

## NGHP - Expedition 1


### Cored Interval - Site 17 - Hole A


Seafloor 1356 (m)


### Barrel Sheet Key


**Cored & Recovered:**


 Core Recovery


 Cored Interval No Recovery

**Bioturbation:**


 Rare


 Moderate


 Common


 Abundant


**Lithology:**


 Catwalk Sampled Core


 Foraminifera Rich Nannofossil Ooze


 Foraminifera Bearing Nannofossil Ooze


 Nannofossil Ooze

 Authigenic Carbonate Rich Nannofossil Ooze


 Authigenic Carbonate Bearing Nannofossil Ooze


 Biosiliceous Rich Nannofossil Ooze


 Biosiliceous Bearing Nannofossil Ooze


 Volcanic Ash


**Fossils:**

 Shell Fragments


 Foraminifera


 Woody Debris


 Visible Sponge Spicules

 Bivalve


**Diagenesis:**


 Pyrite


 FeS


 FeS Nodule


**Disturbance:**

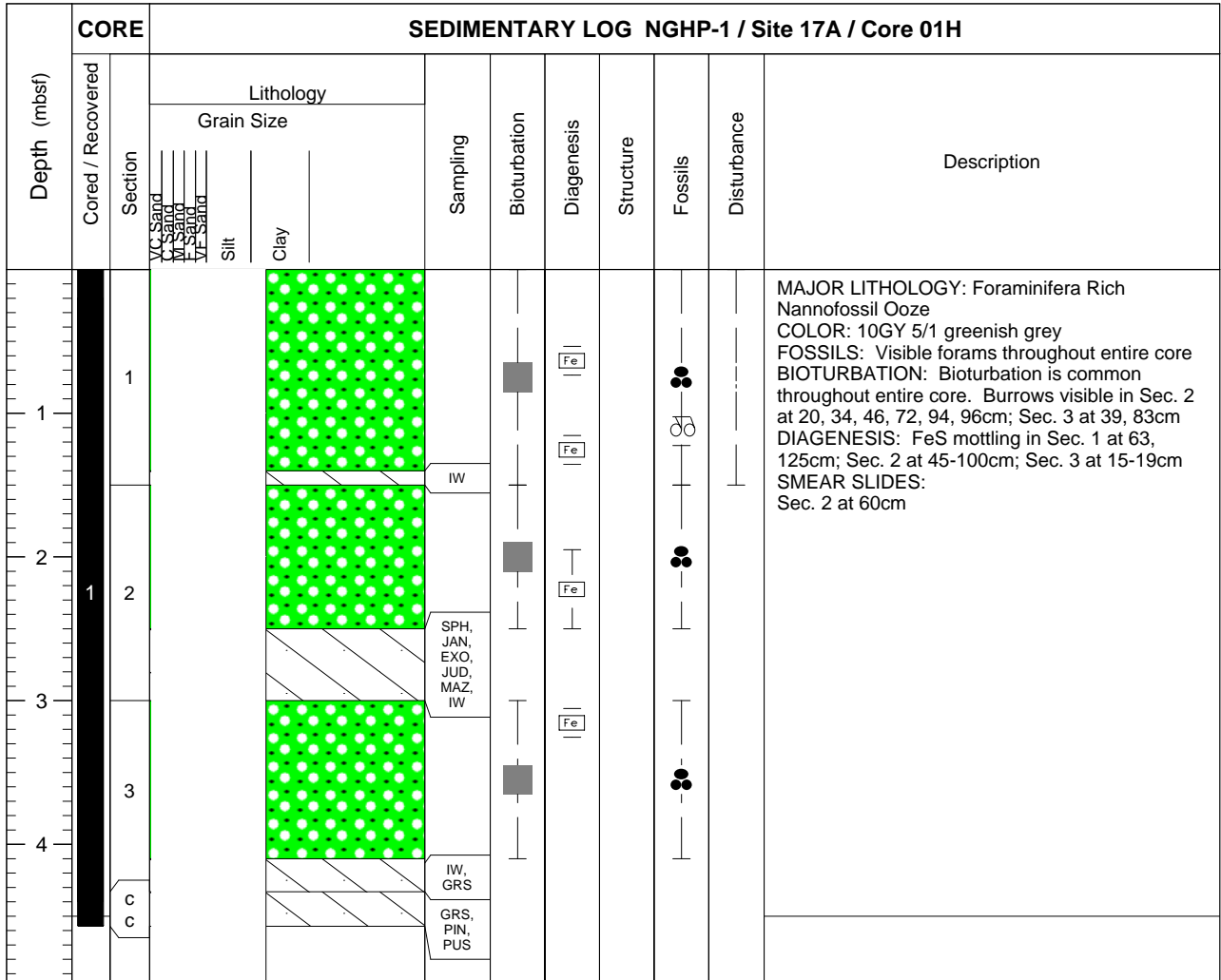
