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 134

Logged By: S.M. Orr

Selected Aliases:

USGS Site ID: 433611112595801
Contractor Well ID:

Drilling Agency: USGS
Year Drilled: 2005
Names of Drillers: M. Gilbert, M. Vance
Well Status: Completed
Total Depth of Hole (ft): 949.0

Total Core Recovered (ft):
Beginning Depth (ft): 0
Ending Depth (ft): 949.0
[x] Continuous Recovery
[ ] Selected Intervals Recovered
Total # of Core Boxes: 150

County & State: Butte Co. ID
Quadrangle Name: North Scoville
Lat / Lng: 43° 36' 11.15" 112° 59" 58.27"
Tns / Rng / Sec: T3N, R29E, S09, ADC1
UTM Coordinates: N/A
Altitude (ft): 4,968.84 NGVD29

Notes:

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

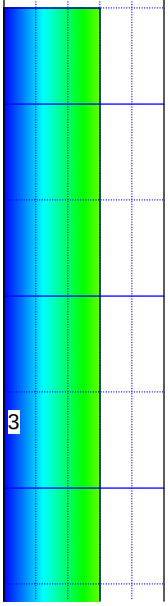
Intervals in Absentia
- Surficial material
- Natural void
- Interval not cored
- Missing interval

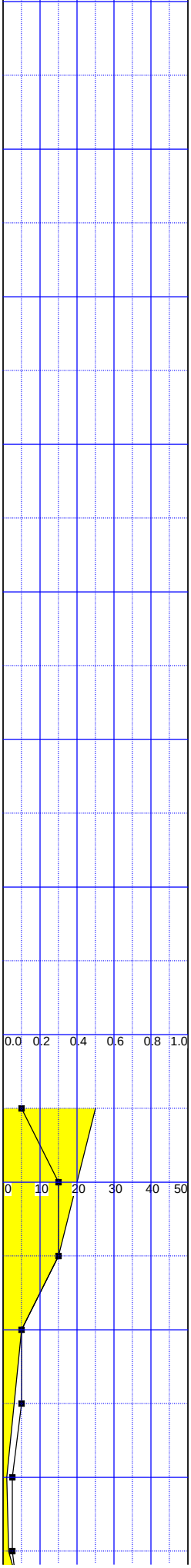
Igneous and Sedimentary Structure Symbols
- Vesicle zone
- Large vesicles
- Vesicle planes
- Mega vesicles
- Vesicle Cylinders
- Pipe vesicles
- Pillows
- Vesicle Sheet
- Flow/Mold
- Spatter feature
- Ripple marks
- Mud cracks
- Imbricated bedding
- Graded bedding
- Cross bedding

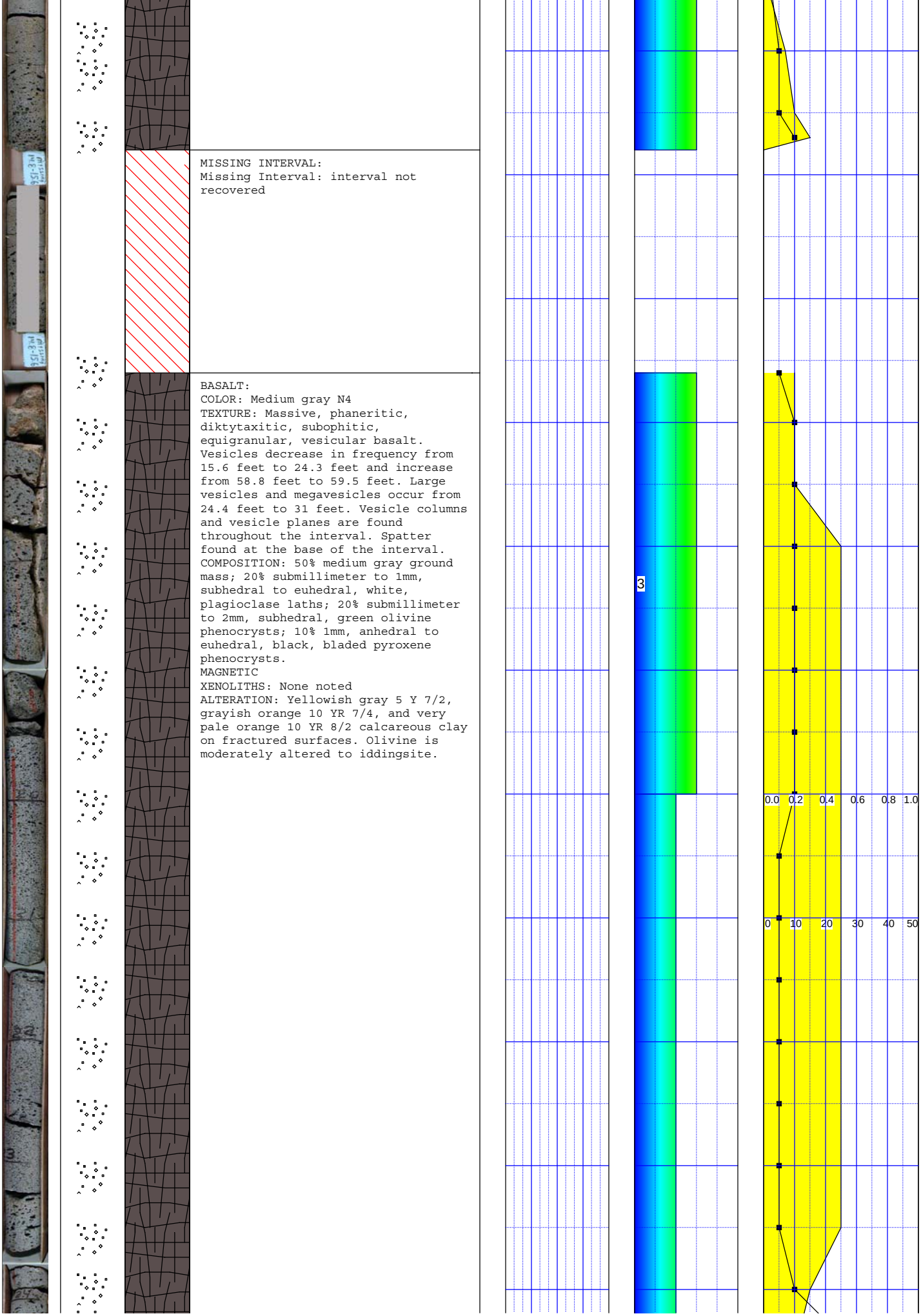
Soil Structure Symbols
- Structureless - Single Grained
- Structureless - Massive
- Platy
- Granular
- Blocky
- Prismatic
- Columnar

Depth (feet & tenths)	Core Photo	Igneous, Soil and Sed Structures	Lithology	Description	Paleomagnetic Inclination (Derived from seperate USGS studies.) Degrees -90 -45 0 45 90	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
0				SURFICIAL MATERIAL: Surficial material not recovered.			
1							
2							
3							

BASALT:
COLOR: Medium gray N4
TEXTURE: Phaneritic, diktytaxitic, subophitic, vesicular basalt. Vesicles decrease in frequency from 10.5 feet to 12.1 feet and increase from 13.9 feet to 14.8 feet.
COMPOSITION: 50% medium gray ground mass; 20% submillimeter to 1 mm, subhedral to euhedral, white, plagioclase laths; 20% 1 mm, anhedral to euhedral, black, bladed pyroxene phenocrysts; 10% submillimeter to 2mm, subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 calcareous clay on fractured surfaces and light gray N7 calcareous clay in large vesicles.

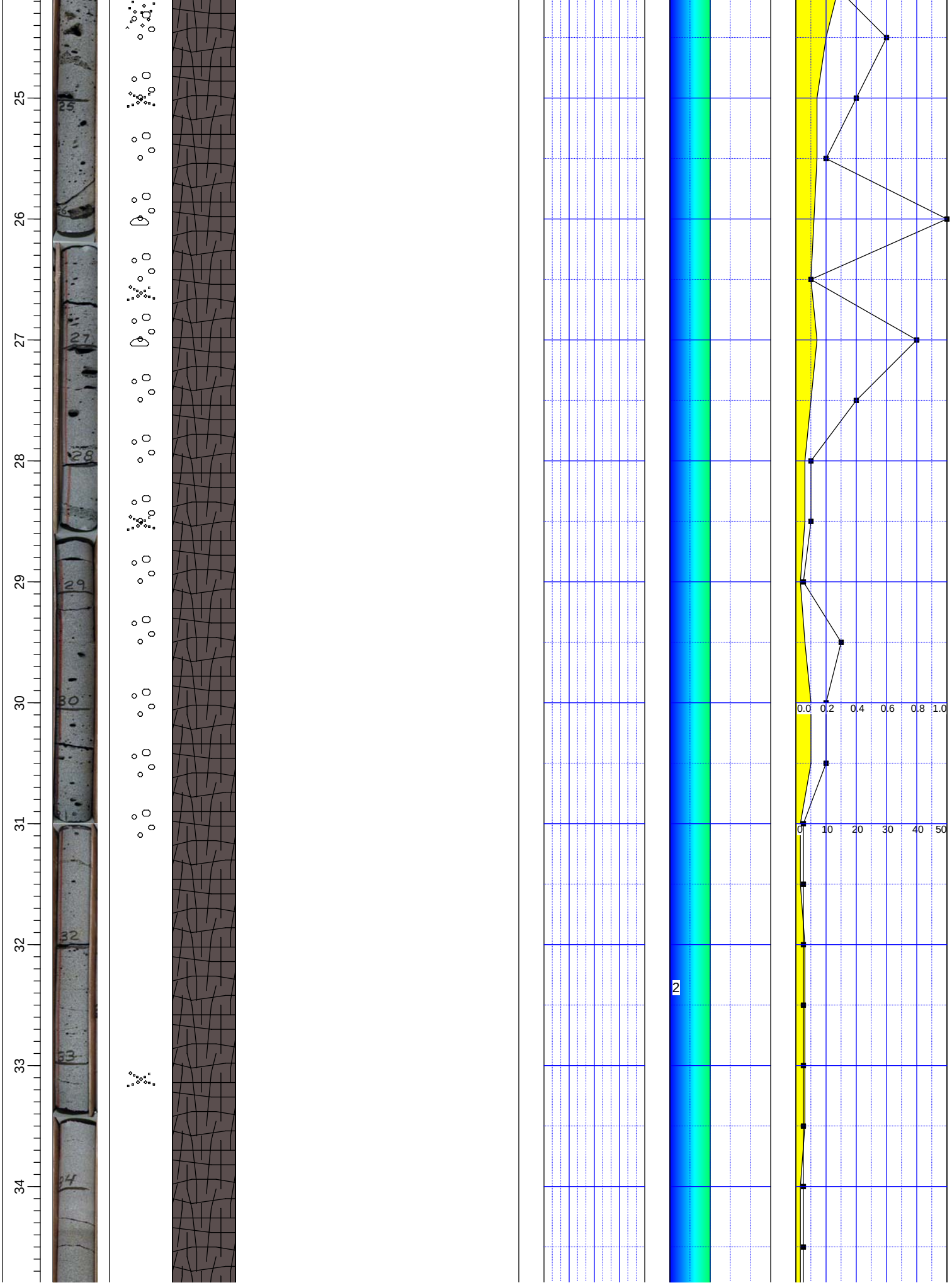






MISSING INTERVAL:
Missing Interval: interval not recovered

BASALT:
COLOR: Medium gray N4
TEXTURE: Massive, phaneritic, diktytaxitic, subophitic, equigranular, vesicular basalt. Vesicles decrease in frequency from 15.6 feet to 24.3 feet and increase from 58.8 feet to 59.5 feet. Large vesicles and megavesicles occur from 24.4 feet to 31 feet. Vesicle columns and vesicle planes are found throughout the interval. Spatter found at the base of the interval.
COMPOSITION: 50% medium gray ground mass; 20% submillimeter to 1mm, subhedral to euhedral, white, plagioclase laths; 20% submillimeter to 2mm, subhedral, green olivine phenocrysts; 10% 1mm, anhedral to euhedral, black, bladed pyroxene phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2, grayish orange 10 YR 7/4, and very pale orange 10 YR 8/2 calcareous clay on fractured surfaces. Olivine is moderately altered to iddingsite.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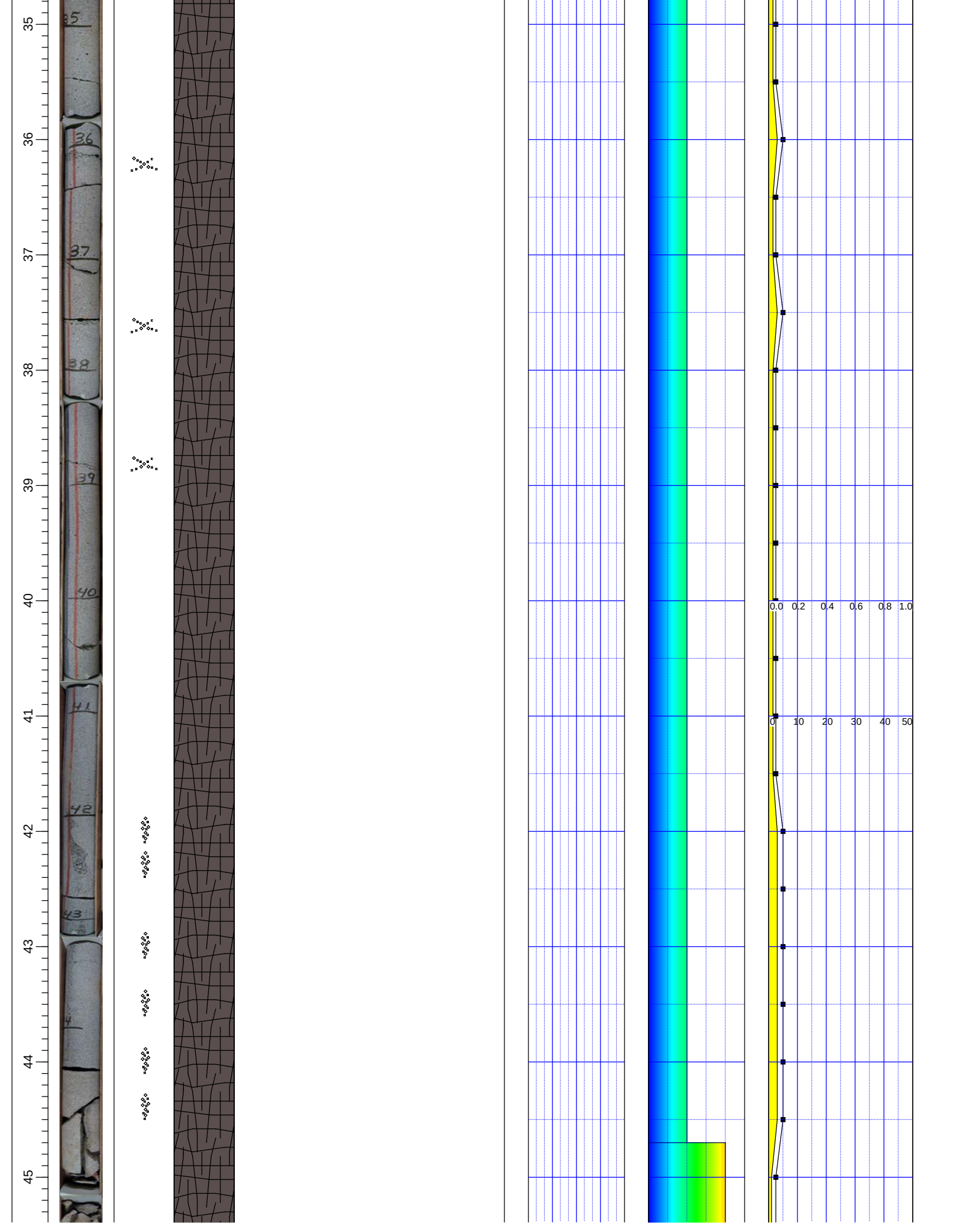
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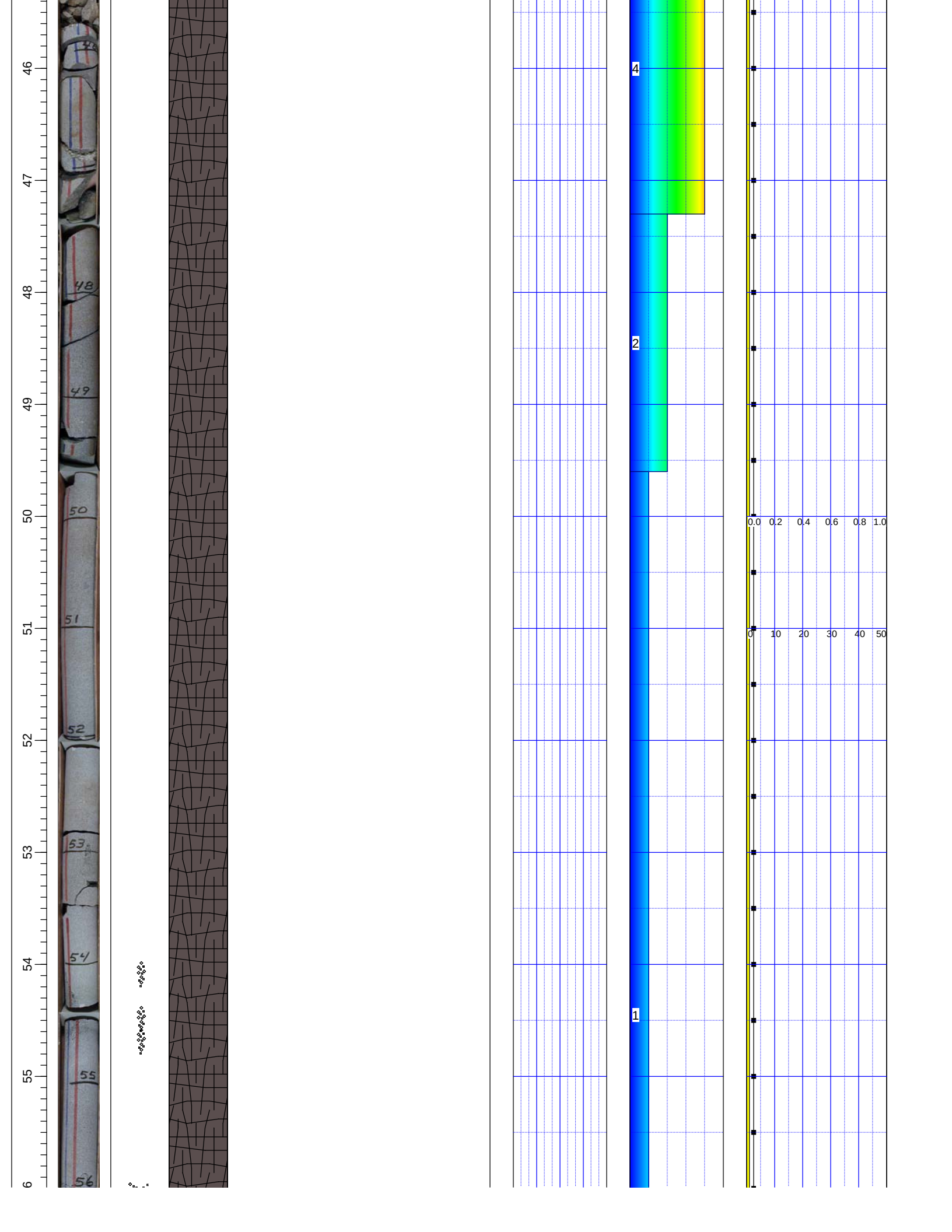
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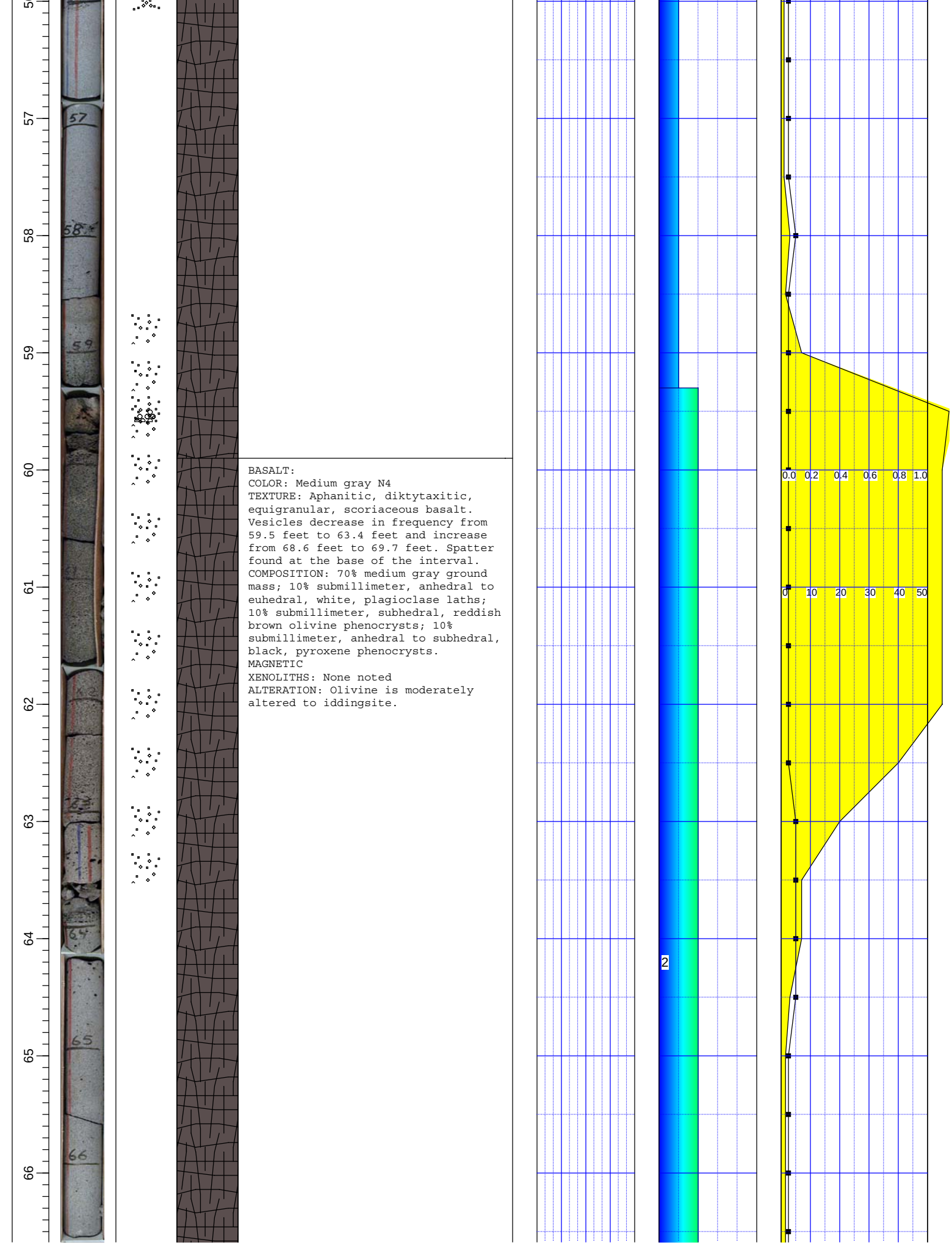
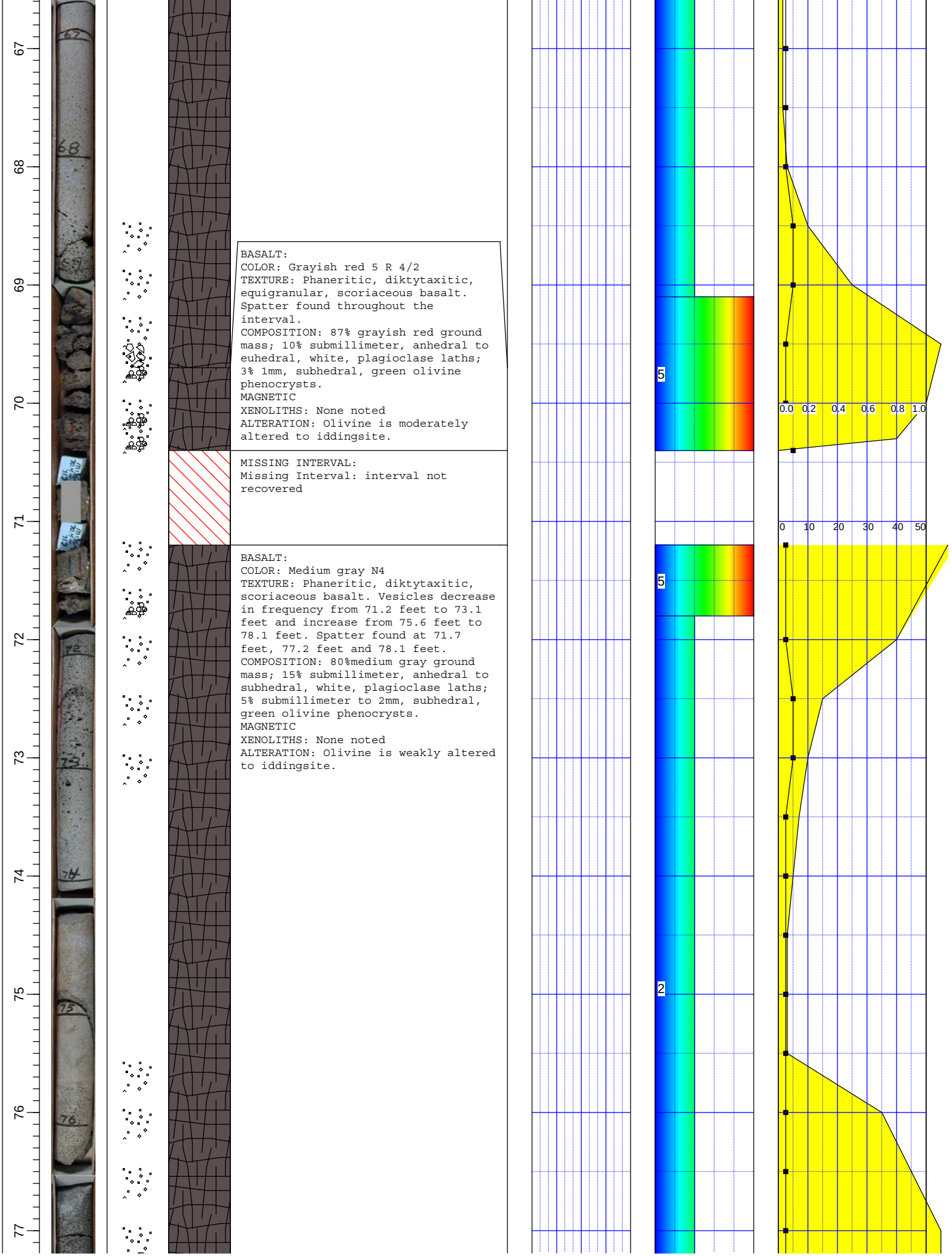
0 10 20 30 40 50



BASALT:
COLOR: Medium gray N4
TEXTURE: Aphanitic, diktytaxitic, equigranular, scoriaceous basalt. Vesicles decrease in frequency from 59.5 feet to 63.4 feet and increase from 68.6 feet to 69.7 feet. Spatter found at the base of the interval.
COMPOSITION: 70% medium gray ground mass; 10% submillimeter, anhedral to euhedral, white, plagioclase laths; 10% submillimeter, subhedral, reddish brown olivine phenocrysts; 10% submillimeter, anhedral to subhedral, black, pyroxene phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Olivine is moderately altered to iddingsite.



BASALT:
COLOR: Grayish red 5 R 4/2
TEXTURE: Phaneritic, diktytaxitic, equigranular, scoriaceous basalt. Spatter found throughout the interval.
COMPOSITION: 87% grayish red ground mass; 10% submillimeter, anhedral to euhedral, white, plagioclase laths; 3% 1mm, subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Olivine is moderately altered to iddingsite.

MISSING INTERVAL:
Missing Interval: interval not recovered

BASALT:
COLOR: Medium gray N4
TEXTURE: Phaneritic, diktytaxitic, scoriaceous basalt. Vesicles decrease in frequency from 71.2 feet to 73.1 feet and increase from 75.6 feet to 78.1 feet. Spatter found at 71.7 feet, 77.2 feet and 78.1 feet.
COMPOSITION: 80%medium gray ground mass; 15% submillimeter, anhedral to subhedral, white, plagioclase laths; 5% submillimeter to 2mm, subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Olivine is weakly altered to iddingsite.

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MISSING INTERVAL:
Missing Interval: interval not recovered

BASALT:
COLOR: Medium gray N4
TEXTURE: Phaneritic, diktytaxitic, equigranular, scoriaceous basalt. Spatter found throughout the interval.
COMPOSITION: 70% medium gray ground mass; 15% submillimeter, anhedral to euhedral, white, plagioclase laths; 10% submillimeter, anhedral to euhedral black, bladed pyroxene phenocrysts; 5% submillimeter to1mm, subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Olivine is weakly altered to iddingsite. Basalt is hydrothermally alterated throughout the interval.

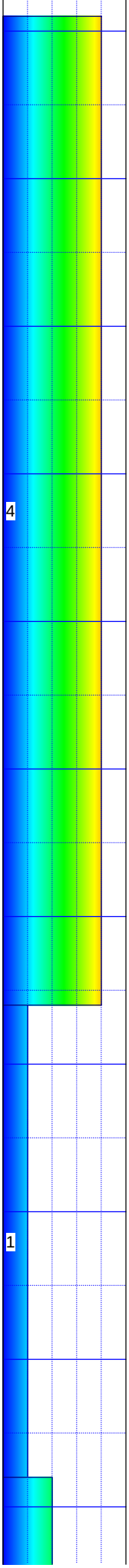
MISSING INTERVAL:
Missing Interval: interval not recovered

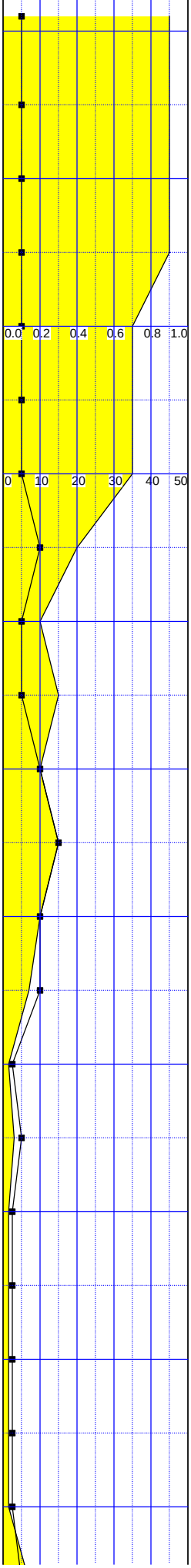
2

0.0 0.2 0.4 0.6 0.8 1.0

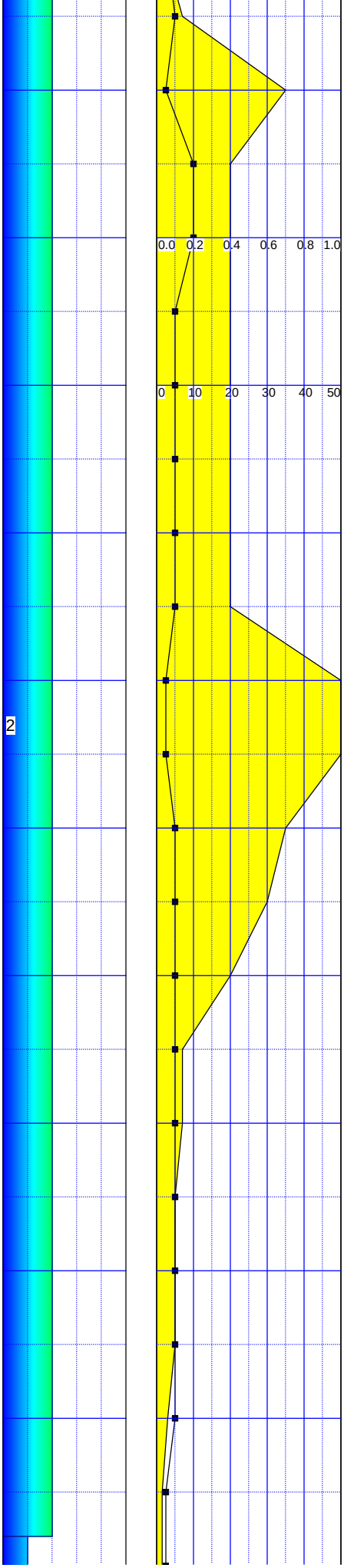
0 10 20 30 40 50

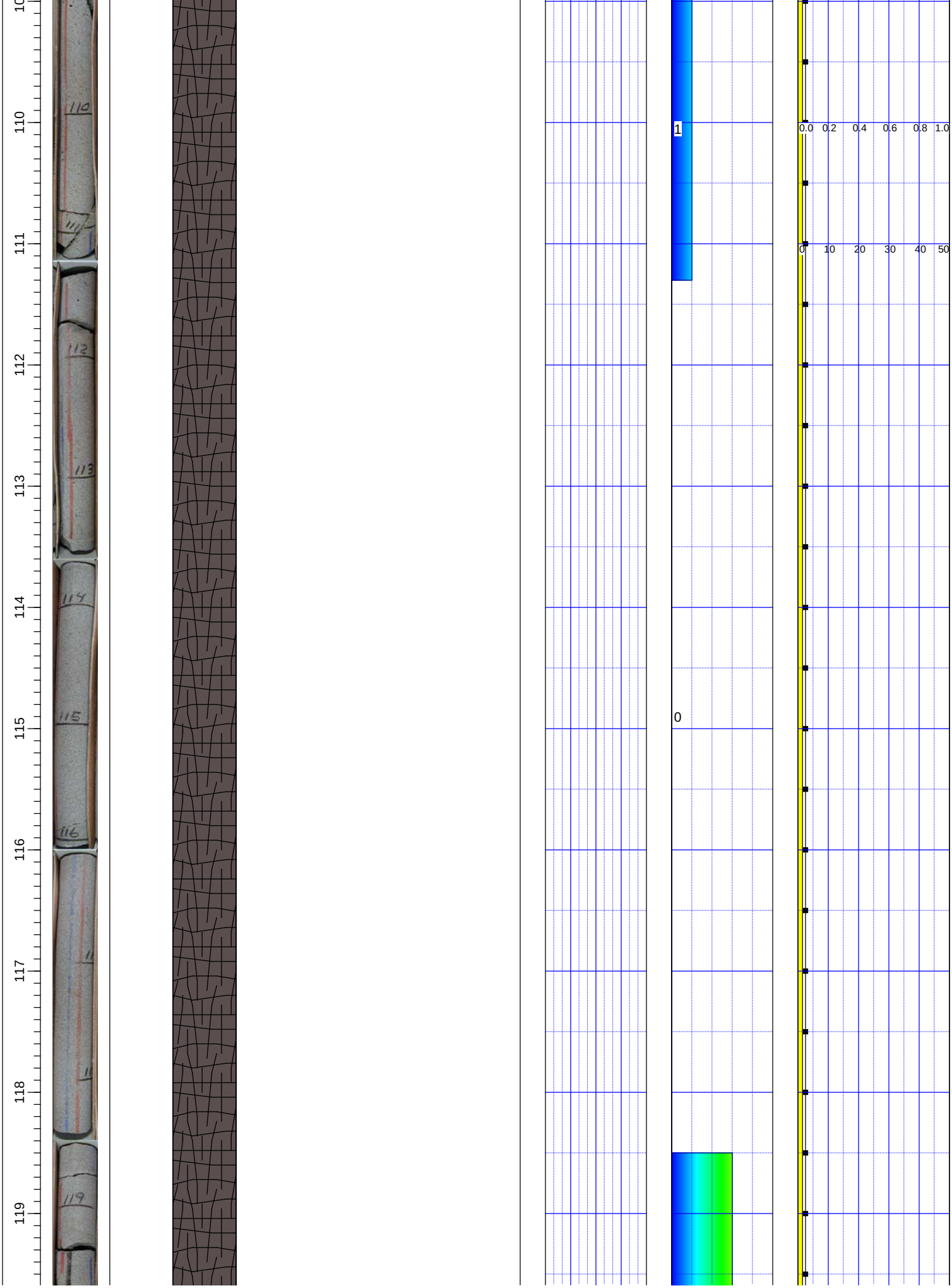
BASALT:
COLOR: Blackish red 5 R 2/2 medium gray N4
TEXTURE: Phaneritic, diktytaxitic, subophitic, vesicular basalt. Vesicles decrease in frequency from 87.9 feet to 94.9 feet and increase from 98.2 feet to 99.2 feet. Spatter found at 87.9 feet to 89 feet.
COMPOSITION: 50% medium gray ground mass; 15% submillimeter to 1mm, subhedral to euhedral, white, plagioclase laths; 10% 1mm, anhedral to euhedral, black, bladed pyroxene phenocrysts; 7% 1 mm to 2 mm, subhedral, green olivine phenocrysts; 3% submillimeter, anhedral to subhedral, reddish brown olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Olivine is weakly altered to iddingsite. Basalt is hydrothermally alterated throughout the interval.





BASALT:
COLOR: Medium gray N4
TEXTURE: Massive, phaneritic, diktytaxitic, vesicular basalt. Vesicles decrease in frequency from 99.2 feet to 107.3 feet and increase from 122 feet to 123.4 feet. Large vesicles around 107.4 feet to 108.8 feet and a vesicle plane at 115.9 feet.
COMPOSITION: 75% medium gray ground mass which contains submillimeter, subhedral to euhedral, white, plagioclase microlites; 15% submillimeter to 2 mm, subhedral, green to reddish green olivine phenocrysts; 10% submillimeter to 2 mm, anhedral to euhedral, black, bladed pyroxene phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Olivine is weakly altered to iddingsite.

