


NGHP Expedition 1


Cored Interval Site 10 - Hole B

Seafloor 1049.4 (m)


Barrel Sheet Key


Cored & Recovered:


 Core Recovery

 Cored Interval No Recovery


Lithology:


 Nannofossil Rich Clay


 Nannofossil Bearing Clay

 Catwalk Sampled Core


Bioturbation:


 Rare


 Moderate


 Abundant


Diagenesis:

 FeS


 FeS Nodule


 Authigenic Carbonate


 Carbonate Cement


 Carbonate Bands

Structures:


 Silt/Sand Beds

 Silt/Sand Laminae


 Mottling


 Salmon Texture


Fossils:


 Shell Fragments


Disturbance:


 Moussey Gas

 Moderately Disturbed

 Expansion Cracks

 Very Disturbed

 Biscuit & Slurry

 Soupy


NGHP Expedition 1


Cored Interval Site 10 - Hole D

Seafloor 1050.4 (m)


Barrel Sheet Key


Cored & Recovered:


 Core Recovery

 Cored Interval No Recovery


Lithology:


 Nannofossil Rich Clay


 Nannofossil Bearing Clay


 Catwalk Sampled Core

Bioturbation:


 Rare


 Moderate


 Common


 Abundant

Diagenesis:


 FeS


 Authigenic Carbonate


 Carbonate Cement


 Carbonate Bands

Structures:


 Silt/Sand Beds


 Silt/Sand Laminae


 Mottling


 Salmon Texture


Fossils:

 Shell Fragments


 Foraminifera


 Mollusk


 Gastropod


 Diatoms


Disturbance:


 Moussey Gas

 Moderately Disturbed

 Expansion Cracks

 Very Disturbed

 Biscuit & Slurry

 Soupy


NGHP Expedition 1


Cored Interval Site 12 - Hole A

Seafloor 1045.8 (m)


Barrel Sheet Key


Cored & Recovered:


 Core Recovery

 Cored Interval No Recovery


Lithology:

 Nannofossil Rich Clay


 Nannofossil Bearing Clay


 Foraminifera Bearing Clay


Bioturbation:


 Abundant


Diagenesis:

 FeS


 PY Pyrite


 Authigenic Carbonate

 Carbonate Cement


 Carbonate Bands


Structures:


 Silt/Sand Beds

 Silt/Sand Laminae


Fossils:


 Shell Fragments


 Mollusk


 Coral


Disturbance:

 Moussey Gas

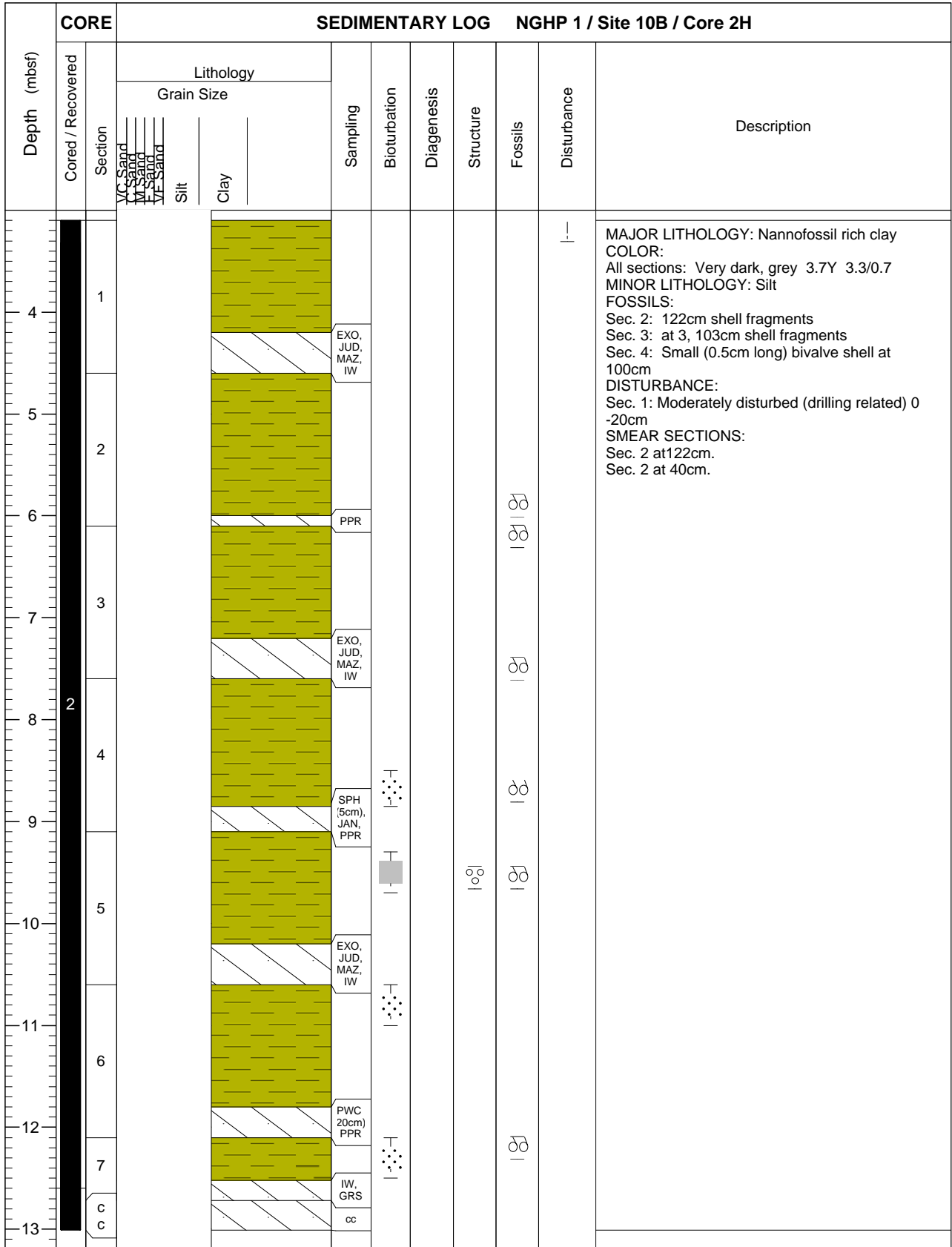
 Moderately Disturbed

 Expansion Cracks

 Very Disturbed

 Biscuit & Slurry

CORE		SEDIMENTARY LOG NGHP 1 / Site 10B / Core 1H								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
		VC Sand								
		MS Sand								
		FS Sand								
		FI Sand								
		Silt								
		Clay								
0	1			EXO, JUD, MAZ, IW						<p>MAJOR LITHOLOGY: Nannofossil bearing clay COLOR: Sec. 1 Very dark, greyish, brown Sec. 2: Very dark greyish brown, 3.0Y 3.7/0.9 MINOR LITHOLOGY: Silt Sec. 2: Silt laminae, faint throughout DIAGENESIS: Sec. 2: Iron monosulfides at 84, 86, 89, 96, 110-111cm FOSSILS: Sec. 2: 12-16cm fossil hash disseminated throughout DISTURBANCE: Sec. 1: Highly disturbed SMEAR SECTIONS: Sec. 1 at 60cm: Major lithology Sec. 2 at 70cm: Major lithology</p>
1	2			PPR, GRS, PUS, CC		Fe				
2	3									
3										



CORE		SEDIMENTARY LOG NGHP 1 / Site 10B / Core 3H							Description	
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils		Disturbance
		Section	Grain Size							
		VC-Sand C-Sand M-Sand F-Sand	Silt Clay							
13	X									NO CORE RECOVERED
14	X									
15	X									
16	X									
17	X									
18	X									
19	X									
20	X									
21	X									
22	X									

CORE		SEDIMENTARY LOG NGHP 1 / Site 10B / Core 4X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
		VC-Sand	Clay							
22	4									<p>MAJOR LITHOLOGY: Nannofossil rich clay COLOR: Very dark, grey 4.7Y 2.9/1.01 MINOR LITHOLOGY: Silt Sec. 1: 95-107cm light colored clay bands DIAGENESIS: Sec. 1: Carbonate concretions at 2, 31, 63-66, 122-124cm Sec. 2: Carbonate concretions at 10-12, 45cm FOSSILS: Sec. 2: 5 cm shell fragments SMEAR SECTIONS: Sec. 1 at 87cm.</p>
23	1									
24	2			IW						
25	3			HS/HSR (5cm), PWC (20cm), PPR, EXO, JUD, MAZ, IW (20cm)						
26	c			HYDR2, HYDR3, IW, HYDR4, HYDR5, HYDR6, HYDR7, HYDR8, MAF, MAR, MAG						
27										
28										
29										
30										
31										

CORE		SEDIMENTARY LOG NGHP 1 / Site 10B / Core 5P								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Section	Grain Size							
		VC Sand VF Sand VF Sand VF Sand								
		Silt								
		Clay								
32	X									NO CORE RECOVERED.
32	X									
33	X									

CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 6X							Description		
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure		Fossils	Disturbance
			Grain Size								
			VC Sand	WC Sand	WC Sand	WC Sand	WC Sand	Silt	Clay		
33	X										No core recovered.
34	X										
35	X										
36	X										
37	X										
38	X										
39	X										
40	X										
41	X										

CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 7X									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			UC Sand								
			IV Sand								
			VF Sand								
			Silt								
			Clay								
42	7				MAR, MAF, MAG, JAN, IW						All recovered core sampled.
43					PUS, HYD9, HYD10, PIN, HYD11, GRS, HYD12, HYD13						
44											
45											
46											
47											
48											
49											
50											

CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 8Y									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
		VC Sand UC Sand M Sand VF Sand Silt Clay									
51	8										Core not recovered at pressure

CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 9X									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			W Sand								
			VF Sand								
			Silt								
			Clay								
52	9				JAN, MAR, MAF, MAG, IW						All recovered core sampled
					PUS, HYD14, PIN, HYD15, GRS						
53											
54											
55											
56											
57											
58											
59											
60											

CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 10X								
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							
61	10	1		SPH, MAZ, HS, IW, MAR, MAF, MAG				∞ ∞	∞ ∞	MAJOR LITHOLOGY: Nannofossil rich clay COLOR: Sec. 1: Very dark, grey GLEY1 3/N Sec. 2: Very dark, grey GLEY1 3/N FOSSILS: Sec. 1: shell fragments throughout Sec. 2: shell fragments throughout.
62		2		EXO, JUD, PNS 20cm) YD17 YD1E				∞ ∞	∞ ∞	
63		c		CC						
63		c								
64										
65										
66										
67										
68										
69										
70										

CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 11E									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			MS Sand								
			MF Sand								
			Silt								
			Clay								
70	1	1									MAJOR LITHOLOGY: Nannofossil rich clay COLOR: Very dark, grey GLEY1 3/N
71											

CORE		SEDIMENTARY LOG NGHP -1 / Site 10B / Core 12X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
		VC Sand								
		W Sand								
		IF Sand								
		Silt								
		Clay								
71	1			MAR, MAF, MAG, MAZ, JAN (5cm), YDR2						<p>MAJOR LITHOLOGY: Nannofossil rich clay</p> <p>COLOR: Sec. 1: Very dark, grey GLEY1 3/N Sec. 2 and 3: Very dark, grey 10yr 3/1</p> <p>FOSSILS: Shell fragments throughout section 3, 4 and 5.</p> <p>DISTURBANCE: Very disturbed throughout sections 1, 3, 4, and 5. Biscuit and slurry drilling structure in sections 3 and 5</p> <p>SMEAR SLIDES: Sec. 3 at 74cm.</p>
	2									
72	3			SPH, EXO, JUD, MAZ, IW (20cm)						
73	4									
74	5			IW (20cm) PUS, PIN, GRS						
75	c			CC						
76										
77										
78										
79										
80										

Depth (mbst)	CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 13							
	Cored / Recovered	Section	Lithology	Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
Grain Size										
		VC Sand _____ Co Sand _____ M Sand _____ F Sand _____ Silt _____ Clay _____								No core was recovered.

CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 14X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
		VC Sand								
		MS Sand								
		MF Sand								
		Silt								
		Clay								
90	1 4							∞		MAJOR LITHOLOGY: Nannofossil rich clay COLOR: Sec. 1: Very dark, grey GLEY 1 3/N FOSSILS: Shell fragments throughout DISTURBANCE: Very disturbed throughout SMEAR SLIDES: Sec. 1 at 20cm.
91	1			MBIO (30cm) SPH (5cm), PPR, PIN, PUS, GRS						
92	2			HYDR (50cm) MBIO (30cm) IW (20cm), MAZ, JAN, IW (20cm) JUD						
93	3			YDR2 (25cm)						
	c c			cc						
94										
95										
96										
97										
98										

CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 15P										
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description	
			Grain Size	Clay								
	1 5	1	VC Sand VF Sand VF Sand VF Sand VF Sand Silt Clay									
					MAZ							MAJOR LITHOLOGY: Nannofossil rich clay COLOR: Sec. 1: Very dark, 10yr 3/1 DISTURBANCE: Very disturbed throughout SMEAR SLIDES: Sec. 1 AT 80cm.
					IW, HS							
					JAN							
99												

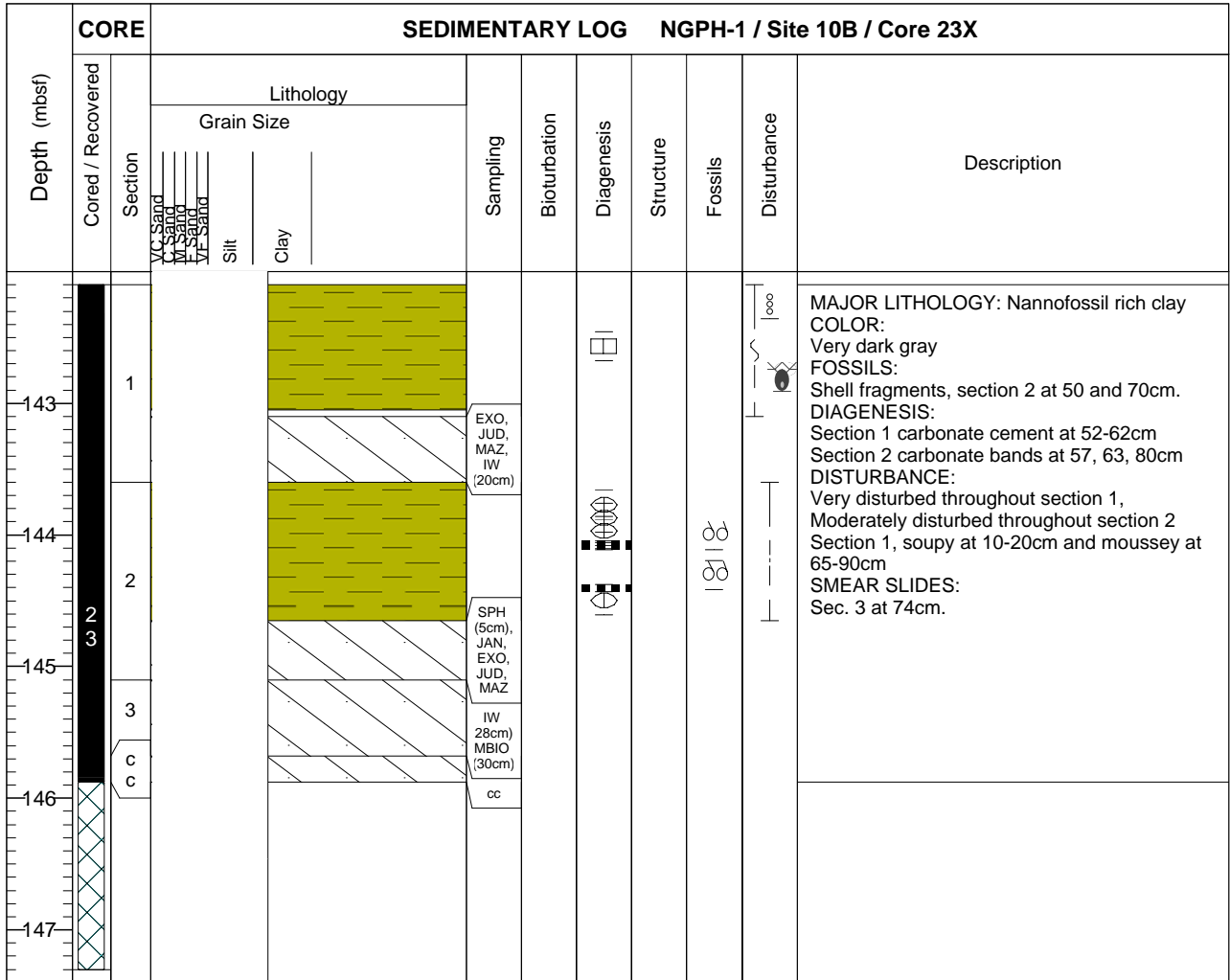
CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 17X									
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description	
		Grain Size									
	Section	VC Sand	Clay								
		VC Sand									
		VC Sand									
		VC Sand									
		VC Sand									
		Silt									
109	1			MBIO 30cm IW 20cm		⊖			⊖	<p>MAJOR LITHOLOGY: Nannofossil rich clay COLOR: Black, 5Y 2.5/1.0 DISTURBANCE: Biscuit & slurry and gas expansion cracks throughout sections 1, 2, 3, 4, and 5. DIAGENESIS: Carbonate concretions within section 1, 3, 4, and 5 SMEAR SLIDES: Sec. 1 at 27cm.</p>	
110				HYD30 HYD 29, HYD2E					⊖		
111	2			HYD31 S/HSF (5cm)					⊖		
112				PPR, EXO, JUD, MAZ, IW (20 cm)		⊖			⊖		
113	3			HYD32 PWC		⊖			⊖		
114		4			SPH (5cm), JAN, PPR, IW (20cm)		⊖				⊖
115	5						⊖				⊖
116			c c		cc		⊖				⊖
117											

CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 18Y									
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							
118	1 8	1									<p>MAJOR LITHOLOGY: Nannofossil rich clay</p> <p>COLOR: not described</p> <p>DIAGENESIS: Carbonate bands diagonal throughout the core at 11-12, 12-18, 64-69, 80-82, 85cm Carbonate nodule at 5cm</p> <p>DISTURBANCE: Gas expansion cracks throughout the entire core Soupy from 83-90cm Salmon-textured at 4-79cm</p> <p>SMEAR SLIDES: Sec. 1 at 40cm.</p>

CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 19X									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			W Sand								
			MF Sand								
			Silt								
			Clay								
119	19				SPH, MAZ, IW						All recovered core sampled
					cc						
120											
121											
122											
123											
124											
125											
126											
127											
128											

CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 20X									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			LS Sand								
			M Sand								
			VF Sand								
			Silt								
			Clay								
128	20				HYD34, HYD33, MAZ						All recovered core sampled
129											
130											
131											
132											
133											
134											
135											
136											

CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 21Y									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand VF Sand W Sand VF Sand	Silt Clay							
	2 1				IW, MAZ, JAN						All recovered core sampled
137											



Depth (mbstf)	CORE										SEDIMENTARY LOG NGHP-1 / Site 10B / Core 24									
	Cored / Recovered	Section	Lithology				Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description							
			Grain Size																	
			VC Sand	CS Sand	MS Sand	FS Sand														
													No core was recovered.							

CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 26X								
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							
167	2 6	1		JAN, SPH (5cm), PPR, EXO, JUD, MAZ, JW (20cm)						<p>MAJOR LITHOLOGY: Nannofossil rich clay COLOR: GLEY 1 3/N DIAGENESIS: Carbonate nodules in Sec. 1 at 34, 37cm and in Sec. 2 at 5cm DISTURBANCE: Section 1 drilling disturbance 0-5cm, Section 2 soupy at 40-41cm SMEAR SLIDES: Sec. 2 at 70cm. Sec. 2 at 55cm.</p>
168		2								
169		c		cc						
170										
171										
172										
173										
174										

CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 27E									
Depth (mbfsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			W Sand								
			VF Sand								
			Silt								
			Clay								
	27										This core was not recovered under pressure.
175											

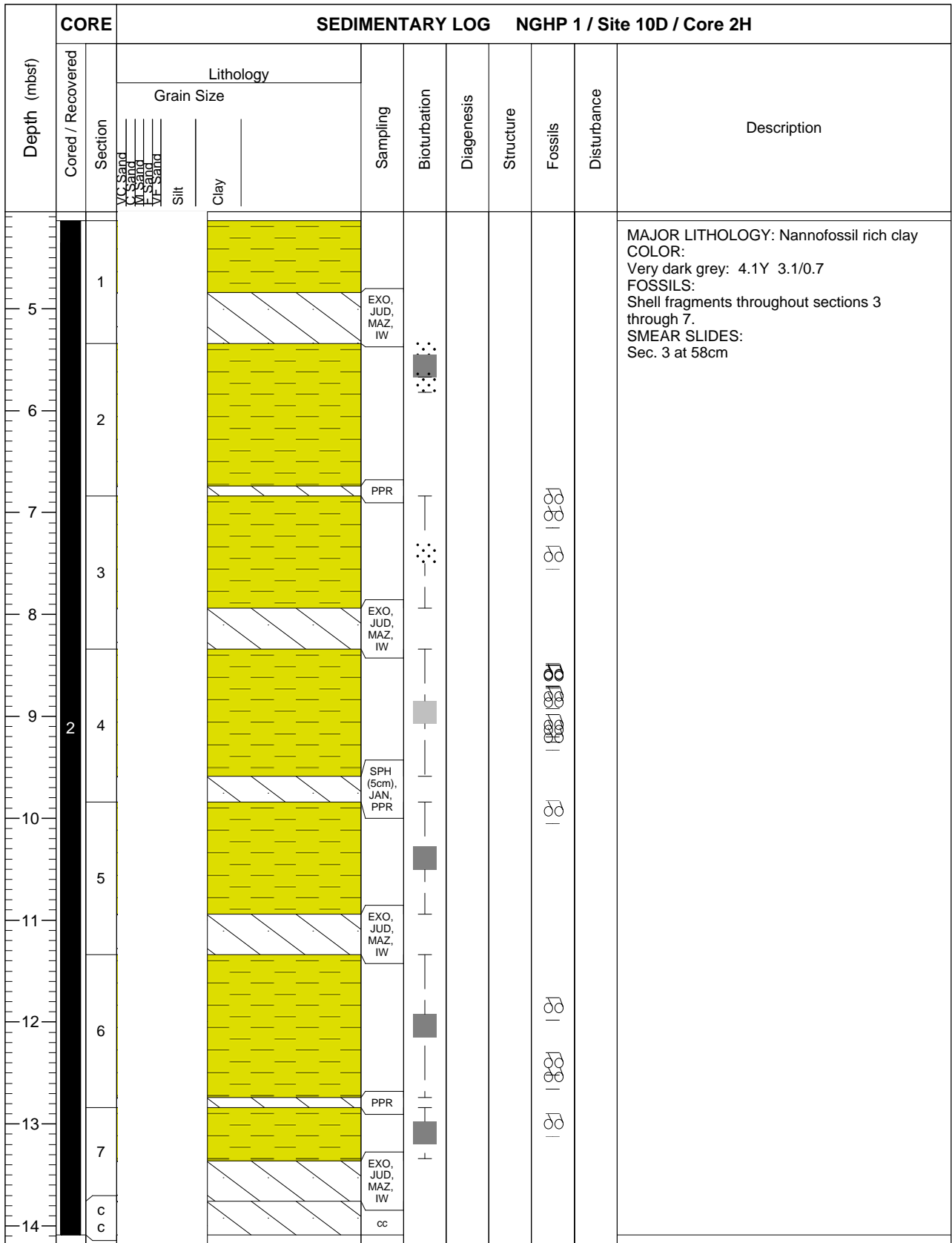
CORE		SEDIMENTARY LOG NGHP-1 / Site 10B/ Core 28P								
Depth (mbst)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Section	Grain Size							
		VC Sand V Sand M Sand VF Sand	Silt Clay							
176	2 8	1		MAZ						<p>Core recovered significantly more than the cored interval. Composite core log shows cored interval, however, this barrel sheet includes the description for the full recovered interval.</p> <p>MAJOR LITHOLOGY: Nannofossil rich clay</p> <p>COLOR: Very dark grey</p> <p>DISTURBANCE: Very disturbed throughout entire section</p> <p>MISC: Sampled at irregular and shorter intervals than usual</p> <p>Core expanded on catwalk beyond the 1 meter cored interval</p> <p>SMEAR SLIDES: Sec. 2 at 35cm.</p>
		2		MAZ, JAN MAZ, IW						
177										

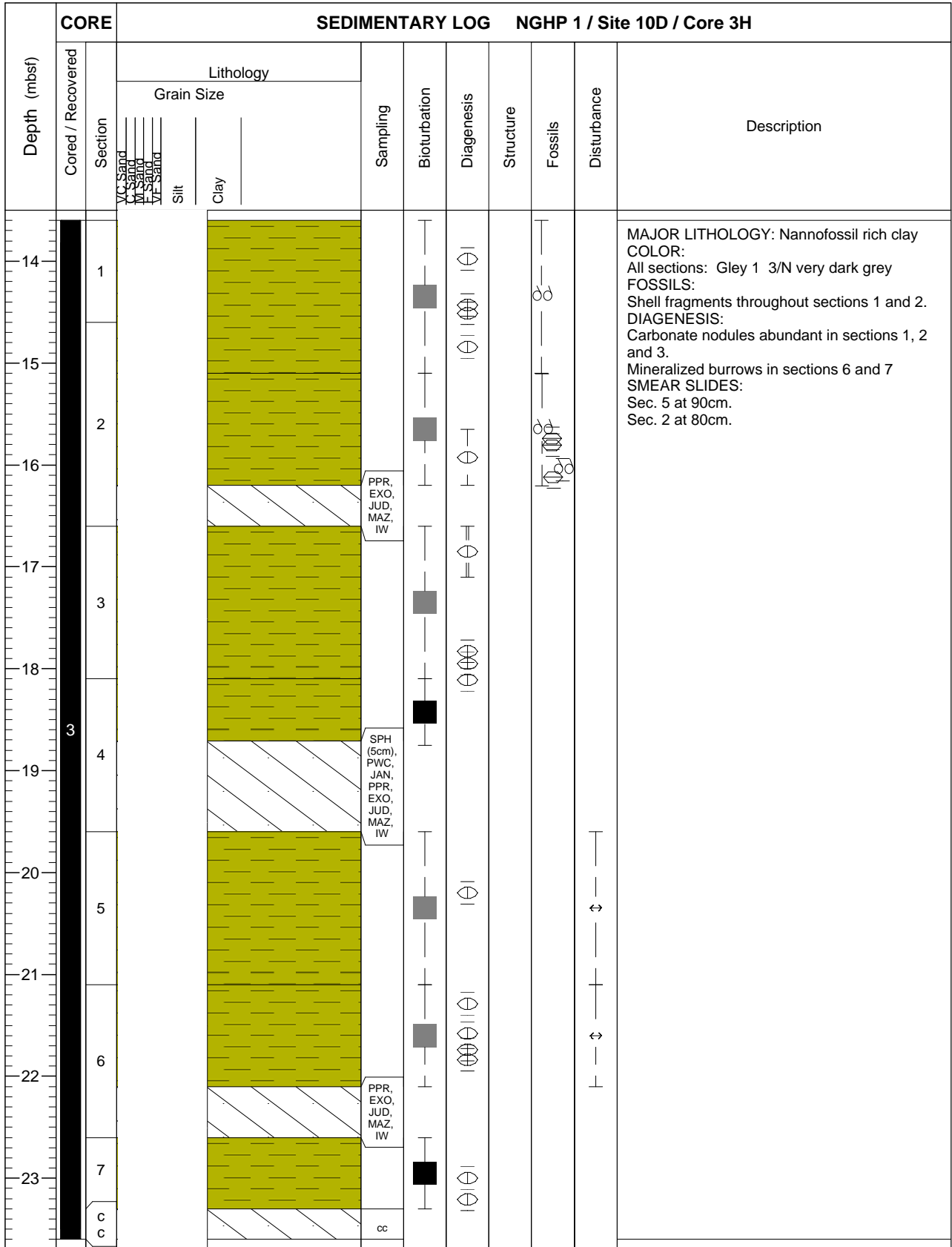
CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 29X								
Depth (mbstf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
	Section	VC Sand	VC Sand							
		VC Sand	VC Sand							
		VC Sand	VC Sand							
		VC Sand	VC Sand							
		Silt	Clay							
177	1				■	Fe				<p>MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: 6.1Y, 2.7/0.5 black . Except for 14-65cm in Sec. 1 4.3Y, 3.7/0.8 olive gray. DIAGENESIS: Iron monosulfide precipitates and nodules common throughout. Sec. 2: at 30-35, 99, 127cm; precipitates. Sec. 3: at 8, 32cm; precipitates. Sec. 4: at 45, 72, 90cm; nodules. FOSSILS: Sec. 2 at 10-13cm; Dentallium sp. SMEAR SLIDES: Sec. 1 at 45cm. Sec. 2 at 70cm.</p>
178	2					Fe		◇		
179				PPR		Fe				
180	3			SPH, PPR, JAN, EXO, JUD, MAZ, IW		Fe				
181	4					Fe				
182		CC		CC		Fe				
183										
184										
185										

