

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	1332	8	20	H	2	20	

Sediment / Rock Name	<i>mud.</i>	Observer	<i>haver.</i>
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Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
10	35	50

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERALS	
	Framework minerals
10	Quartz
7	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
3	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
1	Biotite
8	Muscovite
10	Chlorite
50	Clay sized fraction
	Glaucinite
1	Ferromagnesian minerals
5	Other dense minerals
	Authigenic minerals
	Zeolite
	Pyrite
3	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
	Micrite
	Others

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

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	1353	B	01	11	2	20	

Sediment / Rock Name	sand.	Observer	henner.
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Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
80	20	

Comments:

rare well rounded grains - heavy mix
 a lot of ugly grains - attached fil? or rock frag?
 mudstone?

Percent	Component
SILICICLASTIC GRAINS/MINERALS	
	Framework minerals
40	Quartz
30	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
20	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
	Biotite
1	Muscovite
2	Chlorite
	Clay sized fraction
	Glauconite
1	Ferromagnesian minerals ✓ rounded
3	Other dense minerals
	Authigenic minerals
	Zeolite
	Pyrite
3	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
	Micrite
	Others

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

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	1353	B	23	H	3	90	

Sediment / Rock Name	<i>mud.</i>	Observer	<i>hewer</i>
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Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
5	35	50

Comments:

pellets?

Percent	Component
SILICICLASTIC GRAINS/MINERALS	
	Framework minerals
<i>12</i>	Quartz
<i>7</i>	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
<i>2</i>	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
	Biotite
<i>7</i>	Muscovite
<i>10</i>	Chlorite
<i>50</i>	Clay sized fraction
	Glauconite
<i>2</i>	Ferromagnesian minerals
<i>32</i>	Other dense minerals
	Authigenic minerals
	Zeolite
<i>1</i>	Pyrite
<i>2</i>	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
<i>1</i>	Micrite
	Others

Percent	Component
BIOGENIC GRAINS	
	Calcareous
	Foraminifera
<i>2</i>	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
<i>3</i>	Other spicules
<i>1</i>	Bioclast (undifferentiated)
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Fish remains (teeth, bones, scales)
	Others



IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	1353	B	24	H	3	16	

Sediment / Rock Name	<i>calcareous sandy mud</i>	Observer	<i>Laver</i>
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Smear Slide	Thin Section
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Dominant Lithology	Minor Lithology
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Percent Terrigenous Texture		
Sand	Silt	Clay
20	35	30

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERALS	
	Framework minerals
15	Quartz
13	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
5	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
	Biotite
4	Muscovite
6	Chlorite
30	Clay sized fraction
	Glaucinite
4	Ferromagnesian minerals
3	Other dense minerals
	Authigenic minerals
	Zeolite
1	Pyrite
4	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
2	Micrite <i>pieces? irregular</i>
	Others

Percent	Component
BIOGENIC GRAINS	
	Calcareous
3	Foraminifera
1	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
4	Other spicules <i>pieces</i>
8	Bioclast (undifferentiated)
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Fish remains (teeth, bones, scales)
	Others

✓

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	1353	B	25	H	2	54	

Sediment / Rock Name	<i>Sandy Marlstone</i>	Observer	<i>KMM</i>
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Smear Slide	Thin Section
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Dominant Lithology	Minor Lithology
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Percent Terrigenous Texture		
Sand	Silt	Clay
<i>30</i>	<i>50</i>	<i>20</i>

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERALS	
	Framework minerals
<i>10</i>	Quartz
<i>10</i>	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
<i>1</i>	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
<i>2</i>	Biotite
<i>10</i>	Muscovite
<i>5</i>	Chlorite
<i>10</i>	Clay sized fraction
	Glauconite
<i>5</i>	Ferromagnesian minerals
<i>12</i>	Other dense minerals
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
	Micrite
	Others

