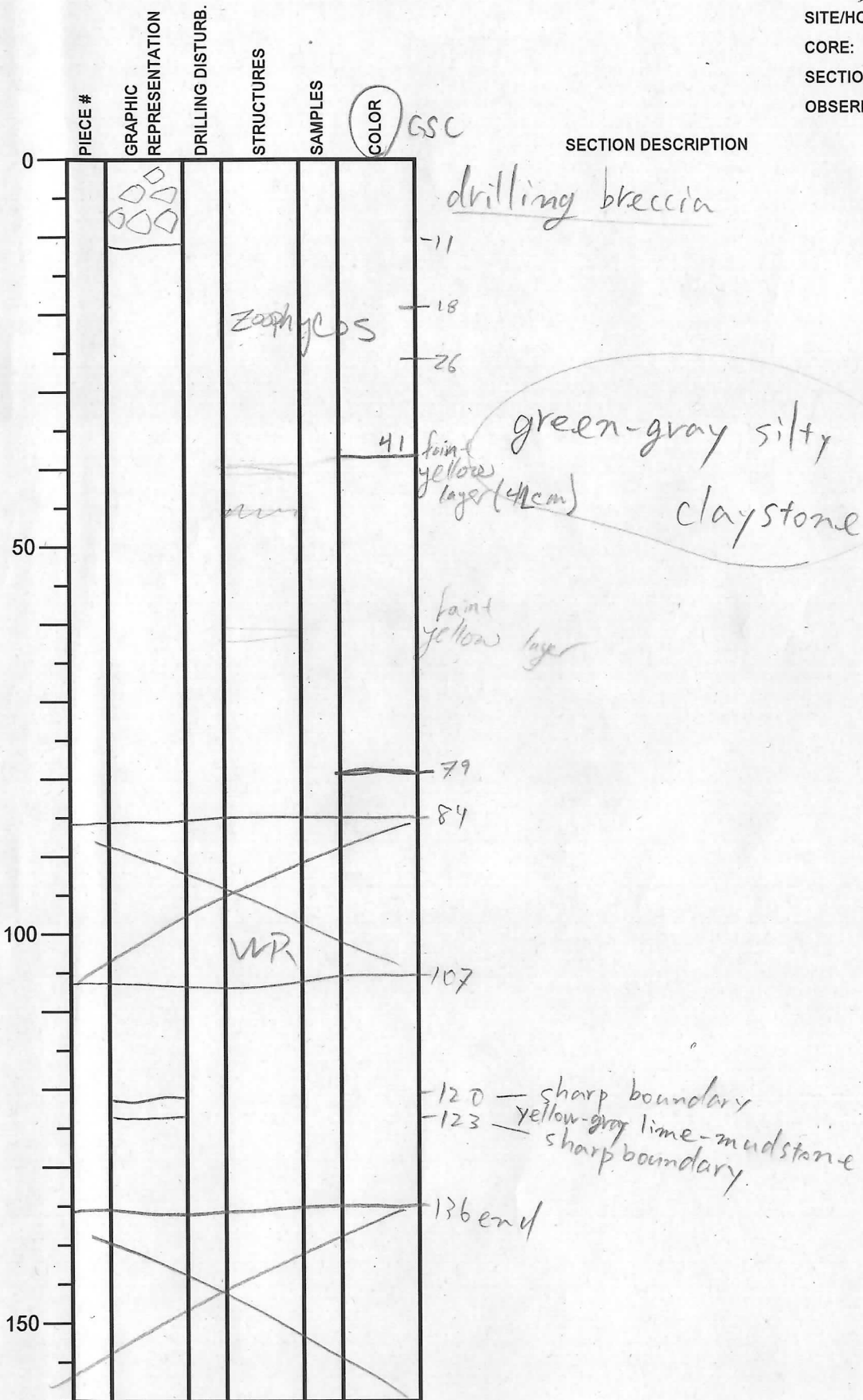


Integrated Ocean Drilling Program Visual Core Description

NO. _____
 DATE: 9/15/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 31R
 SECTION: 1
 OBSERVER: H. Naruse/RS



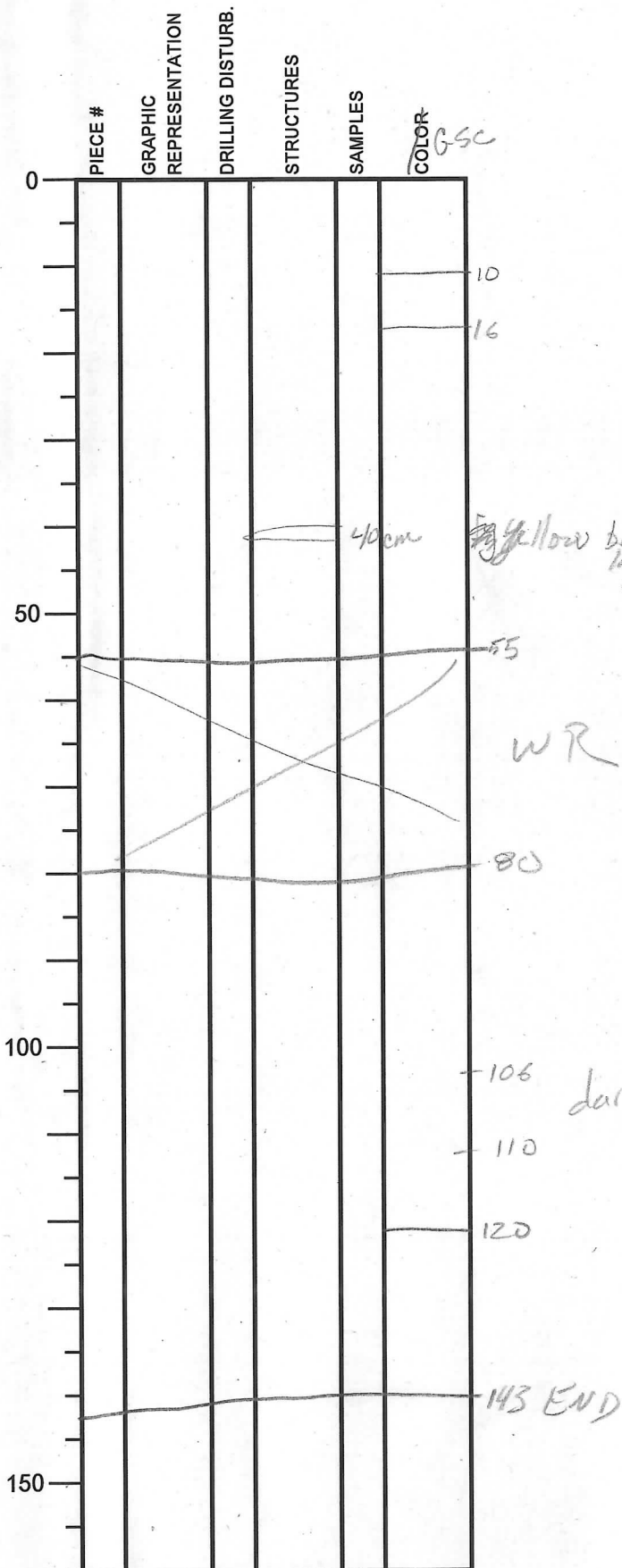
↑ Heavy bioturbation (5)

↑ Heavy bioturbation (5)

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 09/15/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 31
 SECTION: 3
 OBSERVER: RS



Major: Green-gray
 Silty Claystone

Minor: Green silty
 Claystone


Disturbance: 5 (heavy)

dark gray ~~interbedded~~
 (siltstone?)

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 09/15/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 31
 SECTION: 4
 OBSERVER: RS

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50						
100						
150						

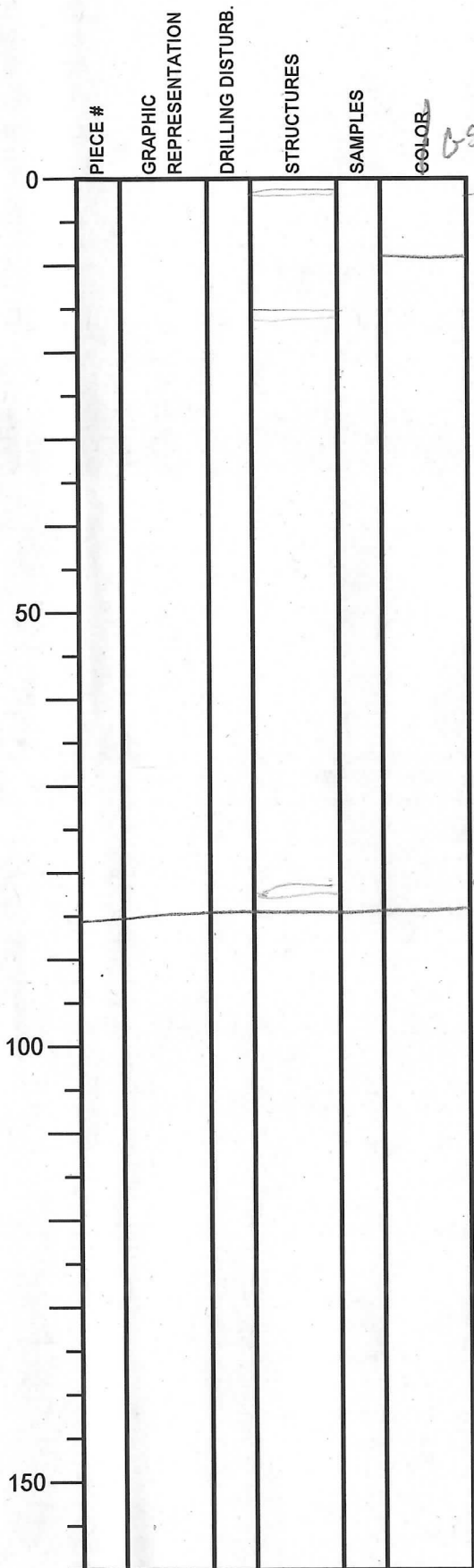
SECTION DESCRIPTION

• yellowish brown nodules in GGSC
 10 yb horizon
 (yellow brown horizons)
 Minor: GSC Present
 Major: GGSC
 35 END
 Bioturbation: 5 (heavy)

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 09/15/20 09
 EXP.: 322
 SITE/HOLE: C001B
 CORE: 31
 SECTION: 5
 OBSERVER: RS



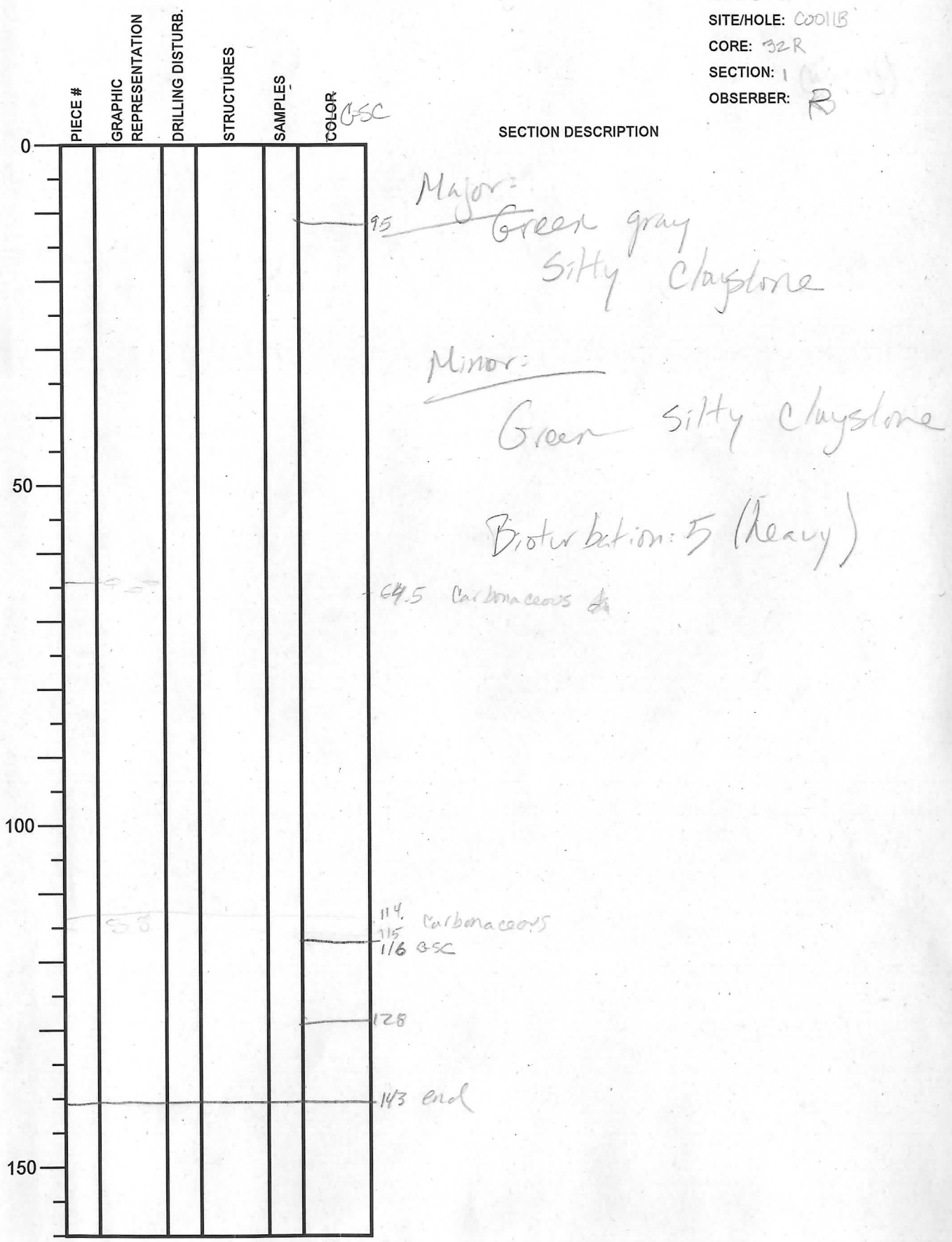
SECTION DESCRIPTION

GGSC
 with minor GSC
 and ybh
 disturbances 5 (heavy)

Integrated Ocean Drilling Program

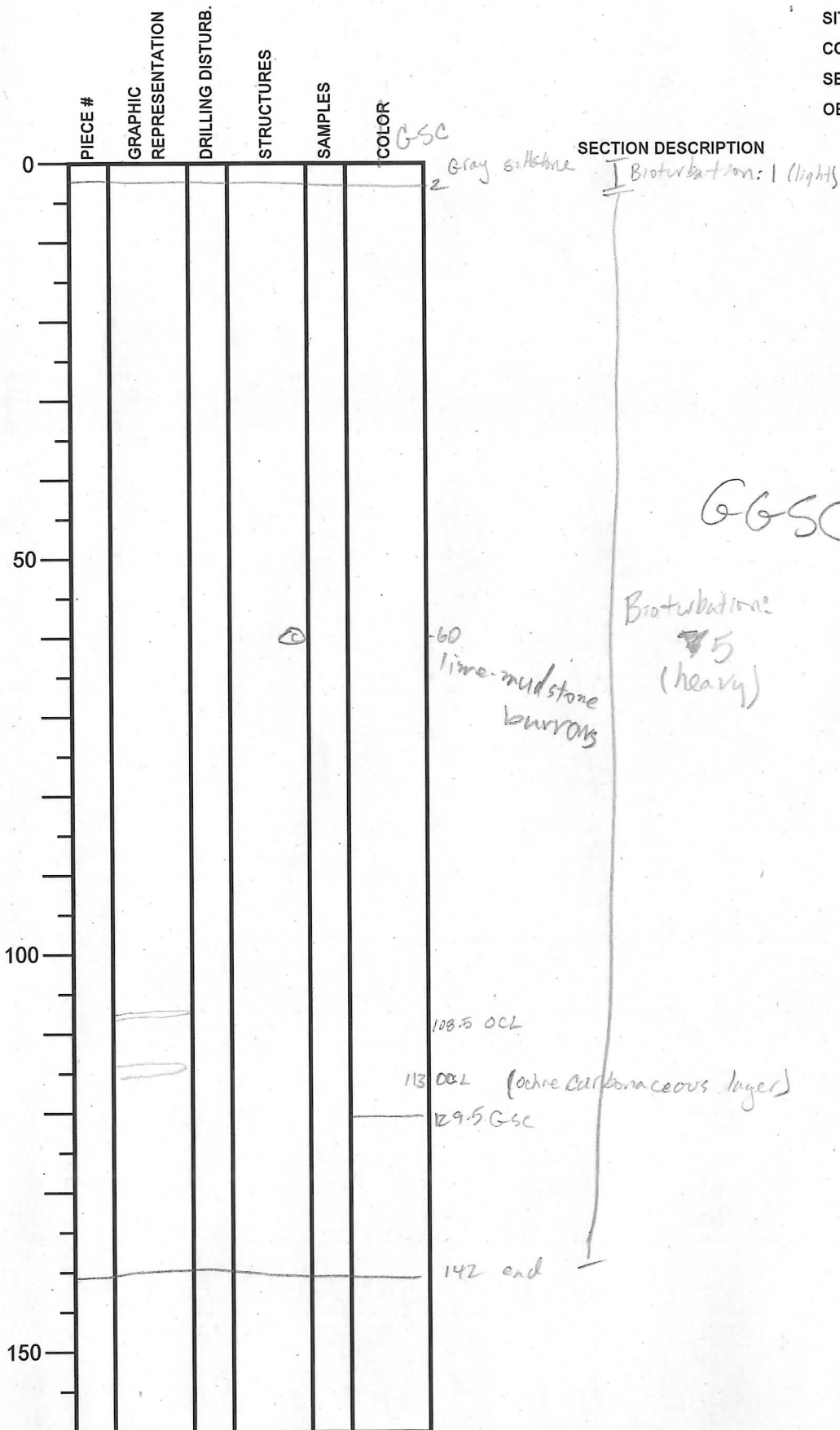
Visual Core Description

NO.
 DATE: 09/15/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 32R
 SECTION: 1
 OBSERVER: R



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 09/15/2009
 EXP.: 322
 SITE/HOLE: 00D11B
 CORE: 32
 SECTION: 2
 OBSERVER: RS



GGSC w/GSC

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 09/15/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 32
 SECTION: 3
 OBSERVER: RS

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50						
100				⊙		
150						

SECTION DESCRIPTION

GGSC w/minor GSC

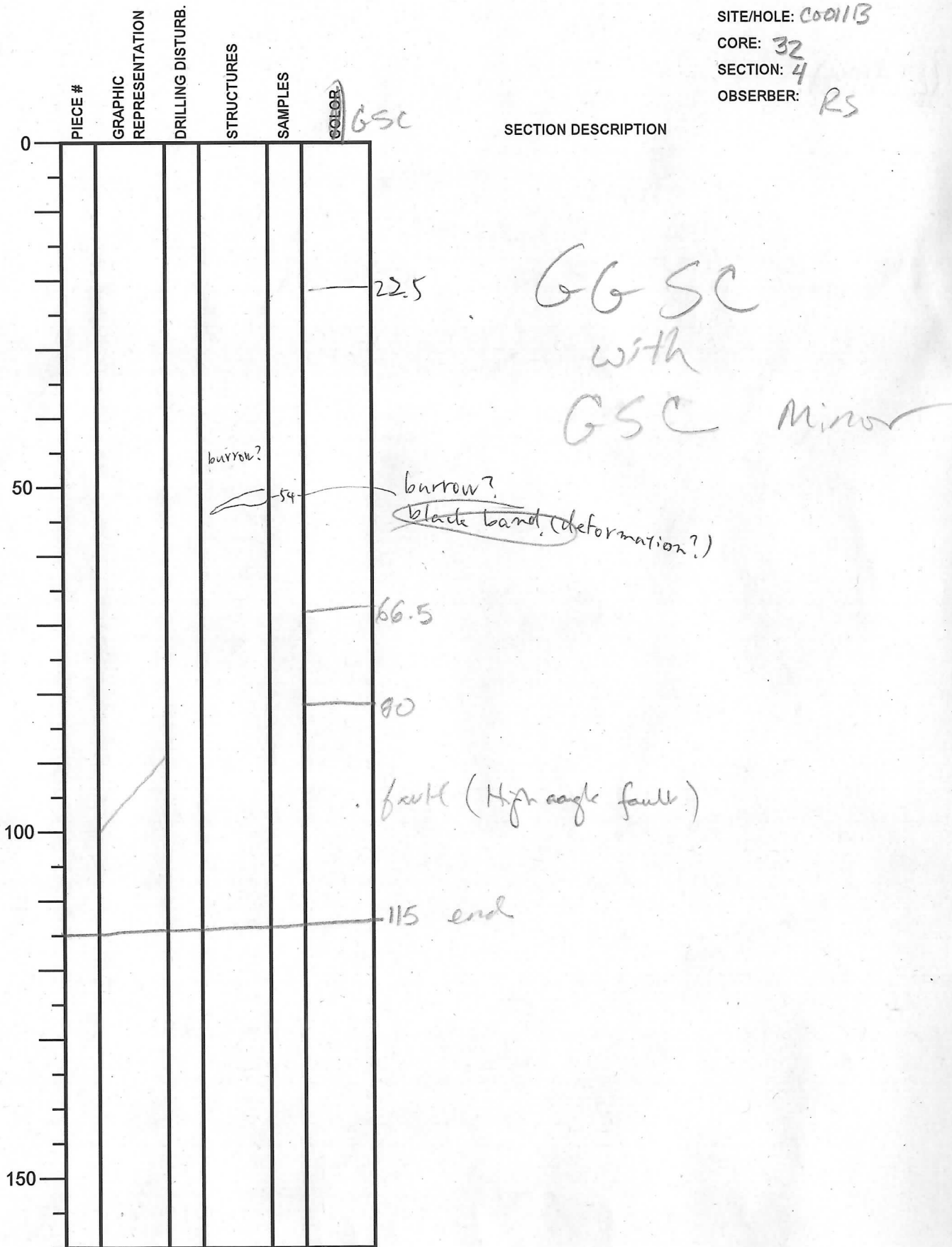
Bioturbation: 5 (heavy)

-131 lime-mudstone burrows

141 end

Integrated Ocean Drilling Program Visual Core Description

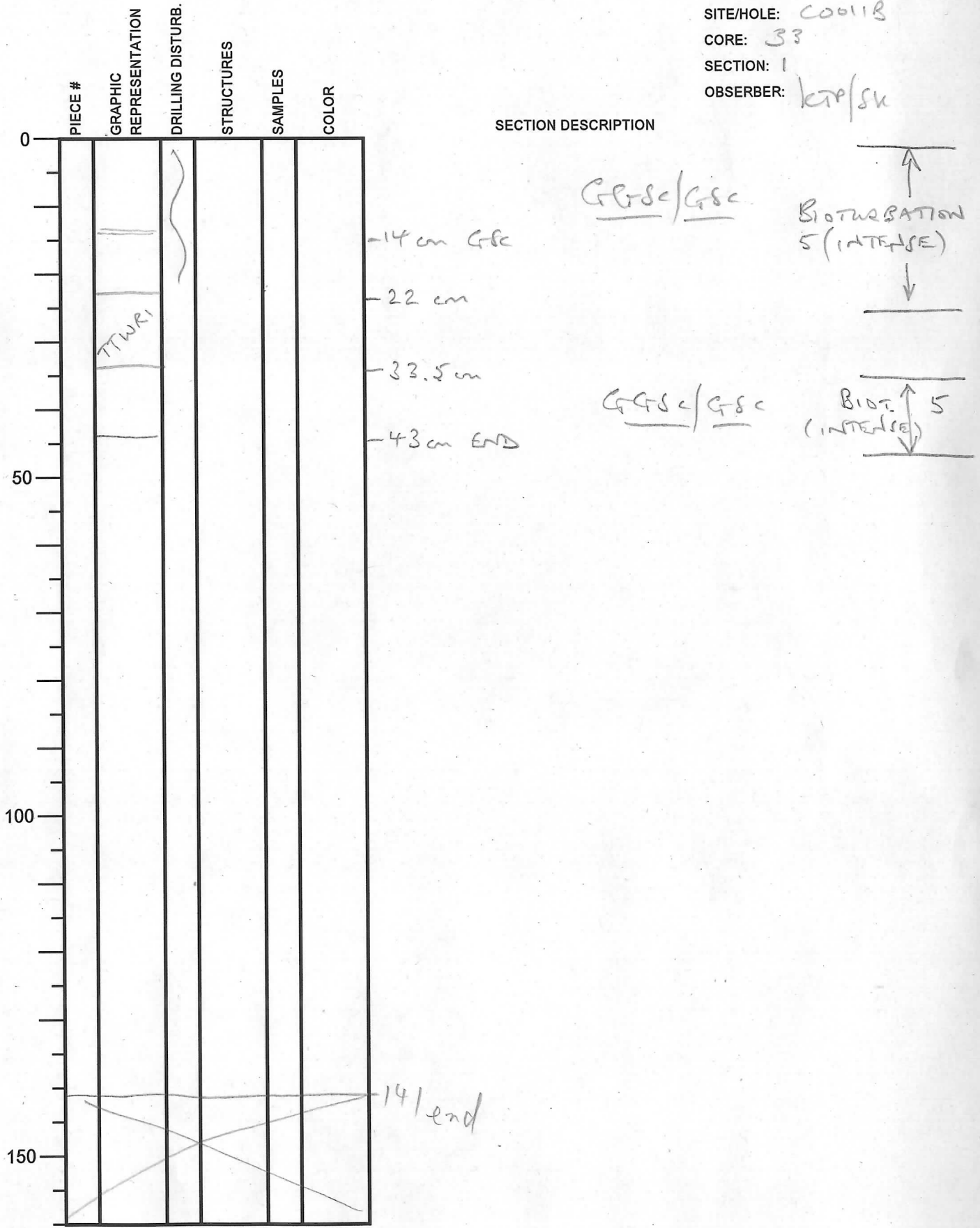
NO.
 DATE: 01/15/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 32
 SECTION: 4
 OBSERVER: RS



Integrated Ocean Drilling Program

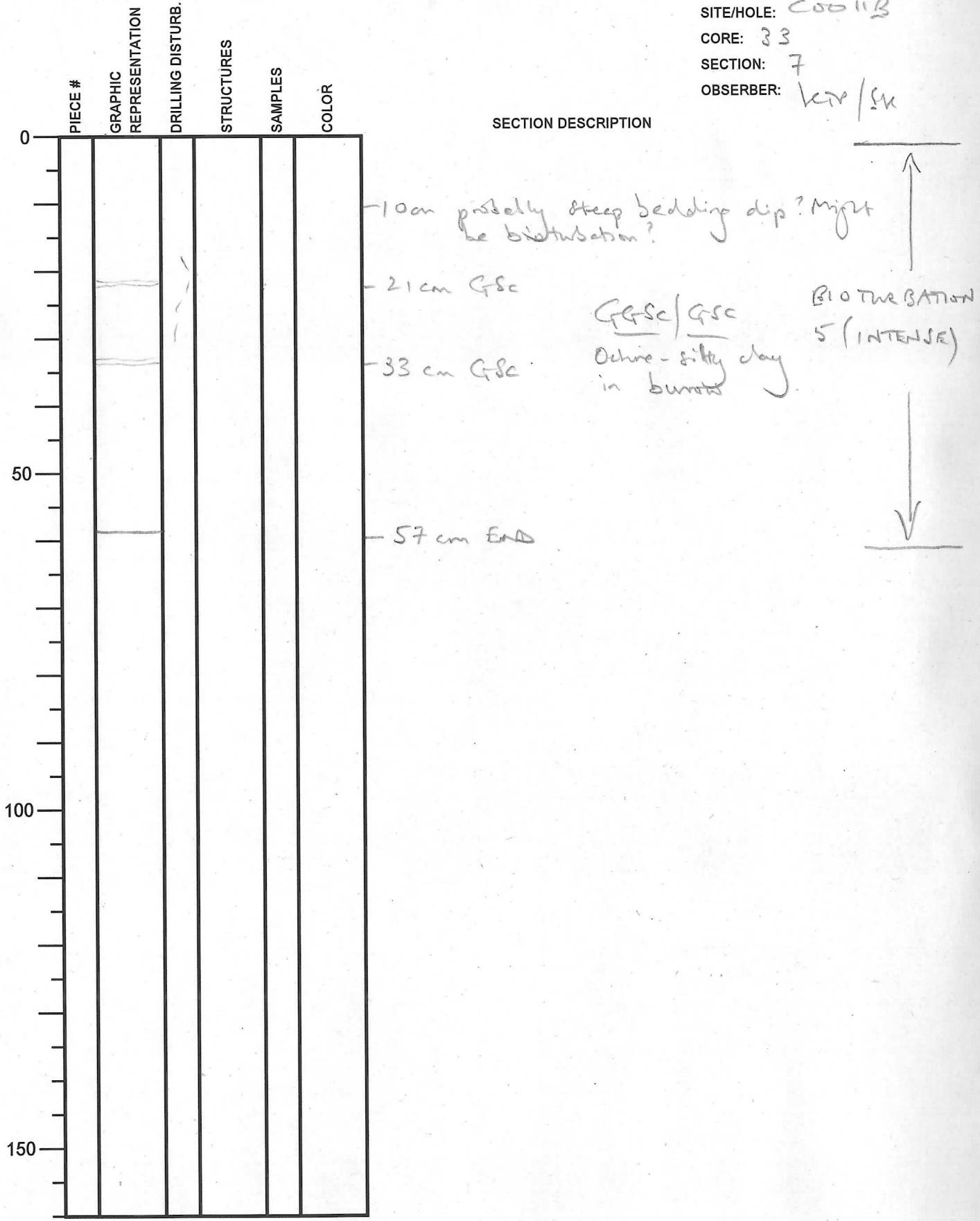
Visual Core Description

NO.
 DATE: 16/05/2007
 EXP.: 322
 SITE/HOLE: C00118
 CORE: 33
 SECTION: 1
 OBSERVER: krp/sk



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 16/09/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 33
 SECTION: 7
 OBSERVER: KTR/SK



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 16/09/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 34
 SECTION: 1
 OBSERVER: KJP/SK

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0			~			
50						
100						
150						

SECTION DESCRIPTION

-12cm GSC GGSC / GSC
 -14cm

↑
 BIOTURBATION
 S (INTENSE)
 ↓

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 16/09/2009
 EXP.: 322
 SITE/HOLE: C00118
 CORE: 34
 SECTION: Cc
 OBSERVER: kmp/sh

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0		PAL				5cm
						15cm
50						
100						
150						

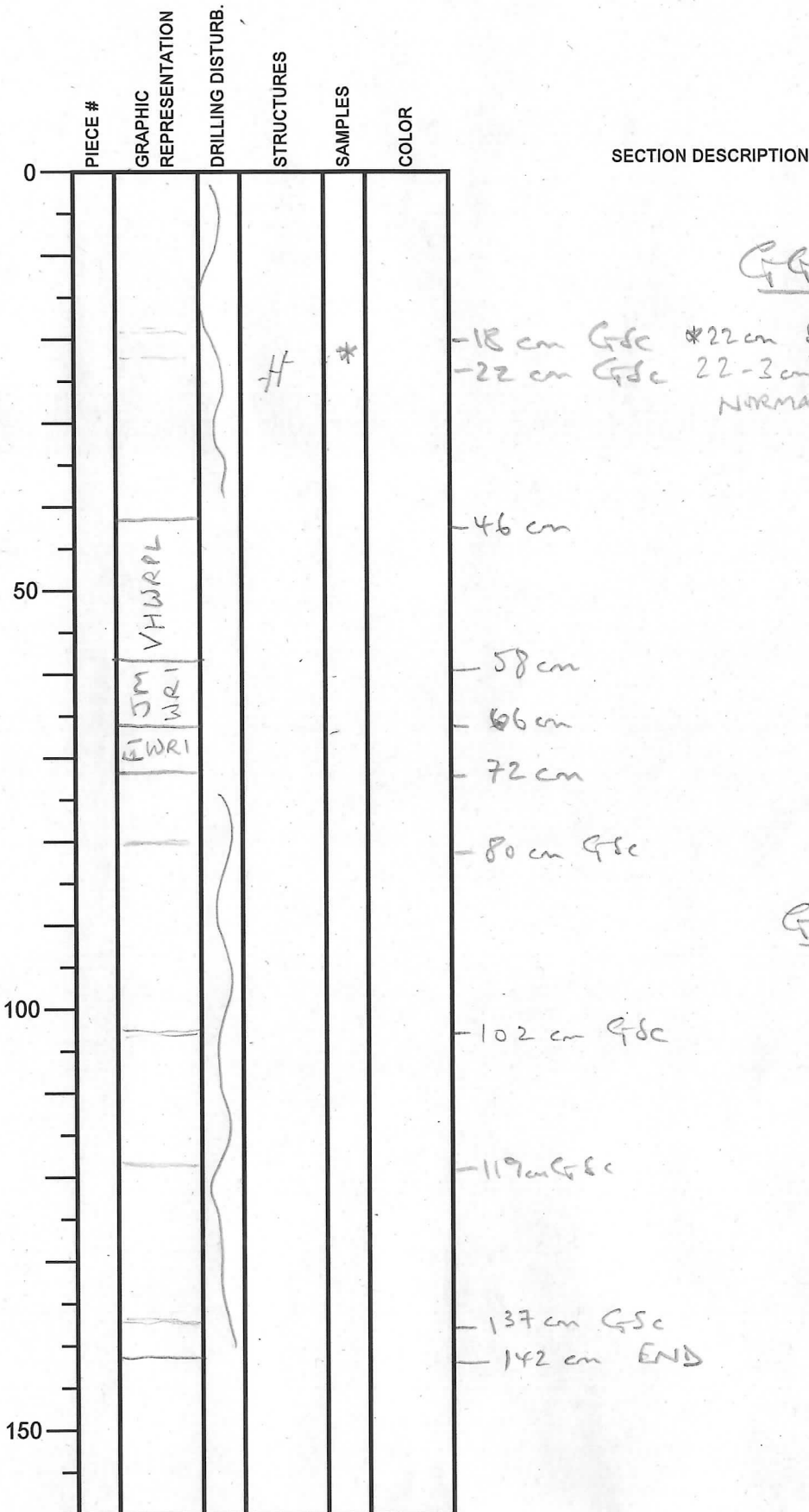
SECTION DESCRIPTION

GGSc / GSc

↑
 BIOTURBATION
 5 (INTENSE)
 ↓

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 16/09/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 35
 SECTION: 1
 OBSERVER: KAP/SK



↑
 BIOTURBATION
 5 (INTENSE)
 ↓

↑
 BIOTURBATION
 5 (INTENSE)
 ↓

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 16/09/20 09
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 35
 SECTION: 2
 OBSERVER: KRP/SK

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50						
100						
150						

SECTION DESCRIPTION

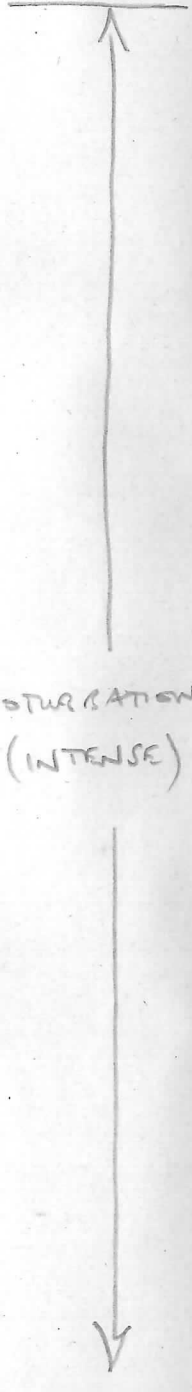
11 cm GSC

-23 cm GSC

GGSC / GSC

-142 cm END

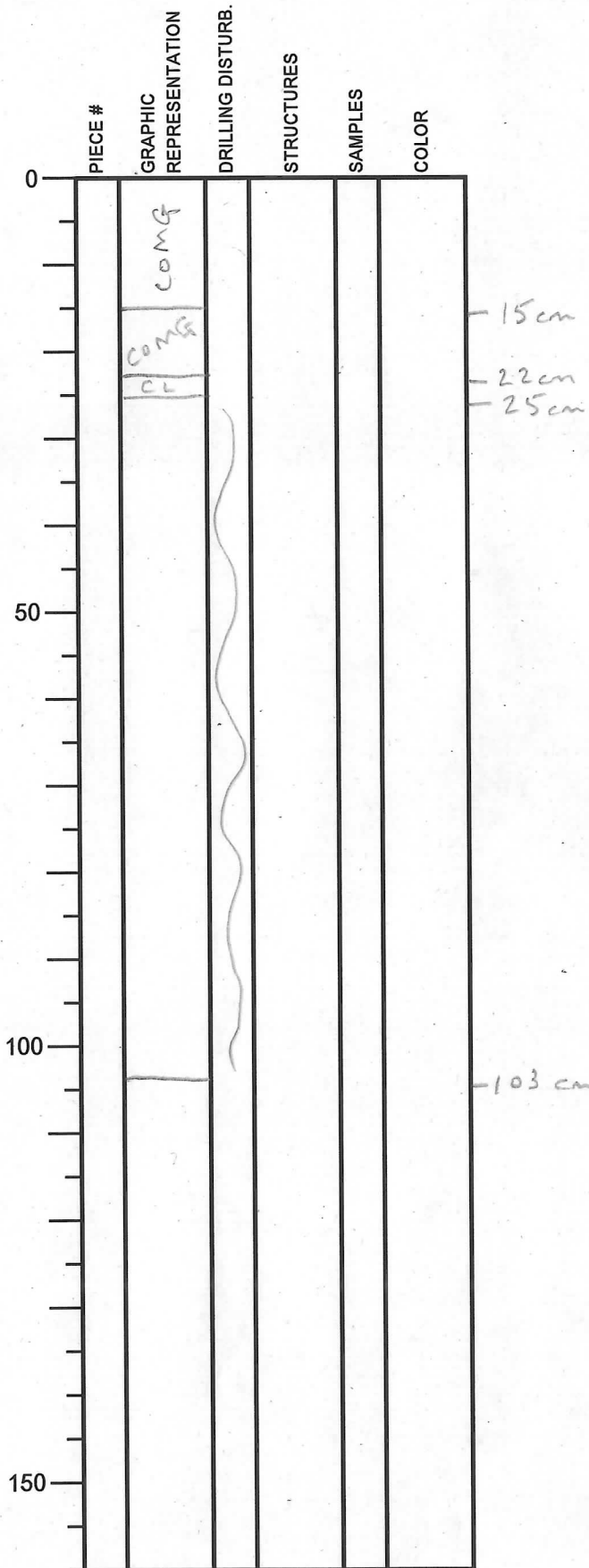
DISTURBANCE
5 (INTENSE)



Integrated Ocean Drilling Program

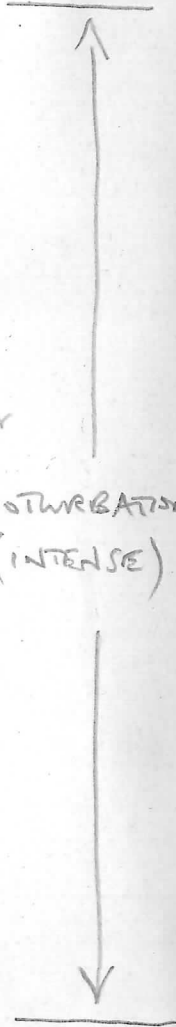
Visual Core Description

NO.
 DATE: 16/09/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 35
 SECTION: 3
 OBSERVER: KTP/SK



SECTION DESCRIPTION

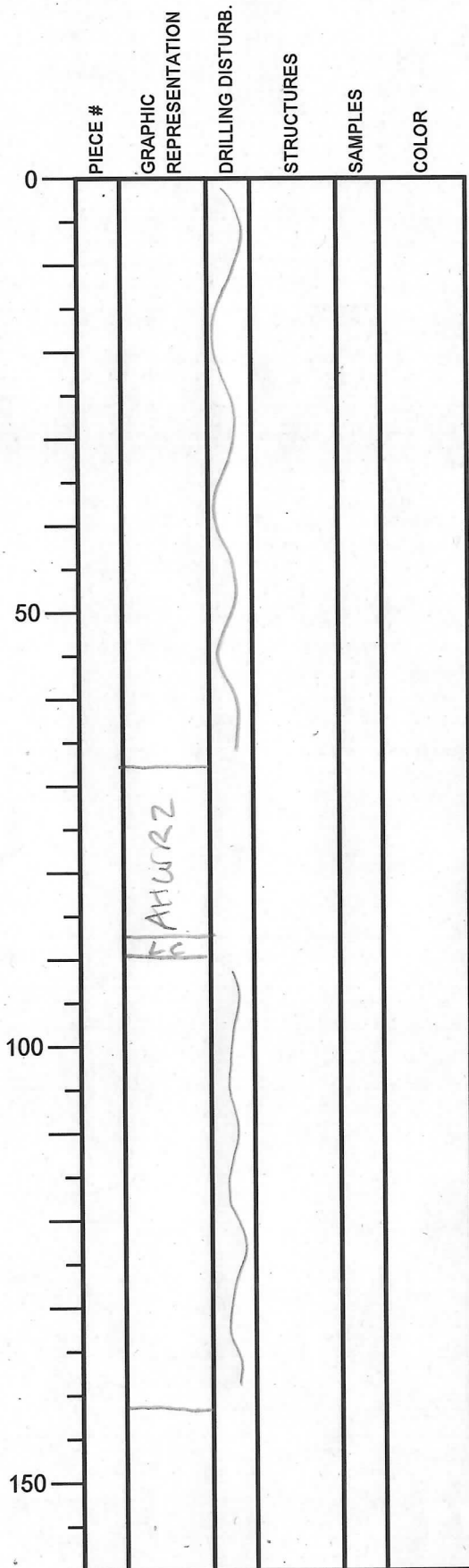
GGSC/GSC
 Ochre thin layers present
 but drilling disrupted &
 only few visible
 BIOTURBATION
 5 (INTENSE)



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 16/09/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 35
 SECTION: 5
 OBSERVER: KTD/SK



SECTION DESCRIPTION

GGSC / GSC

↑
 BIOTURBATION
 5 (INTENSE)
 ↓

67 cm

87 cm
89 cm

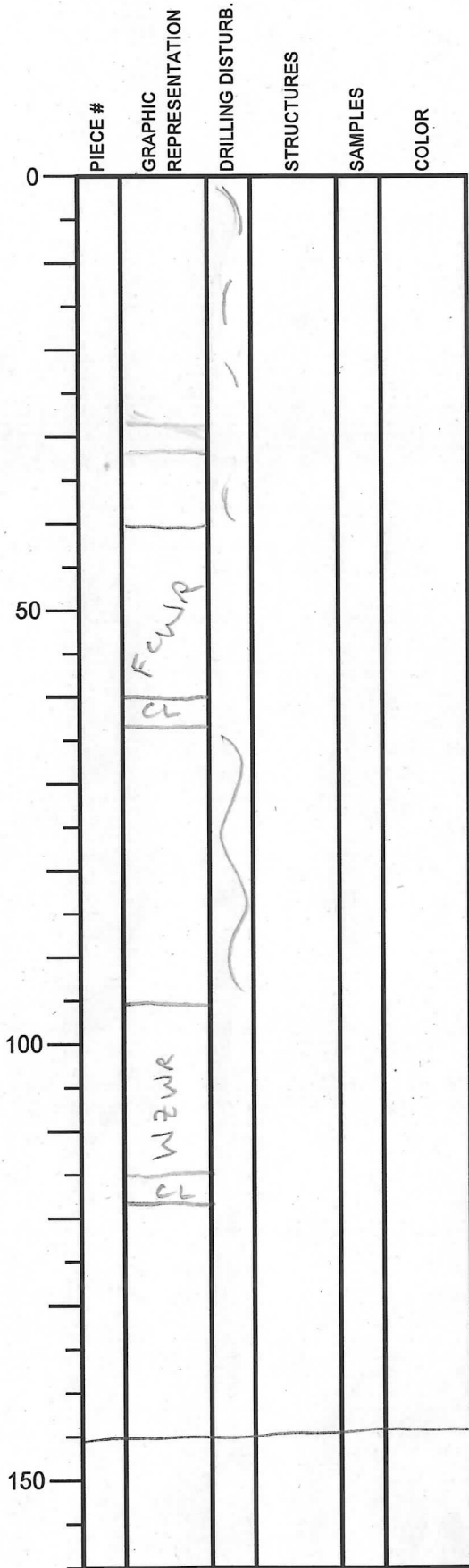
GGSC / GSC

↑
 BIOTURBATION
 5 (INTENSE)
 ↓

141 cm END

Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 16/09/2009
EXP.: 322
SITE/HOLE: 20011B
CORE: 35
SECTION: 6
OBSERVER: kwp/sk



SECTION DESCRIPTION

GGSc/GSc

↑
BIOTURBATION
5 (INTENSE)
↓

28-29 cm - Dark reddish layer with
31 cm - cross-cutting by horizontal
 burrow?
40 cm - also mm burrow horizontal

GGSc/GSc

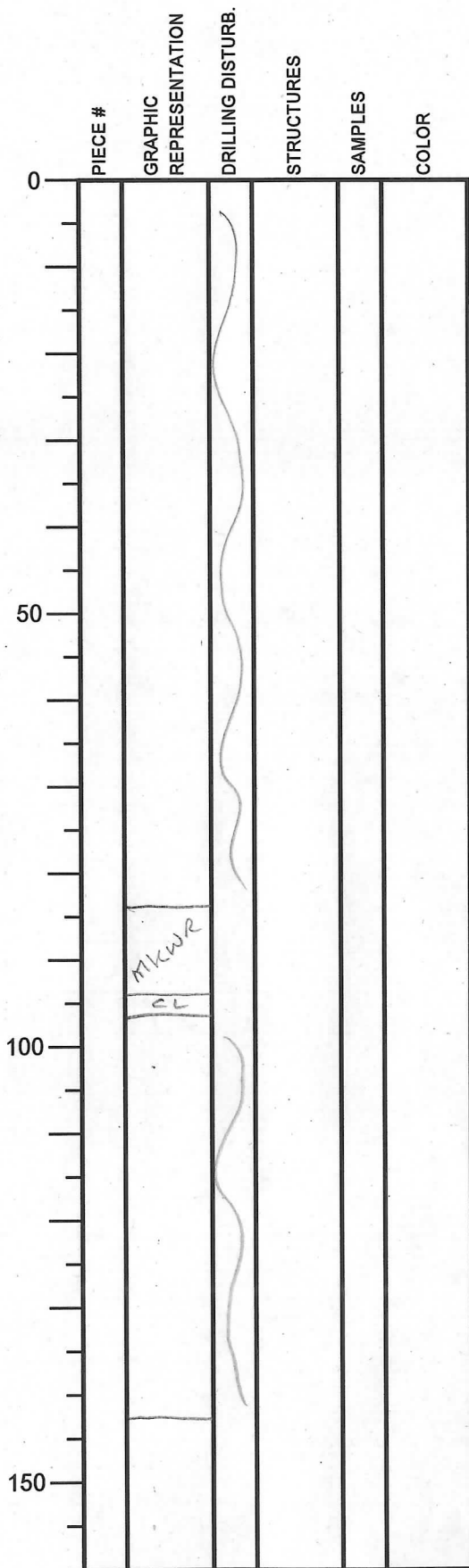
↑
BIOTURBATION
5 (INTENSE)
↓

GGSc

143.5 cm end

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 6/09/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 35
 SECTION: 7
 OBSERVER: KATP/SK



SECTION DESCRIPTION

GGSc/GSc

(Oolite mm-scale layers still present but rare)

BIOTURBATION
5 (INTENSE)

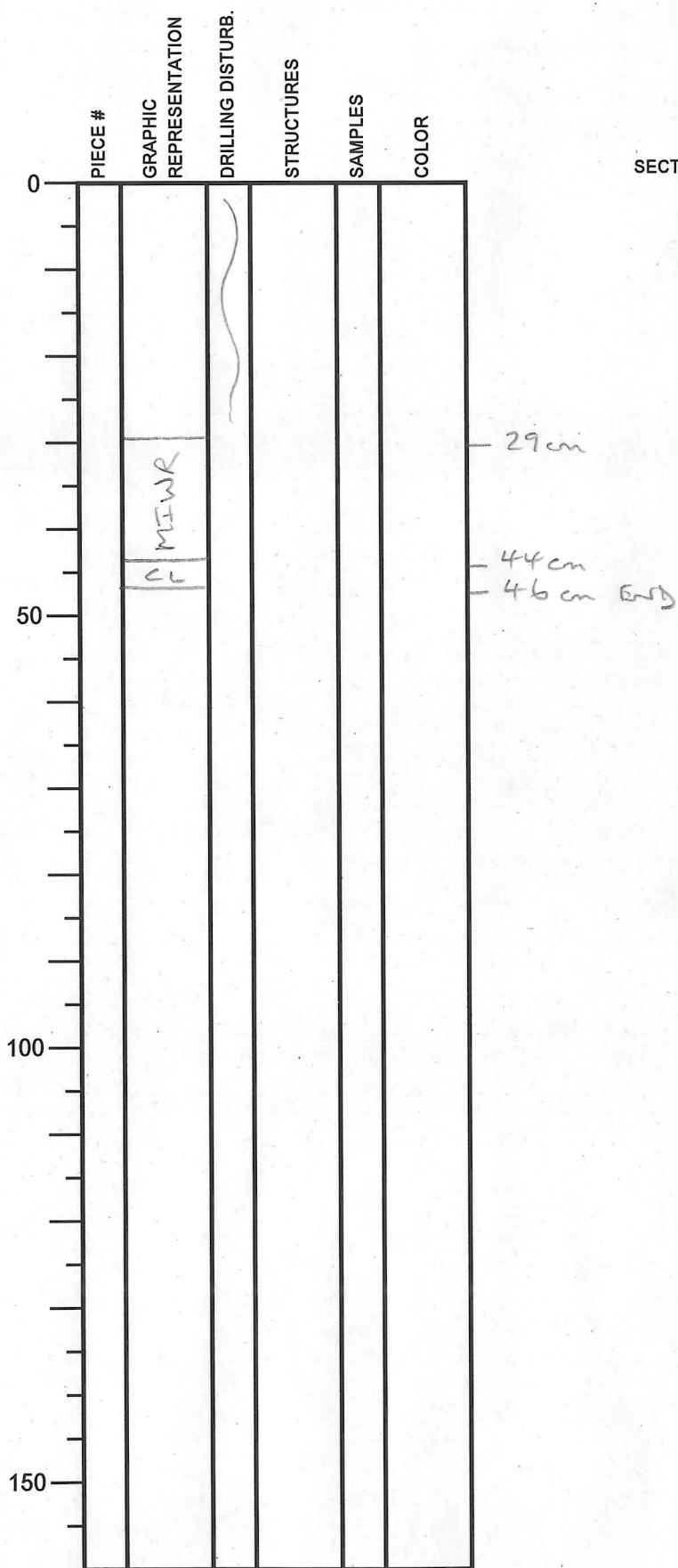
GGSc/GSc

BIOTURBATION
5 (INTENSE)



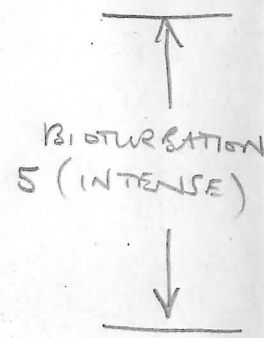
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 6/09/2009
 EXP.: 322
 SITE/HOLE: C00118
 CORE: 35
 SECTION: 8
 OBSERVER: KTR/sh



SECTION DESCRIPTION

GGSc/GSc



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 16/09/2009
 EXP.: 322
 SITE/HOLE: CO011B
 CORE: 35
 SECTION: CC
 OBSERVER: KIP/SK

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0	PAR				
50					
100					
150					

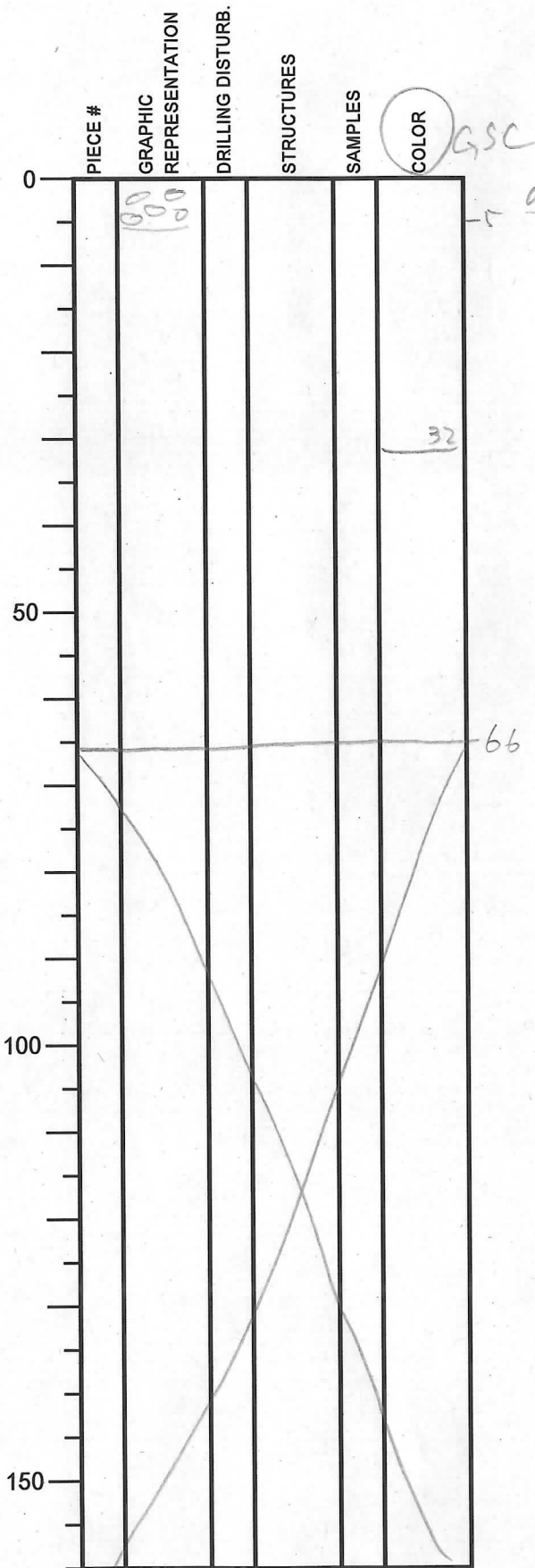
SECTION DESCRIPTION

-5cm
 -11cm GSe CGSe/CGe
 -14cm END

↑
 BIOTURBATION
 5 (INTENSE)
 ↓

Integrated Ocean Drilling Program Visual Core Description

NO. _____
 DATE: 9/15/20 09
 EXP.: 322
 SITE/HOLE: COO11 B
 CORE: 36R
 SECTION: 1
 OBSERVER: H. Naruse



SECTION DESCRIPTION

drilling breccia

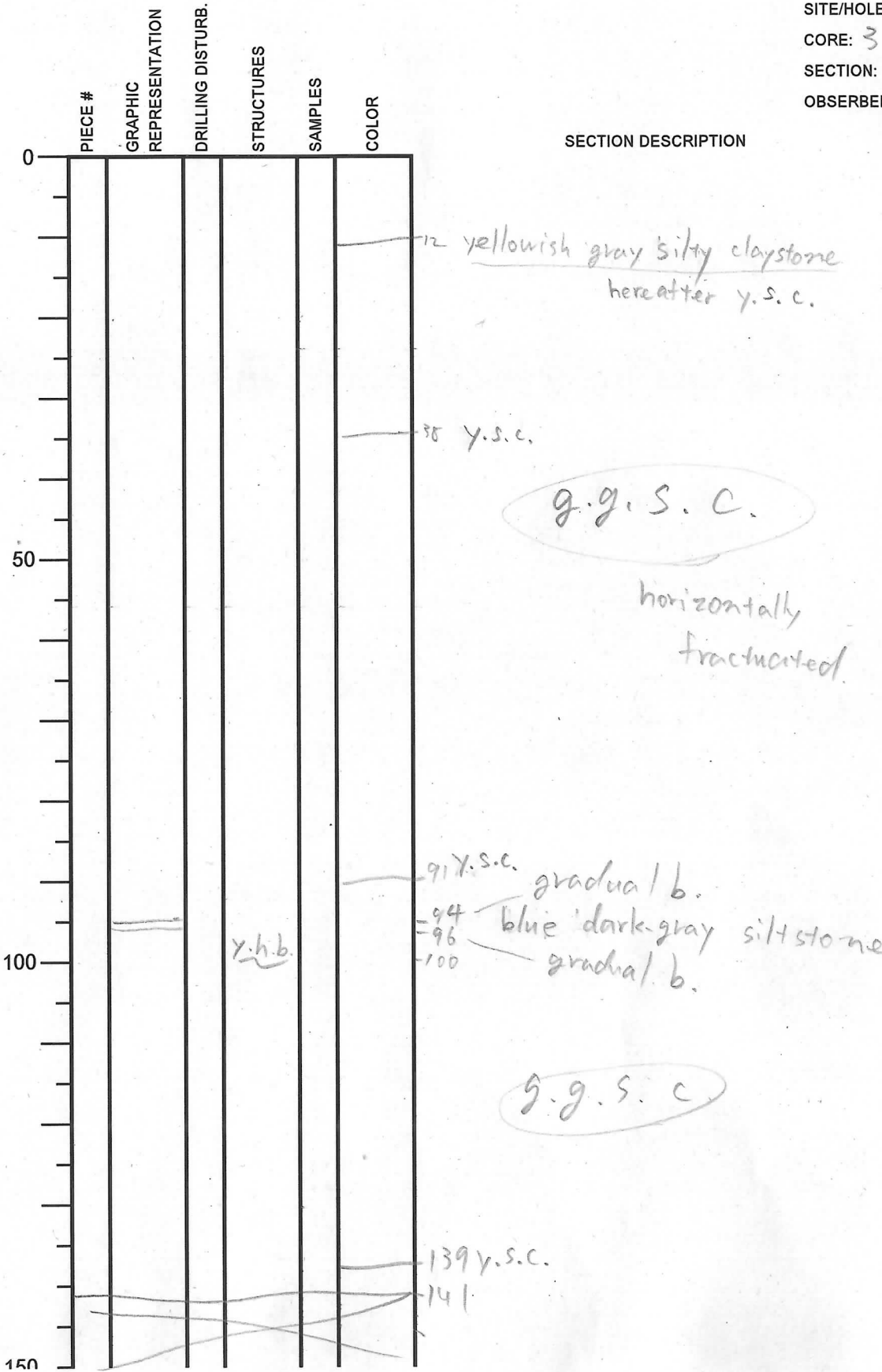
g.g.s. Claystone

↑
 Heavy
 bioturbation
 (5)
 ↓

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/14/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 36R
 SECTION: 3
 OBSERVER: H. Haruse



↑

Heavy
bioturbation
(5)

↓

Integrated Ocean Drilling Program Visual Core Description

NO. _____
 DATE: 9/16/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 36R
 SECTION: 4
 OBSERVER: H. Naruse

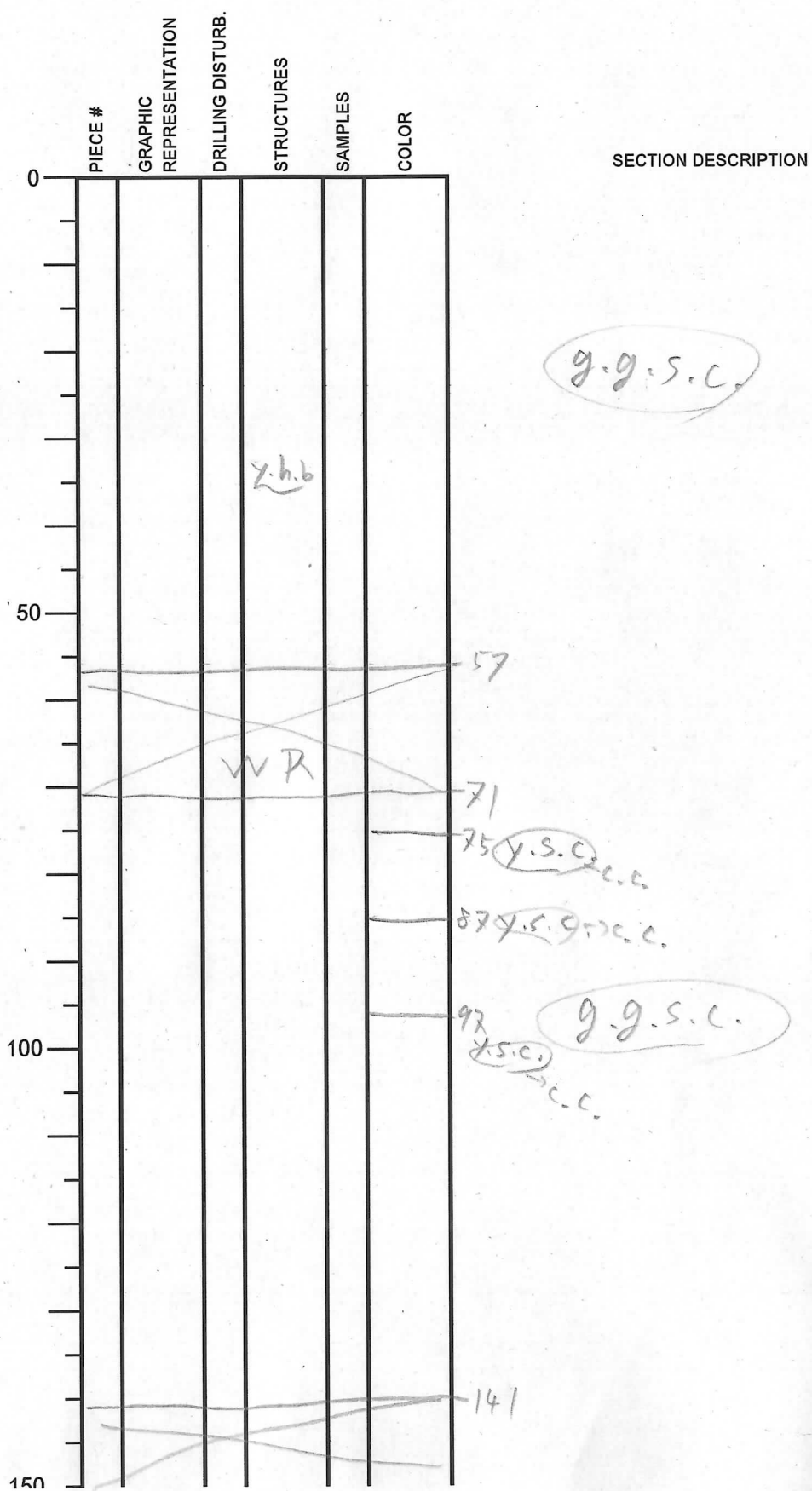
	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR	SECTION DESCRIPTION
0							
50					50 y.s.c. 7.c.c.		g.g.s.c.
					60 y.s.c. 3.c.c.		
				x.h.b. 73	70 y.s.c. 7.c.c.		
100					106 y.s.c. 7.c.c.		
					115		
				WR	129		g-g-s.c.
150					143 end		

↑
 Heavy bioturb. (5)
 ↓

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/16/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 36R
 SECTION: 5
 OBSERVER: H. Naruse



SECTION DESCRIPTION

g.g.s.c.

↑
Heavy bioturb.
(5)
↓

↑
Heavy bioturb.
(5)
↓

y.s.c.

~~y.s.c.~~

g.g.s.c.

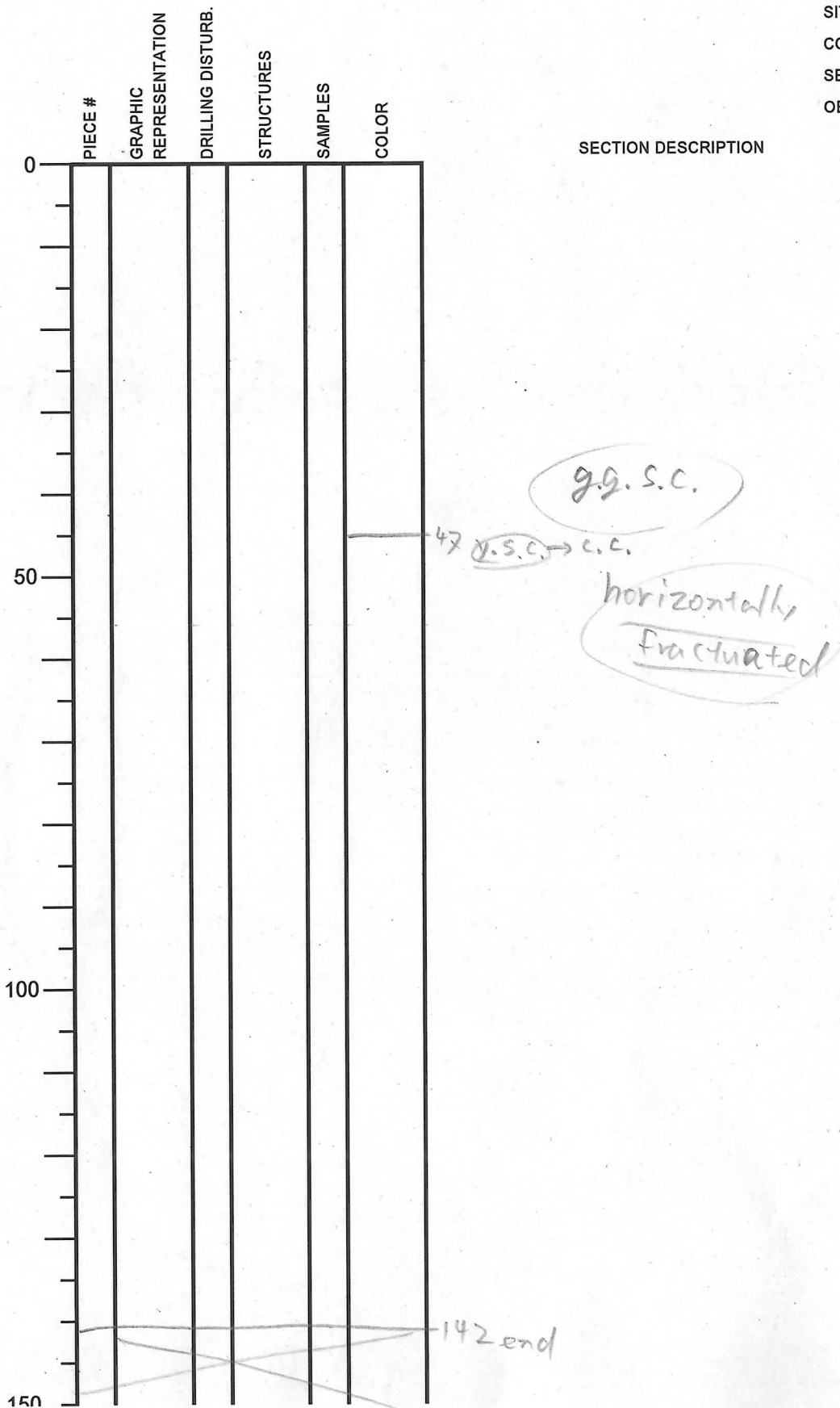
z.s.c.

s.c.c.

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/16/2009
 EXP.: 322
 SITE/HOLE: C0011 B
 CORE: 36R
 SECTION: 6
 OBSERVER: H. Naruse



SECTION DESCRIPTION

Heavy
 bioturb.
 (5)

Integrated Ocean Drilling Program Visual Core Description

NO.

DATE: 9/16/09

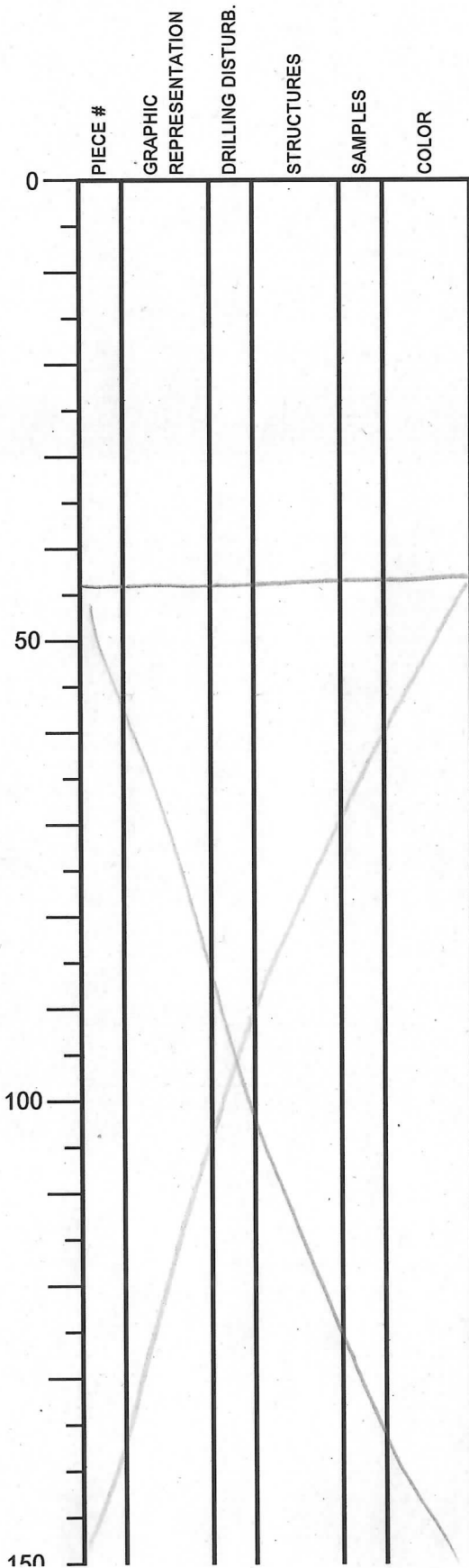
EXP.: 322

SITE/HOLE: C0011 B

CORE: 36R

SECTION: 7

OBSERVER: H. Naruse



SECTION DESCRIPTION

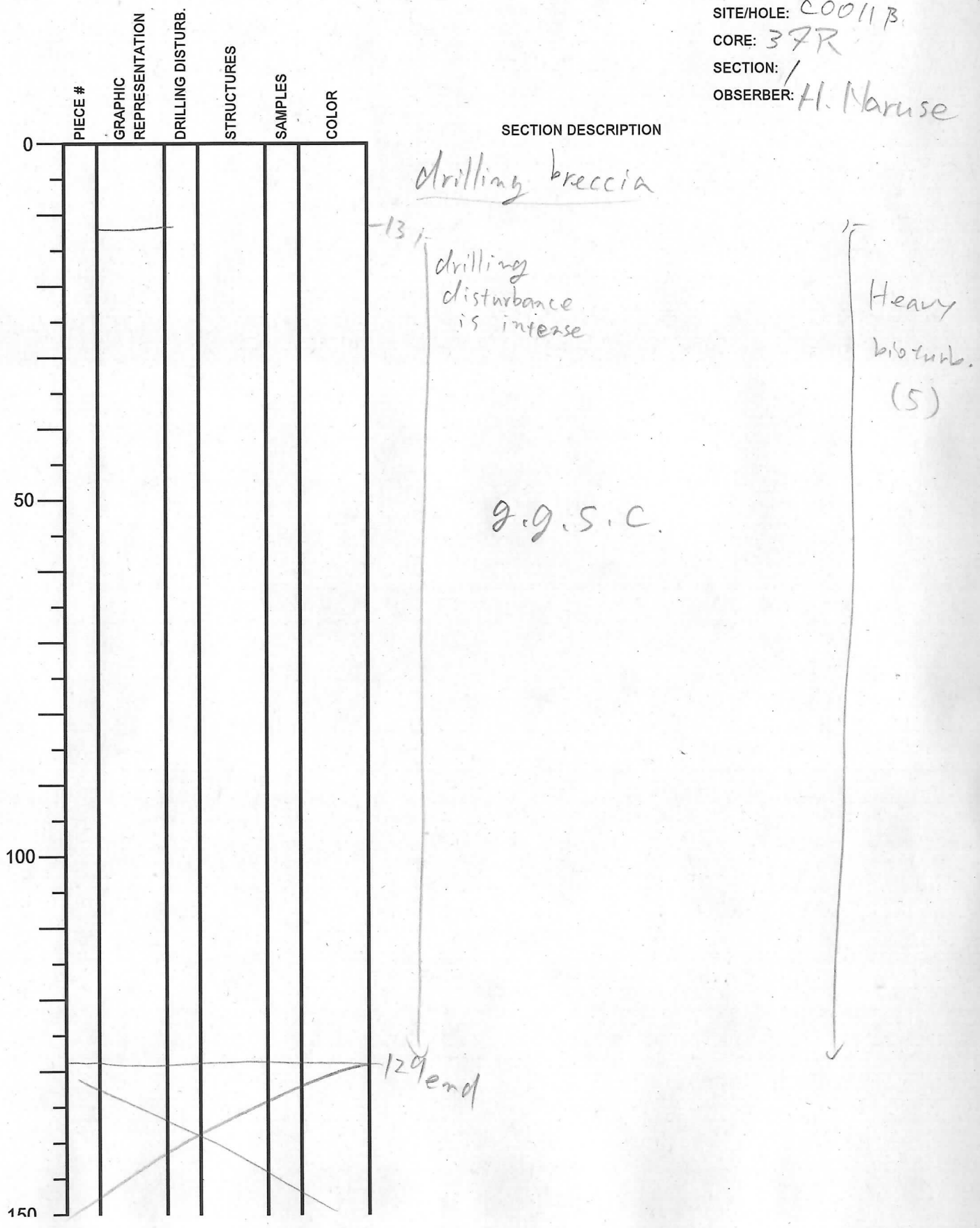
g.g. S.C.

1' Heavy
b.o.
(5)

Integrated Ocean Drilling Program

Visual Core Description

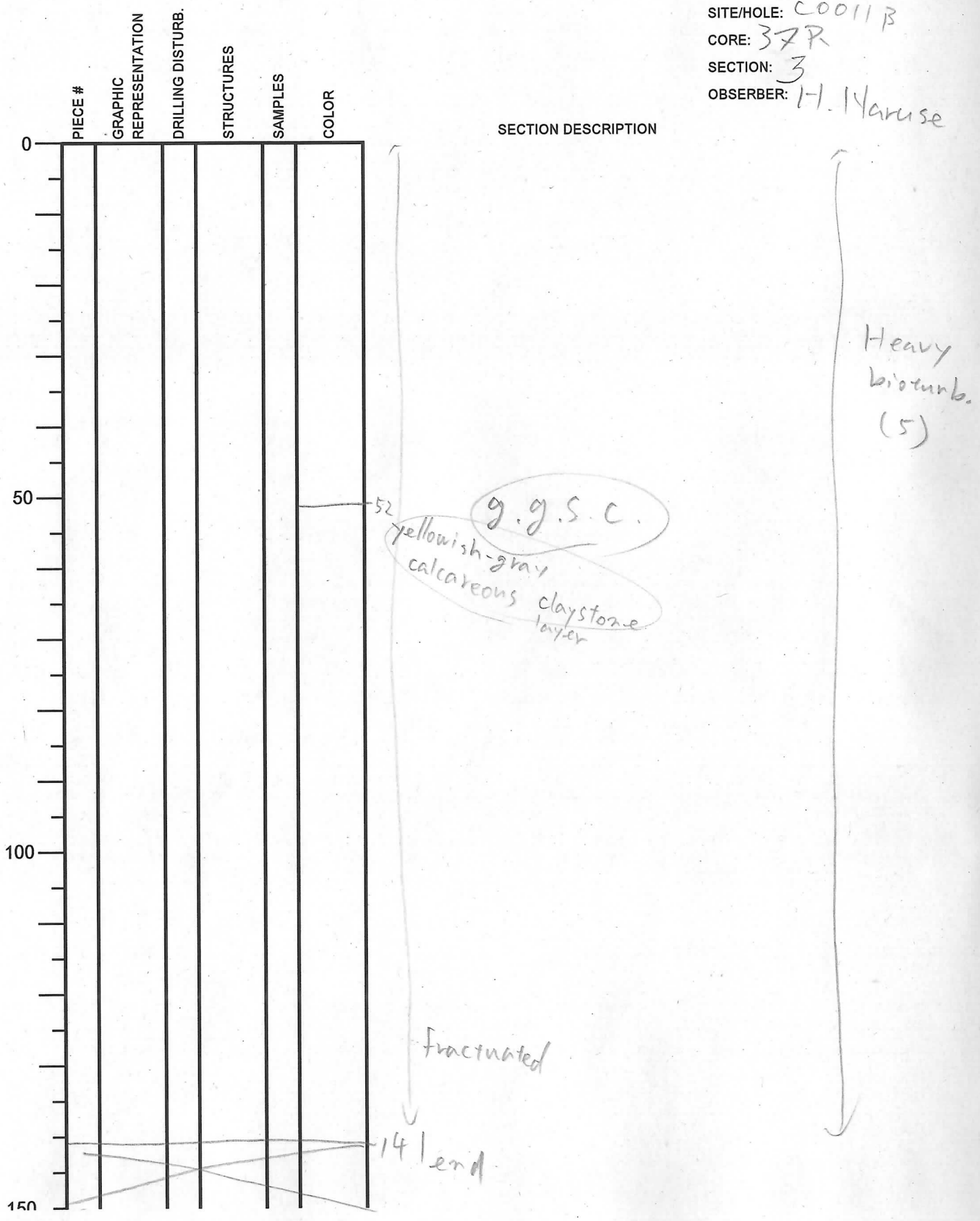
NO.
 DATE: 9/16/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 37R
 SECTION: /
 OBSERVER: H. Naruse



Integrated Ocean Drilling Program

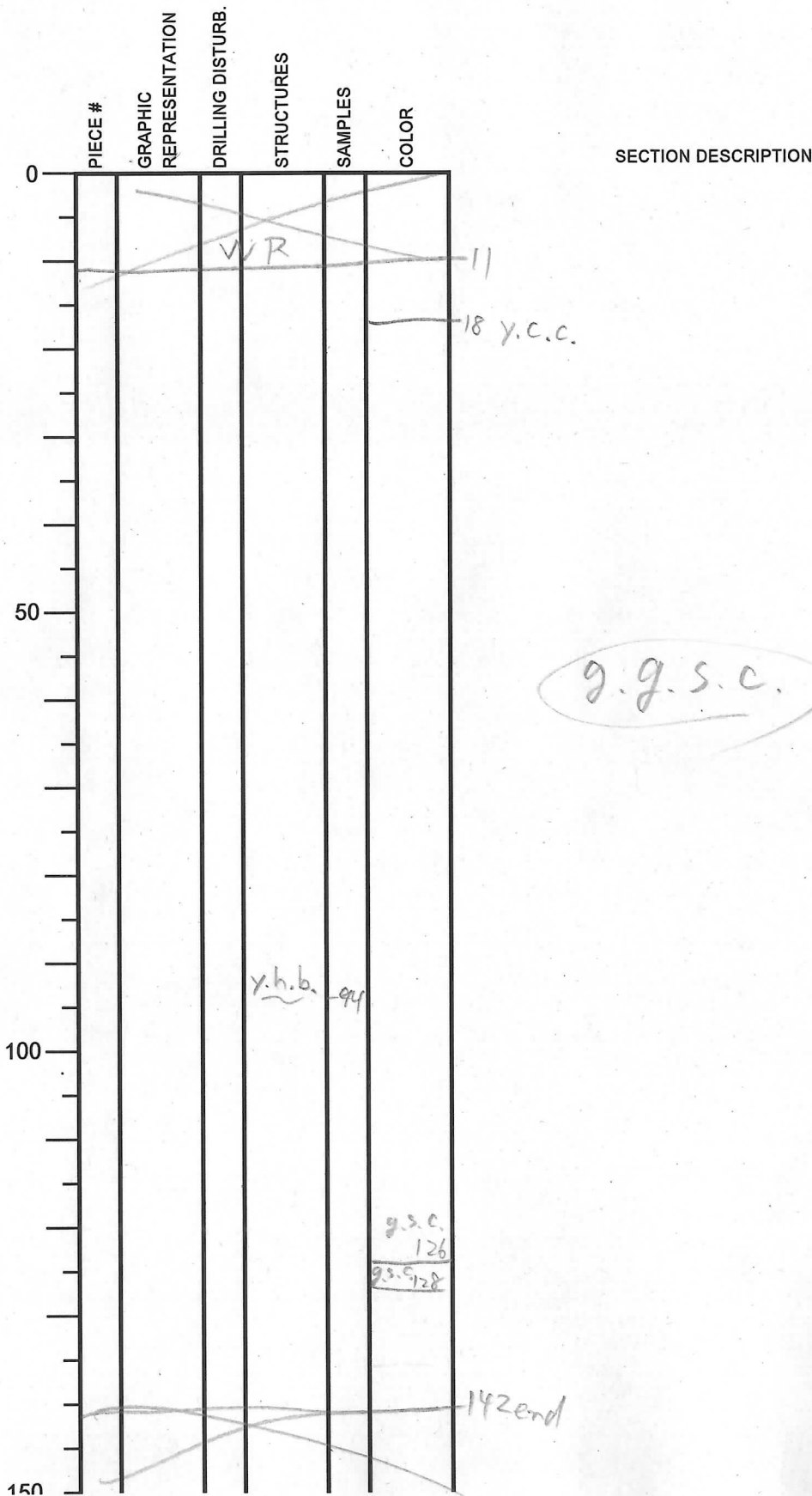
Visual Core Description

NO.
 DATE: 9/16/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 37R
 SECTION: 3
 OBSERVER: H. Yaruse



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/16/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 37R
 SECTION: 4
 OBSERVER: H. Naruse



SECTION DESCRIPTION

Heavy
bioturbation
(5)

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/16/09
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 37R
 SECTION: 5
 OBSERVER: H. Naruse

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0				y.h.b	14	
50						
100						
150						

SECTION DESCRIPTION

g.g.s.c

laminated g.g.s.c

141 end

Heavy bioturbation (5)

125 moderate bioturbation (4)



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: / / 20
 EXP.: 322
 SITE/HOLE: C0011 B
 CORE: 37R
 SECTION: 6
 OBSERVER: H. Haruse

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
				z.h.b.	12	
50				z.h.b.	50	
					64	g.s.c.
100						
				y.h.b.	137	
150						

SECTION DESCRIPTION

g.g.s.c.

↑

Heavy
bioturb.
(5)

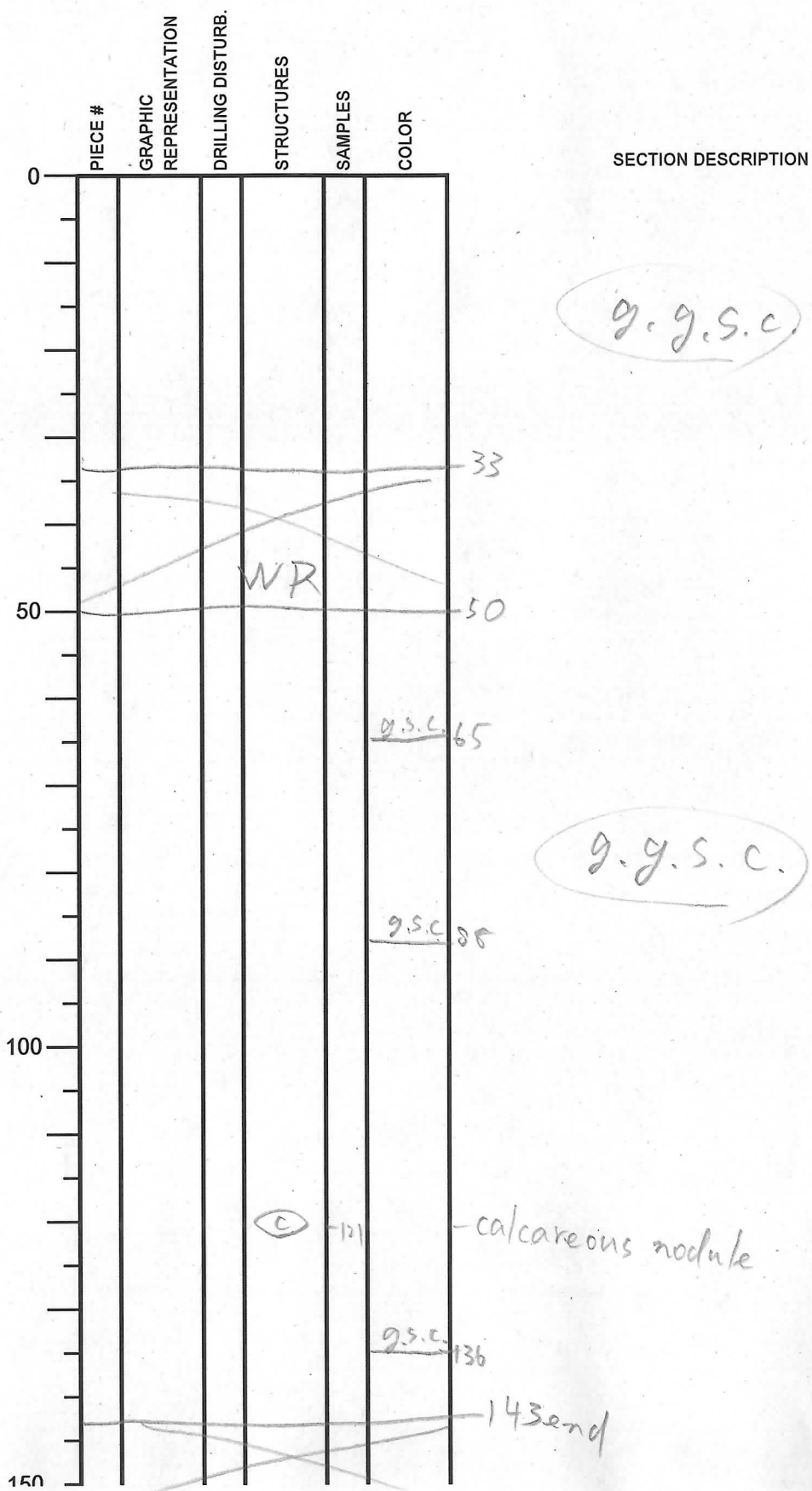
↓

141 end

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/16/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 37R
 SECTION: 7
 OBSERVER: H. Naruse



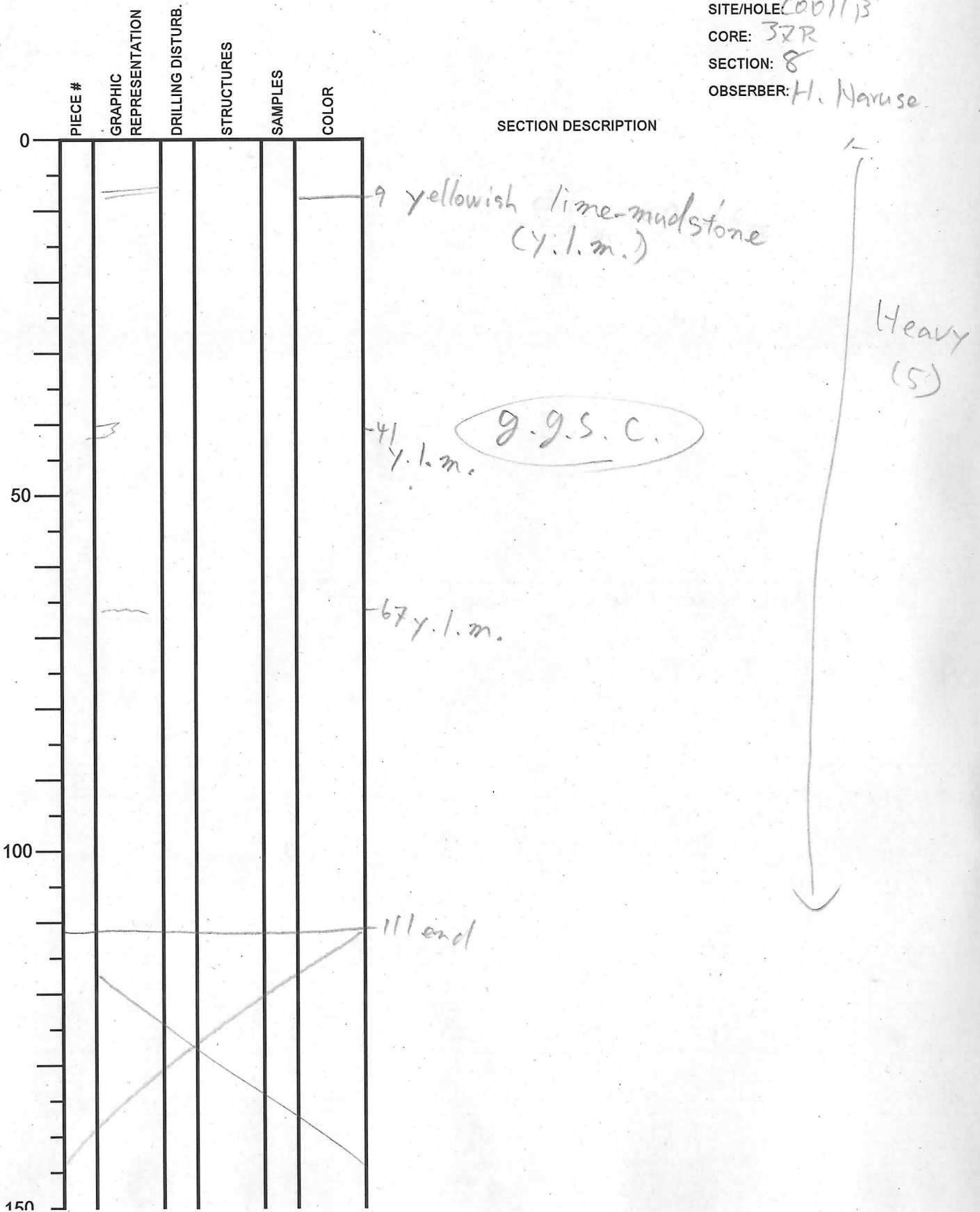
↑ Heavy bioturb. (5)

↑ Heavy bioturb. (5)

Integrated Ocean Drilling Program

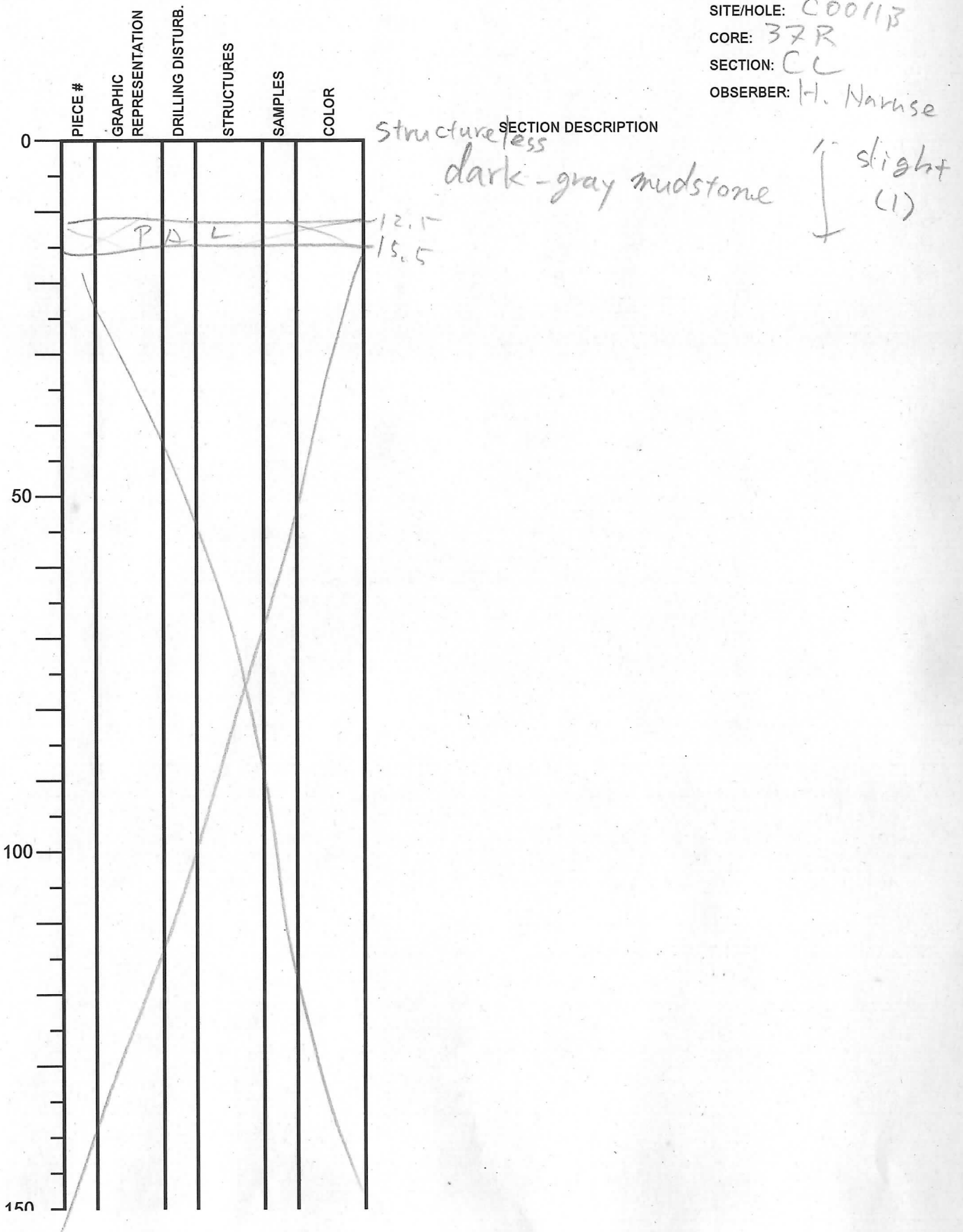
Visual Core Description

NO.
 DATE: 9/14/2009
 EXP.: 322
 SITE/HOLE: CO011B
 CORE: 32R
 SECTION: 8
 OBSERVER: H. Naruse



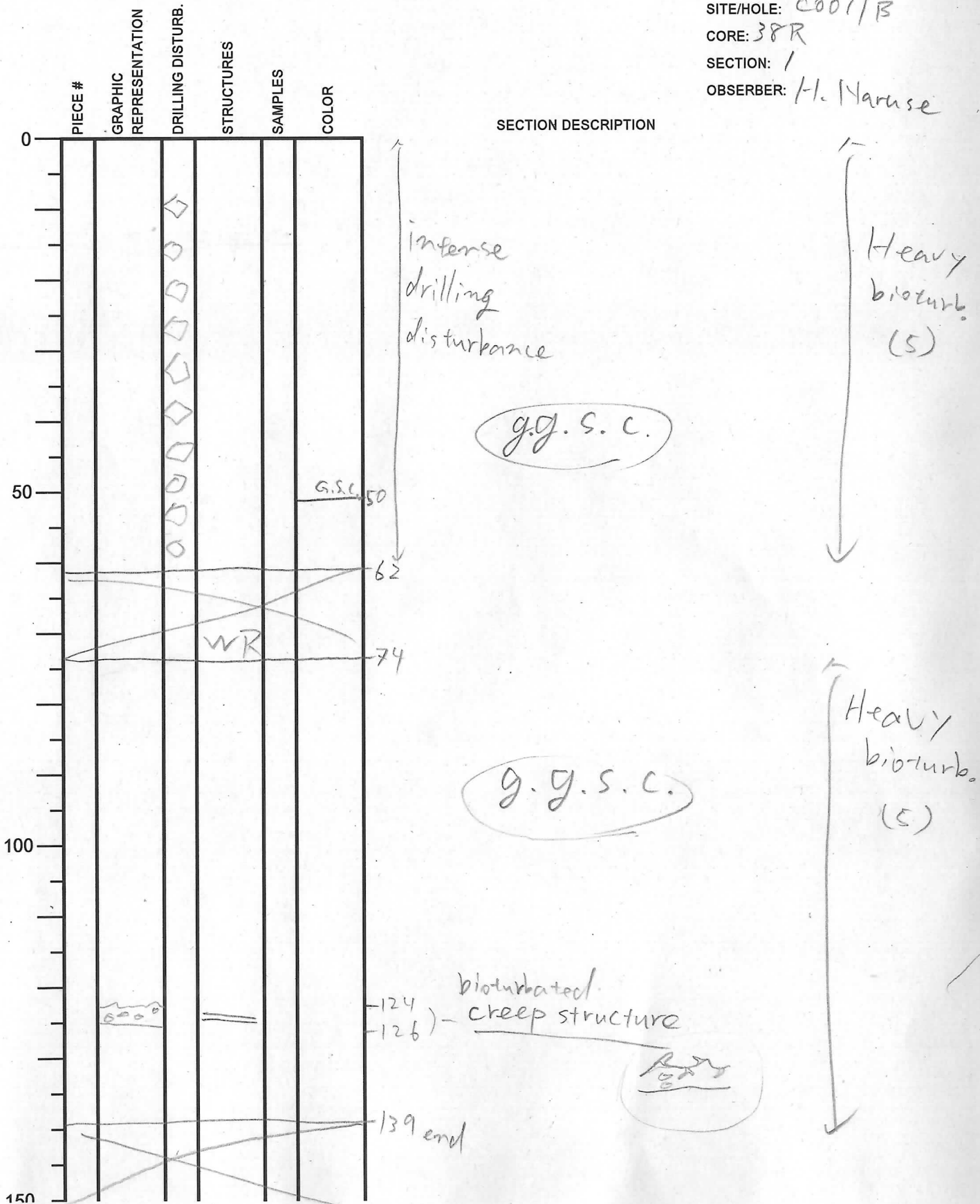
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/16/09
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 37R
 SECTION: CL
 OBSERVER: H. Naruse



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/16/2009
 EXP.: 322
 SITE/HOLE: C001/B
 CORE: 38R
 SECTION: 1
 OBSERVER: H. Haruse



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/14/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 38
 SECTION: 3
 OBSERVER: H. Haruse

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50					g.s.c. 32	
100					g.s.c. 59	
128				r.h.b.		
142						end
150						

SECTION DESCRIPTION

g.g.s.c.

↑

Heavy bioturb. (5)

↓

Integrated Ocean Drilling Program Visual Core Description

NO. _____
 DATE: 9/16/2009
 EXP.: 322
 SITE/HOLE: C001113
 CORE: 38R
 SECTION: 4
 OBSERVER: H. Naruse

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50						
100						
150						

SECTION DESCRIPTION

g.g.s.c.

Heavy
bioturb.
(5)

y.h.b

-62

64

WR

80

g.g.s.c.

Heavy
bioturb.
(5)

140 end

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/16/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 38R
 SECTION: 5
 OBSERVER: H. Naruse

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50				x.h.b.	-22	
100						
150						

SECTION DESCRIPTION

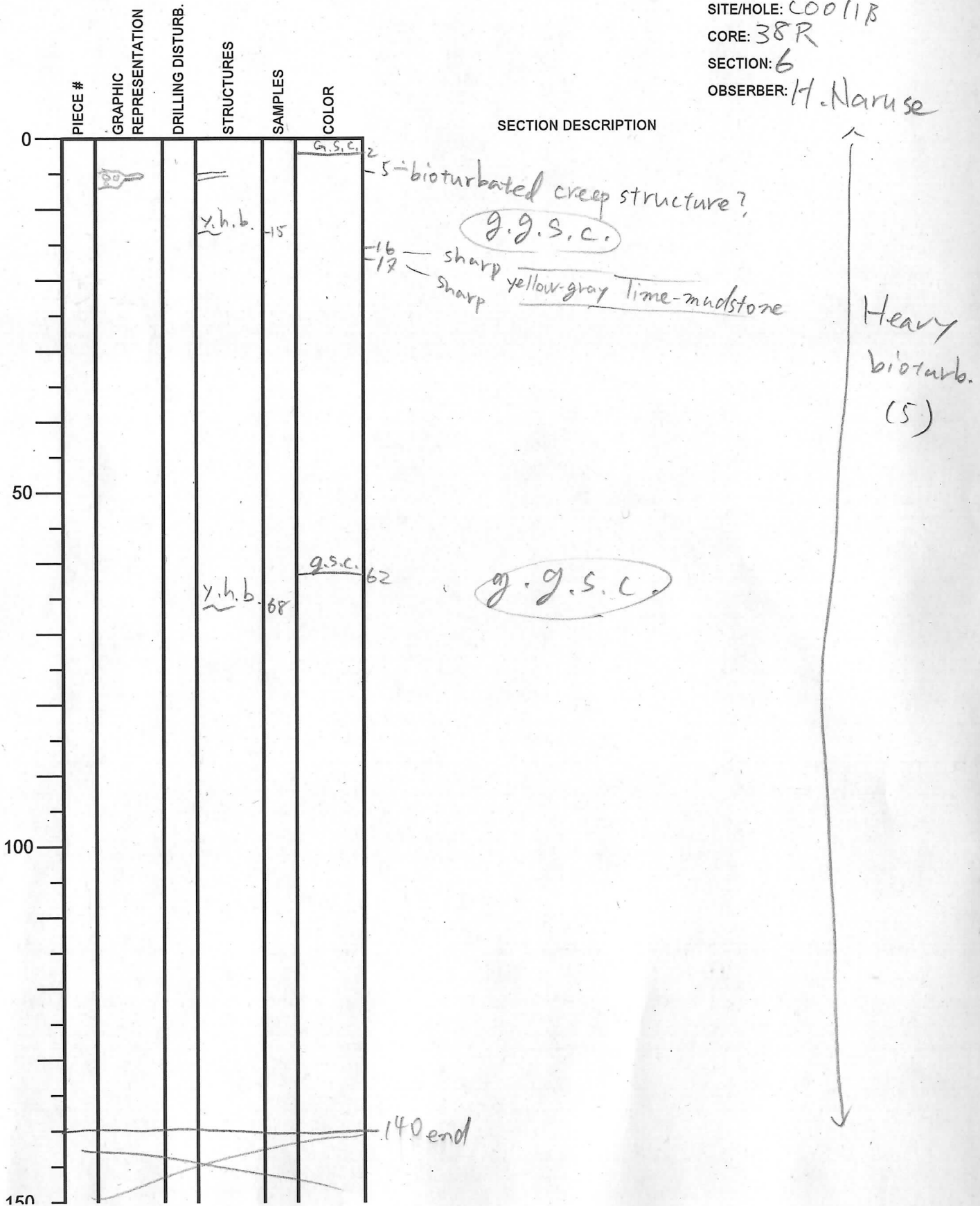
g.g.s.c.

Heavy
 bioturb
 (5)

141 end

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/16/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 38R
 SECTION: 6
 OBSERVER: H. Naruse



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: / / 20
 EXP.:
 SITE/HOLE: C0011B
 CORE: 38R
 SECTION: 7
 OBSERVER: H. Naruse

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0				x.h.b	-12	
50						
74						
94		WR				
100						
102						
150						

SECTION DESCRIPTION

g.g.s.c.

}

Heavy
bioturbation
(5)

g.g.s.c.

102 end

}

Heavy
(5)

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/16/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 38R
 SECTION: 8
 OBSERVER: H. Naruse

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0				y.h.b.	-89	
50				y.h.b.	-91	
100						
150						

SECTION DESCRIPTION

g.g.s.c.

↑

Heavy
bioturb.
(5)

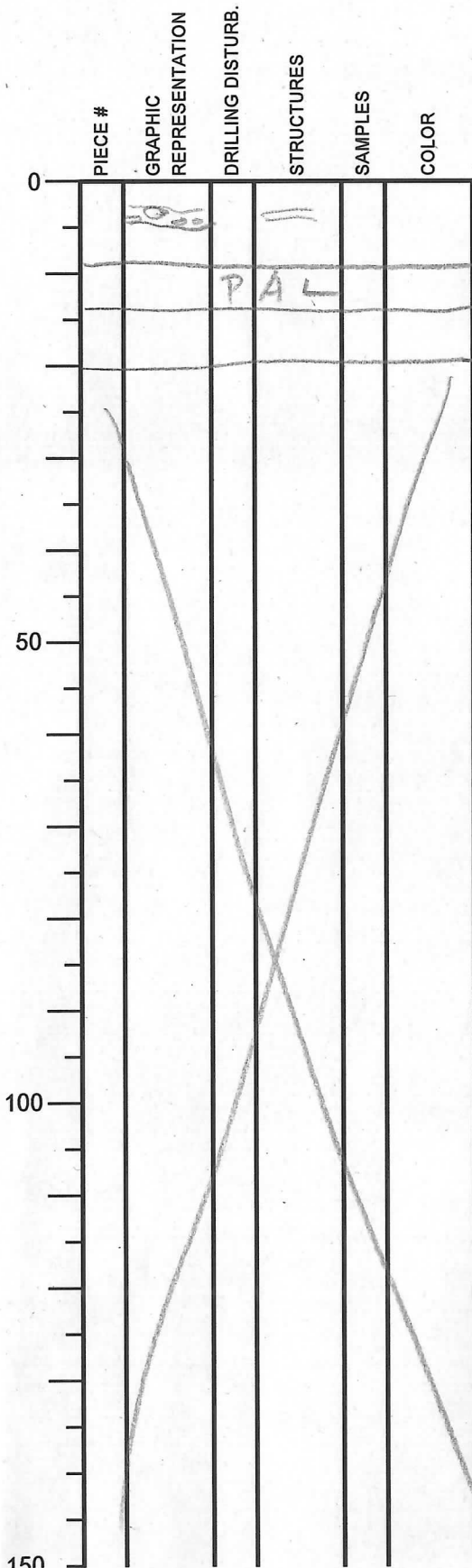
↓

53 end

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/16/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 38R
 SECTION: CC
 OBSERVER: H. Naruse

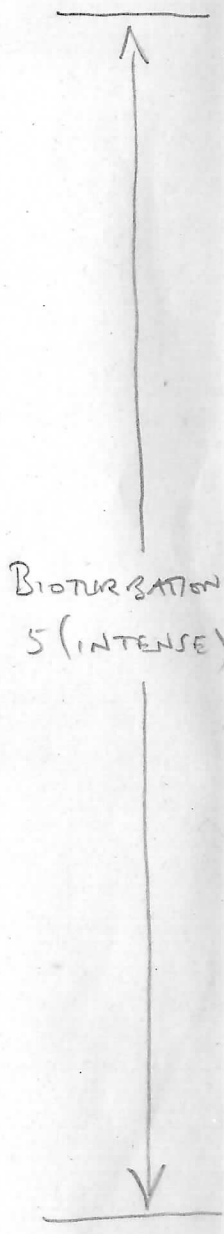
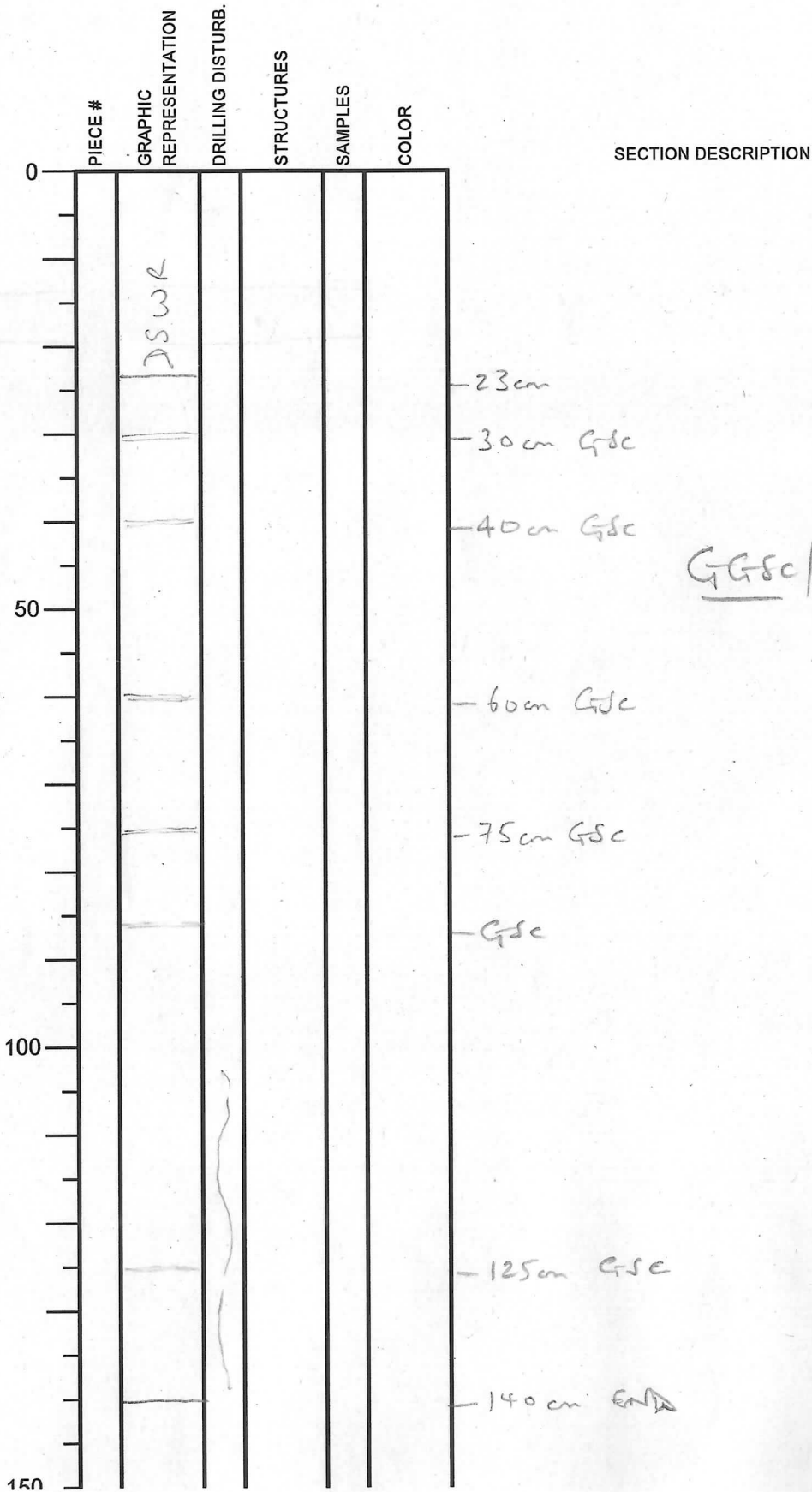


SECTION DESCRIPTION

-4 creep structure
 9.5
 14.5
 20 end
 (g.g.s.c.)
 w/creep structure
 Heavy bio. (S)

Integrated Ocean Drilling Program Visual Core Description

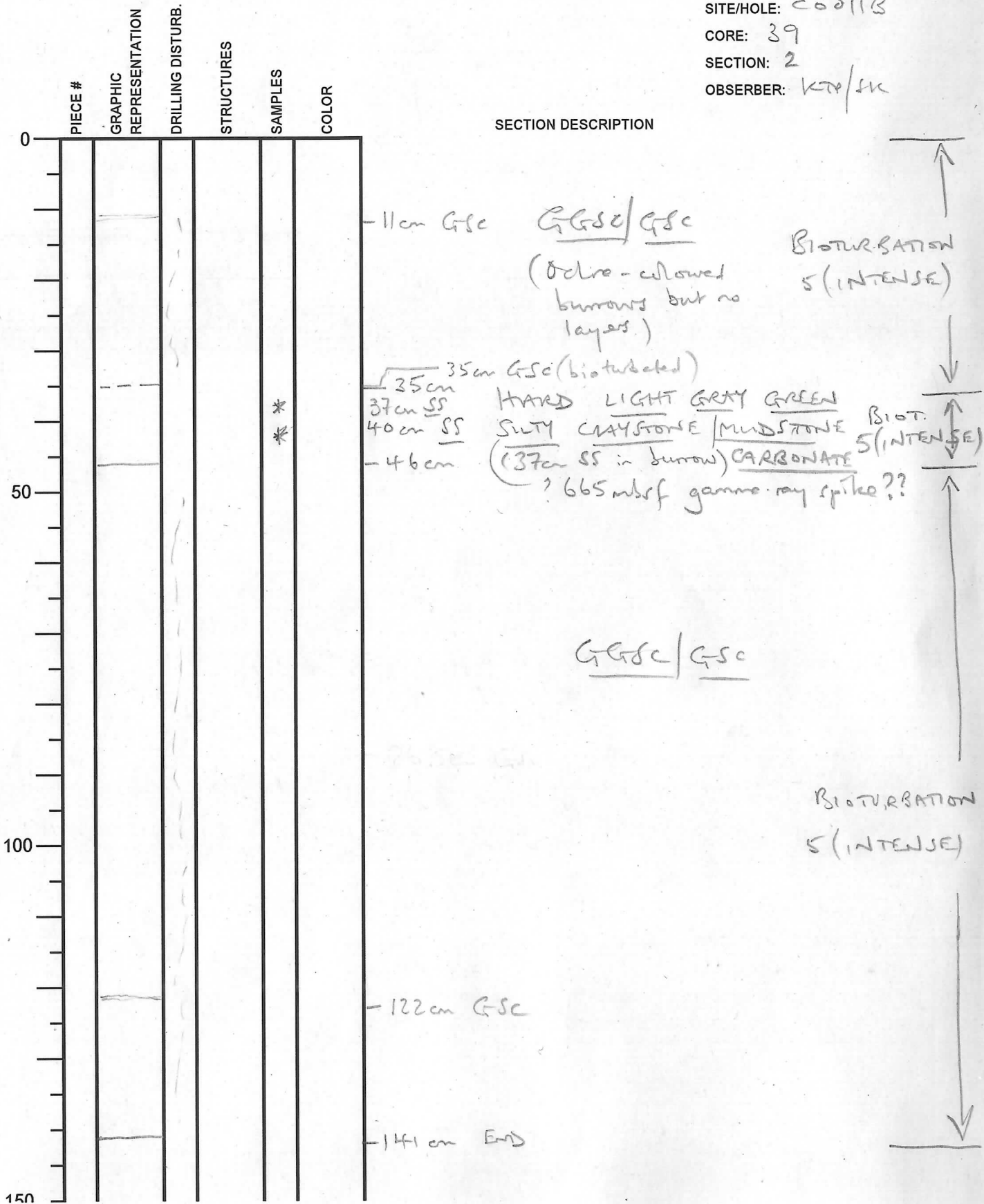
NO.
 DATE: 17/09/2009
 EXP.: 322
 SITE/HOLE: C00118
 CORE: 39
 SECTION: 1
 OBSERVER: krp/sk



Integrated Ocean Drilling Program

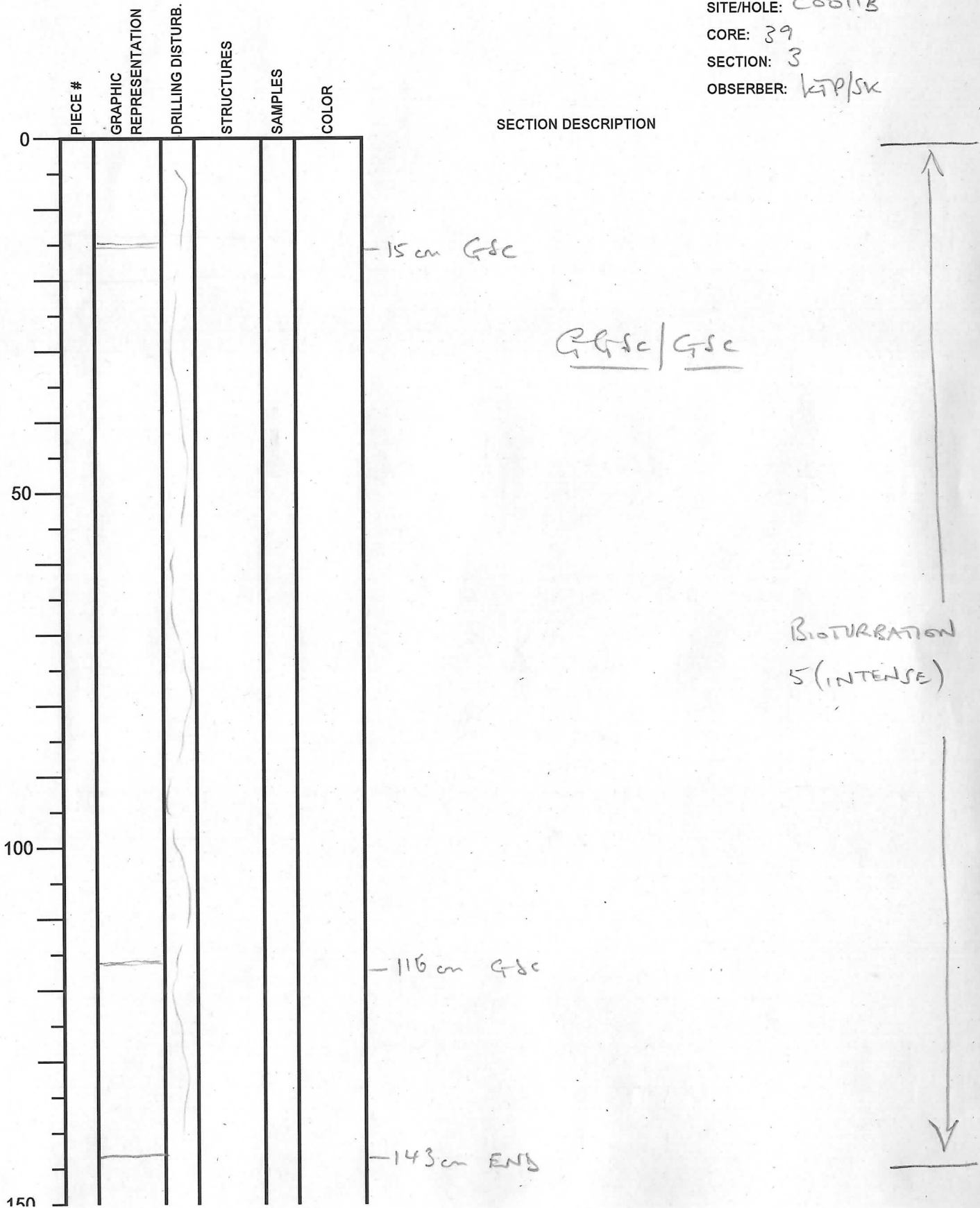
Visual Core Description

NO.
 DATE: 7/27/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 39
 SECTION: 2
 OBSERVER: KTV/fk



Integrated Ocean Drilling Program Visual Core Description

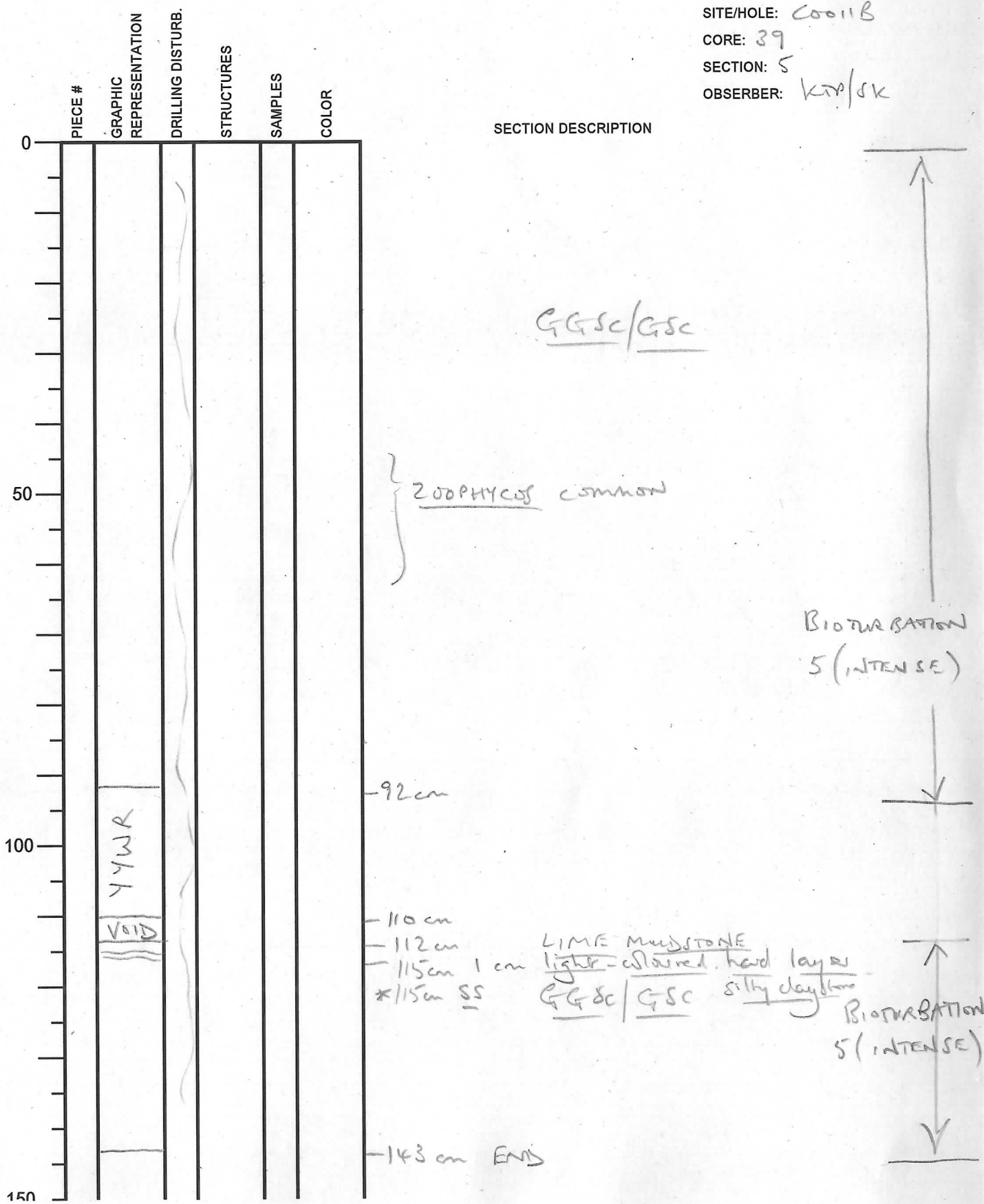
NO.
 DATE: 7/09/20 09
 EXP.: 322
 SITE/HOLE: C00118
 CORE: 39
 SECTION: 3
 OBSERVER: KJP/SK



Integrated Ocean Drilling Program

Visual Core Description

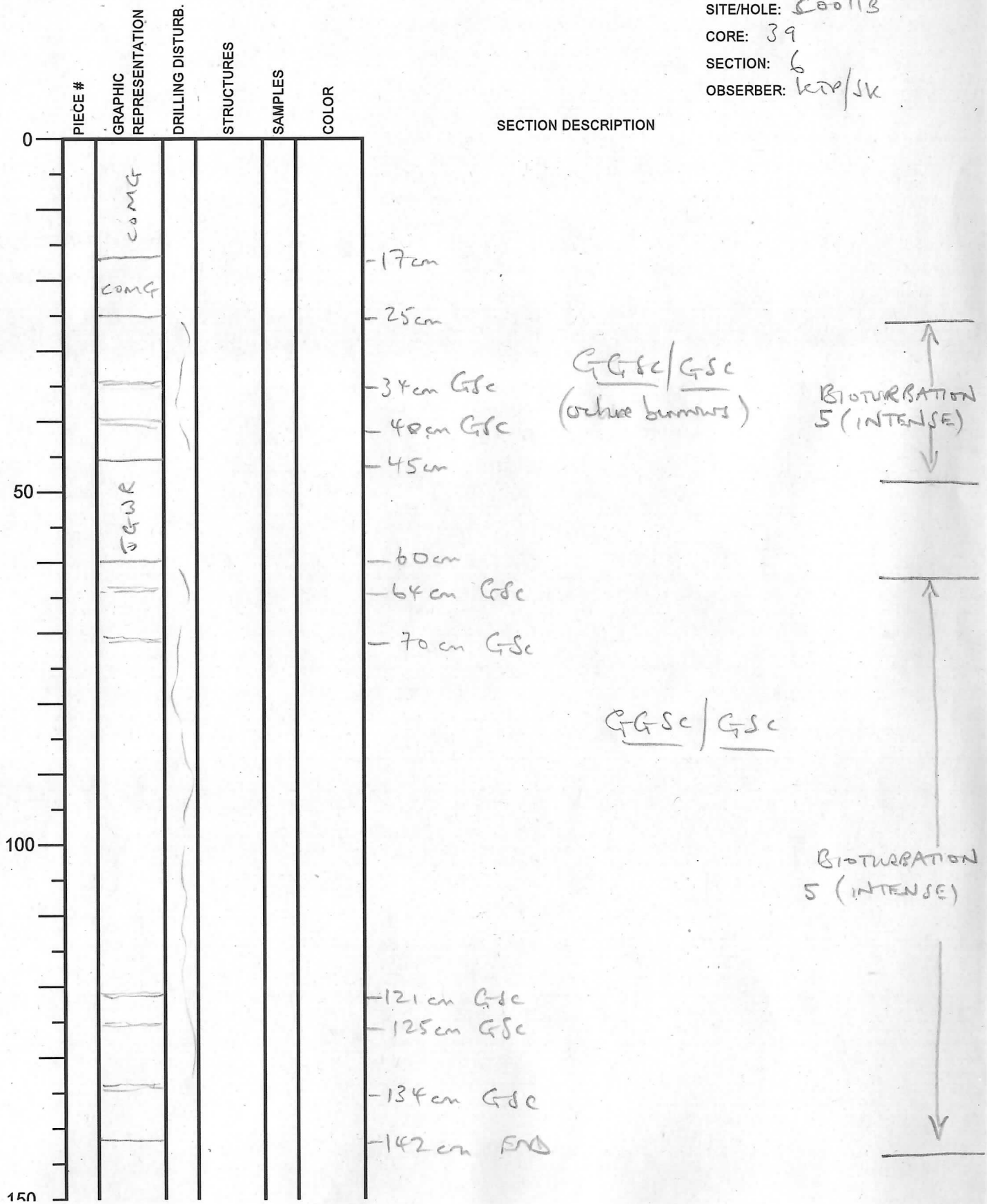
NO.
 DATE: 7/09/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 39
 SECTION: 5
 OBSERVER: KAP/SK



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 7/07/2009
 EXP.: 322
 SITE/HOLE: 20011B
 CORE: 39
 SECTION: 6
 OBSERVER: kwp/sk



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 17/07/2009
 EXP.: 322
 SITE/HOLE: C00116
 CORE: 39
 SECTION: 7
 OBSERVER: KDP/SK

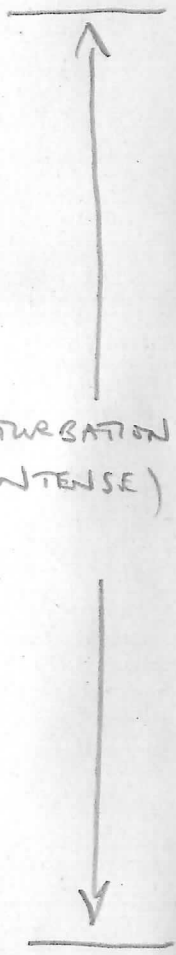
	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50						
100						
150						

SECTION DESCRIPTION

GGSC/GSC

(ochre burrows @ 37, 47, 59, 66, 76, 79 cm) BIOTURBATION 5 (INTENSE)

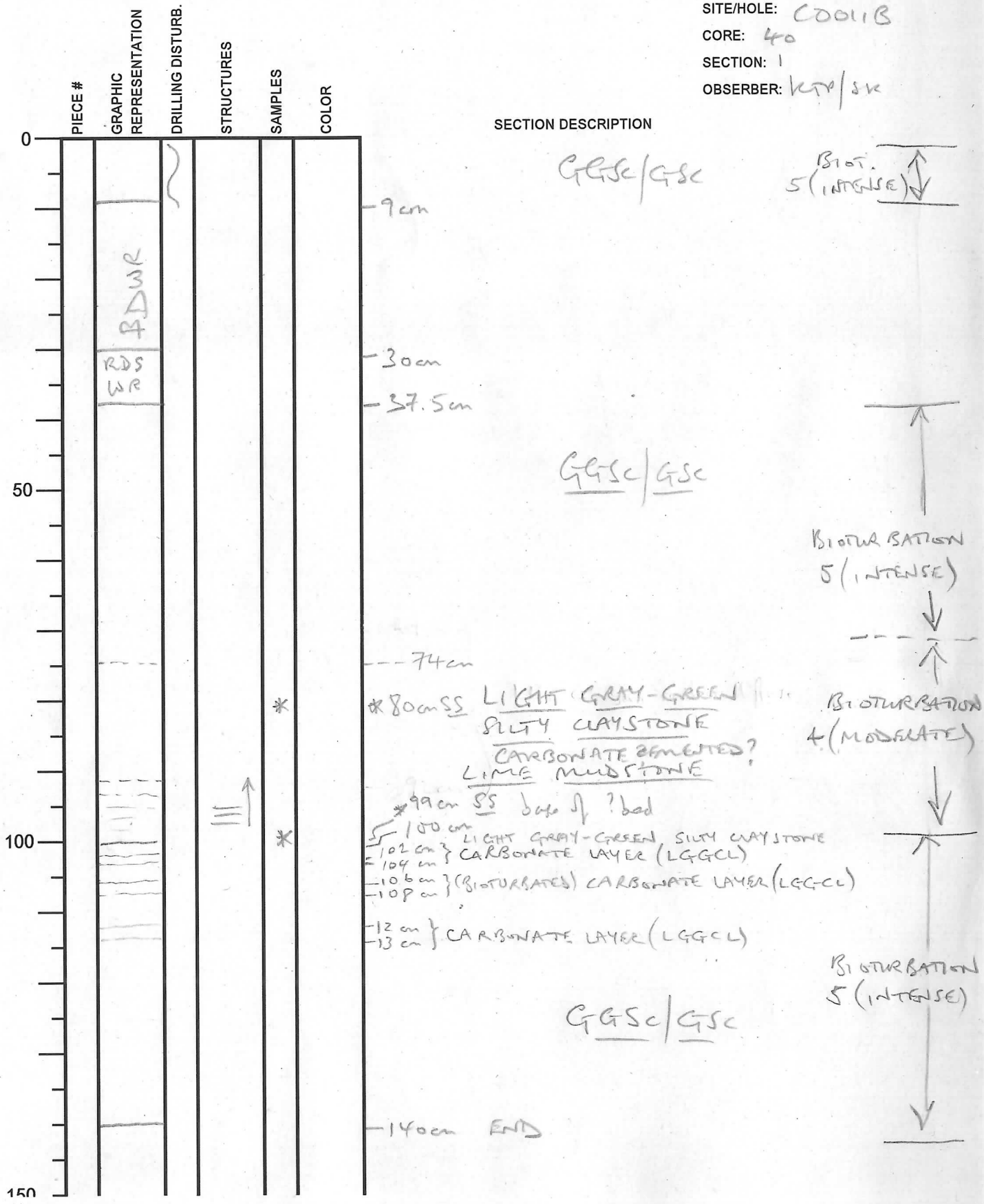
- 88cm END



Integrated Ocean Drilling Program

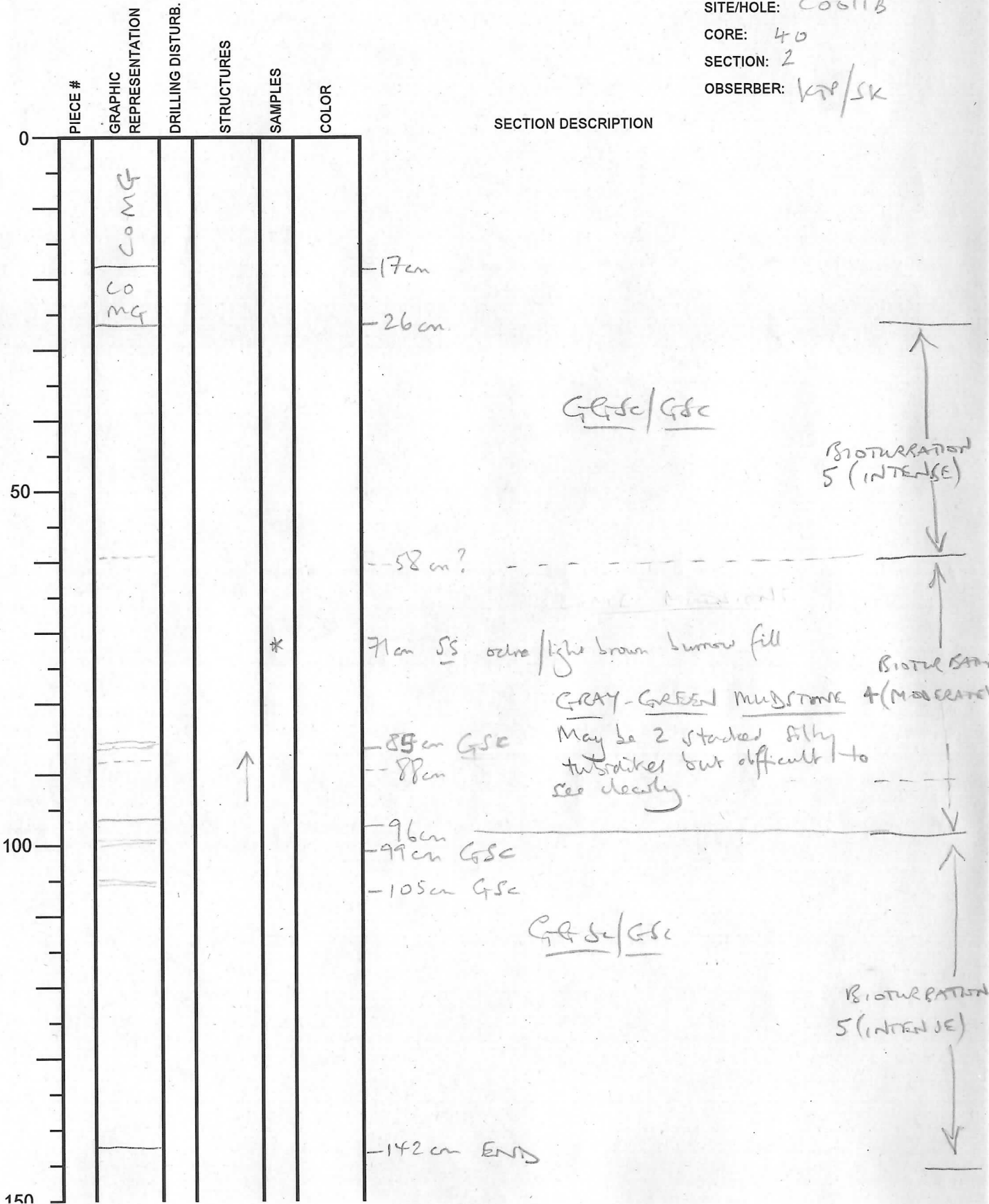
Visual Core Description

NO.
 DATE: 7/19/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 40
 SECTION: 1
 OBSERVER: KTY/SK



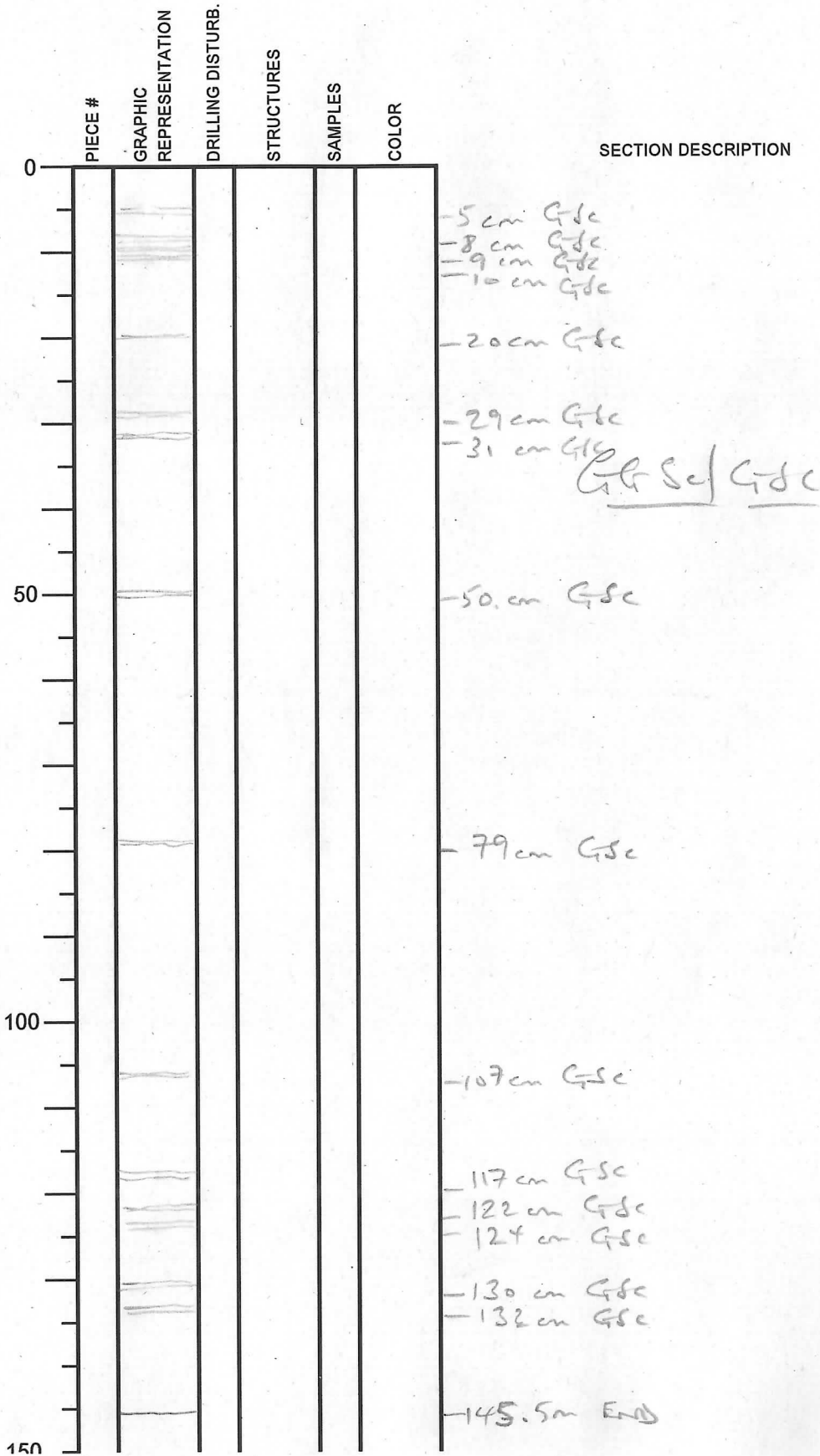
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 17/01/20 09
 EXP.: 322
 SITE/HOLE: C0611B
 CORE: 40
 SECTION: 2
 OBSERVER: KRP/SK

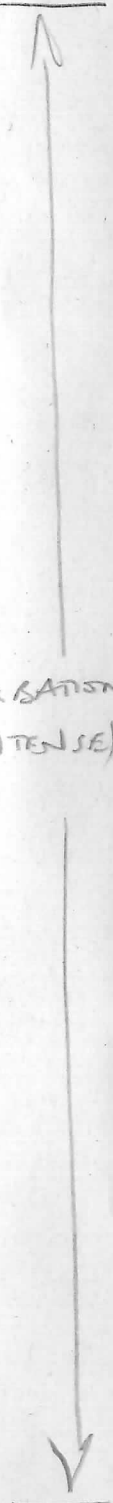


Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 17/07/2009
 EXP.: 322
 SITE/HOLE: COO11 B
 CORE: 40
 SECTION: 4
 OBSERVER: KWD/SK



ROTATION
5 (INTENSE)



Integrated Ocean Drilling Program Visual Core Description

NO.

DATE: 7/09/2009

EXP.: 322

SITE/HOLE: C0611B

CORE: 40

SECTION: CC

OBSERVER: KVP/SU

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0		PAL				
50			}			
100						
150						

SECTION DESCRIPTION

GC8C / GSC

- 112cm GIC
- 115cm END

↑
BIOTURBATION
5 (INTENSE)
↓

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 7/17/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 41
 SECTION: 1
 OBSERVER: KTV/SK

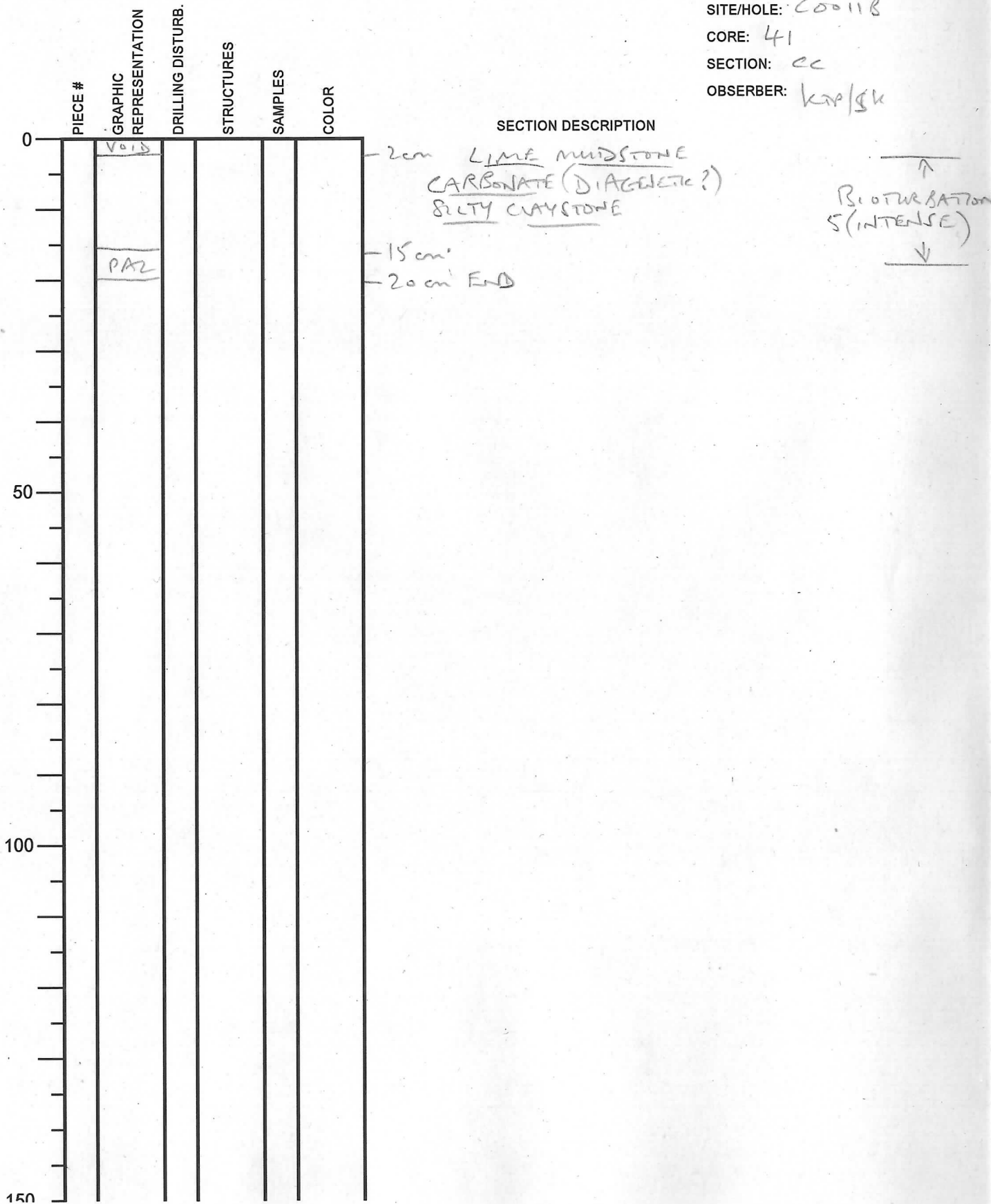
	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR	SECTION DESCRIPTION
0		~	S				<p>5cm END</p> <p><u>CGSC</u> / <u>CGSC</u></p>
50							
100							
150							

BIOT. 5
 INTENSE ↕

Integrated Ocean Drilling Program

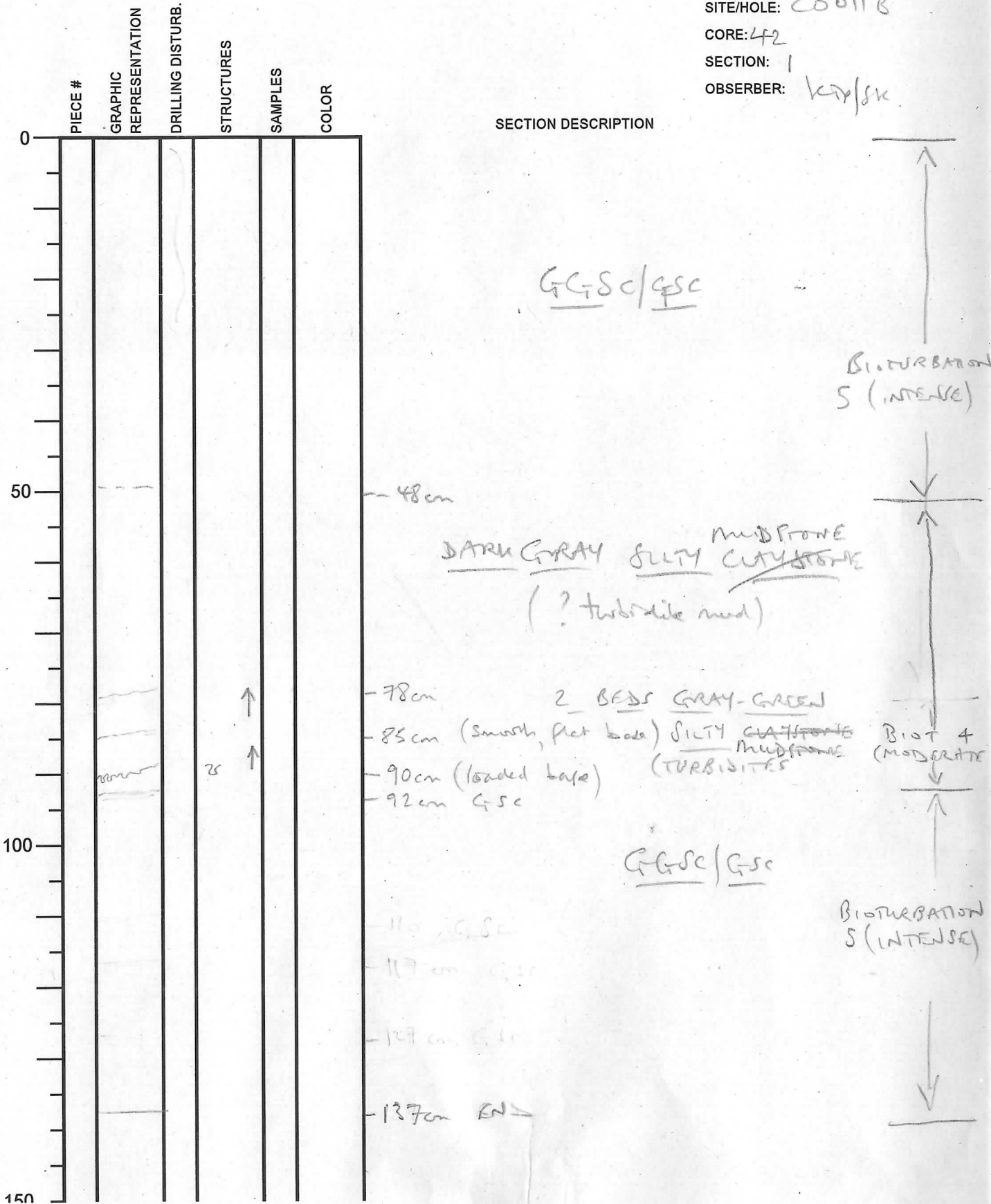
Visual Core Description

NO.
 DATE: 11/07/2009
 EXP.: 322
 SITE/HOLE: C00118
 CORE: 41
 SECTION: CC
 OBSERVER: krp/gk



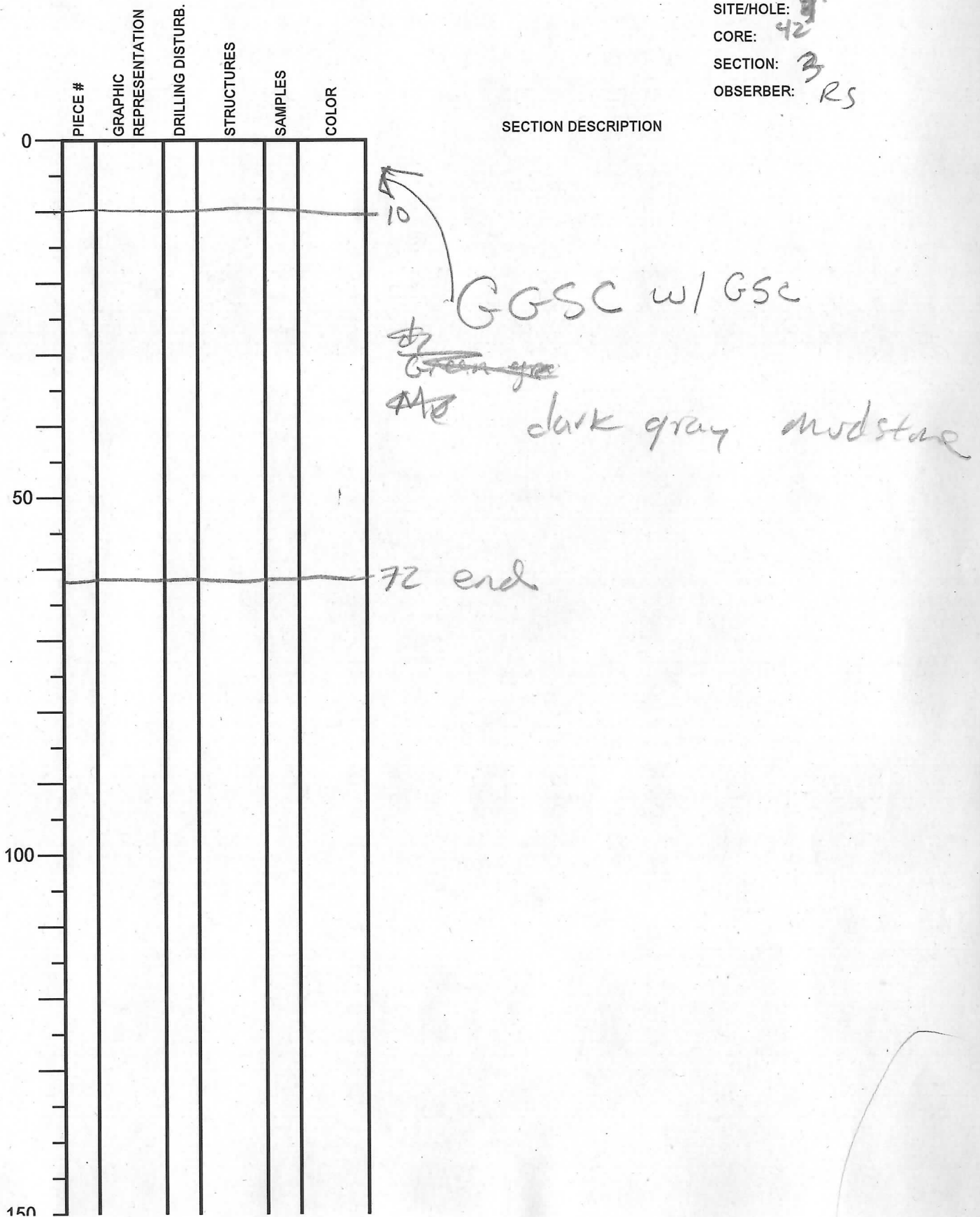
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 7/25/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 42
 SECTION: 1
 OBSERVER: KAP/SK



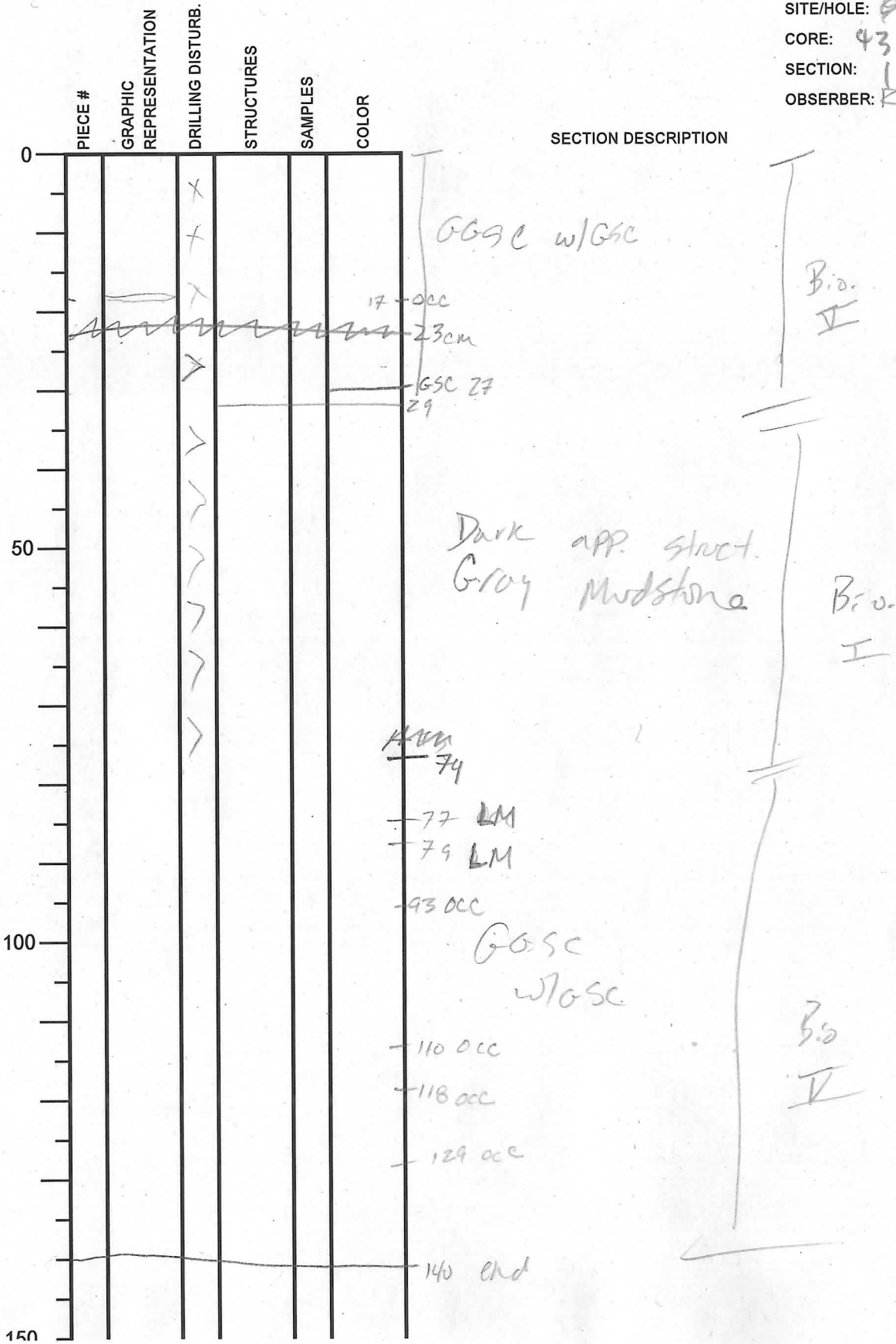
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/14/2009
 EXP.: 322
 SITE/HOLE: 9
 CORE: 42
 SECTION: 3
 OBSERVER: RS



Integrated Ocean Drilling Program Visual Core Description

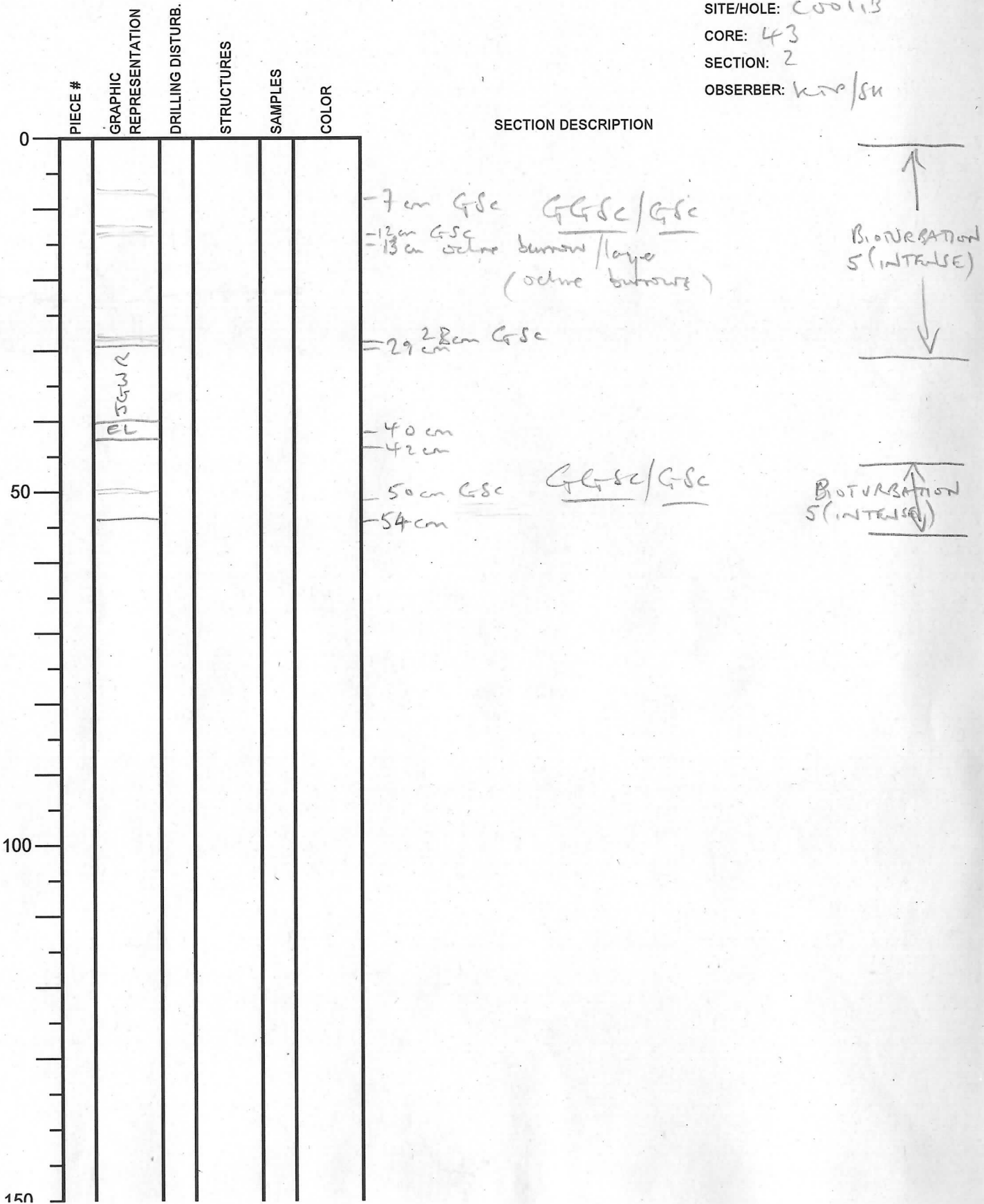
NO.
 DATE: 09/17/2009
 EXP.: 322
 SITE/HOLE: 8
 CORE: 43
 SECTION:
 OBSERVER: KS



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 17/09/20 09
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 43
 SECTION: 2
 OBSERVER: kwp/su



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 09/17/2009
 EXP.: 322
 SITE/HOLE: 0011B
 CORE: 43
 SECTION: 4
 OBSERVER: RS

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0			x.h.b	9	
			x.h.b	14	
			x.h.b	19	
			x.h.b	25	
					36
50					58
	○		○		
100					
					141
150					

SECTION DESCRIPTION

g.g.s.c.

