

Modern forams

CC: Mn-crust

Glass

(A)

multicolor

mat color: very pale brown

Poorly sorted, grain-supported conglomerate (white micrite)
Matrix: cement, foraminifera-bearing micrite(?) → medium-sand to microbreccia rich in basalt and biogenic fragments



(B)

multicolor

mat color: pale brown

Very poorly-sorted, matrix-supported conglomerate (brownish micrite)
Matrix: silty micrite → microbreccia

larger clasts are better rounded

Lower content in bioclast, although some large (1.2 mm) grains in next section

- grains mostly β some fine-grained, gray specimen not seen as larger clast

bioturbated

330-U1373A-1R-1-A_SHLF2724501_20110101181552



clast type

1 PUMICE ✓

(1)

(2)

annelid, ✓
bryozoan, ✓
bioclasts ✓

(2)

= 15.5 = No contact =

(2)(3)

(2)



(2)

(2)

brownish matrix supported conglomerate (continued)

4.5

7.5

17

28.5

HS

55



bioclast w/ annelid ✓

bioturbation ✓

annelid ✓

fresh Olivine grain

bioclast ✓

bioturbated sed. under larger clast ✓

Bioturbated w/ cement + dark grains + fecal pellets? ✓

bioturb. under clast ✓

biogenic encrustment annelid? + black grains ✓

bioturbated + cement ✓

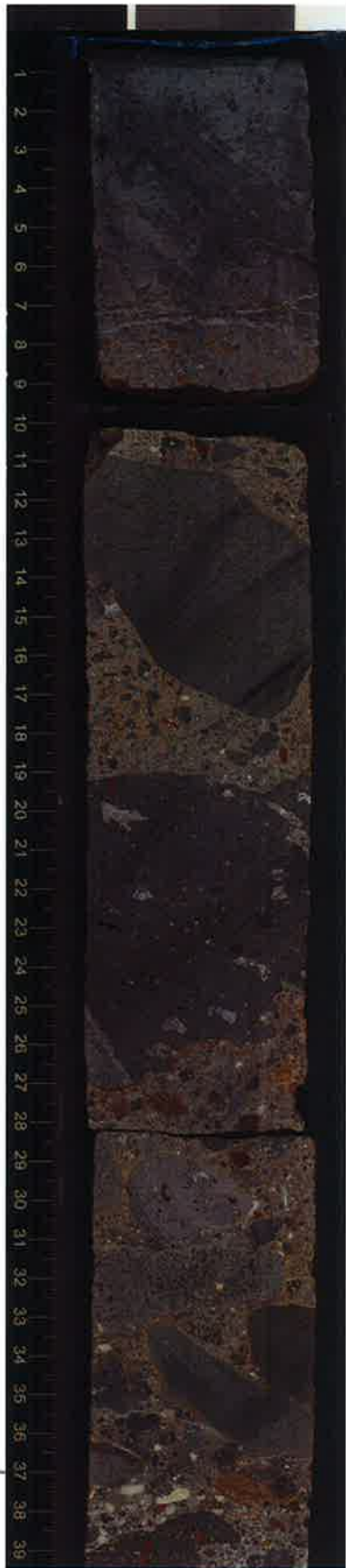
77



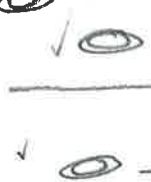
altered red alga ✓

rounded border

brownish
matrix-supported
conglomerate



encrusted
coated grain
annelid
on grain



algal
D

Most larger
clasts are
encrusted/
coated



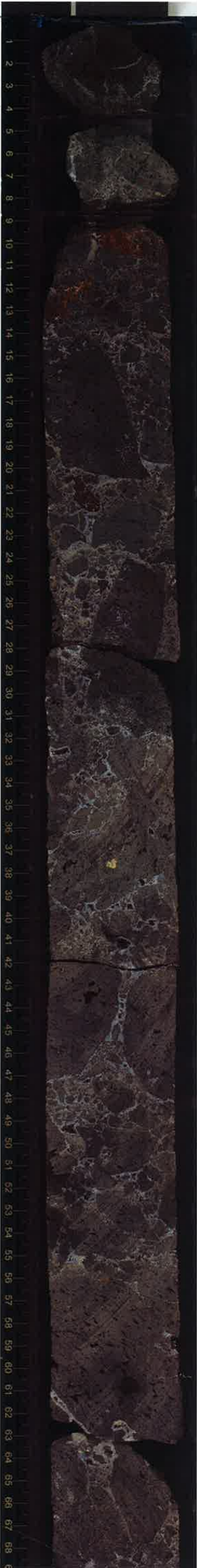
bc v
TS?
large shell
alga

erosive
contact 37
Pale grain-
supported
conglomerate
w/ bioclasts
(including shells)
variety of (A)

lava flow
w/ pinkish
white, silty micrite

contact
not seen

pepper
Anorthositic basalt
+ micrite + core basalt
where?



here
gouge
brown
micrite
interbedded

Geopetal

abundant
compacted
geopetal str.

sub-ventral

bc



welded

③ grain-supported
Very poorly sorted
Brownish
Basalt breccia
matrix: cement
No bioclast
heterolithic

altered
glass rim
Scm

lava flow
unit 1

B breccia
(unit 2)
sediment ③
(heterolithic)

altered
glass rim

altered
glass rim

altered
glass rim

49cm

altered
glass rim

altered
glass rim

lava(?)
unit 3

Nicely welded



Unit 3
(continued)

voids

voids



May locally
contain
sediments
seen in core
2R2
(B breccia)



45
Basalt
breccia
type ©
//2R2
heterolithic
→ sedimentary

φ12A

Unit 4

φ82A



φ13A

φ16A

φ58VA

φ12A

φ34A

φ31VA

B
Breccia
Type(C)

20

21

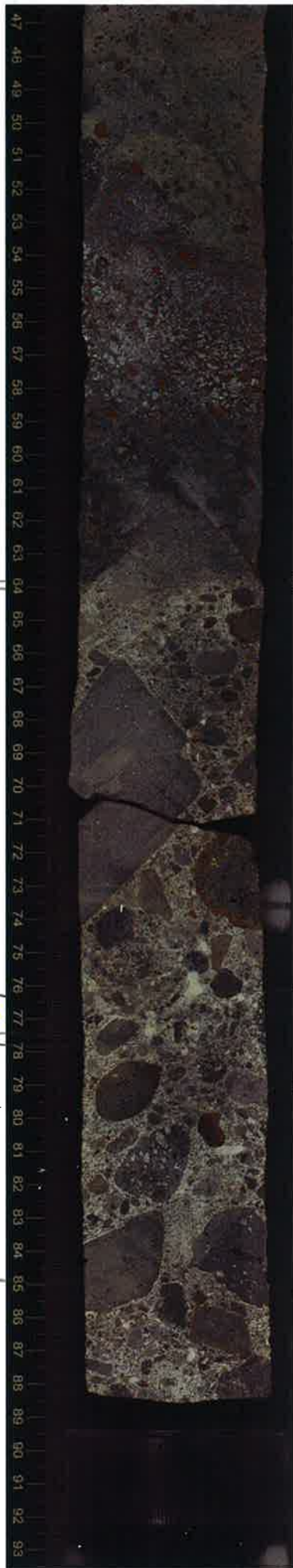
gradual
transition

24 =
lava
flow



grad
-214





Lava
flow

64 =

multicolor
conglomerate
w/ v. pale brown
micrite
Sed. type (A)
(core IR1)

annelid (?)
around clast

large annelid
fragment

○ ✓

○ ✓

multicolor congl
w/ very pale brown
micrite + cement
Sed. type (A)

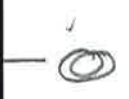
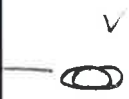
very large bioclast

large bioclast
(perforated)

void

void

void



112
SED Type (D)

- Similar to A, but:
- bedded/cross-bedded
 - oriented clasts
 - better sorting
 - increased porosity
→ intermittent emersion?
 - ⇒ "Dune-like" facies
Paleo beach
 - + Annelid enrust.
on both sides
of clasts