Percent	Component
BIOGENIC GRAINS	
	Calcareous
<i>5</i>	Foraminifera
<i>5</i>	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
<i>tr</i>	Sponge spicules
	Other spicules
<i>25</i>	Bioclast (undifferentiated)
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Fish remains (teeth, bones, scales)
	Others

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	1353	B	26	H	1	110	

Sediment / Rock Name	<i>Sandy Marlstone</i>	Observer	<i>kmm</i>
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Smear Slide	Thin Section
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Dominant Lithology	Minor Lithology
	<input checked="" type="checkbox"/>

Percent Terrigenous Texture		
Sand	Silt	Clay
<i>40</i>	<i>40</i>	<i>30</i>

Comments:

Sandy Bleb

30

Percent	Component
	SILICICLASTIC GRAINS/MINERALS
	Framework minerals
<i>15</i>	Quartz
<i>15</i>	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
<i>5</i>	Rock fragments
<i>5</i>	Volcanic glass
	Accessory/trace minerals
	Micas
	Biotite
<i>3</i>	Muscovite
<i>1</i>	Chlorite
<i>20</i>	Clay sized fraction
<i>tr</i>	Glauconite
<i>5</i>	Ferromagnesian minerals
	Other dense minerals
	Authigenic minerals
	Zeolite
	Pyrite
<i>2</i>	Opaque minerals (undifferentiated)
	Fe-oxide
<i>30</i>	Carbonates
	Micrite
	Others

fine silt-sized carb. x (authigenic)

Percent	Component
	BIOGENIC GRAINS
	Calcareous
<i>tr</i>	Foraminifera
	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
<i>3</i>	Bioclast (undifferentiated)
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Fish remains (teeth, bones, scales)
	Others

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 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	1353	B	26	H	2	74	

Sediment / Rock Name	Mud	Observer	KMM
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Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
tr	65	35

Comments:

Percent	Component
	SILICICLASTIC GRAINS/MINERALS
	Framework minerals
20	Quartz
20	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
0.5	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
	Biotite
5	Muscovite
	Chlorite
30	Clay sized fraction
	Glauconite
	Ferromagnesian minerals
10	Other dense minerals
	Authigenic minerals
	Zeolite
5	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
	Micrite
	Others

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

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	1353	B	27	H	1	37	

Sediment / Rock Name	<i>Sandy Mudsstone</i>	Observer	<i>kmm</i>
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Smear Slide	Thin Section
<i>+</i>	

Dominant Lithology	Minor Lithology
<i>+</i>	

Percent Terrigenous Texture		
Sand	Silt	Clay
<i>30</i>	<i>30</i>	<i>40</i>

Comments:

Percent	Component
SILICICLASTIC GRAINS/MINERALS	
	Framework minerals
<i>10</i> 20	Quartz
<i>15</i> 35	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
	Biotite
<i>2</i> 5	Muscovite
	Chlorite
<i>25</i> 30	Clay sized fraction
	Glaucanite
<i>3</i>	Ferromagnesian minerals
<i>2</i>	Other dense minerals
	Authigenic minerals
	Zeolite
	Pyrite
<i>3</i>	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
<i>10</i> 10	Micrite <i>fine bioclasts</i>
	Others

Percent	Component
BIOGENIC GRAINS	
	Calcareous
<i>3</i>	Foraminifera
<i>2</i>	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
<i>25</i>	Bioclast (undifferentiated)
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Fish remains (teeth, bones, scales)
	Others

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	1353	0	28	H	1	127	

Sediment / Rock Name	<i>Sandy Mud</i>	Observer	<i>Kmm</i>
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Smear Slide	Thin Section
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Dominant Lithology	Minor Lithology
	<input checked="" type="checkbox"/>

Percent Terrigenous Texture		
Sand	Silt	Clay
<i>50</i>	<i>30</i>	<i>20</i>

Comments:

*** Similar to 28H-2, 33
 28H-2, 43*

Percent	Component
SILICICLASTIC GRAINS/MINERALS	
	Framework minerals
<i>5</i>	Quartz
<i>5</i>	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
<i>10</i>	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
	Biotite
	Muscovite
	Chlorite
<i>20</i>	Clay sized fraction
	Glauconite
<i>5</i>	Ferromagnesian minerals
<i>5</i>	Other dense minerals
	Authigenic minerals
	Zeolite
	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
<i>20, 30</i>	Micrite
	Others

Percent	Component
BIOGENIC GRAINS	
	Calcareous
<i>20</i>	Foraminifera
	Nannofossils ? (<i>couldn't focus!</i>)
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
<i>15</i>	Other spicules
	Bioclast (undifferentiated)
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
	Organic debris
	Plant debris
	Fish remains (teeth, bones, scales)
	Others

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	1353	B	28	H	3	12	

Sediment / Rock Name	<i>Sandy Mud</i>		Observer	<i>kmm</i>
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Smear Slide	Thin Section
<input checked="" type="checkbox"/>	

Dominant Lithology	Minor Lithology
	<input checked="" type="checkbox"/>

Percent Terrigenous Texture		
Sand	Silt	Clay
<i>35</i>	<i>55</i>	<i>10</i>

Comments:

*↑
Course set!*

Percent	Component
SILICICLASTIC GRAINS/MINERALS	
	Framework minerals
<i>20</i>	Quartz
<i>25</i>	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
<i>tr</i>	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
	Biotite
<i>15</i>	Muscovite
<i>5</i>	Chlorite
<i>10</i>	Clay sized fraction
	Glauconite
<i>2</i>	? Ferromagnesian minerals
<i>1.5</i>	Other dense minerals
	Authigenic minerals
	Zeolite
<i>10</i>	Pyrite
	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
	Micrite
	Others

Percent	Component
BIOGENIC GRAINS	
	Calcareous
<i>tr</i>	Foraminifera
<i>2</i>	Nannofossils
	Pteropods
	Ostracods
	Echinoderm
	Bivalves
	Bryozoans
	Corals
	Sponge spicules
	Other spicules
<i>1</i>	Bioclast (undifferentiated)
	Siliceous
	Radiolarians
	Diatoms
	Silicoflagellates
	Sponge spicules
	Siliceous debris (undifferentiated)
	Others
	Dinoflagellates
	Pollen
<i>tr</i>	Organic debris
	Plant debris
	Fish remains (teeth, bones, scales)
	Others

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	1353	C	28	H	3	15	

Sediment / Rock Name	Mud	Observer	kmm
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Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
	✓

Percent Terrigenous Texture		
Sand	Silt	Clay
tr	50	40

Comments:

* Similar to 28H -1-120 -2-47 "glacial flour" very fine silt → clay-sized minerals

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

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

IODP Expedition 317
 SEDIMENT SMEAR SLIDE
 & THIN SECTION WORKSHEET

Expedition	Site	Hole	Core	Type	Sec	Interval (cm)	
						Top	Bottom
317	41353	B	29	H	1	80	

Sediment / Rock Name	Mud	Observer	kmm
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Smear Slide	Thin Section
✓	

Dominant Lithology	Minor Lithology
✓	

Percent Terrigenous Texture		
Sand	Silt	Clay
tr	50	50

Comments:

Percent	Component
	SILICICLASTIC GRAINS/MINERALS
	Framework minerals
20	Quartz
20	Feldspar (undifferentiated)
	K-feldspar (Orthoclase, Microcline...)
	Plagioclase
	Rock fragments
	Volcanic glass
	Accessory/trace minerals
	Micas
	Biotite
5	Muscovite
	Chlorite
45.50	Clay sized fraction
	Glaucinite
	Ferromagnesian minerals
.5	Other dense minerals
	Authigenic minerals
	Zeolite
	Pyrite
tr	Opaque minerals (undifferentiated)
	Fe-oxide
	Carbonates
	Micrite
	Others

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