INL Lithologic Core Storage Library
Idaho National Laboratory
Building CFA-663
Operated by the U.S. Geological Survey for the U.S. Department of Energy

Contact:
Linda C. Davis
PO Box 8072
Pocatello, ID.
83209

Official Name: USGS 105

Logged By: M. K. V. Hodges

Selected Aliases: None

USGS Site ID: 432703113001801
Contractor Well ID: N/A

Drilling Agency: U. S. Geological Survey
Year Drilled: 2008
Names of Drillers: M. Gilbert, J. Blom
Well Status: complete
Total Depth of Hole (ft): 1,409.0

Total Core Recovered (ft): 608.0 ft
Beginning Depth (ft): 801.0 ft
Ending Depth (ft): 1,409.0 ft
[x] Continuous Recovery
[ ] Selected Intervals Recovered

County & State: Butte Co., ID
Quadrangle Name: Big Southern Butte
Lat / Lng: Latitude 43°27'03.40", Longitude 113°00'17.78"
Tns / Rng / Sec: 02N 29E 33DCC1
UTM Coordinates: 337774.425 4812630.286
Surface Elevation (ft): 5,095.12 ft

Notes: Enter notes here

Core Geological Profile

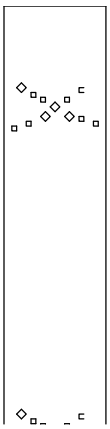
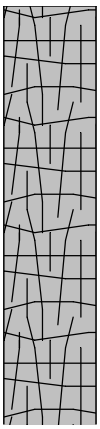
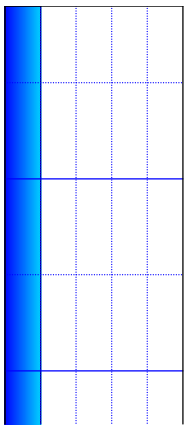
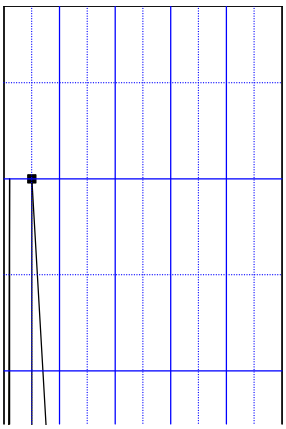
Lithologic Patterns
- Basalts
- Rhyolites
- Sedimentary Rock

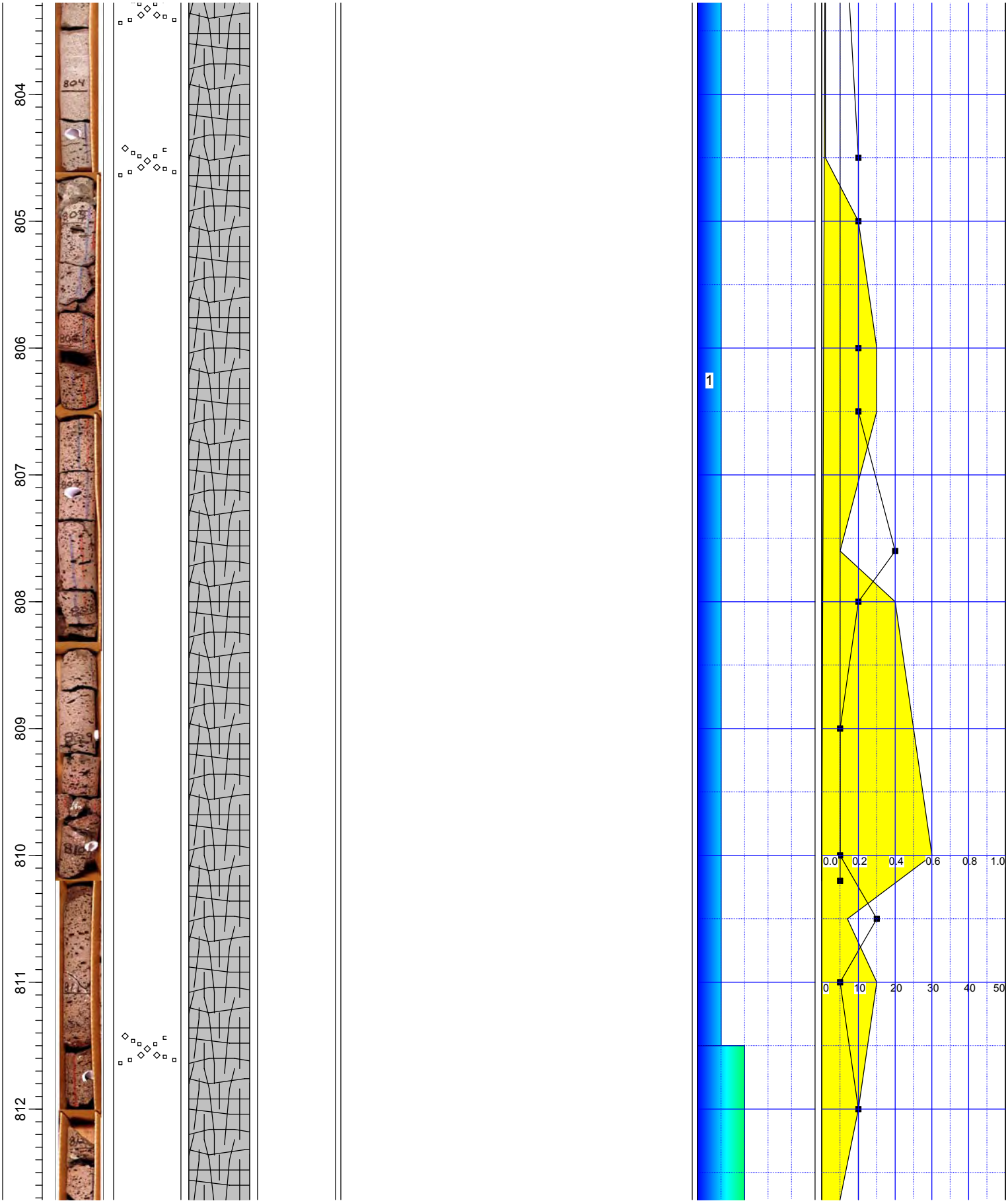
Soil Patterns (See Unified Soil Classification System.)
- Gravels - clean
- Gravels with fines
- Sands - clean
- Sands with fines
- Silts and clays

Intervals in Absentia
- Surficial material
- Natural void
- Interval not cored
- Missing interval

Igneous and Sedimentary Structure Symbols
- Vesicle zone
- Large vesicles
- Vesicle planes
- Mega vesicles
- Vesicle Cylinders
- Pipe vesicles
- Pillows
- Vesicle Sheet
- Flow/Mold
- Spatter feature
- Ripple marks
- Mud cracks
- Imbricated bedding
- Graded bedding
- Cross bedding

Soil Structure Symbols
- Structureless - Single Grained
- Structureless - Massive
- Platy
- Granular
- Blocky
- Prismatic
- Columnar

Depth (feet & tenths)	Core Photo	Igneous, Soil and Sed Structures	Lithology	Description: Miscellaneous Text	Description: Lithologic Description	Fracture Frequency (See fracture classification on website.) 0 1 2 3 4 5	Vesicle Characteristics: Mean Size (in) 0 0.2 0.4 0.6 0.8 1.0; Volume Percentage 0 10 20 30 40 50
802					BASALT: COLOR: N4 medium dark gray to 805.8 ft, where it changes to 10 R 4/2 grayish red, then grades to N4 medium dark gray by 813.4 ft TEXTURE: Aphanitic, diktytaxitic to 804.5 ft, increasingly vesicular to base. Flow texture at 809.6 ft. COMPOSITION: 60% red or gray groundmass, 35% white euhedral plagioclase microphenocrysts, 4% subhedral to anhedral green olivine, trace tiny black pyroxene XENOLITHS: None noted ALTERATION: Reddish film on surfaces at 805.7 ft, and 811.4, and at base, sparry calcite in fractures and vesicles from 809.7 to 812.5 ft		
803							


804
805
806
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809
810
811
812
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0.8
1.0
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10
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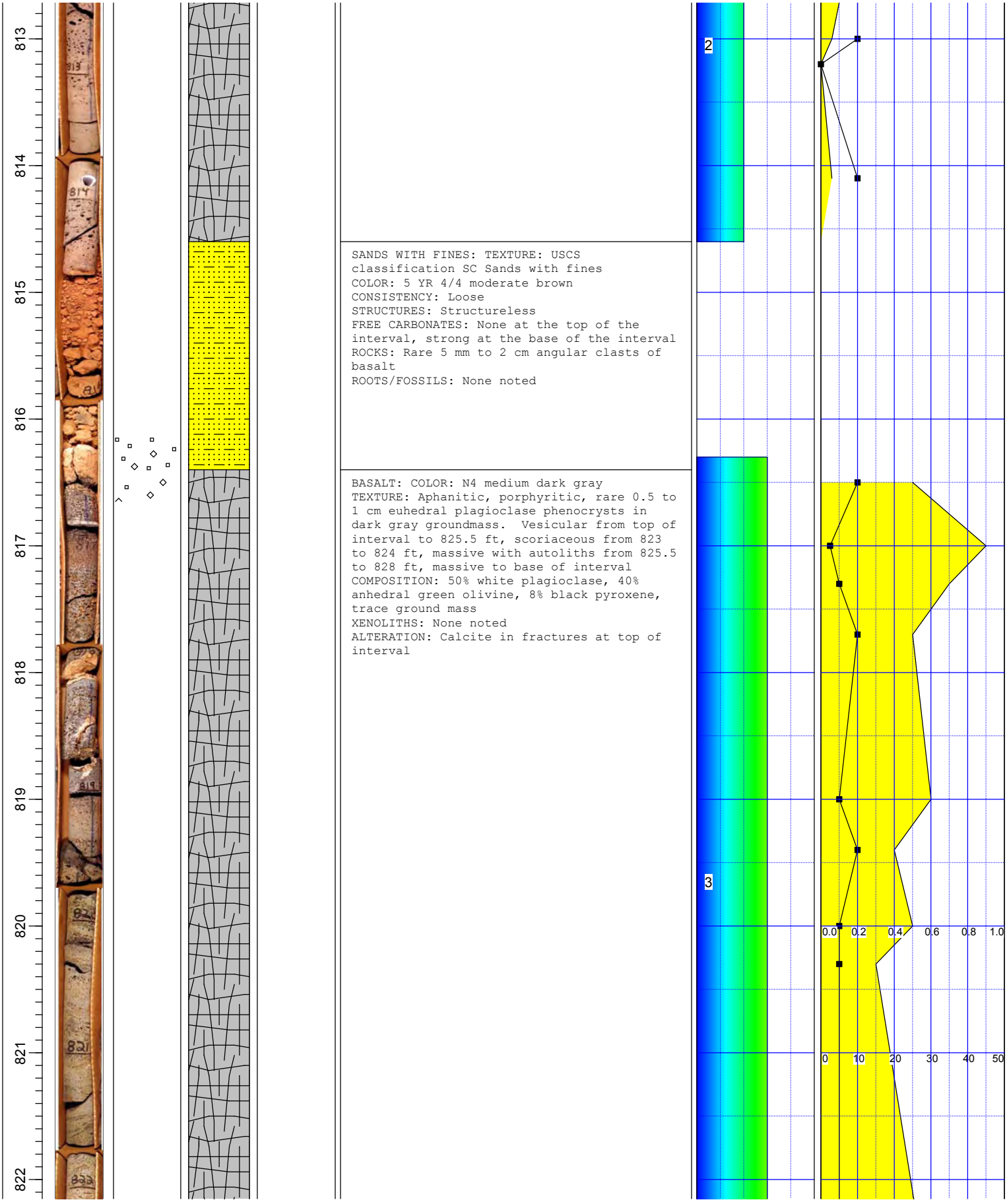
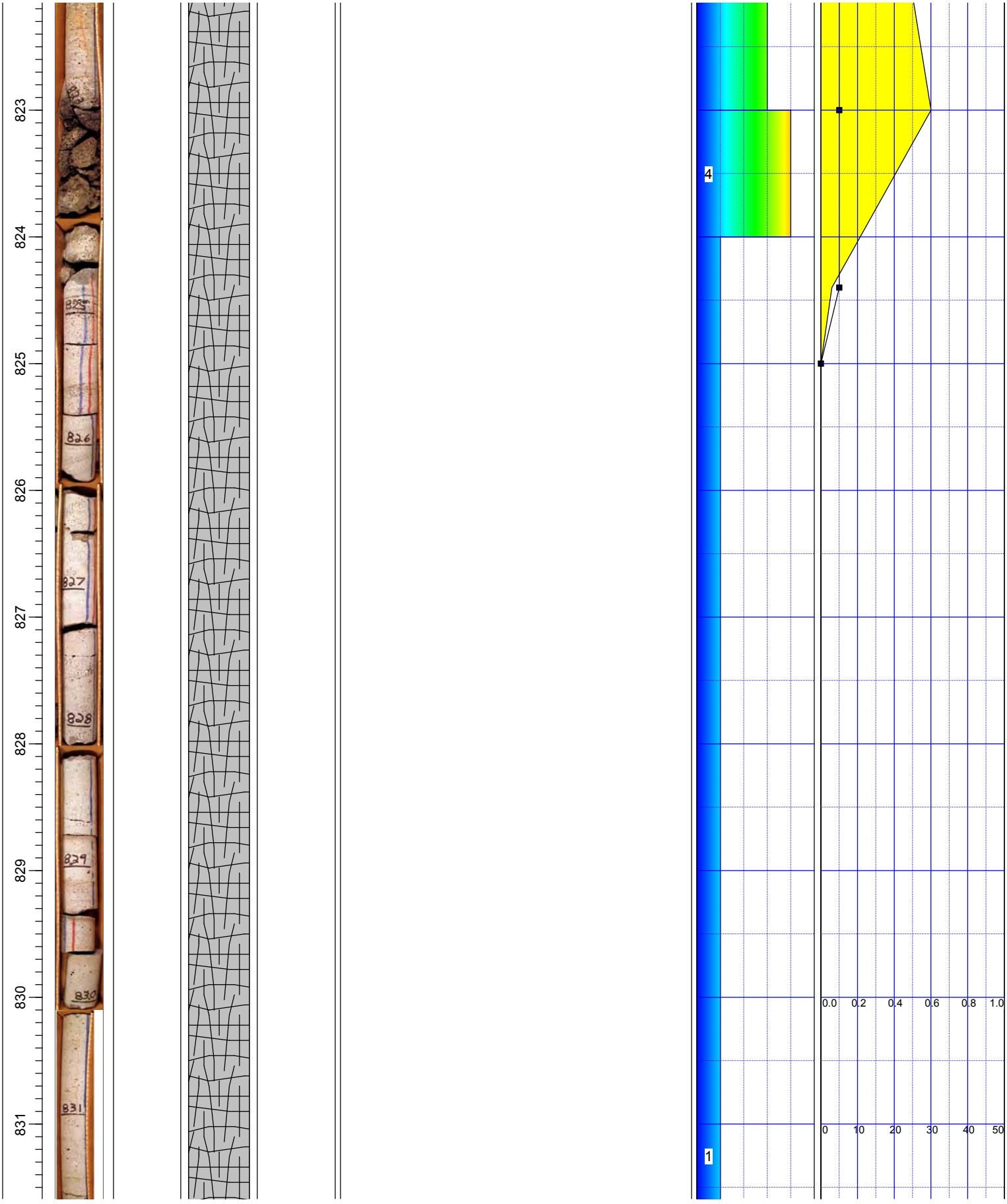
30
40
50



SANDS WITH FINES: TEXTURE: USCS classification SC Sands with fines
COLOR: 5 YR 4/4 moderate brown
CONSISTENCY: Loose
STRUCTURES: Structureless
FREE CARBONATES: None at the top of the interval, strong at the base of the interval
ROCKS: Rare 5 mm to 2 cm angular clasts of basalt
ROOTS/FOSSILS: None noted

BASALT: COLOR: N4 medium dark gray
TEXTURE: Aphanitic, porphyritic, rare 0.5 to 1 cm euhedral plagioclase phenocrysts in dark gray groundmass. Vesicular from top of interval to 825.5 ft, scoriaceous from 823 to 824 ft, massive with autoliths from 825.5 to 828 ft, massive to base of interval
COMPOSITION: 50% white plagioclase, 40% anhedral green olivine, 8% black pyroxene, trace ground mass
XENOLITHS: None noted
ALTERATION: Calcite in fractures at top of interval


823
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825
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830
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829
830
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0.8
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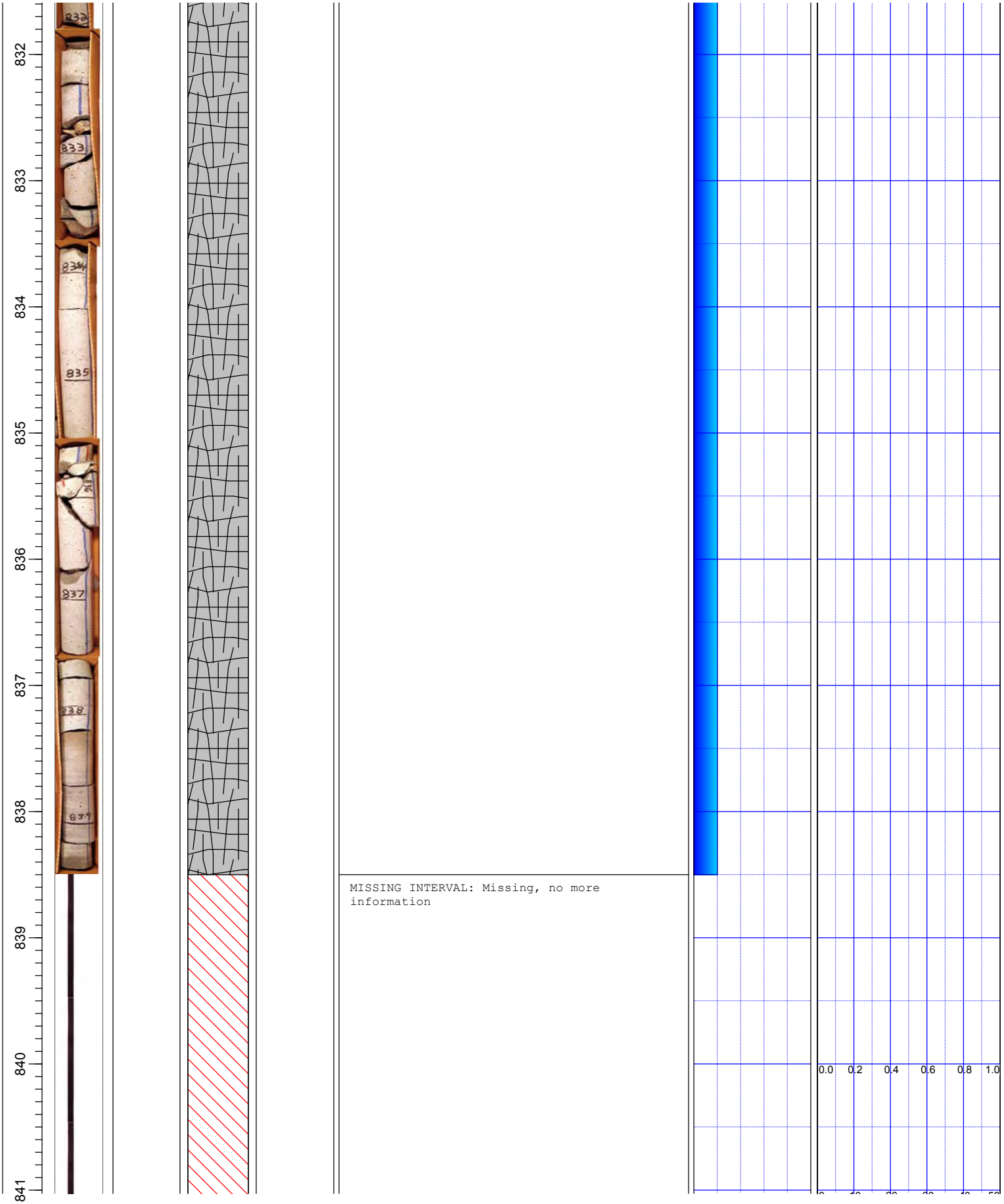
40
50


832
833
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840
841
833
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838
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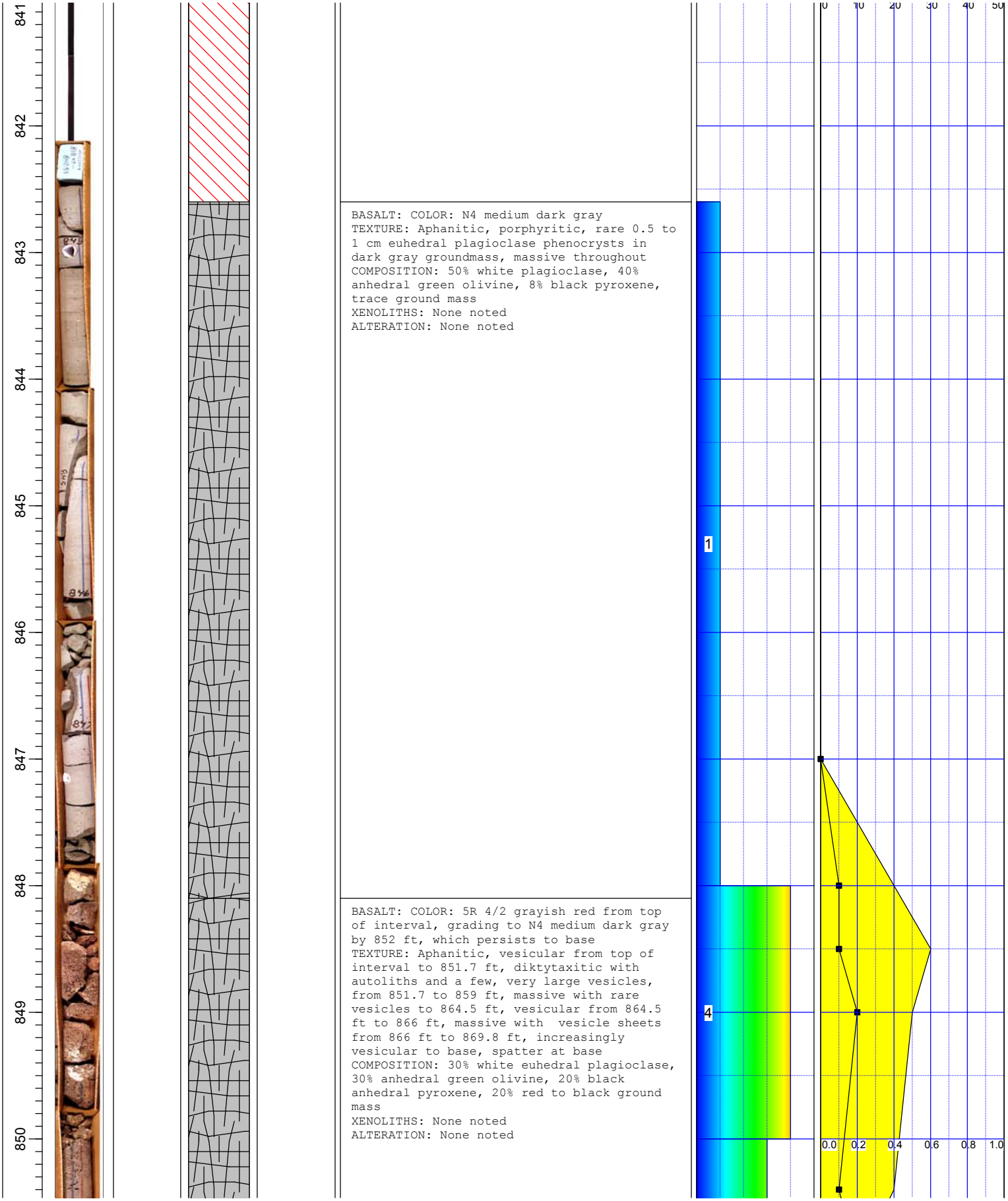
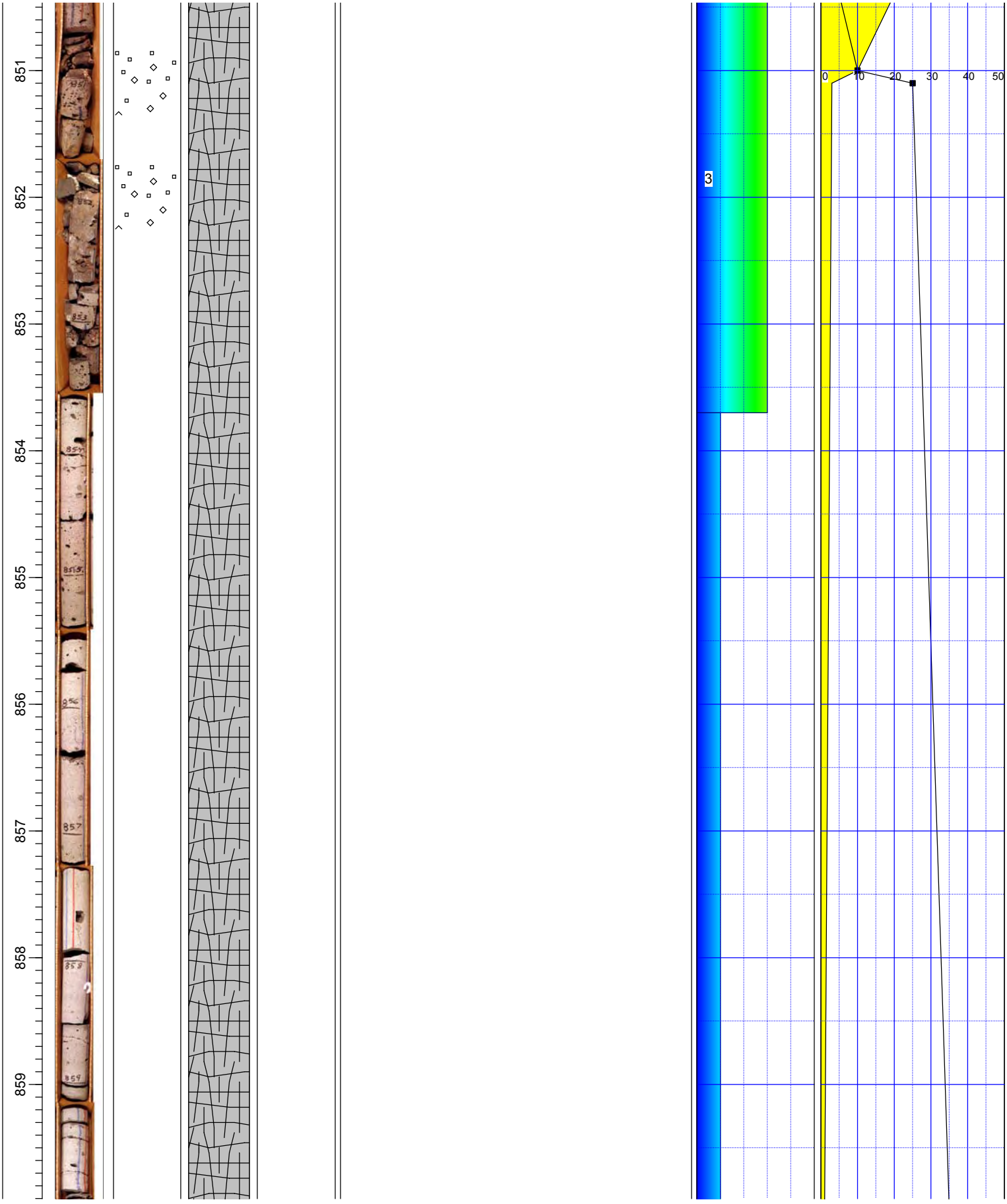
1.0
MISSING INTERVAL: Missing, no more information



BASALT: COLOR: N4 medium dark gray
TEXTURE: Aphanitic, porphyritic, rare 0.5 to 1 cm euhedral plagioclase phenocrysts in dark gray groundmass, massive throughout
COMPOSITION: 50% white plagioclase, 40% anhedral green olivine, 8% black pyroxene, trace ground mass
XENOLITHS: None noted
ALTERATION: None noted

BASALT: COLOR: 5R 4/2 grayish red from top of interval, grading to N4 medium dark gray by 852 ft, which persists to base
TEXTURE: Aphanitic, vesicular from top of interval to 851.7 ft, diktytaxitic with autoliths and a few, very large vesicles, from 851.7 to 859 ft, massive with rare vesicles to 864.5 ft, vesicular from 864.5 ft to 866 ft, massive with vesicle sheets from 866 ft to 869.8 ft, increasingly vesicular to base, spatter at base
COMPOSITION: 30% white euhedral plagioclase, 30% anhedral green olivine, 20% black anhedral pyroxene, 20% red to black ground mass
XENOLITHS: None noted
ALTERATION: None noted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853
854
855
856
857
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859
3
0
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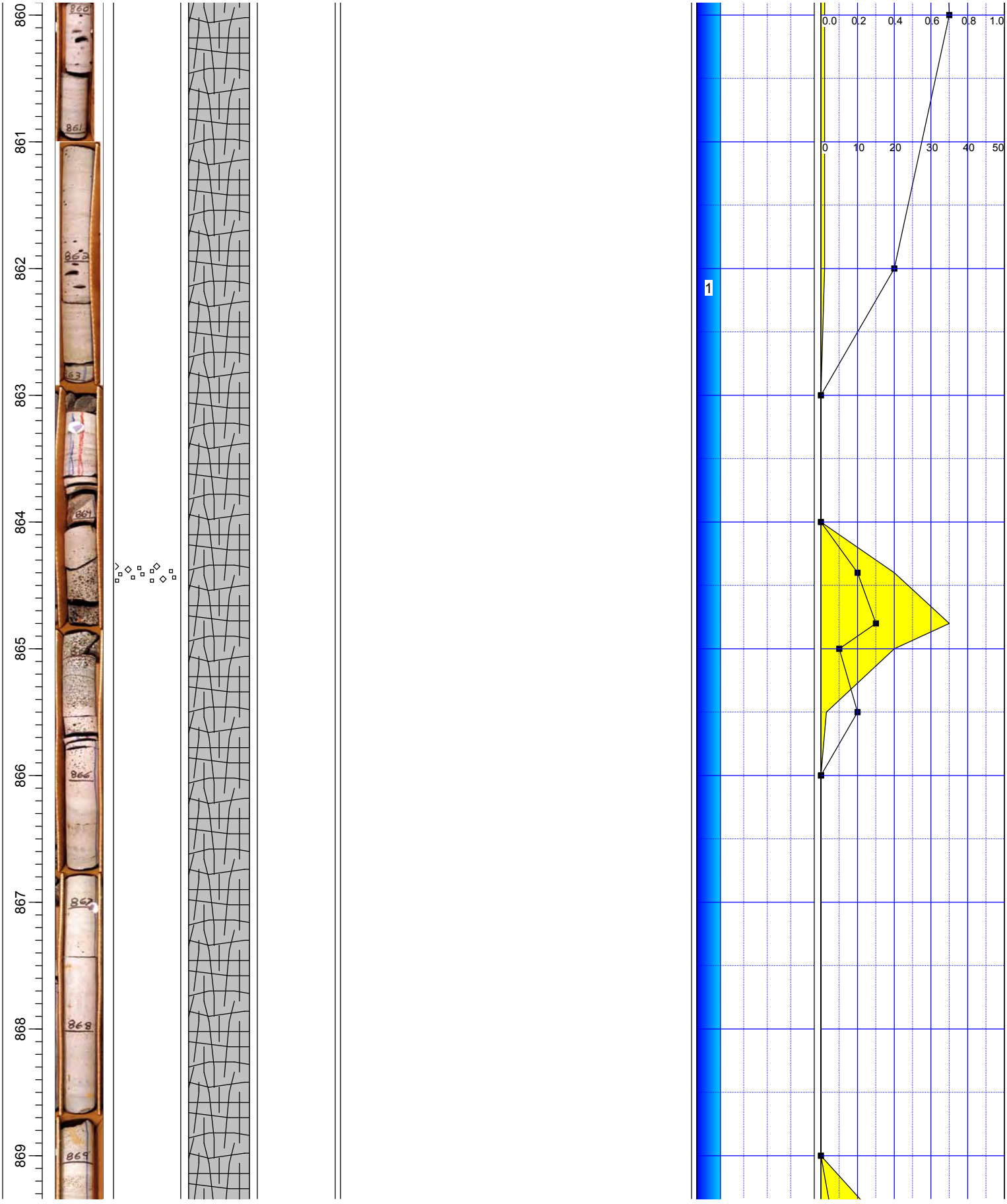
30
40
50


