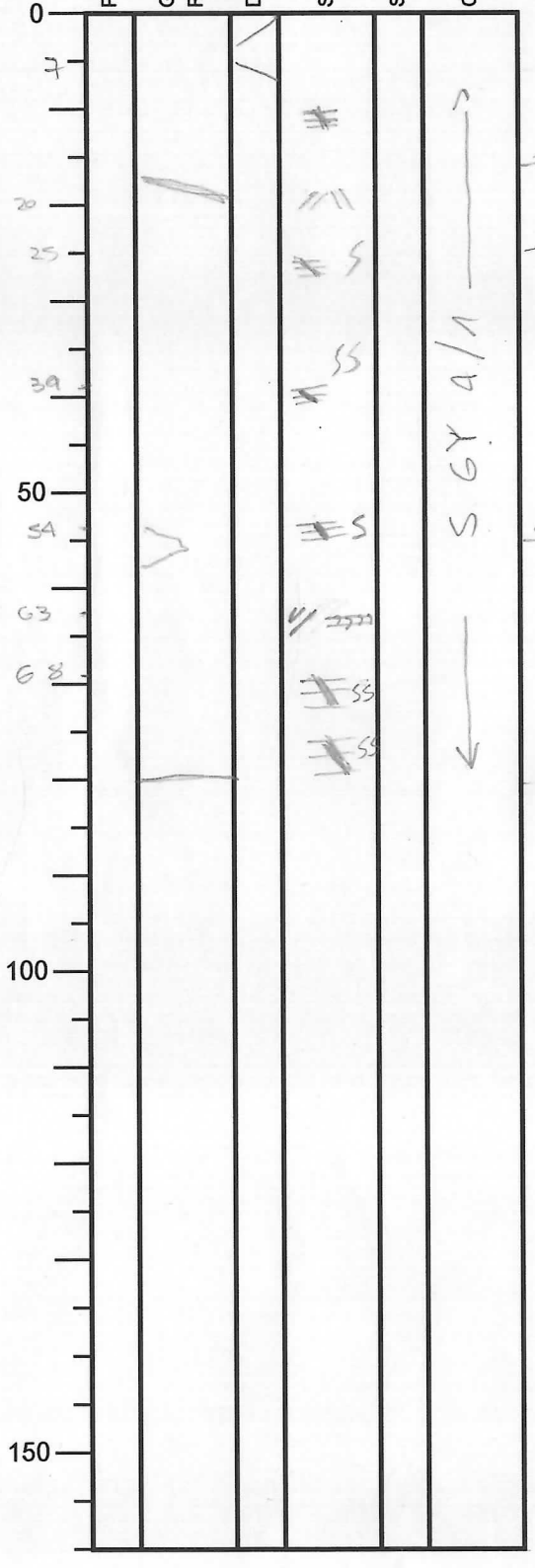
Integrated Ocean Drilling Program

Visual Core Description

NO. 1
DATE: 9 / 12 / 2012
EXP.: 336
SITE/HOLE: C0022J
CORE: 1R
SECTION: 1
TOP DEPTH (m CSF): 902

80 cm total length

OBSERBER: SR + KH



→ Dark olive gray silty claystone.

→ Fault land along a fracture at 19 cm (possible rém structure?)

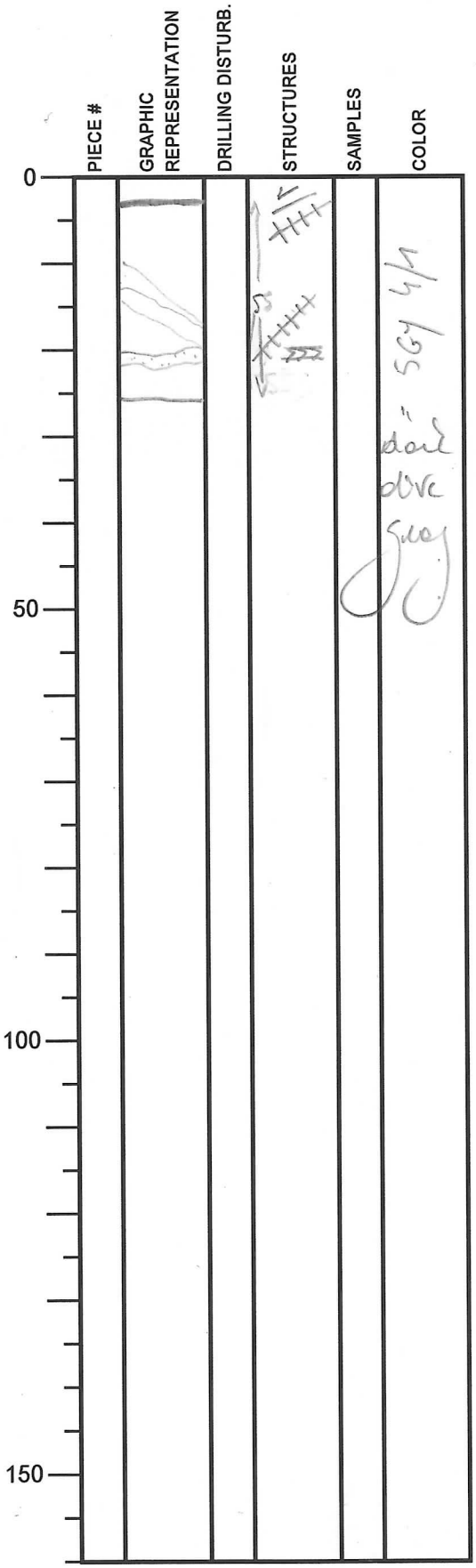
→ Light colored, very soft ~~brittle~~ ash patch

- 19 - 22 Chondrites
- G3 zoophycos
- G overlayed slight to moderate bioturbation

Integrated Ocean Drilling Program

Visual Core Description

NO. 2
DATE: 10 / 12 / 2012
EXP.: 338
SITE/HOLE: C0025
CORE: 1R
SECTION: 3
TOP DEPTH (m CSF): ~~902~~ 902.795
OBSERBER: KH + SR



SECTION DESCRIPTION

Tot: 25 cm

silty claystone 0 – 25 cm

0 - 3.5 = dark coloured, fine grained bed

large scm structure between 11 - 20 cm

zoophycus = large burrow
19.5 - 20.5 cm was filled with coarse material

14.5 - 16.5 = bioturbation ?? maybe zoophycus ??

21 - 25 cm = bioturbated
= lighter coloured patches

Generalized moderate disturb

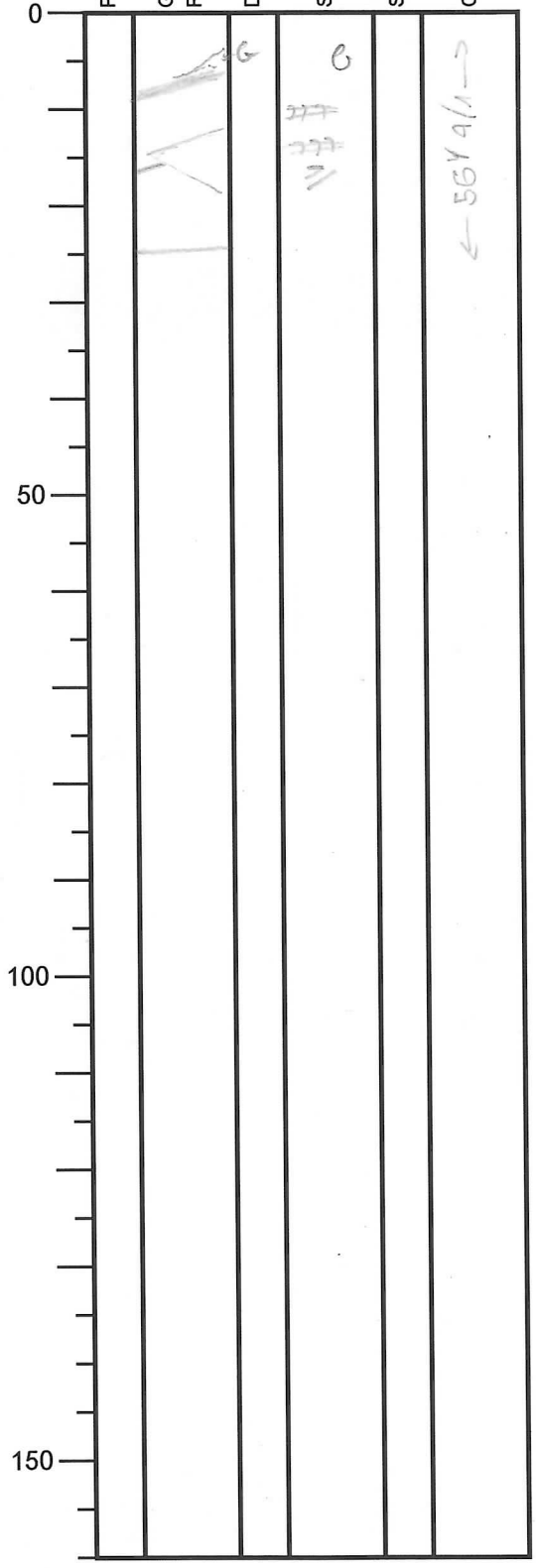
Integrated Ocean Drilling Program

Visual Core Description

NO. 3
DATE: 9/12/2012
EXP.: 338
SITE/HOLE: C0002J
CORE: 1R
SECTION: 4
TOP DEPTH (m CSF): ~~R2~~ 903.15

OBSERBER: SZ

26 cm tot length



SECTION DESCRIPTION

Dark olive green silty clay/clay with moderate to intense bioturbation

- 1-2 cm = pyrite
- 9 cm: dark band of mafic origin top of dark band = glass content = 9-9.5 cm
- 17 cm: small reverse fault affecting a zoophycos.
- 12 cm: zoophycos + $\frac{1}{2}$ cm darker bands with discrete burrows above and below

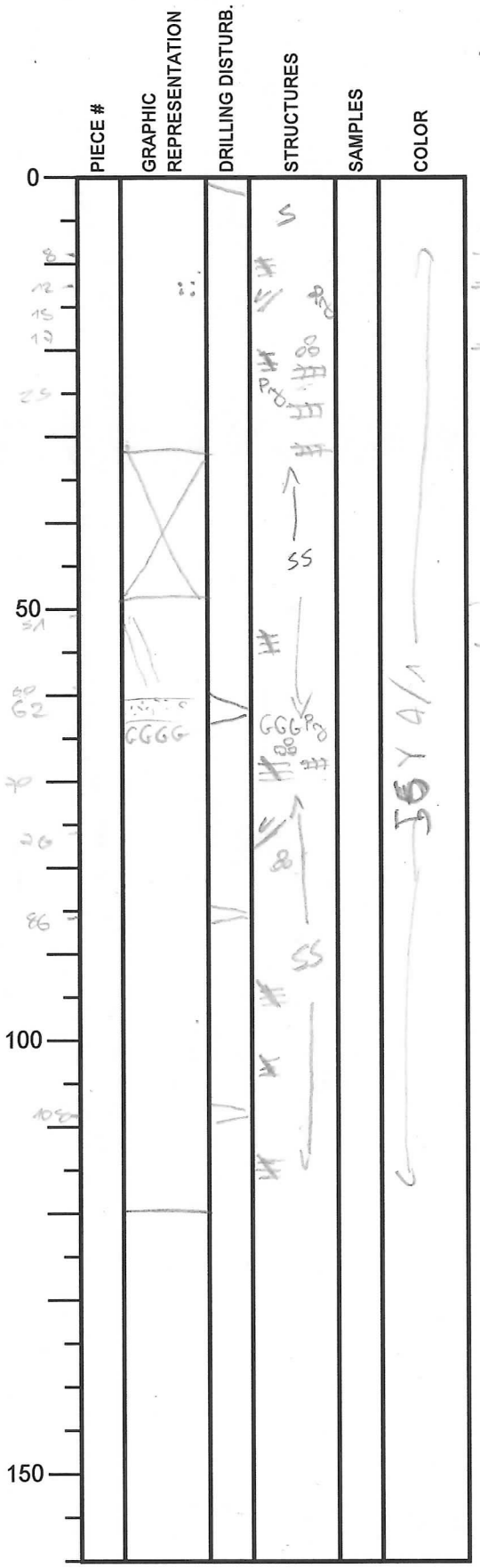
Integrated Ocean Drilling Program

Visual Core Description

NO. 4
DATE: 19/12/2012
EXP.: 338
SITE/HOLE: C0023
CORE: 1R
SECTION: 7
TOP DEPTH (m CSF): ~~R2~~ 903.805

OBSERBER: SR

120 cm total



=> pyritized burrows?
=> agglutinated foams

Dark olive green silty claystone.

