

Hole 397T-U1585A Core 1R, Interval 0.0-0.0 m (CSF-A)

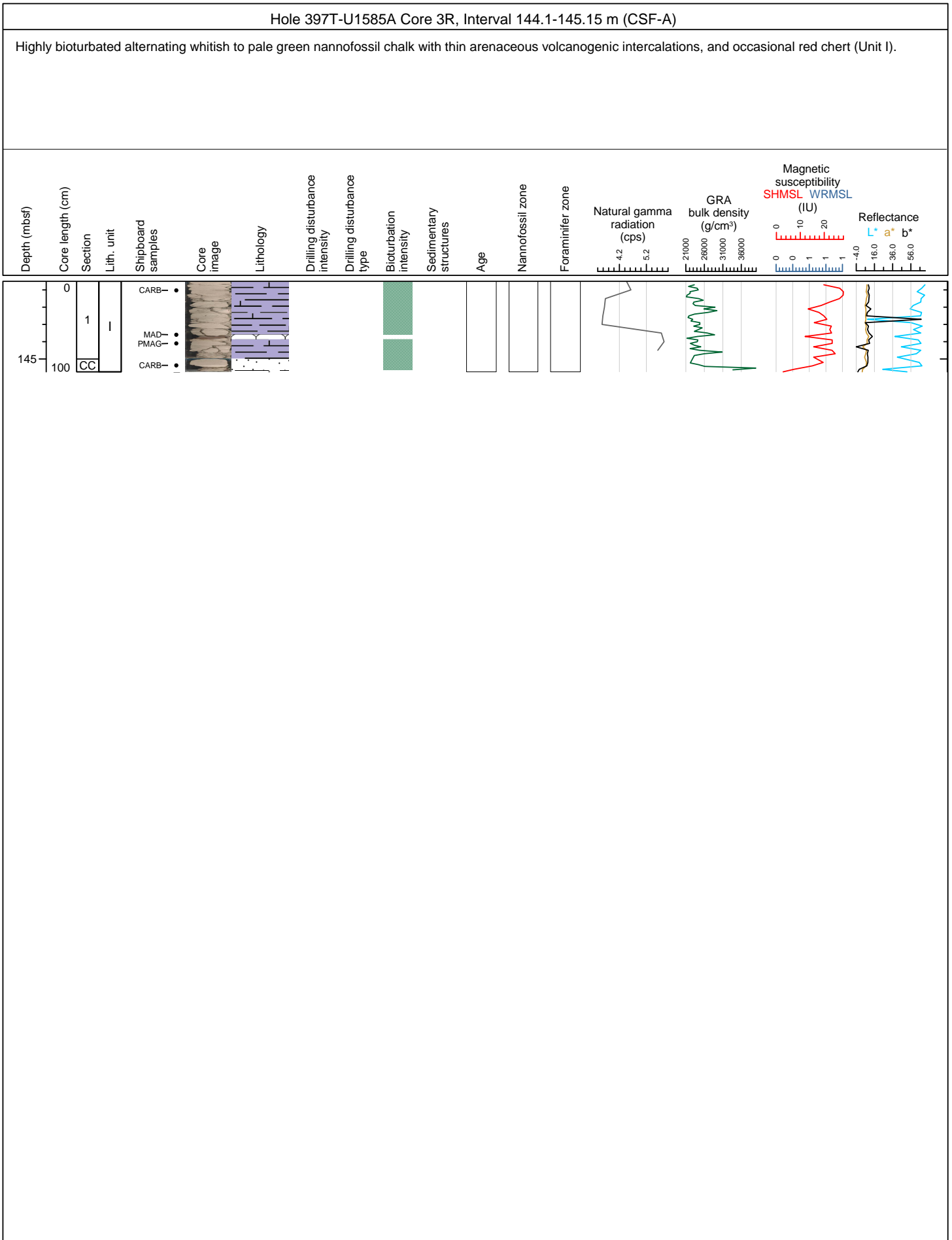
NO RECOVERY 0-0.9 m

Depth (mbsf)	Core length (cm)	Section	Lith. unit	Shipboard samples	Core image	Lithology	Drilling disturbance intensity	Drilling disturbance type	Bioturbation intensity	Sedimentary structures	Age	Nannofossil zone	Foraminifer zone	Natural gamma radiation (cps)	GRA bulk density (g/cm <sup>3</sup> )	Magnetic susceptibility (IU) SHMSL WRMSL	Reflectance L* a* b*
NO RECOVERY 0-0.9 m																	

Hole 397T-U1585A Core 21, Interval 0.9-0.9 m (CSF-A)

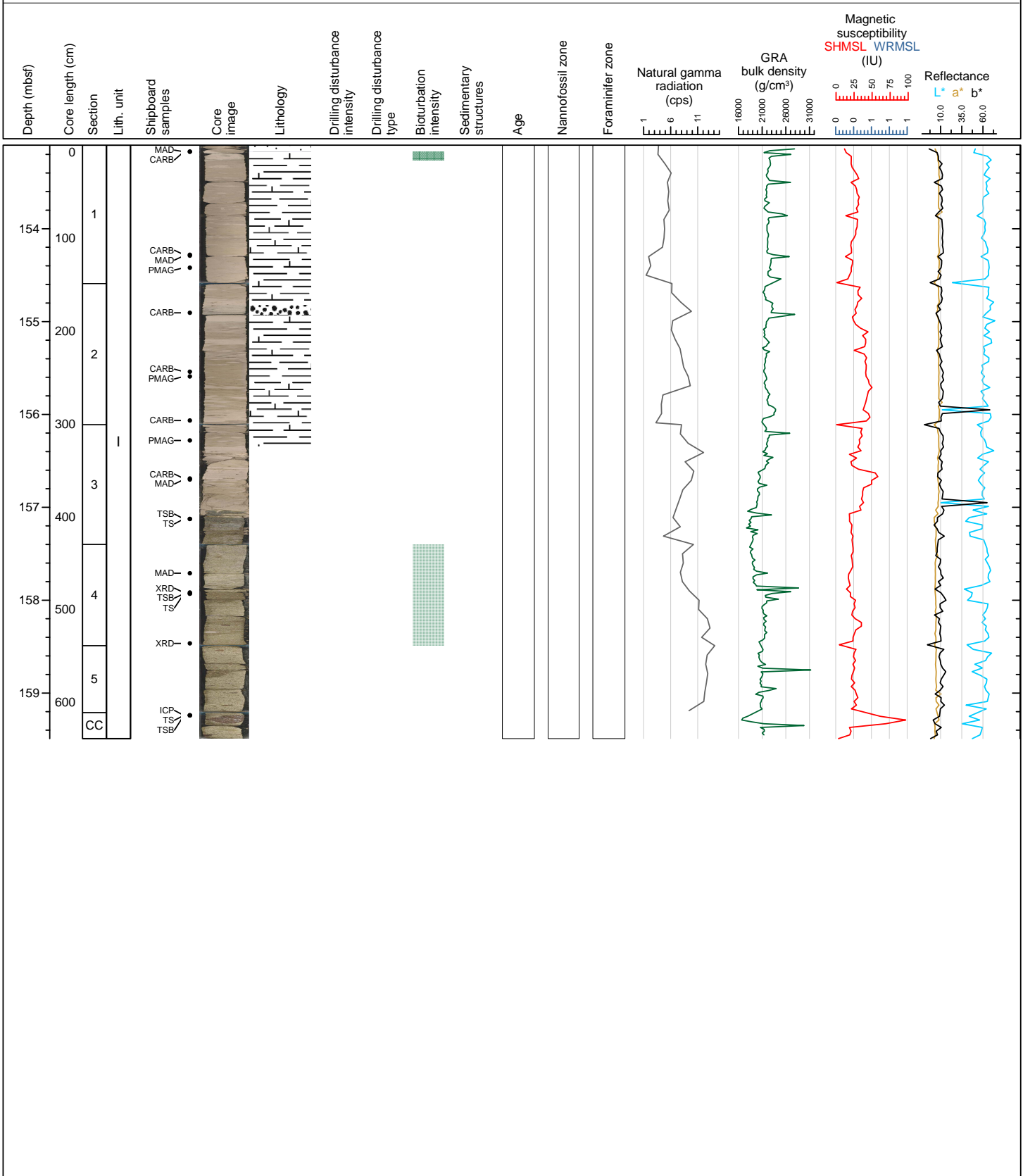
DRILLED INTERVAL 0.9-144.1 m

Depth (mbsf)	Core length (cm)	Section	Lith. unit	Shipboard samples	Core image	Lithology	Drilling disturbance intensity	Drilling disturbance type	Bioturbation intensity	Sedimentary structures	Age	Nannofossil zone	Foraminifer zone	Natural gamma radiation (cps)	GRA bulk density (g/cm <sup>3</sup> )	Magnetic susceptibility (IU) SHMSL WRMSL	Reflectance L* a* b*
This area is intentionally left blank to represent the visual core descriptions																	

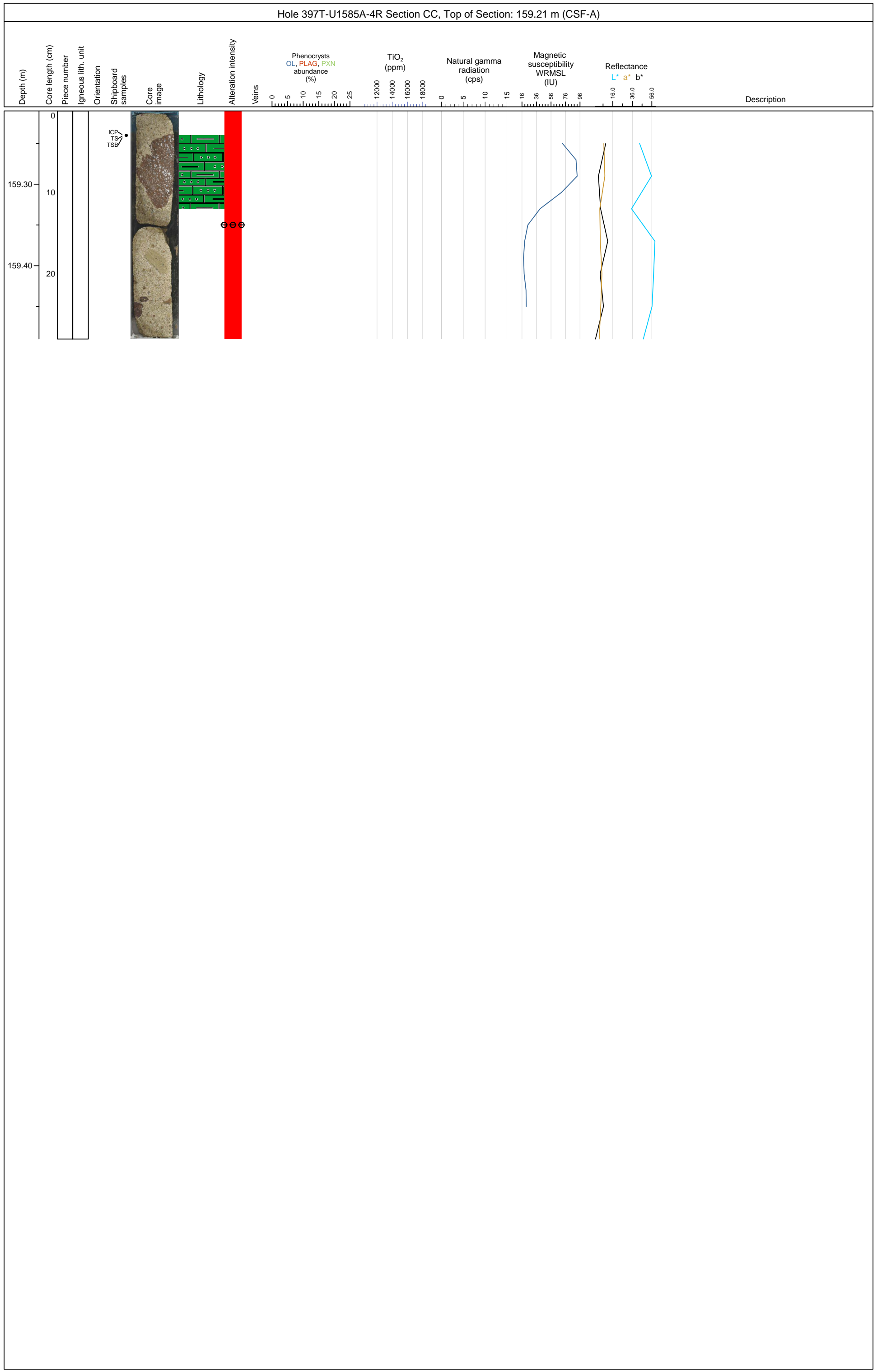


Hole 397T-U1585A Core 4R, Interval 153.1-159.49 m (CSF-A)

Highly bioturbated alternating whitish to pale green nannofossil chalk with thin arenaceous volcanogenic intercalations, and occasional red chert (Unit I); and ash and lapillistone containing varying proportions of dominantly green to reddened (oxidized) scoria, pumice and altered basaltic lithics, and minor chalk component (Subunit IIA). Unit boundary at 157.02 mbsf.

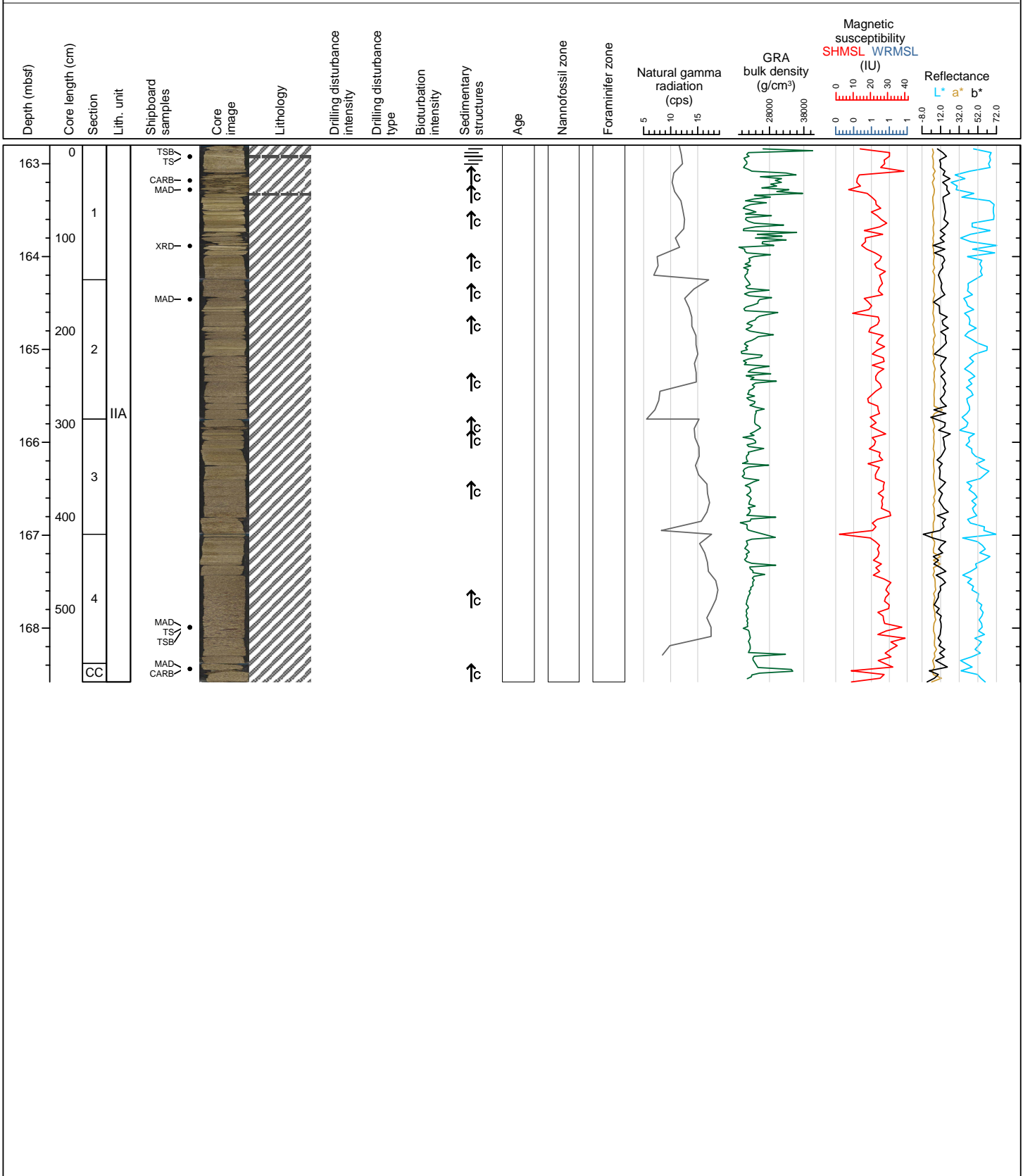






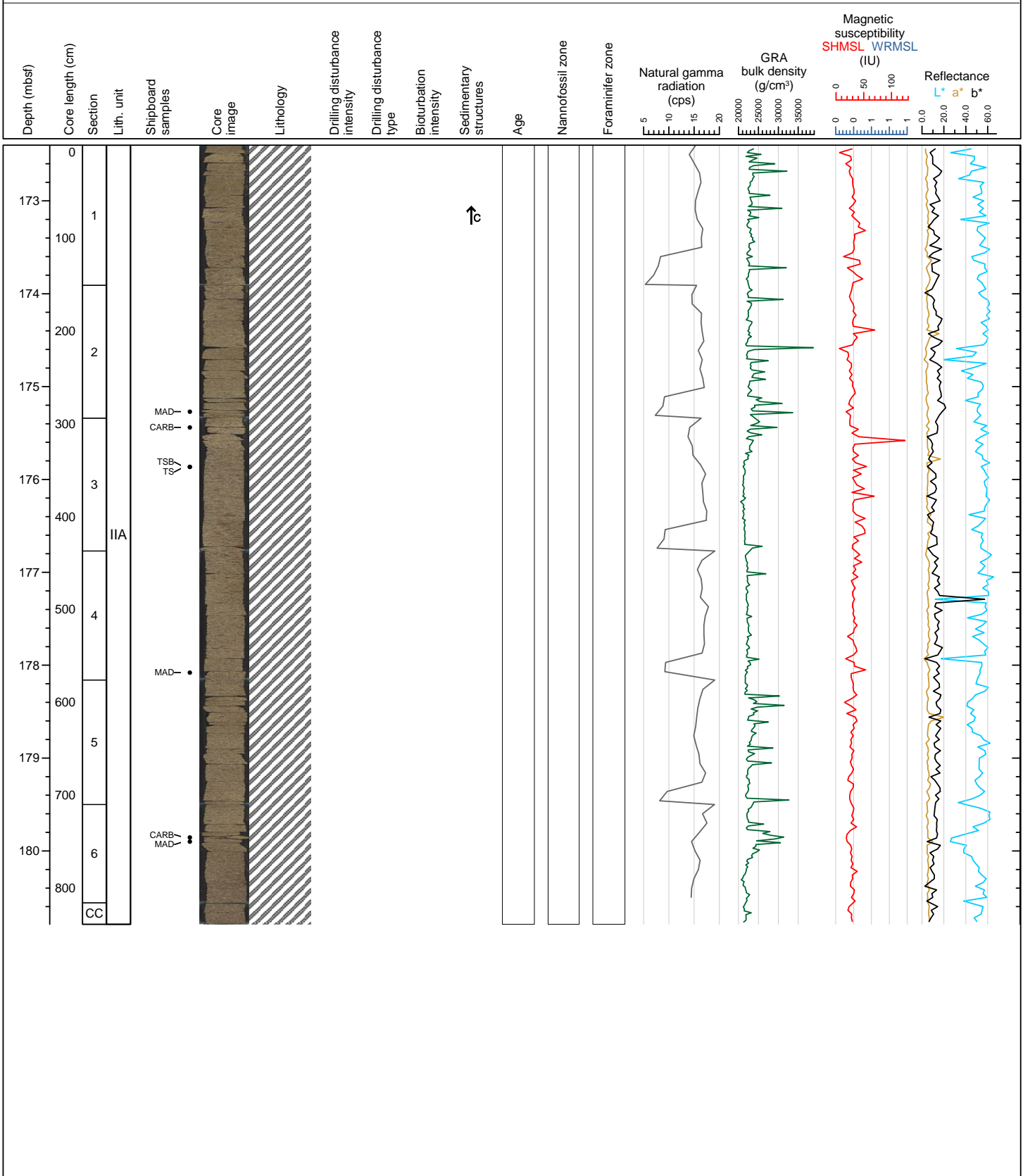
Hole 397T-U1585A Core 5R, Interval 162.8-168.58 m (CSF-A)

Ash and lapillistone containing varying proportions of dominantly green to reddened (oxidized) scoria, pumice and altered basaltic lithics, and minor chalk component (Subunit IIA).



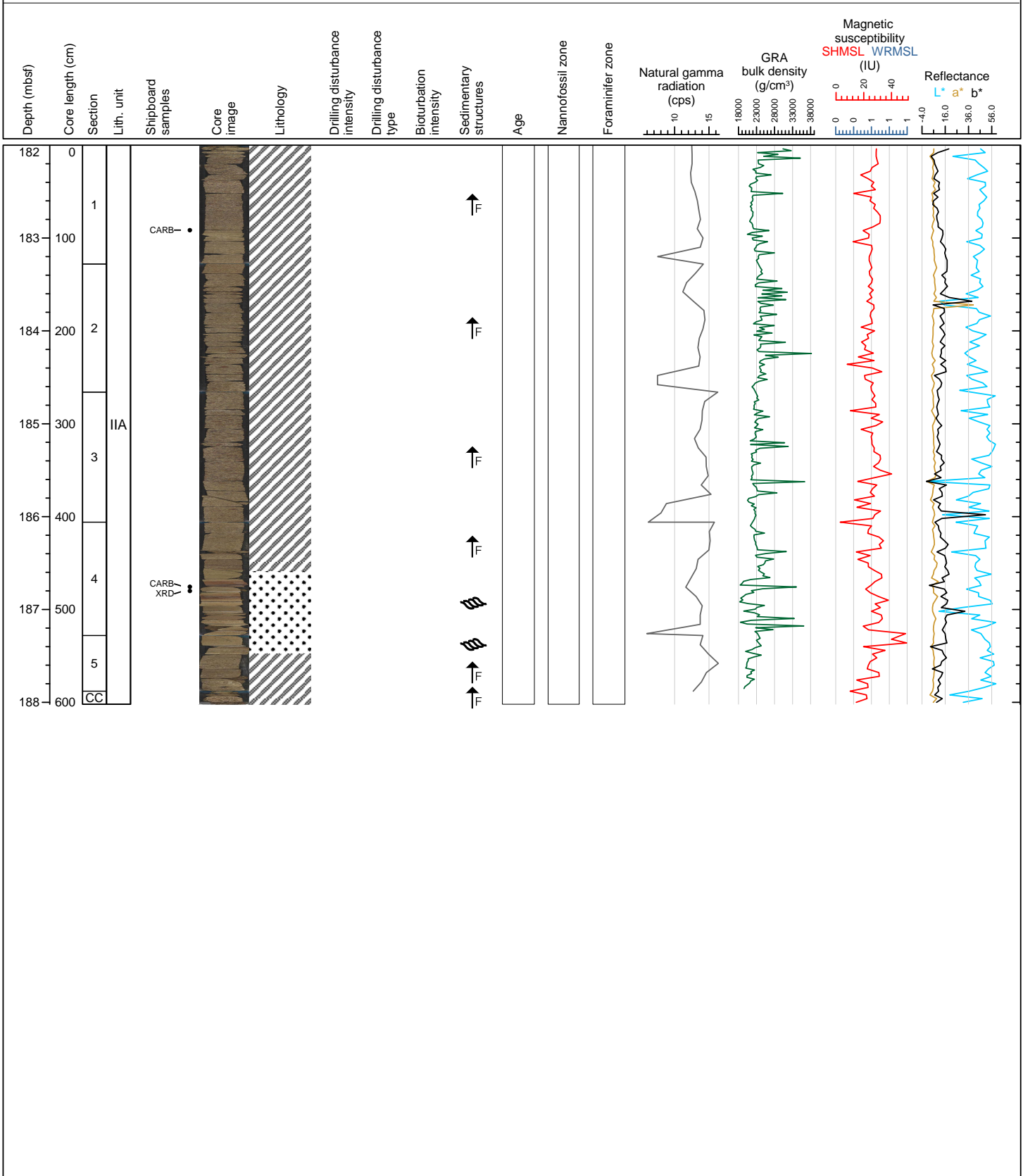
Hole 397T-U1585A Core 6R, Interval 172.4-180.79 m (CSF-A)

Ash and lapillistone containing varying proportions of dominantly green to reddened (oxidized) scoria, pumice and altered basaltic lithics, and minor chalk component (Subunit IIA).



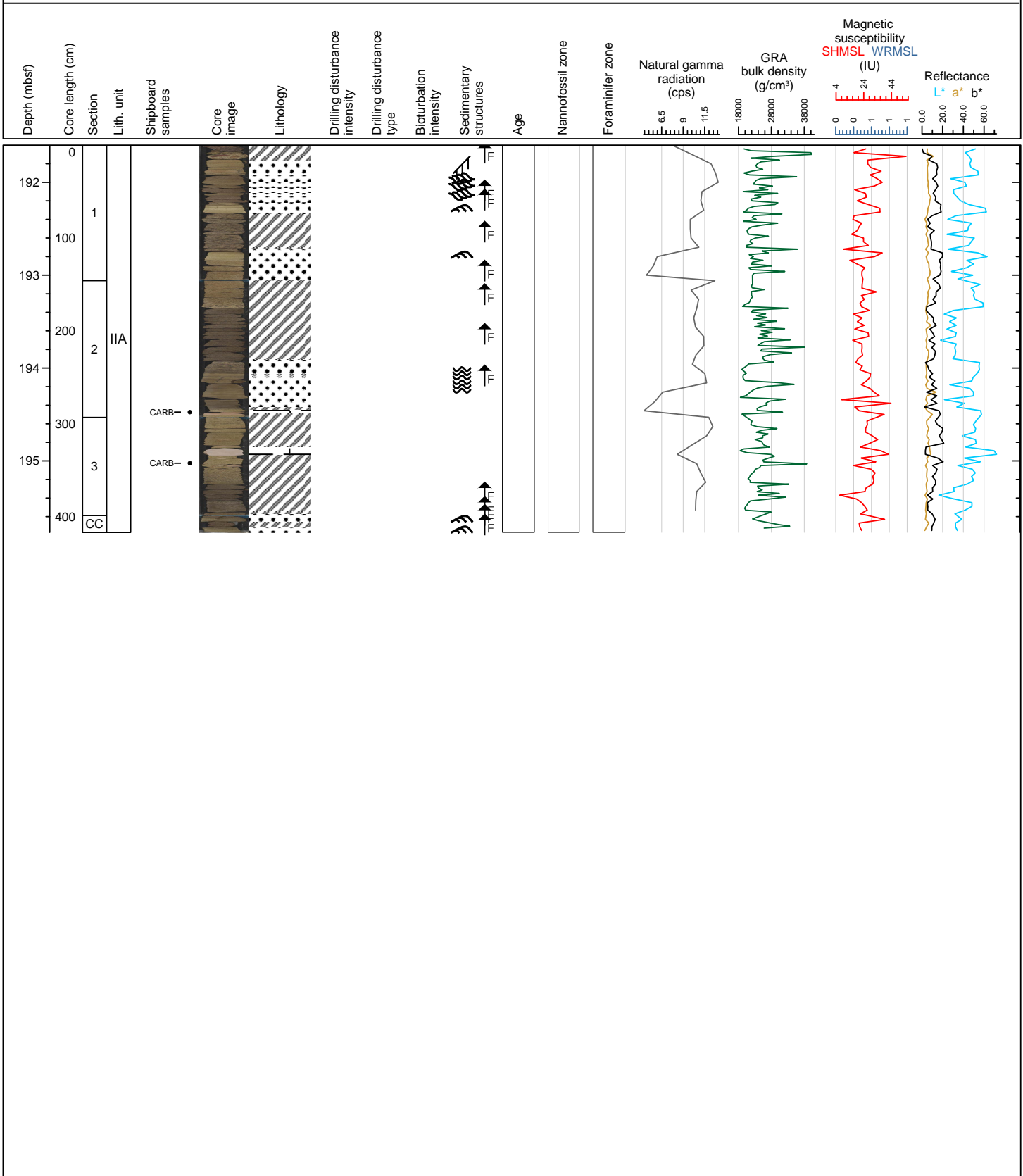
Hole 397T-U1585A Core 7R, Interval 182.0-188.02 m (CSF-A)

Ash and lapillistone containing varying proportions of dominantly green to reddened (oxidized) scoria, pumice and altered basaltic lithics, and minor chalk component (Subunit IIA).



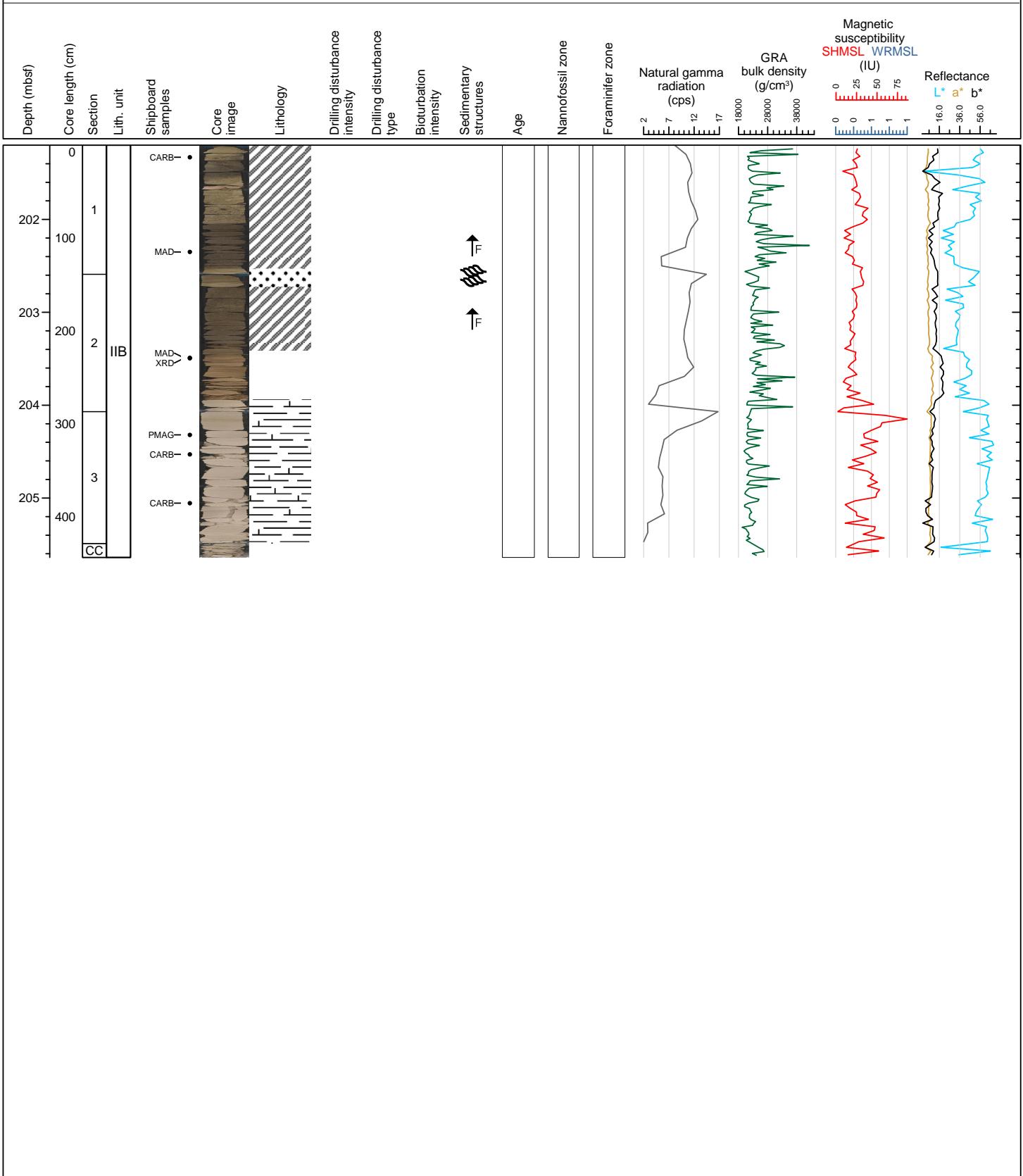
Hole 397T-U1585A Core 8R, Interval 191.6-195.77 m (CSF-A)

Ash and lapillistone containing varying proportions of dominantly green to reddened (oxidized) scoria, pumice and altered basaltic lithics, and minor chalk component (Subunit IIA); and reworked ash and lapillistone containing varying proportions of dominantly green to reddened (oxidized) scoria, pumice and altered basaltic lithics with thick chalk intervals (Subunit IIB). Subunit boundary at 194.80 mbsf.



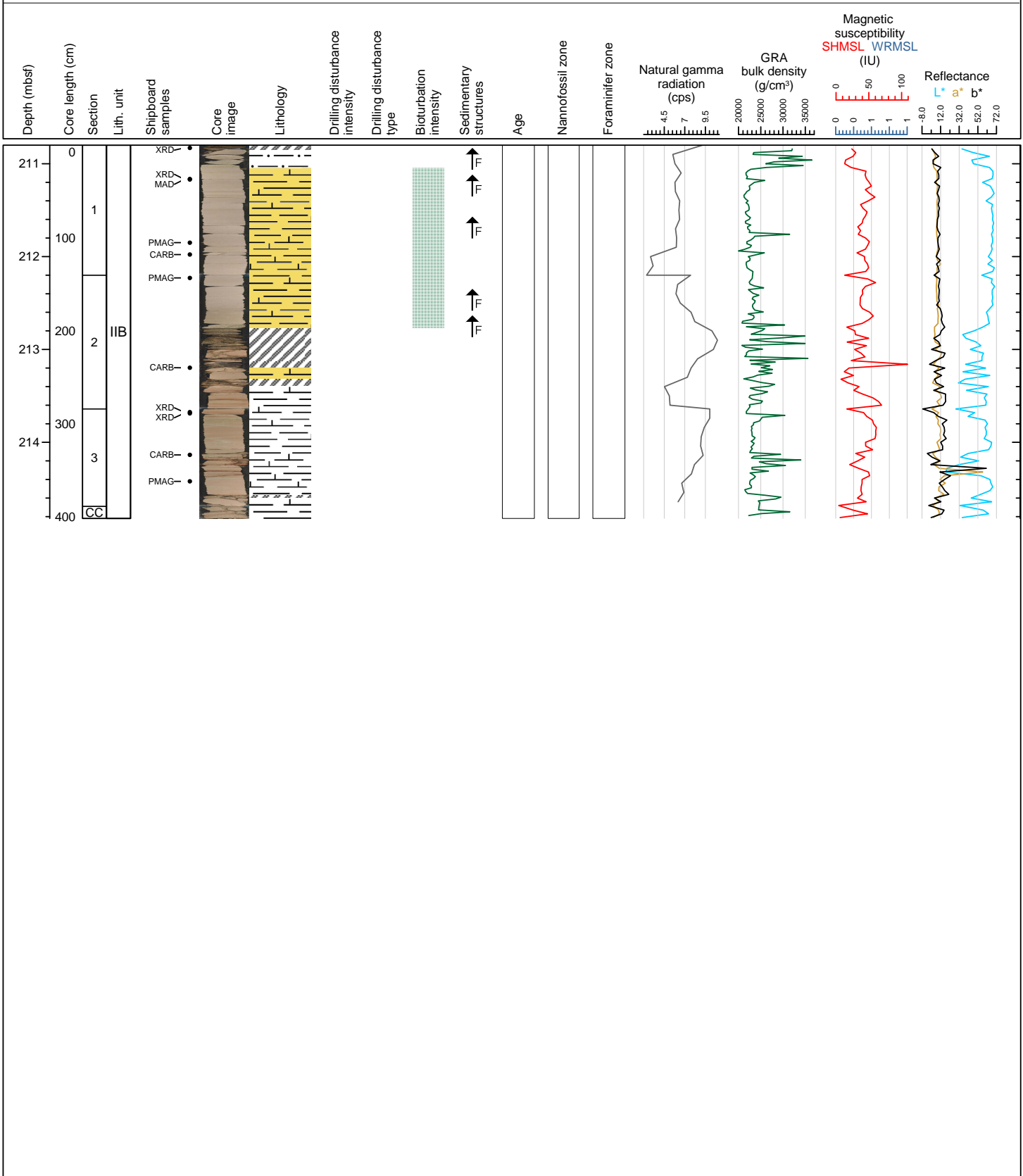
Hole 397T-U1585A Core 9R, Interval 201.2-205.64 m (CSF-A)

Reworked ash and lapillistone containing varying proportions of dominantly green to reddened (oxidized) scoria, pumice and altered basaltic lithics with thick chalk intervals (Subunit IIB).



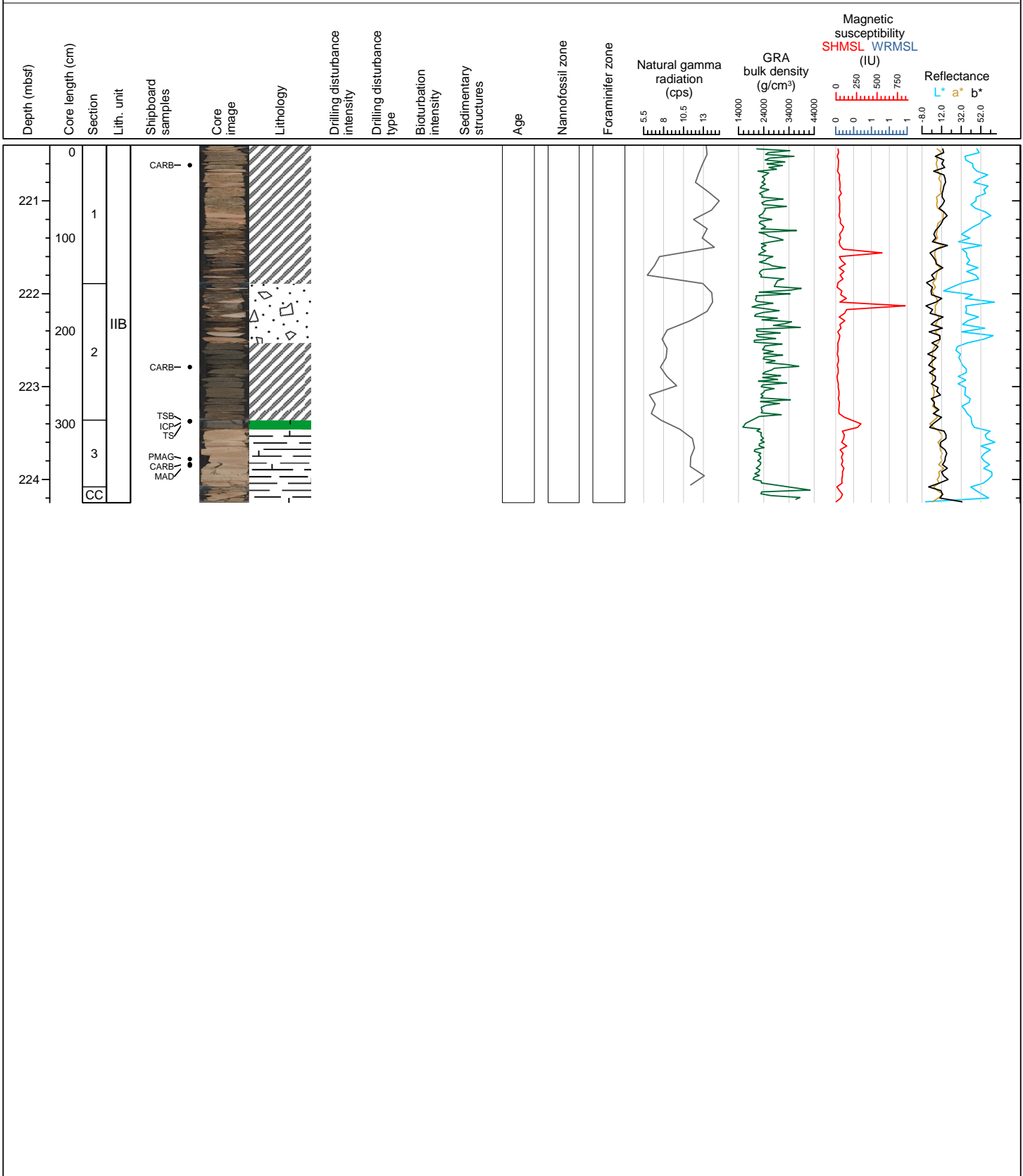
Hole 397T-U1585A Core 10R, Interval 210.8-214.82 m (CSF-A)

Reworked ash and lapillistone containing varying proportions of dominantly green to reddened (oxidized) scoria, pumice and altered basaltic lithics with thick chalk intervals (Subunit IIB).



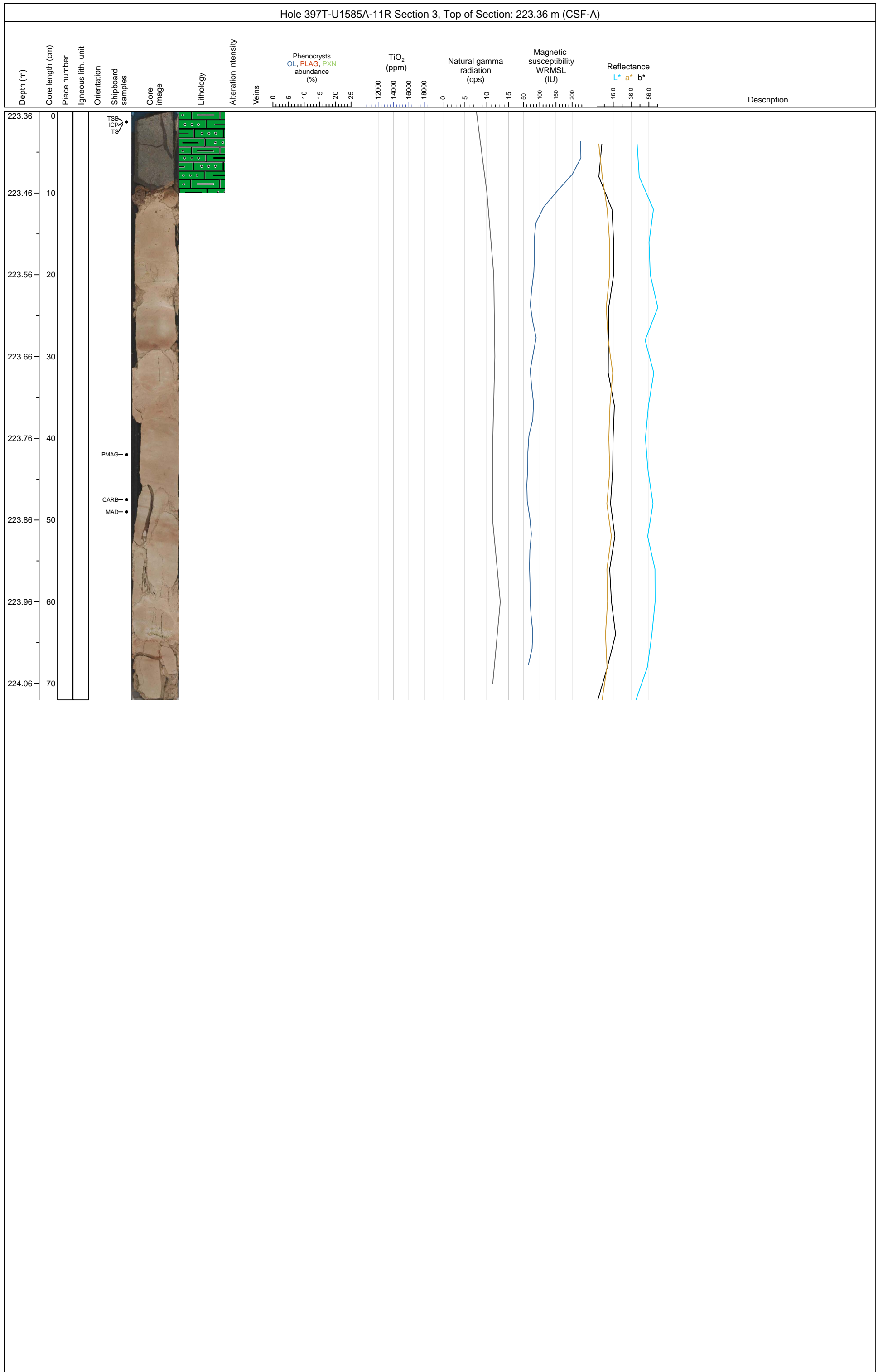
Hole 397T-U1585A Core 11R, Interval 220.4-224.25 m (CSF-A)

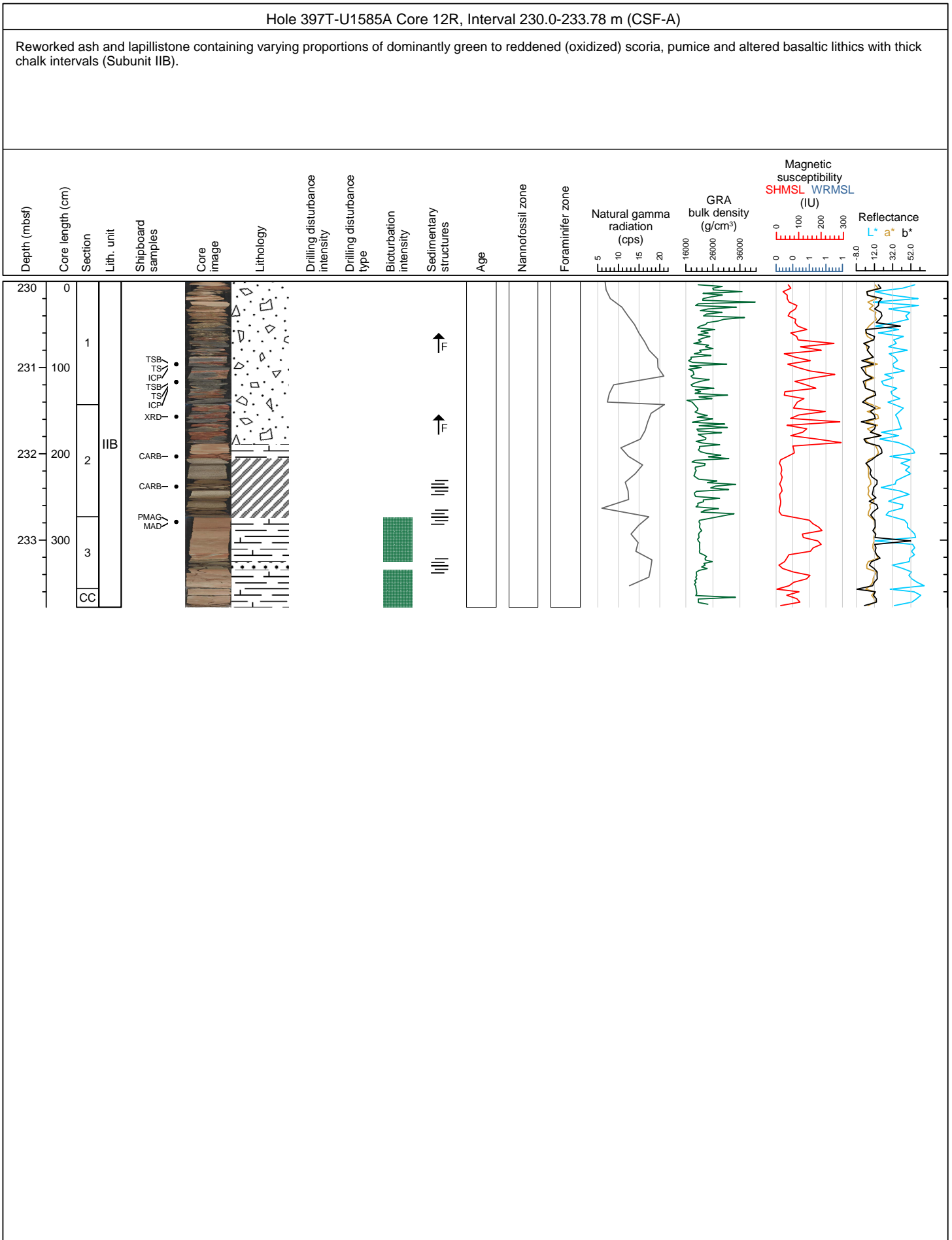
Reworked ash and lapillistone containing varying proportions of dominantly green to reddened (oxidized) scoria, pumice and altered basaltic lithics with thick chalk intervals (Subunit IIB).

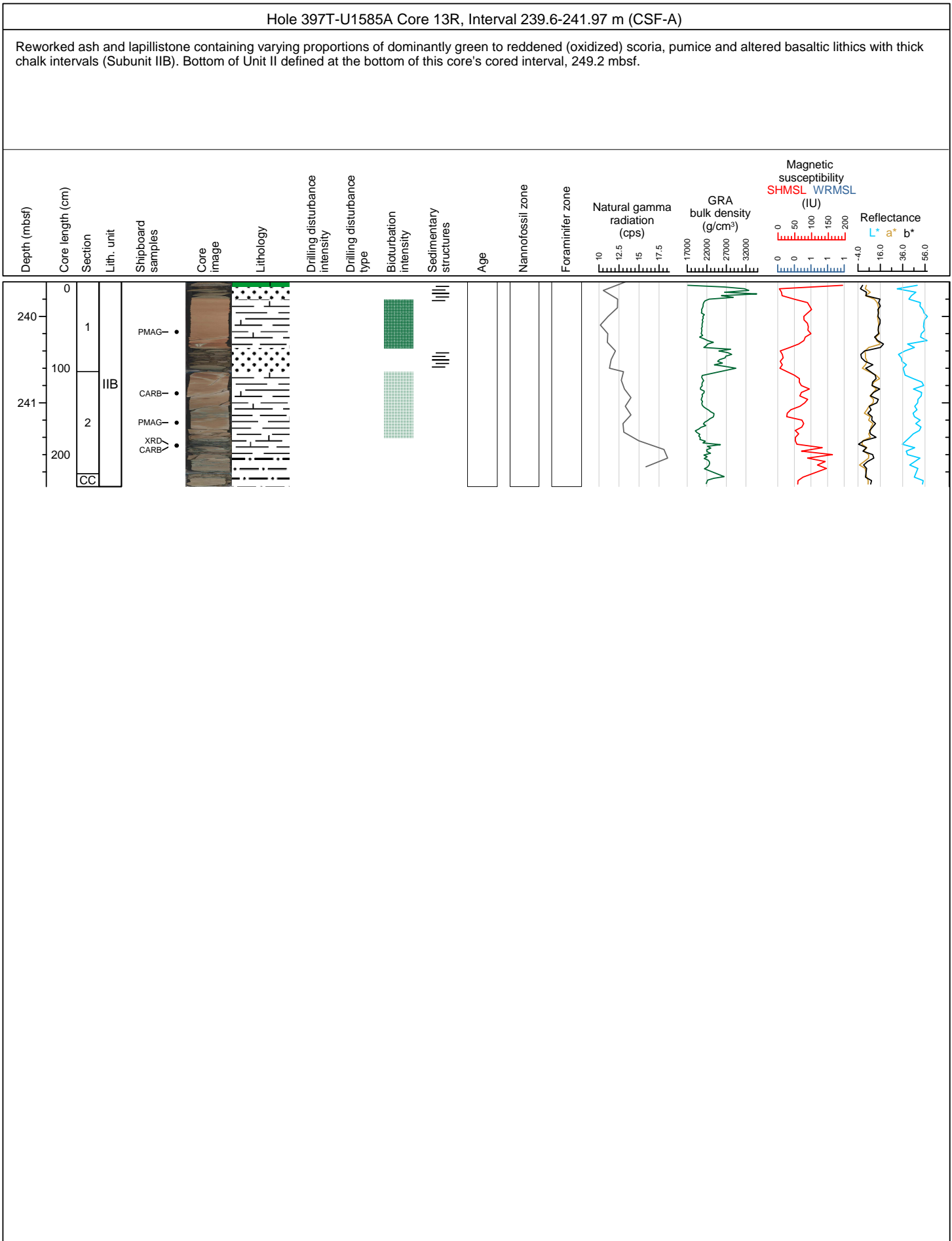


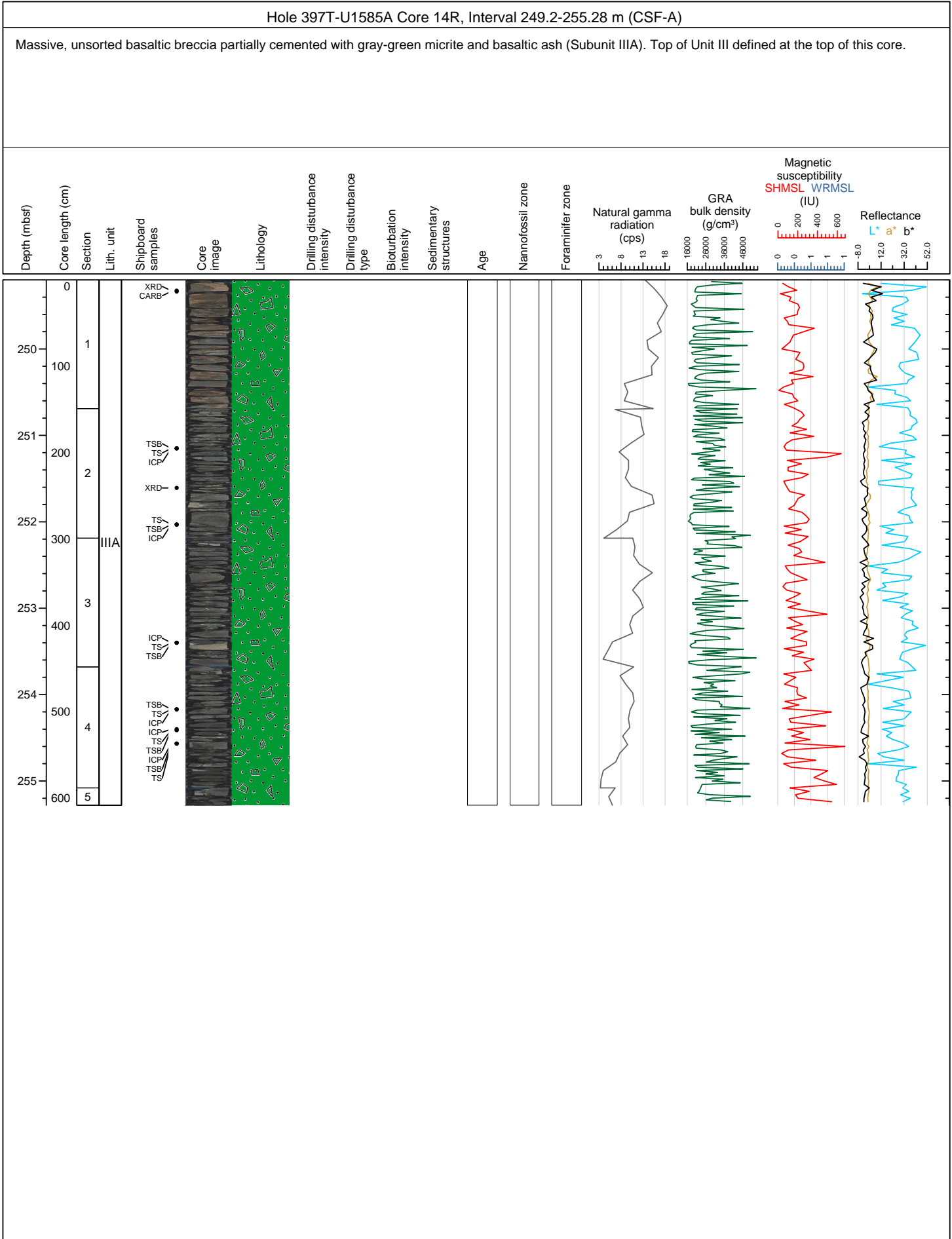


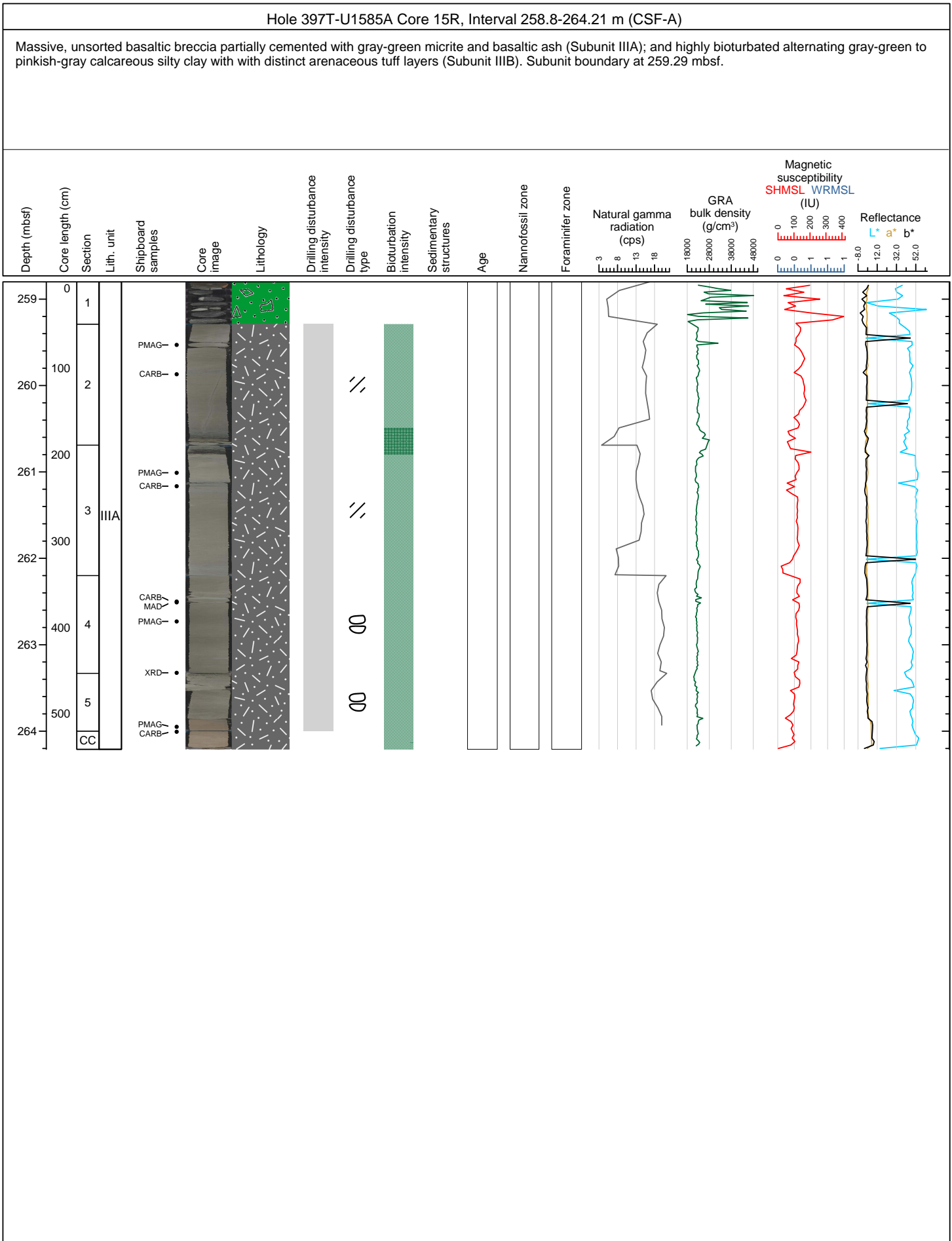
Hole 397T-U1585A-11R Section 3, Top of Section: 223.36 m (CSF-A)





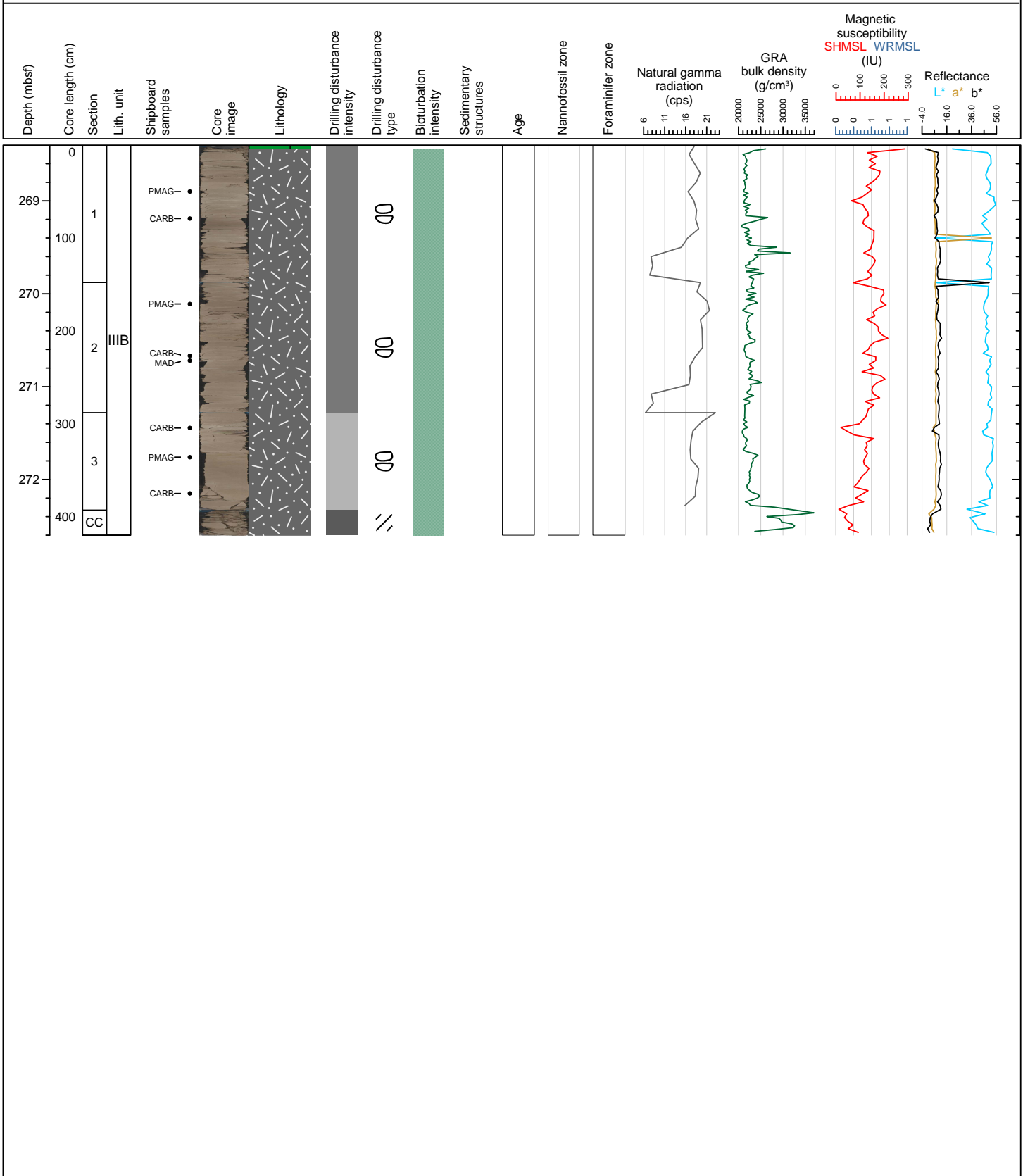






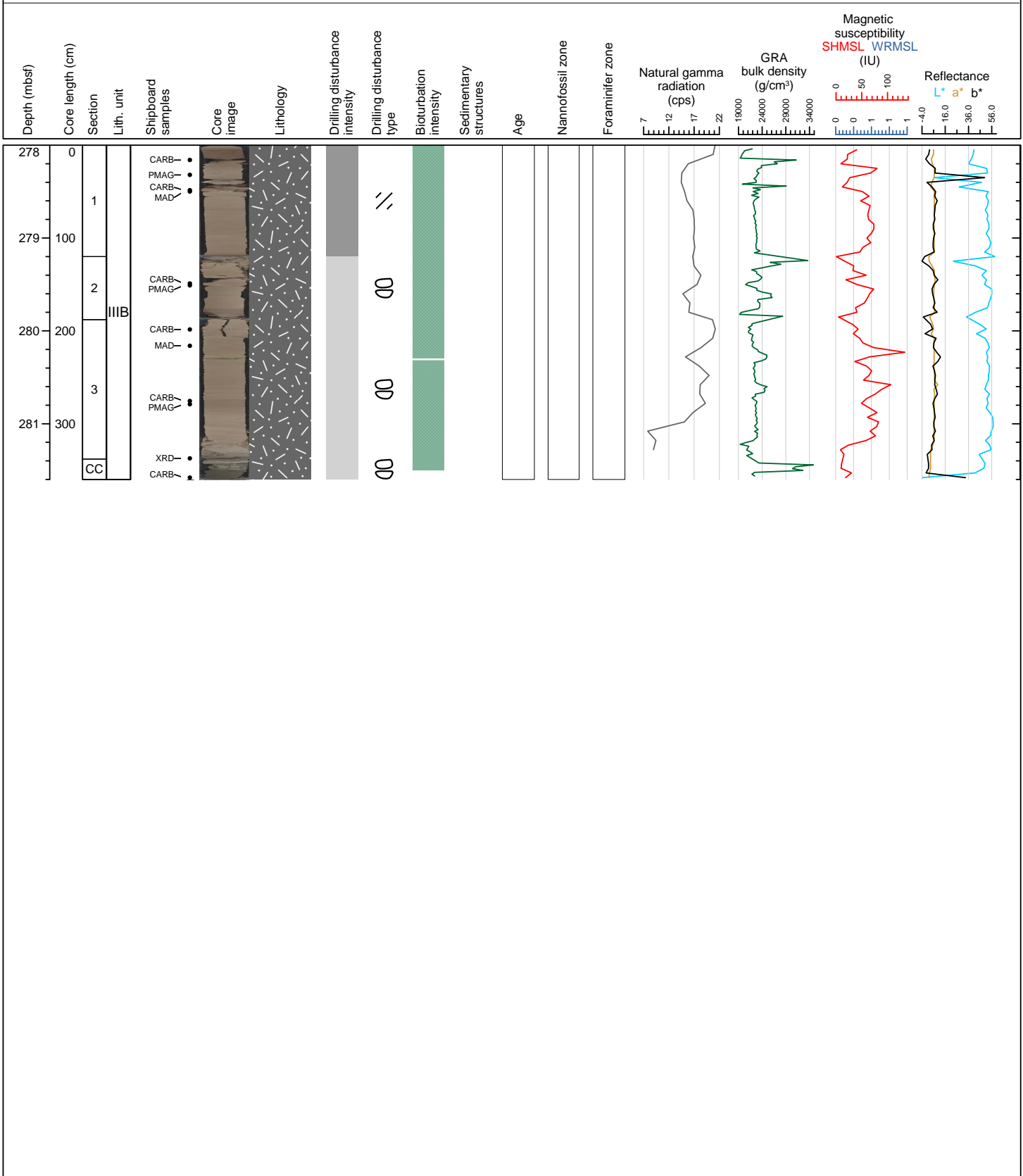
Hole 397T-U1585A Core 16R, Interval 268.4-272.6 m (CSF-A)

Highly bioturbated alternating gray-green to pinkish-gray calcareous silty clay with with distinct arenaceous tuff layers (Subunit IIIB).



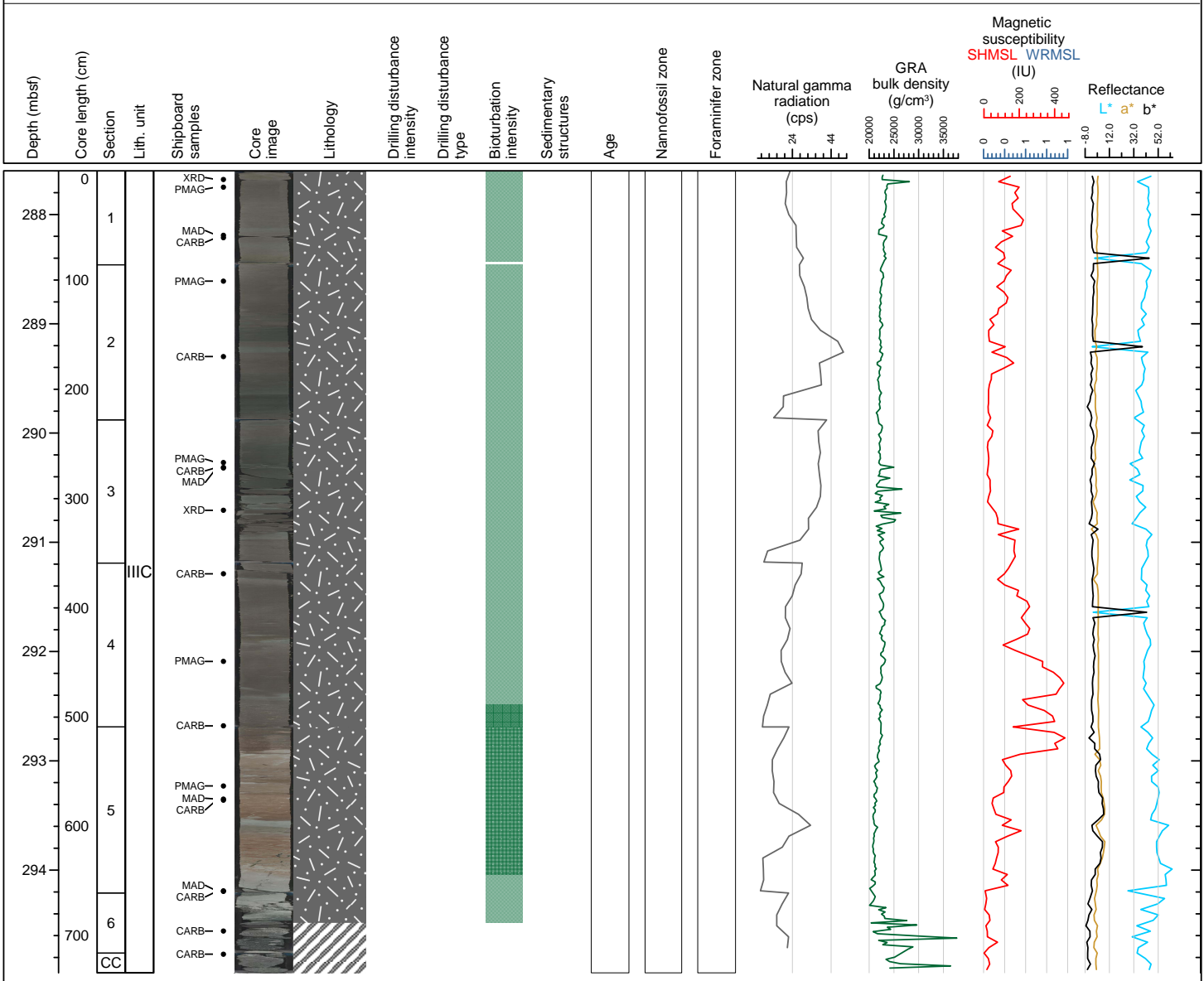
Hole 397T-U1585A Core 17R, Interval 278.0-281.6 m (CSF-A)

Highly bioturbated alternating gray-green to pinkish-gray calcareous silty clay with with distinct arenaceous tuff layers (Subunit IIIB); and alternating dark gray to greenish gray claystone (Subunit IIIC). Subunit boundary at 281.50 mbsf.

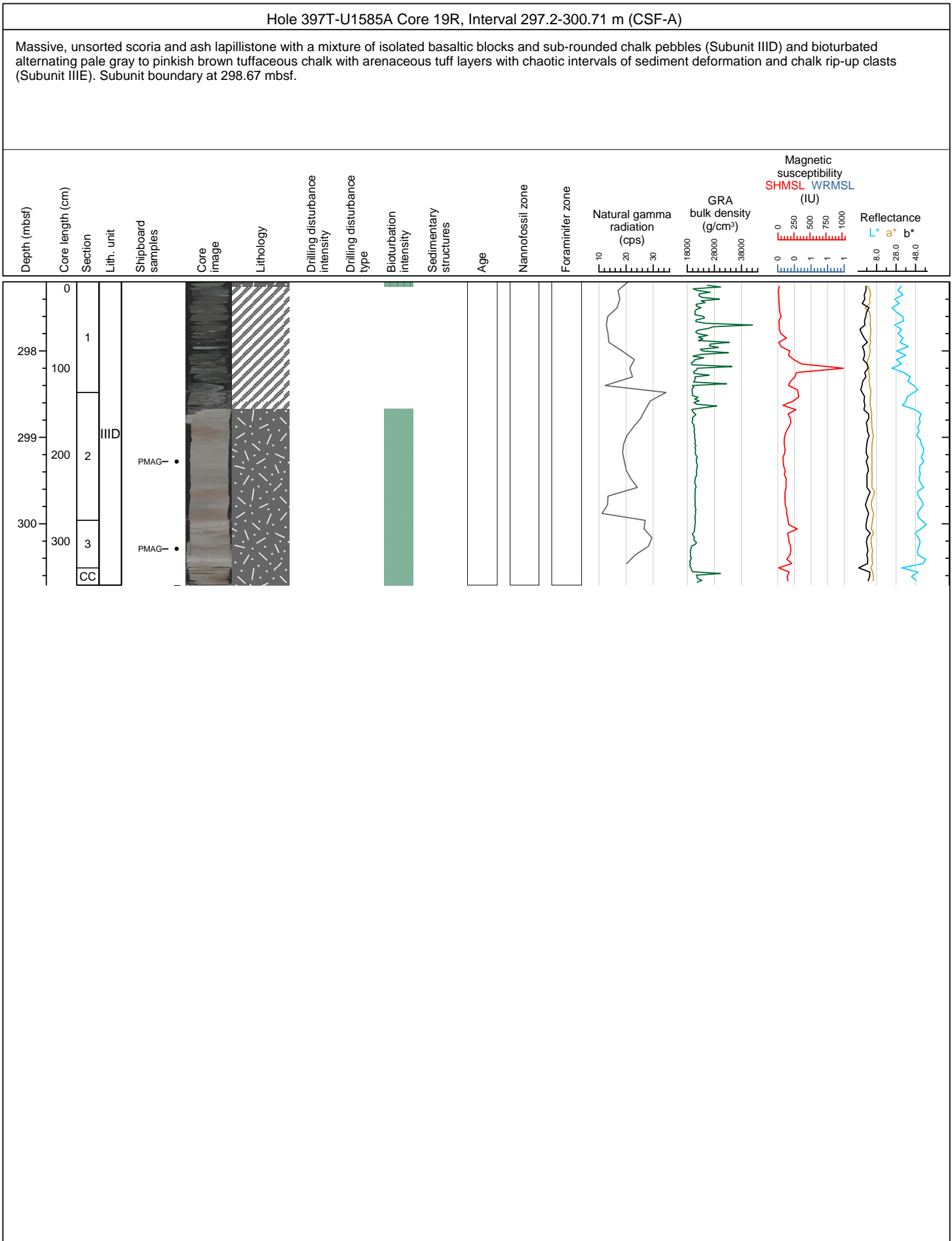


Hole 397T-U1585A Core 18R, Interval 287.6-294.94 m (CSF-A)

Alternating dark gray to greenish gray claystone with basal interval of chaotic gray to buff argillaceous chalk (Subunit IIIC); and Massive, unsorted scoria and ash lapillistone with a mixture of isolated basaltic blocks and sub-rounded chalk pebbles (Subunit IIID). Subunit boundary at 294.48 mbsf.

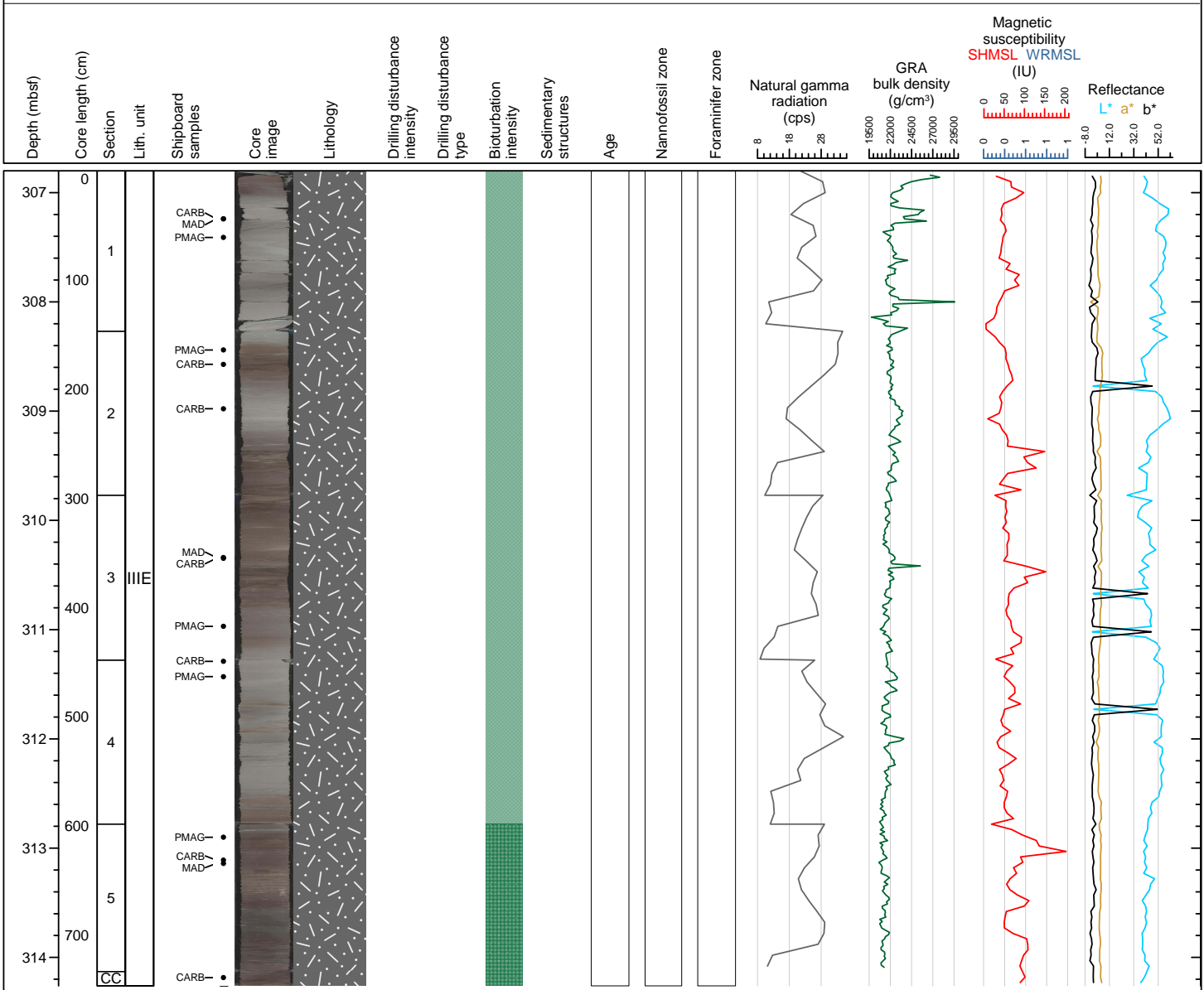






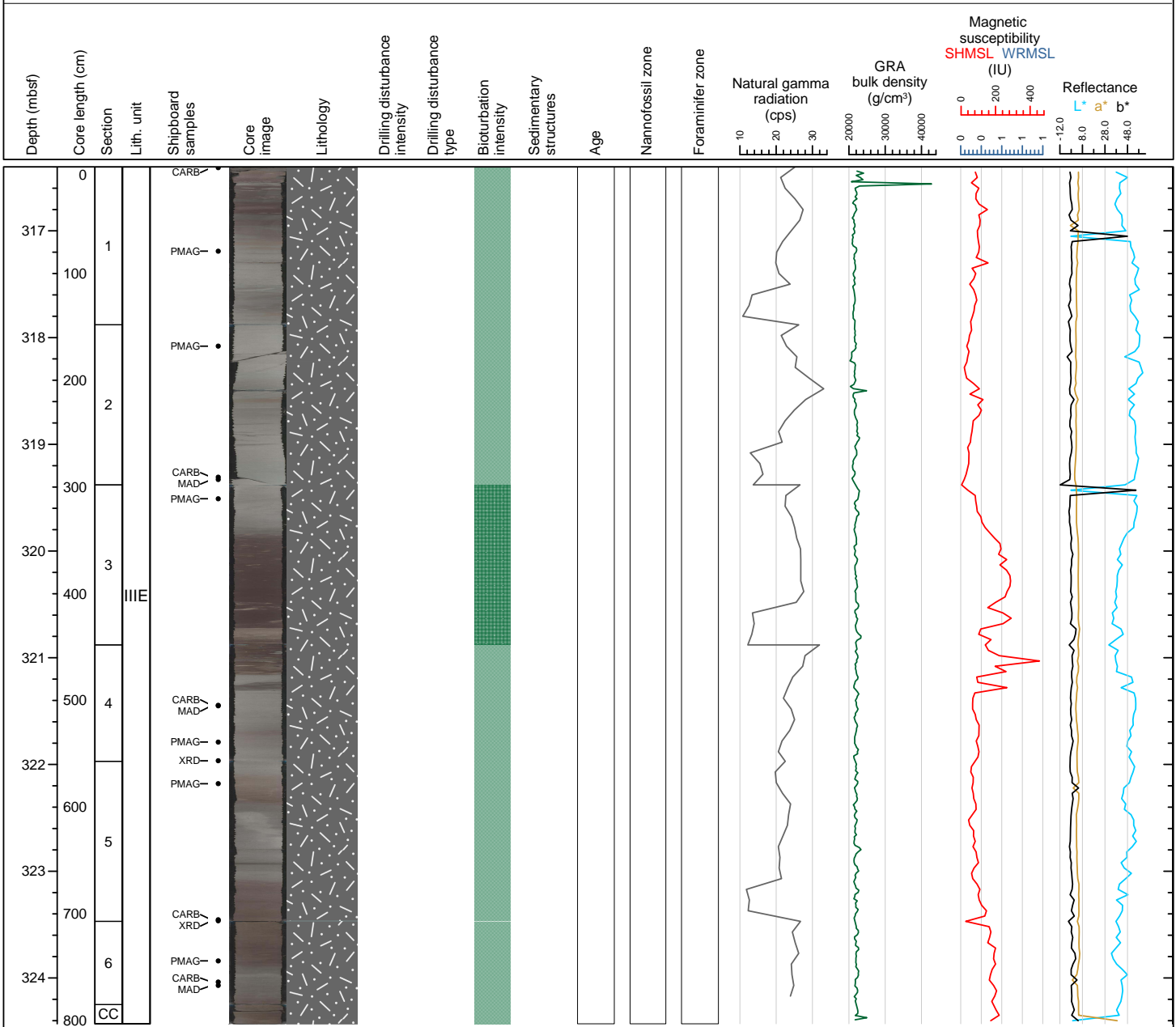
Hole 397T-U1585A Core 20R, Interval 306.8-314.26 m (CSF-A)

Bioturbated alternating pale gray to pinkish brown tuffaceous chalk with arenaceous tuff layers with chaotic intervals of sediment deformation and chalk rip-up clasts (Subnit III E).



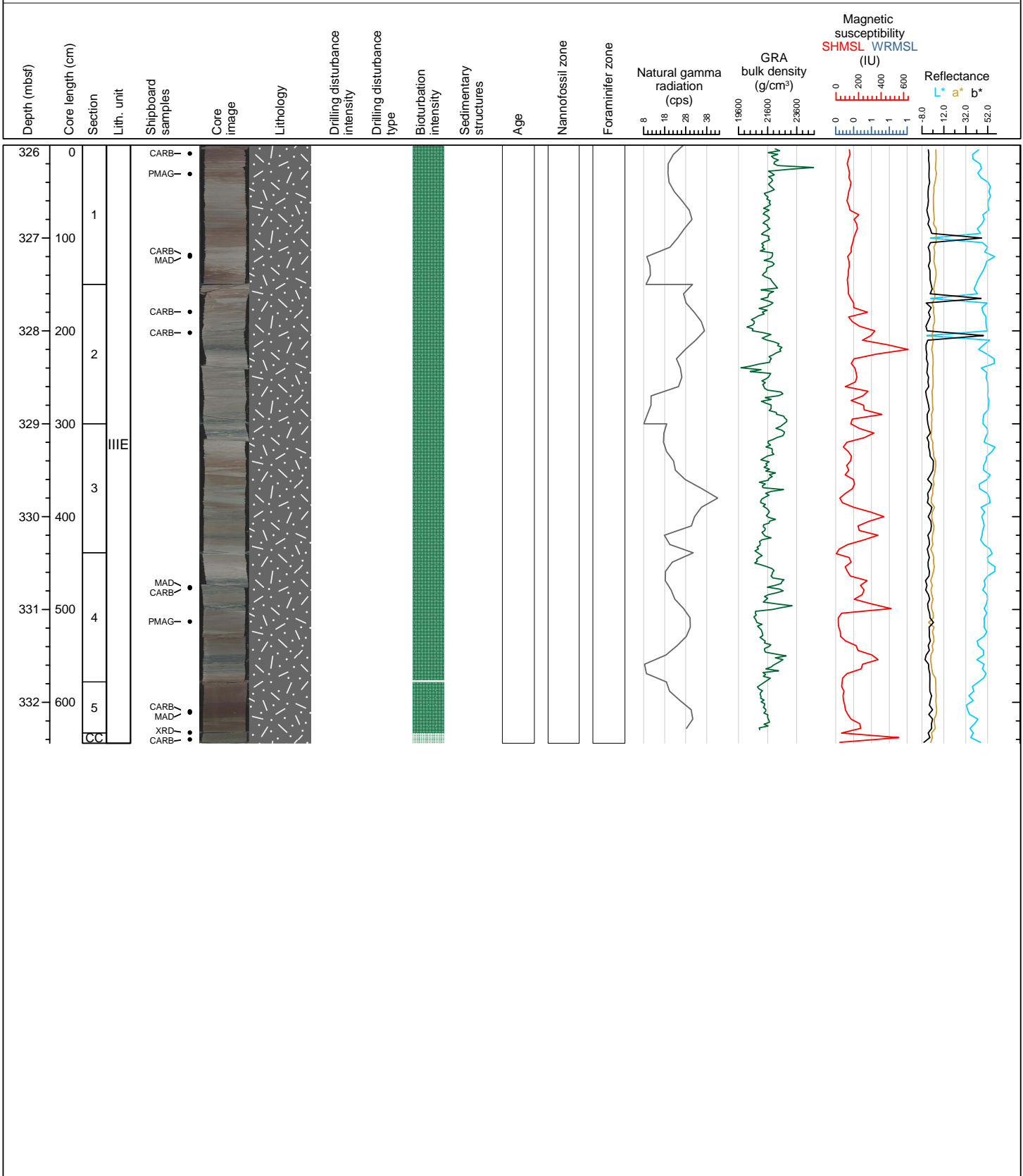
Hole 397T-U1585A Core 21R, Interval 316.4-324.43 m (CSF-A)

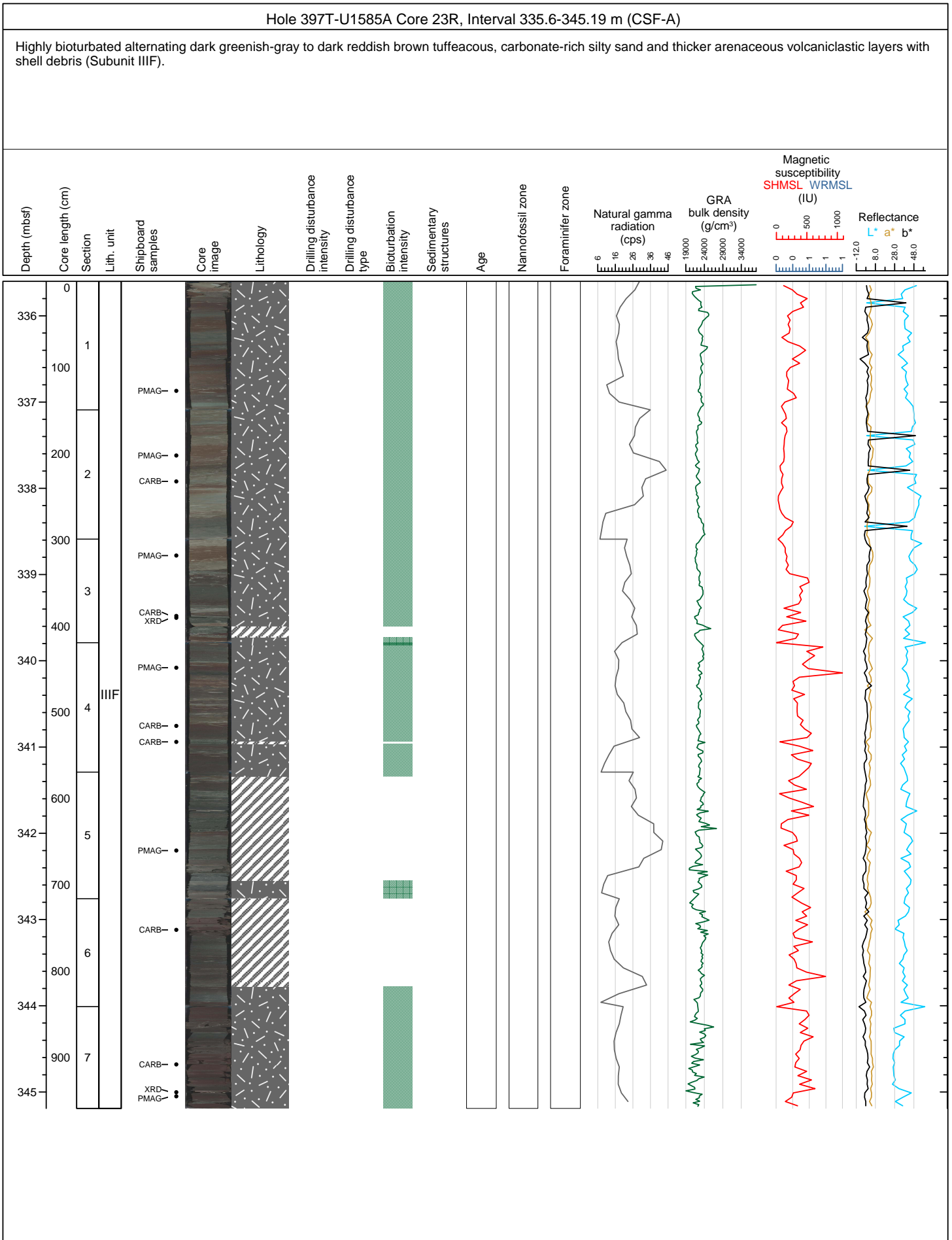
Bioturbated alternating pale gray to pinkish brown tuffaceous chalk with arenaceous tuff layers with chaotic intervals of sediment deformation and chalk rip-up clasts (Subnit IIIE).



Hole 397T-U1585A Core 22R, Interval 326.0-332.44 m (CSF-A)

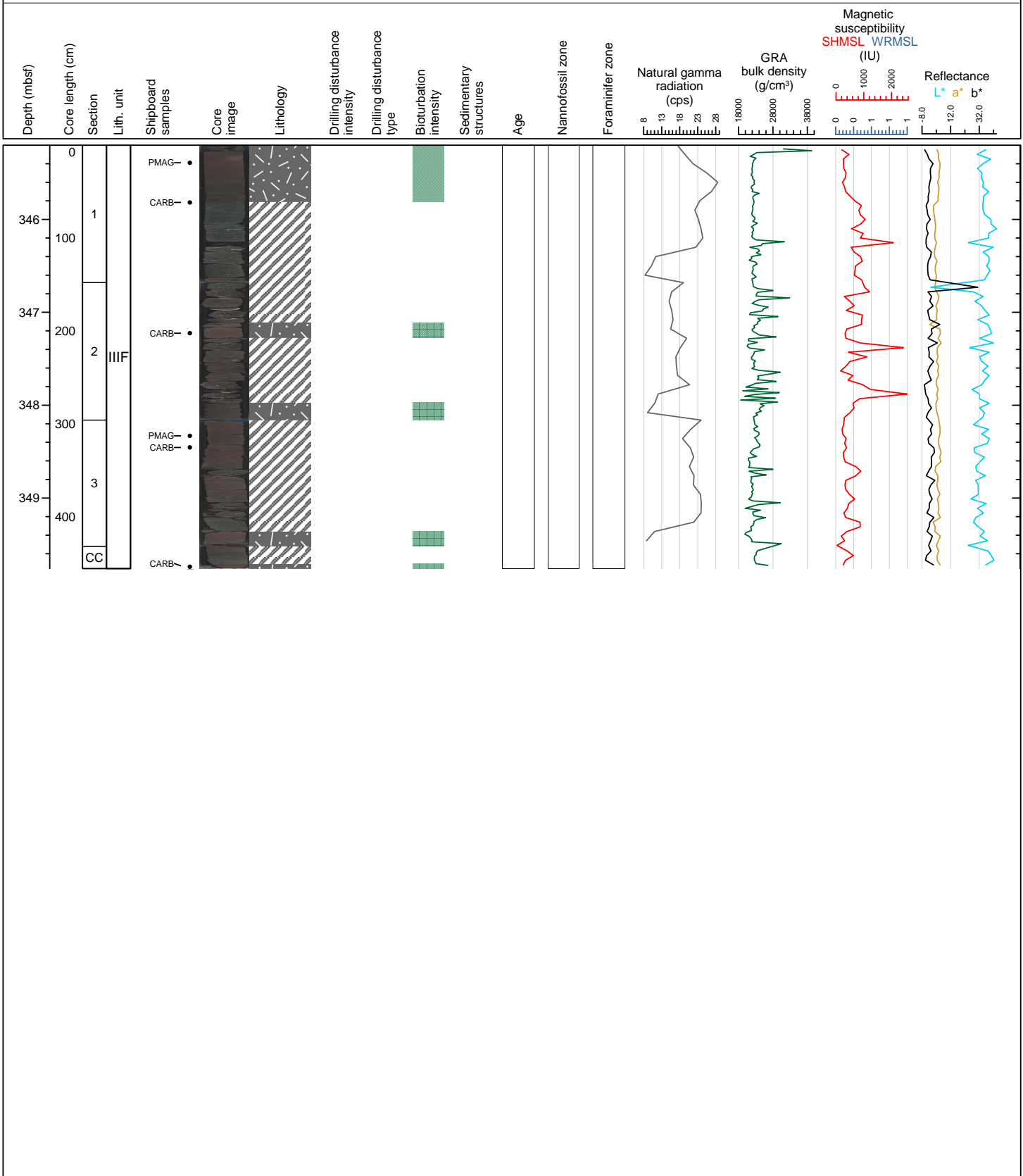
Bioturbated alternating pale gray to pinkish brown tuffaceous chalk with arenaceous tuff layers with chaotic intervals of sediment deformation and chalk rip-up clasts (Subunit III E); and highly bioturbated alternating dark greenish-gray to dark reddish brown tuffaceous, carbonate-rich silty sand and thicker arenaceous volcaniclastic layers with shell debris (Subunit III F). Subunit boundary at 331.76 mbsf.

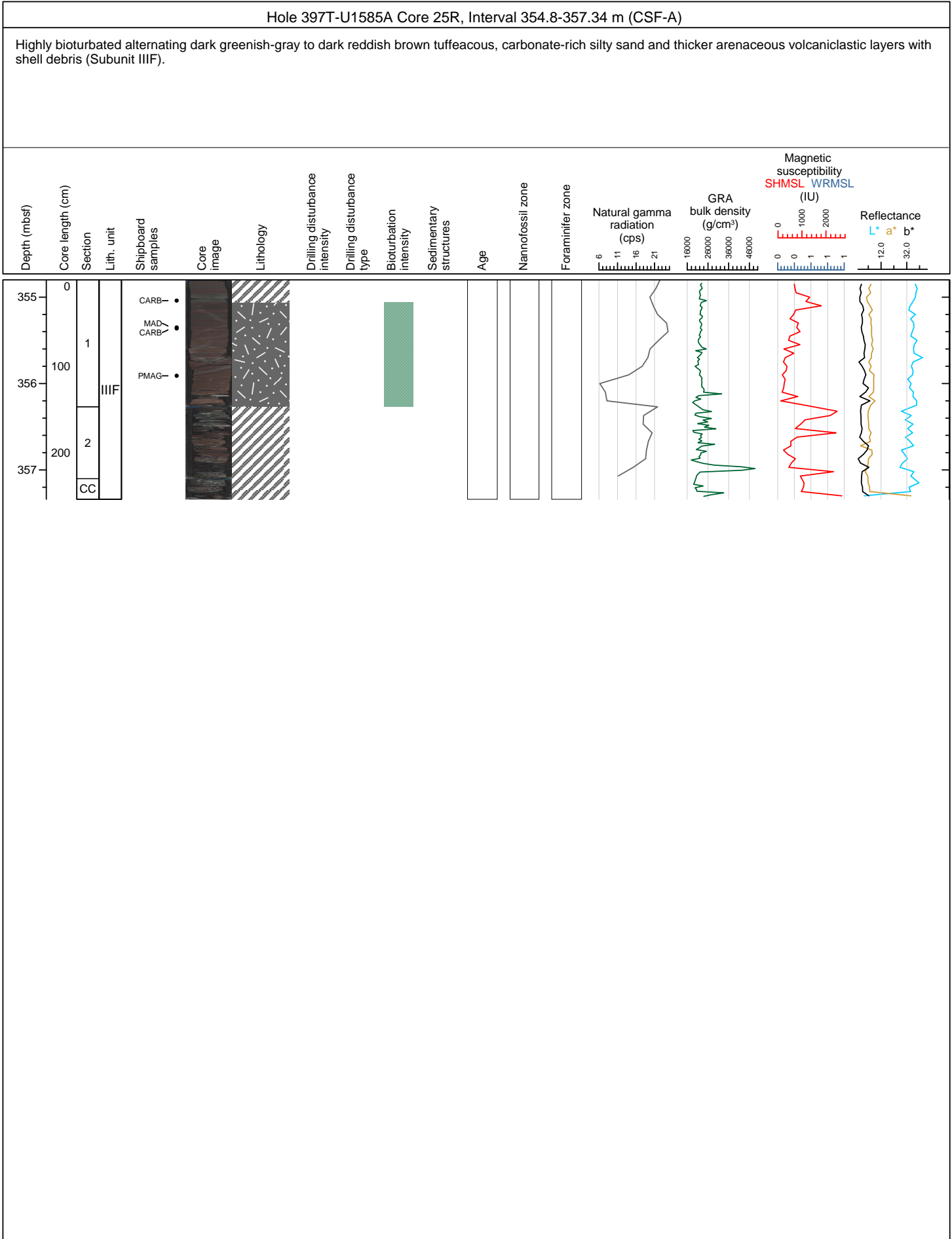


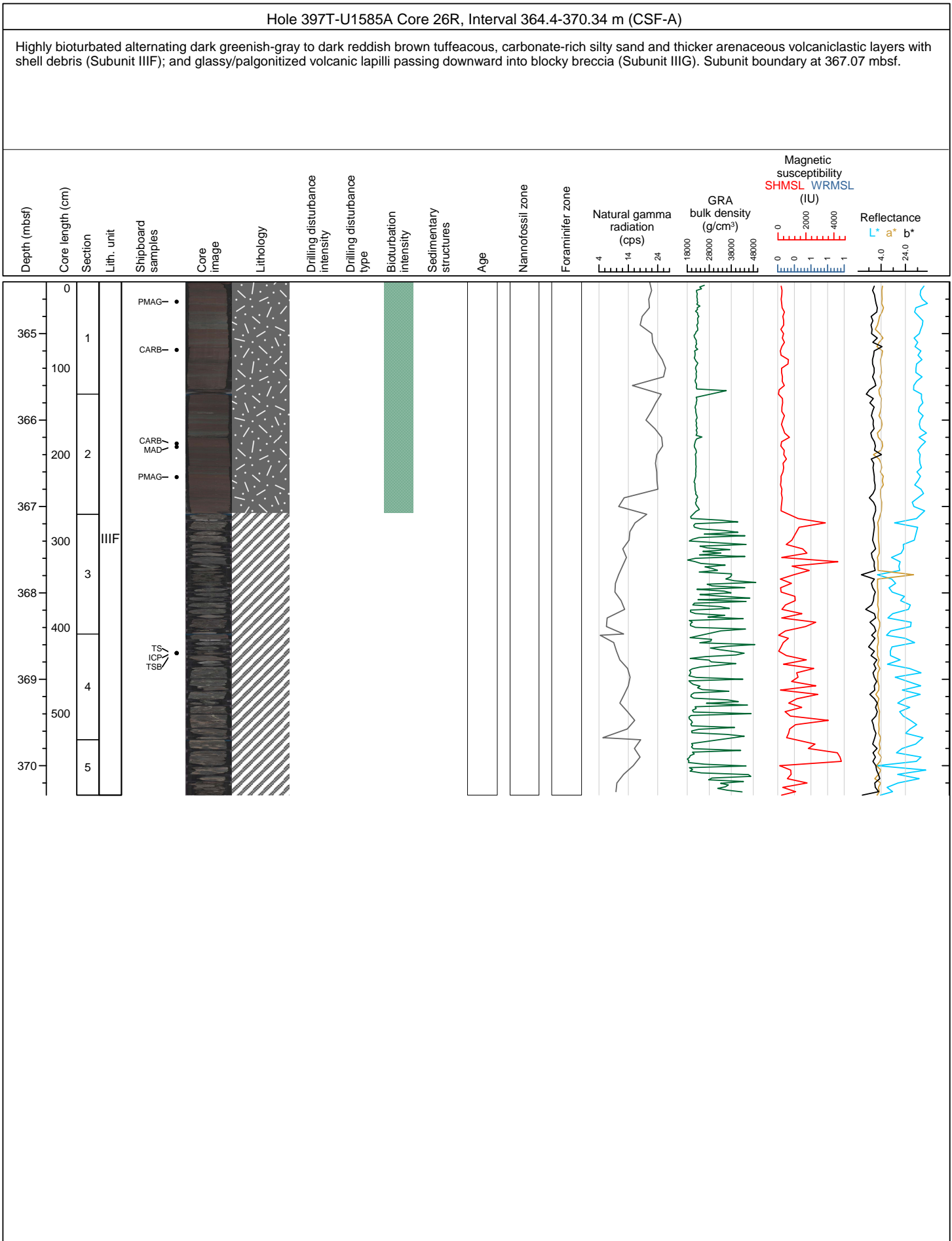


Hole 397T-U1585A Core 24R, Interval 345.2-349.76 m (CSF-A)

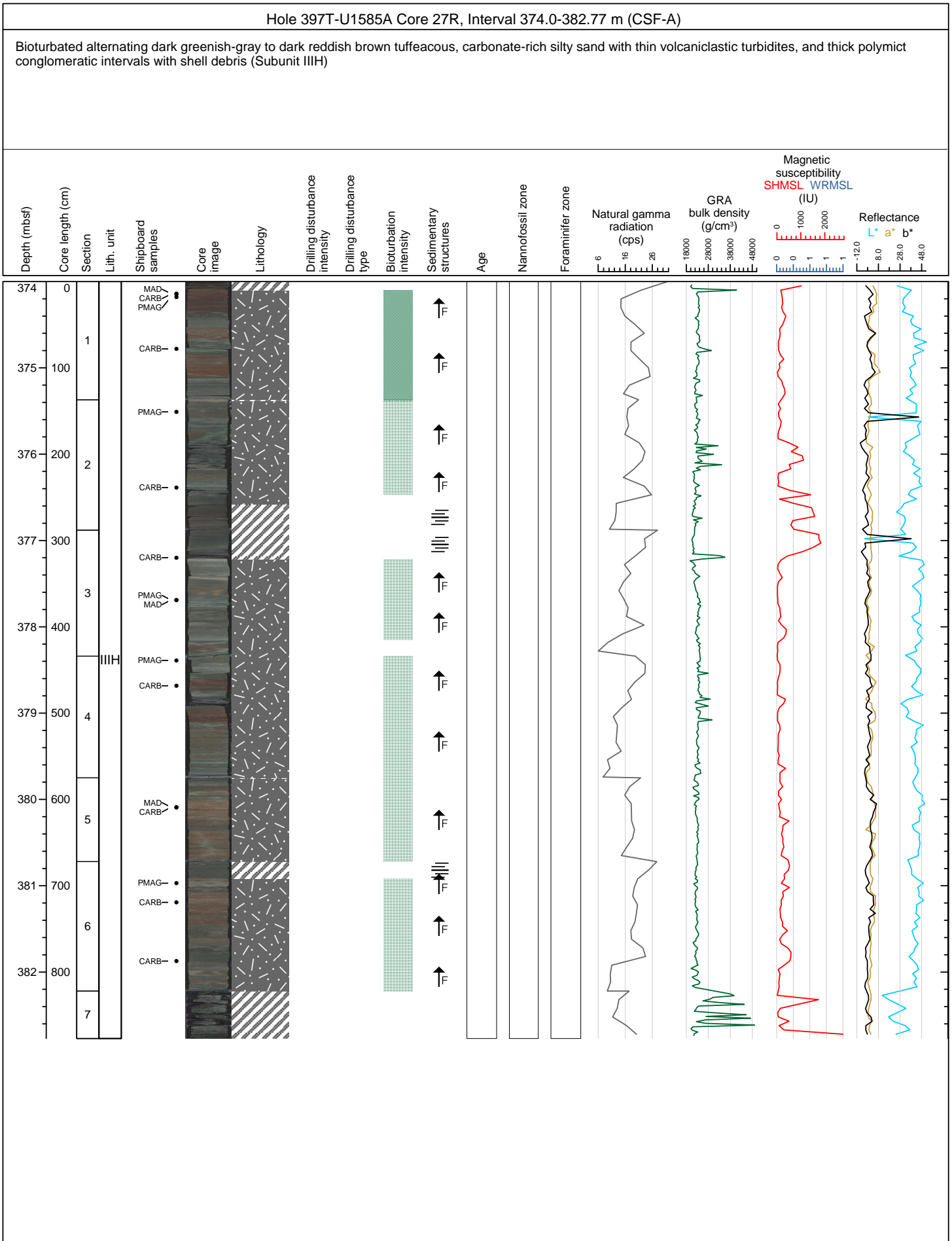
Highly bioturbated alternating dark greenish-gray to dark reddish brown tuffaceous, carbonate-rich silty sand and thicker arenaceous volcanoclastic layers with shell debris (Subunit III F).

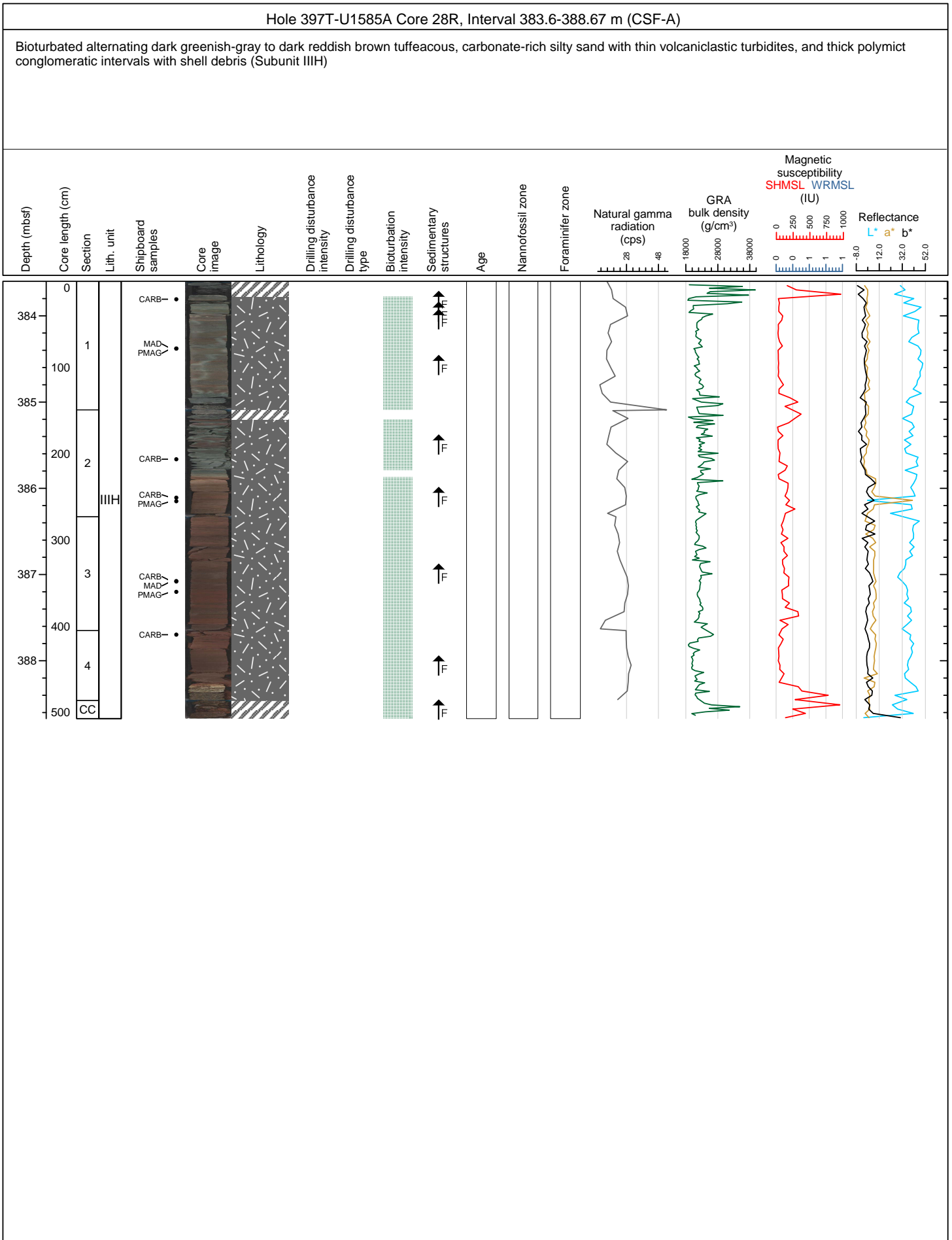






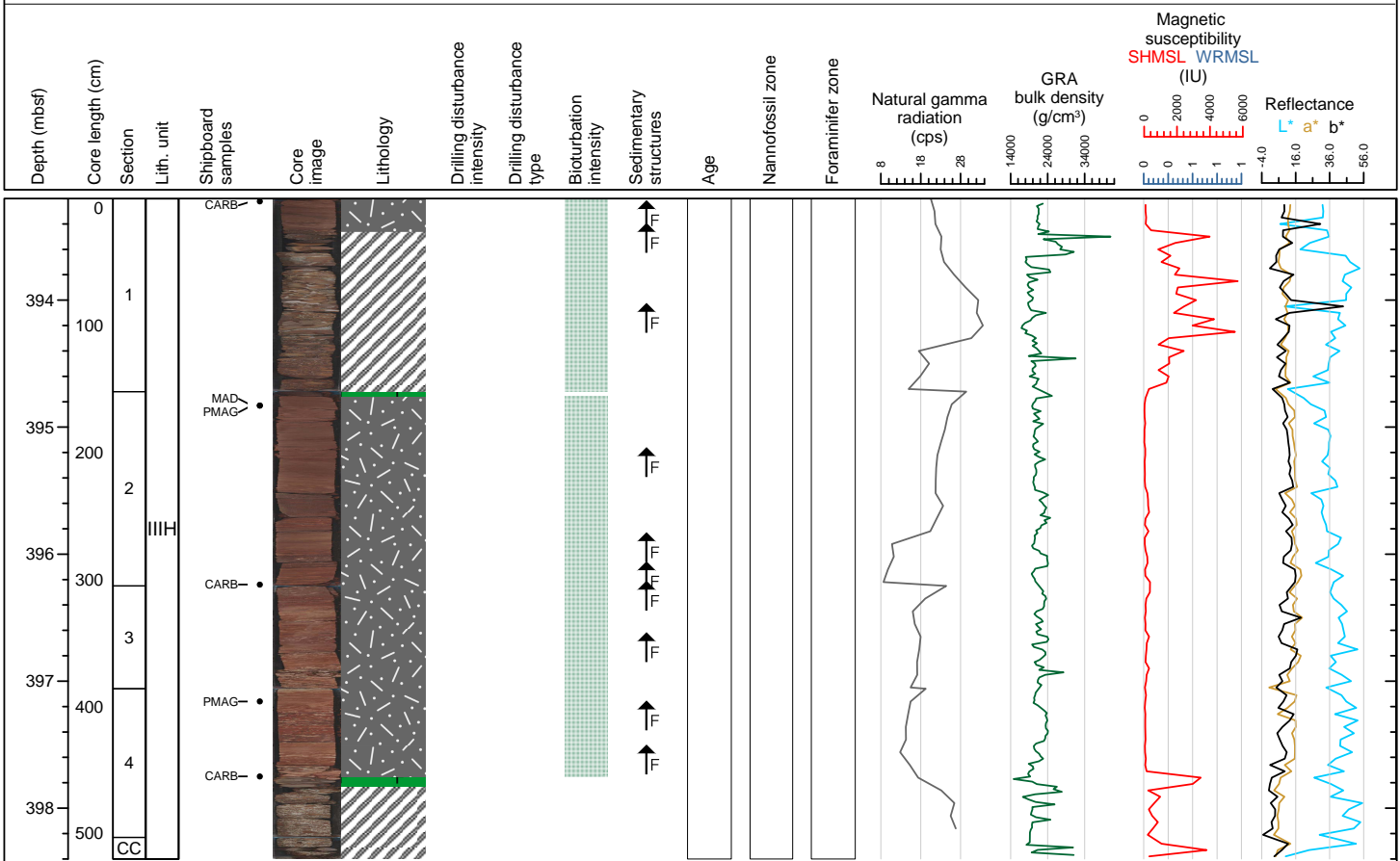


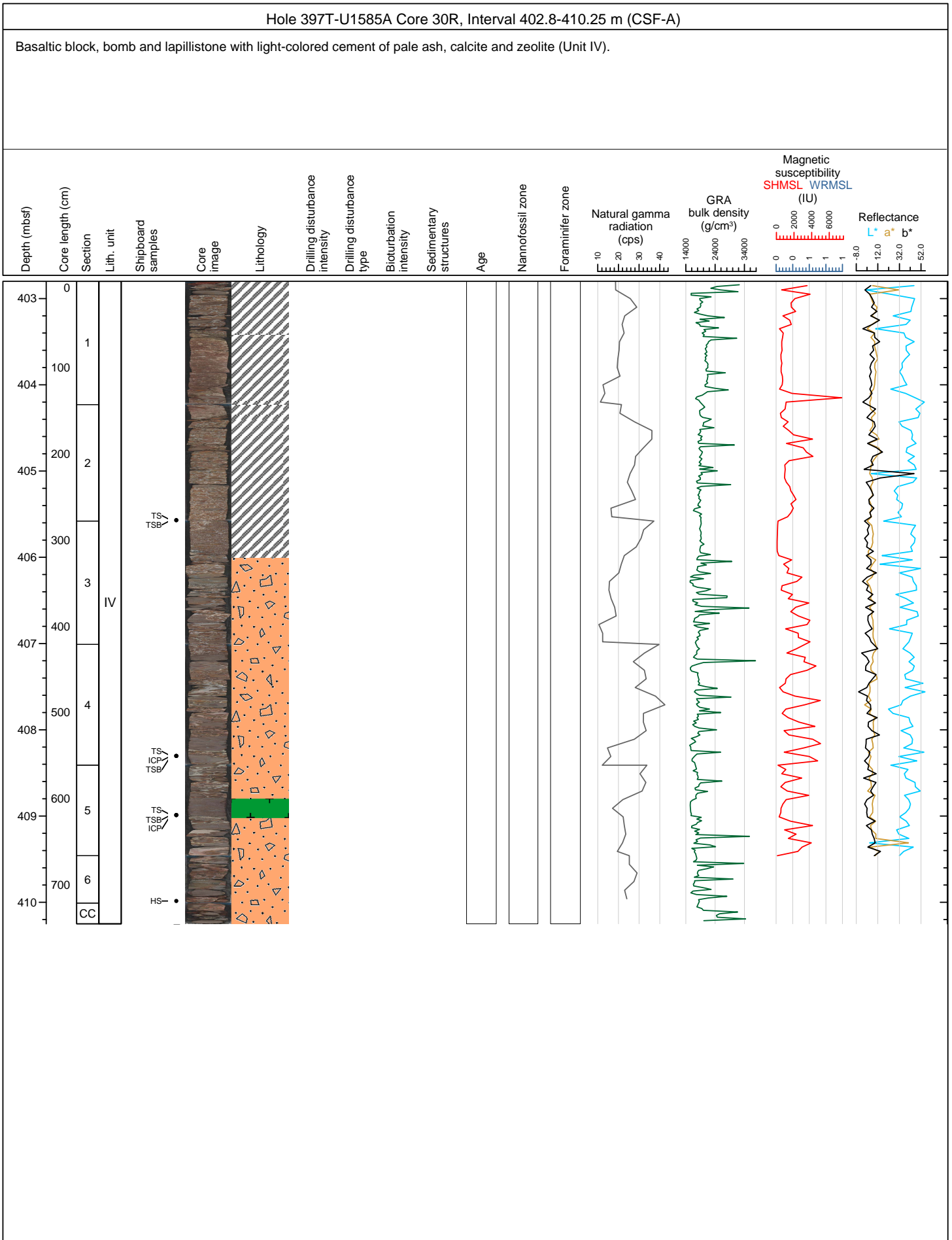




Hole 397T-U1585A Core 29R, Interval 393.2-398.4 m (CSF-A)

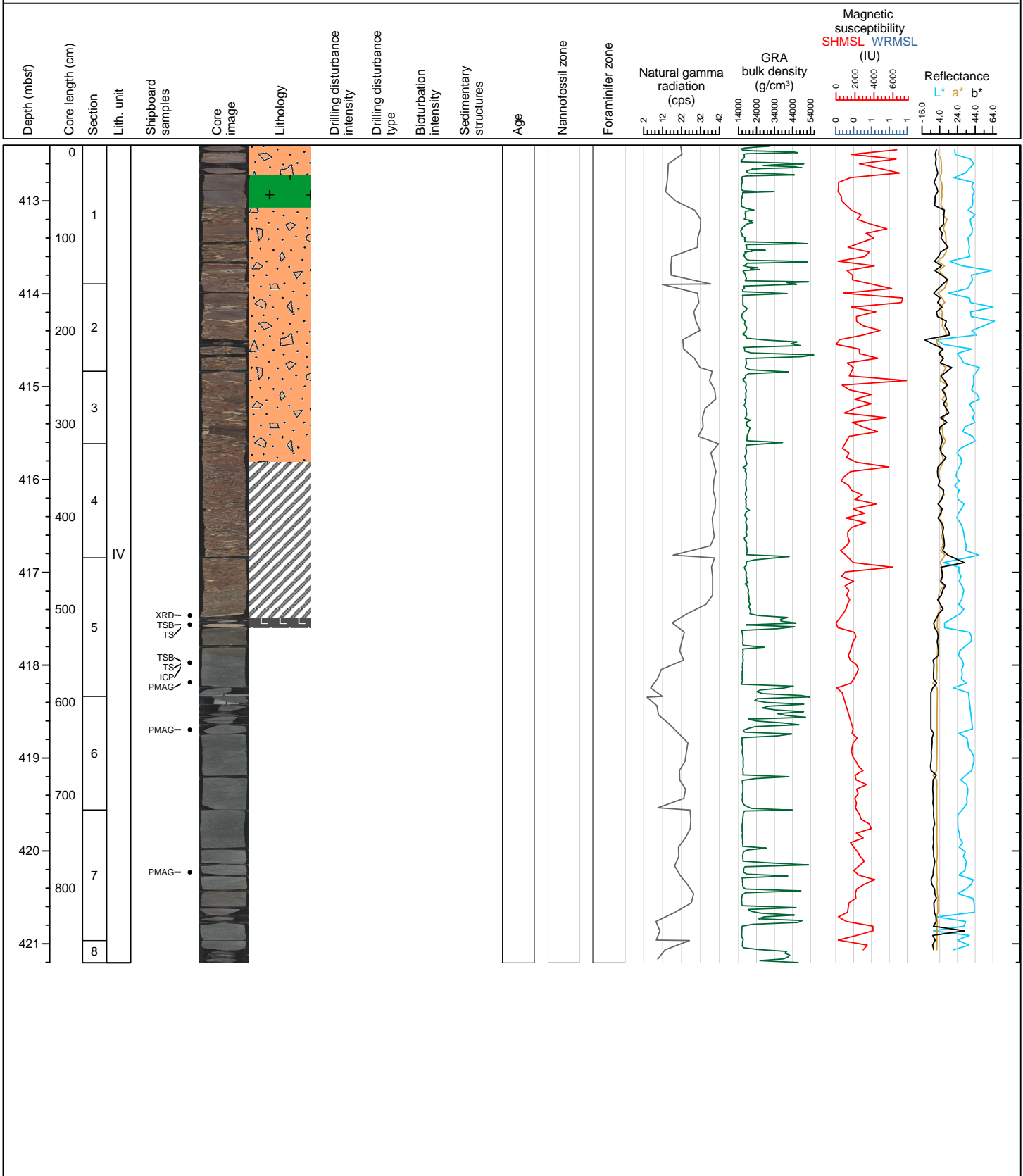
Bioturbated alternating dark greenish-gray to dark reddish brown tuffaceous, carbonate-rich silty sand with thin volcanoclastic turbidites, and thick polymict conglomeratic intervals with shell debris (Subunit IIIH); and basaltic block, bomb and lapillistone with light-colored cement of pale ash, calcite and zeolite (Unit IV). Unit boundary at 397.76 mbsf.



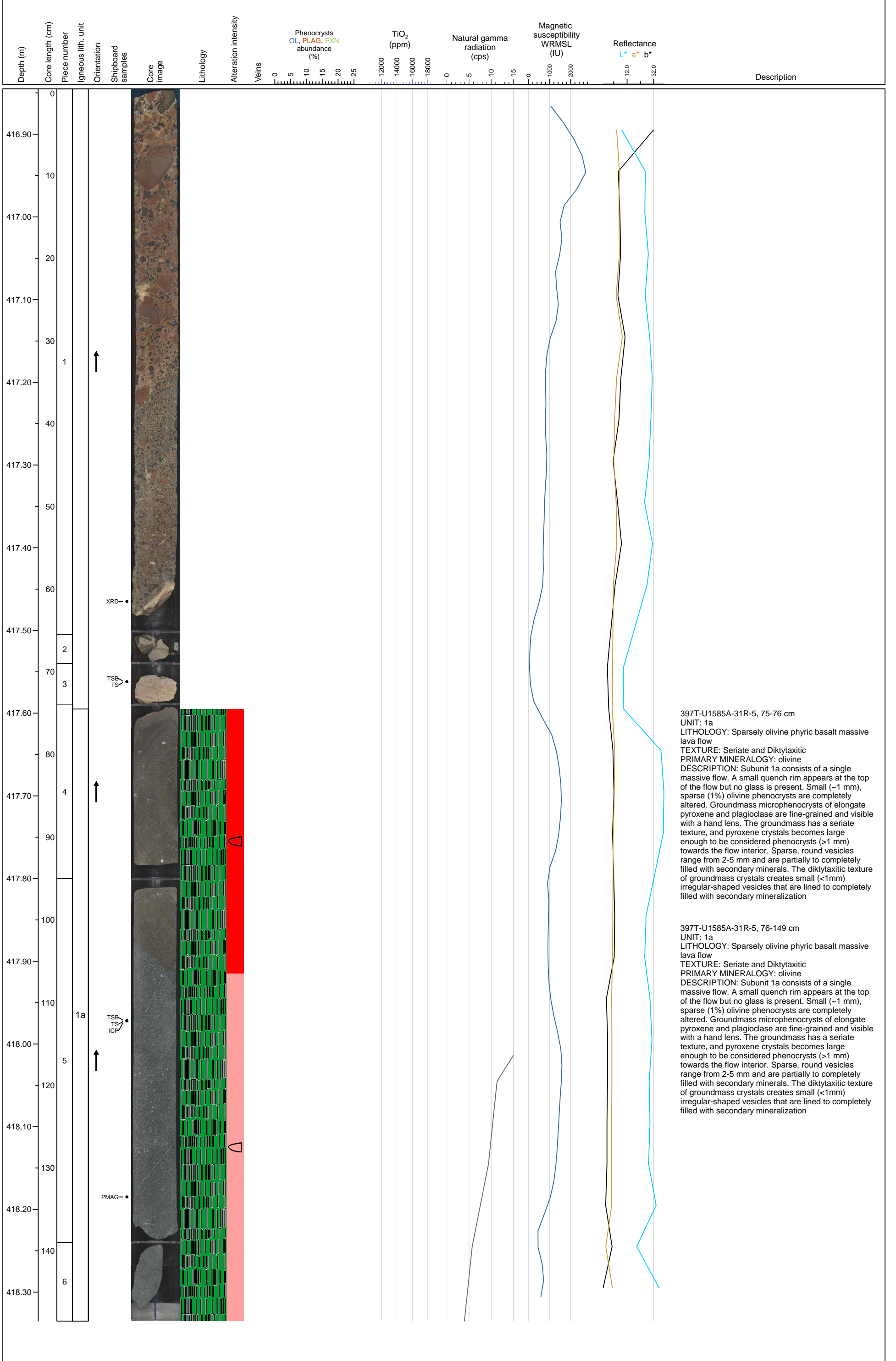


Hole 397T-U1585A Core 31R, Interval 412.4-421.205 m (CSF-A)

Basaltic block, bomb and lapillistone with light-colored cement of pale ash, calcite and zeolite (Unit IV); and igneous basement (Unit V). Unit boundary at 417.60 mbsf

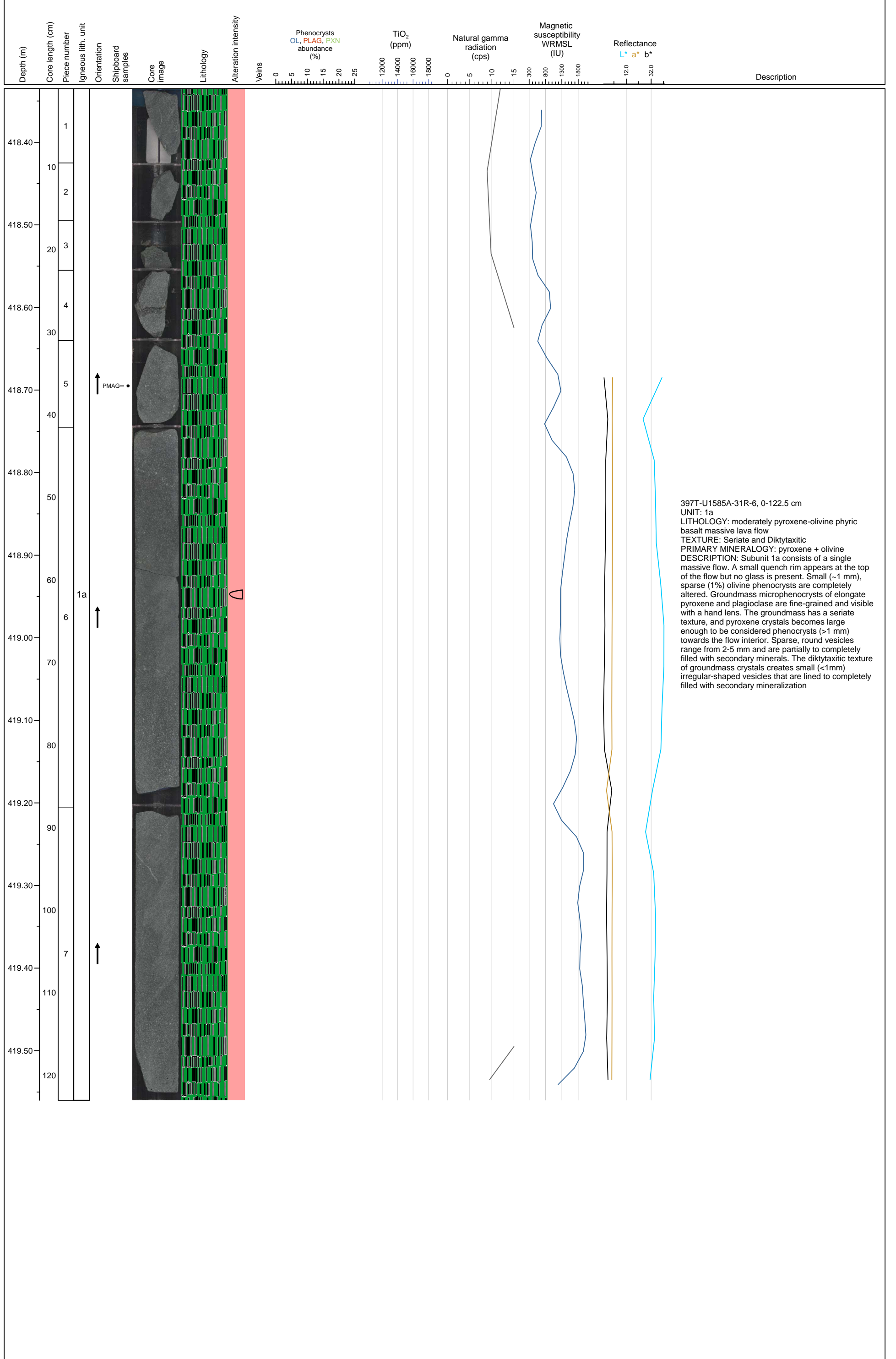


Hole 397T-U1585A-31R Section 5, Top of Section: 416.845 m (CSF-A)

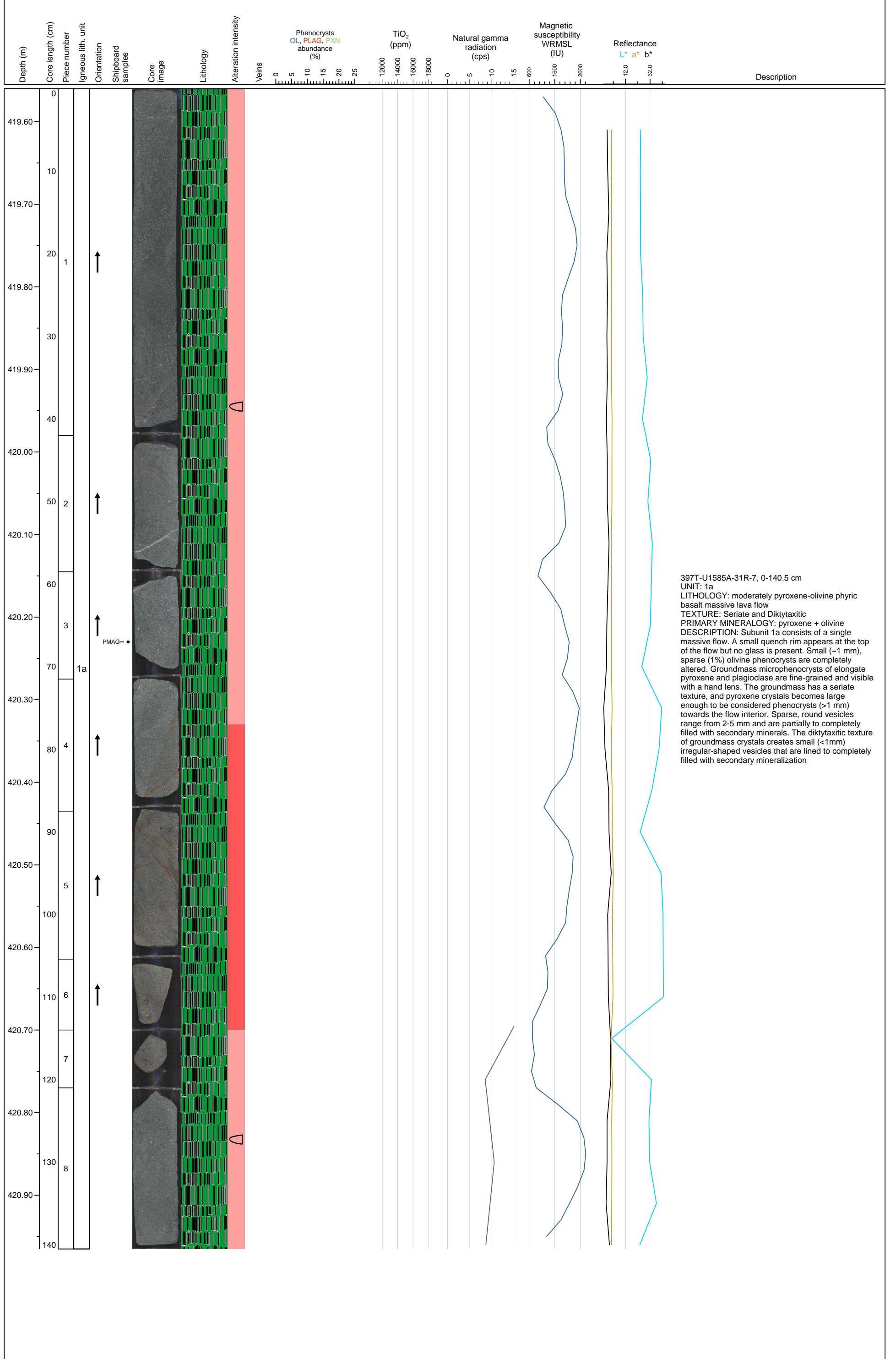




Hole 397T-U1585A-31R Section 6, Top of Section: 418.335 m (CSF-A)



Hole 397T-U1585A-31R Section 7, Top of Section: 419.56 m (CSF-A)

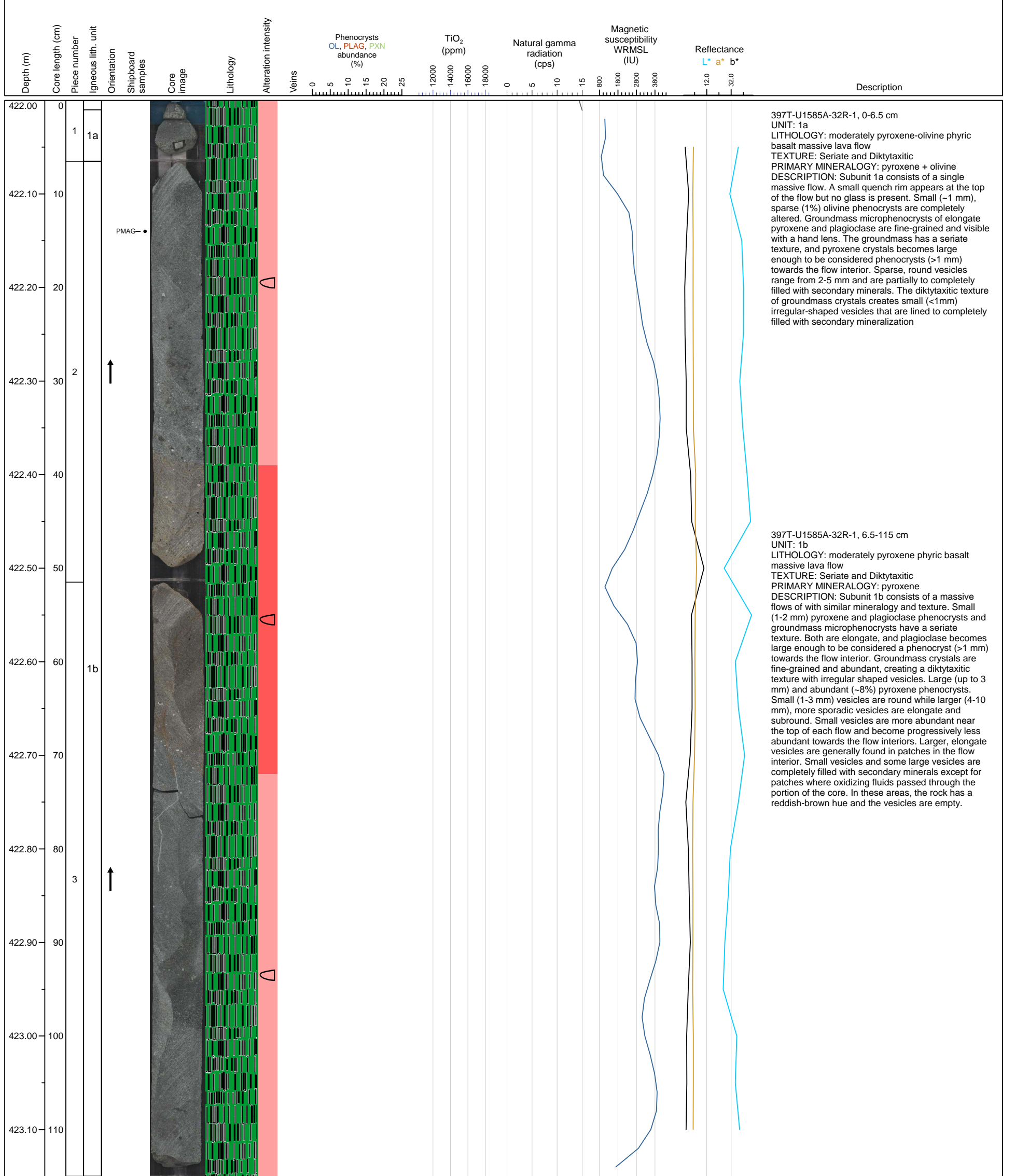




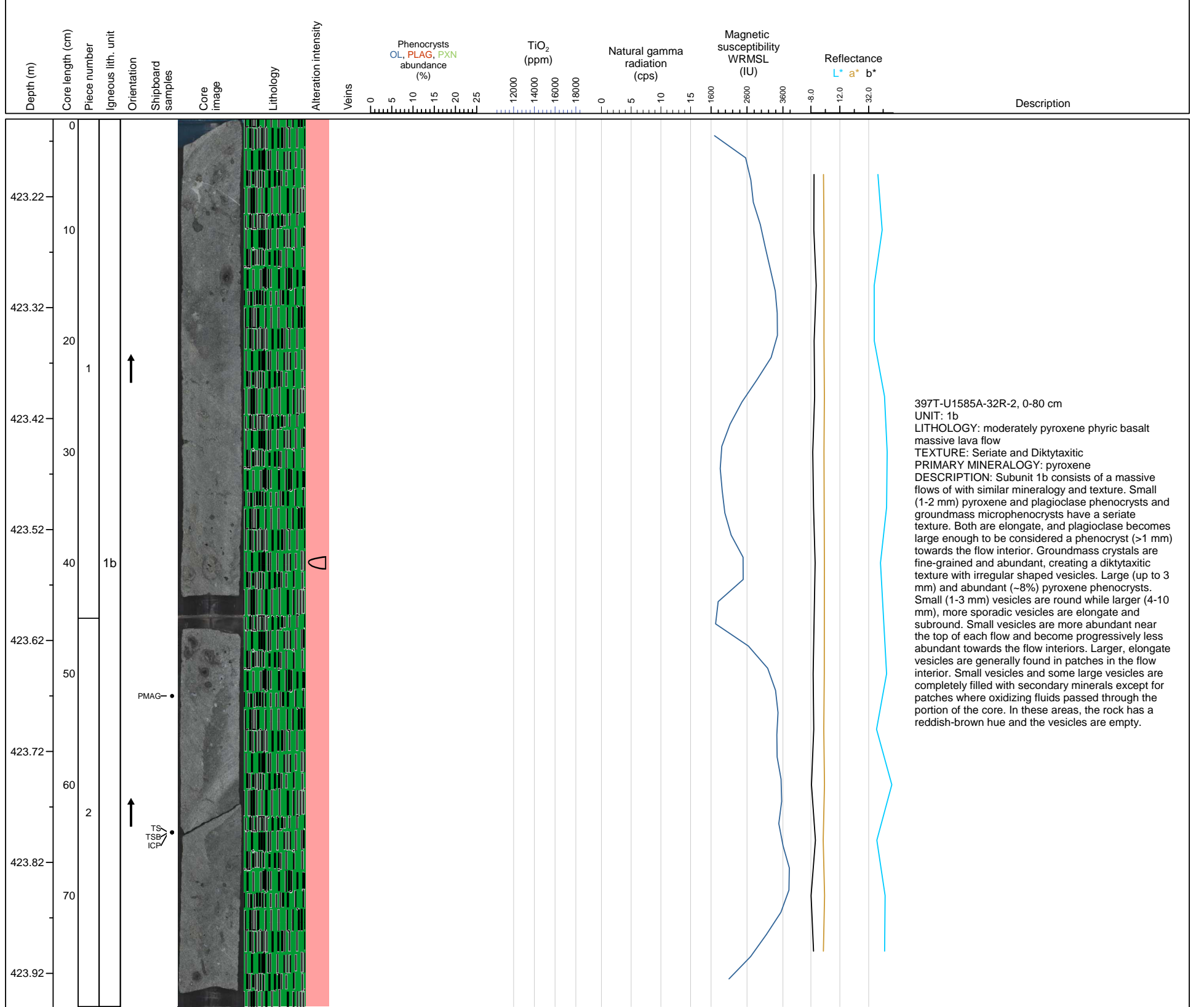
Hole 397T-U1585A-31R Section 8, Top of Section: 420.965 m (CSF-A)



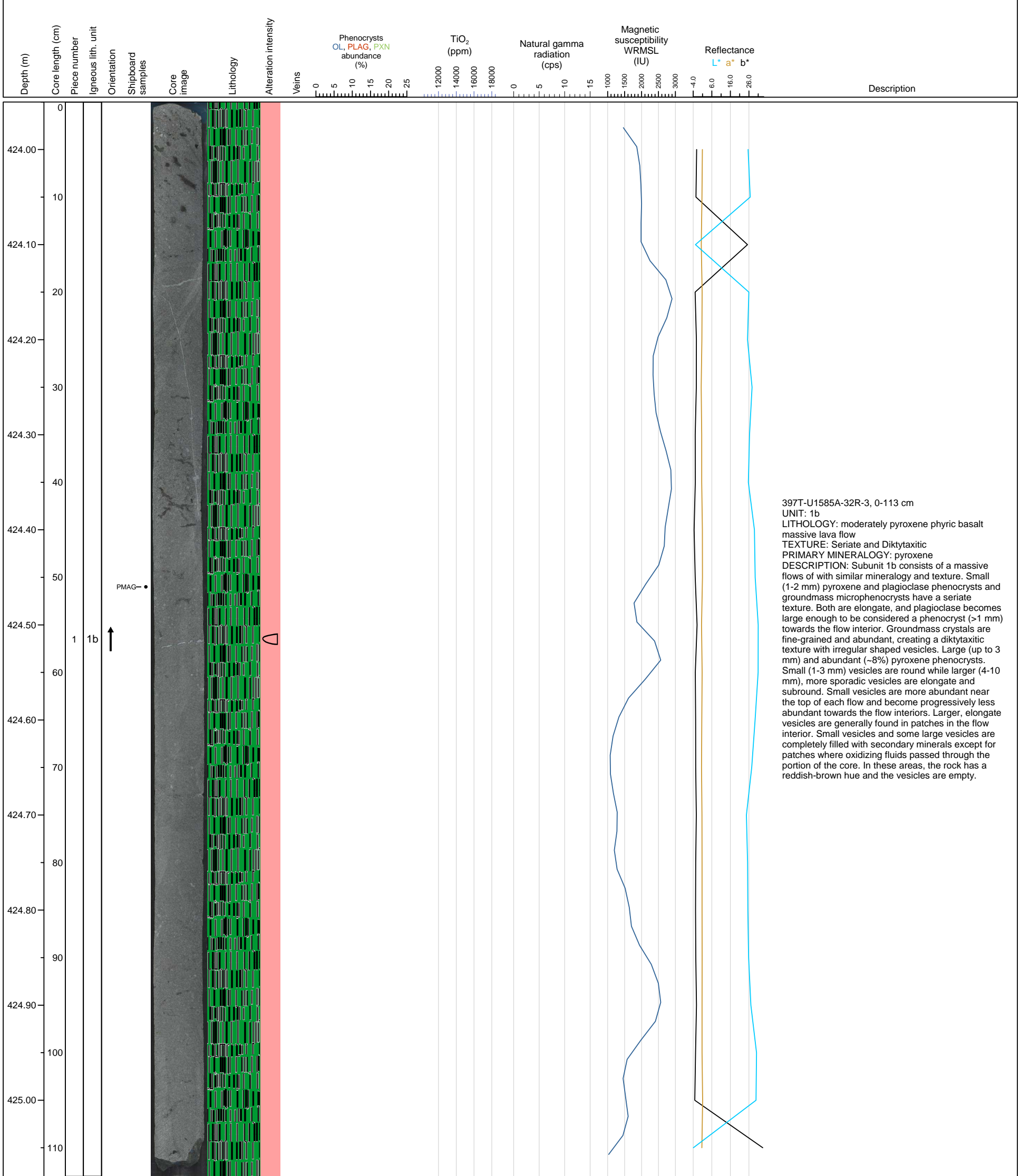
Hole 397T-U1585A-32R Section 1, Top of Section: 422.0 m (CSF-A)



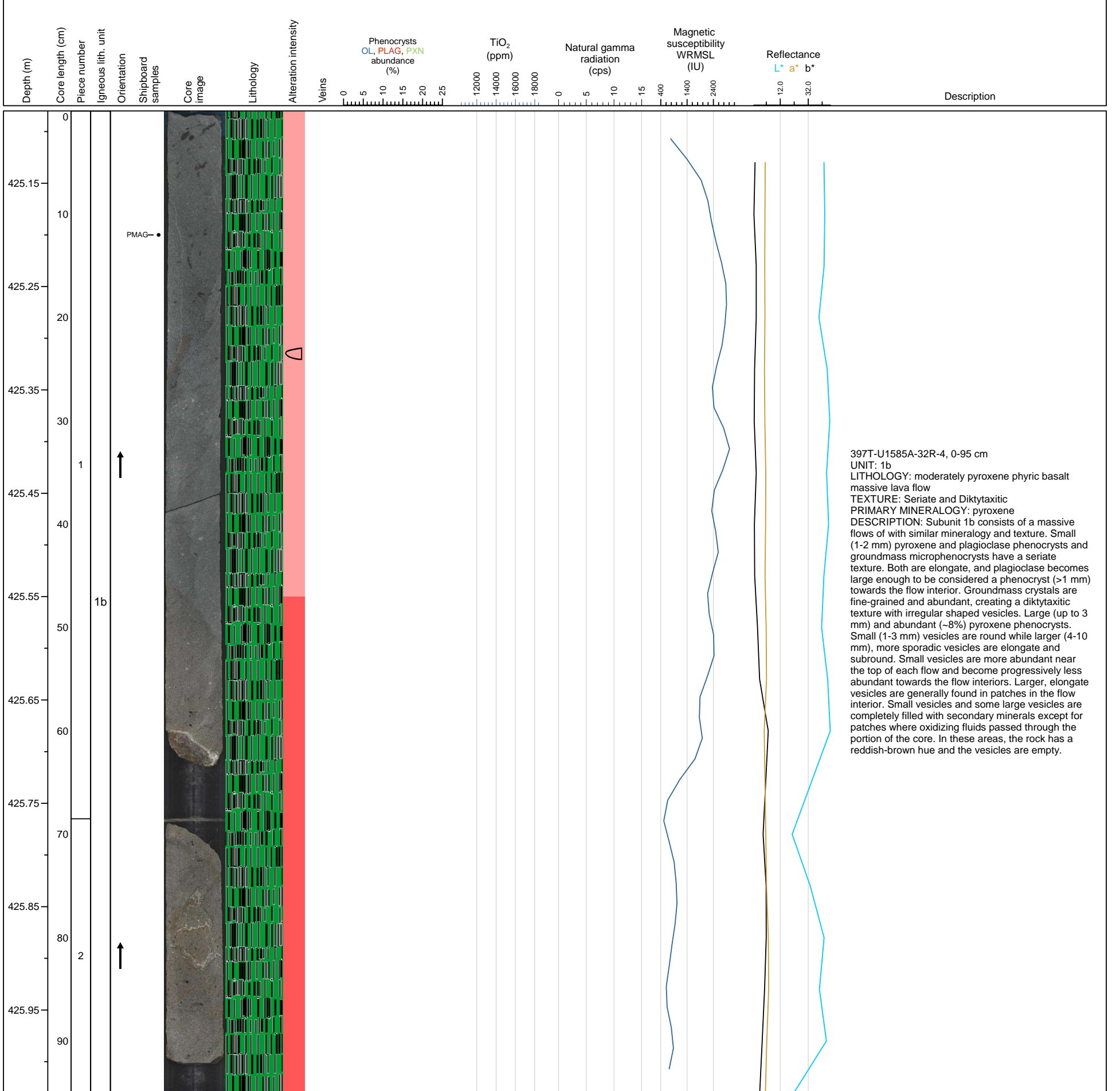
Hole 397T-U1585A-32R Section 2, Top of Section: 423.15 m (CSF-A)



Hole 397T-U1585A-32R Section 3, Top of Section: 423.95 m (CSF-A)

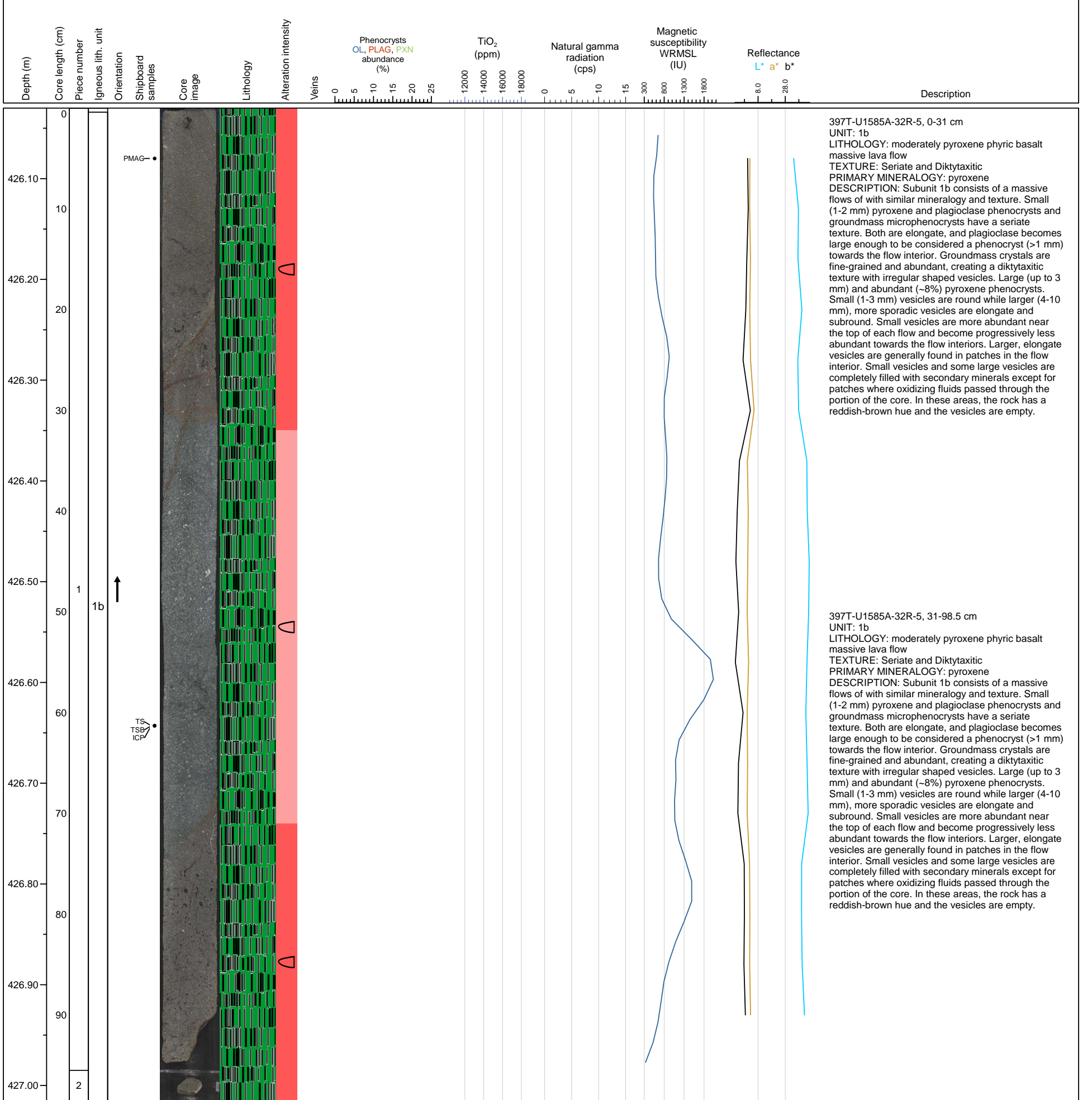


Hole 397T-U1585A-32R Section 4, Top of Section: 425.08 m (CSF-A)

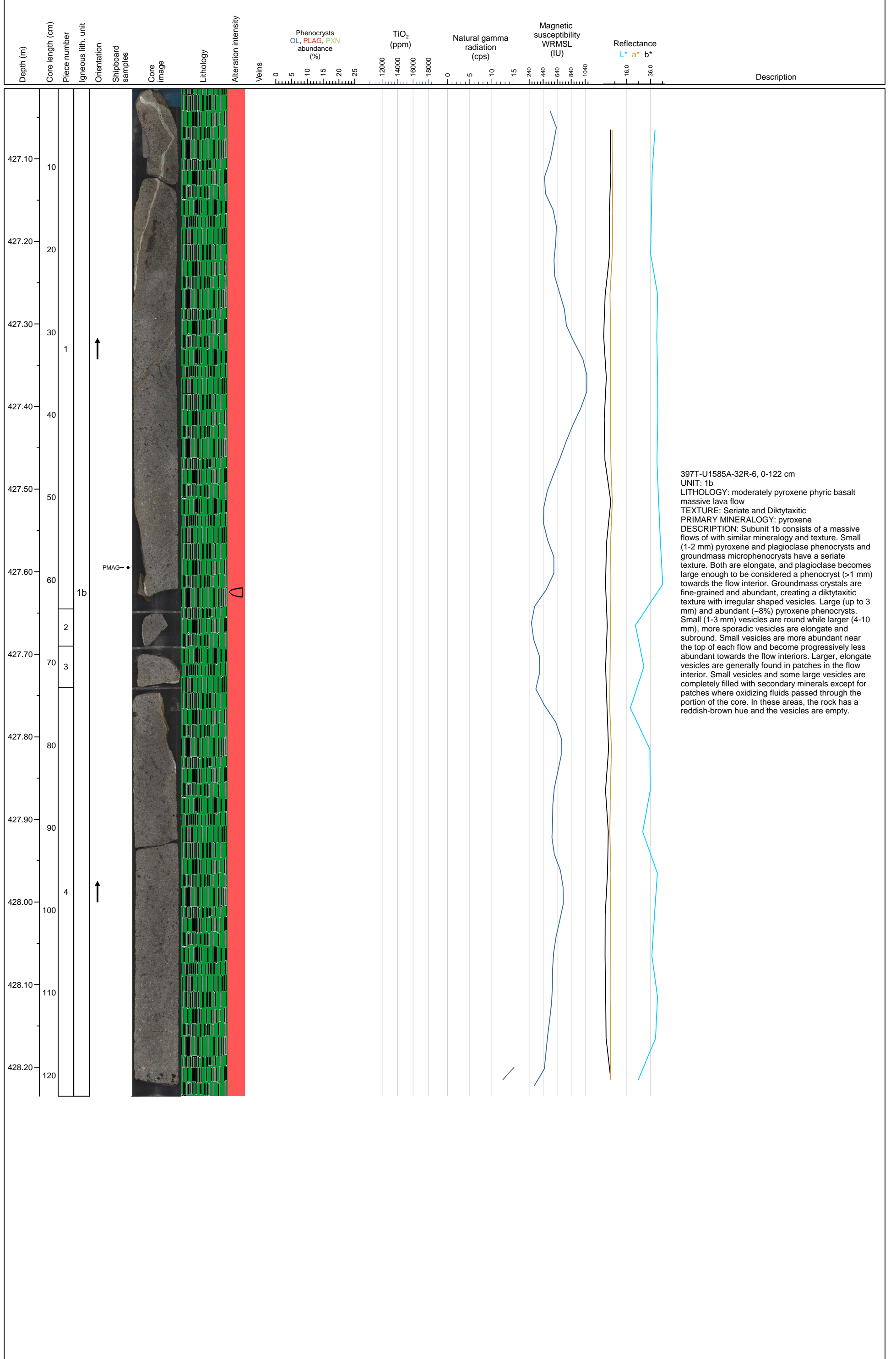




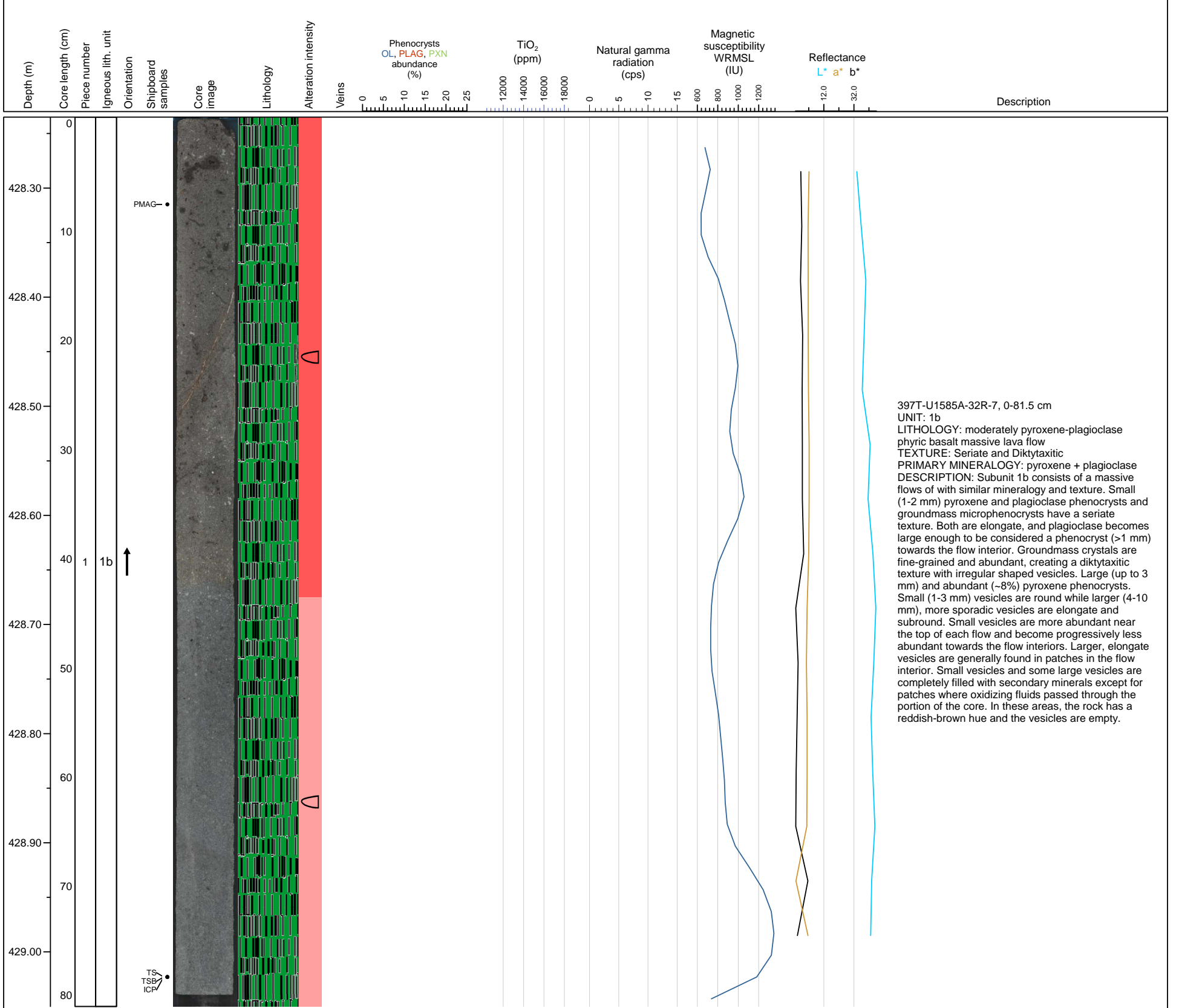
Hole 397T-U1585A-32R Section 5, Top of Section: 426.03 m (CSF-A)



Hole 397T-U1585A-32R Section 6, Top of Section: 427.015 m (CSF-A)

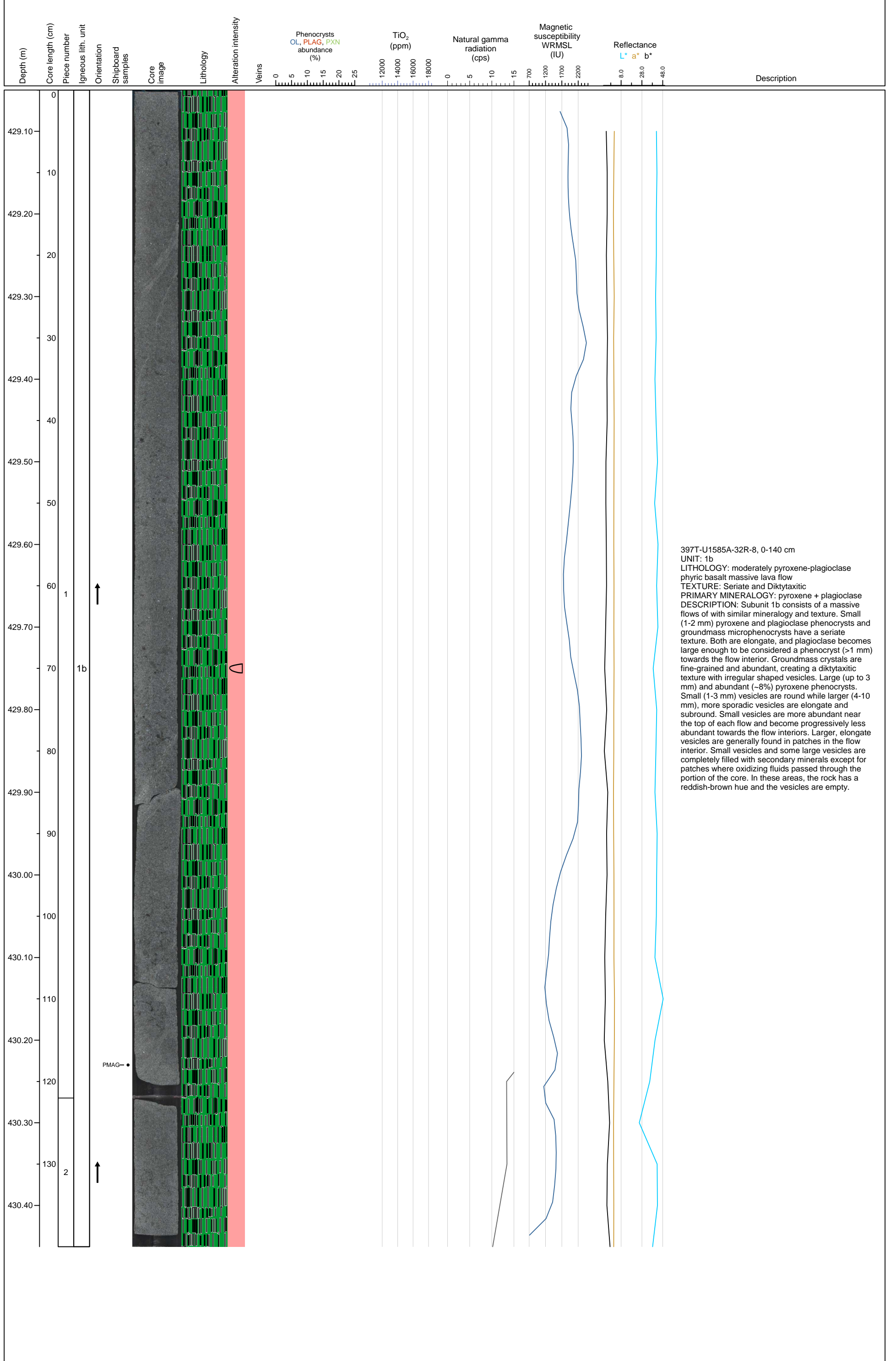


Hole 397T-U1585A-32R Section 7, Top of Section: 428.235 m (CSF-A)

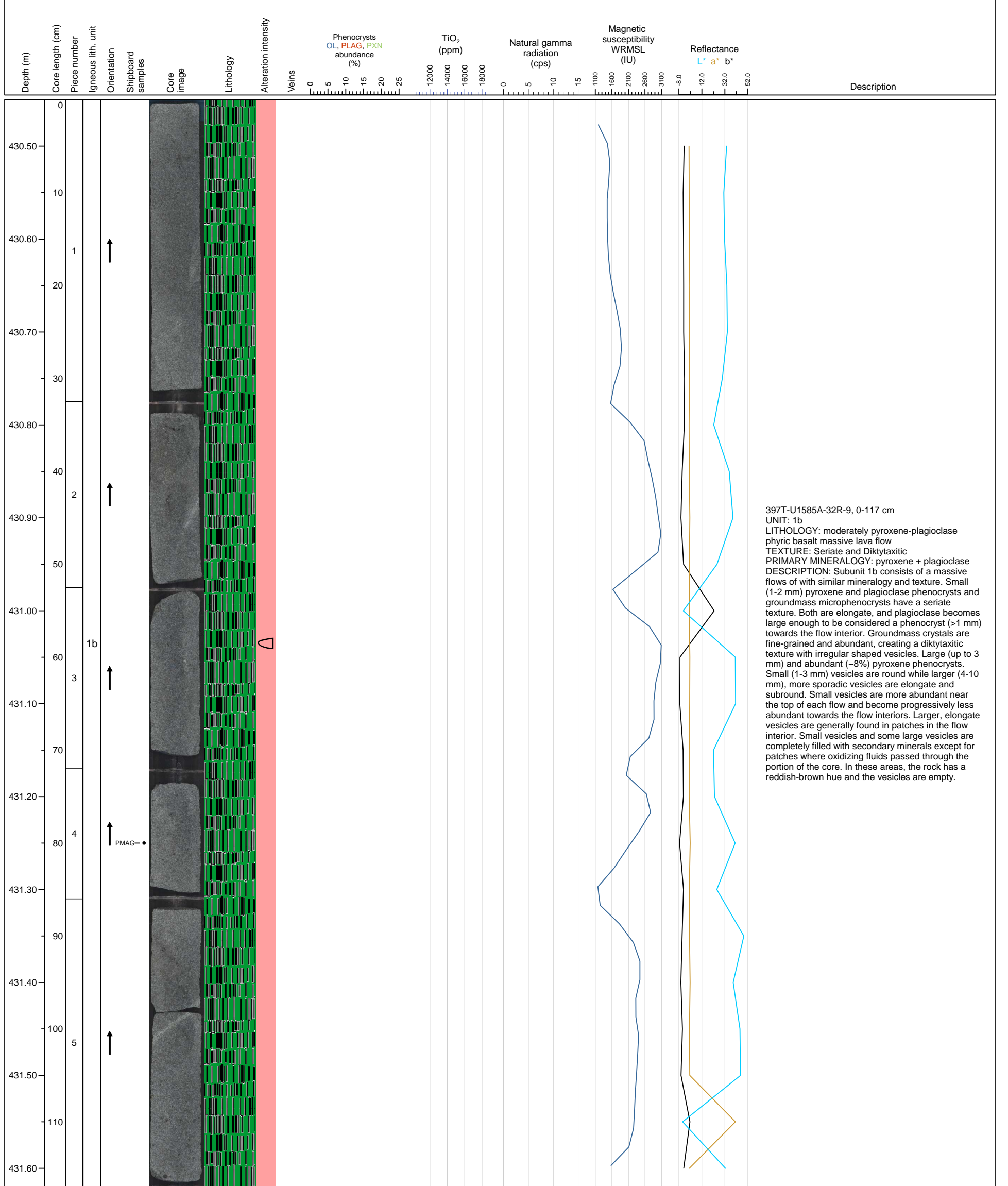




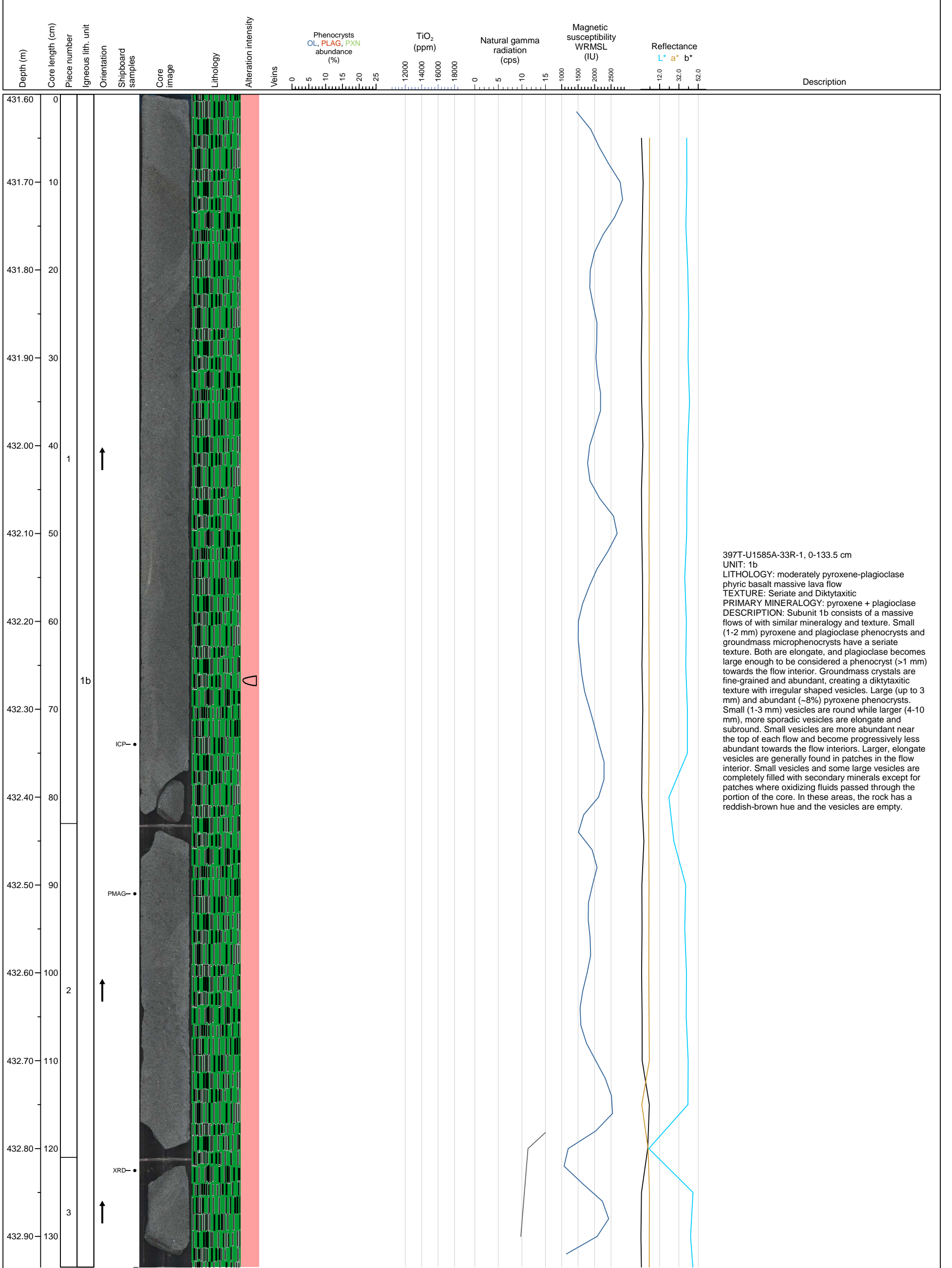
Hole 397T-U1585A-32R Section 8, Top of Section: 429.05 m (CSF-A)



Hole 397T-U1585A-32R Section 9, Top of Section: 430.45 m (CSF-A)

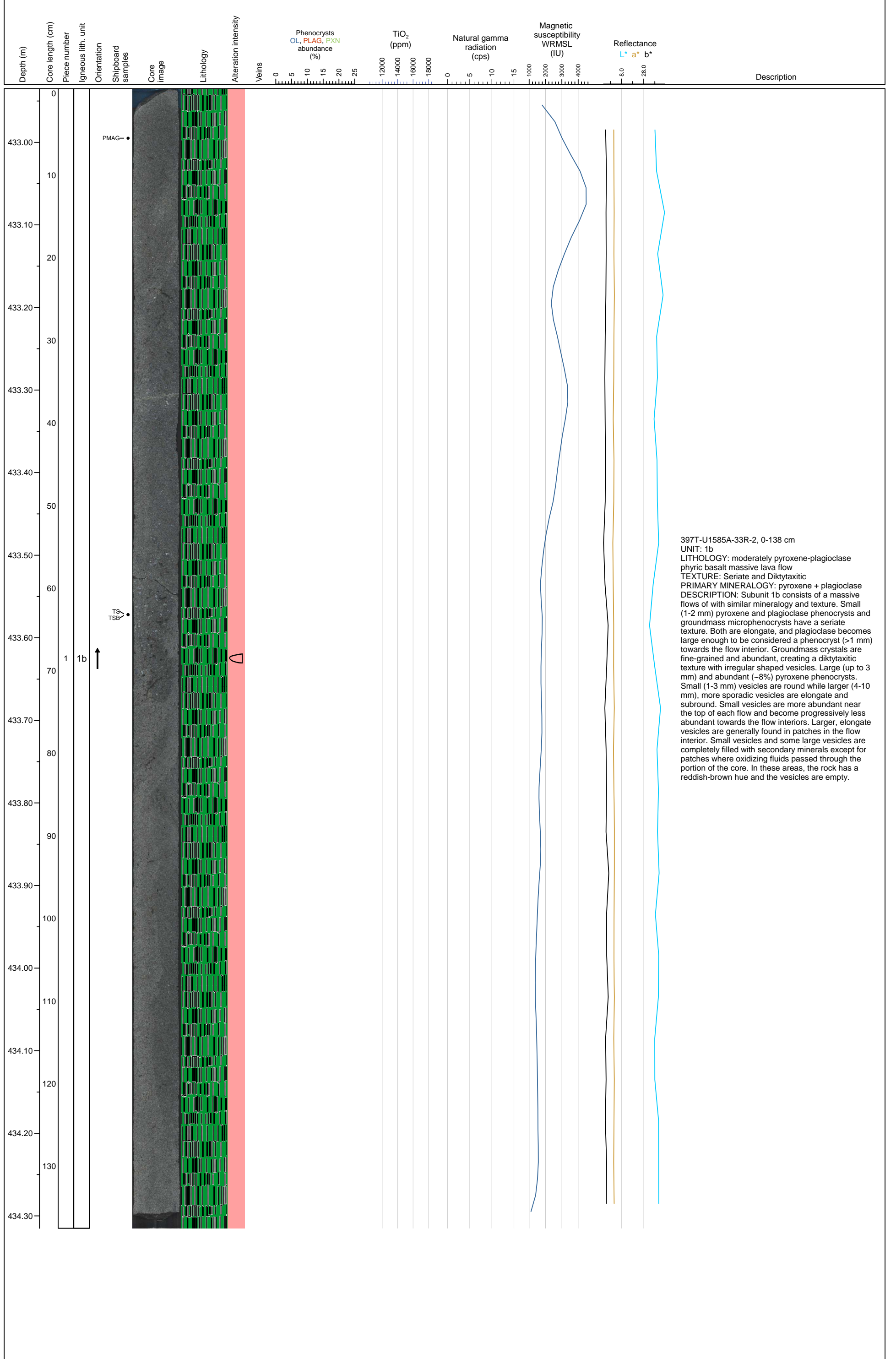


Hole 397T-U1585A-33R Section 1, Top of Section: 431.6 m (CSF-A)

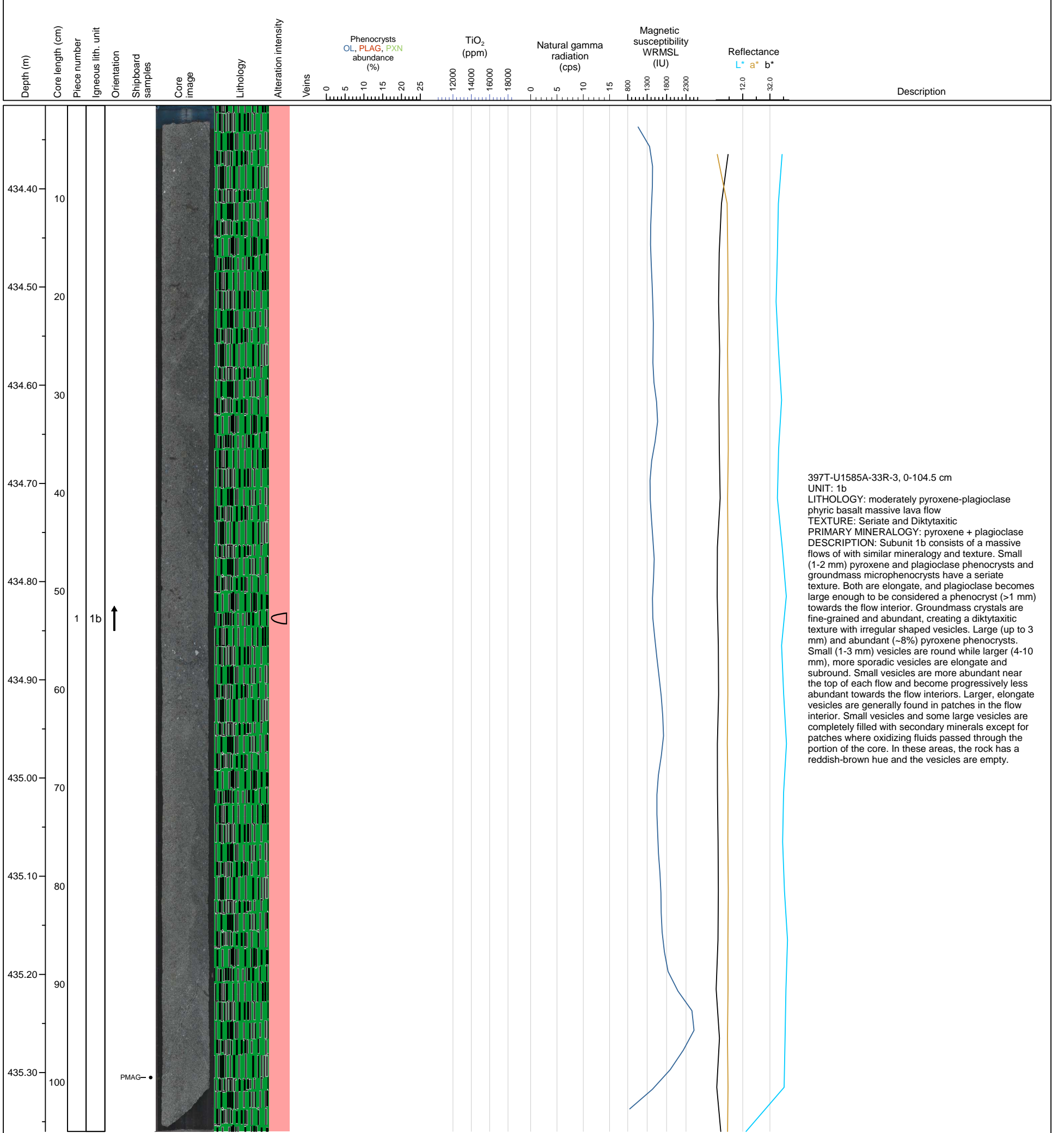




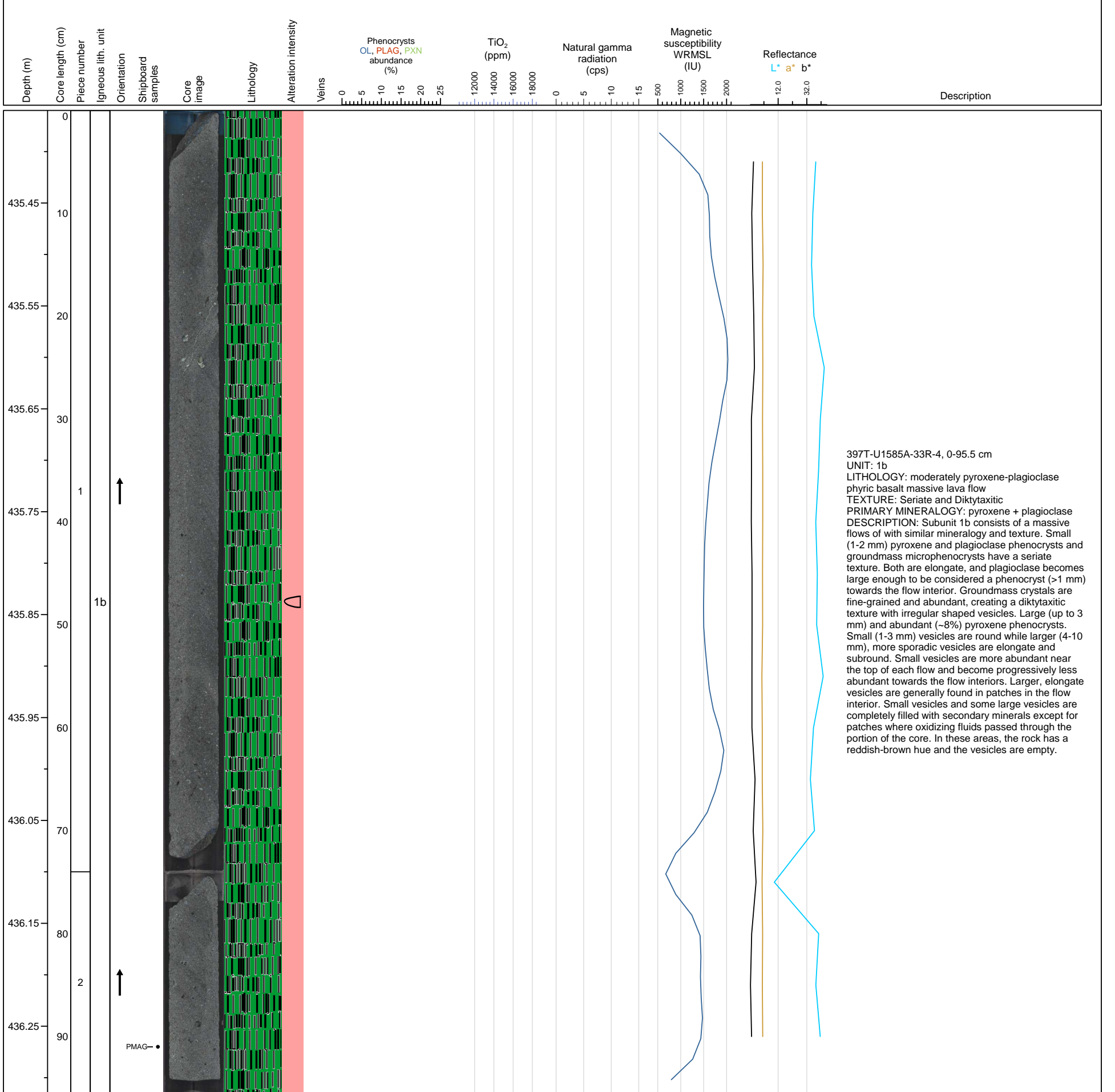
Hole 397T-U1585A-33R Section 2, Top of Section: 432.935 m (CSF-A)



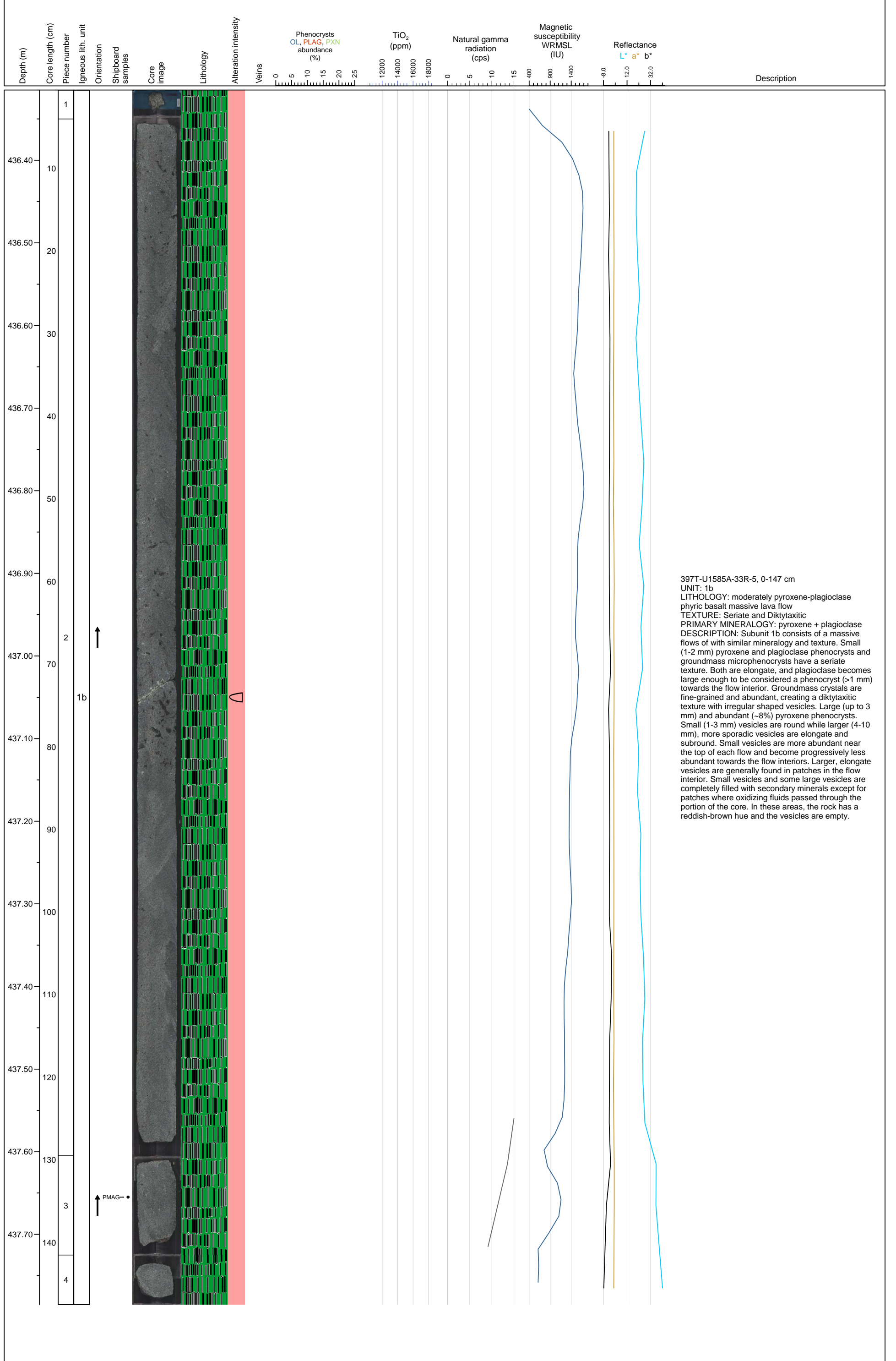
Hole 397T-U1585A-33R Section 3, Top of Section: 434.315 m (CSF-A)



Hole 397T-U1585A-33R Section 4, Top of Section: 435.36 m (CSF-A)

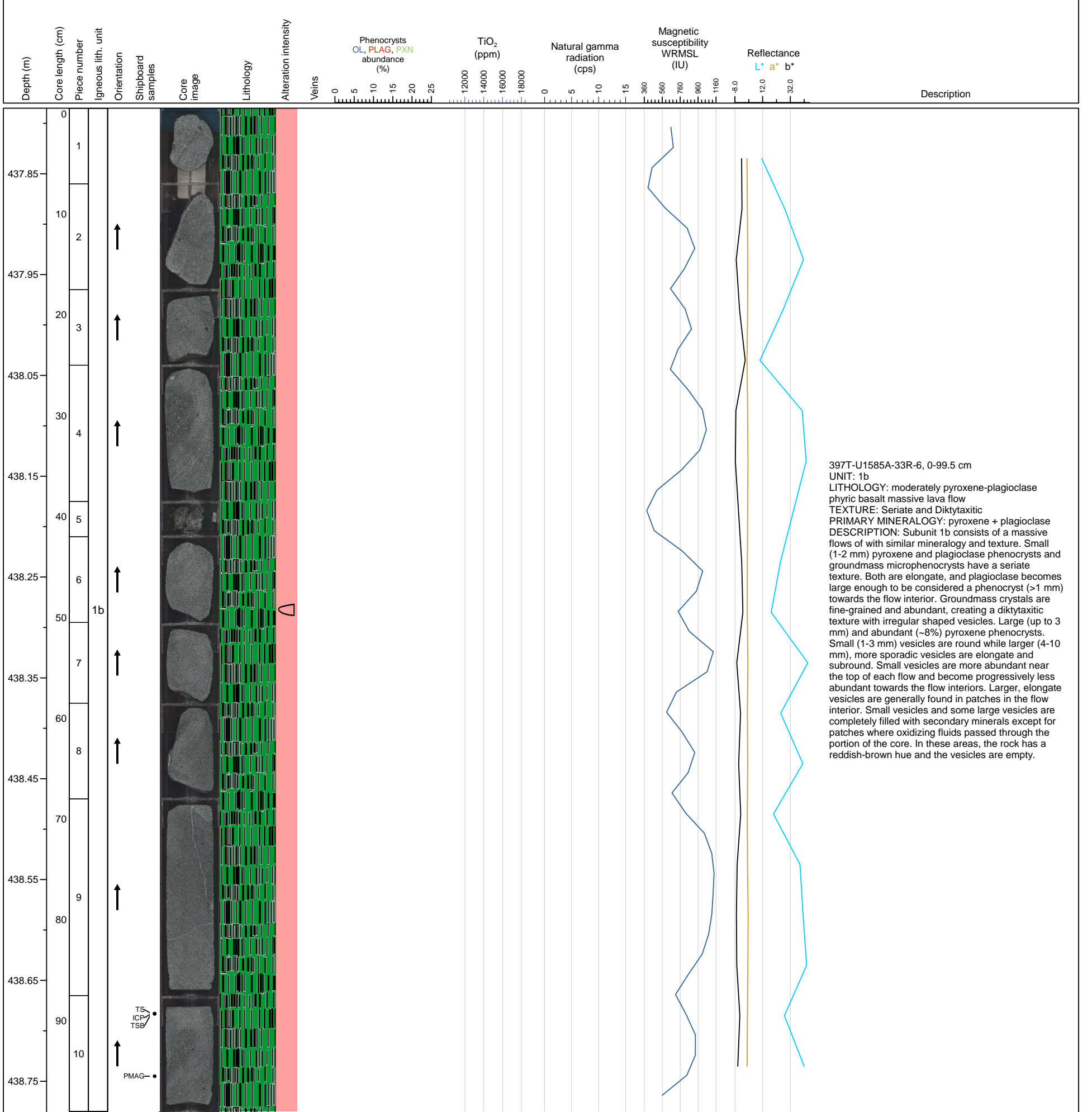


Hole 397T-U1585A-33R Section 5, Top of Section: 436.315 m (CSF-A)



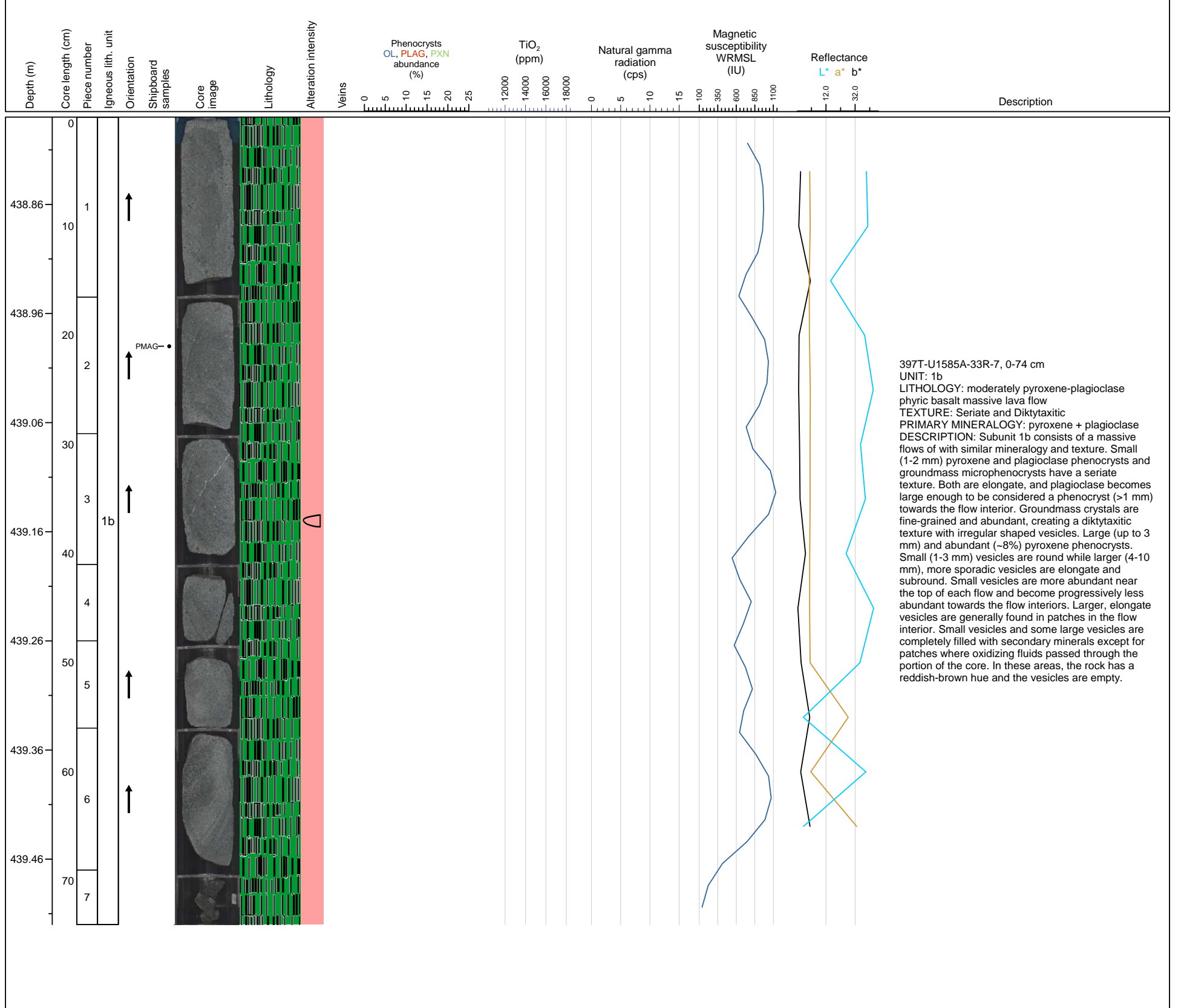


Hole 397T-U1585A-33R Section 6, Top of Section: 437.785 m (CSF-A)

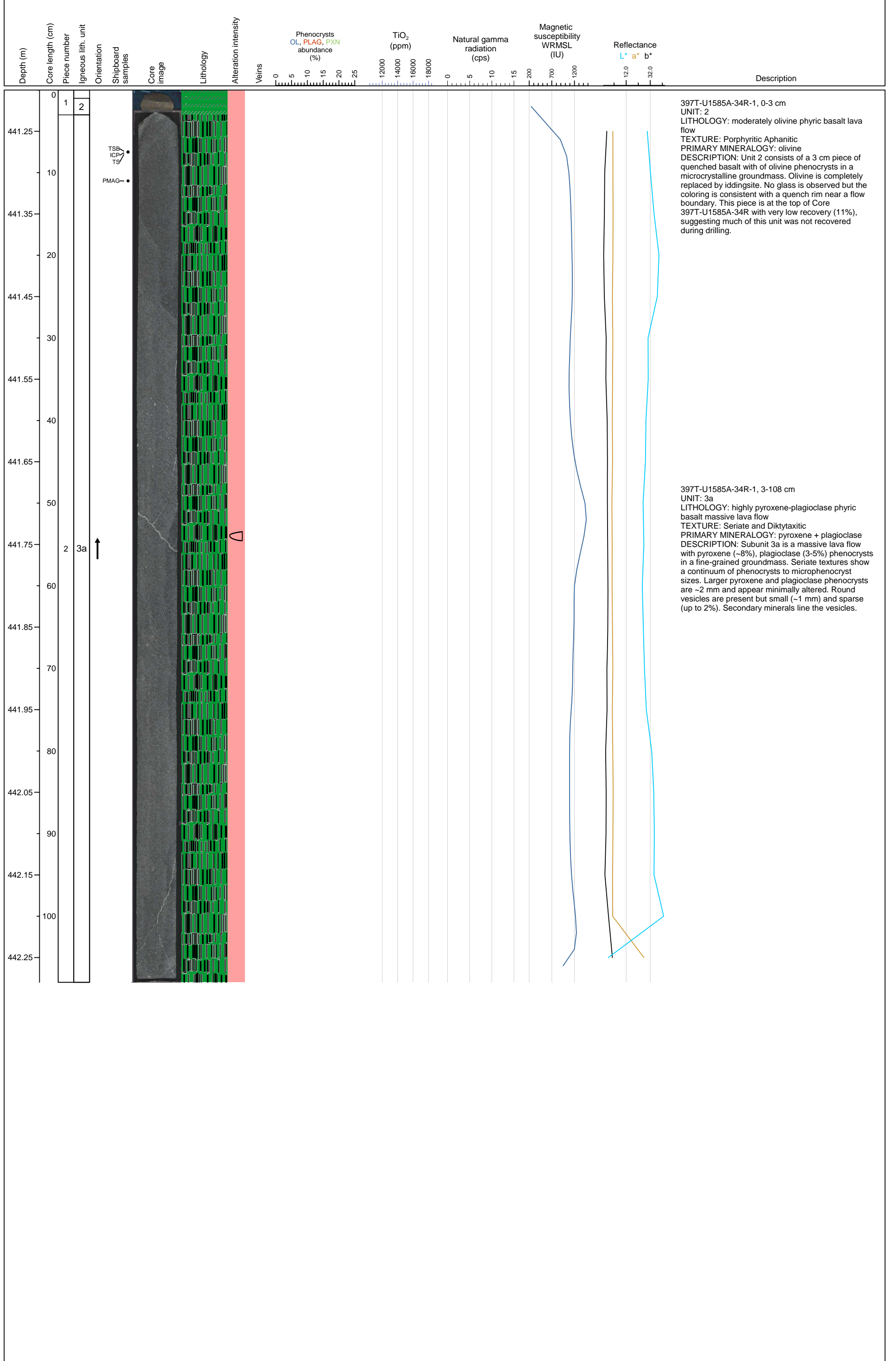




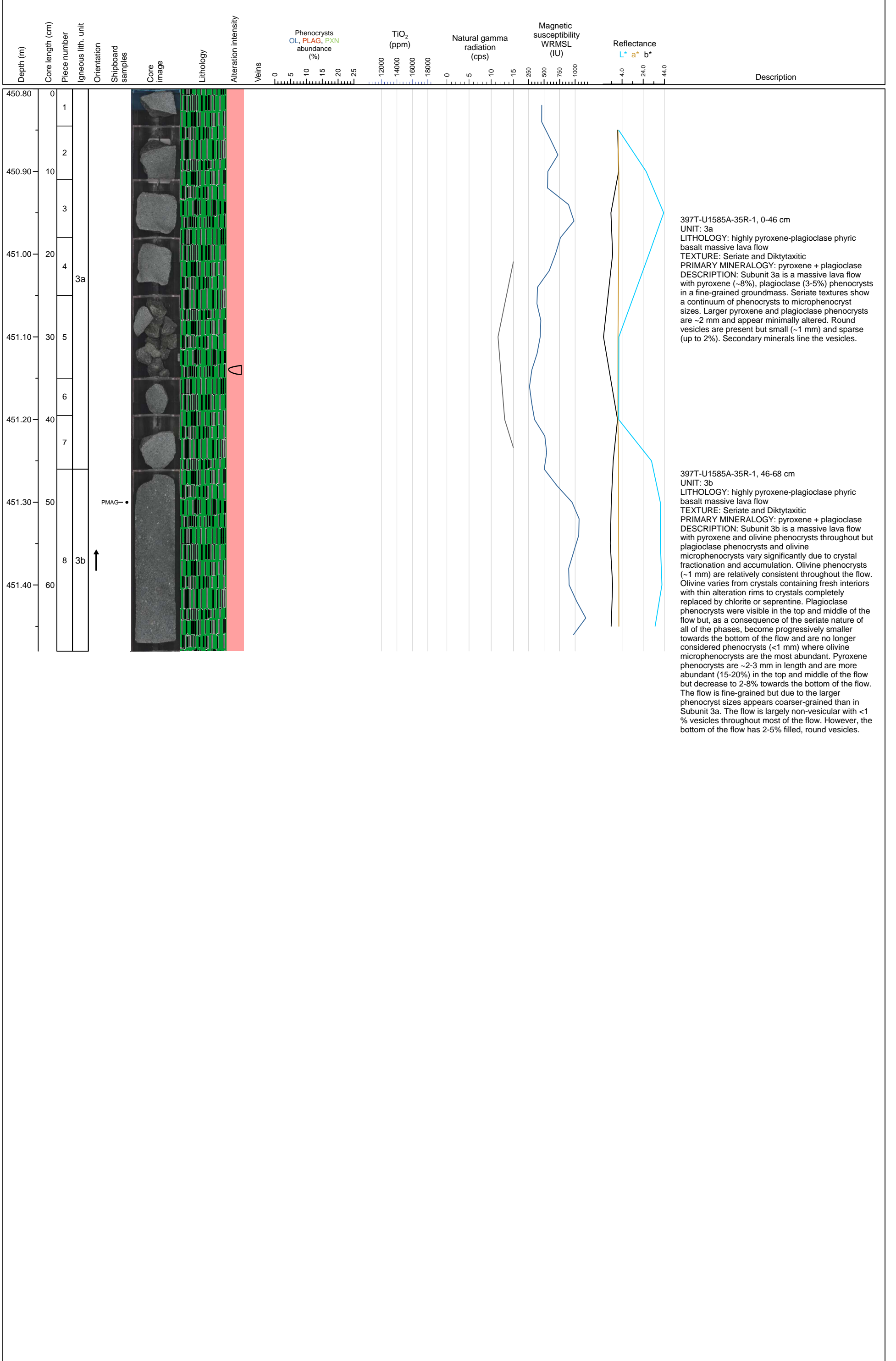
Hole 397T-U1585A-33R Section 7, Top of Section: 438.78 m (CSF-A)



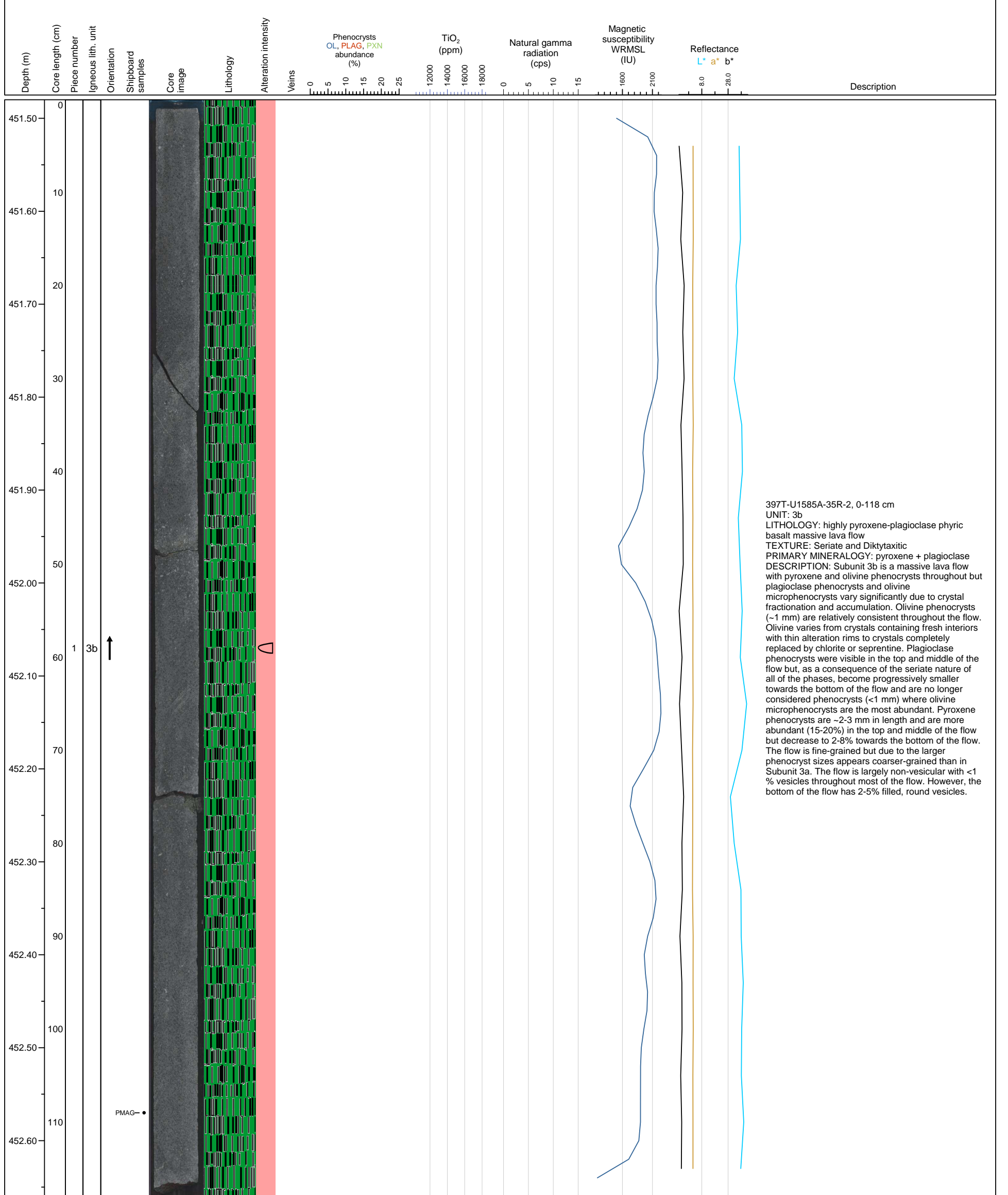
Hole 397T-U1585A-34R Section 1, Top of Section: 441.2 m (CSF-A)



Hole 397T-U1585A-35R Section 1, Top of Section: 450.8 m (CSF-A)

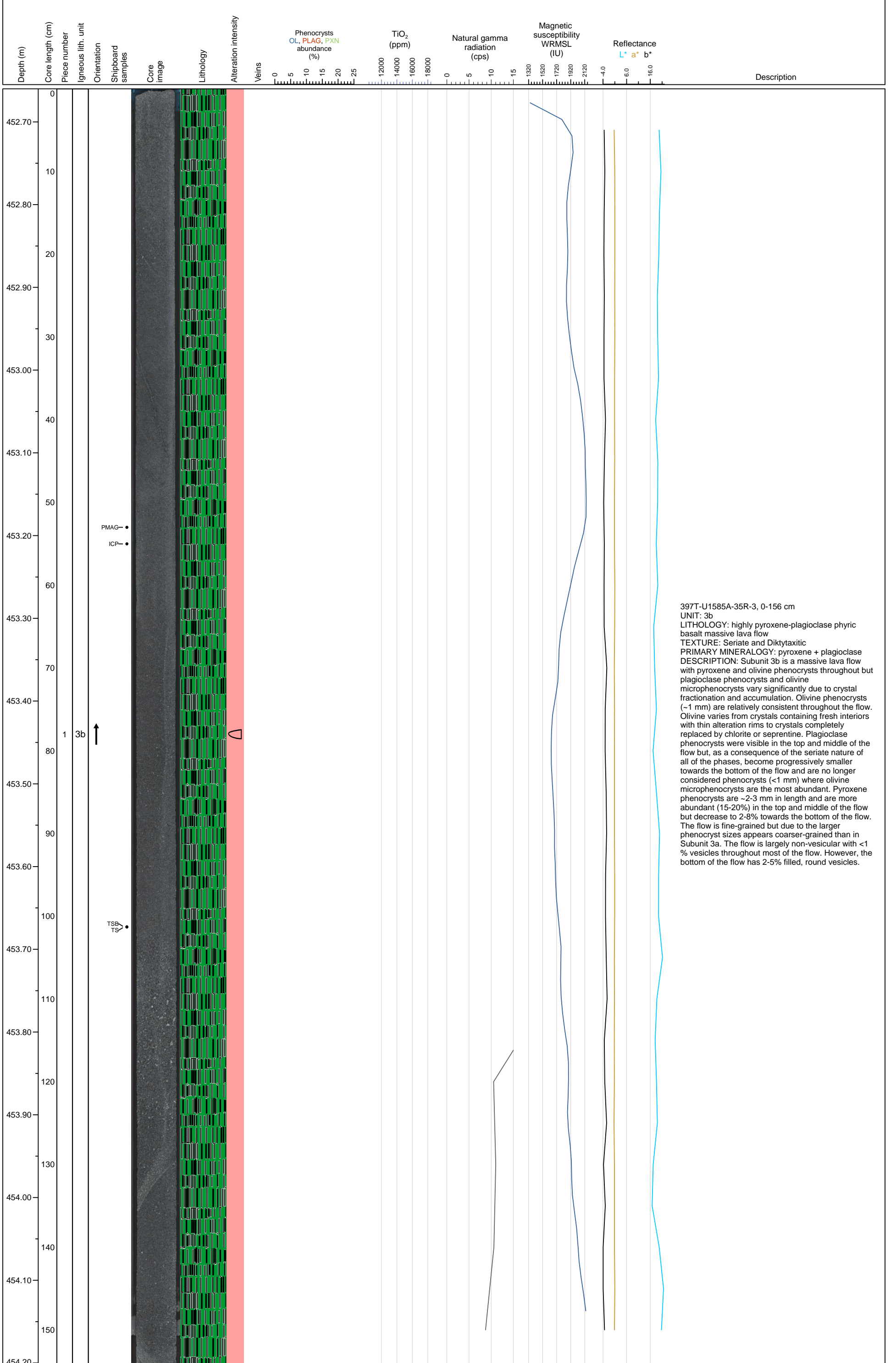


Hole 397T-U1585A-35R Section 2, Top of Section: 451.48 m (CSF-A)

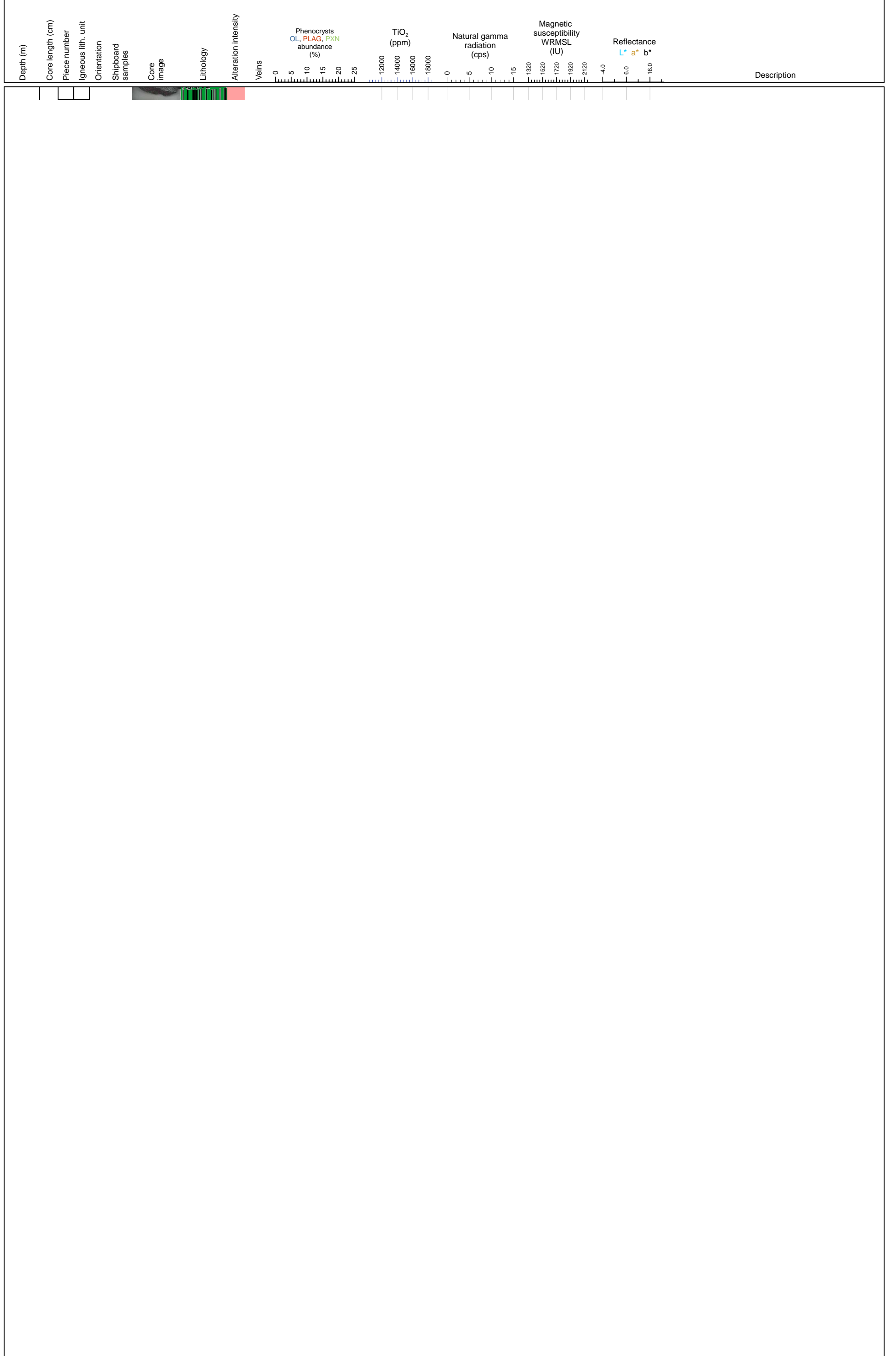


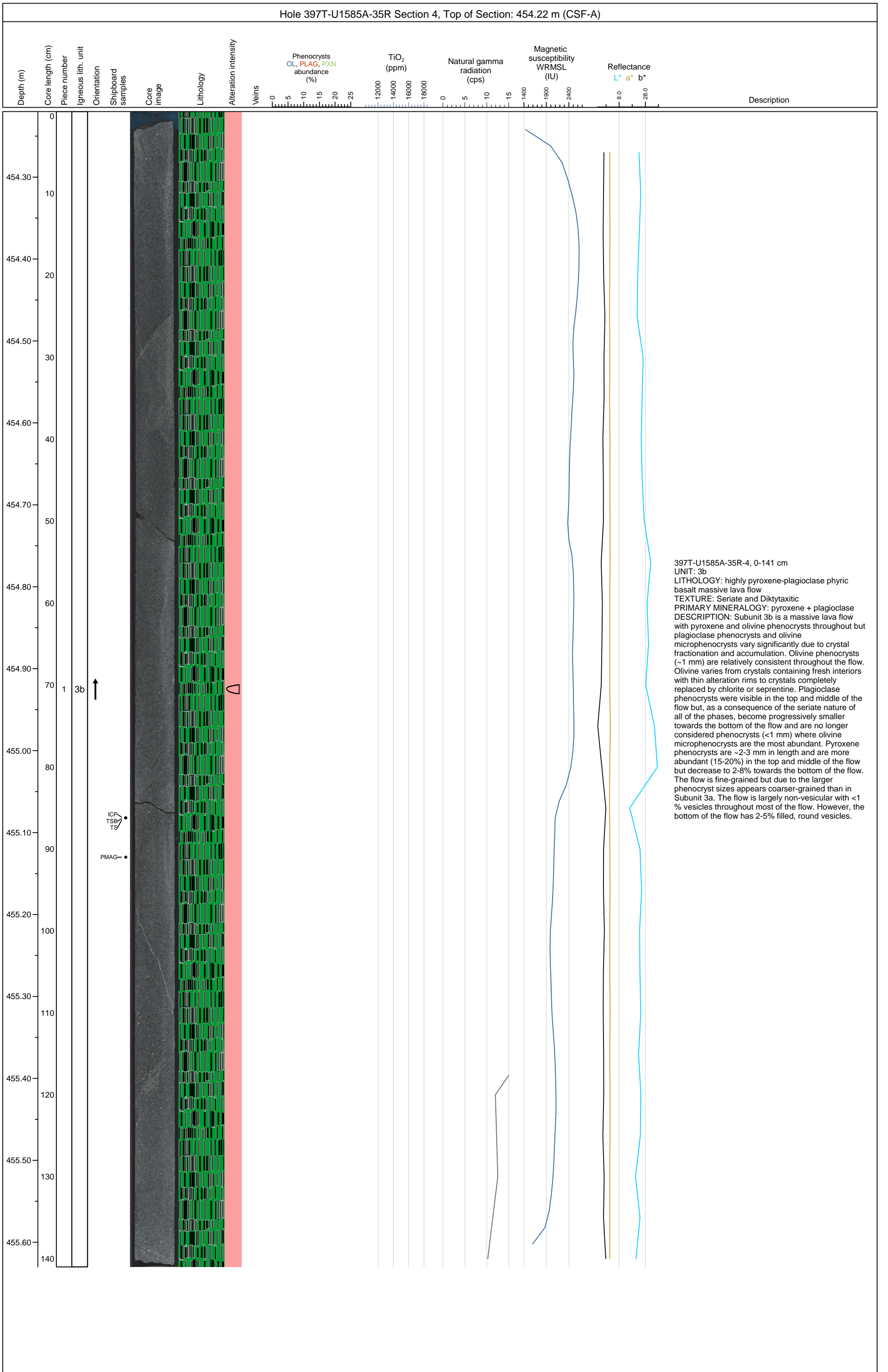


Hole 397T-U1585A-35R Section 3, Top of Section: 452.66 m (CSF-A)

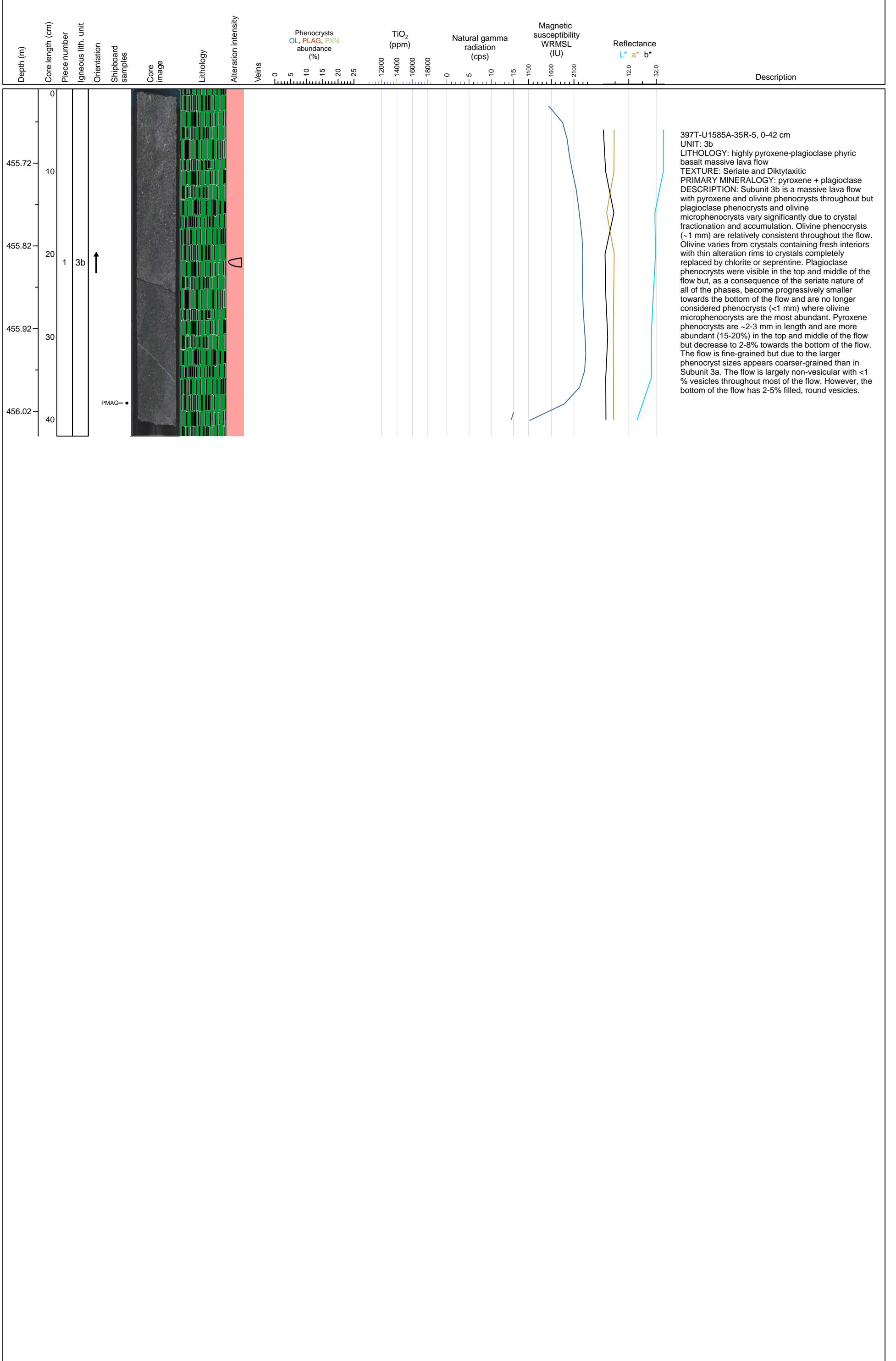


Hole 397T-U1585A-35R Section 3, Top of Section: 452.66 m (CSF-A)



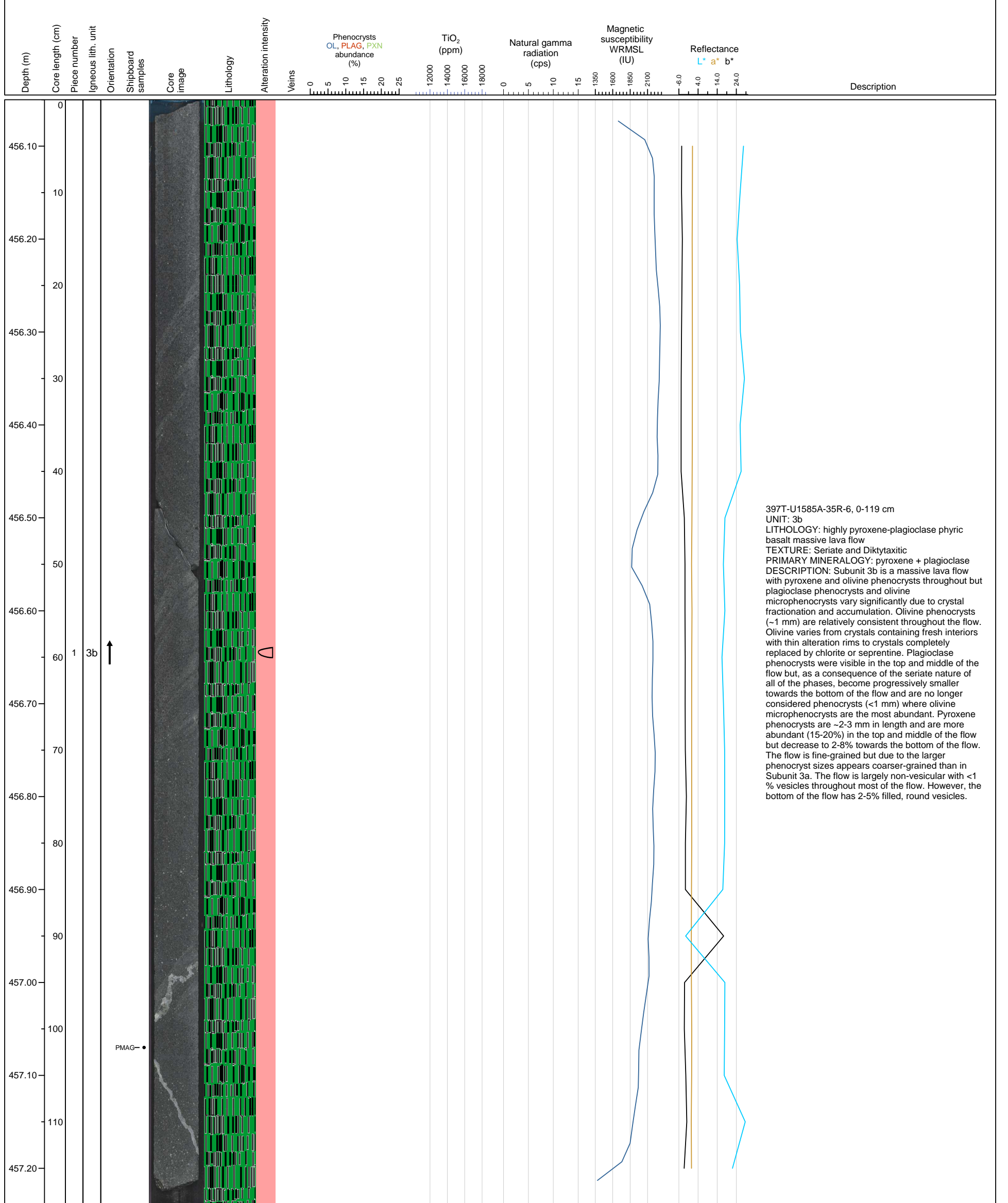


Hole 397T-U1585A-35R Section 5, Top of Section: 455.63 m (CSF-A)

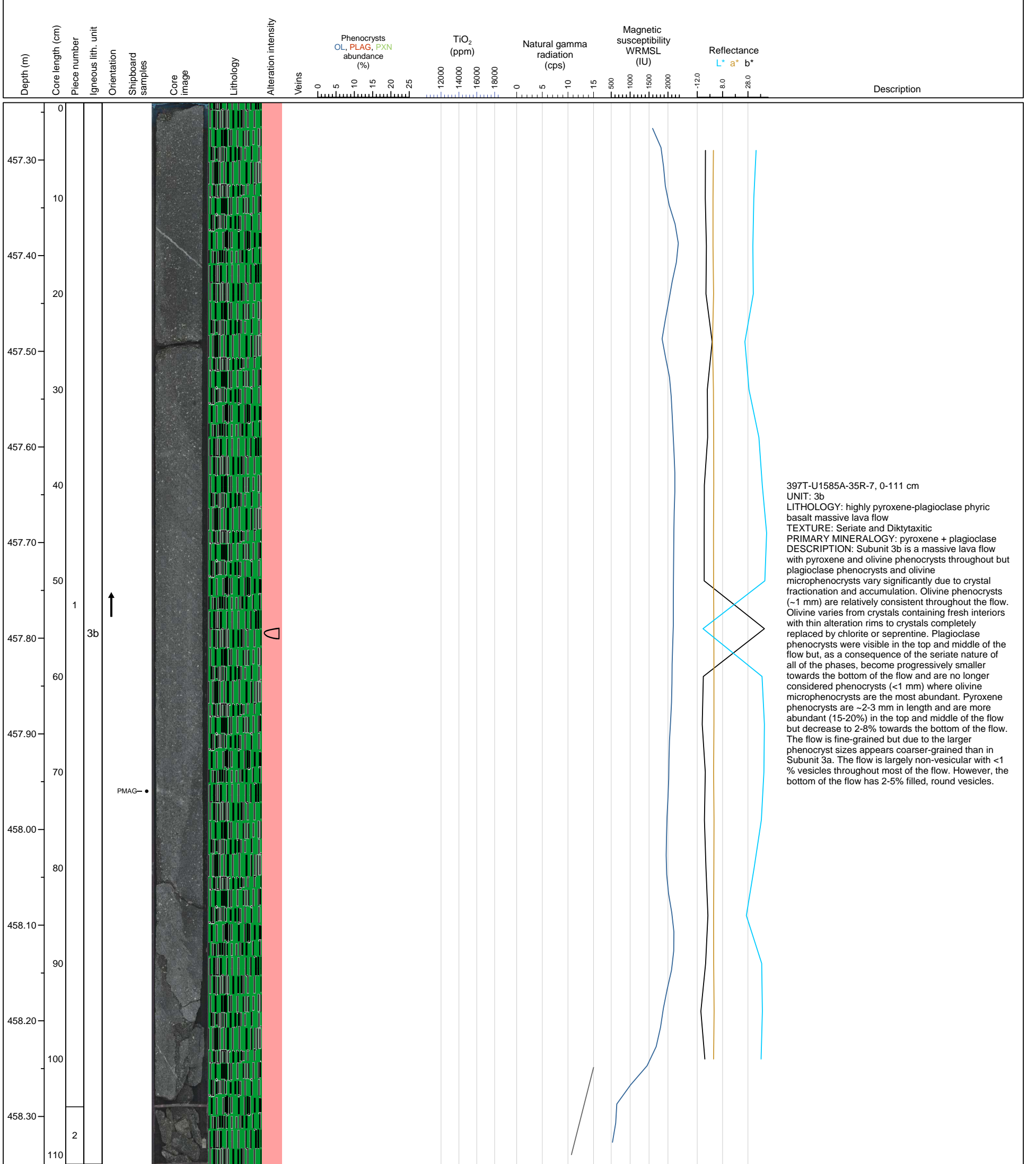




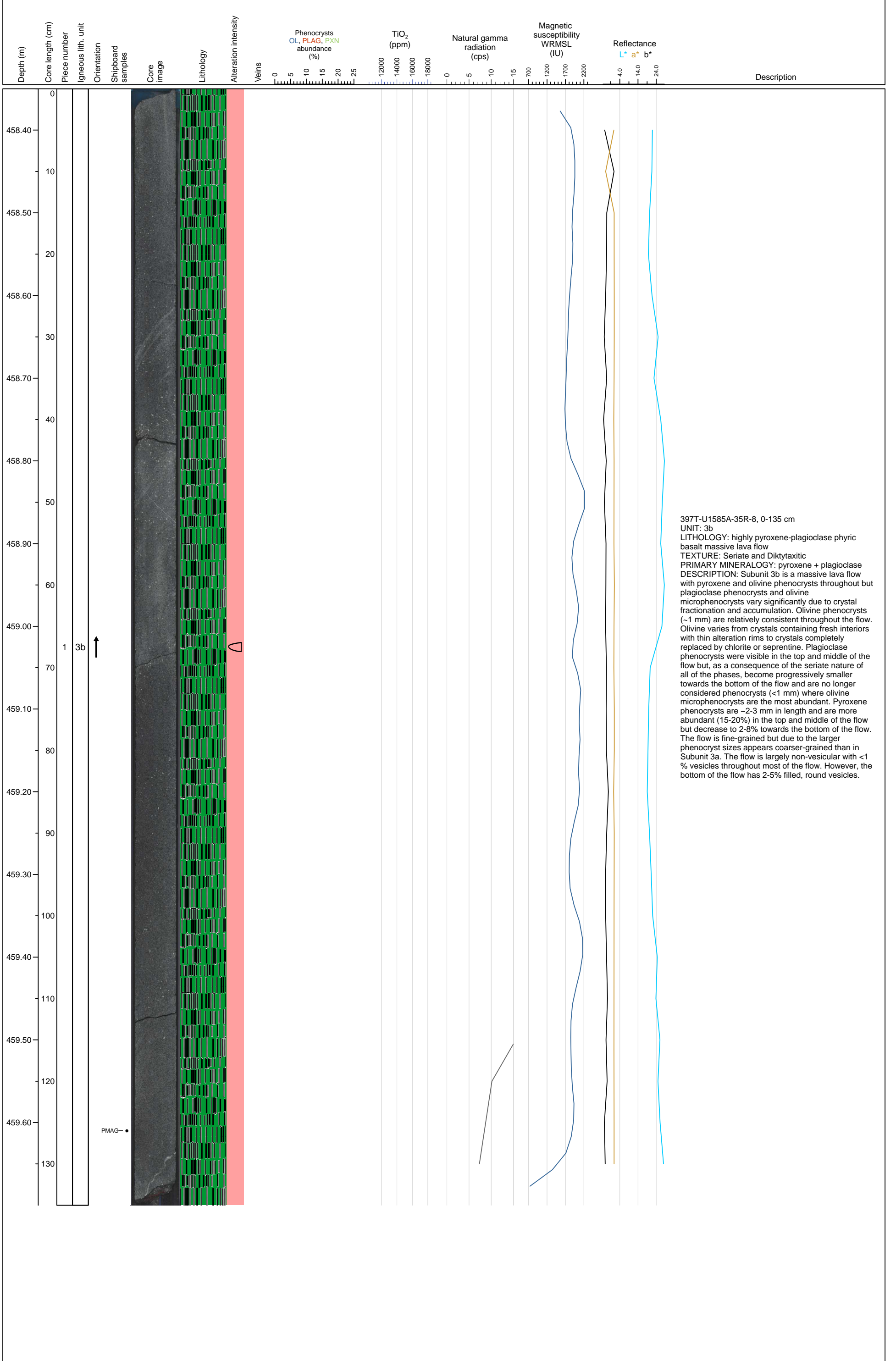
Hole 397T-U1585A-35R Section 6, Top of Section: 456.05 m (CSF-A)



Hole 397T-U1585A-35R Section 7, Top of Section: 457.24 m (CSF-A)

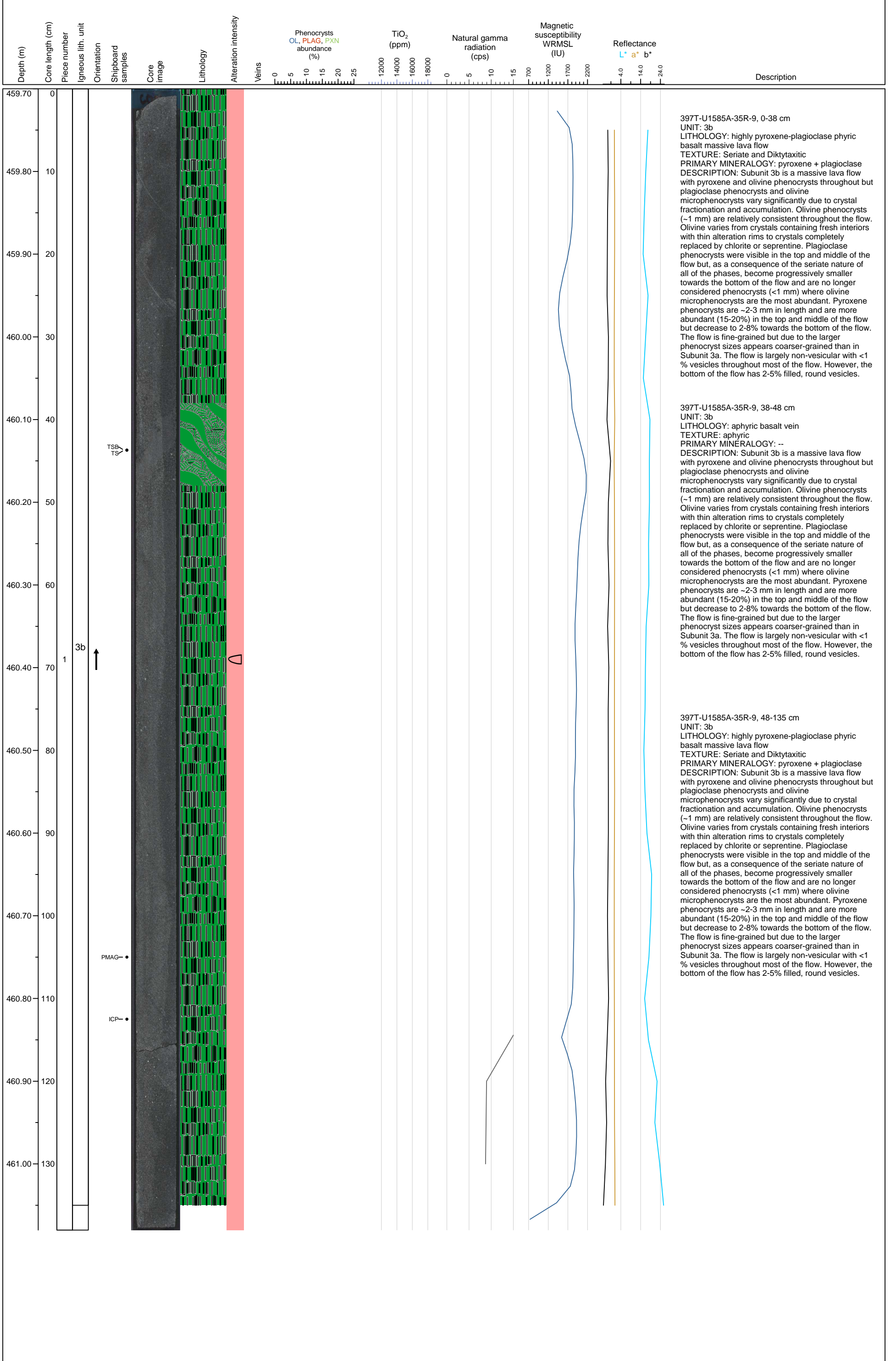


Hole 397T-U1585A-35R Section 8, Top of Section: 458.35 m (CSF-A)

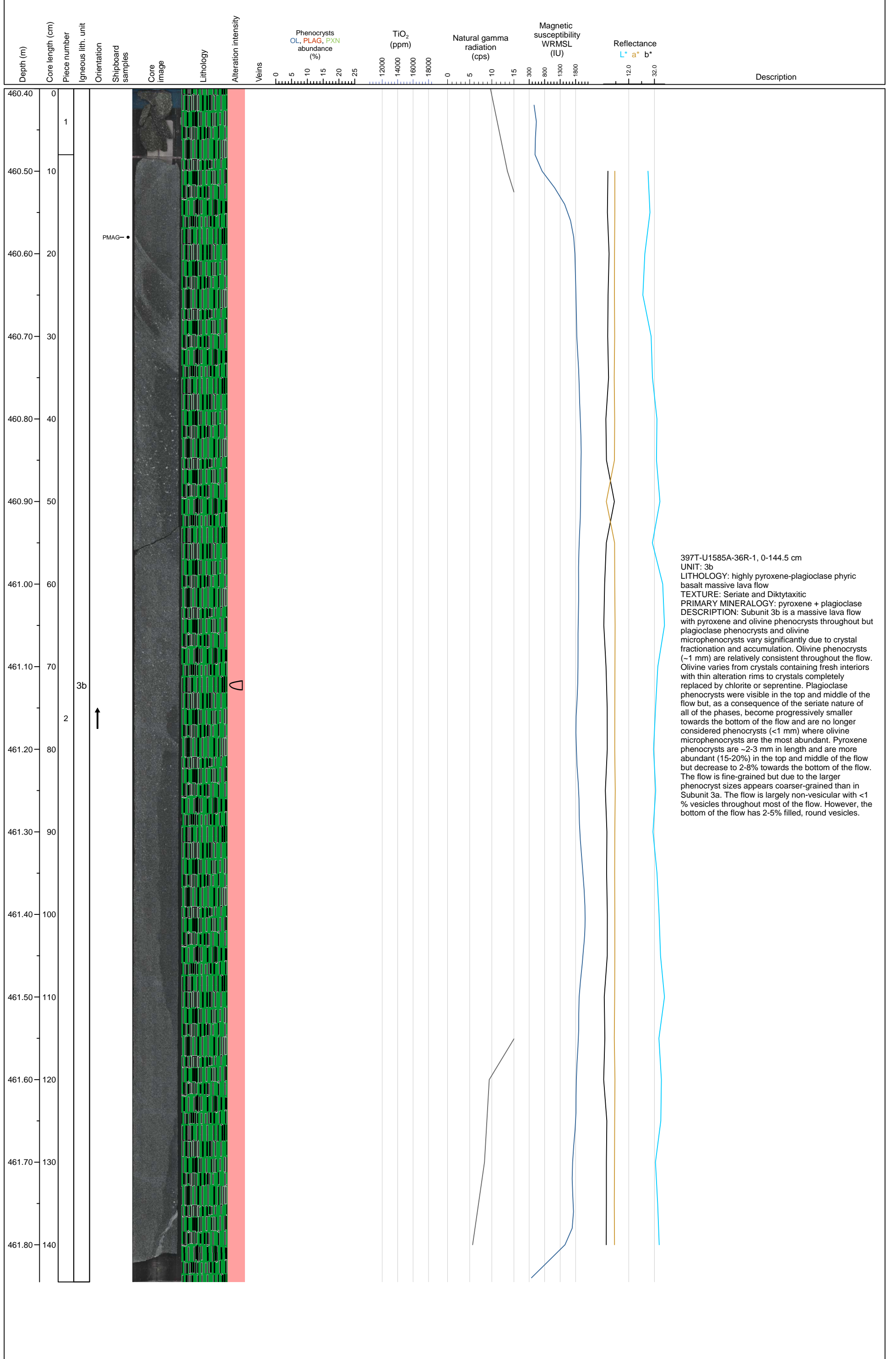




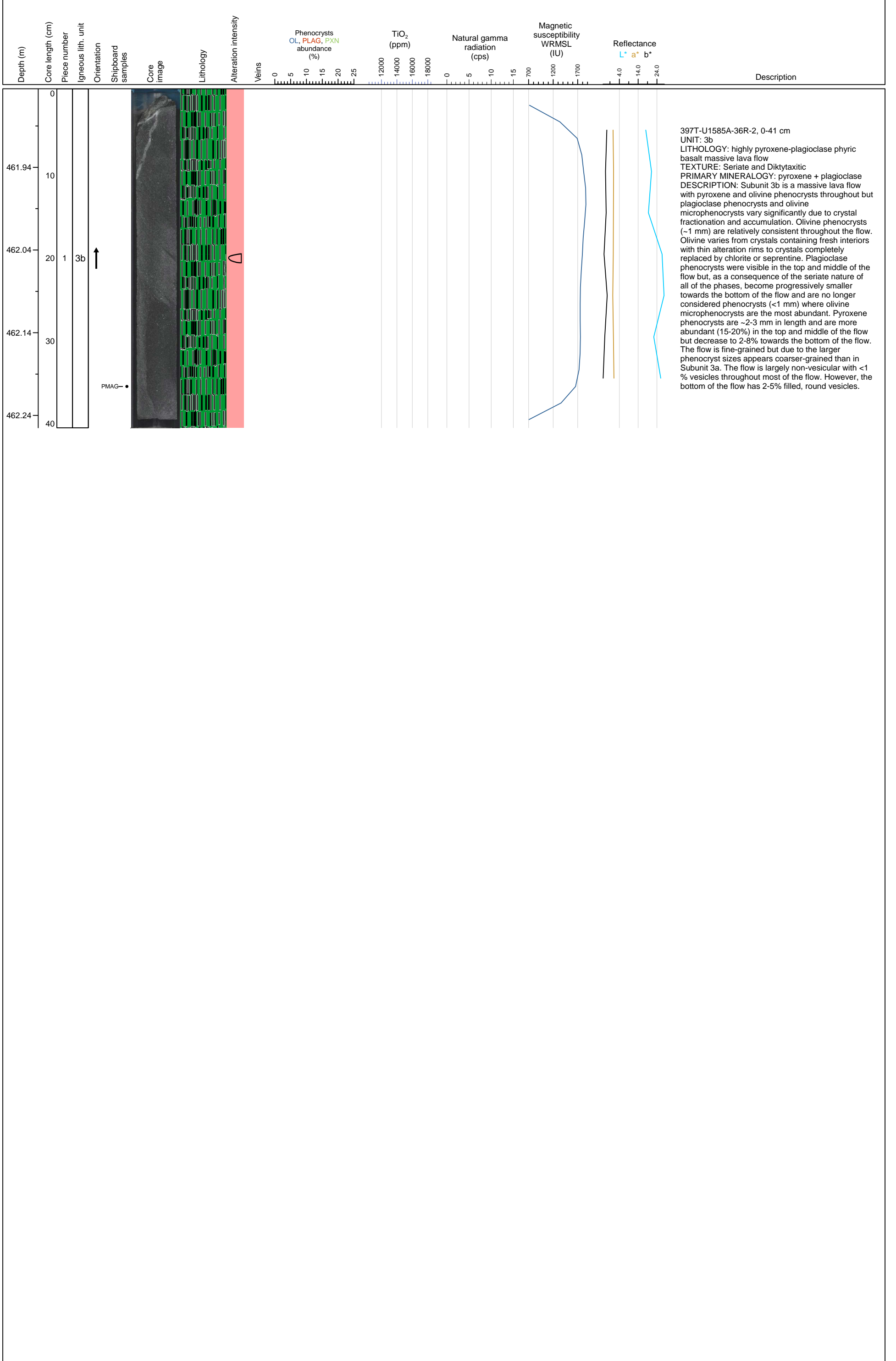
Hole 397T-U1585A-35R Section 9, Top of Section: 459.7 m (CSF-A)



Hole 397T-U1585A-36R Section 1, Top of Section: 460.4 m (CSF-A)

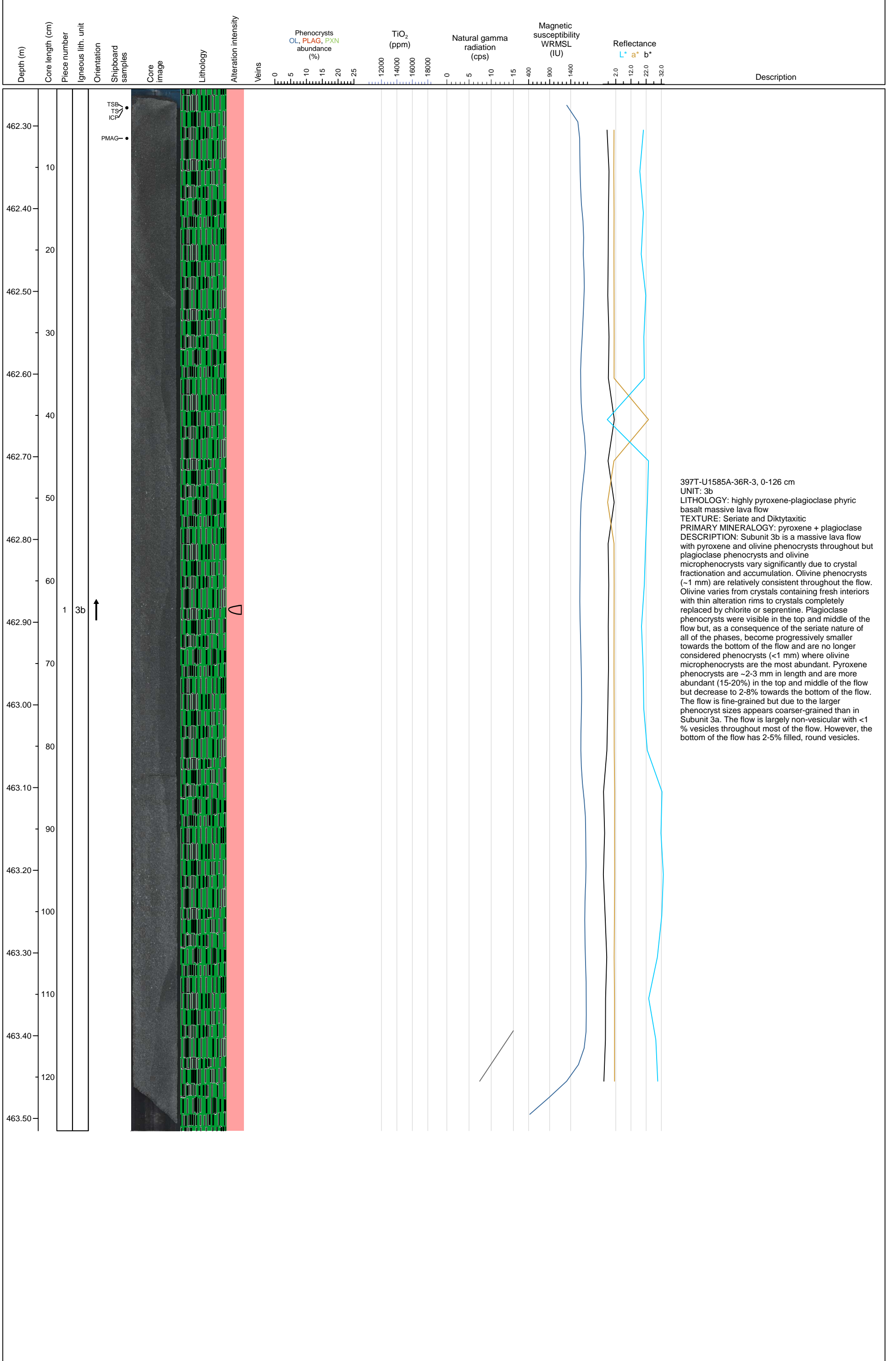


Hole 397T-U1585A-36R Section 2, Top of Section: 461.845 m (CSF-A)

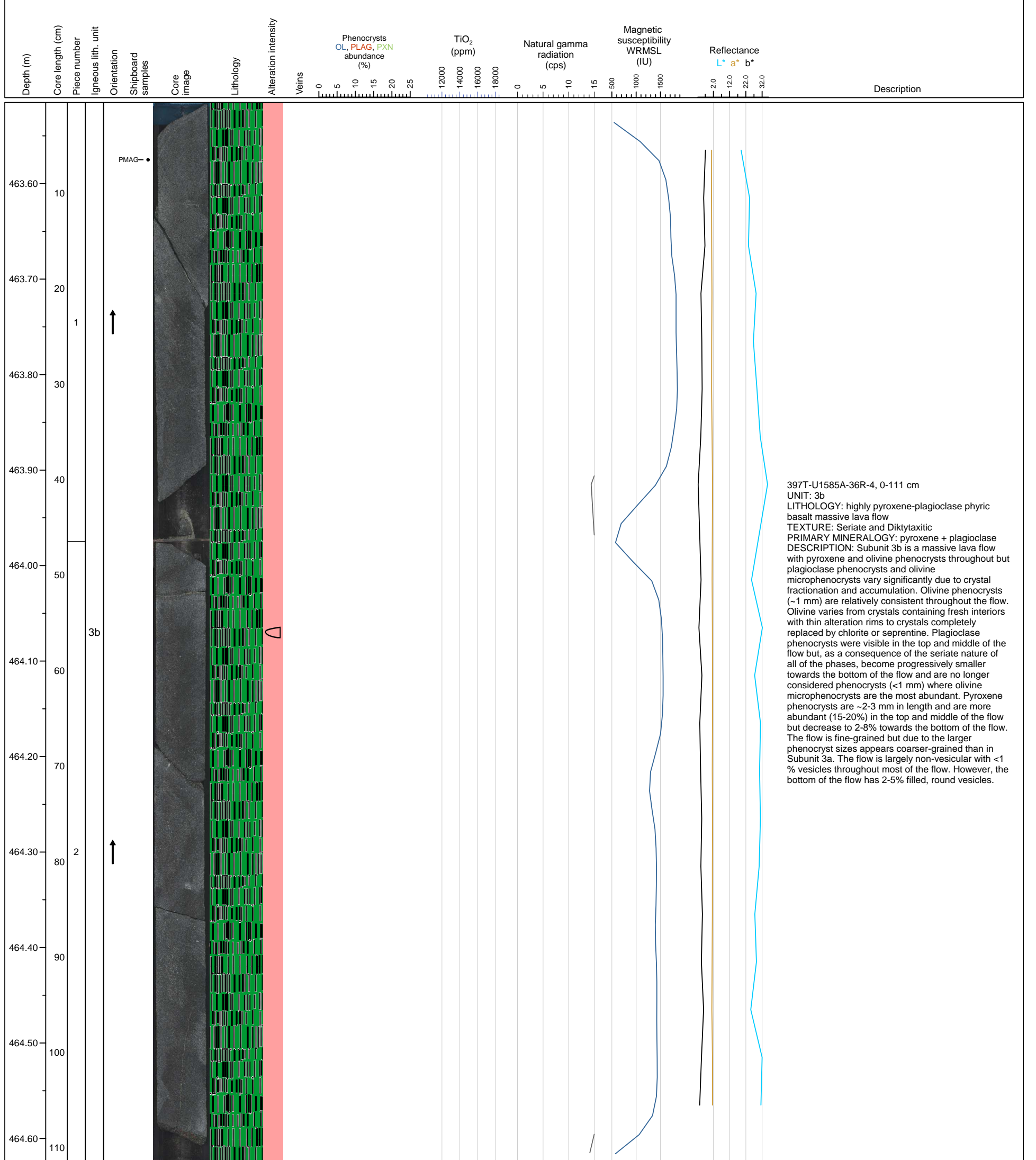




Hole 397T-U1585A-36R Section 3, Top of Section: 462.255 m (CSF-A)

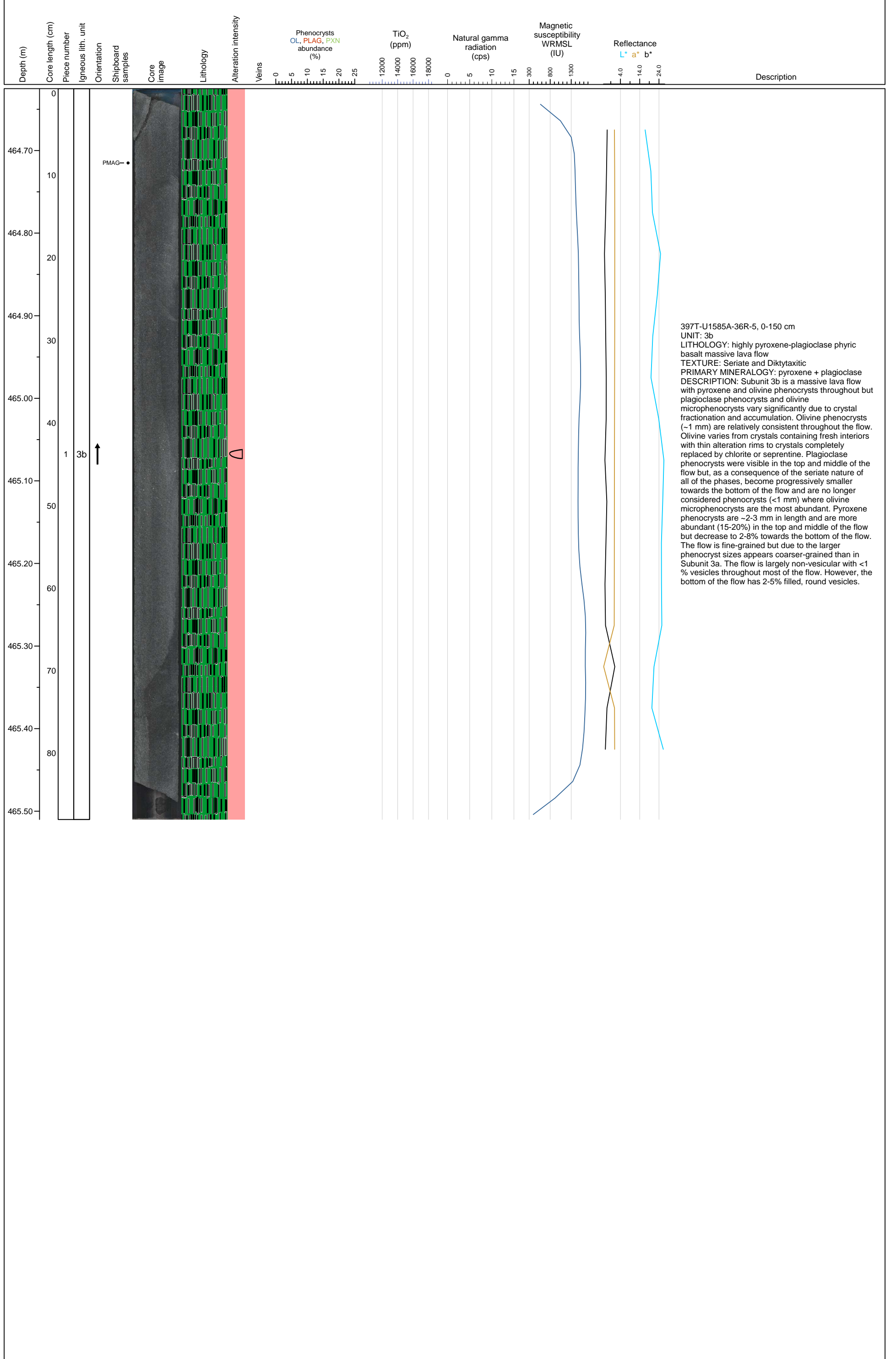


Hole 397T-U1585A-36R Section 4, Top of Section: 463.515 m (CSF-A)

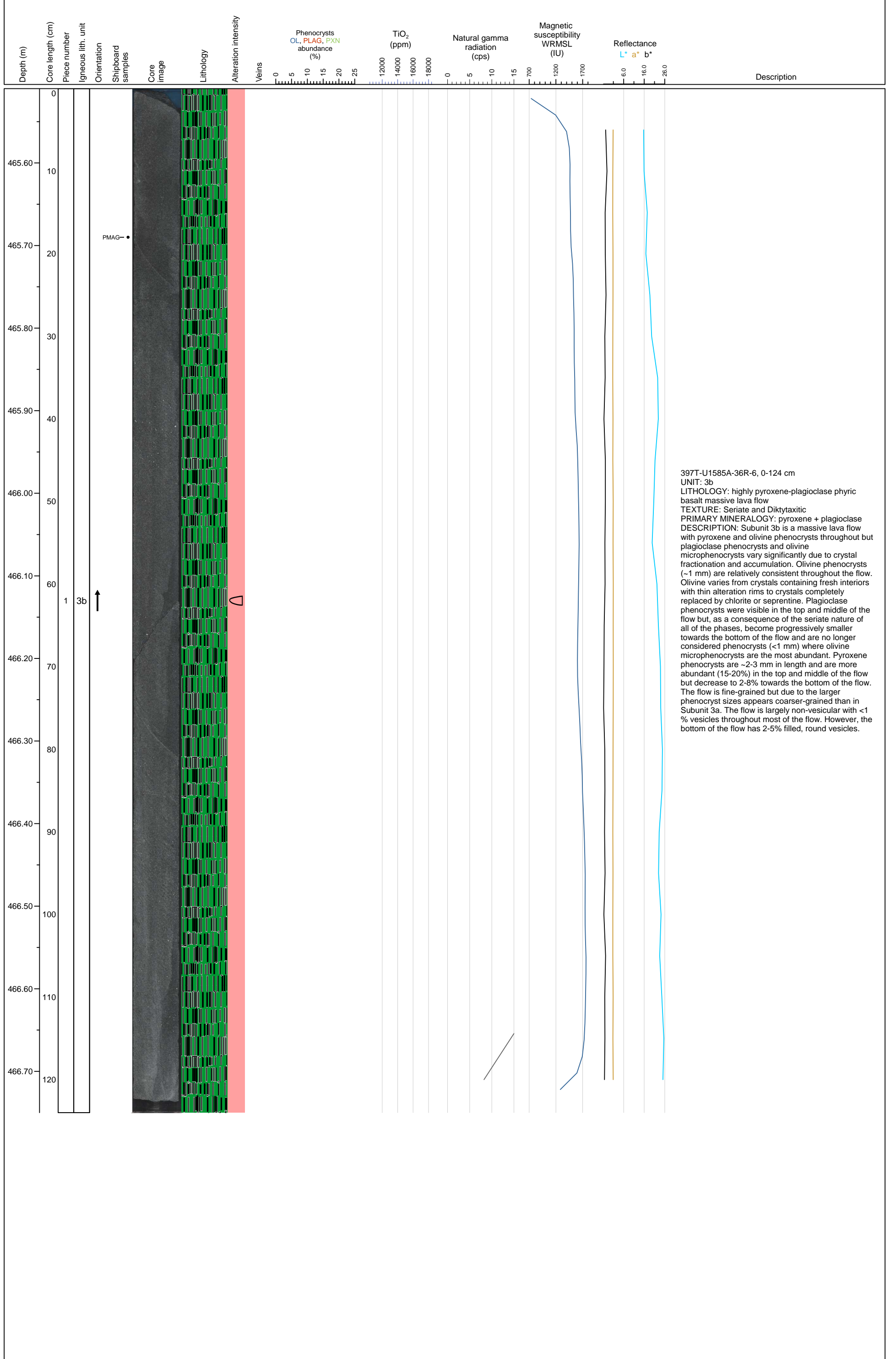




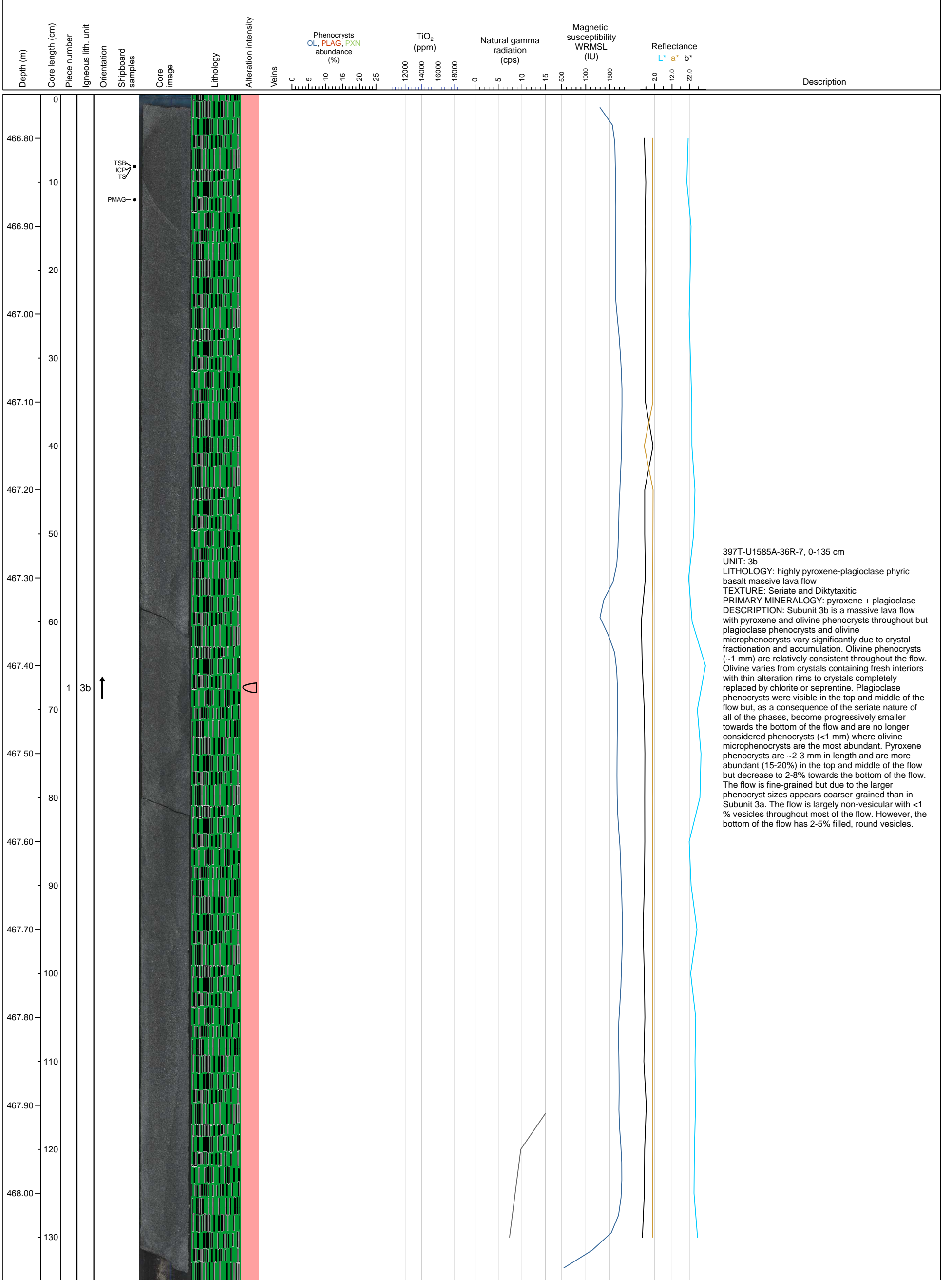
Hole 397T-U1585A-36R Section 5, Top of Section: 464.625 m (CSF-A)



Hole 397T-U1585A-36R Section 6, Top of Section: 465.51 m (CSF-A)



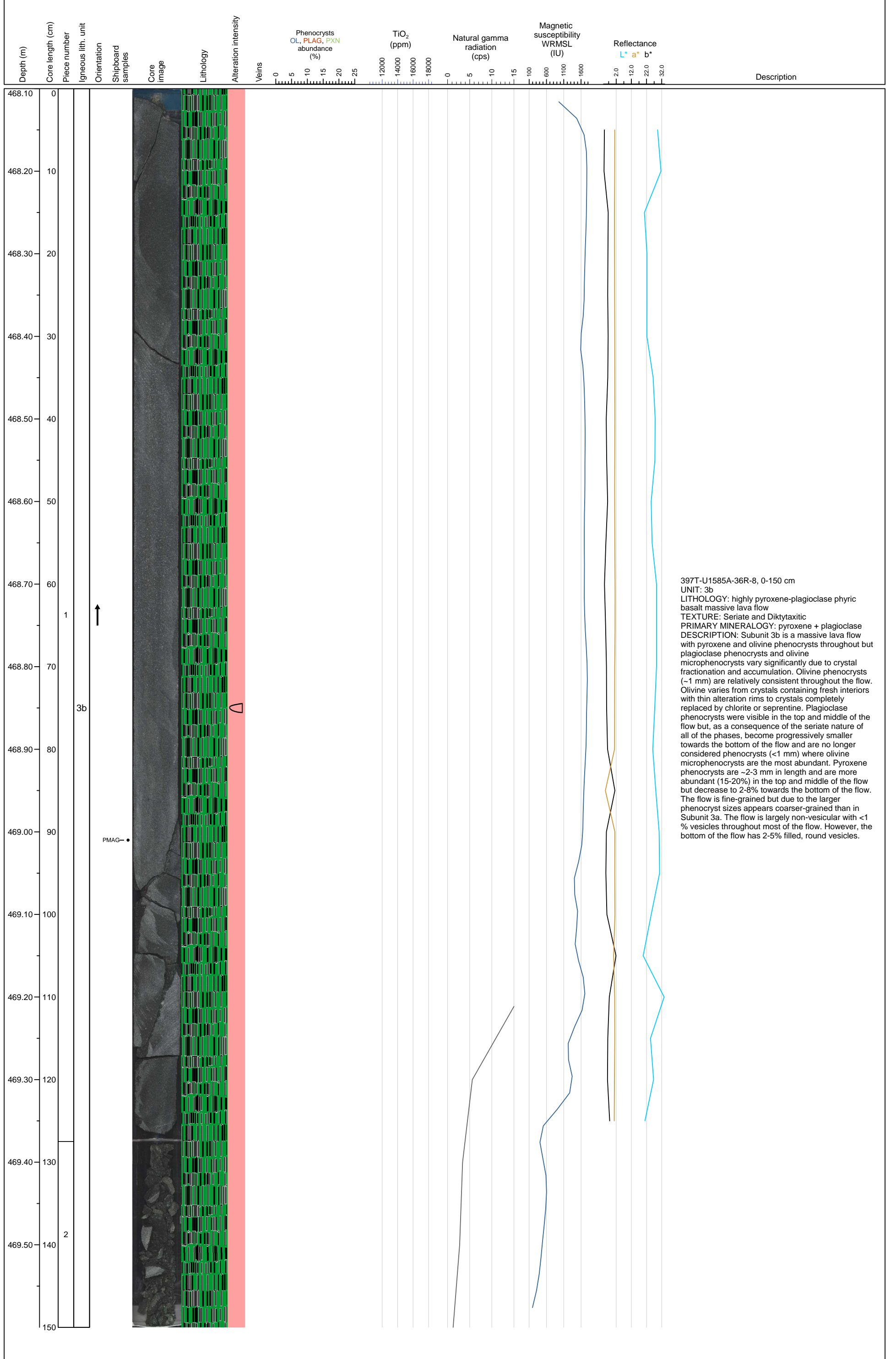
Hole 397T-U1585A-36R Section 7, Top of Section: 466.75 m (CSF-A)



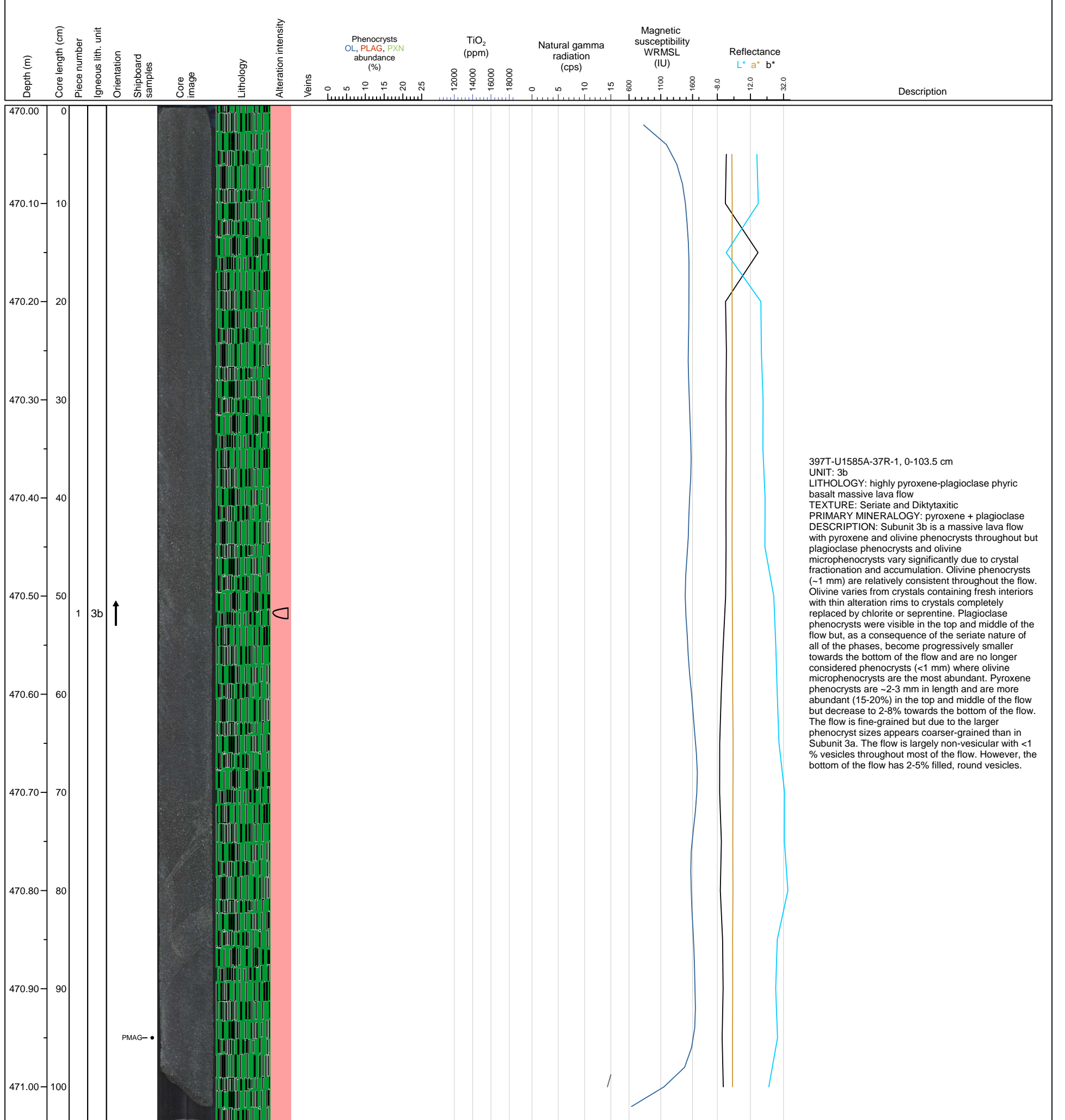
397T-U1585A-36R-7, 0-135 cm  
 UNIT: 3b  
 LITHOLOGY: highly pyroxene-plagioclase phyric basalt massive lava flow  
 TEXTURE: Seriate and Diktytaxitic  
 PRIMARY MINERALOGY: pyroxene + plagioclase  
 DESCRIPTION: Subunit 3b is a massive lava flow with pyroxene and olivine phenocrysts throughout but plagioclase phenocrysts and olivine microphenocrysts vary significantly due to crystal fractionation and accumulation. Olivine phenocrysts (~1 mm) are relatively consistent throughout the flow. Olivine varies from crystals containing fresh interiors with thin alteration rims to crystals completely replaced by chlorite or seprentine. Plagioclase phenocrysts were visible in the top and middle of the flow but, as a consequence of the seriate nature of all of the phases, become progressively smaller towards the bottom of the flow and are no longer considered phenocrysts (<1 mm) where olivine microphenocrysts are the most abundant. Pyroxene phenocrysts are ~2-3 mm in length and are more abundant (15-20%) in the top and middle of the flow but decrease to 2-8% towards the bottom of the flow. The flow is fine-grained but due to the larger phenocryst sizes appears coarser-grained than in Subunit 3a. The flow is largely non-vesicular with <1 % vesicles throughout most of the flow. However, the bottom of the flow has 2-5% filled, round vesicles.



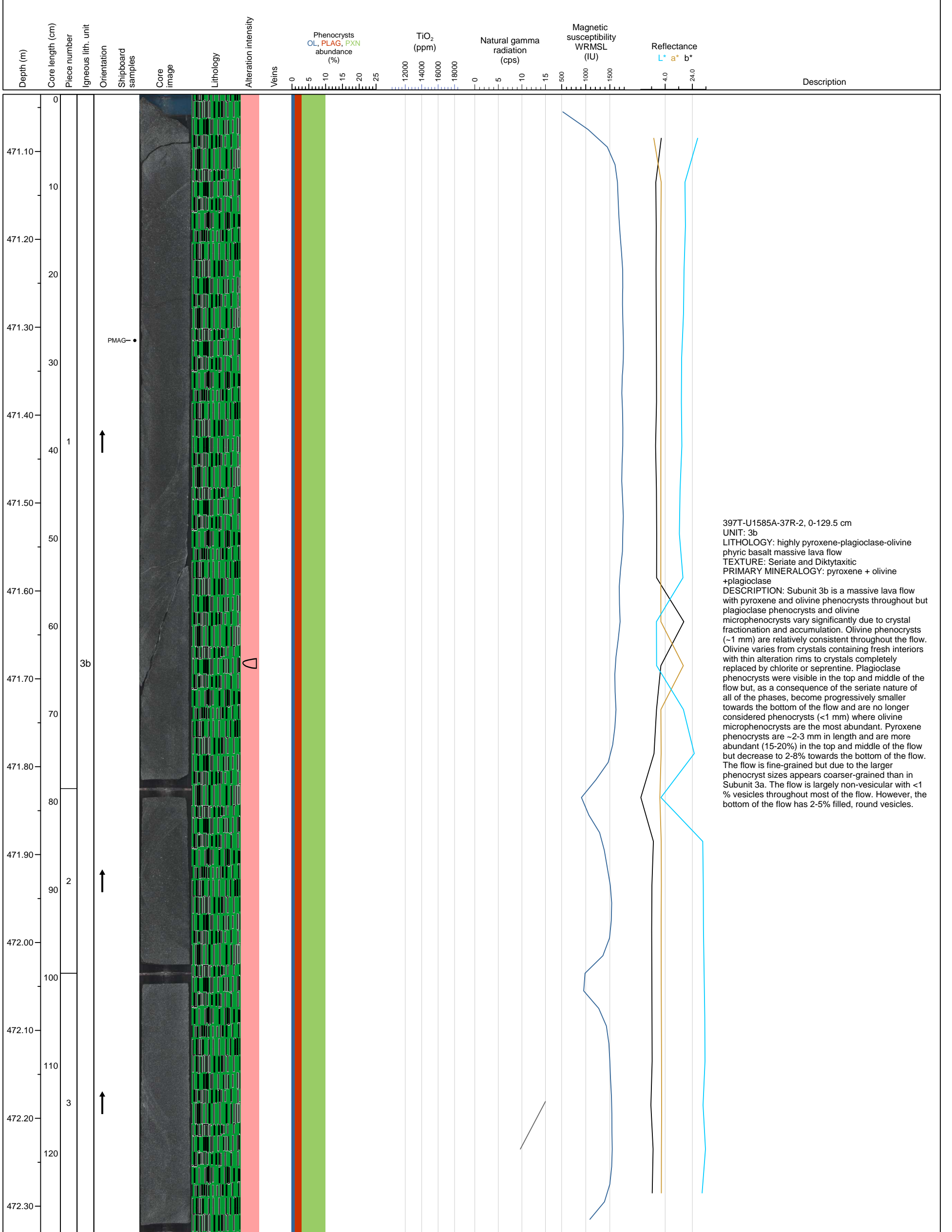
Hole 397T-U1585A-36R Section 8, Top of Section: 468.1 m (CSF-A)



Hole 397T-U1585A-37R Section 1, Top of Section: 470.0 m (CSF-A)

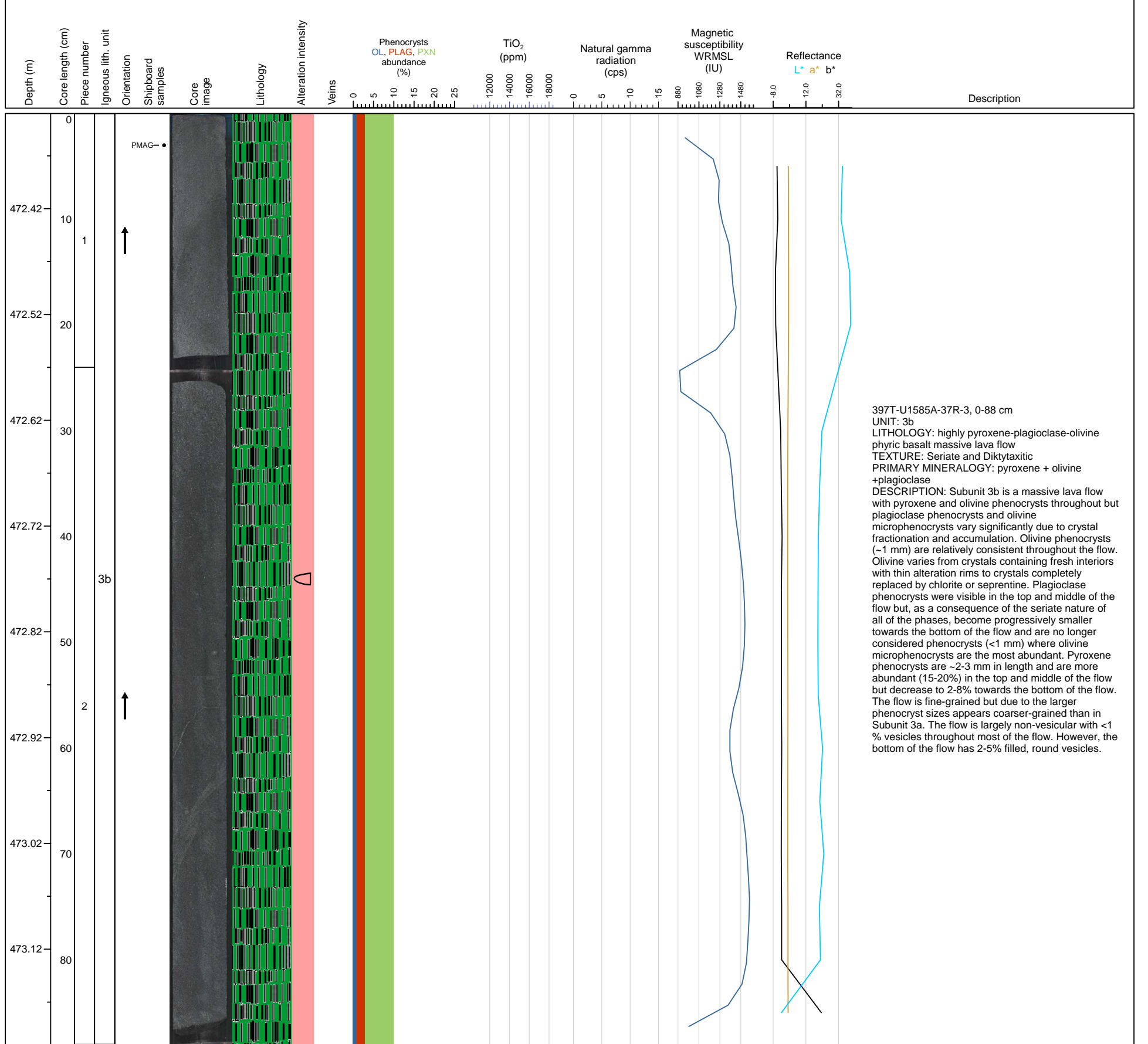


Hole 397T-U1585A-37R Section 2, Top of Section: 471.035 m (CSF-A)

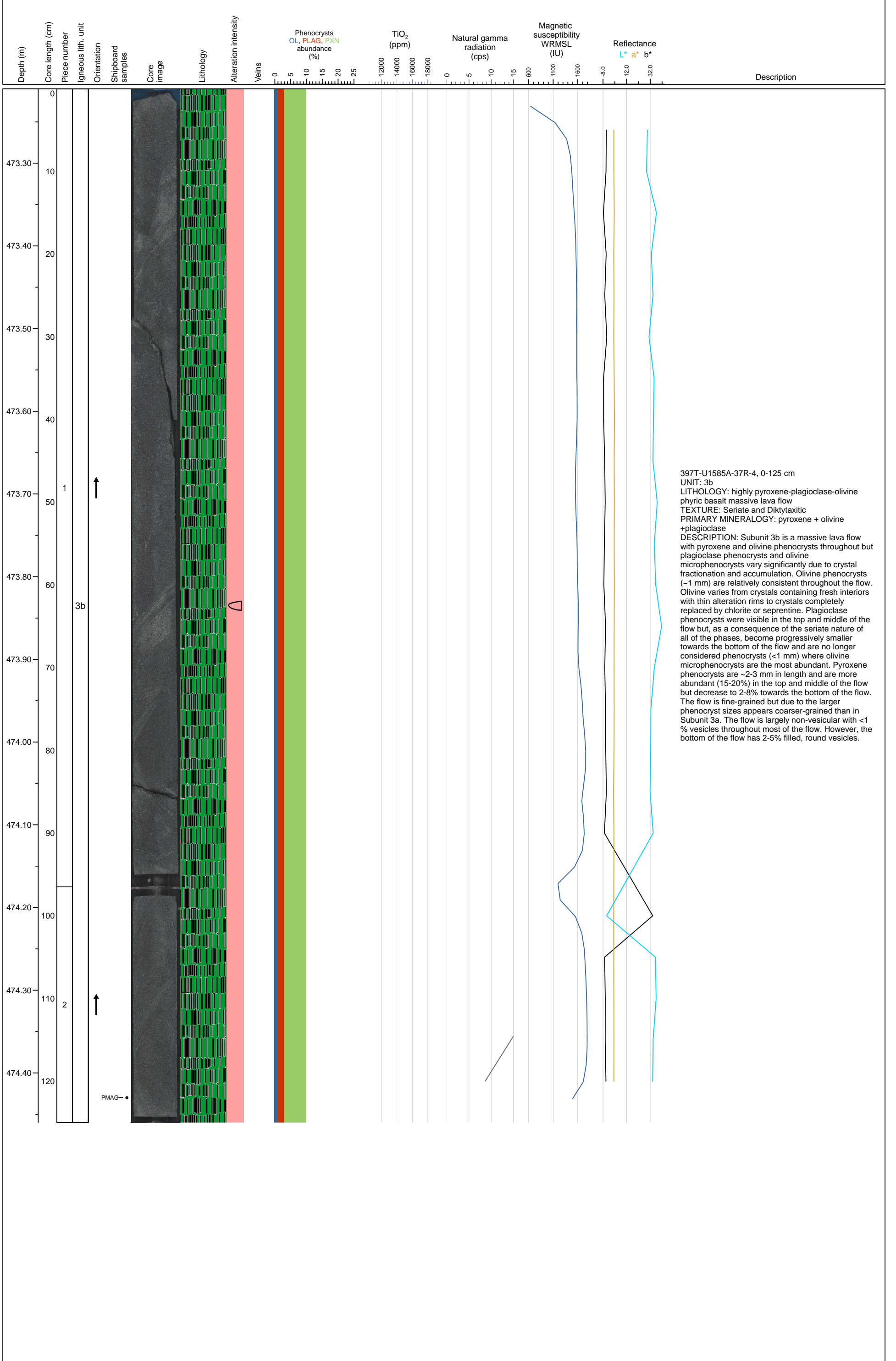




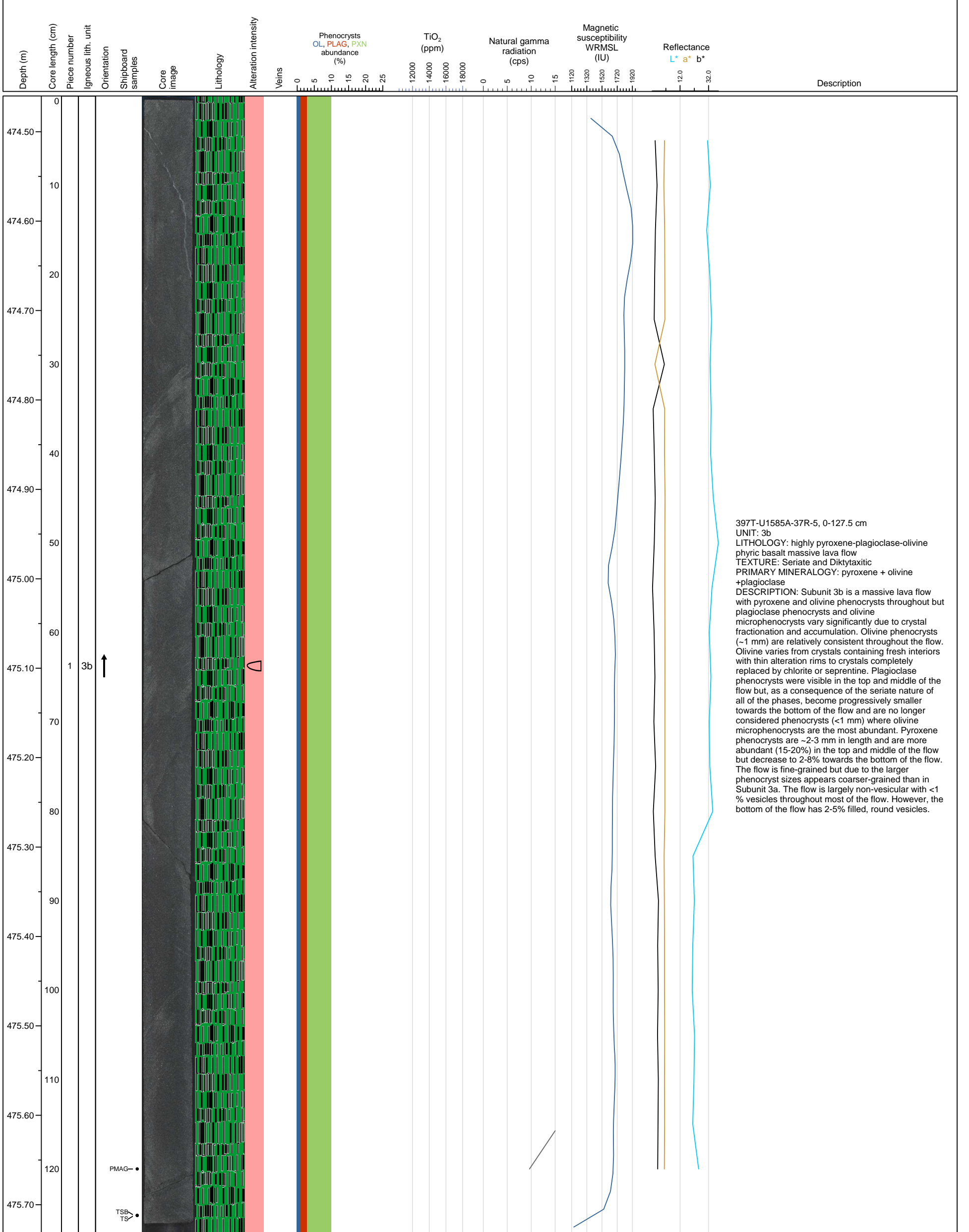
Hole 397T-U1585A-37R Section 3, Top of Section: 472.33 m (CSF-A)



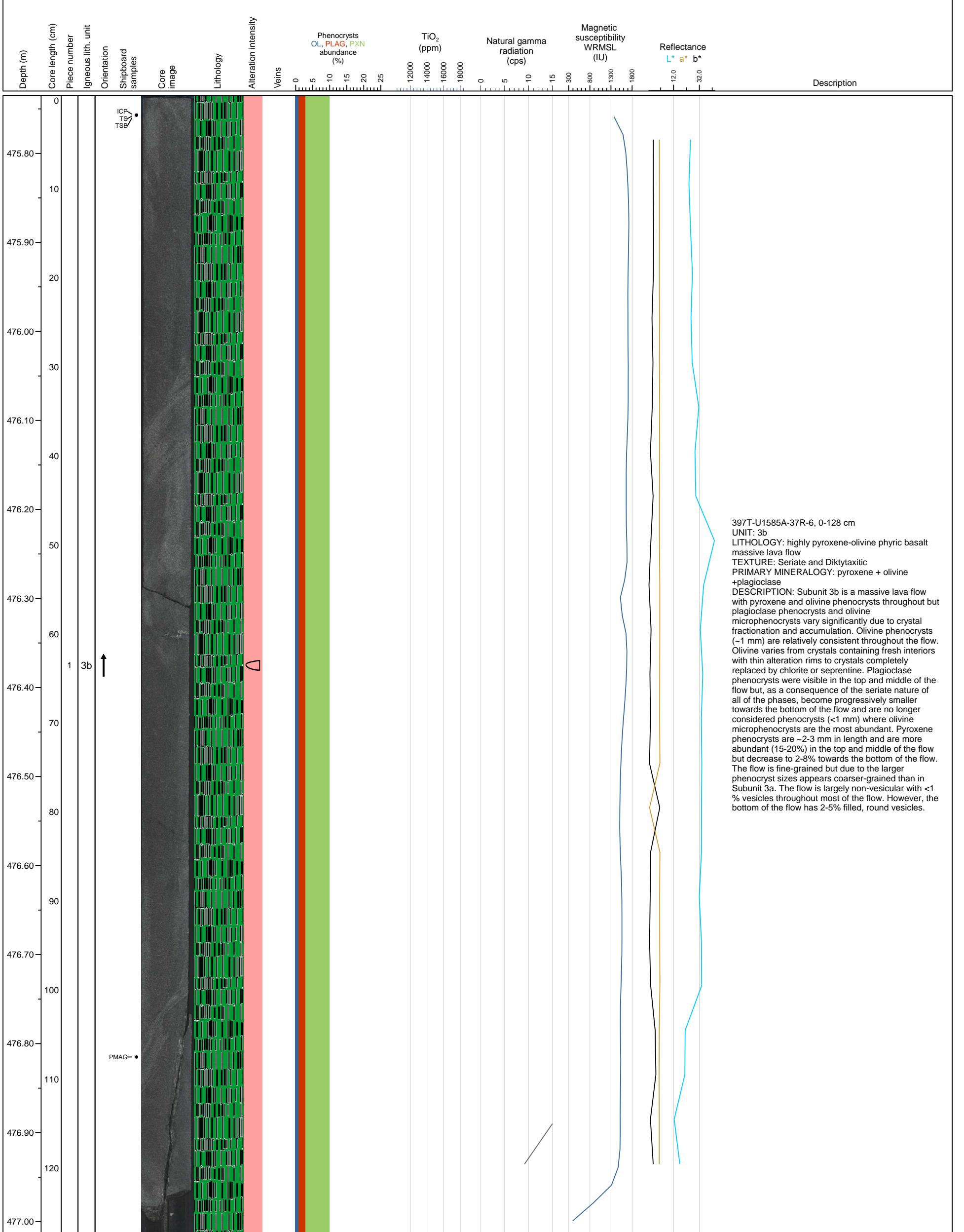
Hole 397T-U1585A-37R Section 4, Top of Section: 473.21 m (CSF-A)



Hole 397T-U1585A-37R Section 5, Top of Section: 474.46 m (CSF-A)

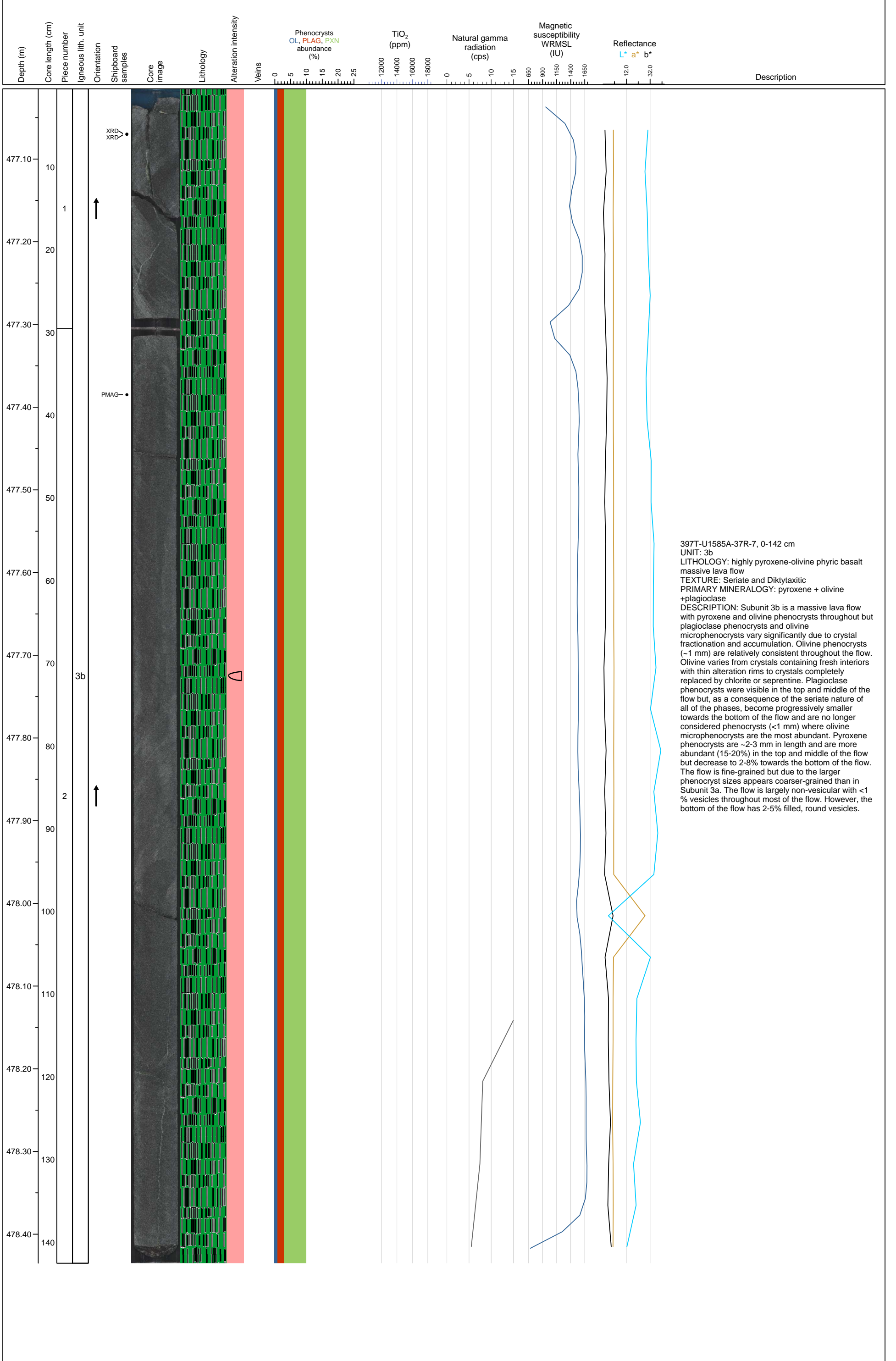


Hole 397T-U1585A-37R Section 6, Top of Section: 475.735 m (CSF-A)

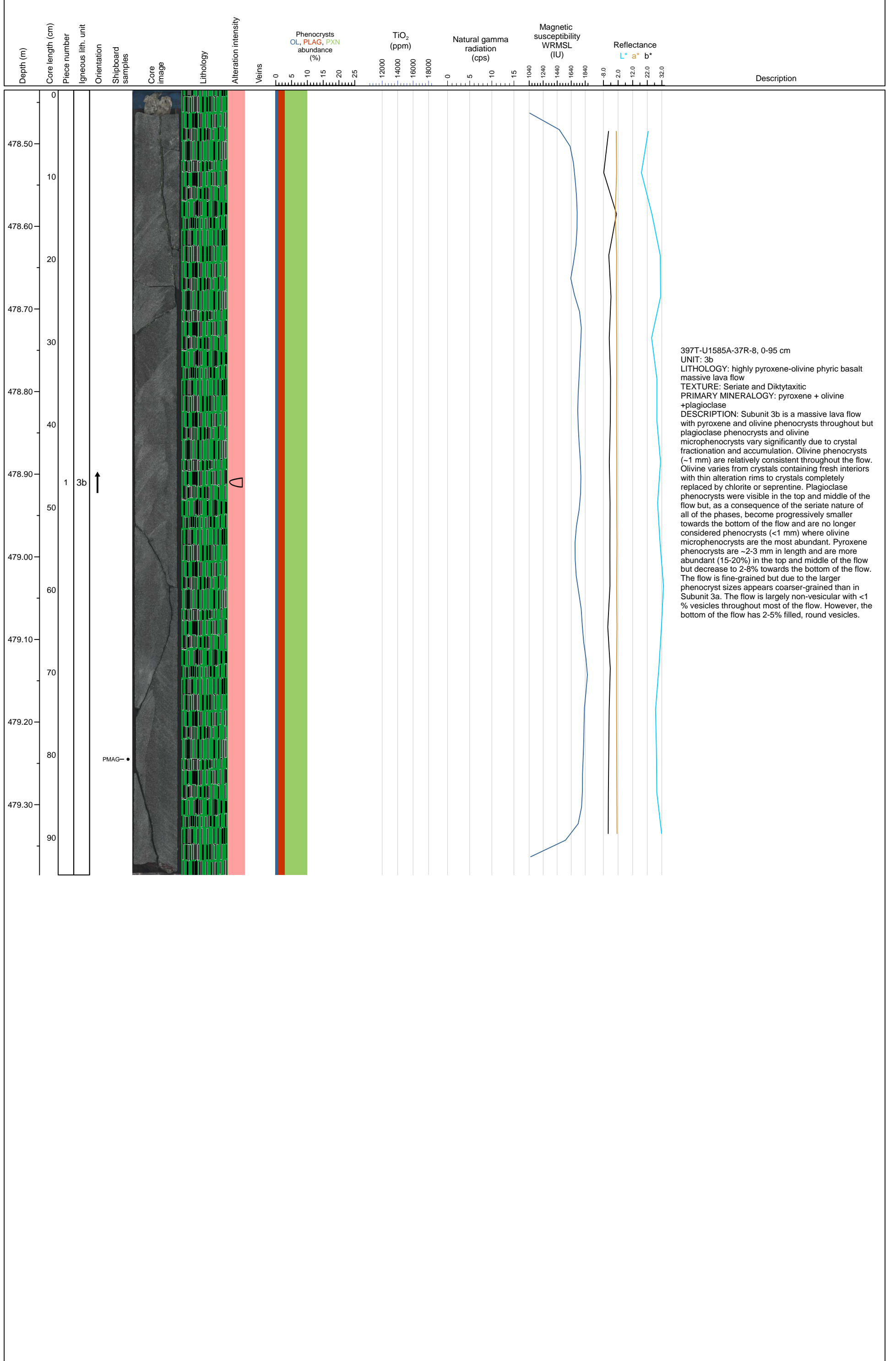




Hole 397T-U1585A-37R Section 7, Top of Section: 477.015 m (CSF-A)

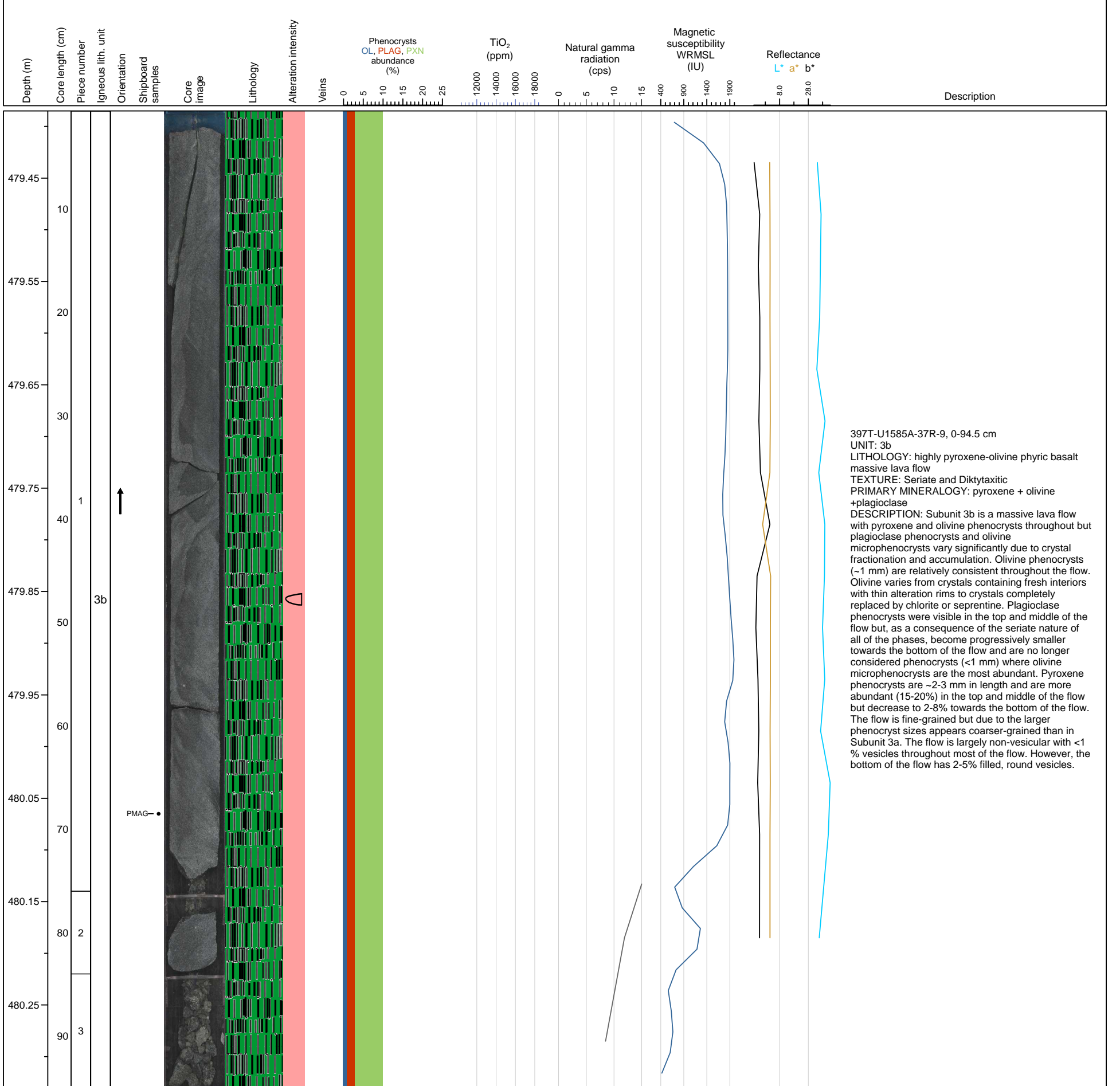


Hole 397T-U1585A-37R Section 8, Top of Section: 478.435 m (CSF-A)

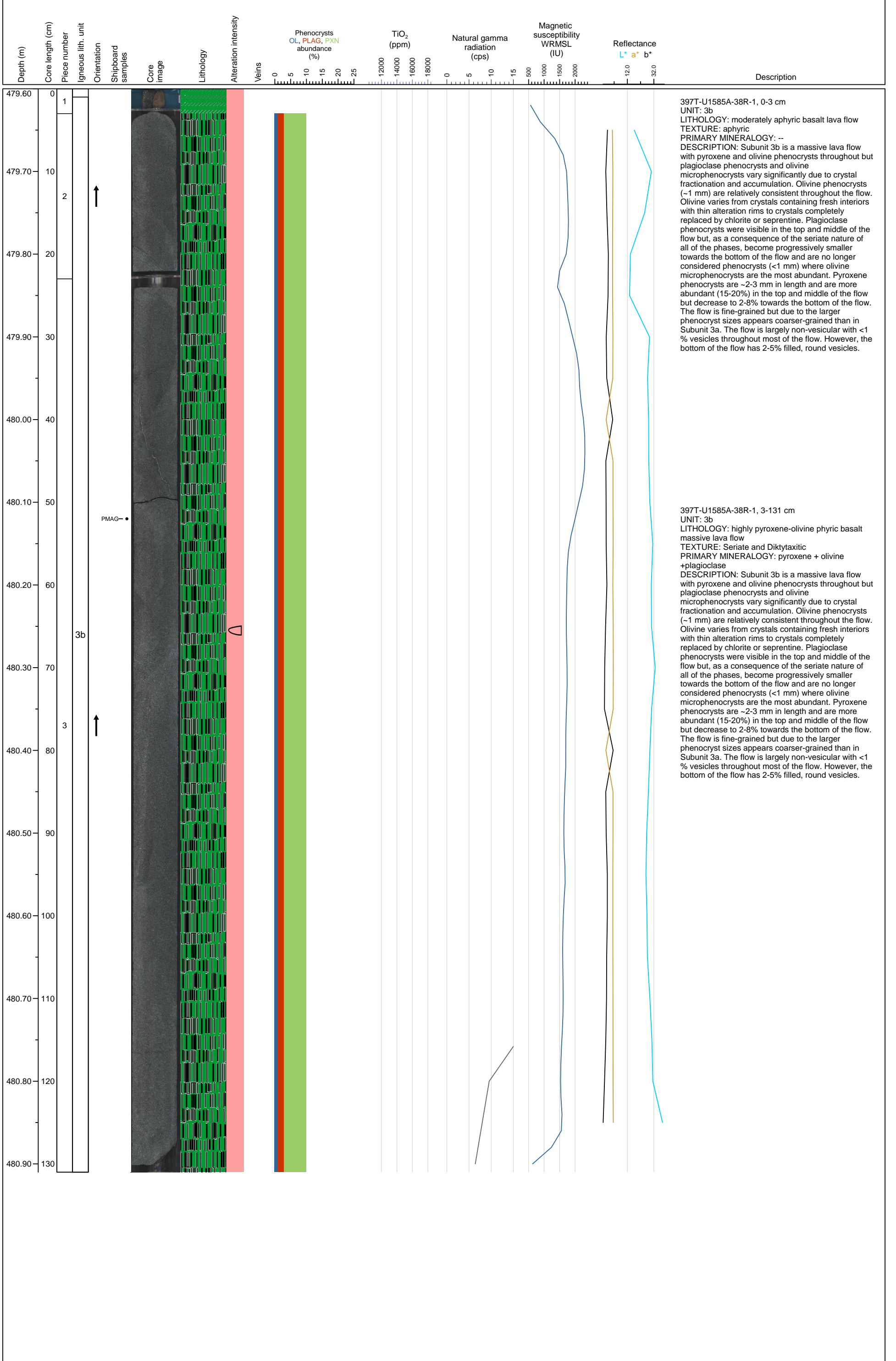




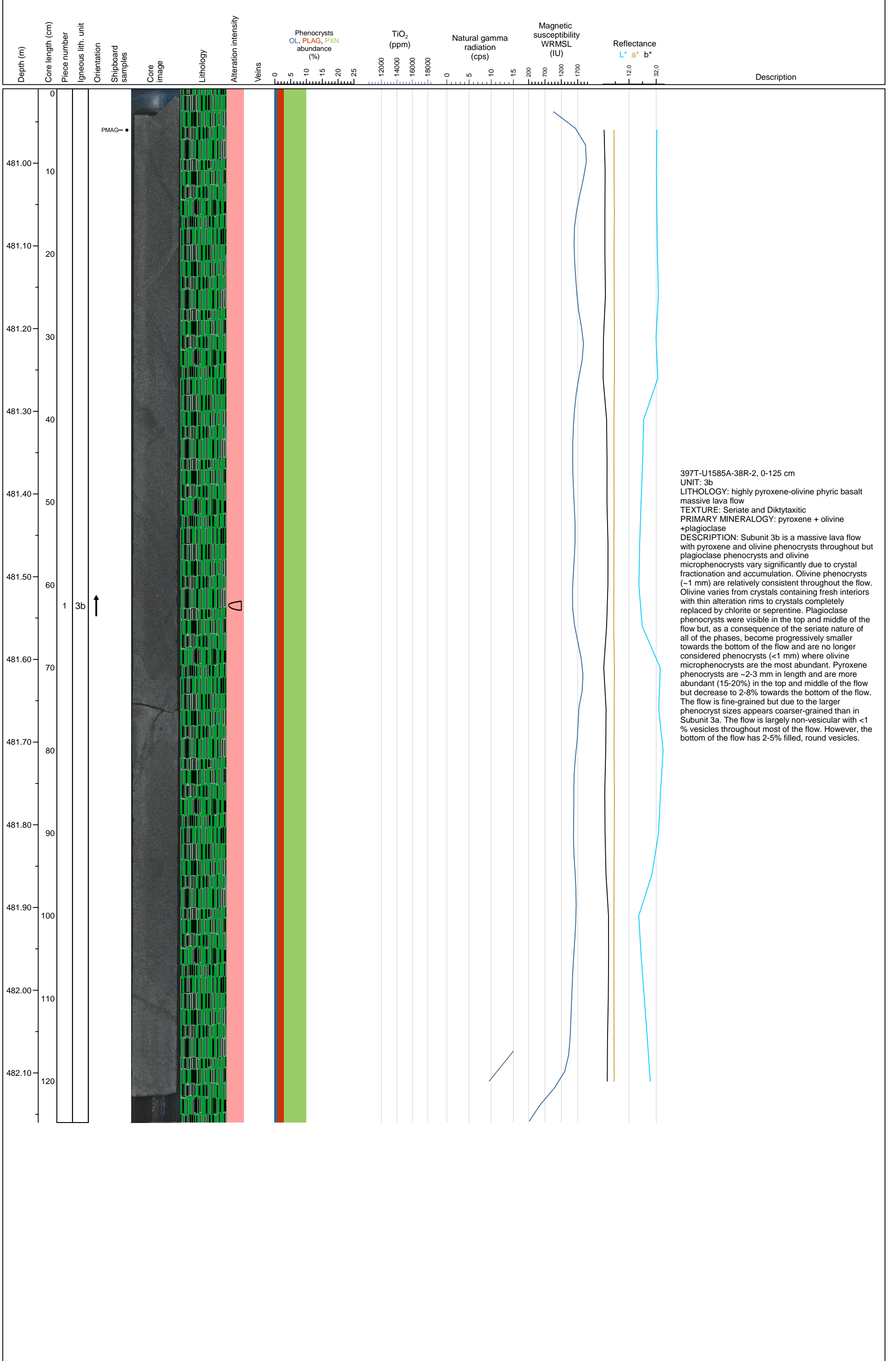
Hole 397T-U1585A-37R Section 9, Top of Section: 479.385 m (CSF-A)



Hole 397T-U1585A-38R Section 1, Top of Section: 479.6 m (CSF-A)

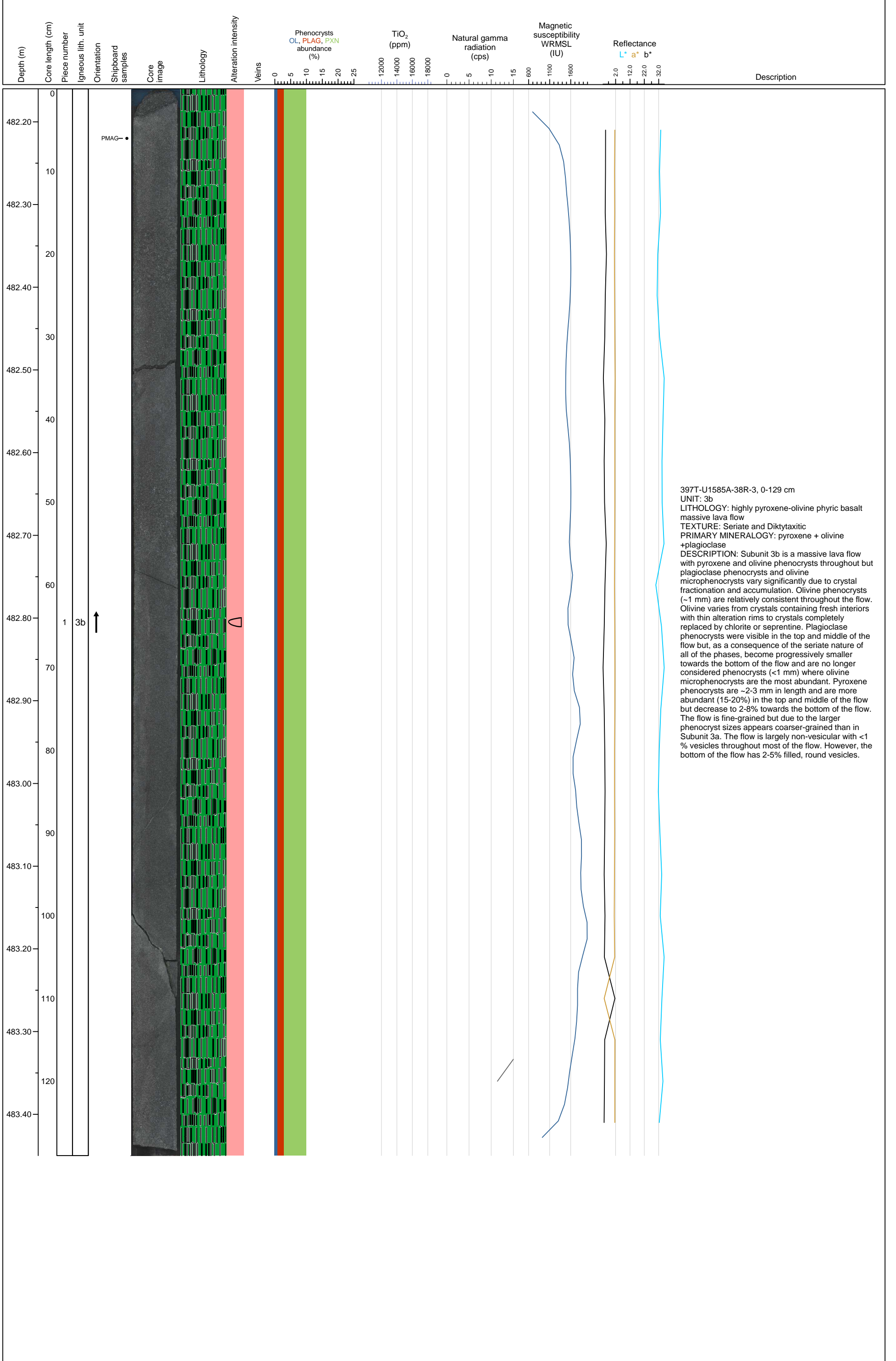


Hole 397T-U1585A-38R Section 2, Top of Section: 480.91 m (CSF-A)