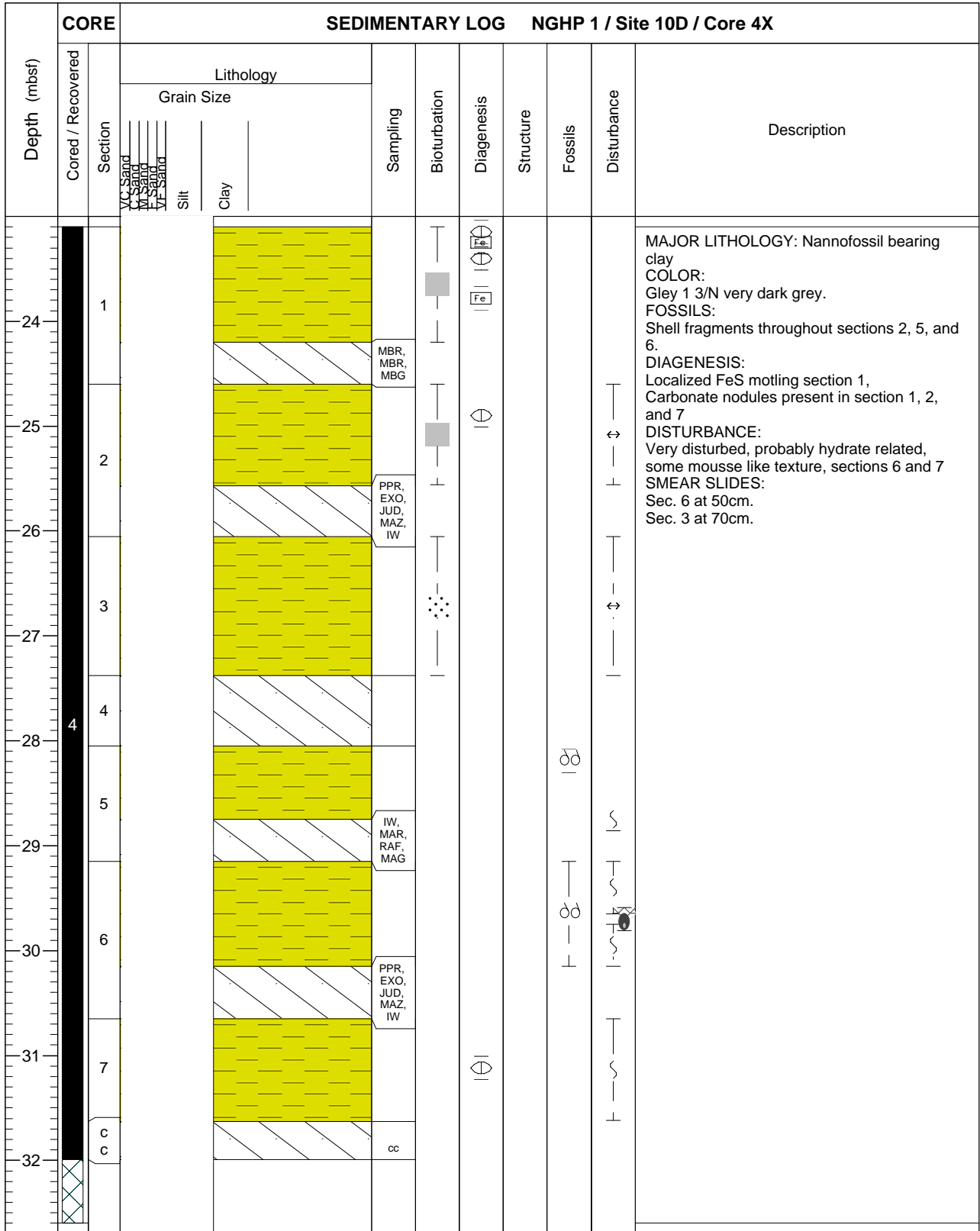
CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 30X									
Depth (mbst)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			MS Sand								
			MF Sand								
			Silt								
			Clay								
186	30	1									MAJOR LITHOLOGY: Nannofossil bearing clay COLOR: Black SMEAR SLIDE: at 19cm
		c			IW						
		c			R						
187											
188											
189											
190											
191											
192											
193											
194											
195											

CORE		SEDIMENTARY LOG NGHP-1 / Site 10B / Core 31X									
Depth (mbsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			U Sand								
			M Sand								
			LF Sand								
			Silt								
			Clay								
	3 1				PUS, PIN, GRS						All recovered core sampled
196											
197											
198											
199											
200											
201											
202											
203											
204											
205											

CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 1H								
Depth (mbstf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
		VC Sand								
		W Sand								
		VF Sand								
		Silt								
		Clay								
1	1			EXO, JUD, MAZ, IW						MAJOR LITHOLOGY: Nannofossil bearing clay COLOR: Sec. 1: 3.3Y 3.7/1.4 dark grey Sec. 2: 2.6Y 3.5/1.0 dark grey FOSSILS: Sec. 2: Shell fragments at 41-42, 59cm SMEAR SLIDES: Sec. 2 at 71.5cm.
2	2									
3	3			PPR						
4	c			SPH, JAN, EXO, JUD, MAZ, IW						
	c			CC						