14-28 well-developed Zoophycos

=> large burrows

60-62 cm = slightly coarser material
= sandy siltstone

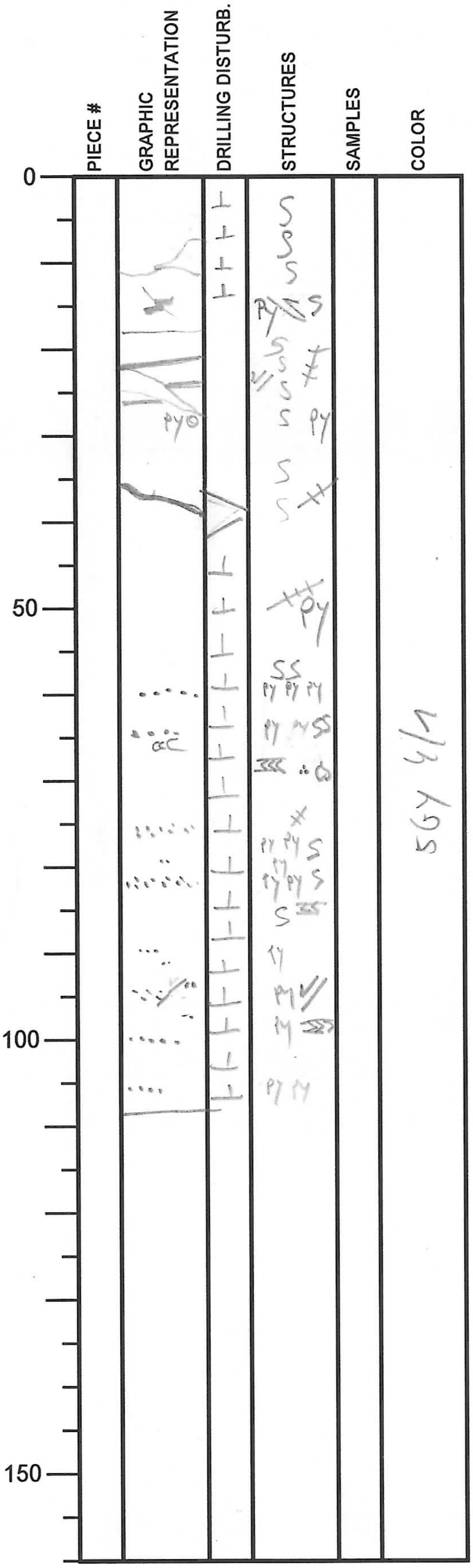
64-65 cm = glauconite rich irregular sand lamination
= Generally moderate bioturbation

Integrated Ocean Drilling Program

Visual Core Description

NO. 5
DATE: 19/12/20
EXP.: 338
SITE/HOLE: C0002J
CORE: 1R
SECTION: 8
TOP DEPTH (m CSF): 904.99

OBSERBER:



SECTION DESCRIPTION

TOT = 107 cm

0 - 107 cm = silty claystone
→ intensly bioturbated

0 - 11 cm = lighter patches = bioturbation

14.5 - 17 cm = pyritized burrow
sliced by fault

18 cm = horizontal vein
separates more patchy top from more flamed appearance below

20 - 25 cm = strong bioturbation
crosscut by veins
and veins are cut by fault

26 cm = pyritized burrow

37 - 38 cm = darker band (vein ?)
right above highly fractured zone

49 - 51 cm = several veins crosscutting bioturbation

51.5 cm = pyrite

60 cm = pyrite level = small pyrite filled burrow
65 cm = pyrite level = " "
66 - 67 = strange structure ((
69 cm = pyritized burrow
70 cm = forams = agglutinated
71 cm = pyritized wood ?
70 - 71 cm = zoophycus
74 - 75 cm = veinstructure
76 - 77 = pyrite level (idem each)
79 cm = small pyrite level
82.5 - 83.5 cm = pyrite level
85 cm = zoophycus
90 + 91 cm = pyrite level
94 - 95 = pyrite level crosscut by fault

94 - 98 = intense bioturbation
97.5 = + vein structure + fault
99 - 100 cm = pyrite patch (= zoophycus)
100 cm = zoophycus (silt burrows)
105.5 - 106.5 cm = pyrite level

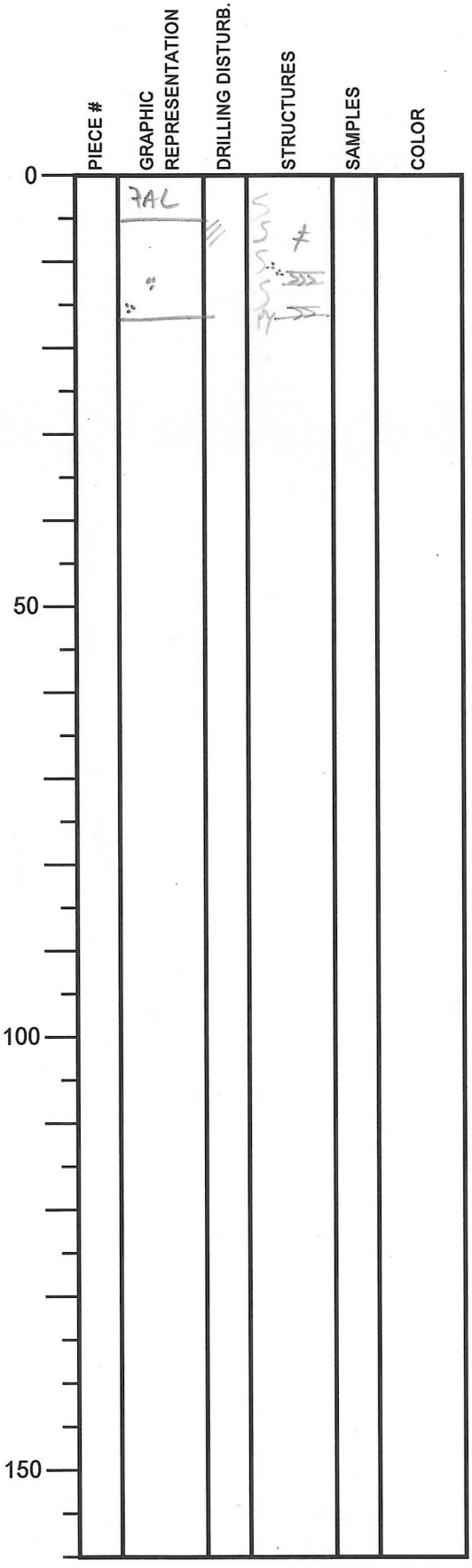
VCD_sheet_100805.xls

Integrated Ocean Drilling Program

Visual Core Description

NO. 6
DATE: 19/12/20
EXP.: 338
SITE/HOLE: C0002J
CORE: 1H
SECTION: CC
TOP DEPTH (m CSF): 906.06

OBSERBER: KH



SECTION DESCRIPTION

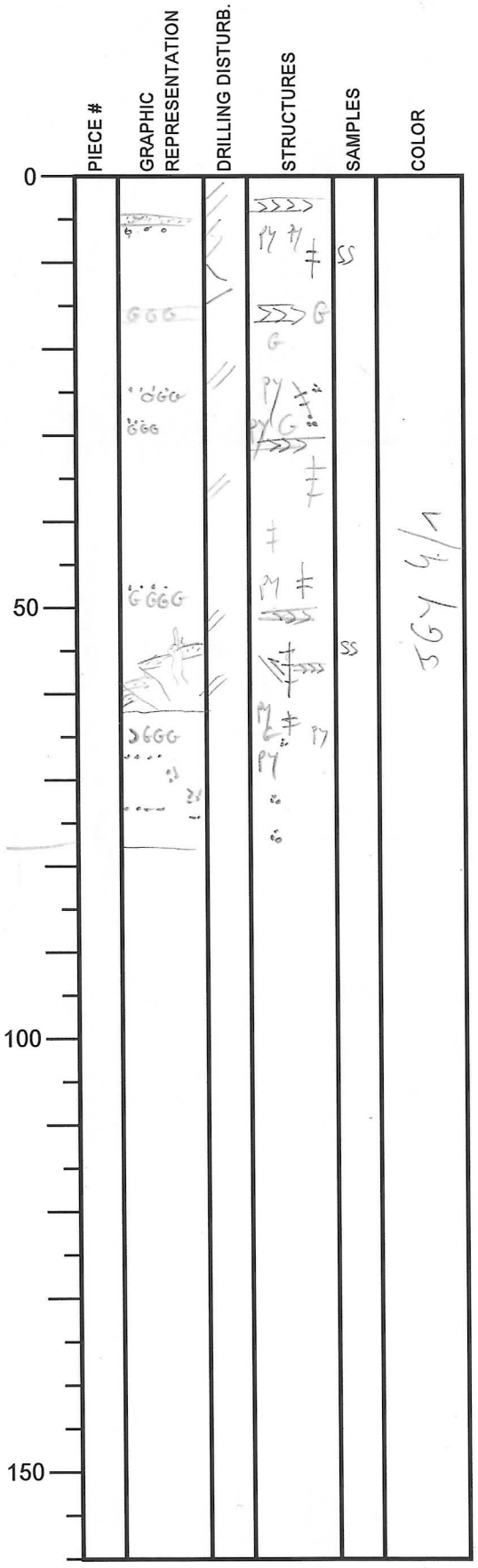
TOT = 16 cm
0-5 cm = 7AL SAMPLE
5-16 cm = silty clay/mud completely bioturbated
6.5 cm = no structure
7+8 cm = pyrotized burrow
11-13 cm = zoophycos
12 cm = pyrotized burrows
13+19 cm = foram fossils
15-16 cm = zoophycos
15.5 cm = pyrotized burrows

Integrated Ocean Drilling Program

Visual Core Description

NO. 7
DATE: 12/19/2012
EXP.: 338
SITE/HOLE: C0002J
CORE: 2R
SECTION: 1
TOP DEPTH (m CSF): 907.0

OBSERBER: KH



SECTION DESCRIPTION

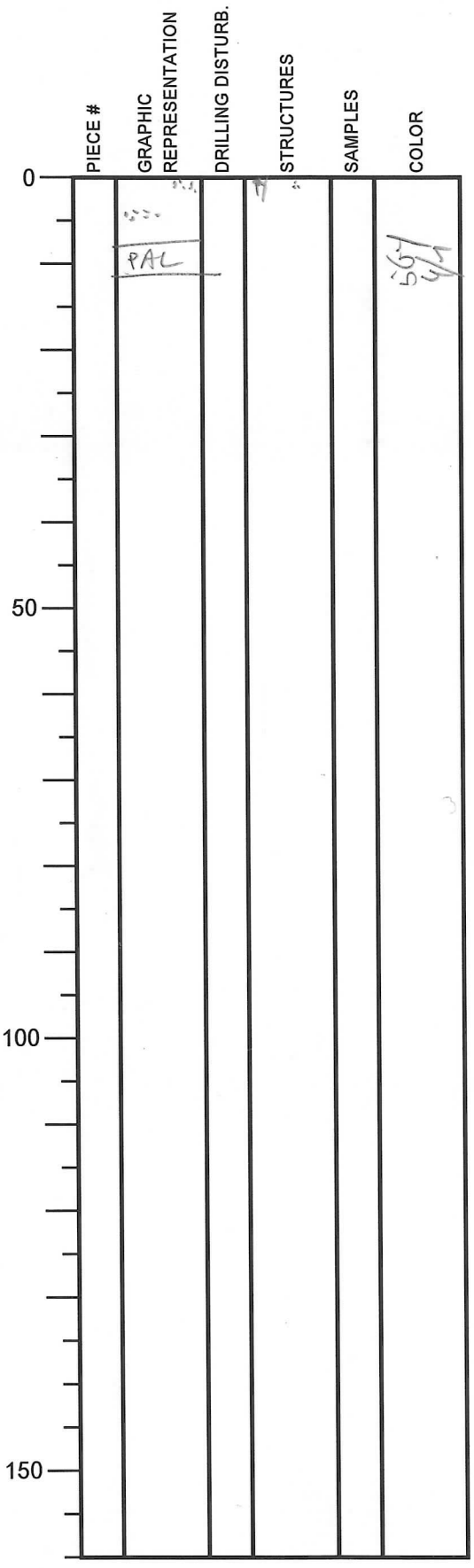
TOT = 77 cm

0 - 77 cm =
5 GY / 4/1 dk olive gray silty clay stone.
with intens bioturbation
some bioturbation levels are pyritized
3-4 cm = zoophycos
4.5 - 6 cm = slightly coarser? (max silt ø ?
6-7 cm = pyrite level = pyritized burrows
10 cm = horizontal vein structure
± 1-2 mm thick
14.5 - 16 cm = zoophycos
16-17 cm = irregular glauconite bohrt
17 - 27 cm = intens bioturbation probably
19-20 cm = zoophycos
20 + 22 cm = lighter colored patches = burrows glauconite large
25 cm = pyrite level
25 - 27 cm = vein structure (26-27 = vein
± 5 cm thick foram
29.5 cm = pyrite level in glauconite
29.5 - 30.5 cm = zoophycos (on top 29.5-29.5 = glauconite rich sand
30 - 40 cm = 3 vein structures
32-34 cm = 2 clear burrow patches
lighter colour
42 - 44 cm = vein structure
48 cm
48-50 cm = irregular level crosscut by vein
50-51 = zoophycos glauconite rich sand
54 - 63 cm = zoophycos crosscut by min. 3 faults
+ several veins
62 cm = pyritized burrow
63.5 cm = horizontal vein
63.5-65 = irregular glauconite sand
65 cm = pyritized burrow + foram
67.5 = pyrite level
69-72 cm = 2 pyrite patches (= burrows)
71 cm = foram
73.5 cm = pyrite level
76 cm = foraminifera