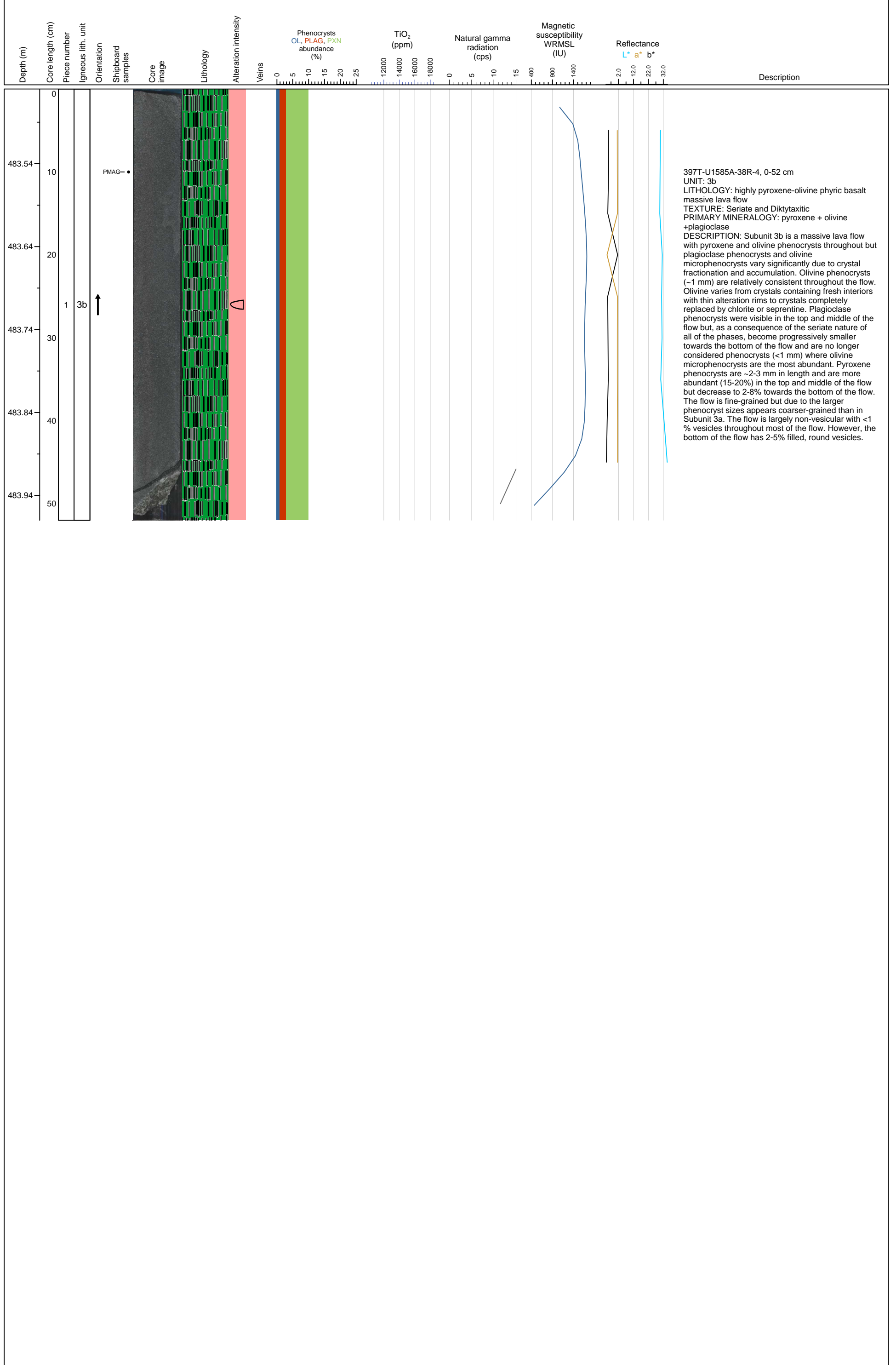




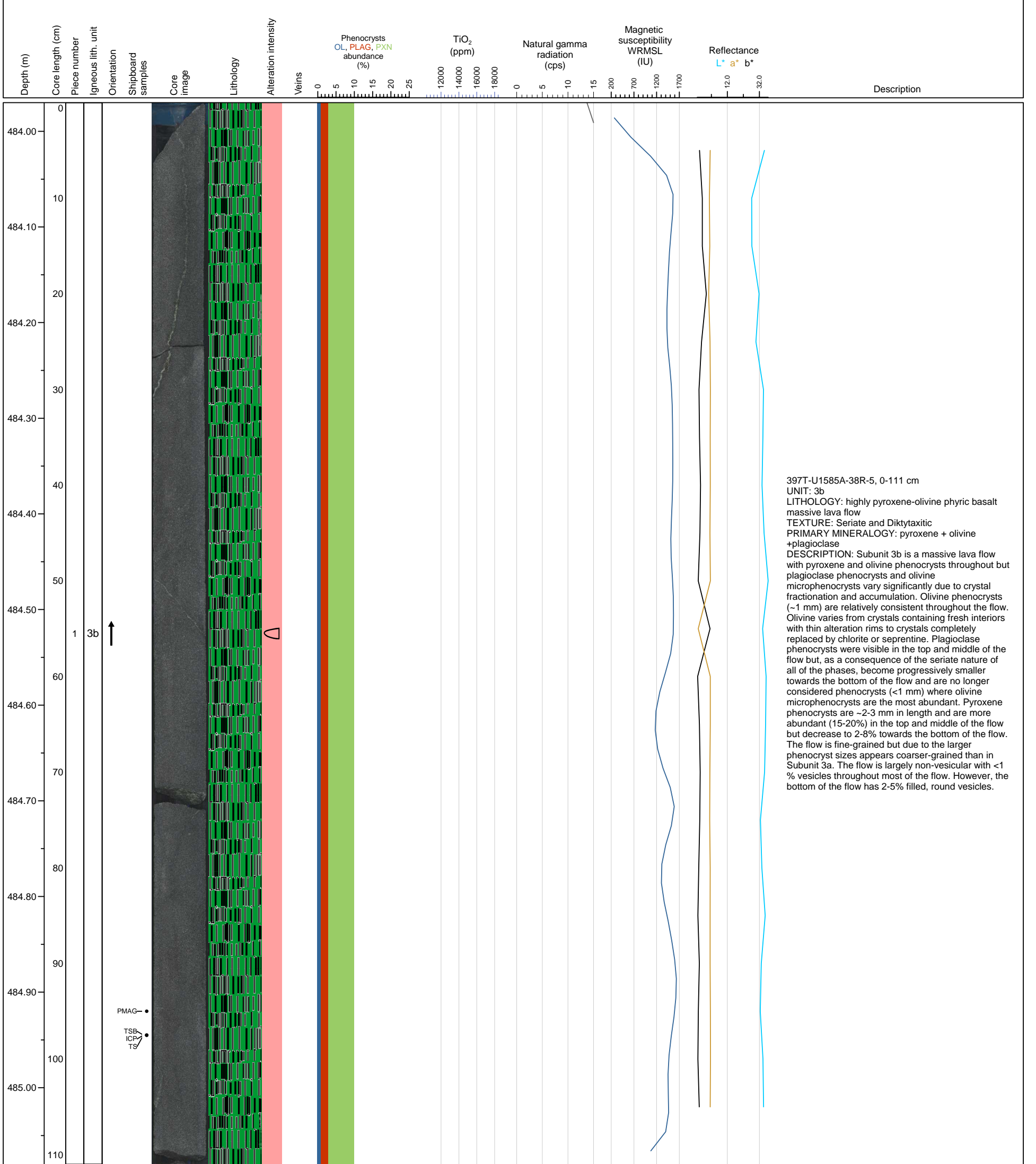
Hole 397T-U1585A-38R Section 3, Top of Section: 482.16 m (CSF-A)



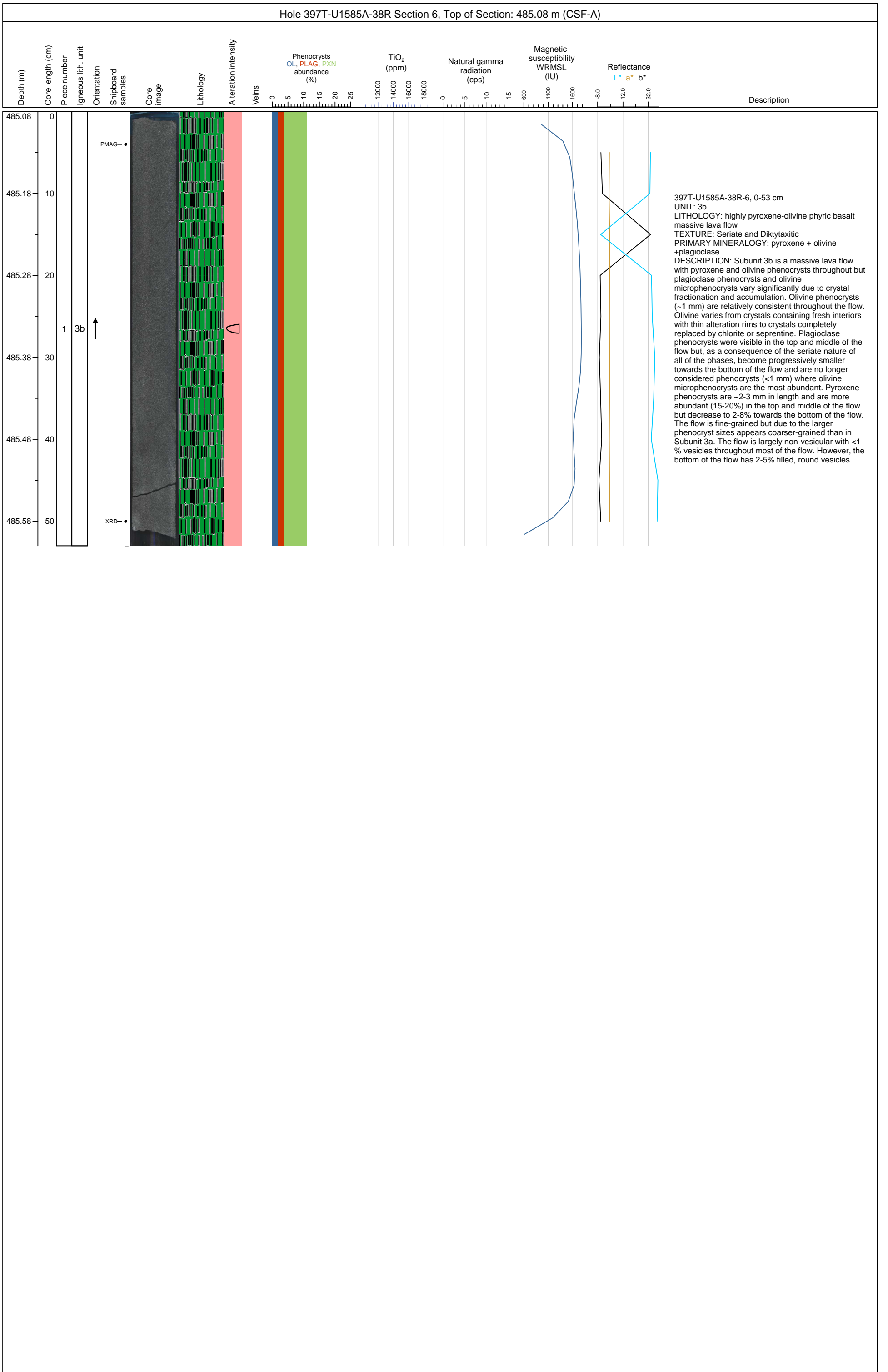
Hole 397T-U1585A-38R Section 4, Top of Section: 483.45 m (CSF-A)



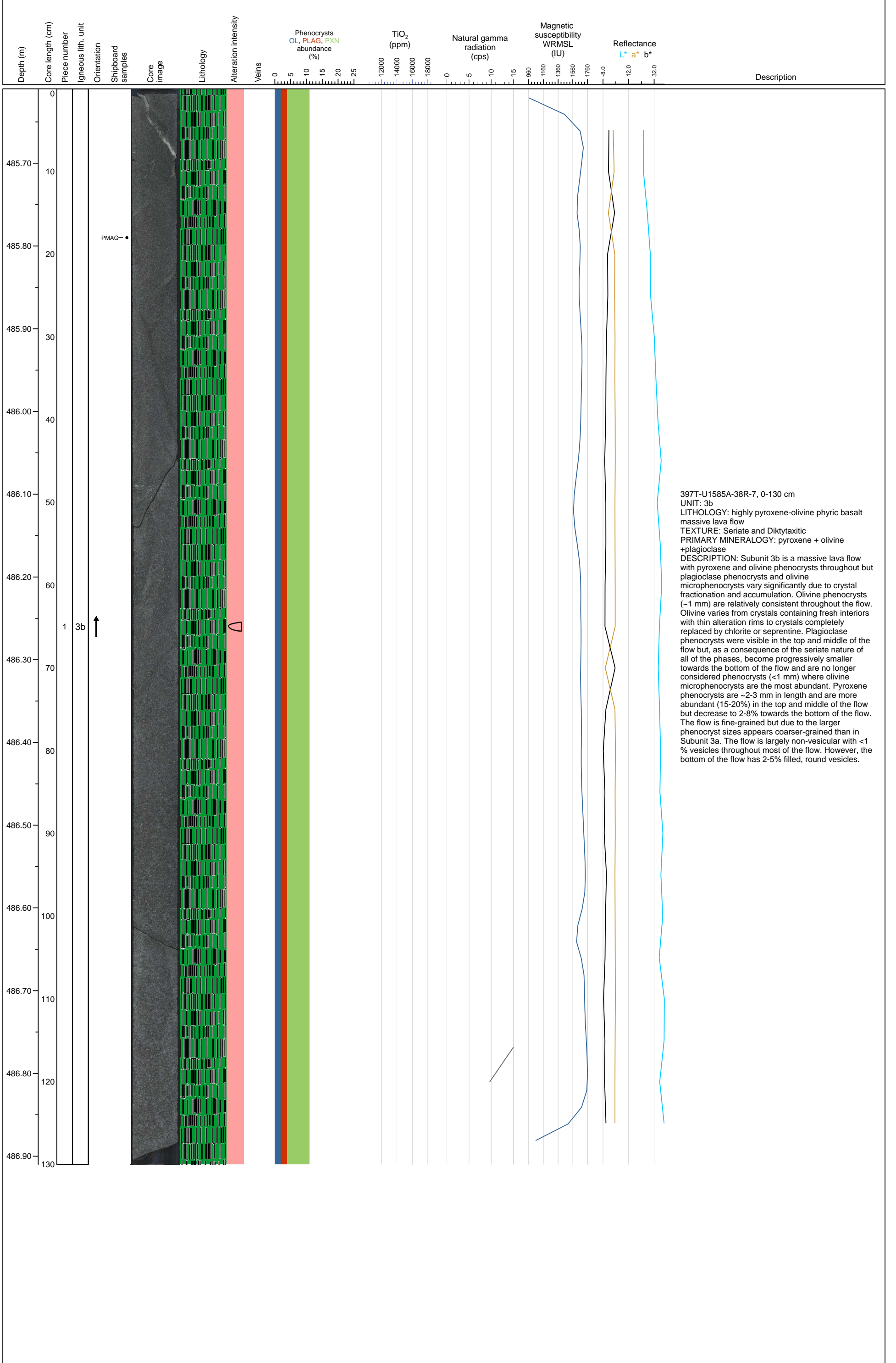
Hole 397T-U1585A-38R Section 5, Top of Section: 483.97 m (CSF-A)



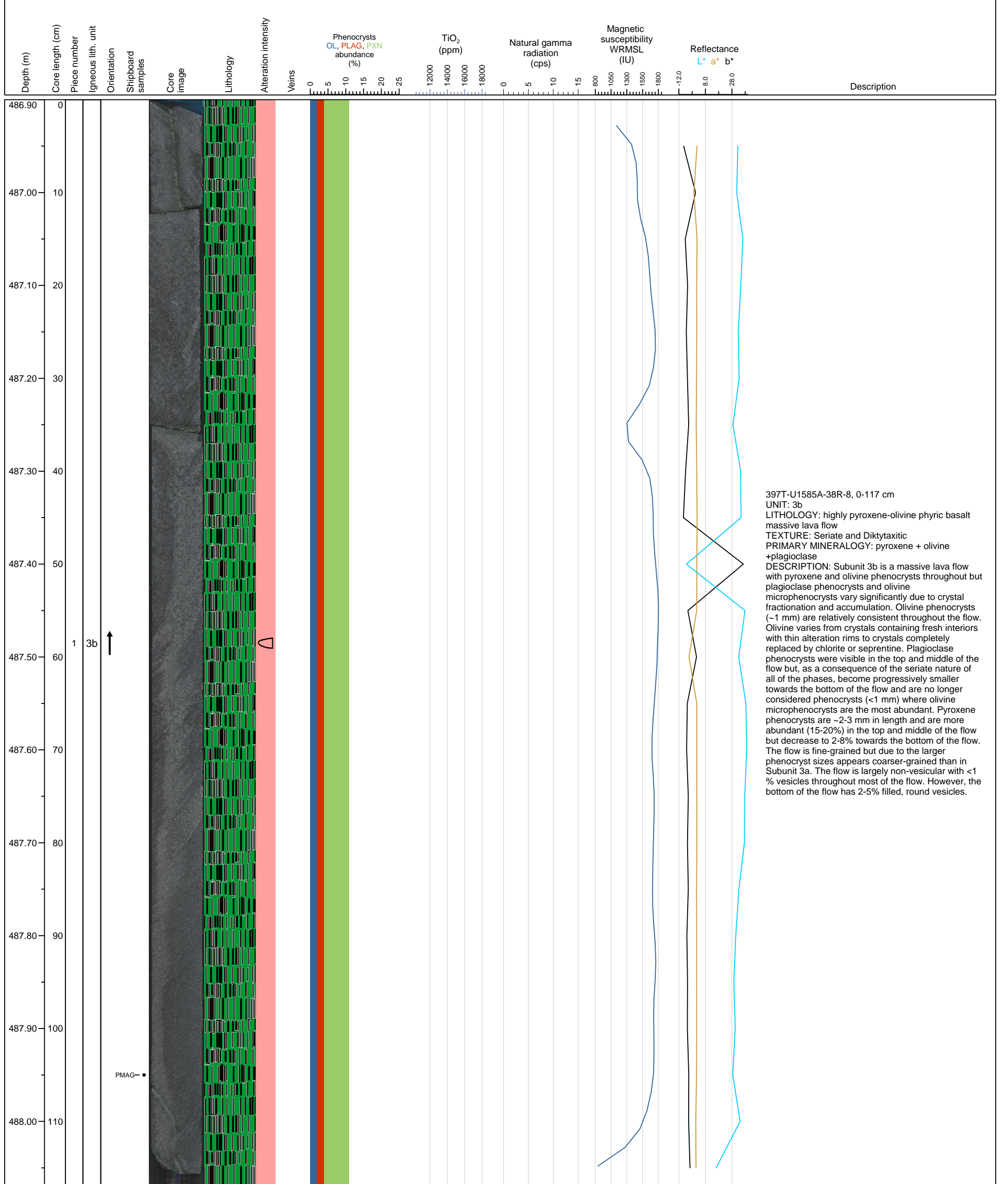




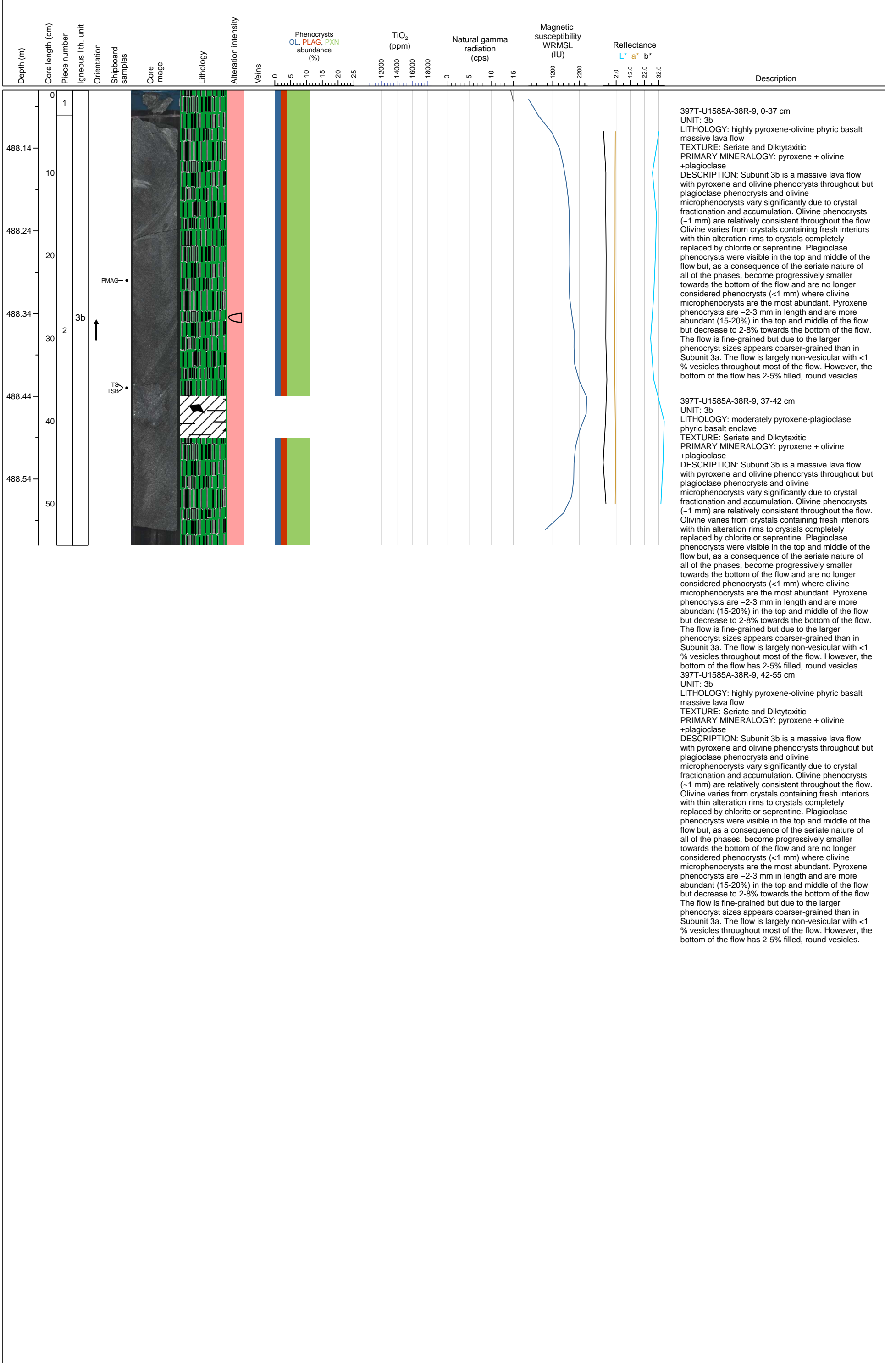
Hole 397T-U1585A-38R Section 7, Top of Section: 485.61 m (CSF-A)



Hole 397T-U1585A-38R Section 8, Top of Section: 486.9 m (CSF-A)

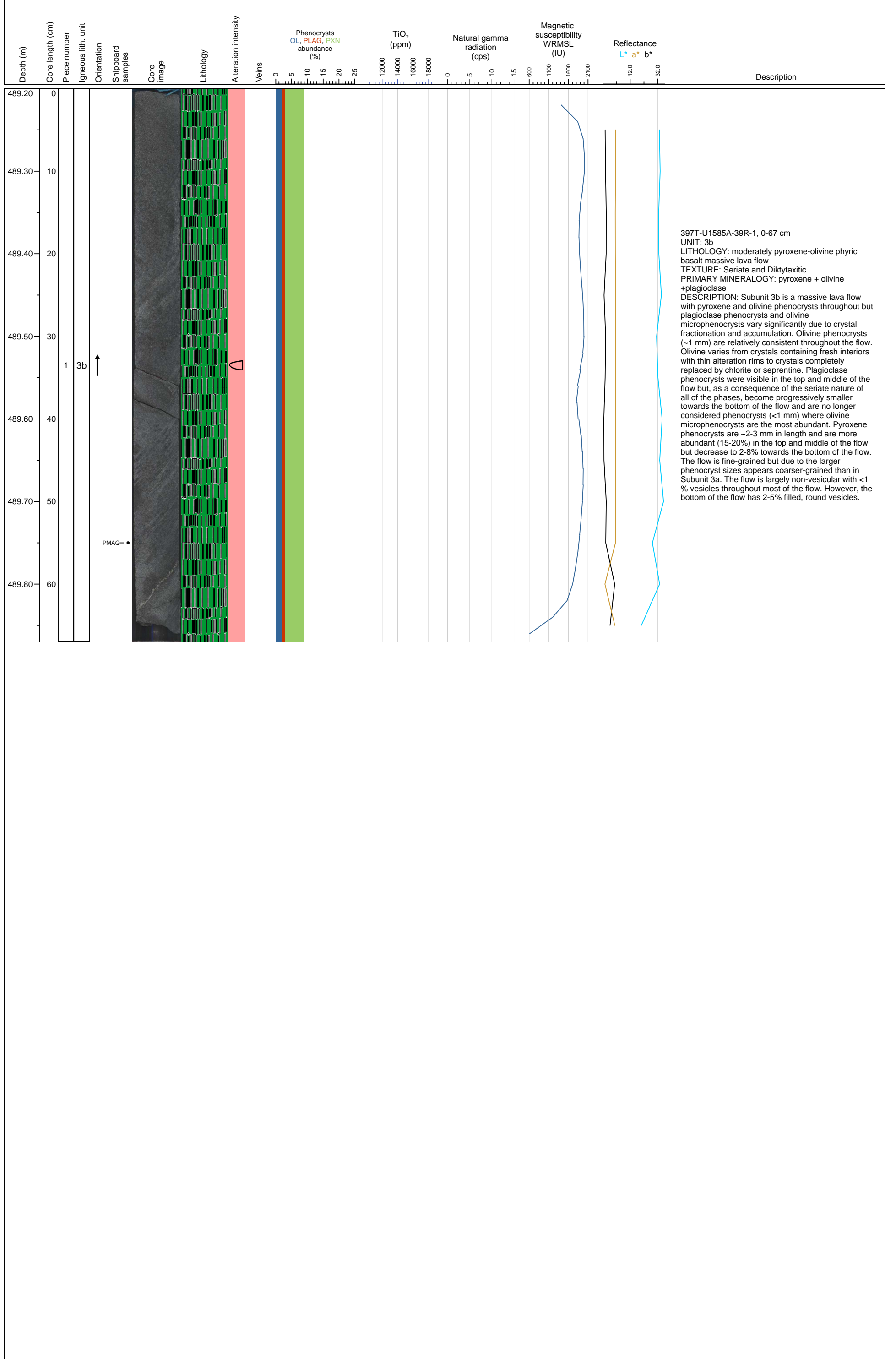


Hole 397T-U1585A-38R Section 9, Top of Section: 488.07 m (CSF-A)



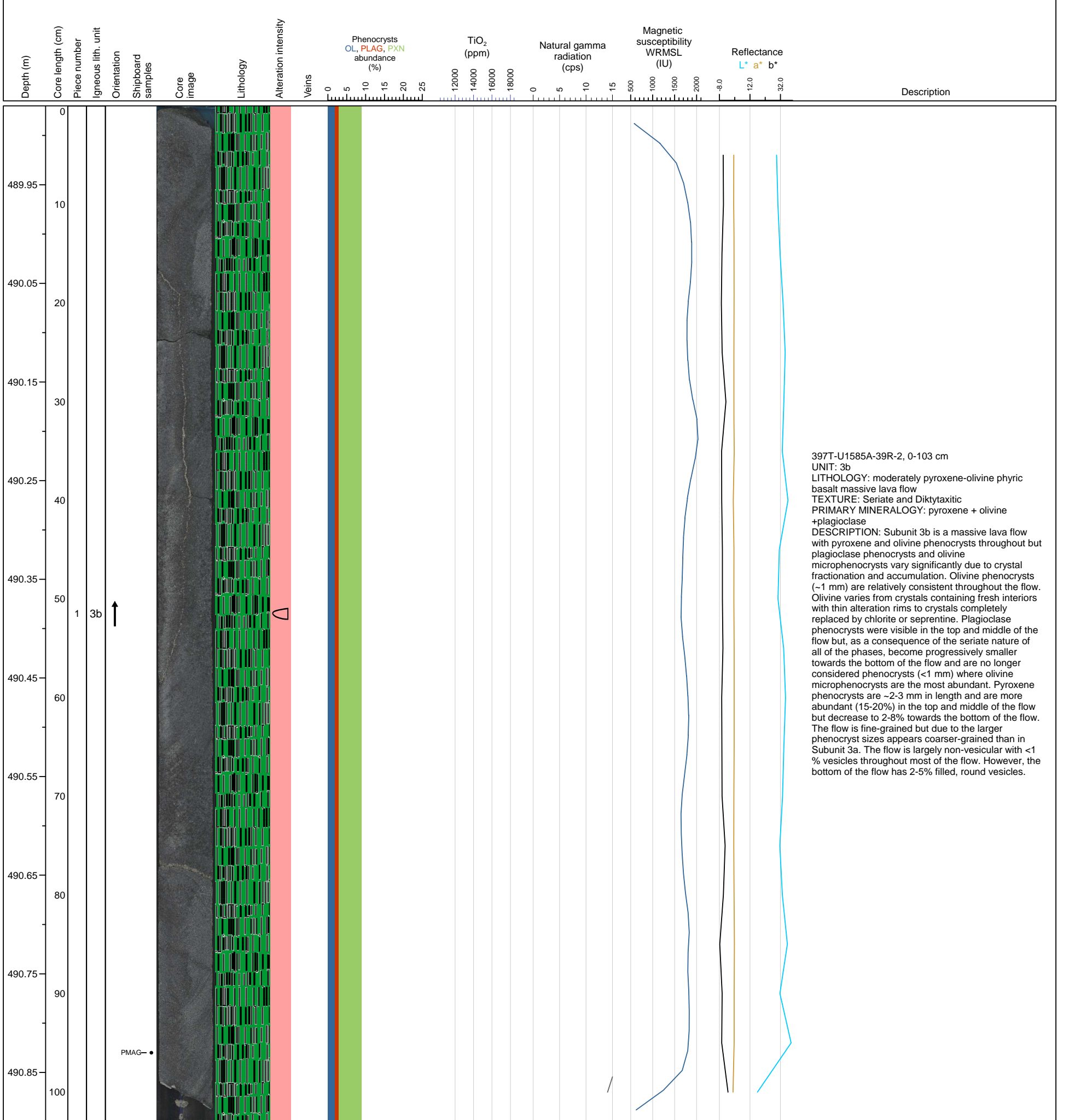


Hole 397T-U1585A-39R Section 1, Top of Section: 489.2 m (CSF-A)

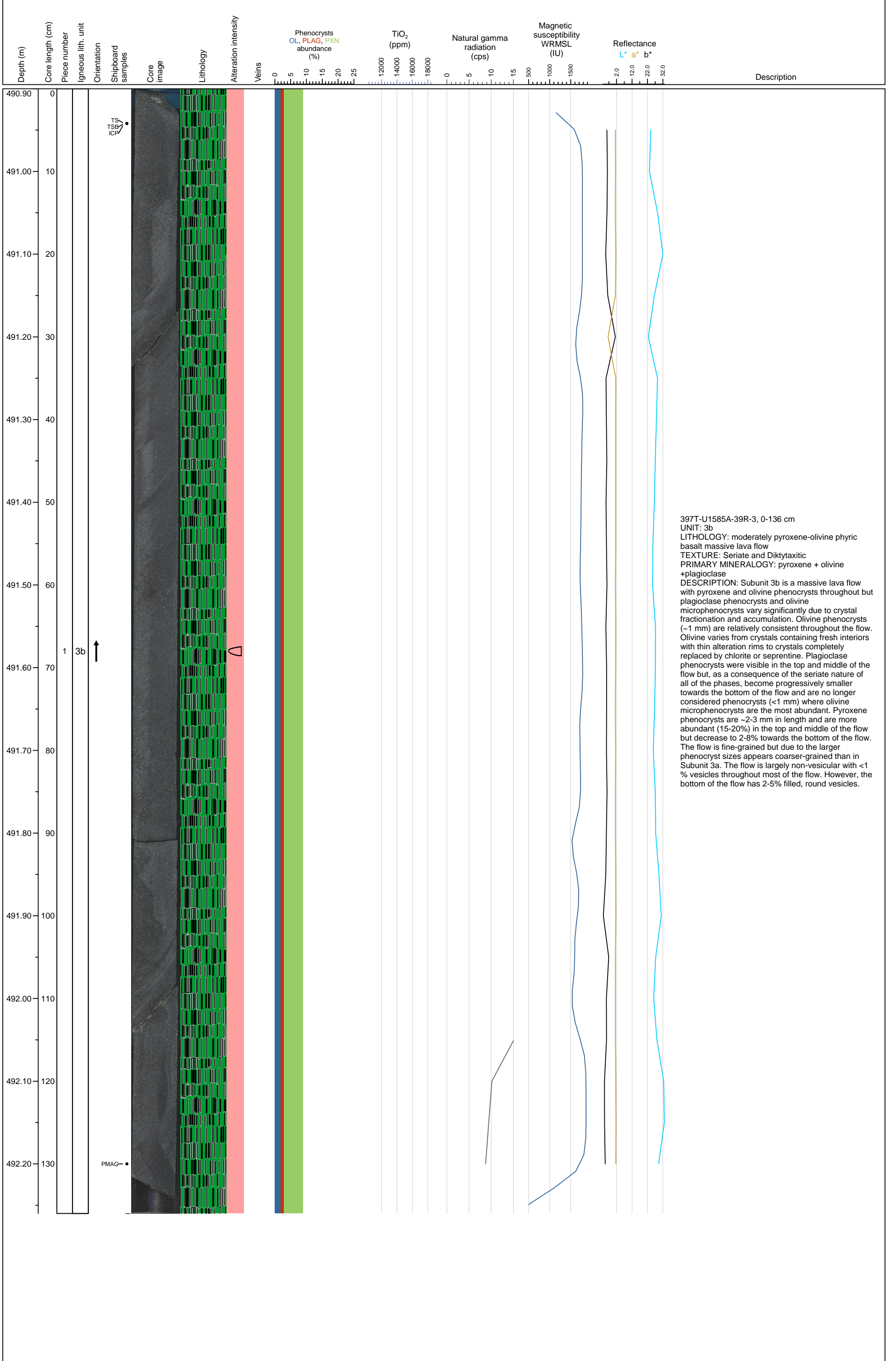




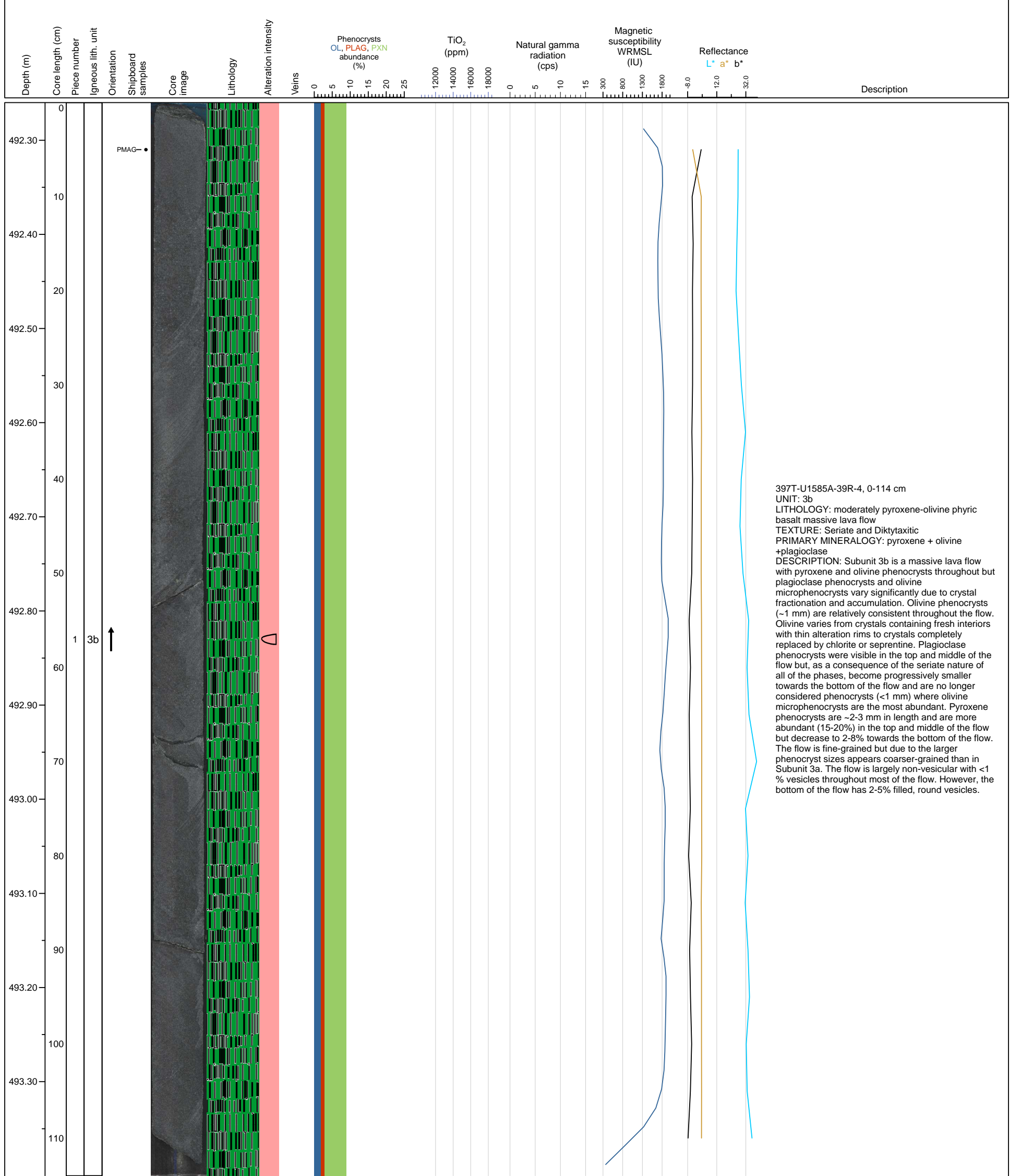
Hole 397T-U1585A-39R Section 2, Top of Section: 489.87 m (CSF-A)



Hole 397T-U1585A-39R Section 3, Top of Section: 490.9 m (CSF-A)

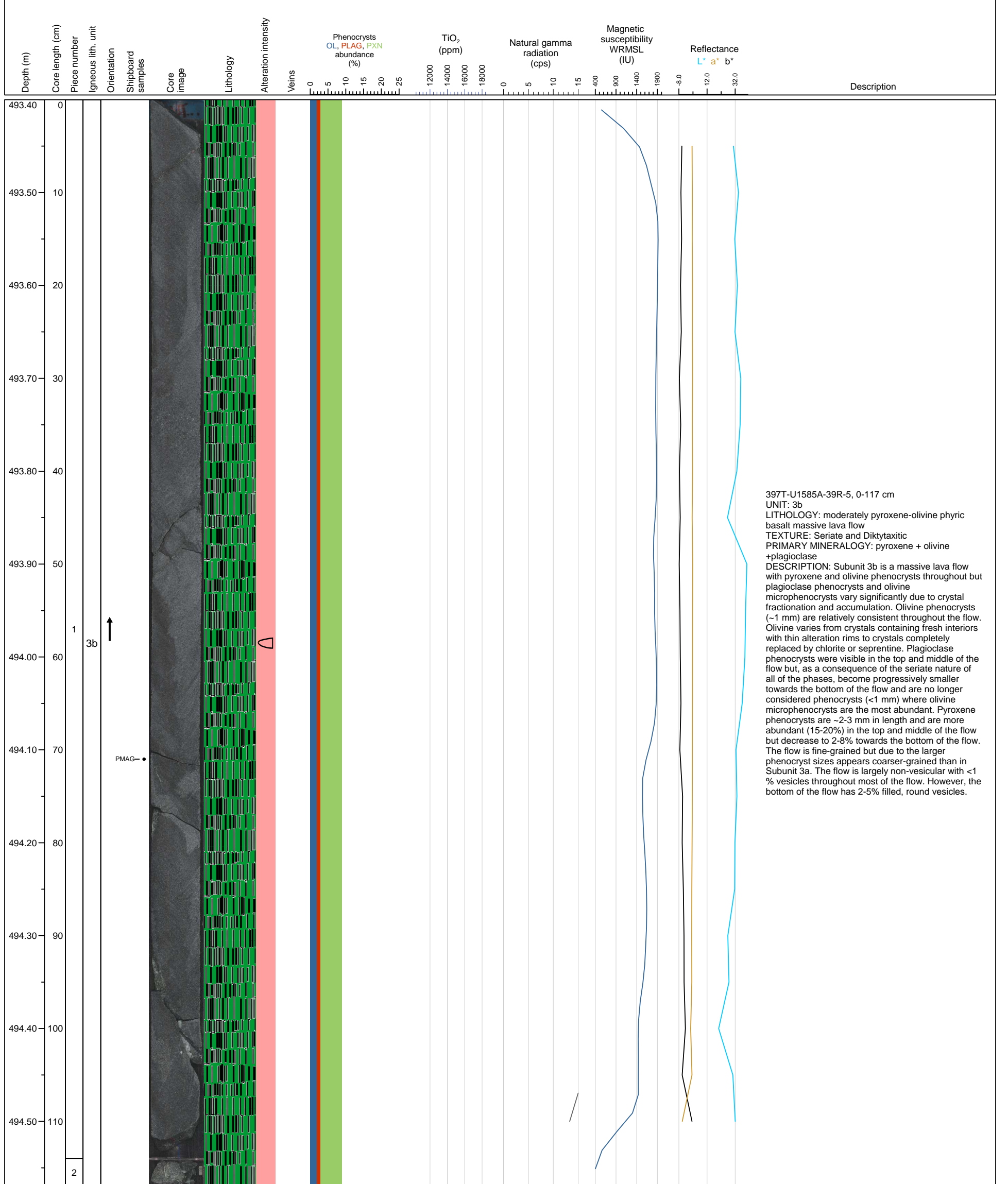


Hole 397T-U1585A-39R Section 4, Top of Section: 492.26 m (CSF-A)



397T-U1585A-39R-4, 0-114 cm  
 UNIT: 3b  
 LITHOLOGY: moderately pyroxene-olivine phyric basalt massive lava flow  
 TEXTURE: Seriate and Diktytaxitic  
 PRIMARY MINERALOGY: pyroxene + olivine + plagioclase  
 DESCRIPTION: Subunit 3b is a massive lava flow with pyroxene and olivine phenocrysts throughout but plagioclase phenocrysts and olivine microphenocrysts vary significantly due to crystal fractionation and accumulation. Olivine phenocrysts (~1 mm) are relatively consistent throughout the flow. Olivine varies from crystals containing fresh interiors with thin alteration rims to crystals completely replaced by chlorite or seprentine. Plagioclase phenocrysts were visible in the top and middle of the flow but, as a consequence of the seriate nature of all of the phases, become progressively smaller towards the bottom of the flow and are no longer considered phenocrysts (<1 mm) where olivine microphenocrysts are the most abundant. Pyroxene phenocrysts are ~2-3 mm in length and are more abundant (15-20%) in the top and middle of the flow but decrease to 2-8% towards the bottom of the flow. The flow is fine-grained but due to the larger phenocryst sizes appears coarser-grained than in Subunit 3a. The flow is largely non-vesicular with <1 % vesicles throughout most of the flow. However, the bottom of the flow has 2-5% filled, round vesicles.

Hole 397T-U1585A-39R Section 5, Top of Section: 493.4 m (CSF-A)





Hole 397T-U1585A-39R Section 6, Top of Section: 494.57 m (CSF-A)

