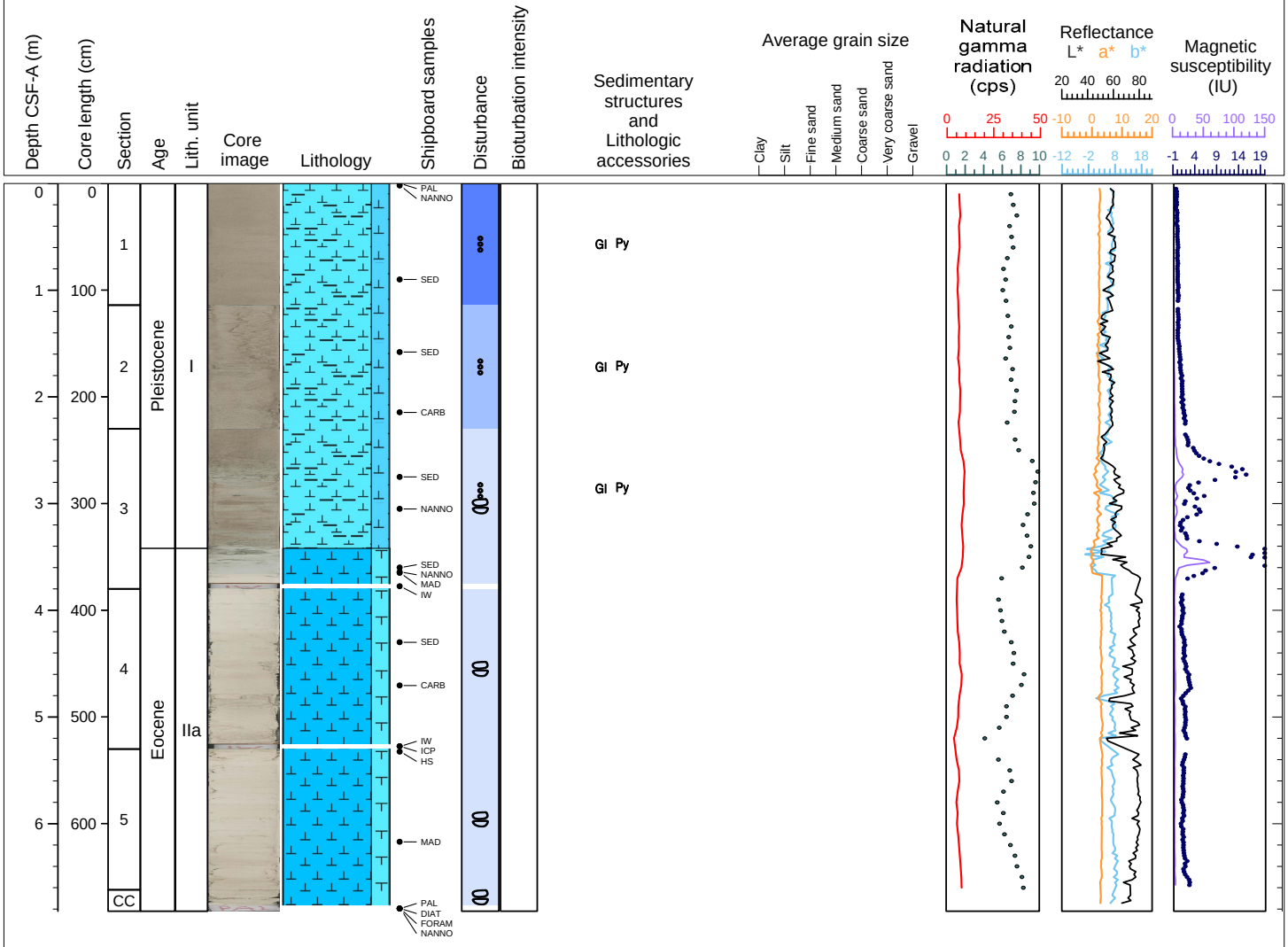
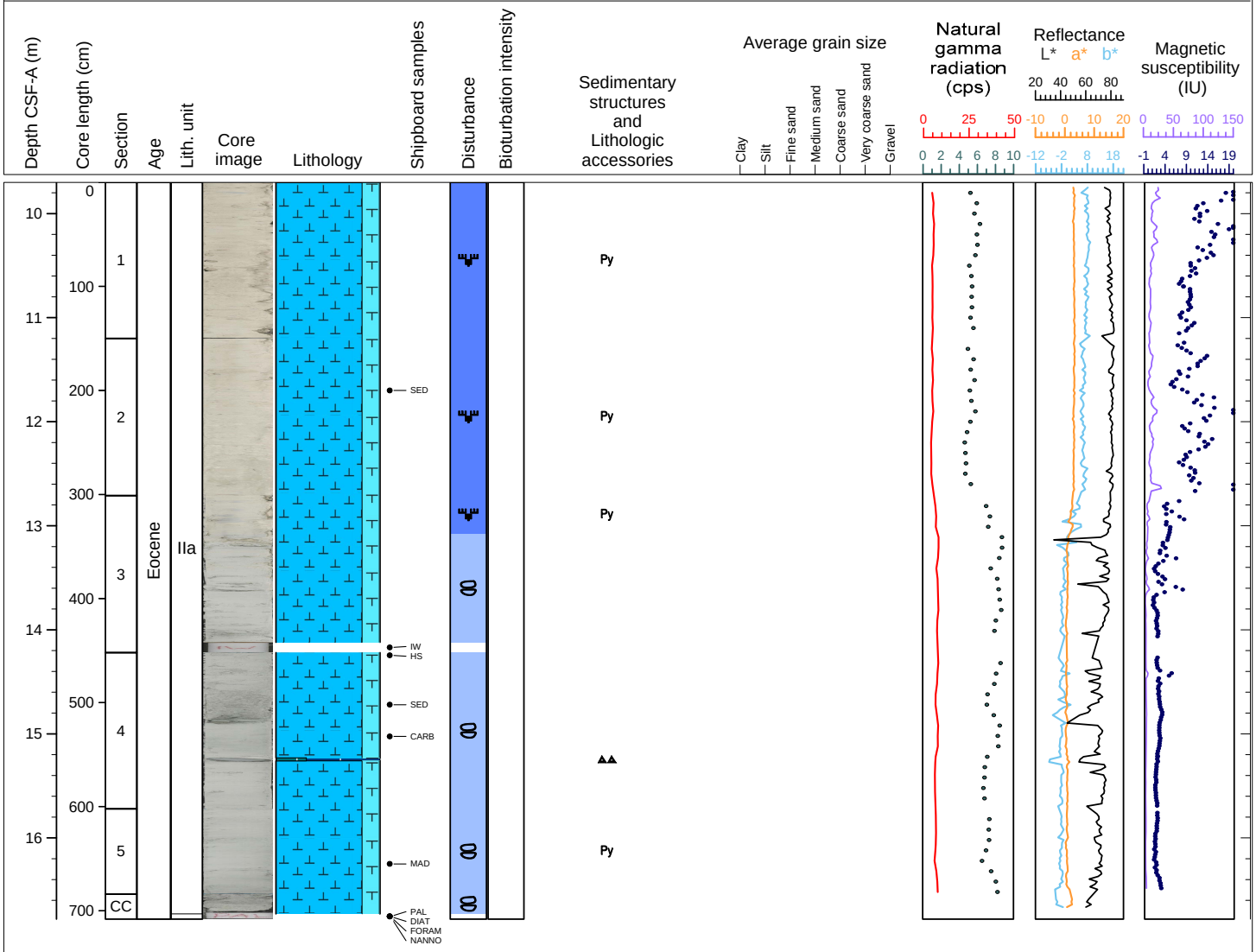
Hole 392-U1580A Core 1R, Interval 0.0-6.82 m (CSF-A)

Core U1580A-1R contains light gray foraminiferal ooze from Section 1, 0 cm through Section 3, 115 cm. Section 4, 0-20 cm, is white nannofossil ooze with foraminifera. Sections 4 to CC are yellow nannofossil ooze with foraminifera. The foraminiferal ooze contains rare black and dark green sand grains. Sections 1 and 3 are soupy and the remainder of the core is slightly biscuited.



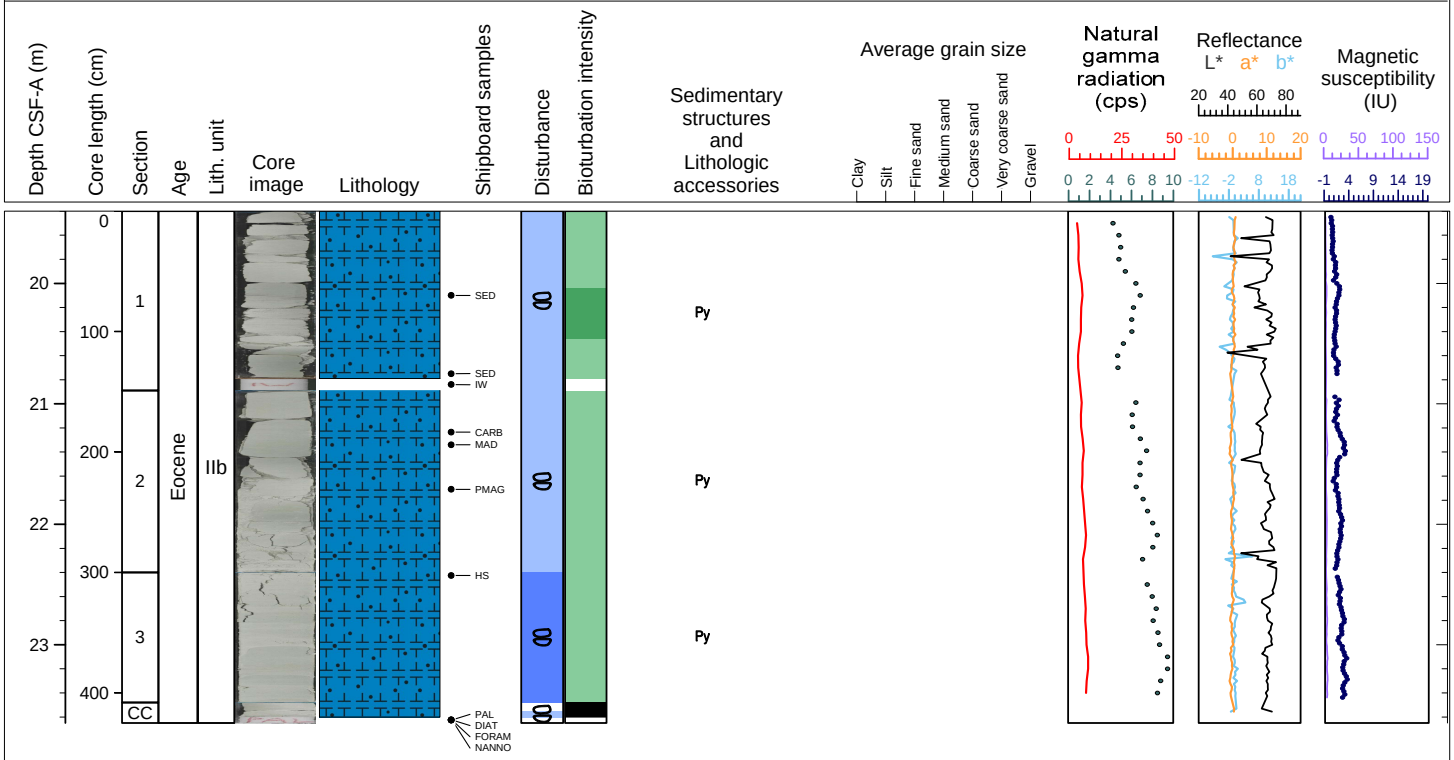
Hole 392-U1580A Core 2R, Interval 9.7-16.78 m (CSF-A)

Core U1580A-2R contains white nannofossil ooze. At Section 3, 37 cm, the color changes downsection from slightly pale yellow to very light gray. In Section 4, 101-105 cm, there is a gray silicified interval. Sections 1 and 2 are soupy and the remainder of the core is moderately biscuited.



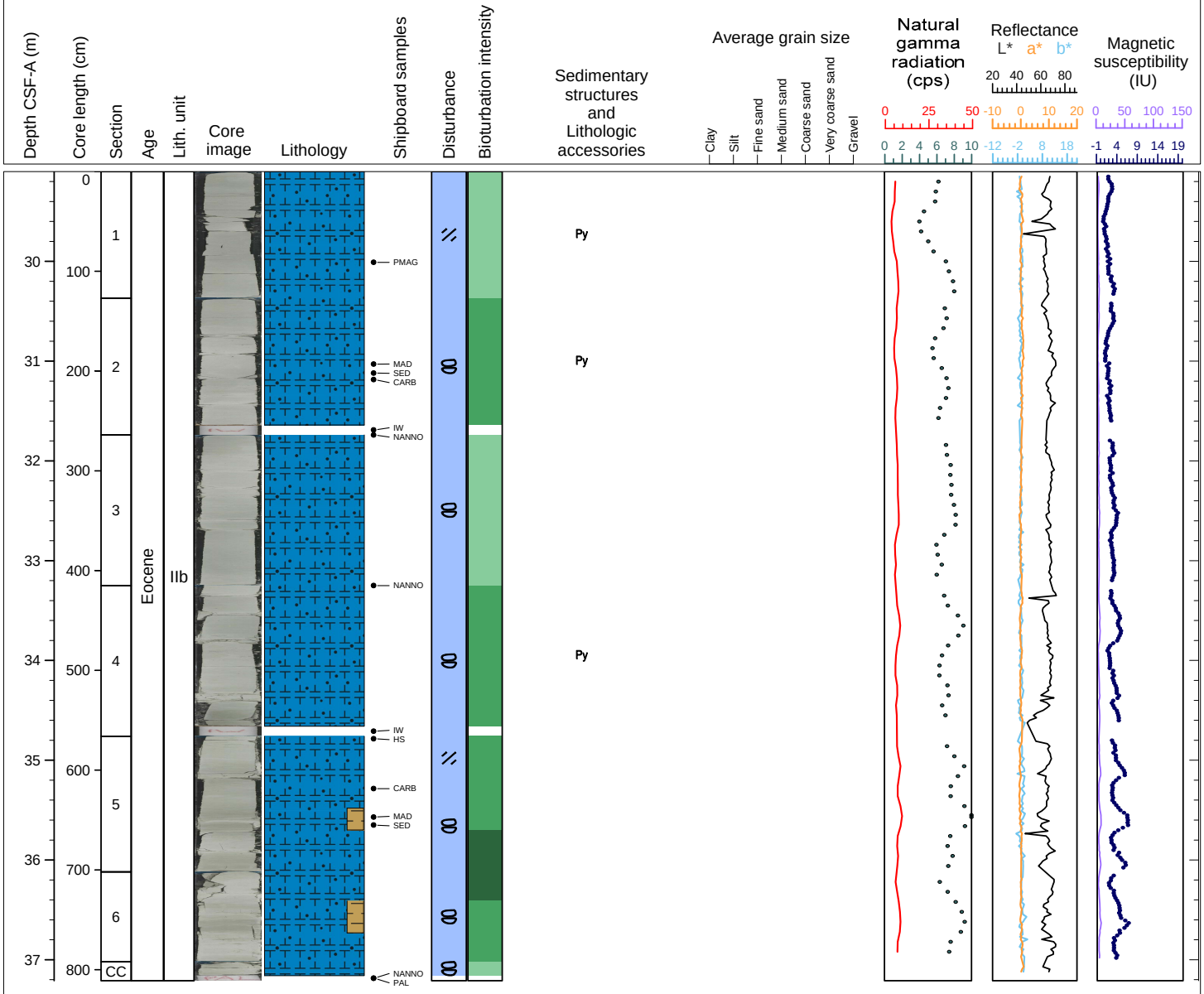
Hole 392-U1580A Core 3R, Interval 19.4-23.65 m (CSF-A)

Core U1580A-3R is light greenish gray nannofossil chalk that is moderately to highly bioturbated. There are faint mottles of gray/black pyrite in Section 1, 64-106 cm. There are occasional Zoophycos burrows in Section 1. Drilling disturbance ranges from absent to moderately and severely biscuited.



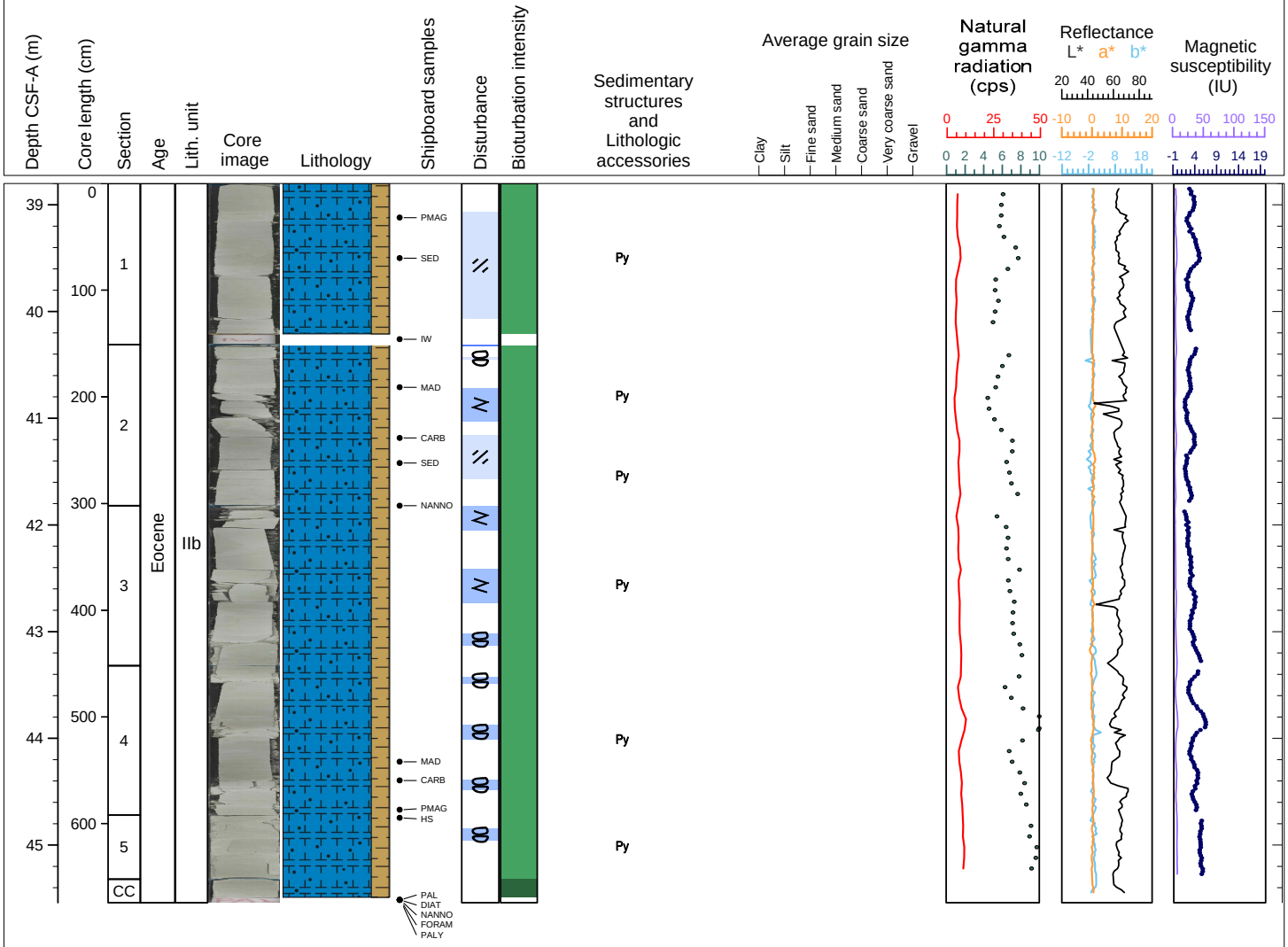
Hole 392-U1580A Core 4R, Interval 29.1-37.21 m (CSF-A)

Core U1580A-4R is light greenish gray nannofossil chalk that is moderately to highly bioturbated. There are faint mottles of gray/black pyrite throughout Sections 2 and 4. Occasional Zoophycos burrows are common in Section 1 and are concentrated in Section 4, 66-70 cm. Drilling disturbance ranges from absent to moderately fractured and biscuited.



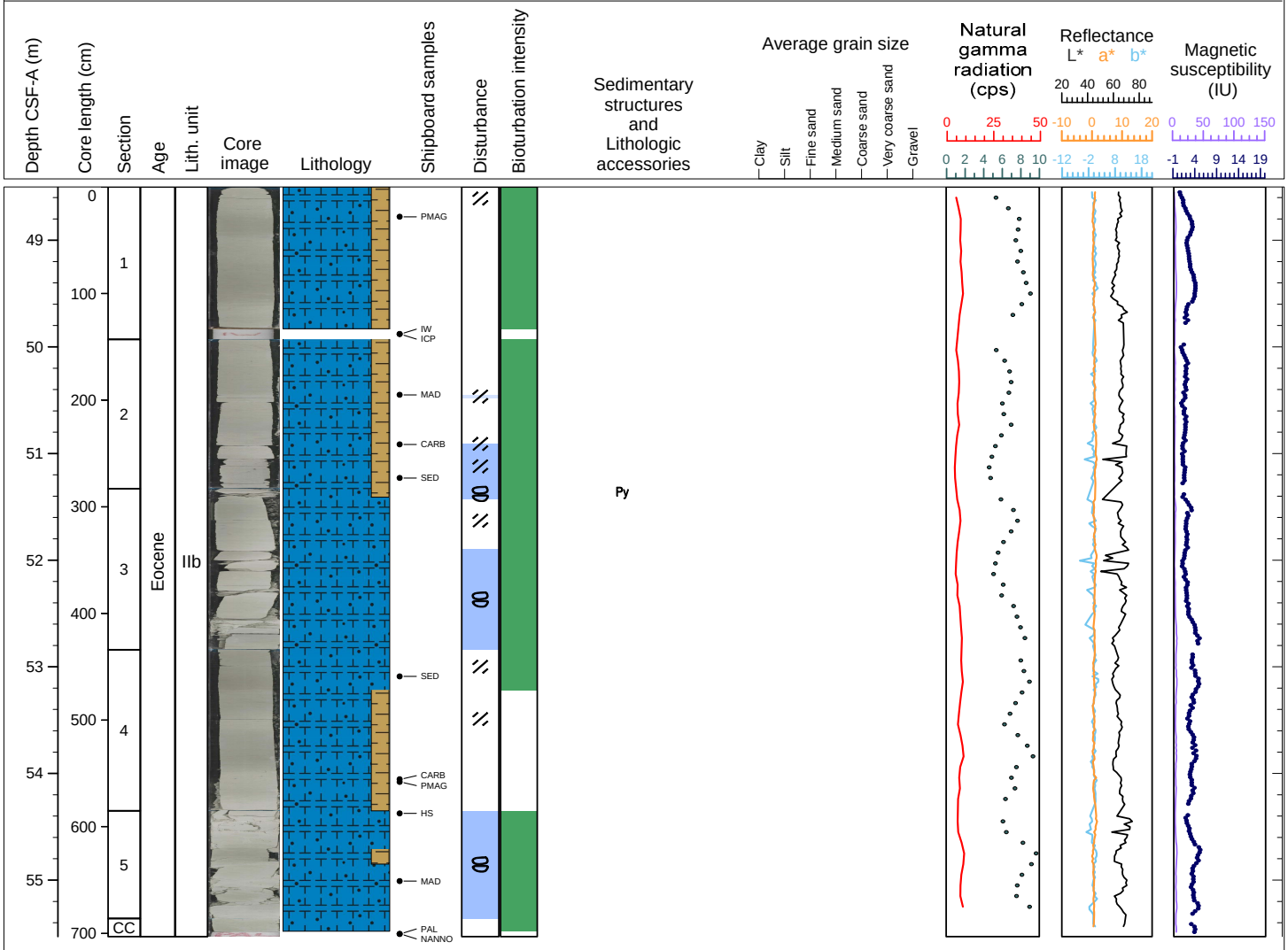
Hole 392-U1580A Core 5R, Interval 38.8-45.54 m (CSF-A)

Core U1580A-5R is light greenish gray nannofossil chalk that is moderately to highly bioturbated. There are faint mottles of gray/black pyrite in Section 2, 97-151 cm. Drilling disturbance ranges from absent to slightly fractured and moderately biscuited.



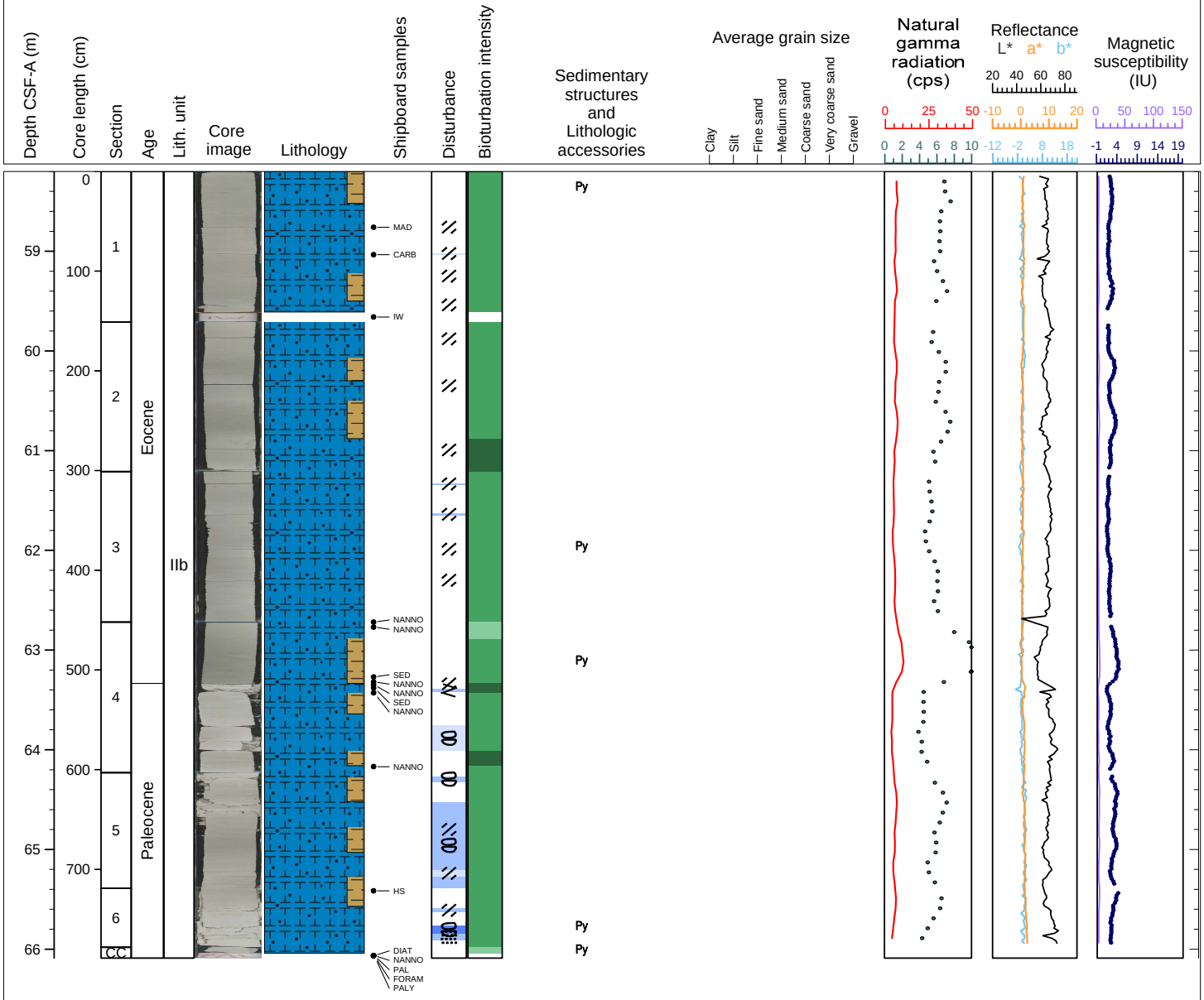
Hole 392-U1580A Core 6R, Interval 48.5-55.53 m (CSF-A)

Core U1580A-6R is light greenish gray nannofossil chalk with clay, interbedded with nannofossil chalk. Bioturbation is moderate to high. There are faint mottles of gray/black pyrite in Sections 2, 3 and 5. Drilling disturbance ranges from absent to slightly fractured and moderately biscuited.



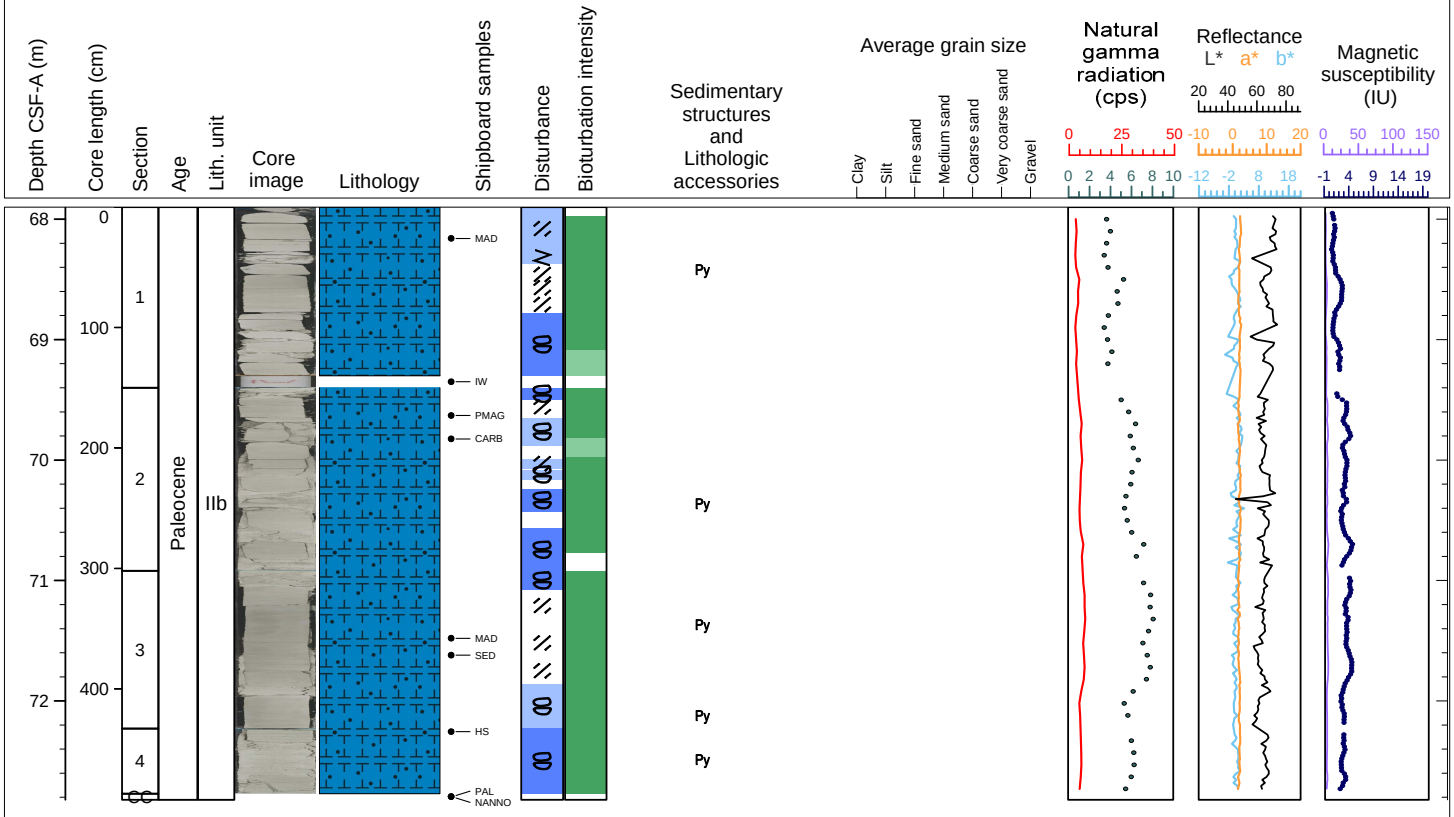
Hole 392-U1580A Core 7R, Interval 58.2-66.09 m (CSF-A)

Core U1580A-7R is light greenish gray nannofossil chalk with clay interbedded with nannofossil chalk. In Section 4 (61-71 cm) there is a 10 cm thick white layer that underlies 44.5 cm of dark green sediment mottled with pyrite. The contact between these two layers is sharp, while all other contacts observed are gradational. Drilling disturbance ranges from absent to moderately fractured and biscuited.



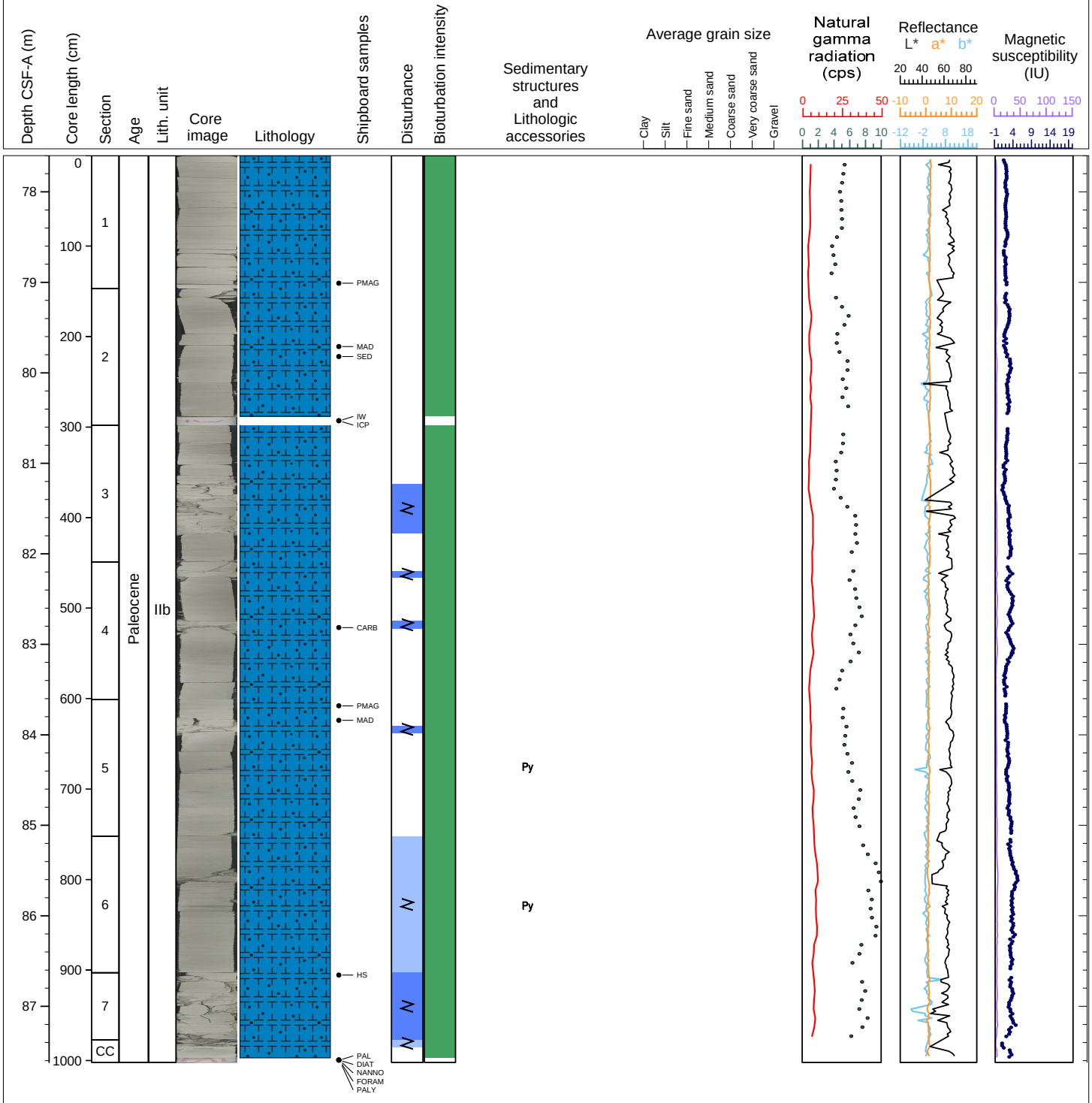
Hole 392-U1580A Core 8R, Interval 67.9-72.82 m (CSF-A)

Core U1580A-8R is light greenish gray massive nannofossil chalk with clay, interbedded with nannofossil chalk, that is moderately bioturbated. There are faint mottles of gray/black pyrite throughout Section 1. There are occasional Zoophycos burrows, which are well preserved in Sections 3 (73-84 cm), and 4 (1-10 cm). Drilling disturbance ranges from absent to moderately fractured, brecciated and biscuited.



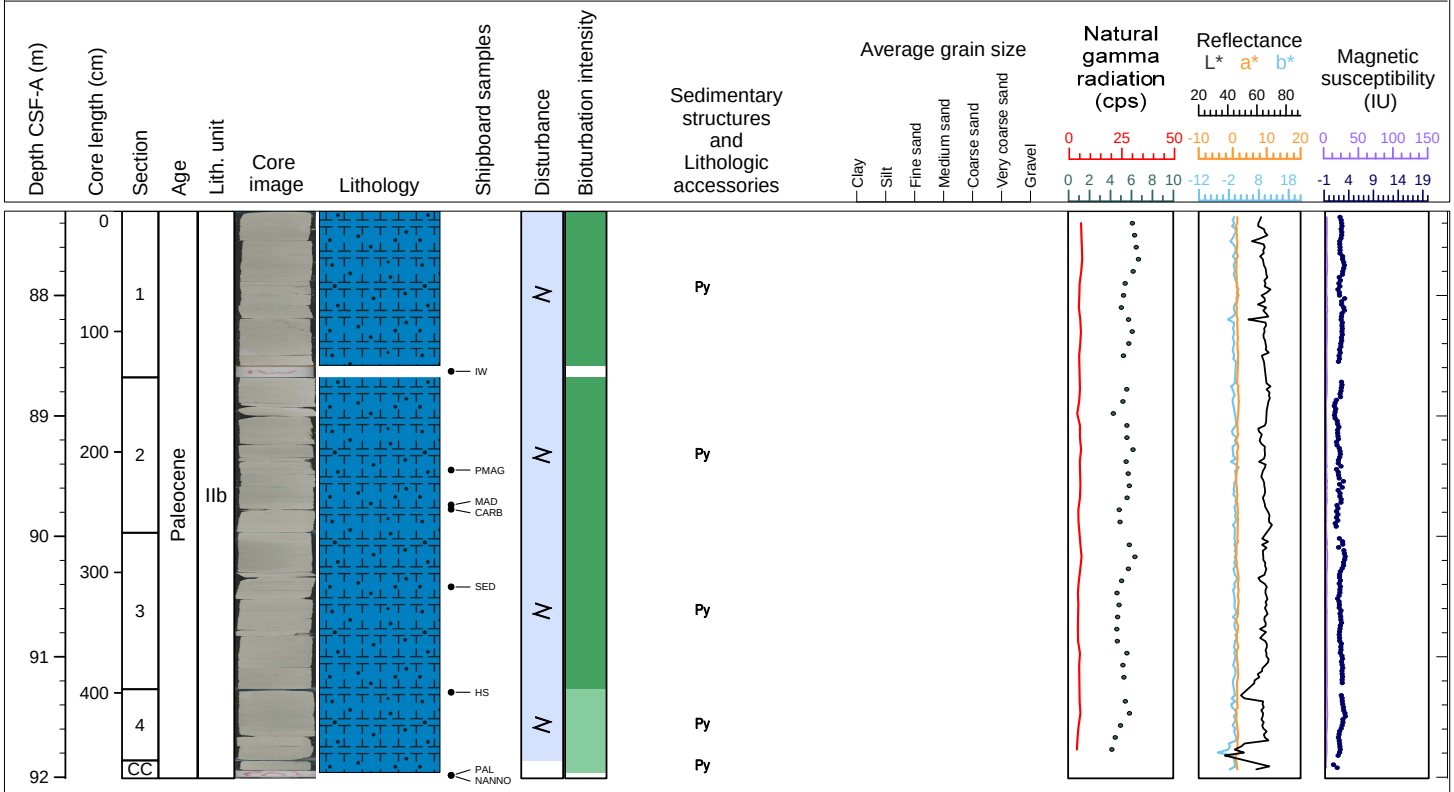
Hole 392-U1580A Core 9R, Interval 77.6-87.62 m (CSF-A)

Core U1580A-9R is light greenish gray, massive nannofossil chalk that is moderately bioturbated. There are specks of pyrite in Sections 5 and 6, including a distinct fleck surrounded by gray halos in Section 5, 77-78.5 cm, and a ~2 cm dark gray interval of disseminated pyrite in Section 6, 77-79 cm. Color alternates very subtly between light greenish gray and greenish gray on m-scale throughout the core. The core is moderately to severely fractured by drilling.



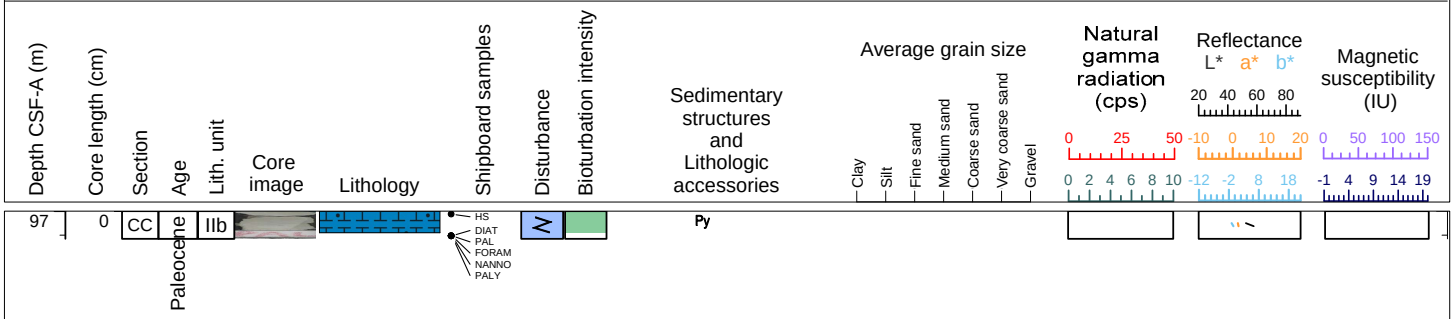
Hole 392-U1580A Core 10R, Interval 87.3-92.01 m (CSF-A)

Core U1580A-10R is light greenish gray, massive nannofossil chalk that is moderately bioturbated. Prominent vertical burrows occur in Sections 1 (88-95 cm), and 3 (116-127 cm). Zoophycus burrows are observed in Sections 2 (20 cm), and 3 (48 cm). There are specks of pyrite throughout the core. Section 3 has a dark patch of disseminated pyrite at 41 cm. The core is slightly fragmented by drilling.



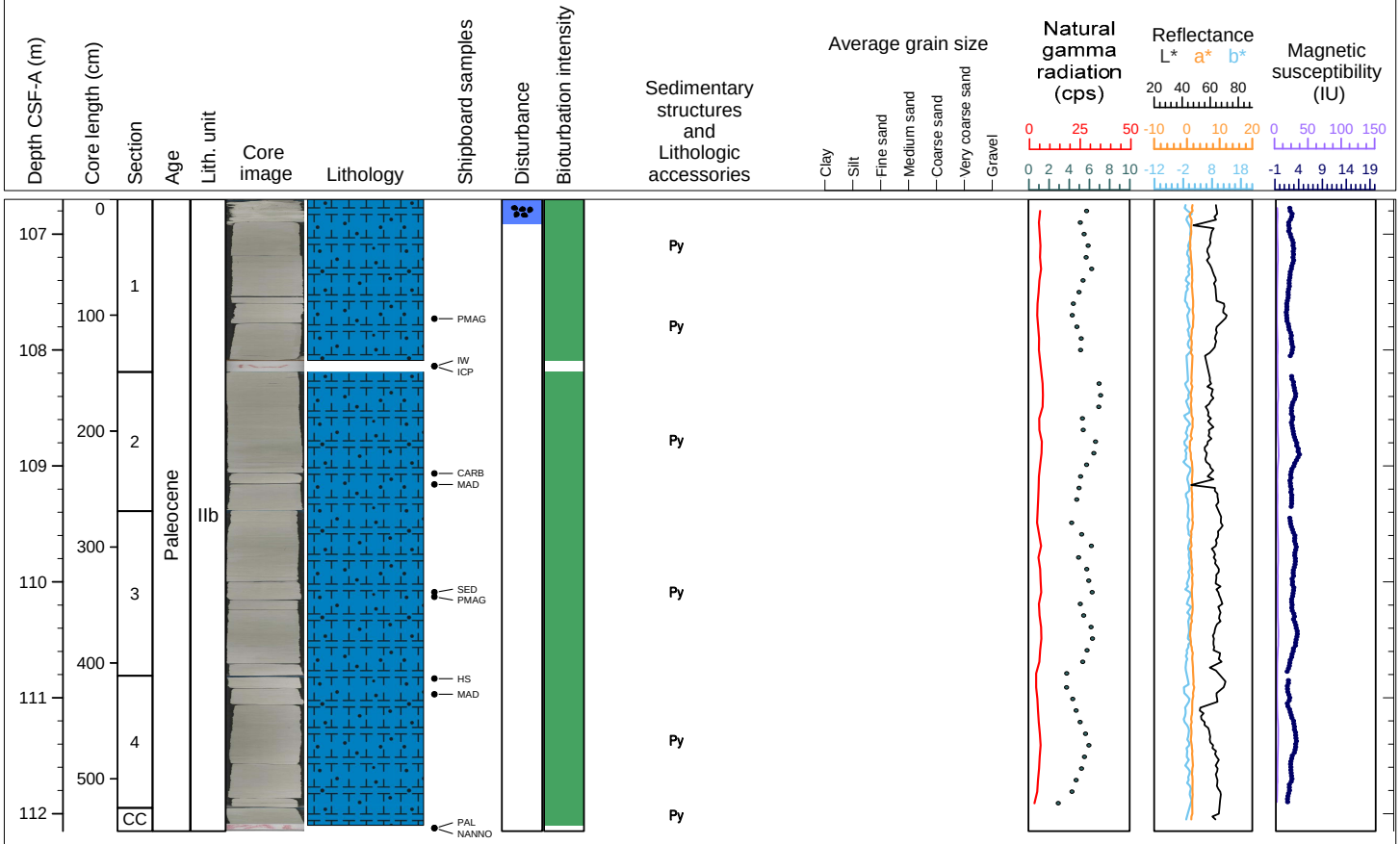
Hole 392-U1580A Core 11R, Interval 97.0-97.23 m (CSF-A)

Core U1580A-11R is light greenish gray, massive nannofossil chalk that is slightly bioturbated. Only the core catcher was recovered, which was moderately fragmented.



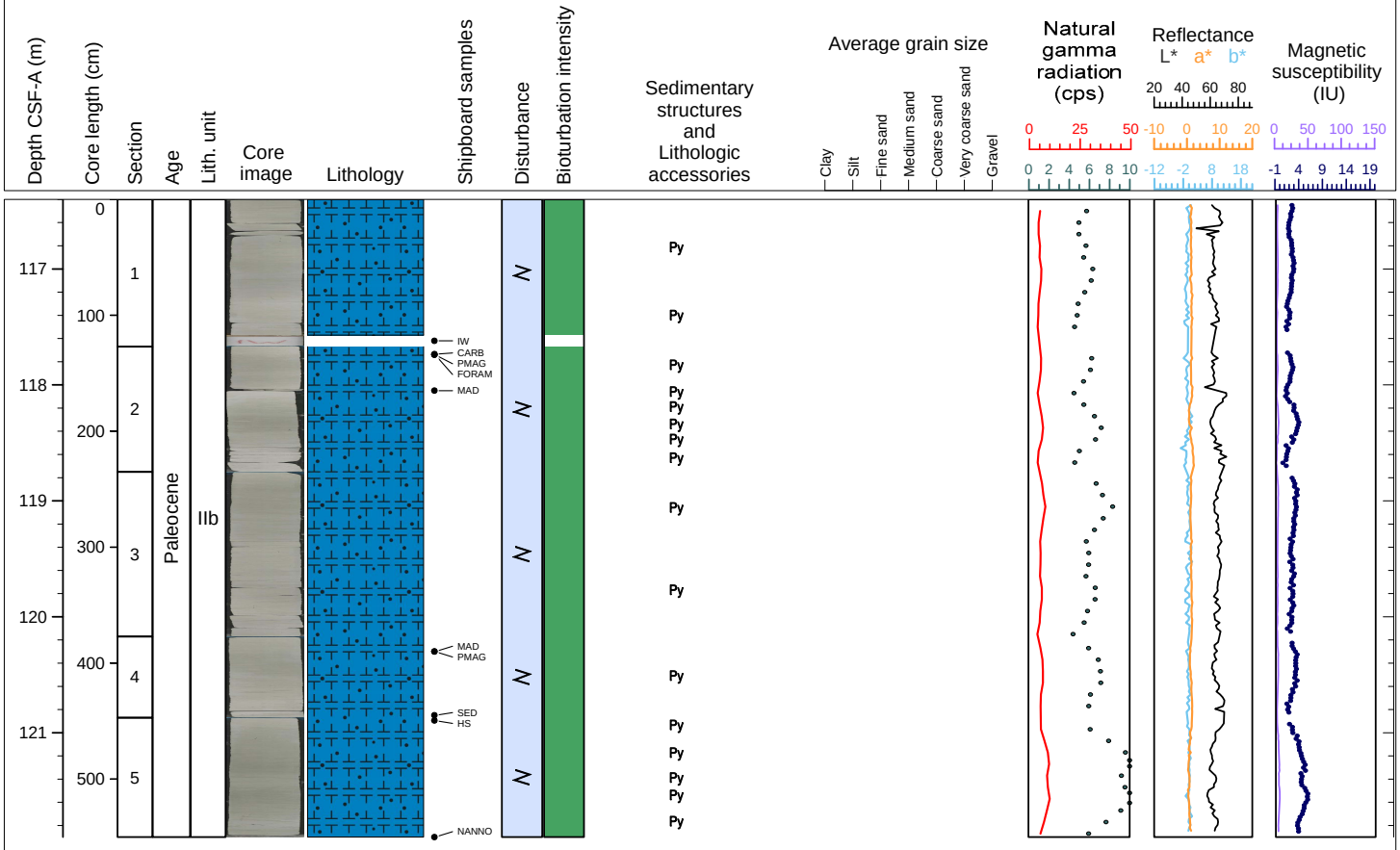
Hole 392-U1580A Core 12R, Interval 106.7-112.15 m (CSF-A)

Core U1580A-12R is light greenish gray, massive nannofossil chalk that is moderately bioturbated. Sporadic black specks of pyrite are present in Sections 1 to 3. The top 21 cm of Section 1 are fall-in.



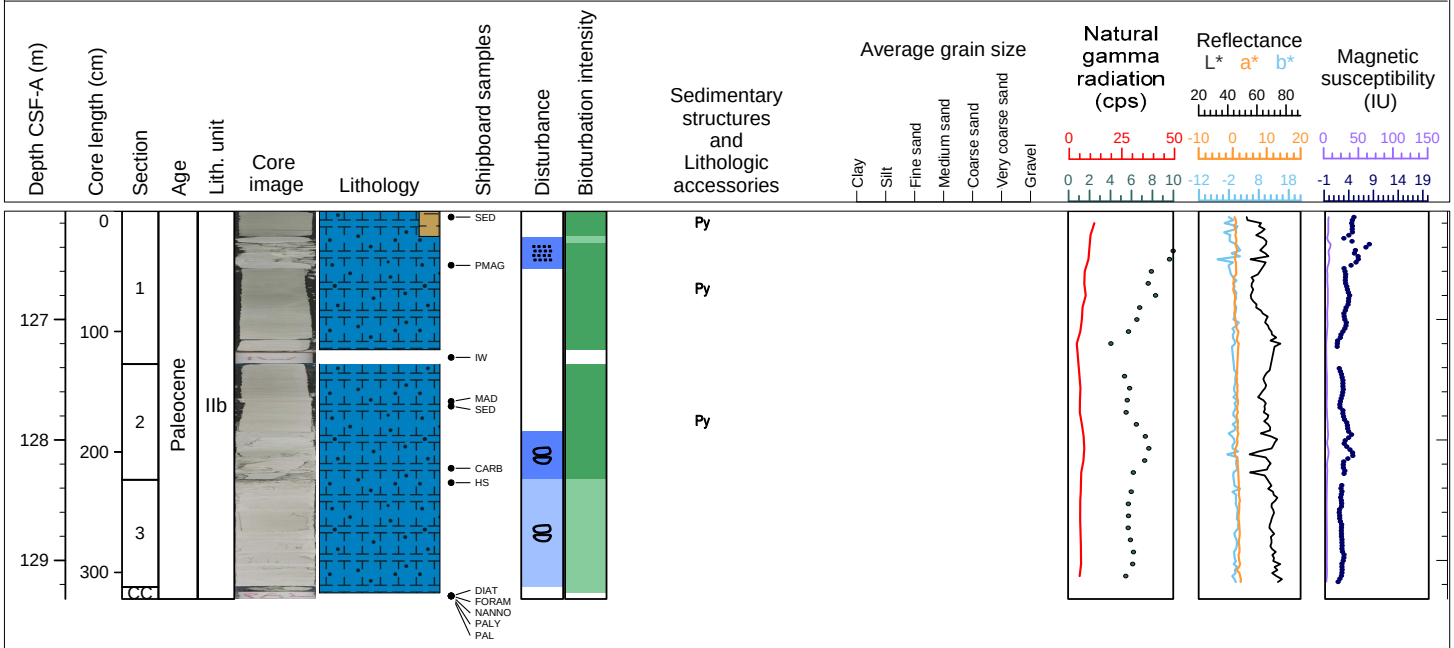
Hole 392-U1580A Core 13R, Interval 116.4-121.9 m (CSF-A)

Core U1580A-13R is light greenish gray to light gray nannofossil chalk that shows subtle color banding and is moderately bioturbated. Sporadic black specks of pyrite occur in all sections. There is a black patch of pyrite in Section 3, 106 cm. Prominent burrows are present in several parts of the core, e.g. Sections 2 (68-69 cm), and 3 (110 cm) to end of core. A very large, branching vertical burrow with dark (possibly infilled with pyrite) is present in Section 4, 50-68 cm.



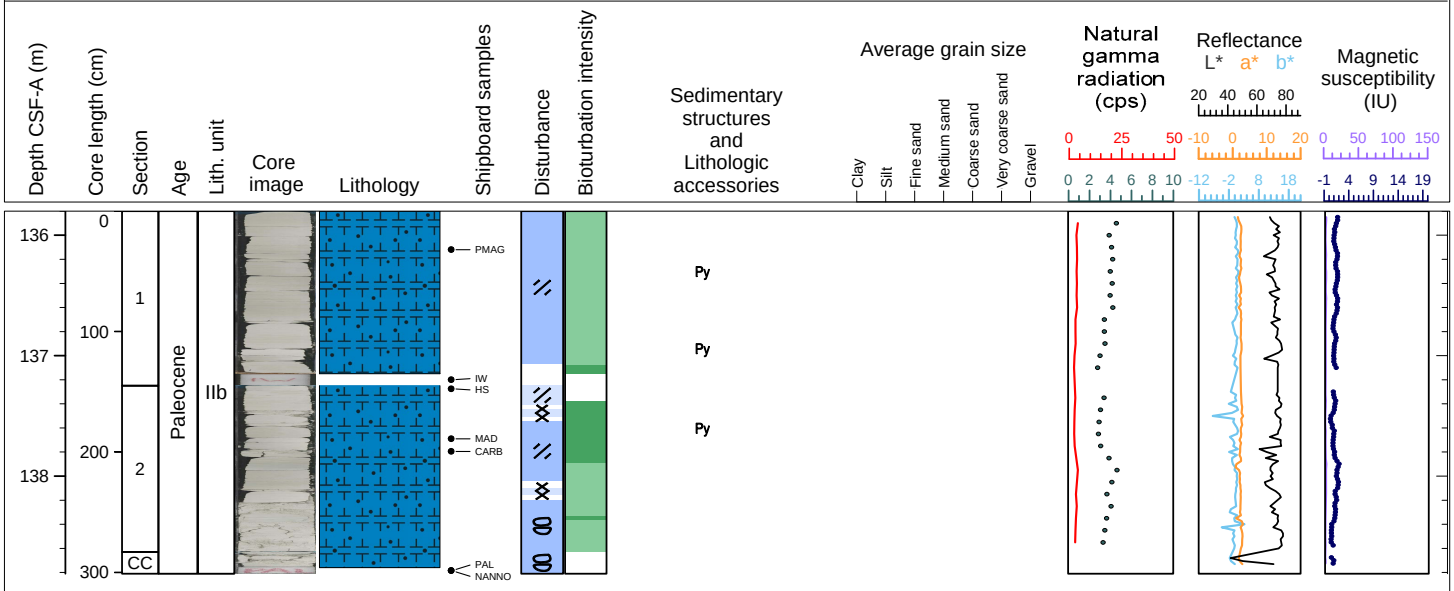
Hole 392-U1580A Core 14R, Interval 126.1-129.32 m (CSF-A)

Core U1580A-14R is light greenish gray, massive nannofossil chalk that is moderately bioturbated. Sporadic black specks of pyrite occur in Sections 1 (0-21 and 26-104 cm), and 2 (0-96 cm). Zoophycos burrows with pyrite infilling are well preserved in Section 2 (0-60, 108-112 cm). The core is moderately to severely fragmented and biscuited.



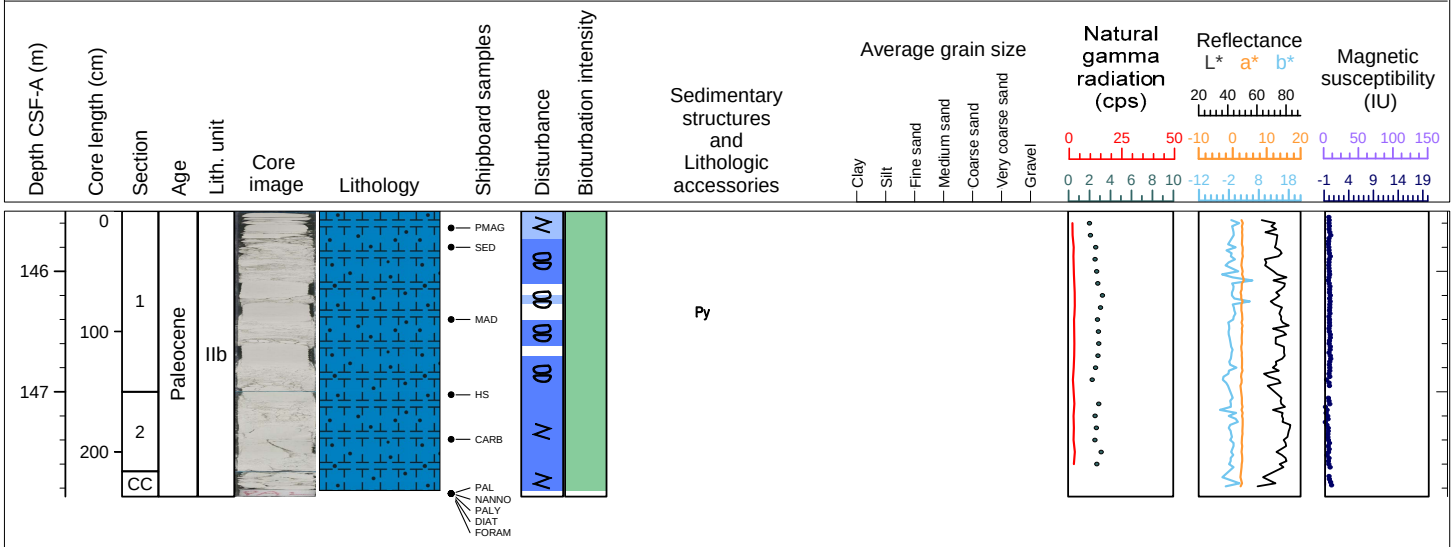
Hole 392-U1580A Core 15R, Interval 135.8-138.81 m (CSF-A)

Core U1580A-15R is light greenish gray, massive to mottled nannofossil chalk. Bioturbation intensity ranges from low to moderate throughout. Sporadic black specks of pyrite occur in Sections 1 (0-123 cm) and 2 (13-60 cm). The core is moderately fractured, fragmented, and biscuited.



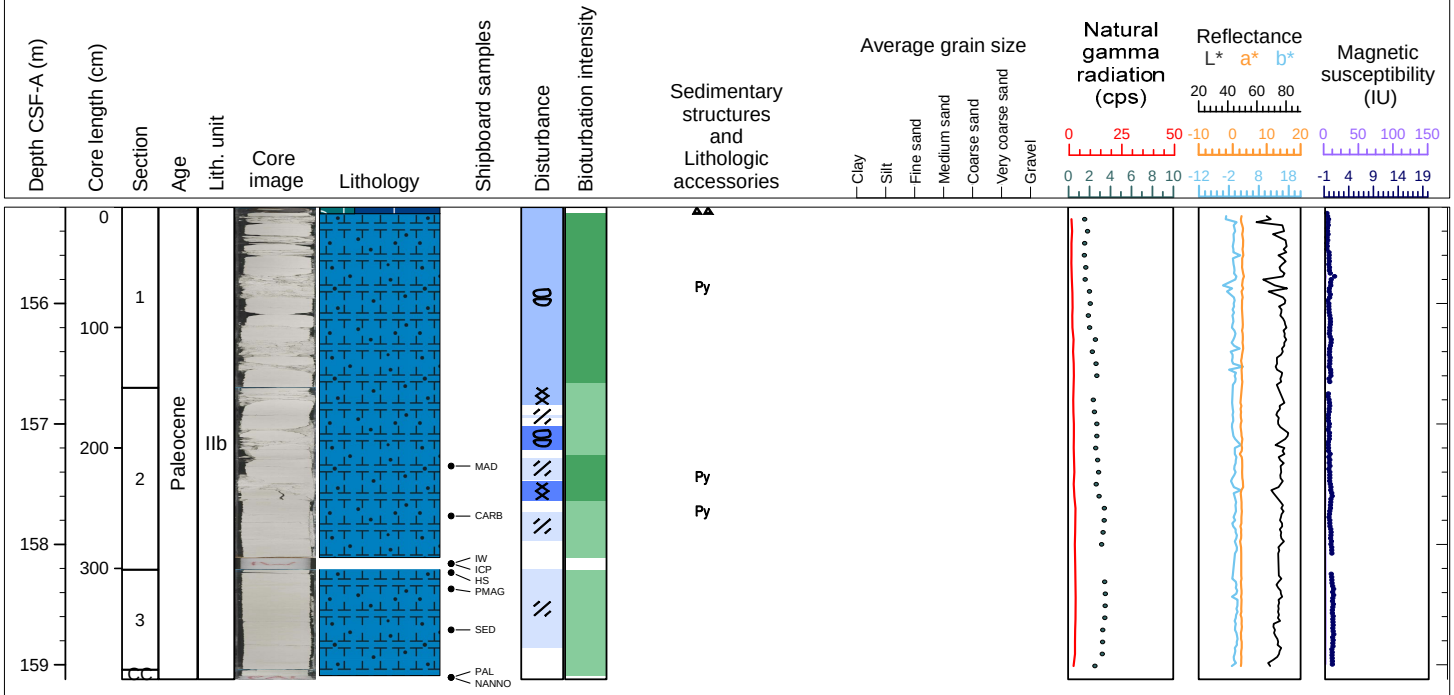
Hole 392-U1580A Core 16R, Interval 145.5-147.87 m (CSF-A)

Core U1580A-16R is light greenish gray, massive nannofossil chalk with low bioturbation intensity. Black mottles of pyrite occur in Section 1, 20-150 cm. The core is moderately to severely fragmented and biscuited.



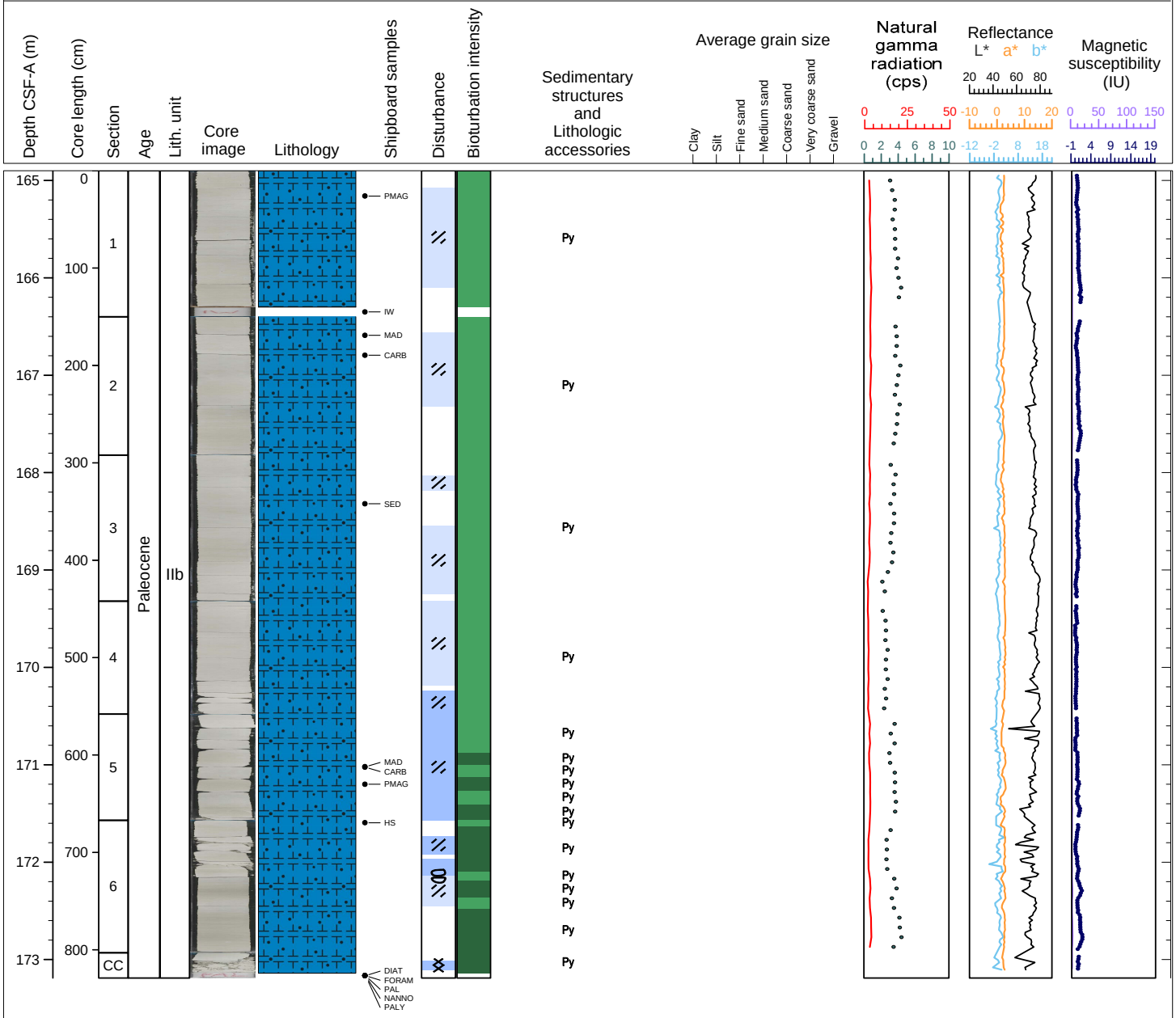
Hole 392-U1580A Core 17R, Interval 155.2-159.12 m (CSF-A)

Core U1580A-17R is white, massive nannofossil chalk with low to moderate bioturbation intensity. Black mottles of pyrite occur in Sections 1 (5.5-129 cm), and 2 (56-113 cm). A dark grayish brown silicified limestone (chert) interval occurs in the top 5.5 cm of Section 1. Zoophycos burrows with pyrite infilling are well preserved in Section 2, 0-56 cm. Drilling disturbance ranges from slight to severely fractured, brecciated, and biscuited.



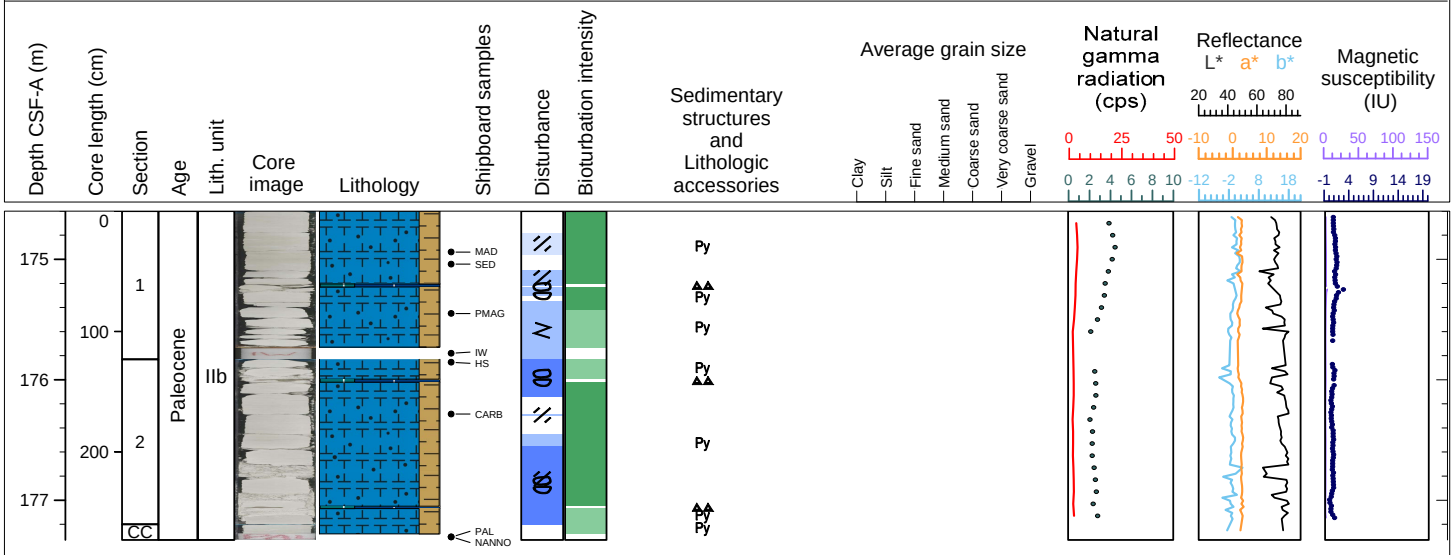
Hole 392-U1580A Core 18R, Interval 164.9-173.19 m (CSF-A)

Core U1580A-18R is white, mottled nannofossil chalk with moderate to high bioturbation intensity. The nannofossil chalk alternates between light greenish white and light reddish white throughout Sections 5 and 6. Bioturbation intensity is higher in the light reddish white intervals compared to the light greenish ones. Black mottles of pyrite appear throughout the core. Drilling disturbance ranges from slightly to moderately fractured, brecciated, and biscuited.