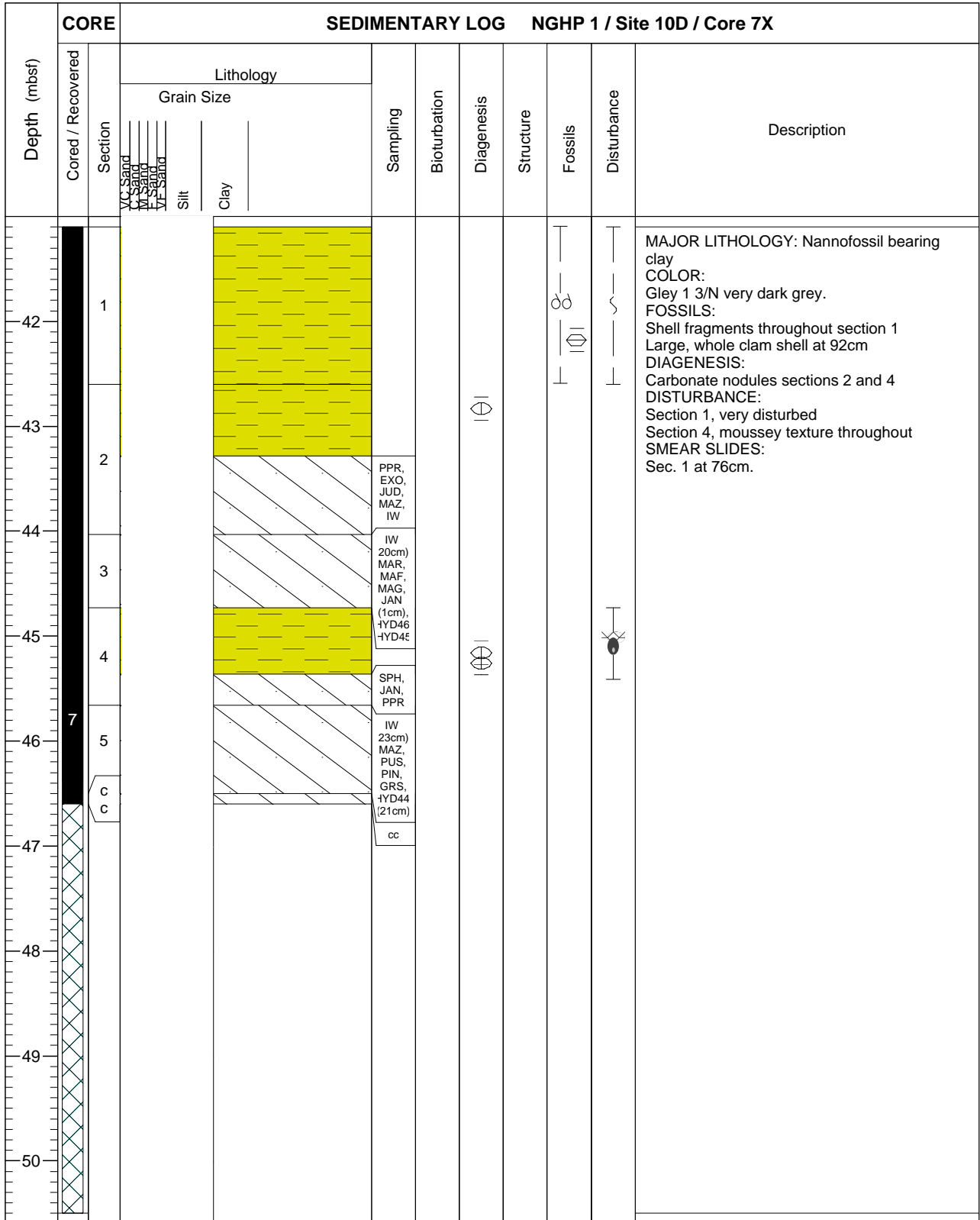






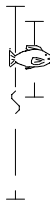


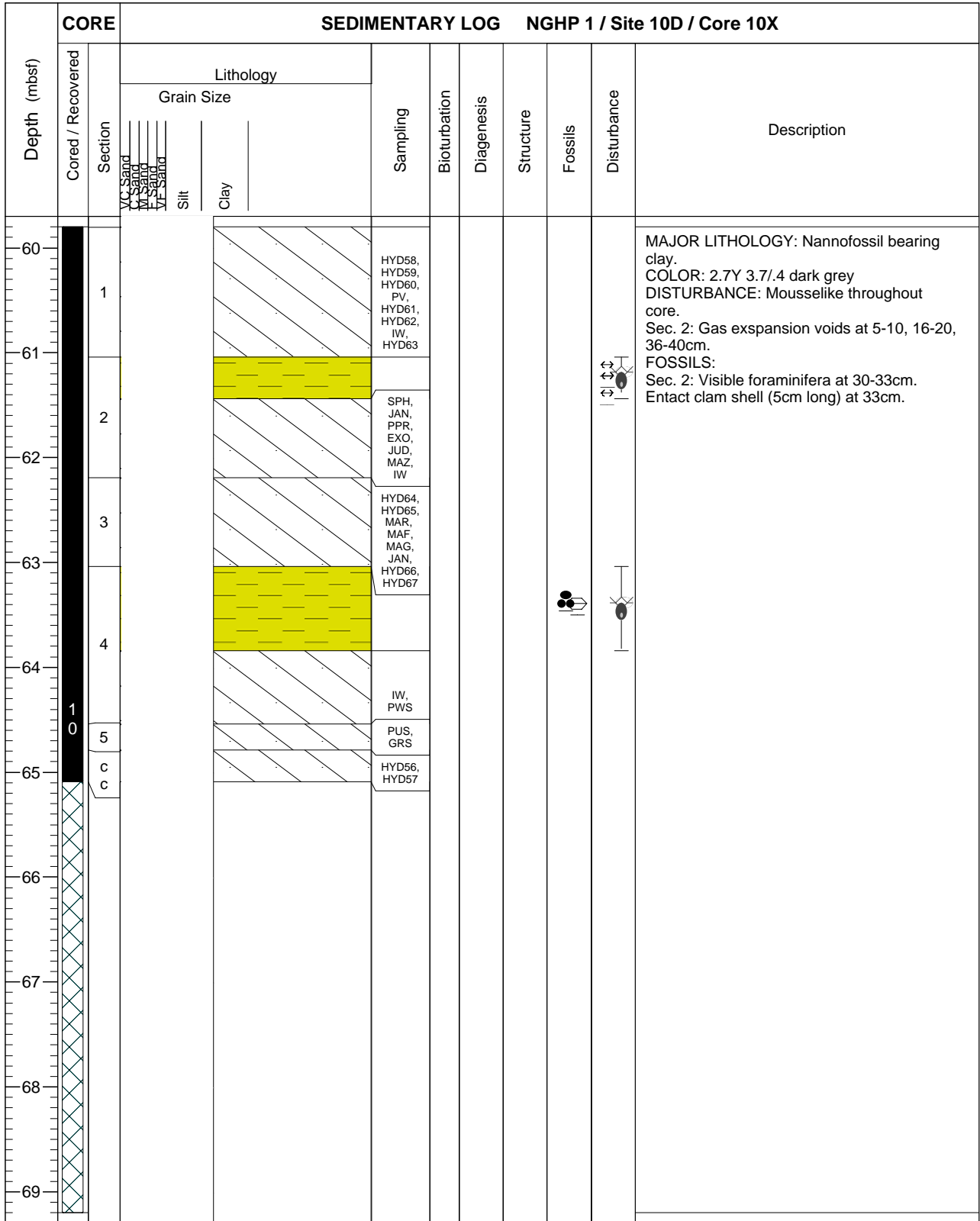
CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 5X								
Depth (mbstf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
	Section	VC Sand	VC Sand							
		VC Sand	VC Sand							
		VC Sand	VC Sand							
		VC Sand	VC Sand							
		Silt	Clay							
33	1					⊖				<p>MAJOR LITHOLOGY: Nannofossil rich clay COLOR: All sections: 10YR 3/1 very dark grey. DIAGENESIS: Carbonate nodules within sections 1, 4, and 5. DISTURBANCE: Very disturbed throughout sections 1, 4, and 5. Biscuit and slurry and moussey structures in section 1 SMEAR SLIDES: Sec. 5 at 70cm. Sec. 4 at 30cm.</p>
34	2			HS (5cm), PPR, EXO, JUD, MAZ, IW (20cm)		⊖				
35	3			-1YD41						
36	4			SPH (5cm), JAN						
37	5			EXO, JUD, MAZ, IW (20cm)		⊖	○ ○			
38	6						○ ○ ○			
39	7			PPR, PWC						
39	c			cc						
40	c									

CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 6P									
Depth (mbfs)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			W Sand								
			VF Sand								
			Silt								
			Clay								
40	6				JAN (7cm), IW (7cm), HS (3cm), MAZ (12cm)						All recovered core sampled
41											



CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 8X								
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							
51	8 1			HYD48 IW, HYD46						<p>MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: 10YR 3/1 very dark grey DISTURBANCE: Sec. 1: Mousseliike at 43-78cm. Contained abundant hydrate that destabilized upon splitting. Sec. 2: Soupy/Mousseliike at 0-24cm. SMEAR SLIDE: Sec. 1 at 54cm.</p>
52	2			HYD54 HYD53 HYD52 HYD51 HYD5C						
53	c c			PPR, EXO, JUD, MAZ, HYD55						
53				CC						
54										
55										
56										
57										
58										

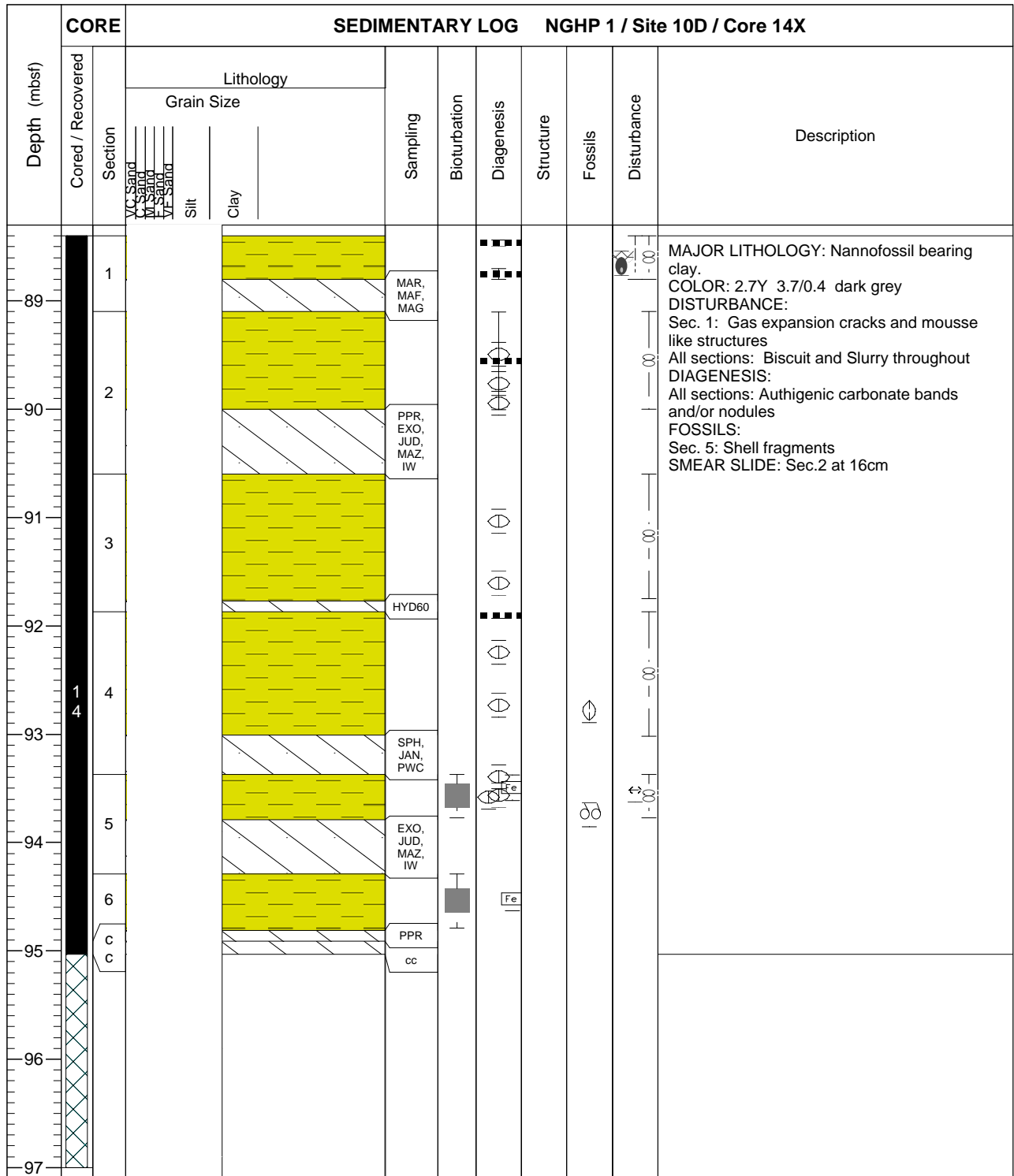
CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 9Y									
Depth (mbfs)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			W Sand								
			VF Sand								
			Silt								
			Clay								
59	9	1								 <p>MAJOR LITHOLOGY: Nannofossil bearing clay COLOR: 10YR 3/1 very dark grey DISTURBANCE: Very disturbed throughout core. Salmon-textured at 4-24cm SMEAR SLIDES: Sec. 1 at 25 cm.</p>	



CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 11X								
Depth (mbfs)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Section	Grain Size							
		VC Sand V Sand IV Sand VF Sand	Silt Clay							
	1			HYD68, IW						All recovered core sampled
70										
71										
72										
73										
74										
75										
76										
77										

Depth (mbst)	CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 12E									
	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description	
			Grain Size									
78	1 2	1	VC Sand VC Sand VC Sand VF Sand VF Sand Silt Clay									
70												This pressure core was NOT recovered at pressure. Stratigraphy is not to be believed as mixing and disturbance of sediment throughout has occurred.

CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 13X									
Depth (mbstf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			MS Sand								
			IF Sand								
			Silt								
			Clay								
79	1 3	1			PPR, EXO, JUD, MAZ, IW, GRS						MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: 5.8Y, 6.0/0.1 very dark grey SMEAR SLIDE: Sec. 1 at 15cm.
80		c c			CC						
81											
82											
83											
84											
85											
86											
87											
88											



CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 15P									
Depth (mbfs)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			VF Sand								
			VF Sand								
			VF Sand								
			Silt								
			Clay								
97	1 5	1									<p>MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: 10YR 3/1 very dark grey DISTURBANCE: Moussey 0 to 53cm Very disturbed throughout entire core DIAGENESIS: Authigenic carbonate nodules from 79 to 91cm SMEAR SLIDE: Sec.1 at 80cm</p>
98											

CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 16X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Section	Grain Size							
		VC Sand M Sand M Sand VF Sand	Silt Clay							
98	1									<p>MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: 10YR 3/1 very dark grey DISTURBANCE: Sec. 1-3: Very disturbed with biscuit and slurry drilling structures Sec. 4 and 5: Moderately disturbed Sec. 3: Moussey 0-25cm DIAGENESIS: All sections: Authigenic carbonate nodules SMEAR SLIDE: Sec.2 at 30cm</p>
99										
100	2			EXO, JUD, MAZ, PPR, HYD75, HYD74, HYD73, IW						
101	3									
102	4			HYD70, HYD71						
103	5			SPH, JAN, PPR, HYD72						
104	c			EXO, JUD, IW, PWC, MAZ						
105	c			cc						
106										
107										

CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 17X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size	Clay							
	Section	VC Sand								
		W Sand								
		VF Sand								
		Silt								
		Clay								
108	1									<p>MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: 10YR 3/1 very dark grey DISTURBANCE: Sec. 1-5: Very disturbed and Biscuit and Slurry throughout Sec. 1: Moussey from 12-35cm DIAGENESIS: All sections: Authigenic carbonate nodules FOSSILS: Sec. 1: Shell fragments at 12-80cm SMEAR SLIDE: Sec.2 at 70cm</p>
109	2									
110				PPR, EXO, JUD, MAZ, IW						
111	3									
112				PW, PWT						
113	4									
114	5			IW, SPH, JAN, PPR						
114	c			EXO, HYD76, JUD, MAZ						
114	c			cc						
115										
116										
117										

CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 18X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Section	Grain Size							
		VC Sand								
		W Sand								
		VF Sand								
		Silt								
		Clay								
118	1									<p>MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: 10YR 3/1 very dark grey DISTURBANCE: All sections: Very disturbed and Biscuit and Slurry throughout DIAGENESIS: All sections: Authigenic carbonate nodules SMEAR SLIDE: Sec.3 at 80cm</p>
119	2									
120				PPR, EXO, JUD, MAZ, IW						
121	3									
122	4			SPH, EXO, JUD, MAZ, IW, JAN, PPR						
123	5									
124	6			HYD78, HYD79						
124	c			cc						
125										

CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 19Y									
Depth (mbfs)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			VF Sand								
			VF Sand								
			VF Sand								
			Silt								
			Clay								
126	19	1									<p>MAJOR LITHOLOGY: Nannofossil bearing clay.</p> <p>DISTURBANCE: Moderately disturbed with moussey to soupy textures throughout</p> <p>DIAGENESIS: Authigenic carbonate nodules from 30 to 50 cm</p> <p>SMEAR SLIDE: Sec. 1 at 40cm</p>

CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 20X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size	Clay							
	Section	VC Sand								
		MS Sand								
		IF Sand								
		VF Sand								
		Silt								
		Clay								
127	1									<p>MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: 10YR 3/1 very dark grey DISTURBANCE: All sections range from Soupy to Very disturbed to Biscuit and Slurry throughout DIAGENESIS: All sections contain Authigenic carbonate nodules FOSSILS: Sec. 8: Shell fragments at 18cm SMEAR SLIDE: Sec.2 at 26cm</p>
128	2			IW						
129	3			PPR, HYD86, JUD, MAZ, IW						
130	4			SPH, JAN, PPR						
131	5			EXO, JUD, MAZ, IW						
132	6									
133	7									
133	8			cc						
134	cc									
135										
136										

CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 21X								
Depth (mbstf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Section	Grain Size							
		VC Sand V Sand M Sand VF Sand	Silt Clay							
137	X									No core recovered
138	X									
139	X									
140	X									
141	X									
142	X									
143	X									
144	X									
145	X									

Depth (mbst)	CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 22E								
	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			VC Sand								
			VC Sand								
			VC Sand								
			VC Sand								
			Silt								
			Clay								
146	2 2	1									MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: 2.7Y 3.6/3 dark grey DISTURBANCE: Soupy throughout core SMEAR SLIDE: Sec. 1 at 20cm

CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 23X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size	Clay							
	Section	VC Sand								
		W Sand								
		MF Sand								
		Silt								
		Clay								
147	1									<p>MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: 2.7Y 3.6/0.3 dark grey DISTURBANCE: Moderate disturbance and occasional Biscuit and Slurry structure in most sections DIAGENESIS: All sections contain Authigenic carbonate nodules FOSSILS: Sections 1,2,4,5,6 contain shell fragments SMEAR SLIDE: Sec. 2 at 25cm Sec. 6 at 22cm</p>
148	2			PPR, IW						
149				HYD88						
150	3									
151	4			SPH, PPR, JAN, EXO, JUD, MAZ, IW						
152	5									
153	6			PPR						
154	c c			cc						
155										