Integrated Ocean Drilling Program

Visual Core Description

NO. 8
DATE: 11/12/20
EXP.: 338
SITE/HOLE: Cascadia
CORE: 2R
SECTION: CC
TOP DEPTH (m CSF): 907.77



SECTION DESCRIPTION

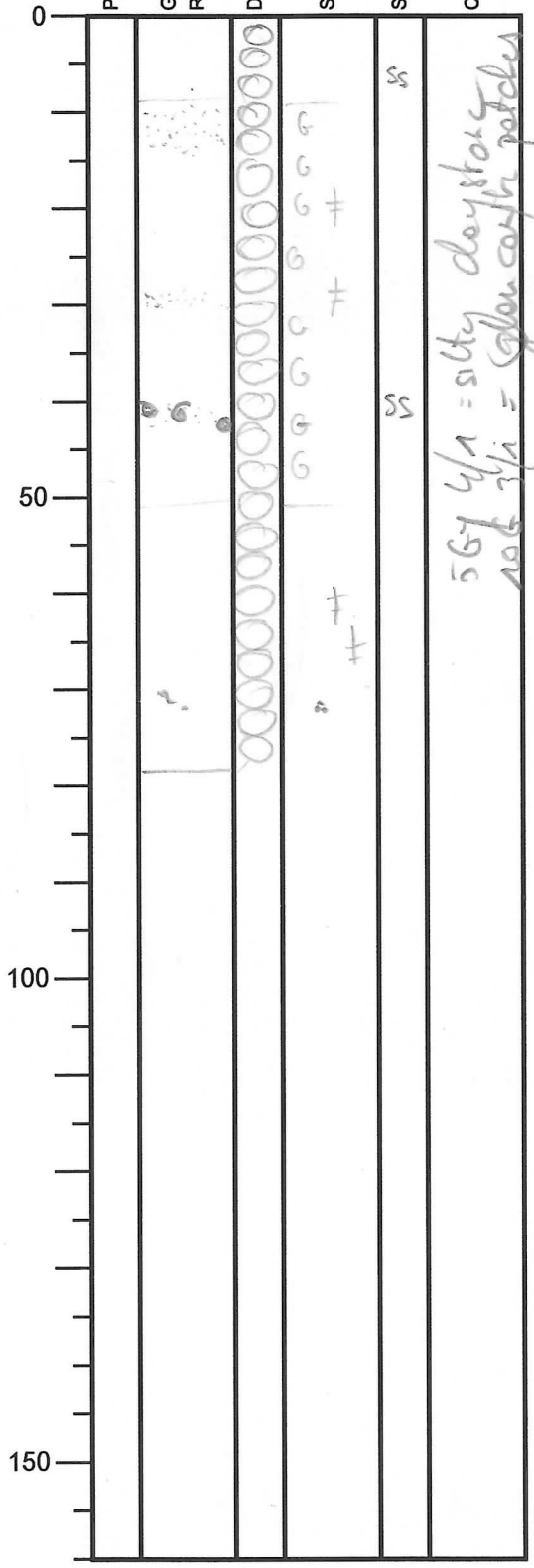
OBSERBER: KH

TOT: 11 cm
7cm - 11 cm = PAL SAMPLE
0-7 cm: silty claystone with bioturbation
1-2cm = pyrite level = pyritized burrows
1cm = foram or forams?
4-5cm = pyrite level = pyritized burrows
almost like pyrite levels
dip ± 45°

Integrated Ocean Drilling Program

Visual Core Description

NO. 9
DATE: 19/12 / 20
EXP.: 338
SITE/HOLE: C0002J
CORE: 3R
SECTION: 1
TOP DEPTH (m CSF): 912
OBSERBER: KLH



SECTION DESCRIPTION

TOT 78 cm

→ 0-78 cm = slty claystone, intensely bioturbated

8-50: sand-sized glauconitic fragments including some granules to pebbly sand glauconite

→ very glauconitic present = coarse slty claystone with some sand

50-78 = slty claystone

40-50 = discrete burrows → glauconitic particles (= bottom glauconitic zone)

→ 44.5 cm: fossil?

6-7 cm = zoophycos (also 3+4 cm)

1-2 cm = burrow

21-25 cm = web structure

30 cm = " "

56-66 cm: some burrows

59-68 cm: web structures

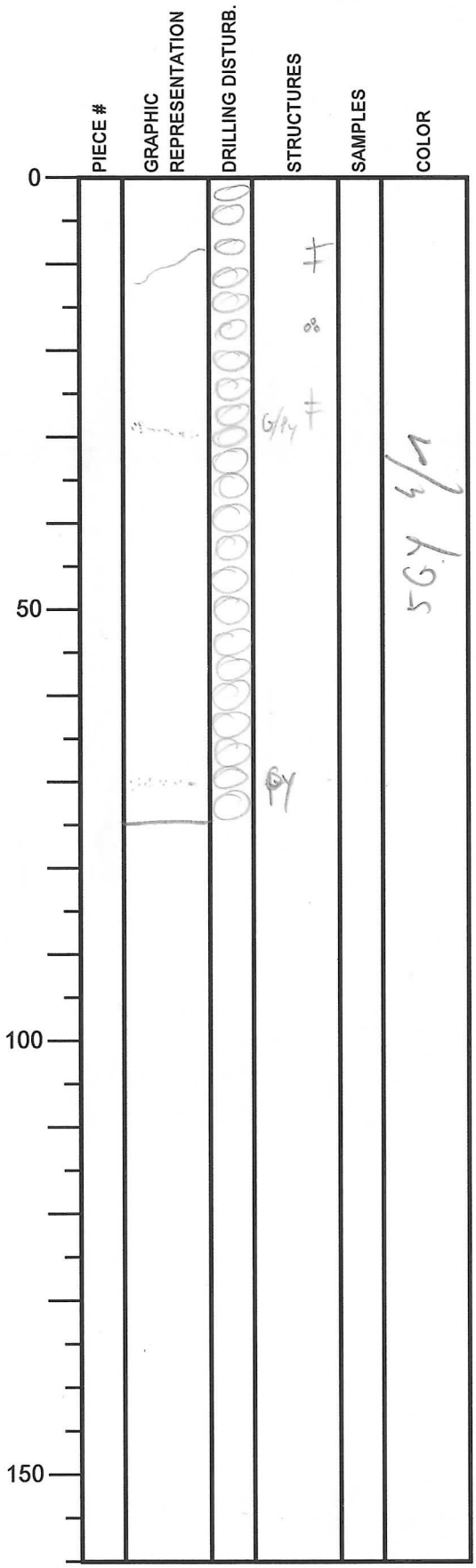
70-72 = pyritized or glauconized burrow

72 cm = fault

Integrated Ocean Drilling Program

Visual Core Description

NO. 10
DATE: 19/12/20
EXP.: 338
SITE/HOLE: C0002J
CORE: 3R
SECTION: 2
TOP DEPTH (m CSF): 912.78



SECTION DESCRIPTION

OBSERBER: KLM

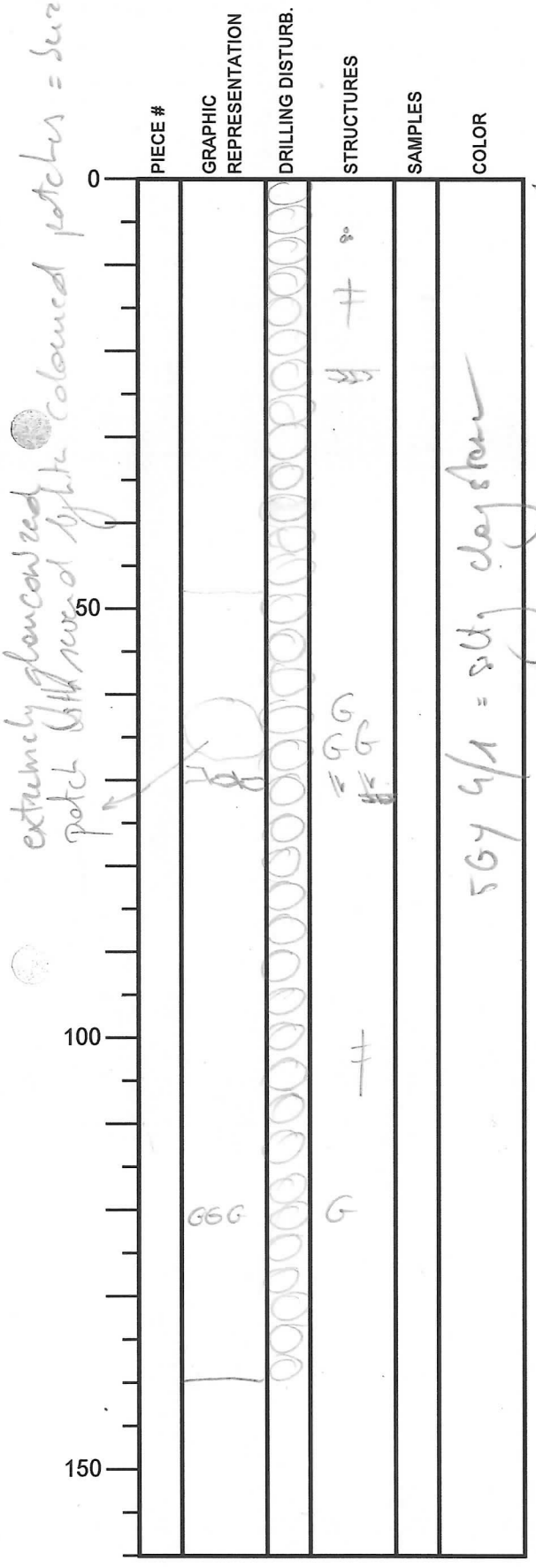
TOT 75 cm
almost structureless
moderate drilling disturbance
(= biscuit)
→ silty claystone

5 cm: discrete burrow
8–13: void structure
12 cm: foram
24–30 cm: void structures
↳ 25 cm = eye structure
29–33: some discrete burrows
zoophycos?
with glauconite sand grains present
60–61 cm: lighter patches
= bioturbation
69–70 = burrow
: zoophycos?
sandy with glauconite sand and grains

Integrated Ocean Drilling Program

Visual Core Description

NO. 11
DATE: 19/12/20
EXP.: 338
SITE/HOLE: C0002J
CORE: 31
SECTION: 5
TOP DEPTH (m CSF): 913.84 VLH
OBSERBER:



SECTION DESCRIPTION

Tot 140 cm: silty clay/clay, intensely bioturbated
→ 0-48 cm = almost structureless silty clay/clay
28-42 = some obscure burrows + patchy texture
→ 48-71 cm = heavily glauconized with many black and glauconite particles + lot of burrowing
→ 71-140 cm structureless silty clay/clay

few obscure burrows
90-91

7.5 cm: foram
8-12: some burrows
14.5: horizontal veins, structureless (darker colour)
24-25 cm: zoophycos
50-56: glauconite grains + veins, structureless
60-71: most extreme glauconitization of this section (5GY 3/1)
69-70 cm: zoophycos bridged by 2 faults
101-105 cm: veins, structureless
122 cm: glauconite sand

