IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	41351	B	7	H	3	110	110

Sediment/Rock Name	Observer
~~Calcareous~~ mud (calcareous)	KMM

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

bistatic

Percent Texture		
Sand	Silt	Clay
5	35	60

20% at 112 cm

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
5	Quartz
5	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
tr	Biotite
10	Muscovite
3	Chlorite
55	Clay Minerals (typed!) not
	Glauconite
	Ferromagnesian minerals
2	other Dense
	Authigenic minerals
	Zeolite
2	Pyrite
	Opaque minerals (undifferentiated)
tr	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
7	Nannofossils
	Pteropods
	Ostracodes
5	Bioclast (undiferentiated)
1	Calc. sponge spicules
2	Holothurian spicules
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
2	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
tr	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	U1351	B	7	H	4	75	75

Sediment/Rock Name	Observer
Sandy mud (calcareous)	KMM

SMEAR	Thin Sect
✓	

Dominant	Minor
	✓

Percent Texture		
Sand	Silt	Clay
35	45	20

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
15	Nannofossils
	Pteropods
	Ostracodes
5	Bioclast (undiferentiated)
1	Calc. Spic
	Siliceous
tr	Radiolarians ?
	Diatoms
	Silicoflagellates
2	Sponge spicules Siliceous
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
tr	Plant debris
	Bryozoans
tr	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	U1351	B	8	H	3	80	80

Sediment/Rock Name	muddy sand (calcareous/bioclastic)

Observer	Kimm

SMEAR	Thin Sect
✓	

Dominant	Minor
	✓

Percent Texture Sand	Silt	Clay
40	40	20

31% at 81 CHNS

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
20	Nannofossils
	Pteropods
	Ostracodes
20	Bioclast (undiferentiated)
1	Calc. sponge
1	tunicate
	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: green

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	U 1351	B	8	H	4	80	80

Sediment/Rock Name	mud	Observer	kmm

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
5	55	40

6%, ca81 Mad carb

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

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

Comments: 1/1 Sediment below Seq. boundary

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	U1351	B	8	H	4	4	4

Sediment/Rock Name		Observer	
	mud (calcareous)		kmm

SMEAR	Thin Sect
✓	

Dominant	Minor
	✓

Percent Texture		
Sand	Silt	Clay
10	50	40

in

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

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

Comments: in sediment above! Seq. boundary matrix of burrowed shell hash

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	U1351	B	8	H	5	133	133

Sediment/Rock Name	Mud	Observer	KMM

SMEAR	Thin Sect
✓	

Dominant	Minor
	✓

Percent Texture		
Sand	Silt	Clay
5	65	30

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
25	Quartz
25	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
	Biotite
5	Muscovite
1	Chlorite
3 2	Clay Minerals
	Glauconite
1	Ferromagnesian minerals
10	other dense
	Authigenic minerals
	Zeolite
	Pyrite
1	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
1	Nannofossils
	Pteropods
	Ostracodes
	Bioclast (undiferentiated)
tr	fine sand 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:

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	U1351	B	9	H	1	124	124

Sediment/Rock Name	mud	Observer	KMM

SMEAR	Thin Sect
✓	

Dominant	Minor
	✓

Percent Texture		
Sand	Silt	Clay
	34	66

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
10 ~~20~~ ?	Quartz
10 ?	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
	Biotite
5	Muscovite
~~20~~ 5	Chlorite
66	Clay Minerals
	Glauconite
	Ferromagnesian minerals
2	other & dense
	Authigenic minerals
	Zeolite
2	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
~~10~~	Nannofossils
	Pteropods
	Ostracodes
	Bioclast (undifferentiated)
	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	Interval (cm) Bottom
317	U1351	B	9	H	2	80	80

Sediment/Rock Name	mud	Observer	

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
10	65	25

4% at 81 cm

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
15 ~~20~~	Quartz
15 ~~20~~	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
tr	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
tr	Biotite
5	Muscovite
5	Chlorite
25 ~~15~~	Clay Minerals
	Glauconite
1	Ferromagnesian minerals
20	other dense
	Authigenic minerals
	Zeolite
	Pyrite
1	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
1	Foraminifera
5	Nannofossils
	Pteropods
	Ostracodes
	Bioclast (undiferentiated)
2	calc. sponge spic
tr	fusiform spic
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
1	Sponge spicules (silic)
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
1	Organic debris
1	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	U1351	B	9	H	6	70	70

Sediment/Rock Name	Observer
Sandy mud (calcareous)	KMM

SMEAR	Thin Sect
✓	

Dominant	Minor
	✓

Percent Texture		
Sand	Silt	Clay
20	50	30

14% at 100

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
12	Quartz
5	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
3	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
2	Biotite
2	Muscovite
2	Chlorite
30	Clay Minerals
	Glauconite
tr	Ferromagnesian minerals
15	undiff. dust lots of zoisite
	Authigenic minerals
	Zeolite
	Pyrite
2	Opaque minerals (undifferentiated)
tr	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
5	Nannofossils
	Pteropods
	Ostracodes
5	Bioclast (undiferentiated) frags of forams ?
5	fumicate spicules – 2 species ?
1	Calc. Spicule
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
tr	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
1	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments: greenish

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	1351	B	#11	H	1	104	

Sediment/Rock Name	calcareous mud.	Observer	H Hesp.