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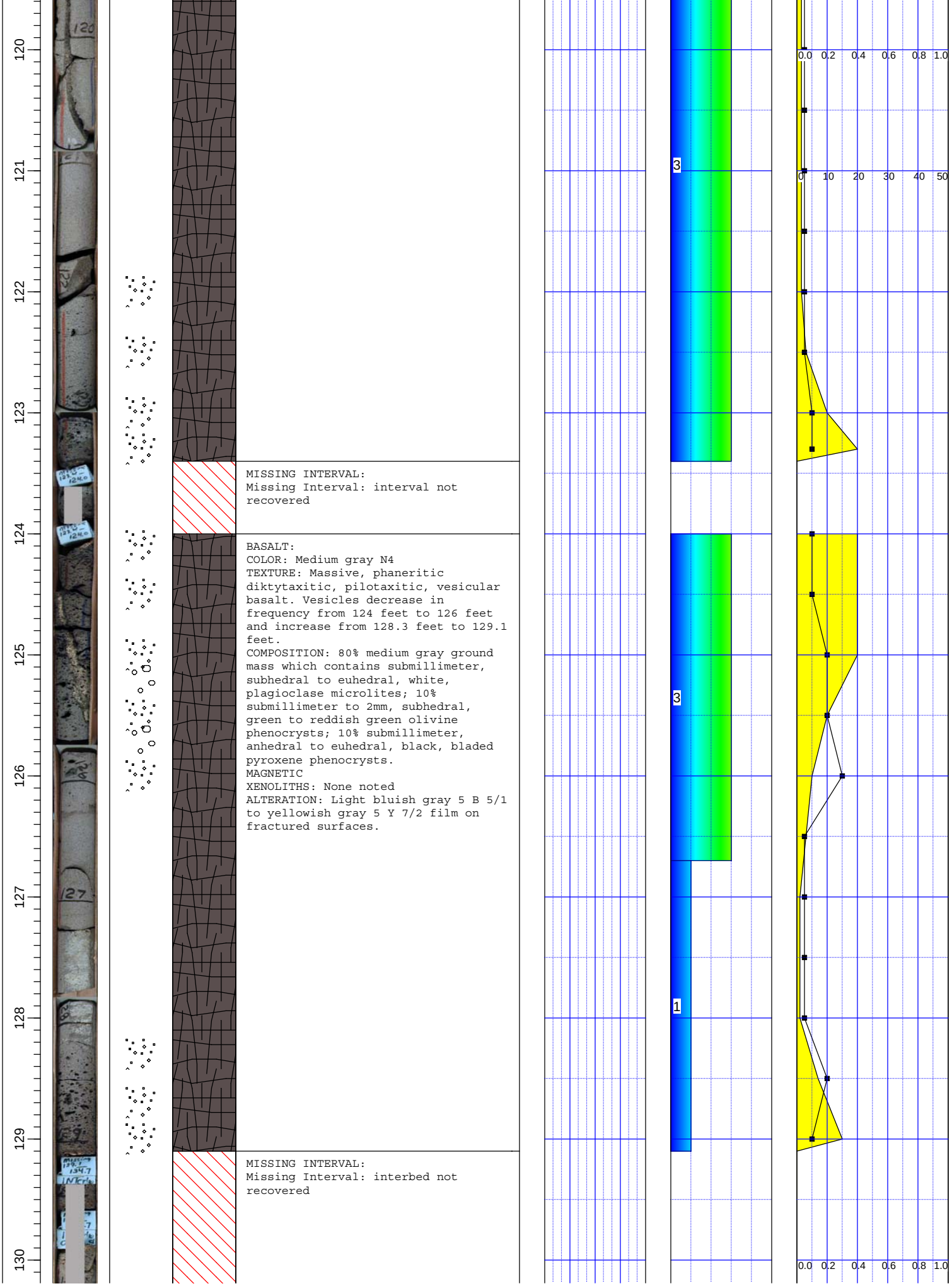
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MISSING INTERVAL:
Missing Interval: interval not recovered
BASALT:
COLOR: Medium gray N4
TEXTURE: Massive, phaneritic diktytaxitic, pilotaxitic, vesicular basalt. Vesicles decrease in frequency from 124 feet to 126 feet and increase from 128.3 feet to 129.1 feet.
COMPOSITION: 80% medium gray ground mass which contains submillimeter, subhedral to euhedral, white, plagioclase microlites; 10% submillimeter to 2mm, subhedral, green to reddish green olivine phenocrysts; 10% submillimeter, anhedral to euhedral, black, bladed pyroxene phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Light bluish gray 5 B 5/1 to yellowish gray 5 Y 7/2 film on fractured surfaces.
MISSING INTERVAL:
Missing Interval: interbed not recovered
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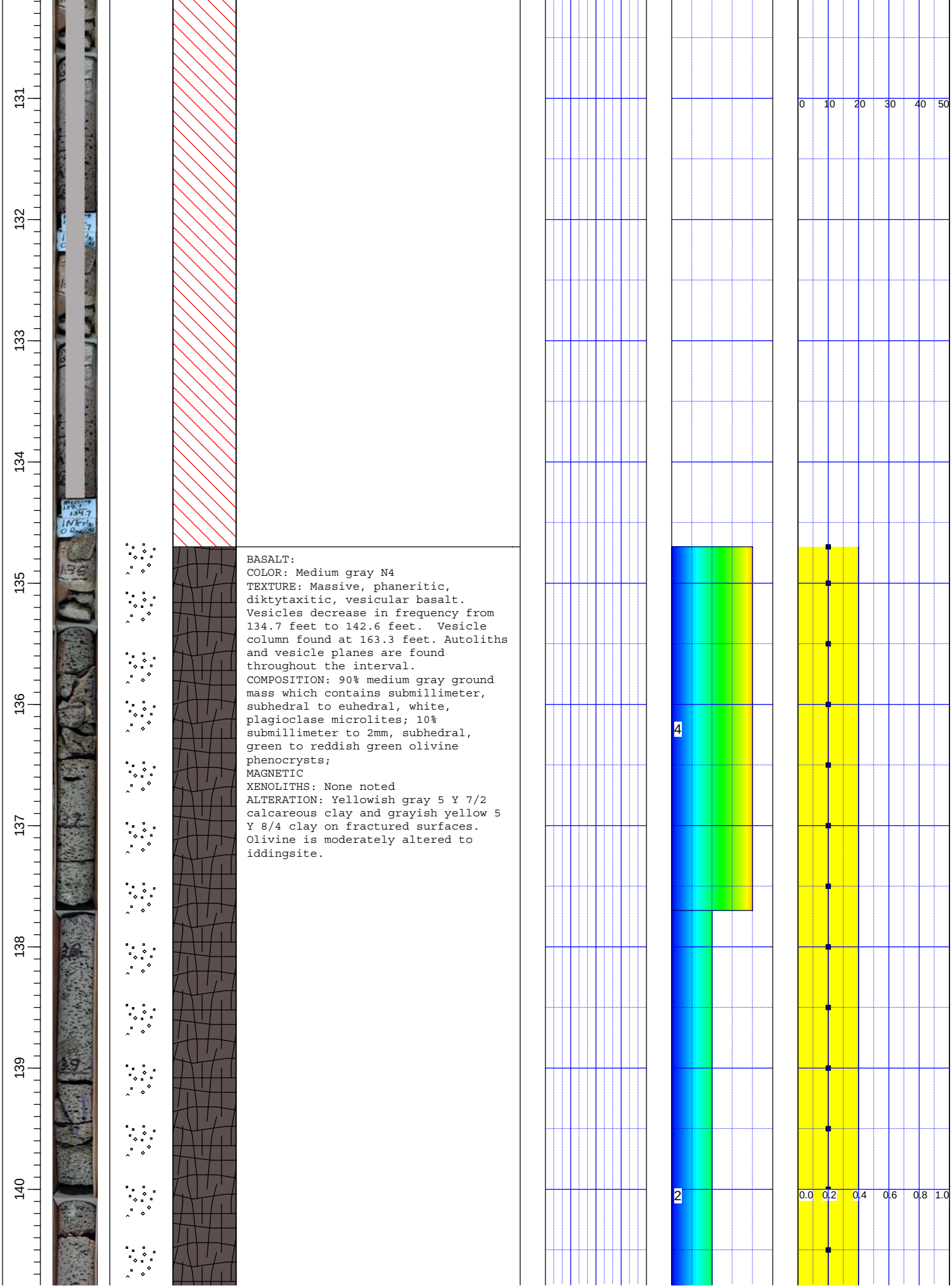
0.0 0.2 0.4 0.6 0.8 1.0
0 10 20 30 40 50
0.0 0.2 0.4 0.6 0.8 1.0


131
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BASALT:
COLOR: Medium gray N4
TEXTURE: Massive, phaneritic, diktytaxitic, vesicular basalt. Vesicles decrease in frequency from 134.7 feet to 142.6 feet. Vesicle column found at 163.3 feet. Autoliths and vesicle planes are found throughout the interval.
COMPOSITION: 90% medium gray ground mass which contains submillimeter, subhedral to euhedral, white, plagioclase microlites; 10% submillimeter to 2mm, subhedral, green to reddish green olivine phenocrysts;
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 calcareous clay and grayish yellow 5 Y 8/4 clay on fractured surfaces. Olivine is moderately altered to iddingsite.
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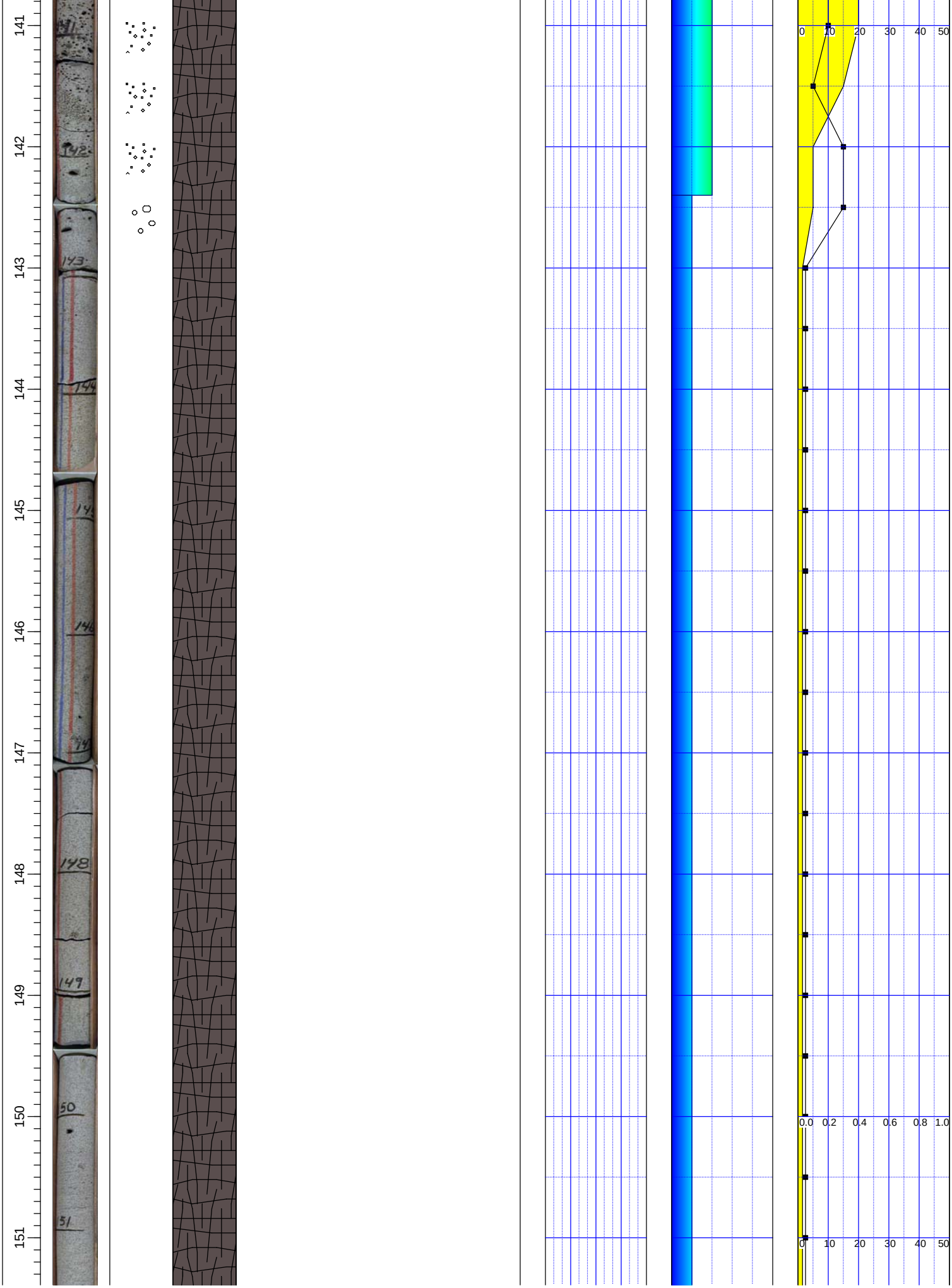
0 10 20 30 40 50
0.0 0.2 0.4 0.6 0.8 1.0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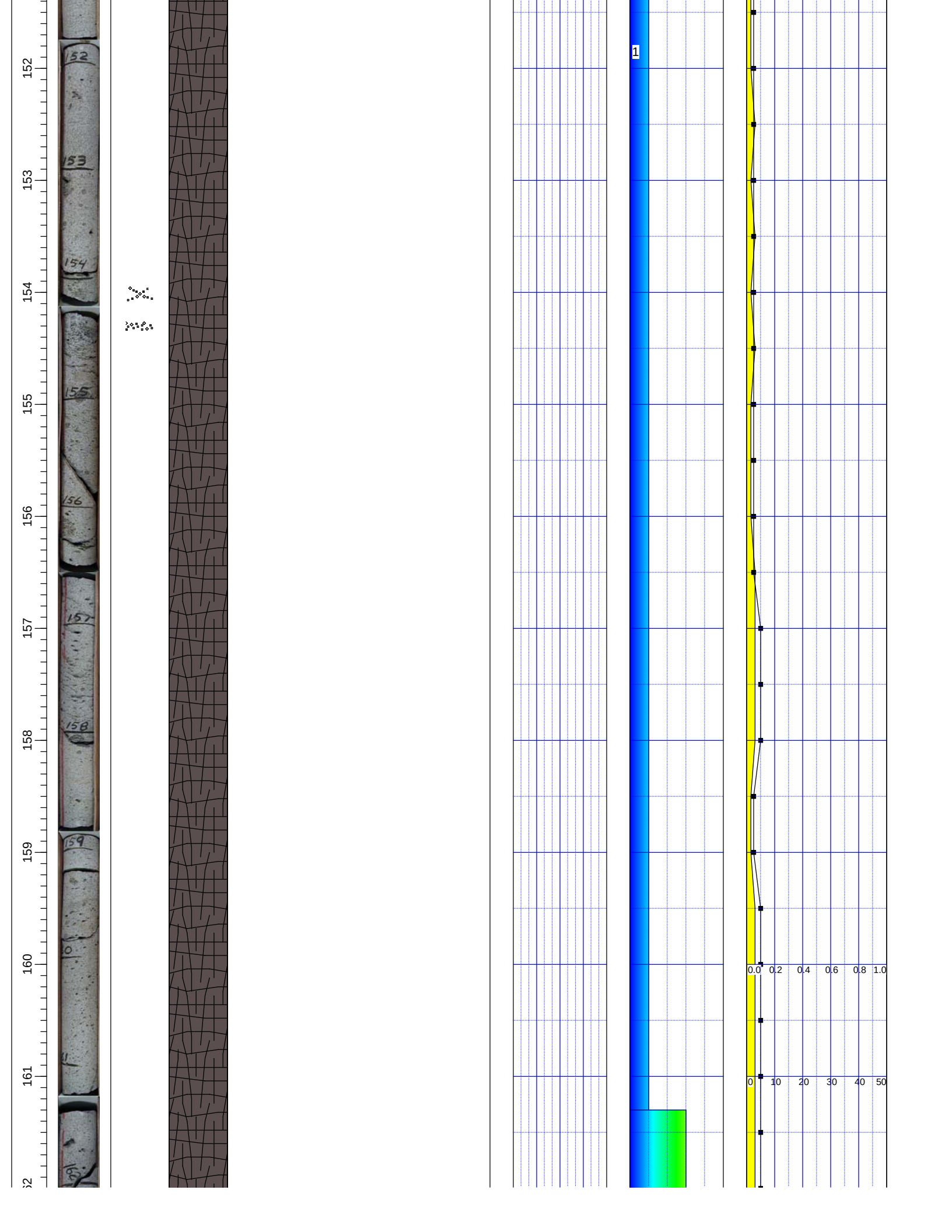
0 10 20 30 40 50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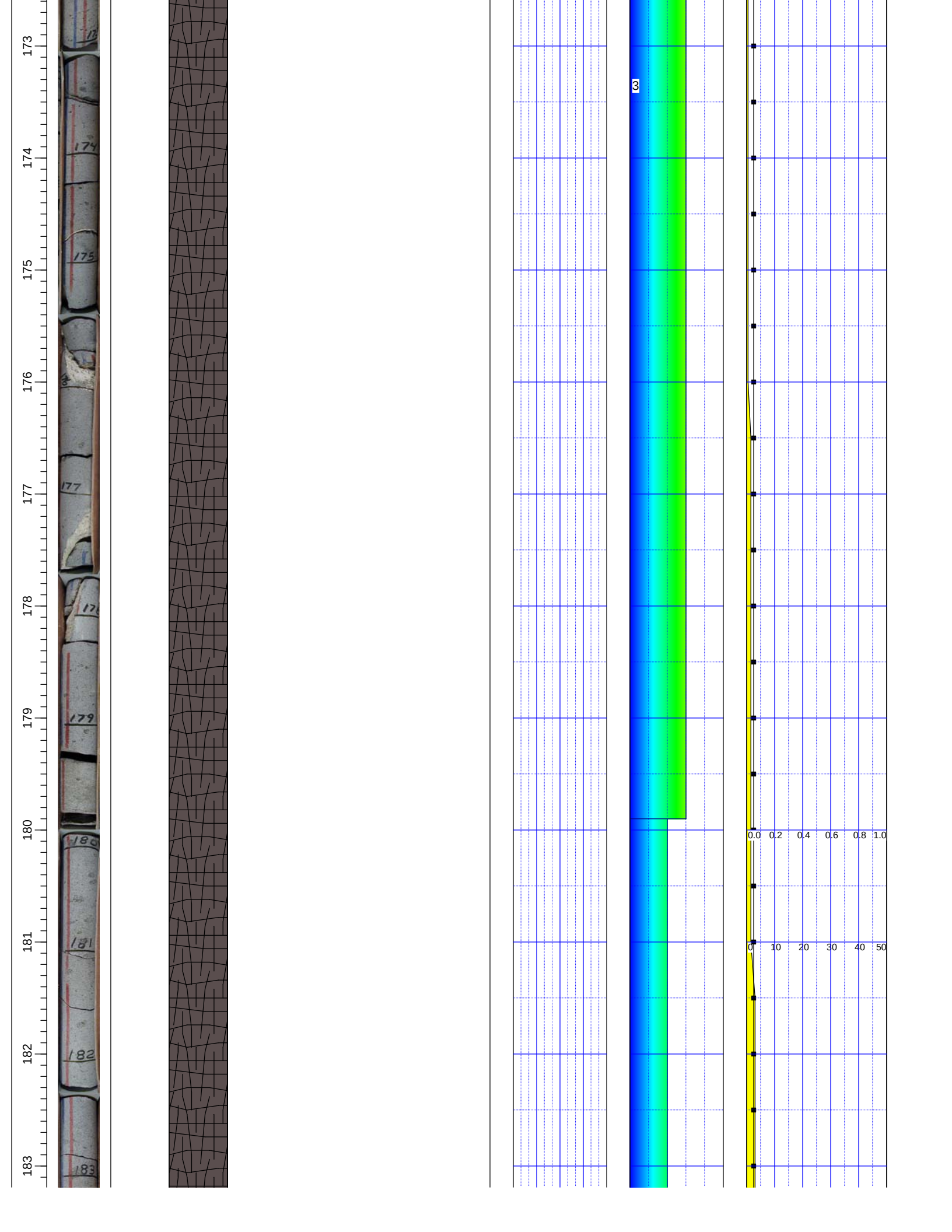
MISSING INTERVAL:
Missing Interval: interval not recovered

BASALT:
COLOR: Medium gray N4
TEXTURE: Phaneritic, diktytaxitic, equigranular, vesicular basalt. Vesicles increase in frequency from 166.8 feet to 169.1 feet. Megavesicle at 167.5 feet, and spatter at 166.8 feet, 167.6 feet, and 169.1 feet.
COMPOSITION: 90% medium gray ground mass which contains submillimeter, subhedral to euhedral, white, plagioclase microlites; 10% submillimeter to 2 mm, subhedral, green to reddish green olivine phenocrysts
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 8/4 calcareous clay on fractured surfaces and in vesicles. Olivine is moderately altered to iddingsite.

BASALT:
COLOR: Medium gray N4
TEXTURE: Massive, aphanitic, diktytaxitic, vesicular basalt. Vesicles decrease in frequency from 169.1 feet to 170.4 feet and increase from 211.8 feet to 213.3 feet. Vesicle zone found at 206 feet to 208.2 feet and a vesicle column found at 209 feet. Autoliths and megavesicles are found throughout the interval.
COMPOSITION: 90% medium gray ground mass which contains submillimeter, subhedral to euhedral, white, plagioclase microlites; 10% submillimeter, subhedral, green to reddish green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 8/4 calcareous clay on fractured surfaces and in vesicles. Olivine is moderately altered to iddingsite.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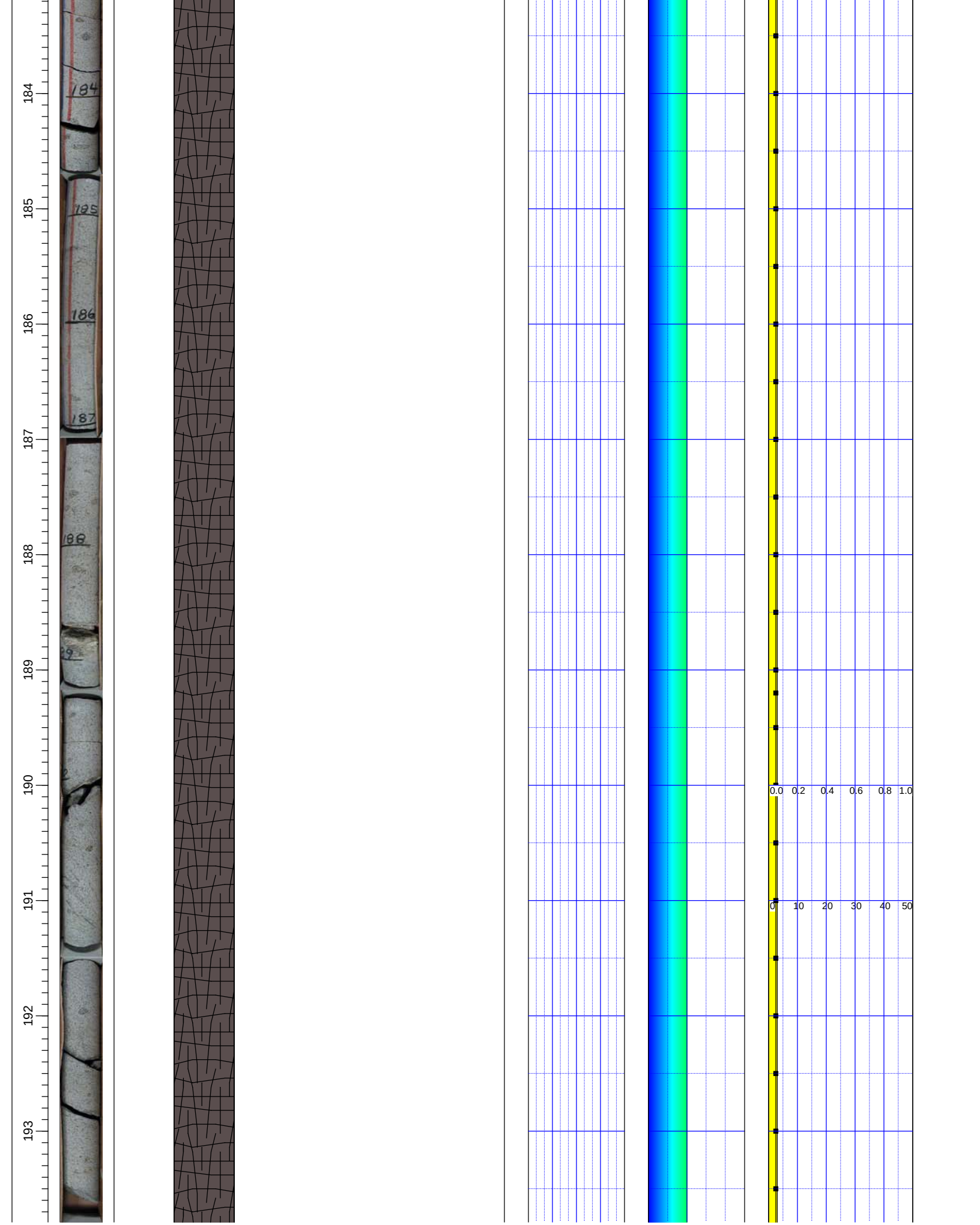
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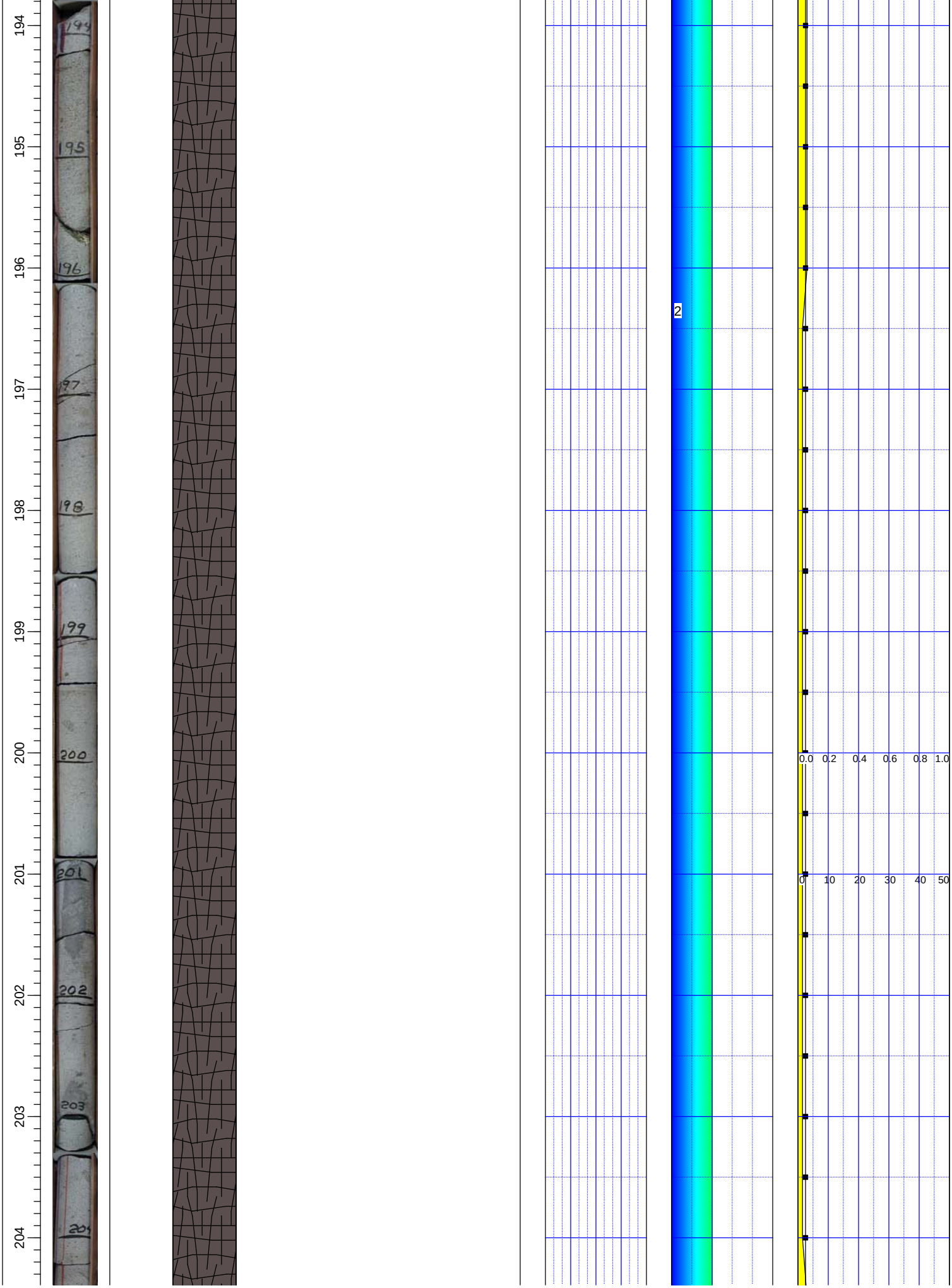
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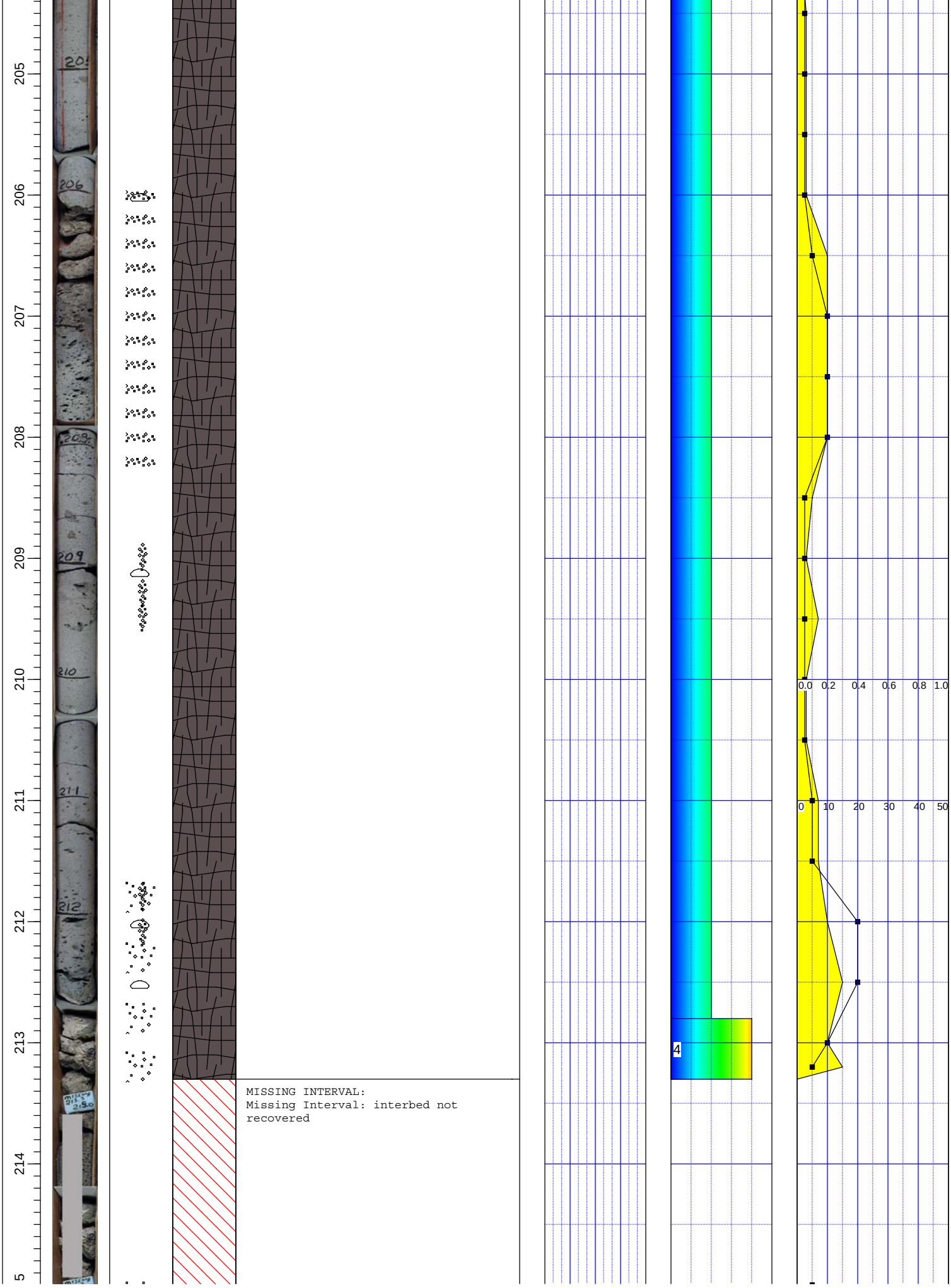
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MISSING INTERVAL:
Missing Interval: interbed not recovered
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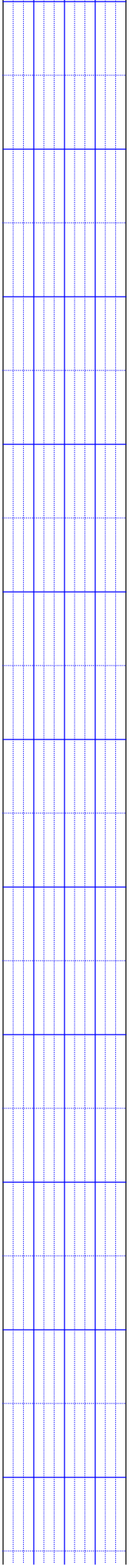
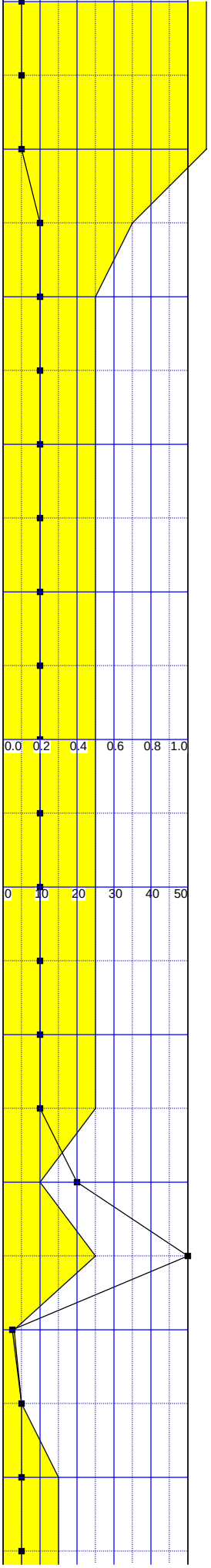
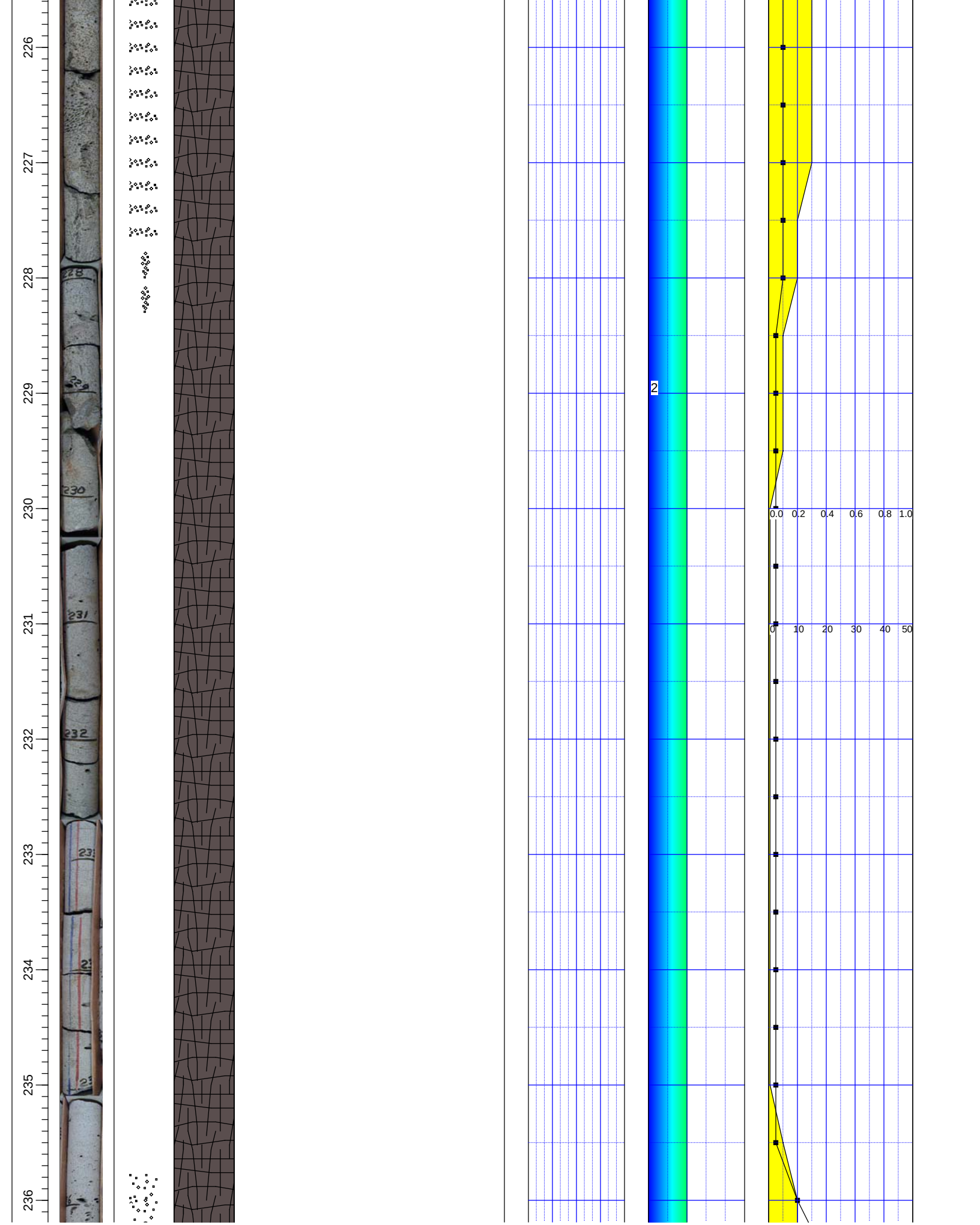
0.0 0.2 0.4 0.6 0.8 1.0
0 10 20 30 40 50

BASALT:
COLOR: Medium gray N4
TEXTURE: Massive, phaneritic, diktytaxitic, vesicular basalt. Scoriaceous from 215 feet to 216.4 feet. Vesicles decrease in frequency from 215 feet to 222.6 feet and increase from 235.9 feet to 237.2 feet. Vesicle zone found at 224.5 feet to 227.9 feet, and vesicle columns found at 223.2 feet, 227.9 feet. Megavesicles are found at 223.7 feet and 236.7 feet. Spatter found at the base of interval.
COMPOSITION: 80% medium gray ground mass which contains submillimeter, subhedral to euhedral, white, plagioclase microlites; 10% submillimeter to 1mm, anhedral to euhedral, black, bladed pyroxene phenocrysts; 7% submillimeter to 3mm, subhedral, red olivine phenocrysts; 3% submillimeter to 3mm anhedral to subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles.



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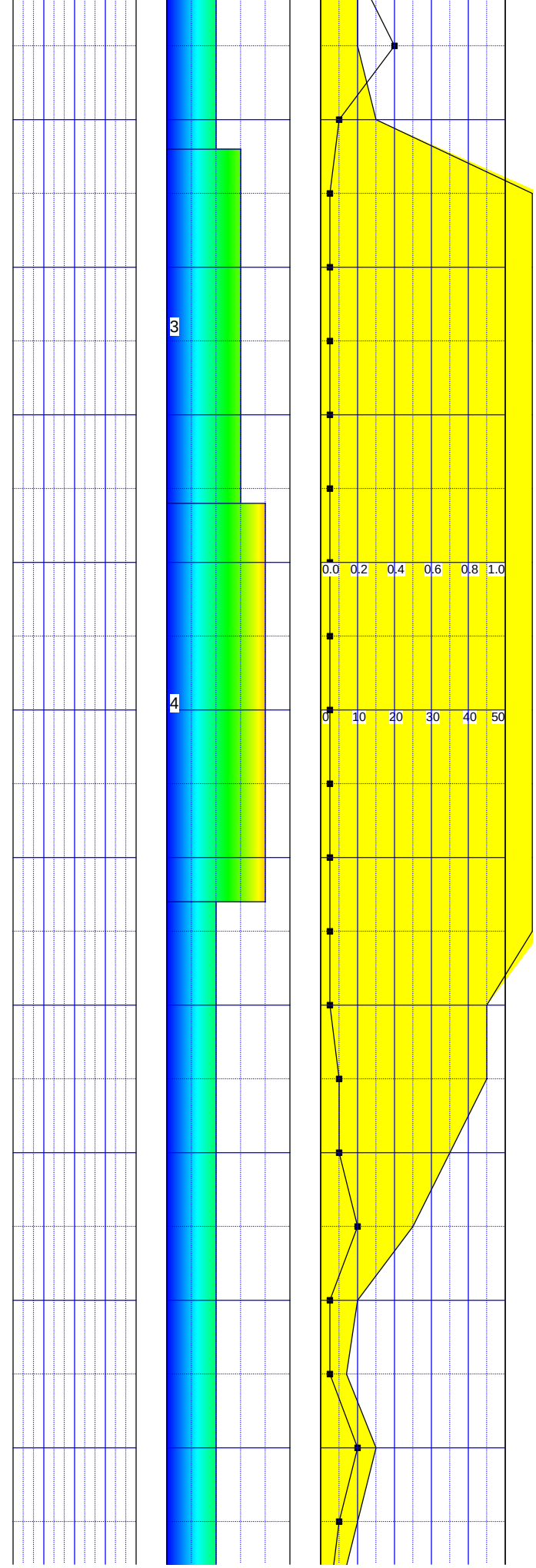
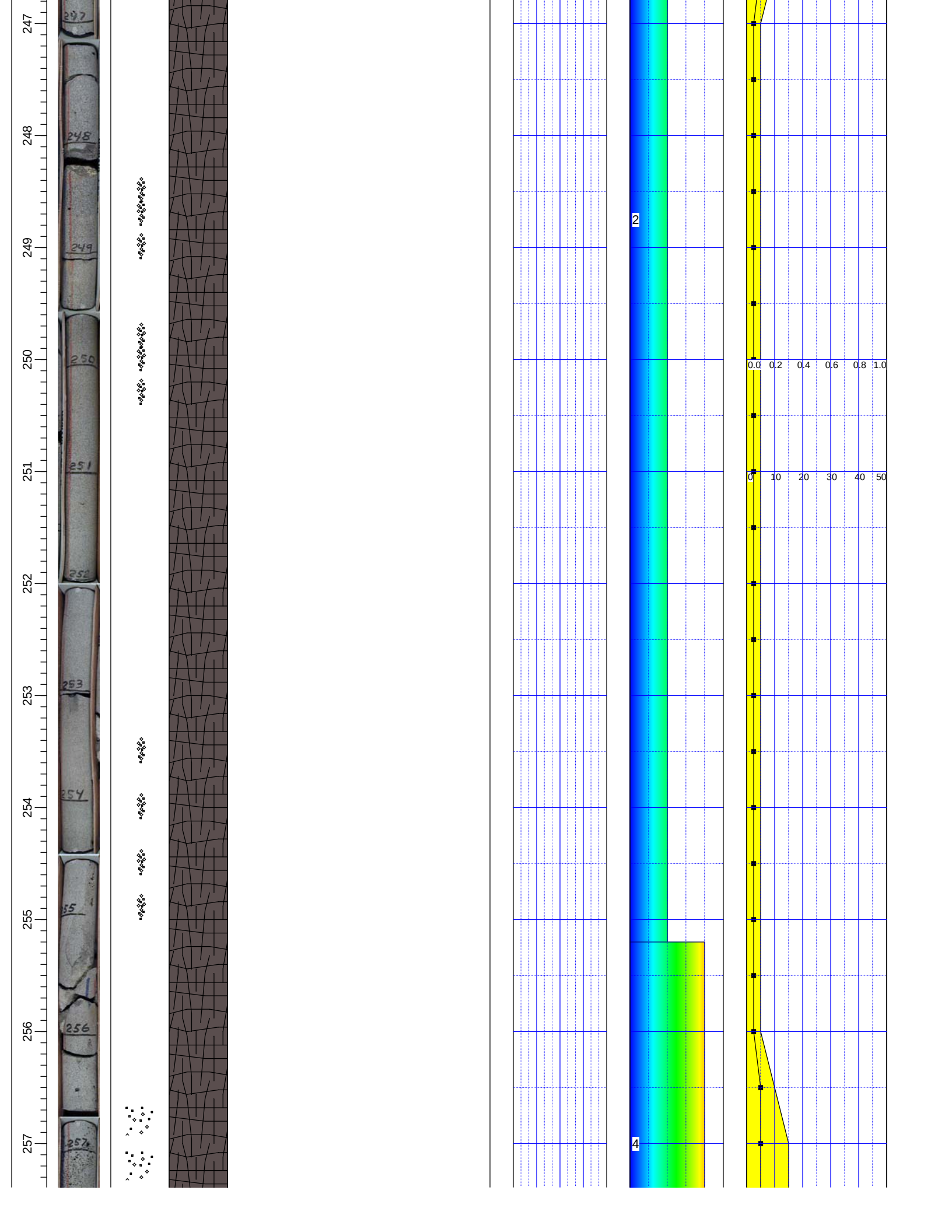
BASALT:
COLOR: Medium gray N4
TEXTURE: Aphanitic, scoriaceous basalt.
COMPOSITION: 95% medium gray ground mass; 5% submillimeter, subhedral, red olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 8/1 clay on fractured surfaces and in vesicles.

BASALT:
COLOR: Medium gray N4
TEXTURE: Massive, phaneritic, diktytaxitic, vesicular basalt. Scoriaceous from 238.7 feet to 242.8 feet. Vesicles decrease in frequency from 238.7 feet to 244.6 feet and increase from 256.7 feet to 258.8 feet. Vesicle zone at 245.9 feet to 246.5 feet, and vesicle columns at 248.5 feet, 249.8 feet, and 253.5 feet.
COMPOSITION: 85% medium gray ground mass which contains submillimeter, subhedral to euhedral, white, plagioclase microlites; 10% submillimeter to 5mm anhedral to subhedral, green olivine phenocrysts; 5% submillimeter, anhedral to euhedral, black, bladed pyroxene phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 8/1 clay on fractured surfaces and in vesicles at the top of interval.

