IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1351	A	1	H	1	30	30

Sediment/Rock Name	shelly sandy mud.	Observer	H Lever.

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent ~~Texture~~ derived		
Sand	Silt	Clay
10	30	40

at 25-26
$CaCO_3$ = 28% 3% org C

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
40	Quartz ✓
	Feldspar (undifferentiated)
2	K-feldspar (Orthoclase, Microcline...) ✓
3	Plagioclase ✓
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
10	Biotite ✓
	Muscovite
	Chlorite
15	Clay Minerals ✓
	Glauconite
10	Ferromagnesian minerals ✓
	- green non-pleochroic high birefringence 2 extinctions @ 90°
	- high rel clear
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others
80	

Percent	Component
	BIOGENIC GRAINS
	Calcareous
15	Foraminifera planktonic/fish frags.
2	Nannofossils
	Pteropods
	Ostracodes
	Bioclast (undiferentiated)
5	Sponge spicules
3	star spics
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others
20	

Problem with correction - check.

Comments:

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1351	A	1	H	2	45	45.

Sediment/Rock Name	Sandy mud.

Observer	H Leve.

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
20	40	25

at 43 cm
$CaCO_3$ = 14% ~2% org C.

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
55	Quartz
	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
5	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
5	Biotite
	Muscovite
	Chlorite
10	Clay Minerals
	Glauconite
~~10~~ 5	Ferromagnesian minerals
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

80

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera planktonic
6	Nannofossils
	Pteropods
	Ostracodes
	Bioclast (undiferentiated)
5	Sponge spicules
4	Star Spicules
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

20

Comments:

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1351	A	1	H	2	88	88

Sediment/Rock Name	Sandy mud	Observer	H Leve...

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture Sand	Silt	Clay
10	40	28

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
45	Quartz
5	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
8	Biotite
	Muscovite
	Chlorite
10	Clay Minerals
	Glauconite
10	Ferromagnesian minerals
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
3	Foraminifera planktonic / Frags.
10	Nannofossils
	Pteropods
	Ostracodes
5	Bioclast (undiferentiated) shell frags.
2	Sponge spicules.
2	star splics.
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments: 18.

22.

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1351	A	1	H	CC	8	8

Sediment/Rock Name	Sandy mud

Observer	H Kuhn.

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
10	50	20

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
45 40	Quartz
	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase ✓
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
10	Biotite
	Muscovite
	Chlorite
10	Clay Minerals
	Glauconite
5	Ferromagnesian minerals
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
15	Nannofossils
	Pteropods
	Ostracodes
	Bioclast (undiferentiated)
2	Sponge spicules
1	Sp spis.
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments: 90

20

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1351	A	2	H	1	9	9

Sediment/Rock Name	Sandy mud

Observer	H Lever.

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
5	40	19

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
34	Quartz
4	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
10	Biotite
	Muscovite
	Chlorite
8	Clay Minerals
	Glauconite
8	Ferromagnesian minerals
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
7	Foraminifera
15	Nannofossils
	Pteropods
	Ostracodes
5	Bioclast (undiferentiated)
3	Sponge spicules.
5	Her Spi.
	Siliceous
	Radiolarians
1	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments: 64

36

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	1351	A	2	H	1	30	

Sediment/Rock Name	Observer
Shelly. mud.	H Lower

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
5.	50	26

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
34	Quartz
12	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
10	Biotite
	Muscovite
	Chlorite
10	Clay Minerals
1	Glauconite ✓
12	Ferromagnesian minerals
	Authigenic minerals
	Zeolite
	Pyrite
1	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
10	Nannofossils
	Pteropods
	Ostracodes
1	Bioclast (undiferentiated) byss.
2	Sterspic.
	Siliceous
	Radiolarians
1	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments: 81 19

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	1351	A	2	H	1	50	

Sediment/Rock Name	mud

Observer	H Lauer

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
5	40	35

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
30	Quartz
10	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
10	Biotite
	Muscovite
	Chlorite
15	Clay Minerals
	Glauconite
15	Ferromagnesian minerals
	+ brown amorphous leucoxene
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
10	Nannofossils
	Pteropods
	Ostracodes
1	Bioclast (undiferentiated)
3	silicified sponge spicules
	Siliceous
	Radiolarians
1	Diatoms
	Silicoflagellates
1	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments: 80 20

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	1351	A	2	H	2	75.	

