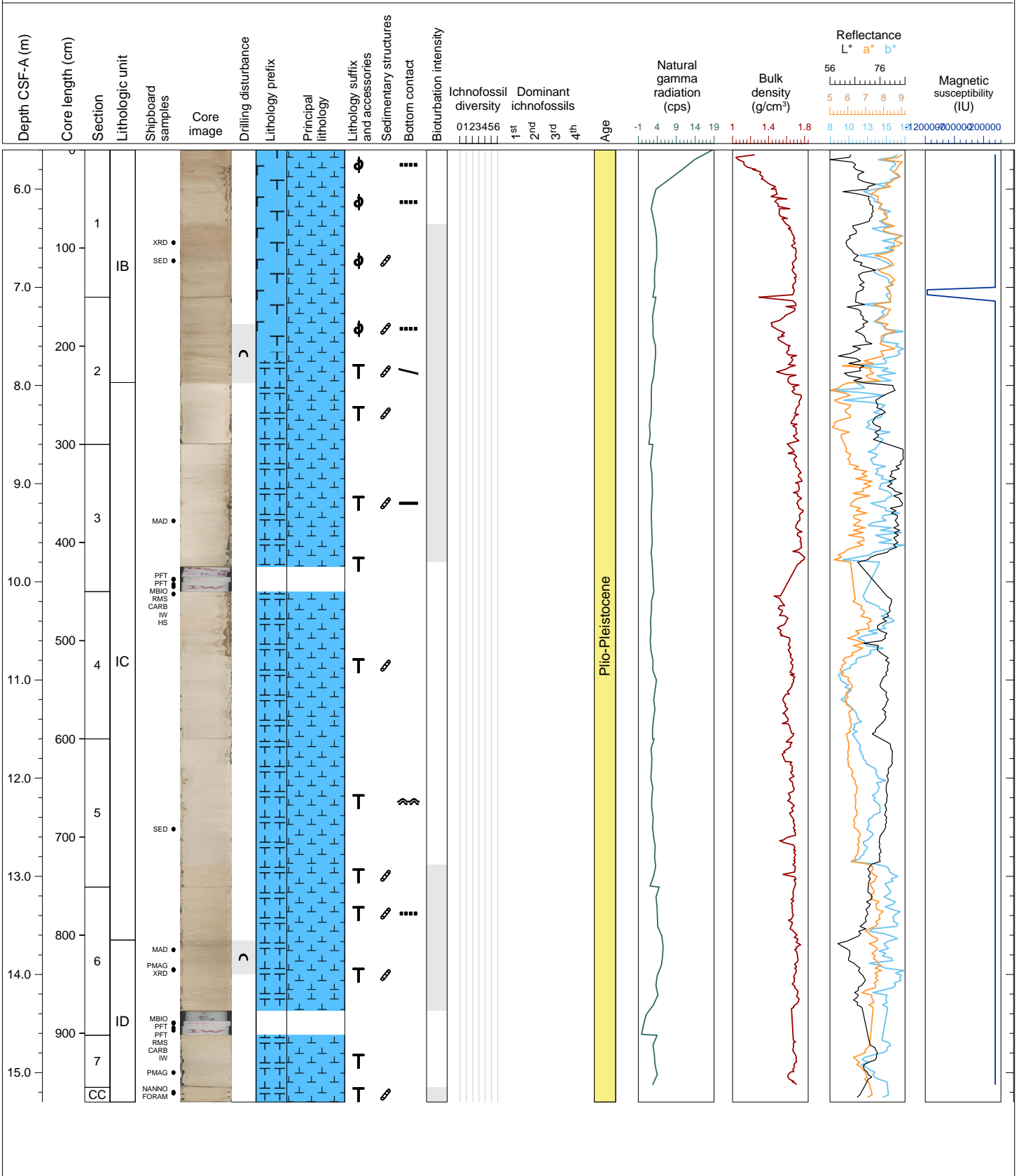
Hole 390-U1559D Core 1H, Interval 0.0-5.57 m (CSF-A)

Core 1H contains (i) light yellowish brown (10YR 6/4) and very pale brown (10YR 7/3) foraminiferal nannofossil ooze with bioclasts and as an accessory clay, and (ii) very pale brown (10YR 8/2) calcareous nannofossil ooze with foraminifera. Basically, the color changes from light yellowish brown in 1A and the top ~60 cm of 2A, to very pale brown (10YR 7/3) below 60 cm of 2A and the top 14 cm of 3A, and then to very pale brown (10YR 8/2) in 3A, 4A and the CC. 1A has <5 mm in size dark splotches (organic rich?). Sparse bioturbation occurs throughout the Core, which is mostly in the form of trace or burrows. There are no drilling disturbances observed.