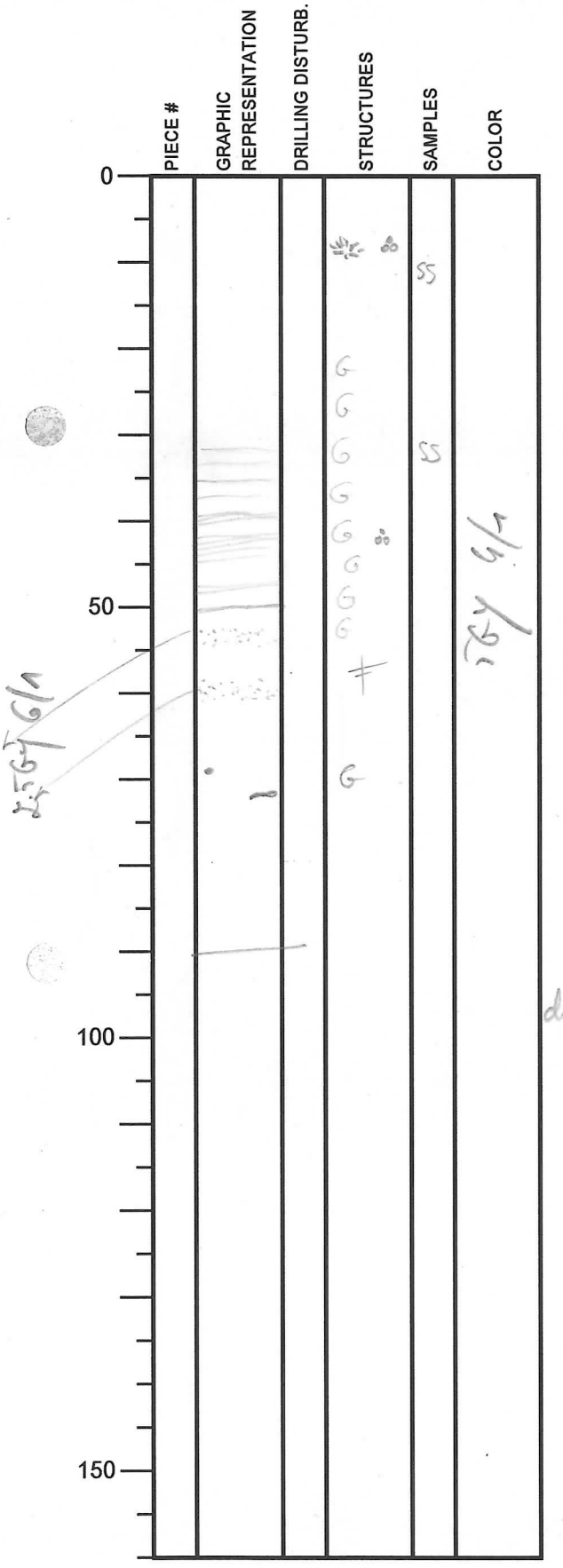
extremely glauconized patch with traces of light coloured patches = burrows

Integrated Ocean Drilling Program

Visual Core Description

NO. 12
DATE: 13/12/20
EXP.: 338
SITE/HOLE: C0002J
CORE: 3R
SECTION: 6
TOP DEPTH (m CSF): 915.245

OBSERBER: KLH



SECTION DESCRIPTION

Tot 90 cm

0-22 cm = homogenous silty claystone with few discrete burrows

9-10: chondrites

11 cm: forams

22-57 cm: distinct bed parallel much sandy individual beds ± 0.5 cm thick separated from each other by 0.5-5 cm silty claystone

57-90 cm: homogenous silty claystone

dark glauconite beds at 33, 34, 36, 37, 39-40, 42-45, 47-48 (= very thin), 50 cm

43 cm: forams

53-57: sand sized glauconite particles in silty claystone

57: wavy structure

58-63: sand sized glauconite particles in silty claystone

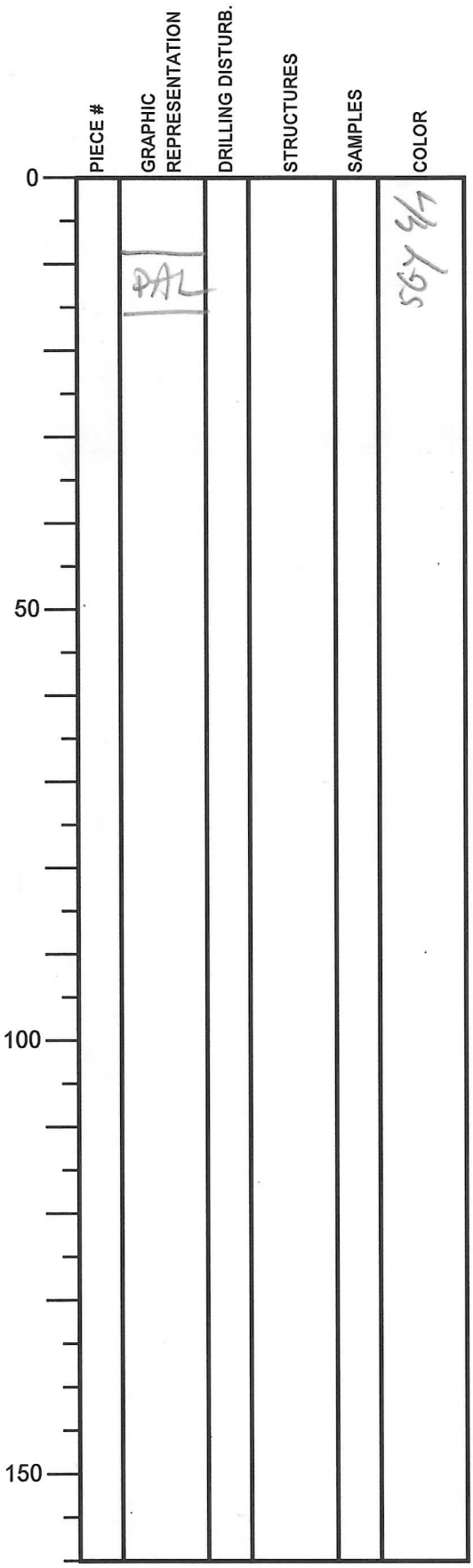
70+73 = dark glauconite grain + pebble

Integrated Ocean Drilling Program

Visual Core Description

NO. 13
DATE: 19/12/20
EXP.: 378
SITE/HOLE: Exotic J
CORE: 3R
SECTION: CC
TOP DEPTH (m CSF): 916.15

OBSERBER: VLM



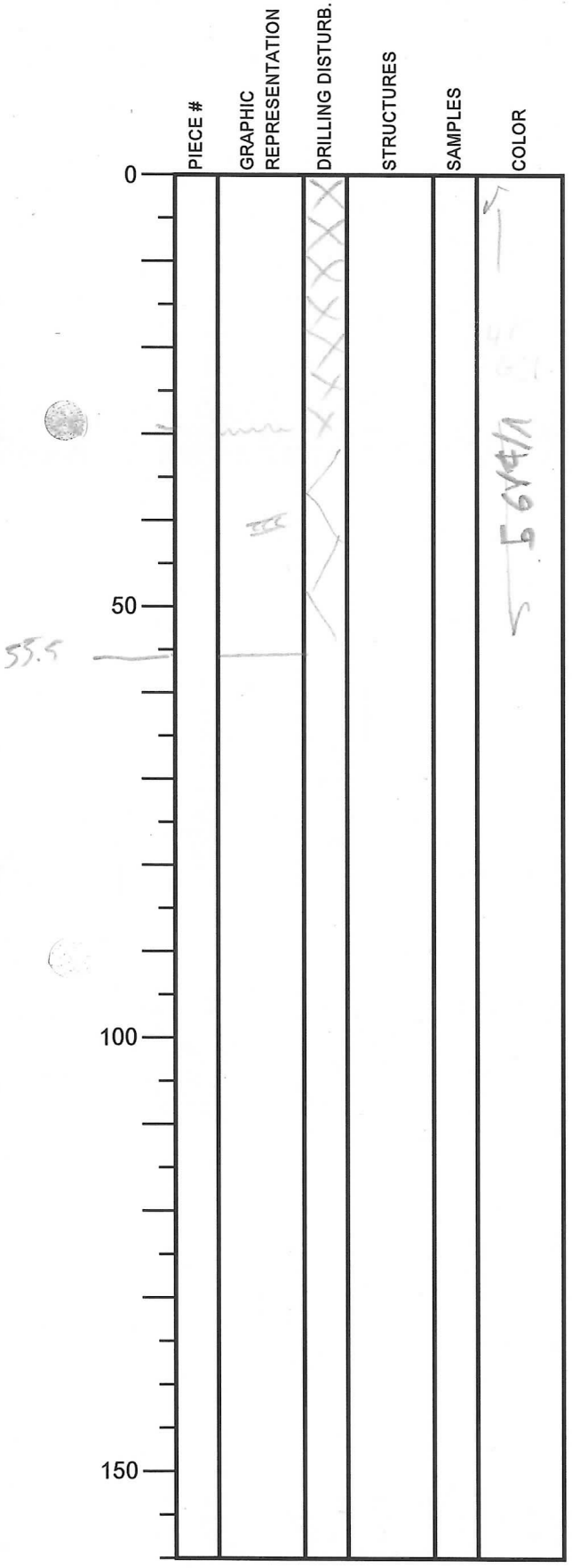
SECTION DESCRIPTION

0-9 = homogenous, ltly clay/stone
some glauconite swirls
9-16 = PAL SAMPLE

Integrated Ocean Drilling Program

Visual Core Description

NO. 14
DATE: 12/20/2012
EXP.: 338
SITE/HOLE: C0002 J
CORE: 4
SECTION: 1
TOP DEPTH (m CSF): 917
OBSERBER: KM



SECTION DESCRIPTION

dk olive-gray silty claystone w/ biotu/bar

0-29 drilling breccia

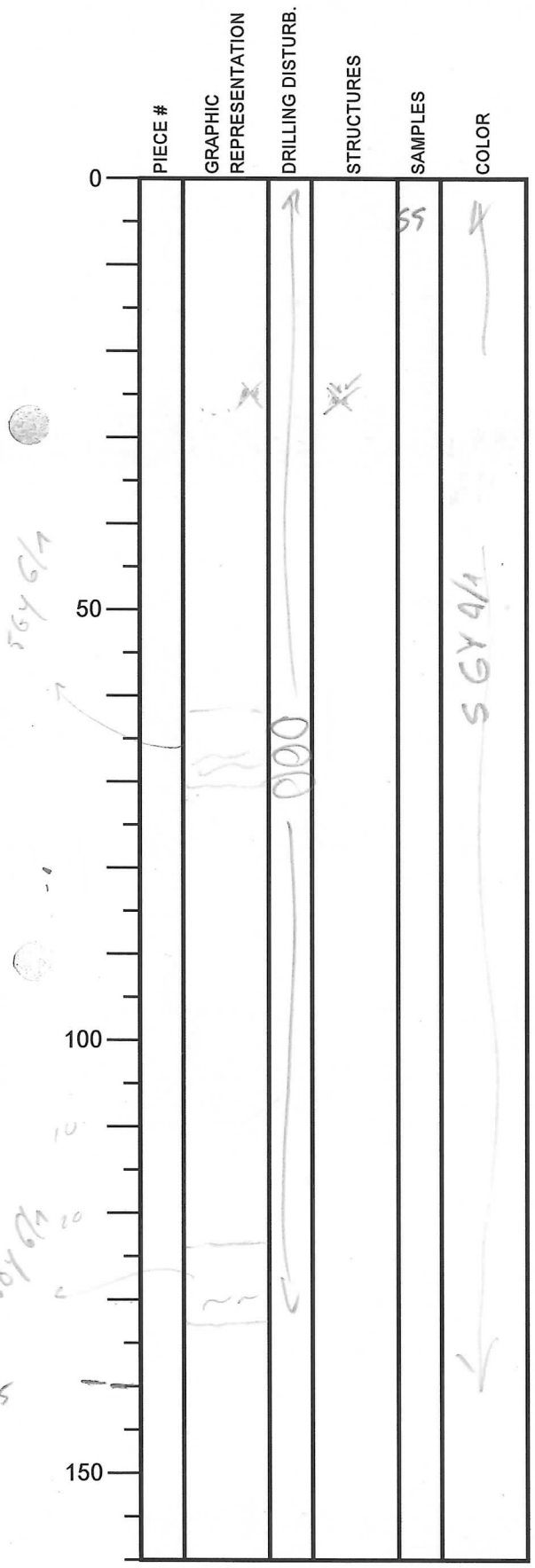
silty clayst. w/ a few Zoophy.

