

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 29/07/20 07
 EXP.: 322
 SITE/HOLE: C0012
 CORE: 31
 SECTION: 1
 OBSERVER: KTA/SK

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
		MIWR	/			
50		CL		↑		
100						
150						

SECTION DESCRIPTION

Ggsc / Gsc Biot. 5 (INTENSE)

-10cm Gsc
 -14cm Gsc

-19.5cm } Tuff fine → SILT GRADE (GRAY-WHITE)
 -20.5cm }
 -26.0cm }

-40.5cm

-45.5cm END

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 29/09/2009
 EXP.: 322
 SITE/HOLE: C0012
 CORE: 31
 SECTION: 2
 OBSERVER: KTP/SK

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

SECTION DESCRIPTION

GSSC/GSC

-11.2m etc

-18.0cm

-38.0cm

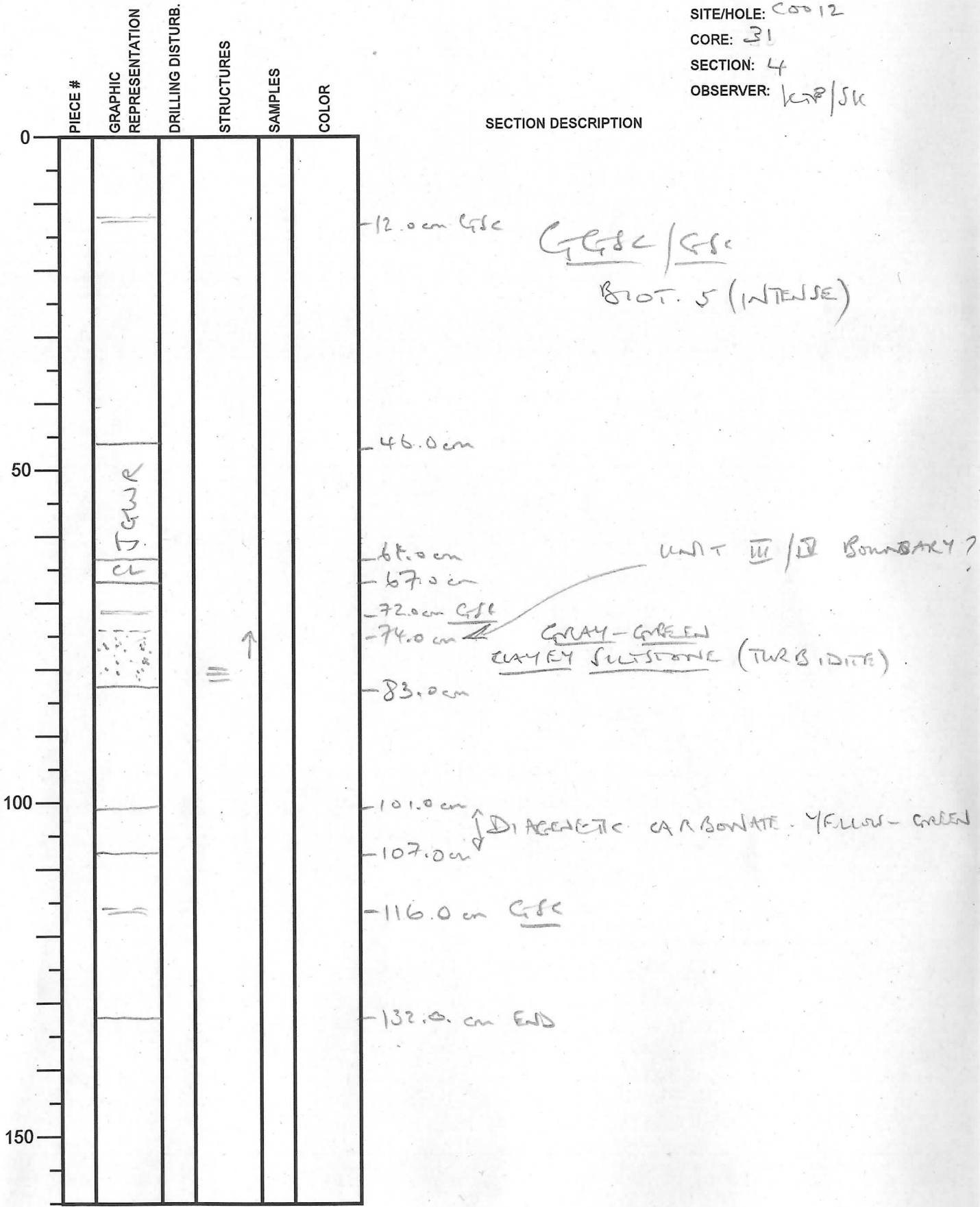
-43.0cm END

BIOT. 5 (INTENSE)

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 21/07/2009
 EXP.: 322
 SITE/HOLE: C0012
 CORE: 31
 SECTION: 4
 OBSERVER: KRP/SK



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 29/09/2009
 EXP.: 322
 SITE/HOLE: C5012
 CORE: 31
 SECTION: 5
 OBSERVER: KCP/SK

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

SECTION DESCRIPTION

GG82 / Gdc
 Plot. 5 (INTENSE)

-27.0 cm

-46.0 cm

-57.0 cm

-70.0 cm

-72.0 cm

-88.0 cm END

Integrated Ocean Drilling Program Visual Core Description

NO.

DATE: 29/09/2009

EXP.: 322

SITE/HOLE: C0012

CORE: 31

SECTION: CC

OBSERVER: KCP/SK

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR	SECTION DESCRIPTION
0		PAZ)				<p style="margin-left: 20px;">- 2.0 cm</p> <p style="margin-left: 20px;">- 7.0 cm</p> <p style="margin-left: 20px;">- 11.5 cm END</p> <p style="margin-left: 20px;"><u>GGSc</u> / <u>GS</u> Biot. 5 (INTENSE)</p>
50			(
100							
150							

Integrated Ocean Drilling Program Visual Core Description

NO.

DATE: 29/07/2009

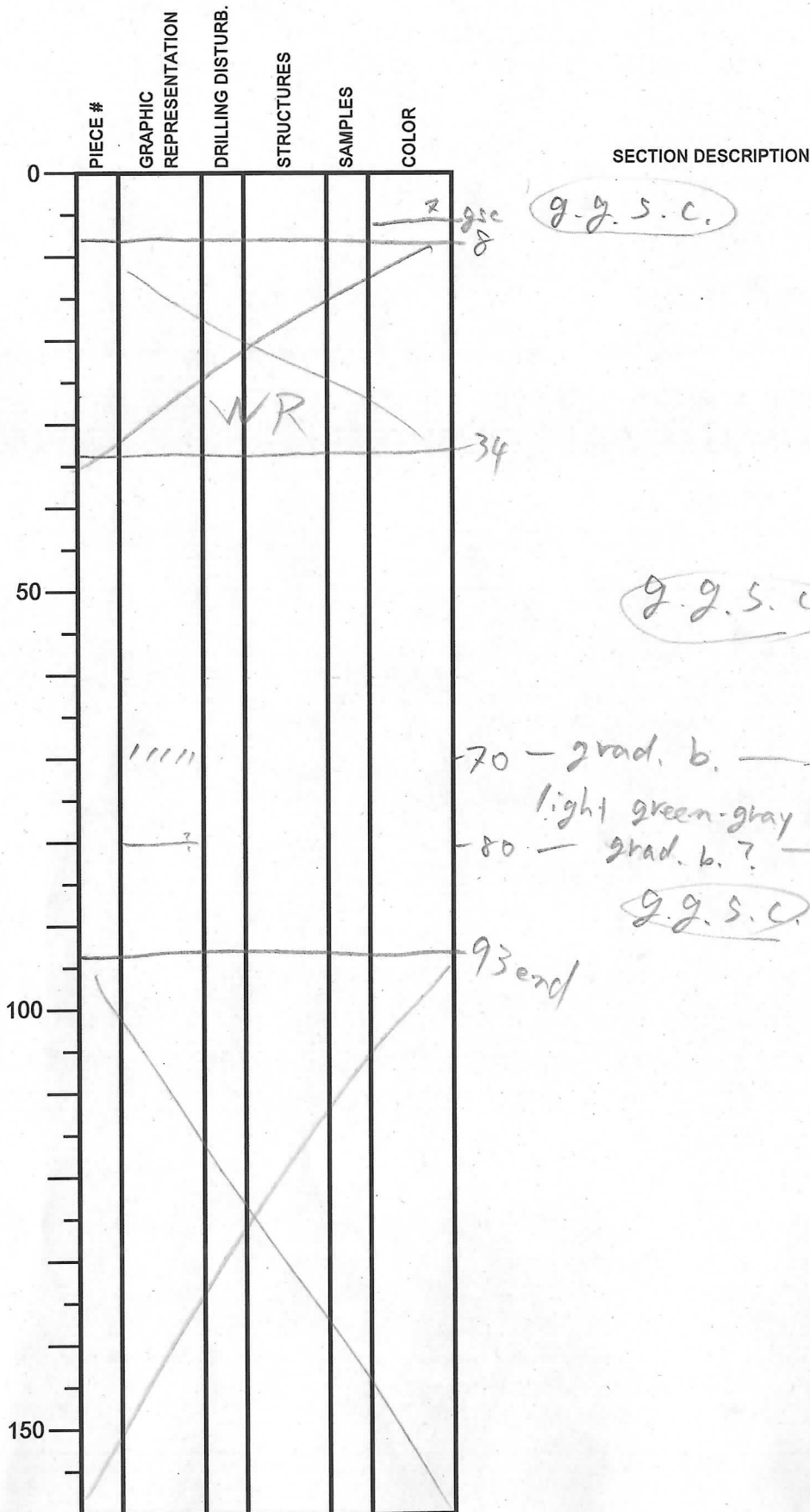
EXP.: 322

SITE/HOLE: COO12A

CORE: 32R

SECTION: 1

OBSERVER: H. Naruse



↑
Heavy
bioturb.
(5)
↓

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 29/09/2009
 EXP.: 322
 SITE/HOLE: C0012
 CORE: 32R
 SECTION: 2
 OBSERVER: H. Hartuse

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0						
50			WR			45
100			yhb.		71	68 25c
150						128 end

SECTION DESCRIPTION

↑
 Heavy bioturb. (5)
 ↓

g.g.s.c.

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/29/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 32R
 SECTION: 4
 OBSERVER: H. Hanse

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
10					
16					
32					
35					
42			y.h.b.		
63					
74					
77					
105					
150					

SECTION DESCRIPTION

g. g. s. c.
drilling debris

g. g. s. c.

drilling - debris

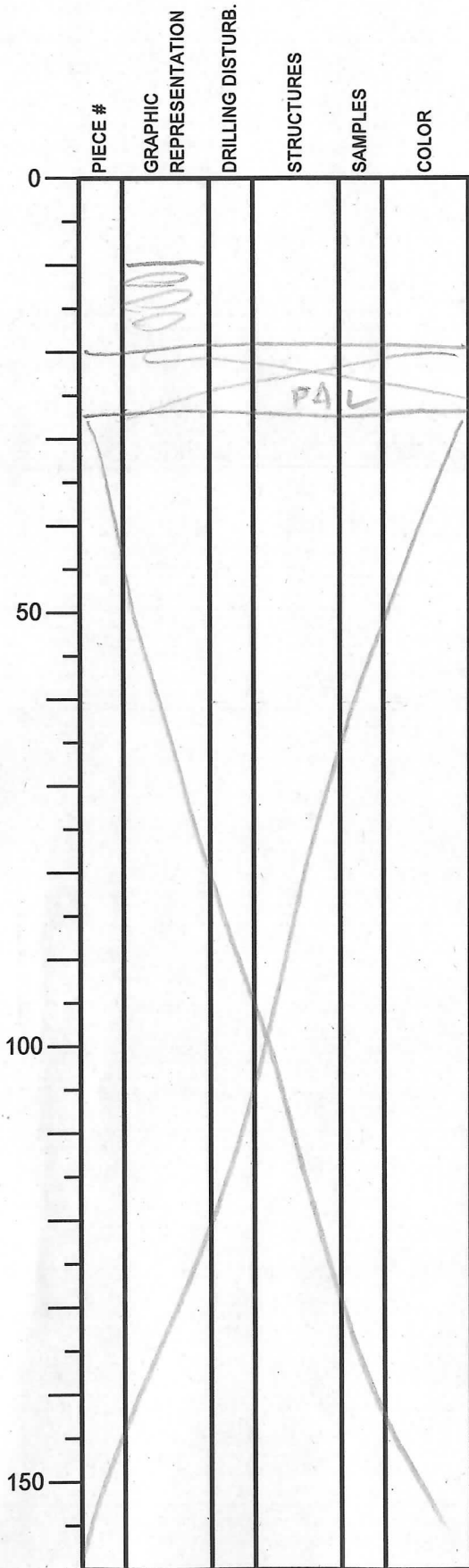
105 end

↑
 Heavy bioturb. (5)
 ↓

↑ 72
 Intense drill-disturb.
 ↓ 105

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/29/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 32R
 SECTION: CC
 OBSERVER: H. Naruse



SECTION DESCRIPTION

10 light green-gray calcareous claystone
 drilling-debris
 20
 PAL
 28 end
 Heavy bioturbation (5)

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/29/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 33R
 SECTION: 1
 OBSERVER: H. Naruse

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
			x.h.b z.bb	21 24	14 gsc
50					44 grad? 51 end
100					
150					

SECTION DESCRIPTION

g.g.s.c.

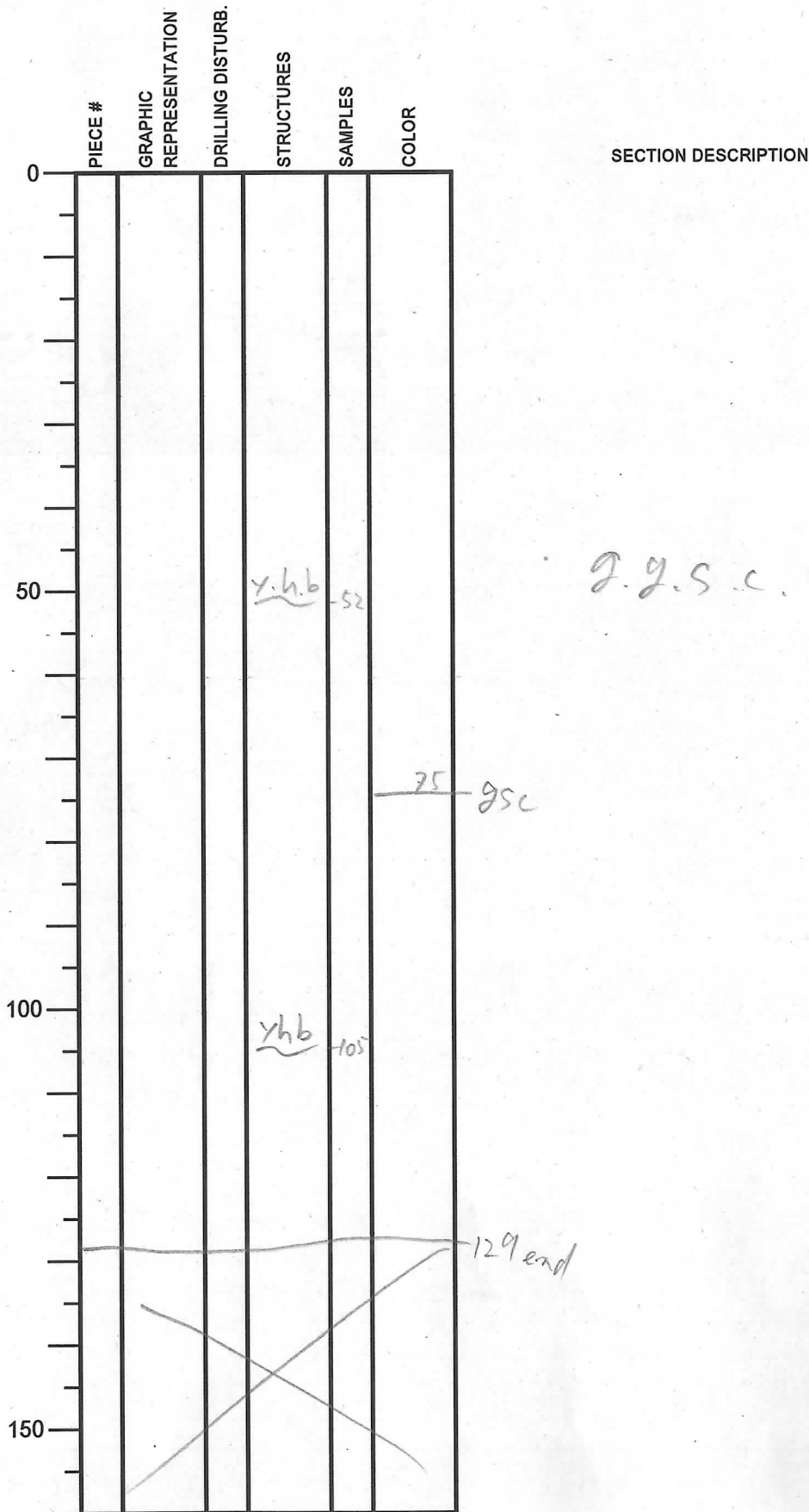
grad?
 green-gray clayey siltstone
 structureless

Heavy
bioturb.
(5)

slight
(1)

Integrated Ocean Drilling Program Visual Core Description

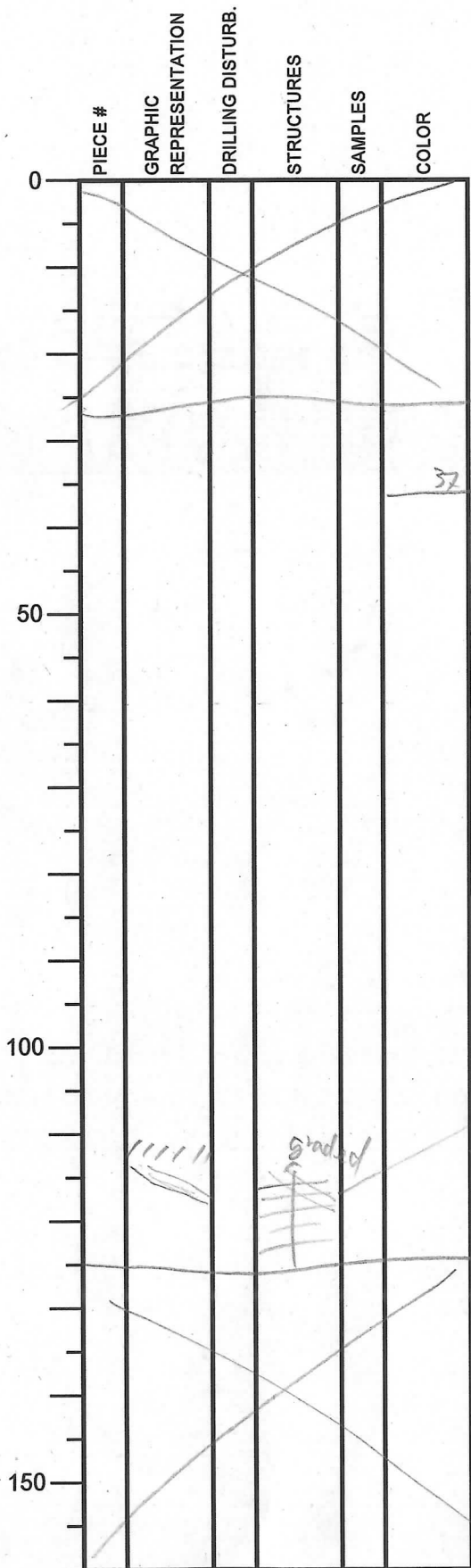
NO.
 DATE: 9/27/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 33R
 SECTION: 3
 OBSERVER: H. Haruse



↑ Heavy
bioturb.
(5)
↓

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/29/09
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 33R
 SECTION: 4
 OBSERVER: H. Naruse



SECTION DESCRIPTION

28
32 gsc

g.g.s.c.

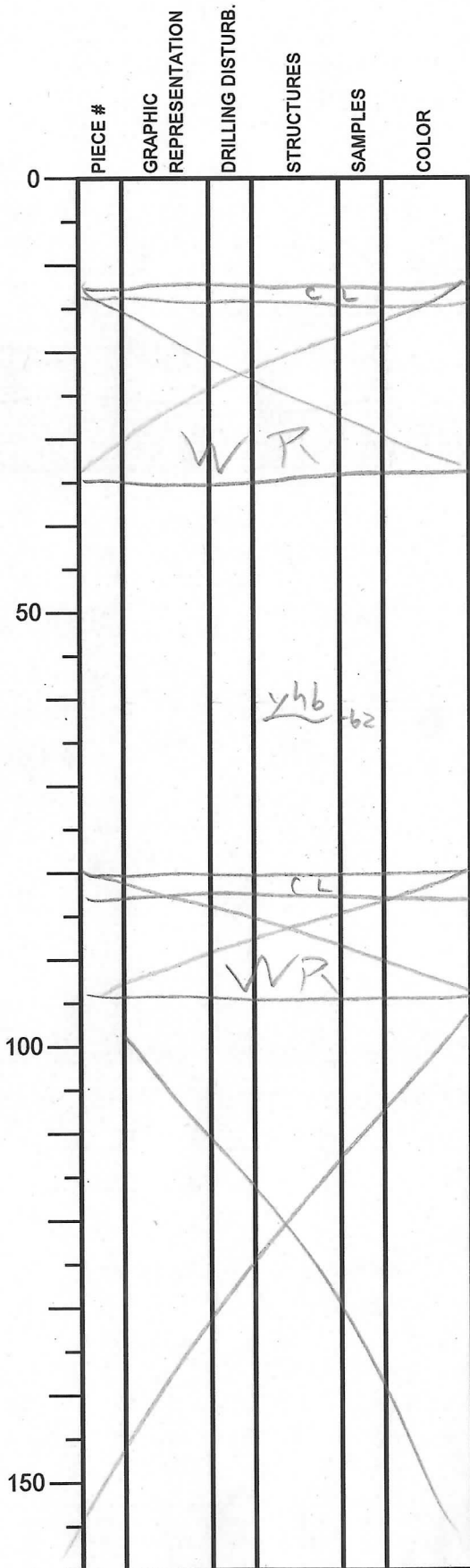
Calcite? vein
 -113 - grad. b.
 laminated
 125 end

clayey siltstone
 slight (1)

Heavy bioturb. (5)

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 7/27/09
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 33R
 SECTION: 5
 OBSERVER: H. Naruse



SECTION DESCRIPTION

g.g.s.l.

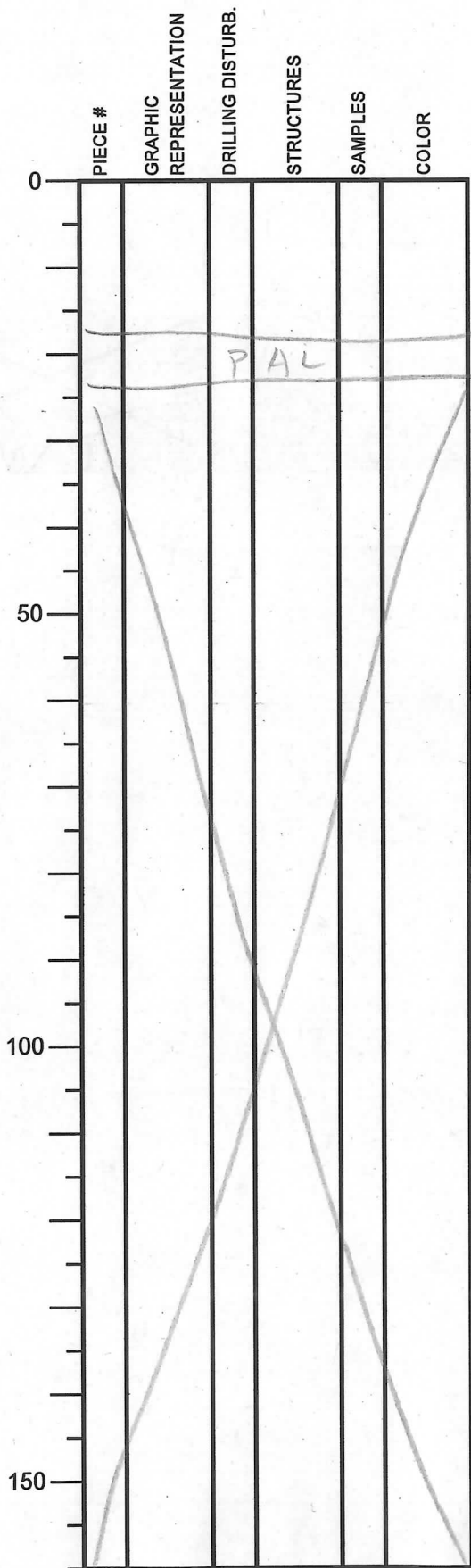
g.g.s.l.

steeply inclined
bedding
(~40°)

↑ Heavy
bioturb.
(5)
↓

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 1 / 20
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 33R
 SECTION: CC
 OBSERVER: H. Naruse

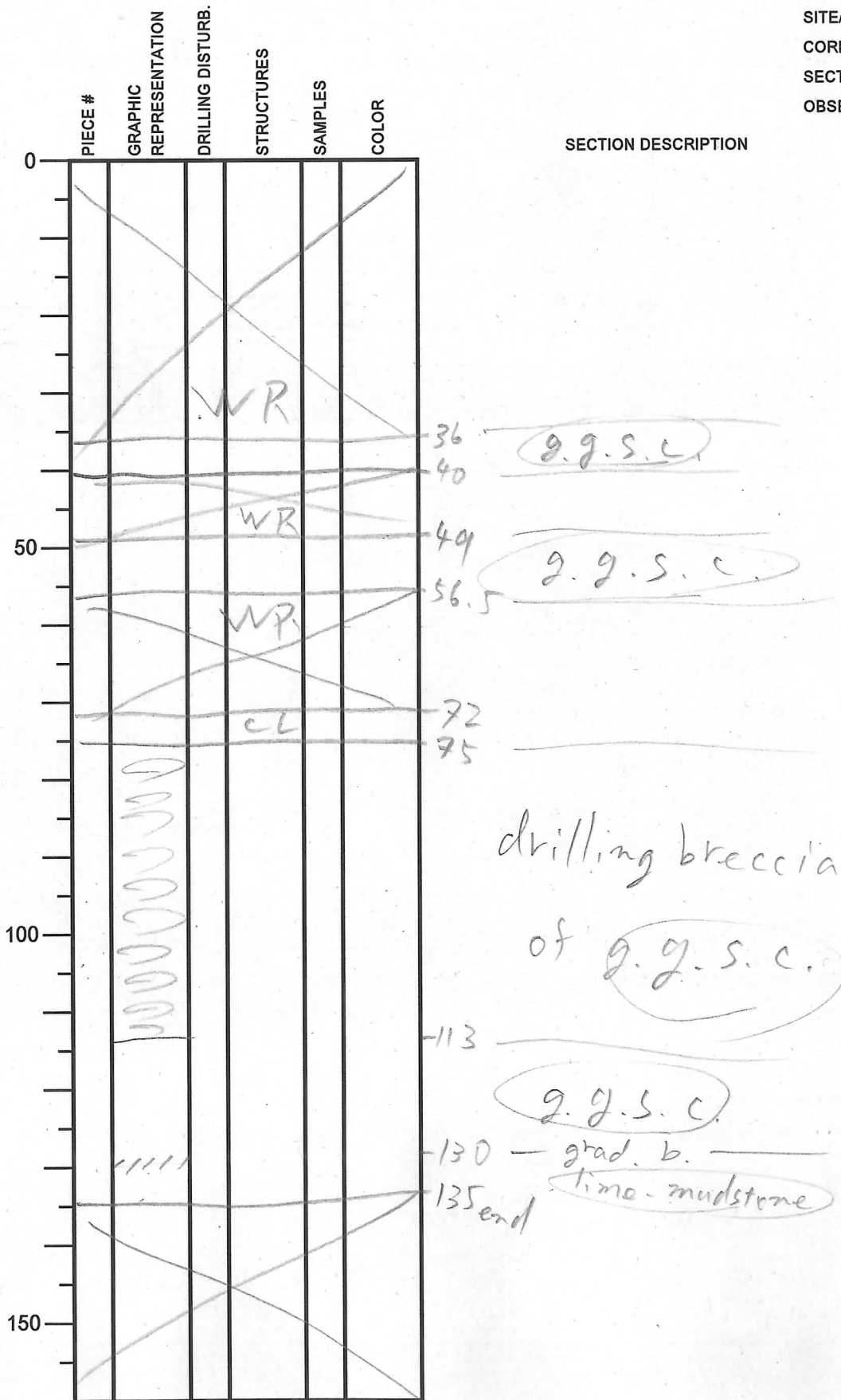


SECTION DESCRIPTION

g.g.s.c.
 steeply inclined bedding (~40°)
 Heavy bioturb. (5)

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/29/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 342
 SECTION: 1
 OBSERVER: H. Naruse



Heavy
bioturb.
(5)



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/29/09
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 34R
 SECTION: 2
 OBSERVER: H. Naruse

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

SECTION DESCRIPTION

g.g.s.c

Heavy
bioturb.
(5)

120 end



Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: / / 20
EXP.:
SITE/HOLE:
CORE:
SECTION: 4
OBSERVER: H. Naruse

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0				yhb	15	
50		//////		yhb	33	
100						
150						

SECTION DESCRIPTION

g.g.s.c

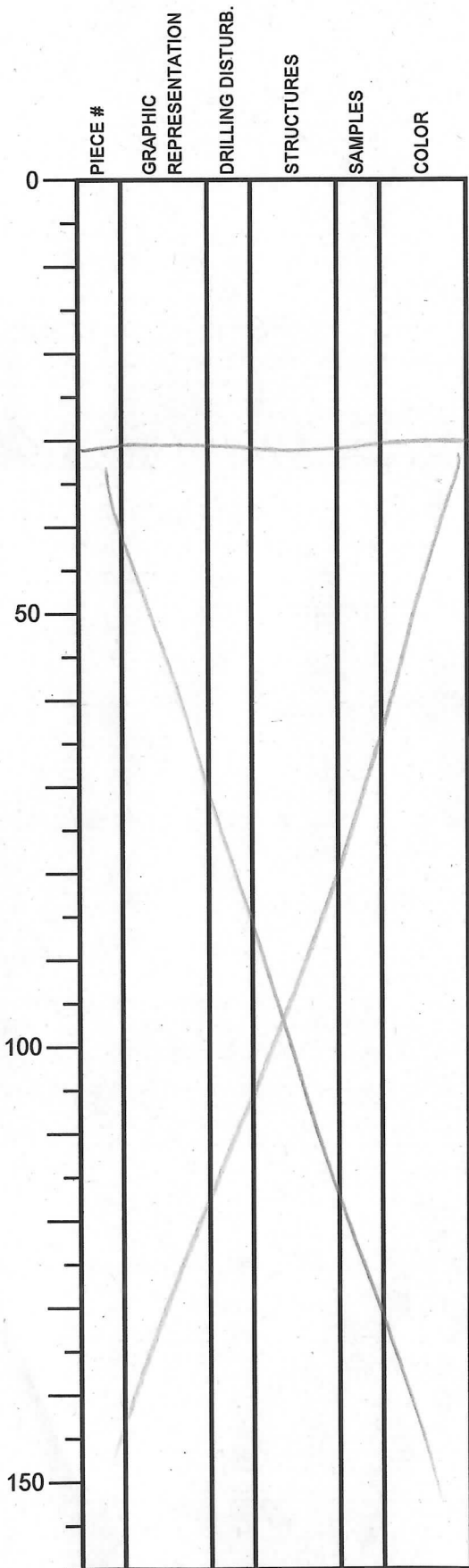
Heavy bioturb. (5)

-56 — grad. b. —————
-60 — dark gray clayey siltstone —————
 — sharp b. —————
69 end

↑ Slight (1)

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/29/09
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 35R
 SECTION: 1
 OBSERVER: H. Naruse



SECTION DESCRIPTION

g.g.s.c.

↑ Intense drill disturb.
 ↓
 ↑ Heavy bioturb. (S)
 ↓

Integrated Ocean Drilling Program Visual Core Description

NO. _____
 DATE: 9/29/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 35R
 SECTION: 3
 OBSERVER: H. Yaruse

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
50				31 32	
100					
150					

SECTION DESCRIPTION

g.g.s.c.

lime-mudstone burrows

-SP

drilling breccia of g.g.s.c. & d.g.c.s.

↑ Heavy bioturb. (5)

↓

↑ intense drill disturb.

↓

140 cm

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/1/20
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 35R
 SECTION: 4
 OBSERVER: H. Haruse

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

SECTION DESCRIPTION

g. g. s. c.

↑ Intense drill dist.
↓

↑ Heavy bioturb.
↓

-39 —————
 drill-breccia of g. g. s. c.

-63 —————
green-gray clayey siltstone

-92 — sharp b.
calcareous claystone

-101 — grad. b.

laminated green-gray clayey siltstone

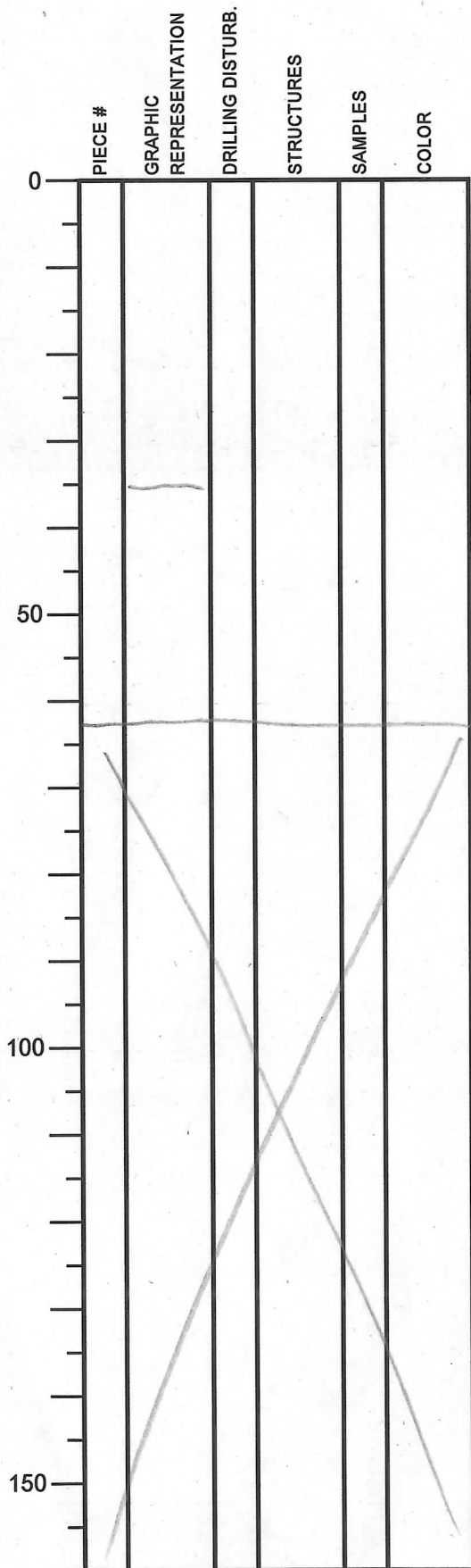
↑ Intense drill dist.
↓

↑ slight bio. (1)
↓
 ↑ Heavy (5)
↓
 ↓ slight (1)
↓

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/29/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 35R
 SECTION: 5
 OBSERVER: H. Naruse



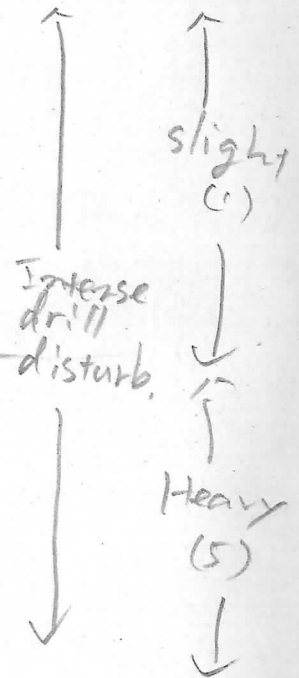
SECTION DESCRIPTION

green-gray
c. Siltstone

— 35 — sharp b? —

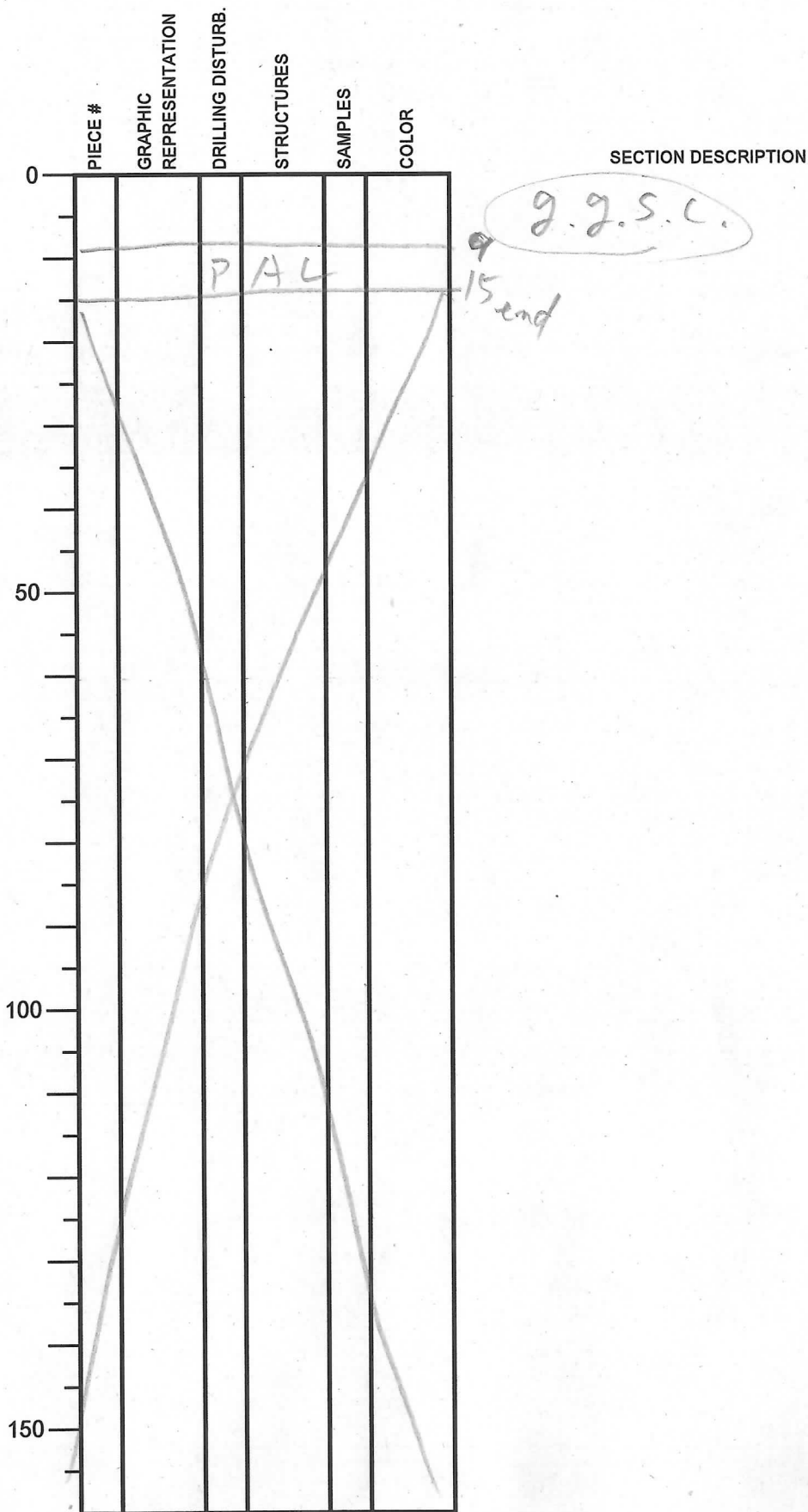
g.g.s.c.

63 end



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/21/09
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 35R
 SECTION: CC
 OBSERVER: H. Haruse

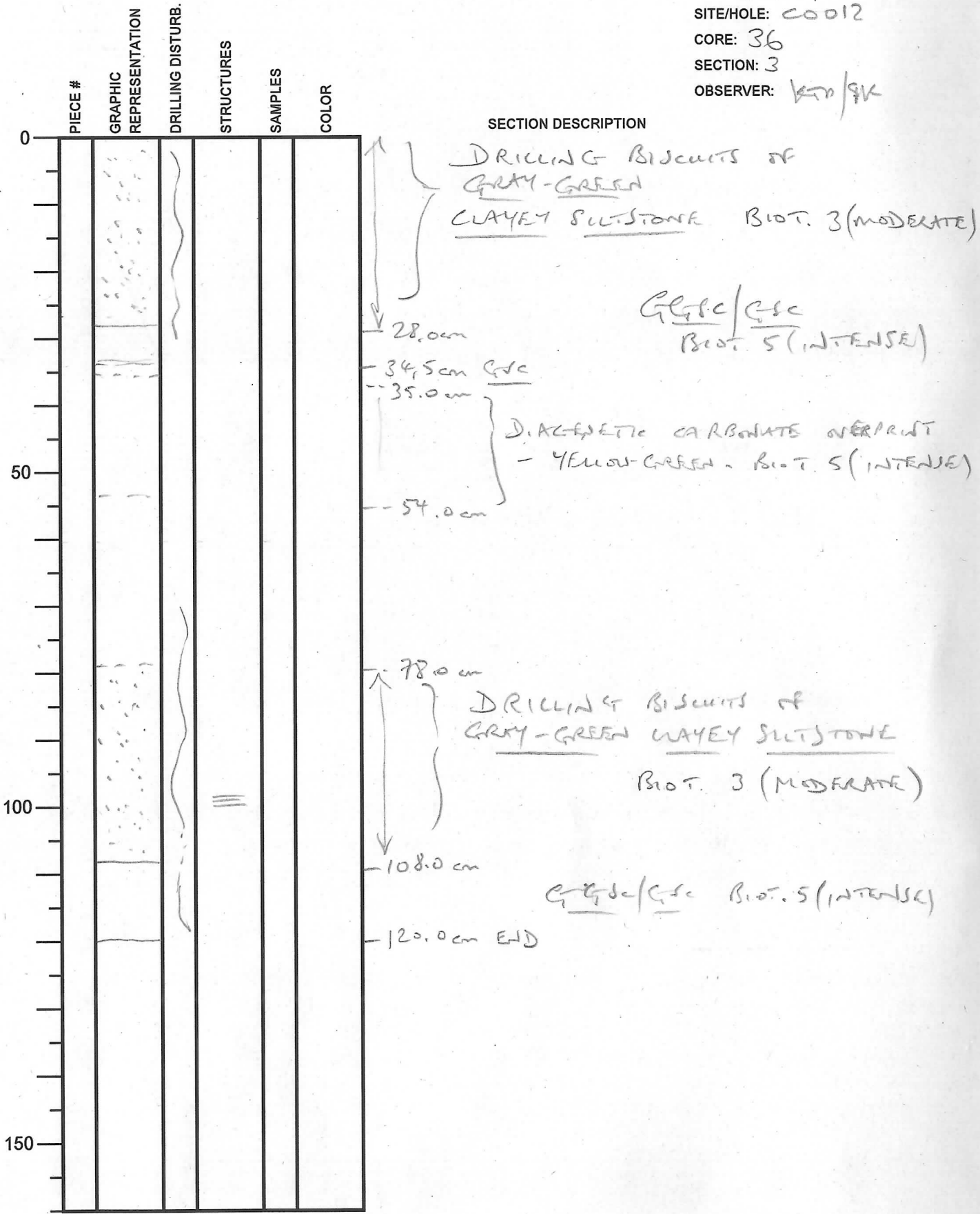


↑ Intense drill dist.
 ↑ Heavy CSI

Integrated Ocean Drilling Program



Visual Core Description

NO.
 DATE: 20/09/2009
 EXP.: 322
 SITE/HOLE: C0012
 CORE: 36
 SECTION: 3
 OBSERVER: KTD/SK



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 30/01/2009
 EXP.: 322
 SITE/HOLE: C0012
 CORE: 36
 SECTION: 4
 OBSERVER: KTT/SK

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

SECTION DESCRIPTION

G-LSC/GSC BIOT. 5 (INTENSE)

12.0 cm DRILLING DISTURBANCE OF
CRAZY-GREEN CLAYEY SILTSTONE
 (31-12 cm) BIOT. 3 (MODERATE)

31.0 cm END

Integrated Ocean Drilling Program Visual Core Description

NO.

DATE: 30/09/2009

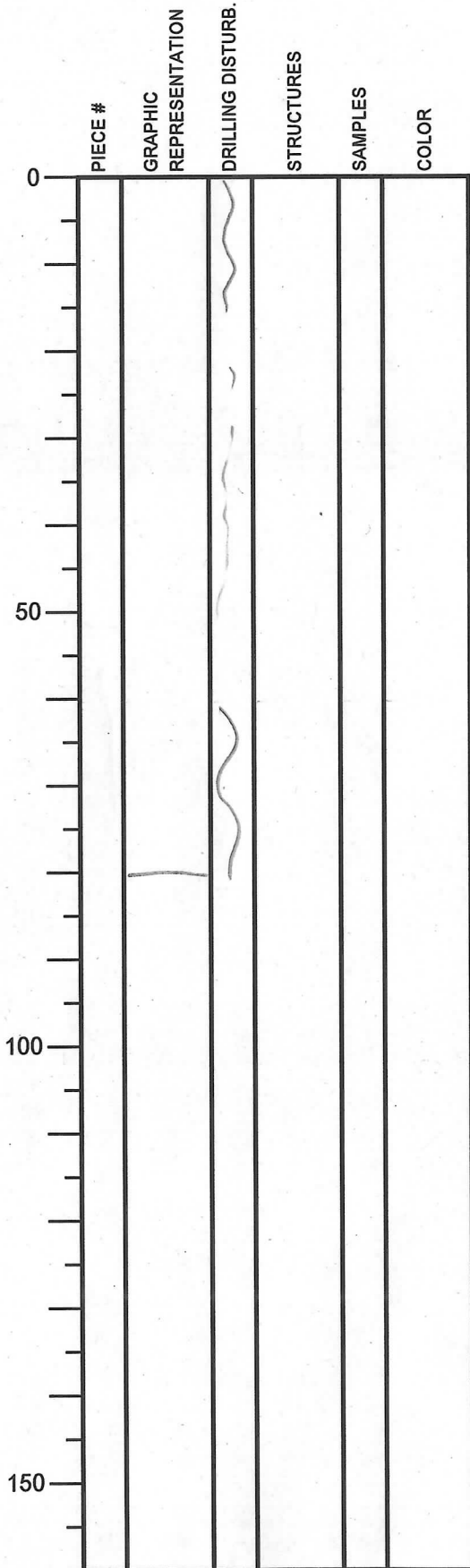
EXP.: 322

SITE/HOLE: C5012

CORE: 37

SECTION: 1

OBSERVER: KTD/SK



SECTION DESCRIPTION

CGSC/GSC

Knot 5 (INTENSE)

80.0cm END

Integrated Ocean Drilling Program

Visual Core Description

NO.

DATE: 30/09/2009

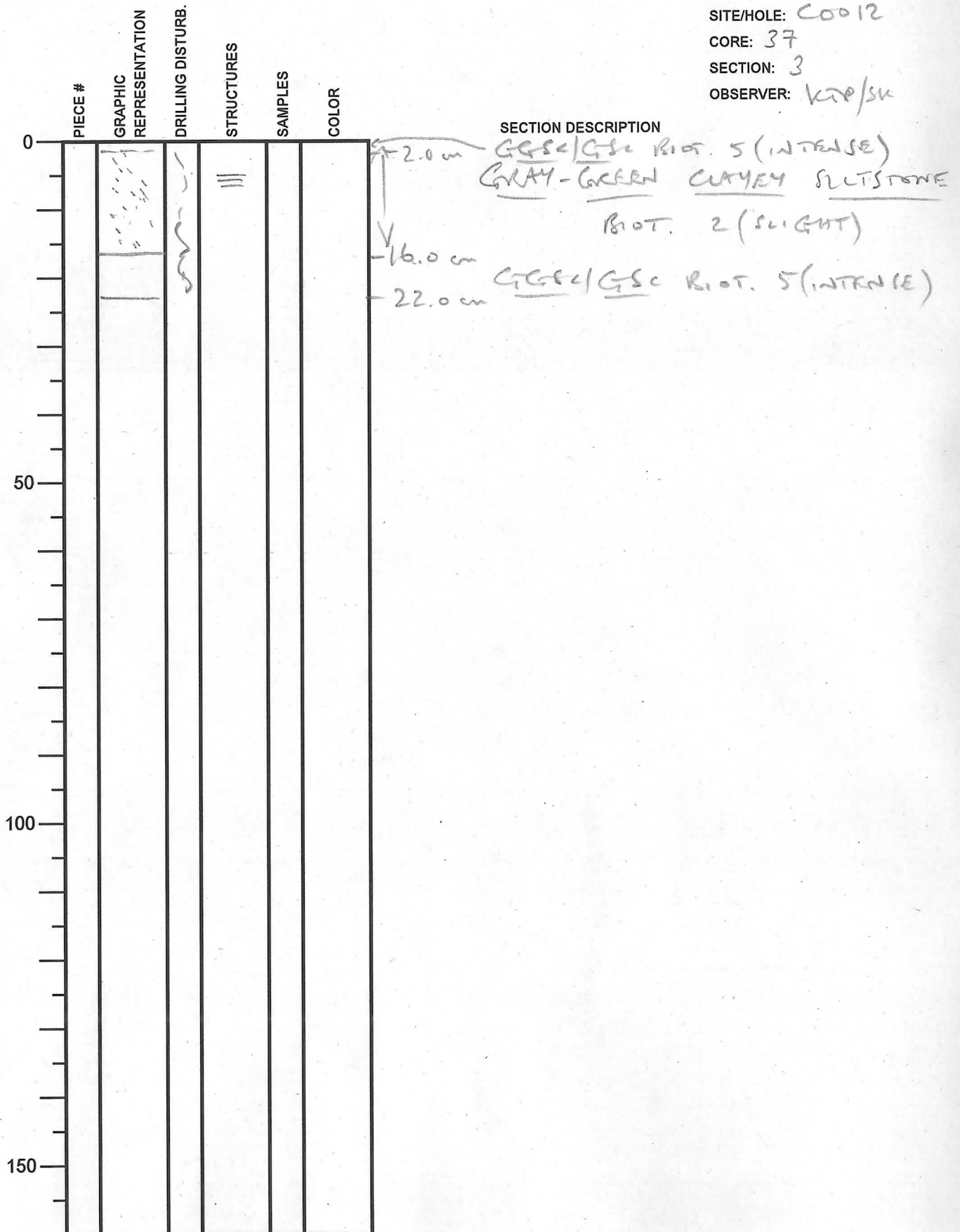
EXP.: 322

SITE/HOLE: C0012

CORE: 37

SECTION: 3

OBSERVER: KAP/SK



Integrated Ocean Drilling Program

Visual Core Description

NO.

DATE: 3/20/09

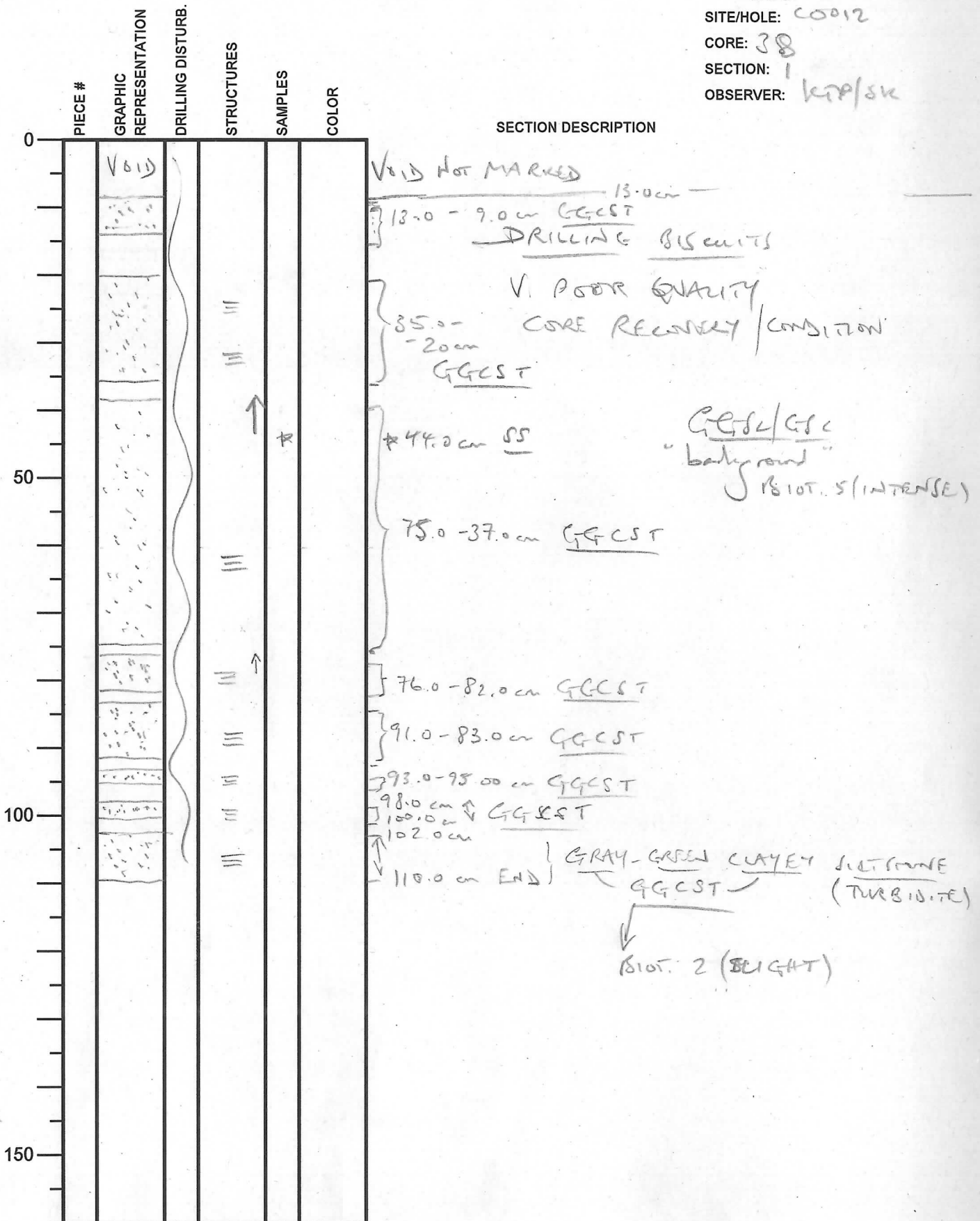
EXP.: 322

SITE/HOLE: C0012

CORE: 38

SECTION: 1

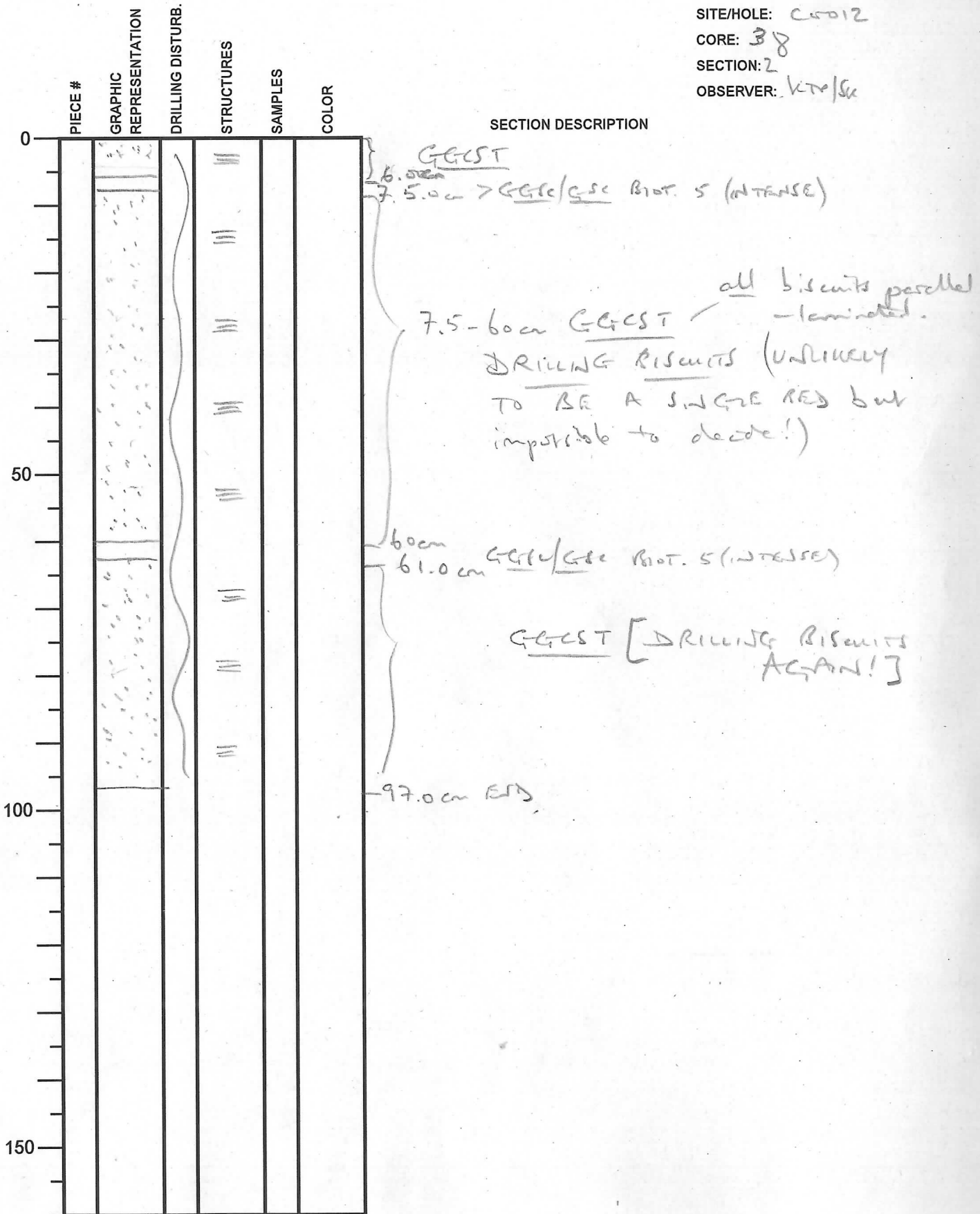
OBSERVER: KJP/SK



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 30/07/2009
 EXP.: 322
 SITE/HOLE: C0012
 CORE: 38
 SECTION: 2
 OBSERVER: KTO/SC



Integrated Ocean Drilling Program

Visual Core Description

NO.

DATE: 3/19/09

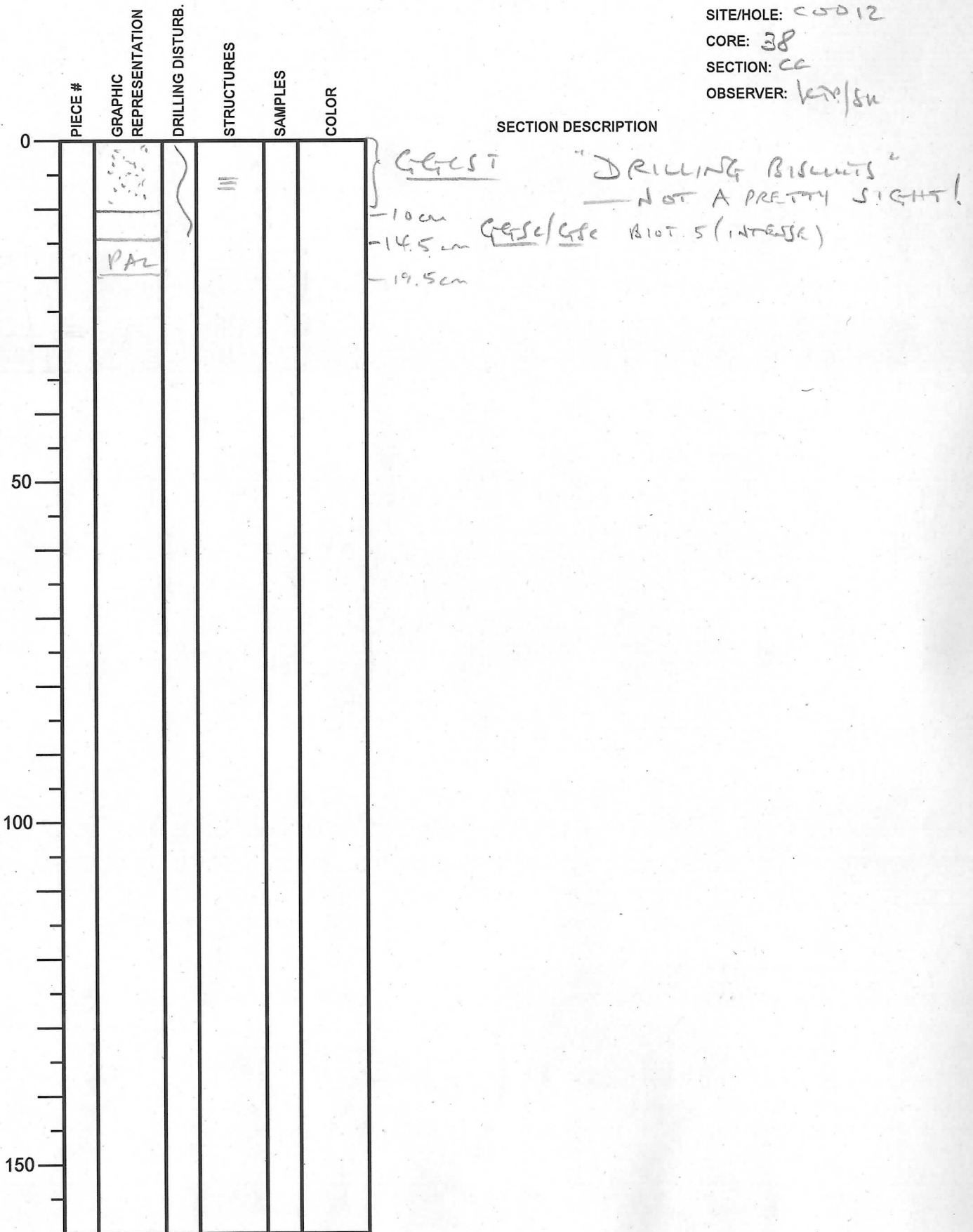
EXP.: 322

SITE/HOLE: C0012

CORE: 38

SECTION: CC

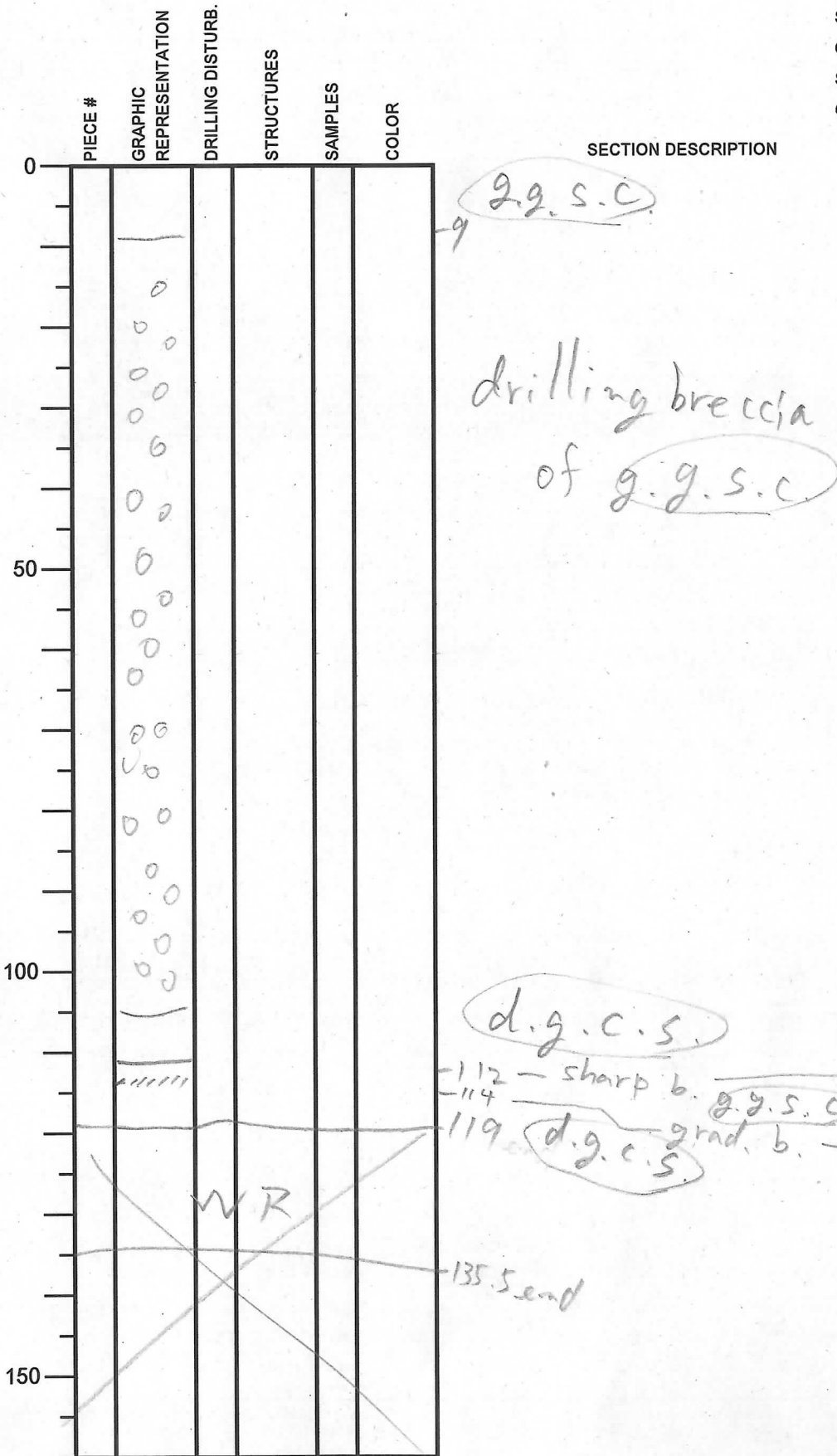
OBSERVER: KXP/SK



Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/30/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 39R
 SECTION: 1
 OBSERVER: H. Naruse



SECTION DESCRIPTION

g.g.s.c.

drilling breccia
of g.g.s.c.

d.g.c.s.

112 - sharp b. g.g.s.c.

114 - grad. b.

119 - d.g.c.s.

slight bio
(1)

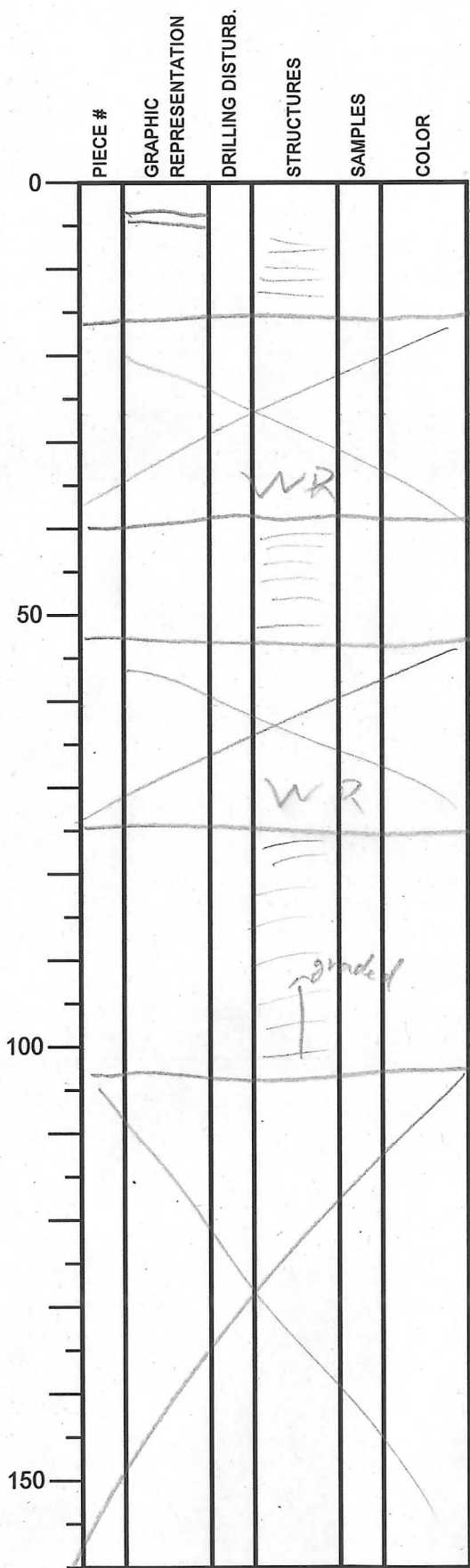
135.5 end

WR

Integrated Ocean Drilling Program

Visual Core Description

NO.
 DATE: 9/30/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 39R
 SECTION: 2
 OBSERVER: H. Naruse



SECTION DESCRIPTION

3 - laminated d.g.c.s.
 4 - sharp b.
 16 - sharp b. g.g.s.c.
 laminated d.g.c.s.
 40 - laminated d.g.c.s.
 53 - laminated d.g.c.s.
 75 - laminated d.g.c.s.
 104 end

↑ slight (1)
 ↓ Heavy (5)
 ↓ slight (1)
 ↓ slight (1)
 ↓ slight (1)

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/30/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 39R
 SECTION: 4
 OBSERVER: H. Haruse



SECTION DESCRIPTION

3 — laminated d.g.s.c.
 5 — sharp b.
 sharp b. g.g.s.c.
 12 — grad b. calcareous clayey siltstone

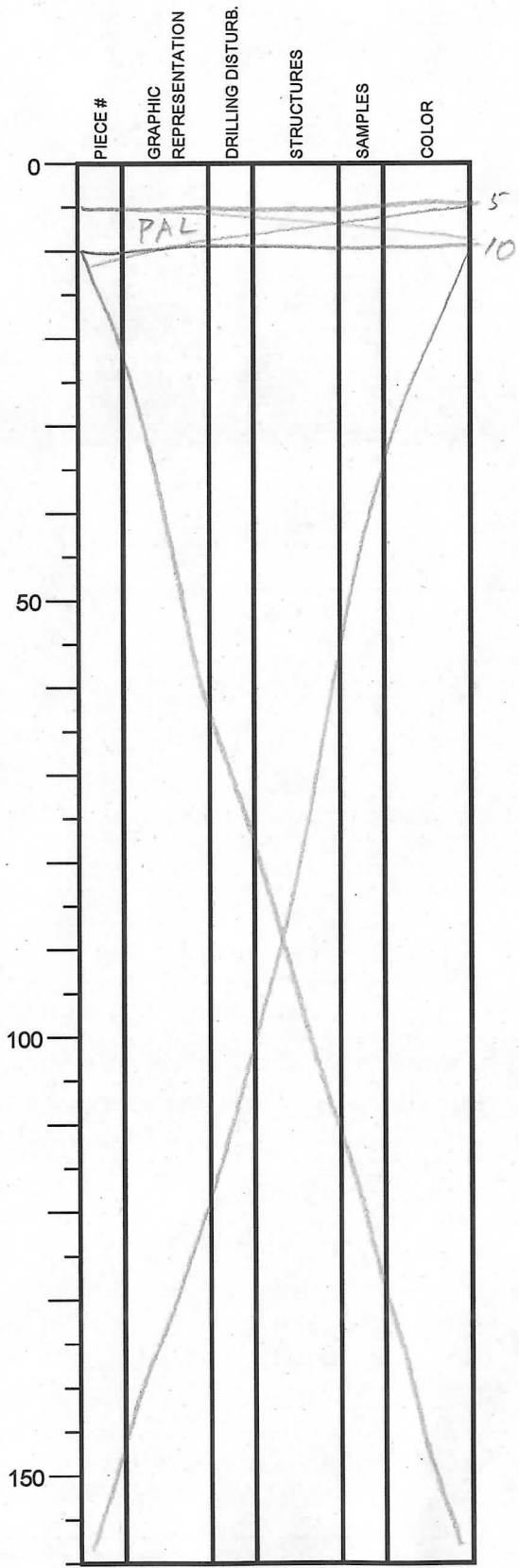
laminated d.g.s.c.

Slight
bioturb.
(1)

69 end

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/30/2009
 EXP.: 322
 SITE/HOLE: CD012A
 CORE: 39R
 SECTION: CC
 OBSERVER: H. Naruse

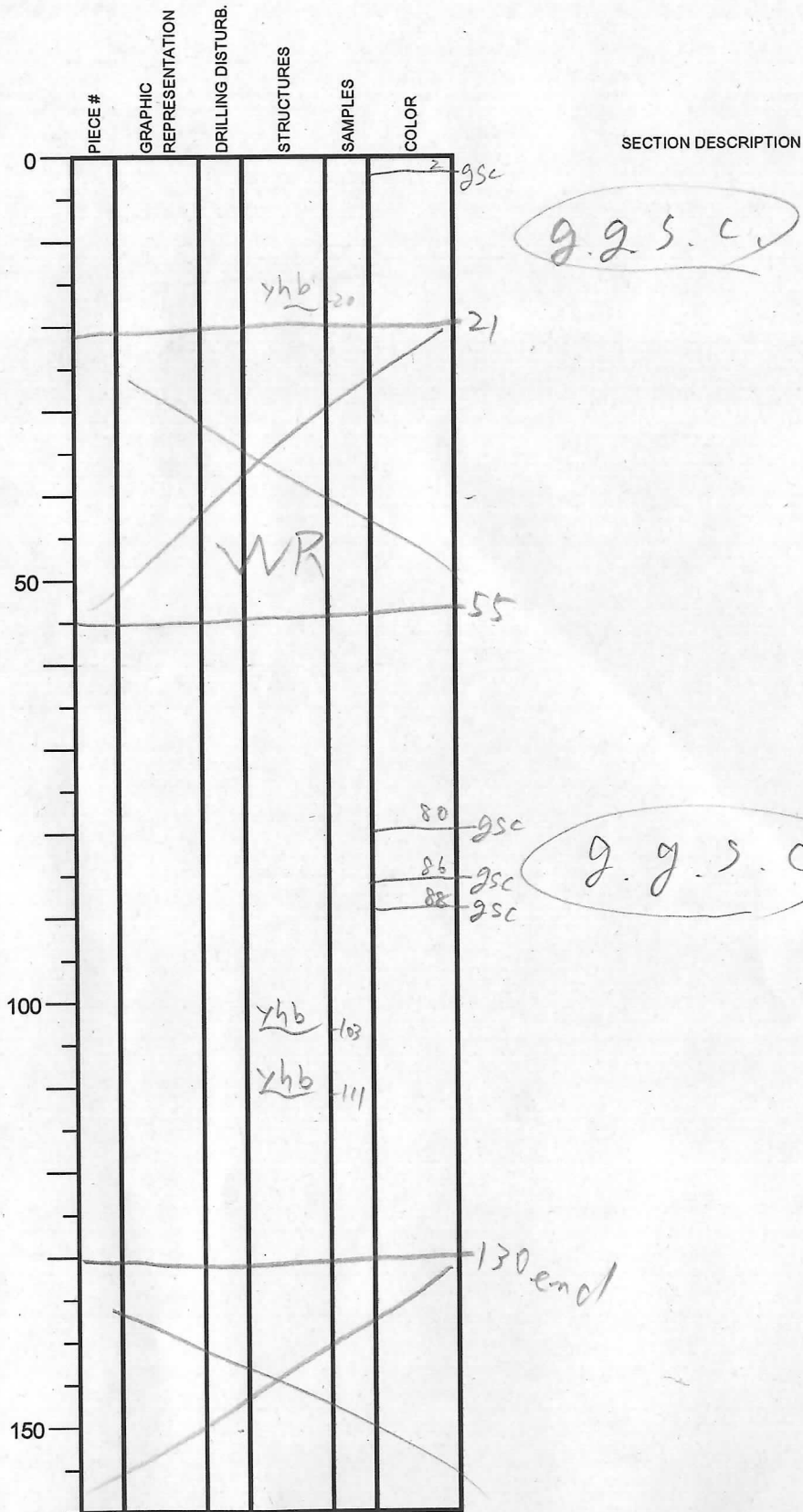


SECTION DESCRIPTION
laminated d.g.c.s.

↑ slight
(1)

Integrated Ocean Drilling Program Visual Core Description

NO. _____
 DATE: 9/30/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 40R
 SECTION: /
 OBSERVER: H. Naruse

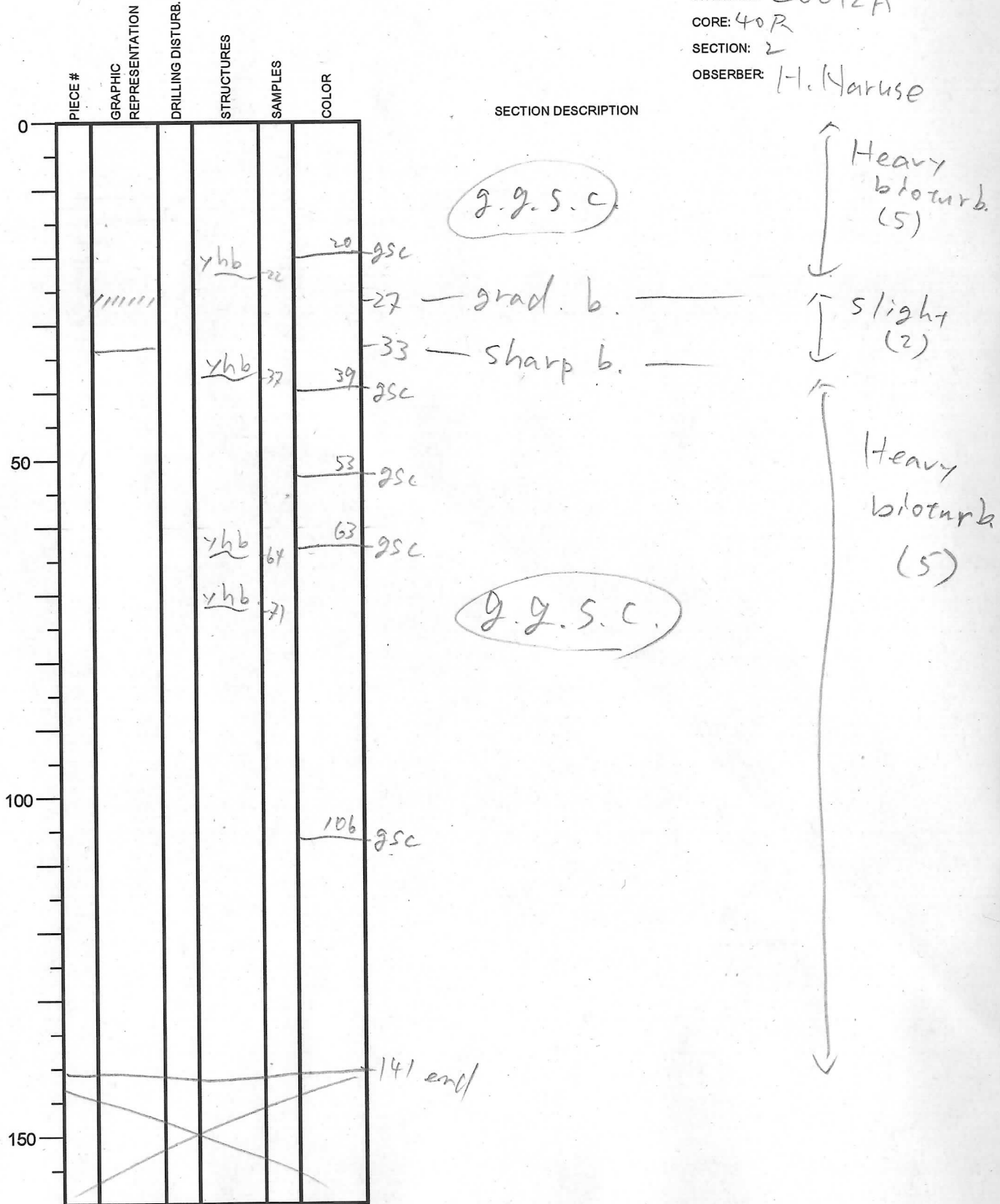


Heavy bioturb. (S)

Heavy bioturb. (S)

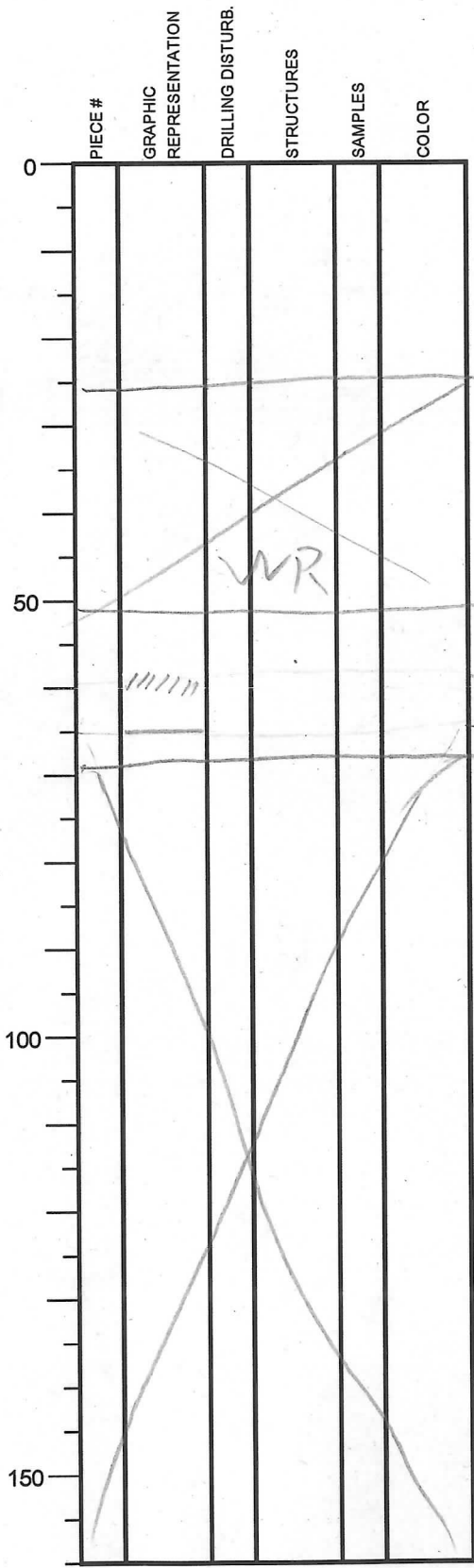
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 4/20/09
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 40R
 SECTION: 2
 OBSERVER: H. Naruse



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/30/09
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 40R
 SECTION: 3
 OBSERVER: A. Naruse



SECTION DESCRIPTION

g.g.s.c.

26

Heavy
(5)

51

g.g.s.c.

|||||

60

grad. b

65

d.g.s.c.

69

sharp b

g.g.s.c.

mod (3)

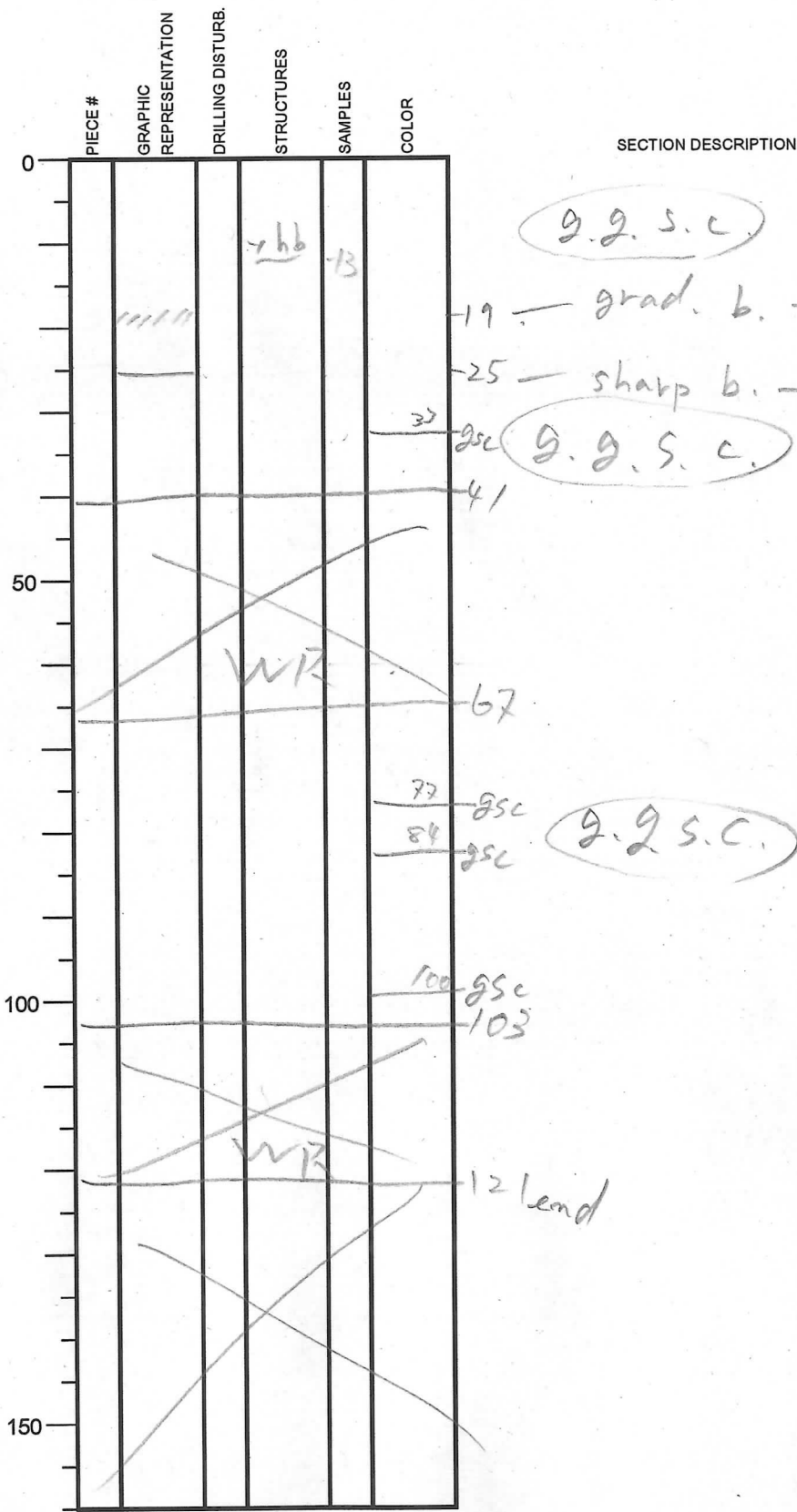
Heavy
(5)

100

150

Integrated Ocean Drilling Program Visual Core Description

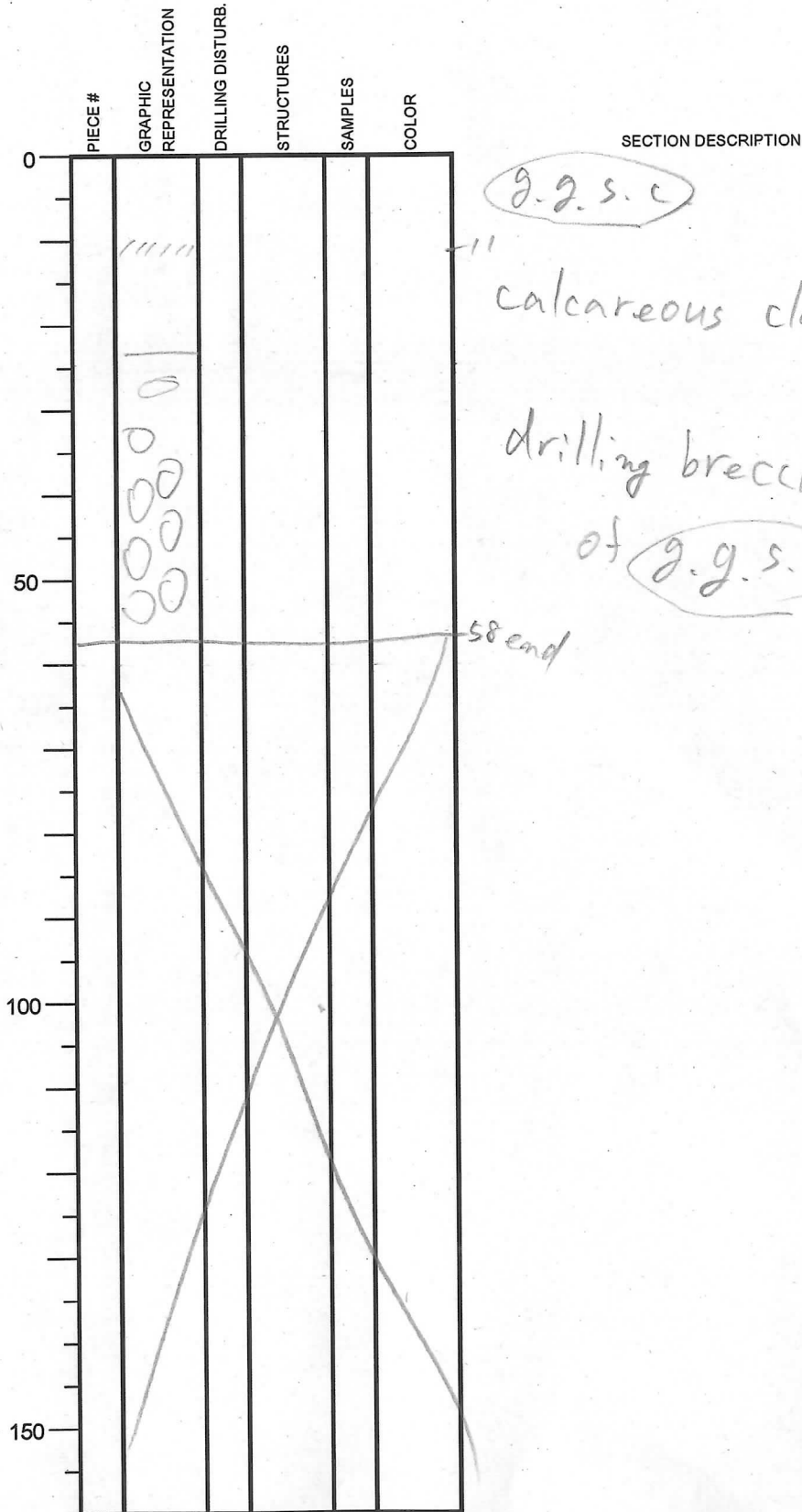
NO.
 DATE: / / 20
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 40R
 SECTION: 5
 OBSERVER: H. H.