860
861
862
863
864
865
866
867
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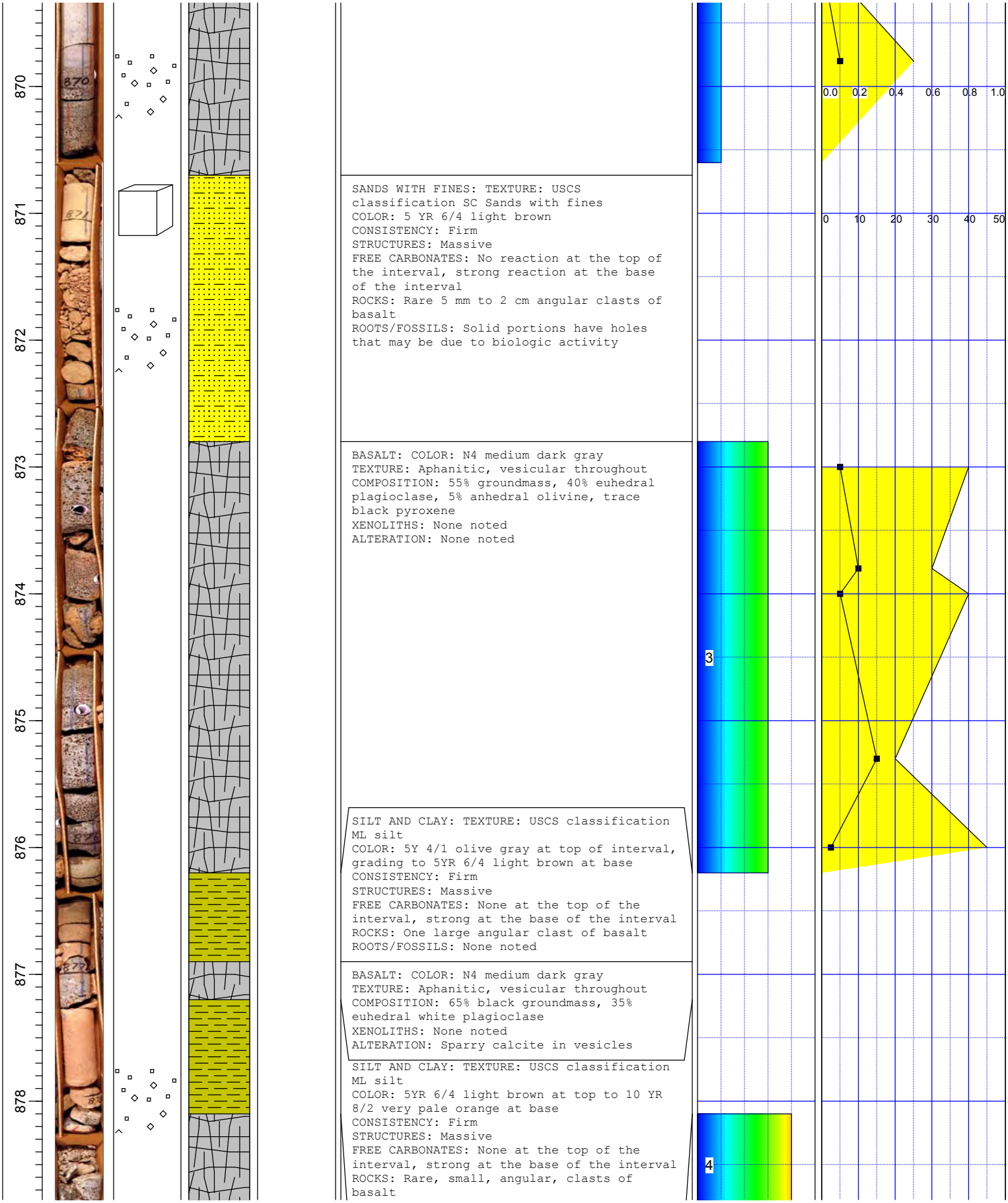
1



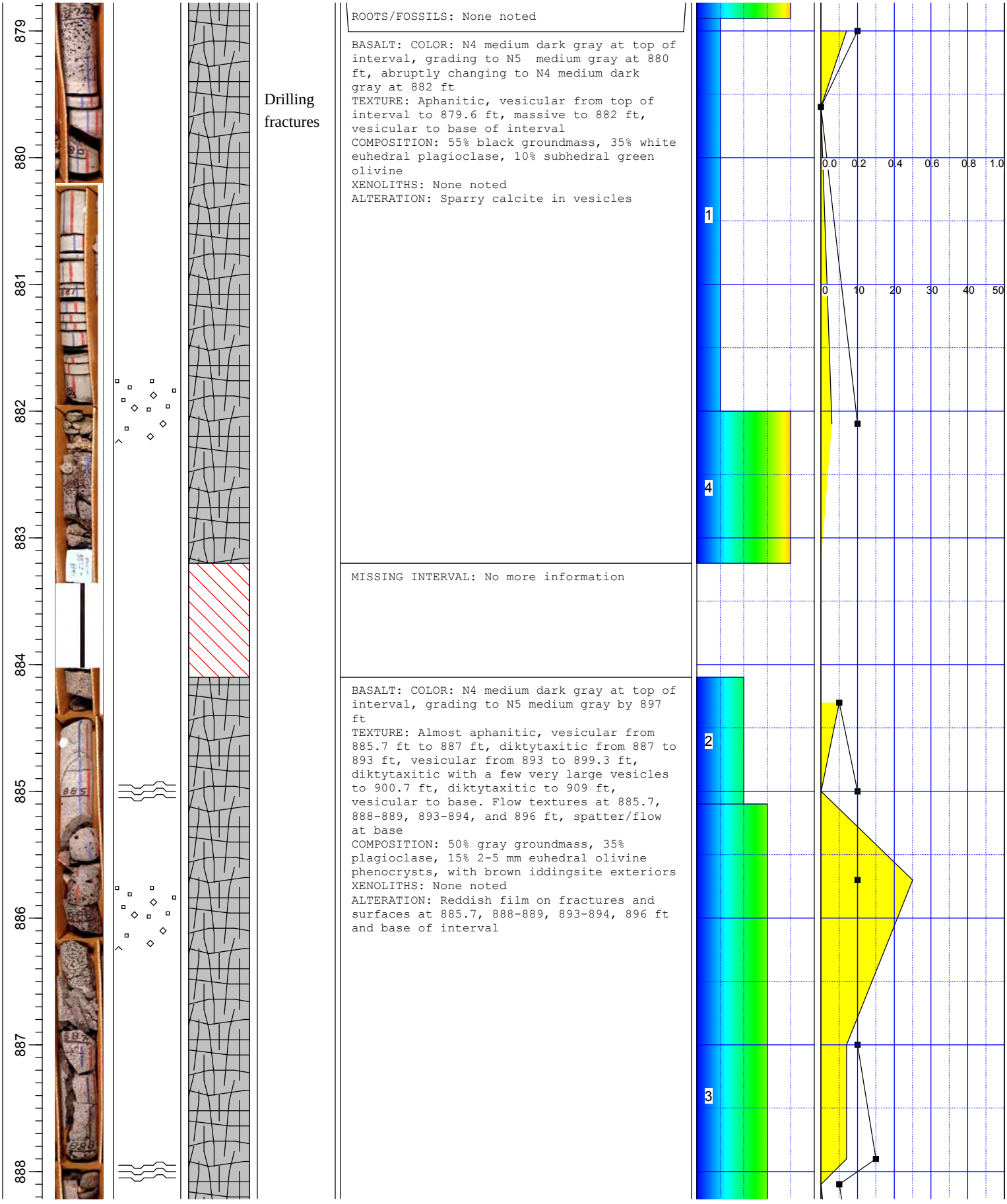
SANDS WITH FINES: TEXTURE: USCS classification SC Sands with fines
COLOR: 5 YR 6/4 light brown
CONSISTENCY: Firm
STRUCTURES: Massive
FREE CARBONATES: No reaction at the top of the interval, strong reaction at the base of the interval
ROCKS: Rare 5 mm to 2 cm angular clasts of basalt
ROOTS/FOSSILS: Solid portions have holes that may be due to biologic activity

BASALT: COLOR: N4 medium dark gray
TEXTURE: Aphanitic, vesicular throughout
COMPOSITION: 55% groundmass, 40% euhedral plagioclase, 5% anhedral olivine, trace black pyroxene
XENOLITHS: None noted
ALTERATION: None noted

SILT AND CLAY: TEXTURE: USCS classification ML silt
COLOR: 5Y 4/1 olive gray at top of interval, grading to 5YR 6/4 light brown at base
CONSISTENCY: Firm
STRUCTURES: Massive
FREE CARBONATES: None at the top of the interval, strong at the base of the interval
ROCKS: One large angular clast of basalt
ROOTS/FOSSILS: None noted

BASALT: COLOR: N4 medium dark gray
TEXTURE: Aphanitic, vesicular throughout
COMPOSITION: 65% black groundmass, 35% euhedral white plagioclase
XENOLITHS: None noted
ALTERATION: Sparry calcite in vesicles

SILT AND CLAY: TEXTURE: USCS classification ML silt
COLOR: 5YR 6/4 light brown at top to 10 YR 8/2 very pale orange at base
CONSISTENCY: Firm
STRUCTURES: Massive
FREE CARBONATES: None at the top of the interval, strong at the base of the interval
ROCKS: Rare, small, angular, clasts of basalt


879
880
881
882
883
884
885
886
887
888
Drilling fractures
ROOTS/FOSSILS: None noted
BASALT: COLOR: N4 medium dark gray at top of interval, grading to N5 medium gray at 880 ft, abruptly changing to N4 medium dark gray at 882 ft
TEXTURE: Aphanitic, vesicular from top of interval to 879.6 ft, massive to 882 ft, vesicular to base of interval
COMPOSITION: 55% black groundmass, 35% white euhedral plagioclase, 10% subhedral green olivine
XENOLITHS: None noted
ALTERATION: Sparry calcite in vesicles
MISSING INTERVAL: No more information
BASALT: COLOR: N4 medium dark gray at top of interval, grading to N5 medium gray by 897 ft
TEXTURE: Almost aphanitic, vesicular from 885.7 ft to 887 ft, diktytaxitic from 887 to 893 ft, vesicular from 893 to 899.3 ft, diktytaxitic with a few very large vesicles to 900.7 ft, diktytaxitic to 909 ft, vesicular to base. Flow textures at 885.7, 888-889, 893-894, and 896 ft, spatter/flow at base
COMPOSITION: 50% gray groundmass, 35% plagioclase, 15% 2-5 mm euhedral olivine phenocrysts, with brown iddingsite exteriors
XENOLITHS: None noted
ALTERATION: Reddish film on fractures and surfaces at 885.7, 888-889, 893-894, 896 ft and base of interval
1
2
3
4
0.0
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0.4
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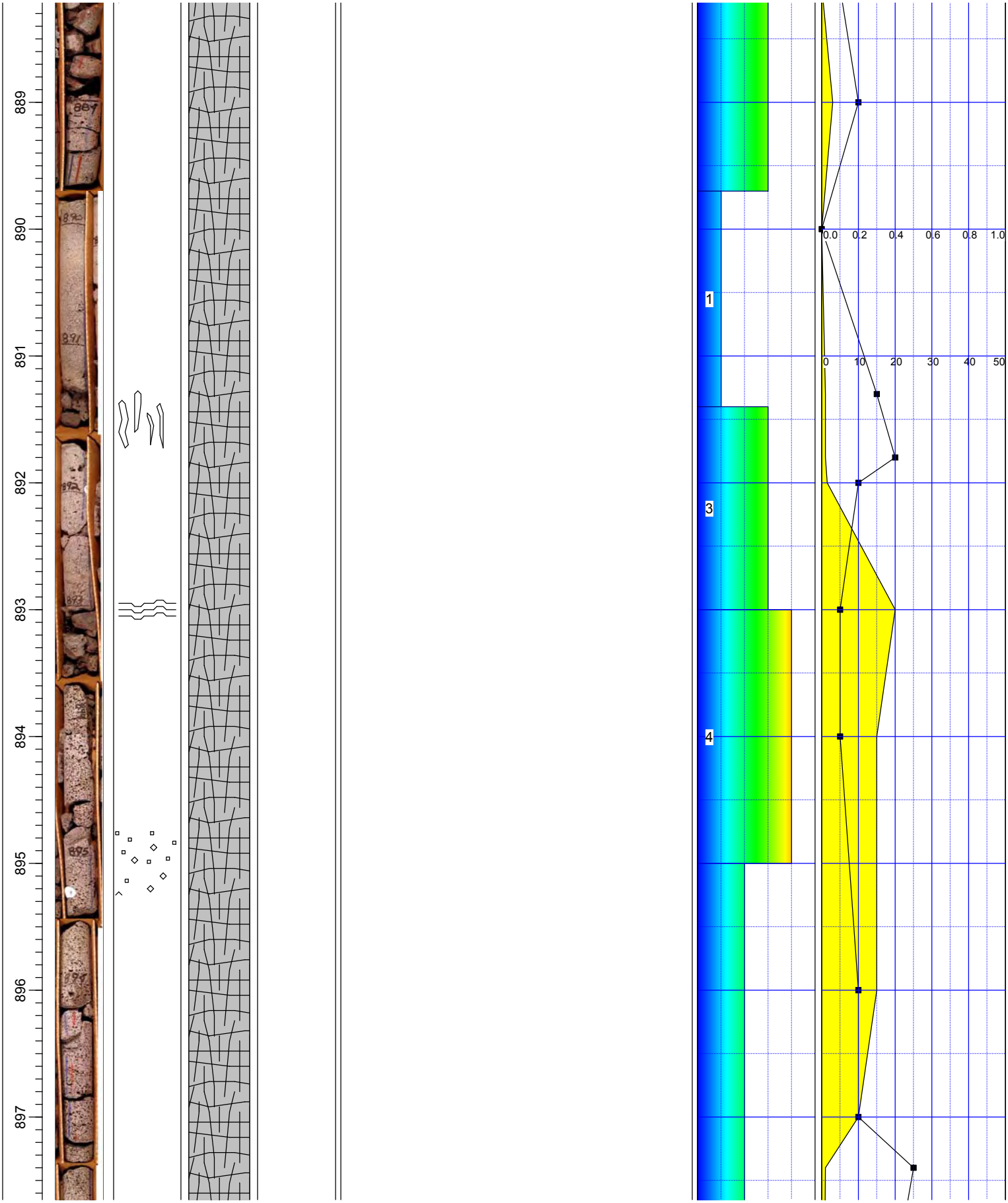
1.0
0
10
20
30
40
50


889
890
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892
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895
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897
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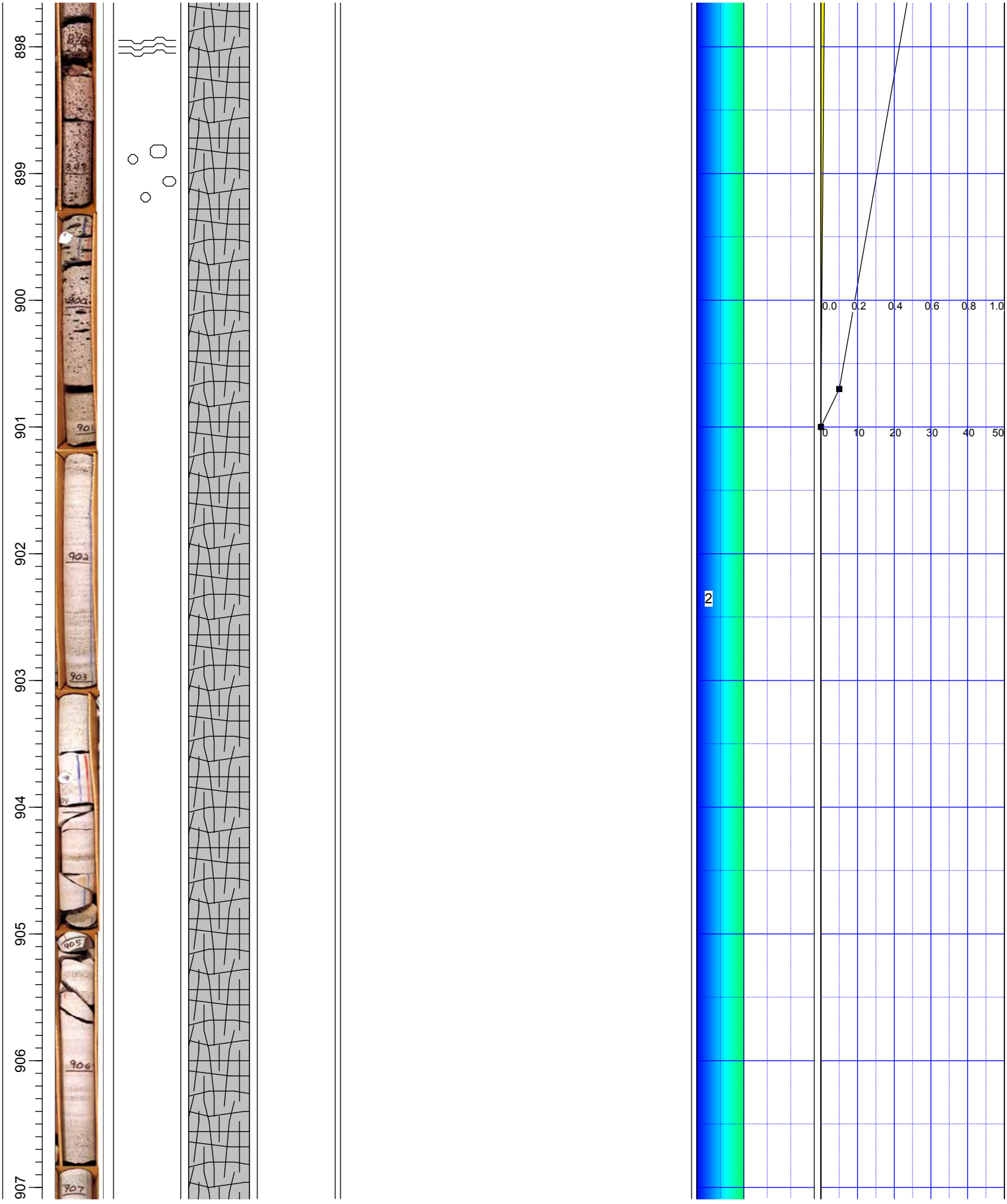
3
4


898
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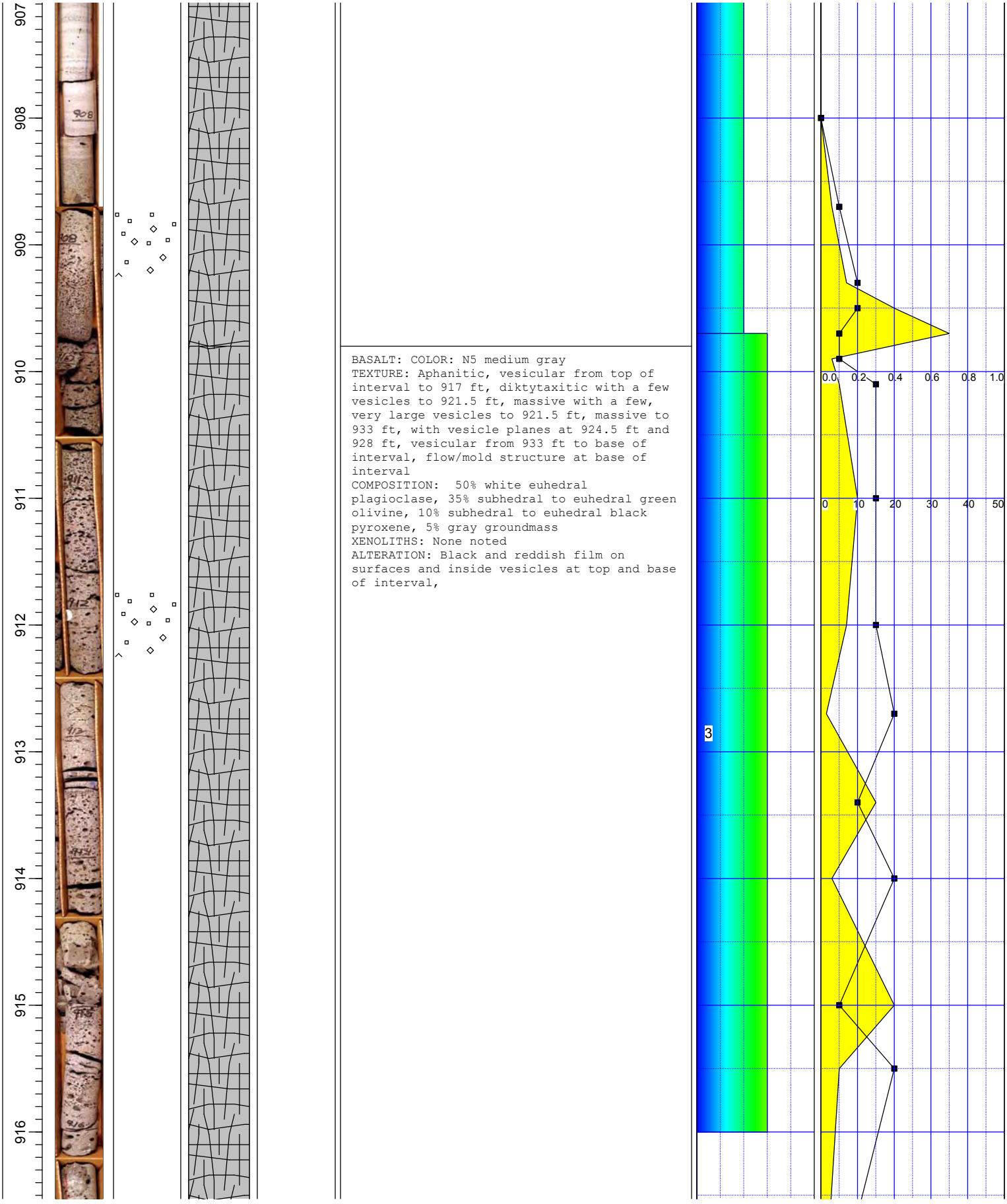
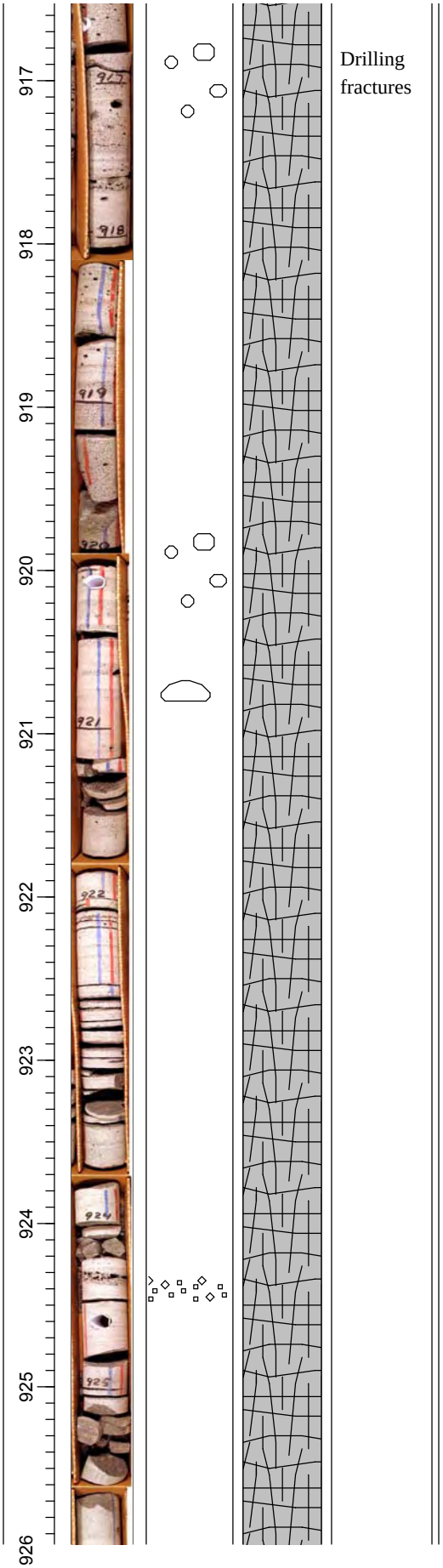


BASALT: COLOR: N5 medium gray
TEXTURE: Aphanitic, vesicular from top of interval to 917 ft, diktytaxitic with a few vesicles to 921.5 ft, massive with a few, very large vesicles to 921.5 ft, massive to 933 ft, with vesicle planes at 924.5 ft and 928 ft, vesicular from 933 ft to base of interval, flow/mold structure at base of interval
COMPOSITION: 50% white euhedral plagioclase, 35% subhedral to euhedral green olivine, 10% subhedral to euhedral black pyroxene, 5% gray groundmass
XENOLITHS: None noted
ALTERATION: Black and reddish film on surfaces and inside vesicles at top and base of interval,


917
918
919
920
921
922
923
924
925
926
Drilling
fractures
0.0
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0.6
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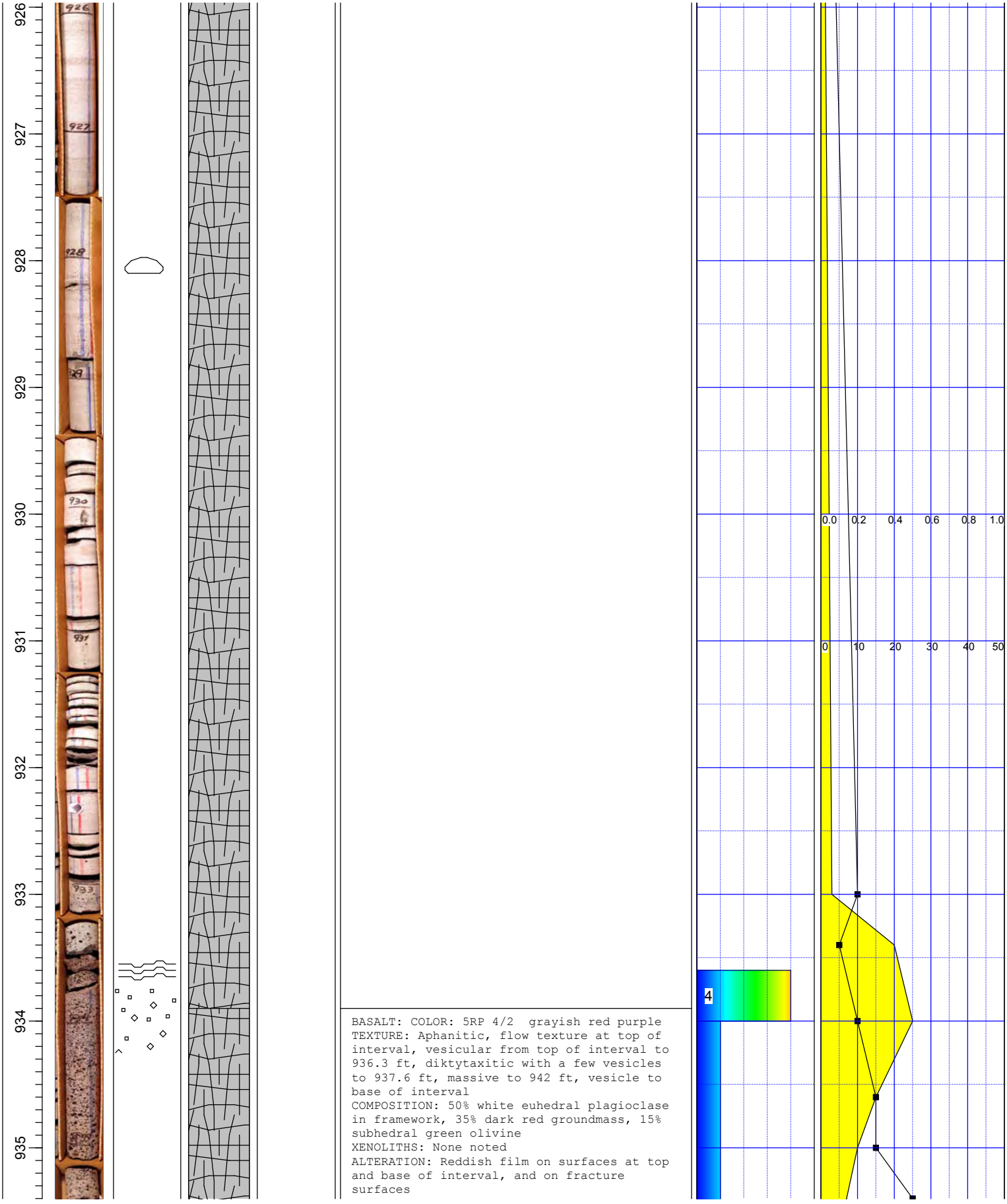
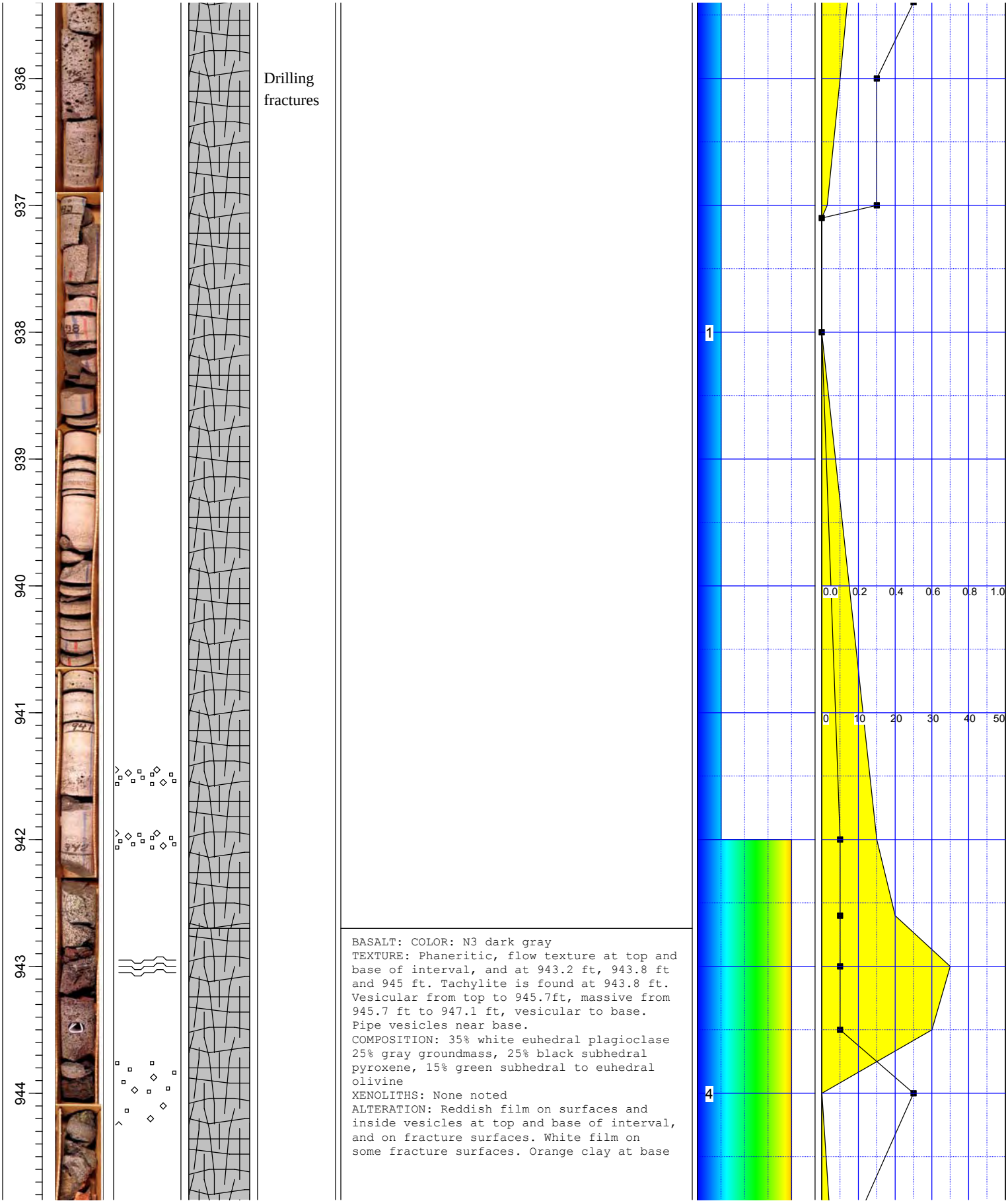
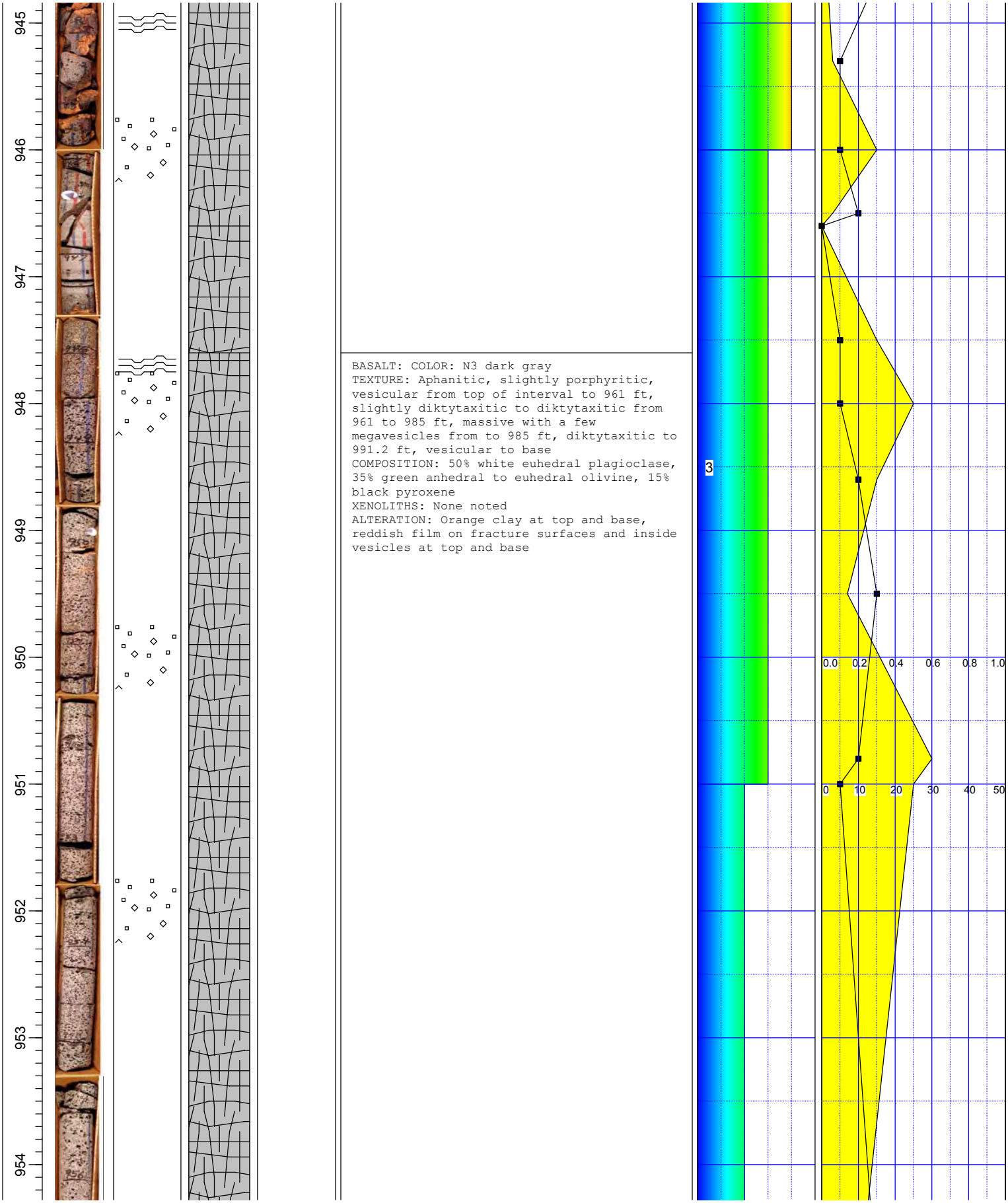
40
50
0