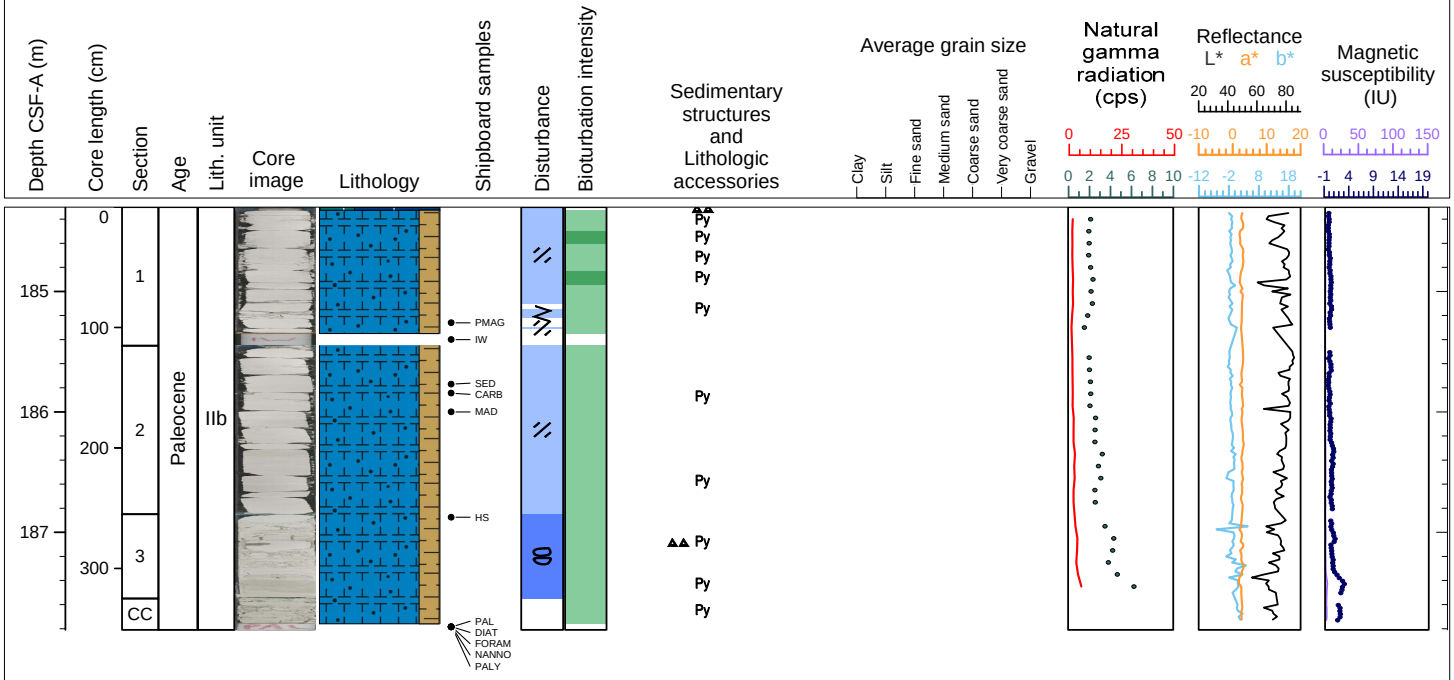
Hole 392-U1580A Core 19R, Interval 174.6-177.33 m (CSF-A)

Core U1580A-19R is white, mottled nannofossil chalk with clay, with low to moderate bioturbation intensity. Massive dark grayish brown beds of silicified limestone (chert) appear in Sections 1 (60.5-63 cm), and 2 (16.5-19, 122-124 cm). Black mottles of pyrite appear throughout the core. Zoophycos burrows are well preserved in Section 2, 19-122 cm. Drilling disturbance ranges from moderately to severely fractured, fragmented, and biscuited.



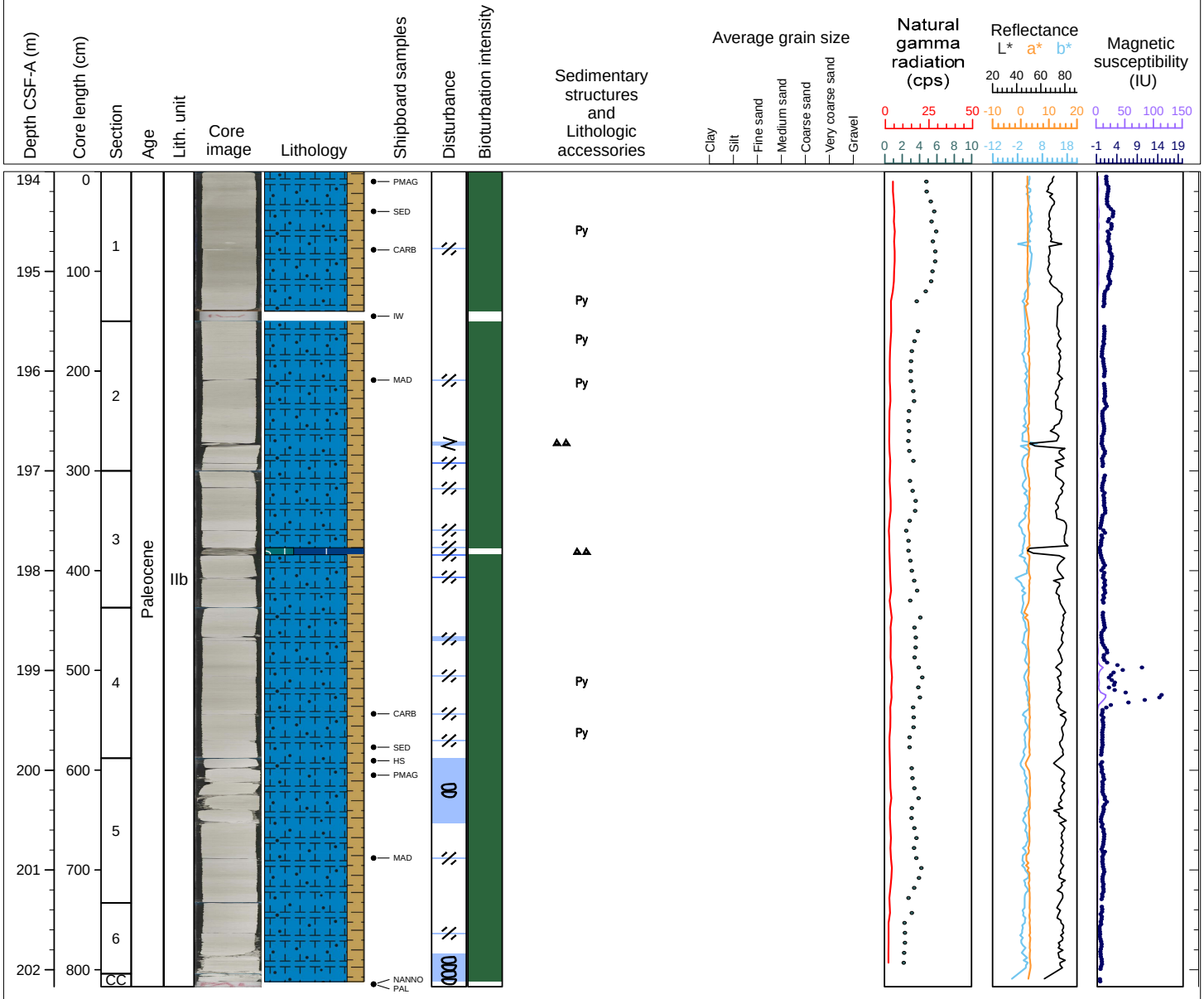
Hole 392-U1580A Core 20R, Interval 184.3-187.81 m (CSF-A)

Core U1580A-20R is white, mottled nannofossil chalk with clay that has moderate to low bioturbation intensity. Massive dark grayish brown beds/clasts of silicified limestone (chert) appear in Sections 1 (0-2.5 cm), and 3 (24-26 cm). The color of the core is greenish gray from Section 3, 47 cm to the bottom of the core catcher. Black mottles of pyrite appear throughout the core. Zoophycos burrows are well preserved in Section 1 at 5, 43.5 and 80 cm. Drilling disturbance ranges from moderately to severely fractured, fragmented, and biscuited.



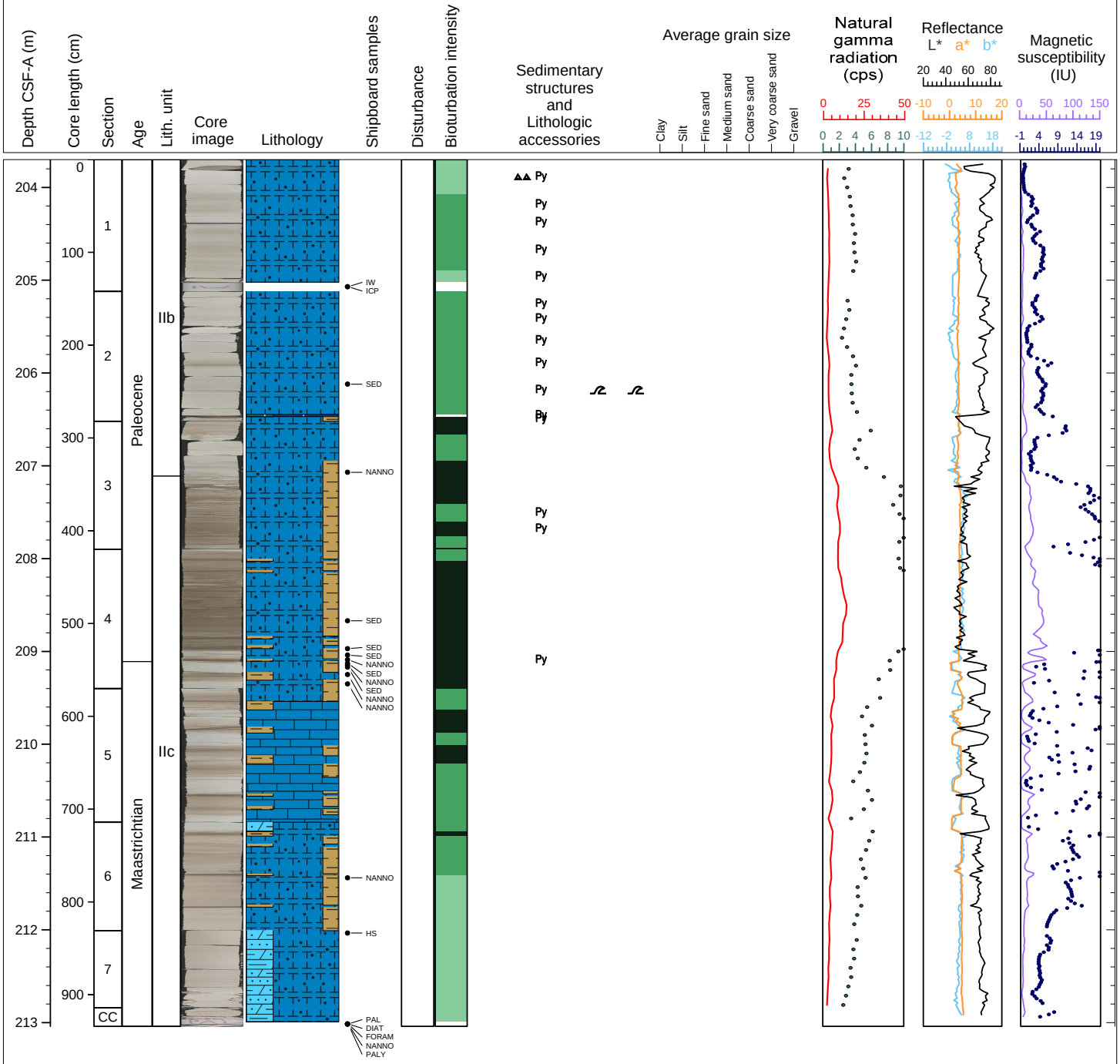
Hole 392-U1580A Core 21R, Interval 194.0-202.17 m (CSF-A)

Core U1580A-21R is alternating light greenish gray to white nannofossil chalk with clay that is highly bioturbated. Frequent evenly spaced Zoophycos burrows occur in Section 4, 102-151 cm. Massive dark grayish brown beds/clasts of silicified limestone (chert) are present in Sections 2 (114-121 cm), and 3 (77-84 cm). Trace specks of pyrite appear throughout the core. The core is moderately to severely fractured and biscuited.



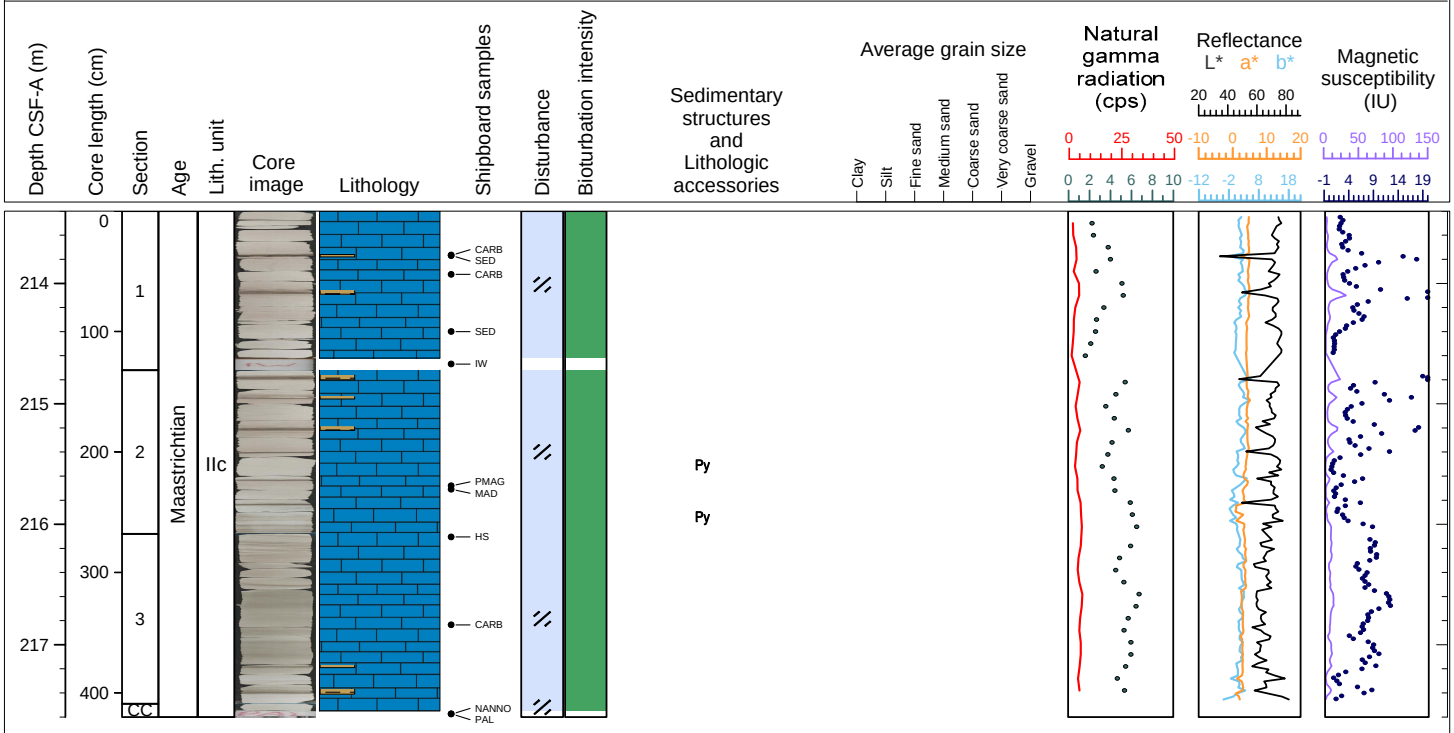
Hole 392-U1580A Core 22R, Interval 203.7-213.04 m (CSF-A)

Core U1580A-22R consists of white/light gray/light brown nannofossil chalk with clay grading into calcareous chalk/calcareous chalk with clay in Section 5. Section 3 (54 cm) to Section 4 (107 cm) is an intensely bioturbated light grayish brown to brown layer of nannofossil chalk with clay within which darker grayish brown beds of clayey nannofossil chalk that are 1-3 cm in thickness and occur at 10-30 cm intervals. The clayey nannofossil/calcareous chalk layers continue from Section 4 (107 cm) to Section 6 (91.5 cm). The entire core has low to intense bioturbation. Typically, bioturbation is higher and more prominent in the darker layers, e.g. a vertical prominent burrow occurs at Section 3, 14-22cm; Zoophycos burrows with pyrite in Section 3, 26-32 cm; large sub-circular burrows with smaller pellets inside them at Section 3, 56-84 cm; inclined burrows at Section 4, 23-27 cm; and burrows with anastomosing appearance at Section 4, 40-44cm. In Section 1 (7-12 cm) is a cobble-sized chert nodule. In Sections 7 (53-55 cm), and CC (4, 6 cm) are dark brown wavy clay laminae (<0.5 mm-scale).



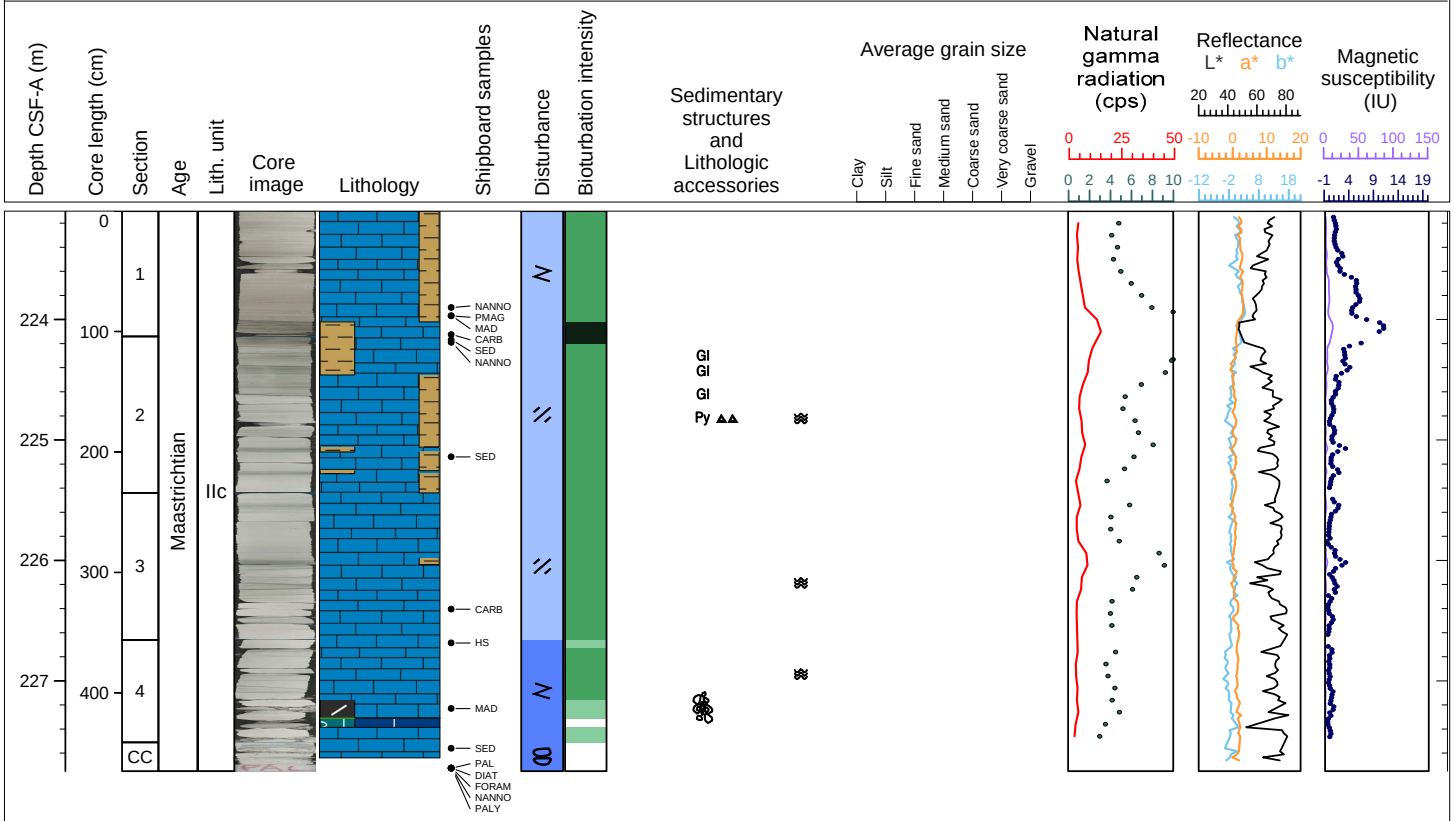
Hole 392-U1580A Core 23R, Interval 213.4-217.6 m (CSF-A)

Core U1580A-23R is alternating white/light gray nannofossil chalk with cm-scale grayish brown clayey nannofossil chalk, spaced tens of cm apart throughout the core. The grayish brown clayey layers have an anastomizing appearance. The entire core is moderately bioturbated and lightly fractured throughout.



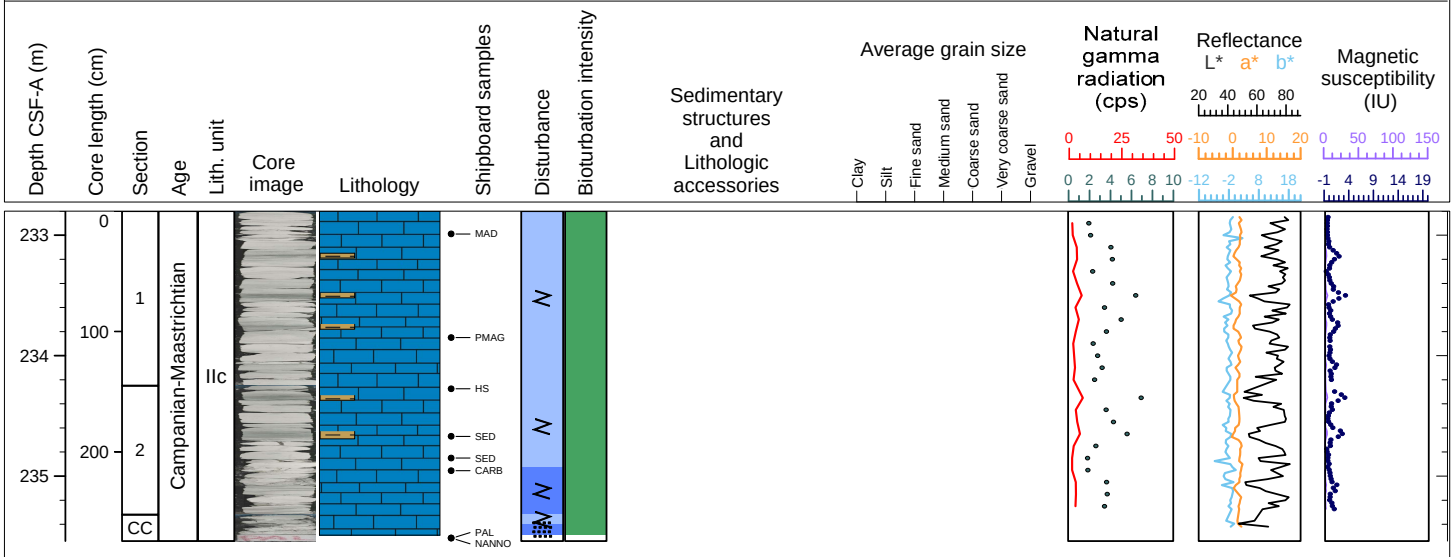
Hole 392-U1580A Core 24R, Interval 223.1-227.75 m (CSF-A)

Core U1580A-24R consists of light gray to light greenish gray calcareous chalk and calcareous chalk with clay interlayered with very thin (1-3 cm) to medium beds (3-10 cm) of grayish green clayey calcareous chalk that appear at ~20-60 cm intervals throughout the core. A single thin bed of grayish green silicified limestone occurs at Section 4, 65-72 cm. The clayey nannofossil/calcareous chalk layers continue beyond Section 4, 107 cm, to Section 6, 91.5 cm. The entire core has low to intense bioturbation. Zoophycos burrows are present in Section 1, 54-62 cm, and horizontal burrows are present in Section 3, 10-17 cm. Glauconite is present in Section 2, 18-44 cm, and pyrite is present in Section 2, 64-71 cm. A chert nodule is present in Section 2, 72 cm. Sections 1-3 are moderately fractured or fragmented throughout, while Section 4 is severely fragmented and the core catcher is severely biscuited.



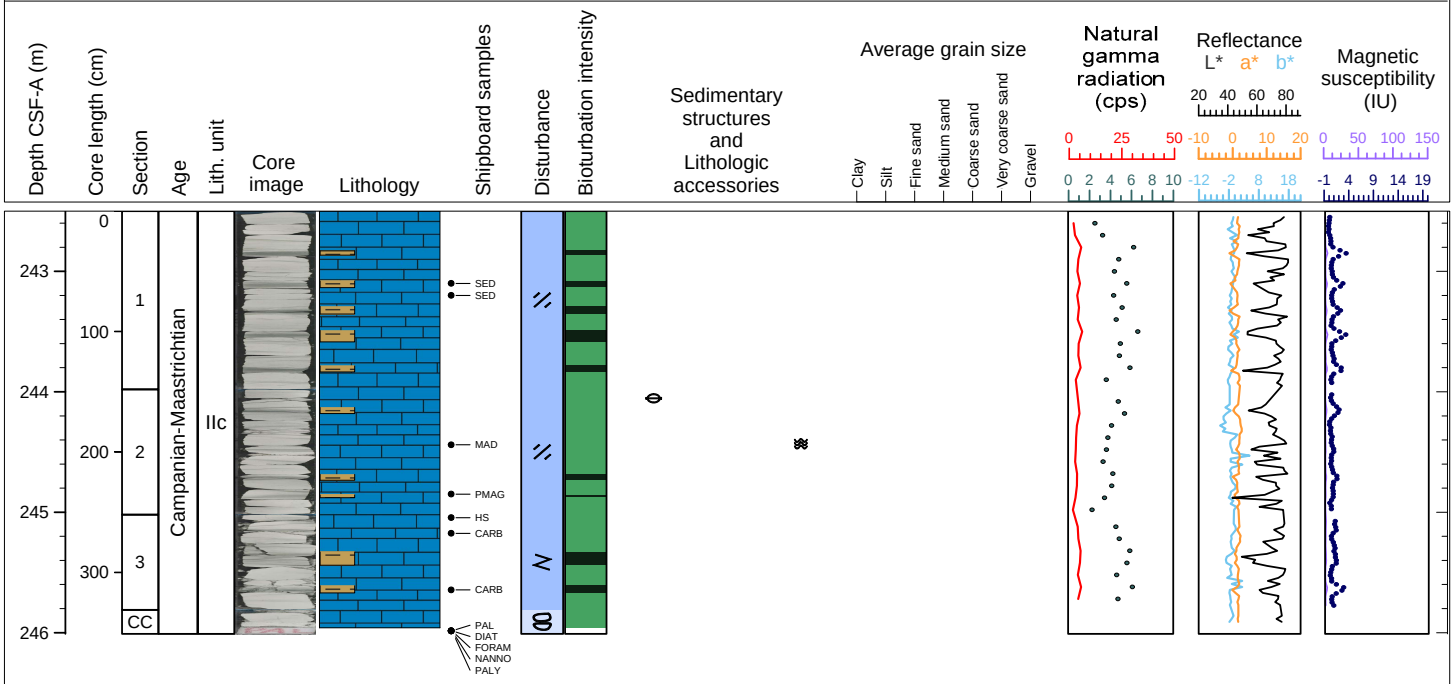
Hole 392-U1580A Core 25R, Interval 232.8-235.54 m (CSF-A)

Core U1580A-25R is white nannofossil chalk with frequent cm-scale greenish gray clayey calcareous chalk spaced tens of cm throughout the core. The clayey layers have an anastomosing appearance. The entire core is moderately to severely fractured and moderately bioturbated.



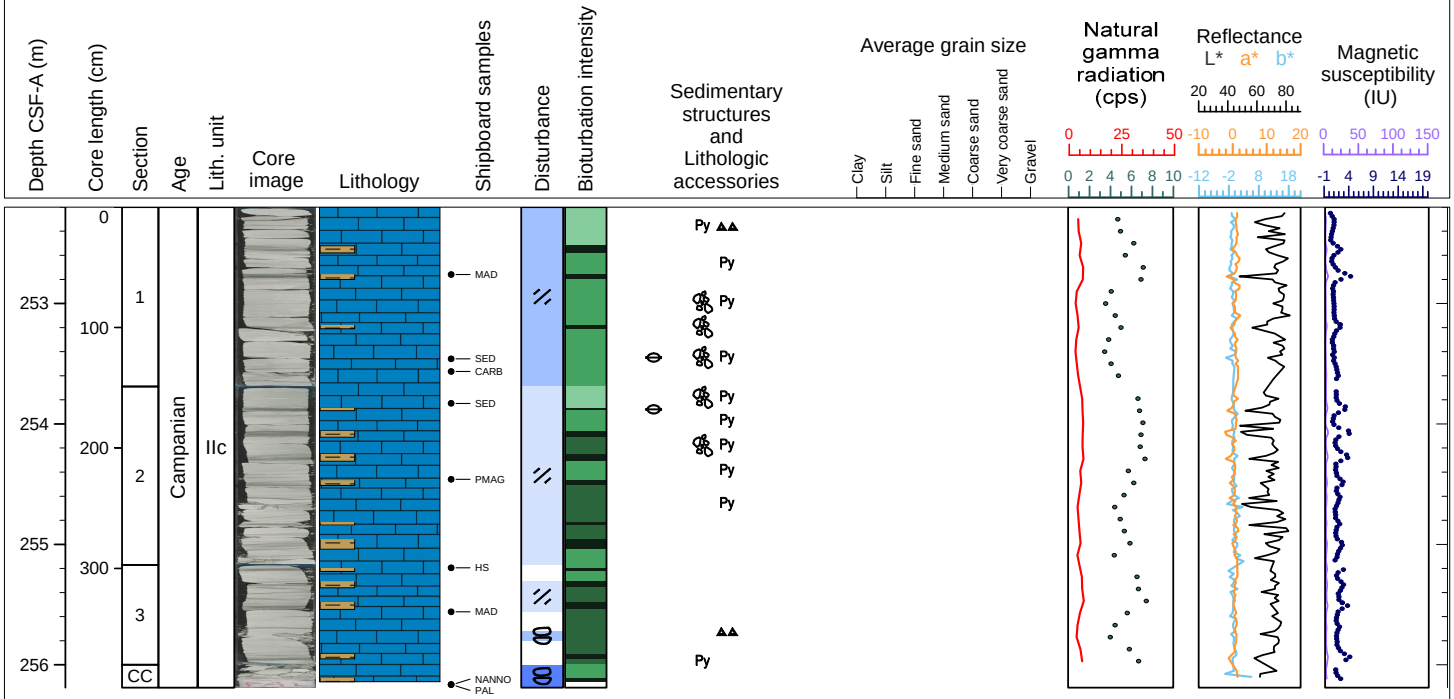
Hole 392-U1580A Core 26R, Interval 242.5-246.01 m (CSF-A)

Core U1580A-26R is light grayish green calcareous chalk and greenish gray clayey calcareous chalk. The light grayish green calcareous chalk is occasionally mottled and is moderately bioturbated. The greenish gray clayey calcareous chalk intervals are intensely bioturbated. There are a few small inoceramid (bivalve) prisms in Section 2, 0-5 cm. Drilling disturbance ranges from slight to moderate (fractured, fragmented, and biscuited).



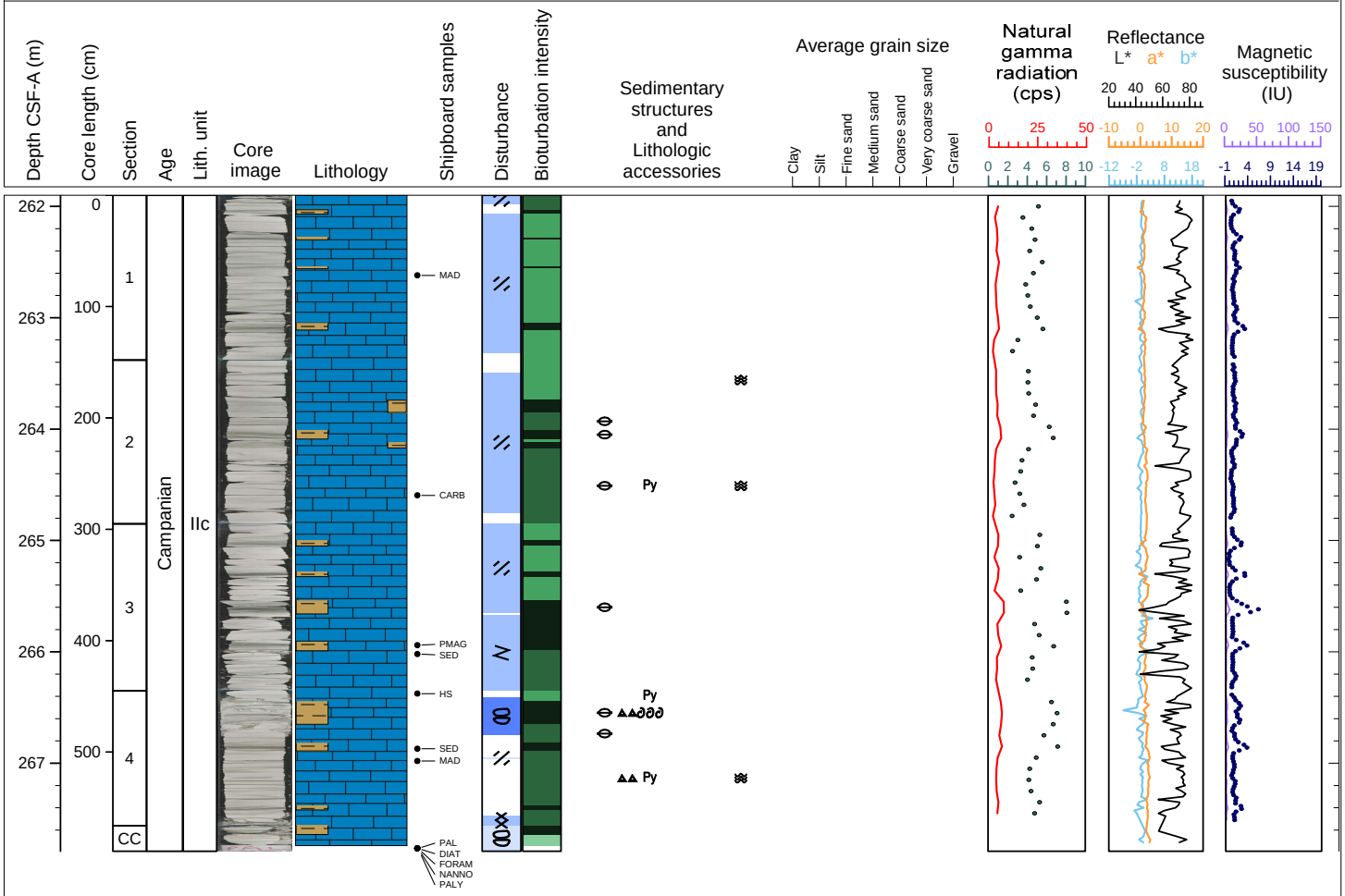
Hole 392-U1580A Core 27R, Interval 252.2-256.19 m (CSF-A)

Core U1580A-27R is light grayish green calcareous chalk and greenish gray clayey calcareous chalk. The light grayish green calcareous chalk is occasionally mottled and is moderately to highly bioturbated. The greenish gray clayey calcareous chalk intervals are intensely bioturbated. There are a few small inoceramid (bivalve) prisms in Sections 1 (105-107 cm), and 2 (17-19 cm). Silicified (chert) nodules are present in Sections 1 (8-11 cm), and 3 (55-59 cm). There are common clasts in Sections 1 (55-148 cm), and 2 (0-20 cm). The clasts are white calcareous clay. Drilling disturbance ranges from slight to moderate (fractured and biscuited).



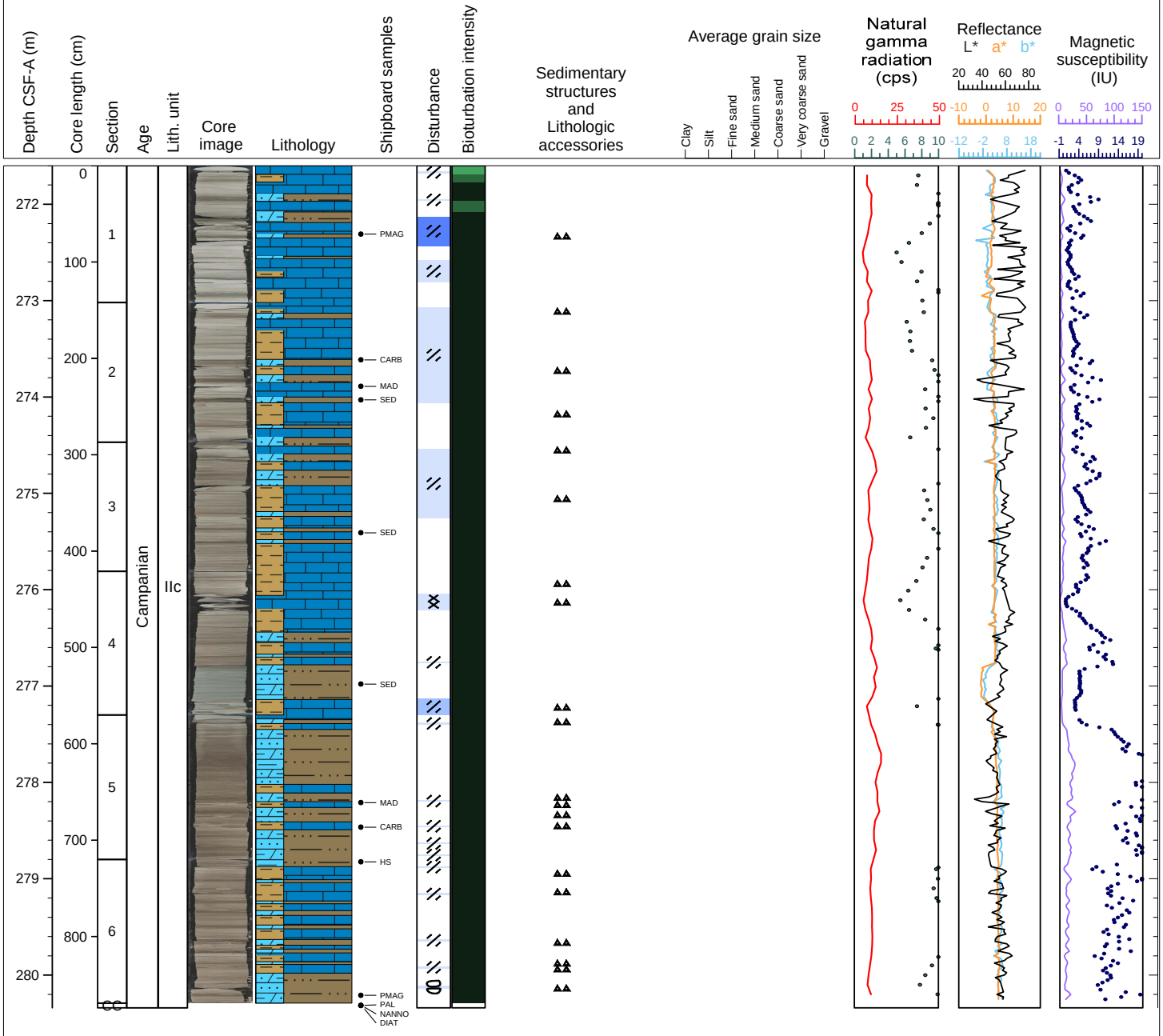
Hole 392-U1580A Core 28R, Interval 261.9-267.79 m (CSF-A)

Core U1580A-28R is light grayish green calcareous chalk and greenish gray clayey calcareous chalk. The light grayish green calcareous chalk is occasionally mottled and is moderately to highly bioturbated. The greenish gray clayey calcareous chalk intervals are intensely bioturbated. There are inoceramid (bivalve) fragments in Sections 2 (51-78 and 135-137 cm), 3 (73-76 cm), and 4 (11-38 and 65-66 cm), and there is a shell fragment in Section 4 (17-18 cm). Silicified (chert) nodules are present in Section 4 (23-24 and 76-78 cm). Drilling disturbance ranges from absent to severe (fractured, fragmented, brecciated, and biscuited).



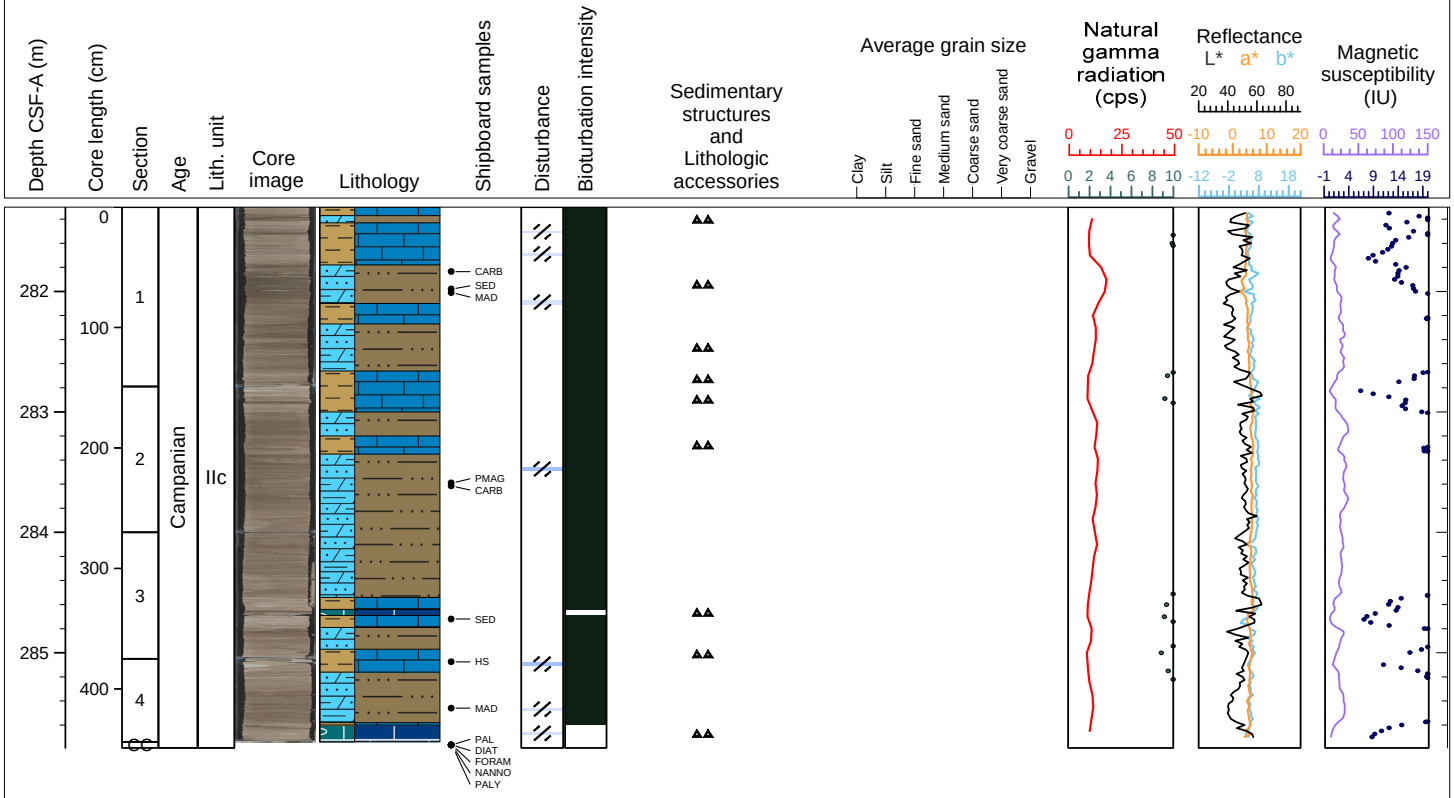
Hole 392-U1580A Core 29R, Interval 271.6-280.34 m (CSF-A)

Core U1580A-29R is grayish brown calcareous claystone, and light brown to green clayey calcareous chalk. Most of the core is intensely bioturbated. Chert nodules between 1 and 4 cm in diameter are dispersed randomly throughout all sections. There is a notable green interval in Section 4, 97-132 cm. Drilling disturbance ranges from absent to slight, moderate, and severe (fractured and biscuited).



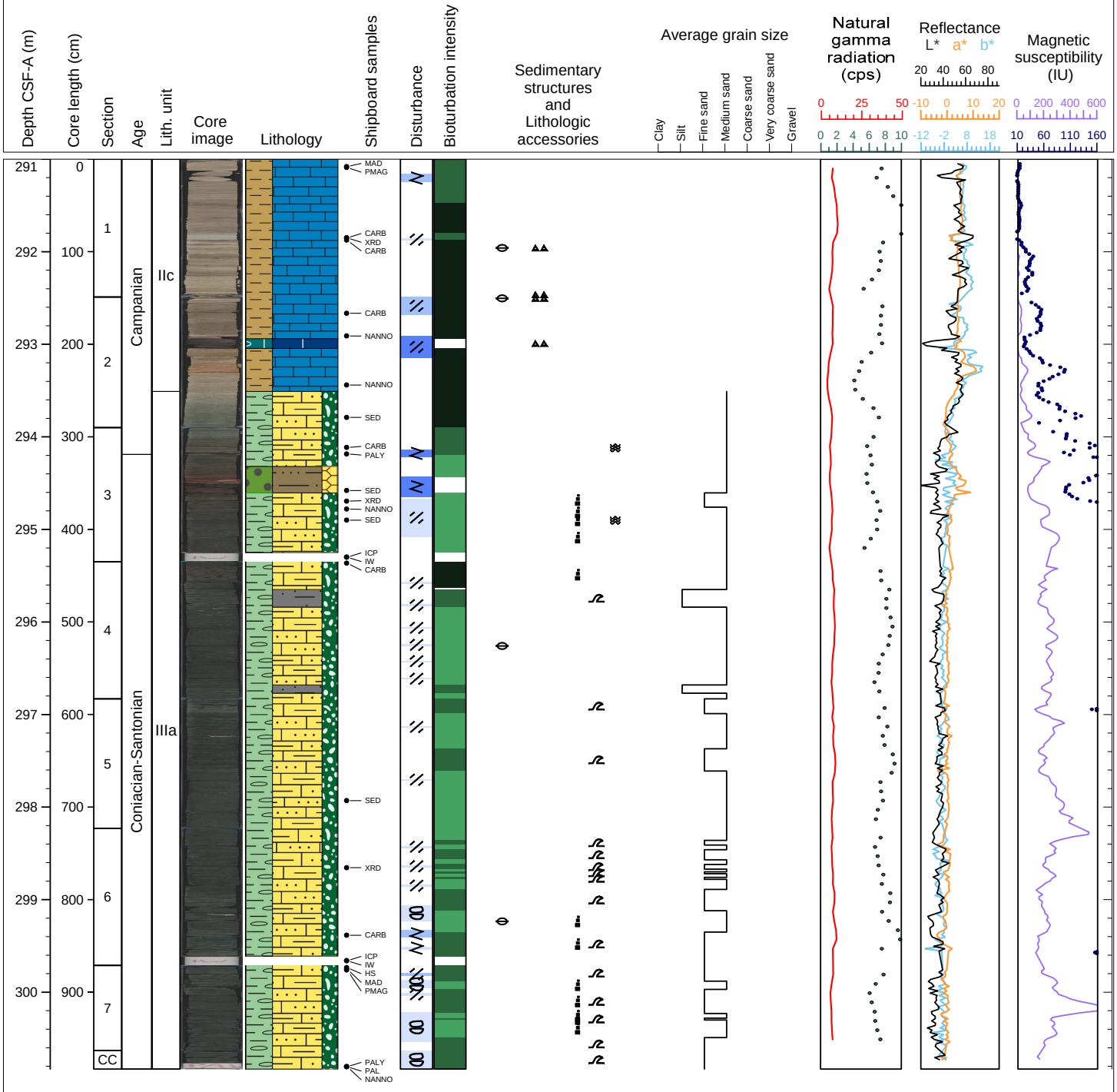
Hole 392-U1580A Core 30R, Interval 281.3-285.79 m (CSF-A)

Core U1580A-30R is light gray to dark grayish brown calcareous claystone and clayey calcareous chalk. Most of the core is intensely bioturbated. Silicified limestone (chert) nodules ranging in diameter from 0.5-5 cm are present sporadically throughout the core, and there is silicified limestone in Section 3, 64-69 cm and Section 4, 55-69 cm. Drilling disturbance ranges from absent to slight and moderate (fractured).



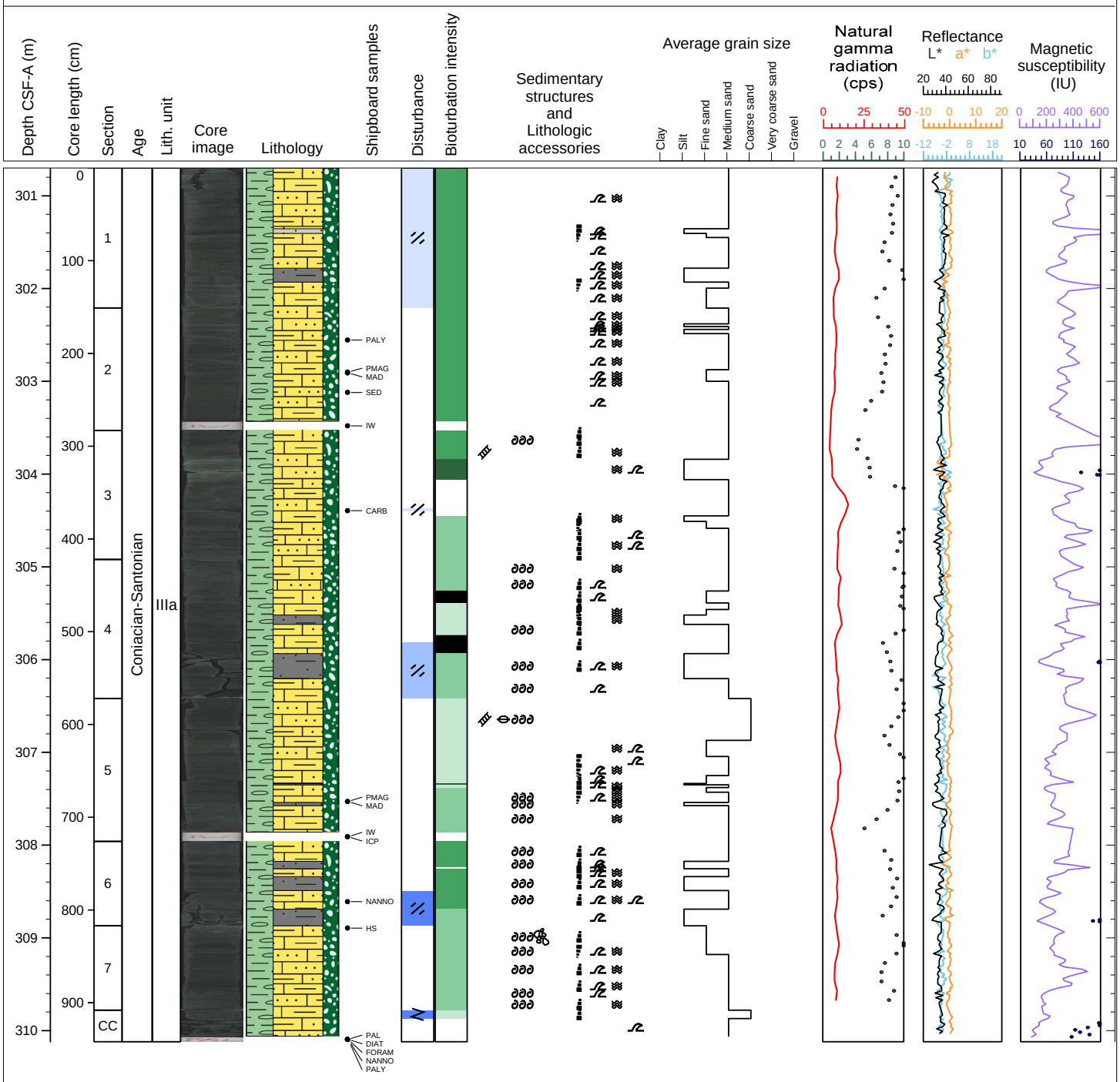
Hole 392-U1580A Core 31R, Interval 291.0-300.83 m (CSF-A)

Core U1580A-31R consists of light gray, red, and green clayey calcareous chalk to zeolitic sand and siltstone with glauconite. The top of Section 1 to Section 2, ~100 cm, is a light gray to light reddish gray calcareous chalk with clay, which is intensely bioturbated and contains an interval of silicified limestone in Section 2, 44-55 cm. From Section 2, 100 cm, to Section 3, 42 cm, is green zeolitic sandstone and siltstone with glauconite. In Section 3, 42 to 70.5 cm, is red to brown organic-rich claystone with pyrite. From Section 3, 70.5 cm to the bottom of the core is zeolitic sandstone and siltstone with glauconite. Bedding in Sections 3 to CC is variable from massive to laminated. There are a variety of poorly defined soft sedimentary features in the green sections of the core. Notably there are deformation bands in Sections 4 (33-45 cm) and 5 (55-61, 65-68, and 71-77 cm). There are inoceramid (bivalve) fragments and prisms in Sections 4 (49-53 cm) and 6 (91-94 cm). Drilling disturbance ranges from absent to slight and severe (fractured, fragmented, and biscuited).



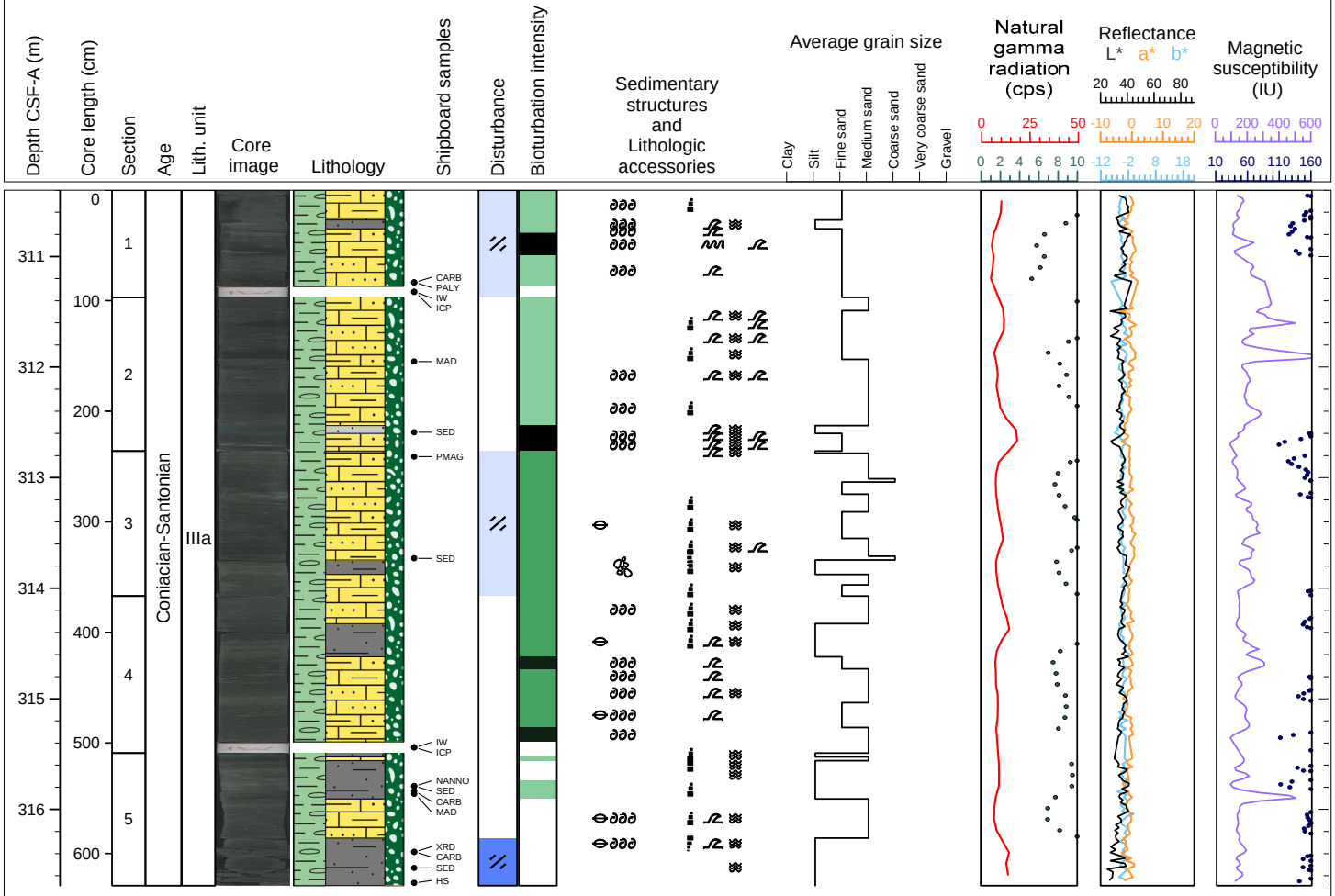
Hole 392-U1580A Core 32R, Interval 300.7-310.12 m (CSF-A)

Core U1580A-32R consists of dark gray, grayish green, bluish green, dark green, grayish black and black zeolitic sandstone and siltstone with glauconite. Bedding is either massive, graded (both normal and inverse) or laminated with thin-medium laminae. The entire core has soft sediment deformation features throughout, the most common being lead casts. Most of the core is moderately to slightly bioturbated. There is a highly bioturbated layer in Section 5 (91.5-93 cm). In Sections 4 (64-60 cm) and CC (8 cm) there is mottling with black patches of silt (or organic matter?). Reworked fossil shell fragments are common throughout the core. A 0.5 cm layer of shell fragments is present in Section 4, at 20 cm and 82 cm; and an inoceramid (bivalve) fragment is present at Section 5, 44 cm. In Section 4, a layer of secondary calcite precipitation occurs at 101.5 cm along a layer boundary. A normal fault is present at Section 5, 51-57 cm. Drilling disturbance ranges from absent to slight and severe (fractured and fragmented).



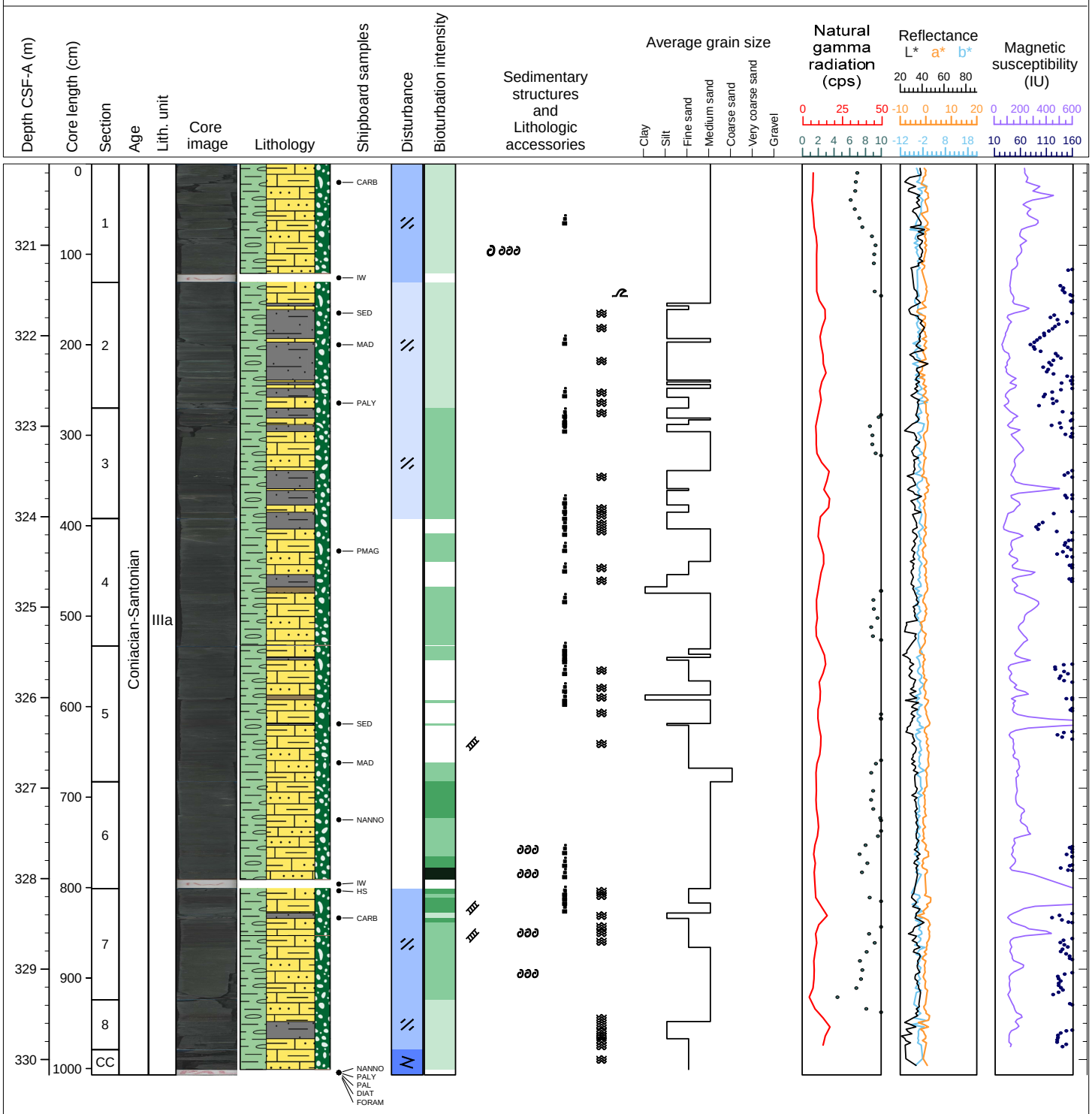
Hole 392-U1580A Core 33R, Interval 310.4-316.69 m (CSF-A)

Core U1580A-33R consists of dark gray, grayish green, bluish green, dark green, grayish black, and black zeolitic sandstone and siltstone with glauconite. Bedding is either massive, graded (both normal and inverse) or laminated with thin-medium laminae. The entire core has soft sediment deformation features throughout, the most common being load casts. Well-defined soft sedimentary features are present in the green sections of the core. Most of the core is moderately to slightly bioturbated. Patches of lighter sediment occur in Section 4 at 35 cm and 41 cm. Pebble sized clasts are rare, and are observed at Section 3, 103 cm, and Section 2, 49 cm. Reworked fossil shell fragments are common in Sections 1, 2, 4, and 5. Inoceramid (bivalve) fragments are present at Section 3, 55 cm and 62 cm, and Section 4, 41 cm. A shell fragment is present in Section 4, 84 cm. Concretions are present in Section 5, 63-65 cm, and nodules in Section 1, 19 cm, 65 cm and 75-81 cm, and Section 4, 7 cm. Voids occur in Section 2, 123-127 cm. Intense soft sediment deformation, overturning, tilting of beds is observed in Section 1, 35-39 cm. Faults with mm-scale offset are present in Sections 2 (66-71 cm) and 3 (79 cm). Drilling disturbance ranges from absent to slight and severe (fractured).



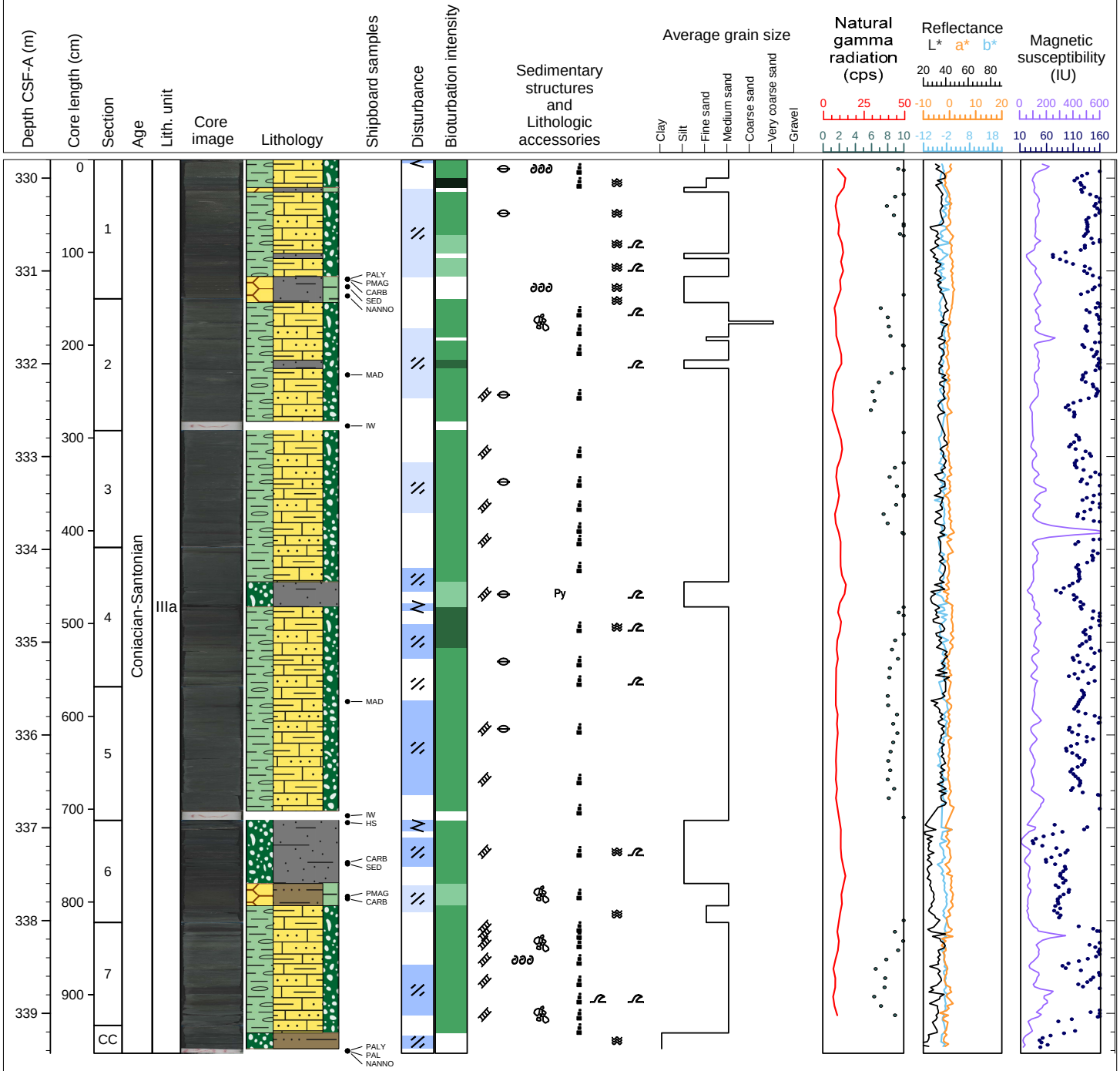
Hole 392-U1580A Core 34R, Interval 320.1-330.17 m (CSF-A)

Core U1580A-34R consists of dark gray, grayish green, bluish green, dark green, grayish black and black zeolitic sandstone and siltstone with glauconite. Bedding is either massive, graded (both normal and inverse) or laminated with thin-medium laminae. The top 53 cm of Section 1 are moderately to intensely reworked. Reworked fossil shell fragments occur as a prominent thin bed in Section 6, 77-83 cm, and a thinner bed at 100-101 cm. There is a faulted contact in Section 6 at 40 cm. Slickensides are observed on the fault plane. In Section 6, voids with calcite infilling are present at 40, 44, and 48 cm, and a nodule is present at 53 cm. Veins with calcite infill occur at Section 7, 21 and 52 cm. There is a very thin convoluted bed at Section 7, 45 cm. Bioturbation is sparse to moderate. There are infilled burrows in Section 6 at 18-19 cm and 26 cm. Drilling disturbance ranges from slight to severe fracturing and fragmentation.



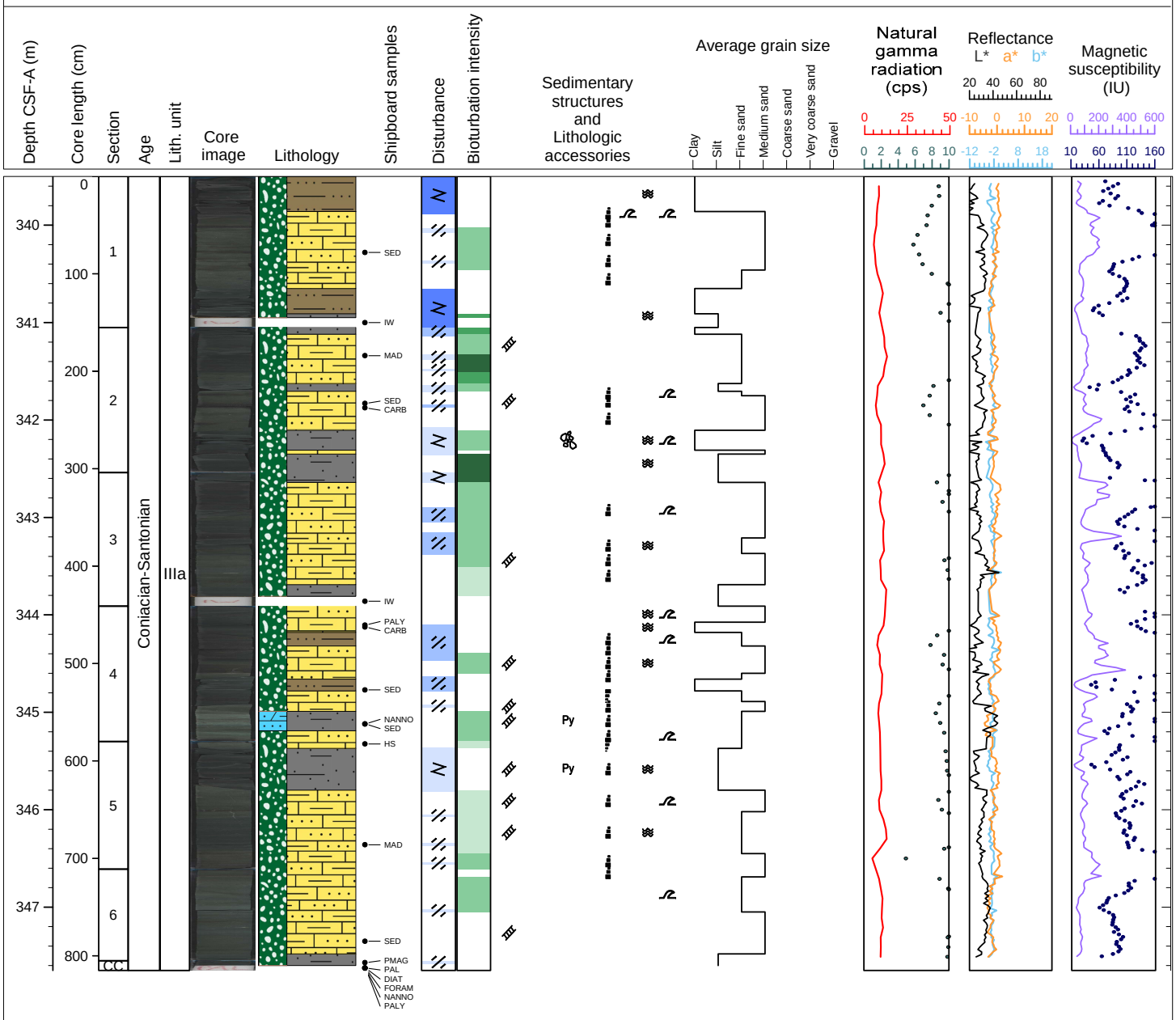
Hole 392-U1580A Core 35R, Interval 329.8-339.43 m (CSF-A)

Core U1580A-35R is green zeolitic sandstone and siltstone with intervening dark gray laminated pyrite siltstone with altered biosilica and bluish green glauconitic siltstone. The lightness/darkness of the green varies throughout the core and in some sections (e.g., Section 6, 0-28 cm) there is bluish green glauconitic siltstone. In Sections 1-5 there are black bands (5-20 cm-thick) present every ~1-1.5 m; in Sections 6-CC they are spaced every ~0.5 m. There are inoceramid (bivalve) fragments dispersed throughout all sections, except in the CC. In Section 4, 47-49 cm, there is a distinct pyritized infilling or fragment. Soft sediment deformation is common throughout. For example, there is a flame structure in Section 7, 87-89 cm. Veins that are infilled with calcite are common in Sections 3 (0-15 cm), 4 (0-9 cm), 5 (62-132 cm), 7 (0-110 cm), and CC (0-4 cm). Bioturbation is difficult to distinguish from soft sediment deformation in some intervals; however, intense bioturbation is evident in Section 1, 21-30 cm. There is slight disturbance by drilling throughout (fractured and fragmented).



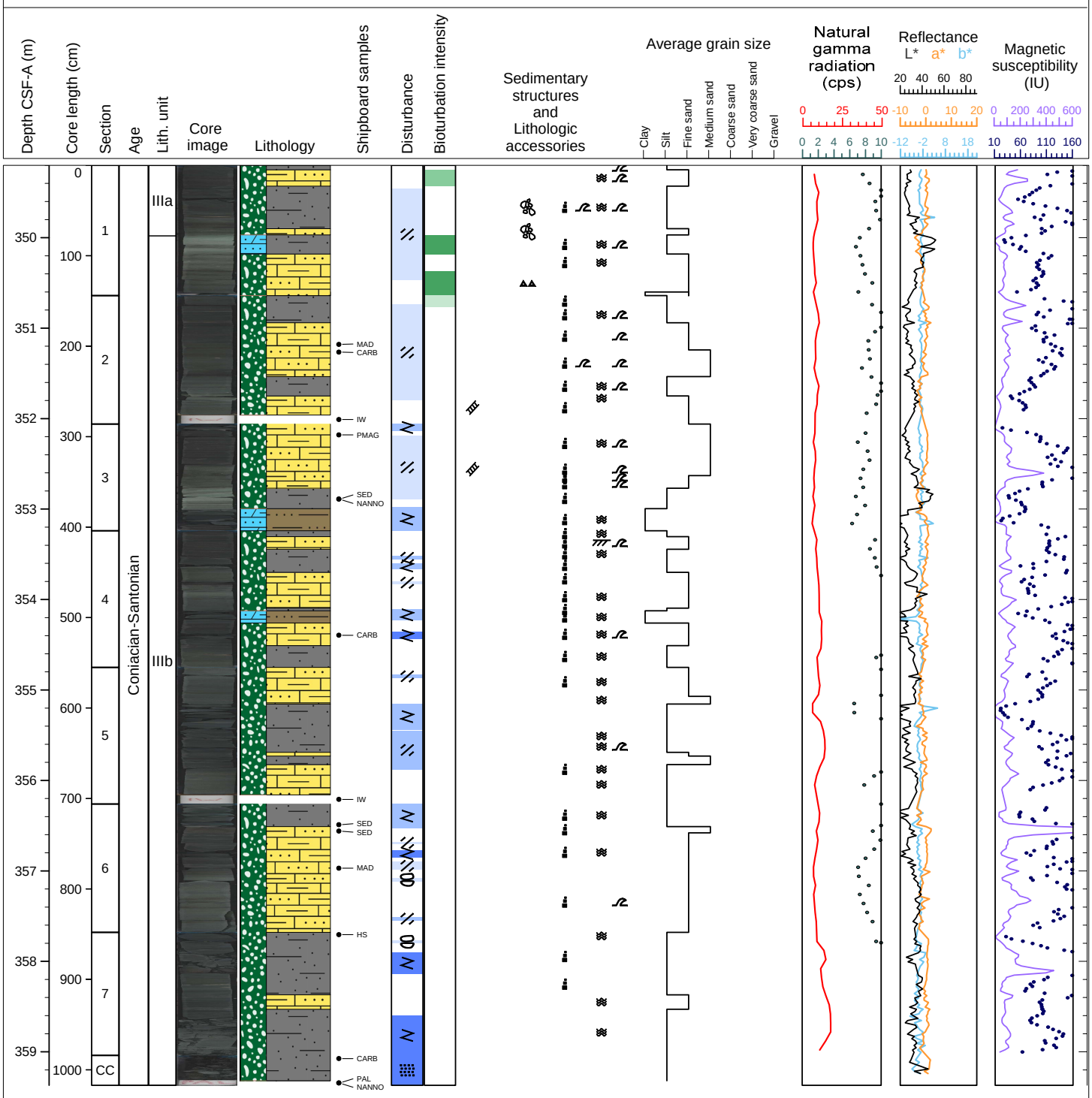
Hole 392-U1580A Core 36R, Interval 339.5-347.65 m (CSF-A)

Core U1580A-36R is green glauconitic sandstone, siltstone and claystone with interlayered black sandy intervals. There are repeating packages of black medium grained sandstone that fine upwards into dark green siltstone in claystone that repeat every ~15-70 cm. There are calcite infilled veins in each section with the most notable being in Section 5, 47-91 cm. There is a distinct pyrite clast in Section 5, 38-39 cm. Bioturbation is difficult to distinguish from soft sediment deformation in some intervals. There is extensive soft sediment deformation throughout the core including load casting in Section 1, 39-42 cm, and micro faulting in Sections 3 (24-38 cm), 4 (128-133 cm), and 5 (13-25 cm). The core is slightly to moderately disturbed by drilling (fractured and fragmented).



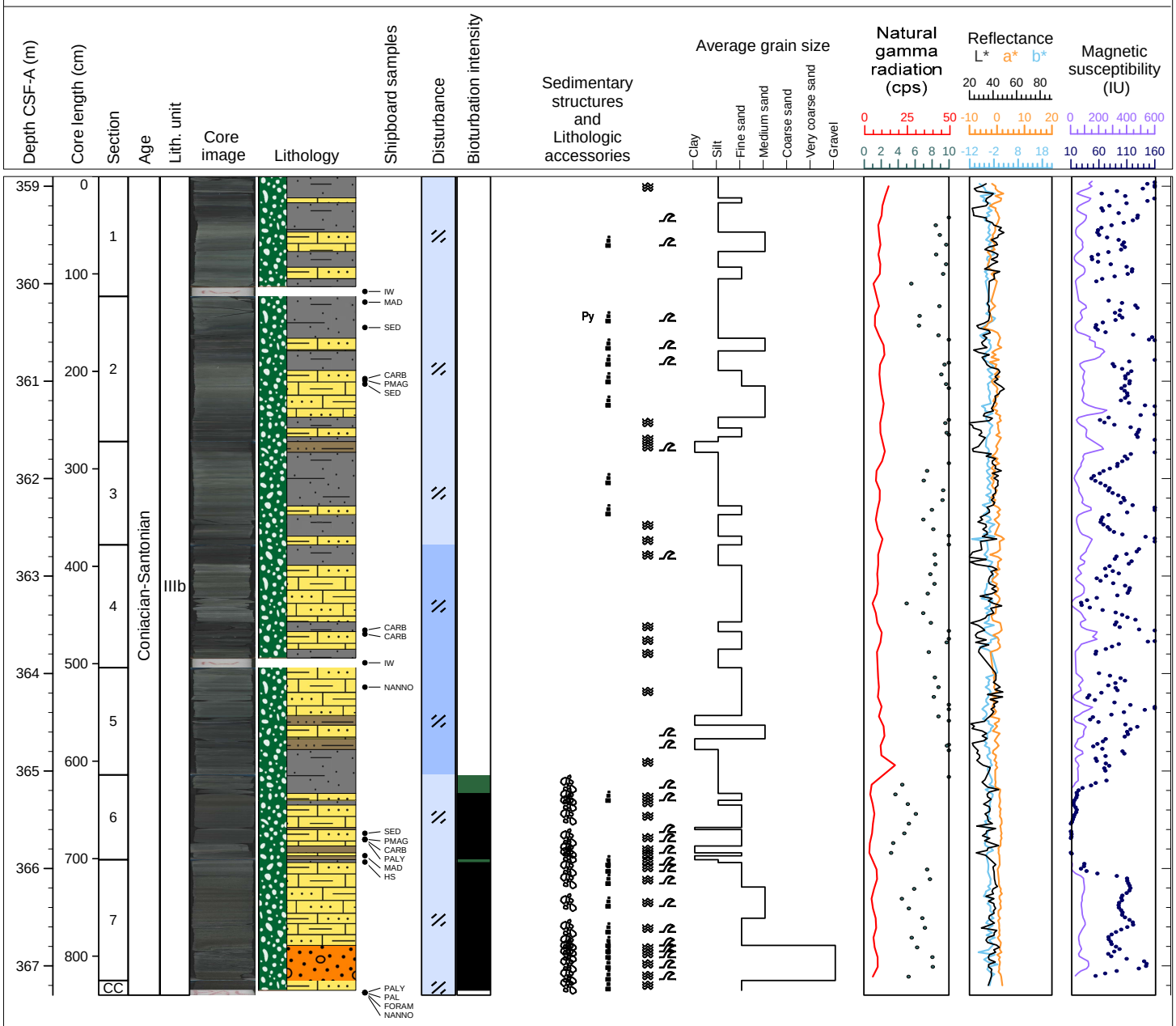
Hole 392-U1580A Core 37R, Interval 349.2-359.37 m (CSF-A)

Core U1580A-37R is green glauconitic sandstone, siltstone, and claystone with interlayered black sandy intervals. There are repeating packages of black medium grained sandstone that fine upwards into thin laminated dark green siltstone in claystone that repeat every ~15-150 cm. There are calcite infilled veins and nodules in Sections 2 (60-89 cm) and 3, (116-132 and 43-57 cm). Bioturbation is difficult to distinguish from soft sediment deformation in some intervals. There is extensive soft sediment deformation throughout the core including ball and pillow in Section 2 (60-89.5 cm), and micro faulting in Sections 2 (89.5-111 cm), and 6 (75-142 cm). Drilling disturbance ranges from slightly to severely fragmented, fractured, biscuited, and pulverized.



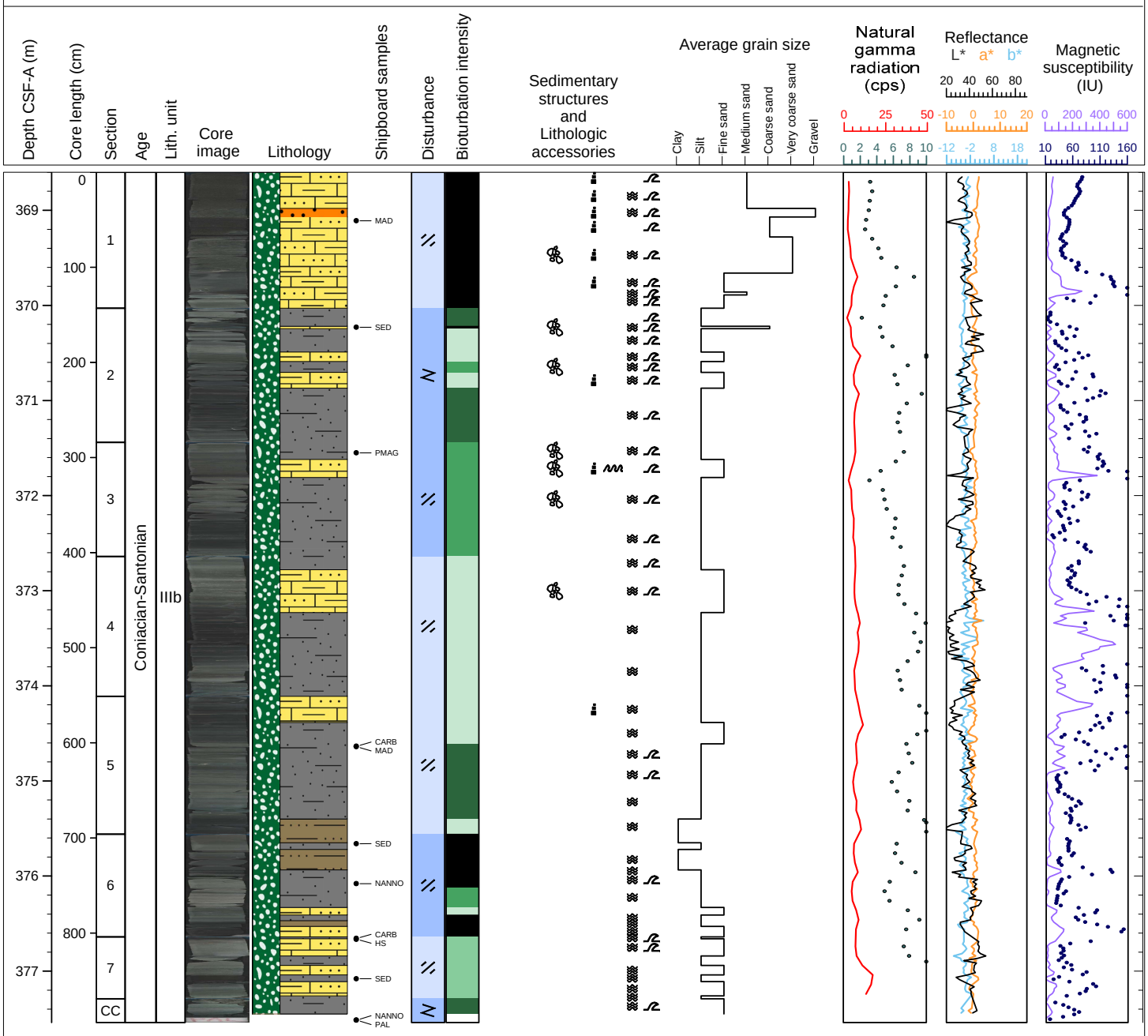
Hole 392-U1580A Core 38R, Interval 358.9-367.3 m (CSF-A)

Core U1580A-38R is dark gray or greenish gray glauconitic conglomerate, sandstone, siltstone, and claystone that are laminated (thin, medium and thick laminae) and show extensive syn-sedimentary deformation. In Section 7, three high angle, subvertical faults are present at 88-112 cm; the faulting appears brittle and clasts show ductile deformation signature. Faulted contacts occur at Sections 6 (56 cm), and 7 (88, 93, and 100 cm). Millimeter to centimeter-scale alternation of coarser and finer grain sizes is seen throughout the core. Conglomerates with pebble sized clasts that are cross cut and offset by normal (cm-scale) faults occur in Section 7, 81-124 cm. There are repeating packages of black medium grained sandstone that fine upwards. No bioturbation is observed Between Section 1 and the top of Section 6. From Section 6 (0-19 cm) to the bottom of the core is highly to severely bioturbated. Drilling disturbance ranges from slightly to moderately fractured.



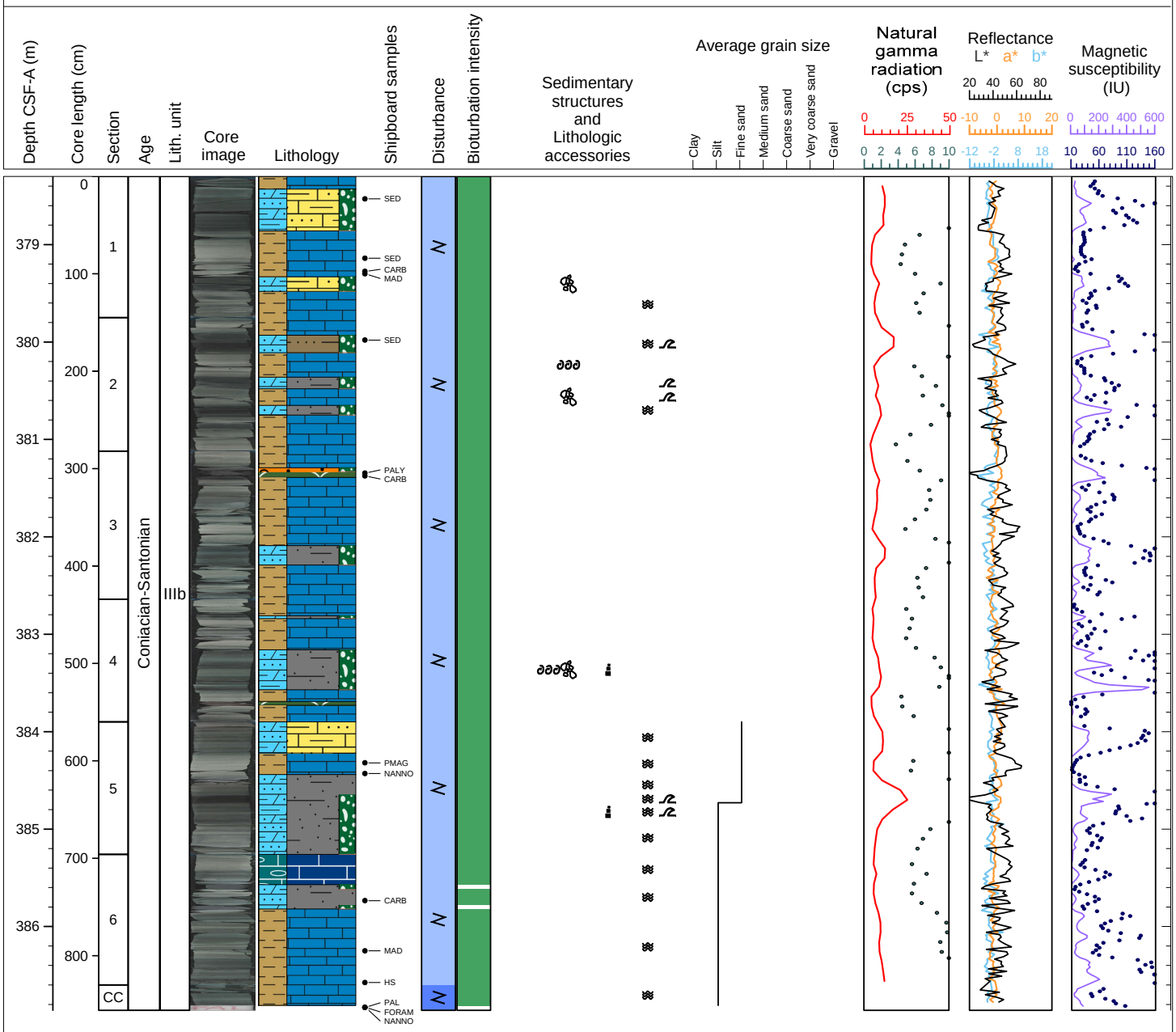
Hole 392-U1580A Core 39R, Interval 368.6-377.54 m (CSF-A)

Core U1580A-39R is comprised of thin-medium sized beds of light green, greenish gray, and green with glauconitic sandstones, siltstones and conglomerate. Bioturbation is difficult to distinguish from soft sediment deformation throughout the core and, when identified, is usually low to moderate. There is extensive soft-sediment deformation throughout the core, most commonly load casts. Normal faulting with curved fault planes and mm-scale offset is observed in Section 2, 120-130 cm. Micro faulting occurs in Sections 2 (84-141 cm) and 5 (50-93 cm). Subvertical faults occur throughout Sections 1 and 2. A fault plane with slickenlines intersects the core in Section 2 (40 cm). There is a convoluted bed within one of the layers identified in Section 7 (7 cm). A reworked layer of fossil fragments is present in Sections 1 (68-106 cm) and 2 (1.5-19 cm). An inoceramid (bivalve) fragment is found in Section 6 (100 cm) and a nodule (possibly chert) is present in Section 2 (68 cm). Drilling disturbance ranges from slightly to moderately fragmented and fractured.



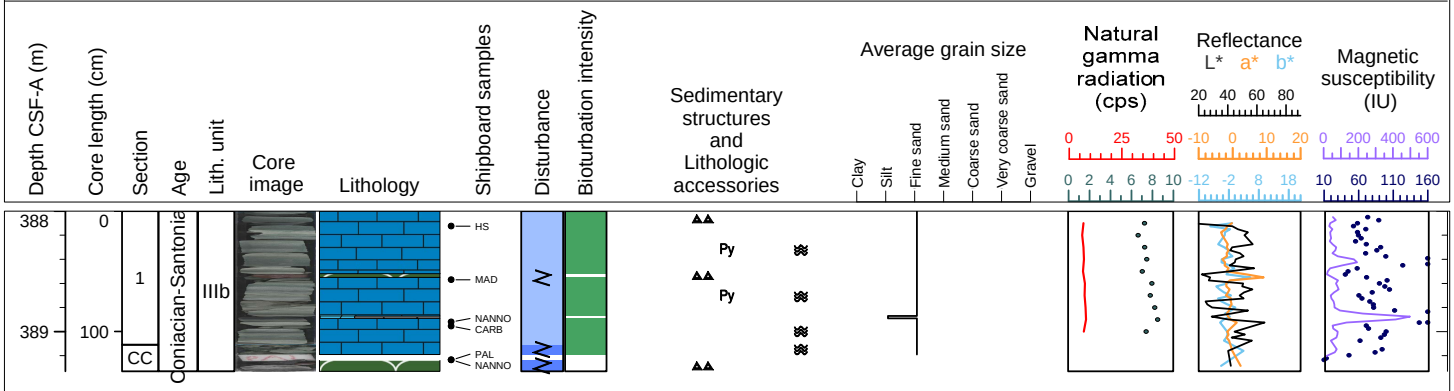
Hole 392-U1580A Core 40R, Interval 378.3-386.86 m (CSF-A)

Core U1580A-40R is made up of alternating thin-medium beds of light green, greenish gray, and green calcareous chalk, clayey calcareous chalk, and light greenish gray to light green clayey calcareous chalk with glauconite and calcareous siltstone with glauconite. Soft sediment deformation, clasts and shell fragments are rare. Bioturbation is moderate throughout. Drilling disturbance ranges from moderately to severely fragmented.



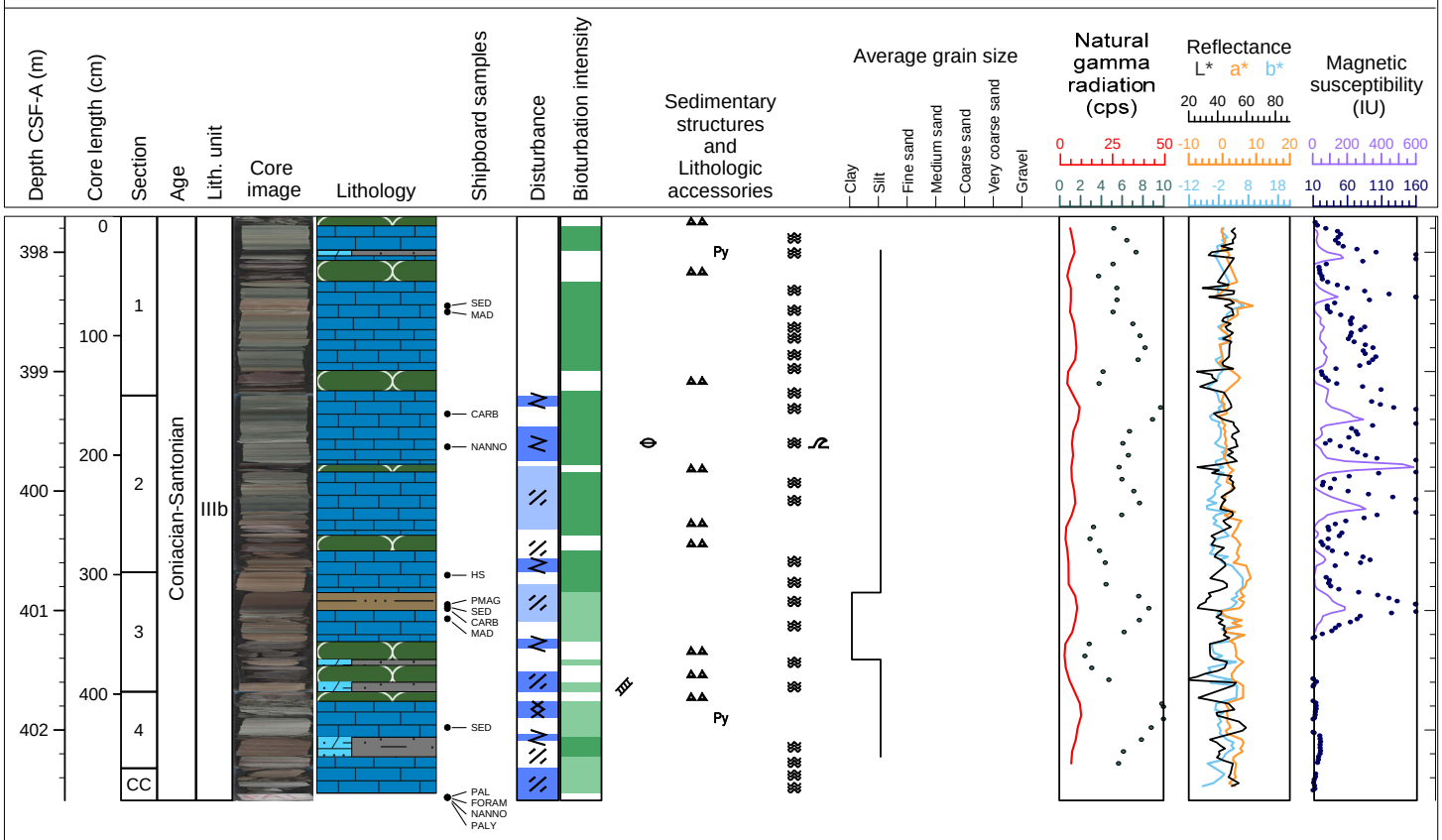
Hole 392-U1580A Core 41R, Interval 388.0-389.33 m (CSF-A)

Core U1580A-41R is thinly laminated greenish gray calcareous chalk with intervening black calcareous siltstone in Section 1, 87-89 cm. The greenish gray calcareous chalk intervals are moderately bioturbated. There are occasional chert intervals in Section 1, 52-55 cm, and in the Core Catcher, 13-22 cm. The core is moderately to severely fragmented.



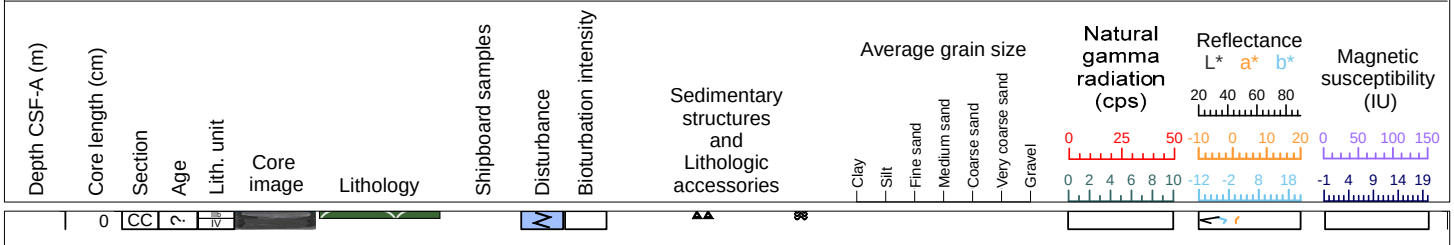
Hole 392-U1580A Core 42R, Interval 397.7-402.59 m (CSF-A)

Core U1580A-42R is greenish gray to pinkish gray calcareous chalk with intervening layers of black calcareous siltstone in Section 1, 28.5-33 cm, dark reddish gray claystone in Section 3, 17-32 cm, and light reddish brown calcareous siltstone in Sections 3 (73-78 and 92-100 cm), and 4 (38-54.5 cm). Chert layers, 10-20 cm thick, are repeated at every 10-75 cm throughout the core. The calcareous chalk intervals are thinly laminated with moderate to low bioturbation. Drilling disturbance ranges from moderately to severely fragmented, fractured, and brecciated.

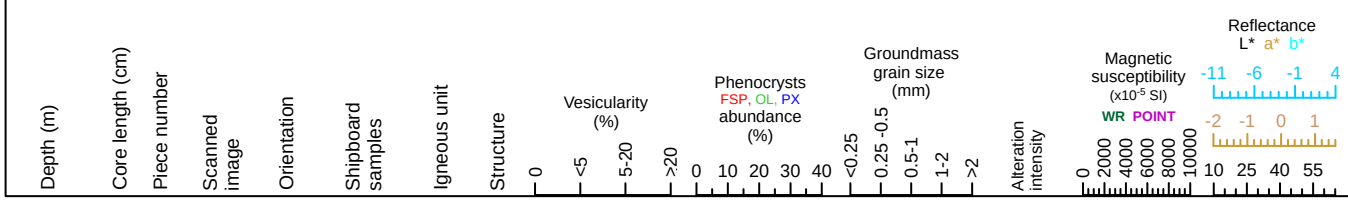


Hole 392-U1580A Core 43R, Interval 407.4-407.55 m (CSF-A)

Core U1580A-43R is composed of chert and basalt. The chert interval is in the Core Catcher, 0-6 cm. It is bluish gray in color, and has medium laminations. This interval immediately overlies basalt. The contact was not recovered due to drilling.



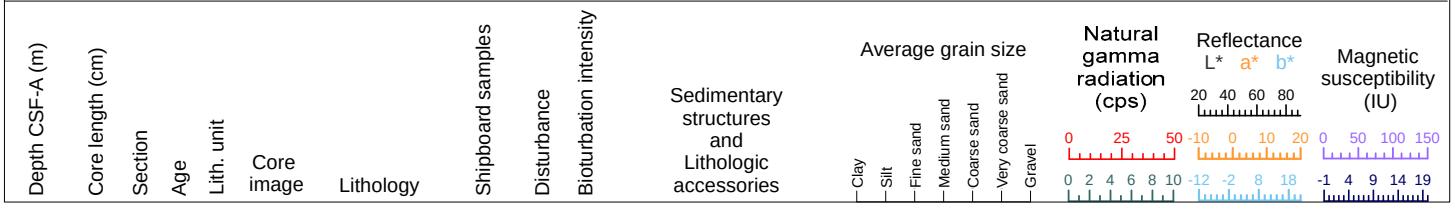
Hole 392-U1580A-43R Section CC, Top of Section: 407.4 m (CSF-A)



UNIT: 1
PIECE: 1
LITHOLOGY: vesicular basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: aphyric
COLOR: dark gray
PHENOCRYSTS:
GROUNDMASS: fine grained
VESICLES: 5-8%
UPPER CONTACT: not recovered
LOWER CONTACT: not recovered (chilled margin at the bottom of Piece 1 in Section 45R-3)
ALTERATION: highly altered

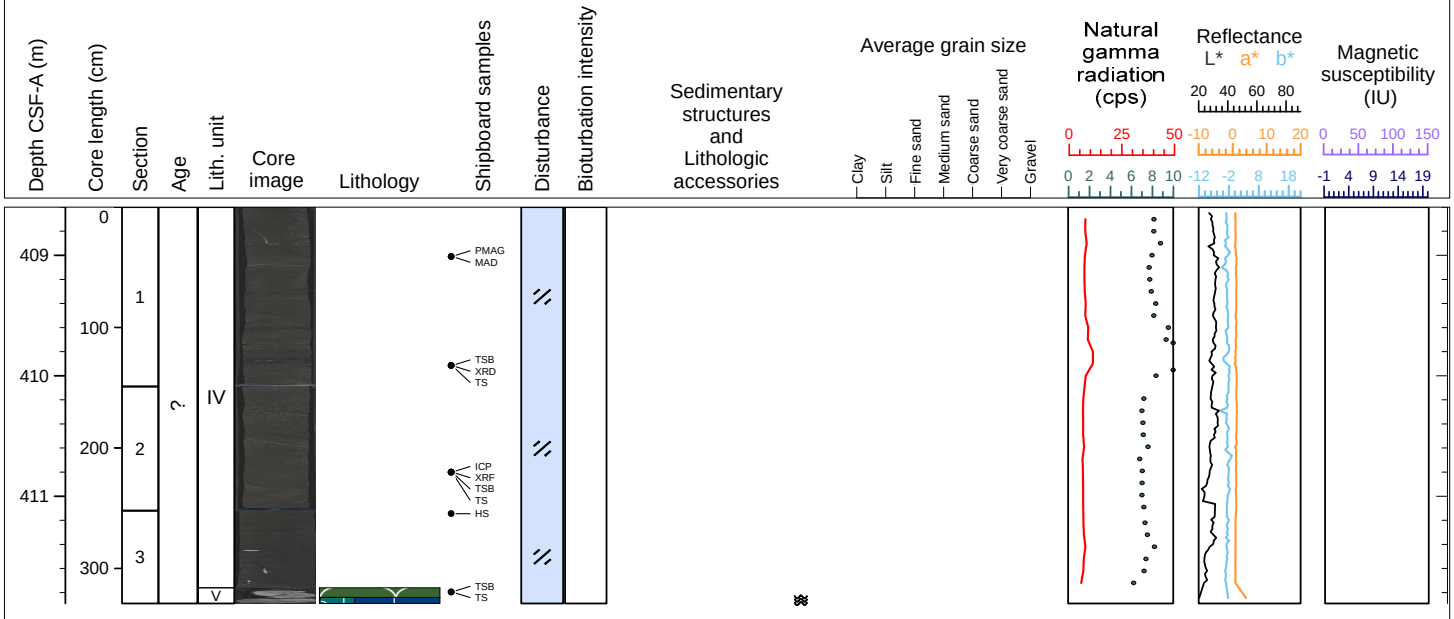
Hole 392-U1580A Core 44R, Interval 407.6-407.6 m (CSF-A)

NO RECOVERY 407.6-408.6 m

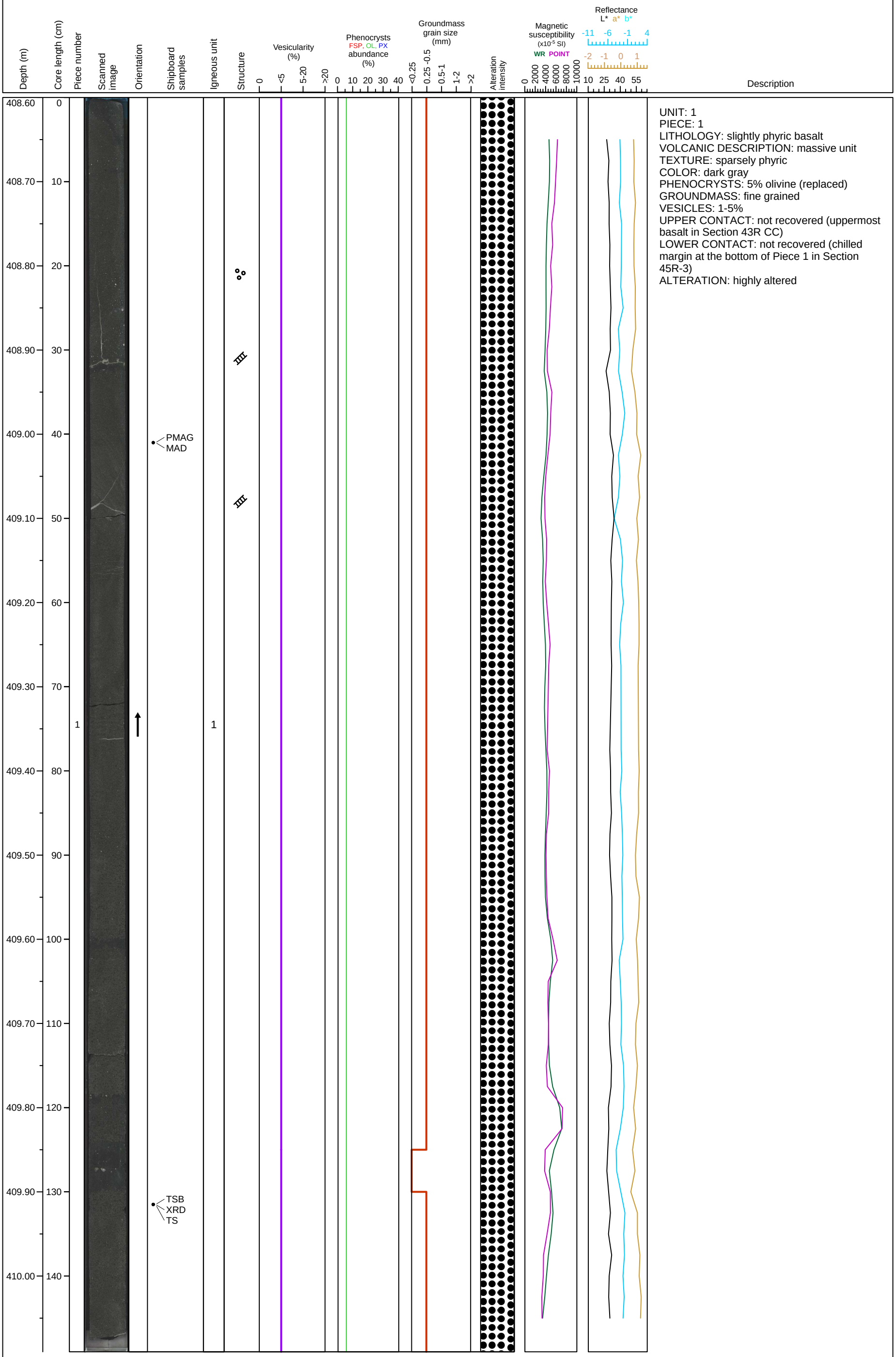


Hole 392-U1580A Core 45R, Interval 408.6-411.89 m (CSF-A)

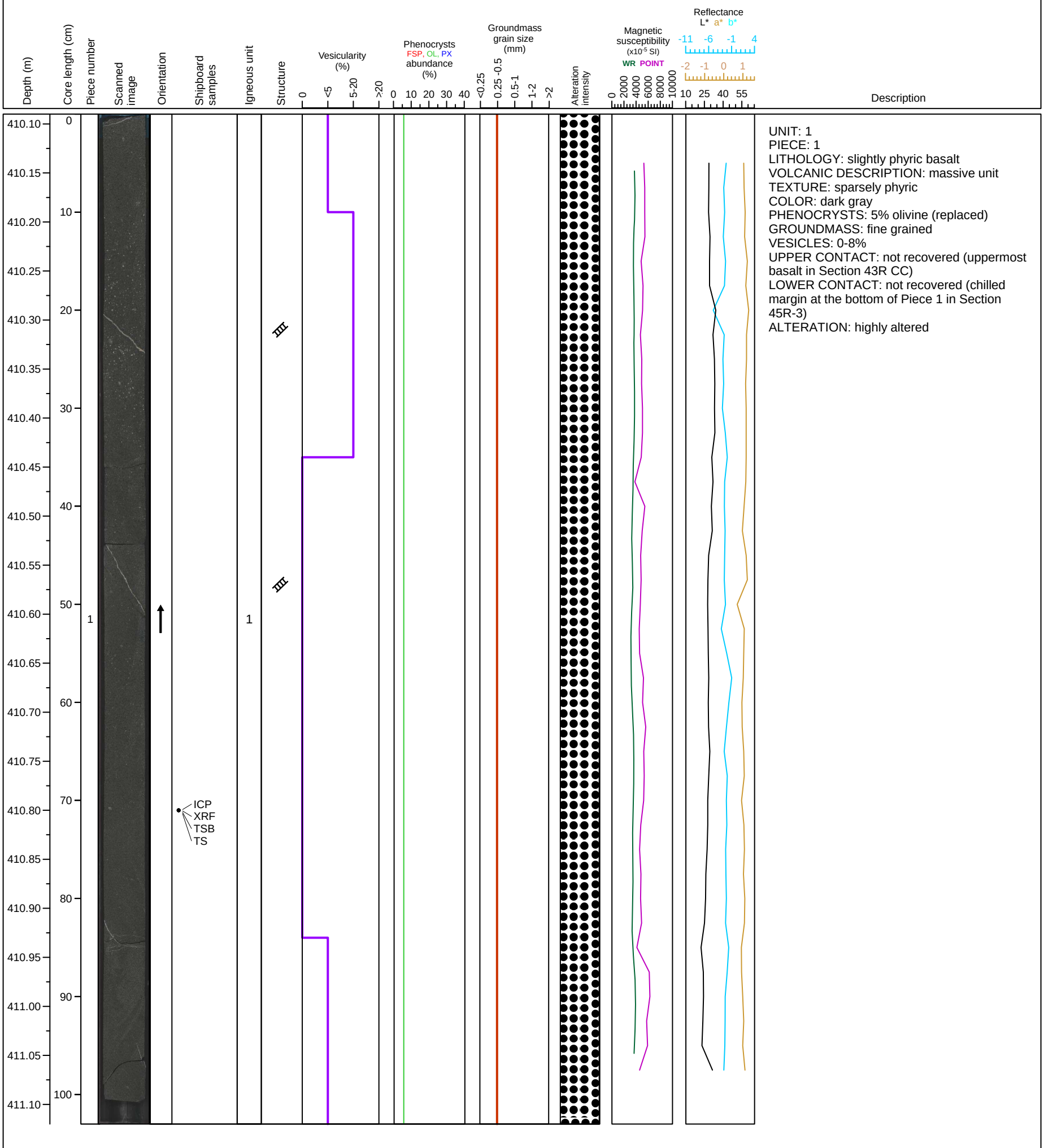
Core U1580A-45R is composed of basalt, chert, and silicified limestone. Chert is present in Section 3, 65-69 cm, and is light gray. Silicified limestone is present in Section 3, 72-76 cm, and is light gray with medium laminations. None of the contacts between the silicified limestone, chert, and basalt were recovered due to drilling.



Hole 392-U1580A-45R Section 1, Top of Section: 408.6 m (CSF-A)

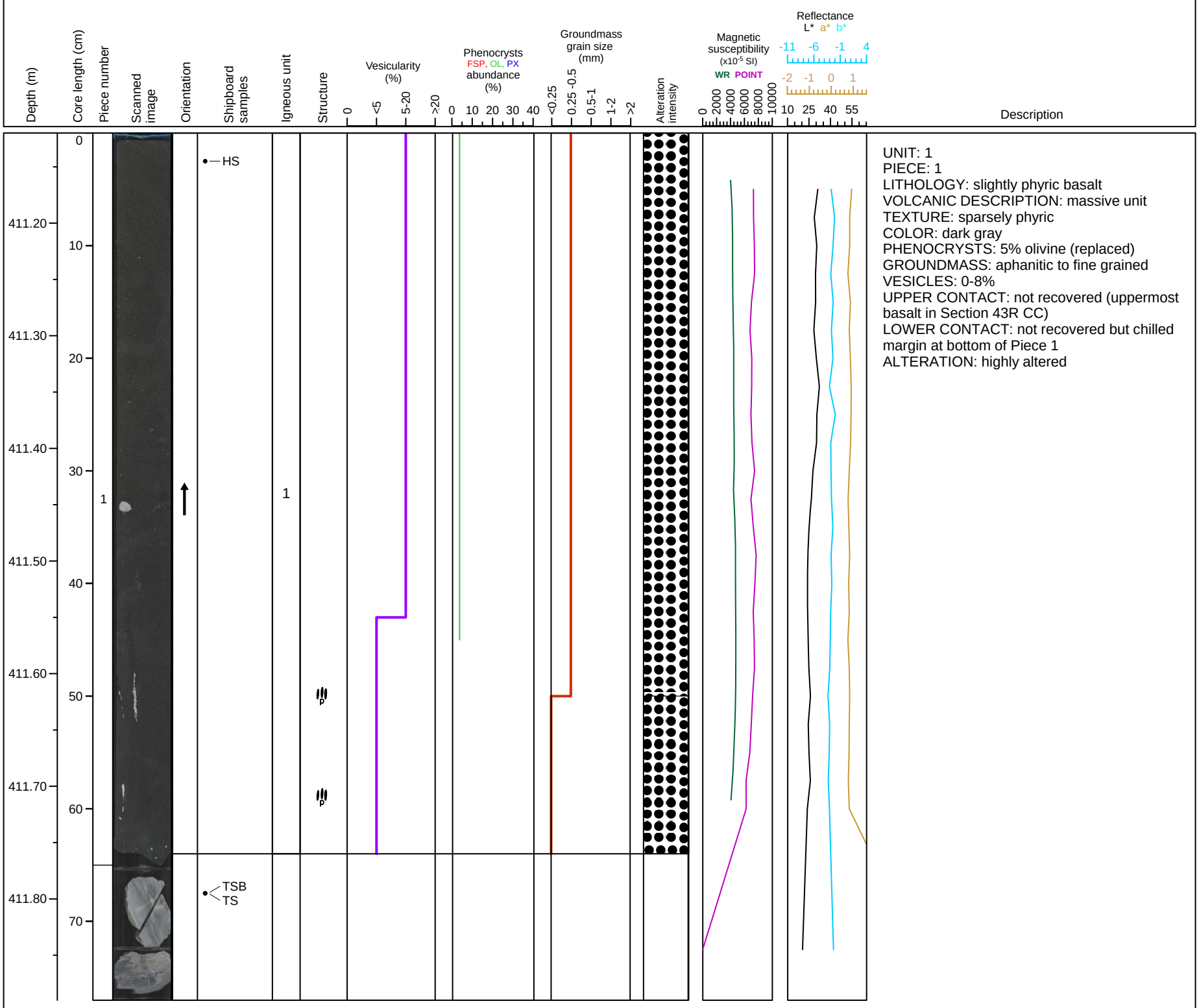


Hole 392-U1580A-45R Section 2, Top of Section: 410.09 m (CSF-A)



UNIT: 1
PIECE: 1
LITHOLOGY: slightly phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 5% olivine (replaced)
GROUNDMASS: fine grained
VESICLES: 0-8%
UPPER CONTACT: not recovered (uppermost basalt in Section 43R CC)
LOWER CONTACT: not recovered (chilled margin at the bottom of Piece 1 in Section 45R-3)
ALTERATION: highly altered

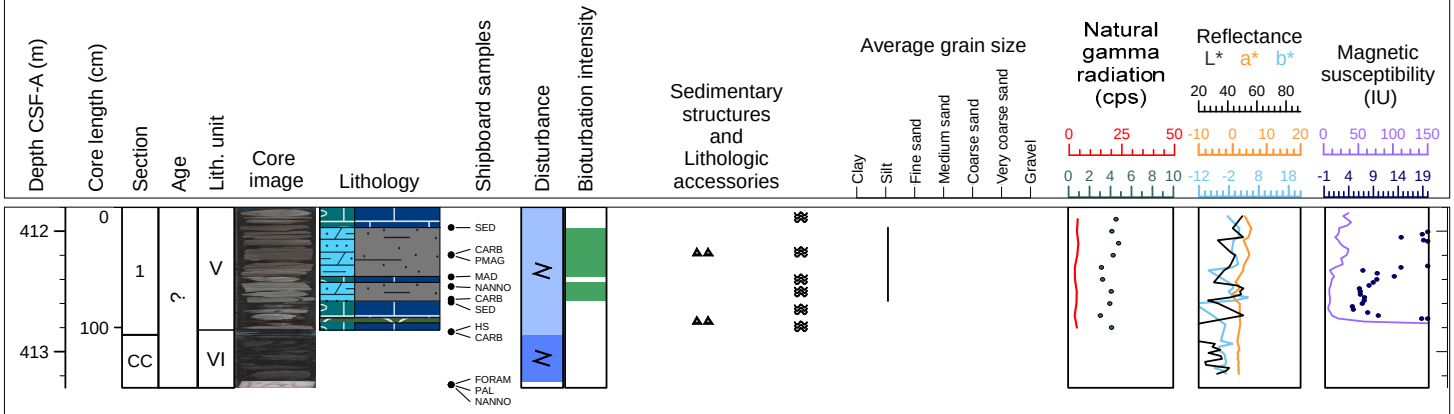
Hole 392-U1580A-45R Section 3, Top of Section: 411.12 m (CSF-A)



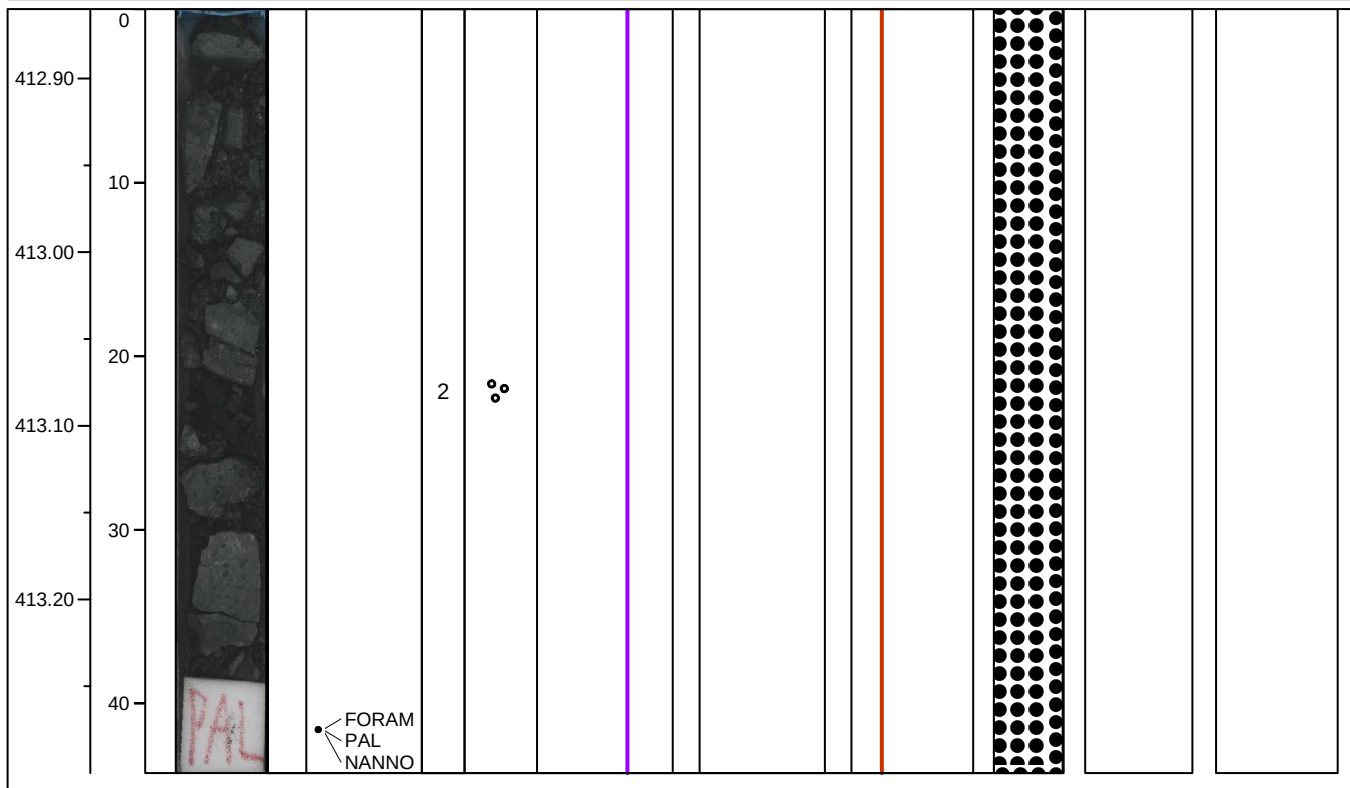
UNIT: 1
PIECE: 1
LITHOLOGY: slightly phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 5% olivine (replaced)
GROUNDMASS: aphanitic to fine grained
VESICLES: 0-8%
UPPER CONTACT: not recovered (uppermost basalt in Section 43R CC)
LOWER CONTACT: not recovered but chilled margin at bottom of Piece 1
ALTERATION: highly altered

Hole 392-U1580A Core 46R, Interval 411.8-413.3 m (CSF-A)

Core U1580A-46R is composed of calcareous siltstone, silicified limestone, chert, and basalt. The sedimentary package of calcareous siltstone, silicified limestone, and chert occurs in Section 1, 0-102 cm, and directly overlies basalt. Reddish gray to light gray calcareous siltstone alternates with light reddish gray silicified limestone interval and is moderately bioturbated. Both intervals include thin laminae. The chert interval in Section 1, 92-96 cm, is dusky red and massive. None of the contacts were recovered due to drilling disturbance (fragmentation).

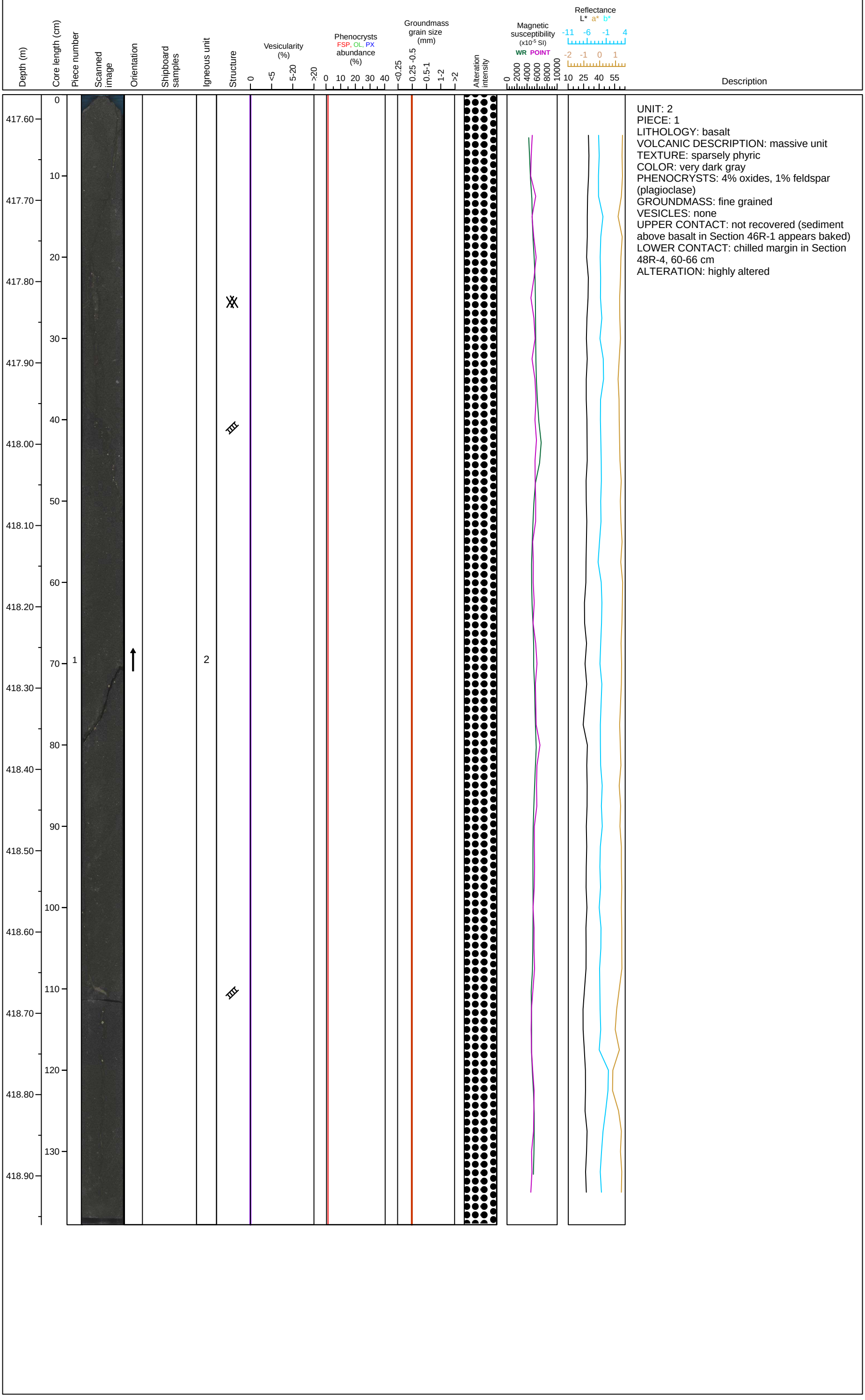


Hole 392-U1580A-46R Section CC, Top of Section: 412.86 m (CSF-A)



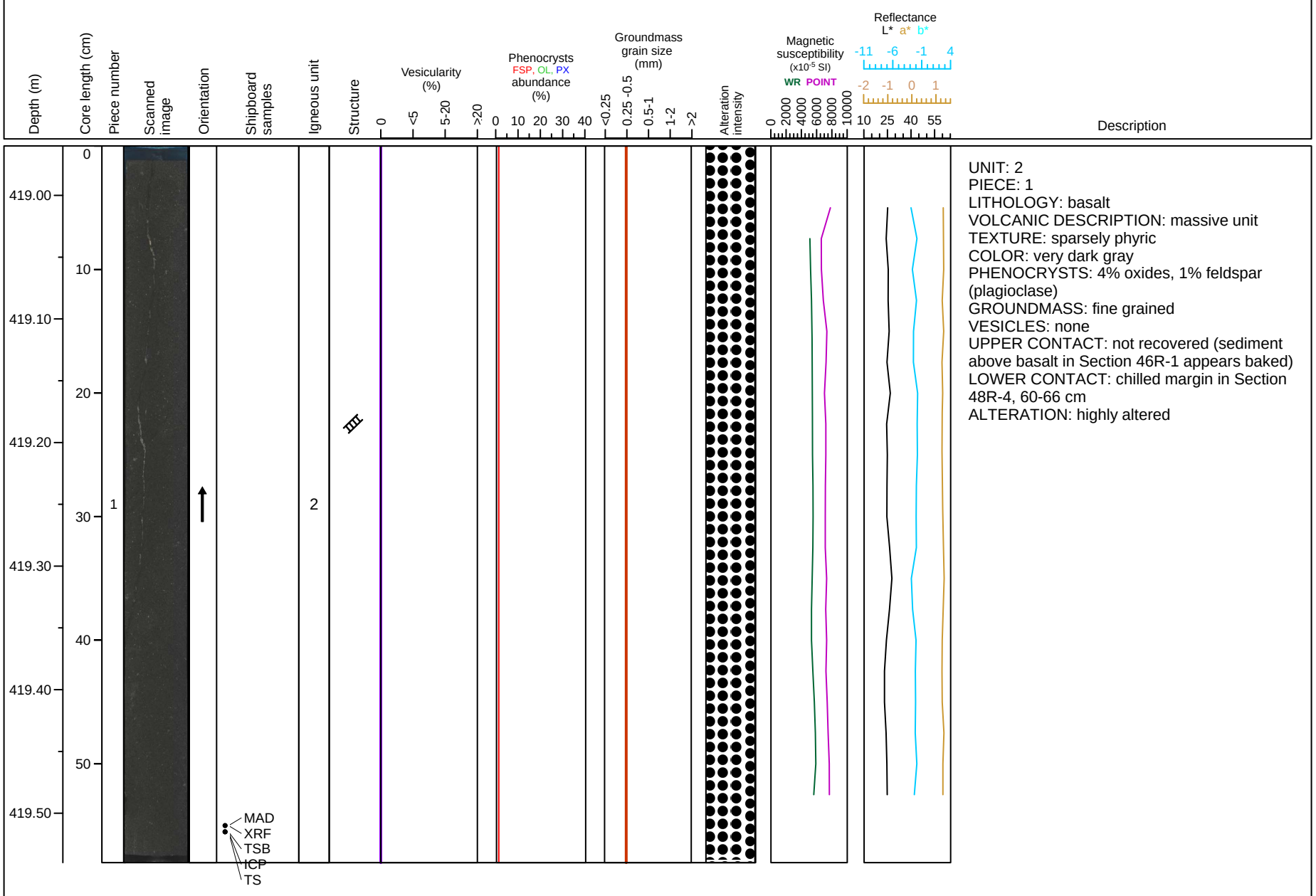
UNIT: 2
PIECE:
LITHOLOGY: vesicular basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: aphyric
COLOR: very dark gray
PHENOCRYSTS:
GROUNDMASS: fine grained
VESICLES: 5-8%
UPPER CONTACT: not recovered (sediment above basalt in Section 46R-1 appears baked)
LOWER CONTACT: chilled margin in Section 48R-4, 60-66 cm
ALTERATION: highly altered

Hole 392-U1580A-47R Section 1, Top of Section: 417.57 m (CSF-A)



UNIT: 2
PIECE: 1
LITHOLOGY: basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: very dark gray
PHENOCRYSTS: 4% oxides, 1% feldspar (plagioclase)
GROUNDMASS: fine grained
VESICLES: none
UPPER CONTACT: not recovered (sediment above basalt in Section 46R-1 appears baked)
LOWER CONTACT: chilled margin in Section 48R-4, 60-66 cm
ALTERATION: highly altered

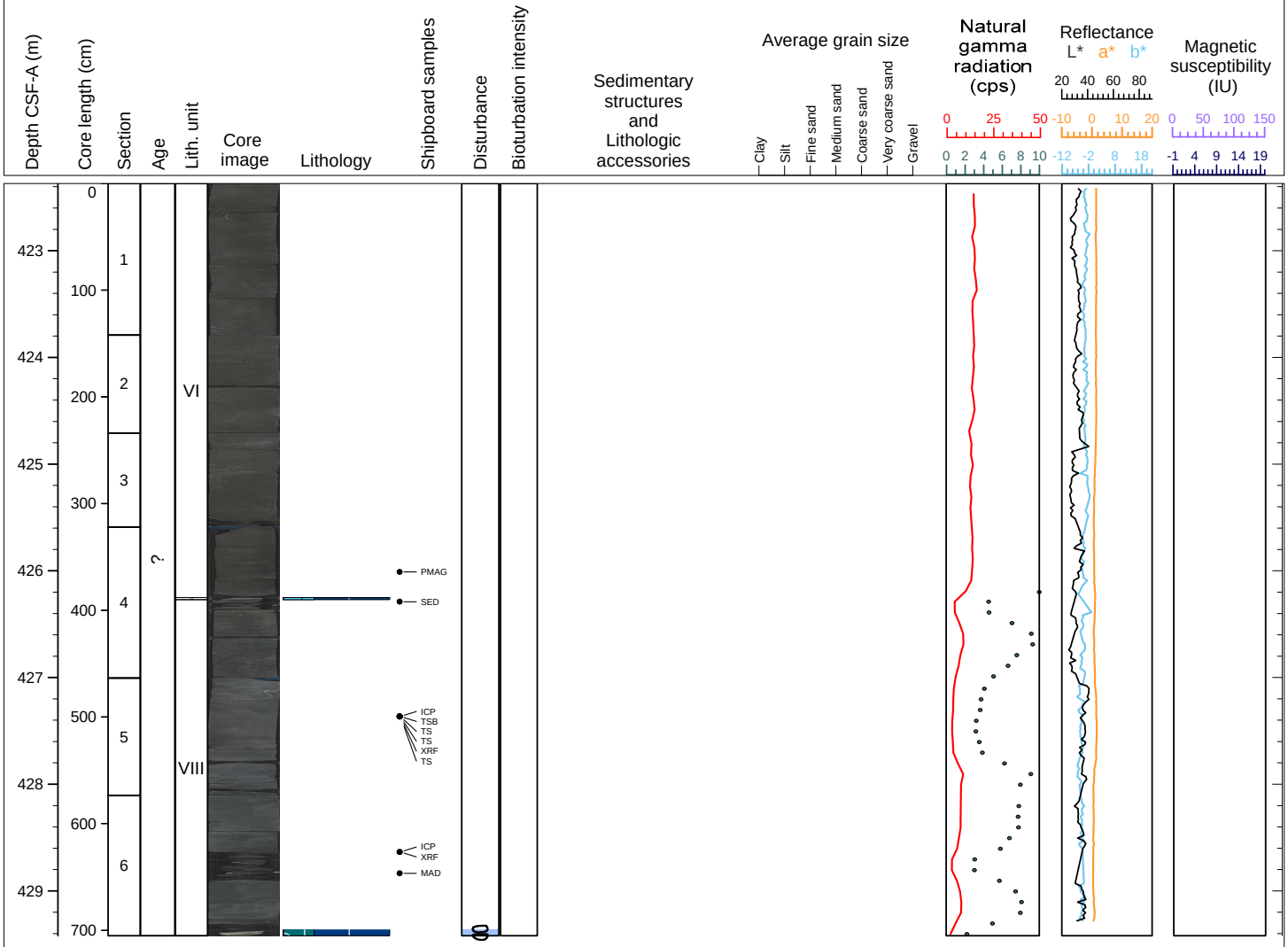
Hole 392-U1580A-47R Section 2, Top of Section: 418.96 m (CSF-A)



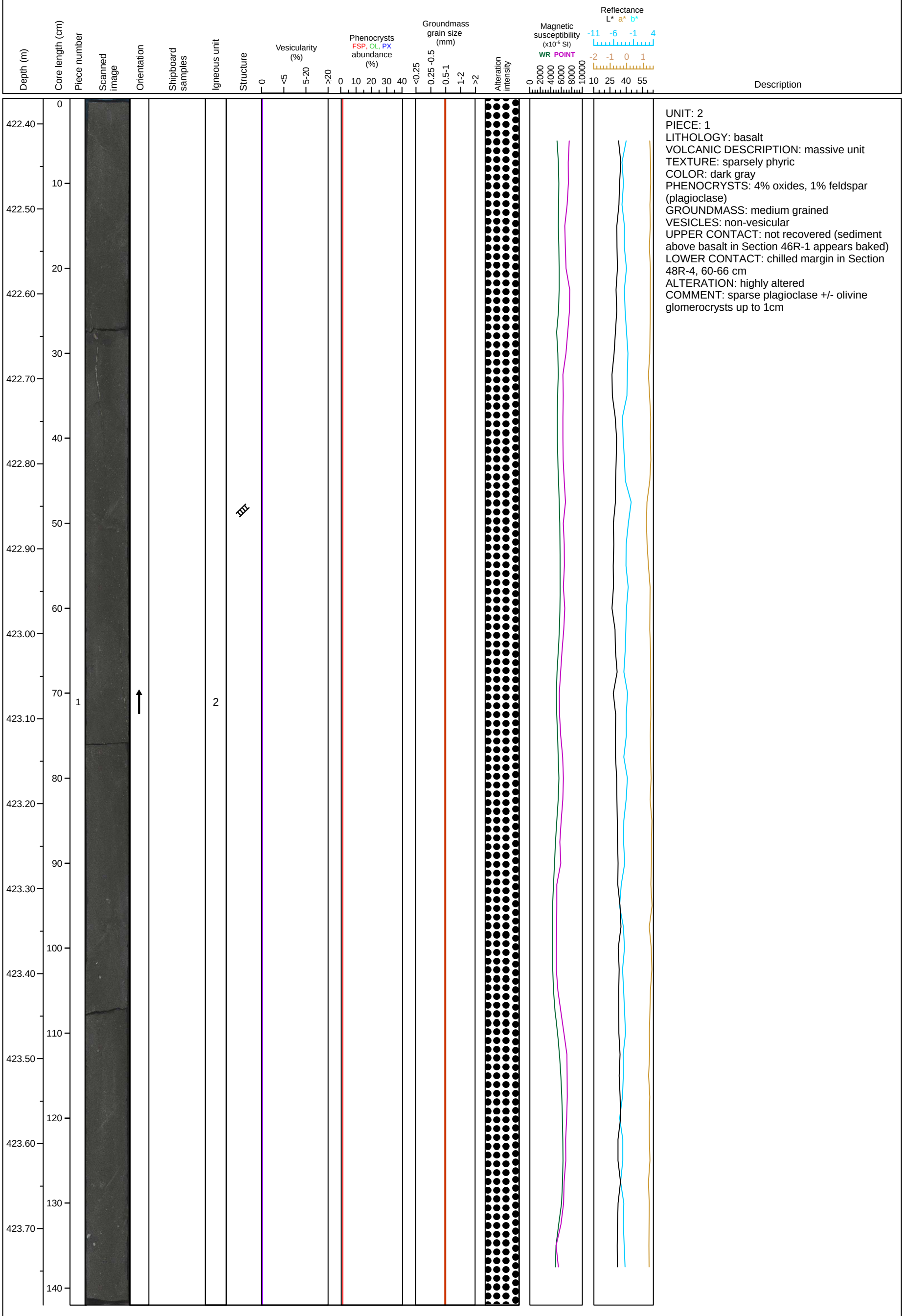
UNIT: 2
PIECE: 1
LITHOLOGY: basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: very dark gray
PHENOCRYSTS: 4% oxides, 1% feldspar (plagioclase)
GROUNDMASS: fine grained
VESICLES: none
UPPER CONTACT: not recovered (sediment above basalt in Section 46R-1 appears baked)
LOWER CONTACT: chilled margin in Section 48R-4, 60-66 cm
ALTERATION: highly altered

Hole 392-U1580A Core 48R, Interval 422.37-429.42 m (CSF-A)

Core U1580A-48R consists of greenish gray calcareous chalk. The sedimentary portion of the core is within Section 4, 66-68 cm. In Section 4 (66-66.25 cm) is a white thin lamination. The rest of the interval is greenish gray calcareous chalk. The upper boundary was not recovered due to drilling but a sharp boundary with the underlying chilled margin of basalt was preserved in Section 4, at 68 cm.