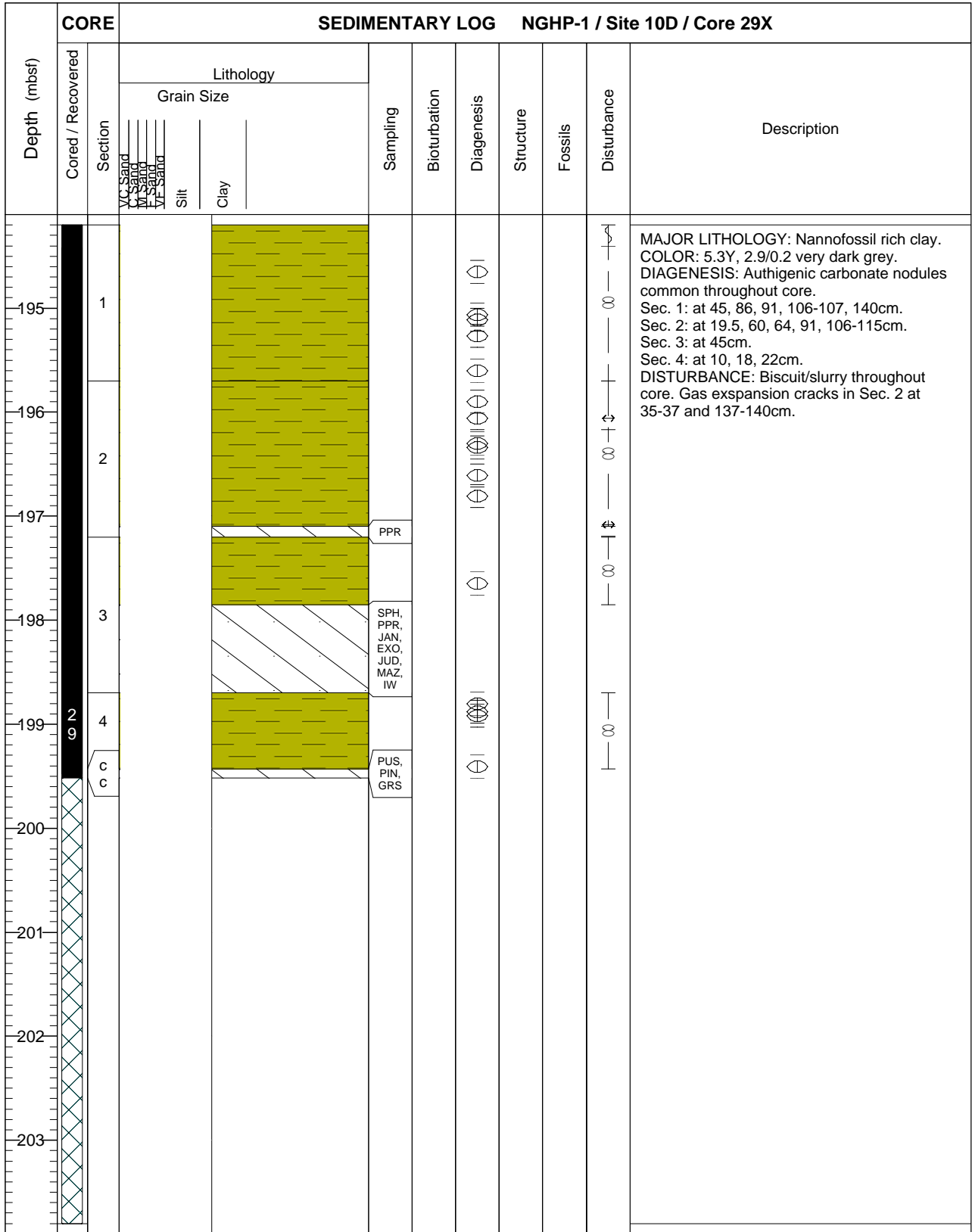
CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 24X								
Depth (mbst)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
	Section	VC Sand	VC Sand	VC Sand	VC Sand	Silt	Clay			
156	1				IW					<p>MAJOR LITHOLOGY: Nannofossil rich clay. COLOR: 6.6Y, 2.5/0.4 black. Sec. 4, 5 & 6 are slightly lighter. DIAGENESIS: Authigenic carbonate nodules rare. Sec. 2: at 106-106cm. Sec. 3: at 131-132cm. FOSSILS: Shell fragments in Sec. 4 at 7-8, 28cm. DISTURBANCE: Gas expansion cracks and biscuit/slurry throughout Sec. 1-4. Sec. 1: Mousseliike at 0-4cm. SMEAR SLIDES: Sec. 2 at 30cm. Sec. 3 at 39cm.</p>
157	2									
158					PPR					
159	3									
160	2 4				SPH, PPR, JAN, EXO, JUD, MAZ, IW					
161	5									
162	6				PPR					
163	c c				PUS, PIN, GRS					
164										

CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 25P											
Depth (mbst)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description		
			Grain Size										
			VC Sand										
			W Sand										
			VF Sand										
			Silt										
			Clay										
164.4	2 5	1									<p>MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: 5Y 2.5/1 Black DISTURBANCE: Very disturbed from 0 to 19 and 34 to 50cm; Moderately disturbed from 50-73cm DIAGENESIS: Authigenic carbonate nodules at 120-122cm SMEAR SLIDES: Sec. 1 at 116cm</p>		
164.8							IW						
165.2													
165.6													

CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 26X								
Depth (mbstf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Section	Grain Size							
		VC Sand								
		W Sand								
		VF Sand								
		Silt								
		Clay								
166	2 6	1								<p>MAJOR LITHOLOGY: Nannofossil rich clay. COLOR: 6.6Y, 2.5/0.4 black. DISTURBANCE: Biscuit/slurry throughout Sec. 1. DIAGENESIS: Silt sized carbonate bands common in Sec. 1 at 5, 60, 77, 80, 115cm. Authigenic carbonate nodules common in Sec. 1 at 6, 89, 126, 136cm. SMEAR SLIDES: Sec. 1 at 55 and 80cm.</p>
167		2		PIN, PUS, GRS						
168		c		PIN, PUS, GRS						
169		c								
170										
171										
172										
173										
174										
175										

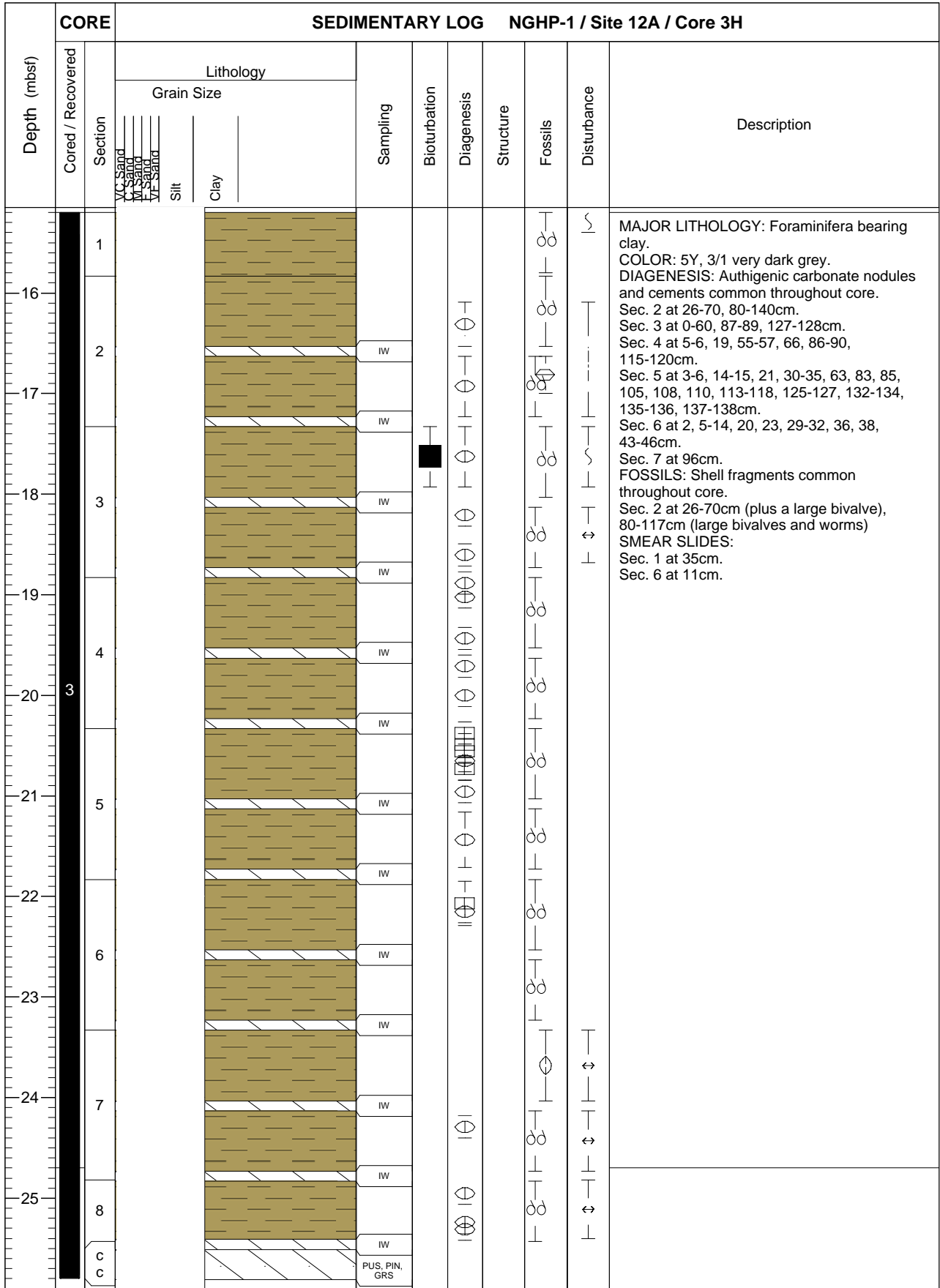
CORE		SEDIMENTARY LOG NGHP 1 / Site 10D / Core 27X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
		VC Sand								
		W Sand								
		MF Sand								
		Silt								
		Clay								
175										<p>MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: 0.4GY, 3.3/0.5 black Sec. 1 Alternating colors of the black above and 5.4Y, 3.3/0.5 very dark grey. DISTURBANCE: Biscuit/slurry throughout core. Gas expansion cracks in Sec. 1 at 20cm and Sec. 5 at 15-18cm. FOSSILS: Shell fragments moderate throughout core. Sec. 2 at 68, 82, 98-110cm. Sec. 4 visible foraminifera at 60-65cm. Sec. 5 at 2, 40-68cm. SMEAR SLIDES: Sec. 1 at 64cm. Sec. 2 at 66cm.</p>
176	1									
177	2									
178				PPR						
179	3									
180	4			SPH, PPR, JAN, EXO, JUD, MAZ, IW						
181	5									
182	c c			PUS, PIN, GRS						
183										
184										

CORE		SEDIMENTARY LOG NGHP-1 / Site 10D / Core 28X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
		VC Sand	Clay							
185	1					⊕				<p>MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: 8.6Y, 2.9/0.2 very dark grey. DIAGENESIS: Authigenic carboantate nodules moderate throughout core. Sec. 1: at 51-52, 57, 67, 142.5cm. Sec. 4: at 70-72cm. DISTURBANCE: Biscuit/slurry throughout core. SMEAR SLIDES: Sec. 1 at 70cm. Sec. 3 at 40cm.</p>
186	2					⊕				
188	3			PPR						
189	4			SPH, PPR, JAN, EXO, JUD, MAZ, IW						
190	4					⊕				
191	c			PUS, PIN, GRS						
192										
193										
194										