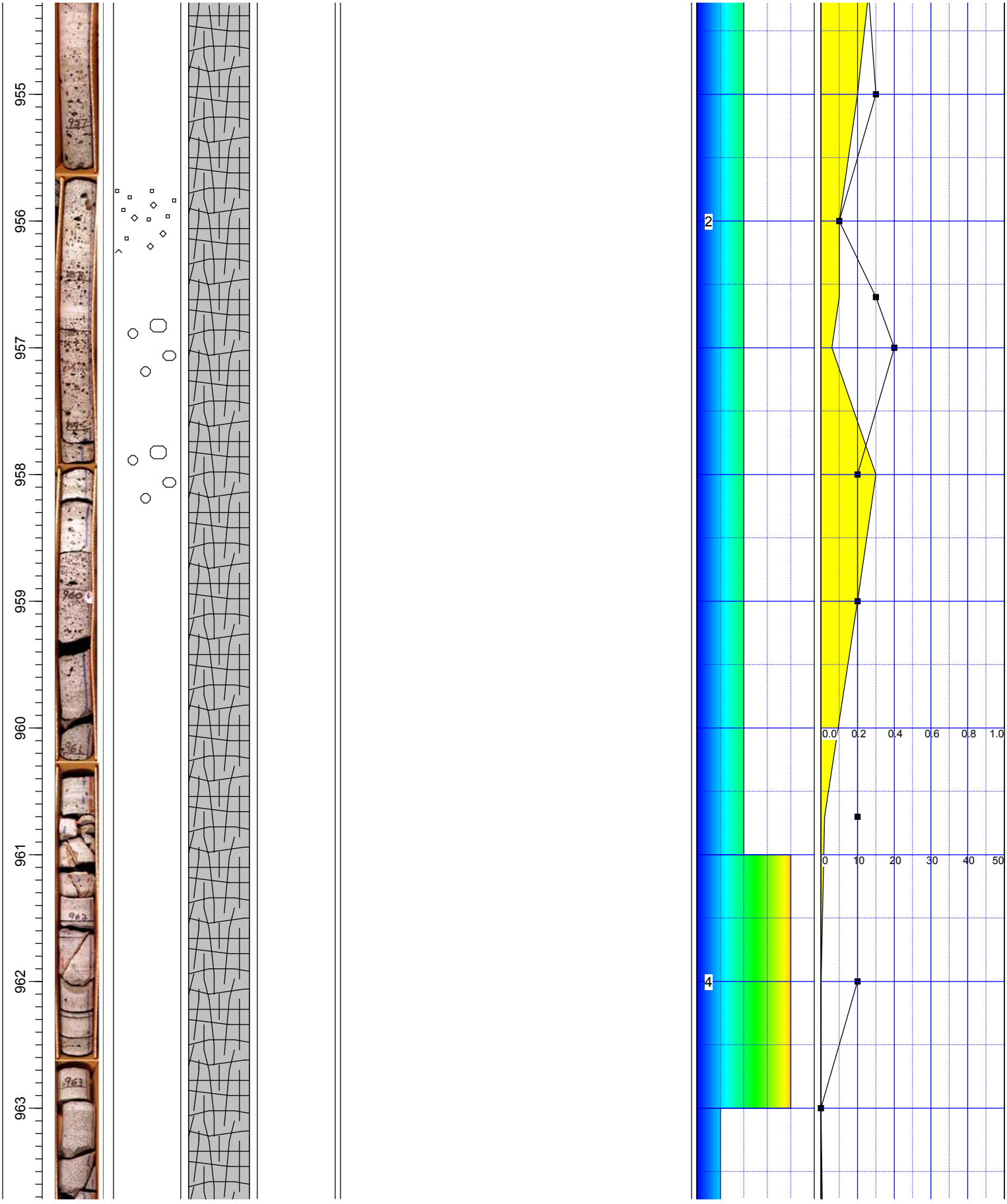
BASALT: COLOR: 5RP 4/2 grayish red purple
TEXTURE: Aphanitic, flow texture at top of interval, vesicular from top of interval to 936.3 ft, diktytaxitic with a few vesicles to 937.6 ft, massive to 942 ft, vesicle to base of interval
COMPOSITION: 50% white euhedral plagioclase in framework, 35% dark red groundmass, 15% subhedral green olivine
XENOLITHS: None noted
ALTERATION: Reddish film on surfaces at top and base of interval, and on fracture surfaces



BASALT: COLOR: N3 dark gray
TEXTURE: Phaneritic, flow texture at top and base of interval, and at 943.2 ft, 943.8 ft and 945 ft. Tachylite is found at 943.8 ft. Vesicular from top to 945.7ft, massive from 945.7 ft to 947.1 ft, vesicular to base. Pipe vesicles near base.
COMPOSITION: 35% white euhedral plagioclase 25% gray groundmass, 25% black subhedral pyroxene, 15% green subhedral to euhedral olivine
XENOLITHS: None noted
ALTERATION: Reddish film on surfaces and inside vesicles at top and base of interval, and on fracture surfaces. White film on some fracture surfaces. Orange clay at base



BASALT: COLOR: N3 dark gray
TEXTURE: Aphanitic, slightly porphyritic, vesicular from top of interval to 961 ft, slightly diktytaxitic to diktytaxitic from 961 to 985 ft, massive with a few megavesicles from to 985 ft, diktytaxitic to 991.2 ft, vesicular to base
COMPOSITION: 50% white euhedral plagioclase, 35% green anhedral to euhedral olivine, 15% black pyroxene
XENOLITHS: None noted
ALTERATION: Orange clay at top and base, reddish film on fracture surfaces and inside vesicles at top and base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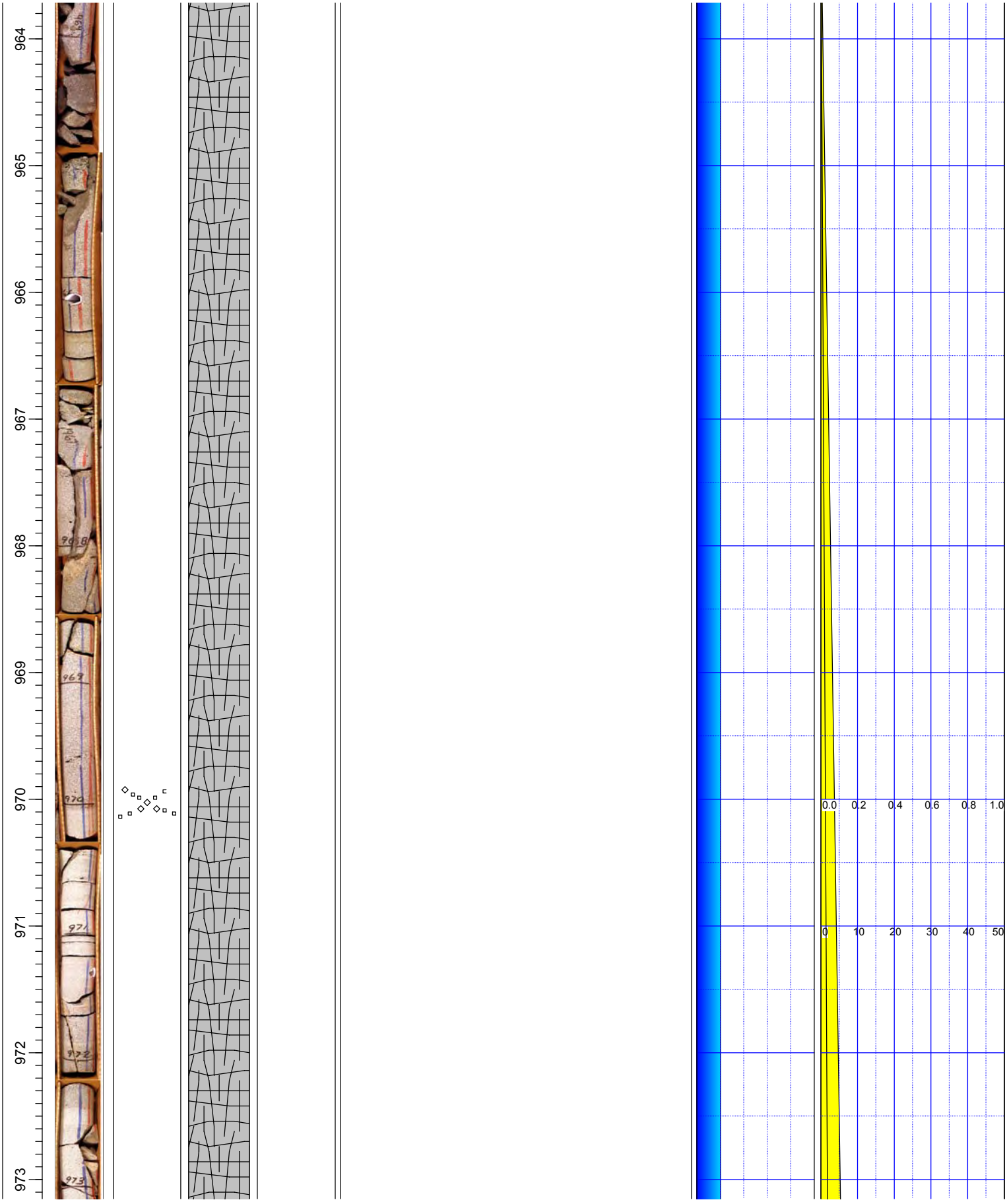
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971
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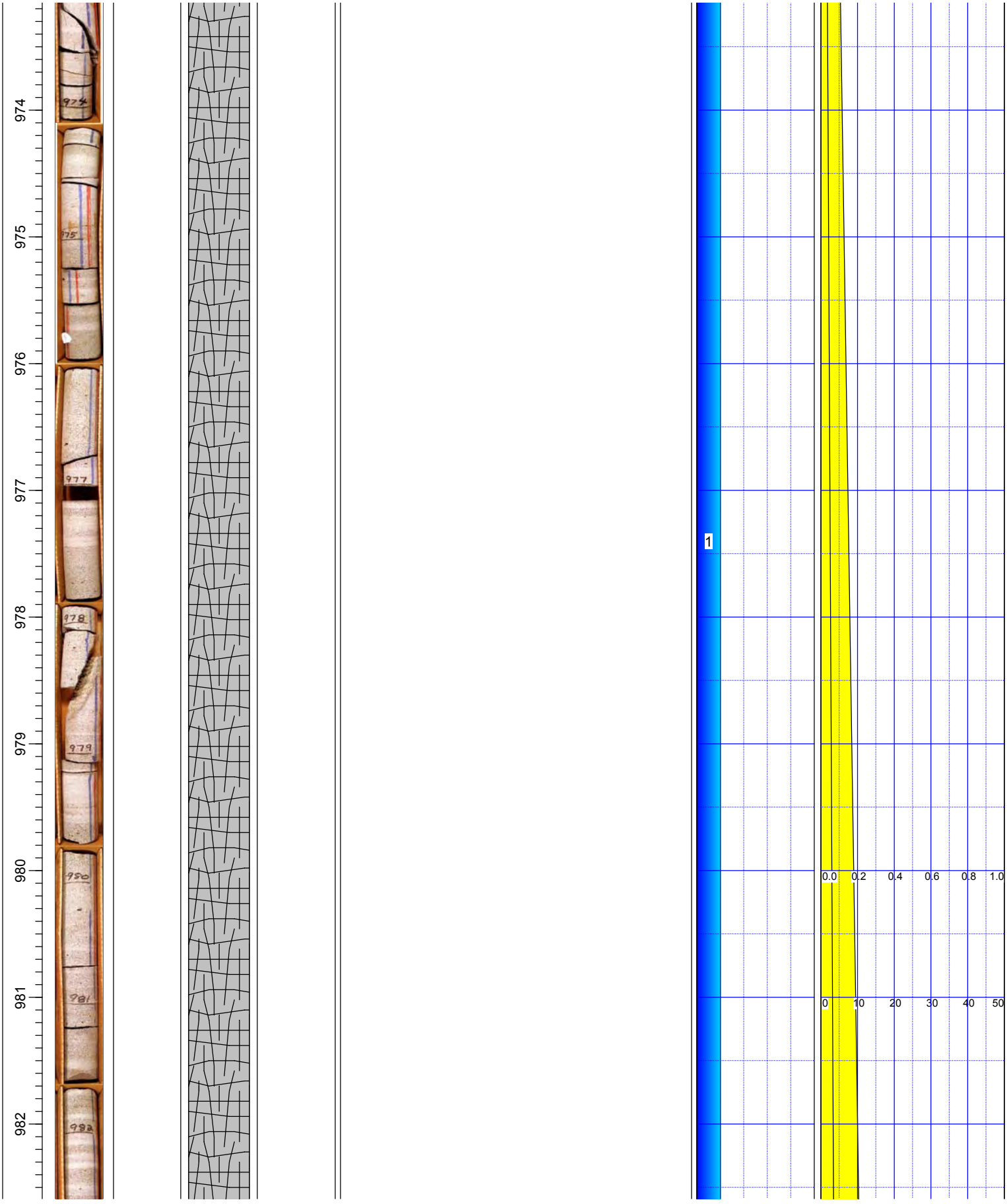
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975
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978
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980
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982
974
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978
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980
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982
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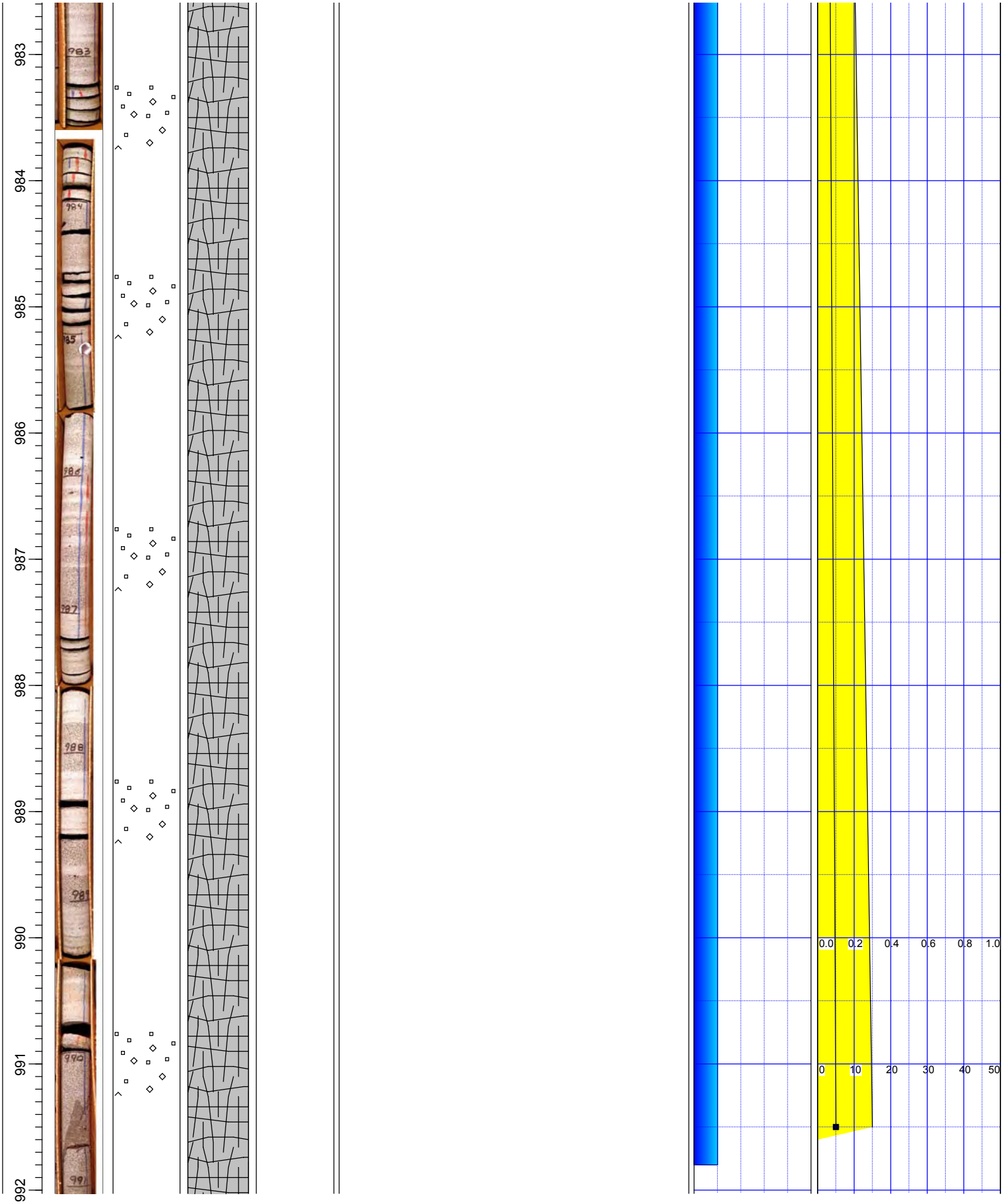
983
984
985
986
987
988
989
990
991
992
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0.2
0.4
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30
40
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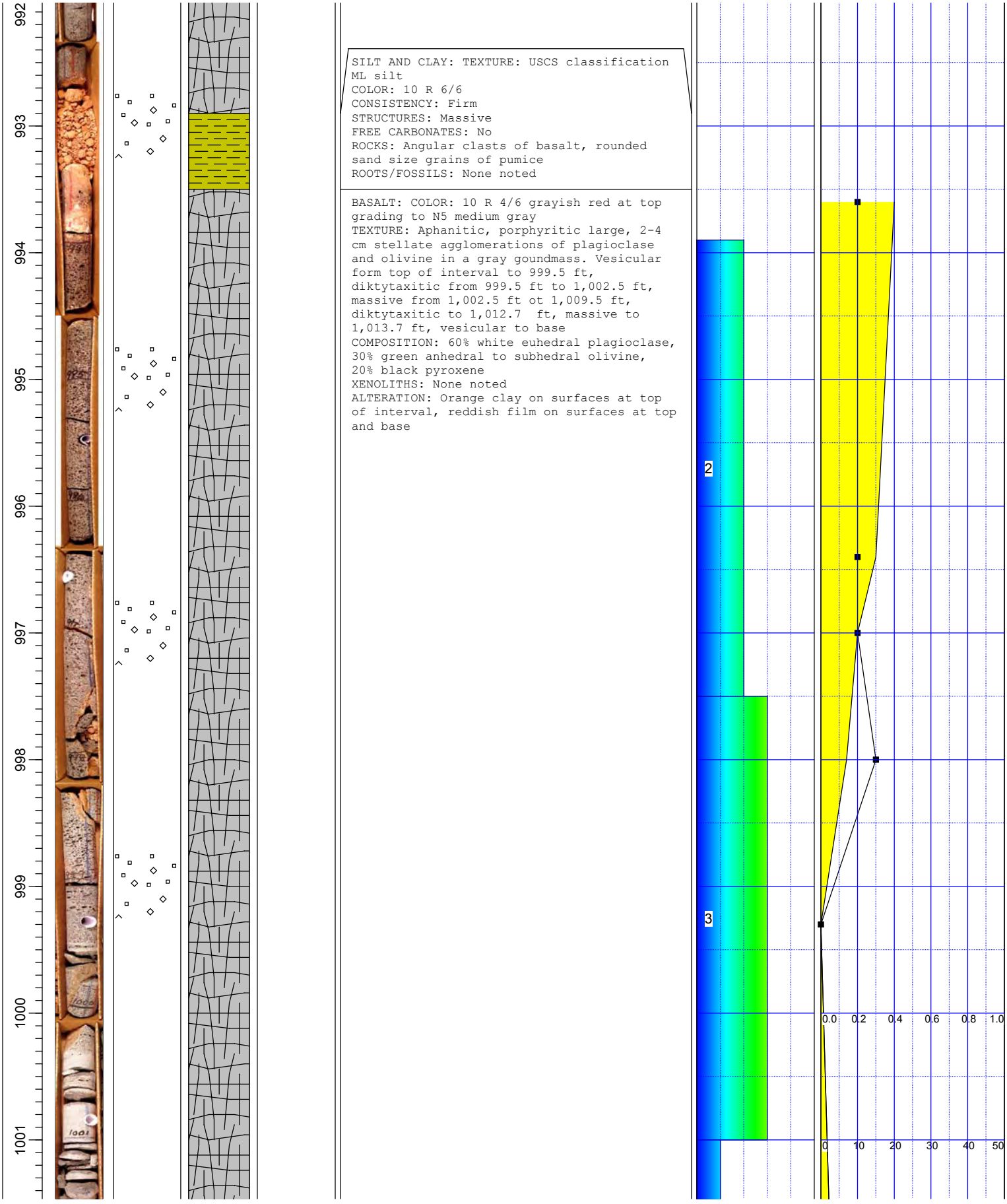
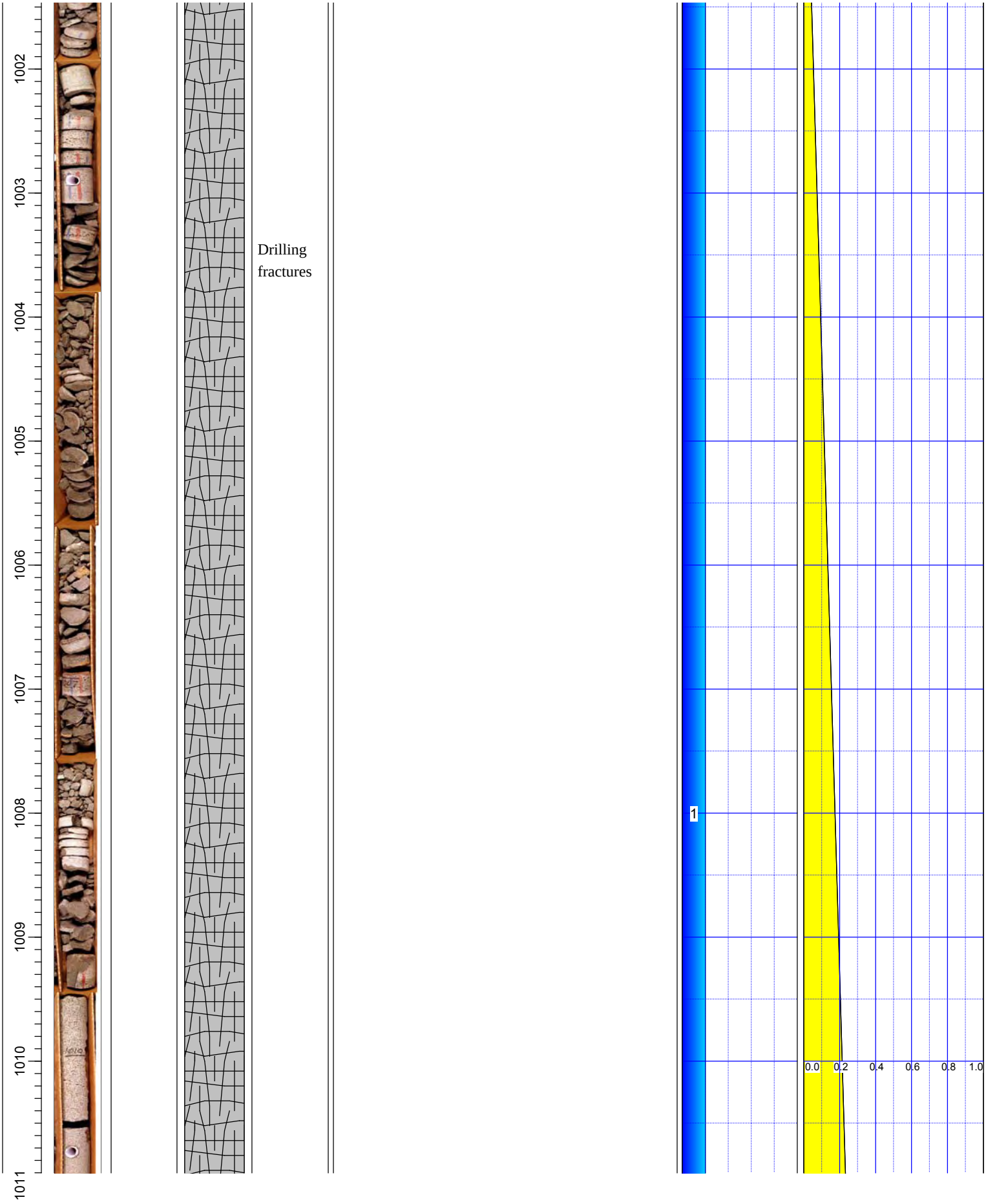
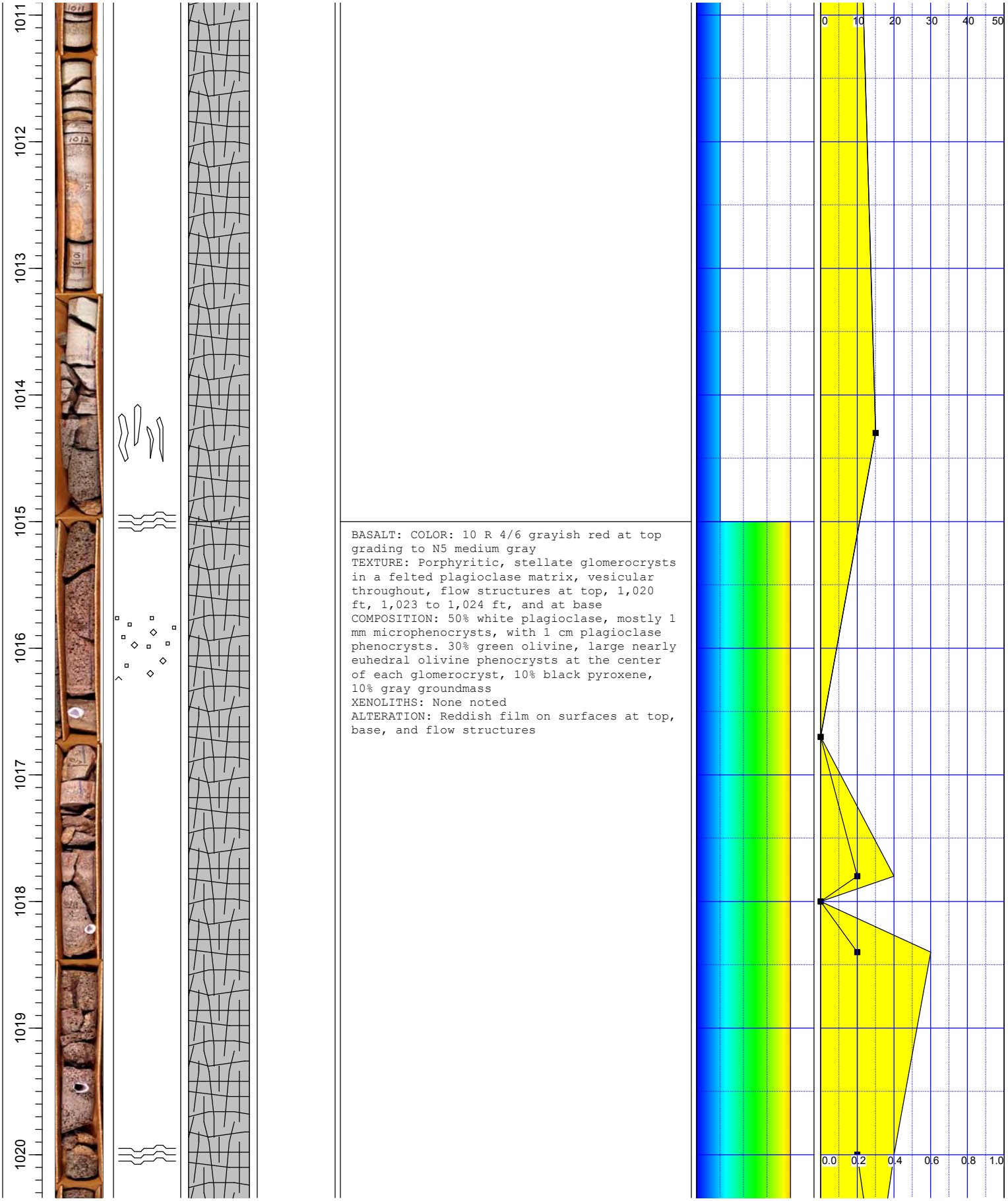


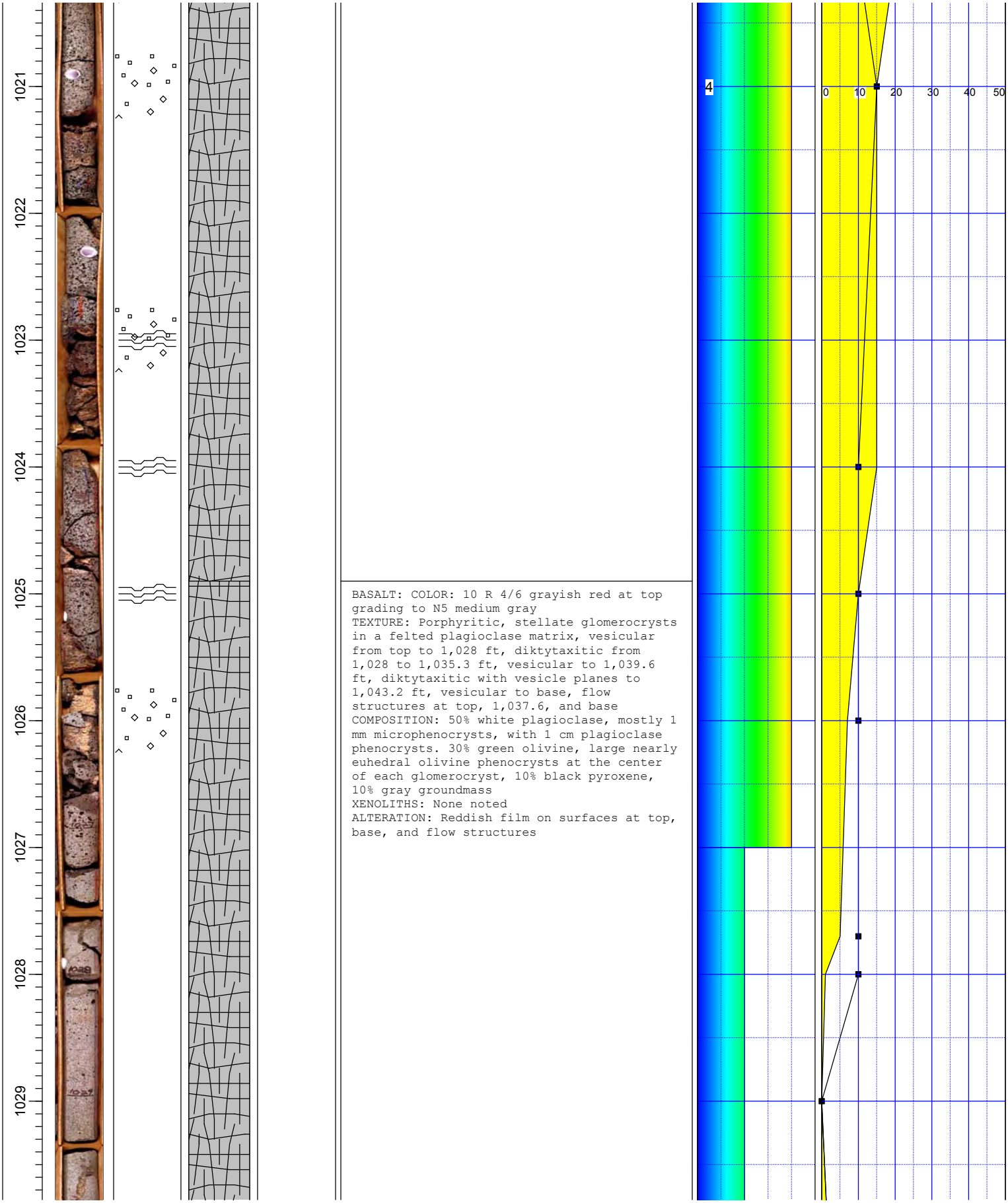
SILT AND CLAY: TEXTURE: USCS classification
ML silt
COLOR: 10 R 6/6
CONSISTENCY: Firm
STRUCTURES: Massive
FREE CARBONATES: No
ROCKS: Angular clasts of basalt, rounded sand size grains of pumice
ROOTS/FOSSILS: None noted