 Expansion Cracks

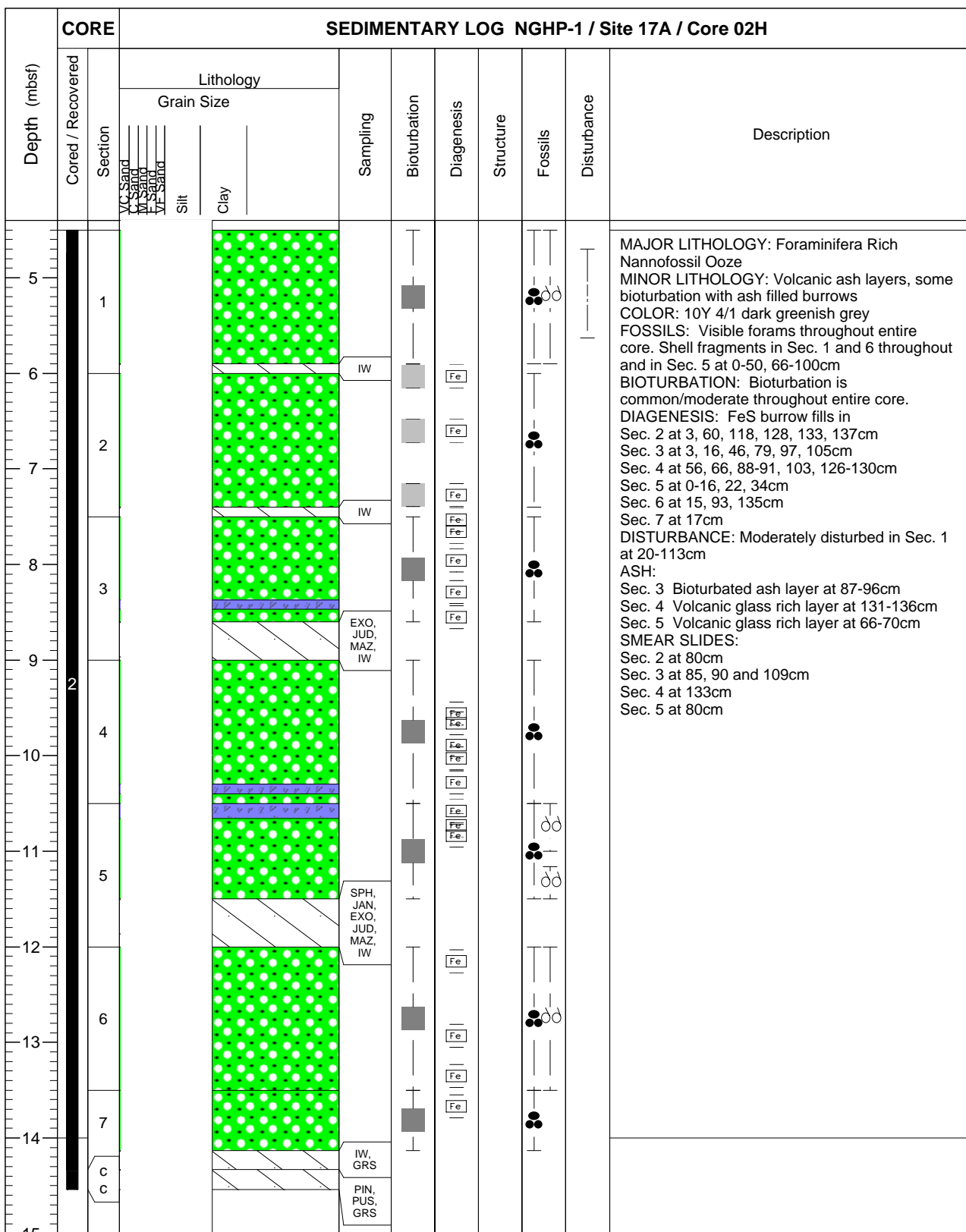
 Moderately Disturbed

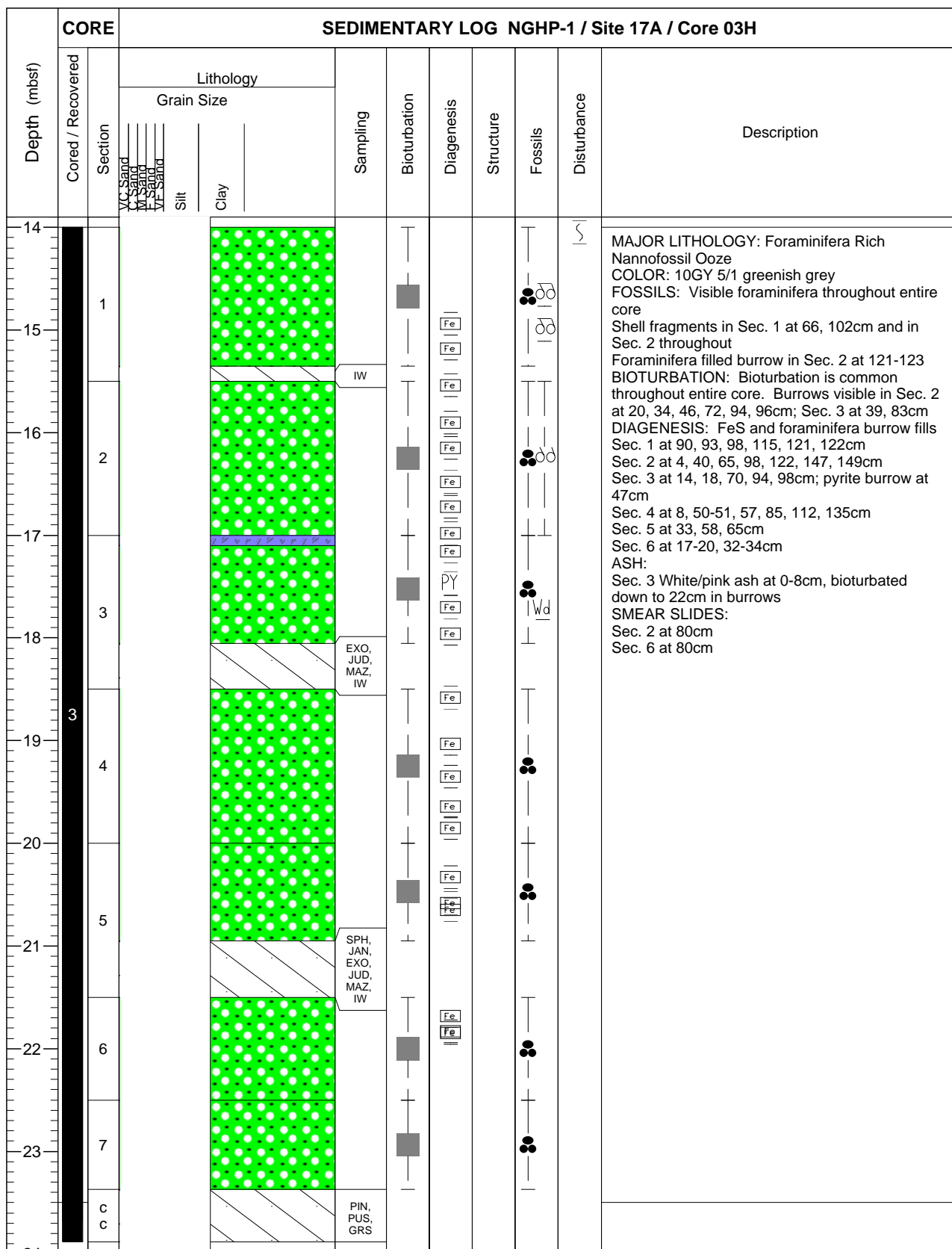
 Very Disturbed

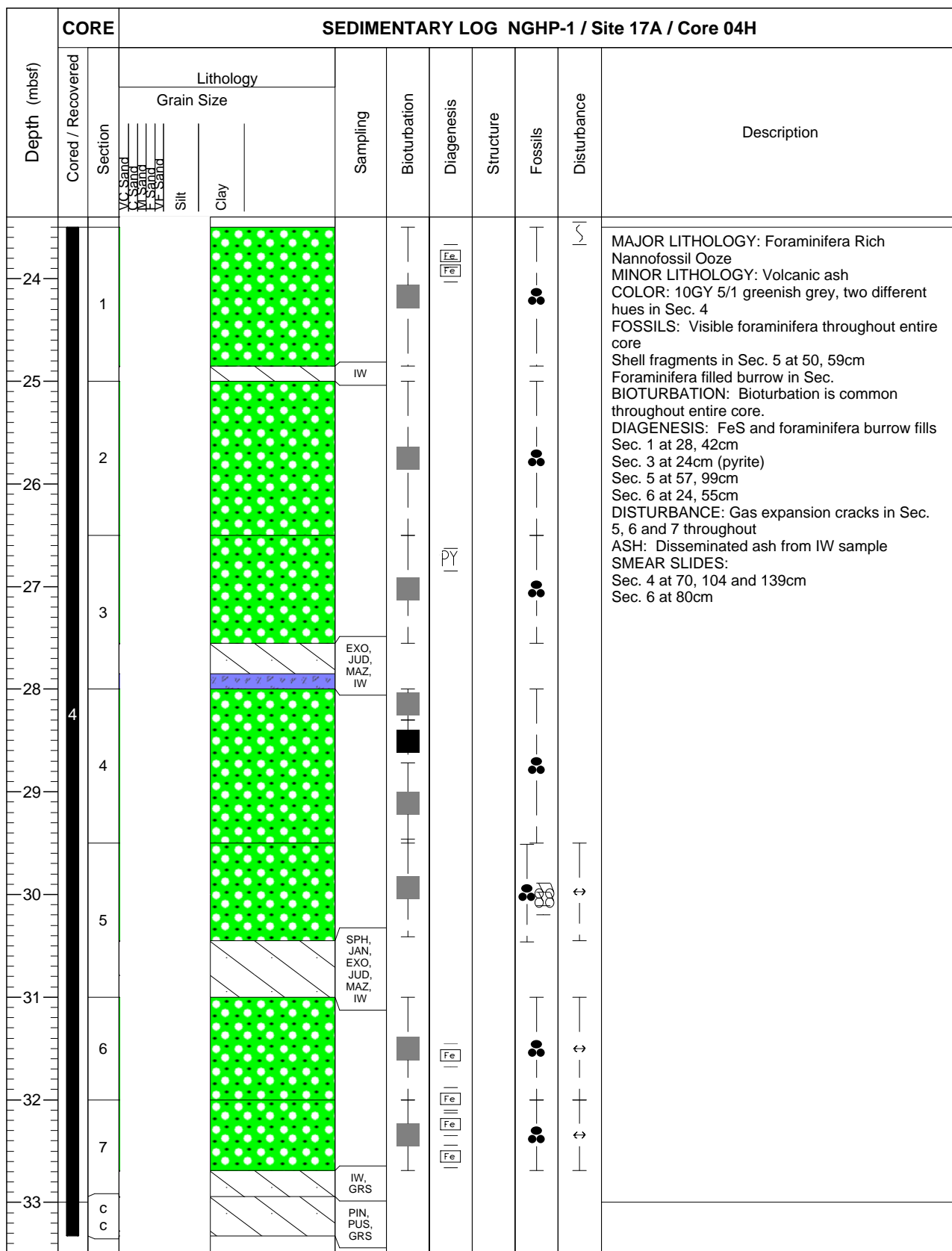
 Biscuit & Slurry

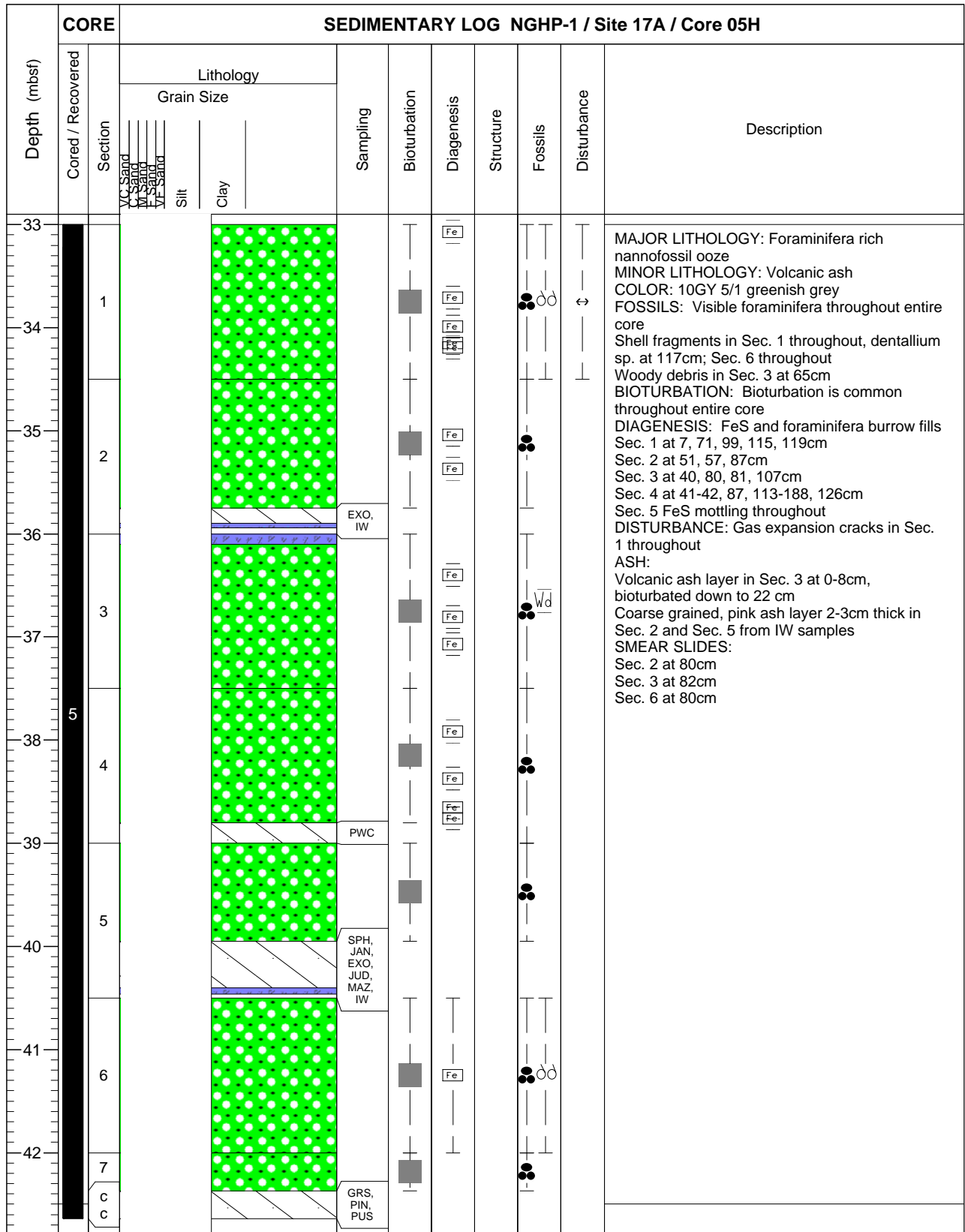
 Drilling Induced Fractures

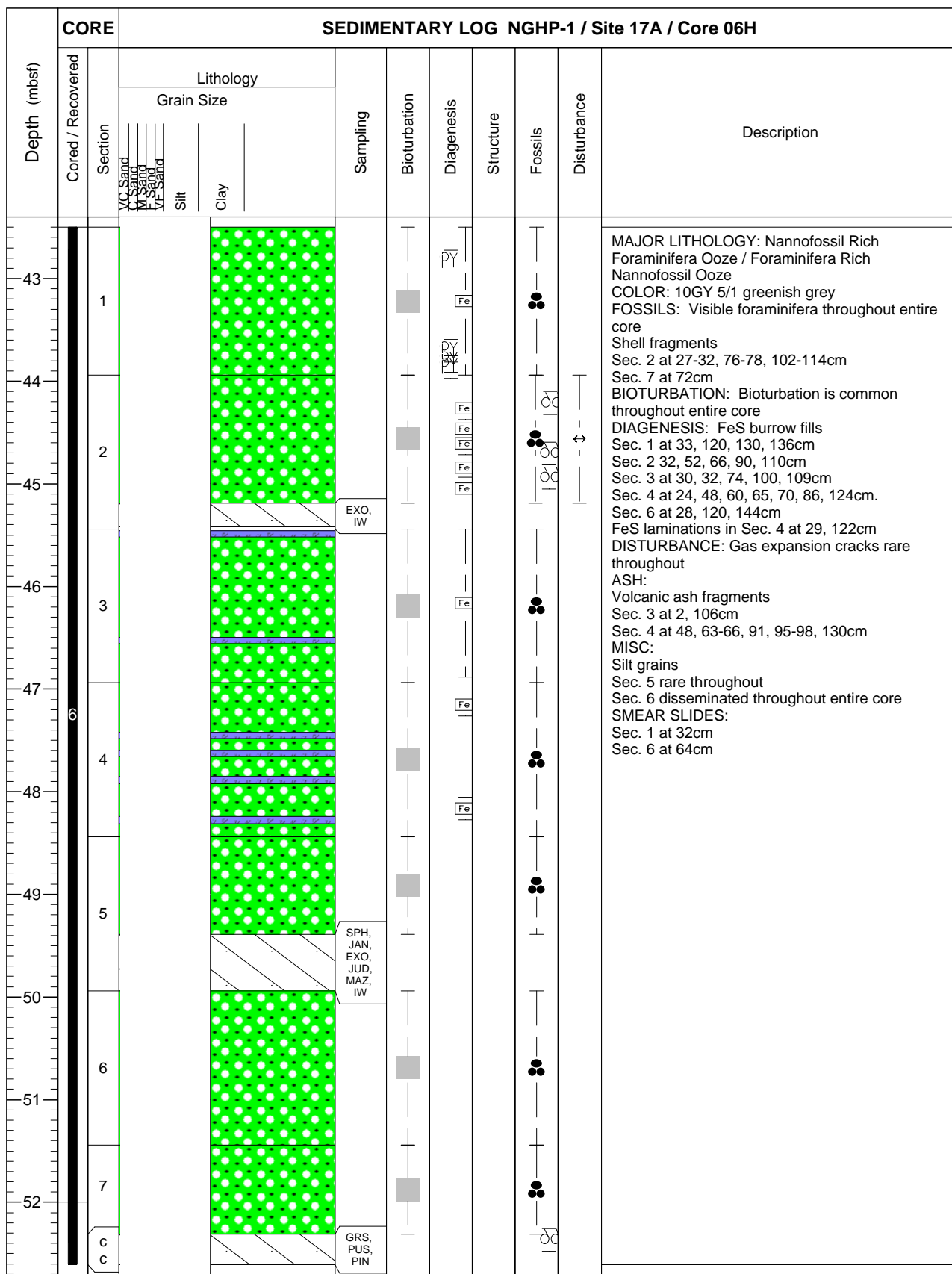


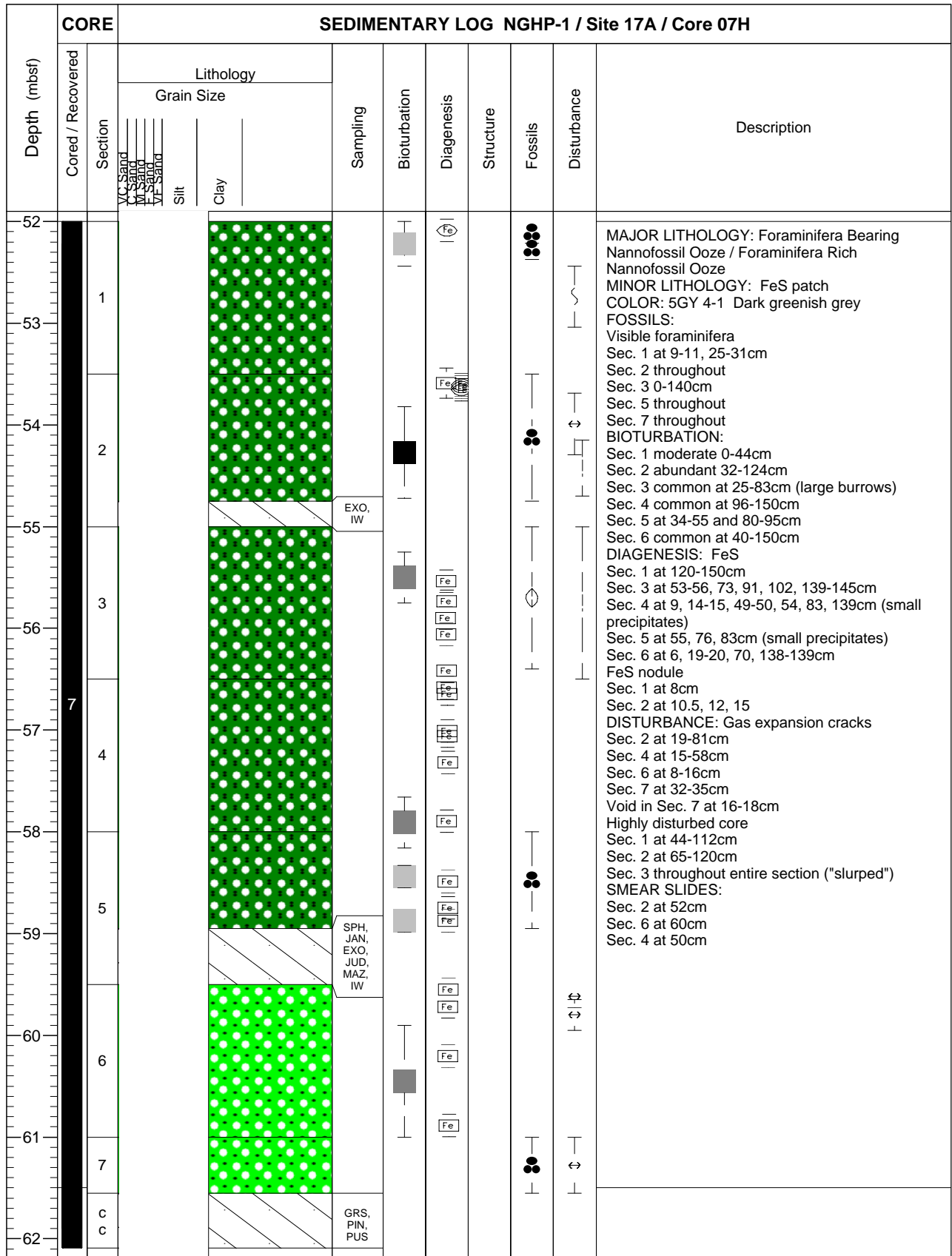




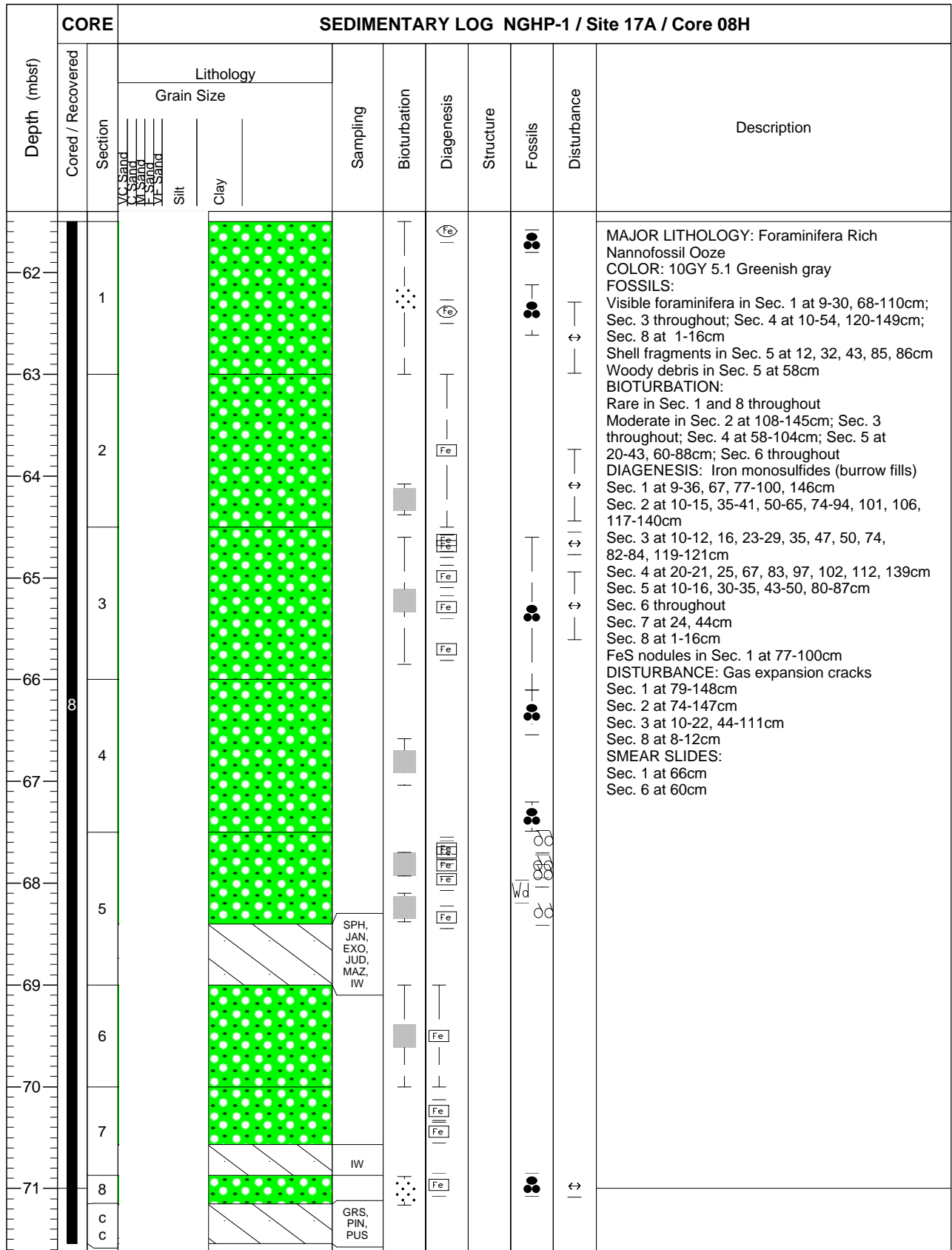


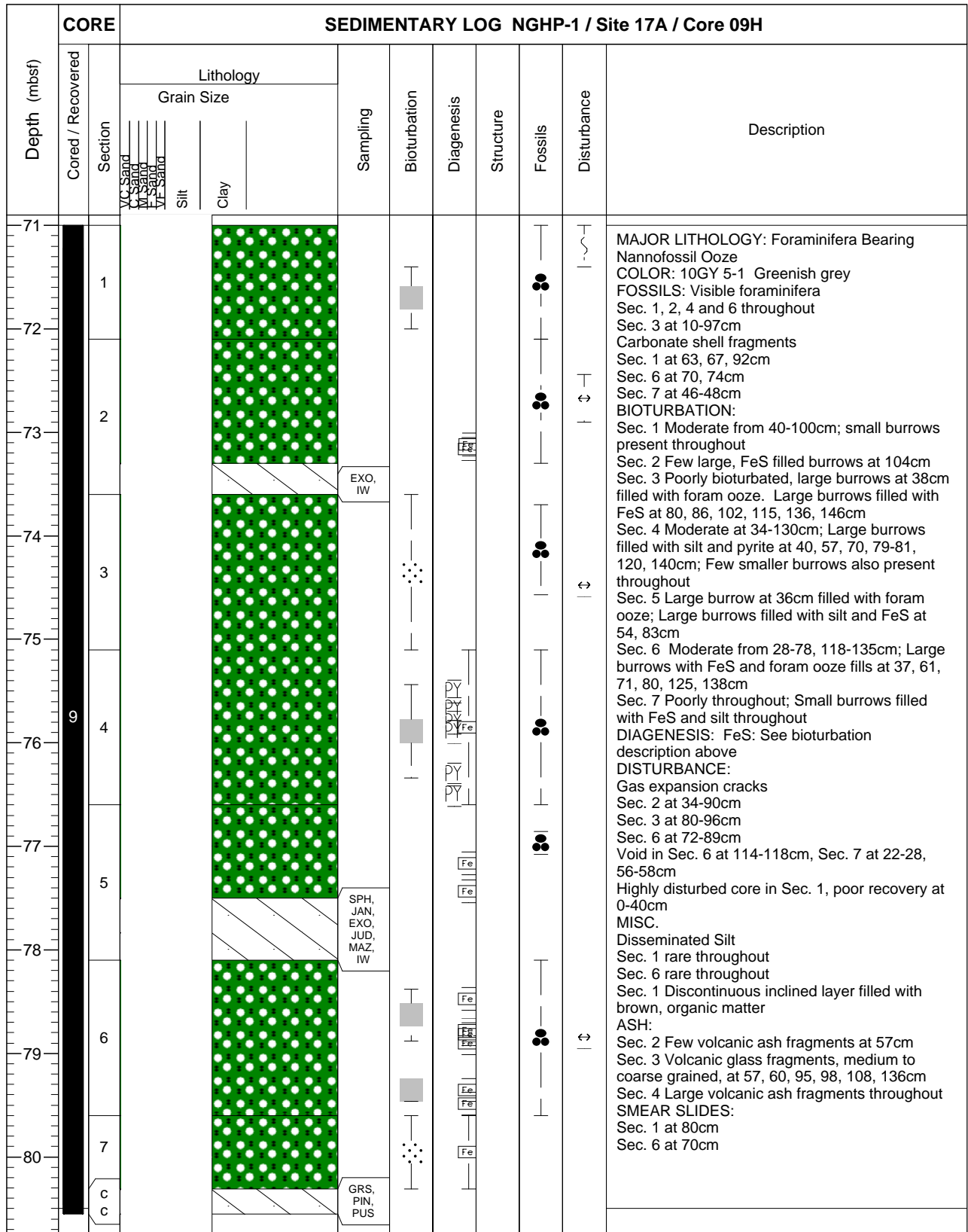


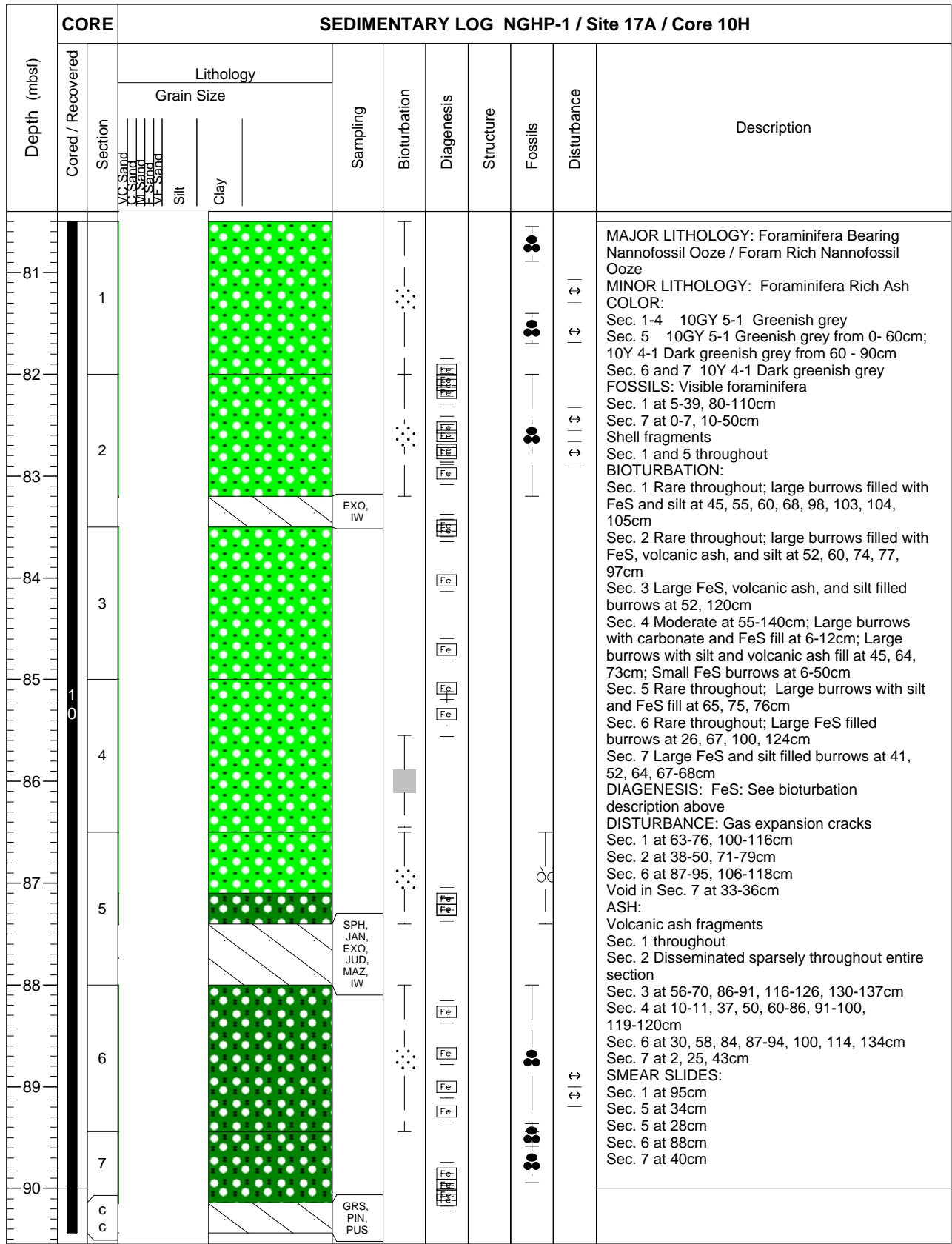


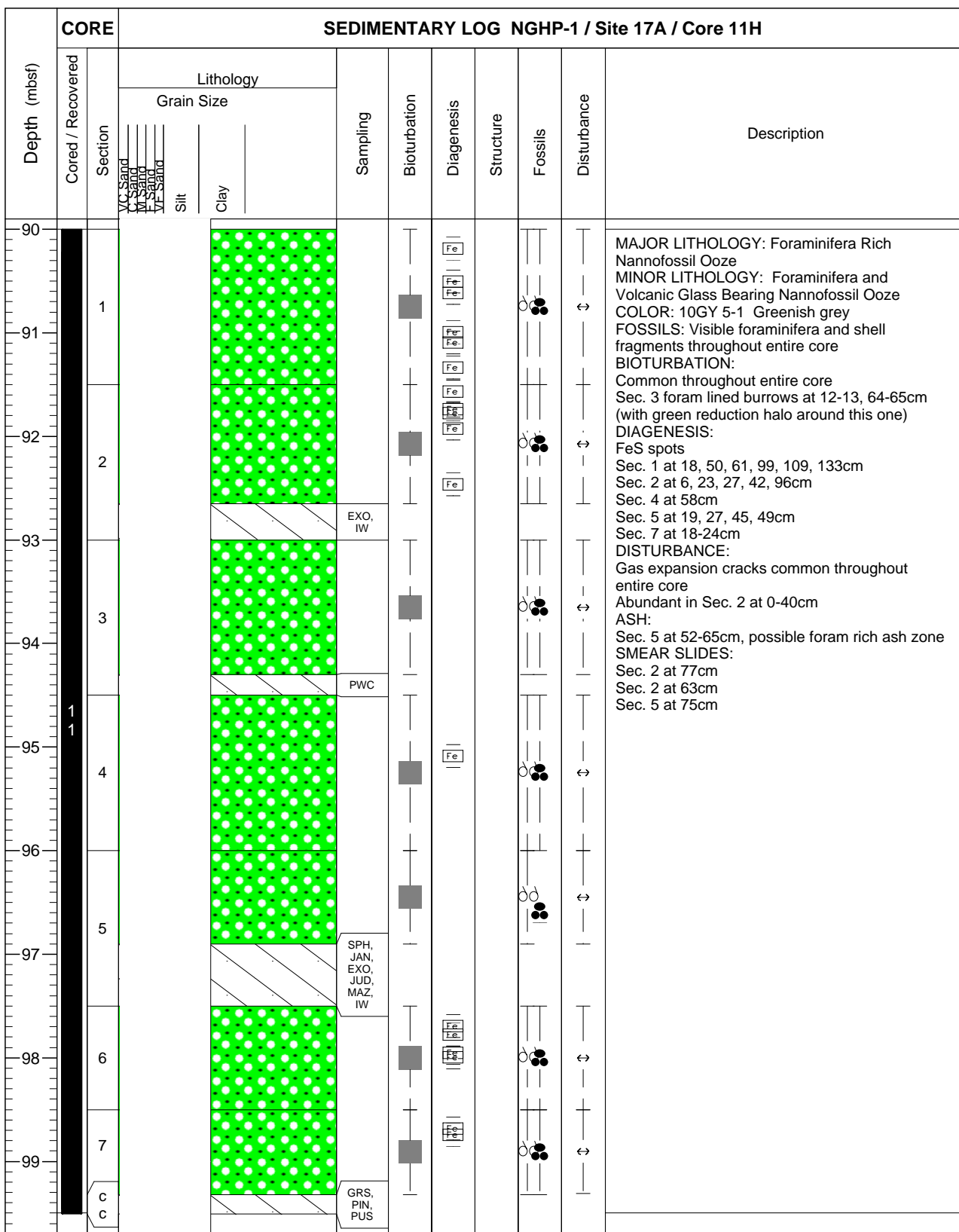


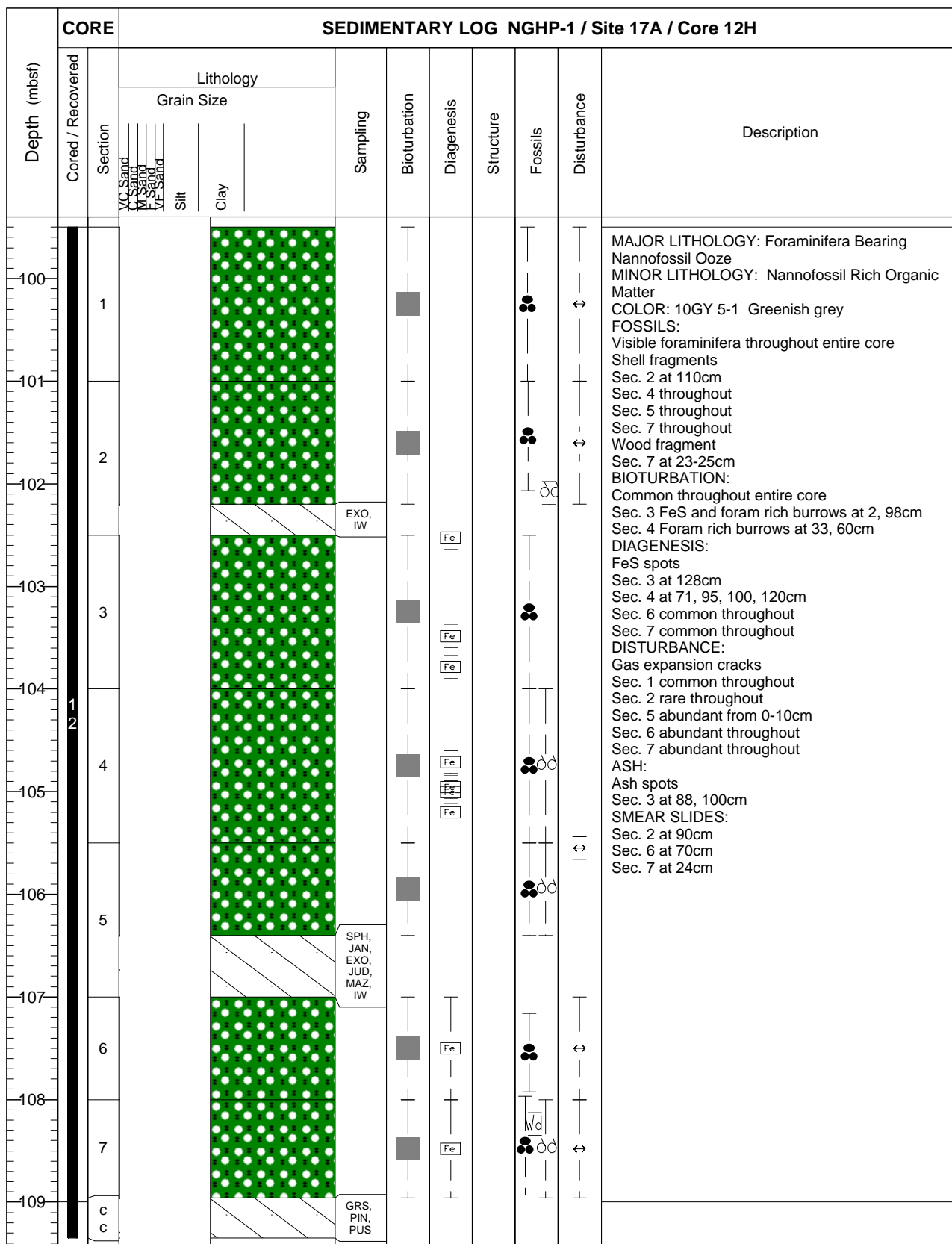


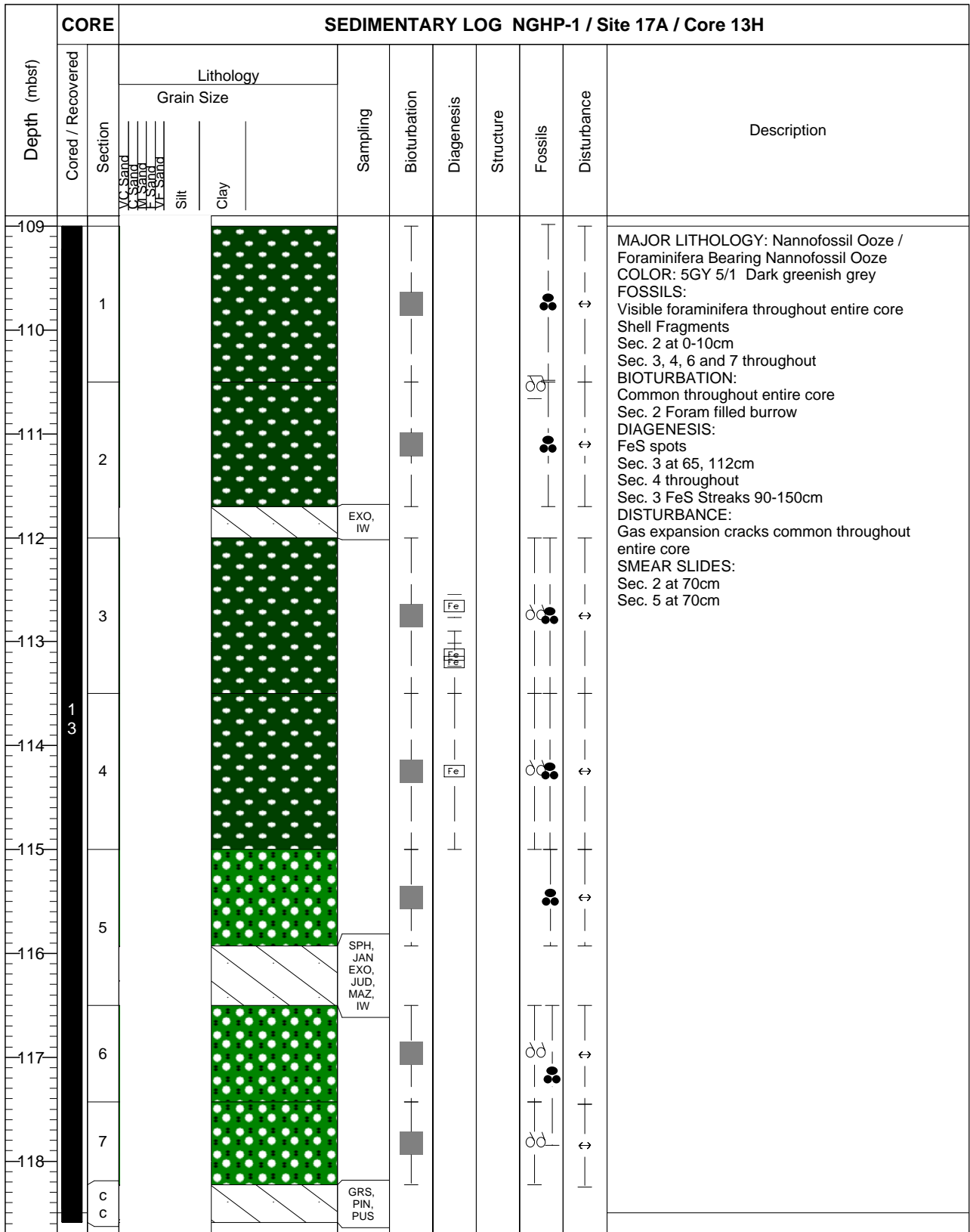


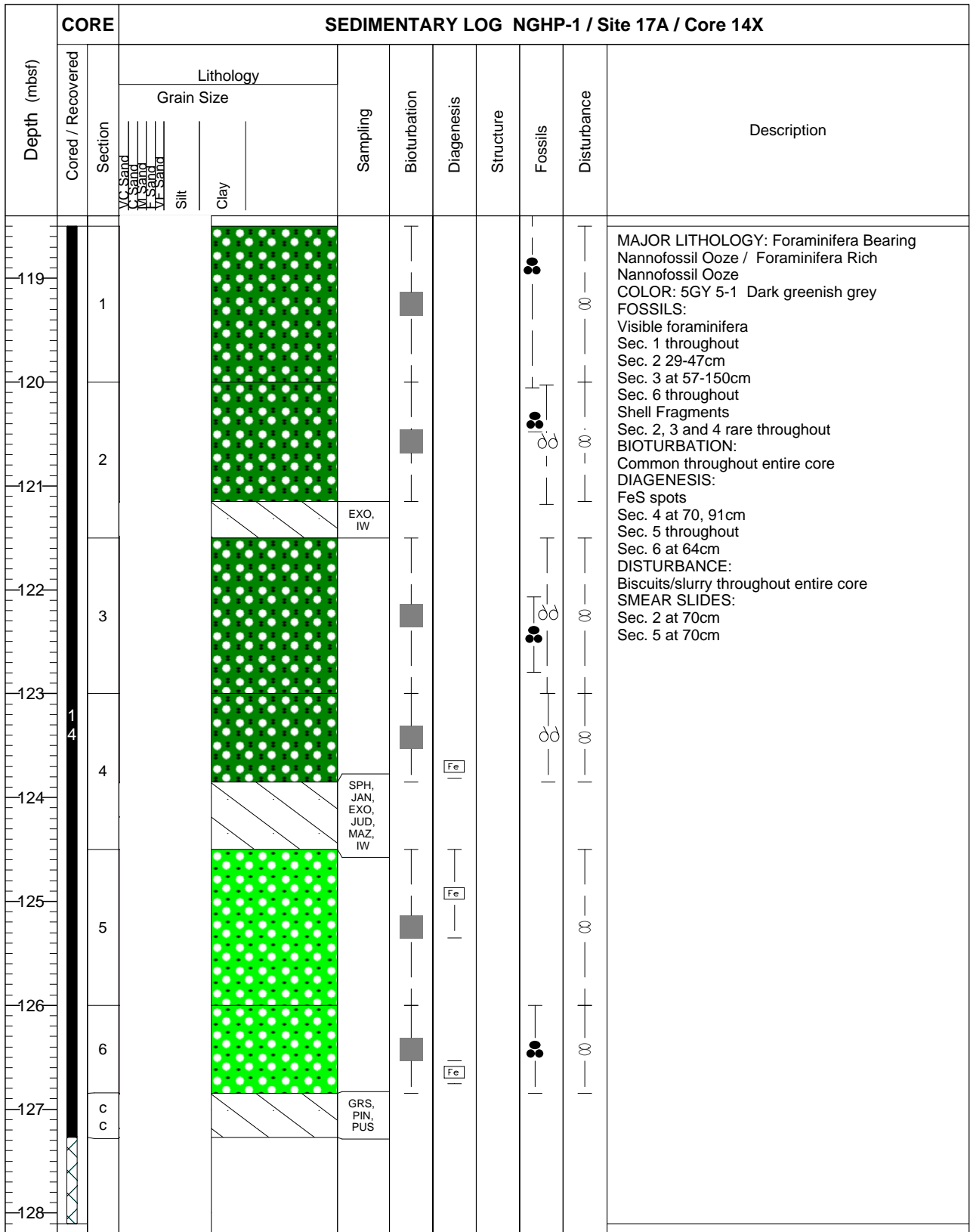


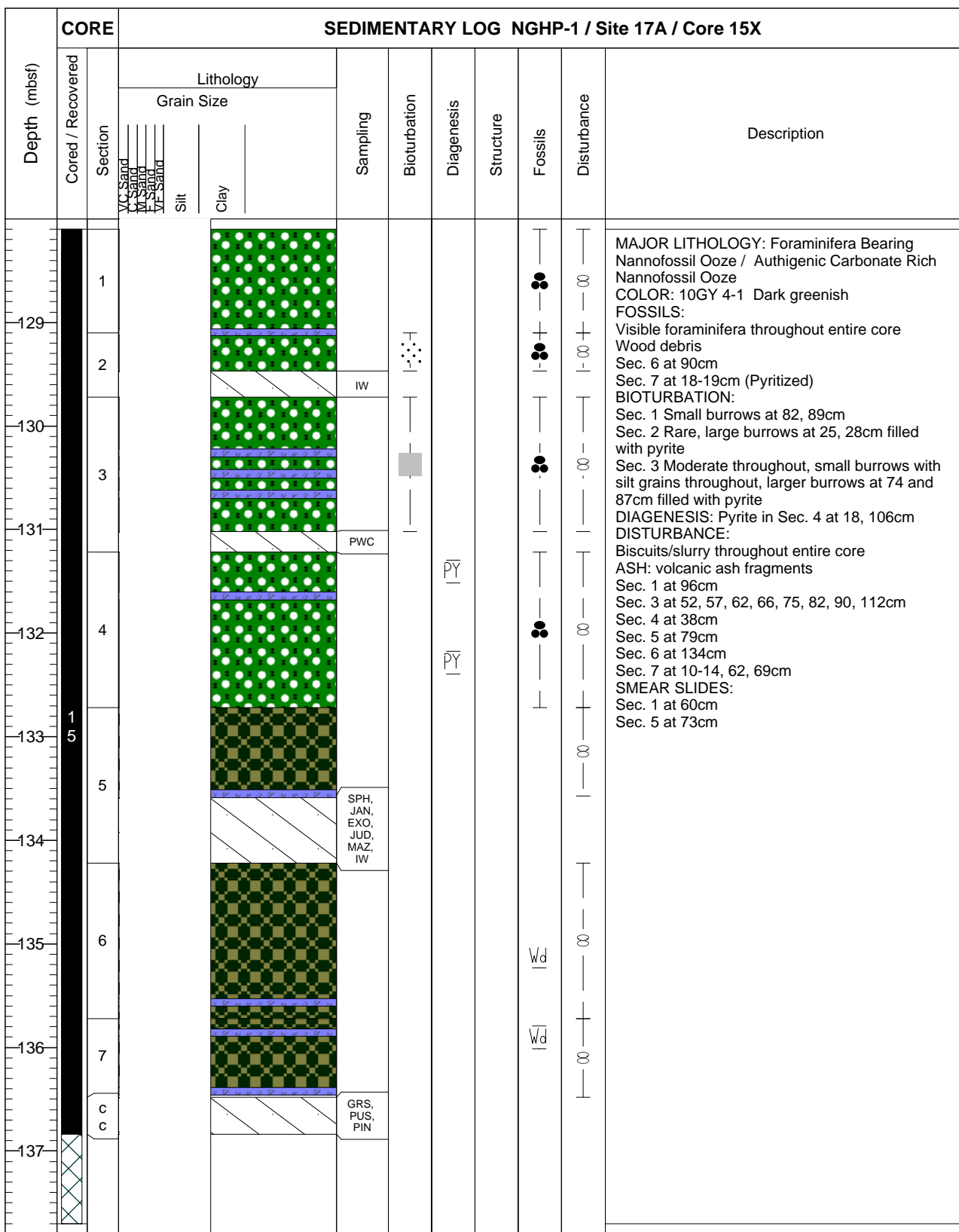




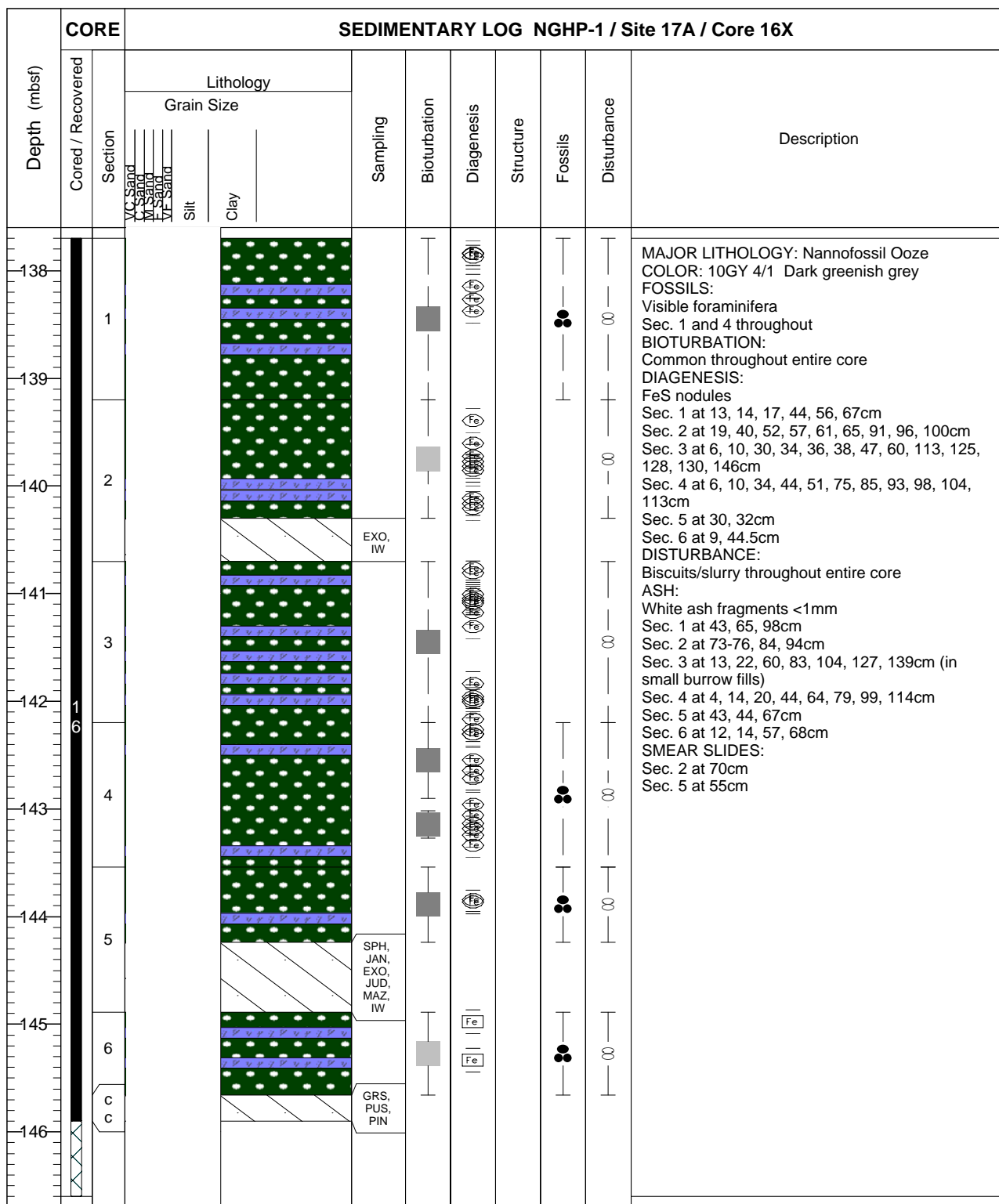






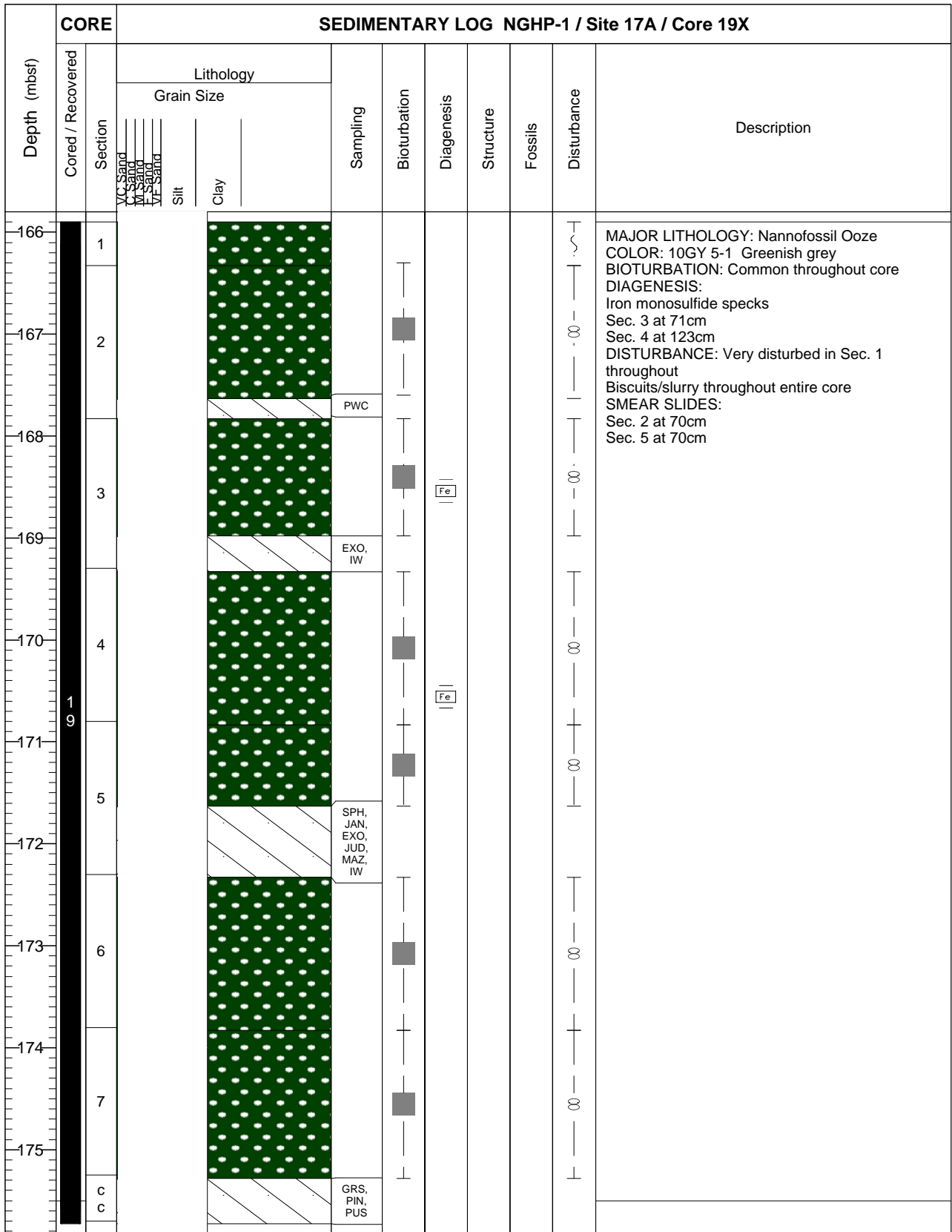