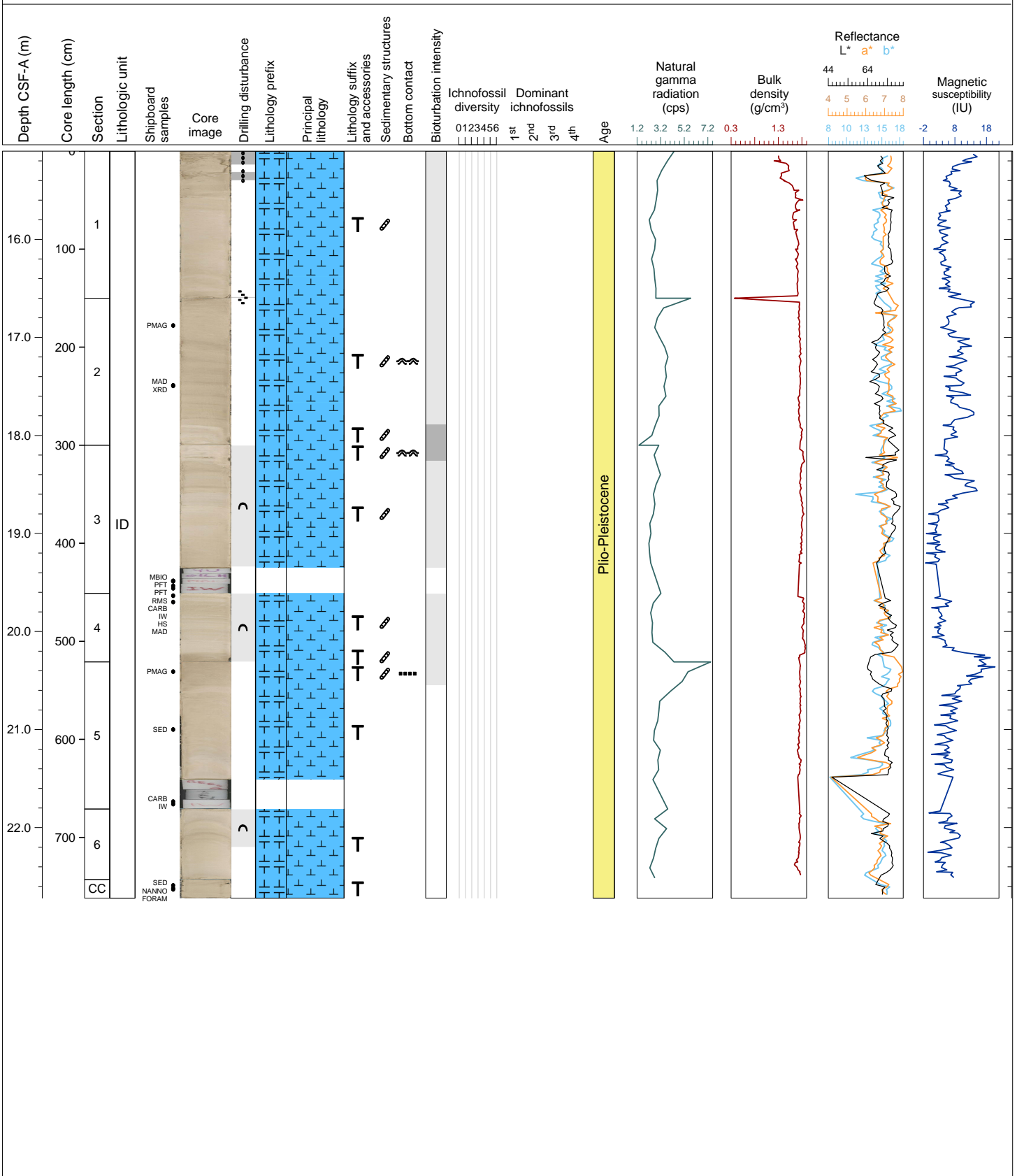
Hole 390-U1559D Core 2H, Interval 5.6-15.3 m (CSF-A)

Core 2H contains very pale brown (10YR 7/3, 7/4, 8/2) foraminiferal nannofossil ooze with bioclasts, very pale brown (10YR 7/3, 7/4, 8/2) calcareous nannofossil ooze with foraminifera, and a lighter very pale brown and pale orange yellow (10YR 8.5/2, 9/2) calcareous nannofossil ooze with foraminifera. The darker colors (e.g., 10YR 7/4, 7/3) have more foraminifera. Bioturbation is sparse or none throughout the Core. Drilling disturbance includes slight up-arching in 2A and 6A.