BASALT: COLOR: 10 R 4/6 grayish red at top grading to N5 medium gray
TEXTURE: Aphanitic, porphyritic large, 2-4 cm stellate agglomerations of plagioclase and olivine in a gray goundmass. Vesicular form top of interval to 999.5 ft, diktytaxitic from 999.5 ft to 1,002.5 ft, massive from 1,002.5 ft ot 1,009.5 ft, diktytaxitic to 1,012.7 ft, massive to 1,013.7 ft, vesicular to base
COMPOSITION: 60% white euhedral plagioclase, 30% green anhedral to subhedral olivine, 20% black pyroxene
XENOLITHS: None noted
ALTERATION: Orange clay on surfaces at top of interval, reddish film on surfaces at top and base

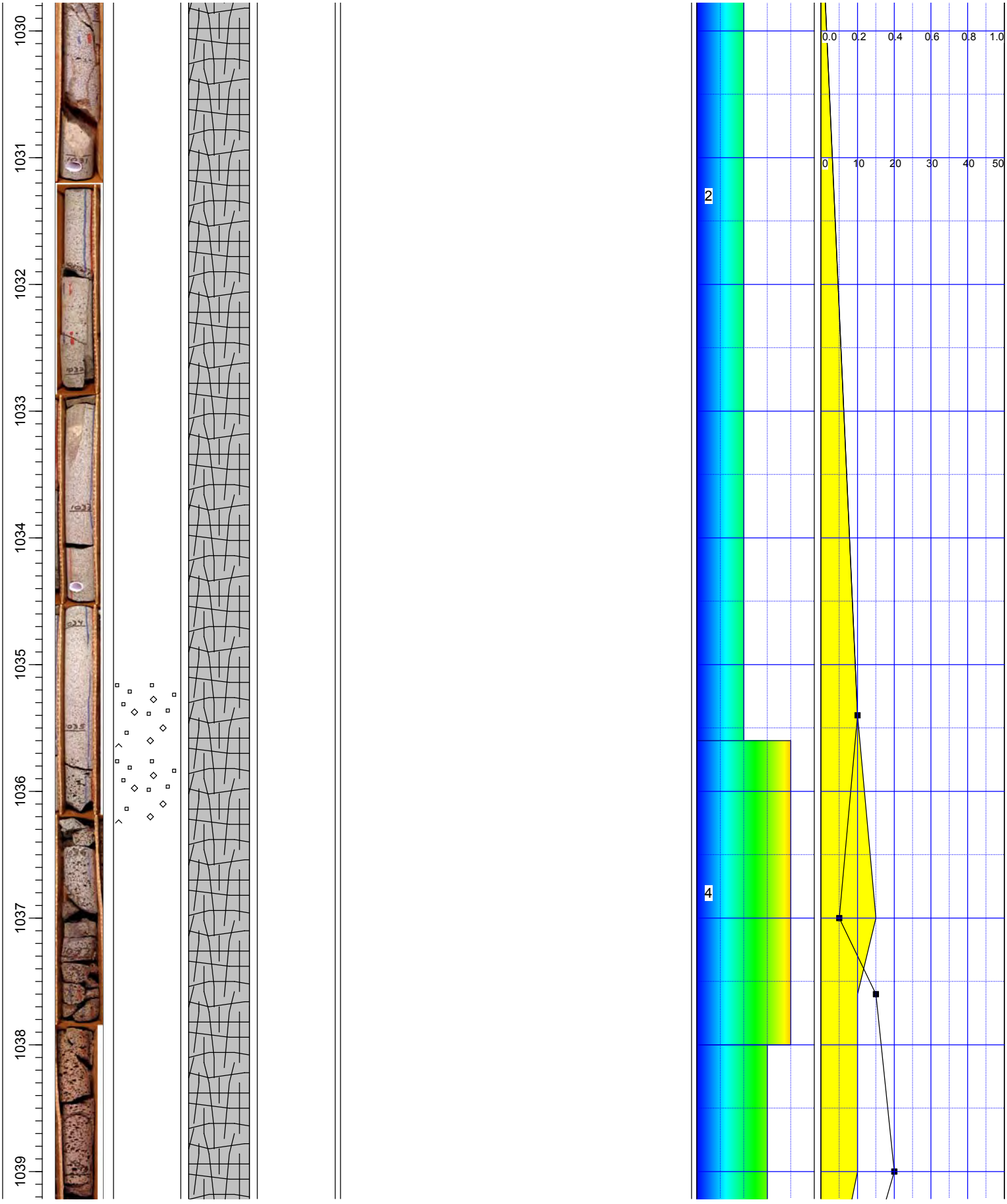

1002
1003
1004
1005
1006
1007
1008
1009
1010
1011
Drilling
fractures
1
0.0
0.2
0.4
0.6
0.8
1.0



BASALT: COLOR: 10 R 4/6 grayish red at top grading to N5 medium gray
TEXTURE: Porphyritic, stellate glomerocrysts in a felted plagioclase matrix, vesicular throughout, flow structures at top, 1,020 ft, 1,023 to 1,024 ft, and at base
COMPOSITION: 50% white plagioclase, mostly 1 mm microphenocrysts, with 1 cm plagioclase phenocrysts. 30% green olivine, large nearly euhedral olivine phenocrysts at the center of each glomerocryst, 10% black pyroxene, 10% gray groundmass
XENOLITHS: None noted
ALTERATION: Reddish film on surfaces at top, base, and flow structures



BASALT: COLOR: 10 R 4/6 grayish red at top grading to N5 medium gray
TEXTURE: Porphyritic, stellate glomerocrysts in a felted plagioclase matrix, vesicular from top to 1,028 ft, diktytaxitic from 1,028 to 1,035.3 ft, vesicular to 1,039.6 ft, diktytaxitic with vesicle planes to 1,043.2 ft, vesicular to base, flow structures at top, 1,037.6, and base
COMPOSITION: 50% white plagioclase, mostly 1 mm microphenocrysts, with 1 cm plagioclase phenocrysts. 30% green olivine, large nearly euhedral olivine phenocrysts at the center of each glomerocryst, 10% black pyroxene, 10% gray groundmass
XENOLITHS: None noted
ALTERATION: Reddish film on surfaces at top, base, and flow structures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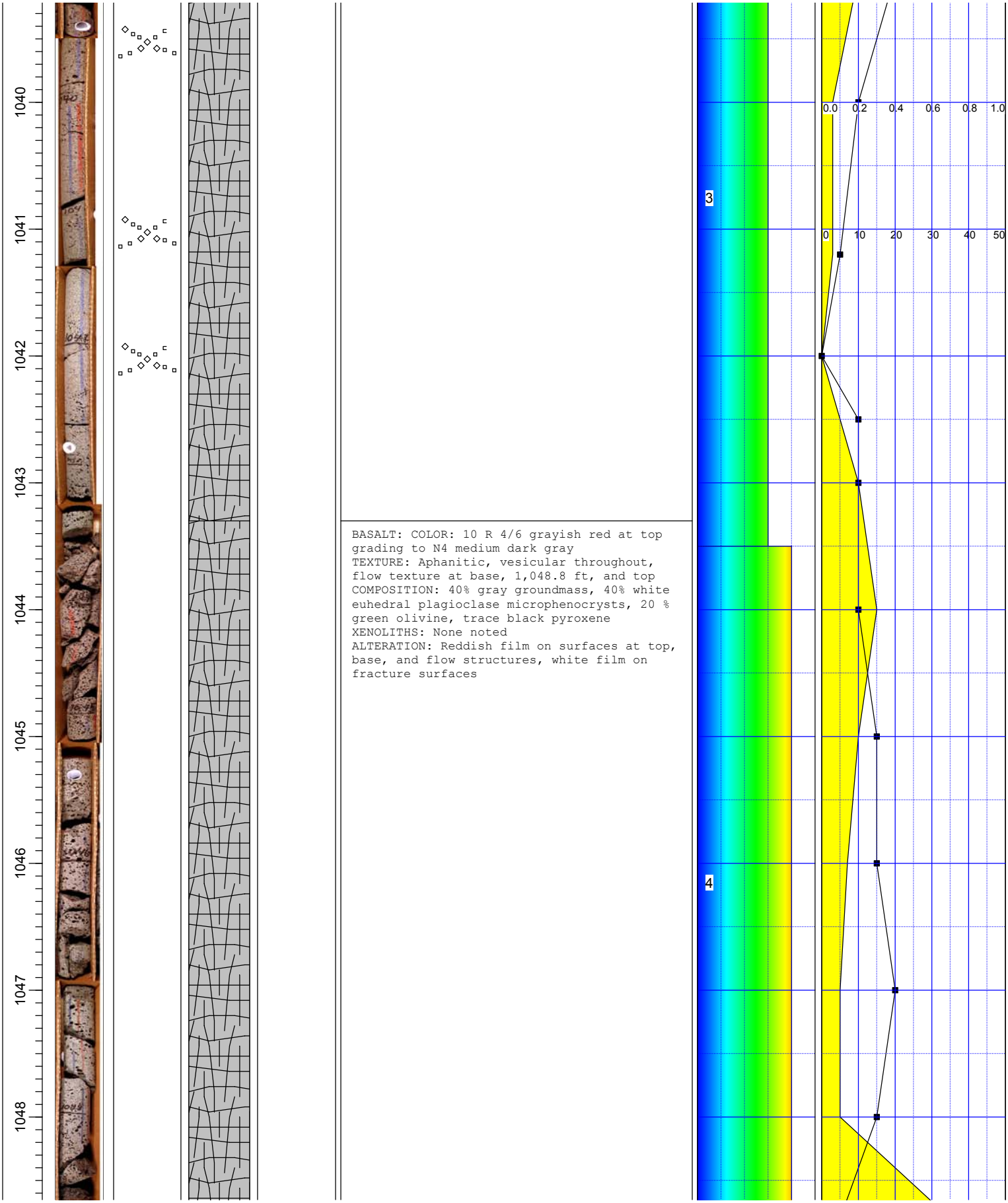
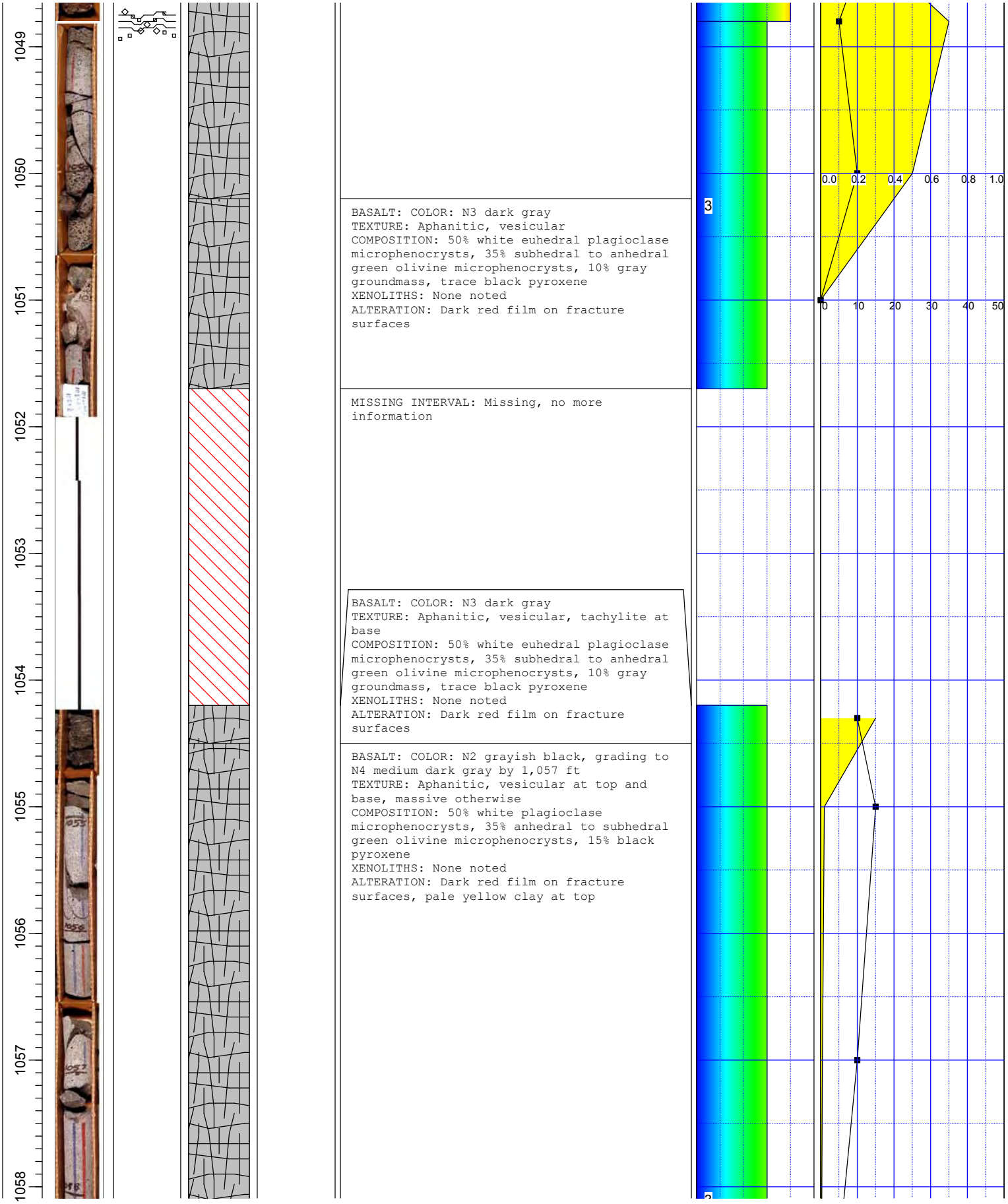


BASALT: COLOR: 10 R 4/6 grayish red at top grading to N4 medium dark gray
TEXTURE: Aphanitic, vesicular throughout, flow texture at base, 1,048.8 ft, and top
COMPOSITION: 40% gray groundmass, 40% white euhedral plagioclase microphenocrysts, 20 % green olivine, trace black pyroxene
XENOLITHS: None noted
ALTERATION: Reddish film on surfaces at top, base, and flow structures, white film on fracture surfaces


1049
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1058
BASALT: COLOR: N3 dark gray
TEXTURE: Aphanitic, vesicular
COMPOSITION: 50% white euhedral plagioclase microphenocrysts, 35% subhedral to anhedral green olivine microphenocrysts, 10% gray groundmass, trace black pyroxene
XENOLITHS: None noted
ALTERATION: Dark red film on fracture surfaces
MISSING INTERVAL: Missing, no more information
BASALT: COLOR: N3 dark gray
TEXTURE: Aphanitic, vesicular, tachylite at base
COMPOSITION: 50% white euhedral plagioclase microphenocrysts, 35% subhedral to anhedral green olivine microphenocrysts, 10% gray groundmass, trace black pyroxene
XENOLITHS: None noted
ALTERATION: Dark red film on fracture surfaces
BASALT: COLOR: N2 grayish black, grading to N4 medium dark gray by 1,057 ft
TEXTURE: Aphanitic, vesicular at top and base, massive otherwise
COMPOSITION: 50% white plagioclase microphenocrysts, 35% anhedral to subhedral green olivine microphenocrysts, 15% black pyroxene
XENOLITHS: None noted
ALTERATION: Dark red film on fracture surfaces, pale yellow clay at top
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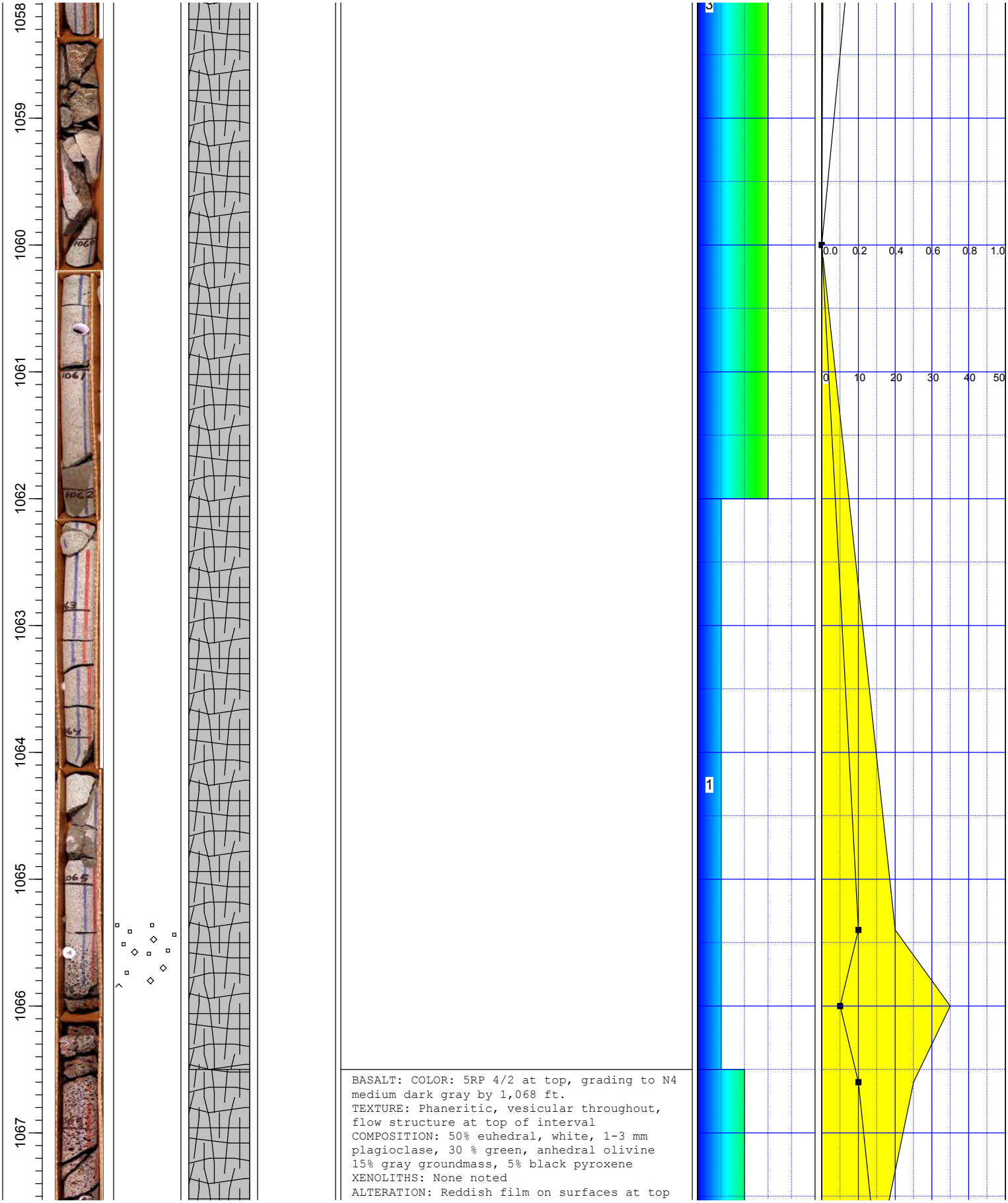
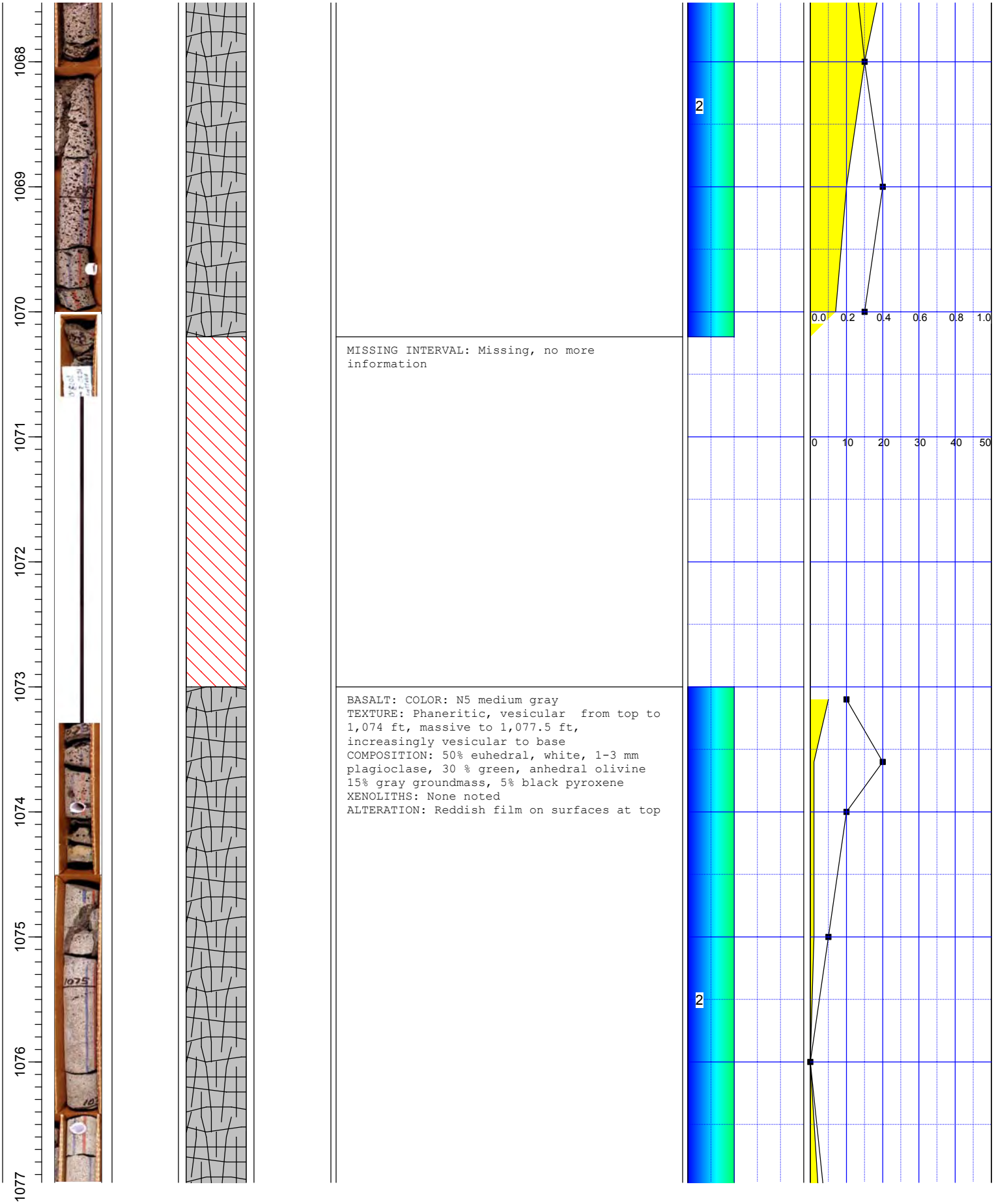
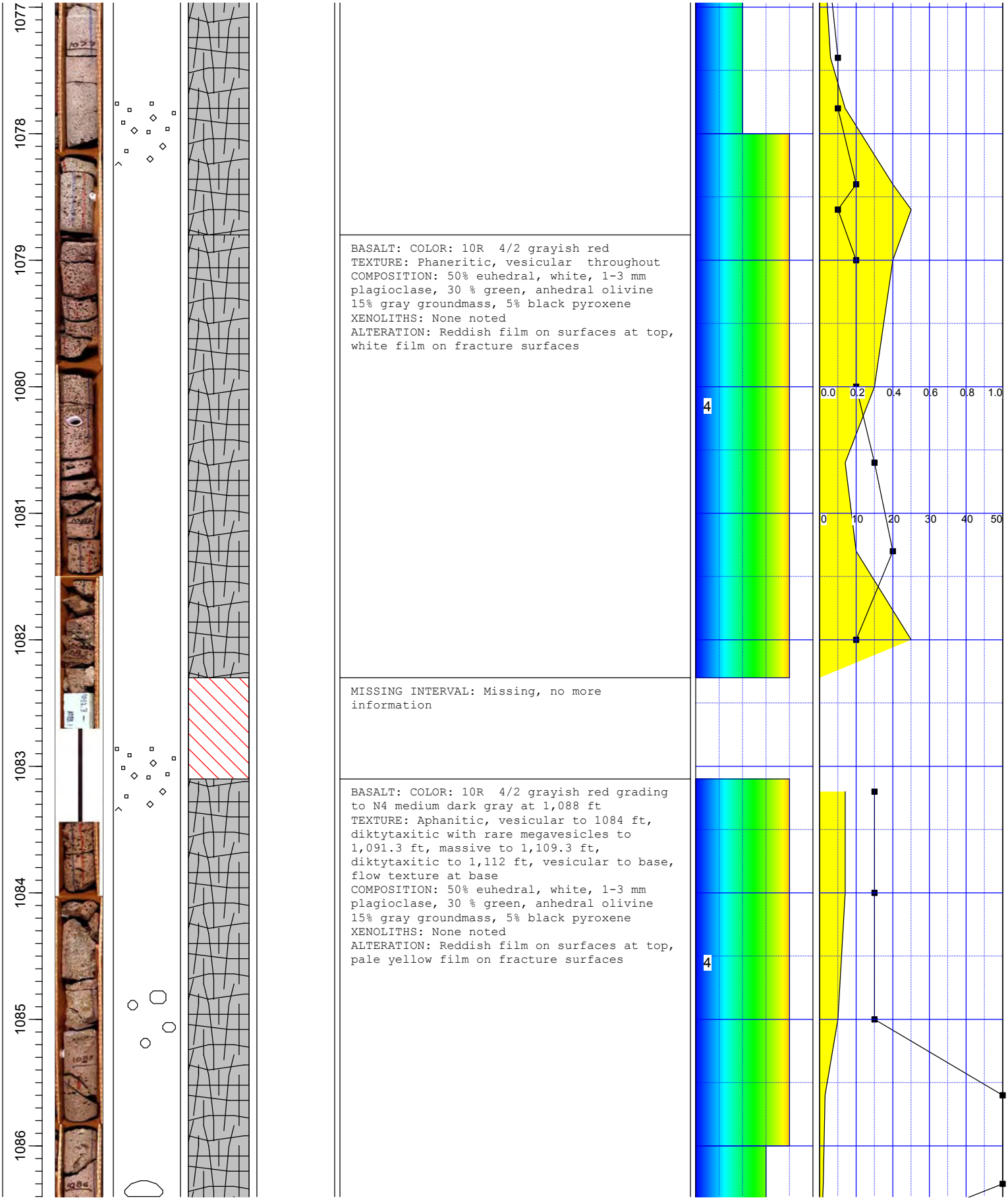


BASALT: COLOR: 5RP 4/2 at top, grading to N4 medium dark gray by 1,068 ft.
TEXTURE: Phaneritic, vesicular throughout, flow structure at top of interval
COMPOSITION: 50% euhedral, white, 1-3 mm plagioclase, 30 % green, anhedral olivine 15% gray groundmass, 5% black pyroxene
XENOLITHS: None noted
ALTERATION: Reddish film on surfaces at top



MISSING INTERVAL: Missing, no more information

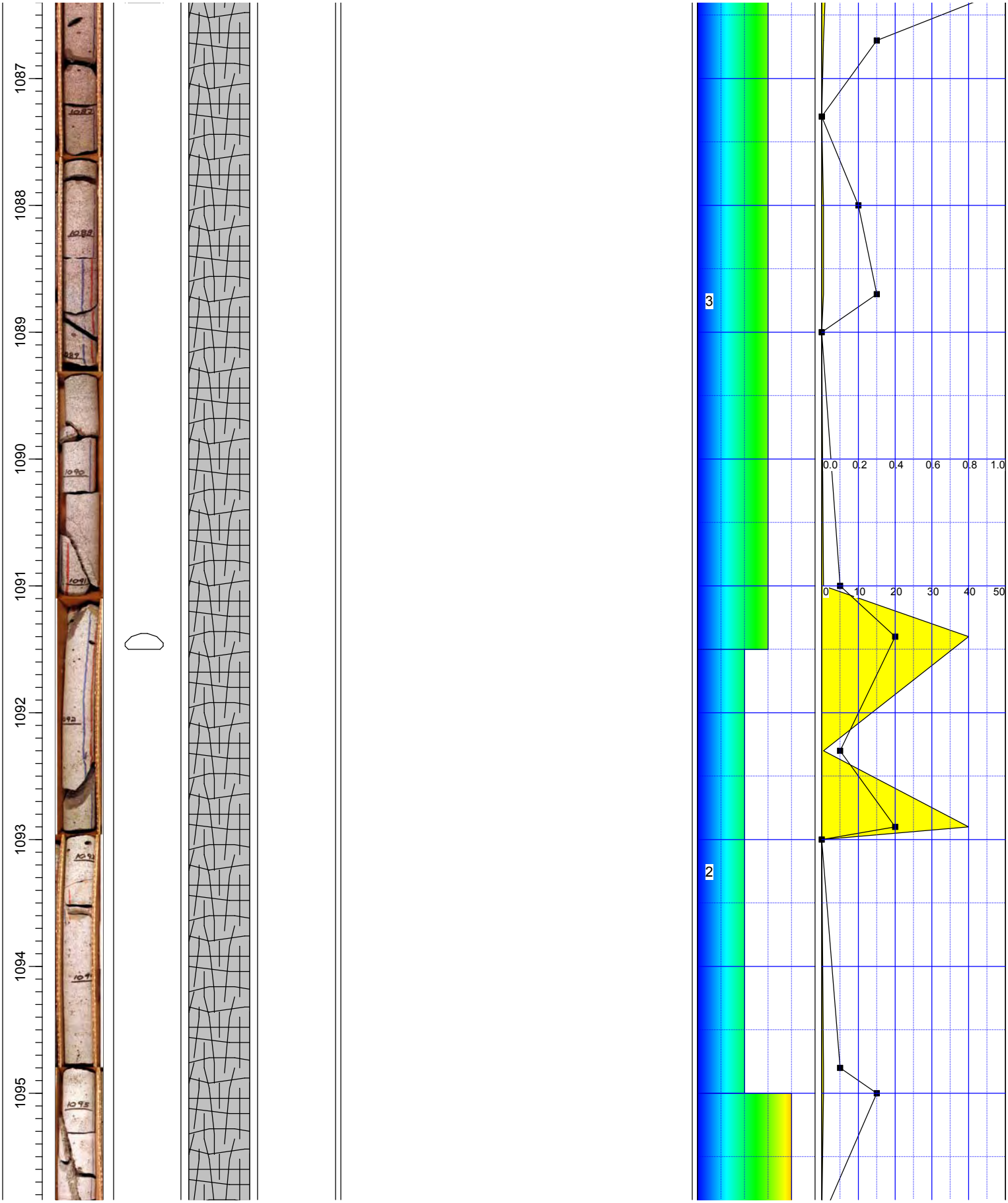
BASALT: COLOR: N5 medium gray
TEXTURE: Phaneritic, vesicular from top to 1,074 ft, massive to 1,077.5 ft, increasingly vesicular to base
COMPOSITION: 50% euhedral, white, 1-3 mm plagioclase, 30 % green, anhedral olivine 15% gray groundmass, 5% black pyroxene
XENOLITHS: None noted
ALTERATION: Reddish film on surfaces at top



BASALT: COLOR: 10R 4/2 grayish red
TEXTURE: Phaneritic, vesicular throughout
COMPOSITION: 50% euhedral, white, 1-3 mm plagioclase, 30 % green, anhedral olivine 15% gray groundmass, 5% black pyroxene
XENOLITHS: None noted
ALTERATION: Reddish film on surfaces at top, white film on fracture surfaces