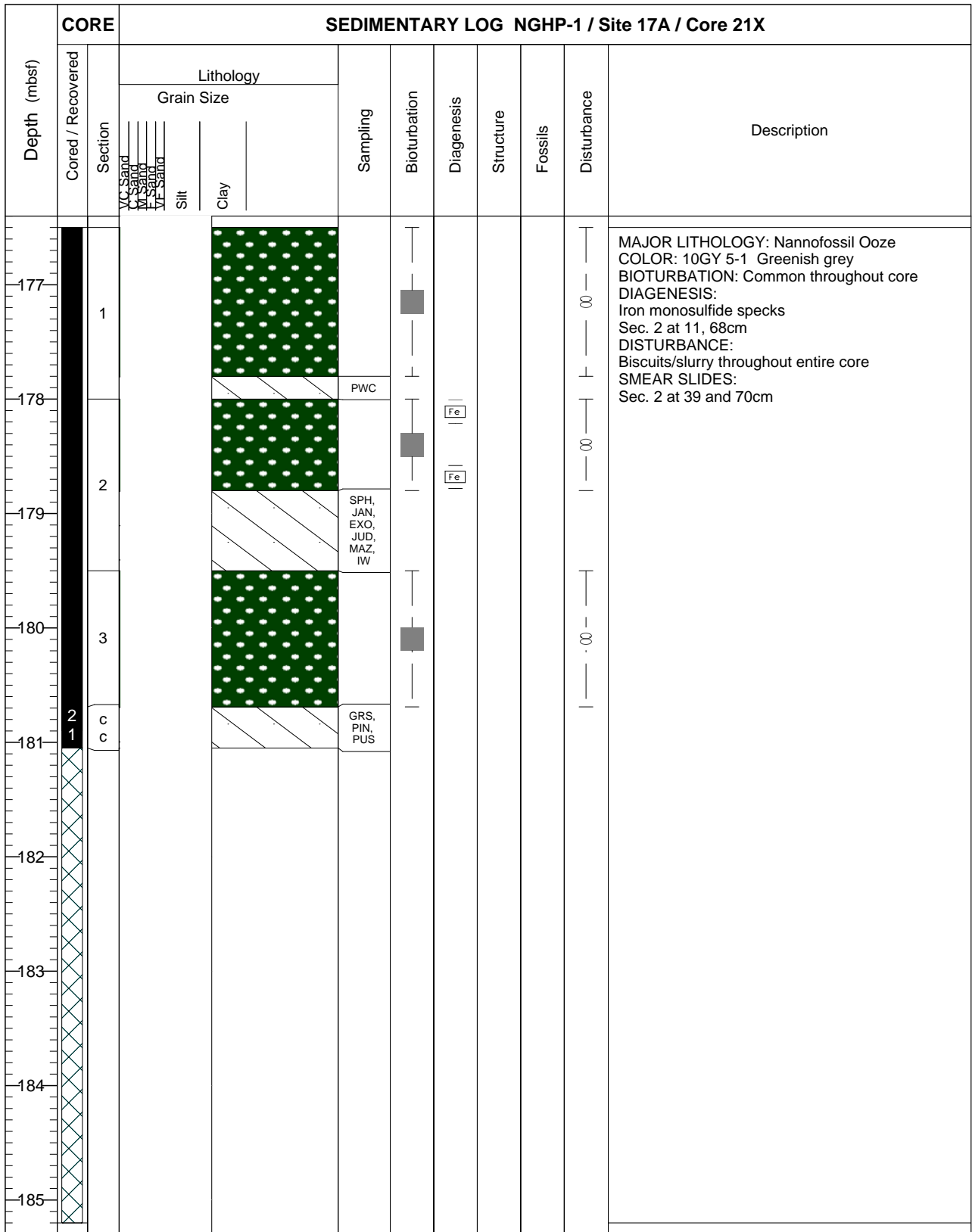


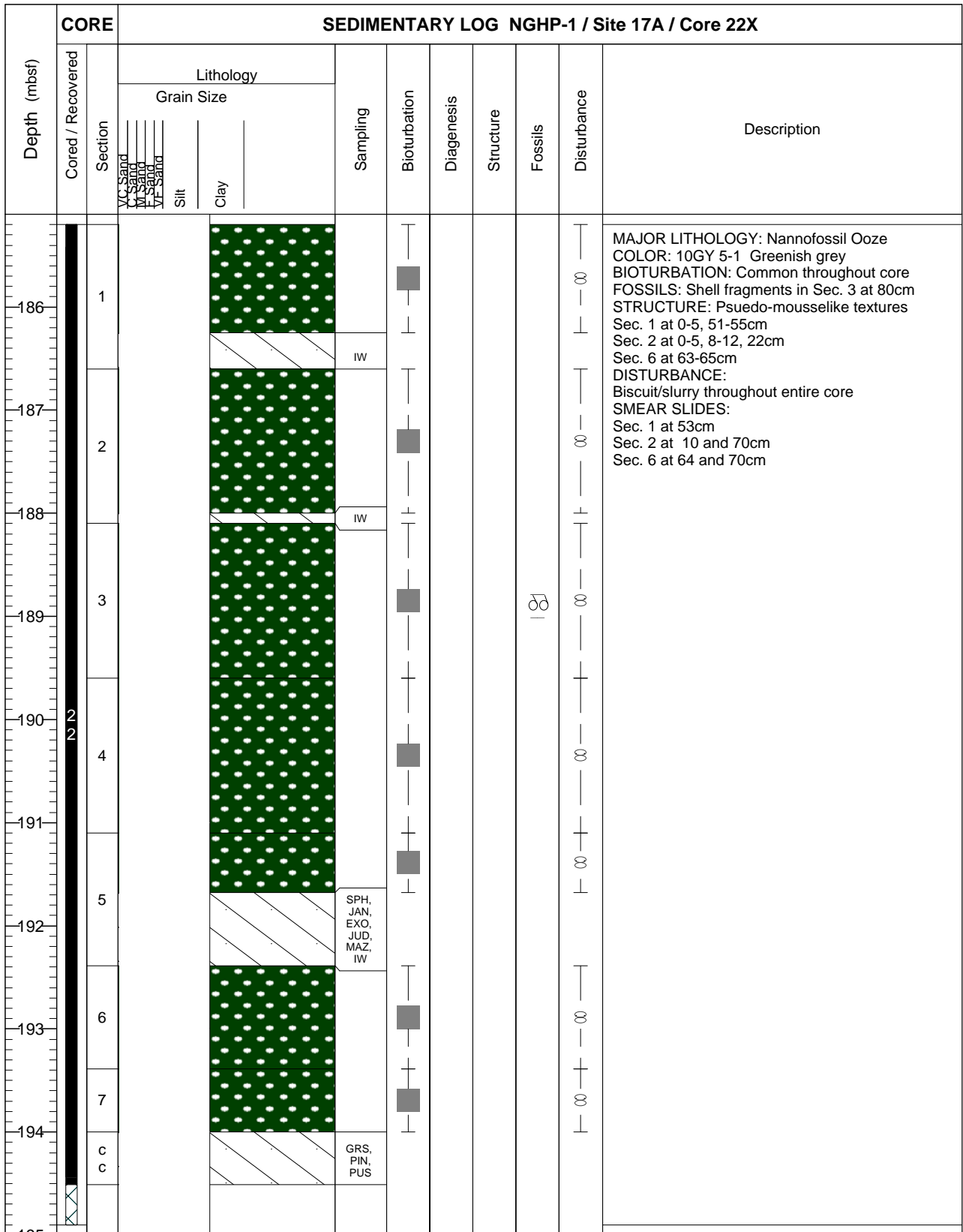
CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 17X									
Depth (mbstf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand V Sand M Sand VF Sand	Silt Clay							
147	1 7	1 c c			GRS, PIN, PUS						<p>MAJOR LITHOLOGY: Authigenic Carbonate Rich Nannofossil Ooze COLOR: 10GY 4/1 Dark greenish grey FOSSILS: Visible foraminifera throughout entire core BIOTURBATION: Rare throughout entire core DIAGENESIS: FeS spots at 14, 21, 28cm DISTURBANCE: Biscuits/slurry throughout entire core 0-12cm highly disturbed SMEAR SLIDES: Sec. 1 at 21cm</p>
148											
149											
150											
151											
152											
153											
154											
155											
156											

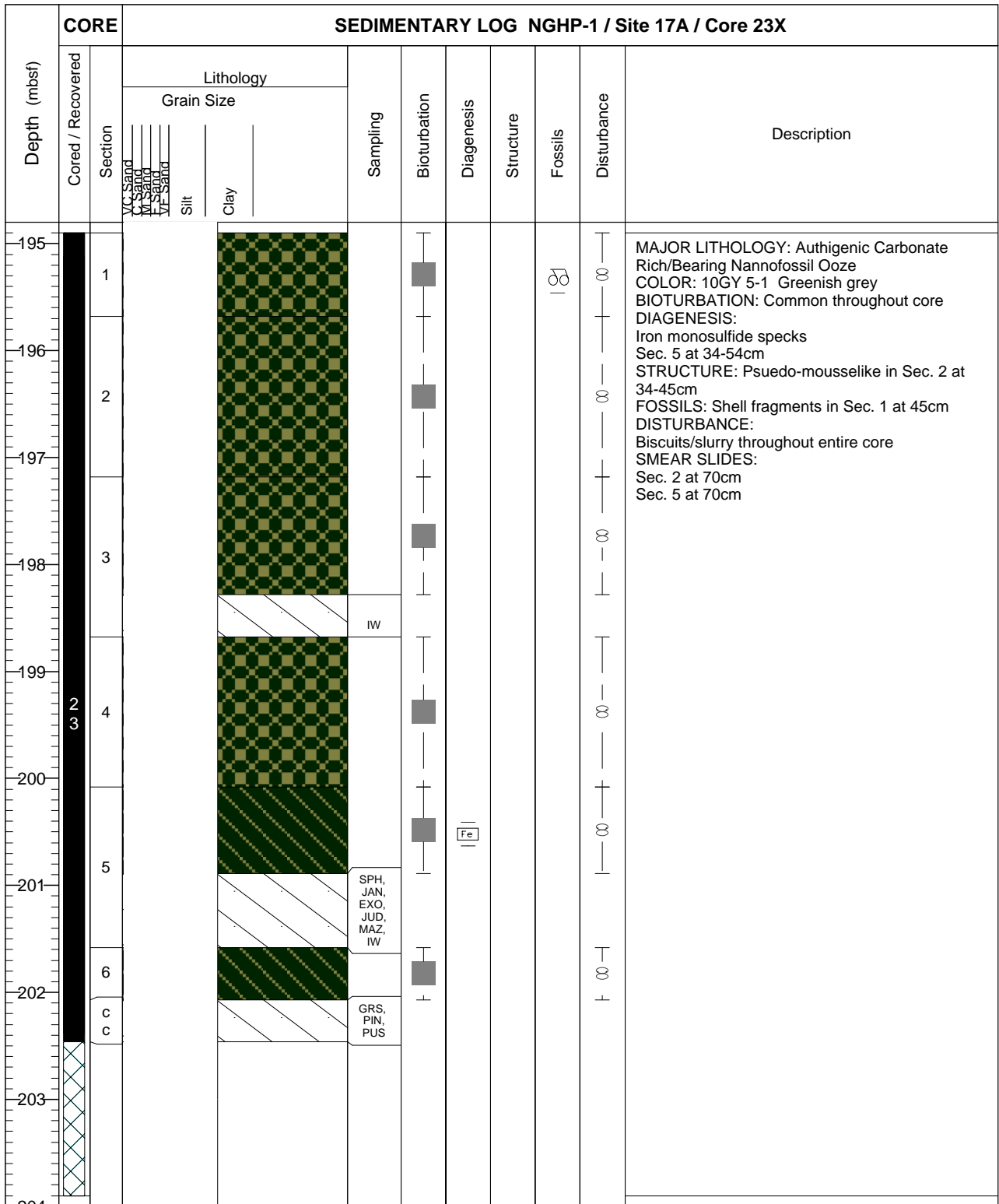




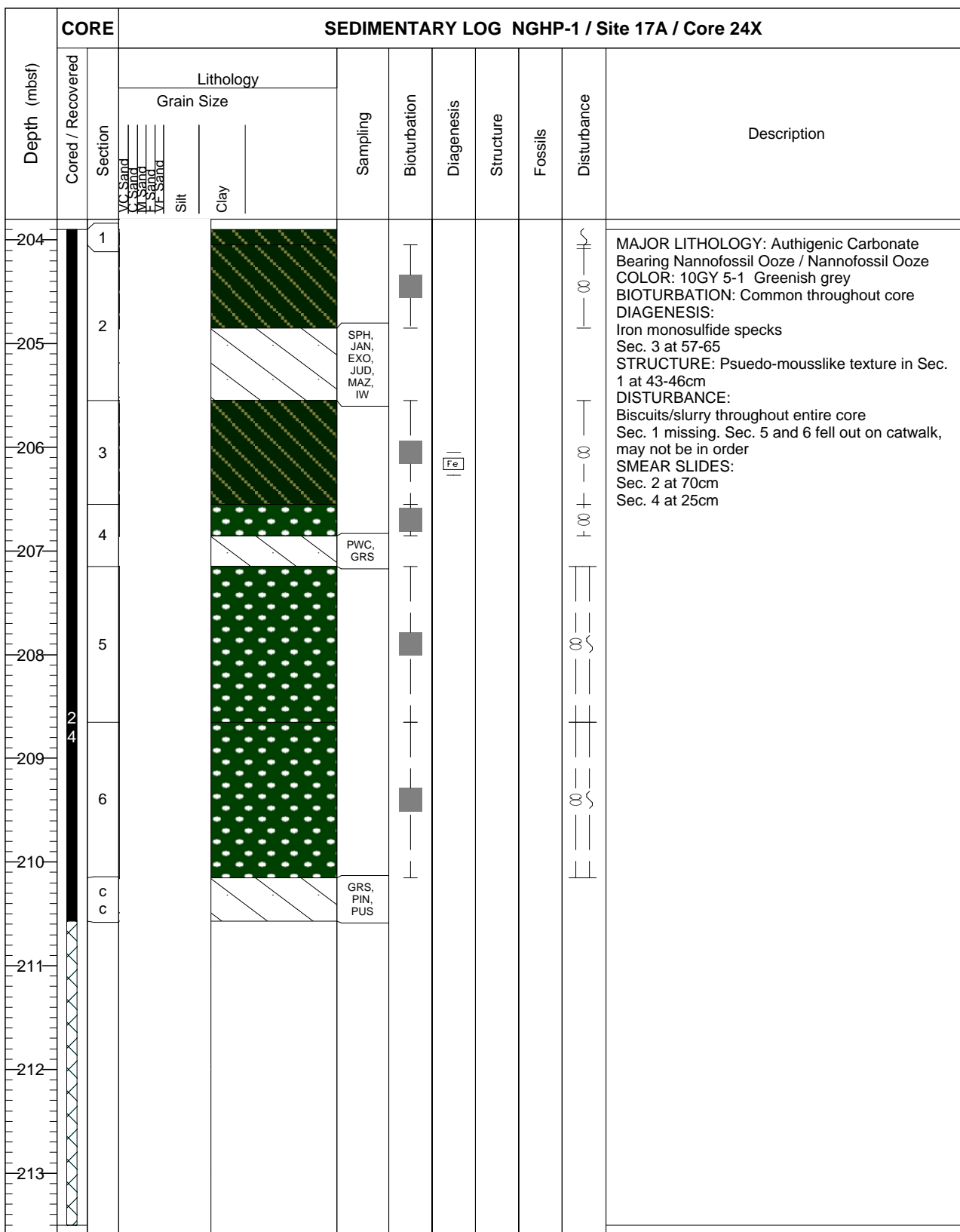
CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 20Y									
Depth (mbstf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			MS Sand								
			MF Sand								
			Silt								
			Clay								
176											
176	20	1									MAJOR LITHOLOGY: Foraminifera Bearing Nannofossil Ooze MINOR LITHOLOGY: Foraminifera (concentrated) COLOR: 5GY 4/1 dark greenish grey FOSSILS: Visible foraminifera throughout entire core with a concentrated patch at 51cm BIOTURBATION: Moderate throughout entire core SMEAR SLIDES: Sec. 1 at 57cm Sec.1 at 61cm Sec. 1 at 70cm
176											

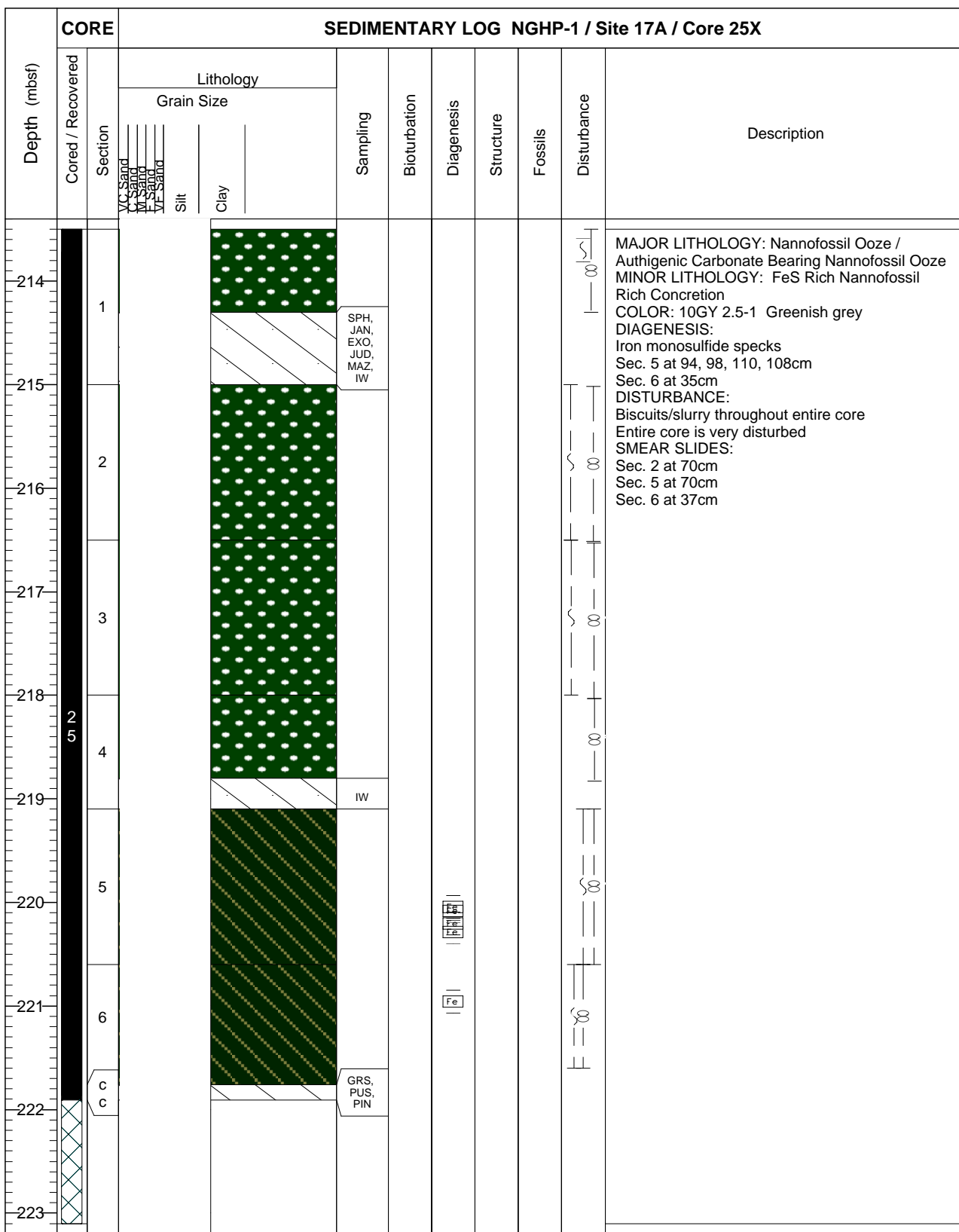






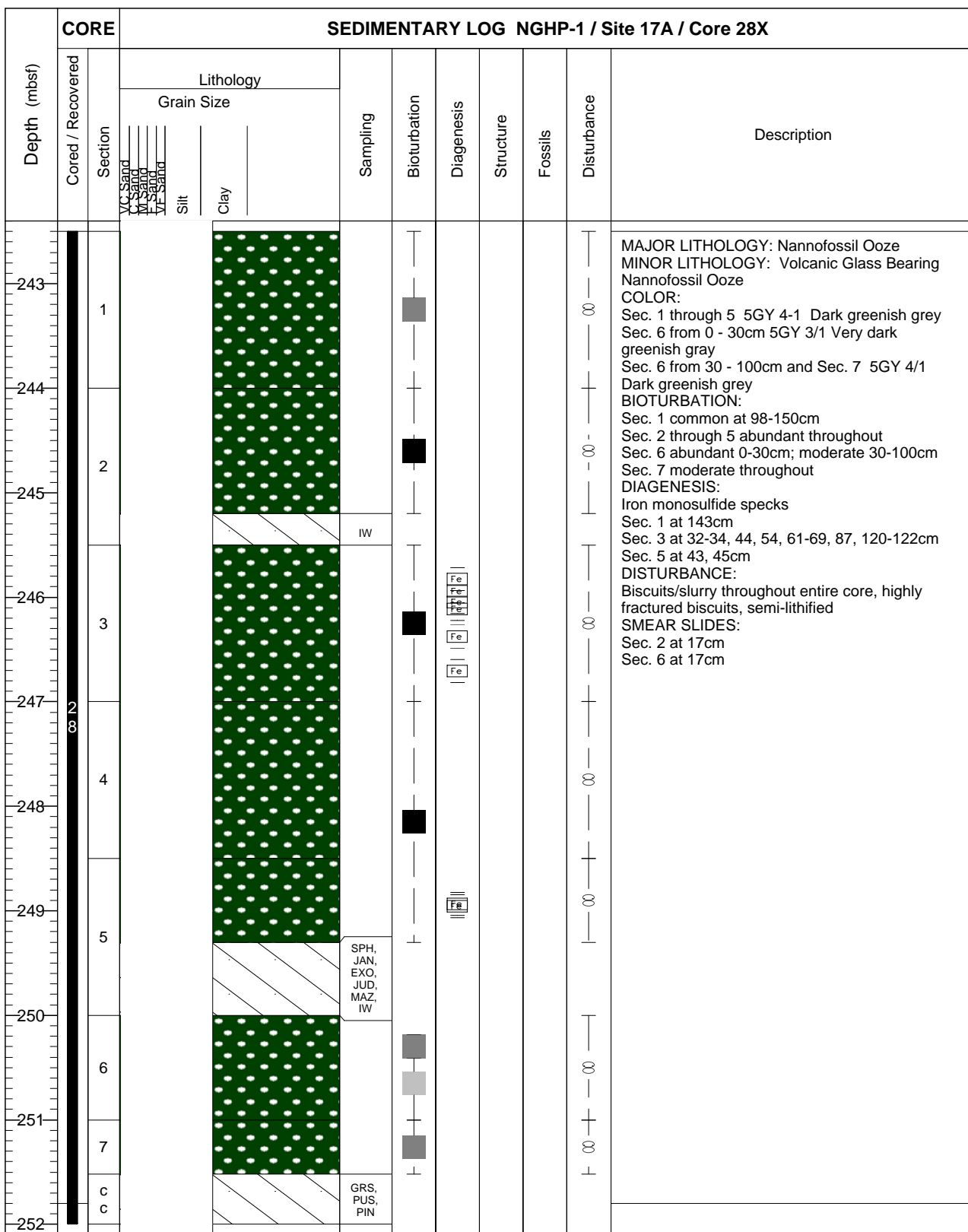


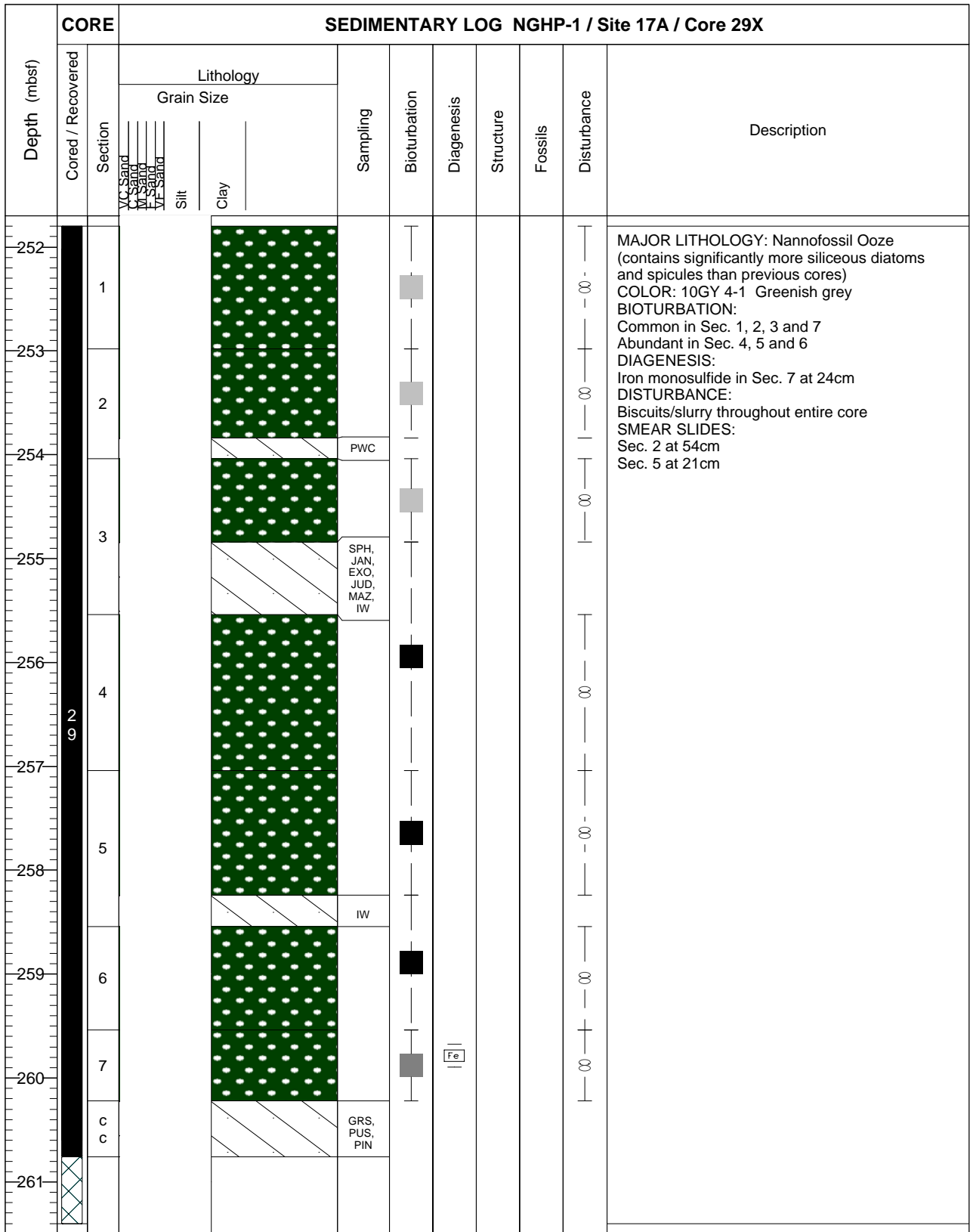




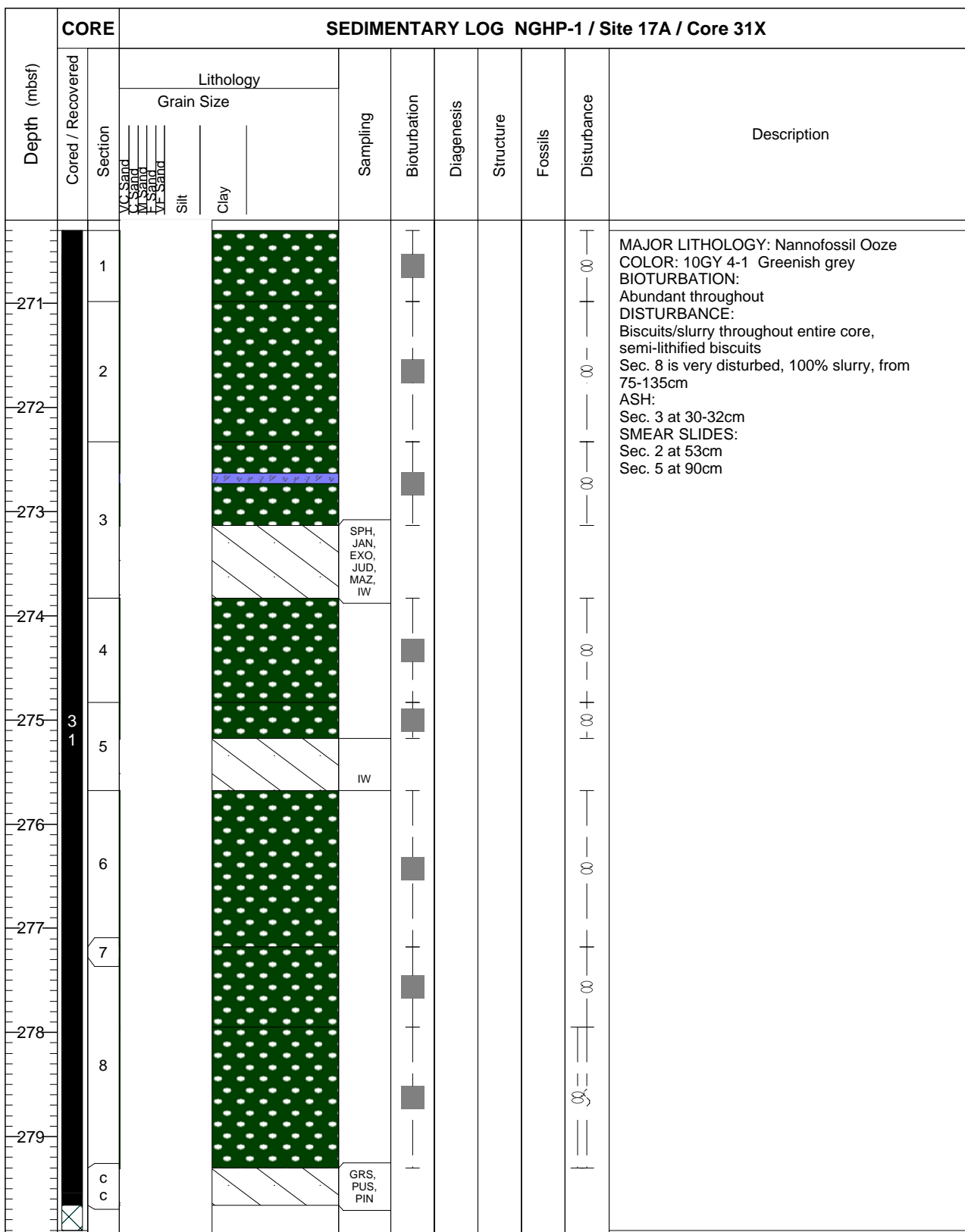
CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 26X									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			W Sand								
			VF Sand								
			Silt								
			Clay								
224	1										<p>MAJOR LITHOLOGY: Authigenic Carbonate Rich Nannofossil Ooze</p> <p>COLOR: Sec. 1 through Sec. 3 10GY 5-1 Greenish grey Sec. 4 at 0 to 47cm 10Y 5/1 Greenish grey Sec. 4 at 47 to 124cm 10GY 5/1 Greenish grey</p> <p>DISTURBANCE: Biscuits (semi-lithified)/slurry throughout entire core</p> <p>SMEAR SLIDES: Sec. 2 at 110cm</p>
225	2				IW						
226											
227	3				SPH, JAN, EXO, JUD, MAZ, IW						
228	4										
229	c c				GRS, PUS, PIN						
230											
231											
232											

CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 27X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
	Section	VC Sand	Clay							
		VC Sand								
		VC Sand								
		VC Sand								
		VC Sand								
		Silt								
233	1									MAJOR LITHOLOGY: Authigenic Carbonate Rich Nannofossil Ooze COLOR: 5GY 5-1 Greenish grey BIOTURBATION: Common throughout core DIAGENESIS: Iron monosulfides in burrows Sec. 1 at 81, 82, 83cm Sec. 2 at 18-19, 30-33, 119-132, 137-147cm Sec. 3 at 22, 23, 24cm Sec. 4 at 20, 40, 43cm DISTURBANCE: Biscuits/slurry throughout entire core SMEAR SLIDES: Sec. 1 at 87cm Sec. 4 at 22cm
234				IW						
235	2									
236										
237	3									
238					SPH, JAN, EXO, JUD, MAZ, IW					
239	4									
240										
241	c									
242					GRS, PUS, PIN					

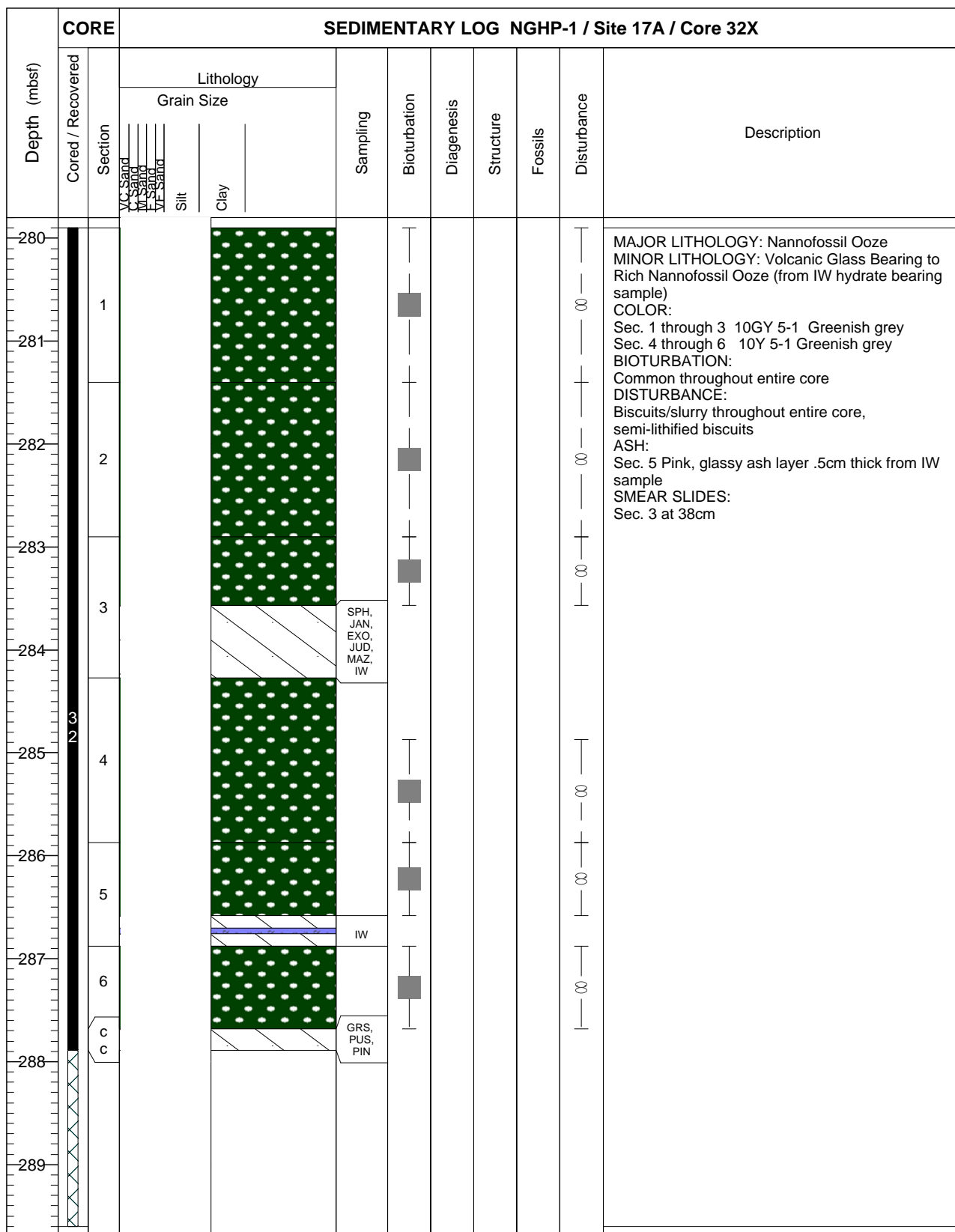




CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 30X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Section	Grain Size							
		VC Sand V Sand IW Sand VF Sand	Silt Clay							
262	1									<p><b>MAJOR LITHOLOGY:</b> Nannofossil Ooze  <b>COLOR:</b> 10GY 4-1 Greenish grey  <b>BIOTURBATION:</b>            Sec. 1 Rare 0-40; Moderate 40-70cm            Sec. 2 Common            Sec. 3 Common 0 to 62; Abundant 62-75            Sec. 4, 5 Abundant            Sec. 6 Moderate            Sec. 7 Common  <b>DISTURBANCE:</b>            Biscuits/slurry throughout entire core,            semi-lithified biscuits  <b>ASH:</b>            Sec. 3 at 120-122 pink ash layer from IW sample            Sec. 6 36 to 66cm, IW sample based on IR            anomaly contained ash bed  <b>SMEAR SLIDES:</b>            Sec. 3 at 59cm            Sec. 5 at 64.5cm            Sec. 7 at 129cm</p>
263	2									
264	3			SPH, JAN, EXO, JUD, MAZ, IW						
265	4									
266	5									
267	6			IW						
268	7									
269	8									
270										
271	c c			GRS, PUS, PIN						







CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 33X									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand V Sand W Sand VF Sand	Silt Clay							
290	3 3	1			SPH, JAN, EXO, JUD, MAZ, IW						<p>MAJOR LITHOLOGY: Nannofossil Ooze            COLOR: 10GY 5-1 Dark greenish grey            BIOTURBATION:            Common throughout entire core            DISTURBANCE:            Biscuits/slurry throughout entire core,            semi-lithified biscuits            SMEAR SLIDES:            Sec. 2 at 12cm</p>
291		2			GRS, PUS, PIN						
292		c									
293											
294											
295											
296											
297											
298											
299											

CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 34X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Section	Grain Size							
		VC Sand V Sand W Sand VF Sand	Silt Clay							
300	1									<p><b>MAJOR LITHOLOGY:</b> Nannofossil Ooze  <b>COLOR:</b> 10GY 5-1 Dark greenish grey  <b>BIOTURBATION:</b>            Common throughout entire core  <b>DISTURBANCE:</b>            Biscuits/slurry throughout entire core,            semi-lithified biscuits            Biscuits are large &gt;5cm and small &lt;5cm            Sec. 1            Large at 0-40cm and 65-150cm            Small at 40-66cm            Sec. 2            Large at 0-45cm            Small at 45-55, 100-130cm            Slurry only from 55-100cm            Sec. 3            Large at 7-28cm            Slurry throughout rest of the section            Sec. 4            Small at 0-15cm            Sec. 5            Small throughout but only on one half of the split            Large  <b>SMEAR SLIDES:</b>            Sec. 2 at 28cm</p>
301	2									
302				PWC						
303	3			SPH, JAN, EXO, JUD, MAZ, IW						
304	3 4									
305	4			IW						
306	5									
307	6			MAD, MAF, MAG, JAN						
308	c c			GRS, PUS, PIN						

CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 35X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size	Clay							
	Section	VC Sand								
		W Sand								
		MF Sand								
		Silt								
		Clay								
309	1									<p>MAJOR LITHOLOGY: Nannofossil Ooze            COLOR: 10GY 5-1 Dark greenish grey            BIOTURBATION:            Common throughout entire core            DIAGENESIS:            FeS spot in Sec. 4 at 85cm            DISTURBANCE:            Biscuits/slurry throughout entire core,            semi-lithified, large biscuits            FOSSILS:            Sampled unknown "bug" in Sec. 2 at 32cm            ASH:            Pumice (?) grains in section 2 at 0-20cm            SMEAR SLIDES:            Sec. 2 at 61cm            Sec. 5 at 60cm</p>
310	2									
311	3			SPH, JAN, EXO, JUD, MAZ, IW						
312	4					Fe				
313	5									
314	6									
315	7									
316	8			IW						
317	c			GRS, PUS, PIN						
318	c									

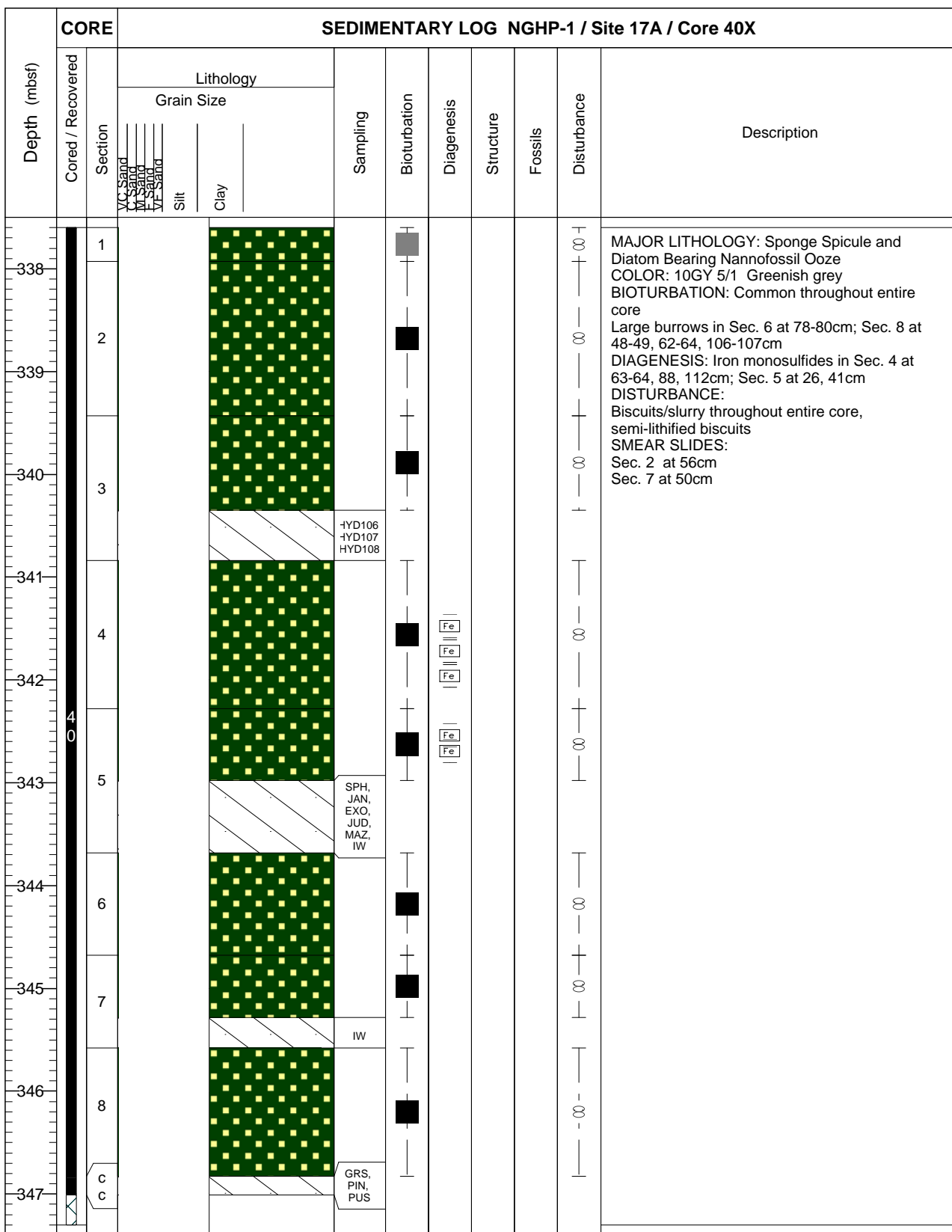
CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 36X							Description	
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils		Disturbance
		Grain Size								
	Section	VC Sand	VC Sand	VC Sand	VC Sand	Silt	Clay			
319	1	[Green dotted pattern]								<p>MAJOR LITHOLOGY: Nannofossil Ooze</p> <p>COLOR: Sec. 1, 2, 5, 6 10GY 5-1 Dark greenish grey Sec. 3 and 4 10Y 5/1 Greenish grey</p> <p>BIOTURBATION: Common throughout Sec. 2 through 6 Color of bioturbated zones is more brown than groundmass</p> <p>DISTURBANCE: Biscuit/slurry throughout entire core, semi-lithified, larger biscuits</p> <p>Large SMEAR SLIDES: Sec. 2 at 99cm Sec. 5at 68cm</p>
320	2	[Green dotted pattern]			[Grey square]					
321	3	[Green dotted pattern]			[Grey square]					
322	4	[Diagonal lines]	[Green dotted pattern]	IW	[Grey square]					
323	6	[Diagonal lines]	[Green dotted pattern]	SPH, JAN, EXO, JUD, MAZ, IW	[Grey square]					
324	5	[Green dotted pattern]			[Grey square]					
325	6	[Green dotted pattern]			[Grey square]					
326	c	[Diagonal lines]	[Green dotted pattern]	GRS, PUS, PIN	[Grey square]					
327	c	[Diagonal lines]	[Green dotted pattern]							
328										

Depth (mbsf)	CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 37P								
	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand	Clay							
328	3 7	1									MAJOR LITHOLOGY: Nannofossil Ooze COLOR: 10GY 4-1 Dark greenish grey Structureless DIAGENESIS: FeS 71-72cm SMEAR SLIDES: Sec. 1 at 66cm
329											

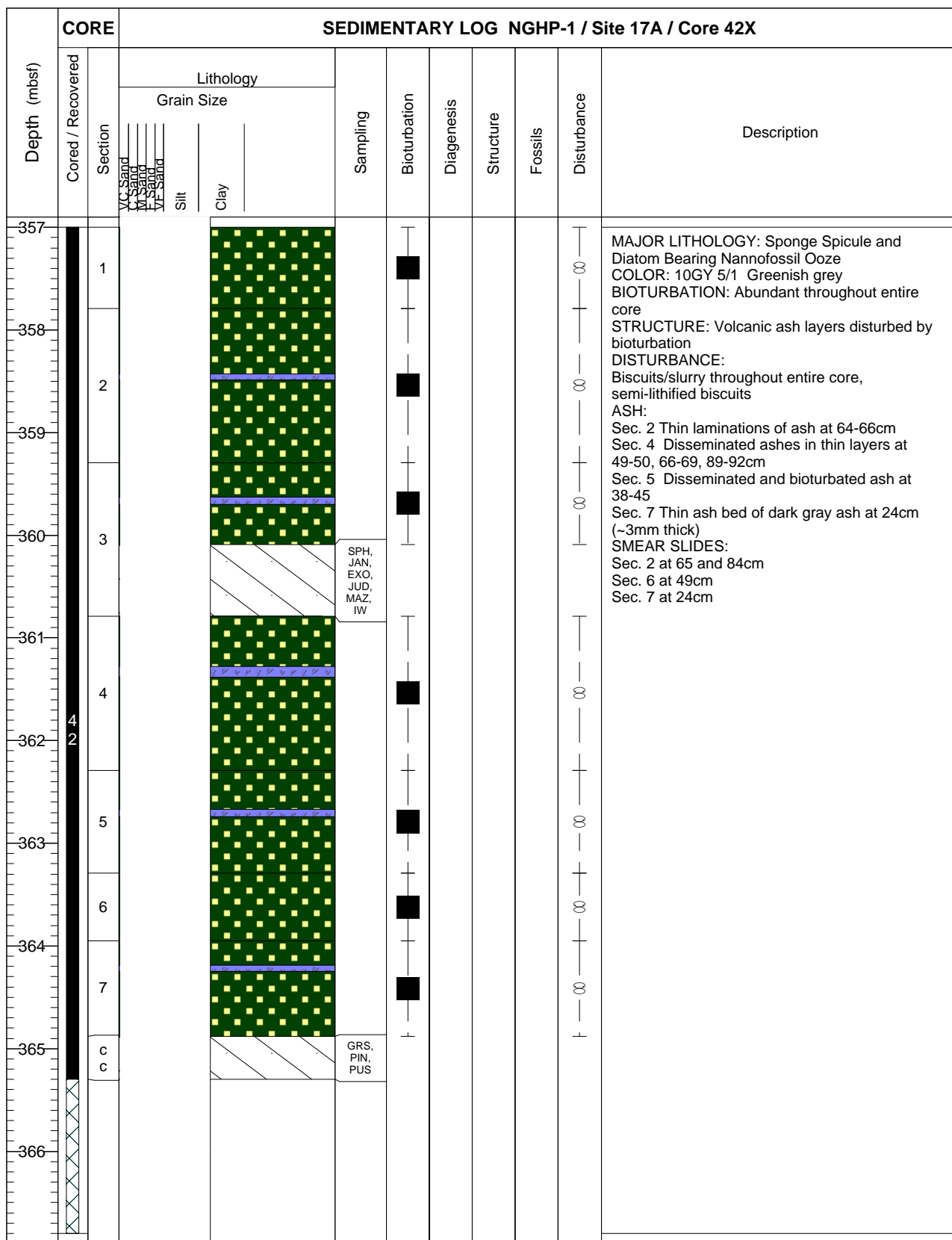
CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 38Y									
Depth (mbstf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			W Sand								
			VF Sand								
			Silt								
			Clay								
329		1									MAJOR LITHOLOGY: Diatom Bearing Sponge Spicule Rich Nannofossil Ooze COLOR: 10GY 5/1 Dark greenish grey DIAGENESIS: FeS spots throughout SMEAR SLIDES: Sec. 1 at 38cm
330	3				VOID						
330											

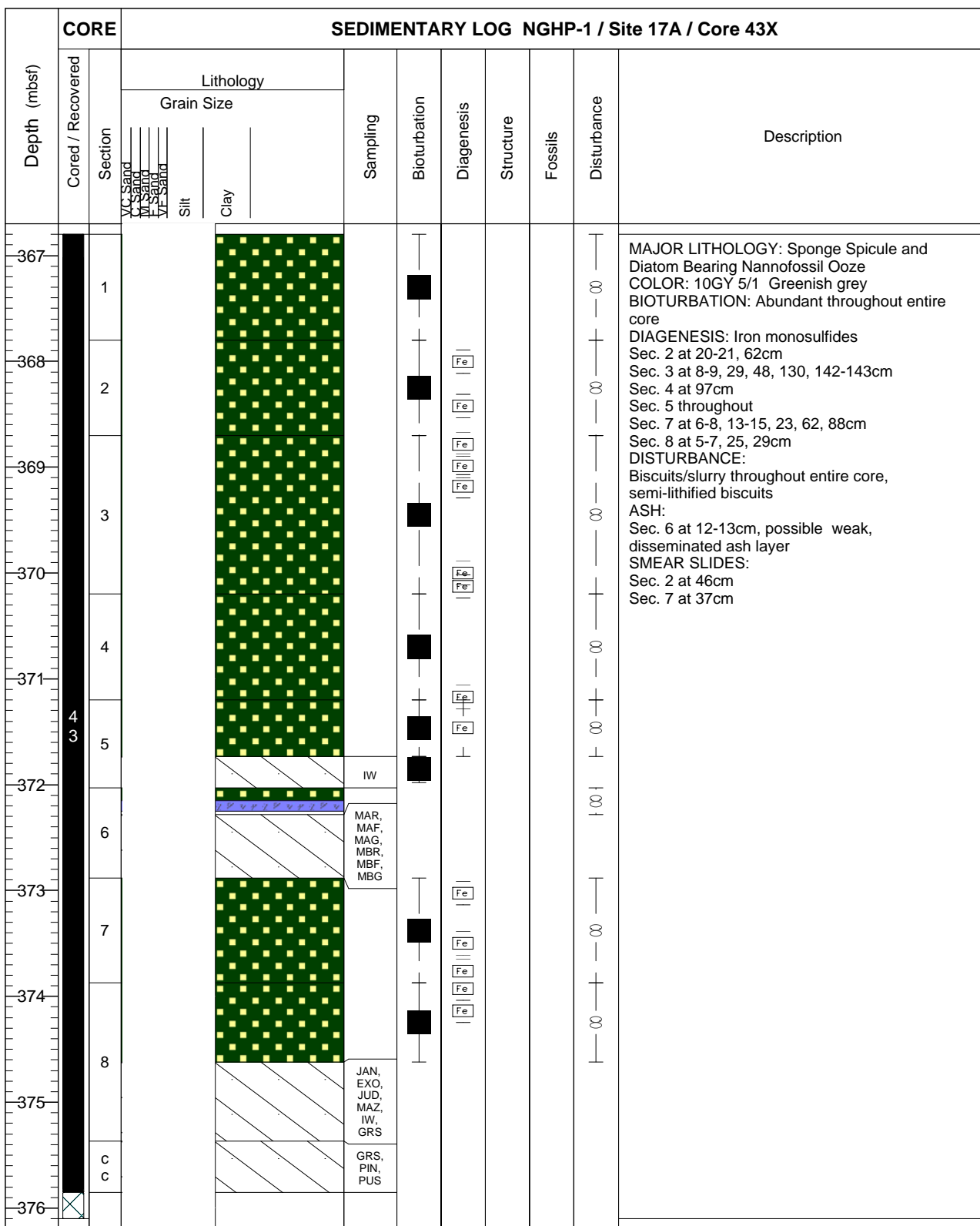
CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 39X									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size	Clay							
			VC Sand VW Sand VF Sand VU Sand VJ Sand VI Sand VH Sand VG Sand VF Sand VU Sand VJ Sand VI Sand VH Sand VG Sand								
330		1									<p>MAJOR LITHOLOGY: Nannofossil Ooze / Sponge Spicule Bearing, Diatom and Radiolarian Rich Nannofossil Ooze            COLOR: 10GY 5/1 Greenish grey            BIOTURBATION: Common throughout entire core            DISTURBANCE: Biscuit/slurry throughout entire core, semi-lithified biscuits            SMEAR SLIDES:            Sec. 2 at 38cm            Sec. 4 at 34cm            Sec. 6 at 13cm</p>
331											
332		2									
333				MBR, MBF, MBG, IW							
334		3			SPH, JAN, EXO, JUD, MAZ, IW						
335		4									
336		5			IW						
337		6									
		7									
		c			GRS, PIN, PUS						
		c									

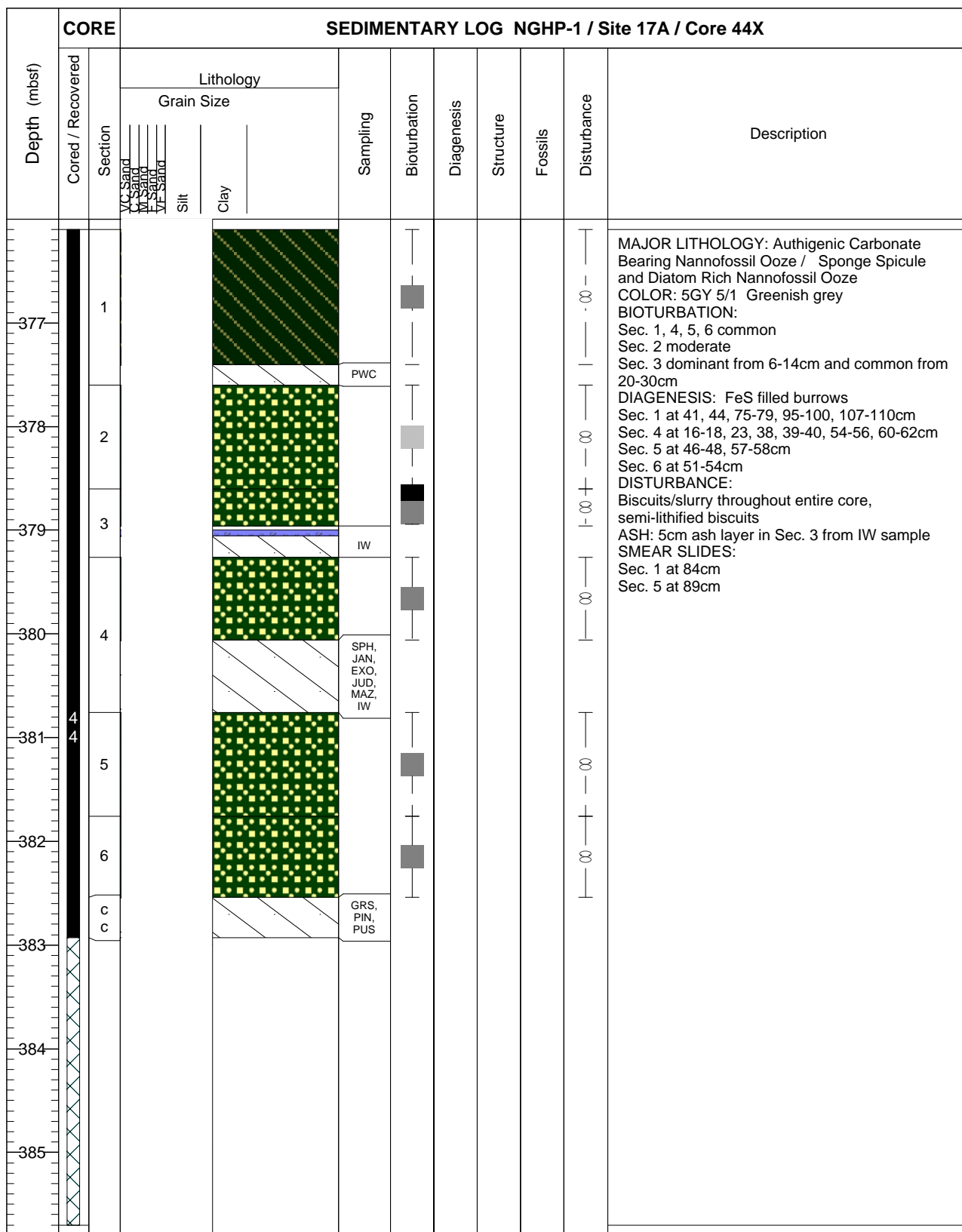




CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 41X									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size	Clay							
			VC Sand C Sand M Sand F Sand	Silt							
348	1					■				∞	<p>MAJOR LITHOLOGY: Sponge Spicule and Diatom Bearing Nannofossil Ooze            COLOR: 10GY 5-1 Greenish grey            BIOTURBATION: Abundant throughout entire core            FOSSILS: Shell fragment in Sec. 6 at 92cm            DISTURBANCE: Biscuits/slurry throughout entire core, semi-lithified biscuits            SMEAR SLIDES: Sec. 2 at 54cm            Sec. 5 at 37cm</p>
349	2					■				∞	
350					SPH, JAN, EXO, JUD, MAZ, IW						
351	3					■				∞	
352	4					■				∞	
353	5				HYD109	■				∞	
354	6					■				∞	
355	c				GRS, PIN, PUS				∞		
356											
357											



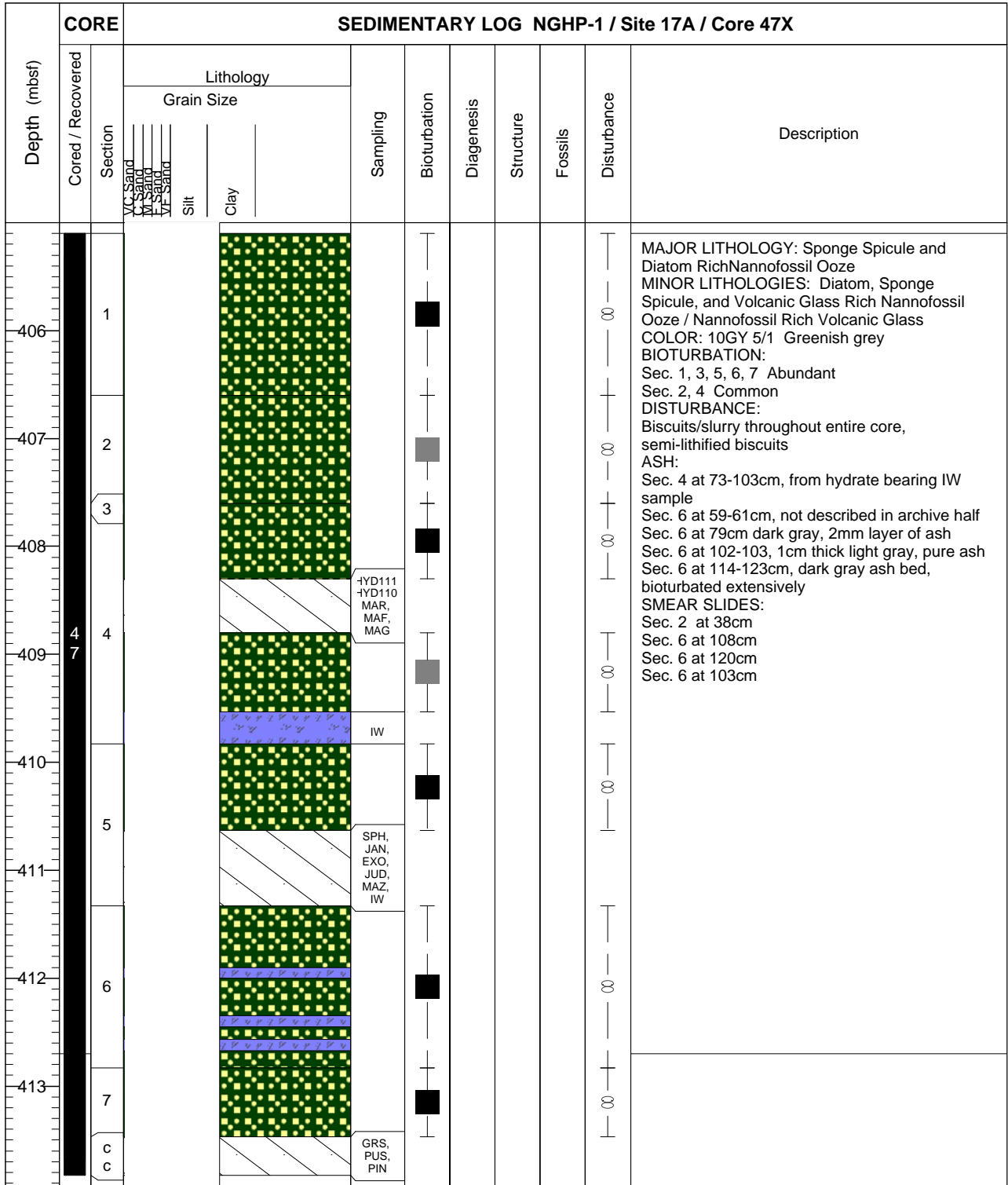




CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 45X									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			CS Sand								
			MS Sand								
			VF Sand								
			Silt								
			Clay								
386	4 5	1									
		c			IW						
		c			GRS, PUS, PIN						
387											
388											
389											
390											
391											
392											
393											
394											
395											

MAJOR LITHOLOGY: Carbonate Rich  
Nannofossil Ooze  
COLOR: 5GY 5/1 Greenish grey  
BIOTURBATION: Common throughout entire core  
DIAGENESIS: FeS filled burrows at 24-26, 35-37, 42-44, 46-48cm  
DISTURBANCE: Biscuits/slurry throughout entire core, semi-lithified biscuits  
SMEAR SLIDES: Sec. 1 at 34cm

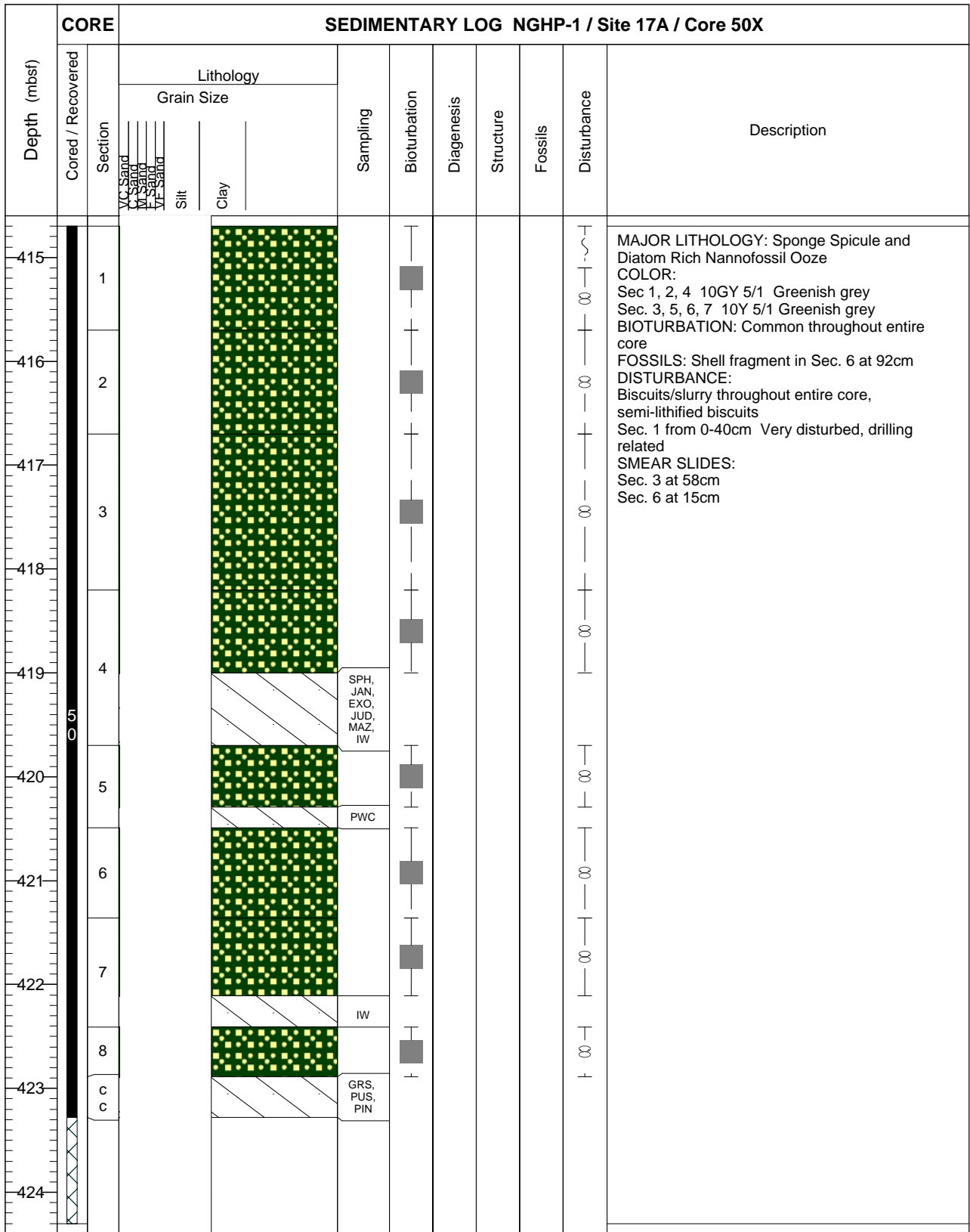
CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 46X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
		VC Sand	Clay							
396	1									<p>MAJOR LITHOLOGY: Sponge Spicule and Diatom Bearing Nannofossil Ooze            COLOR: 10GY 5/1 Greenish grey            BIOTURBATION:            Sec. 1 and 4 Common            Sec. 2, 3 and 6 Abundant            Sec. 5 and 7 Rare            DISTURBANCE:            Biscuits/slurry throughout entire core, semi-lithified biscuits            ASH:            Sec. 5 Ash sample from IW at 67 to 97cm            SMEAR SLIDES:            Sec. 2 at 82cm            Sec. 6 at 78cm</p>
397	2									
398	3									
399	4									
400	4									
401	5			SPH, JAN, EXO, JUD, MAZ, IW						
402	6			IW						
403	7									
404	c c			GRS, PUS, PIN						
405										

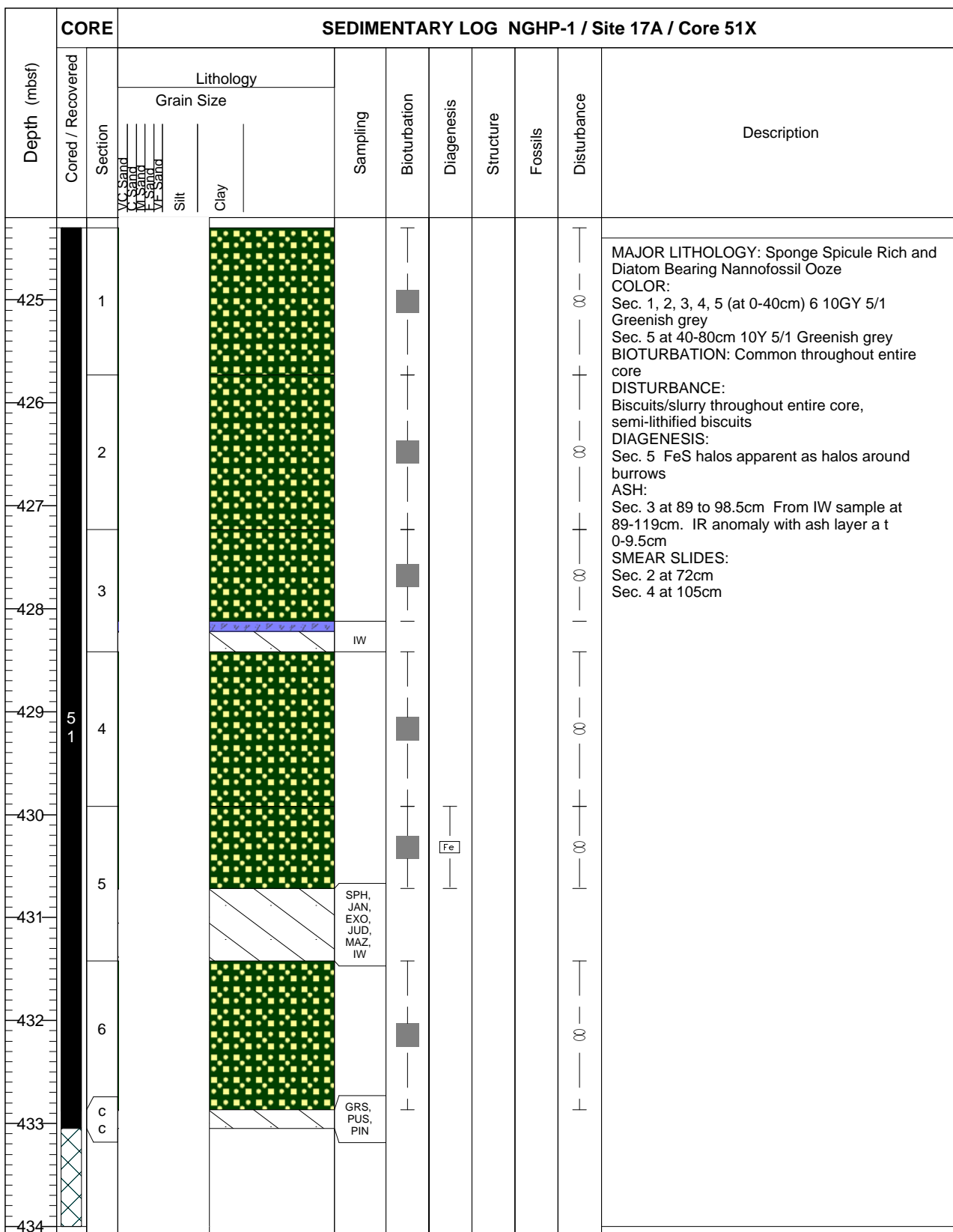


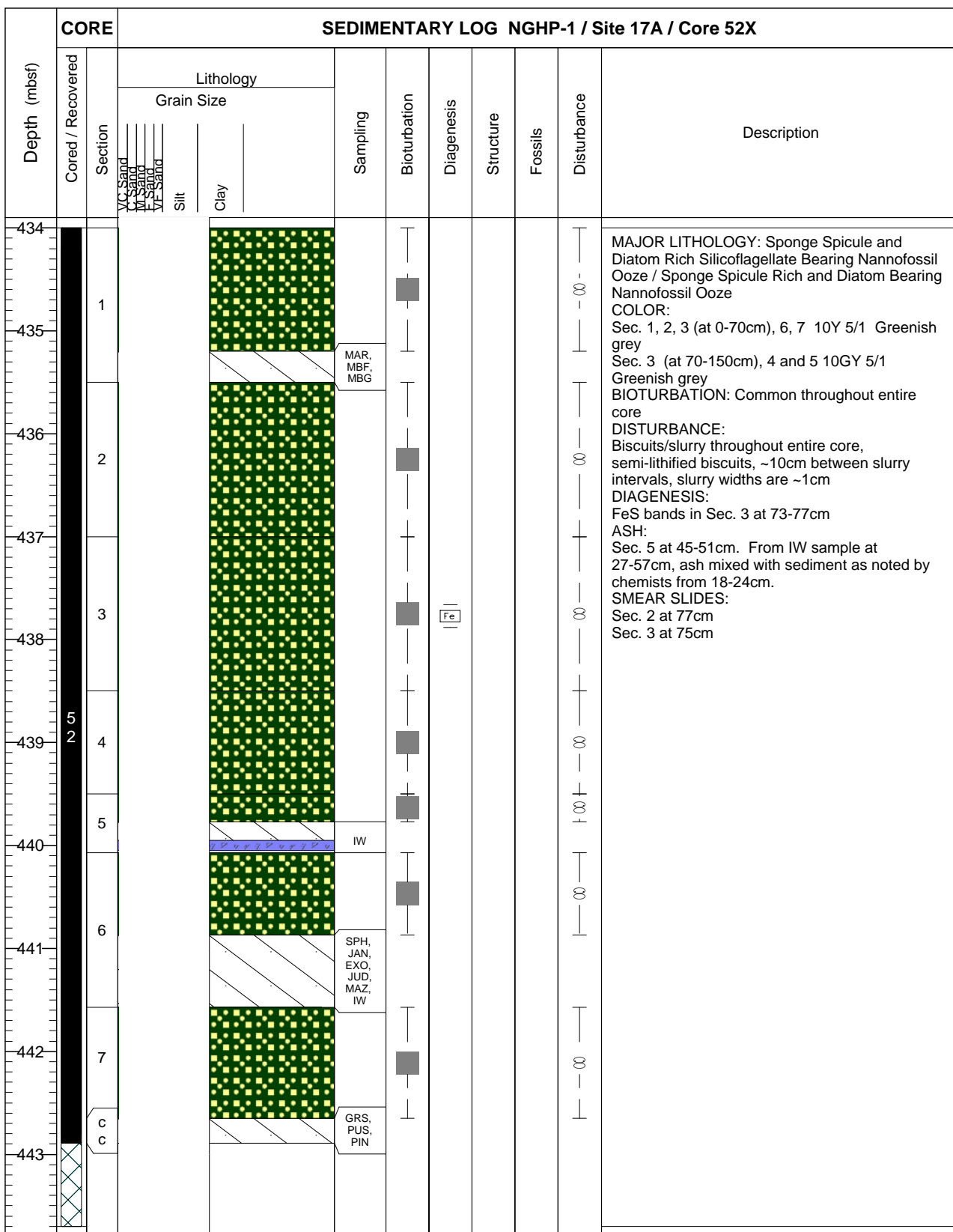


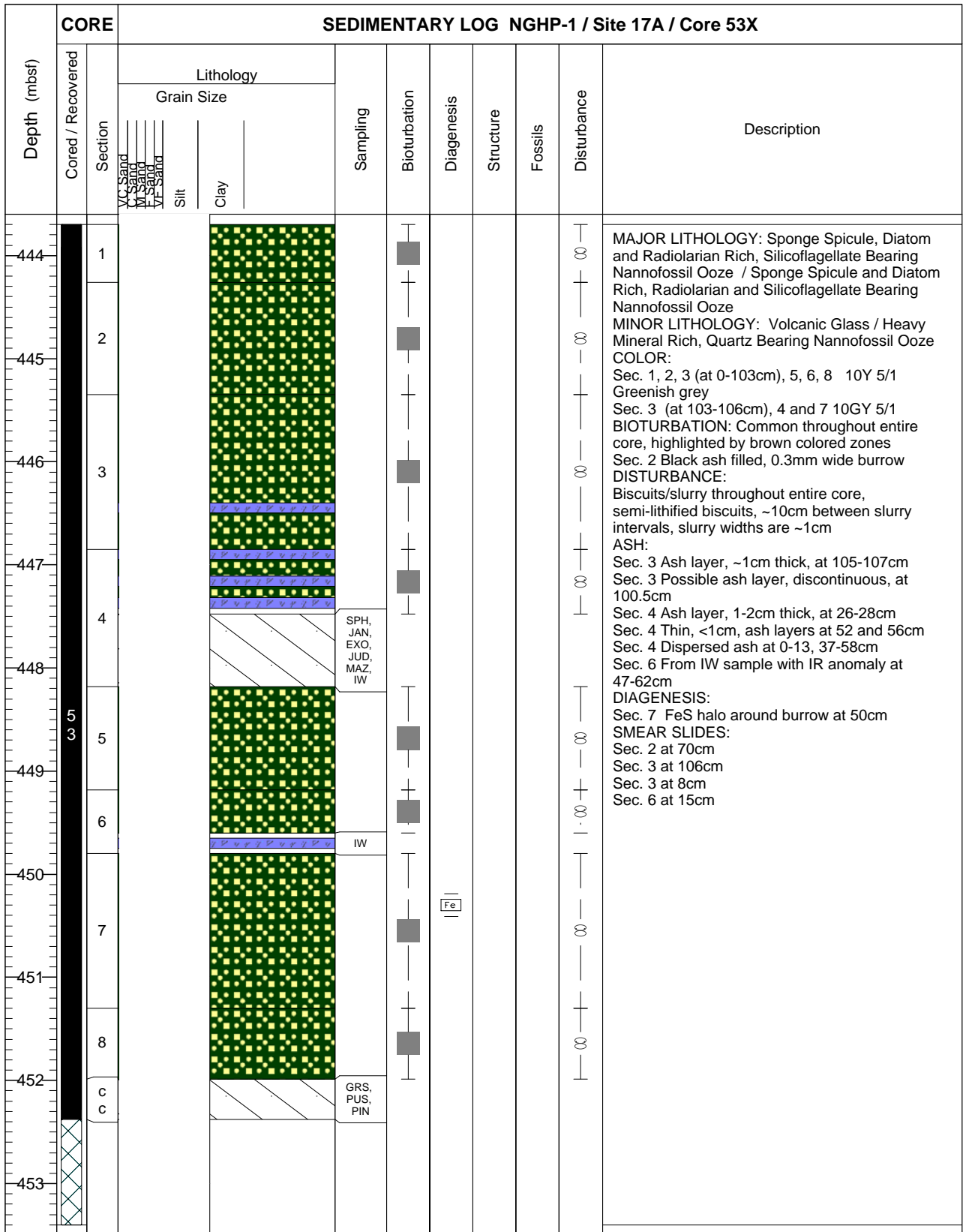
CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 48P									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			W Sand								
			VF Sand								
			Silt								
			Clay								
413											
413	4 8	1			IW				▲ ▲ ▲		MAJOR LITHOLOGY: Sponge Spicule and Diatom Bearing Nannofossil Ooze MINOR LITHOLOGY: Sponge Spicules COLOR: 5GY 5/1 Dark greenish grey DISTURBANCE: Moderately disturbed due to extension FOSSILS: Sponge spicules at 45, 56, 86, 87cm SMEAR SLIDES: Sec. 1 at 75cm Sec. 1 at 87cm
414									▲		

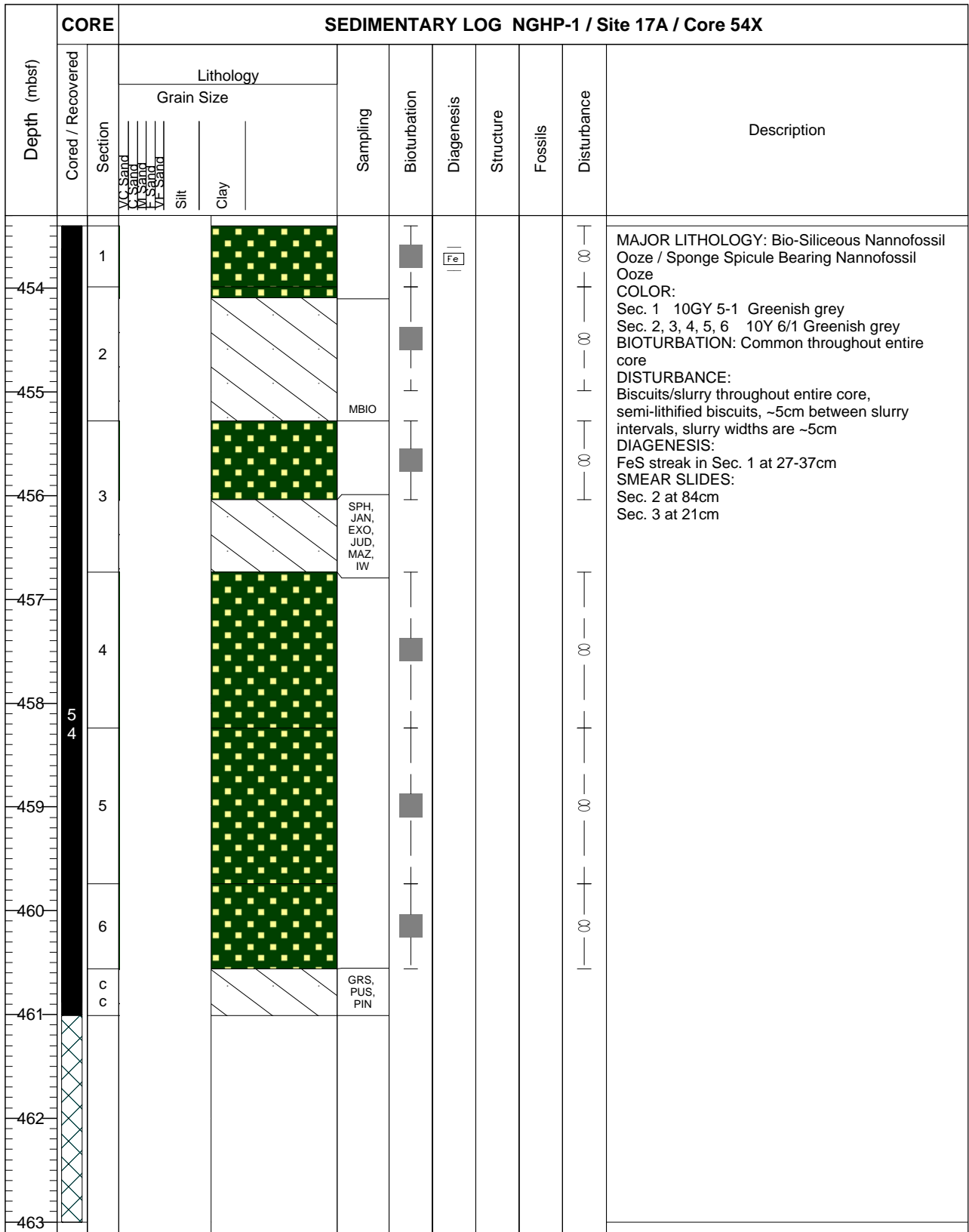
CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 49E							Description		
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure		Fossils	Disturbance
			Grain Size								
			VC Sand								
			W Sand								
			VF Sand								
			Silt								
			Clay								
414	4	1									
414	9										MAJOR LITHOLOGY: Nannofossil Ooze COLOR: 10GY 5/1 Greenish grey BIOTURBATION: Common throughout entire core STRUCTURE: "Foliation" with fractures from 0-40cm SMEAR SLIDES: Sec. 1 at 70cm
415											

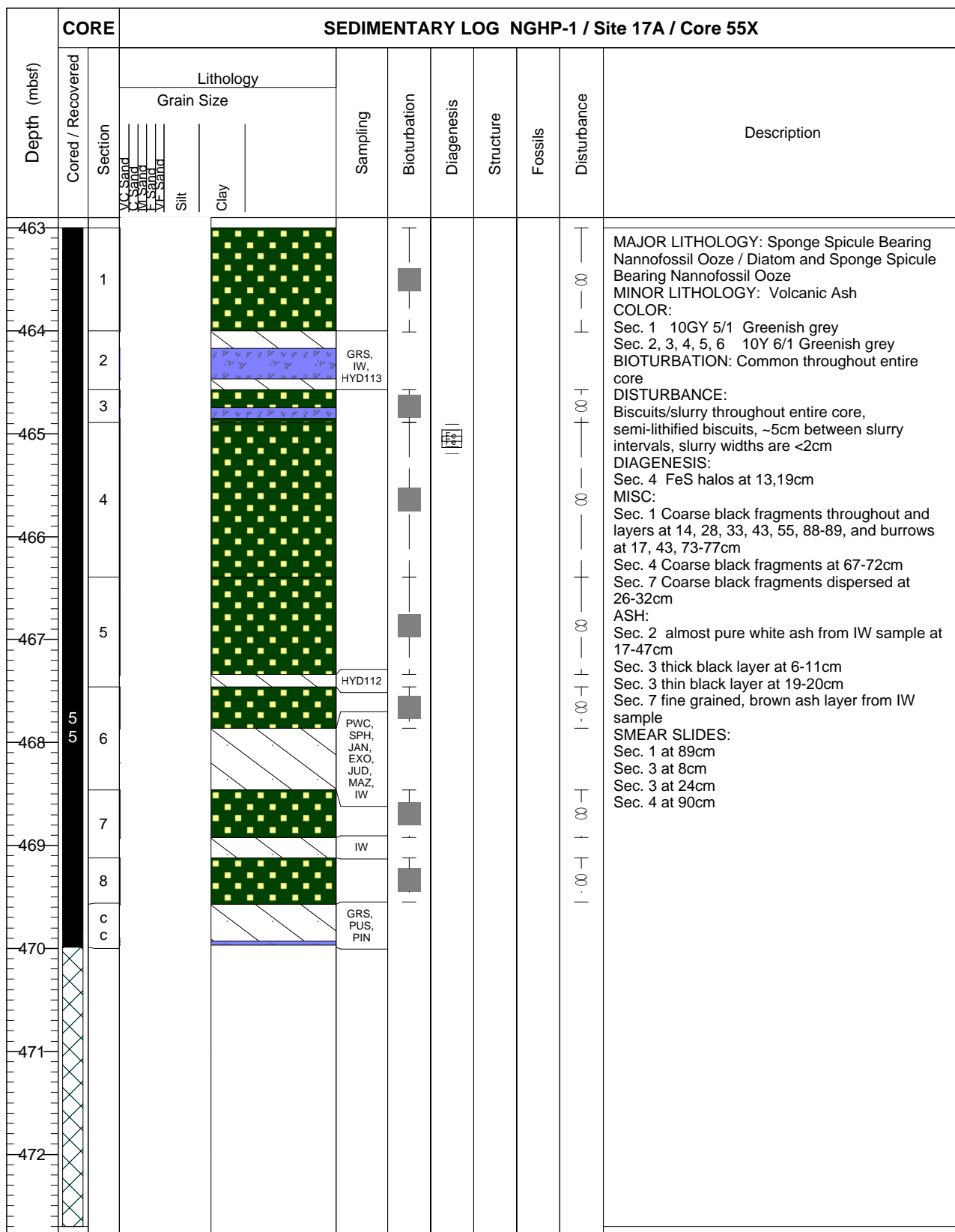














CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 56X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
	Section	VC Sand	Clay							
473	5 6	1								<p><b>MAJOR LITHOLOGY:</b> Sponge Spicule and Diatom Bearing Nannofossil Ooze</p> <p><b>COLOR:</b> Sec. 1-3 10GY 5/1 Greenish grey Sec. 4 5Y 5/2 Olive grey</p> <p><b>BIOTURBATION:</b> Common throughout entire core</p> <p><b>DISTURBANCE:</b> Biscuits/slurry throughout entire core, semi-lithified biscuits, ~5cm between slurry intervals, slurry widths are &lt;3cm</p> <p><b>DIAGENESIS:</b> Sec. 2 FeS streaks throughout</p> <p><b>ASH:</b> Sec. 1 Coarse black fragments throughout Sec. 1 3-5cm Sec. 2 From IW sample at 69-99cm</p> <p><b>SMEAR SLIDES:</b> Sec. 2 at 43cm</p>
474		2		IW		Fe				
475		3								
476		4								
477		c c		GRS, PIN, PUS						
478										
479										
480										
481										
482										