Integrated Ocean Drilling Program

Visual Core Description

NO. 15
DATE: 12/20/2012
EXP.: 338
SITE/HOLE: C0002 J
CORE: 4
SECTION: 3
TOP DEPTH (m CSF): ~~###~~ 917.76

OBSERBER: KM



SECTION DESCRIPTION

dk olive gray silty claystone w/ bioturb., scatter glauc. grains

glauc. grains)

25cm - 26cm: black pyrite patch

62-70 cm: 5GY 6/1 - olive gray, wavy lam. = coarse material (silt with some sand)

5GY 6/1

124-133cm = olive gray, wavy lam. w/ discrete glauc. grains, coarser than mudstone above

(124-128 cm = silt + sand, coarsest part of this interval)

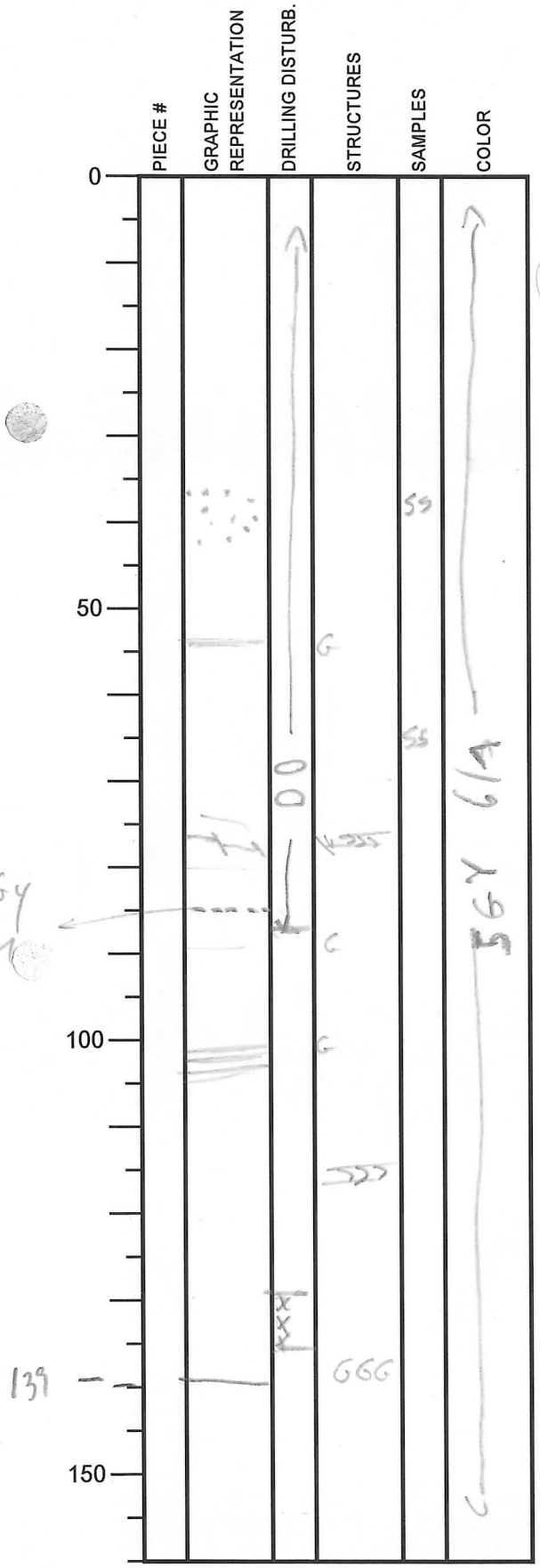
Integrated Ocean Drilling Program

Visual Core Description

NO. 16
DATE: 12/20/2012
EXP.: 338
SITE/HOLE: C0002J
CORE: 4
SECTION: 4
TOP DEPTH (m CSF): ~~919.14~~

OBSERBER: SR

139 cm tot length



SECTION DESCRIPTION

glauconite present throughout entire section

Dark olive gray silty claystone

w/moderate to intense bioturb, more silt and sand than previous section

- 1-3 cm: dark pebbles w/higher concentration & angular
- 43 cm: Patch of medium to coarse glauconitized sand. Some grains are granuled-sized
- 50 cm: burrow with fossil
- 54 cm: glauconite sand
- 58 cm + 61 cm: pyritized burrows
- 65-68 cm: increase in quantity of glauconite grains (= sand sized)
- 76 cm: zoophycos + 2 microfaults
- 80-89 = fine grained zone elsewhere = 5GY 4/1 w/ light gray and dark gray laminae
- 91-130 cm: olive gray bands w/ glauconitized mudstone veins (most visible from 90 to 110 cm)

101, 102.5, 104, 105 } glauconite bands

114-115 = zoophycos

126-139 = glauconite zone

85-85.5 = NLT very fine sand (clay)

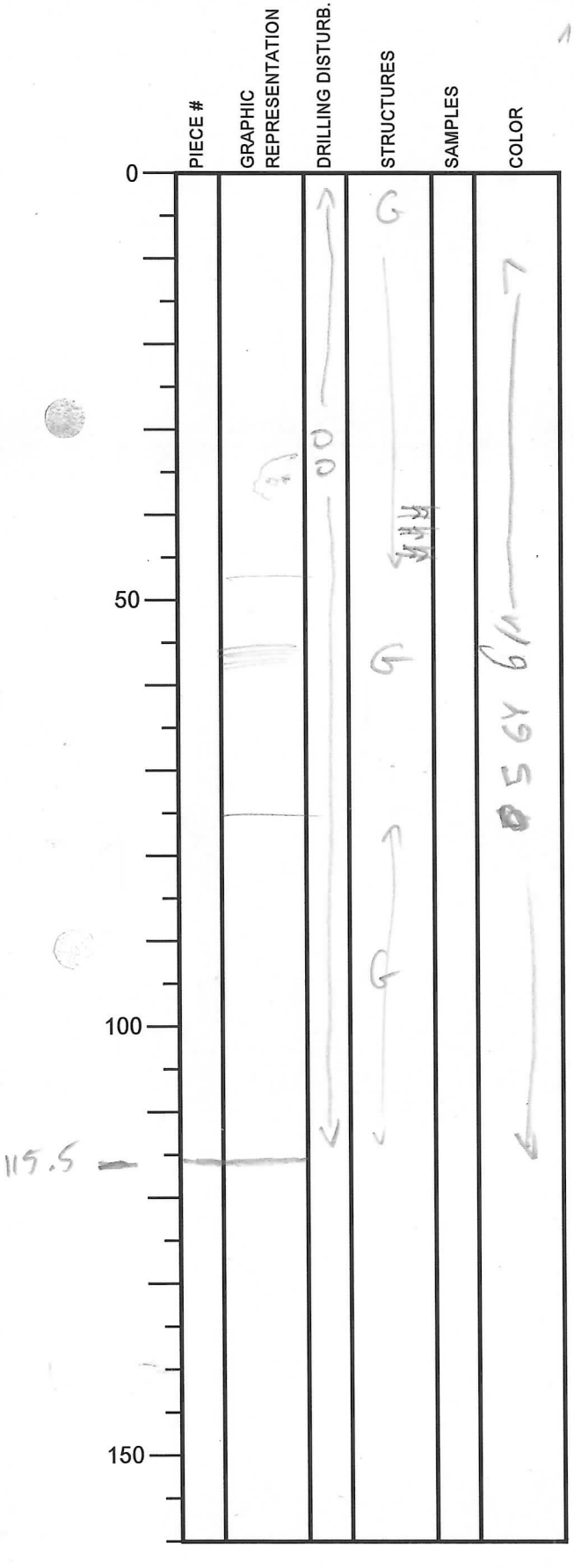
Integrated Ocean Drilling Program

Visual Core Description

NO. 17
DATE: 12 /20/ 20 12
EXP.: 338
SITE/HOLE: C0002 J
CORE: 4
SECTION: 5
TOP DEPTH (m CSF): ~~447~~ 920.525

115.5 Total length

OBSERBER: SR



SECTION DESCRIPTION

- Dark olive gray silty claystone w/ bioturbation
- @ 20 cm: @ 4 mm diameter glauconite patch
- 34-37 cm: coarse bed with lots of pyrite
  - ↳ lots of pyrite with rounded basaltic (+ siliceous) glass shards
- 56-59: (sub) horizontal very fine (<1 mm) glauconite beds
- 14-15 = glauconite patch
- 1-47 = slightly coarser than 'standard' silty claystone w/ sand-sized glauconite grains
  40 + 37 46 = 200 physics
- 47-75 = 5GY 4/1 slightly dark (olive gray) silty claystone
- 75-115.5 = silty claystone with silt-sized (+ sometimes fine sand) glauconite, but lower quantity than 1-47 cm

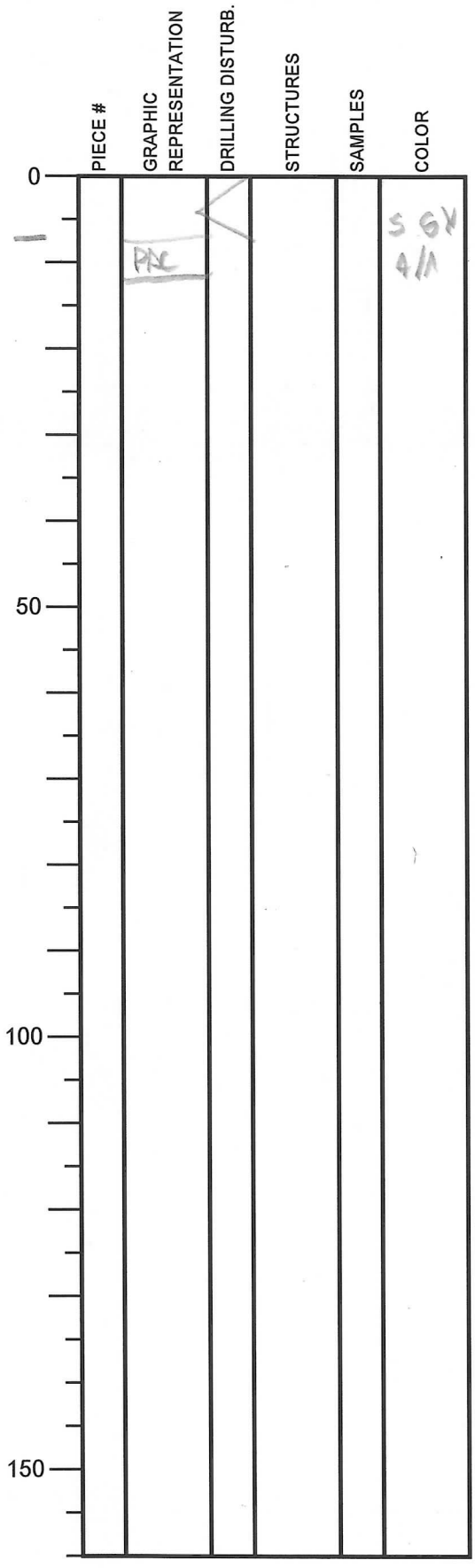
Integrated Ocean Drilling Program

Visual Core Description

NO. 18
DATE: 12/20/2012
EXP.: 338
SITE/HOLE: C0002J
CORE: 4
SECTION: CC
TOP DEPTH (m CSF): ~~917~~ 921.68

OBSERBER: SR

Tot length: 13 cm



SECTION DESCRIPTION

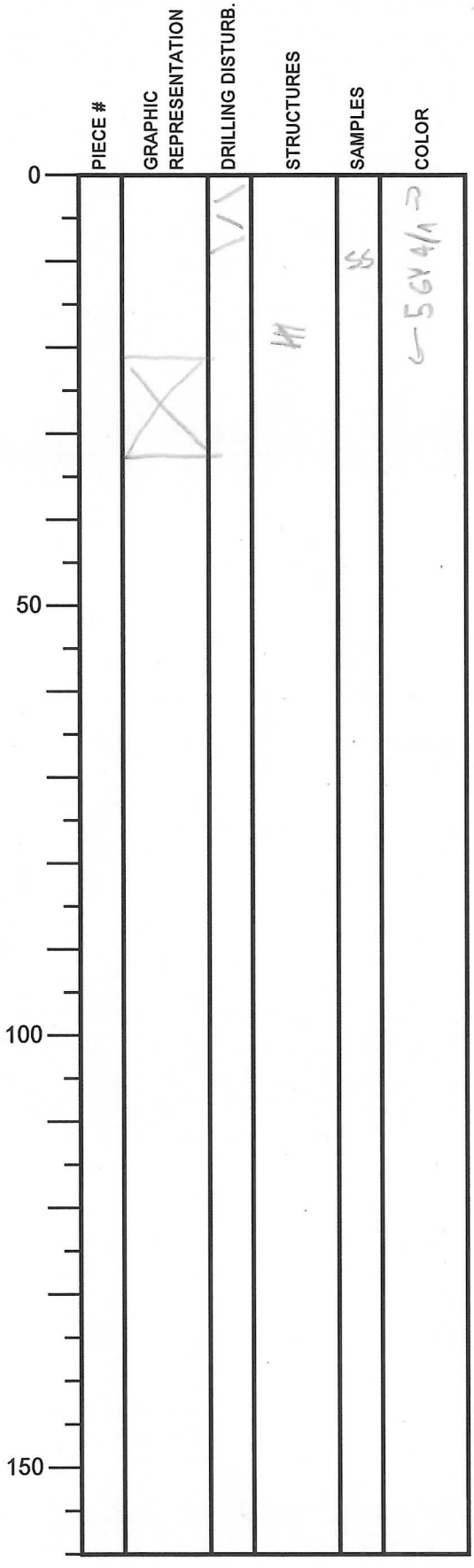
Dark olive gray calcitalated silty claystone