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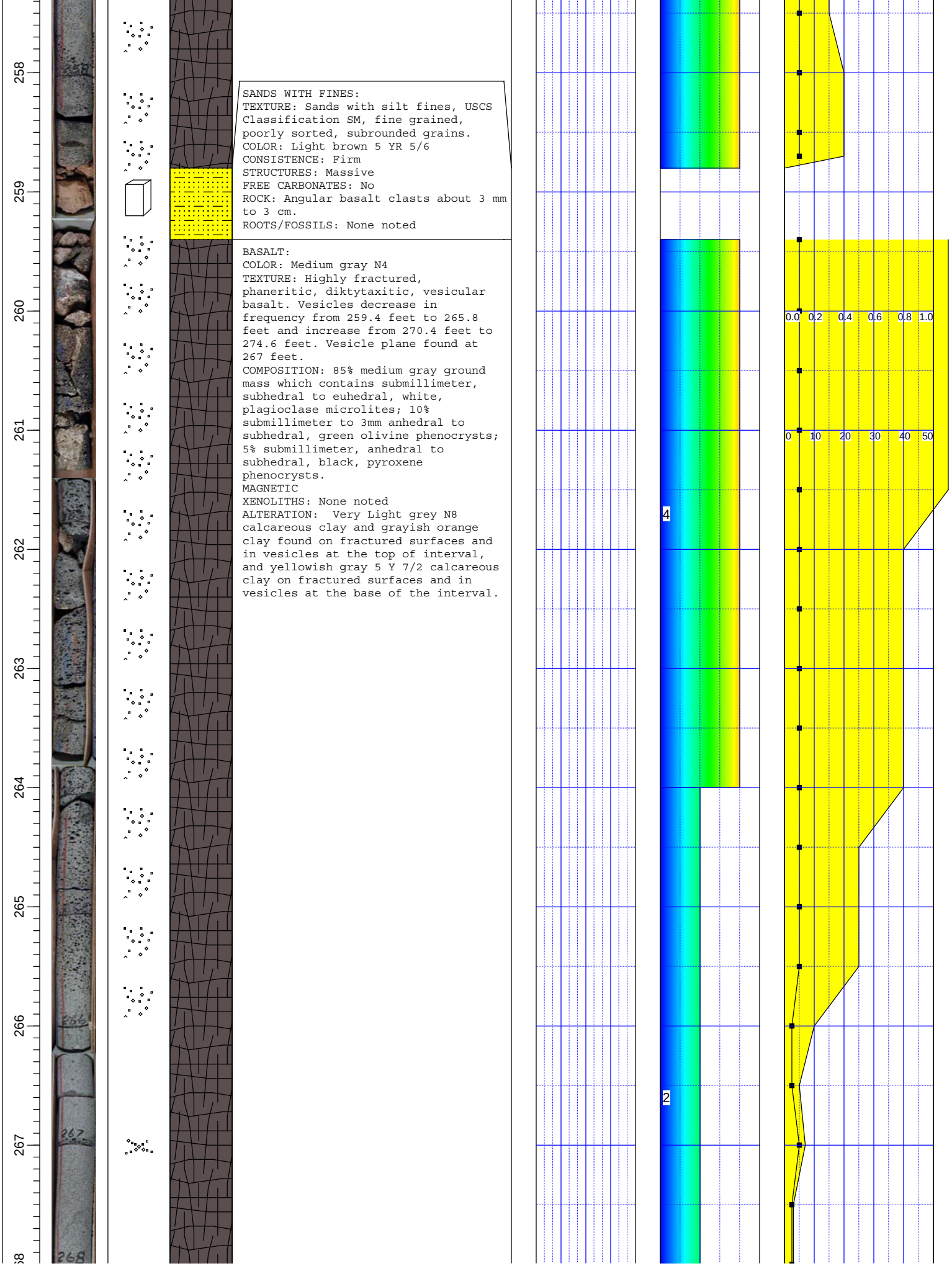
0.0 0.2 0.4 0.6 0.8 1.0
0 10 20 30 40 50


258
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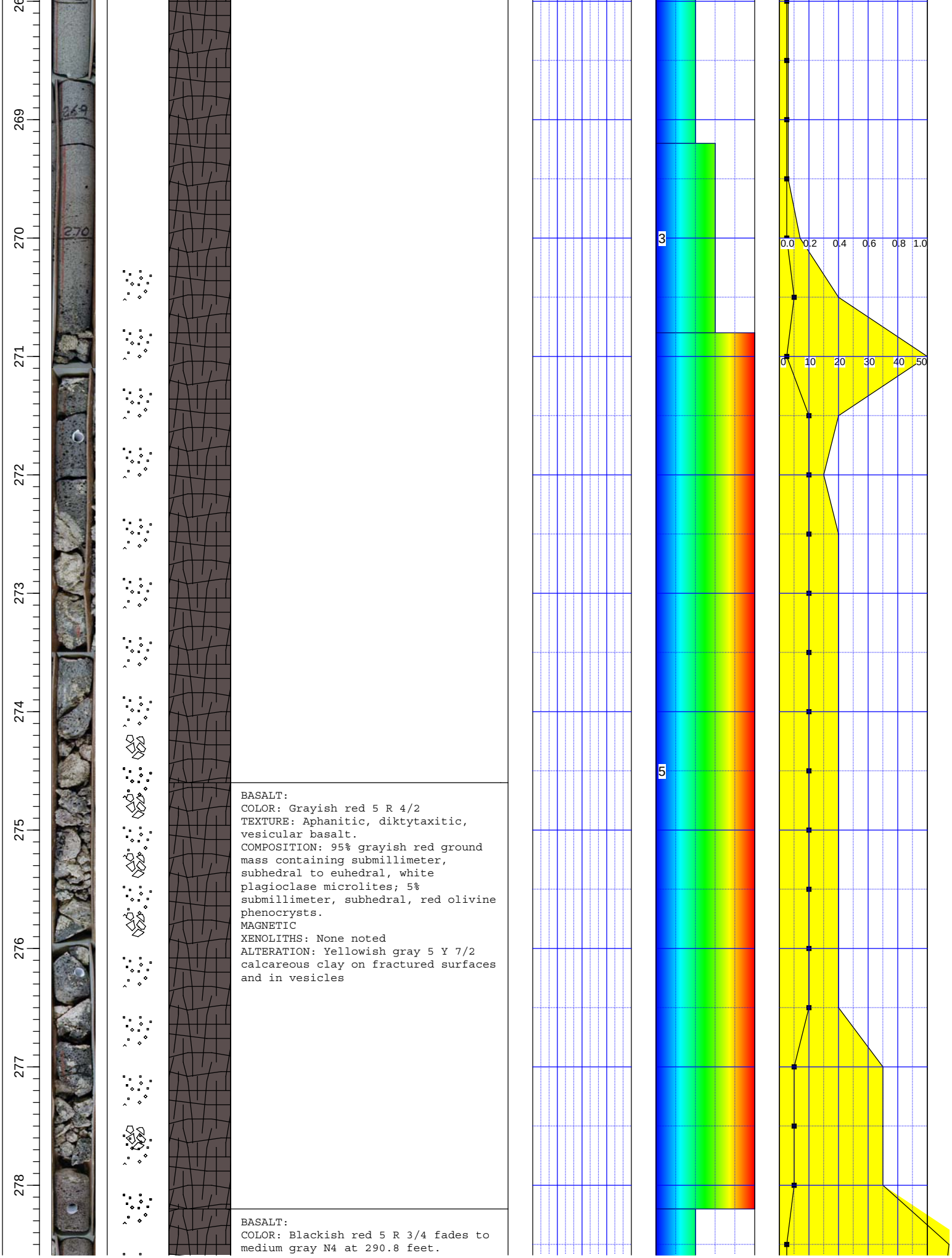
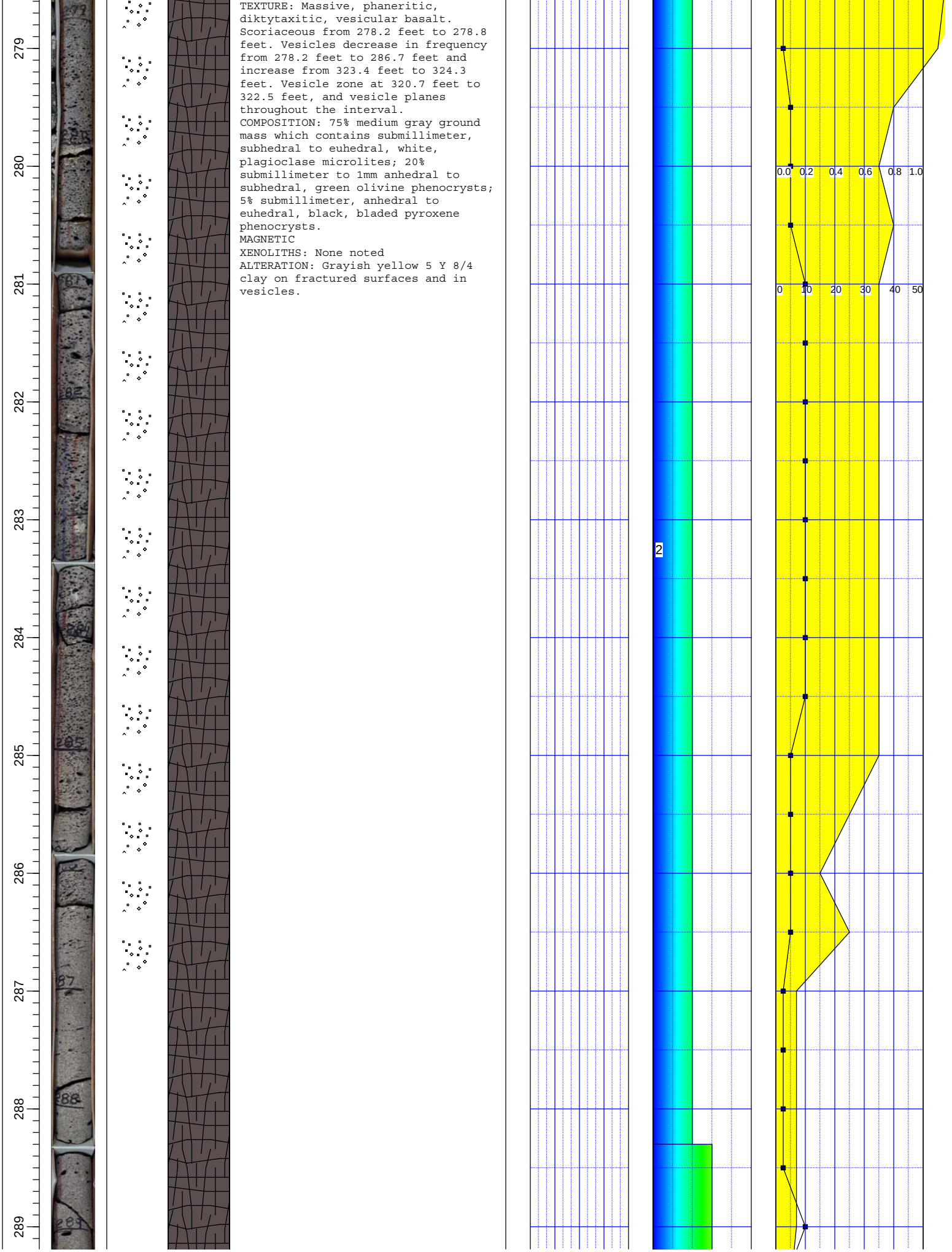
268
SANDS WITH FINES:
TEXTURE: Sands with silt fines, USCS Classification SM, fine grained, poorly sorted, subrounded grains.
COLOR: Light brown 5 YR 5/6
CONSISTENCE: Firm
STRUCTURES: Massive
FREE CARBONATES: No
ROCK: Angular basalt clasts about 3 mm to 3 cm.
ROOTS/FOSSILS: None noted
BASALT:
COLOR: Medium gray N4
TEXTURE: Highly fractured, phaneritic, diktytaxitic, vesicular basalt. Vesicles decrease in frequency from 259.4 feet to 265.8 feet and increase from 270.4 feet to 274.6 feet. Vesicle plane found at 267 feet.
COMPOSITION: 85% medium gray ground mass which contains submillimeter, subhedral to euhedral, white, plagioclase microlites; 10% submillimeter to 3mm anhedral to subhedral, green olivine phenocrysts; 5% submillimeter, anhedral to subhedral, black, pyroxene phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Very Light grey N8 calcareous clay and grayish orange clay found on fractured surfaces and in vesicles at the top of interval, and yellowish gray 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles at the base of the interval.
4
2
0.0 0.2 0.4 0.6 0.8 1.0
0 10 20 30 40 50

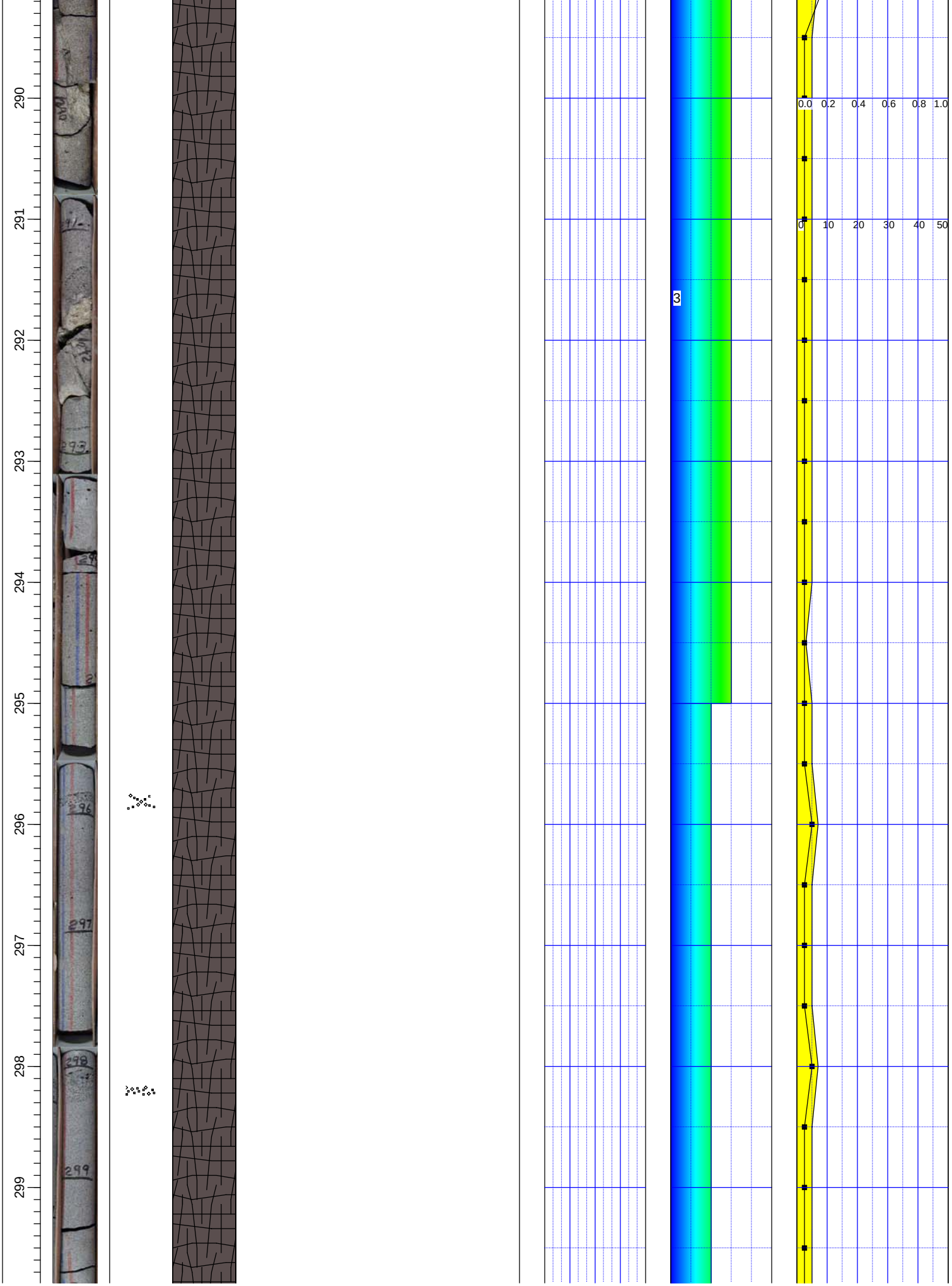


BASALT:
COLOR: Grayish red 5 R 4/2
TEXTURE: Aphanitic, diktytaxitic, vesicular basalt.
COMPOSITION: 95% grayish red ground mass containing submillimeter, subhedral to euhedral, white plagioclase microlites; 5% submillimeter, subhedral, red olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles

BASALT:
COLOR: Blackish red 5 R 3/4 fades to medium gray N4 at 290.8 feet.



TEXTURE: Massive, phaneritic, diktytaxitic, vesicular basalt. Scoriaceous from 278.2 feet to 278.8 feet. Vesicles decrease in frequency from 278.2 feet to 286.7 feet and increase from 323.4 feet to 324.3 feet. Vesicle zone at 320.7 feet to 322.5 feet, and vesicle planes throughout the interval.
COMPOSITION: 75% medium gray ground mass which contains submillimeter, subhedral to euhedral, white, plagioclase microlites; 20% submillimeter to 1mm anhedral to subhedral, green olivine phenocrysts; 5% submillimeter, anhedral to euhedral, black, bladed pyroxene phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 8/4 clay on fractured surfaces and in vesicles.


290
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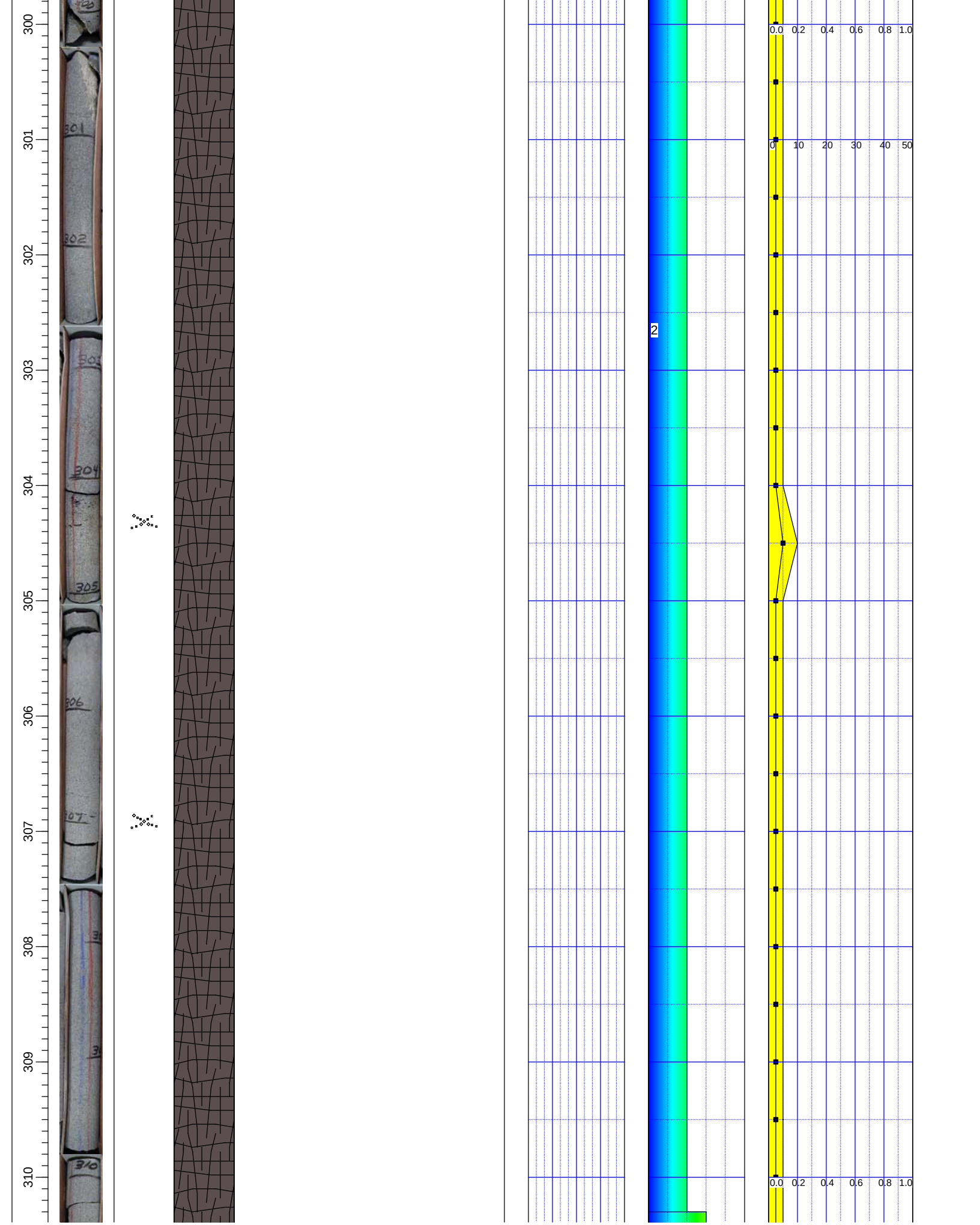
0.0 0.2 0.4 0.6 0.8 1.0
0 10 20 30 40 50
3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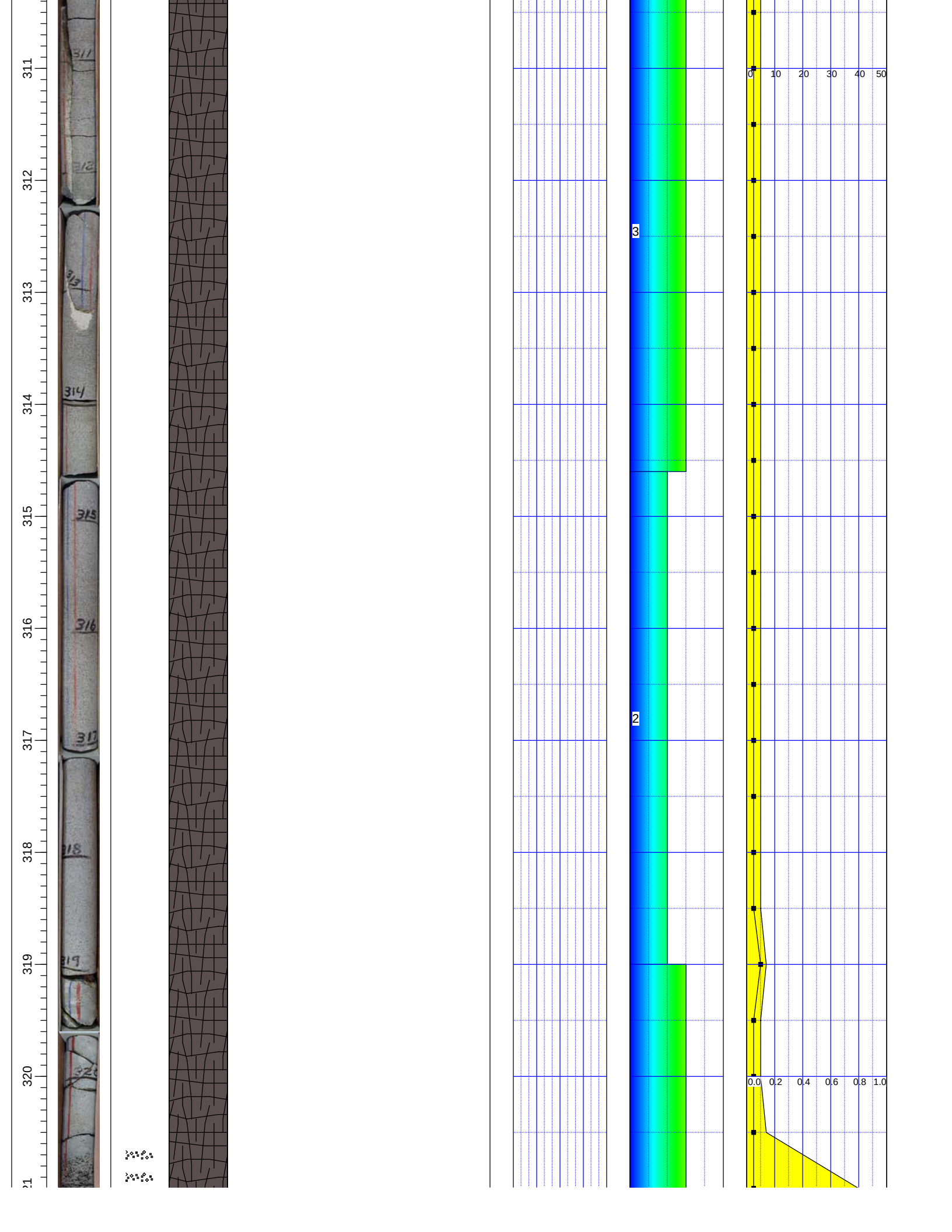
0.0 0.2 0.4 0.6 0.8 1.0
0 10 20 30 40 50
0.0 0.2 0.4 0.6 0.8 1.0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321
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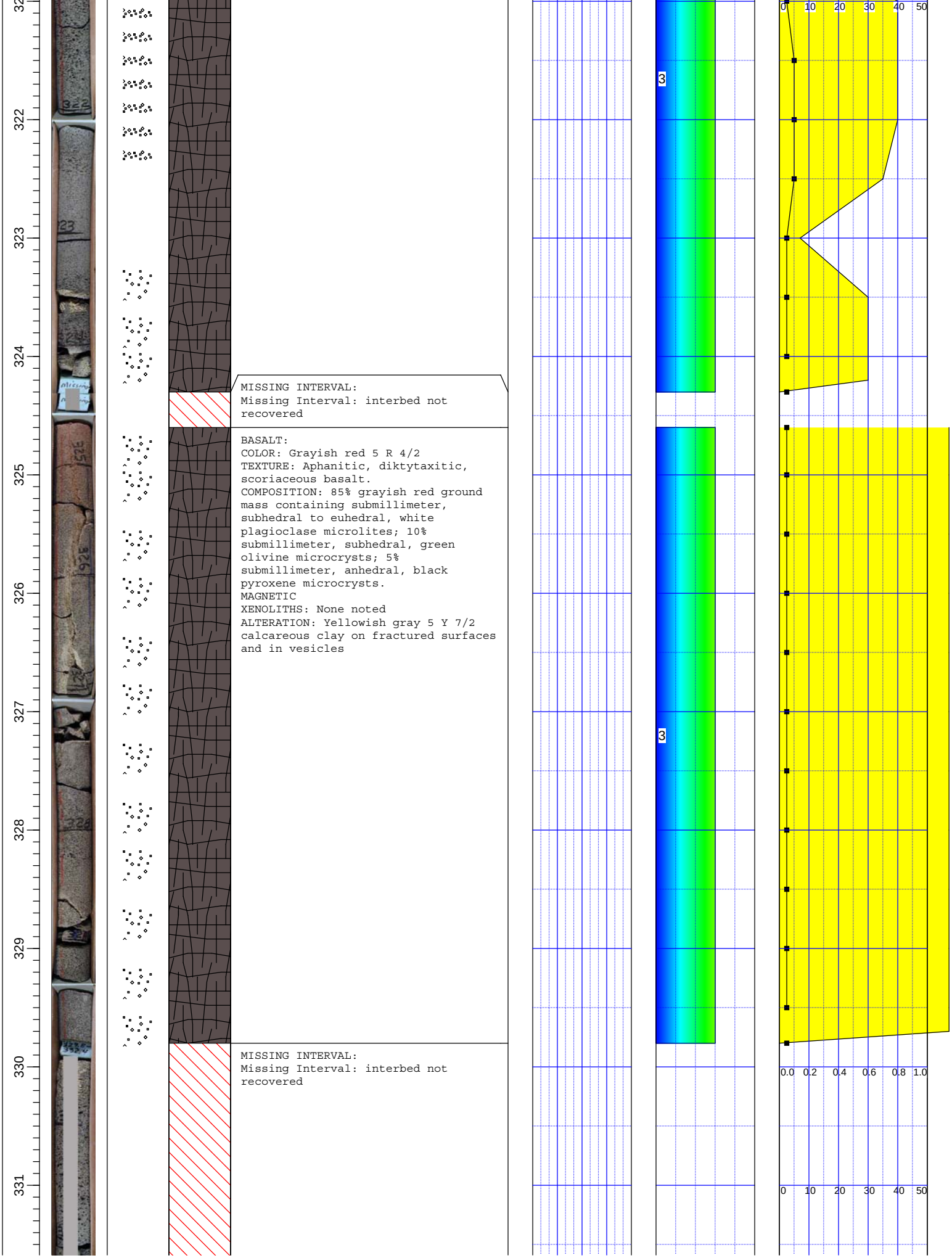
0.0
0.2
0.4
0.6
0.8
1.0


321
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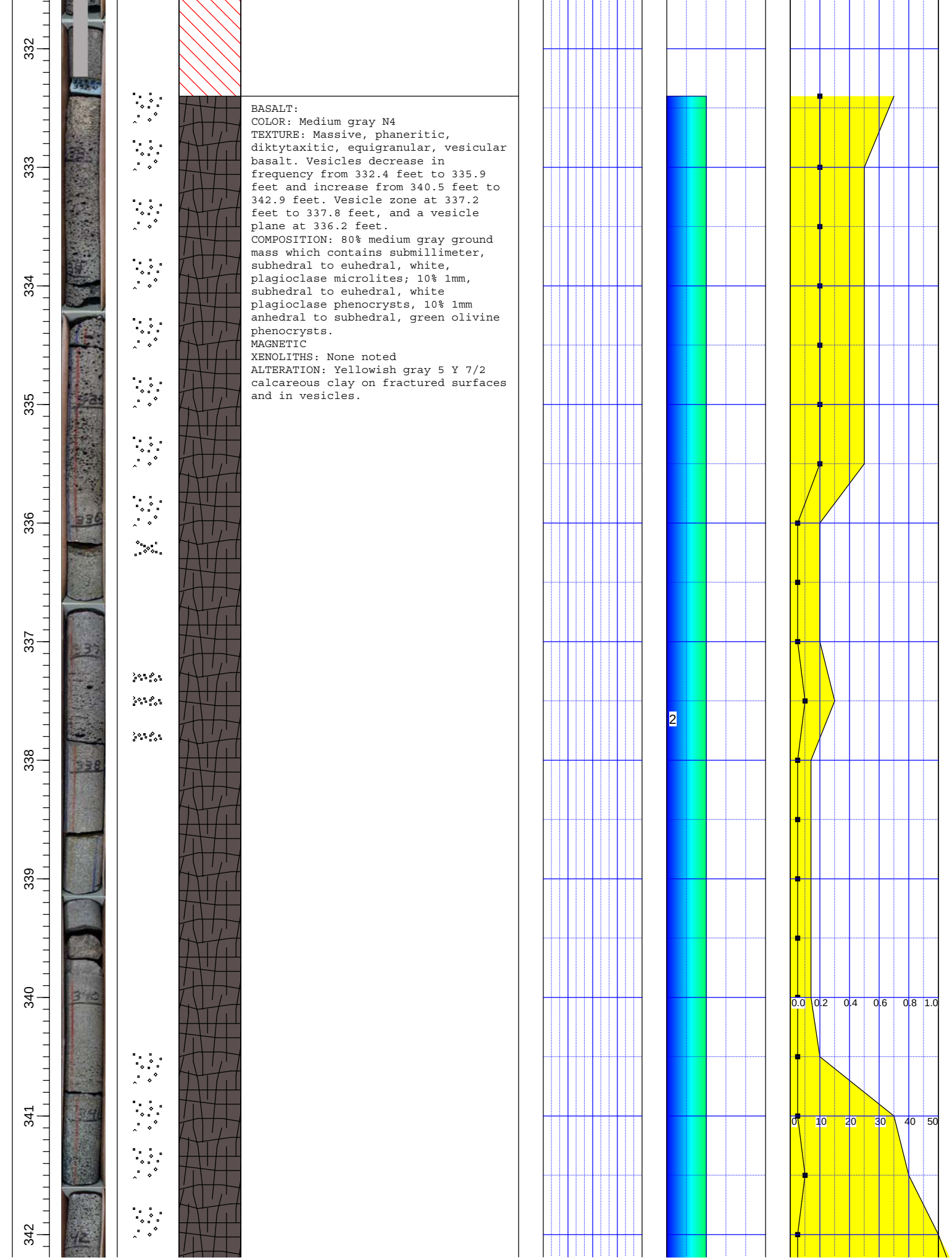
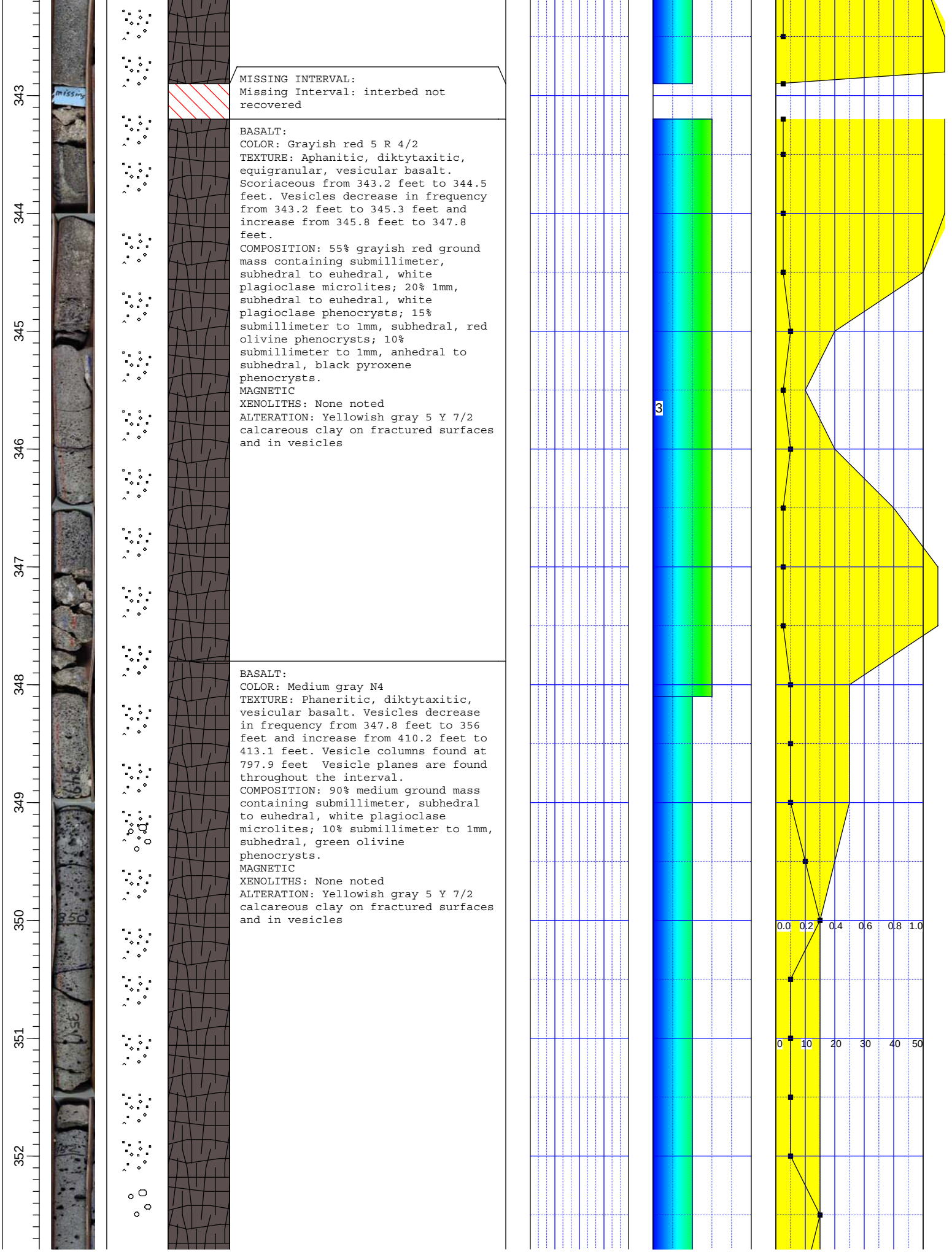
MISSING INTERVAL:
Missing Interval: interbed not recovered
BASALT:
COLOR: Grayish red 5 R 4/2
TEXTURE: Aphanitic, diktytaxitic, scoriaceous basalt.
COMPOSITION: 85% grayish red ground mass containing submillimeter, subhedral to euhedral, white plagioclase microlites; 10% submillimeter, subhedral, green olivine microcrysts; 5% submillimeter, anhedral, black pyroxene microcrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles
MISSING INTERVAL:
Missing Interval: interbed not recovered
3
3
0 10 20 30 40 50
0.0 0.2 0.4 0.6 0.8 1.0
0 10 20 30 40 50



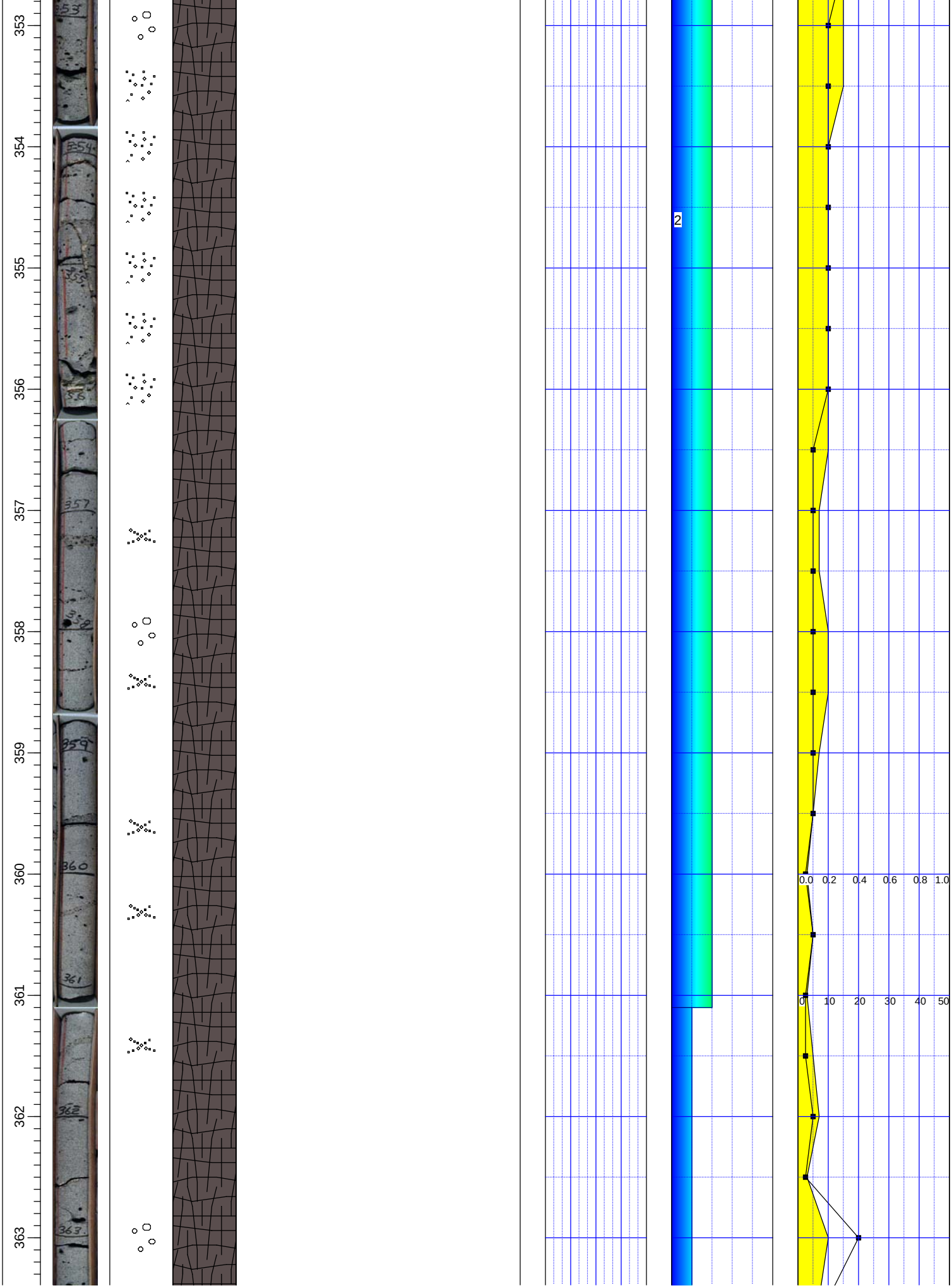
BASALT:
COLOR: Medium gray N4
TEXTURE: Massive, phaneritic, diktytaxitic, equigranular, vesicular basalt. Vesicles decrease in frequency from 332.4 feet to 335.9 feet and increase from 340.5 feet to 342.9 feet. Vesicle zone at 337.2 feet to 337.8 feet, and a vesicle plane at 336.2 feet.
COMPOSITION: 80% medium gray ground mass which contains submillimeter, subhedral to euhedral, white, plagioclase microlites; 10% 1mm, subhedral to euhedral, white plagioclase phenocrysts, 10% 1mm anhedral to subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles.