↑ Heavy (5)
 ↓ Mod (3)
 ↑ Heavy (5)
 ↑ Heavy bioturb (5)

Integrated Ocean Drilling Program Visual Core Description

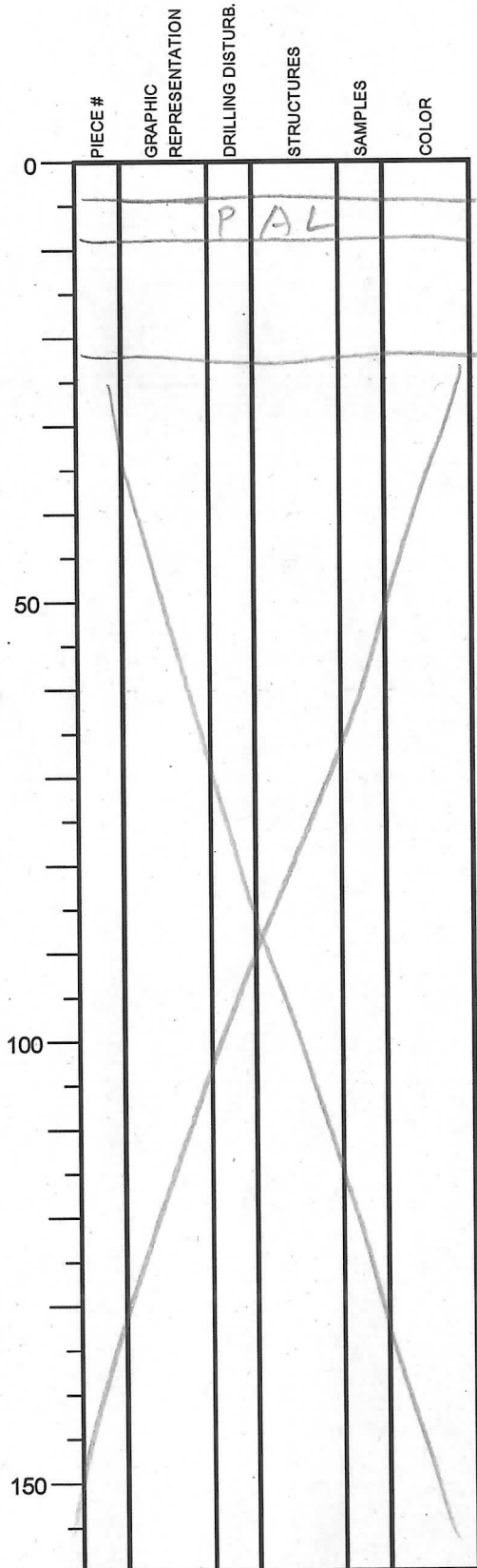
NO.
DATE: 9/30/20 09
EXP.: 322
SITE/HOLE: C0012A
CORE: 402
SECTION: 6
OBSERVER: H. Naruse



↑ Heavy bioturb (5)
↓

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 7/20/09
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 40R
 SECTION: CC
 OBSERVER: H. Haruse

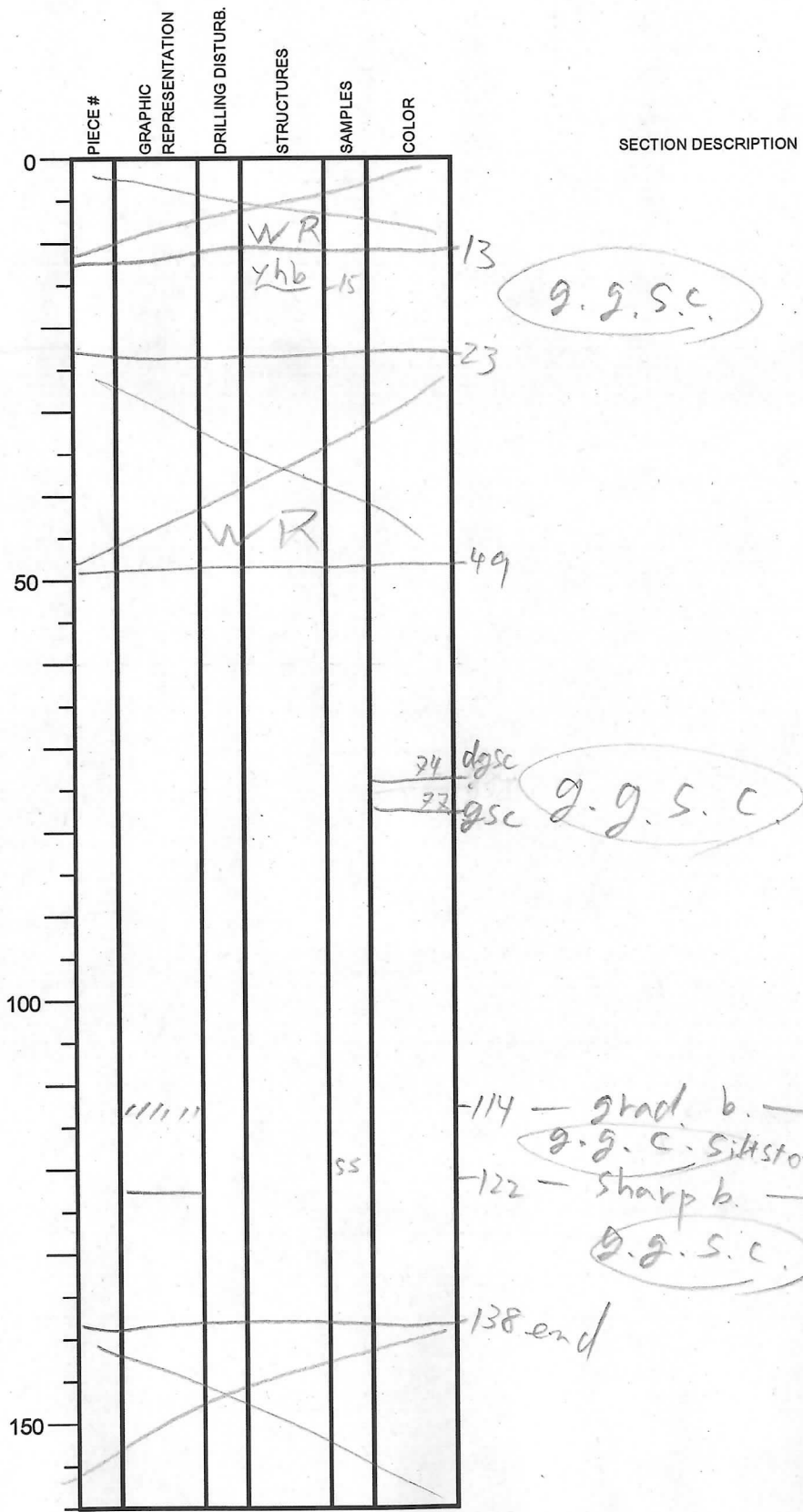


SECTION DESCRIPTION

drilling breccia
of g.g.s.c.

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/30/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 41R
 SECTION: /
 OBSERVER: H. N.



↑

Heavy bioturb. (5)

↓

mod (3)

↓

Heavy (5)

↓

**Integrated Ocean Drilling Program
Visual Core Description**

NO.
DATE: 9/20/20 09
EXP.: 322
SITE/HOLE: C0012A
CORE: 41R
SECTION: 2
OBSERVER: H.N.

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
18					
25					
39					
51					
64					
119 end					
150					

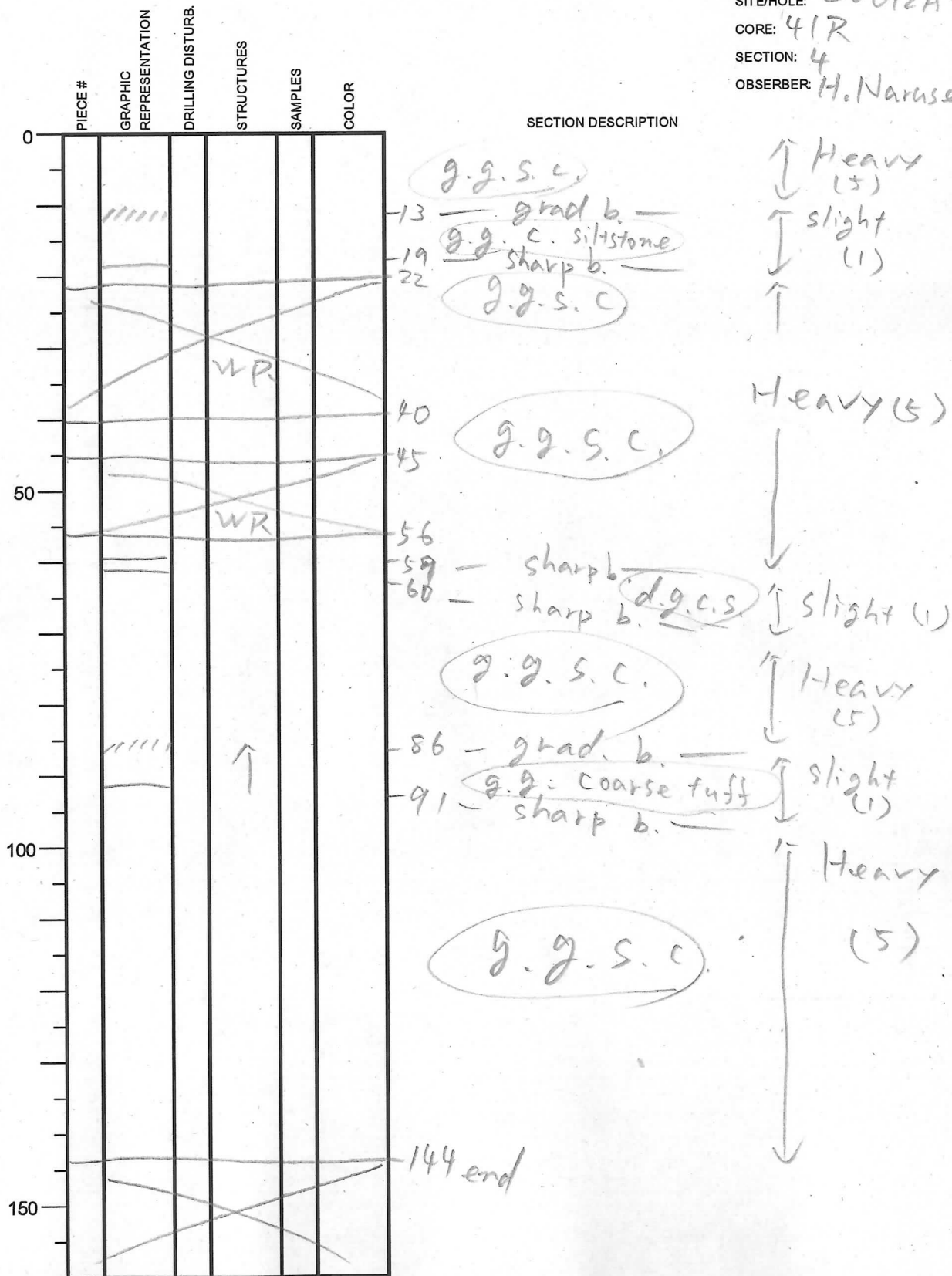
SECTION DESCRIPTION

18 - g.g.s.c.
 25 - grad. b. -
 g.g.c. siltstone
 39 - sharp b. -
g.g.s.c.
 51 - grad. b. -
g.g.c.s
 64 - sharp b. -
g.g.s.c.

↑ Heavy bioturb. (5)
 ↓ slight (2)
 ↑ Heavy (5)
 ↓ Moderate (3)
 ↓ Heavy (5)

Integrated Ocean Drilling Program Visual Core Description

NO. _____
 DATE: 9/30/09
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 41R
 SECTION: 4
 OBSERVER: H. Naruse



Integrated Ocean Drilling Program
Visual Core Description

NO.
DATE: 9/30/09
EXP.: 322
SITE/HOLE: C0012A
CORE: 41R
SECTION: 5
OBSERVER: H. Haruse

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
				25 26	
				44?	
50				49	
			vhb.	71	
100					
150					

SECTION DESCRIPTION

g.g.s.c.

b.
g.g.c. siltstone
sharp b.

g.g.s.c.

↑ Heavy (5)

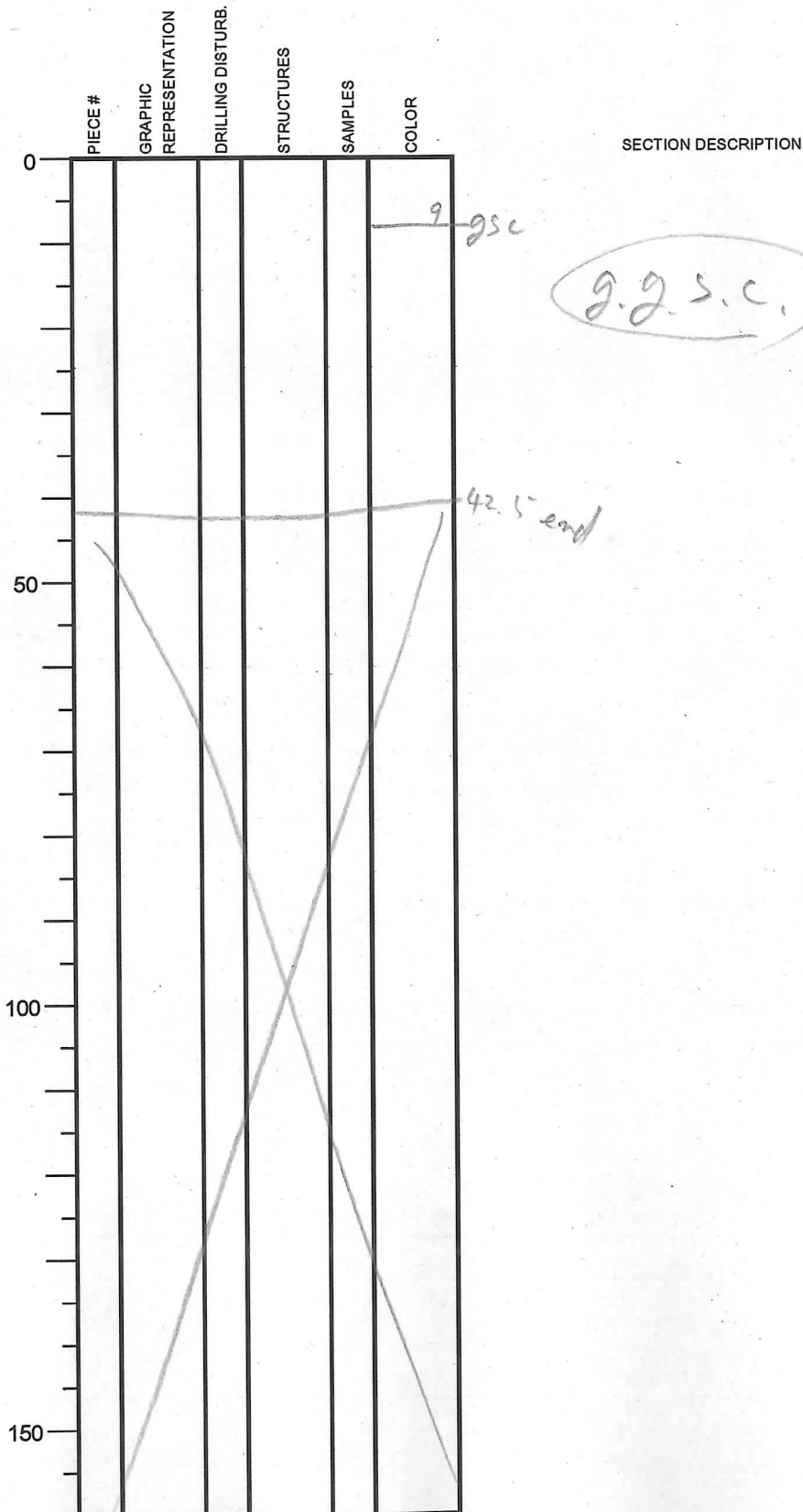
↑ slight (2)

↑ Heavy (5)

125 end

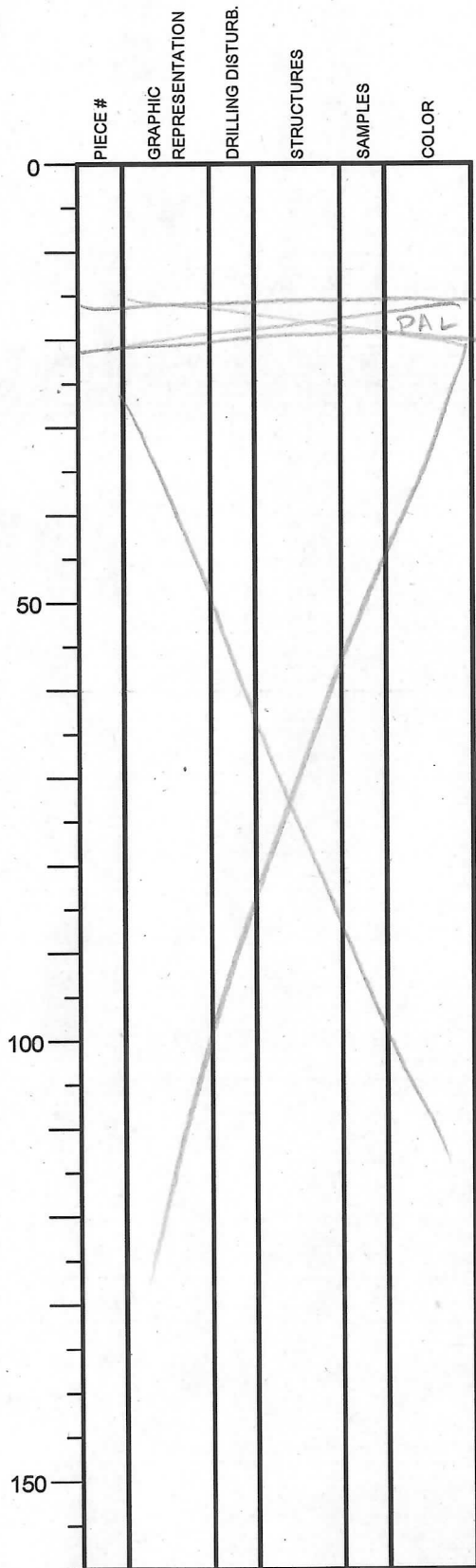
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 4/30/2009
 EXP.: 322
 SITE/HOLE: C0012R
 CORE: 41R
 SECTION: 6
 OBSERVER: H. Nause



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 7/30/09
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 41R
 SECTION: CC
 OBSERVER: H. Haruse



SECTION DESCRIPTION

green-gray
 calcareous silty claystone
 heavy bioturb. (5)

16
 21 end

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 130120 09
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 42R
 SECTION: 1
 OBSERVER: H. Naruse

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
50			yhb	33	
100					
150					

SECTION DESCRIPTION

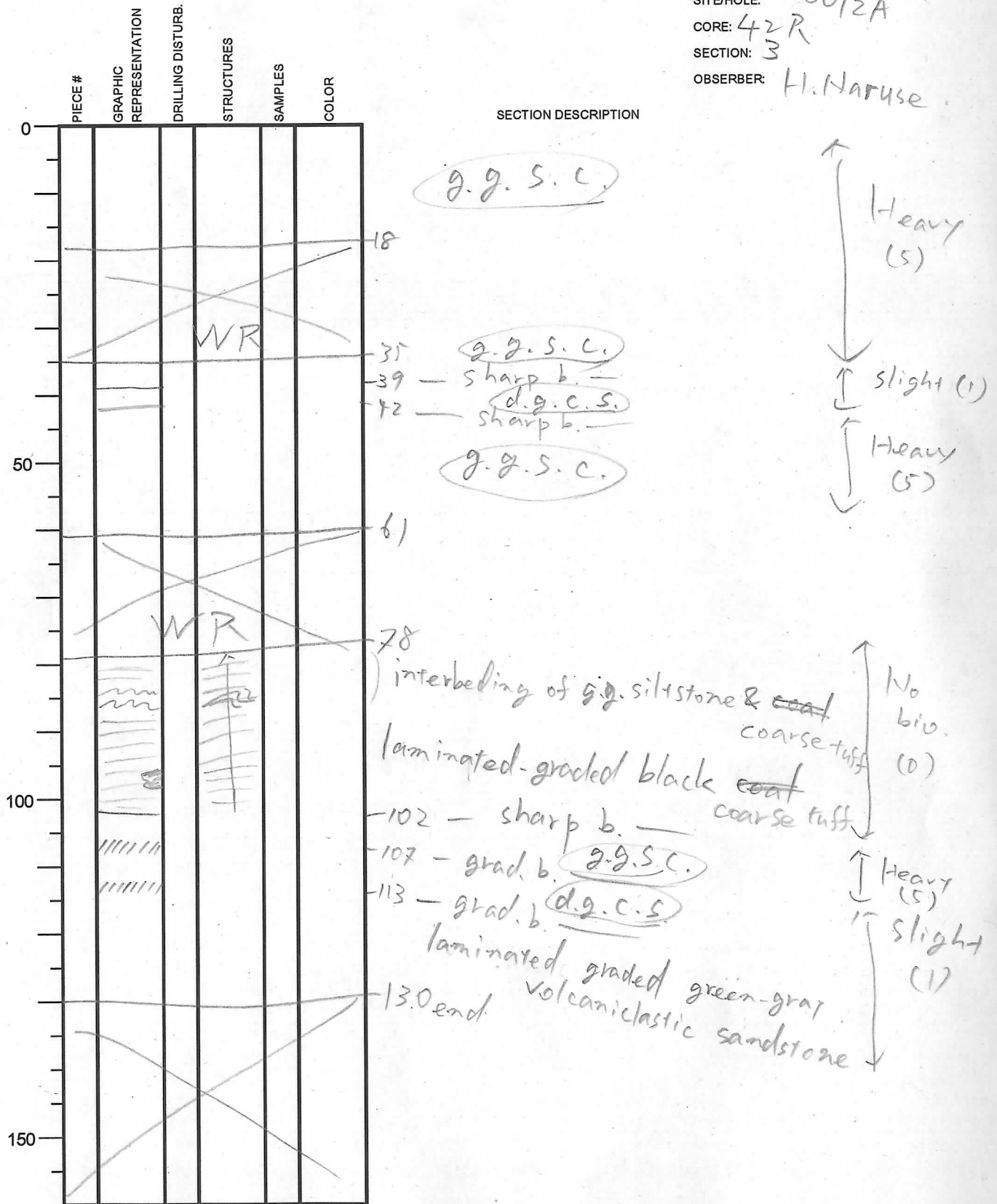
g.g.s.c.

-79 - grad. b -
 mottled green-gray sandstone
 -90 - grad. b - (burrow-fill)
 94.5 end g.g.s.c.

Heavy
 bioturb.
 (5)

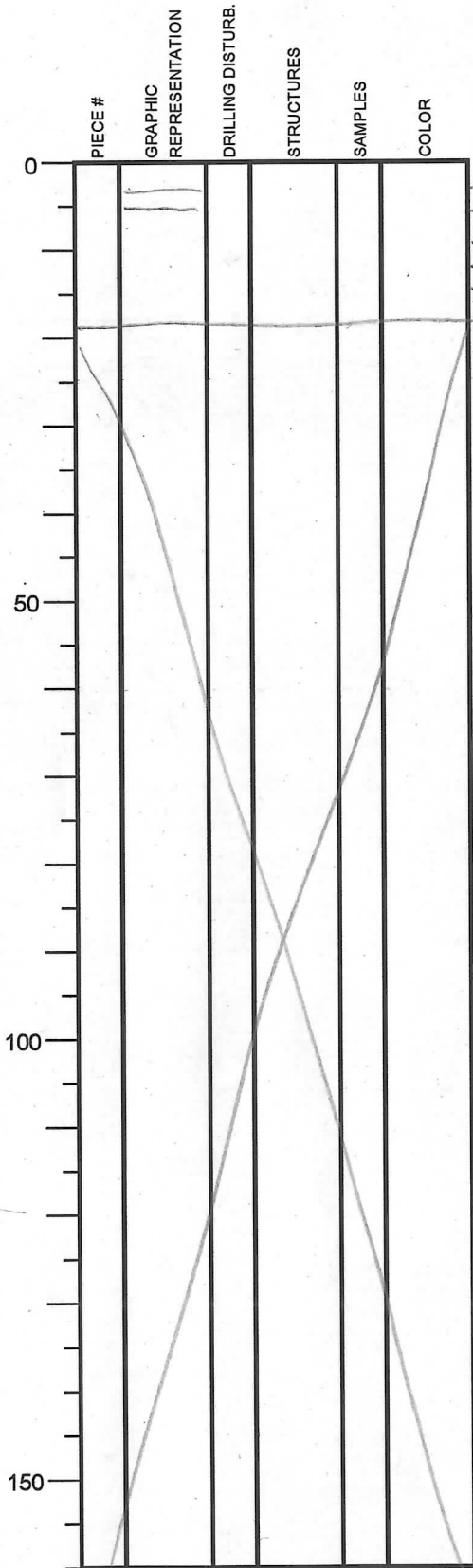
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/13/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 42R
 SECTION: 3
 OBSERVER: H. Naruse



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 9/30/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 42R
 SECTION: 4
 OBSERVER: H. Naruse

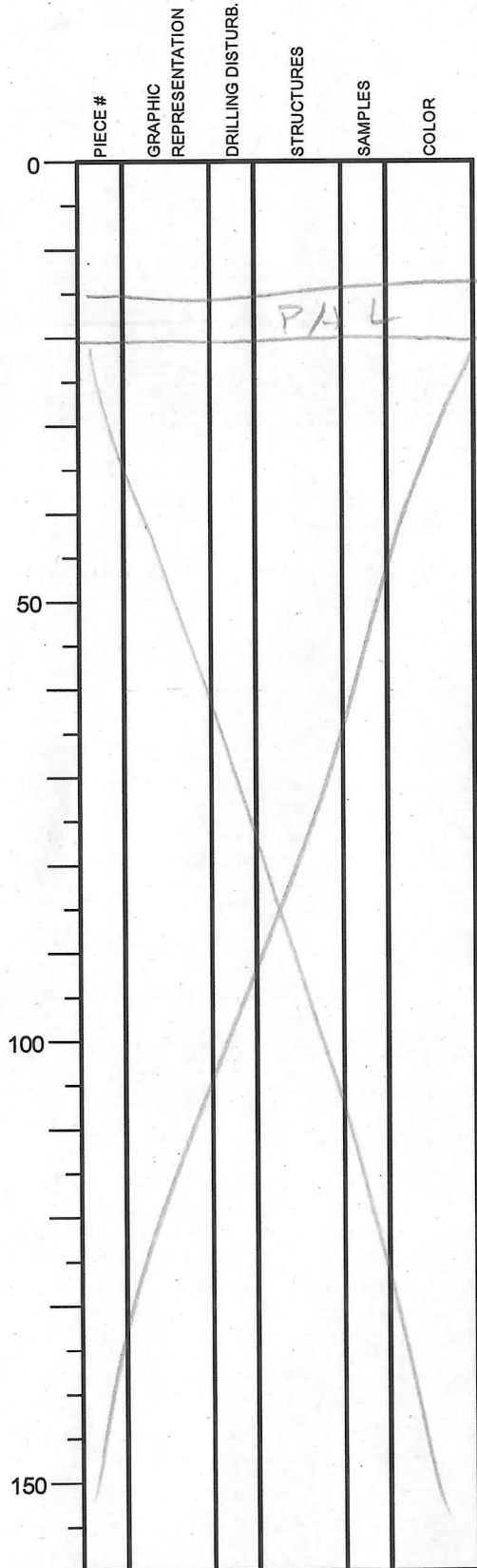


SECTION DESCRIPTION

4 — sharp g.g.s.c. ↑ Heavy (5)
 5 — sharp d.g.c.s. ↓ Moderate (3)
 7 — sharp d.g.c.s.
 9 — sharp
 11 — sharp d.g.c.s.
 15 — sharp d.g.c.s.
 19 end — sharp d.g.c.s.
 ↓ Heavy (5)
 ↓ slight (2)
d.g.c.s.

Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 9/20/09
EXP.: 322
SITE/HOLE: C0012A
CORE: 42R
SECTION: CC
OBSERVER: H. Haruse

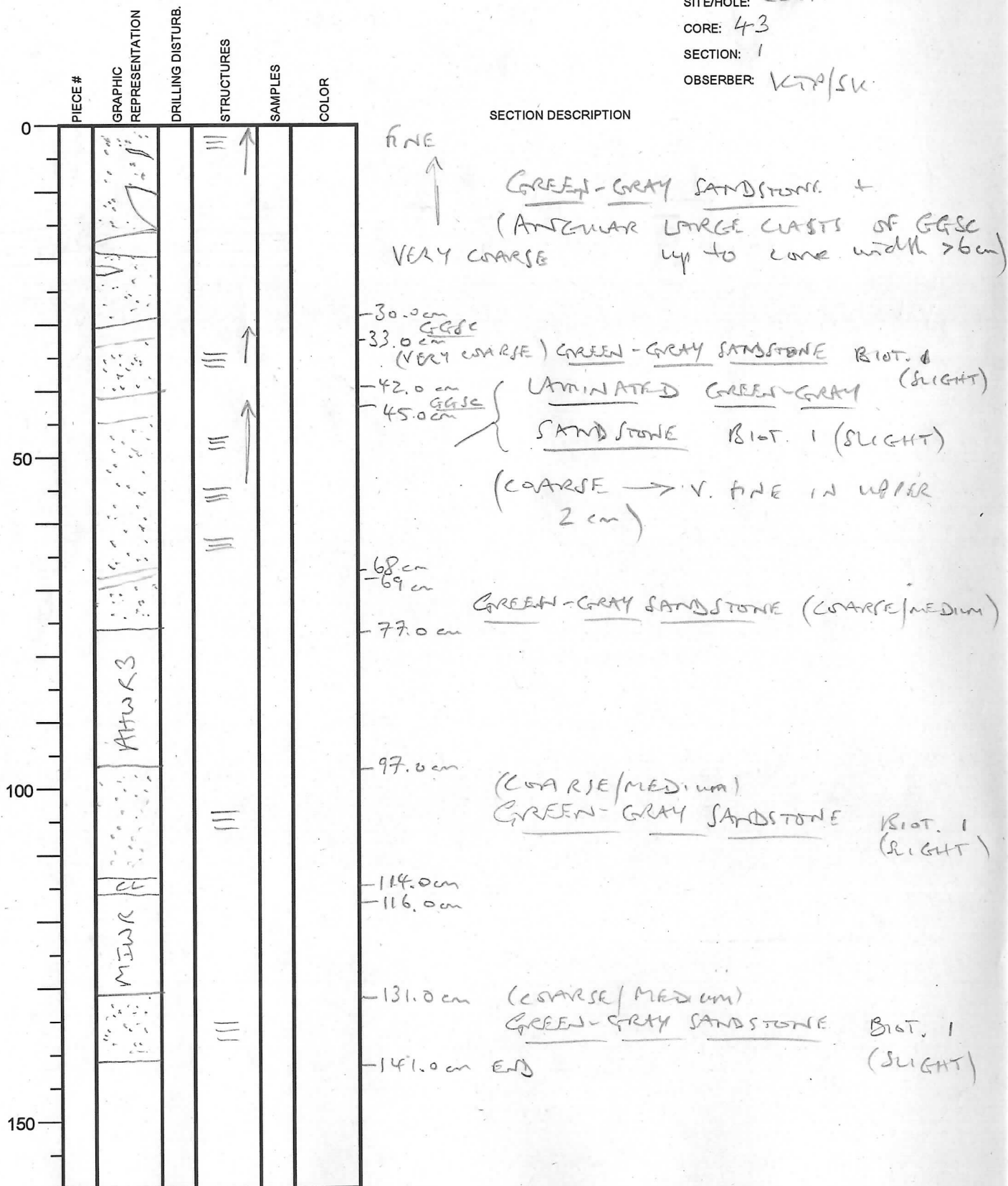


SECTION DESCRIPTION

drilling breccia
of g.g.s.c.

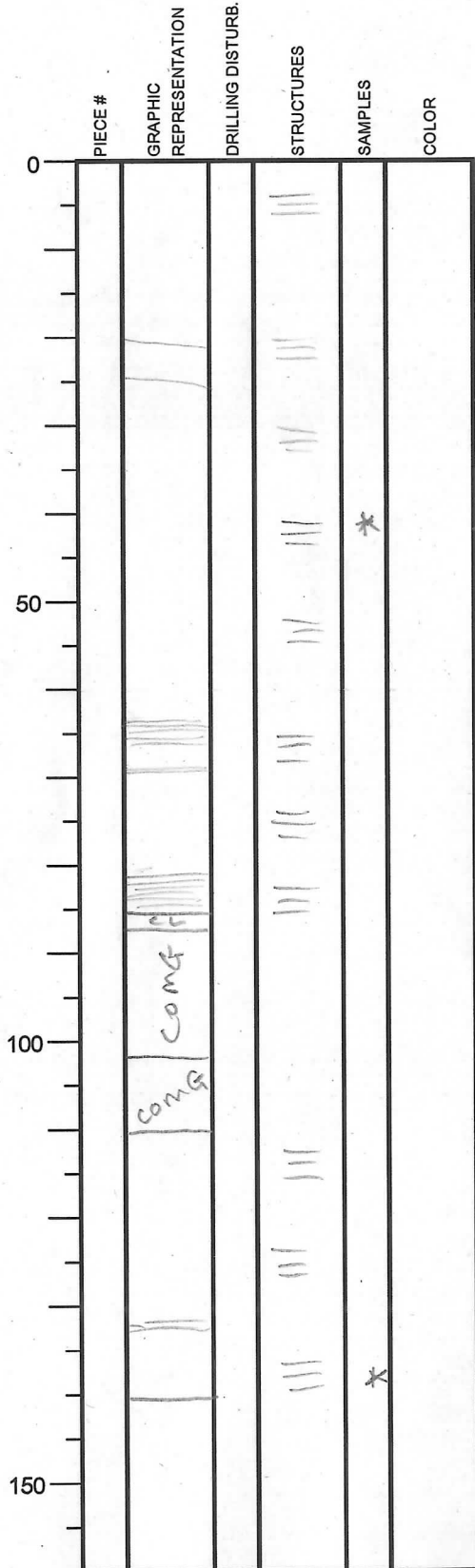
Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 01/10/20 09
EXP.: 322
SITE/HOLE: C0012
CORE: 43
SECTION: 1
OBSERVER: KTD/SK



Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 01/09/20 09
EXP.: 322
SITE/HOLE: C0012
CORE: 43
SECTION: 2
OBSERVER: KJP/SK



SECTION DESCRIPTION

DARK GREEN-GRAY
FINE-GRAINED SANDSTONE
LAMINAE
≡ MSLFGSS

-20 } DARK
-30 } GGS/GSC

↑ ENTIRE SECTION

MM-SCALE LAMINATED FINE-GRAINED

-40 } SANDY SALTSTONES (MSLFGSS)
-50 } SS

Bioturbation 1 (SLIGHT) (minor GGS/GSC)

— CANNOT LOG SEPARATELY AS TOO FINE SCALE

-64-67 LAM MM-SCALE

-69 LAMINATED mm-scale

-83-85 LAMINATED mm-scale DARKER INTERVAL

-85.0 cm

-87.0 cm

100 -102.0 cm

-110.0 cm

-133.0 cm DARK GSC

#139 SS

-140.0 cm END



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 01/09/20 09
 EXP.: 322
 SITE/HOLE: C5012
 CORE: 43
 SECTION: 3
 OBSERVER: hwp/sk

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
24.0					
25.0					
50					
69.0					
100					
150					

SECTION DESCRIPTION

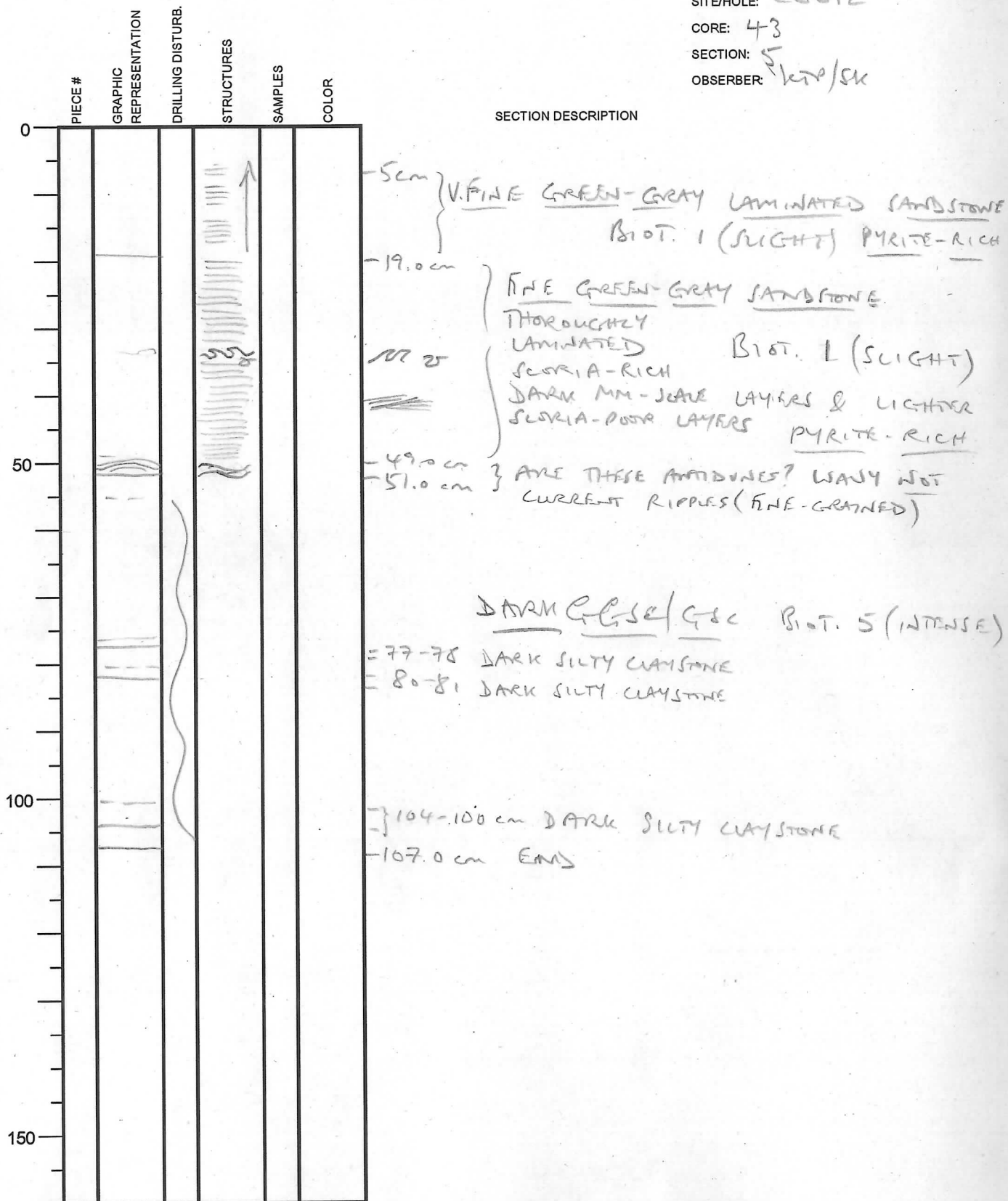
24.0 Gfc
 25.0 Gfc

M S LFSS (FINE GRAINED)
 (V. M. BOX GFC/GCC)
 Biot. 2 (SLIGHT)

69.0 cm END

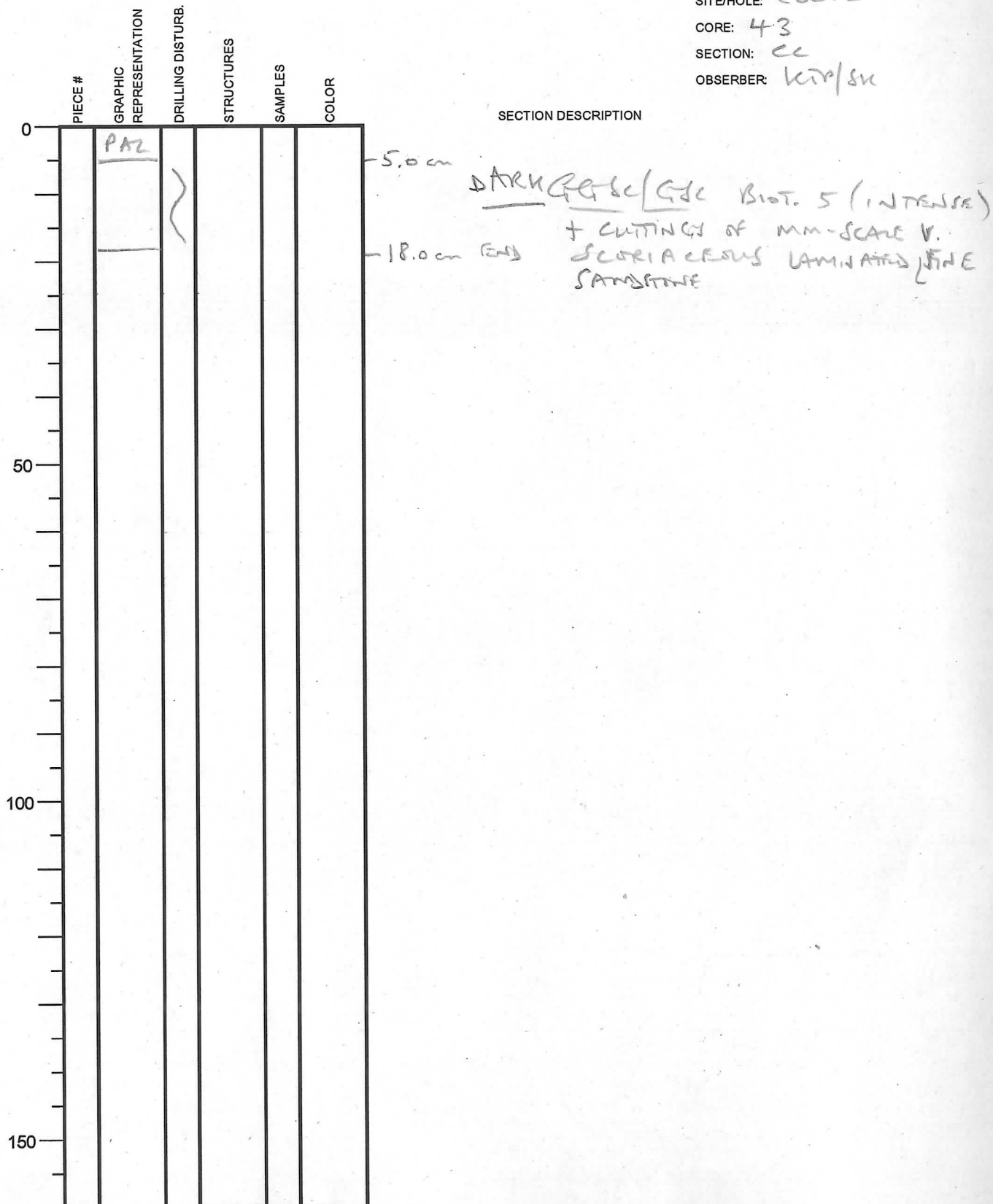
Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 01/09/20 09
EXP.: 322
SITE/HOLE: C0012
CORE: 43
SECTION: 5
OBSERVER: SKP/SK



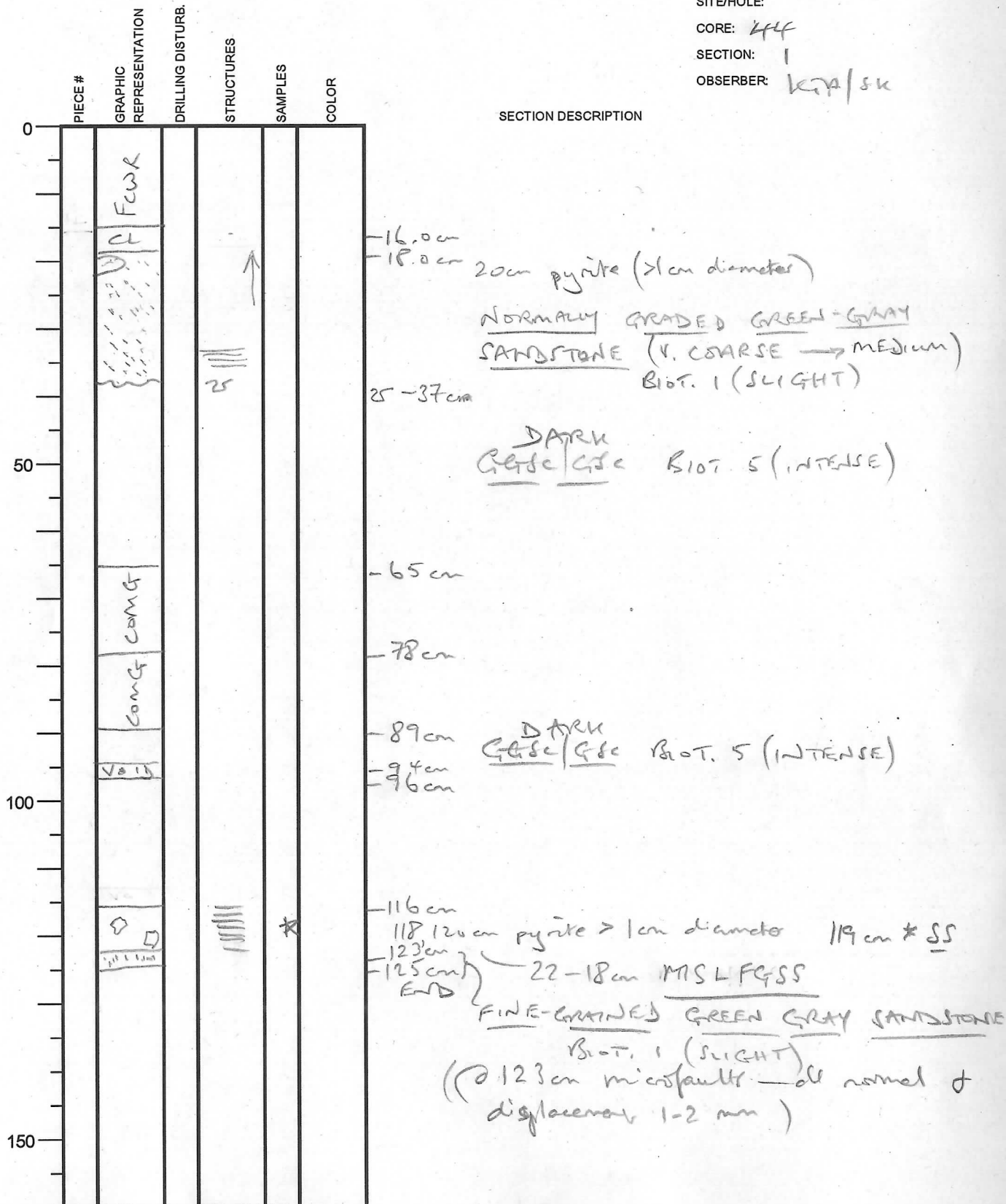
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 01/09/20 09
 EXP.: 322
 SITE/HOLE: C0012
 CORE: 43
 SECTION: CC
 OBSERVER: KIP/SK



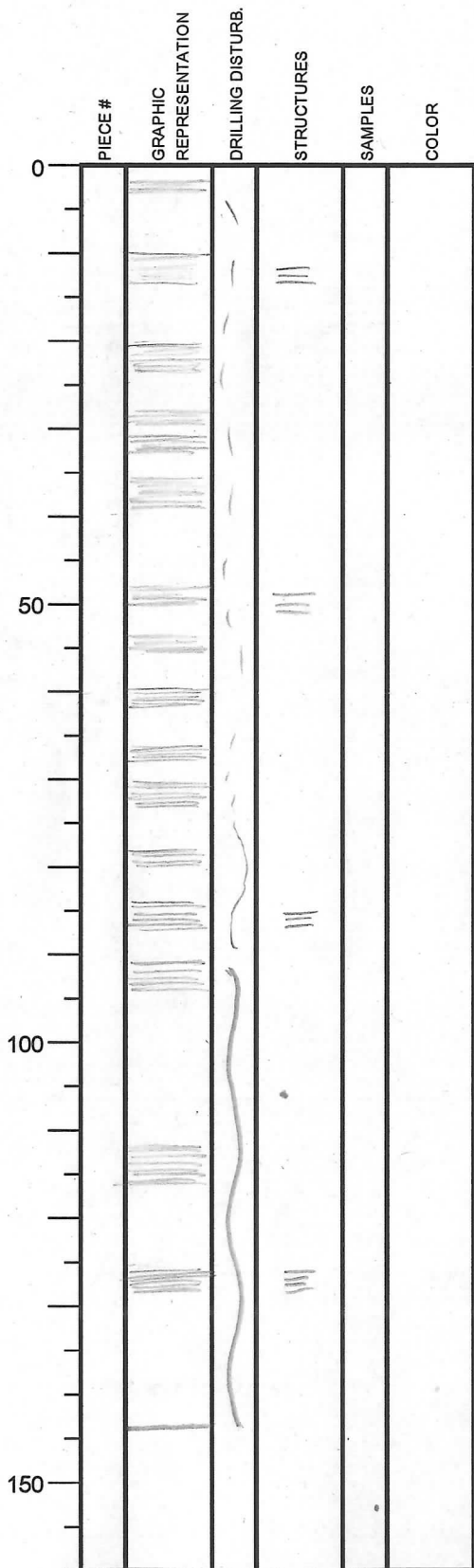
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 01/20/89
 EXP.: 322
 SITE/HOLE: C0012
 CORE: 444
 SECTION: 1
 OBSERVER: KGA/SK



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 01/20/07
 EXP.: 322
 SITE/HOLE: C0012
 CORE: 44
 SECTION: 3
 OBSERVER: KTW/SK



SECTION DESCRIPTION

[LAMINATE]
DARK GRAY SLAYER SILTSTONE

@ 1.5-2.5; 5-8; 10.4-13;
 18-19; 21-22; 25-28; 48-50;
 53-55; 59-61.5; 66-67;
 70-73; 78-79.5; 84.5-87;
 91-94; 111-116;

LARGE 1cm ± MRITE @

110; 117 cm

&

DARK GFS/GSS BIOT. 5 (INTENSE)

(DRILLING-INDUCED)
 BISCUITS

→ 126-127cm MSLFGSS BIOT. 1 (SLIGHT)
 (FINE-GRAINED)

143.0 cm END

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 01/09/2009
 EXP.: 322
 SITE/HOLE: C0012
 CORE: 44
 SECTION: CC
 OBSERVER: *lev/sk*

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

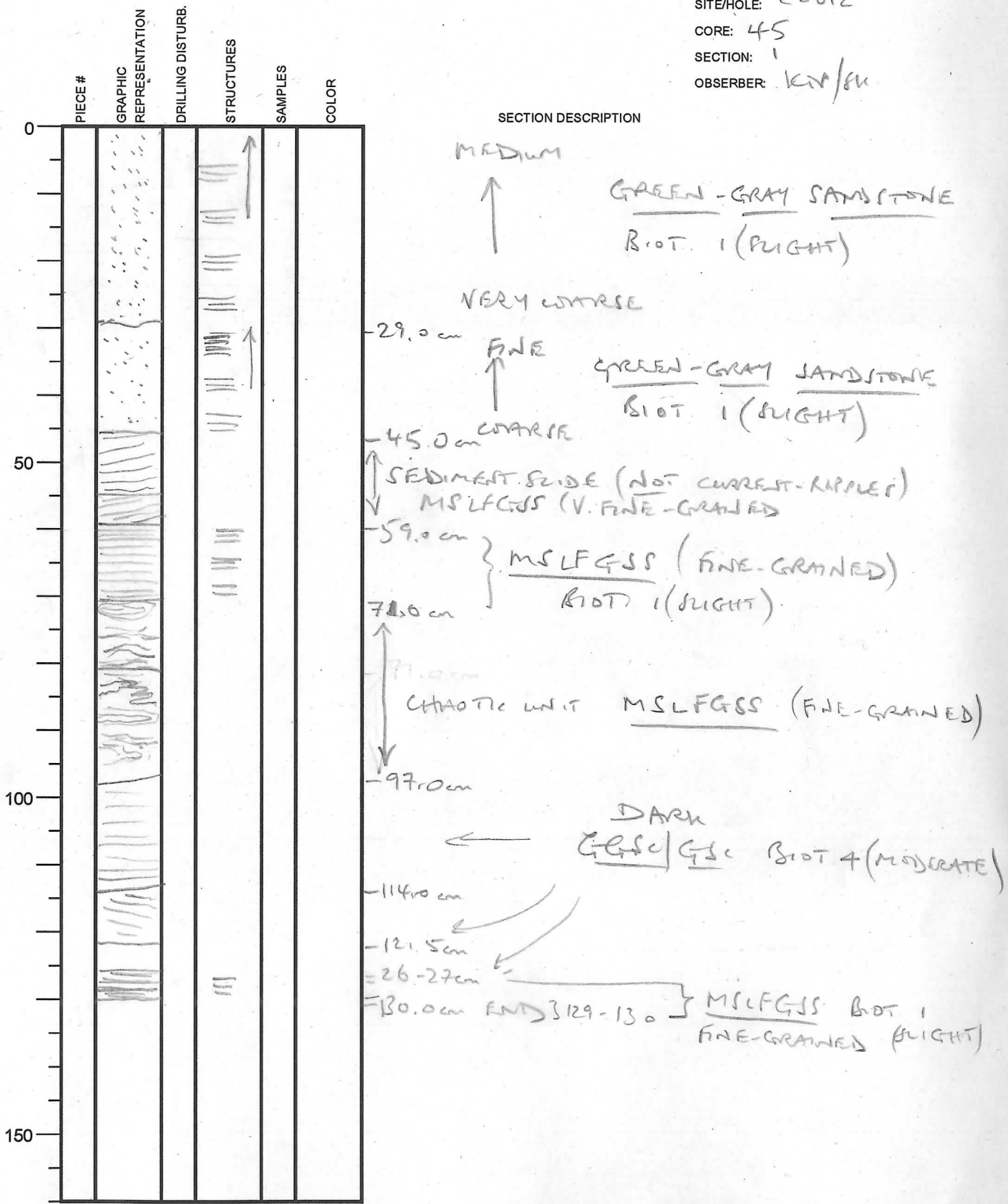
SECTION DESCRIPTION

~~MSLFGSS & GGSJ/GSC~~ BIOT. 1 (SLIGHT) BIOT. 5 (INTENSE)
 DRILLING BIT CUTS
 (FINE-GRAINED)

frame

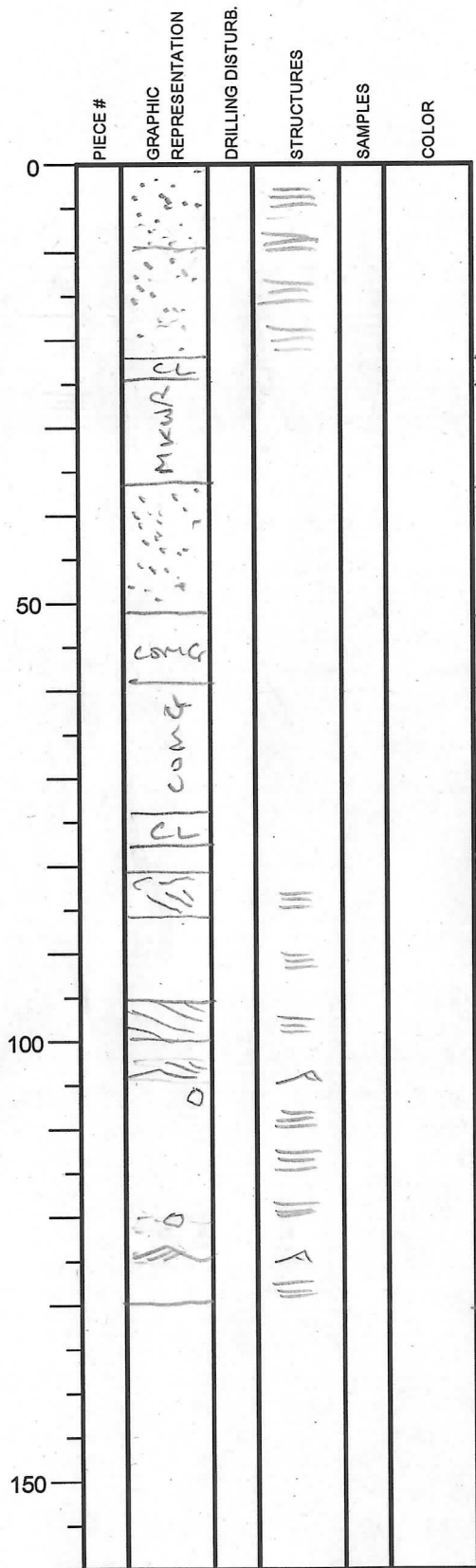
Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 01/20/09
EXP.: 322
SITE/HOLE: C-0012
CORE: 45
SECTION: 1
OBSERVER: KM/SK



Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 01/29/2009
EXP.: 322
SITE/HOLE: C0012
CORE: 45
SECTION: 2
OBSERVER: VCP/SK

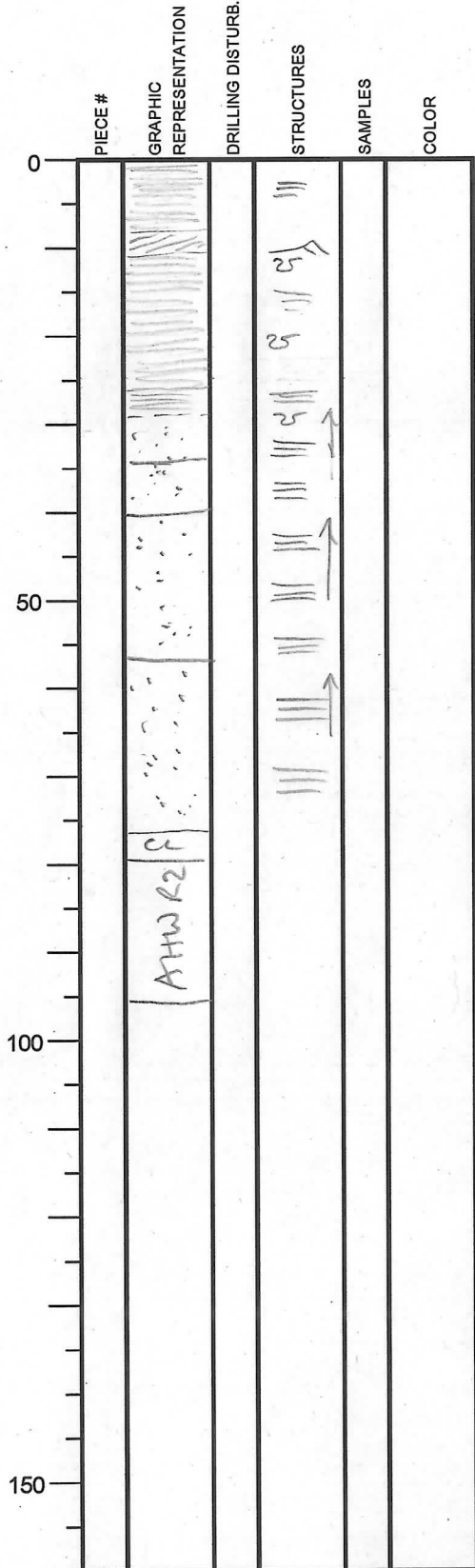


SECTION DESCRIPTION

V. COARSE-GRAINED GREEN GRAY
 SANDSTONE BIOT. 1 (SLIGHT)
 -9 cm base?
 MEDIUM-GRAINED GREEN-GRAY
 SANDSTONE BIOT. 0
 -22
 -25
 -36
 MEDIUM-GRAINED GREEN-GRAY
 SANDSTONE BIOT. 0
 -51
 -59
 -74
 -77
 -81-86 sediment slide (not rippled)
 MSLFGSS BIOT. 2 (SLIGHT)
 V. FINE-GRAINED
 -99-95 sediment slide (not rippled)
 106 cm pyrite to 0.5 cm diameter
 -118 cm pyrite to 0.8 cm diameter
 -129.0 cm END

Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: / / 20
EXP.:
SITE/HOLE:
CORE: 45
SECTION: 4
OBSERVER: *WPA/SK*



SECTION DESCRIPTION

8-26 cm MSLFGSS FINE-GRAINED
2cm high current ripples Biot 1 (SLIGHT)

~ 10, 20 & 18 cm LOAD STRUCTURES

-26 cm pyrite ~ 0.5 cm diameter

-29 cm COARSE → MEDIUM

-34 cm } MEDIUM

-40 cm FINE

↑
MEDIUM } GREEN-GRAY SANDSTONE
Biot. 1 (SLIGHT)

↑
-57 cm FINE

↑
MEDIUM
-76 cm
-79 cm

-95.5 cm

Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: / / 20
EXP.:
SITE/HOLE:
CORE: 45
SECTION: CC
OBSERVER: WTP/JH

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

SECTION DESCRIPTION

-5 cm BASALT INJECTION (GLASSY)
-10 cm INTO SEDIMENT (IN WORKING
MPLFGSS HALF ON REVERSE OF BEDDING)
FINE-GRAINED 0.5cm BASALT FRAGMENTS
-24.0cm END EMBEDDED IN SEDIMENT IN
PIECE IN THIS CORE

(13 cm pyrite to 1.2 cm diameter)

Integrated Ocean Drilling Program Visual Core Description

NO. _____
 DATE: 01/07/20 09
 EXP.: 322
 SITE/HOLE: C0012
 CORE: 46
 SECTION: 1
 OBSERVER: *hwp/du*

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

SECTION DESCRIPTION

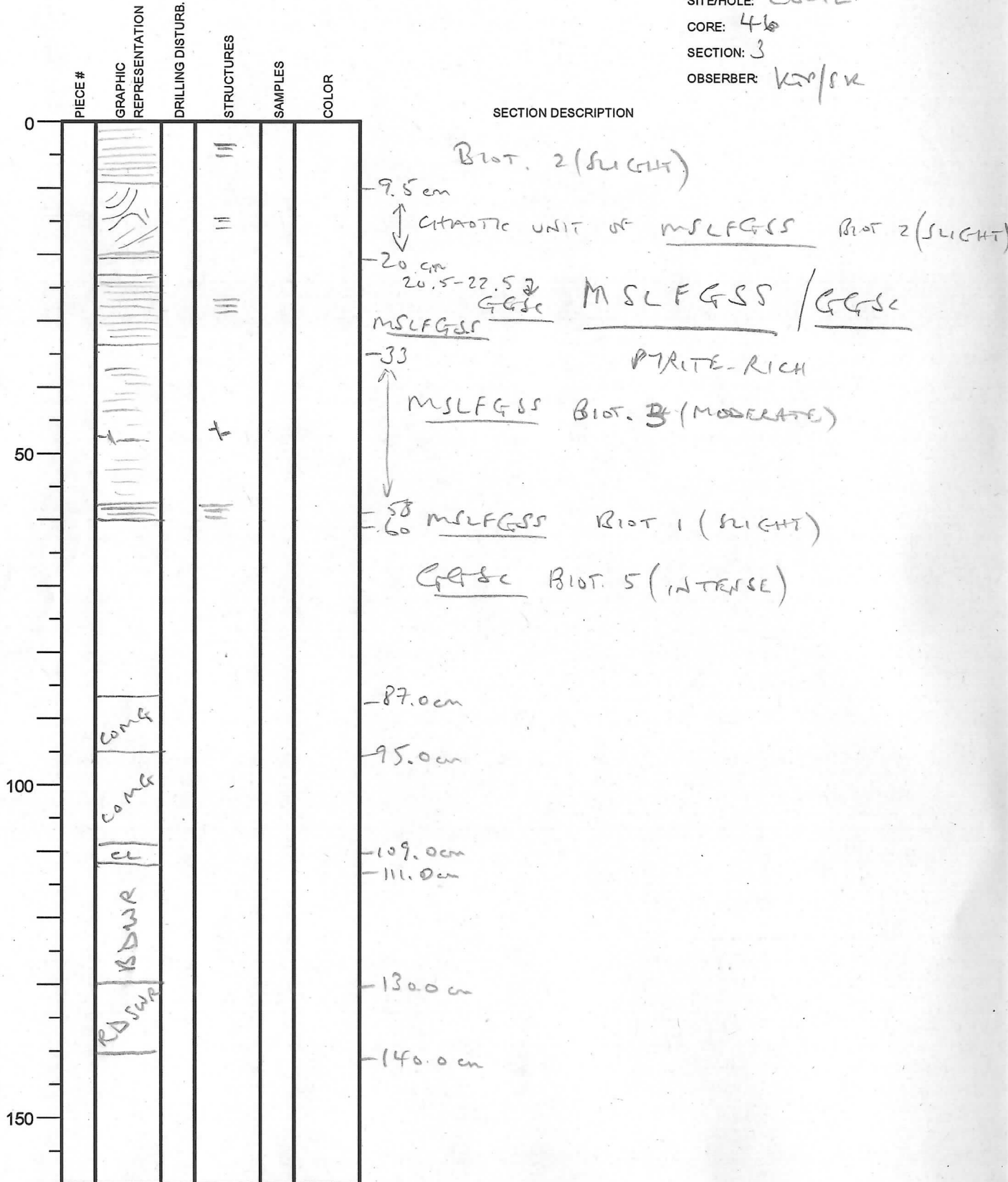
MSL FGSS

*1-2.5, 27.5-30 cm greenish brown
structureless layer of FGSS*

-35 cm END

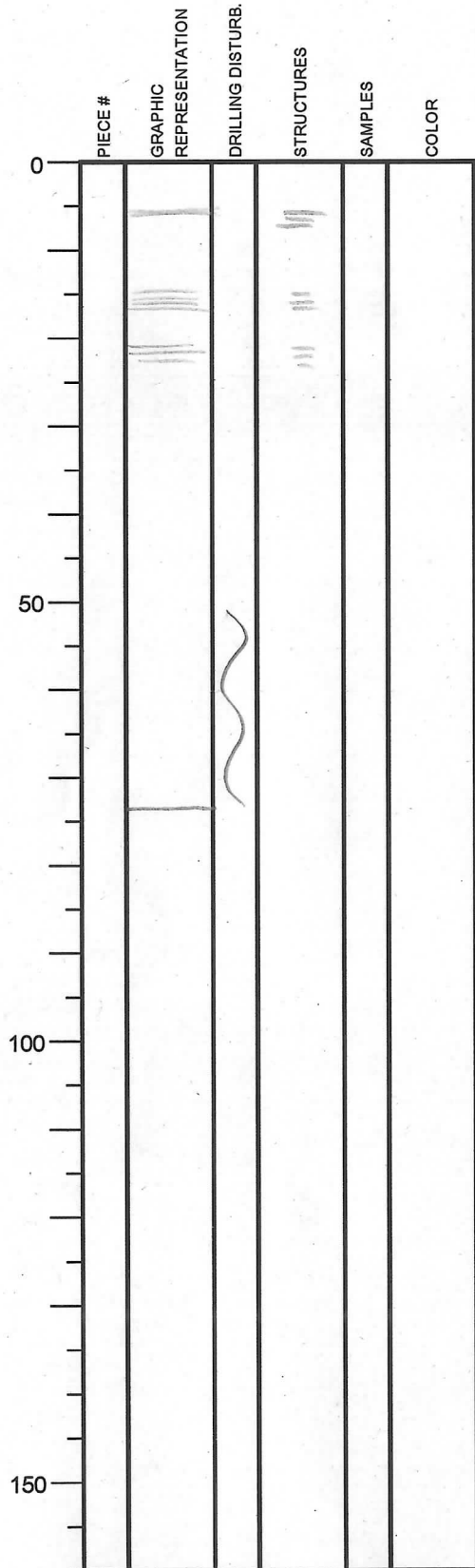
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 01/29/2009
 EXP: 322
 SITE/HOLE: C0012
 CORE: 46
 SECTION: 3
 OBSERVER: KAP/SK



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 01/20/09
 EXP.: 322
 SITE/HOLE: C4012
 CORE: 46
 SECTION: 4
 OBSERVER: KRF/HK



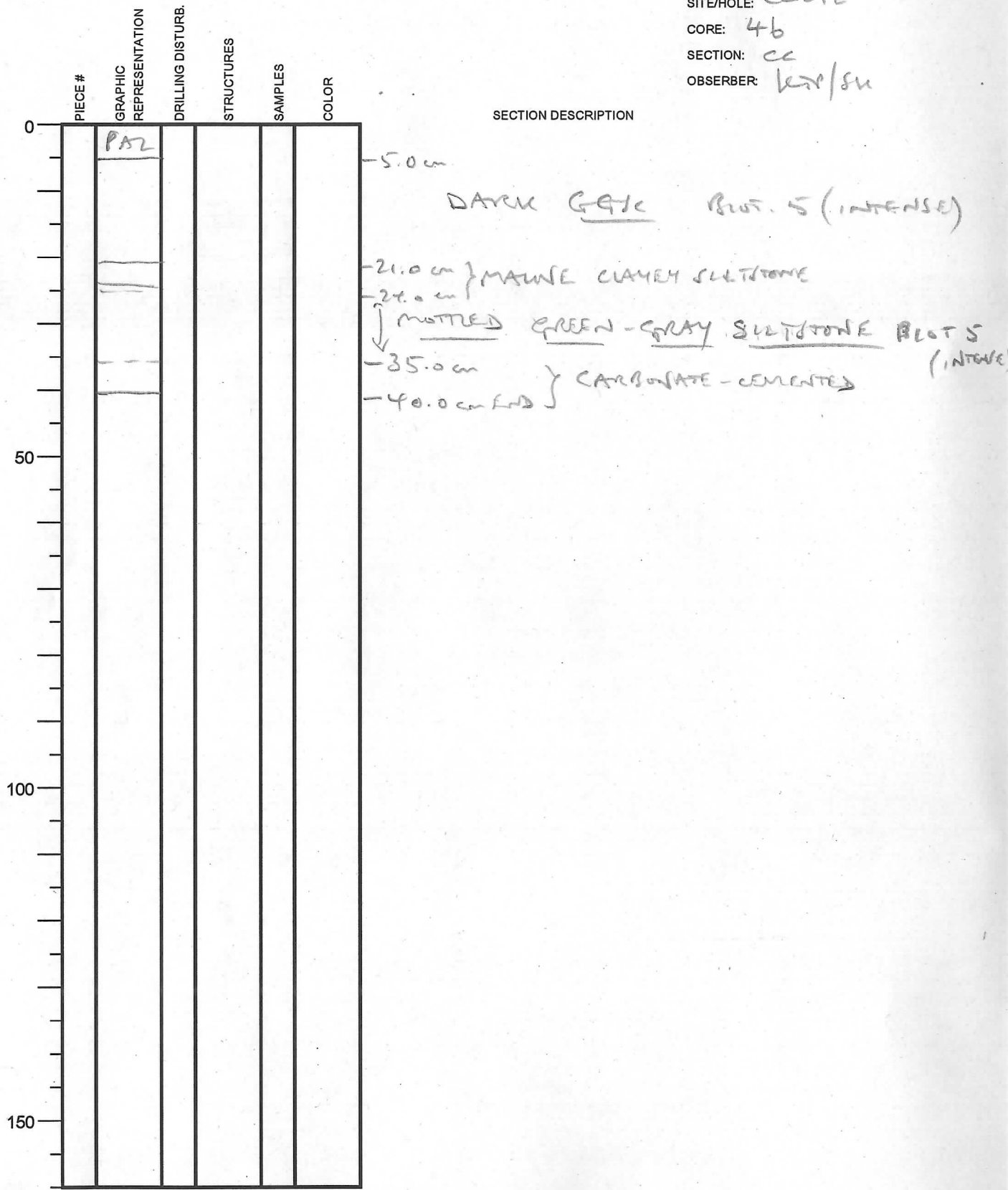
SECTION DESCRIPTION

M.SUGGS BIOT 3 (MODERATE)

-51 cm
 ↑ CUTTINGS
 DARK G-SC BIOT. 5 (INTENSE)
 ↓
 -74.0 cm END

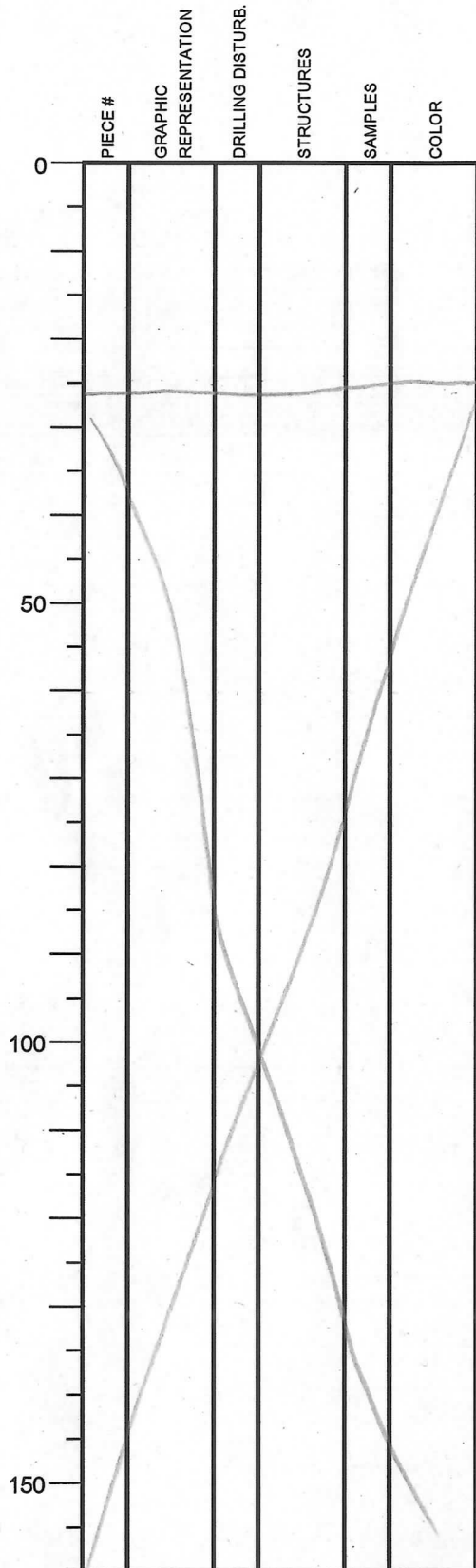
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 01/07/2009
 EXP.: 322
 SITE/HOLE: C05012
 CORE: 4b
 SECTION: CC
 OBSERVER: KAP/SU



Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 01/12/09
EXP.: 322
SITE/HOLE: C0012A
CORE: 47R
SECTION:
OBSERVER: H. Naruse



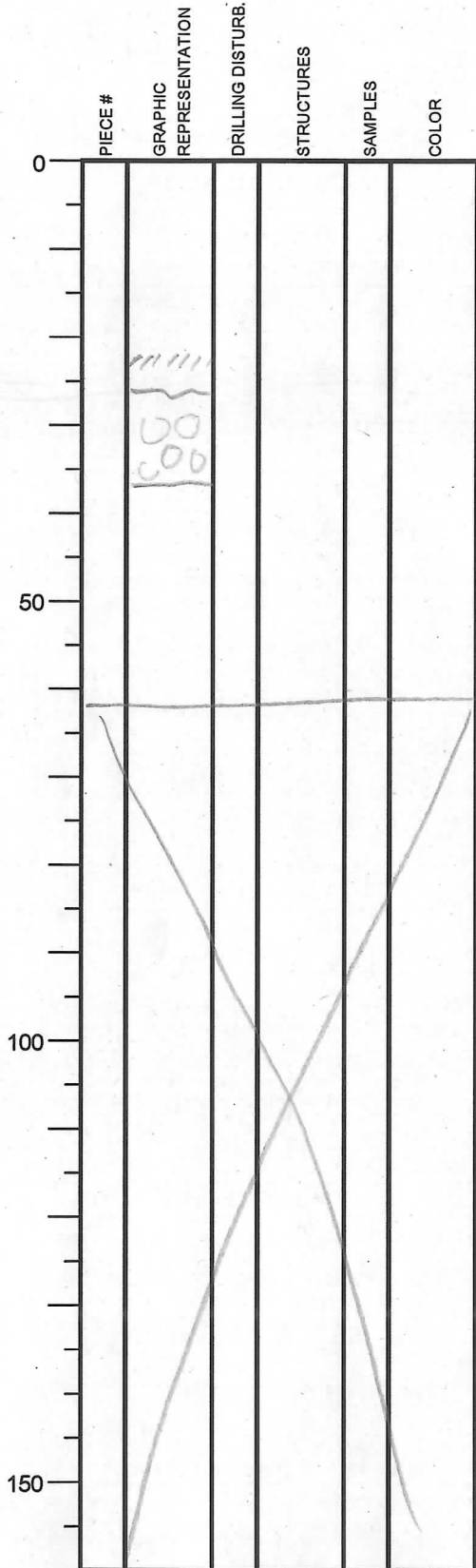
SECTION DESCRIPTION

green-gray siltstone

Intense drill-disturb.
Mod. bioturb. (3)

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 10/1/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 47R
 SECTION: 3
 OBSERVER: H. Naruse



SECTION DESCRIPTION

green-gray siltstone

-23 - grad b. _____
 -25 - sharp b. _____
 dark g.g. siltstone (drill breccia)
 -37 _____

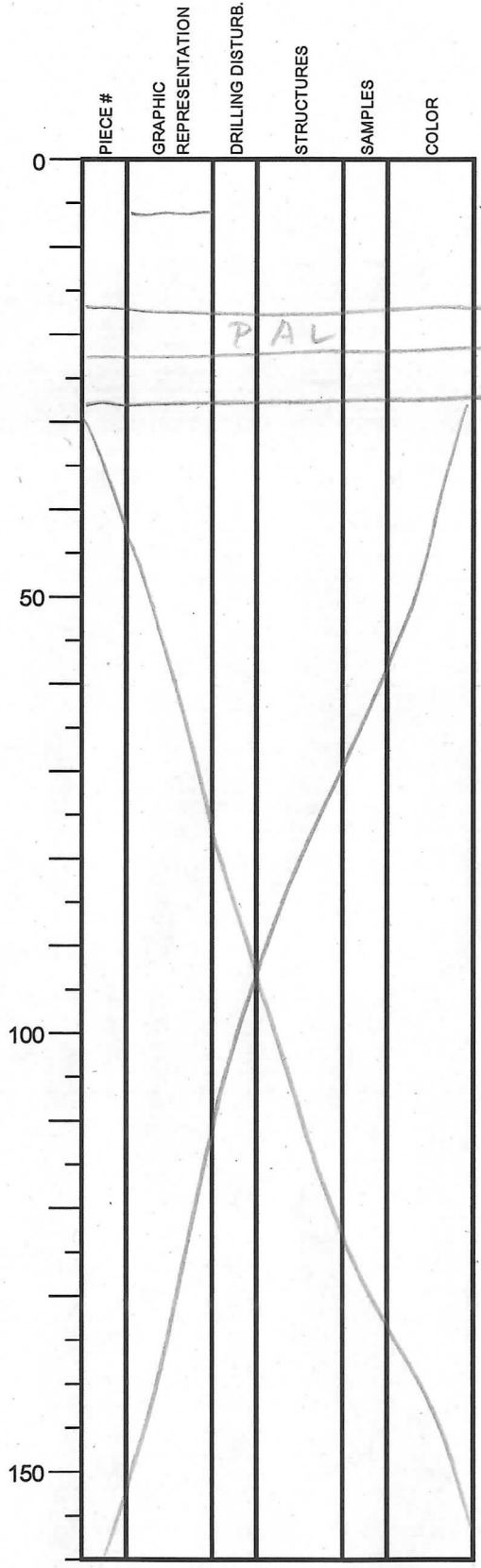
g.g.s.c.

62 end

↑ mod. bio, (3)
 ↓ Heavy bioturb. (5)

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 10/12/09
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 47P
 SECTION: CC
 OBSERVER: H. Naruse



SECTION DESCRIPTION

gray volcaniclastic
sandstone

sharp b.

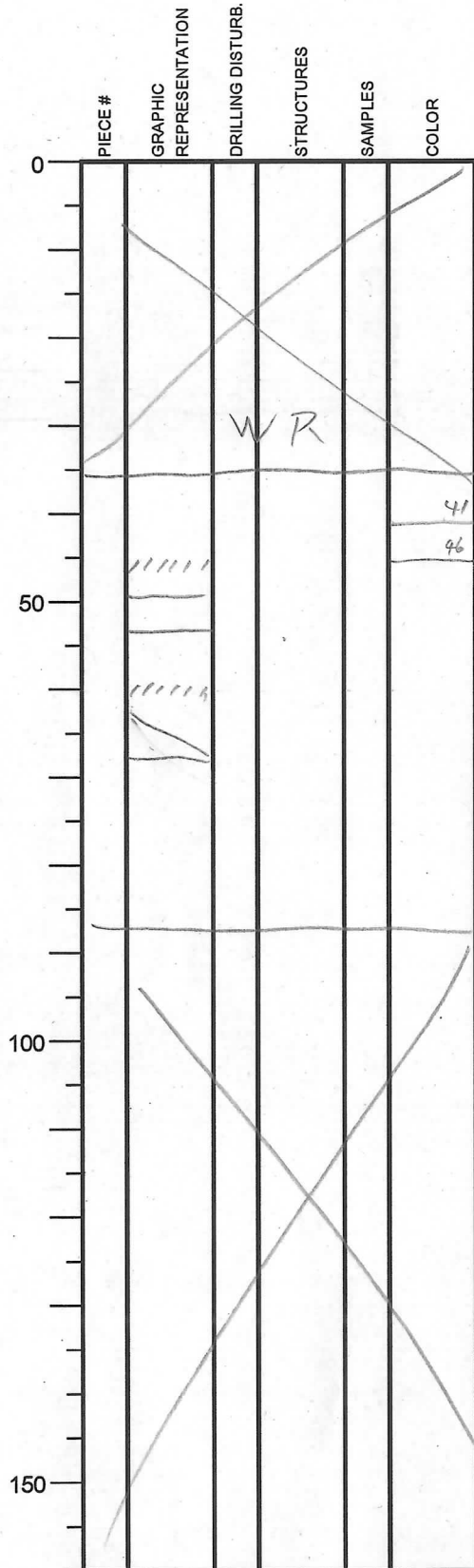
g.g.s.c.

↑ slight
(2)

↓ Heavy
(5)

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 01/120
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 48R
 SECTION: 2
 OBSERVER: H. Haruse



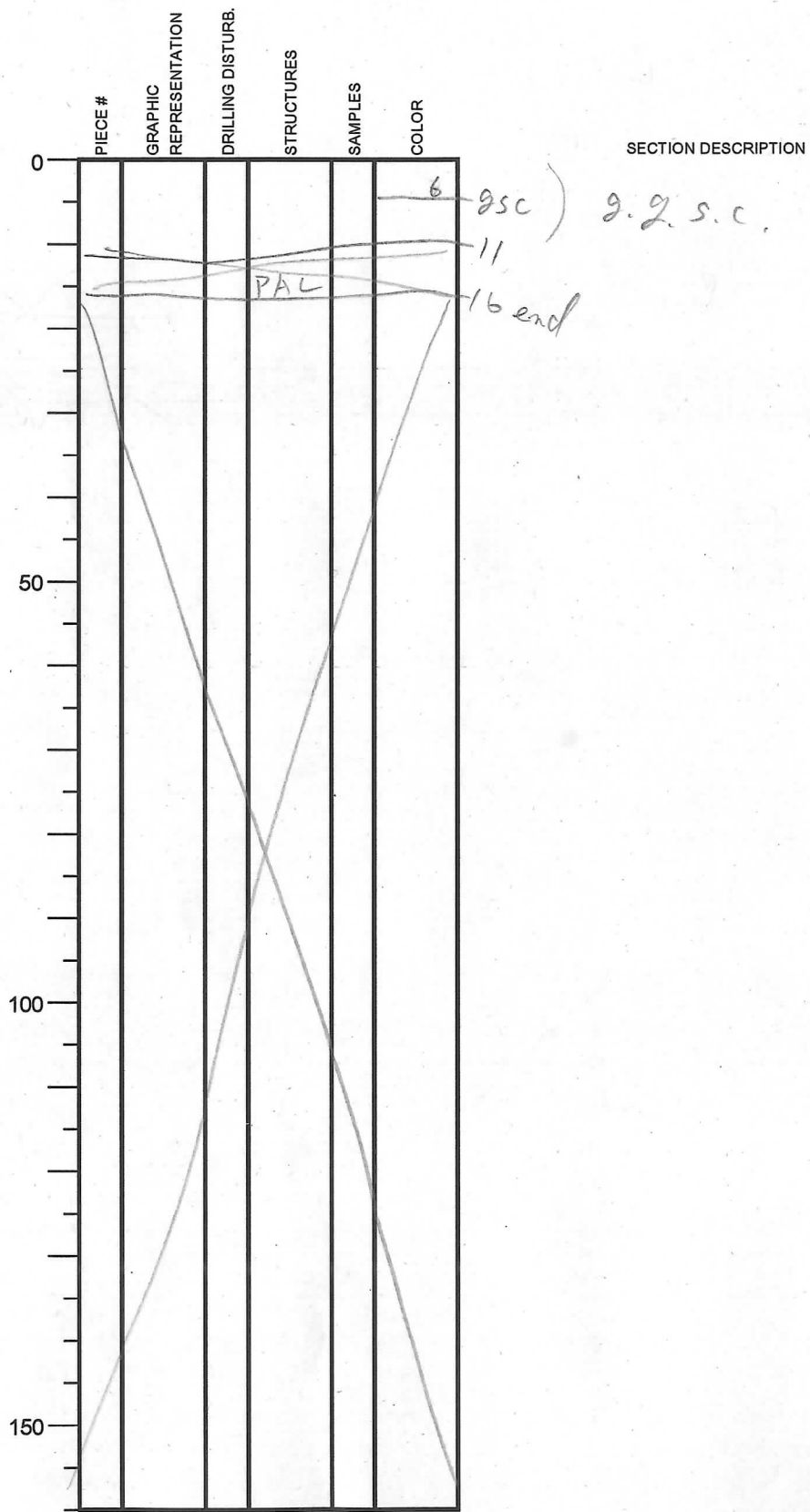
SECTION DESCRIPTION

36
 41 gsc g.g.s.c.
 46 gsc
 47 - grad. b.
 49 - sharp b. d.g.s.c.
 53 - sharp b. g.g.s.c.
 60 - grad. g.g. volcanic fault?
 63 fault volcanic
 66 fine ss. volcaniclastic fine sandstone
 66 - sharp b. fine ss. Volc. silty sandstone
g.g.s.c.
 86 bind

140d. (4)
 120 bio (0)
 140d. (4)

Integrated Ocean Drilling Program Visual Core Description

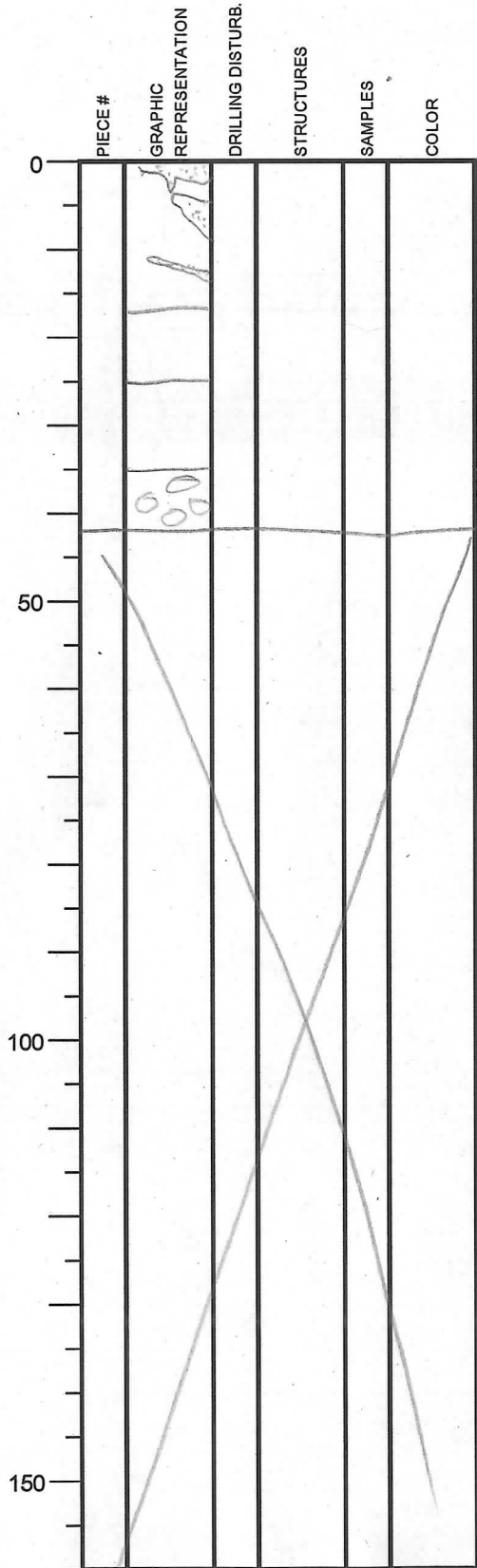
NO.
 DATE: 10/1/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 48R
 SECTION: CC
 OBSERVER: H. Naruse



↑ mod. bioturb. (9)

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 01/12/09
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 49R
 SECTION: 1
 OBSERVER: H. Naruse



SECTION DESCRIPTION

Chaotic deposit of
 g.g.s.c. & fine volcaniclastic
 sandstone

-17 - sharp b. (fault?)

-25 - green-light gray fine tuff

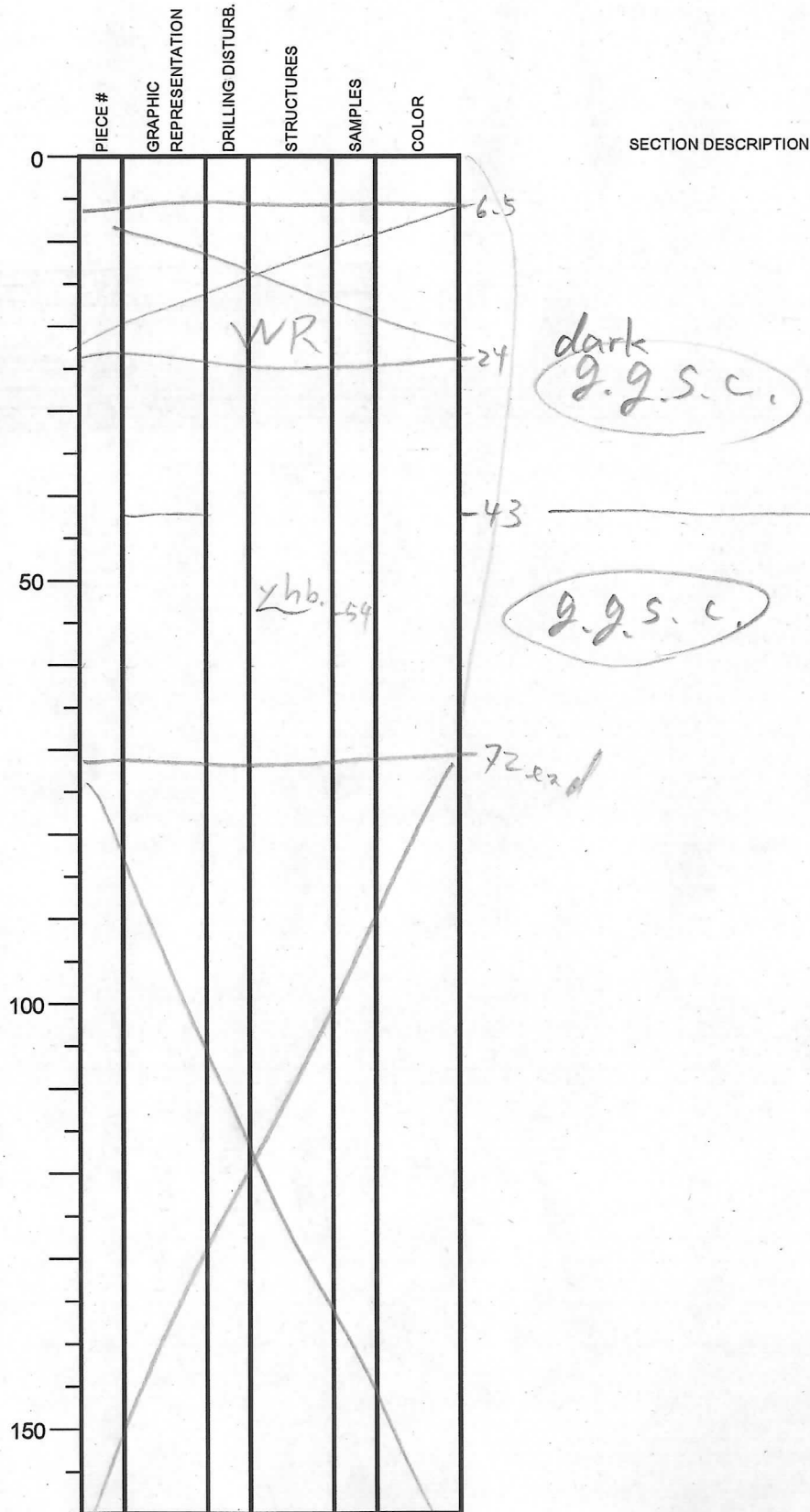
-35 - sharp b.

-42 end drilling breccia of g.g.s.c.

} slight (1)

Integrated Ocean Drilling Program Visual Core Description

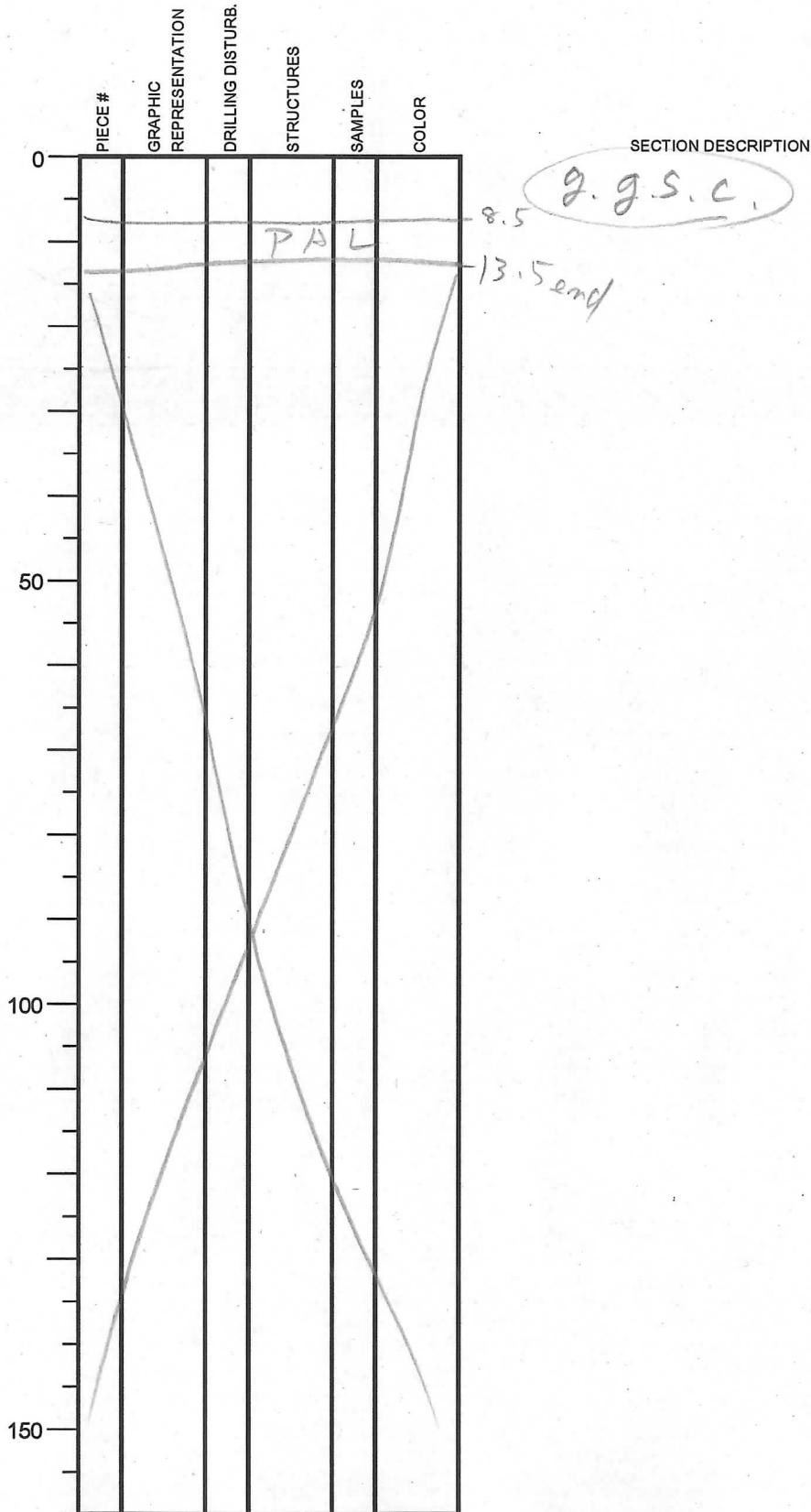
NO.
 DATE: 10/1/20 09
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 49R
 SECTION: 3
 OBSERVER: H. Naruse



↑ Heavy
 bioturb
 (5)

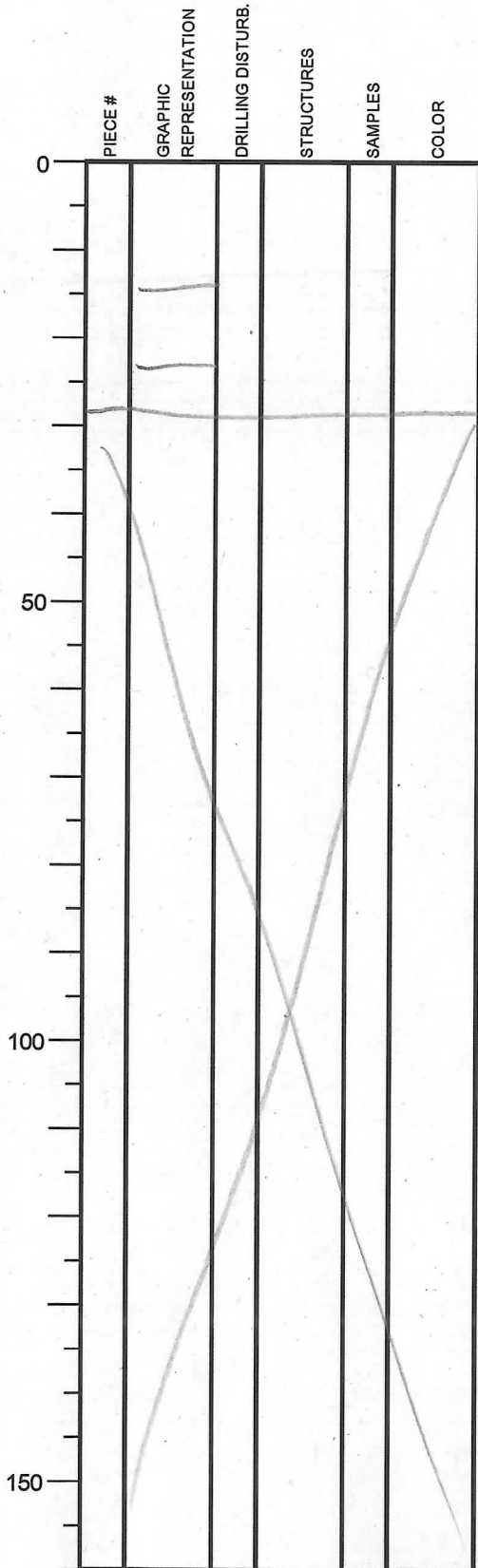
Integrated Ocean Drilling Program Visual Core Description

NO.
DATE: 10/1/2009
EXP.: 322
SITE/HOLE: C0012A
CORE: 49R
SECTION: CC
OBSERVER: H. Naruse



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 01/120 09
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 50R
 SECTION: /
 OBSERVER: H. Naruse



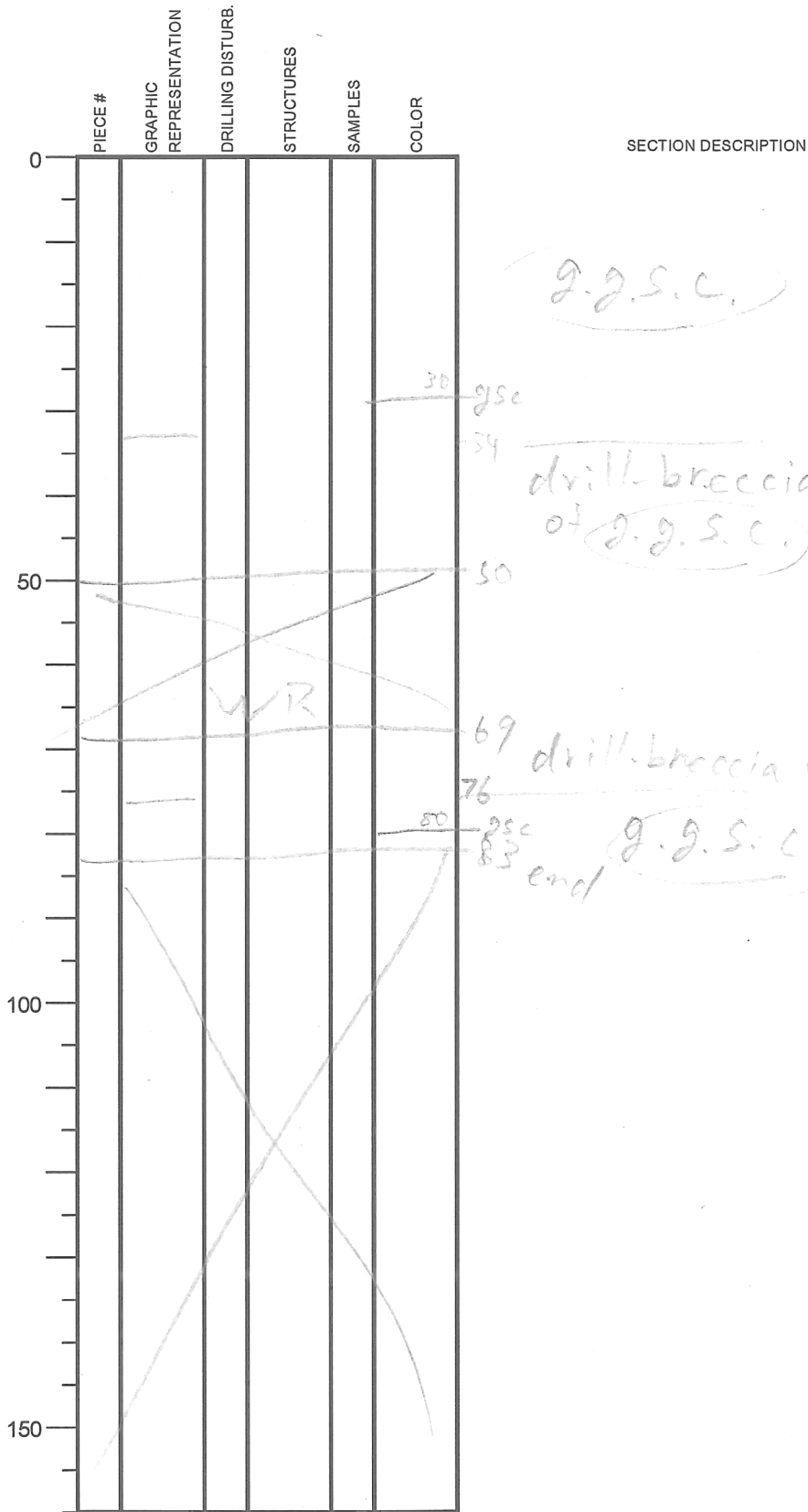
SECTION DESCRIPTION

g.g.s.c.
 -15 — sharp b.?
 g.g. Volcaniclastic medium
 -24 — sharp b.?
 sandstone
 29 end g.g.s.c.

↑ drill. breccia
 ↑ Heavy (5)
 ↑ Heavy (5)

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 10/1/2009
 EXP.: 322
 SITE/HOLE: C00121A
 CORE: 50R
 SECTION: 3
 OBSERVER: H. Nawaise

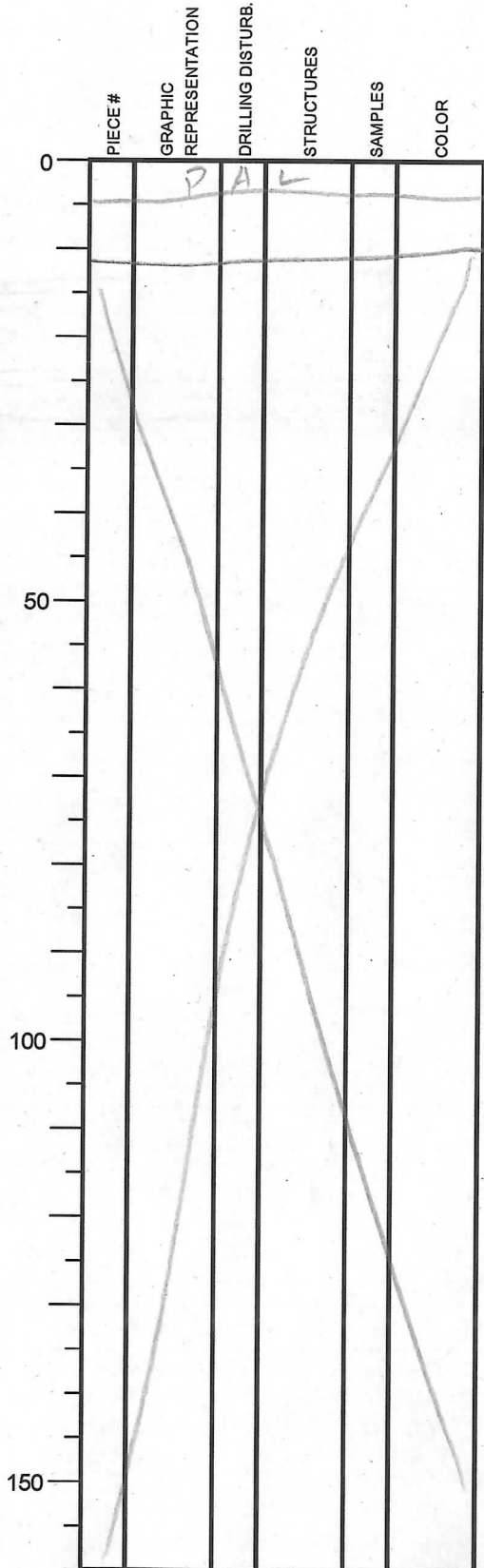


↑ mod
 biot
 (4) 1/2

↑ mod
 biot
 (4)

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 01/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 50R
 SECTION: CC
 OBSERVER: H. Haruse

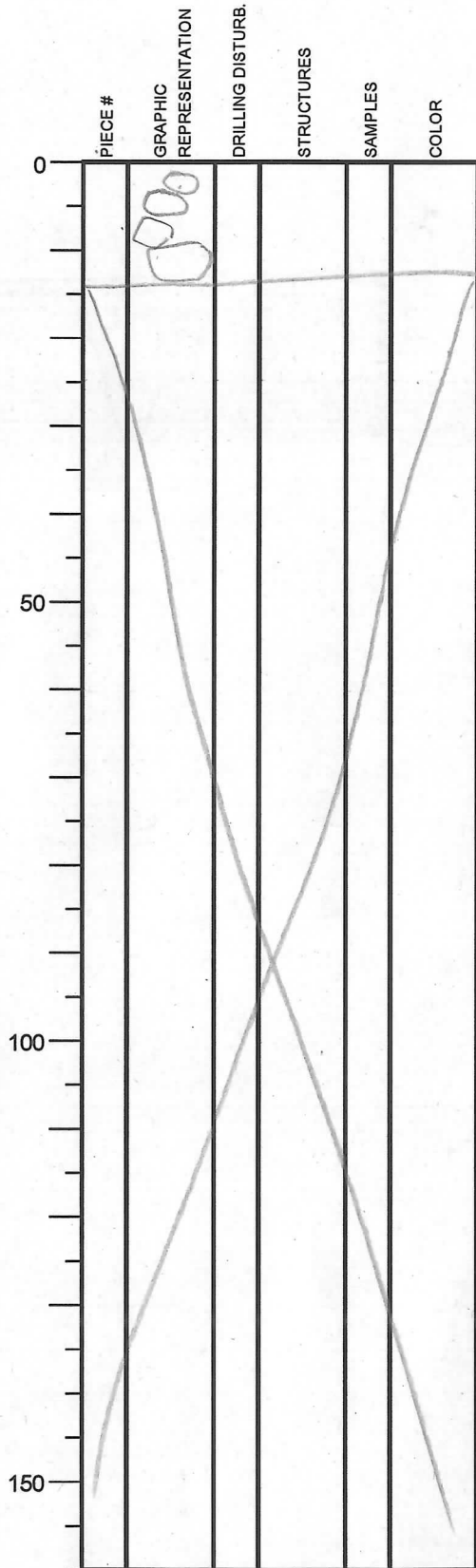


SECTION DESCRIPTION

5 drill-breccia of g.g.s.c.
11 end

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 10/1/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 51R
 SECTION: 1
 OBSERVER: H. Naruse

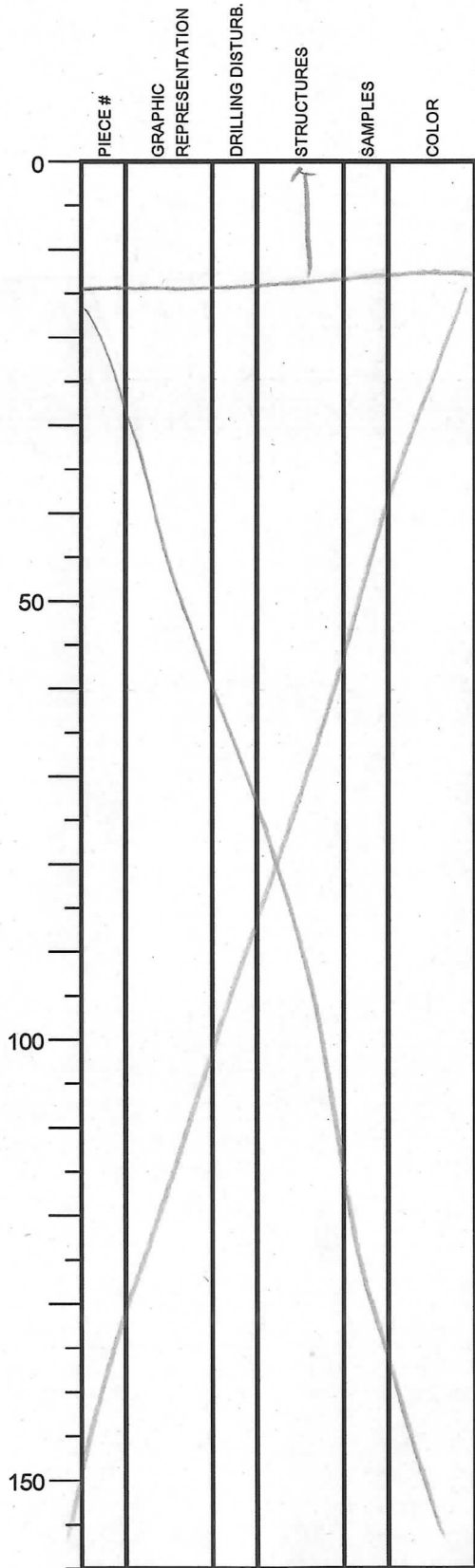


SECTION DESCRIPTION

29.5 g
 7
 14 end
 dark reddish brown
 claystone
 (contact metamorphism?)
 all
 drill
 breccia

Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 10/1/2009
 EXP.: 322
 SITE/HOLE: C0012A
 CORE: 51R
 SECTION: CC
 OBSERVER: H. Haruse



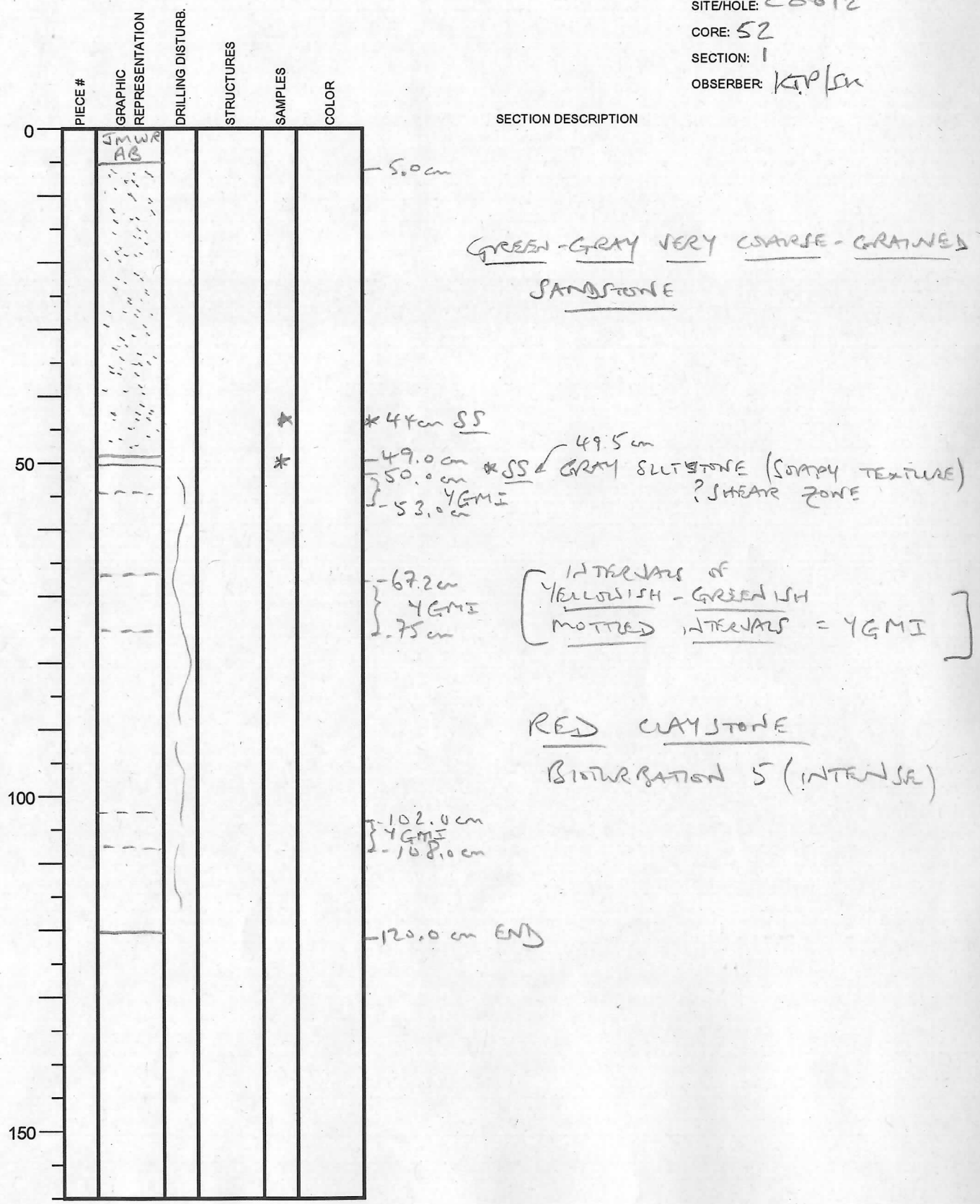
SECTION DESCRIPTION

green-gray volcaniclastic
 graded fine sandstone
 14 end

↑ No bioturb.

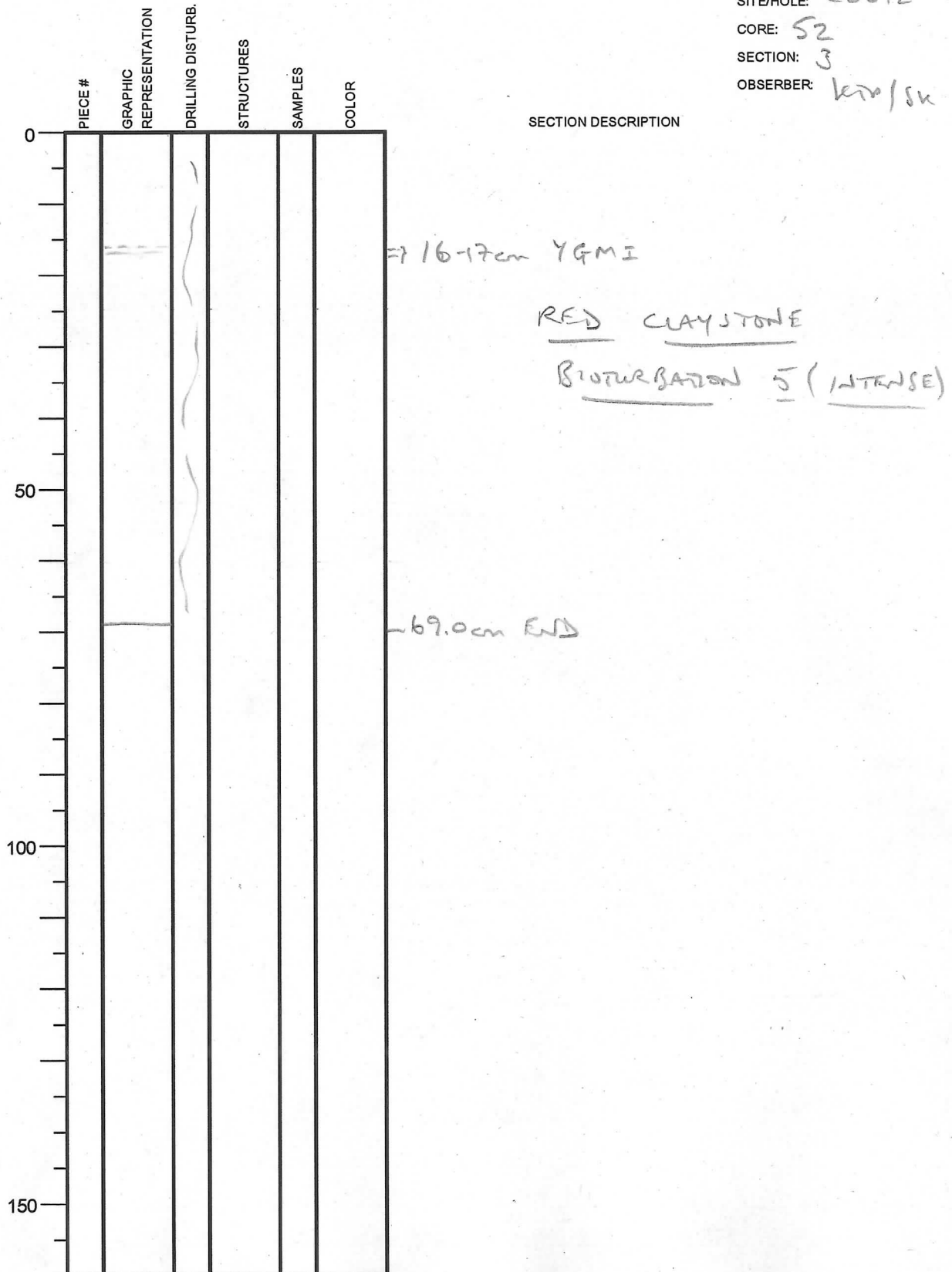
Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 02/27/2007
 EXP.: 322
 SITE/HOLE: C0012
 CORE: 52
 SECTION: 1
 OBSERVER: KJP/SH



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 02/09/20 09
 EXP.: 322
 SITE/HOLE: C0012
 CORE: 52
 SECTION: 3
 OBSERVER: ktp/sk



Integrated Ocean Drilling Program Visual Core Description

NO.
 DATE: 02/07/2009
 EXP: 322
 SITE/HOLE: C0012
 CORE: 52
 SECTION: CC
 OBSERVER: KTO/SK

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR	SECTION DESCRIPTION
0							-2.0cm RED CLAYSTONE BIOTURBATION 5.
		PAL					-7.0cm (intense)
							-12.0cm RND (0-2cm YGMI)
50							
100							
150							

concrete
3.5 inches

Archive Hall

Integrated Ocean Drilling Program Visual Core Description - Hard Rock -

Igneous

NO.
DATE: 06/10/2009
EXP.: 329
SITE/HOLE: 80012A
CORE: 53R
SECTION: 1
OBSERVER: SL

PIECE #	GRAPHIC REPRESENTATION	ORIENTATION	VEIN	SAMPLES	COLOR
0		↑			
31		↑			
1		↑		HAlt	
46		↑		MAlt	
50		↑			
2		↑			
68				SAlt	
76				SAlt	
3					
83				SAlt	
4					
91				SAlt	
5					
100					
150					

SECTION DESCRIPTION

red and green shale
bottom part is heated (?) gradient of color from green to brown and to red-ish...
Thin limit of deep green mineral (?)
↳ celadonite?

← contact
Very top is white, porph. gradient from "beige" to dark grey. veins of Qz and Ep. β heterogeneous one is HP and S Ves and the other is HVes and SA
Presence of a brown/red mineral → ??

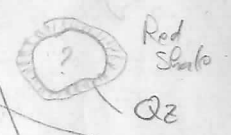
Beautiful fracture half filled with red shales and half (bottom) with ... Ep (?), Qz, celadonite (?), chlorite (?).
one ml is dark green, one is yellowish green and one is light green. No cleavage... No traces of "mineral morphology".