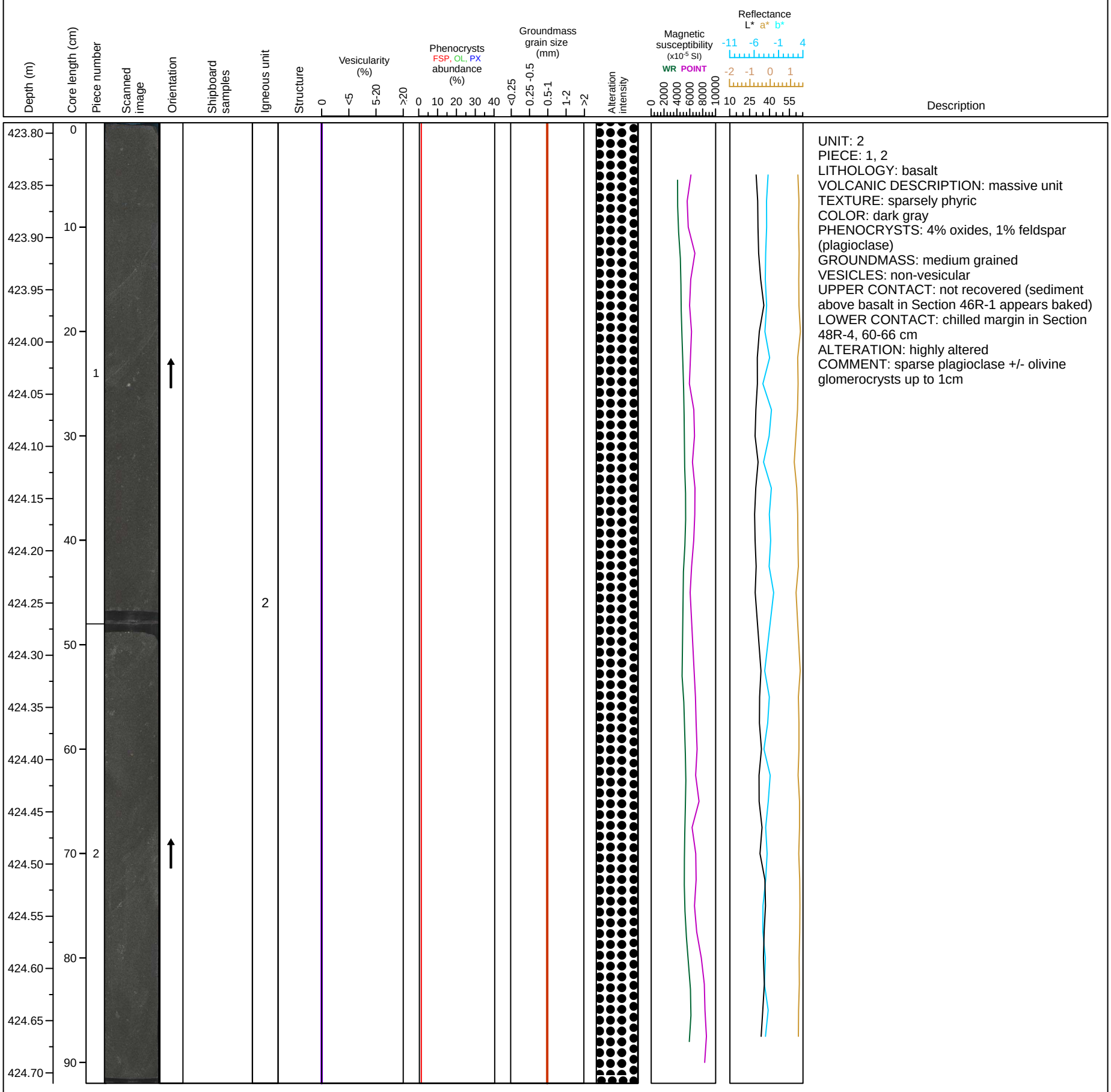


Hole 392-U1580A-48R Section 1, Top of Section: 422.37 m (CSF-A)



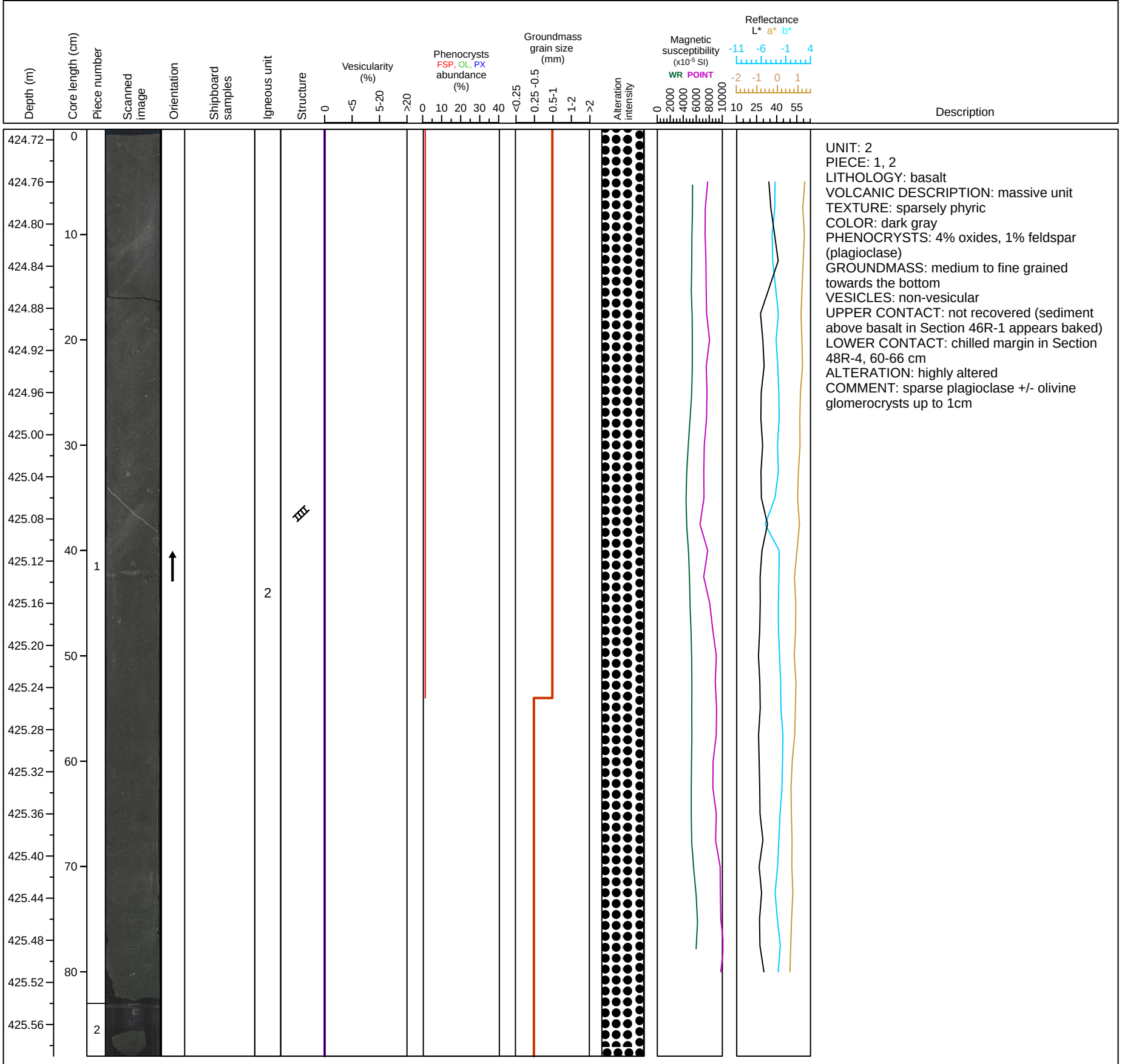
UNIT: 2
PIECE: 1
LITHOLOGY: basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 4% oxides, 1% feldspar (plagioclase)
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (sediment above basalt in Section 46R-1 appears baked)
LOWER CONTACT: chilled margin in Section 48R-4, 60-66 cm
ALTERATION: highly altered
COMMENT: sparse plagioclase +/- olivine glomerocrysts up to 1cm

Hole 392-U1580A-48R Section 2, Top of Section: 423.79 m (CSF-A)



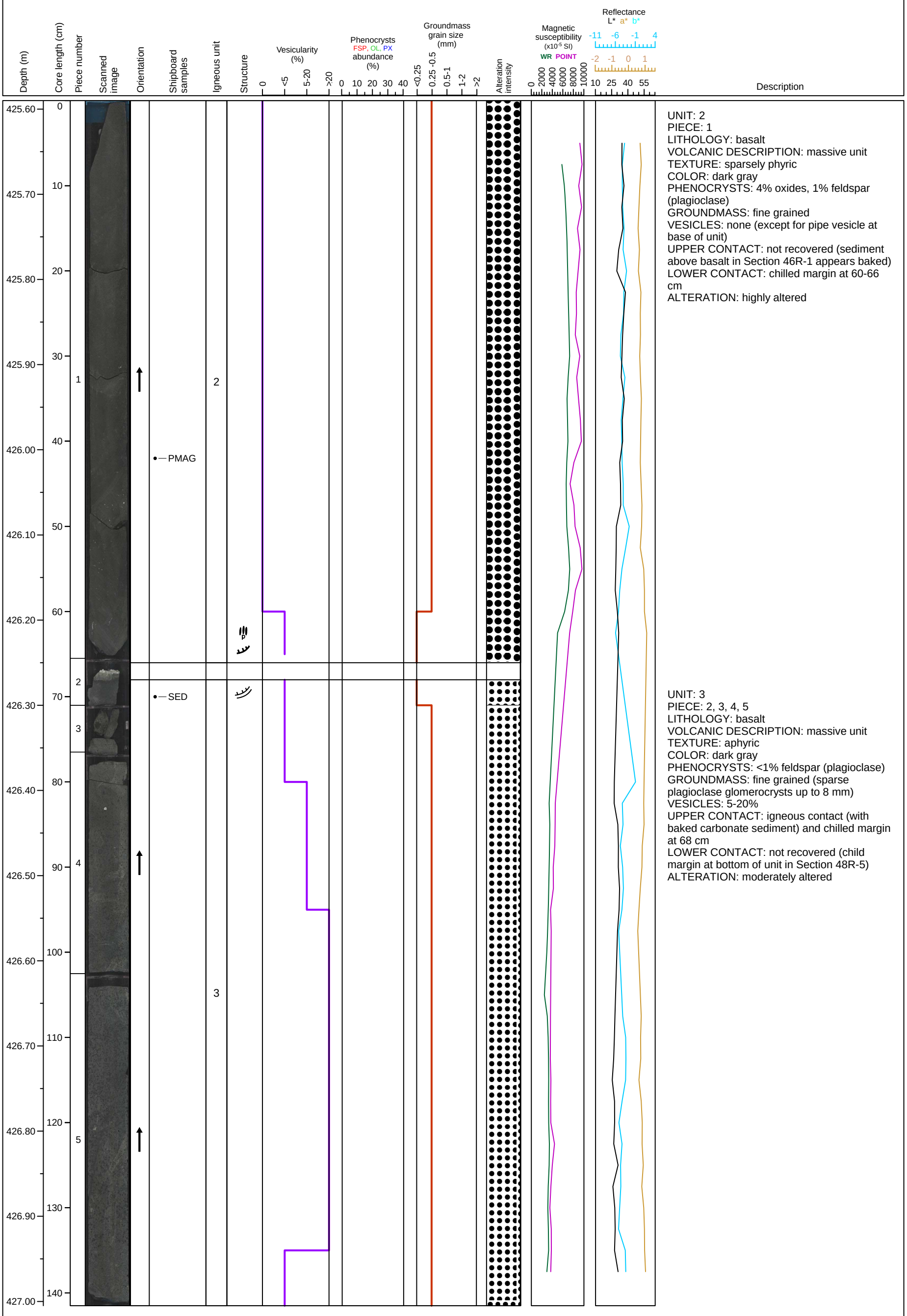
UNIT: 2
PIECE: 1, 2
LITHOLOGY: basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 4% oxides, 1% feldspar (plagioclase)
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (sediment above basalt in Section 46R-1 appears baked)
LOWER CONTACT: chilled margin in Section 48R-4, 60-66 cm
ALTERATION: highly altered
COMMENT: sparse plagioclase +/- olivine glomerocrysts up to 1cm

Hole 392-U1580A-48R Section 3, Top of Section: 424.71 m (CSF-A)



UNIT: 2
PIECE: 1, 2
LITHOLOGY: basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 4% oxides, 1% feldspar (plagioclase)
GROUNDMASS: medium to fine grained towards the bottom
VESICLES: non-vesicular
UPPER CONTACT: not recovered (sediment above basalt in Section 46R-1 appears baked)
LOWER CONTACT: chilled margin in Section 48R-4, 60-66 cm
ALTERATION: highly altered
COMMENT: sparse plagioclase +/- olivine glomerocrysts up to 1cm

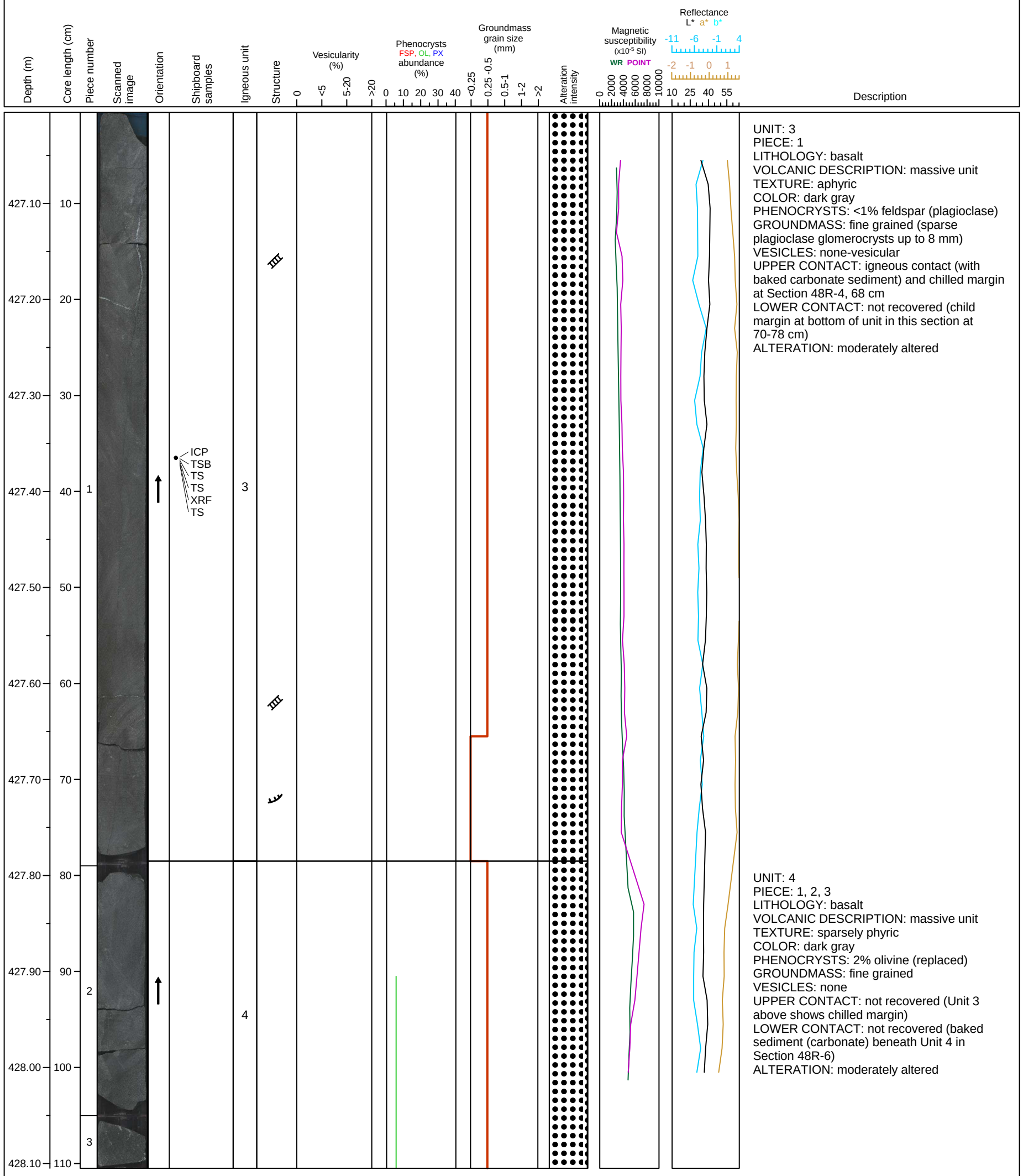
Hole 392-U1580A-48R Section 4, Top of Section: 425.59 m (CSF-A)



UNIT: 2
PIECE: 1
LITHOLOGY: basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 4% oxides, 1% feldspar (plagioclase)
GROUNDMASS: fine grained
VESICLES: none (except for pipe vesicle at base of unit)
UPPER CONTACT: not recovered (sediment above basalt in Section 46R-1 appears baked)
LOWER CONTACT: chilled margin at 60-66 cm
ALTERATION: highly altered

UNIT: 3
PIECE: 2, 3, 4, 5
LITHOLOGY: basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: aphyric
COLOR: dark gray
PHENOCRYSTS: <1% feldspar (plagioclase)
GROUNDMASS: fine grained (sparse plagioclase glomerocrysts up to 8 mm)
VESICLES: 5-20%
UPPER CONTACT: igneous contact (with baked carbonate sediment) and chilled margin at 68 cm
LOWER CONTACT: not recovered (child margin at bottom of unit in Section 48R-5)
ALTERATION: moderately altered

Hole 392-U1580A-48R Section 5, Top of Section: 427.005 m (CSF-A)



UNIT: 3
PIECE: 1
LITHOLOGY: basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: aphyric
COLOR: dark gray
PHENOCRYSTS: <1% feldspar (plagioclase)
GROUNDMASS: fine grained (sparse plagioclase glomerocrysts up to 8 mm)
VESICLES: none-vesicular
UPPER CONTACT: igneous contact (with baked carbonate sediment) and chilled margin at Section 48R-4, 68 cm
LOWER CONTACT: not recovered (child margin at bottom of unit in this section at 70-78 cm)
ALTERATION: moderately altered

UNIT: 4
PIECE: 1, 2, 3
LITHOLOGY: basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 2% olivine (replaced)
GROUNDMASS: fine grained
VESICLES: none
UPPER CONTACT: not recovered (Unit 3 above shows chilled margin)
LOWER CONTACT: not recovered (baked sediment (carbonate) beneath Unit 4 in Section 48R-6)
ALTERATION: moderately altered

Hole 392-U1580A-48R Section 6, Top of Section: 428.105 m (CSF-A)

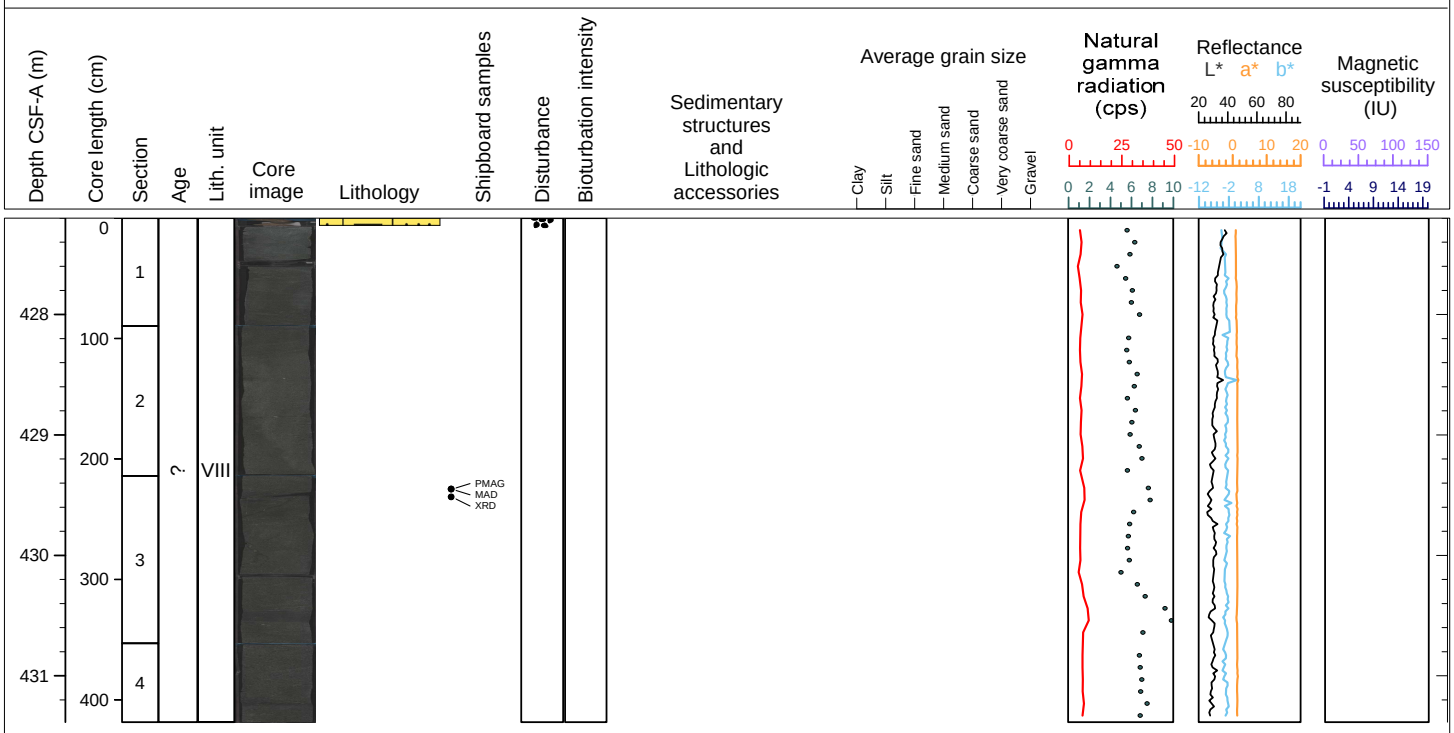
Depth (m) | Core length (cm) | Piece number | Scanned image | Orientation | Shipboard samples | Igneous unit | Structure | Vesicularity (%) 0 <5 5-20 >20 | Phenocrysts FSP, OL, PX abundance (%) 0 10 20 30 40 | Groundmass grain size (mm) <0.25 0.25-0.5 0.5-1 1-2 >2 | Alteration intensity | Magnetic susceptibility (x10^{-5} SI) WR POINT 0 2000 4000 6000 8000 10000 | Reflectance L* a* b* -11 -6 -1 4 -2 -1 0 1 10 25 40 55 | Description

428.20 | 0 | 1
428.30 | 20
428.40 | 30
428.50 | 40
428.60 | 50 | ICP XRF | 2
428.70 | 60 | 3 | 4
428.80 | 70 | 4 | MAD
428.90 | 80
429.00 | 90
429.10 | 100 | 5
429.20 | 110
429.30 | 120 | 6
429.40 | 130 | 7

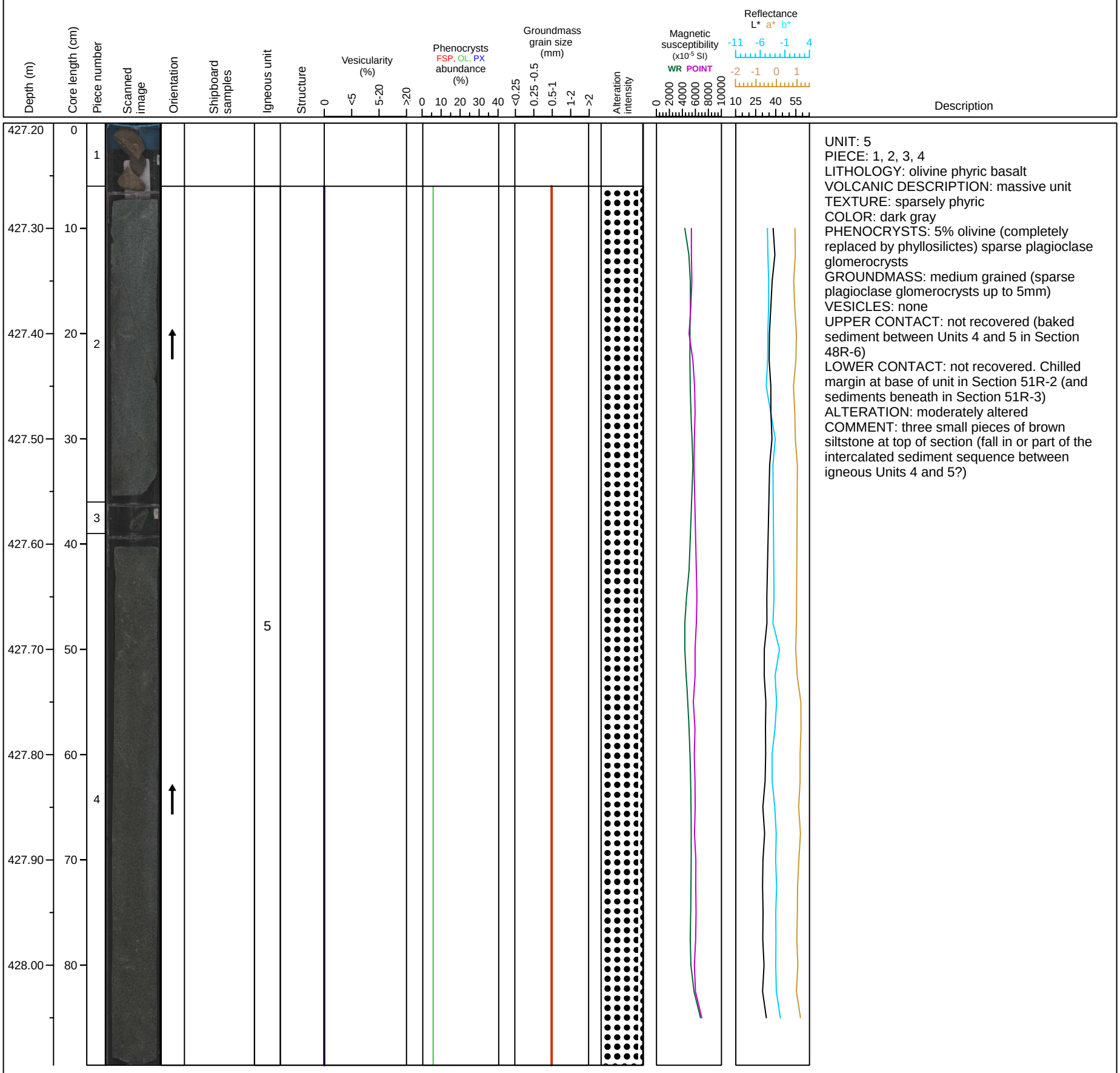
UNIT: 4
PIECE: 1, 2, 3, 4, 5, 6, 7
LITHOLOGY: basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 3-5% olivine (replaced)
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (Unit 3 above shows chilled margin)
LOWER CONTACT: not recovered (baked sediment (carbonate) beneath Unit 4 in Section 48R-6)
ALTERATION: moderately altered
COMMENT: small piece of baked carbonate at end of section

Hole 392-U1580A Core 49R, Interval 427.2-431.385 m (CSF-A)

Core U1580A-49R is brown sandstone that is moderately brecciated due to drilling.

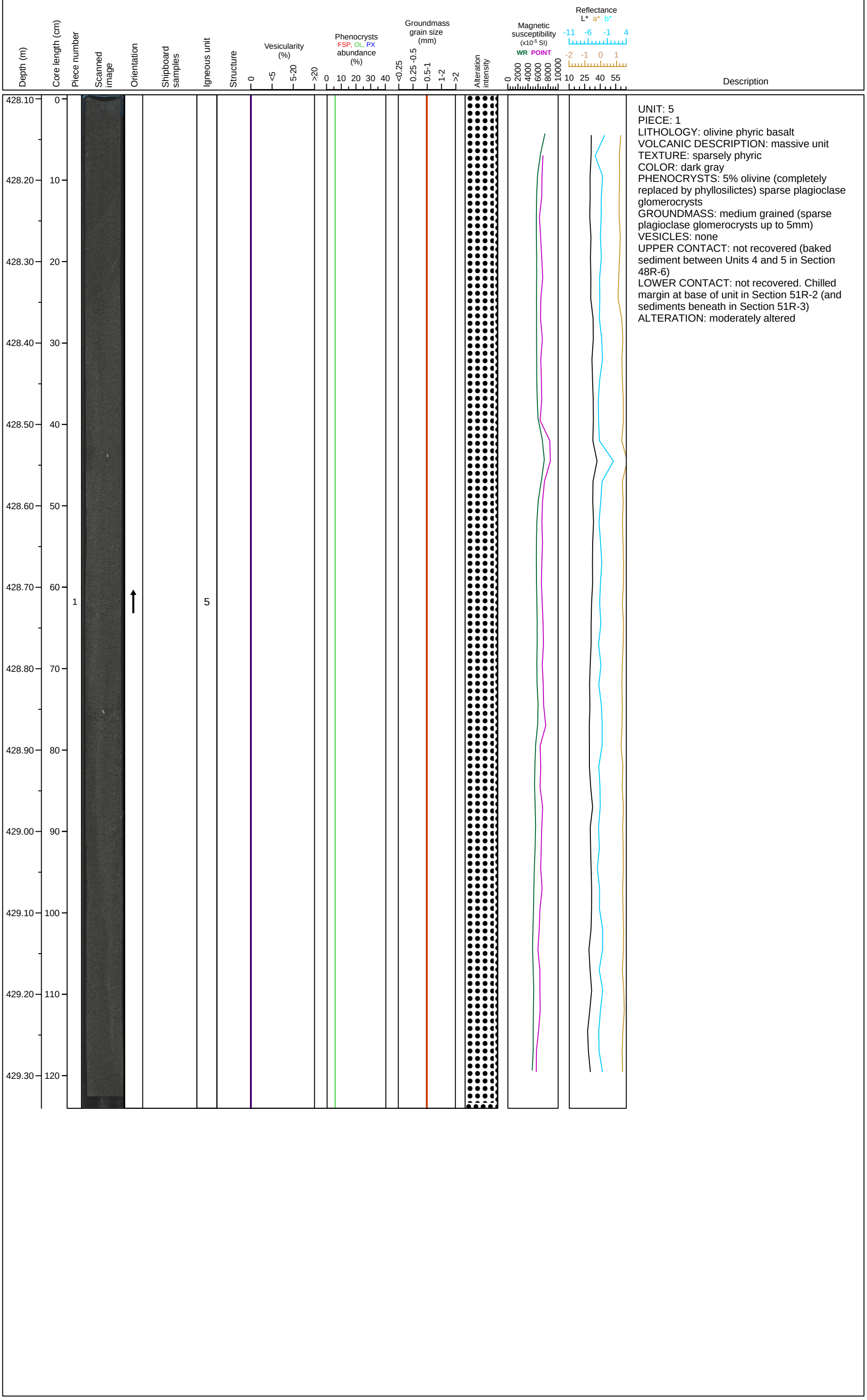


Hole 392-U1580A-49R Section 1, Top of Section: 427.2 m (CSF-A)



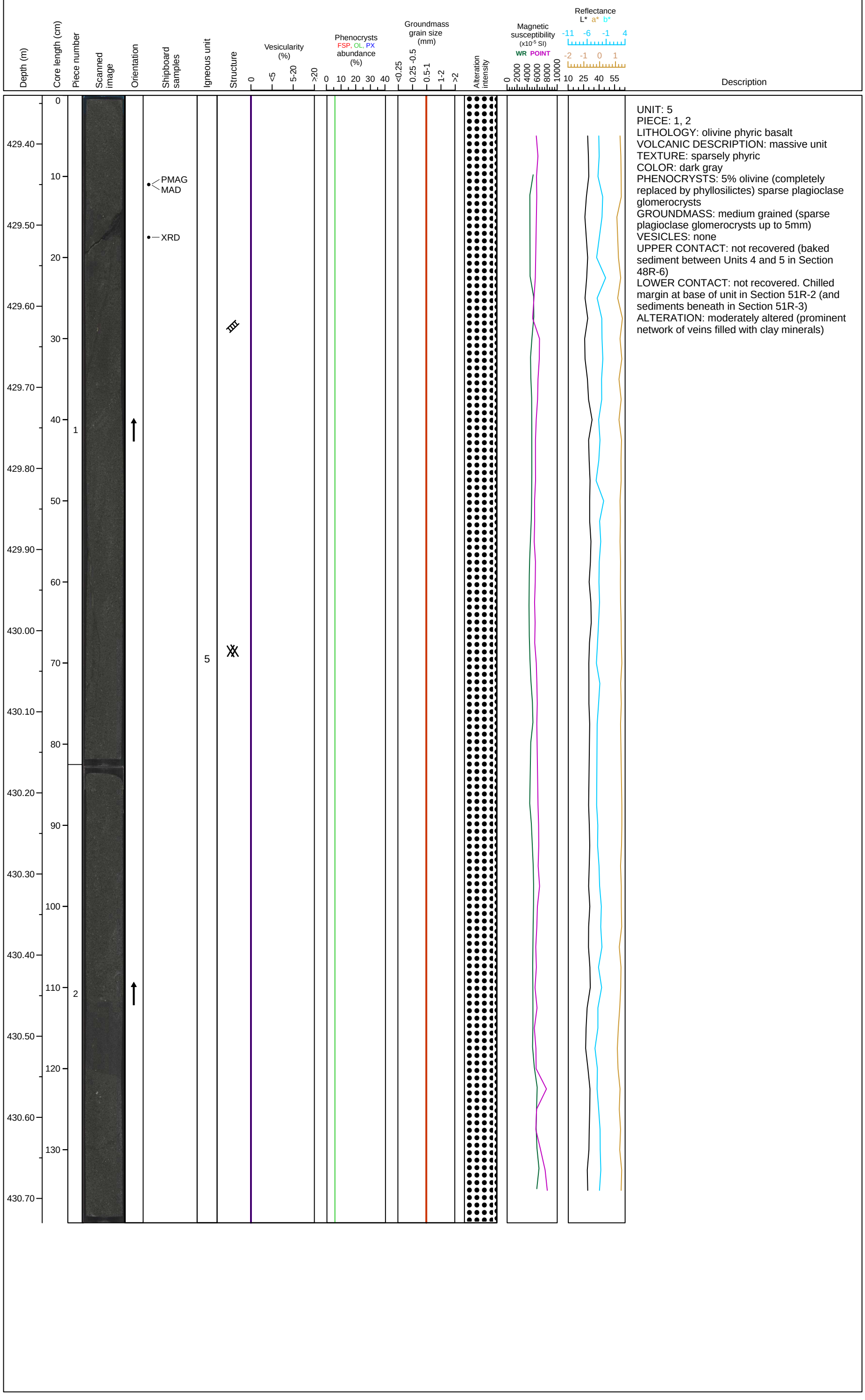
UNIT: 5
PIECE: 1, 2, 3, 4
LITHOLOGY: olivine phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 5% olivine (completely replaced by phyllosilictes) sparse plagioclase glomerocrysts
GROUNDMASS: medium grained (sparse plagioclase glomerocrysts up to 5mm)
VESICLES: none
UPPER CONTACT: not recovered (baked sediment between Units 4 and 5 in Section 48R-6)
LOWER CONTACT: not recovered. Chilled margin at base of unit in Section 51R-2 (and sediments beneath in Section 51R-3)
ALTERATION: moderately altered
COMMENT: three small pieces of brown siltstone at top of section (fall in or part of the intercalated sediment sequence between igneous Units 4 and 5?)

Hole 392-U1580A-49R Section 2, Top of Section: 428.095 m (CSF-A)



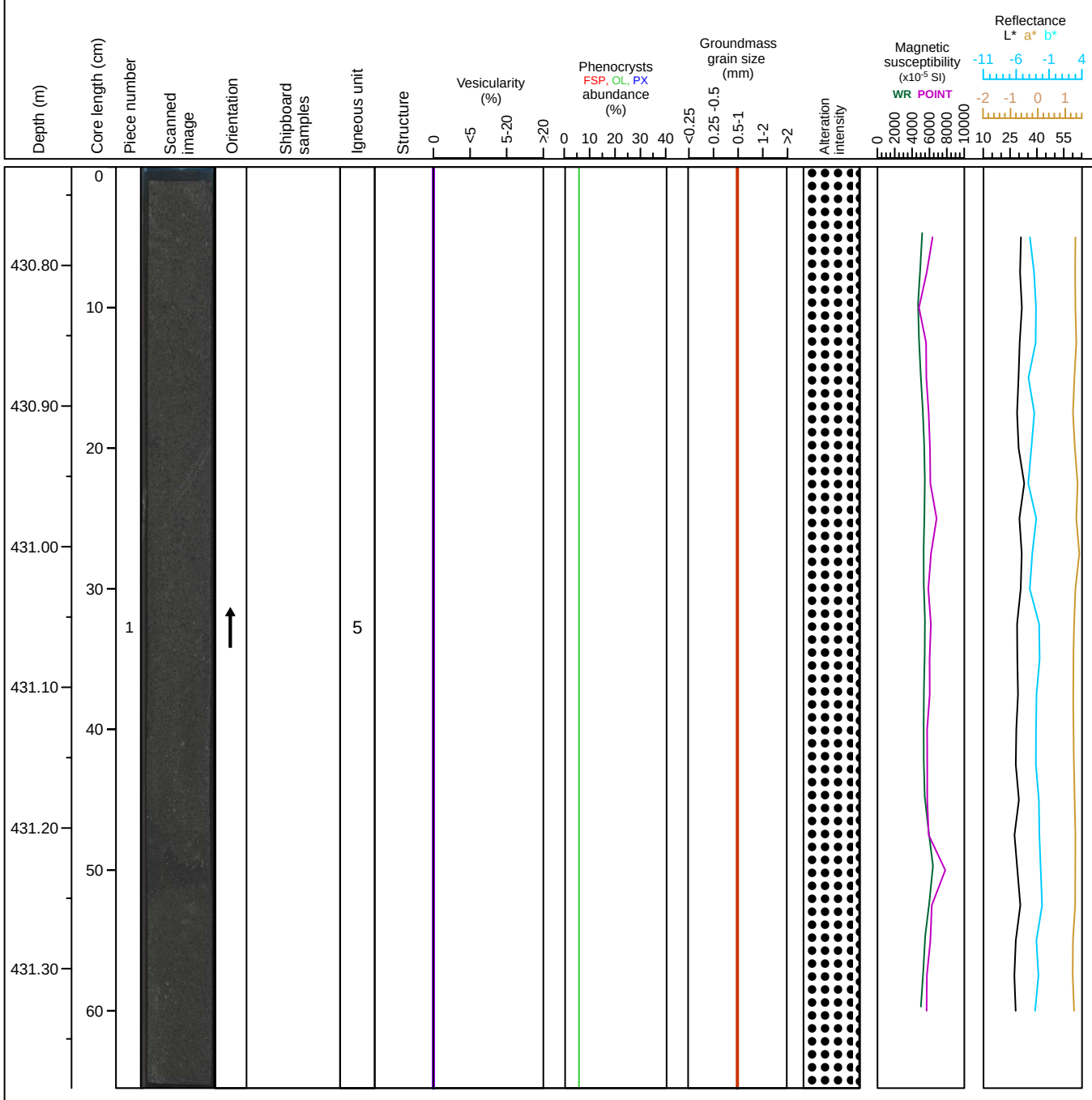
UNIT: 5
PIECE: 1
LITHOLOGY: olivine phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 5% olivine (completely replaced by phyllosilictes) sparse plagioclase glomerocrysts
GROUNDMASS: medium grained (sparse plagioclase glomerocrysts up to 5mm)
VESICLES: none
UPPER CONTACT: not recovered (baked sediment between Units 4 and 5 in Section 48R-6)
LOWER CONTACT: not recovered. Chilled margin at base of unit in Section 51R-2 (and sediments beneath in Section 51R-3)
ALTERATION: moderately altered

Hole 392-U1580A-49R Section 3, Top of Section: 429.34 m (CSF-A)



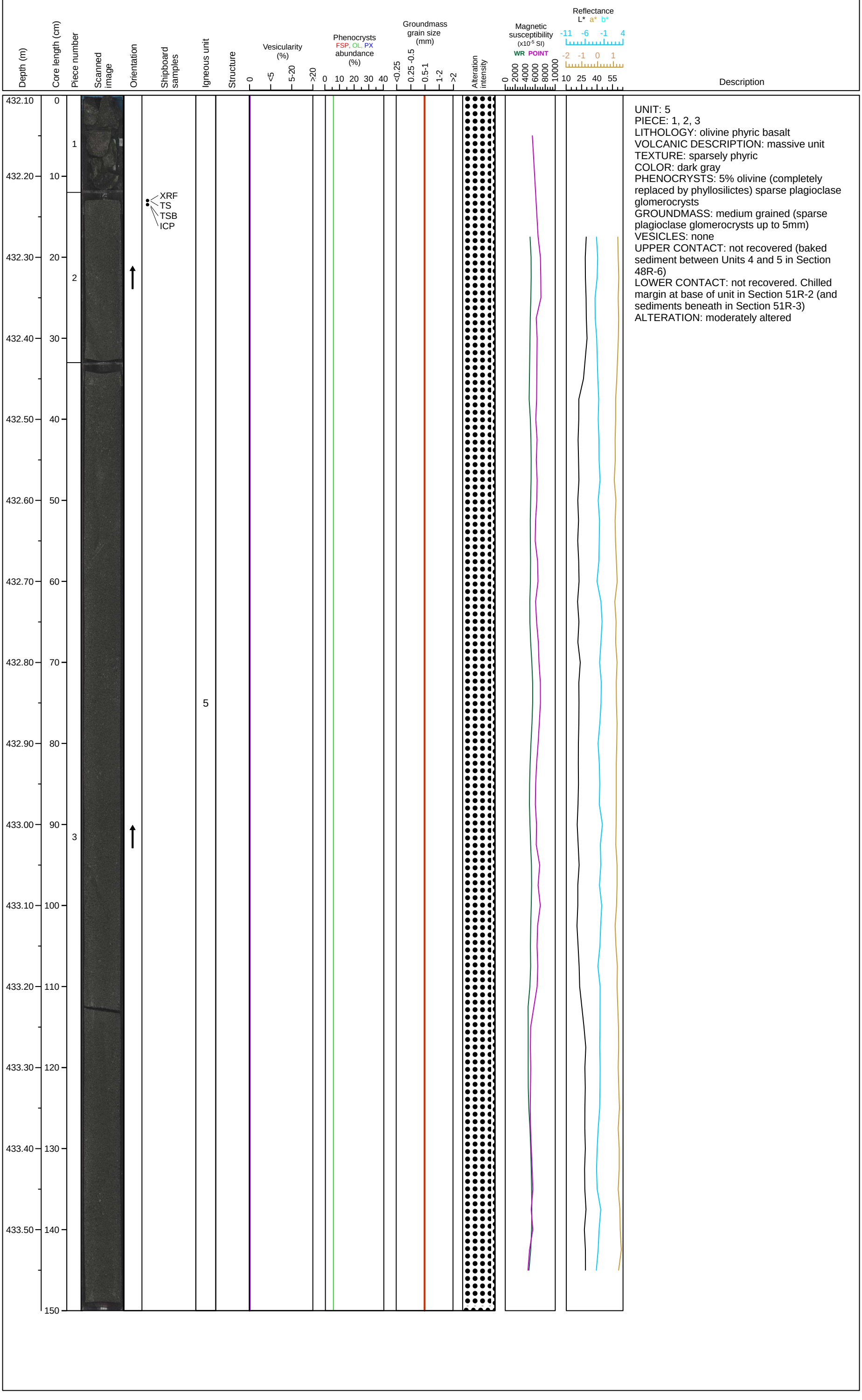
UNIT: 5
PIECE: 1, 2
LITHOLOGY: olivine phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 5% olivine (completely replaced by phyllosilictes) sparse plagioclase glomerocrysts
GROUNDMASS: medium grained (sparse plagioclase glomerocrysts up to 5mm)
VESICLES: none
UPPER CONTACT: not recovered (baked sediment between Units 4 and 5 in Section 48R-6)
LOWER CONTACT: not recovered. Chilled margin at base of unit in Section 51R-2 (and sediments beneath in Section 51R-3)
ALTERATION: moderately altered (prominent network of veins filled with clay minerals)

Hole 392-U1580A-49R Section 4, Top of Section: 430.73 m (CSF-A)



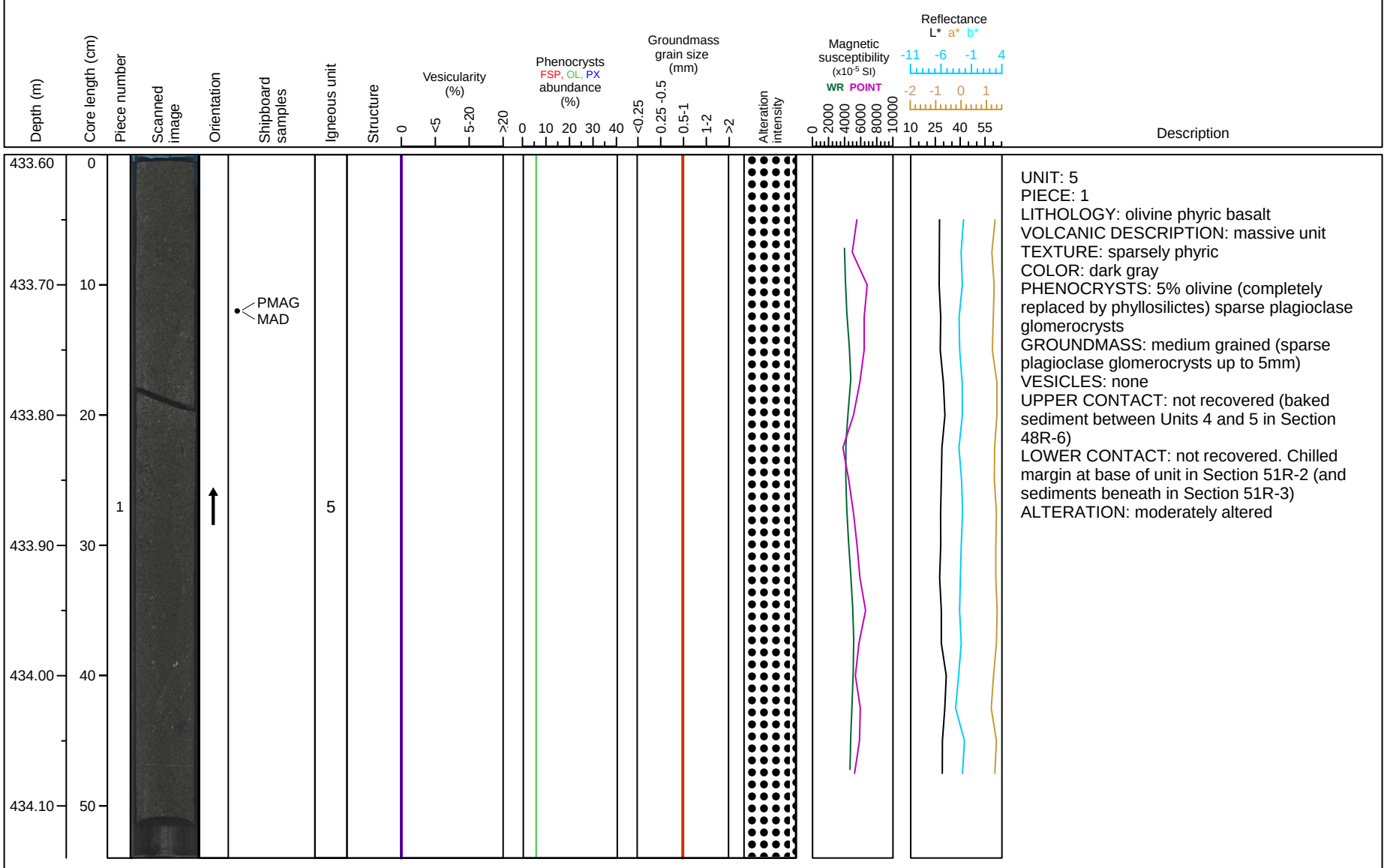
UNIT: 5
PIECE: 1
LITHOLOGY: olivine phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 5% olivine (completely replaced by phyllosilictes) sparse plagioclase glomerocrysts
GROUNDMASS: medium grained (sparse plagioclase glomerocrysts up to 5mm)
VESICLES: none
UPPER CONTACT: not recovered (baked sediment between Units 4 and 5 in Section 48R-6)
LOWER CONTACT: not recovered. Chilled margin at base of unit in Section 51R-2 (and sediments beneath in Section 51R-3)
ALTERATION: moderately altered

Hole 392-U1580A-50R Section 1, Top of Section: 432.1 m (CSF-A)



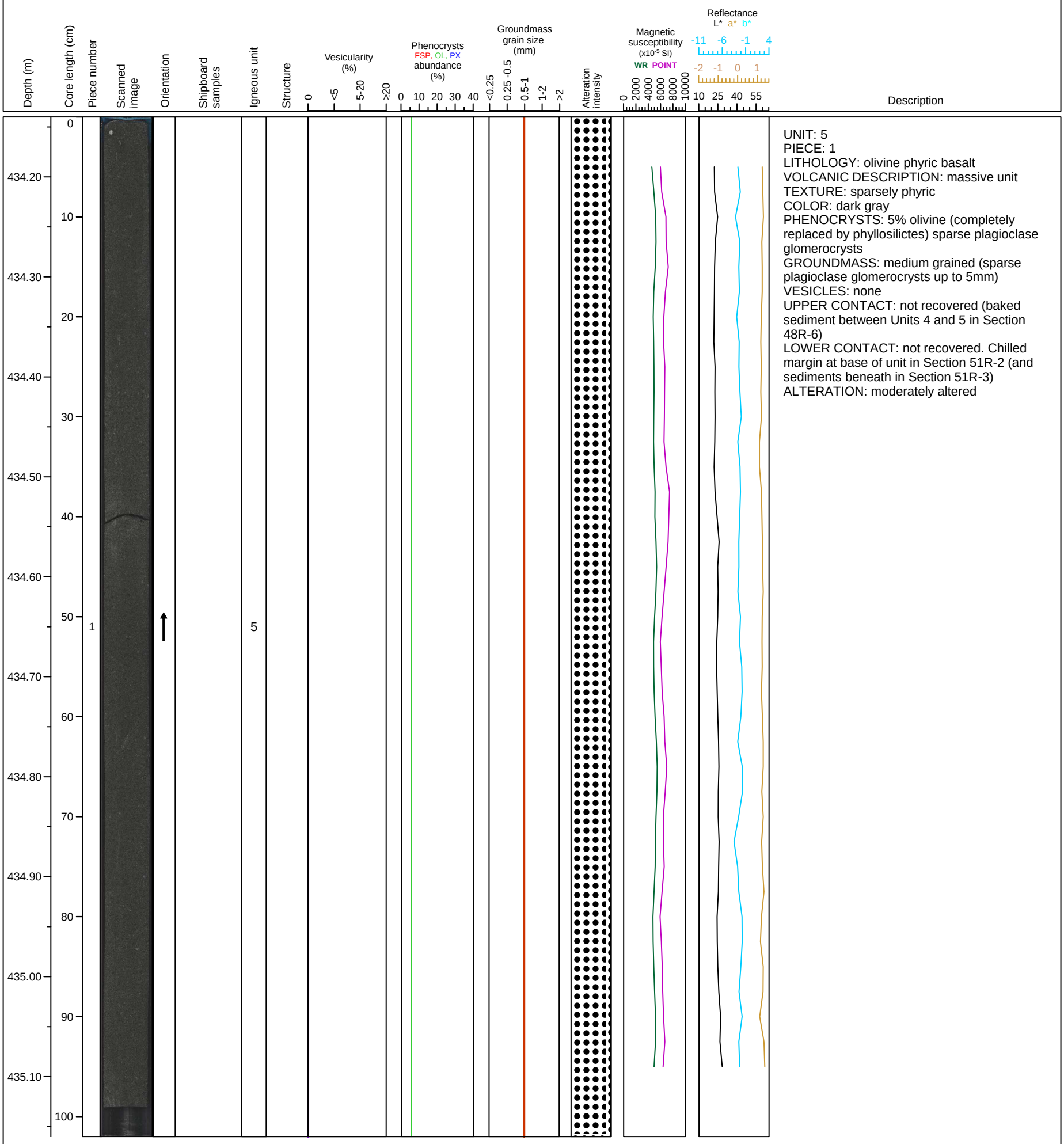
UNIT: 5
PIECE: 1, 2, 3
LITHOLOGY: olivine phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 5% olivine (completely replaced by phyllosilictes) sparse plagioclase glomerocrysts
GROUNDMASS: medium grained (sparse plagioclase glomerocrysts up to 5mm)
VESICLES: none
UPPER CONTACT: not recovered (baked sediment between Units 4 and 5 in Section 48R-6)
LOWER CONTACT: not recovered. Chilled margin at base of unit in Section 51R-2 (and sediments beneath in Section 51R-3)
ALTERATION: moderately altered

Hole 392-U1580A-50R Section 2, Top of Section: 433.6 m (CSF-A)



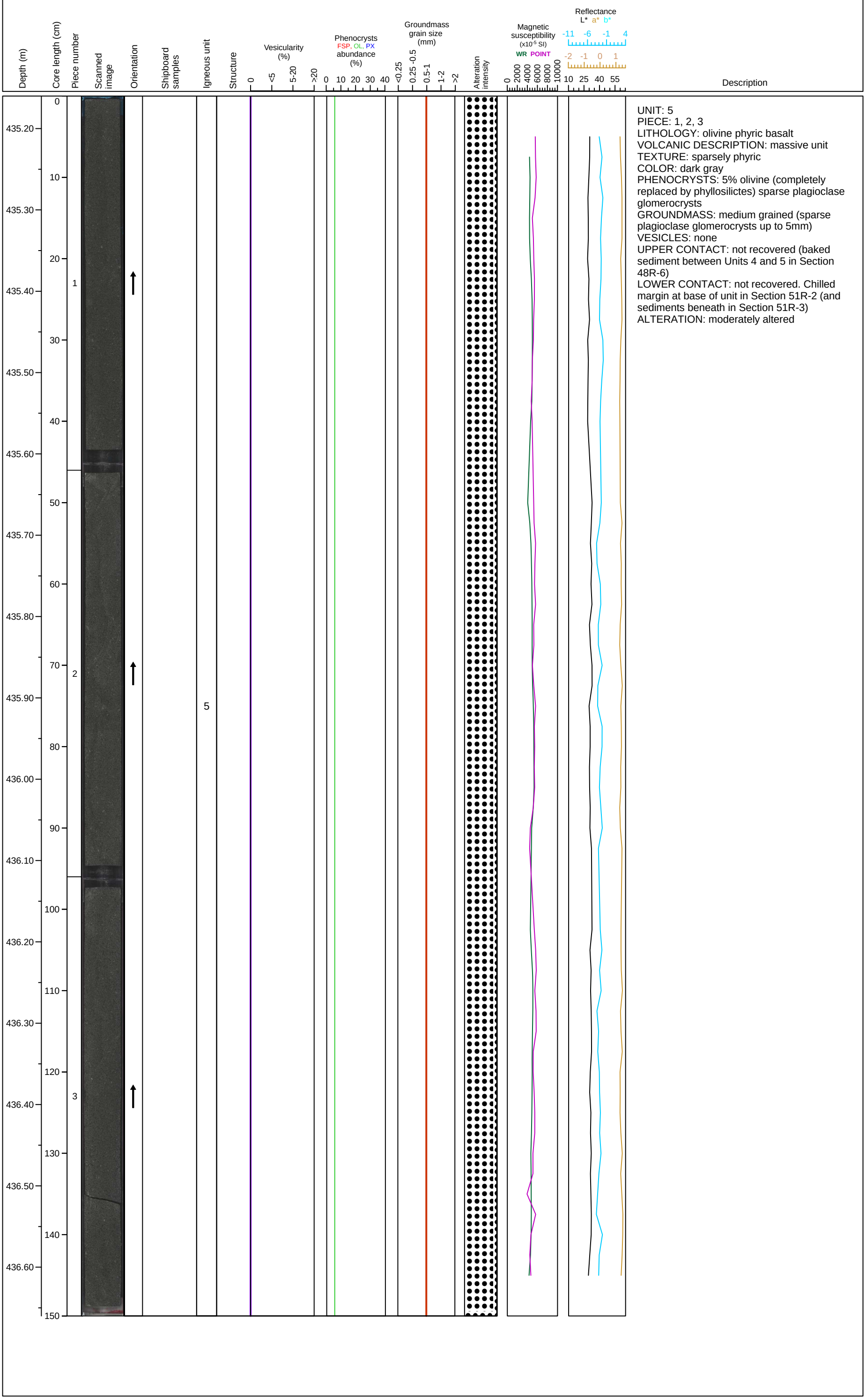
UNIT: 5
PIECE: 1
LITHOLOGY: olivine phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 5% olivine (completely replaced by phyllosilictes) sparse plagioclase glomerocrysts
GROUNDMASS: medium grained (sparse plagioclase glomerocrysts up to 5mm)
VESICLES: none
UPPER CONTACT: not recovered (baked sediment between Units 4 and 5 in Section 48R-6)
LOWER CONTACT: not recovered. Chilled margin at base of unit in Section 51R-2 (and sediments beneath in Section 51R-3)
ALTERATION: moderately altered

Hole 392-U1580A-50R Section 3, Top of Section: 434.14 m (CSF-A)



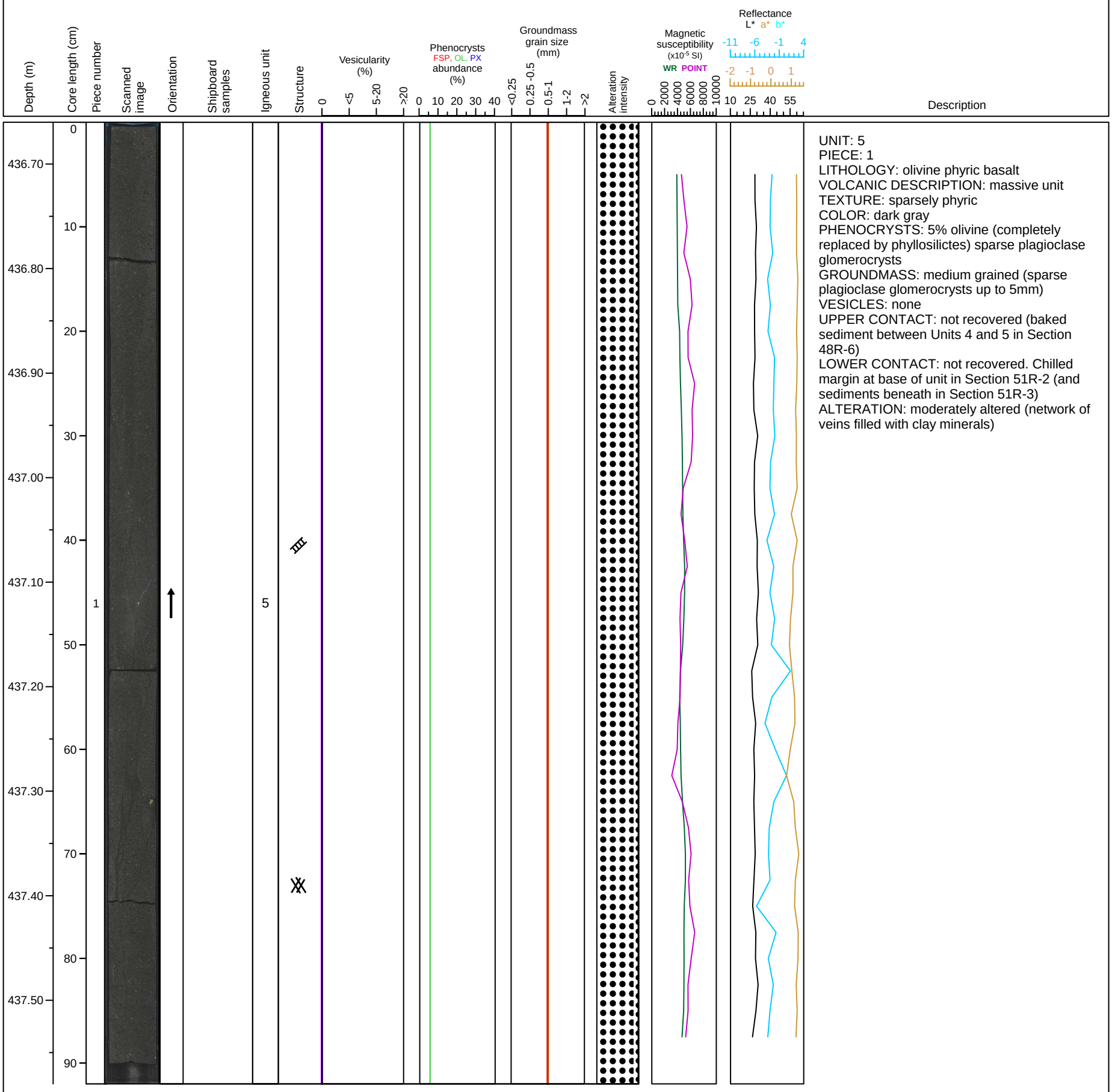
UNIT: 5
PIECE: 1
LITHOLOGY: olivine phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 5% olivine (completely replaced by phyllosilictes) sparse plagioclase glomerocrysts
GROUNDMASS: medium grained (sparse plagioclase glomerocrysts up to 5mm)
VESICLES: none
UPPER CONTACT: not recovered (baked sediment between Units 4 and 5 in Section 48R-6)
LOWER CONTACT: not recovered. Chilled margin at base of unit in Section 51R-2 (and sediments beneath in Section 51R-3)
ALTERATION: moderately altered

Hole 392-U1580A-50R Section 4, Top of Section: 435.16 m (CSF-A)



UNIT: 5
PIECE: 1, 2, 3
LITHOLOGY: olivine phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 5% olivine (completely replaced by phyllosilictes) sparse plagioclase glomerocrysts
GROUNDMASS: medium grained (sparse plagioclase glomerocrysts up to 5mm)
VESICLES: none
UPPER CONTACT: not recovered (baked sediment between Units 4 and 5 in Section 48R-6)
LOWER CONTACT: not recovered. Chilled margin at base of unit in Section 51R-2 (and sediments beneath in Section 51R-3)
ALTERATION: moderately altered

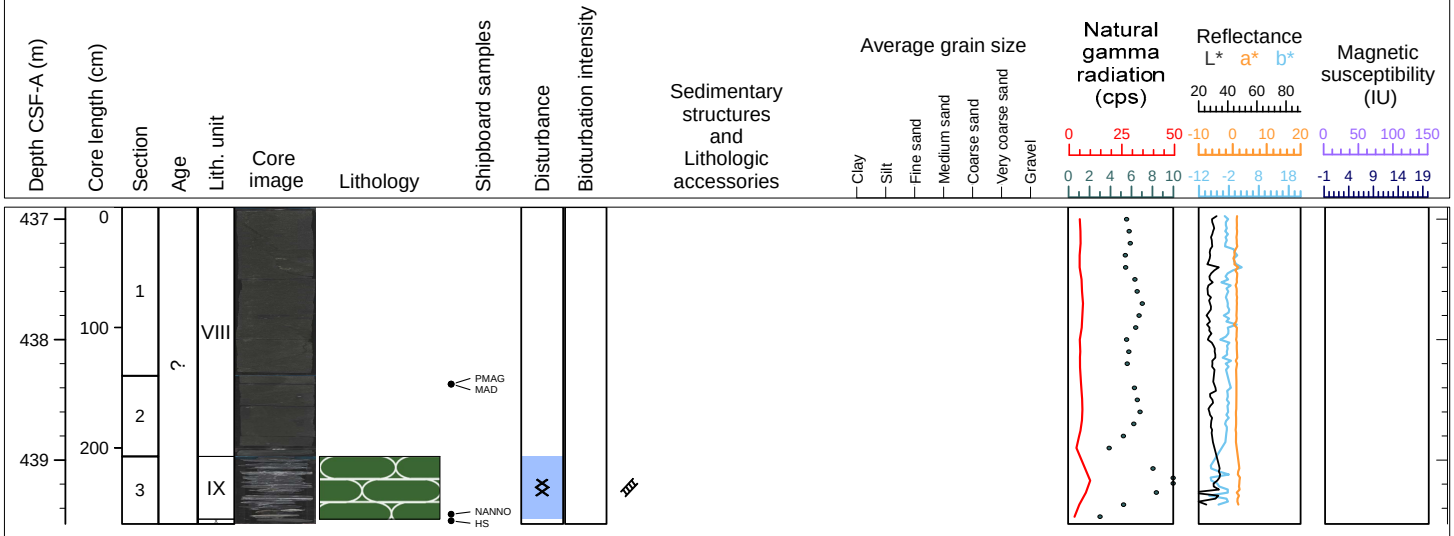
Hole 392-U1580A-50R Section 5, Top of Section: 436.66 m (CSF-A)



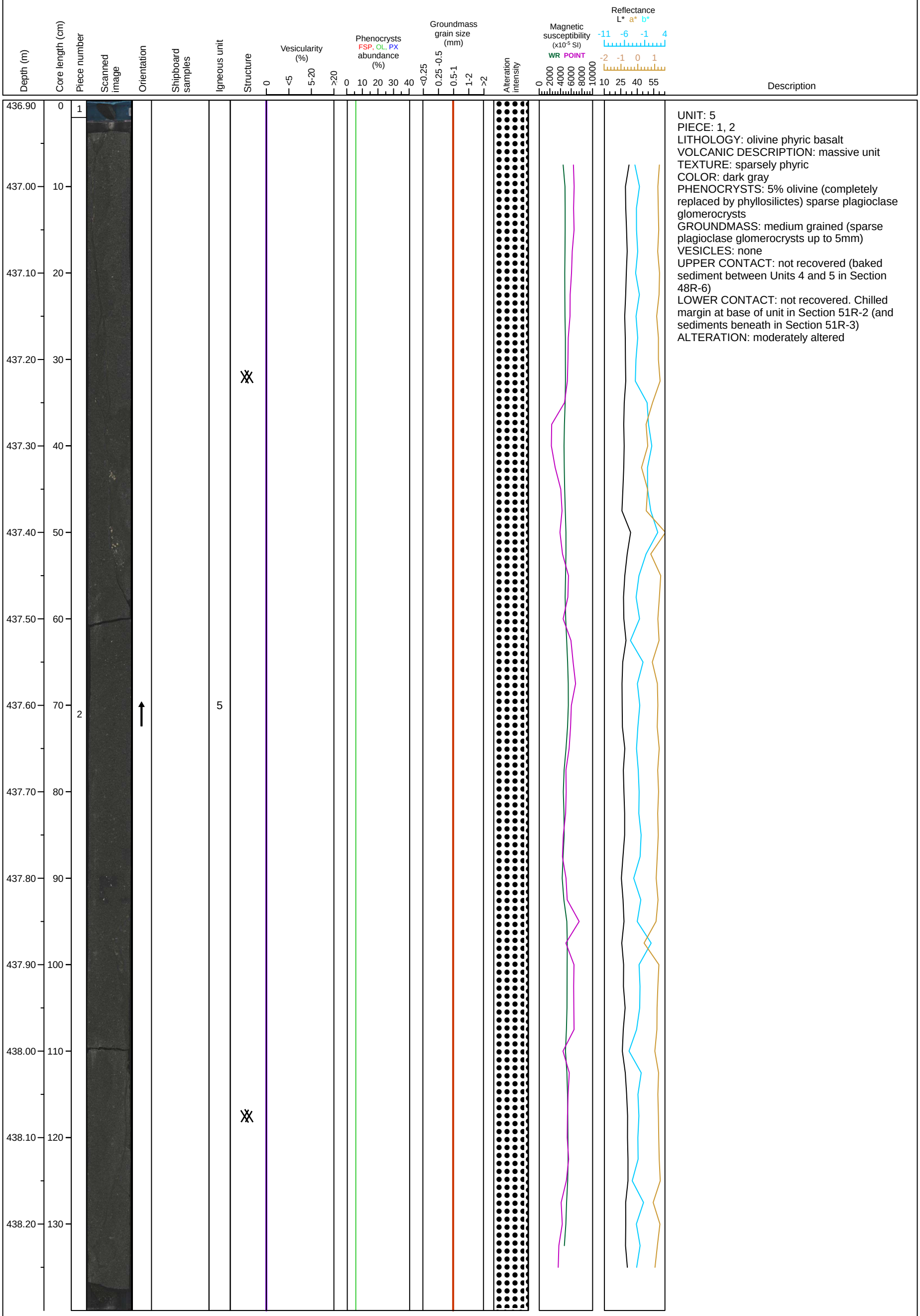
UNIT: 5
PIECE: 1
LITHOLOGY: olivine phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 5% olivine (completely replaced by phyllosilictes) sparse plagioclase glomerocrysts
GROUNDMASS: medium grained (sparse plagioclase glomerocrysts up to 5mm)
VESICLES: none
UPPER CONTACT: not recovered (baked sediment between Units 4 and 5 in Section 48R-6)
LOWER CONTACT: not recovered. Chilled margin at base of unit in Section 51R-2 (and sediments beneath in Section 51R-3)
ALTERATION: moderately altered (network of veins filled with clay minerals)

Hole 392-U1580A Core 51R, Interval 436.9-439.53 m (CSF-A)

Core U1580A-51R consists of basalt in Sections 1-2. In Section 3 (0-56 cm) is black chert with abundant white veins. The entire sedimentary section is moderately brecciated.

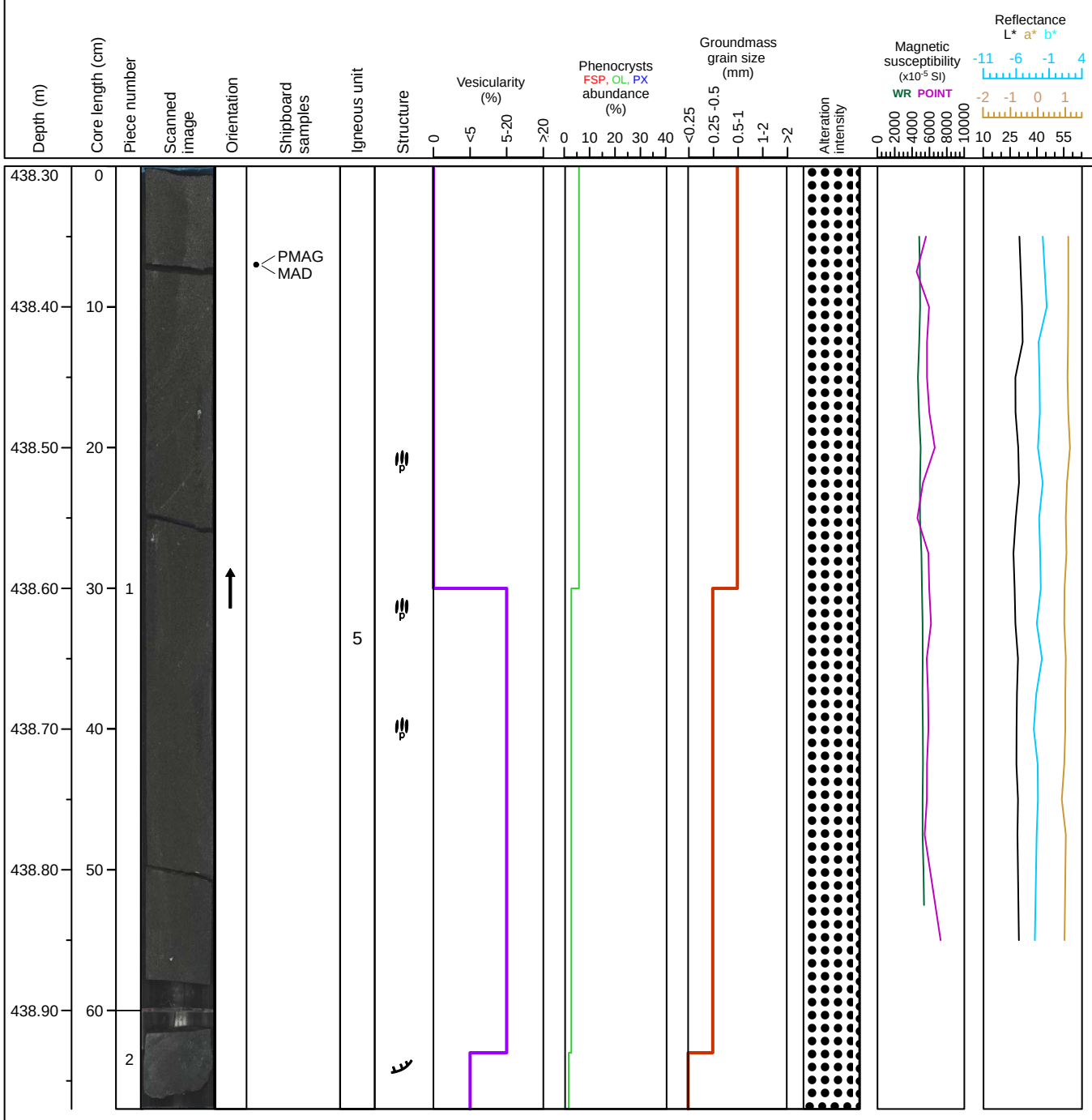


Hole 392-U1580A-51R Section 1, Top of Section: 436.9 m (CSF-A)



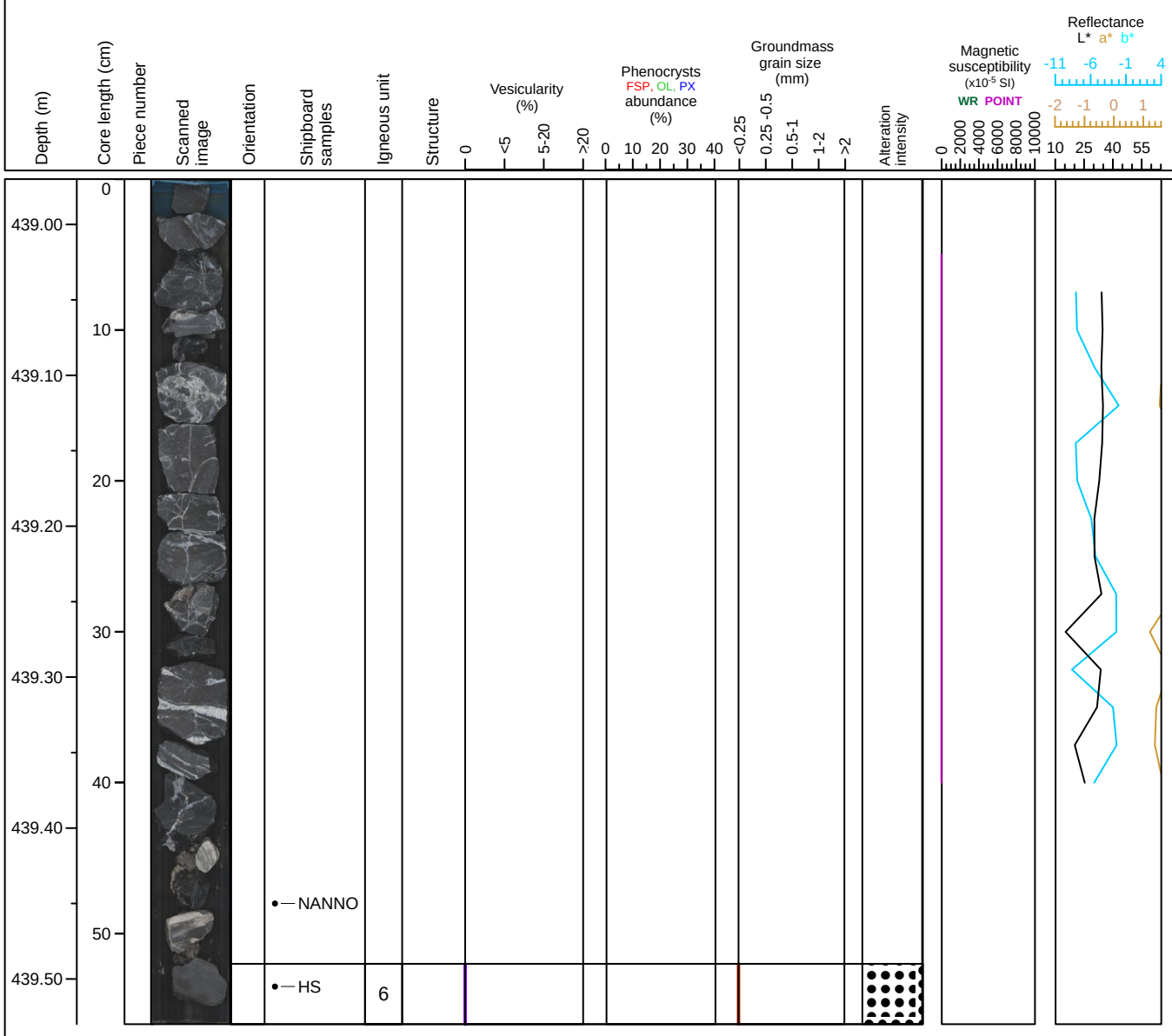
UNIT: 5
PIECE: 1, 2
LITHOLOGY: olivine phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 5% olivine (completely replaced by phyllosilictes) sparse plagioclase glomerocrysts
GROUNDMASS: medium grained (sparse plagioclase glomerocrysts up to 5mm)
VESICLES: none
UPPER CONTACT: not recovered (baked sediment between Units 4 and 5 in Section 48R-6)
LOWER CONTACT: not recovered. Chilled margin at base of unit in Section 51R-2 (and sediments beneath in Section 51R-3)
ALTERATION: moderately altered

Hole 392-U1580A-51R Section 2, Top of Section: 438.3 m (CSF-A)



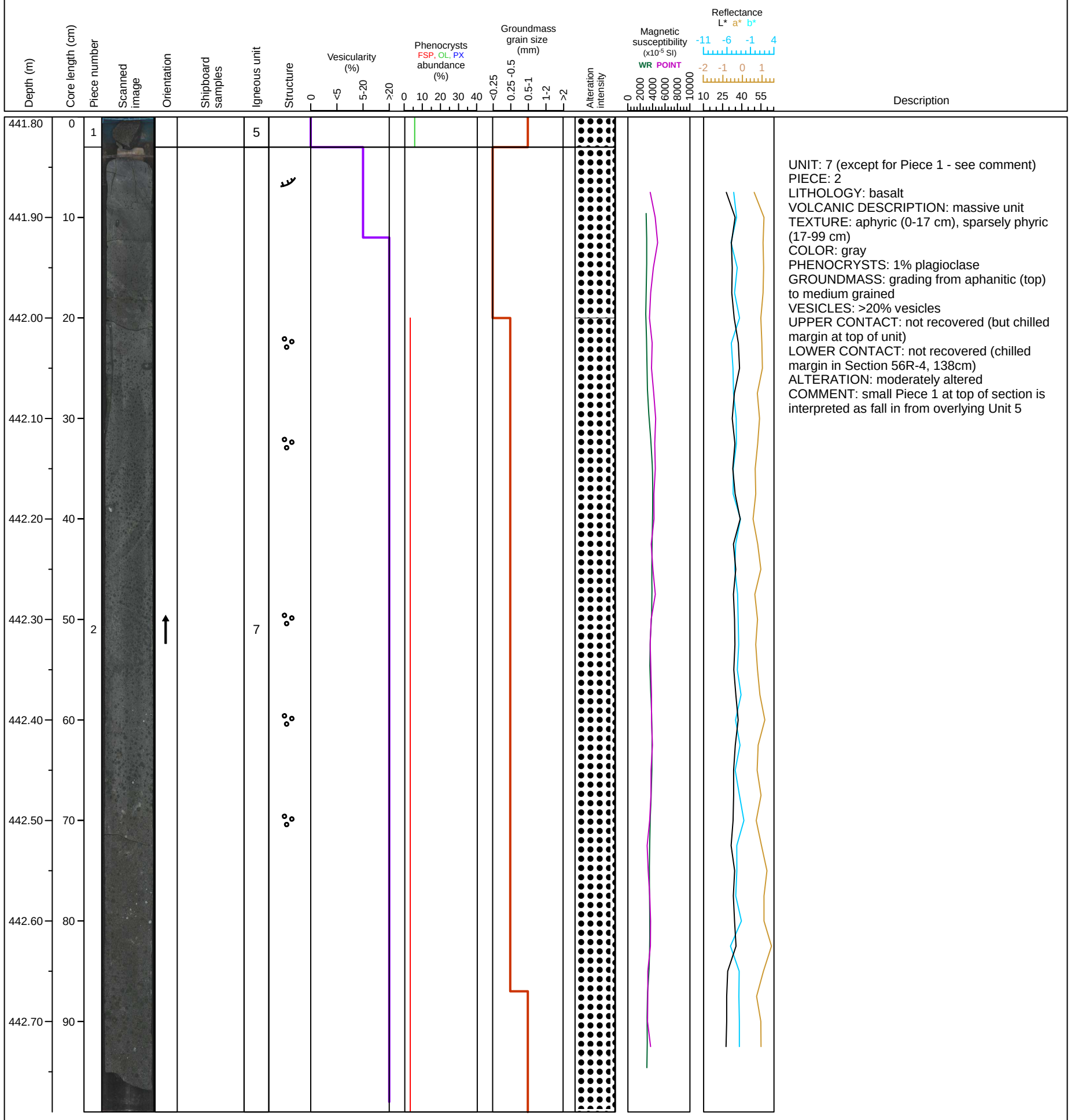
UNIT: 5
PIECE: 1, 2
LITHOLOGY: olivine phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 5% olivine (completely replaced by phyllosilictes) sparse plagioclase glomerocrysts
GROUNDMASS: medium grained at top of section (with sparse plagioclase glomerocrysts up to 5mm), grading to aphanitic downwards
VESICLES: generally none, but several large pipe vesicles at base of the section/this Unit 5)
UPPER CONTACT: not recovered (baked sediment between Units 4 and 5 in Section 48R-6)
LOWER CONTACT: not recovered. Chilled margin at base of unit (at 60-67 cm on this section) and sediments beneath in Section 51R-3
ALTERATION: moderately altered

Hole 392-U1580A-51R Section 3, Top of Section: 438.97 m (CSF-A)



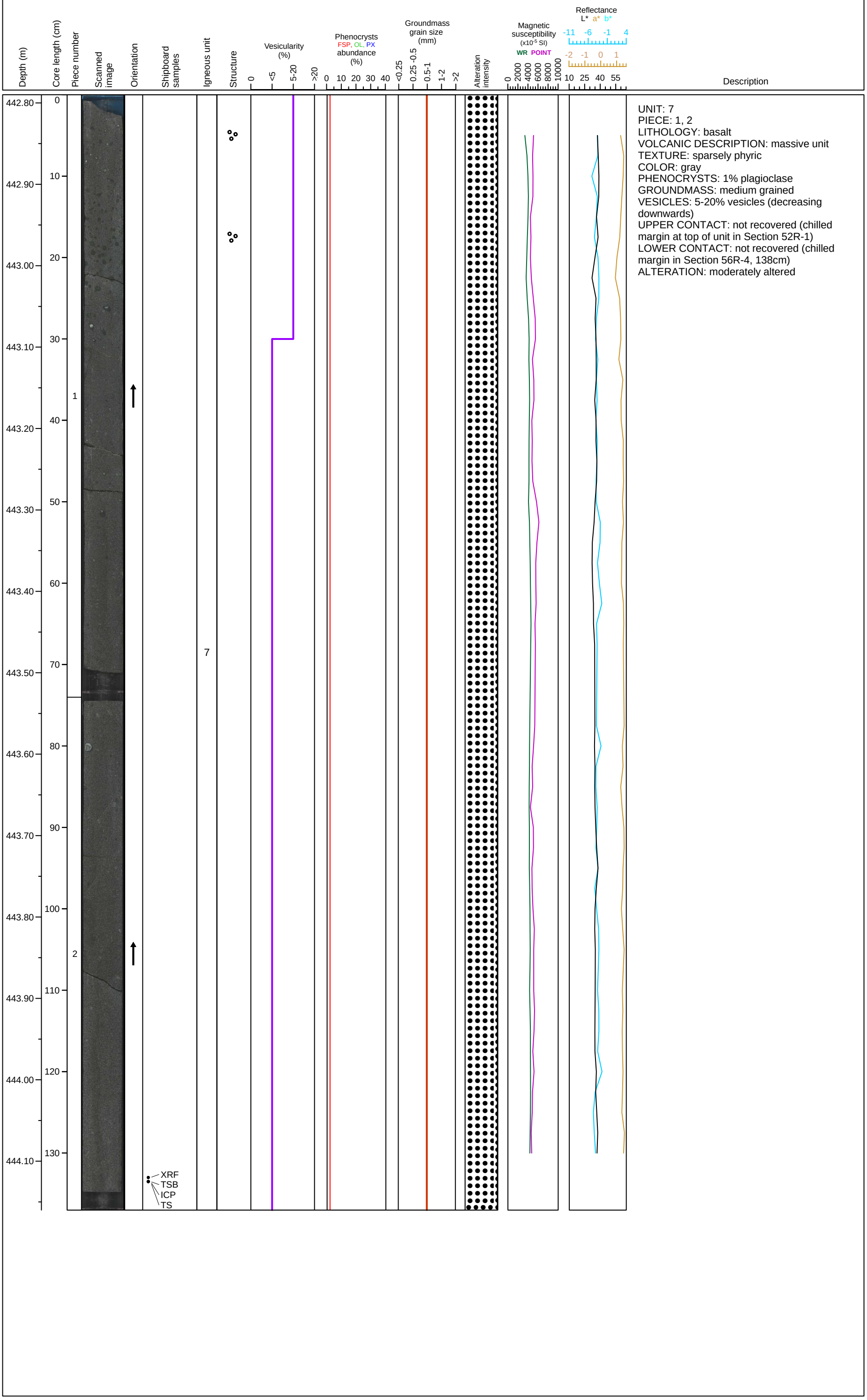
UNIT: 6
PIECE:
LITHOLOGY: basalt
VOLCANIC DESCRIPTION: fragment of unknown volcanic feature
TEXTURE: aphyric with trachytic (flow) texture
COLOR: dark gray
PHENOCRYSTS:
GROUNDMASS: aphanitic
VESICLES: none
UPPER CONTACT: not recovered (several pieces of chert and baked sediment above (0-52 cm)
LOWER CONTACT: not recovered. Chilled margin at top of Unit 7)
ALTERATION: moderately altered
COMMENT: sediment from 0-52 cm comprises 14 pieces of highly brecciated black chert. Breccia cement and veins composed of white silicatic material and minor (secondary) carbonate. Two smaller pieces of white, layered sediment at the bottom of succession. Probably representing predominantly hydrated chert (because only moderate carbonate content was detected).

Hole 392-U1580A-52R Section 1, Top of Section: 441.8 m (CSF-A)

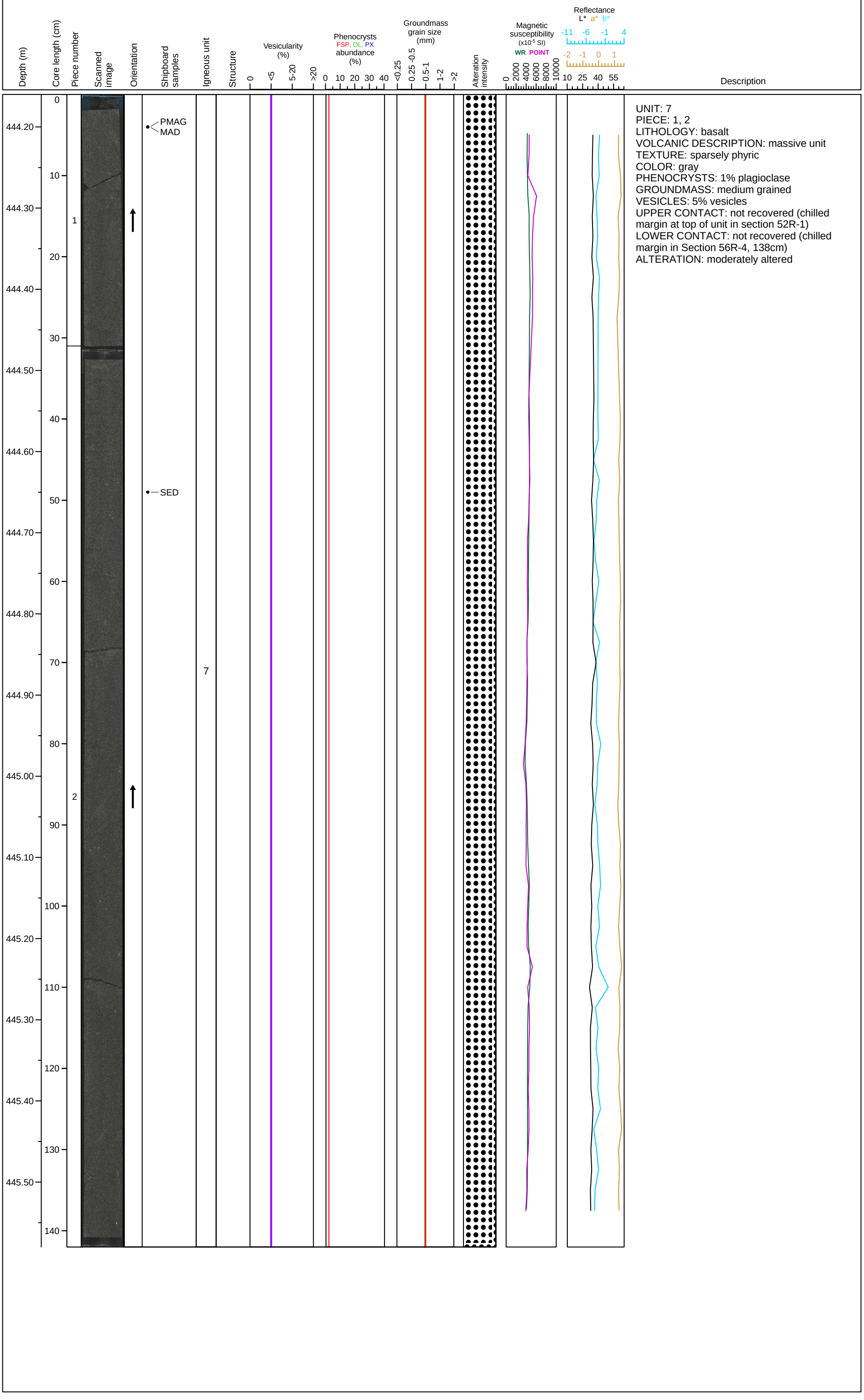


UNIT: 7 (except for Piece 1 - see comment)
PIECE: 2
LITHOLOGY: basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: aphyric (0-17 cm), sparsely phyric (17-99 cm)
COLOR: gray
PHENOCRYSTS: 1% plagioclase
GROUNDMASS: grading from aphanitic (top) to medium grained
VESICLES: >20% vesicles
UPPER CONTACT: not recovered (but chilled margin at top of unit)
LOWER CONTACT: not recovered (chilled margin in Section 56R-4, 138cm)
ALTERATION: moderately altered
COMMENT: small Piece 1 at top of section is interpreted as fall in from overlying Unit 5

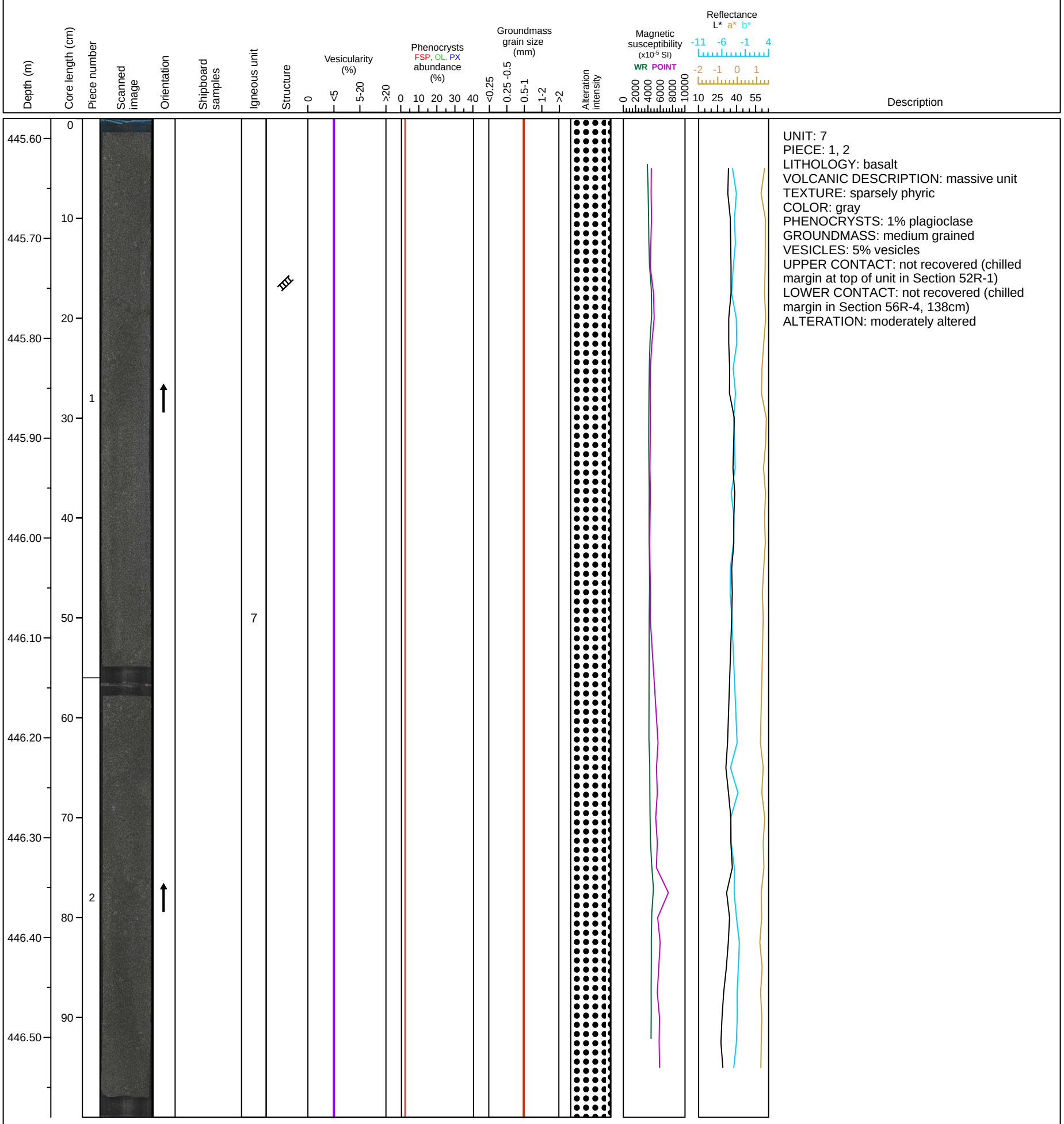
Hole 392-U1580A-52R Section 2, Top of Section: 442.79 m (CSF-A)



Hole 392-U1580A-52R Section 3, Top of Section: 444.16 m (CSF-A)

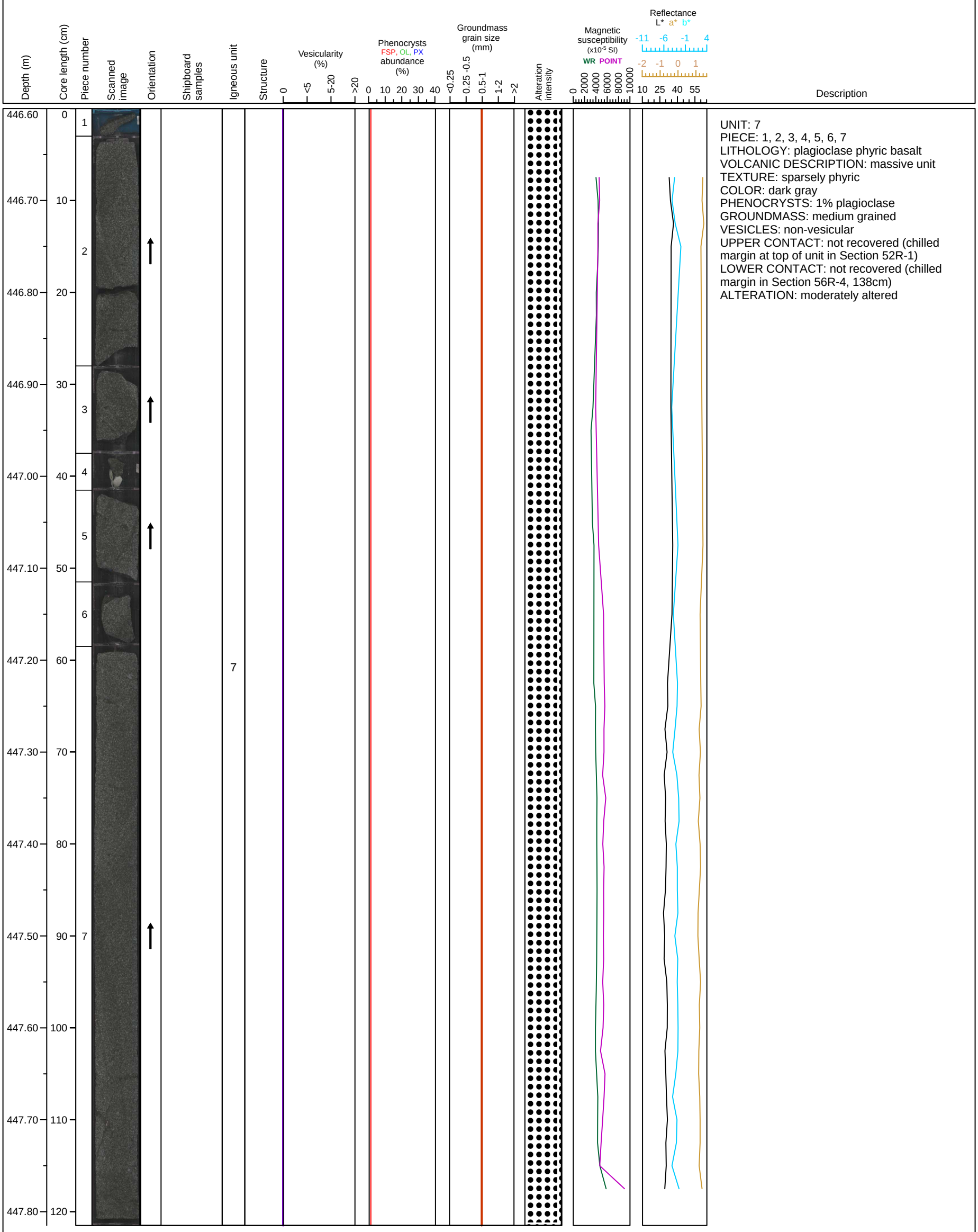


Hole 392-U1580A-52R Section 4, Top of Section: 445.58 m (CSF-A)



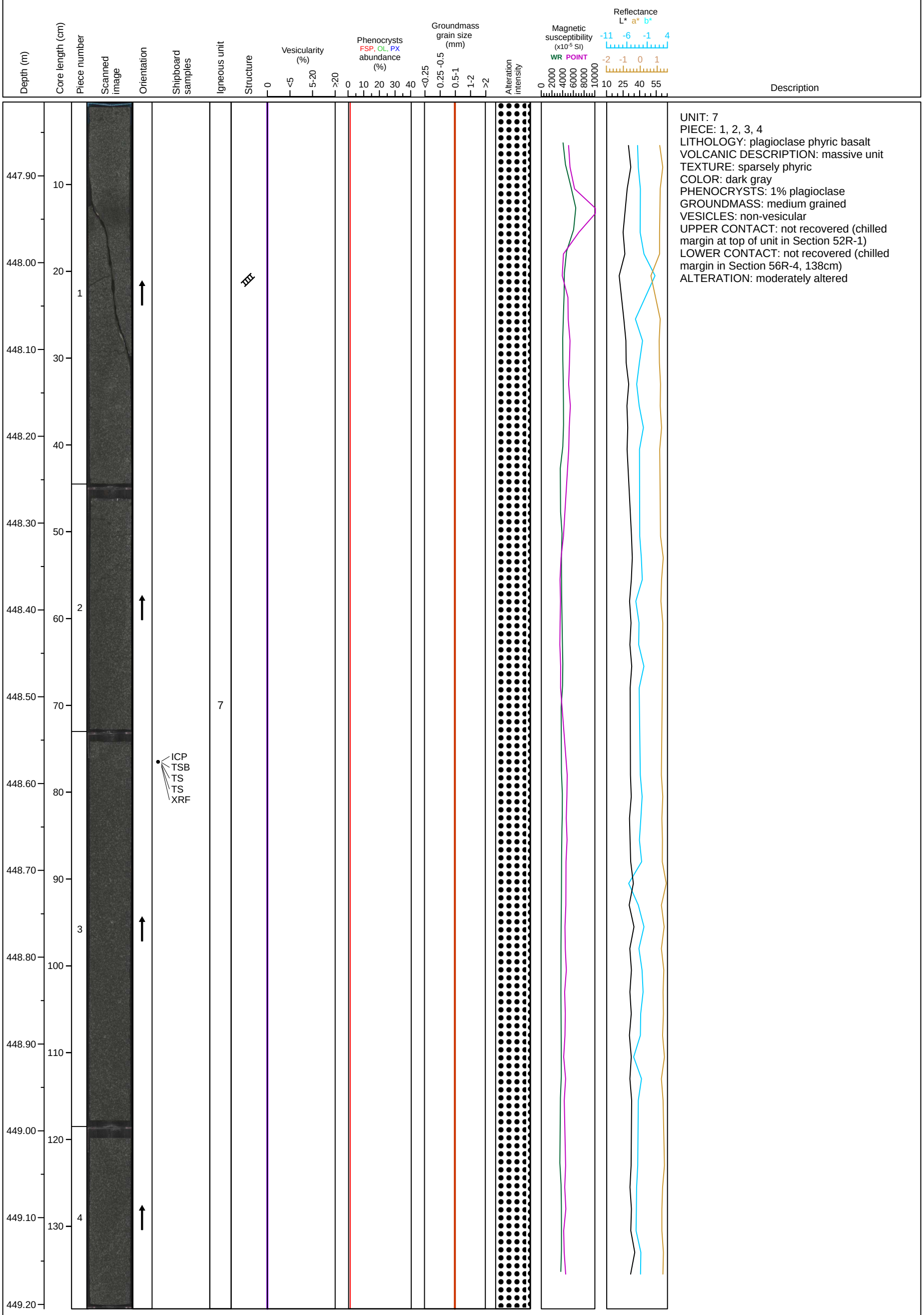
UNIT: 7
PIECE: 1, 2
LITHOLOGY: basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: gray
PHENOCRYSTS: 1% plagioclase
GROUNDMASS: medium grained
VESICLES: 5% vesicles
UPPER CONTACT: not recovered (chilled margin at top of unit in Section 52R-1)
LOWER CONTACT: not recovered (chilled margin in Section 56R-4, 138cm)
ALTERATION: moderately altered

Hole 392-U1580A-53R Section 1, Top of Section: 446.6 m (CSF-A)



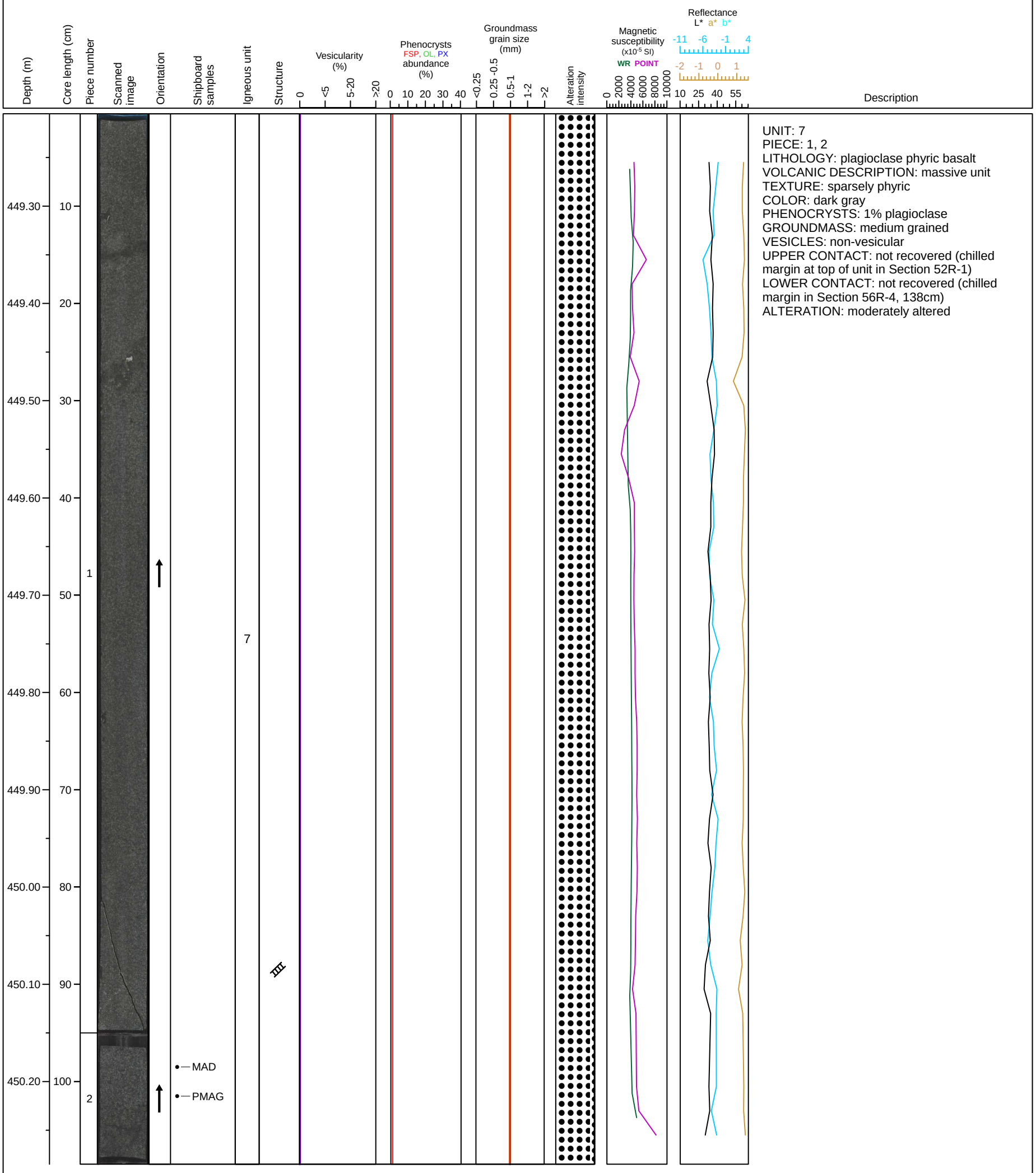
UNIT: 7
PIECE: 1, 2, 3, 4, 5, 6, 7
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 1% plagioclase
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (chilled margin at top of unit in Section 52R-1)
LOWER CONTACT: not recovered (chilled margin in Section 56R-4, 138cm)
ALTERATION: moderately altered

Hole 392-U1580A-53R Section 2, Top of Section: 447.815 m (CSF-A)



UNIT: 7
PIECE: 1, 2, 3, 4
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 1% plagioclase
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (chilled margin at top of unit in Section 52R-1)
LOWER CONTACT: not recovered (chilled margin in Section 56R-4, 138cm)
ALTERATION: moderately altered

Hole 392-U1580A-53R Section 3, Top of Section: 449.205 m (CSF-A)



UNIT: 7
PIECE: 1, 2
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 1% plagioclase
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (chilled margin at top of unit in Section 52R-1)
LOWER CONTACT: not recovered (chilled margin in Section 56R-4, 138cm)
ALTERATION: moderately altered

Hole 392-U1580A-53R Section 4, Top of Section: 450.285 m (CSF-A)

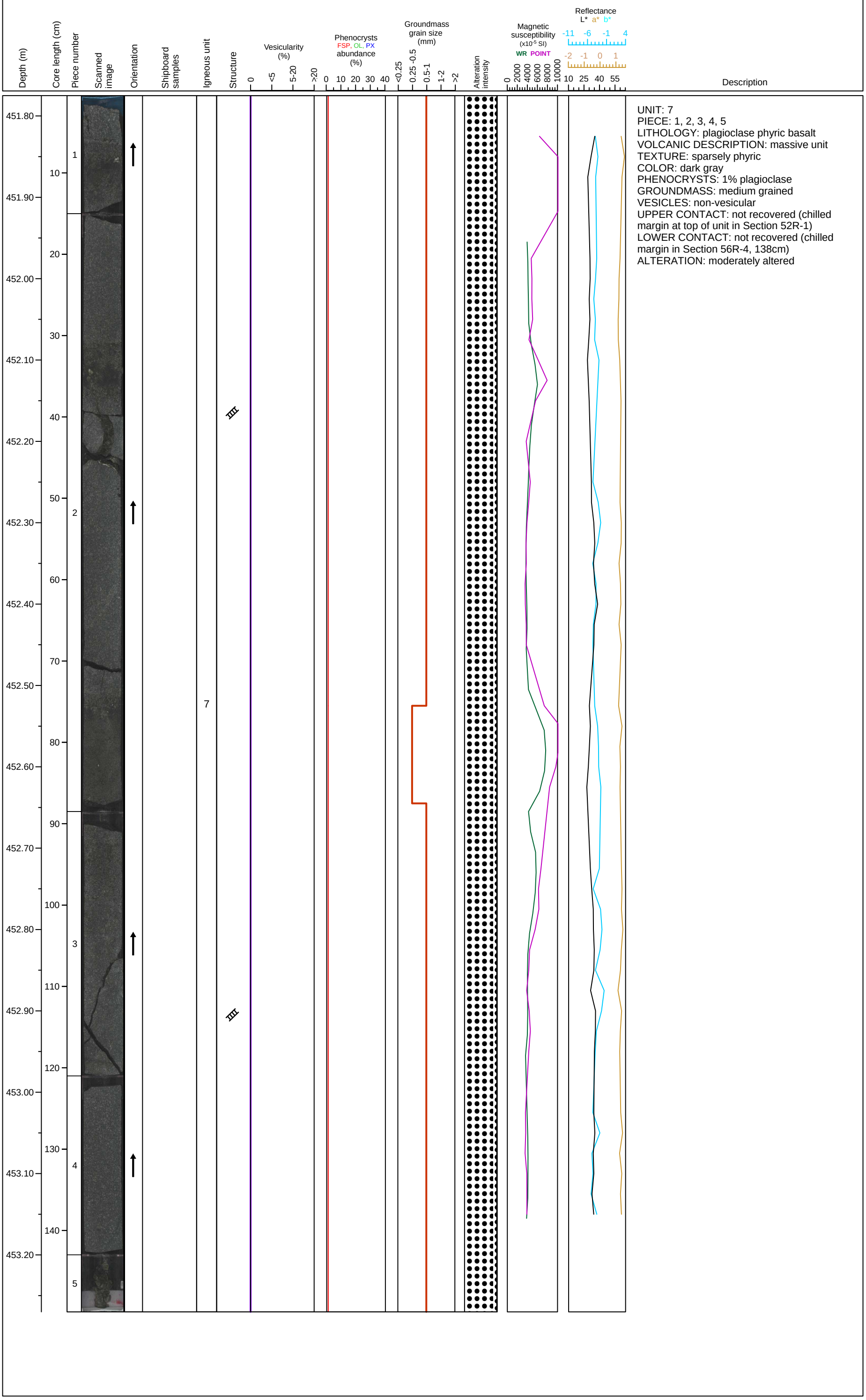
Depth (m) | Core length (cm) | Piece number | Scanned image | Orientation | Shipboard samples | Igneous unit | Structure | Vesicularity (%) 0 <5 5-20 >20 | Phenocrysts FSP, OL, PX abundance (%) 0 10 20 30 40 | Groundmass grain size (mm) <0.25 0.25-0.5 0.5-1 1-2 >2 | Alteration intensity | Magnetic susceptibility (x10^{-5} SI) WR POINT 0 2000 4000 6000 8000 10000 | Reflectance L* a* b* -11 -6 -1 4 / -2 -1 0 1 / 10 25 40 55 | Description

450.30 0
450.40 10
450.50 20
450.60 30
450.70 40
450.80 50
450.90 60
451.00 70
451.10 80
451.20 90
451.30 100
451.40 110
451.50 120
451.60 130
451.70 140

1
7
2

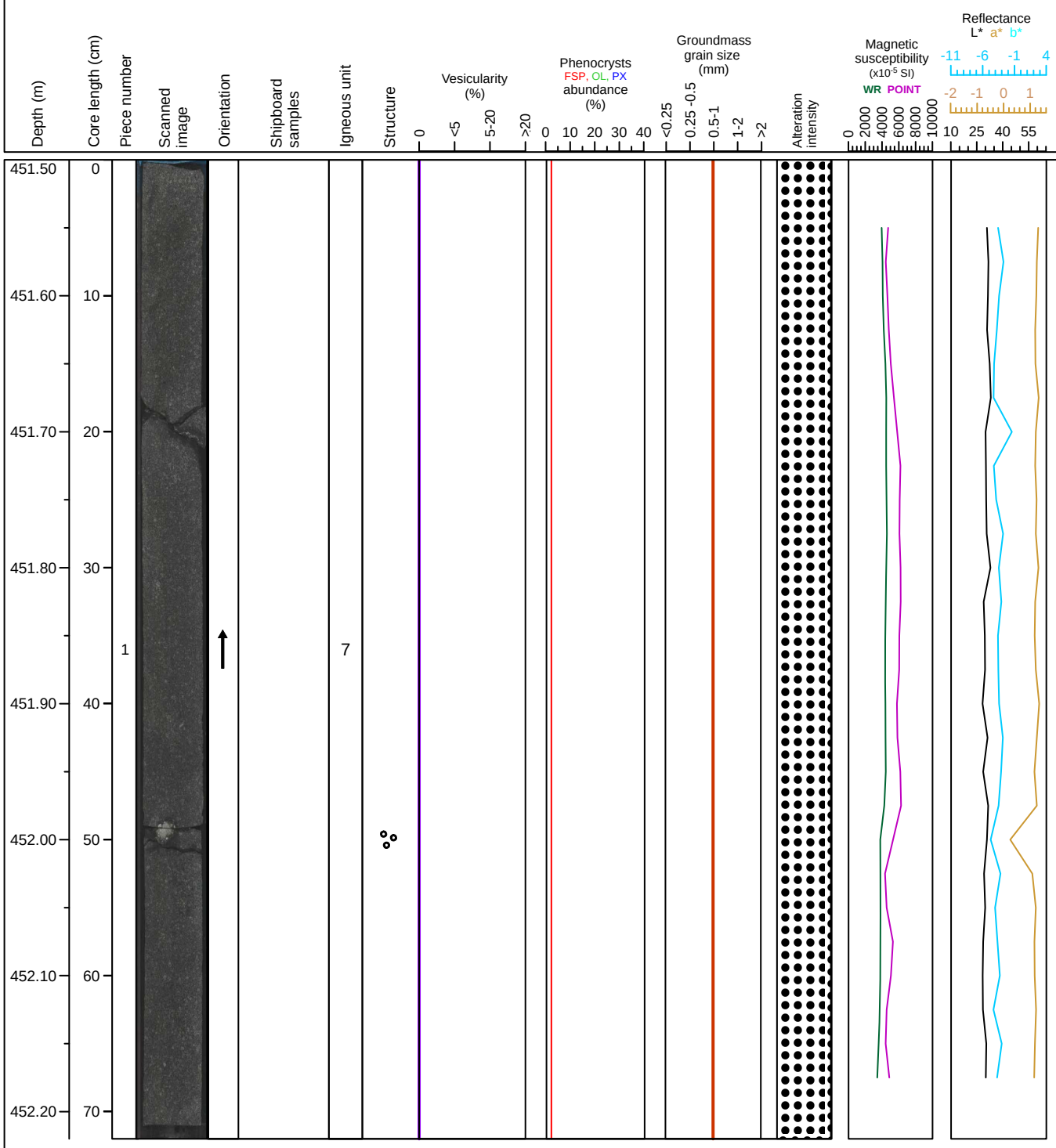
UNIT: 7
PIECE: 1, 2
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 1% plagioclase
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (chilled margin at top of unit in Section 52R-1)
LOWER CONTACT: not recovered (chilled margin in Section 56R-4, 138cm)
ALTERATION: moderately altered

Hole 392-U1580A-53R Section 5, Top of Section: 451.775 m (CSF-A)



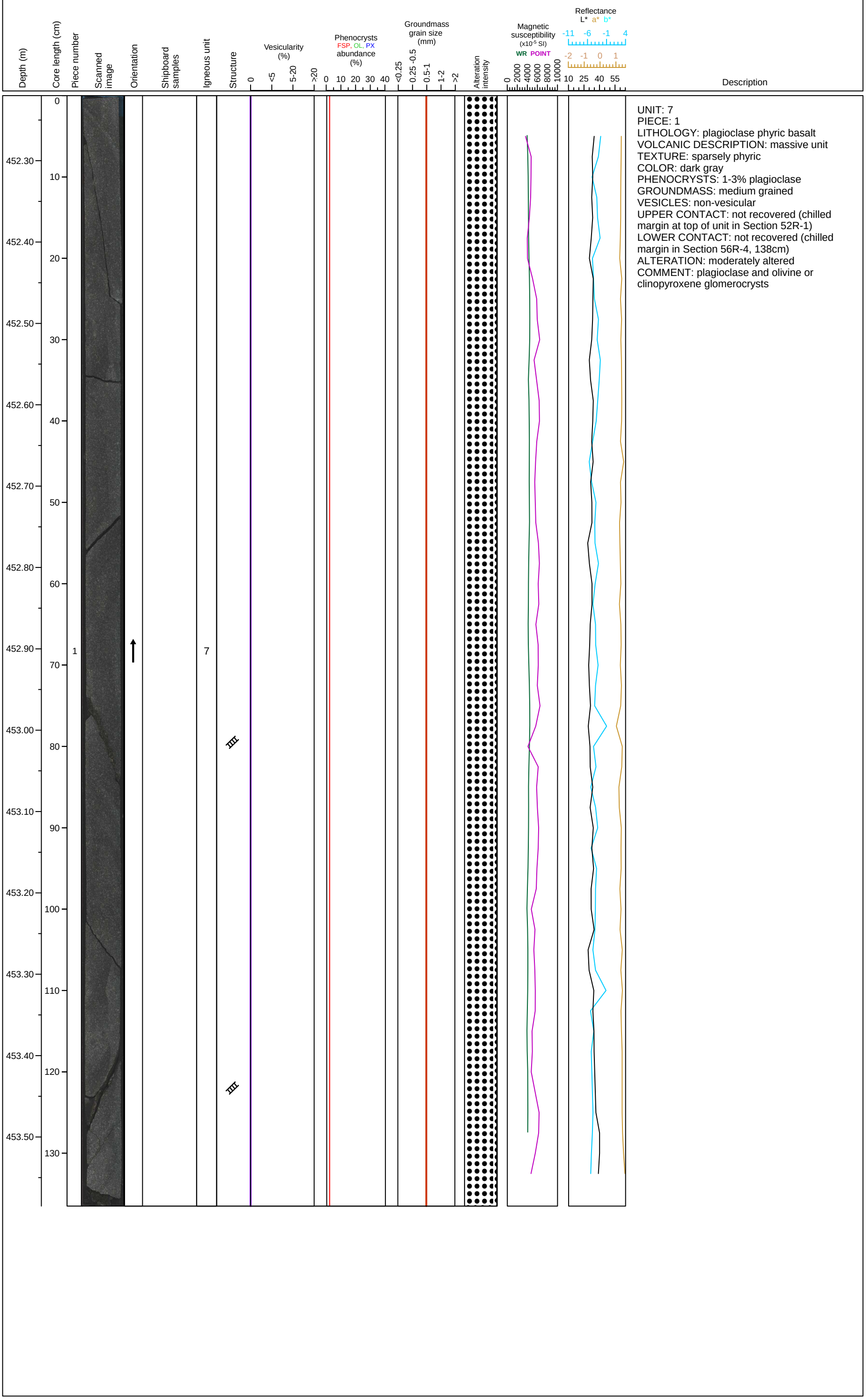
UNIT: 7
PIECE: 1, 2, 3, 4, 5
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 1% plagioclase
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (chilled margin at top of unit in Section 52R-1)
LOWER CONTACT: not recovered (chilled margin in Section 56R-4, 138cm)
ALTERATION: moderately altered

Hole 392-U1580A-54R Section 1, Top of Section: 451.5 m (CSF-A)



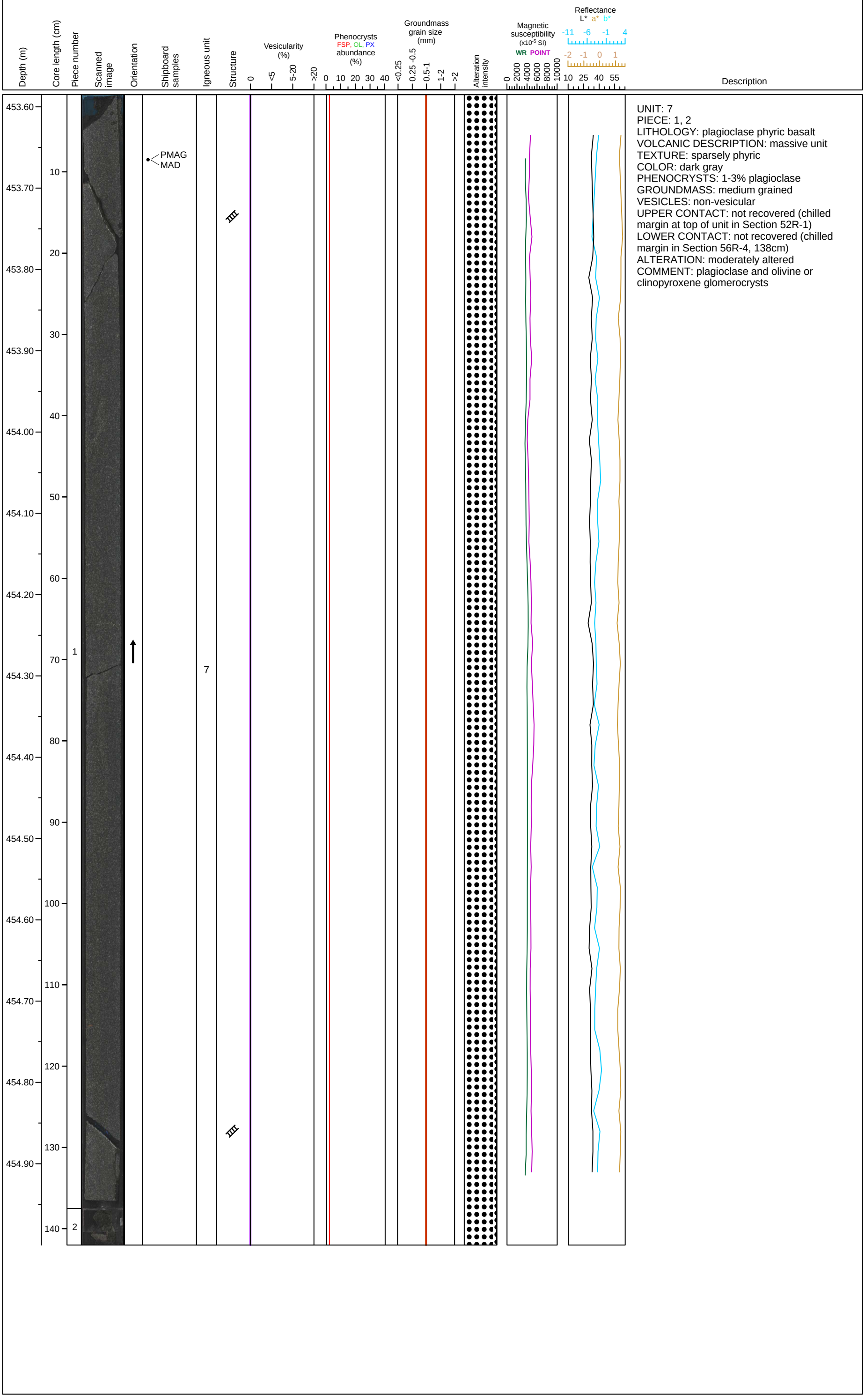
UNIT: 7
PIECE: 1
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 1-3% plagioclase
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (chilled margin at top of unit in 52R-1)
LOWER CONTACT: not recovered (chilled margin in 56R-4, 138cm)
ALTERATION: moderately altered
COMMENT: plagioclase and olivine or clinopyroxene glomerocrysts

Hole 392-U1580A-54R Section 2, Top of Section: 452.22 m (CSF-A)



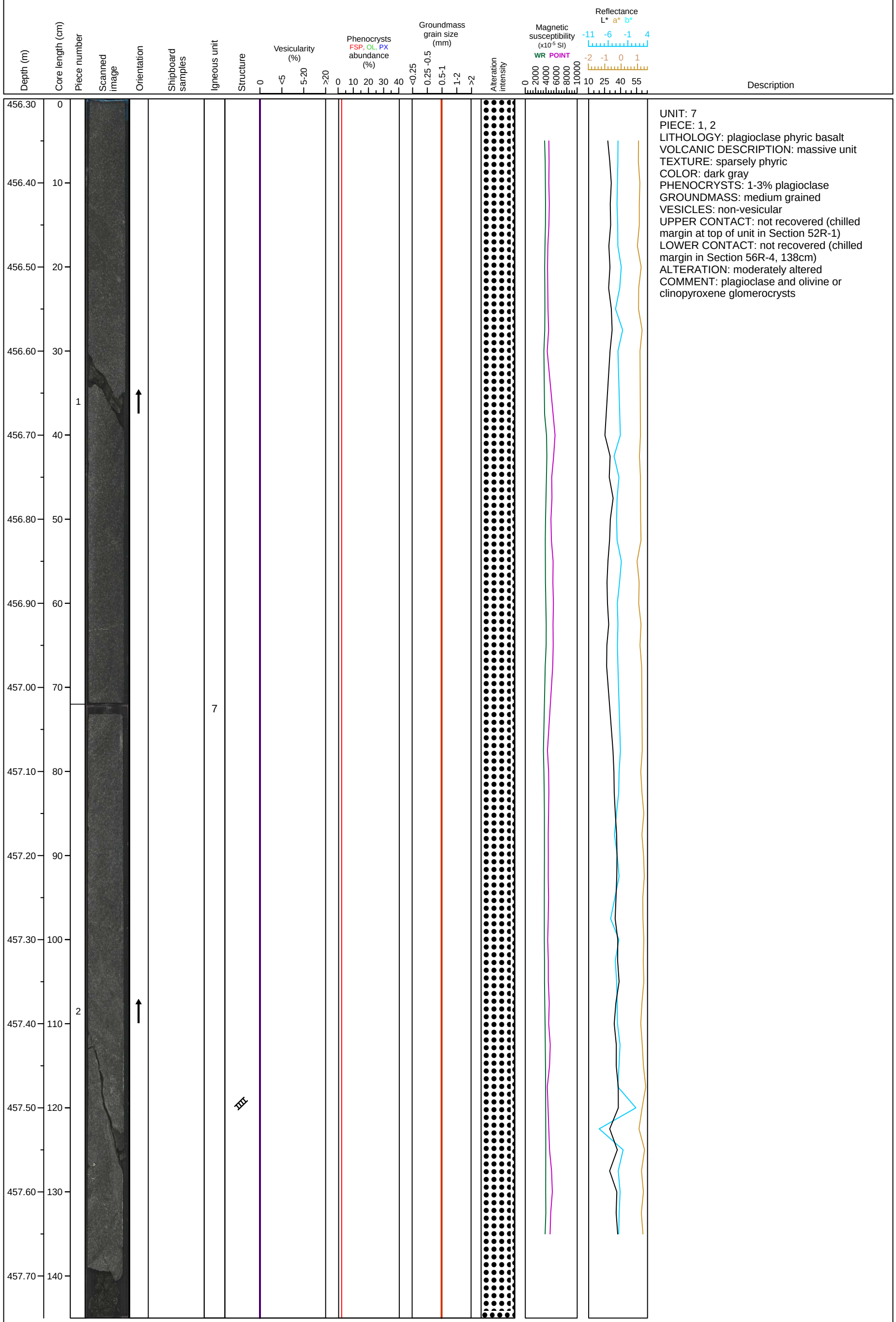
UNIT: 7
PIECE: 1
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 1-3% plagioclase
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (chilled margin at top of unit in Section 52R-1)
LOWER CONTACT: not recovered (chilled margin in Section 56R-4, 138cm)
ALTERATION: moderately altered
COMMENT: plagioclase and olivine or clinopyroxene glomerocrysts

Hole 392-U1580A-54R Section 3, Top of Section: 453.585 m (CSF-A)



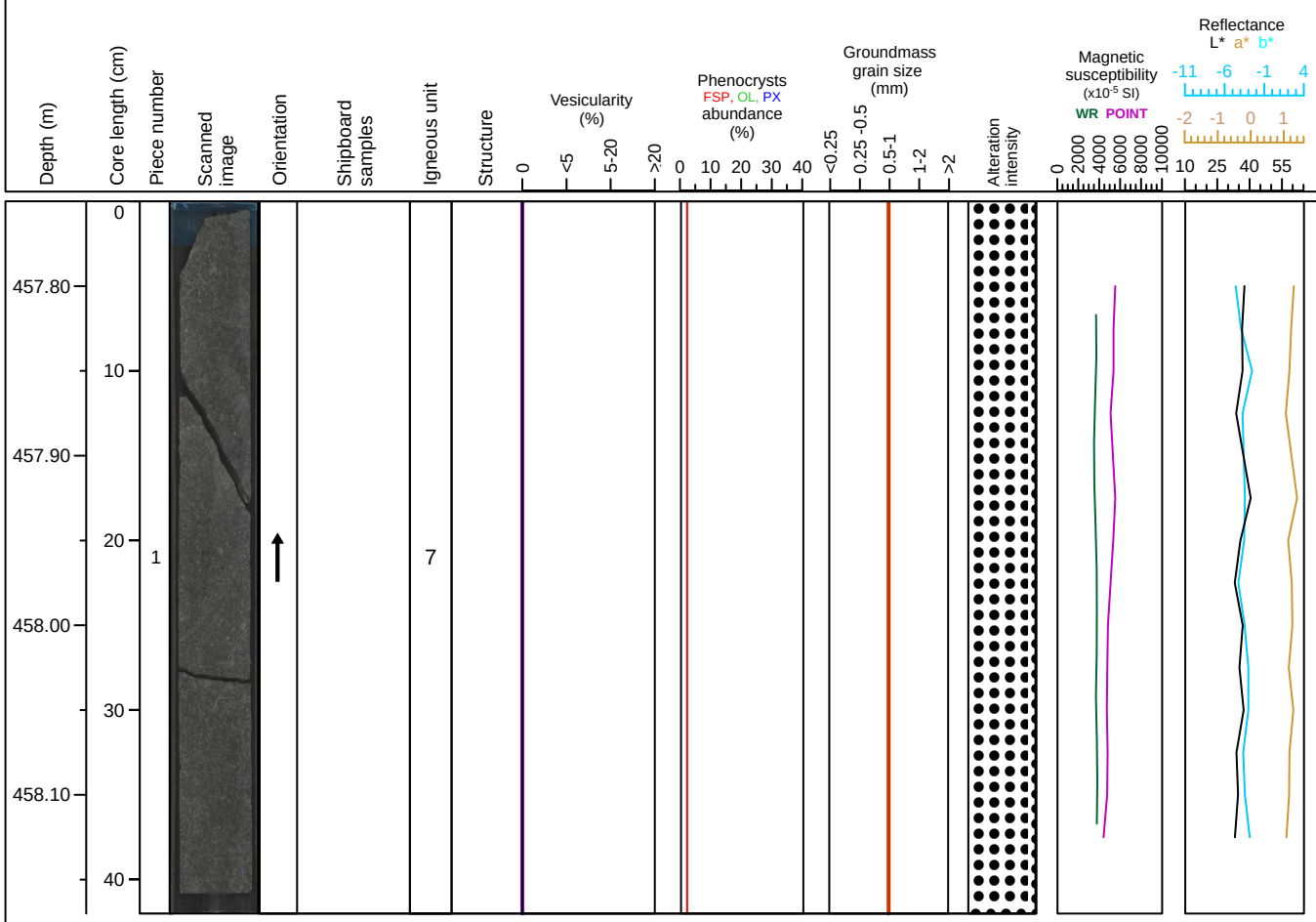
UNIT: 7
PIECE: 1, 2
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 1-3% plagioclase
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (chilled margin at top of unit in Section 52R-1)
LOWER CONTACT: not recovered (chilled margin in Section 56R-4, 138cm)
ALTERATION: moderately altered
COMMENT: plagioclase and olivine or clinopyroxene glomerocrysts

Hole 392-U1580A-55R Section 1, Top of Section: 456.3 m (CSF-A)



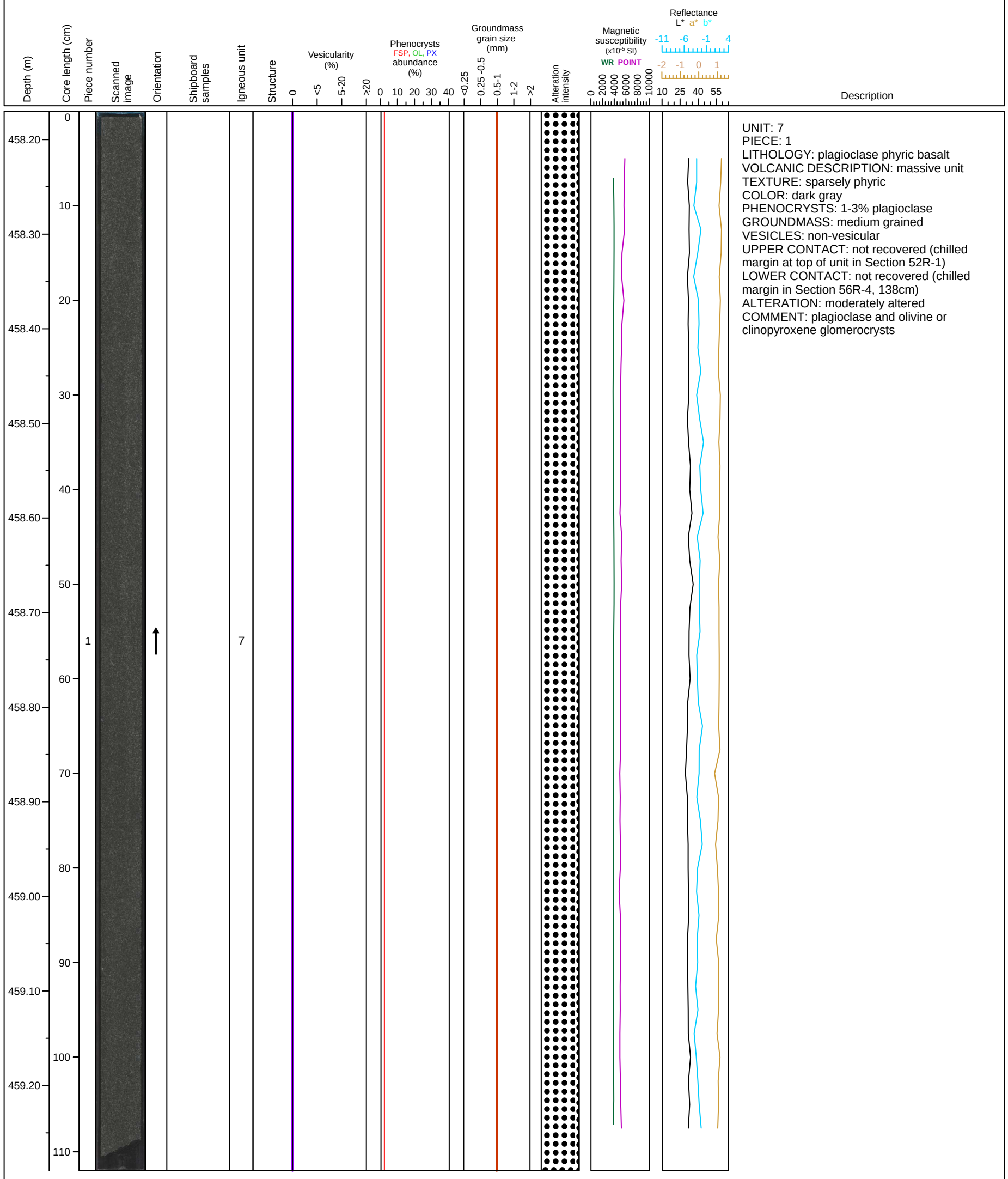
UNIT: 7
PIECE: 1, 2
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 1-3% plagioclase
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (chilled margin at top of unit in Section 52R-1)
LOWER CONTACT: not recovered (chilled margin in Section 56R-4, 138cm)
ALTERATION: moderately altered
COMMENT: plagioclase and olivine or clinopyroxene glomerocrysts

Hole 392-U1580A-55R Section 2, Top of Section: 457.75 m (CSF-A)