↑
 Heavy bioturb.
 (5)
 ↓

yellow-gray
 lime-mudstone nodule
 80

g.g.s.c.

↑
 Heavy bioturb.
 (5)
 ↓

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 09/17/2009
 EXP.: 322
 SITE/HOLE: C00118
 CORE: 43
 SECTION: 5
 OBSERVER: RS

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR	SECTION DESCRIPTION
0							APP APP struct. Dark Gray Mudstone
50							
100							69 sand-sized particles of sediment, drilling fluid - Cuttings
150							

Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 09/17/2009
EXP.: 322
SITE/HOLE: C02011B
CORE: 43
SECTION: 6
OBSERVER: RS

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
50					
100					
150					

SECTION DESCRIPTION

Sand sized particles of
Green Gray silty Claystone (?)
w/ drilling fluid & Iron flakes
- Cuttings

42 end

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 09/17/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 43
 SECTION: 7
 OBSERVER: RS

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50						
100						
150						

SECTION DESCRIPTION

Sand sized particles
 of green gray silty (?)
 Claystone w/ clasts of GG-SC
 drilling fluid: iron flakes (hole wall?)
 -Cuttings

137

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 09/17/2009
 EXP.: 322
 SITE/HOLE: COO11B
 CORE: 43
 SECTION: 8
 OBSERVER: RS

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50						
100						
150						

SECTION DESCRIPTION

Sund sized particles
 of sediment & drilling
 fluid
 w/ some larger mudstone
 clasts

 -cuttings

141 end

Integrated Ocean Drilling Program Visual Core Description

NO.

DATE: 09/17/2009

EXP.: 322

SITE/HOLE: C0011B

CORE: 43

SECTION: 9

OBSERVER: RS

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR	SECTION DESCRIPTION
0						Cuttings
24						
50						
100						
150						

Integrated Ocean Drilling Program Visual Core Description

NO.

DATE: 09/17/2005

EXP.: 322

SITE/HOLE: C00113

CORE: 43

SECTION: CC

OBSERVER: RS

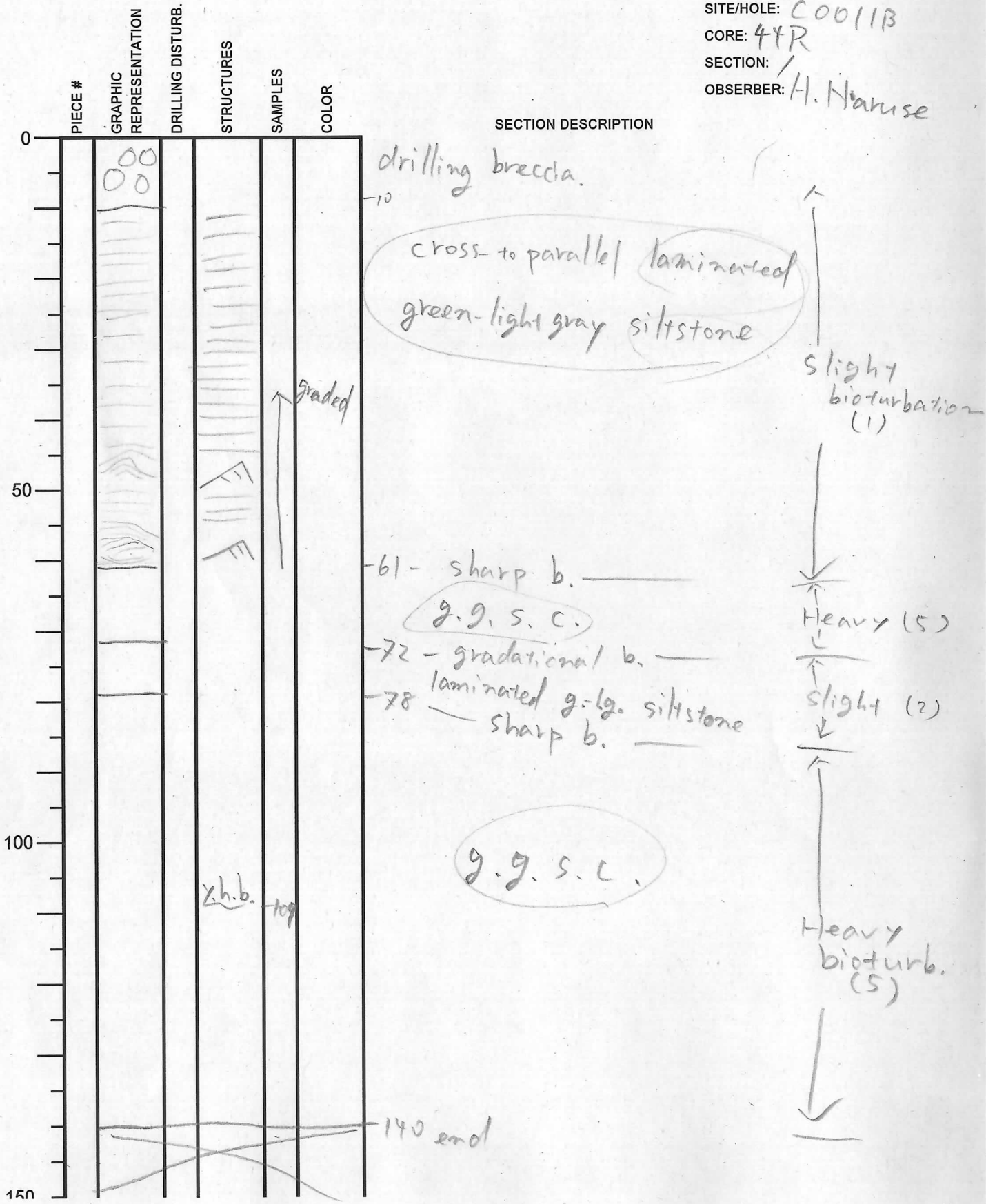
PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
50					
100					
150					

SECTION DESCRIPTION

cuttings

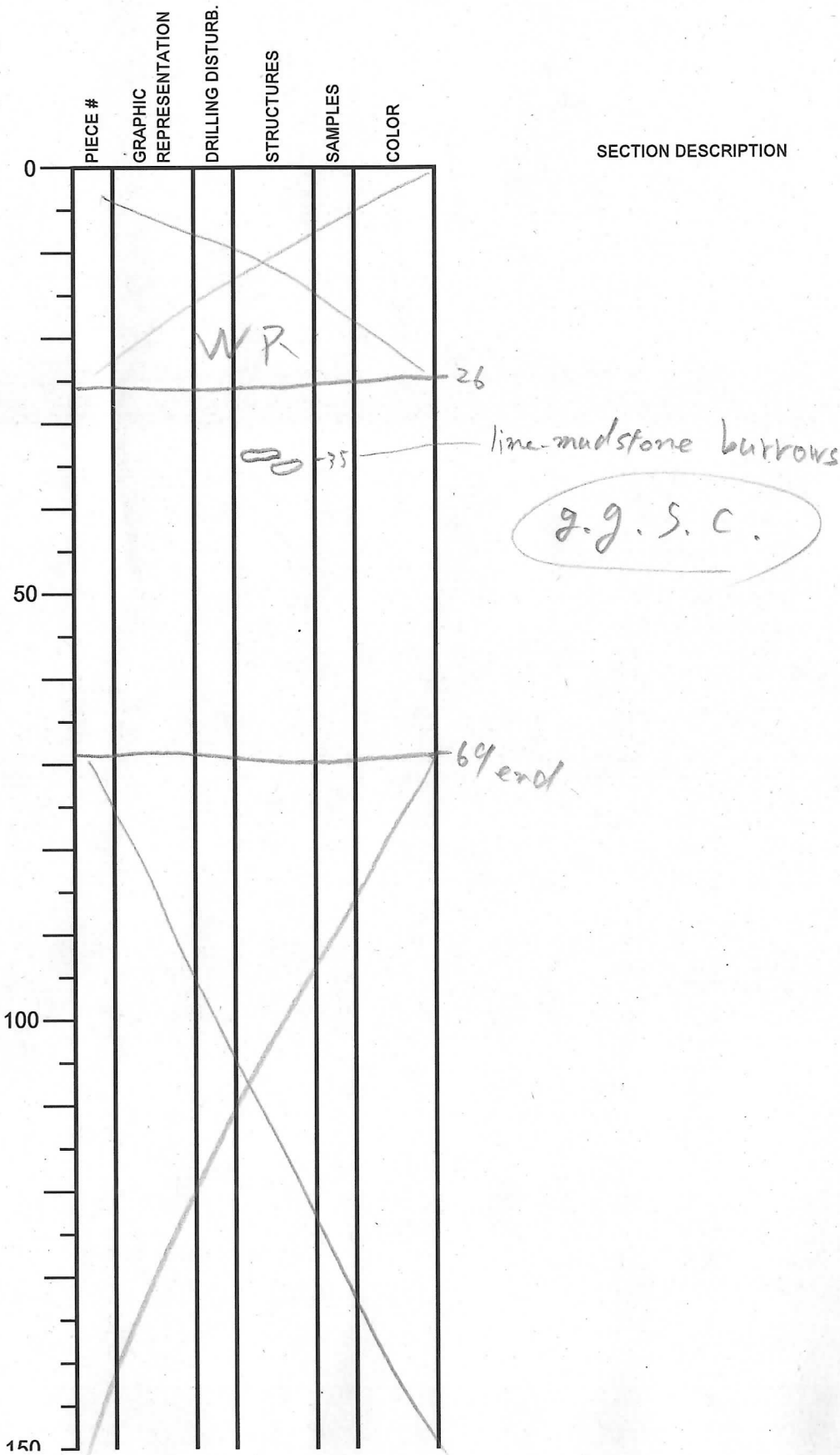
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/17/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 44R
 SECTION:
 OBSERVER: H. Naruse



Integrated Ocean Drilling Program Visual Core Description

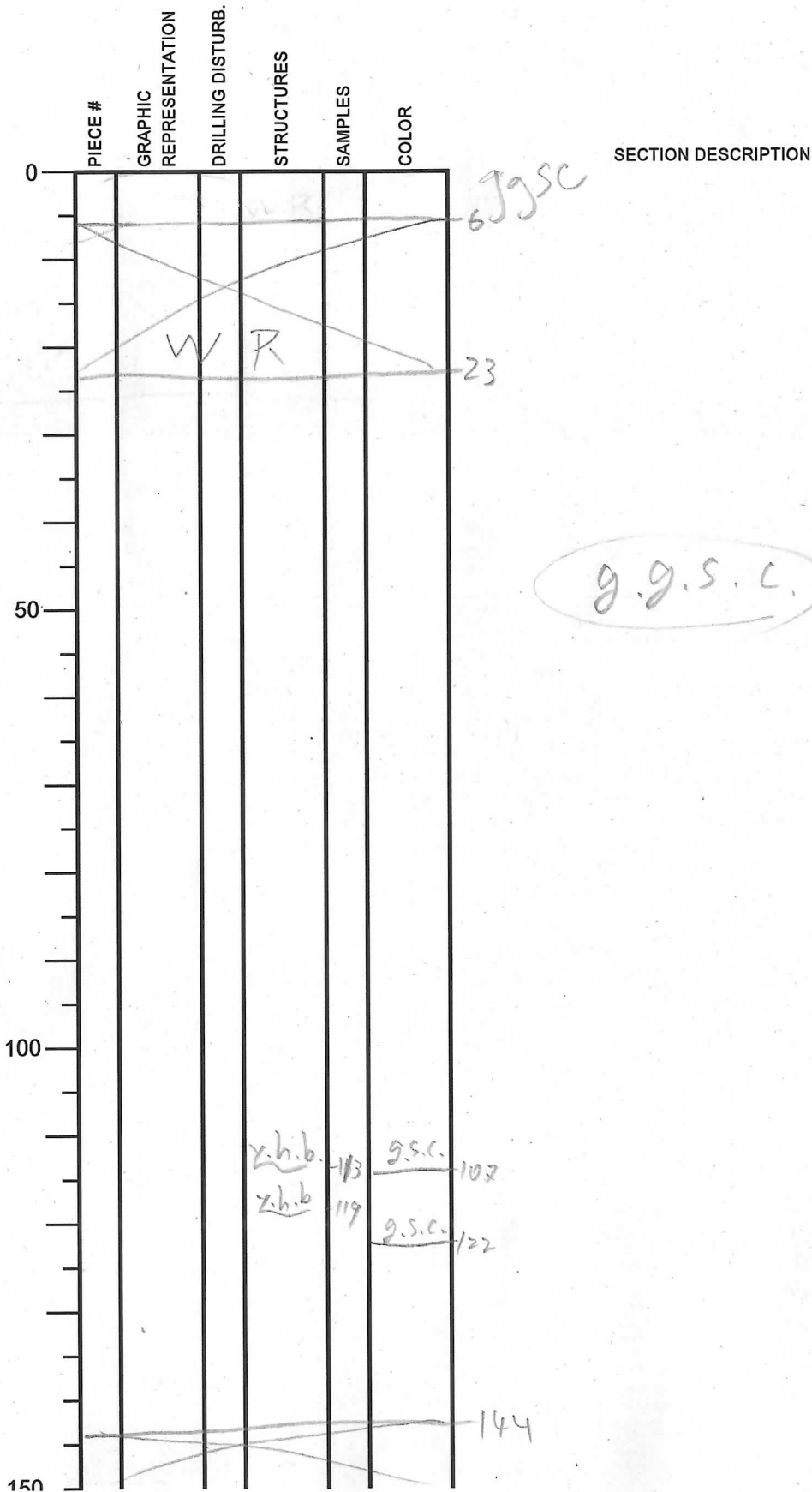
NO.
 DATE: 9/17/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 44R
 SECTION: 2
 OBSERVER: H. Harase



↑
 Heavy
 bioturb.
 (5)
 ↓

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/17/09
 EXP.: 322
 SITE/HOLE: COO11B
 CORE: 44R
 SECTION: 4
 OBSERVER: H. Haruse



↑

Heavy
bioturbation
(5)

↓

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/17/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 44R
 SECTION: 5
 OBSERVER: H. Naruse

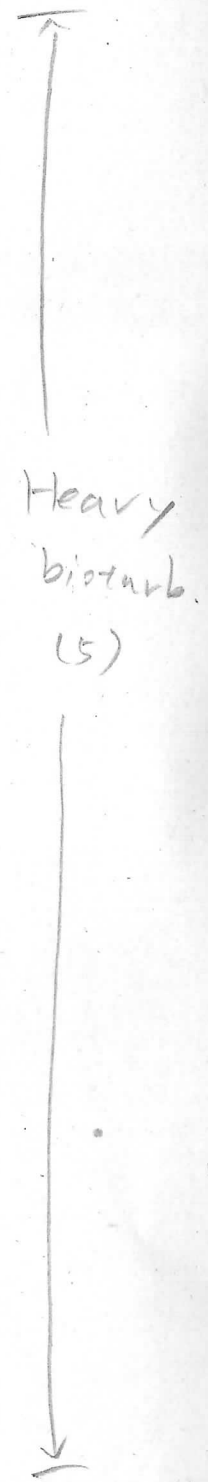
	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50				⊙ x.h.b.	-60	
				⊙ x.h.b.	-75	
100						
150						

SECTION DESCRIPTION

g.g.s.c.

-57 lime-mudstone burrow

-66 lime-mudstone burrow



142 end

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: / / 20
 EXP.: 322
 SITE/HOLE: ~~44R~~ C0011 B
 CORE: 44R
 SECTION: 6
 OBSERVER: H. Naruse

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
			(C)	-28	
50			(C)	-56	
			(C)	-66	
			x.h.b	-75	
100					
150					

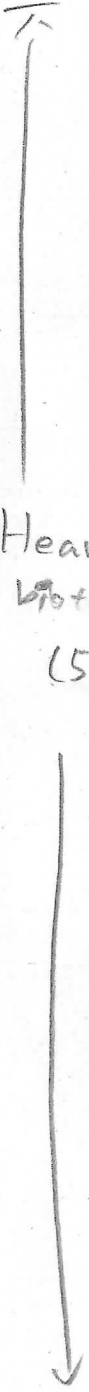
SECTION DESCRIPTION

g.g.s.c.

(C) lime-mudstone burrow

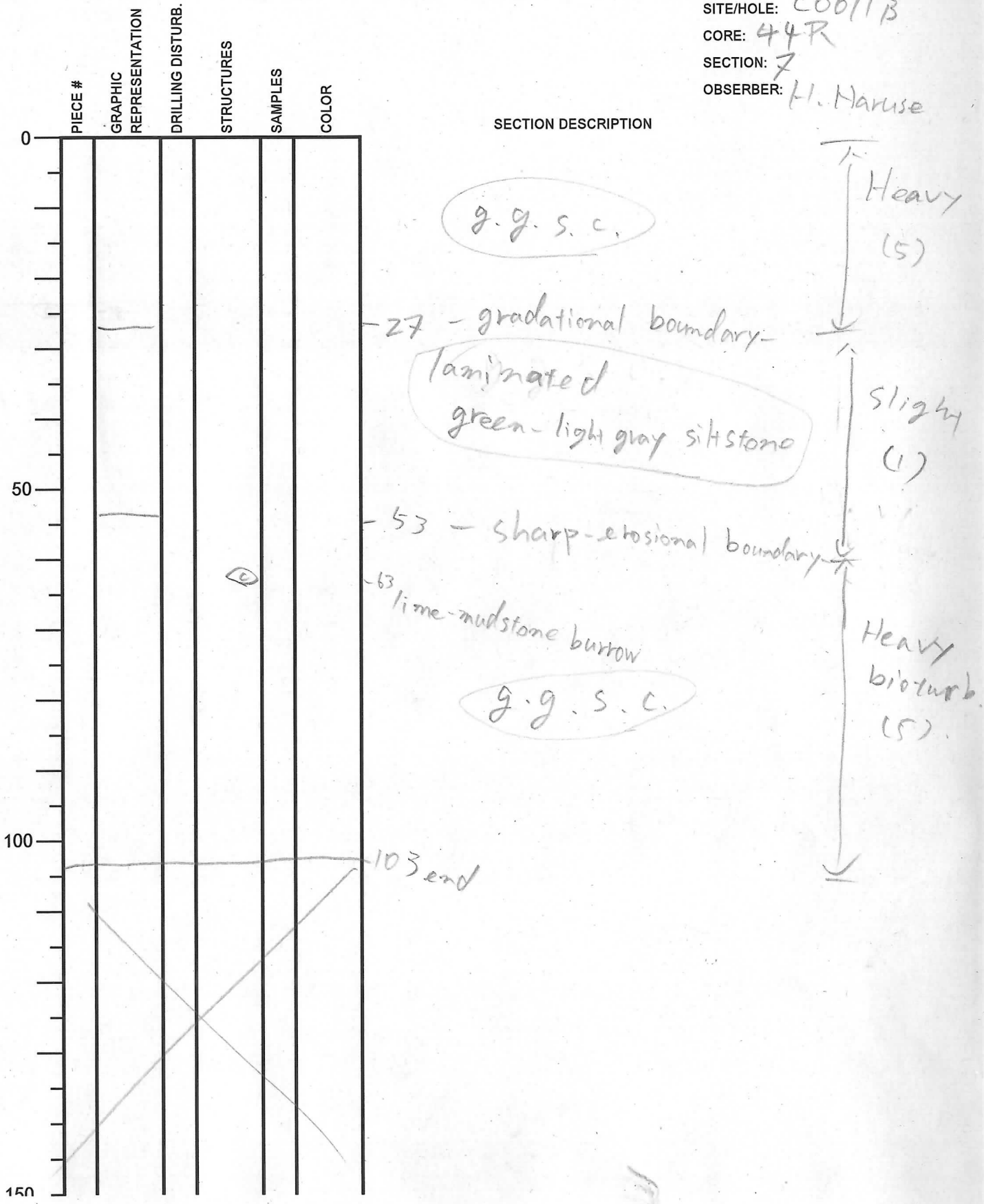
Heavy bioturb.
(5)

142 end



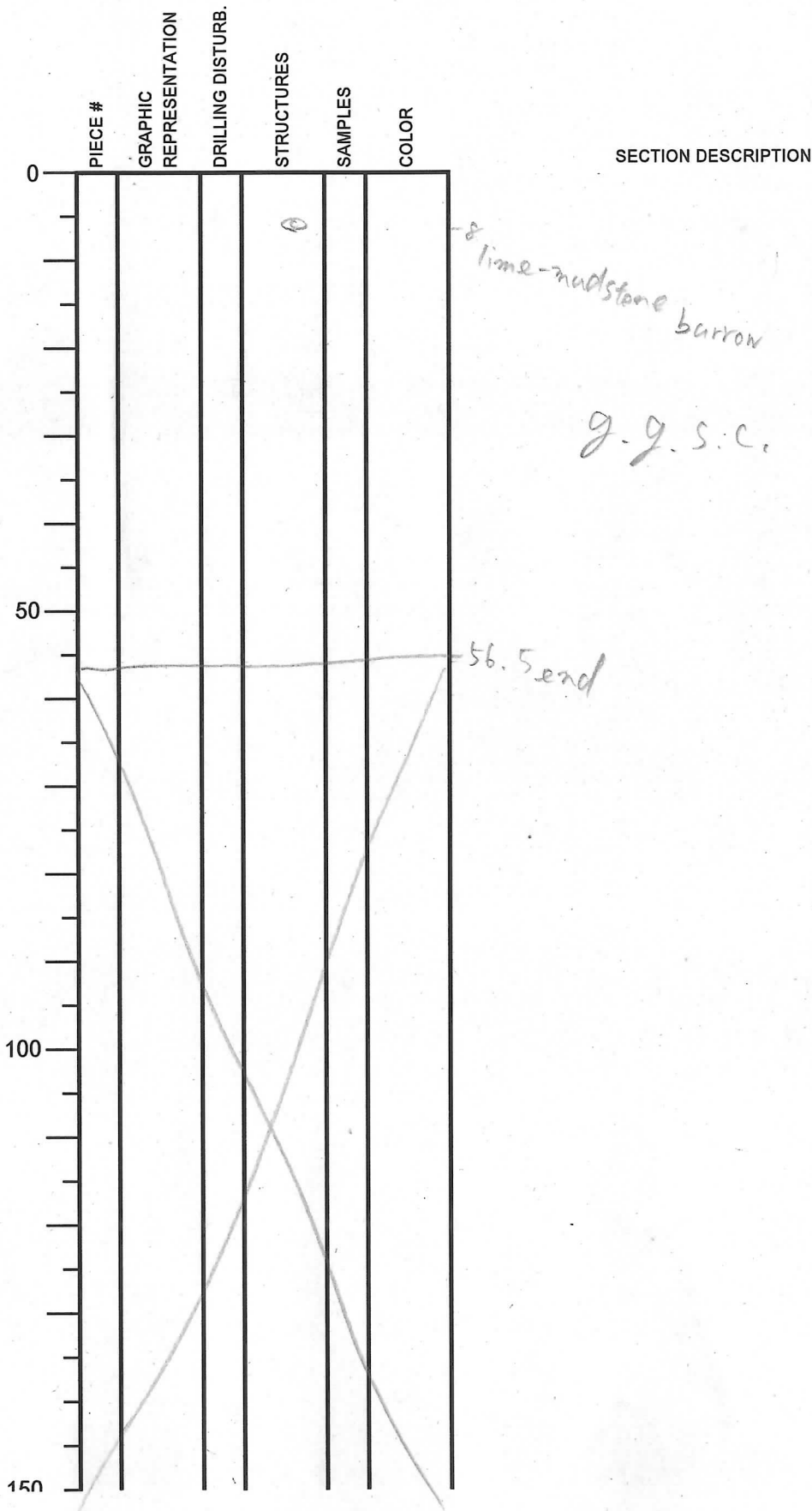
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/17/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 44R
 SECTION: 7
 OBSERVER: H. Haruse



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/17/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 44R
 SECTION: 8
 OBSERVER: H. Naruse



Heavy
 bioturb.
 (5)

Integrated Ocean Drilling Program Visual Core Description

NO.

DATE: 9/17/2009

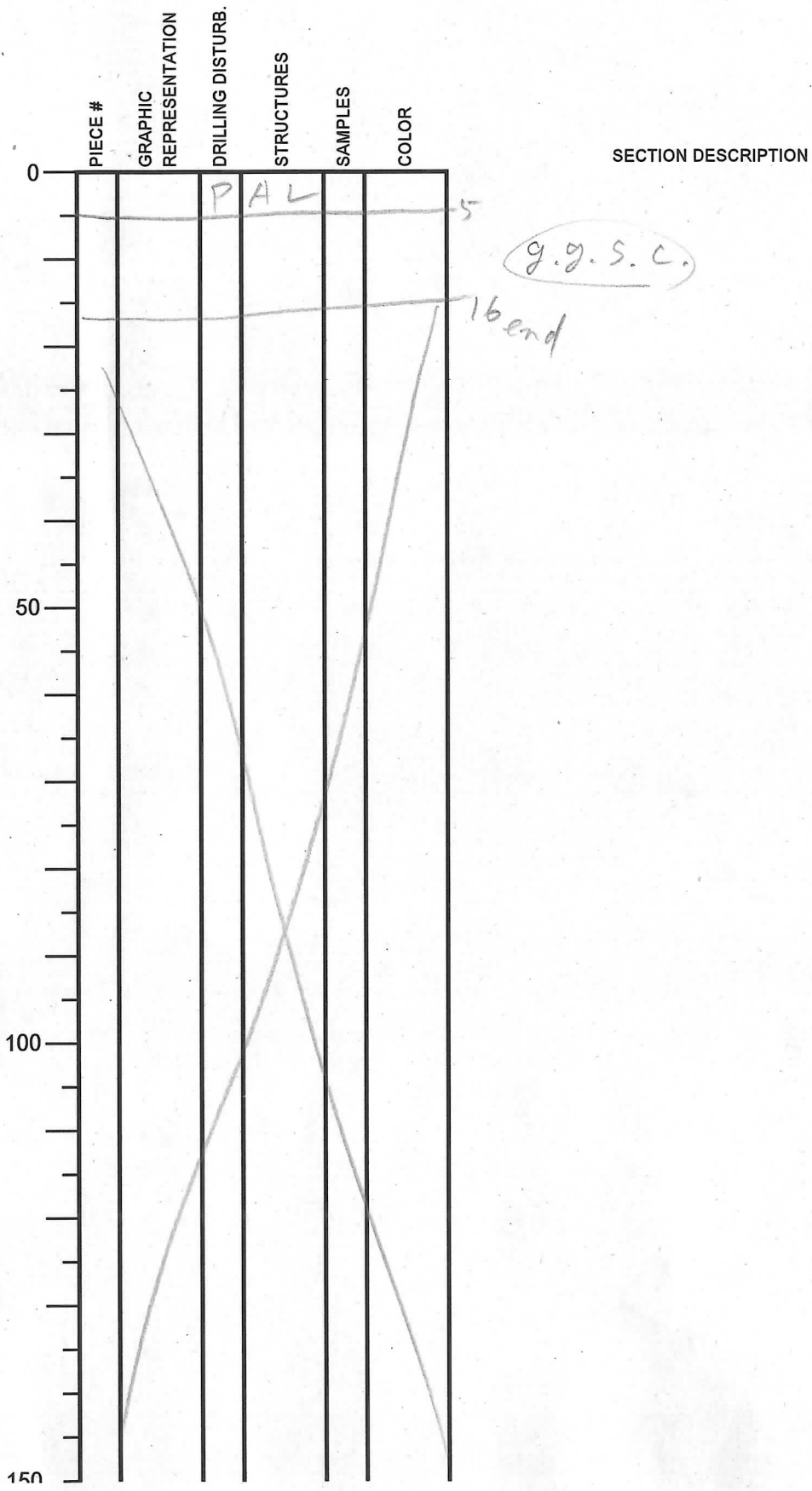
EXP.: 322

SITE/HOLE: C00113

CORE: 44R

SECTION: CC

OBSERVER: H. Haruse



↑ Heavy
bioturb.

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/17/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 45R
 SECTION: 1
 OBSERVER: H. Naruse

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50				○	55	
75				○	75	
100		LM		○	100	
105				○	106	
110				x.h.b.	110	
143						
150						

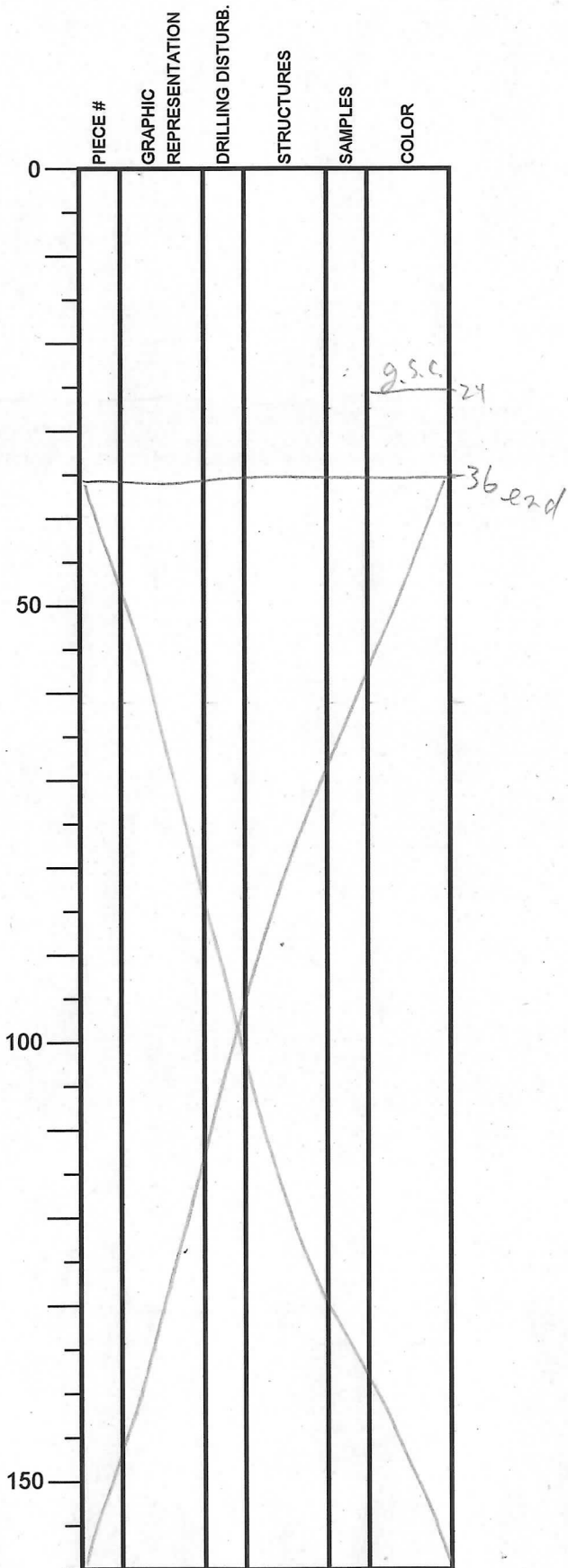
SECTION DESCRIPTION

g.g.s.c.



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/17/2009
 EXP.: 322
 SITE/HOLE: C00118
 CORE: 45R
 SECTION: 2
 OBSERVER: H. Haruse



SECTION DESCRIPTION

g.g.s.c.

↑
 Heavy
 (5)
 ↓

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/17/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 45R
 SECTION: 4
 OBSERVER: H. Haruse

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
			WR		
			r.h.b.	17	
					10
					36.5
50			WR		
					53.5
					75
					76
			(C)	86	
				88	
				90	
100					
					145 end
150					

SECTION DESCRIPTION

g.g.s.c.

↑
 Heavy bio.
 (5)
 ↓

75 — grad. b.
 76 — bioturbated lime-mudstone
 — grad. b.
 — lime-mudstone burrow

↑
 Heavy
 bioturb.
 (5)
 ↓

g.g.s.c.

Integrated Ocean Drilling Program Visual Core Description

NO. _____
 DATE: 9/17/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 45R
 SECTION: 5
 OBSERVER: H. Haruse

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
50					
100					
150					

SECTION DESCRIPTION

g.g.s.c.

73 — d.g. mudstone (DGM)
 83 — sharp b. (DGM)
 86 — sharp dark gray mudstone
 90 — sharp b. g.g.s.c.
 102 — grad. b.
 107 — dark gray mudstone (DGM)
 116 — sharp b. g.g.s.c.
 119 — grad. b. sharp d.g.m. (DGM)
 136 — g.g.s.c.
 141 — d.g.m. grad. b. end

↑
 Moderate bioturbation (4)
 ↓
 ↑
 slight bioturb. (1)
 ↓
 ↑
 moderate (2)
 ↓
 ↑
 slight (1)
 ↓
 ↑
 moderate (3)
 ↓
 ↑
 slight (1)
 ↓
 ↑
 mod. (3)
 ↓
 ↑
 slight (1)

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/17/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 45R
 SECTION: 6
 OBSERVER: M. Naruse

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50						
100						
150						

SECTION DESCRIPTION

↑ slight (1)

↓

↑ moderate (4)

↓

↑ slight (1)

↓

↑ Moderate (4)

↓

↑ slight (1)

↓

↑ Mod. (4)

↓

↑ slight (1)

↓

↑ Mod. (1)

↓

↑ slight (1)

↓

↑ mod. (3)

↓

↑ slight (1)

↓

↑ mod. (9)

↓

↑ slight (1)

↓

↑ mod. (4)

↓

↑

d.g.m.
9 - sharp b.

g.g.s.c.

93 - grad. b.
 47 - sharp. b. d.g.m.
 54 - grad. b. g.g.s.c.
 61 - sharp. b. d.g.m.
 65 - grad. b. g.g.s.c.
 71 - sharp. b. d.g.m.

g.g.s.c.

89 - grad. b.
 96 - d.g.m.
 98 - sharp. b. g.g.s.c.
 108 - sharp d.g.m.

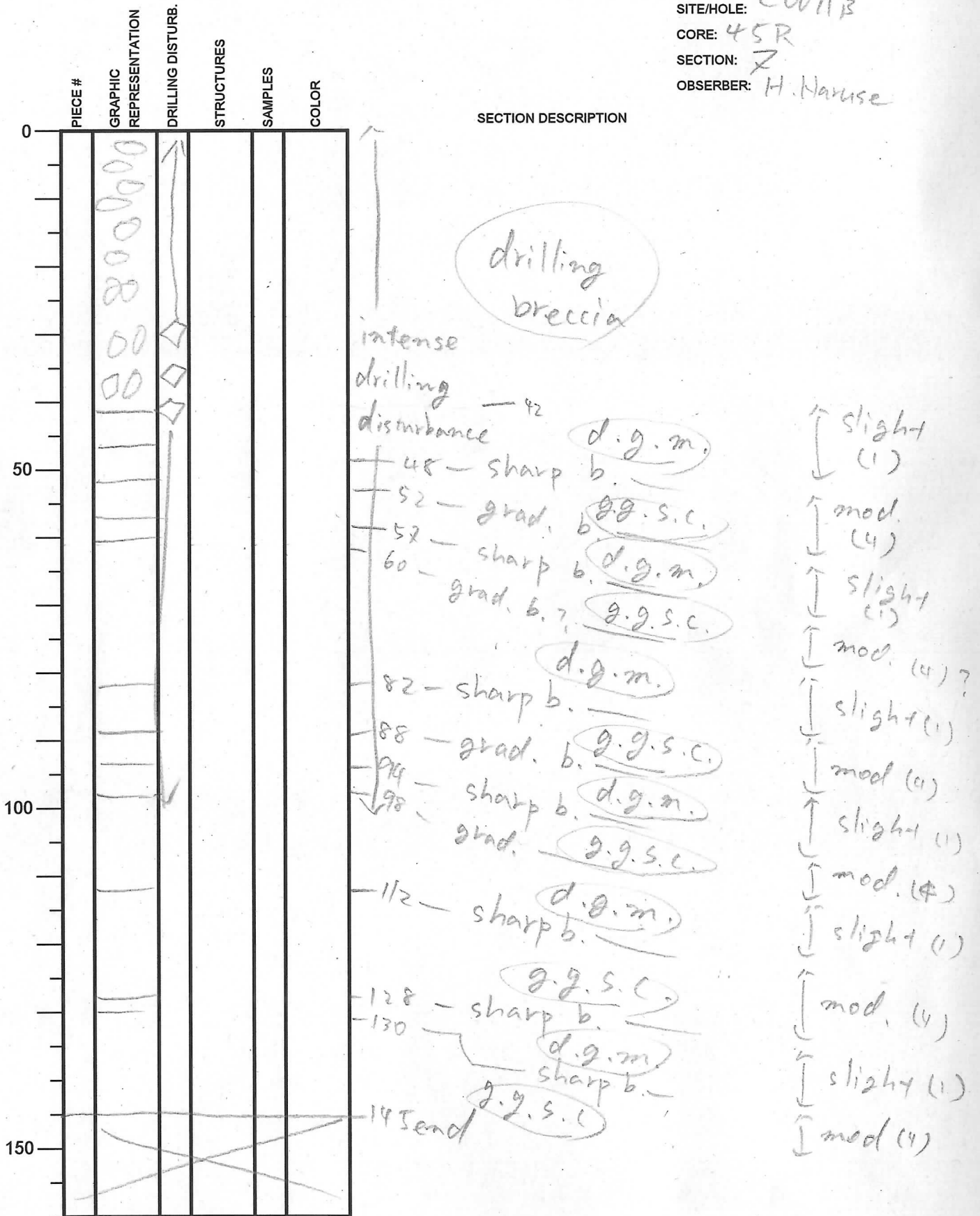
g.g.s.c.

131 - grad. b.
 132 - sharp d.g.m.
 143 end g.g.s.c.

Integrated Ocean Drilling Program

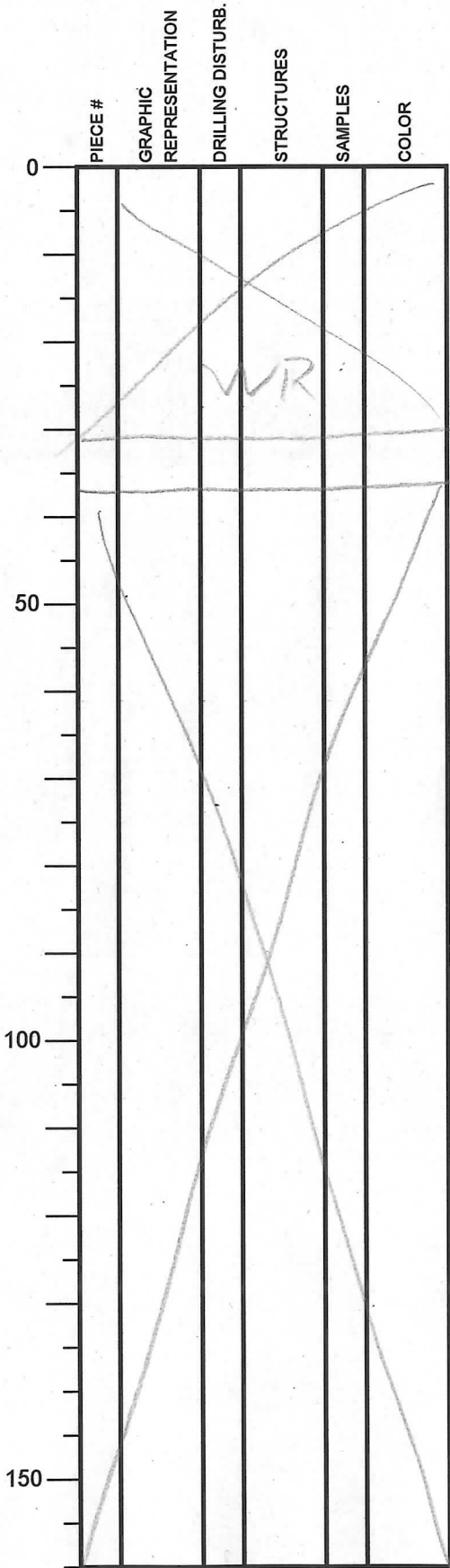
Visual Core Description

NO.
 DATE: 9/17/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 45R
 SECTION: Z
 OBSERVER: H. Naruse



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/17/09
 EXP.: 322
 SITE/HOLE: C0011 B
 CORE: 45R
 SECTION: 8
 OBSERVER: H. Naruse



SECTION DESCRIPTION

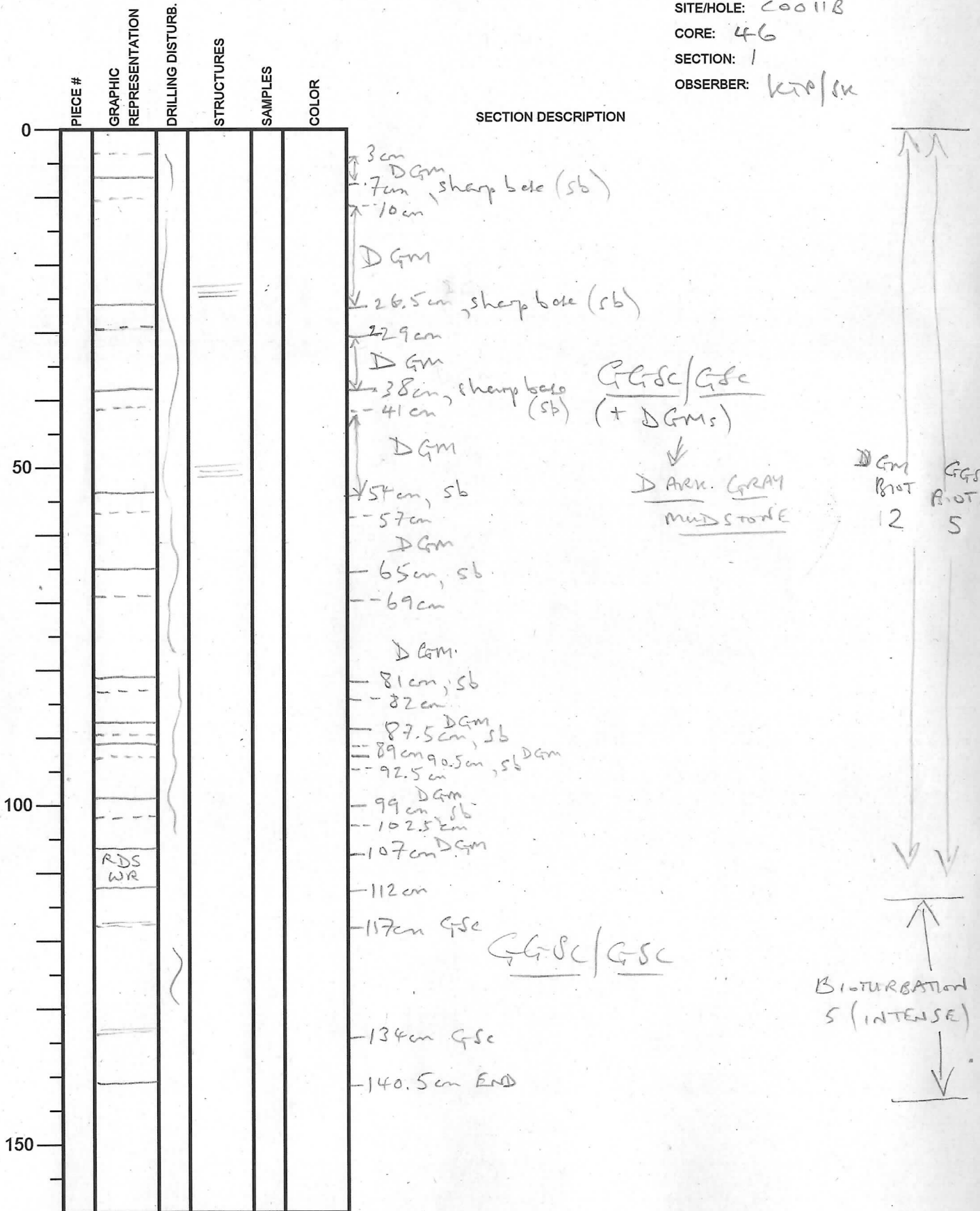
g.g.s.c.