MISSING INTERVAL: Missing, no more information

BASALT: COLOR: 10R 4/2 grayish red grading to N4 medium dark gray at 1,088 ft
TEXTURE: Aphanitic, vesicular to 1084 ft, diktytaxitic with rare megavesicles to 1,091.3 ft, massive to 1,109.3 ft, diktytaxitic to 1,112 ft, vesicular to base, flow texture at base
COMPOSITION: 50% euhedral, white, 1-3 mm plagioclase, 30 % green, anhedral olivine 15% gray groundmass, 5% black pyroxene
XENOLITHS: None noted
ALTERATION: Reddish film on surfaces at top, pale yellow film on fracture surfaces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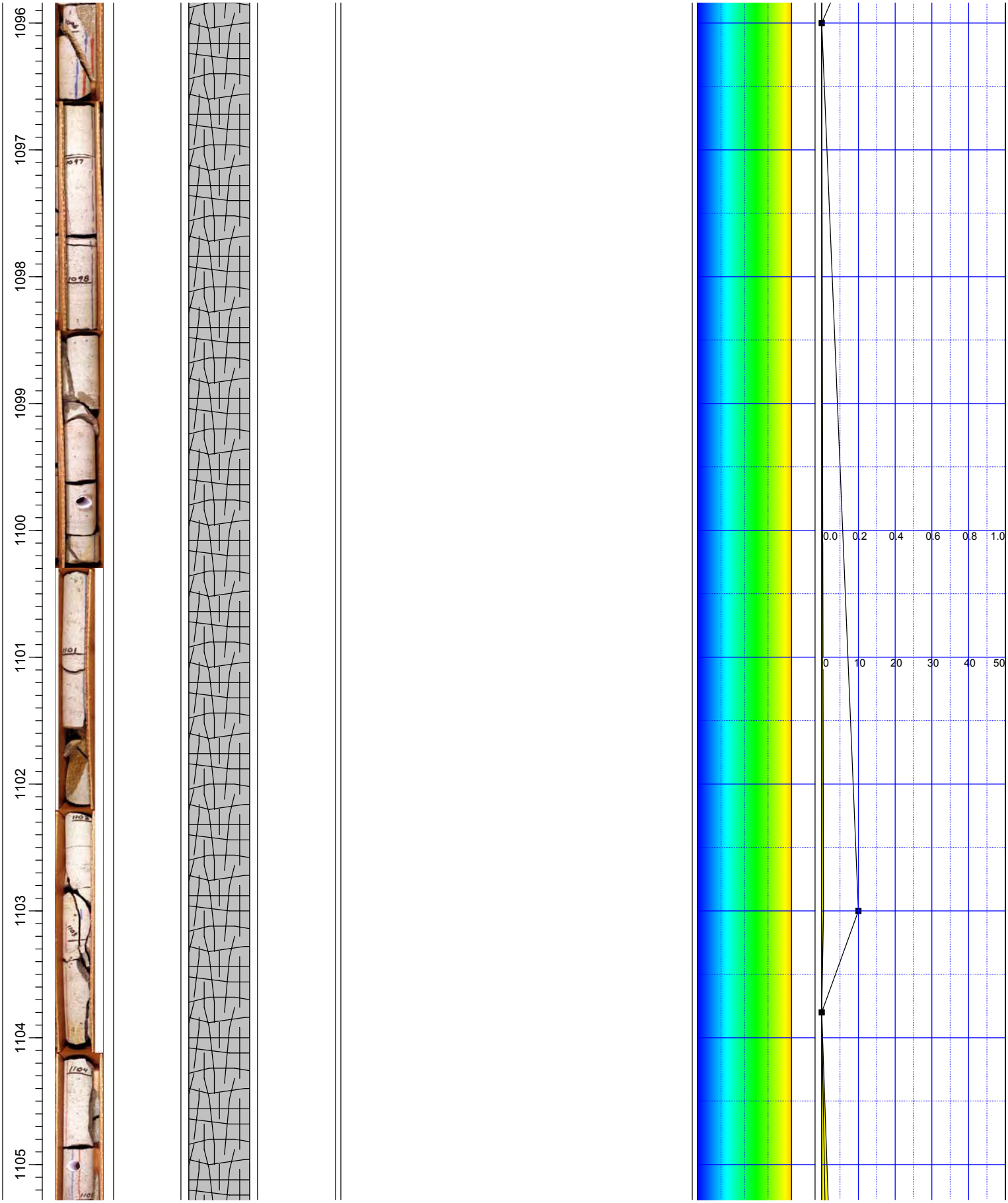
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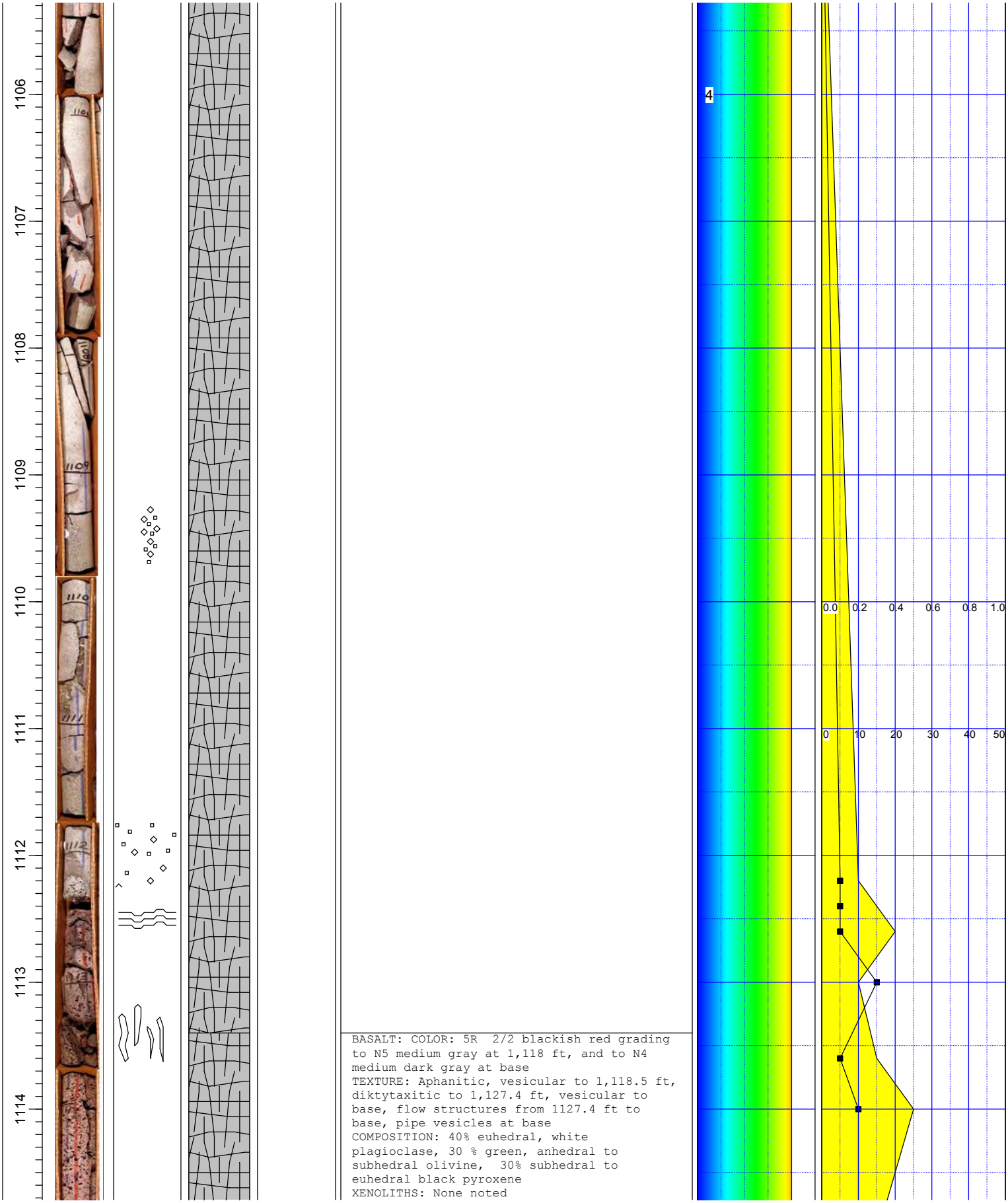
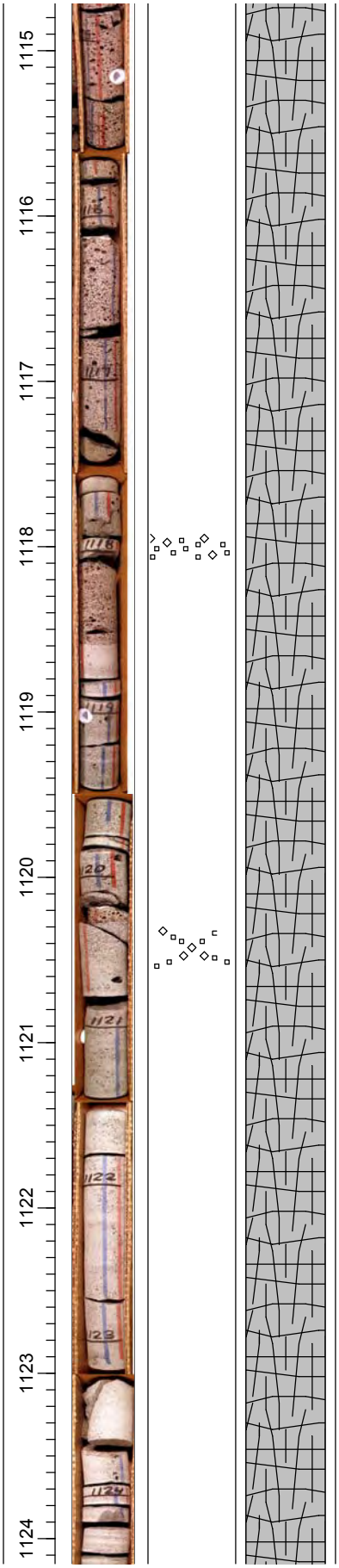
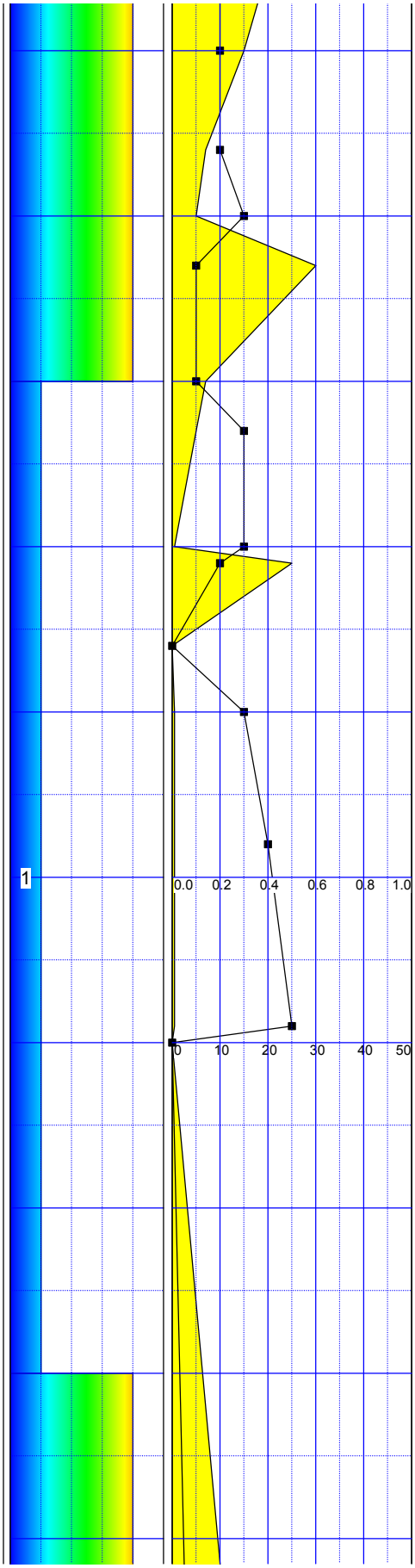
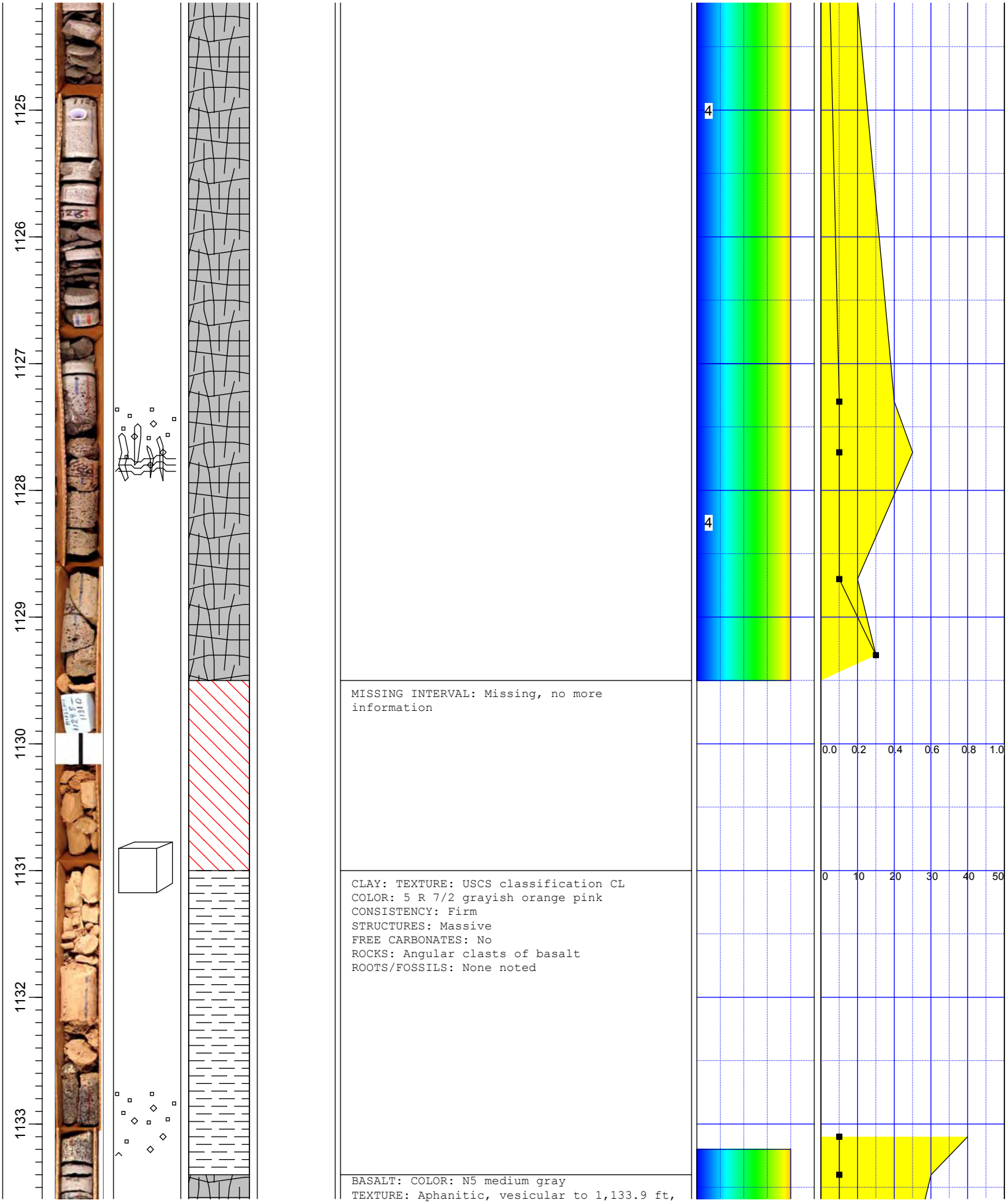


BASALT: COLOR: 5R 2/2 blackish red grading to N5 medium gray at 1,118 ft, and to N4 medium dark gray at base
TEXTURE: Aphanitic, vesicular to 1,118.5 ft, diktytaxitic to 1,127.4 ft, vesicular to base, flow structures from 1127.4 ft to base, pipe vesicles at base
COMPOSITION: 40% euhedral, white plagioclase, 30 % green, anhedral to subhedral olivine, 30% subhedral to euhedral black pyroxene
XENOLITHS: None noted



ALTERATION: Reddish film on surfaces at top, pale yellow film on fracture surfaces

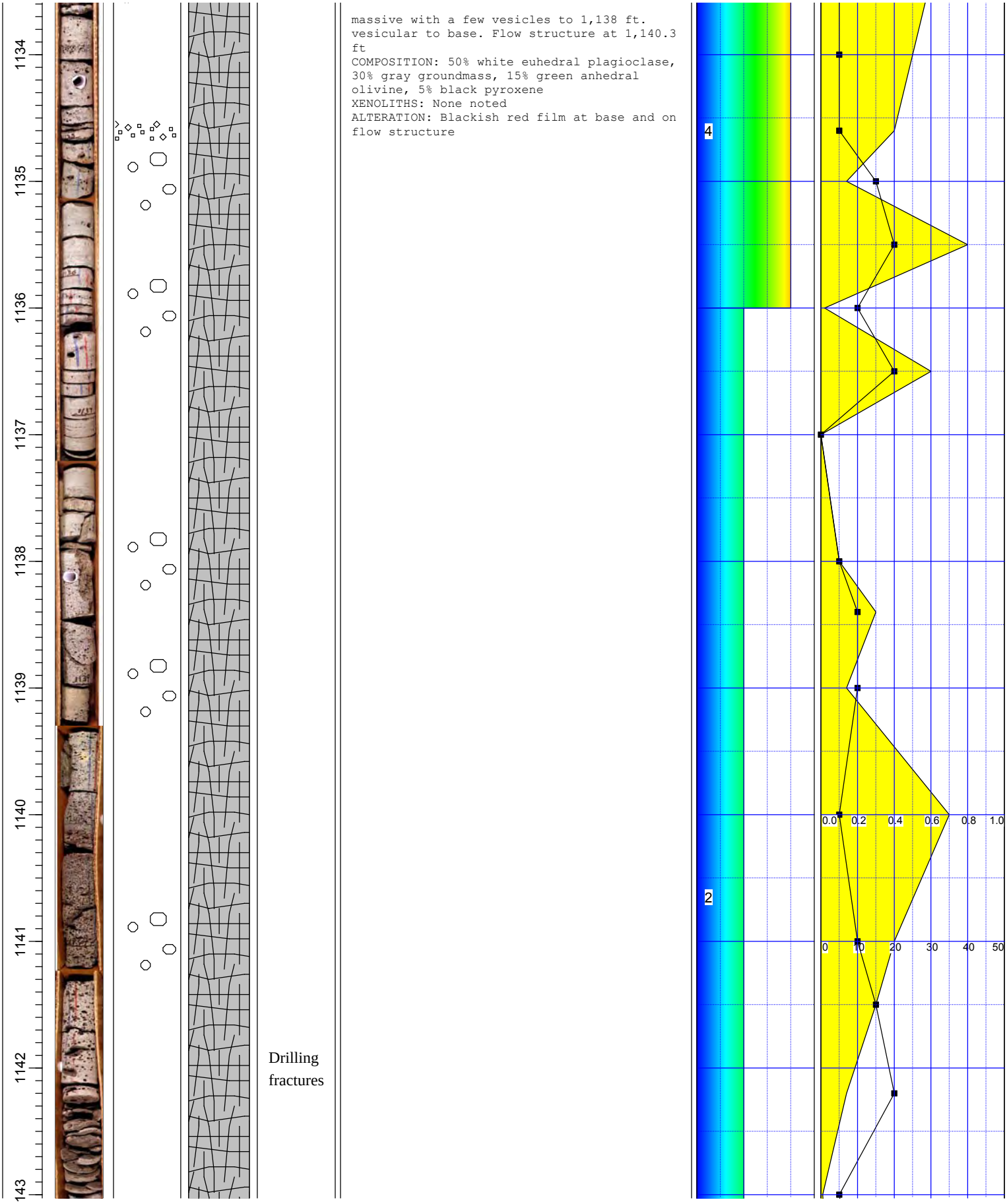




MISSING INTERVAL: Missing, no more information

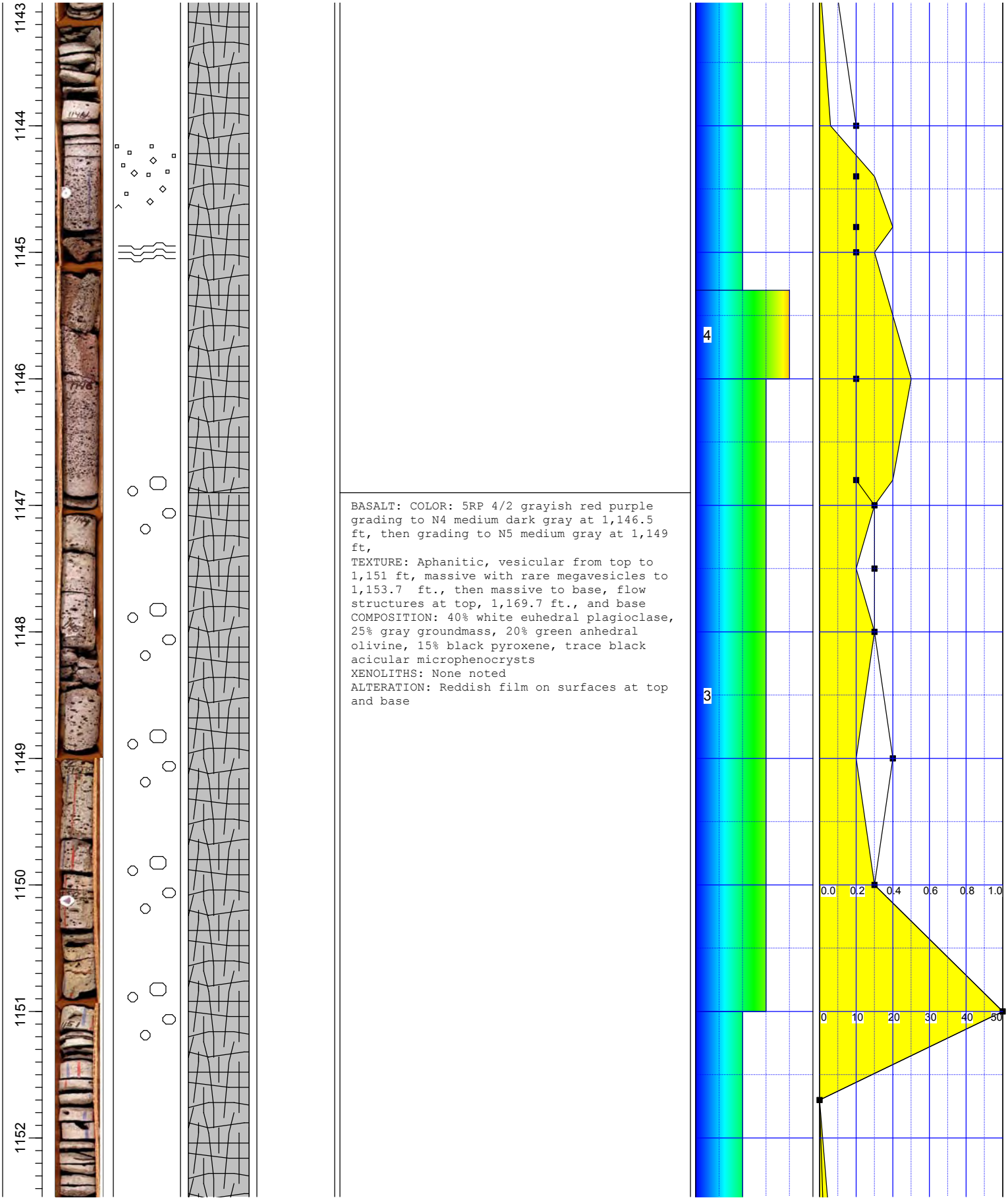
CLAY: TEXTURE: USCS classification CL
COLOR: 5 R 7/2 grayish orange pink
CONSISTENCY: Firm
STRUCTURES: Massive
FREE CARBONATES: No
ROCKS: Angular clasts of basalt
ROOTS/FOSSILS: None noted

BASALT: COLOR: N5 medium gray
TEXTURE: Aphanitic, vesicular to 1,133.9 ft,

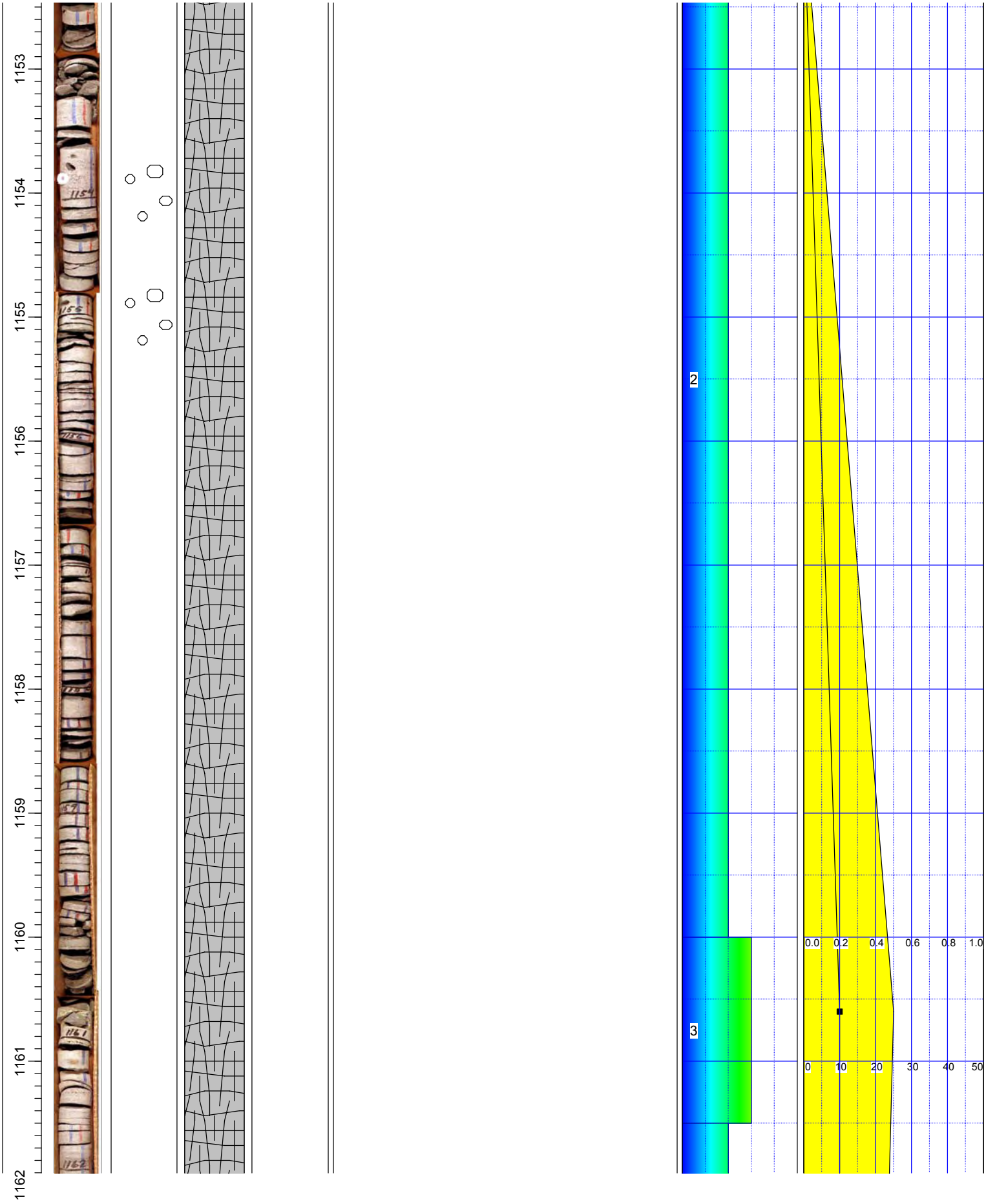


Drilling fractures

massive with a few vesicles to 1,138 ft. vesicular to base. Flow structure at 1,140.3 ft
COMPOSITION: 50% white euhedral plagioclase, 30% gray groundmass, 15% green anhedral olivine, 5% black pyroxene
XENOLITHS: None noted
ALTERATION: Blackish red film at base and on flow structure