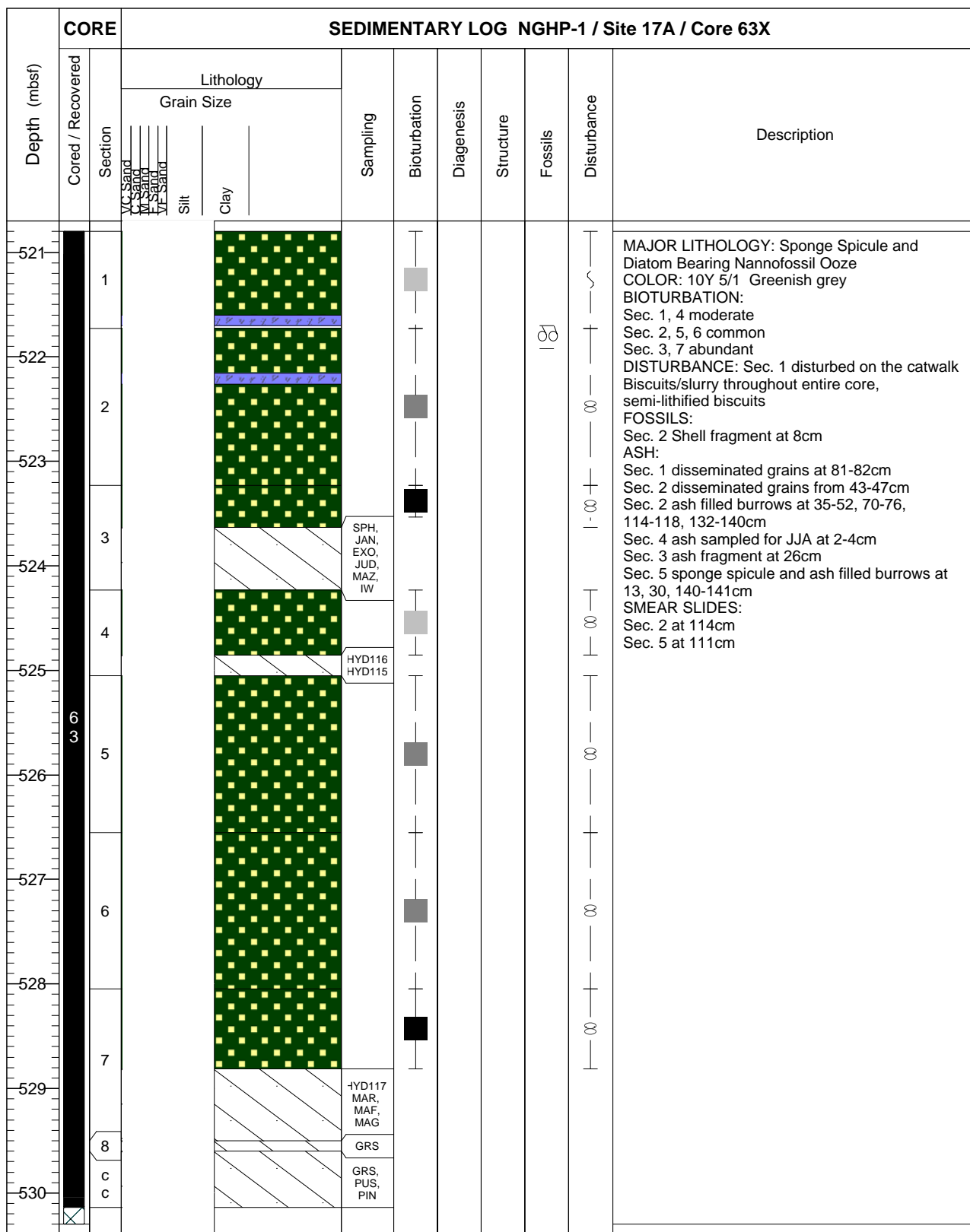
CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 57X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Section	Grain Size							
		VC Sand V Sand M Sand VF Sand	Silt Clay							
483	1			HYD114						<p><b>MAJOR LITHOLOGY:</b> Sponge Spicule Bearing Nannofossil Ooze / Diatom and Sponge Spicule Bearing Nannofossil Ooze  <b>MINOR LITHOLOGY:</b> Volcanic Ash  <b>COLOR:</b>            Sec. 1 10GY 5/1 Greenish grey            Sec. 2, 3, 4, 5, 6 10Y 6/1 Greenish grey  <b>BIOTURBATION:</b> Common throughout entire core; prominent burrows in Sec. 4 at 5-9, 22-26, 33-57, 77-79, 83-95cm  <b>DISTURBANCE:</b>            Biscuits/slurry throughout entire core, semi-lithified biscuits, ~5cm between slurry intervals, slurry widths are &lt;2cm  <b>ASH:</b>            Sec. 1 Disseminated black volcanic ash fragments throughout; black ash burrow fills at 14, 15, 18-19, 22-23, 35-36cm            Sec. 2 thick black layer at 21-23cm; black ash burrow fills at 16-20, 40-48, 61-63, 91-92cm            Sec. 5 thick black layer at 30-34cm; thin black layer at 28cm  <b>SMEAR SLIDES:</b>            Sec. 2 at 21cm            Sec. 5 at 15cm</p>
484	2									
485	3			SPH, JAN, EXO, JUD, MAZ, IW						
486	4									
487	5									
488	c c			GRS, PIN, PUS						
489										
490										
491										
492										

CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 59P									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			W Sand								
			MF Sand								
			Silt								
			Clay								
500		1							●●		
500	59										MAJOR LITHOLOGY: Sponge Spicule and Diatom Bearing Nannofossil Ooze MINOR LITHOLOGY: Volcanic Glass Rich Nannofossil Ooze COLOR: 5GY 5/1 Greenish grey FOSSILS: Shell fragment at 6cm, possible benthic foram? DISTURBANCE: Disturbed by splitting process ASH LAYERS: 29cm gray ash layer 30cm dark gray ash layer 33.5 gray ash layer SMEAR SLIDES: Sec. 1 at 23cm Sec. 1 at 31cm
500											

CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 60Y									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			VS Sand								
			VF Sand								
			Silt								
			Clay								
501	60	1									
501											<p>MAJOR LITHOLOGY: Biosiliceous Bearing (Sponge spicules) Nannofossil Ooze</p> <p>MINOR LITHOLOGY: Volcanic Glass Rich Nannofossil Rich Clay</p> <p>COLOR: 10Y 5/1 Greenish grey</p> <p>BIOTURBATION: Common throughout entire core</p> <p>Possible black ash in burrow at 74cm</p> <p>DISTURBANCE: Moderately disturbed at 0-38cm</p> <p>ASH: Black ash layer at 13-15, 45-47cm</p> <p>Black ash horizons at 74-76cm</p> <p>SMEAR SLIDES: Sec. 1 at 60cm</p> <p>Sec. 1 at 46cm</p>
502											

CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 61X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Section	Grain Size							
		VC Sand V Sand IV Sand VF Sand	Silt Clay							
502	1									<p><b>MAJOR LITHOLOGY:</b> Mixed Biosiliceous Rich Carbonate Bearing Nannofossil Ooze / Sponge Spicule Rich Diatom and Carbonate Bearing Nannofossil Ooze</p> <p><b>MINOR LITHOLOGY:</b> Volcanic Ash</p> <p><b>COLOR:</b> 10Y 5/1 Greenish grey</p> <p><b>BIOTURBATION:</b> Common / abundant throughout entire core</p> <p><b>DISTURBANCE:</b> Sec. 1 disturbed, not scanned with MSCL</p> <p>Biscuits/slurry throughout entire core, semi-lithified biscuits, ~5cm between slurry intervals, slurry widths are &lt;2cm</p> <p><b>ASH:</b></p> <p>Sec. 2 dark gray zone at 37-38</p> <p>Sec. 2 black ash zone at 45-46cm</p> <p>Sec. 2 black, disseminated, ash rich zone at 60-79cm</p> <p>Sec. 3 disseminated at 26-33cm; burrow fill at 66-67, 83-84cm</p> <p>Sec. 4 black, disseminated, ash rich horizon at 39cm</p> <p><b>SMEAR SLIDES:</b></p> <p>Sec. 2 at 58cm</p> <p>Sec. 3 at 28cm</p> <p>Sec. 5 at 54cm</p>
503	2									
504	3									
505	4									
506	6 1			SPH, JAN, EXO, JUD, MAZ, IW						
507	5									
508	c c			GRS, PIN, PUS						
509										
510										
511										

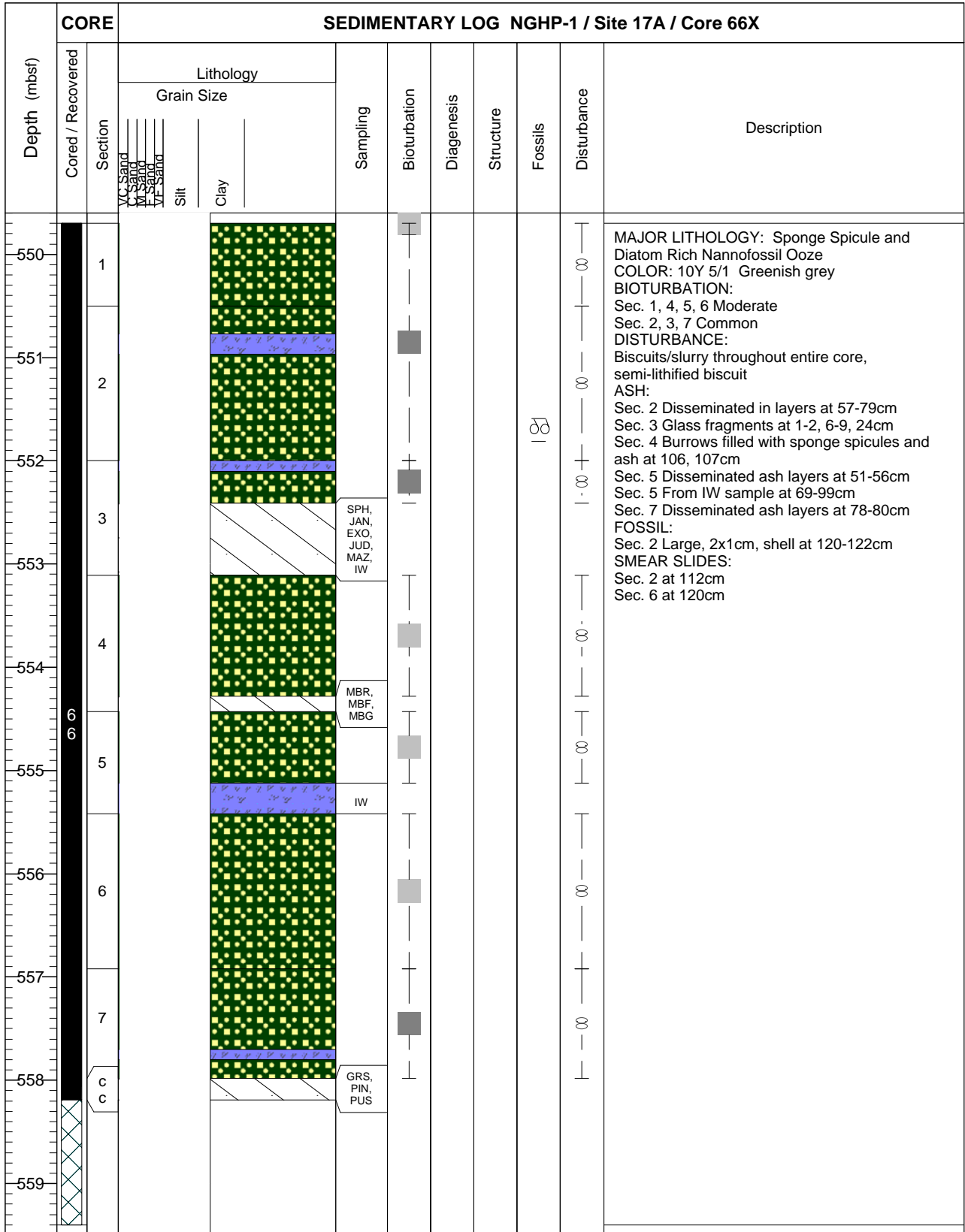
Depth (mbsf)	CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 62X							Description												
	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils		Disturbance											
			Grain Size																			
			VC Sand																			
512		1																				
513		2																				
514		3																				
515		4																				
516	6 2																					
517		5																				
518																						
519		6																				
520		7																				
		c																				
		c																				



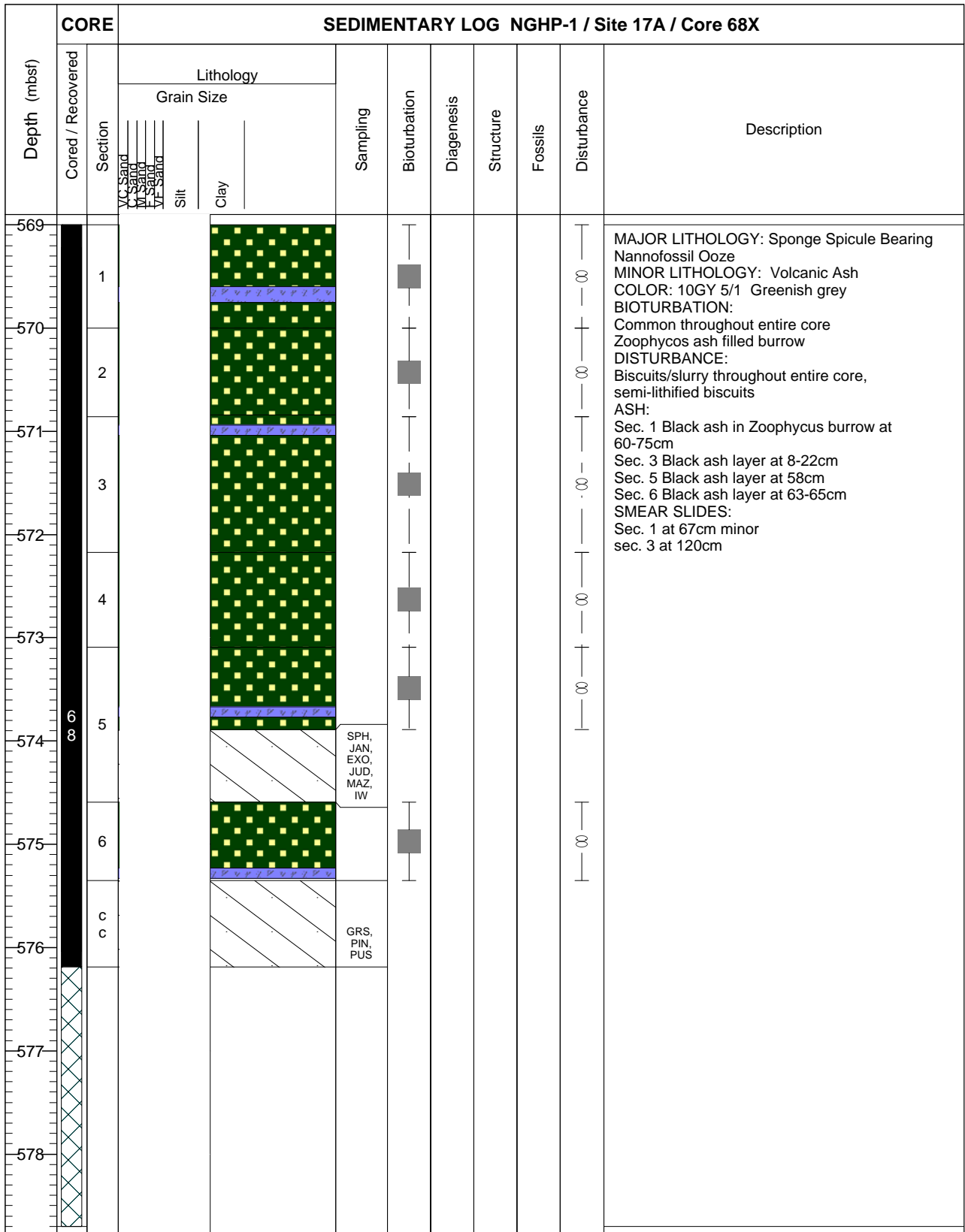
CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 64X									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			W Sand								
			IV Sand								
			VF Sand								
			Silt								
			Clay								
531	6 4	1			SPH, JAN, EXO, JUD, MAZ, IW						<p><b>MAJOR LITHOLOGY:</b> Sponge Spicule and Diatom Bearing Nannofossil Ooze  <b>COLOR:</b> 5GY 5/1 Greenish grey  <b>BIOTURBATION:</b>            Sec. 1, 3 Rare            Sec. 2 Common  <b>DISTURBANCE:</b>            Biscuit/slurry throughout entire core, semi-lithified biscuits  <b>ASH:</b>            Disseminated in discrete layers/bands            Sec. 3 at 3-5, 9-11, 20-22, 26-28, 33-34, 36-38, 42-44, 64-66, 74-77cm  <b>SMEAR SLIDES:</b>            Sec. 21 at 29cm            Sec. 3 at 60cm</p>
532		2									
533		3									
534		c c			GRS, PIN, PUS						
535											
536											
537											
538											
539											
540											

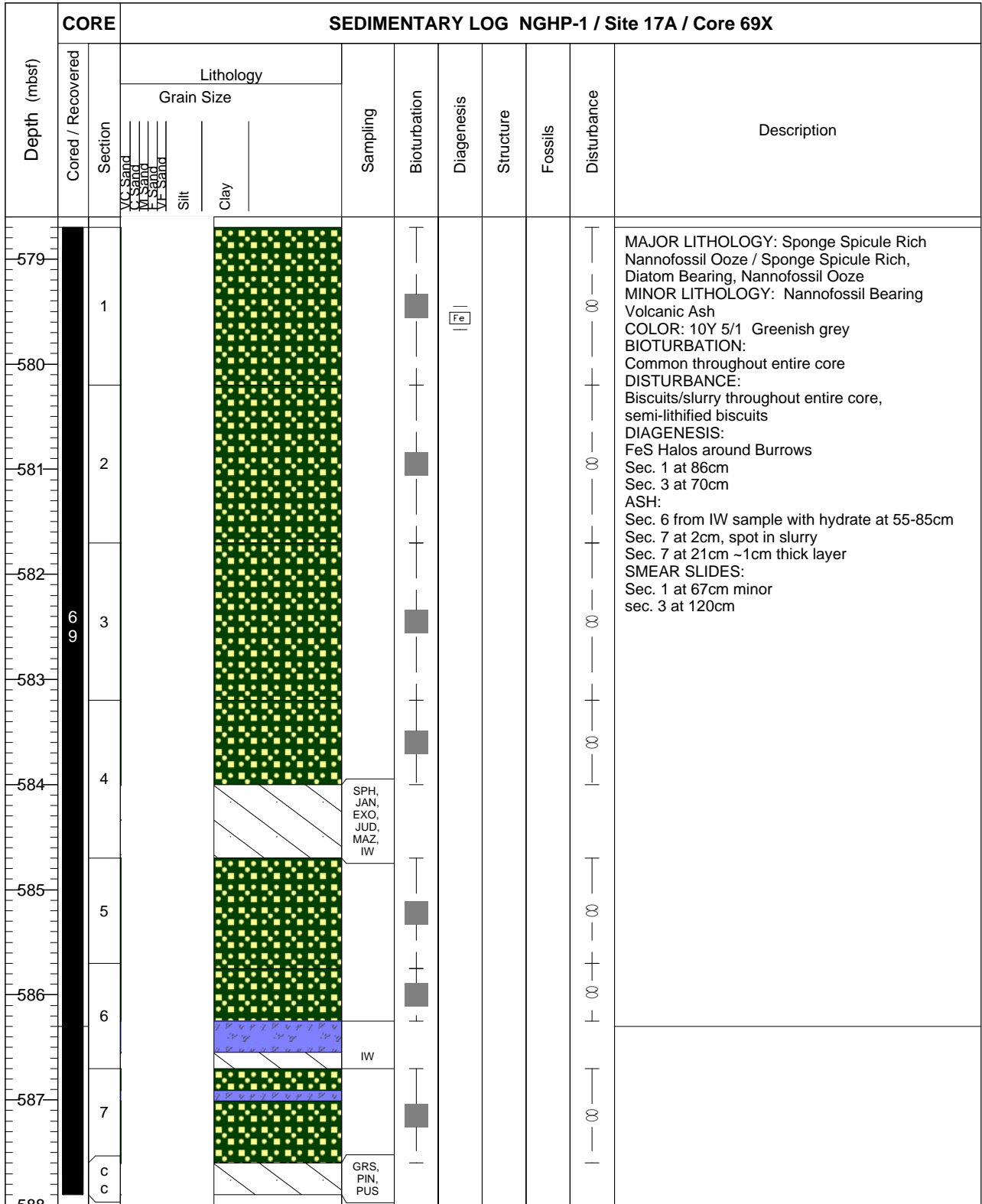


CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 65X									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			CS Sand								
			W Sand								
			VF Sand								
			Silt								
			Clay								
540	6										<p>MAJOR LITHOLOGY: Mixed Biosiliceous Rich Carbonate Bearing Nannofossil Ooze / Sponge Spicule Rich Diatom and Carbonate Bearing Nannofossil Ooze</p> <p>MINOR LITHOLOGY: Volcanic Ash</p> <p>COLOR: 10Y 5/1 Greenish grey</p> <p>BIOTURBATION: Common / abundant throughout entire core</p> <p>DISTURBANCE: Sec. 1 disturbed, not scanned with MSCL</p> <p>Biscuit/slurry throughout entire core, semi-lithified biscuits, ~5cm between slurry intervals, slurry widths are &lt;2cm</p> <p>SMEAR SLIDES: Sec. 2 at 58cm Sec. 3 at 28cm Sec. 5 at 54cm</p>
541	5	1									
542		2			SPH, JAN, EXO, JUD, MAZ, IW						
543		3									
544		c c			GRS, PUS, PIN						
545											
546											
547											
548											
549											