Integrated Ocean Drilling Program

Visual Core Description

NO. 19
DATE: 20 / 12 / 2012
EXP.: 336
SITE/HOLE: C0002J
CORE: 5R
SECTION: 1
TOP DEPTH (m CSF): 922

Tot length 31 cm



SECTION DESCRIPTION

OBSERBER:

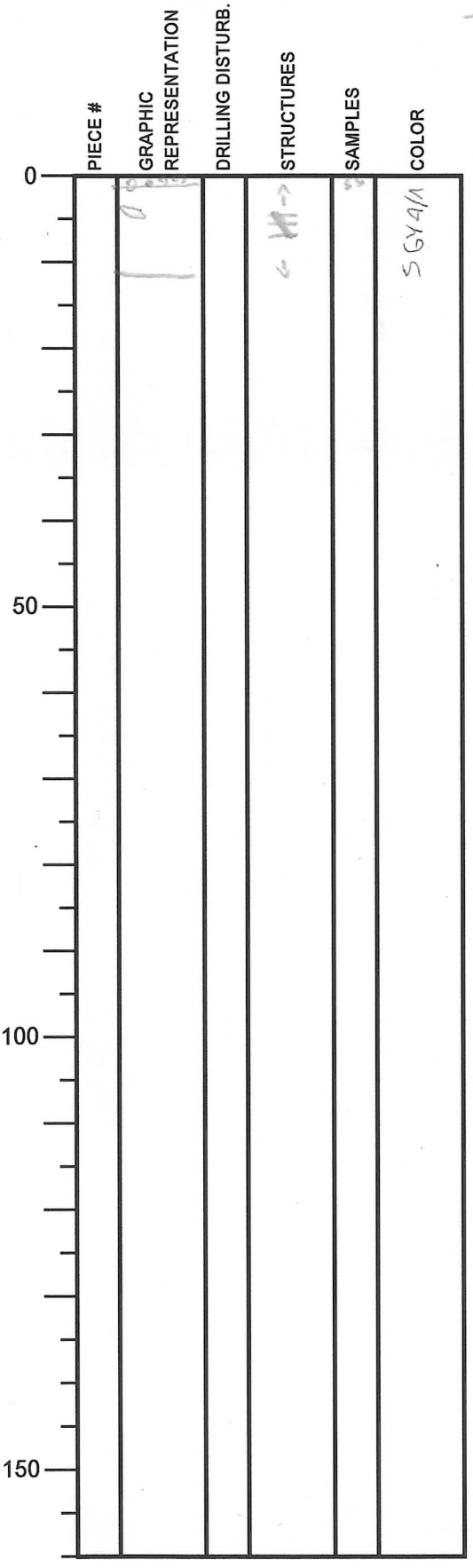
Dark olive gray silty claystone with moderate to high bioturbation

• 15-20 : Vein structes

Integrated Ocean Drilling Program
Visual Core Description

NO. 20
DATE: 30 / 12 / 2012
EXP.: 338
SITE/HOLE: C0002S
CORE: SR
SECTION: 3
TOP DEPTH (m CSF): ~~922.76~~ 922.765

Tot length: 11 cm



SECTION DESCRIPTION

OBSERBER:

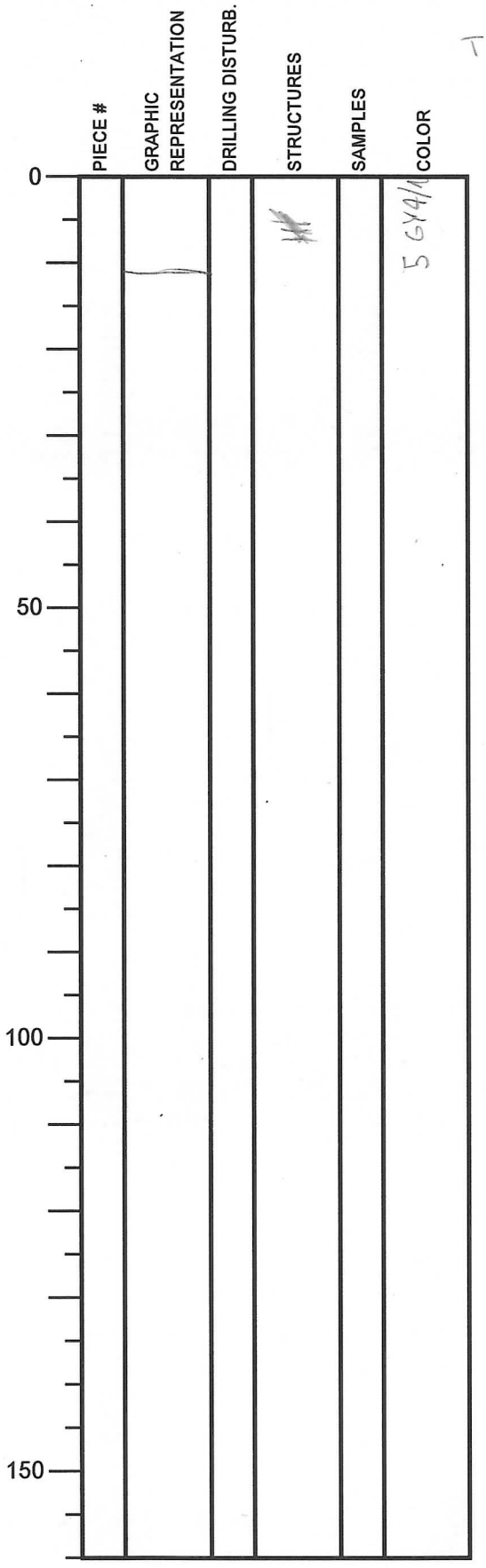
- Dark olive gray silty claystone interval
- 0-1 cm ash layer
- 3 cm: Discrete ash (?) fragment
- Vein structures visible in the whole section below the ash layer.

Integrated Ocean Drilling Program

Visual Core Description

NO. 21
DATE: 30/12/2012
EXP.: 336
SITE/HOLE: C0023
CORE: 5R
SECTION: 4
TOP DEPTH (m CSF): 922.875

Tot length : 11 cm



SECTION DESCRIPTION

OBSERBER:

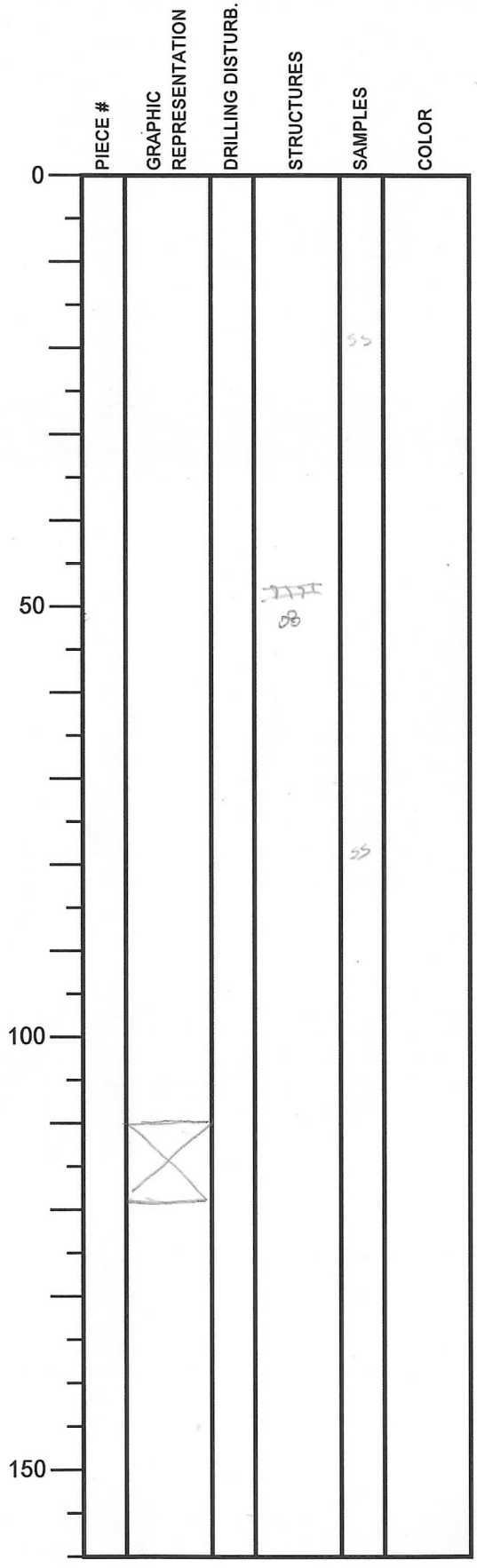
- Dark olive grey silty claystone w/ bioturbation
glauconite grains
- Vein structures are present in the whole section

some foram

Integrated Ocean Drilling Program
Visual Core Description

NO. 22
DATE: / / 20
EXP.: 338
SITE/HOLE: C0002J
CORE: 5R
SECTION: 6
TOP DEPTH (m CSF): 923.18

Tot. 110 cm



SECTION DESCRIPTION

OBSERBER: SR

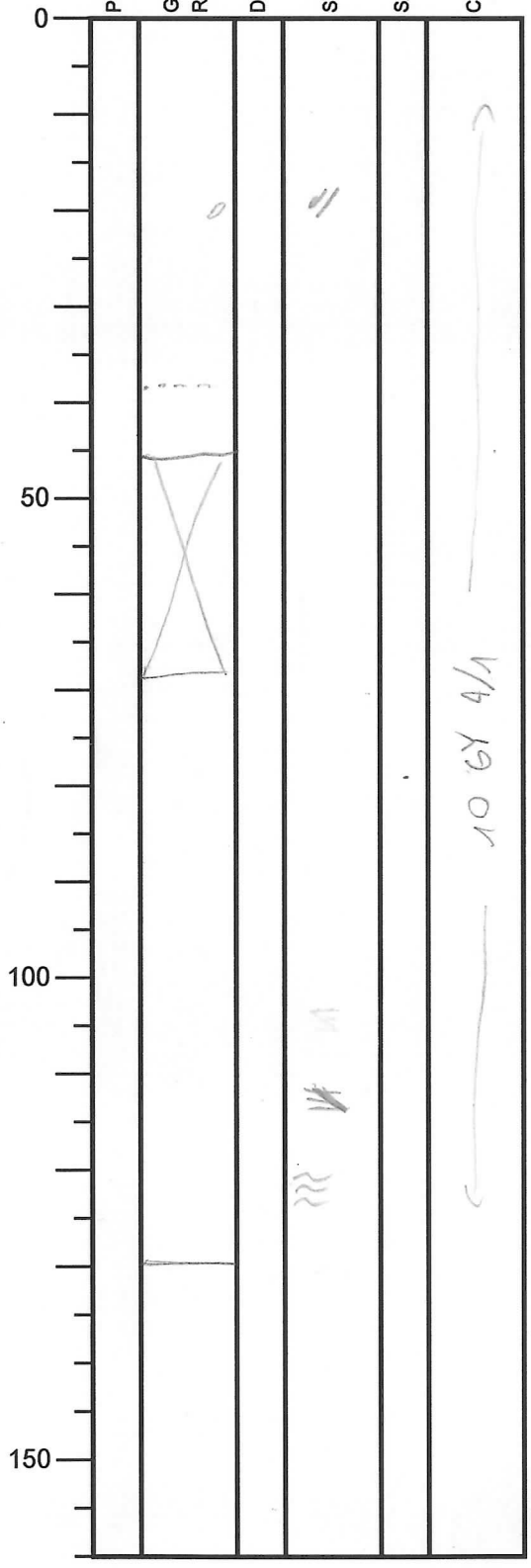
- 13 cm: change in color. From 10 G 5/1 to 5 GY 4/1
- 29 cm: change in color. From 5 GY 4/1 to 10 G 5/1
- 30 cm: very-thin ash layer
- 48 cm: Large zoophycos. Below, change in color. From 10 G 5/1 to 5 GY 4/1
- 53: Agglutinated forams
- 70 - 110 cm