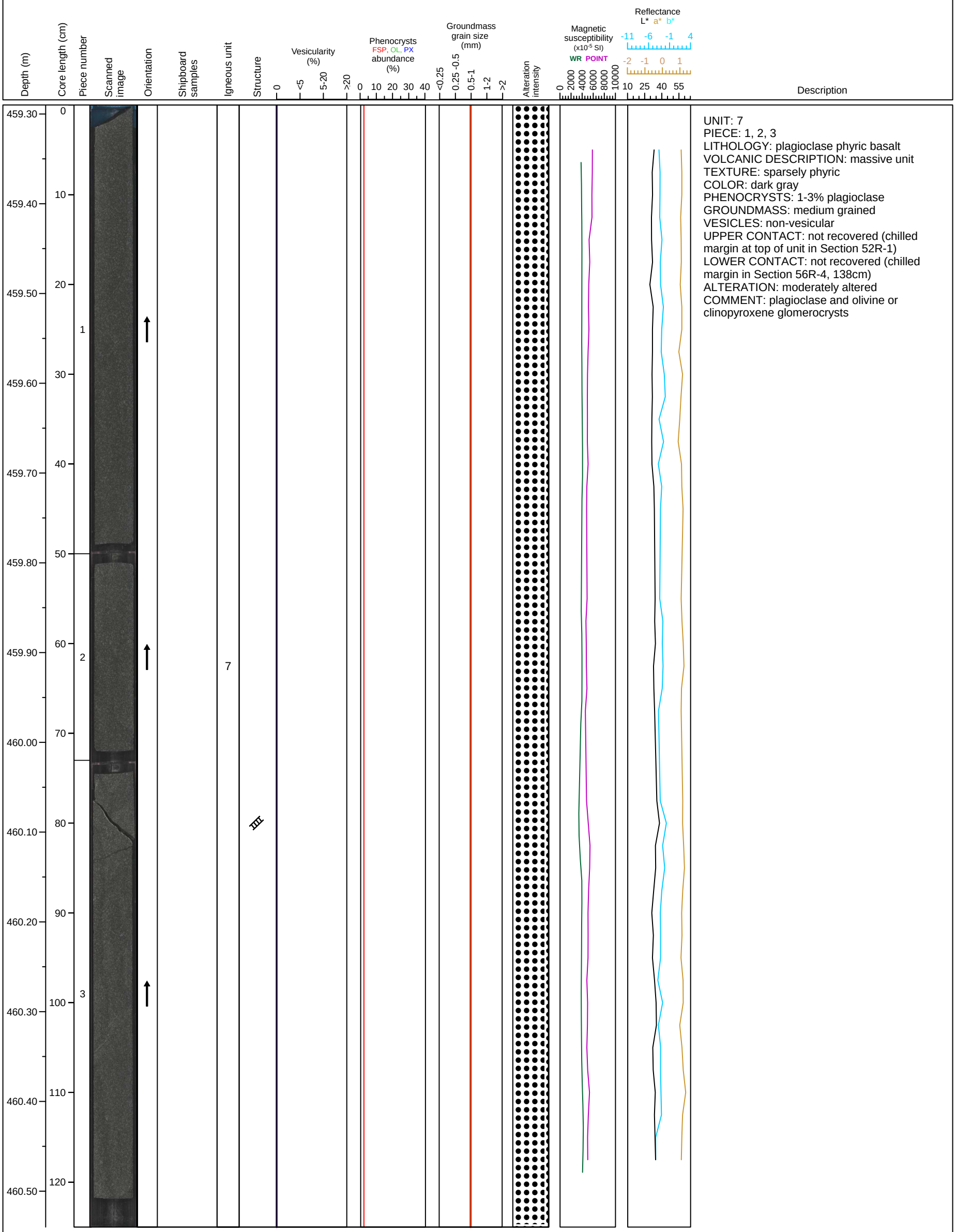
UNIT: 7
PIECE: 1
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 1-3% plagioclase
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (chilled margin at top of unit in Section 52R-1)
LOWER CONTACT: not recovered (chilled margin in Section 56R-4, 138cm)
ALTERATION: moderately altered
COMMENT: plagioclase and olivine or clinopyroxene glomerocrysts

Hole 392-U1580A-55R Section 3, Top of Section: 458.17 m (CSF-A)



UNIT: 7
PIECE: 1
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 1-3% plagioclase
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (chilled margin at top of unit in Section 52R-1)
LOWER CONTACT: not recovered (chilled margin in Section 56R-4, 138cm)
ALTERATION: moderately altered
COMMENT: plagioclase and olivine or clinopyroxene glomerocrysts

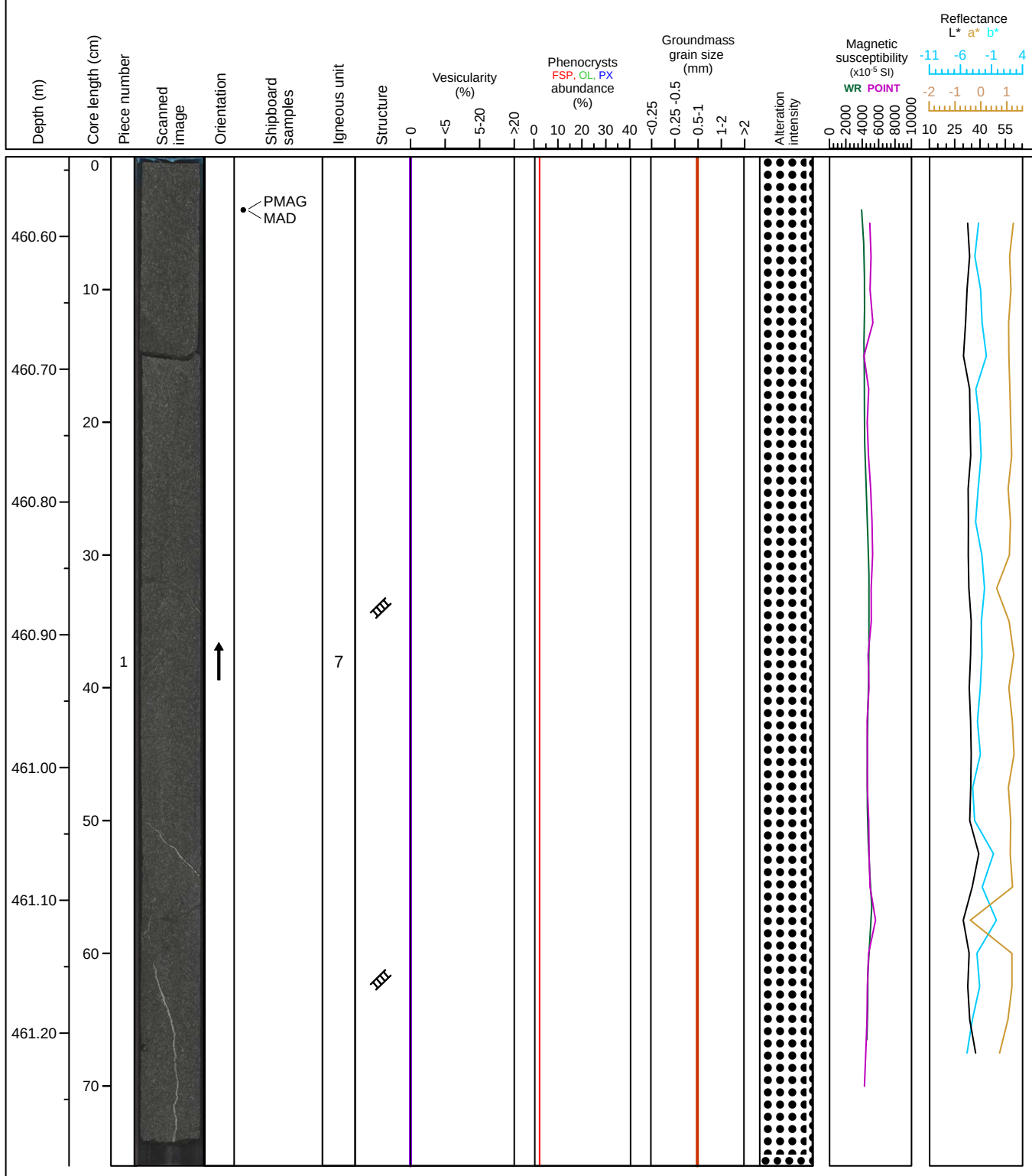
Hole 392-U1580A-55R Section 4, Top of Section: 459.29 m (CSF-A)



Description

UNIT: 7
PIECE: 1, 2, 3
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 1-3% plagioclase
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (chilled margin at top of unit in Section 52R-1)
LOWER CONTACT: not recovered (chilled margin in Section 56R-4, 138cm)
ALTERATION: moderately altered
COMMENT: plagioclase and olivine or clinopyroxene glomerocrysts

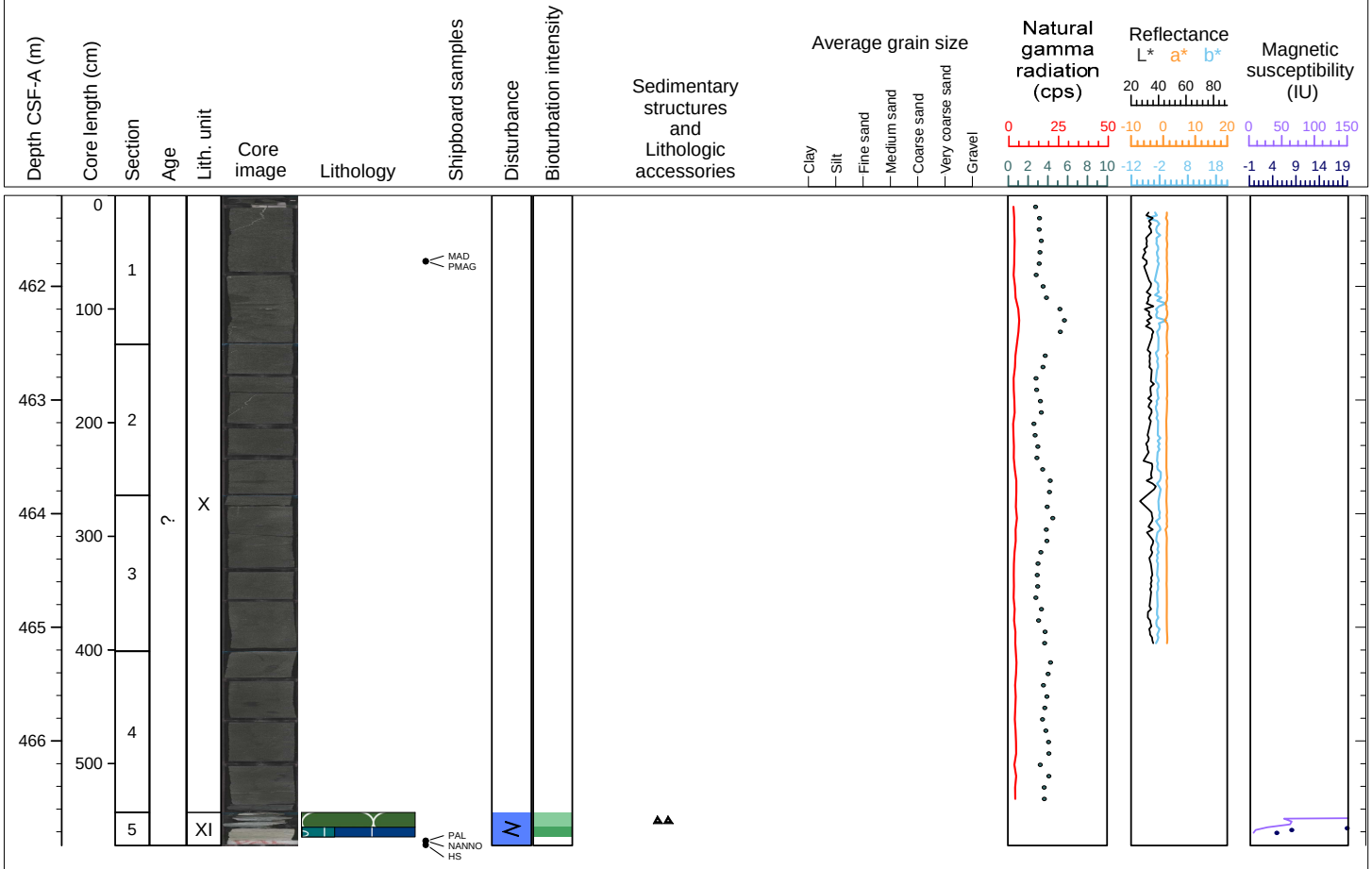
Hole 392-U1580A-55R Section 5, Top of Section: 460.54 m (CSF-A)



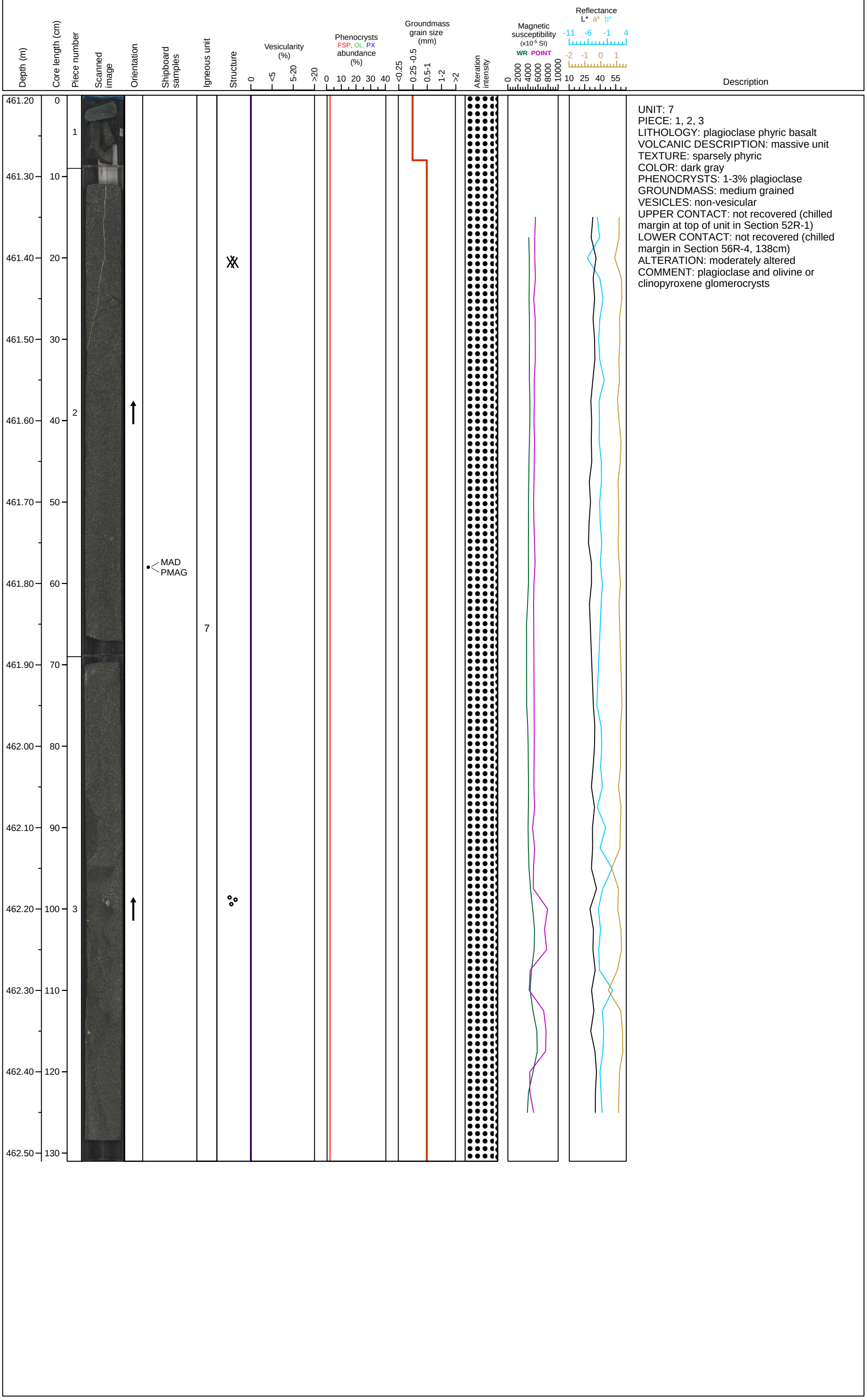
UNIT: 7
PIECE: 1
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 1-3% plagioclase
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (chilled margin at top of unit in Section 52R-1)
LOWER CONTACT: not recovered (chilled margin in Section 56R-4, 138cm)
ALTERATION: moderately altered
COMMENT: plagioclase and olivine or clinopyroxene glomerocrysts

Hole 392-U1580A Core 56R, Interval 461.2-466.92 m (CSF-A)

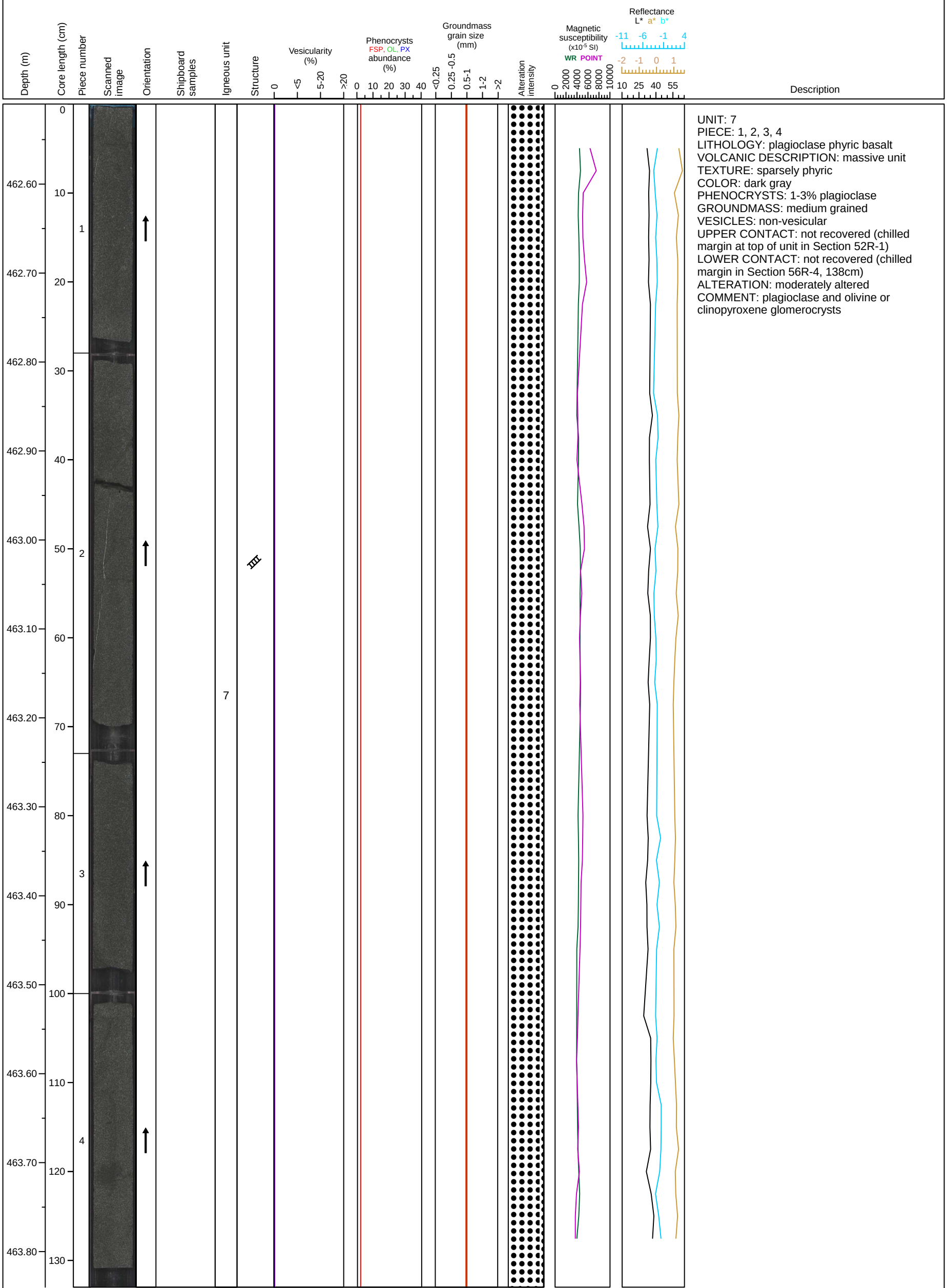
Core U1580-56R consists of a pale blue chert and light greenish gray silicified limestone with moderate bioturbation. Section 5 from 0-13 cm is slightly brecciated by drilling.



Hole 392-U1580A-56R Section 1, Top of Section: 461.2 m (CSF-A)

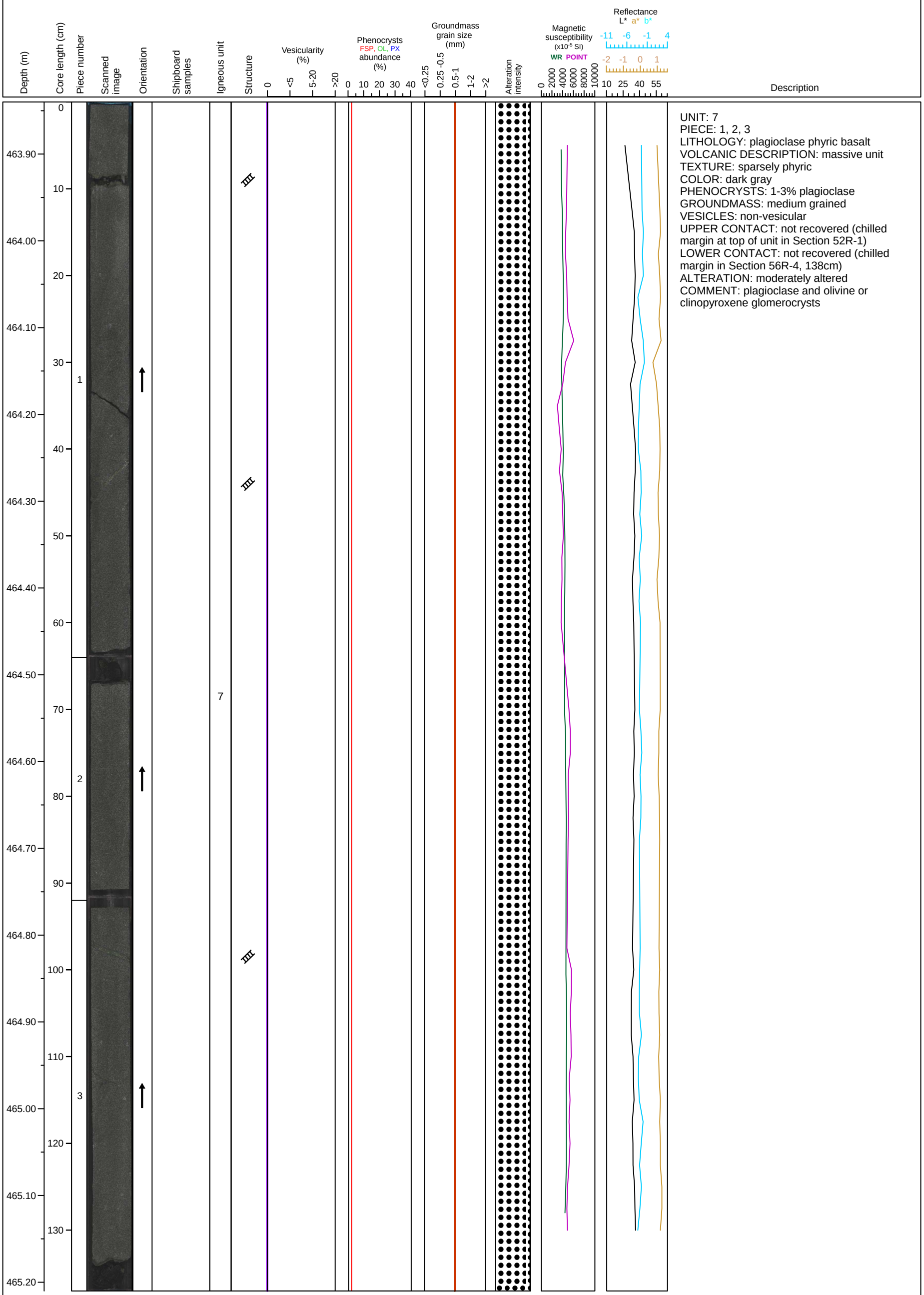


Hole 392-U1580A-56R Section 2, Top of Section: 462.51 m (CSF-A)



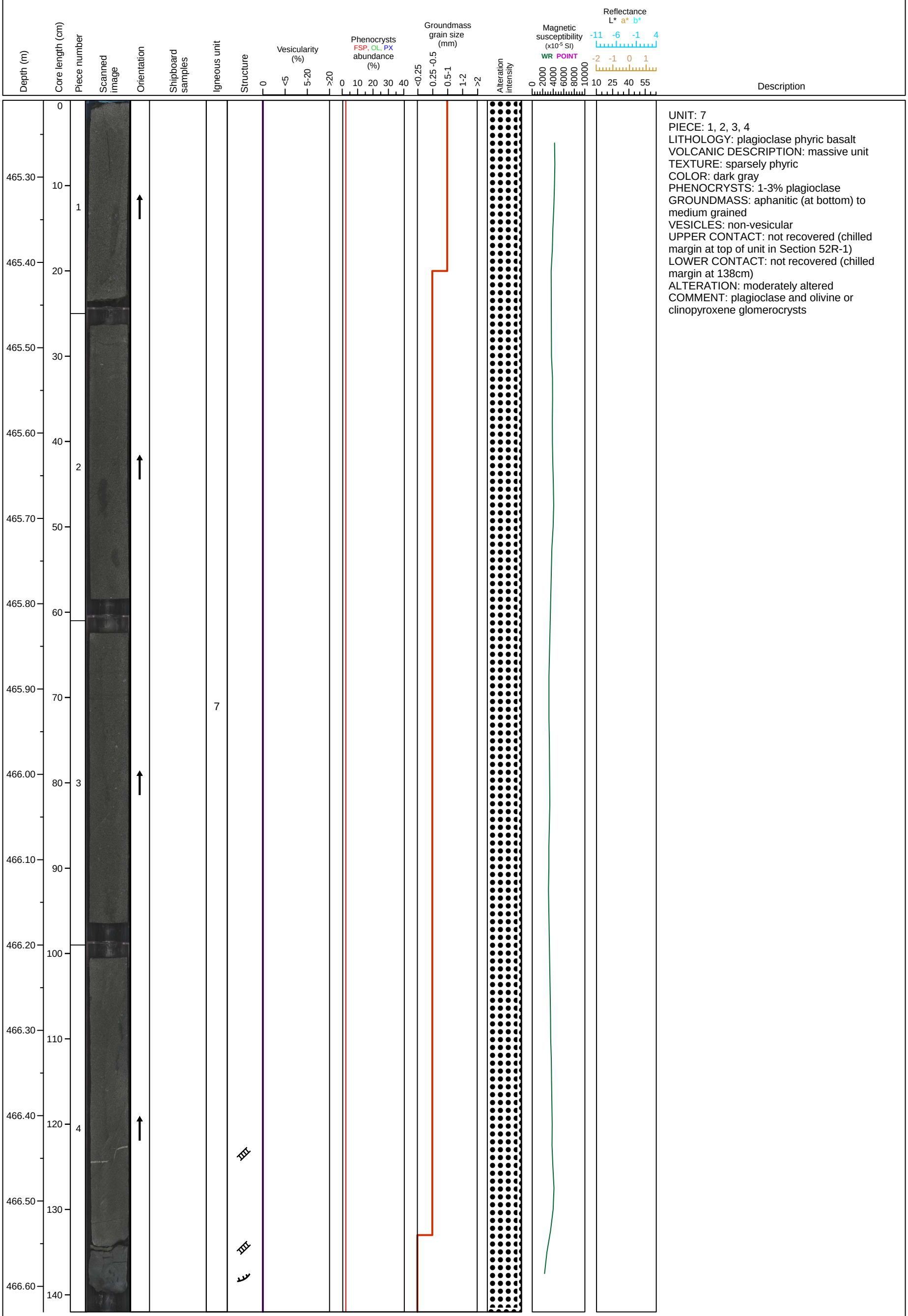
UNIT: 7
PIECE: 1, 2, 3, 4
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 1-3% plagioclase
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (chilled margin at top of unit in Section 52R-1)
LOWER CONTACT: not recovered (chilled margin in Section 56R-4, 138cm)
ALTERATION: moderately altered
COMMENT: plagioclase and olivine or clinopyroxene glomerocrysts

Hole 392-U1580A-56R Section 3, Top of Section: 463.84 m (CSF-A)



UNIT: 7
PIECE: 1, 2, 3
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 1-3% plagioclase
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (chilled margin at top of unit in Section 52R-1)
LOWER CONTACT: not recovered (chilled margin in Section 56R-4, 138cm)
ALTERATION: moderately altered
COMMENT: plagioclase and olivine or clinopyroxene glomerocrysts

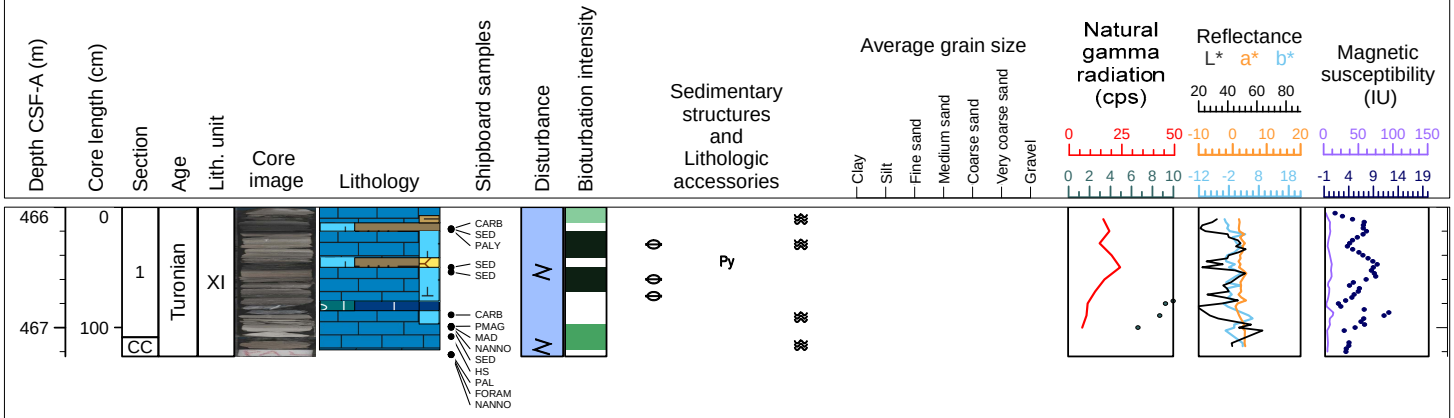
Hole 392-U1580A-56R Section 4, Top of Section: 465.21 m (CSF-A)



UNIT: 7
PIECE: 1, 2, 3, 4
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: dark gray
PHENOCRYSTS: 1-3% plagioclase
GROUNDMASS: aphanitic (at bottom) to medium grained
VESICLES: non-vesicular
UPPER CONTACT: not recovered (chilled margin at top of unit in Section 52R-1)
LOWER CONTACT: not recovered (chilled margin at 138cm)
ALTERATION: moderately altered
COMMENT: plagioclase and olivine or clinopyroxene glomerocrysts

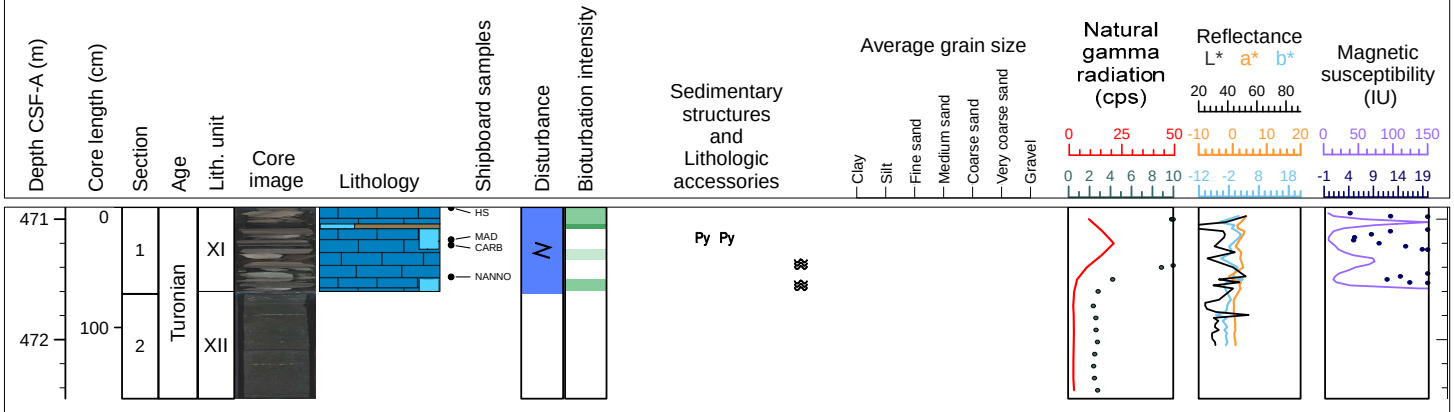
Hole 392-U1580A Core 57R, Interval 466.0-467.24 m (CSF-A)

Core U1580-57R is fragmented by drilling throughout and is composed downcore of calcareous chalk, nannofossil-rich claystone, nannofossil-rich claystone with pyrite, calcareous chalk with nannofossils, and chert. Most bottom contacts are drilling-disturbed boundaries and bioturbation ranges from low to intense.

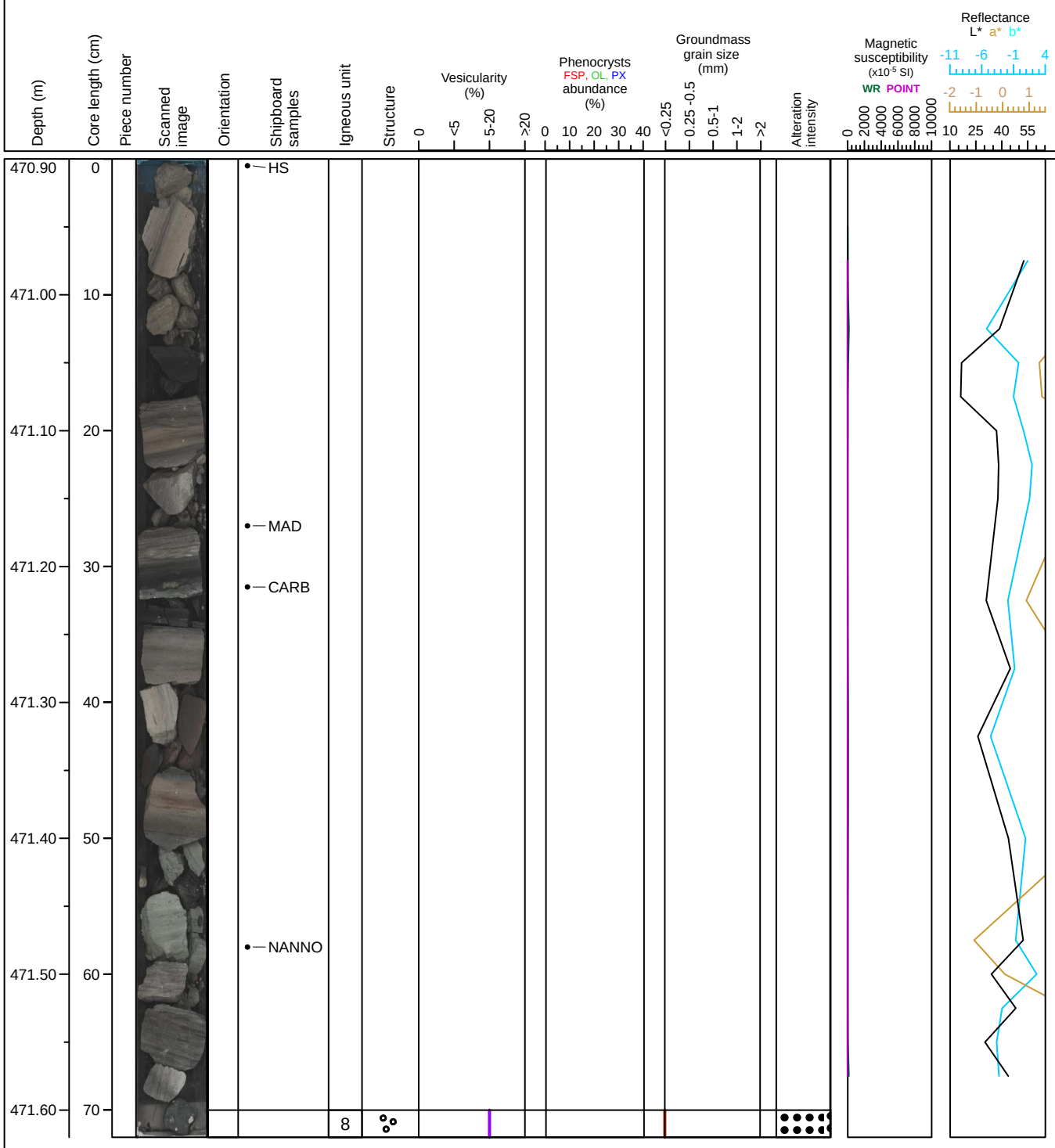


Hole 392-U1580A Core 58R, Interval 470.9-472.49 m (CSF-A)

Core U1580-58R is highly fragmented by drilling throughout, and all contacts are drilling-disturbed boundaries. The lithologies are calcareous chalk, nannofossil-rich claystone with pyrite, and chert. At the base of Section 1, the sedimentary sequence ends and there are pebbles of basalt.

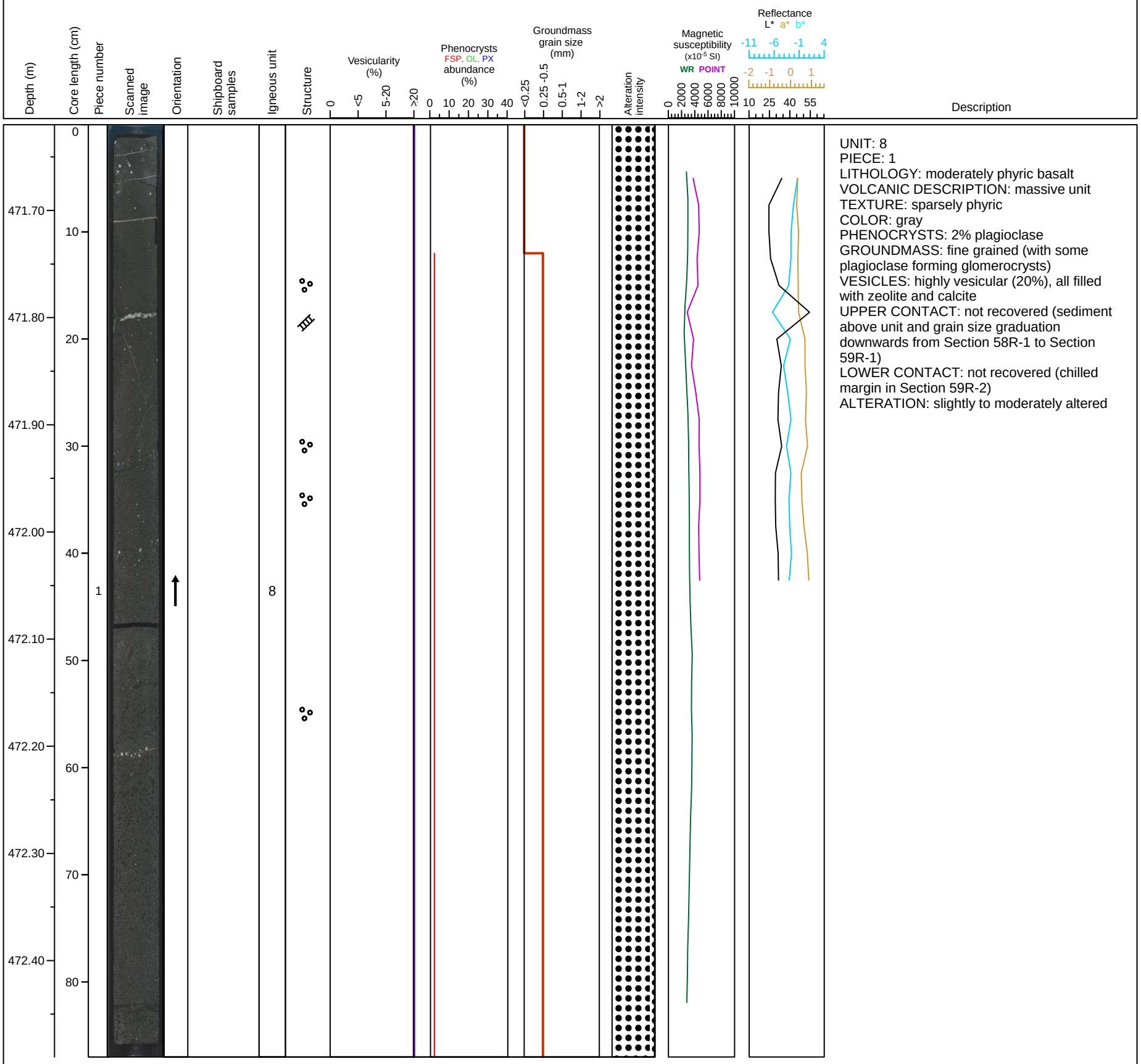


Hole 392-U1580A-58R Section 1, Top of Section: 470.9 m (CSF-A)



UNIT: 8
PIECE:
LITHOLOGY: aphyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: aphyric
COLOR: gray
PHENOCRYSTS:
GROUNDMASS: aphanitic
VESICLES: moderately vesicular (15%), all filled with zeolite and calcite
UPPER CONTACT: not recovered (sediment above unit and grain size graduation downwards from Section 58R-1 to Section 59R-1)
LOWER CONTACT: not recovered (chilled margin in Section 59R-2)
ALTERATION: slightly altered

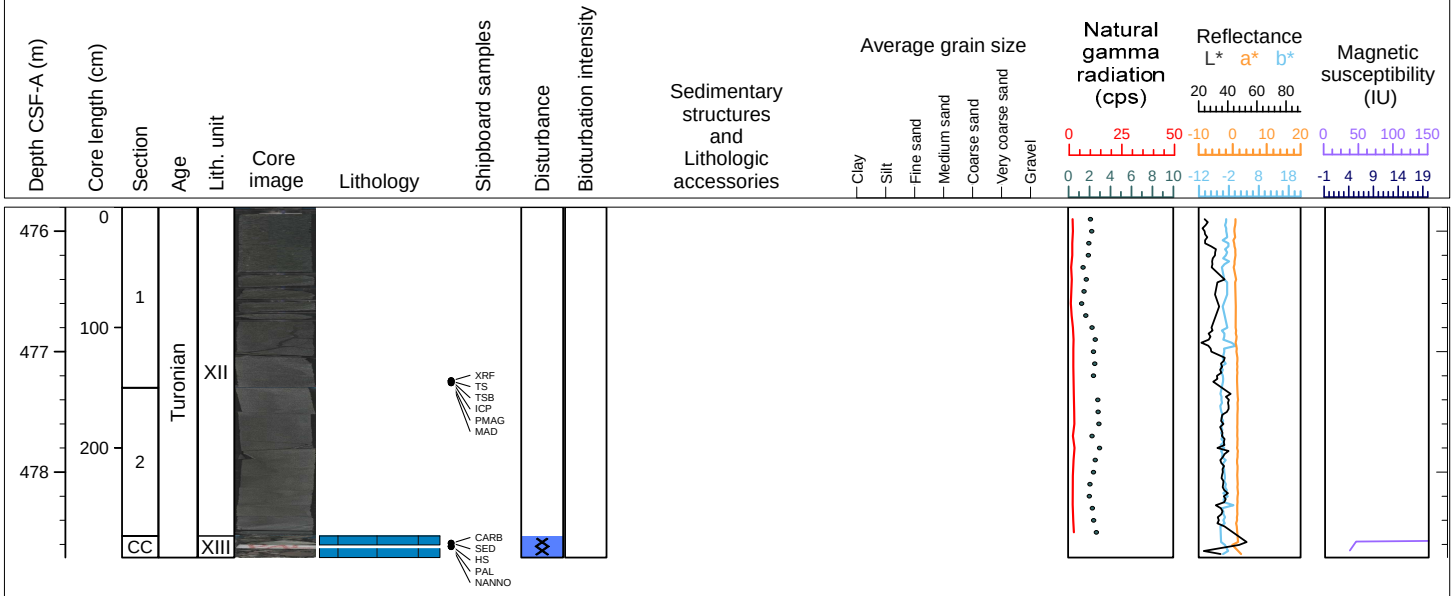
Hole 392-U1580A-58R Section 2, Top of Section: 471.62 m (CSF-A)



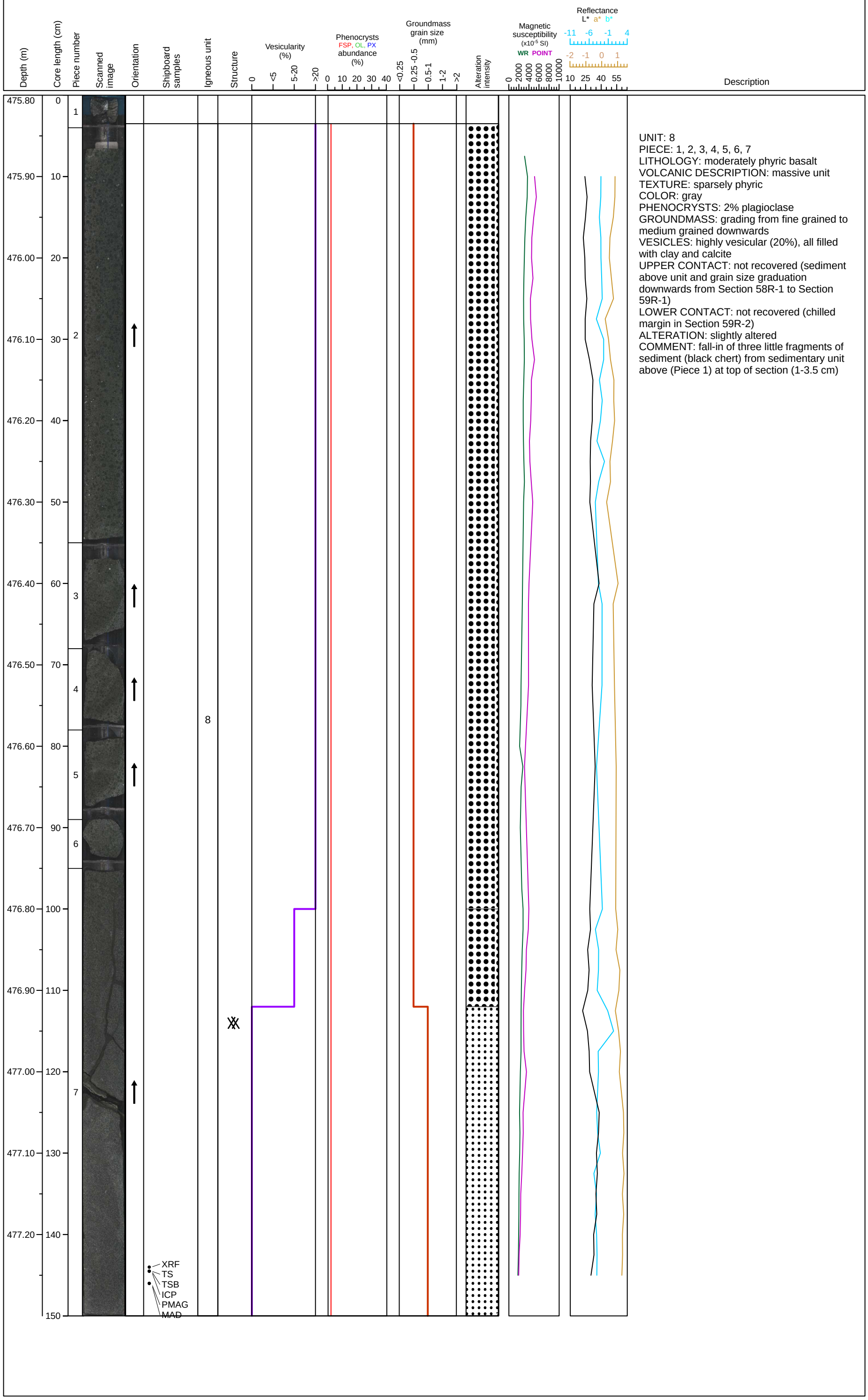
UNIT: 8
PIECE: 1
LITHOLOGY: moderately phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: gray
PHENOCRYSTS: 2% plagioclase
GROUNDMASS: fine grained (with some plagioclase forming glomerocrysts)
VESICLES: highly vesicular (20%), all filled with zeolite and calcite
UPPER CONTACT: not recovered (sediment above unit and grain size graduation downwards from Section 58R-1 to Section 59R-1)
LOWER CONTACT: not recovered (chilled margin in Section 59R-2)
ALTERATION: slightly to moderately altered

Hole 392-U1580A Core 59R, Interval 475.8-478.71 m (CSF-A)

Core U1580-59R consists of light greenish gray calcareous chalk (that underlies Igneous Unit 8) and is only seen in the Core Catcher. Baking of sediments, indicated by reddish brown coloration, is observed between 7.5-18 cm. The entire Core Catcher is severely brecciated by drilling.

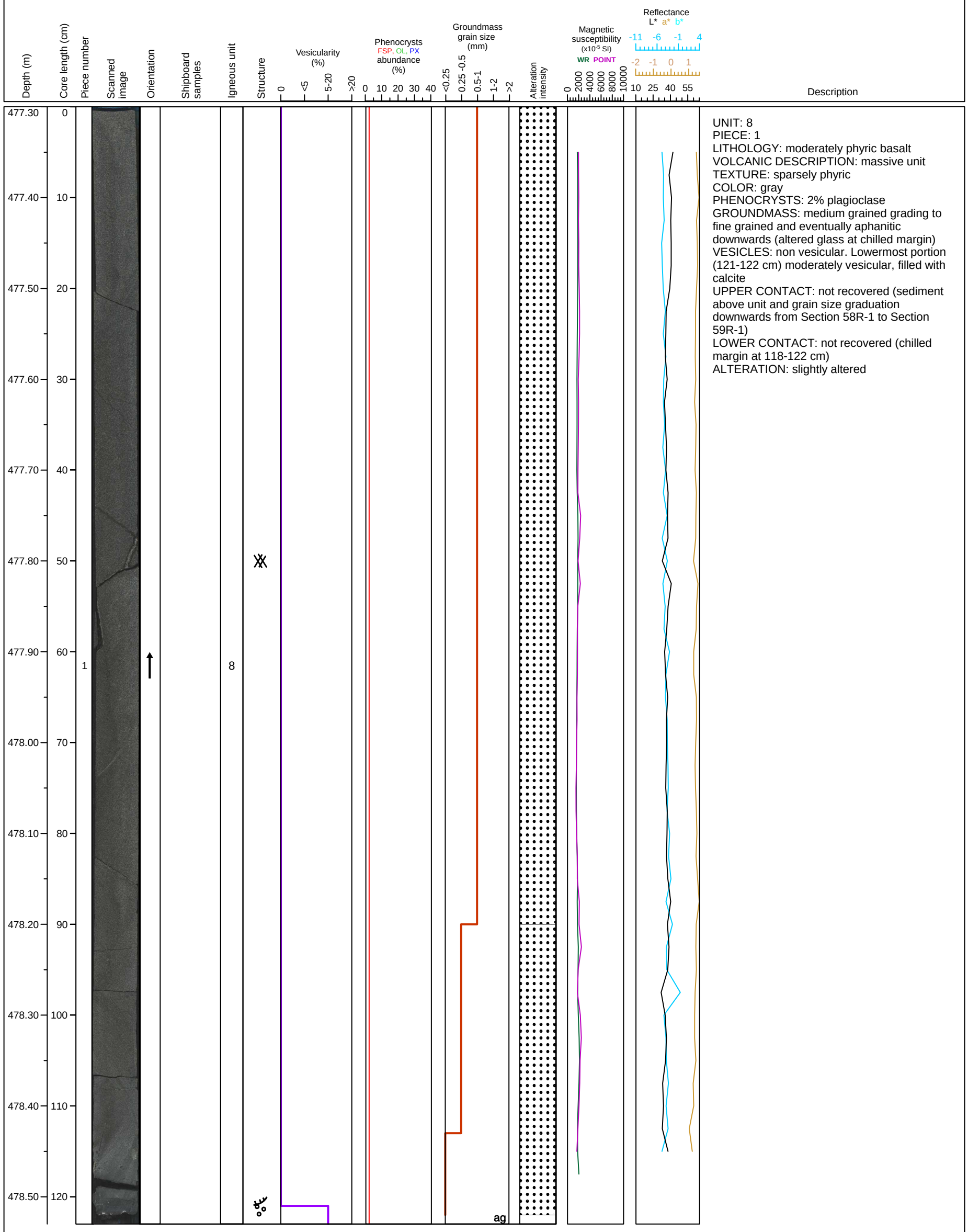


Hole 392-U1580A-59R Section 1, Top of Section: 475.8 m (CSF-A)



UNIT: 8
PIECE: 1, 2, 3, 4, 5, 6, 7
LITHOLOGY: moderately phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: gray
PHENOCRYSTS: 2% plagioclase
GROUNDMASS: grading from fine grained to medium grained downwards
VESICLES: highly vesicular (20%), all filled with clay and calcite
UPPER CONTACT: not recovered (sediment above unit and grain size graduation downwards from Section 58R-1 to Section 59R-1)
LOWER CONTACT: not recovered (chilled margin in Section 59R-2)
ALTERATION: slightly altered
COMMENT: fall-in of three little fragments of sediment (black chert) from sedimentary unit above (Piece 1) at top of section (1-3.5 cm)

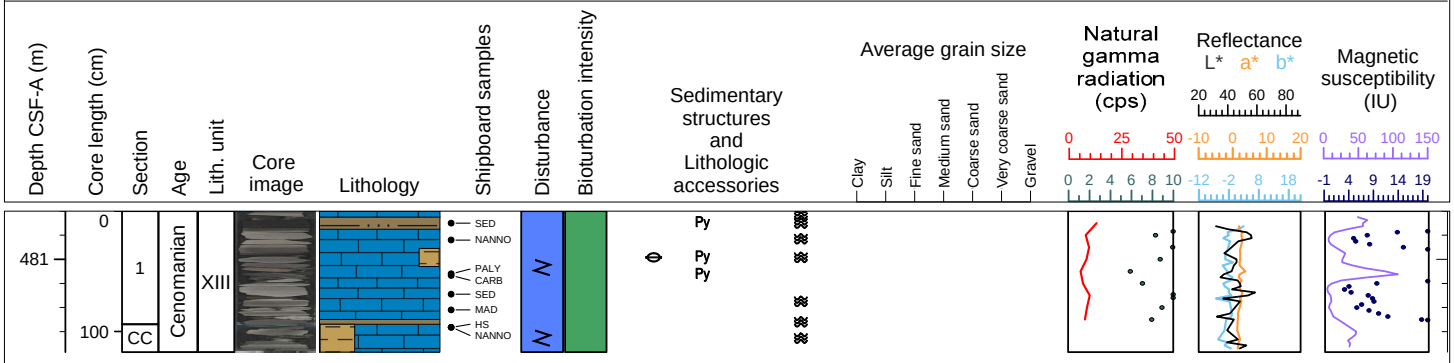
Hole 392-U1580A-59R Section 2, Top of Section: 477.3 m (CSF-A)



UNIT: 8
PIECE: 1
LITHOLOGY: moderately phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: sparsely phyric
COLOR: gray
PHENOCRYSTS: 2% plagioclase
GROUNDMASS: medium grained grading to fine grained and eventually aphanitic downwards (altered glass at chilled margin)
VESICLES: non vesicular. Lowermost portion (121-122 cm) moderately vesicular, filled with calcite
UPPER CONTACT: not recovered (sediment above unit and grain size graduation downwards from Section 58R-1 to Section 59R-1)
LOWER CONTACT: not recovered (chilled margin at 118-122 cm)
ALTERATION: slightly altered

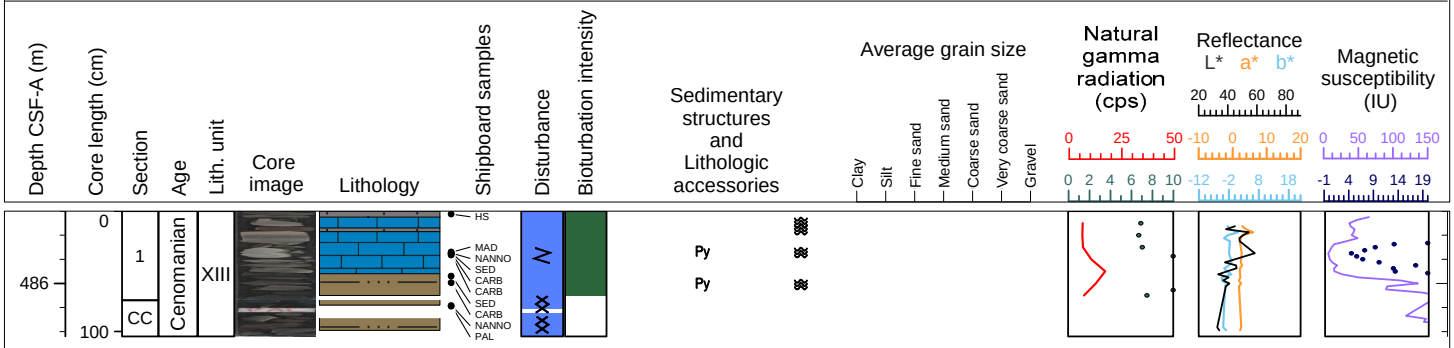
Hole 392-U1580A Core 60R, Interval 480.6-481.77 m (CSF-A)

Core U1580-60R consists of thinly laminated/thinly bedded dark gray to black calcareous chalk, calcareous chalk with clay and claystones. Section 1 is pyrtitized between 5-13 cm and 30-60 cm. Inoceramid fragments are found at Section 1, 33 cm and Core Catcher, 21 cm. Bioturbation is moderate throughout the core. The entire core is severely fragmented by drilling, especially in Section 1, between 46-60 cm and the core catcher.

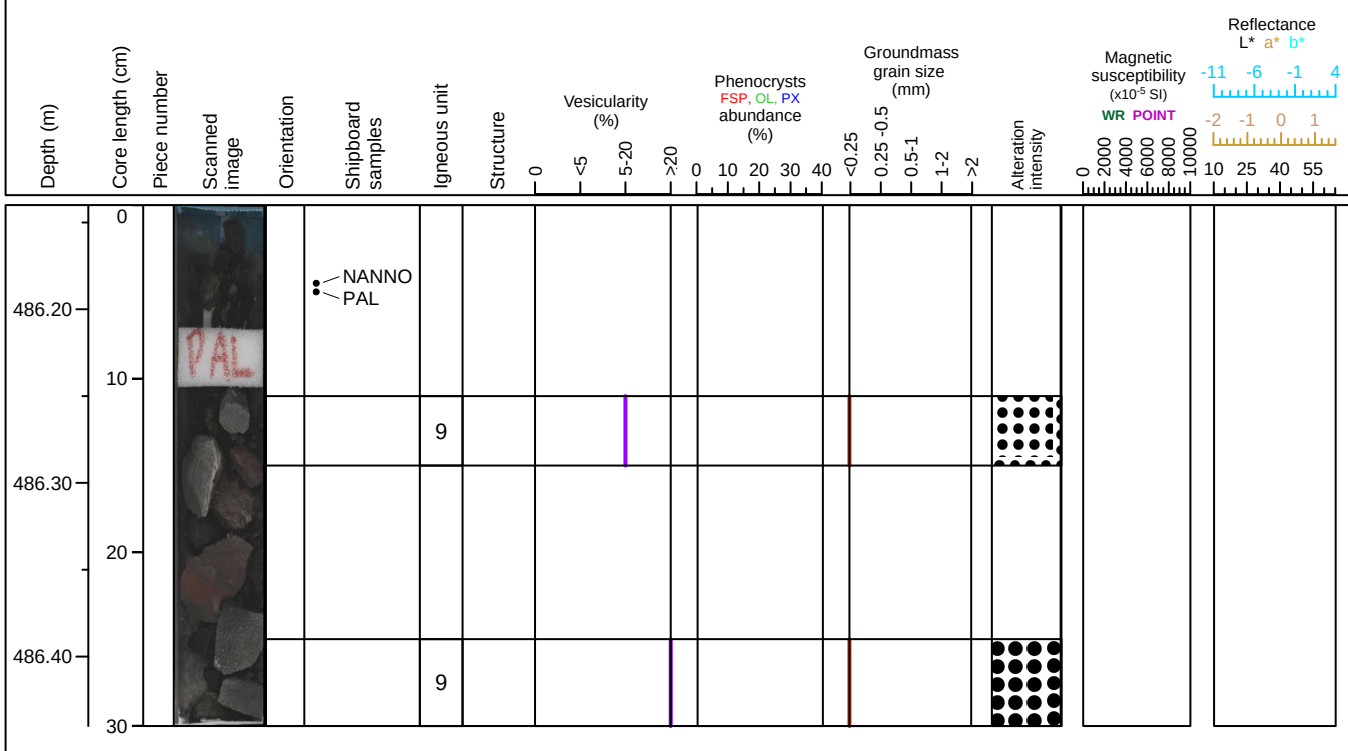


Hole 392-U1580A Core 61R, Interval 485.4-486.44 m (CSF-A)

Core U1580-61R consists of thinly laminated dark gray, black and reddish brown calcareous chalk, siltstones and claystones. Section 1 is pyritized between 17 -74 cm. The Core Catcher consists of fragmented and baked sediments. Bioturbation intensity is high throughout the core, and the entire core is severely fragmented by drilling.



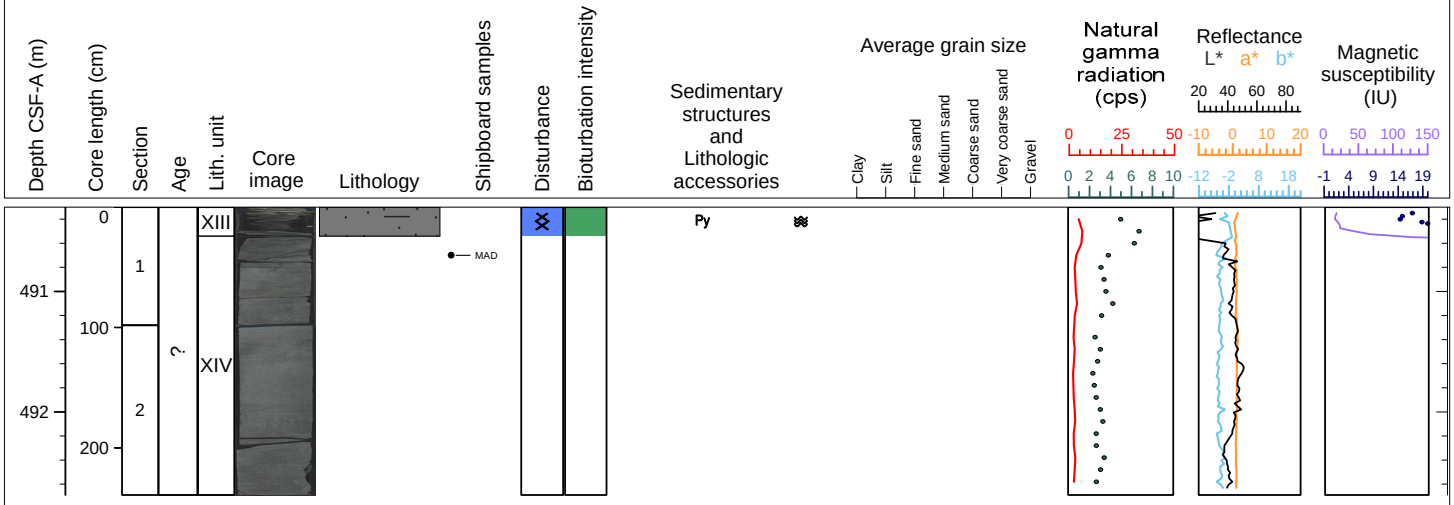
Hole 392-U1580A-61R Section CC, Top of Section: 486.14 m (CSF-A)



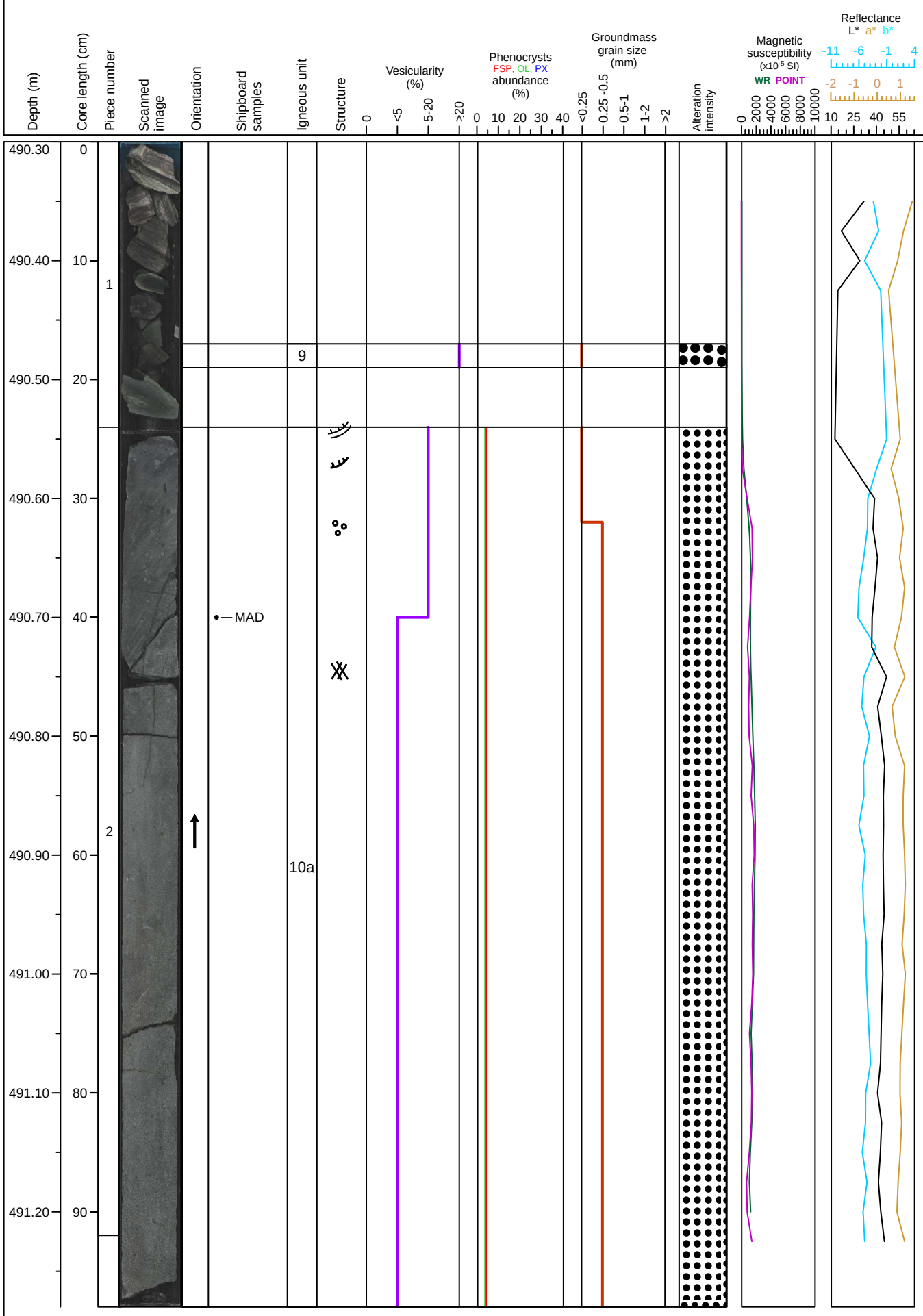
UNIT: 9
PIECE:
LITHOLOGY: basalt
VOLCANIC DESCRIPTION: basaltic rubble (several small pieces)
TEXTURE: aphyric
COLOR: light gray
PHENOCRYSTS:
GROUNDMASS: aphanitic to fine grained
VESICLES: 15% vesicles
UPPER CONTACT: not recovered
LOWER CONTACT: not recovered
ALTERATION: moderately to highly altered
COMMENT: flow texture for piece found at 11-15 cm

Hole 392-U1580A Core 62R, Interval 490.3-492.69 m (CSF-A)

Core U1580-62R consists of brecciated dark gray to greenish gray calcareous chalk, siltstone and claystone that spans Section 1, 0-24 cm and overlies basalt. This interval has been fragmented by drilling. Individual fragments contain thin black or dark gray laminae or thin dark greenish gray beds. Pyrite blebs occur in Section 1, at 10 cm. Moderate bioturbation is seen in individual fragments.