BASALT: COLOR: 5RP 4/2 grayish red purple grading to N4 medium dark gray at 1,146.5 ft, then grading to N5 medium gray at 1,149 ft,
TEXTURE: Aphanitic, vesicular from top to 1,151 ft, massive with rare megavesicles to 1,153.7 ft., then massive to base, flow structures at top, 1,169.7 ft., and base
COMPOSITION: 40% white euhedral plagioclase, 25% gray groundmass, 20% green anhedral olivine, 15% black pyroxene, trace black acicular microphenocrysts
XENOLITHS: None noted
ALTERATION: Reddish film on surfaces at top and base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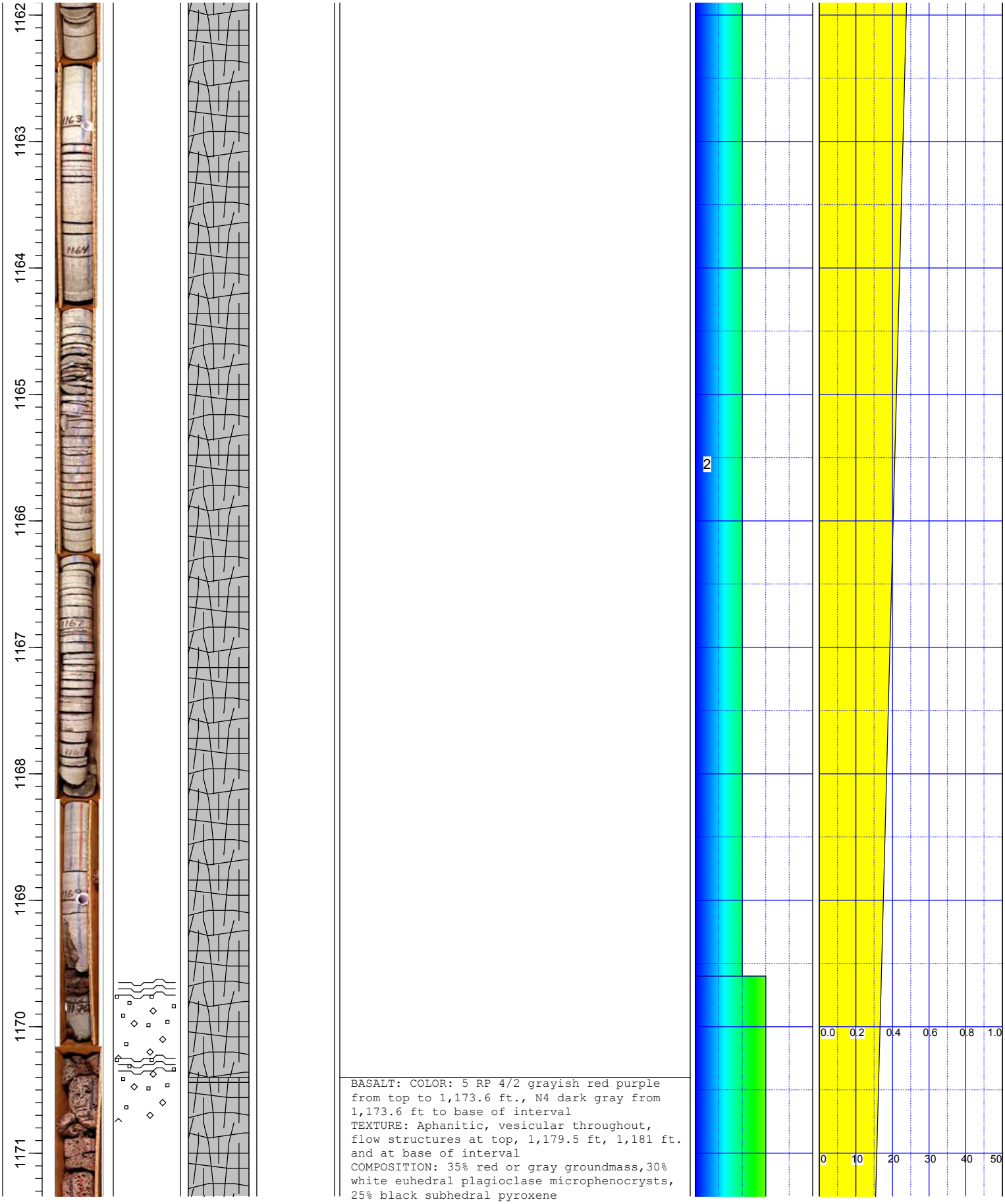
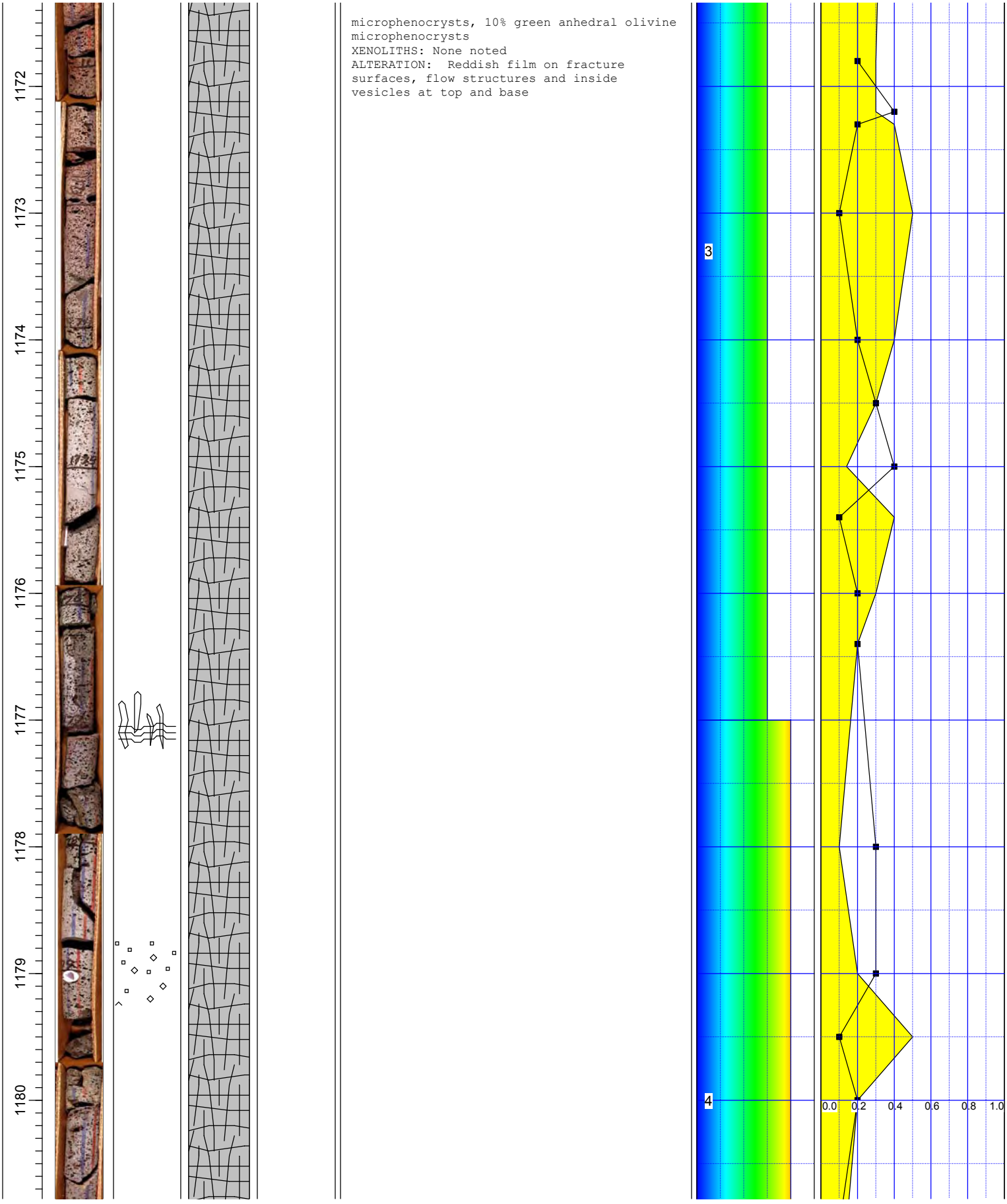
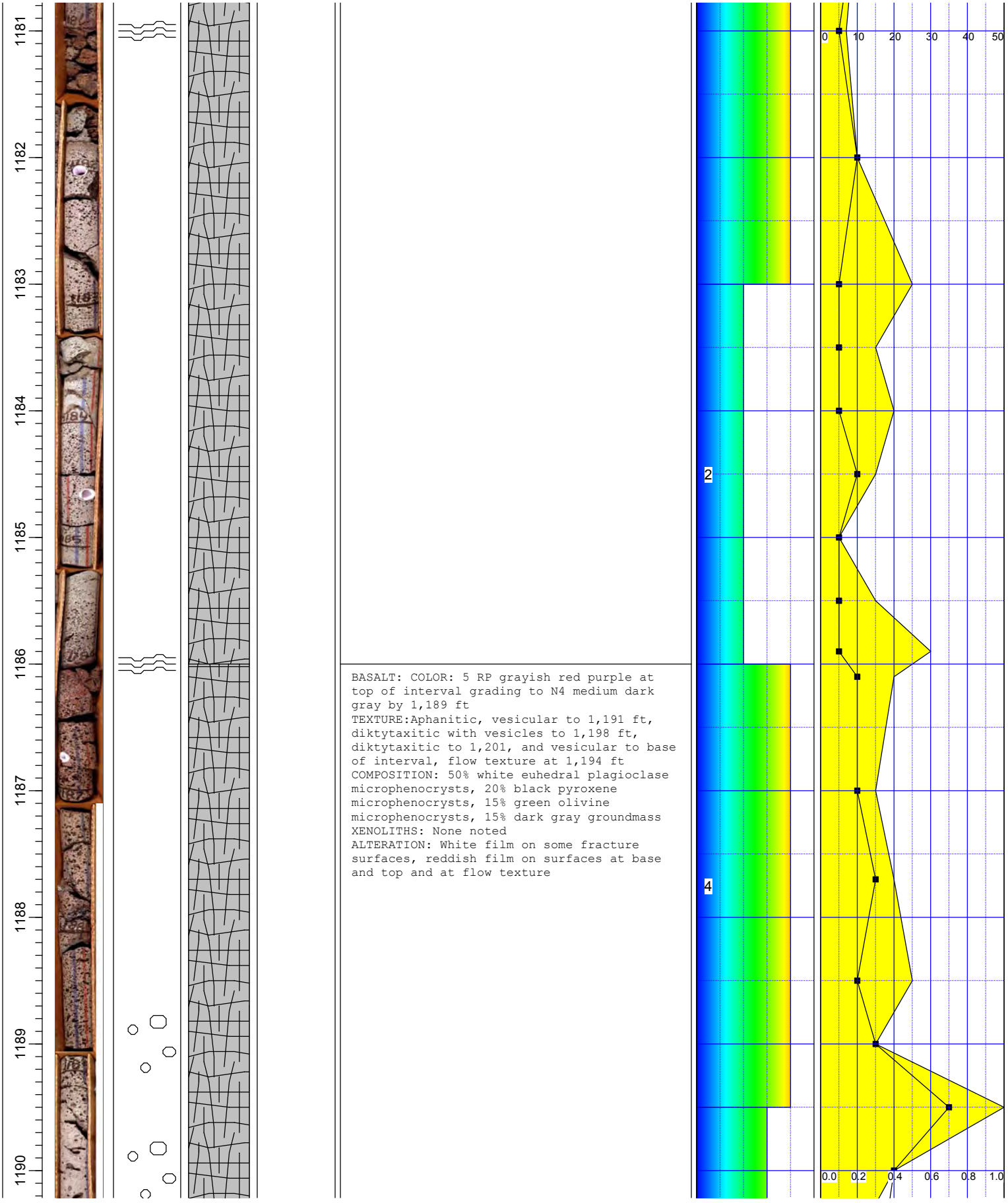


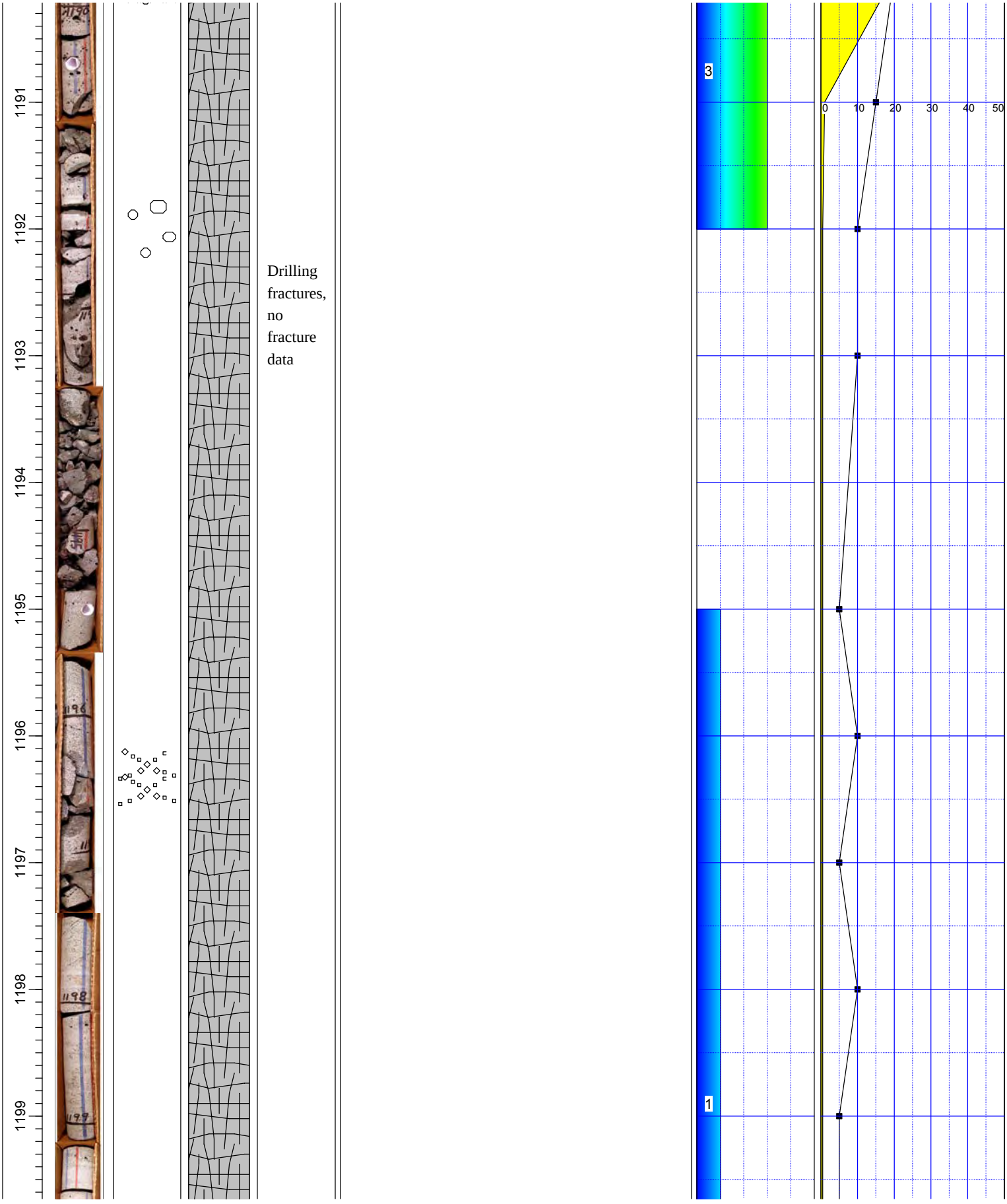
BASALT: COLOR: 5 RP 4/2 grayish red purple from top to 1,173.6 ft., N4 dark gray from 1,173.6 ft to base of interval
TEXTURE: Aphanitic, vesicular throughout, flow structures at top, 1,179.5 ft, 1,181 ft. and at base of interval
COMPOSITION: 35% red or gray groundmass,30% white euhedral plagioclase microphenocrysts, 25% black subhedral pyroxene



microphenocrysts, 10% green anhedral olivine microphenocrysts
XENOLITHS: None noted
ALTERATION: Reddish film on fracture surfaces, flow structures and inside vesicles at top and base



BASALT: COLOR: 5 RP grayish red purple at top of interval grading to N4 medium dark gray by 1,189 ft
TEXTURE:Aphanitic, vesicular to 1,191 ft, diktytaxitic with vesicles to 1,198 ft, diktytaxitic to 1,201, and vesicular to base of interval, flow texture at 1,194 ft
COMPOSITION: 50% white euhedral plagioclase microphenocrysts, 20% black pyroxene microphenocrysts, 15% green olivine microphenocrysts, 15% dark gray groundmass
XENOLITHS: None noted
ALTERATION: White film on some fracture surfaces, reddish film on surfaces at base and top and at flow texture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1199
Drilling fractures, no fracture data
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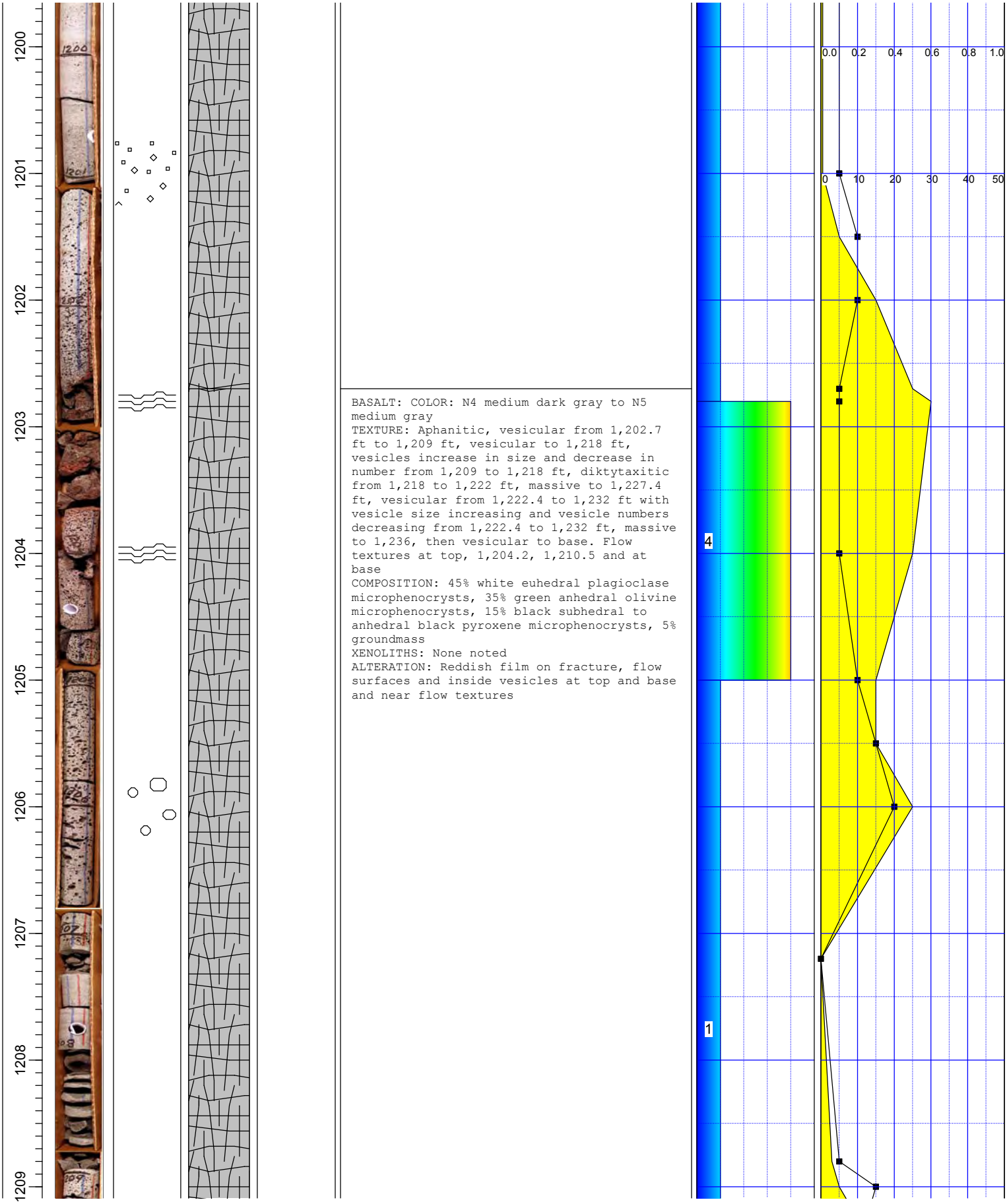
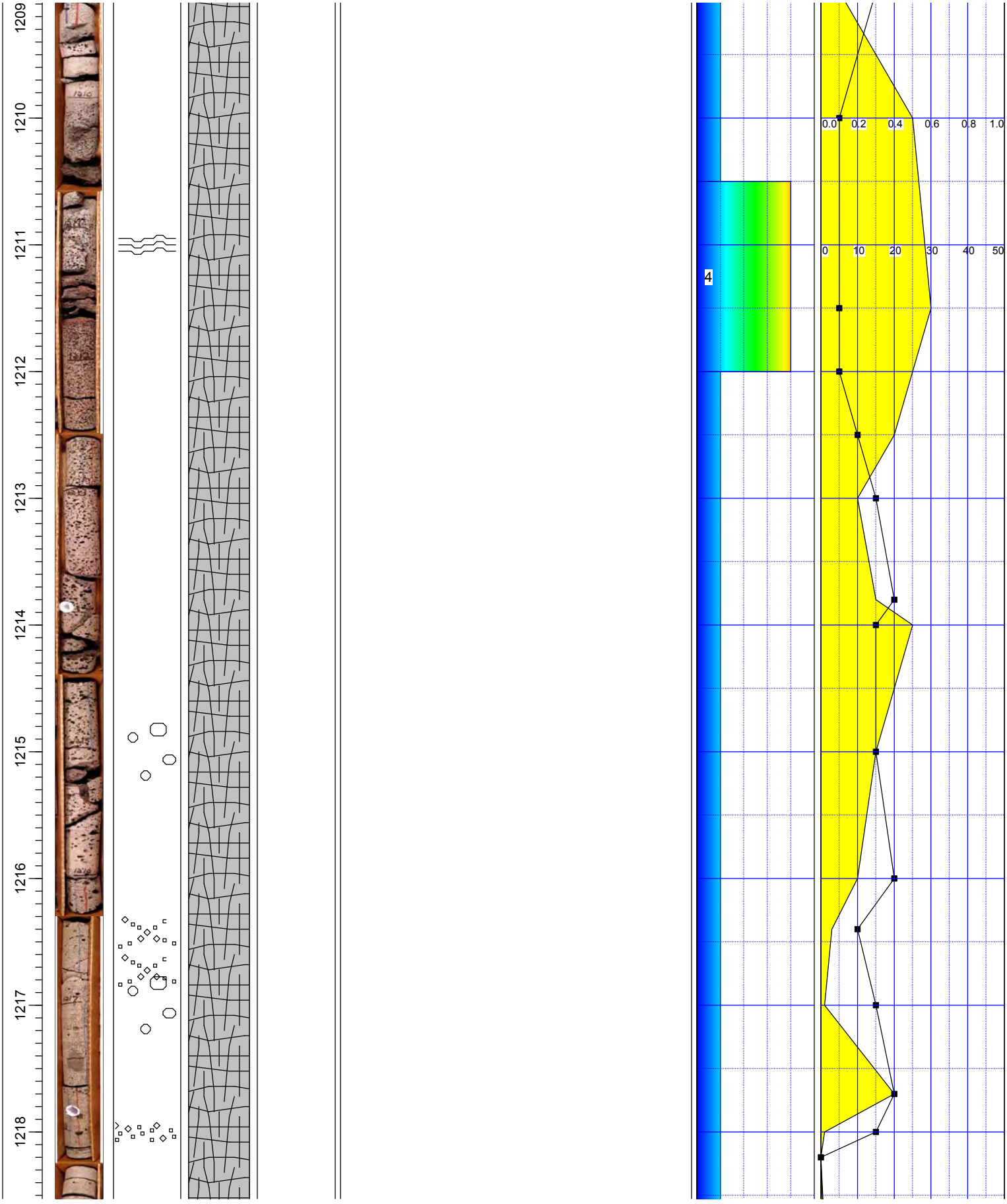


BASALT: COLOR: N4 medium dark gray to N5 medium gray
TEXTURE: Aphanitic, vesicular from 1,202.7 ft to 1,209 ft, vesicular to 1,218 ft, vesicles increase in size and decrease in number from 1,209 to 1,218 ft, diktytaxitic from 1,218 to 1,222 ft, massive to 1,227.4 ft, vesicular from 1,222.4 to 1,232 ft with vesicle size increasing and vesicle numbers decreasing from 1,222.4 to 1,232 ft, massive to 1,236, then vesicular to base. Flow textures at top, 1,204.2, 1,210.5 and at base
COMPOSITION: 45% white euhedral plagioclase microphenocrysts, 35% green anhedral olivine microphenocrysts, 15% black subhedral to anhedral black pyroxene microphenocrysts, 5% groundmass
XENOLITHS: None noted
ALTERATION: Reddish film on fracture, flow surfaces and inside vesicles at top and base and near flow textures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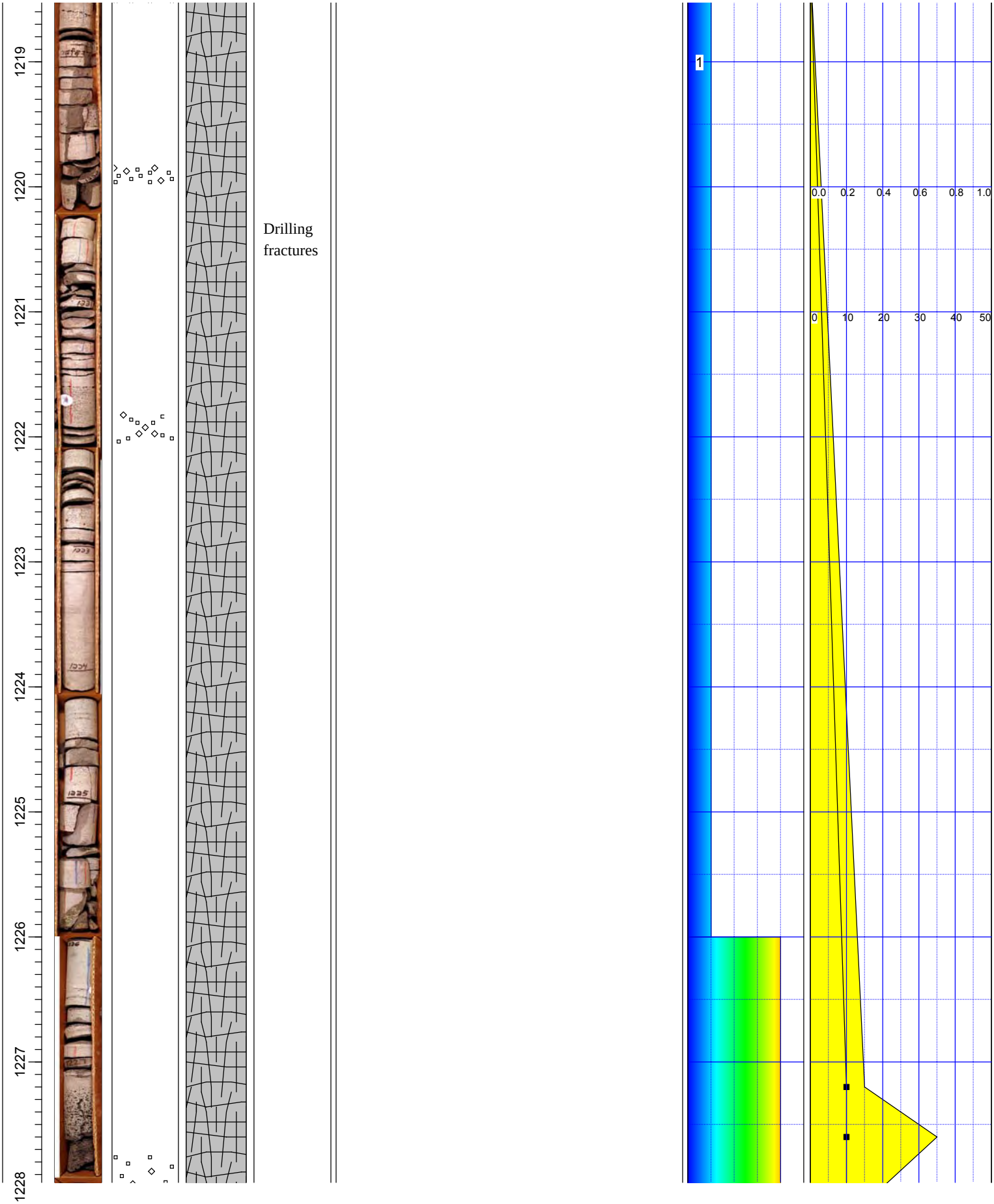
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Drilling
fractures
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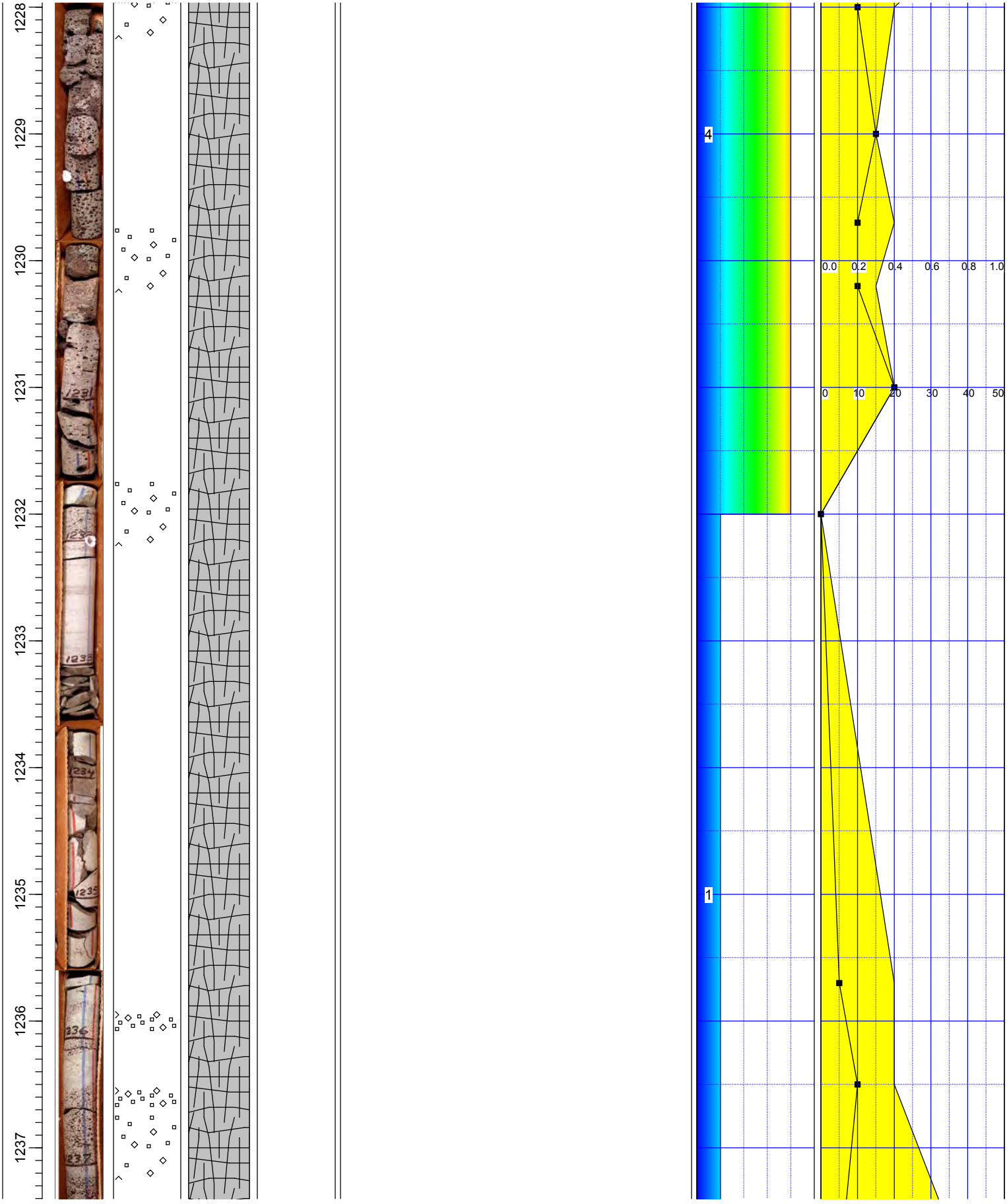
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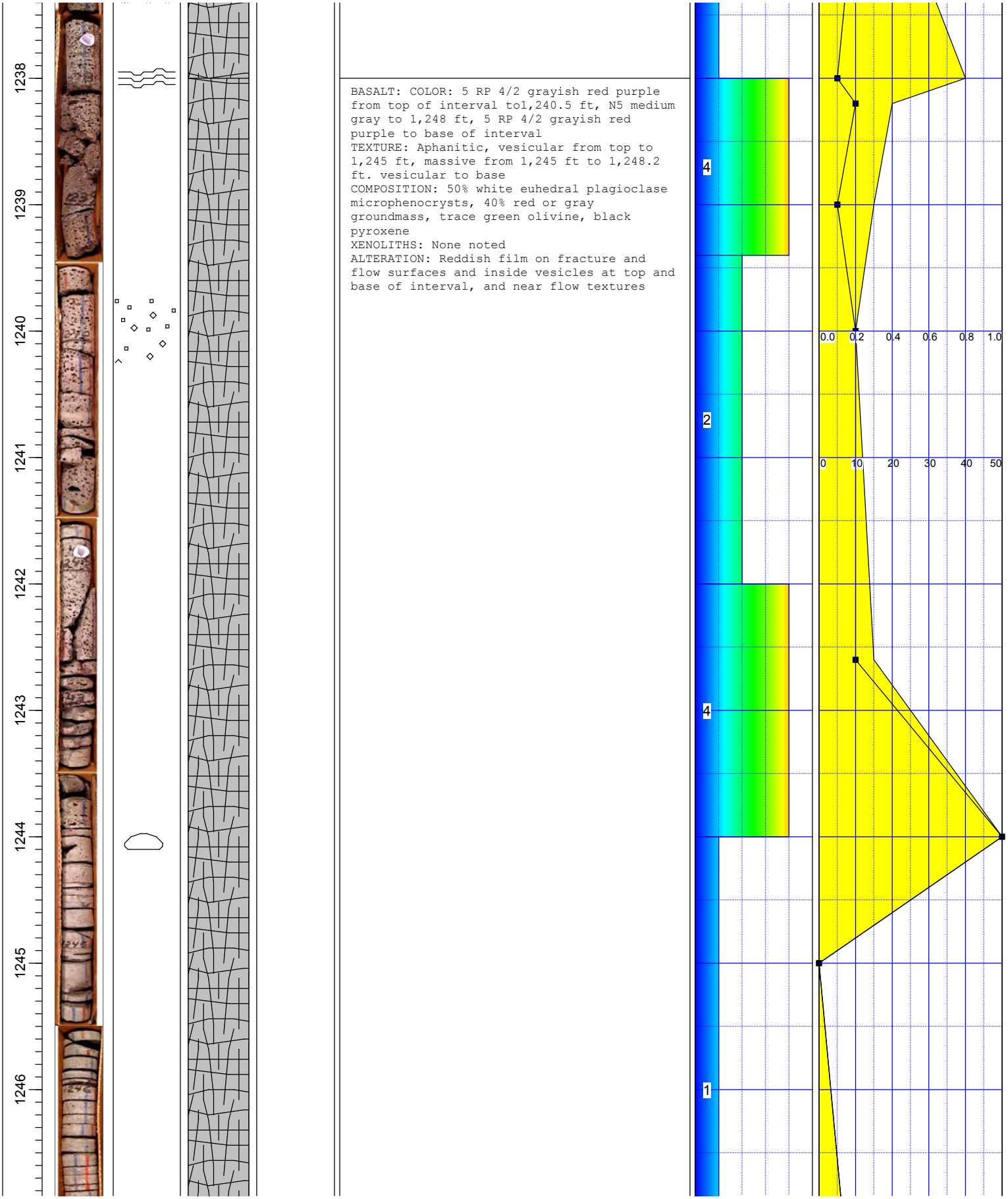
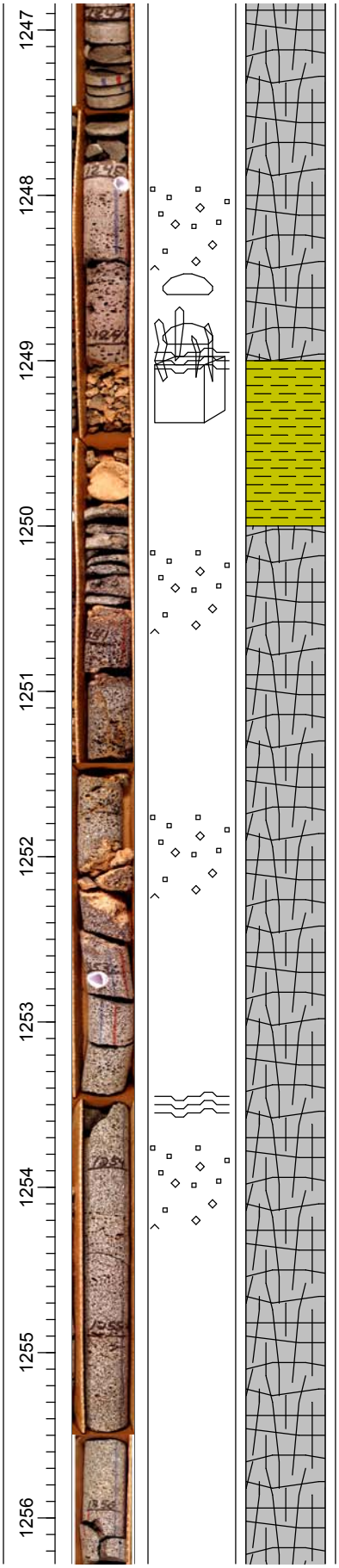
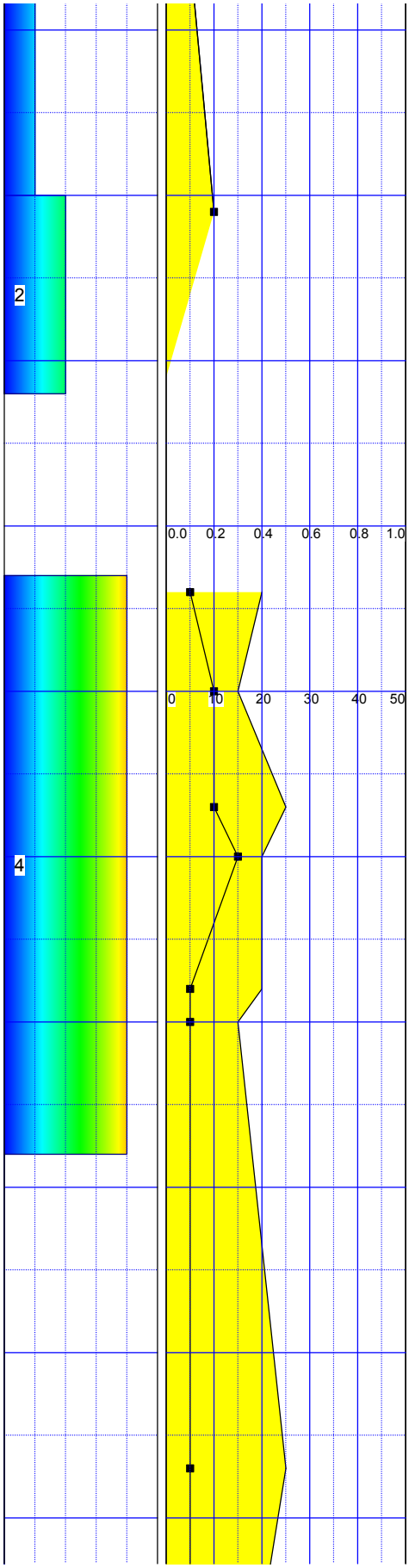


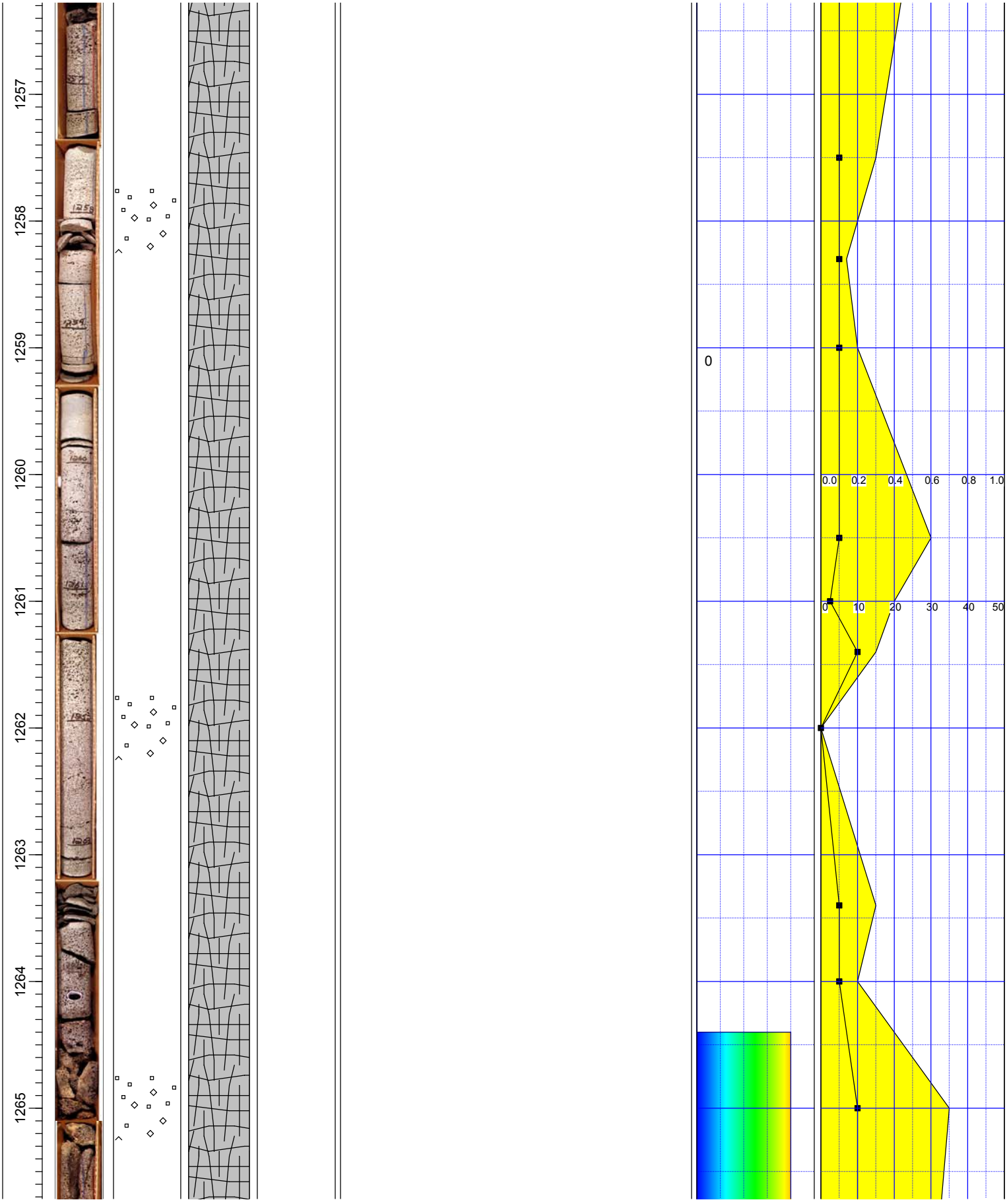
BASALT: COLOR: 5 RP 4/2 grayish red purple from top of interval to1,240.5 ft, N5 medium gray to 1,248 ft, 5 RP 4/2 grayish red purple to base of interval
TEXTURE: Aphanitic, vesicular from top to 1,245 ft, massive from 1,245 ft to 1,248.2 ft. vesicular to base
COMPOSITION: 50% white euhedral plagioclase microphenocrysts, 40% red or gray groundmass, trace green olivine, black pyroxene
XENOLITHS: None noted
ALTERATION: Reddish film on fracture and flow surfaces and inside vesicles at top and base of interval, and near flow textures



SILT AND CLAY: TEXTURE: USCS classification ML silt
COLOR: 5 YR 6/4 light brown
CONSISTENCY: Firm
STRUCTURES: Massive
FREE CARBONATES: No
ROCKS: Angular clasts of basalt
ROOTS/FOSSILS: 1 mm circular holes

BASALT: COLOR: N5 medium gray, grading to N4 medium dark gray at 1,329.5 ft,
TEXTURE: Phaneritic, vesicular to 1,253.6 ft, diktytaxitic with vesicles to 1,258 ft, massive with a few small vesicles to 1,261 ft, diktytaxitic with vesicles to 1,275 ft, core crushed to 1,285.5 ft, vesicular to 1,286.5 ft, massive to 1,290 ft, diktytaxitic to 1,291.7 ft, vesicular to 1,294.4 ft., diktytaxitic to 1,296.5 ft, vesicular to 1,306.5 ft, diktytaxitic to 1,307.7 ft, vexicular to 1,316 ft, massive to 1,318 ft, vesicular to 1,322.7 ft, diktytaxitic to 1,326 ft, massive to 1,327.3 ft, diktytaxitic to 1,328.4 ft, then increasingly vesicular to the base of the interval
COMPOSITION: 50% 2-5mm plagioclase phenocrysts in a felted plagioclase matrix, 25% green anhedral olivine microphenocrysts, 15% gray groundmass, 5% black pyroxene microphenocrysts,
XENOLITHS: None noted
ALTERATION: Reddish film on fracture and flow surfaces and inside vesicles at top and base and near flow textures; sparry calcite at 1,275 ft, 1,292.5 ft, in a fracture from 1,293 to 1,294 ft, 1,297.2, 1,298.4, 1,298.6, 1,301-1,301.6 ft, 1,302.8, 1,308.2, 1,309.5, 1312.2, 1,313.2, 1,313.4, 1,326 to 1,328 ft, and from 1,329 to 1,330.3 ft in fractures; pale orange or yellow clay at top of interval and at 1,265, 1,268, 1,270,1,287,1,294, 1,311, 1,312.7, 1,322.5, and 1,327 ft

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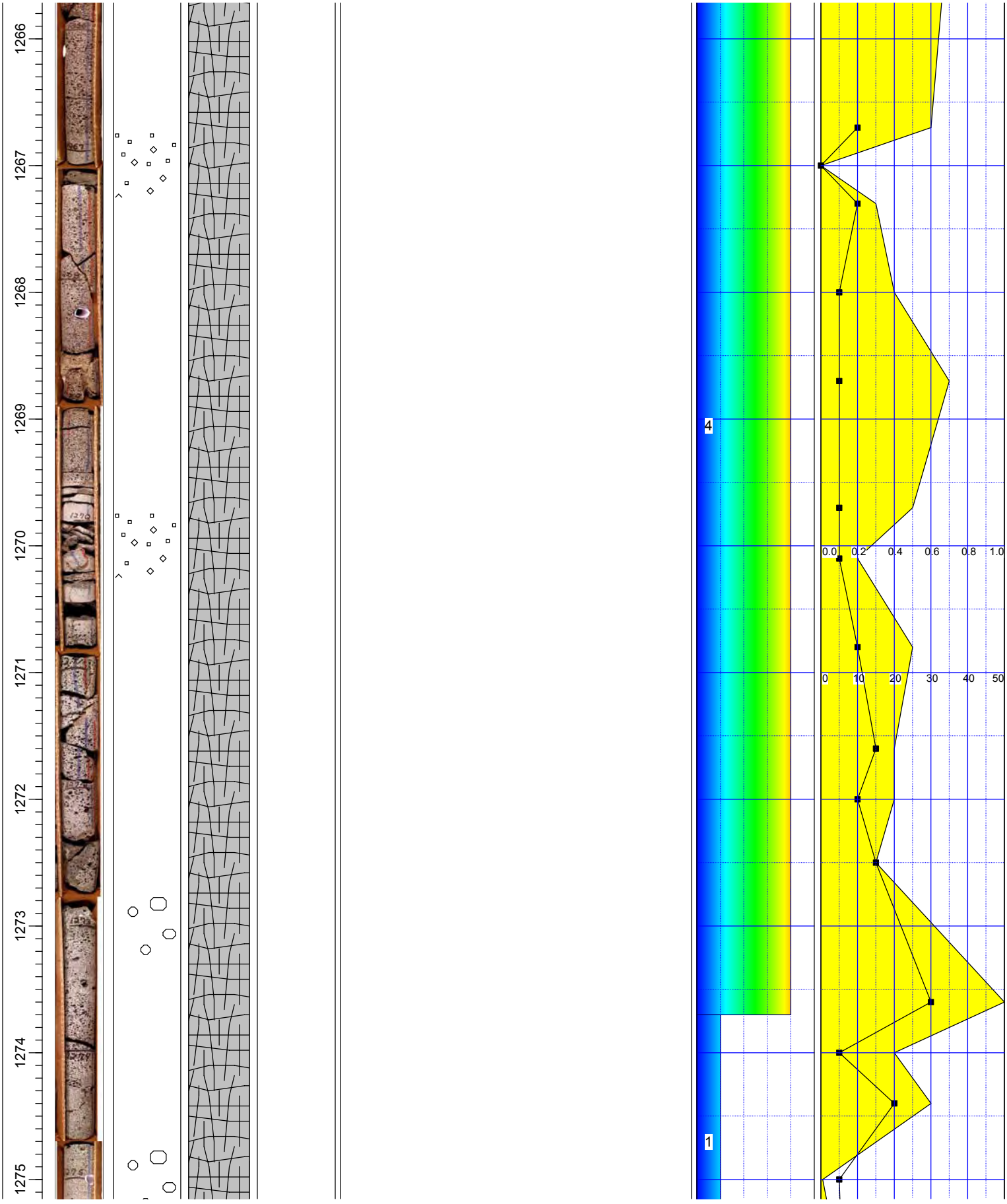
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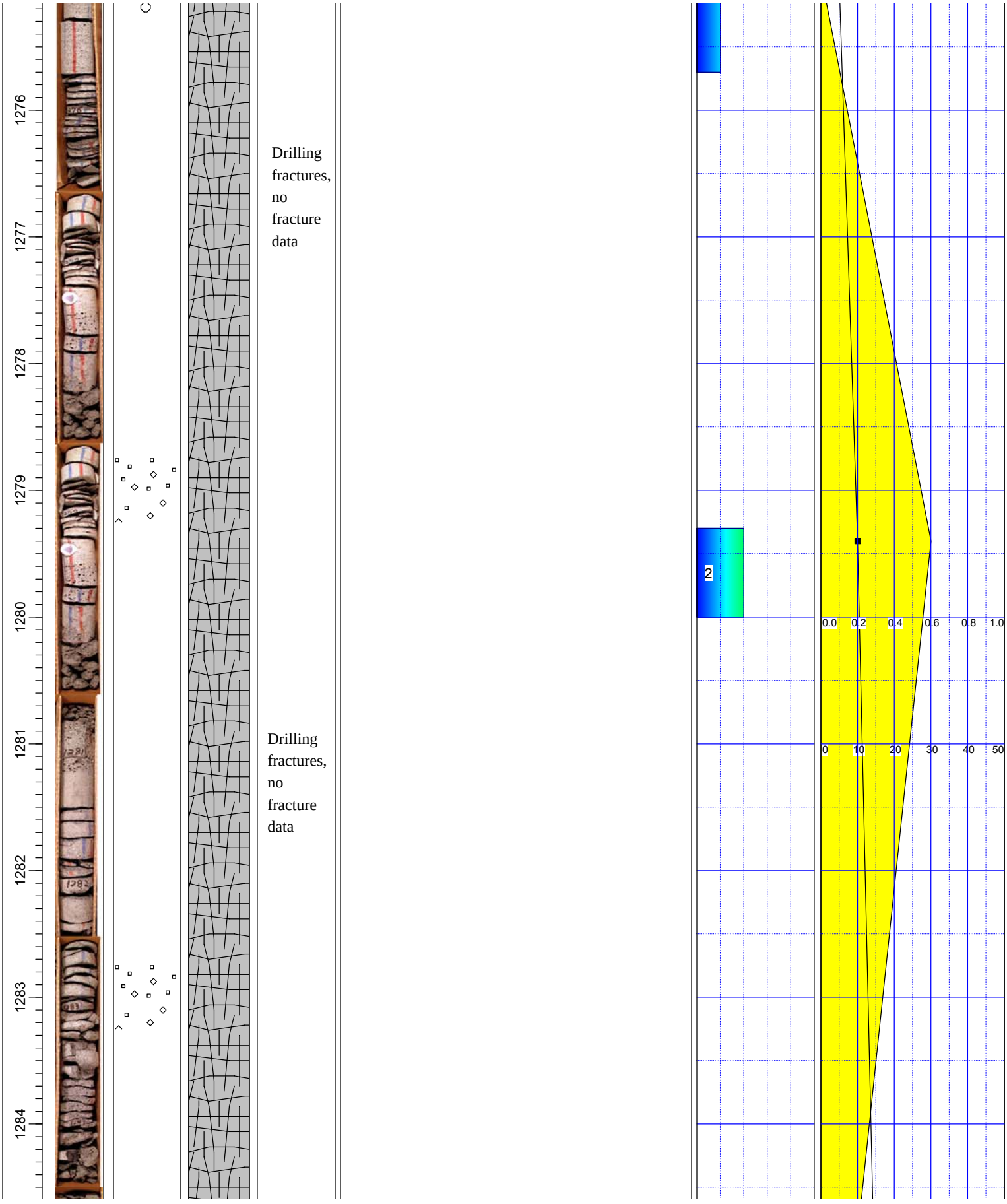
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1284
Drilling fractures, no fracture data
Drilling fractures, no fracture data
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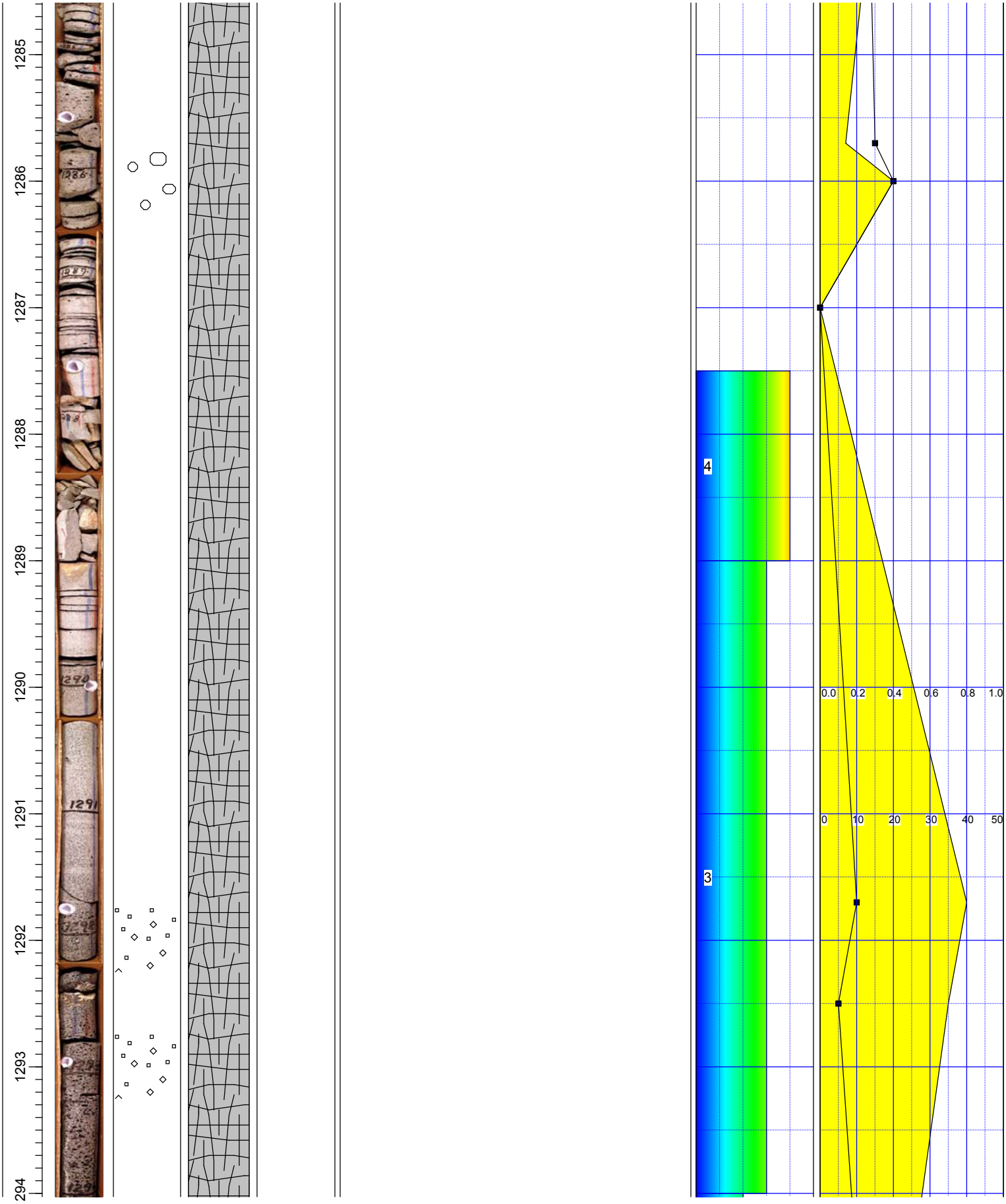
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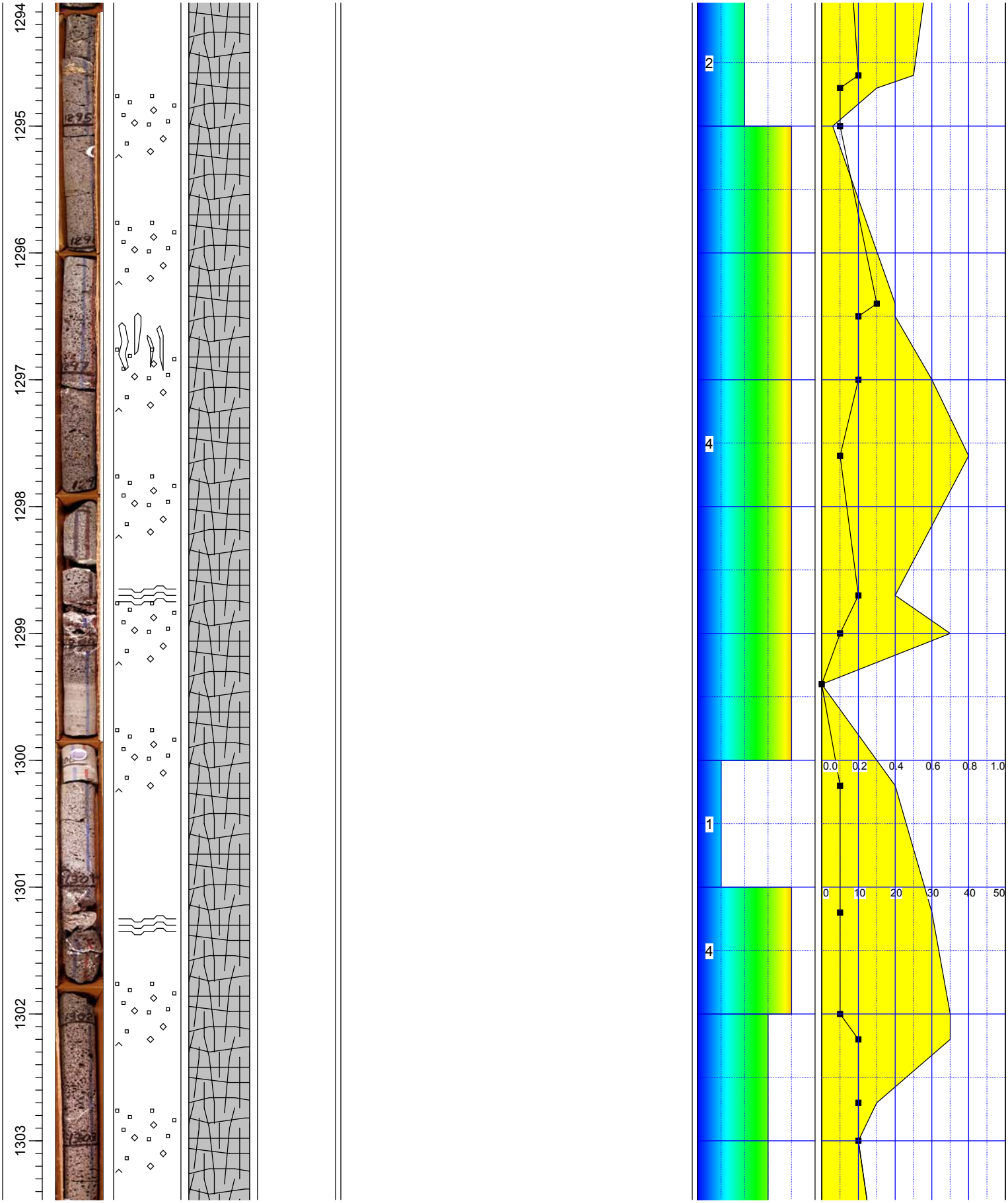
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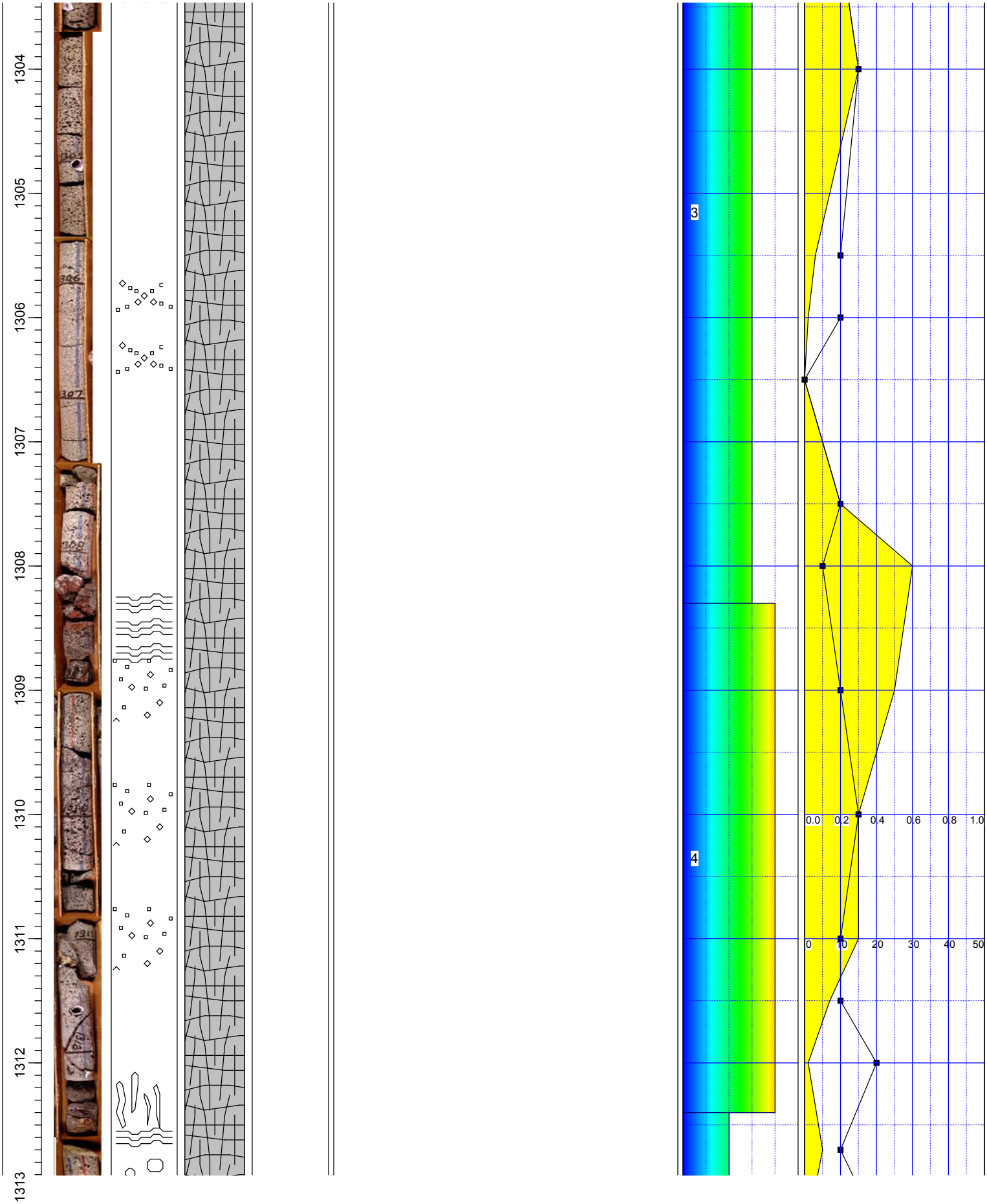
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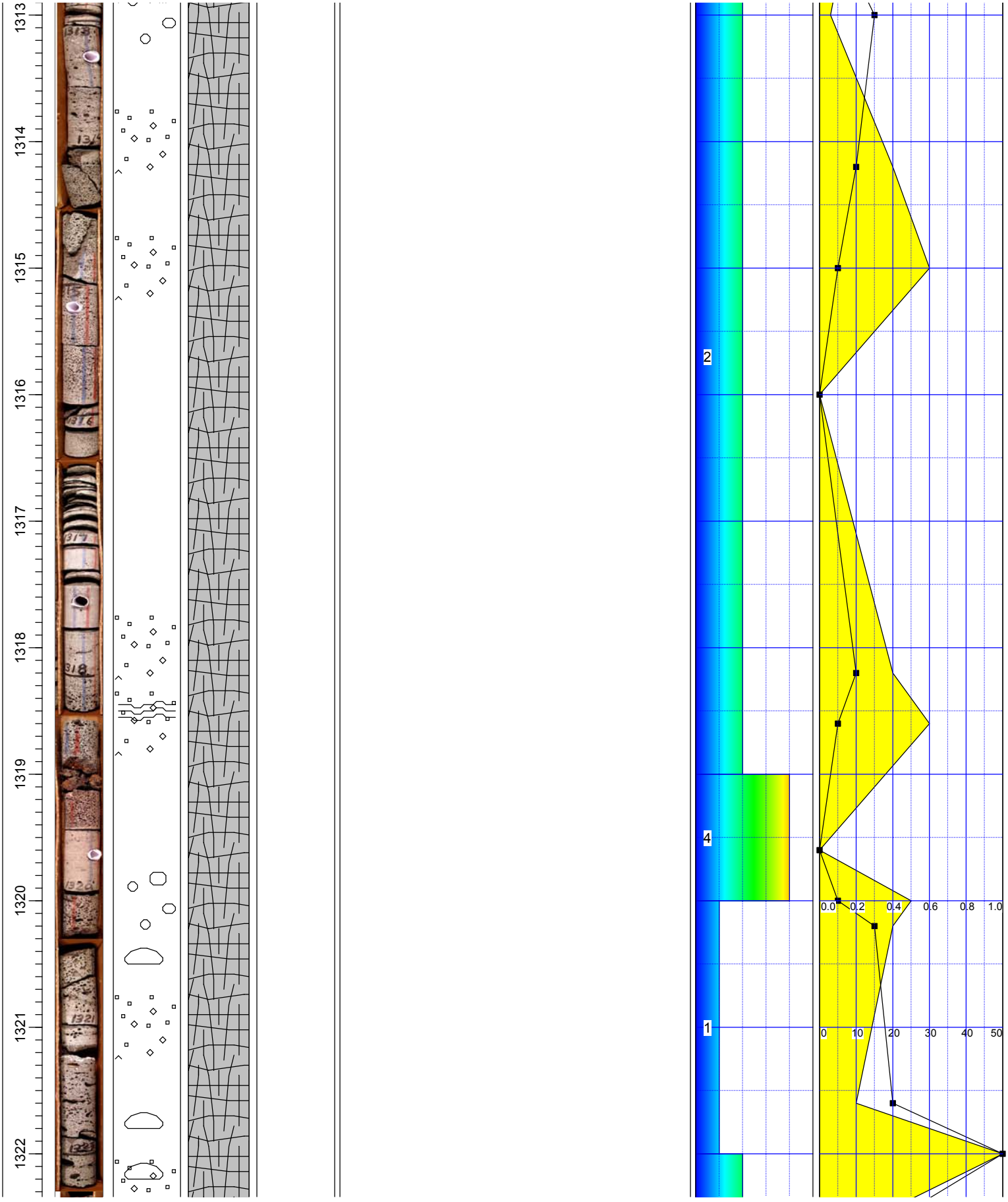
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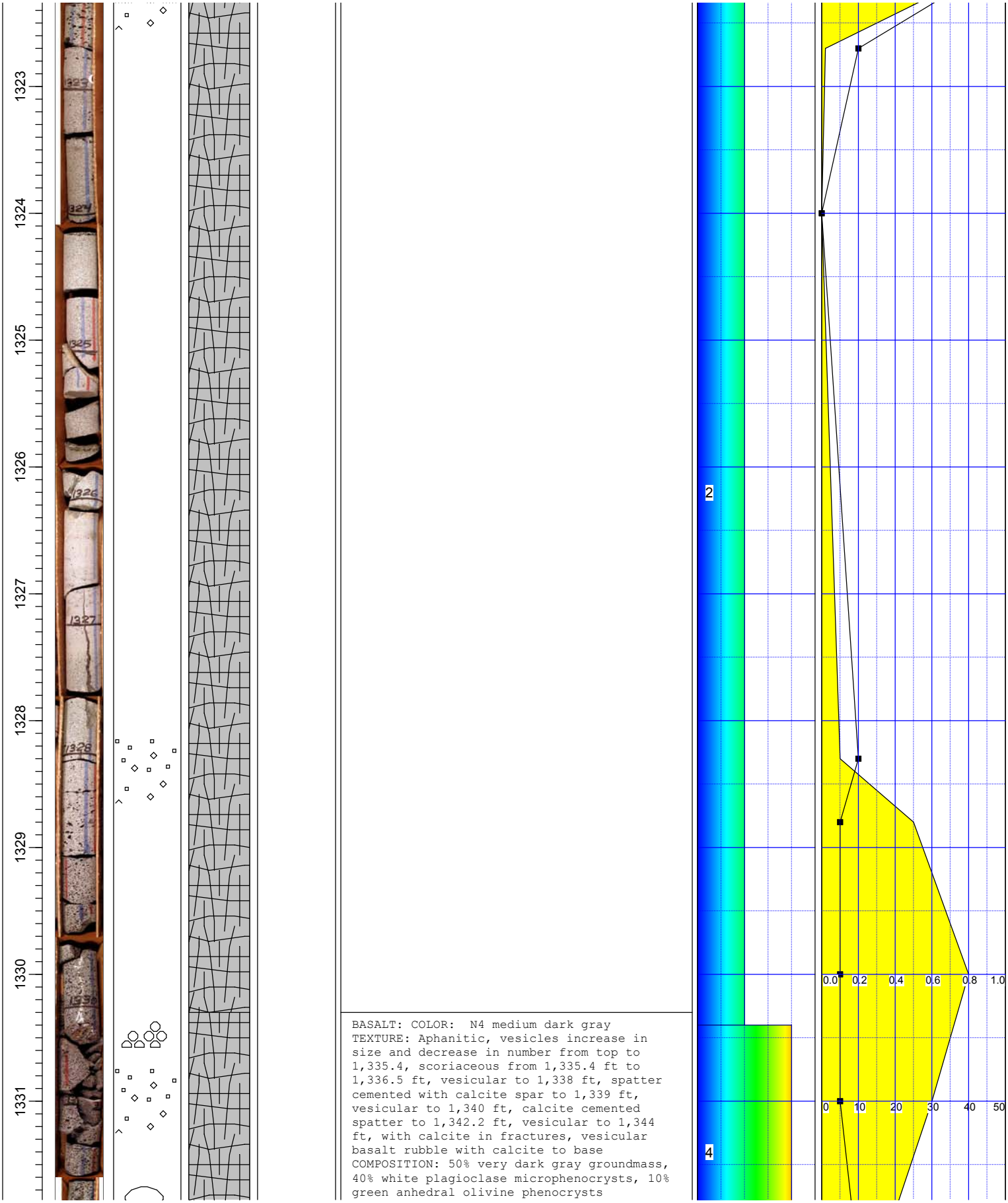
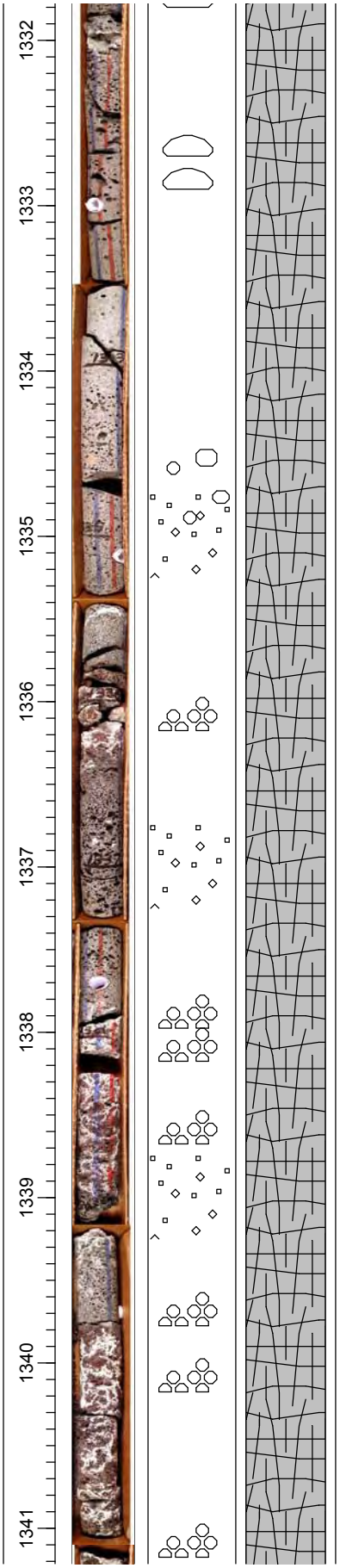
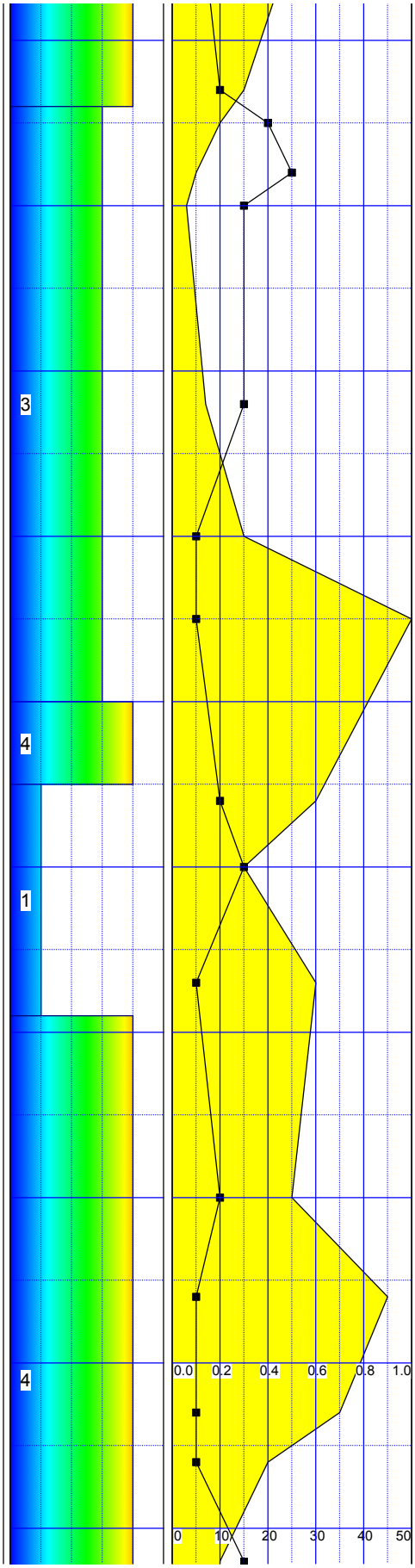
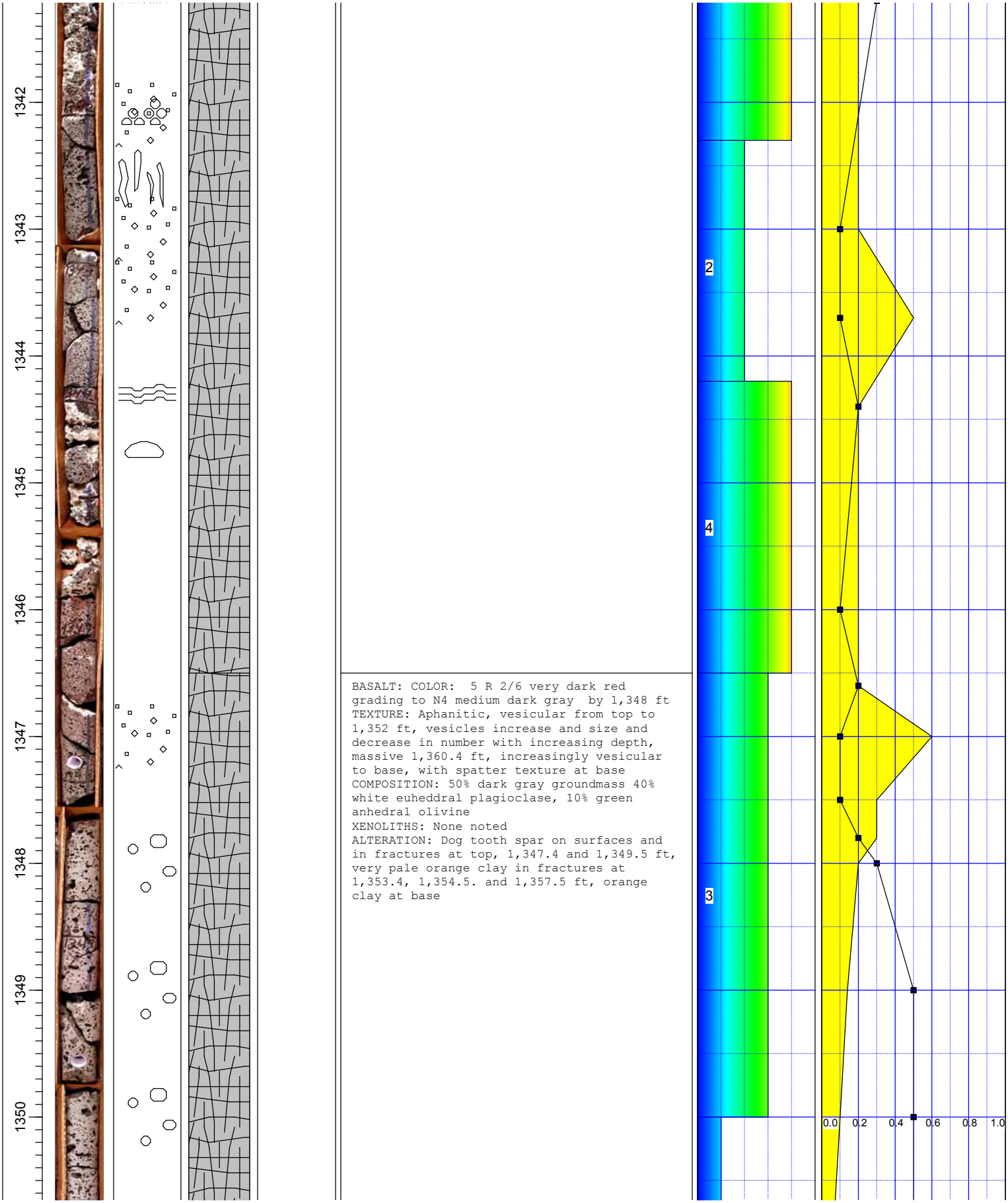