↑ mod.
(4)

Integrated Ocean Drilling Program

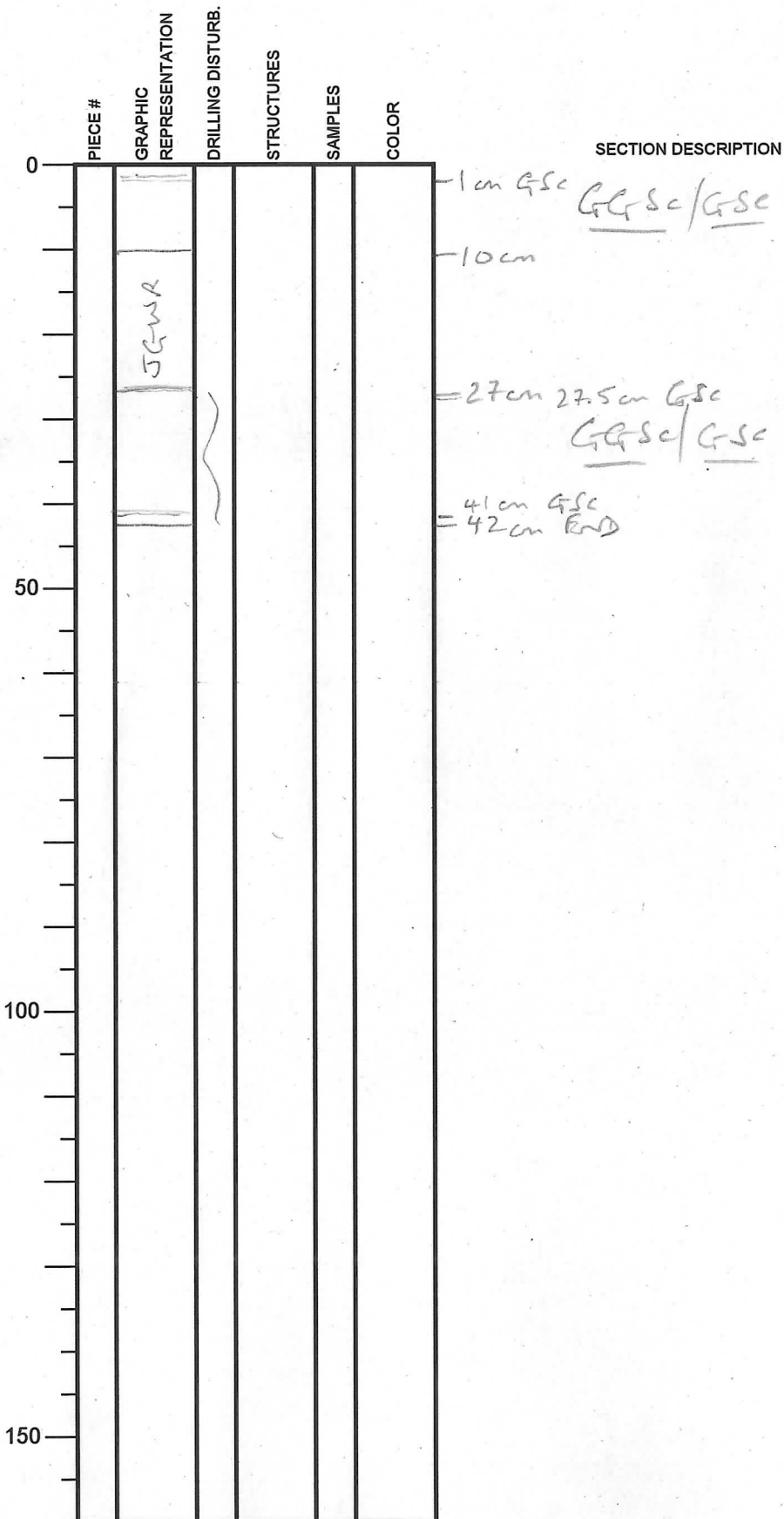
Visual Core Description

NO.
 DATE: 18/05/2009
 EXP.: 322
 SITE/HOLE: C00118
 CORE: 46
 SECTION: 1
 OBSERVER: KTO/CK



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 8/5/20 89
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 46
 SECTION: 2
 OBSERVER: WTP/GR

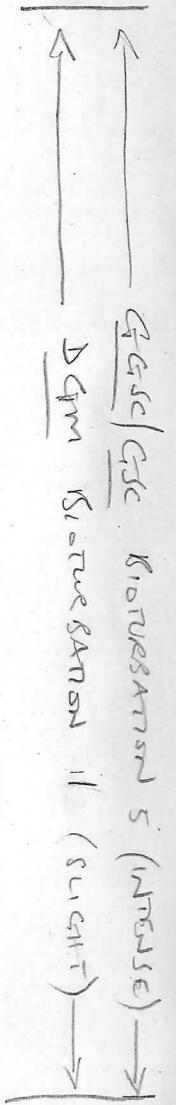
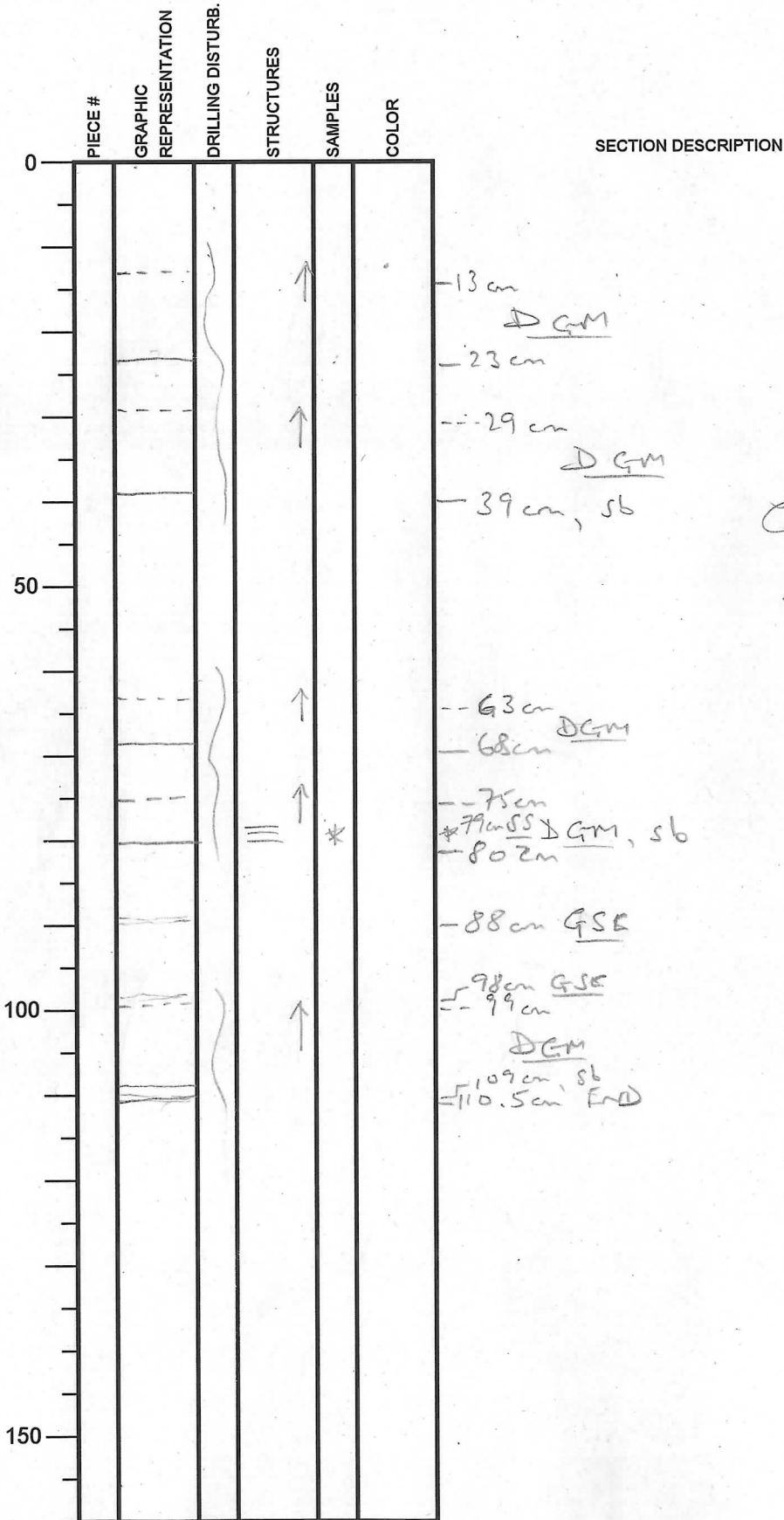


↑
 BIOTURBATION
 5 (INTENSE)
 ↓

↑
 BIOTURBATION
 5 (INTENSE)
 ↓

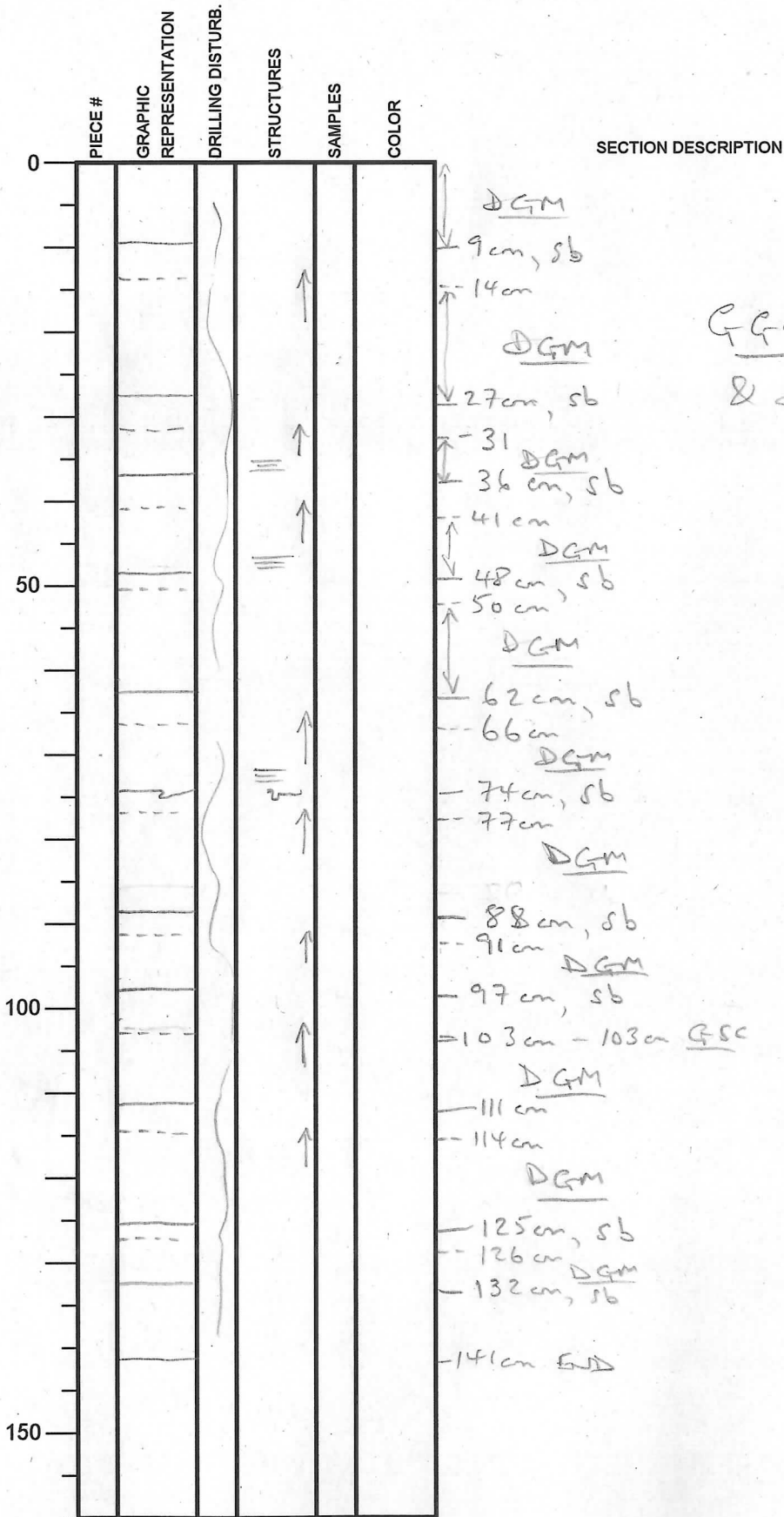
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 18/01/2009
 EXP.: 322
 SITE/HOLE: COB11B
 CORE: 47
 SECTION: 1
 OBSERVER: KTD/SK

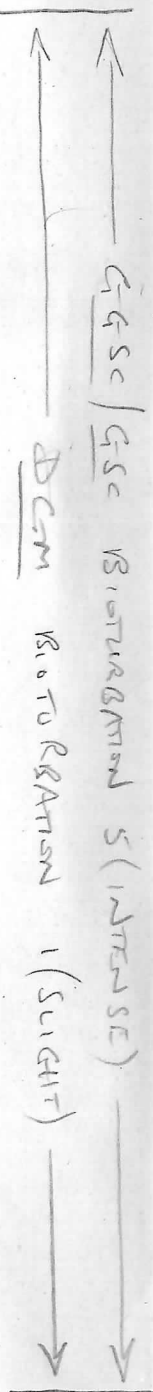


Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 8/27/2009
EXP.: 322
SITE/HOLE: COO11B
CORE: 47
SECTION: 3
OBSERVER: KTD/SK

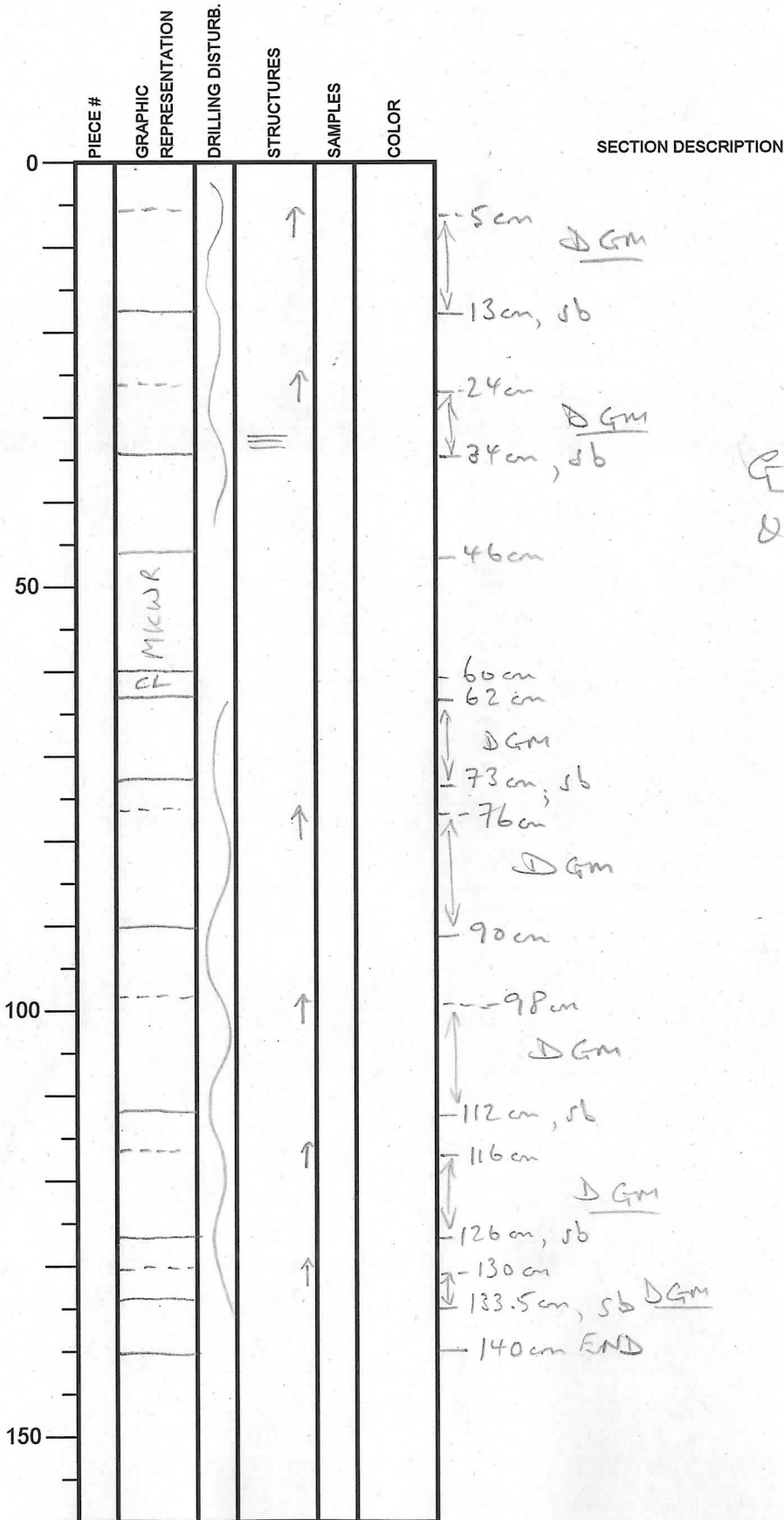


GSC/GSC
& DGMs

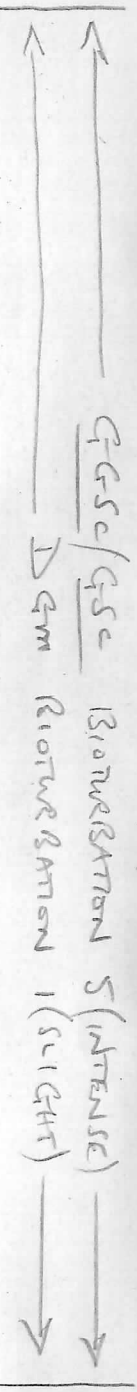


Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 12/07/20 09
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 47
 SECTION: 4
 OBSERVER: kmp/sk

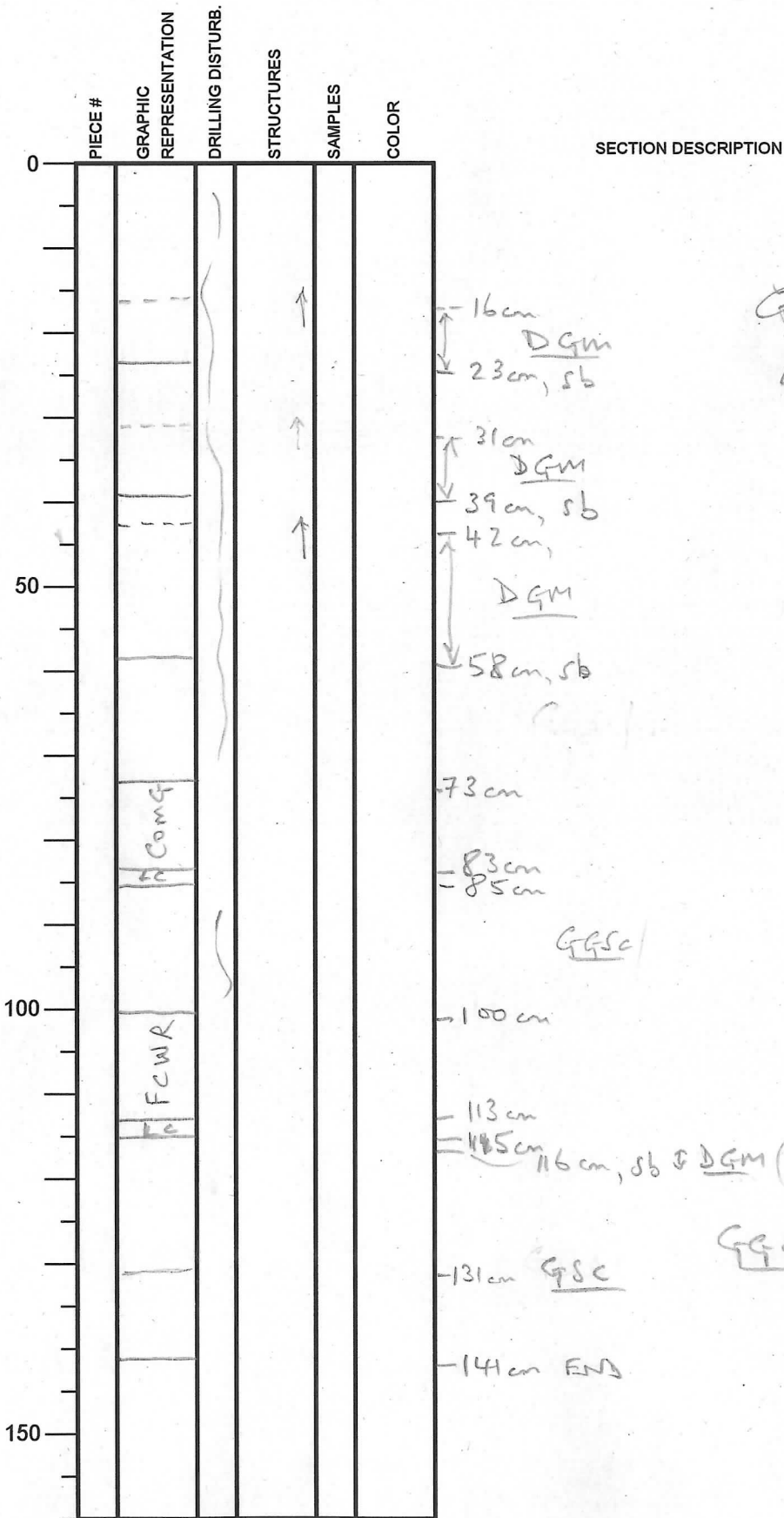


GGSc/GSc
DGM

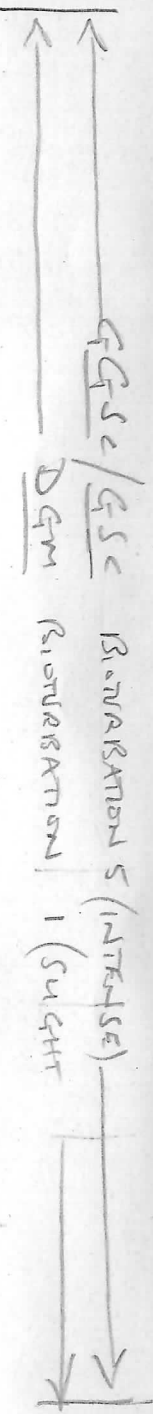


Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 8/27/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 47
 SECTION: 5
 OBSERVER: KWP/SK

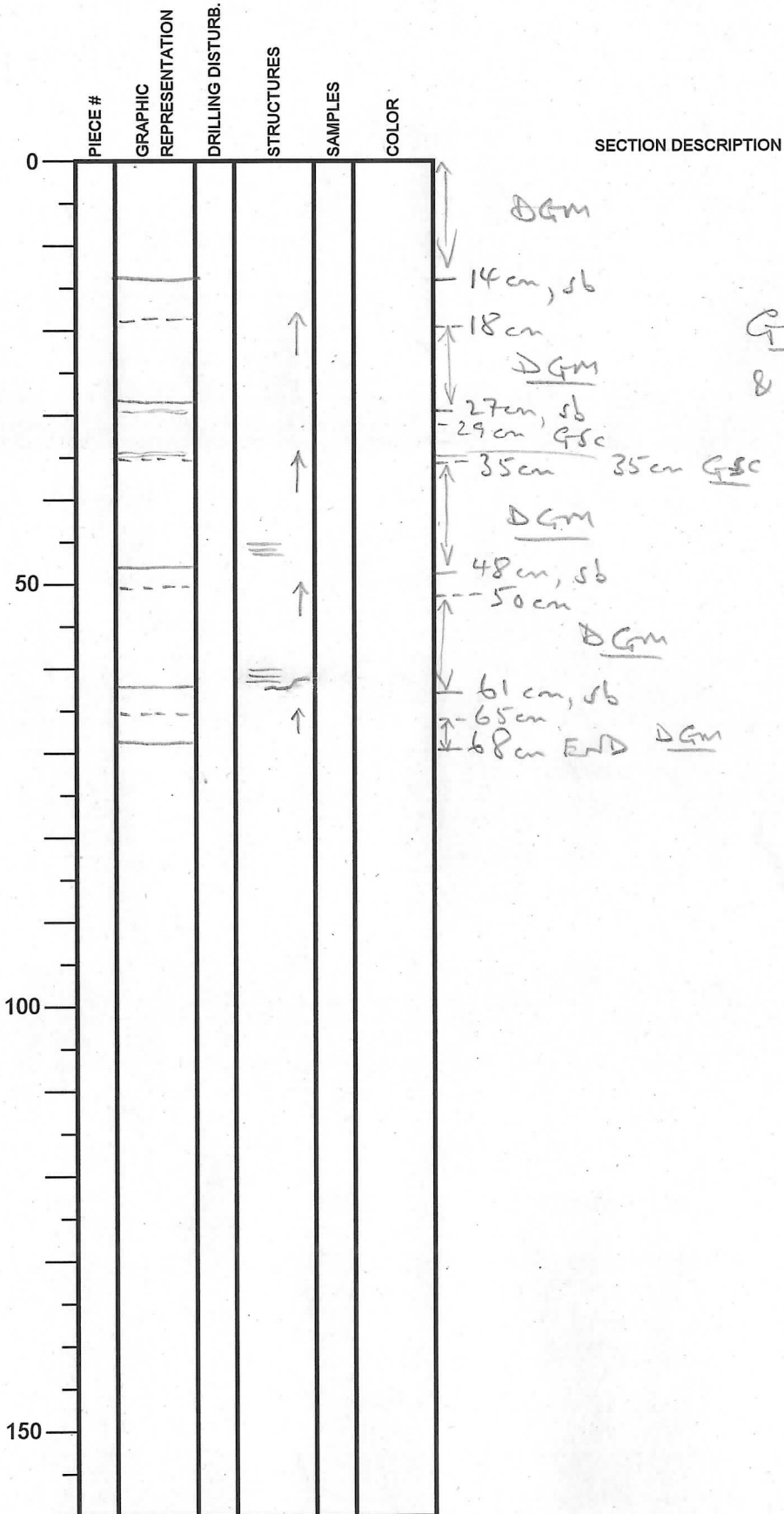


GGSC/GSC
& DGMs



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 8/09/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 47
 SECTION: 6
 OBSERVER: KJP/SK



GSC/GSC Biot. 5 (INTENSE) →
 DGM Biot. (Biot. 1 (Biot. 4)) →

Integrated Ocean Drilling Program

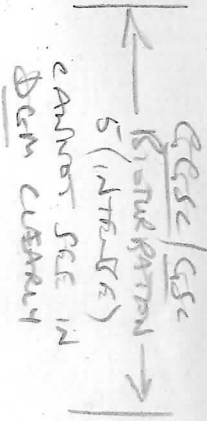
Visual Core Description

NO.
 DATE: 8/19/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 47
 SECTION: CC
 OBSERVER: KTP/SK

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0	PAZ				
50		~			
100					
150					

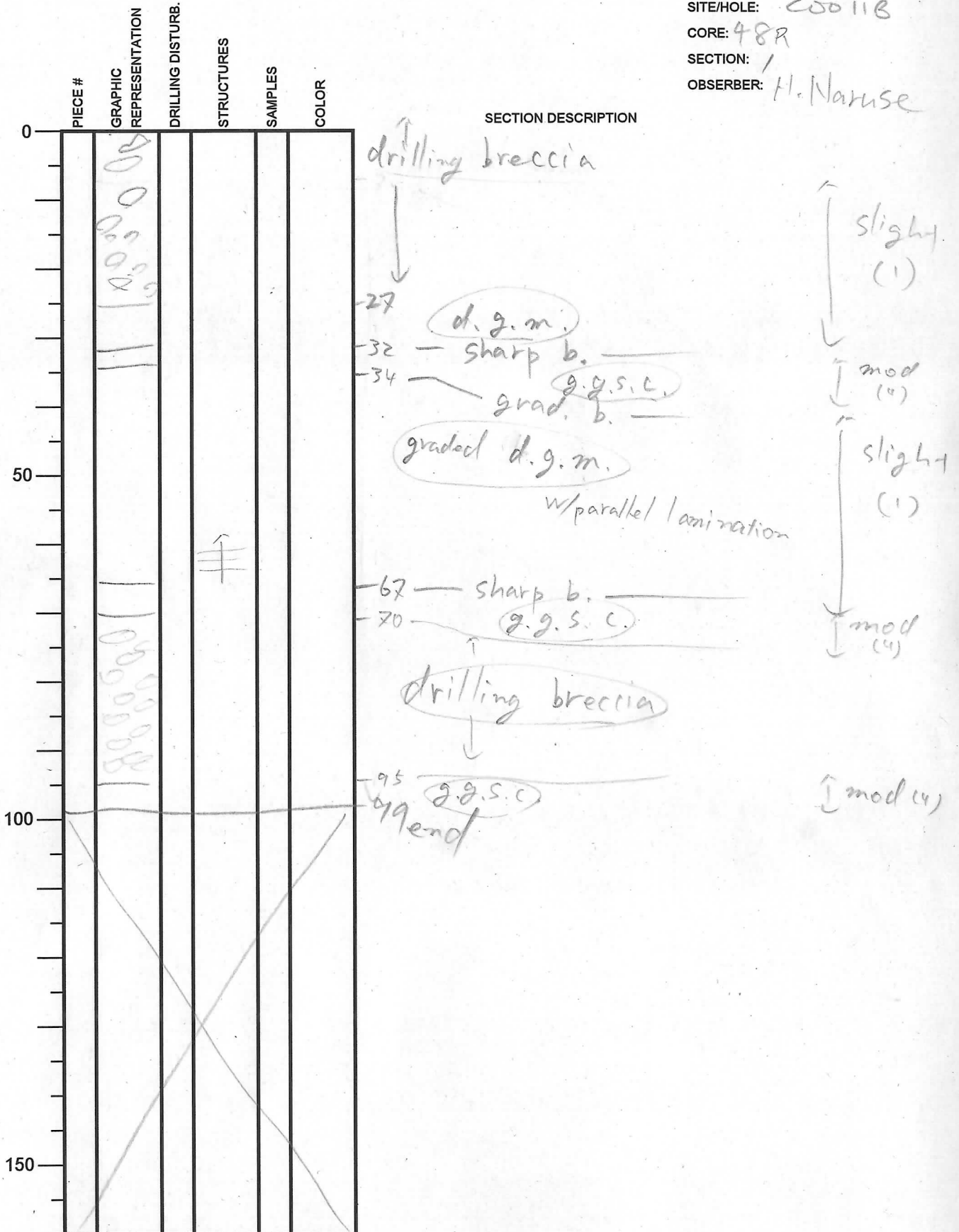
SECTION DESCRIPTION

3 cm GGSc
 8 cm
 ? DGM
GGSc/GSc
 & DGMs
 29 cm (Too disturbed to describe in more detail)
 ? GSc TOP DGM
 40 cm END
 Probably upper part of one and lower part of another DGM



Integrated Ocean Drilling Program Visual Core Description

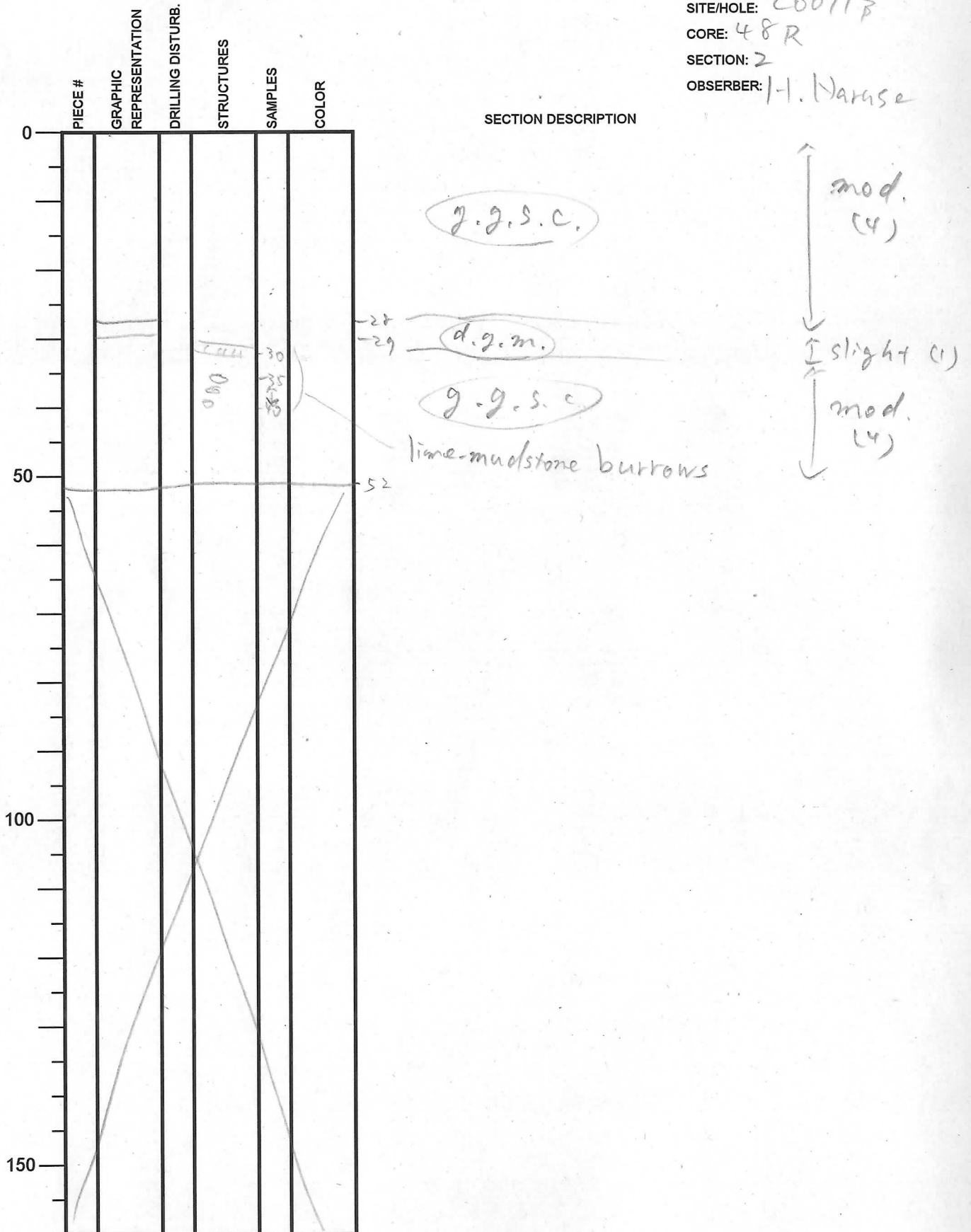
NO.
 DATE: 8/07/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 48R
 SECTION: 1
 OBSERVER: H. Naruse



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/18/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 48R
 SECTION: 2
 OBSERVER: H. Narise



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/18/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 48R
 SECTION: 4
 OBSERVER: H. Naruse

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
50					
100					
150					

SECTION DESCRIPTION

(d.g.m.)

17 - sharp b. g.g.s.c.
 19 - grad. b. g.g.s.c.

(d.g.m.)

56 - sharp b. g.g.s.c.
 58 - grad. b. g.g.s.c.

69 end (d.g.m.)

↑ slight (1)

↑ mod (4)

↑ slight (2)

↑ mod. (4)

↑ slight (1)

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/18/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 48R
 SECTION: 5
 OBSERVER: H. Naruse

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50				↑		
100						
150				↓		

SECTION DESCRIPTION

drilling "conglomerate"

normal grading from pebble-size to granule-size

inverse grading to fine pebbles

Integrated Ocean Drilling Program Visual Core Description

NO.

DATE: 9/19/20

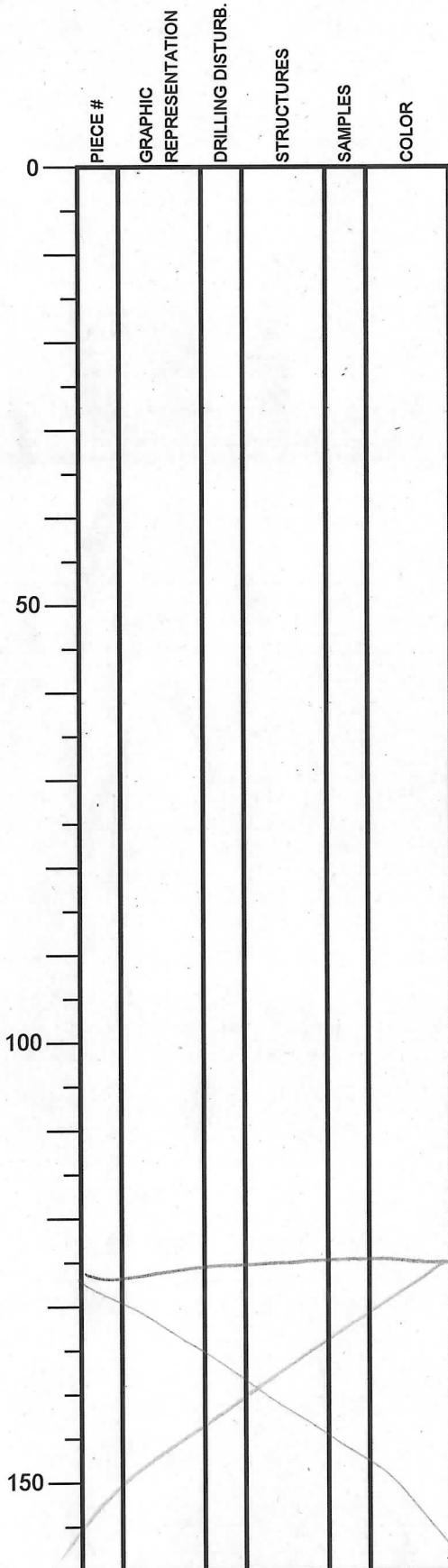
EXP.: 322

SITE/HOLE: C0011B

CORE: 48R

SECTION: 6

OBSERVER: H. Naruse



SECTION DESCRIPTION

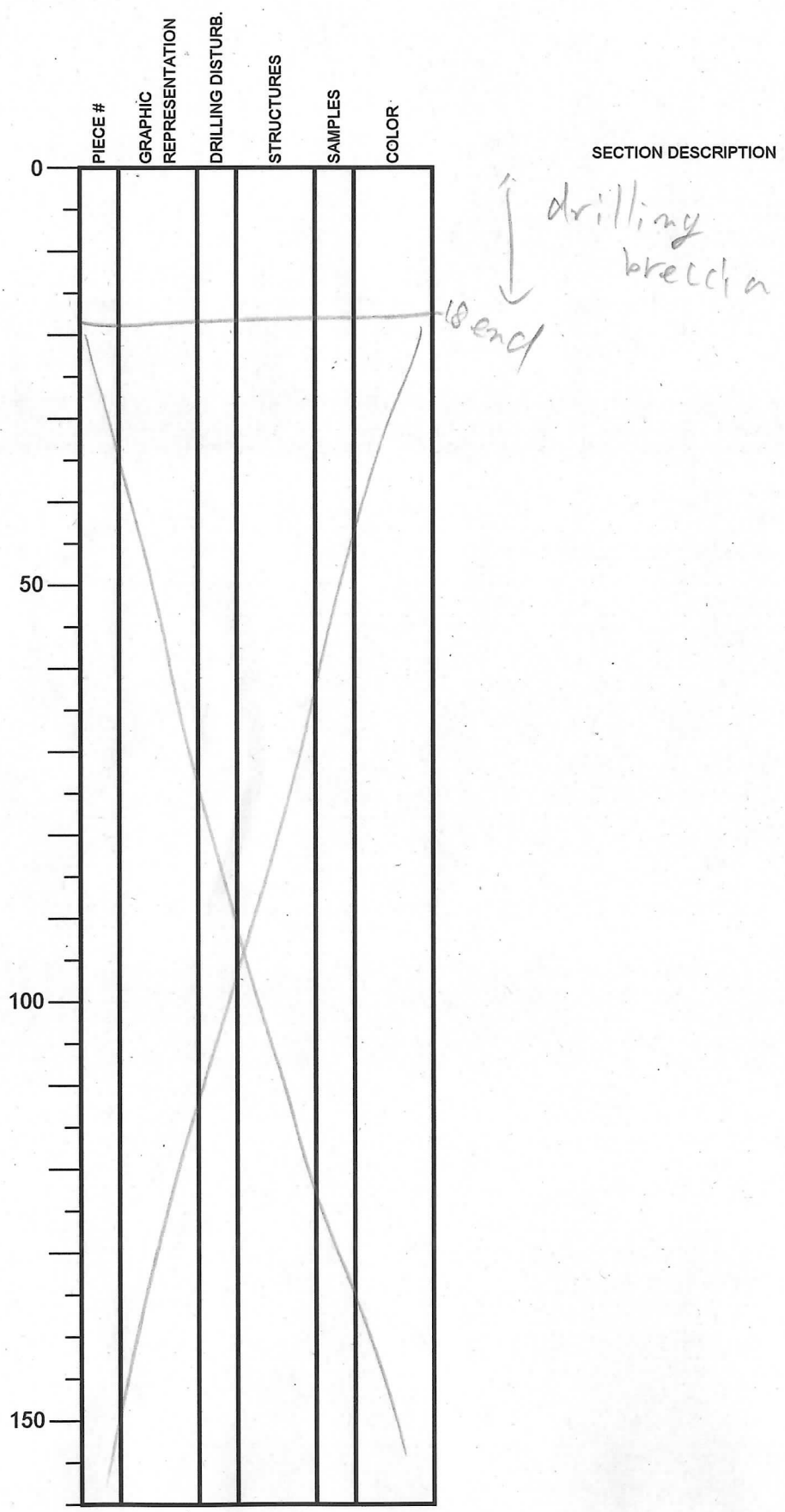
drilling breccia
w/ mud matrix

128

Integrated Ocean Drilling Program Visual Core Description

~~2009/9/18~~

NO.
DATE: 9/18/2009
EXP.: 322
SITE/HOLE: C00113
CORE: 48
SECTION: CC
OBSERVER: H. Naruse



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/18/2009
 EXP.: 322
 SITE/HOLE: COO11B
 CORE: 49R
 SECTION:
 OBSERVER: M. Haruse

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0	○				
10	○				
20	○				
30	○				
40	○				
50	○				
60	○				
70	○				
80	○				
90	○				
100	□				
110	□				
120	□				
130	□				
140	□				
150	□				

SECTION DESCRIPTION

↑
 drilling breccia composed mainly of dark-gray mudstone

91 - 93 - g.g.s.c.
 grad. b.

structureless dark-gray mudstone

mod. (1)
 slight (1)

150 end

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/18/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 49R
 SECTION: 2
 OBSERVER: T. H. Naruse

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50						
100						
150						

SECTION DESCRIPTION

↑
 drilling breccia
 mainly composed of
 dark gray mudstone

↓
 55cm

Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 9/18/09
EXP.: 322
SITE/HOLE: C0011B
CORE: 49R
SECTION: 3
OBSERVER: H. Naruse

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
50					
100					
150					

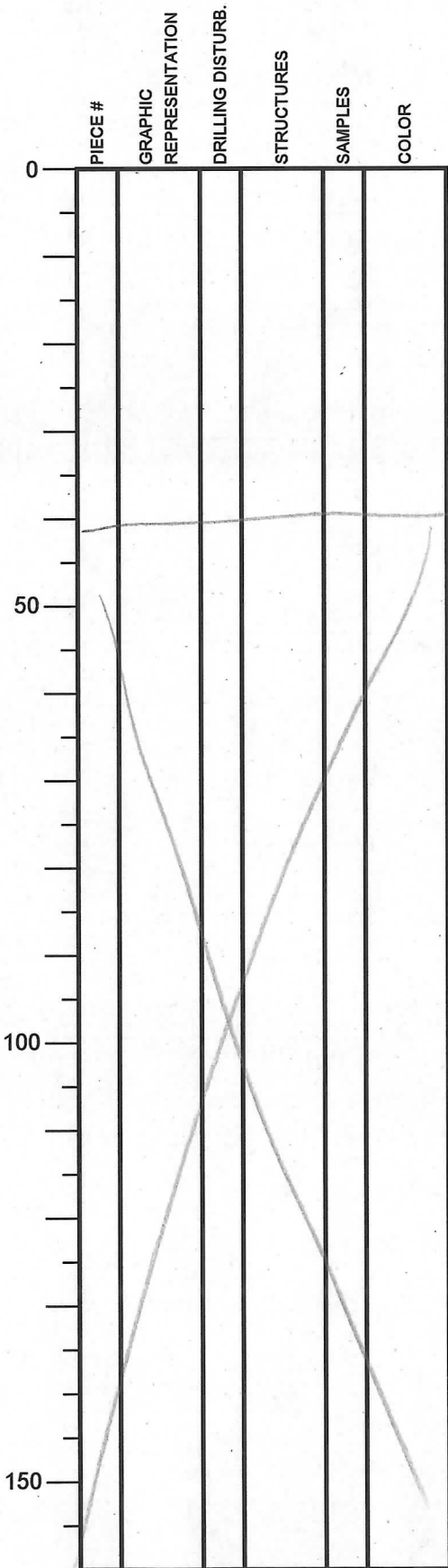
SECTION DESCRIPTION

drilling breccia
mainly composed of
d.g.m.

98 end

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 7/19/2009
 EXP.: 322
 SITE/HOLE: C0011R
 CORE: 49R
 SECTION: 4
 OBSERVER: H. Haruse



SECTION DESCRIPTION

↑
 drilling breccia
 at d.g.m.
 ↓

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: / / 20
 EXP.:
 SITE/HOLE: C0011
 CORE: 49R
 SECTION: 5
 OBSERVER: H. Naruse

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0	△				
50	○ ○ ○ ○ ○	△ △ △			
76	○ ○ ○ ○ ○				
87	○ ○ ○ ○ ○				
89	○ ○ ○ ○ ○				
105	○ ○ ○ ○ ○				
150	○ ○ ○ ○ ○				

SECTION DESCRIPTION

↑
 drilling breccia of d.g.m.
 ↓

43
 structureless d.g.m.] slight (L)
 52
 ↑

drilling breccia of d.g.m.
 ↓

76
 laminated d.g.m.
 87 - sharp b.
 89 - g.g.s.c.
 ↓

105
 drilling breccia of d.g.m.

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/18/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 49R
 SECTION: 6
 OBSERVER: H. Naruse

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50						
100						
150						

SECTION DESCRIPTION

↑
 drilling breccia
 of d.g.m.

↓
 3 lead

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/18/09
 EXP.: 322
 SITE/HOLE: C0011P
 CORE: 49R
 SECTION: 7
 OBSERVER: H. Naruse

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
50					
100					
150					

SECTION DESCRIPTION

drilling breccia
of d.g.m.

41

57

59

g.g.s.c.

d.g.m.
sharp b.

g.g.s.c.

83

grad. b.

structureless
d.g.m.

118

sharp b.

g.g.s.c.

144

grad. b.

150 end

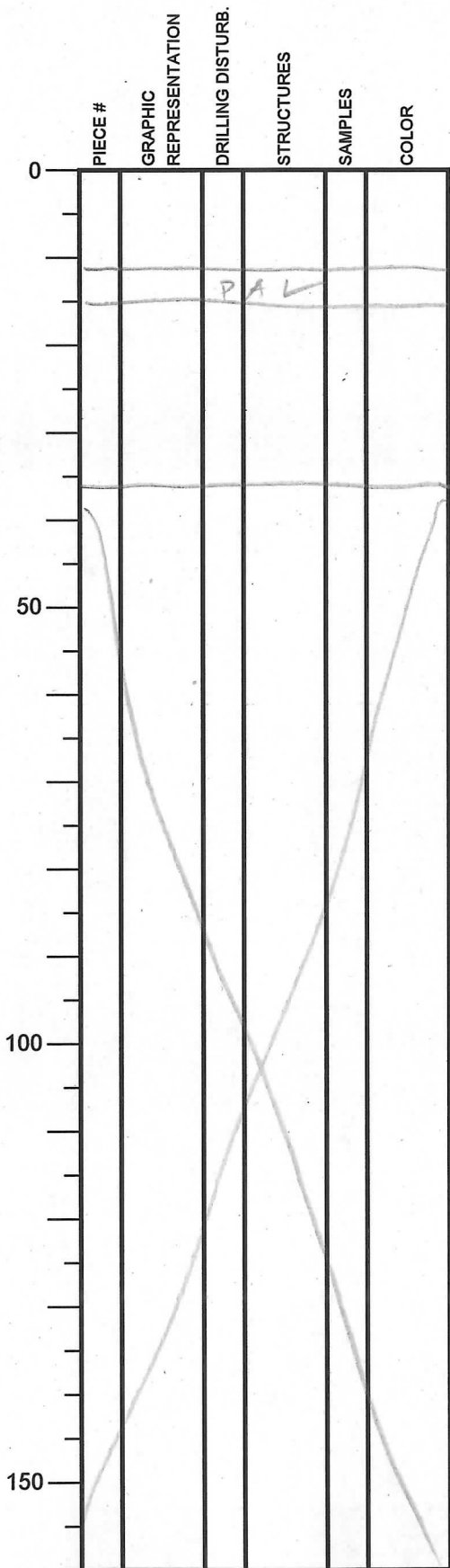
d.g.m.

↑
intense
drilling
disturb.
↓

↑
mod.
(4)
↓

Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 9/18/09
EXP.: 322
SITE/HOLE: C0011 B
CORE: 49R
SECTION: CC
OBSERVER: H. Naruse



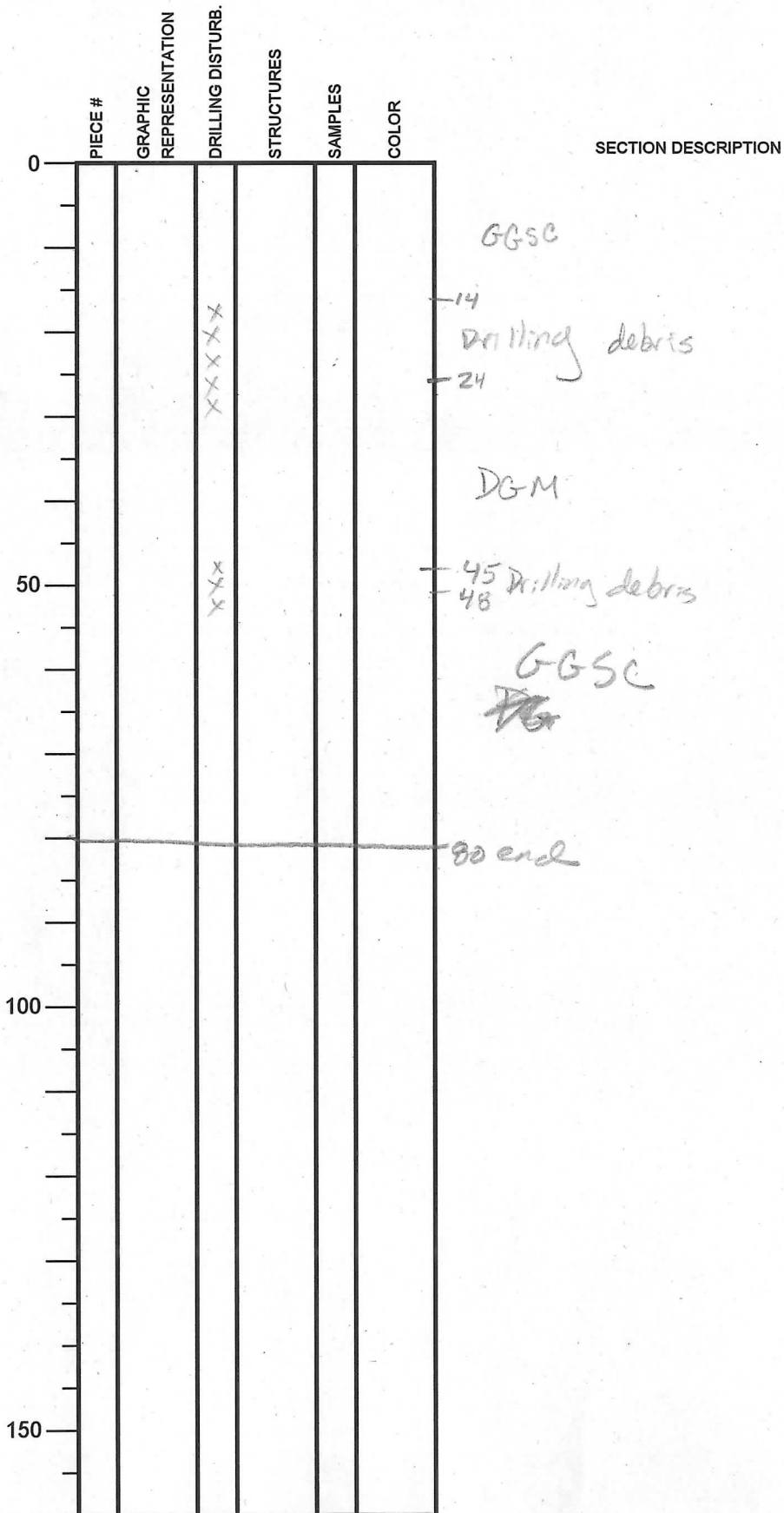
SECTION DESCRIPTION

drilling breccia
of g.g.s.c.

Integrated Ocean Drilling Program

Visual Core Description

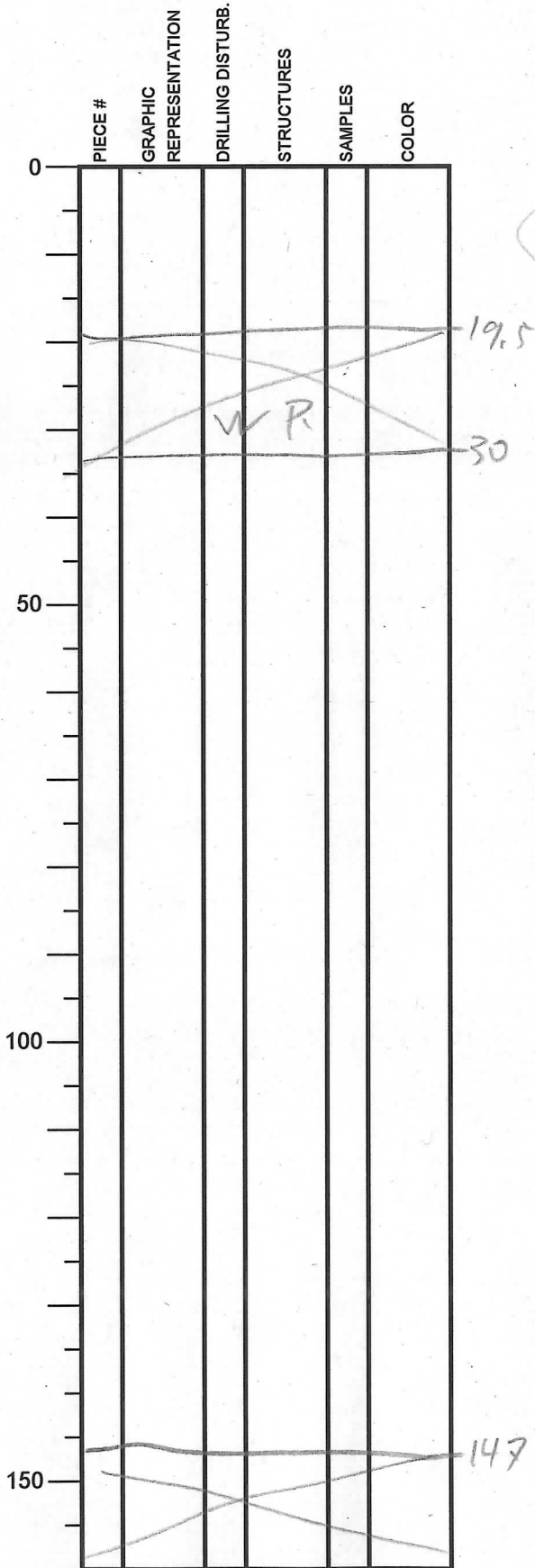
NO.
 DATE: 09/18/2009
 EXP.: 322
 SITE/HOLE: C00118
 CORE: 50
 SECTION: 1
 OBSERVER: RS



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 09/18/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 50
 SECTION: 2
 OBSERVER: RS



SECTION DESCRIPTION

green-gray silty claystone

mod. bio. (4)

drilling breccia composed of g.g.s.c.

mod. bio. (4)



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/18/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 50R
 SECTION: 3
 OBSERVER: H. Naruse

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0	(Hand-drawn circles representing breccia)				
50	(Hand-drawn circles representing breccia)		(Hand-drawn burrow symbol)	-27 -31	
100	(Hand-drawn circles representing breccia)			-59	
150	(Hand-drawn circles representing breccia)			-79	

SECTION DESCRIPTION

drilling breccia
 of g.g.s.c. with mud matrix

-27
-31
Time-mudstone burrows

g.g.s.c.

-59
 drilling breccia of g.g.s.c.
 w/ mud matrix

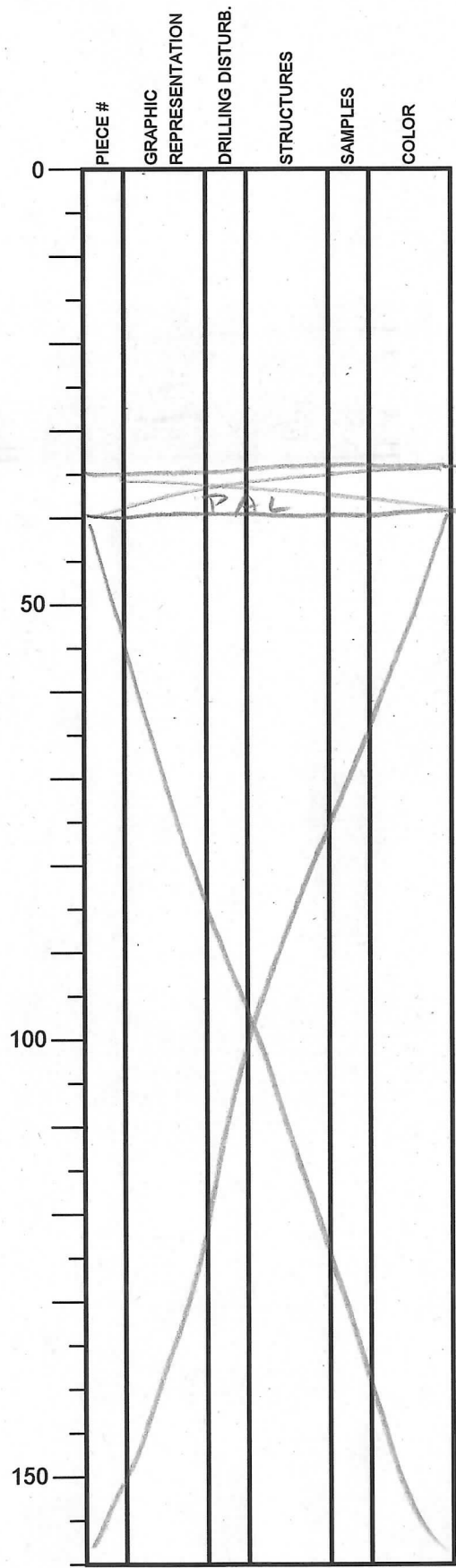
mod. bio. (9)



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/18/09
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 50R
 SECTION: CC
 OBSERVER: H. Naruse



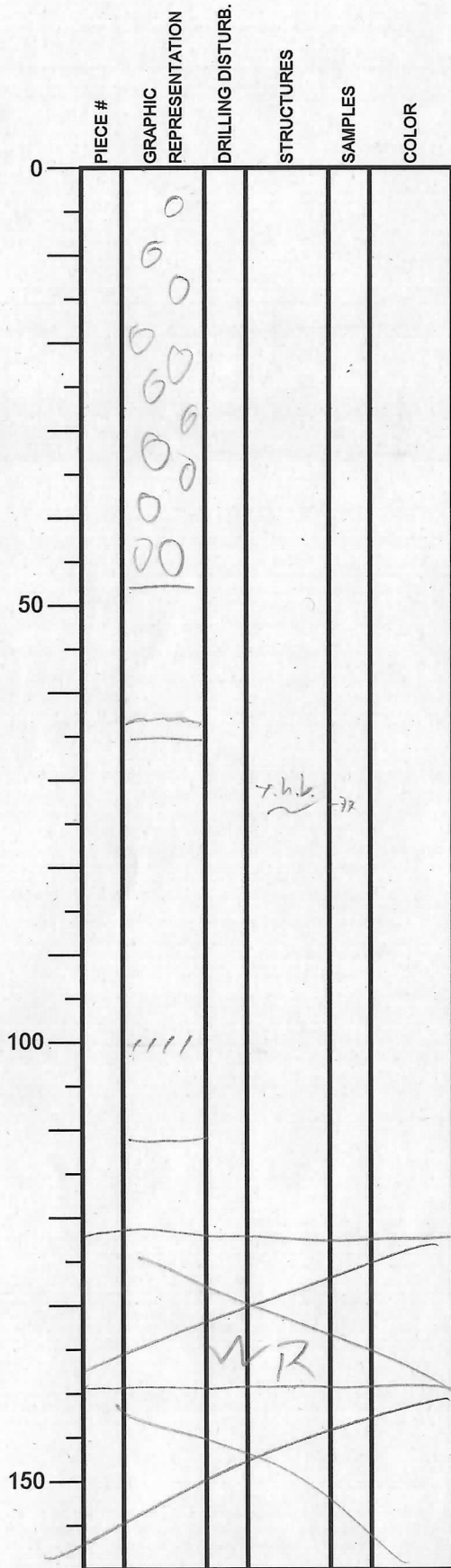
SECTION DESCRIPTION

drilling breccia
 of g.g.s.c.

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/29/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 51R
 SECTION: /
 OBSERVER: H. Naruse



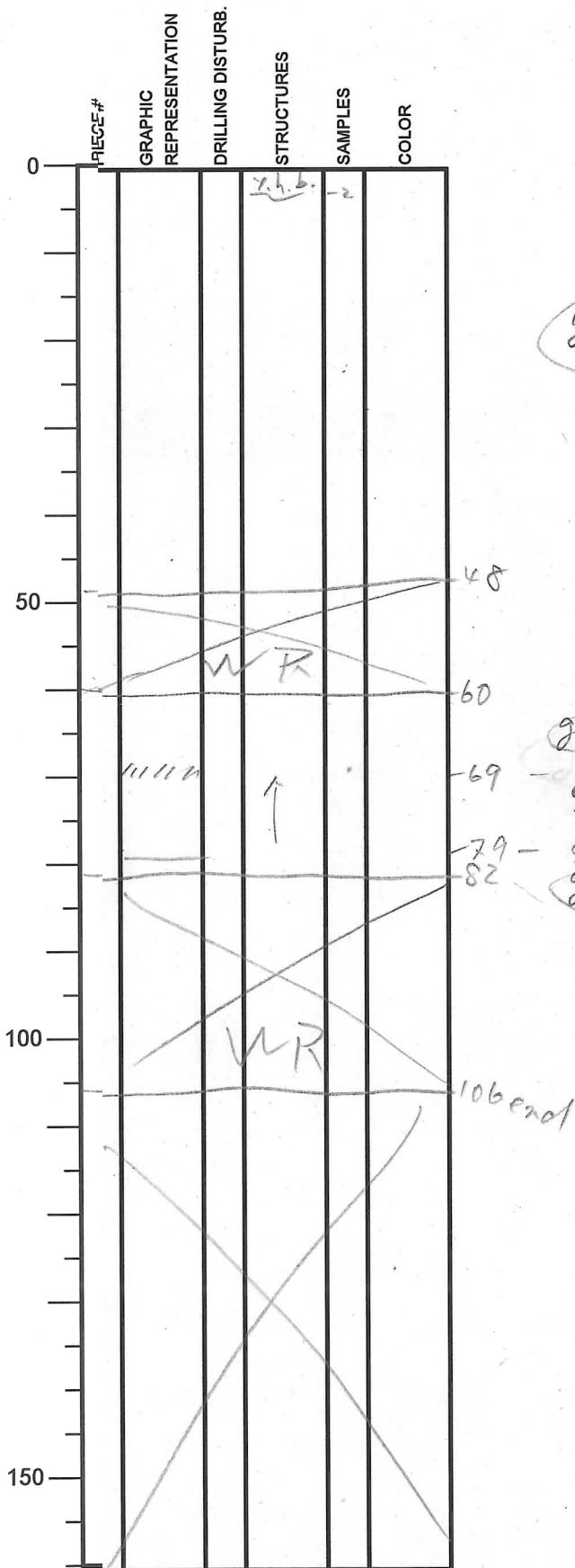
SECTION DESCRIPTION

drilling breccia
of g.g.s.c. and d.g.m.

48
 g.g.s.c.
 67
 65) - bioturbated deformation str.?) dark silty band
 Heavy bioturb (5)
 100 grad. b. light green-gray "mudstone"
 111 - sharp b. slight (1)
 g.g.s.c.
 122.5
 WR
 139 end

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/20/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 51R
 SECTION: 2
 OBSERVER: H. Marisa



SECTION DESCRIPTION

g.g.s.c.

Heavy
bioturb.
(5)

g.g.s.c.

grad. b.
normally graded

dark bluish gray
mudstone

slight
(1)

g.g.s.c.

sharp b.

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/20/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 51R
 SECTION: 3
 OBSERVER: H. Naruse

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
25					
36					
50					
79				y.h.b. 67	
100					
150					

SECTION DESCRIPTION

g.g.s.c.

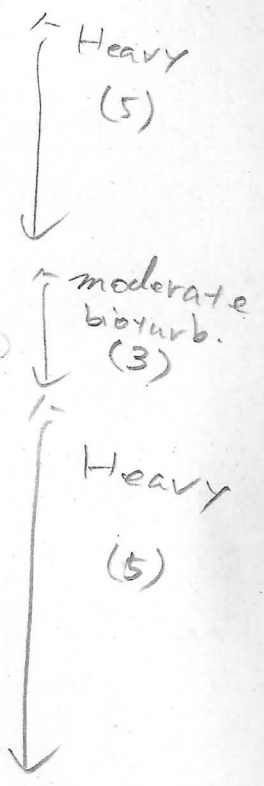
-25 - grad. b. -

yellow-light gray lime-mudstone

-36 - grad. b. -

g.g.s.c.

79 end.



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/20/20 09
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 5/R
 SECTION: 5
 OBSERVER: H. Haruse

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
50					
100					
150					

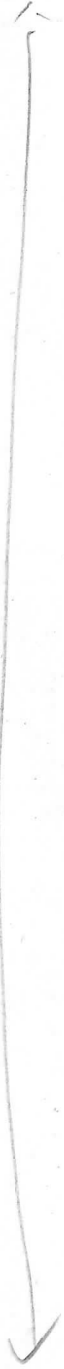
SECTION DESCRIPTION

g.g.s.c

116
 120

) - lime-mudstone burrows

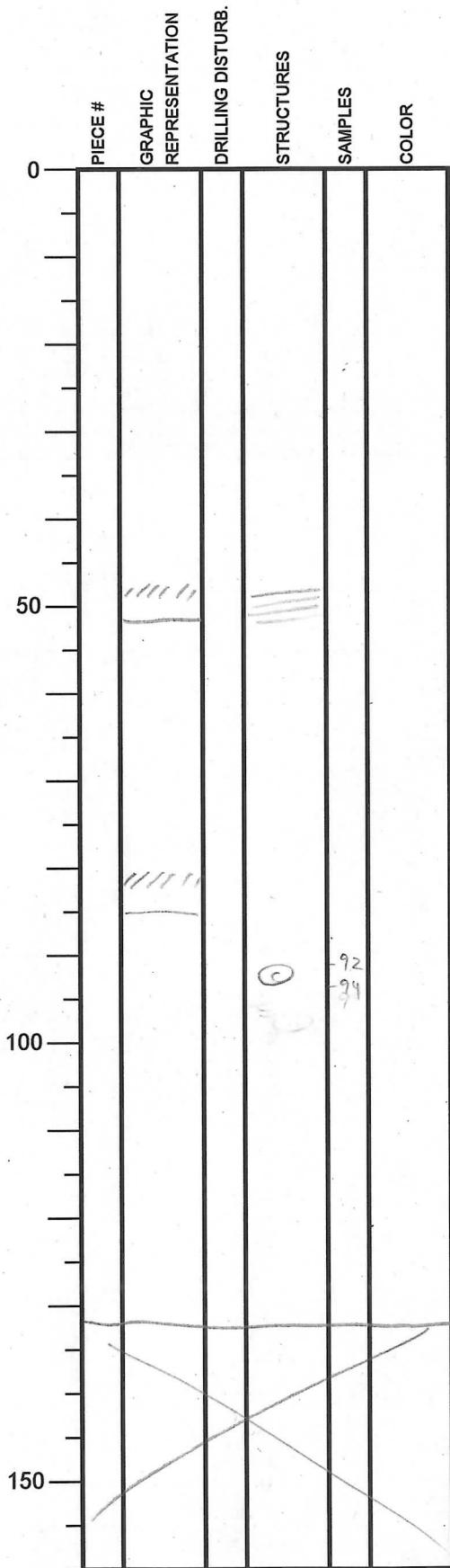
142 end



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/20/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 51R
 SECTION: 6
 OBSERVER: H. Naruse



SECTION DESCRIPTION

g.g.s.c.

49 — grad. b.
 52 — laminated green-gray "mudstone"
 — sharp b.

g.g.s.c.

82 — grad. b.
 85 — laminated light gray-green "mudstone"
 — sharp b.
 lime-mudstone burrow

g.g.s.c.

diffuse lamination occur

142 end

Heavy
(5)

slight
(1)

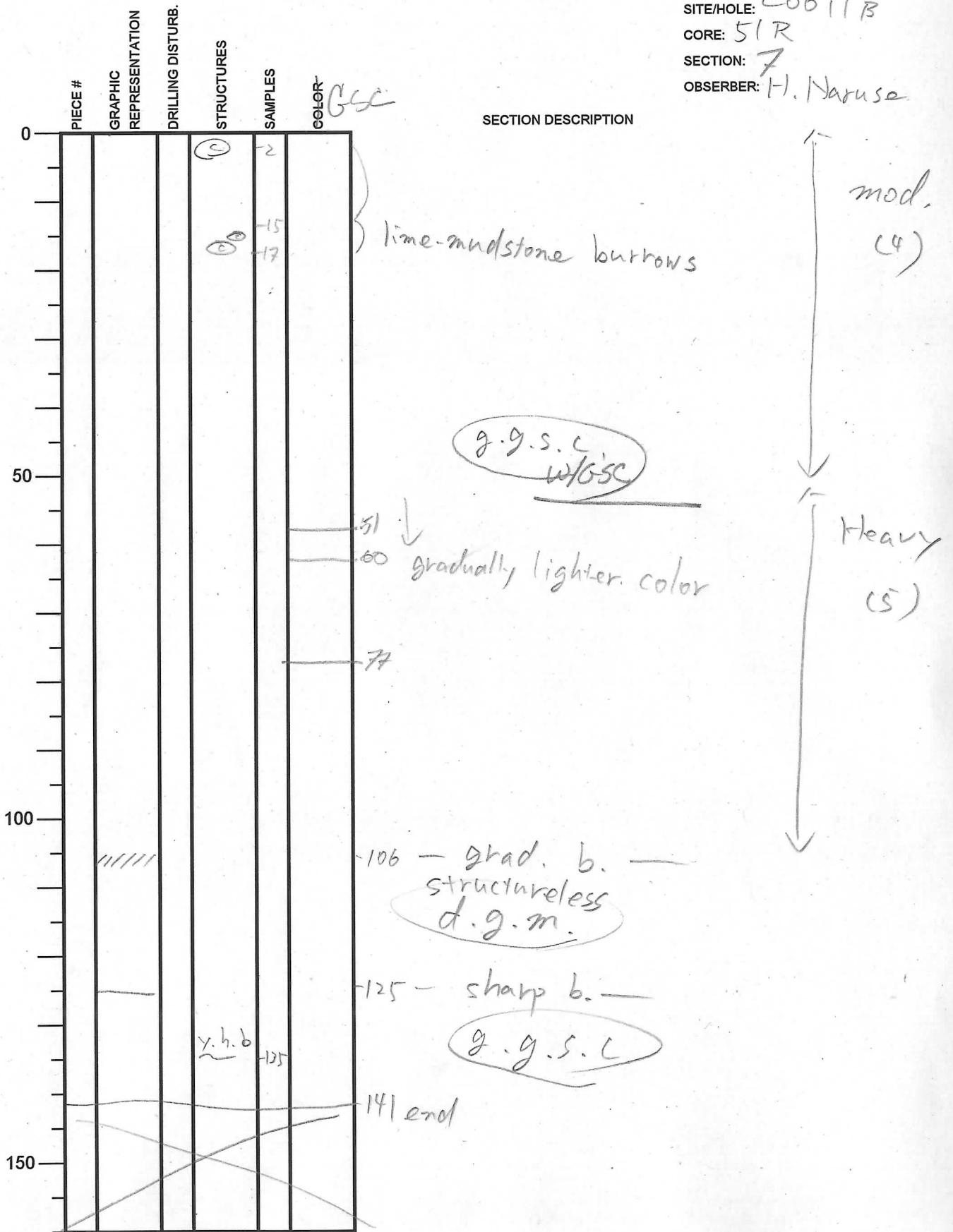
Mod.
(4)

slight
(1)

Mod.
(4)

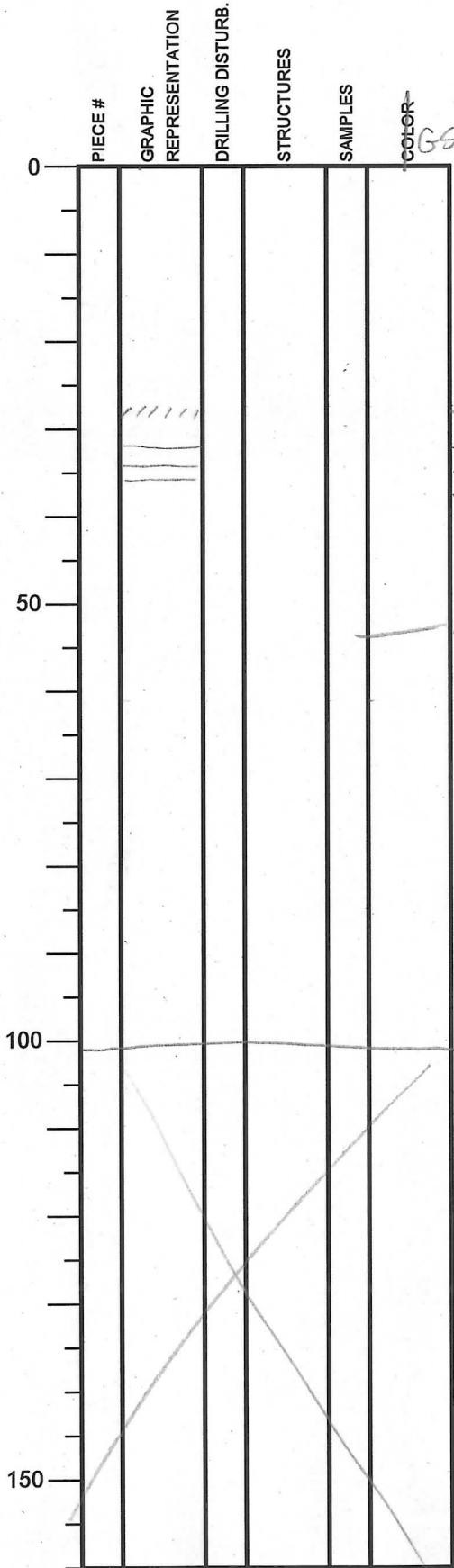
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/20/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 51R
 SECTION: 7
 OBSERVER: H. Naruse



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/20/09
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 51R
 SECTION: 8
 OBSERVER: H. Naruse



SECTION DESCRIPTION

g.g.s.c.

- 28 - grad. b.
- 32 - sharp b.
- 34 - sharp b.
- 35 - sharp b.

d.g.m.

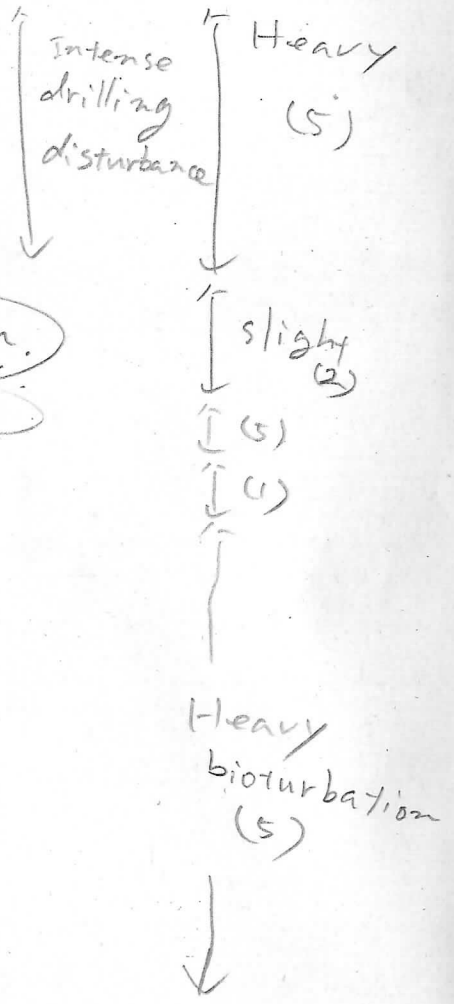
g.g.s.c.

d.g.m.

52

g.g.s.c.

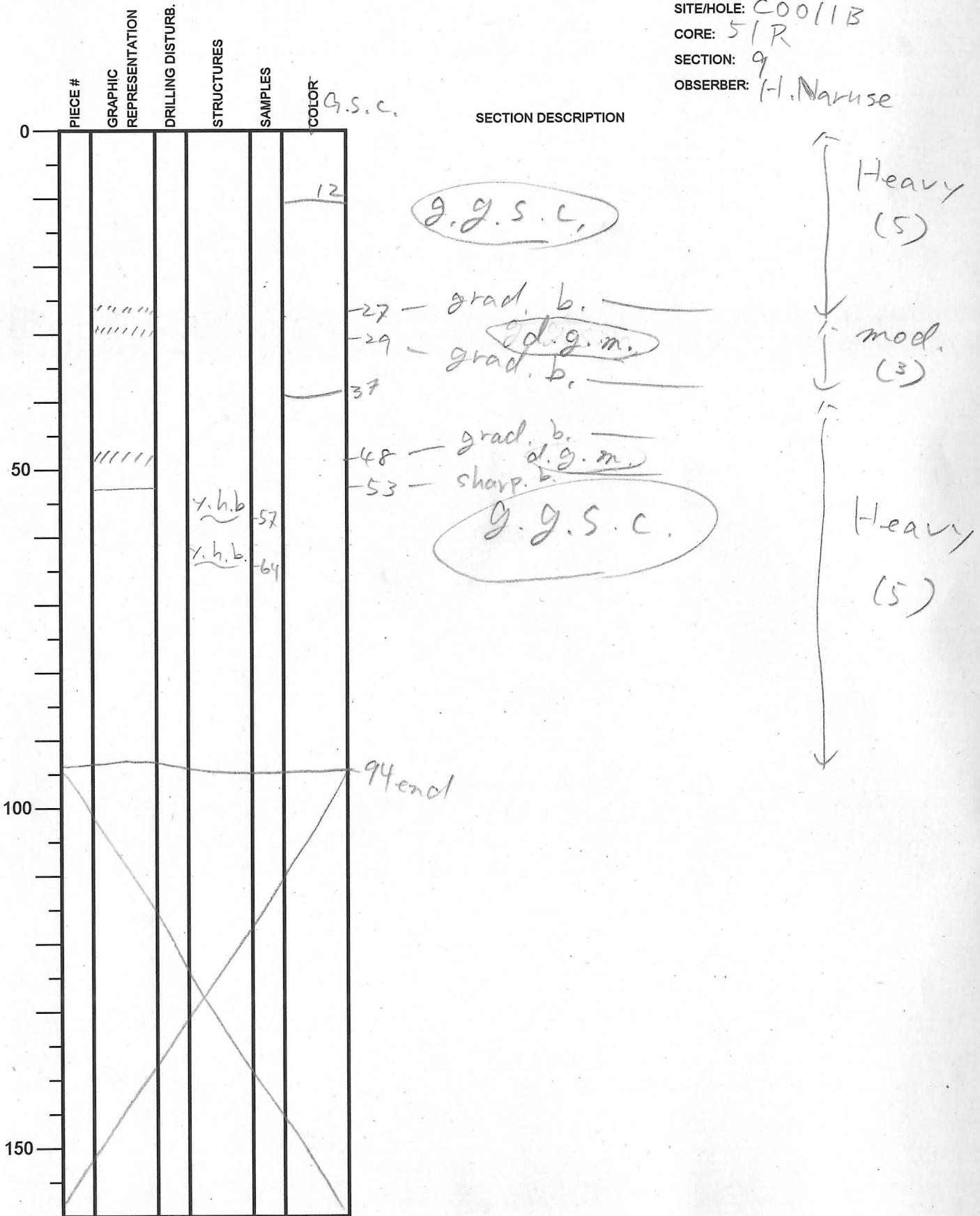
101 end



Integrated Ocean Drilling Program

Visual Core Description

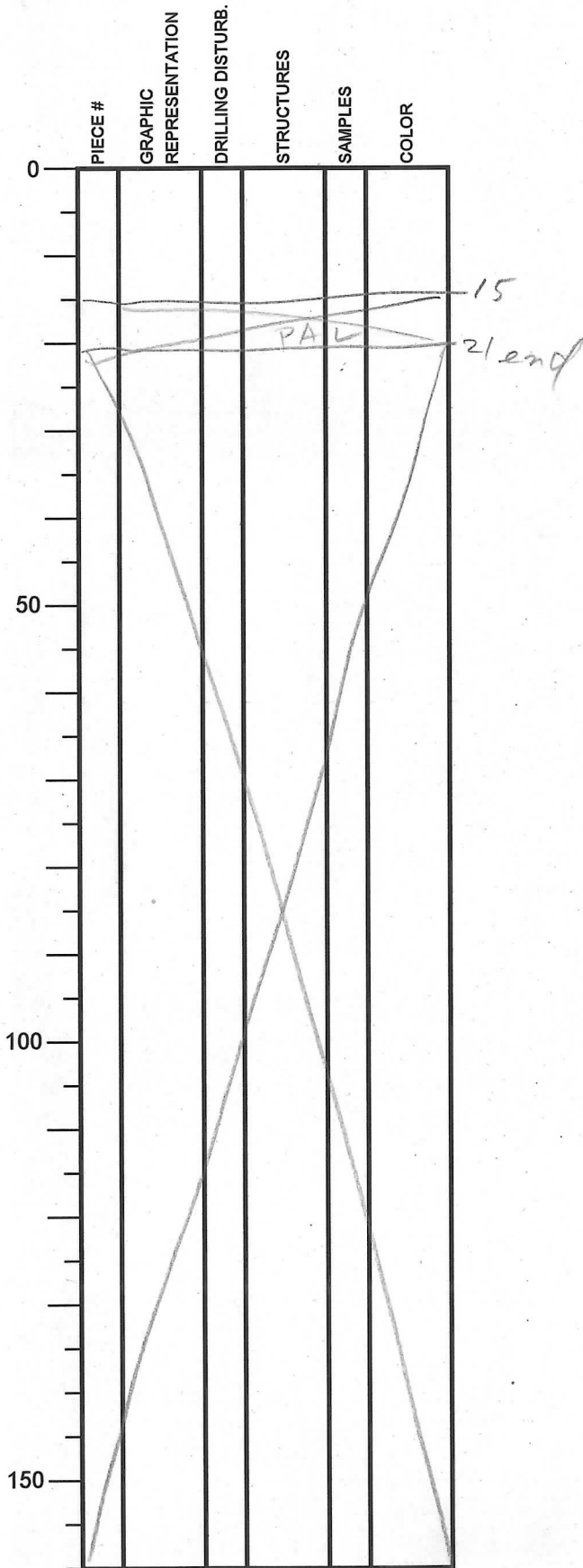
NO.
 DATE: 9/20/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 51R
 SECTION: 9
 OBSERVER: H. Naruse



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/24/09
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 51R
 SECTION: CC
 OBSERVER: H. Naruse



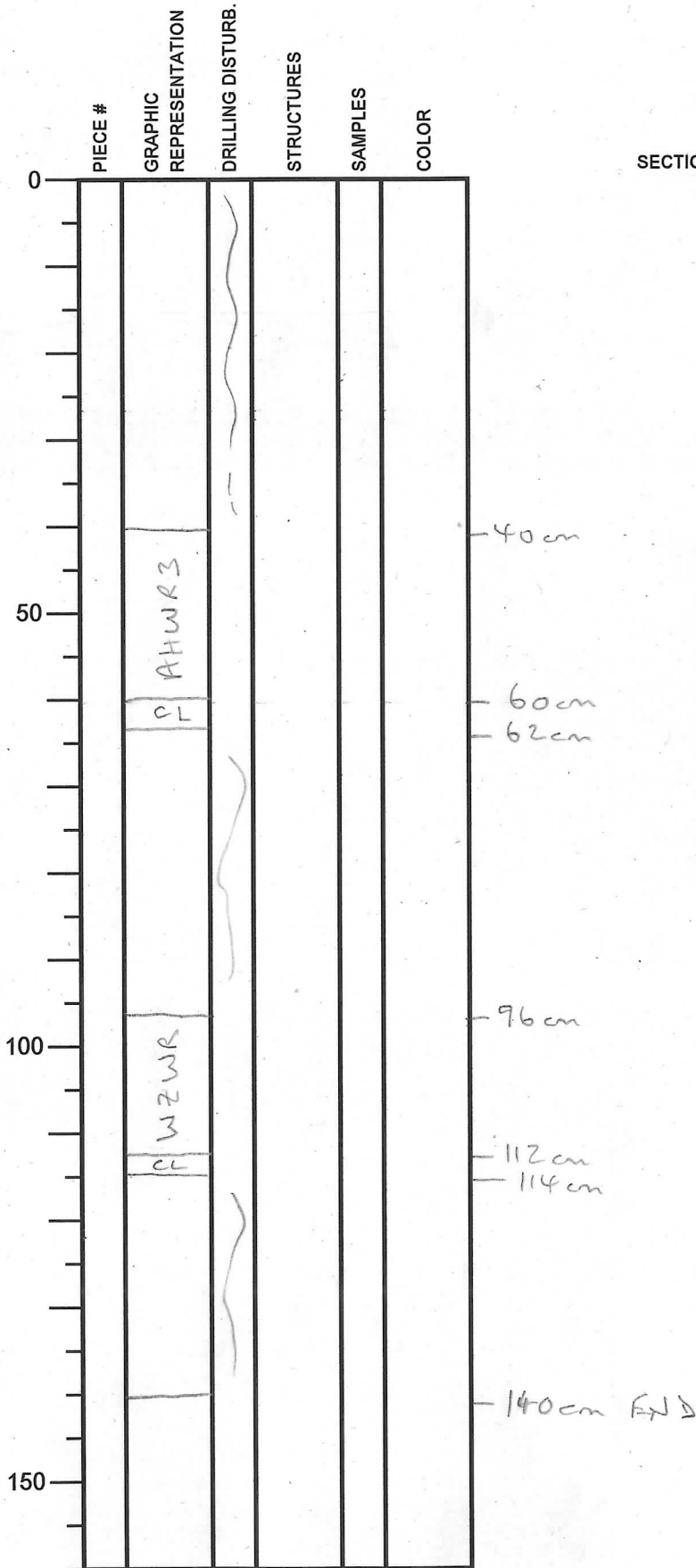
SECTION DESCRIPTION

g.g.s.c.

↑ Heavy
 ↓ (5)

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 2/09/2009
 EXP.: 322
 SITE/HOLE: C00118
 CORE: 52
 SECTION: 1
 OBSERVER: ktp/hk



SECTION DESCRIPTION

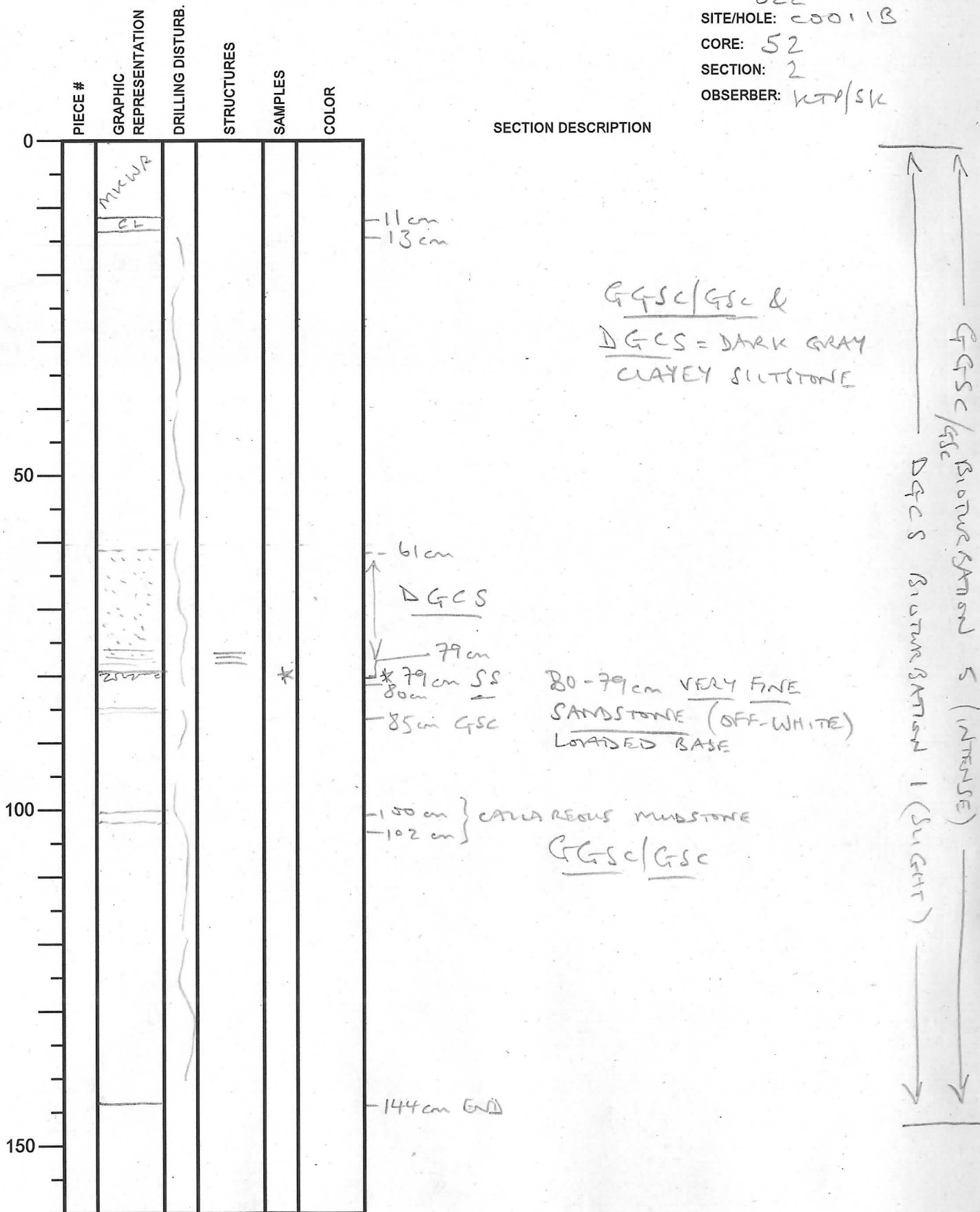
GGSC/GSC
 (no clayey siltstone
 turbidites)

GGSC/GSC BIOTURBATION 5 (INTENSE)

Integrated Ocean Drilling Program

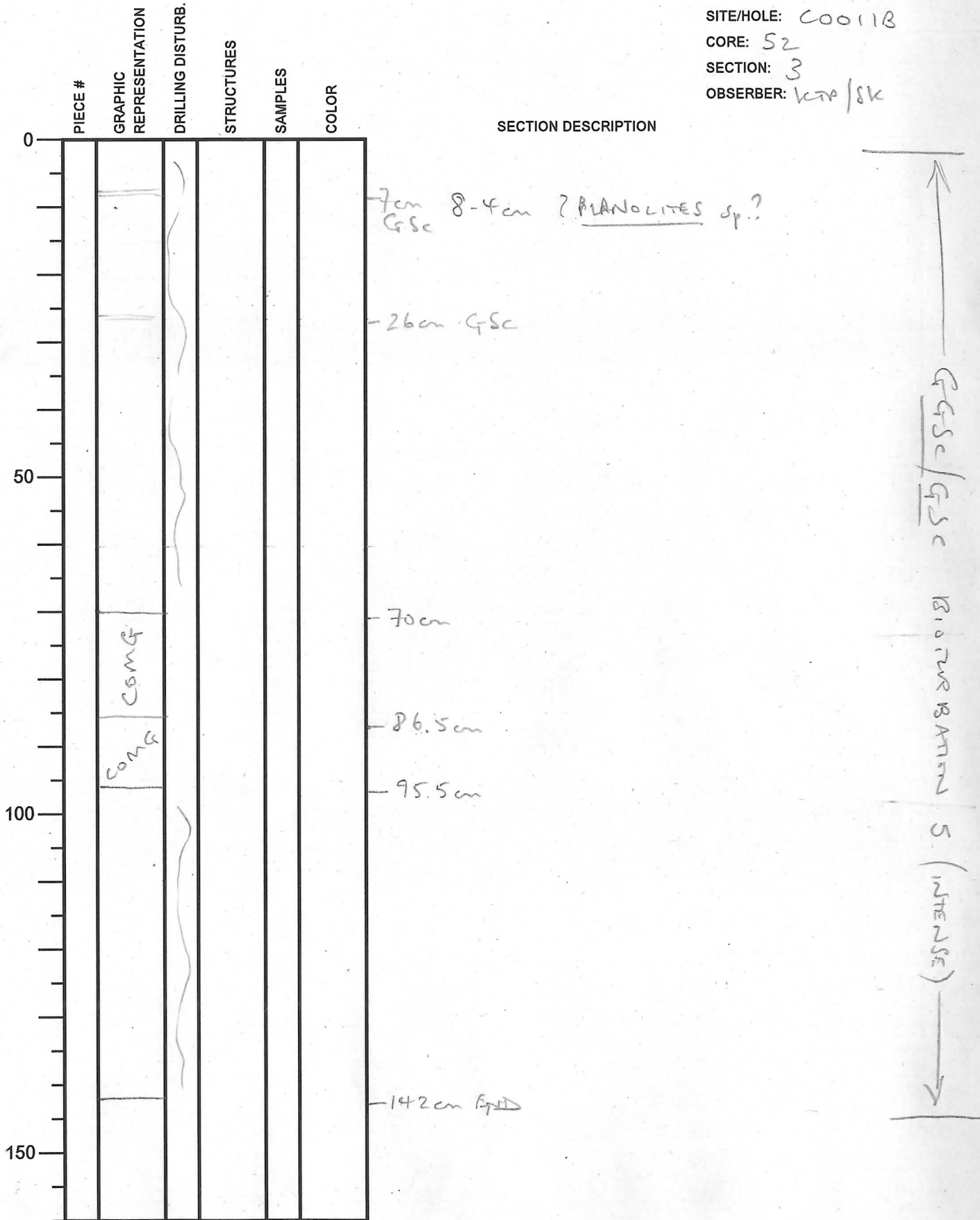
Visual Core Description

NO.
 DATE: 2/10/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 52
 SECTION: 2
 OBSERVER: KTR/SK



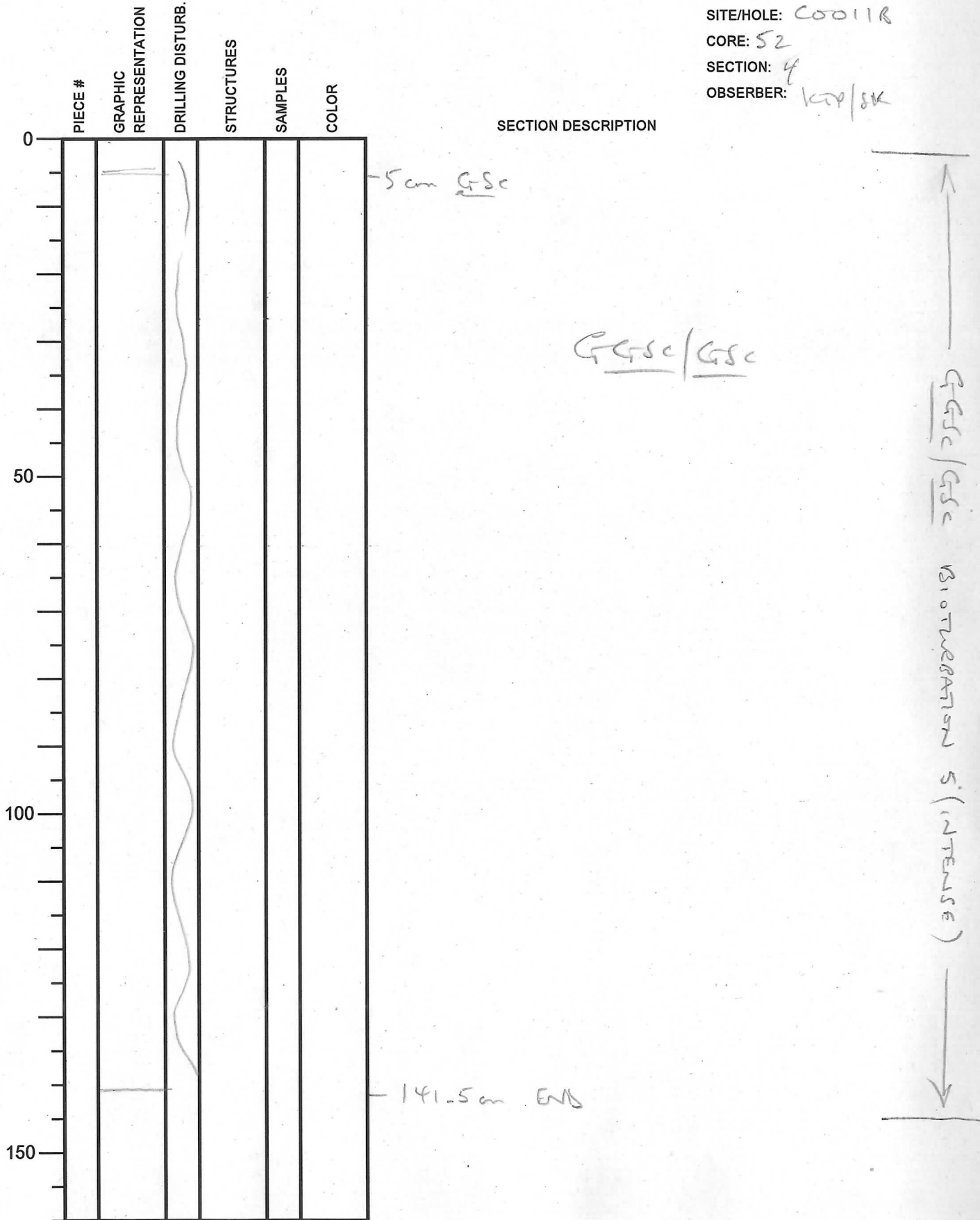
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 2/18/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 52
 SECTION: 3
 OBSERVER: KTA/SK



Integrated Ocean Drilling Program Visual Core Description

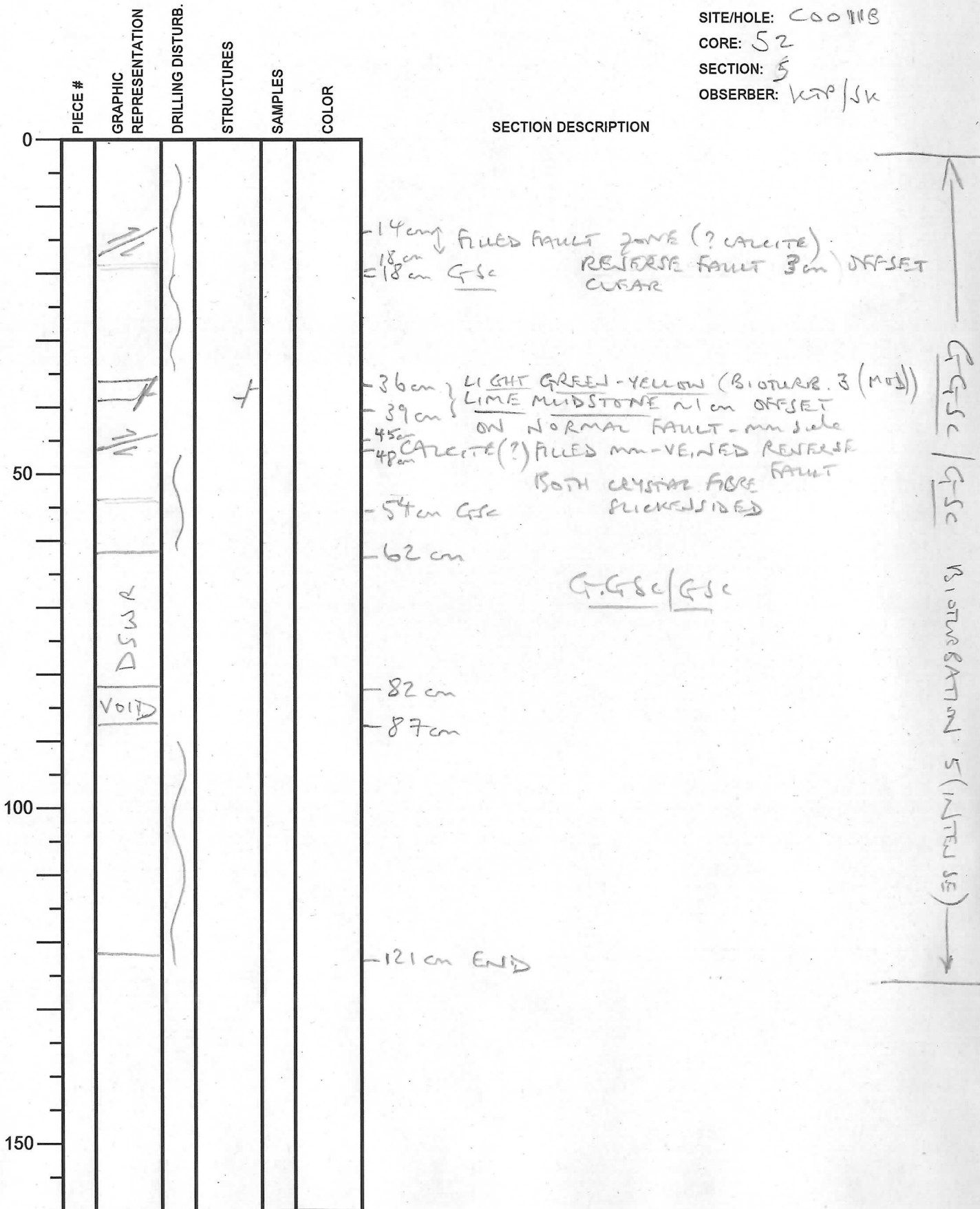
NO.
 DATE: 2/15/2009
 EXP.: 322
 SITE/HOLE: COO11R
 CORE: 52
 SECTION: 4
 OBSERVER: KAP/SK



