

brownish yellow
sdy-fine ooze

m-sand size
suram test
with opogae

soapy

cup

Ss
(75)



disturbed
by soap

disturbed
by soap

dark yellowish
brown

soapy

continue



brownish yellow
to yellowish brown

Soupy



0 →
hole??
82mm

Sf
(95)



ochreous grey
~~subangular~~
R. 3mm
d. 2mm
aggregate glass v

continue

yellowish
brown

high
2 mm

bioturbation?
6 mm

Sloppy

CS
43



Sloppy

100.5 echinoid spine
→ wood fragment?
6.9 mm

128
✓
aggregate of glass
φ 2mm

142
← echinoid spine
wood fragment??

← 146 aggregate of glass?

Sand??



95
95



80
bioturbation
of core
(containing
finer sediment)

85
bioturbation
of core

116.5
bioturbation

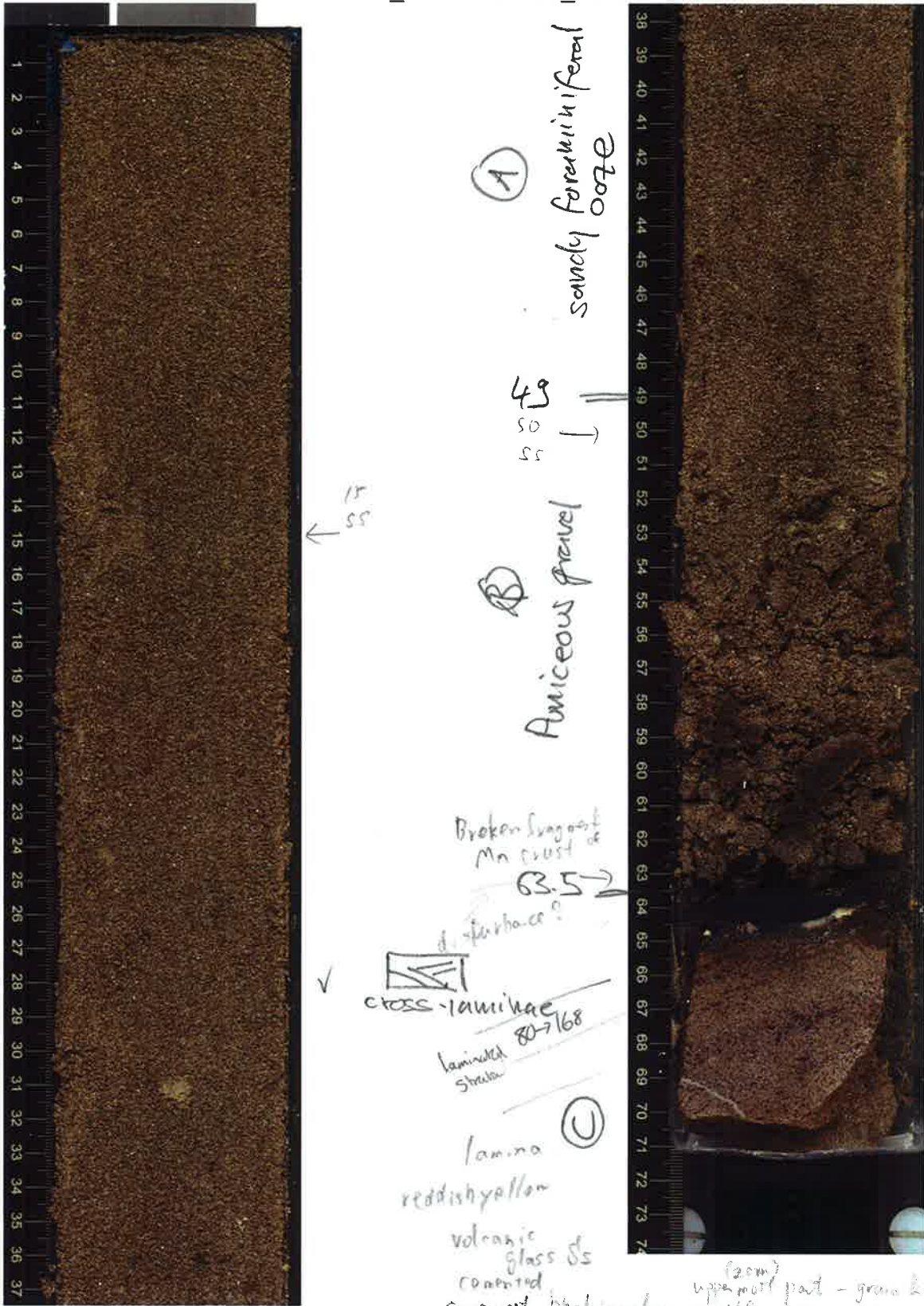
94
bioturbation?
92cm



142
aggregates of glass
49mm

145
MB10
→ PAL
150

SE0 1R4



dark brown
d. crustal?

28.1
bioturbation
0.5m

31
bioturbation
0.7m

15
ss

A
foraminiferal
sandy ooze

49
50
55

B
Amiceous gravel

Broken fragments
Mn crust
63.5
d. disturbance?

cross-laminations
80-168
laminated
strata

lamina
reddish yellow
volcanic
glass ss
cemented
some part black nodular

41
pumice? 0.6mm

47 pumice 0.6mm
50 pumice 0.5mm

34.5 pumice 0.10mm
57 pumice 0.15mm

59 fresh gray
pumice
gravel
upto 10mm
(Subangular)
sand
size
3000
1000-10

Mn-crust
thick ~ 12mm
Core is limestone?
(preserved 3mm thick)
3mm
90-174
base &
MnOx

69-70cm vein 1mm
single 70-7020
curial

"glass" Subangular - subrounded
red in color
in sand ~ granule size

grains:
vesiculated fine-grained
basalt and/or glass

330-U1374A-1R-6-A_SHLF2737281_20110105225919