BASALT: COLOR: N4 medium dark gray
TEXTURE: Aphanitic, vesicles increase in size and decrease in number from top to 1,335.4, scoriaceous from 1,335.4 ft to 1,336.5 ft, vesicular to 1,338 ft, spatter cemented with calcite spar to 1,339 ft, vesicular to 1,340 ft, calcite cemented spatter to 1,342.2 ft, vesicular to 1,344 ft, with calcite in fractures, vesicular basalt rubble with calcite to base
COMPOSITION: 50% very dark gray groundmass, 40% white plagioclase microphenocrysts, 10% green anhedral olivine phenocrysts

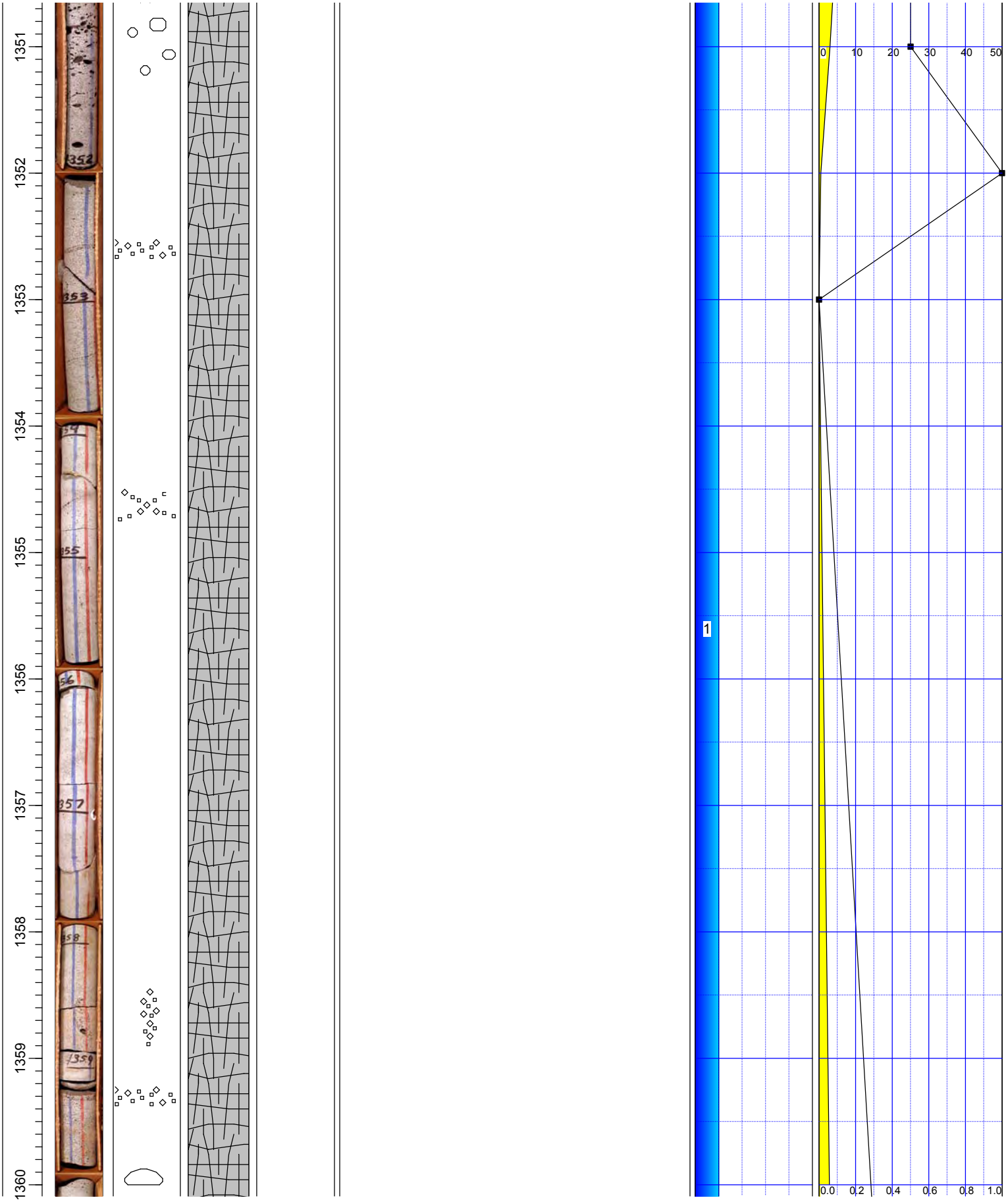


XENOLITHS: None noted
ALTERATION: Dogtooth spar in fractures and in vesicles throughout, reddish or black film inside some vesicles and on spatter fragments





BASALT: COLOR: 5 R 2/6 very dark red grading to N4 medium dark gray by 1,348 ft
TEXTURE: Aphanitic, vesicular from top to 1,352 ft, vesicles increase and size and decrease in number with increasing depth, massive 1,360.4 ft, increasingly vesicular to base, with spatter texture at base
COMPOSITION: 50% dark gray groundmass 40% white euheddral plagioclase, 10% green anhedral olivine
XENOLITHS: None noted
ALTERATION: Dog tooth spar on surfaces and in fractures at top, 1,347.4 and 1,349.5 ft, very pale orange clay in fractures at 1,353.4, 1,354.5. and 1,357.5 ft, orange clay at base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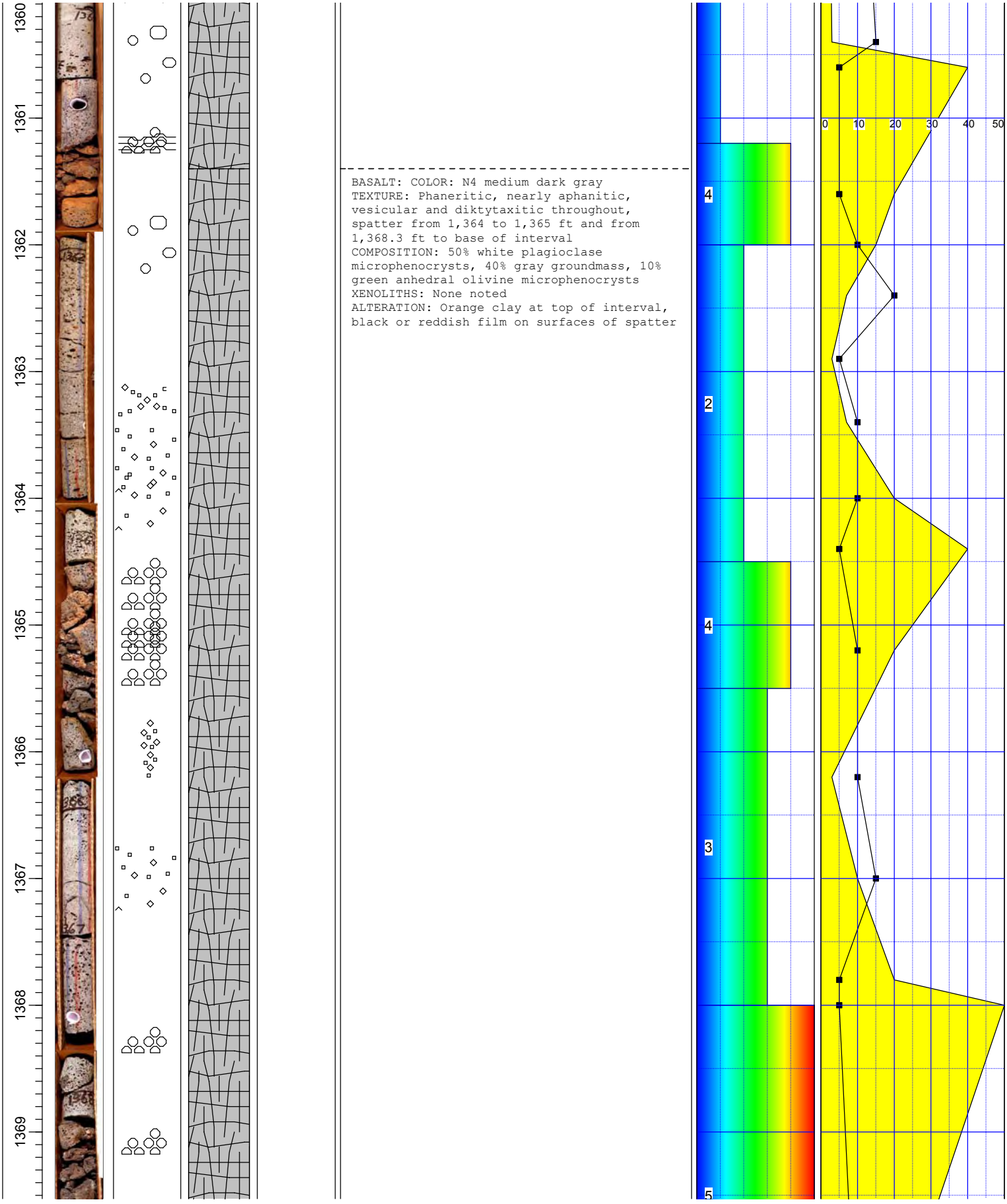
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BASALT: COLOR: N4 medium dark gray
TEXTURE: Phaneritic, nearly aphanitic,
vesicular and diktytaxitic throughout,
spatter from 1,364 to 1,365 ft and from
1,368.3 ft to base of interval
COMPOSITION: 50% white plagioclase
microphenocrysts, 40% gray groundmass, 10%
green anhedral olivine microphenocrysts
XENOLITHS: None noted
ALTERATION: Orange clay at top of interval,
black or reddish film on surfaces of spatter
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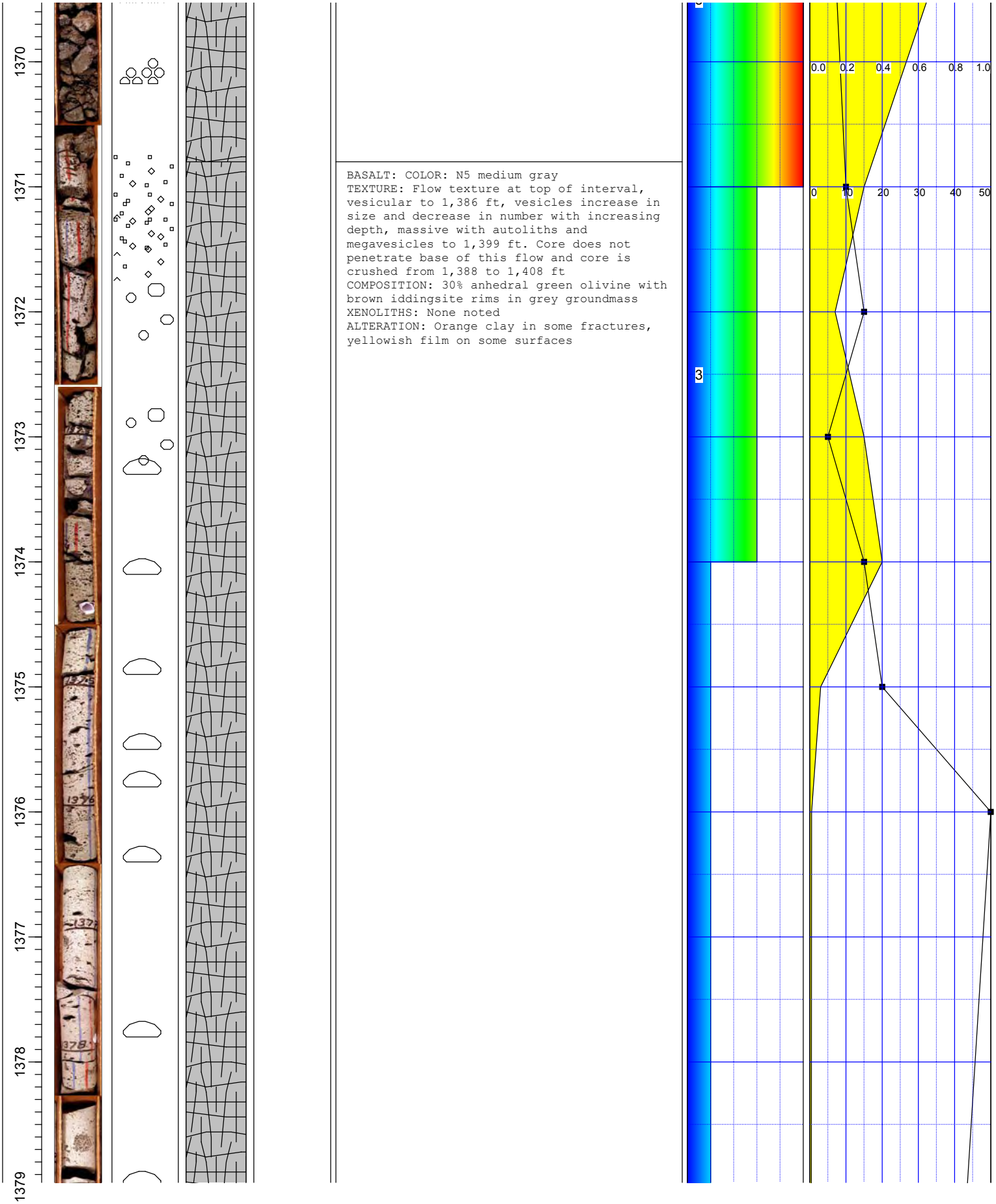
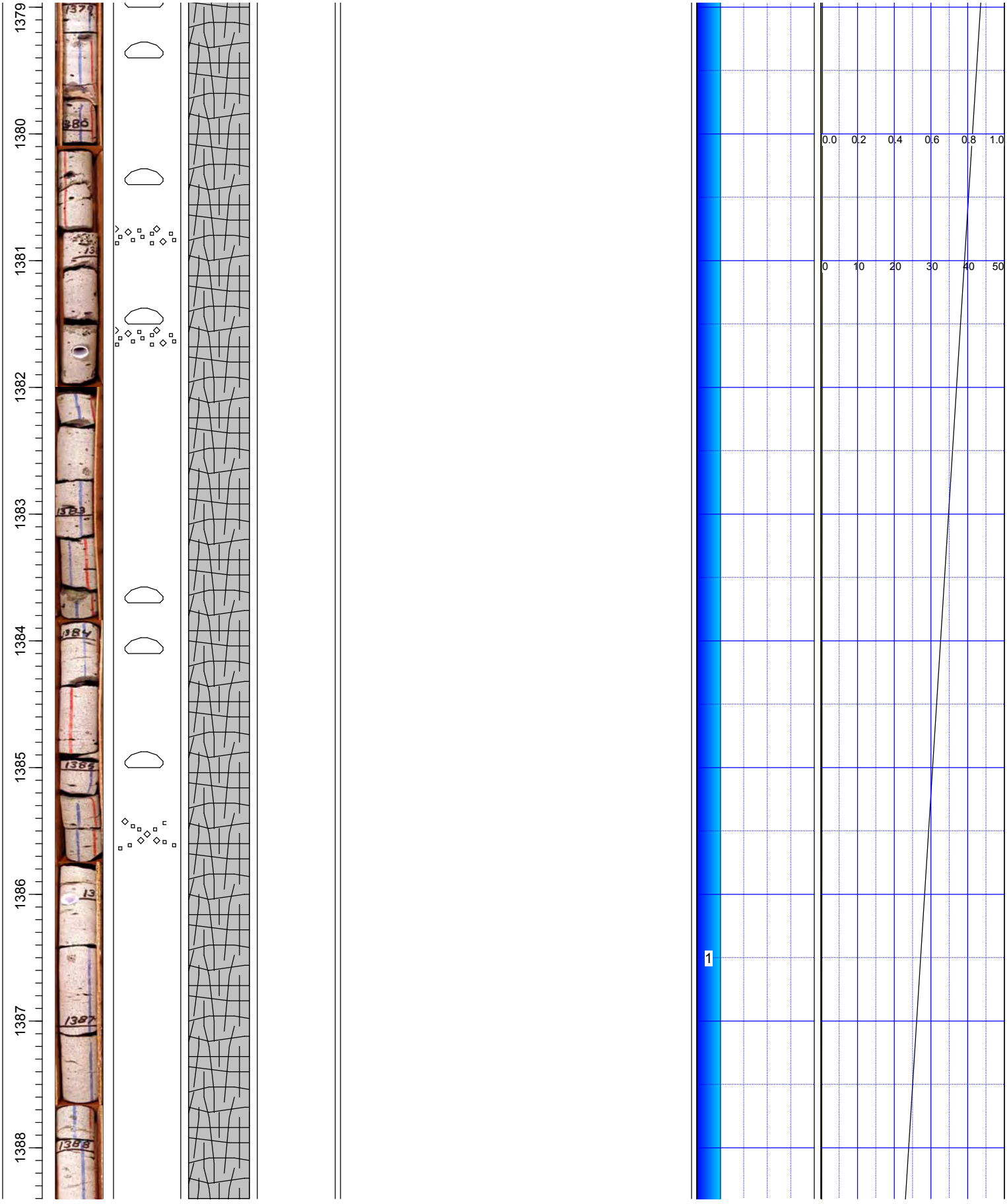


BASALT: COLOR: N5 medium gray
TEXTURE: Flow texture at top of interval, vesicular to 1,386 ft, vesicles increase in size and decrease in number with increasing depth, massive with autoliths and megavesicles to 1,399 ft. Core does not penetrate base of this flow and core is crushed from 1,388 to 1,408 ft
COMPOSITION: 30% anhedral green olivine with brown iddingsite rims in grey groundmass
XENOLITHS: None noted
ALTERATION: Orange clay in some fractures, yellowish film on some surfaces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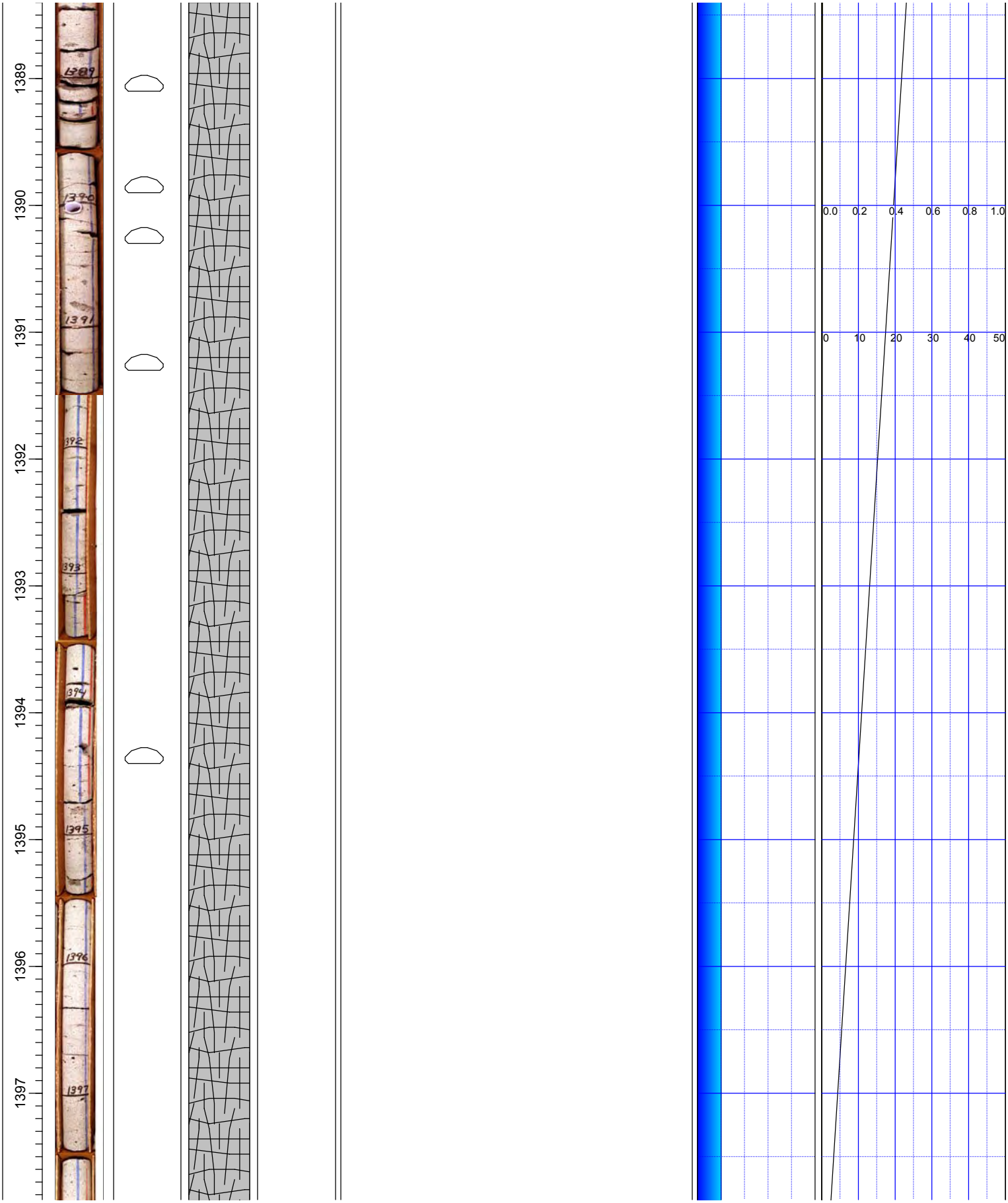
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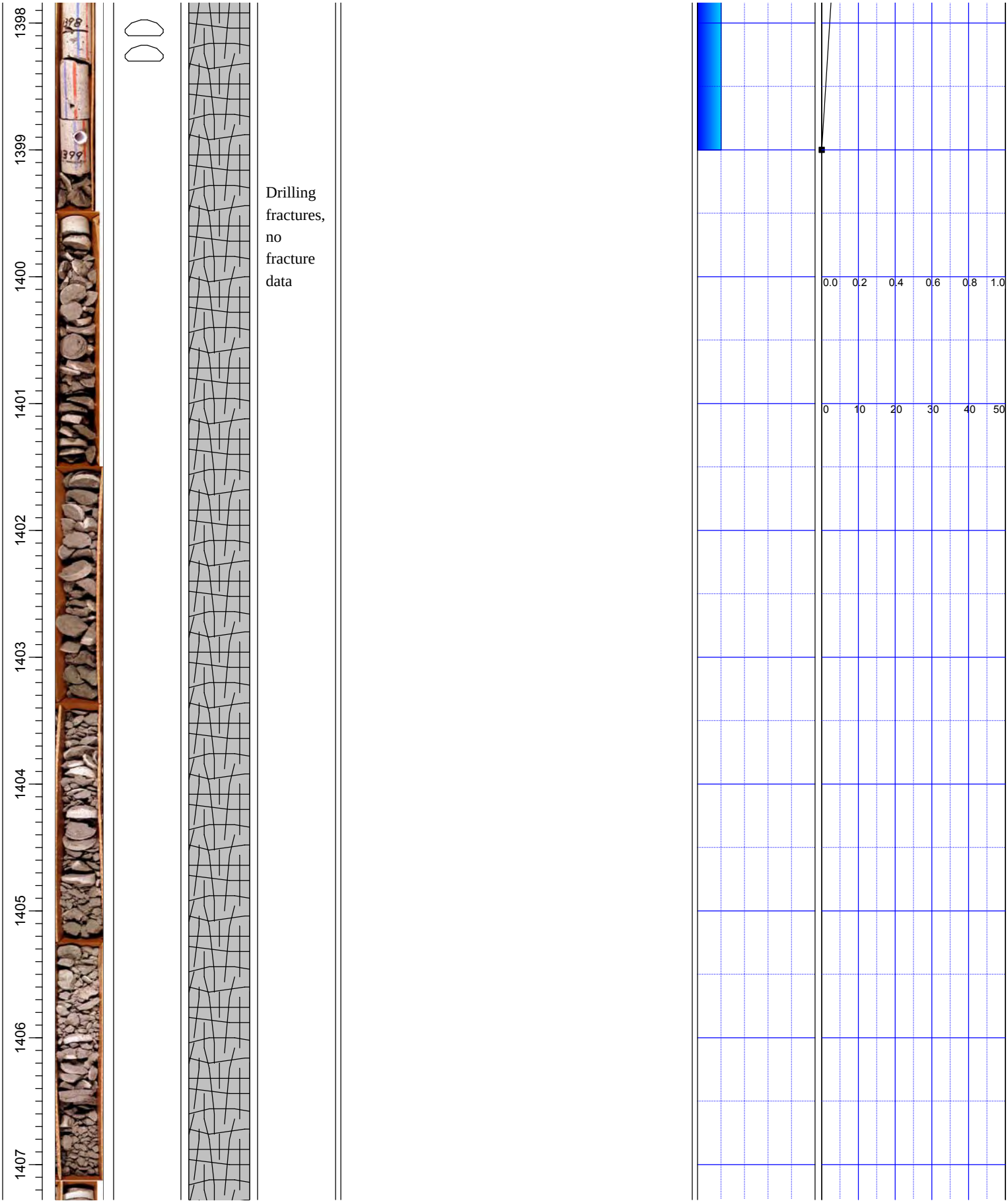
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Drilling fractures, no fracture data
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