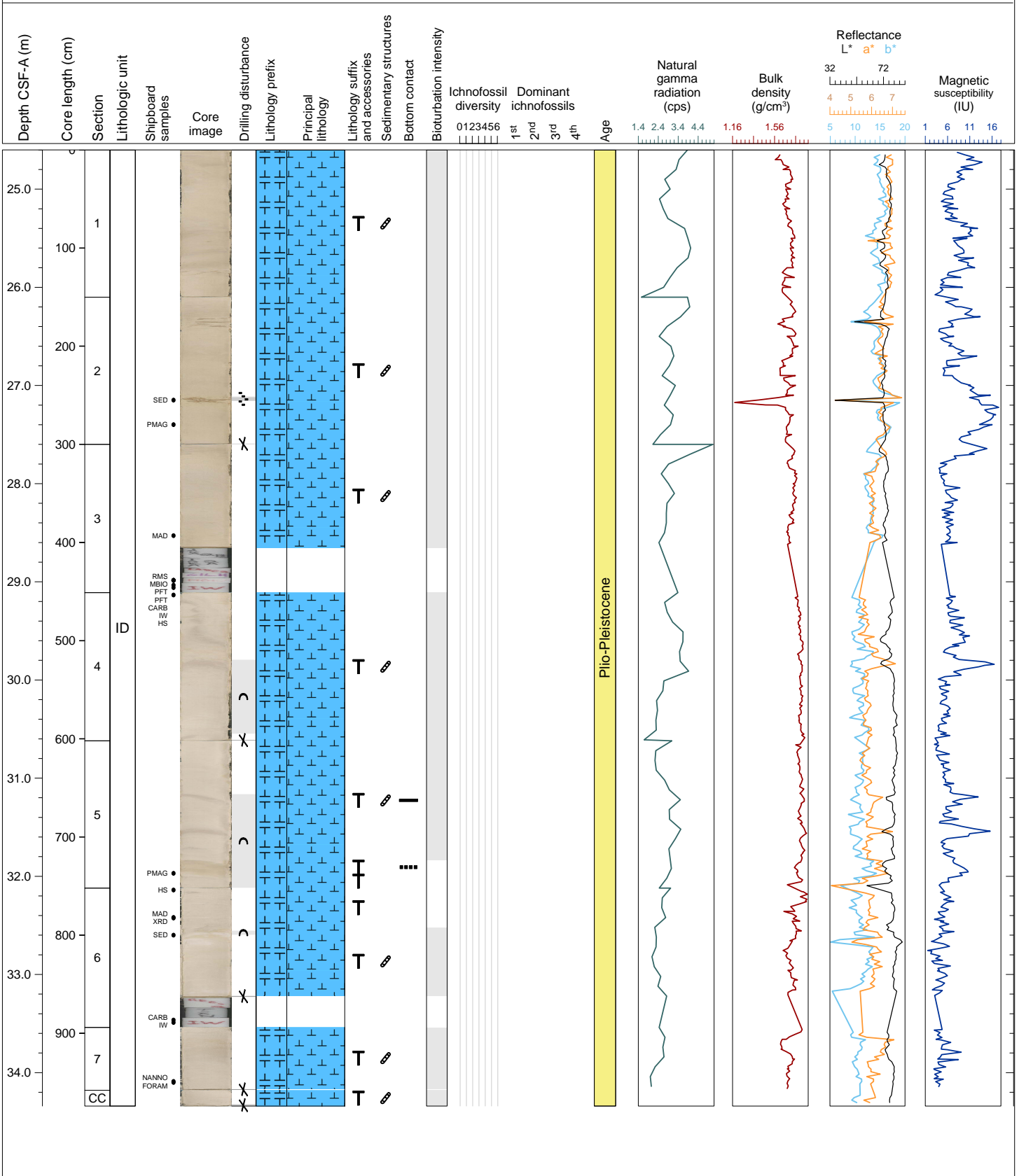
Hole 390-U1559D Core 3H, Interval 15.1-22.72 m (CSF-A)

Core 3H contains very pale brown (10YR 8/2, 8/3, 7/3) calcareous nannofossil ooze with foraminifera. Bioturbation is sparse, none, or low in the Core. Drilling disturbance includes moderate to severe soupy-slurry in 1A and slight up-arching in 3A, 4A, and 6A.



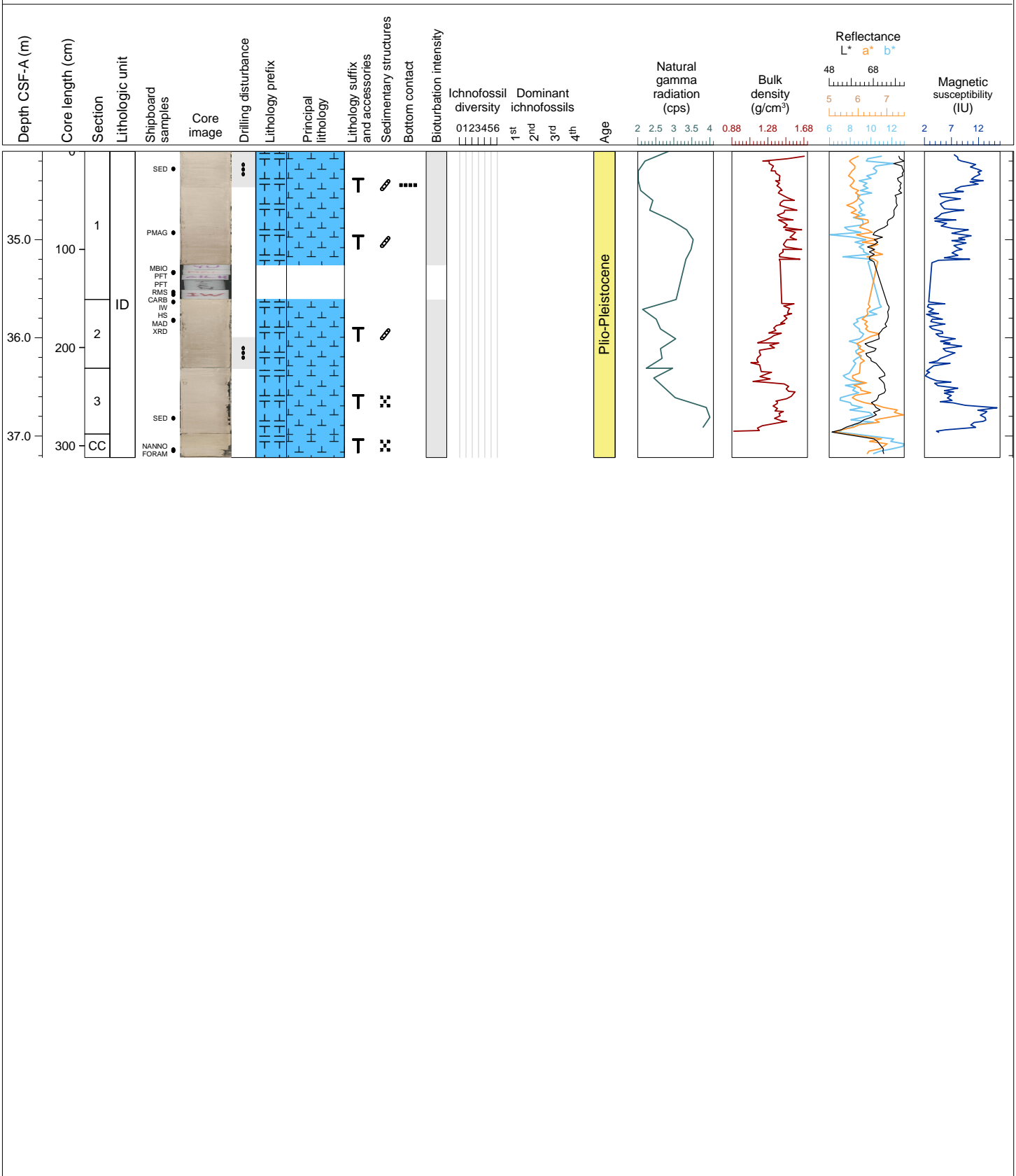
Hole 390-U1559D Core 4H, Interval 24.6-34.34 m (CSF-A)

Core 4H contains very pale brown (10YR 8/2, 8.5/2, and between 10YR 8/2 and 7/3) calcareous nannofossil ooze with foraminifera. Dark splotches often 1 cm or less or spots are in several sections. Bioturbation is generally sparse or none in the Core. Drilling disturbance includes a slurry in 2A, at the bottom of each respective section a short void (?) in 2A, 4A, 6A, 7A and CC, and slight up-arching in 4A, 5A, and 6A.