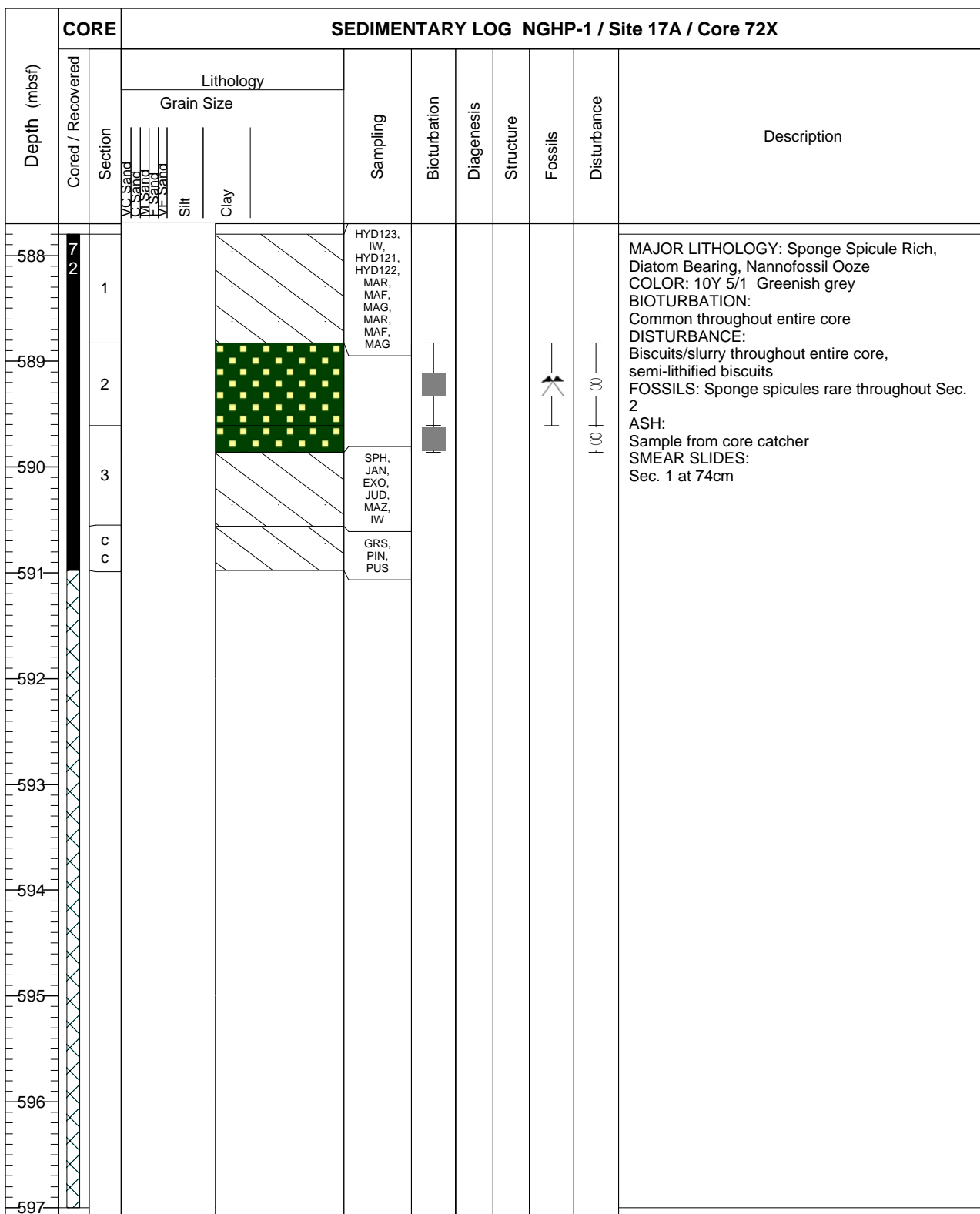
CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 67X							Description	
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils		Disturbance
		Grain Size								
	Section	VC Sand	W Sand	W Sand	W Sand	Silt	Clay			
560	1									<p><b>MAJOR LITHOLOGY:</b> Authigenic Carbonate Rich Nannofossil Ooze / Sponge Spicule and Diatom Bearing Nannofossil Ooze / Sponge Spicule Rich Silicoflagellate and Diatom Bearing Nannofossil Ooze</p> <p><b>MINOR LITHOLOGY:</b> Volcanic Ash</p> <p><b>COLOR:</b> 5GY 5/1 Greenish grey</p> <p><b>BIOTURBATION:</b> Sec. 1, 2, 5 Rare Sec. 4 Abundant Sec. 7 Common</p> <p><b>DISTURBANCE:</b> Biscuits/slurry throughout entire core, semi-lithified biscuits Sec. 1 highly fractured</p> <p><b>ASH:</b> Sec. 3 Black ash layer at 10-11cm Sec. 5 Black volcanic glass rich zone at 45-48cm</p> <p><b>SMEAR SLIDES:</b> Sec. 1 at 67cm Sec. 1 at 97cm Sec. 3 at 120cm Sec. 4 at 60cm</p>
561	2									
562	3									
563	4									
564	5									
565	6									
566	7									
567	c									
568										
569										





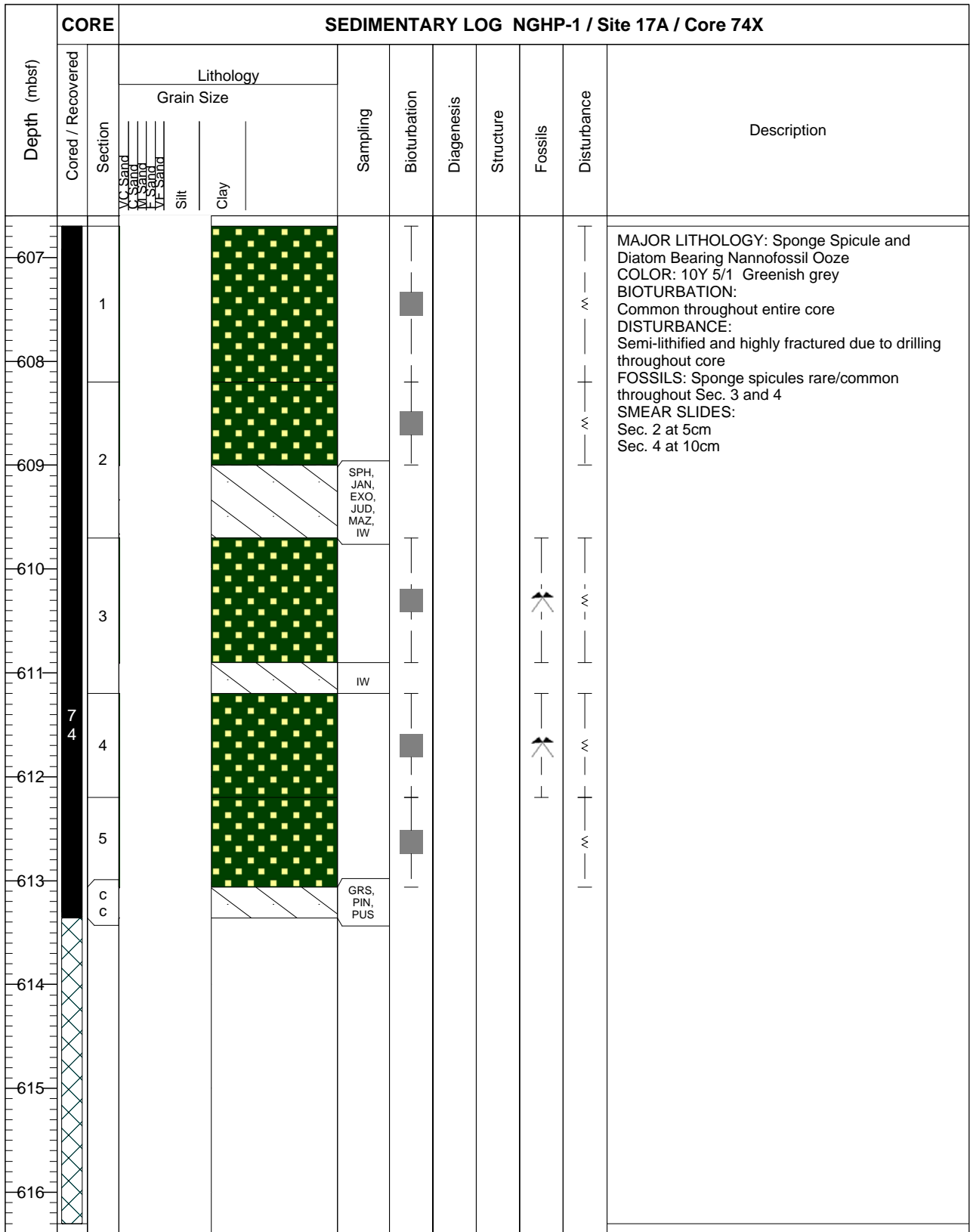


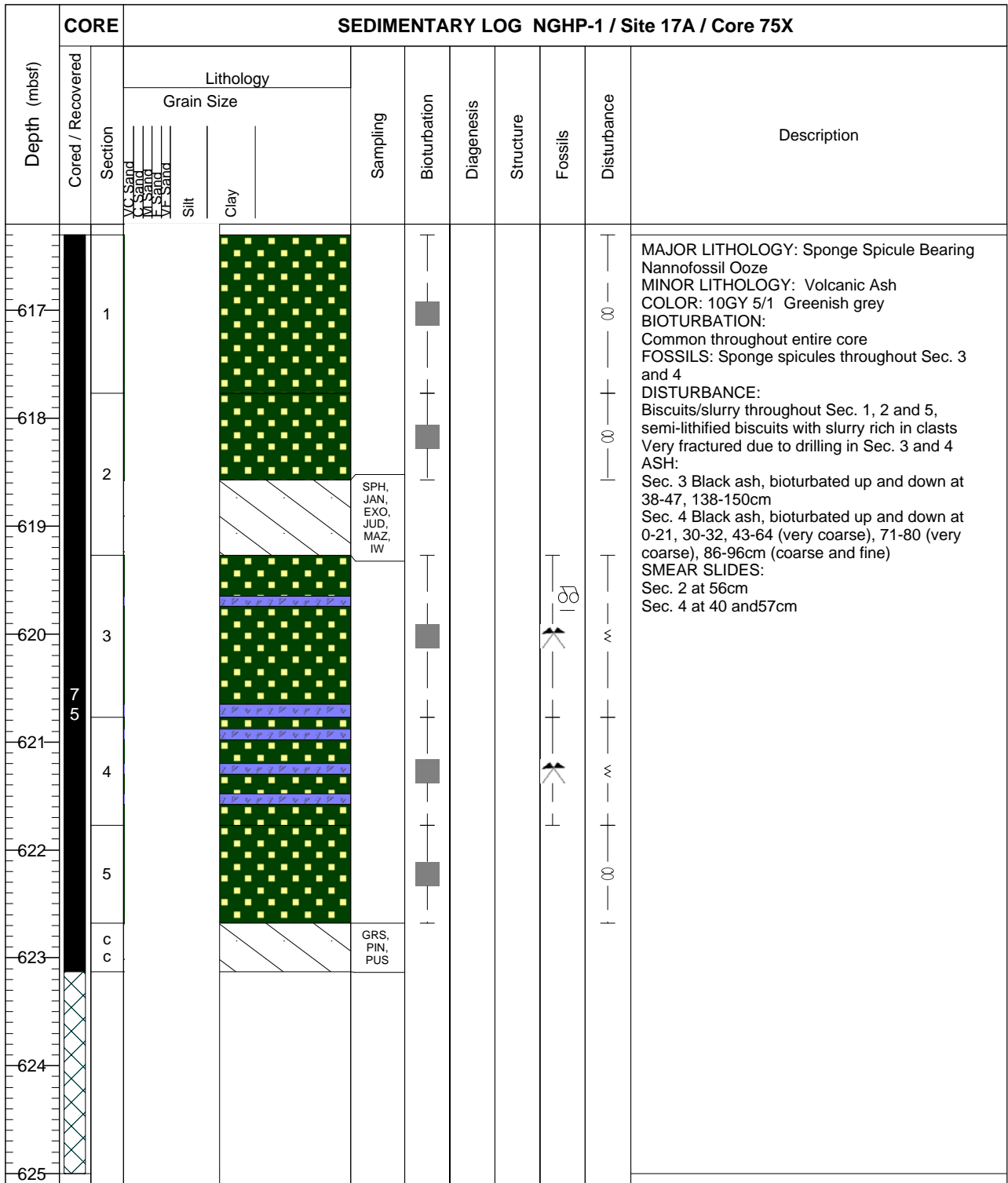
CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 71E									
Depth (mbstf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			MS Sand								
			MF Sand								
			Silt								
			Clay								
587	X										No core recovered

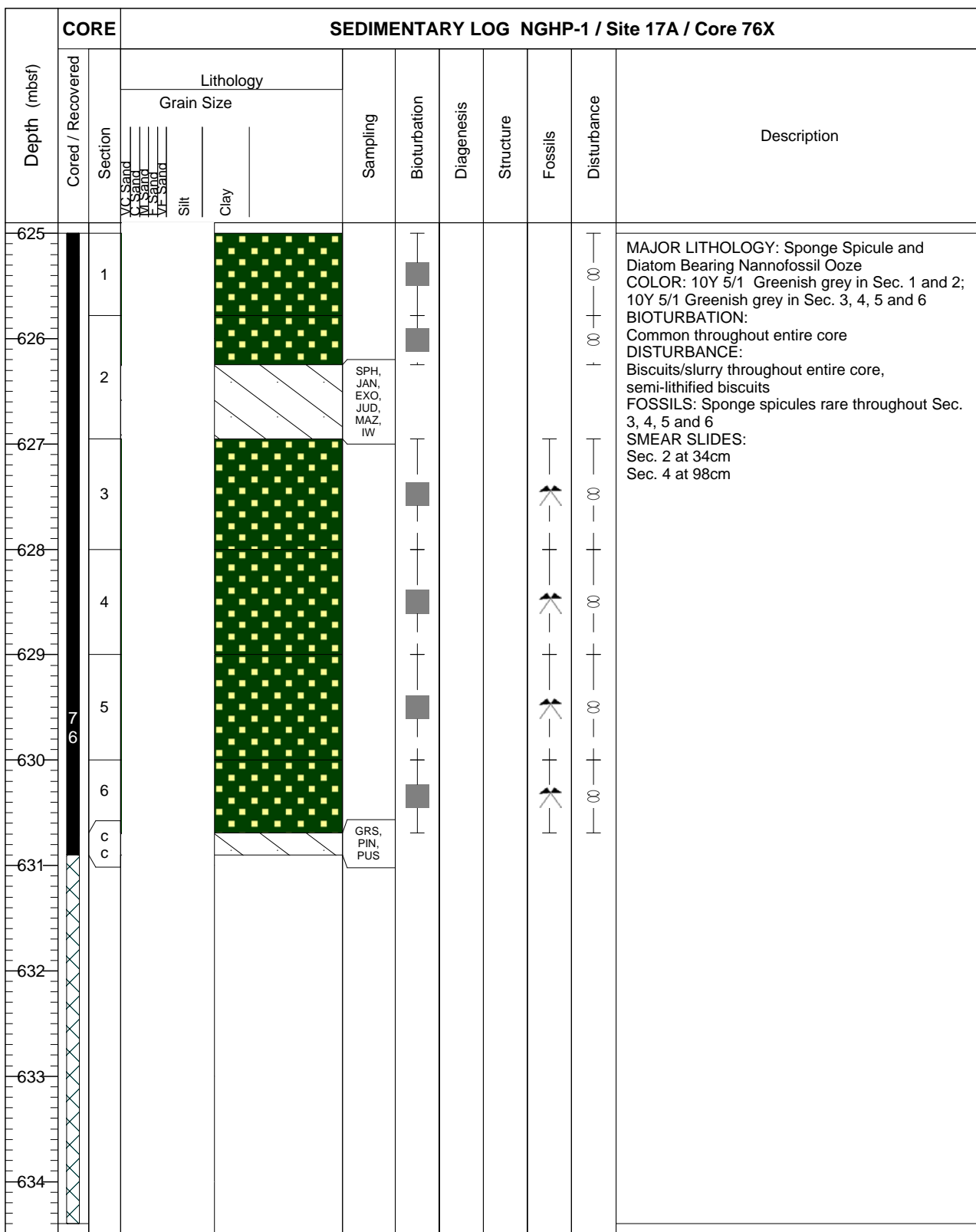




CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 73X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
	Section	VC Sand	Clay							
		VC Sand								
		VC Sand								
		VC Sand								
		VC Sand								
		Silt								
597	1									<p>MAJOR LITHOLOGY: Sponge Spicule Rich, Diatom Bearing, Nannofossil Ooze            COLOR: 10Y 5/1 Greenish grey            BIOTURBATION: Common throughout entire core            DISTURBANCE: Biscuits/slurry throughout entire core, semi-lithified biscuits            FOSSILS: Sponge spicules rare throughout Sec. 1            SMEAR SLIDES: Sec. 5 at 36cm</p>
598										
599	2			IW						
600	3									
601				SPH, JAN, EXO, JUD, MAZ, IW						
602	4									
603	c c			GRS, PIN, PUS						
604										
605										
606										

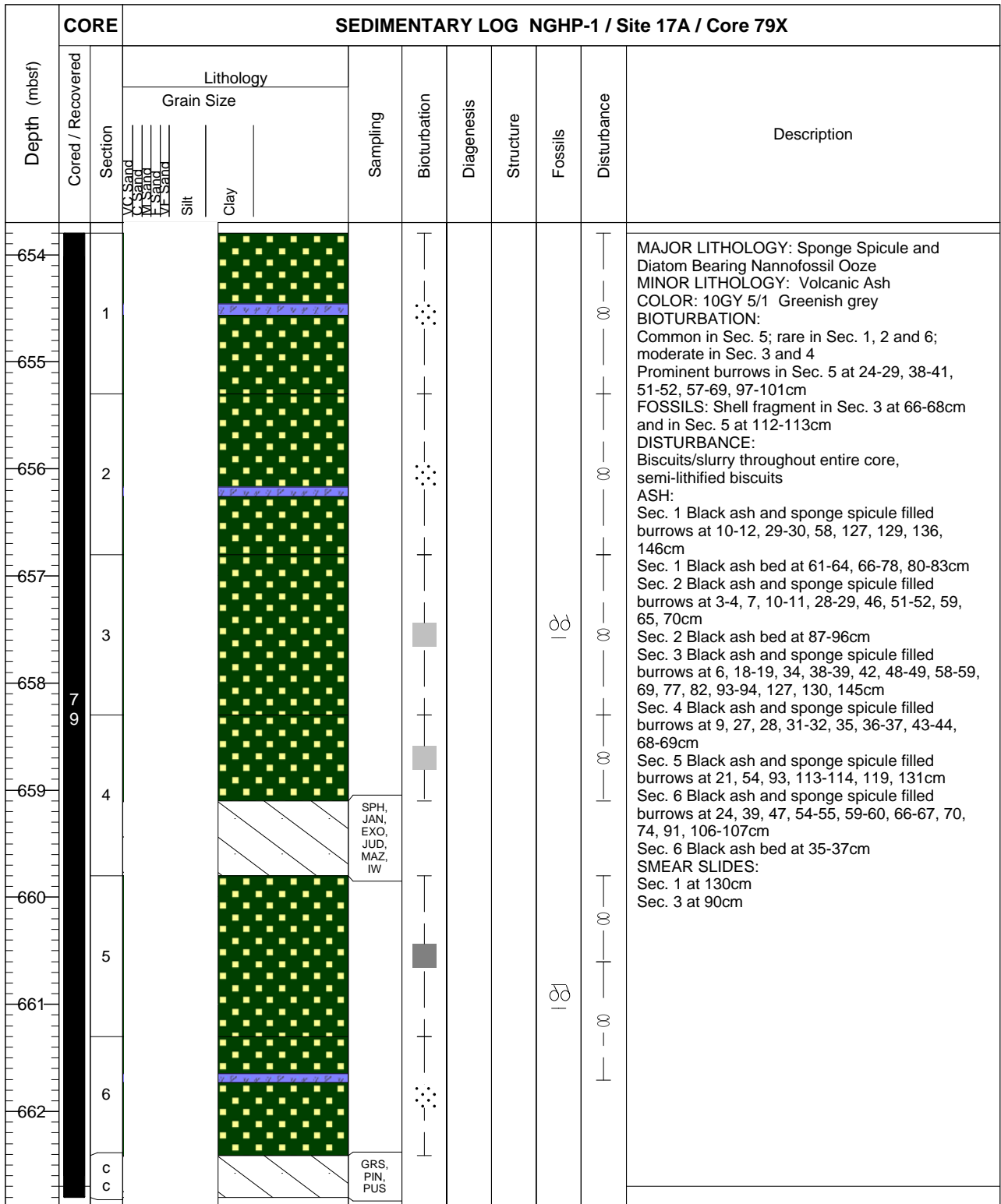






CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 77X							Description		
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils		Disturbance	
		Grain Size									
	Section	VC Sand	VC Sand	VC Sand	VC Sand	Silt	Clay				
635	1										<p><b>MAJOR LITHOLOGY:</b> Sponge Spicule and Diatom Bearing Nannofossil Ooze  <b>MINOR LITHOLOGY:</b> Volcanic Ash  <b>COLOR:</b> 10GY 5/1 Greenish grey  <b>BIOTURBATION:</b> Abundant in Sec. 2; rare in Sec. 3, 4, 5 and 6  <b>DISTURBANCE:</b> Biscuits/slurry throughout Sec. 1, 2 and 3, semi-lithified biscuits  Top of core disturbed due to rubble that fell into hole  <b>ASH:</b>  Sec. 1 Black ash layer speckled with ash/pumice/volcanic fragments at 26-28, 43-47, 80-82cm  Sec. 2 Black ash filled burrows 41-42cm  Sec. 2 Black ash rich layer at 91-95cm  Sec. 4 Black ash rich layer at 44-45cm  Sec. 5 Ash/Sponge Spicule filled burrow at 72, 89cm  Sec. 6 Ash/Sponge Spicule filled burrow at 6-15cm  Sec. 6 Black ash bed at 39-50cm  <b>SMEAR SLIDES:</b>  Sec. 2 at 54cm  Sec. 6 at 4cm</p>
636	2										
637	3										
638											
639	4										
640	5										
641	6										
642	c										
643	c										
644											

CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 78X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
		VC Sand								
		CS Sand								
		MS Sand								
		VF Sand								
		Silt								
		Clay								
645	1									<p>MAJOR LITHOLOGY: Sponge Spicule and Diatom Bearing Nannofossil Ooze MINOR LITHOLOGY: Volcanic Ash COLOR: 5GY 5/1 Greenish grey DISTURBANCE: Biscuits/slurry throughout entire core, semi-lithified biscuits Sec. 6 disturbed throughout, not logged with MSCL ASH: Sec. 1 Black ash bed at 34-37cm Sec. 2 Black ash bed at 84-87 Sec. 3 Black ash and sponge spicule filled burrows at 6-14cm Sec. 4 Black ash rich zone at 3-12cm Sec. 5 Black ash filled burrow at 94-95cm SMEAR SLIDES: Sec. 2 at 53cm Sec. 4 at 43cm</p>
646	2									
647	3									
648				SPH, JAN, EXO, JUD, MAZ, IW						
649	7 8									
650	4									
651	5									
652	6									
653	c c			GRS, PIN, PUS						



CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 80X									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand V Sand W Sand VF Sand	Silt Clay							
663		1									<p><b>MAJOR LITHOLOGY:</b> Sponge Spicule and Diatom Bearing Nannofossil Ooze  <b>MINOR LITHOLOGY:</b> Volcanic Ash  <b>COLOR:</b> 10GY 5/1 Greenish grey  <b>BIOTURBATION:</b> Moderate in Sec. 2 and 4; rare in Sec. 1 and 3            Large inclined burrow in Sec. 3 at 8-16cm  <b>STRUCTURE:</b> Inclined layers in Sec. 3 at 54, 56, 62-66, 68-70, 74-76cm            Silty grains in Sec. 4 at 120-150cm  <b>DISTURBANCE:</b> Biscuits/slurry throughout entire core, semi-lithified biscuits  <b>ASH:</b> Ash and sponge spicule filled burrows            Sec. 1 at 19-20cm            Sec. 2 at 19, 20, 22cm            Sec. 3 at 10-11cm            Sec. 4 at 5-22cm  <b>SMEAR SLIDES:</b>            Sec. 1 at 10cm            Sec. 3 at 61cm</p>
		2			SPH, JAN, EXO, JUD, MAZ, IW						
664											
665		3									
666											
667		4			VOID						
668		80			GRS, PIN, PUS						
669											
670											
671											
672											



CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 81E									
Depth (mbstf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			VF Sand								
			VF Sand								
			VF Sand								
			Silt								
			Clay								
673	8 1	1									<p>MAJOR LITHOLOGY: Sponge Spicule and Diatom Bearing Nannofossil Ooze            COLOR: 10GY 4/1 Dark greenish grey            Poorly preserved core. Soft, sticky, large clasts of angular to sub-rounded 1cm-2cm diameter.            SMEAR SLIDE:            Sec. 1 at 6cm</p>

CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 82X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
	Section	VC Sand	W Sand	MF Sand	Silt	Clay				
674	1									<p><b>MAJOR LITHOLOGY:</b> Sponge Spicule and Diatom Bearing Nannofossil Ooze  <b>COLOR:</b> 10Y 4/1 Greenish grey  <b>BIOTURBATION:</b>            Sec. 2, 3, 4, 6 Rare            Sec. 5 Moderate  <b>DISTURBANCE:</b>            Biscuits/slurry throughout entire core, semi-lithified, fractured biscuits  <b>ASH:</b>            Sec. 2 Ash filled burrows at 38, 64cm            Sec. 6 Disseminated layers at 39, 41, 43, 44cm  <b>FOSSIL:</b>            Shell fragment in Sec. 2 at 84cm  <b>MISC:</b>            Sec. 6 Small calcareous siltstone "clasts" at 26cm            Sec. 6 Large calcareous siltstone "clasts" (~2cmx2cm) at 32-34cm  <b>SMEAR SLIDES:</b>            Sec. 2 at 112cm            Sec. 5 at 104cm</p>
	2									
675										
676	3									
677	4									
678	5									
679	6									
680	c c									
681										
682										

CORE		SEDIMENTARY LOG NGHP-1 / Site 17A / Core 83X									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size	Clay							
			VC Sand								
			U Sand								
			M Sand								
			VF Sand								
			Silt								
			Clay								
683	8 3	1									<p>MAJOR LITHOLOGY: Sponge Spicule and Diatom Bearing Nannofossil Ooze            COLOR: 10Y 4/1 Greenish grey            BIOTURBATION:            Sec. 1 Moderate            Sec. 2 Rare            STRUCTURE:            DISTURBANCE:            Biscuits/slurry throughout entire core, semi-lithified, fractured biscuits            ASH:            Sec. 1 Ash filled burrows at 17-21, 51, 93cm            MISC:            Sec. 1 Large "clasts" of lithified material at 22-23, 41-42, 54-55cm            SMEAR SLIDES:            Sec. 1 at 67cm</p>
684		2			SPH, EXO, IW						
685		c			GRS, PIN, PUS						
685		c									
686											
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