Integrated Ocean Drilling Program
Visual Core Description

NO. 23
DATE: 20 / 12 / 2012
EXP.: 338
SITE/HOLE: C0002J
CORE: SR
SECTION: 7
TOP DEPTH (m CSF): 924.375

Total length: 130 cm

OBSERBER: SR



SECTION DESCRIPTION

- Dark greenish gray silty claystone w/ bioturbation and glauconite
- 21: Discrete 1cm diameter ash fragment. Also small normal faults.
- 39cm: mm - thick glauconite sand layer.
- 111 - 121: weak structure
- 123 - 130: wavy lamination. No clear compositional changes

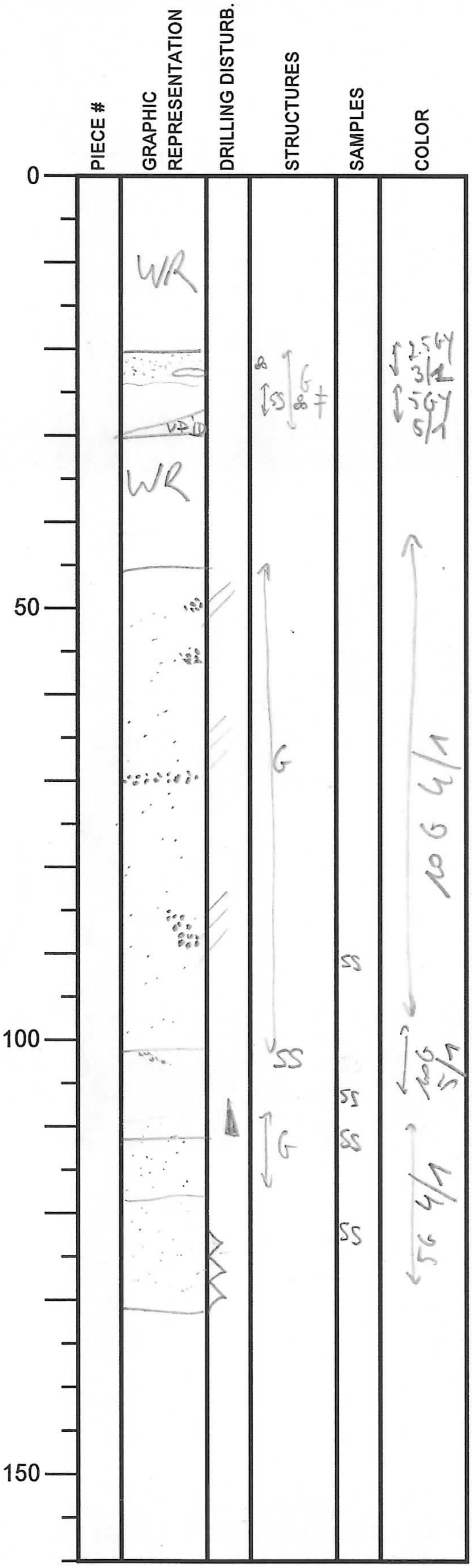
Integrated Ocean Drilling Program

Visual Core Description

NO. 24
DATE: 20 / 12 / 2012
EXP.: 338
SITE/HOLE: C0002S
CORE: 5R
SECTION: 8
TOP DEPTH (m CSF): 925.68

OBSERBER: KH

Tot: 130.5 cm



SECTION DESCRIPTION

0-20 cm = WR sample

20-24 cm = fine sand with coarse sand sized glauconite grains forams present

23 cm = clay-silt inclusion in sand

24-28 cm = silty claystone with glauconite grains (sand-sized to granules) ⇝ intensely bioturbated forams present

25 cm = no structure

30-46 cm = WR sample

46 cm - 101 = fine to medium glauconite sand (glauconite grains also coarse sand to granule size)

beds of coarse sand at 50 cm (= lens) + 56 cm (= lens)
70 cm (= layer) + 86-90 cm (= lens)

101-113 cm = silty claystone homogeneous

101-103 cm = clear bioturbation some sand from above

109-113 = coarse oleagical downwards sand seq.

109-118 cm = 108-111 cm = big burrow medium to coarse sand with many glauconite grains

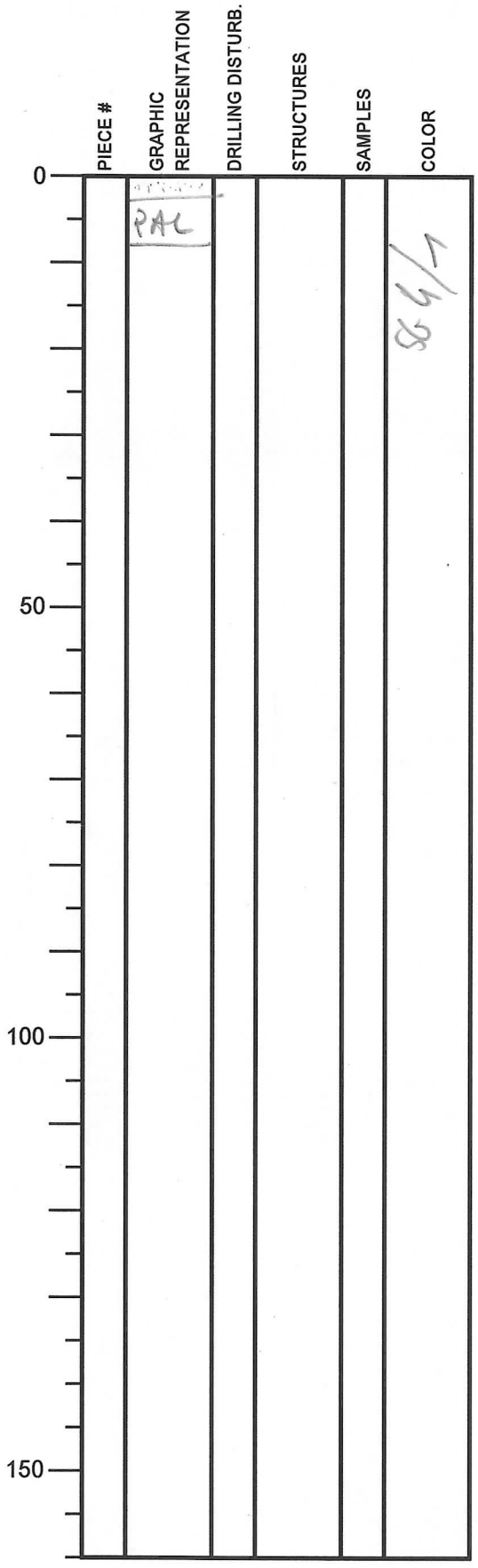
118-130.5 cm = fine sand homogeneous

VCD_sheet_100805.xls

Integrated Ocean Drilling Program

Visual Core Description

NO. 25
DATE: 20/12/2012
EXP.: 336
SITE/HOLE: C0002J
CORE: 5R
SECTION: CC
TOP DEPTH (m CSF): 926.985
OBSERBER: KH



TOT = 7.5CM

SECTION DESCRIPTION

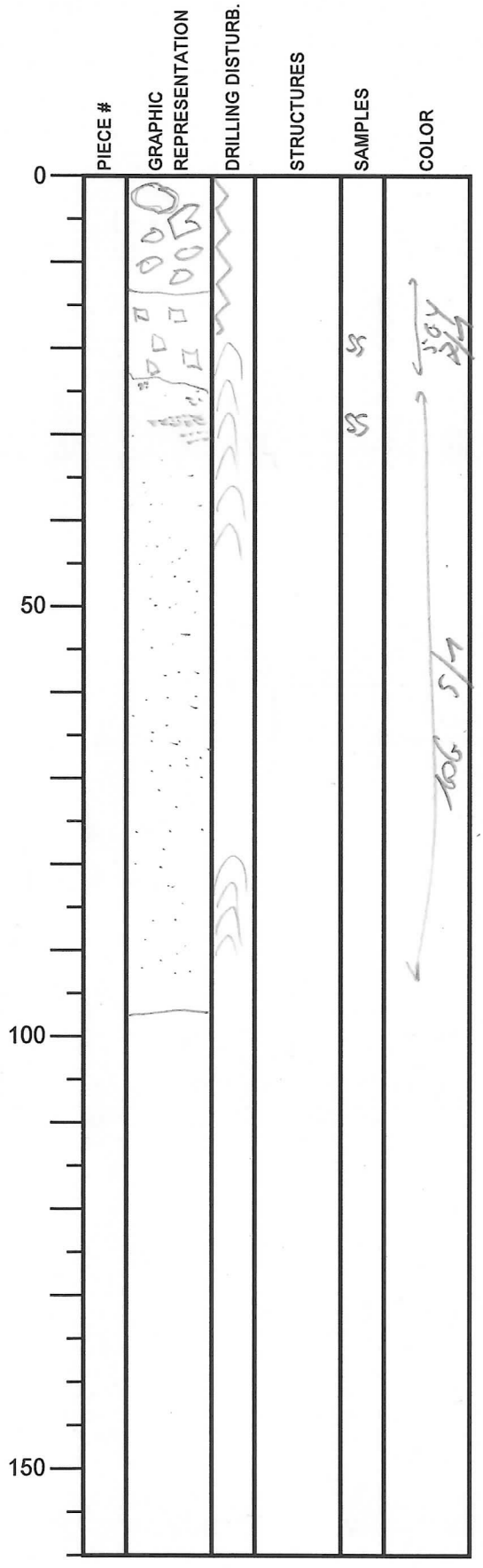
0-2.5cm = fine mud homogeneous

2.5-7.5 = PAL SAMPLE

Integrated Ocean Drilling Program
Visual Core Description

NO. 26
DATE: 20/12/20
EXP.: 338
SITE/HOLE: C0002J
CORE: 6
SECTION: 1
TOP DEPTH (m CSF): 927

OBSERBER: KH



Tot. 97 cm

SECTION DESCRIPTION

0-14 cm = Rubble of large clasts

14-25 cm = clast-supported breccia / sedimentary breccia small pebbles in a hard matrix

clay-rich, very clayey and extremely firm consistency

24-25 cm = irregular boundary (not in archive can rather horizontal (CT shows it is very vertical)

25-97 cm = fine to medium sand

25-30 cm = small intervals (max. 1 cm) of clasty particles (max. 3 mm) (clay)

appear at - 25 cm (= lens)
- 26 cm (= lens)
- 28 cm (= sand-band)
- 29 cm (= lens)
- 30 cm (= lens)

organic matter?

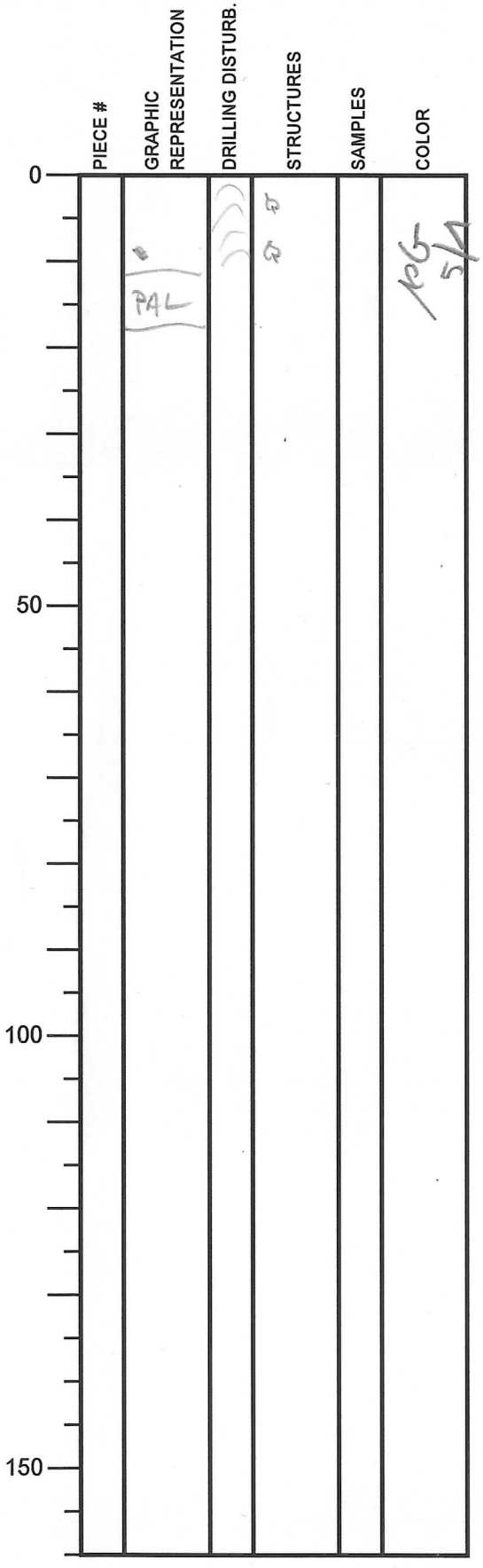
30-97 cm = homogeneous sand

Integrated Ocean Drilling Program

Visual Core Description

NO. 27
DATE: 10/12/20
EXP.: 338
SITE/HOLE: C0002J
CORE: 6
SECTION: CC
TOP DEPTH (m CSF): 927.97

OBSERBER: KH



TOT: 17,5cm

SECTION DESCRIPTION

0-12,5cm: fine to medium sand homogeneous
= structureless
4cm: organic matter
10-12,5cm: large piece of loam
several thin black organic bands between 10-12cm

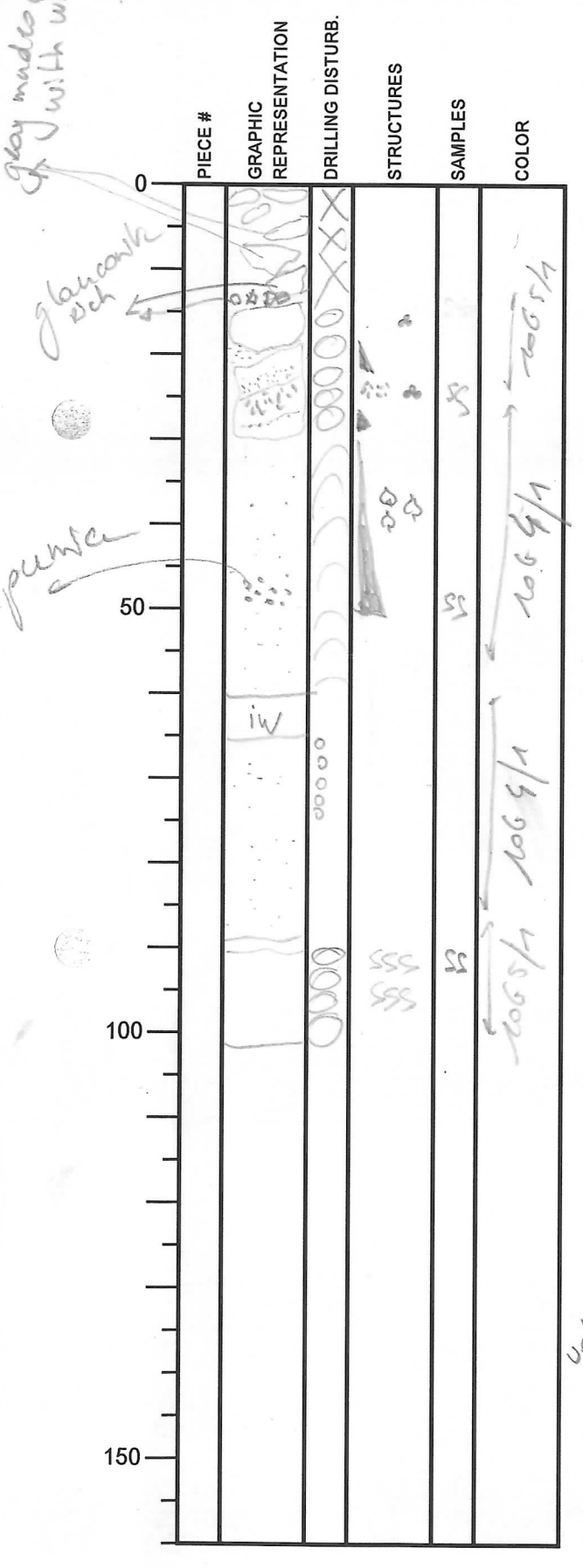
12,5-17 cm = PAL SAMPLE

Integrated Ocean Drilling Program
Visual Core Description

NO. 28
DATE: 6 / 12 / 20
EXP.: 338
SITE/HOLE: C0002J
CORE: 7
SECTION: 1
TOP DEPTH (m CSF): 932

TOT: 100.5 cm

OBSERBER:



SECTION DESCRIPTION

0-12 cm = dolly breccia
several rock fragments
2 light grey, rounded rock fragments
12-14 cm = fragmented glauconite bed (breccia of dolly?)
14-19 cm = fine glauconized sand stone with lots of bioturbation = fragmental
15.5 cm = grain
18-20 cm = medium sand (in place? w. effect of dolly?)
20-30 cm = rock fragment
20-24 cm = medium to fine glauconite sand fining upwards
24-28 cm = fine sand
dandelites
+ 25.5 cm = foram
28 cm = 2mm thick coarse sand layer
28-30 cm = fining upwards glauconite sand sequence
30-50 cm = fining up sequence
36-46 cm = fragments of organic matter
45-50 cm = very coarse sand-sized to granules of pumice
50-60 = structureless medium sand
65-89 = structureless medium sand
89-91 = mud
91-100.5 = silty claystone with intense bioturbation

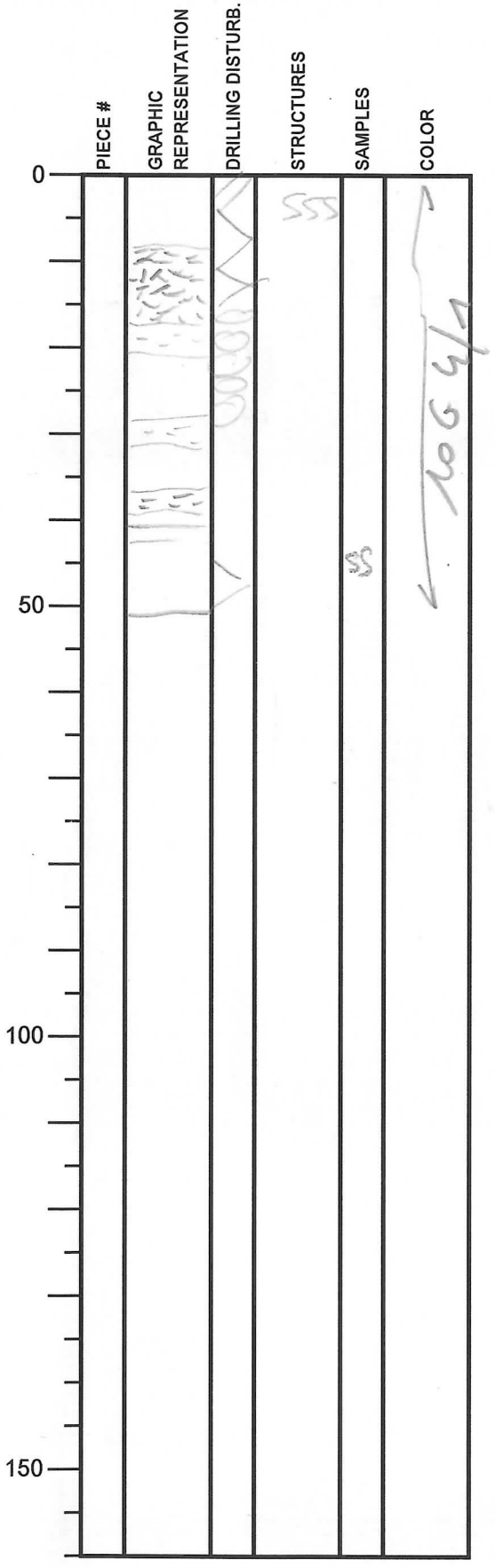
Integrated Ocean Drilling Program

Visual Core Description

NO. 29
DATE: 20/12/20
EXP.: 338
SITE/HOLE: C0002J
CORE: 7R
SECTION: 2
TOP DEPTH (m CSF): 933

Tot. 51 cm

OBSERBER: VCH



SECTION DESCRIPTION

0-7 cm = silty claystone with intense saturation

7-17 cm = very fractured claystone

17-21 cm = homogeneous mud with claystone fragments (=drilling effect?)

21-28 cm = silty claystone

28-31 cm = homogeneous mud (fragmented (=drilling effect)

31-36 cm = claystone saturated

36-38 cm = homogeneous mud (=drilling effect?)

38-43 cm = heterogeneous

joint mudstone obstructed bedding

38-39 cm
40.5-42.5 cm] fine material crosscut by small microfaults

39-40.5 = silty bed

42.5-43 cm = silty clay

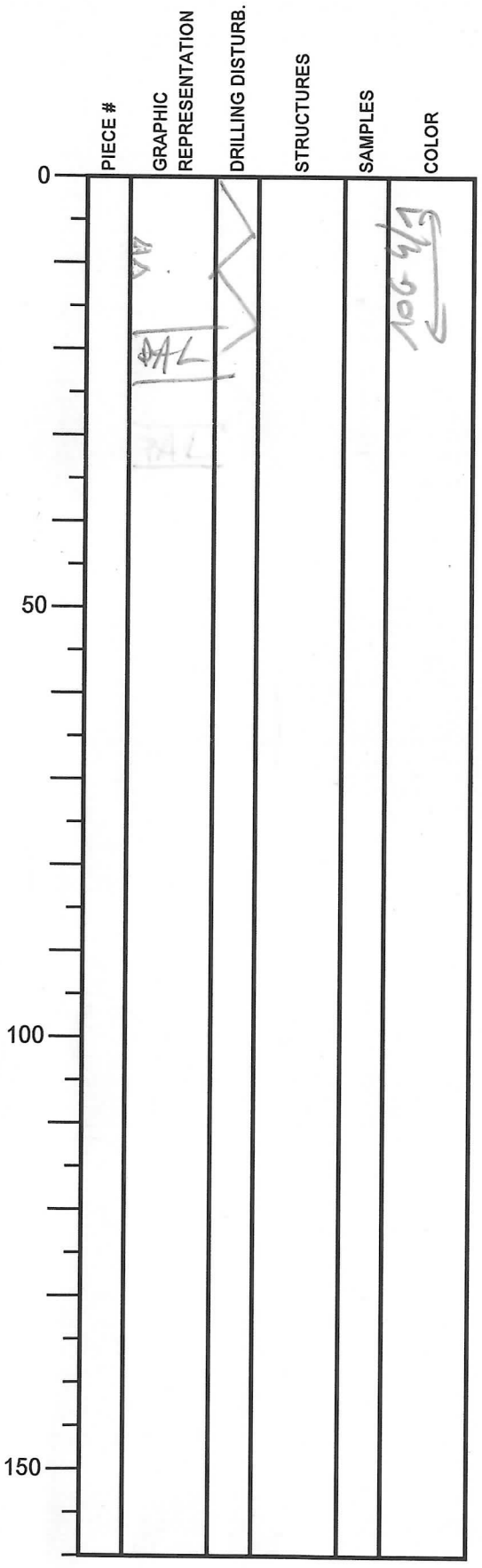
43-51 = fragmented mudstone with some mud (drilling effect?) between pieces

Integrated Ocean Drilling Program

Visual Core Description

NO. 30
DATE: 6/12/20
EXP.: 338
SITE/HOLE: C0002J
CORE: 7R
SECTION: CC
TOP DEPTH (m CSF): 933.51

Tot. 24.5 cm



SECTION DESCRIPTION

OBSERBER: KH

0 - 19.5 = highly fractured almost structureless silty claystone

8-10 cm
11-13 cm } small muddy intrusions (= dully effect)