MISSING INTERVAL:
Missing Interval: interbed not recovered

BASALT:
COLOR: Grayish red 5 R 4/2
TEXTURE: Aphanitic, diktytaxitic, equigranular, vesicular basalt. Scoriaceous from 343.2 feet to 344.5 feet. Vesicles decrease in frequency from 343.2 feet to 345.3 feet and increase from 345.8 feet to 347.8 feet.
COMPOSITION: 55% grayish red ground mass containing submillimeter, subhedral to euhedral, white plagioclase microlites; 20% 1mm, subhedral to euhedral, white plagioclase phenocrysts; 15% submillimeter to 1mm, subhedral, red olivine phenocrysts; 10% submillimeter to 1mm, anhedral to subhedral, black pyroxene phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles

BASALT:
COLOR: Medium gray N4
TEXTURE: Phaneritic, diktytaxitic, vesicular basalt. Vesicles decrease in frequency from 347.8 feet to 356 feet and increase from 410.2 feet to 413.1 feet. Vesicle columns found at 797.9 feet Vesicle planes are found throughout the interval.
COMPOSITION: 90% medium ground mass containing submillimeter, subhedral to euhedral, white plagioclase microlites; 10% submillimeter to 1mm, subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles


353
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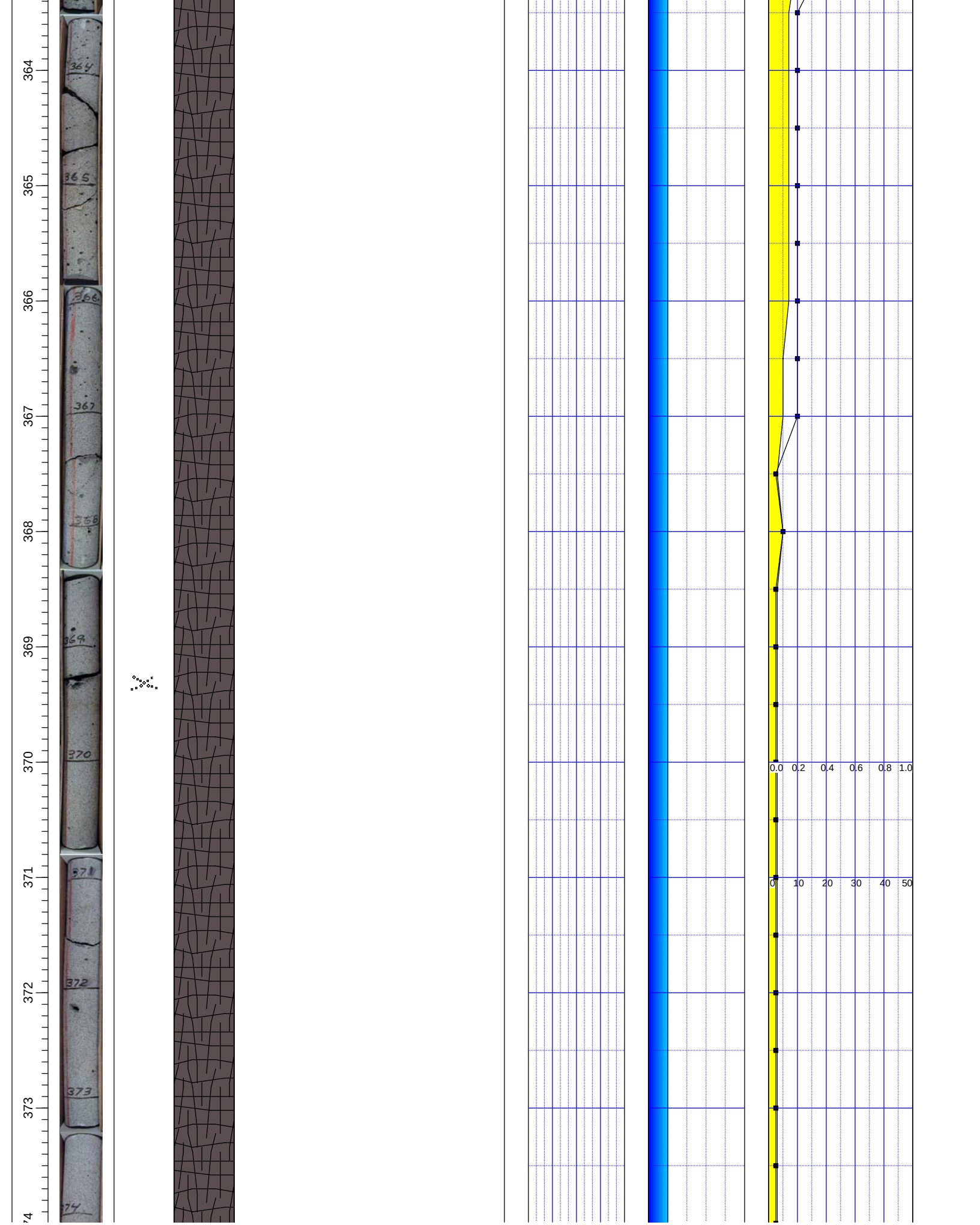
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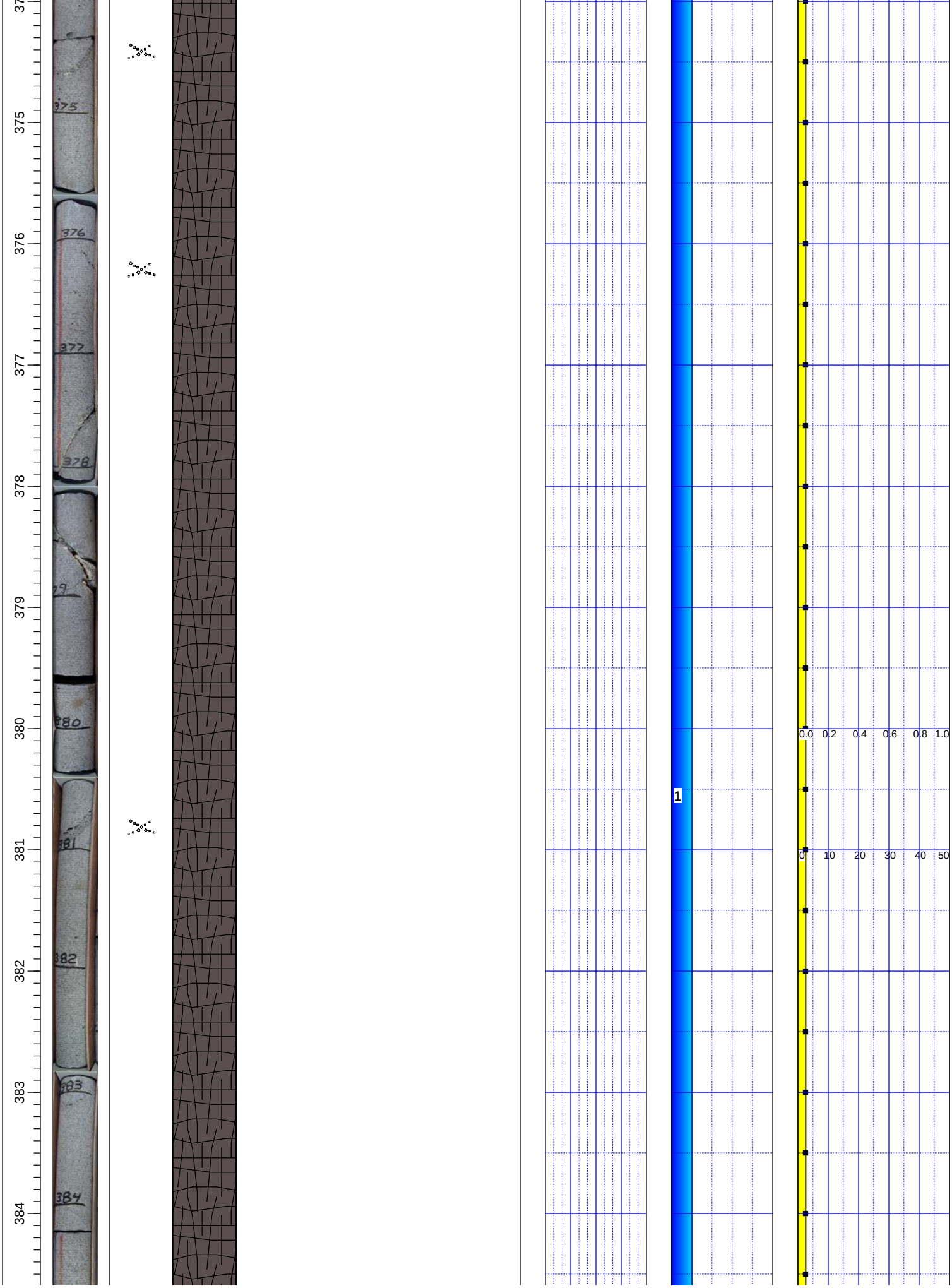
0 10 20 30 40 50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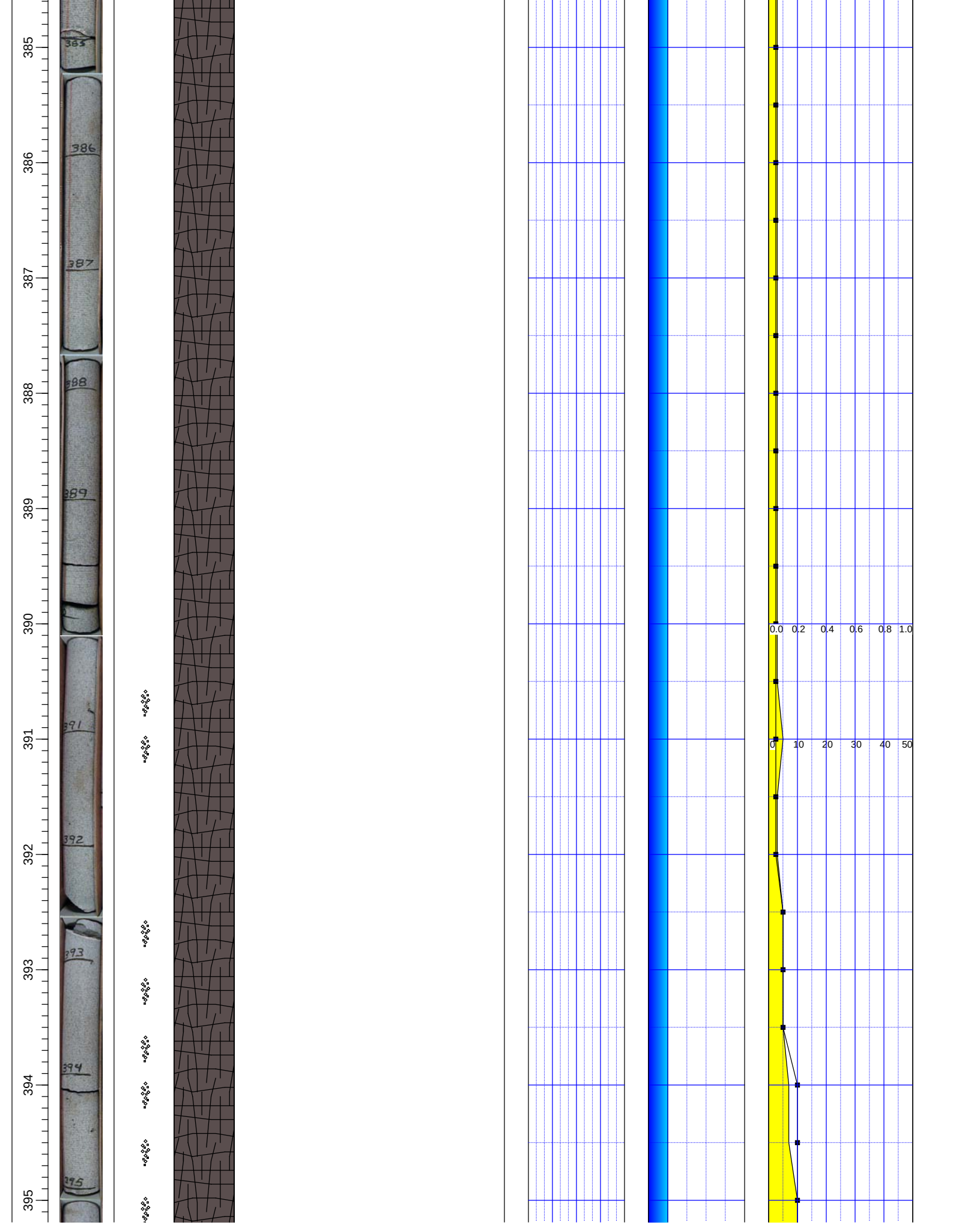
0.0 0.2 0.4 0.6 0.8 1.0
0 10 20 30 40 50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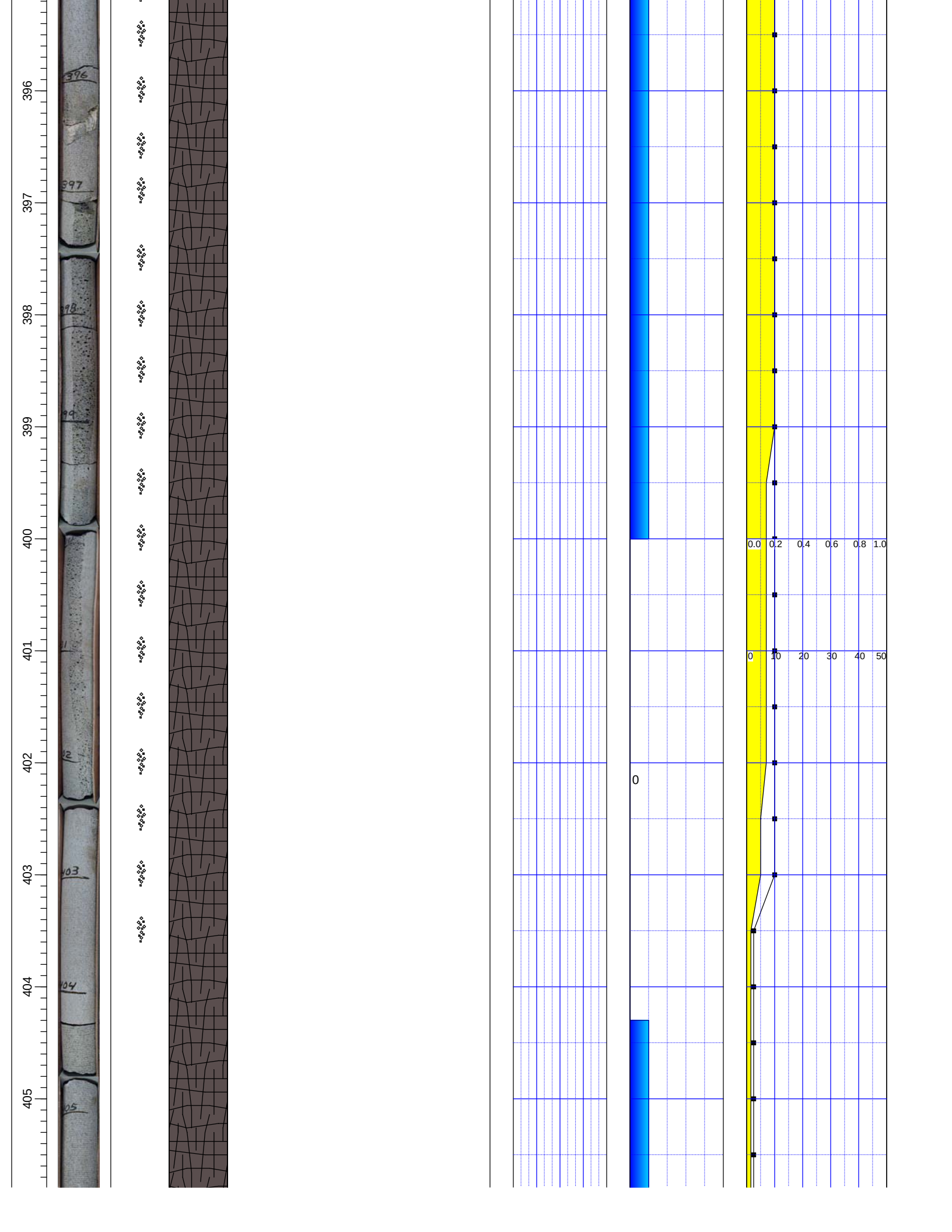
0.0 0.2 0.4 0.6 0.8 1.0
0 10 20 30 40 50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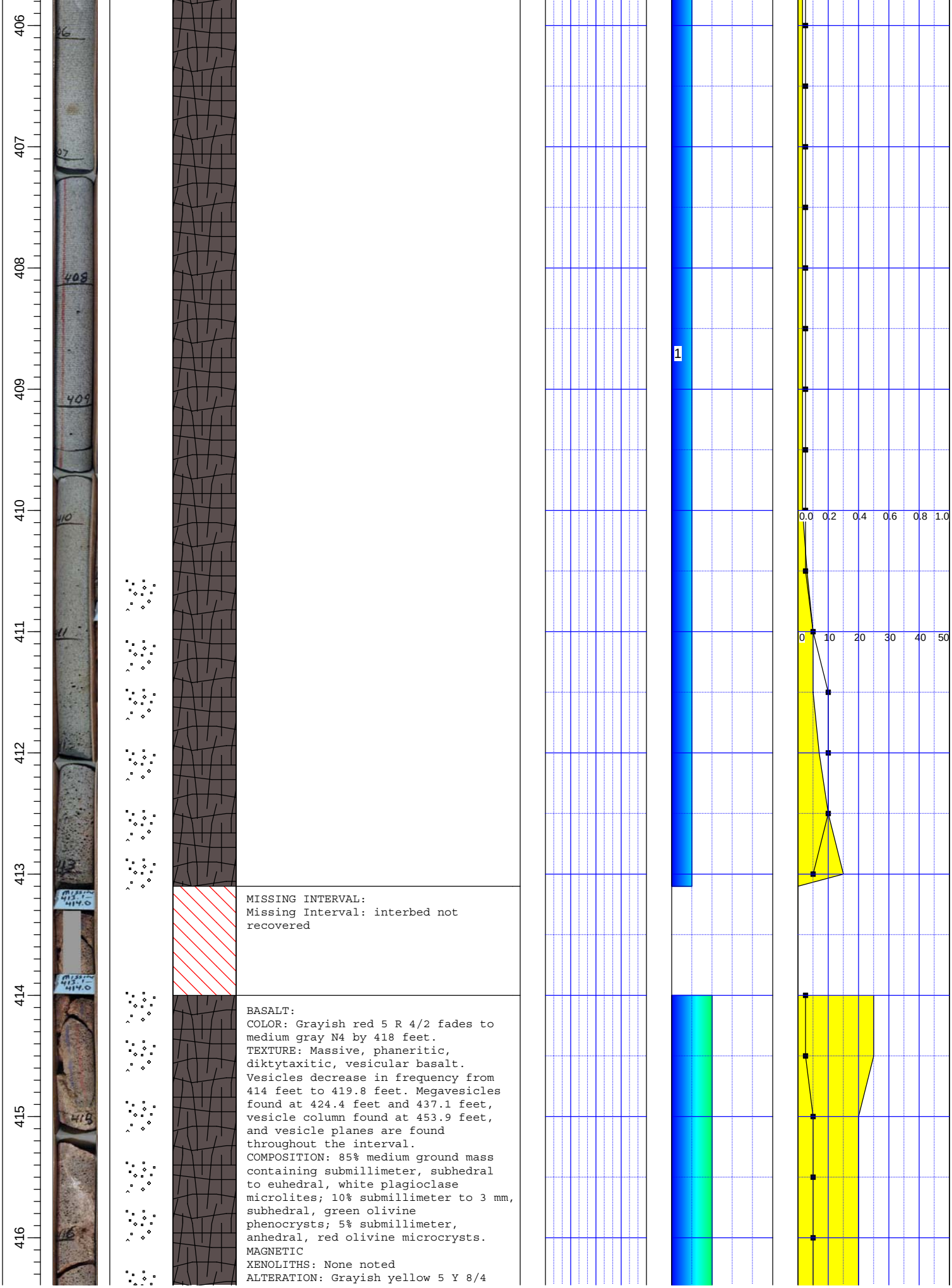
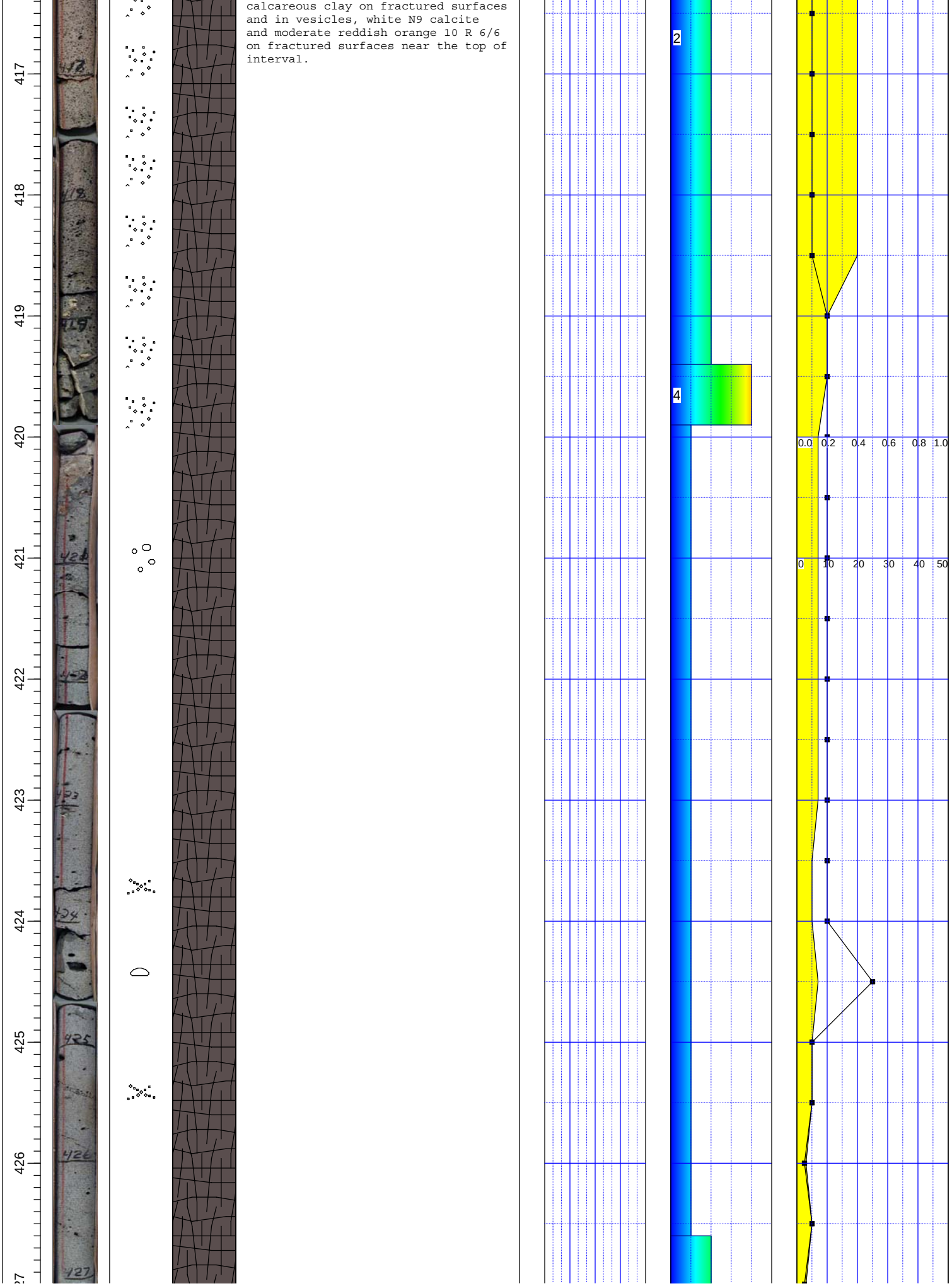


MISSING INTERVAL:
Missing Interval: interbed not recovered

BASALT:
COLOR: Grayish red 5 R 4/2 fades to medium gray N4 by 418 feet.
TEXTURE: Massive, phaneritic, diktytaxitic, vesicular basalt. Vesicles decrease in frequency from 414 feet to 419.8 feet. Megavesicles found at 424.4 feet and 437.1 feet, vesicle column found at 453.9 feet, and vesicle planes are found throughout the interval.
COMPOSITION: 85% medium ground mass containing submillimeter, subhedral to euhedral, white plagioclase microlites; 10% submillimeter to 3 mm, subhedral, green olivine phenocrysts; 5% submillimeter, anhedral, red olivine microcrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 8/4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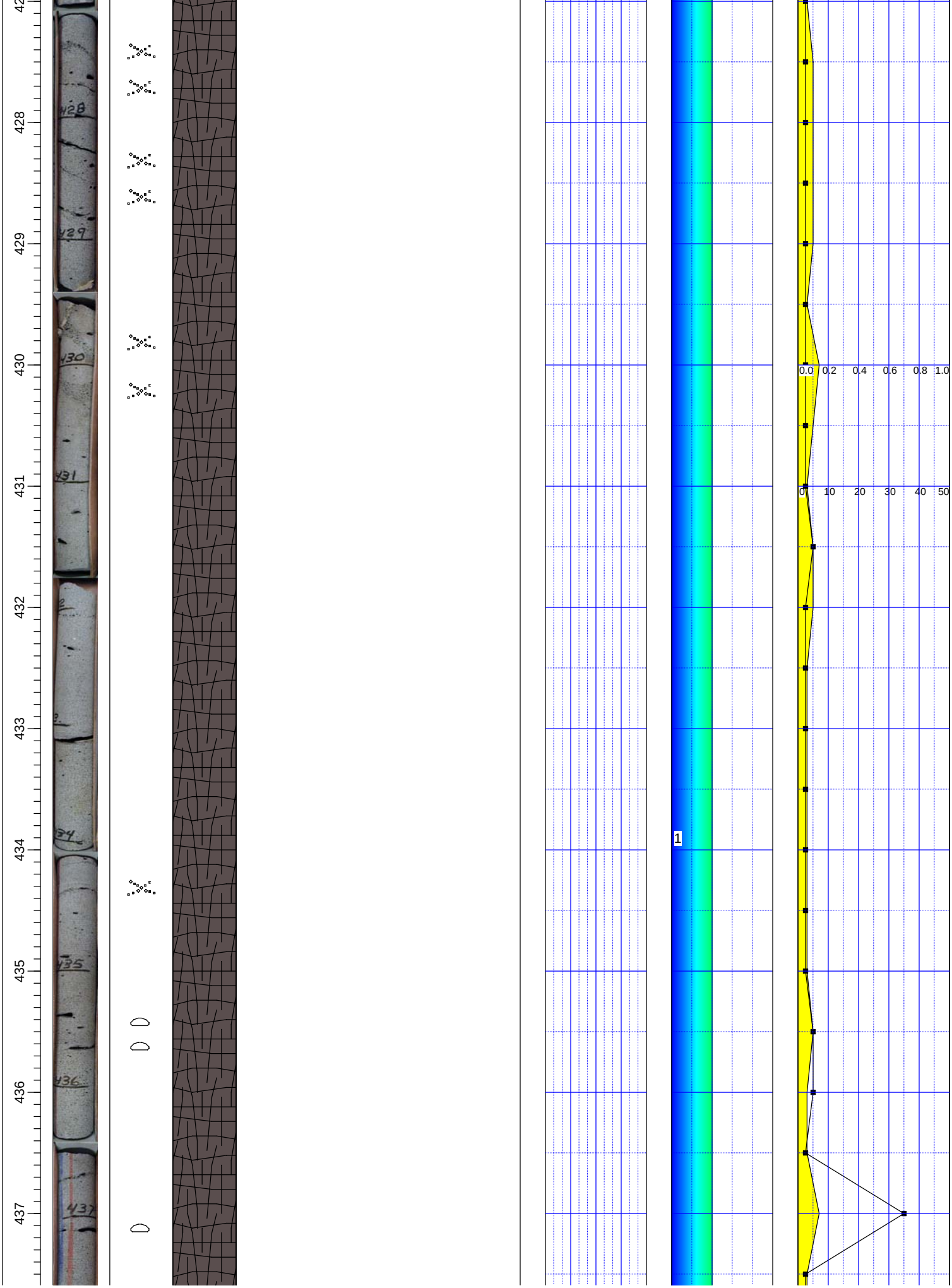
427
calcareous clay on fractured surfaces
and in vesicles, white N9 calcite
and moderate reddish orange 10 R 6/6
on fractured surfaces near the top of
interval.
2
4
0.0 0.2 0.4 0.6 0.8 1.0
0 10 20 30 40 50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434
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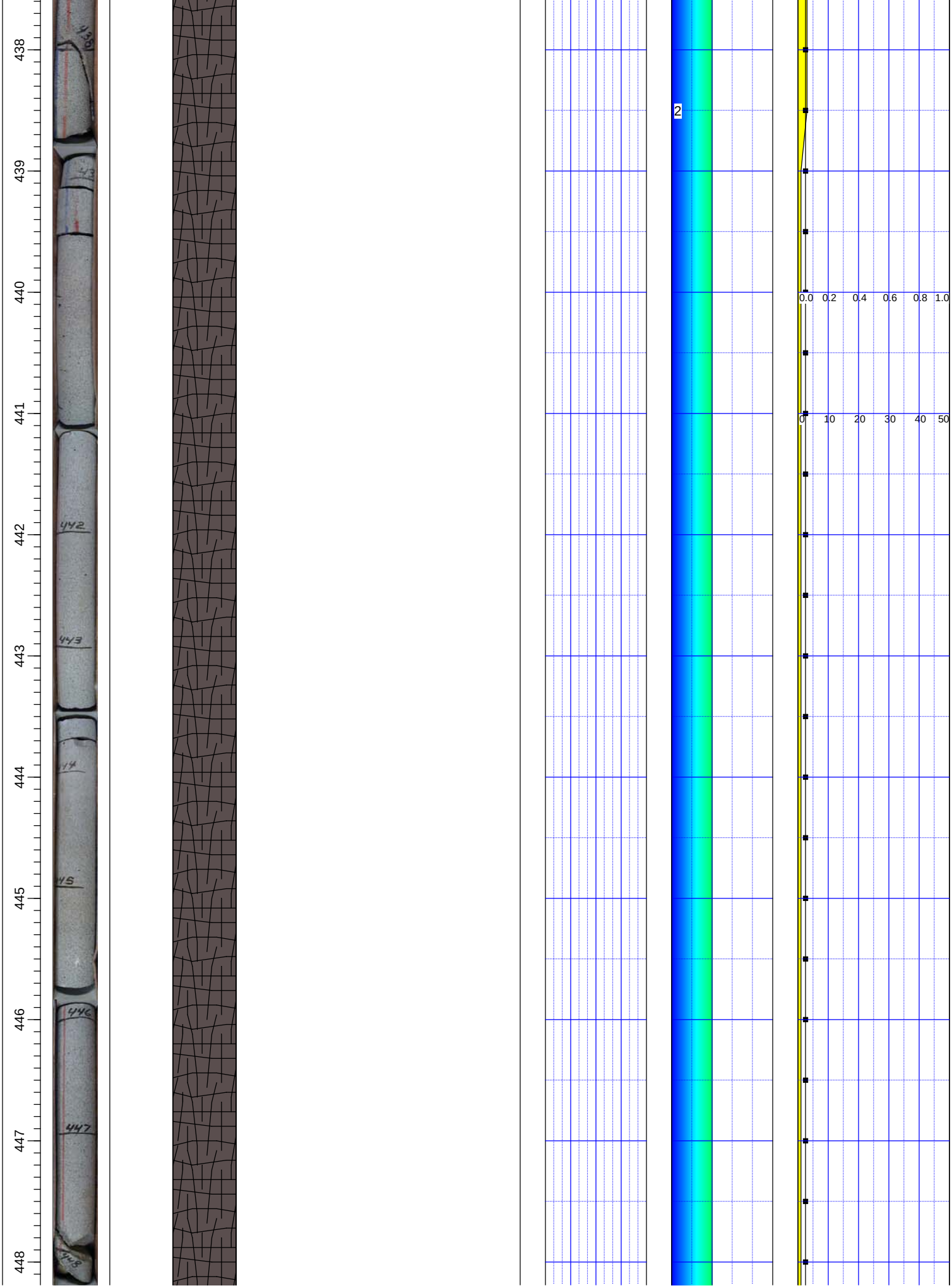
436
437
0.0 0.2 0.4 0.6 0.8 1.0
0 10 20 30 40 50
1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0.2
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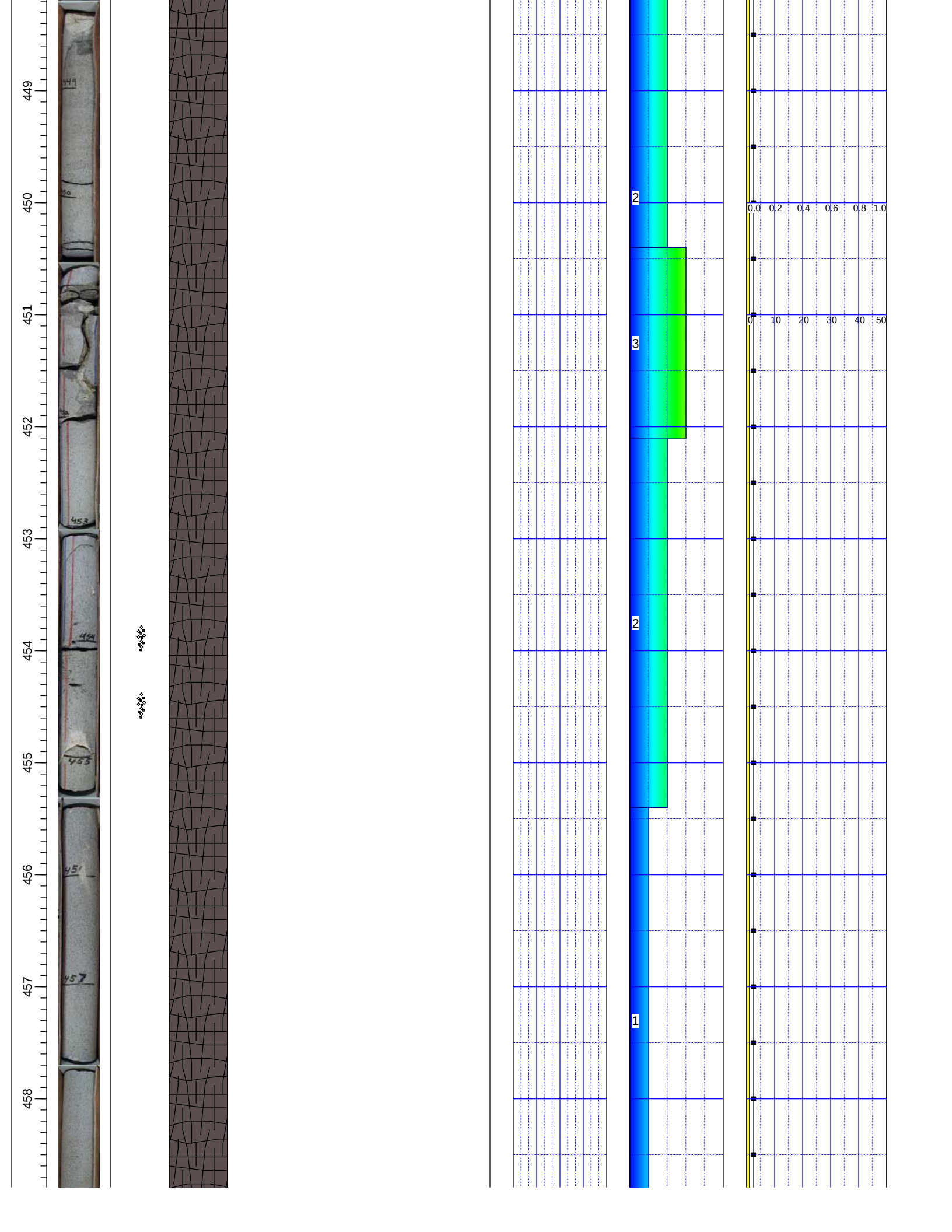
449
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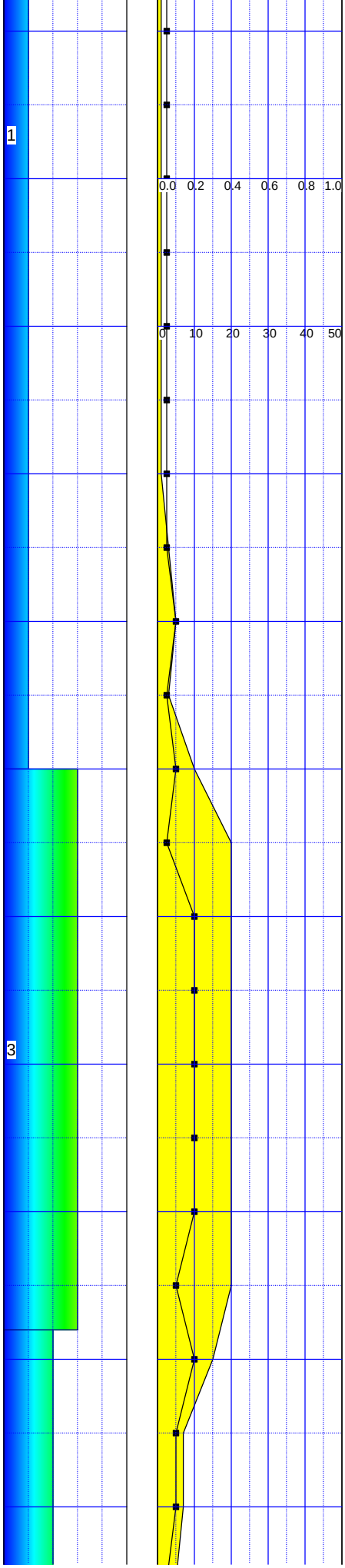
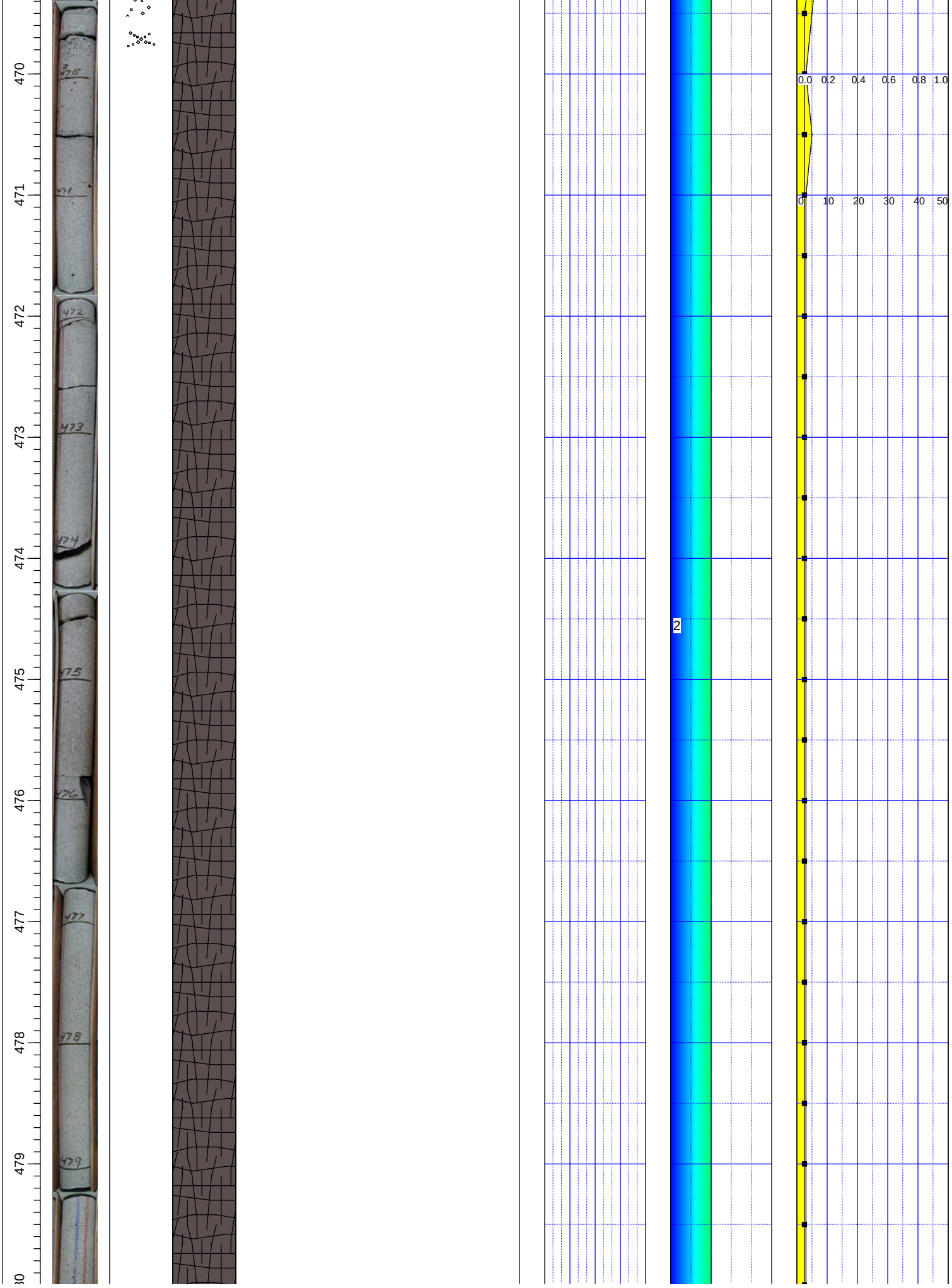
457
458
2
3
2
1
0.0 0.2 0.4 0.6 0.8 1.0
0 10 20 30 40 50

BASALT:
COLOR: Medium gray N4
TEXTURE: Massive, phaneritic, diktytaxitic, vesicular basalt. Vesicles decrease in frequency from 464 feet to 469.4 feet and increase in frequency from 480.4 feet to 481.3 feet. Vesicle plane found at 469.7 feet.
COMPOSITION: 85% medium ground mass containing submillimeter, subhedral to euhedral, white plagioclase microlites; 20% submillimeter, anhedral, red olivine microcrysts; 10% 1mm to 3mm, subhedral, green olivine phenocrysts; 10% submillimeter to 1mm, anhedral to euhedral, black, bladed pyroxene phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles.