In the red clay there are inclusions that are surrounded by Qz (aureoles)

Med Ves - High P. Pl, px.
Ves with celadonite

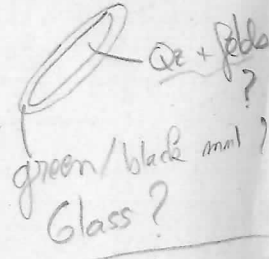
Piece 5: S. Ves - HP, Pl, px

Piece 6: ppriite 1 Pl, px
HP - S Ves.



+ ampb!

+ inclusions of:



PS and TS

Integrated Ocean Drilling Program Visual Core Description - Hard Rock -

Archive Half

NO. 1
DATE: 04/10/2009
EXP.: 322
SITE/HOLE: C0012A
CORE: 53
SECTION: 2
OBSERVER: SL

PIECE #	GRAPHIC REPRESENTATION	ORIENTATION	VEIN / DIKES	SAMPLES	ALTERATION	
0						
1		↑			SA	small vein
24					SA	
32		↑			SA	
38.5					SA	
44					SA	
50					SA	
6		↑			MA	
70		↑			SA	
80		↑			SA	
94.5						
100						
103						
150						

SECTION DESCRIPTION

Pillow B. B = Sparsely vesicular / Pl + Px / Slight Alteration
 Piece 1A: Base is light grey and gradation to dark grey. Piece 1B contains vein (delimiting pillows?) HP
 vein is green (celadonite?) with fragments of B and filled vesicles. vein is highly altered
 probably piece of pillow (gradation of color and vesicles)
 Rim has crystallisation of Qz (small crystals) (MP) Pyrite
 Pillow structure - same B¹ and dikes than piece 1 (MP) S_{ves}
 gradation of color and vesicles → pillow. crystalliz¹ of Qz (MP) S_{ves}
 same thing (MP) S_{ves}
 Massive B - not homogeneous vesicles from sparsely to highly
 some vesicles are filled with green mineral (celadonite? epidote?)
 B has Pl (no Px)
 Bottom has little veins of celadonite (HP) M_{ves}
 Dikes cutting B. dikes are highly altered - Pl-B slightly altered.
 → Breccia (HP) S_{ves}
 Presence of pyrite (sparse). orientated lines of vesicles. (Moderate)
 some vesicles filled with green min¹ (HP) M_{ves}
 vein filled with breccia Paths of vesicles
 Mixed rubble

PS (vein)
(XRF)
XRD vein

TS (pillow rim)


XRF
PS

TS (Breccia)

Integrated Ocean Drilling Program Visual Core Description - Hard Rock -

Archive half

NO. 2
DATE: 01/10/2009
EXP.: 377
SITE/HOLE: 00012 A
CORE: 53 R
SECTION: CC
OBSERVER: SL

PIECE #	GRAPHIC REPRESENTATION	ORIENTATION	VEIN	SAMPLES	COLOR
1		↑			M
2			/		H
3a					
50					
100					
150					

SECTION DESCRIPTION

sparse presence of pyrite, ~10% pl, sparse vesicles
Moderate alteration, no vein. massive β

HP

S Ves

Mixed Rubble and pieces of massive β with pl
veins of Qz and epidote
sparsly vesicular
Moderately Altered
One piece has pyrite. → TS

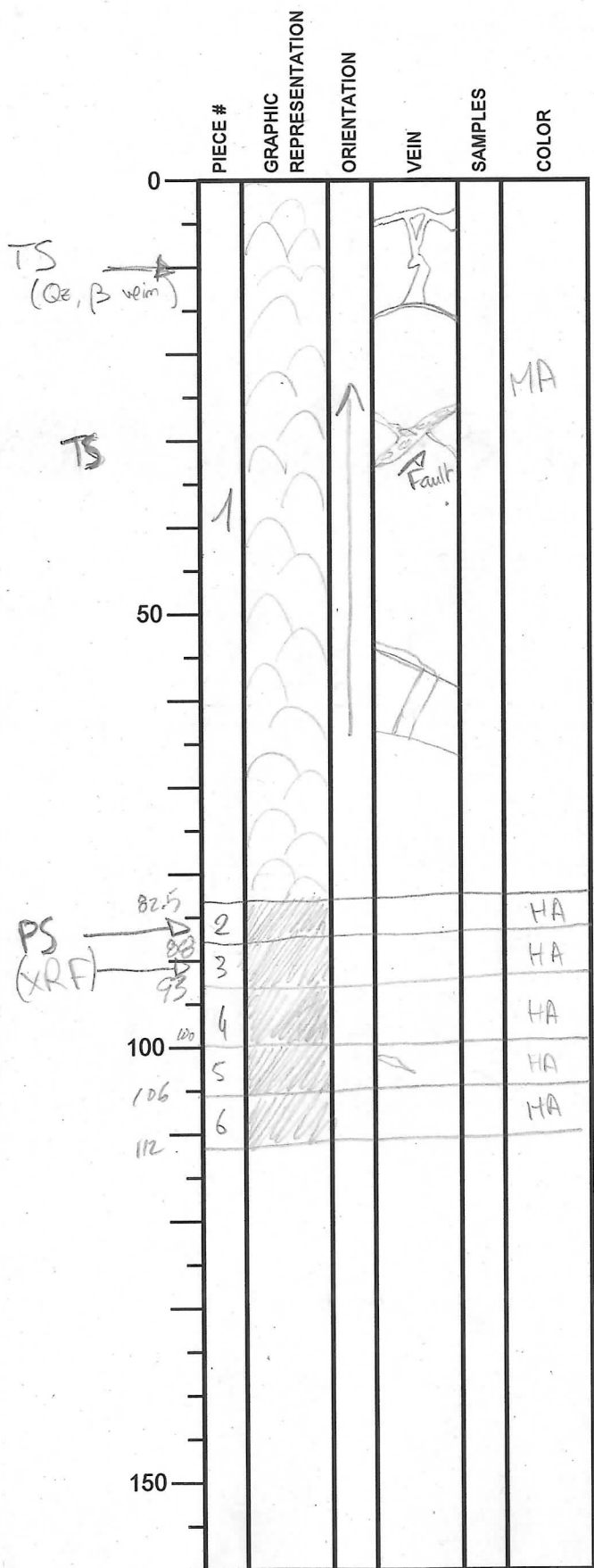
HP

PS?
TS?

Integrated Ocean Drilling Program Visual Core Description - Hard Rock -

Archive half

NO. 3
DATE: 01/10/2009
EXP.: 372
SITE/HOLE: C0012 A
CORE: 54 R
SECTION: 1
OBSERVER: SL



SECTION DESCRIPTION

Pillow B - Sparse to moderately vesicular
 Phenocrsts: pl, px presence of pyrite
 Large Qz veins.
 "Magma mixing" → pillow lavas reworked while cooling so we get 2 types of vesicularity and phenocrysts.

Im Rims of pillows → gradation of B color and vesicles and dikes filled with breccia of B.
 Color not homogeneous, from medium grey to dark grey
MP to HP

B - pl, px - sparse vesic. MP
 B - pl, px - sparse vesic. MP
 _____ - moderately vesic. MP
 B - pl, px, sparse vesic. small veim of Qz MP

Integrated Ocean Drilling Program Visual Core Description - Hard Rock -

Archive half

NO. 4
DATE: 06/10/2009
EXP.: 322
SITE/HOLE: C0012A
CORE: 54R
SECTION: 2
OBSERVER: SL

	PIECE #	GRAPHIC REPRESENTATION	ORIENTATION	VEIN	SAMPLES	COLOR
TS (vein)	1		↑	/		MA
16	2	~ ~ ~	↑			MA to HA
30	3					HA
34	4		↑			MA
PS (XRF)	5	~ ~ ~				MA
50	6	○ ○ ○				HA
54	7	~ ~ ~				HA
63	8	○ ○ ○				HA
69	9		↑	/		
PS XRF	10	○ ○ ○				
PS (altered stuff)						
100						
150						

SECTION DESCRIPTION

B pl, px veins of Qz MP to HP
 Isolated (?) dike of H-phyric lava (?) → TS

Not homogeneous - moderately vesicular
 very small vein of Qz HP
 Rim of pillow → gradat° of color

B pl HP

B pl, px filled vesicles - pyrite? MP

probably pillow (gradat° of vesicles near border) MP

Mixed rubble
 probably pillow - plB - sparse vesicles SP to MP

Mixed rubble

Not homogeneous - sparse vesicles - pl, sparse px.
 veins (little) of Qz and epidote SP

Mixed rubble - one has pillow border SP

Integrated Ocean Drilling Program Visual Core Description - Hard Rock -

Archive half

NO. 5
DATE: 11/10/2009
EXP.: 322
SITE/HOLE: C0012A
CORE: 54R
SECTION: CC
OBSERVER: SL

TS?
XRF - PS?

	PIECE #	GRAPHIC REPRESENTATION	ORIENTATION	VEIN	SAMPLES	COLOR
0	1					MA
5.5	2					MA
10	3					MA
16	4					MA
24	5					VAH
30						
40						
50						
100						
150						

SECTION DESCRIPTION

β - sparse vesicles + filled with celadonite or zeolite (?) SP
 β - sparse vesicles MP
 $2 \neq \beta$ $\left\{ \begin{array}{l} \text{dark grey - sparse vesicles - pl - Mod Alt} \rightarrow \text{MP} \\ \text{medium to light grey - moderately vesicles - Mod Alt} \rightarrow \text{SP} \end{array} \right.$
 magma mixing
 same as piece 3 vesicles filled with zeolites
 Mixed rubble

diffuse
limonite
(intermediate)

Integrated Ocean Drilling Program Visual Core Description - Hard Rock -

Archive Half

NO. 6
DATE: 06/10/2009
EXP.: 322
SITE/HOLE: C0012A
CORE: 55
SECTION: 1
OBSERVER: SL

TS!

	PIECE #	GRAPHIC REPRESENTATION	ORIENTATION	VEIN	SAMPLES	COLOR
0	1	?				
4	2					MA
12	3					MA
17	4					HA
21	5					MA
31	6					HA
35	7					MA
40.5	8					
44	9					MA
50	10					MA
53						
57	11					MA
62						
100						
150						

SECTION DESCRIPTION

Red shale
!

- 1: Moder. vesicular
- 2: gradational border
- 3: aphanic β - glass rim
- 4: altered - celadonite?

SP to MP
Reworked pillows!

Magma mixing ↔ Mod Vesic } diffuse limits (SP)
Sparse Vesic

contact with Mixed rubble breccia (H Altered) Vein?

Magma mixing (SP)

pillow with gradation border (MP)

Pyrite near rim of probable pillow (MP)

Px! (more than usual) (HP)

Integrated Ocean Drilling Program Visual Core Description - Hard Rock -

Archive half

NO. 7
 DATE: 2/10/2009
 EXP.: 322
 SITE/HOLE: 00012A
 CORE: 55
 SECTION: CC
 OBSERVER: SL

PIECE #	GRAPHIC REPRESENTATION	ORIENTATION	VEIN	SAMPLES	COLOR	SECTION DESCRIPTION
0						
1					M	Mixed magmas → MP - M Ves (Px, Pl)
6					M	vesicles with zeolites - pyrite β MP, Mod Ves (Px, Pl)
13						
3					VH	Pyrite: very altered β
22.5					M	SP - β (px)
27						Mixing → MP - M Ves → Zeolites! diffuse limits vesicles are filled with black thing → ?
32						
6						Mixed Rubble
50						
16.5						
100						
150						

TS

Archive Half

Integrated Ocean Drilling Program Visual Core Description - Hard Rock -

NO. 8
 DATE: 06/10/2009
 EXP.: 322
 SITE/HOLE: C0012 A
 CORE: 56R
 SECTION: 1
 OBSERVER: SL

PIECE #	GRAPHIC REPRESENTATION	ORIENTATION	VEIN	SAMPLES	COLOR
1					
2					
3					

SECTION DESCRIPTION

Qtz (and Ep) vein S Ves - SP
 HP B Pl + Px
 vein of celadonite SP Pl, Ax

Pyrite (?)

0
 3.5
 6.5
 15
 50
 100
 150

Integrated Ocean Drilling Program Visual Core Description - Hard Rock -

Archive half

NO. 9
 DATE: 04/10/2009
 EXP.: 322
 SITE/HOLE: 00012 A
 CORE: S6 R
 SECTION: 3
 OBSERVER: SL

TS

	PIECE #	GRAPHIC REPRESENTATION	ORIENTATION	VEIN	SAMPLES	COLOR
0	1					VA
3.5	2		↑			M
14	3					VA
19	4		↑			
41	5					VA
50						
100						
150						

SECTION DESCRIPTION

Magma mixing → M Ves → ol (!), pl vesicles filled with celadonite
 → S Ves → px, pl (MP) (Both β)

Inside pillow a vein contains breccia →

zeolites in some vesicles
 Heterogeneous β → S Ves (MP)
 → M Ves (MP)
 celadonite (?)
 HP β

Integrated Ocean Drilling Program Visual Core Description - Hard Rock -

Archive Half

NO. 10
DATE: 04/10/2009
EXP.: 372
SITE/HOLE: C0012 A
CORE: 56 R
SECTION: CC
OBSERVER: SL

	PIECE #	GRAPHIC REPRESENTATION	ORIENTATION	VEIN	SAMPLES	COLOR
0	1		↑			SA
9	2					SA
14	3					VA
23	4					SA
31	5					VA
37.5	6					VA
47	7					VA
50						
56.5						
100						
150						

SECTION DESCRIPTION

SP B SVes. Rims of pillow are altered - gradatⁿ from core to rim from medium grey to dark grey
 rim of pillow Mod Vesic. (SP)

A

Mixed magma (SP) SVes

(MP)
(SP), M.Ves

Mixed rubble

Integrated Ocean Drilling Program Visual Core Description - Hard Rock -

Archive Half

NO. 11
DATE: 2/10/2009
EXP.: 322
SITE/HOLE: 00012 A
CORE: 57R
SECTION: 1
OBSERVER: SL

	PIECE #	GRAPHIC REPRESENTATION	ORIENTATION	VEIN	SAMPLES	COLOR
0	1					SA
5			↑			
50	2					MAH
62	3					VA
74.5	4					VA
84	5					MA
92.5						
100						
150						

SECTION DESCRIPTION

B - S Ves - SP - px, pl
 magma mixing → MP - S Ves - H
 fine veins of celadonite → HP - M Ves - A
 large veins of az and epidote → sparse
 → well crystallized
 No pillow structure
 2 type of B
 pillow border. vesicles filled with celadonite

And.

Integrated Ocean Drilling Program Visual Core Description - Hard Rock -

NO. 12
DATE: 01/10/2009
EXP.: 322
SITE/HOLE: 00012A
CORE: 5ZR
SECTION: CC
OBSERVER: SL

PIECE #	GRAPHIC REPRESENTATION	ORIENTATION	VEIN	SAMPLES	COLOR	SECTION DESCRIPTION
0						
1					VA	Mixed Rubble some have Qtz veins (HP) Pl zeolite filled vesicles
13						2 types of B (same one) → M Vesic → S Ves → SP
23					VA	
26.5					VA	Mixed rubble
29.5					VA	Mixed rubble
31						
50						
100						
150						

Arch.

Integrated Ocean Drilling Program Visual Core Description - Hard Rock -

NO. 13
DATE: 06/10/2009
EXP.: 322
SITE/HOLE: C0012 A
CORE: 58 R
SECTION: 1
OBSERVER: SL

TS

PS

PIECE #	GRAPHIC REPRESENTATION	ORIENTATION	VEIN	SAMPLES	COLOR
0					
1					
15.5					
2					
21.5					
3					
33.5					
4					
41					
50					
73					
100					
150					

SECTION DESCRIPTION

Breccia in a large vein. in the vein: zeolite and celadonite and pieces of β .
 β = MP - S Ves.
 piece of pillow?
 pieces of β and pillows
 Quartz vein in β -SP-S Ves
 pieces of β → zeolite bearing vesicles
 → mixing between two β
 → pillow borders
 → veins of breccia and celadonite

Integrated Ocean Drilling Program Visual Core Description - Hard Rock -

Archive

NO. 14
DATE: 2/10/2009
EXP.: 322
SITE/HOLE: COO12 A
CORE: 58
SECTION: CC
OBSERVER: SL

	PIECE #	GRAPHIC REPRESENTATION	ORIENTATION	VEIN	SAMPLES	COLOR
0	1					MAIF
7	2					SAIF
12		A				
33.5	3	B		/		VAIF
50	4	C				
100						
150						

SECTION DESCRIPTION

B (SP) - Sves - vesicles are filled with quartz and calcite

B (SP) - Sves vesicles are filled with calcite

Medium mixed rubble of B

little mixed rubble

Order
No.
Date
Description

UNIT 10

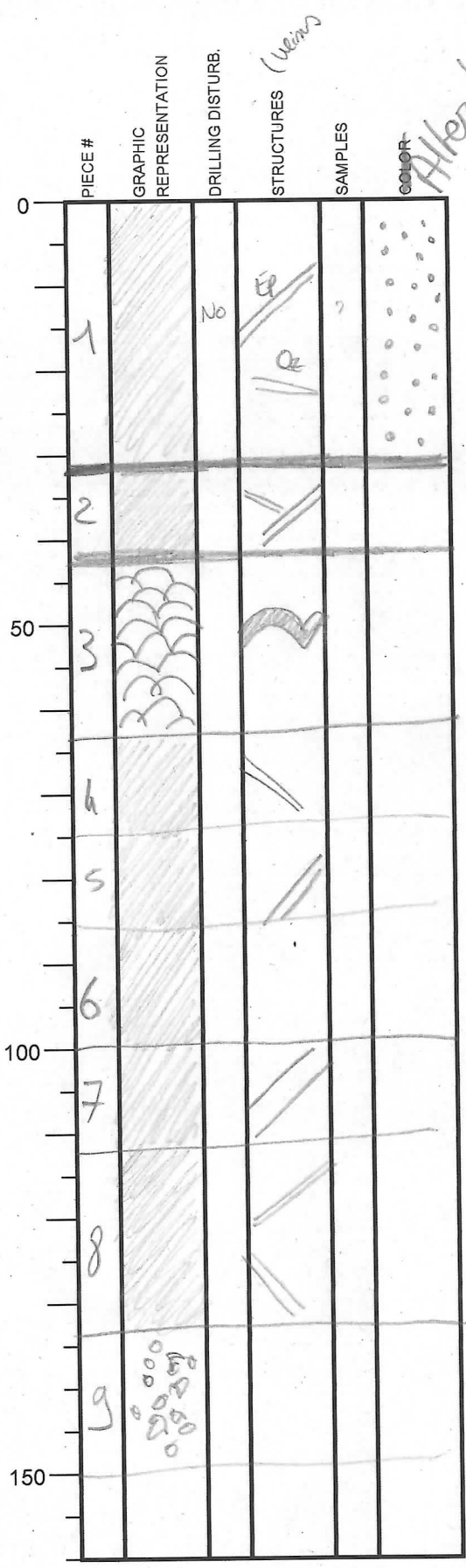
	DATE	DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL	BALANCE	CASH	CREDIT

W.R description

Integrated Ocean Drilling Program Visual Core Description

VWR

NO. 1
 DATE: 03/10/2009
 EXP.: 377
 SITE/HOLE: C0012 A
 CORE: 53
 SECTION: 2
 OBSERVER: Shasa



SECTION DESCRIPTION

Massive β - No pillow structure - veins of
 epidote and of Qz
 Moderate Alterat'

veins of Qz and Ep

Pillow structure
 Altered glass rims (photo 1-4)

} Qz veins

large csts of pl (?) changes of vesicles size
 pl laths visible

large veins of ep, Qz and brown

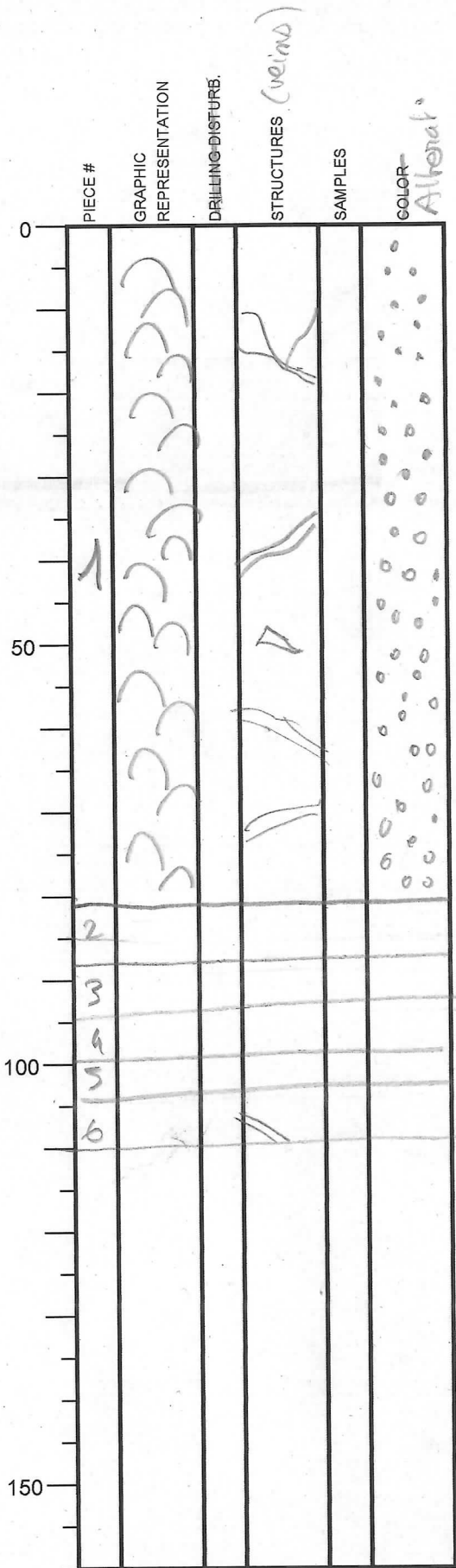
Massive β , ± large vesicles, veins

Mixed rubble

Integrated Ocean Drilling Program Visual Core Description

WR

NO. 2
DATE: 08/10/2009
EXP.: 372
SITE/HOLE: 0012 A
CORE: 56
SECTION: 1
OBSERVER: Shasa



SECTION DESCRIPTION

Pillows - B - veins of Qz
Alterat° moderate
pl talhs
vesicles (not many...)

B - pl talhs
← vein of Qz

WR

Integrated Ocean Drilling Program Visual Core Description

NO. 3
DATE: 07/10/2009
EXP.: 322
SITE/HOLE: 00012A
CORE: 56
SECTION: 2
OBSERVER: Shasa

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
1	[Hatched]				
2	[Wavy lines]				
3	[Hatched]				
4	[Hatched]				
5	[Hatched]				
6	[Ovals]				
7	[Wavy lines]				
8	[Ovals]				
9	[Hatched]				
10	[Ovals]				


SECTION DESCRIPTION

Veins of Qz, Ep
Moderate Alterat.
≠ types of B → Area Aphyric
porphyritic
B
High Alterat. - B
chunks of B
pillow?
chunks
± porph (2 B? or ≠ textures?) → why??
pillows?
chunks

Integrated Ocean Drilling Program Visual Core Description

WR

NO. 4
 DATE: 03/10/2009
 EXP.: 322
 SITE/HOLE: 00012A
 CORE: 56
 SECTION: CC
 OBSERVER: Shasa

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
1			vein		High High
					

SECTION DESCRIPTION

Glassy rims, Pyrite!, Abrat°

filled vesicles - glass inclusions?
zeolites

50

100

150

WR

Integrated Ocean Drilling Program Visual Core Description

NO. 5
DATE: 03/10/2009
EXP.: 322
SITE/HOLE: 0012A
CORE: 55
SECTION: 01
OBSERVER: Shasa

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR	SECTION DESCRIPTION
1					M	Red Shale !
2					M	Pillow B
3					M	B... ? filled vesicles... chunks → zeolites
4					M	
5					M	Interface ! B with Ol and Pl to fine Breccia
6					H	chunks
7					H	? Glass - B - veins
8						chunks
9					M	pillow ? Pyrite ! PX

Integrated Ocean Drilling Program Visual Core Description

1 WR

NO. 6
 DATE: 09/10/2009
 EXP.: 322
 SITE/HOLE: 00012 A
 CORE: 55
 SECTION: C
 OBSERVER: S

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
0					
1					M
2					M/H
3	→ ○ ○				
4	○ ○				
5					
6	→ ○ ○ ○ ○				
50					
100					
150					

SECTION DESCRIPTION

vesicles filled with chalcedony (?) pyrite
 ≠ sizes of phenocrysts... chlorite?
 chunks with pyrite
 chunk β
 β → many vesicles not filled
 → vesicles filled with ~~chalcedony (?)~~
 zeolites (?)
 chunks! was a breccia?

Vims
 Alterat

Integrated Ocean Drilling Program Visual Core Description

LWR

NO. 7
 DATE: 8/10/2009
 EXP.: 322
 SITE/HOLE: COO12A
 CORE: S6
 SECTION: 01
 OBSERVER: SL

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
1					
2					
3					

veins

SECTION DESCRIPTION

chunk → Beautiful vein of Oz well crystallized.
 veins of Oz and Ep

50

100

150

Integrated Ocean Drilling Program Visual Core Description

WR

NO. 8
 DATE: 03/10/2009
 EXP.: 328
 SITE/HOLE: C0012 #
 CORE: S6
 SECTION: 03
 OBSERVER: SL

	PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES <i>veins</i>	SAMPLES	COLOR <i>Alt</i>	SECTION DESCRIPTION
0	1					H	chunk
	2					S	d-B and pl chunks
	3						
	4					S	orientade vesicles - more glossy rims
	5						chunks
50							
100							
150							

WR

Integrated Ocean Drilling Program Visual Core Description

NO. 3
DATE: 03/10/2009
EXP.: 382
SITE/HOLE: C0012A
CORE: 56
SECTION: CC
OBSERVER: Shana

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES <i>rim</i>	SAMPLES	COLOR <i>Alt</i>
1					M
2					M
3					H
4					H
5					
6					
7					

SECTION DESCRIPTION

glass altered and is
two pieces -> do they really go together ?? "

chunks - some have aphyric B

chunks

chunks

50

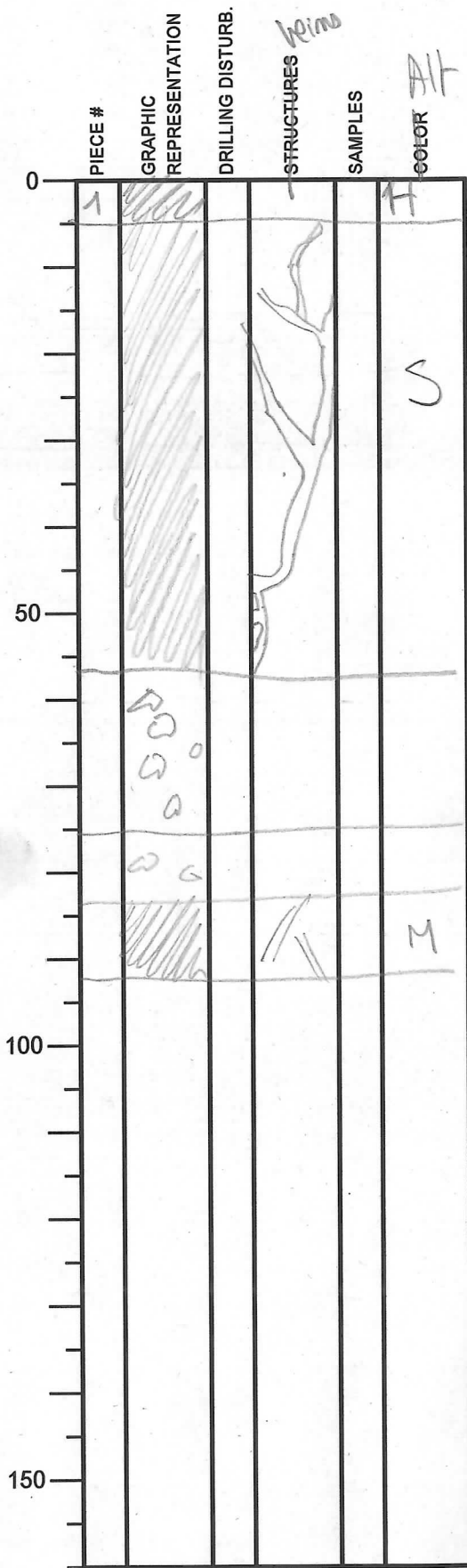
100

150

Integrated Ocean Drilling Program Visual Core Description

WR

NO. 10
 DATE: 03/10/2009
 EXP.: 322
 SITE/HOLE: 00012A
 CORE: 57
 SECTION: 01
 OBSERVER: Shasa



SECTION DESCRIPTION

Qtz veins (\pm ep)
 No pillow structure
 \pm phenocrysts

} chunks of B and of veins of Qtz

B \pm ol

OWR

Integrated Ocean Drilling Program Visual Core Description

NO. 11
DATE: 03/10/2009
EXP.: 322
SITE/HOLE: 0002A
CORE: 57
SECTION: CC
OBSERVER: Shaver

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR
1					N
2					N
3					H
4					H
5					H

SECTION DESCRIPTION

vesicles filled of zeolites!
chunks B. ol, pl

0
50
100
150

WR

Integrated Ocean Drilling Program Visual Core Description

NO. 12
DATE: 03/10/2009
EXP.: 377
SITE/HOLE: 00012A
CORE: 58
SECTION: 1
OBSERVER: SL

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES <i>veins</i>	SAMPLES	COLOR <i>Alt</i>
1					H

SECTION DESCRIPTION

vesicles filled with zeolites
Breccia hyaloclastite / β transition?
fracture filled with hyaloclastite

Qtz vein

β ...

150

Integrated Ocean Drilling Program Visual Core Description

WR

NO. 13
 DATE: 08/10/2009
 EXP.: 300
 SITE/HOLE: C0012A
 CORE: 58
 SECTION: CC
 OBSERVER: SL

PIECE #	GRAPHIC REPRESENTATION	DRILLING DISTURB.	STRUCTURES	SAMPLES	COLOR	SECTION DESCRIPTION
0						
1	[diagonal hatching]		veins [diagonal lines]		M	epidote veins
2	[diagonal hatching]		[diagonal lines]		H	
3	[irregular shapes]				M to H	chunks of B
4	[small circles]					chunks
50						
100						
150						