Sediment/Rock Name	mud (shelly)	Observer	H Lowe.

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
5	50	25

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
40	Quartz
10	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
11	Biotite
	Muscovite
	Chlorite
8	Clay Minerals
1	Glauconite
10	Ferromagnesian minerals
	(mostly the clear high rel)
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
13	Nannofossils
	Pteropods
	Ostracodes
1	Bioclast (undiferentiated)
1	Sponge spicules.
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments: 40

20

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1351	A	2	H	3	75	

Sediment/Rock Name	Mud.	Observer	

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
1	50	42

at 98cm 2% $CaCO_3$ trace org C

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
50	Quartz
10	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
8	Biotite
	Muscovite
	Chlorite
15	Clay Minerals
	Glauconite
10	Ferromagnesian minerals
	Authigenic minerals
	Zeolite
	Pyrite
3	Opaque minerals (undifferentiated)
1	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
2	Nannofossils
	Pteropods
	Ostracodes
4.	Bioclast (undiferentiated)
1	Sponge spic
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments: 9?

7

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	1351	A	2	H	6	75	

Sediment/Rock Name	mud (Shelly)	Observer	H Leva.

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
5	45	34

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
50	Quartz
4	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
6	Biotite
	Muscovite
	Chlorite
12	Clay Minerals
	Glauconite
10	Ferromagnesian minerals
	Authigenic minerals
	Zeolite
	Pyrite
2	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
4	Nannofossils
	Pteropods
	Ostracodes
1	Bioclast (undiferentiated)
1	Sponge spicule
1	Echi spi
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
4	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments: 84

16

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1351	A	3	H	1	30	

Sediment/Rock Name	Mud	Observer	

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
1	50	34

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
50	Quartz
10	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
5	Biotite
	Muscovite
	Chlorite
14	Clay Minerals
1	Glauconite glauconitized foram tests.
5	Ferromagnesian minerals
	green non-pleochroic high bi squared
	clear high bi squarish, straight ext 170° zoned.
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
3	Nannofossils
	Pteropods
	Ostracodes
5	Bioclast (undiferentiated)
1	Sponge spic
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
1	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (te
	Bivalves
	Others

Problem - LIMS
→ altered files entered twice.....

Comments: 84

15

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1351	A	3	H	2	50	

Sediment/Rock Name	mud	Observer	H Lever

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
5	45	33

at 77 ~15% $CaCO_3$

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
42	Quartz
10	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase altered to calcite
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
10	Biotite
	Muscovite
	Chlorite
10	Clay Minerals
	Glauconite
5	Ferromagnesian minerals
	Authigenic minerals
	Zeolite
	Pyrite
4	Opaque minerals (undifferentiated)
2	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
4	Nannofossils
	Pteropods
	Ostracodes
4	Bioclast (undiferentiated)
1	Sponge spicules.
2	Sponge spicule.
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
1	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments: 83

17

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1351	A	3	H	2	130	

Sediment/Rock Name	Observer
Sandy Mud	H Lara

SMEAR	Thin Sect
✓	

Dominant	Minor
	✓

Percent Texture		
Sand	Silt	Clay
10	50	20

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
15	Quartz
10	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline..)
	Plagioclase
1	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
7	Biotite
	Muscovite
	Chlorite
7	Clay Minerals
	Glauconite
10	Ferromagnesian minerals
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
5	Nannofossils
	Pteropods
	Ostracodes
5	Bioclast (undiferentiated)
4	Sponge spic
1	Sta spic
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments: 80 20

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1351	A	3	H	3	20	

Sediment/Rock Name	Shelly mud	Observer	H Lewis

SMEAR	Thin Sect
✓	

Dominant	Minor
	✓

Percent Texture		
Sand	Silt	Clay
10	30	30

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
30	Quartz
10	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
10	Biotite
	Muscovite
	Chlorite
10	Clay Minerals
	Glauconite
10	Ferromagnesian minerals
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
10	Nannofossils
	Pteropods
	Ostracodes
10	Bioclast (undiferentiated) Spine test frag.?
3	Sponge spic.
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
1	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments: 70 30

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1351	A	3	H	3	50	

Sediment/Rock Name	muddy shell bed.	Observer	H Lane.