Integrated Ocean Drilling Program

Visual Core Description

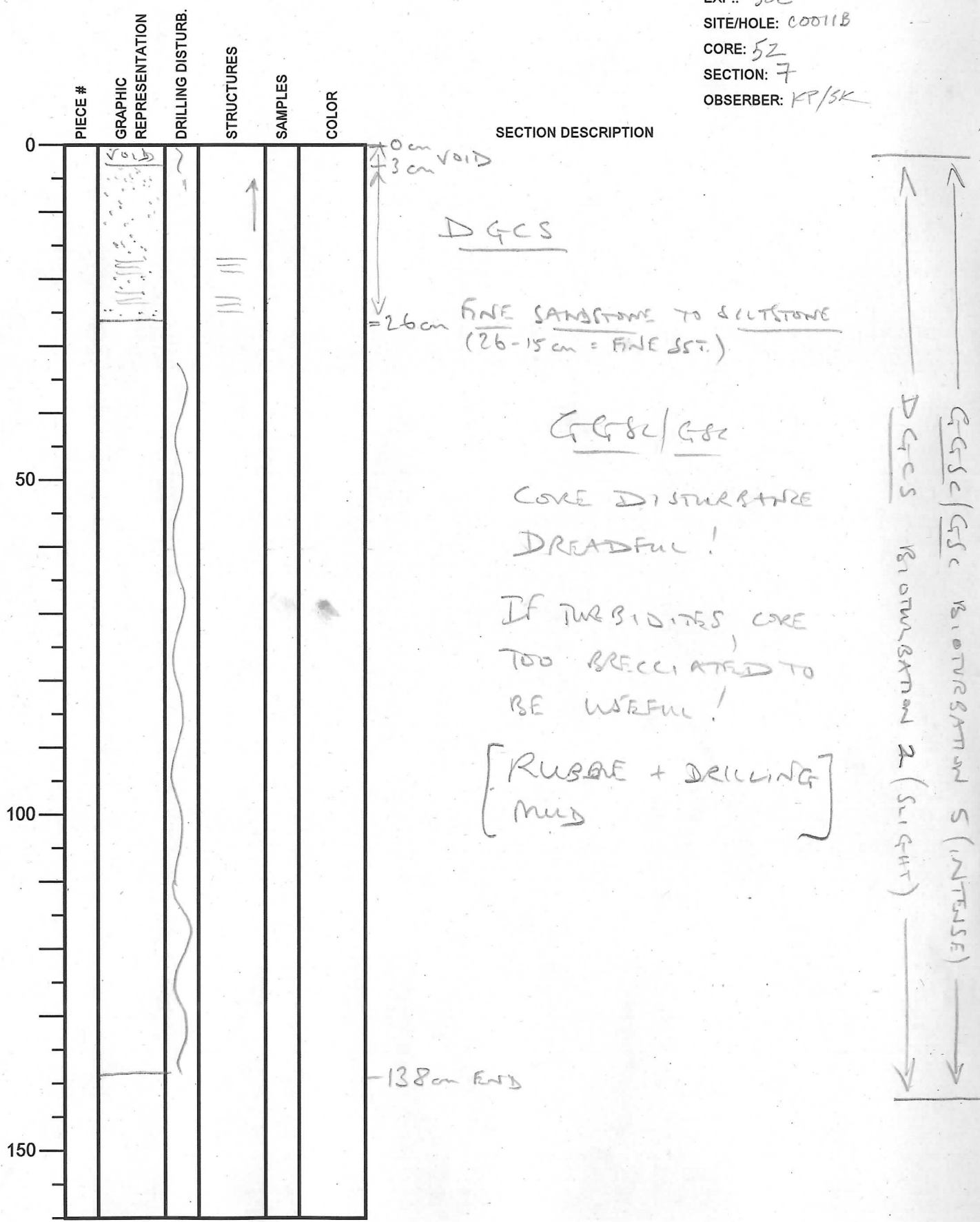
NO.
 DATE: 2/16/91 20 09
 EXP.: 322
 SITE/HOLE: C00118
 CORE: 52
 SECTION: 5
 OBSERVER: WJP/SK



Integrated Ocean Drilling Program

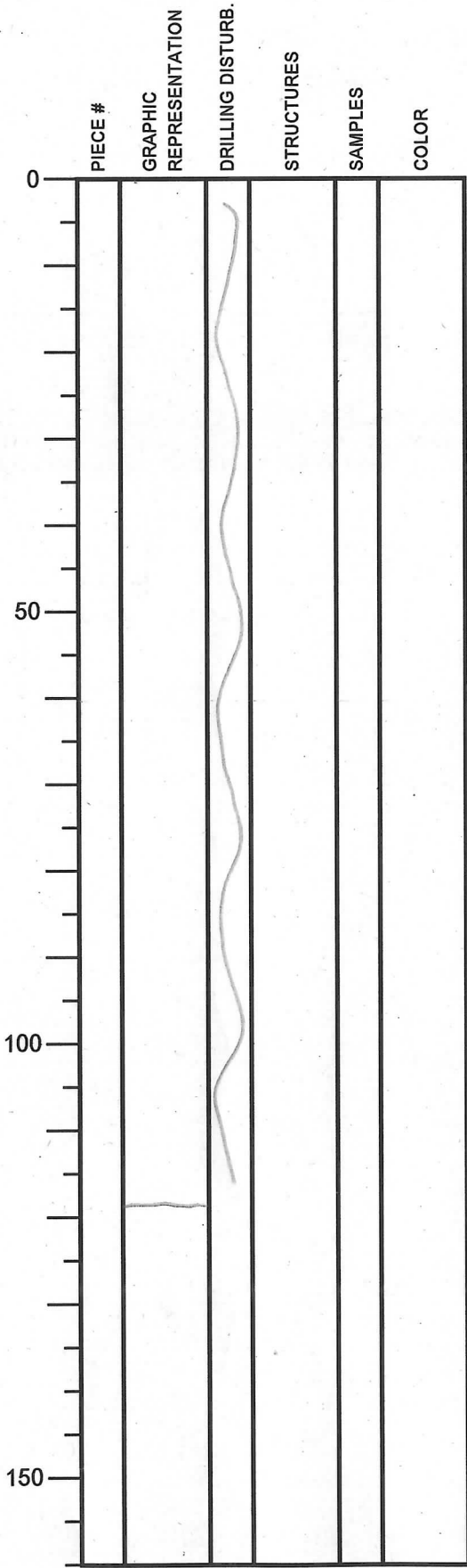
Visual Core Description

NO.
 DATE: 09/21/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 52
 SECTION: 7
 OBSERVER: KP/SK



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 2/09/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 52
 SECTION: 8
 OBSERVER: KDP/SK



SECTION DESCRIPTION

GGS c/GSc AS
RUBBER ENCASED
IN DRILLER'S MUD

 !!
 BIOTURBATION S (INTENSE)

119 cm, END

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 21 / 09 / 20 09
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 52
 SECTION: CC
 OBSERVER:

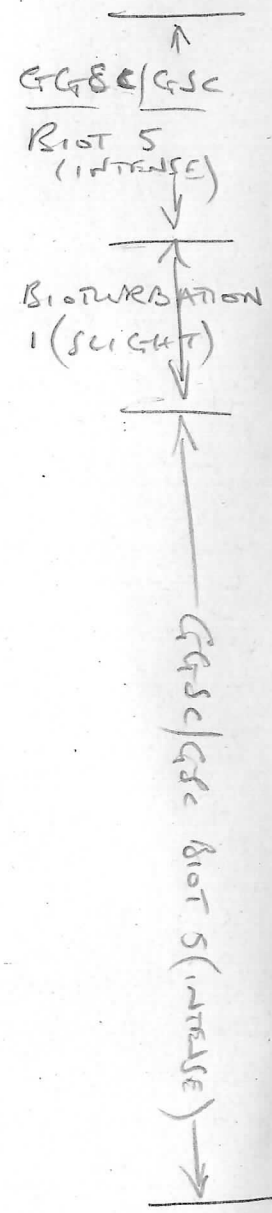
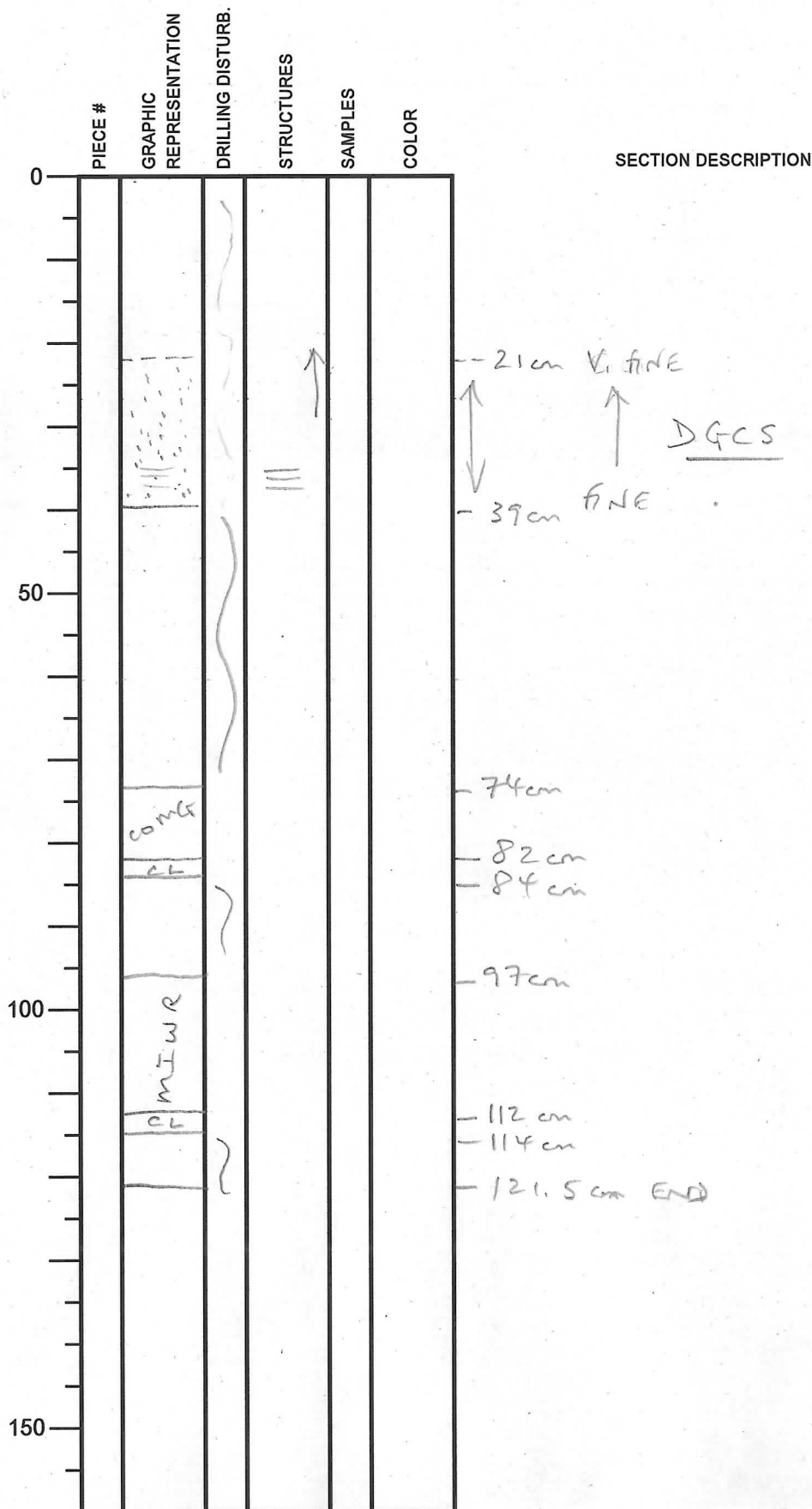
	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0			~			
50		PAZ				- 15.5 cm - 20.5 cm
100						
150						

SECTION DESCRIPTION

CGSC/GSC RUBBLE!
 BIOT. 5 (INTENSE)

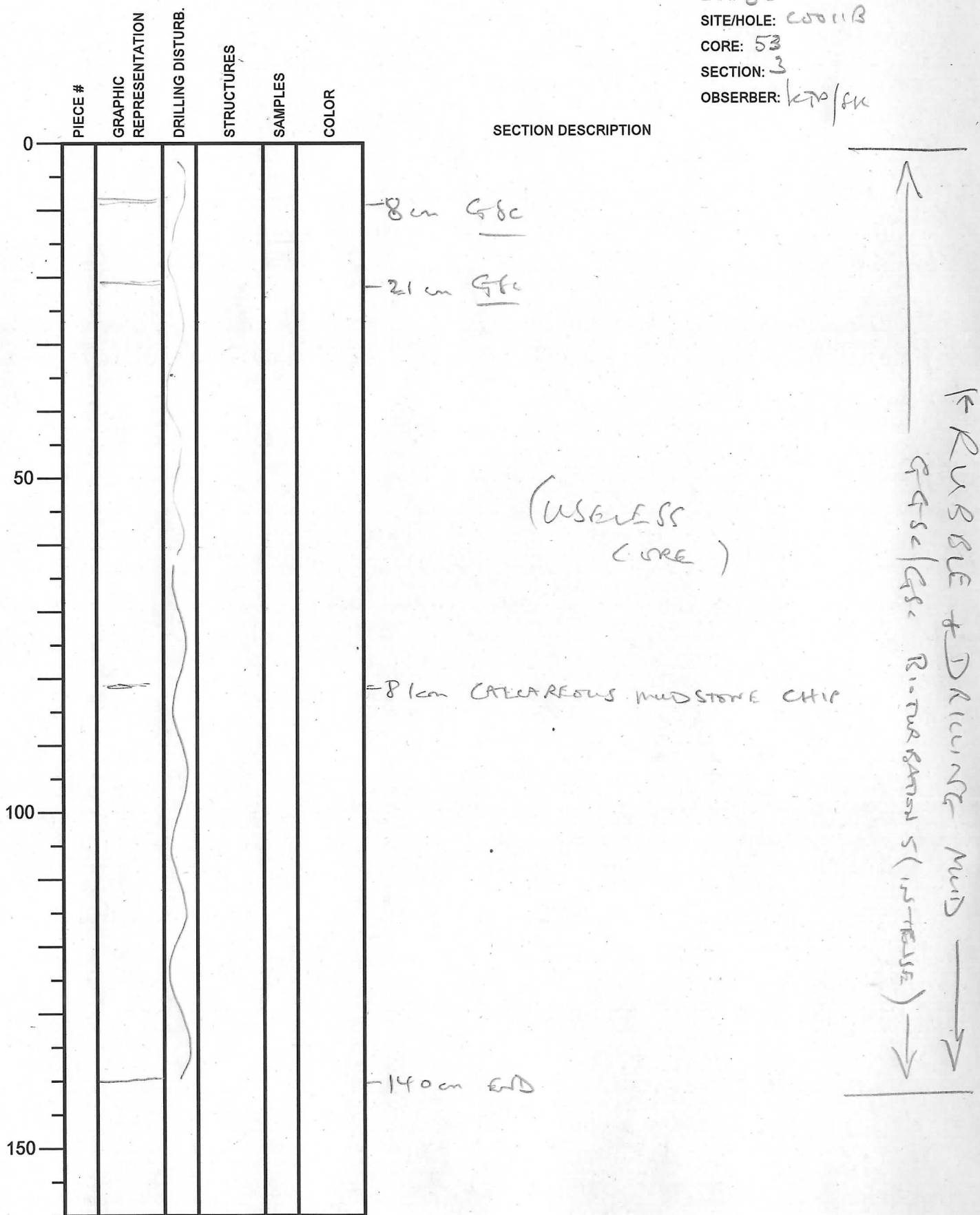
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 1/19/2007
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 53
 SECTION: 1
 OBSERVER: KAP/CK



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 21/07/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 53
 SECTION: 3
 OBSERVER: ktp/sk



Integrated Ocean Drilling Program Visual Core Description

NO.

DATE: 2/09/2009

EXP.: 322

SITE/HOLE: C5011B

CORE: 53

SECTION: 4

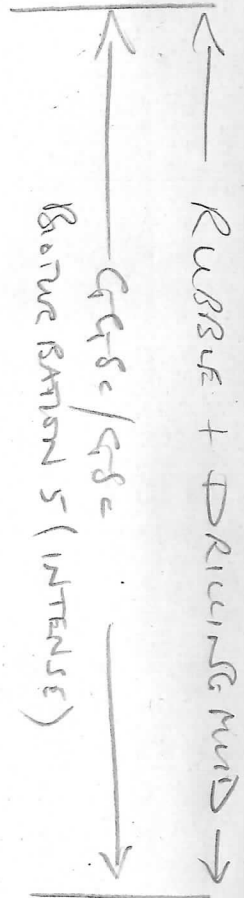
OBSERVER: KJA/SK

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50			~			
100						
150						

SECTION DESCRIPTION

USELESS
CORE

-91cm END



Integrated Ocean Drilling Program Visual Core Description

NO.

DATE: 2/29/20 09

EXP.: 322

SITE/HOLE: COO11B

CORE: 53

SECTION: 5

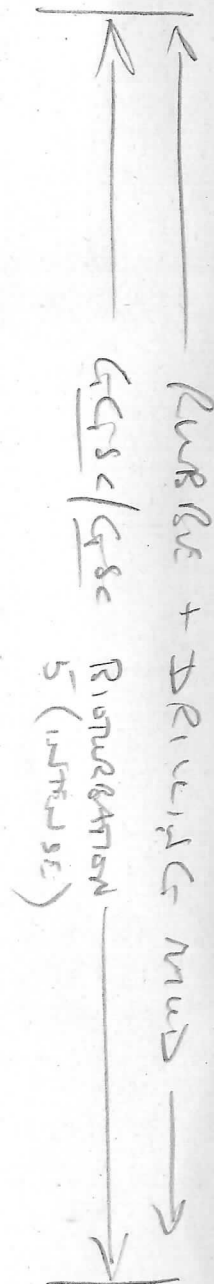
OBSERVER: KTR/SJK

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
50					
100					
150					

SECTION DESCRIPTION

(USELESS
CORE)

-129 cm END



Integrated Ocean Drilling Program

Visual Core Description

NO.

DATE: 2/19/2009

EXP.: 322

SITE/HOLE: C00113

CORE: 53

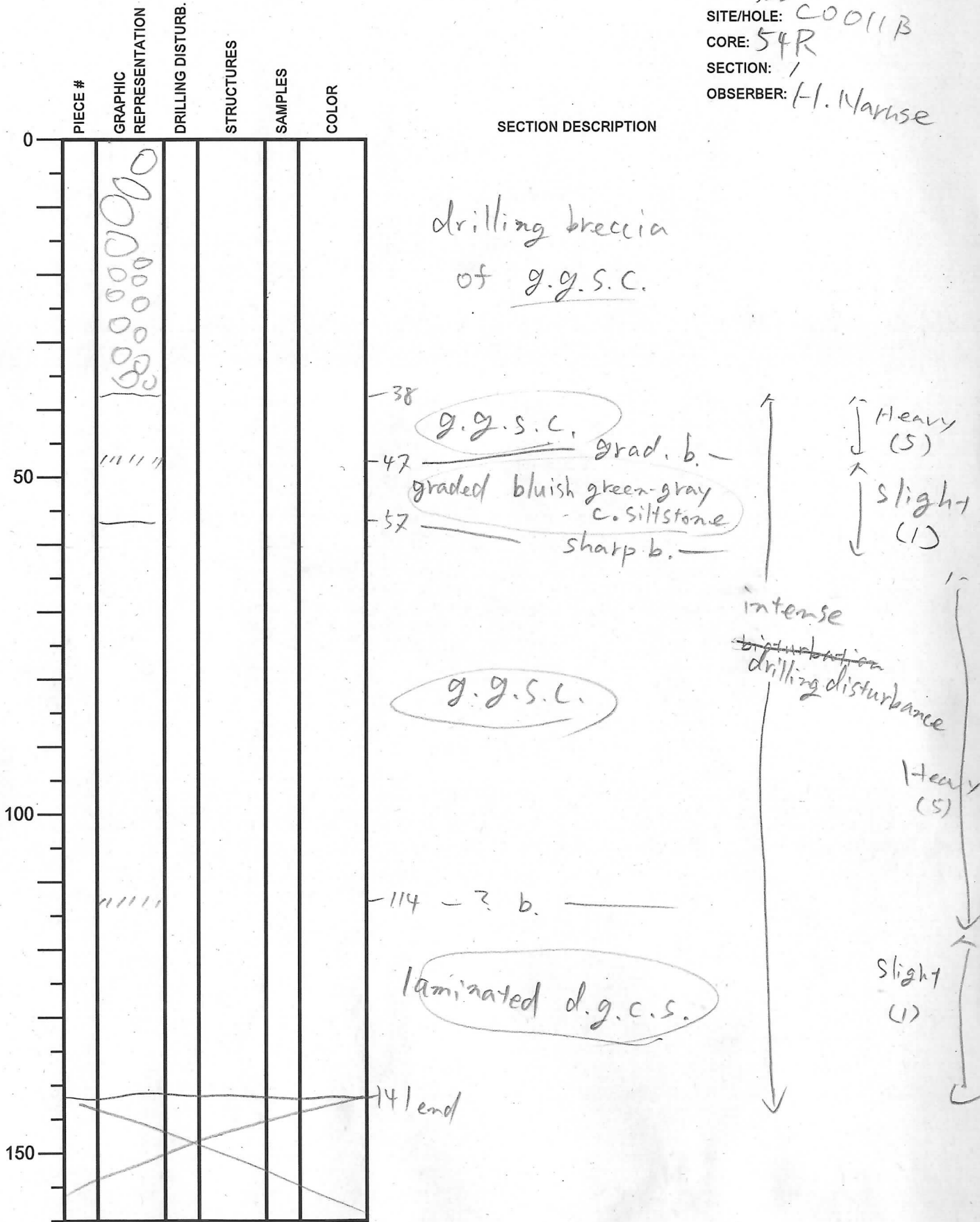
SECTION: CC

OBSERVER: KTF/SH

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR	SECTION DESCRIPTION
0		PAL					
50			}				<p>5cm</p> <p>GGSc/GEc BIOT. 5 (INTENSE)</p> <p>14.5cm END (USELESS CORE)</p>
100							
150							

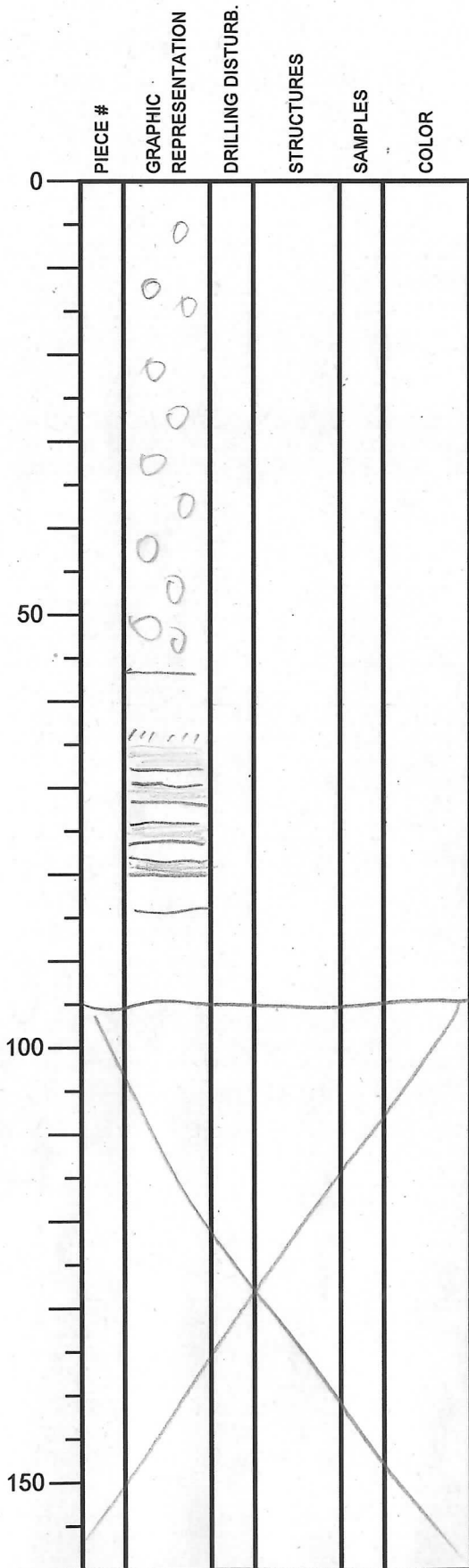
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/21/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 54R
 SECTION: 1
 OBSERVER: H. Naruse



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/21/20 09
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 54R
 SECTION: 2
 OBSERVER: H. Naruse



SECTION DESCRIPTION

drilling breccia
of g.g.s.c.

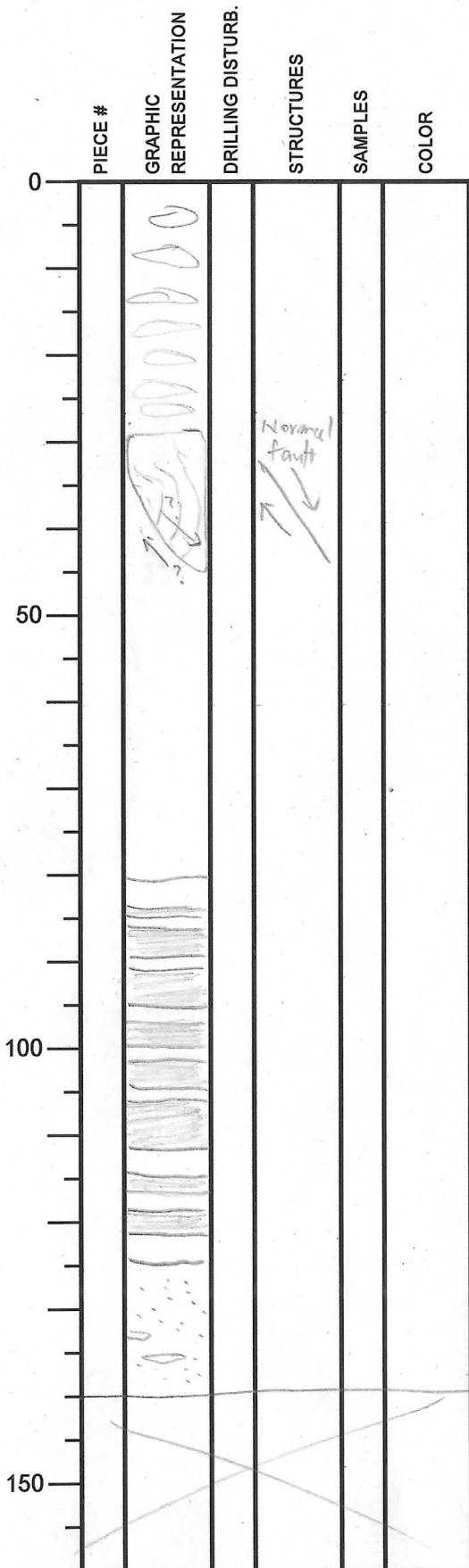
- 57 g.g.s.c. (4)
- 64 d.g.c.s. ? b (1)
- 67 sharp b.
- 69 g.g.s.c. (4)
- 71 d.g. sharp b. (1)
- 74 d.g.c.s. sharp b.
- 76 sharp b.
- 78 sharp b.
- 84 g.g.s.c. (4)
- 95 end d.g.c.s. (1)
- g.g.s.c. (4)
- d.g.c.s. (1)
- g.g.s.c. (5)

bioturbation

drilling disturbance

Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 9/24/2009
EXP.: 322
SITE/HOLE: C00117
CORE: 54R
SECTION: 4.
OBSERVER: H. Haruse



SECTION DESCRIPTION

drilling breccia
of d.g.c.s.

29
44

g.g.s.c.

fault-induced deformation

mod. bio.
(4)

structureless green-gray
fine sandstone

No bioturb.
(0)

80
82
83
86
89
91
93
97
99
101
105
106
112
114
116
118
121
129

sharp b.
g.g.s.c.
sharp b.
d.g.c.s.
sharp b.
g.g.s.c.
sharp b.
d.g.c.s.
sharp b.
g.g.s.c.
sharp
d.g.c.s.
g.g.s.c. sharp
d.g.c.s. sharp
g.g.s.c. sharp
g.g.s.c. sharp
g.g.s.c.
d.g.c.s.
g.g.s.c.
d.g.c.s.
g.g.s.c.
d.g.c.s.
g.g.s.c.

slight
(2)

140 end

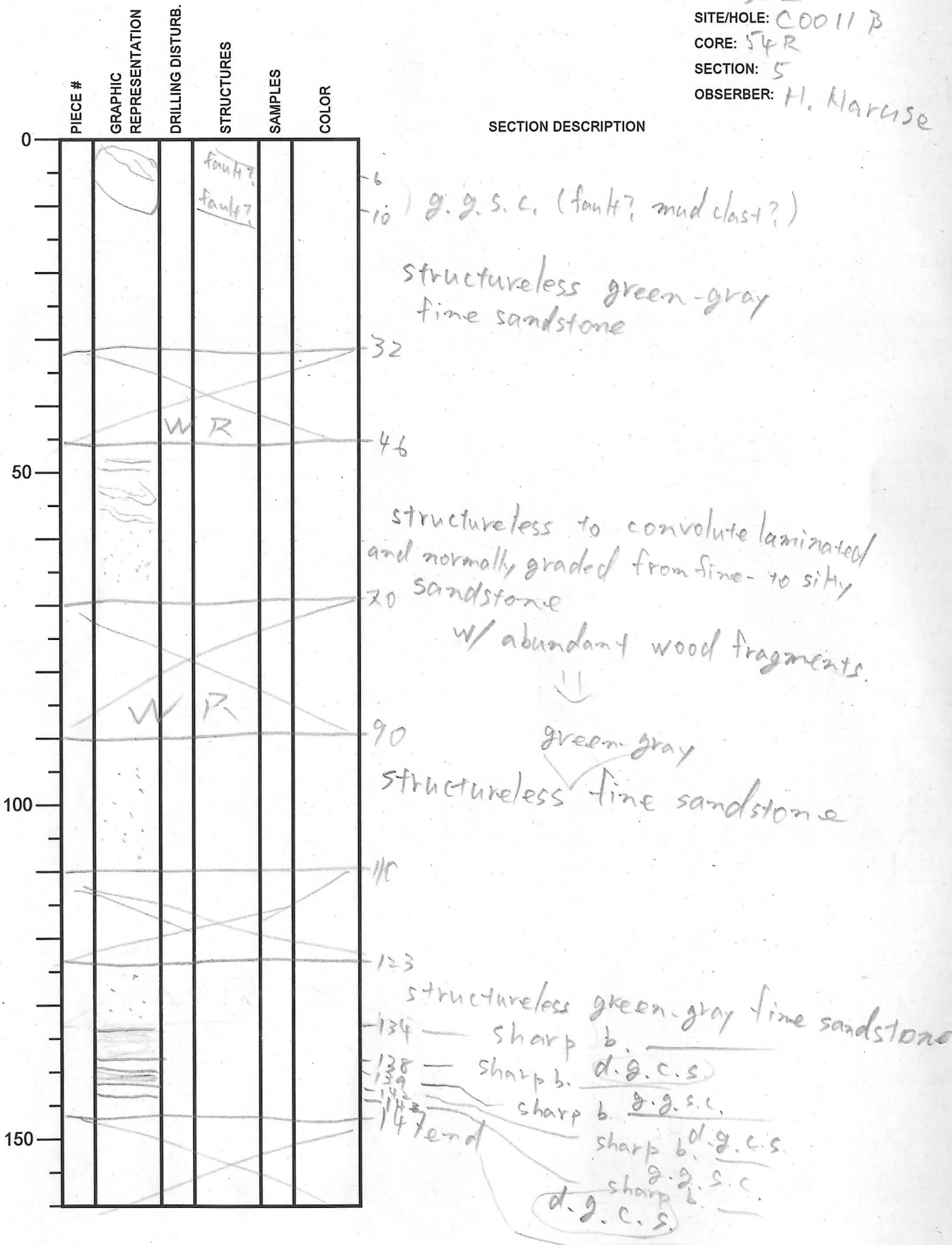
all sharp

structureless
green-gray fine sandstone
w/ mud clasts (1-2cm)

116


Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/21/2009
 EXP.: 322
 SITE/HOLE: C0011 B
 CORE: 54R
 SECTION: 5
 OBSERVER: H. Naruse



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/21/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 54R
 SECTION: CC
 OBSERVER: H. Naruse

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50						
100						
150						

SECTION DESCRIPTION

drilling breccia
of d.g.c.s.

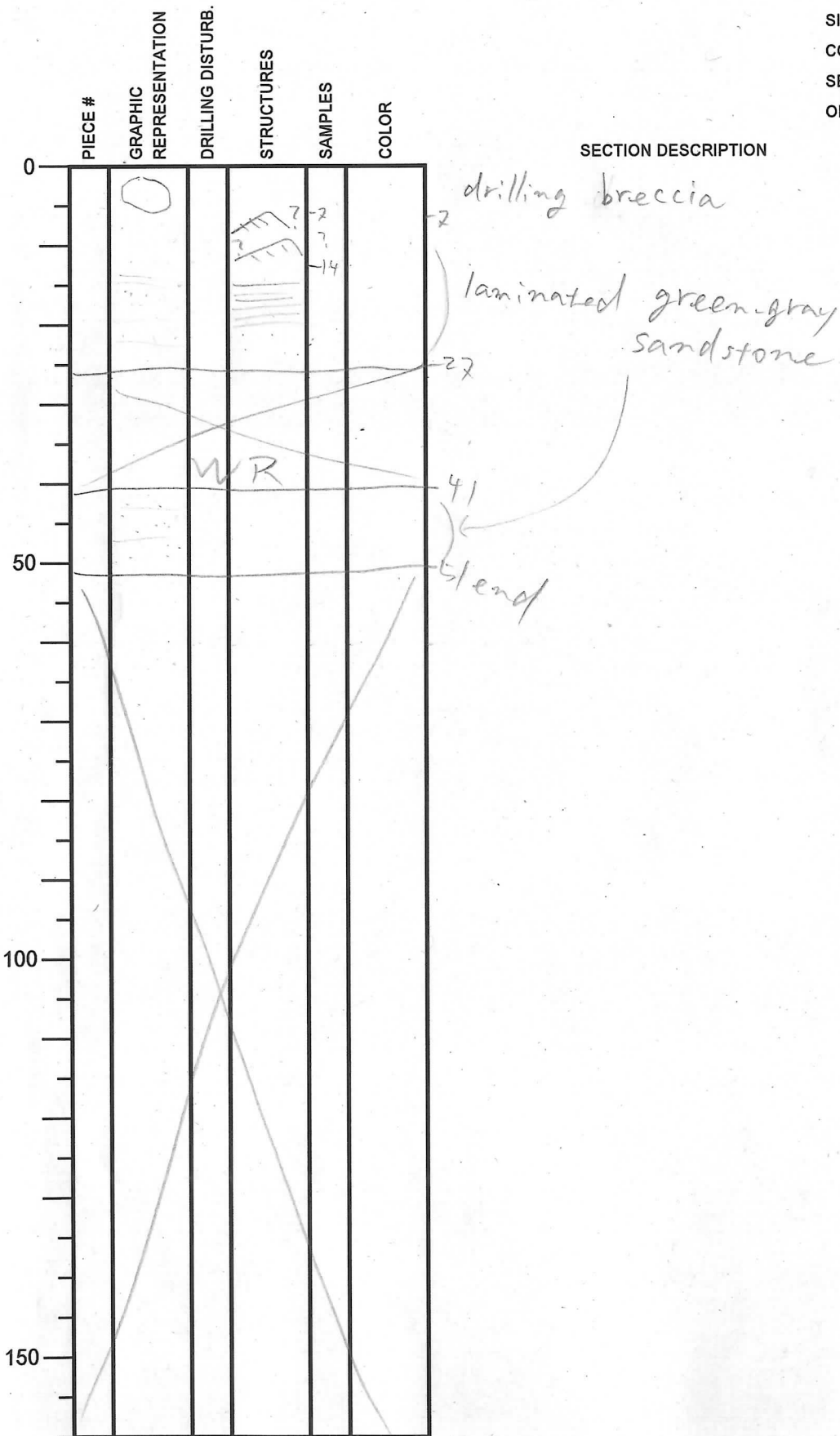
laminated

41 cm cl

Integrated Ocean Drilling Program

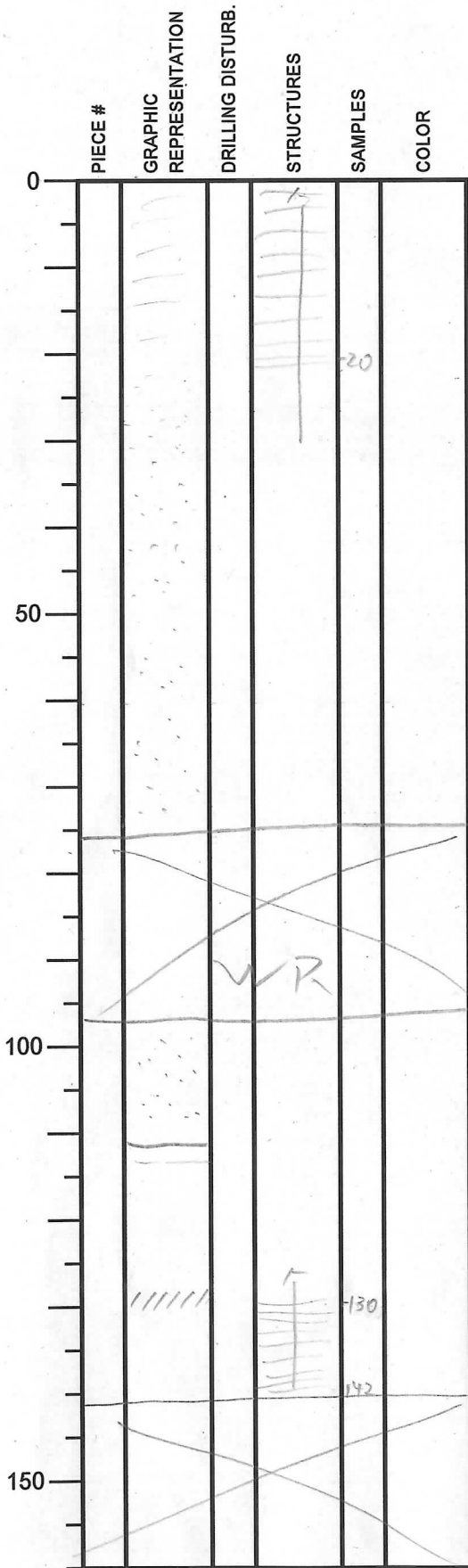
Visual Core Description

NO.
 DATE: 9/21/2009
 EXP.: 322
 SITE/HOLE: C0011 B
 CORE: 55R
 SECTION: 1
 OBSERVER: H. Naruse



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/21/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 55R
 SECTION: 3
 OBSERVER: H. Naruse



SECTION DESCRIPTION

parallel laminated to structureless
 normally graded medium to
 very fine sandstone
 green-gray

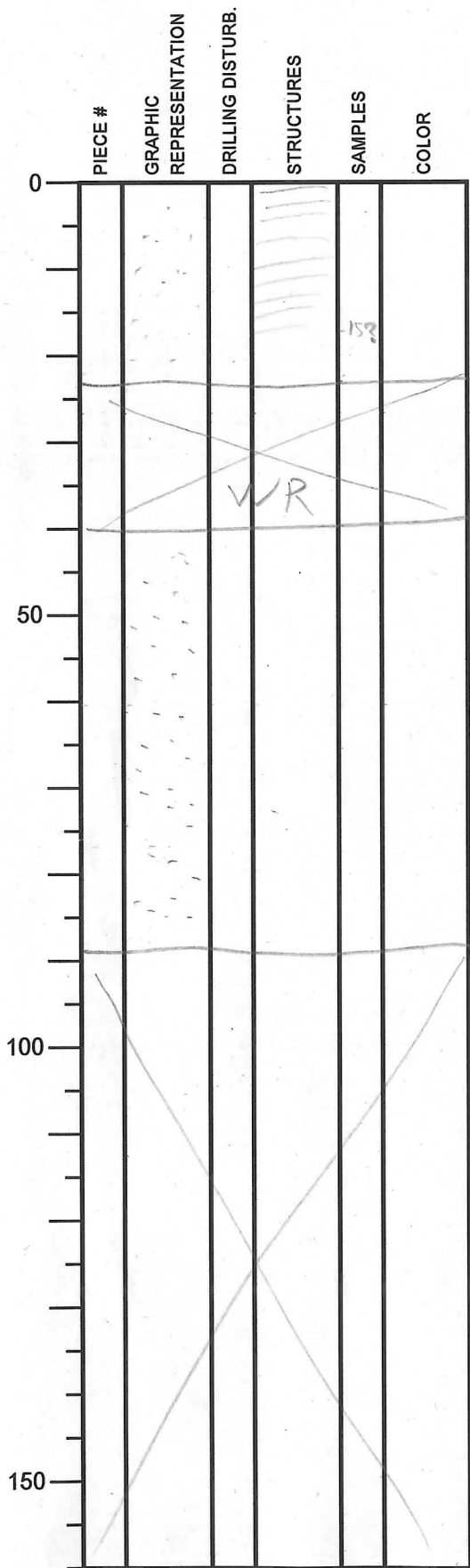
No
 picture

111
 113 - green silty claystone
 dark-gray clayey siltstone

130 - gradual
 parallel laminated and graded
 142 end fine to very fine sandstone

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/21/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 55R
 SECTION: 5
 OBSERVER: H. Narase

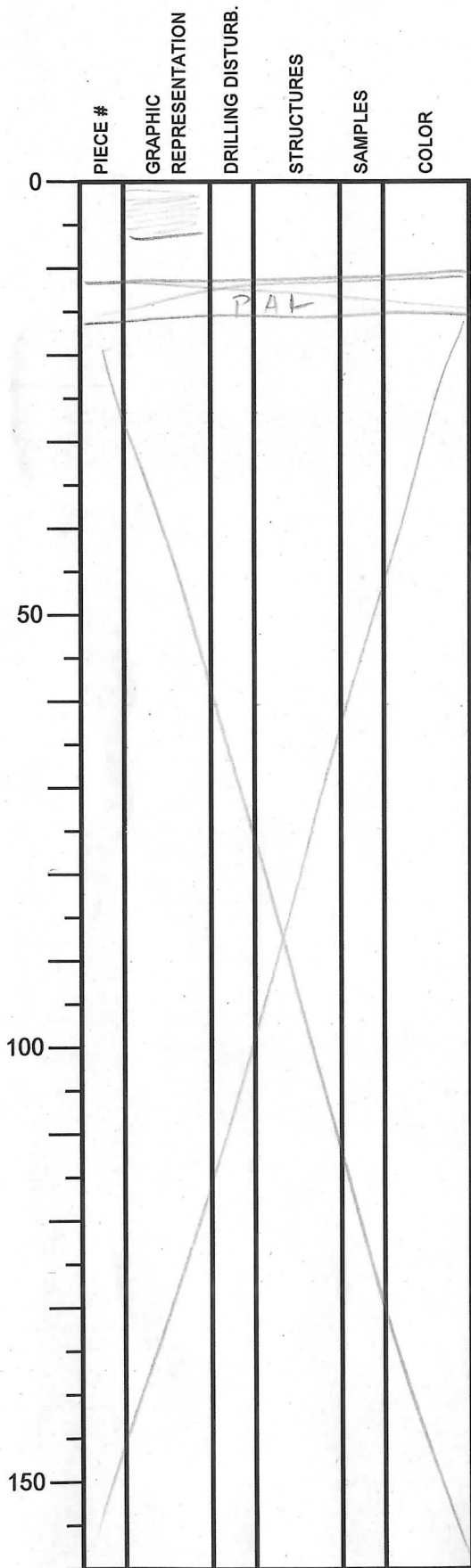


SECTION DESCRIPTION

structureless to laminated
 green-gray fine
 sandstone

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/21/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 55R
 SECTION: CC
 OBSERVER: H. Naruse



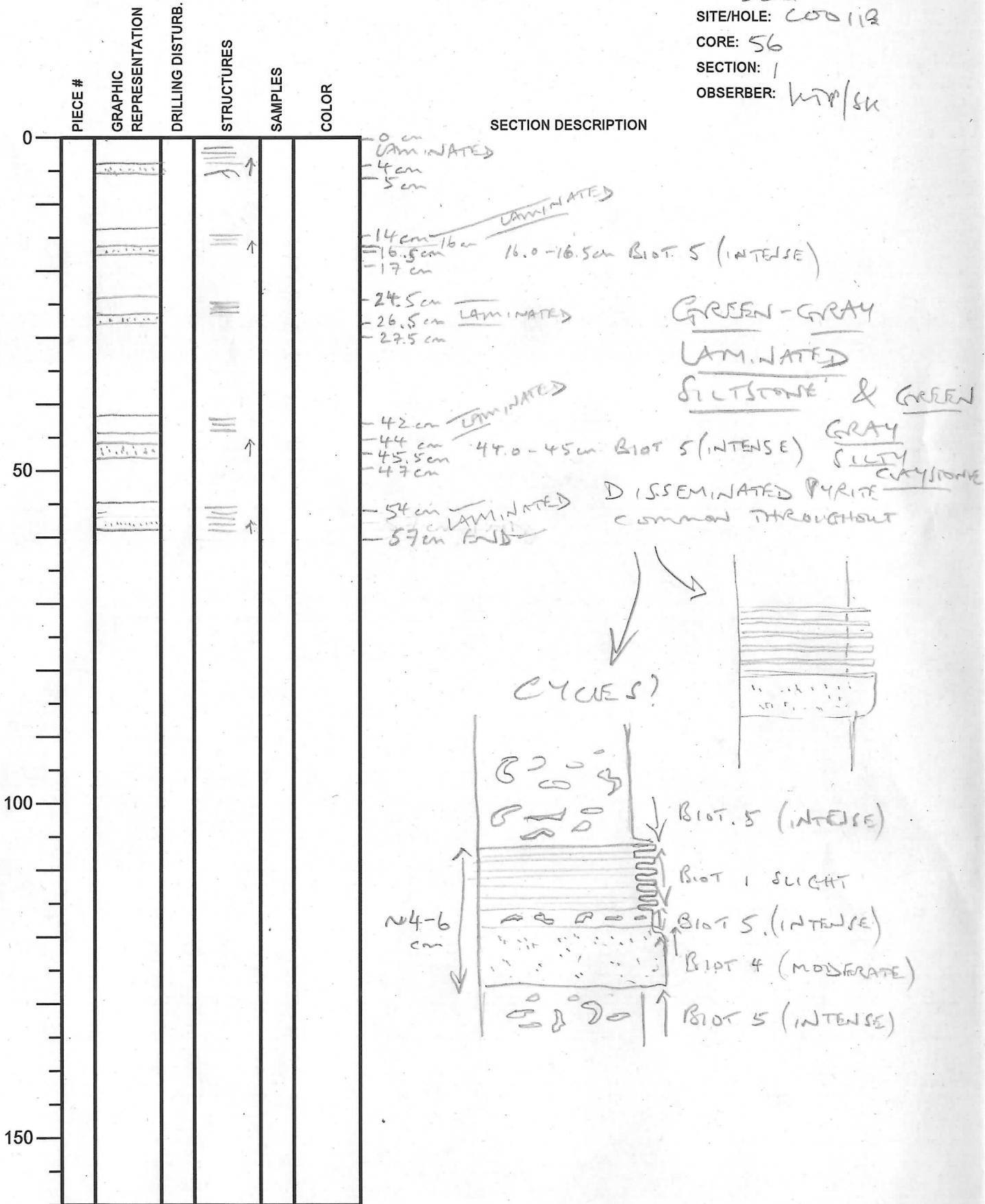
SECTION DESCRIPTION

28.9 d.g.c.s. sharp
 12.5 d.g.c.s. sharp g.g.s.c.
 17 end

↑ slight
 (1)
 ↓

Integrated Ocean Drilling Program Visual Core Description

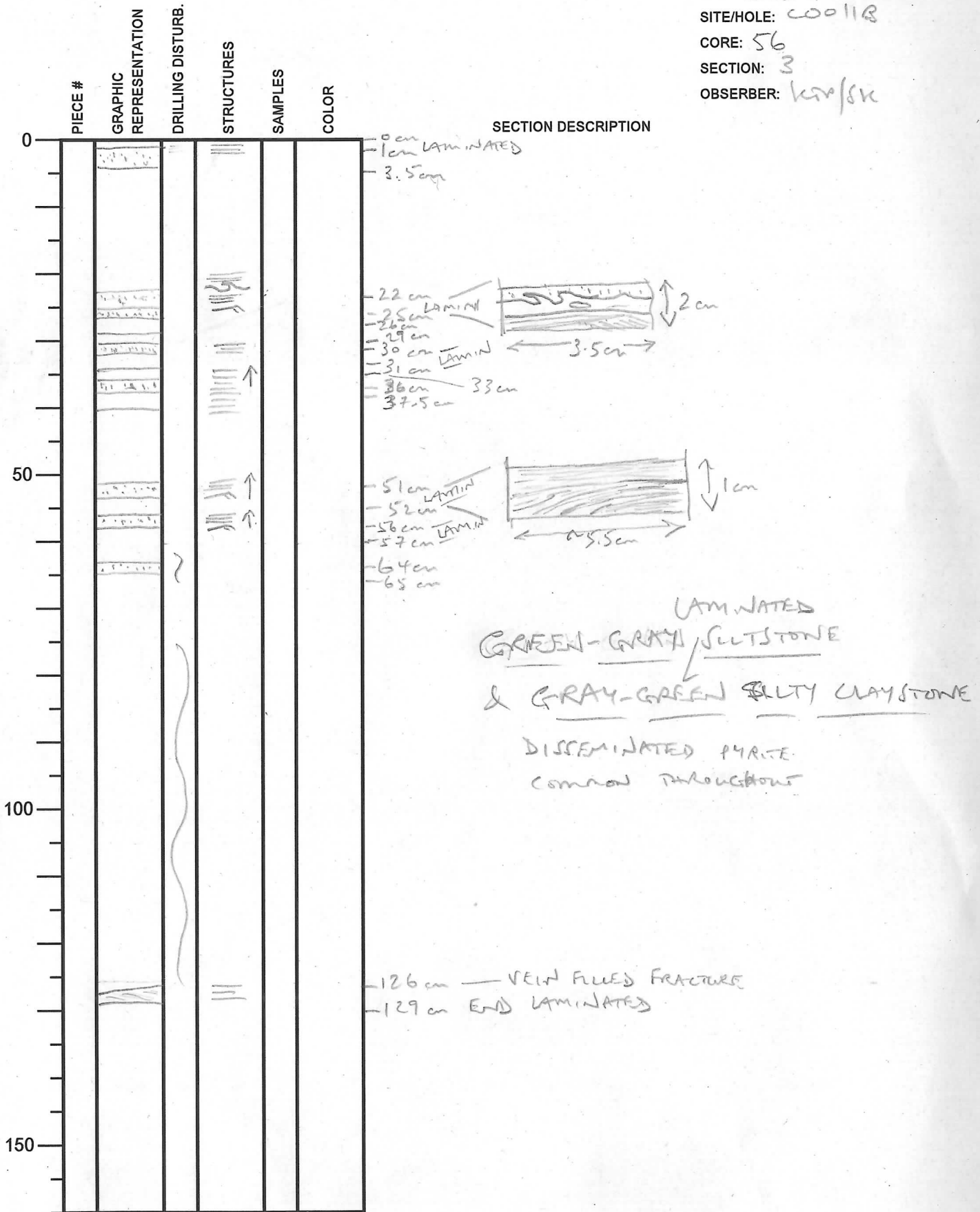
NO.
DATE: 21/9/20 09
EXP.: 322
SITE/HOLE: C00112
CORE: 56
SECTION: 1
OBSERVER: WTP/SK