Sandy
Suar
size
drop in
some parts of
grains
changed
to
black
5.5-17cm
vein
2mm wide
80-72.5°
possibly
rotated
piece



cross laminated
6-7.5cm laminated
75-170°
laminiae
Ø6mm
finer part
size - sand size
yellowish
(micrite?)
truncated?
cross-laminated
3mm



31.5-40cm
laminated
80-318°
Ø1mm
35-39cm vein 1mm
straight, single 70-036
Ø2mm
more lithified
cement part remains
in some part
calcite grains
with clayey matrix
altered
volc glass ss?
nd

red & black grains

fin c. sand
angular to subangular
calcite cemented

dark color part.
Yellowish grains
alteration?

Void
remains.

Void
filled
by cement

erosive
silt

Void
only
in
coarse
part.

light
(not heavy)
calcite
dissolution



microscopic part
on silt

Ø 5mm

microscopic part
on silt

Ø 1mm

bioturbation?

Ø 2mm
inclined

24-35 bedding
Ø 9 → 339

bioturbation fill? or scour?

36-42 vein,
Ø 42 → 201

Ø 2mm
bioturbated 79 → 210

Ø 2mm

bioturb.?

Ø 1mm

66-67
Ø 4 → 174

Ø 3.5

Ø 2.5

CAUTION
M/BIO

106-
107-

Ø 2mm

wavy
laminae /
beach
glass



wavy
laminae

lamina
not steep

Ø filled with matrix (pale
yellow)

calcite
cement

angular to subrounded

duffy red

calcite
cement

Ø 2mm

grain color
slightly different

slightly inclined

Ø fracture
Ø 3mm

Continued to 4A-1R



16-17 bedding 80-347
 5mm

bedding 88-354

bedding 95-95 89-356

bedding 108-108 82-353

bedding 110-120 88-360

bedding 83.5-64 89-001

5mm

3mm almost flat lamina

7mm

5mm

9mm



4mm

3mm

not clear

almost flat lamina

3mm

3mm

7mm

fine-grained

reverse grading?

alteration band?