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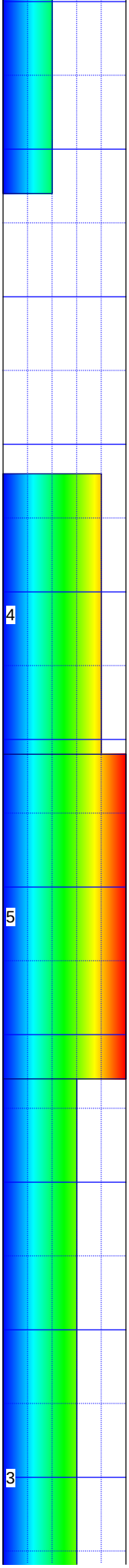
2

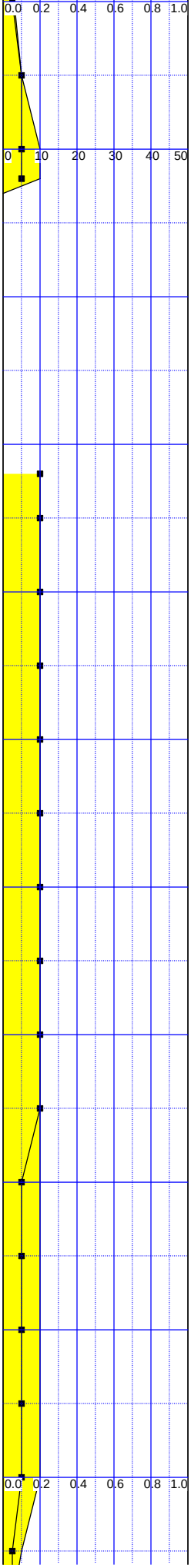
SANDS - CLEAN:
TEXTURE: Sands, USCS Classification SW, medium grained, well sorted, subrounded to rounded grains.
COLOR: Moderate yellowish brown 10 YR 5/4
CONSISTENCE: Friable
STRUCTURES: Structureless
FREE CARBONATES: Yes
ROCK: No
ROOTS/FOSSILS: None noted

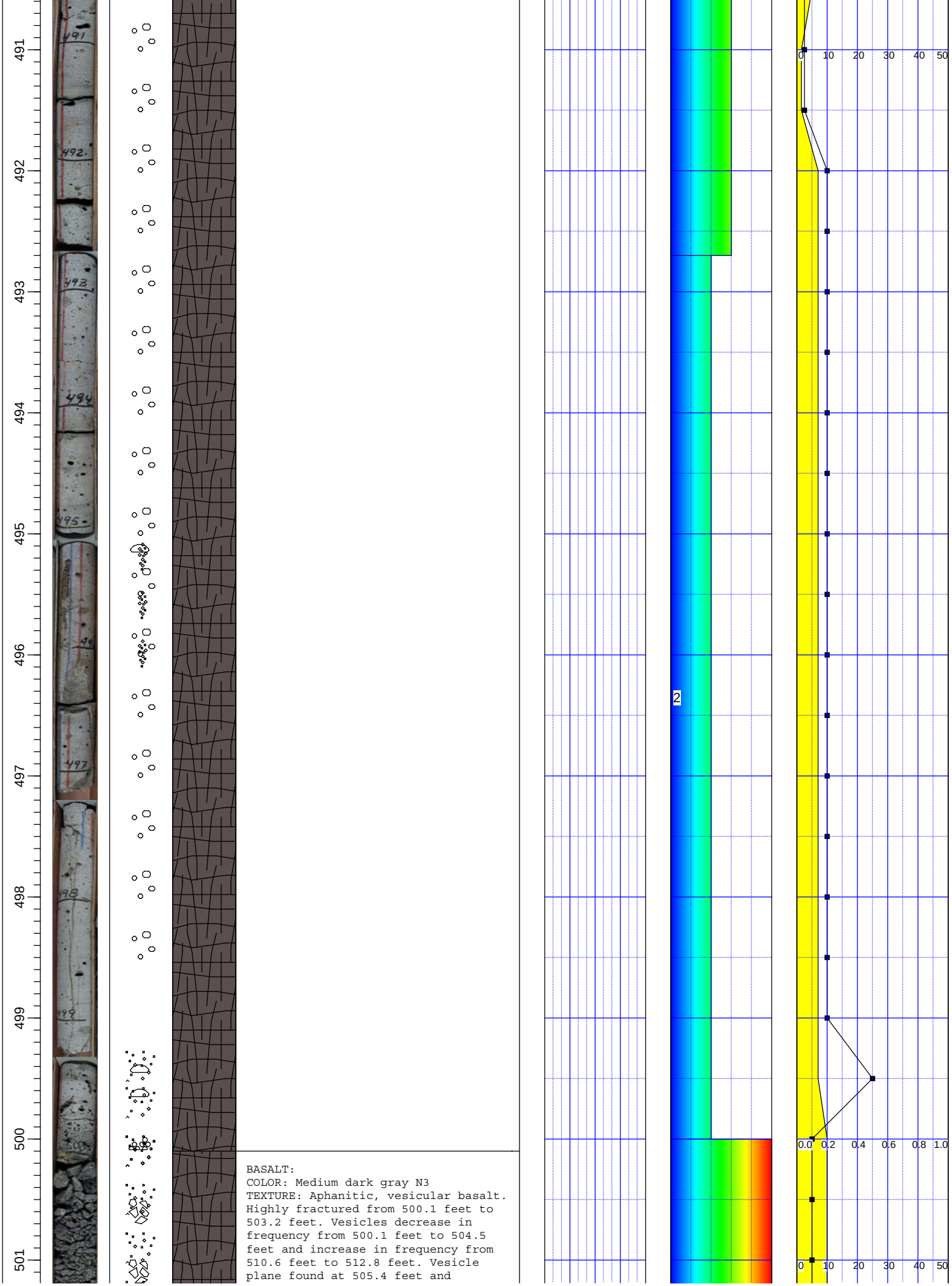
MISSING INTERVAL:
Missing Interval: interbed not recovered

BASALT:
COLOR: Medium dark gray N3
TEXTURE: Highly fractured, aphanitic, vesicular basalt.
COMPOSITION: 95% grayish red ground mass containing submillimeter, anhedral, white plagioclase microlites and submillimeter, anhedral, red olivine microcrysts; 5% submillimeter, anhedral to subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Olivine is weakly altered to iddingsite. Grayish orange 10 YR 7/4 clay on fractured surfaces and in vesicles

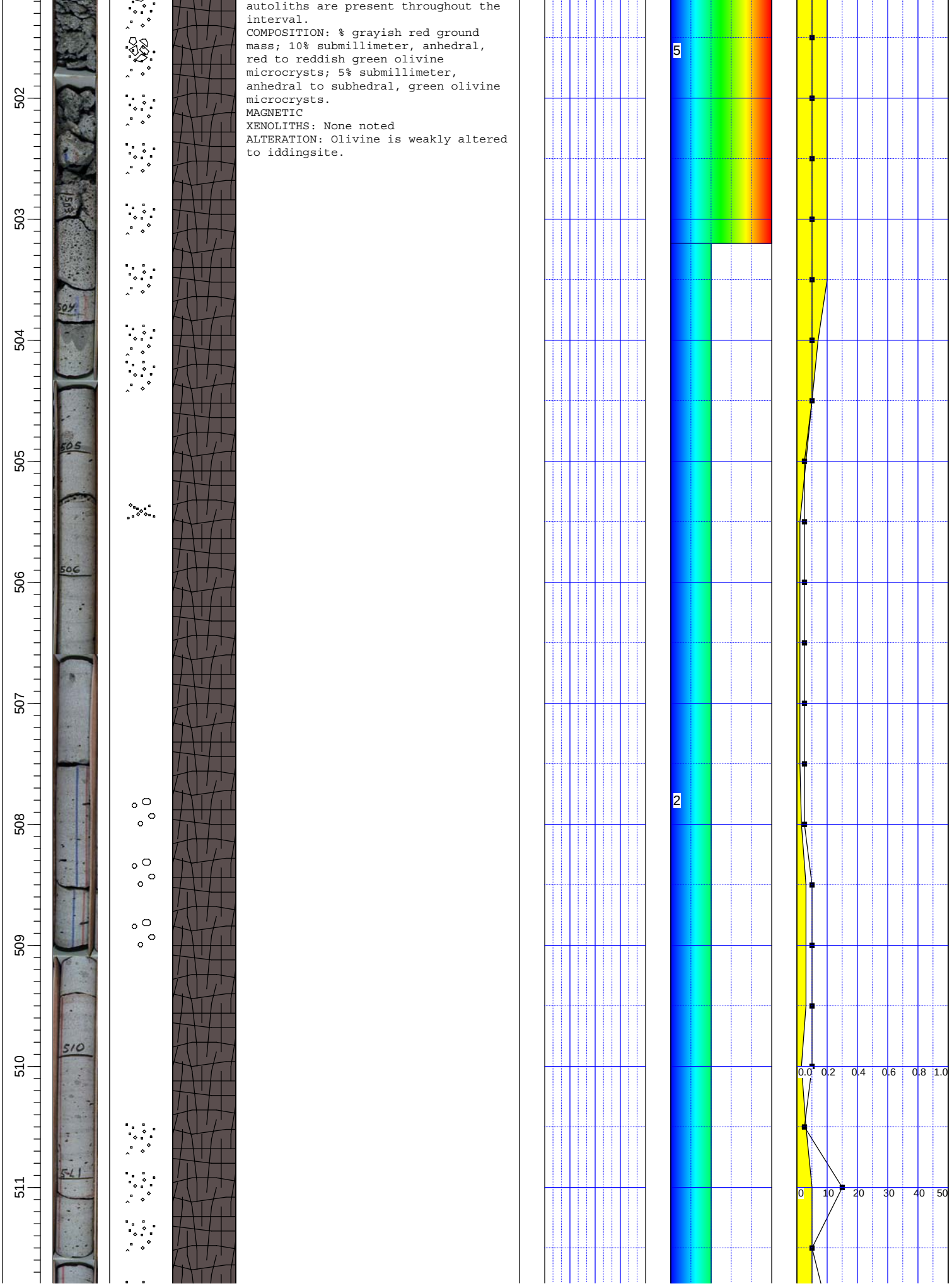
BASALT:
COLOR: Medium gray N4
TEXTURE: Massive, phaneritic, diktytaxitic, vesicular basalt. Vesicles decrease in frequency from 486.3 feet to 490.4 feet and increase in frequency from 499.4 feet to 500.1 feet. Vesicle column found at 495.2 feet. Vertical fractures, mega vesicles, and autoliths are common throughout the interval.
COMPOSITION: 85% medium ground mass containing submillimeter, subhedral to euhedral, white plagioclase microlites and submillimeter, anhedral to euhedral, bladed, black pyroxene microcrysts; 10% 1mm to 3mm, subhedral, green olivine phenocrysts; 10% submillimeter to 1mm, anhedral to subhedral, red olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles.



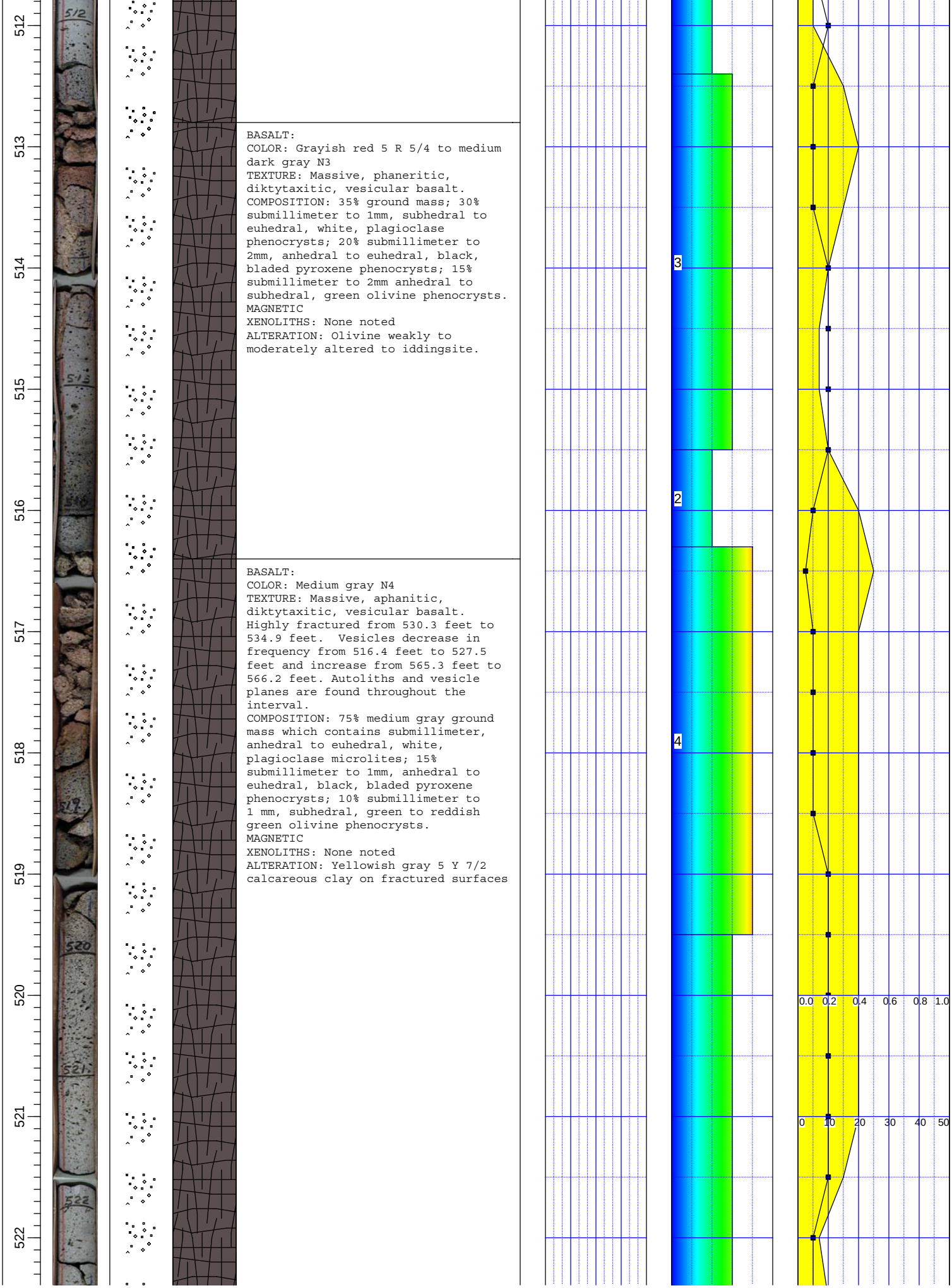




BASALT:
COLOR: Medium dark gray N3
TEXTURE: Aphanitic, vesicular basalt. Highly fractured from 500.1 feet to 503.2 feet. Vesicles decrease in frequency from 500.1 feet to 504.5 feet and increase in frequency from 510.6 feet to 512.8 feet. Vesicle plane found at 505.4 feet and



autoliths are present throughout the interval.
COMPOSITION: % grayish red ground mass; 10% submillimeter, anhedral, red to reddish green olivine microcrysts; 5% submillimeter, anhedral to subhedral, green olivine microcrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Olivine is weakly altered to iddingsite.


512
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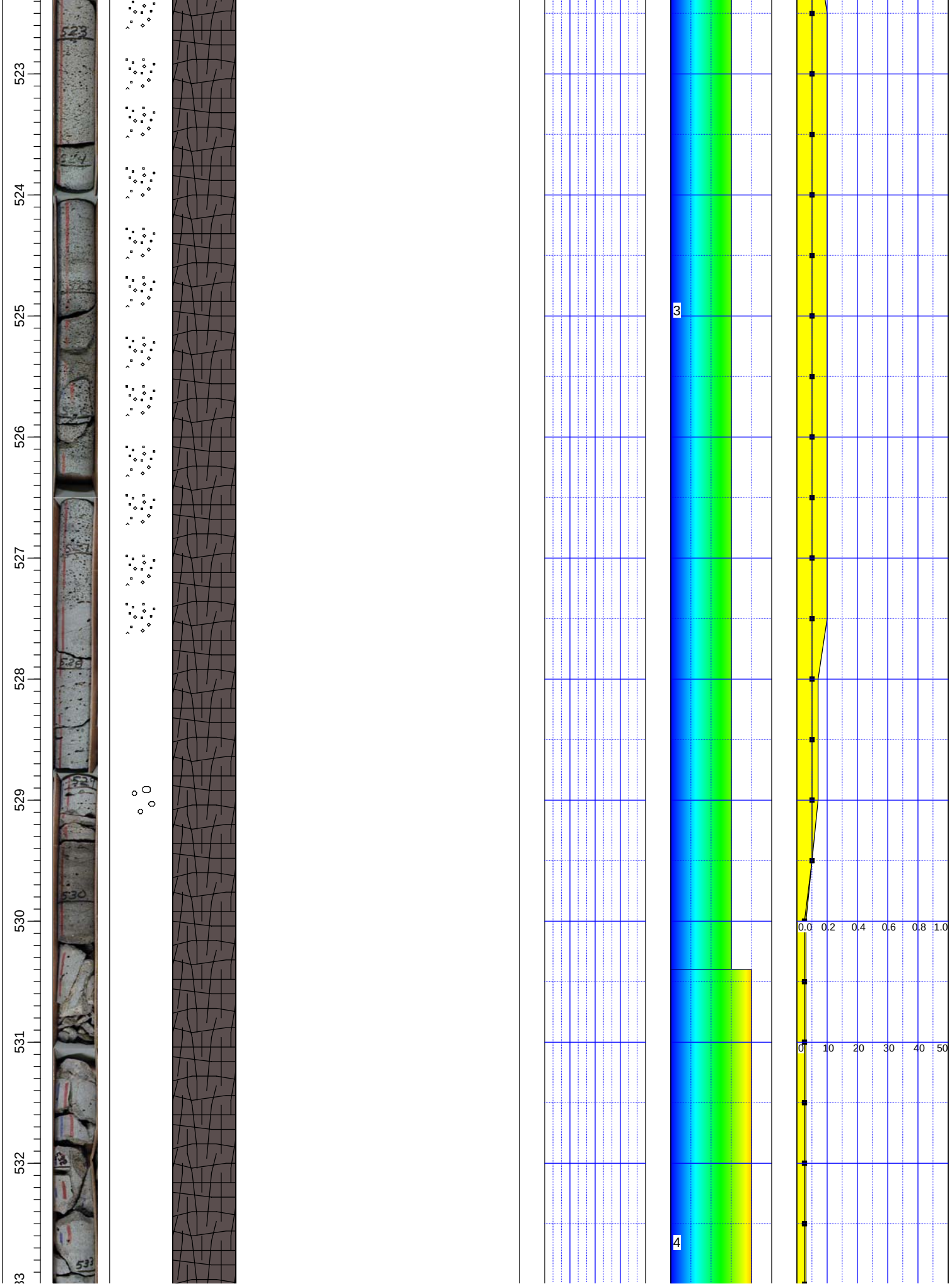
522
BASALT:
COLOR: Grayish red 5 R 5/4 to medium dark gray N3
TEXTURE: Massive, phaneritic, diktytaxitic, vesicular basalt.
COMPOSITION: 35% ground mass; 30% submillimeter to 1mm, subhedral to euhedral, white, plagioclase phenocrysts; 20% submillimeter to 2mm, anhedral to euhedral, black, bladed pyroxene phenocrysts; 15% submillimeter to 2mm anhedral to subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Olivine weakly to moderately altered to iddingsite.
BASALT:
COLOR: Medium gray N4
TEXTURE: Massive, aphanitic, diktytaxitic, vesicular basalt. Highly fractured from 530.3 feet to 534.9 feet. Vesicles decrease in frequency from 516.4 feet to 527.5 feet and increase from 565.3 feet to 566.2 feet. Autoliths and vesicle planes are found throughout the interval.
COMPOSITION: 75% medium gray ground mass which contains submillimeter, anhedral to euhedral, white, plagioclase microlites; 15% submillimeter to 1mm, anhedral to euhedral, black, bladed pyroxene phenocrysts; 10% submillimeter to 1 mm, subhedral, green to reddish green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 calcareous clay on fractured surfaces
3
2
4
0.0 0.2 0.4 0.6 0.8 1.0
0 10 20 30 40 50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531
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533
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0.2
0.4
0.6
0.8
1.0
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10
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30
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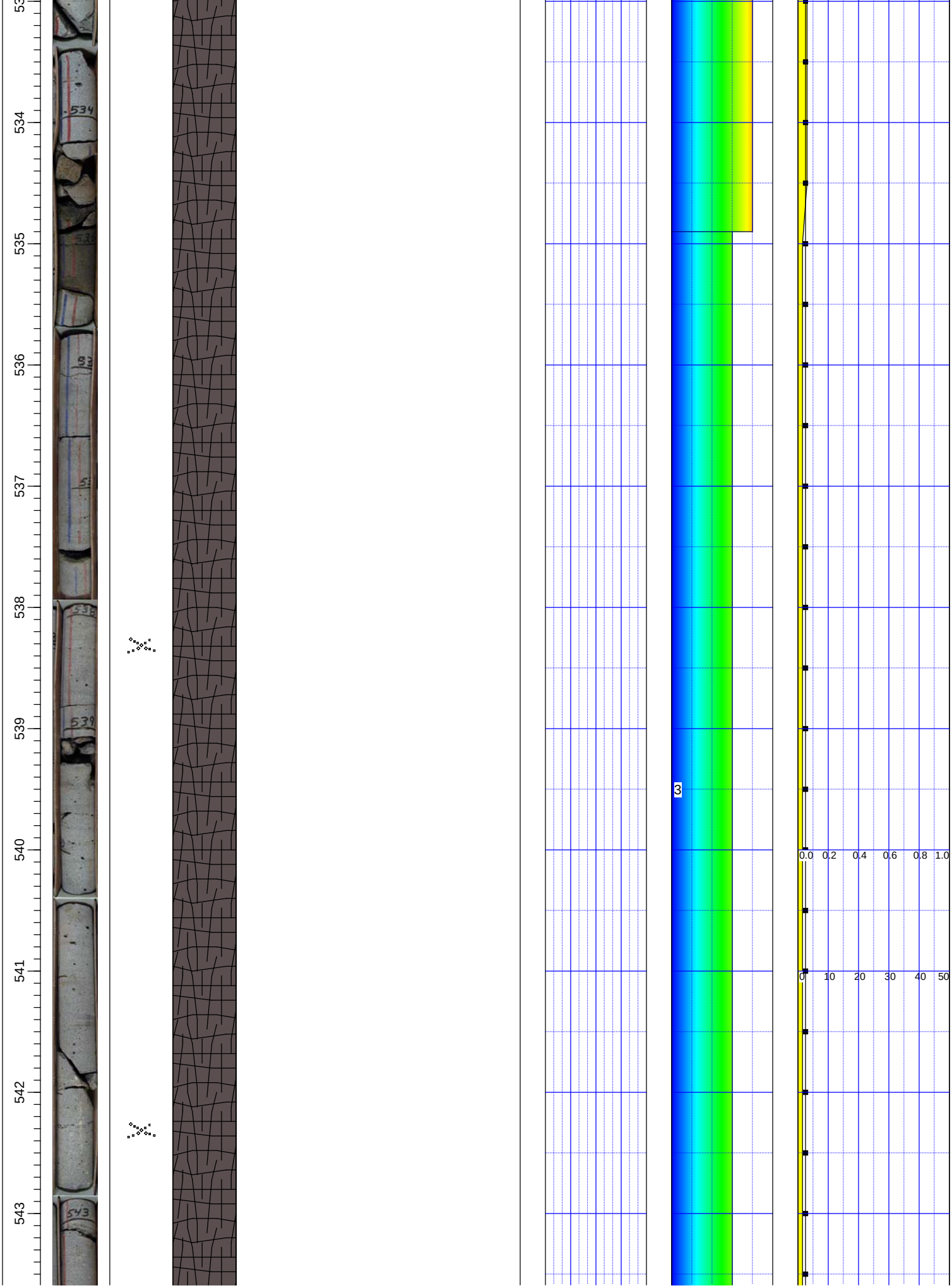
50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3
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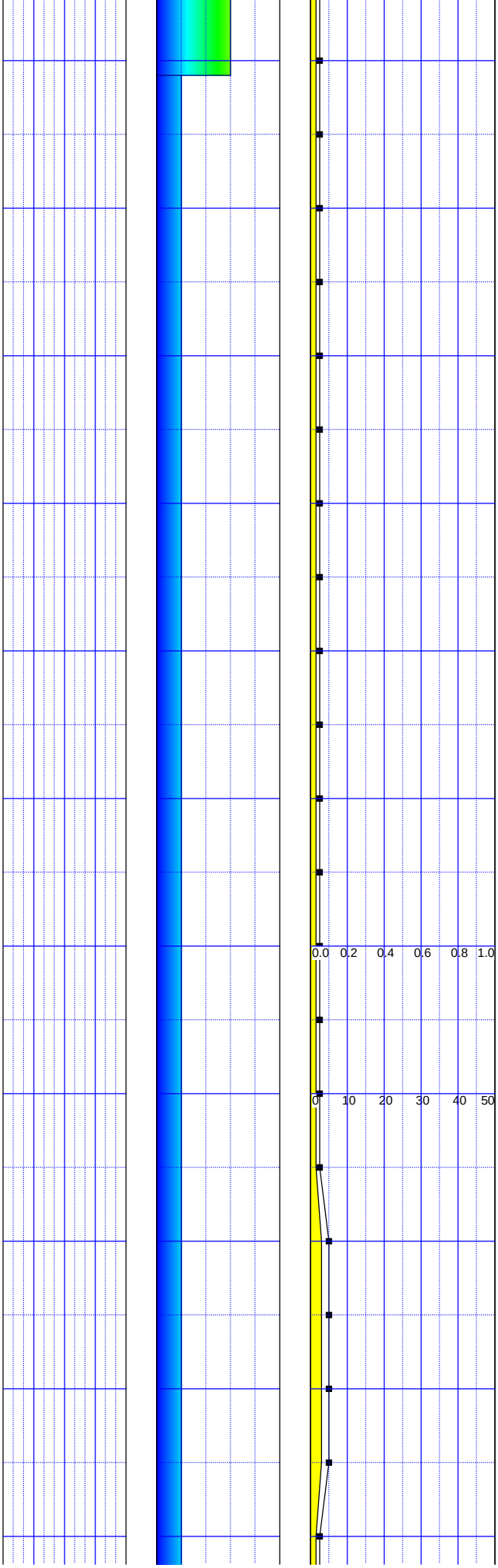
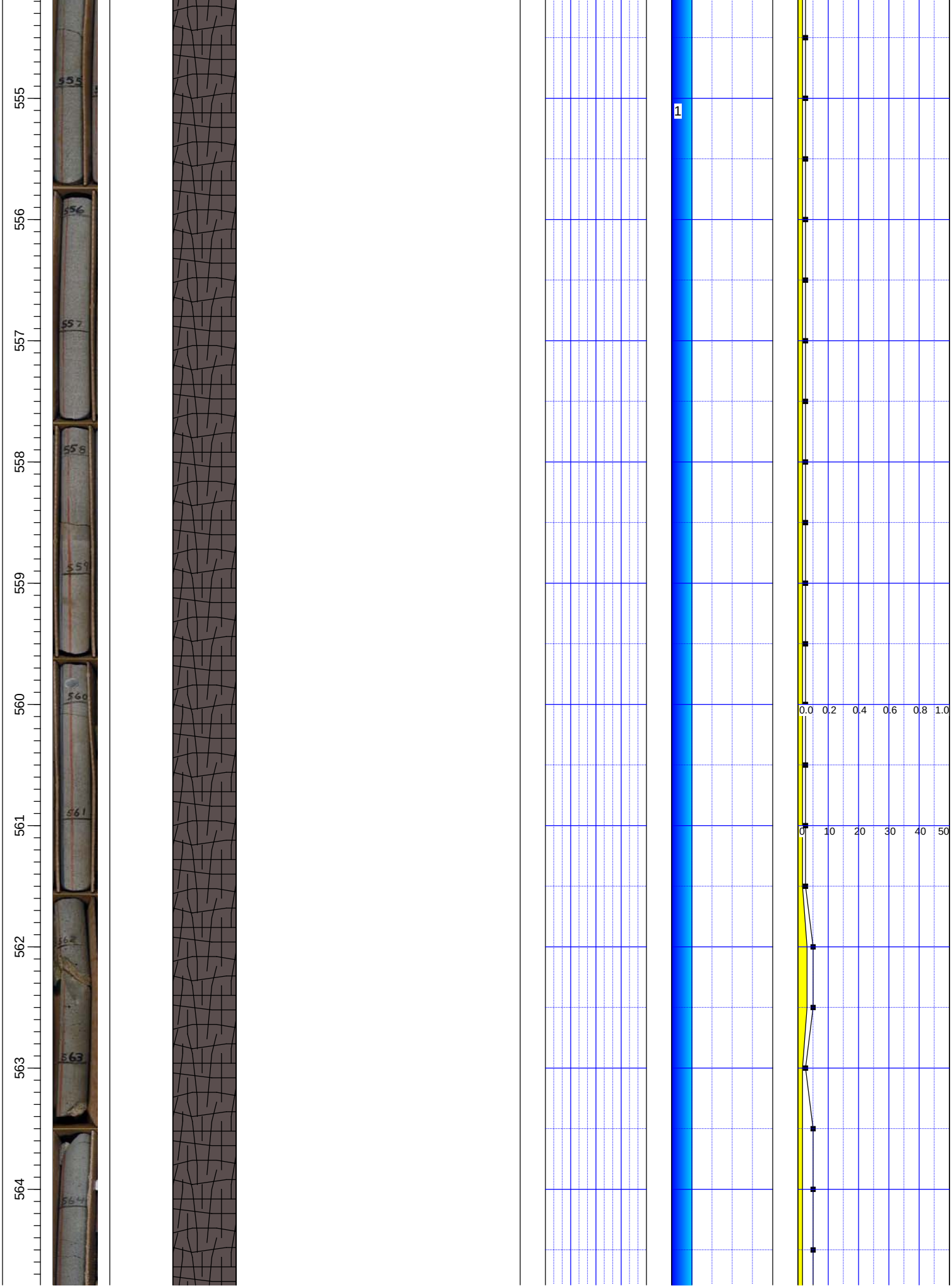
0 10 20 30 40 50

End of PQ core, beginning of HQ core

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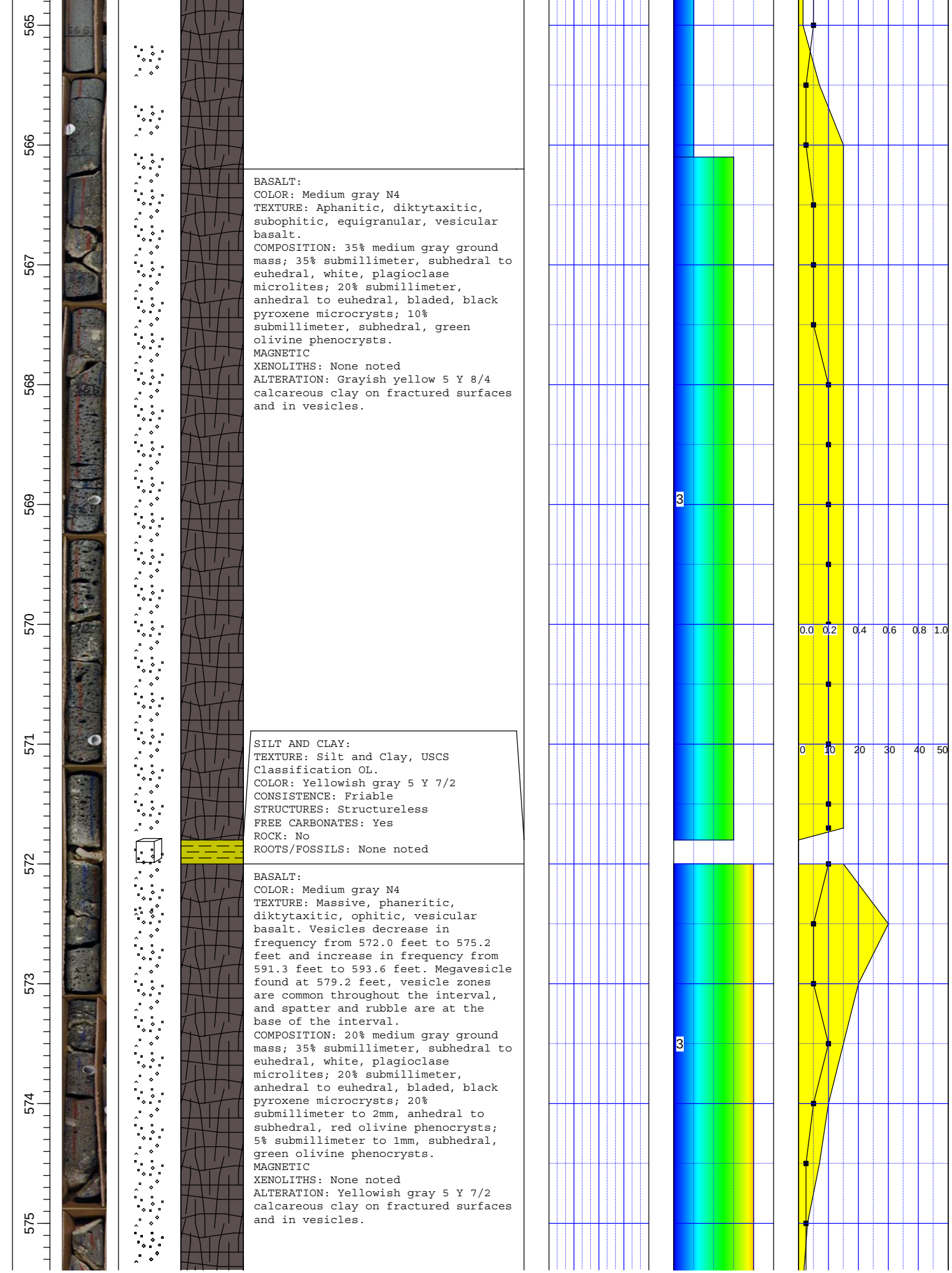
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BASALT:
COLOR: Medium gray N4
TEXTURE: Aphanitic, diktytaxitic, subophitic, equigranular, vesicular basalt.
COMPOSITION: 35% medium gray ground mass; 35% submillimeter, subhedral to euhedral, white, plagioclase microlites; 20% submillimeter, anhedral to euhedral, bladed, black pyroxene microcrysts; 10% submillimeter, subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 8/4 calcareous clay on fractured surfaces and in vesicles.
SILT AND CLAY:
TEXTURE: Silt and Clay, USCS Classification OL.
COLOR: Yellowish gray 5 Y 7/2
CONSISTENCE: Friable
STRUCTURES: Structureless
FREE CARBONATES: Yes
ROCK: No
ROOTS/FOSSILS: None noted
BASALT:
COLOR: Medium gray N4
TEXTURE: Massive, phaneritic, diktytaxitic, ophitic, vesicular basalt. Vesicles decrease in frequency from 572.0 feet to 575.2 feet and increase in frequency from 591.3 feet to 593.6 feet. Megavesicle found at 579.2 feet, vesicle zones are common throughout the interval, and spatter and rubble are at the base of the interval.
COMPOSITION: 20% medium gray ground mass; 35% submillimeter, subhedral to euhedral, white, plagioclase microlites; 20% submillimeter, anhedral to euhedral, bladed, black pyroxene microcrysts; 20% submillimeter to 2mm, anhedral to subhedral, red olivine phenocrysts; 5% submillimeter to 1mm, subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles.
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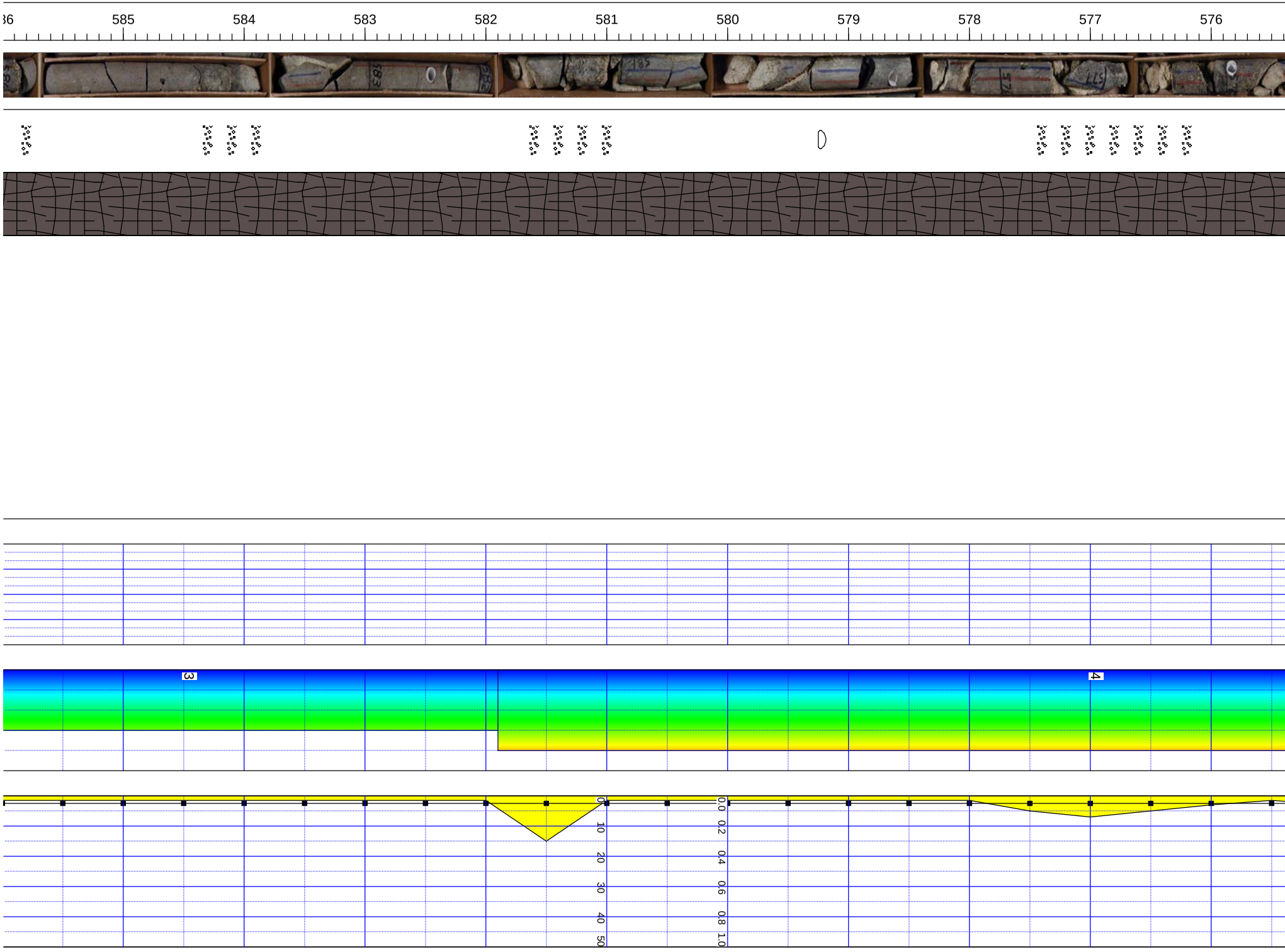
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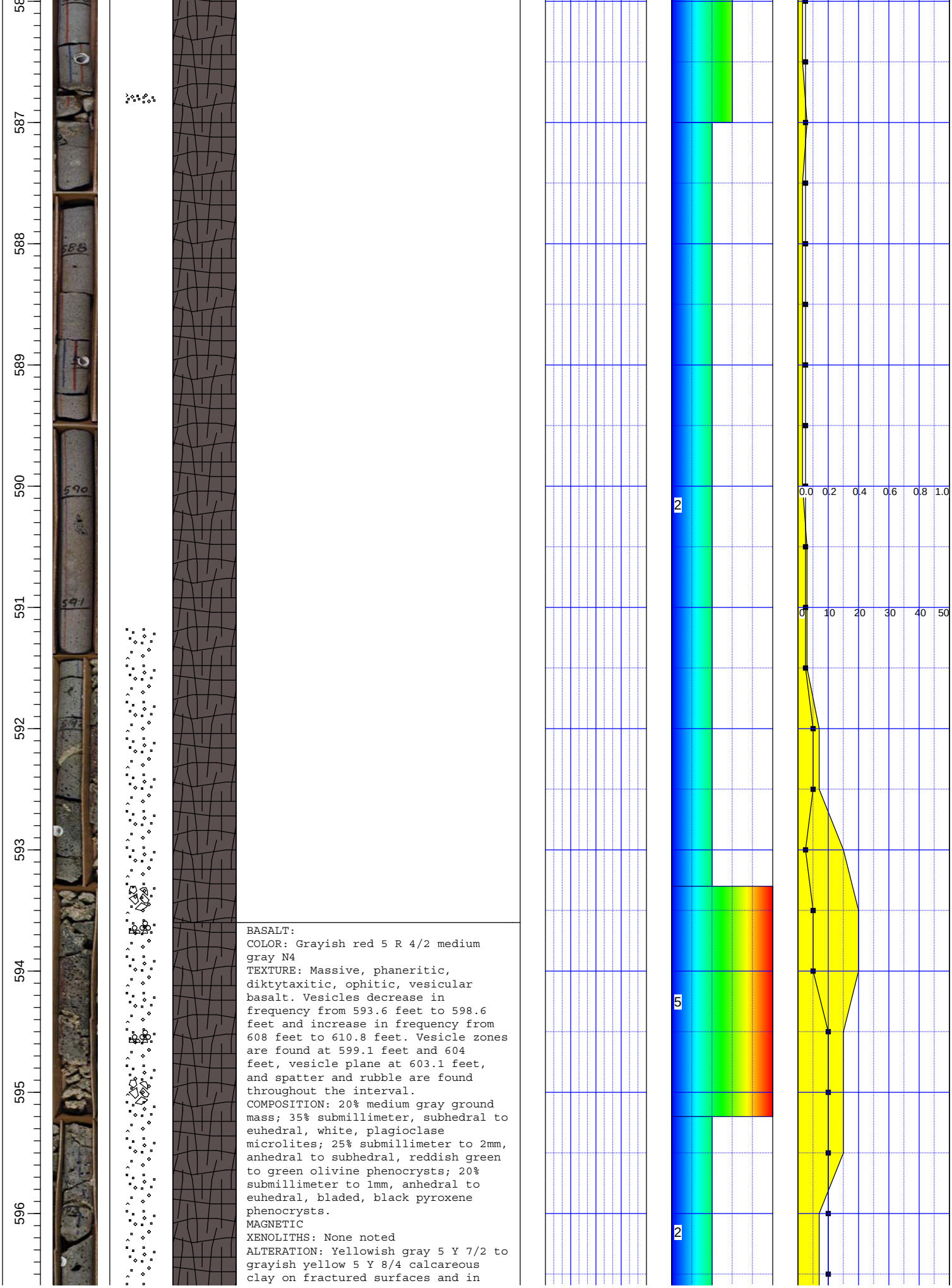
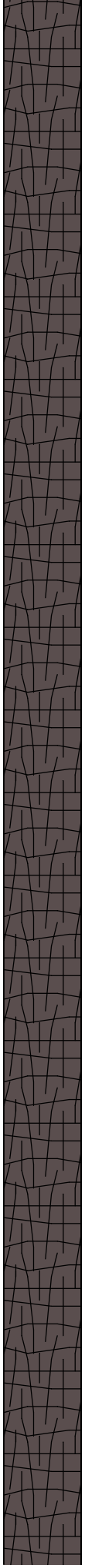
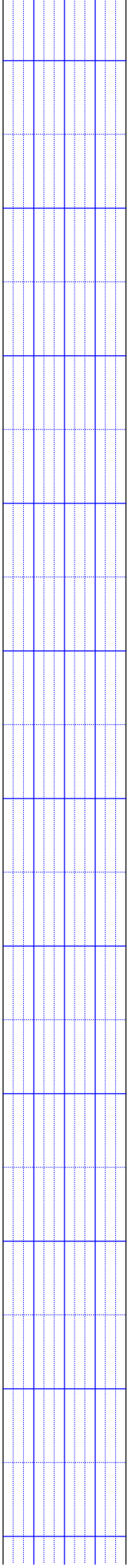
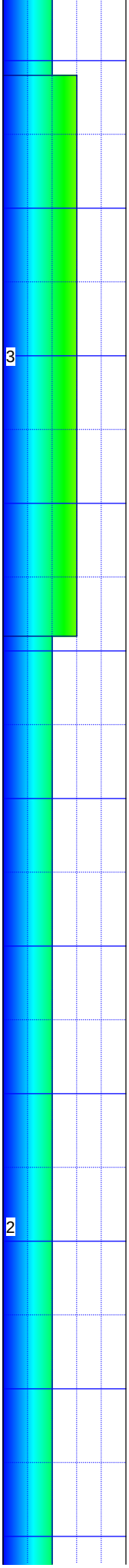


BASALT:
COLOR: Grayish red 5 R 4/2 medium gray N4
TEXTURE: Massive, phaneritic, diktytaxitic, ophitic, vesicular basalt. Vesicles decrease in frequency from 593.6 feet to 598.6 feet and increase in frequency from 608 feet to 610.8 feet. Vesicle zones are found at 599.1 feet and 604 feet, vesicle plane at 603.1 feet, and spatter and rubble are found throughout the interval.
COMPOSITION: 20% medium gray ground mass; 35% submillimeter, subhedral to euhedral, white, plagioclase microlites; 25% submillimeter to 2mm, anhedral to subhedral, reddish green to green olivine phenocrysts; 20% submillimeter to 1mm, anhedral to euhedral, bladed, black pyroxene phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 to grayish yellow 5 Y 8/4 calcareous clay on fractured surfaces and in

vesicles.