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 22/09/2009
 EXP.: 322
 SITE/HOLE: COO11B
 CORE: 56
 SECTION: 3
 OBSERVER: KSP/SK



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 27/09/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 56
 SECTION: CC
 OBSERVER: KTW/SK

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0	PAZ	C			
50					
100					
150					

SECTION DESCRIPTION

4 cm GRAY-GREEN SILTY CLAYSTONE } Bot. }

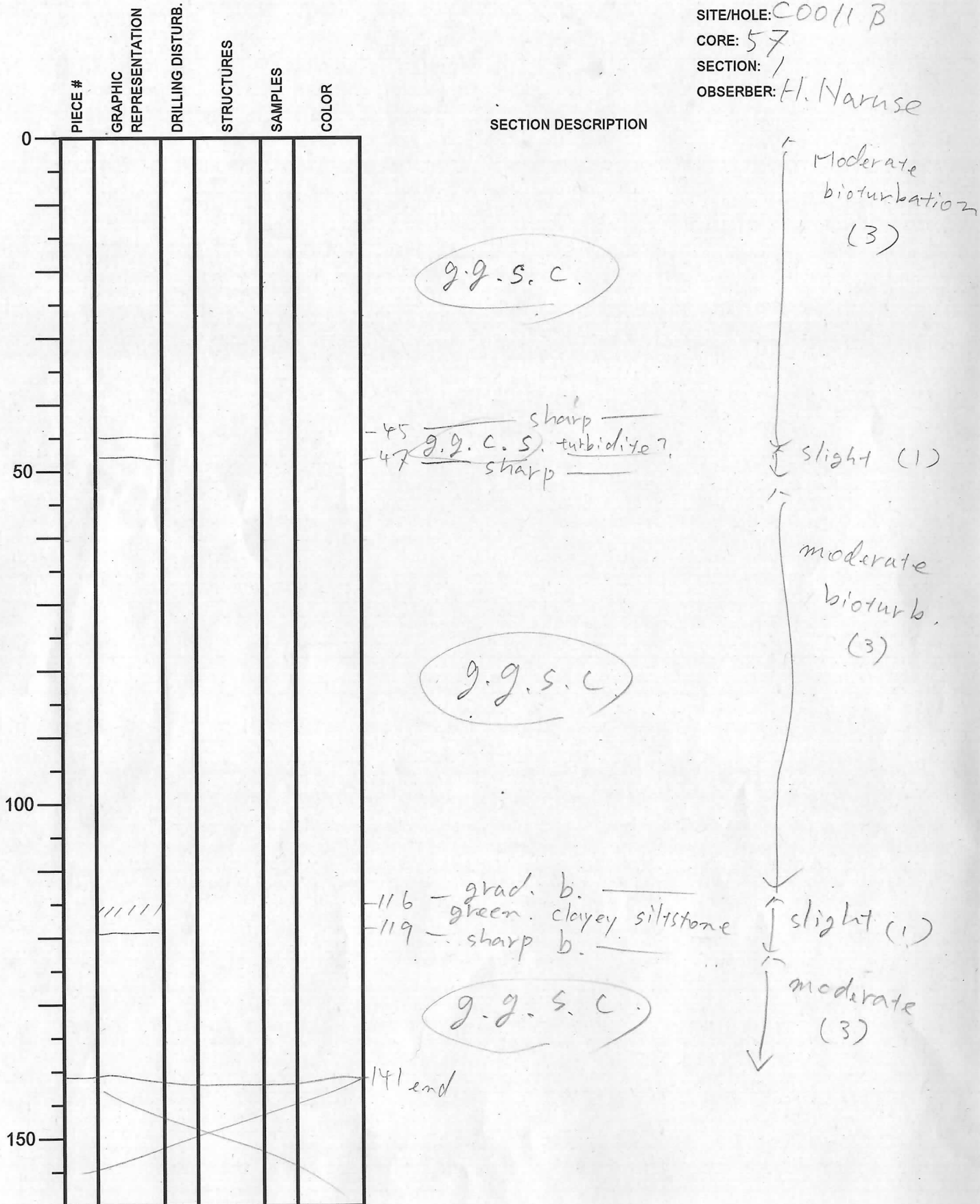
9 cm GREEN-GRAY SILTSTONE S (INTENSE) } }

11 cm

Integrated Ocean Drilling Program

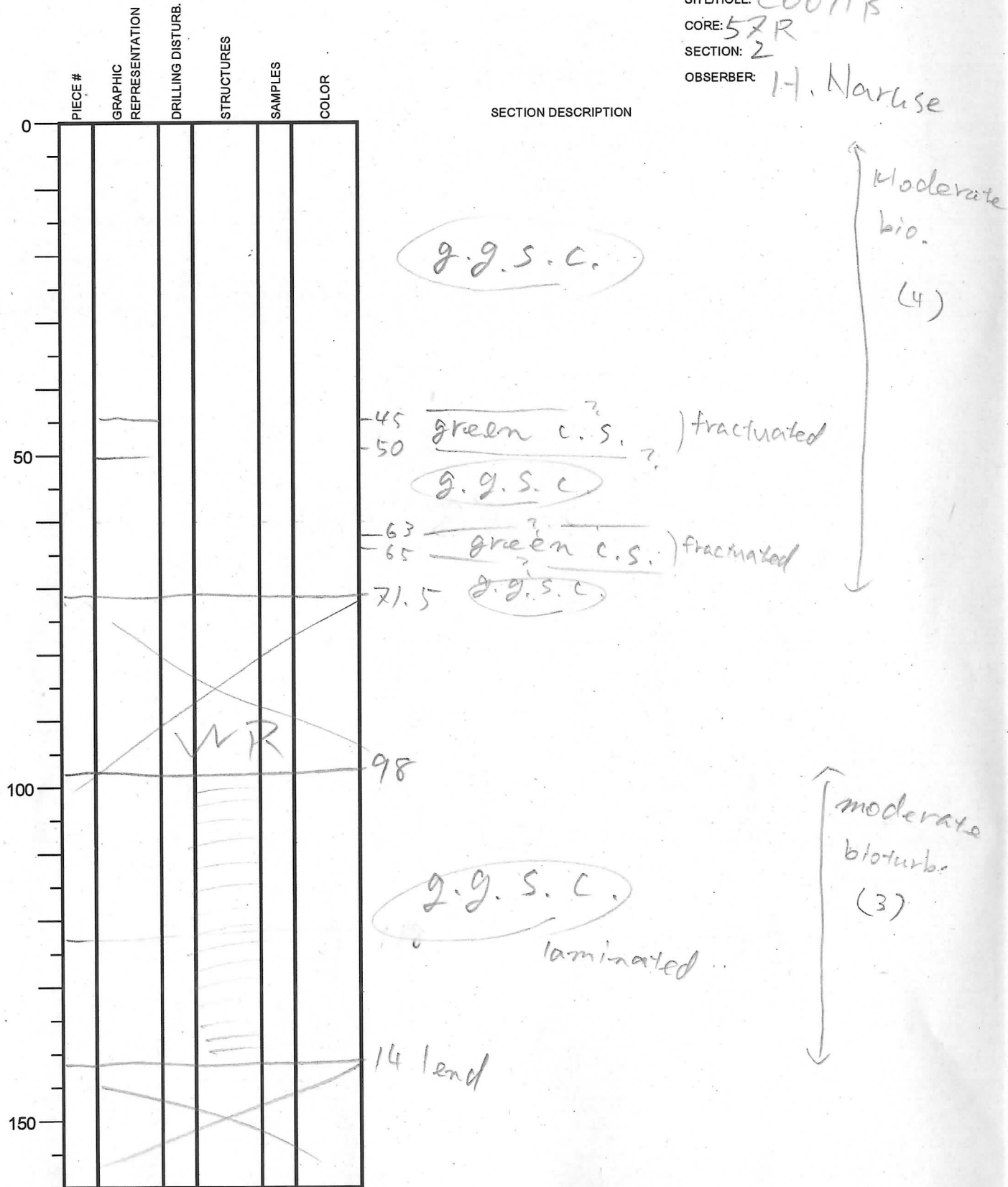
Visual Core Description

NO.
 DATE: 9/22/2009
 EXP.: 322
 SITE/HOLE: C0011 B
 CORE: 57
 SECTION: 1
 OBSERVER: H. Naruse



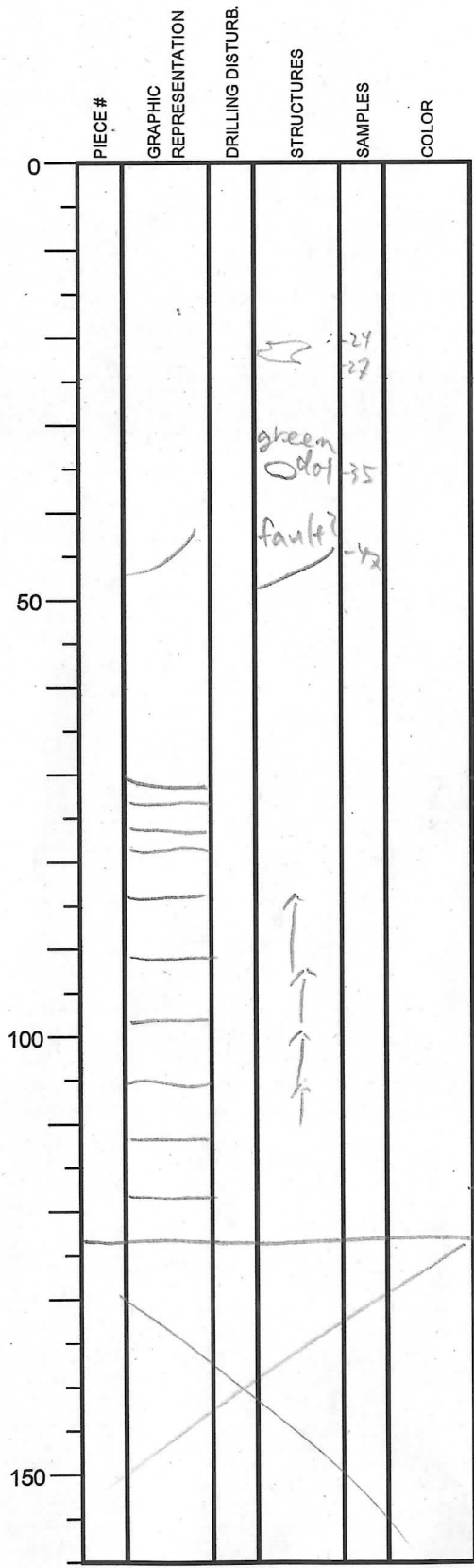
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/22/2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 52R
 SECTION: 2
 OBSERVER: H. Naruse



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/22/2009
 EXP.: 322
 SITE/HOLE: C0011 B
 CORE: 57
 SECTION: 3
 OBSERVER: H. Naruse



SECTION DESCRIPTION

dark-gray burrows filled by tuff

g.g.s.c.

- sharp deformed b. —
- 71 green
- 73 white
- 75 green-light gray
- 79 sharp b.
- 83 graded sharp b. g.g.s.c.
- 91 blue-gray to green-lg. coarse tuff
- 98 graded green-lg. coarse tuff
- 105 deformed b. g.g.lg. coarse tuff
- 112 g.g.lg. coarse tuff
- 118 g.g.lg. coarse tuff
- 123 end g.g.s.c.

↑ moderate (4)

↑ slight bioturb (1)

↓

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: / / 20
 EXP.:
 SITE/HOLE:
 CORE:
 SECTION: 5
 OBSERVER: H. Naruse

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0				~	~	
50				~	~	
100				⊙	85	
120				⊙	100	
141				W R		
150						

SECTION DESCRIPTION

burrows filled by pyrites

burrows filled by lime-mudstone

g.g.s.c.

small (<5mm) pyrite nodules

120
 141 end

↑

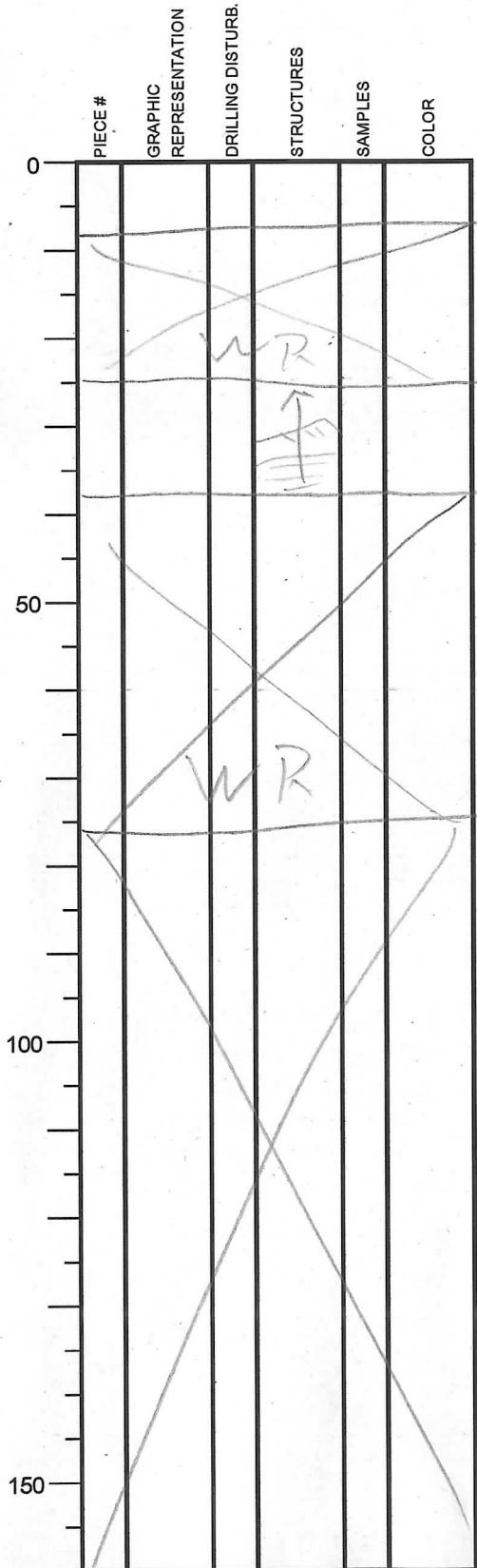
moderate
 bioturb.

(4)

↓

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/22/09
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 52
 SECTION: 6
 OBSERVER: H. Naruse



SECTION DESCRIPTION


g.g.s.c.

parallel to cross-laminated
 green-light gray fine tuff

Moderate (4)
 slight (1)

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/22/09
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 57R
 SECTION: CC
 OBSERVER: M. Naruse

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
						
			D/L			
50						
100						
150						

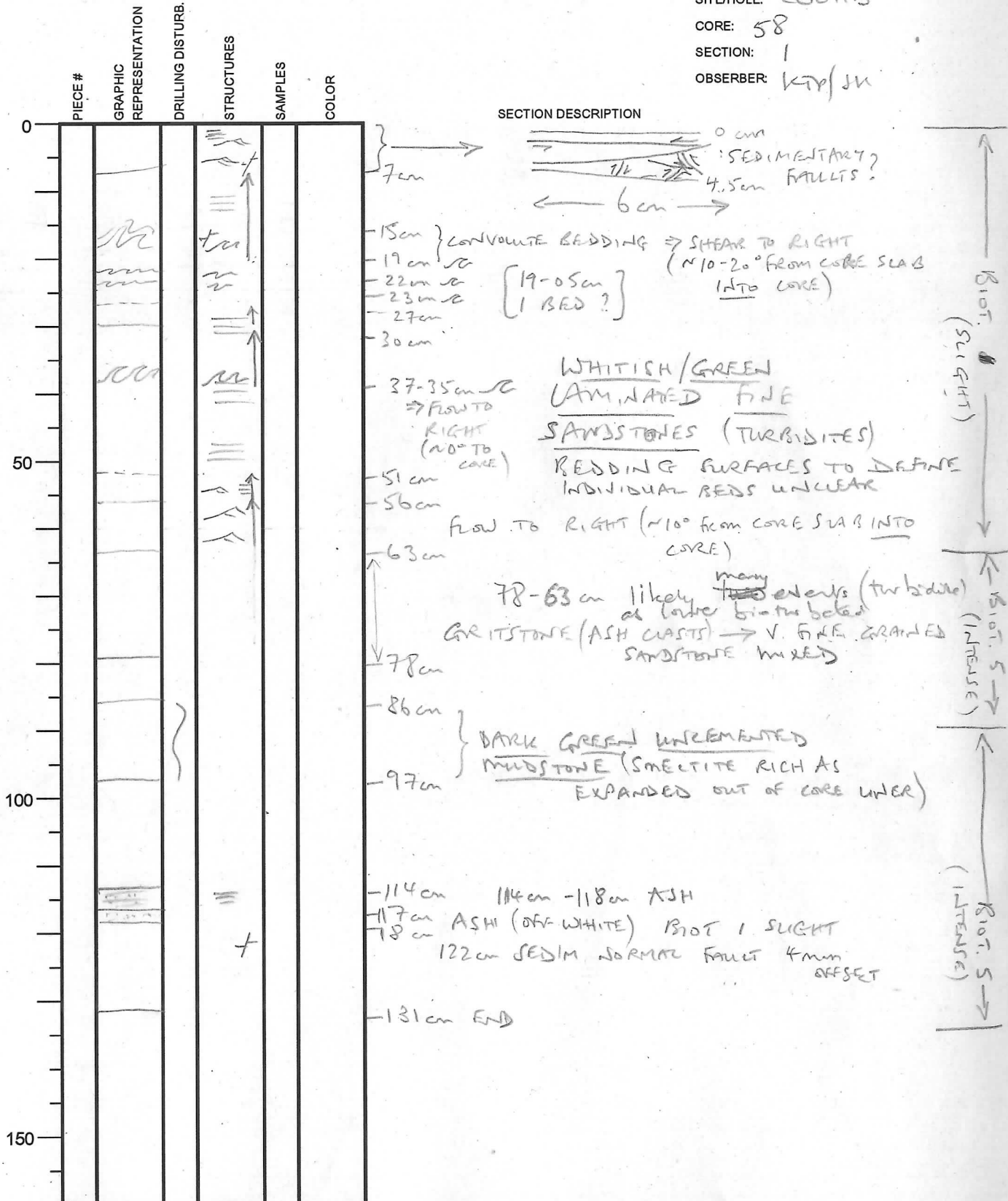
SECTION DESCRIPTION

drill cuttings

16
21

Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 2/10/2009
EXP.: 322
SITE/HOLE: C00113
CORE: 58
SECTION: 1
OBSERVER: KTY/JM



SECTION DESCRIPTION

0 cm
SEDIMENTARY?
4.5 cm
FAULTS:
6 cm

15 cm } CONVOLUTE BEDDING ⇒ SHEAR TO RIGHT
19 cm } (N10-20° FROM CORE SLAB
22 cm } [19-05cm] INTO CORE)
23 cm } (1 BED?)
27 cm }
30 cm }

37-35 cm } WHITISH/GREEN
⇒ FLOW TO } LAMINATED FINE
RIGHT } SANDSTONES (TURBIDITES)
(N0° TO } REDDING SURFACES TO DEFINE
CORE) } INDIVIDUAL BEDS UNCLEAR

51 cm } FLOW TO RIGHT (N10° FROM CORE SLAB INTO
56 cm } CORE)

63 cm } 78-63 cm likely ^{many} events (turbidite)
at lower bio-turbidite
GRITSTONE (ASH CLASTS) → V. FINE GRAINED
SANDSTONE MIXED

78 cm }
86 cm } DARK GREEN UNLAMINATED
97 cm } MUDSTONE (SMECTITE RICH AS
EXPANDED OUT OF CORE LOWER)

114 cm } 114cm - 118cm ASH
117 cm } ASH (OFF-WHITE) BIOT. S SLIGHT
122 cm } 122cm SEDIM. NORMAL FAULT 4mm
OFFSET

131 cm } END

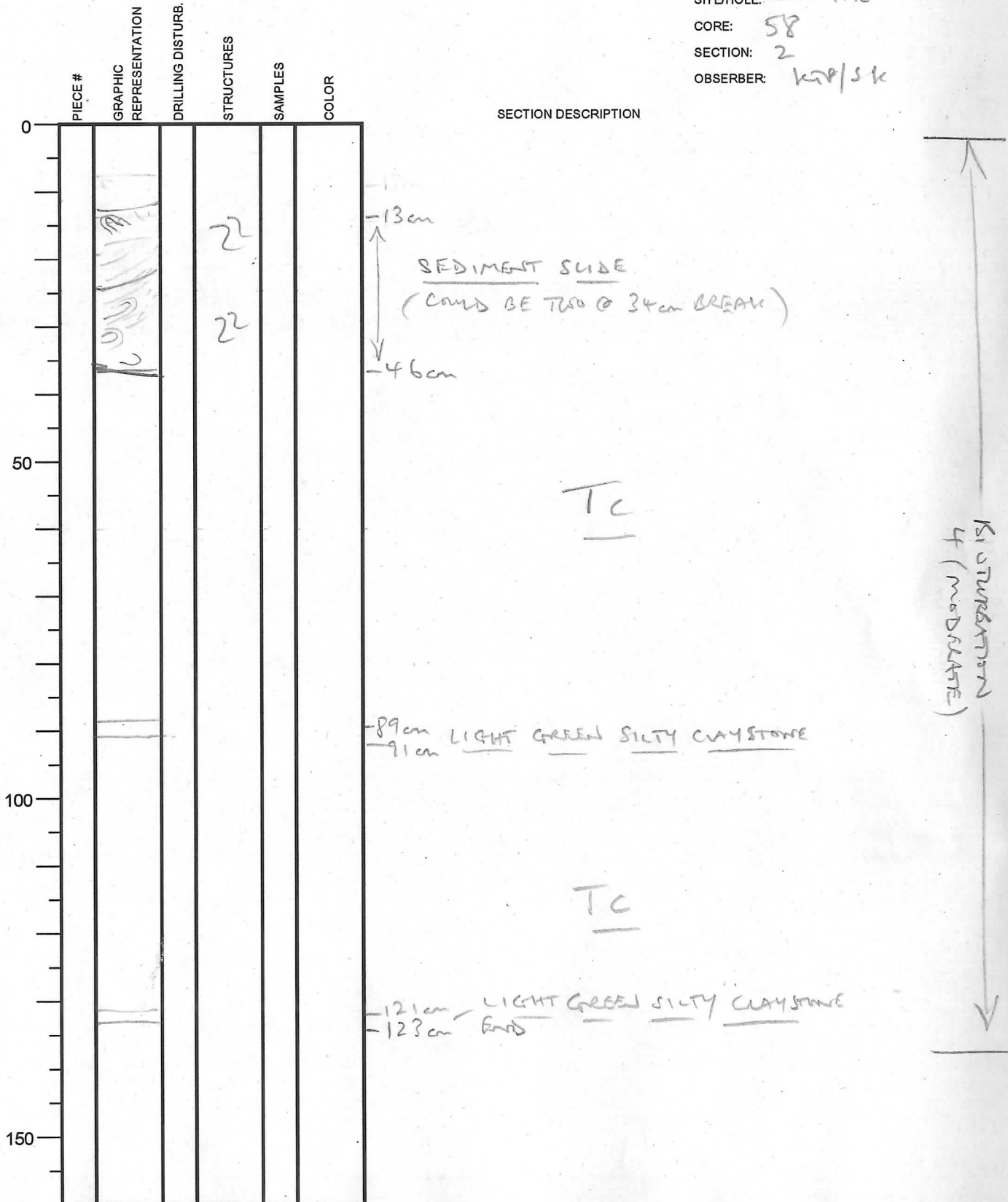
Biot. S (SLIGHT)

Biot. S (INTENSE)

Biot. S (INTENSE)

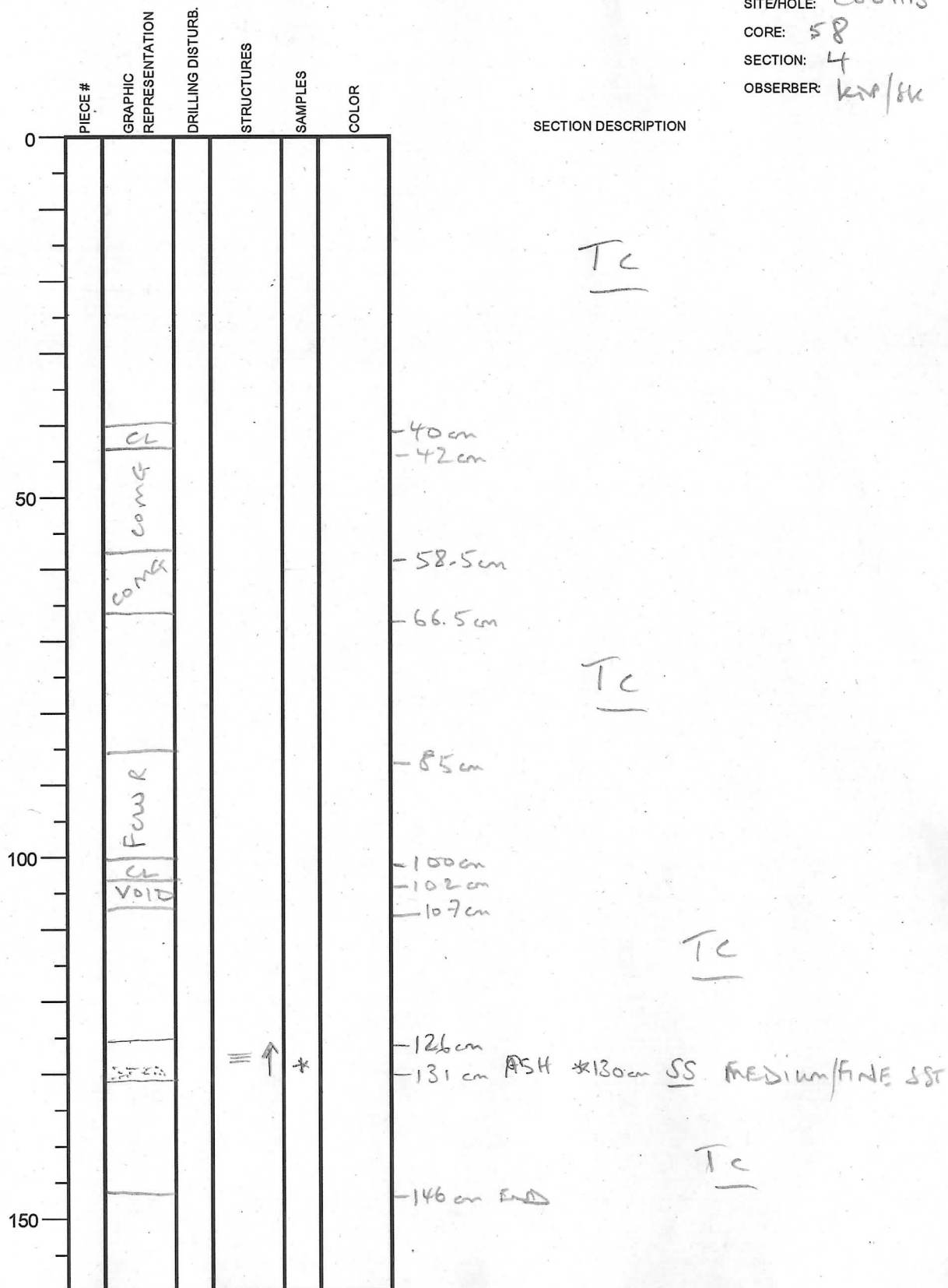
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 23/07/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 58
 SECTION: 2
 OBSERVER: KSP/SK



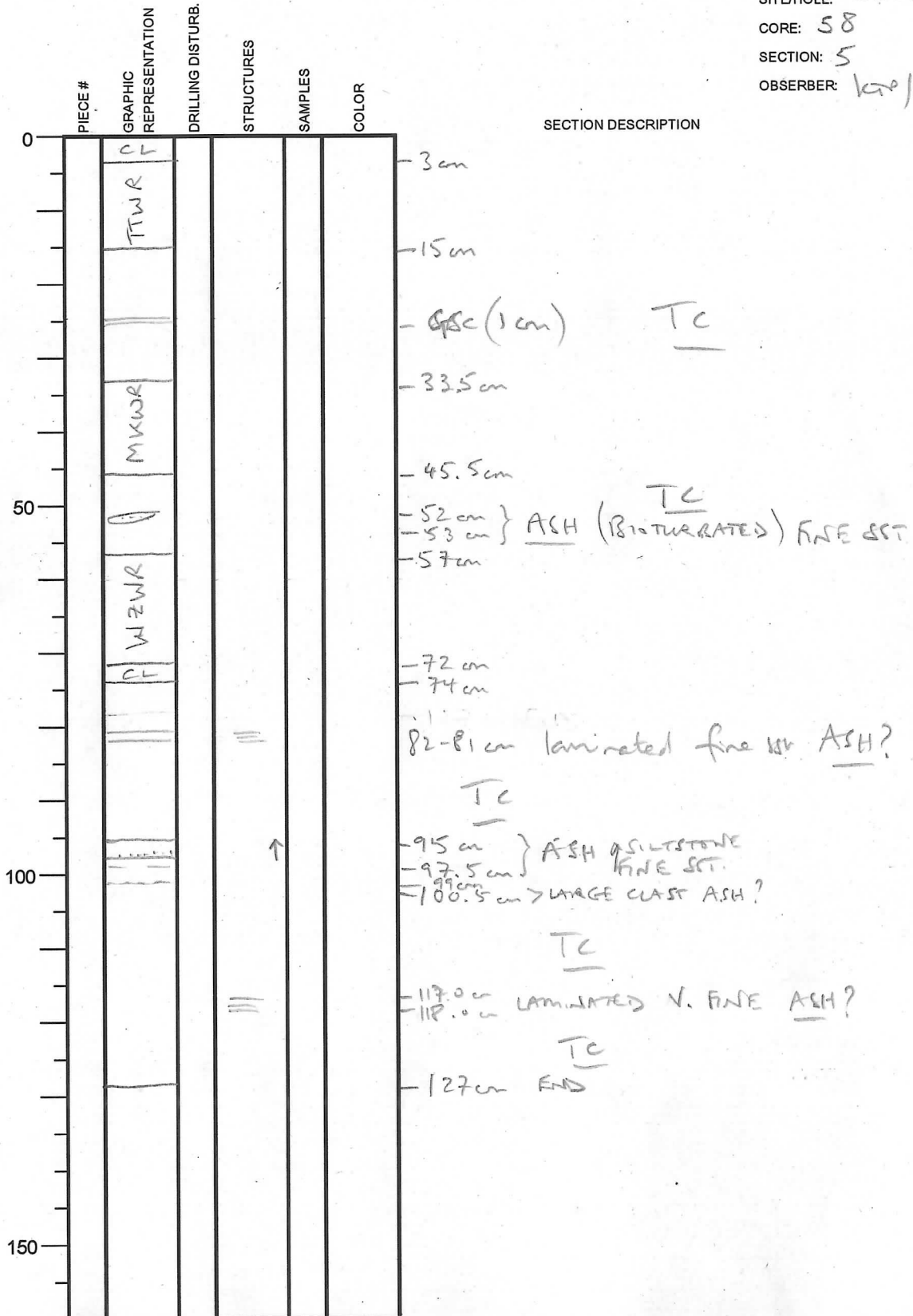
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 23/ 01/ 2009
 EXP.: 322
 SITE/HOLE: C00113
 CORE: 58
 SECTION: 4
 OBSERVER: km/bk



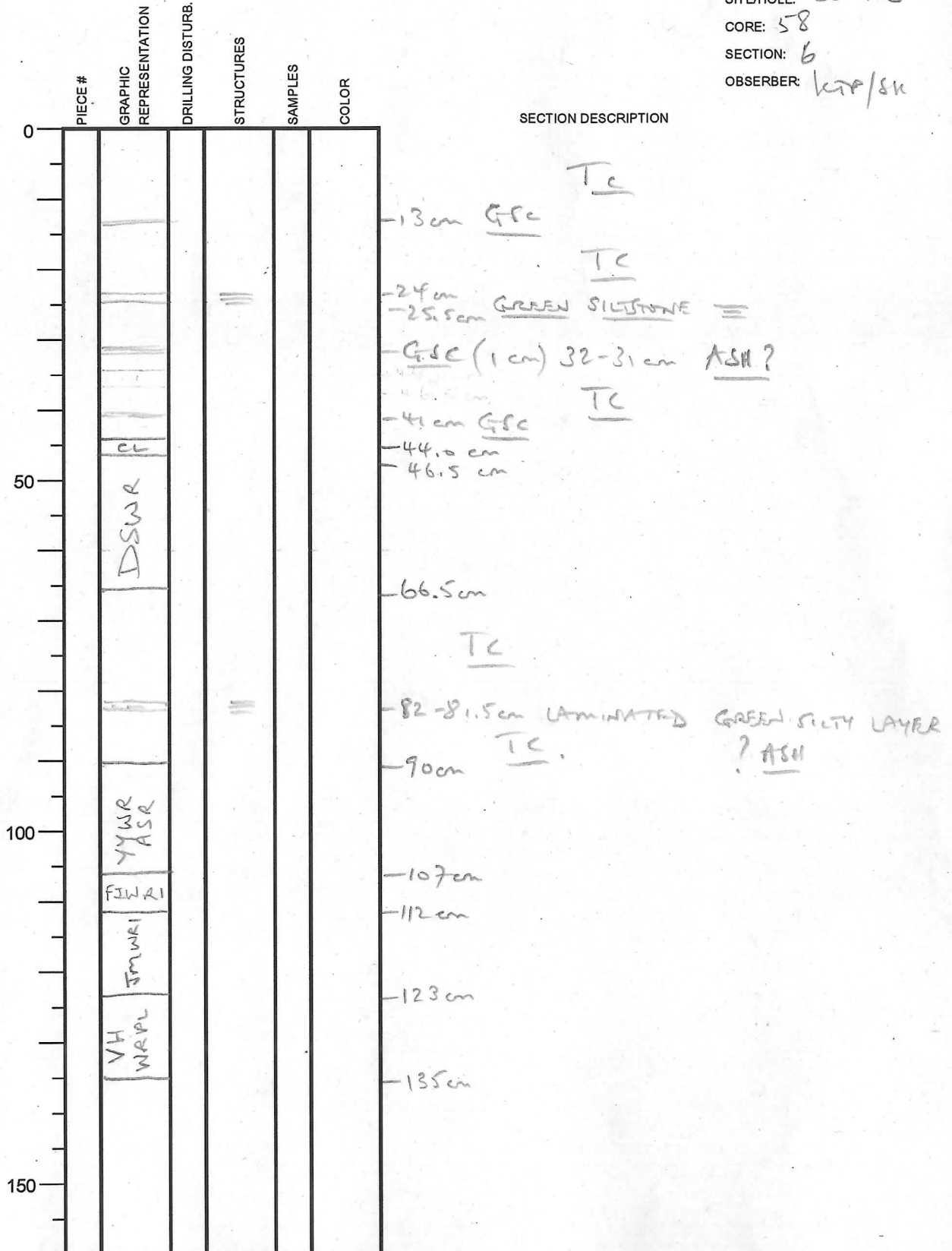
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 28/09/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 58
 SECTION: 5
 OBSERVER: KJP/SK



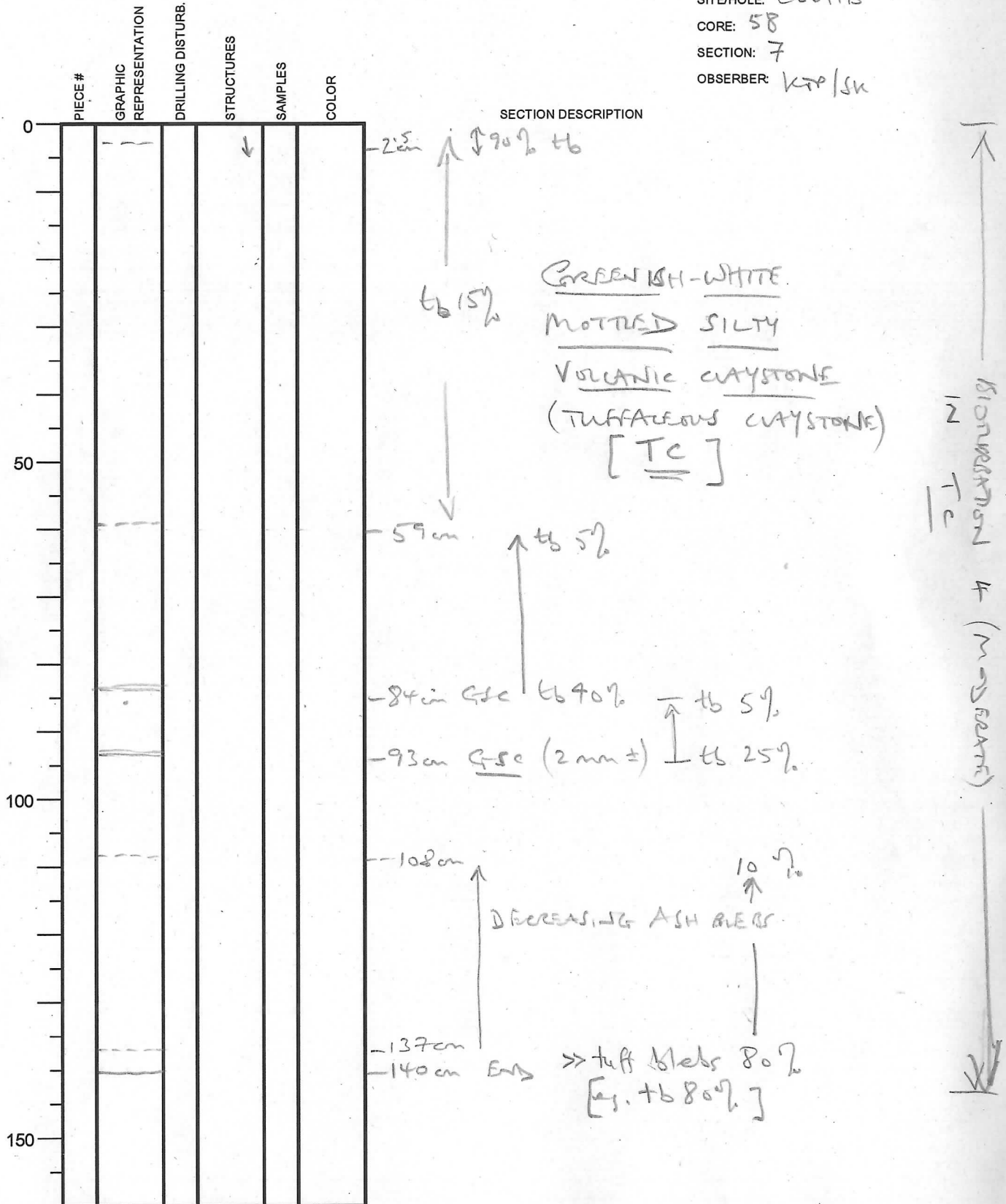
Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 2/9/2009
EXP.: 322
SITE/HOLE: C0011B
CORE: 58
SECTION: 6
OBSERVER: KJP/SK



Integrated Ocean Drilling Program Visual Core Description

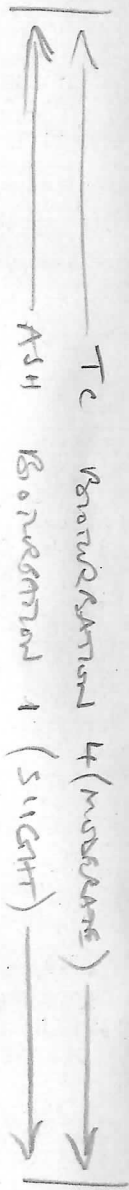
NO.
 DATE: 23/09/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 58
 SECTION: 7
 OBSERVER: KJP/SK



Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 23 / 07 / 2009
EXP.: 322
SITE/HOLE: COO11B
CORE: 58
SECTION: 8
OBSERVER: htp/sk

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR	SECTION DESCRIPTION
0			≡ ↑			3cm ASH FINE SST ↑
			≡ ↑			7cm SILTSTONE
			≡ ↑			21.5cm ASH ↑ FINE SST
50			≡ ↑			44.0cm FINE SST 51.0cm ASH ↑ MEDIUM SST
						62.5cm ASH FINE/SILTSTONE 68cm
			≡ ↑			78.5cm ASH MEDIUM SST 81.0cm
100						116cm ASH MEDIUM SST 117cm
150						123.5cm END



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 27/07/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 58
 SECTION: CC
 OBSERVER: KAP/SK

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50						
100						
150						

SECTION DESCRIPTION

TC
 = 13cm ?? ASH LAYER REINTERBATED + (MODERATE)
 - 17cm END

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 23/09/2009
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 59
 SECTION: 2
 OBSERVER: WTP/SK

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0				≡ ↑		
50						
100						
150						

SECTION DESCRIPTION

TC

- 8cm SILTSTONE

- 13cm ASH FINE ↑

- 21.5cm GSC TC

- 37.5cm CALCITE VEIN (2mm)

TC

- 52.0cm } MORE CEMENTED ZONE OF TC

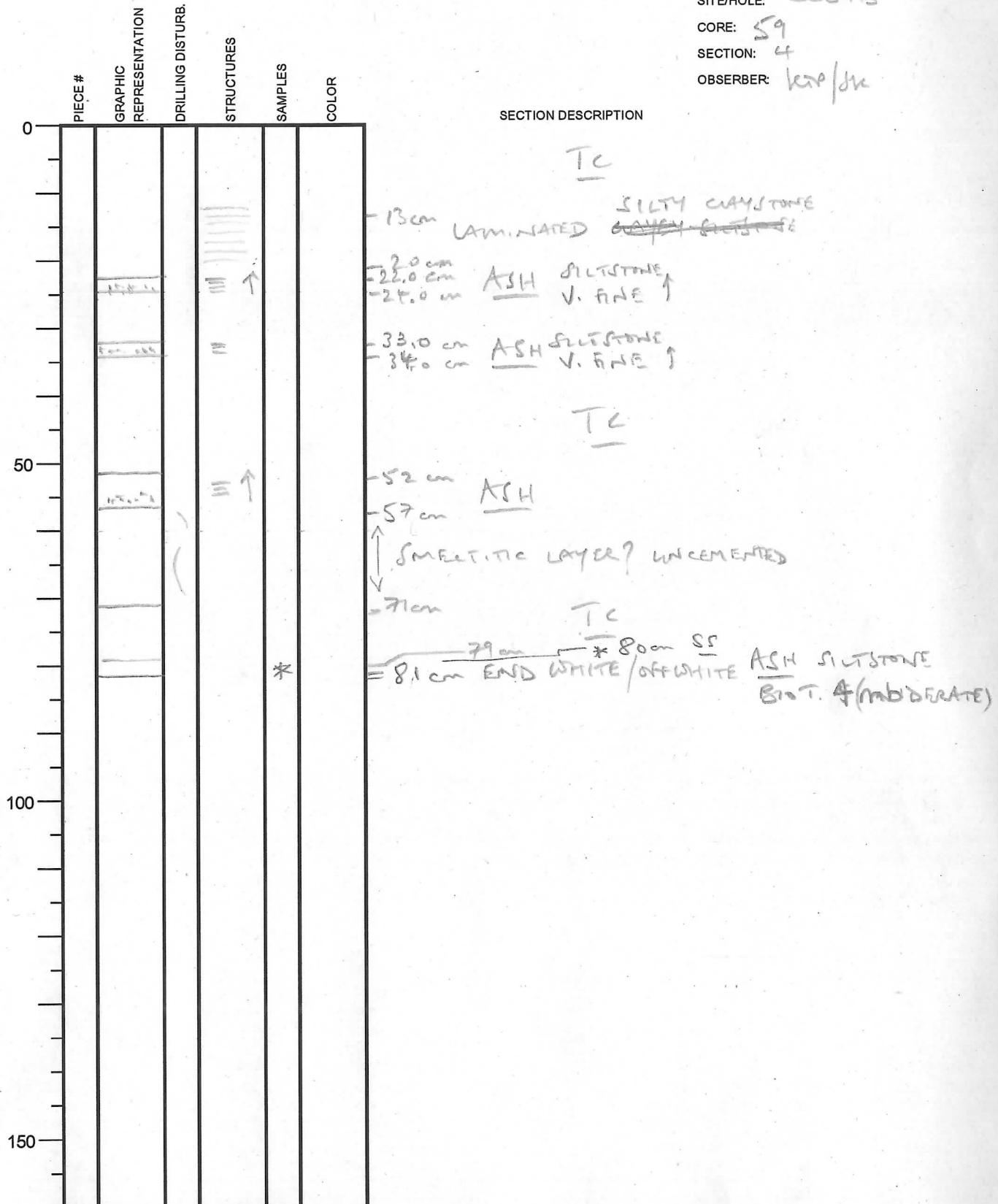
- 59.0cm } (CALCITE VEIN AT TOP)

↑ SMECTITE LAYER? (in red line)

- 72cm END TC? ↓

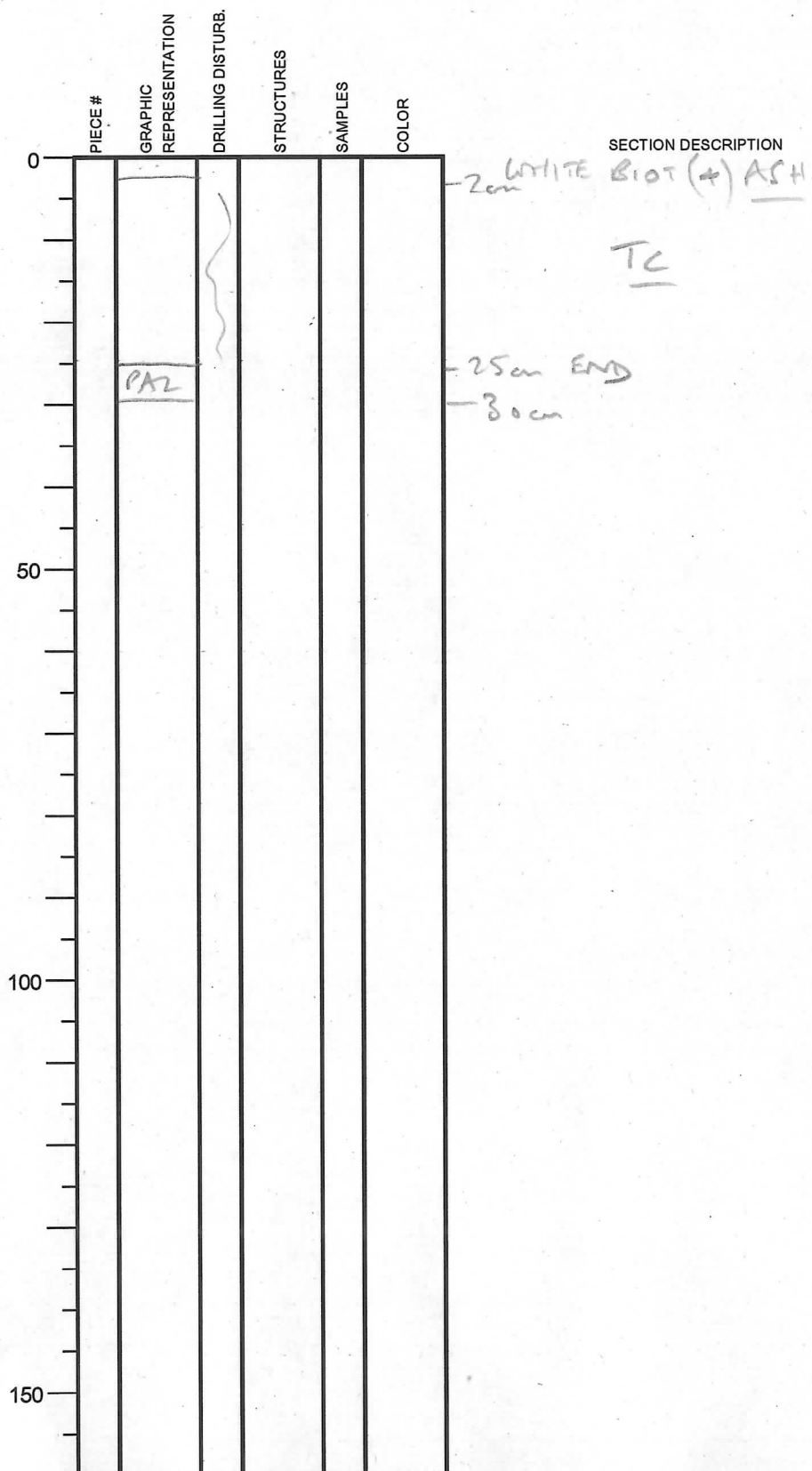
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 28/07/20 09
 EXP.: 322
 SITE/HOLE: C00118
 CORE: 59
 SECTION: 4
 OBSERVER: kwp/jk



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 23/07/20 09
 EXP.: 322
 SITE/HOLE: C0011B
 CORE: 59
 SECTION: CC
 OBSERVER: KVP/SK



Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 2/9/2009
EXP.: 322
SITE/HOLE: C0011B
CORE: 60
SECTION: 1
OBSERVER: KTD/SK

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR	SECTION DESCRIPTION
0						6cm END TC
50						
100						
150						

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 23/07/2007
 EXP.: 322
 SITE/HOLE: C00118
 CORE: 60
 SECTION: CC
 OBSERVER: km/sk

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR	
0		PAL					SECTION DESCRIPTION -7cm TC -12cm END
50							
100							
150							

Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 09/23/2009
EXP.: 322
SITE/HOLE: C0011B
CORE: 61
SECTION: CC
OBSERVER: PS

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR	SECTION DESCRIPTION
0						TC
5						ASH NSA END
10						
15						
20						
25						
30						
35						
40						
45						
50						
55						
60						
65						
70						
75						
80						
85						
90						
95						
100						
105						
110						
115						
120						
125						
130						
135						
140						
145						
150						