CORE		SEDIMENTARY LOG NGHP-1 / Site 12A / Core 1H								
Depth (mbst)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
		VC Sand								
		VC Sand								
		VC Sand								
		VC Sand								
		Silt								
		Clay								
1	1			IW						<p>MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: Alternating zones of 10YR, 3/2 very dark grayish brown and 10YR, 4/3 brown. DIAGENESIS: Mottled iron monosulfides throughout core. SMEAR SLIDES: Sec. 1 at 40cm. Sec. 4 at 40cm.</p>
				IW						
2	2			IW		Fe				
				IW		Fe				
3				IW						
	3			IW						
4				IW						
	4			IW						
5				IW						
	c									
	c									


CORE		SEDIMENTARY LOG NGHP-1 / Site 12A / Core 2H								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
	Section	VC Sand	Clay							
6	1			IW						<p>MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: Gley 1/3 very dark greenish grey. FOSSILS: Shell fragments common throughout core. Large bivalve in Sec. 3 at 106-111cm. Coral fragment in Sec. 4 at 51-56cm. SMEAR SLIDES: Sec. 1 at 90cm. Sec. 5 at 40cm.</p>
7				IW						
8	2			IW						
9				IW						
10	3			IW						
11				IW						
12	4			IW						
13				IW						
14	5			IW						
15				IW						
16	6			IW						
17				IW						
18	7			IW						
19				IW						
20	c									
21	c									

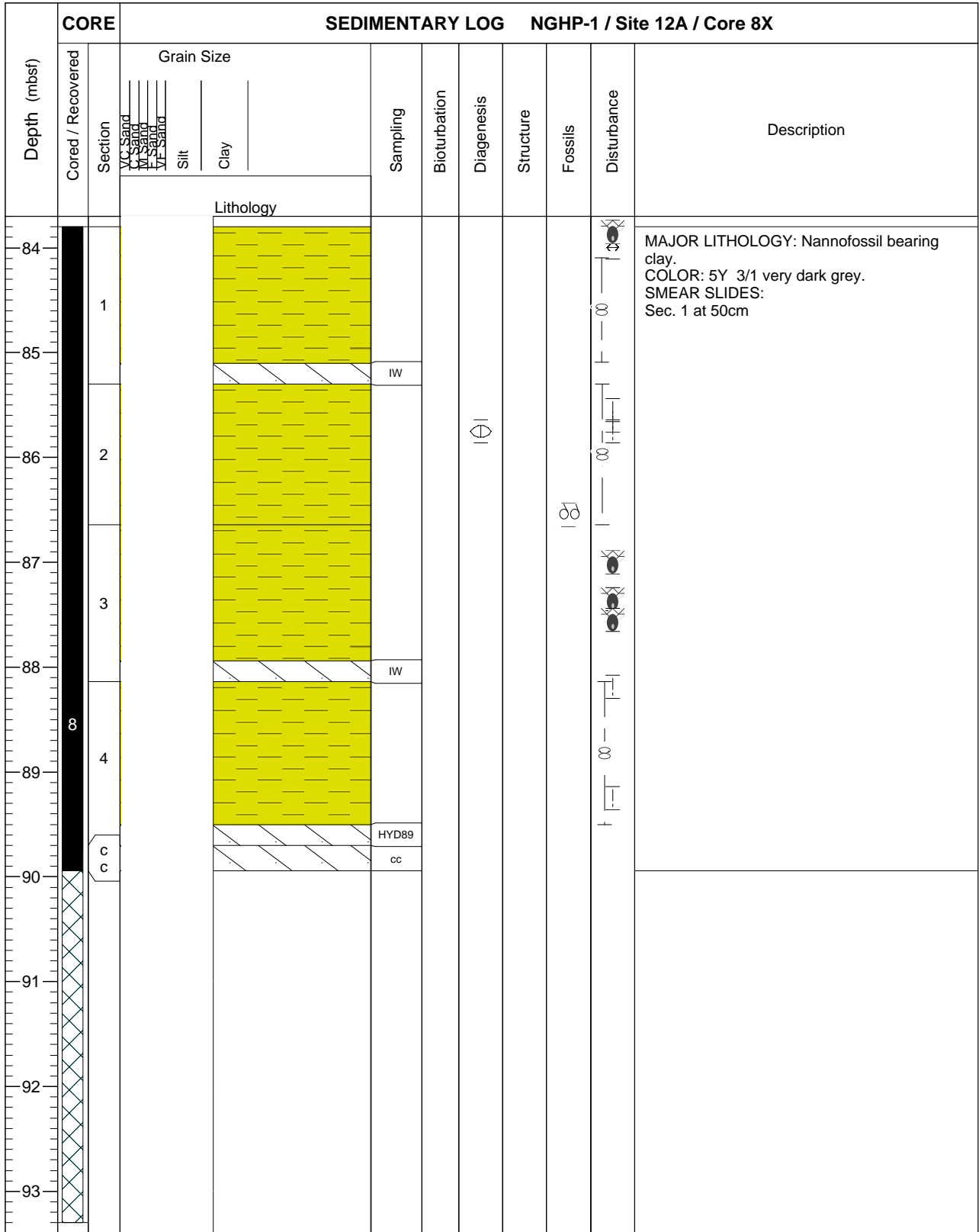


CORE		SEDIMENTARY LOG NGHP-1 / Site 12A / Core 4X								
Depth (mbst)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Grain Size								
		VC Sand								
		W Sand								
		VF Sand								
		Silt								
		Clay								
40	1									<p>MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: 5Y 3/1 very dark grey. SMEAR SLIDES: Sec. 2 at 32cm</p>
41				IW						
42	2							OR		
43	3			IW						
44	4			IW						
45	c			c		PY				

CORE		SEDIMENTARY LOG NGHP-1 / Site 12A / Core5Y									
Depth (mbfsf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			VF Sand								
			VF Sand								
			VF Sand								
			Silt								
			Clay								
46	5	1									MAJOR LITHOLOGY: Nannofossil rich clay. COLOR: 5Y 3/1 very dark grey. SMEAR SLIDES: Sec. 1 at 47cm.

CORE		SEDIMENTARY LOG NGHP-1 / Site 12A / Core 6E									
Depth (mbfs)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			VF Sand								
			VF Sand								
			VF Sand								
			Silt								
			Clay								
47	6	1									MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: 5Y 2.5/1 SMEAR SLIDES: Sec. 1 at 60cm

CORE		SEDIMENTARY LOG NGHP-1 / Site 12A / Core 7P									
Depth (mbfs)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			VC Sand								
			VC Sand								
			VC Sand								
			Silt								
			Clay								
48											No core recovered



CORE		SEDIMENTARY LOG NGHP-1 / Site 12A / Core 9Y									
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							
94	9	1									<p>MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: 5Y 3/1 very dark grey. Inclined bedding, light carbonate bands and silts appear semi-horizontal. Very weak dark to light clay laminations SMEAR SLIDES: Sec. 1 at 50cm</p>

CORE		SEDIMENTARY LOG NGHP-1 / Site 12A / Core 10E									
Depth (mbfs)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand								
			VC Sand								
			VC Sand								
			VC Sand								
			VC Sand								
			Silt								
			Clay								
95											No core recovered

CORE		SEDIMENTARY LOG NGHP-1 / Site 12A / Core 11Y									
Depth (mbstf)	Cored / Recovered	Section	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
			Grain Size								
			VC Sand VF Sand VF Sand VF Sand VF Sand Silt Clay								
		1									MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: 5Y 3/1 very dark grey. SMEAR SLIDES: Sec. 1 at 48cm
96											

CORE		SEDIMENTARY LOG NGHP-1 / Site 12A / Core 12X								
Depth (mbsf)	Cored / Recovered	Lithology		Sampling	Bioturbation	Diagenesis	Structure	Fossils	Disturbance	Description
		Section	Grain Size							
		VC Sand								
		W Sand								
		VF Sand								
		Silt								
		Clay								
97	1					○				<p>MAJOR LITHOLOGY: Nannofossil bearing clay. COLOR: Sec. 1, 2, 3; 5Y 3/1 very dark grey. Alternating bands of light and dark colored clay. Sec. 4; 5Y 2.5/1 very dark grey. DISTURBANCE: Sec. 2 at 37-40cm, inclined moussey texture and associated gas hydrate vein SMEAR SLIDES: Sec. 1 at 48cm Sec. 3 at 54cm</p>
98	2			HYD91, HYD90		○				
99	3			IW		○				
100	4			IW		○				
101		c		cc		○				
102		c								

CORE		SEDIMENTARY LOG NGHP-1 / Site 12A / Core 13X								
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							
142	1									<p>MAJOR LITHOLOGY: Nannofossil rich clay. COLOR: 10Y 3/1 very dark greenish grey. DISTURBANCE: Drilling related "moussey" structure, top of section 1 STRUCTURES: Faint silt rich zones throughout sections 1, 2 and 3 SMEAR SLIDES: Sec. 3 at 87cm</p>
143	2			HYD92 IW, IW						
144	3									
145	4									
146	c c			IW, IW cc						
147										
148										
149										
150										
151										