The image displays two vertical columns of photomicrographs, each accompanied by a ruler on the left side. The ruler is marked from 1 to 144. The left column shows a large, relatively uniform sample from approximately 1 to 45 cm, and several smaller, more irregular samples from 46 to 69 cm. The right column shows a series of smaller, more varied samples from approximately 71 to 144 cm. Handwritten annotations include:

- Left Column:**
 - Vertical scale: 1 to 69.
 - Annotations: "finer grained" with an upward arrow (74-75 cm), "Ø 5mm" (24 cm), "size" with a diagram (30-32 cm), "Ø 4mm" (41 cm), "Ø 4mm" (51 cm), "Ø 4mm" (61 cm).
 - Notes: "400-44 bedding 89-178" (46-48 cm), "Ø 4" (51 cm), "Ø 4" (61 cm).
- Right Column:**
 - Vertical scale: 71 to 144.
 - Annotations: "Ø 4mm" (84 cm), "Ø 6mm" (94-95 cm), "Ø 12mm" with a diagram (107 cm), "Ø 5mm" (117 cm), "angle" with a diagram (123 cm).
 - Notes: "74-75 bedding 90-130" (74-75 cm), "Ø 4mm" (84 cm), "94-95 80-122 bedding Ø 6mm" (94-95 cm), "Ø 5mm" (117 cm), "angle" (123 cm).



volcanic glass?
fine sandstone
pale yellow

dissolved
bivalve?
3m

cavity
or
bioturbation
in ss

many gastropod
φ 6-7mm

redish part
extensively
bioturbated?

similar to
redish ss part



ghost
redish
layer

cross
bedded
(see other
side of
core)

remnant
trinite

micrite

distinct
facies

← bioturbation?

lamina
is
not
clear
but
wavy

bioturbated
facies



yellowish brown

contains ammonite
fragment



9-22
vein, irreg
steep dip

Umbrella



limestone w/
forams, gastropods,
shell fragments
Mn-encrustments
as B clasts
annelid

angular
unconformity

SED (F)



Mn encrustment
surface of
clast →



Disoriented

SED
(E)

Angular-
sub-rounded
grains

Ø 5mm
- shell fragment
gastropod
AMMONITE?

100-111
vein netw.
irreg, brown

116-117
vein, 79 →
163

123-124
80 → 163

finer-
grained
sandstone
129-131
vein netw.
steep dip →
160

66-67
bedding
79 → 021
stylolite
dissolution
texture?
filled by ls with vitric sand



Ø 85
A

Ø 50
block

well-rounded
grains

limestone
(Cyelting sandstone)

SED (G)

Ø 32
Block
algal-
annelid encrustment
(104mm)
Boring shell
Ø 7mm
100-100
Ø 100
→ 178
Gropete
(12.5mm
thick)

Basalt conglom.
grain-supported
light grey micrite
+ cement
annelid shell
fragments

Ø 10
2A
20-30

SED 3R1



77-85
vein
70 -> 203

A

VA

SR

711#
54

SR

87-89
contact
62 -> 202

616
VA

SED (G)
Basalt conglomerate
w/ micrite + cement
(light grey)
bioclasts
(e.g. thin shells, spha)
grain-supported
& poorly-sorted

1225
127
vein
sleep dir
irreg.

cement at
bottom of clasts
infilling texture

sand
in fill
(no micrite)
(G)

675
VA

cement
infilling texture



Unit 1

87 cm
lava flow
89-93 vein, steep

94-98 vein, irreg, non-orient
4mm
"geopetal vein"
congl infill

89-104
vein, irreg, non-orient
0.1mm

113-116
fracture netw., non-
oriented

130-137
vein netw.
irreg, non-orient

330-U1374A-3R-3-A_SHLF2738831_20110106130308



Crack
infills



Cracks infills
B congl(G)

330-U1374A-5R-1-A_SHLF2740851_20110107041249

no bioherms
most part
covered
Micrite
fallen piece
from BR/4R
(lava contact
U1-U2)

Unit 2