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
10	55.	15

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
5	Nannofossils
	Pteropods
	Ostracodes
5	Bioclast (undiferentiated)
5.	Calc Sponge Spicule.
3	Star 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:

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	1351	B	11	H	2	111	

Sediment/Rock Name	calcareous sandy siltstone	Observer	Hhaus

SMEAR	Thin Sect
✓	

Dominant	Minor
	✓

Percent Texture		
Sand	Silt	Clay
20	50	7

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera Pa & B.
4	Nannofossils
	Pteropods
	Ostracodes
5	Bioclast (undiferentiated) lg shell frag.
2	Sp spic
6	Sp spic - at least 2 different kinds.
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
1	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Bryozoans
	Echinoderm
	Fish remains (teeth, bones, scales)
	Bivalves
	Others

Comments: 77 23

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1351	B	11	H	2	137	

Sediment/Rock Name	mud	Observer	Hanes

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
3	60	20

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

Percent	Component
BIOGENIC GRAINS	
	Calcareous
3	Foraminifera
4	Nannofossils
	Pteropods
	Ostracodes
	Bioclast (undiferentiated)
4	Sp Spic
3	Sf 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: 87 16

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1351	C	11	H	3	137	

Sediment/Rock Name	calcareous mud	Observer	H Lever

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
3	45	20

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
4	Foraminifera
10	Nannofossils
	Pteropods
	Ostracodes
10	Bioclast (undiferentiated)
3	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: 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	B	11	H	4	106	

Sediment/Rock Name	calc mud.	Observer	H Lowe

SMEAR	Thin Sect
✓	

Dominant	Minor
	✓

Percent Texture		
Sand	Silt	Clay
7	56	10

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
5	Foraminifera
8	Nannofossils
	Pteropods
	Ostracodes
6	Bioclast (undiferentiated)
8	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: 73 27

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	1351	C	13	H	1	30	

Sediment/Rock Name	mud	Observer	

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
3	62	25

Percent	Component
	SILICICLASTIC GRAINS/MINERAL
	Framework minerals
48	Quartz
2	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase) twinned
2	Rock fragments altered
	Volcanic glass
	Accessory/trace minerals
5	Micas
5	Biotite
	Muscovite
1	Chlorite
10	Clay Minerals clay globule
	Glauconite
3	Ferromagnesian minerals
3	Heavy
	Authigenic minerals
	Zeolite
8	Pyrite framboid., foram fort
2	Opaque minerals (undifferentiated)
	Fe-oxide blebby
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
4	Foraminifera
4	Nannofossils
	Pteropods
	Ostracodes
	Bioclast (undiferentiated)
1	star 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:

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	1351	B	13	H	2	90	

Sediment/Rock Name	mud	Observer	Wilson

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
2	65	15

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
5	Nannofossils
	Pteropods
	Ostracodes
2	Bioclast (undiferentiated)
1	Sp spic
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: 85 15

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	1351	B	13	H	3	108.	

Sediment/Rock Name	Silt

Observer	H Leve...

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
2	86	5

mostly Mica

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
4	Nannofossils
	Pteropods
	Ostracodes
	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:

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Interval (cm) Bottom
317	1351	B	13	H	3	135	

Sediment/Rock Name	mud	Observer	H Lowe

SMEAR	Thin Sect
✓	

Dominant	Minor
	✓

Percent Texture		
Sand	Silt	Clay
2	63	30

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
2	Nannofossils
	Pteropods
	Ostracodes
	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:

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	1351	B	14	X	1	80.	

Sediment/Rock Name	mud.	Observer	

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
4	60	20

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
	Foraminifera
3.	Nannofossils
	Pteropods
	Ostracodes
1	Bioclast (undiferentiated)
2	calc. sponge
	tunicate 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:

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	1351	B	16	X	1	100.	

Sediment/Rock Name	calc mud.	Observer	Leva

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
4.	50.	25

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
7	Nannofossils
	Pteropods
	Ostracodes
5.	Bioclast (undiferentiated)
5	calc. sponge tunicate 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	Bottom
317	1351	B	16	X	2	16	

Sediment/Rock Name	calc mud.	Observer	kevo

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
6.	50.	20.

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
3	Biotite
	Muscovite
1	Chlorite
10	Clay Minerals
1	Glauconite
3.	Ferromagnesian minerals
	other dense
	Authigenic minerals
	Zeolite
4	Pyrite
2.	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonate
	Micrite
	Others

Percent	Component
	BIOGENIC GRAINS
	Calcareous
6	Foraminifera
5	Nannofossils
	Pteropods
	Ostracodes
6	Bioclast (undiferentiated) Sandy.
4	calc. sponge
2	tunicate 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:

✓

IODP Expedition 317

SEDIMENT SMEAR SLIDE & THIN SECTION WORKSHEET

Leg	Site	Hole	Core	Type	Sec	Interval (cm) Top	Bottom
317	1351	C	16	X	3	60	

Sediment/Rock Name	mud.	Observer	Kore.

SMEAR	Thin Sect
✓	

Dominant	Minor
✓	

Percent Texture		
Sand	Silt	Clay
1	44	40

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

Percent	Component
	BIOGENIC GRAINS
	Calcareous
2	Foraminifera
4	Nannofossils
	Pteropods
	Ostracodes
1	Bioclast (undiferentiated)
2	calc. sponge
	tunicate 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: