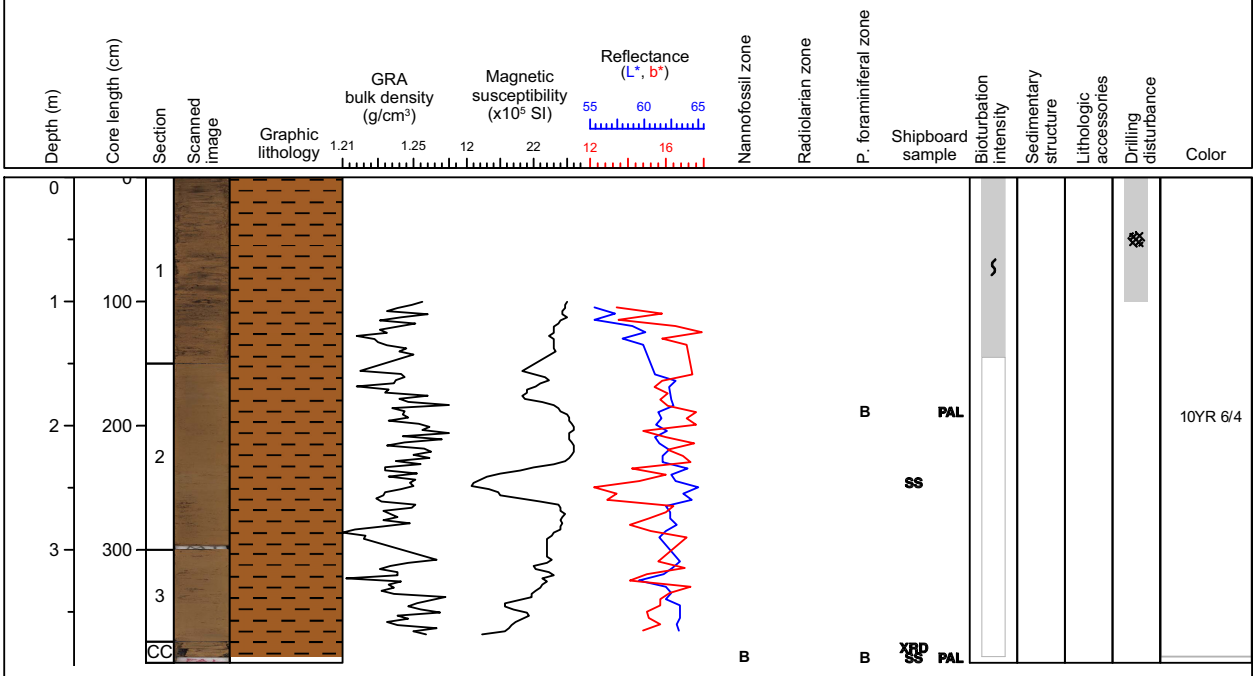
Core Photo

Hole 320-U1332A Core 1H, Interval 0.0-3.91 m (CSF-A)

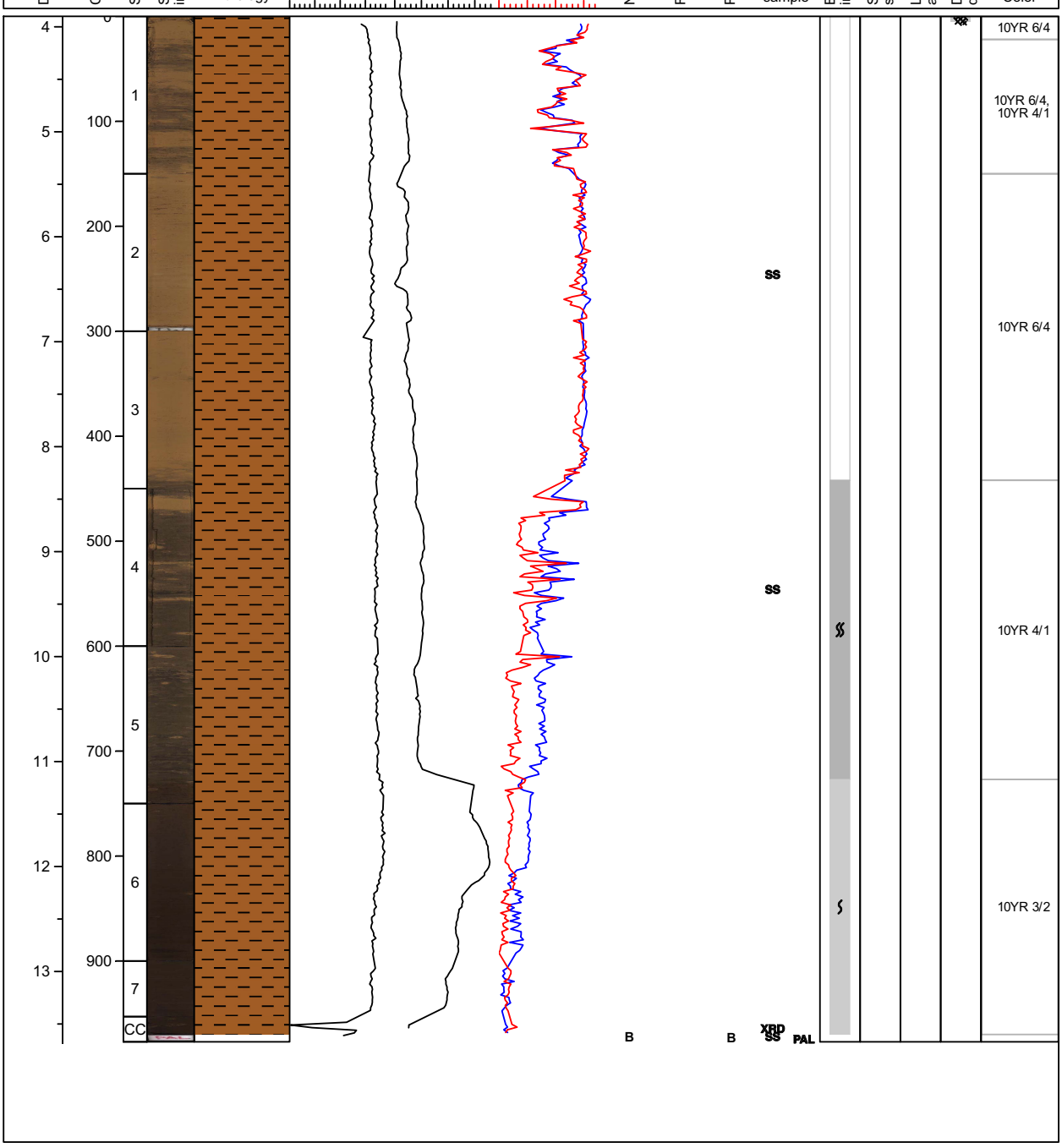
Major Lithology: Clay with radiolarians. Homogeneous light yellowish brown clay with radiolarians.



Core Photo

Hole 320-U1332A Core 2H, Interval 3.9-13.67 m (CSF-A)

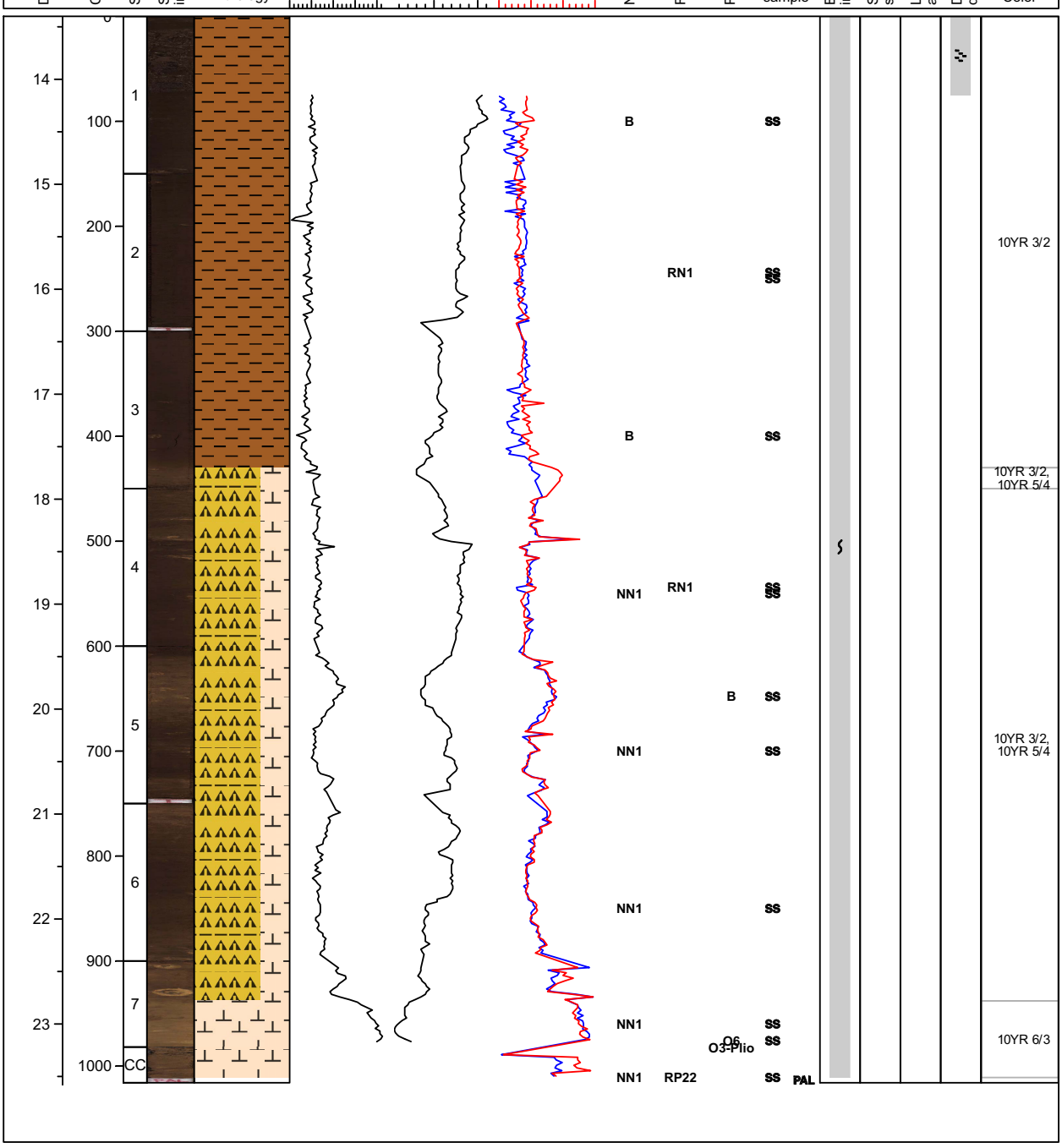
Major Lithology: Clay with radiolarians; zeolite clay. Homogeneous light yellowish brown and dark gray clay with radiolarians grading down to very dark grayish brown zeolite clay.



Core Photo

Hole 320-U1332A Core 3H, Interval 13.4-23.56 m (CSF-A)

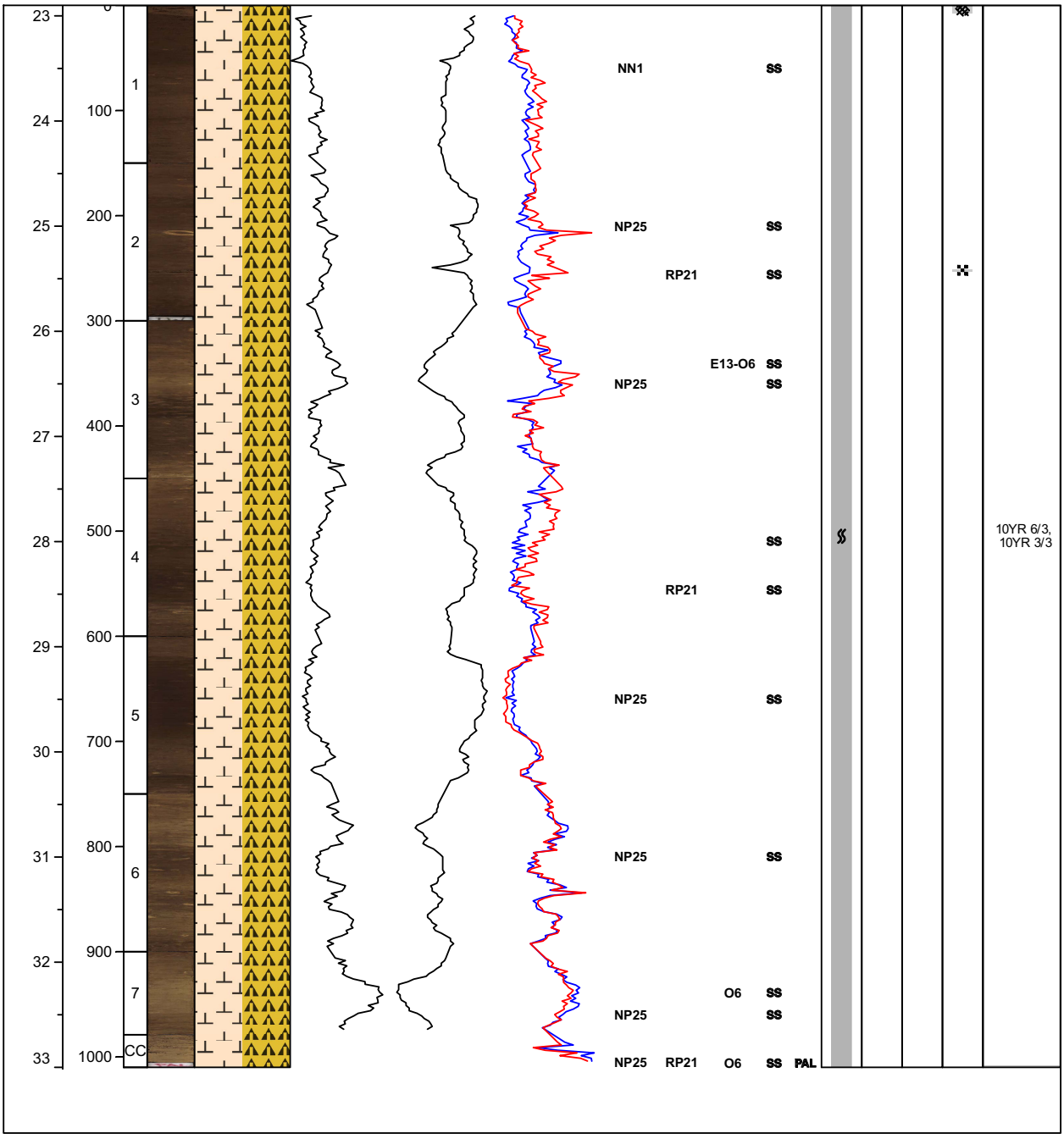
Major Lithology: Zeolite clay; clayey radiolarian ooze; nannofossil ooze with radiolarians and clay; nannofossil ooze. Homogenous very dark grayish brown zeolite clay overlying an alternating sequence of very dark brown clayey radiolarian ooze and yellowish brown nannofossil ooze with radiolarians and clay, overlying a homogeneous pale brown nannofossil ooze.



Core Photo

Hole 320-U1332A Core 4H, Interval 22.9-33.0 m (CSF-A)

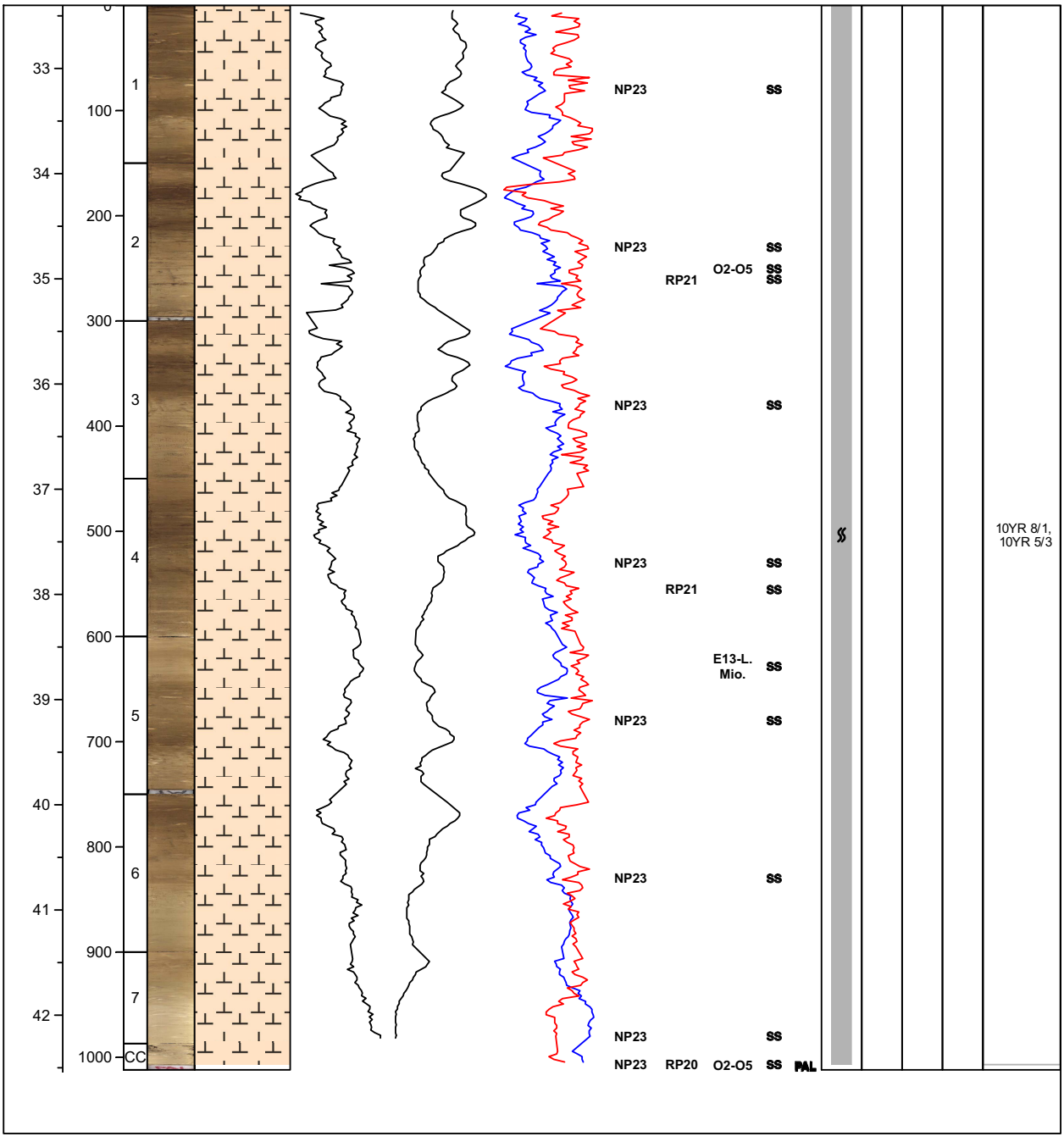
Major Lithology: Radiolarian ooze with clay; nannofossil ooze with radiolarians. Alternating sequence of dark brown radiolarian ooze with clay and pale brown nannofossil ooze with radiolarians.



Core Photo

Hole 320-U1332A Core 5H, Interval 32.4-42.52 m (CSF-A)

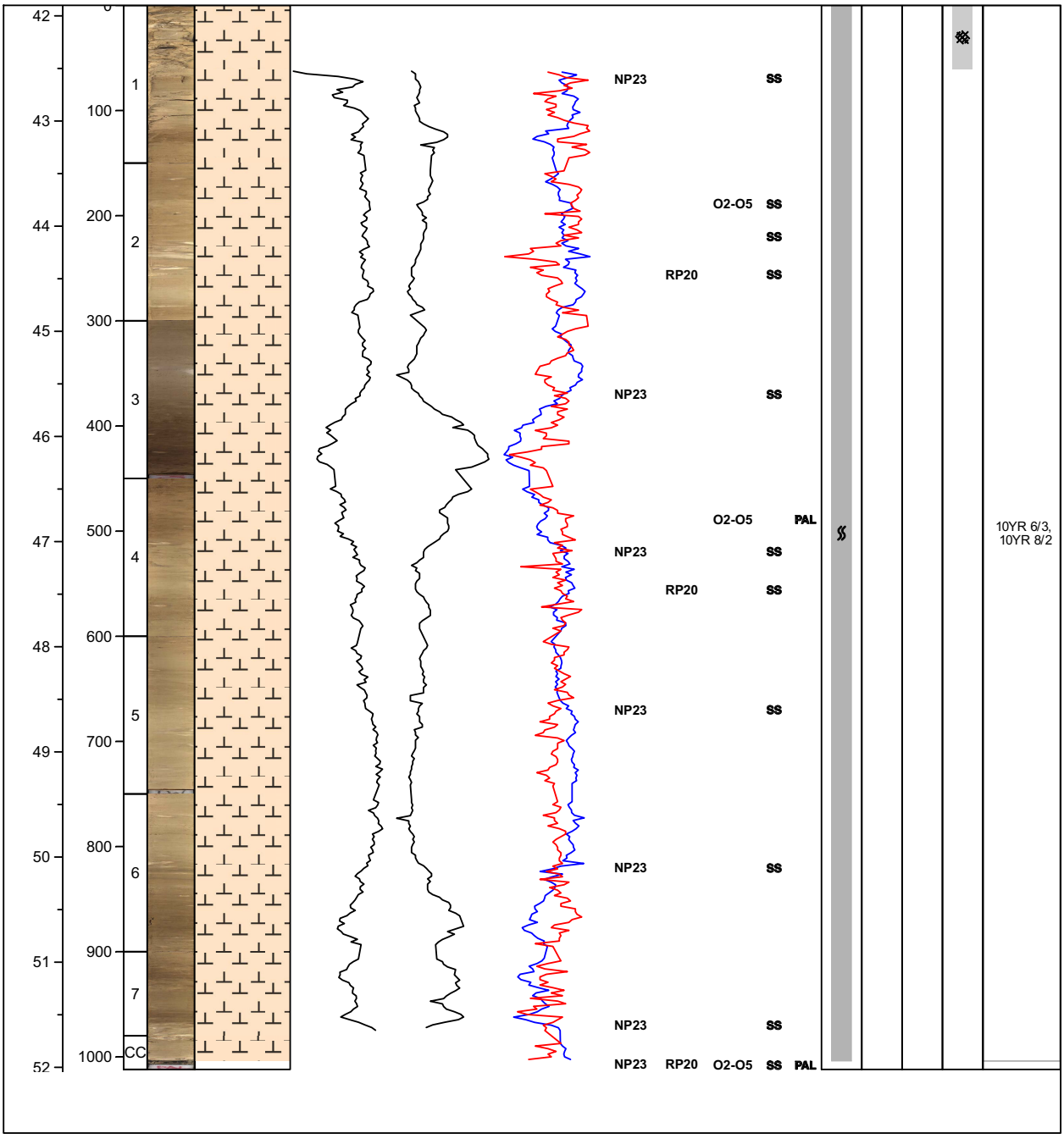
Major Lithology: Nannofossil ooze; nannofossil ooze with radiolarians. Alternating sequence of white nannofossil ooze and brown nannofossil ooze with radiolarians. Thickness and lightness of nannofossil ooze intervals increase with depth.



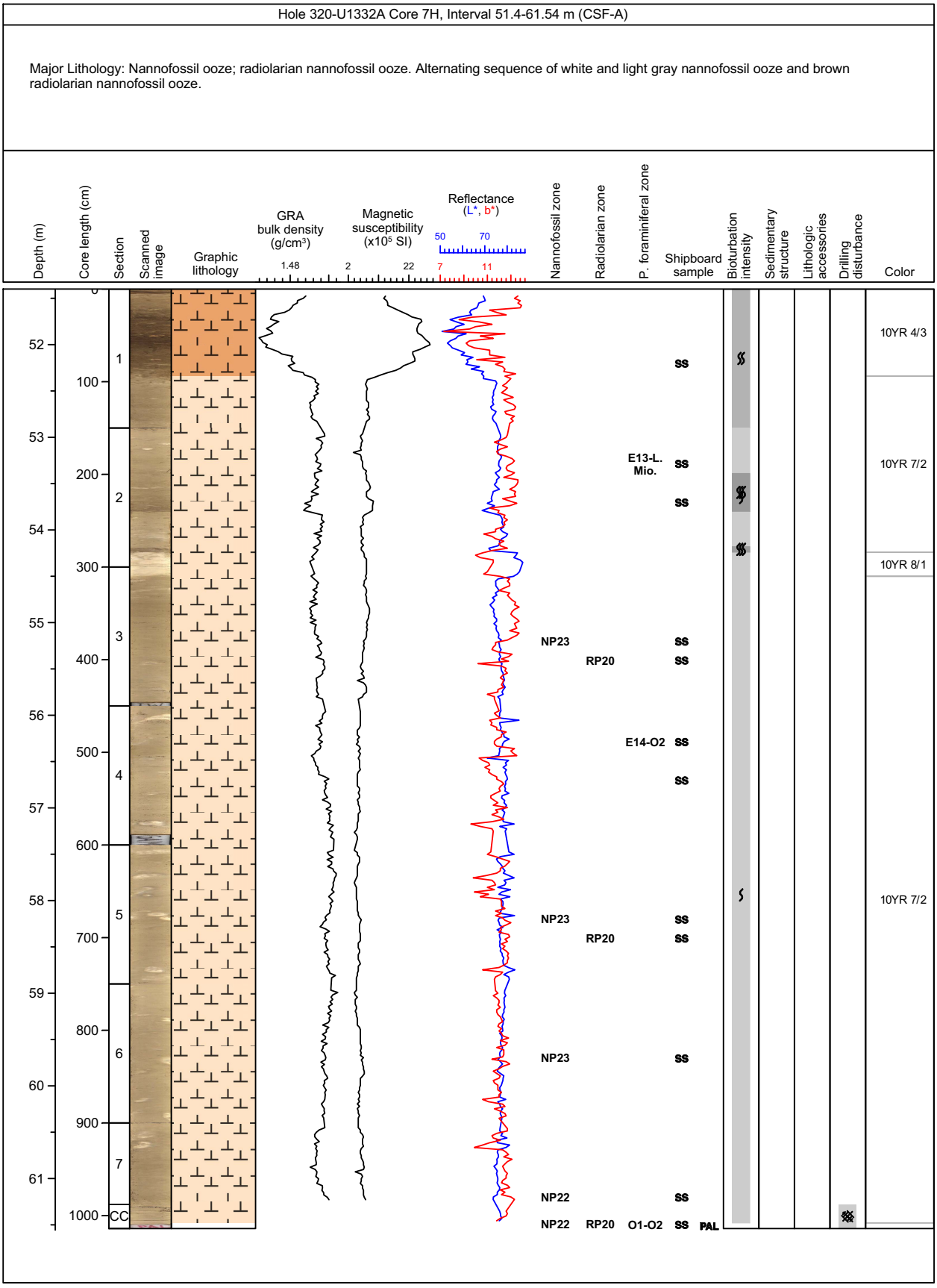
Core Photo

Hole 320-U1332A Core 6H, Interval 41.9-52.02 m (CSF-A)

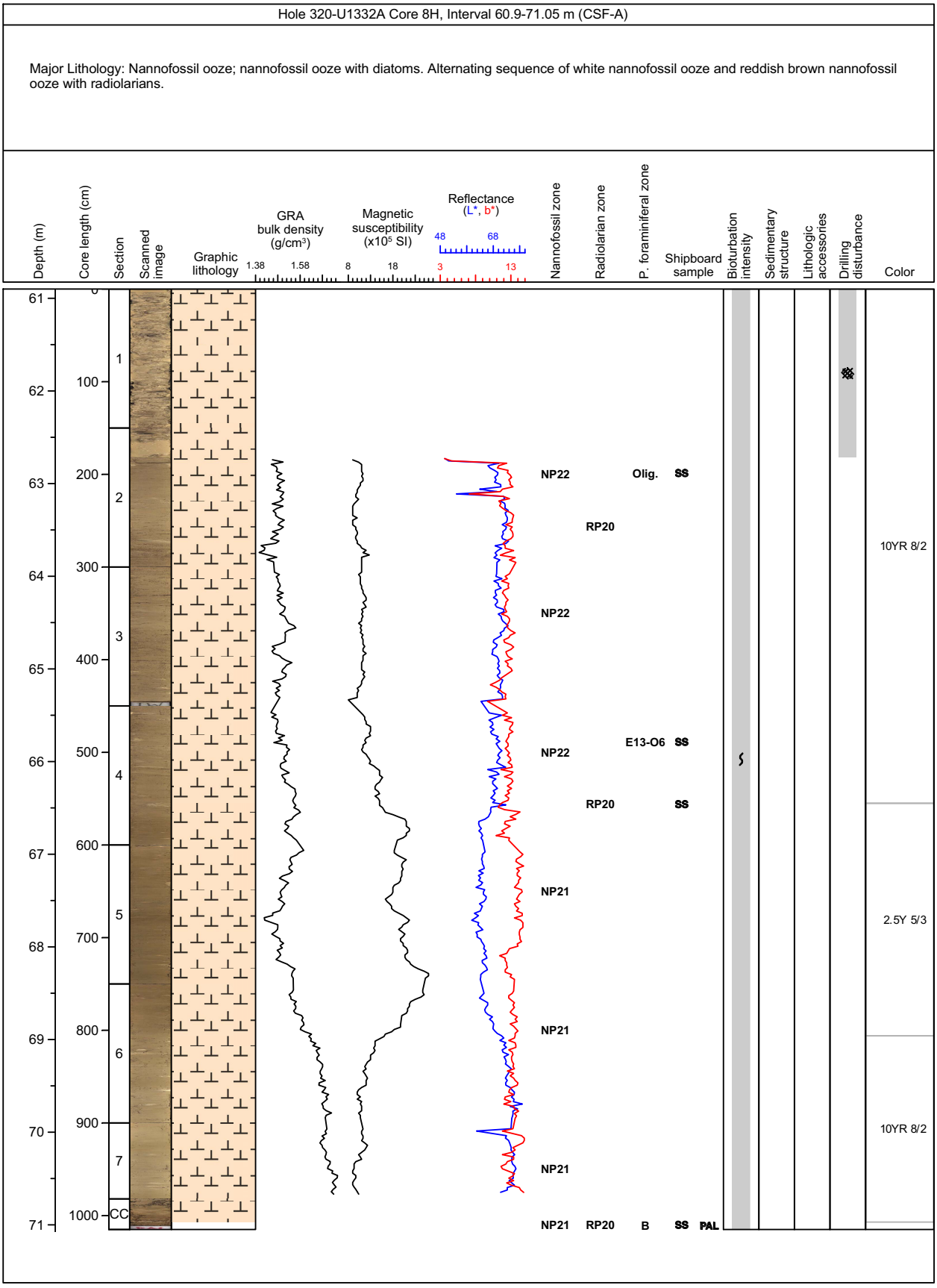
Major Lithology: Nannofossil ooze; nannofossil ooze with radiolarians. Alternating sequence of very pale brown nannofossil ooze and pale brown nannofossil ooze with radiolarians.



Core Photo


Hole 320-U1332A Core 7H, Interval 51.4-61.54 m (CSF-A)
Major Lithology: Nannofossil ooze; radiolarian nannofossil ooze. Alternating sequence of white and light gray nannofossil ooze and brown radiolarian nannofossil ooze.
Depth (m)
Core length (cm)
Section
Scanned image
Graphic lithology
GRA bulk density (g/cm³)
Magnetic susceptibility (x10⁵ SI)
Reflectance (L*, b*)
Nannofossil zone
Radiolarian zone
P. foraminiferal zone
Shipboard sample
Bioturbation intensity
Sedimentary structure
Lithologic accessories
Drilling disturbance
Color
10YR 4/3
10YR 7/2
10YR 8/1
10YR 7/2
E13-L. Mio.
E14-O2
NP23
NP22
RP20
O1-O2
SS
PAL

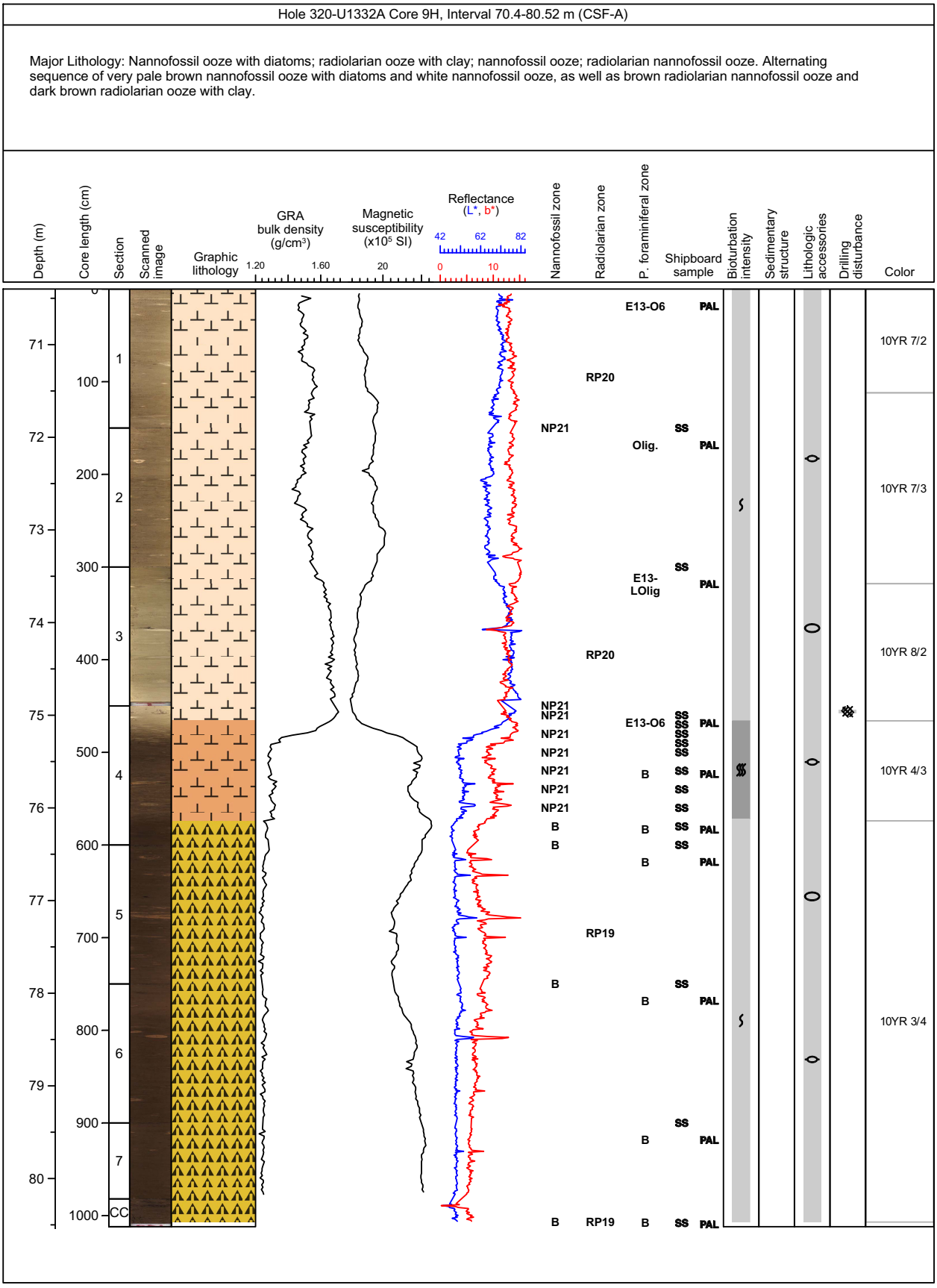
Core Photo


Hole 320-U1332A Core 8H, Interval 60.9-71.05 m (CSF-A)
Major Lithology: Nannofossil ooze; nannofossil ooze with diatoms. Alternating sequence of white nannofossil ooze and reddish brown nannofossil ooze with radiolarians.
Depth (m)
Core length (cm)
Section
Scanned image
Graphic lithology
GRA bulk density (g/cm³)
1.38
1.58
Magnetic susceptibility (x10⁵ SI)
8
18
Reflectance (L*, b*)
48
68
3
13
Nannofossil zone
Radiolarian zone
P. foraminiferal zone
Shipboard sample
Bioturbation intensity
Sedimentary structure
Lithologic accessories
Drilling disturbance
Color
61
62
63
64
65
66
67
68
69
70
71
100
200
300
400
500
600
700
800
900
1000
1
2
3
4
5
6
7
CC
NP22
RP20
NP22
NP22
RP20
NP21
NP21
NP21
NP21
RP20
Olig.
E13-O6
B
SS
PAL
10YR 8/2
2.5Y 5/3
10YR 8/2

Core Photo

Hole 320-U1332A Core 9H, Interval 70.4-80.52 m (CSF-A)

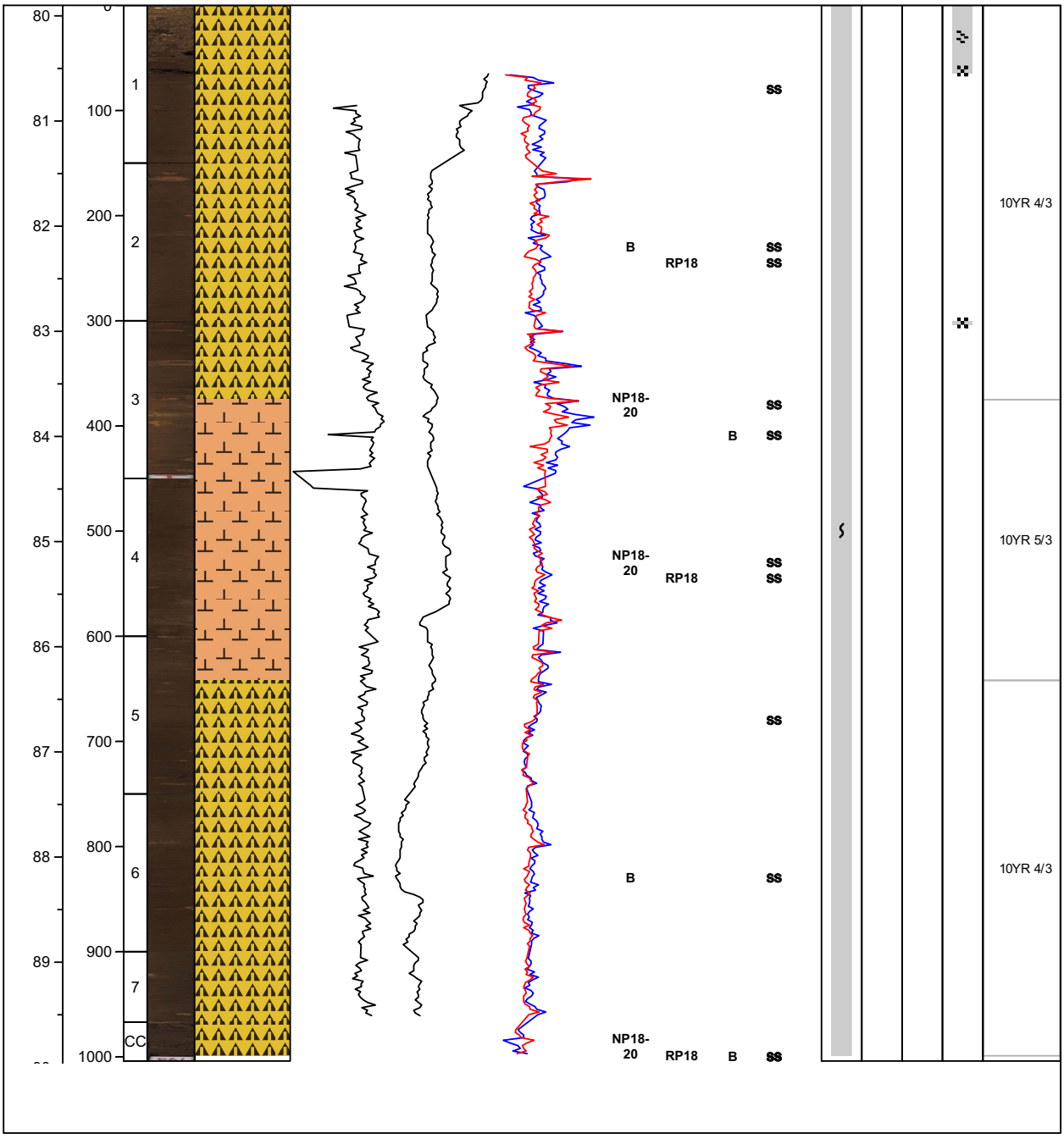
Major Lithology: Nannofossil ooze with diatoms; radiolarian ooze with clay; nannofossil ooze; radiolarian nannofossil ooze. Alternating sequence of very pale brown nannofossil ooze with diatoms and white nannofossil ooze, as well as brown radiolarian nannofossil ooze and dark brown radiolarian ooze with clay.



Core Photo

Hole 320-U1332A Core 10H, Interval 79.9-89.94 m (CSF-A)

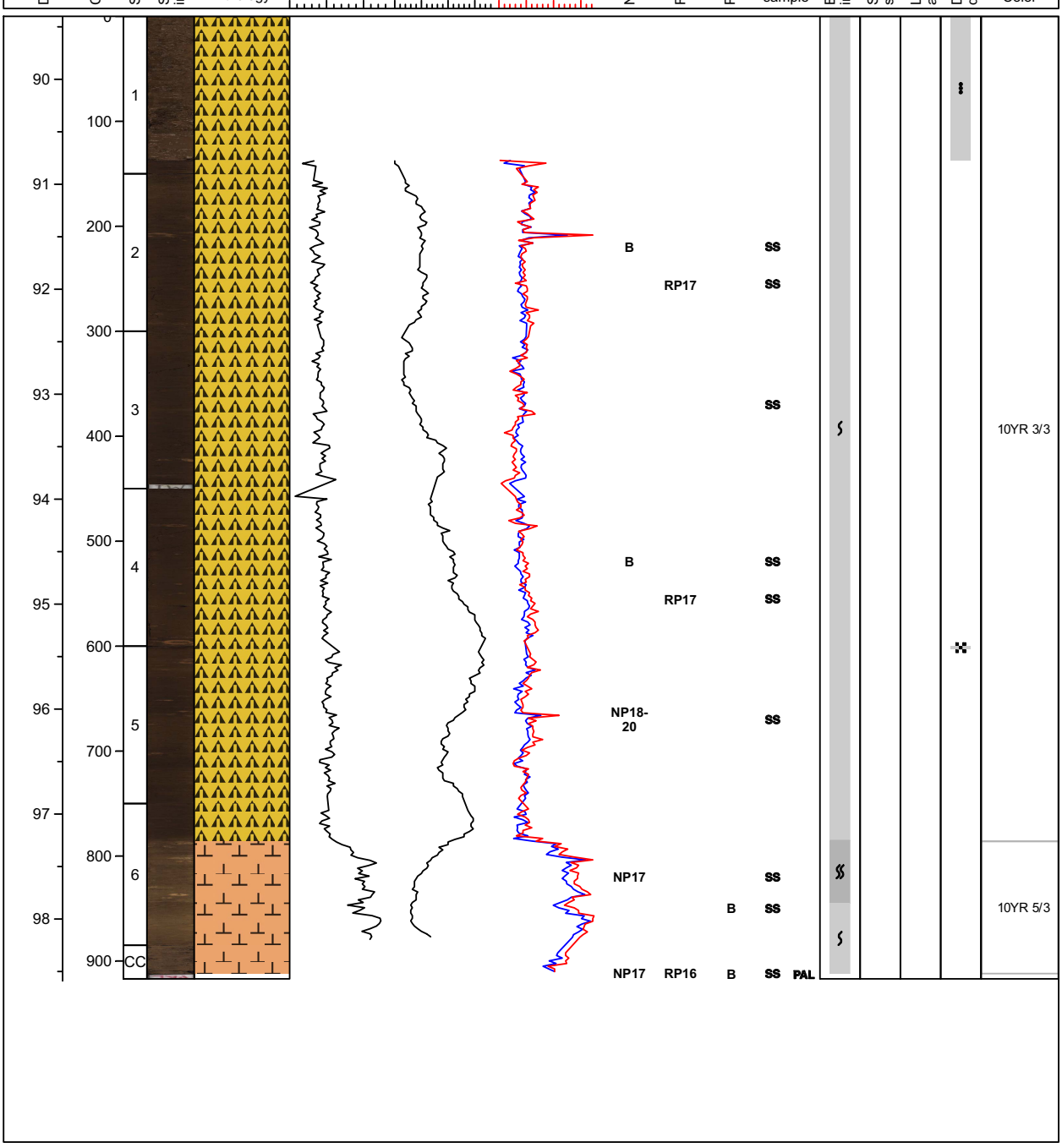
Major Lithology: Radiolarian ooze with diatoms and clay; radiolarian nannofossil ooze. Alternating sequence of brown radiolarian nannofossil ooze and brown radiolarian ooze with diatoms and clay.



Core Photo

Hole 320-U1332A Core 11H, Interval 89.4-98.57 m (CSF-A)

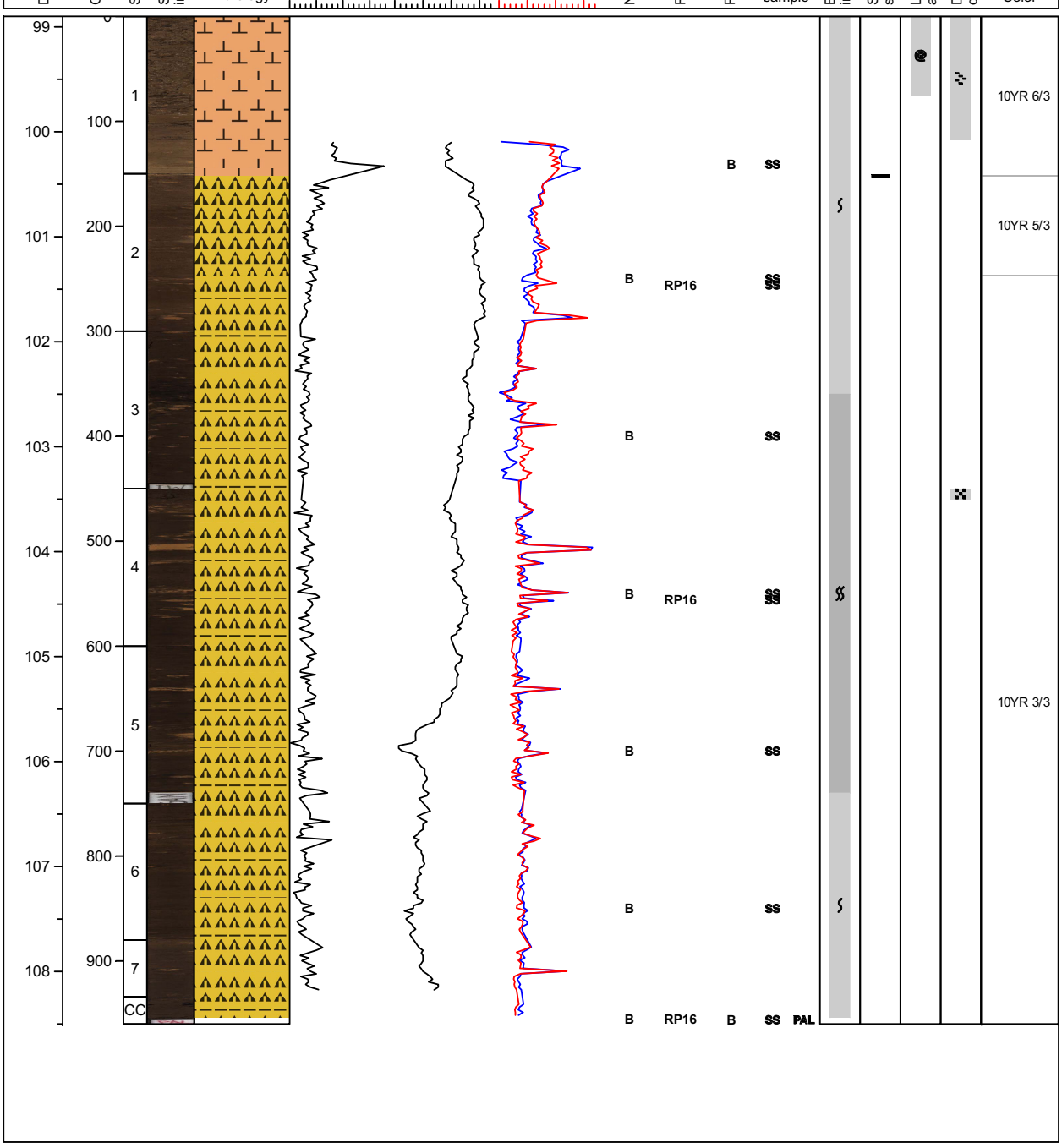
Major Lithology: Radiolarian ooze with clay; radiolarian nannofossil ooze. Minor lithology: pumice. Dark brown radiolarian nannofossil ooze and brown radiolarian ooze with clay and, occasionally, pumice.



Core Photo

Hole 320-U1332A Core 12H, Interval 98.9-108.5 m (CSF-A)

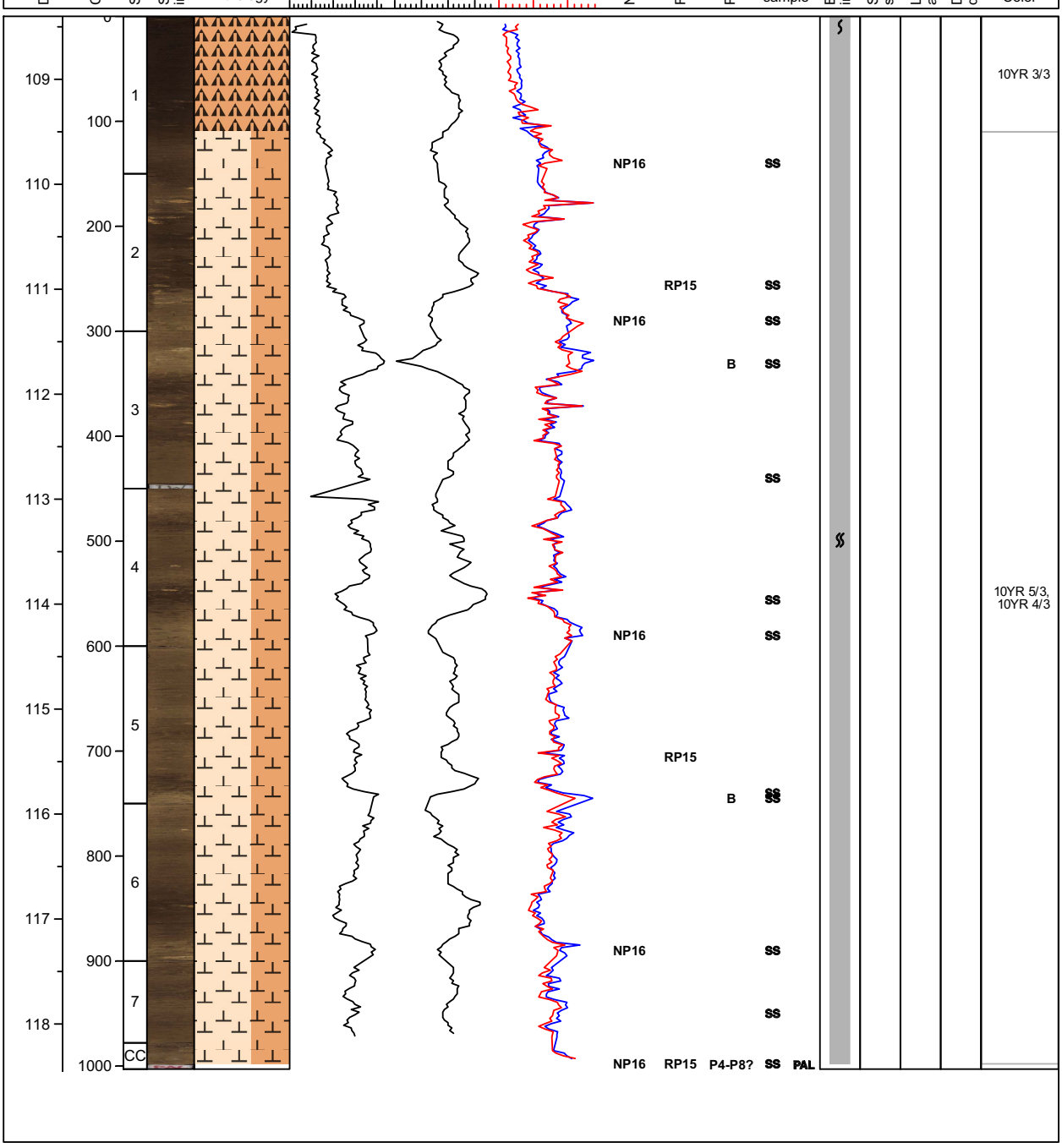
Major Lithology: Radiolarian nannofossil ooze; clayey radiolarian ooze; radiolarian ooze with nannofossil and clay. A succession of pale brown radiolarian nannofossil ooze; dark brown radiolarian ooze with nannofossil and clay; brown clayey radiolarian ooze.



Core Photo

Hole 320-U1332A Core 13H, Interval 108.4-118.43 m (CSF-A)

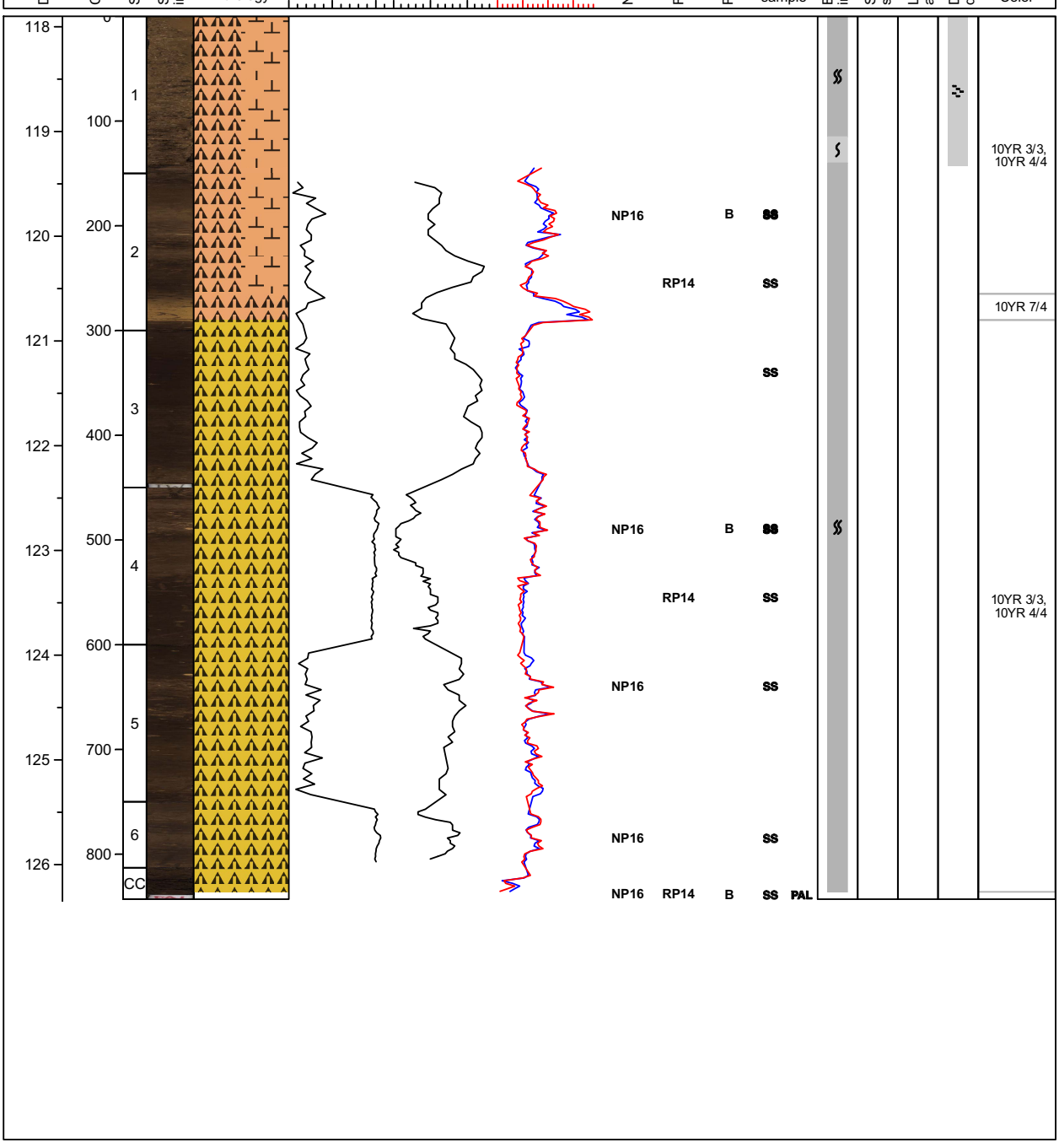
Major lithology: Clayey radiolarian ooze; radiolarian nannofossil ooze; and nannofossil ooze. Homogeneous dark brown clayey radiolarian ooze overlying an alternating sequence of brown radiolarian nannofossil ooze and brown nannofossil ooze.



Core Photo

Hole 320-U1332A Core 14H, Interval 117.9-126.33 m (CSF-A)

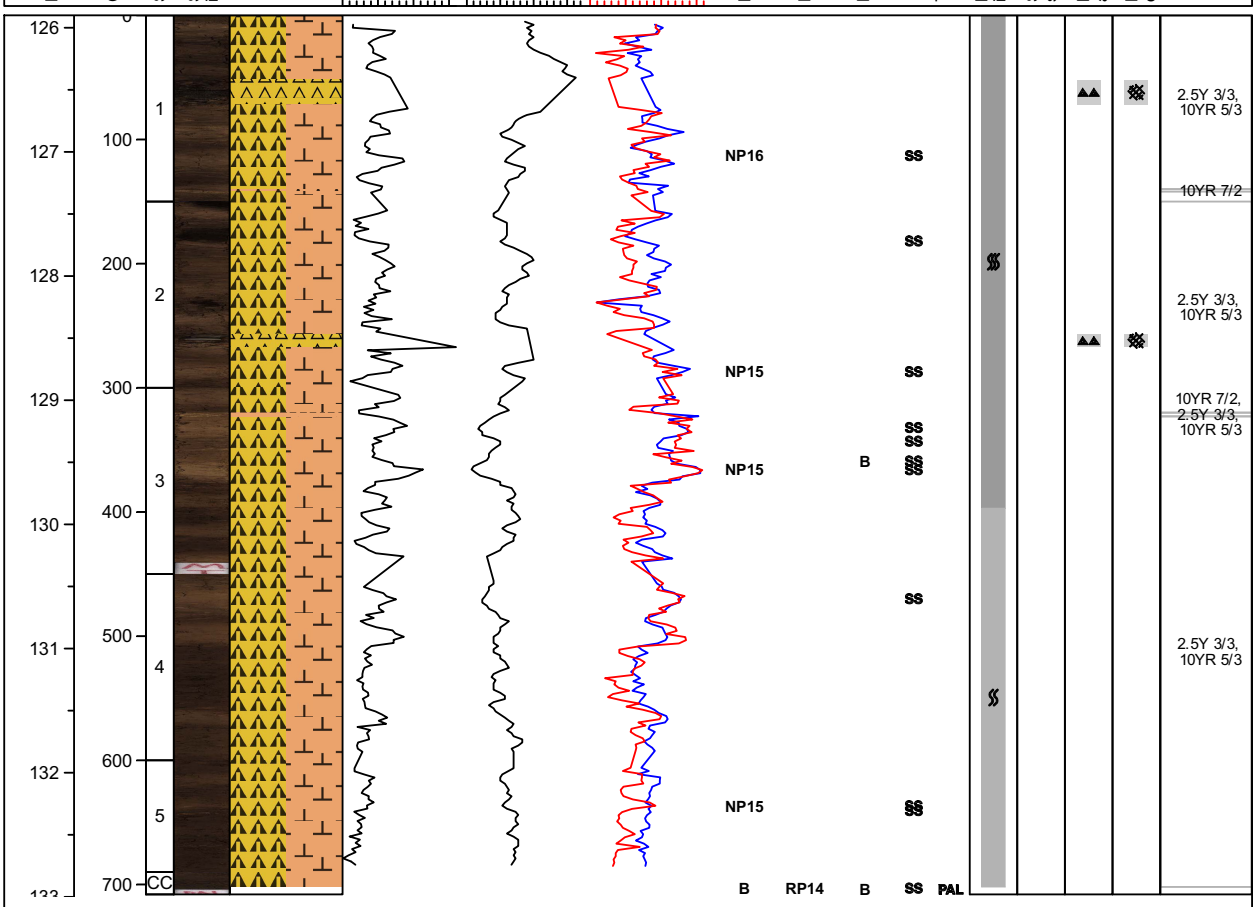
Major lithology: Nannofossil radiolarian ooze; clay and radiolarian nannofossil ooze; nannofossil radiolarian ooze. Moderate to intense bioturbated dark brown nannofossil radiolarian ooze with clay and dark yellowish brown radiolarian nannofossil ooze and minor bioturbated very pale brown nannofossil radiolarian ooze.



Core Photo

Hole 320-U1332A Core 15X, Interval 125.9-132.98 m (CSF-A)

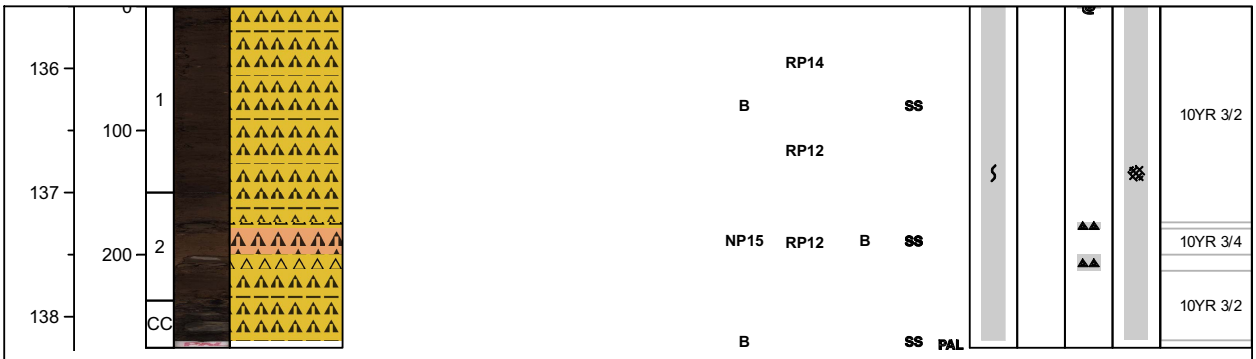
Major lithology: Radiolarian ooze with clay; radiolarian nannofossil ooze. Minor lithology: Two porcellanite layers are present. Nannofossil radiolarian ooze; porcellanite. Alternation of very dark grayish brown radiolarian ooze with clay and brown radiolarian nannofossil ooze.



Core Photo

Hole 320-U1332A Core 16X, Interval 135.5-138.25 m (CSF-A)

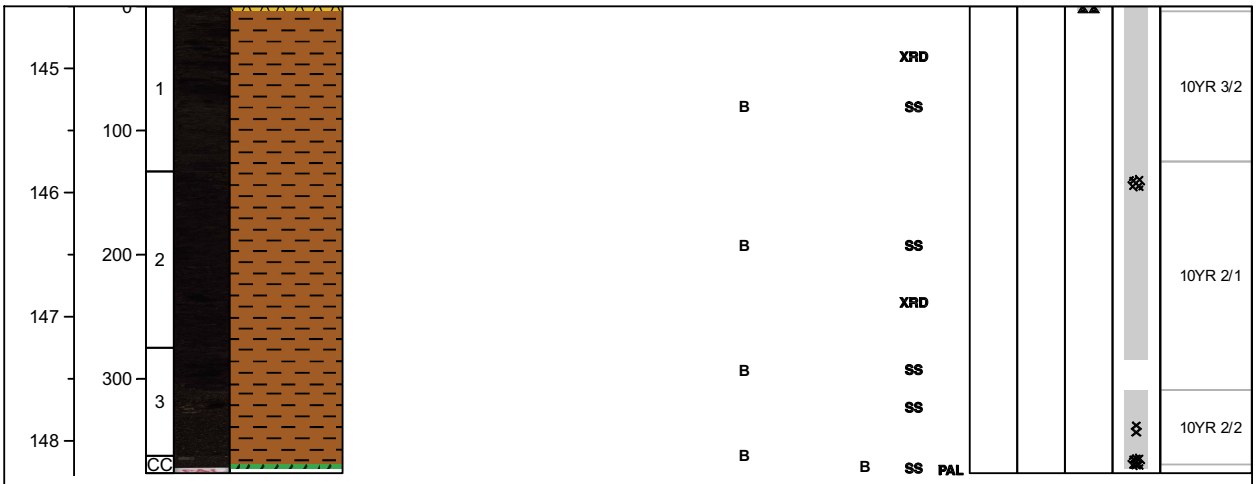
Major lithology: Clayey radiolarian ooze; nannofossil radiolarian ooze. Minor lithology: Porcellanite. Homogeneous dark grayish brown clayey radiolarian ooze overlying an interval of dark yellowish brown nannofossil radiolarian ooze. Two porcellanite layers are present.



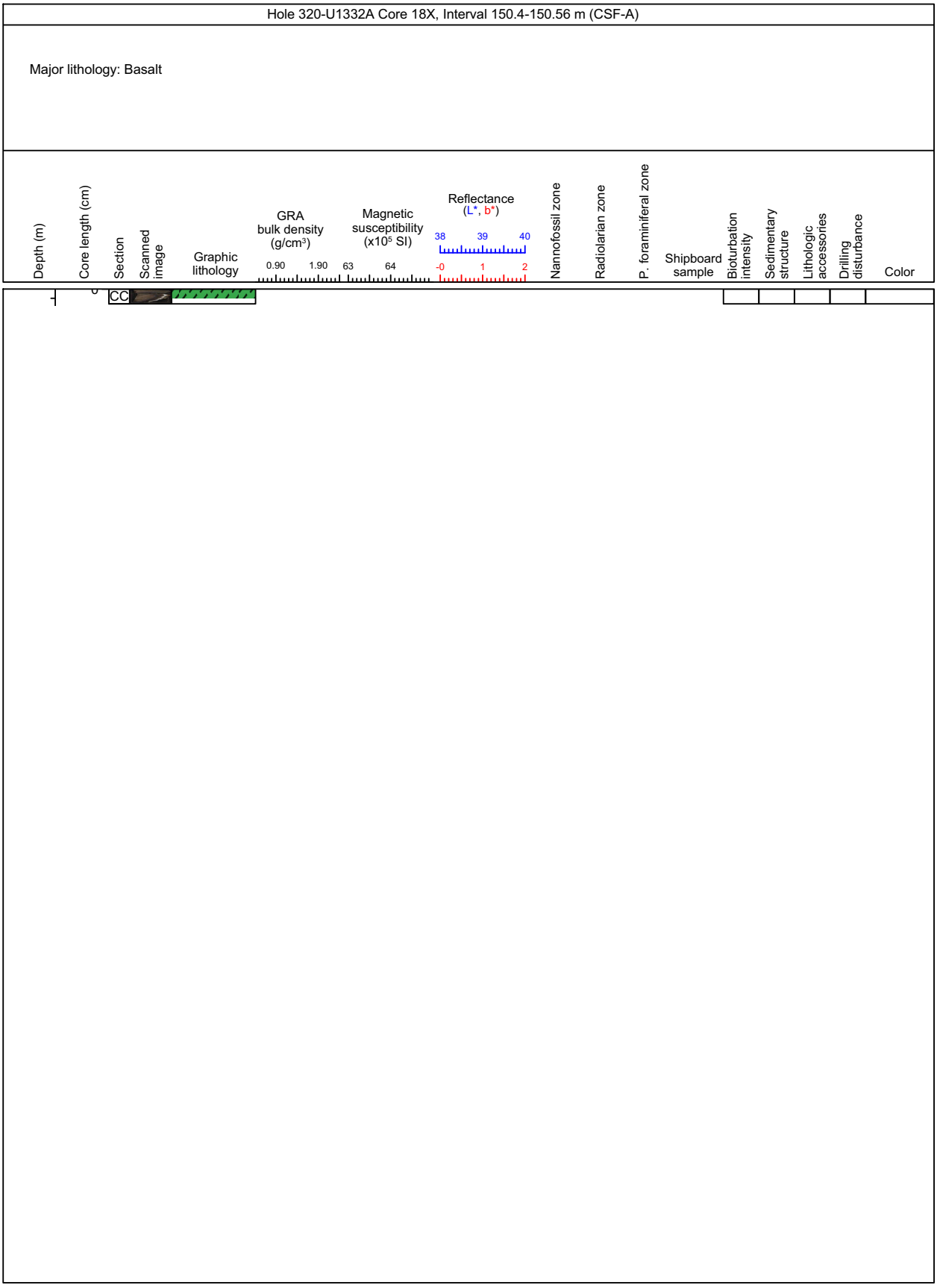
Core Photo

Hole 320-U1332A Core 17X, Interval 144.5-148.26 m (CSF-A)

Major lithology: Clay; porcellanite. Minor lithology: Basalt. Porcellanite is present at top of core. Very dark grayish brown to black clay overlies basalt.



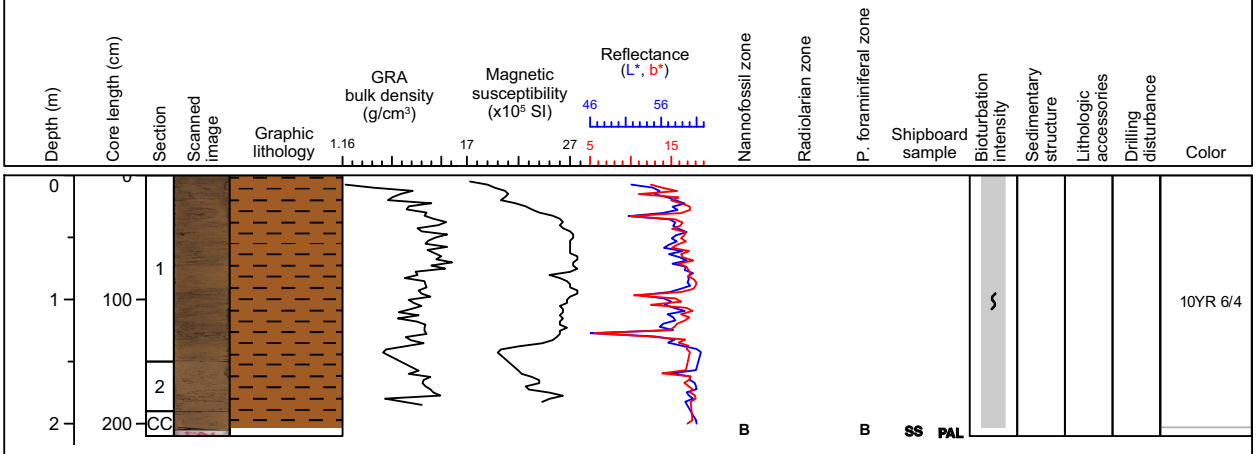
Core Photo


Hole 320-U1332A Core 18X, Interval 150.4-150.56 m (CSF-A)
Major lithology: Basalt
Depth (m)
Core length (cm)
Section
Scanned image
Graphic lithology
GRA bulk density (g/cm³)
0.90
1.90
Magnetic susceptibility (x10⁵ SI)
63
64
Reflectance (L*, b*)
38
39
40
-0
1
2
Nannofossil zone
Radiolarian zone
P. foraminiferal zone
Shipboard sample
Bioturbation intensity
Sedimentary structure
Lithologic accessories
Drilling disturbance
Color
CC

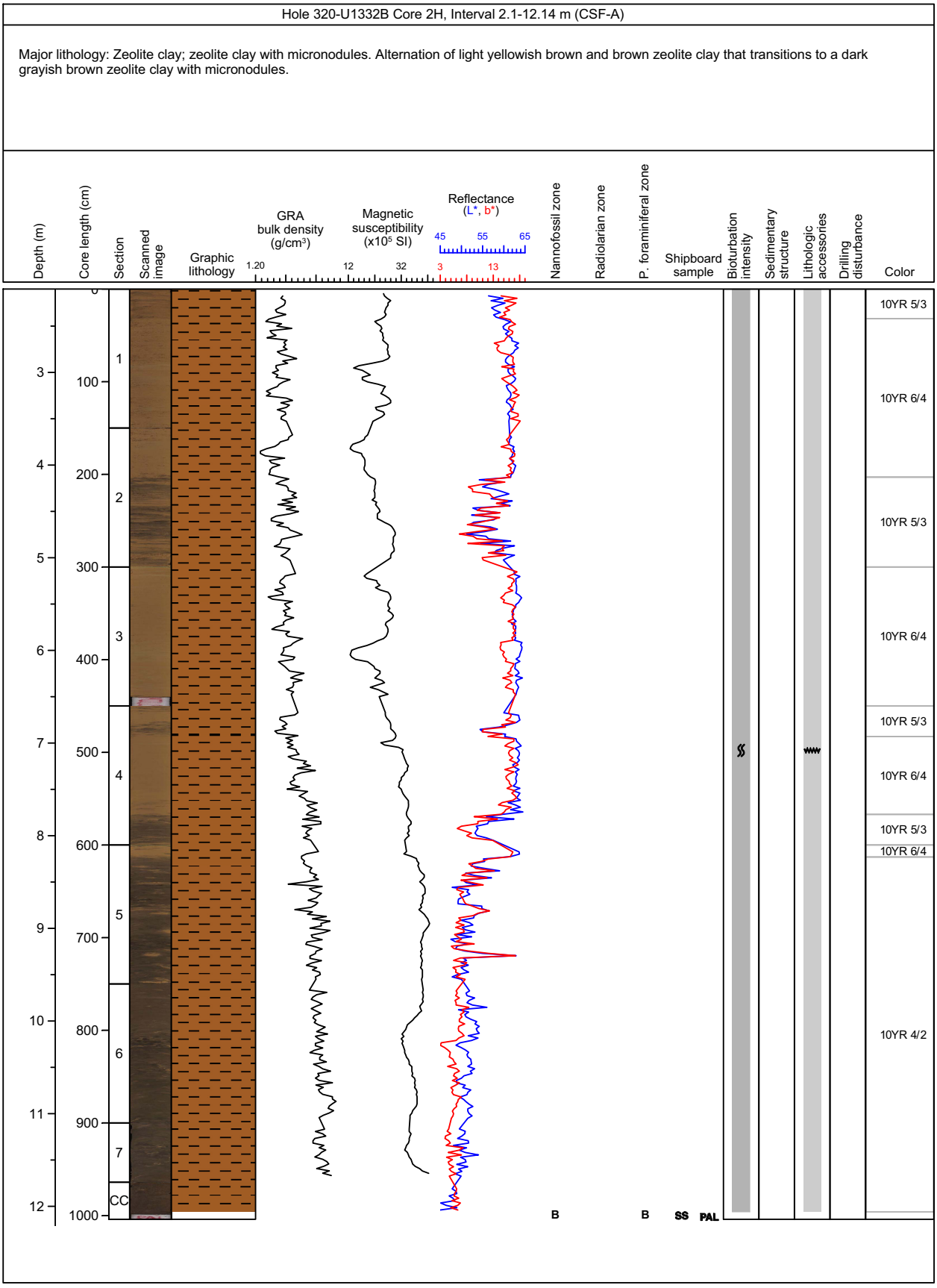
Core Photo

Hole 320-U1332B Core 1H, Interval 0.0-2.1 m (CSF-A)

Major lithology: Clay with radiolarians. Homogeneous light yellowish brown clay with radiolarians.



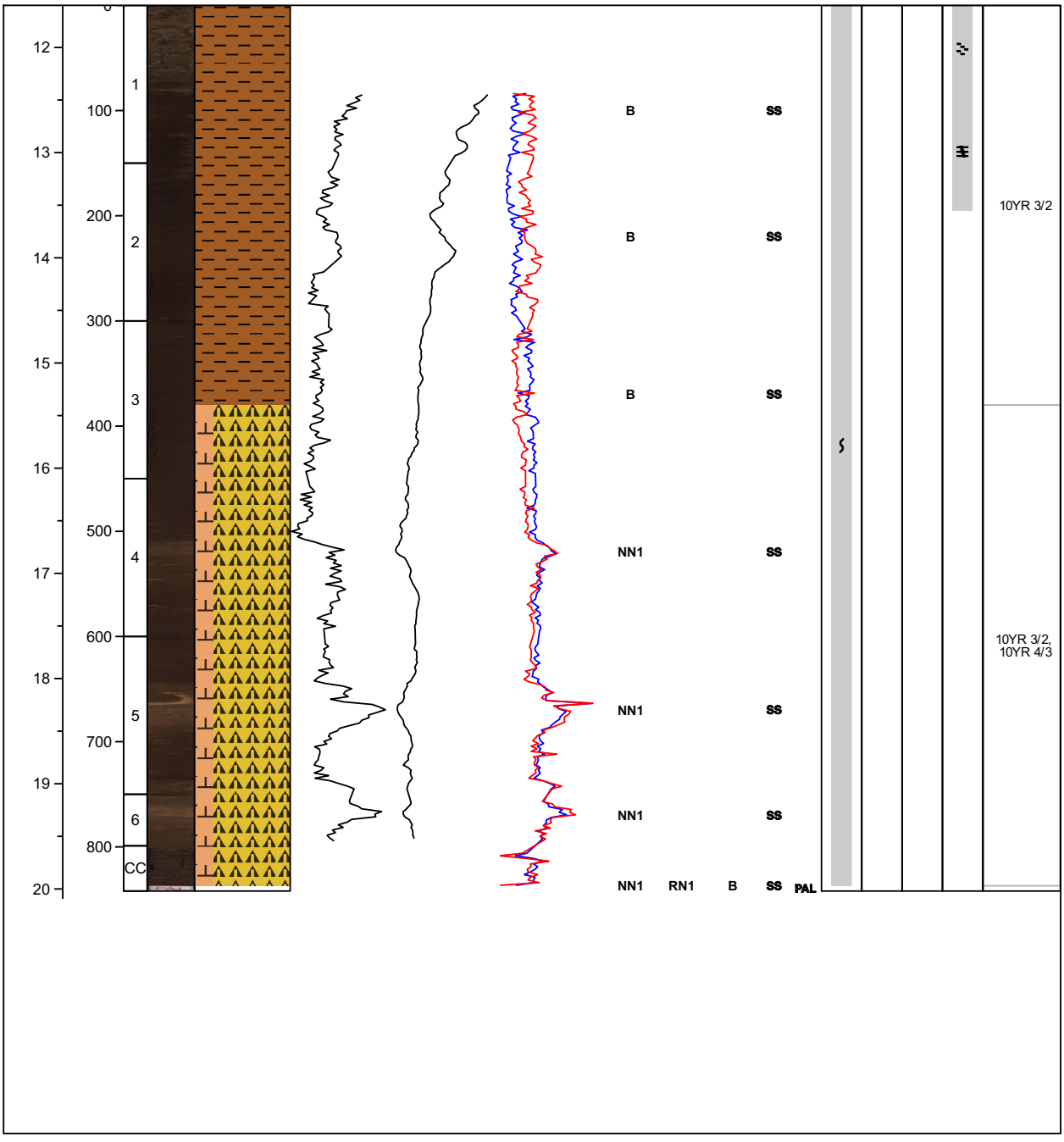
Core Photo


Hole 320-U1332B Core 2H, Interval 2.1-12.14 m (CSF-A)
Major lithology: Zeolite clay; zeolite clay with micronodules. Alternation of light yellowish brown and brown zeolite clay that transitions to a dark grayish brown zeolite clay with micronodules.
Depth (m)
Core length (cm)
Section
Scanned image
Graphic lithology
GRA bulk density (g/cm³)
1.20
12
Magnetic susceptibility (x10⁵ SI)
32
Reflectance (L*, b*)
45
55
65
3
13
Nannofossil zone
Radiolarian zone
P. foraminiferal zone
Shipboard sample
Bioturbation intensity
Sedimentary structure
Lithologic accessories
Drilling disturbance
Color
10YR 5/3
10YR 6/4
10YR 5/3
10YR 6/4
10YR 5/3
10YR 6/4
10YR 5/3
10YR 6/4
10YR 4/2
B
B
SS
PAL

Core Photo

Hole 320-U1332B Core 3H, Interval 11.6-20.02 m (CSF-A)

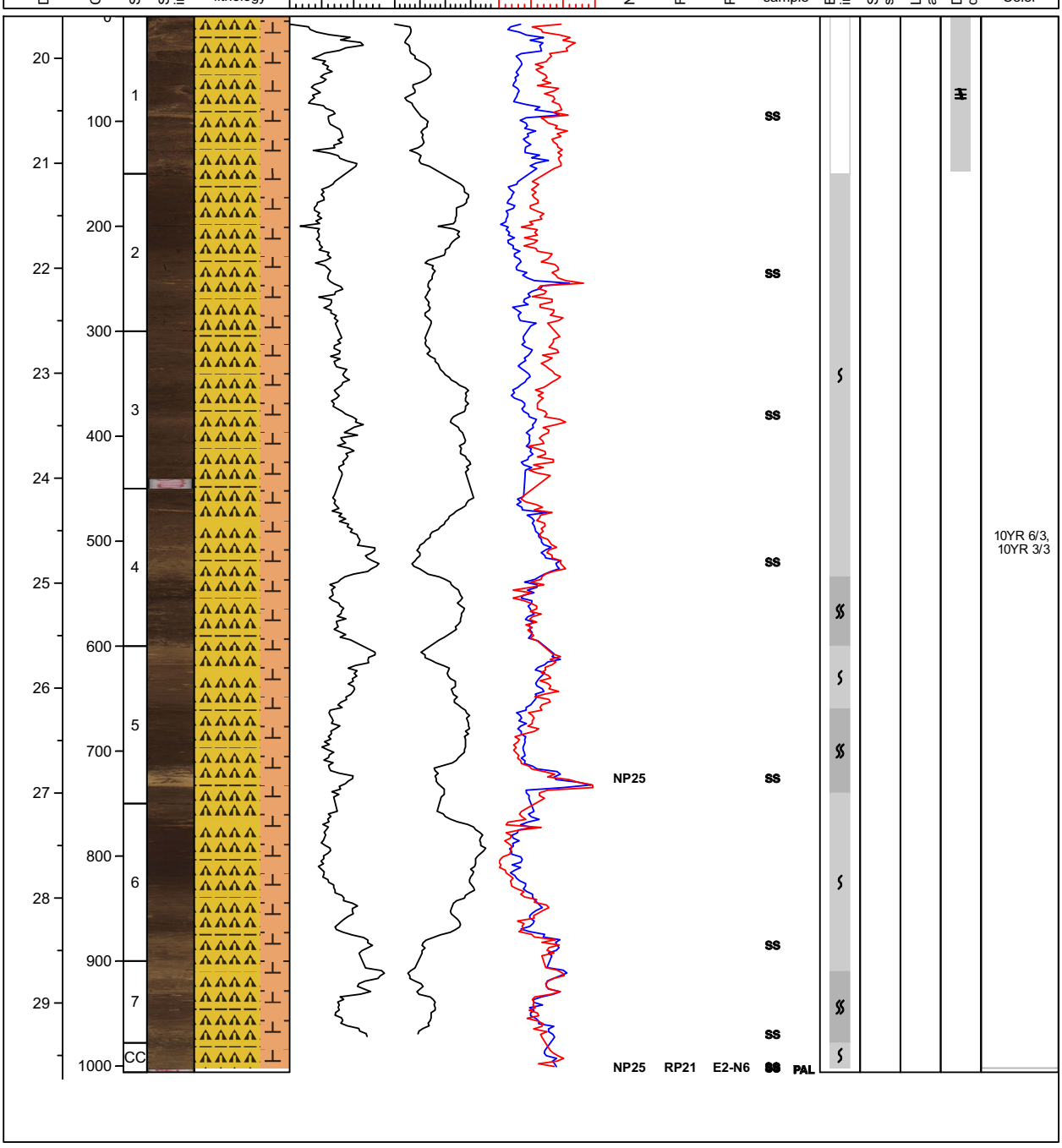
Major lithology: Zeolite clay; radiolarian ooze with zeolite. Minor lithology: Radiolarian nannofossil ooze. Very dark brown zeolite clay and alternating sequence of very dark brown radiolarian ooze with zeolite and brown radiolarian nannofossil ooze.



Core Photo

Hole 320-U1332B Core 4H, Interval 19.6-29.66 m (CSF-A)

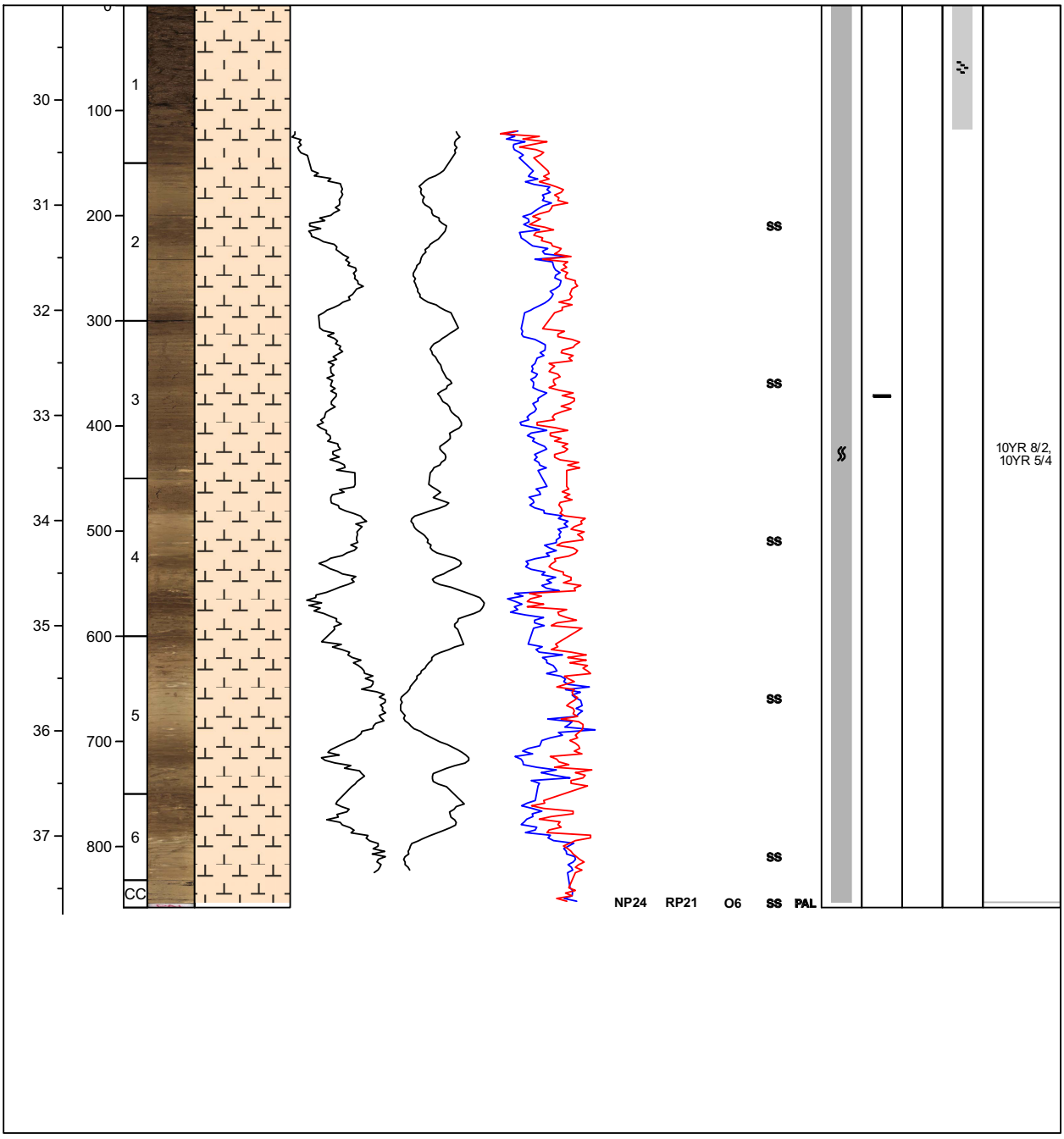
Major lithology: Clayey radiolarian ooze; radiolarian nannofossil ooze with clay. Alternation of dark brown clayey radiolarian ooze and pale brown radiolarian nannofossil ooze with clay.



Core Photo

Hole 320-U1332B Core 5H, Interval 29.1-37.68 m (CSF-A)

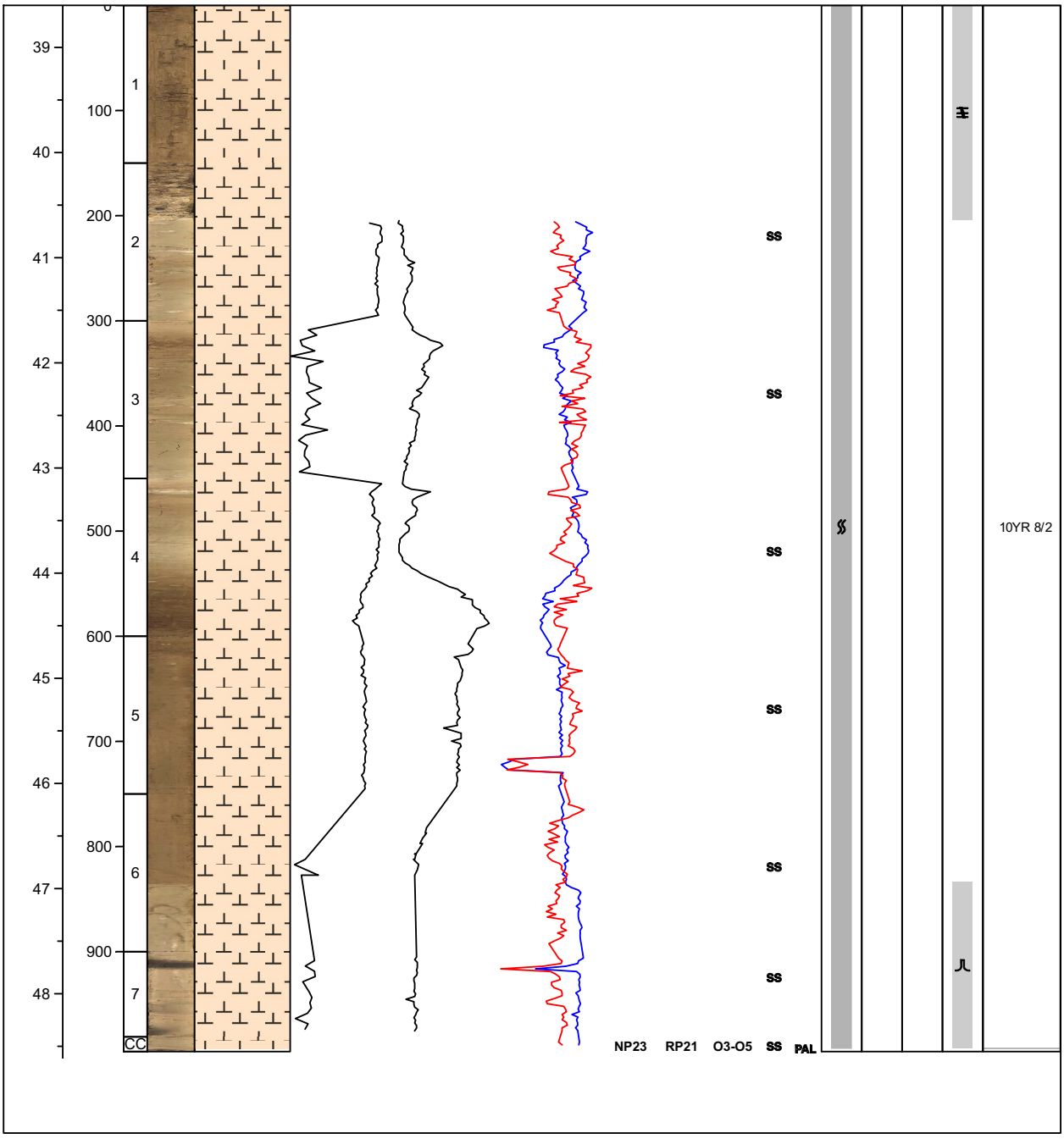
Major lithology: Nannofossil ooze with radiolarians; nannofossil ooze. Alternation of dark yellowish brown nannofossil ooze with radiolarians and very pale brown nannofossil ooze. A sharp bounday described by color change and no lithologic change is present.



Core Photo

Hole 320-U1332B Core 6H, Interval 38.6-48.55 m (CSF-A)

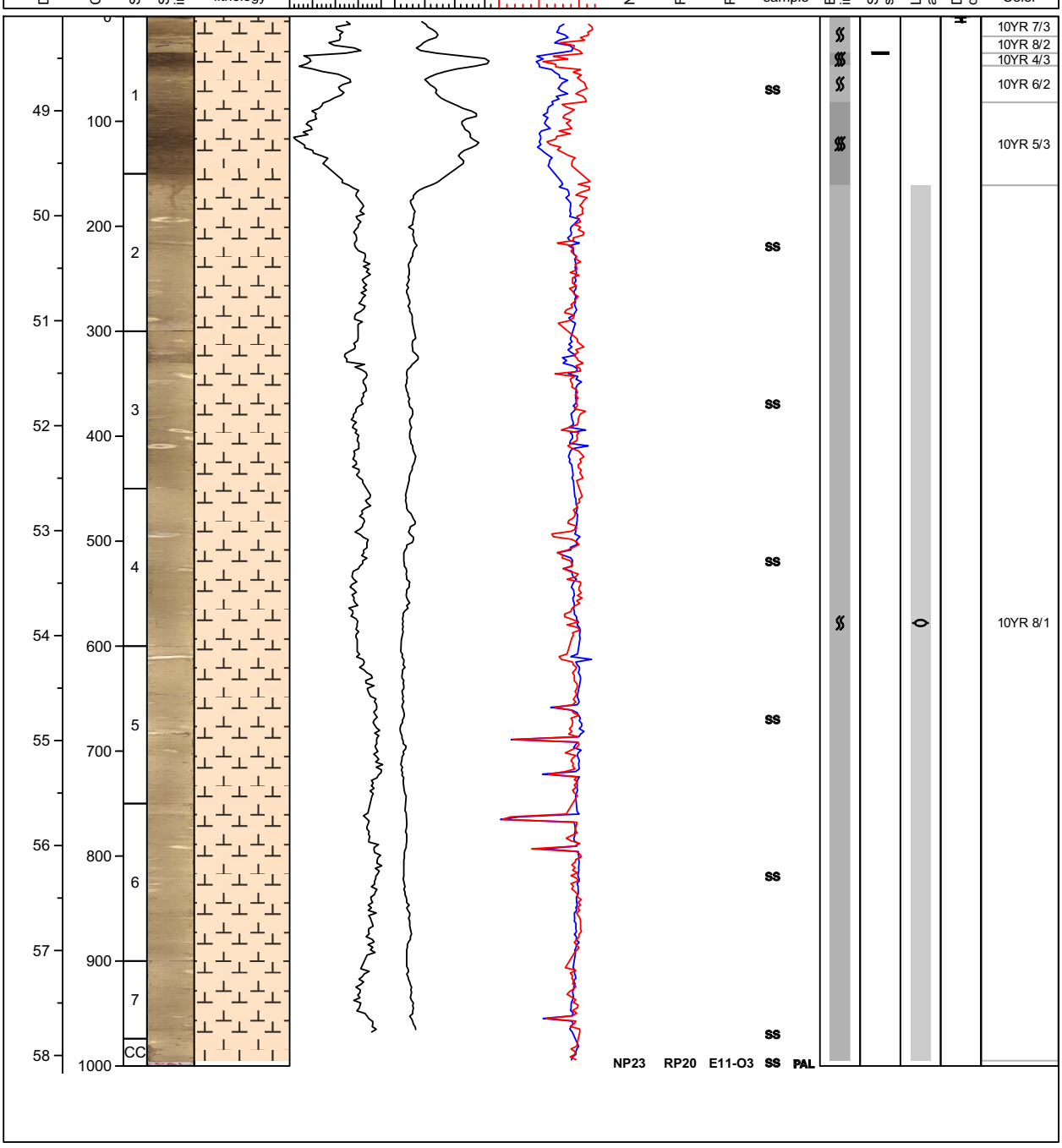
Major lithology: Nannofossil ooze with radiolarians; nannofossil ooze. Alternation of dark yellowish brown nannofossil ooze with radiolarians and very pale brown nannofossil ooze.



Core Photo

Hole 320-U1332B Core 7H, Interval 48.1-58.1 m (CSF-A)

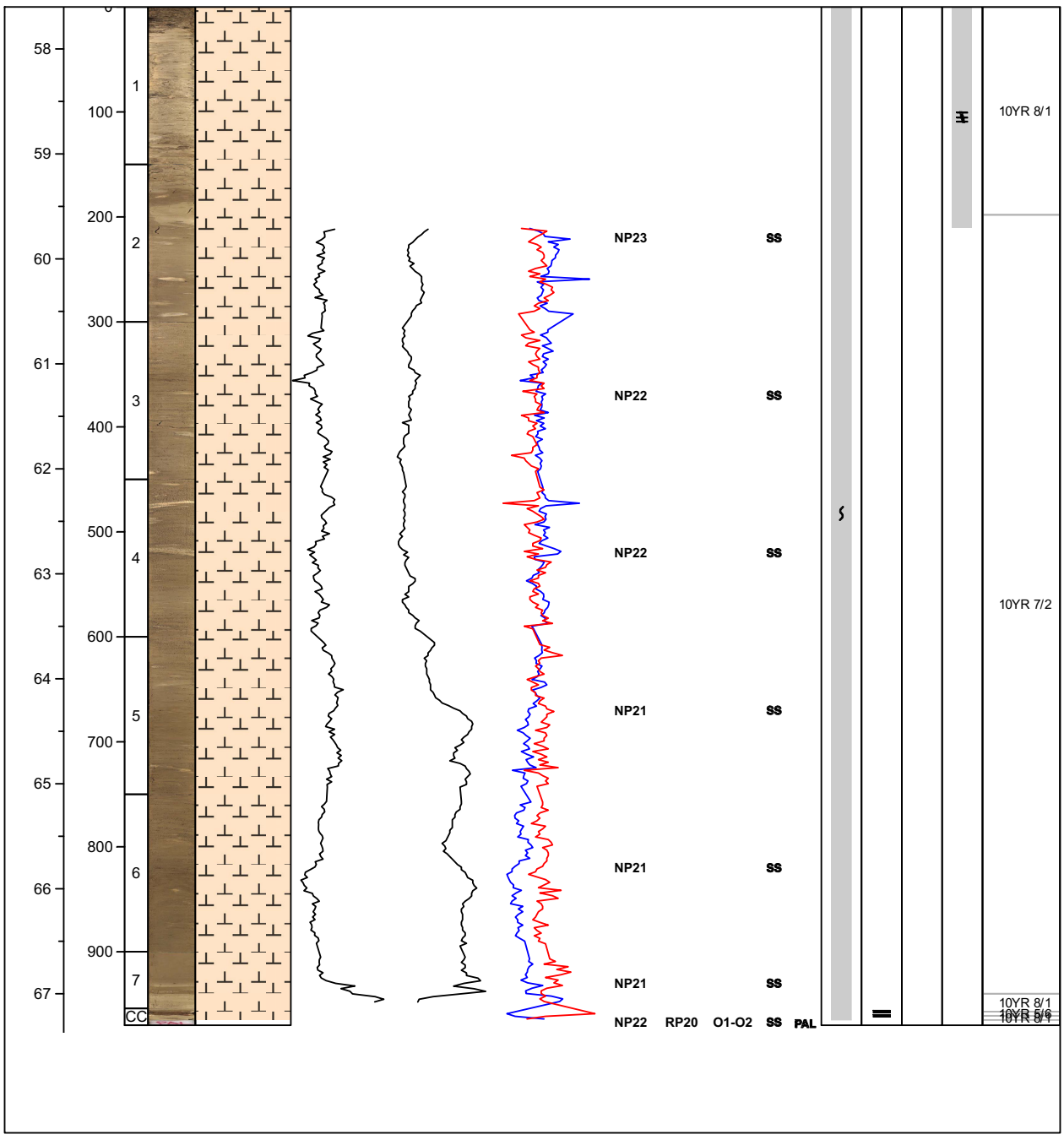
Major lithology: Nannofossil ooze; nannofossil ooze with radiolarians. Alternation of very pale brown, light brownish gray, and white nannofossil ooze and very pale brown and brown nannofossil ooze with radiolarians. Alteration halos are common throught light colored nannofossil oozes.



Core Photo

Hole 320-U1332B Core 8H, Interval 57.6-67.3 m (CSF-A)

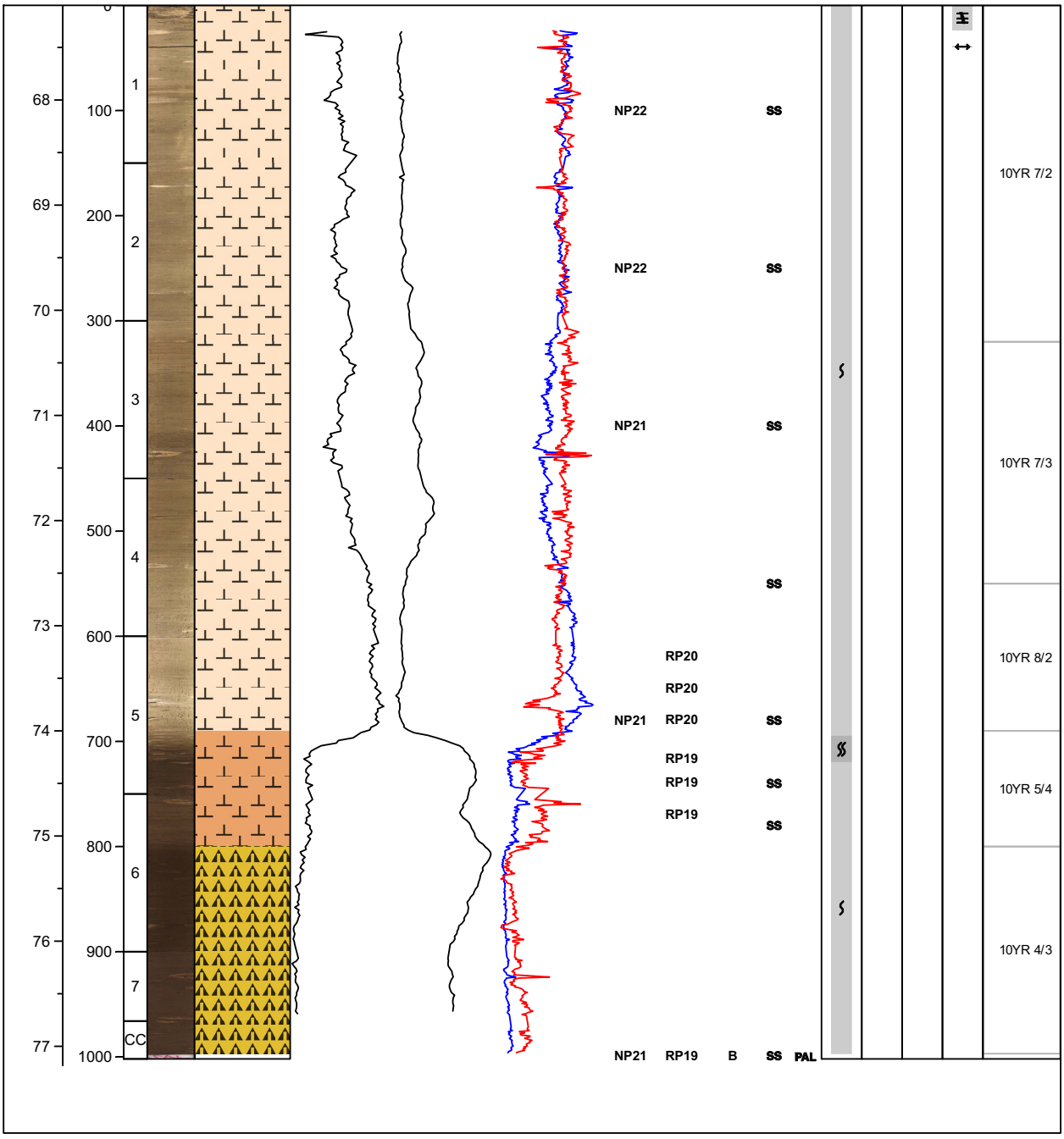
Major lithology: Nannofossil ooze; nannofossil ooze with diatoms and radiolarians. Very pale brown nannofossil ooze alternating with light gray nannofossil ooze with radiolarians and diatoms.



Core Photo

Hole 320-U1332B Core 9H, Interval 67.1-77.12 m (CSF-A)

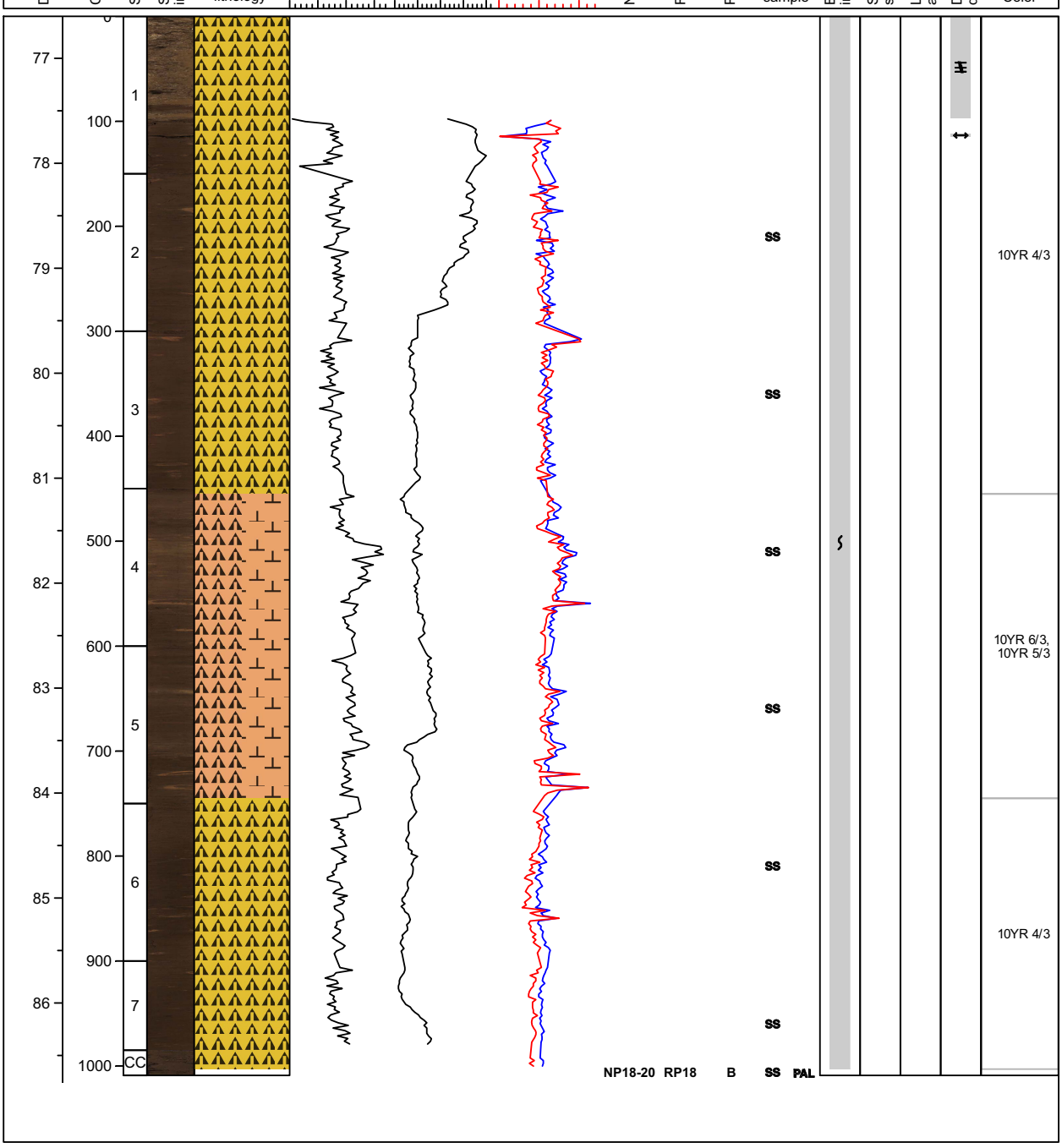
Major lithology: Nannofossil ooze; radiolarian ooze. Light gray and very pale brown nannofossil ooze transition down core to yellowish brown radiolarian nannofossil ooze and brown radiolarian ooze.



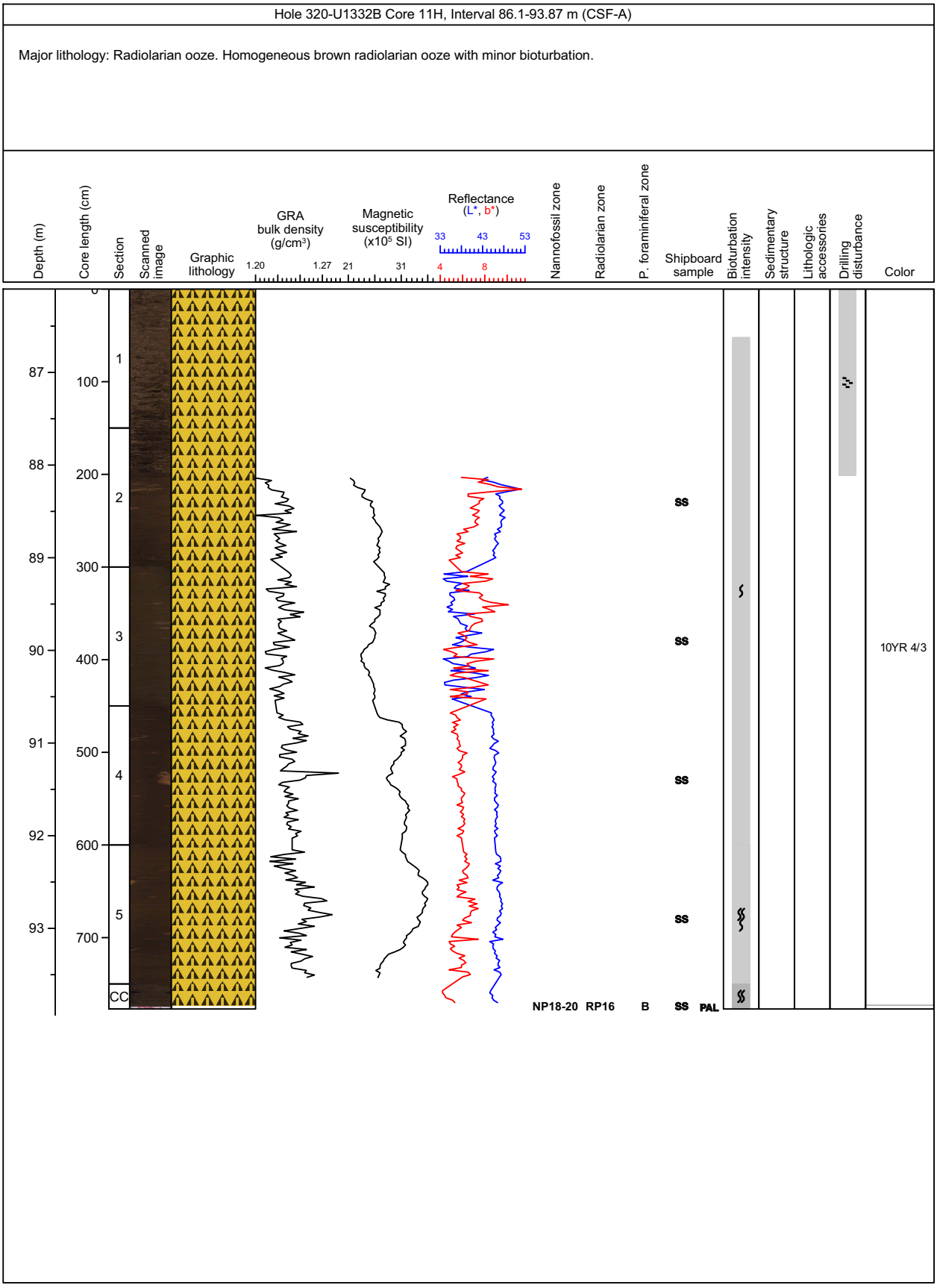
Core Photo

Hole 320-U1332B Core 10H, Interval 76.6-86.69 m (CSF-A)

Major lithology: Radiolarian ooze; nannofossil radiolarian ooze; radiolarian nannofossil ooze. Brown radiolarian ooze transitions to alternating sequence of pale brown radiolarian nannofossil ooze and brown nannofossil radiolarian ooze.



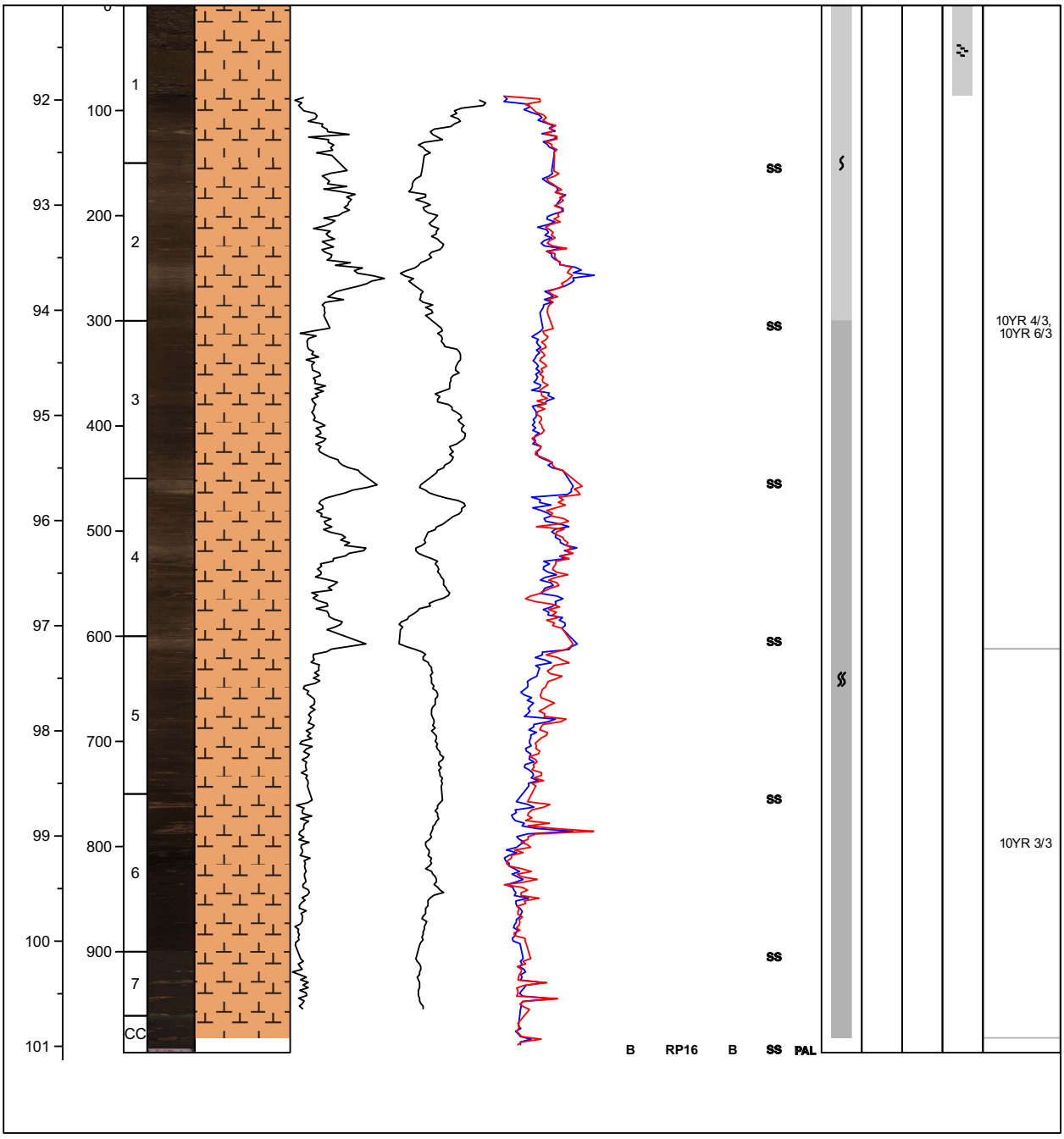
Core Photo


Hole 320-U1332B Core 11H, Interval 86.1-93.87 m (CSF-A)
Major lithology: Radiolarian ooze. Homogeneous brown radiolarian ooze with minor bioturbation.
Depth (m)
Core length (cm)
Section
Scanned image
Graphic lithology
GRA bulk density (g/cm³)
1.20
1.27
Magnetic susceptibility (x10⁵ SI)
21
31
Reflectance (L*, b*)
33
43
53
4
8
Nannofossil zone
Radiolarian zone
P. foraminiferal zone
Shipboard sample
Bioturbation intensity
Sedimentary structure
Lithologic accessories
Drilling disturbance
Color
87
88
89
90
91
92
93
100
200
300
400
500
600
700
1
2
3
4
5
CC
SS
10YR 4/3
NP18-20 RP16 B SS PAL

Core Photo

Hole 320-U1332B Core 12H, Interval 91.1-101.06 m (CSF-A)

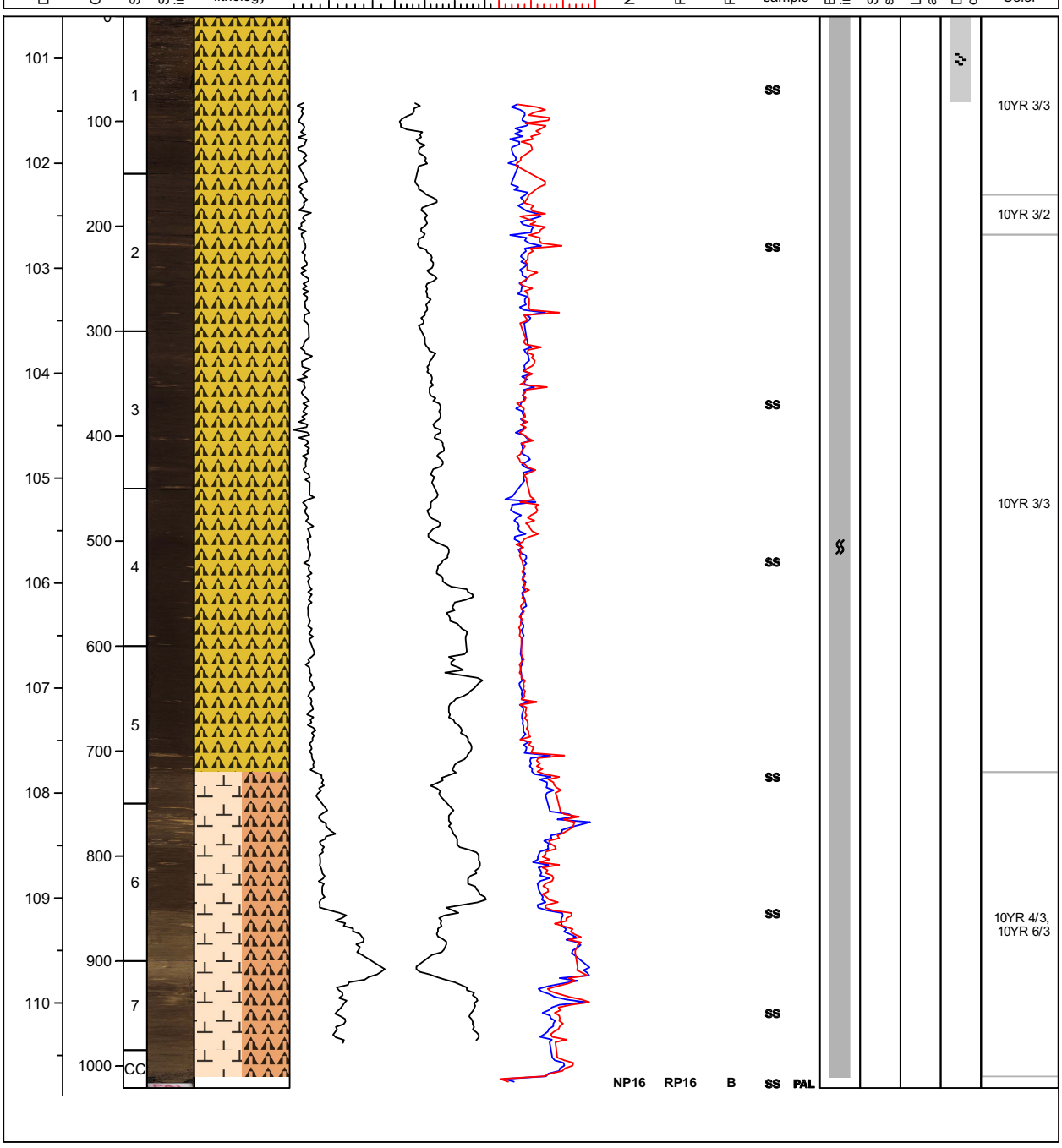
Major lithology: Radiolarian nannofossil ooze; radiolarian ooze. Alternating sequence of sub-meter scale brown and pale brown radiolarian nannofossil ooze overlying a homogeneous dark brown radiolarian ooze.



Core Photo

Hole 320-U1332B Core 13H, Interval 100.6-110.81 m (CSF-A)

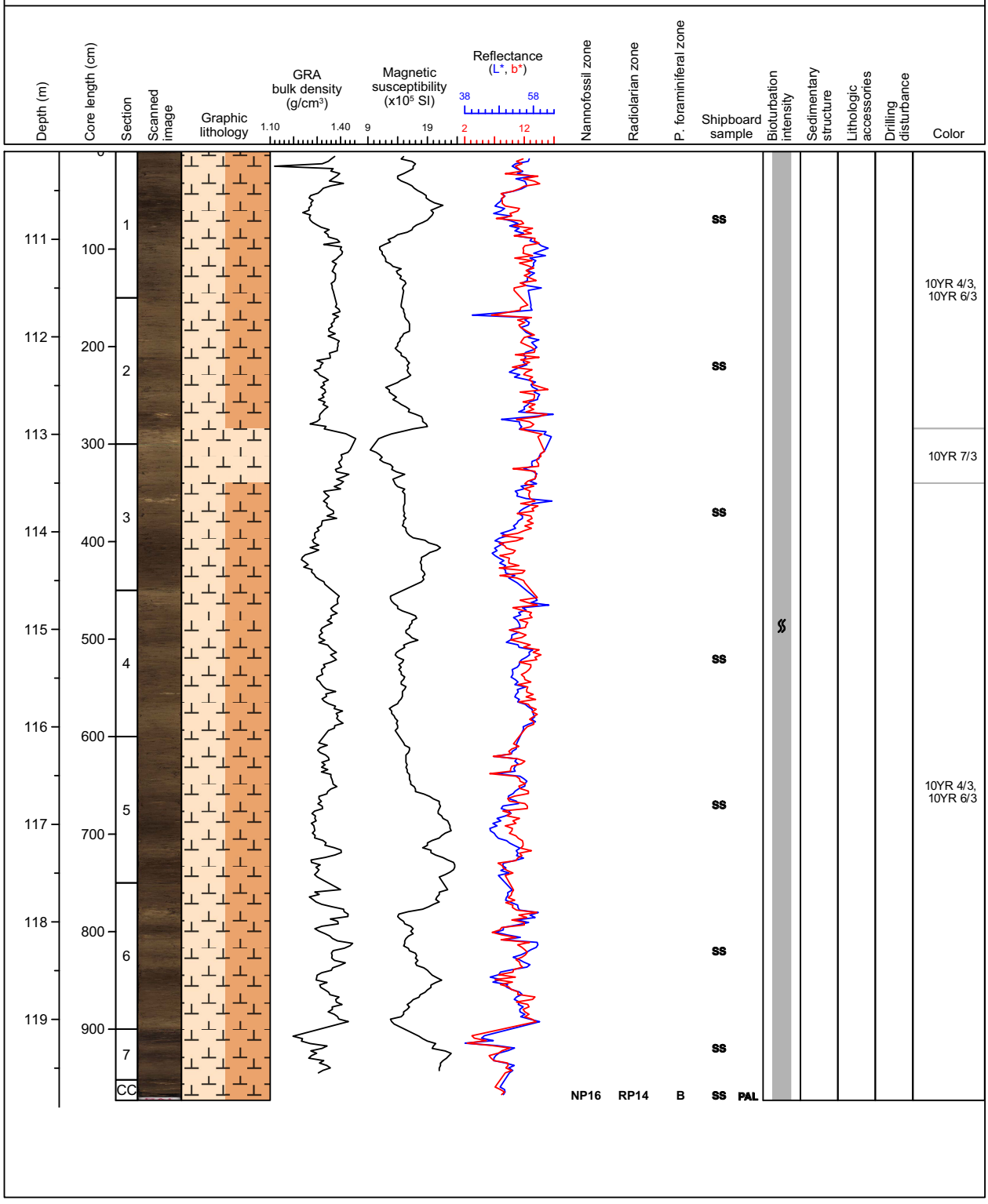
Major lithology: Radiolarian ooze; radiolarian nannofossil ooze with clay; nannofossil ooze with radiolarians. Minor lithology: Radiolarian ooze with clay. Homogeneous dark brown radiolarian ooze transitioning to 0.5 m scale alternations between brown radiolarian nannofossil ooze with clay and pale brown nannofossil radiolarian ooze. Three cm-scale, firm very dark brown radiolarian clay layers are present. Three distinct layers of radiolarian ooze with clay are present in Section 2.



Core Photo

Hole 320-U1332B Core 14X, Interval 110.1-119.83 m (CSF-A)

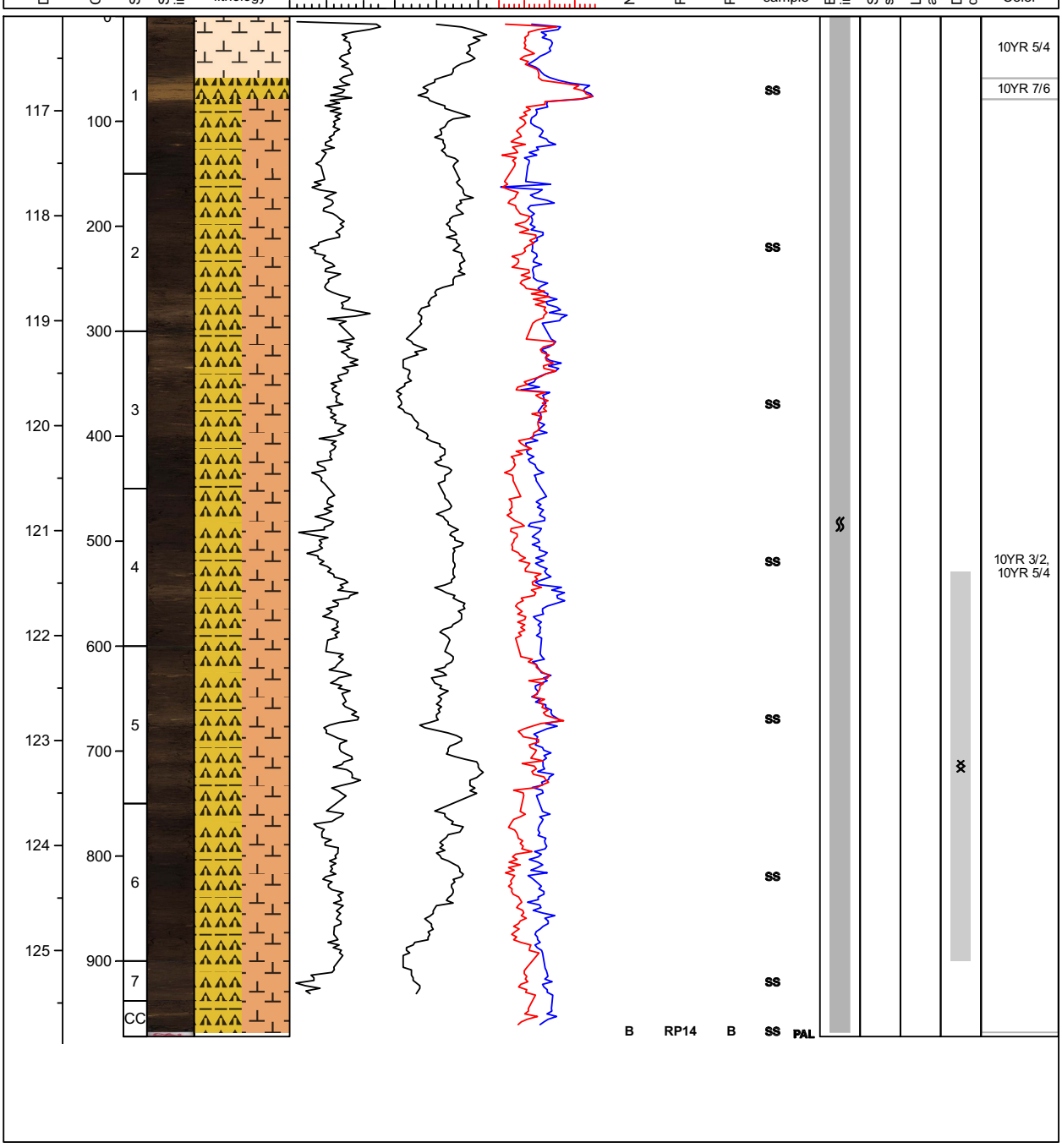
Major lithology: Radiolarian nannofossil ooze; nannofossil ooze with radiolarians. Alternating sequence of sub-meter scale of brown radiolarian nannofossil ooze and pale brown nannofossil ooze with radiolarians.



Core Photo

Hole 320-U1332B Core 15X, Interval 116.1-125.82 m (CSF-A)

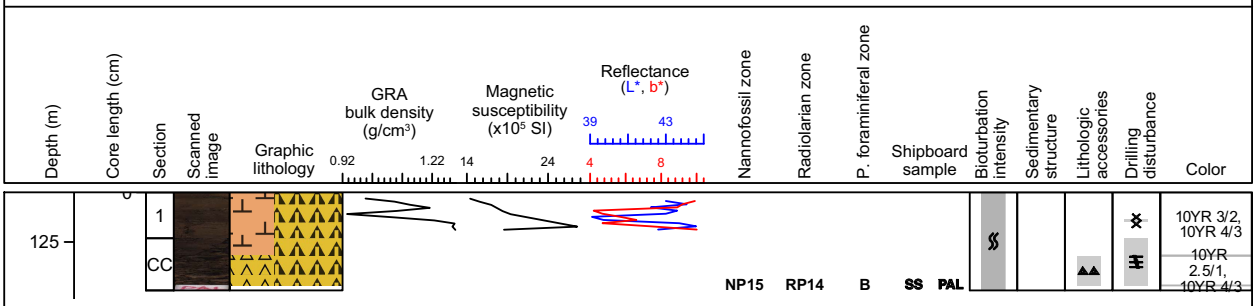
Major lithology: Radiolarian nannofossil ooze ; clayey radiolarian ooze. Minor lithology: Nannofossil ooze with radiolarians ; radiolarian ooze with nannofossils. Alternating sequence of sub-meter scale yellowish brown radiolarian nannofossil ooze with very dark grayish brown clayey radiolarian ooze underlying yellowish brown nannofossil ooze with radiolarians and yellow radiolarian ooze with nannofossils.



Core Photo

Hole 320-U1332B Core 16X, Interval 124.6-125.39 m (CSF-A)

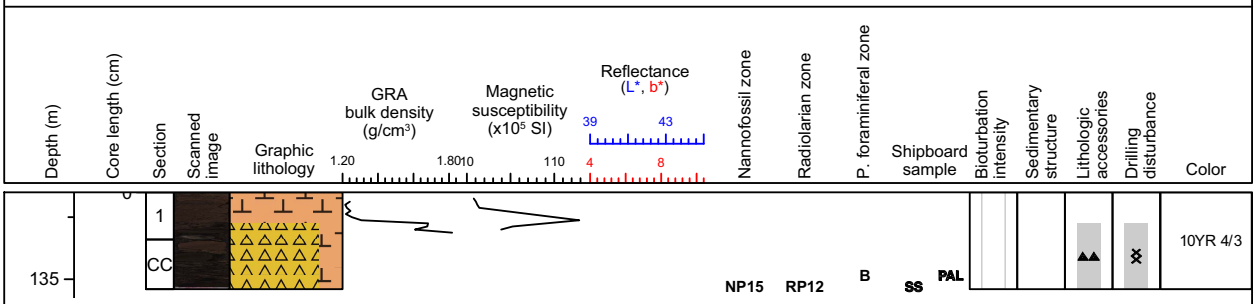
Major lithology: Radiolarian nannofossil ooze with clay and clayey radiolarian nannofossil ooze; Minor lithology: Porcellanite. Alternating brown radiolarian nannofossil ooze with clay and very dark grayish brown clayey radiolarian nannofossil ooze. Porcellanite is present at base of core.



Core Photo

Hole 320-U1332B Core 17X, Interval 134.3-135.08 m (CSF-A)

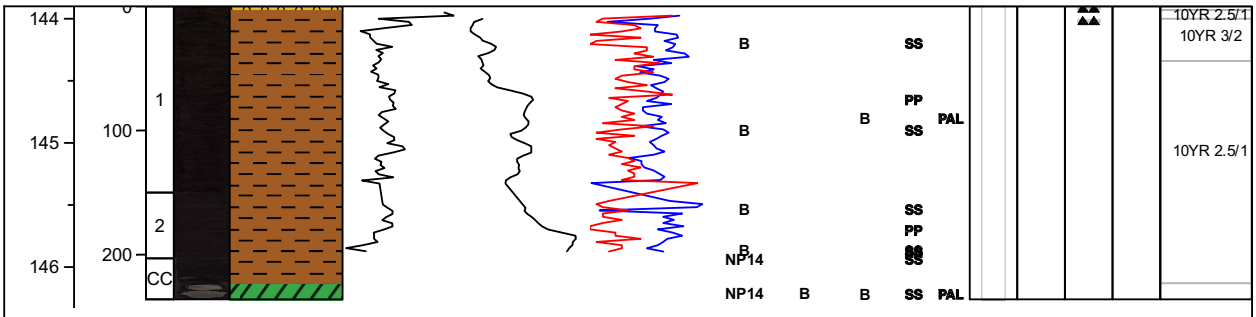
Major lithology: Radiolarian nannofossil ooze with clay; Minor lithology: Porcellanite. Brown radiolarian nannofossil ooze with clay overlies a porcellanite layer.



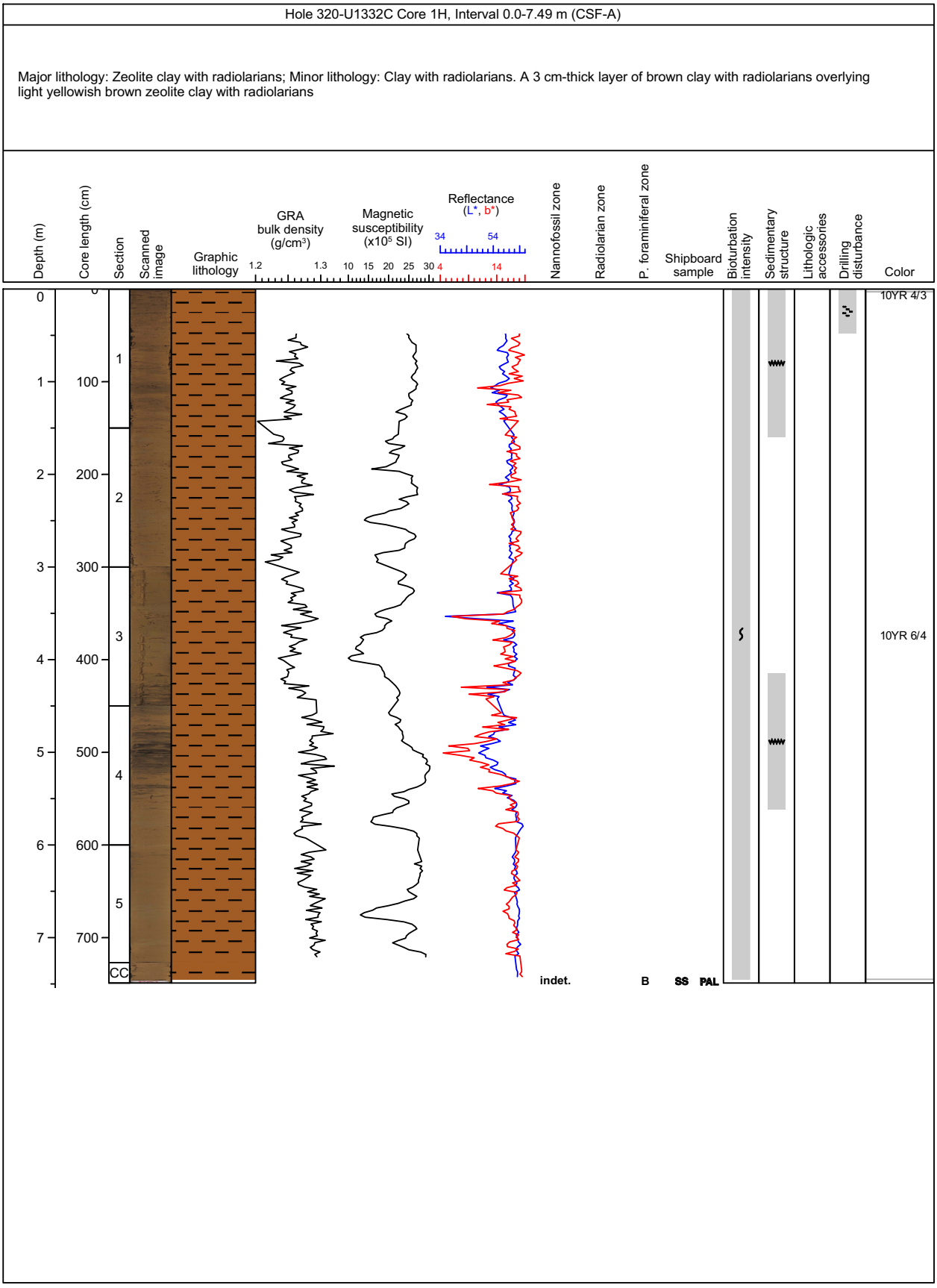
Core Photo

Hole 320-U1332B Core 18X, Interval 143.9-146.26 m (CSF-A)

Major lithology: Clay with porcellanite nodules; Minor lithology: Clay with zeolite; basalt. Very dark grayish brown clay and very dark grayish brown clay with zeolite and porcellanite overlie basalt.



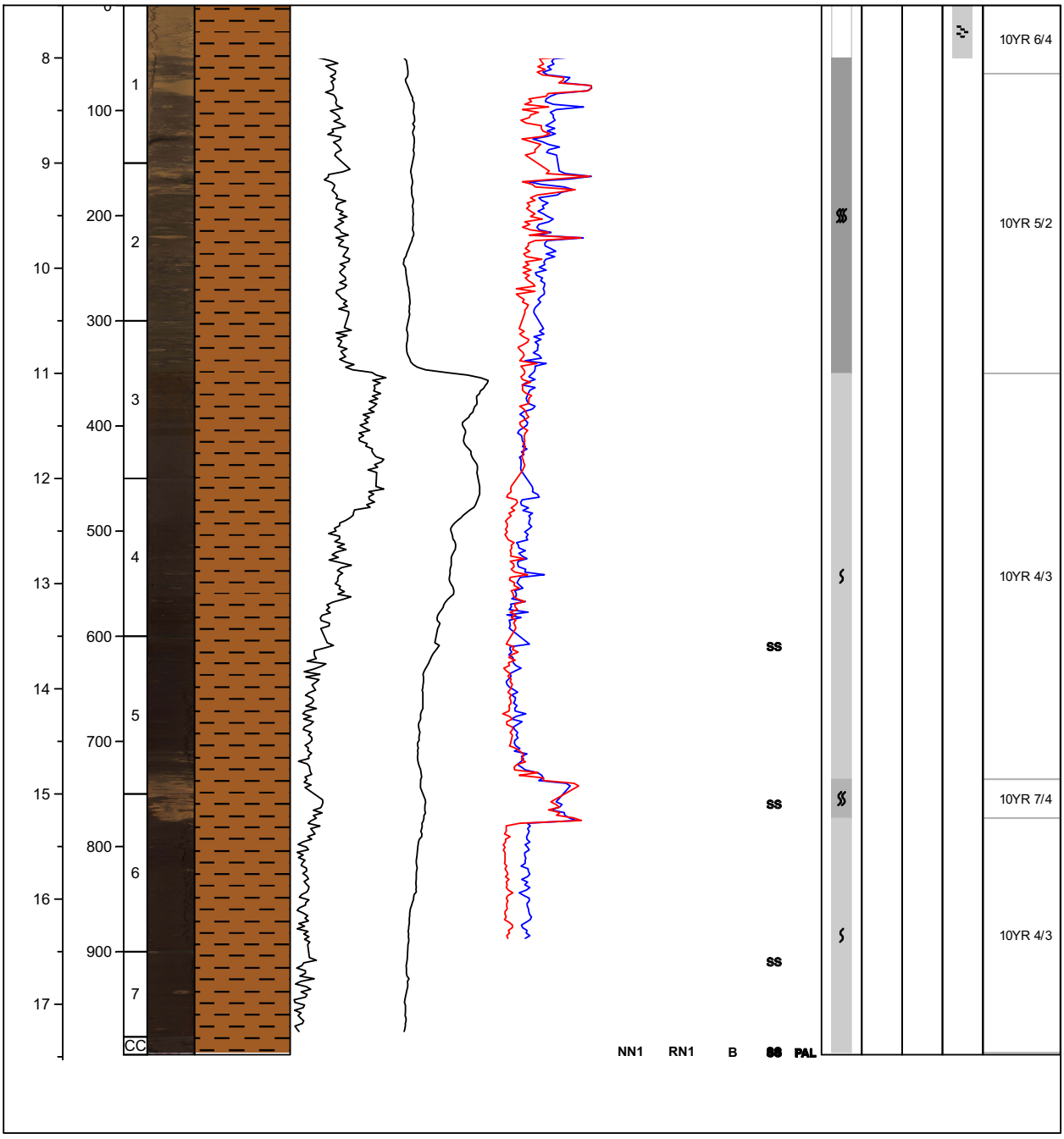
Core Photo


Hole 320-U1332C Core 1H, Interval 0.0-7.49 m (CSF-A)
Major lithology: Zeolite clay with radiolarians; Minor lithology: Clay with radiolarians. A 3 cm-thick layer of brown clay with radiolarians overlying light yellowish brown zeolite clay with radiolarians
Depth (m)
Core length (cm)
Section
Scanned image
Graphic lithology
GRA bulk density (g/cm³)
Magnetic susceptibility (x10⁵ SI)
Reflectance (L*, b*)
Nannofossil zone
Radiolarian zone
P. foraminiferal zone
Shipboard sample
Bioturbation intensity
Sedimentary structure
Lithologic accessories
Drilling disturbance
Color
10YR 4/3
10YR 6/4
indet.
B
SS
PAL
CC

Core Photo

Hole 320-U1332C Core 2H, Interval 7.5-17.48 m (CSF-A)

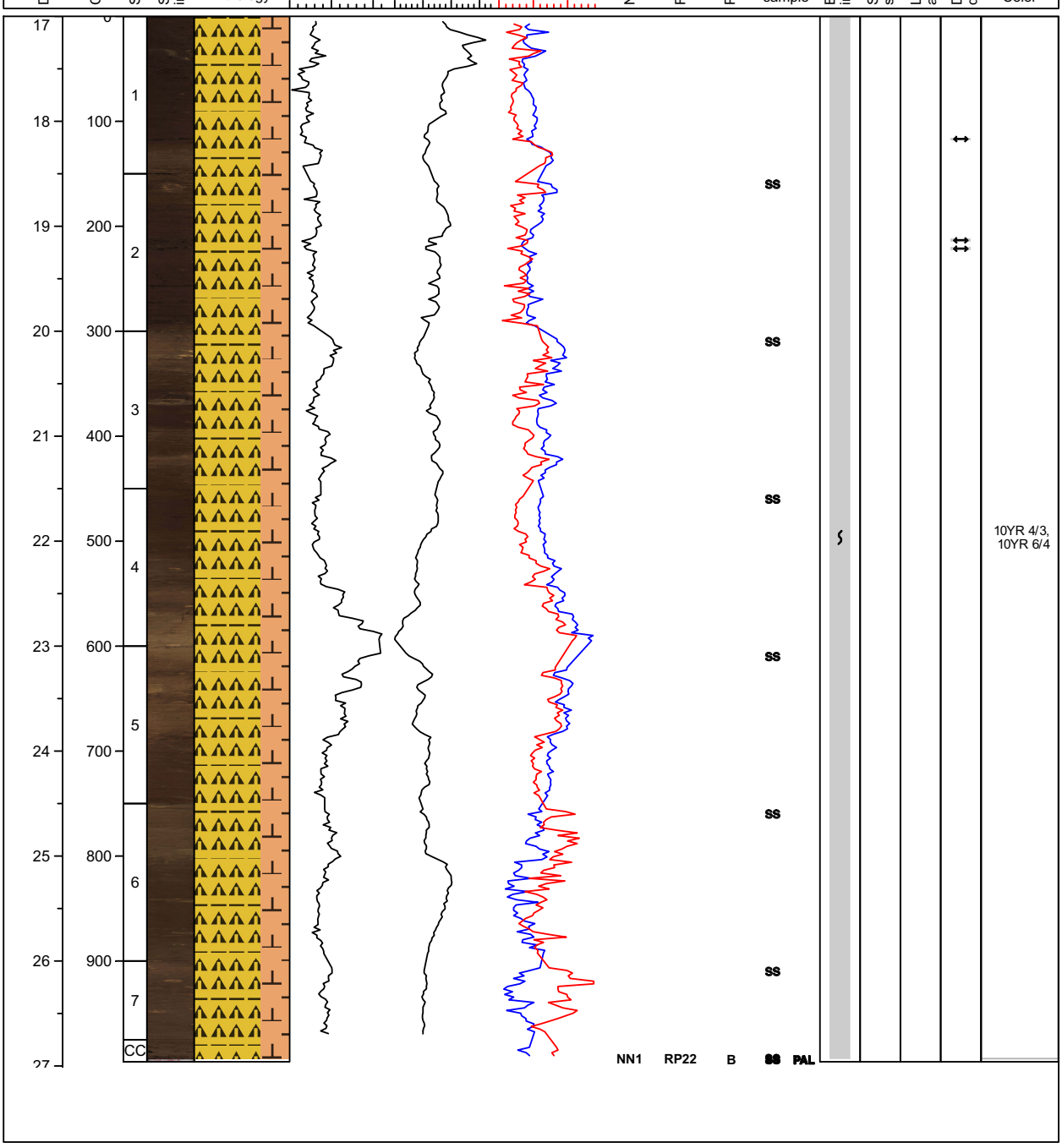
Major lithology: Zeolite clay; zeolite clay with radiolarians. Light yellowish brown zeolite clay with radiolarians grades down to brown zeolite clay.



Core Photo

Hole 320-U1332C Core 3H, Interval 17.0-26.96 m (CSF-A)

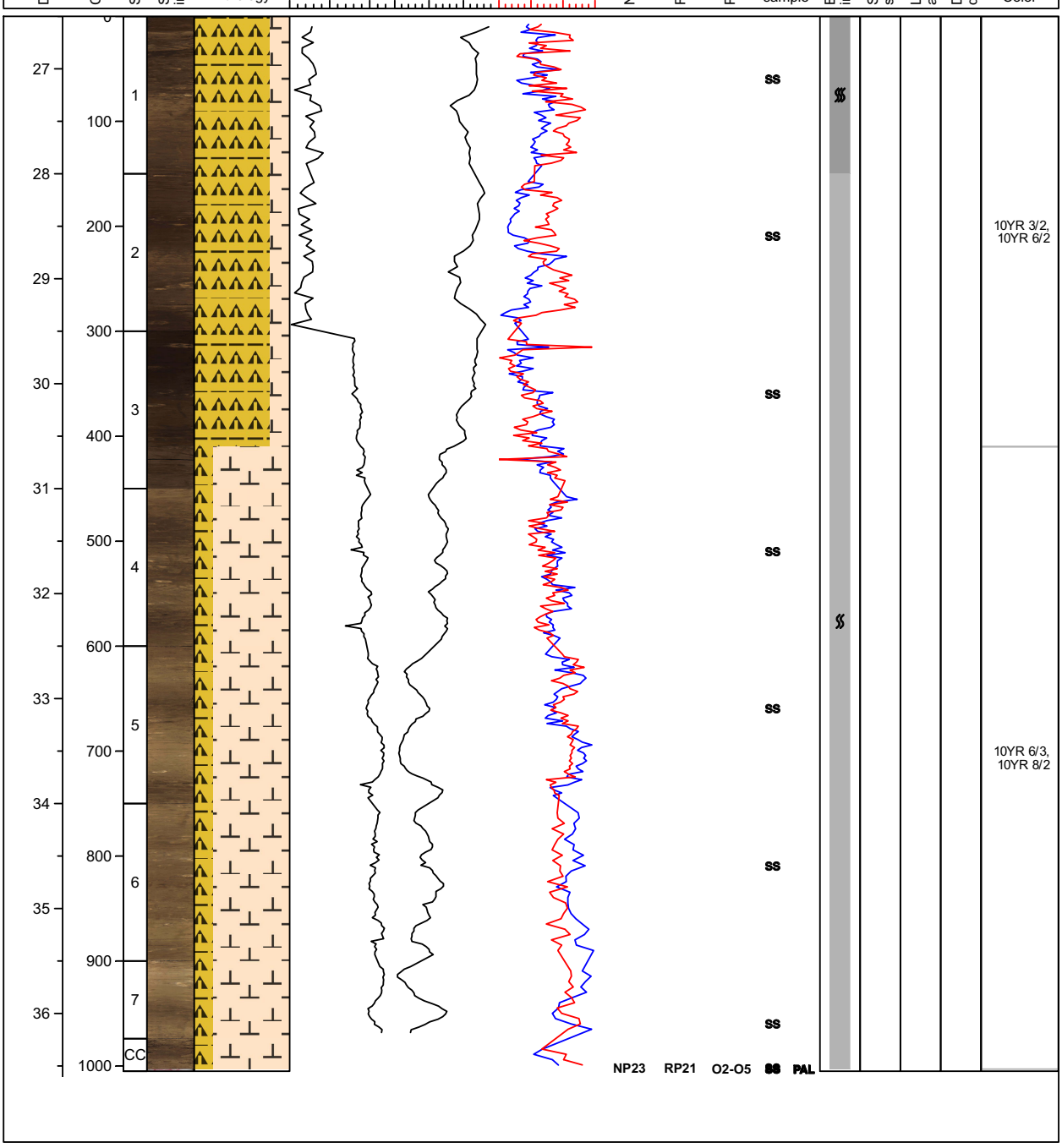
Major lithology: Clayey radiolarian ooze; radiolarian nannofossil ooze with clay. Alternating sequence of brown clayey radiolarian ooze with light yellowish brown radiolarian nannofossil ooze with clay.



Core Photo

Hole 320-U1332C Core 4H, Interval 26.5-36.55 m (CSF-A)

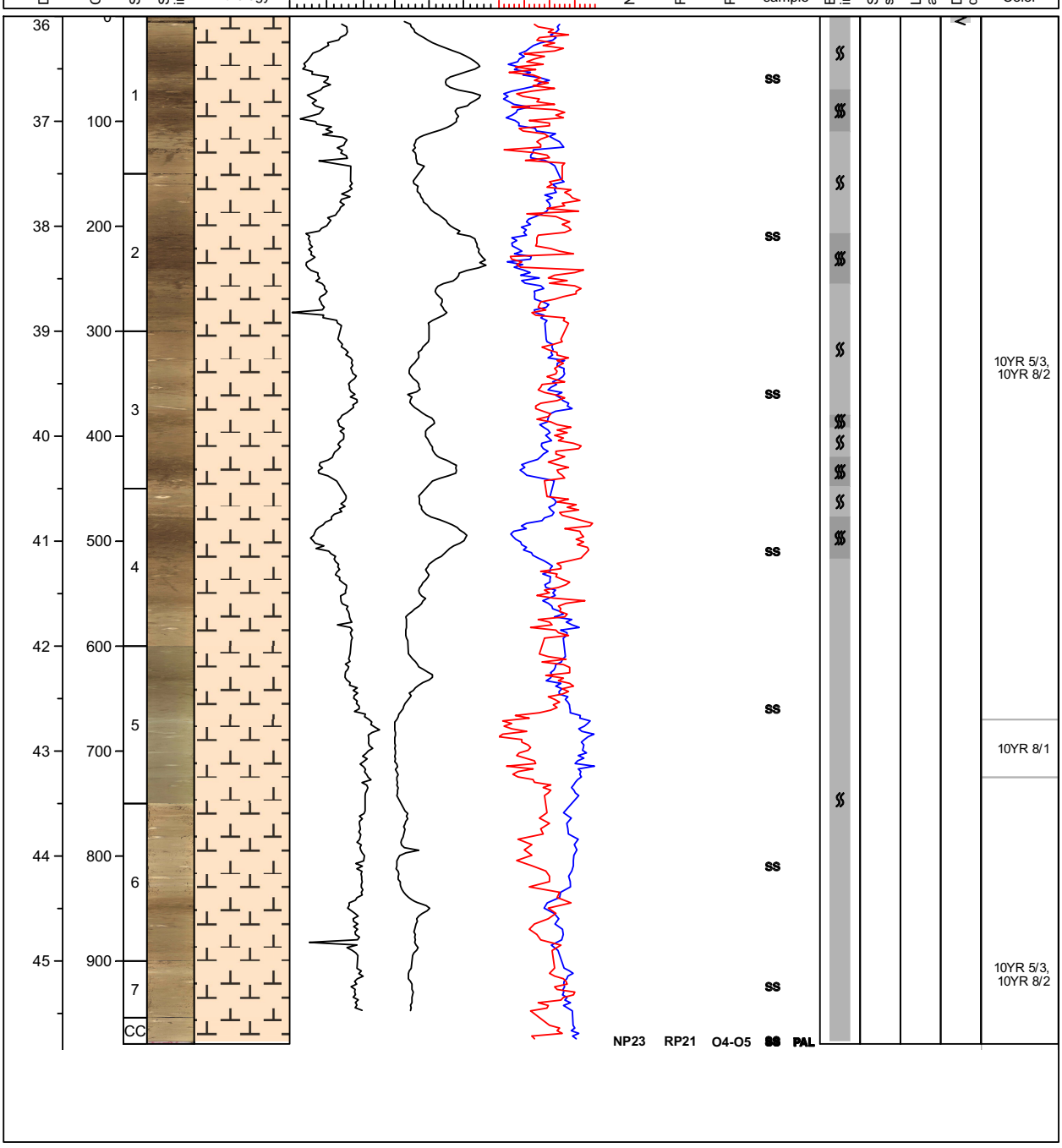
Major lithology: Clayey radiolarian ooze and nannofossil ooze with radiolarians; alternating sequence of very dark grayish brown clayey radiolarian ooze and very pale brown nannofossil ooze with radiolarians. Proportion of nannofossil ooze with radiolarians increases downward.



Core Photo

Hole 320-U1332C Core 5H, Interval 36.0-45.79 m (CSF-A)

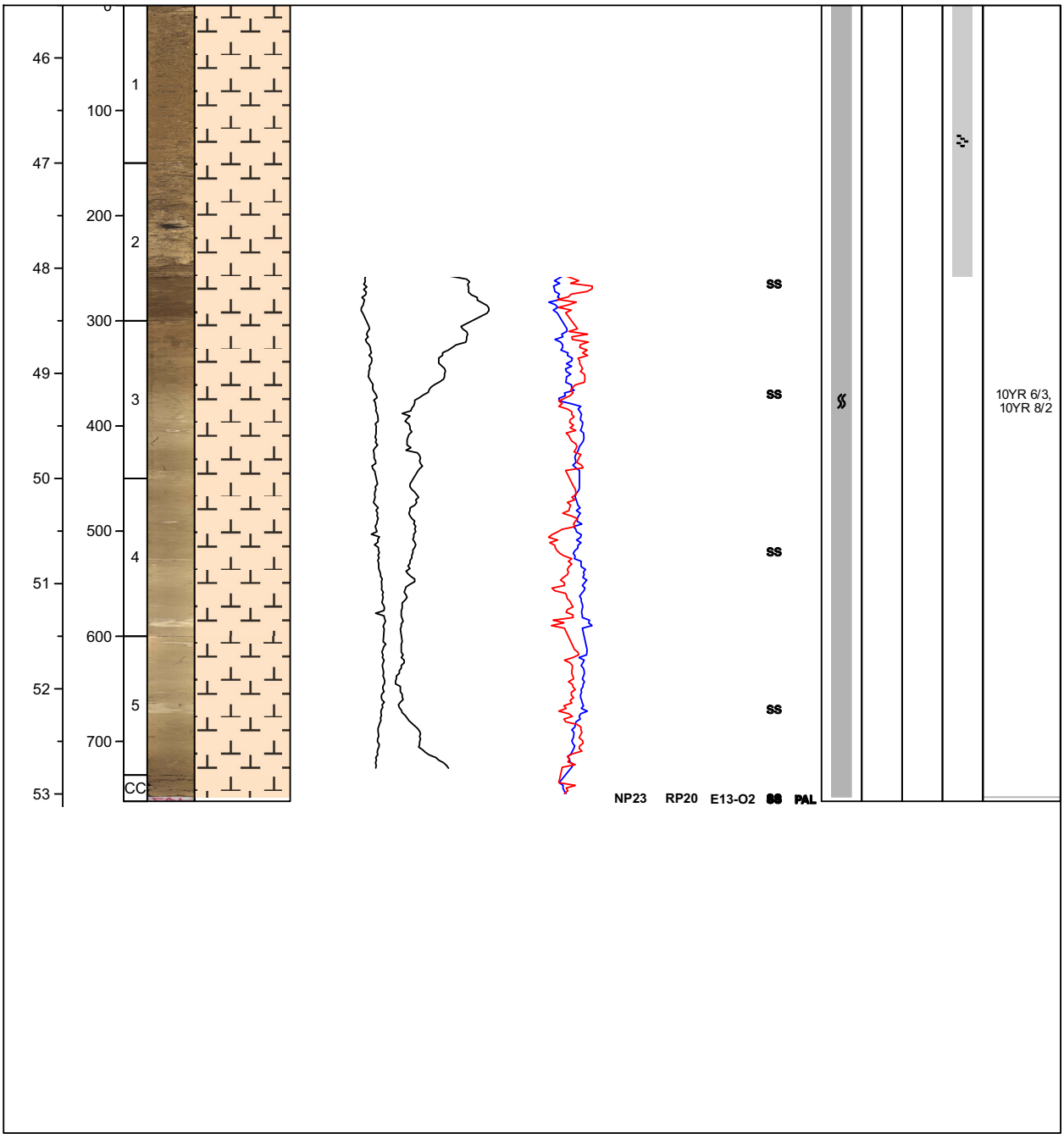
Major lithology: Nannofossil ooze; nannofossil ooze with radiolarians. Alternating sequence of very pale brown to white nannofossil ooze and pale brown nannofossil ooze with radiolarians. Proportion of nannofossil ooze increases slightly downward.



Core Photo

Hole 320-U1332C Core 6H, Interval 45.5-53.07 m (CSF-A)

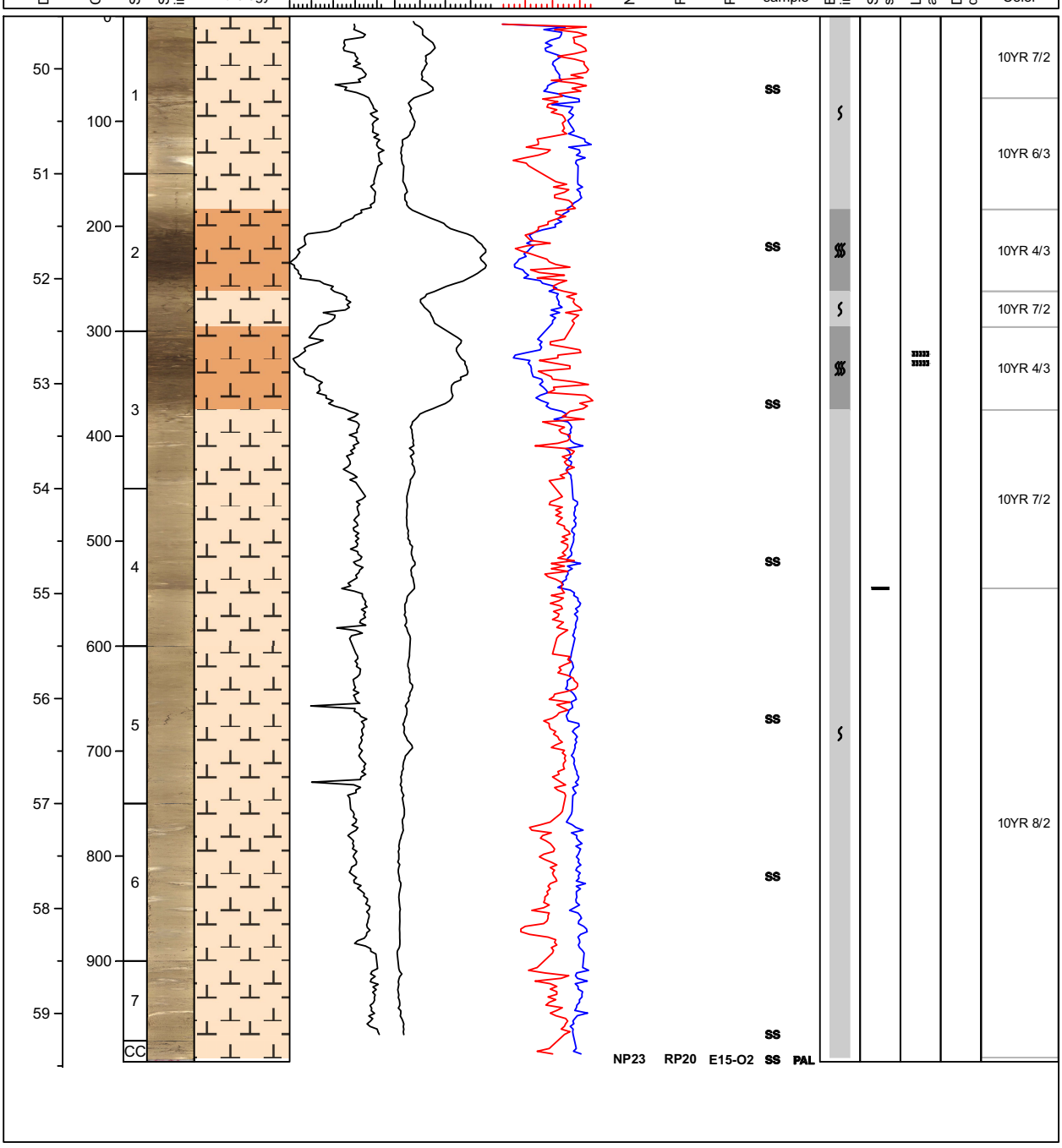
Major lithology: Nannofossil ooze. Alternating sequence of pale brown nannofossil ooze and very pale brown nannofossil ooze.



Core Photo

Hole 320-U1332C Core 7H, Interval 49.5-59.46 m (CSF-A)

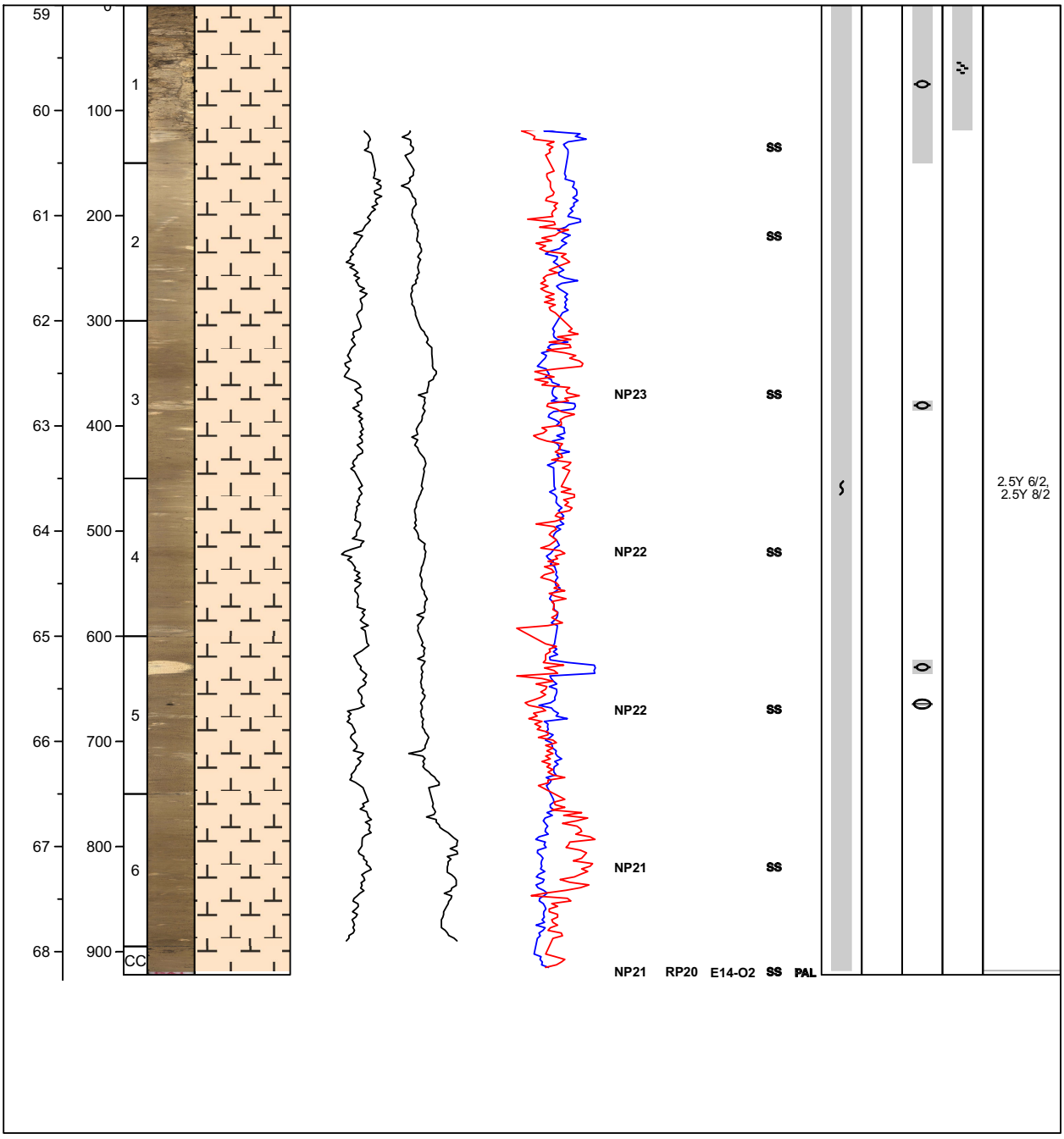
Major lithology: Nannofossil ooze with radiolarians; radiolarian nannofossil ooze with clay. Alternating sequence of pale brown radiolarian nannofossil ooze and very pale brown nannofossil ooze and brown radiolarian nannofossil ooze with clay.



Core Photo

Hole 320-U1332C Core 8H, Interval 59.0-68.22 m (CSF-A)

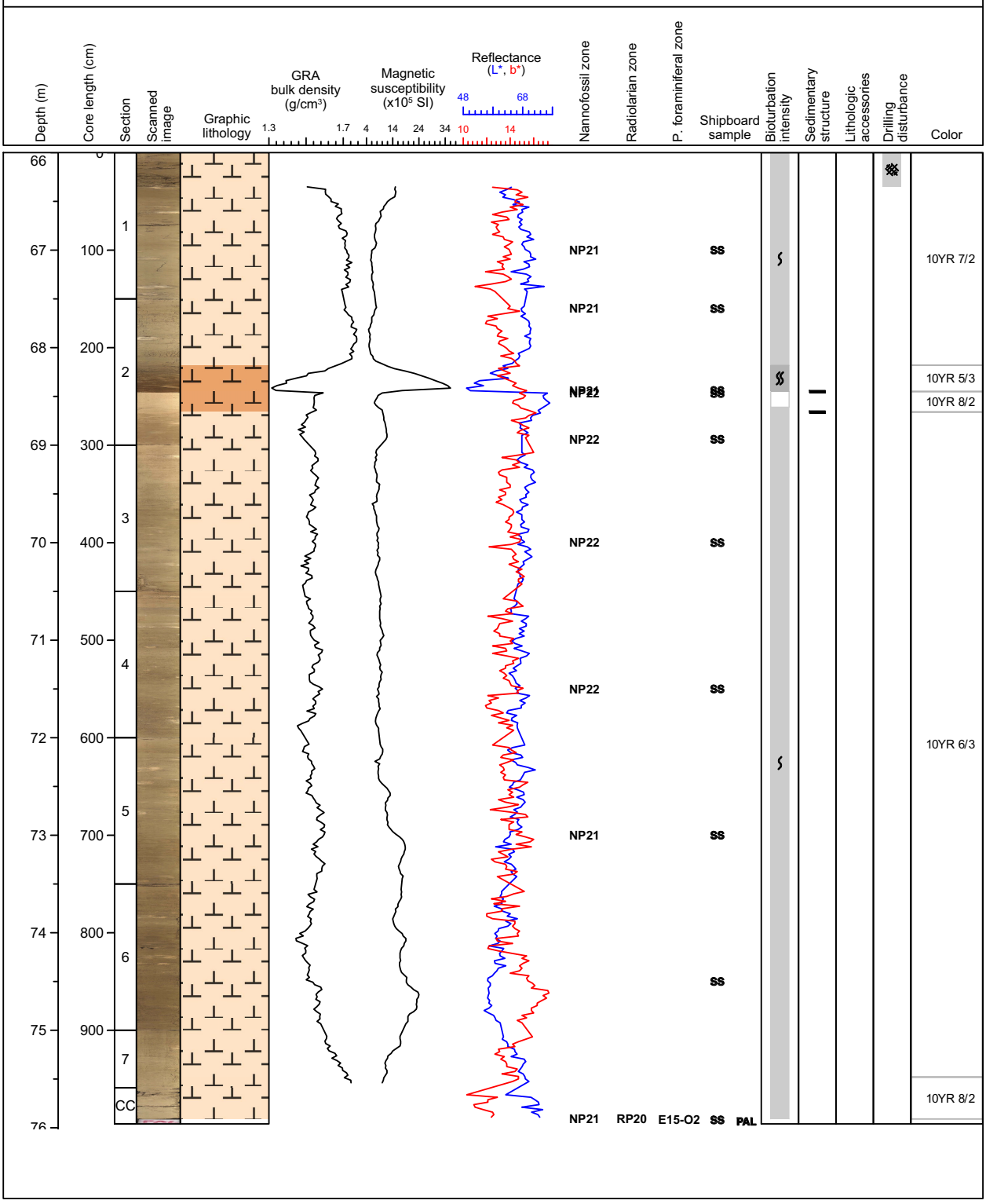
Major lithology: Nannofossil ooze with radiolarians and diatoms; nannofossil ooze with radiolarians. Alternating sequence of pale yellow nannofossil ooze with radiolarians and light yellowish brown nannofossil ooze with radiolarians and diatoms.



Core Photo

Hole 320-U1332C Core 9H, Interval 66.0-75.96 m (CSF-A)

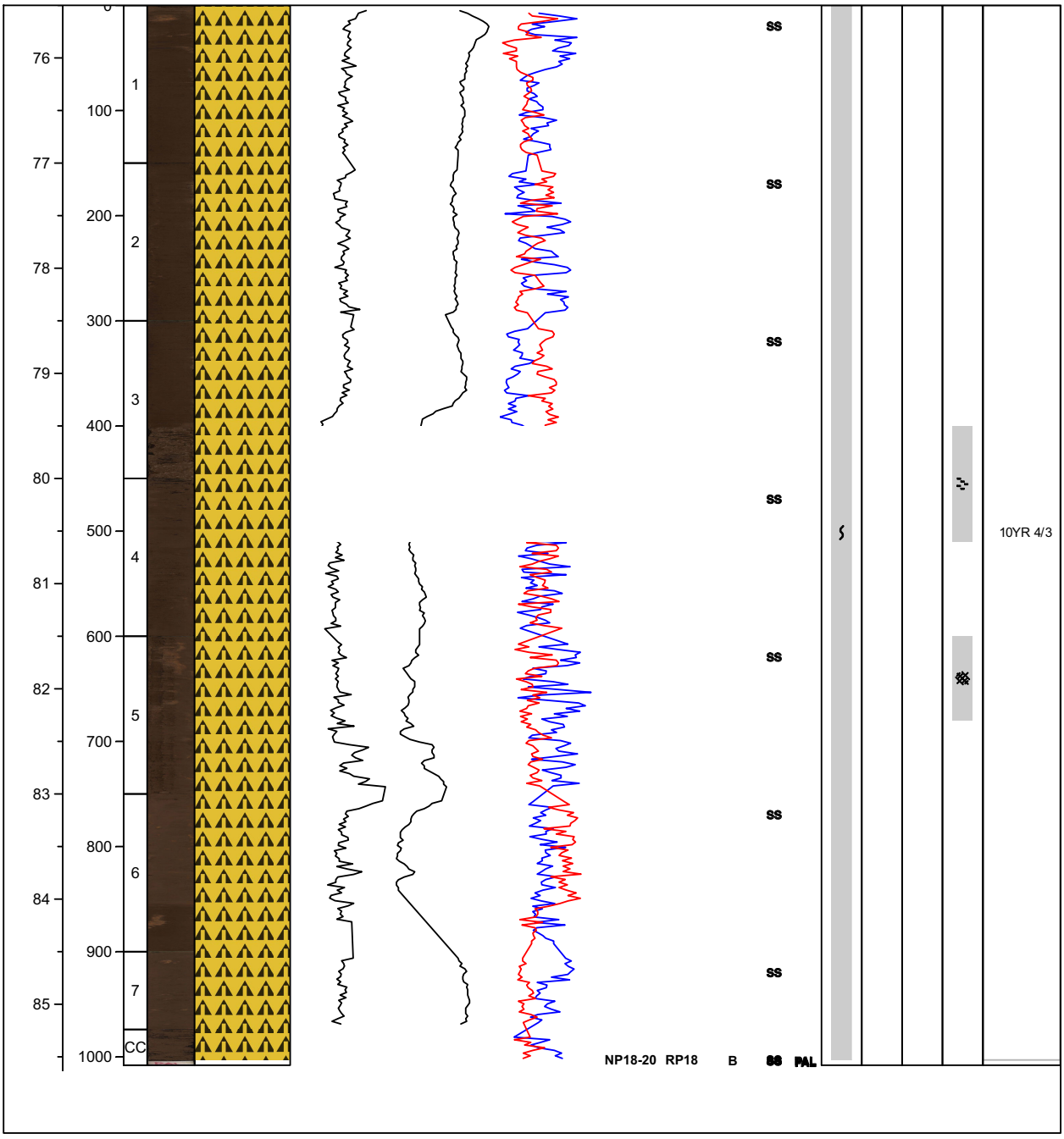
Major lithology: Nannofossil ooze with radiolarians, radiolarian nannofossil ooze, nannofossil ooze with radiolarians. Alternating sequence of gray nannofossil ooze with radiolarians, very pale brown radiolarian nannofossil ooze, pale brown nannofossil ooze with radiolarians, and pale brown nannofossil ooze with radiolarians. 27 cm-thick bed of brown radiolarian nannofossil ooze in section 2 (68-95 cm) overlying a very sharp basal boundary. In this bed concentration of radiolarians increases up to twice of the adjacent sediments although nannofossils are dominant throughout the core.



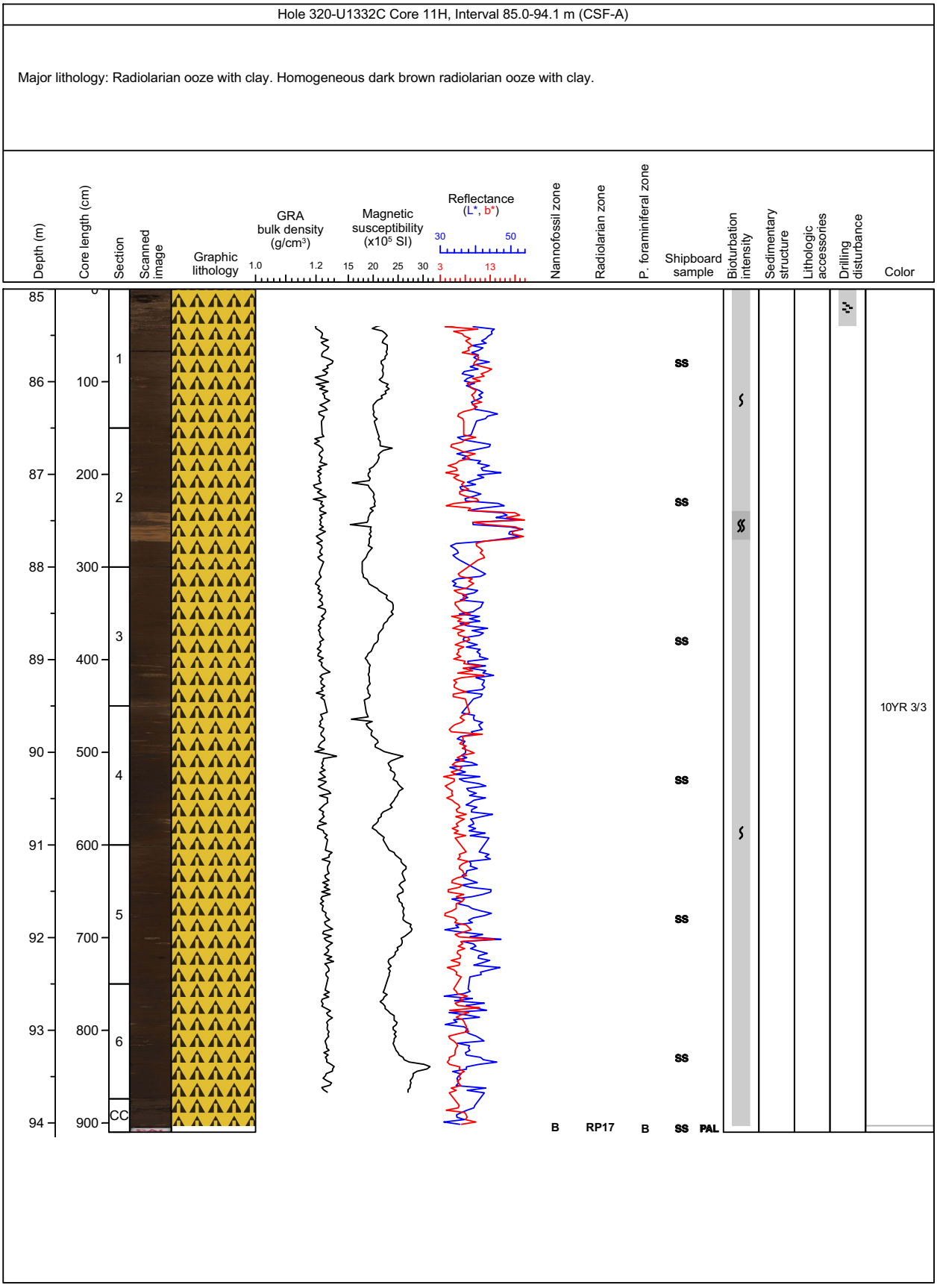
Core Photo

Hole 320-U1332C Core 10H, Interval 75.5-85.58 m (CSF-A)

Major lithology: Radiolarian ooze with clay; brown radiolarian ooze with clay. Power was interrupted during drilling, drilling disturbance is possible throughout the core.



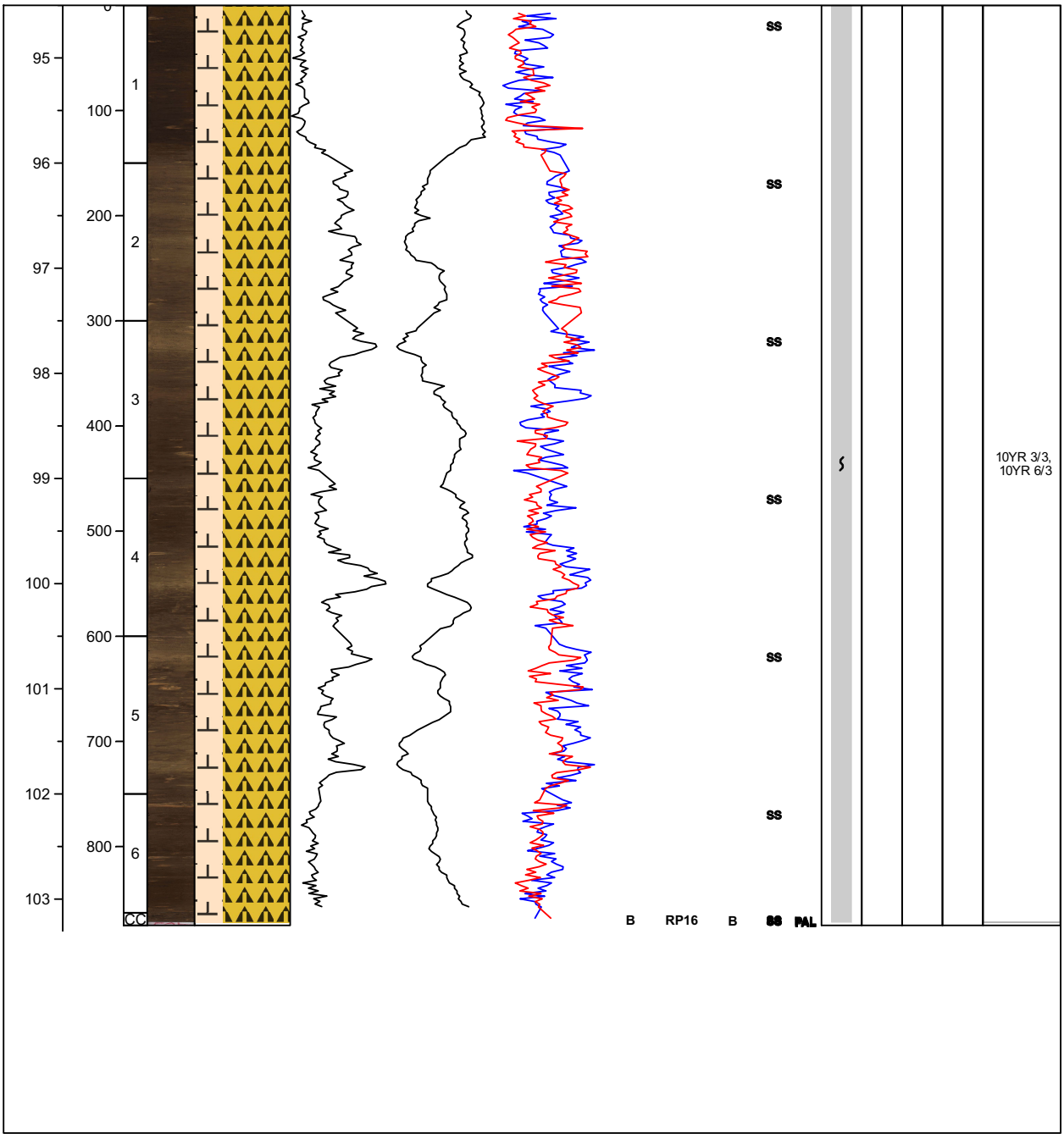
Core Photo


Hole 320-U1332C Core 11H, Interval 85.0-94.1 m (CSF-A)
Major lithology: Radiolarian ooze with clay. Homogeneous dark brown radiolarian ooze with clay.
Depth (m)
Core length (cm)
Section
Scanned image
Graphic lithology
GRA bulk density (g/cm³)
Magnetic susceptibility (x10⁵ SI)
Reflectance (L*, b*)
Nannofossil zone
Radiolarian zone
P. foraminiferal zone
Shipboard sample
Bioturbation intensity
Sedimentary structure
Lithologic accessories
Drilling disturbance
Color
10YR 3/3
B
RP17
B
PAL

Core Photo

Hole 320-U1332C Core 12H, Interval 94.5-103.25 m (CSF-A)

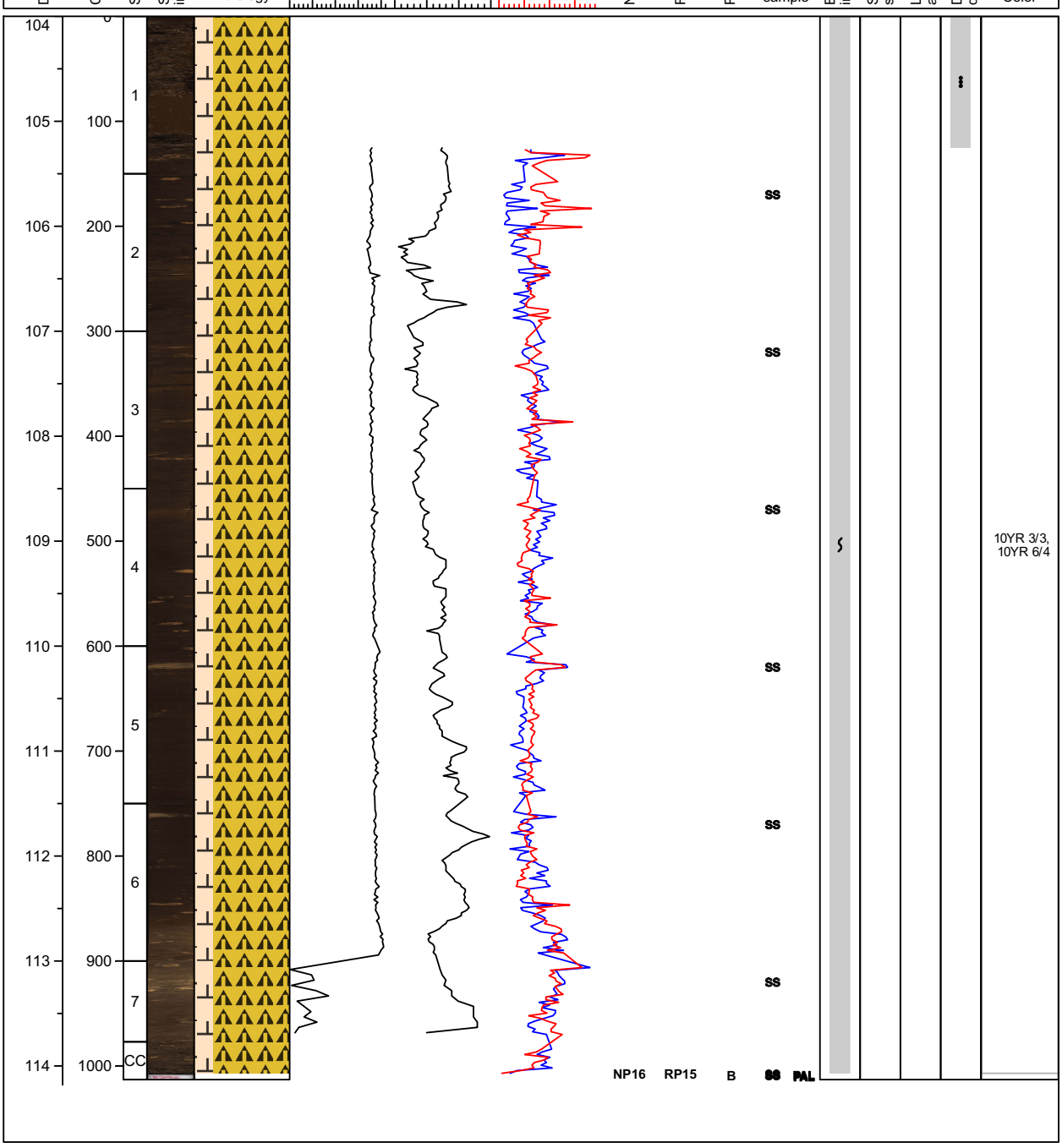
Major lithology: Radiolarian ooze with clay; nannofossil ooze with radiolarians. Alternating sequence of dark brown radiolarian ooze with clay and pale brown nannofossil ooze with radiolarians.



Core Photo

Hole 320-U1332C Core 13H, Interval 104.0-114.13 m (CSF-A)

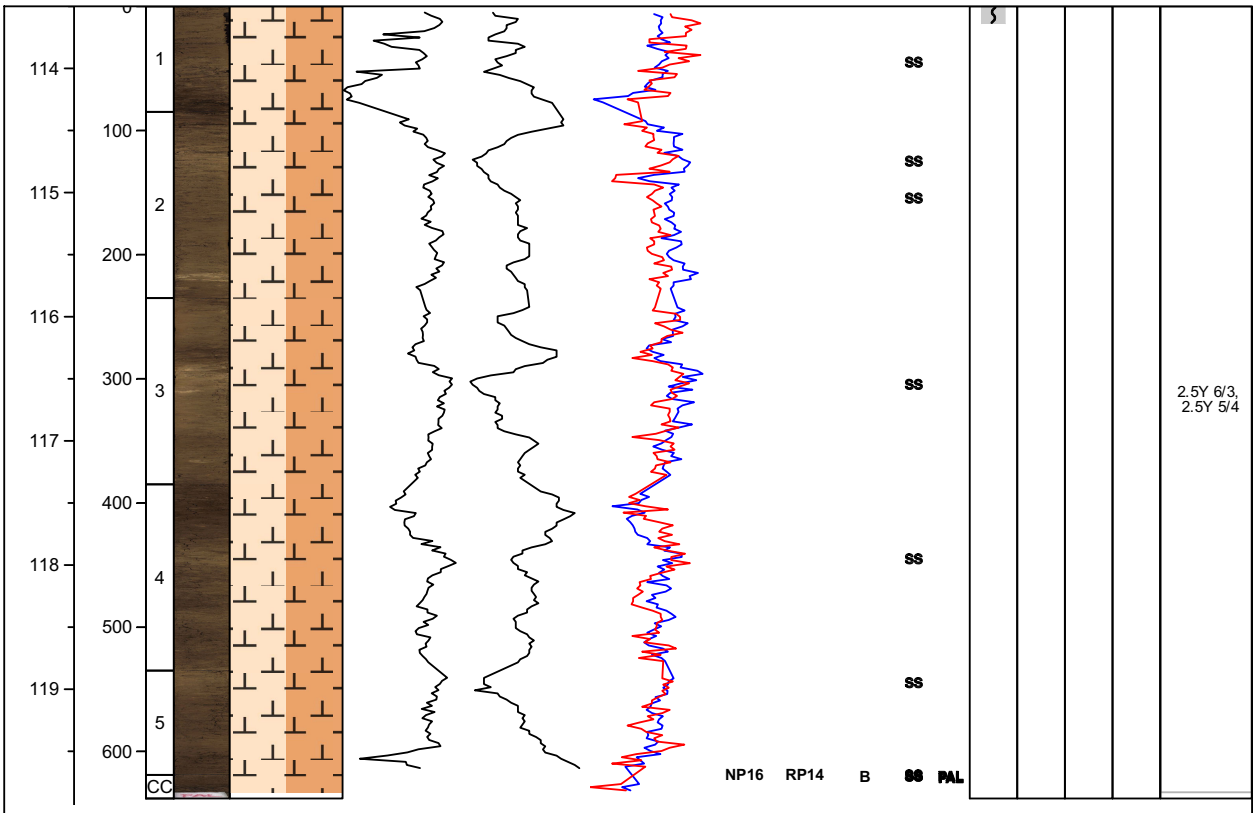
Major lithology: Radiolarian ooze with clay; nannofossil ooze with radiolarians. Alternating sequence of dark brown radiolarian ooze with clay and light yellowish brown nannofossil ooze with radiolarians.



Core Photo

Hole 320-U1332C Core 14X, Interval 113.5-119.88 m (CSF-A)

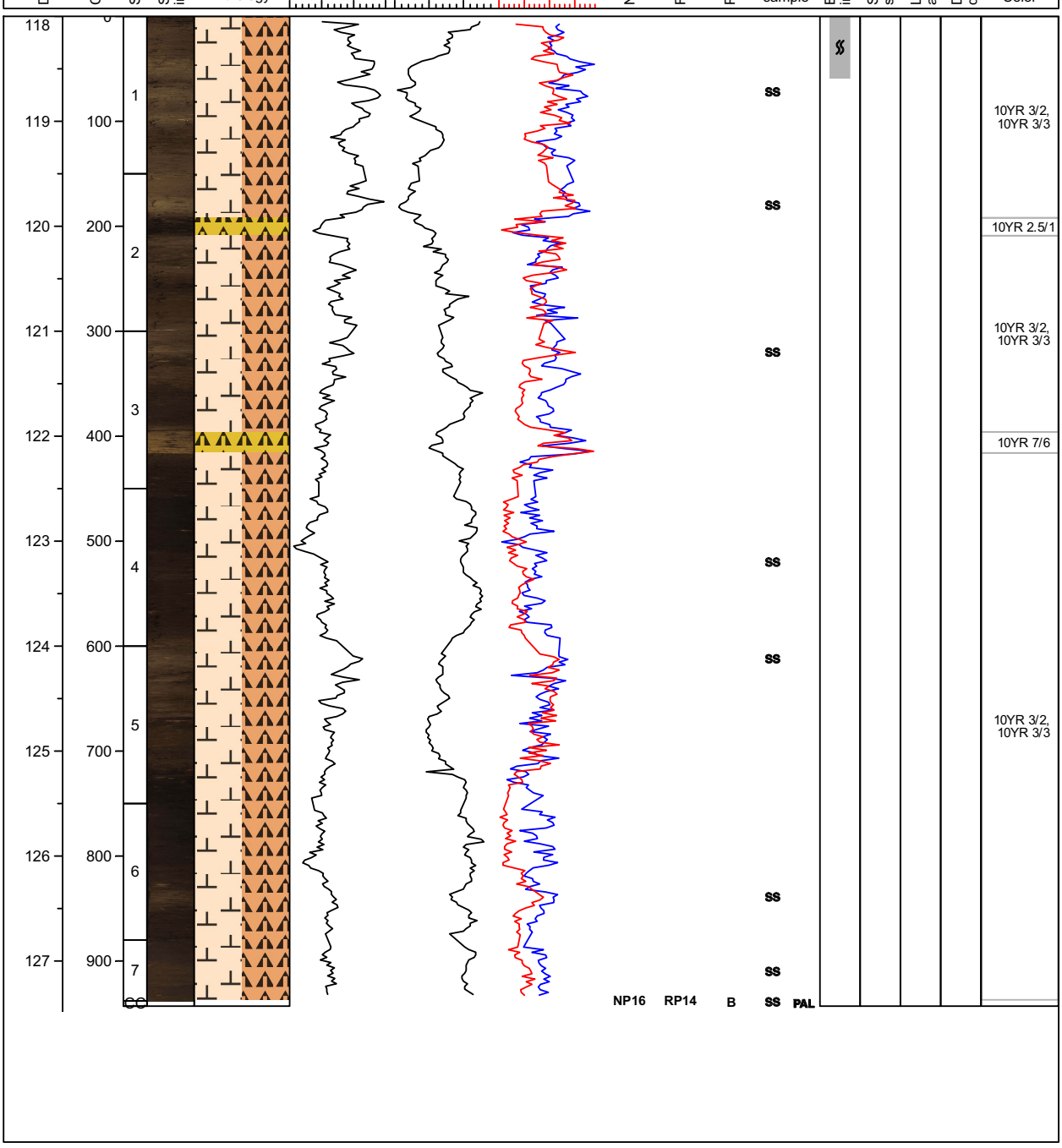
Major lithology: Nannofossil ooze with radiolarians; radiolarian nannofossil ooze. Alternating sequence of light yellowish brown nannofossil ooze with radiolarians and light olive brown radiolarian nannofossil ooze.



Core Photo

Hole 320-U1332C Core 15X, Interval 118.0-127.43 m (CSF-A)

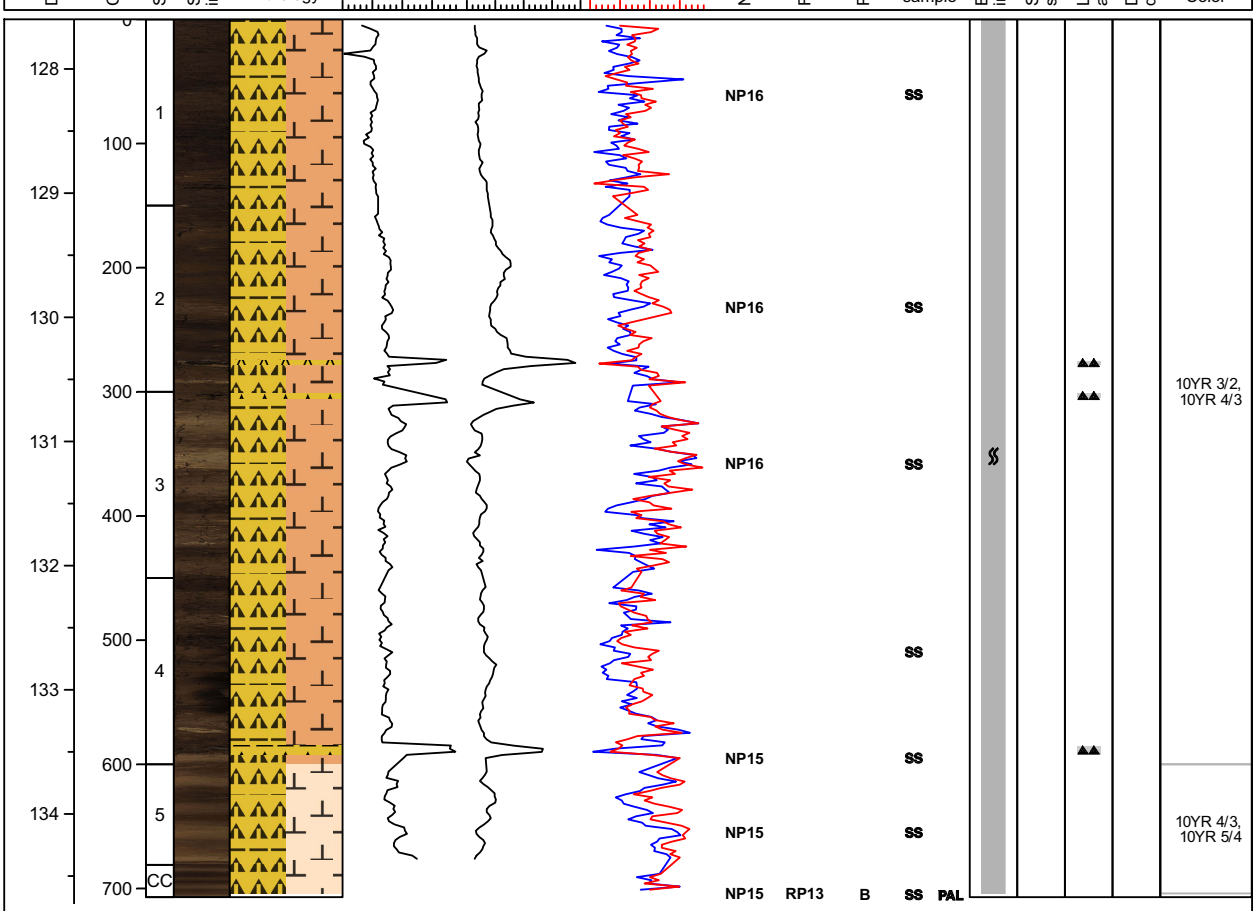
Major lithology: Nannofossil ooze with radiolarians; nannofossil radiolarian ooze with clay. Minor lithology: Radiolarian ooze with clay. Alternating sequence of very dark grayish brown nannofossil ooze with radiolarians and dark brown nannofossil radiolarian ooze with clay. Two distinct radiorian ooze with clay layers interrupt major lithology.



Core Photo

Hole 320-U1332C Core 16X, Interval 127.6-134.67 m (CSF-A)

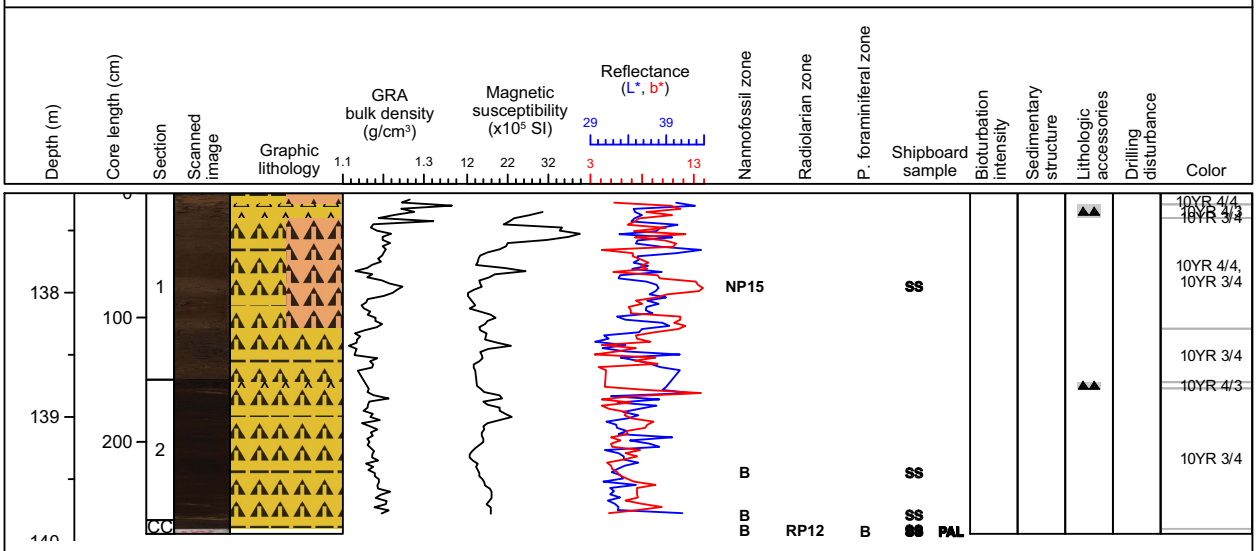
Major lithology: Clayey radiolarian ooze;radiolarian nannofossil ooze; nannofossil ooze with radiolarians; Minor lithology: Porcellanite. Alternating sequence of very dark grayish brown clayey radiolarian ooze and brown radiolarian nannofossil ooze as well as yellowish brown clayey radiolarian ooze and brown nannofossil ooze with radiolarians. Brown porcellanite nodules of up to 5 cm are frequent.



Core Photo

Hole 320-U1332C Core 17X, Interval 137.2-139.94 m (CSF-A)

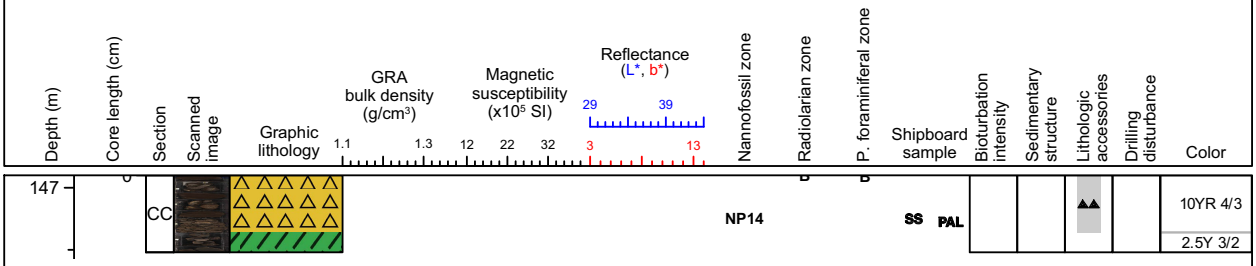
Major lithology: Nannofossil radiolarian ooze with clay; clayey radiolarian ooze; Minor lithology: Porcellanite. Alternating sequence of dark yellowish brown nannofossil radiolarian ooze with clay and dark yellowish brown clayey radiolarian ooze overlying homogeneous dark yellowish brown clayey radiolarian ooze. Porcellanite nodules and fragments of up to 2 cm are frequent.



Core Photo

Hole 320-U1332C Core 18X, Interval 146.9-147.52 m (CSF-A)

Major lithology: Porcellanite and basalt; Minor lithology: Clayey radiolarian ooze; brown clayey radiolarian ooze with porcellanite and basalt at the base.



Sample				Mineralogy (%)												Biogenic (%)										
Sample ID	Top Interval (cm)	Depth CSF-A (m)	Lithology*	Clay Mineral	Phillipsite	Clinoptilolite	Mica	Calcite	Dolomite	Quartz	Microcrystalline Quartz	Apatite	Fe Oxide	Mn Oxide	Feldspar	Volcanic Glass	Micronodules	Nannofossils	Foraminifers	Diatoms	Radiolarians	Silicoflagellates	Spicules	Fish Remains	Opaque	Lithology
Hole A																										
320-U1332A-1H-1-A	120	1.20	D	85											T**			T		5	10				T	Clay with radiolarians
320-U1332A-1H-1-A	117	1.17	M	80	2															4	14					Clay with radiolarians
320-U1332A-1H-2-A	105	2.55	D	75	7										T					3	15				T	Clay with radiolarians
320-U1332A-2H-5-A	62	10.52	D	70	12					T										1	15				2	Clay with radiolarians
320-U1332A-2H-7-A	10	13.00	D	73	25					T															2	Zeolite Clay
320-U1332A-3H-6-A	5	20.95	D	12	1			1										65		1	20					Nannofossil ooze with radiolarians and clay
320-U1332A-3H-6-A	70	21.60	D	40	1					T										2	55		1		1	Clayey radiolarian ooze
320-U1332A-3H-7-A	70	23.10	D	3				T										90			7					Nannofossil ooze
320-U1332A-4H-5-A	58	29.48	D	20	2					T										1	75		1		1	Radiolarian ooze
320-U1332A-4H-7-A	38	32.28	D	8				T										80		T	12					Nannofossil ooze with radiolarians
320-U1332A-5H-3-A	40	35.80	D	4				1										83			12					Nannofossil ooze with radiolarians
320-U1332A-5H-7-A	75	42.15	D															98			2					Nannofossil ooze
320-U1332A-6H-1-A	97	42.87	D															98		T	2					Nannofossil ooze
320-U1332A-6H-3-A	130	46.20	D	1														70		4	25					Nannofossil ooze with radiolarians
320-U1332A-7H-1-A	64	52.04	D	8														60	T		35					Radiolarian nannofossil ooze
320-U1332A-7H-2-A	150	54.40	M															98			2					Nannofossil ooze
320-U1332A-7H-5-A	67	58.07	D															95			5					Nannofossil ooze
320-U1332A-8H-5-A	100	67.90	D											T				80		12	8				T	Nannofossil ooze with diatoms
320-U1332A-8H-7-A	36	70.26	D															95		1	4					Nannofossil ooze
320-U1332A-9H-1-A	70	71.10	D															75		20	5					Nannofossil ooze with diatoms
320-U1332A-9H-2-A	71	72.61	D															72		20	8					Nannofossil ooze with diatoms
320-U1332A-9H-4-A	50	75.40	D	8									T	T				56		8	28				T	Radiolarian nannofossil ooze
320-U1332A-9H-4-A	100	75.90	D	6														55		8	31					Radiolarian nannofossil ooze
320-U1332A-9H-4-A	145	76.35	D	22									T							12	66					Radiolarian ooze with diatom and clay
320-U1332A-9H-4-A	2	74.92	D															92		5	3					Nannofossil ooze
320-U1332A-9H-5-A	55	76.95	M	75																3	22					Clay with radiolarians
320-U1332A-9H-5-A	49	76.89	D	20														T		13	67					Radiolarian ooze with diatoms and clay
320-U1332A-9H-6-A	28	78.18	D	15														T		5	80					Radiolarian ooze with clay
320-U1332A-10H-2-A	5	81.45	D	16						T										7	77		T		T	Radiolarian ooze with clay
320-U1332A-10H-4-A	138	85.78	D	8				5	T									42		5	40				T	Radiolarian nannofossil ooze
320-U1332A-10H-7-A	50	89.40	D	20				6	T									3		5	65				1	Radiolarian ooze with clay
320-U1332A-11H-2-A	90	91.80	D	24						T								3		1	72					Radiolarian ooze with clay
320-U1332A-11H-6-A	85	97.75	D															58			45					Radiolarian nannofossil ooze
320-U1332A-12H-2-A	42	100.82	D	7													3.33	10			80				T	Radiolarian ooze with nannofossils
320-U1332A-12H-3-A	69	102.59	D	25																T	74				1	Clayey radiolarian ooze
320-U1332A-12H-5-A	35	105.25	D	43													T	T			57					Clayey radiolarian ooze
320-U1332A-12H-6-A	39	106.79	M	45				T	T				T								55				T	Clayey radiolarian ooze
320-U1332A-13H-1-A	50	108.90	D	33						T						T	T				67				T	Clayey radiolarian ooze
320-U1332A-13H-6-A	142	117.32	D	5														83			12				T	Nannofossil ooze with radiolarian
320-U1332A-13H-6-A	160	117.50	D	8										T			1	48			43				T	Radiolarian nannofossil ooze

*Lithology: (D) Dominant; (M) Minor

**(T) Trace

Sample				Mineralogy (%)												Biogenic (%)										
Sample ID	Top Interval (cm)	Depth CSF-A (m)	Lithology*	Clay Mineral	Phillipsite	Clinoptilolite	Mica	Calcite	Dolomite	Quartz	Microcrystalline Quartz	Apatite	Fe Oxide	Mn Oxide	Feldspar	Volcanic Glass	Micronodules	Nannofossils	Foraminifers	Diatoms	Radiolarians	Silicoflagellates	Spicules	Fish Remains	Opaque	Lithology
Hole A (continued)																										
320-U1332A-14H-2-A	132	120.72	D	25														8			67					Radiolarian ooze with clay
320-U1332A-14H-2-A	40	119.80	D	6													T	55			39				T	Radiolarian nannofossil ooze
320-U1332A-14H-3-A	110	122.00	D	18													T	22			60					Radiolarian ooze with clay and nannofossils
320-U1332A-15X-1-A	142	127.32	M	2				4										30			64				T	Nannofossil radiolarian ooze
320-U1332A-15X-3-A	23	129.13	M	4				3										28		5	60					Nannofossil radiolarian ooze
320-U1332A-15X-3-A	69	129.59	D	2														55		T	43					Radiolarian nannofossil ooze
320-U1332A-15X-4-A	84	131.24	D	18														T			82					Radiolarian ooze with clay
320-U1332A-16X-1-A	102	136.52	D	44														1			55				T	Clayey Radiolarian ooze
320-U1332A-16X-2-A	40	137.40	D	18														27		T	55				T	Nannofossil Radiolarian ooze with clay
320-U1332A-17X-1-A	90	145.40	D	60	40													T								Zeolite Clay
320-U1332A-17X-1-A	109	145.59	D	91	6									3												Clay
Hole B																										
320-U1332B-1H-CC-A	4	1.94	D	72	15					T								T		1	12				T	Clay with radiolarian
320-U1332B-2H-4-A	50	7.10	D	55	40								T					1			4					Zeolite Clay
320-U1332B-2H-6-A	143	11.03	D	44	38								T	5			8				4				1	Zeolite Clay
320-U1332B-3H-3-A	45	15.05	D	51													3			2	44					Radiolarian Clay
320-U1332B-3H-5-A	75	18.35	D		11													66		1	22					Nannofossil ooze with radiolarians and zeolite
320-U1332B-4H-6-A	46	27.56	D	55																5	40					Radiolarian Clay
320-U1332B-4H-7-A	11	28.71	D	12	5													45		3	35				T	Radiolarian nannofossil ooze with clay
320-U1332B-5H-3-A	72	32.82	M															88		1	11					Nannofossil ooze wirh radiolarians
320-U1332B-5H-4-A	120	34.80	D	5				T										75		T	20					Nannofossil ooze with radiolarians
320-U1332B-5H-5-A	72	35.82	D	T														98			2					Nannofossil ooze
320-U1332B-6H-4-A	115	44.25	D	2														81		3	14					Nannofossil ooze with radiolarians
320-U1332B-6H-7-A	70	48.30	D	1														95			4					Nannofossil ooze
320-U1332B-7H-1-A	41	48.51	D	T														83			17				T	Nannofossil ooze with radiolarians
320-U1332B-7H-4-A	68	53.28	D															94		1	5					Nannofossil ooze
320-U1332B-8H-2-A	45	59.55	D					2										92			6					Nannofossil ooze
320-U1332B-8H-6-A	20	65.30	D	T														77		13	10				T	Nannofossil ooze with radiolarians and diatoms
320-U1332B-8H-CC-A	5	67.19	M															74		10	16					Nannofossil ooze with diatoms and radiolarians
320-U1332B-9H-3-A	50	70.60	D													2		96			2					Nannofossil ooze
320-U1332B-9H-5-A	40	73.50	D					1										99			T					Nannofossil ooze
320-U1332B-9H-6-A	15	74.75	D	4														35		9	53					Radiolarian nannofossil ooze
320-U1332B-9H-6-A	100	75.60	D	5				2										T		5	86		2			Radiolarian ooze
320-U1332B-10H-4-A	60	81.70	D	5				2										43			50					Nannofossil Radiolarian ooze
320-U1332B-10H-6-A	60	84.7	D	15				2										45			38					Radiolarian nannofossil ooze with clay
320-U1332B-12H-2-A	41	93.01	D	3					T									67		T	30					Radiolarian nannofossil ooze
320-U1332B-12H-7-A	50	100.60	D	5																T	95				T	Radiolarian ooze
320-U1332B-13H-2-A	58	102.68	M	12									T							T	88				T	Radiolarian ooze with clay
320-U1332B-13H-5-A	66	107.26	D	3																2	93				2	Radiolarian ooze
320-U1332B-13H-6-A	80	108.90	D	13													T	45		6	36				T	Radiolarian nannofossil ooze with clay

*Lithology: (D) Dominant; (M) Minor

**(T) Trace

Sample				Mineralogy (%)												Biogenic (%)										
Sample ID	Top Interval (cm)	Depth CSF-A (m)	Lithology*	Clay Mineral	Phillipsite	Clinoptilolite	Mica	Calcite	Dolomite	Quartz	Microcrystalline Quartz	Apatite	Fe Oxide	Mn Oxide	Feldspar	Volcanic Glass	Micronodules	Nannofossils	Foraminifers	Diatoms	Radiolarians	Silicoflagellates	Spicules	Fish Remains	Opaque	Lithology
Hole B (continued)																										
320-U1332B-13H-7-A	5	109.65	D	T													1	87			12				T	Nannofossil ooze with radiolarians
320-U1332B-14X-2-A	145	113.05	M	2														87		2	9					Nannofossil ooze
320-U1332B-14X-3-A	114	114.24	D	1													T	61		3	34				1	Radiolarian nannofossil ooze
320-U1332B-14X-4-A	50	115.10	D	3														51		3	43					Radiolarian nannofossil ooze
320-U1332B-14X-4-A	129	115.89	D															82		T	18					Nannofossil ooze with radiolarians
320-U1332B-15X-1-A	70	116.80	D															16		2	82				T	Radiolarian ooze with nannofossils
320-U1332B-15X-3-A	30	119.40	D	7														71		T	22					Nannofossil ooze with radiolarians
320-U1332B-15X-4-A	24	120.84	D	33									T							T	68				T	Clayey radiolarian ooze
320-U1332B-16X-1-A	30	124.90	D	23														5			72					Radiolarian nannofossil ooze with clay
320-U1332B-16X-1-A	19	124.79	D	40	T				T									3			57					Clayey radiolarian nannofossil ooze
320-U1332B-18X-1-A	87	144.77	D	90	5												5									Clay
320-U1332B-18X-1-A	25	144.15	D	80	13												7									Clay with zeolite
Hole C																										
320-U1332C-1H-4-A	49	4.99	M	76	3											T	14				4				3	Clay with micronodules
320-U1332C-1H-5-A	125	7.25	D	58	25															1	15				1	Zeolite Clay with radiolarians
320-U1332C-2H-2-A	55	9.55	D	67	25												2				3				3	Zeolite Clay
320-U1332C-2H-3-A	100	11.50	D	66	27								4			T	1								2	Zeolite Clay
320-U1332C-2H-3-A	50	11.00	M	69	25																1				5	Zeolite Clay
320-U1332C-2H-5-A	50	14.00	D	65	20												15									Zeolite Clay
320-U1332C-2H-6-A	20	15.20	D	80	20																					Zeolite Clay
320-U1332C-3H-1-A	70	17.70	D	32				3													65					Clayey radiolarian ooze
320-U1332C-3H-1-A	143	18.43	D	7														56			37					Radiolarian nannofossil ooze
320-U1332C-3H-2-A	42	18.92	D	26														19		4	56				T	Nannofossil radiolarian ooze with clay
320-U1332C-4H-3-A	17	29.67	D	28	2															2	65				3	Clayey radiolarian ooze
320-U1332C-4H-7-A	27	35.77	D	3				2										85			10				T	Nannofossil ooze with radiolarians
320-U1332C-5H-2-A	70	38.20	D	3														83			14					Nannofossil ooze with radiolarians
320-U1332C-5H-2-A	14	37.64	D															97			3					Nannofossil ooze
320-U1332C-5H-5-A	96	42.96	D															98			2					Nannofossil ooze
320-U1332C-6H-5-A	104	52.54	D	2														94		1	3					Nannofossil ooze
320-U1332C-7H-1-A	20	49.70	D	3														80		5	12				T	Nannofossil ooze with radiolarians
320-U1332C-7H-2-A	80	51.80	D	16													T	58			26				T	Radiolarian nannofossil ooze with clay
320-U1332C-7H-6-A	95	57.95	D															83			17					Nannofossil ooze with radiolarians
320-U1332C-8H-5-A	18	65.18	D															73		15	11.5					Nannofossil ooze with radiolarians and diatoms
320-U1332C-8H-6-A	30	66.80	D															86		6	16					Nannofossil ooze with radiolarians
320-U1332C-9H-2-A	90	68.40	M	6												4		50			38				1	Radiolarian nannofossil ooze
320-U1332C-9H-2-A	100	68.50	D	7												1		64		9	19					Radiolarian nannofossil ooze
320-U1332C-9H-6-A	105	74.55	D	13														57		2	28					Radiolarian nannofossil ooze
320-U1332C-10H-5-A	67	82.17	D	13	T													86							1	Radiolarian ooze with clay
320-U1332C-12H-1-A	100	95.50	D	12														20			67				1	Radiolarian ooze with clay and nannofossils
320-U1332C-12H-2-A	100	97.00	D															80			20					Nannofossil ooze with radiolarians

*Lithology: (D) Dominant; (M) Minor

**(T) Trace

Sample				Mineralogy (%)												Biogenic (%)										
Sample ID	Top Interval (cm)	Depth CSF-A (m)	Lithology*	Clay Mineral	Phillipsite	Clinoptilolite	Mica	Calcite	Dolomite	Quartz	Microcrystalline Quartz	Apatite	Fe Oxide	Mn Oxide	Feldspar	Volcanic Glass	Micronodules	Nannofossils	Foraminifers	Diatoms	Radiolarians	Silicoflagellates	Spicules	Fish Remains	Opaque	Lithology
Hole C (continued)																										
320-U1332C-14X-1-A	39	113.89	D	6													T	78			16				T	Nannofossil ooze wirh radiolarians
320-U1332C-14X-4-A	16	117.51	D	4														58		5	31				2	Radiolarian nannofossil ooze
320-U1332C-15X-1-A	126	119.26	D	6														74			21				T	Nannofossil ooze wirh radiolarians
320-U1332C-15X-3-A	112	122.12	D	8														15			77					Radiolarian ooze with nannofossils
320-U1332C-15X-4-A	56	123.06	D	16				3										32			49				T	Nannofossil radiolarian ooze wirh clay
320-U1332C-15X-4-A	56	123.06	D	16				3										32			49				T	Nannofossil radiolarian ooze with clay
320-U1332C-16X-2-A	87	129.97	D	44													1			1	53				1	Clayey radiolarian ooze
320-U1332C-16X-2-A	87	129.97	D	44													1			1	53				1	Clayey radiolarian ooze
320-U1332C-16X-3-A	52	131.12	D															60		T	40					Radiolarian nannofossil ooze
320-U1332C-16X-3-A	52	131.12	D															60		T	40					Radiolarian nannofossil ooze
320-U1332C-16X-5-A	26	133.86	D	36																2	62					Clayey radiolarian ooze
320-U1332C-16X-5-A	58	134.18	D	3													T	75			22					Nannofossil ooze wirh radiolarians
320-U1332C-16X-5-A	26	133.86	D	36																2	62					Clayey radiolarian ooze
320-U1332C-16X-5-A	58	134.18	D	3													T	75			22					Nannofossil ooze with radiolarians
320-U1332C-17X-1-A	74	137.94	D	22				2										36			40					Nannofossil radiolarian ooze wirh clay
320-U1332C-17X-1-A	74	137.94	D	22				2										36			40					Nannofossil radiolarian ooze with clay
320-U1332C-17X-2-A	16	138.86	D	46				T													54				T	Clayey radiolarian ooze
320-U1332C-17X-2-A	16	138.86	D	46				T													54				T	Clayey radiolarian ooze
320-U1332C-13H-2-A	120	106.70	D																							Radiolarian ooze with clay
320-U1332C-13H-7-A	15	113.15	D																							Nannofossil ooze with radiolarians

*Lithology: (D) Dominant; (M) Minor

**(T) Trace

THIN SECTION: 320-U1332A-18X-CC 12-16 13
ROCK NAME: Sparsely plagioclase phyric basalt
GRAIN SIZE: Very fine grained
TEXTURE: Intergranular, spherulithic (altered groundmass), hypocrystalline

PRIMARY MINERALOGY	Percent Present	Percent Original	Size (mm) min.	Size (mm) max.	Size (mm) ave.	Aproximate composition	Morphology	Comments
Phenocrysts								
Plagioclase	3	5	0.3	0.5	0.3			
Clinopyroxene								
Olivine								
Groundmass/matrix								
Plagioclase	15	25		0.3	0.2		Lath	
Olivine	0	T*		0.2	0.1			
Clinopyroxene	2	10		0.3	0.1		Subhedral	Preserved in the rim (chilled margin?)
Opaque minerals	T	T		0.01				
Glass	10	60						Preserved in the rim (chilled margin?)

SECONDARY MINERALOGY	Percent	Size (mm) min.	Size (mm) max.	Size (mm) ave.	Replacing/filling	Comments
Clay minerals	50				Ferromagnesian minerals and groudmass	
Calcite	20	0.1	0.8	0.3	Forming calcite vein	

VESICULES/CAVITIES
Vesicules

COMMENTS: A highly altered basalt at the top of basement of 320-U1332A. Glass and ferromagnesian minerals are partly preserved in the rim (chilled margin?).

THIN SECTION: 320-U1332A-18X-CC 16-19 14
ROCK NAME: Sparsely plagioclase phyric basalt
GRAIN SIZE: Fine grained
TEXTURE: Spherulithic (altered groundmass), hypocrystalline

PRIMARY MINERALOGY	Percent Present	Percent Original	Size (mm) min.	Size (mm) max.	Size (mm) ave.	Aproximate composition	Morphology	Comments
Phenocrysts								
Plagioclase	3		0.3	0.5	0.3		Lath	
Clinopyroxene								
Groundmass/matrix								
Plagioclase	2			0.3			Lath	
Clinopyroxene								Replaced with chlorite
Glass								Replaced with clay minerals

SECONDARY MINERALOGY	Percent	Size (mm) min.	Size (mm) max.	Size (mm) ave.	Replacing/filling	Comments
Clay minerals	70				Ferromagnesian minerals and groudmass	Chlorite replaces cpx
Calcite	25	0.1	0.5	0.2	Forming calcite vein	

VESICULES/CAVITIES
Vesicules

COMMENTS: A highly altered basalt, groundmass is completely replaced with clay minerals

*T= Trace

Thin section

Sample Interval	(cm)	Depth CSF-A (m)	Structures/ Textures	Textures: Gravel	Sand	Silt	Clay	Non-biogenic materials: Clay Mineral	Phillipsite	Clinoptilolite	Mica	Calcite	Dolomite	Quartz	Microcrystalline Quartz	Apatite	Feldspar	Volcanic Glass	Micronodules	Biogenic materials: Nannofossils	Foraminifers	Diatoms	Radiolarians	Silicoflagellates	Spicules	Fish Remains	Opaque	Lithology Name	Comments
320-U1332A-15X-2	**112-114**	**128.52-128.54**						45				3			30						2		10				10	**Porcellanite**	Foraminifera tests are filled with microcrystalline quartz. Test chambers are partly preserved as calcite. Radiolarian remains are replaced/filled with microcrystalline quartz. The porcalleanite shows a layering of clay rich and radiolarian and foraminifera rich intervals.
320-U1332A-16X-2	**27-29**	**137.27-137.29**						50				5			20						T*		5				20	**Porcellanite**	Foraminifera tests are filled with microcrystalline quartz. Chamber walls are partly preserved as calcite. Radiolarian remains are replaced/filled with microcrystalline quartz. The porcalleanite shows a layering of clay rich and microcrystalline quartz rich intervals.
320-U1332A-16X-2	**52-54**	**137.52-137.54**						34				20	1		20					T	10		10			T	5	**Porcellanite**	Flat flakes of clay minerals (0.1-0.2 mm in length). Radiolarians and foraminifers are replaced/filled with microcrystalline quarts. Nannofossils are visible only in very thin part of the slide.
320-U1332A-16X-CC	**17-19**	**138.04-138.06**						40							25								15			T	20	**Porcellanite**	Radiolarian remains are replaced/filled with microcrystalline quartz
320-U1332A-17X-1	**0-4**	**144.50-144.54**						35							50												15	**Chert**	Microcrystalline quartz grows >0.3 mm in vein

*T= Trace

Top	(cm)	Bottom	(cm)	Top Depth CSF-A (m)	Bottom Depth CSF-A (m)	Lithology	Abundance (%)	Color	Comment	Thin section
Hole A										
320-U1332A-15X-1-A	52	320-U1332A-15X-1-A	72	126.42	126.62	porcellanite	100		High Logging GRA interval*	
320-U1332A-15X-2-A	107	320-U1332A-15X-2-A	117	128.47	128.57	porcellanite	100		*	112-114 cm
320-U1332A-16X-2-A	24	320-U1332A-16X-2-A	29	137.24	137.29	porcellanite	100		*	27-29 cm
320-U1332A-16X-2-A	50	320-U1332A-16X-2-A	63	137.50	137.63	porcellanite	100		*	52-54 cm
320-U1332A-16X-CC-A	17	320-U1332A-16X-CC-A	24	138.04	138.11	porcellanite	100		*	17-19 cm
320-U1332A-17X-1-A	0	320-U1332A-17X-1-A	4	144.50	144.54	chert	100		Chert nodule 4 cm in diameter concoidal fracture[$]	0-4 cm
Hole B										
320-U1332B-16X-CC-A	14	320-U1332B-16X-CC-A	38	125.11	125.35	porcellanite	40	10YR 2/1	[#]	
320-U1332B-17X-1-A	25	320-U1332B-17X-CC-A	40	134.55	135.08	porcellanite	80	10YR 4/3	*	
320-U1332B-18X-1-A	0	320-U1332B-18X-1-A	3	143.90	143.93	porcellanite	100	10YR 2/1	3 cm in diameter[$]	
320-U1332B-18X-1-A	10	320-U1332B-18X-1-A	13	144.00	144.03	porcellanite	100	10YR 2/1	*	
Hole C										
320-U1332C-16X-2-A	125	320-U1332C-16X-2-A	128	130.35	130.38	porcellanite	100	10YR 4/3	Fragmented*	
320-U1332C-16X-3-A	1	320-U1332C-16X-3-A	5	130.61	130.65	porcellanite	100	10YR 4/3	6 cm in diameter*	
320-U1332C-16X-4-A	135	320-U1332C-16X-4-A	142	133.45	133.52	porcellanite	100	10YR 4/3	Fragmented*	
320-U1332C-17X-1-A	9	320-U1332C-17X-1-A	20	137.29	137.40	porcellanite	100	10YR 4/3	1 cm pieces highly fragmented^	
320-U1332C-17X-2-A	2	320-U1332C-17X-2-A	7	138.72	138.77	porcellanite	100	10YR 4/3	1 cm pieces highly fragmented^	
320-U1332C-18X-CC-A	0	320-U1332C-18X-CC-A	35	146.90	147.25	porcellanite	100	10YR 4/3	Highly fragmented (1-5 cm in diameter), a brownish yellow mudstone chip (3 cm)[#]	
320-U1332C-18X-CC-A	35	320-U1332C-18X-CC-A	46	147.25	147.36	porcellanite	50	10YR 4/3	1-2 cm pieces highly fragmented[#]	

* Interbedded, [$] Top of core (fall in?), [#] Core catcher only (in place?), ^ Fragment within sediment