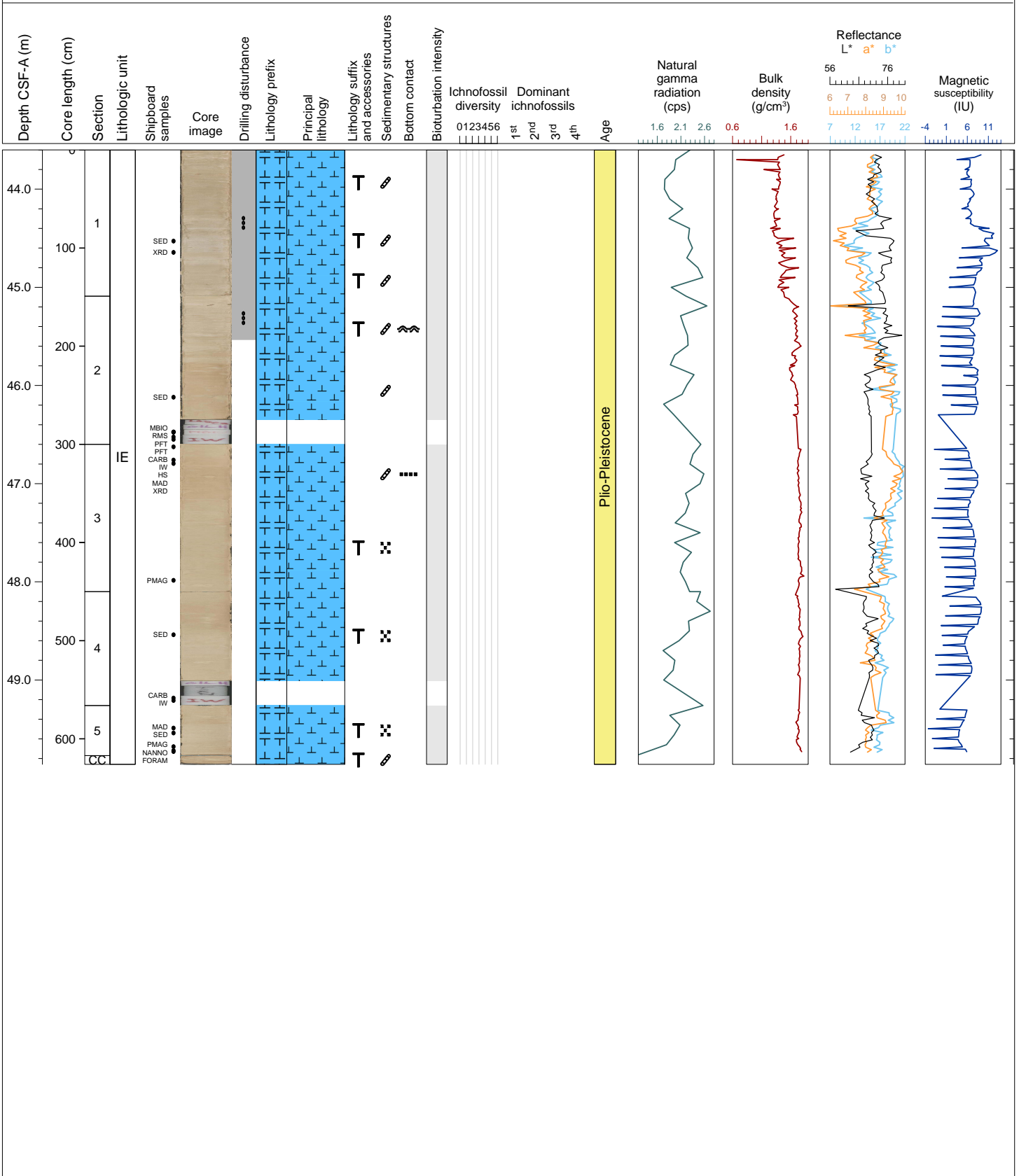
Hole 390-U1559D Core 5H, Interval 34.1-37.22 m (CSF-A)

Core 5H contains very pale brown (10YR 8/2 to 8.5/2) calcareous nannofossil ooze with foraminifera. Organic rich thin lamination are in 1A and 3A. Bioturbation is generally sparse or none in the Core. Drilling disturbance includes a slurry in 1A and 2A.



Hole 390-U1559D Core 6H, Interval 43.6-49.86 m (CSF-A)

Core 6H contains very pale brown to pinkish white (10YR 8/3 to 8.8/4; 7.5YR 8/2) calcareous nannofossil ooze with foraminifera. Organic rich dark mottling are in 2A and 3A. Bioturbation is generally sparse in the Core with mottling. Drilling disturbance includes a sever slurry in 1A and 2A.



Hole 390-U1559D Core 7X, Interval 49.9-51.12 m (CSF-A)

Core 7X contains pink (7.5YR 8/4) calcareous nannofossil ooze. Organic rich scattered dark mottling are in 1A. Bioturbation is generally none in the Core. Drilling disturbance is none in the Core