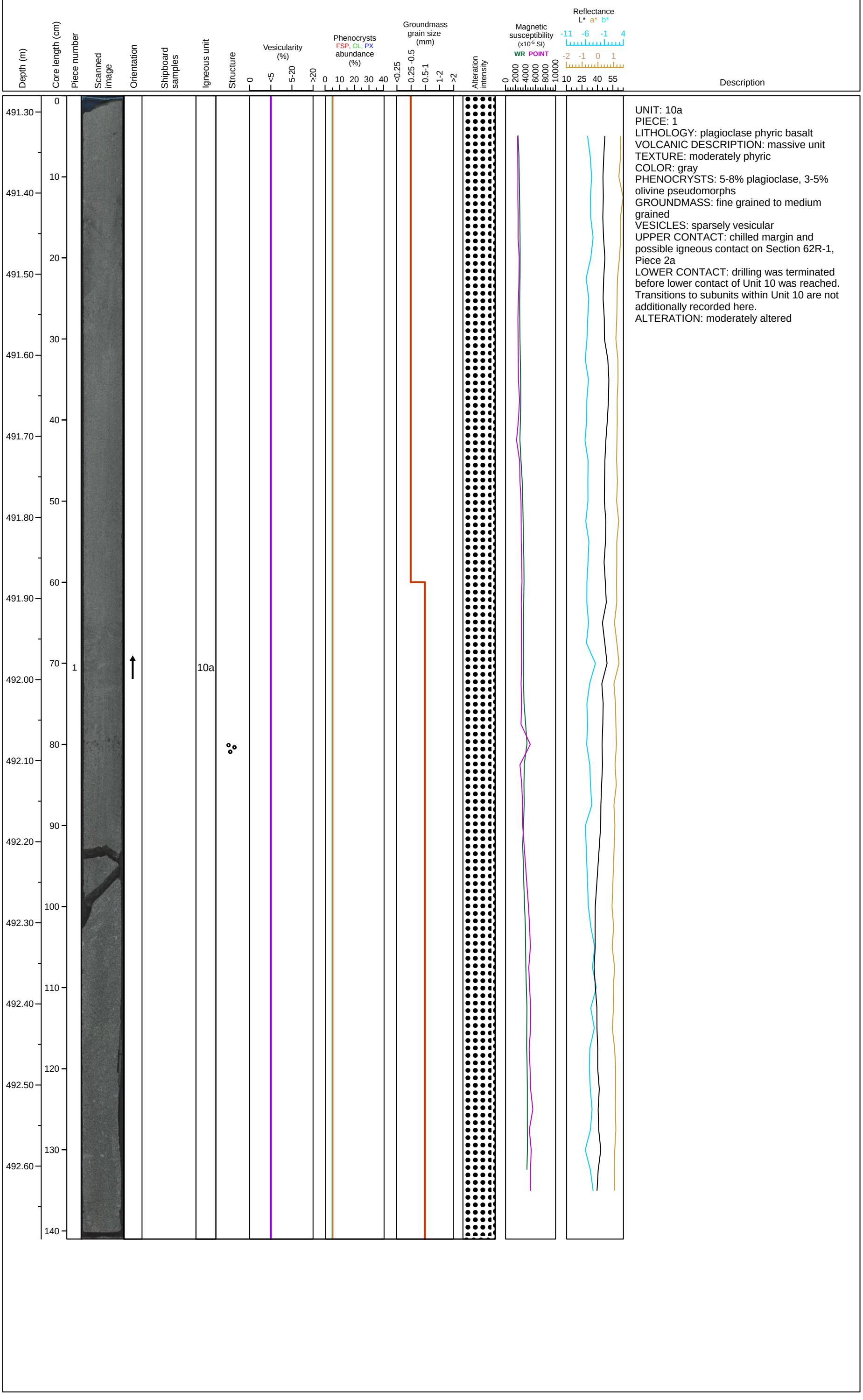
Hole 392-U1580A-62R Section 1, Top of Section: 490.3 m (CSF-A)



UNIT: 9
PIECE: 1
LITHOLOGY: basalt
VOLCANIC DESCRIPTION: basaltic rubble (17-19 cm)
TEXTURE: aphyric
COLOR: light gray
PHENOCRYSTS: basalt
GROUNDMASS: aphanitic to fine grained
VESICLES: 15% vesicles
UPPER CONTACT: not recovered
LOWER CONTACT: not recovered
ALTERATION: moderately to highly altered

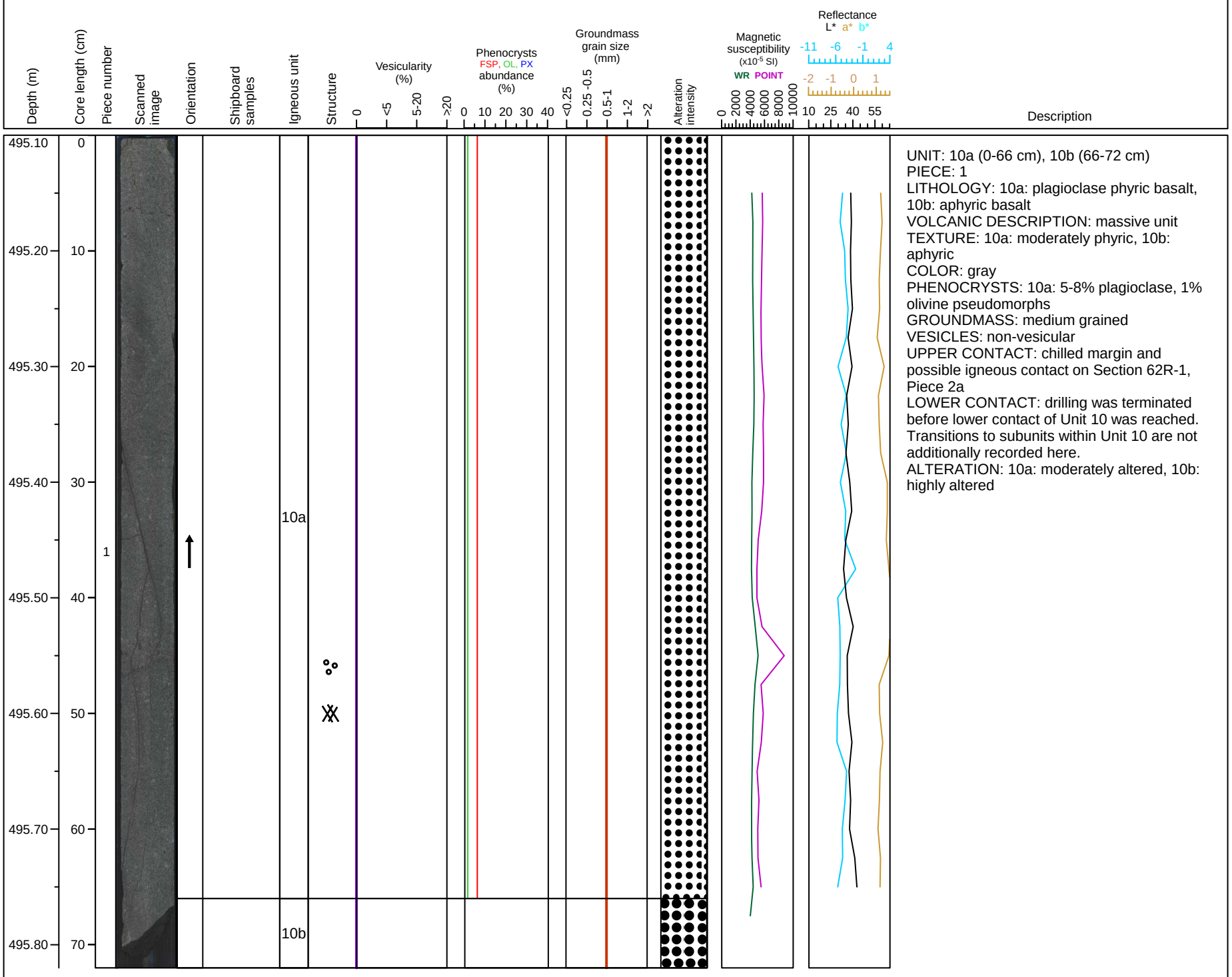
UNIT: 10a
PIECE: 2
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: moderately phyric
COLOR: gray
PHENOCRYSTS: 5-8% plagioclase, 3-5% olivine pseudomorphs
GROUNDMASS: aphanitic to fine grained
VESICLES: sparsely to moderately vesicular
UPPER CONTACT: possible igneous contact on Piece 2a and chilled margin
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: moderately altered
COMMENT: upper margin of an at least 38m thick massive unit

Hole 392-U1580A-62R Section 2, Top of Section: 491.28 m (CSF-A)



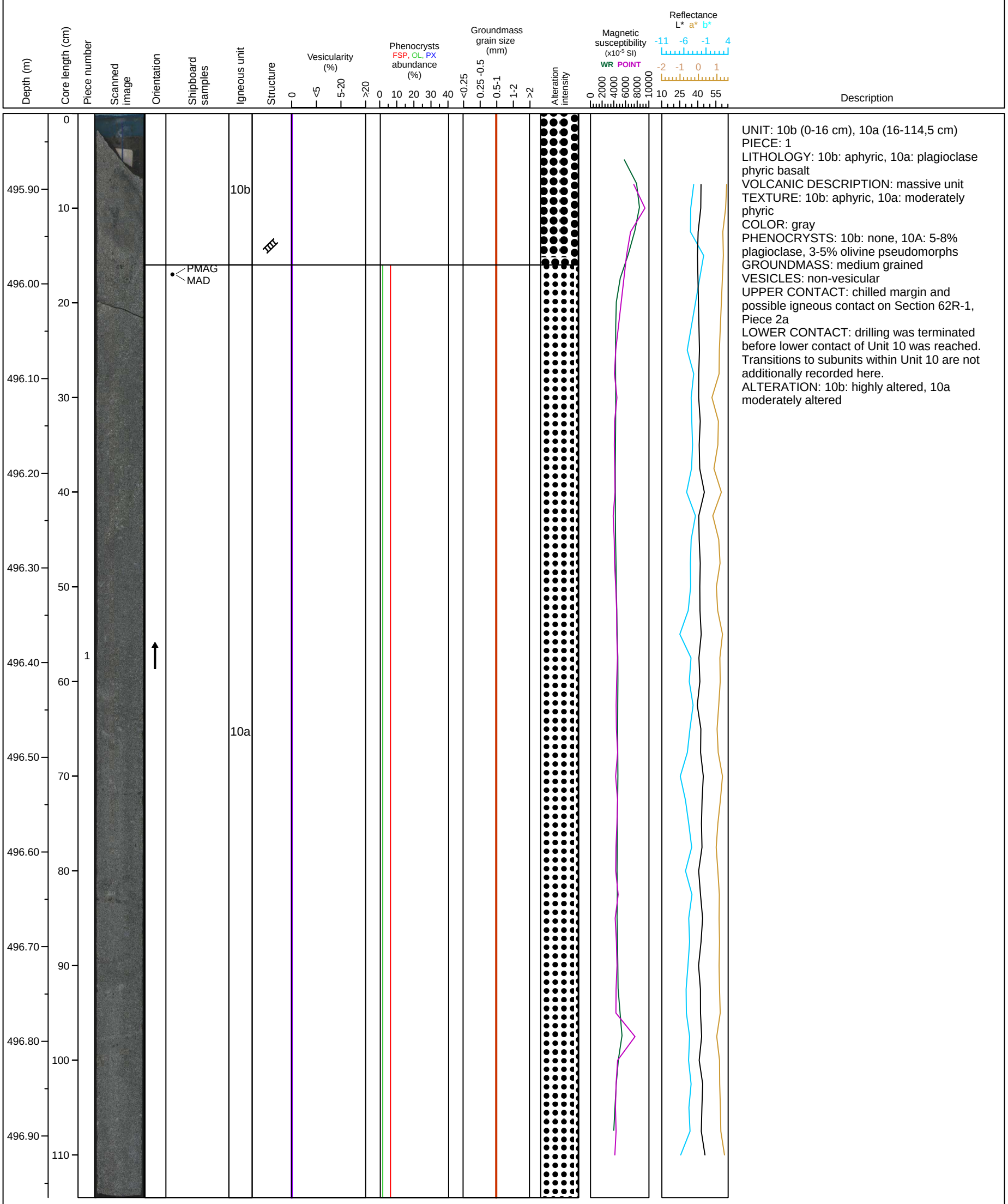
UNIT: 10a
PIECE: 1
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: moderately phyric
COLOR: gray
PHENOCRYSTS: 5-8% plagioclase, 3-5% olivine pseudomorphs
GROUNDMASS: fine grained to medium grained
VESICLES: sparsely vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: moderately altered

Hole 392-U1580A-63R Section 1, Top of Section: 495.1 m (CSF-A)



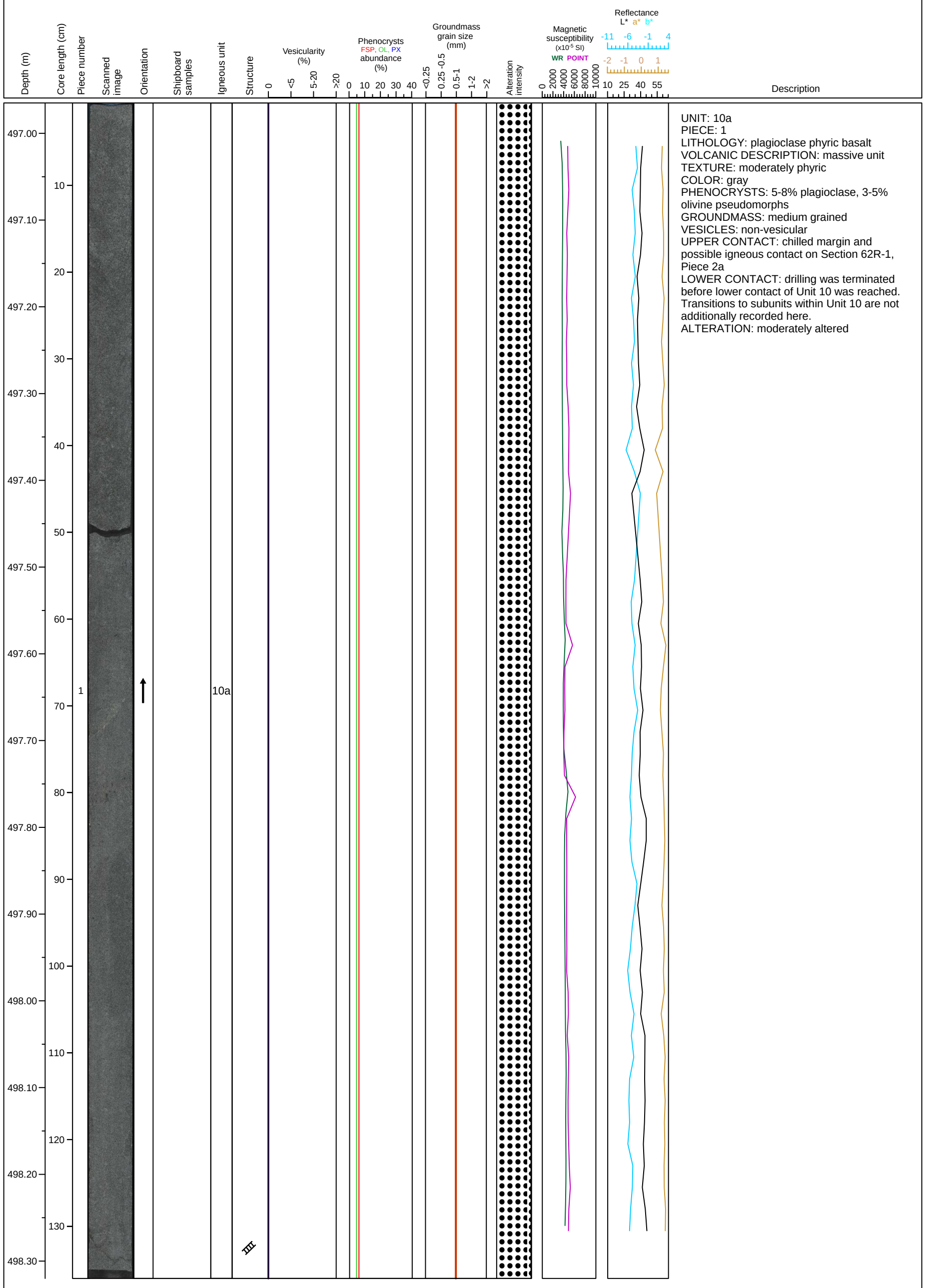
UNIT: 10a (0-66 cm), 10b (66-72 cm)
PIECE: 1
LITHOLOGY: 10a: plagioclase phyric basalt, 10b: aphyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: 10a: moderately phyric, 10b: aphyric
COLOR: gray
PHENOCRYSTS: 10a: 5-8% plagioclase, 1% olivine pseudomorphs
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: 10a: moderately altered, 10b: highly altered

Hole 392-U1580A-63R Section 2, Top of Section: 495.82 m (CSF-A)



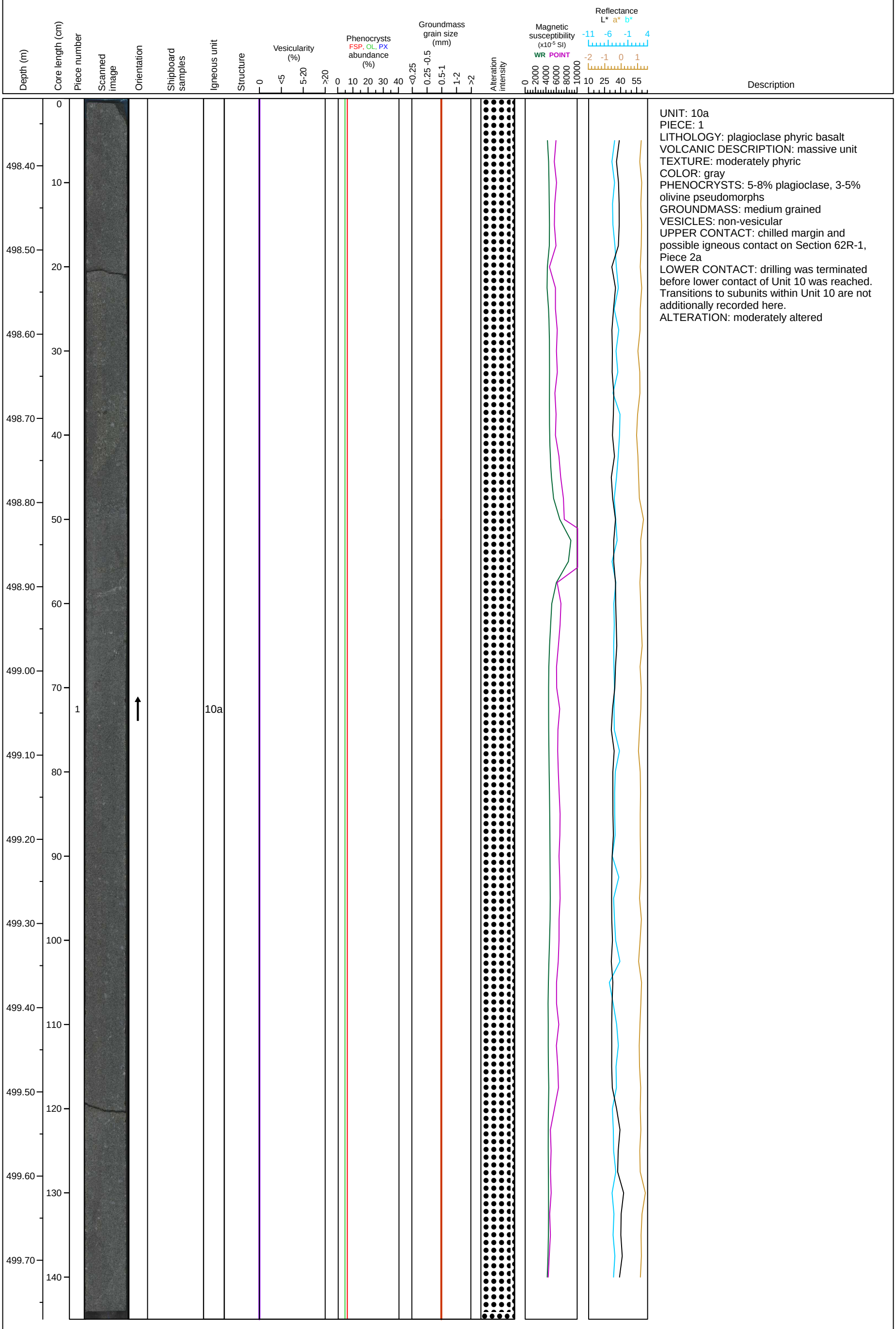
UNIT: 10b (0-16 cm), 10a (16-114,5 cm)
PIECE: 1
LITHOLOGY: 10b: aphyric, 10a: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: 10b: aphyric, 10a: moderately phyric
COLOR: gray
PHENOCRYSTS: 10b: none, 10A: 5-8% plagioclase, 3-5% olivine pseudomorphs
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: 10b: highly altered, 10a moderately altered

Hole 392-U1580A-63R Section 3, Top of Section: 496.965 m (CSF-A)



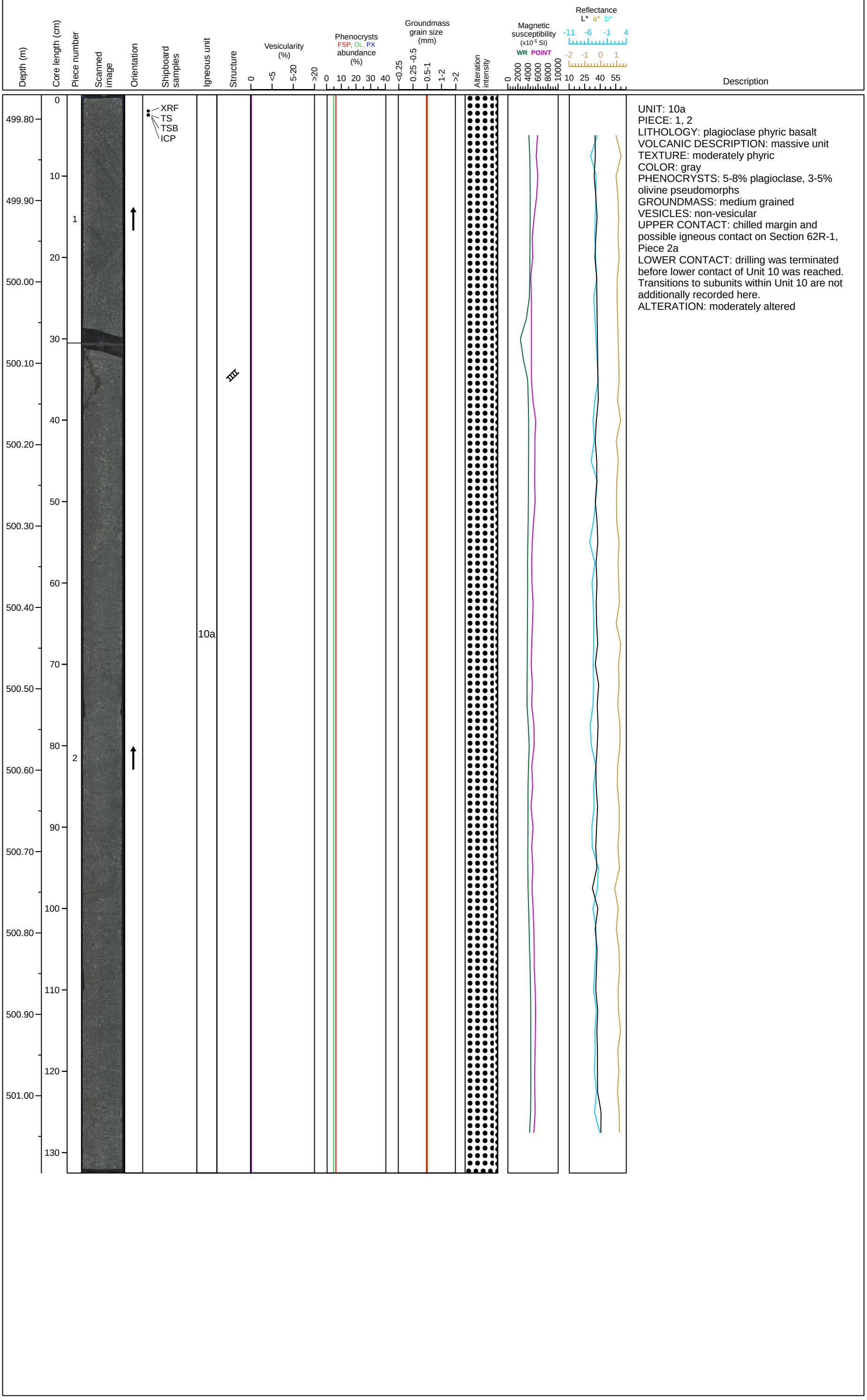
UNIT: 10a
PIECE: 1
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: moderately phyric
COLOR: gray
PHENOCRYSTS: 5-8% plagioclase, 3-5% olivine pseudomorphs
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: moderately altered

Hole 392-U1580A-63R Section 4, Top of Section: 498.32 m (CSF-A)

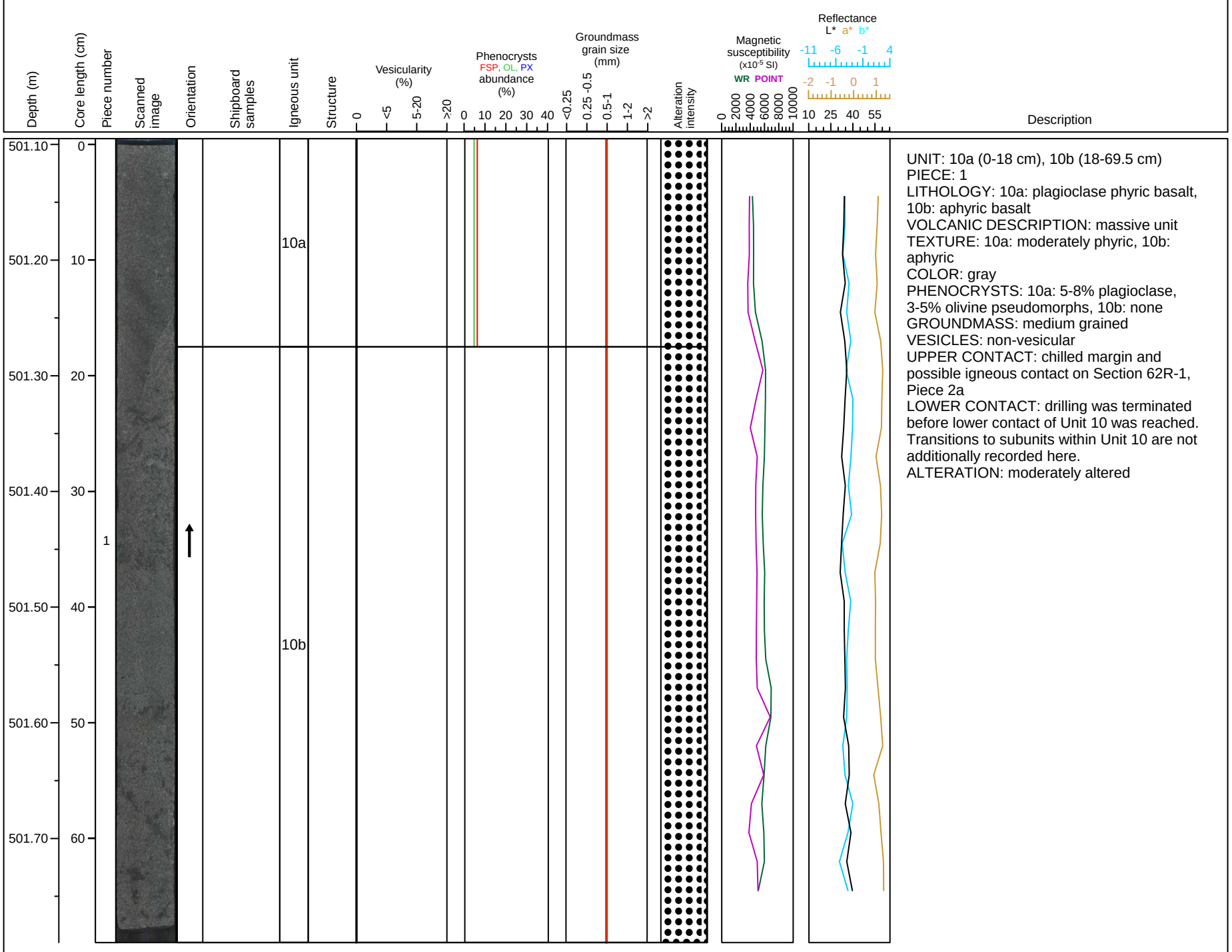


UNIT: 10a
PIECE: 1
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: moderately phyric
COLOR: gray
PHENOCRYSTS: 5-8% plagioclase, 3-5% olivine pseudomorphs
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: moderately altered

Hole 392-U1580A-63R Section 5, Top of Section: 499.77 m (CSF-A)



Hole 392-U1580A-63R Section 6, Top of Section: 501.095 m (CSF-A)

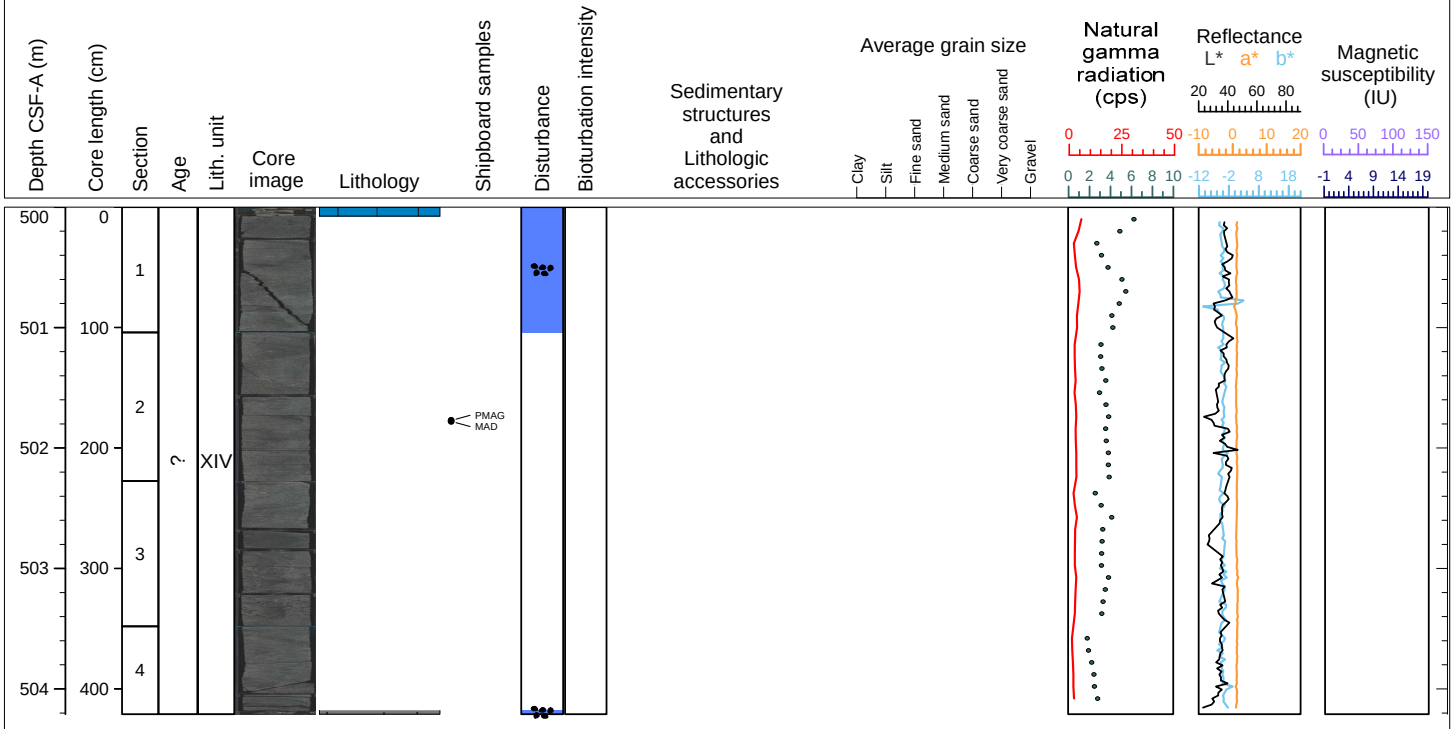


Description

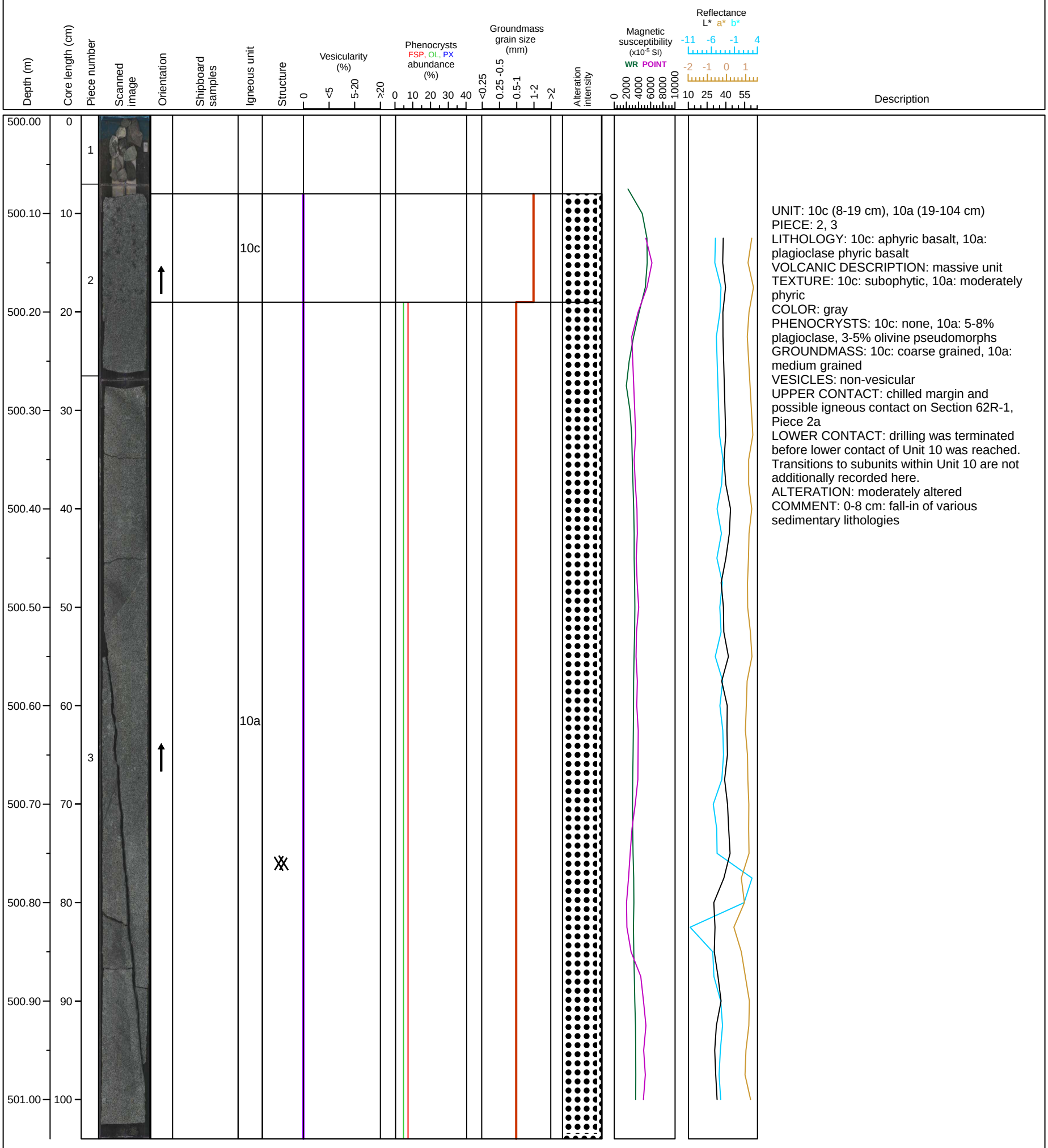
UNIT: 10a (0-18 cm), 10b (18-69.5 cm)
PIECE: 1
LITHOLOGY: 10a: plagioclase phyric basalt, 10b: aphyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: 10a: moderately phyric, 10b: aphyric
COLOR: gray
PHENOCRYSTS: 10a: 5-8% plagioclase, 3-5% olivine pseudomorphs, 10b: none
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: moderately altered

Hole 392-U1580A Core 64R, Interval 500.0-504.21 m (CSF-A)

Core U1580A-64R consists of basalts with a few pebbles of sediment in Section 1 (0-7.5 cm), and the bottom of the core (Section 4, 70-73 cm). The pebbles consist of various lithologies including calcareous chalk and siltstone. The sedimentary portions of the core are severely brecciated fall-in from overlying intervals.

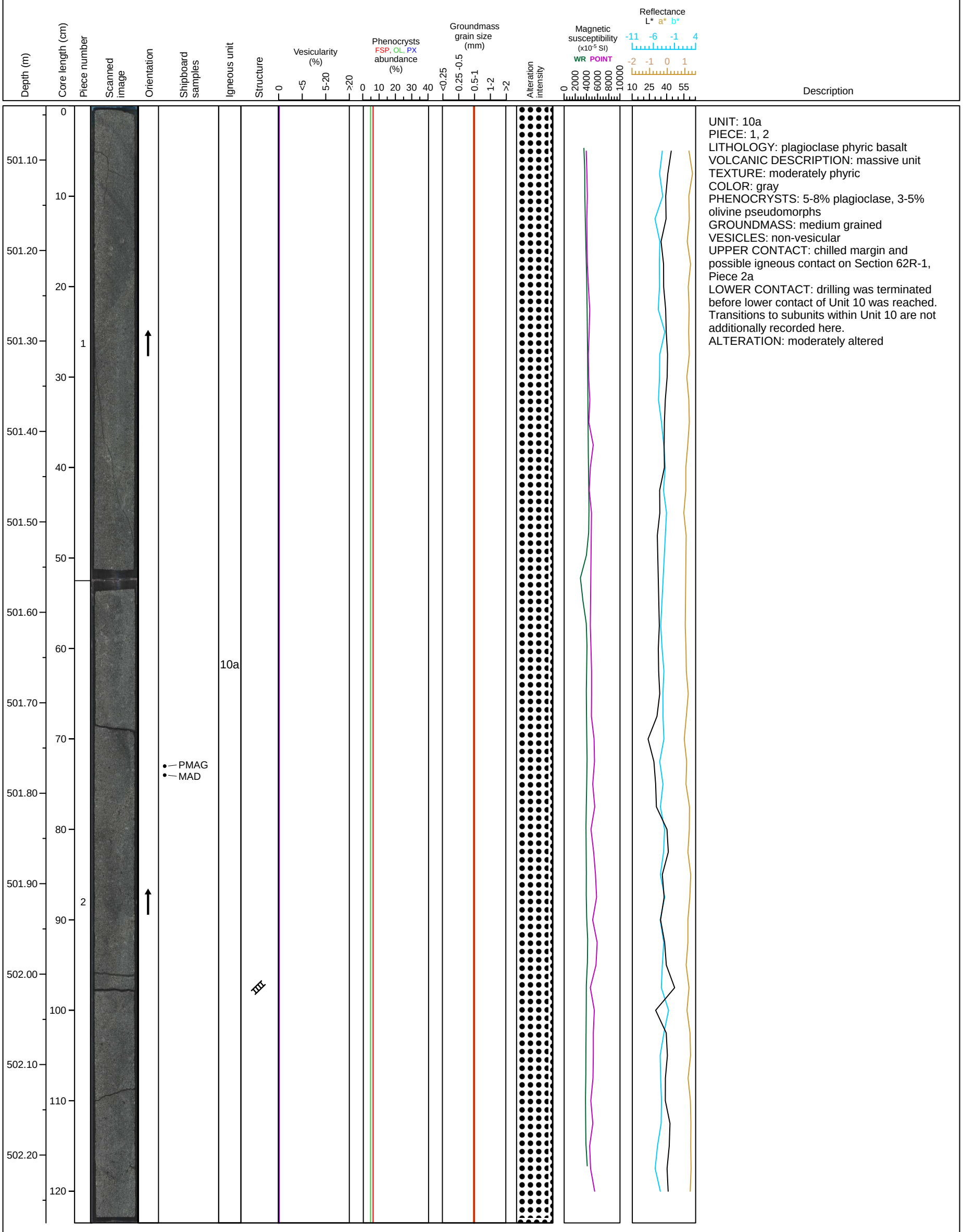


Hole 392-U1580A-64R Section 1, Top of Section: 500.0 m (CSF-A)



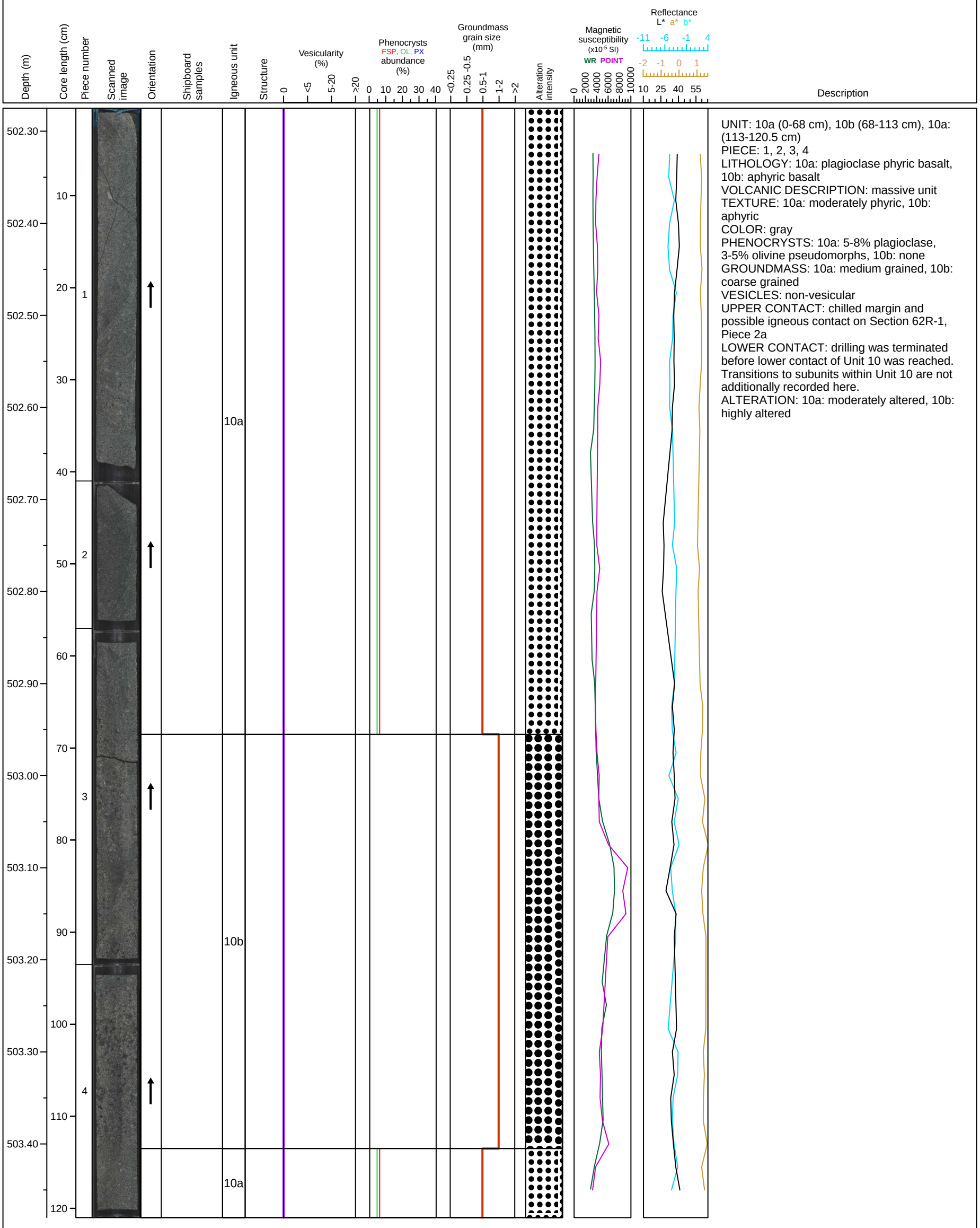
UNIT: 10c (8-19 cm), 10a (19-104 cm)
PIECE: 2, 3
LITHOLOGY: 10c: aphyric basalt, 10a: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: 10c: subophytic, 10a: moderately phyric
COLOR: gray
PHENOCRYSTS: 10c: none, 10a: 5-8% plagioclase, 3-5% olivine pseudomorphs
GROUNDMASS: 10c: coarse grained, 10a: medium grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: moderately altered
COMMENT: 0-8 cm: fall-in of various sedimentary lithologies

Hole 392-U1580A-64R Section 2, Top of Section: 501.04 m (CSF-A)



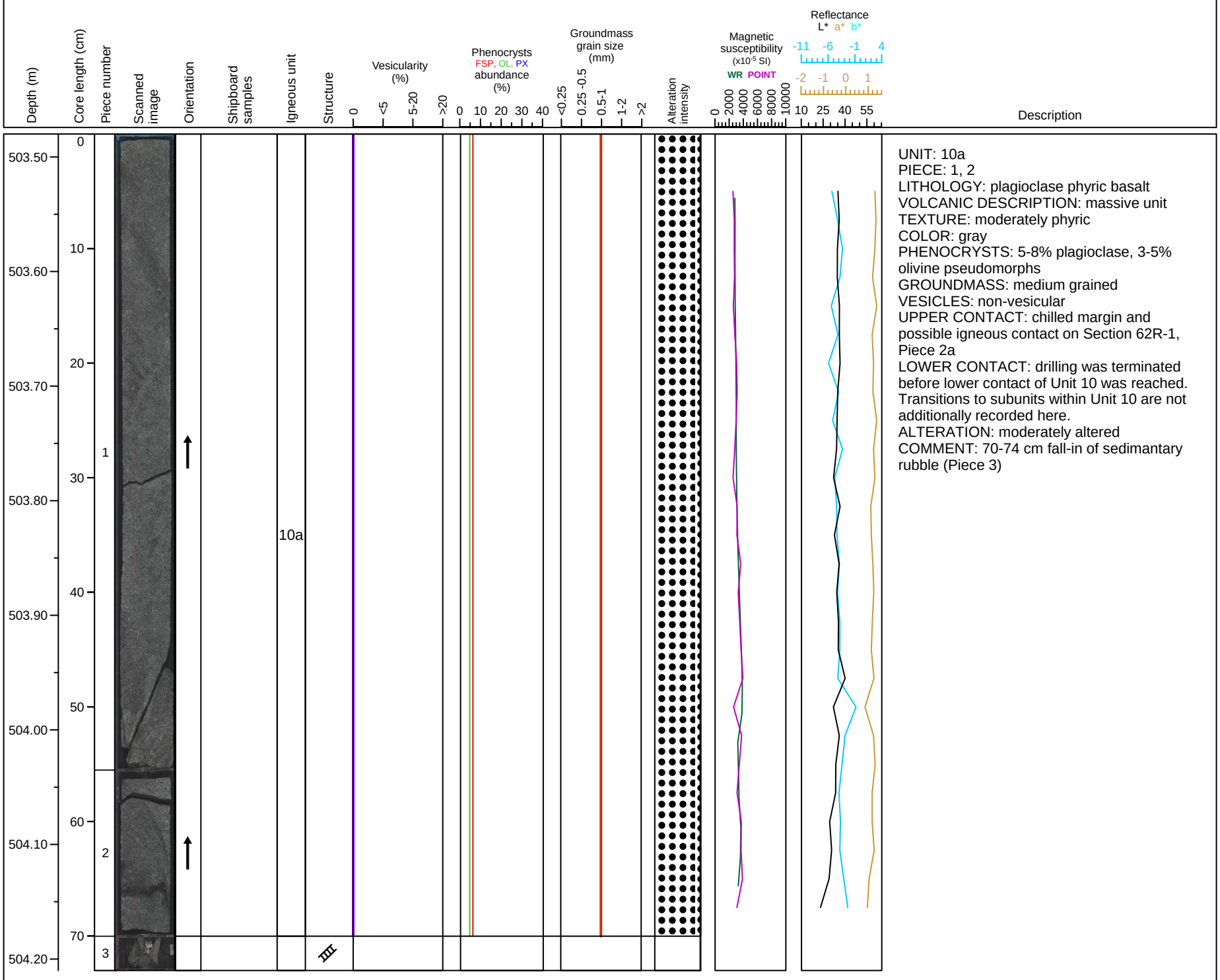
UNIT: 10a
PIECE: 1, 2
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: moderately phyric
COLOR: gray
PHENOCRYSTS: 5-8% plagioclase, 3-5% olivine pseudomorphs
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: moderately altered

Hole 392-U1580A-64R Section 3, Top of Section: 502.275 m (CSF-A)



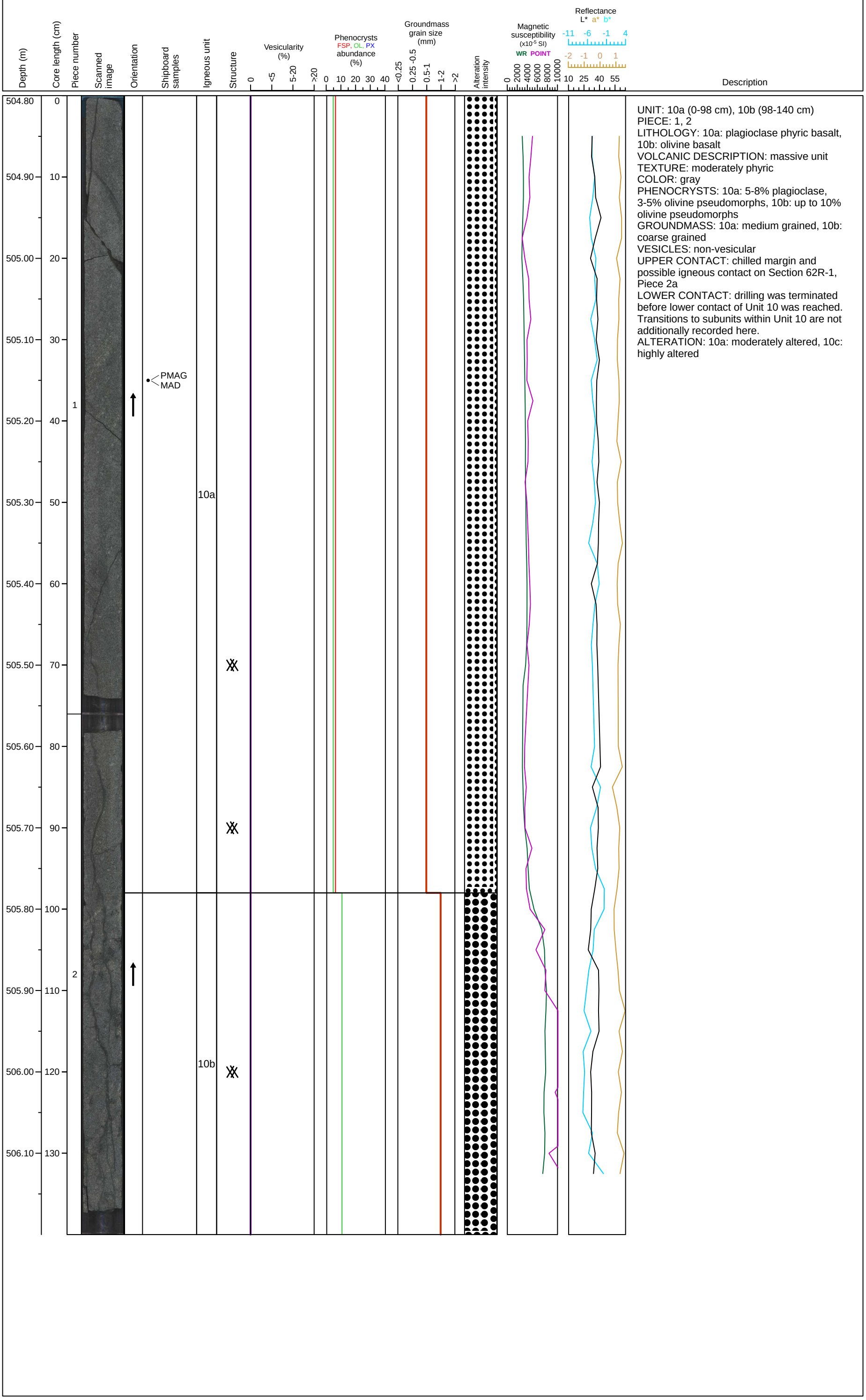
UNIT: 10a (0-68 cm), 10b (68-113 cm), 10a: (113-120.5 cm)
PIECE: 1, 2, 3, 4
LITHOLOGY: 10a: plagioclase phyric basalt, 10b: aphyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: 10a: moderately phyric, 10b: aphyric
COLOR: gray
PHENOCRYSTS: 10a: 5-8% plagioclase, 3-5% olivine pseudomorphs, 10b: none
GROUNDMASS: 10a: medium grained, 10b: coarse grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: 10a: moderately altered, 10b: highly altered

Hole 392-U1580A-64R Section 4, Top of Section: 503.48 m (CSF-A)



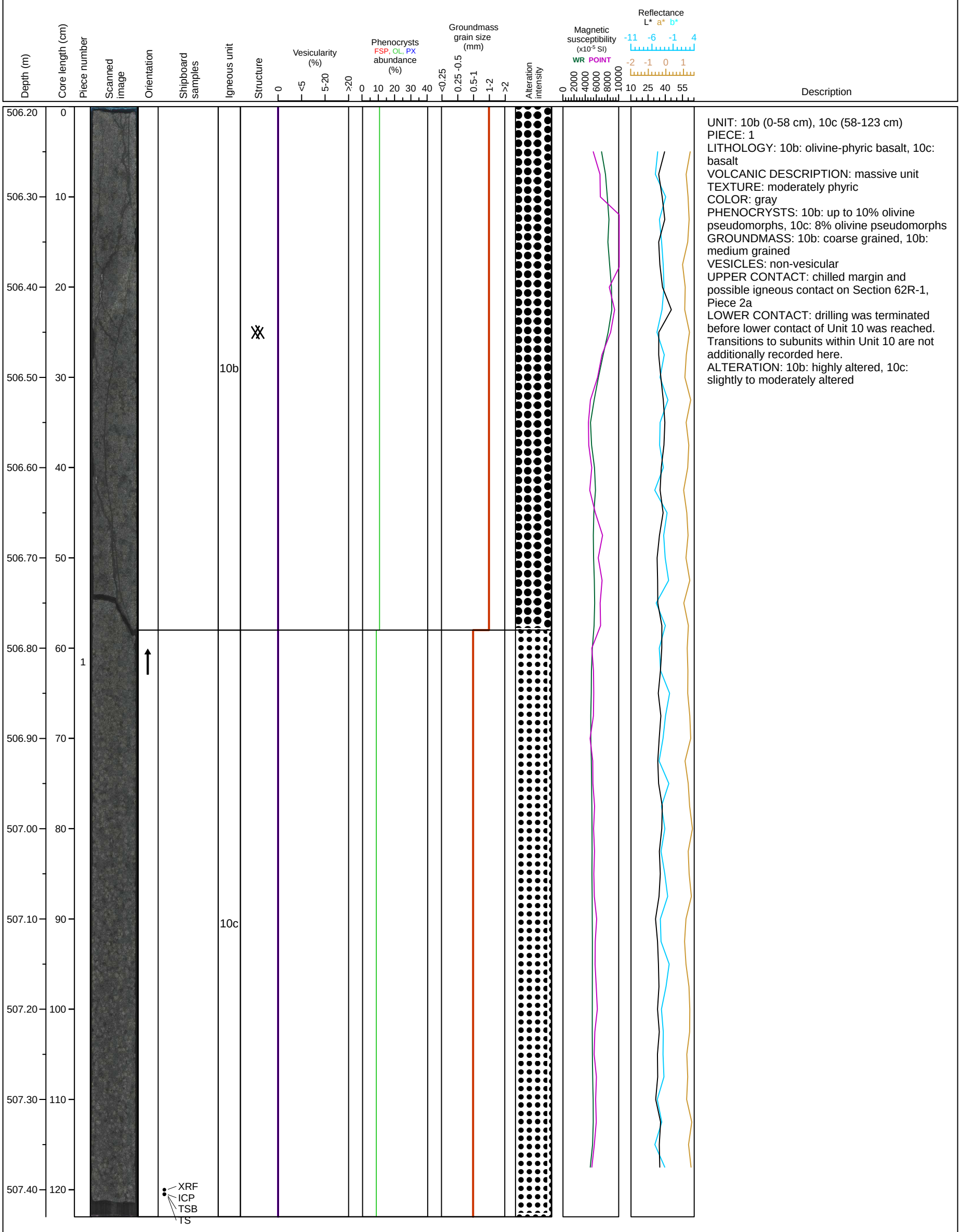
UNIT: 10a
PIECE: 1, 2
LITHOLOGY: plagioclase phyric basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: moderately phyric
COLOR: gray
PHENOCRYSTS: 5-8% plagioclase, 3-5% olivine pseudomorphs
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: moderately altered
COMMENT: 70-74 cm fall-in of sedimentary rubble (Piece 3)

Hole 392-U1580A-65R Section 1, Top of Section: 504.8 m (CSF-A)



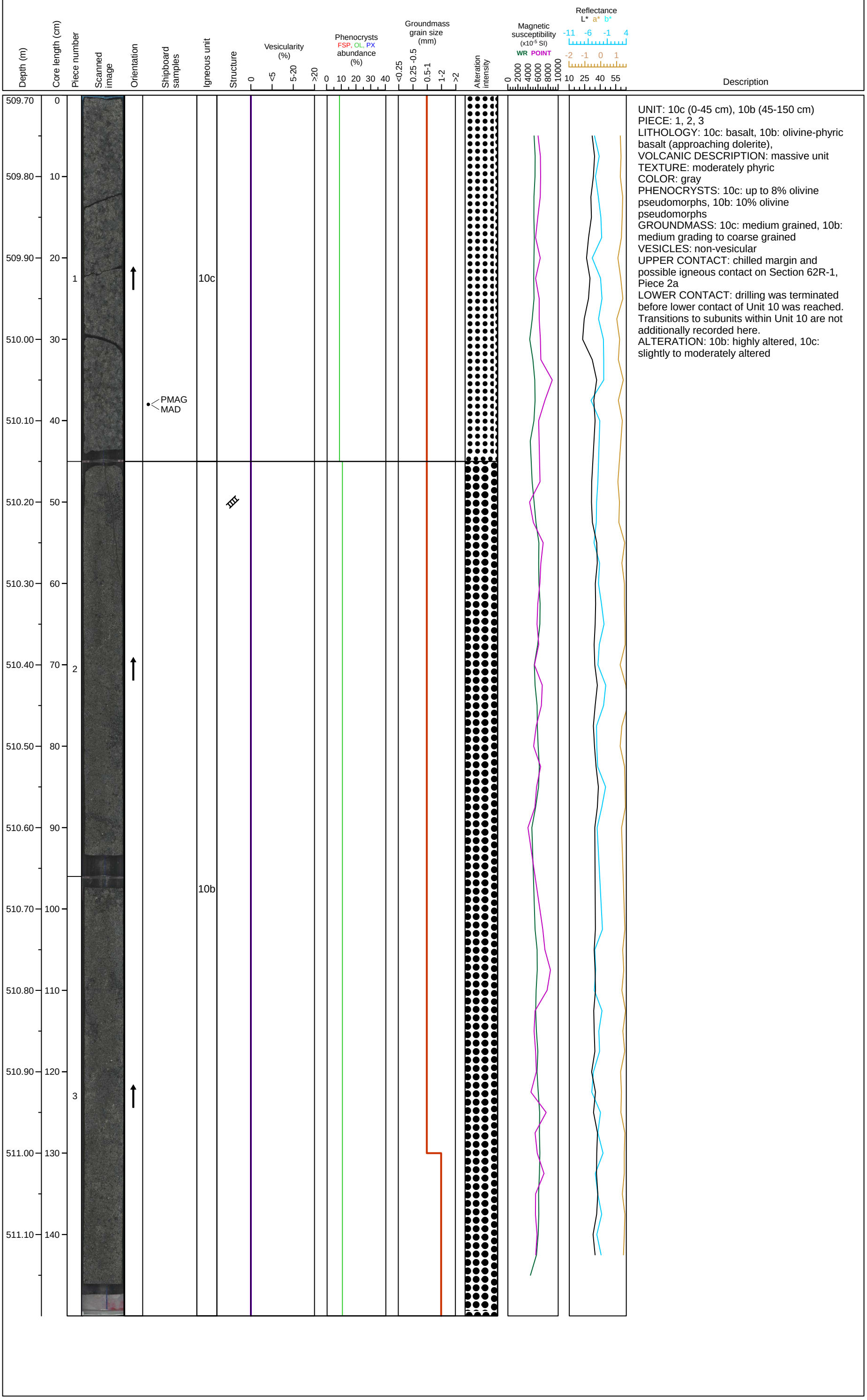
UNIT: 10a (0-98 cm), 10b (98-140 cm)
PIECE: 1, 2
LITHOLOGY: 10a: plagioclase phyric basalt, 10b: olivine basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: moderately phyric
COLOR: gray
PHENOCRYSTS: 10a: 5-8% plagioclase, 3-5% olivine pseudomorphs, 10b: up to 10% olivine pseudomorphs
GROUNDMASS: 10a: medium grained, 10b: coarse grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: 10a: moderately altered, 10c: highly altered

Hole 392-U1580A-65R Section 2, Top of Section: 506.2 m (CSF-A)



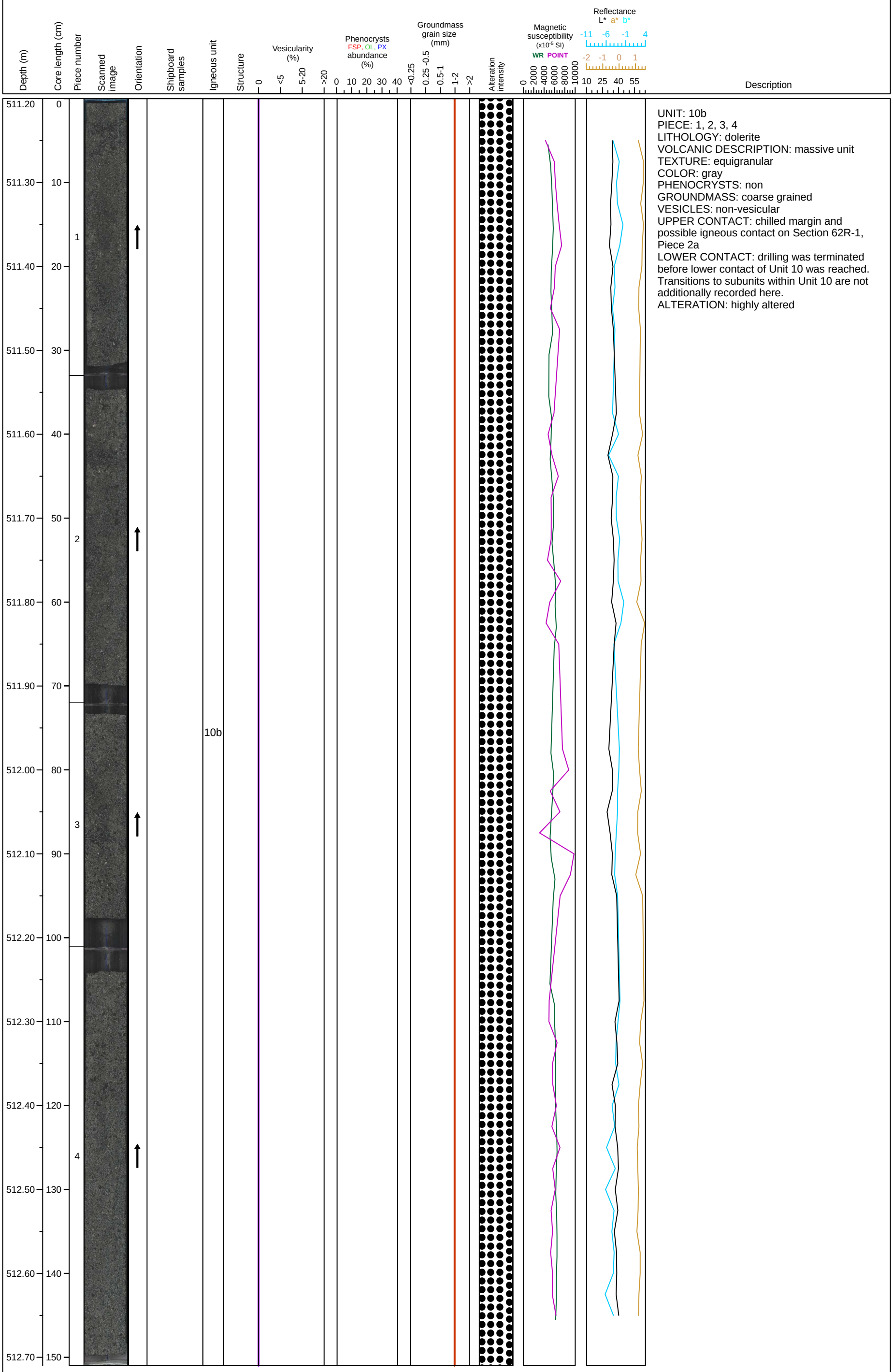
UNIT: 10b (0-58 cm), 10c (58-123 cm)
PIECE: 1
LITHOLOGY: 10b: olivine-phyric basalt, 10c: basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: moderately phyric
COLOR: gray
PHENOCRYSTS: 10b: up to 10% olivine pseudomorphs, 10c: 8% olivine pseudomorphs
GROUNDMASS: 10b: coarse grained, 10b: medium grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: 10b: highly altered, 10c: slightly to moderately altered

Hole 392-U1580A-66R Section 1, Top of Section: 509.7 m (CSF-A)



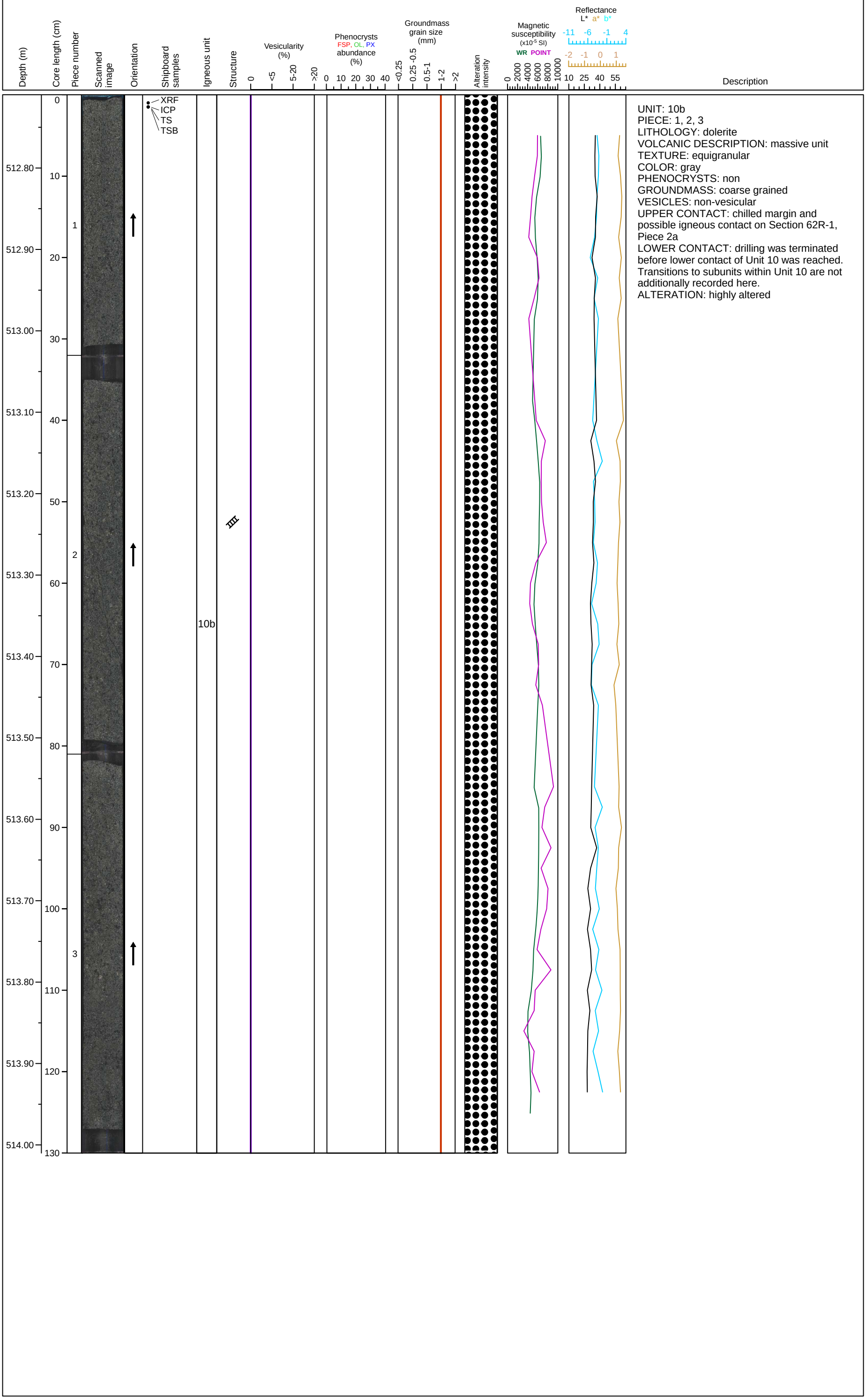
UNIT: 10c (0-45 cm), 10b (45-150 cm)
PIECE: 1, 2, 3
LITHOLOGY: 10c: basalt, 10b: olivine-phyric basalt (approaching dolerite),
VOLCANIC DESCRIPTION: massive unit
TEXTURE: moderately phyric
COLOR: gray
PHENOCRYSTS: 10c: up to 8% olivine pseudomorphs, 10b: 10% olivine pseudomorphs
GROUNDMASS: 10c: medium grained, 10b: medium grading to coarse grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: 10b: highly altered, 10c: slightly to moderately altered

Hole 392-U1580A-66R Section 2, Top of Section: 511.2 m (CSF-A)