SMEAR	Thin Sect
✓	

Dominant	Minor
	✓

Percent Texture		
Sand	Silt	Clay
15	40	24

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
37	Quartz
5	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
10	Micas
5	Biotite
	Muscovite
	Chlorite
10	Clay Minerals
	Glauconite
10	Ferromagnesian minerals
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
2	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
1	Nannofossils
	Pteropods
	Ostracodes
16	Bioclast (undiferentiated)
3	Sponge spic
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
2	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments: 79 bad slide → big size range. 21
Shells (bivalves & gastropods) not sampled → too big.

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	1351	A	3	H	3	100	

Sediment/Rock Name	shelly mud

Observer	H. Aoki

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture Sand	Silt	Clay
15	40	19

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
33	Quartz
10	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
1	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
10	Biotite
	Muscovite
	Chlorite
10	Clay Minerals
	Glauconite
10	Ferromagnesian minerals
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
10	Nannofossils
	Pteropods
	Ostracodes
5	Bioclast (undiferentiated)
3	sl. spicules
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
3	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments: bad slide → lg size range.. 26

77

✓

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SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	1351	A	3	H	4	50.	

Sediment/Rock Name	mud	Observer	H Lowe

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
3	60	30

at 56cm ~2% CaCO3

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
55	Quartz
10	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
5	Biotite
	Muscovite
	Chlorite
18	Clay Minerals
	Glauconite
10	Ferromagnesian minerals
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
2	Nannofossils
	Pteropods
	Ostracodes
	Bioclast (undiferentiated)
2	Sponge spic
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
1	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments:

7

✓

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SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	1351	A	4	H	1	20.	

Sediment/Rock Name	mud.	Observer	

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
20	50	20

more = medium sand grain

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
45	Quartz
10	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
1	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
5	Biotite
	Muscovite
	Chlorite
10	Clay Minerals
2	Glauconite
10	Ferromagnesian minerals
	Authigenic minerals
	Zeolite
	Pyrite
5	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
3	Nannofossils
	Pteropods
	Ostracodes
	Bioclast (undiferentiated)
1	Calc Spon. s—
2	Sponge spic
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments: 90

98

✓

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SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1351	A	4	H	2	28.	

Sediment/Rock Name	clay.	Observer	

SMEAR	Thin Sect
✓	

Dominant	Minor
	✓

Percent Texture		
Sand	Silt	Clay
	10	90

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
25.	Quartz
	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
5	Micas
	Biotite
	Muscovite
	Chlorite
80	Clay Minerals
	Glauconite
	Ferromagnesian minerals
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
	Nannofossils
	Pteropods
	Ostracodes
	Bioclast (undiferentiated)
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments:

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	1351	A	4	H	2	50	

Sediment/Rock Name	silt	Observer	H Jove.

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
10	67	15.

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
45	Quartz
10	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
10	Micas
5	Biotite
	Muscovite
	Chlorite
10	Clay Minerals
	Glauconite
15	Ferromagnesian minerals
	Authigenic minerals
	Zeolite
	Pyrite
2	Opaque minerals (undifferentiated)
1	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
	Nannofossils
	Pteropods
	Ostracodes
3	Bioclast (undiferentiated)
1	calc sp. spics
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
1	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments:

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1351	A	4	H	2	130.	

Sediment/Rock Name	Silt

Observer	Mena

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
15	60	19

at 1.27 8% $CaCO_3$ 1% TOC

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
35	Quartz
8	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
5	Micas
10	Biotite
	Muscovite
	Chlorite
5	Clay Minerals
5	Glauconite
18	Ferromagnesian minerals
	esp green high f minerals
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
3	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
2	Nannofossils
	Pteropods
	Ostracodes
3	Bioclast (undiferentiated)
1	Sp Spic
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments: 99 11

✓