TS

TS

Bioclast-rich interval

dissolved + partly cemented shell
Increased porosity

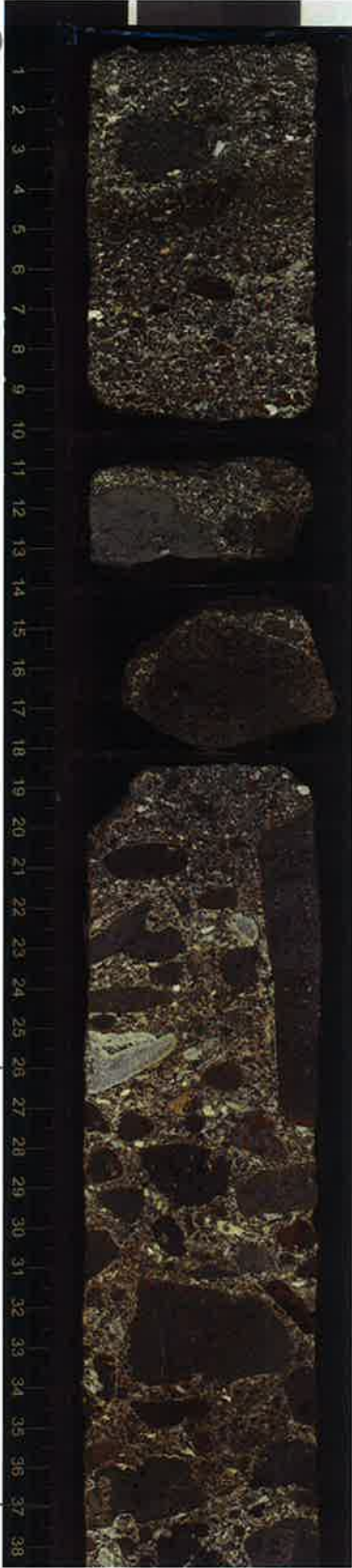
Basalt-richer increased porosity

cross-bedded
bedded

330-U1373A-3R-4-A_SHLF2725861_20110102084634

SED type ①
(continued)

✓
≡



large ✓
bioclast

○
both sides

○
both sides

○

≡



SED Type (D)

macro picture
ameliid in living
position
includes perforation
w/ black grain
sim to core IRZ



ts



large shell fragment

increased porosity

Bioturbated



≡ ✓

≡ ✓

≡ ✓

large shell fragment

Bioturbated ✓

Bioturbated ✓

≡ ✓

dissolved & partly cemented shell fragment

≡

≡

≡

Or transition contact
not seen

SED (E)

well-rounded
poorly sorted
multicolor
Basalt conglomerate
matrix:
Pale yellow
silty micrite
to basalt(micro)
conglomerate w/
bioclasts
or cement
abundant
echinoderm
fragments



Bioclasts
48.5 =

bc
with micrite
gradual
100% cemented

last bioclasts?
downhole

SED (F)

Similar to
(E) but nearly
azurite, 100%
cemented,
→ bluish grey
basalt conglomerate
+ increased sorting
of matrix congl

large
shell frag.

No Bioclast
↓

SED(E)
with green
micrite (?)



Sediment still
bluish gray
but weathered place
is brownish

-SED(E) altered?

-SED(E)
with porosity



SED(E)
← including
brownish conglomerate
← well rounded
pebble



including brownish conglomerate →



105 =
SED (G)
very poorly sorted
matrix supported
dark multicolor
basalt breccia
matrix:
dark grey
azoic micrite →
basalt siltstone -
breccia
Angular gravels
(v. angular -
subrounded)

105 =
reddish
clast margin

SED (G)
(continued)



poor layering



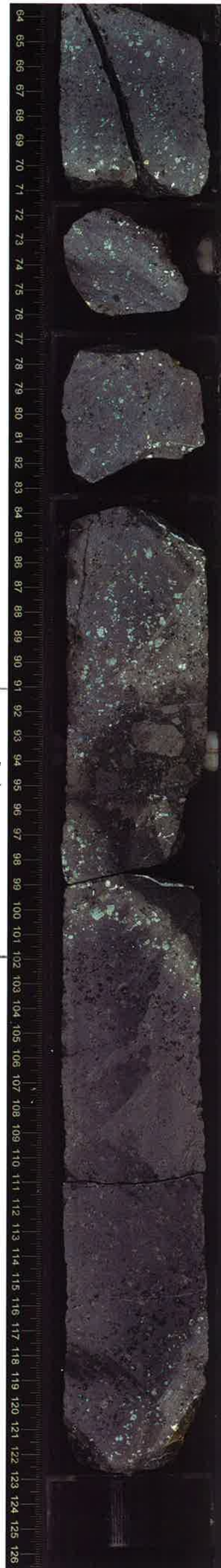
SED (6)
continued



120 =
Lava flow

Basalt breccia
Conglomerate?
Basement
Volcanic
Basement





91 —
Sediment
⑥
interbedded
or
included
in lava flow

102 —





330-U13/SR





330-U1373A-7R-5-A_SHLF2729161_20110103073357