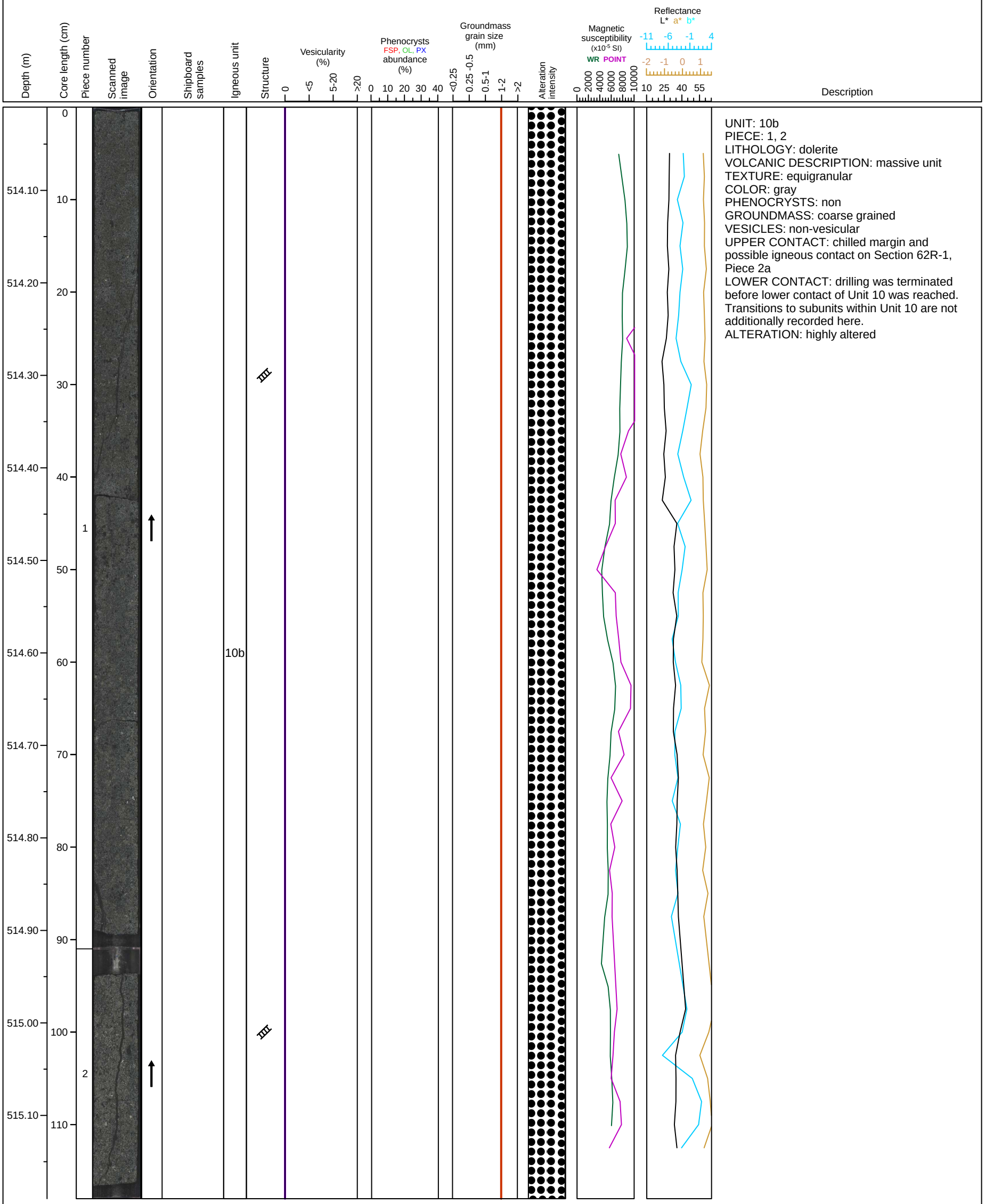
UNIT: 10b
PIECE: 1, 2, 3, 4
LITHOLOGY: dolerite
VOLCANIC DESCRIPTION: massive unit
TEXTURE: equigranular
COLOR: gray
PHENOCRYSTS: non
GROUNDMASS: coarse grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: highly altered

Hole 392-U1580A-66R Section 3, Top of Section: 512.71 m (CSF-A)



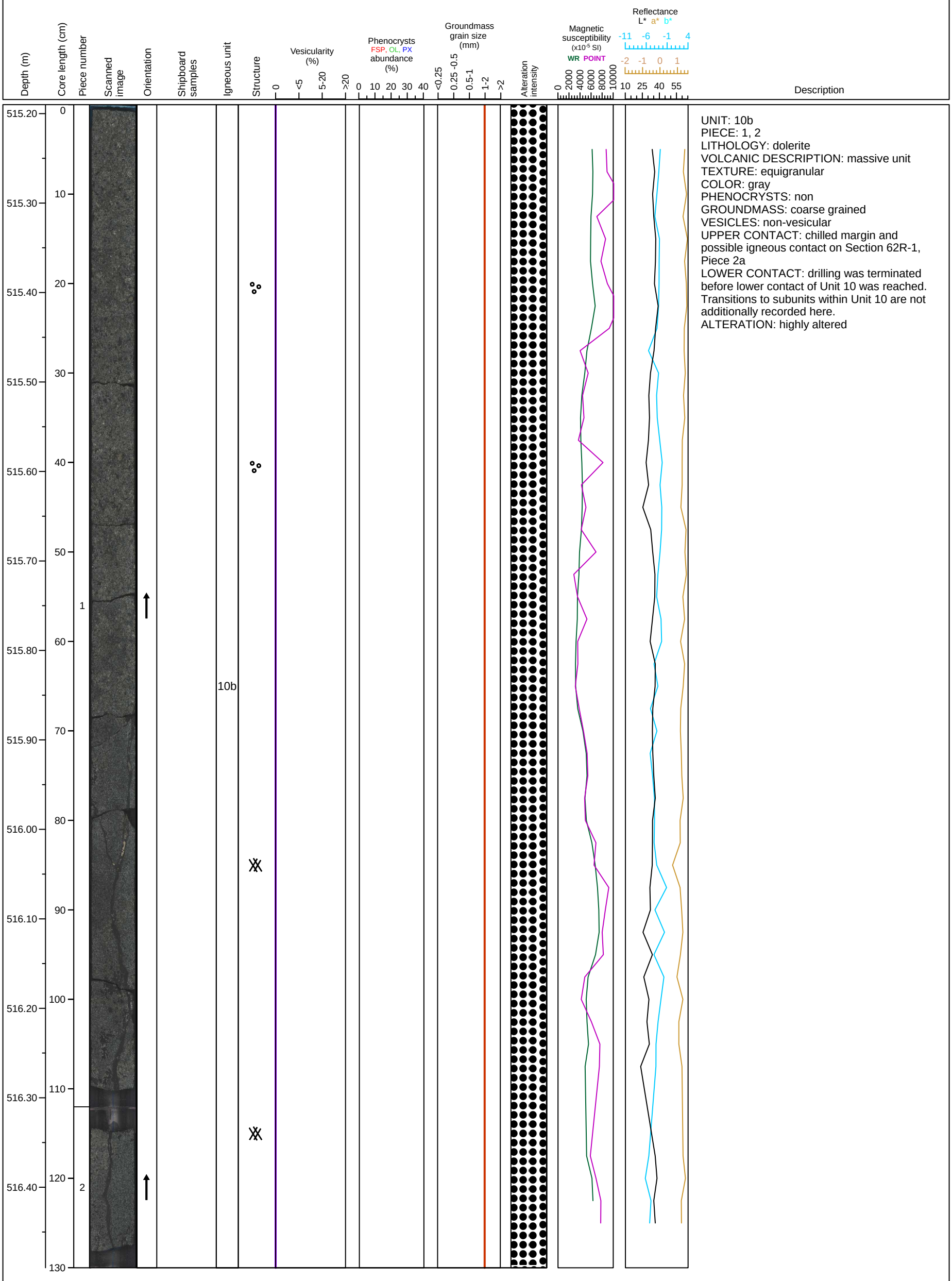
UNIT: 10b
PIECE: 1, 2, 3
LITHOLOGY: dolerite
VOLCANIC DESCRIPTION: massive unit
TEXTURE: equigranular
COLOR: gray
PHENOCRYSTS: non
GROUNDMASS: coarse grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: highly altered

Hole 392-U1580A-66R Section 4, Top of Section: 514.01 m (CSF-A)

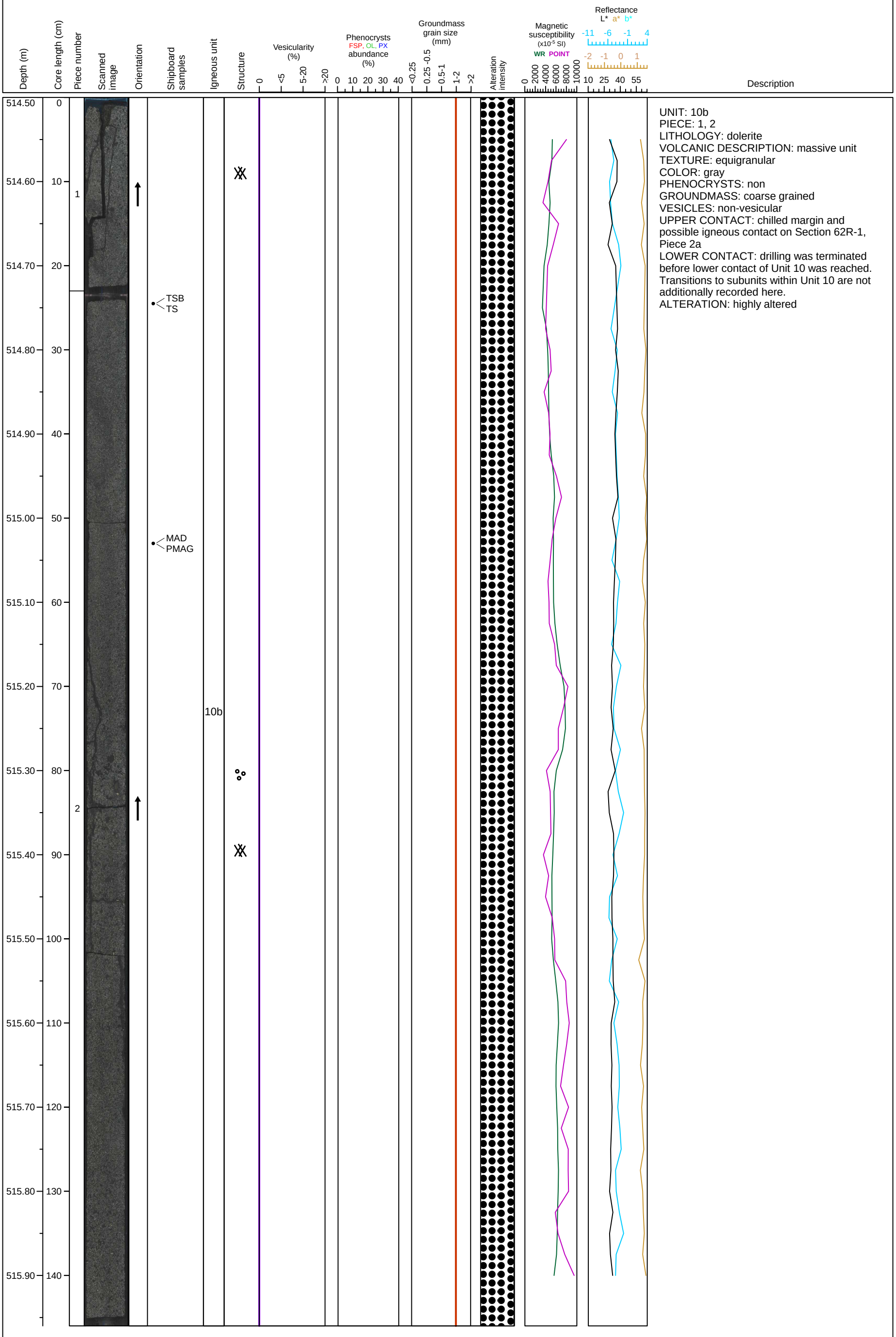


UNIT: 10b
PIECE: 1, 2
LITHOLOGY: dolerite
VOLCANIC DESCRIPTION: massive unit
TEXTURE: equigranular
COLOR: gray
PHENOCRYSTS: non
GROUNDMASS: coarse grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: highly altered

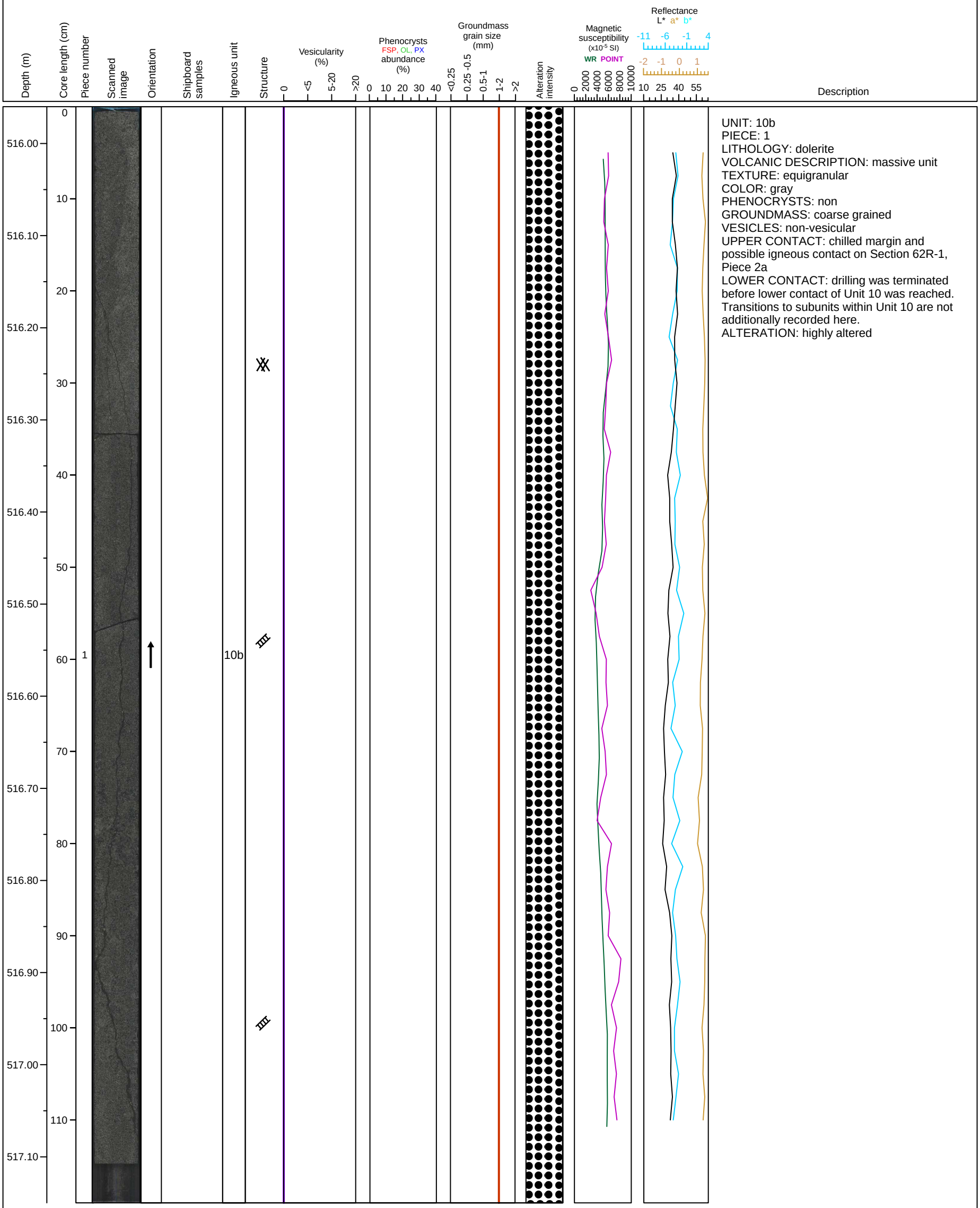
Hole 392-U1580A-66R Section 5, Top of Section: 515.19 m (CSF-A)



Hole 392-U1580A-67R Section 1, Top of Section: 514.5 m (CSF-A)

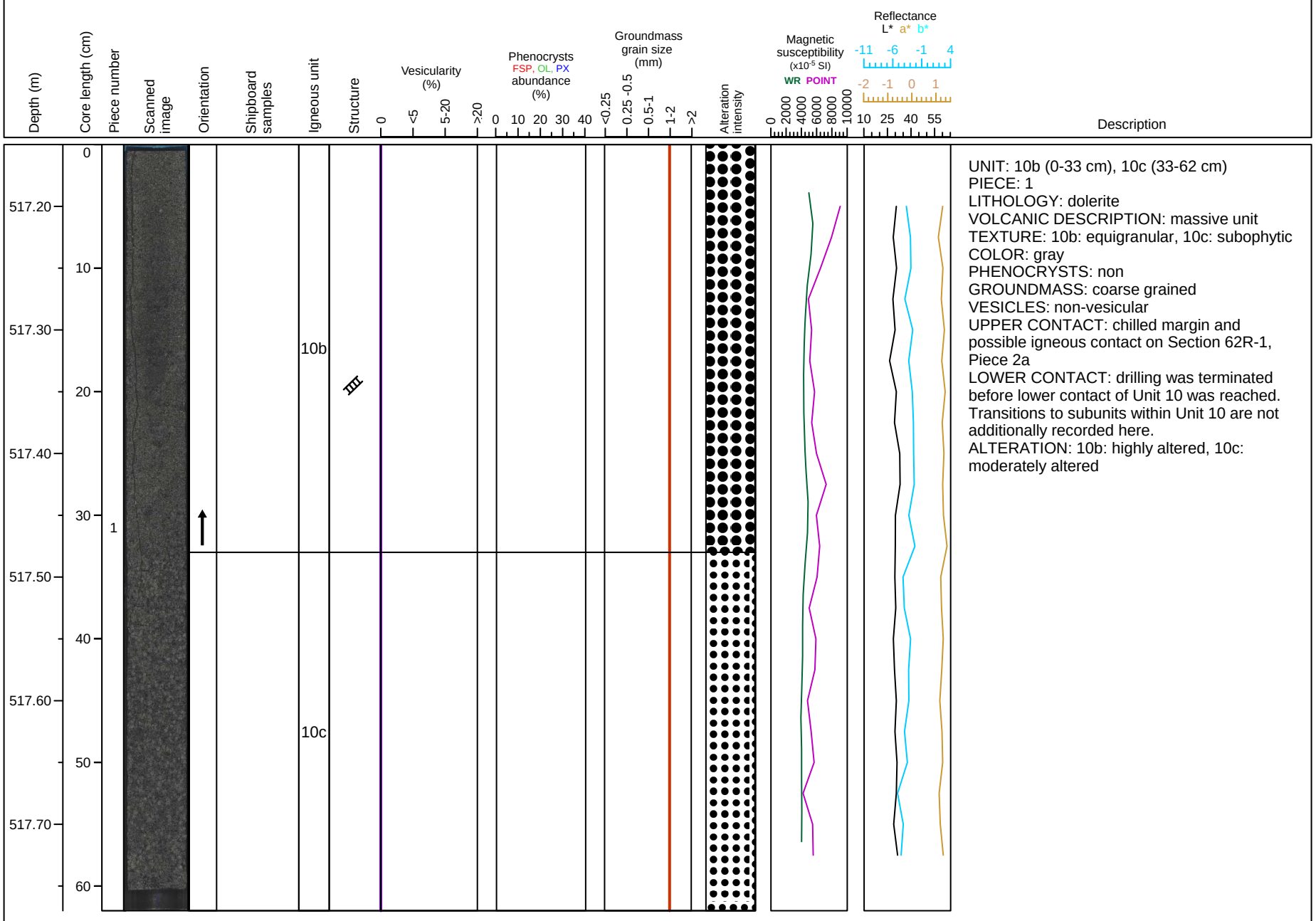


Hole 392-U1580A-67R Section 2, Top of Section: 515.96 m (CSF-A)



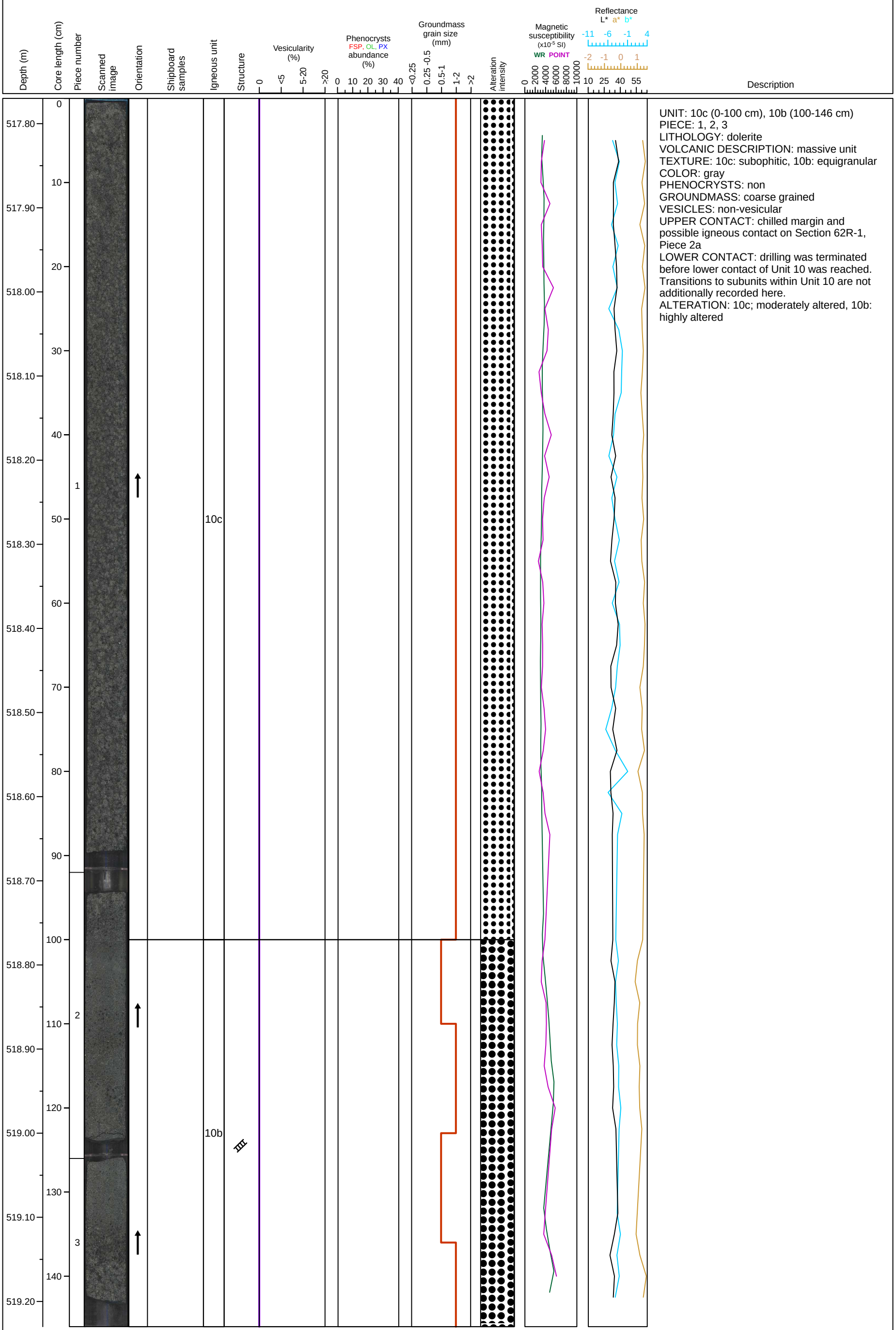
UNIT: 10b
PIECE: 1
LITHOLOGY: dolerite
VOLCANIC DESCRIPTION: massive unit
TEXTURE: equigranular
COLOR: gray
PHENOCRYSTS: non
GROUNDMASS: coarse grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: highly altered

Hole 392-U1580A-67R Section 3, Top of Section: 517.15 m (CSF-A)



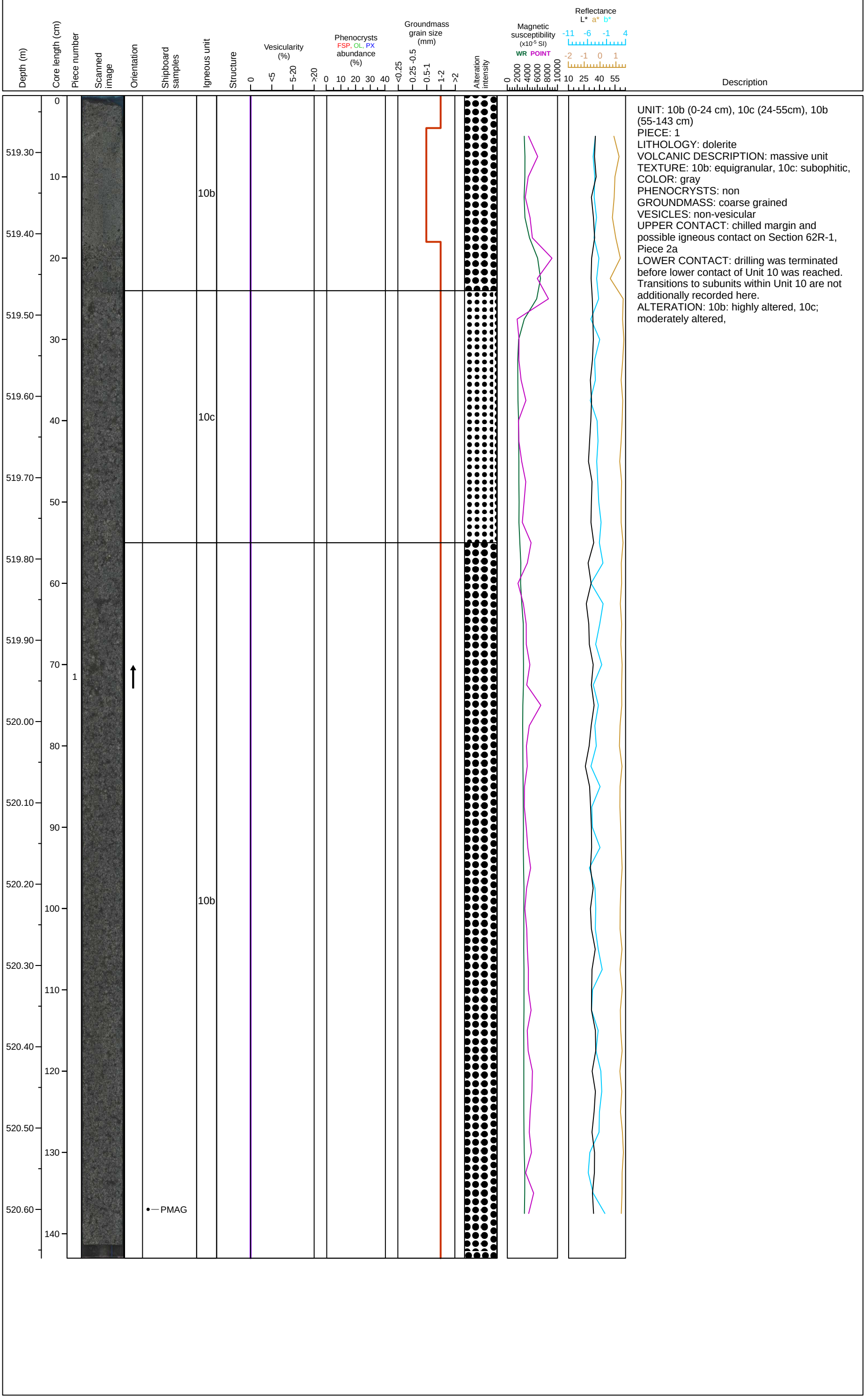
UNIT: 10b (0-33 cm), 10c (33-62 cm)
PIECE: 1
LITHOLOGY: dolerite
VOLCANIC DESCRIPTION: massive unit
TEXTURE: 10b: equigranular, 10c: subophytic
COLOR: gray
PHENOCRYSTS: non
GROUNDMASS: coarse grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: 10b: highly altered, 10c: moderately altered

Hole 392-U1580A-67R Section 4, Top of Section: 517.77 m (CSF-A)



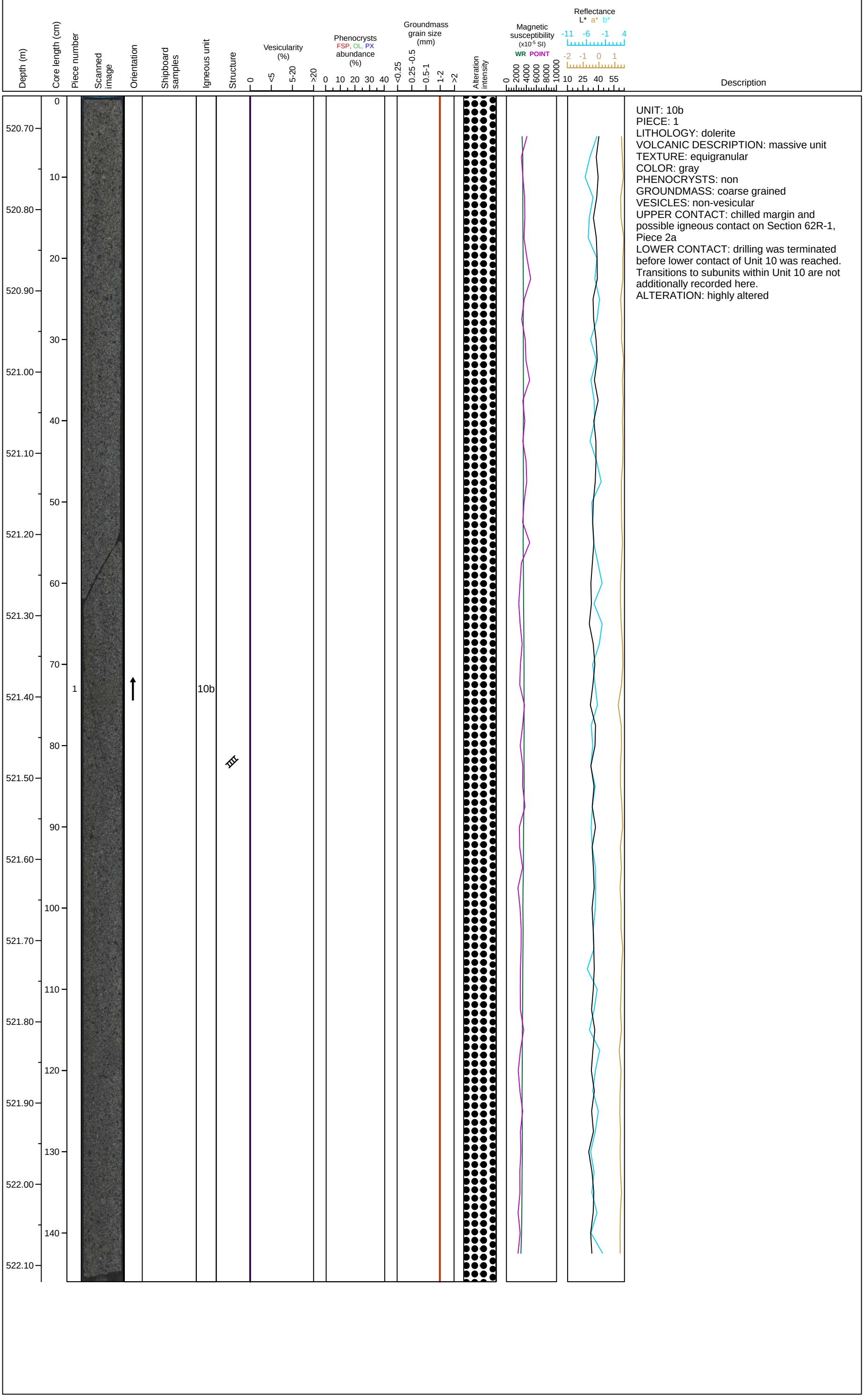
UNIT: 10c (0-100 cm), 10b (100-146 cm)
PIECE: 1, 2, 3
LITHOLOGY: dolerite
VOLCANIC DESCRIPTION: massive unit
TEXTURE: 10c: subophitic, 10b: equigranular
COLOR: gray
PHENOCRYSTS: non
GROUNDMASS: coarse grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: 10c; moderately altered, 10b: highly altered

Hole 392-U1580A-67R Section 5, Top of Section: 519.23 m (CSF-A)

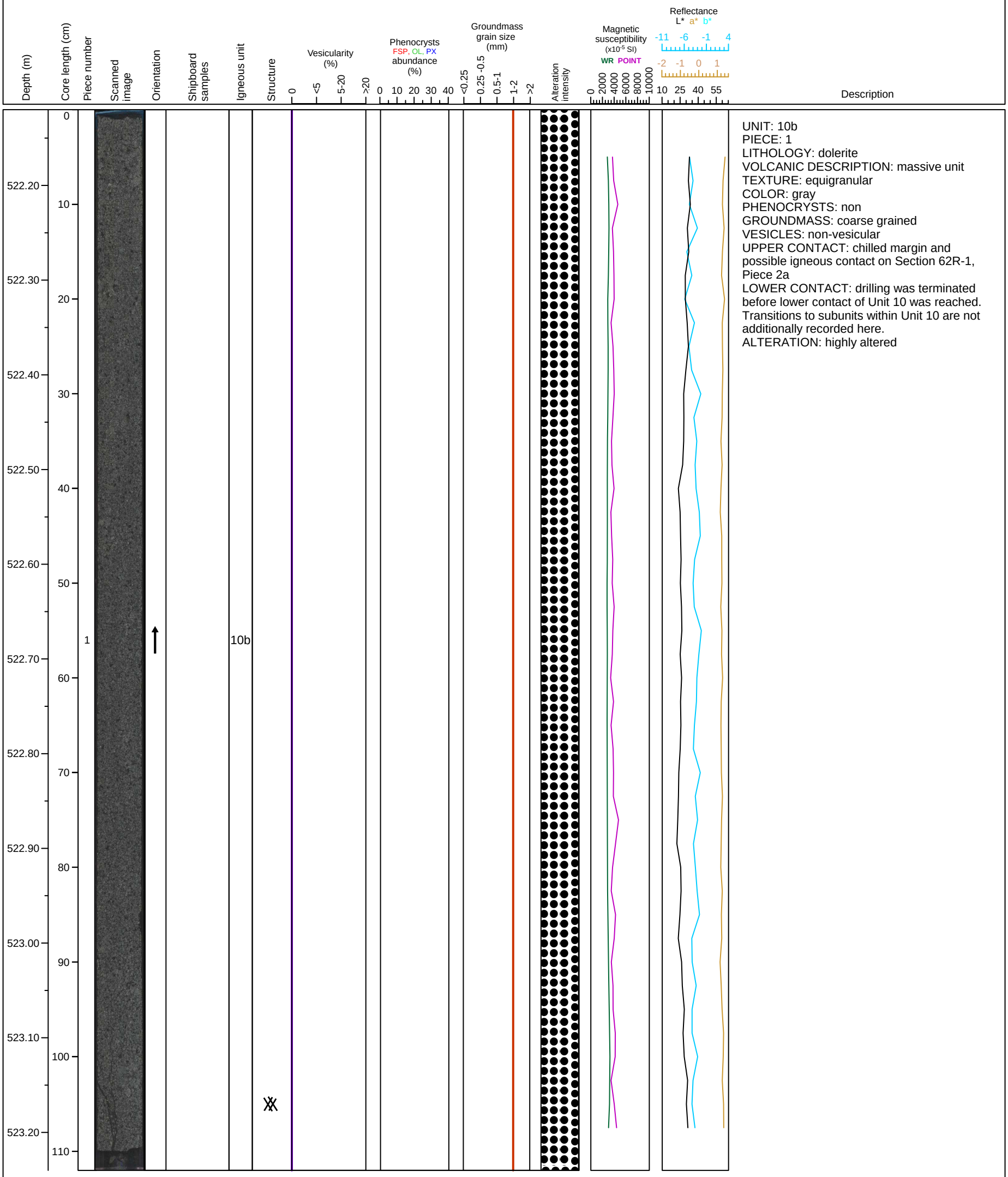


UNIT: 10b (0-24 cm), 10c (24-55cm), 10b (55-143 cm)
PIECE: 1
LITHOLOGY: dolerite
VOLCANIC DESCRIPTION: massive unit
TEXTURE: 10b: equigranular, 10c: subophitic,
COLOR: gray
PHENOCRYSTS: non
GROUNDMASS: coarse grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: 10b: highly altered, 10c; moderately altered,

Hole 392-U1580A-67R Section 6, Top of Section: 520.66 m (CSF-A)

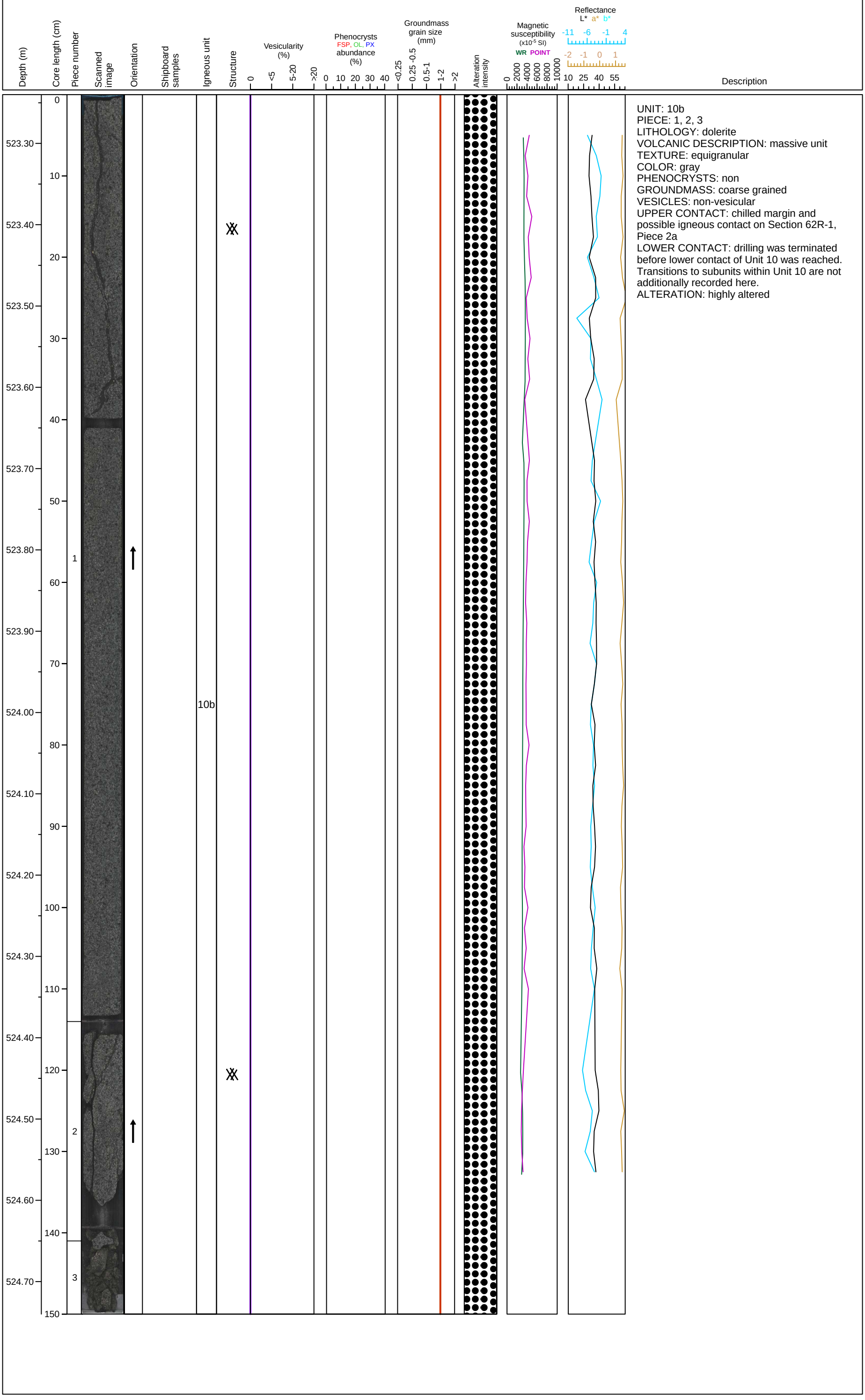


Hole 392-U1580A-67R Section 7, Top of Section: 522.12 m (CSF-A)



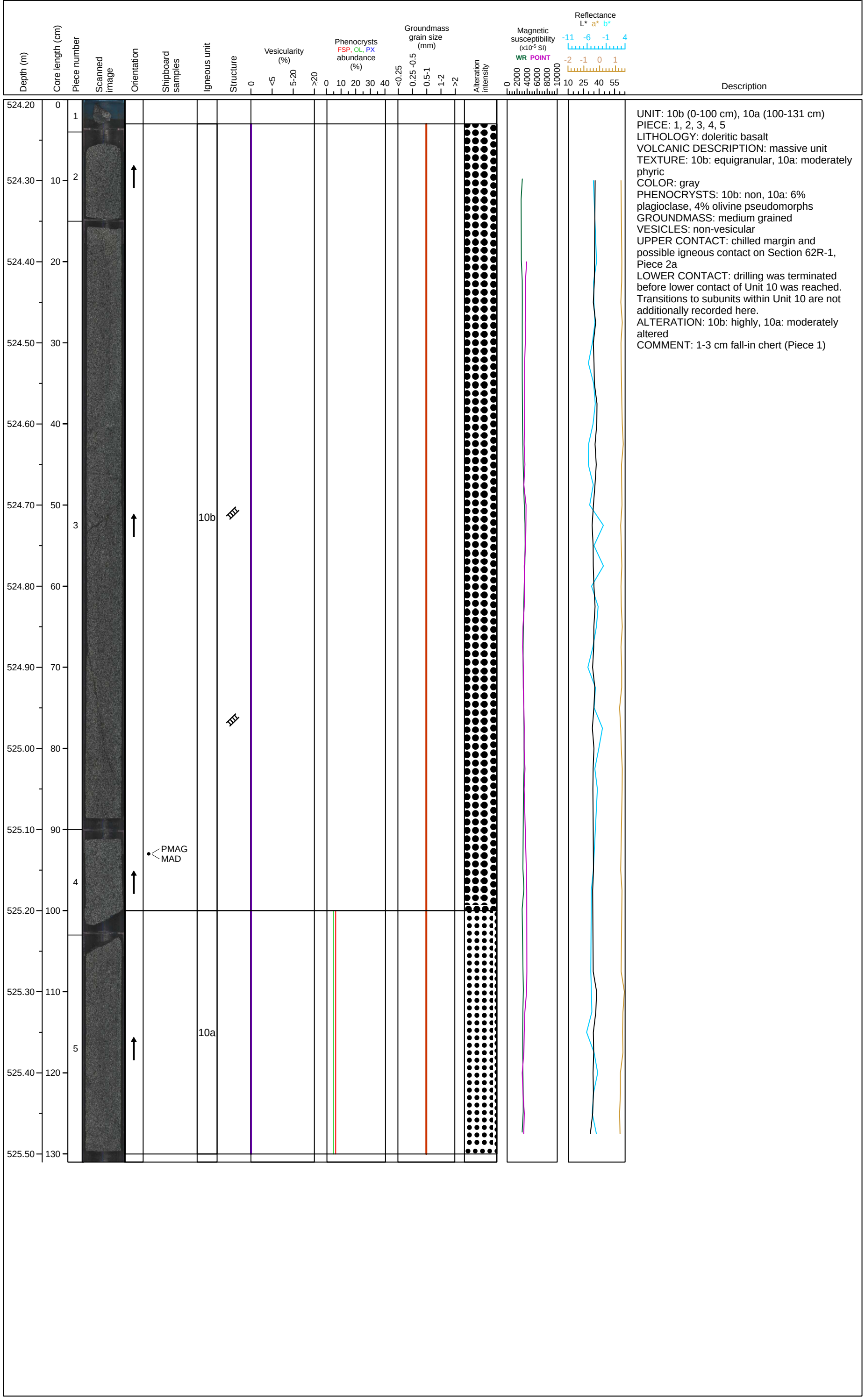
UNIT: 10b
PIECE: 1
LITHOLOGY: dolerite
VOLCANIC DESCRIPTION: massive unit
TEXTURE: equigranular
COLOR: gray
PHENOCRYSTS: non
GROUNDMASS: coarse grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: highly altered

Hole 392-U1580A-67R Section 8, Top of Section: 523.24 m (CSF-A)



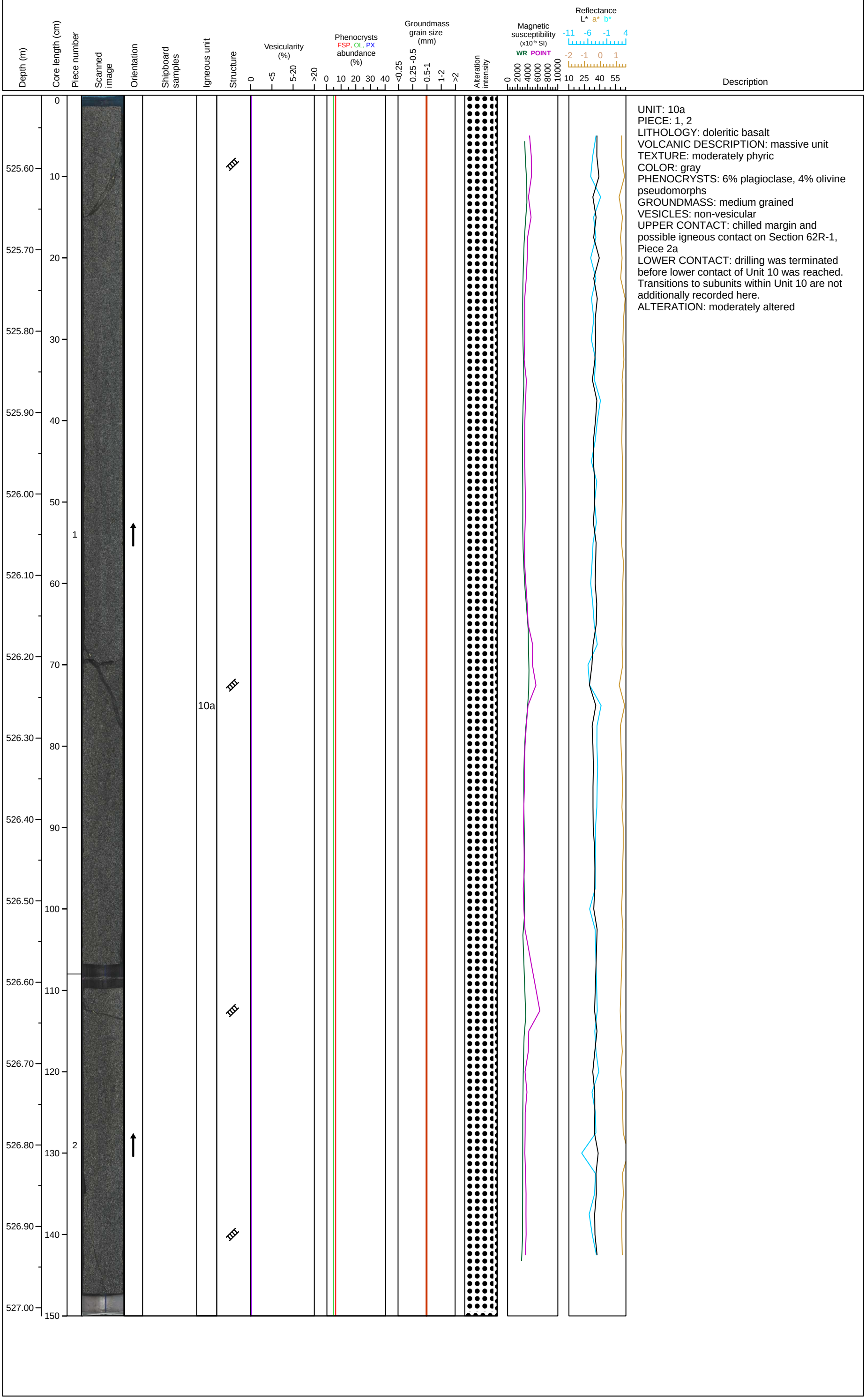
UNIT: 10b
PIECE: 1, 2, 3
LITHOLOGY: dolerite
VOLCANIC DESCRIPTION: massive unit
TEXTURE: equigranular
COLOR: gray
PHENOCRYSTS: non
GROUNDMASS: coarse grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: highly altered

Hole 392-U1580A-68R Section 1, Top of Section: 524.2 m (CSF-A)



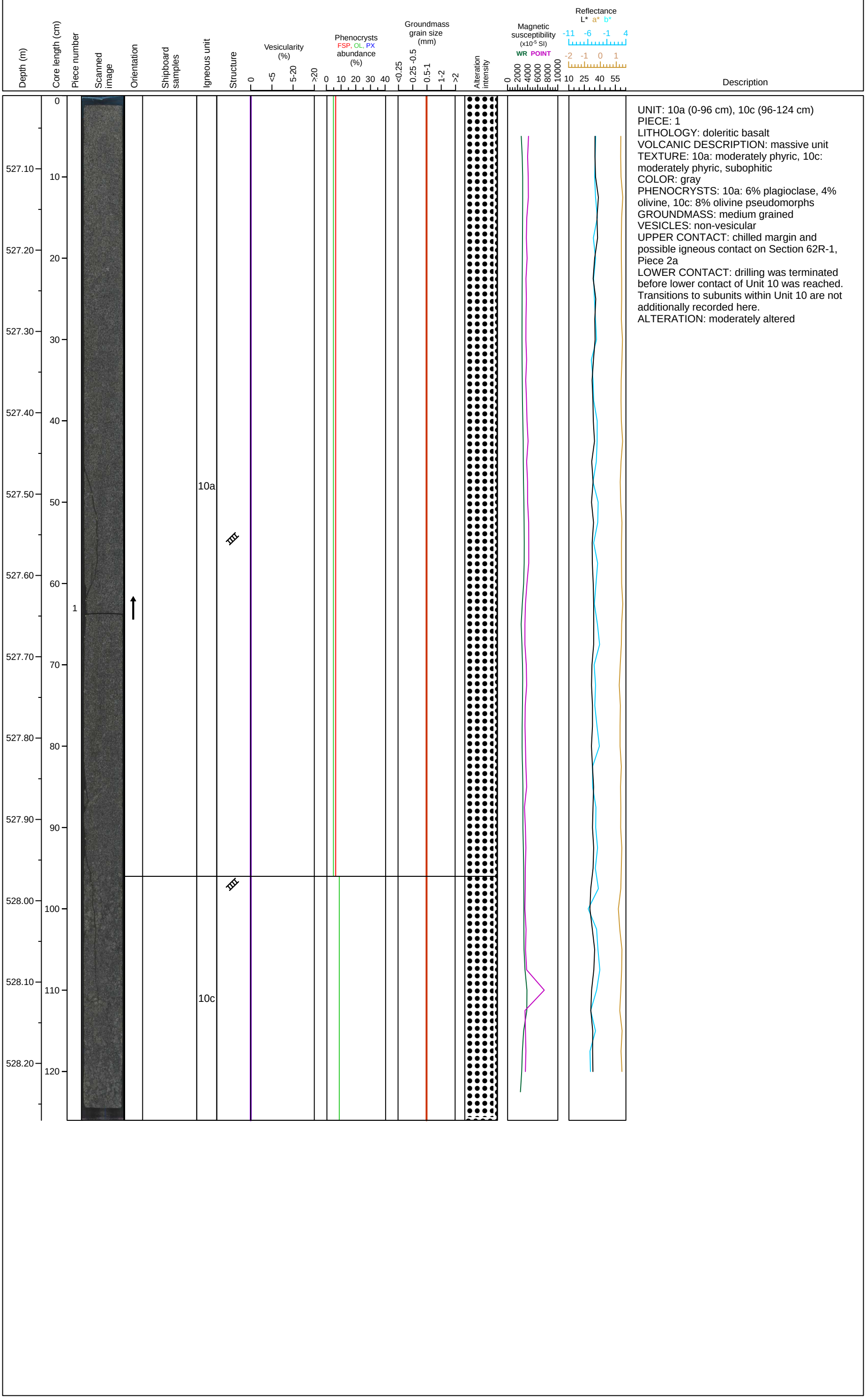
UNIT: 10b (0-100 cm), 10a (100-131 cm)
PIECE: 1, 2, 3, 4, 5
LITHOLOGY: doleritic basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: 10b: equigranular, 10a: moderately phyric
COLOR: gray
PHENOCRYSTS: 10b: non, 10a: 6% plagioclase, 4% olivine pseudomorphs
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: 10b: highly, 10a: moderately altered
COMMENT: 1-3 cm fall-in chert (Piece 1)

Hole 392-U1580A-68R Section 2, Top of Section: 525.51 m (CSF-A)



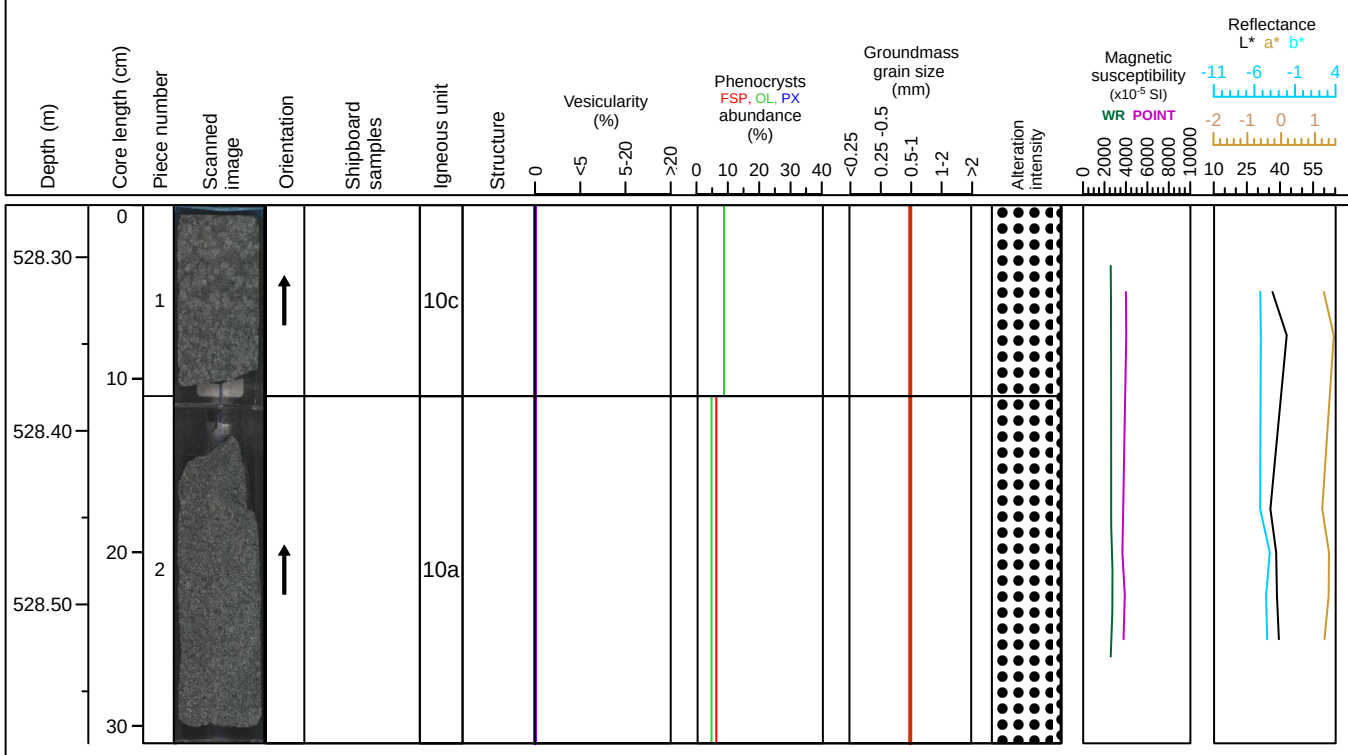
UNIT: 10a
PIECE: 1, 2
LITHOLOGY: doleritic basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: moderately phyric
COLOR: gray
PHENOCRYSTS: 6% plagioclase, 4% olivine pseudomorphs
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: moderately altered

Hole 392-U1580A-68R Section 3, Top of Section: 527.01 m (CSF-A)



UNIT: 10a (0-96 cm), 10c (96-124 cm)
PIECE: 1
LITHOLOGY: doleritic basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: 10a: moderately phyric, 10c: moderately phyric, subophitic
COLOR: gray
PHENOCRYSTS: 10a: 6% plagioclase, 4% olivine, 10c: 8% olivine pseudomorphs
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached. Transitions to subunits within Unit 10 are not additionally recorded here.
ALTERATION: moderately altered

Hole 392-U1580A-68R Section 4, Top of Section: 528.27 m (CSF-A)

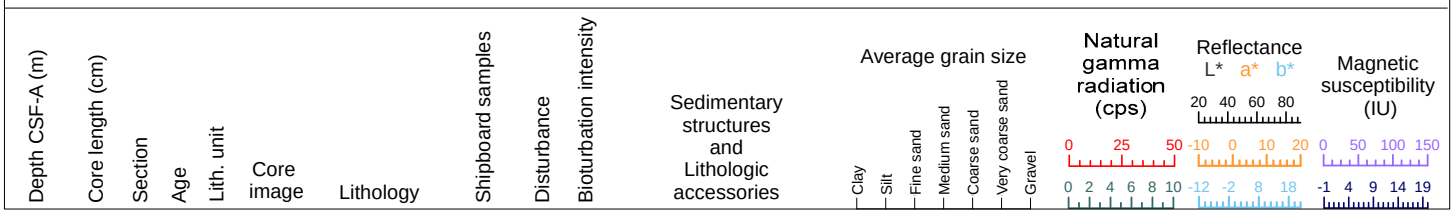


Description

UNIT: 10c (0-11 cm), 10a (11-31 cm)
PIECE: 1, 2
LITHOLOGY: doleritic basalt
VOLCANIC DESCRIPTION: massive unit
TEXTURE: 10c: moderately phyric, subophitic, 10a: moderately phyric
COLOR: gray
PHENOCRYSTS: 10c: 8% olivine pseudomorphs, 10a: 6% plagioclase, 4% olivine,
GROUNDMASS: medium grained
VESICLES: non-vesicular
UPPER CONTACT: chilled margin and possible igneous contact on Section 62R-1, Piece 2a
LOWER CONTACT: drilling was terminated before lower contact of Unit 10 was reached.
ALTERATION: moderately altered
COMMENT: drilling terminated in this hole at 528.58 m CSFA

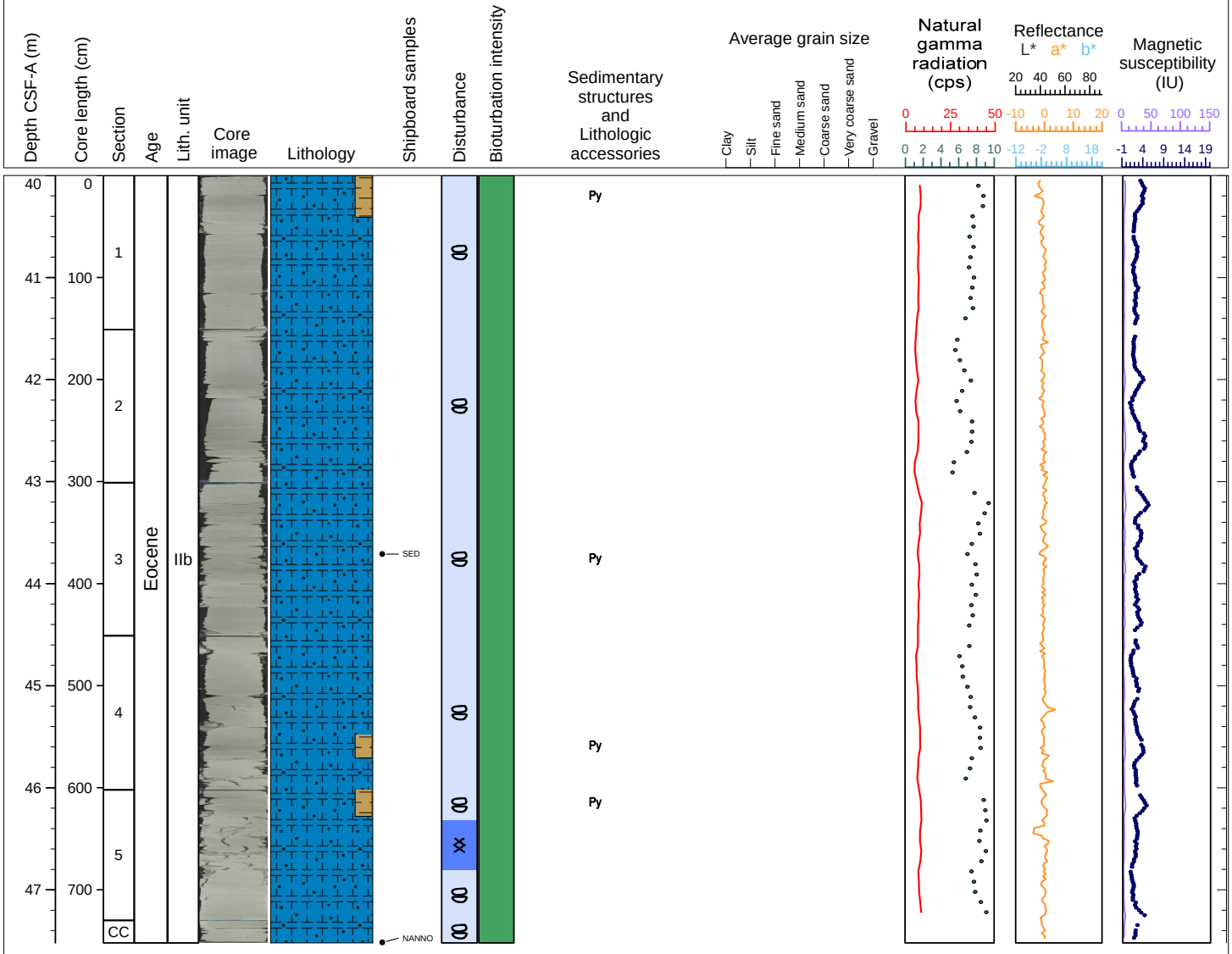
Hole 392-U1580B Core 11, Interval 0.0-0.0 m (CSF-A)

DRILLED INTERVAL 0-40 m



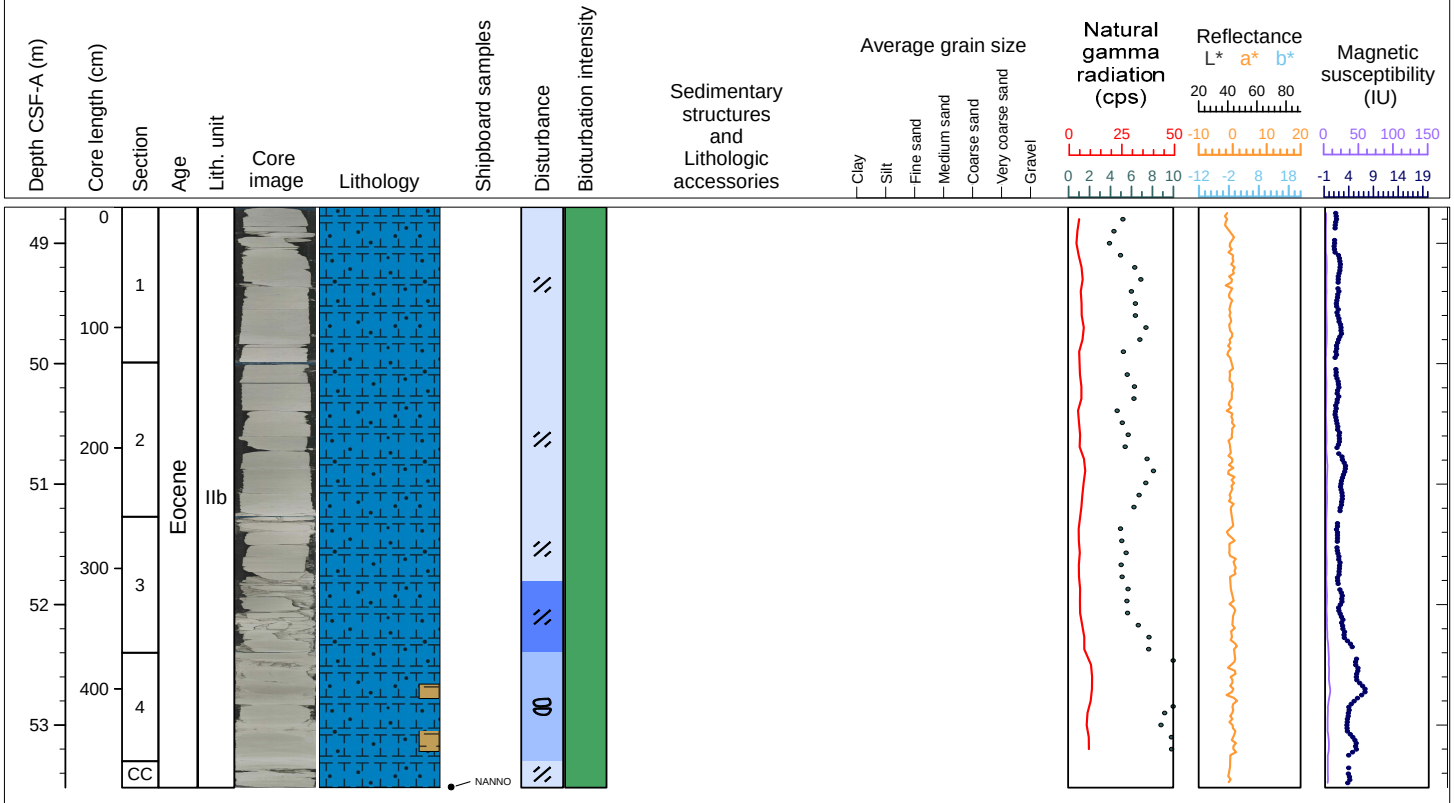
Hole 392-U1580B Core 2R, Interval 40.0-47.52 m (CSF-A)

Core U1580B-2R consists of light greenish gray nannofossil chalk with decimeter-scale intervals of subtly darker light greenish gray nannofossil chalk with clay. Bioturbation is moderate throughout and is more apparent in the clayey intervals. Small specks of pyrite occur throughout, and two circular gray patches of disseminated pyrite occur in Section 3. The entire core is slightly disturbed by biscuit-type drilling disturbance, and Section 4 is severely pulverized.



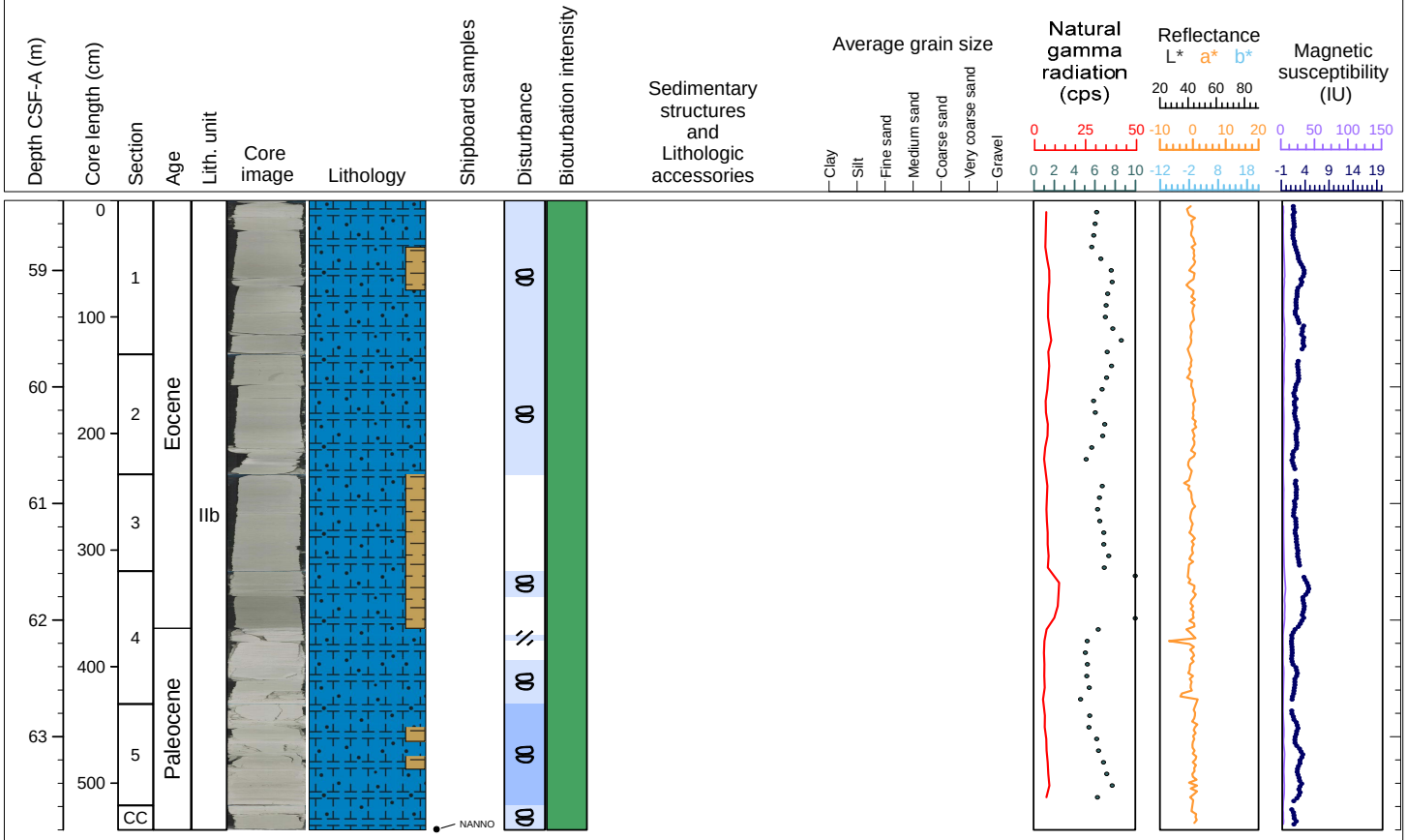
Hole 392-U1580B Core 3R, Interval 48.7-53.52 m (CSF-A)

Core U1580B-3R consists of light greenish gray nannofossil chalk with two decimeter-scale intervals of subtly darker light greenish gray nannofossil chalk with clay in Section 4. Bioturbation is moderate throughout, and is more apparent in the clayey intervals. Small flecks of pyrite occur throughout. The entire core is slightly fractured to moderately fractured and Section 4 is severely biscuited.



Hole 392-U1580B Core 4R, Interval 58.4-63.8 m (CSF-A)

Core U1580B-4R consists of light greenish gray nannofossil chalk with a prominent interval of greenish gray nannofossil chalk with clay in Section 4. A ~30 cm interval in Section 4, 51-80 cm, is lighter in color than the background light greenish gray. Section 4 is also moderately bioturbated, with prominent burrows of darker material in the white sediment. The entire core is slightly to moderately fractured by drilling.



Hole 392-U1580B Core 5R, Interval 68.1-74.14 m (CSF-A)

Core U1580B-5R consists of massive light greenish gray nannofossil chalk with clay and white intervals of nannofossil chalk in Sections 1 (0-6, 14-41, 68-96 cm) and 2 (36-57 cm). The entire core is moderately bioturbated, with prominent Zoophycos burrows in Sections 1 (4-25 cm) and 2 (41-65 cm). Some smaller Zoophycos burrows also occur in Section 4, 105-132 cm. Pyrite specks are present throughout, and a small patch of pyrite is present in Section 3, 42 cm. The entire core is slightly to moderately fractured and biscuited by drilling.