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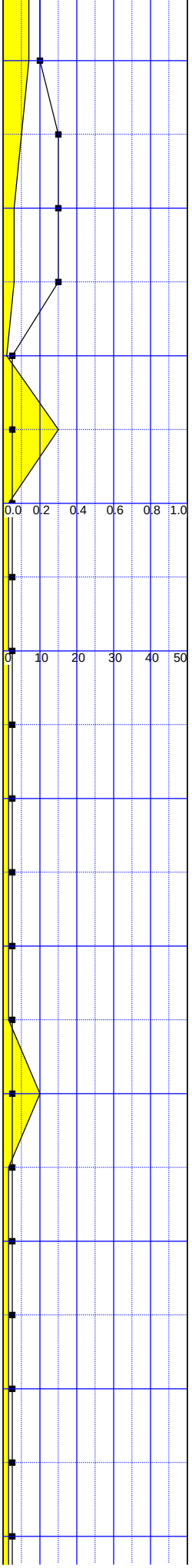
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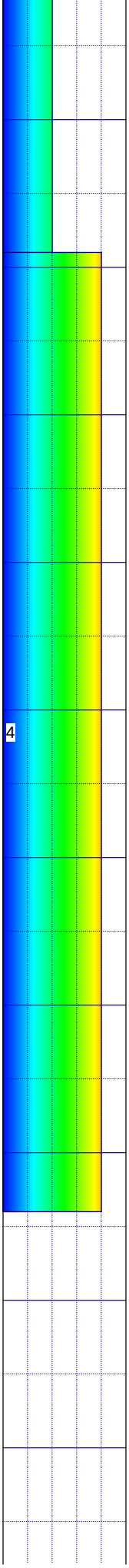
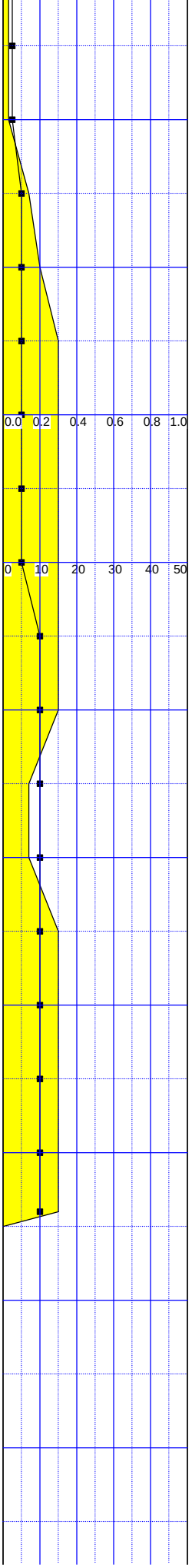
BASALT:
COLOR: Blackish red 5 R 2/2
TEXTURE: Massive, phaneritic, diktytaxitic, vesicular basalt. Spatter found at the base of the interval.
COMPOSITION: 15% blackish red ground mass; 40% submillimeter, subhedral to euhedral, white, plagioclase phenocrysts; 25% submillimeter to 2mm, anhedral to subhedral, red olivine phenocrysts; 20% submillimeter to 2mm, subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles.

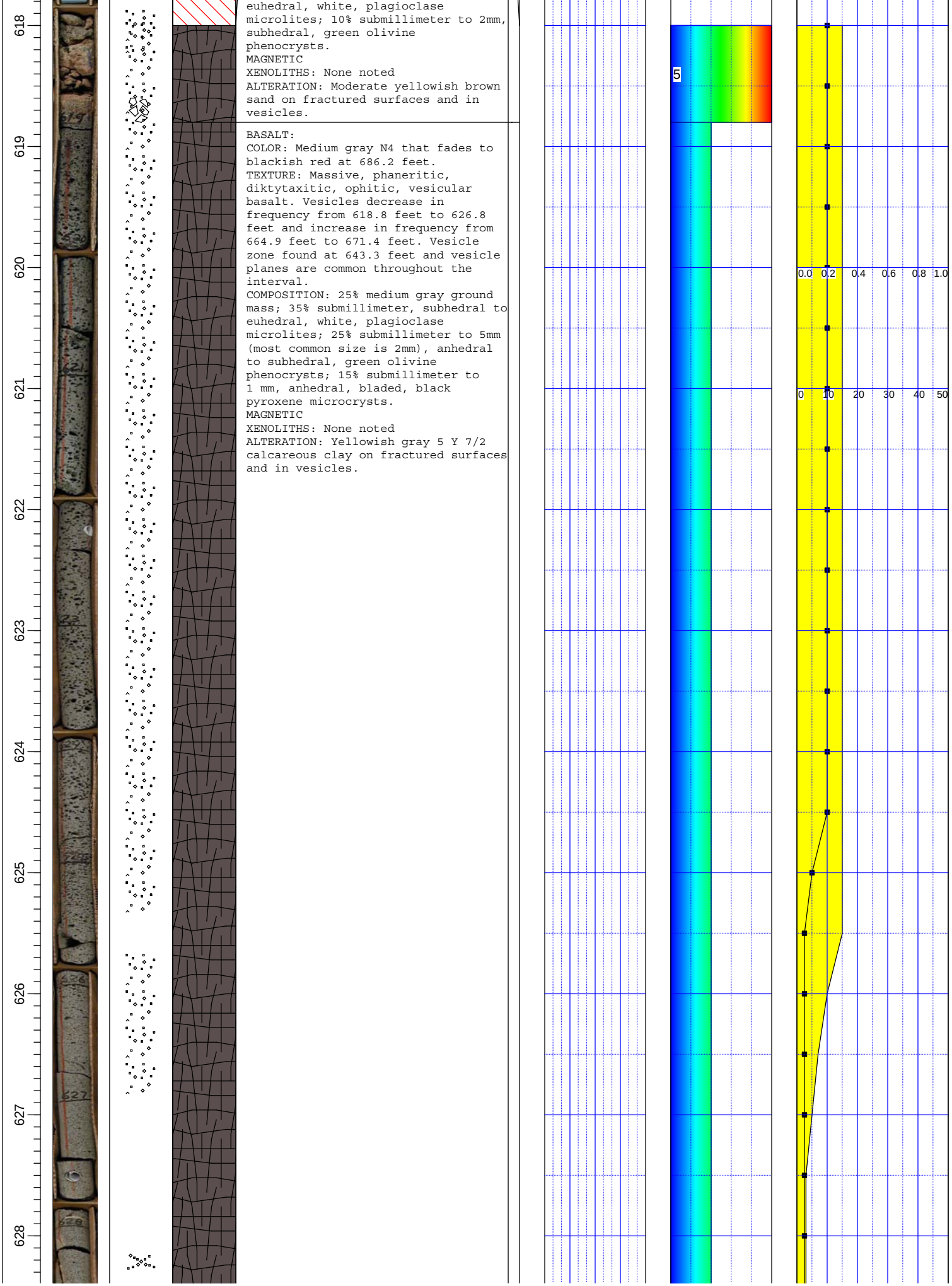
BASALT:
COLOR: Blackish red 5 R 2/2
TEXTURE: Aphanitic, diktytaxitic, equigranular, vesicular basalt.
COMPOSITION: 30% blackish red ground mass; 25% submillimeter, subhedral to euhedral, white, plagioclase microlites; 25% submillimeter, anhedral to subhedral, red olivine microcrysts; 20% submillimeter to 1mm, subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 8/4 calcareous clay on fractured surfaces and in vesicles.

MISSING INTERVAL:
Missing Interval: interval not recovered

BASALT:
COLOR: Very dusky red 10 R 2/2
TEXTURE: Aphanitic, diktytaxitic, equigranular, vesicular, rubbly basalt.
COMPOSITION: 65% blackish red ground mass; 25% submillimeter, subhedral to

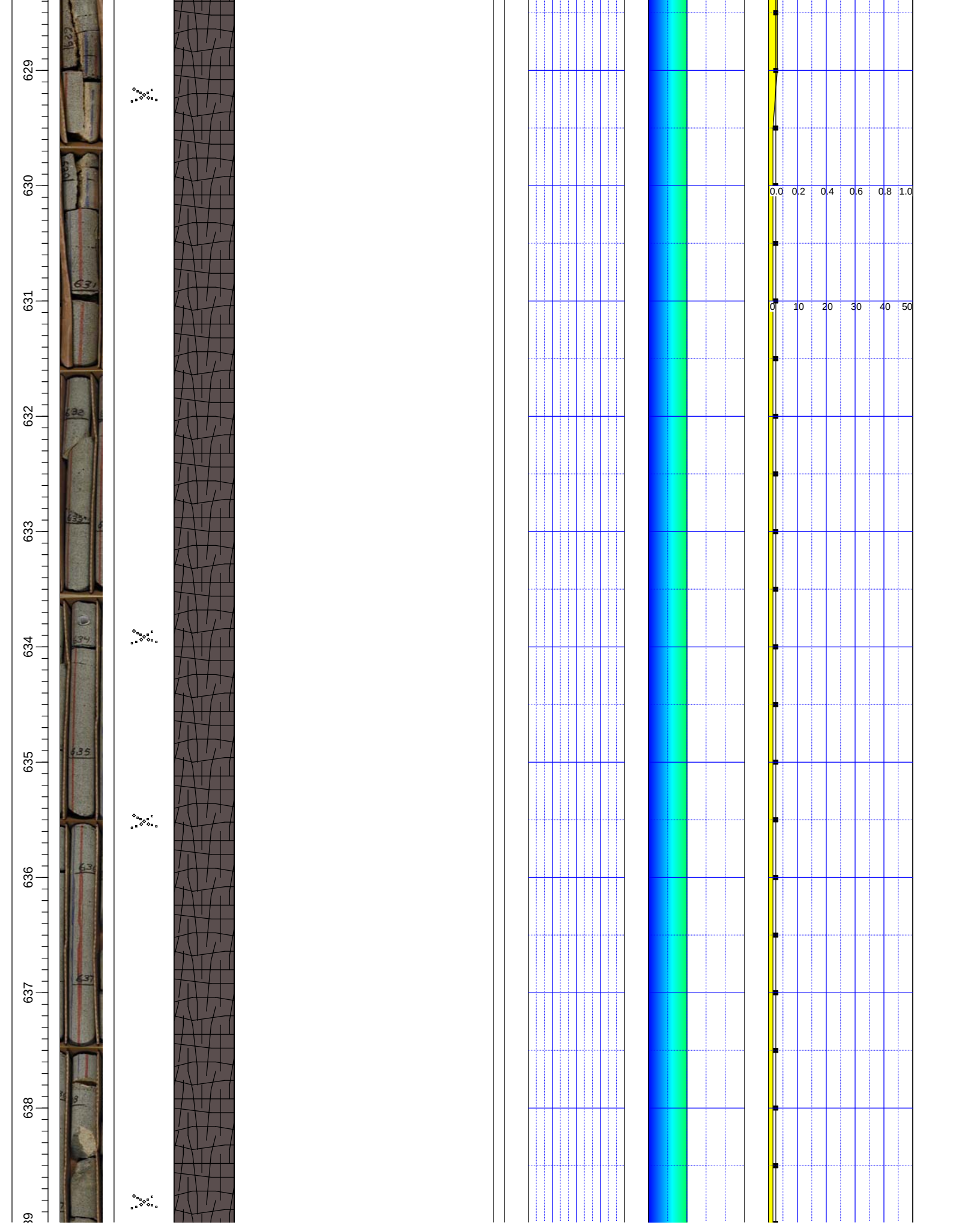






euhedral, white, plagioclase microlites; 10% submillimeter to 2mm, subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Moderate yellowish brown sand on fractured surfaces and in vesicles.

BASALT:
COLOR: Medium gray N4 that fades to blackish red at 686.2 feet.
TEXTURE: Massive, phaneritic, diktytaxitic, ophitic, vesicular basalt. Vesicles decrease in frequency from 618.8 feet to 626.8 feet and increase in frequency from 664.9 feet to 671.4 feet. Vesicle zone found at 643.3 feet and vesicle planes are common throughout the interval.
COMPOSITION: 25% medium gray ground mass; 35% submillimeter, subhedral to euhedral, white, plagioclase microlites; 25% submillimeter to 5mm (most common size is 2mm), anhedral to subhedral, green olivine phenocrysts; 15% submillimeter to 1 mm, anhedral, bladed, black pyroxene microcrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles.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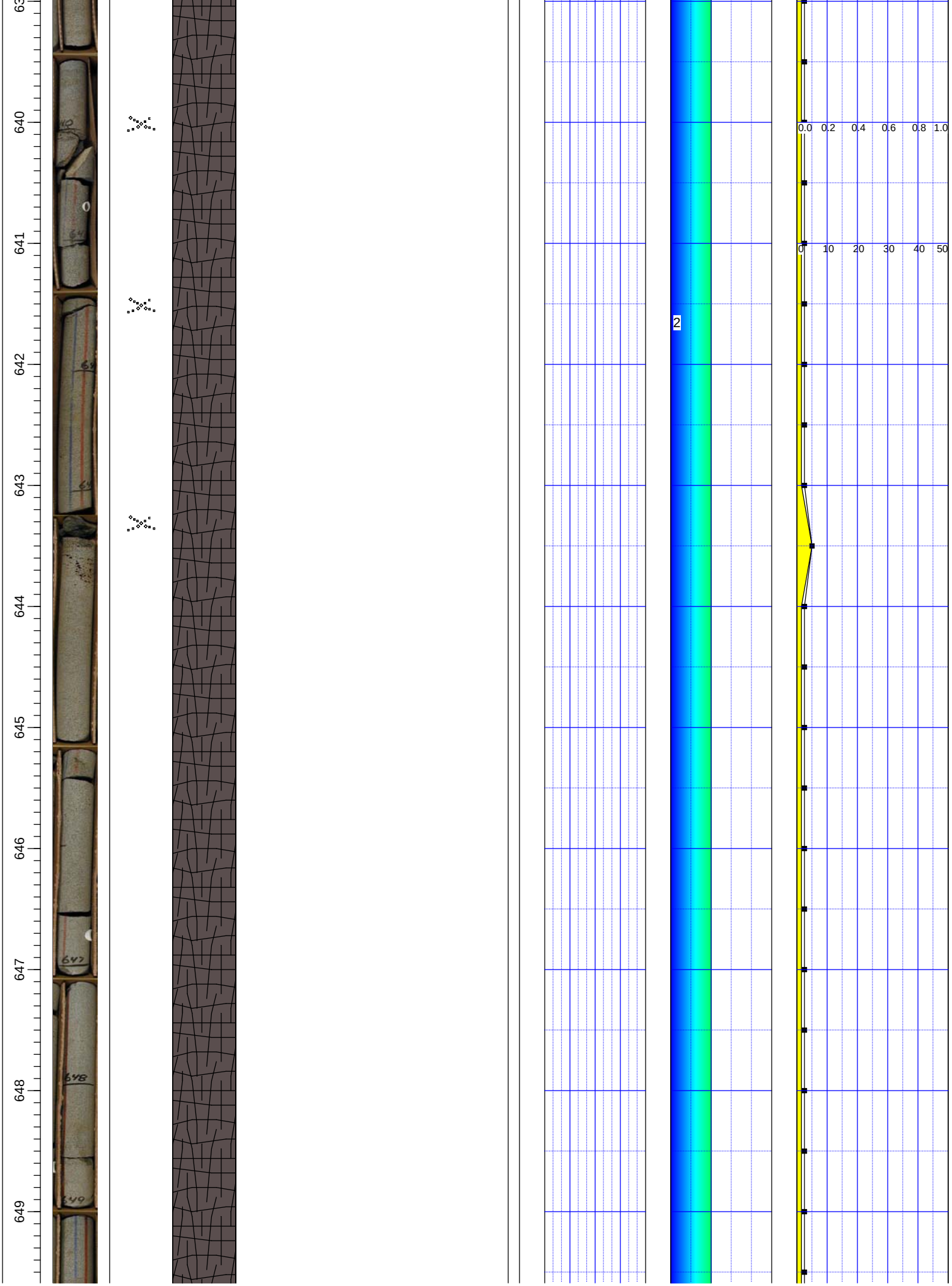
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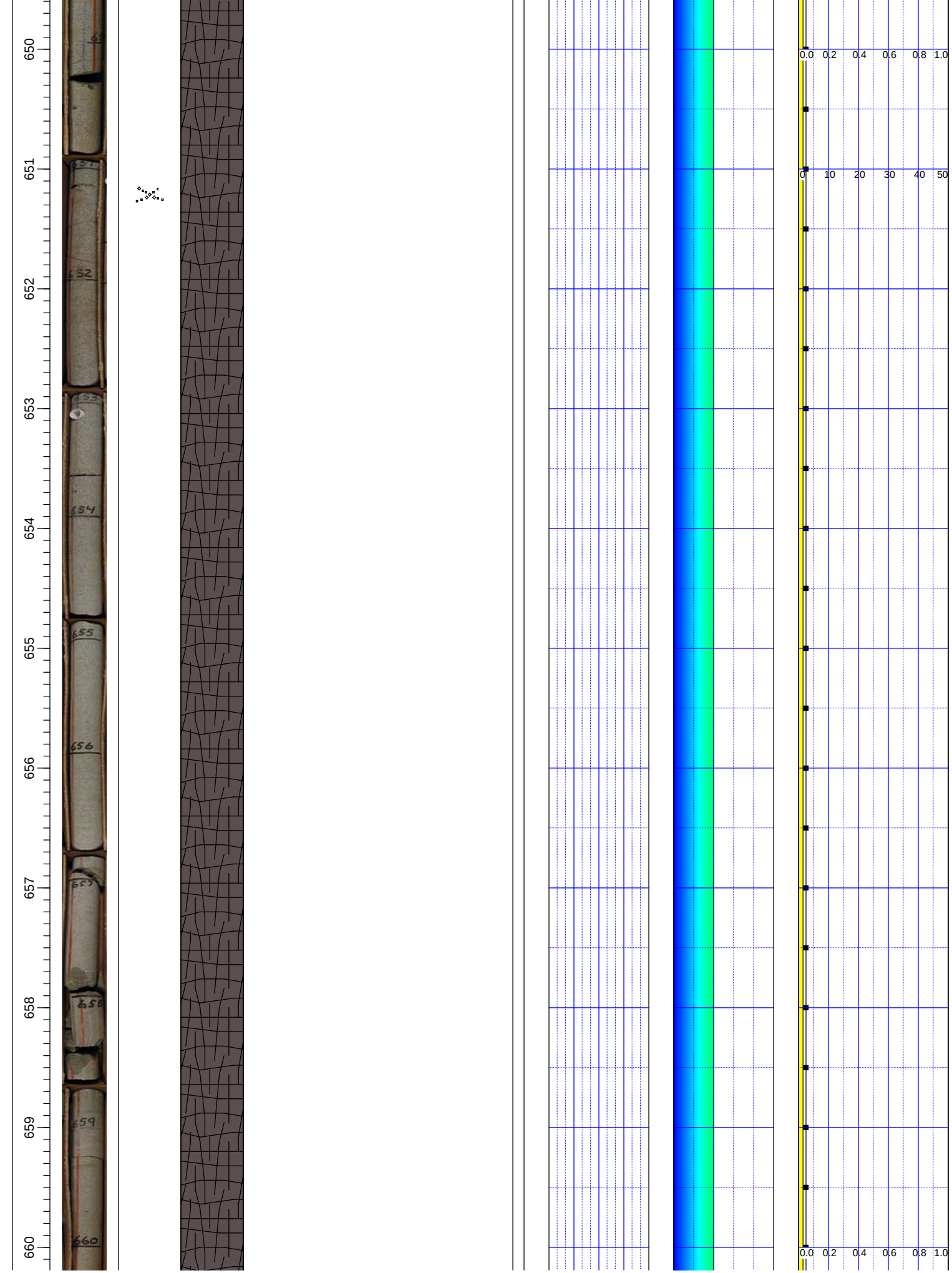
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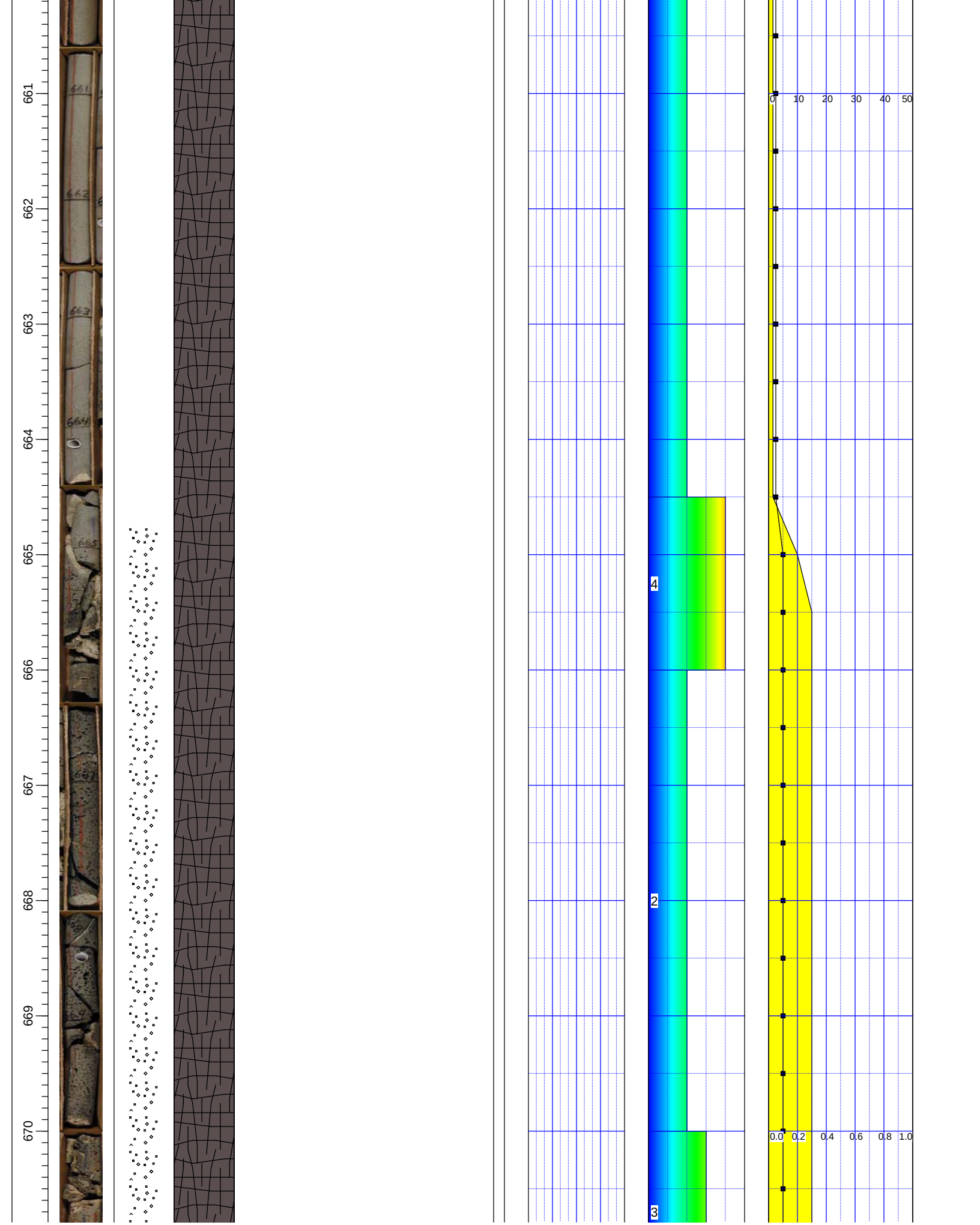
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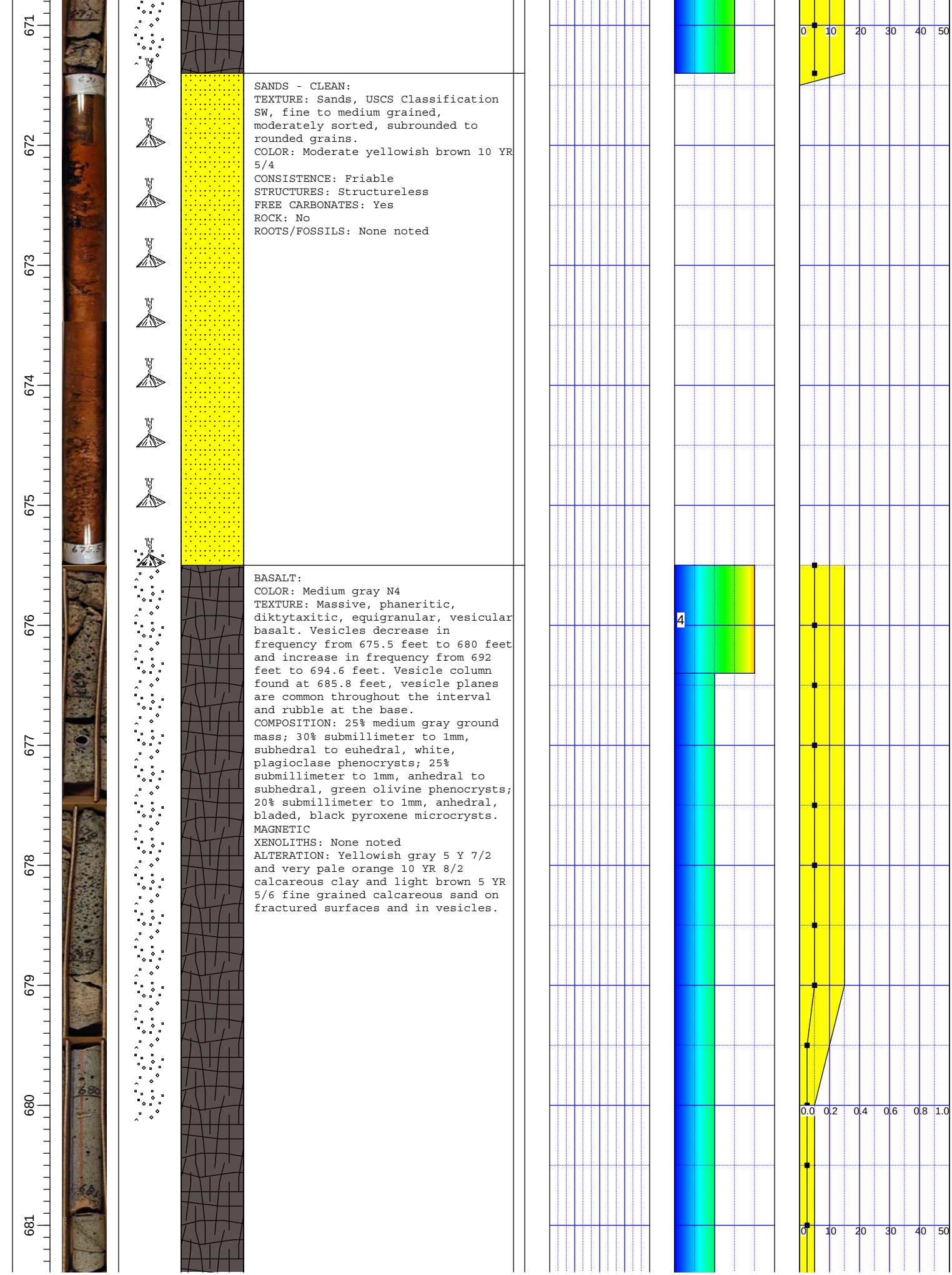
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SANDS - CLEAN:
TEXTURE: Sands, USCS Classification SW, fine to medium grained, moderately sorted, subrounded to rounded grains.
COLOR: Moderate yellowish brown 10 YR 5/4
CONSISTENCE: Friable
STRUCTURES: Structureless
FREE CARBONATES: Yes
ROCK: No
ROOTS/FOSSILS: None noted
BASALT:
COLOR: Medium gray N4
TEXTURE: Massive, phaneritic, diktytaxitic, equigranular, vesicular basalt. Vesicles decrease in frequency from 675.5 feet to 680 feet and increase in frequency from 692 feet to 694.6 feet. Vesicle column found at 685.8 feet, vesicle planes are common throughout the interval and rubble at the base.
COMPOSITION: 25% medium gray ground mass; 30% submillimeter to 1mm, subhedral to euhedral, white, plagioclase phenocrysts; 25% submillimeter to 1mm, anhedral to subhedral, green olivine phenocrysts; 20% submillimeter to 1mm, anhedral, bladed, black pyroxene microcrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 and very pale orange 10 YR 8/2 calcareous clay and light brown 5 YR 5/6 fine grained calcareous sand on fractured surfaces and in vesicles.
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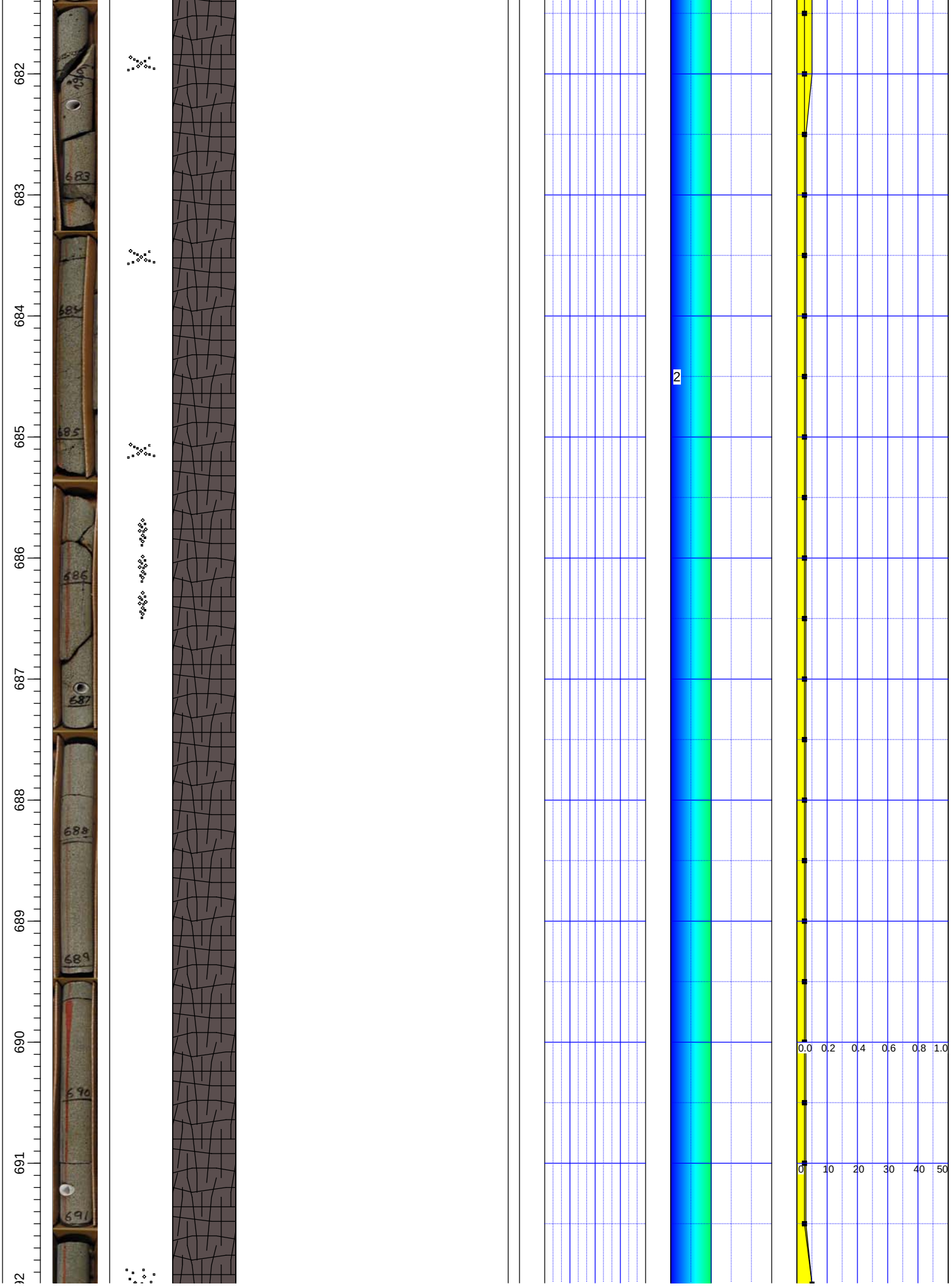
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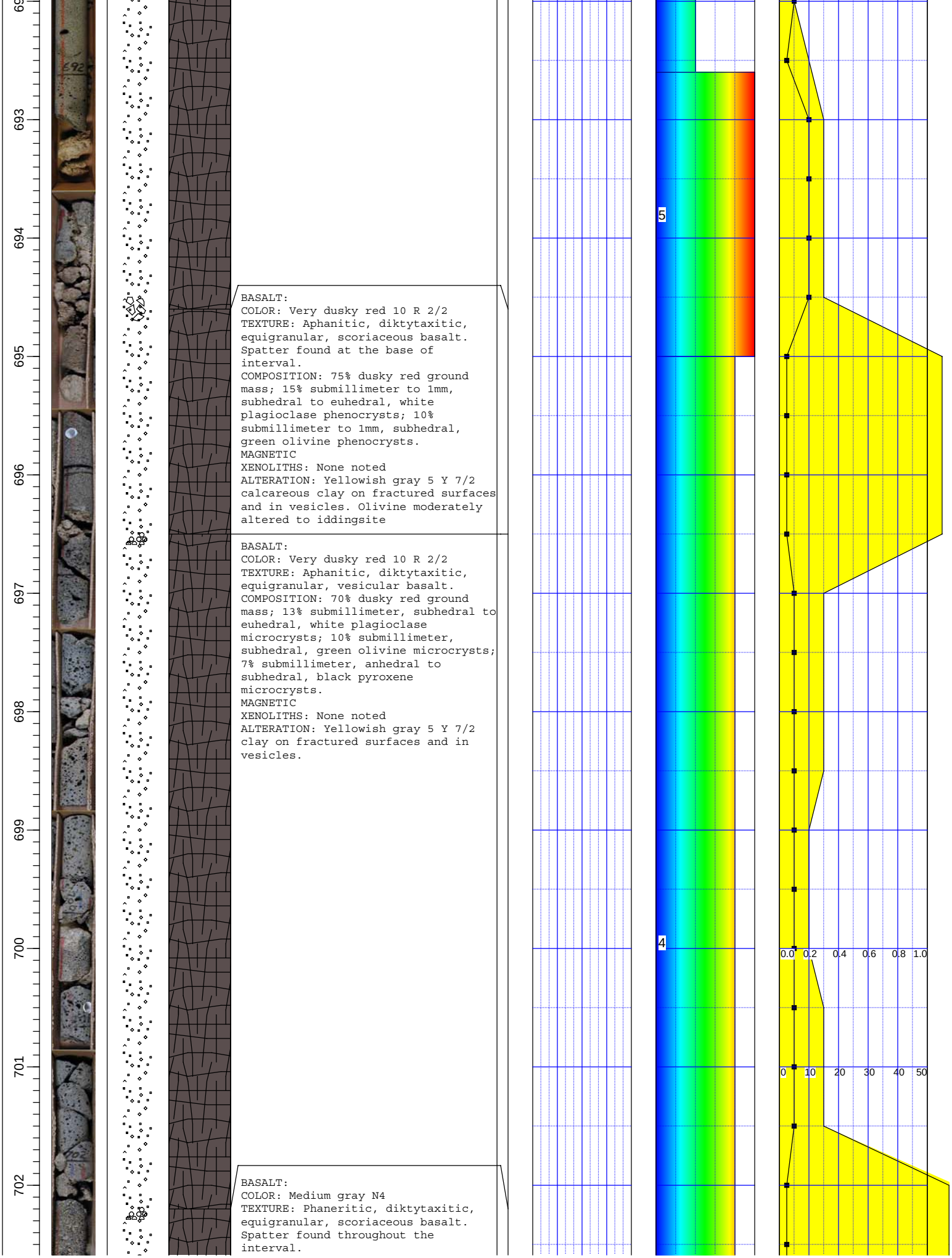
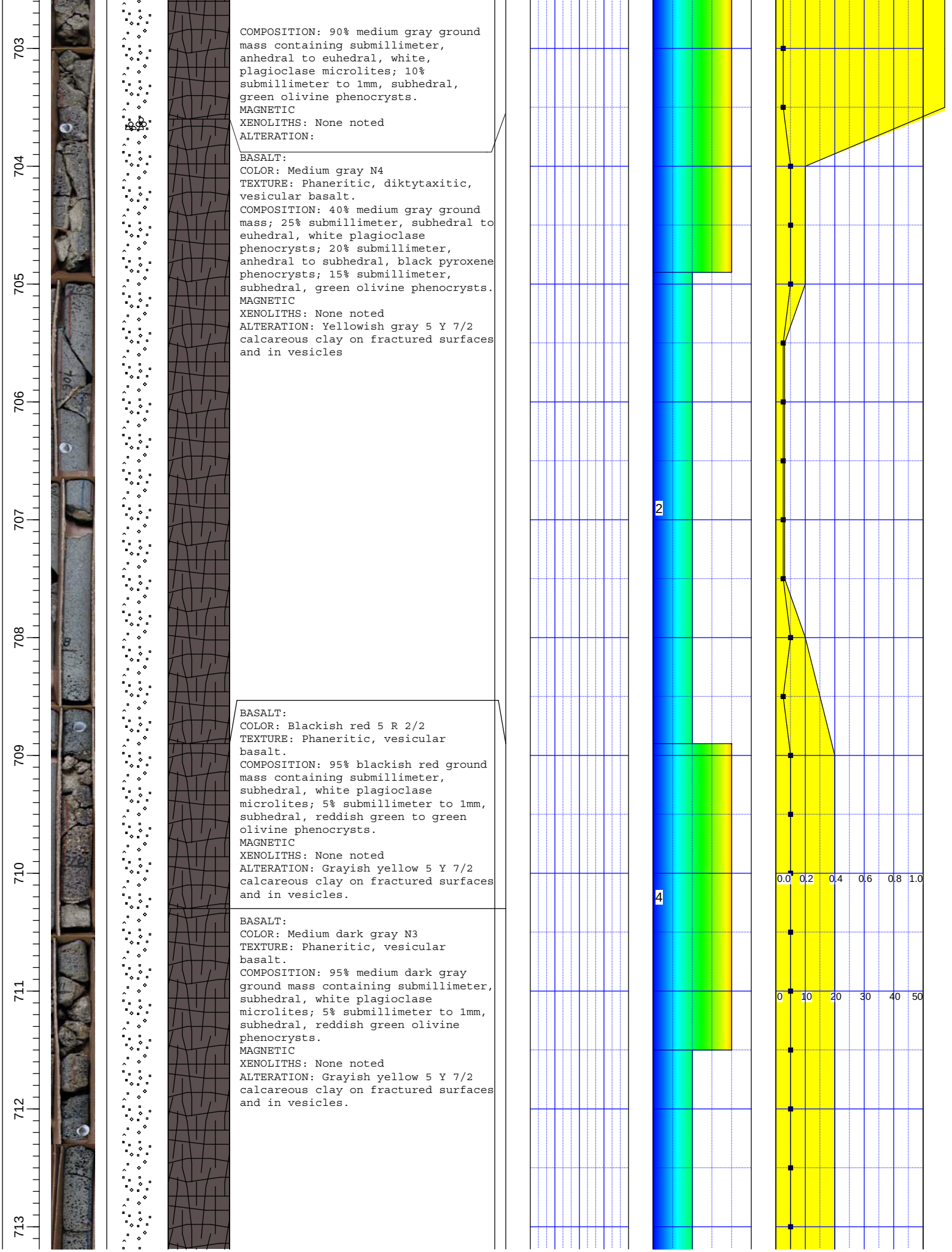


BASALT:
COLOR: Very dusky red 10 R 2/2
TEXTURE: Aphanitic, diktytaxitic, equigranular, scoriaceous basalt. Spatter found at the base of interval.
COMPOSITION: 75% dusky red ground mass; 15% submillimeter to 1mm, subhedral to euhedral, white plagioclase phenocrysts; 10% submillimeter to 1mm, subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles. Olivine moderately altered to iddingsite

BASALT:
COLOR: Very dusky red 10 R 2/2
TEXTURE: Aphanitic, diktytaxitic, equigranular, vesicular basalt.
COMPOSITION: 70% dusky red ground mass; 13% submillimeter, subhedral to euhedral, white plagioclase microcrysts; 10% submillimeter, subhedral, green olivine microcrysts; 7% submillimeter, anhedral to subhedral, black pyroxene microcrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 clay on fractured surfaces and in vesicles.

BASALT:
COLOR: Medium gray N4
TEXTURE: Phaneritic, diktytaxitic, equigranular, scoriaceous basalt. Spatter found throughout the interval.



COMPOSITION: 90% medium gray ground mass containing submillimeter, anhedral to euhedral, white, plagioclase microlites; 10% submillimeter to 1mm, subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION:

BASALT:
COLOR: Medium gray N4
TEXTURE: Phaneritic, diktytaxitic, vesicular basalt.
COMPOSITION: 40% medium gray ground mass; 25% submillimeter, subhedral to euhedral, white plagioclase phenocrysts; 20% submillimeter, anhedral to subhedral, black pyroxene phenocrysts; 15% submillimeter, subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Yellowish gray 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles

BASALT:
COLOR: Blackish red 5 R 2/2
TEXTURE: Phaneritic, vesicular basalt.
COMPOSITION: 95% blackish red ground mass containing submillimeter, subhedral, white plagioclase microlites; 5% submillimeter to 1mm, subhedral, reddish green to green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles.

BASALT:
COLOR: Medium dark gray N3
TEXTURE: Phaneritic, vesicular basalt.
COMPOSITION: 95% medium dark gray ground mass containing submillimeter, subhedral, white plagioclase microlites; 5% submillimeter to 1mm, subhedral, reddish green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles.

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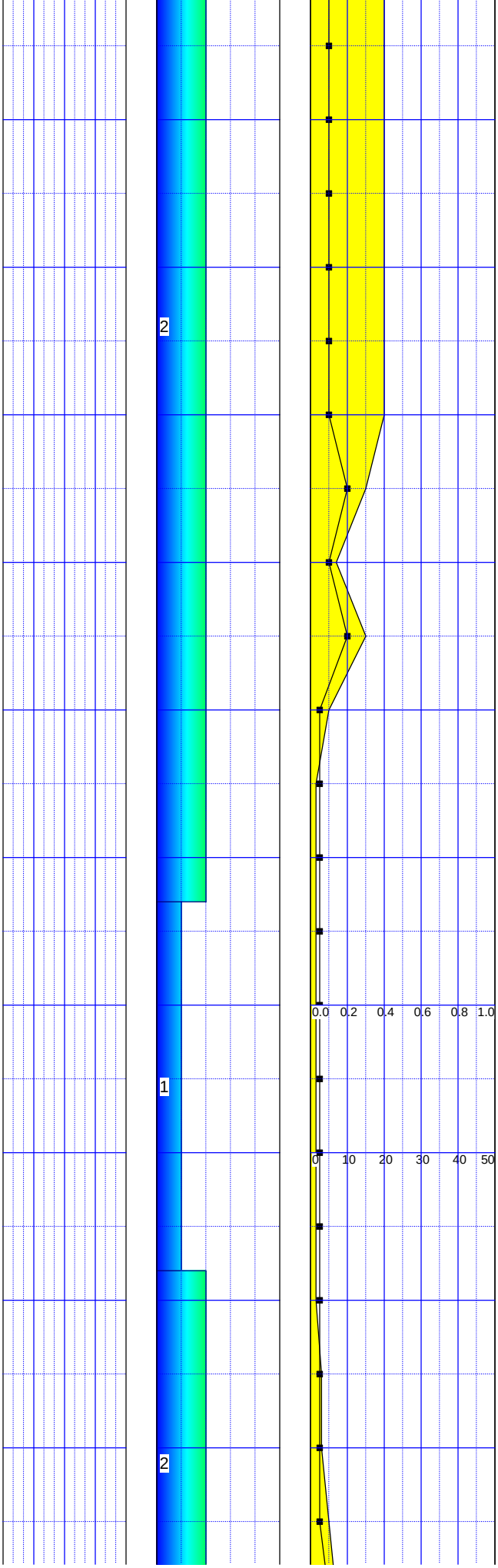
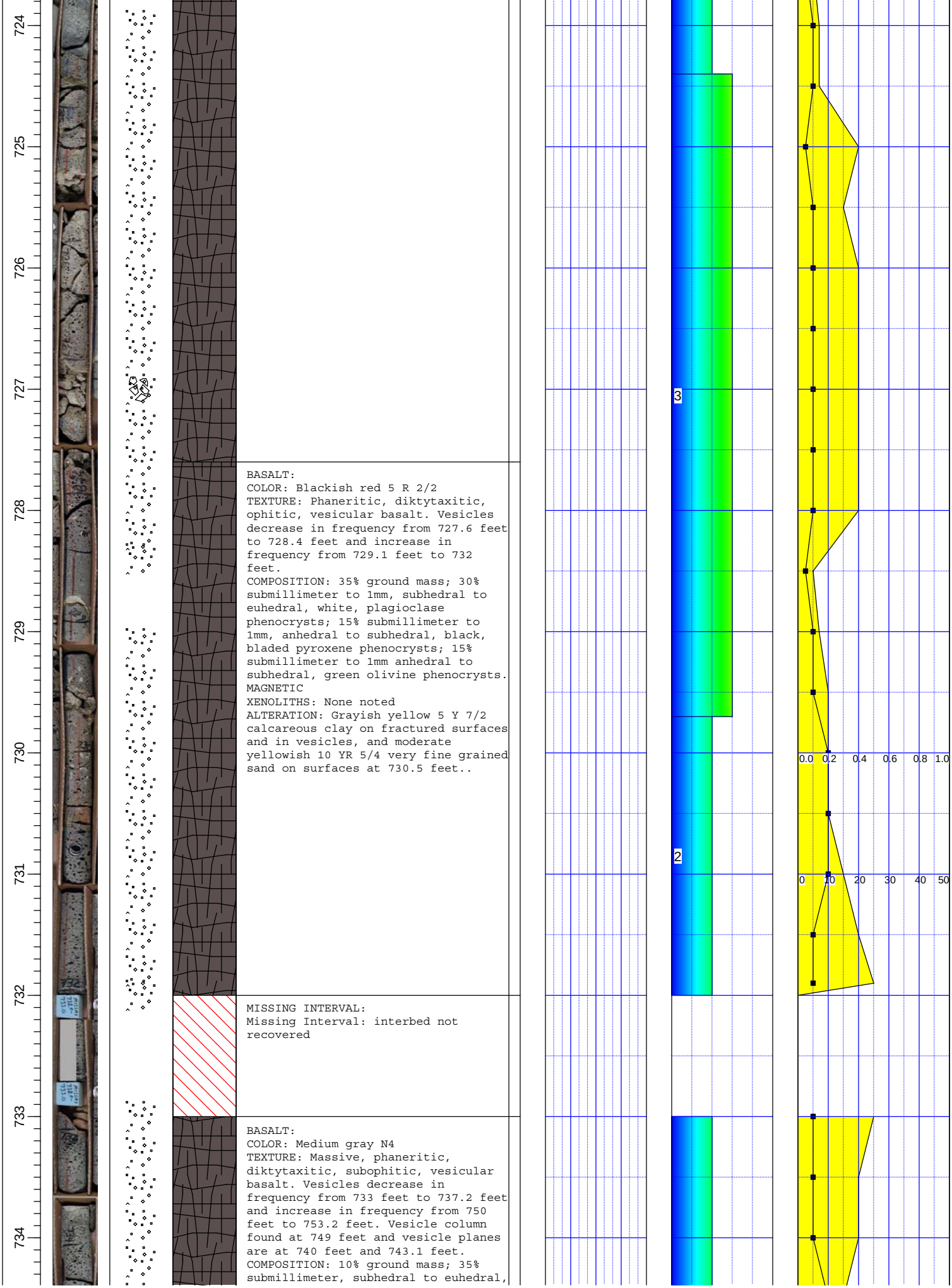
BASALT:
COLOR: Medium dark gray N3
TEXTURE: Massive, phaneritic, diktytaxitic, vesicular basalt. Vesicles decrease in frequency from 618.8 feet to 718.1 feet and increase in frequency from 724 feet to 727.6 feet. Vesicle column found at 721 feet and vesicle planes are at 719.3 feet and 720 feet.
COMPOSITION: 35% ground mass; 30% submillimeter to 1mm, subhedral to euhedral, white, plagioclase phenocrysts; 15% submillimeter to 2mm, anhedral to euhedral, black, bladed pyroxene phenocrysts; 15% submillimeter to 2mm anhedral to subhedral, green to reddish green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles.

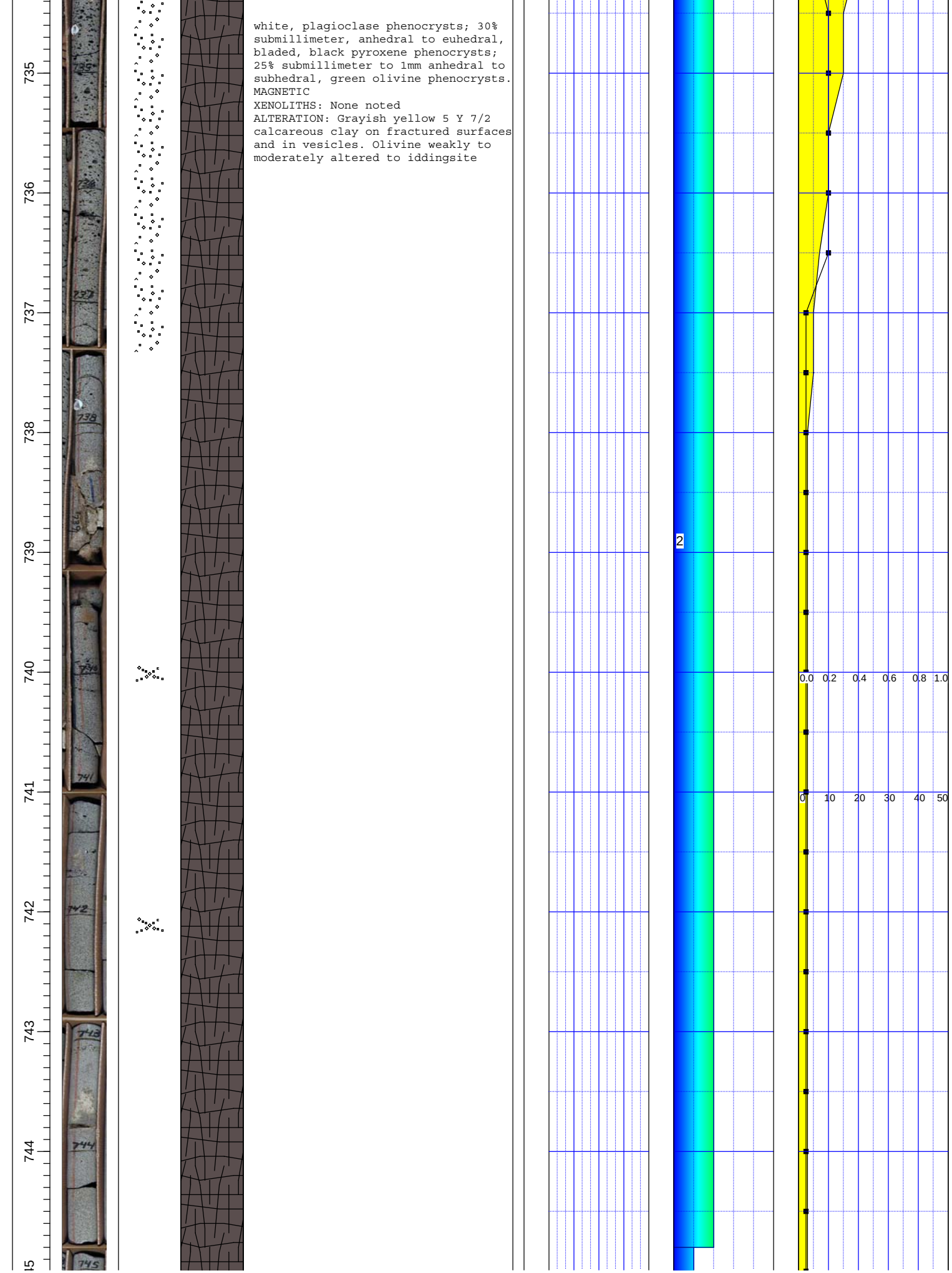




BASALT:
COLOR: Blackish red 5 R 2/2
TEXTURE: Phaneritic, diktytaxitic, ophitic, vesicular basalt. Vesicles decrease in frequency from 727.6 feet to 728.4 feet and increase in frequency from 729.1 feet to 732 feet.
COMPOSITION: 35% ground mass; 30% submillimeter to 1mm, subhedral to euhedral, white, plagioclase phenocrysts; 15% submillimeter to 1mm, anhedral to subhedral, black, bladed pyroxene phenocrysts; 15% submillimeter to 1mm anhedral to subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles, and moderate yellowish 10 YR 5/4 very fine grained sand on surfaces at 730.5 feet..

MISSING INTERVAL:
Missing Interval: interbed not recovered

BASALT:
COLOR: Medium gray N4
TEXTURE: Massive, phaneritic, diktytaxitic, subophitic, vesicular basalt. Vesicles decrease in frequency from 733 feet to 737.2 feet and increase in frequency from 750 feet to 753.2 feet. Vesicle column found at 749 feet and vesicle planes are at 740 feet and 743.1 feet.
COMPOSITION: 10% ground mass; 35% submillimeter, subhedral to euhedral,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white, plagioclase phenocrysts; 30% submillimeter, anhedral to euhedral, bladed, black pyroxene phenocrysts; 25% submillimeter to 1mm anhedral to subhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles. Olivine weakly to moderately altered to iddingsite
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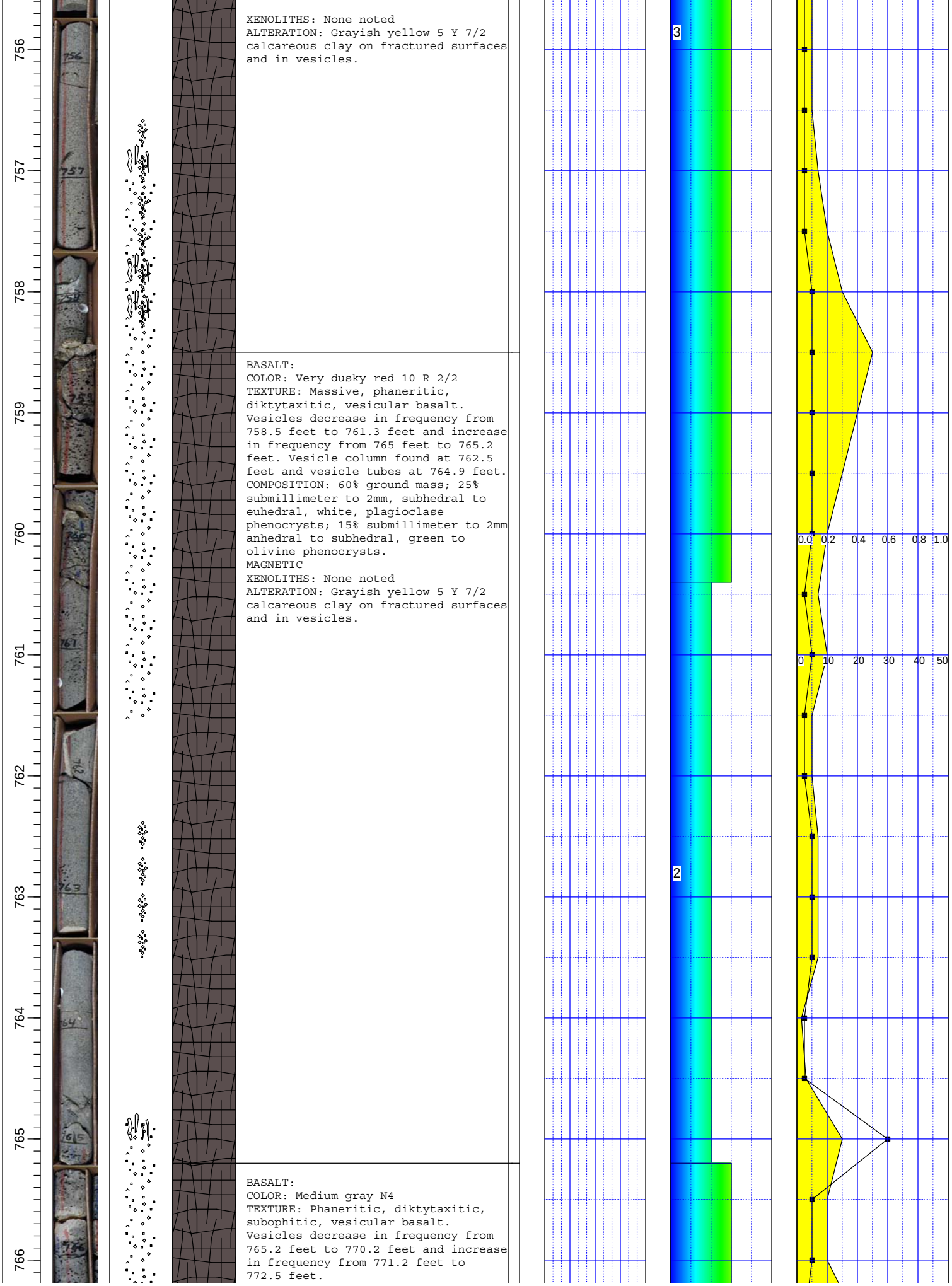
0.0 0.2 0.4 0.6 0.8 1.0
0 10 20 30 40 50

BASALT:
COLOR: Medium dark gray N3
TEXTURE: Massive, phaneritic, diktytaxitic, vesicular basalt. Vesicles decrease in frequency from 753.2 feet to 754.4 feet and increase in frequency from 757.2 feet to 758.5 feet. Vesicle column found at 756.7 feet, a vesicle planes is at 755.2 feet and vesicle tubes at 756.9 feet, 757.8 feet and 758.1 feet.
COMPOSITION: 40% ground mass; 30% submillimeter to 2mm, subhedral to euhedral, white, plagioclase phenocrysts; 15% submillimeter to 2mm, anhedral to euhedral, black, bladed pyroxene phenocrysts; 15% submillimeter to 2mm anhedral to subhedral, green to reddish green olivine phenocrysts.
MAGNETIC


XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles.
BASALT:
COLOR: Very dusky red 10 R 2/2
TEXTURE: Massive, phaneritic, diktytaxitic, vesicular basalt. Vesicles decrease in frequency from 758.5 feet to 761.3 feet and increase in frequency from 765 feet to 765.2 feet. Vesicle column found at 762.5 feet and vesicle tubes at 764.9 feet.
COMPOSITION: 60% ground mass; 25% submillimeter to 2mm, subhedral to euhedral, white, plagioclase phenocrysts; 15% submillimeter to 2mm anhedral to subhedral, green to olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles.
BASALT:
COLOR: Medium gray N4
TEXTURE: Phaneritic, diktytaxitic, subophitic, vesicular basalt. Vesicles decrease in frequency from 765.2 feet to 770.2 feet and increase in frequency from 771.2 feet to 772.5 feet.
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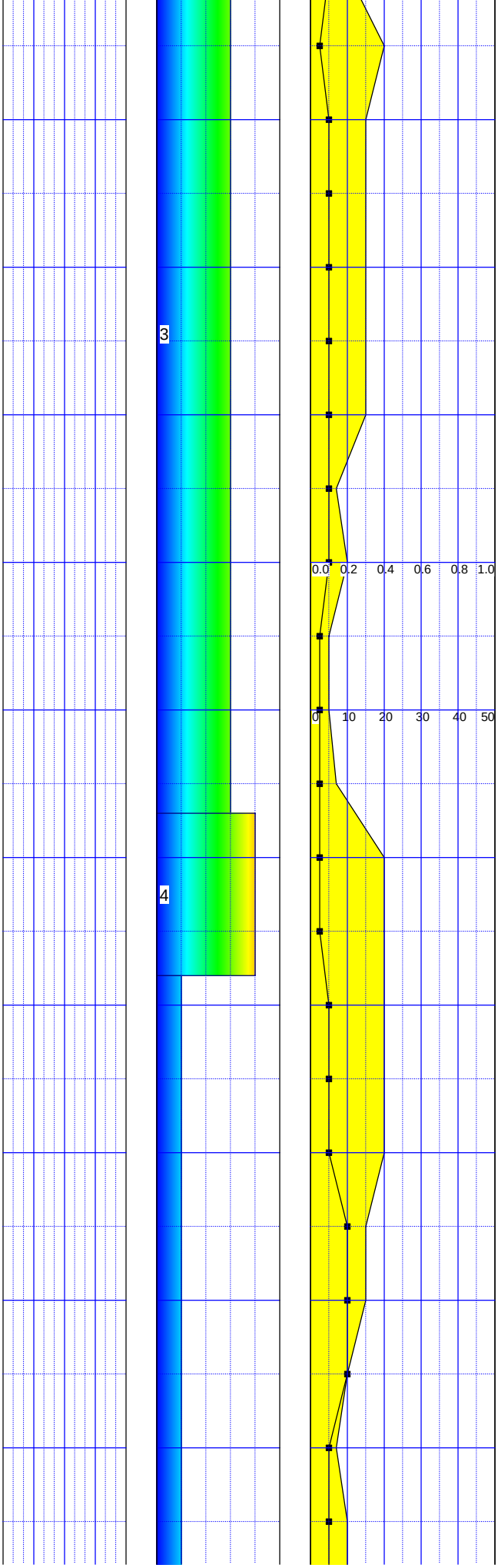
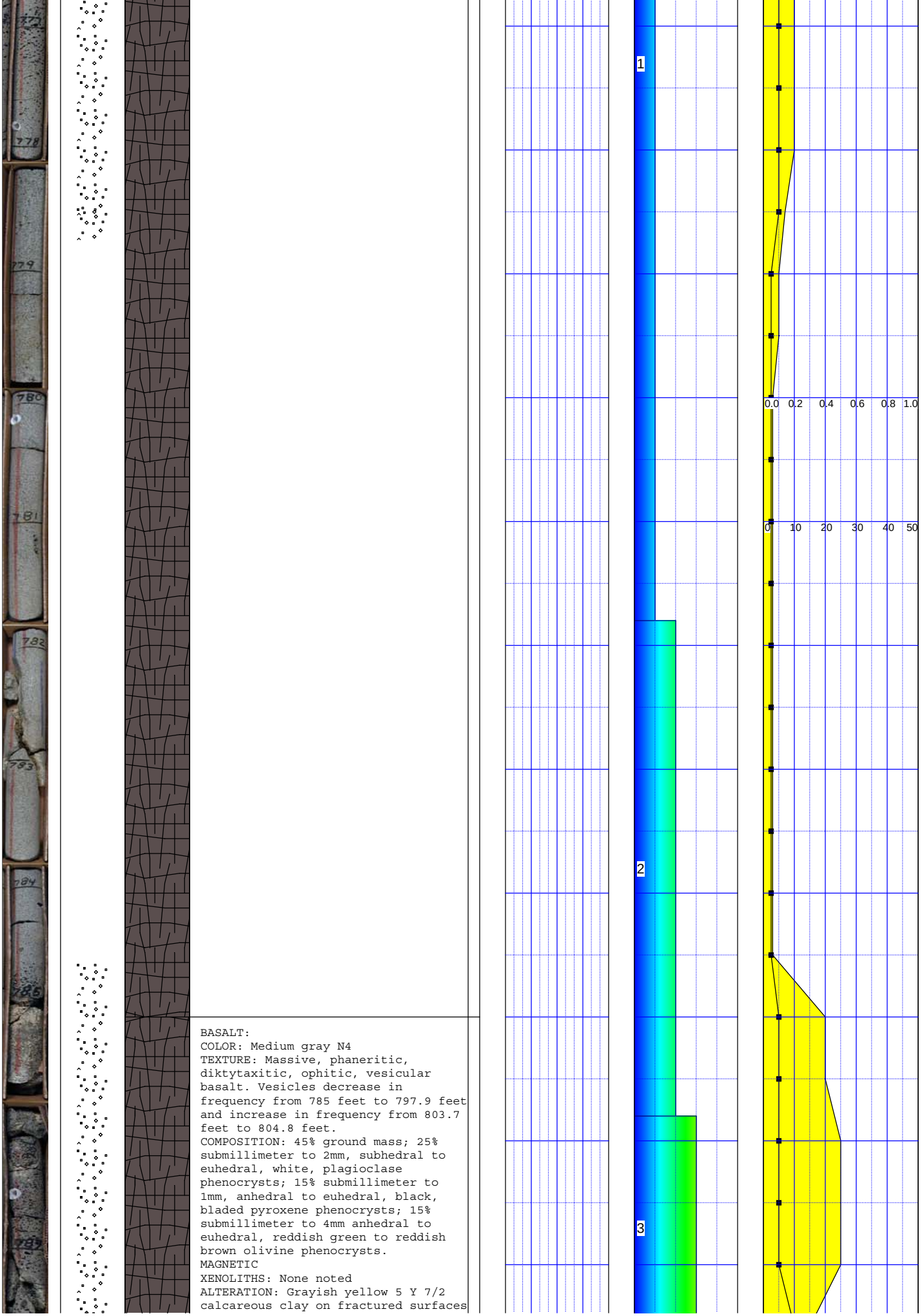
COMPOSITION: 65% ground mass containing submillimeter, subhedral to euhedral, white, plagioclase microlites; 15% submillimeter, anhedral to subhedral, bladed, black pyroxene phenocrysts; 10% submillimeter to 1mm anhedral to euhedral, green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Very pale orange 10 YR 8/2 calcareous clay on fractured surfaces and in vesicles.

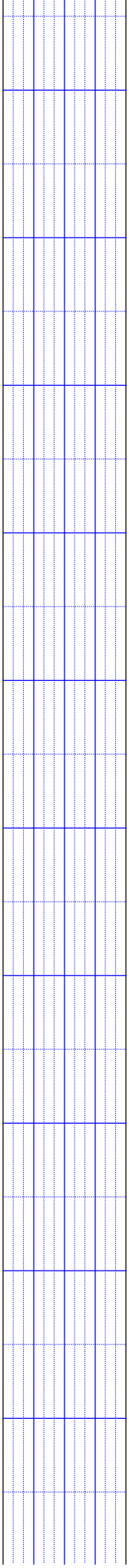
BASALT:
COLOR: Medium gray N4
TEXTURE: Phaneritic, diktytaxitic, ophitic, vesicular basalt. Vesicles decrease in frequency from 772.5 feet to 778.6 feet and increase in frequency from 784.7 feet to 785 feet.
COMPOSITION: 50% ground mass; 25% submillimeter, subhedral to euhedral, white, plagioclase phenocrysts; 15% submillimeter, anhedral to euhedral, black, bladed pyroxene phenocrysts; 10% submillimeter to 1mm anhedral to euhedral, green to reddish green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles.

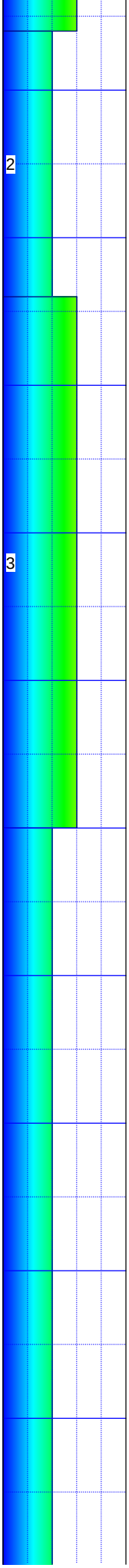


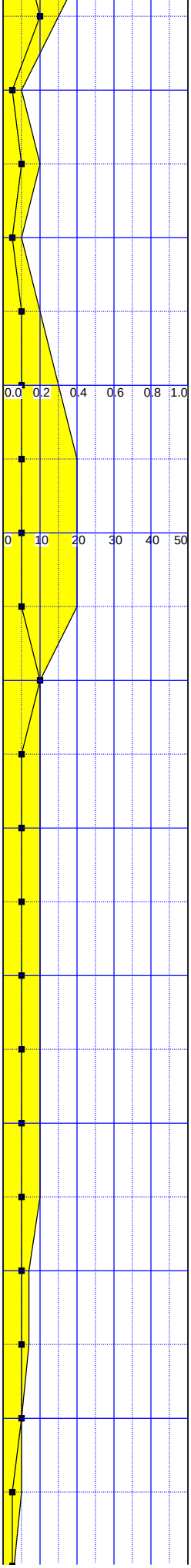


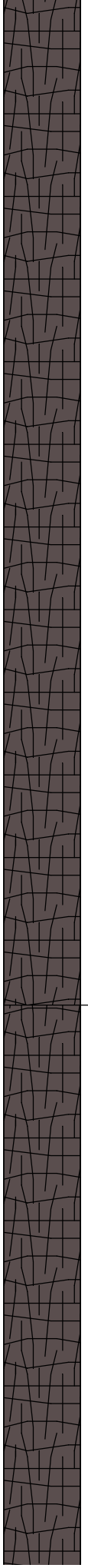
BASALT:
COLOR: Medium gray N4
TEXTURE: Massive, phaneritic, diktytaxitic, ophitic, vesicular basalt. Vesicles decrease in frequency from 785 feet to 797.9 feet and increase in frequency from 803.7 feet to 804.8 feet.
COMPOSITION: 45% ground mass; 25% submillimeter to 2mm, subhedral to euhedral, white, plagioclase phenocrysts; 15% submillimeter to 1mm, anhedral to euhedral, black, bladed pyroxene phenocrysts; 15% submillimeter to 4mm anhedral to euhedral, reddish green to reddish brown olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 7/2 calcareous clay on fractured surfaces

and in vesicles.

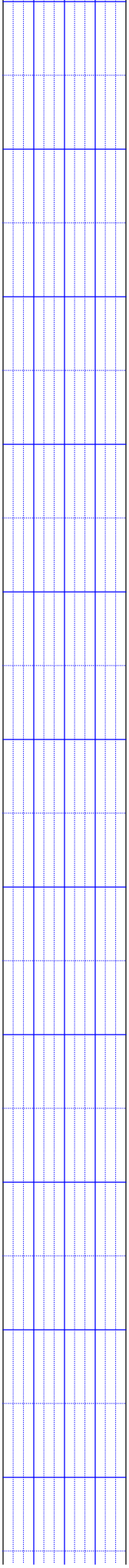


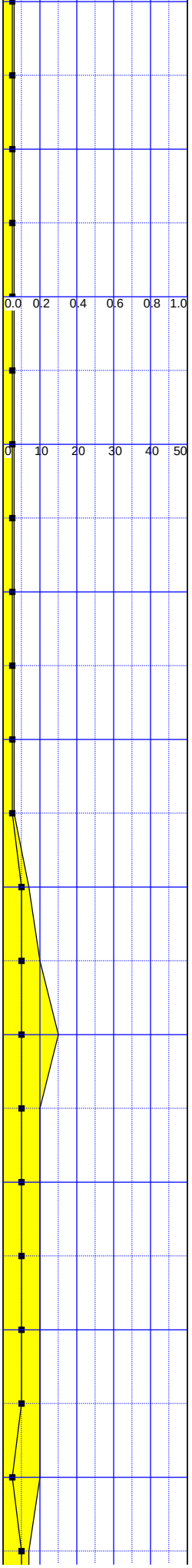


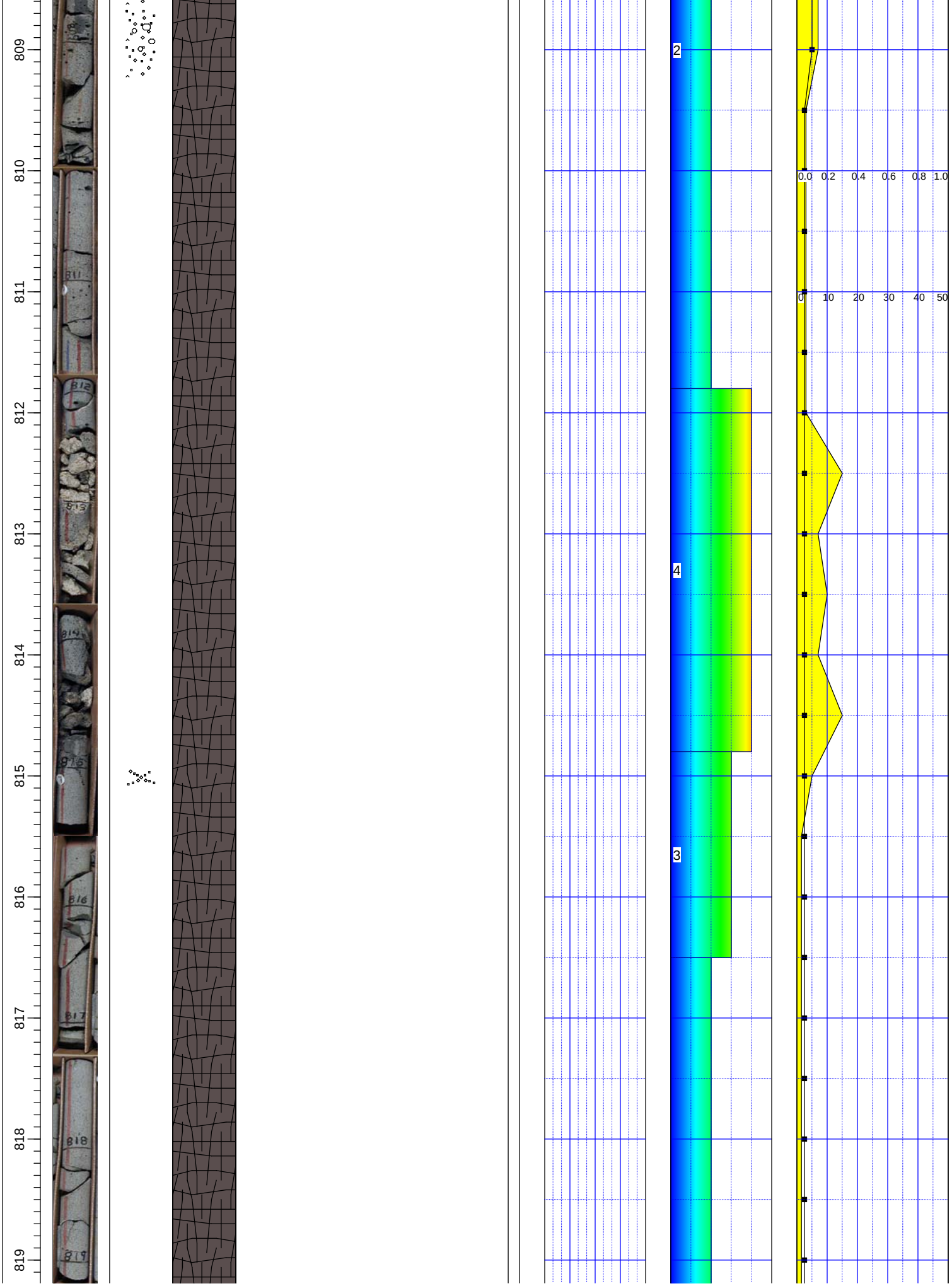




BASALT:
COLOR: Medium gray N4
TEXTURE: Phaneritic, diktytaxitic, ophitic, vesicular basalt. Vesicles decrease in frequency from 804.8 feet to 809.2 feet and increase in frequency from 833.5 feet to 834.7 feet.
COMPOSITION: 70% ground mass containing submillimeter, subhedral to euhedral, white, plagioclase microlites; 15% submillimeter to 1mm, anhedral to euhedral, black, bladed pyroxene phenocrysts; 15% 2mm subhedral to euhedral, green to reddish green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles.



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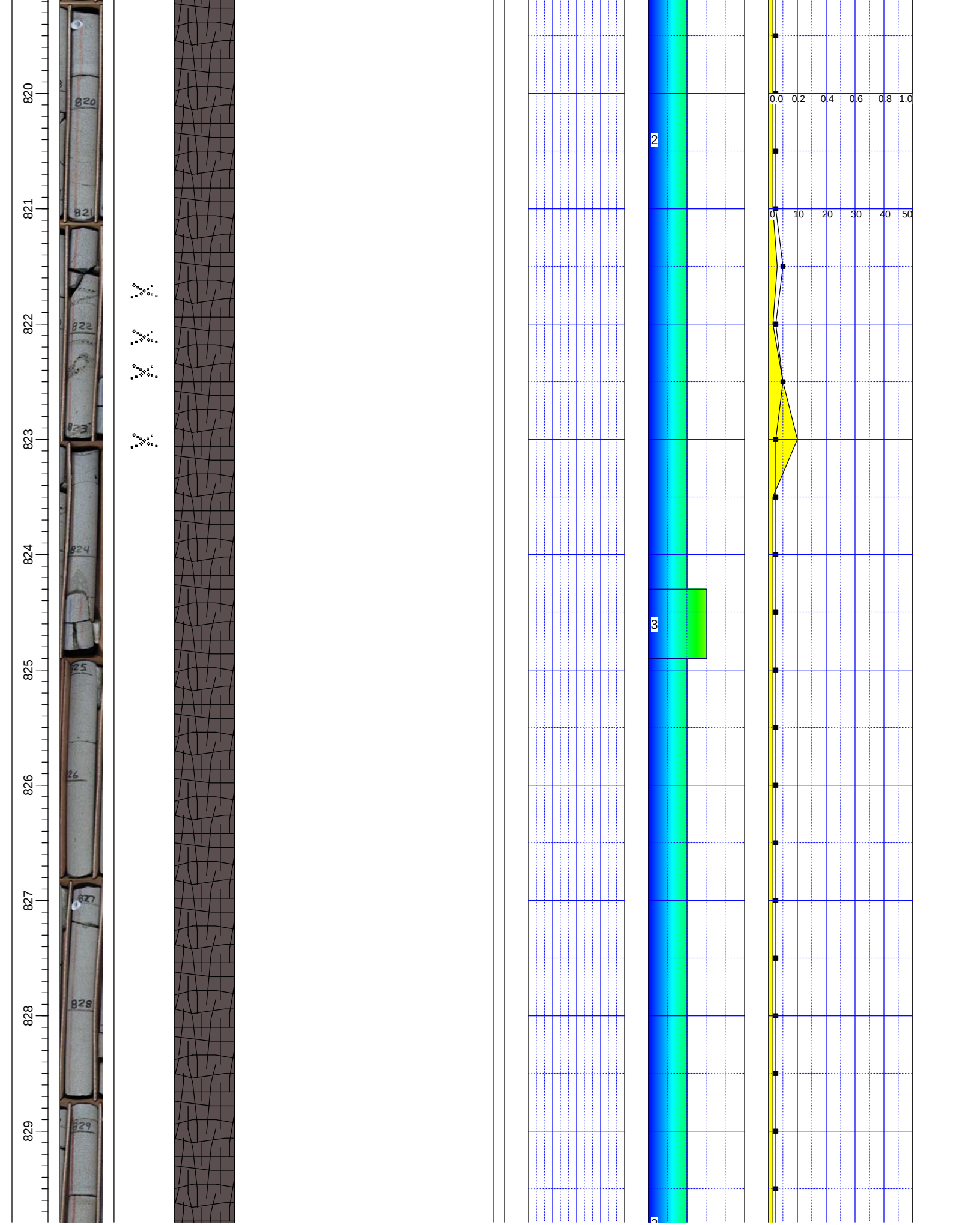
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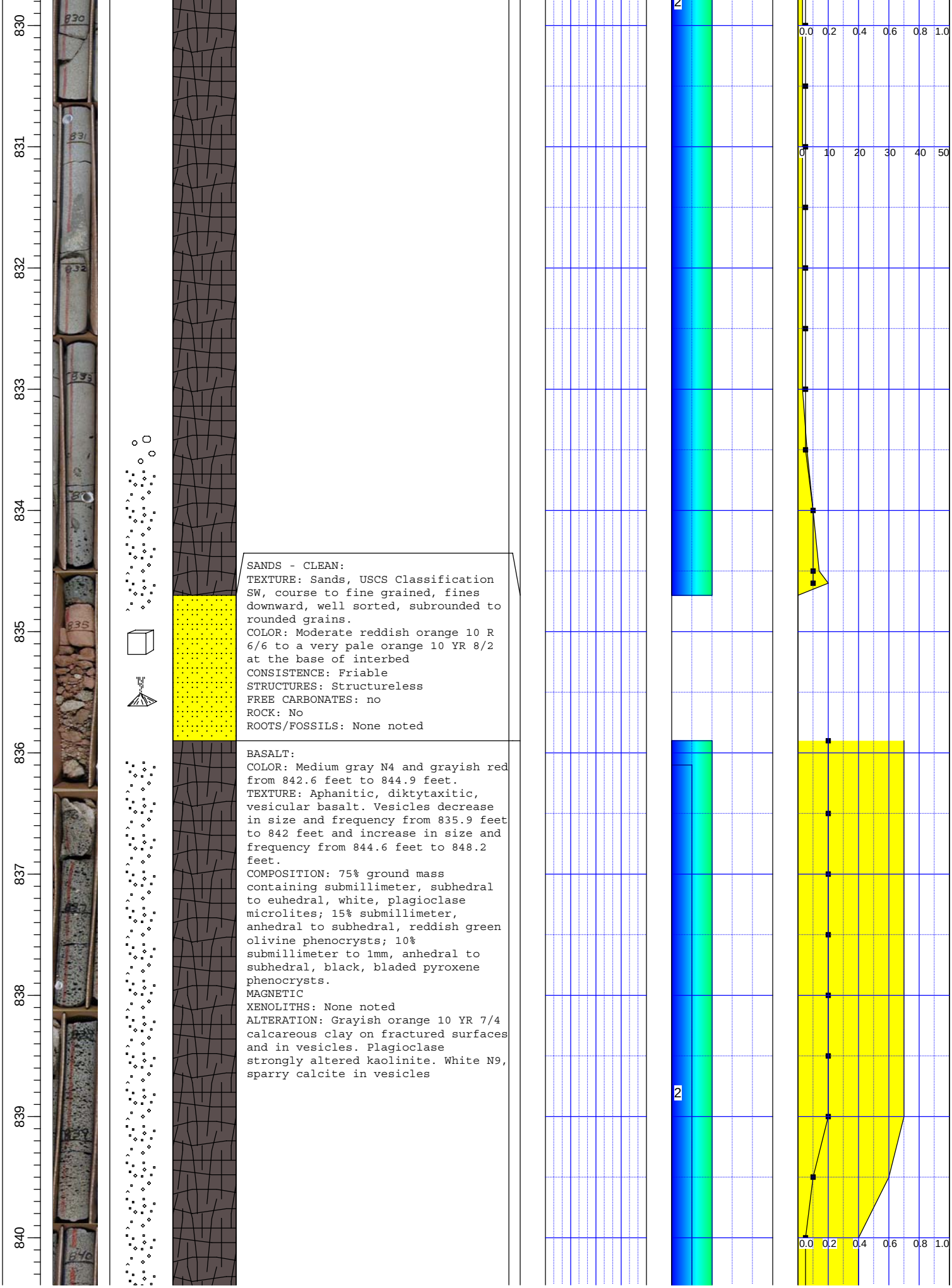
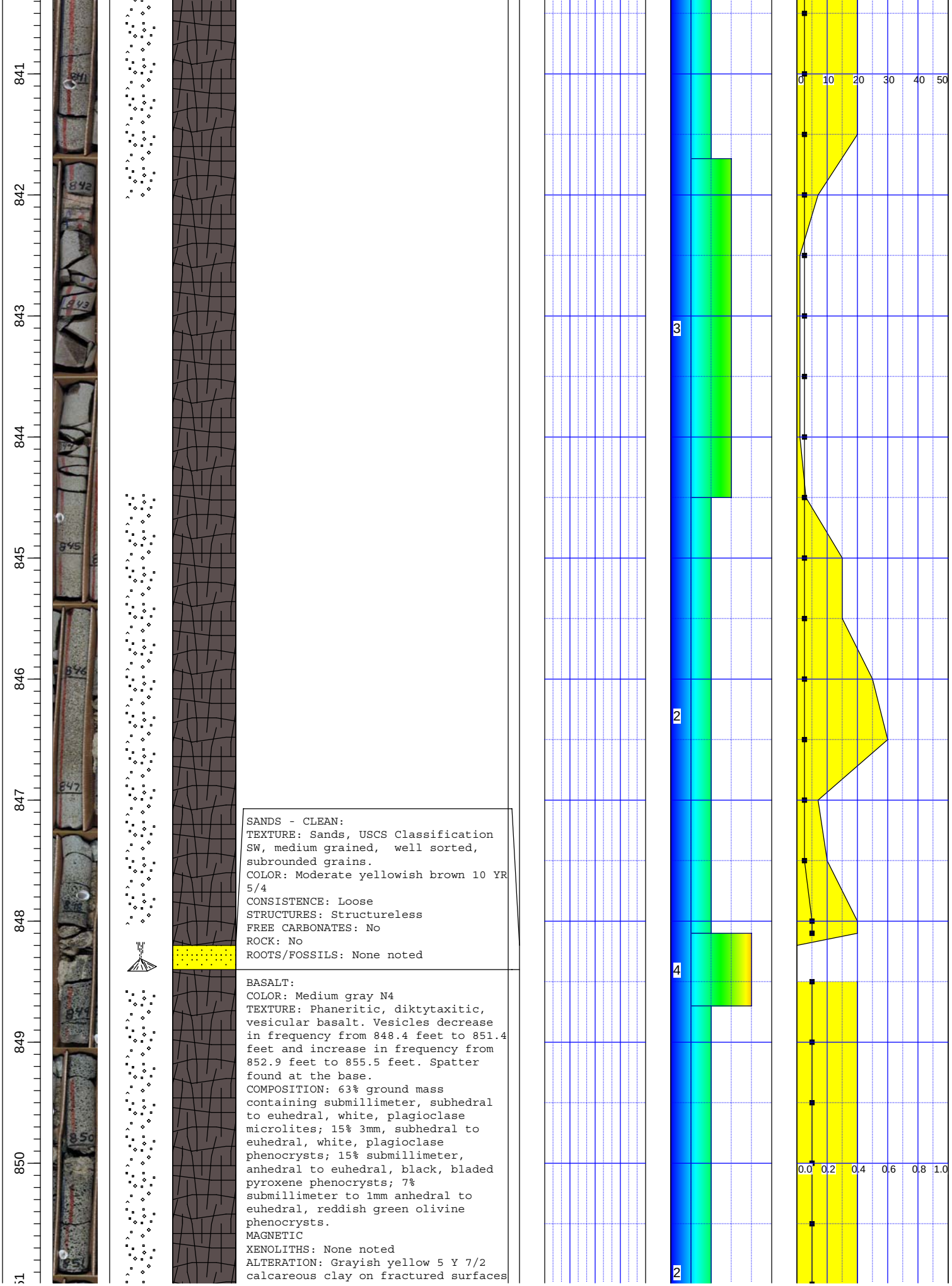


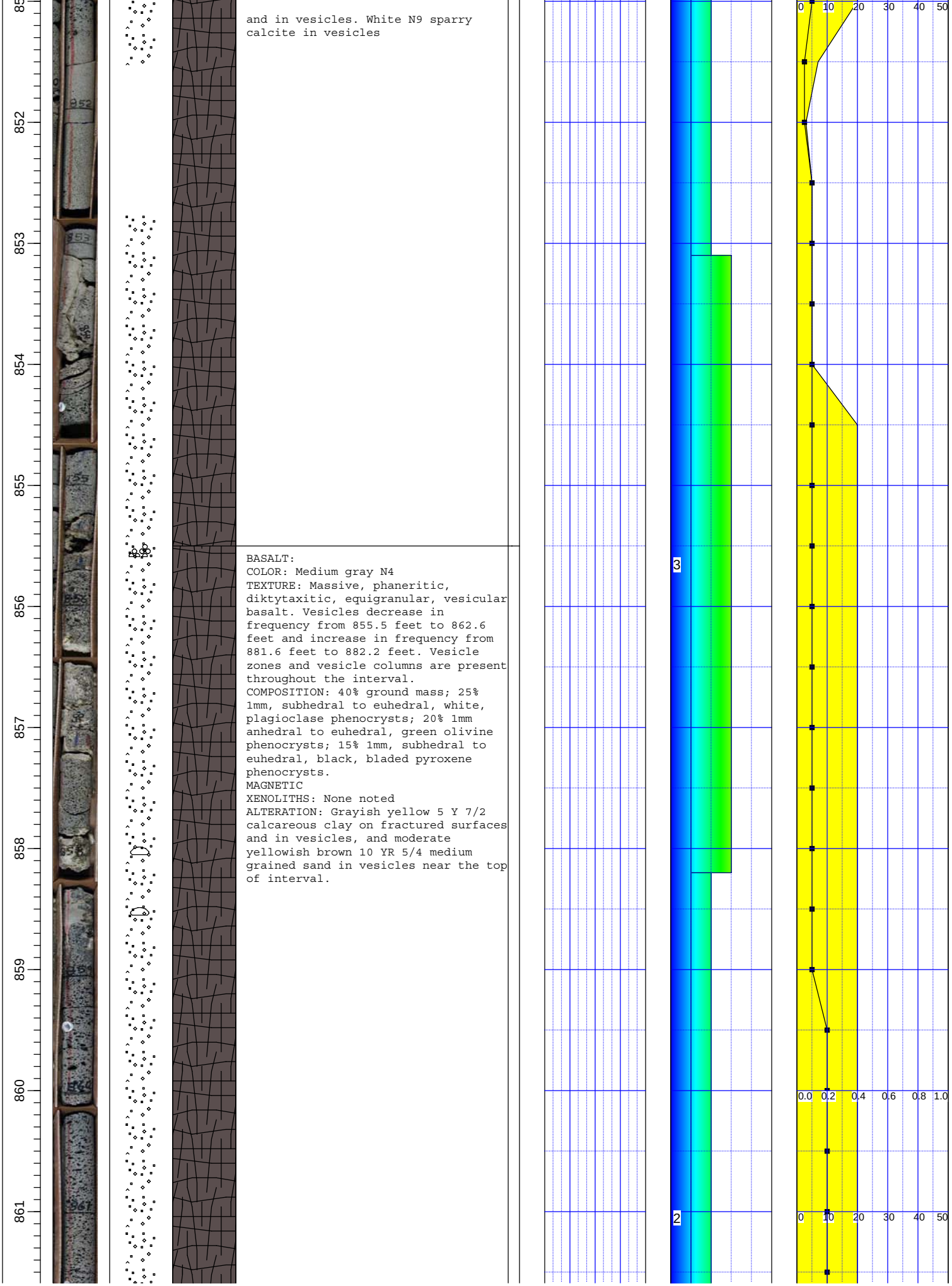
SANDS - CLEAN:
TEXTURE: Sands, USCS Classification SW, course to fine grained, fines downward, well sorted, subrounded to rounded grains.
COLOR: Moderate reddish orange 10 R 6/6 to a very pale orange 10 YR 8/2 at the base of interbed
CONSISTENCE: Friable
STRUCTURES: Structureless
FREE CARBONATES: no
ROCK: No
ROOTS/FOSSILS: None noted

BASALT:
COLOR: Medium gray N4 and grayish red from 842.6 feet to 844.9 feet.
TEXTURE: Aphanitic, diktytaxitic, vesicular basalt. Vesicles decrease in size and frequency from 835.9 feet to 842 feet and increase in size and frequency from 844.6 feet to 848.2 feet.
COMPOSITION: 75% ground mass containing submillimeter, subhedral to euhedral, white, plagioclase microlites; 15% submillimeter, anhedral to subhedral, reddish green olivine phenocrysts; 10% submillimeter to 1mm, anhedral to subhedral, black, bladed pyroxene phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish orange 10 YR 7/4 calcareous clay on fractured surfaces and in vesicles. Plagioclase strongly altered kaolinite. White N9, sparry calcite in vesicles



SANDS - CLEAN:
TEXTURE: Sands, USCS Classification SW, medium grained, well sorted, subrounded grains.
COLOR: Moderate yellowish brown 10 YR 5/4
CONSISTENCE: Loose
STRUCTURES: Structureless
FREE CARBONATES: No
ROCK: No
ROOTS/FOSSILS: None noted

BASALT:
COLOR: Medium gray N4
TEXTURE: Phaneritic, diktytaxitic, vesicular basalt. Vesicles decrease in frequency from 848.4 feet to 851.4 feet and increase in frequency from 852.9 feet to 855.5 feet. Spatter found at the base.
COMPOSITION: 63% ground mass containing submillimeter, subhedral to euhedral, white, plagioclase microlites; 15% 3mm, subhedral to euhedral, white, plagioclase phenocrysts; 15% submillimeter, anhedral to euhedral, black, bladed pyroxene phenocrysts; 7% submillimeter to 1mm anhedral to euhedral, reddish green olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 7/2 calcareous clay on fractured surfaces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and in vesicles. White N9 sparry calcite in vesicles
BASALT:
COLOR: Medium gray N4
TEXTURE: Massive, phaneritic, diktytaxitic, equigranular, vesicular basalt. Vesicles decrease in frequency from 855.5 feet to 862.6 feet and increase in frequency from 881.6 feet to 882.2 feet. Vesicle zones and vesicle columns are present throughout the interval.
COMPOSITION: 40% ground mass; 25% 1mm, subhedral to euhedral, white, plagioclase phenocrysts; 20% 1mm anhedral to euhedral, green olivine phenocrysts; 15% 1mm, subhedral to euhedral, black, bladed pyroxene phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 7/2 calcareous clay on fractured surfaces and in vesicles, and moderate yellowish brown 10 YR 5/4 medium grained sand in vesicles near the top of interval.
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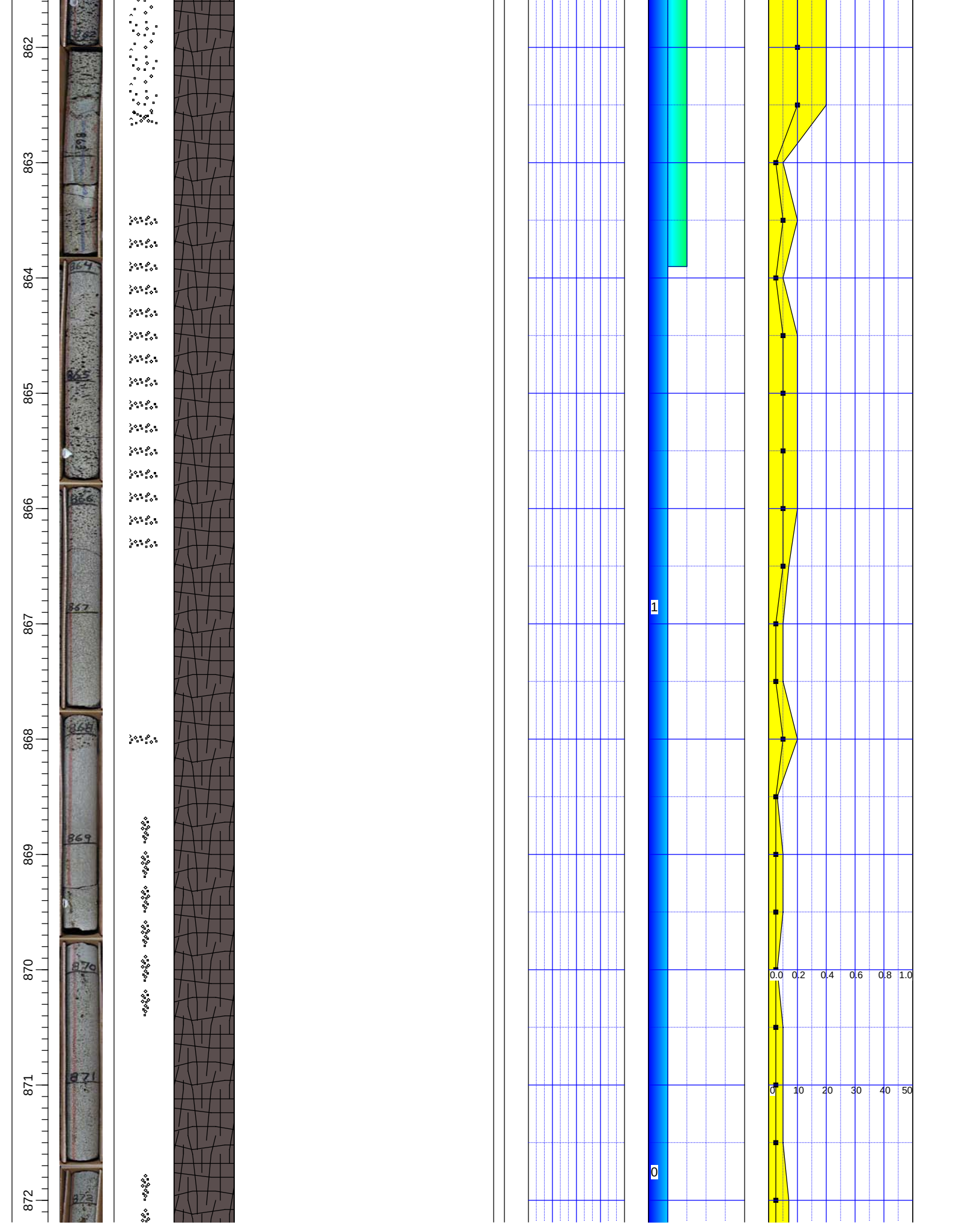
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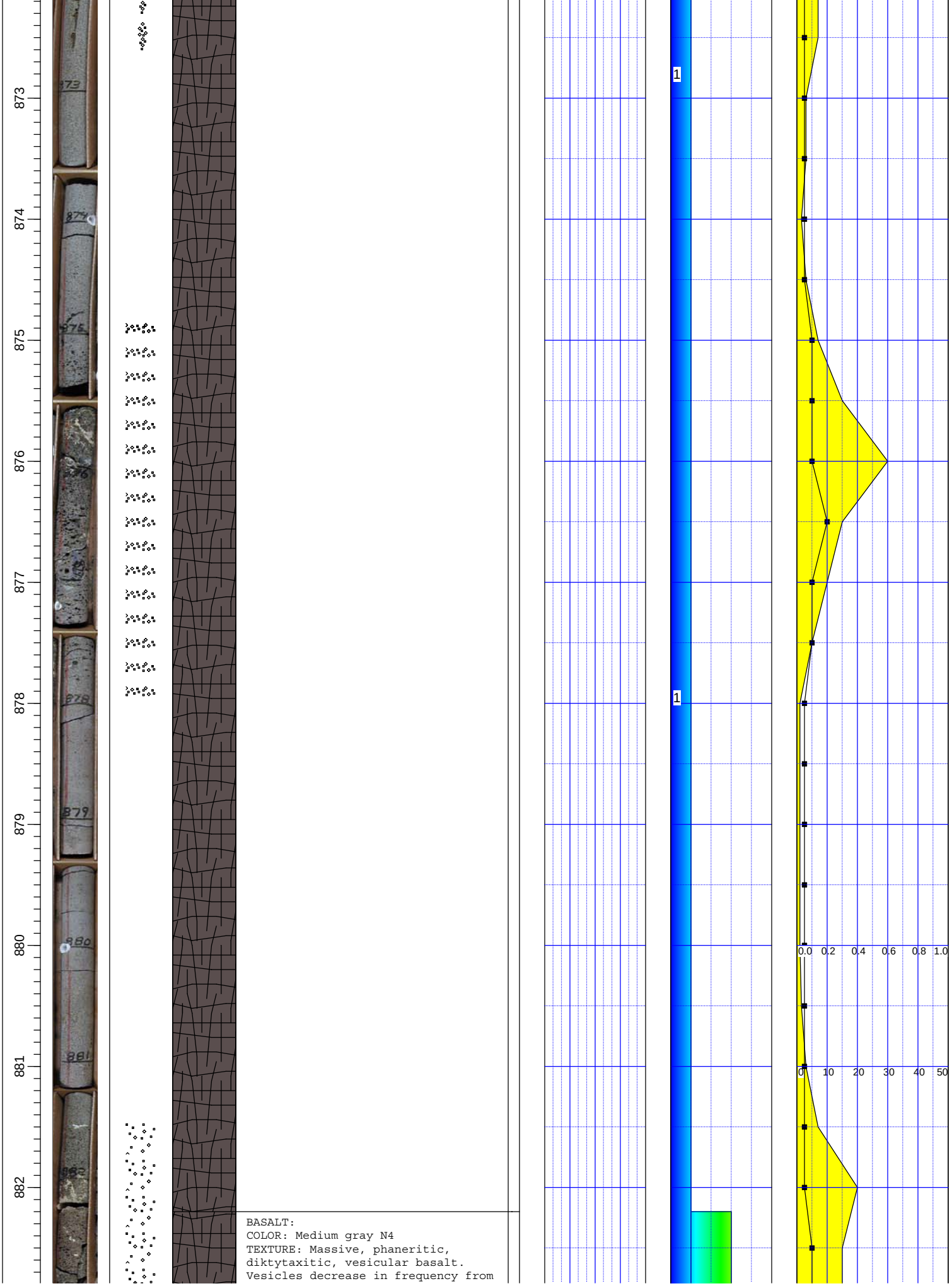
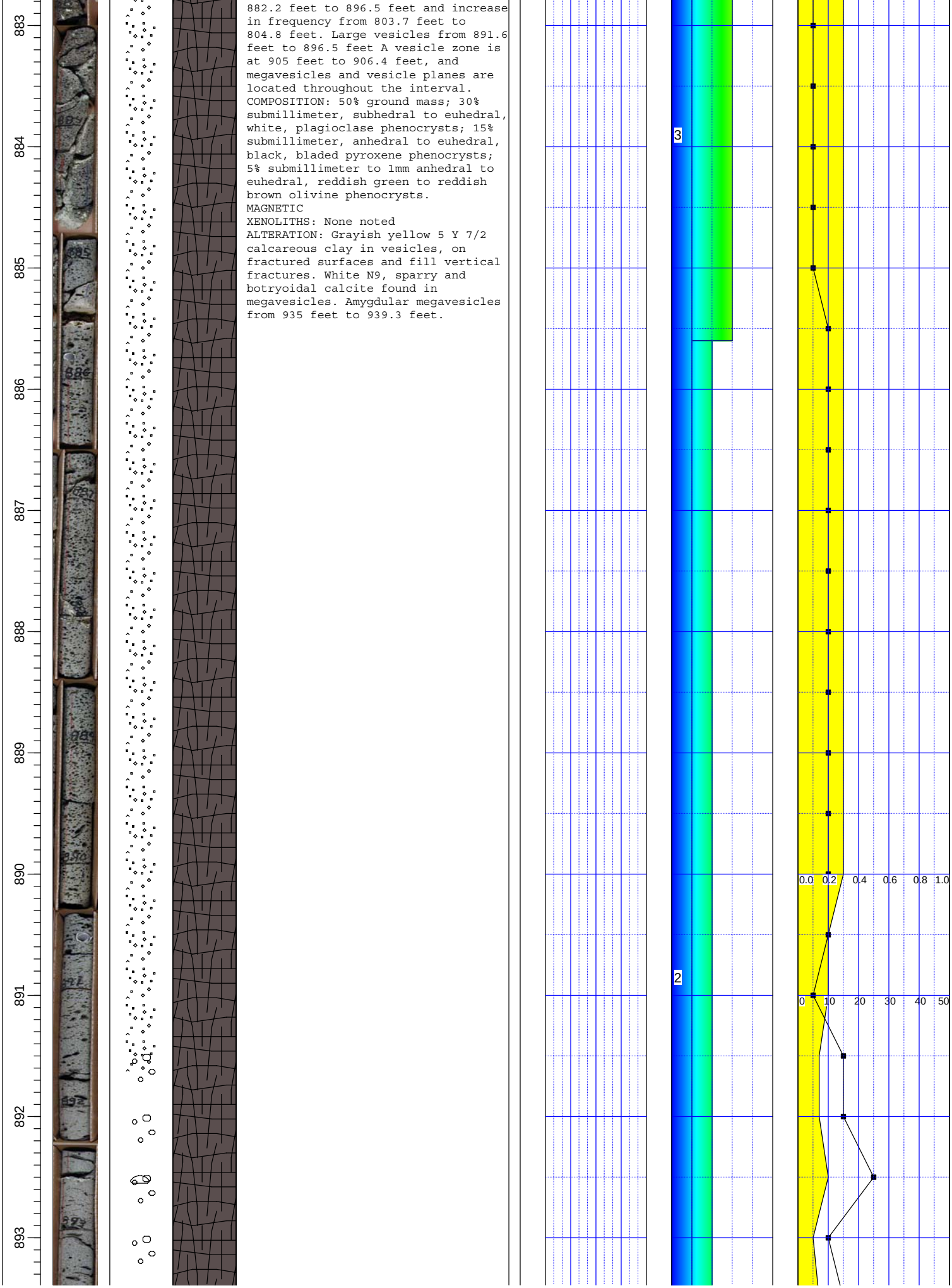
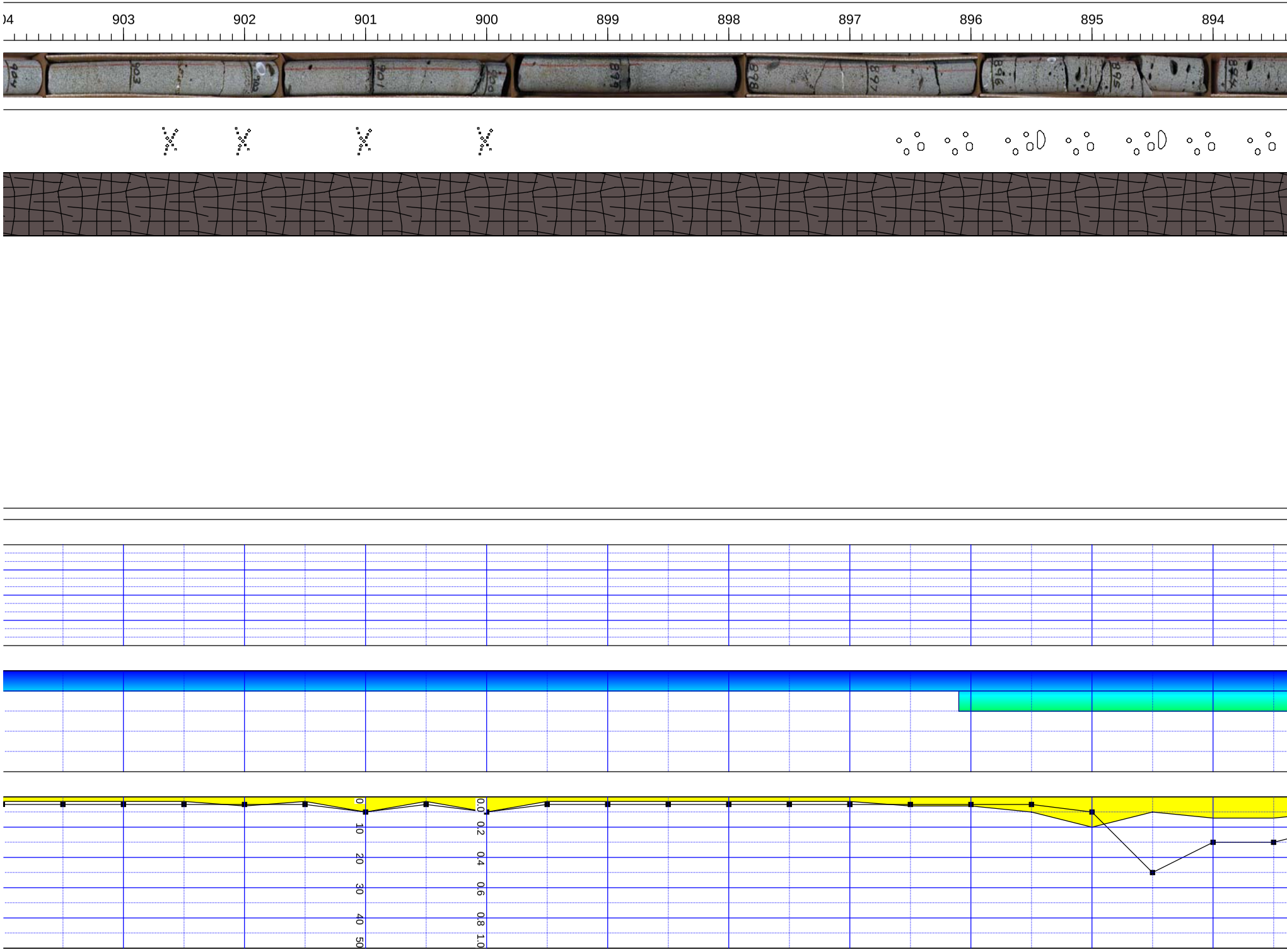


BASALT:
COLOR: Medium gray N4
TEXTURE: Massive, phaneritic, diktytaxitic, vesicular basalt. Vesicles decrease in frequency from



882.2 feet to 896.5 feet and increase in frequency from 803.7 feet to 804.8 feet. Large vesicles from 891.6 feet to 896.5 feet A vesicle zone is at 905 feet to 906.4 feet, and megavesicles and vesicle planes are located throughout the interval.
COMPOSITION: 50% ground mass; 30% submillimeter, subhedral to euhedral, white, plagioclase phenocrysts; 15% submillimeter, anhedral to euhedral, black, bladed pyroxene phenocrysts; 5% submillimeter to 1mm anhedral to euhedral, reddish green to reddish brown olivine phenocrysts.
MAGNETIC
XENOLITHS: None noted
ALTERATION: Grayish yellow 5 Y 7/2 calcareous clay in vesicles, on fractured surfaces and fill vertical fractures. White N9, sparry and botryoidal calcite found in megavesicles. Amygdular megavesicles from 935 feet to 939.3 feet.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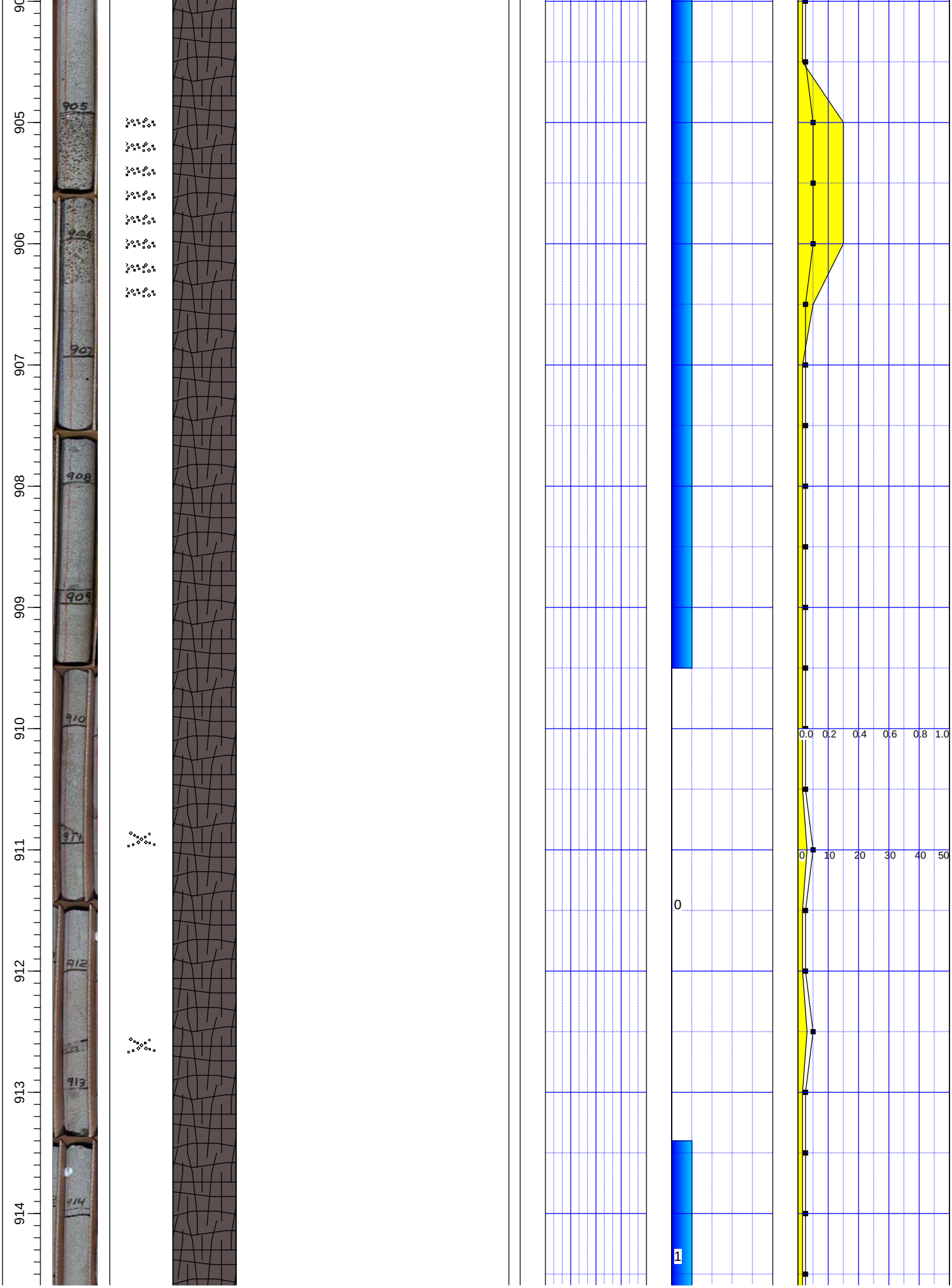
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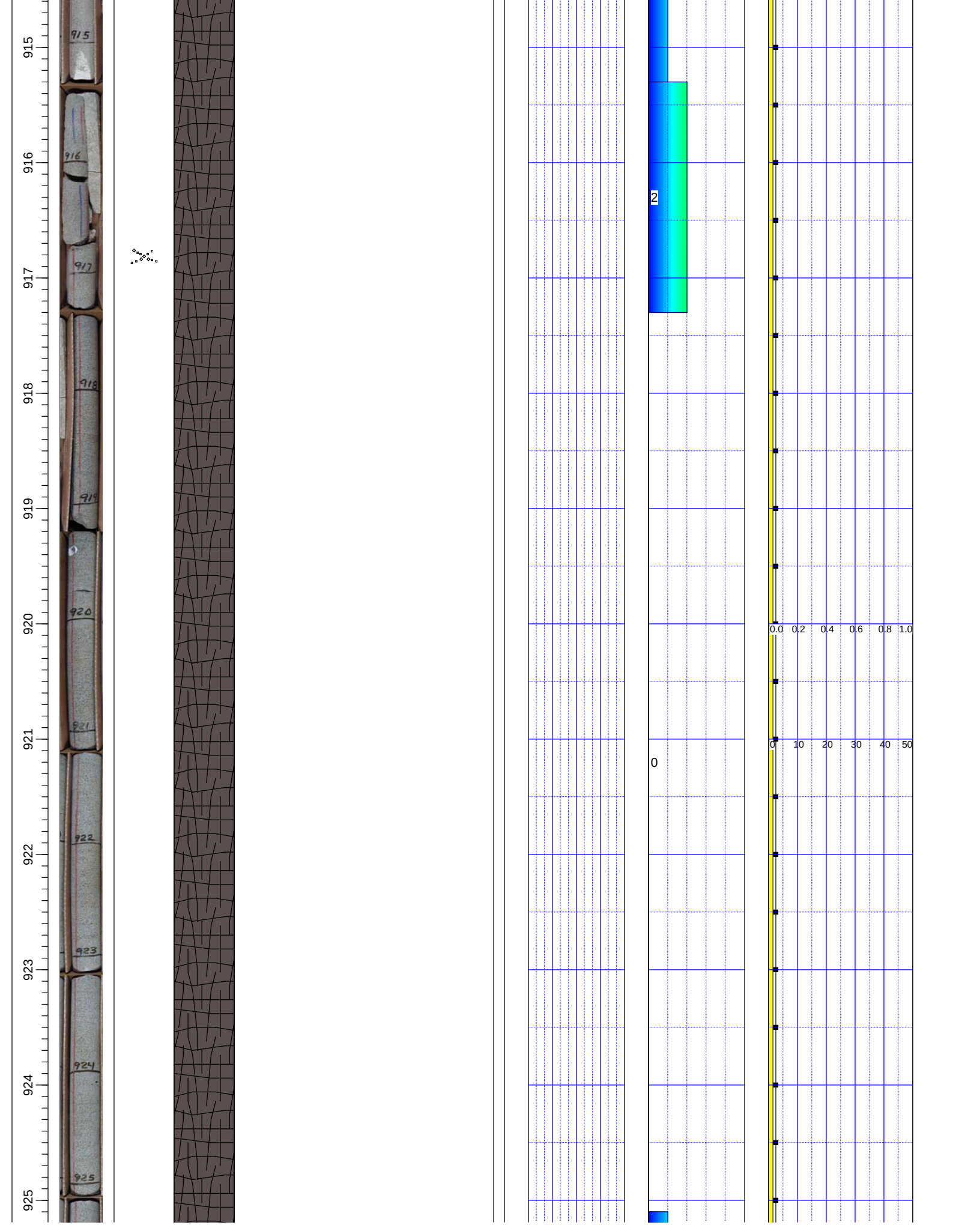
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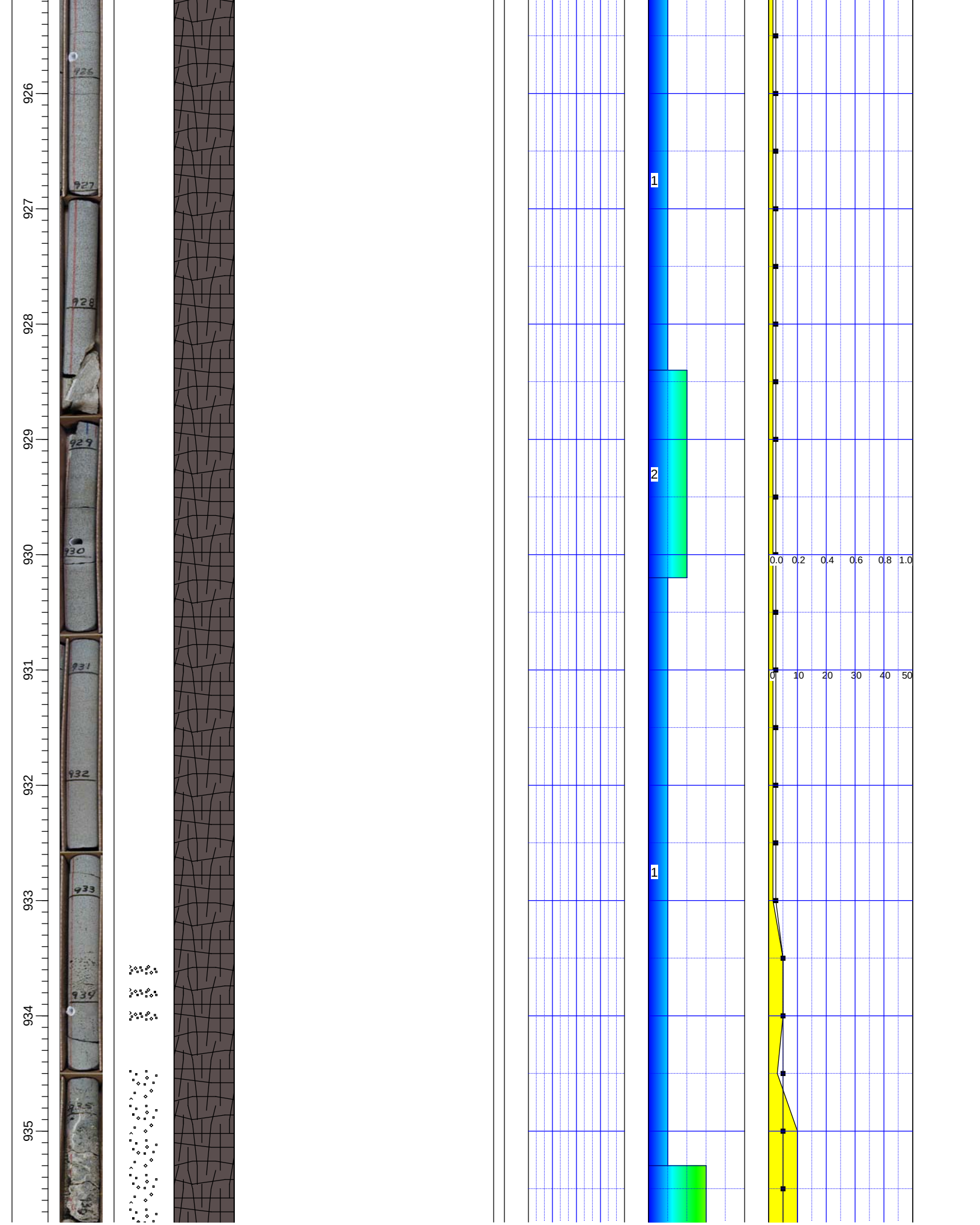
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SANDS - CLEAN:
TEXTURE: Sands, USCS Classification SW, course to very fine grained, fines downward, moderately to well sorted, grains range from subangular to rounded and become more rounded with depth.
COLOR: Light olive gray 5 Y 6/1that fades to a dark yellowish brown 10 YR 4/2 at 947.2 feet.
CONSISTENCE: Firm
STRUCTURES: Massive
FREE CARBONATES: No
ROCK: Rounded gravels are present at 941 feet.
ROOTS/FOSSILS: None noted

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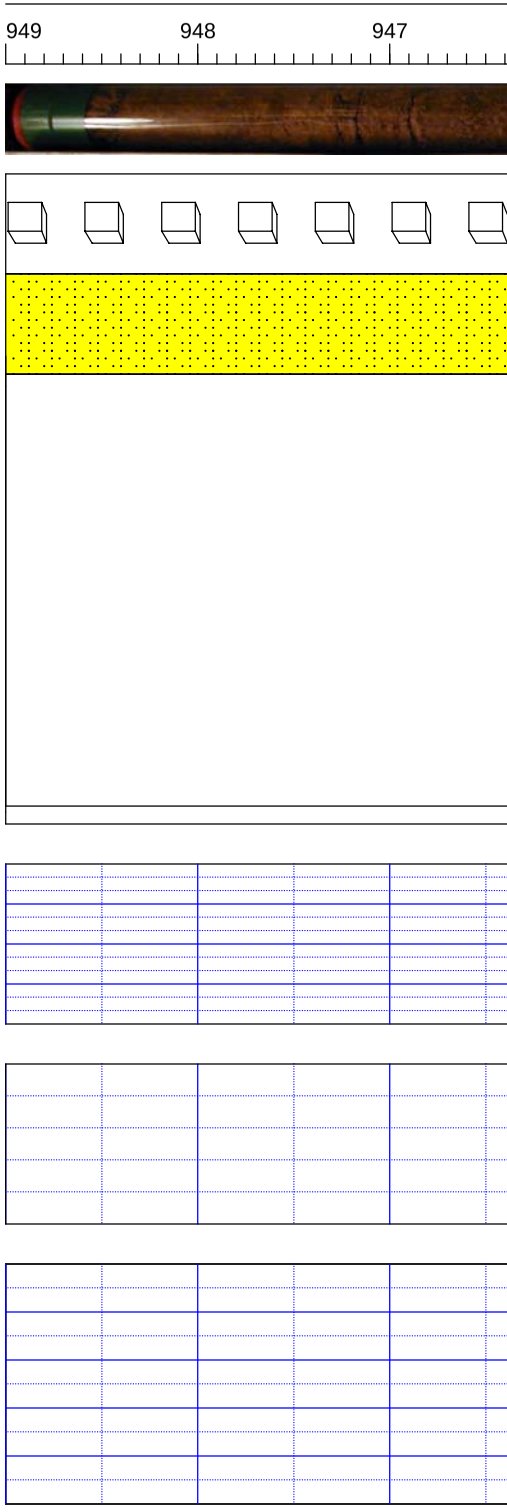
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